

IUGG XXIV GENERAL ASSEMBLY

Perugia, July 2-13, 2007

02 July, 2007

UL001 Our Changing Climate: A Global Policy Issue,
Robert W. Corell: Invited Speaker

Oral 2 July, 2007 from 08:30 AM to 09:30 AM - Rectorate Main Hall

US001 Our Changing Planet (Part 1)
Conveners: Peltier Richard

Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Rectorate Main Hall

09:30 am **Solar Forcing Of Global Climate Over The Instrumental Era**
Lean Judith. Speaker Lean Judith

09:55 am **Monitoring the Variability in the Atlantic Meridional**
Overturning Circulation at 25°N
Bryden Harry, Stuart Cunningham, Torsten Kanzow, Darren Rayner, Molly Baringer, William Johns, Jochem Marotzke, Hannah Longworth, Elizabeth Grant, Joel Hirschi, Lisa Beal, Christopher Meinen. Speaker Bryden Harry

10:20 am **Global climate modeling activities in Japan**
Kimoto Masahide. Speaker Kimoto Masahide

10:45 am **Coffee Break (30 minutes)**

11:15 am **Observing and understanding present-day sea level rise :**
Cazenave Anny. Speaker Cazenave Anny

11:40 am **Mass flux of high latitude land ice from GRACE lumped harmonic mascon solutions**
Luthcke Scott, H.J. Zwally, D.D. Rowlands, W. Abdalati, F. G. Lemoine, A.A. Arendt, S.M. Klosko. Speaker Luthcke Scott

12:05 pm **Arctic warmth, Greenland melting, and sea-level rise: a lesson from the past**
Otto-Bliesner Bette, Jonathan Overpeck, Shawn Marshall, Gifford Miller. Speaker Otto-Bliesner Bette

JAS001 Planetary cores: physics, chemistry and dynamics
Conveners: Tanaka Satoru, Cardin Philippe

Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Department of Mathematics Room A0

09:30 am **Elasticity and phase stability of iron and iron alloys at inner core conditions**
Vocadlo Lidunka. Speaker Vocadlo Lidunka

09:50 am **Viscosity of Earth's Outer Core**
Smylie Douglas. Speaker Smylie Douglas

10:10 am **Dissipation on the core-mantle boundary and free librations of the multilayer moon**
Gusev Alexander. Speaker Gusev Alexander

10:30 am **Seismic structure of the outer core from P4KP-PcP travel times observed with the J-array and IMS arrays**
Tanaka Satoru. Speaker Tanaka Satoru

10:50 am **Coffee Break (30 minutes)**

11:20 am **The dynamics of interacting compositional plumes**
Eltayeb Ibrahim, M.A. Al-Lawati, T.B.A. Elbashir. Speaker Eltayeb Ibrahim

11:40 am **Synthetic Seismograms for realistic 3D Earth model with anisotropic inner core**
Tsuboi Seiji, Yoko Tono. Speaker Tsuboi Seiji

12:00 pm **ExoMars/GEP Lander Radioscience LaRa, a Space Geodesy Experiment to Mars**
Dehant Veronique, Veronique Dehant, William Folkner, Sebastien Le Maistre, Dannel Orban, Martin Paetzold, And The Lara Team. Speaker User6731 User6731

Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A0

02:00 pm **Experimental study of the migration of silicate, metal and sulfide phases in centrifugal fields.**
Lebedev Evgeny. Speaker Lebedev Evgeny

02:20 pm **On the Expression of the 41,000 year in the Paleomagnetic Record of the Geomagnetic Field.**
Fuller Mike. Speaker Fuller Mike

02:40 pm **Convection and magnetic stability of the planetary cores**
Starchenko Sergey. Speaker Starchenko Sergey

03:00 pm **Translational oscillations of cores of Mercury, Venus, Mars and the Earth and variations of natural processes**
Barkin Yury. Speaker Barkin Yury

03:20 pm **Texture of Earths Uppermost Inner Core from Forward and Back Scattered Seismic Waves**
Cormier Vernon. Speaker Cormier Vernon

03:40 pm **Coffee Break (30 minutes)**

04:10 pm **Marginal stability of almost adiabatic convection in rotating planetary shells**
Maslov Igor, Maria Kotelnikova. Speaker Maslov Igor

04:30 pm **Recent progress on core dynamics from magnetic observations**
Finlay Chris. Speaker Finlay Chris

04:50 pm **Torsional oscillations and the viscosity of the Earth's core**
Mound Jon, Bruce Buffett. Speaker Mound Jon

05:10 pm **Zonal flows in planetary cores: The effect of rotation**
Evonuk Martha. Speaker Evonuk Martha

JAS006 Electrodynamical and chemical effects in the middle and upper atmosphere generated by thunderstorms
Conveners: Sao Sabbas Fernanda, Rodger Craig, Sentman Davis, Blanc Elisabeth

Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Department of Physics Room B

09:30 am **Coupling of thunderstorms to the stratosphere, mesosphere and ionosphere**
Neubert Torsten, Cal Team. Speaker Neubert Torsten

10:00 am **Global lightning distributions in high time and space resolution**
Holzworth Robert, E.H. Lay, C. J. Rodger, R. L. Dowden. Speaker Holzworth Robert

10:15 am **Using the World Wide Lightning Location Network to investigate local time effects of strong lightning strokes on the lower ionosphere**
Lay Erin, Robert H. Holzworth, Abram R. Jacobson, Craig J. Rodger, Harald U. Frey, Richard L. Dowden. Speaker Lay Erin

10:30 am **Coffee Break (30 minutes)**

11:00 am **The TARANIS project - ELF/VLF signatures of TLEs at ground and on-board satellites**
Lefevre Francois. Speaker Lefevre Francois

11:15 am **Day-Night Asymmetry Influence on Schumann Resonance Amplitude Records**
Pechony Olga, Colin Price. Speaker Pechony Olga

11:30 am **Occurrence conditions of TLEs**
Takahashi Yukihiro, Toru Adachi, Hiroshi Fukunishi, Shogo Chikada, Akihiro Yoshida, Satoshi Kondo, Rue-Ron Hsu, Han-Tzong Su, Alfred Bing-Chih Chen, Stephen B. Mende, Harald U. Frey, Lou-Chuang Lee. Speaker Takahashi Yukihiro

12:00 pm **TLE Producing Storms over Argentina Observed from Brazil: Analysis of the IR Cloudtop Temperatures and Comparison with US Case Study**
Sao Sabbas Fernanda, Pierre-Dominique Pautet, Michael

J. Taylor, Matt J. Bailey, Natalia Solorzano, Thomas Jeremy, Robert H. Holzworth, Steven Cummer, Nicolas Jaugey, Osmar Pinto, Nelson J. Schuch, Marcos Michels, Vinicius T. Rampinelli. *Speaker Sao Sabbas Fernanda*

12:15 pm **Investigating Sprite Halo Optical Signatures and Associated Lightning Characteristics over South America**
Taylor Michael, S. Cummer, J. Li, F. Sao Sabbas, J. Thomas, R. Holzworth, O. Pinto, N. Schuch. Speaker Taylor Michael

Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Department of Physics Room B

02:00 pm **Balloon electric field measurements in the vicinity of an active convective storm**
Berthelier Jean-Jacques, F. Simoes, M. Godefroy, S. Yahi, E. Seran, Jean-Pierre Pommereau, P Franois, J-L Maria. Speaker Berthelier Jean-Jacques

02:15 pm **Mesospheric electric fields associated with lightning discharges, and some of their consequences**
Rycroft Michael, A. Odzimek, A. Kulak, R. L. Iwanski, N. F. Arnold. Speaker Rycroft Michael

02:30 pm **Submillisecond Video and Electromagnetic Observations of TLE Development and Structure**
Cummer Steven, Jingbo Li, Walter A. Lyons, Thomas E. Nelson. Speaker Cummer Steven

03:00 pm **Long recovery early/fast events as possible evidence of persistent ionization by giant blue jets**
Inan Umran, Benjamin R. T. Cotts, Nikolai G. Lehtinen. Speaker Inan Umran

03:15 pm **On the Mechanism of Blue Jet Formation**
Milikh Gennady, Yuri P. Raizer, Michael N. Shneider. Speaker Milikh Gennady

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Terrestrial gamma-ray flashes seen from orbit**
Smith David. Speaker Smith David

04:30 pm **Terrestrial Gamma-Ray Flashes and Very Low Frequency Data**
Cohen Morris, Umran S Inan, Ryan K Said, David M Smith. Speaker Cohen Morris

04:45 pm **Relativistic Runaway Electron Avalanche Seeding Efficiency**
Carlson Brant, Nikolai G. Lehtinen, Umran S. Inan. Speaker Carlson Brant

05:00 pm **Report of Poster Session coordinator**
Sao Sabbas Fernanda. Speaker Sao Sabbas Fernanda

JAS009 Equatorial atmosphere-ionosphere coupling processes: responses to forcing from lower atmosphere and magnetosphere
Conveners: Abdu Mangalathayil

Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Department of Chemistry Room E

09:30 am **Coupling Processes in the Equatorial Atmosphere (CPEA)**
Fukao Shoichiro. Speaker Fukao Shoichiro

10:00 am **Evidence of atmosphere ionosphere coupling obtained during the spread Experiment (SpreadFEX): a campaign overview**
Fritts Dave. Speaker Fritts Dave

10:30 am **Coffee Break (30 minutes)**

11:00 am **Characterizing the Mesospheric Gravity Wave Field Near the Magnetic Equator, Brazil, During the Occurrence of Spread F**
Taylor Michael, P.-D. Pautet, S. Vadas, D. C. Fritts, A. F. Medeiros, R. Buriti, J. Fechine, H. Takahashi, P. Batista, F. Sao Sabbas. Speaker Taylor Michael

11:30 am **Reverse ray-tracing gravity waves over Brazil to identify convective source regions, modeling GW spectra from these regions, and identifying potential influences at the highest altitudes**
Vadas Sharon, C. Fritts, P.-D. Pautet, M.J. Taylor, H.-L. Liu, P. P. Batista, P. Stamus, H. Takahashi, F. Sao Sabbas, A.F. Medeiros, R. Buriti, J. Fechine. Speaker Vadas Sharon

11:50 am **Ultra-multi-channel and multi-static meteor radar observation of horizontal distribution of wind velocities with the MU radar and cooperative optical observations**
Nakamura Takuji, Masaki Tsutsumi, Takuyad. Kawahara, Kazuo Shiokawa. Speaker Nakamura Takuji

12:10 pm **An observational study on MJO in West Sumatera, Indonesia based on the EAR, BLR, OLR, MAWS**
Hermawan Eddy, Tri Wahyu Hadi, Findy Renggono, Mega Puspawardhany, Sopia Lestari, Fikri Muhammad Abdul Wahab. Speaker Hermawan Eddy

Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room E

02:00 pm **Dynamical Response of the Tropical Stratosphere-Mesosphere to the Major Stratospheric Warming in 2003/2004**
Pancheva Dora, Plamen Mukhtarov, Borislav Andonov. Speaker Pancheva Dora

02:30 pm **Planetary wave coupling of equatorial atmosphere-ionosphere system: recent results**
Gurubaran Subramanian, S. Sathishkumar, R. Dhanya. Speaker Gurubaran Subramanian

03:00 pm **Equatorial middle atmosphere - ionosphere coupling through the Kelvin waves**
Takahashi Hisao, C. M. Wrasse, D. Gobbi, D. Pancheva, M. A. Abdu, I. S. Batista, L. M. Lima, P. P. Batista, B. R. Clemesha, N. J. Schuch, K. Shiokawa, J. Fechine, M. G. Mlynzcak, J. M. Russell. Speaker Takahashi Hisao

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Equatorial Spread F and Coupled Low-Latitude Ionosphere Studied by the Equatorial Atmosphere Radar**
Yokoyama Tatsuhiro, Shoichiro Fukao. Speaker Yokoyama Tatsuhiro

04:30 pm **Equatorial spread F and sporadic E layer connection during the conjugate point experiment (COPEX) in Brazil**
Batista Inez, M. A. Abdu, B. W. Reinisch. Speaker Batista Inez

05:00 pm **Investigating the Ionospheric Bubble Structures Observed Simultaneously from two Sites over Brazil**
Pautet Pierre-Dominique, Michael J. Taylor, Hisao Takahashi, Eurico Rodrigues De Paula, Jos Humberto Andrade Sobral, Fernanda De Sao Sabbas Tavares, Amauri Fragoso De Medeiros, Farzad Kamalabadi, David C. Fritts. Speaker Pautet Pierre-Dominique

05:15 pm **Zonal variations in the prereversal enhancement and equatorial spread F occurrences**
Saito Susumu, Takashi Maruyama. Speaker Saito Susumu

Susumu ASI002 Paleomagnetism and geodynamics neotectonics, continental reconstruction, reference frames
Conveners: Yo-Ichiro Otofujii, Geuna Silvana, Appel Erwin

Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy Room A

02:00 pm **Jurassic intermediate VGPS, Pangea Subduction Zones and Seismic Wave Propagation in the Lower Mantle**
Vizan Haroldo, van Zele Mara Andrea. Speaker Vizan Haroldo

02:16 pm **Geophysical survey of the Fagnano pluton. Tierra del Fuego. Argentina**
Vilas Juan Francisco, Tassone A., Peroni J. I., Lippai H., Menichetti M, Lodolo E. Speaker Vilas Juan Francisco

02:32 pm **Paleomagnetism of Late Tertiary lava flows from Lundarhals, Stortjarnir, and Su durdalur, Iceland**
Kono Masaru. Speaker Kono Masaru

02:48 pm **Break-up of Pangea and early Mesozoic plate motions in the central Atlantic, Atlas and Tethys regions**
Schettino Antonio, Eugenio Turco. Speaker Schettino Antonio

03:04 pm **Internal deformation of the Shan-Thai block in Southeast Asia due to collision of India: Paleomagnetic evidence from Mesozoic sedimentary rocks in Yunnan and Northern Thailand**
Yo-Ichiro Otofujii, Kazuyoshi Aihara, Ken Sato, Kazuhiro Takemoto. Speaker Yo-Ichiro Otofujii

03:20 pm **Magnetostratigraphic and magnetofabric investigations on the Cenozoic sediments of the Assam - Arakan Basin, North-East India**
Patil Shiva, A.K. Mullick. Speaker Patil Shiva

03:36 pm **Coffee Break (30 minutes)**

04:06 pm **Major Clockwise rotation of Northeast Africa during the Late Triassic- Early Cretaceous time: A paleomagnetic study on the alkaline intrusions in the South Eastern Desert of Egypt**
Lotfy Hamza. Speaker Lotfy Hamza

04:22 pm **Hotspot Drift vs. True Polar Wander**
Harada Yasushi, Paul Wessel. Speaker Harada Yasushi

04:38 pm **Palaeomagnetism of Miocene volcanics in Biga Peninsula, NW Turkey**
Yurtseven Özmen Ayca, Assoc. Prof. Dr. Mmtaz Hisarli, Assoc. Prof. Dr. Timur Ustamer. Speaker Yurtseven Özmen Ayca

04:54 pm **Evidence of stable secondary pyrrhotite remanences in the high himalayan crystalline of Solo Khumbu (Nepal): mechanism and thermo-tectonic implications**
El Bay Rachida, Erwin Appel. Speaker El Bay Rachida

05:10 pm **IITPW hypothesis and new data on paleomagnetism of Lower Cambrian of South-East of the Siberian Platform.**
Pavlov Vladimir. Speaker Pavlov Vladimir

ASI006 Acquisition and stability of natural and laboratory-produced remanence
Conveners: Elmora Richard, Sagnotti Leonardo, Heslop David

Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Department of Pharmacy Room B

09:30 am **The anhyretic remanent magnetization of interacting single domain particles**
Eglio Ramon. Speaker Eglio Ramon

09:50 am **Early diagenetic greigite as recorder of the palaeomagnetic signal in the Mio-Pliocene sedimentary rocks of the Carpathian foredeep (Romania)**
Vasiliev Iuliana, Mark J. Dekkers, Wout Krijgsman, Christine Franke, Cor. G. Langereis, Tom A. T. Mullender. Speaker Vasiliev Iuliana

10:10 am **Small circle methods in paleomagnetism**
Waldhoer Martin, Erwin Appel. Speaker Waldhoer Martin

10:30 am **Coffee Break (30 minutes)**

11:00 am **Remagnetisation as evidence of a natural thermal event in the history of the lignite-clay sequences: magnetic signals from porcelanites (Dacian Basin, Romania)**
Radan Sorin-Corneliu. Speaker Radan Sorin-Corneliu

11:15 am **Paleomagnetic and rock-magnetic study of folded Lower Carboniferous carbonates, NW Montana and SW Alberta**
Zechmeister Matthew, Richard D. Elmore, Eric C. Ferre, Vanessa J. O'Brien. Speaker Zechmeister Matthew

11:30 am **Paleomagnetism of the Central Metasedimentary Belt, Grenville Province, Ontario, Canada: Thermal or Chemical Remagnetization?**
Dunlop David, Jeremy S. Brett. Speaker Dunlop David

11:45 am **Origin of remagnetizations at Sierra Madera Impact Crater, Trans-Pecos Region, Texas**
Dennie Devin, Elmore, R. Douglas, Huson, Sarah A., O'Brien, Vanessa J.. Speaker Dennie Devin

12:00 pm **Post impact remagnetizations in the Devonian Alamo Breccia, Nevada**
Elmore Richard, Devin Dennie, Shannon Dulin, John E. Warme. Speaker Elmore Richard

12:15 pm **Micrometeorites influx: a possible bias on the detrital remanent magnetization of sediments**
Suavet Clement, Jrme Gattacceca, Pierre Rochette, Luigi Folco, Ralph Harvey, Jean Duprat. Speaker Suavet Clement

ASII012 Small- and meso-scale structure in the thermosphere and ionosphere: observations and modeling
Conveners: Hysell David, Aruliah Anasuya

Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Department of Chemistry Room C

09:30 am **Optical illumination of sporadic-e layer irregularities by high power HF radio waves**
Bernhardt Paul, Frank T. Djuth, Michael P. Sulzer, Craig A. Tepley. Speaker Bernhardt Paul

09:48 am **Neutral density measurements in the polar thermosphere during the HEX-2 rocket campaign**
Lehmacher Gerald, Lin Li, Miguel Larsen, John Craven, Mark Conde. Speaker Lehmacher Gerald

10:06 am **Effects of penetration electric fields on low latitude ionosphere**
Nanan Balan. Speaker Nanan Balan

10:24 am **The fractal structure of convection in the thermosphere and ionosphere**
Freeman Mervyn. Speaker Freeman Mervyn

10:42 am **ISR observations of dayside convection and its coupling to ionospheric disturbance electro dynamics**
Lyons Larry, Shasha Zou, Craig Heinselman, Mary Mccready. Speaker Lyons Larry

11:00 am **Coffee Break (30 minutes)**

11:30 am **Simulation of shock reformation physics and electron energisation at collisionless shocks**
Yuan Xingqiu, Peter A. Robinson. Speaker Yuan Xingqiu

11:48 am **Enhanced Aurora and Instabilities in Thin Ionization Layers**
Johnson Jay, Hideo Okuda. Speaker Johnson Jay

12:06 pm **Radar and optical observation of medium-scale traveling ionospheric disturbances and field-aligned irregularities in the F region**
Otsuka Yuichi, Tadahiko Ogawa, Tatsuhiro Yokoyama, Kazuo Shiokawa, Mamoru Yamamoto. Speaker Otsuka Yuichi

Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room C

02:00 pm **Effects of high-latitude ionospheric electric field variability on the estimation of global thermospheric Joule heating**
Matsuo Tomoko, Arthur D. Richmond. Speaker Matsuo Tomoko

02:18 pm **Rocket observations of the response of the E-region**

Scientific Program

July 2-6, 2007

Observable and Reanalysis Data Sets	<i>Speaker Cocker Steven</i> 02:45 pm Impact of ocean initial conditions on the seasonal forecast of tropical cyclones Alonso Balmaseda Magdalena, Frederic Vitart. <i>Speaker Frederic Vitart</i>	Room 2 Chairpersons: Kevin Hamilton 09:30 am Current challenges in middle atmosphere science Shepherd Theodore. <i>Speaker Shepherd Theodore</i> 10:00 am Changing atmospheric composition: Fact or Fiction? Burrows John. <i>Speaker Burrows John</i> 10:30 am Coffee Break (30 minutes) 11:00 am The importance of the Montreal Protocol in protecting climate Velders Guus, Stephen Andersen, John Daniel, David Fahey, Mack McFarland. <i>Speaker Velders Guus</i> 11:30 am Stratospheric ozone trend analysis: Challenges to attribute ozone trends to ozone depleting substances Staehelin Johannes. <i>Speaker Staehelin Johannes</i> 12:00 pm Past and future influence of changes in stratospheric climate on the evolution of Antarctic ozone trends Bodeker Greg, Hamish Struthers, Irene Cionni, Petra Huck, Adrian Mcdonald. <i>Speaker Bodeker Greg</i> Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Room 2 Chairpersons: Fabrizio Sassi 02:00 pm Multi-model projections of ozone recovery in the 21st century Eyring Veronika, Darryn W. Waugh, Ccmval Team. <i>Speaker Eyring Veronika</i> 02:30 pm Chemical ozone loss from models and measurements deduced using ozone-tracer relations Miller Rolf, Simone Tilmes, Carsten Lemmen, Jens-Uwe Groo, Paul Konopka, Martin Dameris, Martin Riese. <i>Speaker Miller Rolf</i> 03:00 pm Past and future trends in the upper stratosphere and mesosphere from the Canadian Middle Atmosphere Model Fomichev Victor, Andreas I. Jonsson. <i>Speaker Fomichev Victor</i> 03:30 pm Coffee Break (30 minutes) 04:00 pm Variations of the residual circulation in northern hemispheric winter and their impact on Arctic ozone Tegtmeier Susann, Markus Rex, Kirstin Krger, Ingo Wohltmann, Kathrin Schillhammer. <i>Speaker Tegtmeier Susann</i> 04:15 pm Testing Lagrangian theories of internal wave spectra Klaassen Gary, Len Sonmor. <i>Speaker Klaassen Gary</i> 04:18 pm Thermospheric temperatures derived from atomic oxygen densities. Gusev Oleg, K.-U. Grossmann, H. Gerstner. <i>Speaker Gusev Oleg</i> 04:21 pm Comparison in Vortex-Based Coordinates of Stratospheric Ozone Measured by the JPL lidars at Table Mountain Facility, CA and Mauna Loa Observatory, HI and by the Aura-MLS Leblanc Thierry, I. Stuart Mcdermid, Lucien Froidevaux. <i>Speaker Leblanc Thierry</i> 04:24 pm Mesospheric bore observations during CAWSES 2005 campaign in Brazil Fechine Joaquim, C. M. Wrasse, A. F. Medeiros, P. P. Batista, B. R. Clemesha, L. M. Lima, D. Fritts, B. Laughman, M. J. Taylor, P. D. Paulet, M. G. Mlynczak, J. M. Russell. <i>Speaker Fechine Joaquim</i> 04:27 pm Gravity Wave Momentum Fluxes inferred from OH and O2 Airglow Image Observations Gobbi Delano. <i>Speaker Gobbi Delano</i> 04:30 pm The CO2 15 micron band additional cooling of the MLT due to the diurnal tide in a doubled CO2 atmosphere Ogibalov Vladimir. <i>Speaker Ogibalov Vladimir</i> 04:33 pm Low- frequency oscillations observed from meteor winds and timed/laber temperatures in the equatorial region Lima Lourivaldo, Joaquim Fechine, Hisao Takahashi, Cristiano Max Wrasse, G. Mlynczak, J. M. Russell. <i>Speaker Lima Lourivaldo</i> 04:36 pm Observations of waves and coupling at the Polar Environment Atmospheric Research Laboratory (PEARL) in Eureka, Canada Ward William, Alan Manson, Young-Min Cho, Tatyana Chshyolkova, Dragan Veselinovic, Ding Yi Wang, Tom Duck, Gordon Shepherd, Marianna Shepherd, Robert J. Sica, Kimberly Strong, Jim Whiteway. <i>Speaker Ward William</i> 04:39 pm Searching for Gravity Waves Sources in the Brazilian Equatorial Region During CAWSES Campaign Wrasse Cristiano, Hisao Takahashi, Joaquim Fechine, Amauri Fragoso Medeiros, Luis Fernando Guarneri, Luis Eduardo Antunes Vieira. <i>Speaker Wrasse Cristiano</i> 04:42 pm Persistence and decay of anomalies in the vertical ozone distribution Tegtmeier Susann, Vitali Fioletov. <i>Speaker Tegtmeier Susann</i> 04:45 pm Semidiurnal tides from the Extended Canadian Middle Atmosphere Model (CMAM) and comparisons with TIMED Doppler Interferometer (TIDI) and meteor radar observations Du Jian, William. E. Ward, Jens Oberheide, Takuji Nakamura. <i>Speaker Du Jian</i> 04:48 pm Instabilities of an atmospheric front that couple balanced and unbalanced motions Plougonven Riwal, Jonathan Gula, Vladimir Zeitlin. <i>Speaker Plougonven Riwal</i> 04:51 pm The Terdiurnal Tide Simulated by the Extended Canadian Middle Atmosphere Model (CMAM) Du Jian, William E, Ward. <i>Speaker Du Jian</i> 04:54 pm A dipole type of zonal wind variation in the upper troposphere and lower stratosphere during weak and strong years of indian summer monsoon V Madhu, K. Mohankumar. <i>Speaker V Madhu</i> 04:57 pm Monthly averaged ozone and nitrous oxide derived from ILAS/ILAS-II and Odin/SMR measurements for the Northern and Southern Hemispheric polar regions: A method for the validation of atmospheric photochemical models Khosravi Farahnaz, Michael H. Proffitt, Joachim Urban, Donal Murtagh, Hideaki Nakajima. <i>Speaker Khosravi Farahnaz</i> 05:00 pm The vertical structure of the winter stratospheric warming on lidar data Nikolashkin Semyen, Valery Marichev, Semyen Titov. <i>Speaker Nikolashkin Semyen</i> 05:03 pm COSMIC temperature and humidity profiles - A validation study Namboothiri Parameswaran, Pangaluru Kishore, Kiyoshi Igarashi. <i>Speaker Namboothiri Parameswaran</i> 05:06 pm A correlation between tidal wind shear and gravity waves in the low latitude MLT region. Clemesha Barclay, Paulo Batista. <i>Speaker Clemesha Barclay</i> 05:09 pm Longterm behavior of sporadic sodium layers at 23 S Simonich Dale, Barclay Clemesha, Paulo Prado Batista. <i>Speaker Simonich Dale</i> 05:12 pm A modeling study of O2 Atmospheric (0,0) nightglow wave perturbations observed from space Belyaev Alexey, Alpatov Victor. <i>Speaker Belyaev Alexey</i> 05:15 pm A model for interpretation of space-based optical data containing information about gravity waves in the mesosphere. Alpatov Victor. <i>Speaker Alpatov Victor</i> 05:18 pm Long term trends in tides in the lower thermosphere above Antarctica Murphy Damian, Evgeny G. Merzlyakov, Yuri I. Portnyagin, Robert A. Vincent. <i>Speaker Murphy Damian</i> 05:21 pm A three element atmosphere model Zamlutti Carlos. <i>Speaker Zamlutti Carlos</i> 05:24 pm Characteristics of stratospheric gravity waves in the tropics Analyzed by using GPS RO data in 2001-2006 Tsuda Toshitaka, M. Venkat Ratnam, Yukari Takayabu, Toshiaki Tozu. <i>Speaker Tsuda Toshitaka</i> 05:27 pm Stratosphere Troposphere Interactions during the passage of cyclones using Indian MST radar Govindankutty Mrudula, K. Mohan Kumar. <i>Speaker Govindankutty Mrudula</i>
<i>Hiroshi</i> 10:15 am Characterization of Iberian autumn precipitation through observed, simulated and reanalysed data Martn Mara Luisa, M. Luisa Martn, Marcos Sotillo, Francisco Valero, Ana Morata, Yolanda Luna. <i>Speaker Martn Mara Luisa</i> 10:30 am Diurnal Variations of the Meiyu/Baiu Rain Belt Observed by the TRMM Precipitation Radar Geng Biao, Hiroyuki Yamada. <i>Speaker Geng Biao</i> 10:45 am Coffee Break (30 minutes) 11:15 am The relationship between a negative SST anomaly over the Subtropical Central South Atlantic and the active phase of the SACZ Sato Naoki, Yasu-Masa Kodama. <i>Speaker Sato Naoki</i> 11:30 am The Influence of the Large-Scale Meridional Sea Surface Curvature on Tropical Circulation Regimes Borth Hartmut, Anne Kunz, Volkmar Wirth. <i>Speaker Borth Hartmut</i> 11:45 am variability 12:00 pm The influence of the NAO on oceanic precipitation Mariotti Annarita, Phillip Arkin. <i>Speaker Mariotti Annarita</i> 12:00 pm Simulation and projection of Arctic freshwater budget by the IPCC AR4 global climate models Kattsov Vladimir, John E. Walsh, William L. Chapman, Veronika Govorkova, Tatyana Pavlova, Xiangdong Zhang. <i>Speaker Kattsov Vladimir</i> 12:15 pm Sources for Large River Basin Precipitation Bosilovich Michael, Jiun-Dar Chern. <i>Speaker Bosilovich Michael</i> Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Room 1 Chairpersons: - 02:00 pm GEWEX Water and Energy Budget Studies Roads John. <i>Speaker Roads John</i> 02:15 pm Regional Water Vapor sources for the Euphrates-Tigris watershed Evans Jason. <i>Speaker Evans Jason</i> 02:30 pm Large-scale, coherent rainfall systems, the Madden-Julian Oscillation, and flow volumes in Australia's Murray-Darling Basin Padgham Mark. <i>Speaker Padgham Mark</i> 02:45 pm The Role of Orography and Soil Moisture in Hydrological Associated with Monsoon Onset in Southeast Asia Dairaku Koji. <i>Speaker Dairaku Koji</i> 03:00 pm A recent drought over the canadian prairies and its associated storms Stewart Ronald, William Henson, Kit Szeto. <i>Speaker Stewart Ronald</i> 03:15 pm Modélisation de la relation pluie - débit par les réseaux de neurones artificiels (RNA) : Cas du bassin versant de l' Oued Haddad (Nord Ouest de l'Algerie) Mohamed Achite. <i>Speaker Mohamed Achite</i> 03:30 pm Coffee Break (30 minutes) 04:00 pm The heat flux during the pre-monsoon period over the Indochina Peninsula Kiguchi Masashi, Shin Miyazaki, Shinjiro Kanae, Winsik Kim, Taikan Oki, Jun Matsumoto, Takehiko Satomura. <i>Speaker Kiguchi Masashi</i> 04:15 pm Tropical North African hydroclimate variability Yeshanew Abebe. <i>Speaker Yeshanew Abebe</i> 04:30 pm Conditions associated with deep convection and precipitation over Africa laing Arlene, Richard Carbone, Vincenzo Levizzani. <i>Speaker laing Arlene</i> Change of precipitable water vapor obtained by means of GPS at Khon Kaen, Thailand Satomura Mikio, Shun Touma, Seiichi Shimada, Sununtha <i>Speaker Satomura Mikio</i> Timescale-Dependent Characteristics of U.S. Precipitation Anomalies Jiang Yundi. <i>Speaker Jiang Yundi</i> 04:51 pm Linking Monthly Precipitation and Atlantic Weather Regimes: An Information Theory Approach Pires Carlos. <i>Speaker Pires Carlos</i> 04:54 pm Analysis of time serial of precipitation water vapor sensed by GPS network in three gorges area Wan Rong, Guoguang Zheng, Kenneth Howard, Wei Wang, Weihua Zhang. <i>Speaker Wan Rong</i> 04:57 pm WRF model simulation of an intense convective system event over South America Sakamoto Meiry, Rosmerir Porfirio Da Rocha, Tercio Ambrizzi, Luiz Augusto Toledo Machado. <i>Speaker Tercio Ambrizzi</i> 05:00 pm A Composite Study of the Heavy Rainfall Events over Northern Taiwan during the Meiyu Season Chou Yu-Chieh, Song-Chin Lin. <i>Speaker Chou Yu-Chieh</i> 05:03 pm Warm Season Cloud-to-Ground LightningPrecipitation Relationships around Chengdu Wang Weijia, Zhang Shilin. <i>Speaker Wang Weijia</i> 05:06 pm River flow trends in La Plata Basin: relationship with ENSO phases Doyle Moira, Vicente Barros, Ricardo Vidal. <i>Speaker Doyle Moira</i> Structure of tropical squall line observed in HARIMAU 2006 campaign Fudeyasu Hironori, Shuichi Mori, Namiko Sakurai, Jun-Ichi Hamada, Masayuki Kawashima, Yasushi Fujiyoshi, Fadli Syamsudin, Emrizal, Manabu D. Yamanaka, Jun Matsumoto. <i>Speaker Fudeyasu Hironori</i> 05:12 pm Effect of incorporating parameter uncertainty on extreme rainfall estimates. Kagoda Paulo, J. G. Ndiritu. <i>Speaker Kagoda Paulo</i> 05:15 pm Distributed Rain-on-Snow Mixed Flood Forecast Model and Its Application Jian Wu, Lilan. <i>Speaker Jian Wu</i> 05:18 pm Numerical study of warm detailed microphysics evolution of cumulus cloud updrafts Shpyg Vitalii, Pirmach Ganna. <i>Speaker Pirmach Ganna</i> 05:21 pm Lake evaporation of a semiarid small dam using a floating station data Barbosa Carlos, Arthur Mattos. <i>Speaker Arthur Mattos</i> 05:24 pm Ecohydrological forecast in assessing the environmental vulnerability Codruta Badaluta Minda, Mocanu Flaminia Claudia, Cretu Gheorghe. <i>Speaker Codruta Badaluta Minda</i> 05:27 pm Ecohydrological modeling in the management of water resources Flaminia Claudia Mocanu, Badaluta-Minda Codruta, Cretu Gheorghe. <i>Speaker Flaminia Claudia Mocanu</i> JMS010 Tropical Cyclones Convener: Smith Roger, Baines Peter Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Department of Physics Room A 09:30 am Sensitivity of a Simplified Tropical Cyclone Intensity Model Demaria Mark, Chelle Gentemann. <i>Speaker Demaria Mark</i> 10:00 pm Impacts of ice phase processes on tropical cyclone development Sawada Masahiro, Toshiki Iwasaki. <i>Speaker Sawada Masahiro</i> 10:15 am Numerical Simulation of the intensification and movement of tropical cyclones over Bay of Bengal: A case study Hari Prasad Dasari, Dodla Venkata Bhaskar Rao. <i>Speaker Hari Prasad Dasari</i> Sudden onset of eye occurrence in thermally forced axisymmetric vortices Wirth Volkmar, Timothy Dunkerton. <i>Speaker Wirth Volkmar</i> 11:00 am Coffee Break (30 minutes) 11:30 am Mesoscale Model Investigation of Ocean-Atmospheric Interactions and Hurricane Predictive Index (HPI) Associated with Hurricane Katrina land fall over Louisiana-Mississippi Gulf Coast Remata Suseela, Markeitta Benjamin, Arundhati Surakanti. <i>Speaker Remata Suseela</i> 11:45 am Boundary-layer Wind Structure in Landfalling Tropical Cyclones Tang Xiao-Dong, Zhe-Min Tan. <i>Speaker Tang Xiao-Dong</i> 12:00 pm Effects of aerosols on lightning and intensity of tropical cyclones Khain Alexander, Alexander Khain, Naftali Cohen, Yaron Segal, Daniel Rosenfeld. <i>Speaker Khain Alexander</i> A Godunov-Type Finite Volume Scheme for Simulating Hurricanes Ahmad Nash'At. <i>Speaker Ahmad Nash'At</i> Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Department of Physics Room A 02:00 pm An analytical expression for the amplitude of wavenumber-one vertical velocity in the inner-core region of tropical cyclones under the influence of ambient vertical shear Ueno Mitsuru. <i>Speaker Ueno Mitsuru</i> 02:30 pm Seasonal Simulation and Potential Predictability of Tropical Cyclones using the FSU/COAPS Climate Model Cocke Steven, Tim Larow, Dong-Wook Shin, Young-Kwon Lim.	Frederic Vitart 03:00 pm Studying Intense Tropical Cyclones Using the World Wide Lightning Location Network Solorzano Natalia, Jeremy N. Thomas, Robert H. Holzworth. <i>Speaker Solorzano Natalia</i> 03:15 pm Evaluating and Improving Ocean Model Response to Tropical Cyclones for Improving Intensity Forecasts Halliwell George, Lynn K. Shay, Peter Vertes, William J. Teague. <i>Speaker Halliwell George</i> 03:30 pm Coffee Break (30 minutes) 04:00 pm Long-wave response of the West Florida shelf to the landfall of Hurricane Wilma, October 2005 Yankovsky Alexander. <i>Speaker Yankovsky Alexander</i> 04:15 pm The effects of the vertical wind shear on intensity and rainfall structure of strong storm Biliss(2006) Yu Jinhua, Zhe-Min Tan. <i>Speaker Yu Jinhua</i> 04:30 pm Wind Field Decomposition, Adjustment and Retrievals by Using Variational Method Huang Sixun. <i>Speaker Huang Sixun</i> 04:45 pm Sensitivity analysis of a statistical-dynamic model with the adjoint method Xiang Jie, Xijun Zhang, Yi Luan. <i>Speaker Xiang Jie</i> 05:00 pm Triggering of the Positive Indian Ocean Dipole Events by Severe Cyclones over the Bay of Bengal Pavanathara Francis, Prof. Sulochana Gadgil. <i>Speaker Pavanathara Francis</i> 05:15 pm Tropical cyclones formed in 30-day simulation by cloud-system-resolving global nonhydrostatic model (NICAM) Yanase Wataru, Masaki Satoh, Hiroaki Miura, Hirofumi Tomita, Tomoe Nasuno, Shin-Ichi Iga, Akira Noda. <i>Speaker Yanase Wataru</i> 05:18 pm Assessing severe wind hazard from tropical cyclones Arthur Craig, Nariman Habilil. <i>Speaker Arthur Craig</i> 05:21 pm The Emergence of Numerical Weather Prediction: Richardson's Dream to the ENIAC Integrations Maggero Balla. <i>Speaker Maggero Balla</i> MS003 Aerosols, Radiation and Clouds (IRC, ICCP, ICACGP) Convener: Nakajima Teruyuki, Isaac George Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Department of Economics Main Hall 09:30 am Use A-train satellite data to study interactions between cloud, aerosol and precipitation Li Zhanqing. <i>Speaker Li Zhanqing</i> 09:55 am Characterization of tropical convection in Southern India with wind profilers and scanning Doppler weather radar G Viswanathan, R. Rangarao, V. K. Anandan. <i>Speaker G Viswanathan</i> 10:20 am Study of aerosol and cloud interactions over North Eastern China Zhao Chunsheng. <i>Speaker Zhao Chunsheng</i> 10:45 am Coffee Break (30 minutes) 11:15 am Controlling Factors of Aerosol Radiative Forcing in Asia Nakajima Teruyuki, Toshihiko Takemura, Akiko Higurashi, Takashi Y. Nakajima, Kentarou Suzuki, Takamichi Iguchi, Daisuke Goto. <i>Speaker Nakajima Teruyuki</i> 11:40 am Approximation of cloud drop distributions by analytical functions Kogan Yefim, David Mechem, Zena Kogan. <i>Speaker Kogan Yefim</i> 12:05 pm How much they are in confusion! surface temperature, solar global radiation, sunshine duration, cloud amount and pan evaporation over China Shi Guang-Yu, Tadahiro Hayasaka, Sai-Chun Tan, Biao Wang, Shou-Guo Ding, Zhi-Hua Chen, Hui-Zheng Che. <i>Speaker Shi Guang-Yu</i> Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Main Hall 02:00 pm Potential Radiative Forcings to the Surface Shortwave Radiation Hayasaka Tadahiro, Kazuaki Kawamoto. <i>Speaker Hayasaka Tadahiro</i> 02:25 pm Some Measurement Results Derived from 3 Aeronet Sites in Beijing Chen Hong-Bin, X.H. Fan, X.A. Xia, P. Goloub, Z.Q. Li, P.C. Zhang. <i>Speaker Chen Hong-Bin</i> 02:50 pm Column-integrated aerosol optical properties and aerosol effects on surface solar radiation in eastern China Xia Xiangao, Z. Li, P. Wang, H. Chen, M. Cribb. <i>Speaker Xia Xiangao</i> 03:15 pm Optical properties of trade-wind cumuli: observations and modeling Grabowski Wojciech, Sally Mcfarlane, Joanna Slawinska, Hanna Pawlowska. <i>Speaker Grabowski Wojciech</i> 03:40 pm Coffee Break (30 minutes) 04:10 pm A regional climate chemistry model and its preliminary application on effect of the tropospheric sulfate and ozone on cliamte of China Wang Tjian, L Zhang, S Li. <i>Speaker Wang Tjian</i> 04:35 pm Bulk microphysics schemes suitable for assessing the indirect impact of atmospheric aerosols Morrison Hugh. <i>Speaker Morrison Hugh</i> 05:00 pm Tropical high clouds: variations and radiative effects Lin Bing, Bing Lin, Patrick Minnis, Kuan-Man Xu, Bruce Wielicki, Lin Chambers, Yongxiang Hu, Alice Fan, Wenbo Sun. <i>Speaker Lin Bing</i> MS008 Ensembles and Probabilistic Forecasting (ICDM) Convener: Bishop Craig Oral 2 July, 2007 from 11:00 AM to 12:30 AM - Department of Chemistry Room G 11:00 am Model error in probabilistic climate forecasting Allen Myles, Carl Christensen, Tolu Aina, Nicholas Faull, David Frame. <i>Speaker Allen Myles</i> 11:30 am Probabilistic predictions of climate change in Australia using the Reliability Ensemble Average (REA) of AR4 model simulations Moise Aurel, Debra A. Hudson. <i>Speaker Moise Aurel</i> 11:45 am A comparison of pre- and post-model resampling schemes for seasonal streamflow forecasting with Ensemble Streamflow Prediction method Gan Thian Yew, Adam K. Gobena. <i>Speaker Gan Thian Yew</i> 12:00 pm Prediction of Climate Indices Using the First Passage Time Chu Peter. <i>Speaker Chu Peter</i> Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room G 02:00 pm Climate change ensemble prediction at the Hadley Centre Booth Ben, Mat Collins, B. Bhaskaran, Glen Harris, James Murphy, David Sexton, Mark Webb. <i>Speaker Booth Ben</i> 02:30 pm A regional scale ensemble prediction system for 10 days - 1 month range Sasu Roxana-Monica, Mihaela Caian. <i>Speaker Sasu Roxana-Monica</i> Seasonal prediction of Korea regional climate from preceding large-scale climate indices Yeonhee Kim, Woo-Seop Lee. <i>Speaker Yeonhee Kim</i> 02:40 pm Ensemble Hindcasts of SST Anomalies in the Tropical Pacific Using an Intermediate Coupled Model Zheng Fei, Jiang Zhu, Rong-Hua Zhang. <i>Speaker Zheng Fei</i> 02:45 pm Use of linear discriminant methods for calibration of seasonal probability forecasts Colman Andrew, Dr Richard Graham. <i>Speaker Colman Andrew</i> 02:46 pm Ensemble Data Assimilation with the NCEP GFS Hamill Thomas. <i>Speaker Hamill Thomas</i> 03:16 pm Coffee Break (30 minutes) 03:46 pm Developing multiple approaches for mesoscale ensemble data assimilation and prediction Liu Yubao, Joshua Hacker, Mei Xu, Wani Wu, Thomas T Warner, Scott Swerdlin. <i>Speaker Liu Yubao</i> 04:01 pm Data assimilation through particle filters for small diffusion kernels on branches of prediction Krause Paul. <i>Speaker Krause Paul</i> 04:16 pm Comparison of Ensemble-based Filters for the Stochastic Cessi-Young Equation Kim Sangil, Gregory L. Eyink. <i>Speaker Kim Sangil</i> 04:31 pm ECO-RAP, Part 1: A new adaptive error covariance localization tool for 4-dimensional ensemble data assimilation Bishop Craig. <i>Speaker Bishop Craig</i> 05:01 pm Nowcasting with Indistinguishable States Du Hailiang, Kevin Judd, Leonard A Smith. <i>Speaker Du Hailiang</i> 05:06 pm Particle filtering for strongly non-linear ecosystem modelling Losa Svetlana, Gennady Kivman, Jens Schrtter, Manfred Wenzel. <i>Speaker Losa Svetlana</i> Middle Atmosphere Science (ICMA) Convener: Hamilton Kevin Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Department of Economics	

<i>Deusers</i>	
Impact of channel geometry and rotation on the trapping of internal tides	Drijffhout Sybren, Leo Maas. <i>Speaker Drijffhout Sybren</i>
04:30 pm of Rockall Channel	Inertial convective subrange in the bottom boundary layer
	Bouruet-Aubertot Pascale, Hans Van Haren. <i>Speaker Bouruet-Aubertot Pascale</i>
04:45 pm ocean	Dissipation mechanism in the internal wave field in a deep ocean
	Ibragimov Ranis. <i>Speaker Ibragimov Ranis</i>
05:00 pm consequence of inertial instability	Intermittent mixing in equatorial deep jets as a consequence of inertial instability
	Menesguen Claire, Bach Lien Hua, Richard Schopp. <i>Speaker Menesguen Claire</i>
05:15 pm	Mixing in the equatorial thermocline
	Richards Kelvin. <i>Speaker Richards Kelvin</i>
PS011 Underpinning Ocean Science	Fundamental Physical and Chemical Principles
Conveners: McDougall Trevor	Conveners: McDougall Trevor
Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Academy of Fine Arts Library	Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Academy of Fine Arts Library
09:30 am Zooplankton	On acoustic volume backscattering by Antarctic at 38 and 150 KHz using ADCPS Echo Data.
	Baques Michele, Silvia Blanc. <i>Speaker Silvia Blanc</i>
10:06 am Seawater	A New Look at the Conductivity Density Relationship for Seawater
	Millero Frank. <i>Speaker Millero Frank</i>
10:42 am Measurements	Deep Ocean CO2 Hydration Kinetics Fundamental Rate Measurements
	Peltzer Edward, Peter G. Brewer, Rachel M. Dunk, William J. Kirkwood, Peter M. Walz. <i>Speaker Peltzer Edward</i>
11:18 am	Coffee Break (30 minutes)
11:48 am	Absolute Salinity versus Practical Salinity and other proposed revisions to Seawater Thermodynamics such as the equation of state
	McDougall Trevor. <i>Speaker McDougall Trevor</i>
Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Academy of Fine Arts Library	Oral 2 July, 2007 from 02:00 PM to 05:30 PM - Academy of Fine Arts Library
Chairpersons: -	Chairpersons: -
02:00 pm	Polarizations of the oceanic surface flow
	Elipot Shane, Sarah Gille, Rick Lumpkin. <i>Speaker Elipot Shane</i>
02:36 pm	Will slowing of the MOC warm or cool Europe?
	Nof Doron. <i>Speaker Nof Doron</i>
03:12 pm	Thermodynamic efficiency of the oceans
	Tailleux Remi. <i>Speaker Tailleux Remi</i>
03:48 pm	Coffee Break (30 minutes)
04:18 pm	Baroclinic instability over topography: Eddy formation near the West coast of Greenland
	Bracco Annalisa. <i>Speaker Bracco Annalisa</i>
04:54 pm	The Raman signal of water in seawater
	Dunk Rachel, Peter G Brewer, Edward T Peltzer, Peter M Walz. <i>Speaker Dunk Rachel</i>

PS012 their Future Behaviour (invited abstracts only)	The Oceans - Their Past and Present; Considerations on their Future Behaviour (invited abstracts only)
Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Department of Mathematics Room A2	Oral 2 July, 2007 from 09:30 AM to 12:30 AM - Department of Mathematics Room A2
09:30 am	Future changes in climate, ocean circulation, ecosystems and biogeochemical cycling simulated for a business-as-usual CO2 emission scenario until year 4000 AD
	Schmittner Andreas, Andreas Oschlies, H. Damon Matthews, Eric D. Galbraith. <i>Speaker Schmittner Andreas</i>
10:10 am	Nitrogen, Oxygen, Physics and Export Production in the late Quaternary North Pacific: Links to CO2, Climate and the Southern Ocean
	Pedersen Tom, Alice Chang, Eric Galbraith, Ingrid Hendy, Sam Jaccard, Danny Sigman. <i>Speaker Pedersen Tom</i>
10:50 am	Coffee Break (30 minutes)

03 July, 2007

US002 and the international years of 2007/08	IGY+50 and I*Y: The International Geophysical Year 1957/58 and the international years of 2007/08
Conveners: Kuhn Michael	Conveners: Kuhn Michael
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Rectorate Main Hall	Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Rectorate Main Hall
09:00 am Commons	eGY - Towards an Earth and Space Science Information Commons
	Charles Barton, Daniel Baker. <i>Speaker Charles Barton</i>
09:40 am	The Earth's radiation belts: history and future prospects
	Baker Daniel. <i>Speaker Baker Daniel</i>
10:20 am	Is it still the same old Antarctic ice sheet? A look back at Antarctic glaciology since the IGY
	usr3720 usr3720. <i>Speaker usr3720 usr3720</i>
11:00 am	Coffee Break (30 minutes)
11:30 am	Data for the Ages--A look at datas role in science over the 125 year history of IPY
	Parsons Mark, Ruth Duerr, Ronald S. Weaver, Vladimir Papitashvili. <i>Speaker Parsons Mark</i>
US003	Global Earth Observing Systems
Conveners: Beutler Gerhard, Alverson Keith	Conveners: Beutler Gerhard, Alverson Keith
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Rectorate Main Hall	Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Rectorate Main Hall
02:00 pm	GEOS: The Global Earth Observation System of Systems
	Achache Jos. <i>Speaker Achache Jos</i>
02:20 pm	The Earth Explorers of ESAs Living Planet Programme
	Drinkwater Mark. <i>Speaker Drinkwater Mark</i>
02:40 pm	The Global Geodetic Observing System (GGOS)
	Rothacher Markus, Ruth Neilan, Hans-Peter Plag. <i>Speaker Rothacher Markus</i>
03:00 pm	An integrated, operational global ocean observing and hazard warning system
	Alverson Keith. <i>Speaker Alverson Keith</i>
03:20 pm	Platforms and data for a detailed mapping of the geomagnetic
	Mandea Mioara. <i>Speaker Mandea Mioara</i>
03:40 pm	Coffee Break (30 minutes)
04:10 pm	Global hydrological data - still a major challenge
	Askew Arthur. <i>Speaker Askew Arthur</i>
04:30 pm to come	Systematic ocean observations - revolutions past and yet to come
	Gould W John. <i>Speaker Gould W John</i>
04:50 pm	Coordination between In-Situ Global Observing Systems in the Seismological Community
	Giardini Domenico, T. Ahern, R. Butler, B. Dost, J. Lyons, S. Tsuboi. <i>Speaker Giardini Domenico</i>
05:10 pm	Understanding sea level rise and variability
	Neilan Ruth, Thorikild Aarup, John Church, Stan Wilson, Phil Woodworth. <i>Speaker Neilan Ruth</i>
JAS001	Planetary cores: physics, chemistry and dynamics
Conveners: Tanaka Satoru, Cardin Philippe	Conveners: Tanaka Satoru, Cardin Philippe
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Mathematics Room A0	Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Mathematics Room A0
09:00 am	Characteristic parameters of geomagnetic jerks related to mantle conductivity
	Nagao Hiromichi, Hisayoshi Shimizu, Hisashi Utada. <i>Speaker Nagao Hiromichi</i>
09:20 am	Coupling of lowermost mantle and uppermost inner core by convection in the Earth's outer core
	Aubert Julien, Hagay Amit, Peter Olson, Gauthier Hulot. <i>Speaker Aubert Julien</i>
09:40 am	Topographic core-mantle coupling and subdecadal variations of the core flow
	Asari Seiki, Hisayoshi Shimizu, Hisashi Utada. <i>Speaker Asari Seiki</i>
10:00 am	The effect of the inner core dimension on the termination of Martian Dynamo
	Jiang Weiyuan, Weijia Kuang. <i>Speaker Jiang Weiyuan</i>
10:20 am	Geometrical and thermal effects of the inner core on magnetohydrodynamic dynamos
	Oishi Yusuke, Ataru Sakuraba, Yozo Hamano. <i>Speaker Oishi Yusuke</i>
10:40 am	Coffee Break (30 minutes)
11:10 am	Turbulent thermal convection in liquid metal and the effect of magnetic field
	Yanagisawa Takatoshi, Yasuko Yamagishi, Ataru Sakuraba, Yuji Tasaka, Kanako Yano, Yasushi Takeda, Yozo Hamano. <i>Speaker Yanagisawa Takatoshi</i>
11:30 am	The Role of Resonant Triads in Driving Planetary Dynamos
	Aldridge Keith, Ross Baker, David Mcmillan. <i>Speaker Aldridge Keith</i>

11:30 am	Effects of Si on the crystal structure and elastic property of Fe at Earths inner core pressures
	Tsuchiya Taku, Mika Fujibuchi. <i>Speaker Tsuchiya Taku</i>
12:10 pm	Observational constraints on core structure and core chemistry
	Helfrich George, James Wookey, Oliver Lord, Mike Walter. <i>Speaker Helfrich George</i>
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A0	Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A0
02:00 pm	A search for Slichter mode using extensometer records in Japan due to the 2004 Great Sumatra earthquake
	Kawasaki Ichiro, Azumi Komaki, Wataru Morii, Yuzo Ishikawa, Tsuneya Tsubokawa, Makoto Okubo. <i>Speaker Kawasaki Ichiro</i>
02:20 pm	Seismic constraints on inner core structure from normal mode data, and comparison with mineral physics
	Deuss Arwen. <i>Speaker Deuss Arwen</i>
02:40 pm	Inner core anisotropy investigated with normal modes and body waves
	Irving Jessica, Dr Arwen Deuss. <i>Speaker Irving Jessica</i>
03:00 pm	Recent progress in models of planetary interiors
	Rivoldini Attilio, Verhoeven Olivier, Mocquet Antoine, van Hoolst Tim, Dehant Veronique. <i>Speaker Rivoldini Attilio</i>
03:20 pm	Uncertainty in seismological parameters within the core
	Valette Bernard. <i>Speaker Valette Bernard</i>
03:40 pm	Coffee Break (30 minutes)
04:10 pm	Splitting of Normal Modes by Magnetic Field
	Rogister Yves, Bernard Valette, Mickael Delatre. <i>Speaker Rogister Yves</i>

04:30 pm	Investigating the 2003 geomagnetic jerk by simultaneous inversion of the secular variation and acceleration for both the core flow and its acceleration
	Silva Luis. <i>Speaker Silva Luis</i>
JAS006	Electrodynamical and chemical effects in the middle and upper atmosphere generated by thunderstorms
Conveners: Sao Sabbas Fernanda, Rodger Craig, Sentman Davis, Blanc Elisabeth	Conveners: Sao Sabbas Fernanda, Rodger Craig, Sentman Davis, Blanc Elisabeth
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Physics Room B	Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Physics Room B
02:00 pm	Planetary Equatorial Waves, Typhoons/Hurricanes, and Terrestrial Gamma-Ray Flashes: What do they have in common?
	Roussel-Dupre Robert, Zhen Huang, Douglas Revelle, Jonah Colman. <i>Speaker Roussel-Dupre Robert</i>
02:30 pm	Observations of Burst-like VLF activity in association with sprites and correlations with intracloud lightning activity
	Marshall Robert, Umrans S. Inan, Walter A. Lyons. <i>Speaker Marshall Robert</i>
02:45 pm	Climatological Variations of upper atmosphere using Whistlers at low latitude
	Patel Ravindra Pratap. <i>Speaker Patel Ravindra Pratap</i>
03:00 pm	Seeking sprite-induced signatures in remotely sensed middle atmosphere NO2
	Arnone Enrico, Antti Kero, Carl-Fredrik Enell, Bianca Maria Dinelli, Massimo Carlotti, Marco Ridolfi, Esa Turunen, Neil F. Arnold. <i>Speaker Arnone Enrico</i>
03:15 pm	Preliminary kinetic simulations of the transient electron driven air plasma chemistry stimulated by Sprites: impact on the formation of nitride oxides
	Gordillo-Vazquez Francisco J. <i>Speaker Gordillo-Vazquez Francisco J</i>
03:30 pm	Coffee Break (30 minutes)
04:00 pm	The chemical impact of transient luminous events in the middle atmosphere
	Enell Carl-Fredrik, Enrico Arnone, Olivier Chanrion, Toru Adachi, Pekka T. Verronen, Annika Seppl, Torsten Neubert, Thomas Ulich, Esa Turunen. <i>Speaker Enell Carl-Fredrik</i>
04:30 pm	TLE influence upon the neutral chemistry of the upper atmosphere
	Rodger Craig, Annika Seppl, Mark A. Clilverd. <i>Speaker Rodger Craig</i>
04:45 pm	Modeling the influence of a high altitude discharge on the chemical balance of the mesosphere
	Evtushenko Andrey. <i>Speaker Evtushenko Andrey</i>
05:00 pm	Air Chemistry of Sprite Streamers
	Sentman Davis, H. Stenbaek-Nielsen, G. Mcharg, J. Morrill. <i>Speaker Sentman Davis</i>

03:30 pm	Coffee Break (30 minutes)
04:00 pm	The chemical impact of transient luminous events in the middle atmosphere
	Enell Carl-Fredrik, Enrico Arnone, Olivier Chanrion, Toru Adachi, Pekka T. Verronen, Annika Seppl, Torsten Neubert, Thomas Ulich, Esa Turunen. <i>Speaker Enell Carl-Fredrik</i>
04:30 pm	TLE influence upon the neutral chemistry of the upper atmosphere
	Rodger Craig, Annika Seppl, Mark A. Clilverd. <i>Speaker Rodger Craig</i>
04:45 pm	Modeling the influence of a high altitude discharge on the chemical balance of the mesosphere
	Evtushenko Andrey. <i>Speaker Evtushenko Andrey</i>
05:00 pm	Air Chemistry of Sprite Streamers
	Sentman Davis, H. Stenbaek-Nielsen, G. Mcharg, J. Morrill. <i>Speaker Sentman Davis</i>

03:30 pm	Coffee Break (30 minutes)
04:00 pm	The chemical impact of transient luminous events in the middle atmosphere
	Enell Carl-Fredrik, Enrico Arnone, Olivier Chanrion, Toru Adachi, Pekka T. Verronen, Annika Seppl, Torsten Neubert, Thomas Ulich, Esa Turunen. <i>Speaker Enell Carl-Fredrik</i>
04:30 pm	TLE influence upon the neutral chemistry of the upper atmosphere
	Rodger Craig, Annika Seppl, Mark A. Clilverd. <i>Speaker Rodger Craig</i>
04:45 pm	Modeling the influence of a high altitude discharge on the chemical balance of the mesosphere
	Evtushenko Andrey. <i>Speaker Evtushenko Andrey</i>
05:00 pm	Air Chemistry of Sprite Streamers
	Sentman Davis, H. Stenbaek-Nielsen, G. Mcharg, J. Morrill. <i>Speaker Sentman Davis</i>
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP	Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -	Chairpersons: -
Coupling into the magnetosphere caused by the lightning-induced acoustic-gravity wave	Coupling into the magnetosphere caused by the lightning-induced acoustic-gravity wave
	Shalimov Sergei, Nikolai Erokhin. <i>Speaker Shalimov Sergei</i>
Observational and Numerical studies of Winter Thunderstorms with Positive C-G lightning over the Sea of Japan	Observational and Numerical studies of Winter Thunderstorms with Positive C-G lightning over the Sea of Japan
	Hayashi Syugo. <i>Speaker Hayashi Syugo</i>
The phase spectra approach to the analysis of Schumann resonance (SR) transients	The phase spectra approach to the analysis of Schumann resonance (SR) transients
	Ondraskova Adriena, Pavel Kostecky, Sebastian Sevcik, Ladislav Rosenberg. <i>Speaker Ondraskova Adriena</i>
JAS009	Equatorial atmosphere-ionosphere coupling processes: responses to forcing from lower atmosphere and magnetosphere
Conveners: Abdu Mangalathayil	Conveners: Abdu Mangalathayil
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room E	Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room E
09:00 am	Global Ionospheric Weather observed by the FORMOSAT-3/COSMIC
	Lin Chien-Hung, Chun-Chieh Hsiao, Jann-Yenq Liu, Ho-Fang Tsai, Chao-Han Liu. <i>Speaker Lin Chien-Hung</i>
09:30 am	6-hr variation of thermospheric meridional wind at low latitudes as deduced from a meridional ionosonde network
	Maruyama Takashi, Masabumi Kawamura, Kenro Nozaki, Susumu Saito, Hisao Kato, Mamoru Ishii. <i>Speaker Maruyama Takashi</i>
09:50 am	Observations and model calculations of the F3 layer in Southeast Asia
	Uemoto Jyunpei, Takayuki Ono, Takashi Maruyama, Susumu Saito, Masahide Iizima, Atsushi Kumamoto. <i>Speaker Uemoto Jyunpei</i>
10:05 am	Relation between equatorial zonal electric field and F region electron density distribution
	Stolle Claudia, Manoj, C. Lhr, H., Maus, S., Alken, P.. <i>Speaker Stolle Claudia</i>
10:20 am	Coffee Break (30 minutes)
10:50 am	Observations of the low latitude solar eclipse on 8 April 2005 by CHAMP
	M. Tomas Ana Teresa, Hermann Luehr, Matthias Foerster, Stefanie Rentz, Martin Rother. <i>Speaker M. Tomas Ana Teresa</i>
11:05 am	He+ Density depletions (bubbles) and thermospheric meridional wind
	Sidorova Larissa, Sergey Vitalvich Filippov. <i>Speaker Sidorova Larissa</i>

11:20 am	Unusual ionospheric effects observed in the brazilian sector during the October 2003 solar flare
	Becker-Guedes Fabio, Yogeshwar Sahai, Paulo Roberto Fagundes, Washington L. C. Lima, Alessandro Jose De Abreu, Valdir G. Pillat. <i>Speaker Becker-Guedes Fabio</i>
11:35 am	Investigation of dependence of substorm effects in equatorial electrojet and parameters of F-Region of ionosphere on the separate stations from ut substorm beginning on the basis of GSM TIP
	Klimenko Maksim. <i>Speaker Klimenko Maksim</i>
11:50 am	Attenuation of GPS scintillations during the 2003 Halloween Storm, at Natal, Brazil
	Bonelli Enivaldo, Flavio Enrique Costa. <i>Speaker Bonelli Enivaldo</i>

Enivaldo	Enivaldo
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room E	Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room E
02:00 pm	Storm time electric fields and ionosphere/thermosphere responses over low latitudes
	Fejer Bela G. <i>Speaker Fejer Bela G.</i>
02:30 pm	Coupling in the magnetosphere-ionosphere-atmosphere system during October 30, 2003 superstorm.
	Verkhoglyadova Olga, Bruce T. Tsurutani, Anthony J. Mannucci, Akinori Saito, Tohru Araki, Toshihaka Tsuda, Kiyohumi Yumoto, David Anderson. <i>Speaker Verkhoglyadova Olga</i>
03:00 pm	Longitude/ local time dependent ionospheric responses to the October 2003 super storm over equatorial and low latitudes.
	Abdu Mangalathayil, Takashi Maruyama, Inez Staciariini Batista, Susumu Saito, Maho Nakamura. <i>Speaker Abdu Mangalathayil</i>
03:20 pm	Coffee Break (30 minutes)
03:50 pm	Evolution of spatial structure in equatorial plasma bubbles generated due to magnetospheric forcing
	Bhattacharyya Archana, B. Kakad, D. Tiwari. <i>Speaker Bhattacharyya Archana</i>
04:20 pm	Ionospheric positive storm phase: a model-data comparison
	Lu Gang, Larisa Goncharenko, Arthur Richmond, Raymond Roble, Nestor Aponte. <i>Speaker Lu Gang</i>
04:50 pm	Effects of penetration electric fields on equatorial plasma bubbles
	Huang Cheryl, William J. Burke. <i>Speaker Huang Cheryl</i>

ASI002	ASI002
Continental reconstruction, reference frames	Paleomagnetism and geodynamics neotectonics, continental reconstruction, reference frames
Conveners: Yo-ichiro Otofuji, Geuna Silvana, Appel Erwin	Conveners: Yo-ichiro Otofuji, Geuna Silvana, Appel Erwin
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP	Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Analysis of a Permo-Triassic polarity transition in different absolute reconstructions of Pangaea, considering a model with features of the present earth magnetic field	Analysis of a Permo-Triassic polarity transition in different absolute reconstructions of Pangaea, considering a model with features of the present earth magnetic field
	Vizan Haroldo, van Zele Mara Andrea. <i>Speaker Vizan Haroldo</i>
Magnetostratigraphy Section of the Late Pliocene Pleistocene of Armenia	Magnetostratigraphy Section of the Late Pliocene Pleistocene of Armenia
	Minasian Julya. <i>Speaker Minasian Julya</i>
Geomagnetic and geological events	Geomagnetic and geological events
	Minasian Julya, Karakhanian Armen. <i>Speaker Minasian Julya</i>
Constraining the timing of southern Central Andes vertical axis rotations	Constraining the timing of southern Central Andes vertical axis rotations
	Prezzi Claudia, Pablo J. Caffè. <i>Speaker Prezzi Claudia</i>
Paleomagnetic data of Lower Jurassic marine strata from west-central Argentina: a new Jurassic Apparent Polar Wander Path for South America	Paleomagnetic data of Lower Jurassic marine strata from west-central Argentina: a new Jurassic Apparent Polar Wander Path for South America
	Iglesia Llanos Maria Paula, Alberto Carlos Riccardi, Silvia Elisabet Singer. <i>Speaker Iglesia Llanos Maria Paula</i>
Paleomagnetism of Permian red beds in Punta del Viento, eastern flank of the Sierra de Umango, La Rioja, Argentina: the Paganzo basin revisited	Paleomagnetism of Permian red beds in Punta del Viento, eastern flank of the Sierra de Umango, La Rioja, Argentina: the Paganzo basin revisited
	Geuna Silvana, Leonardo Daro Escosteguy, Carlos Oscar Limarino. <i>Speaker Geuna Silvana</i>
Paleomagnetic and AMS results of Late Triassic red beds, CAMP-related lava flows and Lower Jurassic limestones from Argana Basin, Morocco: geodynamic implications.	Paleomagnetic and AMS results of Late Triassic red beds, CAMP-related lava flows and Lower Jurassic limestones from Argana Basin, Morocco: geodynamic implications.
	Ruiz-Martnez Vicente Carlos, Juan Jos Villalán, Alicia Palencia-Ortas. <i>Speaker Juan Jos Villalán</i>
ASI003	ASI003
Magnetic dating on all time scales	Magnetic dating on all time scales
Conveners: Batt Cathy, Schnepf Elisabeth	Conveners: Batt Cathy, Schnepf Elisabeth
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room C	Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room C
09:00 am	Paleomagnetic comparisons of late Pleistocene sediment records
	Pilipenko Olga. <i>Speaker Pilipenko Olga</i>
09:30 am	Evaluating archaeomagnetic dates using prior information as part of a Bayesian model. an archaeological case study
	Griffiths Seren, Dr Mark Hounslow, Dr Alex Bayliss, Ben Ford, Steve Teague, Paul Linford. <i>Speaker Griffiths Seren</i>
10:00 am	Bayesian archaeomagnetic dating: The RENDATE software
	Philippe Lanos, Dufresne Philippe. <i>Speaker Philippe Lanos</i>
10:30 am	Coffee Break (30 minutes)
11:00 am	Relative paleointensity studies in sediments from the perit-antarctic margins: applications to dating of pleistocene sequences
	Sagnotti Leonardo, Patrizia Macr. <i>Speaker Sagnotti Leonardo</i>
11:30 am	A New Approach to Archaeological Dating Using Geomagnetic Field Modelling.
	Lodge Alexandra, Richard Holme. <i>Speaker Lodge Alexandra</i>
12:00 pm	Paleomagnetic, rock magnetic and low field AMS investigations on the Proterozoic dykes of Bundelkhand Craton: constraints on their age and mode of emplacement mechanism
	Patil Shiva, Ramesh Kr. Nishad, M.S. Seena, Vinod Kumar Singh. <i>Speaker Patil Shiva</i>
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room C	Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room C
02:00 pm	Establishing a secular variation curve for Romania: recent research and a case study dating a roman Kiln complex
	Suteu Achim Calin, Dr. Cathy M. Batt. <i>Speaker Suteu Achim Calin</i>

Calin	Calin
02:30 pm	Placement of the Frasnian-Famennian (Upper Devonian) extinction event and boundary within the XOM NHA section, Middle Vietnam, using new biostratigraphic (CONODONT) and magnetostratigraphic
	Thi Phuong Lan Luu, Brooks B. Ellwood, Ta Hoa Phuong, Dr. Eberhard Schindler. <i>Speaker Thi Phuong Lan Luu</i>
03:00 pm	Chronology of the final marine regression in the eastern Ebro Basin (Eocene-Oligocene, NE Spain).
	Costa Elisenda, Miguel Garcés, Alberto Sez, Miguel Lpez-Blanco, Lus Cabrera. <i>Speaker Costa Elisenda</i>
03:30 pm	Coffee Break (30 minutes)
04:00 pm	Cyclostratigraphy of the core and well data log from a bore-hole in upper cretaceous reworked carbonates
	Napoleone Giovanni, Andrea Albanelli, Maria Teresa Galli, Maria Rose Petrizzo, Isabella Premoli Silva, Antonio Valdisturlo. <i>Speaker Isabella Premoli Silva</i>
04:30 pm	Calibration of the continental sediments from the upper Valdarno Basin to the Plio-pleistocene as a tool for correlating the apennine continental sequences
	Napoleone Giovanni, Andrea Albanelli, Augusto Azzaroli, Adele Bertini, Maurizio Maggi. <i>Speaker Napoleone Giovanni</i>
05:00 pm	Archeomagnetic reference curves for the Iberian Peninsula
	Chauvin Annick, Miriam Gmez-Paccard, Philippe Lanos, Marisa Osete, Gregg Mcintosh, Jacques Thiriot. <i>Speaker Chauvin Annick</i>
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP	Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -	Chairpersons: -
Variation of archaeointensity in East Siberia and their using for revision of the dating multilayered archaeological sites	Variation of archaeointensity in East Siberia and their using for revision of the dating multilayer

ehring Andreas
Development of soil differentiation in Chernozem - Luvisol
Phaeozem genetic types revealed by their rock magnetic and chemical properties
Jordanova Diana, Neli Jordanova, Ann Marie Hirt, Ruben Kretzschmar, Kurt Barmettler. *Speaker Jordanova Diana*

11:30 am
Mineral magnetic properties and soil chemistry of Planosols from south Bulgaria
Jordanova Neli, Diana Jordanova, Ruben Kretzschmar, Kurt Barmettler, Ann Marie Hirt. *Speaker Jordanova Neli*

11:45 am
Magnetic signature in a well-characterized Podzol
Hirt Ann, Jan Wiederhold, Ruben Kretzschmar, Neli Jordanova. *Speaker Hirt Ann*

12:00 pm
Magnetic properties of brown soil profile containing archaeological site
Jelenska Maria, Agata Hasso-Agopowicz. *Speaker Jelenska Maria*

12:15 pm Discussion
July 3, 2007 from 02:00 pm to 05:30 pm
ASI007
Magnetic signature of past and present environmental changes
Conveners: Hanesch Monika, Hirt Ann
Oral
02:00 pm
Polar ice magnetization: results from Vostok ice core (Antarctica) and comparison with North Grip (Greenland) ice
Lanci Luca, Dennis V. Kent, Pierre E. Biscaye. *Speaker Lanci Luca*

02:15 pm
Chemical, morphological, and hysteresis characterization of magnetic airborne particulate matter in Rome (Italy)
Sagnotti Leonardo, Jacopo Taddeucci. *Speaker Sagnotti Leonardo*

Leonardo
02:30 pm
Atmospheric pollution in Beijing area, China: evidences from tree leaf and soil magnetic signatures
Hoffmann Viktor H., Hu Shouyuan, Mingjie Shen, Blaha Ulrich, Rslser Wolfgang, Appel Erwin, Yan Haitao. *Speaker Hoffmann Viktor H.*

02:45 pm
Use of paleosols and soils magnetic signal as a climate index
Orgeira Mara Julia, Rosa H. Compagnucci. *Speaker Orgeira Mara Julia*

03:00 pm
Geomagnetic secular variations recorded in the sediment cores from Lake Qarun, Egypt.
Odah Hatem, Yoza Hamano. *Speaker Odah Hatem*

03:15 pm Discussion
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
The magnetic signature of present environmental changes in lake sediments induced by hydrotechnical works; a case study from the Danube Delta (Romania)
Radan Sorin-Corneliu, Silviu Radan. *Speaker Radan Sorin-Corneliu*

A detailed map of anthropogenic pollution in Giant Mountains National Park by using soil magnetometry
Kapicka Ales, Eduard Petrovsky, Igor Dvorak, Hana Fialova. *Speaker Kapicka Ales*

Correlation between particle size distribution and rock-magnetic parameters of the marine sediments from off Wilkesland, East Antarctica
Ueno Naoko, Mutsumi Nakai, Rie Morijiri, Tomoko Ogishima, Kei Kanai. *Speaker Ueno Naoko*

Environmental magnetism of the terrestrial moss Hylocomium splendens: Results from a south-north profile crossing the city of Oslo, Norway
Fabian Karl, Clemens Reimann, Suzanne Mcenroe. *Speaker Fabian Karl*

Topsoils magnetic susceptibility mapping - as a tool for pollution monitoring by heavy metals in the vicinity of nickel factory dump in the slovak city of Sered
Kluciarova Denisa. *Speaker Kluciarova Denisa*

ASI012
Small- and meso-scale structure in the thermosphere and ionosphere: observations and modeling
Conveners: Hysell David, Aruliah Anasuya
ASI013
Response of the ionosphere-thermosphere to large geomagnetic storms: data availability and modeling
Conveners: Nanan Balan, Zhu Lie, Aylward Alan
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Pharmacy (E Room) Room E

09:00 am
The effect of intense interplanetary electric fields during super magnetic storms: the dayside ionospheric super fountain effect
Tsurutani Bruce, Olga P. Verkhoglyadova, Anthony J. Mannucci, Akinori Saito, Tohru Araki, Toshitaka Tsuda. *Speaker Tsurutani Bruce*

09:15 am
Thermosphere Response to the May 29, 2003, Magnetic Storm as Observed by CHAMP and GRACE
Bruinsma Sean, J.M. Forbes. *Speaker Bruinsma Sean*

09:30 am
Relative importance of the main drivers of positive ionospheric storms
Nanan Balan. *Speaker Nanan Balan*

09:45 am
Optical Signatures of Large Geomagnetic Storms seen from Ground-based Observatories
Slanger Tom, Brian Sharpee. *Speaker Slanger Tom*

10:00 am
Network data
Blanch Estefania, Vadym Paznukhov, David Altadill, Bodo W. Reinisch. *Speaker Blanch Estefania*

10:15 am
Coffee Break (30 minutes)
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
Large geomagnetic storms and their manifestation in the ionosphere
Zherebtsov Gellii, Olga Pirog, Nelya Polekh, Anatoli Tashchilin, Elena Romanova, Jiankui Shi, Xiao Wang. *Speaker Zherebtsov Gellii*

ASI018
Magnetopause and magnetosheath processes: reconnection, diffusion and boundary dynamics (Divisions III and IV)
Conveners: Owen Christopher
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Physics Room B

09:00 am
Reconnection between plasmas with different properties
Birni Joachim, J Borovsky, M Hesse. *Speaker Birni Joachim*

09:15 am
Magnetic reconnection at the magnetopause and in the magnetosheath
Andre Mats, Alessandro Retin, Andris Vaivads. *Speaker Andre Mats*

Mats
09:30 am
On the formation of 3-D fine magnetic structures at the magnetopause
Fruit Gabriel, Philippe Louarn, Elena Budnik, Andrei Fedorov, Jean-Andr Sauvaud, Elizabeth Lucek, Christopher Owen, Pierrette Decrau, Nicole Cornilleau-Wehrin. *Speaker Fruit Gabriel*

09:45 am
Determining the rate and location of magnetopause reconnection from observations of the ionosphere
Milan Steve, Suzanne M. Imber, Gabrielle Provan, Benoit Hubert. *Speaker Milan Steve*

10:15 am
Coffee Break (30 minutes)
10:45 am
Transport of ionospheric oxygen across the turbulent magnetopause
Zimbaro Gaetano, A. L. Taktakishvili, P. Veltri, E. Amata, S. Savin. *Speaker Zimbaro Gaetano*

11:00 am
Effect of IMF northward turning on the cusp particle precipitation observed by the Cluster spacecraft
Escoubet C. Philippe, J. Berchem, J. M. Bosqued, M. G. G. T. Taylor, K. J. Trattner, F. Pitout, H. Laakso, A. Masson, M. Dunlop, H. Reme, I. Dandouras, A. Fazakerley. *Speaker Escoubet C. Philippe*

11:15 am
The Magnetospheric Low-Latitude Boundary Layer and Cusp Dynamics during Interplanetary Coronal Mass Ejection Events
Bogdanova Yulia, C.J. Owen, G. Siscoe, O. Marghitu, I. Dandouras, Z. Kaymaz, H. Reme, E.A. Lucek, A.N. Fazakerley. *Speaker Bogdanova Yulia*

11:30 am
Energetic particle signatures in association with flux transfer events in the exterior cusp
Asikainen Timo, Kalevi Mursula, Patrick Daly. *Speaker Asikainen Timo*

Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
Magnetosheath turbulence and boundary layer formation
Antonova Elizaveta, C.C. Rossolenko, Yu.I. Yermolaev, M.I. Verigin, I.P. Kirpichev, N.L. Borodkova, E.Yu. Budnik. *Speaker Antonova Elizaveta*

Cluster-Double star and conjugate ground-based observations of dayside reconnection under different IMF conditions.
Dunlop Malcolm, Q-H. Zhang, R-Y. Liu, Y. H. Liu, M. G. G. T. Taylor, Y. Bogdanova, Z. Pu, F. Pitout. *Speaker Dunlop Malcolm*

Cluster observations of interplanetary shock waves into the magnetosheath
Palocchia Giuseppe, M. B. Cattaneo, M. F. Marucci, H. Reme, E. Lucek. *Speaker Palocchia Giuseppe*

A Wind - Polar Study of Energetic Ion Bursts and Associated Polar Rain Electron Flux Enhancements during Magnetic Cloud Passage at Earth
Farrugia Charles, Per Even Sandholt, Arvind Sharma. *Speaker Farrugia Charles*

Sudden Impulses at geostationary orbit and their relationships with magnetospheric current systems.
Villanti Umberto, Mirko Piersanti. *Speaker Mirko Piersanti*

Propagation of Electrostatic Solitary Waves in the Magnetosheath: Are they coming from the Magnetopause?
Pickett Jolene, Jolene S. Pickett, Ivar Christopher. *Speaker Pickett Jolene*

Observations of the low frequency plasma waves in the polar cusp associated with strong fluxes of the energetic particles
Blecki Jan, N. Cornilleau-Wehrin, M. Parrot, S.Savin, R.Wronowski. *Speaker Blecki Jan*

ULF waves in the cusp and in the magnetosheath regions: new results obtained with k-filtering analysis
Grison Benjamin, F. Sahraoui, N. Cornilleau-Wehrin, J. M. Bosqued, E. Lucek. *Speaker Grison Benjamin*

Multi-point perspectives of magnetospheric boundary layers and their relation to cold dense plasma sheet formation
Taylor Matt, A.N. Fazakerley, M.W. Dunlop, A. Snos, C.P. Escoubet, H. Laakso, A. Masson, H.J. Opgenoorth, J.A. Davies, M. Lester, L. Kistler, I. Alexeev, Z. Pu, J. Shi, M. Volwerk, A. Grocott, C. Mouikis, A. Walsh, A. Lui, E.A. Lucek, H. Reme, T.L. Zhang. *Speaker Taylor Matt*

Response of the magnetosphere to tangential stresses applied at its boundary
Farrugia Charles, Fausto T. Gratton, Claire Foullon, Eric J. Lund, Roy B. Torbert, Per Even Sandholt, Stanley W. H. Cowley, I. R. Mann, J. F. Watermann, A. Viljanen, K. Yumoto. *Speaker Farrugia Charles*

Occurrence of reconnection jets at the dayside magnetopause: Double Star observations.
Trenchi Lorenzo, Maria Federica Marucci, Giuseppe Palocchia, Maria Bice Bavassano Cattaneo, Henri Reme, Lynn Kistler, Berndt Klecker, Axel Korth, Chris Carr. *Speaker Trenchi Lorenzo*

Plasma sheet during dual lobe reconnection: a case study
Milillo Anna, Maria Federica Marucci. *Speaker Milillo Anna*

Conditions for a Kelvin-Helmholtz stable gap at the supersonic near equatorial magnetopause flanks for northward IMF
Gnavi Graciela, C.J. Farrugia, F.T. Gratton. *Speaker Fausto Gratton*

ASI019
Progressing to closure in magnetotail plasma sheet and substorm processes
Conveners: Angelopoulos Vassilis, Baumjohann Wolfgang
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Pharmacy Room A

09:00 am
Current sheet flapping and magnetotail activity
Sergeev Victor. *Speaker Sergeev Victor*

09:18 am
The current disruption model for substorms
Lui Anthony. *Speaker Lui Anthony*

09:36 am
Cluster observations of broadband electromagnetic waves in and around a reconnection region in the terrestrial magnetotail current sheet
Petkaki Panagiota, M. P. Freeman, A.P. Walsh. *Speaker Petkaki Panagiota*

09:54 am
Substorm current sheet dynamics: a case study
Runov Andrei, R. Nakamura, W. Baumjohann, T. Takada, K. Keika, I. Alexeev, C. J. Owen, A. N. Fazakerley, O. Amm, L. Jusuola, H. Frey, E. Lucek, I. Dandouras. *Speaker Runov Andrei*

10:12 am
Quasi-periodic dipolarisations in the mid-magnetotail observed by Cluster and Double star
Dunlop Malcolm, A N Fazakerley, C Shen, Z Pu, M G G T Taylor, C Perry, J A Davies, C Carr, Z-X Liu. *Speaker Dunlop Malcolm*

10:30 am
Coffee Break (30 minutes)
11:00 am
Current sheet flapping with tilted Hall fields and changing propagation speed during tail reconnection
Laitinen Tiera, Rumi Nakamura, Andrei Runov, Henri Rme, Elizabeth A. Lucek. *Speaker Laitinen Tiera*

11:18 am
Energetic Electron Acceleration in the Downstream Reconnection Outflow Region
Imada Shinsuke, Rumi Nakamura, Patrick Daly, Masahiro Hoshino, Wolfgang Baumjohann, Stefan Muehlbacher, Andre Balogh, Henri Reme. *Speaker Imada Shinsuke*

11:36 am
Plasma sheet ion pressure profiles during substorm
Wing Simon, Jesper Gjerloev. *Speaker Wing Simon*

11:54 am
Instabilities in thin tail current sheets
Roux Alain, Olivier Le Contel, Dominique Fontaine, Patrick Robert, Philippe Louarn, Andrew Fazakerley. *Speaker Roux Alain*

12:12 pm
Multi-point observations of thin current sheets
Nakamura Rumi, Wolfgang Baumjohann, Andrei Runov, Yoshihiro Asano, Christopher J. Owen, Masaki Fujimoto, Berndt Klecker, Henri Reme, Andrew N Fazakerley, Elisabeth Lucek. *Speaker Nakamura Rumi*

Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy Room A

02:00 pm
Thinning and stretching of the magnetotail's plasma sheet
Petrukovich Anatoli, Wolfgang Baumjohann, Rumi Nakamura, Andrei Runov, Andre Balogh, Henri Reme. *Speaker Petrukovich Anatoli*

02:18 pm
Response of nightside magnetosphere to IMF variation: multipoint observations
Cheng Ching-Chang, Christopher T. Russell, Jih-Hong Shue. *Speaker Cheng Ching-Chang*

02:36 pm
Low-frequency electromagnetic modes driven by oxygen ions in the plasma sheet region
Singh Satyavir, A.P. Kakad, G.S. Lakhina. *Speaker Singh Satyavir*

02:54 pm
Structure and stability of thin current sheets in collisionless plasma
Zelenyi Lev, Helmi Malova, Anton Artemiev, Victor Popov. *Speaker Zelenyi Lev*

03:12 pm
Connection between tail transport and the Harang reversal, their changes, and substorm dynamics
Lyons Larry, Dae-Young Lee, Chih-Ping Wang, Steve B. Mende. *Speaker Lyons Larry*

03:30 pm
Coffee Break (30 minutes)
04:00 pm
Evolution of electron distributions and the magnetic structure in the thin current sheet during magnetic reconnections
Asano Yoshihiro, Rumi Nakamura, Masaki Fujimoto, Iku Shinohara, Taku Takada, Tsugunobu Nagai, Wolfgang Baumjohann, Christopher J. Owen, Andrew N. Fazakerley, Elizabeth A. Lucek, Henri Reme. *Speaker Asano Yoshihiro*

04:18 pm
Current sheet dynamics in relation to Pi2 pulsations
Keiling Andreas, Forrest Mozer, Henri Reme, Iannis Dandouras, Elizabeth Lucek, Masaki Fujimoto, Hiroshi Hasegawa, Geoff Reeves. *Speaker Keiling Andreas*

04:36 pm
Overview of the THEMIS mission and datasets
Angelopoulos Vassilis, John Bonnell, Davin Larson, James Mcfadden, Charles Carlson, Stephen Mende, Harald Frey, Robert Ergun, C. T. Russell, Karl-Heinz Glassmeier, Uli Auster, Wolfgang Baumjohann, Rumi Nakamura, Alain Roux, Olivier Le Contel, Eric Donovan, Ian Mann. *Speaker Angelopoulos Vassilis*

04:54 pm
Electron dispersed structures on the open-closed boundary as a tool for remote study of the reconnection process
Alexeev Ilya, V. Sergeev, C. J. Owen, A. N. Fazakerley, E. Lucek, H. R'Eme. *Speaker Alexeev Ilya*

05:12 pm
ULF waves as a diagnostic of the nightside magnetosphere
Rae Jonathan, David K. Milling, Ian R. Mann, Zo C. Dent. *Speaker Rae Jonathan*

Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
Energy transport, storage, and dissipation in the magnetosphere during substorms: a comparison with MHD.
Halford Alexa, Dr. Daniel Baker, Dr. James Weygand. *Speaker Halford Alexa*

Implication for O+ Acceleration in the Plasma Sheet Triggered by Solar Wind Compression
Keika Kunihiro, Rumi Nakamura, Wolfgang Baumjohann, Andrei Runov, Taku Takada, Berndt Klecker, Henri Rme, Iannis Dandouras, Elizabeth Lucek, Harald Frey. *Speaker Keika Kunihiro*

A new general mathematical framework to explain the global properties of the substorm cycle
Freeman Mervyn. *Speaker Freeman Mervyn*

Analysis of the substorm recovery phase using a multisatellite view and LFM MHD simulation
Farr Nathan, Daniel Baker, Michael Wiltberger. *Speaker Farr Nathan*

IMF Bz dependent inner plasma sheet resulting from electric and magnetic drift transport
Wang Chih-Ping, Larry R. Lyons, James M. Weygand, Tsugunobu Nagai, Richard W. Mcentire. *Speaker Wang Chih-Ping*

Statistical Study of Plasma Sheet Electrons and the Solar Wind
Burin Des Roziers Edward, Xinlin Li, Daniel N. Baker. *Speaker Burin Des Roziers Edward*

Statistical comparison of the energy input and dissipation in triggered and non-triggered substorms
Hsu Tung-Shin. *Speaker Hsu Tung-Shin*

On the topology of Earthward Flux Ropes
Sergeev Victor, T.Nagai, R.Mcentire, T. Mukai. *Speaker Sergeev Victor*

Plasma Waves in the Turbulent Magnetotail
Lin Naiguo, E. S. Lee, G. Parks, F. Mozer, M. Wilber, N. Cornilleau-Wehrin, P. Canu, P. Decreau, E. Lucek, H. Reme, A. Fazakerley, M. Goldstein, C. Gurgiolo. *Speaker Lin Naiguo*

Geomagnetic storms: toward a coupled system level understanding (Divisions III and II)
Conveners: Pulkkinen Tuja
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Pharmacy Room B
Chairpersons: Ondrej Santolik and Yuri Shprits
09:00 am
Factors Controlling the Mode of Magnetospheric Response to the Solar Wind
McPherron Roberrt. *Speaker McPherron Roberrt*

09:20 am
Dynamics and mechanisms of the ring current during storm and substorms
Brandt Pontus, S. Ohtani, A. Y. Ukhorskiy, Y. Zheng, D. G. Mitchell, I. Dandouras. *Speaker Brandt Pontus*

09:40 am
Full 3D MHD-Test Particle Simulations of Prompt Relativistic Electron Injections
Hudson Mary, B.T. Kress, H.-R. Mueller, J.B. Blake. *Speaker Hudson Mary*

Hudson Mary
10:00 am
Ring current activity during two-step development of geomagnetic storms
Biktash Lilia. *Speaker Biktash Lilia*

10:20 am
Are the Dst Stations Sufficient for Describing Storm-Time Enhancements
Zhu Lie, Z. Xu, J. J. Sojka, R. W. Schunk, P. Kokoszka, A. Jach. *Speaker Zhu Lie*

10:40 am
Coffee Break (30 minutes)
11:10 am
Ion Refilling Rates for L = 2.3 3.8 Flux Tubes
Obana Yuki, Fred W. Menk. *Speaker Obana Yuki*

11:30 am
Quasi-periodic precipitations of energetic particles and the geomagnetic pulsations of Ps6 type
Baishev Dmitry, I.Ya. Plotnikov, K. Yumoto. *Speaker Baishev Dmitry*

11:50 am
Saturation of the polar cap potential: Analysis in terms of Alfvn wave coupling
Kivelson Margaret, Aaron Ridley. *Speaker Kivelson Margaret*

12:10 pm
Particle and field characteristics of twelve broadband electron events observed by the FAST satellite during geomagnetic storms
Nakajima Akimitsu, Kazuo Shiokawa, Kanako Seki, Kiyofumi Yumoto, Robert J. Strangeway, James P. Mcfadden, Charles W. Carlson. *Speaker Nakajima Akimitsu*

Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy Room B
Chairpersons: Ondrej Santolik and Yuri Shprits
02:00 pm
Initial results from the SuperDARN Hokkaido radar observation: Intense poleward flows in the dayside cusp region at about 58 geomagnetic latitude
Nishitani Nozomu, Tadahiko Ogawa, Takashi Kikuchi, Ryuho Kataoka, Keisuke Hosokawa, Yoshizumi Miyoshi, Kazuo Shiokawa, Yuichi Otsuka, Natsuo Sato, Hisao Yamagishi, Akira Sessai Yukimatu. *Speaker Nishitani Nozomu*

02:20 pm
Low latitude geomagnetic storm signatures during the descending phase of solar cycle 23
Alex Sobhana, Shyamoli Mukherjee. *Speaker Shyamoli Mukherjee*

02:40 pm
Study of storm-time dynamics of TEC latitudinal profiles over Europe using GPS measurements
Krankowski Andrzej, Shagimuratov Irk, Ephishov Ivan, Krypiak-Gregorzczuk Anna. *Speaker Krankowski Andrzej*

03:00 pm
Coupling processes and transition from moderate magnetospheric activity
Daglis Ioannis A., Fiori-Anastasia Metallinou, Athina Varotsou, Dimitris Vassiliadis. *Speaker Daglis Ioannis A.*

03:20 pm
The access of solar wind and ionospheric ions to the storm-magnetotail
Peromian Vahe, Mostafa El-Alaoui, Pontus C:son Brandt. *Speaker Peromian Vahe*

03:40 pm
Coffee Break (30 minutes)
04:10 pm
Storm-time dynamics of whistler-mode chorus at different scales
Santolik Ondrej, D.A. Gurnett, J.S. Pickett, M. Parrot, N. Cornilleau-Wehrin, P.W. Daly. *Speaker Santolik Ondrej*

04:30 pm
Coupled Plasmasphere-Ionosphere System during Storm Times: Implications from Coordinated Ground and Satellite Observations
Chi Peter, C. T. Russell, J. N. Tu, M. Spasojevic, D. L. Carpenter. *Speaker Chi Peter*

04:50 pm
Motivations and implications for revising the Dst index
Mursula Kalevi, Lauri Holappa, Arto Karinen. *Speaker Mursula Kalevi*

Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
Local time variation of magnetic disturbances and asymmetry of the ring current during super-intense storms (DST<-250 nT)
Echer Ezequiel, Walter D Gonzalez. *Speaker Echer Ezequiel*

Real-time modeling at the community-coordinated modeling center
Rastaetter Lutz, Peter Macneice, Michael Hesse, Marlo Maddox, David Berrios, Anna Chulaki, Maria Kuznetsova. *Speaker Rastaetter Lutz*

Conjugate ionospheric perturbations during magnetic storms: evidence for stormtime M-I coupling
Foster John. *Speaker Foster John*

Study on solar sources and polar cap absorption events recorded at Mario Zucchelli Station, Antarctica
Perrone Loredana, Parisi Marco, Meloni Antonio, Damasso Mario, Galliani Marco. *Speaker Perrone Loredana*

Large-scale electric field in the inner magnetosphere during geomagnetic storms
Shinbori Atsuki, Yukitoshi Nishimura, Takayuki Ono, Atsushi Kumamoto, Takashi Kikuchi. *Speaker Shinbori Atsuki*

Modeling of ring current -multiple phases of the Storm time ring current
Nagarajan Nandini, P.V. Nagamani. *Speaker Nagarajan Nandini*

Plasma sheet and ionospheric ions contribution to the ring current during storm-time substorms
Metallinou Fiori-Anastasia, Ioannis A. Daglis, Dominique C. Delcourt. *Speaker Metallinou Fiori-Anastasia*

The characteristic time of the magnetospheric ring current decay from experiment and theory
Biktash Lilia. *Speaker Biktash Lilia*

Variation of the inner radiation belt electron fluxes at low L-shells inside the South Atlantic Anomaly
Asikainen Timo, Kalevi Mursula. *Speaker Asikainen Timo*

Solar wind parameters at L1 and the response of the magnetosphere: a comparison between two events
Cid Consuelo, Elena Saiz, Yolanda Cerrato, Angels Aran, Hebe Cremades, Sergio Dasso, Cristina Mandrini, Stefan Poedts, Luciano Rodriguez, Brigitte Schmieder, Andrei Zhukov. *Speaker Cid Consuelo*

Relations Between Polar and Equatorial Current Systems Inferred from PC, DST and HASYM Indices
Stauning Peter. *Speaker Stauning Peter*

Correlation between interplanetary plasma parameters and AKR emission during magnetic storms
Alves Maria Virginia, Edio Da Costa Junior, Walter Demetrio Gonzalez. *Speaker Alves Maria Virginia*

Study of the turbulence in the central plasma sheet during August
Arancibia Karina, Marina Stepanova, Jean Michel Bosqued, Elizavieta E. Antonovad. *Speaker Arancibia Karina*

ASI025
Techniques and instrumentation in space plasma physics
Conveners: Luhr Hermann, Hilgers Alain
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
Experimental studies aiming to development of instrumentation for geomagnetic measurements fluxgate magnetometer
Bertagnolli Sandro, Nelson Jorge Schuch, Josemar Siqueira, Cassio Espindola Antunes, Fagner Chagas Rother, Nalin Babulal Trivedi. *Speaker Bertagnolli Sandro*

Sounding rocket wave electric field observations with a new all-digital, ultra-low noise receiver
Colpitts Chris. *Speaker Colpitts Chris*

Optical Mesosphere Thermosphere Imagers (OMTIs) using cooled-CCD detectors to monitor disturbances in the magnetosphere, ionosphere, and atmosphere
Shiokawa Kazuo, Yuichi Otsuka, Tadahiko Ogawa. *Speaker Shiokawa Kazuo*

Estimating space and time gradients from multi-spacecraft measurements
Hamrin Maria, Niclas Borlin, Kjell Ronnmark, Stephan Buchert. *Speaker Hamrin Maria*

Automatic whistler detector and analyzer system network: a new tool for real-time monitoring of the plasmasphere
Lichtenberger Jnos, Csaba Ferencz, Laszlo Bodnar, Arthur. R. W. Hughes, Andrew B. Collier, Craig J. Rodger, Mark A. Clilverd. *Speaker Lichtenberger Jnos*

In situ space plasma measurements: electron moments from quasi-thermal noise spectroscopy
Zouganelis Ioannis, N. Meyer-Vernet, K. Issautier, M. Moncuquet. *Speaker Zouganelis Ioannis*

An intelligent instrument Cylindrical Langmuir Probe for the International Space Station

ASIV029 The International Geophysical Year and its impact on space science (Division IV and IDCH, Divisions II, III and V)
Conveners: Cliver Ed
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy (E Room) Room E
02:00 pm **James A. Van Allen and the IGY**
Krimigis Stamatiotis. *Speaker Krimigis Stamatiotis*
02:30 pm **The IGY and the soviet space program**
Petrukovich Anatoli, Obridko V.N., Raspopov O.M., Zelenyi L.M.. *Speaker Petrukovich Anatoli*
03:00 pm **John Simpson & the IGY Neutron Monitor Program**
Lopate Clifford. *Speaker Lopate Clifford*
03:30 pm **Coffee Break (30 minutes)**
04:00 pm **COSPAR: An Offspring of the IGY**
Haerendel Gerhard. *Speaker Haerendel Gerhard*
04:30 pm **Satellites, Computers, & Geomagnetism: Enhancing Earth's Magnetic**
Good Gregory A.. *Speaker Good Gregory A.*
05:00 pm **Geodesy, Time and the Markowitz Moon Camera Program**
Dick Steven. *Speaker Dick Steven*
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
The "IGY Gold" History Preservation Program
Thompson Barbara. *Speaker Thompson Barbara*
ASIV030 **New results from solar and heliospheric missions**
Conveners: Miralles Mari Paz, Sanchez Almeida Jorge
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room B
Chairpersons: S. Habbal and M. L. Kaiser
09:00 am **New results from Hinode-EIS**
Harra Louise. *Speaker Harra Louise*
09:30 am **Highlights from RHESSI - Diagnostics of Particle Acceleration**
Smith David. *Speaker Smith David*
10:00 am **Prominence plasma investigations with SOHO/SUMER spectra**
Parenti Susanna, Jean-Claude Vial. *Speaker Parenti Susanna*
10:30 am **The SECCHI Experiment on the STEREO Mission**
Howard Russell, Daniel Moses, Angelos Vourlidas, Simon P Plunkett, Jeffrey S Newmark, Dennis S Socker, Joseph M Davila, O. Chris St. Cyr, William T Thompson, James R Lemen, Jean-Pierre Wuelsel, Richard A. Harrison, Christopher J Davis, Nicholas R Waltham, Christopher J Eyles, Jean-Mark Defise, Jean-Philippe Halain, Volker Bothmer, Jean-Pierre Delabroudinere, Frederic Auchere, Raymond Mercier, Marie Francoise Ravet, Dennis Wang, Rebecca Baugh, Donald R McMullin. *Speaker Howard Russell*
11:00 am **Coffee Break (30 minutes)**
11:30 am **NEMO: Novel EIT wave Machine Observing tool for SECCHI/EUVI.**
Podladchikova Olena. *Speaker Podladchikova Olena*
11:45 am **Study of CME related phenomena using combined STEREO/EUVI data from both spacecraft**
Rodriguez Luciano, A. N. Zhukov. *Speaker Rodriguez Luciano*
12:00 pm **First results from the stereo plasma and suprathermal ion composition investigation**
Galvin Antoinette, L. A. Kistler, M. A. Popecki, C. Farrugia, E. Moebius, M. Lee, L. Ellis, K. Simunac, K. Singer, C. Walker, L. M. Blush, B. Klecker, R.F. Wimmer-Schweingruber, B. Thompson, P. Bochsler, P. Wurz, H. Daoudi, C. Giammanco, R. Karrer, A. Opitz, M. Koeten, J. Luhmann, R. Howard, J.-P. Wuelsel, M. Acuna, C.T. Russell. *Speaker Galvin Antoinette*
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room B
Chairpersons: R. Howard and S. Parenti
02:00 pm **From Solar Flares to CIRs: First Results from the STEREO/IMPACT Suite**
Wimmer-Schweingruber Robert F., B. Heber, R. Mueller-Mellin, S. Boettcher, R. Gomez-Herrero, C. T. Steigies, A. Klassen, J. Luhmann, D. Curtis, P. Schroeder, R.A. Mewaldt, E. C. Stone, M.A. Wiedenbeck, T.T. Von Roseninge, M. Acuna, C.T. Russell, A.B. Galvin. *Speaker Wimmer-Schweingruber Robert F.*
02:30 pm **Initial results provided by the IMPACT/STEREO measurements of solar wind electrons, suprathermal electrons and magnetic field**
Sauvaud Jean Andre, J. Luhman, C. T. Russell, C. Mazelle, R.P. Lin, D. Larson, P. Schroeder. *Speaker Sauvaud Jean Andre*
03:00 pm **First results of the S/Waves experiment on the Stereo mission.**
Maksimovic Milan, J.-L. Bougeret, J. Goetz, S.D. Bale, M.L. Kaiser, P.J. Kellogg, M.J. Reiner, B. Cecconi, R.J. Macdowall. *Speaker Maksimovic Milan*
03:30 pm **Solar wind bulk properties as seen by STEREO/PLASTIC**
Opitz Andrea, Peter Bochsler, Lisa M. Blush, Hagar Daoudi, Corrado Giammanco, Reto Karrer, Peter Wurz, Lorna Ellis, Antoinette B. Galvin, Lynn M. Kistler, Eberhard Moebius, Mark A. Popecki, Kristin Simunac, Katherine L. Singer, Berndt Klecker, Robert F. Wimmer-Schweingruber, Harald Kucharek, Charles J. Farrugia, Martin A. Lee. *Speaker Opitz Andrea*
03:45 pm **Coffee Break (30 minutes)**
04:15 pm **The Coronal and Interplanetary Propagation of Shocks Driven by CMEs from Remote Radio and In-situ Shock Measurements**
Reiner Michael, Michael L. Kaiser. *Speaker Reiner Michael*
04:30 pm **Helium, neon, and argon isotopic and elemental composition in Genesis targets**
Wieler Rainer, Ansgar Grimberg, Veronika S. Heber, Heinrich Baur, Peter Bochsler, Fritz Bhlr, Donald S. Burnett. *Speaker Wieler Rainer*
05:00 pm **STEREO, ACE and Wind Observations of Reconnection X-line Extents and Durations in the Solar Wind**
Eriksson Stefan, John T. Gosling, Lisa M. Blush, Tai D. Phan, Janet G. Luhmann, David J. Mccomas, Mario H. Acuna, Christopher T. Russell, Antoinette B. Galvin. *Speaker Eriksson Stefan*
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Coronas-F observations of solar-terrestrial outstanding events in the 23RD solar cycle
Kuznetsov Vladimir, Zhitnik Igor, Kuzin Sergei, Kuznetsov Sergei, Kotov Yuri. *Speaker Kuznetsov Vladimir*
Do Magnetic Clouds deform?
Möstl Christian, C. J. Farrugia, Q. Hu, A. Galvin, H. K. Biernat. *Speaker Möstl Christian*
Possible mechanism of N-S asymmetry of the Sun processes and main cyclicities of the solar activity
Barkin Yury. *Speaker Barkin Yury*
Temperature-Dependent Blueshifts in the Plage Region During the Gradual Phase of the X3.2 Flare on December 13, 2006
Imada Shinsuke, Hirohisa Hara, Tetsuya Watanabe, Ayumi Asai, Suguru Kamio, Keiichi Matsuzaki. *Speaker Imada Shinsuke*
Limb CME geometry using LASCO observations
Dal Lago Alisson, Rainer Schwenn, Walter D. Gonzalez. *Speaker Dal Lago Alisson*
CME Initiation Observed in Four Bandpasses of STEREO/EUVI
Zhukov Andrei, Luciano Rodriguez. *Speaker Zhukov Andrei*
Evolution of a coronal hole-associated neutral solar wind up to the Solar Orbiter position
D'Amicis Raffaella, Stefano Orsini, Ester Antonucci, Andrea M. Di Lellis, Martin Hilchenbach, Daniele Telloni, Alessandro Mura, Anna Millilo, Silvano Fineschi, Roberto Bruno. *Speaker D'Amicis Raffaella*
Multiresolution Analysis of Synoptic Solar Magnetic Fields
Lundstedt Henrik, Magnus Wik, Peter Wintoft. *Speaker Lundstedt Henrik*
Are there systematic hemispherical or longitudinal asymmetries in Coronal Mass Ejections?
Asikainen Timo, Kalevi Mursula. *Speaker Asikainen Timo*
On step-like changes in the out-of-plane magnetic field confined to solar wind reconnection exhausts
Eriksson Stefan, John T. Gosling, Dietmar Krauss-Varban. *Speaker Eriksson Stefan*
Consequences of the forcefree model of magnetic clouds for their heliospheric evolution
Leither Martin, C. J. Farrugia, C. Mstl, K. W. Ogilvie, A. Galvin, R. W. Schwenn, H. K. Biernat. *Speaker C. Mstl*
Helium distribution and heavy ion composition in solar wind. First results from PLASTIC instrument onboard STEREO.
Karrer Reto, Lisa M. Blush, Peter Bochsler, Hagar Daoudi, Corrado Giammanco, Andrea Opitz, Peter Wurz, Antoinette B. Galvin, Lynn M. Kistler, Lorna Ellis, Eberhard Moebius, Kristin Simunac, Katherine Singer, Mark A. Popecki, Berndt Klecker, Robert F. Wimmer-Schweingruber, Charlie Farrugia, Harald Kucharek, Marty Lee. *Speaker Karrer Reto*
Dynamical Models of the Solar Activity Cycle and Data Assimilation
Kitiashvili Irina. *Speaker Kitiashvili Irina*
The observation of Gamma-ray emission during January 20 2005 solar flare
Arkhangelskaja Irene, Arkhangelsky A.I, Gilyanenko A.S., Kotov Yu. D., Kuznetsov S.N.. *Speaker Arkhangelskaja Irene*
ASIV033 **Neutral-plasma interactions for planets, moons, asteroids, and comets**
Conveners: Mazelle Christian
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

The peculiarities of the solar wind interaction with Mars from the Phobos 2 mission data
Mordovskaya Valentina. *Speaker Mordovskaya Valentina*
Plasma interaction with Venus, Mars and Titan: similarities and differences
Coates Andrew, Yasir Soobiah, Chris Arridge, Rudy Frahm, David Winningham, David Young, Stas Barabash, Rickard Lundin, Ed Sittler, Karoly Szego, Dick Hartle, Aspera-4 Team, Aspera-3 Team, Caps Team. *Speaker Coates Andrew*
Ion distributions and associated low frequency waves in the upstream region and foreshock of Venu
Mazelle Christian, S. Barabash, T.L. Zhang. *Speaker Mazelle Christian*
ASV035 **The role of magnetic observatories in monitoring and modeling Earths magnetic field**
Conveners: Kotze Pieter, Schott Jean-Jacques
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Mathematics Room I2
09:00 am **Reason of the North and South Magnetic Poles drift**
Kuznetsov Vladimir. *Speaker Kuznetsov Vladimir*
09:22 am **Observatory contributions to regional reference field models in the Satellite ERA - the australian experience**
Hitchman Adrian, Andrew Lewis. *Speaker Hitchman Adrian*
09:44 am **Geomagnetic field of the Republic of Macedonia 2003 2004**
Panovska Sanja, Todor Delipetrov, Blagoj Delipetrov. *Speaker Panovska Sanja*
10:06 am **Establishing geomagnetic observatory and net of repeat stations on the territory of the Republic of Macedonia**
Delipetrov Marjan, Blagica Doneva, Todor Delipetrov. *Speaker Delipetrov Marjan*
10:28 am **Geomagnetic field models for Southern Africa during 2005 - 2006**
Kotze Pieter, M. Manda, M. Korte. *Speaker Kotze Pieter*
10:50 am **Coffee Break (30 minutes)**
11:20 am **A seismological task for geomagnetic observatories**
Duma Gerald. *Speaker Duma Gerald*
11:42 am **Development of fluxgate magnetometer with ring-core for South Atlantic magnetic anomaly sama monitoring**
Antunes Cassio Espindola, Nelson Jorge Schuch, Josemar De Siqueira, Sandro Fettermann Bertagnolli, Fagner Chagas Rother, Nalin Babulau Trivedi. *Speaker Antunes Cassio Espindola*
12:04 pm **San Fernando magnetic observatory (SFS): new site and improvements**
Catalán Manuel, Jos A. Marn, Jos Martn-Davila, Manuel Larn. *Speaker Catalán Manuel*
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room I2
02:00 pm **Spherical Harmonic Analysis of data from magnetic observatories poorly covered the globe.**
Yakovleva Svetlana, Vadim Golovkov. *Speaker Yakovleva Svetlana*
02:22 pm **Global dynamics of storm associated magnetic pulsations based on the ground observations**
Kozyreva Olga, N.G. Kleimenova, J.-J. Schott. *Speaker Kozyreva Olga*
02:42 pm **The development and role of geomagnetic observatories in Indonesia**
Muhammad Husni. *Speaker Muhammad Husni*
03:06 pm **The role of geomagnetic field measurements in monitoring the magnetospheric dynamics.**
Villante Umberto. *Speaker Villante Umberto*
03:28 pm **A comparative analysis of geomagnetic, magnetospheric and interplanetary observations of long period oscillations at discrete frequencies**
Villante Umberto, Patrizia Francia, Massimo Vellante. *Speaker Patrizia Francia*
03:50 pm **Coffee Break (30 minutes)**
04:20 pm **The achievements of geomagnetic observations and studies in Egypt since the IGY 1957**
Deebes Hanafy, Tarek Arafa-Lumhad. *Speaker Deebes Hanafy*
04:42 pm **The role of magnetic observatories: the observatory operators perspective.**
Kerridge David. *Speaker Kerridge David*
05:04 pm **The role of ground-based measurements for modelling the magnetic field at regional scales**
Thebault Erwan. *Speaker Thebault Erwan*
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Using neural networks to study the geomagnetic field evolution
Duka Bejo, Andrew Jackson. *Speaker Duka Bejo*
Local anomalies of secular variations as the result of the main geomagnetic field sources dynamics.
Koroleva Tatiana, Demina Irina, Farafonova Yulia, Nikitina Lidia. *Speaker Koroleva Tatiana*
The regional secular variations repeat stations in Ukraine: the new project
Maksymchuk Valentyn, Horodyskyi Yuriy, Tregubenko Victor, Orlyuk Mykhaylo. *Speaker Maksymchuk Valentyn*
Assessment of relatively rapid changes at the geomagnetic secular variation field in Mexico from the Teoloyucan (Mexico) Geomagnetic Observatory time series
Campos-Enrquez Oscar, U. Arellano-Gonzalez, Esteban Hernandez-Quintero, David Rivera-Recillas, Gerardo Cifuentes-Nava. *Speaker Campos-Enrquez Oscar*
Tidal components of the geomagnetic variations
Smirnov Sergey, Sheremetyeva Olga, Krolevets Alexandr. *Speaker Smirnov Sergey*
European geomagnetic observatories: quality and role in understanding the secular variation
Verbanac Giuli, Monika Korte, Mioara Manda. *Speaker Verbanac Giuli*
On the quality of geomagnetic observatory hourly means since IGY Korte Monika, Mioara Manda. Speaker Korte Monika
New acquisition systems in French Austral Magnetic Observatories
Fotz Marcellin, Armelle Bernard, Jacques Durand, Aude Chambodut, Jean-Jacques Schott. *Speaker Aude Chambodut*
Isoporic modelling of the geomagnetic field components at the epoch 2005.0. Iberian Peninsula and Balearic Islands.
Socias Isabel, Victor.M. Marin, F.Javier Pavon. *Speaker F.Javier Pavon*
A study on the long term behavior of the impedance tensor at Nagycenk Geophysical Observatory
Lemperger Istvan, Rpd Kis, Judit Szendröl, Viktor Wesztzergom. *Speaker Lemperger Istvan*
Comparison of daily variation characteristics at different Antarctic geomagnetic observatories and their dependence on IMF conditions
Cafarella Lili, D. Di Mauro, S. Lepidi, A. Meloni, M. Pietrolungo, J. Santarelli, J.J. Schott. *Speaker Cafarella Lili*
Propagation of ULF geomagnetic field fluctuations in Antarctica: comparison between two polar cap stations
Lepidi Stefania, Lucia Santarelli, Lili Cafarella. *Speaker Lepidi Stefania*
Antarctic Reference Model (ARM) updated to 2006: an example of integrated use of magnetic data
Tozzi Roberta, Angelo De Santis, Luis R. Gaya-Piqu. *Speaker Tozzi Roberta*
On the 22-year variation seen in the observatory annual means of the geomagnetic field
Dobrica Venera, Crisan Demetrescu. *Speaker Dobrica Venera*
A new data service from the World Data Centre, Geomagnetism (Edinburgh)
Reay Sarah, Ewan Dawson, Simon Flower, Juergen Matzka, Tom Shanahan, David Kerridge, Susan Mc. Millan. *Speaker Reay Sarah*
Using observatory data to characterise geomagnetic daily variations
Hamilton Brian. *Speaker Hamilton Brian*
A newly established magnetometer chain in Greece
Balasis Georgios, Panayiotis Kapisris, Boris Di Fiore, Ioannis A. Daglis. *Speaker Balasis Georgios*
USGS operations at the Fredericksburg Geomagnetic Observatory a status report
Finn Carol, Jeffrey J. Love. *Speaker Finn Carol*
Information center based on Nagycenk Geophysical Observatory (GGRI of HAS) data
Koppán András, Wesztzergom Viktor, Kovács Károly. *Speaker Koppán András*
EGY in China: from data center to geophysical informatics
Peng Fenglin, Jian Zhang, Qinghua Huang, Keyun Tang, Guangding Liu. *Speaker Peng Fenglin*
ASV038 **World Digital Magnetic Anomaly Map**
Conveners: Ravat Dhananjay, Thebault Erwan, Korhonen Juha
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Mathematics Room A3
Chairpersons: -
09:00 am **Magnetic anomalies at Atlantic Ocean under the WDMAM compilation**
Catalán Manuel, Ana Snchez-Mera. *Speaker Catalán Manuel*
09:36 am **Leveling of marine track-line data in the North Pacific Ocean**
Ishihara Takemi. *Speaker Ishihara Takemi*
10:12 am **GeoForschungsZentrum Anomaly Magnetic MAP (GAMMA): A candidate model for the World Digital Magnetic Anomaly Map**

Mioara. *Speaker Hamoudi Mohamed*
10:48 am **Coffee Break (30 minutes)**
11:18 am **Towards the second generation Antarctic Digital Magnetic Anomaly Map**
Gaya-Pique Luis, Erwan Thbault, Hyung-Rae Kim, Alexander V. Golynsky, Massimo Chiappini, Ralph R.B. Von Frese. *Speaker Gaya-Pique Luis*
11:54 am **Magnetic anomaly map of the world: merging satellite, airborne, marine and ground-based magnetic data sets**
Hemant Kumar, Erwan Thbault, Mioara Manda, Stefan Maus. *Speaker Hemant Kumar*
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A3
Chairpersons: -
02:00 pm **Magnetic anomaly compilation for Argentine continental margin studies**
Ghidella Marta, Bernd Schreckenberger, Carlos Marcelo Paterlini, Daniel Alberto Abraham. *Speaker Ghidella Marta*
02:36 pm **Reuniting Gondwanaland with transformations of the World Digital Magnetic Anomaly Map (WDMAM)**
Ravat Dhananjay, Colin Reeves, The Wdmam Team. *Speaker Ravat Dhananjay*
03:12 pm **World Digital Magnetic Anomaly Map (WDMAM), 2007 Edition**
Korhonen Juha, Colin Reeves, Stefan Maus, Susan Mclean, Mioara Manda, Michael Purucker, Tamara Litvinova, Peter Milligan. *Speaker Korhonen Juha*
03:48 pm **Coffee Break (30 minutes)**
04:18 pm **WDMAM-candidate of the GTK-team**
Korhonen Juha, Tamara Litvinova. *Speaker Korhonen Juha*
04:54 pm **The Magnetic Anomaly Map of Australia – development, current calibration survey, products and interpretations**
Milligan Peter, Ross Franklin, Brian Minty, Murray Richardson, Dhananjay Ravat. *Speaker Milligan Peter*
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -
Geomagnetic reference field models on the Romanian territory and their space-time dynamics as inferred from ground and satellite data
Atanasiu Ligia, Lucian Besutiu, Gabi Cucu, Andrei Soare. *Speaker Atanasiu Ligia*
On estimating high-degree crustal field models using Spherical Harmonic Transforms
Olsen Nils. *Speaker Olsen Nils*
Digital maps of the magnetic anomaly components of the Baltic.
Koroleva Tatiana, Demina Irina, Boyarskikh Vasily. *Speaker Koroleva Tatiana*
Circum-Arctic Mapping Project: new magnetic anomaly map of the Arctic (to 64/60 degrees N)
Gaina Carmen, Camp-Gm Group. *Speaker Gaina Carmen*
Analysis and processing of marine magnetic measurements to construct a magnetic anomaly grid at regional scale
Quesnel Yoann, Vincent Lesur, Mohamed Hamoudi, Mioara Manda. *Speaker Quesnel Yoann*
Spectral Analysis of the Global Lithospheric Magnetic Anomaly Field derived from Airborne, shipborne, and satellite Data
Hamoudi Mohamed, Lesur Vincent, Chambodut Aude, Thbault Erwan, Quesnel Yoann, Manda Mioara. *Speaker Hamoudi Mohamed*
The NGDC candidate for the World Digital Magnetic Anomaly Map
Maus Stefan, Tatiana Sazonova, J. Derek Fairhead, Kumar Hemant, Dhananjay Ravat. *Speaker Maus Stefan*
Visualized combination of IGRF and local geomagnetic data in China
Peng Fenglin, Wang Dan, Peng Le, Peng Fenglin, An Zhenchang, Shen Xiaoyang, Xia Guohui, Tang Keyun, Ma Faining. *Speaker Le Peng*
ASICDC041 **The investigation of low-latitude and equatorial geomagnetic variations since the International Geophysical Year 1957**
Conveners: Kim Thoa Nguyen Thi, Arora Baldev
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room A
Chairpersons: -
09:00 am **The Magnetic Variations of the Equatorial Electrojet and the Low-latitude Ionospheric Current Simulated by the Thermosphere-Ionosphere-Electrodynamics General Circulation Model (TIE-GCM).**
Dumbia Vafi, Astrid Maute, Art Richmond. *Speaker Dumbia Vafi*
09:15 am **Seasonal deformations in the SQ current system**
Arora Baldev, S.K.Bhardwaj. *Speaker Arora Baldev*
09:30 am **Evidence for short correlation lengths of the noon-time equatorial electrojet inferred from a comparison of satellite and ground magnetic data.**
Manoj Chandrasekharan, Hermann Lhr, Stefan Maus, Nandini Nagarajan. *Speaker Manoj Chandrasekharan*
09:45 am **Analysis of the equatorial electrojet magnetic field over West Africa**
Chulliat Arnaud, Yves Cohen. *Speaker Chulliat Arnaud*
10:00 am **Investigation of equatorial geomagnetic variations in India (1957 to 2007)**
Nagarajan Bala, J. L. Saini, J. S. Tariyal. *Speaker Nagarajan Bala*
10:15 am **Study of longitudinal variability from a spread of observatories to complement satellite measurements in the study of spatial and temporal variability of EEJ**
Nagarajan Nandini. *Speaker Nagarajan Nandini*
10:30 am **Coffee Break (30 minutes)**
11:00 am **Association between the strength of equatorial electrojet current and variability in the SQ focus**
Jadhav Madhavi, Sobhana Alex, B.D. Kadam. *Speaker Jadhav Madhavi*
Madhavi
11:15 am **On the magnetic quiet daily variation of the Earth's magnetic field sr above Vietnam, comparison with the other longitude sectors**
Pham Thi Thu Hong, Christine Amory-Mazaudier, Minh Le Huy. *Speaker Pham Thi Thu Hong*
11:30 am **Pi2 pulsations at low and near-equatorial latitudes**
Rakhmatulin Ravil, Zhao Hua. *Speaker Rakhmatulin Ravil*
11:45 am **Generation of Pi2 pulsations at the dayside dip equator (DDE) by the cavity resonance mode (CRM): a statistic study of the Pi2 pulsations observed on observations at Jicamarca (JIC) and Kakioka (KAK)**
Han Desheng, Hui-Gen Yang, Zhuo-Tian Chen. *Speaker Han Desheng*
12:00 pm **Low latitude Pi2 pulsations: multisubstorm activity**
Vohat Praveen, Ashwini Kumar Sinha, Bashir Mohd. Pathan. *Speaker Vohat Praveen*
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room A
Chairpersons: -
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -
The effect of dust particles on two-stream instability: a possible explanation for the persistence of ionization trails of Leonid meteor showers in the ionosphere.
Kulkarni Vaman. *Speaker Kulkarni Vaman*
Geomagnetic field oscillations at equatorial and low latitudes through Singular Spectrum Analysis
Bhardwaj Sandeep. *Speaker Bhardwaj Sandeep*
Separation of normal and counter electrojet variations through Principal Component Analysis during ISEEJ
Bhardwaj Sandeep. *Speaker Bhardwaj Sandeep*
GS001 **Reference Frames**
Conveners: Dermanis Athanasios, Drewes Hermann
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Education Room 3
Chairpersons: -
09:00 am **Reference systems, reference frames and the geodetic datum**
Drewes Hermann. *Speaker Drewes Hermann*
09:25 am **Toward consistent weekly determinations of Earth Orientation Parameters and station coordinates**
Gambis Daniel, R. Biancale, A. Pollet. *Speaker Gambis Daniel*
09:40 am **A mid-ocean ridge fixed absolute reference frame: Comparison and analysis**
Jin Shuanggen, Jong-Uk Park. *Speaker Jin Shuanggen*
09:55 am **Investigations into a dynamic geocentric datum**
Wang Jian, Junqiang Wang, Craig Roberts, Jinling Wang, Samsung Lim. *Speaker Jinling Wang*
10:10 am **Extension of ITRF2005 for Precise Orbit Determination (DPOD2005, LPOD2005), Realization and validation**
Willis Pascal, J.C. Ries, F.G. Lemoine, E.C. Pavlis, L. Soudarin, N. Zelenski. *Speaker Willis Pascal*
10:30 am **Coffee Break (30 minutes)**
11:00 am **The International Terrestrial Reference Frame (ITRF): Past, Present and Future**
Altamimi Zuheir. *Speaker Altamimi Zuheir*
11:25 am **Reanalysis and extension of the ILRS weekly solutions: towards an ILRS-TRF**

1:45 am Pavis Erricos C., V. Luceri. *Speaker Pavis Erricos C.*
On the strengths of SLR observations to realize the scale and origin of the terrestrial reference system
Angermann Detlef, Horst Mller. *Speaker Angermann Detlef*
12:00 pm **Impact of the network effect on the origin and scale: case study of Satellite Laser Ranging.**
Collillieux Xavier, Zuheir Altamimi. *Speaker Collillieux Xavier*
12:15 pm **Satellite Laser Ranging biases and Terrestrial Reference Frame scale factor**
Coulot David, Philippe Berio, Dominique Fraudy, Olivier Laurain, Pierre Exertier. *Speaker Coulot David*
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Analysis of the bias between TOPEX and GPS vTEC determinations
Brunini Claudio, Francisco Azpilicueta. *Speaker Brunini Claudio*
Adoption of an ITRF 2005 based frame as the National Geodetic Reference Frame Of Argentina
Cimbaro Sergio, Eduardo Andrs Laura. *Speaker Cimbaro Sergio*
MASS & MyRTKnet:The Revised Geodetic Definition of GDM2000
Nordin Soeb. *Speaker Nordin Soeb*
Towards a new vertical reference system for Argentina
Pacino Maria Cristina, Daniel Del Cogliano, Graciela Font, Eduardo Laura, Silvia Miranda, Paula Natal. *Speaker Pacino Maria Cristina*
Earth crust deformation map based on continuous GPS measurements in Colombia
Martinez William. *Speaker Martinez William*
GPS measurements for the establishment of the SIRGAS-REGVEN datum in the morichal operational area
Forgione Mario, Jose Borrego, Carlos Vargas, Manolo Reina, Hermes Mendez, Jose Rodriguez. *Speaker Forgione Mario*
Status of establishment of the polish part of the network of reference stations ASG/EUPOS
Sledzinski Janusz, Wieslaw Graszka. *Speaker Sledzinski Janusz*
EUPOS AND EUPOS INTERREG IIC two european initiatives of regional cooperation.
Sledzinski Janusz, Anette Blaser, Wieslaw Graszka, Gerd Rosenthal. *Speaker Sledzinski Janusz*
Analysis of 14 years (1993-2006) of SLR data combination of High (Lageos-1 & -2) and Low (Starlette, Stella, TOPEX/Poseidon & Jason-1) satellites for TRF and EOP study
Gourine Bachir, Kahlouche Salem, Berio Philippe, Deleflie Florent, Feraudy Dominique, Exertier Pierre. *Speaker Gourine Bachir*
Research on framework sites selection on unite-processing of IGS CORS and Chinese CORS
Mi Jinzhong, Jiang Zhihao. *Speaker Mi Jinzhong*
Combined adjustment of nationwide astro-geodetic and the national GPS2000 geodetic control networks
Cheng Yingyan, Pengfei Cheng, Jingzhong Bei. *Speaker Cheng Yingyan*
Gravity data analysis for the calculation of geopotential numbers in the altimetric network of Argentina
Vilella Juan Carlos, Maria Cristina Pacino. *Speaker Vilella Juan Carlos*
Variations of lengths of latitudinal circles of the Earth and their mechanism
Barkin Yury. *Speaker Barkin Yury*
Real Time Monitoring of IGU clock corrections provided by a Web-based User Information Portal
Opitz Michael, Robert Weber, Mark Caissy, Veronika Broederbauer. *Speaker Opitz Michael*
Epoch rectification of GPS on benchmarks in Canada
Fotopoulos Georgia, Michael Craymer, Earl Lapelle. *Speaker Fotopoulos Georgia*
Refining the Brazilian Vertical Datum by integrating satellite altimeter data and local geopotential anomalous component
De Freitas Silvio, Regiane Dalazoana, Bernhard Heck, Vagner Goncalves Pereira, Alessandra Svonka Palmeiro. *Speaker De Freitas Silvio*
Impact of near-field effects on the GNSS Position solution
Dilner Florian, Gnter Seeber, Steffen Schn. *Speaker Dilner Florian*
Realization of a global vertical reference frame a case study for the areas of Germany and the european part of Russia
Ihde Johannes, Gleb Demianov, Andrey Mayorov, Mariya Yurkina, Martina Sacher, Uwe Schfer, Uwe Schirmer. *Speaker Ihde Johannes*
Development of a glonass infrastructure at the Federal Agency of Geodesy and Cartography of Russia (ROSKARTOGRAFIA)
Habrich Heinz, Vladimir Gorobets, Gleb Demiyonov, Victor Zabnev, Georg Weber, Johannes Ihde. *Speaker Vladimir Gorobets*
Completion of the Swiss national triangular transformation network: Precise transformation between the old reference frame LV03, the new LV95 and global ones like ETRF
Kistler Matthias. *Speaker Kistler Matthias*
Strategies for processing GPS densification networks
mercan Hüseyin, Rahmi Nurhan Elik. *Speaker Mercan Hüseyin*
Least squares spectral analysis as applied to the adjustment of the national levelling network of Iran
Mohammad Karim Mahmood, P. Vanicek, Y. Djamour, Y. Hatam, M. Nikkho, S. Arabi, B. Voosoghi, M. Najafi Alamdari. *Speaker Mohammad Karim Mahmood*
Latest Enhancements in the Brazilian Active Control Network
Fortes Luiz, Sonia Maria Alves Costa, Mario Alexandre De Abreu, Alberto Luis Da Silva, Newton Jos De Moura Jnior, Joo Francisco Galera Monico, Marcelo Carvalho Santos, Pierre Ttreault. *Speaker Fortes Luiz*
The Use of GNSS for Reference Frames Report of IAG SG 1.2 and the IGS GNSS Working Group
Weber Robert, Carine Bruyninx. *Speaker Weber Robert*
Present day velocities estimation for monitoring of regional reference frames by continuous GPS observations
Baez Juan Carlos, Silvio Rogerio Correia De Freitas, Hector Parra, Rodrigo Maturana. *Speaker Rodrigo Maturana*
A possible explanation for periodic signals in the formal errors of geodetic station position time series
Collillieux Xavier, David Coulot, Zuheir Altamimi, Philippe Berio. *Speaker Collillieux Xavier*
The Portuguese Geodetic Reference Frames
Vasconcelos Manuela, Henrique Botelho, Helena Kol, Joo Casaca. *Speaker Vasconcelos Manuela*
Improving Gravity Coverage over Brazilian Fundamental Vertical Network
Teixeira Luz Roberto, Bernhard Heck. *Speaker Teixeira Luz Roberto*
Searching for the optimal relationships between SIRGAS2000, South American Datum of 1969 and Crrego Alegre, in Brazil
Santos Marcelo, Leonardo Oliveira, Sonia Costa, Felipe Nievinski, Mauricio Galo, Paulo Camargo, Carlos Silva, Rodrigo Leandro. *Speaker Leonardo Oliveira*
Coordinates transformation by “ZONING METHOD” for parameters computing between WGS84 and North Sahara “clarke 1880” Systems
Nouredine Kheloufi. *Speaker Nouredine Kheloufi*
The role of NASA’s Global GPS Network in Regional and Global Geodesy
Ruud Oivind. *Speaker Ruud Oivind*
Remarks on the ITRF2005 reference frame
Bianco Giuseppe, R. Devoti, V. Luceri, C. Sciarretta. *Speaker Bianco Giuseppe*

GS002 Gravity Field
Conveners: Visser Pieter, Okubo Shuhei, Jekeli Christopher, Sneeuw Nico, Marti Urs
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Education Main Hall
Chairpersons: -
09:00 am **The fennoscandian land uplift gravity lines 1966-2006**
Makinen Jaakko, Andreas Engfeldt, Bjrn Geirr Harsson, Hannu Ruotsalainen, Gabriel Strykowski, Tnis Oja, Detlef Wolf. *Speaker Makinen Jaakko*
09:14 am **Time Variability of the European Gravity Field (1997-2006) from GGP SG Data, Compared to GRACE Satellite Data and Hydrology Models.**
Crossley David, Jacques Hinderer, Caroline De Linage, Jean-Paul Boy. *Speaker Crossley David*
09:28 am **5 years of GRACE time variable geoid models**
Biancale Richard, J-M Lemoine, S Bruinsma, F Perosanz, G Balmino. *Speaker Biancale Richard*
09:42 am **Recovery of temporal gravity field variations from GRACE data with the range-combination approach**
Liu Xianglin, Pavel Ditmar, Qile Zhao. *Speaker Liu Xianglin*
09:56 am **Review of evaluation methods and test results for the quality assessment of Earth gravity models**
Huang Jianliang, Christopher Kotsakis. *Speaker Huang*

Jianliang
10:10 am **Periodic components of water stock changes from GRACE and global hydrology models**
Schmidt Roland, Svetozar Petrovic, Johann Wnsch, Franz Barthelmes, Jrgen Kusche. *Speaker Schmidt Roland*
10:24 am **Evaluation of the terrain-generated gravitational potential and its directional derivatives by combination of analytical formulae and numerical integration**
Tsoulis Dimitrios, Pavel Novak, George S. Vergos, Martin Kadlec. *Speaker Tsoulis Dimitrios*
10:38 am **Coffee Break (30 minutes)**
11:08 am **A data-driven approach to local gravity field modeling**

using spherical radial basis functions
Klees Roland, Ilya Prutkin, Tobias Wittwer. *Speaker Klees Roland*
11:22 am **Assessment of GRACE Temporal Gravity Field Inversion Methodologies for Earth Geodynamic Studies**
Schmidt Michael, C. K. Shum, D. Yuan, C.Y. Kuo, Y. Chen, L. Wang, M. Watkins. *Speaker Schmidt Michael*
11:36 am **Improved resolution of a GRACE gravity field model by regional refinements**
Eicker Annette. *Speaker Eicker Annette*
11:50 am **On a refined global topographic correction to gravity disturbances**
Vajda Peter, A. Ellmann, B. Meurers, P. VančEk, P. Novk, R. Tenzer. *Speaker Vajda Peter*
12:04 pm **Earth gravitational model to degree 2160: status and progress**
Pavlis Nikolaos, Simon A. Holmes, Steve C. Kenyon, John K. Factor. *Speaker Pavlis Nikolaos*
12:18 pm **Monitoring And Modelling Individual Sources Of Mass Distribution And Transport In The Earth System By Means Of Satellites**
Koop Radboud, Thomas Gruber, Pieter Visser, Nico Sneeuw, Matt King, Jonathan Bamber, Marc Bierkens, Tonie Van Dam, Martin Losch, Maik Thomas, Michael Kern, Roger Haagman. *Speaker Roger Haagman*
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Education Main Hall
Chairpersons: -
02:00 pm **Progress towards the GGM03 mean Earth gravity models from GRACE**
Tapley Byron, John Ries, Srinivas Bettadpur, Don Chambers, Francis Condi, Stephen Poole. *Speaker Tapley Byron*
02:14 pm **Experiments on the determination of global GRACE-only gravity models at sub-monthly intervals**
Flechtner Frank, Roland Schmidt, Ulrich Meyer, Karl-Hans Neumayer, Rolf Knig, Jrgen Kusche. *Speaker Ulrich Meyer*
02:28 pm **Evaluations of CSR-RL04 GRACE Gravity Field Models**
Bettadpur Srinivas, Csr Level-2 Team. *Speaker Bettadpur Srinivas*
02:42 pm **GOCE Mission Development Status**
Muzi Danilo, Rune Floberghagen. *Speaker Muzi Danilo*
02:56 pm **Development of an Interferometric Laser Ranging System for a Follow-On Gravity Mission to GRACE**
Nerem Steve, P. Bender, B. Loomis, M. M. Watkins, W. Folkner, M. Stephens, J. Leitch, R. Pierce. *Speaker Nerem Steve*
03:10 pm **Study of the detectability of gravity changes caused by Tectonic processes using the space gravity missions**
Sharifi Mohammadali, Gholamreza Joodaki, Nico Sneeuw. *Speaker Sharifi Mohammadali*
03:24 pm **Approximate decorrelation and non-isotropic smoothing of time-variable GRACE gravity field models**
Kusche Juergen, Roland Schmidt. *Speaker Kusche Juergen*
03:38 pm **Coffee Break (30 minutes)**
04:08 pm **Numerical integration of ocean tides for an improved de-aliasing of GRACE gravity field models**
Bosch Wolfgang, Roman Savcenko. *Speaker Bosch Wolfgang*
04:22 pm **The Role of the Atmosphere for Satellite Gravity Field Missions**
Gruber Thomas, Thomas Peters, Lieselotte Zenner. *Speaker Gruber Thomas*
04:36 pm **Assessment of GPS observables for gravity field recovery from GRACE**
Jggi Adrian, Gerhard Beutler, Lars Prange, Rolf Dach. *Speaker Jggi Adrian*
04:50 pm **Precise spaceborne accelerometry on board the GRACE mission**
Flury Jakob, S Bettadpur. *Speaker Flury Jakob*
05:04 pm **Calibration of the CHAMP and GRACE Accelerometers**
Bruinsma Sean, F. Perosanz, R. Biancale. *Speaker Bruinsma Sean*

Sean
05:18 pm **Exploring the possibilities for calibrating the GOCE accelerometers by the star trackers**
Visser Pieter. *Speaker Visser Pieter*
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -
Tailored Reference Geopotential Model for Egypt
Abd-Elmotaal Hussein. *Speaker Abd-Elmotaal Hussein*
Investigation of gravity gradients of potential anomaly in Iran territory using GRACE
Kiamehr Ramin, Mehdi Eshagh. *Speaker Kiamehr Ramin*
Adjustment of the gravity reference network of Estonia
Oja Tõnis. *Speaker Oja Tõnis*
Calibration of relative LaCoste-Romberg G and Scintrex CG-5 gravimeters in the Estonian and Finnish calibration lines
Oja Tõnis. *Speaker Oja Tõnis*
Satellite altimetry over land and coastal zones: a summary of achievements of IAG SG2.3 over 2003-2007
Hwang Chainway. *Speaker Hwang Chainway*
Accuracy Evaluation for SST Gravity Field Models in China
Luo Jia. *Speaker Luo Jia*
Simulation Research of Satellite-to-Satellite Tracking in Lunar Gravity Field Determination
Luo Jia. *Speaker Luo Jia*
New investigation on the choice of the tailored global geopotential model for Algeria
Benahmed Daho Sid Ahmd, C. L. Merry. *Speaker Benahmed Daho Sid Ahmd*
A new vertical datum for Algeria derived from the combination of the local Gravimetric geoid and GPS/Levelling data
Benahmed Daho Sid Ahmd, C. L. Merry. *Speaker Benahmed Daho Sid Ahmd*
Towards a new global digital elevation model
Berry Philippa, Richard Smith, Jennifer Freeman, Jerome Benveniste. *Speaker Berry Philippa*
The Antarctic Geoid Project (IAG Commission Project 2.4)
Scheinert Mirko. *Speaker Scheinert Mirko*
Self-adaptive choice of a system of localizing base functions for regional gravity field recovery
Keller Wolfgang. *Speaker Keller Wolfgang*
On the principal difficulties and ways to their solution in the theory of gravitational condensation of infinitely distributed dust substance
Krot Alexander. *Speaker Krot Alexander*
Coastal and land Applications of satellite altimetry
Chang Xiaotao, Guo Jinyun, Li Jiancheng, Zhang Chuanyin, Dang Yamin. *Speaker Chang Xiaotao*
Gravity changes caused by tide-generating potential and by internal dislocation in a 3-D heterogeneous earth (1) theory
Fu Guangyu, Wenke Sun. *Speaker Wenke Sun*
GRACE application to the receding Lake Victoria water level and the Australian drought
Awange Joseph, Dr.-Ing. Mohammad A. Sharifi, Prof. Wolfgang Keller, Prof. Will E. Featherstone, Dr. Michael Kuhn. *Speaker Awange Joseph*
Solution of the inverse Stokes and inverse Hotine problems to order f for an ellipsoidal boundary
Heck Bernhard, Kurt Seitz. *Speaker Heck Bernhard*
Comparison of analytical and numerical methods for the computation of the potential of different mass elements and its first or second derivatives
Wild-Pfeiffer Franziska, Bernhard Heck, Kurt Seitz. *Speaker Wild-Pfeiffer Franziska*

A Molodenskij geoid model in Iran
Najafi-Alamdari Mehdi, Seyed Rohallah Emadi, Makan. Abdolhazadeh. *Speaker Najafi-Alamdari Mehdi*
Realisation of one centimetre geoid in Klang Valley
Chang David, Dr Samad Bin Hj Abu, Mr Soeb Nordin. *Speaker Chang David*
Malaysia Airborne Gravity and Geoid Determination Project
Abu Samad, David Chang Leng Hua, Soeb Nordin. *Speaker Abu Samad*
On the feasibility of Biased Kriging
Dermanis Athanasios. *Speaker Dermanis Athanasios*
The fast analysis of GOCE gravity field
Xu Xinyu, Jc Li, Xiancai Zou, Chunbo Fan, Yonghai Chu. *Speaker Xu Xinyu*
Fitting the best geopotential model for Argentina: a case study at Patagonia.
Pereira Ayelen. *Speaker Pereira Ayelen*
Preliminary results of the first campaign of absolute gravity measurements at Polish GNSS stations
Walo Janusz, Tomasz Olszak, Andrzej Pachuta, Marcin Barlik, Ryszard Szpunar, Dominik Prochniewicz. *Speaker Tomasz Olszak*
Improved marine gravity field from satellite altimetry: Case study of the South China Sea
Bao Lifeng, Yang Lu. *Speaker Bao Lifeng*
A New Improved Geoid In North Eastern Italy
Sterzai Paolo. *Speaker Sterzai Paolo*
Combination Method for Computing TerrainCorrections: A case study in a region in Iran
Jalal Shiva, Hossein Zomorrodian. *Speaker Jalal Shiva*
Reference frame consistency in CHAMP and GRACE earth gravity models
Kotsakis Christopher. *Speaker Kotsakis Christopher*
Performance Simulations of a GRACE Follow-On Mission Using a

Mascon Approach
Loomis Bryant, R. Steven Nerem, Scott Luthcke, Dave Rowlands. *Speaker Loomis Bryant*
Mass changes detected from GRACE data in Argentina
Pereira Ayelen, Rene Forsberg. *Speaker Pereira Ayelen*
The role of the covariance function in least-squares collocation for local gravity field modelling
Darbeheshti Neda, Will Featherstone, Wolfgang Keller. *Speaker Darbeheshti Neda*
Computation of Geoid and its interpretation in Saurashtra, western India using Gravity data
Prajapati Sanjay, Bijendra Singh, C.C. Tscherning. *Speaker Prajapati Sanjay*
Estimating the time-variable component of the sea surface topography with geodetic data
Vergos Georgios S., Ilias N. Tziavos. *Speaker Vergos Georgios S.*
Analysis of repeated GPS measurements over a geodetic network and a common adjustment of heterogeneous height data
Tziavos Ilias N., Dimitrios Tsoulis, Vassilios N. Grigoriadis, Vassilios D. Andritsanos, Eleni A. Tzanou. *Speaker Tziavos Ilias N.*
Robust Trend Estimation from GOCE SGG Satellite Track Cross-Over Differences
Jarecki Focke. *Speaker Jarecki Focke*
Stokes-like solution to the second geodetic boundary-value problem
Ziqing Wei. *Speaker Ziqing Wei*
Geoid determination combining ground data and satellite-derived global models
Pail Roland, Fernando Sans, Norbert Kuehtreiber, Mirko Reguzzoni, Bernadette Wiesenhofer. *Speaker Pail Roland*
Three-Dimensional Microgravity modeling of Tehran subway basement
Nasuti Aziz, Dr.Vahid Ebrahimzadeh Ardestani. *Speaker Nasuti Aziz*
The Precise orbital determination of Earth satellites: a tool for investigating the atmosphere ?
Vespe Francesco. *Speaker Vespe Francesco*
Geopotential number estimation by the use of Digital Terrain Model
Szeghy Erika. *Speaker Szeghy Erika*
Current status of gravity measurements in the Republic of Croatia with the Basic Gravity Network Finalization Project
Lucic Maro, Mihajla Liker, Ilija Grgic, Bojan Barisic, Marija Repanic. *Speaker Mihajla Liker*
Precise determination of vertical gravity gradients in the Czech gravity network
Lederer Martin, Vojtech Plink. *Speaker Lederer Martin*
How to detect small hydrological variations in gravity by repeated measurements with field gravimeters ?
Naujoks Marco, Adelheid Weise, Corinna Kroner, Thomas Jahr. *Speaker Naujoks Marco*
Estimation of a new high-accuracy marine geoid model offshore Argentina using CHAMP and GRACE-derived geopotential models
Tocho Claudia, Michael G. Sideris. *Speaker Tocho Claudia*
Analysis of synthetic TFM patterns for salt domes
Panisova Jaroslava, Peter Vajda. *Speaker Panisova Jaroslava*
Gravity field parameter estimation using QR factorization
Bruinsma Sean, J.C. Marty, M. Baboulin, S. Gratton, G. Balmino. *Speaker Bruinsma Sean*
The inversion of the Poisson integral in the wavelet domain
Elhabiby Mohamed, Michael G. Sideris. *Speaker Elhabiby Mohamed*
The Bias in GRACE estimates of continental water storage variations
Zapreeva Elena, Roland Klees, Hessel C. Winsemius, Hubert H.G. Savenije. *Speaker Zapreeva Elena*
Signals of extreme weather conditions in central Europe from GRACE 4-D wavelet expansions
Seitz Florian, Michael Schmidt, C.K. Shum, Lei Wang. *Speaker Seitz Florian*
Construction of the Absolute Gravity Network in Taiwan
Chung Yi-Da, Chun-Sung Chen. *Speaker Chun-Sung Chen*
The core drift and oscillations as the main mechanism of non-tidal variations of gravity
Barkin Yury. *Speaker Barkin Yury*
The detailed model of Antarctic gravity field
Grushinskiy Andrey, Andrey Aleksandrovich Buluchev. *Speaker Grushinskiy Andrey*
Research on the calibration of onboard accelerometer by dynamic method
Zou Xiancai, J.Li, Luo Jia. *Speaker Zou Xiancai*
The ICAGM07 geoid model for the North-East Atlantic (Iberia Canaria - Azores)
Catalao Joao, Miguel J. Sevilla, Helena Koll. *Speaker Catalao Joao*
Gravity field determination at the AIUB - the celestial mechanics approach.
Prange Lars, Gerhard Beutler, Leos Mervart, Rolf Dach, Adrian Jggi. *Speaker Prange Lars*
Accuracy analysis of external reference data for GOCE evaluation in space and frequency domain
Wolf Karen Insa. *Speaker Wolf Karen Insa*
Calibration in the MBW of simulated GOCE gradients aided by ground data.
Veicherts Martin, J. Boumann, C. C. Tscherning. *Speaker Veicherts Martin*
An error model for the GOCE space-wise solution by Monte Carlo methods
Migliaccio Federica, Mirko Reguzzoni, Fernando Sans, Nikolaos Tselfes. *Speaker Mirko Reguzzoni*
Downward continuation of airborne gravity by Poisson integral, least-squares collocation and Fourier transform: a case study over the Kuroshio east of Taiwan
Hwang Chainway, Artu Ellmann, Hsuan-Chang Shih, Yu-Shen Hsiao. *Speaker Hwang Chainway*
Inversion of gravity data N wavelet domain using normalized forward models
Motasharrie Arash, Hossein Zomorrodian. *Speaker Motasharrie Arash*
Estimation of the time-variable part of the geoid from monthly GRACE solutions
Huang Jianliang. *Speaker Huang Jianliang*
Status Report of Commission 2 - Gravity Field
Jekeli Christopher. *Speaker Jekeli Christopher*
Ocean tide loading correction for GPS static positioning in Taiwan: comparison of GPS and SG loading effects
Wang Chun-Huan, Chun-Sung Chen, Ta-Kang Yeh, Chainway Hwang. *Speaker Wang Chun-Huan*
Non-stationary covariance function modelling for least-squares collocation
Darbeheshti Neda, Will Featherstone. *Speaker Darbeheshti Neda*
Recovery and analysis of earths gravity field using FORMOSAT-3/ COSMIC GPS data
Lin Tingjung, Chienway Hwang, Tzu-Pang Tseng. *Speaker Lin Tingjung*
Gravity field modeling using spherical radial basis functions A case study for the territory of the Netherlands
Tenzer Robert, Roland Klees, Ilya Prutkin, Tobias Wittwer, Erna Oudman. *Speaker Tenzer Robert*
What type of spherical radial basis functions are best suited for local gravity field modeling?
Tenzer Robert, Roland Klees. *Speaker Tenzer Robert*
Comparison of techniques for the computation of a height reference surface from gravity anomalies and GPS/levelling data a case study at the territory of Germany
Tenzer Robert, Uwe Schirmer, Roland Klees, Johannes Ihde, Ilya Prutkin, Gunter Liebsch, Tobias Wittwer, Uwe Schaefer, Bas Alberts. *Speaker Tenzer Robert*
Analysis of the possibility of predicting sea floor from vertical gravity gradient
Jin Taoyong, Jiancheng Li, Zhengtao Wang, Yunsun Wu. *Speaker Jin Taoyong*
Error-covariances of the estimates of spherical harmonic coefficients computed by LSC, using simulated GOCE gradiometer data
Arabelos Dimitrios, Carl Christian Tscherning. *Speaker Arabelos Dimitrios*
Scientific report of subcommission 2.1 for the period 2003-2007
Okubo Shuhei. *Speaker Okubo Shuhei*
Overview of GOCE Level 2 Gravity Field Products
Gruber Thomas, Reiner Rummel, Radboud Koop. *Speaker Gruber Thomas*
Upward continuation of seafloor gravity data over inland seas
Ellmann Artu, Harli Jrgenson. *Speaker Ellmann Artu*
Off-line validation tools for GOCE gradiometer data
Plank Gernot, Michael Kern, Roger Haagmans, Rune Floberghagen. *Speaker Plank Gernot*
Mean vertical gravity gradient within the topography
Tenzer Robert, Artu Ellmann. *Speaker Tenzer Robert*
In-flight validation methods for the GOCE gradiometer
Kern Michael, Roger Haagmans, Gernot Plank, Rune Floberghagen. *Speaker Kern Michael*
Physical interpretation of the differences between the gravity anomalies and the gravity disturbances A case study for the Canadian Rocky Mountains
Tenzer Robert, Artu Ellmann, Philip Moore, Petr VančEk, Pavel Novk, Peter Vajda. *Speaker Tenzer Robert*
Numerical Comparison of Two Strategies for Geoid and Quasigeoid Determination over Sweden
Agren Jonas, Ramin Kiamehr, Lars E Sjberg. *Speaker Agren Jonas*
Image superresolution via filtered scales integral reconstruction applied to GOCE Geoid Data

Geoid-type surface computation for the improved determination of heights from global positioning systems
Soltanpour Ali, Hossein Nahavandchi. *Speaker Vingione Guido*

GRACE and the geoid in South America
Blitzkow Denizar, Ana Cristina O. Cancoro, De Matos, Ilce De Oliveira Campos, Flvio Guilherme Vaz De Almeida, Maria Cristina B. Lobianco.
Speaker Blitzkow Denizar

Improving the precision of GPS acceleration for moving base gravimetry
Li Xiaopeng, Christopher Jekeli. *Speaker Li Xiaopeng*

On Some Aspects of GLS06 Data Quality assessment and downward continuation
Saleh Jarir, Dan R. Roman, Yan Ming Wang. *Speaker Saleh Jarir*

Evaluation of the Regularization Methods Used in the Torus-Based Semi-Analytical Approach for Gravity Field Recovery
Xu Chen, Michael G. Sideris. *Speaker Xu Chen*

Ellipsoidal corrections for geoid computations with modified kernels
Claessens Sten, Will Featherstone. *Speaker Claessens Sten*

A unified definition and formulation of analytical approximations in gravity field modelling
Claessens Sten, Will Featherstone. *Speaker Claessens Sten*

Determination of Earth Gravity Field Model WHU-GM-05 Using GRACE Gravity Data
Wang Zhengtao, Jiancheng Li, Dingbo Chao, Weiping Jiang. *Speaker Wang Zhengtao*

Modelling range rates for recovering the Earths gravity field by fully taking the errors of acceleration measurements into account
Shen Yunzhong, Peiliang Xu, Houze Hsu. *Speaker Shen Yunzhong*

Combined vertical motion model - a case study for the Great Lakes
Rangelova Elena, Michael G. Sideris. *Speaker Rangelova Elena*

On the potential of least squares product spectra for calibration of Superconducting Gravimeter and atmospheric reduction
Abd El-Geilil Mahmoud, Spiros Pagiatakis, Ahmed El-Rabbany. *Speaker Spiros Pagiatakis*

Insights into the Mexican Gravimetric Geoid (GGM05)
Santos Marcelo, David Avalos, Petr Vanicek. *Speaker Santos Marcelo*

Approach of regional gravity field modeling from GRACE data for geoid model improvement for Japan
Kuroishi Yuki, Frank G. R. Lemoine, David D. Rowlands. *Speaker Kuroishi Yuki*

Towards the optimum strategy of determination of terrain corrections in Poland
Krynski Jan. *Speaker Krynski Jan*

Forward gravity modelling of global databases - report of IAG study group 2.2 for the period 2003 - 2007
Kuhn Michael, Dimitrios Tsoulis. *Speaker Kuhn Michael*

Shallow-water gravity anomalies over China Seas from retracked Geosat/GM and ERS-1/GM altimetry
Hwang Cheinway, Haihong Wang, Yuande Yang. *Speaker Hwang Cheinway*

Qu-AUSSIE-Geoid: The anticipated new Australian geoid-type model
Featherstone Will, S. J. Claessens, M. Kuhn, J.F. Kirby, N. Darbeheshti, M. Filmer. *Speaker Featherstone Will*

Analysis and Comparison of multi-year GRACE Gravity Field Time Series by means of spectral and spatial Techniques
Zenner Lieselotte, Thomas Peters. *Speaker Zenner Lieselotte*

Analysis of the Gradiometer Equations of the GOCE Satellite Mission
Stummer Claudia, Bjrn Frommknecht. *Speaker Stummer Claudia*

Regional astrogeodetic validation of GPS/levelling data and quasigeoid models
Voigt Christian, Heiner Denker. *Speaker Voigt Christian*

Activities of IAG Subcommittee 2.2: Spatial and Temporal Gravity Fields and Geoid Modelling
Vermeer Martin. *Speaker Vermeer Martin*

Postseismic deformation and gravity changes around Marmara Sea
Roedelsperger Sabine, Ugur Dogan, Semih Ergintav, Carl Gerstenecker. *Speaker Roedelsperger Sabine*

An auto-adaptive method for numerical integration over the Earth's surface in gravity field studies
Nesvadba Otakar. *Speaker Nesvadba Otakar*

Determination of precise kinematic orbits of CHAMP and GRACE satellites for gravity field modeling
Zhao Qile. *Speaker Zhao Qile*

On the rigorous determination of orthometric heights in regional areas
Manoussakis Gerassimos, Demetris Delikaraoglou, George Ferentinos. *Speaker Manoussakis Gerassimos*

Gravity field modeling on the basis of satellite accelerations directly derived from onboard GPS measurements
Zhao Qile. *Speaker Zhao Qile*

The Realization of Three-Dimensional Inversion of Non-tidal Gravity Changes by Wavelet Decomposition
Liu Shaoming, Minyu Jia, Shaoan Sun, Chongyang Shen. *Speaker Liu Shaoming*

The analysis of models of the Earths gravity field derived from GRACE using empirical orthogonal functions
Wen Hanjiang. *Speaker Wen Hanjiang*

Preparing the next generation EGM; Satellite altimetry for gravity and Mean sea surface determination
Andersen Ole, Per Knudsen. *Speaker Andersen Ole*

A preliminary three-dimensional density model of the Western Carpathians based on the CELEBRATION 2000 seismic experiment.
Alasonati Tasarova Zuzana, Miroslav Bielik, Hans-Jrgen Gtze. *Speaker Alasonati Tasarova Zuzana*

Influence of hydrology-related temporal aliasing on the quality of monthly models derived from GRACE satellite gravimetric data
Encarnacao Joao, R.Klees, E.Zapreeva, P.Ditmar, J.Kusche. *Speaker Encarnacao Joao*

Terrain correction of gravity gradients by different approaches
Tth Gyula. *Speaker Tth Gyula*

New combined geoid solution by gravity space approach applied in the South of Portugal mainland
Antunes Carlos, Joo Catalo. *Speaker Antunes Carlos*

GOCE: System and Mission Performance, Data Processing and Mission Products
Floberghagen Rune, Danilo Muzi. *Speaker Floberghagen Rune*

Progress in Regional Quasi-geoid Determination of China
Li Jiancheng, Jinsheng Ning, Weiping Jiang, Dingbo Chao, Yibin Yao. *Speaker Li Jiancheng*

The effect of topographic and isostatic masses on the ETVs-tensor
Rozsa Szabolcs, Gyula Tth. *Speaker Rozsa Szabolcs*

Report on the Activities of SC 2.4 "Regional Geoid Determination"
Marti Urs. *Speaker Marti Urs*

The National Gravity Network of Switzerland
Marti Urs. *Speaker Marti Urs*

Report of Working Group on Satellite Gravity Theory
Sneeuw Nico. *Speaker Sneeuw Nico*

The analysis of models of the Earths gravity field derived from GRACE using empirical orthogonal functions
Wen Hanjiang, Zhu Guangbin, Xu Kehong. *Speaker Wen Hanjiang*

New combined geoid solution HGTUB2007 for Hungary
Tth Gyula. *Speaker Tth Gyula*

Report of the Internal Working Group of the ICCT on Inverse Problems and Global Optimization
Kusche Juergen. *Speaker Kusche Juergen*

Time variable gravity field recovery in local areas by means of Slepian functions
Weigelt Matthias, Oliver Bauer, Nico Sneeuw, Wolfgang Keller. *Speaker Weigelt Matthias*

Computing Lateral Topographical Density Variations and Terrain Roughness Effects on the Orthometric Heights in Iran
Saadat Seyed Abdoreza. *Speaker Saadat Seyed Abdoreza*

Determination of Local GPS/Levelling Geoid using New Computing Approaches
Erol Bihter, Rahmi Nurhan Elik. *Speaker Erol Bihter*

The gravity signature of the Sumatra-Andaman 2004 earthquake: comparison between GRACE observations and modeling.
De Linage Caroline, Luis Rivera, Sophie Lambotte, Jean-Paul Boy, Jacques Hinderer, Richard Biancale. *Speaker De Linage Caroline*

Reduced-dynamic Precise Orbit Determination Based on Helmert Transformation
Chen Junping, Jiexian Wang, Jrgen Klotz, Marcos Moreno, Volker Grund, Jan Bolte. *Speaker Chen Junping*

Space localizing gravity field determination for airborne gravimetry in consideration of topographical aspects
Mueller Felix, A.A. Makhloof. *Speaker Mueller Felix*

Combining GPS, Levelling and Geoid Data using Estimated Stochastic Parameters for Vertical Control in North-West of Turkey
Erol Bihter, Roland Klees, Michael G. Sideris, Rahmi N. Elik. *Speaker Erol Bihter*

Unveiling a glaciated Antarctic Volcano with airborne gravity data
Jordan Tom, Fausto Ferraccioli, Jones Phil, John Smellie, Marta Ghidella. *Speaker Jordan Tom*

Numerical approximation of trajectory disturbing gravity
Dongming Zhao, Wu Xiaoping, Zhang Chuanding. *Speaker Wu Xiaoping*

Use of a Fine Scale Hydrologic Model to Validate GRACE Measurements in the Amazon Basin

Castelao Guilherme, William Johns, Gustavo Goni. *Speaker Castelao Guilherme*

03:47 pm **Coffee Break (30 minutes)**

04:17 pm **Spatial variability of floodplain hydrological cycle with radar altimetry and satellite images. Rio Negro Basin (Brazilian Amazon)**
Santos Da Silva Joiceila, Emmanuel Roux 3, Stephane Calmant 1, Frederique Seyler 3, Otto Correa Rotunno Filho 2, Webe Joo Mansur 2, Jean-Loup Guyot 3, Marrie-Paule Bonnet 3. *Speaker Santos Da Silva Joiceila*

04:22 pm **Satellite observations of thermal variability in the Western Pacific Warm Pool**
Ho Chung-Ru, Chun-Yi Lin, Zhe-Wen Zheng, Nan-Jung Kuo. *Speaker Ho Chung-Ru*

04:27 pm **Satellite observations of chlorophyll-a concentration and sea surface wind in the South China Sea**
Kuo Nan-Jung, Chung-Ru Ho, Hong-Yuan Yang, Chi-Yuan Lin, Shih-Chin Chen, Wei-Chung Su. *Speaker Kuo Nan-Jung*

04:32 pm **An evaluation of the classical and extended Rossby wave theories in explaining spectral estimates of the first few baroclinic modes in the South Pacific Ocean**
Holbrook Neil, Angela M. Maharaj, Peter D. Killworth, Jeffrey R. Blundell. *Speaker Holbrook Neil*

04:37 pm **Inversion of surface roughness parameters of intertidal mudflat from airborne polarimetric SAR data**
Park Sang-Eun, Duk-Jin Kim, Ji-Eun Kim, Wooil M. Moon. *Speaker Park Sang-Eun*

04:42 pm **An atmospheric forward model to deduce solar induced chlorophyll fluorescence from radiance spectra of leaves in the oxygen absorption bands**
Del Bianco Samuele, Marina Mazzoni, Pierluigi Falorni, Bruno Carli. *Speaker Del Bianco Samuele*

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Kim Jun-Su, Sang-Eun Park, Wooil M. Moon. *Speaker Kim Jun-Su*

04:52 pm **Determination of vegetation characteristics from three Brazilian study sites using a combination of TRMM-TMI and AVHRR satellite observations**
Rossato Luciana, Richard De Jeu, Regina C. S. Alval. *Speaker Rossato Luciana*

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Yamasoe Marcia, Ricardo Almeida De Siqueira. *Speaker Yamasoe Marcia*

05:02 pm **Geophysical validation of MIPAS/ENVISAT temperature**
Ridolfi Marco, U. Blum, B. Carli, V. Catoire, S. Ceccherini, H. Claude, C. De Clercq, K. H. Fricke, M. Iarlori, P. Keckhut, B. Keridge, J.-C. Lambert, Y. J. Meijer, L. Mona, H. Oelhaf, G. Pappalardo, M. Pirre, V. Rizzi, C. Robert, D. Swart, T. Von Clarmann, A. Waterfall, G. Wetzel. *Speaker Ridolfi Marco*

05:07 pm **Global observations of ozone isotopes from MIPAS limb emission spectra**
Piccolo Chiara, Dudhia Anu, Payne Vivienne. *Speaker Piccolo Chiara*

05:12 pm **Estimating column amounts of atmospheric carbon dioxide and methane from high-resolution infrared sounders data**
Uspensky Alexander, Alexander V.Kukharsky. *Speaker Uspensky Alexander*

05:17 pm **Comparison of the total ozone, ozone profile, and surface UV radiation measurements at Belsk Observatory (52N, 21E) with the AURA satellite overpasses data in the period 2004-2006**
Rajewska-Wiech Bonawentura. *Speaker Rajewska-Wiech Bonawentura*

JMS004 Intercontinental Transport of Substances and its Consequences
Conveners: **Thomson Anne**
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
Chairpersons: -
Trans-Eurasian Pollution Transport Study by Mobile Railway Laboratory TROICA
Skorokhod Andrey, Nikolai Elansky, Olga Lavrova, Vladimir Kopeikin, Konstantin Moiseenko, Alexander Safronov, Natalya Pankratova, Maria Artamonova. *Speaker Maria Artamonova*

Influence of airmass transport on atmospheric CO2 and CH4 in the Mediterranean
Florinda Arturo, Paolo Chamard, Alcide Di Sarra, Daniela Meloni, Francesco Monteleone, Salvatore Piacentino, Damiano Sferlazzo. *Speaker Florinda Arturo*

JMS009 Hydrological Cycle, Precipitation and Precipitation Systems
Conveners: **Stewart Ronald**
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Economics Room 1
Chairpersons: -
09:00 am **Idealized Numerical Sensitivity Studies on Shallow-Convection-Triggered Storms --- Abandoning the "Warm Bubble"**
Blahak Ulrich. *Speaker Blahak Ulrich*

09:15 am **CCN-effects on the development of a convective storm: 2-moment bulk microphysics parameterization compared to spectral bin modeling**
Noppel Heike, Alexander Khain, Andrei Pokrovsky, Ulrich Blahak, Klaus-Dieter Beheng. *Speaker Noppel Heike*

09:30 am **Characteristics of the Explosively Developed Cyclone during the winter season of 2005/06**
Asuma Yoshio, Akira Kuwano-Yoshida. *Speaker Asuma Yoshio*

09:45 am **Wintertime Lake-Effect Snow in the Great Lakes Region of North America**
Hudak David, Walt Petersen, Peter Rodriguez, V.N. Bringi, Yoshio Asuma, Michael Leduc. *Speaker Hudak David*

10:00 am **Internal structure of westward migratory cloud systems with diurnal cycle over Sumatera Island during HARIMAU2006 campaign**
Namiko Sakurai, Shuichi Mori, Masayuki Kawashima, Yasushi Fujiyoshi, Masayuki Ohi, Hamada Jun-Ichi, Hironori Fudeyasu, Wu Peiming, Taichi Sasaki, Yoshikazu Tabata, Fadli Samsudin, Emrizal, Manabu D. Yamanaka, Jun Matsumoto. *Speaker Namiko Sakurai*

10:15 am **Trend analysis of extreme precipitation indices in the Carpathian Basin**
Pongracz Rita, Judit Bartholy. *Speaker Pongracz Rita*

10:30 am **Coffee Break (30 minutes)**

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Battaglia Alessandro, Clemens Simmer. *Speaker Battaglia Alessandro*

11:15 am **Diurnal and seasonal variation of rain events over different geographical stations over Kerala, India**
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Kurita Naoyuki, Hiroyuki Yamada. *Speaker Kurita Naoyuki*

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02:00 pm **Recent perspectives in measuring and estimating precipitation: ground and space points of view**
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02:15 pm **Regional rainfall projections refining model-based estimates using observed trends.**
Smith Ian. *Speaker Smith Ian*

02:30 pm **Cloud-Resolving Model Simulations of Convective Precipitation - Model evaluation in mountainous terrain**
Trentmann Joerg, Heini Wernli, Ulrich Corsmeier. *Speaker Trentmann Joerg*

02:45 pm **Precipitation modeling of the Yellow River basin using WRF model**
Ma Xiyao, Takao Yoshikane, Masayuki Hara, Fujio Kimura, Fujio Kimura, Yoshihiro Fukushima. *Speaker Ma Xiyao*

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Knuth Shelley, Dr. Gregory J. Tripoli, Jonathan E. Thom, A. Weidner, Dr. Charles R. Stearns. *Speaker Knuth Shelley*
03:30 pm **Extraction of doppler profiles during precipitation using complex wavelets**
Sourirajan Varadarajan, S Narayana Reddy, T.Sreenivasulu Reddy. *Speaker Sourirajan Varadarajan*
03:45 pm **Modelling point rainfall occurrences using a Bartlett-Lewis stochastic rainfall model**
Hejjam Sohrab, Fatemeh Zanir. *Speaker Hejjam Sohrab*
04:00 pm **Coffee Break (30 minutes)**
04:30 pm **An Empirical Model for raindrop size distribution in the tropical Indian region**
Sarangam Sampath, Sasi Kumar, V, Hari Kumar, R. *Speaker Sarangan Sampath*
04:45 pm **Understanding groundwater resources potential of Komadugu Yobe Basin in Nigeira**
Jimoh Onemayin David. *Speaker Jimoh Onemayin David*
05:00 pm **Climatic change effects on groundwaters in Milano and Lodi provinces.**
Canepa Paola, Bonomi Tullia, Del Rosso Francesca, Fumagalli Letizia. *Speaker Canepa Paola*
05:15 pm **Flood in Bangladesh : How to face the Challenge**
Hossain Abul. *Speaker Hossain Abul*

JMS010
Conveners: Smith Roger, Baines Peter
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Physics Room A
Chairpersons: -
09:00 am **Double structure in the typhoon eye**
Hayashi Taiichi, Tomoharu Kumabe, Kazuhisa Tsuboki.

Speaker Hayashi Taiichi
09:15 am **Prospects and limitations in hurricane modification by cloud seeding**
Rosenfeld Daniel. *Speaker Rosenfeld Daniel*

09:30 am **Dependence of vortex axisymmetrization on the characteristics of the asymmetry**
Peng Melinda, Jiayi Peng, Tim Li. *Speaker Peng Melinda*

10:00 am **Comparing the Rainfall Patterns of Hurricanes Frances (2004) and Jeanne (2004) During Landfall Over Florida**
Matyas Corene. *Speaker Matyas Corene*

10:15 am **Winds and Waves in the Troposphere and Lower Stratosphere during the passage of Tropical cyclones**
Govindankutty Mrudula, K. Mohan Kumar. *Speaker Govindankutty Mrudula*
10:30 am **Coffee Break (30 minutes)**
11:00 am **Characteristics of Atlantic hurricanes from time-series observations**
Andronache Constantin, Vaughan Phillips. *Speaker Andronache Constantin*

11:15 am **Is African Lightning Activity a Precursor of Atlantic Hurricane Activity?**
Price Colin, Yoav Yair, Mustafa Asfur. *Speaker Price Colin*
11:30 am **Using synergy among satellite sensors to study cyclones**
Devasthale Abhay, Hartmut Grassl. *Speaker Devasthale Abhay*
11:45 am **Tropical Cyclone Impact Forecasting and Warnings in Cuba.**
Rubiera Jose. *Speaker Rubiera Jose*

MS003
Aerosols, Radiation and Clouds (IRC, ICCP, ICACGP) Conveners: Nakajima Teruyuki, Isaac George
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Economics Main Hall
09:00 am **Temporal and chemical variability of aerosols at a rural area in Canada**
Li Shao-Meng, John Liggio, Katherine Hayden, Amy Leithead.

Speaker Li Shao-Meng
09:25 am **The Pacific Dust Experiment (PACDEX): Overview of the experiment and summary of missions**
Stith Jeff. *Speaker Stith Jeff*

09:50 am **Aerosol Pollution Impact on Precipitation**
Levin Zev, William Cotton. *Speaker Levin Zev*

10:15 am **Solar brightening over Europe a consequence of strong aerosol decline is coming to an end**
Philipona Rolf. *Speaker Philipona Rolf*

10:40 am **Coffee Break (30 minutes)**
11:10 am **Kinematic collision statistics in a turbulent suspension of sedimenting inertial droplets**
Wang Lian-Ping, Bogdan Rosa, Scott Johnson, Wojciech W. Grabowski. *Speaker Wang Lian-Ping*

11:35 am **Tripleclouds: an efficient method for representing cloud inhomogeneity in 1D radiation schemes by using three regions at each height**
Shonk Jon, Robin J Hogan. *Speaker Shonk Jon*

12:00 pm **Transformation of aerosol chemical composition during transport over East China Sea**
Takami Akinori, Xiaoxiu Lun, Akio Shimono, Seiichiro Yonemura, Wei Wang, Shiro Hatakeyama. *Speaker Takami Akinori*

Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Main Hall
Chairpersons: -
02:00 pm **A global view of aerosol indirect radiative effects on clouds and climate**
Lohmann Ulrike. *Speaker Lohmann Ulrike*

02:25 pm **Atmospheric Radiative Heating Under Different meteorological Condition**
Fan Tai-Fang, Bing Lin. *Speaker Fan Tai-Fang*

02:50 pm **Towards the Evaluation of Cloud-Aerosol Interactions using Super-Droplet Method**
Shima Shin-Ichiro, Kanya Kusano, Fumiaki Araki, Shintaro Kawahara. *Speaker Shima Shin-Ichiro*

03:15 pm **Aerosol Processing in Mixed-Phase Clouds**
Hoose Corinna, Ulrike Lohmann, Ernest Weingartner. *Speaker Hoose Corinna*

Hoose Corinna
03:40 pm **Coffee Break (30 minutes)**
04:10 pm **EARLINET-ASOS, an european research infrastructure for the aerosol study at continental scale**
Pappalardo Gelsomina, Jens Bsenberg, Aldo Amodeo, Albert Ansmann, Arnoud Apituley, Lucas Alados Arboledas, Dimitris Balis, Christine Beckmann, Anatoly Chaikovsky, Adolfo Comeron, Volker Freudenthaler, Georg Hansen, Valentin Mitev, Doina Nicolae, Alexandros Papayannis, Maria Rita Perrone, Aleksander Pietruczuk, Manuel Pujadas, Jean-Philippe Pautaud, Francois Ravetta, Vincenzo Rizzi, Valentin Simeonov, Nicola Spinelli, Dimitar Stoyanov, Thomas Trickl, Matthias Wiegner. *Speaker Pappalardo Gelsomina*

04:35 pm **Cloud forcing in coupled climate models: dignosis of problems and a way forward**
Sherwood Steven, Florian Bennhold. *Speaker Sherwood Steven*

Steven
05:00 pm **Shortwave radiative impacts from aerosol effects on marine shallow cumuli**
Zuidema Paquita, Huiwen Xue, Graham Feingold. *Speaker Zuidema Paquita*

Zuidema Paquita
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -

Impact of opencast coal mining on the air environment
Chandrasekhar Matli. *Speaker Chandrasekhar Matli*

Insitu radiation observations in southern Tamil Nadu, India and implication on habitat and environment
Shanker Daya, H.N. Singh, V.N. Neelakandan, M. Banerjee, V. P. Singh. *Speaker Shanker Daya*

Aerosol optical properties estimation using a MFRSR at So Paulo city
Yamasoe Marcia, Nilton Manuel Evora Do Rosario, Andr Cozza Sayo, Paulo Artaxo. *Speaker Yamasoe Marcia*

The Analyses of Precipitation Acidity and Chemical Composition In Industrial Estate Located In North Bank of the Yangtze River, Nanjing
Zheng You-Fei, Tang Xin-Ying, Xu Jian-Qiang, Zhang Hai-Ou, Yang Lei, Bai Xue. *Speaker Zheng You-Fei*

Validation of concentrations of lead-210 in high altitude simulated by MOCAGE
Etchevers Ingrid, Vincent-Henri Peuch, Dietmar Wagenbach, Michel Legrand. *Speaker Etchevers Ingrid*

Retrieval of aerosol optical properties over Beijing from polarized signals of PARASOL
Fan Xuehua, Hongbin Chen, Zhigang Han, Philippe Goloub. *Speaker Hongbin Chen*

Numerical study for the vertical distributions and optical properties of Asian dust and anthropogenic aerosols over Japan
Shinsuke Satake, Tadahiro Hayasaka, Kazuma Aoki, Atsushi Shimizu, Nobuo Sugimoto, Ichiro Matsui. *Speaker Shinsuke Satake*

Radiative effects of NO2 and aerosols in the atmosphere of large city
Chubarova Nataly, Mikhail A. Sviridenkov, Alexei N. Rublev, Brent N. Holben. *Speaker Chubarova Nataly*

Cloud Water and Related Hydrological Cyle over China: A Climatic Analysis Using ISCCP Data During 1984- 2004
Li Xingyu, Xueliang Guo, Jiang Zhu. *Speaker Li Xingyu*

Chemical apportionment of direct aerosol radiative forcing at the surface: a new approach
Kim Jiyoung, Soon-Chang Yoon, Byoung-Cheol Choi. *Speaker Kim Jiyoung*

Evaluation of Aerosol Particle Size Distribution (APSD)
Jagodnicka Anna, Tadeusz Stacewicz, Grzegorz Karasiński, Michał Posyniak, Tomasz Kardaś. *Speaker Jagodnicka Anna*

Study of anthropogenic aerosol effects on the climate using GCM
Mukai Makiko. *Speaker Mukai Makiko*

Human impact on direct and diffuse solar radiation during the industrial era
Myhre Gunnar, Maria M. Kvalevg. *Speaker Myhre Gunnar*

Vicarious calibration of GMS-5/VISSR for estimation of radiation budget
Takenaka Hideaki, Satoru Fukuda, Takashi Y Nakajima, Akiko Higurashi, Miho Sekiguchi, Arata Okuyama, Toru Hashimoto, Tamio Takamura, Teruyuki Nakajima. *Speaker Takenaka Hideaki*

Characteristics of aerosols over the Zhongshan Station, East Antarctica and the human pollution
Wang Jianjun, Liqi Chen, Xulin Yang, Qi Lin. *Speaker Wang Jianjun*

Modeling studying the role of bacteria on ice nucleation processes
Sun Jiming. *Speaker Sun Jiming*

Solar irradiance changes in Switzerland since 1981
Ruckstuhl Christian, Philipona Rolf, Moesch Mike, Zelenka Antoine. *Speaker Ruckstuhl Christian*

Correlative measurements of aerosols and water vapor profiles over Athens, Greece during 2006-2007 in the frame of EARLINET-ASOS
Papayannis Alexandros, Vassilios Amiridis, Rodanthi-Elisabeth Mamouri, Gergios Tsanakas. *Speaker Papayannis Alexandros*

Study of cloudiness influence on solar radiation measures in the South of Brazil at the Southern Space observatory
Florin Daniel Vinicius, Fernando Ramos Martins, Marcelo Pizzuti Pes, Marcus Guedes, Rafael Jonas Righi Batista, Diogo Alessandro Arsego, Ricardo Andr Guarnieri, Enio Bueno Pereira. *Speaker Florin Daniel Vinicius*

Impact of aerosol competition effects on global cloud fields using a general circulation model
Goto Daisuke, Toshihiko Takemura, Teruyuki Nakajima. *Speaker Goto Daisuke*

Modeling short-range interactions in a hybrid simulation of turbulent collision of cloud droplets
Wang Lian-Ping, Bogdan Rosa, Wojciech W. Grabowski. *Speaker Wang Lian-Ping*

A fully resolved simulation method for turbulent collision of cloud droplets
Wang Lian-Ping, Hui Gao. *Speaker Wang Lian-Ping*

Effects of turbulent collision Kernel and initial size dispersion on rain initiation
Wang Lian-Ping, Stephanie Merkle, Wojciech W. Grabowski. *Speaker Wang Lian-Ping*

Results of simulation microphysical and optical characteristics of marine and coastal aerosol
Kaloshin Gennady. *Speaker Kaloshin Gennady*

The code MaexPro for calculation atmospheric aerosol extinction in the marine and coastal surface layer
Kaloshin Gennady. *Speaker Kaloshin Gennady*

Empirical model for estimation of diffuse solar radiation for the Southern Region of Brazil
Guedes Marcus, Nelson Jorge Schuch, Fernando Ramos Martins, Daniel Vinicius Florin, Marcelo Pizutti Pes, Diogo Alessandro Arsego, Rafael Jonas Righi Batista, Ricardo Andr Guarnieri, Enio Bueno Pereira. *Speaker Guedes Marcus*

Aerosol optical depth: current status of the gaw sun photometer network
Nyeki Stephan, Christoph Wehrl, Julian Groebner. *Speaker Nyeki Stephan*

Optical properties of Arctic aerosol in spring based on sky-radiometer and micro-pulse lidar measurements at Ny-Alesund, Svalbard
Shiobara Masataka, Masanori Yabuki, Kazuma Aoki, Hiroshi Kobayashi, Maki Yamano, James R. Campbell. *Speaker Shiobara Masataka*

Numerical study the relative contributions of liquid and ice phases in precipitation formation during floods in Carpathian
Pirnach Ganna. *Speaker Pirnach Ganna*

Influnse of biomass burning at aerosol optical thickness on Southern Brazil from 1997 to 2006
Possani Germano, Ana Marceli Soares, Caroline Bertagnolli, Damaris Kirsch Pinheiro, Plinio Carlos Alval. *Speaker Possani Germano*

Correlation analysis of long-term variation of cloudiness, aerosol pollution and total solar radiation in Tbilisi
Amiranashvili Avtandil. *Speaker Amiranashvili Avtandil*

Observations of radiative flux divergence and vertical temperature structure evolution
Hoch Sebastian W., C. David Whiteman. *Speaker Hoch Sebastian W.*

Global atmospheric chemistry: integrating over fractional cloud cover
Prather Michael, Jessica L. Neu, Joyce E. Penner. *Speaker Prather Michael*

Satellite observations of the deep convective cloud characteristics over the Indian Subcontinent and surrounding oceanic regions
Rajeev Kunjukrishnapillai, S. Meenu, K. Parameswaran, C. Suresh Raju. *Speaker Rajeev Kunjukrishnapillai*

Observations of semi-transparent Cirrus clouds over the Indian subcontinent using KALPANA-1 VHRR Data
Rajeev Kunjukrishnapillai, S. Meenu, K. Parameswaran, C. Suresh Raju, K. S. Jagannath. *Speaker Rajeev Kunjukrishnapillai*

LIDAR observations of aerosol compared to global transport model results
Schutgens Nick, T. Takemura, A. Shimizu, K. Aoki, T. Nakajima. *Speaker Schutgens Nick*

Airborne spectral radiation measurements in the Saharan dust plume
Bierwirth Eike, Andr Ehrlich, Manfred Wendisch, Sebastian Otto, Thomas Trautmann. *Speaker Bierwirth Eike*

Retrieval of minor constituents in a cloudy atmosphere with remote sensing millimeter wave measurements
Del Bianco Samuele, Marco Gai, Leonardo Santurri, Cesare Cecchi-Pestellini, Bianca Maria Dinelli, Bruno Carli. *Speaker Del Bianco Samuele*

Determination of atmospheric aerosol properties from MFRSR measurements
Alexandro, Mikhail, Andrew A. Lacis, Barbara E. Carlson, Brian Cairns. *Speaker Alexandrov Mikhail*

Measurement of Aerosol Optical Thickness While PA/AE 2005-2006
Posyniak Michal. *Speaker Posyniak Michal*

Monitoring of Aerosol profiles over New Delhi using Micro Pulse Lidar
Jain Sohan Lal, B. C. Arya, Y. Nazeer Ahammed, Arun Kumar. *Speaker Jain Sohan Lal*

Size distributions of aerosol number concentrations at an urban site New Delhi, India
Ahammed Y.N., B. C. Arya, Arun Kumar, P.R. Sinha, D.K. Shukla, S.L. Jain. *Speaker Ahammed Y.N.*

Investigations of the aerosol load over the Southern Balkan region as an indicator of air quality
Koukoul Maria Elisavet, Stelios Kazadzis, Dimitris Balis, Charles Ichoku, Vassilis Amiridis, Dimitris Paronis. *Speaker Koukoul Maria Elisavet*

Relative contribution of dynamic feedbacks to AIRF
Lee Woo-Seop. *Speaker Lee Woo-Seop*

A look-up table method with separating the ground surface process for simulation of satellite-measured radiances
Ishida Haruma, Takashi Y. Nakajima. *Speaker Ishida Haruma*

A nested-grid simulation of cloud microphysical properties with a bin-type cloud resolving model
Iguchi Takamichi, Teruyuki Nakajima, Alexander P. Khain, Kazuo Saito, Takemura Toshihiko. *Speaker Iguchi Takamichi*

Validation of CERES Polar Night Cloud Detection using Aqua MODIS data with CALIPSO Observations
Treppe Qing, Patrick Minnis, Chip Trepte. *Speaker Treppe Qing*

Assessing the Aerosol Direct Radiative Forcing of the Canadian GEM Model Against Satellite Measurements
Paunova Irena, Paul Vaillancourt, Louis Garand, Knut Von Salzen. *Speaker Paunova Irena*

Inversion of optical data into microphysical particle data using Markov Chain Monte Carlo approach
Wagner Frank, Bruno Mendes. *Speaker Bruno Mendes*

An Analysis of Tropical Cirrus from the CALIPSO Satellite Mission
Treppe Chip, David Winker, Yongxiang Hu, Patrick Minnis, Qing Treppe. *Speaker Treppe Chip*

Efficient ice crystal growth in the atmosphere prevents an indirect cirrus-aerosol climate feedback
Kay Jennifer, Robert Wood, Marcia B. Baker. *Speaker Kay Jennifer*

Global cloud resolving simulation of aerosol-cloud interaction with NICAM-SPRINTARS coupled model
Suzuki Kentaroh, Hirofumi Tomita, Masaki Satoh, Toshihiko Takemura, Teruyuki Nakajima, Graeme L. Stephens. *Speaker Suzuki Kentaroh*

Detecting trends of global solar radiation in the Arctic
Chiacchio Marc. *Speaker Chiacchio Marc*

A Simple Study of Retrieval of Aerosol Optical Depth from All-Sky Images
Huo Juan. *Speaker Huo Juan*

A numerical experiment of the stratocumulus observed during RF02 DYCOMS-I
Nakamura Kozo, Yasushi Fujiyoshi, Kazuhisa Tsuboki, Naomi Kuba. *Speaker Nakamura Kozo*

Climate response to anthropogenic aerosols and CO2-increase in CAM-Oslo
Kirkev Alf, Trond Iversen, Yvind Seland, Jens Boldingh Debernard, Jon Egill Kristjansson. *Speaker Kirkev Alf*

Aerosol optical depth in the UV range over Belsk, Poland, 1992-2007

Jaroslawski Janusz. *Speaker Jaroslawski Janusz*

Long term observation of aerosol spectral absorption at an urban site in Seoul, Korea
Jung Jin Sang, Joon Kim, Young Joon Kim. *Speaker Young Joon Kim*

Lidar-radar ice microphysics retrieval comparison using CloudSat and CALIPSO data.
van Zadelhoff Gerd-Jan, Julien Delano, Dominique Bouniol, Robin Hogan, Dave Donovan. *Speaker van Zadelhoff Gerd-Jan*

Entrainment and mixing in convective clouds: observations in shallow cumuli during the RICO experiment
Burnet Frederic, Jean-Louis Brenguier. *Speaker Burnet Frederic*

Statistical property of ice cloud characteristic in relation to the environment
Sato Kaori, Hajime Okamoto, Nobuo Sugimoto, Hiroshi Kumagai, Yuichi Ohno, Toshiaki Takano. *Speaker Sato Kaori*

The retrieval of cloud top pressure and effective extinction height using combined observations of MERIS and AATSR
Lindstrot Rasmus, Rene Preusker, Jrgen Fischer. *Speaker Lindstrot Rasmus*

An investigation into aerosol optical properties over East Asia: Combination of aerosol data from 3-D photochemical modeling and satellite/sun photometer network
Song Chul. *Speaker Song Chul*

Aerosol radiative effect on atmospheric thermal dynamics
Hatziianastassiou Nikos, Ilias Vardavas 2,3. *Speaker Hatziianastassiou Nikos*

Retrieval of tropical water vapour vertical profiles from wide-band emission spectra acquired by an uncooled FTS spectroradiometer
Bianchini Giovanni, Bruno Carli, Ugo Cortesi, Samuele Del Bianco, Luca Palchetti. *Speaker Bianchini Giovanni*

A new radiative transfer scheme in a NWP model ; GEM meso-strato
Vaillancourt Paul, Martin Charron, Michel Roch, Irena Paunova, Jean Degrandpre, Jiangnan Li. *Speaker Vaillancourt Paul*

A simple parameterization for detrainment in shallow cumulus.
De Rooy Wim, Pier Siebesma. *Speaker De Rooy Wim*

A Case Study of Aircraft Measurements Characterizations of Aerosols over the Beijing Region
Zhang Qiang, Chunsheng Zhao, Xuexi Tie, Huang Mengyu. *Speaker Huang Mengyu*

Cloud model studies for the simulation of brightness temperatures: improvements and applications to cloud classification from radiosoundings
Mattioli Vinia, Basili Patrizia, Bonafoni Stefania, Ciotti Piero, Fionda Ermanno, Ed. R. Westwater. *Speaker Mattioli Vinia*

Waste burning under laboratory conditions: a study of aerosol concentrations
Fraile Roberto, Calvo Ana Isabel, Castro Amaya, Pont Vronique, Snchez Marta Elena, Fraile Roberto. *Speaker Fraile Roberto*

Is it possible to retrieve both aerosol and thick cloud properties using a single lidar?
Chiu Jui-Yuan Christine, Alexander Marshak, Warren Wiscombe, Sandra C. Valencia, E. Judd Welton. *Speaker Chiu Jui-Yuan Christine*

The effects of temporal sampling of humidity and cloud fields on the calculated radiation fluxes
Willen Ulrika. *Speaker Willen Ulrika*

Aerosol characterisations at the ABC-pyramid high altitude observatory in Himalayas
Marinoni Angela, Laj Paolo, Bonasoni Paolo, Cristofanelli Paolo, Decesari Stefano, Facchini Cristina, Maione Michela, Sellegri Karine, Venzac Herv, Vuillemoz Elisa. *Speaker Marinoni Angela*

Radiative transfer simulations within Saharan dust atmospheres compared to measurements from the SAMUM experiment
Otto Sebastian, Thomas Trautmann, Manfred Wendisch. *Speaker Thomas Trautmann*

Estimation of fractional sky cover, cloud type and cloud forcing effects at Mario Zucchelli and Concordia stations (75S) from broadband radiation measurements
Lanconelli Christian, Vito Vitale, Lucia Agnoletto, Angelo Lupi, Mauro Mazzola, Boyan Petkov, Claudio Tomasi, Maurizio Busetto. *Speaker Lanconelli Christian*

Relationship between the downwelling longwave radiation at the surface and the GPS derived Precipitable Water at Mario Zucchelli Station, Terra Nova Bay, Antarctica
Lupi Angelo, Negusini Monia, Sarti Pierguido, Tomasi Claudio, Vitale Vito. *Speaker Lupi Angelo*

Convective and stratiform precipitation partition dependence on horizontal resolution
Gomes Jorge, Sin Chan Chou. *Speaker Gomes Jorge*

Investigation of cirrus cloud formation, maintenance, and dissipation processes by using ARM SGP surface radar-LIDAR observations and NASA GISS SCM simulations
Kennedy Aaron, Xiquan Dong, Baik Xi, Anthony Delgenio, Audrey Wolf. *Speaker Kennedy Aaron*

Combination of LIDAR plus MODIS radiances to retrieve the vertical profile of aerosol extinction and particle size information
Fernandez Borda Roberto, Vanderlei Martins, Lorraine Remer, Richard Ferrare. *Speaker Fernandez Borda Roberto*

Impact of the JULY 2003 Popocatepetl eruptions on the aerosol optical depth in Mexico City.
Valdes Mauro, Martin Del Pozzo Ana Lillian, Mendiola Lopez Fabiola, Leyva Contreras Amando, Holben Berto. *Speaker Valdes Mauro*

Impact of surface solar dimming and brightening on global warming
Wild Martin. *Speaker Wild Martin*

Earth radiation budget as simulated in IPCC AR4 GCMs
Wild Martin. *Speaker Wild Martin*

A Flexible Analytical Interface Between the Microphysical and Radiative Properties of Ice Clouds
Mitchell David, Anthony J. Baran, W.P. Arnott, Carl Schmitt. *Speaker Mitchell David*

MS008 Ensembles and Probabilistic Forecasting (ICDM) Conveners: Bishop Craig

Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room G

Chairpersons: -
09:00 am **Mogreps: a met office ensemble prediction system for short-range weather forecasting**
Beare née John Sarah, Neill Bowler, Ken Mylne, Alberto Arribas, Kelvyn Robertson, Tim Legg. *Speaker Beare née John Sarah*

09:30 am **Impact of using model perturbations in a limited-area ensemble forecasting system for the short-range.**
Marsigli Chiara, Tiziana Paccagnella, Andrea Montani. *Speaker Marsigli Chiara*

Marsigli Chiara
09:45 am **Forecasting the duration of weather events on the monthly time scale**
Becker Bernd, Richard Graham. *Speaker Becker Bernd*

10:00 am **Probabilistic forecasts of (severe) thunderstorms for the purpose of issuing a weather alarm**
Schmeits Maurice, Kees Kok, Daan Vogelezang, Rudolf Van Westrhenen. *Speaker Schmeits Maurice*

10:15 am **Dynamical downscaling of ECMWF EPS forecasts applied to cases of severe weather in Croatia**
Matjacic Blazenka, Cedo Brankovic, Stjepan Ivatek-Sahdan, Roberto Buizza. *Speaker Stjepan Ivatek-Sahdan*

10:30 am **Coffee Break (30 minutes)**

11:00 am **The COSMO-LEPS system at ECMWF: present status and future plans**
Montani Andrea, Chiara Marsigli, Tiziana Paccagnella. *Speaker Montani Andrea*

11:30 am **Flow dependent inexpensive high resolution ensembles of ocean surface forcings using time deformation**
Hong Xiaodong, Craig Bishop. *Speaker Hong Xiaodong*

11:45 am **A local-ensemble prediction system (L-EPS) for fog and low clouds prediction at paris international airport**
Roquelaure Stevie, Roquelaure Stevie, Bergot Thierry. *Speaker Roquelaure Stevie*

12:00 pm **Sensitivity study of T2m and precipitation forecasts to soil moisture initial condition using NCEP WRF ensemble system**
Du Jun, George Gayno. *Speaker Du Jun*

12:05 pm **Evaluation of different short-range ensemble forecast methodologies in severe weather events**
Bustamante Josiane, Sin Chan Chou. *Speaker Bustamante Josiane*

Josiane
12:10 pm **Dealing with the uncertainties related with LAMEPS**
Wang Yong. *Speaker Wang Yong*

12:15 pm **Probabilistic Short-Range Prediction over the Northwest U.S.**
Mass Cliff. *Speaker Mass Cliff*

Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room G

Chairpersons: -
02:00 pm **Report of the THORPEX Interest Group on Theoretical Aspects of Ensemble Prediction**
Talagrand Olivier, Craig H. Bishop. *Speaker Talagrand Olivier*

02:30 pm **The Prediction of Extratropical Cyclones by the ECMWF Ensemble Prediction System: A Regional Analysis**
Froude Lizzie, Kevin Hodges, Lennart Bengtsson. *Speaker Froude Lizzie*

Froude Lizzie
02:45 pm **Generation and Validation of probabilistic quantitative precipitation forecasts using Breeding and Ensemble Kalman**

techniques with the global model GME
Keller Jan, Luis Kornblueh, Andreas Rhodin, Andreas Hense,
Werner Wergen. *Speaker Keller Jan*
03:00 pm Application of conditional nonlinear optimal perturbations
to ensemble prediction
Jiang Zhina, Mu Mu. *Speaker Jiang Zhina*
03:15 pm Coffee Break (30 minutes)
03:45 pm Applying Probabilistic Forecasts of Physical Systems:
Probably not Probabilistic but Probabilistic
Smith Lenny. *Speaker Smith Lenny*
04:15 pm The Application of the the Box - Jenkins Methodology for
Early Flood Warning in Nigeria
Boluwade Alaba. *Speaker Boluwade Alaba*
04:30 pm Ensemble forecast calibration using "reforecasts"
Hamill Thomas. *Speaker Hamill Thomas*
04:45 pm A probabilistic forecast approach for (extreme) daily
precipitation totals applied to GFS forecasts
Friederichs Petra, Andreas Hense. *Speaker Friederichs Petra*
05:00 pm Forecast evaluation and proper scores
Broecker Jochen. *Speaker Broecker Jochen*
05:15 pm Quantifying Predictability by the Local Entropy
Kim Sangil, Roger M. Samelson, Chris Snyder. *Speaker Kim*

Sangil
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
CERP
Chairpersons: -
An ensemble-based approach to information content analysis and
some new applications
Zupanski Dusanka, Arthur Y. Hou, Sara Q. Zhang, A. Scott Denning. *Speaker*
Zupanski Dusanka
A dynamic localization method for use with targeted observations and
ensemble data assimilation
Zupanski Milija, Dusanka Zupanski. *Speaker Zupanski Milija*
The relationship between Lyapunov vectors and singular vectors in a
time-periodic baroclinic wave-mean oscillation
Wolfe Christopher, Roger M. Samelson. *Speaker Wolfe Christopher*

MS019 Middle Atmosphere Science (ICMA)
Conveners: Hamilton Kevin
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of
Economics Room 2
Chairpersons: Greg Bodeker
09:00 am Interannual Changes of Arctic Ozone: Contributions from
Transport and Photochemical Destruction
Salby Murry. *Speaker Salby Murry*
09:30 am Ozone variation in the years 1980-2100 calculated by the
CCSR/NIES CCM in the CCMVAL-REF2 scenario
Imamura. *Speaker Akiyoshi Hideharu*
09:45 am O3-N2O correlations: Revisiting a diagnostic of transport
and chemistry in the stratosphere
Hegglin Michaela, Theodore G. Shepherd. *Speaker Hegglin*

Michaela
10:00 am A study of daily total column ozone forecasting based on
TOMS data and meteorology
Demirhan Bari Deniz, Sema Topcu, Bulent Aksoy, Ceyhan
Kahya, Selahattin Incecik, Yilmaz Acar, Mustafa Ozunlu, Mithat Ekici.
Speaker Demirhan Bari Deniz
10:15 am Analysis of Short-term Variation of Stratospheric Ozone
Connected Dynamical Variations over Rikubetsu, Japan
Matsuura Makoto, Tomoo Nagahama, Akira Mizuno, Hideaki
Nakane, Yasuo Fukui, Atsushi Morihira. *Speaker Matsuura Makoto*
10:30 am Energetic particle precipitation effects on the polar winter
stratosphere as observed by MIPAS/Envisat
Funke Bernd, Manuel Lpez-Puertas, Gabriele Stiller, Thomas
Voll Clarmann, Norbert Glatthor, Udo Grabowski, Michael Hpfner, Sylvia
Kellermann, Andrea Linden, Mathias Milz, Herbert Fischer. *Speaker Funke*
Bernd
11:30 am Variability of ozone in the upper mesosphere and its
relationship with temperature and dynamics
Smith Anne, Daniel R. Marsh, Martin G. Mlynczak. *Speaker*
Smith Anne
12:00 pm The Mystery of Calcium in the Upper Atmosphere
Plane John, Tomas Vondrak, Sarah Broadley. *Speaker Plane*

John
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of
Economics Room 2
Chairpersons: Rolando Garcia
02:00 pm Determination of catalytic ozone production and
destruction cycles in the stratosphere and mesosphere
Lehmann Ralph. *Speaker Lehmann Ralph*
02:15 pm A revised ozone parameterisation scheme: COPCAT
coefficients within SLIMCAT simulations
Monge-Sanz Beatriz, Martyn P. Chipperfield. *Speaker Monge-*
Sanz Beatriz

02:30 pm Latitudinal Extent of Solar Proton Forcing from Hydroxyl
Observations and Modelling
Verronen Pekka T., Craig J. Rodger, Herbert M. Pickett, Mark
A. Clilverd, Esa Turunen. *Speaker Verronen Pekka T.*
02:45 pm Interannual variability in mesospheric wintertime descent:
implications for the thermosphere-stratosphere coupling
Siskind David, Stephen D. Eckermann, Larry Coy, John
McCormack. *Speaker Siskind David*
03:00 pm Lidar observations of potassium densities and
atmospheric temperatures at Spitsbergen (78N)
Luebken Franz-Josef, Josef Hffner, Jens Lautenbach. *Speaker*
Luebken Franz-Josef

03:15 pm Thermal Structure in the Arctic middle atmosphere above
ALOMAR (69N)
Baumgarten Gerd, Armin Schch, Jens Fiedler. *Speaker*
Baumgarten Gerd
03:30 pm Coffee Break (30 minutes)
04:00 pm Mid-latitude temperature soundings by lidar from 1 - 100
km: Annual variation and variability
Gerding Michael, Josef Hffner, Jens Lautenbach, Monika
Rauthe, Franz-Josef Lbken. *Speaker Gerding Michael*
04:15 pm MIPAS global observations of the atmosphere from the
upper troposphere to the lower thermosphere
Stiller Gabriele P., Thomas Von Clarmann, Norbert Glatthor,
Michael Hoepfner, Mathias Milz, Joerg Steinwagner, Swaroop Chauhan,
Bernd Funke, Udo Grabowski, Sylvia Kellmann, Michael Kiefer, Mariliza
Koukoulis, Andrea Linden, Manuel Lopez-Puertas, Tilman Steck, Stefan
Versick, Herbert Fischer. *Speaker Stiller Gabriele P.*
04:45 pm HIRDLS measurements of temperature, water vapor and
ozone at the tropical and mid-latitude tropopause
Gille John, John Barnett, Craig Hartsough, Charles
Cavanaugh, Chris Hepplewhite, Hyunah Lee, Bruno Nardi. *Speaker Gille*
John

05:00 pm Comparison of model predictions with data from the OMI
SO2 measurements and the CALIPSO backscatter measurements
Hamill Patrick, Jens Redemann, Simon A. Carn, Pieternel
Levelt, David Winker. *Speaker Hamill Patrick*
05:15 pm Calipso observations of stratospheric aerosols: a
preliminary assessment
Thomason Larry, Michael C. Pitts, David M. Winker. *Speaker*
Thomason Larry

Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
CERP
Chairpersons: -
Simulation of Semidiurnal Tide in an Ultrafine Resolution Global Model
Hamilton Kevin, Wataru Ohfuchi. *Speaker Hamilton Kevin*
JPS001 Interannual and Interdecadal Climate Variability
Conveners: McPhaden Michael, Holbrook Neil
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of
Economics Room 6
Chairpersons: -
09:00 am How ENSO impacts precipitation in Southwest and Central
Asia
Mariotti Annarita. *Speaker Mariotti Annarita*
09:18 am Mariotti Annarita. *Speaker Mariotti Annarita*
interannual and decadal variability
Yu Bin, Francis W. Zwiers, Amir Shabbar. *Speaker Yu Bin*
09:36 am Climate variability analysis for temperature and
precipitation based on REMO datasets
Chen Youmin. *Speaker Chen Youmin*
09:54 am Dynamics of Decadal Variability in the Northeast Pacific
Capotondi Antonietta. *Speaker Capotondi Antonietta*
10:12 am Arctic Oscillation and Dipole Anomaly and their
contribution to sea ice export from the Arctic in the 20th century
Wang Jia, Eiji Watanabe. *Speaker Wang Jia*
10:30 am Coffee Break (30 minutes)
11:00 am Global SST Variability and Drought over North America
Schubert Siegfried, Max Suarez, Philip Pegion, Randy Koester.
Speaker Schubert Siegfried

11:18 am Southern African climate variability: subtleties and
challenges
Reason Chris. *Speaker Reason Chris*

11:36 am Variability of mean wind speed in large cities over Iran
Rahimzadeh Fatemeh, Nooshin Mohammadian, Abdolrah
Sedaghatkardar. *Speaker Rahimzadeh Fatemeh*
11:54 am Decadal variability of stratification and biological impacts
in the California Current with CalCOFI and ROMS
Kim Hey-Jin, Arthur J. Miller. *Speaker Kim Hey-Jin*
12:12 pm Climate change in Turkey: temporal and spatial variability
Tayan Mete, Ulas Inm, Murat Dogruel, Mehmet Karaca. *Speaker*

Tayan Mete
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics
Room 6
Chairpersons: -
02:00 pm Anti-persistence in global temperature anomaly field
Carvalho Leila, Anastasios Antonios Tsonis, Charles Jones,
Humberto Ribeiro Da Rocha, Paulo Flomenato Polito. *Speaker Carvalho Leila*
02:18 pm ENSO and Mean Sea Level Energetics over the Western North
Pacific during Typhoon Season
Hsu Pang-Chi, Chieh-Hua Tsou. *Speaker Hsu Pang-Ch*
02:36 pm Changes in Atmospheric Circulation over the Last Century
Sidorenkov Nikolay. *Speaker Sidorenkov Nikolay*
02:54 pm Reconstruction of global monthly upper-level fields back to
1870
Griesser Thomas, Prof. Dr. Stefan Brnnmann. *Speaker*
Griesser Thomas

03:12 pm Changes in high frequency (2-14 yr) variability in sea level
records since 1807
Jevrejeva Svetlana, A. Grinsted, J. C. Moore, S. Holgate.
Speaker Jevrejeva Svetlana
03:30 pm Coffee Break (30 minutes)
04:00 pm A diagnostic study of the Indian Ocean dipole mode in El
Nino and non-El Nino years
Drbohlav Hae-Kyung, Silvio Gualdi, Antonio Navarra. *Speaker*
Drbohlav Hae-Kyung
04:18 pm Variability of global sea surface temperature from 1982 to
2005: low-frequency and Enso contributions
Barbosa Susana. *Speaker Barbosa Susana*
04:36 pm Why does reemergence of winter sea surface temperature
anomalies not occur in North Pacific eastern subtropical mode water
area?
Sugimoto Shusaku, Kimio Hanawa. *Speaker Sugimoto*

Shusaku
04:54 pm Increases in Net Precipitation and Recent Freshening of
the North Atlantic Subpolar Gyre
Josey Simon, Robert Marsh, Paul G. Myers. *Speaker Josey*
Simon
05:12 pm A statistical downscaling method to force an ocean model
over the North Atlantic region for climate change studies
Minvielle Marie, Julien Boe, Julien Najac, Christophe Cassou,
Laurent Terray. *Speaker Minvielle Marie*
Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main
Hall
Chairpersons: -
On the role of the Chandler wobble in the interannual and interdecadal
climate variations
Nadezda Ivashchenko, Sonechkin Dmitry. *Speaker Nadezda Ivashchenko*
Detecting climatic jumps in 500 HPA geopotential height monthly
anomalies in Antarctica
Yuchechen Adrian, Susana Amalia Bischoff, Pablo Osvaldo Cazanieri.
Speaker Yuchechen Adrian
Climate impacts of Atlantic Multidecadal Variability: seasonal mean
climate and ENSO
Sutton Rowan, Bowen Dong, Daniel Hodson. *Speaker Sutton Rowan*
Study of the 1973-2002 variability of the Annual Cycle of ERA-40
Geopotential Height: an interhemispheric comparison.
Repossi Patricia. *Speaker Repossi Patricia*
Rapid warming and salinification of the intermediate and deep waters in the
Irminger and Iceland Basins during the past decade
Sarafanov Artem, Alexey Sokov, Anastasiya Falina. *Speaker Sarafanov Artem*
Interdecadal Variability of the Typhoon Activity in Autumn
Tsou Chih-Hua, Chih-Yi Lin. *Speaker Tsou Chih-Hua*
Multi-scale variability patterns in NCEP/NCAR reanalysis sea-level
pressure
Barbosa Susana, Maria Eduarda Silva, Maria Joana Fernandes. *Speaker*
Barbosa Susana
20-year period circulation of upper ocean heat content anomaly in the
North Pacific subtropical gyre
Sugimoto Shusaku, Takuya Hasegawa, Kimio Hanawa. *Speaker Sugimoto*
Shusaku

Structure and temporal variability of the bottom waters properties in the
Equatorial and South Atlantic
Demidov Alexander, Dobrolyubov Sergey. *Speaker Demidov Alexander*
Particular Barents Sea circulation regime
Pnyushkov Andrey. *Speaker Pnyushkov Andrey*
Utilizing the Koeppeen climate classification to assess the future climate
change.
Hori Masatake, Tetsuzo Yasunari. *Speaker Hori Masatake*
Response of Tropical Atlantic Variability to a reduction of the Meridional
Overturning Circulation
Haarsma Reindert, Edmo Campos, Wilco Hazeleger, Camiel Severijns.
Speaker Haarsma Reindert
Spatial structure of the global surface air temperature trend changes
and NAO and SOI indices
Tom Antnio Rodrigues Tom, Pedro M A Miranda. *Speaker Tom Antnio*
Rodrigues Tom
Quality control of dissolved oxygen data measured by profiling floats: a
preliminary result based on historical data
Kobayashi Taiyo. *Speaker Kobayashi Taiyo*
Variability in North Atlantic source waters and MOC
Schott Friedrich. *Speaker Schott Friedrich*
Hydrography and Current Measurements from Hawaii to western Pacific
in summer 2006
Jeon Dongchull, Chang Woong Shin, Dong Gook Kim. *Speaker Jeon*
Dongchull

The effects of the Tsushima Warm Current on the interdecadal
variability of the East/Japan Sea thermohaline circulation
Park Young-Gyu. *Speaker Park Young-Gyu*
The influence of cloud cover and weekend effect on diurnal temperature
range in some meteorological stations in Iran
Sahraian Fatemeh. *Speaker Sahraian Fatemeh*
Resolution dependence of decadal variability over the Pacific in global
warming experiments using an atmosphere-ocean coupled model
effects of eddy-permitting ocean model
Sakamoto Takashi T., Hiroyasu Hasumi. *Speaker Sakamoto Takashi T.*
Dominant modes of climate variability extracted by self-organizing map
Sugimoto Norihiko, Kanta Tachibana. *Speaker Sugimoto Norihiko*
Two different features of Decade cycle of equatorial upper ocean
content related to El Nino events
Horii Takanori, Takuya Hasegawa, Tamaki Yasuda, Kimio Hanawa. *Speaker*
Horii Takanori

Difference of large-scale atmospheric circulation fields between
extremely severe weather in December 2005 and extremely mild weather
in December 2006
Yagi Koji, Kimio Hanawa. *Speaker Yagi Koji*
Interdecadal variability of the Tsushima warm current in the eastern part
of the Japan Sea
Watanabe Tatsuro, Daisuke Simizu, Hideaki Kidokoro. *Speaker Watanabe*
Tatsuro
Time variations in the periodicity of atmospheric teleconnection
patterns and their coherence with quasi-periodic atmospheric and
extra-terrestrial phenomena
Huth Radan, Petra Auli. *Speaker Huth Radan*
Phase-synchronized QBO in the NAO and temperature records
Novotna Dagmar, Milan Palus. *Speaker Novotna Dagmar*
Inversion of periodic and trend variations of climate in opposite
hemispheres of the Earth and their mechanism
Barkin Yury. *Speaker Barkin Yury*
A Two-Oscillator View of ENSO and Its Decadal Modulation
Yu Jin-Yi, Jin-Yi Yu, Hsun-Ying Kao, Fengpeng Sun. *Speaker Yu Jin-Yi*
Feature of thermohydrodynamical regime of the Caspian Sea on remote
sensing data
Lebedev Sergey, Alexander Sirota, Andrey Kostianoy, Anna Ginzburg.
Speaker Lebedev Sergey

Compatibility of occurrences of higher warm spell duration index and
lower cold spell duration index over Iran with earth's warmest years
Rahimzadeh Fatemeh, Mohammadian Nooshin. *Speaker Rahimzadeh*
Fatemeh
Historical changes in radiosonde temperature and humidity data in
Teheran Mehrabad upper air station
Emamhadi Mandana, Azit Amir. *Speaker Emamhadi Mandana*
Analyses of Extreme Sea Level Events from Cananea and UH data
De Jmesquita Afranio Rubens. *Speaker De Jmesquita Afranio Rubens*
International Collaboration and World Data Center's Role in Improving
Space-Time Coverage of Global Data Bases for Observational Studies
of Decadal and Interdecadal Variability
Johnson Daphne. *Speaker Johnson Daphne*PS004 Ocean Mixing (co-

sponsored by SCOR)
Conveners: Muench Robin

Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Department of
Mathematics Room A2
Chairpersons: -
09:00 am Internal wave propagation and mixing in marginally
stratified waters: the Mediterranean laboratory
van Haren Hans. *Speaker van Haren Hans*
09:30 am Tidal Beams and Mixing near Monterey Bay
Johnston Shaun, Dan Rudnick, Robert Todd, Sylvia Cole.
Speaker Johnston Shaun
09:45 am Internal tide generation and propagation near a continental
shelf: experimental and numerical modeling approaches
Paireud Ivane, Chantal Staquet, Joel Sommeria, Mehdi
Mehdizadeh. *Speaker Paireud Ivane*
10:00 am Internal Hydraulic Jumps and Overturning generated by
tidal flow over a tall steep ridge
Legg Sonya, Jody Klymak. *Speaker Legg Sonya*
10:15 am Estimates of tidal energy dissipation and diapycnal
diffusivity in the Kuril Straits using TOPEX/Poseidon altimetric data
Tanaka Yuki, Toshiyuki Hibiya, Yoshihiro Niwa. *Speaker Tanaka*
Yuki

10:30 am Coffee Break (30 minutes)
11:00 am Internal Waves Across the Pacific
MackJenny Jennifer, Matthew Alford, Robert Pinkel,
Zhongxiang Zhao, Jody Klymak. *Speaker MackJenny Jennifer*
11:15 am Energetics of M2 barotropic to baroclinic tidal conversion
at the Hawaiian Islands
Carter Glenn, Mark Merrfield, Katsuro Katsumata, Janet
Becker, Yvonne Firing, Michael Gregg. *Speaker Carter Glenn*
11:30 am Direct breaking of the internal tide over Kaena Ridge,
Hawaii
Pinkel Rob. *Speaker Pinkel Rob*
11:45 am Near-Inertial Parametric Subharmonic Instability
Young William, Yue-Kin Tsang. *Speaker Young William*
12:00 pm Near-resonant internal wave triads
Lamb Kevin, Youna Hu. *Speaker Lamb Kevin*
12:15 pm Theoretical results on abyssally trapped near-inertial
waves
Gerkema Theo. *Speaker Gerkema Theo*

Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Department of
Mathematics Room A2
Chairpersons: -
02:00 pm Does double-diffusion matter anymore?
Ruddick Barry, Robin D Muench. *Speaker Ruddick Barry*
02:30 pm The role of mesoscale eddies in the maintenance of deep
stratification and the meridional overturning circulation.
Wolfe Christopher, Paola Cessi. *Speaker Wolfe Christopher*
02:45 pm An energy-constrained parameterization of eddy tracer flux
Cessi Paola. *Speaker Cessi Paola*
03:00 pm Diagnosing thickness diffusivities in eddy-resolving
models
Eden Carsten, Richard J. Greatbatch, Jrgen Willebrand.
Speaker Eden Carsten

03:15 pm Mesoscale Eddy - Internal Wave Coupling and Closure of
the Thermocline Circulation
Polzin Kurt, Brian Arbic, Rob Scott. *Speaker Polzin Kurt*
03:30 pm Coffee Break (30 minutes)
04:00 pm On bottom drag, horizontal eddy viscosity, and energy
dissipation in models and observations of oceanic mesoscale eddies
Arbic Brian, Kurt L Polzin, Robert B Scott. *Speaker Arbic Brian*
04:15 pm Towards a turbulence model for mesoscale eddies
Eden Carsten, Richard J. Greatbatch, Dirk Olbers, Jrgen
Willebrand. *Speaker Eden Carsten*
04:30 pm Modeling mesoscales in the mixed layer
Canuto Vittorio, M.S. Dubovikov, C.A. Clayson, M. Luneva.
Speaker Canuto Vittorio

04:45 pm Southern Ocean Diapycnal Mixing in a Coupled General
Circulation Model
Graham Tim, David P Stevens, Adrian J Matthews. *Speaker*
Graham Tim
05:00 pm Study of the meridional overturning structure of the
Antarctic Circumpolar Current using an eddy resolving ocean model
Tanaka Yuki, Hiroyasu Hasumi. *Speaker Tanaka Yuki*
05:15 pm Comparative quantification of physically and numerically
induced mixing in a coastal model application
Burchard Hans, Hannes Rennau. *Speaker Burchard Hans*

Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main
Hall
Chairpersons: -
The analysis of distributions of some turbulence characteristics in the
Indonesian Seas based on results of simulations with a regional model
O'Driscoll Kieran, Vladimir M. Kamenkovich. *Speaker O'Driscoll Kieran*
Research of tide-current-induced mixing and its influence on seawater
temperature vertical structure in the Yellow Sea
Li Qing-Hong, Zhang Yong-Gang, Nie Bang-Sheng. *Speaker Li Qing-Hong*
Bottom mixed layer in the northern East China Sea
Lee Jae Hak, Sung Tae Jang, Chang Su Hong, Inssa Lee Lozovasky. *Speaker*
Lee Jae Hak
Thermohaline interleaving over the Laptev Sea continental slope
Kirillov Sergey, Leonid Timokhov. *Speaker Kirillov Sergey*
Observations and a Model of the Energy Variability of Near-Inertial
Motions
Silverthorne Katie, John Toole. *Speaker Silverthorne Katie*
Parameterizations of sub-grid turbulent transport in an eddy-permitting
Ocean Model
Hirabara Mikitoshi, Hiroshi Ishizaki, Goro Yamanaka, Ichiro Ishikawa.
Speaker Hirabara Mikitoshi

Three-dimensional modeling of tidal circulation and mixing over the
Java Sea
Koropitan Alan Frendy, Motoyoshi Ikeda. *Speaker Koropitan Alan Frendy*
Breaking of inertia-gravity waves as inferred from direct numerical
simulations
Bouruet-Aubertot Pascale, Pascale Lelong. *Speaker Bouruet-Aubertot*
Pascale
Turbulent fluxes in oceanic gravity currents
Zyryanov Denis, Achim Wirth, Jacques Veron. *Speaker Zyryanov Denis*
Lagrangian statistics in Langmuir turbulence
Esposito Serena, Guglielmo Lacorata, Vincenzo Botte, Maurizio Ribera
D'Alcal. *Speaker Esposito Serena*

PS006 Arctic Ocean Processes
Conveners: Zhao Jinping, Guo Laodong
Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Academy of Fine Arts
Room 6
09:00 am Simulating ice-ocean downscaling characteristics in the
Beaufort-Chukchi seas by an IARC Coupled Ice-Ocean Model (CIOM)
Wang Jia, Haoguo Hu, Kodahei Mizobata. *Speaker Wang Jia*
09:20 am Interannual and decadal variability in the Arctic Ocean
shown in geochemical and physical data responding to atmospheric
variability
Yamaguchi Hiroyasu, Motoyoshi Ikeda, Takayoshi Ikeda.
Speaker Yamaguchi Hiroyasu

09:40 am Ocean circulation and freshwater exchange between the
Arctic and North Atlantic
Wu Peili, Richard Wood. *Speaker Wu Peili*
10:00 am Interrelated Changes of Arctic Sea Ice and Surface Air
Temperature during last 100 years
Aleksseev Genrikh, Ola Johannessen, Svetlana Kuzmina,
Nikolai Ivanov. *Speaker Aleksseev Genrikh*
10:20 am Contribution of a pathway through the Arctic Ocean to the
sea ice cover
Ikeda Motoyoshi, Hiroyasu Yamaguchi, Akemi Yamada.
Speaker Ikeda Motoyoshi

10:40 am Coffee Break (30 minutes)
11:10 am Modeling transport, fate and lifetime of riverine dissolved
organic carbon in the Arctic Ocean
Manizza Manfredi, Stephanie Dutkiewicz, Michael J. Follows,
Chris N. Hill. *Speaker Manizza Manfredi*
11:30 am The Seasonal Cycle and Variability in Cloud Liquid Water
Paths over the Sea-Ice-Free Arctic
Zuidema Paquita. *Speaker Zuidema Paquita*
11:50 am The long-term changes in the Siberian Arctic shelf waters
during 20th century
Kirillov Sergey, Makhotin Mokhail, Dmitrenko Igor. *Speaker*
Kirillov Sergey
12:10 pm Arctic oscillation controlled region and its spatiotemporal
variation
Zhao Jinping, Yong Cao, Shuiqing Wang. *Speaker Zhao*

Jinping
Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Academy of Fine Arts
Room 6
Chairpersons: -
02:00 pm The 1948-2002 ice-ocean monthly mean variability as
derived by the Finite-Element Model of the Arctic Ocean (FEMAO):
Towards the understanding of some physical processes in charge of
the observed state of the Arctic Ocean formation.
Yakovlev Nikolay. *Speaker Yakovlev Nikolay*
02:20 pm The critical role of the Bering Strait in climate change
Nof Doron, Catherine Sandal. *Speaker Nof Doron*

21st century Atlantic water warmer anomaly along the Eurasian Basin margins

Dmitrenko Igor, Igor Polyakov, Sergey Kirillov, Leonid Timokhov, Ivan Frolov, Vladimir Sokolov, Harper Simmons, Vladimir Ivanov, David Walsh. *Speaker Dmitrenko Igor*

03:00 pm **Transformation of the Barents Sea inflow of the Atlantic water in the western Laptev Sea in 2005-2006: Impact of the upstream atmospheric circulation**

Rozhkova Anna, Igor Dmitrenko, Dorothea Bauch, Jens Hleemann, Leonid Timokhov. *Speaker Rozhkova Anna*

03:20 pm **Organic carbon dynamics in the Western Arctic Ocean: Implications for shelf basin interactions**

Guo Laodong, Celine Gueguen, Tomoyuki Tanaka, Ming-Yi Sun. *Speaker Guo Laodong*

03:40 pm **Coffee Break (30 minutes)**

04:10 pm **Arctic freshwater impacts on the intermediate water formation in the Labrador Sea**

Kitauchi Hideaki, Hiroyasu Hasumi. *Speaker Kitauchi Hideaki*

04:30 pm **Accelerated Multiyear Sea Ice Reduction: Present-day Manifestation, Future Projection, and Underlying Physical Mechanisms**

Zhang Xiangdong. *Speaker Zhang Xiangdong*

04:50 pm **Hindcast and Reanalysis of the Circulation in the Bering and Chukchi Seas**

Pantelev Gleb, Dmitri Nechaev, Vladimir Luchin, Phyllis Stabeno, Rebecca Woodgate, Ekaterina Panteleeva. *Speaker Pantelev Gleb*

05:10 pm **Interaction of high frequency hydrodynamic processes and brines evolution in the Stroffjorden**

Cuypers Yannis, Pascale Bouruet Aubertot, Frdric Vivier, Antonio Lourenco, Jean Claude Gascard. *Speaker Cuypers Yannis*

Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall

Chairpersons: -

Interannual variability in the Arctic Ocean freshwater balance

Jahn Alexandra, Bruno Tremblay. *Speaker Jahn Alexandra*

Internal waves under ice cover

Muzylev Sergey. *Speaker Muzylev Sergey*

The granular sea-ice model in spherical coordinates and its application to a global climate model

Mysak Lawrence, Jan Sedlacek, Jean-Francois Lemieux, L. Bruno Tremblay, David M. Holland. *Speaker Mysak Lawrence*

Characteristics of heavy metals in Chukchi Sea sediments as compared to selected circum-arctic sea areas

Ma Hao, Liqi Chen, Shi Zeng, Jianhua He, Xianzhang Zeng, Mingduan Yin, Wenyi Zeng. *Speaker Ma Hao*

Observations in the Arctic Ocean Do Not Confirm Weakening of Thermohaline Circulation in the North Atlantic

Alekseev Genrikh, Ivan Frolov, Vladimir Sokolov. *Speaker Alekseev Genrikh*

A column model for the Arctic Ocean ice cover

Borens Karin, Gran Bjrk. *Speaker Borens Karin*

The changes of temperature, salinity and hydrochemical characteristics over the Siberian Arctic shelves during the last century: data confidence and long-term trends

Makhotin Mikhail, Igor Dmitrenko. *Speaker Makhotin Mikhail*

Interannual variability of Pacific origin waters in the Canadian Basin caused by large-scale atmospheric circulation over the Arctic

Makhotin Mikhail, Roger Colony, Leonid A. Timokhov. *Speaker Makhotin Mikhail*

Radiation Climate of the Laptev and East-Siberian Seas Surface Layer in the Present and Past

Makshtas Alexander, Roman Vlasenkov, Nina Belchiva, Alexander Charkin, Alexey Pavlov. *Speaker Makshyas Alexander*

PS008 Processes in Oceanic Fronts

Conveners: Belkin Igor

Oral 3 July, 2007 from 09:00 AM to 12:30 AM - Academy of Fine Arts Room 14

Chairpersons: Igor Belkin

09:00 am **Evolution of solitary marginal disturbances in baroclinic frontal geostrophic currents with dissipation and time-varying background flow**

Swaters Gordon. *Speaker Swaters Gordon*

09:25 am **ADCP Current data analysis in the Rio de La Plata salinity front: variability from tidal to synoptic time scales**

Simionato Claudia G., Virna Loana Meccia, Walter Dragani, Raul Guerrero, Mario Nstor Nuez. *Speaker Simionato Claudia G.*

09:50 am **Structural features of the mixing zone between river and sea waters near the Amur River mouth**

Zhabin Igor, Vyacheslav Dubina, Luiza Propp, Pavel Tishchenko. *Speaker Zhabin Igor*

10:15 am **Evolution of air-sea interaction parameters during the temperature front passage: the measurements on an oceanographic platform**

Komarova Natalia, Goryachkin Yury N., Pospelov Michael N., Repina Irina A.. *Speaker Komarova Natalia*

10:40 am **Coffee Break (30 minutes)**

11:10 am **Restratification at ocean fronts**

Ferrari Raffaele. *Speaker Ferrari Raffaele*

The upwelling of downwelling currents

Matano Ricardo, Elbio D. Palma. *Speaker Matano Ricardo*

12:00 pm **On the significance of mid-latitude oceanic frontal zones in the mean state and dominant variability of the tropospheric circulation**

Nakamura Hisashi, Takeaki Sampe, Atsushi Goto, Daisuke Hotta, Wataru Ohfuchi, Shang-Ping Xie. *Speaker Nakamura Hisashi*

Oral 3 July, 2007 from 02:00 PM to 05:30 PM - Academy of Fine Arts Room 14

Chairpersons: Igor Belkin

02:00 pm **Mesoscale variability of the Adriatic Sea and its response to strong wind events**

Korotenko Konstantin, Benoit Cushman-Roisin. *Speaker Korotenko Konstantin*

02:25 pm **Coastal water dynamics in the eastern English channel and its impact on the transport and assemblages of the vertically migrating larvae**

Korotenko Konstantin, Alexei Sentchev. *Speaker Alexei Sentchev*

02:50 pm **Validation of a high-resolution ocean shelf model using automated front detection**

Miller Peter, Jason Holt. *Speaker Miller Peter*

03:15 pm **Statistical Modelling of New Zealands Southland Front From Space**

Hopkins Jo, Mr Peter Challenor, Dr Andrew Shaw. *Speaker Hopkins Jo*

03:40 pm **Coffee Break (30 minutes)**

04:10 pm **Inner Shelf Transient Downwelling Fronts: The Effect of Curved Coastline**

Yankovsky Alexander, Rosario Sanay, George Voulgaris. *Speaker Yankovsky Alexander*

04:35 pm **Topographically-steered jets at the tip of the Antarctic Peninsula**

Thompson Andrew F., Karen J. Heywood, Sally E. Thorpe, Angelika Renner, Armando Trasvina Castro. *Speaker Thompson Andrew F.*

05:00 pm **Subsurface counter current simulated by an asian Mediterranean Sea model**

Sasajima You-Ichiro, Satoshi Nakada, Naoki Hirose, Jong Hwan Yoon. *Speaker Sasajima You-Ichiro*

Poster 3 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall

Chairpersons: -

Tidal mixing fronts in the Okhotsk Sea

Zhabin Igor. *Speaker Zhabin Igor*

Velocity and position variations of the Kuroshio axis south of Japan influenced by mesoscale eddies in the Kuroshio recirculation region

Uehara Hiroki, Shoichi Kizu, Yasushi Yoshikawa, Kimio Hanawa. *Speaker Uehara Hiroki*

Observations of cross-shelf penetrating fronts off the southeast coast of China

Yuan Dongliang, Hui Zhou, Ruixiang Li, Hui Lei, Fan Wang, Dunxin Hu. *Speaker Hui Zhou*

Revisit of climatological view of North Pacific Intermediate Water

Kobayashi Taiyo. *Speaker Kobayashi Taiyo*

Field investigations of sea surface and atmospheric near-surface layer diurnal dynamics above a depth dumping

Bakhanov Victor, Aleksei Ermoshkin, Vasiliï Kazakov, Olga Kemarskaya, Vadim Lobanov, Irina Repina, Victor Titov, Emma Zuikova. *Speaker Bakhanov Victor*

Structure of zones with high salinity gradient from the point of view of diurnal variations

Shevtsova Olya. *Speaker Shevtsova Olya*

Observation of frontal eddies between the Kuroshio and coastal waters

Nadai Akitsugu. *Speaker Nadai Akitsugu*

Okhotsk Sea surface termal fronts evolution based on 1999-2006 NOAA satellites data

Novinenko George. *Speaker Novinenko George*

Formation mechanism of the barrier layer in the North Pacific subtropical gyre

Sato Kanako, Toshio Suga, Kimio Hanawa, Hideharu Sasaki, Yoshikazu

04 July, 2007

US004 Digital geophysical data exchange: remote access, virtual observatories, GEOSS, and eGY

Conveners: Papitashvili Vladimir, McLean Susan, Thomson Alan Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Rectorate Main Hall

09:00 am **Virtual observatories in geosciences: finding and using data**

Fox Peter. *Speaker Fox Peter*

09:20 am **GEOSS: the global, virtual observatory**

Achache Jos. *Speaker Achache Jos*

09:40 am **The earthscope plate boundary observatory distributed data management system**

Anderson Greg, Mike Jackson, Chuck Meertens. *Speaker Anderson Greg*

09:55 am **NASA'S VO program for integrating space and solar physics data**

Holmes Charles, Joseph Bredekamp, Aaron Roberts. *Speaker Holmes Charles*

10:15 am **Data access for space science through virtual observatories**

Walker Raymond, Jan Merka, Todd A. King, Steven P. Joy, Tom Narock. *Speaker Walker Raymond*

10:30 am **Coffee Break (30 minutes)**

11:00 am **Integrating Ocean Observing Systems**

Bermudez Luis. *Speaker Bermudez Luis*

Geoscience information systems and interoperable catalog and data access services for global distributed gravity field data

Ritschel Bernd, Hartmut Palm, Ronny Kopsischke, Steffen Loos, Sebastian Freiberg, Lutz Gericke. *Speaker Ritschel Bernd*

11:40 am **Advancing virtual observatories via knowledge management**

Messerotti Mauro. *Speaker Messerotti Mauro*

12:00 pm **Virtual observatories, data fabric and cyberspace: scientific data collection, management, and dissemination in the era of internet and world wide web**

Papitashvili Vladimir. *Speaker Papitashvili Vladimir*

12:15 pm **Network geoinformation environment for the analysis of spatial and spatio-temporal data**

Gitis Valeri, Yuri Arsky, Alexei Shogin, Arkady Weinstock. *Speaker Gitis Valeri*

JAS001 Planetary cores: physics, chemistry and dynamics

Conveners: Tanaka Satoru, Cardin Philippe

Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Russian project “the moon – 2012+”: interior structure of the moon

Gusev Alexander. *Speaker Gusev Alexander*

Model of annual variation of oblateness of Mars and possible annual oscillation of its pole

Barkin Yury. *Speaker Barkin Yury*

The effect of magnetic field on thermal convection in a rotating annulus

Revallo Milos. *Speaker Revallo Milos*

Paleomagnetic Pole Locations Deduced From Lunar Strong Magnetic Anomalies: A Possible Pre-existence of a Global Dipole Field

Sherif Berguig, Yves Cohen, Mohamed Hamoudi, Mark Wieczorek. *Speaker Sherif Berguig*

JAS002 Large scale imaging of the continental and oceanic lithosphere

Conveners: Harinarayana T., Key Kerry

Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Department of Pharmacy (E Room) Room E

09:00 am **Large-scale EM experiments: An overview of capabilities, actual research and new techniques**

Brasse Heinrich. *Speaker Brasse Heinrich*

09:30 am **Imaging the electrical characteristics in the deep crust across Narmada Tapti Lineament zone in Central India**

Harinarayana T., K. Naganjaneyulu, B. P. K. Patro, M. Someswara Rao, G. Virupakshi. *Speaker Harinarayana T.*

09:45 am **The resistive oceanic lithosphere and the deep mantle structure beneath the northwest Pacific basin**

Toh Hiroaki, Tsutomu Motobayashi. *Speaker Toh Hiroaki*

10:00 am **Do we need graphite, brines and partial melts to account for crustal electrical conductivity variations?**

Freund Friedemann. *Speaker Freund Friedemann*

10:15 am **Indication of the deep tectonics by resistivity and phase anisotropy, invariants and phase tensor parameters in a three-dimensional sedimentary basin**

Novak Attila, Antal Dm, Lszl Szarka. *Speaker Novak Attila*

10:30 am **Coffee Break (30 minutes)**

11:00 am **High resolution seismic reflection image of the Achankovil shear zone and its relevance in interpreting the pan-african event**

Bitragunta Rajendra Prasad, B. Rajendra Prasad, P. Koteswara Rao, S. Raju. *Speaker Bitragunta Rajendra Prasad*

11:15 am **A Continent-wide Map of Lg Coda Q Variation across Eurasia and its Relation to Lithospheric Evolution**

Mitchell Brian, Lianli Cong. *Speaker Mitchell Brian*

11:30 am **Lithospheric structure across the southern part of the continental margins of India**

Singh Bijendra, Niraj Kumar, A. P. Singh. *Speaker Singh Bijendra*

Bijendra Gravity anomalies over India and their relevance to lithospheric structure

Hari Venkata Ram Babu. *Speaker Hari Venkata Ram Babu*

12:00 pm **Proterozoic-Type Tectonics of Mars Revealed From Magnetic Anomalies**

Arkani-Hamed Jafar, Andrew Hynes. *Speaker Arkani-Hamed Jafar*

12:15 pm **Delineation of subsurface structures and tectonics of Marsa Matrouh area, western desert, Egypt, as deduced from magnetotelluric and magnectic data**

Khalil Ahmed, El Kotb Ahmed, Mohamed El Bohoty. *Speaker Khalil Ahmed*

Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy (E Room) Room E

02:00 pm **Magnetotelluric Survey Across The Contact Of Proterozoic Eastern Ghat Mobile Belt And Singhbhum Archean Craton ,Eastern India**

Roy Kalyan Kumar, Suman Dey, Someswar Srivastava. *Speaker Roy Kalyan Kumar*

02:15 pm **Crustal imaging and tectonic evaluation over parts of shiilong plateau using aero magnetic data**

Sivakumarsinha G.D.J.. *Speaker Sivakumarsinha G.D.J.*

Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Chairpersons: -

Geoelectric structure of the Deccan Volcanic Province observed from magnetotelluric studies

Gupta Gautam, S.G. Gokarn. *Speaker Gupta Gautam*

Deep-seated conductivity anomaly next to the andean range suggested by magnetotelluric and magnetovariational studies in Mendoza, Argentina

Borzotta Enrique. *Speaker Borzotta Enrique*

A 2-D resistivity modeling of the southern sector of the Pringles Metamorphic Complex, Sierra de San Luis, Argentina

Pomposiello Cristina, Monica G. Lpez De Luchi, Alicia Favetto. *Speaker Pomposiello Cristina*

First multi-site magnetotelluric experiment in Egypt: opportunities of remote reference technique

Khalil Ahmed, Abdou Khalaf. *Speaker Khalil Ahmed*

Electromagnetic induction mosaics from two significant tectonic lines of the Pannonian Basin and the Alps

Szarka Laszlo, Antal Dm, Gza Varga. *Speaker Szarka Laszlo*

Inversion of the geomagnetic induction data from EMTESZ experiments by stochastic and linearized thin sheet inversion.

Cerv Vaclav, S. KOVACIKOVA, M. MENVIELLE, J. PEK, EMTESZ Working Group. *Speaker Cerv Vaclav*

Paraguay Belt Conductivity Anomaly: A fundamental tectonic boundary of the South American platform imaged by electromagnetic induction surveys

Padilha Antonio, Mauricio S. Bologna, Marcelo B. Padua, Icaro Vitorello, Franois H. Chamalaun. *Speaker Padilha Antonio*

The Speed Field models of Chinese Continent Established by GPS Observations

Yao Yibin. *Speaker Yao Yibin*

EM sounding of the lithosphere in the trans-european suture zone (NW Poland and NE Germany)

Ernst Tomasz, Waldemar Jozwiak, Anne Neska, Heinrich Brasse, Anja Kreutzmann, Nikolay Palshin, Elena Sokolova, Ivan Varentsov, Laust Pedersen, Maxim Smirnov, Vaclav Cerv. *Speaker Ernst Tomasz*

The extension of the Emtesz-Pomerania Em sounding array towards the Baltic Sea.

Jozwiak Waldemar, Anne Neska, Tomasz Ernst, Heinrich Brasse, Lars Houpt, Anja Schafer, Elena Sokolova, Ivan Varentsov. *Speaker Jozwiak Waldemar*

Deep electrical conductivity structure across the trap covered volcanic plugs in Saurashtra

Harinarayana T., D.N.Murthy, M.Someswara Rao. *Speaker D.N. Murthy*

Second-order magnetic phase transition in the Earths crust: reality or fiction?

Kiss Jnos, Lszl Szarka, Ernő Prcser, Antal Dm, Antje Franke. *Speaker Kiss Jnos*

JAS007 Response of the atmosphere/ionosphere coupling system to forcing from the Sun and the lower atmosphere

Conveners: Kazimirovsky Edward, Pancheva Dora Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room E

09:00 am **Measurements and Models of spectral solar irradiance variations**

Unruh Yvonne, S K Solanki, N Krivova. *Speaker Unruh Yvonne*

09:30 am **Solar Irradiance Variability and its Effect on the Earth’s Atmosphere**

Pap Judit. *Speaker Pap Judit*

10:00 am **Tropospheric response to the 20 November 2003 geomagnetic storm using global GPS network data**

Jin Shuanggen, Jung-Ho Cho, Jong-Uk Park,. *Speaker Jin Shuanggen*

10:15 am **Resonant interaction between two planetary waves with zonal wave number 2**

Wuest Sabine, Michael Bittner. *Speaker Wuest Sabine*

10:30 am **Coffee Break (30 minutes)**

11:00 am **Solar variability and climate change**

Cubasch Ulrich, Thomas Spangehl, Semjon Schimanke. *Speaker Cubasch Ulrich*

11:30 am **Stratospheric Variability: Effects on Tropospheric Climate**

Baldwin Mark. *Speaker Baldwin Mark*

12:00 pm **Study of the ozone response to the rotational solar activity variations at the Tropics by wavelet application**

Werner Rolf, Ivan Kostadinov. *Speaker Werner Rolf*

12:15 pm **Regions of low variability in the middle atmosphere**

Bittner Michael, Sabine Wst. *Speaker Bittner Michael*

Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room E

02:00 pm **Influence of the Solar Cycle on the Residual Mean Circulation of the Middle Atmosphere**

Salby Murry. *Speaker Salby Murry*

02:30 pm **Solar Induced variations of odd nitrogen: Multiple regression analysis of UARS HALOE data**

Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Using Satellite Geomagnetism to Probe Ocean Flow
Hawe James, Dr. Richard Holme, Dr. Rob Tyler. *Speaker Hawe James*

The analysis of the time series of the daily spherical harmonic models received according to the satellite CHAMP
Zvereva Tatiana, Vadim Golovkov, Tatiana Chernova. *Speaker Zvereva Tatiana*

Using the comprehensive model in disturbed conditions.
Woodfield Emma, Robert M. Shore, Roland G. Ayliffe, Richard Holme. *Speaker Woodfield Emma*

Ionospheric magnetic field modeling from ground-based and satellite data
Penquerc Virginie, Chulliat Arnaud. *Speaker Penquerc Virginie*

A case for variational geomagnetic data assimilation
Fournier Alexandre, Cline Eymin, Thierry Alboussire, Elisabeth Canet, Alexandra Pais, Dominique Jault. *Speaker Fournier Alexandre*

A continuous model of the Earths magnetic field and its temporal change of the period 1956 to 2006
Wardinski Ingo, Vincent Lesur, Richard Holme. *Speaker Vincent Lesur*

ASIDC042 Advances in the investigation of equatorial aeronomic processes since the International Geophysical Year 1957
Conveners: Muralikrishna Polinaya

Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room A

09:00 am **Equatorial Aeronomy Then and Now**
Clemesha Barclay. *Speaker Clemesha Barclay*

09:40 am **Data sources needed for data assimilation modeling of the equatorial ionosphere**
Schunk Robert, Ludger Scherliess, Jan J. Sojka, Donald C. Thompson, Lie Zhu. *Speaker Schunk Robert*

10:20 am **The Solar Wind Control of the Equatorial Ionosphere Dynamics during Geomagnetic Storms**
Biktash Lilia, Takashi Maruyama, Kenro Nozaki. *Speaker Biktash Lilia*

10:40 am **Coffee Break (30 minutes)**

11:10 am **Role of E- and F-region coupling in the evolution of equatorial plasma bubbles**
Bhattacharyya Archana. *Speaker Bhattacharyya Archana*

11:50 am **Possible effects of lower E-region dust particles on the electrojet current profile**
Muralikrishna Polinaya, V. H. Kulkarni. *Speaker Muralikrishna Polinaya*

12:10 pm **Measurement of mesospheric temperature by three molecular airglow band at Kolhapur (16.8° N, 74.2° E), India**
Mukherjee Girija Kumar. *Speaker Mukherjee Girija Kumar*

Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room A

02:00 pm **Satellite studies of low equatorial vertical plasma drifts**
Fejer Bela G., John W. Jensen, S.-Y. Su. *Speaker Fejer Bela G.*

02:40 pm **Simultaneous measurement of OH (6-2) Meinel band, OI 557.7 nm and O2 (0-1) atmospheric band emissions at Kolhapur (17° N), India**
Parihar Navin. *Speaker Parihar Navin*

03:00 pm **Spectral characteristics of waves in the mesosphere-thermosphere region from ground based airglow measurements at Kolhapur (16.8° N, 74.2° E), India**
Mukherjee Girija Kumar. *Speaker Mukherjee Girija Kumar*

03:20 pm **Atypical k-spectra associated with topside equatorial irregularities**
Muralikrishna Polinaya. *Speaker Muralikrishna Polinaya*

03:40 pm **Coffee Break (30 minutes)**

04:10 pm **Equatorial Low latitude Ionospheric Responses to Some Recent Intense Magnetic Storms**
Abdu Mangalathayil, Inez Staciari Batista, Eurico R. De Paula, Jose Humberto A. Sobral, Clezio M. Denardin. *Speaker Abdu Mangalathayil*

04:50 pm **GPS Tec variation over Southeast Asian Region during magnetic storms**
Le Huy Minh, Rolland Fleury, Patrick Lassudrie Duchesne, Alain Bourdillon, Christine Amory-Mazaudier, Thang Nguyen Chien, Lan Tran Thi, Hong Pham Thi Thu, Hung Luu Viet, Thanh Le Truong. *Speaker Le Huy Minh*

05:10 pm **Effects of geomagnetic storm on F region plasma irregularities over India**
Chakrabarty D, R. Sekar, C. V. Devasia. *Speaker Chakrabarty D*

Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Chairpersons: -

Study of the South Atlantic magnetic anomaly influence on the energetic particle precipitation
Jaskulski Tiago, Nelson Jorge Schuch, Henrique Carlotto Aveiro, Lilian Piecha Moor, Juliano Moro, Clezio Marcos Denardini, Polinaya Muralikrishna. *Speaker Jaskulski Tiago*

The response of the equatorial and low latitude F-region in the Brazilian sector to intense geomagnetic disturbances during the early part of November 2004: A comparative study with the TIMEGCM model results
Sahai Yogeshwar, Fabio Becker-Guedes, Rodolfo De Jesus, Alessandro J. De Abreu, Geoff Crowley, Fernando L. Guarnieri, Kiyoshi Igarashi, Valdir Gil Pillat, Jose Ricardo Abalde, Jose Augusto Bittencourt, Alan S. Ferreira, Newton S. Lima, Washington L. C. Lima, Fernando Bertoni. *Speaker Sahai Yogeshwar*

The effect of dust particles on two-stream instability: a possible explanation for the persistence of ionization trails of Leonid meteor showers in the ionosphere.
Kulkarni Vaman, P. Muralikrishna. *Speaker Kulkarni Vaman*

The climatology of Equatorial Spread-F magnetic signatures
Stolle Claudia, Lhr, H., Rother, M.. *Speaker Stolle Claudia*

ASIDCH043 The International Geophysical Year: A 50-yr Retrospective
Conveners: Cliver Ed, Good Gregory A.

Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Department of Mathematics Room 12

09:00 am **The IGY and Internationalism in the Ocean Sciences**
Hamblin Jacob. *Speaker Hamblin Jacob*

09:30 am **IGY: Springboard for Atmospheric Science Research**
Harper Kristine. *Speaker Harper Kristine*

10:00 am **The Impact of the IGY on Seismology**
Hough Susan. *Speaker Hough Susan*

10:30 am **Coffee Break (30 minutes)**

11:00 am **Notes on the Soviet IGY**
Bulkeley Rip. *Speaker Bulkeley Rip*

11:30 am **The IGY and the Promise of Openness**
Korsmo Fae. *Speaker Korsmo Fae*

12:00 pm **The IGY and American Popular Culture**
Sternberg Rob. *Speaker Sternberg Rob*

Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Russian research in Antarctic oases from IGY to IPY
Sokratova Irina. *Speaker Sokratova Irina*

Italian activities during IGY and the post-IGY expansion of Geophysics in Italy
Alfonsi Lucilla, Antonio Meloni. *Speaker Antonio Meloni*

The Politics of IGY Philately
Bulkeley Rip. *Speaker Bulkeley Rip*

An IGY Roll of Honour
Bulkeley Rip. *Speaker Bulkeley Rip*

The Hermanus Magnetic Observatory and the IPYs: Past, Present, and Future.
Sutcliffe Peter. *Speaker Sutcliffe Peter*

Sydney Chapman and his relation to geophysics IB Germany
Schrder Wilfried. *Speaker Schrder Wilfried*

On the work of amateurs in the auroral and aeronomy program during the IGY
Schrder Wilfried. *Speaker Schrder Wilfried*

Impact of IGY on Indian Geo-science Activities
Lakhina Gurbax, Sobhana Alex. *Speaker Lakhina Gurbax*

Earth's Polar Regions' - A New Web-Based Educational Resource for the Public
Johnson Roberta. *Speaker Johnson Roberta*

The process and management of geophysical information in national geophysical database of Iran since IGY
Kamkar-Rouhani Abolghasem. *Speaker Kamkar-Rouhani Abolghasem*

World Data Center for Solar-Terrestrial Physics, Boulder
McLean Susan, William F. Denig. *Speaker McLean Susan*

The world data centers: a successful 50 years and the challenges of the 21st century
McLean Susan, Jean-Bernard Minster, David M. Clark. *Speaker Jean-Bernard Minster*

GS001 Reference Frames
Conveners: Dermanis Athanasios, Drewes Hermann

Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Education Room 3

02:00 pm **Determination of a Global Reference Frame Based on a Reprocessed GPS Network**

Rothacher, Peter Steigenberger. *Speaker Fritsche Mathias*

02:20 pm **Status of the European Reference Frame (EUREF)**
Torres Joao, Zuheir Altamimi, Claude Boucher, Elmar Carine Bruyninx, Alessandro Caporali, Werner Gurtner, Helmut Hornik, Ambrus Kenyeres, Jaakko Mkinen, Hans V. D. Marel, Jaroslav Simek, Johannes Ihde, Heinz Habrich, Guenter Stangl, Hermann Seeger, Georg Weber. *Speaker Torres Joao*

02:35 pm **Reprocessing a Regional GPS network in EUROPE**
Voelksen Christof. *Speaker Voelksen Christof*

02:50 pm **Regional reference frames for North America: Current status and future plans of Subcommittee SC1.3c**
Craymer Michael R., Richard Snay. *Speaker Craymer Michael R.*

03:10 pm **Recent achievements of SIRGAS Working Group I**
Brunini Claudio. *Speaker Brunini Claudio*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Report on the work of the Inter-Commission Project ICP 1.1 Satellite Altimetry**
Bosch Wolfgang. *Speaker Bosch Wolfgang*

04:20 pm **Vertical reference frames - report of IAG Inter-Commission Project 1.2**
Ihde Johannes. *Speaker Ihde Johannes*

04:40 pm **The permanent tide in height systems**
Makinen Jaakko, Johannes Ihde. *Speaker Makinen Jaakko*

04:55 pm **The relationship of the AHD to a Global Geoid**
Kearsley Arthur H W, Ramesh Govind, Geoff Luton. *Speaker Kearsley Arthur H W*

Kearsley Arthur H W

05:15 pm **The continuation of height anomalies into masses revisited**
Sampietro Daniele, Fernando Sans. *Speaker Sampietro Daniele*

Daniele GS002 Gravity Field
Conveners: Visser Pieter, Okubo Shuhei, Jekeli Christopher, Sneeuw Nico, Marti Urs

Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Department of Education Main Hall

09:00 am **The Development of the European Gravimetric Geoid Model EGG07**
Denker Heiner, J.-P. Barriot, R. Barzaghi, D. Fairhead, R. Forsberg, J. Ihde, A. Kenyeres, U. Marti, M. Sarraihl, I.N. Tziavos. *Speaker Denker Heiner*

09:14 am **An updated geoid model for Africa**
Merry Charles. *Speaker Merry Charles*

09:28 am **Arctic Gravity Project revised: gravity and geoid of the Arctic from surface and airborne gravity, ICESAT and GRACE**
Forsberg Rene, Henriette Skourup, Steve Kenyon, Alex Braun. *Speaker Forsberg Rene*

09:42 am **The quasi-geoid determination in a cm level in Middle-East China**
Zhang Quande, Peng Zhang, Zhicai Li. *Speaker Zhang Quande*

09:56 am **Gravity Field and Geoid in the Antarctic Peninsula Region**
Scheinert Mirko, Fausto Ferraccioli, Jan Mller, Tom Jordan, Reinhard Dietrich. *Speaker Scheinert Mirko*

10:10 am **An attempt for an Amazon geoid model using Helmert anomaly**
Blitzkow Denizar, Denizar Blitzkow, Ana Cristina Oliveira Cancoro De Matos, Ilce De Oliveira Campos, Artu Ellmann, Petr VančEK, Marcelo Carvalho Dos Santos. *Speaker Blitzkow Denizar*

10:24 am **Combination of gravimetry, altimetry and GOCE data for geoid determination in the Mediterranean: evaluation by simulation**
Barzaghi Riccardo, Adriano Maggi, Nikolaos Tselfes, Dimitrios Tsoulis, Ilias N. Tziavos, Georgios S. Vergos. *Speaker Barzaghi Riccardo*

10:38 am **Coffee Break (30 minutes)**

11:08 am **An Attempt towards an Optimum Combination of Gravity Field Wavelengths in Geoid Computation**
Abd-Elmotaal Hussein, Norbert Khtreiber. *Speaker Abd-Elmotaal Hussein*

Elmotaal Hussein

11:22 am **BVP, Global models and the residual terrain correction**
Sampietro Daniele, Mohamed Elhabiby, Fernando Sans, Michael G. Sideris. *Speaker Sampietro Daniele*

11:36 am **A new method of height datum unification using GPS and gravity data**
Zhang Liming, Li Fei, Wu Chen. *Speaker Zhang Liming*

11:50 am **Vertical reference frames - report of IAG Inter-Commission Project 1.2**
Ihde Johannes. *Speaker Ihde Johannes*

12:04 pm **Definition of local geoidal potential and datum height difference of Turkish National Vertical Control Network (TUDKA99)**
Kilicoglu Ali, Orhan Firat, Coskun Demir, Bahadir Aktug, Ayhan Tekgul, Ahmet Direnc. *Speaker Kilicoglu Ali*

12:18 pm **Height datum unification in Greece employing Tide Gauge, Marine Geoid and Sea Surface topography data**
Vergos Georgios S., Ilias N. Tziavos. *Speaker Vergos Georgios S.*

Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Education Main Hall

02:00 pm **Optimization concepts, boundary problems and iterations in the combination of terrestrial and satellite gravity field data**
Holota Petr, Otakar Nesvadba. *Speaker Holota Petr*

02:14 pm **Complex, vector and tensor least square collocation methods for over-determined boundary value problems in GOCE data processing**
Dongming Zhao, Wu Xiao-Ping, Zhang Chuan-Ding. *Speaker Wu Xiao-Ping*

02:28 pm **The linearized GBVPs; quantitative estimates with square integrable data**
SansÒ Fernando. *Speaker SansÒ Fernando*

02:42 pm **Ellipsoidal collocation**
Pertusini Lisa, Mirko Reguzzoni, Fernando Sans, Giovanna Sonza. *Speaker Pertusini Lisa*

02:56 pm **Analyzing two approaches for integral inversion of ground gravity in local geoid computations**
Novak Pavel, Jianliang Huang. *Speaker Novak Pavel*

03:10 pm **Analysis of a two-dimensional matched filter to detect mass anomalies in the Earth's gravity field using local gradiometry.**
Abt Tin Lian, Puttipol Dumrongchai, Christopher Jekeli. *Speaker Abt Tin Lian*

03:24 pm **Numerical solution of the Fixed Altimetry-Gravimetry BVP using the Direct BEM Formulation**
Cunderlik Robert, Karol Mikula. *Speaker Cunderlik Robert*

03:38 pm **Coffee Break (30 minutes)**

04:08 pm **Can local quasi-geoids be determined uniquely from local gravity data?**
Klees Roland, Ilya Prutkin. *Speaker Klees Roland*

04:22 pm **Spatiotemporal resolution of multi-satellite missions**
Sneeuw Nico, Mohammad Ali Sharifi. *Speaker Sneeuw Nico*

04:36 pm **Modeling the time variations of the Earth gravity field by Ensemble Kalman Filter**
Zizhan Zhang, Houtse Hsu. *Speaker Zizhan Zhang*

04:50 pm **Molodenskys theory and modern satellite technologies**
Mazurova Elena. *Speaker Mazurova Elena*

05:04 pm **Gravity changes caused by tide-generating potential and by internal dislocation in a 3-D heterogeneous earth (2) numerical results**
Sun Wenke. *Speaker Sun Wenke*

05:18 pm **Flexural isostatic anomalies from the wavelet transform**
Kirby Jon, Chris Swain. *Speaker Kirby Jon*

Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Chairpersons: -

Tailored Reference Geopotential Model for Egypt
Abd-Elmotaal Hussein. *Speaker Abd-Elmotaal Hussein*

Investigation of gravity gradients of potential anomaly in Iran territory using GRACE
Kiamehr Ramin, Mehdi Eshagh. *Speaker Kiamehr Ramin*

Adjustment of the gravity reference network of Estonia
Oja Tõnis. *Speaker Oja Tõnis*

Calibration of relative LaCoste-Romberg G and Scintrex CG-5 gravimeters in the Estonian and Finnish calibration lines
Oja Tõnis. *Speaker Oja Tõnis*

Satellite altimetry over land and coastal zones: a summary of achievements of IAG SG2.3 over 2003-2007
Hwang Chainway. *Speaker Hwang Chainway*

Accuracy Evaluation for SST Gravity Field Models in China
Luo Jia. *Speaker Luo Jia*

Simulation Research of Satellite-to-Satellite Tracking in Lunar Gravity Field Determination
Luo Jia. *Speaker Luo Jia*

New investigation on the choice of the tailored global geopotential model for Algeria
Benahmed Daho Sid Ahmd, C. L. Merry. *Speaker Benahmed Daho Sid Ahmd*

A new vertical datum for Algeria derived from the combination of the local Gravimetric geoid and GPS/Levelling data
Benahmed Daho Sid Ahmd, C. L. Merry. *Speaker Benahmed Daho Sid Ahmd*

Towards a new global digital elevation model

Berry Philippa, Richard Smith, Jennifer Freeman, Jerome Benveniste. *Speaker Berry Philippa*

The Antarctic Geoid Project (IAG Commission Project 2.4)
Scheinert Mirko. *Speaker Scheinert Mirko*

Self-adaptive choice of a system of localizing base functions for regional gravity field recovery
Keller Wolfgang. *Speaker Keller Wolfgang*

On the principal difficulties and ways to their solution in the theory of gravitational condensation of infinitely distributed dust substance
Krot Alexander. *Speaker Krot Alexander*

Coastal and land Applications of satellite altimetry
Chang Xiaotao, Guo Jinyun, Li Jiancheng, Zhang Chuanyin, Dang Yamin. *Speaker Chang Xiaotao*

Gravity changes caused by tide-generating potential and by internal dislocation in a 3-D heterogeneous earth (1) theory
Fu Guangyu, Wenke Sun. *Speaker Wenke Sun*

GRACE application to the receding Lake Victoria water level and the Australian drought
Awange Joseph, Dr.-Ing. Mohammad A. Sharifi, Prof. Wolfgang Keller, Prof. Will E. Featherstone, Dr. Michael Kuhn. *Speaker Awange Joseph*

Solution of the inverse Stokes and inverse Hotine problems to order f for an ellipsoidal boundary
Heck Bernhard, Kurt Seitz. *Speaker Heck Bernhard*

Comparison of analytical and numerical methods for the computation of the potential of different mass elements and its first or second derivatives
Wild-Pfeiffer Franziska, Bernhard Heck, Kurt Seitz. *Speaker Wild-Pfeiffer Franziska*

A Molodenskij geoid model in Iran
Najafi-Alamdari Mehdi, Seyed Rohallah Emadi, Makan. Abdolhazadeh. *Speaker Najafi-Alamdari Mehdi*

Realisation of one centimetre geoid in Klang Valley
Chang David, Dr Samad Bin Hj Abu, Mr Soeb Nordin. *Speaker Chang David*

Malaysia Airborne Gravity and Geoid Determination Project
Abu Samad, David Chang Leng Hua, Soeb Nordin. *Speaker Abu Samad*

On the feasibility of Biased Kriging
Dermanis Athanasios. *Speaker Dermanis Athanasios*

The fast analysis of GOCE gravity field
Xu Xinyu, Jc Li, Xiancai Zou, Chunbo Fan, Yonghai Chu. *Speaker Xu Xinyu*

Fitting the best geopotential model for Argentina: a case study at Patagonia.
Pereira Ayelen. *Speaker Pereira Ayelen*

Preliminary results of the first campaign of absolute gravity measurements at Polish GNSS stations
Walo Janusz, Tomasz Olszak, Andrzej Pachuta, Marcin Barlik, Ryszard Szpunar, Dominik Prochniewicz. *Speaker Tomasz Olszak*

Improved marine gravity field from satellite altimetry: Case study of the South China Sea
Bao Lifeng, Yang Lu. *Speaker Bao Lifeng*

A New Improved Geoid in North Eastern Italy
Sterzai Paolo. *Speaker Sterzai Paolo*

Combination Method for Computing Terrain Corrections: A case study in a region in Iran
Jalal Shiva, Hossein Zomorrodian. *Speaker Jalal Shiva*

Reference frame consistency in CHAMP and GRACE earth gravity models
Kotsakis Christopher. *Speaker Kotsakis Christopher*

Performance Simulations of a GRACE Follow-On Mission Using a Mascon Approach
Loomis Bryant, R. Steven Nerem, Scott Luthcke, Dave Rowlands. *Speaker Loomis Bryant*

Mass changes detected from GRACE data in Argentina
Pereira Ayelen, Rene Forsberg. *Speaker Pereira Ayelen*

The role of the covariance function in least-squares collocation for local gravity field modelling
Darbeheshti Neda, Will Featherstone, Wolfgang Keller. *Speaker Darbeheshti Neda*

Computation of Geoid and its interpretation in Saurashtra, western India using Gravity data
Prajapati Sanjay, Bijendra Singh, C.C. Tscherning. *Speaker Prajapati Sanjay*

Estimating the time-variable component of the sea surface topography with geodetic data
Vergos Georgios S., Ilias N. Tziavos. *Speaker Vergos Georgios S.*

Analysis of repeated GPS measurements over a geodetic network and a common adjustment of heterogeneous height data
Tziavos Ilias N., Dimitrios Tsoulis, Vassilios N. Grigoriadis, Vassilios D. Andriatsano, Eleni A. Tzanou. *Speaker Tziavos Ilias N.*

Robust Trend Estimation from GOCE SGG Satellite Track Cross-Over Differences
Jarecki Focke. *Speaker Jarecki Focke*

Stokes-like solution to the second geodetic boundary-value problem
Ziqing Wei. *Speaker Ziqing Wei*

Geoid determination combining ground data and satellite-derived global models
Pail Roland, Fernando Sans, Norbert Kuehtreiber, Mirko Reguzzoni, Bernadette Wiesenhofer. *Speaker Pail Roland*

Three-Dimensional Microgravity modeling of Tehran subway basement.
Nasuti Aziz, Dr.Vahid Ebrahimzadeh Ardestani. *Speaker Nasuti Aziz*

The Precise orbital determination of Earth satellites: a tool for investigating the atmosphere ?
Vespe Francesco. *Speaker Vespe Francesco*

Geopotential number estimation by the use of Digital Terrain Model
Szeghy Erika. *Speaker Szeghy Erika*

Current status of gravity measurements in the Republic of Croatia with the Basic Gravity Network Finalization Project
Lucic Maro, Mihajla Liker, Ilija Grgic, Bojan Barisic, Marija Repanic. *Speaker Mihajla Liker*

Precise determination of vertical gravity gradients in the Czech gravity network
Lederer Martin, Vojtech Plink. *Speaker Lederer Martin*

How to detect small hydrological variations in gravity by repeated measurements with field gravimeters?
Naujoks Marco, Adelheid Weise, Corinna Kroner, Thomas Jahr. *Speaker Naujoks Marco*

Estimation of a new high-accuracy marine geoid model offshore Argentina using CHAMP and GRACE-derived geopotential models
Tocho Claudia, Michael G. Sideris. *Speaker Tocho Claudia*

Analysis of synthetic TFM patterns for salt domes
Panisova Jaroslava, Peter Vajda. *Speaker Panisova Jaroslava*

Gravity field parameter estimation using QR factorization
Bruinsma Sean, J.C. Marty, M. Baboulin, S. Gratton, G. Balmino. *Speaker Bruinsma Sean*

The inversion of the Poisson integral in the wavelet domain
Elhabiby Mohamed, Michael G. Sideris. *Speaker Elhabiby Mohamed*

The Bias in GRACE estimates of continental water storage variations
Zapreeva Elena, Roland Klees, Hessel C. Winsemius, Hubert H.G. Savenije. *Speaker Zapreeva Elena*

Signals of extreme weather conditions in central Europe from GRACE 4-D wavelet expansions
Seitz Florian, Michael Schmidt, C.K. Shum, Lei Wang. *Speaker Seitz Florian*

Construction of the Absolute Gravity Network in Taiwan
Chung Yi-Da, Chun-Sung Chen. *Speaker Chun-Sung Chen*

The core drift and oscillations as the main mechanism of non-tidal variations of gravity
Barkin Yuri. *Speaker Barkin Yuri*

The detailed model of Antarctic gravity field
Grushinskiy Andrey, Andrey Aleksandrovich Buluchehev. *Speaker Grushinskiy Andrey*

Research on the calibration of onboard accelerometer by dynamic method
Zou Xiancai, J.Li, Luo Jia. *Speaker Zou Xiancai*

The ICAGM07 geoid model for the North-East Atlantic (Iberia Canaria - Azores)
Catalao Joao, Miguel J. Sevilla, Helena Koll. *Speaker Catalao Joao*

Gravity field determination at the AIUB - the celestial mechanics approach.
Prange Lars, Gerhard Beutler, Leos Mervart, Rolf Dach, Adrian Jggi. *Speaker Prange Lars*

Accuracy analysis of external reference data for GOCE evaluation in space and frequency domain
Wolf Karen Insa. *Speaker Wolf Karen Insa*

Calibration in the MBW of simulated GOCE gradients aided by ground data.
Veichert Martin, J. Boumann, C. C. Tscherning. *Speaker Veichert Martin*

An error model for the GOCE space-wise solution by Monte Carlo methods
Migliaccio Federica, Mirko Reguzzoni, Fernando Sans, Nikolaos Tselfes. *Speaker Mirko Reguzzoni*

Downward continuation of airborne gravity by Poisson integral, least-squares collocation and Fourier transform: a case study over the Kuroshio east of Taiwan
Hwang Chainway, Artu Ellmann, Hsuan-Chang Shih, Yu-Shen Hsiao. *Speaker Hwang Chainway*

Inversion of gravity data N wavelet domain using normalized forward models
Motasharrie Arash, Hossein Zomorrodian. *Speaker Motasharrie Arash*

Estimation of the time-variable part of the geoid from monthly GRACE

Gravity field modeling of the surface thermal fronts in the China Seas based on an Essential Report of Geodesy in the Gravity Field	New combined geoid solution by gravity space approach applied in the South of Portugal mainland	SYSTEM	Plag Hans-Peter, Corne Kreemer, William C. Hammond.
Validation of a sea surface temperature field in the tropical Indian Ocean	Antunes Carlos, Joo Catalo. <i>Speaker Antunes Carlos</i>	Speaker Plag Hans-Peter	10:36 am
Ordering the Subtropical Convergence in the Tropics	GOCE: System and Mission Performance, Data Processing and Mission Products	Coffee Break (30 minutes)	11:06 am
Comparison of GPS and SG loading effects	Floberghagen Rune, Danilo Muzi. <i>Speaker Floberghagen Rune</i>	Combined analysis of earth orientation parameters and gravity field coefficients for mutual validation	
Wang Chuanwen, Jiahua Sun, Cheng. <i>Speaker Wang Chuanwen</i>	Progress in Regional Quasi-geoid Determination of China		Heiker Andrea, Kutterer Hansjrg, Miller Jrgen. <i>Speaker Heiker</i>
Satellite Technology: ERSST and Chlorophyll Fronts in the Northeast North Atlantic	Li Jiancheng, Jincheng Ning, Weiping Jiang, Dingbo Chao, Yibin Yao. <i>Speaker Li Jiancheng</i>	Earth rotation parameters from combined VLBI, ring laser and gravity observations	11:18 am
Belkacem John E. O'Reilly. <i>Speaker Belkin Igor</i>	The effect of topographic and isostatic masses on the EtvS-tensor		Mendes Cerveira Paulo Jorge, Kluegel Thomas, Schreiber
Darbelys de So Vill Pacific subtropical waters: The relation between sea level and geoid	Roza Szabolcs, Gyula Tth. <i>Speaker Roza Szabolcs</i>	Ulrich, Velikoseltsev Alexander, Meurers Bruno, Schuh Harald. <i>Speaker Mendes Cerveira Paulo Jorge</i>	11:30 am
Retrieval of geoid anomalies from satellite altimetry data using GOCE and GRACE	Report on the Activities of SC 2.4 "Regional Geoid Determination"	Atmosphere angular momentum time series in the frame of GGOS	
Li Jun, Jinhua Chen, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Li Jun</i>	The National Gravity Network of Switzerland		Boehm Johannes, Paulo Jorge Mendes Cerveira, Sigrid English, Robert Weber, Harald Schuh. <i>Speaker Boehm Johannes</i>
Gravity field modeling using spherical radial basis functions A case study for the Mediterranean	Marti Urs. <i>Speaker Marti Urs</i>	Numerical models of transient atmospheric and hydrospheric dynamics: Benefits for the interpretation of geodetic observations	11:42 am
Chemical Principles	Report of Working Group on Satellite Gravity Theory		Boehm Johannes, Paulo Jorge Mendes Cerveira, Sigrid English, Robert Weber, Harald Schuh. <i>Speaker Boehm Johannes</i>
Underpinning Global Geodesy	Sneeuw Nico. <i>Speaker Sneeuw Nico</i>	The analysis of models of the Earths gravity field derived from GRACE using empirical orthogonal functions	11:42 am
Consistent and Accurate	Wen Hanjiang, Zhu Guangbin, Xu Kehong. <i>Speaker Wen Hanjiang</i>	New combined geoid solution HGUTB2007 for Hungary	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	The National Gravity Network of Switzerland	Th Gyula. <i>Speaker Tth Gyula</i>	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Report of the Internal Working Group of the ICTT on Inverse Problems and Global Optimization	Time variable gravity field recovery in local areas by means of Slepian functions	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Kusche Juergen. <i>Speaker Kusche Juergen</i>	Weigelt Matthias, Oliver Bauer, Nico Sneeuw, Wolfgang Keller. <i>Speaker Weigelt Matthias</i>	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Computing Lateral Topographical Density Variations and Terrain Roughness Effects on the Orthometric Heights in Iran	Computing Lateral Topographical Density Variations and Terrain Roughness Effects on the Orthometric Heights in Iran	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Saadat Seyed Abdoreza. <i>Speaker Saadat Seyed Abdoreza</i>	Determination of Local GPS/Levelling Geoid using New Computing Approaches	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Erol Bihter, Rahmi Nurhan Elik. <i>Speaker Erol Bihter</i>	The gravity signature of the Sumatra-Andaman 2004 earthquake: comparison between GRACE observations and modeling.	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	De Linage Caroline, Luis Rivera, Sophie Lambotte, Jean-Paul Boyer, Jacques Hinderer, Richard Biancale. <i>Speaker De Linage Caroline</i>	Reduced-dynamic Precise Orbit Determination Based on Helmert Transformation	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Chen Junping, Jiexian Wang, Jrgen Klotz, Marcos Moreno, Volker Grund, Jan Bolte. <i>Speaker Chen Junping</i>	Space localizing gravity field determination for airborne gravimetry in consideration of topographical aspects	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Mueller Felix, A.A. Makhloof. <i>Speaker Mueller Felix</i>	Combining GPS, Levelling and Geoid Data using Estimated Stochastic Parameters for Vertical Control in North-West of Turkey	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Erol Bihter, Roland Klees, Michael G. Sideris, Rahmi N. Elik. <i>Speaker Erol Bihter</i>	Unveiling a glaciated Antarctic Volcano with airborne gravity data	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Jordan Tom, Fausto Ferraccioli, Jones Phil, John Smellie, Marta Ghidella. <i>Speaker Jordan Tom</i>	Numerical approximation of trajectory disturbing gravity	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Dongming Zhao, Wu Xiaoping, Zhang Chuanding. <i>Speaker Wu Xiaoping</i>	Use of a Fine Scale Hydrologic Model to Validate GRACE Measurements in the Amazon Basin	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Chen Yiqun, Jeong Woo Kim123, Doug Alsdorf, R.E. Beighley, Yiping He, C.K. Shum, Kenneth Eggert, Burkhard Schaffrin. <i>Speaker Chen Yiqun</i>	Study of the orbit accuracy improvement for the Single and Multi-satellite SAR Mission using the currently released Geopotential Models	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Shariif Mohammadali, Marzieh Jafari. <i>Speaker Marzieh Jafari</i>	Prediction of the gravity field in shallow waters from the bathymetry data	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Sarrailh Michel, Bria Anne, Lequentrec-Lalancette Marie-Francoise, Rouxel Didier. <i>Speaker Sarrailh Michel</i>	Report CP2.1: The European Gravity and Geoid Project (EGGP)	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Denker Heiner, J.-P. Barriot, R. Barzaghi, D. Fairhead, R. Forsberg, J. Ihde, A. Kenyeres, U. Marti, M. Sarrailh, I.N. Tziavos. <i>Speaker Denker Heiner</i>	Alternative Mission Architectures for Future Satellite Gravity Missions	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Wiese David, R. S. Nerem, P. L. Bender, M. Watkins, W. M. Folkner. <i>Speaker Wiese David</i>	Using airborne gravity to image sedimentary basins beneath the Thwaites glacier Catchment, West Antarctica	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Diehl Theresa, John W. Holt, Donald D. Blankenship, Duncan A. Young, Fausto Ferraccioli. <i>Speaker Diehl Theresa</i>	Strengthening the vertical reference in the southern Baltic Sea by airborne gravimetry	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Skourup Henriette, Rene Forsberg, Sofie Louise Sandberg Srensen, Christian Jermin Andersen, Uwe Schfer, Gnter Liebsch, Johannes Ihde. <i>Speaker Skourup Henriette</i>	Detecting the Baltic Sea Level Surface with GPS-measurements and Comparing it with the Local Geoid Model	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Liibusk Aive, Harli Jrgenson. <i>Speaker Liibusk Aive</i>	On a feasibility of high-precision gravity field modeling based on data from non-dedicated satellite missions	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Ditmar Pavel, Ales Bezdek, Xianglin Liu, Qile Zhao. <i>Speaker Ditmar Pavel</i>	Gravity and Geoid Projects in South America	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Blitzkow Denizar, Maria Cristina Pacino. <i>Speaker Blitzkow Denizar</i>	Updated OCTAS geoid in the northern North Atlantic - OCTAS07	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Omang Ove, Dag Solheim, Addisu Hunegnaw, Dagny I. Lysaker, Kourosh Ghazavi, Hossein Nahavandchi. <i>Speaker Omang Ove</i>	Accurate Account of the Topographic Effect on the Geoid Computations	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Wang Yan Ming, J Saleh, D Roman. <i>Speaker Wang Yan Ming</i>	Time series of absolute gravity in finland 1976-2006	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Makinen Jaakko, Mirjam Bilker-Koivula, Fred Klopping, Reinhard Falk, Olga Gitlein, Ludger Timmen. <i>Speaker Makinen Jaakko</i>	Gravity field determination based on relativity	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Svehla Drazen, Christophe Salomon. <i>Speaker Svehla Drazen</i>	Refinements of a numerical approach to direct methods in the determination of gravity potential from terrestrial data with iterations representing some small effects	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Holota Petr. <i>Speaker Holota Petr</i>	Designing and Implementation of the Multi-purpose Physical Geodesy and Geodynamics Network of Iran (MPGGN2005)	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Hatam Yaghoub, Y. Djamour, P. Vanicek, R. Bayer, M. Mohammad Karim, A. M. Abolghasem, M. Najafi Alamdari, R. Saadat, H. Cheraghi, S. Rafiey, S. Arabi, H. Nankali, S. Hoseini. <i>Speaker Hatam Yaghoub</i>	FINN2007: The New Geoid Model for Finland	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Finn Gunter, Erik W. Grafarend. <i>Speaker Finn Gunter</i>	Efficient gravity field solution from GOCE mission by DFT integral	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Garcia Ramon, Moraila Carlos, Guzman Tiojari. <i>Speaker Garcia Ramon</i>	Monte Carlo Gibbs sampler methods for variance covariance estimations in gravity network adjustment	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Hunegnaw Addisu, Roger Hipkin. <i>Speaker Hunegnaw Addisu</i>	A method of error adjustment in marine gravity with application to sea surface topography in Northern North Atlantic	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Hunegnaw Addisu, John Edwards, Roger Hipkin. <i>Speaker Hunegnaw Addisu</i>	The first airborne gravity survey in ethiopia for the purpose of geoid determinations and the establishment of vertical height systems.	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Hunegnaw Addisu, Roger Hipkin, Arne Olesen, Rene Forsberg. <i>Speaker Hunegnaw Addisu</i>	Determination of tensor gravity at GOCE height	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Hunegnaw Addisu, Roger Hipkin. <i>Speaker Roger Hipkin</i>	Representation of regional gravity field by radial base function	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Antoni Markus, Wolfgang Keller, Matthias Weigelt. <i>Speaker Antoni Markus</i>	GS005: The Global Geodetic Observation System (GGOS)	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Conveners: Plag Hans-Peter, Rothacher Markus, Neilan Ruth	Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Department of Education Room 3	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	09:00 am	Design of next generation global geodetic networks to support GGOS	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Pavlis Erricos C., J. C. Ries, D. S. Macmillan, M. Kuzmicz-Cieslak, C. Ma, D. D. Rowlands. <i>Speaker Pavlis Erricos C.</i>	Simulations for VLBI2010 at the IGG Vienna	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	09:12 am	Wresnik Joerg, Johannes Bhm, Harald Schuh. <i>Speaker Wresnik Joerg</i>	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	09:24 am	The EarthScope Plate Boundary Observatory Unified Geodetic Network	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Anderson Greg, Michael Jackson, Karl Feaux, David Mencin, Brian Coyle, Barrett Friesen, Katrin Hafner, Mike Hasting, Wade Johnson, Ben Pauk, Chris Walls, Chuck Meertens. <i>Speaker Anderson Greg</i>	Homogeneous time-series of EOP derived from space-geodetic techniques and their combination	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Thaller Daniela, Manuela Krgel, Barbara Meisel, Thomas Artz, Sarah Bckmann, Rolf Knig, Markus Rothacher, Peter Steigenberger, Volker Tesmer, Johann Wnsch. <i>Speaker Thaller Daniela</i>	Consistency of Earth Rotation, Gravity, and Shape Measurements	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Gross Richard. <i>Speaker Gross Richard</i>	GGOS and the gravity field	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	Forsberg Rene, Steve Kenyon. <i>Speaker Forsberg Rene</i>	The Contribution of GGP Superconducting Gravimeters to GGOS	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	10:00 am	Crossley David, Jacques Hinderer. <i>Speaker Crossley David</i>	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	10:12 am	Collocated GPS and absolute gravity measurements help	
Wang Yuhua, Jiahua Sun, Jiahua Sun, Jiahua Sun. <i>Speaker Wang Yuhua</i>	10:24 am		

MS012
Planetary Atmospheres and Their Evolution
Conveners: Coustenis Athena, Casavecchia Piergiorgio, Strobel Darrell
Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Department of Physics Room B

09:00 am **Spectroscopy of outer planetary atmospheres**
Encrenaz Therese. *Speaker Encrenaz Therese*

09:20 am **Polar Views of the Deep Atmosphere of Saturn: New Waves, Storms, and Global Circulation from Cassini/VIMS**
Baines Kevin, Thomas W. Momary, Takafumi Temma, Maarten Sushil K. Atreya, Robert H. Brown, Bonnie J. Buratti, Roger N. Clark, Philip D. Nicholson. *Speaker Baines Kevin*

09:40 am **A 3D turbulent convection model of zonal flow on the Ice Giants**
Aurnou Jonathan, Moritz H. Heimpel, Johannes Wicht. *Speaker Aurnou Jonathan*

09:55 am **Zonal flows in Giant Planets: Anelastic Rotating Convection Models**
Jones Chris, Dr Kirill Kuzanyan. *Speaker Jones Chris*

10:10 am **From Enceladus to Pluto: Origin of nitrogen on small bodies of the solar system**
Atreya Sushil. *Speaker Atreya Sushil*

10:30 am **Coffee Break (30 minutes)**

11:00 am **Cassini-Huygens: past, present and future exploration of Saturn and Titan.**
Lebreton Jean-Pierre. *Speaker Lebreton Jean-Pierre*

11:20 am **Cassini Radio Occultations of Titans Atmosphere: Extinction Observations**
Marouf Essam, Richard French, Michael Flasar, Paul Schinder, Arvydas Kliore, Nicole Rappaport, Colleen Mcghee, Aseel Anabtwai. *Speaker Richard French*

11:35 am **Titan's atmospheric structure from Cassini-Huygens in situ measurements**
Ferri Francesca, Marcello Fulchignoni, And The Hasi Team. *Speaker Ferri Francesca*

11:55 am **Huygens GCMS Results from Titan**
Niemann Hasso, Sushil Atreya, Jaime Demick, Wayne Kasprzak, Tobias Owen, The Gcms Team. *Speaker Niemann Hasso*

12:15 pm **The stratospheric chemical composition of Titan**
Coustenis Athena, D. Jennings, C. Nixon, M. Flasar, A. Jolly, Y. Bnilan, D. Gautier, S. Vinatier, R. Achterberg, P. Romani, G. Bjoraker, B. Conrath. *Speaker Coustenis Athena*

Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Physics Room B

02:00 pm **Titans ionosphere as a source for aerosols**
Vuitton Veronique, Roger V Yelle. *Speaker Vuitton Veronique*

02:15 pm **Monitoring Titan's cloud activity during the last decade from Earth-based instruments and in-situ observations by Cassini**
Hirtzig Mathieu, Sbastien Rodriguez, Sthpane Le Moulic, Christophe Sotin, Athna Coustenis, Pierre Drossart, Michel Combes, Eric Gendron, Olivier Lai, Pascal Rannou. *Speaker Hirtzig Mathieu*

02:30 pm **Titans Dynamic Meteorology**
Tokano Tetsuya. *Speaker Tokano Tetsuya*

02:45 pm **Dynamics of Titans Stratosphere**
Flasar F. Michael, R. K. Achterberg, P. J. Schinder, B. J. Conrath, P. J. Gierasch, E. A. Marouf, R. G. French, A. J. Kliore, N. J. Rappaport. *Speaker Flasar F. Michael*

03:00 pm **Review on the current state (successes and problems) of today's Titan GCMS**
Lebonnois Sebastien, David Luz, Frdric Jourdin, Pascal Rannou, Tetsuya Tokano. *Speaker Lebonnois Sebastien*

03:15 pm **Titan Aeronomy**
Strobel Darrell. *Speaker Strobel Darrell*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Simulation of Titans atmospheric processes and validation against Cassini/Huygens mission results.**
Lavvas Panayotis, Athena Coustenis, Ilias M. Vardavas. *Speaker Lavvas Panayotis*

04:15 pm **The Origin and Evolution of Titan**
Lunine Jonathan. *Speaker Lunine Jonathan*

04:35 pm **Discovery of a Dynamic Atmosphere at Enceladus from Cassini Magnetometer Observations**
Dougherty Michele, Fritz Neubauer, Christopher Russell, Joachim Saur, Jared Leisner, Marcia Burton. *Speaker Dougherty Michele*

04:55 pm **Escape from Io and Enceladus**
Schneider Nick. *Speaker Schneider Nick*

05:10 pm **A three element atmosphere model**
Zamlutti Carlos. *Speaker Zamlutti Carlos*

05:13 pm **A 3D convective turbulence model of the zonal jets on Jupiter and Saturn**
Aurnou Jonathan, Moritz H. Heimpel, Johannes Wicht. *Speaker Aurnou Jonathan*

05:16 pm **Meteor detection using complex wavelets**
Sourirajan Varadarajan, G R Reddy, T.Sreenivasulu Reddy. *Speaker Sourirajan Varadarajan*

Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Organic chemistry on Titan: astrobiological implications
Raoulin Francois, Patrice Coll, Mai-Julie Nguyen. *Speaker Raoulin Francois*

Will Titan lose its veil?
Dimitrov Vasili. *Speaker Dimitrov Vasili*

JMS020 Assessing & Exploiting Re-analysis Data Sets
Conveners: Arkin Phillip, Mariotti Annarita
Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Department of Mathematics Room A3

09:00 am **Atmospheric Analysis and Reanalysis: Current Capabilities and Future Directions**
Arkin Phillip. *Speaker Arkin Phillip*

09:15 am **Comparison of basic fields in ERA-40 and NCEP/DOE Reanalysis II Datasets**
Grotjahn Richard. *Speaker Grotjahn Richard*

09:30 am **North american regional reanalysis: strengths, weaknesses, applications; what have we learned from a Mesinger Fedor, Kenneth Mitchell, Geoff Dimego, Eugenia Kalnay, Ernesto H. Berbery. *Speaker Mesinger Fedor***

09:45 am **Reanalysis-based Precipitation Monitoring**
Ropelewski Chester, Michael Bell. *Speaker Ropelewski Chester*

Chester

10:00 am **NASA's Modern Era Retrospective-analysis for Research and Applications**
Bosilovich Michael, Siegfried D. Schubert, Michele Rienecker, Ron Gelaro, Ricardo Todling. *Speaker Bosilovich Michael*

10:30 am **Coffee Break (30 minutes)**

11:00 am **Seasonal and Interannual Variations of Fresh Water Flux over Global Oceans in the NCEP CDAS, CDAS2, GDAS, GFS, and CFS**
Xie Pingping, John E. Janowiak, Mingyue Chen, Chung-Lin, Shie, Long Chiu. *Speaker Xie Pingping*

11:30 am **How useful are re-analyses in describing interannual oceanic precipitation anomalies?**
Mariotti Annarita. *Speaker Mariotti Annarita*

11:45 am **Precipitation Reconstruction Based on Satellite and In Situ Data**
Smith Thomas, Philip Arkin, Mathew Sapiano. *Speaker Smith Thomas*

Thomas

12:15 pm **Climate variability from the new ECMWF ocean reanalysis**
Alonso Balmaseda Magdalena, David Anderson, Arthur Vidard. *Speaker David Anderson*

Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A3

02:00 pm **Tropical Shallow Meridional Circulations in Three Global Agreement, Biases, and Uncertainties**
Zhang Chidong, David Nolan, Chris Thorncroft. *Speaker Zhang Chidong*

Chidong

02:30 pm **Discrepancy of mass transport between the Northern and Southern Hemispheres among the ERA-40, NCEP/NCAR, NCEP-DOE AMIP-2, and JRA-25 reanalysis**
Li Jianping, Yufei Zhao. *Speaker Li Jianping*

02:45 pm **A tropospheric assessment of the ERA-40, NCEP, and JRA-25 global reanalyses in the polar regions**
Fogt Ryan, David H. Bromwich, Kevin I. Hodges, John E. Walsh. *Speaker David Bromwich*

03:00 pm **Analysis of warm season convective regimes over Europe using MeteoSAT and NCEP reanalysis data**
Levizzani Vincenzo, Matteo Masotti, Roberto Ginnetti, Arlene Laing, Richard Carbone. *Speaker Levizzani Vincenzo*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **CTM simulations with assimilated winds: Improvements in the stratospheric circulation**
Monge-Sanz Beatriz, Martyn P. Chipperfield, Adrian J. Simmons, Sakari M. Uppala. *Speaker Monge-Sanz Beatriz*

04:15 pm **Characteristics and Validation of the NAAPS Aerosol Re-analysis Dataset**
Westphal Douglas, Jeffrey S. Reid, Cynthia A. Curtis, Timothy F. Hogan, Elizabeth A. Reid, Annette L. Walker, Marcin L. Witek, Piotr J. Flatau. *Speaker Westphal Douglas*

04:30 pm **A Lagrangian Climatology of Stratosphere-Troposphere Exchange derived from the ERA40 data set - its features and the limitations of the underlying data set**

Jonas Markus, Heini Wernli. *Speaker Jonas Markus*

Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Satellite Assessment of Water Vapor Transport from NCEP, ERA40, and JRA25 Reanalyses over the Asian Summer Monsoon Region
Park Seong-Chan, Byung-Ju Sohn, Bin Wang. *Speaker Park Seong-Chan*

Investigation of circulation indices
Hirsch Tamás. *Speaker Hirsch Tamás*

Mid-latitude Atmospheric Variability of the NCEP-NCAR and ECMWF Reanalyses
Dell'Aquila Alessandro, Paolo M Ruti, Sandro Calmanti, Valerio Lucarini. *Speaker Dell'Aquila Alessandro*

Comparison of Surface Turbulent Flux Products
Hughes Paul, Mark A. Bourassa, Jeremy Rolph, Shawn R. Smith. *Speaker Hughes Paul*

A comparison of latent heat fluxes over global oceans for ERA and NCEP with GSSTF2
Li Jianping, Licheng Feng. *Speaker Li Jianping*

Interannual and interdecadal variations of temperature and precipitation in Bulgaria estimated from high-resolution climate data sets
Peneva Elisaveta, Nikolay Rachev. *Speaker Peneva Elisaveta*

Reconstruction of the ENIAC Forecasts using the NCEP-NCAR Reanalysis
Lynch Peter. *Speaker Lynch Peter*

Intercomparison of NCEP Reanalysis and Drifting Stations North Pole Data in Application to the Thermodynamic Sea Ice Model
Makshatas Alexander, Andrey Proshutinski, Mikhail Kulakov, Sergey Shutilin. *Speaker Makshatas Alexander*

MS002 Global Observing Systems, Past, Present and Future (ICCL)
Conveners: Alverson Keith, Kiladis George
Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room B3

02:00 pm **Schumann Resonances as a Passive Global Monitoring Tool of Global Thunderstorms**
Pechony Olga, Colin Price. *Speaker Pechony Olga*

02:20 pm **Worldwide glacier monitoring present state and current challenges**
Zemp Michael, Richard Armstrong, Wilfried Haeblerli, Martin Hoelzle, Andreas Kaeae, Jeff Kargel, Frank Paul, Bruce Raup. *Speaker Zemp Michael*

02:40 pm **Seasonal and spatial variability of the mixed layer depth over the North Indian Ocean using ARGO observations**
Ali M.M.. *Speaker Ali M.M.*

03:00 pm **An integrated, operational global ocean observing and hazard warning system**
Alverson Keith. *Speaker Alverson Keith*

03:20 pm **Implementation of IndOOSA sustained ocean observing system in the Indian Ocean for climate research**
Meyers Gary. *Speaker Meyers Gary*

03:40 pm **Coffee Break (30 minutes)**

04:10 pm **WDC integrated global data and delivery tools in support of GEOSS biodiversity and ecological societal benefits**
Hill John, Thomas Hermann, Thomas Lahr, Gladys Cotter. *Speaker Hill John*

04:30 pm **The World Data Center for Glaciology Boulder and National Snow and Ice Data Center Data at Age 30: A Vision for the Future**
Weaver Ron, Clark Judy, Julia Collins. *Speaker Weaver Ron*

04:50 pm **The GlobGlac project**
Volden Espen, Frank Paul. *Speaker Volden Espen*

05:10 pm **Global Infrasonic Research**
Garces Milton, Henry E. Bass, David McCormack, Paola Campus. *Speaker Garces Milton*

Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Chairpersons: -

Global Forum For Climate Changes and Observing Systems for Geo-Disasters Mitigation : Case Study
Choudhary Narendra Kumar, Director, Dr.A.G.Bhole., Dr.R.C.Bhattacharjee, Prof.S.P.Yavalkar. *Speaker Prof.S.P.Yavalkar*

The value of targeted observations
Buizza Roberto, Graeme Kelly, Carla Cardinali, Jean-Noel Thepaut. *Speaker Buizza Roberto*

The australian integrated marine observing system
Meyers Gary. *Speaker Meyers Gary*

Stabilization of energy exchange between Earth and its environment - space, is the main task to solve ecological problems of the planet
Kerimov Ikram, Seymur Kerimov. *Speaker Kerimov Ikram*

Overview of Seven Years of Spore Dosimetry Biomonitoring in Southern Brazil
Rosa Marcelo, Pabulo Henrique Rampelotto, Andr Passaglia Schuch, Damaris Kirsch Pinheiro, Nobuo Munakata. *Speaker Rosa Marcelo*

MS003 Aerosols, Radiation and Clouds (IRC, ICCP, ICACGP)
Conveners: Nakajima Teruyuki, Isaac George
Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Department of Economics Main Hall

09:00 am **Warm rain microphysics parameterisations that include the effect of turbulence**
Franklin Charmaine. *Speaker Franklin Charmaine*

09:25 am **Observational evidence for the radiative impact of aerosols in modifying the sea surface temperature**
Rajeew Kunjukrishnapillai, K. Parameswaran, Sandhya K Nair, S. Meenu. *Speaker Rajeew Kunjukrishnapillai*

09:50 am **Rotational Raman Lidar measurements for the characterization of stratosphere-troposphere exchange mechanisms**
Di Girolamo Paolo, Donato Summa, Rossella Ferretti. *Speaker Di Girolamo Paolo*

10:15 am **One year of global cloud and aerosol profiling from CALIPSO**
Winker Dave. *Speaker Winker Dave*

10:40 am **Coffee Break (30 minutes)**

11:10 am **Assessment of the dehydration-greenhouse feedback over the Arctic during winter for 2 winter months and 2 atmospheric circulation regimes.**
Girard Eric, Marianne Peltier-Champigny, Alexandru Stefanof, Jean-Pierre Blanchet, Rodrigo Munoz-Alpizar, Patrick Grenier. *Speaker Girard Eric*

11:35 am **Aerosol-Cloud Interactions in a Mesoscale Model: Sensitivity to Collision-Coalescence and Aqueous-Phase Chemistry**
Paunova Irena, Henry Leighton. *Speaker Paunova Irena*

12:00 pm **Changes in cloud and precipitation formations by anthropogenic aerosols in Asian region**
Takemura Toshihiko. *Speaker Takemura Toshihiko*

Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Main Hall

02:00 pm **PBL Aerosols SE of Mexico City during MILAGRO 2006: biomass burning and windblown dust and its impact on photolysis frequencies**
Junkermann Wolfgang, Rainer Steinbrecher. *Speaker Junkermann Wolfgang*

02:25 pm **In situ calibration of CIMEL sun-sky photometers through applications of the SKYRAD improved Langley plot method (SKYLIL).**
Campanelli Monica. *Speaker Campanelli Monica*

02:50 pm **3D radiative aspects of the increased aerosol optical depth in the vicinity of clouds**
Marshak Alexander, Guoyong Wen, Lorraine Remer, Jim Coakley, Robert Cahalan. *Speaker Marshak Alexander*

03:15 pm **Atmospheric Brown Clouds (ABCs) : New perspectives on the Regional Impacts of Atmospheric Solar Heating**
Ramanathan Veerabhadran. *Speaker Ramanathan Veerabhadran*

Veerabhadran

03:40 pm **Coffee Break (30 minutes)**

04:10 pm **An evaluation of the surface radiation budget over North America for a suite of regional climate models and ECMWF reanalysis**
Markovic Marko, Colin Jones, Paul Vaillancourt, Dominique Paquin. *Speaker Markovic Marko*

04:35 pm **ECOWAR/COBRA: a research contribution to spectrally resolved observations of the Earth emission spectrum in the water vapour rotational band (17-50 micron) to test models of atmospheric radiative transfer**
Serio Carmine, Rohini Bhawar, Giovanni Bianchini, Alessio Rozzo, Maria Rosaria Calvello, Massimo Carloti, Marco Cacciani, Francesco Castagnoli, Vincenzo Tomaso, Paolo Di Girolamo, Luca Di Liberto, Tatiana Di Iorio, Alcide Di Sarra, Francesco Esposito, Giorgio Fiocco, Daniele Fu, Giuseppe Grieco, Tiziano Maestri, Guido Masiello, Giovanni Muscari, Luca Palchetti, Enzo Papandrea, Giulia Pavese, Rosa Restieri, Rolando Rizzi, Filomena Romano, Donato Summa, Giulio Todini, Ennio Tosi. *Speaker Serio Carmine*

05:00 pm **Long-term radiative effects of asian aerosol and dust**
Yoon Soon-Chang, In-Jin Choi, Sang-Chun Park, Jiyoung Kim, Sihye Lee. *Speaker Yoon Soon-Chang*

Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Impact of opencast coal mining on the air environment
Chandrasekhar Matti. *Speaker Chandrasekhar Matti*

Insitu radiation observations in southern Tamil Nadu, India and implication on habitat and environment

Shanker Daya, H.N. Singh, V.N. Neelakandan, M. Banerjee, V. P. Singh. *Speaker Shanker Daya*

Aerosol optical properties estimation using a MFRSR at So Paulo city
Yamasoe Marcia, Nilton Manuel Evora Do Rosario, Andr Cozza Sayo, Paulo Artaxo. *Speaker Yamasoe Marcia*

The Analyses of Precipitation Acidity and Chemical Composition In Industrial Estate Located In North Bank of the Yangtze River, Nanjing
Zheng You-Fei, Tang Xin-Ying, Xu Jian-Qiang, Zhang Hai-Ou, Yang Lei, Bai Xue. *Speaker Zheng You-Fei*

Validation of concentrations of lead-210 in high altitude simulated by MOCAGE
Etchevers Ingrid, Vincent-Henri Peuch, Dietmar Wagenbach, Michel Legrand. *Speakers Etchevers Ingrid*

Retrieval of aerosol optical properties over Beijing from polarized signals of PARASOL
Fan Xuehua, Hongbin Chen, Zhigang Han, Philippe Goloub. *Speaker Hongbin Chen*

Numerical study for the vertical distributions and optical properties of Asian dust and anthropogenic aerosols over Japan
Shinsuke Satake, Tadahiro Hayasaka, Kazuma Aoki, Atsushi Shimizu, Nobuo Sugimoto, Ichiro Matsui. *Speaker Shinsuke Satake*

Radiative effects of NO2 and aerosols in the atmosphere of large city
Chubarova Natalya, Mikhail A. Sviridenkov, Alexei N. Rublev, Brent N. Holben. *Speaker Chubarova Natalya*

Cloud Water and Related Hydrological Cycle over China: A Climatic Analysis Using ISCCP Data During 1984- 2004
Li Xingyu, Xueliang Guo, Jiang Zhu. *Speaker Li Xingyu*

Chemical apportionment of direct aerosol radiative forcing at the surface: a new approach
Kim Jiyoung, Soon-Chang Yoon, Byoung-Cheol Choi. *Speaker Kim Jiyoung*

Evaluation of Aerosol Particle Size Distribution (APSD)
Jagodnicka Anna, Tadeusz Stacewicz, Grzegorz Karasiński, Michał Posnyniak, Tomasz Kardaś. *Speaker Jagodnicka Anna*

Study of anthropogenic aerosol effects on the climate using GCM
Mukai Makiko. *Speaker Mukai Makiko*

Human impact on direct and diffuse solar radiation during the industrial era
Myhre Gunnar, Maria M. Kvalevg. *Speaker Myhre Gunnar*

Vicarious calibration of GMS-5/VISSR for estimation of radiation budget
Takenaka Hideaki, Satoru Fukuda, Takashi Y Nakajima, Akiko Higurashi, Miho Sekiguchi, Arata Okuyama, Toru Hashimoto, Tamio Takamura, Teruyuki Nakajima. *Speaker Takenaka Hideaki*

Characteristics of aerosols over the Zhongshan Station, East Antarctica and the human pollution
Wang Jianjun, Liqi Chen, Xulin Yang, Qi Lin. *Speaker Wang Jianjun*

Modeling studying the role of bacteria on ice nucleation processes
Sun Jiming. *Speaker Sun Jiming*

Solar irradiance changes in Switzerland since 1981
Ruckstuhl Christian, Philipona Rolf, Moesch Mike, Zelenka Antoine. *Speaker Ruckstuhl Christian*

Correlative measurements of aerosols and water vapor profiles over Athens, Greece during 2006-2007 in the frame of EARLINET-ASOS
Papayannis Alexandros, Vassilios Amiridis, Rodanthi-Elisabeth Mamouri, Gergios Tsaknakis. *Speaker Papayannis Alexandros*

Study of cloudiness influence on solar radiation measures in the South of Brazil at the Southern Space observatory
Fiorin Daniel Vinicius, Fernando Ramos Martins, Marcelo Pizzuti Pes, Marcus Guedes, Rafael Jonas Righi Batista, Diogo Alessandro Arsego, Ricardo Andr Guarnieri, Enio Bueno Pereira. *Speaker Fiorin Daniel Vinicius*

Impact of aerosol competition effects on global cloud fields using a general circulation model
Goto Daisuke, Toshihiko Takemura, Teruyuki Nakajima. *Speaker Goto Daisuke*

Modeling short-range interactions in a hybrid simulation of turbulent collision of cloud droplets
Wang Lian-Ping, Bogdan Rosa, Wojciech W. Grabowski. *Speaker Wang Lian-Ping*

A fully resolved simulation method for turbulent collision of cloud droplets
Wang Lian-Ping, Hui Gao. *Speaker Wang Lian-Ping*

Effects of turbulent collision Kernel and initial size dispersion on rain initiation
Wang Lian-Ping, Stephanie Merkler, Wojciech W. Grabowski. *Speaker Wang Lian-Ping*

Results of simulation microphysical and optical characteristics of marine and coastal aerosol
Kaloshin Gennady. *Speaker Kaloshin Gennady*

The code MaexPro for calculation atmospheric aerosol extinction in the marine and coastal surface layer
Kaloshin Gennady. *Speaker Kaloshin Gennady*

Empirical model for estimation of diffuse solar radiation for the Southern Region of Brazil
Guedes Marcus, Nelson Jorge Schuch, Fernando Ramos Martins, Daniel Vinicius Fiorin, Marcelo Pizutti Pes, Diogo Alessandro Arsego, Rafael Jonas Righi Batista, Ricardo Andr Guarnieri, Enio Bueno Pereira. *Speaker Guedes Marcus*

Aerosol optical depth: current status of the gaw sun photometer network
Nyeki Stephan, Christoph Wehrl, Julian Groebner. *Speaker Nyeki Stephan*

Optical properties of Arctic aerosol in spring based on sky-radiometer and micro-pulse lidar measurements at Ny-Alesund, Svalbard
Shiobara Masataka, Masanori Yabuki, Kazuma Aoki, Hiroshi Kobayashi, Maki Yamano, James R. Campbell. *Speaker Shiobara Masataka*

Numerical study the relative contributions of liquid and ice phases in precipitation formation during floods in Carpathian
Pirnach Ganna. *Speaker Pirnach Ganna*

Influense of biomass burning at aerosol optical thickness on Southern Brazil from 1997 to 2006
Possani Germano, Ana Marceli Soares, Caroline Bertagnolli, Damaris Kirsch Pinheiro, Plinio Carlos Alval. *Speaker Possani Germano*

Correlation analysis of long-term variation of cloudiness, aerosol pollution and total solar radiation in Tbilisi
Amiranashvili Avtandil. *Speaker Amiranashvili Avtandil*

Observations of radiative flux divergence and vertical temperature structure evolution
Hoch Sebastian W., C. David Whiteman. *Speaker Hoch Sebastian W.*

Global atmospheric chemistry: integrating over fractional cloud cover
Prather Michael, Jessica L. Neu, Joyce E. Penner. *Speaker Prather Michael*

Satellite observations of the deep convective cloud characteristics over the Indian Subcontinent and surrounding oceanic regions
Rajeew Kunjukrishnapillai, S. Meenu, K. Parameswaran, C. Suresh Raju. *Speaker Rajeew Kunjukrishnapillai*

Observations of semi-transparent Cirrus clouds over the Indian subcontinent using KALPANA-1 VHRR Data
Rajeew Kunjukrishnapillai, S. Meenu, K. Parameswaran, C. Suresh Raju, K. S. Jagannath. *Speaker Rajeew Kunjukrishnapillai*

LIDAR observations of aerosol compared to global transport model results
Schutgens Nick, T. Takemura, A. Shimizu, K. Aoki, T. Nakajima. *Speaker Schutgens Nick*

Airborne spectral radiation measurements in the Saharan dust plume
Bierwirth Eike, Andr Ehrlich, Manfred Wendisch, Sebastian Otto, Thomas Trautmann. *Speaker Bierwirth Eike*

Retrieval of minor constituents in a cloudy atmosphere with remote sensing millimeter wave measurements
Del Bianco Samuele, Marco Gai, Leonardo Santurri, Cesare Cecchi-Pestellini, Bianca Maria Dinelli, Bruno Carli. *Speaker Del Bianco Samuele*

Determination of atmospheric aerosol properties from MFRSR measurements
Alexandrov Mikhail, Andrew A. Lacis, Barbara E. Carlson, Brian Cairns. *Speaker Alexandrov Mikhail*

Measurement of Aerosol Optical Thickness While PA/AE 2005-2006
Posnyniak Michal. *Speaker Posnyniak Michal*

Monitoring of Aerosol profiles over New Delhi using Micro Pulse Lidar
Jain Sohan Lal, B. C. Arya, Y. Nazeer Ahmed, Arun Kumar. *Speaker Jain Sohan Lal*

Size distributions of aerosol number concentrations at an urban site New Delhi, India
Ahamed Y.N., B. C. Arya, Arun Kumar, P.R. Sinha, D.K. Shukla, S.L. Jain. *Speaker Ahamed Y.N.*

Investigations of the aerosol load over the Southern Balkan region as an indicator of air quality
Koukoul Maria Elisavet, Stelios Kazadzis, Dimitris Balis, Charles Ichoku, Vassilis Amiridis, Dimitris Paronis. *Speaker Koukoul Maria Elisavet*

Relative contribution of dynamic feedbacks to AIRF
Lee Woo-Seop. *Speaker Lee Woo-Seop*

A look-up table method with separating the ground surface process for simulation of satellite-measured radiances
Ishida Haruma, Takashi Y. Nakajima. *Speaker Ishida Haruma*

A nested-grid simulation of cloud microphysical properties with a bin-type cloud resolving model
Iguchi Takamichi, Teruyuki Nakajima, Alexander P. Khain, Kazuo Saito, Takemura Toshihiko. *Speaker Iguchi Takamichi*

Validation of CERES Polar Night Cloud Detection using Aqua MODIS data with CALIPSO Observations
Trepte Qing, Patrick Minnis, Chip Trepte. *Speaker Trepte Qing*

Assessing the Aerosol Direct Radiative Forcing of the Canadian GEM

12:00 pm	Andrew Bushell. <i>Speaker Osprey Scott</i>	04:45 pm	Zonal Asymmetry of Methane Distributions in the Equatorial Lower Stratosphere Associated with the Quasi-Biennial Oscillation Choi Wookap, Hyesun Choi. <i>Speaker Choi Wookap</i>
12:15 pm	Low-Frequency Variability and Remote Forcing of Gap Winds in the Eastern Tropical Pacific Ocean Karnauskas Kristopher, Antonio J. Busalacchi, Raghu Murtugudde. <i>Speaker Karnauskas Kristopher</i>	05:00 pm	Empirical master equations applied to stratospheric QBO, solar cycle and northern annular mode Dall'Amico Mauro, Prof Joseph Egger, Prof Martin Dameris, Prof Lesley Gray. <i>Speaker Dall'Amico Mauro</i>
12:15 pm	The impact of ocean mixing on the atmosphere/ocean interactions in the Eastern tropical Pacific Richards Kelvin. <i>Speaker Richards Kelvin</i>	05:15 pm	Tropical oscillations in the middle and upper atmosphere simulated by the HAMMONIA model Manzini Elisa, Hauke Schmidt, Marco A Giorgetta. <i>Speaker Manzini Elisa</i>
12:45 pm	Ocean dynamics and thermodynamics at play in the SST seasonal cycle within the Atlantic North Eastern Tropical Upwelling System Lazar Alban, Irene Polo, Caroline Serraud. <i>Speaker Lazar Alban</i>	05:30 pm	The Definitions of Atmospheric Ice Particles Conveners: List Roland, Isaac George
02:00 pm	The large-scale setting for subtropical oceanic anticyclones Hoskins Brian. <i>Speaker Hoskins Brian</i>	05:30 pm	Oral 4 July, 2007 from 09:00 AM to 12:00 AM - Department of Mathematics Room B3
02:30 pm	Influence of anomalous convective activity on the summertime subtropical anticyclone over the northwestern Pacific: Importance of moist processes and air-sea interaction Nakamura Hisashi, Yosuke Kosaka. <i>Speaker Nakamura Hisashi</i>	05:30 pm	JPS001 Interannual and Interdecadal Climate Variability Conveners: McPhaden Michael, Holbrook Neil
02:45 pm	What role does Tropical Atlantic Ocean play in the equatorial Atlantic mode? Polo Irene, Beln Rodriguez-Fonseca, Javier Garca-Serrano. <i>Speaker Beln Rodriguez-Fonseca</i>	05:30 pm	Oral 4 July, 2007 from 11:00 AM to 12:30 AM - Department of Economics Room 6
03:15 pm	What determines the position and intensity of the South Atlantic anticyclone in austral winter? Mechoso Carlos, Ingo Richter, C. Roberto Mechozo, Andrew W. Robertson. <i>Speaker Mechoso Carlos</i>	05:30 pm	Chairpersons: -
03:30 pm	Coffee Break (30 minutes)	11:00 am	Variability of the Deep Western Boundary Current-Gulf Stream system in the North Atlantic Pena-Molino Beatriz, Terry M. Joyce. <i>Speaker Pena-Molino Beatriz</i>
04:00 pm	Dynamics and Seasonality of the Subtropical Anticyclones Nakamura Hisashi, Takafumi Miyasaka. <i>Speaker Nakamura Hisashi</i>	11:18 am	Understanding the anatomy and drivers of low frequency variability in the South Pacific gyre Hill Katy, Stephen R. Rintoul, Richard Coleman, Ken Ridgway. <i>Speaker Hill Katy</i>
04:30 pm	The representation of stratocumulus in global atmospheric models: the role of GCSS Teixeira Joao. <i>Speaker Teixeira Joao</i>	11:36 am	Interannual Variability of SST in the East Pacific Warm Pool Karnauskas Kristopher, Antonio J. Busalacchi. <i>Speaker Karnauskas Kristopher</i>
05:00 pm	The warm bias in the Southeastern Pacific in the NCEP CFS model Wang Wanqiu, Pingping Xie, Wayne Higgins, Meghan Cronin, Phillip Arkin, Robert Weller, Sarah Levinson. <i>Speaker Wang Wanqiu</i>	11:54 am	Coffee Break (30 minutes)
05:15 pm	The VAMOS Ocean-Cloud-Atmosphere-Land Study (VOCALS) Wood Robert. <i>Speaker Wood Robert</i>	12:24 pm	Interannual variations of intraseasonal Kelvin waves in the equatorial Indian Ocean Iskandar Iskhaq, Tomoki Tozuka, Yukio Masumoto, Toshio Yamagata. <i>Speaker Iskandar Iskhaq</i>
05:22 pm	Eastern tropical SST AND 500 HPA anomalies connected with monthly low and high precipitation over South-Eastern South America Caffera Mario, Gustavo J. Nagy, Carlos M. Martnez, Mario Bidegain. <i>Speaker Caffera Mario</i>	12:42 pm	Decadal variability in the monsoon and post monsoon Total Precipitable Water over Peninsular India region J Rajesh, K. Mohankumar. <i>Speaker J Rajesh</i>
05:30 pm	Poster 4 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP	02:00 pm	Long wave dynamics of the Indian Ocean Dipole events Yuan Dongliang. <i>Speaker Yuan Dongliang</i>
05:30 pm	Processes controlling the mean tropical Pacific precipitation pattern Takahashi Ken. <i>Speaker Takahashi Ken</i>	02:18 pm	Southwest Pacific Subtropical Mode Water: a climatology Holbrook Neil, Angela M Maharaj. <i>Speaker Holbrook Neil</i>
05:30 pm	Influence of Anomalous Convective Activity on the Summertime Subtropical Anticyclone over the Northwestern Pacific: Dynamics of the Pacific-Japan Teleconnection Pattern Kosaka Yosuke. <i>Speaker Kosaka Yosuke</i>	02:36 pm	Mechanisms of interannual-decadal variability of the Atlantic Meridional Overturning Circulation Bjastoch Arne. <i>Speaker Bjastoch Arne</i>
05:30 pm	Formation mechanism for isopycnal temperaturesalinity anomalies propagating from the eastern South Pacific to the equatorial region Nonaka Masami, Hideharu Sasaki. <i>Speaker Nonaka Masami</i>	02:54 pm	Decadal to centennial climate variability in a model of the coupled ocean-atmosphere system Farneti Riccardo, Geoffrey K. Vallis. <i>Speaker Farneti Riccardo</i>
05:30 pm	Observed variability in the subsurface temperatures between near coast and deep sea in the eastern Arabian Sea from XBT observations during the YEAR 2002 to 2007 Zacharia Johnson, Girish.K, Anish Kumar .N, Dr.C.K.Rajjan. <i>Speaker Zacharia Johnson</i>	03:12 pm	Mechanisms of interdecadal variability of the East Asian Summer Monsoon Lei Yonghui, Brian Hoskins, Julia Slingo. <i>Speaker Lei Yonghui</i>
05:30 pm	SETP variability and ENSO in coupled GCMs Toniazio Thomas. <i>Speaker Toniazio Thomas</i>	03:30 pm	Coffee Break (30 minutes)
05:30 pm	Modes of SST variability over the Northeastern Subtropical Atlantic: impacts over the North Atlantic Rodriguez-Fonseca Belen, Javier Garcia Serrano, Irene Polo. <i>Speaker Rodriguez-Fonseca Belen</i>	04:00 pm	Exploring decadal time scale predictability in the GFDL CM2.1 global climate model Dixon Keith, Thomas Delworth, William Hurlin. <i>Speaker Dixon Keith</i>
05:30 pm	Middle Atmosphere Science (ICMA) Conveners: Hamilton Kevin	04:18 pm	THE Indonesian throughflow and the climate shift of 1976/77 Meyers Gary, Lana Wainwright, Susan Wijffels. <i>Speaker Meyers Gary</i>
05:30 pm	Oral 4 July, 2007 from 09:00 AM to 12:30 AM - Department of Economics Room 2	04:36 pm	The role of equatorial/off-equatorial wind stress forcing on interdecadal sea surface temperature variability in the equatorial Pacific Ocean Holbrook Neil, Shayne Mcgregor, Scott B. Power. <i>Speaker Holbrook Neil</i>
05:30 pm	Chairpersons: Dave Siskind	04:54 pm	Large Scale Dynamics and High Frequency Forcing of ENSO Variability McPhaden Michael, Xuebin Zhang, Harry Hendon, Matthew Wheeler. <i>Speaker McPhaden Michael</i>
09:00 am	Radiosonde temperature trend during 1958-2005 in China Guo Yanjun. <i>Speaker Guo Yanjun</i>	05:12 pm	Decadal Changes in North Pacific Subtropical Subduction Zhang Dongxiao, Michael J. Mcphaden, Wei Cheng, Bo Qiu. <i>Speaker Zhang Dongxiao</i>
09:15 am	Vertical distributions of Temperature, Water, Ozone and Nitric Acid from MARSCHALS measurements during the SCOUT-O3 campaign in Darwin (Nov-Dec 2005) Dinelli Bianca Maria, B. M. Dinelli, E. Castelli, M. Gai, L. Santurri, B. Carli. <i>Speaker Dinelli Bianca Maria</i>	05:30 pm	Prince Albert I Lecture
09:30 am	Ground-based millimeter-wave measurements of stratospheric H218O in a subtropical region in the southern hemisphere, Atacama highland in Chile Mizuno Akira, Tomoyo Sugimoto, Tomoo Nagahama, Hiroyuki Maezawa, Toshihisa Kuwahara, Makoto Matsuura, Noriji Toriyama, Yasuo Fukui, Norikazu Mizuno, Toshikazu Onishi, Hideaki Nakane, Atsushi Morihira. <i>Speaker Mizuno Akira</i>	05:30 pm	Oral 4 July, 2007 from 09:30 AM to 10:30 AM - Department of Economics Room 6
09:45 am	Measurements of Atomic Oxygen, Hydrogen, and Chemical Heating Rates Kaufmann Martin, C. Lehmann, L. Hoffmann, M. Riese, C. V. Savigny, M. Lopez-Puertas, B. Funke, D. R. Marsh. <i>Speaker Kaufmann Martin</i>	05:30 pm	PS004 Ocean Mixing (co-sponsored by SCOR) Conveners: Muench Robin
10:00 am	First results on mesospheric rotational temperatures using ground-based multi-wavelength photometer from Tirunelveli (8.7N), India Rupa Kondala Rao, S. Gurubaran. <i>Speaker Rupa Kondala Rao</i>	05:30 pm	Oral 4 July, 2007 from 11:00 AM to 12:30 AM - Department of Mathematics Room A2
10:15 am	H2O densities in the mesosphere and lower thermosphere measured by TIMED/SABER Feofilov Artem, Alexander A. Kutepov, Valentine A. Yankovsky, Rada O. Manuilova, Benjamin T. Marshall, Larry L. Gordley, William D. Pesnell, Richard A. Goldberg, James M. Russell Iii. <i>Speaker Feofilov Artem</i>	11:00 am	Variability of Turbulent Mixing Parameters off the Egyptian Mediterranean Coast Sharaf El Din Said, Fahmy Mohamed Eid, Nabil Saad, Khaled Alam El Din, Mohamed Elsharkawy. <i>Speaker Sharaf El Din Said</i>
10:30 am	Coffee Break (30 minutes)	11:15 am	Wind Drag on Waves Munk Walter. <i>Speaker Munk Walter</i>
11:00 am	Morphology and forcing of nonmigrating tides in the middle atmosphere: What did we learn from TIMED? Oberheide Jens, Qian Wu, Maura E. Hagan, Raymond G. Roble, William E. Ward, Jeffrey M. Forbes. <i>Speaker Oberheide Jens</i>	11:30 am	Energetics of wind-induced turbulent mixing in the ocean Watanabe Michio, Toshiyuki Hibiya. <i>Speaker Watanabe Michio</i>
11:30 am	Mechanisms for coupling the mesosphere and lower atmosphere in data assimilation systems Polavarapu Saroja. <i>Speaker Polavarapu Saroja</i>	11:45 am	Wave-Turbulent Mixing for Upper Ocean Multifractal Thermal Structure Chu Peter, Chung-Ping Hsieh. <i>Speaker Chu Peter</i>
12:00 pm	The sensitivity of the QBO to variations in the lower and upper boundary conditions by El Nino and the 11-year solar cycle Giorgetta Marco, Hauke Schmidt, Natalia Calvo. <i>Speaker Giorgetta Marco</i>	12:00 pm	LES of Langmuir Circulations in unstratified and stratified upper oceans Polton Jeff, Jerome Smith, Jennifer Mackinnon, Andres Tejada-Martinez, Stephen Belcher. <i>Speaker Polton Jeff</i>
12:00 pm	Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Room 2	12:15 pm	Modeling oceanic non-local mixing Canuto Vittorio, Y. Cheng, A.M. Howard. <i>Speaker Canuto Vittorio</i>
12:00 pm	Vertical distribution of temperature fluctuations in mesosphere measurements from SABER and modeling Gusev Oleg, D. Offermann, H. Schmidt, M.Donner, J.M.Forbes. <i>Speaker Gusev Oleg</i>	12:00 pm	Oral 4 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A2
12:15 pm	Short-period waves in the mesosphere and lower thermosphere observed by SABER Garcia Rolando, Ruth Lieberman. <i>Speaker Garcia Rolando</i>	02:00 pm	Phytoplankton in a turmoil Iudicone Daniele, Vincenzo Botte, Claudia Pasquero, Maurizio Ribera D'Alcal, Antonello Provenzale. <i>Speaker Iudicone Daniele</i>
12:30 pm	Non-migrating tides above Antarctica and their variation on short and long time scales Murphy Damian, T. Aso, M. Tsutsumi, D. C. Fritts, D. M. Riggan, M. J. Jarvis, A. J. Mcdonald, S. E. Palo, H. Iimura, R. A. Vincent. <i>Speaker Murphy Damian</i>	02:15 pm	Some riddles about turbulent diapycnal mixing in the oceans Tailleux Remi. <i>Speaker Tailleux Remi</i>
12:45 pm	Evidence for diurnal tide and planetary waves coupling from meteor winds at So Joo Do Cariri (7.4 S), Brazil Lima Lourivaldo, Ana Roberta Paulino, P. P. Batista, Hisao Takahashi. <i>Speaker Lima Lourivaldo</i>	02:30 pm	Mapping of Mixing Hotspots in the World Deep Oceans Hibiya Toshiyuki, Maki Nagasawa, Yoshihiro Niwa. <i>Speaker Hibiya Toshiyuki</i>
03:00 pm	Observations of the stratospheric diurnal tide with cosmic satellite and radiosonde data Alexander Simon, Toshihiko Tsuda. <i>Speaker Alexander Simon</i>	02:45 pm	Coffee Break (30 minutes)
03:15 pm	Mesospheric winds study in southern Brazil with an all-sky interferometric meteor radar Bertagnoli Sandro, Nelson Jorge Schuch, Cassio Espindola Antunes, Thiago Brum Pretto, Czar Augusto Daroit, Natanael Rodrigues Gomes, Barclay Robert Clemesha, Paulo Prado Batista. <i>Speaker Bertagnoli Sandro</i>	03:15 pm	Vertical mixing model with tides. a new BBL Canuto Vittorio, A.M. Howard, C.J. Muller, S.R. Jayne. <i>Speaker Canuto Vittorio</i>
03:30 pm	Coffee Break (30 minutes)	03:30 pm	A Lagrangian based approach for determining trajectories taxonomy and turbulence regimes Rupolo Volfango. <i>Speaker Rupolo Volfango</i>
04:00 pm	An instability of the polar lowermost stratosphere ? Davies Huw, Sarah Kew, M. Sprenger. <i>Speaker Davies Huw</i>	03:45 pm	Laboratory modeling of excitation of internal waves by turbulent buoyant plumes discharged from a submerged wastewater outfall Troitskaya Yuliya, Daniil Sergeev, Ekaterina Ezhova. <i>Speaker Troitskaya Yuliya</i>
04:15 pm	Predictability of stratospheric sudden warmings in the Northern Hemisphere as inferred from ensemble forecast data Ichimaru Tomoko, Toshihiko Hirooka, Hitoshi Mukougawa. <i>Speaker Ichimaru Tomoko</i>	03:50 pm	Processes in Oceanic Fronts Conveners: Belkin Igor
04:30 pm	Sensitivity of the Stratosphere Resolving Metoffice Model to Changes in Horizontal Resolution Sensitivity of the Stratosphere Resolving Metoffice Model to Changes in Horizontal Resolution	04:00 pm	Oral 4 July, 2007 from 11:00 AM to 12:30 AM - Academy of Fine Arts Room 14
04:30 pm		04:00 pm	Chairpersons: Igor Belkin
04:30 pm		04:00 pm	A trans-Pacific hydrographic section traversing North Pacific Central Mode Water Suga Toshio, Hiroko Saito, Tomowo Watanabe, Masao Fukasawa. <i>Speaker Suga Toshio</i>
04:30 pm		04:00 pm	Propagation of Temperature-Salinity Anomalies along North Americas Eastern Seaboard Belkin Igor, John E. O'Reilly. <i>Speaker Belkin Igor</i>
04:30 pm		04:00 pm	Fronts in the World Oceans Large Marine Ecosystems Belkin Igor, Kenneth Sherman, Marie-Christine Aquarone. <i>Speaker Belkin Igor</i>
04:30 pm		04:00 pm	The eddy field of the Polar front in the southern Norwegian Sea from SeaSoar-CTD and VM-ADCP observations Orvik Kjell Arild, Pierre Jaccard. <i>Speaker Orvik Kjell Arild</i>
04:30 pm		04:00 pm	Modeling of Sharp Frontal Interfaces in the Near-Surface

05 July, 2007

UL002 Inside the terrestrial planets, Maria Zuber
Oral 5 July, 2007 from 08:30 AM to 09:30 AM - Rectorate Main Hall US005 Solar and planetary geophysics
Conveners: Esposito Larry
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Rectorate Main Hall Chairpersons: -
09:30 am Voyage through the solar system: latest results: Esposito Larry. *Speaker Esposito Larry*
10:00 am Venus atmosphere from Venus Express VIRTIS
Drossart Pierre, Giuseppe Piccioni. *Speaker Drossart Pierre*
10:30 am Dunes and Lakes on Titan
Lunine Jonathan, Cassini Radar Team. *Speaker Lunine*

Coffee Break (30 minutes)
Recent results on cometary water production
T. Mkinen J. Teemu. *Speaker T. Mkinen J. Teemu*
MRO-HIRISE Close-Up Views of Mars
Russell Patrick, A. McEwen, The Hirise Team. *Speaker Russell*

Patrick

USSE013 Our Understanding of Climate Change
Shamir Uri, Malanotte-Rizzoli Paola
Oral 5 July, 2007 from 07:00 PM to 09:00 PM - Rectorate Main Hall 07:00 pm Intercomparison of the Northern Hemisphere Winter Mid-Latitude Atmospheric Variability of the IPCC Models by Wave Activity Performance Metrics
Dell'Aquila Alessandro, Valerio Lucarini, Sandro Calmanti, Paolo M. Ruti, Antonio Speranza. *Speaker Dell'Aquila Alessandro*
JAS003 Distribution of water and heat in the crust: Indication from EM studies
Conveners: Ogawa Yasuo
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Pharmacy (E Room) Room E
09:30 am Delineation of subsurface structures and tectonics of hot spring, Central Sinai, Egypt, as deduced from magnetotelluric and magnetic data
Mekkawi Mahmoud, Mohamed Elsaid Elbohoty. *Speaker Mekkawi Mahmoud*
10:10 am New laboratory measurements of Vp, Vs and electrical conductivity to unravel the deep crustal anomaly in the Alborn Domain (SE Spain)
Ferri Fabio, Bernardo Cesare, Luigi Burlini, Frank R. Schilling. *Speaker Ferri Fabio*
10:50 am Coffee Break (30 minutes)
11:20 am Radiowave technology for 3D-geolectrical study of water-bearing pay horizons in oil fields and thawing - water seepage zones in permafrost massif
Istratov Viatcheslav, Kuchmin Alexei Olegovich, Lyakh Ekaterina Viktorovna. *Speaker Istratov Viatcheslav*
Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy (E Room) Room E
Chairpersons: -
02:00 pm Resistivity as tool for geothermal exploration and case-stories from Italy and Acele
Manzella Adele. *Speaker Manzella Adele*
02:40 pm Correlations of resistivity structure, seismicity and deformation from some case studies in Japan
Ogawa Yasuo. *Speaker Ogawa Yasuo*
03:20 pm Multidisciplinary approach coupling high resolution resistivity tomography, self-potential, natural and CO2 soil degassing on Stromboli and Vulcano Islands
Finizola Anthony, Revil Andr, Piscitelli Sabatino, Rizzo Enzo, Ricci Tullio, Angeletti Bernard, Barde Cabusson Stphanie, Bennati Laura, Byrdina Svetlana, Carzaniga Nicol, Crespy Agns, Di Gangi Fabio, Mocochain Ludovic, Morin Julie, Rossi Matteo, Rouilleau Emilie, Sortino Francesco, Suski Barbara. *Speaker Finizola Anthony*
04:00 pm Coffee Break (30 minutes)
Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Interpretation of self-potential anomalies on Nishu volcano, Japan
Hase Hideaki, Takeshi Hashimoto, Yasunori Nishida, Mitsuru Utsugi, Hiroshi Inoue, Mizue Saba. *Speaker Hase Hideaki*
In search for the electrical conductors at the fault zone of North Anatolian Fault in Turkey by audio-frequency magnetotelluric
Tank Sabri Bulent, Yoshimura Honkura, Yasuo Ogawa, Mustafa Kemal Tuncer, Masaki Matsushima. *Speaker Tank Sabri Bulent*
Two-dimensional inverse modeling of magnetotelluric data at Duzce fault, Turkey
Tank Sabri Bulent, Mustafa Kemal Tuncer, Igor Rokityansky, Tulay Kaya, Timur Shavchenko. *Speaker Tank Sabri Bulent*
Post-volcanic geothermal water aquifer near the Slanske Vrchy MTS. (Slovakia), its magnetotelluric investigation and mathematical models
Vozar Jan, Milan Hvozدارa. *Speaker Vozar Jan*
Resistivity imaging of Tarumai Volcano in Northern Japan
Yamaya Yusuke, Takeshi Hashimoto, Toru Mogi, Hiroshi Ichihara. *Speaker*

Yamaya Yusuke
Geothermal system of a phreatic eruption environment under Kusatsu-Shirane volcano, implied by three dimensional magnetotelluric modeling
Ogawa Yasuo, Nurhasan, S. Bulent Tank, Naoto Ujihara, Yoshimori Honkura. *Speaker Ogawa Yasuo*
Electrical conductivity structure of the crust and upper mantle in Aershan volcanic area
Tang Ji, Wang Jijun, Zhao Guoze, Zhan Yan. *Speaker Tang Ji*
Seaflor Electromagnetic Observations off Tottori in the Sea of Japan
Kasaya Takafumi, Hiroaki Toh, Masashi Shimoizumi, Ichiro Shiozaki, Ryokei Yoshimura. *Speaker Kasaya Takafumi*
JAS007 Response of the atmosphere/ionosphere coupling system to forcing from the Sun and the lower atmosphere
Conveners: Kazimirovsky Edward, Pancheva Dora
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Chemistry Room E
09:30 am Structure of the Polar Non-Migrating Semidiurnal Tide Observed from TIDI
Palo Scott, Hiroyuki Iimura, Qian Wu, Timothy L Killeen, Stan C Solomon. *Speaker Palo Scott*
10:00 am Global Distribution and Inter-annual Variations of Mesospheric and Lower Thermospheric Neutral Wind Migrating Diurnal Tide
Wu Qian, T. L. Killeen, R. G. Roble, S. C. Solomon, D. A. Ortland, W. R. Skinner, R. Niciejewski. *Speaker Timothy Killeen*
10:15 am Spatial and temporal variations of Atomic Oxygen in the Mesosphere and Lower Thermosphere
Yee Jeng-Hwa, W. R. Skinner. *Speaker Yee Jeng-Hwa*
10:30 am Coffee Break (30 minutes)
11:00 am The effects of solar variability on the coupling of gravity waves from the lower atmosphere with the thermosphere
Vadas Sharon, D. C. Fritts. *Speaker Vadas Sharon*
11:30 am Observations of mesospheric gravity waves above Halley, Antarctica (76S, 27W) using an imaging riometer.
Moffat-Griffin Tracy, Martin J Jarvis, Robert E Hibbins. *Speaker Moffat-Griffin Tracy*
11:45 am Inter-annual and long-term variations observed in the ITM system
Talaat Elsayed, Jeng-Hwa Yee, Xun Zhu, James Russell Iii, Martin G Mlynczak, Larry Paxton, Andrew Christensen. *Speaker Talaat Elsayed*
12:00 pm Mechanism of formation of reactive-diffusional waves in the mesospheric photochemical system
Mikhail Kulikov, A.M. Feigin. *Speaker Mikhail Kulikov*
12:15 pm Observation of barometric oscillations and its comparison with geomagnetic pulsations
Iyemori Toshihiko, Mitsuru Matsumura, Yoshikazu Tanaka, Akinori Saito, Masahito Nose, Naoto Oshiman, Yoko Odagi, Hiroyuki Shinagawa. *Speaker Iyemori Toshihiko*
Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room E
02:00 pm The enhanced circulation in the mesosphere and lower thermosphere region
Larsen Miguel. *Speaker Larsen Miguel*
02:30 pm Planetary wave type oscillations (PWTO) seen in ionospheric TEC-maps
Borries Claudia, Norbert Jakowski, Christof Peter Hoffmann, Alexander Pogoreltsev. *Speaker Borries Claudia*
02:45 pm Troposphere – ionosphere interaction at equatorial latitude, Tirunelveli, India
Yadav Manohar Lal. *Speaker Yadav Manohar Lal*
03:00 pm Study of the atmospheric processes influence on the ionization of the ionosphere F2-layer
Kurkin Vladimir, Polekh Nelya M., Vergasova Galina V., Chernigovskaya Marina A., Mikhalev Alexander V.. *Speaker Kurkin Vladimir*
03:15 pm Observation of gravity waves oscillations in F2-layer heights at low latitude during high and low solar activity
Fagundes Paulo Roberto, Virginia Klausner, Y. Sahai, Valdir Gil Pillat, Fabio Becker-Guedes. *Speaker Fagundes Paulo Roberto*
03:30 pm Coffee Break (30 minutes)
04:00 pm Radar observations of equatorial electrojet irregularities at Jicamarca
Hysell David, J. Drexler, E. B. Shume, J. L. Chau, D. E. Scipion, M. Vlasov, R. Cuevas, C. Heinselman. *Speaker Hysell David*
04:30 pm Statistical Study of Ionospheric Scintillation Associated with Hurricanes and Typhoons
Bishop Rebecca, Paul Straus. *Speaker Bishop Rebecca*
04:45 pm Observations of coupling of the ionosphere and thermosphere to the sun and lower atmosphere
Paxton Larry, Hyosub Kil, Yongliang Zhang, Joseph Lamberiate, Bob Demajistre, Andy Christensen, Bob Meier. *Speaker Paxton Larry*
05:00 pm New formula representations of high-latitude O+ ionospheric outflows for use in global magnetospheric modeling
Horwitz James, Wen Zeng. *Speaker Horwitz James*
05:15 pm Simulations of the O+ trough region in the polar cap ionosphere-magnetosphere coupling region with the UT Arlington DyFK model
Horwitz James, Fajer Jaafari, Wen Zeng. *Speaker Horwitz*

James
JAS010 Magnetic field forcing of the thermosphere
Conveners: Luhr Hermann, Liu Huixin
Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room B
02:00 pm Neutral density holes, fountains, and supersonic winds associated with magnetic field influences
Schunk Robert, Howard G. Demars. *Speaker Schunk Robert*
02:30 pm Statistical studies on local thermospheric cusp density enhancements
Rentz Stefanie, Hermann Luehr, Wolfgang Koehler. *Speaker Rentz Stefanie*
02:45 pm CHAMP observations of neutral density enhancement associated with polar cap convection
Sato Soga, Huixin Liu, Shigeto Watanabe, Hermann Luehr. *Speaker Shigeto Watanabe*
03:00 pm Thermospheric signature of medium-scale field-aligned currents at auroral latitudes
Ritter Patricia, Hermann Lhr, Stefanie Rentz. *Speaker Ritter Patricia*
03:15 pm Average thermospheric wind patterns over the polar regions during solstices, as observed by CHAMP
Luhr Hermann, Huixin Liu, Patricia Ritter, Katrihn Husler. *Speaker Luhr Hermann*
03:30 pm Coffee Break (30 minutes)
04:00 pm Longitude dependencies of thermospheric zonal winds at dip equator latitudes as derived from CHAMP
Haeusler Kathrin, Hermann Luehr, Wolfgang Koehler. *Speaker Haeusler Kathrin*
04:15 pm Contrasting behavior of the thermosphere and ionosphere in responses to the Oct. 28, 2003 solar flare in equatorial anomaly regions
Liu Huixin, H. Luehr, S. Watanabe. *Speaker H. Luehr*
04:30 pm Discussion of models inadequate spatial distribution of energy into the thermosphere during storms
Sojka Jan, Rod Heelis. *Speaker Sojka Jan*
04:45 pm Global Effects of Subauroral Electrodic Fields on the Thermosphere
Anderson Phillip, Geoff Crowley, William R. Johnston. *Speaker Anderson Phillip*
05:00 pm Thermosphere response to solar wind forcing during magnetic storms
Marchaudon Aurelie, Lathuillere Chantal, Menvielle Michel. *Speaker Chantal Lathuillere*
ASI001 Planetary Dynamos: theory, models, observation and experiment
Conveners: Wicht Johannes, Chulliat Arnaud, Ivers David
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Pharmacy Room A
09:30 am Observation of Earth's core dynamics and constraints on the inner core axial rotation
Dumberry Mathieu. *Speaker Dumberry Mathieu*
10:00 am Integration of 7000 years of surface geomagnetic observations to numerical geodynamo modeling
Kuang Weijia, Andrew Tangborn, Zigang Wei. *Speaker Kuang Weijia*
10:15 am Impact of data assimilation on initial conditions for geodynamo models
Tangborn Andrew, Weijia Kuang. *Speaker Tangborn Andrew*
10:30 am Coffee Break (30 minutes)
11:00 am Approaching smaller scales of core surface flows
Pais Maria Alexandra, Dominique Jault. *Speaker Pais Maria Alexandra*
11:15 am Axial invariance of rapidly varying diffusionless motions in the Earth's core interior
Jault Dominique. *Speaker Jault Dominique*
11:30 am Spatial-temporal structure of the geomagnetic field

Yakovleva Svetlana, Tatiana Bondar, Vadim Golovkov. *Speaker Yakovleva Svetlana*
11:45 am Zonal westward movement of short-term variations of the observed geomagnetic field. consequences for core surface fluid flow morphology
Demetrescu Crisan. *Speaker Demetrescu Crisan*
12:00 pm Torsional oscillations in numerical dynamo simulations
Wicht Johannes, Ulrich R. Christensen. *Speaker Wicht Johannes*
Johanne
12:15 pm Kinematic dynamos revisited
James Ron, Martin Dudley. *Speaker James Ron*

ASI009 Progress in palaeo- and rock-magnetic methodologies
Conveners: Petrovsky Eduard, Egli Ramon
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Chemistry Room H
09:30 am Fully automated alternating field demagnetization, ARM and IRM acquisition with a 2G magnetometer
Dekkers Mark J., Tom A.T. Mullender. *Speaker Dekkers Mark J.*
09:49 am A new magnetometer system
Bhnel Harald. *Speaker Bhnel Harald*
10:08 am Electron Holography in Rock Magnetic Studies
Feinberg Joshua, Richard Harrison, Takeshi Kasama, Edward Simpson, Rafal Dunin-Borkowski. *Speaker Feinberg Joshua*
10:42 am Coffee Break (30 minutes)
11:12 am Magnetic properties of nanofabricated synthetic magnetite samples
Krasa David, Wyn Williams, Chris D. W. Wilkinson, Nikolaj Gadegaard, Haiping Zhou, Adrian R. Muxworthy, Andrew P. Roberts. *Speaker Krasa David*
11:31 am Transition Warming and Cooling Remanences
Dunlop David. *Speaker Dunlop David*
11:50 am Rock magnetic methods applied to the study of airborne particulate matter pollution in Rome (Italy)
Sagnotti Leonardo. *Speaker Sagnotti Leonardo*
12:09 pm Thermochemical alteration of magnetic minerals - exploiting the undesirable.
Spassov Simo, Jozef Hus. *Speaker Spassov Simo*
Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room H
02:00 pm Quality control of rock-magnetic measurements of weak samples
Petrovsky Eduard, Ales Kapicka, Hana Fialova. *Speaker Petrovsky Eduard*
02:19 pm First-order Reversal Curve (FORC) Diagrams of Natural and Cultured Biogenic Magnetic Particles
Chen Amy P, Dr Ramon Egli, Dr. Bruce M. Moskowitz. *Speaker Chen Amy P*
02:38 pm Magnetic field paleointensity using SQUID microscopy
Weiss Benjamin, Eduardo A. Lima, Luis E. Fong, Francis J. Baudenbacher. *Speaker Weiss Benjamin*
03:12 pm Coffee Break (30 minutes)
03:42 pm Inverting magnetic data for grain and shape distributions: thermal-fluctuation stogyraphy
Carter-Stiglitz Brian, Michael Jackson, Amy Chen, Peter Solheid, Bruce Moskowitz. *Speaker Carter-Stiglitz Brian*
04:16 pm MORIN OZDLEN IN HEMATITES
Ordemir Ozden. *Speaker Ordemir Ozden*
04:35 pm Low temperature exchange bias of nanoscale lamellar exsolutions of ilmenite in hematite
Fabian Karl, Valera P. Shcherbakov, Suzanne McEnroe, Peter Robinson. *Speaker Fabian Karl*
04:54 pm A mean field model of the magnetic structure in hematite-ilmenite solid solutions and exsolved nanostructures of ilmenite and hematite
Shcherbakov Valeriy, Fabian Karl, McEnroe Suzanne, Robinson Peter. *Speaker Shcherbakov Valeriy*
Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
The maximum likelihood solution for inclination-only data
Arason Pordur, Shaul Levi. *Speaker Arason Pordur*
Comparisons of inclination-only statistical methods
Arason Pordur, Shaul Levi. *Speaker Arason Pordur*
Rock-magnetic studies on experimental fires
Carrancho Ngel, Juan Jos Villalan, Manuel Calvo-Rathert. *Speaker Carrancho Ngel*
ASI1015 Conjugate and interhemispheric polar studies (Division II and III)
Conveners: Freeman Mervyn, Clauer C. Robert, Kauristie Kirsti
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Chemistry Room C
09:30 am High-Latitude Plasma Convection From Titan EDI Measurements: Variances and Solar Wind Correlation
Foerster Matthis, G. Stein E. Haaland, Jack M. Quinn, Roy B. Torbert, Hans Vaih, Craig A. Kletzing. *Speaker Foerster Matthis*
09:45 am Comparison of convection patterns inferred from the SuperDARN observations and from FAC-based convection model
Lukianova Renata, Christian Hanuise, Roman Rozanov. *Speaker Lukianova Renata*
10:00 am SuperDARN observations of Northern and Southern high latitude convection during a positive By period
Ambrosino Danila, E. Amata, M.F. Maruccci, I. Cocco, W. Bristow, P. Dyson. *Speaker Ambrosino Danila*
10:15 am Interhemispheric Asymmetries in the Transpolar Potential: MHD Simulation
Lopez Ramon E.. *Speaker Lopez Ramon E.*
10:45 am Coffee Break (30 minutes)
11:15 am South-north asymmetry of field aligned current in the ionosphere-magnetosphere system
Shi Jiankui, Z. W. Cheng, T. L. Zhang, M. Dunlop, Z. X. Liu. *Speaker Shi Jiankui*
11:30 am North-South asymmetry of high latitude ULF pulsations during the Magnetic Storm on April 1617, 1999
Kozyreva Olga, N. G. Kleimenova, A. E. Levitin. *Speaker Kozyreva Olga*
11:45 am Modelling two-dimensional cross-phase gradients in high-latitude ULF magnetometer data
Ables Sean. *Speaker Ables Sean*
12:00 pm Conjugate observations of field-line resonances and the determination of equatorial mass density in the inner magnetosphere
Zesta Eftyhia, Athanasios Boudouridis, Dave Berube, Mark Moldwin, Peter Chi. *Speaker Zesta Eftyhia*
Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room C
02:00 pm Interhemispheric comparison of substorm onset characteristics: Solar wind and ionospheric control
Luhr Hermann, Hui Wang, Harald Frey. *Speaker Luhr Hermann*
02:30 pm UAMPY: Upper Atmosphere Monitoring for Polar Year 2007-2008
Alfonsi Lucilla, Giordiana De Franceschi, Vincenzo Romano, Cathryn N. Mitchell, Paul Spencer, Ping Yin, Pierre J. Cilliers, Ben Hopperman, Andrzej W. Wernik, Susan Skone, Massimo Materassi, Paolo Spalla. *Speaker Alfonsi Lucilla*
02:45 pm Seasonal asymmetry in the polar cap magnetic activity as a consequence of different electrodynamic coupling in the summer and winter polar caps.
Troshichev Oleg, Peter Stauning. *Speaker Troshichev Oleg*
03:15 pm Cusp-latitude conjugate imaging riometer observations during northward
Nishino Masanori, Hisao Yamagishi, Natuo Sato, Jan Holtet, Ruiyuan Liu. *Speaker Nishino Masanori*
03:30 pm Coffee Break (30 minutes)
04:00 pm The high-latitude ionosphere structure in the two polar regions from the multi-satellite observations
Biktash Lilia, Alex Karpachev, Takashi Maruyama. *Speaker Biktash Lilia*
04:15 pm Ground-based HIRISE observations of daytime auroral and sunlit cross polar cap arcs
Pallamraju Duggirala, S. Chakrabarti, T. Pedersen, H. Frey. *Speaker Pallamraju Duggirala*
04:30 pm Different magnetospheric responses to the solar wind pressure pulses
Alexeev Igor, Robert Clauer, Elena Belenkaya. *Speaker Alexeev Igor*
04:45 pm Solar cosmic ray structure and n-s anisotropy in the polar cap and auroral zone
Lazutin Leonid, Sergey Kuznetsov, Yuri Denisov. *Speaker Lazutin Leonid*
05:00 pm Significant North-South and EastWest Asymmetries in the Lower Ionosphere Effects of the Intense Geomagnetic Storms and Superstorms
Shirochkov Alexander, Sergey Sokolov. *Speaker Shirochkov Alexander*
Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
ULF noise properties in the Pc5 frequency range at high latitudes in two

ospheres
Agova Nadejda, Mark Engebretson, Jurgen Waterman, Kiyohumi Yumoto. *Speaker Yagova Nadejda*

Long distance monitoring of the lower ionosphere: the global AARDDVARK sensors
Ciliverd Mark. *Speaker Ciliverd Mark*

One mechanism of spatial and temporal variations of concentration of ozone in atmosphere of the Earth
Barkin Yuri. *Speaker Barkin Yuri*

Statistical Correlation between GPS Scintillations and HF backscatter
Coco Igino, Ermanno Amata, Giorgiana De Franceschi, Lucilla Alfonsi, Vincenzo Romano, Maria Federica Maruccci, Mark Lester, Peter L. Dyson. *Speaker Coco Igino*

Formation of the transition current system in one or two polar caps
Belenkaya Elena. *Speaker Belenkaya Elena*

ASII019 Progressing to closure in magnetotail plasma sheet and substorm processes
Conveners: Angelopoulos Vassilis, Baumjohann Wolfgang

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy Room A
02:00 pm **Electron populations in thin current sheets during growth phases and substorms**
Fontaine Dominique, Roux Alain, Le Contel Olivier, Robert Patrick, Owen Chris. *Speaker Fontaine Dominique*

02:18 pm **Magnetic island coalescence in a thin current sheet**
Shinohara Iku, T. Hayakawa, T. Yumura, K. G. Tanaka, M. Fujimoto. *Speaker Shinohara Iku*

02:36 pm **Solitary Electromagnetic Pulses Detected with Super-Alfvnic flows**
Parks George. *Speaker Parks George*

02:54 pm **The role of the magnetic turbulence on the dynamics of non-adiabatic ions in the cross-tail current sheet.**
Greco Antonella. *Speaker Greco Antonella*

03:12 pm **Generation, Propagation and Interactions of Alfvnic Disturbances in the Magnetotail: Simulations**
Lysak Robert, Yan Song, Thomas W. Jones. *Speaker Lysak Robert*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Investigation of the Nightside Magnetosphere through Travel-time Magnetoseismology**
Chi Peter, S. Ohtani, C. T. Russell. *Speaker Chi Peter*

04:18 pm **Ion beam variability in the Plasma Sheet Boundary Layer**
Ashour-Abdalla Maha, Jean-Michel Bosqued, Mostafa El-Peromian, Raymond Walker. *Speaker Ashour-Abdalla Maha*

04:36 pm **Magnetotail Current Sheet Structures: Observations and Global MHD Simulations**
El-Alaoui Mostafa, Maha Ashour-Abdalla, Jean-Michel Bosqued, Robert L. Richard. *Speaker El-Alaoui Mostafa*

04:54 pm **Study of relationship between turbulence in the central plasma sheet and substorm processes using the Interball-Tail satellite data**
Paredes Davis Daniela, M. Stepanova, E.E. Antonova, I. Ovchinnikov, Yu. I. Yermolaev. *Speaker Paredes Davis Daniela*

05:12 pm **Generation, Propagation and Interaction of Alfvnic Disturbances in Magnetotail: Theory**
Song Yan, Bob Lysak. *Speaker Song Yan*

ASII020 Magnetosphere-ionosphere interactions and auroral processes (Divisions III and II)
Conveners: Lotko William

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Economics Room 1
09:30 am **Investigation of dependence of substorm effects in auroral electrojet and parameters of F-Region of ionosphere on the separate structures from ut substorm beginning on the basis of GSM TIP**
Klimenko Maksim, Bryukhanov Valerij Veniaminovich. *Speaker Klimenko Maksim*

09:51 am **What are the ionospheric signatures of magnetotail reconnection?**
Ostgaard Nikolai, Nikolai Stgaard, Anette Laue Borg, Arne Snæs, Arne Pedersen, Marit Ieroset, Tai Phan. *Speaker Ostgaard Nikolai*

10:12 am **The role of quiet-time thermal ion outflow in magnetosphere-ionosphere coupling during the substorm cycle**
Yau Andrew, Andrew Howarth. *Speaker Yau Andrew*

10:33 am **Auroral Arcs as Sites of Magnetic Stress Release**
Haerendel Gerhard. *Speaker Haerendel Gerhard*

10:54 am **Coffee Break (30 minutes)**

11:24 am **Generation of electron-cyclotron waves by electron beam in the magnetosphere**
Singh Satyavir, R.V.Reddy, G.S. Lakhina, R. Bharuthram. *Speaker Singh Satyavir*

11:45 am **Whistler-induced optical emission at L~5.5**
Manninen Jyrki, Michael J. Rycroft, Tauno Turunen. *Speaker Manninen Jyrki*

12:06 pm **Features of the magnetosphere-ionosphere coupling via Alfvén waves at auroral latitudes**
Pilipenko Viacheslav, Fedorov E.N., Engebretson M.J.. *Speaker Pilipenko Viacheslav*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Local time variation of magnetic disturbances and asymmetry of the ring current during super-intense storms (DST<-250 nT)
Echer Ezequiel, Walter Gonzalez. *Speaker Echer Ezequiel*

Strong geomagnetic storms and its effect on the ionosphere and the telluric currents
Silbergleit Virginia, Ana Georgina Elias. *Speaker Silbergleit Virginia*

Center-West Argentina gas pipeline: A Study
Silbergleit Virginia, Virginia Mabel Silbergleit, Patricia A. Larocca. *Speaker Silbergleit Virginia*

Magnetic activity in the polar cap (PC index) as a precursor of magnetic substorms
Troshichev Oleg, Alexander Janzhura, Peter Stauning. *Speaker Troshichev Oleg*

Cluster results on auroral electric field scale sizes
Johansson Tommy, Gaur Marklund, Tomas Karlsson, Sonia Lilo, Per-Arne Lindqvist, Hans Nilsson, Stephan Buchert. *Speaker Johansson Tommy*

The global geomagnetic and auroral response to the sudden expansion of the magnetosphere
Moiseev Alexey, Stepan Solovyev, Kiyohumi Yumoto, Mark Engebretson. *Speaker Moiseev Alexey*

Electron-acoustic solitary waves in electron-ion beam plasmas
Kakad Amar, S. V. Singh, R. V. Reddy, G. S. Lakhina. *Speaker Kakad Amar*

Searching for ULF signatures of the Cup: Observations from search coil magnetometers and auroral imagers in Svalbard
Engebretson Mark, Fei Lu, Marc Lessard, Hyomin Kim, Joran Moen, Dag Lorentzen. *Speaker Engebretson Mark*

The spatial structure of ionospheric vorticity as measured by the SuperDARN radars
Chisham Gareth, Mervyn P Freeman, Gary A Abel. *Speaker Chisham Gareth*

Change in Ionospheric Electric Field and Geomagnetic Field due to Solar Wind Variations at the time of SC
Ikeda Akihiro, Manabu Shinohara, Akimasa Yoshikawa, Kenro Nozaki, Atsuki Shinbori, Kiyohumi Yumoto. *Speaker Ikeda Akihiro*

Parallel electric fields due to shear Alfvén Waves at 3-6RE altitude
Watt Clare, Robert Rankin. *Speaker Watt Clare*

Polar ionosphere response to changes of mutual orientation of pointing vector in near-earth space and geomagnetic moment
Kuznetsova Tamara, Alex Laptukhov. *Speaker Kuznetsova Tamara*

Investigation of the temporal evolution of mid-latitude ionospheric current system by natural orthogonal component analysis
De Michelis Paola, Robrta Tozzi, Giuseppe Consolini. *Speaker De Michelis Paola*

Space-ground cross-phase analysis of Pc3 pulsations
Heilig Balzs, Hermann Lhr. *Speaker Heilig Balzs*

Modeling of magnetospheric VLF response to atmospheric infrasonic waves
Bespalov Peter, Peter Bespalov, Olga Savina. *Speaker Bespalov Peter*

AKR generation characters at the polar border of auroral region
Chugunin Dmitriy, Mogilevsky M.M., Moiseenko I., Sauvaud J. A., Hanasz J.. *Speaker Chugunin Dmitriy*

The Meridional Current System During Substorm Expansion Phase
Liu William, Jun Liang. *Speaker Liu William*

The relationship between geomagnetic auroral disturbances and By IMF during geomagnetic storms
Boroyev Roman, Anna Koshlyak. *Speaker Boroyev Roman*

ASII021 Geomagnetic storms: toward a coupled system level understanding (Divisions III and II)
Conveners: Pulkkinen Tuija

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Chemistry Room B
Chairpersons: Mark Ciliverd and Nataly Ganushkina

09:3 0 am **Influence of the magnetopause location, ring current, plasmasphere, and plasmaspheric plumes on the evolution of the radiation belt fluxes during geomagnetic storms.**
Shprits Yuri. *Speaker Shprits Yuri*

09:50 am **The study of the Solar-Geophysical events and effects on the meteorological parametars changes**

Caslav. *Speaker Mihajlovic Spomenko, Cop Rudi, Palangio Paolo, Lazovic Mihajlovic Spomenko*

10:10 am **Effects of the geomagnetic storms in the lower ionosphere: what can we learn from ground based observations?**
Shirochkov Alexander, Ludmila Makarova. *Speaker Shirochkov Alexander*

Alexander

10:30 am **Dynamics of the plasmasphere during geomagnetic storms and substorms**
Pierrard Viviane. *Speaker Pierrard Viviane*

10:50 am **Coffee Break (30 minutes)**

11:20 am **Modeling of the Sawtooth profile geosynchronous injections using coupled MHD and The FOK Ring current models**
Taktakishvili Aleksandre, Maria Kuznetsova, Mei-Ching Fok, Michael Hesse, Lutz Rastaetter, Tamas Gombosi, Darren Dezeeuw. *Speaker Taktakishvili Aleksandre*

11:40 am **Studing the superstorm of may 15, 2005: “main” substorm, dynamics of the westward electrojet and outer radiation belt**
Tverskaya Liudmila, Ginzburg Eugeny, Ivanova Tatyana, Pavlov Nikolay, Svidsky Pavel. *Speaker Tverskaya Liudmila*

12:00 pm **Trapping of 1-5 mev solar protons into the inner magnetosphere during magnetic storms**
Lazutin Leonid, Kuznetsov S.N., Podorolsky A.N.. *Speaker Lazutin Leonid*

Lazutin Leonid

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room B
Chairpersons: Pontus Brandt and Robert McPherron

02:00 pm **Stormtime electron phase space density radial profiles and their dependence on M and K**
Fennell Joseph. *Speaker Fennell Joseph*

02:20 pm **Ring Current Asymmetry During Magnetic Storm on 6-14 November 2004**
Kalegaev Vladimir, Ksenia Bakhmina. *Speaker Kalegaev Vladimir*

Vladimir

02:40 pm **Radiation belt acceleration and loss during the Halloween storms of 2003**
Baker Daniel, Shrikanth Kanekal, Scot R. Elkington. *Speaker Baker Daniel*

03:00 pm **Quantitative modeling of the ring current using ENA data assimilation**
Nakano Shinya, Genta Ueno, Yusuke Ebihara, Mei-Ching Fok, Shin-Ichi Ohtani, Pontus C:son Brandt, Donald G. Mitchell, Kunihiro Keika, Tomoyuki Higuchi. *Speaker Nakano Shinya*

03:20 pm **Variation of Field-Aligned Current at Plasma Sheet Boundary Layers With AE Index During Storm Time: Cluster Observation**
Shi Jiankui, Z. W. Cheng, T. L.Zhang, M. Dunlop, Z. X. Liu. *Speaker Shi Jiankui*

03:40 pm **Coffee Break (30 minutes)**

04:10 pm **Role of different spatial and temporal scale variations of electromagnetic fields in the evolution of energetic particle populations in the near-Earth’s magnetosphere during storms**
Ganushkina Natalia, Marina V. Kubyskhina, Tuija I. Pulkkinen. *Speaker Ganushkina Natalia*

04:30 pm **Comparative study of Geomagnetic Sudden Commencement (SC) between Oersted and ground observations at different local times**
Han Desheng, T. Araki1,2, H-G. Yang, Z-T. Chen, T. Iyemori, P. Stauning. *Speaker Han Desheng*

04:50 pm **Solar wind conditions associated with geomagnetic storms with Dst<-30nT**
Khabarova Olga, Yuri I.Yermolaev. *Speaker Khabarova Olga*

05:10 pm **Improved dynamic geomagnetic rigidity cutoff modeling: testing predictive accuracy**
Ciliverd Mark, Craig J. Rodger, Tracy Moffat-Griffin, Pekka T. Verronen. *Speaker Ciliverd Mark*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Local time variation of magnetic disturbances and asymmetry of the ring current during super-intense storms (DST<-250 nT)
Echer Ezequiel, Walter D Gonzalez. *Speaker Echer Ezequiel*

Real-time modeling at the community-coordinated modeling center
Rastaetter Lutz, Peter Macneice, Michael Hesse, Marlo Maddox, David Berrios, Anna Chulaki, Maria Kuznetsova. *Speaker Rastaetter Lutz*

Conjugate ionospheric perturbations during magnetic storms: evidence for stormtime M-I coupling
Foster John. *Speaker Foster John*

Study on solar sources and polar cap absorption events recorded at Mario Zucchelli Station, Antarctica
Perrone Loredana, Parisi Mario, Meloni Antonio, Damasso Mario, Galliani Marco. *Speaker Perrone Loredana*

Large-scale electric field in the inner magnetosphere during geomagnetic storms
Shinbori Atsuki, Yukitoshi Nishimura, Takayuki Ono, Atsushi Kumamoto, Takashi Kikuchi. *Speaker Shinbori Atsuki*

Modeling of ring current -multiple phases of the Storm time ring current
Nagarajan Nandini, P.V. Nagamani. *Speaker Nagarajan Nandini*

Plasma sheet and ionospheric ions contribution to the ring current during storm-time substorms
Metallinou Fiori-Anastasia, Ioannis A. Daglis, Dominique C. Delcourt. *Speaker Metallinou Fiori-Anastasia*

The characteristic time of the magnetospheric ring current decay from experiment and theory
Biktash Lilia. *Speaker Biktash Lilia*

Variation of the inner radiation belt electron fluxes at low L-shells inside the South Atlantic Anomaly
Asikainen Timo, Kalevi Mursula. *Speaker Asikainen Timo*

Solar wind parameters at L1 and the response of the magnetosphere: a comparison between two events
Cid Consuelo, Elena Saiz, Yolanda Cerrato, Angels Aran, Hebe Cremades, Sergio Dasso, Cristina Mandrini, Stefan Poedts, Luciano Rodriguez, Brigitte Schmieder, Andrei Zhukov. *Speaker Cid Consuelo*

Relations Between Polar and Equatorial Current Systems Inferred from PC, DST and HASYM indices
Stauning Peter. *Speaker Stauning Peter*

Correlation between interplanetary plasma parameters and AKR emission during magnetic storms
Alves Maria Virginia, Edio Da Costa Junior, Walter Demetrio Gonzalez. *Speaker Alves Maria Virginia*

Study of the turbulence in the central plasma sheet during August
Arancibia Karina, Marina Stepanova, Jean Michel Bosqued, Elizavieta E. Antonovad. *Speaker Arancibia Karina*

ASII027 Other magnetospheric worlds and planetary ionospheres and thermospheres (ASII014 merged with this symposium)
Conveners: Bunce Emma, Brandt Pontus

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Chemistry Room G
09:30 am **Comparative view of transport in magnetospheres.**
Paranicas Chris, Robert Decker, Pontus Brandt, Donald G Mitchell, Barry Mauk, Abigail Rymer, Stamatios Krimigis, Elias Roussos, Geraint Jones, Norbert Krupp. *Speaker Paranicas Chris*

09:55 am **Solar Wind Magnetospheric Interaction at Mercury**
Killen Rosemary, Menelaos Sarantos. *Speaker Killen Rosemary*

10:20 am **Signatures of geo-effective solar flare events in December 2006 recorded close to Venus and Mars**
Futaana Yoshifumi, S. Barabash, M.Dryer, C.D. Fry, Z. Smith, W. Sun, C. S. Deehr, K. Kecskemety, K. Kudela, R. Courtney, R. Lundin, Aspera-3 And -4 Team. *Speaker Futaana Yoshifumi*

10:45 am **Coffee Break (30 minutes)**

11:15 am **Thermosphere Responses of the Terrestrial Planets to Solar Variability**
Forbes Jeffrey M., Frank G. Lemoine, Stephen W. Bougher, Sean Bruinsma, Bruce R. Bowman, Alex Konopliv. *Speaker Forbes Jeffrey M.*

11:40 am **Effects of a rotational force in the ionosphere of Venus and Mars**
Perez-De-Tejada Hector. *Speaker Perez-De-Tejada Hector*

11:55 am **Recent findings about processes governing the solar wind geospace interaction and their counterparts at Saturn**
Kozyra Janet, P. C. Brandt, J. T. Clarke, T. I. Gombosi, K. C. Hansen, M. M. Kuznetsova, A. Ridley. *Speaker Kozyra Janet*

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room
02:00 pm **Ring currents at Earth, Jupiter and Saturn: Similarities and differences**
Krimigis Stamatios. *Speaker Krimigis Stamatios*

02:25 pm **Magnetospheric storms at Earth and Saturn**
Brandt Pontus, D. G. Mitchell, A. Rymer, M. Hill. *Speaker Brandt Pontus*

02:40 pm **Global Plasma Dynamics at Saturn and its Dependence on the Solar Wind**
Hansen Kenneth, Bertalan Zieger, Darren L. De Zeeuw, Tamas I. Gombosi. *Speaker Hansen Kenneth*

03:05 pm **Interchange motions as the basic process of plasma transport in planetary magnetospheres**
Vasyliunas Vytenis. *Speaker Vasyliunas Vytenis*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **A system’s view of Saturn’s dynamical magnetosphere**
Jackman Cairtriona. *Speaker Jackman Cairtriona*

04:25 pm **Saturnian Magnetospheric Dynamics: Elucidation of a Camshaft Model**
Kivelson Margaret. *Speaker Kivelson Margaret*

04:40 pm **Recent observations of Saturns and Jupiters FUV aurora with the ACS camera on board the Hubble Space Telescope**
Gerard Jean-Claude, J.T. Clarke, D. Grodent, B. Bonfond, A. Saglam, J.D. Nichols, G.R. Gladstone, And The Hst Program 10862 Team. *Speaker Gerard Jean-Clau*

04:55 pm **Dynamics of the thermospheres of the giant planets**
Strobel Darrell. *Speaker Strobel Darrell*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Bifurcation of the tail current sheet in Jovian magnetosphere
Israelevich Peter, Alexander Ershkovich. *Speaker Israelevich Peter*

1D Hybrid Simulations of Ion Cyclotron Waves Generated by Newborn Ions in Jupiter and Saturn’s Magnetospheres
Cowee Misa, Jared S. Leisner, Christopher T. Russell, Robert J. Strangeway. *Speaker Cowee Misa*

The response of Saturn’s Magnetosphere to a Northward IMF
Fukazawa Keiichiro, Tatsuki Ogino, Raymond J. Walker. *Speaker Fukazawa Keiichiro*

BepiColombo MMO in the context of the Plasma Universe
Fujimoto Masaki. *Speaker Fujimoto Masaki*

Modeling the tilted current sheet of Saturn
Khurana Krishan. *Speaker Khurana Krishan*

Improving the Internal Magnetic Field Model of Ganymede by use of 3D MHD Simulations
Jia Xianzhe, Margaret G. Kivelson, Krishan K. Khurana, Jon A. Linker. *Speaker Jia Xianzhe*

The Magnetic World of Multipolar Paleomagnetospheres During Geomagnetic Polarity Transition Epochs
Zieger Bertalan, Joachim Vogt, Kenneth C. Hansen, Tamas I. Gombosi. *Speaker Zieger Bertalan*

Science Operation Concept based on the MDP scheme for BepiColombo/MMO
Kasaba Yasumasa, M. Fujimoto, T. Takashima, H. Hayakawa, Mmo Science Working Sub-Group. *Speaker Kasaba Yasumasa*

Plasma / Radio Wave Observation plans for Mercury science: Plasma Wave Investigation (PWI) aboard BepiColombo / MMO
Kasaba Yasumasa, H. Matsumoto, J.-L. Bougeret, L. G. Blomberg, H. Kojima, S. Yagitani, M. Moncuquet, G. Chanteur, J.-G. Trotignon, Y. Kasahara, Y. Omura, Plasma Wave Investigation Team. *Speaker Kasaba Yasumasa*

Magnetic field structure of Saturn’s dayside magnetosphere and its mapping to the ionosphere: results from ring current modelling
Bunce Emma, C.S Arridge, S.W.H. Cowley, M.K. Dougherty. *Speaker Bunce Emma*

Modelling the influence of hermean magnetospheric currents on Bepi-Colombo magnetic field observations
Heyner Daniel, Karl-Heinz Glassmeier, Hans-Ulrich Auster. *Speaker Heyner Daniel*

The Ionopause at Mars and Venus
Fraenz Markus, E. Dubinin, E. Roussos, C. Martinecz, J. Woch, R. Frahm, D. Winningham, A.J. Coates, Y. Soobiah, S. Barabash, R. Lundin. *Speaker Fraenz Markus*

Meteoritic metal layers in the Mars atmosphere
Plane John, Tomas Vondrak, Sarah Broadley. *Speaker Plane John*

Evidence of a second layer in the topside of the ionosphere of Mars
Kopf Andrew, A.J. Kopf, D.A. Gurnett, D.L. Kirchner, D.D. Morgan. *Speaker Kopf Andrew*

Response of the martian ionosphere to solar stimuli as detected by the MARSIS active ionospheric sounder aboard Mars express
Morgan David D., D.D. Morgan, D.A. Gurnett, D.L. Kirchner, A.J. Kopf, E. Nielsen, J.J. Plaut, G. Picardi. *Speaker Morgan David D.*

Low Altitude Characteristics of Ion-Neutral Coupling in Venus Nightside Ionosphere An Examination using Pioneer Venus Orbiter Data
Hartle Richard, Joseph Grebowsky, Wayne Kasprzak, Walter Hoegy. *Speaker Hartle Richard*

Tracing Sodium in the Exosphere of Mercury
Paral Jan, Pavel Travnicek. *Speaker Paral Jan*

ASIV031 From micro- to macro-scales in the heliosphere and magnetospheres (Divisions IV, II, and III)
Conveners: Zank Gary

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Pharmacy Room B
09:30 am **Electron dynamics and cross-shock potential at the quasi-perpendicular bow shock**
Lefebvre Bertrand, Steven J. Schwartz. *Speaker Lefebvre Bertrand*

Bertrand

10:00 am **Particle acceleration at shocks: beyond the diffusion approximation**
Florinski Vladimir, Gary Zank, Jakobus Le Roux. *Speaker Florinski Vladimir*

10:30 am **Simulation study of EM radiation from LANGMUIR/Z waves in warm magnetized plasmas**
Kim Eun-Hwa, Peter A. Robinson. *Speaker Kim Eun-Hwa*

10:45 am **Coffee Break (30 minutes)**

11:15 am **Data-driven solar wind model and prediction of type II bursts**
Cairns Iver, Magali Florens, Stuart Knock, Peter Robinson. *Speaker Cairns Iver*

11:30 am **Investigating turbulent structure in the ionosphere using the Halley SuperDARN radar.**
Abel Gary, Mervyn P. Freeman, Gareth Chisham, Nicholas W. Watkins. *Speaker Abel Gary*

11:45 am **Heliospheric distribution of the solar EUV flux over the latest solar cycle**
Auchere Frederic. *Speaker Auchere Frederic*

12:00 pm **Transport of energetic particles by large amplitude MHD turbulence**
Hada Tohru, Y. Nariyuki. *Speaker Hada Tohru*

ASIV034 Reporter Reviews
Conveners: Cairns Iver

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room I2
02:00 pm **Solar flares and the magnetic field near active regions**
Shibata Kazunari. *Speaker Shibata Kazunari*

02:45 pm **Coronal mass ejections in the corona and solar wind**
Gopalswamy Natchimuthuk. *Speaker Gopalswamy Natchimuthuk*

Natchimuthuk

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Advances In Magnetic Turbulence And Particle Acceleration In The Corona And Solar Wind**
Zank Gary. *Speaker Zank Gary*

04:45 pm **Recent advances in shock studies in the corona, solar wind, and planetary bow shocks**
Krasnoselskikh Vladimir, V. Lobzin. *Speaker Krasnoselskikh Vladimir*

ASV037 International Decade of Geopotential Field Research: Current achievements and expected impact of Swarm (Divisions V, and I, II, III)
Conveners: Lesur Vincent, Maus Stefan, Friis-Christensen Eigil

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room F
02:00 pm **Satellite Data Selection, Treatment and Modelling in Global Geomagnetic Field Models**
Thomson Alan, Sarah J Reay, Susan Macmillan, Brian Hamilton. *Speaker Thomson Alan*

02:30 pm **A new magnetic field model for years 2001-2006 based on satellite and observatory vector data**
Lesur Vincent, Ingo Wardinski, Martin Rother, Mioara Mandaea. *Speaker Lesur Vincent*

02:45 pm **Integration of satellite data with historical data in time-dependent field models**
Jackson Andrew, Nicolas Gillet, Christopher Finlay. *Speaker Jackson Andrew*

03:15 pm **Towards CM5: Concepts, Approaches and Data Used in Improving the Comprehensive Model**
Sabaka Terence, Niils Olsen, Alexey Kuvshinov. *Speaker Sabaka Terence*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **On Recent Geomagnetic Jerks**
Olsen Niils, Mioara Mandaea. *Speaker Olsen Niils*

04:15 pm **Towards data assimilation in a dynamical model consisting of small scale axial vortices**
Jault Dominique, Alexandra Pais, Alexandre Fournier, Elisabeth Canet. *Speaker Jault Dominique*

04:45 pm **Cleaner geomagnetic jerks to probe core dynamics**
Holme Richard, Gemma Kelly. *Speaker Holme Richard*

05:00 pm **Core Flow Modelling using CHAMP satellite vector data**
Beggan Ciaran, Kathy Whaler, Susan Macmillan. *Speaker Beggan Ciaran*

Beggan Ciaran

05:15 pm **How special is the present geomagnetic field?**
Qamili Enkelejda, De Santis Angelo. *Speaker Qamili Enkelejda*

W033 Use of geomagnetic data and indices in space weather and space climatology
Conveners: Lukianova Renata, Mursula Kalevi, Curto Juan Jos
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Chemistry Room F
 09:30 am **Forecasting storm-time changes in the ionosphere**
 Gehmeyr Michael, E. Araujo-Pradere. *Speaker Gehmeyr Michael*
 09:45 am **Forecasting magnetic storms using a novel wavelet analysis technique**
 Balasis Georgios, Ioannis A. Daglis, Panayiotis Kapisris, Anastasios Anastasiadis, Konstantinos Eftaxias. *Speaker Balasis Georgios*
 10:00 am **Predicting the Dst and AL Using Solar Wind Parameters**
 Li Xinlin, Kap Soo Oh, Michael Temerin. *Speaker Li Xinlin*
 10:15 am **On the use of magnetic indices for describing the thermospheric density response to Solar activity**
 Menvielle Michel, Chantal Lathuillere, Aurilie Marchaudon. *Speaker Menvielle Michel*

10:30 am **Coffee Break (30 minutes)**
 11:00 am **Determination of ground conductivity and system parameters for optimal modeling of geomagnetically induced current flow in technological systems**
 Pulkkinen Antti, Risto Pirjola, Ari Viljanen. *Speaker Pulkkinen Antti*

11:30 am **ULF Wave Power Indices for the Space Weather Applications**
 Pilipenko Viacheslav, M. Engebretson, L. Simms, N. Romanova. *Speaker Pilipenko Viacheslav*
 12:00 pm **On a role of global Pc5 oscillations in the magnetosphere dynamics during geomagnetic storms**
 Potapov Alexander, Tatyana Polyushkina, Battuulai Tsegmed, Jinbin Cao. *Speaker Potapov Alexander*
 12:15 pm **Geomagnetic pulsations and ionospheric processes**
 Bencze Pi, J. Verő. *Speaker Bencze Pi*
Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

The characteristic of morphology and structure of the class intensive geomagnetic disturbances
 Mihajlovic Spomenko, Cop Rudi, Palangio Paolo, Cander Ljiljana. *Speaker Mihajlovic Spomenko*
Relevant activity indicators of geomagnetically induced currents
 Viljanen Ari, Antti Pulkkinen, Risto Pirjola. *Speaker Viljanen Ari*
Kp forecast models
 Wing Simon, Jay R. Johnson. *Speaker Wing Simon*
Geomagnetic Effects of a Solar Flare during Halloween Superstorm
 Villante Umberto, Mauro Regi. *Speaker Mauro Regi*
Ap-index as a function of solar wind input and its seasonal variations
 Petrukovich Anatoli, M. Zakharov. *Speaker Petrukovich Anatoli*
Medium- and long-term perodicities in geomagnetic parameters
 Diego Piero, Marisa Storini. *Speaker Diego Piero*
Comparing SARGENT III and LEVITIN ET AL. methods to identify time intervals characterized by recurrent solar wind structures
 Diego Piero, Marisa Storini. *Speaker Diego Piero*
A Floor in the Solar Wind Magnetic Field
 Cliver Ed, Leif Svalgaard. *Speaker Cliver Ed*
Determination of the quiet daily geomagnetic variation in on-line regime.
 Janzhura Alexander. *Speaker Janzhura Alexander*

New subsystem index derived from high-resolution geomagnetic field data at low latitude and its comparison with real-time AE index
 Nose Masahito, Toshihiko Iyemori, Masahiko Takeda, Takashi Ookawa, Gerardo Cifuentes-Nava, Jrgen Matzka, Mustafa K. Tuner. *Speaker Nose Masahito*
A Guide for Geomagnetic Indices Derived from Earth Surface Data
 Menvielle Michel, Heather Mccreadie. *Speaker Menvielle Michel*
The ISGI www homepage
 Menvielle Michel, Alain Pan. *Speaker Menvielle Michel*
Quick-look, provisional and definitive vakues of am and aa indices
 Menvielle Michel. *Speaker Menvielle Michel*
New Magnetometer in Southern Sweden at LOIS, Lund
 Lundstedt Henrik, Peter Wintoft, Magnus Wik, Bo Thid, Anton Lundmark. *Speaker Lundstedt Henrik*
Using of the geomagnetic indices for the study of probability appearance of the equatorial scintillations during geomagnetic storms
 Biktash Lilia. *Speaker Biktash Lilia*
The Combined Polar Cap (PCC) Index as a Space Weather Parameter
 Stauning Peter, Oleg Troshichev, Alexander Janzhura. *Speaker Stauning Peter*
The Geomagnetic Digital Data of Trelew and Las Acacias Observatories and Their Relationship With Space Weather Effects
 Gianibelli Julio, Nicols Maciel Quaglino, Ricardo Ezequiel Garca. *Speaker Gianibelli Julio*
Local Vector Activity Proxy Indices: using INTERMAGNET observatories to estimate local magnetic field conditions
 Reay Sarah. *Speaker Reay Sarah*
Is there a need to revise the aa index?
 Clarke Ellen, Mark Clilverd. *Speaker Clarke Ellen*
Corrected hourly values from Eskdalemuir observatory and the implications for studies on the long term changes in geomagnetic activity
 Clarke Ellen, Orsi Baillie, Ewan Dawson, Susan Macmillan, Sarah Reay, Andrew Snedden. *Speaker Clarke Ellen*
How wavelet singularities can be used to characterize geomagnetic storms
 Mendes Da Costa Aracy, Margarette Oliveira Domingues, Odim Mendes Jr. *Speaker Mendes Da Costa Aracy*
Dcx an extended and corrected Dst index
 Mursula Kalevi, Lauri Holappa, Arto Karinen. *Speaker Lauri Holappa*
Transient effects detected during magnetic storms and solar-proton events in the South Atlantic magnetic anomaly Region
 Mendes Da Costa Aracy, Odim Mendes Jr, Margarette Oliveira Domingues. *Speaker Mendes Da Costa Aracy*
JGS001 Ocean Circulation and contributions from new satellite missions

Conveners: Chambers Don, Zlotnicki Victor
Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Education Room 3
 02:00 pm **Ocean bottom pressure from model and GRACE estimates**
 M. Ponte Rui, Katherine J. Quinn, Patrick Heimbach, Carl Wunsch. *Speaker M. Ponte Rui*
 02:20 pm **Seasonal changes in global ocean currents from GRACE gravity field observations**
 Thomas Maik, Henryk Dobslaw. *Speaker Thomas Maik*
 02:40 pm **Return of the Arctic Ocean to Pre-1990s Circulation as Suggested by GRACE and In Situ Bottom Pressure Measurements**
 Morison James, John Wahr, Ron Kwok, Cecilia Peralta-Ferriz. *Speaker Morison James*
 03:00 pm **Observing Steric Sea Level Variations with a Combination of Jason-1, GRACE, and Argo**
 Chambers Don, Josh K. Willis. *Speaker Chambers Don*
 03:20 pm **Mass variation in the Mediterranean and Black Seas and in their catchments areas**
 Fenoglio-Marc Luciana, Juergen Kusche, Matthias Becker, Sebastian Grayek. *Speaker Fenoglio-Marc Luciana*
 03:35 pm **Coffee Break (30 minutes)**
 04:05 pm **Eddy propagation velocity in the global oceans determined from satellite altimetry and numerical models**
 Fu Lee-Lueng. *Speaker Fu Lee-Lueng*
 04:25 pm **Combining new GRACE-based Geoids with Satellite Altimetry to Estimate Arctic Dynamic Ocean Topography**
 McAdoo David, Sinead L. Farrell, Seymour W. Laxon, Andy L. Ridout, Carl A. Wagner. *Speaker McAdoo David*
 04:40 pm **Mean dynamic topography of the Arctic Ocean from altimetry and geoid compared to oceanographic models**
 Forsberg Rene, Henriette Skourup, Helge Drange, Johnny Johannessen, Seymour Laxon, Wieslaw Maslowski, Mike Steele, Jinlun Zhang. *Speaker Forsberg Rene*
 04:55 pm **Estimating the sea surface topography the profile approach with error examination**
 Bosch Wolfgang, Roman Savcenko. *Speaker Bosch Wolfgang*
 05:10 pm **GOCE : ESA's Earth Gravity Mission**
 Muzi Danilo, Rune Floberghagen. *Speaker Muzi Danilo*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Spatial and temporal variations of the Kuroshio derived from altimetry, GRACE and hydrological data
 Zizhan Zhang, Yang Lu, Houtse Hsu. *Speaker Zizhan Zhang*
Assessment of Geoid Models off Western Australia Using In-Situ Measurements
 Deng Xiaoli, R. Coleman, K.R. Ridgway. *Speaker Deng Xiaoli*
Integration of Altimetry and GRACE geoid for Ocean Modeling: Results from the GOCINA and the GUTS projects.
 Knudsen Per, The Gocina And Guts Teams. *Speaker Knudsen Per*
GRACE mass variations and ocean bottom pressure fluctuations in the South Atlantic
 Boening Carmen, Ralph Timmermann, Jens Schrter, Andreas Macrander. *Speaker Boening Carmen*

High Resolution Ocean Topography from Satellite Gravimetry and Altimetry
 Albertella Alberta, Reiner Rummel. *Speaker Albertella Alberta*
Ocean circulation with a focus on the importance of a high precision mean sea surface model
 Nahavandchi Hossein, C.K. Shum, Yuchan Yi, Ove Omang, Dag Solheim. *Speaker Nahavandchi Hossein*
Altimetric mean sea surface for the North Atlantic and the Arctic Sea
 Ghazavi Kourosh, Hossein Nahavandchi, C.K. Shum, Yuchan Yi, Ove Omang, Dag Solheim. *Speaker Ghazavi Kourosh*
Combining Altimeter and Satellite Gravity to Compute Quasi-stable Dynamic Ocean Topography
 Wang Zhengtao, Yamin Dang, Weiping Jiang, Xiaoyang Zhao. *Speaker Weiping Jiang*
Empirical ocean tide analysis of cross-calibrated multi-mission altimeter data
 Savcenko Roman, Dr. Wolfgang Bosch. *Speaker Savcenko Roman*
Regional high resolution geoid determination by a combination of GRACE data and in-situ altimetry observations
 Mayer-Guerr Torsten. *Speaker Mayer-Guerr Torsten*
GOCE Mission Products and Performance
 Floberghagen Rune, Danilo Muzi. *Speaker Floberghagen Rune*
Gravity field and mean sea level determination in the North Atlantic using a combination of laser and radar satellite altimetry
 Calvao Joao. *Speaker Calvao Joao*
Global and Regional Trends in Ocean Mass (Bottom Pressure) from GRACE
 Zlotnicki Victor, Joshua K. Willis, John Wahr. *Speaker Zlotnicki Victor*
Mean dynamic topography by an iterative combination method
 Hunegnaw Addisu, Roger Hipkin, Dag Solheim, Ove Omang Dahl. *Speaker Roger Hipkin*

GS001 Reference Frames
Conveners: Dermanis Athanasios, Drewes Hermann
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Education Room 3
 09:30 am **Chinese geodetic control network 2000**
 Yang Yuanxi, Junyong Chen, Min Wang, Yanping Zhang, Yingzhe Tang, Hui Li, Pengfei Cheng, Fenghua Sun, Peng Zhang, Chunxi Guo. *Speaker Yang Yuanxi*
 09:45 am **A zero order network of permanent GNSS stations for the positioning services in Italy: some hypotheses and tests**
 Biagi Ludovico, Stefano Caldera, Mattia Crespi, Ambrogio Maria Manzino, Augusto Mazzoni, Marco Roggero, Fernando Sans. *Speaker Biagi Ludovico*
 10:00 am **A first attempt to embed VLBI gravitational deformations into the Invariant Points definition at Medicina**
 Claudio Abbondanza, Montaguti Simonetta, Negusini Monia, Sarti Pierguido, Vittuari Luca. *Speaker Claudio Abbondanza*
 10:15 am **Systematic analysis of 2-D and 3-D coordinate transformations with least-squares and total least-squares methods**
 Cai Jianqing, Nico Sneeuw, Ronggang Guo. *Speaker Cai Jianqing*

Jianqing
 10:30 am **Coffee Break (30 minutes)**
 11:00 am **Report of the Intercommission Committee on Theory**
 Xu Peiliang, Athanasios Dermanis. *Speaker Xu Peiliang*
 11:25 am **A rigorous intra-technique combination procedure for terrestrial reference frames**

Kutterer Hansjoerg, Xing Fang, Manuela Krgel. *Speaker Kutterer Hansjoerg*
 11:45 am **Robust estimation of spherical harmonic coefficients from scattered data**

van Loon Jasper, Mark-Willem Jansen, Juergen Kusche. *Speaker van Loon Jasper*
 12:00 pm **Non-polar variations of altitudes and their mechanism**
 Barkin Yuri. *Speaker Barkin Yuri*

12:15 pm **On the Possibilities of Geodetic Study with VSOP-2**
 Wei Erhu, Liu Jing-Nan, Kulkarni Madhav. N, Li Zhenghang, Shi Chuang. *Speaker Wei Erhu*
GS002 Gravity Field
Conveners: Visser Pieter, Okubo Shuhei, Jekeli Christopher, Sneeuw Nico, Marti Urs
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Education Main Hall
 09:30 am **Optimizing the flight-path for airborne gravimetry campaigns**

Bos Machiel, Luisa Bastos, Joao Catalao, Richard A. Deurloo. *Speaker Luisa Bastos*
 09:44 am **Frequency-dependent data weighting in airborne gravity data processing**
 Alberts Bas, Pavel Ditmar, Roland Klees. *Speaker Alberts Bas*
 09:58 am **Kalman smoothing filter algorithm design for moving vector gravimetry: first results of field experiments using the LIMOG system**
 Verdun Jerome, Bertrand De Saint-Jean, Henri Duquenne, Jose Cali, Jean-Pierre Barriot. *Speaker Bertrand De Saint-Jean*
 10:12 am **Exploring linkages between the Wilkes subglacial Basin and the transantarctic mountains with new airborne gravity data**
 Jordan Tom, Fausto Ferraccioli, A.B. Watts, Egidio Armadillo, Charlotte Moss, Hugh Corr, Emanuele Bozzo, Giorgio Caneva, Carl Robinson. *Speaker Jordan Tom*
 10:26 am **Regional airborne scalar gravimetry for geoid determination**

Olesen Arne Vestergaard, Rene Forsberg. *Speaker Olesen Arne Vestergaard*
 10:40 am **Coffee Break (30 minutes)**
 11:10 am **The impact of littoral aerogravity on coastal geoid heights**
 Roman Daniel. *Speaker Roman Daniel*
 11:24 am **Precise gravity timeseries and instrumental properties from combination of superconducting and absolute gravity measurements**
 Wziontek Hartmut, Reinhard Falk, Herbert Wilmes, Peter Wolf. *Speaker Wziontek Hartmut*
 11:38 am **Comparison of time series from superconducting gravimeter with hydrological models of various spatial extents and GRACE**

Virtanen Heikki, Mirjam Bilker-Koivuula, Jaakko Mkinen, Maaria Tervo, Jenni Virtanen, Bertel Vehvilinen, Markus Huttunen, Risto Mkinen. *Speaker Virtanen Heikki*
 11:52 am **Determination of the transformation function between UEGN and the Hungarian gravity networks**
 Foldvary Lorant, Lajos Volgyesi, Geza Csapo. *Speaker Foldvary Lorant*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Tailored Reference Geopotential Model for Egypt
 Abd-Elmotaal Hussein. *Speaker Abd-Elmotaal Hussein*
Investigation of gravity gradients of potential anomaly in Iran territory using GRACE
 Kiamehr Ramin, Mehdi Eshagh. *Speaker Kiamehr Ramin*
Adjustment of the gravity reference network of Estonia
 Oja Tõnis. *Speaker Oja Tõnis*
Calibration of relative LaCoste-Romberg G and Scintrex CG-5 gravimeters in the Estonian and Finnish calibration lines
 Oja Tõnis. *Speaker Oja Tõnis*
Satellite altimetry over land and coastal zones: a summary of achievements of IAG SG2.3 over 2003-2007
 Hwang Chainway. *Speaker Hwang Chainway*
Accuracy Evaluation for SST Gravity Field Models in China
 Luo Jia. *Speaker Luo Jia*
Simulation Research of Satellite-to-Satellite Tracking in Lunar Gravity Field Determination
 Luo Jia. *Speaker Luo Jia*
New investigation on the choice of the tailored global geopotential model for Algeria
 Benahmed Daho Sid Ahmd, C. L. Merry. *Speaker Benahmed Daho Sid Ahmd*
A new vertical datum for Algeria derived from the combination of the local Gravimetric geoid and GPS/Levelling data
 Benahmed Daho Sid Ahmd, C. L. Merry. *Speaker Benahmed Daho Sid Ahmd*
Towards a new global digital elevation model
 Berry Philippa, Richard Smith, Jennifer Freeman, Jerome Benveniste. *Speaker Berry Philippa*
The Antarctic Geoid Project (IAG Commission Project 2.4)
 Scheinert Mirko. *Speaker Scheinert Mirko*
Self-adaptive choice of a system of localizing base functions for regional gravity field recovery
 Keller Wolfgang. *Speaker Keller Wolfgang*
On the principal difficulties and ways to their solution in the theory of gravitational condensation of infinitely distributed dust substance
 Krot Alexander. *Speaker Krot Alexander*
Coastal and land Applications of satellite altimetry
 Chang Xiaotao, Guo Jinyun, Li Jiancheng, Zhang Chuanyin, Dang Yamin. *Speaker Chang Xiaotao*
Gravity changes caused by tide-generating potential and by internal dislocation in a 3-D heterogenous earth (1) theory
 Fu Guangyu, Wenke Sun. *Speaker Wenke Sun*
GRACE application to the receding Lake Victoria water level and the Australian drought

Awange Joseph, Dr.-Ing. Mohammad A. Sharifi, Prof. Wolfgang Keller, Prof. Will E. Featherstone, Dr. Michael Kuhn. *Speaker Awange Joseph*
Solution of the inverse Stokes and inverse Hotine problems to order f for an ellipsoidal boundary
 Heck Bernhard, Kurt Seitz. *Speaker Heck Bernhard*
Comparison of analytical and numerical methods for the computation of the potential of different mass elements and its first or second derivatives
 Wild-Pfeiffer Franziska, Bernhard Heck, Kurt Seitz. *Speaker Wild-Pfeiffer Franziska*
A Molodenskij geoid model in Iran
 Najafi-Alamdari Mehdi, Seyed Rohallah Emadi, Makan. Abdolhazadeh. *Speaker Najafi-Alamdari Mehdi*
Realisation of one centimetre geoid in Klang Valley
 Chang David, Dr Samad Bin Hj Abu, Mr Soeb Nordin. *Speaker Chang David*
Malaysia Airborne Gravity and Geoid Determination Project
 Abu Samad, David Chang Leng Hua, Soeb Nordin. *Speaker Abu Samad*
On the feasibility of Biased Kriging
 Dermanis Athanasios. *Speaker Dermanis Athanasios*
The fast analysis of GOCE gravity field
 Xu Xinyu, Jc Li, Xiancai Zou, Chunbo Fan, Yonghai Chu. *Speaker Xu Xinyu*
Fitting the best geopotential model for Argentina: a case study at Patagonia.
 Pereira Ayelen. *Speaker Pereira Ayelen*
Preliminary results of the first campaign of absolute gravity measurements at Polish GNSS stations
 Walo Janusz, Tomasz Olszak, Andrzej Pachuta, Marcin Barlik, Ryszard Szpunar, Dominik Prochniewicz. *Speaker Tomasz Olszak*
Improved marine gravity field from satellite altimetry: Case study of the South China Sea
 Bao Lifeng, Yang Lu. *Speaker Bao Lifeng*
A New Improved Geoid In North Eastern Italy
 Sterzai Paolo. *Speaker Sterzai Paolo*
Combination Method for Computing TerrainCorrections: A case study in a region in Iran

Jalal Shiva, Hossein Zomorrodian. *Speaker Jalal Shiva*
Reference frame consistency in CHAMP and GRACE earth gravity models
 Kotsakis Christopher. *Speaker Kotsakis Christopher*
Performance Simulations of a GRACE Follow-On Mission Using a Mascon Approach
 Loomis Bryant, R. Steven Nerem, Scott Luthcke, Dave Rowlands. *Speaker Loomis Bryant*
Mass changes detected from GRACE data in Argentina
 Pereira Ayelen, Rene Forsberg. *Speaker Pereira Ayelen*
The role of the covariance function in least-squares collocation for local gravity field modelling
 Darbeheshti Neda, Will Featherstone, Wolfgang Keller. *Speaker Darbeheshti Neda*
Computation of Geoid and its interpretation in Saurashtra, western India using Gravity data
 Prajapati Sanjay, Bijendra Singh, C.C. Tscherning. *Speaker Prajapati Sanjay*
Estimating the time-variable component of the sea surface topography with geodetic data
 Vergos Georgios S., Ilias N. Tziavos. *Speaker Vergos Georgios S.*
Analysis of repeated GPS measurements over a geodetic network and a common adjustment of heterogeneous height data
 Tziavos Ilias N., Dimitrios Tsoulis, Vassilios N. Grigoriadis, Vassilios D. Andriatsanos, Eleni A. Tzanou. *Speaker Tziavos Ilias N.*
Robust Trend Estimation from GOCE SGG Satellite Track Cross-Over Differences

Jarecki Focke. *Speaker Jarecki Focke*
Stokes-like solution to the second geodetic boundary-value problem
 Ziqing Wei. *Speaker Ziqing Wei*
Geoid determination combining ground data and satellite-derived global models
 Pail Roland, Fernando Sans, Norbert Kuehtreiber, Mirko Reguzzoni, Bernadette Wiesenhofer. *Speaker Pail Roland*
Three-Dimensional Microgravity modeling of Tehran subway basement.
 Nasuti Aziz, Dr.Vahid Ebrahimzadeh Ardestani. *Speaker Nasuti Aziz*
The Precise orbital determination of Earth satellites: a tool for investigating the atmosphere ?
 Vespe Francesco. *Speaker Vespe Francesco*
Geopotential number estimation by the use of Digital Terrain Model
 Szeghy Erika. *Speaker Szeghy Erika*
Current status of gravity measurements in the Republic of Croatia with the Basic Gravity Network Finalization Project
 Lucic Maro, Mihajla Liker, Ilija Grgic, Bojan Barisic, Marija Repanic. *Speaker Mihajla Liker*

Precise determination of vertical gravity gradients in the Czech gravity network
 Lederer Martin, Vojtech Plink. *Speaker Lederer Martin*
How to detect small hydrological variations in gravity by repeated measurements with field gravimeters?
 Naujoks Marco, Adelheid Weise, Corinna Kroner, Thomas Jahr. *Speaker Naujoks Marco*
Estimation of a new high-accuracy marine geoid model offshore Argentina using CHAMP and GRACE-derived geopotential models
 Tocho Claudia, Michael G. Sideris. *Speaker Tocho Claudia*
Analysis of synthetic TFM patterns for salt domes
 Panisova Jaroslava, Peter Vajda. *Speaker Panisova Jaroslava*
Gravity field parameter estimation using QR factorization
 Bruinsma Sean, J.C. Marty, M. Baboulin, S. Gratton, G. Balmino. *Speaker Bruinsma Sean*
The inversion of the Poisson integral in the wavelet domain
 Elhabiby Mohamed, Michael G. Sideris. *Speaker Elhabiby Mohamed*
The Bias in GRACE estimates of continental water storage variations
 Zapreeva Elena, Roland Klees, Hessel C. Winsemius, Hubert H.G. Savenije. *Speaker Zapreeva Elena*
Signals of extreme weather conditions in central Europe from GRACE 4-D wavelet expansions
 Seitz Florian, Michael Schmidt, C.K. Shum, Lei Wang. *Speaker Seitz Florian*
Construction of the Absolute Gravity Network in Taiwan
 Chung Yi-Da, Chun-Sung Chen. *Speaker Chun-Sung Chen*
The core drift and oscillations as the main mechanism of non-tidal variations of gravity
 Barkin Yuri. *Speaker Barkin Yuri*
The detailed model of Antarctic gravity field
 Grushinskiy Andrey, Andrey Aleksandrovich Buluchev. *Speaker Grushinskiy Andrey*
Research on the calibration of onboard accelerometer by dynamic method
 Zou Xiancai, J.Li, Luo Jia. *Speaker Zou Xiancai*
The ICAGM07 geoid model for the North-East Atlantic (Iberia Canaria - Azores)
 Catalao Joao, Miguel J. Sevilla, Helena Koll. *Speaker Catalao Joao*
Gravity field determination at the AIUB - the celestial mechanics approach.
 Prange Lars, Gerhard Beutler, Leos Mervart, Rolf Dach, Adrian Jggi. *Speaker Prange Lars*
Accuracy analysis of external reference data for GOCE evaluation in space and frequency domain
 Wolf Karen Insa. *Speaker Wolf Karen Insa*
Calibration in the MBW of simulated GOCE gradients aided by ground data.
 Veicherts Martin, J. Boumann, C. C. Tscherning. *Speaker Veicherts Martin*
An error model for the GOCE space-wise solution by Monte Carlo methods
 Migliaccio Federica, Mirko Reguzzoni, Fernando Sans, Nikolaos Tselfes. *Speaker Mirko Reguzzoni*
Downward continuation of airborne gravity by Poisson integral, least-squares collocation and Fourier transform: a case study over the Kuroshio east of Taiwan
 Hwang Chainway, Artu Eilmann, Hsuan-Chang Shih, Yu-Shen Hsiao. *Speaker Hwang Chainway*
Inversion of gravity data N wavelet domain using normalized forward models
 Motasharrie Arash, Hossein Zomorrodian. *Speaker Motasharrie Arash*
Estimation of the time-variable part of the geoid from monthly GRACE solutions
 Huang Jianliang. *Speaker Huang Jianliang*
Status Report of Commission 2 - Gravity Field
 Jekeli Christopher. *Speaker Jekeli Christopher*
Ocean tide loading correction for GPS static positioning in Taiwan: comparison of GPS and SG loading effects
 Wang Chun-Huan, Chun-Sung Chen, Ta-Kang Yeh, Chainway Hwang. *Speaker Wang Chun-Huan*
Non-stationary covariance function modelling for least-squares collocation
 Darbeheshti Neda, Will Featherstone. *Speaker Darbeheshti Neda*
Recovery and analysis of earths gravity field using FORMOSAT-3/ COSMIC GPS data
 Lin Tingjung, Chienway Hwang, Tzu-Pang Tseng. *Speaker Lin Tingjung*
Gravity field modeling using spherical radial basis functions A case study for the territory of the Netherlands
 Tenzer Robert, Roland Klees, Ilya Prutkin, Tobias Wittwer, Erna Oudman. *Speaker Tenzer Robert*

What type of spherical radial basis functions are best suited for local gravity field modeling?

Tenzen Robert, Roland Klees. *Speaker Tenzer Robert*
Comparison of techniques for the computation of a height reference surface from gravity anomalies and GPS/levelling data a case study at the territory of Germany

Tenzen Robert, Uwe Schirmer, Roland Klees, Johannes Ihde, Ilya Prutkin, Gunter Liebsch, Tobias Wittmer, Uwe Schaefer, Bas Alberts. *Speaker Tenzer Robert*

Analysis of the possibility of predicting sea floor from vertical gravity gradient

Jin Taoyong, Jiancheng Li, Zhengtao Wang, Yunsun Wu. *Speaker Jin Taoyong*

Error-covariances of the estimates of spherical harmonic coefficients computed by LSC, using simulated GOCE gradiometer data

Arabelos Dimitrios, Carl Christian Tscherning. *Speaker Arabelos Dimitrios*
Scientific report of subcommission 2.1 for the period 2003-2007

Okubo Shuhei. *Speaker Okubo Shuhei*
Overview of GOCE Level 2 Gravity Field Products

Gruber Thomas, Reiner Rummel, Radboud Koop. *Speaker Gruber Thomas*
Upward continuation of seafloor gravity data over inland seas

Ellmann Artu, Harli Jrgenson. *Speaker Ellmann Artu*
Off-line validation tools for GOCE gradiometer data

Plank Gernot, Michael Kern, Roger Haagmans, Rune Floberghagen. *Speaker Plank Gernot*

Mean vertical gravity gradient within the topography

Tenzen Robert, Artu Ellmann. *Speaker Tenzer Robert*
In-flight validation methods for the GOCE gradiometer

Kern Michael, Roger Haagmans, Gernot Plank, Rune Floberghagen. *Speaker Kern Michael*

Physical interpretation of the differences between the gravity anomalies and gravity disturbances A case study for the Canadian Rocky Mountains

Tenzen Robert, Artu Ellmann, Philip Moore, Petr VančEk, Pavel Novk, Peter Vajda. *Speaker Tenzer Robert*

Numerical Comparison of Two Strategies for Geoid and Quasigeoid Determination over Sweden

Agren Jonas, Ramin Kiammehr, Lars E Sjöberg. *Speaker Agren Jonas*

Image superresolution via filtered scales integral reconstruction applied to GOCE Geoid Data

Vingione Guido, Ciro Caramiello, Alessandra Tassa, Eric Monjoux, Rune Floberghagen, Alessandra Buongiorno. *Speaker Vingione Guido*

Geoid-type surface computation for the improved determination of heights from global positioning systems

Soltanpour Ali, Hossein Nahavandchi. *Speaker Soltanpour Ali*
GRACE and the geoid in South America

Blitzkow Denizar, Ana Cristina O. Cancoro De Matos, Ilce De Oliveira Campos, Flvio Guilherme Vaz De Almeida, Maria Cristina B. Lobianco. *Speaker Blitzkow Denizar*

Improving the precision of GPS acceleration for moving base gravimetry

Li Xiaopeng, Christopher Jekeli. *Speaker Li Xiaopeng*
On Some Aspects of GLS06 Data Quality assessment and downward continuation

Saleh Jarir, Dan R. Roman, Yan Ming Wang. *Speaker Saleh Jarir*
Evaluation of the Regularization Methods Used in the Torus-Based Semi-Analytical Approach for Gravity Field Recovery

Xu Chen, Michael G. Sideris. *Speaker Xu Chen*
Ellipsoidal corrections for geoid computations with modified kernels

Claessens Sten, Will Featherstone. *Speaker Claessens Sten*
A unified definition and formulation of analytical approximations in gravity field modelling

Claessens Sten, Will Featherstone. *Speaker Claessens Sten*
Determination of Earth Gravity Field Model WHU-GM-05 Using GRACE Gravity Data

Wang Zhengtao, Jiancheng Li, Dingbo Chao, Weiping Jiang. *Speaker Wang Zhengtao*

Modelling range rates for recovering the Earths gravity field by fully taking the errors of acceleration measurements into account

Shen Yunzhong, Peiliang Xu, Houze Hsu. *Speaker Shen Yunzhong*
Combined vertical motion model- a case study for the Great Lakes

Rangelova Elena, Michael G. Sideris. *Speaker Rangelova Elena*
On the potential of least squares product spectra for calibration of Superconducting Gravimeter and atmospheric reduction

Abd El-Gelli Mahmoud, Spiros Pagiatakis, Ahmed El-Rabbany. *Speaker Spiros Pagiatakis*
Insights into the Mexican Gravimetric Geoid (GGM05)

Santos Marcelo, David Avalos, Petr Vanicek. *Speaker Santos Marcelo*
Approach of regional gravity field modeling from GRACE data for geoid model improvement for Japan

Kuroishi Yuki, Frank G. R. Lemoine, David D. Rowlands. *Speaker Kuroishi Yuki*
Towards the optimum strategy of determination of terrain corrections in Poland

Krynski Jan. *Speaker Krynski Jan*
Forward gravity modelling of global databases - report of IAG study group 2.2 for the period 2003 – 2007

Kuhn Michael, Dimitrios Tsoulis. *Speaker Kuhn Michael*
Shallow-water gravity anomalies over China Seas from retracked Geosat/GM and ERS-1/GM altimetry

Hwang Cheinway, Haihong Wang, Yuande Yang. *Speaker Hwang Cheinway*
Qu-AUSSIE-Geoid: The anticipated new Australian geoid-type model

Featherstone Will, S. J. Claessens, M. Kuhn, J.F. Kirby, N. Darbeheshti, M. Filmer. *Speaker Featherstone Will*
Analysis and Comparison of multi-year GRACE Gravity Field Time Series by means of spectral and spatial Techniques

Zenner Lieselotte, Thomas Peters. *Speaker Zenner Lieselotte*
Analysis of the Gradiometer Equations of the GOCE Satellite Mission

Stummer Claudia, Bjrn Frommknrecht. *Speaker Stummer Claudia*
Regional astrogeodetic validation of GPS/levelling data and quasigeoid models

Voigt Christian, Heiner Denker. *Speaker Voigt Christian*
Activities of IAG Subcommission 2.2: Spatial and Temporal Gravity Field and Geoid Modelling

Vermeer Martin. *Speaker Vermeer Martin*
Postseismic deformation and gravity changes around Marmara Sea

Roedelsperger Sabine, Ugur Dogan, Semih Ergintav, Carl Gerstenecker. *Speaker Roedelsperger Sabine*
An auto-adaptive method for numerical integration over the Earth's surface in gravity field studies

Nesvadba Otakar. *Speaker Nesvadba Otakar*
Determination of precise kinematic orbits of CHAMP and GOCE satellites for gravity field modeling

Zhao Qile. *Speaker Zhao Qile*
On the rigorous determination of orthometric heights in regional areas

Manoussakis Gerassimos, Demitris Delikaraoglou, George Ferentinos. *Speaker Manoussakis Gerassimos*
Gravity field modeling on the basis of satellite accelerations directly derived from onboard GPS measurements

Zhao Qile. *Speaker Zhao Qile*
The Realization of Three-Dimensional Inversion of Non-tidal Gravity Changes by Wavelet Decomposition

Liu Shaoming, Minyu Jia, Shaoan Sun, Chongyang Shen. *Speaker Liu Shaoming*
The analysis of models of the Earths gravity field derived from GRACE using empirical orthogonal functions

Wen Hanjiang. *Speaker Wen Hanjiang*
Preparing the next generation EGM; Satellite altimetry for gravity and Mean sea surface determination

Andersen Ole, Per Knudsen. *Speaker Andersen Ole*
A preliminary three-dimensional density model of the Western Carpathians based on the CELEBRATION 2000 seismic experiment.

Alasonati Tasarova Zuzana, Miroslav Bielik, Hans-Jrgen Gtze. *Speaker Alasonati Tasarova Zuzana*
Influence of hydrology-related temporal aliasing on the quality of monthly models derived from GRACE satellite gravimetric data

Encarnacao Joao, R.Klees, E.Zapreeva, P.Ditmar, J.Kusche. *Speaker Encarnacao Joao*
Terrain correction of gravity gradients by different approaches

Tth Gyula. *Speaker Tth Gyula*
New combined geoid solution by gravity space approach applied in the South of Portugal mainland

Antunes Carlos, Joo Catalo. *Speaker Antunes Carlos*
GOCE: System and Mission Performance, Data Processing and Mission Products

Floberghagen Rune, Danilo Muzi. *Speaker Floberghagen Rune*
Progress in Regional Quasi-geoid Determination of China

Li Jiancheng, Jinsheng Ning, Weiping Jiang, Dingbo Chao, Yibin Yao. *Speaker Li Jiancheng*
The effect of topographic and isostatic masses on the ETVs-tensor

Rozsa Szabolcs, Gyula Tth. *Speaker Rozsa Szabolcs*
Report on the Activities of SC 2.4 "Regional Geoid Determination"

Marti Urs. *Speaker Marti Urs*
The National Gravity Network of Switzerland

Marti Urs. *Speaker Marti Urs*
Report of Working Group on Satellite Gravity Theory

Sneeuw Nico. *Speaker Sneeuw Nico*
The analysis of models of the Earths gravity field derived from GRACE using empirical orthogonal functions

Wen Hanjiang, Zhu Guangbin, Xu Kehong. *Speaker Wen Hanjiang*
New combined geoid solution HGTUB2007 for Hungary

Tth Gyula. *Speaker Tth Gyula*
Report of the Internal Working Group of the ICCT on Inverse Problems and Global Optimization

Kusche Juergen. *Speaker Kusche Juergen*
Time variable gravity field recovery in local areas by means of Slepian functions

Weigelt Matthias, Oliver Bauer, Nico Sneeuw, Wolfgang Keller. *Speaker Weigelt Matthias*
Computing Lateral Topographical Density Variations and Terrain Roughness Effects on the Orthometric Heights in Iran

Saadat Seyed Abdoreza. *Speaker Saadat Seyed Abdoreza*
Determination of Local GPS/Levelling Geoid using New Computing Approaches

Erol Bihter, Rahmi Nurhan Elik. *Speaker Erol Bihter*
The gravity signature of the Sumatra-Andaman 2004 earthquake: comparison between GRACE observations and modeling.

De Linage Caroline, Luis Rivera, Sophie Lambotte, Jean-Paul Boy, Jacques Hinderer, Richard Biancale. *Speaker De Linage Caroline*
Reduced-dynamic Precise Orbit Determination Based on Helmert Transformation

Chen Junping, Jiexian Wang, Jrgen Klotz, Marcos Moreno, Volker Grund, Jan Bolte. *Speaker Chen Junping*
Space localizing gravity field determination for airborne gravimetry in consideration of topographical aspects

Mueller Felix, A.A. Makhloof. *Speaker Mueller Felix*
Combining GPS, Levelling and Geoid Data using Estimated Stochastic Parameters for Vertical Control in North-West of Turkey

Erol Bihter, Roland Klees, Michael G. Sideris, Rahmi N. Elik. *Speaker Erol Bihter*
Unveiling a glaciated Antarctic Volcano with airborne gravity data

Jordan Tom, Fausto Ferraccioli, Jones Phil, John Smellie, Marta Ghidella. *Speaker Jordan Tom*
Numerical approximation of trajectory disturbing gravity

Dongming Zhao, Wu Xiaoping, Zhang Chuanding. *Speaker Wu Xiaoping*
Use of a Fine Scale Hydrologic Model to Validate GRACE Measurements in the Amazon Basin

The analysis of models of the Earths gravity field derived from GRACE using empirical orthogonal functions

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Dongming Zhao, Wu Xiaoping, Zhang Chuanding. *Speaker Wu Xiaoping*
Use of a Fine Scale Hydrologic Model to Validate GRACE Measurements in the Amazon Basin

Chen Yiqun, Jeong Woo Kim123, Doug Alsdorf, R.E. Beighley, Yiping He, C.K. Shum, Kenneth Eggert, Burkhard Schaffrin. *Speaker Chen Yiqun*
Study of the orbit accuracy improvement for the Single and Multi-satellite SAR Mission using the currently released Geopotential Models

Sharifi Mohammadali, Marzieh Jafari. *Speaker Marzieh Jafari*
Prediction of the gravity field in shallow waters from the bathymetry data

Sarrailh Michel, Briais Anne, Lequentrec-Lalancette Marie-Franoise, Rouxel Didier. *Speaker Sarrailh Michel*
Report CP2.1: The European Gravity and Geoid Project (EGGP)

Denker Heiner, J.-P. Barriot, R. Barzaghi, D. Fairhead, R. Forsberg, J. Ihde, A. Kenyeres, U. Marti, M. Sarrailh, I.N. Tziavos. *Speaker Denker Heiner*
Alternative Mission Architectures for Future Satellite Gravity Missions

Wiese David, R. S. Nerem, P. L. Bender, M. Watkins, W. M. Folkner. *Speaker Wiese David*
Using airborne gravity to image sedimentary basins beneath the Thwaites glacier Catchment, West Antarctica

Diehl Theresa, John W. Holt, Donald D. Blankenship, Duncan A. Young, Fausto Ferraccioli. *Speaker Diehl Theresa*
Strengthening the vertical reference in the southern Baltic Sea by airborne gravimetry

Skourup Henriette, Rene Forsberg, Sofie Louise Sandberg Srensen, Christian Jermin Andersen, Uwe Schfer, Gnter Liebsch, Johannes Ihde. *Speaker Skourup Henriette*
Detecting the Baltic Sea Level Surface with GPS-measurements and Comparing it with the Local Geoid Model

Liibusk Aive, Harli Jrgenson. *Speaker Liibusk Aive*
On a feasibility of high-precision gravity field modeling based on data from non-dedicated satellite missions

Ditmar Pavel, Ales Bezdek, Xianglin Liu, Qile Zhao. *Speaker Ditmar Pavel*
Gravity and Geoid Projects in South America

Blitzkow Denizar, Maria Cristina Pacino. *Speaker Blitzkow Denizar*
Updated OCTAS geoid in the northern North Atlantic - OCTAS07

Omang Ove, Dag Solheim, Addisu Hunegnaw, Dagny I. Lysaker, Kouroush Ghazavi, Hossein Nahavandchi. *Speaker Omang Ove*
Accurate Account of the Topographic Effect on the Geoid Computations

Wang Yan Ming, J. Saleh, D Roman. *Speaker Wang Yan Ming*
Time series of absolute gravity in finland 1976-2006

Makinen Jaakko, Mirjam Bilker-Koivuola, Fred Klopping, Reinhard Falk, Olga Giltein, Ludger Timmen. *Speaker Makinen Jaakko*
Gravity field determination based on relativity

Svehla Drazen, Christophe Salomon. *Speaker Svehla Drazen*
Refinements of a numerical approach to direct methods in the determination of gravity potential from terrestrial data with iterations representing some small effects

Holota Petr. *Speaker Holota Petr*
Designing and Implementation of the Multi-purpose Physical Geodesy and Geodynamics Network of Iran (MPGGNI2005)

Hatam Yaghoub, Y. Djamour, P. Vanicek, R. Bayer, M. Mohammad Karim, A. M. Abolghasem, M. Najafi Alamdari, R. Saadat, H. Cheraghi, S. Rafiey, S. Arabi, H. Nankali, S. Hoseini. *Speaker Hatam Yaghoub*
FINN2007: The New Geoid Model for Finland

Finn Gunter, Erik W. Grafarend. *Speaker Finn Gunter*
Efficient gravity field solution from GOCE mission by DFT integral

Garcia Ramon, Moraila Carlos, Guzman Tiojari. *Speaker Garcia Ramon*
Monte Carlo Gibbs sampler methods for variance covariance estimations in gravity network adjustment

Hunegnaw Addisu, Roger Hipkin. *Speaker Hunegnaw Addisu*
A method of error adjustment in marine gravity with application to sea surface topography in Northern North Atlantic

Hunegnaw Addisu, John Edwards, Roger Hipkin. *Speaker Hunegnaw Addisu*
The first airborne gravity survey in ethiopia for the purpose of geoid determinations and the establishment of vertical height systems.

Hunegnaw Addisu, Roger Hipkin, Arne Olesen, Rene Forsberg. *Speaker Hunegnaw Addisu*
Determination of tensor gravity at GOCE height

Hunegnaw Addisu, Roger Hipkin. *Speaker Roger Hipkin*
Representation of regional gravity field by radial base function

Antoni Markus, Wolfgang Keller, Matthias Weigelt. *Speaker Antoni Markus*
GS004 Positioning and Applications

Conveners: Rizos Chris, Verhagen Sandra
Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Education Main Hall

Chairpersons: Sandra Verhagen

02:00 pm **The IAG Commission 4 Positioning & Applications**
Rizos Chris. *Speaker Rizos Chris*

02:30 pm **Carrier phase ambiguity resolution: challenges and open problems**
Teunissen Peter J.G., Sandra Verhagen. *Speaker Teunissen Peter J.G.*

02:50 pm **Carrier phase ambiguity resolution using multiple GNSS signals: geometric approaches and performance analysis**
Feng Yanming, Chris Rizos. *Speaker Feng Yanming*

03:10 pm **The total optimal criterion in solving the mixed integer linear model with GNSS carrier phase observations**
Cai Jianqing, Erik W. Grafarend, Congwei Hu. *Speaker Cai Jianqing*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Challenges In Stochastic Modelling, Quality Control And Design In Geodetic Positioning**
Santos Marcelo, Richard Langley, Don Kim, Rodrigo Leandro. *Speaker Santos Marcelo*

04:30 pm **Rigorous analysis of GPS time series with respect to operator-software noise**
Kutterer Hansjoerg, Xing Fang. *Speaker Kutterer Hansjoerg*

04:50 pm **Improving the stochastic model of GNSS observations**
Luo Xiaoguang, Michael Mayer, Bernhard Heck. *Speaker Luo Xiaoguang*

05:10 pm **Stochastic Modelling for Network-Based GPS Positioning**
Lim Samsung, Tajul A. Musa, Chris Rizos. *Speaker Lim Samsung*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Use of GPS survey methods for estimating
Abidin Hasanuddin, V. Sadarviana, J. Santoso, J. Kahar, H. Andreas, M. Gamal. *Speaker Abidin Hasanuddin*

Monitoring distortion of THAI Geodetic Network due to the BANDA-ACEH and NIAS earthquakes using GPS observations
Satirapod Chalermchon, Wim Simons, Chaiwat Promthong. *Speaker Satirapod Chalermchon*

Contemporary High-Resolution LiDAR Derived DEMs Could Inspire Developments in the Study of Impact Structures
Finn Michael, Gary W. Krizanich, E. Lynn Usery. *Speaker Gary Krizanich*

Monitoring Deformation using Robust and Conventional Kalman Filters
Mertikas Stelios. *Speaker Mertikas Stelios*

GPS Precise Point Positioning Accuracy Test: Regional Egyptian Case
Mousa Ashraf. *Speaker Mousa Ashraf*

The Impact of rose-type LEO constellations Parameters on the Number and Distribution of GPS Occultation Events

Xu Xiaohua, Li Zhenghang. *Speaker Xu Xiaohua*
GPS-Based monitoring of subsidence phenomenon

Abidin Hasanuddin, M.A. Kusuma, B. Istadi, A.B. Darmoyo, P. Sumintadireja, I. Purwaman, H. Andreas, M. Gamal. *Speaker Abidin Hasanuddin*
Monitoring land subsidence using GPS and INSAR

Patel Parul. *Speaker Patel Parul*
So Paulo State - BRA - Active GPS Network: status and services

Monico Joo F Galera, Daniele Barroca Marra Alves, Luiz Fernando Antonio Dalbello. *Speaker Monico Joo F Galera*
New solutions to classical geodetic problems on the ellipsoid

Sjoberg Lars. *Speaker Sjoberg Lars*
Low-Frequency multipath mitigation in kinematic positionings using the wavelet method: preliminary results

Menezes De Souza Eniuce, Joo Francisco Galera Monico, Wesley G. Canducci Polezel, Aylton Pagamisse. *Speaker Menezes De Souza Eniuce*
Analysis of Temporal Non-stationary Tropospheric Processes Using Geodetic PWV Time Series

Joel Botai, Dr. Combrinck, W. L., Prof. C. J. Dew (Hannes) Rautenbach. *Speaker Joel Botai*
A 3D Measurement and Analysis System for Quality Control Supported by AI-Techniques

Reiterer Alexander, Martin Lehmann, Johannes Fabiankowski. *Speaker Reiterer Alexander*
AutoGNSS: A new GPS Vector Processing Software.

Zurutuza Joaquin, Miguel J. Sevilla De Lerma, Miguel Elorza. *Speaker Zurutuza Joaquin*
An Forecasting Model for Combined Bias in Network RTK Based on NUB-SVR

Wang Xinzhou, Shu Haichi. *Speaker Wang Xinzhou*
Geodetic Height Determination of the Qomolangma Mountain

Dang Yamin, Chuanlu Cheng, Xiaorui Wang, Chunxi Guo. *Speaker Dang Yamin*
Precise point positioning: an attractive alternative to kinematic relative positioning

Zhang Xiaohong. *Speaker Zhang Xiaohong*
MyRTKnet: The accuracy and coverage of real-time positioning services for Survey and Mapping community in Malaysia

Nordin Soeb. *Speaker Nordin Soeb*
GNSS Precision Orbit Determination Based on Regional Stations and LEO Constellation

Geng Jianghui, Jingnan Liu, Cheinway Hwang. *Speaker Geng Jianghui*
Effect Analysis of Different Observations and Satellite Clock Bias Sampling Intervals on Ambiguity Convergence in PPP

Zheng Zuoya, Chen Yongqi, Lu Xiushan. *Speaker Chen Yongqi*
Research on 3-Dimensional laser scanner system monitoring the land sliding of the strip mine

Fan Yang, Hu Zeng-Qi, Qian Jian-Guo, Li Hui. *Speaker Fan Yang*
The Accuracy and Reliability of Shanghai VRS Network

Lou Lizhi, Yi Chen. *Speaker Lou Lizhi*
Establishing a GNSS receiver antenna calibration field in the framework of PROBRAL

Krueger Claudia, Jaime Freiberg Junior, Michael Mayer, Andreas Knpfler. *Speaker Krueger Claudia*
Performance improvement of network-based RTK-GPS positioning in North Taiwan

Yeh Ta-Kang, Zu-Yu Lee, Chun-Sung Chen. *Speaker Yeh Ta-Kang*
Analysis of multi-scale monitoring data for landslide disaster mitigation

Haberler-Weber Michaela, Dr. Andreas Eichhorn, Prof. Heribert Kahmen. *Speaker Haberler-Weber Michaela*
Model correction and analysis of the influence on high accuracy Baseline processing

Zou Xuan, Jingnan Liu, Weiping Jiang. *Speaker Zou Xuan*
Semi-linear method in nonlinear geodesy joint inversion with weight scaling factor

Xu Caijun, Kaihua Ding. *Speaker Xu Caijun*
Effect of Inter-Station Height Difference on GPS Vertical Positioning Accuracy

Sanli D. Ugur, Fatih Kurumahmut. *Speaker Sanli D. Ugur*
Impact of a GPS network location on tropospheric and positioning estimates

Francois Fund, Morel Laurent, Mocquet Antoine, Duroy-Nicolas Jolle, Durand Stphane. *Speaker Francois Fund*
Application of CAS to geodesy: a 'live' approach

Zaletnyik Pirooska, Bla Palncz, Joseph L. Awange, Erik W. Grafarend. *Speaker Zaletnyik Pirooska*
Region specific model for tropospheric delay correction for GPS ranging over Indian Subcontinent

Raju Suresh, Korak Saha, K. Parameswaran. *Speaker Raju Suresh*
GPS Based Water Vapor Estimation Using Models Developed Based On Atmospheric Data Over The Indian Sub-Continent

Raju Suresh, Korak Saha, K. Parameswaran. *Speaker Raju Suresh*
A Study of Best-Fit Plane Accuracy of 3D Laser Scanner Point Cloud

Wu Chien-Ting, Chun-Sung Chen, Mei-Li Liu. *Speaker Wu Chien-Ting*
Towards the development of next generation RTK technologies

Gao Yang, Lambert Wanninger, Sunil Bisnath, Wu Chen, Yanming Feng. *Speaker Gao Yang*
Testing DGNS and NRTK positioning accuracy and repeatability on long sessions

Stoppini Aurelio, Radicioni Fabio, Fastellini Guido. *Speaker Fabio Radicioni*
The impact of trivial baselines on GPS network solutions

Pikridas Christos, A. Fotiou, C.Pikridas, D. Rossikopoulos, M. Chatzinikos. *Speaker Pikridas Christos*
Crustal velocity field modelling with neural network and with polynomials

Zaletnyik Pirooska. *Speaker Zaletnyik Pirooska*
Monitoring Crustal and Dam Deformation and the Dam Movement During the Occurrence of an Earthquake Using GPS, at the Koyna Dam in Western India

Kulk

Li Liu, Zhang Jingnan, Zhang Shiyu, Jiang Yanxiang, Lu Xu, Xia Yi. *Speaker Tao Li*

An evaluation of geodetic positioning error simulated using the fast ray tracing algorithms through the JMA mesoscale numerical weather data
Ichikawa Ryuichi, Thomas Hobiger, Koyama Yasuhiro, Kondo Tetsuro.
Speaker Ichikawa Ryuichi

Reliability of Helmert coordinate transformation for horizontal control networks in deformation analysis
Erdogan Bahattin, Serif Hekimoglu. *Speaker Erdogan Bahattin*

An investigation into robust estimation applied to correlated GPS networks
Erenoglu Ramazan Cuneyt, Serif Hekimoglu. *Speaker Erenoglu Ramazan Cuneyt*

A critical assessment on the current EGNOS performance
Opitz Michael, Robert Weber, Wolfgang Winkler. *Speaker Opitz Michael*

The behavior of the horizontal gradients of TEC over Europe during different geomagnetic conditions and its impact on GPS positioning accuracy
Krankowski Andrzej, Shagimuratov Irk, Baran Lubomir, Sieradzki Rafal, Krypiak-Gregorczyk Anna. *Speaker Krankowski Andrzej*

Verification of GPS derived ZTD and IWV potential for meteorology
Kruczyk Michal. *Speaker Kruczyk Michal*

Ionospheric scintillation impact on precise positioning at European auroral latitudes
Forte Biagio. *Speaker Forte Biagio*

Report on Activities 2003-2007 for IAG Sub-Commission 4.3: GNSS Measurement of the Atmosphere
Skone Susan, Hans Van Der Marel. *Speaker Skone Susan*

Precise vertical velocities from continuous GPS
Bennett Rick, Rick Bennett, Sigrun Hreinsdottir. *Speaker Bennett Rick*

Linear combination for differential radar interferometry
Ge Linlin. *Speaker Ge Linlin*

Modelling tropospheric delays without mapping functions
Smythe Peter, Paul Tregoning. *Speaker Smythe Peter*

Effect of un-modeled errors on GNSS integer ambiguity resolution and validation
Wang Jian, Jinling Wang. *Speaker Jinling Wang*

Analysis on temporal-spatial variation of Australian Tec
Wang Jian, Gary Ouyang, Jinling Wang, David Cole. *Speaker Jinling Wang*

Towards Single Epoch Ambiguity Resolution with Multiple Frequency Galileo
Wu Chen, Ji Shenyue, Xiaoli Ding, Yongqi Chen. *Speaker Wu Chen*

Network RTK with moving reference stations
Wu Chen, Congwei Hu, Xiaoli Ding, Yongqi Chen, Shan Gao. *Speaker Wu Chen*

Continuous Orbit Polynomials Stream: the source, usage and evaluation
Dousa Jan, Leos Mervart. *Speaker Dousa Jan*

GPS clock correction estimation for near real-time orbit determination applications
Bock Heike, Yoke Yoon, Rolf Dach, Oliver Montenbruck. *Speaker Bock Heike*

Results obtained applying ionosphere maps for differential and precise point positioning in the South American region
Costa Sonia, Mauricio Alfredo Gende, Claudio Antonio Brunini, Alberto Luis Da Silva, Newton Jos De Moura Junior. *Speaker Costa Sonia*

Geodetic Remote Sensing: Past and Future Work of the IAG SC 4.4
Ding Xiaoli, Xiaoli Ding, Linlin Ge, Makoto Omura. *Speaker Ding Xiaoli*

Water vapour estimations under heavy storm conditions in Hungary
Rozsa Szabolcs, Ferenc Dombai, Dvid Ablonczy. *Speaker Rozsa Szabolcs*

An Optimality Property of GNSS Integer Ambiguity Bootstrapping
Teunissen Peter J.G.. *Speaker Teunissen Peter J.G.*

Post-processing of GPS data with one minute of observations using virtual reference stations
Sejas Mauricio, Claudia Pereira Krueger. *Speaker Sejas Mauricio*

Total mapping function
Orliac Etienne, Norman Teferle, Alan Dodson, Richard Bingley. *Speaker Alan Dodson*

PPP vs Double-Difference positioning: first results of the GINS CNES/GRGS software.
Perosanz Felix, Stavros Melachroinos, Sofiane Rekhis, Sylvain Loyer, Richard Biancale. *Speaker Perosanz Felix*

Uncertainty assessment in Kalman filter techniques with respect to non-stochastic measurement errors
Neumann Ingo. *Speaker Neumann Ingo*

Combination of GPS and Levelling Data in terms of 1D, 2D and 3D Deformation Analysis
Erol Serdar, Tefvik Ayan. *Speaker Erol Serdar*

Monitoring hydrologically induced deformations in Gothenburg with GPS
Haas Rudiger, Natthachet Tangdamrongsub, Hans-Georg Scherneck, Jan Johansson. *Speaker Haas Rudiger*

Working Group on Numerical Prediction Model for Positioning: report on activities
Santos Marcelo, Anna Jensen. *Speaker Santos Marcelo*

Accuracy in zenith tropospheric delay from the Canadian regional numerical weather model
Nievinski Felipe. *Speaker Nievinski Felipe*

Impact of Galileo measurements on zero- and double-difference processing of GPS data for a global IGS network
Heinze Markus, Drazen Svehla. *Speaker Heinze Markus*

A new technique for topographic surveys
Leandro Rodrigo, Tule Barcelos Maia. *Speaker Tule Barcelos Maia*

An assessment of Bernese GPS software precise point positioning for geodetic monitoring applications
Teferle Norman, Etienne Orliac, Richard Bingley, Alan Dodson. *Speaker Teferle Norman*

Humidity convergence zones influence in the seasonal variability of the tropospheric zenithal delay in the South America.
Sapucci Luiz Fernando, Luiz Augusto Toledo Machado, Joo Francisco Galera Monico. *Speaker Sapucci Luiz Fernando*

L2C signal assessment using IGS L2C network
Sukeova Liliiana, Richard B. Langley, Rodrigo F. Leandro, Okwuchi Nnani. *Speaker Sukeova Liliiana*

An adaptive knowledge-based system for indoor navigation
Grejner-Brzezinska Dorota, Charles Toth, Shahram Moafipoor, Jay Kwon. *Speaker Grejner-Brzezinska Dorota*

GPS Tropospheric delay estimation from different softwares - results and analyses
Monico Joo F Galera, Daniele Barroca Marra Alves, Guilherme Poleszuck Santos Rosa, Luiz Fernando Antonio Dalbello. *Speaker Monico Joo F Galera*

Next-generation algorithms for navigation, geodesy and earth sciences under modernized Global Navigation Satellite Systems (GNSS)
Santos Marcelo, Richard Langley, Spiros Pagiatakis, Sunil Bisnath, Rock Santerre, Marc Cocard, Ahmed El-Rabbany, Ren Landry, Herb Dragert, Pierre Hroux, John Paul Collins. *Speaker Santos Marcelo*

A new GPS data analysis and positioning tool
Leandro Rodrigo, Richard B. Langley. *Speaker Leandro Rodrigo*

Ionospheric modelling in the North of Algeria
Kahlouche Salem, Kadri C., Dekkiche H., Mir R.. *Speaker Dekkiche H.*

Establishing corner reflector networks for PSINSAR analysis
Leighton Jon, A. Sowler, R.M. Bingley, F.N. Teferle. *Speaker Leighton Jon*

Correlation between codes for PPP
Daghay Salua. *Speaker Daghay Salua*

The Sigma-C model: a proposal for modelling physical correlations between GPS phase observations
Schön Steffen, Fritz K. Brunner. *Speaker Schön Steffen*

JMS003 Satellite Observations: Products and Applications
Conveners: Drummond James
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Economics Room 3
Chairpersons: Allen Huang
09:30 am **Satellite observations of atmospheric methane by the Atmospheric Infrared Sounder (AIRS)**
Xiong Xiaozhen, Chris Barnet, Eric Maddy, Xingpin Liu. *Speaker Xiong Xiaozhen*

09:45 am **Satellite Observations of Tropospheric Composition: from Regional Air Pollution to Global Climate**
Li Qinbin, Changsub Shim, Xun Jiang, Yang Chen. *Speaker Li Qinbin*

10:00 am **Interannual Variability of Regional Tropospheric Ozone Pollution: Extending the Data Record into the Next Decade**
Fishman Jack, John K. Creilson, Amy E. Wozniak, Jerry R. Ziemke. *Speaker Fishman Jack*

10:15 am **Recovering the data from the damaged HIRDLS Instrument**
Gille John, John Barnett, Charles Cavanaugh, James Craft, Vincil Dean, Thomas Eden, David Ellis, Chris Halvorson, Craig Hartsough, Chris Hepplewhite, Rashid Khosravi, Hyunah Lee, Bruno Nardi. *Speaker Gille John*

10:30 am **Assimilation of TES observations for the analysis of processes governing the composition of the troposphere**
Parrington Mark, Dylan Jones, Kevin Bowman, Larry Horowitz. *Speaker Parrington Mark*

10:45 am **Application of the teledetection dans l'évaluation de la diversité écologique des massifs forestiers en Algérie**
Zegrar Ahmed. *Speaker Zegrar Ahmed*

11:00 am **Coffee Break (30 minutes)**

11:30 am **Interannual variability of total ozone over the Indian**

subcontinent: a study based on NIMBUS 7 TOMS data using Morlet Wavelet analysis
V Madhu, K. Mohankumar. *Speaker V Madhu*

11:45 am **One decade of pyrogenic NMVOC emissions deduced from HCHO satellite data**
Stavrakou Jenny, Isabelle De Smedt, Michel Van Roozendael, Guido Van Der Werf, Louis Galgou. *Speaker Stavrakou Jenny*

12:00 pm **Geophysical validation of MIPAS-ENVISAT operational ozone data**
Cortesi Ugo, Jean-Christopher Lambert, Coralie De Clercq, Giovanni Bianchini, Thomas Blumenstock, Astrid Bracher, Elisa Castelli, Valery Catoire, Kelly Chance, Martine De Maziere, Philippe Demoulin, Sophie Godin-Beekmann, Nicholas Jones, Kenneth Jucks, Corneli Keim, Tobias Kerzenmacher, Harry Kuellmann, Jayanarayanan Kuttipurath, Marco Iarlori, Guangyuan Liu, Yi Liu, I. Stuart Mcdermid, Yajana Meijer, Francesco Mencaraglia, Sabine Mikuteit, Hermann Oelhof, Chiara Piccolo, Michael Pirre, Piera Raspollini, Farbizio Ravegnani, Jolyon Reburn, Gianluca Redaelli, John Remedios, Harjinder Sembhi, Dan Smale, Tilman Steck, Antonella Taddai, Costas Varotsos, Corinne Vigouroux, Alison Waterfall, Gerald Wetzel, Stephen Wood. *Speaker Cortesi Ugo*

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Room 3
JMS007 Stable Water Isotopes: from Basin to Global Scale
Conveners: McGuffie Kendal, Gibson John
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Mathematics Room B3
09:30 am **Relationship between stable isotope of precipitation and atmospheric circulation case study: application in a pilot basin in Middle Anatolia**
Tekeli Y.Inci, A.Unal Sorman. *Speaker Tekeli Y.Inci*

09:45 am **Air parcel trajectory analysis of stable water isotopes in water vapour in the Eastern Mediterranean Region**
Pfahl Stephan, Prof. Joel R. Gat, Prof. Heini Wernli. *Speaker Pfahl Stephan*

10:00 am **The isotopic signature of deep convective detrainment in a GCM**
Wright Jonathon, Adam Sobel, Gavin Schmidt. *Speaker Wright Jonathon*

10:15 am **Processes governing isotopic composition of precipitation in the Central Mediterranean, new insights from single rain event samples.**
Liotta Marcello, Serafino Bellissimo, Rocco Favara, Mariano Valenza. *Speaker Liotta Marcello*

10:30 am **Spatial and temporal relations between isotope ratios of water vapour and ocean surface conditions in the Southern Ocean**
Uemura Ryu, Yohel Matsui, Kei Yoshimura, Hideaki Motoyama, Naohiro Yoshida. *Speaker Uemura Ryu*

10:45 am **Modeling stable water isotope composition over northwestern Canada**
Field Robert. *Speaker Field Robert*

11:00 am **Coffee Break (30 minutes)**

11:30 am **Predicting the isotopic ratio of western European precipitation using an isotope trajectory model**
Mathews Adrian, Katherine Eames, Peter Rowe. *Speaker Katherine Eames*

11:45 am **MIBA-US: Temporal and spatial variation of water isotopes in terrestrial ecosystems across the United States**
Knohl Alexander, Kevin P. Tu, Vanessa Boukili, Paul D. Brooks, Stefania Mambelli, Todd E. Dawson, Miba-Us Site Participants. *Speaker Knohl Alexander*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -
Sensitivity of stable water isotopes to parameter changes in a land surface model
McGuffie Kendal, Ann Henderson-Sellers. *Speaker McGuffie Kendal*

iPLPS: Comparing simulations of stable water isotopes at the land surface
McGuffie Kendal, Ipilps Participants. *Speaker McGuffie Kendal*

JMS013 Aeronomy of Planetary Atmospheres: Comparative Planetology
Conveners: Coustenis Athena, Casavecchia Piergiorgio, Strobel Darrell, Titov Dmitry
Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Physics Room B
02:00 pm **The Present Climate of Venus**
Taylor Fredric W. *Speaker Taylor Fredric W*

02:27 pm **Venus Express - Results of the first year in orbit**
Svedhem Hkan. *Speaker Svedhem Hkan*

02:45 pm **Dynamical phenomena in the Venus atmosphere observed by VIRTIS/VEX**
Piccioni Giuseppe, Drossart Pierre, Lebonnois Sebastien, Sanchez-Lavega Agustin, Hueso Ricardo, Wilson Colin, Tsang Constantin, Adriani Alberto, Moriconi Maria Luisa, Grassi Davide, The Virtis-Venusx Team. *Speaker Piccioni Giuseppe*

03:03 pm **Non-LTE emissions in the upper atmospheres of terrestrial planets**
Drossart Pierre, Giuseppe Piccioni, Miguel-Angel Lopez-Valverde, Angioletta Coradini, Jean-Pierre Bibring. *Speaker Drossart Pierre*

03:21 pm **Coffee Break (30 minutes)**

03:51 pm **Thermal Fields in the Venusian Mesosphere as Observed by the VIRTIS-Venus Express Instrument**
Grassi Davide, Pierre Drossart, Giuseppe Piccioni, Patrick Irwin, Ludmilla V. Zasova, Nikolay I. Ignatiev, Alberto Adriani, Maria Luisa Moriconi. *Speaker Grassi Davide*

04:05 pm **Vortex Circulations on Venus and Earth**
Limaye Sanjay. *Speaker Limaye Sanjay*

04:23 pm **Structure and composition of the Venus upper atmosphere from the SPICAV/SOIR/ Venus Express observations.**
Bertaux Jean-Loup, A.C. Vandaele, O. Korabiev, E. Villard, A. Fedorova, D. Fussen, E. Quémerais, D. Beliaev, A. Mahieux, F. Montmessin, C. Müller, E. Neefs, D. Nevejans, V. Wilquet, A. Hauchecorne, A. Rodin. *Speaker Bertaux Jean-Loup*

04:41 pm **The regular thin structure of the upper cloud layer of Venus northern polar atmosphere observed from radio occultation data**
Vladimir Gubenko, Andreev, V.E., Pavelev, A.G.. *Speaker Vladimir Gubenko*

04:55 pm **Radiation in the atmospheres of terrestrial planets**
Titov Dmitry, Fredric W. Taylor, David Crisp, Mark A. Bullock, Nilton O. Renno. *Speaker Titov Dmitry*

05:13 pm **A numerical simulation of lower Venus atmosphere.**
Iga Shin-Ichi. *Speaker Iga Shin-Ichi*

05:14 pm **Superrotation of the Venus atmosphere simulated by an atmospheric general circulation model**
Ikeda Kohei, Masaru Yamamoto, Masaaki Takahashi. *Speaker Ikeda Kohei*

05:15 pm **The expansion of dust in the region of the Hellas Basin**
Ogohara Kazunori, Takehiko Satomura. *Speaker Ogohara Kazunori*

05:16 pm **Variations of elastic energy of Luni-Solar tides and repeatability and inversion of forms of atmospheric circulations**
Barkin Yuri. *Speaker Barkin Yuri*

05:17 pm **Oxygen chemistry and the stability of CO2 in Venus' middle atmosphere**
Mills Franklin, Brenton Lewis, Manuraj Shunmuga Sundaram, Sonika Johri, Tom Slanger, Yuk Yung, Mark Allen. *Speaker Mills Franklin*

05:18 pm **Hydrogen Collisions in Planetary Atmospheres, Ionospheres, and Magnetospheres**
Huestis David. *Speaker Huestis David*

05:19 pm **The weakly bound complexes of acetylene with rare gases and hydrogen molecule: molecular-beam scattering and pressure broadening cross section experiments**
Cappelletti David, F. Thibault, G. Blanquet, M. Bartolomei, F. Pirani. *Speaker Cappelletti David*

05:20 pm **Experimental investigation of neutral-neutral gas-phase reactions involving simple radicals (CN, OH, CH3 and C2) of relevance in the chemistry of planetary atmospheres**
Petrucci Raffaele, Francesca Leonori, Nadia Balucani, Kevin H. Hickson, Enrico Segoloni, Piergiorgio Casavecchia. *Speaker Petrucci Raffaele*

05:21 pm **Laboratory studies on neutral-neutral gas-phase reactions of O, C, and N atoms with organic and inorganic molecules of relevance in the chemistry of planetary atmospheres**
Leonori Francesca, Nadia Balucani, Kevin H. Hickson, Enrico Segoloni, Piergiorgio Casavecchia. *Speaker Leonori Francesca*

JMS015 Mid-latitude Droughts in a Changing Climate
Conveners: Seneviratne Sonia, Schär Christoph, Brönnimann Stefan
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Physics Room A
09:30 am **The Summer North Atlantic Oscillation (SNAO) since the eighteenth century**
Folland Chris, Dr David Fereday, Dr Hans Linderholm, Dr Jim Hurrell, Miss Sarah Ineson, Dr Jeff Knight, Dr Adam Scaife. *Speaker Folland Chris*

10:00 am **The influence of large scale atmospheric circulation on drought variability in Central Europe**
Beck Christoph, Jucundus Jacobeit. *Speaker Beck Christoph*

10:15 am **The contribution of landatmosphere coupling to recent European summer heatwaves**
Fischer Erich Markus, Sonia Seneviratne, Daniel Lthi, Christoph Schr. *Speaker Fischer Erich Markus*

10:30 am **Coffee Break (30 minutes)**

11:00 am **The effects of soil water conditions on the ECMWF seasonal forecast skill**
Ferranti Laura. *Speaker Ferranti Laura*

11:30 am **ERA-40 hydrological applications of drought analysis over the Iberian Peninsula**
Viterbo Pedro, Pedro M. A. Miranda. *Speaker Viterbo Pedro*

11:45 am **Aspects of summer droughts in Europe during 1958-2002**
Dutra Emanuel, Pedro Viterbo, Pedro M. A. Miranda. *Speaker Dutra Emanuel*

Dutra Emanuel

12:00 pm **The role of Mediterranean SST in enhancing the European heat wave of summer 2003**
Feudale Laura, Jagadish Shukla. *Speaker Feudale Laura*

12:15 pm **On the hydrological drought event in the Danube lower basin in 2003 and possible signals of the atmospheric and oceanic variability**
Mares Ileana, Petre Stanciu. *Speaker Mares Ileana*

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Physics Room A
Chairpersons: -
02:00 pm **Future Mid-latitude Summer Drought: Contrasts between North America and Europe**
Rowell Dave. *Speaker Rowell Dave*

02:30 pm **Long-term drought variability for the Mississippi basin from a novel application of the water budget equation**
Zeng Ning, Jin-Ho Yoon, Annarita Mariotti, Sean Swenson. *Speaker Zeng Ning*

02:45 pm **An Ingredients-Based Approach to Drought Mechanisms**
Nielsen-Gammon John, Boksoon Myoung. *Speaker Nielsen-Gammon John*

03:00 pm **Po River droughts: an evidence of solar-driven hydrological variability?**
Zanchettin Davide, Pietro Traverso, Mario Tomasino. *Speaker Zanchettin Davide*

03:15 pm **Changes in australian droughts using a simple water-balance model**
Gallant Allie, Kevin J. Hennessy, Freddie Mpelasoka. *Speaker Gallant Allie*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **A Paleo-Perspective on Western North American Drought**
Graham Nicholas. *Speaker Graham Nicholas*

04:30 pm **Occurrence and severity of droughts in the Alpine region: past and future**
Calanca Pierluigi. *Speaker Calanca Pierluigi*

04:45 pm **Future changes in European summer climate: mechanisms and implication for the hydrological cycle over France.**
Bo Julien, Laurent Terray. *Speaker Bo Julien*

05:00 pm **Dominant patterns of atmospheric blocking activity associated to meteorological and hydrological drought in Southern part of Romania**
Stefan Sabina, Norel Rimbu. *Speaker Stefan Sabina*

Developing and evaluating drought characteristics using Markov chain
Hejjam Sohrab. *Speaker Hejjam Sohrab*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Tree-ring reconstruction of hydrothermic index for AD1680-2005 in Near-Issik region, Kirgiz Republic
Solomina Olga. *Speaker Solomina Olga*

Monitoring of drought severity using GIS in Iran
Nosrati Kazem, Ali Alesheikh. *Speaker Nosrati Kazem*

The Rainfall Enhancement Programme against the Worst Drought in Sichuan
Wang Weijia. *Speaker Wang Weijia*

Definition of meteor-climatic scenarios for regional impact of climatic changes: an example from Northern Italy
Lacavalla Matteo. *Speaker Lacavalla Matteo*

Towards the forecasting of regional drought in France
Prudhomme Christel, Eric Sauquet. *Speaker Prudhomme Christel*

The Relation Between Drought and Dust Storm in Southeast Iran
Pedram Mojhdh. *Speaker Pedram Mojhdh*

Effect of soil drought to evapotranspiration on semi-arid grassland in Mongolia
Zhang Yinsheng, T. Ohata, G. Davaa. *Speaker Zhang Yinsheng*

Recent trend of dry spells in Isfahan Province, Iran
Nasri Masoud. *Speaker Nasri Masoud*

Mid-latitude droughts in a changing climate, a case study of drought frequency analysis in upper Benue Basin North-Eastern Nigeria.
Mu'Azu Abubakar. *Speaker Mu'Azu Abubakar*

Changes of extreme dry conditions in spring-summer for mid-latitude regions of northern Eurasia from observations, reanalysis and model simulations
Mokhov Igor, Alexander Chernokulsky, Igor Shkolnik, Vladimir Tikhonov. *Speaker Mokhov Igor*

Changes in extreme precipitation indices in Romania, 1961-2005
Boroneant Constanta, Madalina Baciu, Ioana Colfescu. *Speaker Boroneant Constanta*

JMS017 The Holocene-Anthropocene Transition: From Natural to Human-Dominance of the Earth System
Conveners: Mann Michael
Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room A
02:00 pm **Simulations of the past millennium with the GCM ECHO-G: comparison with regional reconstructions and simulated surface energy balance**
Zorita Eduardo, Hans Von Storch, Fidel Gonzalez-Rouco, Sebastian Wagner. *Speaker Zorita Eduardo*

02:30 pm **Relevance of the mid- to late-Holocene Period for Assessing Anthropogenic Climate Change**
Ammann Caspar. *Speaker Ammann Caspar*

03:00 pm **Toward a better understanding of regional climate change in the Holocene**
Shindell Drew. *Speaker Shindell Drew*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Proxy-Based Reconstructions of Past Hemispheric and Global Mean Surface Temperature Variations**
Mann Michael, Zhihua Zhang, Scott Rutherford, Raymond Bradley, Malcolm Hughes, Sonya Miller. *Speaker Mann Michael*

04:20 pm **Mid-Holocene climate shift induced by increasing carbon dioxide and surface albedo changes is correlated with global cultural hiatuses**
Bush Andrew. *Speaker Bush Andrew*

04:40 pm **From a climate to man-controlled C budget in a temperate wetland (Las Tablas de Daimiel National Park, Central Spain)**
Santisteban Juan, Rosa Mediavilla, Fernando Dominguez-Castro, M Jose Gil-Garcia, M Blanca Ruiz-Zapata, Cristino J. Dabrio. *Speaker Santisteban Juan*

04:55 pm **Holocene climatic-environmental variability in Campania and Apulia (southern Italy)**
Vincenzo Amato. *Speaker Vincenzo Amato*

05:10 pm **On the Anthropogenic Global Warming and Some it Consequences**
Mavrodiev Strachimir Cht.. *Speaker Mavrodiev Strachimir Cht.*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Bayesian multi-scale smoothing as a new tool for reconstructing regional climate and separating natural climate variability from human induced changes
Sorvari Sanna, Atte Korhola, Lasse Holmstrm, Jan Weckstrm, Panu Erst. *Speaker Sorvari Sanna*

Reconstruction and analysis of past climate of the Carpathian Basin in 500-1900 AD
Pongracz Rita, Judit Bartholy. *Speaker Judit Bartholy*

JMS019 Toward Bridging the Gap Between Weather and Inter-Annual Climate Variability: Processes, Phenomena and Prediction
Conveners: Davies Huw
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Mathematics Room A3
rder in the weather and climate dynamics
Dmitry Sonechkin. *Speaker Dmitry Sonechkin*

09:55 am **Verification of Hemispheric-Wide Winter Temperature Forecasts Based on Fall Snow and Atmospheric Anomalies**
Cohen Judah, Christopher Fletcher. *Speaker Cohen Judah*

10:20 am **Nonlinear error dynamics and the study of climate predictability**
Ding Ruiqiang, Jianping Li. *Speaker Ding Ruiqiang*

10:45 am **Coffee Break (30 minutes)**

11:15 am **What's inside a monthly mean data point? Examination of tropical column data**
Mapes Brian. *Speaker Mapes Brian*

11:40 am **Quasi-Equilibrium from Small Scales to Large: The Vertical Structure of Temperature and Moisture Perturbations in the Tropics**
Holloway Christopher, J. David Neelin. *Speaker Holloway Christopher*

Christopher
12:05 pm **Climate change in the tropics induced by indian weather events**

Illig Serena, Claire Perigaud. *Speaker Illig Serena*
Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A3

02:00 pm **Summer and Winter seasonal temperature lags: a comparison of regional patterns in Chile and Australia**
Bye John, Ian Smith, Claudia Villarroel Jimenez. *Speaker Bye John*

02:25 pm **The seamless weather-climate prediction problem**
Hoskins Brian. *Speaker Hoskins Brian*

02:50 pm **Atmospheric blocking and its space-time links to inter-annual climate variability**
Schwierz Conny, Mischa Croci-Maspoli, Huw C. Davies. *Speaker Schwierz Conny*

03:15 pm **On the downstream influence of the tropical Pacific on mid-latitude high-impact weather forecasting from weeks to seasons.**
Brunet Gilbert, Dr. Hai Lin, Bertrand Denis, Prof. Jacques Derome. *Speaker Brunet Gilbert*

03:40 pm **Coffee Break (30 minutes)**

04:10 pm **Use of satellite data and weather typing methods to understand time-scale interactions in the Indian Ocean climate**
Cassou Christophe, Claire Perigaud, Julien Boe, Julien Najac, Serena Illig. *Speaker Cassou Christophe*

04:35 pm **Potential and actual predictability of Indian monsoon rainfall derived from DEMETER using a Tie r 1.5 approach**
Bracco Annalisa. *Speaker Bracco Annalisa*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Developments of the ECMWF ensemble system
Buizza Roberto, Martin Leutbecher. *Speaker Buizza Roberto*

Impacts of forced sub-tropical waves on extra-tropical flow: Theory and Model Simulations
Spengler Thomas, Jana Campa, Huw C. Davies. *Speaker Spengler Thomas*

How do weather, insolation, and interannual phenomena affect spectral slopes of climate variables?
Amrhein Daniel, Alexey Kaplan. *Speaker Amrhein Daniel*

Breaking waves on the tropopause and their relation to inter-annual climate variability
Schwierz Conny, Olivia Martius, Huw C. Davies. *Speaker Schwierz Conny*

MS003 Aerosols, Radiation and Clouds (IRC, ICCP, ICACGP) Conveners: Nakajima Teruyuki, Isaac George

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Economics Main Hall

09:30 am **In-situ measurements of liquid water content profiles in mid-latitude stratiform clouds**
Korolev Alexei, G. A. Isaac, J. W. Strapp, S. G. Cober, H. W. Barker. *Speaker Korolev Alexei*

09:55 am **Effect of hygroscopic seeding on warm rain**
Kuba Naomi. *Speaker Kuba Naomi*

10:20 am **Submicron aerosol size distributions, hygroscopicities and CCN spectra measured at Gosan and Seoul, Korea**
Yum Seong Soo, James G. Hudson, Jong Hwan Kim, Seoung-Cheol Lee. *Speaker Yum Seong Soo*

10:45 am **Coffee Break (30 minutes)**

11:15 am **Possible Abnormal SW Flux Observation over Tibet and Its Impact on Cloud-Radiation Interaction- Case Study on Observation at YBJ Station**
Lu Daren. *Speaker Lu Daren*

11:40 am **Correlation between retrieved black carbon aerosol and carbon monoxide from satellite remote sensing**
Kim Jhoon, Jaehwa Lee. *Speaker Kim Jhoon*

12:05 pm **Modeled sensitivity of Aerosol burden, optical properties, and CCN production to uncertain physical assumptions.**
Seland Øyvind, Trond Iversen, Alf Kirkevg. *Speaker Seland Øyvind*

Øyvind

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Main Hall

02:00 pm **Cloud vertical structure observed from ship-based and space-borne radar and lidar**
Okamoto Hajime, Yuichiro Hagihara, Hiroshi Kumagai, Nobuo Sugimoto, Tomoaki Nishizawa, Atsushi Shimizu, Toshiaki Takano, Toshihiko Takemura, Teruyuki Nakajima. *Speaker Okamoto Hajime*

02:25 pm **Comparative analysis of ISCCP clouds between MIROC GCM, satellitedata, and global cloud resolving model NICAM**
Tsushima Yoko, Tomoo Ogura, Seita Emori. *Speaker Tsushima Yoko*

Yoko

02:50 pm **Spatial and temporal variability of aerosols over the Mediterranean Basin based on 6-year MODIS data**
Hatzianastassiou Nikos, Christos D. Papadimas 1,2, Nikos Mihailopoulos 3, Ilias Vardavas 2,4. *Speaker Christos D. Papadimas 1,2*

03:15 pm **SMART-COMMIT Observations and Deep-Blue Retrievals of Saharan Dust Properties during NAMMA**
Tsay Si-Chee, N. Christina Hsu, Qiang Ji, Myeong-Jae Jeong. *Speaker Tsay Si-Chee*

03:40 pm **Coffee Break (30 minutes)**

04:10 pm **Assessment of the Arctic dehydration/greenhouse feedback using measurements from the A-Train satellites.**
Grenier Patrick, Jean-Pierre Blanchet, Eric Fetzler, Graeme Stephens, David Winker, Colin Jones, Eric Girard. *Speaker Grenier Patrick*

04:35 pm **Decadal variations of surface solar radiation: Insights from GCM simulations and data analyses**
Wild Martin. *Speaker Wild Martin*

05:00 pm **Remote sensing of cloud sides of deep convective clouds**
Zinner Tobias, Alexander Marshak, Vanderlei Martins, Steven Lang. *Speaker Zinner Tobias*

MS014 Interactions of Land Cover and Climate (ICCL) Conveners: Andrea Meinrat O.

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Chemistry Room A

09:30 am **An impact of carbon/nitrogen interaction on the feedback between climate and a terrestrial carbon cycle.**
Sokolov Andrei, David Kicklighter, Ben Felzer, C. Adam Schlosser. *Speaker Sokolov Andrei*

09:46 am **Large Seasonal Swings in Leaf Area of Amazon Rainforests**
Myneni Ranga. *Speaker Myneni Ranga*

10:02 am **Evaluating the impacts of climatic and land use/cover changes on hydrological processes with a hydrological and vegetation dynamic coupling model in a large basin of the Loess Plateau**
Mo Xingguo, Zhonghui Lin. *Speaker Mo Xingguo*

10:18 am **Photosynthesis, respiration and isoprene emission in relation to rising temperature and drought kinetics in one-year-old Populus nigra saplings**
Brilli Federico, Csengele Barta, Alessio Fortunati, Francesco Loreto, Mauro Centritto. *Speaker Brilli Federico*

10:34 am **The land-use changes in the Brazilian Amazonia and the consequences on the regional precipitation over southern South America for the 2071- 2100 period, as evaluated with the regional climate model precis**
Carbajal Gerardo, Barbero Nidia, Ressler Cristina, Canziani Pablo. *Speaker Carbajal Gerardo*

10:50 am **Coffee Break (30 minutes)**

11:20 am **Coupling of drought and C emissions from biomass burning in Indonesia**
Field Robert, Samuel S.P. Shen. *Speaker Field Robert*

11:36 am **Mesoscale simulations of the land-surface effects of historical deforestation in a moist continental climate regime**
Klingaman Nicholas, Jason Butke, Daniel J. Leathers, Kevin Brinson, Elsa Nickl. *Speaker Klingaman Nicholas*

11:52 am **Evaluating Modeled Vegetation Phenology Over North American Continent With Satellite and Ground-based Observations**
Lu Lixin, Reto Stockli, Scott Denning, Peter Thornton, Jeff Morisette. *Speaker Lu Lixin*

12:08 pm **From biogenic through anthropogenic emissions: changes in the patterns of wet and dry deposition in Brazil**
Lara Luciene, Plinio B. Camargo, Paulo Artaxo, Elisabeth A. Holland, Theotonio Pauliquevis, Luiz A. Martinelli. *Speaker Lara Luciene*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Interactional effects of land cover and rainfall on soil moisture regime and sediment yield in Northeastern Region of India
Sharma Uttam C.. *Speaker Sharma Uttam C.*

Impact of a greener West Africa on the Mediterranean climate.
Baldi Marina, Dalu Giovanni, Segnalini Maria. *Speaker Segnalini Maria*

Urbanization and climate change in Varadero
Moya Barbaro. *Speaker Moya Barbaro*

Estimation of a vertical flux of fine-dispersed arid aerosol in the absence of dust storms
Granberg Igor, Alexandra Andronova, Maria Artamonova, Natalya Efimenko, Eugeny Grechko, Mikhail Iordansky, Alexander Kazansky, Valery Kramar, Leonid Maksimenkov, Fedor Pogarsky. *Speaker Maria Artamonova*

Climate change and water resources in Central Asia: what can we speak earnest about?
Rysbekov Yusup. *Speaker Rysbekov Yusup*

CO2, heat and water vapor profile within a canopy in a tropical rain forest at Peninsular Malaysia
Ohkubo Shinjiro, Yoshiko Kosugi, Satoru Takanashi, Naoko Matsuo, Makoto Tani, Abdul Rahim Nik. *Speaker Ohkubo Shinjiro*

Monitoring of climatic changes effects on forested areas by satellite remote sensing
Zoran Maria. *Speaker Zoran Maria*

The influence of irrigation and urbanization in the climate of the metropolitan area of Granada (South-Eastern Spain): a case study of the 2003 heat-wave
Pozo-Vazquez David, N Sanchez-Sanchez, Jp Montvez, Jm Jimnez-Gutierrez, Ricardo M. Trigo, Ja Ruiz-Arias, J Tovar-Pescador. *Speaker Pozo-Vazquez David*

Modelling impacts of land-use on regional climate: uncertainty due to model parameterisation and changes in vegetation parameters
Zhang Huqiang, Xuejie Gao, Yaohui Li. *Speaker Zhang Huqiang*

Effects of Land-Use Pattern on the Bidirectional Ammonia Exchange between the Atmosphere and Biosphere
Wu Yihua, Christa Peters-Lidard. *Speaker Wu Yihua*

Modeling the regional climate impact of boreal lakes
MacKay Murray. *Speaker MacKay Murray*

Assessing the climate impact of a large water reservoir
Salgado Rui, Emanuel Dutra, Perdro M. A. Miranda, Lurdes Semedo. *Speaker Salgado Rui*

A new approach of oxygen data acquisition and methods of data interpretation (the measurement system plant vital® 5000)
Vidyakina Svetlana, Edgar O.Klose. *Speaker Vidyakina Svetlana*

Assessment of irrigation requirements of the Chemical Oxygen Tree conducted under environmental conditions
Ben Ahmed Chedlia, Bechir Ben Rouina, Mekki Boukhriiss, Serhat Sensoy. *Speaker Serhat Sensoy*

A 50-Year-ago of climate change in the South of Tunisia: an assessment for the future
Ben Ahmed Chedlia, Bechir Ben Rouina, Mekki Boukhriiss, Serhat Sensoy. *Speaker Serhat Sensoy*

MS019 Middle Atmosphere Science (ICMA) Conveners: Hamilton Kevin

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Economics Room 2

09:30 am **Tropical waves in the LMDz stratospheric model and in the ERA40 reanalysis**
Lott Francois, Francois Vial, Jayan Kuttipurath. *Speaker Lott Francois*

Francois

09:45 am **Stereoscopic imaging of gravity waves in the mesosphere at -mid and low latitudes**
Moreels Guy, Faivre Michal, Clairemidi Jacques, Meriwether John, Lehmacher Gerald, Chau Jorge, Vidal Erick, Mougín-Sisini Davy. *Speaker Moreels Guy*

10:00 am **Variability of mesospheric gravity wave activity at high and mid-latitudes**
Hoffmann Peter, Werner Singer, Ralph Latteck, Dieter Keuer. *Speaker Hoffmann Peter*

10:15 am **The wave origin of a temperature fluctuations observed in the radio occultation measurements and the method of determination of the intrinsic frequency of internal long-period gravity waves propagating in stratosphere of the Earth**
Vladimir Gubenko, Andreev, V.E, Pavelyev, A.G.. *Speaker Vladimir Gubenko*

10:30 am **Coffee Break (30 minutes)**

11:00 am **Comparative gravity wave contributions to middle atmosphere dynamics on Earth and Mars**
Fritts Dave. *Speaker Fritts Dave*

11:30 am **Gravity wave studies in the lower stratosphere using superpressure balloons**
Vincent Robert, Albert Hertzog, Gillian Boccara, Francois Vial. *Speaker Vincent Robert*

12:00 pm **Three-Dimensional Satellite Observations of Atmospheric Gravity Waves**
Alexander Joan. *Speaker Alexander Joan*

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Room 2

Chairpersons: Kevin Hamilton

02:00 pm **Jets and fronts as sources of inertia-gravity waves**
Plougonven Riwal, Chris Snyder. *Speaker Plougonven Riwal*

02:30 pm **Gravity waves generation around the polar vortex in the stratosphere**
Sato Kaoru. *Speaker Sato Kaoru*

03:00 pm **Seasonal variations of the stratospheric gravity waves in the polar region analyzed with GPS radio occultation data**
Tsuda Toshitaka, Hayato Hei. *Speaker Tsuda Toshitaka*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **A sensitivity study of the middle atmosphere to changes in the parameterized momentum drag of gravity waves**
Sassi Fabrizio, J.H. Richter, R. R. Garcia. *Speaker Sassi Fabrizio*

04:30 pm **A numerical study of mesospheric gravity waves forced by cumulus convection**
Chun Hye-Yeong, Young-Ha Kim. *Speaker Chun Hye-Yeong*

04:45 pm **Comparison of satellite gravity wave measurements with a global ray tracing experiment**
Ern Manfred, P. Preusse, S. D. Eckermann, C. D. Warner, R. H. Picard, M. G. Mlynczak, J. M. Russell Iii. *Speaker Ern Manfred*

05:00 pm **Conditions for the Formation of Mesospheric Undular Bores**
Walterscheid Richard. *Speaker Walterscheid Richard*

05:15 pm **Geographical Distribution of Potential and Kinetic Energy of Internal Waves in the Atmosphere found from CHAMP and FORMOSAT3 Radio Occultation Data**
Alexander Pavelyev, J. Wickert, Y. Liou, A. Pavelev, T. Schmidt. *Speaker A. Pavelev*

JPS001 Interannual and Interdecadal Climate Variability Conveners: McPhaden Michael, Holbrook Neil

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Economics Room 6

09:30 am **A study of the seasonal to interannual predictability of the Iberian Peninsula winter river flow**
Pozo-Vazquez David, Sr Gmiz-Fortis, R M Trigo, Y Castro-Dez. *Speaker Pozo-Vazquez David*

09:48 am **Estimates of ocean heat content variability using isotherms**
Palmer Matthew, Tara Ansell, Simon Tett, Keith Haines, Helene Banks. *Speaker Palmer Matthew*

10:06 am **Future changes in internal MOC variability**
Drijfhout Sybren, Wilco Hazeleger, Frank Selten, Rein Haarsma. *Speaker Drijfhout Sybren*

10:24 am **Impacts of no Agulhas leakage on the Tropical Atlantic in a coupled Ocean-Atmosphere simulation**
Haarsma Reindert, Edmo Campos, Wilco Hazeleger, Sybren Drijfhout. *Speaker Haarsma Reindert*

10:42 am **Biennial and interdecadal variations in the monsoon-ENSO system of a coupled GCM under doubled CO2 conditions**
Turner Andrew, Peter M. Inness, Julia M. Slingo. *Speaker Turner Andrew*

11:00 am **Coffee Break (30 minutes)**

11:30 am **ENSO-Related interannual variability in the frequency of upper troughs at low latitudes**
Frllich Luise, Peter Knippertz. *Speaker Frllich Luise*

11:48 am **The effects of the Atlantic Meridional Overturning Circulation on Tropical Ocean-Atmosphere Variability**
Chang Ping, Xiuquan Wan, Caihong Wen, Rong Zhang, R. Saravanan. *Speaker Chang Ping*

12:06 pm **A New Interpretation of the North Atlantic Oscillation**
Woollings Tim, Mike Blackburn. *Speaker Woollings Tim*

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Room 6

02:00 pm **The Kuroshio extension decadal variability: modeling results suggest that internal nonlinear mechanisms may play a crucial role**
Pierini Stefano. *Speaker Pierini Stefano*

02:18 pm **Multi-decadal Simulation of Atlantic Ocean Climate Variability Driven by Realistic High-Frequency Atmospheric Reanalyses**
Garraffo Zulema, George R. Halliwell, Linda T. Smith, G. Peng, Eric P. Chassignet. *Speaker Garraffo Zulema*

02:36 pm **Large-scale variability in Salinity and Oxygen Based on Recent Repeat Hydrographic Sections**
Talley Lynne, Nathan Bindoff, Corinne Lequere, Gregory Johnson, Sabine Mecking, James Swift, Janet Sprintall, Igor Yashayaev, Nicolas Gruber, Richard Feely. *Speaker Talley Lynne*

02:54 pm **ENSO and Western North Pacific Tropical Cyclone Activity Simulated in a CGCM**
Iizuka Satoshi, Tomonori Matsuura. *Speaker Iizuka Satoshi*

03:12 pm **Oceanic process associated with the 2006 Indian Ocean Dipole**
Vinayachandran P. N., Jaison Kurian, C. P. Neema. *Speaker Vinayachandran P. N.*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Interannual variation of mesoscale eddy activity around the North Pacific subtropical front and its influence on the generation of Kuroshio large meander**
Kashima Motohiko, Kaoru Ichikawa, Sho-Ichiro Kojima. *Speaker Kashima Motohiko*

04:18 pm **The Pacific Decadal Oscillation in IPCC AR4 Models**
Arritt Raymond, Christopher Kuball. *Speaker Arritt Raymond*

04:36 pm **Impacts of Recent El Nio Modoki on Extreme Climate Conditions in East Asia and the United States during Boreal Winter**
Weng Hengyi, Karumuri Ashok, Swadhin K. Behera, Anguluri S. Rao, Toshio Yamagata. *Speaker Weng Hengyi*

04:54 pm **El Nio Modoki**
Karumuri Ashok, Swadhin K. Behera, Suryachandra A. Rao, Hengyi Weng, Toshio Yamagata. *Speaker Karumuri Ashok*

05:12 pm **High Frequency Variations in Evolution of Indian Ocean Dipole Events in 2003 and 2006**
Anguluri Suryachandra Rao, Toshio Yamagata. *Speaker Anguluri Suryachandra Rao*

JPS002 Abrupt Climate Change Conveners: Renssen Hans

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Academy of Fine Arts Room 6

09:30 am **Influence of the Greenland ice sheet melting on the Atlantic meridional overturning circulation during the next millennium**
Fichefet Thierry, E. Driesschaert, H. Goosse, P. Huybrechts, I. Janssens, A. Mouchet, G. Munhoven, V. Brovkin, S.L. Weber. *Speaker Fichefet Thierry*

09:50 am **Meridional reorganizations of tropical marine and terrestrial productivity during Heinrich events**
Menviel Laurie, Axel Timmermann, Anne Mouchet, Oliver Timm. *Speaker Menviel Laurie*

10:10 am **Ocean core evidence for past THC changes**
Dokken Trond. *Speaker Dokken Trond*

10:30 am **Rapid response of Antarctica and Greenland to external forcing**
Bamber Jonathan. *Speaker Bamber Jonathan*

10:50 am **Coffee Break (30 minutes)**

11:20 am **Northward energy transport in a coupled climate model**
Wu Peili, Michael Vellinga. *Speaker Wu Peili*

11:40 am **Impact on the Ocean Circulation of Extreme Nordic Seas Heat Loss in a Range of Coupled Ocean-Atmosphere Models**
Josey Simon, Jeremy P. Grist, Bablu Sinha, Adam T. Blaker. *Speaker Josey Simon*

12:00 pm **Unraveling carbon cycle dynamics during Early Paleogene transient global warming events using biomarkers and dinoflagellates**
Sluijs Appy. *Speaker Sluijs Appy*

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Academy of Fine Arts Room 6

02:00 pm **Slowdown in the Atlantic meridional overturning circulation since 1980**
Bryden Harry. *Speaker Bryden Harry*

02:20 pm **Is the stability of the Atlantic MOC changed by global warming?**
Drijfhout Sybren, Eric De Swaluw, Suzanne Weber. *Speaker Drijfhout Sybren*

02:40 pm **Historical reconstruction of the Atlantic Meridional Overturning from the ECMWF ocean analysis**
Alonso Balmaseda Magdalena, Keith Haines, David Anderson, Arthur Vidard. *Speaker Alonso Balmaseda Magdalena*

03:00 pm **Monitoring Rapid Climate Change with Ocean Reanalyses**
Giese Benjamin, Yangxing Zheng. *Speaker Giese Benjamin*

03:20 pm **Changes in ocean carbon cycle by weakening of the Atlantic meridional overturning circulation**
Oka Akira, Hiroyasu Hasumi. *Speaker Oka Akira*

03:40 pm **Coffee Break (30 minutes)**

04:10 pm **The Probability of Rapid Climate Change in an Intermediate Complexity Climate Model**
Challenor Peter, Doug Mcneal. *Speaker Challenor Peter*

04:30 pm **On LSW and the making of the 8.2 kyr event**
Legrande Allegra N., Gavin A. Schmidt. *Speaker Gavin A. Schmidt*

04:50 pm **An amplification mechanism for multicentennial Holocene climate variability involving bistable Labrador Sea convection**
Jongma Jochem. *Speaker Jongma Jochem*

05:10 pm **Thermodynamic efficiency and reactivity of the AMOC**
Tailleux Remi, Jonathan M. Gregory. *Speaker Tailleux Remi*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall

Detection of Climate Change using Extreme Climate Index Software(ECIS) in Iran
Taghavi Farahnaz. *Speaker Taghavi Farahnaz*

Archaeological and abrupt environmental
Lewkovskaya Galina, Hoeffcker John, Housley Rupert, Anikovich Michail, Popov Viktor, Lisizin Sergei, Sinizin Sergei, Anisutkin Nikolai, Pospelova Genrietta. *Speaker Lewkovskaya Galina*

The abrupt cold event and culture subrogation 4,400 AB.P. in Yuchisi site, Mengcheng, Anhui, China
Wang Jianjun, Liguang Sun, Libin Xu. *Speaker Wang Jianjun*

Simulation of the 8.2 kyr BP event with a coupled climate model: the impact of catastrophic meltwater drainage on the early Holocene climate
Renssen Hans, A.P. Wiersma, H. Goosse, T. Fichefet. *Speaker Renssen Hans*

Impact of Sea Level Rise on Hydrodynamics of Estuarine Systems: Case Study of Mtwapu Creek, Kenya
Magori Charles. *Speaker Magori Charles*

PS002 Variability of the Antarctic Circulation and Water Masses and Their Sensitivity to Climate Change
Conveners: Bergamasco Andrea

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Academy of Fine Arts Room 14

09:30 am **The Global Ocean Conveyor Belt, the Southern Hemisphere Supergyre and their variations with time**
Speich Sabrina, Bruno Blanke, Olivier Marti, Wenju Cai. *Speaker Speich Sabrina*

10:00 am **Can surface buoyancy loss prevent deep upwelling in the Southern Ocean?**
De Boer Agatha. *Speaker De Boer Agatha*

10:30 am **Modes of Interannual to Multi-Century Water-Mass Variability in the Southern Ocean**
England Matthew, Agus Santoso, Alex Sen Gupta. *Speaker England Matthew*

11:00 am **Coffee Break (30 minutes)**

11:30 am **Observed subsurface signature of Southern Ocean sea level rise**
Morrow Rosemary, Guillaume Valladeau. *Speaker Morrow Rosemary*

11:45 am **Eddy fluxes in the circulation of Antarctic Intermediate Water and implications for climate models**
Nunes Nuno, Dorothee C. E. Bakker, Karen J. Heywood, David P. Stevens, Alberto C. Naveira Garabato. *Speaker Nunes Nuno*

12:00 pm **Preliminary Analysis of a Southern Ocean State Estimate**
Mazloff Matthew, Patrick Heimbach, Carl Wunsch. *Speaker Mazloff Matthew*

12:15 pm **The role of ocean circulation in the southern hemisphere ocean temperature and salinity biases in HadCM3 and HadGEM1**
Wang Zhaomin, John Turner, Mike P. Meredith, William M. Connolley. *Speaker Wang Zhaomin*

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Academy of Fine Arts Room 14

02:00 pm **Winter observations of Antarctic Intermediate Water and Subantarctic Mode Water formation in the southeast Pacific**
Talley Lynne, Teresa Chereskin, Bernadette Sloyan, James Holte. *Speaker Talley Lynne*

02:15 pm **The role of convective and turbulent mixing on the formation of Southeast Pacific Antarctic Intermediate Water.**
Sloyan Bernadette, Lynne Talley, Teresa Chereskin, James Holte. *Speaker Sloyan Bernadette*

02:30 pm **A synoptic view of the Subantarctic Front in the southeast Pacific**
Chereskin Teresa. *Speaker Chereskin Teresa*

02:45 pm **Southern Ocean subsurface water mass structure and variability inferred from satellite altimetry**
Meijers Andrew, Nathaniel L. Bindoff, Stephen R. Rintoul. *Speaker Meijers Andrew*

03:00 pm **Coffee Break (30 minutes)**

03:30 pm **On the role of the Southern Ocean in the global ocean circulation**
Iudicone Daniele, Gurvan Madec, Sabrina Speich, Bruno Blanke, Ilaria Stendardo, Olivier Aumont. *Speaker Iudicone Daniele*

03:45 pm **Defining Steady and Time-dependent Streamlines using Satellite Altimetry and Direct Velocity Observations of the Antarctic Circumpolar Current in Drake Passage**
Lenn Yueng-Djern, Teresa K. Chereskin. *Speaker Lenn Yueng-Djern*

Sallee Jean-Baptiste, Kevin Spear, Rosemary Morrow. *Speaker*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall

ENSO and the west Antarctic Peninsula
Wallace Margaret, Mark Brandon, Mike Meredith, Andrew Clarke. *Speaker Wallace Margaret*

Ten years of currentmeters measurements in Terra Nova Bay (Ross SEA, Antarctica): data set presentation
Picco Paola, Andrea Cappelletti, Paola Esposito, Daniela Martucci, Giannetta Fusco, Roberto Meloni. *Speaker Andrea Cappelletti*

SOPHOCLES -Southern ocean physical oceanography and cryospheric linkages.
O'Farrell Siobhan, Dr Victoria Lytle, Dr Anthony Worby, Dr Todd Arbetter. *Speaker O'Farrell Siobhan*

The chemical signature of water masses mixing off Victoria Land, Ross Sea, Antarctica.
Rivarolo Paola, Serena Massolo, Maria Luisa Abelmoschi, Andrea Bergamasco, Giorgio Budillon. *Speaker Rivarolo Paola*

Sulphur oxidised compounds stratigraphies from Talos Dome, D66, Law Dome Ice Core as proxy of climatic variability in the Southern Ocean
Becagli Silvia, Emiliano Castellano, Andrea Morganti, Mirko Severi, Rita Traversi, Marco Proposito, Massimo Frezzotti, Mark Curran, Roberto Udisti. *Speaker Becagli Silvia*

Spatial and temporal variability of the Southern Boundary of the Antarctic Circumpolar Current based on hydrographic data and satellite altimetry
Yabuki Takashi, Toshio Suga, Kimio Hanawa, Koji Matsuoka, Hiroshi Kiwada, Tomoko Watanabe. *Speaker Yabuki Takashi*

Improvement on dense water transport out of the Antarctic continental shelf in a coarse-resolution OGCM: impact on the deep water formation process
Komuro Yoshiki, Hiroyasu Hasumi. *Speaker Komuro Yoshiki*

Antarctic Sea Ice, Large Scale Wind Patterns, and Climate Change
Marsland Simon, P.A. Reid. *Speaker Marsland Simon*

Decadal Temperature Changes Across the ACC
Dispert Astrid, Claus W. Bning, Steve Rintoul, Martin Visbeck. *Speaker Dispert Astrid*

Southern Ocean water mass formation in a finite-element coupled sea ice-ocean model
Timmermann Ralph, Carmen Bning, Qiang Wang, Jens Schrtter, Sergey Danilov. *Speaker Timmermann Ralph*

A comparison of the Mar Madel at 10-Km and 2-Km horizontal resolution
Clai Giulia, Pellegrini Andrea. *Speaker Clai Giulia*

PS005 Flows and Waves in Straits
Conveners: Morozov Eugene, Parrilla Gregorio

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Mathematics Room A2

09:30 am **Downslope windstorms and morning glories: analogues from the coastal ocean**
Peltier Richard, Marek M. Stastna. *Speaker Peltier Richard*

09:55 am **The Stability of Deep Overflows**
Pratt Lawrence, Karl Helfrich. *Speaker Pratt Lawrence*

10:20 am **Non-traditional effects of wave-flow-topography interaction in straits**
Vlasenko Vasyli, Nataliya Stashchuk. *Speaker Vlasenko Vasyli*

10:45 am **Coffee Break (30 minutes)**

11:15 am **Timor Indonesian Throughflow as Measured by INSTANT**
Molcard Robert, Susan Wijffels, Janet Sprintall, Agus Atmadipoera, Indra Jaya. *Speaker Molcard Robert*

11:40 am **Ombai and Lombok Strait Indonesian Throughflow as measured by INSTANT**
Sprintall Janet, Susan Wijffels, Robert Molcard. *Speaker Sprintall Janet*

11:55 am **A Twenty Year Average of the Regional Currents and Interbasin Exchange in the Indonesian Region**
Wijffels Susan E, Gary Meyers, J. Stuart Godfrey. *Speaker Wijffels Susan E*

12:10 pm **Property structure and variability of Indonesian Throughflow Water (ITW)**
Atmadipoera Agus, Robert Molcard, Gurvan Madec, Susan Wijffels, Janet Sprintall, Indra Jaya. *Speaker Atmadipoera Agus*

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A2

02:00 pm **Water masses transformation in the Indonesian straits**
Koch-Larrouy Ariane. *Speaker Koch-Larrouy Ariane*

02:15 pm **Estuarine versus transient flow regimes in Juan de Fuca Strait**
Thomson Richard, Steven F. Mihly, Evgueni A. Kulikov. *Speaker Thomson Richard*

02:30 pm **The flow connection the South Pacific and Indian Ocean gyres south of Australia**
Ridgway Ken, Jeff Dunn. *Speaker Ridgway Ken*

02:45 pm **Interactions between the Kuroshio Main Stream and the Eddies East of Luzon Strait**
Le Kentang, Zhao Wei. *Speaker Le Kentang*

03:00 pm **Generation of Nonlinear Internal Waves from Luzon Strait**
Liu Cho-Teng, Chang-Wei Lee, Yuan-Jie Chiou, Hsien-Wen David. *Speaker Liu Cho-Teng*

03:15 pm **Absolute Geostrophic Currents in the Drake Passage**
Tarakanov Roman. *Speaker Tarakanov Roman*

03:30 pm **Currents in the Bransfield Strait**
Morozov Eugene. *Speaker Morozov Eugene*

03:45 pm **The energetics of internal solitary waves in the ocean**
Lamb Kevin. *Speaker Lamb Kevin*

04:00 pm **The critical role of straits jamming in abrupt climate change**
Nof Doron, Catherine Sandal. *Speaker Nof Doron*

04:15 pm **Do internal wave breathers exist in the ocean?**
Talipova Tatiana, Kevin G. Lamb. *Speaker Talipova Tatiana*

04:30 pm **A Modeling Study on Flows in the Strait of Hormuz**
Chu Peter, Travis Clem. *Speaker Chu Peter*

04:45 pm **Coffee Break (30 minutes)**

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall

Long-term variation of the Volume Transports through the Korea Strait and the Tsugaru Strait
Na Hanna, Kuh Kim. *Speaker Na Hanna*

Some Estimates of the Baltic Deep-Water Transport through the Stolpe Trench
Borens Karin, R. Hietala, J. Laanearu, P. Lundberg. *Speaker Borens Karin*

Direct measurement of Tsugaru Through Flow
Park Jongjin, Joon-Yong Yang, Kuh Kim. *Speaker Park Jongjin*

Diagnosis of inertia-gravity waves in an oceanic general circulation model : an intercomparison between numerical simulations and in situ-measurements from the Cirne experiment
Le Vaillant Xavier, Pascale Bouruet-Aubertot, Sbastien Masson, Gurvan Madec, Keiko Takahashi. *Speaker Le Vaillant Xavier*

A study of internal wave cinematic in the strait of Gibraltar analyzing in situ data
Snchez Garrido Jose Carlos. *Speaker Snchez Garrido Jose Carlos*

Short-scale circulation patterns in the coastal margins of the Strait of Gibraltar
Mejias Miguel, Jamal Chioua, Jeanette Romero Czar, Alfredo Izquierdo Gonzalez, Julio Prez Reyes, Agueda Vzquez Lpez-Escobar, Rafael Maanes Salinas. *Speaker Mejias Miguel*

JSS001 Physics and Chemistry of Earth Materials
Conveners: Jackson Ian

Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Department of Physics Room C

09:30 am **Ultrahard nano-polycrystalline diamond: novel material for high-pressure mineral physics studies**
Irifune Tetsuo, Hitoshi Sumiya. *Speaker Irifune Tetsuo*

09:45 am **High-temperature elasticity of high-pressure minerals: new insights from gas-medium ultrasonic interferometry**
Jackson Ian, Gabriel D. Gwanmesia, Syle M. Antao, Jennifer Kung, Sally M. Rigden, Robert C. Liebermann. *Speaker Jackson Ian*

10:00 am **Constraining the Composition and Thermal State of the Earth's Mantle from Inversion of Geophysical Data**
Khan Amir, James Connolly, Nils Olsen. *Speaker Khan Amir*

10:15 am **The relation between the rock variables and exponents of the lithology of nukhul formation at Ferian Oil Field, central part of the Gulf of Suez, Egypt.**
Ghorab Mahmoud. *Speaker Ghorab Mahmoud*

10:30 am **Coffee Break (30 minutes)**

11:00 am **Viscosity of Magmatic Liquids: A model for volcanology**
Russell Kelly, Daniele Giordano, Don Dingwell. *Speaker Russell Kelly*

Kelly

11:15 am **The role of mechanochemical production for the CO2 released from the seismic area of Apennine Chain**
Italiano Francesco, Giovanni Martinelli, Sonia Pizzullo, Paolo Plescia. *Speaker Italiano Francesco*

11:30 am **The transition from elastic to viscoelastic behaviour: grain-size sensitive relaxation in polycrystalline MgO**
Barnhoorn Auke, John D. Fitz Gerald, Akira Kishimoto. *Speaker Barnhoorn Auke*

11:45 am **Plane strain and axisymmetric models to simulate the mechanical behavior of a rock sample**
Mizani Shervin. *Speaker Mizani Shervin*

12:00 am **Investigation of extensional deformation of ductile rocks**
Mehrabian Shayesteh. *Speaker Mehrabian Shayesteh*

JSS007 Progress in electromagnetic studies on earthquakes and volcanoes - Volcanic structure and activities (same as JVS002)
Conveners: Spichak Vlachoslav, Sasai Yoichi, Jacques Zlotnicki, Del Negro Ciro, Patella Domenico

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall

Inspection of the dike position by total intensity data in the 2000 eruption of Miyake-jima volcano
Sasai Yoichi, Mitsuru Utsugi, Eisuke Fujita, Makoto Uyeshima, Jacques Zlotnicki. *Speaker Sasai Yoichi*

Magnetic and electric field variations associated with the tilt-step event during the caldera formation of Miyake-jima volcano in 2000.
Sasai Yoichi, Makoto Uyeshima, Motoo Ukawa, Jacques Zlotnicki, Eisuke Fujita, Hideki Ueda. *Speaker Sasai Yoichi*

A dense aeromagnetic survey on Kuju volcano, central Kyushu Japan
Utsugi Mitsuru, Yoshikazu Tanaka. *Speaker Utsugi Mitsuru*

Piezomagnetic modeling associated with hydrothermal pressurization.
Okubo Ayako, Wataru Kanda. *Speaker Okubo Ayako*

Shallow Resistivity Structure of Asama Volcano and Its Implication for Magma Ascent Process of 2004 Eruptions
Aizawa Koki, Yasuo Ogawa, Takeshi Hashimoto, Takao Koyama, Wataru Kanda, Electromagnetic Research Group For Asama Volcano. *Speaker Aizawa Koki*

Magnetic imaging of the feeding system of oceanic volcanic islands: El Hierro (Canary Islands)
Blanco-Montenegro Isabel, Iacopo Nicolosi, Alessandro Pignatelli, Massimo Chiappini. *Speaker Blanco-Montenegro Isabel*

Looking at Tenerife (Canary Islands) from a magnetic perspective
Garcia Alicia, Nieves Snchez, Massimo Chiappini, Roberto Carluccio, Riccardo De Ritis, Iacopo Nicolosi, Alessandro Pignatelli, Isabel Blanco-Montenegro. *Speaker Garcia Alicia*

Lightning and electrical activity during the 2006 eruption of Mt. Augustine
Thomas Ronald, S.R. Mcnutt, G. Tytgat, P.R. Krehbiel, W. Rison, H. Edens. *Speaker S.R. Mcnutt*

A magnetotelluric study along Satluj valley thermal springs in NW Himalaya
K. K. Abdul Azeez, K. Ravi Shankar, Dhanunjaya Naidu, Sharana Basava. *Speaker K. K. Abdul Azeez*

A shallow resistivity structure of Kuju Volcano, Central Kyushu, Japan
Kanda Wataru, Yoshikazu Tanaka, Mitsuru Utsugi, Yasuaki Okada, Hiroyuki Inoue. *Speaker Kanda Wataru*

Multi-electrode resistivity surveys around a cyclic hydrothermal system: the hot lakes of the Waimangu geothermal area, New Zealand
Legaz Aurilie, Andre Revil, Jean Vandemeulebrouck, Tony Hurst. *Speaker Legaz Aurilie*

Temporal changes of resistivity and self potential at the Onikobe geyser, NE Japan
Ogawa Yasuo, Seiji Mishima, Keisuke Saho. *Speaker Ogawa Yasuo*

Self-potential anomalies around Ontake volcano, Central Japan - the earthquake swarm and summit areas -
Yoshimura Ryokei, Ken'Ichi Yamazaki, Yasuaki Okada, Naoto Oshiman, Makoto Uyeshima. *Speaker Yoshimura Ryokei*

JSS008 Progress in electromagnetic studies on earthquakes and volcanoes - Electromagnetic fields associated with earthquakes and active faulting
Conveners: Johnston Malcolm

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall

A review of selected problems in seismoelectrodynamics
Guglielmi Anatol, Tsegmed Battulai, Dovbnya Boris, Zotov Oleg. *Speaker Guglielmi Anatol*

The relationship between seimo-electric/magnetic field and earthauke magnitude
Fan Xiaoping, Li Qinghe, Yang Congjie. *Speaker Fan Xiaoping*

The micro-satellite Compass-2 for investigation of the ionosphere disturbances related to seismic, meteo and human activity.
Ruzhin Yuri, Kuznetsov V.D., Danilkin V.A., Dokukin V.S.. *Speaker Ruzhin Yuri*

The Magnetic Storm influence on the Pre-seismic Ionosphere Anomaly (a case study)
Shpakovski Vitali, I. E. Zakharenkova, Yu.Ya. Ruzhin, I.I.Shagimuratov, N.Yu. Tepenitsina. *Speaker Shpakovski Vitali*

Analytical study on piezomagnetic effect due to 3-D magnetic structure and it's applications to the earthquakes in Japan
Nishida Yasunori, Mitsuru Utsugi, Toru Mogi. *Speaker Nishida Yasunori*

Possible association between some geomagnetic anomalies and Vrancea (Romania) significant earthquakes occurred in the years 2004-2007
Iren-Adelina Moldovan, Dumitru Enescu, Adrian-Septimiu Moldovan. *Speaker Iren-Adelina Moldovan*

MEMFIS - Multiple Electromagnetic Field and Infrasonic Monitoring Array at Plostina - Vrancea. An attempt to guess what's cooking.
Moldovan Adrian-Septimiu, Iren-Adelina Moldovan, Constantin Ionescu, Simion Ersen, Aurelia Ersen. *Speaker Moldovan Adrian-Septimiu*

HRT wave precursor to the Sumatra earthquake
Qian Wei. *Speaker Qian Wei*

Effects of water content on the converse piezoelectric effect in granite with an Atomic Force Microscope
Esaki Yuko. *Speaker Esaki Yuko*

1-D AND 2-D interpretation of bam fault CSTMT data
Moghadas Davood, Saeid Hashemi Tabatabaei. *Speaker Moghadas Davood*

The piezomagnetic field in association with a subduction and a slow slip on a plate boundary
Yamazaki Ken'Ichi, Makoto Uyeshima, Tsutomu Ogawa, Shigeru Koyama. *Speaker Yamazaki Ken'Ichi*

A magnetotelluric study to recognize a fault zone in Markazi province,Iran
Ansari Masoud, Behrooz Oskooi. *Speaker Ansari Masoud*

Complex Electromagnetic monitoring of Corinth Gulf seismic area (Greece): Fuzzy logic algorithms time series pattern recognition
Jacques Zlotnicki, Gvishiani A., Le Moul J.L., Rodkin M., Agayan S., Bogoutdinov Sh., Vargemezis G. *Speaker Jacques Zlotnicki*

The INGV tectonomagnetic network: future developments in the MEM Project
Masci Fabrizio, Paolo Palangio, Cinzia Di Lorenzo, Manuele Di Persio, Antonio Meloni. *Speaker Masci Fabrizio*

Network-MT surveys in Central Japan
Uyeshima Makoto, Tsutomu Ogawa, Satoru Yamaguchi, Hiroaki Toh, Hideki Murakami, Ryokei Yoshimura, Naoto Oshiman, Shigeru Koyama, Toshiya Tanbo, Weerachai Siripunvaraporn. *Speaker Uyeshima Makoto*

Electric and magnetic field variations due to the seismic dynamo effect associated with blasting
Honkura Yoshimori, Shintaro Nagaoka, Yasuo Ogawa. *Speaker Honkura Yoshimori*

Numerical modeling of self-potential variation associated with very long-period seismic pulse observed in the 2000 Miyake-jima volcanic activity
Kuвано Osamu, Shingo Yoshida, Masao Nakatani, Makoto Uyeshima. *Speaker Kuвано Osamu*

Resistivity structure at damage area of the 2006 Mid Java earthquake
Mogi Toru, Yasuo Ogawa, Nurhasan, Djedi S. Widarto. *Speaker Mogi Toru*

Electrical resistivity structure around the hypocentral region of DLF events in the Kii peninsula, southwest Japan
Oshiman Naoto, Tkehiro Nagano, Roikei Yoshimura, Satoru Yamaguchi, Makoto Uyeshima. *Speaker Oshiman Naoto*

Crustal heterogeneity on electrical resistivity around the Niigata-Kobe Tectonic Zone, Chubu Region, Japan
Yoshimura Ryokei, Hiroaki Toh, Makoto Uyeshima, Naoto Oshiman, Research Group For Crustal Resistivity Structure. *Speaker Yoshimura Ryokei*

Deep electrical imaging of Parbati Beas Valley geothermal region of NW Himalayan region
Koppireddi Veeraswamy, K.Ravi Shyankar, G.Dhanunjaya Naidu, Sarana Basava, K.K.Abdul Azeez. *Speaker Koppireddi Veeraswamy*

Seismomagnetic studies in central Italy: 16 years of monitoring by the INGV network
Di Mauro Domenico, Manuele Di Persio, Stefania Lepidi, Fabrizio Masci, Giuliana Mele, Antonio Meloni, Paolo Palangio. *Speaker Di Mauro Domenico*

July 5, 2007 from 09:30 am to 12:30 am

JSS009 Progress in electromagnetic studies on earthquakes and volcanoes - Crustal instabilities and earthquake precursors
Conveners: Biagi Pier Francesco

Chairpersons: P. F. Biagi and T. Nagao

Oral

09:30 am **Some basic problems related to ground based seismo-electromagnetics**
Uyeda Seiya. *Speaker Uyeda Seiya*

09:45 am **Towards extraction of precursory changes from noisy electromagnetic data**
Nagao Toshiyasu, Takayuki Kawakami, Keizo Sayanagi, Jun

Izutsu, Makoto Harada, Makoto Uyeshima, Tada-Nori Goto. *Speaker Nagao Toshiyasu*

10:00 am **Precursors of geomagnetic anomaly and earthquake locations**
Liu Jann-Yeng, Chieh-Hung Chen, Horng-Yuan Yen. *Speaker Liu Jann-Yeng*

10:15 am **Recent results on seismic electric signals (SES)**
Varotsos Panayiotis, Eftimios S Skordas, Nicholas V Sarlis. *Speaker Varotsos Panayiotis*

10:30 am **Coffee Break (30 minutes)**

11:00 am **Statistical study of the relationship between seismic electric signals and earthquakes at Kozu-Shima Island, Japan**
Kamogawa Masashi, Yoshiaki Orihara, Toshiyasu Nagao, Seiya Uyeda. *Speaker Kamogawa Masashi*

11:15 am **Changes of the electromagnetic parameters used as possible seismic premonitory signals**
Stanica Dumitru, Maria Stanica, Nicoleta Vladimirescu. *Speaker Stanica Dumitru*

11:30 am **The electromagnetic device optimization modeling of seismo-electromagnetic processes**
Sengor Taner. *Speaker Sengor Taner*

11:45 am **The transfer functions between geomagnetic changes and neutral current of 500kV power line**
Izutsu Jun, Junji Kanaya, Tomiichi Uetake, Makoto Harada, Toshiyasu Nagao. *Speaker Izutsu Jun*

12:00 am **VLF transmitter signals received on satellite for global diagnostics of ionospheric perturbations associated with seismicity**
Rozhnoi Alexander, Molchanov Oleg, Solovieva Maria, Akenatieva Olga, Berthelie Jean Jacky, Parrot Michel, Lefeuve Francuas, Hayakawa Masashi, Yamauchi Takeshi, Biagi Pier Francesco, Castellana Laura. *Speaker Rozhnoi Alexander*

12:15 am **Preliminary report on the observation of the electromagnetic field and other geophysical parameters by real-time deep sea floor observatory in Sagami Bay, Japan**
Sayanagi Keizo, Tada-Nori Goto, Toshiyasu Nagao, Kenichi Asakawa, Kyohiko Mitsuzawa, Eiichiro Araki, Takafumi Kasaya, Shigehiko Morita, Tomoki Watanabe, Masataka Kinoshita. *Speaker Sayanagi Keizo*

July 5, 2007 from 02:00 pm to 05:30 pm

JSS009 Progress in electromagnetic studies on earthquakes and volcanoes - Crustal instabilities and earthquake precursors
Conveners: Biagi Pier Francesco

Chairpersons: Y.Liu and P. F. Biagi

Oral

02:00 pm **Standardised procedure for satellite remote sensing thermal anomalies and earthquakes**
Srivastava Hari Narain. *Speaker Srivastava Hari Narain*

02:15 pm **Instabilities, electric currents and earthquake precursors associated with volcanic activity**
Freund Friedemann, Michelle Mcmillan, John Keefner, Joshua J. Mellon, Rachel Post. *Speaker Michelle Mcmillan*

02:30 pm **Observation evidences of Atmospheric Gravity Waves induced by seismic activity from analysis of subionospheric LF signal spectra**
Rozhnoi Alexander, Solovieva Maria, Molchanov Oleg, Biagi Pier Francesco, Hayakawa Masashi. *Speaker Rozhnoi Alexander*

02:45 pm **Anomalies in VLF radio intensities related to seismicity during November-December 2004: a comparison of ground and Demeter satellite rresults**
Biagi Pier Francesco, Castellana Laura, Maggipinto Tommaso, Piccolo Roberto, Minafra Antonio, Ermini Anita, Capozzi Vito, Solovieva Masha, Molchanov Oleg, Hayakawa Masashi, Rozhnoi Alexander. *Speaker Biagi Pier Francesco*

03:00 pm **Earthquake precursors detected through the analysis of mutual interactions of hydrogeochemical signals**
Castellana Laura, Pier Francesco Biagi. *Speaker Castellana Laura*

03:15 pm **Study of self potential anomalous fluctuations in a seismic active zone of Lucano Apennine (southern Italy): recent results**
Gerardo Colangelo, Vincenzo Lapenna, Luciano Telesca. *Speaker Gerardo Colangelo*

03:30 pm **coffee break (30 minutes)**

04:00 pm **Analysing complex time series in natural time**
Varotsos Panayiotis, Nicholas V Sarlis, Eftimios S Skordas. *Speaker Varotsos Panayiotis*

04:15 pm **The Tor Caldara CO2 Diffuse Degassing Structure (DDS): 222Rn/220Rn output before and after the August, 22, 2005 Anzio Earthquake (Mw=4.6).**
Quattrocchi Fedora, Voltattorni N., Cantucci B., Cinti D., Gasparini C., Pizzino L., Procesi M.. *Speaker Quattrocchi Fedora*

04:30 pm **Natural time analysis of seismicity in Japan and California**
Uyeda Seiya. *Speaker Uyeda Seiya*

04:45 pm **Multi-parametric monitoring of crustal stress propagation in a very active tectonic area such as the Cephallonia island (Greece)**
Poscolieri Maurizio, Giovanni P. Gregori, Evangelos Lagios, Matteo Lupieri, Gabriele Paparo, Issaak Parcharidis, Vassilis Sakkas. *Speaker Poscolieri Maurizio*

05:00 pm **Patterns preceding major earthquakes in Central Himalaya**
Gupta Harsh, Dodla Shashidhar, Metilda Pereira. *Speaker Gupta Harsh*

Gupta Harsh

05:15 pm **Observation report of quasi-electrostatic for Wenan earthquake**
Gao Yougang, Li Yantang. *Speaker Gao Yougang*

Poster July 5, 2007 from 06:00 pm to 08:00 pm - Baldeschi Palace Main Hall

Chairpersons: Y.Liu, P. F. Biagi and T. Nagao

INTRODUCTORY REMARKS TO INTEGRATED EMSV SESSIONS (S. Uyeda)

GROUNDWATER GEOCHEMICAL DISTURBANCES RELATED TO SEISMICITY REVEALED IN KAMCHATKA (RUSSIA) DURING THE LAST 30 YEARS: FURTHER RESULTS
(P.F. Biagi)

STUDY OF GROUND DATA VLF RADIO ANOMALY RELATED TO SEISMICITY REVEALED BY DEMETER SATELLITE ON 2004: PHASE ANALYSIS
(T. Maggipinto)

DETECTION OF TIME AND DIRECTION OF EARTHQUAKES WITH THE PARAMETERS OF NATURAL ULF/ELF MAGNETIC FIELD
(A. Schekotov)

MAGNETOTELLURIC STUDY OF MOUNT ST. HELENS WASHINGTON, USA: PHASE TENSOR ANALYSIS PRELIMINARY RESULTS
(R. Cas)

ASSOCIATION OF THE NEGATIVE ANOMALIES OF THE QUASISTATIC ELECTRIC FIELD IN ATMOSPHERE WITH KAMCHATKA SEISMICITY
(S. Smirnov)

ELECTROMAGNETIC MONITORING OF REGIONAL GEODYNAMICAL PROCESSES IN THE FRAME OF MEM PROJECT
(P. Palangio)

NEW ASPECTS ON THE STATISTICAL PROPERTIES OF SEISMICITY
(P. Varotsos)

IONOSPHERIC ANOMALOUS CHANGES OBSERVED BY GPS-TEC AND NMF2 POSSIBLY ASSOCIATED WITH LARGE EARTHQUAKES
(M. Nishihashi)

MODIFICATION OF THE SIGNALS FROM VLF TRANSMITTERS IN SEISMIC REGIONS-STUDIES OF THE DEMETER MEASUREMENTS
(J. Blecki)

ELECTRIC CURRENT EMISSIONS FROM BRITTLE MATERIALS SUFFERING NEAR FRACTURE MECHANICAL STRESS
(I. Stavrakas)

MULTISCALE ENTROPY ANALYSIS OF SELF-POTENTIAL TIME SERIES ASSOCIATED TO THE MW=7.4 EARTHQUAKE OF 14 SEPTEMBER 1995 IN MEXICO
(Cervantes De la Torre)

A MULTIFRACTAL STUDY OF SELF-POTENTIAL TIME SERIES
(Cervantes De la Torre)

EFFECT OF NOISE FROM DC-DRIVEN TRAINS TO GEOELECTRICAL POTENTIAL DIFFERENCE AND ITS REDUCTION AT HAKUBA AREA, JAPAN
(K. Hattori)

SINGULAR SPECTRAL ANALYSIS AND PRINCIPAL COMPONENT ANALYSIS FOR SIGNAL DISCRIMINATION OF ULF GEOMAGNETIC DATA ASSOCIATED WITH 2000 IZU ISLAND EARTHQUAKE SWARM
(K. Hattori)

SEISMIC CHARACTERISTICS OF PRE-SEISMIC VHF WAVE SCATTERING
(M.Mogi)

HYDROSTRUCTURAL AND HYDROTHERMAL MODELS FOR THE STUDIES OF THE HYDROGEOCHEMICAL PRECURSORS OF THE SEISMIC ACTIVITY: EXAMPLES FROM "SERCHIO AND MAGRA GRABENS" (NORTHERN APENNINES, ITALY)
(F. Baldacci)

(WAVELETS IN THE ANALYSIS OF SEISMOELECTROMAGNETIC SIGNALS)
(G. Hloupis)

THERMAL NEUTRONS' RESPONSE TO THE EARTHQUAKES DEPENDING ON THE DIRECTION OF THEIR EPICENTER (BASED ON KAMCHATKA OBSERVATIONS)
(E. Sigaeva)

ABOUT CORRELATION OF SOCIAL TENSION AND DAMAGING EARTHQUAKES
(O. Molchanov)

MECHANISMS OF SEISMIC EFFECTS IN THE ATMOSPHERE FROM SOUNDING BY VLF, LF AND HF RADIO SIGNALS
(O. Molchanov)

JSS011 Earth Structure and Geodynamics
Conveners: Lay Thorne
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Law School Room 3
Continental growth and preservation of geochemical mantle heterogeneity in spite of whole-mantle convection
Walzer Uwe, Roland Hendel, John. Baumgardner. *Speaker Walzer Uwe*

09:42 am Tomographic Imaging of the Kachchh seismic zone, western India : A mechanism for stress concentration in the lower crust
Mandal Prantik, Dr. R.K. Chadha. *Speaker Mandal Prantik*

09:54 am Upper mantle seismic anisotropy structure beneath central and southern Japan subduction zone
Salah Mohamed, Tetsuzo Seno, Takashi Iidaka. *Speaker Salah Mohamed*

10:06 am An 1-2-1 Model for the Evolution of the Earths Mantle Structure and Their Implications for Supercontinent Cycles and True Polar Wander.
Zhng Shijie, Nan Zhang, Zheng-Xiang Li, James H. Roberts. *Speaker Zhng Shijie*

10:18 am Crust and mantle structure from the Northern Indian Shield to Western Himalaya and Ladakh using receiver functions
Rai Shyam, K. Suryaprakasam, Keith Priestley, Vinod Gaur. *Speaker Rai Shyam*

10:30 am Mantle convection beneath Mongolian-Baikal Rift zone and its geodynamic implications
Xiong Xiong, Jiye Wang, Rongshan Fu. *Speaker Xiong Xiong*

10:42 am Upper mantle anisotropy beneath the Ltzow-Holm Bay Region, East Antarctica in relation to past tectonic events
Usui Yusuke, Masaki Kanao, Atsuki Kubo, Yoshihiro Hiramatsu, Hiroaki Negishi. *Speaker Usui Yusuke*

10:54 am Coffee Break (30 minutes)

11:24 am P-wave velocity structure of the mantle beneath the South Pacific superswell revealed by joint ocean floor and islands broadband seismic experiments
Tanaka Satoru, Masayuki Obayashi, Daisuke Suetsugu, Hajime Shiobara, Hiroko Sugioka, Toshihiko Kanazawa, Yoshio Fukao, Guilhem Barruol. *Speaker Tanaka Satoru*

11:36 am Frequency distribution of seismic wavespeed as evidence for bodies of distinct material in the lowermost mantle, and analogies with the lithosphere.
Steinberger Bernhard, Kevin Burke, Trond H. Torsvik, Mark A. Smethurst. *Speaker Steinberger Bernhard*

11:48 am Three-dimensional share wave speed structure beneath the South Pacific superswell
Isse Takehi, Daisuke Suetsugu, Hajime Shiobara, Hiroko Sugioka, Kazunori Yoshizawa, Toshihiko Kanazawa, Yoshio Fukao, Guilhem Barruol. *Speaker Isse Takehi*

12:00 pm Subduction roll-back, slab break-off and induced strain in the uppermost mantle beneath Italy
Margherita Lucia, Francesco Pio Lucente. *Speaker Margherita Lucia*

12:12 pm Lowermost mantle structure of the western part of the Pacific low velocity province constrained by the Vietnamese broadband seismograph array
Takeuchi Nozomu. *Speaker Takeuchi Nozomu*

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Law School Room 3
02:00 pm Cratonic keels and a two-layer mantle tested: mantle expulsion during Arabia-Russia closure linked to westward enlargement of the Black Sea, formation of the Western Alps and subduction of the Tyrrhenian (not the Ionian) Sea.
Osmaston Miles. *Speaker Osmaston Miles*

02:12 pm Density, shear and compressional velocity models of the Vrancea seismogenic zone
Tondi Rosaria, Ulrich Achauer, Lucian Besutiu. *Speaker Tondi Rosaria*

Rosaria
02:24 pm Thermal evolution and geometry of the descending lithosphere beneath the SE-Carpathians
Ismail-Zadeh Alik, Gerald Schubert, Igor Tsepelev. *Speaker Ismail-Zadeh Alik*

02:36 pm Crustal and sub crustal structure of the Italian peninsula as inferred from local seismic tomography
Scafidì Davide, Stefano Solarino, Claudio Eva. *Speaker Scafidì Davide*

Daveide
02:48 pm Preliminary Body-wave Tomography of the Cameroon Volcanic Line: Linear Anomaly in a Convecting Mantle
Larson Angela Marie, Andy Ntblade, Doug Wiens, Rigobert Tibi, Patrick Shore, Garrett Euler, Bekoa Ateba, Joseph Nnange, Charles Tabod, Yongcheol Park. *Speaker Larson Angela Marie*

03:00 pm Short wavelength topography on the inner core boundary
Romanowicz Barbara, Aimin Cao, Yder Masson. *Speaker Romanowicz Barbara*

03:12 pm Locating scatterers in the mantle using array analysis of PKP precursors from an earthquake doublet
Romanowicz Barbara, Aimin Cao. *Speaker Romanowicz Barbara*

03:24 pm Deep earthquakes and orogenic processes: toward a new interpretation
Scalera Giancarlo. *Speaker Scalera Giancarlo*

03:36 pm Coffee Break (30 minutes)

04:06 pm Temperature and composition of the upper mantle as inferred from long period seismic waveforms
Cammarano Fabio. *Speaker Cammarano Fabio*

04:18 pm Hydrogen enhanced melting beneath the East Pacific Rise near 9 degrees 30 N
Key Kerry, Steven Constable. *Speaker Key Kerry*

04:30 pm Ridge jumps associated with plume-ridge interaction: Weakening of the lithosphere by upwelling asthenosphere
Mittelstaedt Eric, Garrett Ito. *Speaker Mittelstaedt Eric*

04:42 pm Water flow into the mantle transition zone
Tonegawa Takashi, Kazuro Hirahara, Takuo Shibutani, Katsuhiko Shiom, Hiroo Kanamori. *Speaker Tonegawa Takashi*

04:54 pm Ab initio modeling of seismic velocity structure of deep mantle
Tsuchiya Taku, Jun Tsuchiya. *Speaker Tsuchiya Taku*

05:06 pm Iranian Model Determination for Crust and Upper Mantle using Pn and Sn Tomography
Tabatabai Shadi, Eric Bergman, M.R. Gheitanchi. *Speaker Tabatabai Shadi*

05:18 pm Crust and upper mantle structure in the Caribbean Region by group velocity tomography and regionalization
Guidarelli Mariangela, O'Leary Gonzales, Leonardo Alvarez, Giuliano Francesco Panza. *Speaker Guidarelli Mariangela*

JSS014 Crustal structure and Tectonophysics - Crustal and lithospheric structure in active continental blocks and their boundaries
Conveners: Furlong Kevin P
Oral 5 July, 2007 from 09:30 AM to 12:30 AM - Law School Room 11
09:30 am Distributed vs. narrow deformation in the mantle lithosphere beneath the central South Island, New Zealand: Insights from GPS and geology
Wallace Laura, Susan Ellis. *Speaker Wallace Laura*

09:50 am Evolution of the Plate Boundary Through New Zealand since 25 Ma
Furlong Kevin P, P.J.J. Kamp, G.P. Hayes. *Speaker Furlong Kevin*

10:10 am New constraints on the motion and boundaries of the Sierra Nevada Block and Colorado Plateau from continuous GPS velocities
Kreemer Come, William C. Hammond, Geoffrey Blewitt. *Speaker Kreemer Come*

10:25 am GPS Constraining on Active Faulting and Block Rotation in deforming Asia
Qi Wang. *Speaker Qi Wang*

10:40 am Deformation field and tectonics of Eastern Asia based on GPS observations
Kato Teruyuki, Makiko Iwakuni. *Speaker Kato Teruyuki*

10:55 am Coffee Break (30 minutes)

11:25 am Amurian a nassiance plate: new GPS result supplemented

by geological and geophysical evidence
Houze Xu, Xiong Xiong, Pil-Ho Park, Teruyuki Kato, Jun Li. *Speaker Houze Xu*

11:40 am Seismic image of the Central Himalaya (India) from broadband seismic network
Kr. Ashish, K. Sivaram, P. Rajgopala Sarma, K. Suryaprakasam, S. S. Rai. *Speaker Kr. Ashish*

11:55 am Seismic velocity and kinostrophic structures of the collision zone in Himalaya
Ding Zhifeng, Wulin Liao, Hong Zhang, Guiyin Li, Hui Wang. *Speaker Ding Zhifeng*

12:10 pm Seismic Structure Beneath Tibet: Implications for Top-down Tectonics
Ni James. *Speaker Ni James*

12:25 pm Significant lateral crustal elasticity contrast across the East Kunlun Fault in northern Tibet, inferred from co-seismic INSAR measurements of the 2001 Mw 7.8 Kokoxili earthquake
Tao Wei, Zhengkang Shen, Yongge Wan, Xinjian Shan, Chao Ma. *Speaker Tao Wei*

Oral 5 July, 2007 from 02:00 PM to 05:30 PM - Law School Room 11
Chairpersons: -
02:00 pm Estimating Moho Depth and 1-D Velocity Structure of the Himalaya Region using GA-MHYPO with HIMT Earthquake Data
Kim Woohan, Charlotte Rowe. *Speaker Kim Woohan*

02:15 pm Plate deformation and crustal structures at the southern end of the Ryukyu subduction zone off eastern Taiwan
Liu Char-Shine, Philippe Schnurle, Serge Lallemand, Yvonne Font. *Speaker Liu Char-Shine*

02:30 pm Active monitoring of asperities-reflectors system: time lapse monitoring of subducting interplate earthquakes and dynamics of magma reservoir
Kasahara Junzo, Kayoko Tsuruga, Teruo Yamawaki, Naoyuki Fujii. *Speaker Kasahara Junzo*

02:45 pm Influence of the Along-Plate-Boundary rupturing on the subduction zone earthquake intensity pattern: the January 21 (22), 2003, Colima, Mexico, Across-Trench Earthquake (Mw 7.5)
Zobin Vyacheslav. *Speaker Zobin Vyacheslav*

03:00 pm Local Velocity Ratio Calculation for California A Simple Approach for Estimating Regional Vp/Vs
Hayes Gavin, Kevin Furlong. *Speaker Hayes Gavin*

03:15 pm Coffee Break (30 minutes)

03:45 pm Interaction of active fault and fold development: the Balanegra-Sierra de Gador GPS network (Central Betic Cordillera, SE Spain)
Galindo-Zaldivar Jesus, Antonio Gil, Carlos Marr-Lechado, Pedro Alfaro, Clara De Lacy, Francisco Jun Garca-Tortosa, Angel Carlos Lpez-Garrido, Antonio Pedrera-Parias, Isabel Ramos, Gracia Rodriguez-Caderot, Ana Ruiz-Constn, Carlos Sanz De Galdeano, Maria Jess Borque. *Speaker Galindo-Zaldivar Jesus*

04:00 pm Neotectonic model of the croatian external dinarides; a tectonic framework for the Adria Plate margin and carbonate wedge tectonics
Casale Gabriele. *Speaker Casale Gabriele*

04:15 pm Present-day horizontal and vertical tectonic motion of the Dinarides region, Croatia, from GPS data and tide gauge data
Buble Goran, Richard A. Bennett, Sigrund Heinsdttir, Gabriele Casale, Tomislav Bačić, Elijko Bačić, Marijan Marjanović. *Speaker Buble Goran*

04:30 pm Plate boundary deformation and microplates motion in the Central Mediterranean
D'Agostino Nicola, Giulio Selvaggi, Antonio Avallone, Daniele Cheloni, Elisabetta D'Anastasio, Sergio Mantenuito. *Speaker D'Agostino Nicola*

Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall
Moho and Crustal Structures of the South China sea from satellite gravity anomaly
Nguyen Nhu Trung. *Speaker Nguyen Nhu Trung*

Neotectonic models of the three recent devastating SCR earthquakes in India
Kayal Jnana. *Speaker Kayal Jnana*

Technology of the prediction of the tectonic and geomechanic processes at a selected areas for dispose radioactive waste
Victor Tatarinov, Morozov Vladislav, Belov Sergey, Kolesnikov Iliia. *Speaker Victor Tatarinov*

Fine crustal structure in active tectonic area at Northwestern Edge of Tarim Basin Block
Xu Zhaofan. *Speaker Xu Zhaofan*

Three-Dimensional velocity structure of the South Fossa Magna, Central Japan
Nakamichi Haruhisa, Hidefumi Watanabe, Takao Ohminato. *Speaker Nakamichi Haruhisa*

Is there the Amurian plate in northeast Asia?
Jin Shuanggen, Pil-Ho Park. *Speaker Jin Shuanggen*

Crust and upper mantle structure in continental China and its adjacent area from surface wave two-station analysis
Yi Guixi, Yao Huajian, Zhu Jie-Shou, Robert D, van der Hilst. *Speaker Yi Guixi*

Structure of earths crust and upper mantle, inland subduction and its coupling effects on the Dabie orogenic belt and the Tancheng-Lujiang fault zone
Teng Jiwen, Yan Yafen, Wang Guangjie, Xiong Xiong. *Speaker Teng Jiwen*

Antarctic plate boundary with the gravimetric tomography data
Grekou Rudolf. *Speaker Greku Rudolf*

Crustal configuration of NW Himalaya based on modeling of gravity data
Chamoli Ashutosh, A.K.Pandey, V.P. Dimri, P. Banerjee. *Speaker Chamoli Ashutosh*

Can Amurian plate be discriminated from Eurasia: results from significance tests
Guo Dongmei. *Speaker Guo Dongmei*

High resolution refraction tomography - resolving the vertical displacement of Tepla-Barrandien unit of Bohemian Massif in the P-velocity sections on CEL9 LINE.
Novotny Miroslav. *Speaker Novotny Miroslav*

Seismic hazard assessment for east of Iran
Boustan Elham, Dr. Noorbakhsh Mirzaei. *Speaker Boustan Elham*

Investigation of focal mechanism solutions of earthquakes in Iran
Tahernai Nadia, Dr. Mohammad Reza Gheitanchi. *Speaker Tahernai Nadia*

Distribution of Seismic Energy Released in Iran
Tahernai Nadia, Dr. Mohammad Reza Gheitanchi. *Speaker Tahernai Nadia*

A new sophisticated and integrated analysis for the crustal structure analysis using OBS and control sources
Kasahara Junzo, Ryuji Kubota, Tomoyuki Tanaka, Shigeharu Mizohata, Eiichro Nishiyama, Azusa Nishizawa, Kentaro Kaneda. *Speaker Kasahara Junzo*

Feasibility study for the continuous active monitoring of the temporal change and spatial movement of a magma reservoir beneath a volcano
Tsuruga Kayoko, Junzo Kasahara, Naoyuki Fujii. *Speaker Tsuruga Kayoko*

Evaluation of the effects by heterogeneously inserted Thin/Thick High Low velocity layers in the part of crust
Tsuruga Kayoko, Junzo Kasahara, Ryuji Kubota, Yoshihiro Naito, Azusa Nishizawa, Kentaro Kaneda. *Speaker Tsuruga Kayoko*

A Interactive and Integrated modeling tool for the crustal analysis using OBS-control sources
Kasahara Junzo, Gou Fujie, Kei Murase, Ryuji Kubota, Eiichiro Nishiyama, Tomoyuki Tanaka, Kayoko Tsuruga, Shigeharu Mizohata, Shigeki Kawamura, Azusa Nishizawa, Kentaro Kaneda. *Speaker Kasahara Junzo*

Evaluation of efficiencies of P-S conversion in THE oceanic crust and Vp/Vs estimation
Tsuruga Kayoko, Junzo Kasahara, Eiichiro Nishiyama, Kei Murase, Ryuji Kubota, Azusa Nishizawa. *Speaker Tsuruga Kayoko*

Crustal structure and Moho depth profile crossing the central Apennines (Italy) along the N42 parallel.
Lucente Francesco Pio, Massimo Di Bona, Nicola Piana Agostinetti. *Speaker Lucente Francesco Pio*

Large scale features of the south-easternmost TTZ as inferred from geophysical data
Besutiu Lucian. *Speaker Besutiu Lucian*

Electrical resistivity imaging of seismically active frontal Himalaya
Rawat Gautam. *Speaker Rawat Gautam*

Seismotectonic model for Kangra-Chamba Region of NW Himalaya
Kumar Naresh, Jyoti Sharma, S.Mukhopadhyaya. *Speaker Kumar Naresh*

Crustal velocity structure of Northeast of Iran
Nowrouzi Gholamrezza, Keith F. Priestley, Mohsen Ghafoury Ashtiany, Gholam Javan Dolei, Mohammad Mokhtary. *Speaker Nowrouzi Gholamrezza*

Crustal structures in the rupture area of the 2003 Tokachi-oki earthquake (Mw=8.0)
Takanami Tetsuo, Yoshio Murai, Yuya Machida, Yumi Makino, Ryosuke Azuma, Ichisuke Saito, Toshihiko Kanazawa, Masanao Shinohara, Kimihiro Mochizuki, Tomoaki Yamada, Ryota Hino, Minoru Nishino, Kenji Uehira, Hiroki Miyamachi. *Speaker Takanami Tetsuo*

Velocity structure in Naeen Region, Central Iran
Riazi Zohreh. *Speaker Riazi Zohreh*

Crustal structure in South of Zagros, from the 2005 Qeshm Island earthquake in Iran
Riazi Zohreh. *Speaker Riazi Zohreh*

Seismic traveltime curves of the local earthquake in East- SouthEast of Iran
Riazi Zohreh. *Speaker Riazi Zohreh*

Three-dimensional velocity structure of the convergent plate boundary in Eastern Taiwan from seismic and gravity data
Cheng Win-Bin. *Speaker Cheng Win-Bin*

Seismotectonics of Makran subduction zone
Srivastava Kirti, V P Dimri. *Speaker Srivastava Kirti*

Analysis and modelling the recent vertical crustal movements and their relations with basement depth gravity anomaly and terrestrial heat flow
Joo Istvan, Timea Pajer. *Speaker Joo Istvan*

Active deformation in the Zanjan region, northwest Iran
Sobouti Farhad, Khaled Hesami, Reza Ghods. *Speaker Sobouti Farhad*

Short term (geodetic) and long term (geological) deformation patterns in the Northern Apennines
Cenni Nicola, Paolo Baldi, Enzo Mantovani, Maurizio Ferrini, Marcello Viti, Vittorio D'Intinosante, Daniele Babbucci, Dario Albarello. *Speaker Cenni Nicola*

Structure of the crust and upper mantle in the Qinghai-Tibet Plateau and its adjacent areas
Zhang Xuemei, Teng Jiwen. *Speaker Zhang Xuemei*

Preliminary Results of a Seismological Experiment on Mantle Dynamics and Crustal Structure beneath Isparta Turkey
Teoman Ugur Mustafa, Eric Sandvol, Niyazi Turkelli, Dogan Aksari, Amanda Lough, Cem Destici, Sakir Sahin, Alev Berberoglu, DogAn Kalafat. *Speaker Teoman Ugur Mustafa*

Gravity anomalies and lithospheric structure across the co-seismic rupture of great Sumatra-Andaman earthquake
Tiwari Virendra Mani, V. M. Tiwari, K. Arora, B. Singh. *Speaker Tiwari Virendra Mani*

Paleostresses and recent tectonic activity of the Palomares-Carboneras strike-slip faults (Eastern Betic Cordilleras, SE Spain)
Ruano Patricia, Jess Galindo-Zaldivar, Carlos Marr-Lechado. *Speaker Ruano Patricia*

Tectonophysical model of Tersko-Sunja segment of East Ciscaucasia based on seismotomography and lineament analysis.
Ivanchenko Galina. *Speaker Ivanchenko Galina*

Spatial variation of the crustal stress field in Taiwan Region
Wu Wen-Nan. *Speaker Wu Wen-Nan*

Plate convergence at the Westernmost Philippine Sea plate
Wu Wen-Nan. *Speaker Wu Wen-Nan*

Temporal variation of the compressive direction in the hypocentral region after the 1999 Chi-Chi earthquake, Taiwan
Wu Wen-Nan. *Speaker Wu Wen-Nan*

Numerical simulation of the transition from subduction to arc-continent collision in offshore southeastern Taiwan
Wang Wei-Hau, Hwong-Yi Wu. *Speaker Wang Wei-Hau*

An extension of lower crust in central Kyushu, Japan, inferred from GPS derived velocity field- An Implication of Beppu-Shimabara graben structure
Hosseini Keivan, Shoichi Yoshioka, Takeshi Matsushima, Sadaomi Suzuki. *Speaker Hosseini Keivan*

The mechanical role of the Philippine Sea Plate in Taiwan orogeny
Lin Yu-Yeh, Wei-Hau Wang. *Speaker Lin Yu-Yeh*

Shallow crustal geological signatures in electrical
Roy Kalyan Kumar, N, Sri Rama Murthy, Lakshi Kanta Das, Kajal Kumar Mukherjee. *Speaker Roy Kalyan Kumar*

P-Wave velocity perturbations of the crust beneath Georgia
Mumladze Tea. *Speaker Mumladze Tea*

Origin of tectonic stresses in the chinese continent and adjacent areas
Zhu Shoubiao, Yaolin Shi. *Speaker Zhu Shoubiao*

Simulation of earthquake processes by finite element method: the case of megathrust earthquakes on the Sumatra subduction zone
Zhu Shoubiao, Huilin Xing, Furen Xie, Yaolin Shi. *Speaker Zhu Shoubiao*

Folding of MOHO beneath Tibet and South Korea
Shin Young Hong, Houze Xu, Pil Ho Park, Jong Uk Park, Jeong Ho Baek. *Speaker Shin Young Hong*

Lithosphere-asthenosphere system beneath The Carpathian Bending Zone by seismic attenuation and satellite geodesy
Mocanu Victor, Ray Russo, Boudewijn Ambrosius. *Speaker Mocanu Victor*

Crustal structure of the Abruzzo Apennines (Central Italy) through the analysis of seismic data registered by a local network
Bagh Samer, Claudio Chiarabba, Pasquale De Gori, Nicola Piana Agostinetti. *Speaker Bagh Samer*

Modeling formation and development of a pull-apart basin effect of crustal rheology
Petrunin Alexey, Stephan V. Sobolev. *Speaker Petrunin Alexey*

Imaging the structure-sensitive bodies inseismogenic zone by across
Fujii Naoyuki, Mineo Kumazawa, Junzo Kasahara, Takahiro Kunitomo, Takahiro Nakajima, Ken Hasegawa, Yoko Hatsuma, Toshikiyotani, Weipeng Huang, Toshiaki Masuda, Mikio Osamura, Katsuyoshi Michibayashi. *Speaker Fujii Naoyuki*

Karst Drainage and Erosion Patterns: Implications for Erosional and Depositional Flux in an Accretionary Wedge
Gendaszek Andrew, Gabe Casale. *Speaker Gendaszek Andrew*

To the global factors, stimulating tectonic movements
Karimov Farshed, Zafar Usmanov. *Speaker Karimov Farshed*

Spatial pattern similarities between small magnitude seismicity in the argentinian backarc continental crust (m < 3.5) and in the Nazca Plate (M < 4.5) at its transition from flat to normal subduccion
Tresp Enrique, Renzo Furlani. *Speaker Tresp Enrique*

JSS016 Underwater observatories
Conveners: Romanowicz Barbara
Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall
Development of a new method of geophysical survey of saltwater-freshwater interface in the coastal zone
Kontar Evgeny, Yuriy Ozorovich. *Speaker Kontar Evgeny*

Seafloor borehole seismic observatories in the western Pacific and upper mantle and crustal structure beneath the northwestern Pacific basin
Shinohara Masanao, Tetsuo Fukano, Toshihiko Kanazawa, Eiichiro Araki, Kiyoshi Suyehiro, Masashi Mochizuki, Kazuo Nakahigashi, Yuka Kaiho, Tomoaki Yamada. *Speaker Shinohara Masanao*

Underwater observation with new tool makes it different: Concept is not new, but the result is worth nugget
Kisimoto Kiyoyuki, Masato Joshima, Kiyokazu Nishimura. *Speaker Kisimoto Kiyoyuki*

Effects of bias of reference GPS position on observation for ocean bottom crustal deformation
Watanabe Tsuyoshi, Keiichi Tadokoro, Takashi Okuda, Yoshitaka Aizawa, Shingo Sugimoto, Jin Yasuda, Daisuke Muto, Masataka Ando. *Speaker Watanabe Tsuyoshi*

Gas-hydrates: a future potential source of energy in India
Sain Kalachand. *Speaker Sain Kalachand*

Repeated Observation of Seafloor Crustal Deformation Using a GPS/Acoustic System
Tadokoro Keiichi, Masataka Ando, Shingo Sugimoto, Takashi Okuda, Ryoya Ikuta, Tsuyoshi Watanabe, Keizo Sayanagi, Masahiro Kuno, Jin Yasuda, Daisuke Muto. *Speaker Tadokoro Keiichi*

Evaluation of analysis method for GPS/Acoustic seafloor geodetic observation
Sugimoto Shingo, Keiichi Tadokoro, Ryoya Ikuta, Takashi Okuda, Yoshitaka Aizawa, Tsuyoshi Watanabe, Jin Yasuda, Daisuke Muto, Keizo Sayanagi, Toshiyasu Nagao, Masataka Ando. *Speaker Sugimoto Shingo*

ESONET: a network to integrate European research on sea observatories
Favali Paolo, R. Person, C. Berndt, J.J. Danobeitia, M. Gillyooly, J. Mienert, J.M. Miranda, A. Tselepidis, T. Van Weering, C. Waldmann. *Speaker Favali Paolo*

JSS017 Lithosphere thermal state and geodynamic processes: from measurements to models
Conveners: Chapman David
Poster 5 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall
The evaluation of the heat flow in the area of the Uralian Superdeep well CF-4
Lipaev Aleksander, Sergey Lipaev. *Speaker Lipaev Aleksander*

Temperature-time series, thermal regime and the instability of the fluid column in a borehole
Cermak Vladimir. *Speaker Cermak Vladimir*

Resolving terrain effects in borehole temperature profiles
Heinle Shannon, William Gosnold. *Speaker Heinle Shannon*

Hydro-geothermal characters of the Moroccan Atlas
Verdoya Massimo, Yassine Zarhloule, Abdenbi El Mandour, Paolo Chiozzi, Mimoun Boughriba, Abderrahim Lahrach. *Speaker Verdoya Massimo*

Time-dependent lithosphere thermal state in the Carpatho-Pannonian Area. a review based on heat flow data and modeling
Demetrescu Crisan, Maria Tumanian. *Speaker Demetrescu Crisan*

Heat and groundwater flow modeling in the lithosphere of the Eastern Carpathians Bend
Dobrica Venera, Helmut Wilhelm. *Speaker Dobrica Venera*

Hydrothermal circulation within subducting crust: Implications for subduction zone temperature
Kummer Troy, Glenn Spinelli. *Speaker Kummer Troy*

Crustal rheology along the Neapolitan Volcanic Zone-Apennine-Apulia foreland transect, (Southern Italy)

Miklashevskiy Dmitriy, Yuri Popov, Vladimir Tertychniy, Irina Bayuk, Raisa Romushkevich, Christof Clauser, Renate Pechinig. *Speaker Miklashevskiy Dmitriy*

Temperature dependence of the relationship of thermal diffusivity versus thermal conductivity for crystalline rocks
Clauser Christoph, Darius Mottaghy, Hans-Dieter Vosteen, R diger Schellschmidt. *Speaker Clauser Christoph*

Estimation of formation temperature from measurements in near bottom zone
Semenova Anna, Yury Popov, Vyacheslav Pimenov. *Speaker Semenova Anna*

Martyshko Peter, Aza Dyakonova, Olesya Surina. *Speaker Martyshko Peter*

Imaging the subsurface in the Cameroon Centre Province using the Audiomagnetotelluric (AMT) soundings for the monitoring of the Monatele-Saa earthquake area.
Theophile Ndougsa-Mbarga, Gouet Daniel Henry, Manguelle-Dicoum Eliezer. *Speaker Theophile Ndougsa-Mbarga*

Two-and-half-dimensional inversion modeling for CSEM data
Di Qingyun, Changmin Fu. *Speaker Di Qingyun*

Global optimization for the interpretation of magnetotelluric sounding data using polynomial approximation and estimation of static shift
Sharma Shashi Prakash, Marta Kis. *Speaker Sharma Shashi Prakash*

The non-harmonic downward continuation method in deep earth magnetic field studies
Ballani Ludwig, Dietrich Stromeyer, Hans Greiner-Mai, Jan Hagedoorn. *Speaker Ballani Ludwig*

Advanced methods for regional magnetotelluric profile studies of active orogens: the experience from the Central Tian Shan
Sokolova Elena, M. Berdichevsky, Iv. Varentsov, N. Golubtsova, A. Rybin, N, Baglaenko, V. Batalev, P. Pushkarev, I. Safronov. *Speaker Sokolova Elena*

Long Period Magnetotelluric (MT) study using Geomagnetically Induced Currents in the Scottish Power network
McKay Allan, Antti Pulkkinen, Alan Thomson. *Speaker McKay Allan*

Numerical simulations of the new deep electromagnetic sounding of the mantle
Vozar Jan, Vladimir Yu. Semenov. *Speaker Vozar Jan*

10:30 am **Coffee Break (30 minutes)**
11:00 am **Distinctive deep magnetic highs in northwestern North America (Canada and Alaska): Indicators of deep crustal strength and structure?**
Saltus Richard, Mark Pilkington. *Speaker Saltus Richard*

11:30 am **Aeromagnetic evidence for a major fault belt at the transition between the Transantarctic Mountains and the Wilkes Subglacial Basin**
Armadillo Egidio, Fausto Ferraccioli, Andrea Zunino, Emanuele Bozzo. *Speaker Armadillo Egidio*

11:50 am **New aeromagnetic view of the Wilkes subglacial Basin (East Antarctica)**
Ferraccioli Fausto, Egidio Armadillo, Jordan Tom, Emanuele Bozzo, Hugh Corr, Giorgio Caneva, Carl Robinson. *Speaker Ferraccioli Fausto*

12:10 pm **Further investigations into the aeromagnetic anomalies and earthquake potential of the Marmara region, NW Turkey**
Ates Abdullah, Aydin Byksara, Funda Bilim, Zeynep Bektaş, Iğdem Sendur, Gonca Komanovali. *Speaker Ates Abdullah*

06 July, 2007

US006 Challenges and Advances in Nonlinear Geophysics
Conveners: Schertzer Daniel

Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Rectorate Main Hall
09:00 am **A dynamical systems view of the ocean circulation**
Dijkstra Henk. *Speaker Dijkstra Henk*

09:36 am **Scale, scaling and nonlinear variability in precipitation, landscape morphology and river flows**
Lovejoy Shaun, D. Schertzer, Y. Tchiguirinskaya. *Speaker Lovejoy Shaun*

10:12 am **Chaotic dynamics, fractional transport and non-adiabatic acceleration of plasma in the Earth's magnetotail**
Zelenyi Lev. *Speaker Zelenyi Lev*

10:48 am **Coffee Break (30 minutes)**
11:18 am **Advances in characterizing spatio-temporal clustering and emergent applications in seismicity**
Davidsen Joern. *Speaker Davidsen Joern*

11:54 am **Similarities and differences in sequences of starquakes, solar flares, and earthquakes**
Kossobokov Vladimir, Fabio Lepreti, Vincenzo Carbone. *Speaker Kossobokov Vladimir*

Electromagnetic sounding of the mantle
Vozar Jan, Vladimir Yu. Semenov. *Speaker Vozar Jan*

Electromagnetic study at the Antarctic station Vernadsky Region
Maksymchuk Valentyn, Borys Ladanivskyy, Igor Logvinov, Victor Tarasov. *Speaker Maksymchuk Valentyn*

Electrical conductance modelling for central Italy
Di Mauro Domenico, Angelo De Santis, Vaclav Cerv, Michael Menvielle, Josef Pek, Svetlana Kovacicikova. *Speaker Di Mauro Domenico*

JAS008 Long-term trends and changes in the atmosphere-ionosphere system
Conveners: Beig Gufran, Lastovicka Jan

Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Pharmacy Room A
09:00 am **Progress and problems in the global change pattern in the upper atmosphere and ionosphere**
Lastovicka Jan. *Speaker Lastovicka Jan*

09:30 am **Long-term Temperature Trends in the Thermosphere Based on Incoherent Scatter Radar Data.**
Holt John, Shunrong Zhang. *Speaker Holt John*

09:50 am **Solar Influence on the Composition and Climatology of the Mesosphere and Lower Thermosphere**
Beig Gufran. *Speaker Beig Gufran*

10:10 am **A fourteen years monthly climatology in the 35-65 km altitude range from Rayleigh Lidar temperature measurements at a low latitude station**
Batista Paulo, Barclay Robert Clemesha, Dale Martin

10:30 am **Coffee Break (30 minutes)**
11:00 am **Long-term Trends and Solar-Generated Variability in the Atmosphere: A Model Study**
Brosseur Guy, Hauke Schmidt. *Speaker Brosseur Guy*

11:30 am **SABER observations of solar cycle influence in the mesosphere and lower thermosphere**
Mlynzcak Martin, F. J. Martin-Torres, R. E. Thompson, D. P. Kratz, R. R. Garcia, S. Solomon, R. G. Roble, B. T. Marshall, J. M. Russell Iii, L. L. Gordley. *Speaker Mlynzcak Martin*

12:00 pm **TIMED/GUVI remote sensing observations of the thermospheric composition, temperature, and mass density from 2002-2007**
Meier Robert R, J. M. Picone, J. Bishop, D. Drob, J. T. Emmert, A. Stephan, D. J. Strickland, A. B. Christensen, L. J. Paxton, D. Morrison, H. Kil, G. Crowley. *Speaker Meier Robert R*

12:15 pm **Long term modifications in the ionosphere at Low Latitudes: Impact of Greenhouse Gases**
Sharma Som Kumar, Harish Chandra. *Speaker Sharma Som Kumar*

High-Performance Computations in Geosciences
Conveners: Ismail-Zadeh Alik

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Rectorate Main Hall
02:00 pm **Fostering the simulation science**
Sato Tetsuya. *Speaker Sato Tetsuya*

02:20 pm **High-performance computations in mantle dynamics using finite volume**
Tackley Paul, Taras Gerya, Takashi Nakagawa. *Speaker Tackley Paul*

02:40 pm **Application of automatic finite element code generator to Earth science research**
Shi Yaolin, Huai Zhang, Zhongliang Wu. *Speaker Shi Yaolin*

03:00 pm **The essence of data assimilation or, why combine data with models?**
Ghil Michael. *Speaker Ghil Michael*

03:20 pm **Towards seismic tomography based upon adjoint methods**
Tromp Jeroen, Qinya Liu, Carl Tape, Alessia Maggi. *Speaker Tromp Jeroen*

03:40 pm **Coffee Break (30 minutes)**
04:10 pm **Three-dimensional simulations of explosive volcanic eruptions**
Glatzmaier Gary. *Speaker Glatzmaier Gary*

Simonich. *Speaker Batista Paulo*

10:30 am **Coffee Break (30 minutes)**
11:00 am **Long-term Trends and Solar-Generated Variability in the Atmosphere: A Model Study**
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12:15 pm **Long term modifications in the ionosphere at Low Latitudes: Impact of Greenhouse Gases**
Sharma Som Kumar, Harish Chandra. *Speaker Sharma Som Kumar*

04:30 pm **The trail-vring igneous complex in the Greenland-Norwegian Sea, NE Atlantic**
Olesen Odleiv, Odleiv Olesen, Laurent Gernigon, Jrg Ebbing, Erik Lundin. *Speaker Olesen Odleiv*

04:50 pm **Multifractal scaling analysis of magnetic surveys as a constraint on proposed tectonic sequences**
Gettings Mark. *Speaker Gettings Mark*

05:10 pm **Aeromagnetic anomalies revealing the presence and age of Carbonatite complexes in north-eastern India**
Hari Venkata Ram Babu. *Speaker Hari Venkata Ram Babu*

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP

Reconstruction and prediction fault using paleomagnetic methode
Ahadi Suaidi, Ken Wirawan, Margono, Hasanudin, Roy Tulus G. *Speaker Ahadi Suaidi*

Modelling and Interpreting Oceanic Lithospheric Magnetic Field Anomalies using CHAMP Satellite Data
Masterton Sheona, Kumar Hemant, David Gubbins. *Speaker Masterton Sheona*

Three-dimensional magnetic and gravity inversions in and around Iwo-Jima Volcano
Kubota Ryuji. *Speaker Kubota Ryuji*

Integral and differential analysis methods of the magnetic field from MAGSAT, CHAMP satellite data.
Kharitonov Andrey, Fonarev Gennadiy, Kharitonova Galina. *Speaker Kharitonov Andrey*

Modeling and prediction-oriented simulations of hazards engineering application
Panza Giuliano. *Speaker Panza Giuliano*

04:30 pm **Computational challenges in real-time tsunami forecasting**
Titov Vasily. *Speaker Titov Vasily*

04:50 pm **Challenges in computational geodynamics**
Ismail-Zadeh Alik. *Speaker Ismail-Zadeh Alik*

JAS004 Inversion
Conveners: Kuvshinov Alexei

Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Mathematics Room 12
09:00 am **Efficient Inversion of Multi-frequency EM Data: A hybrid conjugate gradients Gauss/Newton algorithm**
Egbert Gary. *Speaker Egbert Gary*

09:30 am **Adaptive finite element modeling for Marine EM**
Key Kerry, Yuguo Li, Chester Weiss. *Speaker Key Kerry*

09:45 am **Marine Controlled Source Electromagnetics Using a Bottom Towed System to Explore Submarine Cold Vent Sites in Cascadia and New Zealand**
Schwalenberg Katrin. *Speaker Schwalenberg Katrin*

10:00 am **Development of Microsoft.NET (C#) program and finite difference electro magnetic modeling of Krishna-Godavari Basin**
Rao Prabhakar, Dr. K Mallick, Mr. G. Ashok Babu. *Speaker Rao Prabhakar*

Kumar

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy Room A
02:00 pm **Long term trends of foF2 over Antarctica: possible links with the geomagnetic secular behaviour**
Alfonsi Lucilla, Giorgiana De Franceschi, Angelo De Santis. *Speaker Giorgiana De Franceschi*

02:30 pm **Variability of planetary-wave amplitudes as a signature of climatic changes in the stratosphere dynamics**
Kanukhina Anna, Suvorova Ekaterina, Skrygina Eugenia, Pogoreltsev Alexander. *Speaker Kanukhina Anna*

02:45 pm **The impact of changes in the CO2 concentration on the middle and upper atmosphere sensitivity to doubling base level and gravity wave parameterization**
Cnossen Ingrid, Neil F. Arnold, Matthew J. Harris, Alan D. Aylward. *Speaker Cnossen Ingrid*

03:00 pm **Long term changes in the total radio waves absorption in the ionosphere & D-Region over low latitude**
Mohan Vyas Brij, Vimal Saraswat. *Speaker Mohan Vyas Brij*

03:15 pm **Long-term changes in temperature fields and global circulation of the atmosphere caused by observed ozone depletion and CO2 increase during last decade of XX Century**
Krivolutsky Alexei, Georgy Zakharov, Victor Fomichev, Lidiya Cherepanova. *Speaker Krivolutsky Alexei*

03:30 pm **Coffee Break (30 minutes)**
04:00 pm **Radar and optical observations at Adelaide, Australi**
Reid Iain, David A. Holdsworth, Daniel McIntosh, Abas Sivjee, Robert A. Vincent, Jonathan Woithe. *Speaker Reid Iain*

04:15 pm **Long-term Variabilities in the Mesosphere and Lower Thermosphere (MLT) Winds over Tirunelveli (8.7N, 77.8E)**
Sridharan Sundararajan, Subramanian Gurubaran. *Speaker Sridharan Sundararajan*

04:30 pm **DIAS, European Digital Upper Atmosphere Server: a project co-funded by the eContent programme of the European Commission**
Zolesi Bruno, Anna Belehaki, Ljiljana Cander, Jurgen Bremer, Christov Juren, Iwona Stanislawska, Mike Hatzopoulos, Dimitri Dialeitis, Jan Lastovicka, Benito Antonio De La Morena, David Altadill. *Speaker Zolesi Bruno*

04:45 pm **Transient and regional response of climate to natural forcing**
Barlyaeva Tatiana, Dmitri I. Ponyavin. *Speaker Barlyaeva Tatiana*

05:00 pm **Long-term trend of the ionospheric F2-layer peak height deduced from EISCAT UHF radar observations**
Motoba Tetsuo, Yasunobu Ogawa, Ryoichi Fujii, Satonori Nozawa. *Speaker Motoba Tetsuo*

The geology structure imaging by aeromagnetic data inversion at the southeast margin of Bayankela block in Tibet plateau
Wang Ruo, Miaoyue Wang, Qingyun Di, Guangjie Wang. *Speaker Wang Ruo*

Magnetic characterization offshore North Tenerife Island: a decade perspective
Catalán Manuel, Alicia Garca, Jos Martn-Davila, Nieves Snchez. *Speaker Catalán Manuel*

Curie point depths of bulgarian territory inferred from geomagnetic observation
Trifonova-Rusinova Petya, Zhelev Zheljo 1, Petrova Totka 1, Bojadgieva Klara 2. *Speaker Trifonova-Rusinova Petya*

Tectonics of Guhaghar area of Maharashtra: a case study based on electromagnetic and ground magnetic data
Erram Vinit, Gautam Gupta, B.N. Umrikar, S.S. Thigale. *Speaker Erram Vinit*

Helicopter-borne Aeromagnetic Survey over Sakurajima Volcano, Kyushu, Japan.
Okubo Ayako, Yoshikazu Tanaka, Wataru Kanda, Kazuhiro Ishihara, Daisuke Miki, Mitsuru Utsugi. *Speaker Okubo Ayako*

Gulf of Cadiz airborne magnetic survey
Socias Isabel, Armand Galdeano, Javier Pavon. *Speaker Socias Isabel*

Long-wavelength geopotential fields study in East Asia from satellite data
Taylor Patrick, Jong Sun Hwang, Gest, Jan Kutina. *Speaker Taylor Patrick*

Detection of aeromagnetic anomaly change associated with volcanic activities - Application of generalized mis-tie control
Nakatsuka Tadashi, Mitsuru Utsugi, Shigeo Okuma, Yoshikazu Tanaka, Takeshi Hashimoto. *Speaker Nakatsuka Tadashi*

Tracing a Cenozoic magmatic province over the Transantarctic Mountains with aeromagnetic anomaly data
Armadillo Egidio, Fausto Ferraccioli, Andrea Zunino, Emanuele Bozzo, Pietro Arienti, Sergio Rocchi. *Speaker Andrea Zunino*

Magnetic anomaly field for Europe and Western Siberia regions from CHAMP satellite data
DARIA Yu. Abramova. *Speaker Daria Yu. Abramova*

Does the west antarctic rift system extend to the Amundsen Sea embayment region?
Ferraccioli Fausto, Jack Holte, Tom Jordan, Don Blankenship, Theresa Diehl, Hugh Corr, Duncan Young, Scott Kempf, David Vaughan. *Speaker Ferraccioli Fausto*

Bayesian stochastic sampling for inversion of geomagnetotelluric and geomagnetic induction data
Pek Josef, Vaclav Cerv, Michel Menvielle, Fernando A. M. Santos. *Speaker Pek Josef*

12:00 pm **Evidence of fractures from the image of the subsurface in the Akonlinga-Ayos area (Cameroon) by combining the Classical and the Bostick approaches in the interpretation of audio-magnetotelluric data.**
Theophile Ndougsa-Mbarga, Meying Arsne, Enyegue-Nyam Franoise, Manguelle-Dicoum Eliezer. *Speaker Theophile Ndougsa-Mbarga*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room 12
02:00 pm **A semi-global inversion of geomagnetic and geoelectric response functions**
Utada Hisashi. *Speaker Utada Hisashi*

02:30 pm **Time-harmonic electromagnetic induction in the spherical multi-layered earth due to coaxial current loops or belts**
Hvozdar Milan. *Speaker Hvozdar Milan*

02:45 pm **Non-linear Conjugate Gradient Inversion Technique for the Problem of 3-D Global Electromagnetic Induction**
Kelbert Anna, Gary D. Egbert, Adam Schultz. *Speaker Kelbert Anna*

Bayesian stochastic sampling for inversion of geomagnetotelluric and geomagnetic induction data
Pek Josef, Vaclav Cerv, Michel Menvielle, Fernando A. M. Santos. *Speaker Pek Josef*

12:00 pm **Evidence of fractures from the image of the subsurface in the Akonlinga-Ayos area (Cameroon) by combining the Classical and the Bostick approaches in the interpretation of audio-magnetotelluric data.**
Theophile Ndougsa-Mbarga, Meying Arsne, Enyegue-Nyam Franoise, Manguelle-Dicoum Eliezer. *Speaker Theophile Ndougsa-Mbarga*

Forced redistribution of air masses between Southern and Northern Hemispheres of the Earth
Barkin Yury. *Speaker Barkin Yury*

Possible mechanism of superrotation of the atmosphere in Southern and Northern Hemispheres of the Earth (and others planets)
Barkin Yury. *Speaker Barkin Yury*

A study of ionospheric climatology by using GPS phase fluctuations at Taiwan-Philippines longitudes
Chu Fangdar, C. C. Lee, W. S. Chen, J. Y. Liu. *Speaker C. C. Lee*

Long-term trends in the amplitude range of the daily geomagnetic field variation
Torta J. Miquel, David Altadill, Juan J. Curto, Luis R. Gaya-Piqu. *Speaker Torta J. Miquel*

Long Term Plasma Density variations of Sporadic E Layer and its Association with Meteor Activity over Ahmedabad
Sharma Som Kumar, Harish Chandra, H S S Sinha. *Speaker Sharma Som Kumar*

Peculiarities of Impact of Greenhouse Gases on the Expected Recovery of the Ozone Layer in the Polar Regions
Zadorozhny Alexander, Igor Dyominov. *Speaker Zadorozhny Alexander*

JAS012 Seismological, geological and tectonic interpretation of geomagnetic anomalies on continents and oceans
Conveners: Okuma Shigeo, Hemant Kumar

Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Economics Room 2
Chairpersons: Kumar Hemant

09:00 am **Derivation and Interpretation of the new World Digital Magnetic Anomaly Map**
Purucker Michael. *Speaker Purucker Michael*

09:30 am **The reassembled geology of the North Atlantic Margins**
Reeves Colin. *Speaker Reeves Colin*

09:50 am **Investigating local crustal properties by inversion of magnetic anomaly measurements**
Quesnel Yoann, Vincent Lesur, Mioara Manda, Benoit Langlais, Christophe Sotin, Armand Galdeano. *Speaker Quesnel Yoann*

10:10 am **New tectonic and crustal structure of the central Indian shield regions inferred from CHAMP satellite magnetic anomaly maps**
Hemant Kumar, Mike Purucker. *Speaker Hemant Kumar*

Palaeointensity studies progress and challenges
Conveners: Yu Yongjiae, Krasa David, Yamamoto Yuhji

Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Pharmacy (E Room) Room E
Chairpersons: Yuhji Yamamoto and Roman Leonhardt

09:00 am **Thellier-type paleointensity determinations from North-West Russia dyke complex of 1450 Ma age**
Shcherbakov Valeriy, Shcherbakova Valentina, Lubnina Natalia, Zhidkov Grigory. *Speaker Shcherbakov Valeriy*

09:20 am **Absolute paleointensity determinations on baked materials from a large Roman tile kiln at Hermalle-sous-Huy (Belgium) a case study.**
Spassov Simo, Jozef Hus, Raoul Geeraerts. *Speaker Spassov Simo*

09:40 am **The Auckland geomagnetic excursion: paleodirections and paleointensities from five key volcanoes within the Auckland Volcanic Field**
Cassidy John, Mimi J Hill. *Speaker Cassidy John*

10:00 am **The multispecimen parallel differential PTRM method for absolute paleointensity determination**
Dekkers Mark J., Harald N. Bhnel. *Speaker Dekkers Mark J.*

10:30 am **Coffee Break (30 minutes)**
11:00 am **Absolute paleointensities for recent lavas from East Maui (Hawaii, USA) determined with the multispecimen parallel differential PTRM method**
Herrero-Bervera Emilio, Harald N. Bhnel, Mark J. Dekkers. *Speaker Herrero-Bervera Emilio*

11:20 am **Development of the microwave LTD-DHT Shaw method**
Yamamoto Yuhji, John Shaw. *Speaker Yamamoto Yuhji*

11:40 am **Magnetic cooling rate dependency and paleointensity determination**
Leonhardt Roman, J. Matzka, A.R.L. Nichols, D.B. Dingwell. *Speaker Leonhardt Roman*

12:10 pm **Preference of normalizer on sedimentary paleointensity: strong influence of magnetostatic interaction on ARM acquisition**
Yamazaki Toshitsugu. *Speaker Yamazaki Toshitsugu*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy (E Room) Room E
Chairpersons: Simo Spassov and John Cassidy

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
Chairpersons: -

How strong was the geomagnetic field during the Cretaceous Normal Superchron?
Hill Mimi, Ceri J Davies, John Shaw. *Speaker Hill Mimi*

Some unusual magnetic minerals found in palaeo-slugs, North Bohemian Browncoal basin; their termomagnetic and low field characteristics
Chadima Martin, Marta Chlupacova, Vladimir Zacek, Roman Skala, Frantisek Hroudka. *Speaker Marta Chlupacova*

Oral 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP

ESTIMATION OF CORRELATION MATRIX
Karapetian Karine, Zaven Chilingarian. *Speaker Karapetian Karine*

Geoelectric cross-section of the Northern Urals lithosphere

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy (E Room) Room E
Chairpersons: Simo Spassov and John Cassidy

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP
Chairpersons: -

How strong was the geomagnetic field during the Cretaceous Normal Superchron?
Hill Mimi, Ceri J Davies, John Shaw. *Speaker Hill Mimi*

Some unusual magnetic minerals found in palaeo-slugs, North Bohemian Browncoal basin; their termomagnetic and low field characteristics
Chadima Martin, Marta Chlupacova, Vladimir Zacek, Roman Skala, Frantisek Hroudka. *Speaker Marta Chlupacova*

Assessment of in-flow palaeointensity variation from samples according to the Brunhes-Matuyama geomagnetic field reversal using first-order reversal curves
Brown Maxwell. *Speaker Brown Maxwell*

Testing multiple specimen absolute paleointensity determination: Theory and experiments
Fabian Karl, Roman Leonhardt. *Speaker Fabian Karl*

The IZZI paleointensity protocol and its novelty
Yu Yongjia. *Speaker Yu Yongjia*

Paleointensity of the geomagnetic field derived from neolithic remnants from South-Western Slovakia
Tunji Igor, 2 Hrouda Frantisek, 3 Hovorka Dusan. *Speaker Tunji Igor*

Tertiary volcanic rocks from the Patagonian plateau, Argentina.
Perrin Mireille. L.M. Alva-Valdivia. *Speaker Perrin Mireille*

ASI010 Open Poster Session
Conveners: Werner Tomasz, De Wall Helga
Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Paleomagnetism of Ar-Ar dated volcanics from the Trans-Mexican Volcanic Belt: Contribution to the time-averaged field global database and Geomagnetic Instability Time Scale
Gogichaishvili Avto. *Speaker Gogichaishvili Avto*

Mineralogy and genesis of Lashak plain clay deposit in the North of Alborz Mountain, Iran
Ansari Mohammad Reza, Isa Mataji, Mohammad Reza Ansari. *Speaker Ansari Mohammad Reza*

Strongly magnetic soils developed on weakly magnetic rock basement
Fialova Hana, Eduard Petrovsky, Ales Kapicka, Neli Jordanova. *Speaker Fialova Hana*

A configuration change in the magnetotail during reconnection?
Laitinen Tiera, Rumi Nakamura, Andrei Runov, Henri Rme, Elizabeth A. Lucek. *Speaker Laitinen Tiera*

Magnetic Perturbations seen by CHAMP and evaluated using the TIE--GCMZ
Mozzoni David, Mioara Manda, Joseph Cain. *Speaker Mozzoni David*

Magnetic signature of atmospheric PM10 from sites with different environmental stress
Petrovsky Eduard, Bohumil Kotlik, Radek Zboril, Jiri Novak, Ales Kapicka, Hana Fialova. *Speaker Petrovsky Eduard*

Analysis of geomagnetic observations made in Rome around the year 1790
Matzka Juergen, Angelo De Santis. *Speaker Matzka Juergen*

Measurement and compensation of the Earth's magnetic field using a cesium optical pumping magnetometer
Park Po Gyu. *Speaker Park Po Gyu*

Magnetospheric Line Radiation observed by a low altitude satellite: classification, sources and theory of propagation
Nemec Frantisek, Ondrej Santolik, Michel Parrot, Jean-Jacques Berthelier. *Speaker Nemec Frantisek*

Information center based on Nagycenk Geophysical Observatory (GGRI of HAS) data
Koppán András, Viktor Wesztzergom, Kroy Kovcs. *Speaker Koppán András*

Paleomagnetism and Secular Variation in Southern Patagonia Plateau Lavas, 46S to 52S, Argentina
Brown Laurie, Daniel Mason, Matthew Goring, Christopher Condit. *Speaker Brown Laurie*

A statistical analysis of simultaneous Pc3 pulsation and whistler activity
Lemperger Istvan, Balzs Heilig, Arpad Kis, Jnos Lichtenberger, Werner Magnes, Tmea Prodn, Judit Szendrői, Massimo Vellante, Viktor Wesztzergom. *Speaker Lemperger Istvan*

Analysis of long term behaviour of geoelectric activity at Nagycenk Geophysical Observatory
Kis Arpad, Andrs Koppn, Istvn Lemperger, Tmea Prodn, Judit Szendrői, Viktor Wesztzergom. *Speaker Kis Arpad*

In-situ TEM observation of the interaction between magnetic domain walls and twin domain walls below the Verwey transition in magnetite
Church Nathan, Dr. Richard J. Harrison, Dr. Joshua M. Feinberg, Dr. Takeshi Kasama, Dr. Rafal Dunin-Borkowski. *Speaker Church Nathan*

ASI011 Environmental studies
Conveners: El-Qady Gad, Meju Maxwell, Sainato Claudia Mabel
Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A0

02:00 pm Controls on methane gas localisation in a covered wetland-hosted landfill site as inferred from integrated analyses of electrical resistivity, hydrological and hydrochemical data
Meju Maxwell, Thomas Gntner, Trisha Hodson. *Speaker Meju Maxwell*

02:25 pm On the geoelectric monitoring at the CO2 sequestration
Tosha Toshiyuki, Tsuneo Ishido, Shinichi Takakura, Akinobu Miyakoshi. *Speaker Tosha Toshiyuki*

02:50 pm Palaeovalley characteristics revealed by shallow geophysical and hydrogeological observations
Joseph John, Dirk Kirste, Lisa Worrall. *Speaker Joseph John*

03:15 pm Hydrocarbon contaminated soils and magnetic response
Rijal Moti Lal, Katharina Porsch, Erwin Appel, Andreas Kappler, Ulrich Blaha. *Speaker Rijal Moti Lal*

03:40 pm Coffee Break (30 minutes)

04:10 pm Mapping peat layer using integrated surface geoelectric techniques: Case study at eastern Nile Delta, Egypt.
El-Qady Gad, Ahmed El-Galladi, Mohamed Metwaly, Sultan Awad. *Speaker El-Qady Gad*

04:35 pm Computational simulation of heat transfer enhancement from surfaces with cavities
Chandra Suresh, Geo Lee. *Speaker Chandra Suresh*

05:00 pm Geophysical investigation of saline intrusion near the Bevano River mouth: preliminary results
Sabia Marcella, Laura Caruso, Marco Antonellini, Vincenzo Lapenna, Enzo Rizzo. *Speaker Laura Caruso*

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Examination of the Potential for Time Domain Electromagnetic Method for Monitoring water Infiltration to subsurface aquifer
El-Kaliouby Hesham. *Speaker El-Kaliouby Hesham*

Delineation of contamination plume around oxidation sewage-ponds in Southwestern Nigeria
Adepelumi Adekunle. *Speaker Adepelumi Adekunle*

Model tank DC-Resistivity characterization of LNLP migration in a Clay-Sand Formation
Adepelumi Adekunle. *Speaker Adepelumi Adekunle*

Geoelectric investigation of a pluridirectional fissure system in a karstic area
Szalai Sandor, Laszl Szarka, Mihaly Varga. *Speaker Szalai Sandor*

New evidences of leachate plumes detected by a geoelectric studies at a waste disposal site and its environment in Gualaguach city, Province of Entre Ros, Argentina
Pomposiello Cristina, Dapea Cristina, Favetto Alicia. *Speaker Pomposiello Cristina*

Effects of lightning impact on organic matter-rich soil (So Miguel Island, Azores archipelago)
Zanon Vittorio, Teresa Ferreira, Ftima Viveiros, Catarina Silva, Ana Rita Hiplito. *Speaker Zanon Vittorio*

The role of geophysical techniques for hydrogeological and environmental study in the Sand-Dunes area in Vietnam
Giang Nguyen Van. *Speaker Giang Nguyen Van*

1D and 2D interpretation of the MT data to detect subsurface salinity and conductive structures in Inche-broon, Golestan, Iran.
Javaheri Amir Hosein. *Speaker Javaheri Amir Hosein*

Electrostatic wave simulation generated from a seismic pulse in a two-layer medium
Montahaei Mansoure, Mohammad Ali Riahi. *Speaker Montahaei Mansoure*

Inversion of magnetotelluric data to detect iodine bearing structures
Mansouri Eisa. *Speaker Mansouri Eisa*

Audiomagnetotellurics investigations of railway tunnel route
Saraev Alexander. *Speaker Saraev Alexander*

The spatial distribution of the electromagnetic fields surrounding L'Aquila (Italy) due to a new electrified public transport
Palangio Paolo, Cinzia Di Lorenzo, Fabrizio Masci. *Speaker Cinzia Di Lorenzo*

Electromagnetic fields measurements in ULF-ELF-VLF (0.001Hz-100KHz) bands
Palangio Paolo, Cinzia Di Lorenzo, Fabrizio Masci. *Speaker Cinzia Di Lorenzo*

Electrical Resistivity Tomography applied to a feedlot to detect conductivity anomalies
Sainato Claudia Mabel, Malleville Horacio, Losinno Beatriz. *Speaker Sainato Claudia Mabel*

Very low frequency electromagnetic observations in the high altitude region of North Sikkim, India
Sharma Shashi Prakash, K. Anbarasu, Saibal Gutpa, A. Sengupta. *Speaker Sharma Shashi Prakash*

Removal of near-surface effects in 2D Schlumberger resistivity for improved characterisation of covered landfill sites: a TEM-based approach
Mather Philip, Dr Max Meju. *Speaker Mather Philip*

ASI016 Data assimilation and space weather (Division II, III and IV)
Conveners: Scherliess Ludger, Matsuo Tomoko

Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room C
09:00 am Imaging and data assimilation in the ionosphere using MIDAS
Mitchell Cathryn, Dimitry Pokhotelov, Paul S. J. Spencer, Ping Yin. *Speaker Mitchell Cathryn*

09:25 am Prospects for Space Weather Forecasting: lessons from Meteorology.
Swinbank Richard, Mike Keil. *Speaker Swinbank Richard*

09:50 am Ring current modeling with an algorithm based on the particle filter/smoothen
Nakano Shinya, Genta Ueno, Yusuke Ebihara, Mei-Ching Fok, Shin-Ichi Ohtani, Pontus C:son Brandt, Donald G. Mitchell, Kunihiro Keika, Tomoyuki Higuchi. *Speaker Nakano Shinya*

10:15 am High-latitude ionospheric scintillation modelling based on satellite in situ data
Wernik Andrzej, Massimo Materassi, Mariusz Pożoga, Vincenzo Romano. *Speaker Wernik Andrzej*

10:40 am Coffee Break (30 minutes)

11:10 am The response of the Earth-ionosphere VLF waveguide to the January 15-22 2005 solar events
Grubor Davorka, Desanka Sulic, Vida Zigman. *Speaker Grubor Davorka*

11:35 am Types of VLF amplitude/phase perturbation reveal the properties of the lower ionosphere during solar flares
Igman Vida, Davorka Grubor, Desanka Ulić. *Speaker Igman Vida*

12:00 pm Global assimilation of ionospheric measurements: strengths and limitations
Schunk Robert, Ludger Scherliess, Jan J. Sojka, Donald C. Thompson, Lie Zhu. *Speaker Schunk Robert*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room C
02:00 pm Specification of low- and mid-latitude ionospheric dynamics using the Global Assimilation of Ionospheric Measurements (GAIM) model
Scherliess Ludger, D.C. Thompson, R.W. Schunk, J.J. Sojka. *Speaker Scherliess Ludger*

02:25 pm On model error growth in applications of an ensemble Kalman filter to the mesosphere and lower thermosphere region
Matsuo Tomoko, Han-Li Liu, Jeffrey L. Anderson, Daniel R. Marsh, Anne K. Smith. *Speaker Matsuo Tomoko*

02:50 pm State and parameter estimation in radial diffusion model of radiation belts
Kondrashov Dmitri, Yuri Shprits, Michael Ghil, Richard Thorne. *Speaker Kondrashov Dmitri*

03:15 pm The sensitivity of middle atmosphere analyses to data assimilation parameters
Polavarapu Saroja. *Speaker Polavarapu Saroja*

03:40 pm Coffee Break (30 minutes)

04:10 pm Validation of a near real time model assisted ionosphere electron density retrieval technique
Nava Bruno, Sandro M. Radicella, Pierdave Cosson. *Speaker Nava Bruno*

04:35 pm FORMOSAT-3/COSMIC ionospheric data processing and availability for data assimilation systems
Syndergaard Stig. *Speaker Syndergaard Stig*

05:00 pm Regional Multi-Dimensional Modeling of the Vertical Total Electron Content from Satellite Data and IRI
Schmidt Michael, D. Bilitza (2), W. Bosch (1), C. Zeilhofer (1), C.K. Shum (3), Y. Yi (3), K. Cheng (4). *Speaker Schmidt Michael*

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

The influence of solar wind on geomagnetic activity
Jankovicova Dana, Zoltan Voros. *Speaker Jankovicova Dana*

Use of NeQuick model for ionospheric scenarios generation
Cosson Pierdave, Bruno Nava, Sandro Maria Radicella. *Speaker Cosson Pierdave*

ASI017 Sun-Earth system: science and impacts (Divisions II, III and IV)
Conveners: Kozyra Janet
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room B
Chairpersons: -

09:00 am CEDAR, GEM and ISTP magnetospheric storms effects on HF radio propagation at high latitudes
Blagoveshchensky Donat. *Speaker Blagoveshchensky Donat*

09:20 am Tracking intense geomagnetic storms to the interplanetary mediu: May 15, 2005
Brigitte Schmieder, Sergio Dasso. *Speaker Brigitte Schmieder*

09:40 am Various ways of the solar energy impact on the Earths climate and weather
Makarova Ludmila, Alexander Frank-Kamenetsky. *Speaker Makarova Ludmila*

10:00 am Statistic study of large-scale interplanetary phenomena resulting in geomagnetic storms
Yermolaev Yuri, M. Y. Yermolaev, N.S. Nikolaeva, I.G. Lodkina. *Speaker Yermolaev Yuri*

10:20 am Observations of Pc4 ULF waves at Indian Antarctic station Maitri (L=4.5)
Singh Ashok. *Speaker Singh Ashok*

10:40 am Coffee Break (30 minutes)

11:10 am First-principles modeling of geomagnetically induced electromagnetic fields and currents from upstream solar wind to the surface of Earth
Pulkkinen Antti, Michael Hesse, Maria Kuznetsova, Lutz Rastaetter. *Speaker Pulkkinen Antti*

11:30 am An international integrated research program in South of Brazil for observations of solar-terrestrial interactions
Schuch Nelson Jorge, Alisson Dal Lago, Marlos Rockenbach Da Silva, Ezequiel Echer, Walter Demtrio Gonzalez Alarcon, Jairo Francisco Savian, Alan Prestes, Carlos Roberto Braga, Kazuoki Munakata, Zenjiro Fujii, John W. Bieber, Takao Kuwabara, Marc L. Duldig, Ismail Sabbah, Ashot Chilingarian, Rainer Hippler, John E. Humble. *Speaker Schuch Nelson Jorge*

11:50 am Specification and forecast of energetic magnetospheric particles and geomagnetic activity
Baker Daniel, Michael Gehmeyr. *Speaker Baker Daniel*

12:10 pm Solar flare effect on the geomagnetic field and ionosphere
Meza Amalia, Mara Andrea Van Zele, Marta Rovira. *Speaker Meza Amalia*

Meza Amalia
Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room B
02:00 pm Solar wind - magnetosphere coupling efficiency: Role of solar wind dynamic pressure
Palmroth Minna, Noora Partamies, Jussi Polvi, Dave McComas, Robin Barnes, Peter Stauning, Charles W. Smith, Howard Singer, Rami Vainio. *Speaker Palmroth Minna*

02:20 pm Systematic study of the response of the pipe-to-soil voltages induced in the Czech oil pipelines on geomagnetic disturbances
Hejda Pavel, Josef Bochnicek, Tomas Novotny, Jan Simkanin. *Speaker Hejda Pavel*

02:40 pm Effects of solar wind speed in driving magnetospheric activity
Pulkkinen Tuija, Noora Partamies, Minna Palmroth, Robert L. Mcherron, Charles C Goodrich. *Speaker Pulkkinen Tuija*

03:00 pm MHD modeling of varying solar wind and IMF propagating from L1 to Earth
Papitashvili Vladimir, Konstantin Kabin. *Speaker Papitashvili Vladimir*

03:20 pm Solar corona effects on angle-of-arrival fluctuations for RF telecommunication links during superior solar conjunction
Ho Christian, David D. Morabito, Richard Woo. *Speaker Ho Christian*

03:40 pm Coffee Break (30 minutes)

04:10 pm Solar-Wind Sources for Large-Scale Disturbances (including Super Substorms) during Geomagnetic Storms
Lyons Larry, Dae-Young Lee, Shsha Zou, Chih-Ping Wang, Steve Mende. *Speaker Lyons Larry*

04:30 pm Submitted to Wrong Session---withdrawn
Johnson Jay. *Speaker Johnson Jay*

04:50 pm Dependence of DST and AE indices on the magnetic cloud electric field as an indicator of the type of magnetic clouds
Barkova Elena, I.Ya. Plotnikov. *Speaker Barkova Elena*

05:10 pm On the nature of the solar influence on climate and its contribution to climate change
Veira Luis Eduardo, Fernando Luis Guarnieri. *Speaker Veira Luis Eduardo*

Luis Eduardo
Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -

Quasi-Real Time Derivation of TEC and its Application for Space Weather Monitoring
Miyake Wataru, Hidekatsu Jin. *Speaker Miyake Wataru*

Study of the auroral emissions and electron precipitation at low sun activity
Guineva Veneta, Espen Trndsen, Steve Marple, Chris Hall, Paul Cannon,

Truls Lynne Hansen. *Speaker Guineva Veneta*

Ionosphere transfer characteristic for radio astronomical signals and space weather impact as deduced from two-frequency GPS radiosounding and IRI-2001 modeling
Astafyeva Elvira, Edward L. Afraimovich, Yuri V. Yasukevich, Pavel V. Tatarinov. *Speaker Astafyeva Elvira*

Analysis on coronal holes and high-speed solar wind during solar minimum
Watari Shinichi, Kazuyuki Hakamada. *Speaker Watari Shinichi*

Influence of space weather on cardio system of health people: results of telecommunication experiment
Ragoulskaya Mary, Vitally Vishnevsky, Sergey Samsonov. *Speaker Ragoulskaya Mary*

The first space weather forecast models from the center for integrated space weather modeling
Gehmeyr Michael, D.N. Baker, C.N. Arge, G. Millward, J. Rigler, R.S. Weigel. *Speaker Gehmeyr Michael*

The influence of dipole tilts on plasma parameters inside the magnetosphere using two-dimensional MHD simulations
Cardoso Flavia, Maria Virginia Alves, Luis Eduardo A. Vieira. *Speaker Cardoso Flavia*

Influence of space weather changes on human health state
Khabarova Olga, Elchin S. Babayev 2, 3, Vladimir N.Obrieko 2, 4, E.A. Kazimov 2, 5, Abbas B. Asgarov 2, F.R. Mustafa 2, 3. *Speaker Khabarova Olga*

Study of the fast forward shock propagation in the Earth's vicinity
Prech Lubomir, Katerina Andreeova. *Speaker Katerina Andreeova*

Solar activity imprint on Mesozoic Gondwana tree rings
Prestes Alan, Nivaor Rodolfo Rigozo, Daniel Jean Roger Nordemann, Luis Eduardo Antunes Vieira, Mariza Pereira De Souza Echer, Nelson Jorge Schuch. *Speaker Prestes Alan*

SEP/X-flare relation with GLE events during solar cycle 23
Damiani Alessandro, Monica Laurenza. *Speaker Damiani Alessandro*

Solar and Interplanetary Causes of High-Intensity, Long Duration, Continuous AE Activity (HILDCAA) Events.
Guarnieri Fernando, Ezequiel Echer, Luis Eduardo Antunes Vieira, Alisson Dal Lago, Walter Demetrio Gonzalez, Alicia Luiza Clua De Gonzalez, Bruce T. Tsurutani. *Speaker Guarnieri Fernando*

ASI020 Magnetosphere-ionosphere interactions and auroral processes (Divisions III and IV)
Conveners: Lotko William
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Economics Room 1
Chairpersons: -

09:00 am Response of the magnetosphere and ionosphere to CME events
Nanan Balan. *Speaker Nanan Balan*

09:21 am Field-aligned acceleration of plasmas in midnight sector by slow mode wave: Pi2 band modulation of aurora in all-sky image
Osuke Saka, Kanji Hayashi. *Speaker Osuke Saka*

09:42 am High-Latitude Plasma Convection From Cluster EDI Measurements
Haaland Stein, G. Paschmann, M. Foerster, J. M. Quinn, R. B. Torbert, C. Kletzing, H. Vaith, P. A. Puhl-Quinn, C. E. McIlwain. *Speaker Haaland Stein*

10:03 am Generation of intense quasistatic fields at high altitudes by the ionospheric Alfvén resonator
Lotko William, Jonathan C. Watts, Anatoly V. Streltsov. *Speaker Lotko William*

10:24 am Electric field and undulations in the evening diffuse auroral zone
Baishev Dmitry, A.E. Stepanov, F. Rich, K. Yumoto. *Speaker Baishev Dmitry*

10:45 am Coffee Break (30 minutes)

11:15 am Peculiarities in plasmaspheric thermal structure as observed by INTERBALL satellites
Kotova Galina, V. Bezrukikh, M. Verigin, J. Smilauer. *Speaker Kotova Galina*

11:36 am On the formation and motion of transpolar arcs
Milan Steve, Atousa Goudarzi, Mark Lester, Adrian Grocott, Benoit Hubert. *Speaker Milan Steve*

11:57 am Multi-point observations of field-aligned currents from Space Technology 5
Le Guan, James A. Slavin, Yongli Wang, Robert J. Strangeway. *Speaker Le Guan*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Room 1
Chairpersons: -

02:00 pm Ionospheric storm-time convection as seen by GPS tomography and in-situ spacecraft observations
Pokhotelov Dimitry, Dimitry Pokhotelov, Cathryn N Mitchell, Paul S J Spencer, Roderick A Heelis. *Speaker Pokhotelov Dimitry*

02:21 pm Alfvén wave resonance cones and ionospheric outflow
Singh Nagendra, Igor Khazanov. *Speaker Singh Nagendra*

02:42 pm Relation of Substorm Onset to Harang Discontinuity
Weyand James, O. Amm, H.U. Frey, K. Kauristie, A. Viljanen, A. Koistinen. *Speaker Weyand James*

03:03 pm Variation of the cold plasma density structure above the polar ionosphere associated with geomagnetic storms
Kitamura Naritoshi, Atsuki Shinbori, Yukitoshi Nishimura, Takayuki Ono, Masahide Iizima, Atsushi Kumamoto, Yukio Nishimura. *Speaker Kitamura Naritoshi*

03:24 pm On estimating low-energy spectral information due to daylight auroral arcs using combined optical and radar measurements from Sondrestrom
Pallamraju Duggirala, R. Doe. *Speaker Pallamraju Duggirala*

03:45 pm Coffee Break (30 minutes)

04:15 pm Coordinated ground-based and satellite observations of magnetosphere-ionosphere coupling process
Yizengaw Endawoke, Mark B. Moldwin. *Speaker Yizengaw Endawoke*

04:36 pm Initial results from the SuperDARN Hokkaido radar observation: Nightside ionospheric convection in mid-latitudes during magnetic storms
Kataoka Ryuho, Nozomu Nishitani, Takashi Kikuchi, Tadahiko Ogawa, Keisuke Hosokawa, Hokkaido Hf Radar Group. *Speaker Kataoka Ryuho*

04:57 pm Multi-point Observations of Field-Aligned Currents in the Polar Ionosphere
Strangeway Robert, Guan Le, James A Slavin, Scott A Boardsen, Joachim Raeder, Douglas J. Larson. *Speaker Strangeway Robert*

ASI022 Perspectives from global models and synoptic observations (Divisions III and IV)
Conveners: Eriksson Stefan, Gjerloev Jesper
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Mathematics Room B3
Chairpersons: -

09:00 am OpenGGCM comparisons with ionospheric data
Raeder Joachim, Douglas Larson, Haje Korth, Brian Anderson. *Speaker Raeder Joachim*

09:30 am Field-aligned and ionospheric currents during northward IMF: Multi-satellite observations and global modeling
Vennerstrom Susanne, Therese Moretto, Lutz Rastter, Jimmy Raeder. *Speaker Vennerstrom Susanne*

10:00 am Non-potential fields and field aligned currents in regular daily variations in observatory and satellite magnetic data
Winch Denis, David Ivers, Robert Stening. *Speaker Winch Denis*

10:15 am Effect of solar wind dynamic pressure changes on convection and the aurora: modeling and observations
Zesta Eftyhia, Athanasios Boudouridis, Jimmy Raeder, Douglas J Larson, Dirk Lummerzheim, Robert J Strangeway, Larry Lyons. *Speaker Zesta Eftyhia*

11:00 am Coffee Break (30 minutes)

11:00 am Global Specification of the Magnetosphere-Ionosphere State with Distributed Space-based Observations and Remote Sensing: Putting Global Simulations to the Test
Korth Haje, Brian J. Anderson, Colin L. Waters, David L. Green, Lutz Rastaetter, John G. Lyon, Mike Wiltberger, Peter Stauning, Hermann Luehr, F. Rich, J. Michael Ruohoniemi. *Speaker Korth Haje*

11:30 am Ultra Large Terrestrial International Magnetic Array (ULTIMA): A Global Magnetometer Network for Space Physics Research
Yumoto Kiyohumi, Christopher T. Russell, Brian J. Fraser, Vassilis Angelopoulos, Ian R. Mann, Peter J. Chi. *Speaker Yumoto Kiyohumi*

11:45 am Virtual observatories and 21ST century data systems
Baker Daniel, Robert S. Weigel. *Speaker Baker Daniel*

12:00 pm Response in Polar Cap Indices to Solar Wind Dynamic Pressure Variations
Stauning Peter. *Speaker Stauning Peter*

12:15 pm Statistical Study of the Effect of Long-duration, Solar Wind Dynamic Pressure Step Increases on the Transpolar Potential
Boudouridis Athanasios, Eftyhia Zesta, Larry R. Lyons, Phillip C. Anderson, J. Mike Ruohoniemi. *Speaker Boudouridis Athanasios*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room B3
02:00 pm The inertial effects of the auroral thermosphere on the magnetosphere-ionosphere system

Aruliah Anasuya, *Speaker Aruliah Anasuya*
The global Upper Atmosphere Model: the present state and future perspectives

Namgaladze Alexander, Elena Doronina, Maria Knyazeva, *Speaker Namgaladze Alexander*
02:45 pm **The quiet time ionospheric source of ring current plasmas in boundary related coordinates**

Peterson W.K., *Speaker Peterson W.K.*
03:00 pm **Influence of ionospheric conductance in simulations of the earth magnetosphere-ionosphere system**
Rastaetter Lutz, Michael Hesse, Maria M. Kuznetsova, Aaron Ridley, Tamas I. Gombosi, Joachim Raeder. *Speaker Rastaetter Lutz*
03:15 pm **Remote sensing the dynamics of the ionosphere-plasmasphere system by ground-based ULF wave observations**

Vellante Massimo, Matthias Foerster, Michael Pezzopane, Norbert Jakowski, Tielong Zhang, Umberto Villante, Marcello De Lauretis, Bruno Zolesi, Werner Magnes. *Speaker Vellante Massimo*
03:30 pm **Coffee Break (30 minutes)**
04:00 pm **Simulations of Seasonal Variations in MI Coupling**
Wiltberger Michael, Robert S. Weigel. *Speaker Wiltberger*

Michael
04:30 pm **Ionospheric convection and NBZ field-aligned current response to high-latitude reconnection for changing IMF By conditions**
Eriksson Stefan, Gabrielle Provan, Frederick J. Rich, Marc

R. Hairston, Mark Lester, Henri Reme, Malcolm W. Dunlop, Maria M. Kuznetsova. *Speaker Eriksson Stefan*
Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP

Chairpersons: -
A global model for the geomagnetic noise in the Pc5/Pi3 frequency range for different space weather conditions
Yagova Nadejda, Vyacheslav Pilipenko, Mark Engebretson, Kiyohumi Yumoto. *Speaker Vyacheslav Pilipenko*
Framework atmosphere model modeling environment with tuned system of physical interrelations
Martynenko Oleg, Mikhail Gladkikh. *Speaker Martynenko Oleg*
ASI026 Wave and particle dynamics in the ring current and radiation belts
Conveners: Chan Anthony
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room F

Chairpersons: -
09:00 am **Characterizing ULF wave activity during geomagnetic storms driven by high speed solar wind events.**
Elkington Scot, Seth G. Claudepierre, Anthony A. Chan, Michael Wiltberger, Shri Kanekal. *Speaker Elkington Scot*
09:30 am **Radial transport of relativistic electrons during storms driven by high speed solar wind streams**
Chan Anthony, Scot R. Elkington, Bin Yu, Xin Tao, Seth G. Claudepierre. *Speaker Chan Anthony*

09:45 am **Solar Wind Driving of Magnetospheric ULF Waves**
Claudepierre Seth, Scot R. Elkington, Michael J. Wiltberger. *Speaker Claudepierre Seth*

10:00 am **Empirical characterisation of ULF wave power: Towards a ULF wave index**
Rae Jonathan, Paul T. M. Lotoaniu, Ian R. Mann, Louis G. Ozeke. *Speaker Rae Jonathan*
10:15 am **Calculations of the diffusion coefficients and electron flux changes caused ULF pulsations**
Sarris Theodore, Xinlin Li, Michael Temerin. *Speaker Sarris*

Theodore
10:30 am **Coffee Break (30 minutes)**
11:00 am **Quarter Waves Detected by Cross-phase Analysis**
Obana Yuki, Fred W. Menk, Colin L. Waters, Murray D. Sciffer. *Speaker Obana Yuki*

Speaker Obana Yuki
11:15 am **Mass and electron densities in the inner magnetosphere during a prolonged disturbed interval**
Menk Frederick, Russell Grew, Mark Clilverd, Bill Sandel. *Speaker Menk Frederick*

11:30 am **Morphology of whistler mode chorus and its interactions with energetic electrons**
Santolik Ondrej, D.A. Gurnett, J.S. Pickett, N.P. Meredith, D. Winningham, N. Cornilleau-Wehrin, A. Fazakerley. *Speaker Santolik Ondrej*
12:00 pm **Slot Region Electron Loss Timescales due to Plasmaspheric Hiss and Lightning Generated Whistlers**
Meredith Nigel, Richard B. Horne, Sarah A. Glauert. *Speaker Meredith Nigel*

12:15 pm **Radiation belt electron precipitation into the atmosphere: recovery from a geomagnetic storm**
Rodger Craig, Mark A. Clilverd, Neil R. Thomson, Rory J. Gamble, Annika Seppi, Esa Turunen, Nigel P. Meredith, Michel Parrot, Jean-Andr Sauvaud, Jean-Jacques Berthelier. *Speaker Rodger Craig*

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -
Energy spectrum and the plateau-like temporal profile of the relativistic electron fluxes at geosynchronous orbit during the storm recovery phase: theoretical interpretation
Tverskaya Liudmila, Bakhareva Margarita, Ivanova Tatyana. *Speaker Tverskaya Liudmila*

The spatial structure of the coupled Alfvén and mirror modes in non-uniform space plasmas
Klimushkin Dmitri. *Speaker Klimushkin Dmitri*

Near-equatorial localization of poloidal Alfvén waves in the magnetosphere
Mager Pavel, Dmitri Baskakov. *Speaker Mager Pavel*
Ground-based observations of electron precipitation from radiation belts in the lower ionosphere over Europe
Sulic Desanka, Davorka Grubor, Vida Zigman. *Speaker Sulic Desanka*

Magnetic Pulsation and Riometer Absorption Signatures During Two Geomagnetic Storms in Late 2006
Posch Jennifer, M. R. Lessard, D. L. Detrick, A. T. Weatherwax, J. Manninen, M. C. Rose. *Speaker Posch Jennifer*

Relationship between Storm-time Pc5 observed at ground stations and MeV Electron Flux at the Geosynchronous orbit
Fujimoto Akiko, Manabu Shinohara, Kiyohumi Yumoto, Circum-Pan Pacific Magnetometer Network Group. *Speaker Fujimoto Akiko*

Subauroral proton spots visualize the Pc1 source
Yahnin Alexander, T.A. Yahnina, H.U. Frey. *Speaker Yahnin Alexander*

Efficiency of cyclotron acceleration of radiation belt electrons by whistler-mode waves with varying frequency
Demekhov Andrei, V. Yu. Trakhtengerts, M. J. Rycroft, D. Nunn. *Speaker Demekhov Andrei*

ULF waves in field-aligned current region as observed from INTERBALL-Au satellite
Bochev Alexander, Ashwini Sinha, Satyavir Singh, Shobana Alex, Gurbah Lakhina. *Speaker Bochev Alexander*

ASIV032 IHY and universal processes (Divisions IV, II, and III)
Conveners: Davila Joseph
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Pharmacy Room B

Chairpersons: -
09:00 am **The international heliophysical year: an overview**
Gopalswamy Natchimuthuk, Joseph M. Davila, Barbara J. Thompson. *Speaker Gopalswamy Natchimuthuk*

09:20 am **Heliospheric distribution of the solar EUV flux over the latest solar cycle**
Auchere Frederic. *Speaker Auchere Frederic*

09:40 am **Multi-spacecraft study of the January 21st 2005 ICME**
Foullon Claire, C.J. Owen, S. Dasso, L.M. Green, I. Dandouras, H.A. Elliott, A.N. Fazakerley, Y.V. Bogdanova, N.U. Crooker. *Speaker Foullon Claire*

10:10 am **Abundances in the solar wind**
Bochsler Peter. *Speaker Bochsler Peter*

10:30 am **Development of three-dimensional MHD model of the solar wind-interplanetary space combining system**
Nakamizo Aoi, Takashi Tanaka. *Speaker Nakamizo Aoi*

11:00 am **Observational constraints for solar particle acceleration**
Klein Karl-Ludwig. *Speaker Klein Karl-Ludwig*

11:20 am **On the role played by interplanetary MHD turbulence in the geomagnetic auroral response**
D'Amicis Raffaella, Roberto Bruno, Bruno Bavassano. *Speaker D'Amicis Raffaella*

11:50 am **Coffee Break (30 minutes)**
12:20 pm **Turbulence generation and propagation from the Sun to the Heliosphere**
Bruno Roberto, Bruno Bavassano, Raffaella D'Amicis, Vincenzo Carbone, Luca Sorriso-Valvo. *Speaker Bruno Roberto*

12:40 pm **Universal classification principles of solar and heliospheric processes: dimensionless scaling**
Veselovsky Igor. *Speaker Veselovsky Igor*

01:10 pm **Solar cycle dependence of solar wind structure**
Kojima Masayoshi, Munetoshi Tokumaru, Ken-Ichi Fujiki. *Speaker Kojima Masayoshi*

01:30 pm **Aspects of particle acceleration and transport in inner heliosphere**
Li Gang, Zank, G. P., Verkhoglyadova, Olga P.. *Speaker Zank,*

G. P.
02:00 pm **Characteristics of the Space Environmental Viewing and Analysis Network (SEVAN)**
Reymers Artur, Ashot Chilingarian, Gagik Hovsepyan, Karen Arakelyan, Ashot Avetisyan, Suren Chilingarian, Varujan Danielyan, Karen Avakyan, S.Tserunyan. *Speaker Reymers Artur*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Pharmacy Room B
Chairpersons: -
02:00 pm **Electron Acceleration at Collisionless Shocks**
Burgess David. *Speaker Burgess David*

02:20 pm **Sheaths: A comparison of ICMEs, Planets, and the Heliosphere**
Richardson John. *Speaker Richardson John*

02:40 pm **What does Long-term Geomagnetic Activity tell us about the Sun?**
Mursula Kalevi. *Speaker Mursula Kalevi*

03:00 pm **The distributed Coherent Ionospheric Doppler Receiver (CiDR) network contribution to IHY07**
Garner Trevor, Thomas L. Gaussiran, Ii, Johnathan A. York, Charles M. Slack. *Speaker Thomas (Tom) Gaussiran*

03:20 pm **Remote Sensing of the Lower Ionosphere with AWESOME VLF Receivers**
Inan Umran, Morris Cohen, Phil Scherrer, Deborah Scherrer. *Speaker Inan Umran*

03:40 pm **Coffee Break (30 minutes)**
04:10 pm **IHY Campaign Plans for 2007-2009**
Thompson Barbara, Richard Stamper. *Speaker Thompson*

Barbara
04:40 pm **The Education and Public Outreach Program for IHY**
Rabello-Soares M. Cristina, Barbara J. Thompson, Cheryllynn Morrow, Deborah Scherrer. *Speaker Rabello-Soares M. Cristina*

05:10 pm **Scientific but People Oriented Education (SPOE) & International Heliophysical Year (IHY) Outreach**
Faiyetole Ayodele, Prof. Ekundayo E. Balogun, Dr. Babatunde A. Rabiun. *Speaker Faiyetole Ayodele*

05:40 pm **Coffee Break (30 minutes)**
06:10 pm **Identification and support of outstanding astronomy students**
Stoev Alexey, Eva Bozhurova. *Speaker Stoev Alexey*

06:40 pm **Education and public outreach activities in Bulgaria devoted to the celebration of the IHY**
Stoeva Penka. *Speaker Stoeva Penka*

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -
Studies of the Energy Spectra of incident cosmic radiation by the networks of particle detectors
Hovsepyan Gagik, Ashot Chilingarian. *Speaker Hovsepyan Gagik*

Advanced Date Acquisition System for the SEVAN (Space Environmental Viewing and Analysis Network)
Chilingaryan Suren, Ashot Chilingarian, Varuzhan Danielyan, Aram Yeghikyan. *Speaker Chilingaryan Suren*

Electromagnetic spectrum monitoring in the frequency range of 10 240 mhz at the Brazilian Southern Space Observatory - a radio-quiet site potential for IHY-2007 installation of instrumentation
Pereira Da Silva Cleomar, Natanael Rodrigues Gomes, Jean Carlos Daroit, Thiago Brum Preto, Tiago Jaskulski, Marcelo Dos Santos Zastawny, Luis Eduardo Antunes Vieira, Fernando Luis Guarnieri, Damaris Kirsch Pinheiro, Raulin Jean-Pierre. *Speaker Pereira Da Silva Cleomar*

Multi-Cultural Adaptations of International Heliophysical Year (IHY) Education Resources: A Perspective of a Developing Country.
Faiyetole Ayodele. *Speaker Faiyetole Ayodele*

Space Weather Monitors for the IHY 2007: Distributing Scientific Instruments and Classroom Materials Worldwide
Rabello-Soares M. Cristina, Deborah Scherrer, Morris Cohen, Todd Hoeksema, Umran Inan, Ray Mitchell, Philip Scherrer. *Speaker Rabello-Soares M. Cristina*

Comparing waiting time distributions of Bs and AE extreme events D'Amicis Raffaella, Roberto Bruno, Bruno Bavassano. *Speaker D'Amicis Raffaella*

ASV036 Geomagnetic measurements in remote regions (Division V and ICDC)
Conveners: Qamili Enkelejda, Arora Baldev, De Santis Angelo
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room A

Chairpersons: -
09:00 am **Two years of continuous record of the Earth's magnetic field at Concordia station (DomeC, Antarctica)**
Schott Jean-Jacques, Domenico Di Mauro, Aude Chambodut, Lucia Agnoletto. *Speaker Schott Jean-Jacques*

09:20 am **Autonomous Low-Power Instrument Platform to enable Remote High Latitude Array Deployment**
Clauer C. Robert, Stephen Musko, Ken Arnett, Vladimir Papitashvili, Aaron Ridley. *Speaker Clauer C. Robert*

09:40 am **The british antarctic surveys low power magnetometer project**
Rose Mike, Mervyn Freeman. *Speaker Rose Mike*

10:00 am **An example of operation for a partly manned antarctic observatory and the development of a radio link for data transmission**
Torta J. Miquel, Joan L. Pijoan, David Altadill, Joan J. Curto, Angelo De Santis, Luis R. Gaya-Piqu, Santiago Marsal, Joan Mauricio, John C. Riddick, J. German Sol, Arantza Ugalde, Carles Vilella. *Speaker Torta J. Miquel*

10:20 am **Magneto-seismic Chain in the Arctic Far East (MsCAFÉ): A Strategic Plan for Improving Ground Observations of Magnetospheric Dynamics**
Chi Peter, C. T. Russell, V. A. Pilipenko, S. I. Solovvey, K. Yumoto, M. J. Engebretson. *Speaker Chi Peter*

10:40 am **Coffee Break (30 minutes)**
11:10 am **MAGnetic Data Acquisition System (MAGDAS)**
Yumoto Kiyohumi, Magdas/cpmn Group. *Speaker Yumoto*

Kiyohum
11:30 am **Advanced data logger and communication system for data collection from remote regions**
Janzhura Alexander. *Speaker Janzhura Alexander*

11:50 am **Need for new geomagnetic observatories in the Indian Ocean**
Arora Baldev, S.K. Bhardwaj. *Speaker Arora Baldev*

12:10 pm **GEOSTAR deep seafloor missions: Magnetic data analysis and main geoelectric characteristics underneath the southern Tyrrhenian Sea**
Vitale Sergio, De Santis Angelo, Di Mauro Domenico. *Speaker Vitale Sergio*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room A
Chairpersons: -
02:00 pm **Secular variation and Sq variation in the South Atlantic Magnetic Anomaly**
Matzka Juergen, Cathrine Fox Maule, Nils Olsen. *Speaker Matzka Juergen*

02:20 pm **Localizing the North magnetic pole from ground survey and satellite data**
Chulliat Arnaud, Larry Newitt, Jean-Jacques Orgeval, Lorne Mckee, Erwan Thebault, Gauthier Hulot. *Speaker Chulliat Arnaud*

02:40 pm **Geomagnetic storms recorded by global network of broadband seismometers**
Kawasaki Ichiro, Yuktaka Ido, Ryokei Yoshimura, Takuro Shibutani. *Speaker Kawasaki Ichiro*

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -
Geophysical complex of ISTP SB RAS for monitoring of electromagnetic fields at high and middle latitudes
Rakhmatulin Ravil, Potapov A.S., Nechaev S.A., Kharchenko V.V.. *Speaker Rakhmatulin Ravil*

Geomagnetic pulsations of long periods (1,0 10 milihertz) with variation of solar cycle of in the region of the South Atlantic magnetic anomaly
Sama Rother Fagner, Nelson Jorge Schuch, Sandro Fettermann Bertagnolli, Josemar Siqueira, Cassio Espindola Antunes;, Severino Luiz Guimares Dutra, Nalin Babulal Trivedi. *Speaker Rother Fagner*

Low and mid-frequency pulsations in the polar cap: polarization pattern and MLT dependence of the spectral power during the descending phase of the solar cycle
De Lauretis Marcello, Franca Patrizia, Piancatelli Andrea, Vellante Massimo, Villante Umberto. *Speaker De Lauretis Marcello*

An experience of tectonomagnetic investigations in Western Antarctic Maksymchuk Valentyn. *Speaker Maksymchuk Valentyn*

Estimations of magnetic coseismics polarization parameters for Koyna earthquakes
Leontyeva Olha, Baldev Arora, Fedir Dudkin, Gautam Rawat, Ashok Sharma. *Speaker Leontyeva Olha*

Measuring the magnetic field in remote regions using low-altitude airport platform
Thebault Erwan, Arnaud Chulliat, Luis Gaya-Piqu, Gauthier Hulot, Jean-Louis Etienne, Jean-Michel Lger, Denis Duret. *Speaker Thebault Erwan*

Experimental studies with a fluxgate magnetometer of toroidal core
Siqueira Josemar, Nelson Jorge Schuch, Cassio Espindola Antunes, Fagner Chagas Rother, Nalin Babulal Trivedi. *Speaker Siqueira Josemar*

Prospects of the Far-Eastern observatories in the framework of International Programs of Geophysical Polar Year
Shevtsov Boris, Vladimir Kuznetsov, Kiyohumi Yumoto, Takashi Kikuchi, Mioara Manda, Jean Rasson, Manabu Shinohara, Sergey Smirnov, Ilham Babakanov, Stanislav Nechaev, Sergey Khomutov, Nina Cherneva, Igor Poddelskiy, Mikhail Basalaev, Alexander Zaitzev. *Speaker Shevtsov Boris*

Development of a small autonomous unmanned helicopter for aeromagnetic survey
Funaki Minoru, Takafumi Nishioka. *Speaker Funaki Minoru*

ASV039 Use of geomagnetic data and indices in space weather and space climatology
Conveners: Lukianova Renata, Mursula Kalevi, Curto Juan Jos
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room E

Chairpersons: -
09:00 am **The polar cap magnetic activity (PC index) as an indicator of current state of the magnetosphere**
Troshichev Oleg, Alexander Janzhura, Peter Stauning. *Speaker Troshichev Oleg*

09:30 am **Revising the polar cap index definition: issues and choices**
Bargatze Lee, Lee Frost. *Speaker Bargatze Lee*

09:45 am **Near real-time availability of the K based geomagnetic indices Kp, ap, Ap and Cp**
Linthe Hans-Joachim, Mioara Manda, Monika Korte, Ellen Clarke. *Speaker Linthe Hans-Joachim*

10:00 am **Validation/Reconstruction of the Sunspot Number Series, 1840-Present**
Cliver Ed, Leif Svalgaard. *Speaker Cliver Ed*

10:15 am **A New Verifiable Measure of Centennial Geomagnetic Activity: Modifying the K Index Method for Hourly Data**
Mursula Kalevi, Daniel Martini. *Speaker Mursula Kalevi*

10:30 am **Coffee Break (30 minutes)**
11:00 am **Statistical characteristics of the day-to-day variability in the geomagnetic Sq field**
Xu Wen-Yao. *Speaker Xu Wen-Yao*

11:15 am **Separation of atmospheric-ionospheric current signatures from magnetospheric current signatures during storm periods**
Sojka Jan, Lie Zhu, Piotr Kokoszka, Agnieszka Jach. *Speaker Sojka Jan*

11:30 am **Evolution in the SC knowledge and its implications in terminology and classification.**
Curto Juan Jos, T. Araki, L.F. Alberca. *Speaker Curto Juan Jos*

11:45 am **Earth's magnetic field behavior inferred from wavelet analysis using a North-South array of magnetometers**
Mendes Da Costa Aracy, Odim Mendes Jr, Margarete Oliveira Domingues, Andrea Ines Borgazzi. *Speaker Mendes Da Costa Aracy*

12:00 pm **Analyzing the April 2000 and October 2001 magnetic storms using ground and satellite observations**
Kotze Pieter. *Speaker Kotze Pieter*

12:15 pm **Solar proton events and geomagnetic storms relationships during solar cycle 23**
Hady Ahmed. *Speaker Hady Ahmed*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room E
Chairpersons: -
02:00 pm **Climatology of the geomagnetic activity**
Menvielle Michel. *Speaker Menvielle Michel*

02:30 pm **The long-term variation in the correlation between solar and geomagnetic activity, and its implications for the solar dynamo theory**
Georgieva Katya. *Speaker Georgieva Katya*

03:00 pm **Contribution of geometric parameters into geomagnetic activity in different models of the solar wind - magnetosphere interaction**
Kuznetsova Tamara, Alex Laptukhov. *Speaker Kuznetsova*

Tamara
03:15 pm **Variation of Magnetospheric Dynamics During the Solar Cycle**
Johnson Jay, Simon Wing. *Speaker Johnson Jay*

03:30 pm **Coffee Break (30 minutes)**
04:00 pm **Ground effects of space weather: use of geomagnetic data for analysis, real-time simulation and forecasting.**
Trichtchenko Larisa, D. H. Boteler. *Speaker Trichtchenko Larisa*

04:30 pm **The global magnetometer network initiative: SuperMAG**
Gjerloev Jesper. *Speaker Gjerloev Jesper*

04:45 pm **Statistical characteristics of the variability in the long-term geomagnetic records**
Lukianova Renata, Nicolay Ivanov. *Speaker Lukianova Renata*

05:00 pm **Geomagnetic indices in studies of Space Climate**
Mursula Kalevi. *Speaker Mursula Kalevi*

JGS002 Global sea-level change: Altimetry, GNSS and tide gauge measurements
Conveners: Nerem Steve, Coleman Richard
Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Education Room 3

Chairpersons: Richard Coleman and Steven Nerem
02:00 pm **Global Coastal Sea Level Change on Decadal and Century Timescales**
Woodworth Philip, Simon Holgate, Svetlana Jevrejeva, Roland Gehrels. *Speaker Woodworth Philip*

02:15 pm **Assessment of the 20th Century Sea Level Rise**
Shum C. K., Chungyen Kuo, Alexander Braun, Benjamin Fong Chao, Junyi Guo, Patrick Wu. *Speaker Shum C. K.*

02:30 pm **Global sea level reconstruction 1807-2002**
Jevrejeva Svetlana. *Speaker Jevrejeva Svetlana*

02:45 pm **Hydrologic Contributions to Global Mean Sea Level Change**
Nerem Steve, D. P. Chambers, J. Famiglietti, E. Leuliette. *Speaker Nerem Steve*

03:00 pm **Towards more Accurate Estimates of the Thermosteric Sea Level Rise**
Domingues Catia, John A. Church, Neij J. White, Susan E. Wijffels. *Speaker Domingues Catia*

03:15 pm **Looking for acceleration in the rate of global sea level change**
Holgate Simon. *Speaker Holgate Simon*

03:30 pm **Coffee Break (30 minutes)**
04:00 pm **A decade of tide gauge monitoring using continuous GPS and absolute gravimetry in the UK: new estimates of vertical land motion and sea-level change**
Teferle Norman, Richard Bingley, Simon Williams, Etienne Orliac, Alan Dodson, Trevor Baker. *Speaker Teferle Norman*

04:15 pm **GRACE-based water volume change in major river basins over 2002-2006 and contribution to sea level**
William Llovel, Cazenave Anny, Ramillien Guillaume, Guentner Andreas. *Speaker William Llovel*

04:30 pm **Comparing the sea level response to pressure and wind forcing of two barotropic models: validation with tide gauge and altimetry data**
Pascual Ananda, Marta Marcos. *Speaker Pascual Ananda*

04:45 pm **Combining ICESat Altimetry and Tide Gauges for Coastal Water Surface Determination in the Great Lakes**
Ali Ibraheem, Dr. Alexander Braun, Dr. Michael G. Sideris. *Speaker Ali Ibraheem*

05:00 pm **Study of the mean sea level and its time variations**
Ducarme Bernard, A. P. Venedikov, R. Vieira Diaz, D. Dimitrov. *Speaker Ducarme Bernard*

05:15 pm **Validation of the thermosteric sea level sensitivity of climate models based on observations**
Katsman Caroline. *Speaker Katsman Caroline*

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -
Estimation of the ocean tide effect on the altimetric measurements
Rami Ali, Mhamed Khelif, Selem Kahlouche, Toufik Dennonkri. *Speaker Rami Ali*

Sea level trend in Gulf of Thailand and South China Sea
Niernnil Sommart, Itthi Trisirisatayawong. *Speaker Niernnil Sommart*

Surface Elevation Change of Ice Sheet from Crossover of ENVISAT Data
Chu Yonghai, Jiangcheng Li. *Speaker Chu Yonghai*

mpensation
Athiyaseelan Rajesh, Tapan Jyoti Majumdar. *Speaker Sathyaseelan Rajesh*
New combination models of GNSS observations for precise orbit determination of LEOs with undifferenced geometric strategy
Zhang Shoujian, Jiancheng Li, Xiancai Zou. *Speaker Zhang Shoujian*
Regional characteristics of long-term sea level variations from sea level and sea surface temperature data
Knudsen Per, Ole Andersen, Susana Barbosa, Allan Aasbjerg Nielsen. *Speaker Knudsen Per*
Attribution of global sea level variations from the ECMWF ocean reanalysis
Alonso Balmaseda Magdalena, David Anderson, Arthur Vidard. *Speaker David Anderson*
JASON-1 absolute calibration results from the Eastern Mediterranean Gavdos project
Pavlis Erricos C., S. P. Mertikas. *Speaker Pavlis Erricos C.*
Sea-level Rise in the Northeast Pacific from a Combined Tide Gauge, GPS, and Absolute Gravity Analysis
Mazzotti Stephane, Richard Thomson, Anthony Lambert, Herb Dragert, Fred Stephenson. *Speaker Mazzotti Stephane*
Vertical motion control of tide gauges in the Atlantic as a part of the TIGA Project
Sanchez Laura. *Speaker Sanchez Laura*
Seavar - sea level anomalies from combined satellite altimetry and GPS-corrected Tiga tide gauge data
Sadowsky Nana, Tilo Schoene, Saskia Esselborn, Feipeng Zhang. *Speaker Sadowsky Nana*
Changes in ocean heat content in the twentieth century: a comparison between climate model simulations and observations
Katsman Caroline, Jorge Urrego Blanco. *Speaker Katsman Caroline*
Geocenter motions and geodynamic consequences due to dynamics of sea surface topography from TOPEX/POSEIDON altimetry 1993 2004
Vi'Ma Zdislav, Milan Bura, Steve Kenyon, Jan Kouba, Zdislav Ma, Viliam Vatr, Vojtech Vtek, Marie Vojt?kov. *Speaker Vi'Ma Zdislav*
GIA vignaturs on Holocene and present-day vertical movements along the coasts of Italy
Stocchi Paolo, Giorgio Spada. *Speaker Stocchi Paolo*
Observations of the sea level in the geodynamics laboratory of Lanzarote (Canary Islands)
Ricardo Vieira, Vlez Emilio, Venedikov Angel. *Speaker Ricardo Vieira*
The role of altimeter data processing on global sea level studies
Fernandes Joana, Susana Barbosa. *Speaker Fernandes Joana*
Improvement of satellite altimetry data sets in the coastal regions
Fernandes Joana, Clara Lzaro, Susana Barbosa, Philippa Berry. *Speaker Fernandes Joana*
New tide gauge technologies at Lestartit for monitoring sea level and altimeter calibration campaigns
Martinez-Benjamin Juan Jose, Marina Martinez-Garcia, Miquel Angel Ortiz Castellon, Begoa Perez Gomez, Gema Rodriguez-Velasco. *Speaker Martinez-Benjamin Juan Jose*
Determination of sea-level change and vertical crustal motion in the Canadian Arctic from GPS and tide gauges
Craymer Michael R., Donald L. Forbes, Joseph A. Henton, Mieczyslaw Piraszewski. *Speaker Craymer Michael R.*
Evaluating the Brazilian Vertical Reference System and Frame through Improved Coastal Satellite Altimetry Data
Teixeira Luz Roberto, Wolfgang Bosch, Bernhard Heck. *Speaker Teixeira Luz Roberto*
HYDROWEB : an on-line database from space altimetry for lake and river levels
Daillet Sylviane, J-F Crtaux, M-C Gennero, M. Berg-Nguyen, A. Cazenave, S. Calmant, A. Kouraev. *Speaker Daillet Sylviane*
A Fast Improvement of Sea Level Change Monitoring in Indonesia Archipelago after the Indian Ocean Tsunami 26 December 2004
Manurung Parluhutan, Rustandi Poerawardhi, Joko Ananto, Anton B Wijanarto. *Speaker Manurung Parluhutan*
GS003 Earth Rotation and Geodynamics
Conveners: Dehant Veronique, Huang Cheng-Li
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Education Room 3
Chairpersons: -
09:00 am Accuracy in the Earth Orientation Monitoring
Gambis Daniel, C. Bizouard, L. Seoane. *Speaker Gambis Daniel*
09:45 am High-frequent EOP variations from continuous VLBI campaigns
Haas Rudiger. *Speaker Haas Rudiger*
10:00 am Refined prediction of earth rotation parameters with Neuro-Fuzzy techniques
Martin Stephanie. *Speaker Martin Stephanie*
10:15 am VLBI analysis strategy and geophysical parameters
Dehant Veronique, Sebastien B. Lambert, Veronique Dehant, Gontier. *Speaker Sebastien B. Lambert*
10:30 am Coffee Break (30 minutes)
11:00 am An estimation of the contribution of the S1 thermal tide to Earth rotation
Brzezinski Aleksander, Rui M. Ponte, Sergei Bolotin. *Speaker Brzezinski Aleksander*
11:15 am Comparison of regional polar motion excitations derived from hydrological signals
Nastula Jolanta, David A. Salstein, Rui M. Ponte, Barbara Kolaczek. *Speaker Nastula Jolanta*
11:30 am Axial Atmospheric Angular Momentum Budget at Diurnal and Sub-Diurnal Periodicities
Lott Francois, Olivier De Viron, Pedro Viterbo, Francois Vial. *Speaker Lott Francois*
11:45 am Simulation of Earth rotation parameters with GCMS
Simulation of Earth rotation parameters with GCMS
Winkelkemper Timo, Xueen Chen, Florian Seitz, Claudia Walter, Andreas Hense. *Speaker Winkelkemper Timo*
12:00 pm Contribution of non-tidal oceanic mass variations to Earth rotation determined from space geodesy and ocean data
Goettl Franziska, Michael Schmidt, Florian Seitz, Wolfgang Bosch. *Speaker Goettl Franziska*
12:15 pm Physical modelling to remove hydrological effects at local and regional scale: application the 100-m hydrostatic inclinometer in Sainte-Croix-aux-Mines (Vosges Mountains, France)
Longuevergne Laurent, Frederic Boudin, Jean-Paul Boy, Nicolas Florsch. *Speaker Longuevergne Laurent*
Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -
Seismicity and monitoring crustal movements in and around Egypt
Mahmoud Salah. *Speaker Mahmoud Salah*
Research on correlation between tide generating forces and global great earthquakes
Hui Hu, Han Yanben, J.Vondrak. *Speaker Hui Hu*
Research on crustal movement of Tibetan Plateau using repeated GPS measurement
Xiaohui Zhou, Weiping Jiang. *Speaker Xiaohui Zhou*
Analysis methodology of Doris stations coordinates time series
Khelifa Sofiane, Boualem Ghezali, Bachir Gourine. *Speaker Khelifa Sofiane*
Normal Modes for Kinematics of A Triaxial Earth
Wang Wen-Jun, Wenbin Shen, Han-Wei Zhang. *Speaker Wang Wen-Jun*
Structural-geological and lithospheric factors affecting deformations of the upper crust
Gebauer André, Corinna Kroner, Thomas Jahr. *Speaker Gebauer André*
Activities of the IAG permanent study group geodynamics of central europe
Sledzinski Janusz. *Speaker Sledzinski Janusz*
Free libration of the earth-like multi-layer planets
Gusev Alexander. *Speaker Gusev Alexander*
High resolution verification of ocean tide models using kinematic GPS: A case study across the British Isles
Penna Nigel, Matt A King, Peter J Clarke, Machiel S Bos, Trevor F Baker. *Speaker Penna Nigel*
Geodetic inversion of fault geometry and slip distribution: A case of co-post-seismic study
Jin Shuanggen, Pil-Ho Park. *Speaker Jin Shuanggen*
Comparison of some datum transformation procedures
Christian Ezeigbo, Oyewusi Abimbola M.. *Speaker Christian Ezeigbo*
Present day crustal deformation and plate kinematics in the north-eastern region of India from repeated GPS measurements
Sukumaran Sunil, C.D. Reddy, S.K. Prajapati, M.Ponraj, S. Amirtharaj. *Speaker Sukumaran Sunil*
Precession and nutation based on LLR observations from 1969 to 2006
Zerhouni Wassila. *Speaker Zerhouni Wassila*
Ocean tide loading effects on GPS positioning around Taiwan
Yeh Ta-Kang, Ming-Han Chang, Chainway Hwang, Yuei-An Liou. *Speaker Yeh Ta-Kang*
Current estimation of the earths mechanical and geometrical parameters
Marchenko Alexander. *Speaker Marchenko Alexander*
Earths global density distribution and gravitational potential energy
Marchenko Alexander. *Speaker Marchenko Alexander*
Contribution of the GPS networks as the new infrastructure for investigations of Dinarides

Mulic Medzida, Spec. Sc. Eldin Donlagic, Prof. Dr. Sc. Asim Bilajbegovic. *Speaker Mulic Medzida*
Active fault segments and block movement in Sichuan-Yunnan Region from joint inversion of GPS and gravity data
Xu Caijun, Yuning Fu, Hui Li. *Speaker Xu Caijun*
Comparison between Bernese 5.0 and Gipsy/Oasis II PPP solutions: Case study on ocean loading in Brittany, Northwest France
Durand Sthpane, Laurent Morel, Jolle Nicolas-Duroy. *Speaker Durand Sthpane*
Second order Poisson terms in the non-rigid Earth nutation theory
Dehant Veronique, Marta Folgueira, Nicolas Rambaux, Sebastien B. Lambert, Veronique Dehant. *Speaker Marta Folgueira*
Electromagnetic core-mantle coupling torques for different magnetic field models and core velocity fields
Hagedoom Jan M., H. Greiner-Mai, L. Ballani, I. Wardinski. *Speaker Hagedoom Jan M.*
Mantle dynamics and Length of Day variations
Greff Marianne, Helene Rouby. *Speaker Greff Marianne*
The influence of earth tides on the intermediate depth seismic activity in the Vrancea zone, reflected through the periodicity of earthquake parameters: implications to seismic hazard estimation
Cadicheanu Nicoleta, Michel Van Ruymbeke. *Speaker Cadicheanu Nicoleta*
Geocenter motion and its geodynamical contents
Leonid Zotov. *Speaker Leonid Zotov*
To an explanation of secular changes of ocean surface
Barkin Yury. *Speaker Barkin Yury*
To an explanation of non-tidal acceleration of the Earth diurnal rotation and secular trend of its pole
Barkin Yury. *Speaker Barkin Yury*
Chandler amplitude and phase decade oscillations of the Earth pole and corresponding variations of geopotential coefficients C21 and S21
Barkin Yury. *Speaker Barkin Yury*
To model explanation of annual variation of oblateness and annual pole oscillations of the Earth
Barkin Yury. *Speaker Barkin Yury*
Tidal excitation of Earth rotation observed by GPS and VLBI
Englich Sigrid, Paulo Mendes Cerveira, Robert Weber, Harald Schuh. *Speaker Englich Sigrid*
Digital Elevation Model; a tool in detail study of deformed landforms of Earth's crust
Babaie Mahani Alireza, Shayesteh Mehrabian, Majid Bagheri. *Speaker Babaie Mahani Alireza*
TIDAL variations of the gravitational potentials of the Moon, Mercury and Titan
Barkin Yury. *Speaker Barkin Yury*
Constraints on Glacial Isostatic Adjustment (GIA) Motion in North American Using GPS
Sella Giovanni, S. Stein, T. H. Dixon, M. Craymer, T. James And S. Mazzotti, R. K. Dokka. *Speaker Sella Giovanni*
The spatiotemporal distribution of the earth tide responses estimated from GPS network in Japan
Ito Takeo, Makoto Okubo, Takeshi Sagiya. *Speaker Ito Takeo*
Modeling and Observation of Time-Variable GPS Site Positions
Gegout Pascal, Gilbert Ferhat (1,2), J.-P. Boy (1), J. Hinderer (1). *Speaker Jacques Hinderer*
Analytical Development of Tide-Generating Potential of Terrestrial Planets
Kudryavtsev Sergey. *Speaker Kudryavtsev Sergey*
Semi-hourly polar motion and universal time series from the VLBI CONT02 data set
Mendes Cerveira Paulo Jorge, Wresnik Jrg, Bhm Johannes, Weber Robert, Hobiger Thomas, Tetsuro Kondo, Salstein David, Schuh Harald. *Speaker Mendes Cerveira Paulo Jorge*
GPS estimates of ocean tide loading in NW-France and comparison with a recent ocean tide model.
Vergnolle Mathilde, Marie-Noelle Bouin, Joelle Nicolas, Laurent Morel, Frdric Masson, Sthpane Durand, Stavros Melachroinos. *Speaker Vergnolle Mathilde*
Surface-Load Induced Deformation of Lake Nasser, Egypt
Zahran Khaled. *Speaker Zahran Khaled*
SWISS4D: modelling the kinematics of the deformation of the Swiss Geodetic Reference Network
Wiget Adrian A., Urs Marti, Ramon Egli, Alain Geiger, Oliver Heller. *Speaker Wiget Adrian A.*
Determination of invariant deformation parameters from GPS permanent stations using stochastic spatial interpolation
Biagi Ludovico, Athanasios Dermanis. *Speaker Biagi Ludovico*
Report of Activities (2003-2007) of Commission 3: Earth Rotation and Geodynamics
Dehant Veronique. *Speaker Dehant Veronique*
Vertical deformation in the southern Tibetan plateau derived from GPS data
Wang Min, Zheng-Kang Shen, Qi Wang, Peng Li. *Speaker Wang Min*
Seasonal Signals in Gravimetric Data, Polar Motion and the Gravitational Constant
Unzicker Alexander. *Speaker Unzicker Alexander*
GPS height time series: amplification of spurious long period signals in float solutions
Stewart Mike, Nigel Penna. *Speaker Stewart Mike*
The Crustal Strain Rate in Baikal-Mongolia Area From GPS Measurement
Diao Faqi, Xiong Xiong. *Speaker Diao Faqi*
3D models of basement evolution and salt structures activity in Firouzabad area, Zagros, from Permian to Miocene
Pirouz Mortaza, Mohammad Reza Ghassemi, Abbas Bahroudi, Neda Ghazipour. *Speaker Pirouz Mortaza*
Velocity field in Southern Spain- Northern Morocco Area
Garate Jorge. *Speaker Garate Jorge*
Numerical modelling of the crustal deformation due to post glacial rebound and post seismic deformation in southern Alaska
Okuno Junichi. *Speaker Okuno Junichi*
Low degree variation in the surface mass load from GPS and SLR
Lavallee David, Philip Moore, Peter John Clarke, Qiang Zhang, Craig Hancock. *Speaker Lavallee David*
Spectral Analysis of Global and Local Sea Level Changes
Erol Serdar. *Speaker Erol Serdar*
Analysis of geophysical variations of the Earths dynamical flattening
Fernandez Laura Isabel. *Speaker Fernandez Laura Isabel*
Modelling the glacial isostatic adjustment of the British Isles: constraints from continuous GPS measurements of 3-3-D crustal motion
Teferle Norman, Sarah Bradley, Glenn Milne, Richard Bingley, Etienne Orlia. *Speaker Teferle Norman*
Impact of regional GNSS permanent networks in the study of local geodynamics
Stoppini Aurelio, Radicioni Fabio, Fastellini Guido. *Speaker Stoppini Aurelio*
GS004 Positioning and Applications
Conveners: Rizos Chris, Verhagen Sandra
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Education Main Hall
Chairpersons: Yang Gao
09:00 am Current state of Precise Point Positioning, and future prospects and limitations
Bisnath Sunil. *Speaker Bisnath Sunil*
09:20 am State-of-the-Art RTK and DGNSS in comparison with Precise Point Positioning
Landau Herbert. *Speaker Landau Herbert*
09:40 am Precise Real-Time Point Positioning of Airplanes with Decimeter Accuracy
Bar-Sever Yoaz, Robert Meyer. *Speaker Robert Meyer*
10:00 am Use of Global and Regional Ionosphere Maps for Single-Frequency Precise Point Positioning
Le Quan, Christian Tiberius. *Speaker Le Quan*
10:20 am The International GNSS Service Real-time Pilot Project, Preparing for the Delivery of Real-time IGS Products
Caissy Mark, Paul Collins, Robert Weber. *Speaker Paul Collins*
10:40 am Coffee Break (30 minutes)
11:10 am NTRIP based Real-Time Estimation and Broadcast of GNSS Clock Corrections from EUREF and IGS Sources
Weber Georg, Prof. Dr. Leo Mervart, Dr. Christian Rocken. *Speaker Weber Georg*
11:30 am Integer ambiguity fixing for GPS precise point positioning
Ge Maorong, Gerd Gendt, Markus Rothacher, Chuang Shi, Jianghui Geng, Jingnan Liu. *Speaker Ge Maorong*
11:50 am Real-time kinematic OTF positioning using a single GPS receiver: test results and challenges
Gao Yang, Min Wang, Yufeng Zhang. *Speaker Gao Yang*
12:10 pm Kinematic precise point positioning during marginal satellite availability
Gjevestad Jon Glenn, Dr. Narve Kjorsvik, Dr. Ola Ovstedal. *Speaker Dr. Ola Ovstedal*
Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Education Main Hall
Chairpersons: Xiaoli Ding
02:00 pm Permanent Scatterer Interferometry: State of the Art and New Trends
Rocca Fabio, A. Ferretti, Claudio Prati. *Speaker A. Ferretti*
02:30 pm Signal models with application to selection of persistent

scatters
Agram Piyush, Howard Zebker. *Speaker Agram Piyush*
02:50 pm Least Squares-Based Filtering of SAR Interferograms
Ding Xiaoli, Xiaoli Ding. *Speaker Ding Xiaoli*
03:10 pm Combination of multiple repeat orbits of Envisat for mining deformation monitoring
Chang Hsing-Chung, Linlin Ge, Hua Wang, Chris Rizos. *Speaker Chang Hsing-Chung*
03:30 pm Coffee Break (30 minutes)
04:00 pm InSAR Results from ALOS PALSAR: Southern San Andreas Fault and Hawaii
Sandwell David, Benjamin Brooks, Masanobu Shimada. *Speaker Sandwell David*
04:30 pm Integration of InSAR time series analysis and water vapour correction for mapping postseismic deformation after the 2003 Bam, Iran Earthquake
Li Zhenhong, Eric J. Fielding, Paul Cross. *Speaker Li Zhenhong*
04:50 pm Static Stress Change from the 8 November, 1997 Ms 7.9 Manyi, Tibet Earthquake as Inferred from InSAR Observation
Wen Yangmao, Xu Caijun. *Speaker Wen Yangmao*
05:10 pm Land subsidence monitoring in Australia using satellite interferometry
Ng Alex Hay-Man, Hsing-Chung Chang, Kui Zhang, Linlin Ge, Chris Rizos. *Speaker Ng Alex Hay-Man*
Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Use of GPS survey methods for estimating
Abidin Hasanuddin, V. Sadarviana, J. Santoso, J. Kahar, H. Andreas, M. Gamal. *Speaker Abidin Hasanuddin*
Monitoring distortion of THAI Geodetic Network due to the BANDA-ACEH and NIAS earthquakes using GPS observations
Satirapod Chalermchon, Wim Simons, Chaiwat Promthong. *Speaker Satirapod Chalermchon*
Contemporary High-Resolution LiDAR Derived DEMs Could Inspire Developments in the Study of Impact Structures
Finn Michael, Gary W. Krizanich, E. Lynn Usery. *Speaker Gary Krizanich*
Monitoring Deformation using Robust and Conventional Kalman Filters
Mertikas Stelios. *Speaker Mertikas Stelios*
GPS Precise Point Positioning Accuracy Test: Regional Egyptian Case
Mousa Ashraf. *Speaker Mousa Ashraf*
The Impact of rose-type LEO constellations Parameters on the Number and Distribution of GPS Occultation Events
Xu Xiaohua, Li Zhenghang. *Speaker Xu Xiaohua*
GPS-Based monitoring of subsidence phenomenon
Abidin Hasanuddin, M.A. Kusuma, B. Istadi, A.B. Darmoyo, P. Sumintadireja, I. Purwaman, H. Andreas, M. Gamal. *Speaker Abidin Hasanuddin*
Monitoring land subsidence using GPS and INSAR
Patel Parul. *Speaker Patel Parul*
So Paulo State - BRA - Active GPS Network: status and services
Monico Joo F Galera, Daniele Barroca Marra Alves, Luiz Fernando Antonio Dalbello. *Speaker Monico Joo F Galera*
New solutions to classical geodetic problems on the ellipsoid
Sjoberg Lars. *Speaker Sjoberg Lars*
Low-Frequency multipath mitigation in kinematic positionings using the wavelet method: preliminary results
Menezes De Souza Eniuce, Joo Francisco Galera Monico, Wesley G. Canducci Polezel, Aylton Pagamisse. *Speaker Menezes De Souza Eniuce*
Analysis of Temporal Non-stationary Tropospheric Processes Using Geodetic PWV Time Series
Joel Botai, Dr. Combrinck, W. L., Prof. C. J. Dew (Hannes) Rautenbach. *Speaker Joel Botai*
A 3D Measurement and Analysis System for Quality Control Supported by AI-Techniques
Reiterer Alexander, Martin Lehmann, Johannes Fabiankowitsch. *Speaker Reiterer Alexander*
AutoGNSS: A new GPS Vector Processing Software.
Zurutuza Joaquin, Miguel J. Sevilla De Lerma, Miguel Elorza. *Speaker Zurutuza Joaquin*
An Forecasting Model for Combined Bias in Network RTK Based on Nu-SVR
Wang Xinzhou, Shu Haichi. *Speaker Wang Xinzhou*
Geodetic Height Determination of the Qomolangma Mountain
Dang Yamin, Chuanli Cheng, Xiaorui Wang, Chunxi Guo. *Speaker Dang Yamin*
Precise point positioning: an attractive alternative to kinematic relative positioning
Zhang Xiaohong. *Speaker Zhang Xiaohong*
MyRTKnet:The accuracy and coverage of real-time positioning services for Survey and Mapping community in Malaysia
Nordin Soeb. *Speaker Nordin Soeb*
GNSS Precision Orbit Determination Based on Regional Stations and LEO Constellation
Geng Jianghui, Jingnan Liu, Chainway Hwang. *Speaker Geng Jianghui*
Effect Analysis of Different Observations and Satellite Clock Bias Sampling Intervals on Ambiguity Convergence in PPP
Zheng Zuoya, Chen Yongqi, Lu Xiushan. *Speaker Chen Yongqi*
Research on 3-Dimensional laser scanner system monitoring the land sliding of the strip mine
Fan Yang, Hu Zeng-Qi, Qian Jian-Guo, Li Hui. *Speaker Fan Yang*
The Accuracy and Reliability of Shanghai VRS Network
Lou Lizhi, Yi Chen. *Speaker Lou Lizhi*
Establishing a GNSS receiver antenna calibration field in the framework of PROBRAL
Krueger Claudia, Jaime Freiberger Junior, Michael Mayer, Andreas Knpfler. *Speaker Krueger Claudia*
Performance improvement of network-based RTK-GPS positioning in North Taiwan
Yeh Ta-Kang, Zu-Yu Lee, Chun-Sung Chen. *Speaker Yeh Ta-Kang*
Analysis of multi scale monitoring data for landslide disaster mitigation
Haberler-Weber Michaela, Dr. Andreas Eichhorn, Prof. Heribert Kahmen. *Speaker Haberler-Weber Michaela*
Model correction and analysis of the influence on high accuracy Baseline processing
Zou Xuan, Jingnan Liu, Weiping Jiang. *Speaker Zou Xuan*
Semi-linear method in nonlinear geodesy joint inversion with weight scaling factor
Xu Caijun, Kaihua Ding. *Speaker Xu Caijun*
Effect of Inter-Station Height Difference on GPS Vertical Positioning Accuracy
Sanli D. Ugur, Fatih Kurumahmut. *Speaker Sanli D. Ugur*
Impact of a GPS network location on tropospheric and positioning estimates
Francois Fund, Morel Laurent, Mocquet Antoine, Duroy-Nicolas Jolle, Durand Sthpane. *Speaker Francois Fund*
Application of CAS to geodesy: a 'live' approach
Zaletnyik Pirooska, Bla Palncz, Joseph L. Awange, Erik W. Grafarend. *Speaker Zaletnyik Pirooska*
Region specific model for tropospheric delay correction for GPS ranging over Indian Subcontinent
Raju Suresh, Korak Saha, K. Parameswaran. *Speaker Raju Suresh*
GPS Based Water Vapor Estimation Using Models Developed Based On Atmospheric Data Over The Indian Sub-Continent
Raju Suresh, Korak Saha, K. Parameswaran. *Speaker Raju Suresh*
A Study of Best-Fit Plane Accuracy of 3D Laser Scanner Point Cloud
Wu Chien-Ting, Chun-Sung Chen, Mei-Li Liu. *Speaker Wu Chien-Ting*
Towards the development of next generation RTK technologies
Gao Yang, Lambert Wanninger, Sunil Bisnath, Wu Chen, Yanming Feng. *Speaker Gao Yang*
Testing DGNSS and NRTK positioning accuracy and repeatability on long sessions
Stoppini Aurelio, Radicioni Fabio, Fastellini Guido. *Speaker Fabio Radicioni*
The impact of trivial baselines on GPS network solutions
Pikridas Christos, A. Fotiou, C.Pikridas, D. Rossikopoulos, M. Chatzinikos. *Speaker Pikridas Christos*
Crustal velocity field modelling with neural network and with polynomials
Zaletnyik Pirooska. *Speaker Zaletnyik Pirooska*
Monitoring Crustal and Dam Deformation and the Dam Movement During the Occurrence of an Earthquake Using GPS, at the Koyna Dam in Western India
Kulkarni Madhav. *Speaker Kulkarni Madhav*
Intrinsic Deformation Analysis
Moghtased-Azar Khosro, Erik W. Grafarend. *Speaker Moghtased-Azar Khosro*
Research in the field of indoor and pedestrian navigation at the research group engineering geodesy at the Vienna University of Technology
Retscher Guenther. *Speaker Retscher Guenther*
Using GPS Scintillation Data and Receiver Tracking Models to Mitigate Positioning Errors
Aquino Marcio, Joao F G Monico, Alan Dodson, Haroldo Marques, Giorgiana Defranceschi, Lucilla Alfonsi, Vincenzo Romano. *Speaker Aquino Marcio*
Solar flare effect on the geomagnetic field and ionosphere
Meza Amalia, Maria Andrea Van Zele, Marta Rovira. *Speaker Meza Amalia*
Analysis of ionospheric range delay corrections for navigation in South America low latitude Region

Useful Amalia, Laura Fernandez. *Speaker Meza Amalia*
region based on TOPEX

Meza Amalia, Mara Paula Natali. *Speaker Meza Amalia*
inter comparison and validations of ionospheric VTEC maps for the South American Region

Meza Amalia, Mauricio Gende. *Speaker Meza Amalia*
Mutipath analysis on ROSA GPS receiver onboard of OCEANSAT_2 Indian space mission and its effects on the accuracy of atmospheric profiles retrieved by applying radio occultation technique

Vespe Francesco, Alberto Zin, Vittorio De Cosmo. *Speaker Vespe Francesco*
On the Determination of Systematic Errors Caused By Deformation in Geodetic Data, Case study: Kenai-peninsula area

Joodaki Gholamreza, A.Safari, V.Nafisi, M.Jafari. *Speaker Joodaki Gholamreza*
Crustal Deformation following the imponderments of the Three Gorges Reservoir, China

Xinzhao You. *Speaker Xinzhao You*
Network Based DGNS for Location Based Services Applications

Meng Xiaolin, Chun Liu, Alan Henry Dodson, Terry Moore, Pengfei Cheng, Quan Wang. *Speaker Meng Xiaolin*
Monitoring the Nanpu Bridge in Shanghai with GPS and Result Analysis

Yao Lianbi, Ping Yao, Rengpeng Wang. *Speaker Yao Lianbi*
Quality Assurance of Network RTK GNSS Positioning: an end user perspectives

Meng Xiaolin, Alan Henry Dodson, Chun Liu, Terry Moore, Chris Hill. *Speaker Alan Dodson*
GNSS activities within the Automated GPS Network of Switzerland (AGNES)

Brockmann Elmar, D. Neichen, S. Schaer, U. Wild. *Speaker Brockmann Elmar*
A new GNSS software simulator

Munekane Hiroshi, Yuki Kuroishi, Shigeru Matsuzaka, Akira Akaishi. *Speaker Munekane Hiroshi*
Performance of New Rapid-Static Positioning Algorithms for Centimeter-Level Position within EUPOS Network

Wielgosz Pawel. *Speaker Wielgosz Pawel*
Report of Sub-Commission 4.2 - Applications of Geodesy in Engineering

Kahmen Heribert. *Speaker Kahmen Heribert*
GPS, leveling and InSAR data fusing in City Subsidence monitoring

Tao Li, Liu Jingnan, Zhang Shiyu, Jiang Yanxiang, Lu Xu, Xia Ye. *Speaker Tao Li*
An evaluation of geodetic positioning error simulated using the fast ray tracing algorithms through the JMA mesoscale numerical weather data

Ichikawa Ryuichi, Thomas Hobiger, Koyama Yasuhiro, Kondo Tetsuro. *Speaker Ichikawa Ryuichi*
Reliability of Helmert coordinate transformation for horizontal control networks in deformation analysis

Erdogan Bahattin, Serif Hekimoglu. *Speaker Erdogan Bahattin*
An investigation into robust estimation applied to correlated GPS networks

Erenoglu Ramazan Cuneyt, Serif Hekimoglu. *Speaker Erenoglu Ramazan Cuneyt*
A critical assessment on the current EGNOS performance

Opitz Michael, Robert Weber, Wolfgang Winkler. *Speaker Opitz Michael*
The behavior of the horizontal gradients of TEC over Europe during different geomagnetic conditions and its impact on GPS positioning accuracy

Krankowski Andrzej, Shagimuratov Irk, Baran Lubomir, Sieradzki Rafal, Krypiak-Gregorczyk Anna. *Speaker Krankowski Andrzej*
Verification of GPS derived ZTD and IWW potential for meteorology

Kruczyk Michal. *Speaker Kruczyk Michal*
Ionospheric scintillation impact on precise positioning at European auroral latitudes

Forte Biagio. *Speaker Forte Biagio*
Report on Activities 2003-2007 for IAG Sub-Commission 4.3: GNSS Measurement of the Atmosphere

Skone Susan, Hans Van Der Marel. *Speaker Skone Susan*
Precise vertical velocities from continuous GPS

Bennett Rick, Rick Bennett, Sigrun Hreinsdottir. *Speaker Bennett Rick*
Linear combination for differential radar interferometry

Ge Linlin. *Speaker Ge Linlin*
Modelling tropospheric delays without mapping functions

Smythe Peter, Paul Tregoning. *Speaker Smythe Peter*
Effect of un-modeled errors on GNSS integer ambiguity resolution and validation

Wang Jian, Jinling Wang. *Speaker Jinling Wang*
Analysis on temporal-spatial variation of Australian Tec

Wang Jian, Gary Ouyang, Jinling Wang, David Cole. *Speaker Jinling Wang*
Towards Single Epoch Ambiguity Resolution with Multiple Frequency Galileo

Wu Chen, Ji Shenyue, Xiaoli Ding, Yongqi Chen. *Speaker Wu Chen*
Network RTK with moving reference stations

Wu Chen, Congwei Hu, Xiaoli Ding, Yongqi Chen, Shan Gao. *Speaker Wu Chen*
Continuous Orbit Polynomials Stream: the source, usage and evaluation

Dousa Jan, Leos Mervart. *Speaker Dousa Jan*
GPS clock correction estimation for near real-time orbit determination applications

Bock Heike, Yoke Yoon, Rolf Dach, Oliver Montenbruck. *Speaker Bock Heike*
Results obtained applying ionosphere maps for differential and precise point positioning in the South American region

Costa Sonia, Mauricio Alfredo Gende, Claudio Antonio Brunini, Alberto Luis Da Silva, Newton Jos De Moura Jnior. *Speaker Costa Sonia*
Geodetic Remote Sensing: Past and Future Work of the IAG SC 4.4

Ding Xiaoli, Xiaoli Ding, Linlin Ge, Makoto Omura. *Speaker Ding Xiaoli*
Water vapour estimations under heavy storm conditions in Hungary

Rozsa Szabolcs, Ferenc Dombai, Dvid Ablonczy. *Speaker Rozsa Szabolcs*
An Optimality Property of GNSS Integer Ambiguity Bootstrapping

Teunissen Peter J.G.. *Speaker Teunissen Peter J.G.*
Post-processing of GPS data with one minute of observations using virtual reference stations

Sejas Mauricio, Claudia Pereira Krueger. *Speaker Sejas Mauricio*
Total mapping function

Oriac Etienne, Norman Teferle, Alan Dodson, Richard Bingley. *Speaker Alan Dodson*
PPP vs Double-Difference positioning: first results of the GINS CNES/GRGS software.

Perosanz Felix, Stavros Melachroinos, Sofiane Rekhis, Sylvain Loyer, Richard Biancale. *Speaker Perosanz Felix*
Uncertainty assessment in Kalman filter techniques with respect to non-stochastic measurement errors

Neumann Ingo. *Speaker Neumann Ingo*
Combination of GPS and Levelling Data in terms of 1D, 2D and 3D Deformation Analysis

Erol Serdar, Tefvik Ayan. *Speaker Erol Serdar*
Monitoring hydrologically induced deformations in Gothenburg with GPS

Haas Rudiger, Natthachet Tangdamrongsub, Hans-Georg Scherneck, Jan Johansson. *Speaker Haas Rudiger*
Working Group on Numerical Prediction Model for Positioning: report on activities

Santos Marcelo, Anna Jensen. *Speaker Santos Marcelo*
Accuracy in zenith tropospheric delay from the Canadian regional numerical weather model

Nievinski Felipe. *Speaker Nievinski Felipe*
Impact of Galileo measurements on zero- and double-difference processing of GPS data for a global IGS network

Heinze Markus, Drazen Svehla. *Speaker Heinze Markus*
A new technique for topographic surveys

Leandro Rodrigo, Tule Barcelos Maia. *Speaker Tule Barcelos Maia*
An assessment of Bernese GPS software precise point positioning for geodetic monitoring applications

Teferle Norman, Etienne Oriac, Richard Bingley, Alan Dodson. *Speaker Teferle Norman*
Humidity convergence zones influence in the seasonal variability of the tropospheric zenithal delay in the South America.

Sapucci Luiz Fernando, Luiz Augusto Toledo Machado, Joo Francisco Galera Monaco. *Speaker Sapucci Luiz Fernando*
L2C signal assessment using IGS L2C network

Sukeova Liliana, Richard B. Langley, Rodrigo F. Leandro, Okwuachi Nnani. *Speaker Sukeova Liliana*
An adaptive knowledge-based system for indoor navigation

Grejner-Brzezinska Dorota, Charles Toth, Shahram Moafipoor, Jay Kwon. *Speaker Grejner-Brzezinska Dorota*
GPS Ttopospheric delay estimation from different softwares - resultsts and analyses

Monico Joo F Galera, Daniele Barroca Marra Alves, Guilherme Poleszuck Santos Rosa, Luiz Fernando Antonio Dalbello. *Speaker Monico Joo F Galera*
Next-generation algorithms for navigation, geodesy and earth sciences under modernized Global Navigation Satellite Systems (GNSS)

Santos Marcelo, Richard Langley, Spiros Pagiatakis, Sunil Bisnath, Rock Santerre, Marc Cocard, Ahmed El-Rabbany, Ren Landry, Herb Dragert, Pierre Hroux, John Paul Collins. *Speaker Santos Marcelo*
A new GPS data analysis and positioning tool

Leandro Rodrigo, Richard B. Langley. *Speaker Leandro Rodrigo*

Ionospheric modelling in the North of Algeria

Kahlouche Salem, Kadri C., Dekkiche H., Mir R. *Speaker Dekkiche H.*
Establishing corner reflector networks for PSINSAR analysis

Leighton Jon, A. Sowler, R.M. Bingley, F.N. Teferle. *Speaker Leighton Jon*
Correlation between codes for PPP

Daghay Salua. *Speaker Daghay Salua*
The Sigma-C model: a proposal for modelling physical correlations between GPS phase observations

Schön Steffen, Fritz K. Brunner. *Speaker Schön Steffen*
JMS013 Aeronomy of Planetary Atmospheres: Comparative Planetology

Conveners: Coustenis Athena, Casavecchia Piergiorgio, Strobrel Darrell, Titov Dmitry
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Physics Room B

09:00 am Coupled Climate/Surface/Interior Evolution of Venus

Grinspoon David. *Speaker Grinspoon David*
09:18 am Modeling of the global climate on terrestrial planets

Forget Francois. *Speaker Forget Francois*
09:36 am Effects of thermal tides on the Venus atmospheric superrotation

Takagi Masahiro, Yoshihisa Matsuda. *Speaker Takagi Masahiro*
09:50 am Seasonal changes of the baroclinic wave activity in the northern hemisphere of Mars simulated with a General Circulation Model

Kuroda Takeshi, Alexander S. Medvedev, Paul Hartogh, Masaaki Takahashi. *Speaker Kuroda Takeshi*
10:04 am Observations of the atmospheric water on Mars with the OMEGA experiment onboard Mars Express

Maltagliati Luca, Therese Encrenaz, Francois Forget, Horst Uwe Keller, Jean-Pierre Bibring. *Speaker Maltagliati Luca*
10:18 am Cassini Radio Science Observations of Titan's ionosphere

Kliore Arvydas, A.F. Nagy, P.J. Schinder, R.G. French, N.J. Rappaport, A. Anabtawi, C.A. Mcghee. *Speaker Kliore Arvydas*
10:32 am Coffee Break (30 minutes)

11:02 am Interaction with the solar wind and escape processes on terrestrial planets

Chassefire Eric. *Speaker Chassefire Eric*
11:20 am Hydrodynamic escape from planetary atmospheres and its cooling effect

Tian Feng, James F. Kasting. *Speaker Tian Feng*
11:34 am Effect of aerosol absorption on the transfer of radiation in the near-infrared CO2 band in the atmosphere of Mars

Ogibalov Vladimir. *Speaker Ogibalov Vladimir*
11:48 am Kuiper Belt objects and comets: links and thermal evolution

Coradini Angioletta, M.T. Capria, M.C. De Sanctis. *Speaker Coradini Angioletta*
12:15 pm The Mars Canadian, Climate and Composition Mission (MCCCM)

Drummond James, Peter Bernath, Dylan Jones, Jacek Kaminski, E.J. Llewellyn, Kimberly Strong, Kaley Walker, William Ward, Thomas Duck. *Speaker Drummond James*
Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Physics Room B

02:00 pm Spectroscopic issues related to infrared investigations of planetary atmospheres

Bézar Bruno. *Speaker Bézar Bruno*
02:18 pm Gas-phase neutral-neutral reactions in planetary atmospheres

Balucani Nadia. *Speaker Balucani Nadia*
02:36 pm Titan ionospheric chemistry, laboratory experiments and uncertainty propagation, tools for improving models

Dutuit Odile, Thissen Roland, Alcaraz Christian, Carrasco Nathalie, Pernot Pascal. *Speaker Dutuit Odile*
02:54 pm Towards the Formation of PAHs in Titans Atmosphere

Kaiser Ralf I.. *Speaker Kaiser Ralf I.*
03:12 pm Laboratory measurements of ion-molecule reactions of relevance for Titan's ionosphere: reactivity of aromatic hydrocarbon ions

Ascenzi Daniela, Nives Cont, Pietro Franceschi, Graziano Guella, Giorgina Scardueli, Paolo Tosi. *Speaker Ascenzi Daniela*
03:26 pm Coffee Break (30 minutes)

03:56 pm Low-temperature rate constants for neutral reactions of Titan's atmosphere

Le Picard Sebastien, Coralie Berteloite, Andr Canosa, Ian R. Sims. *Speaker Le Picard Sebastien*
04:14 pm Role of Cosmic Dust Analogues in prebiotic chemistry

Brucato John Robert. *Speaker Brucato John Robert*
04:32 pm Dissociative recombination of nitrogen-containing ions detected in titans ionosphere

Geppert Wolf D.. *Speaker Geppert Wolf D.*
04:50 pm The role of photoionization in the formation of complex organic molecules in Titans upper atmosphere

Smith Mark, Hiroshi Imanaka. *Speaker Smith Mark*
05:08 pm Laboratory measurements of spectral properties of atmospheric gases

Snels Marcel. *Speaker Snels Marcel*
JMS018 High Latitude Modes of Climate Variability

Conveners: Bromwich David
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Physics Room A

09:00 am Distinguishing trends from multi-decadal variability in the Antarctica circulation: A view from the South Pole with recent climate model insights

Neff William, Judith Perwitz, Martin Hoerling. *Speaker Neff William*
09:15 am Centennial southern annular mode behaviour in observations and IPCC AR4 models

Fogt Ryan, Andrew J. Monaghan, Martin Visbeck, Julie M. Jones, Phil D. Jones, Gareth J. Marshall, David H. Bromwich. *Speaker Fogt Ryan*
09:30 am Changes in snowfall and near-surface temperature over Antarctica during the past 50 years in IPCC AR4 GCMs

Monaghan Andrew, David H. Bromwich, David P. Schneider. *Speaker David Bromwich*
09:45 am Tropical intraseasonal activity and impacts on the lower-stratosphere and antarctic ozone during the austral spring.

Carvalho Leila, Charles Jones, Tercio Ambrizzi. *Speaker Carvalho Leila*
10:00 am Antarctic peninsula climate variability study

Lagun Victor, Nikolay Ivanov. *Speaker Lagun Victor*
10:15 am Coffee Break (30 minutes)

10:45 am Regional circulation changes in the Antarctic Peninsula from ice core records

Thomas Liz, Gareth Marshall. *Speaker Thomas Liz*
11:00 am Atmospheric mechanisms related to extreme intraseasonal temperature anomalies in the Antarctic Peninsula during the winter season

Boiaski Nathalie, Leila Maria Vespoli De Carvalho. *Speaker Boiaski Nathalie*
11:15 am Trends in the daily extreme temperatures in the Antarctic Peninsula

Uribe Paola, Jorge Carrasco, Patricio Aceituno. *Speaker Uribe Paola*
11:30 am The role of the annular modes in recent trends in sea ice

Turner John. *Speaker Turner John*
11:45 am Relationship between Arctic climate modes and daily weather patterns in the Mackenzie and Yukon watersheds

Cassano John, Elizabeth Cassano. *Speaker Cassano John*
12:00 pm Arctic Ocean as an amplifier of arctic climate warming

Maslowski Wieslaw, Wieslaw Maslowski, Jaclyn Clement Kinney, Jaromir Jakacki. *Speaker Maslowski Wieslaw*
12:15 pm Independent Components in the Northern Hemisphere

Winter: Is the Arctic Oscillation an independent mode?
Itoh Hisanori. *Speaker Itoh Hisanori*
Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Physics Room A

Chairpersons: -
02:00 pm Links between the mountain torque and the Arctic Oscillation

Lott Francois, Fabio D'Andrea, Laure Goudard, Armel Martin. *Speaker Lott Francois*
02:15 pm The Growth and Triggering Mechanisms of PNA : A MJO-PNA coherence

Mori Masato, Masahiro Watanabe. *Speaker Mori Masato*
02:30 pm Stratosphere-Troposphere coupling and links with Eurasian Land-Surface variability

Cohen Judah, Mathew Barlow, Paul J. Kushner, Kazuyuki Saito. *Speaker Cohen Judah*
02:45 pm Teleconnections and the Arctic Oscillation observed in the barotropic component of the atmosphere

Tanaka Hiroshi, Ippei Suzuki. *Speaker Tanaka Hiroshi*
03:00 pm Coffee Break (30 minutes)

03:30 pm Meridional and Vertical Out-of-Phase Relationships of Temperature Anomalies Associated with the NAM variability

Ren Rongcai, Ming Cai. *Speaker Ren Rongcai*

03:45 pm Oceanic and atmospheric transport of multi-year ENSO signature to the Polar Regions

Jevrejeva Svetlana. *Speaker Jevrejeva Svetlana*
04:00 pm Sensitivity model study of Arctic ice-ocean interactions during the Little Ice using different radiative and wind stress forcings

Mysak Lawrence, Jan Sedlacek. *Speaker Mysak Lawrence*
04:15 pm Associations between large-scale atmospheric circulation and polar mesocyclone developments over both hemispheres

Claud Chantal, Andrew Carleton, Bertrand Duchiron, Pascal Terray. *Speaker Duchiron Bertrand*
04:18 pm Long-Term Variability of Free Atmosphere in the Polar Regions

Makshatas Alexander, Valentina Maistrova, Sergey Shutilin. *Speaker Makshatas Alexander*
04:21 pm Current upper-air parameters trends over Antarctic

Jagovkina Svetlana, Oleg Aldukhov, Irina Chernykh. *Speaker Jagovkina Svetlana*
04:24 pm Geopotential height annual cycle in Antarctica: Year-to-year variability and trends, 1980-2004

Yuhechen Adrian, Pablo Osvaldo Canziani, Susana Amalia Bischoff. *Speaker Yuhechen Adrian*
04:27 pm Moisture transport to Syowa Station and Dome Fuji Station, Antarctica

Suzuki Kazue, Takashi Yamanouchi, Naohiko Hirasawa, Hideaki Motoyama. *Speaker Suzuki Kazue*
04:30 pm Planetary and synoptic scale adjustment of the Arctic atmosphere to sea ice cover changes

Sokolova Elena, Klaus Dethloff, Annette Rinke, Andreas Benkel. *Speaker Sokolova Elena*
04:33 pm 3D Eliassen-Palm fluxes in stratosphere and troposphere

Zyulyaeva Yulia. *Speaker Zyulyaeva Yulia*
04:48 pm Interactions between the Southern Annular Mode and the Mean State

Codron Francis. *Speaker Codron Francis*
05:03 pm High latitude modes and trends in the IPCC AR4 models

Connolley William. *Speaker Connolley William*
05:18 pm The dependence of the structure of the NAM (Northern Annular Mode) on the polarity of ENSO

Blad Ileana. *Speaker Blad Ileana*
JMS021 Energetic Particles and Geomagnetic Storm Influence on Chemical and Dynamical Processes in the Polar Stratosphere and Mesosphere

Conveners: Krivolutsky Alexei, Orsolini Yvan, Randall Cora
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Chemistry Room G

Chairpersons: -
09:00 am Chemical and dynamical response of the middle atmosphere to solar proton events

Marsh Daniel, D.E. Kinnison, F.M. Vitt, R.R. Garcia, C.H. Jackman. *Speaker Marsh Daniel*
09:20 am Downward transport of EEP produced NOx from mesosphere/lower thermosphere and its impact on the stratosphere NOy and ozone budget

Stiller Gabriele P., Thomas Von Clarmann, Thomas Reddman, Herbert Fischer, Bernd Funke, Manuel Lopez-Puertas, Miriam Sinnhuber. *Speaker Stiller Gabriele P.*
09:40 am Regional Response of the Mesosphere-Lower Thermosphere Dynamics over Scandinavia to solar proton events and geomagnetic storms in late October 2003

Pancheva Dora, Werner Singer, Plamen Mukhtarov. *Speaker Pancheva Dora*
09:55 am Strong NO2 enhancements in the high latitude middle atmosphere in winter as seen form GOMOS/ENVISAT

Hauchecorne Alain. *Speaker Hauchecorne Alain*
10:15 am Charge energetic particles at low altitude polar orbits during 2001-2006 years: russian space missions measurements.

Myagkova Irina. *Speaker Myagkova Irina*
10:35 am Coffee Break (30 minutes)

11:05 am Middle Atmospheric Production of HOx and NOx by Solar Protons: A Solar Cycle 23 Update

Jackman Charles. *Speaker Jackman Charles*
11:25 am Upper stratospheric nitric acid polar enhancements observed by the ODIN satellite in 2001-2007

Orsolini Yvan, J. Urban, D. Murtagh. *Speaker Orsolini Yvan*
11:40 am Interaction between atmospheric chemical composition, temperature and dynamics during solar proton events

Krivolutsky Alexei, Grigory Zakharov, Tatyana Vyushkova, Alexander Kuminov, Anna Kukoleva, Irina Maygkova. *Speaker Krivolutsky Alexei*
11:55 am N2O as a possible marker of high energy auroral precipitation

Semeniuk Kirill, Jack C. McConnell, Peter F. Bernath, Chao Fu, Jianjun Jin. *Speaker Semeniuk Kirill*
12:15 pm Response of the lower ionosphere to solar proton event on July 14 2000. Model simulations over the both poles

Ondraskova Adriena, Alexei A. Krivolutsky. *Speaker Ondraskova Adriena*
Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Chemistry Room G

02:00 pm Nox enhancements in the middle atmosphere: the relative significance of solar proton events and the aurora as a source

Seppala Annika, Mark A. Cillverd, Craig J. Rodger. *Speaker Seppala Annika*
02:15 pm Thermospheric nitric oxide at higher latitudes Model calculations with auroral energy input

Stadsnes Johan, Camilla Stre, Charles A. Barth, Nikolai Stgaard, Scott M. Bailey, Daniel N. Baker, Glynn A. Germany, Jesper W. Gjerloev. *Speaker Stadsnes Johan*
02:30 pm Solar and interplanetary origin of the unusual atmospheric circulation conditions on the Pacific Southern hemisphere Magnetic Anomaly region during intense magnetic storms

Veira Luis Eduardo, Marcos Rockenbach Da Silva, Nelson Jorge Schuch, Ezequiel Echer. *Speaker Veira Luis Eduardo*
02:45 pm Effect of solar activity on atmospheric processes in the southern polar region

Troshichev Oleg. *Speaker Troshichev Oleg*
03:05 pm Peculiarities of long-term trends of lower atmosphere temperature in Antarctica and their possible connection with outer belt electron precipitation

Shirochkov Alexander. *Speaker Shirochkov Alexander*
03:20 pm Arctic and Antarctic polar winter nox and energetic particle precipitation in 2002-2006

Seppala Annika, Pekka T. Verronen, Mark A. Cillverd, Cora E. Randall, Johanna Tamminen, Viktoria Sofieva, Leif Backman, Erkki Kyril. *Speaker Seppala Annika*
03:35 pm Coffee Break (30 minutes)

04:05 pm Temporal variability of the descent of high-altitude nox inferred from ionospheric data

Cillverd Mark, Annika Seppl, Craig J. Rodger, Neil R. Thomson, Jnos Lichtenberger, Pter Steinbach. *Speaker Cillverd Mark*
04:20 pm The Effects of Solar Proton Events on the Stratospheric Chemistry: MIPAS Measurements and Model Simulations

Lopez-Puertas Manuel, Bernd Funke, Thomas Von Clarmann, Gabriele Stiller, Thomas Reddman, Stefan Versick, Miriam Sinnhuber. *Speaker Lopez-Puertas Manuel*
04:40 pm High latitudinal variations of aerosol optical properties under solar forcing

Mironova Irina, Dmitri Ponyavin. *Speaker Mironova Irina*
04:55 pm Observing Nitric Oxide in the Polar Night

Bailey Scott, William McClintock, Cora E. Randall, David W. Rusch, Aimee W. Merkel, Daniel N. Baker, James M. Russell Iii, David D. Siskind. *Speaker Bailey Scott*
JMS023 Instabilities in the Neutral Atmosphere, Ionosphere and Magnetosphere

Conveners: Hecht James
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Mathematics Room A3

09:00 am An Overview of Wave-Driven Instabilities in the Upper Mesosphere and Lower Thermosphere

Walterscheid Richard. *Speaker Walterscheid Richard*
09:30 am Turbulence generation by gravity waves

Vincent Robert, Florian Zink. *Speaker Vincent Robert*
10:00 am Kelvin-Helmholtz instability at the Earths magnetopause: Characteristics and recent advances

Hasegawa Hiroshi. *Speaker Hasegawa Hiroshi*
10:30 am Coffee Break (30 minutes)

11:00 am New insights into ionospheric plasma instabilities at low, middle, and high latitudes

Hysell David. *Speaker Hysell David*
11:30 am Nonlinear numerical simulation investigation of generalized Rayleigh-Taylor instability on the development of pre-midnight plume event during geomagnetic storm

Sekar R, D. Chakrabarty. *Speaker Sekar R*
11:45 am Simulations of Farley-Buneman instability: new hybrid approach

Smirnov Alexander, Dmitry V. Kovalev, Yakov S. Dimant. *Speaker Dmitry Kovalev*

ULF doppler oscillations in the low latitude ionosphere
Menk Frederick, Colin Waters, Ian Dunlop. *Speaker Menk Frederick*

GPS signal scintillation in a disturbance magnetic period over Brazilian territory
Moor Lilian, Henrique Carlotto Aveiro, Tiago Jaskulski, Juliano Moro, Eurico Rodrigues De Paula, Clezio Marcos Denardini. *Speaker Moor Lilian*

The occurrences of ionosonde spread F and GPS phase fluctuations in Taiwan
Chen Wei-Sheng, Fang-Dar Chu, Jann-Yenq Liu. *Speaker Chen Wei-Sheng*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A3
Chairpersons: -
02:00 pm **Neutral instabilities in the lower and upper atmosphere: similarities in dynamics and effects**
Larsen Miguel. *Speaker Larsen Miguel*

02:30 pm **Characteristics of Short-Period Wavelike Features Near 87 km Altitude From Airglow and Lidar Observations Over Maui**
Hecht James, R. J. Rudy, R. L. Walterscheid, A. Z. Liu, S. J. Franke, M. J. Taylor, P.-D. Pautet. *Speaker Hecht James*

02:45 pm **Radar and optical observations of instabilities related to the aurora**
Semeter Joshua. *Speaker Semeter Joshua*

03:15 pm **About the ion acceleration in F layer of the ionosphere**
Mordovskaya Valentina. *Speaker Mordovskaya Valentina*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Gravity wave instabilities and turbulence generation at large and small amplitudes and high intrinsic frequencies**
Fritts Dave. *Speaker Fritts Dave*

MS003 Aerosols, Radiation and Clouds (IRC, ICCP, ICACGP) Conveners: Nakajima Teruyuki, Isaac George
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Economics Main Hall
09:00 am **Simultaneous high-resolution observation of scattering layers in the lower troposphere using a Raman/Mie lidar and a VHF radar with the range imaging technique**
Nakamura Takuji, Tomoaki Takai, Hubert Luce, Gernot Hassenpflug, Mamoru Yamamoto, Toshitaka Tsuda. *Speaker Nakamura Takuji*

09:25 am **Impact of a new parameterization for intermediate cloud evolution and aerosol indirect effects**
Jeffery Christopher, Jon M Reisner, Miroslaw Andrejczuk. *Speaker Jeffery Christopher*

09:50 am **Diurnal Evolution of Aerosol Optical Properties and Morphology at Pico Tres Padres, Mexico City: A Phenomenological Analysis**
Dubey Manvendra, Claudio Mazzoleni, Rajan Chakrabarty, Hans Moosmuller, Petr Chylek, Timothy B. Onash, Miguel Zavala, Scott C. Herndon, Charles E. Kolb. *Speaker Dubey Manvendra*

10:15 am **The Scale Dependence of Cloud Microphysical Parameters**
Isaac George, Ismail Gulpepe, Alexei Korolev, Stewart Cober, Monika Bailey. *Speaker Isaac George*

10:40 am **Coffee Break (30 minutes)**

11:10 am **Remote Sensing the Vertical Profile of Cloud Droplet Effective Radius, Thermodynamic Phase, and Temperature as a tool for the Study of Cloud-Aerosol Interaction**
Martins J. Vanderlei. *Speaker Martins J. Vanderlei*

11:35 am **Estimate of radiative forcing and regional feedback of asian biomass burning aerosols during the period of trace-P**
Lin Neng-Huei, Sheng-Hsiang Wang, Ming-Dah Chou. *Speaker Sheng-Hsiang Wang*

12:00 pm **Fine particles in Beijing: seasonal variation, secondary composition and regional pollution**
Hu Min, Zhijun Wu, Ling-Yan He, Xiao-Feng Huang. *Speaker Hu Min*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Main Hall
MS006 Ice Microphysics: Theory and Measurement (ICCP) merged with MW001
Conveners: Field Paul, Korolev Alexei, Isaac George
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Physics Room C
Chairpersons: -
09:00 am **Laboratory Studies on the Ice Nucleating Ability of Mineral Dust Doped with Traces of Heavy Metals**
Stetzer Olaf, Daniel Cziczko, Ulrike Lohmann. *Speaker Stetzer Olaf*

09:15 am **Ice nucleation efficiency of mineral dust particles coated with sulphuric acid and secondary organic aerosol**
Mhler Ottmar, Stefan Benz, Richard Cotton, Dan Cziczko, Karl Froyd, Stephane Gallavardin, Andrew Heymsfield, Col Schmitt, Johannes Schneider, Joseph Ulanowski, Saskia Walter. *Speaker Mhler Ottmar*

09:30 am **Observations and modelling the heterogeneous freezing mechanism**
Connolly Paul, Ottmar Moehler, Martin Gallagher, Stephan Benz, Thomas Choulaton. *Speaker Connolly Paul*

09:45 am **Experimental observations of heterogeneous ice nucleation of mineral dust**
Kulkarni Gourihar, Steven Dobbie, Mike Smith, Jim Mcquaid. *Speaker Kulkarni Gourihar*

10:00 am **The Chemical Composition of Ice Nuclei in Ice and Mixed Phase Clouds**
Cziczko Daniel, Stphane Gallavardin, Hanna Herich, Livia Keller, Paul Demott, Daniel Murphy, Ulrike Lohmann. *Speaker Cziczko Daniel*

10:15 am **In Situ Microphysical Measurements of Subviscous Cirrus Near the Tropical Tropopause**
Lawson Paul, Bryan Pilson, Brad Baker, Qixu Mo, Eric Jensen. *Speaker Lawson Paul*

10:30 am **Coffee Break (30 minutes)**

11:00 am **The ice growth equation solution by utilizing truncated ice spectra**
Curic Mladjen, Dejan Janc, Vladan Vučković. *Speaker Curic Mladjen*

11:15 am **2. The Definitions of Atmospheric Ice Particles**
List Roland. *Speaker List Roland*

11:30 am **Snow size distribution parameterization for midlatitude and tropical ice clouds**
Field Paul, Andrew Heymsfield, Aaron Bansemmer. *Speaker Field Paul*

11:45 am **First results from the GEWEX GCSS WG2 cirrus inter-comparison study of March 9, 2000 ARM IOP at SGP**
Dobbie Steven, Huiyi Yang, Damian Wilson, Gerald Mace, Andy Ross. *Speaker Dobbie Steven*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Physics Room C
Chairpersons: -
02:00 pm **Polycrystal Formation through the Freezing Nucleation Processes**
Hashino Tempei, Greg J. Tripoli. *Speaker Hashino Tempei*

02:15 pm **Studies towards the understanding of ice microphysics in mixed-phase clouds**
De Boer Gijs, Tempei Hashino, Gregory J. Tripoli, Edwin W. Eloranta. *Speaker De Boer Gijs*

02:30 pm **Aerosol influence on mixed-phase clouds in CAM-Oslo**
Storelvmo Trude, Jon Egill Kristjánsson, Ulrike Lohmann. *Speaker Storelvmo Trude*

02:45 pm **Microphysics of wave and cirrus clouds**
Baker Brad. *Speaker Baker Brad*

03:00 pm **Experimental study on immersion freezing in mixed-phase cloud conditions**
Lnd Felix. *Speaker Lnd Felix*

03:03 pm **Ice initiation by lightning**
Vukovic Zlatko. *Speaker Vukovic Zlatko*

03:06 pm **The effect of dynamics on mixed-phase clouds: theoretical considerations**
Korolev Alexei, Paul Field. *Speaker Korolev Alexei*

03:09 pm **Impact of parameterization scheme of ice crystals cloud microphysics and dynamics**
Petrova Savka, Boryana Tsenova. *Speaker Petrova Savka*

03:12 pm **Patchiness of cirrus clouds - impact of dynamics and aerosols**
Spichtinger Peter, Ulrike Lohmann. *Speaker Ulrike Lohmann*

03:15 pm **Glaze and rime climatology of the russian polar coast**
Bezrukova Natalia. *Speaker Bezrukova Natalia*

03:18 pm **Terminology and interpretation of Glaze and Rime ground observations**
Bezrukova Natalia. *Speaker Bezrukova Natalia*

03:21 pm **Vapour density field of a mixed-phase cloud**
Saunders Clive. *Speaker Saunders Clive*

03:24 pm **Numerical simulation of frontal mixed clouds (microphysical and optical characteristics) and cloud microstructure effect on satellite signal**
Bakhanov Vladimir, Oleksiy Kryvobok, Boris Dorman. *Speaker Bakhanov Vladimir*

03:27 pm **Simulation of microphysical and optical characteristics of**

frontal ice clouds with several forms of crystals
Dorman Boris. *Speaker Dorman Boris*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **High Ice Particle Concentrations in Stratiform Layer Clouds**
Isaac George, Alexi V. Korolev, Ismail Gulpepe, Stewart G. Cober, J. Walter Strapp, Faisal S. Boudala, Monika Bailey, John Hallett. *Speaker Isaac George*

04:15 pm **The Impact of Controversial Small Ice Crystals on GCM Simulations**
Mitchell David, Philip J. Rasch, Dorothea C. Ivanova, Greg Mcfarquhar, Timo Nousiainen. *Speaker Mitchell David*

04:30 pm **Assessing the Concentrations of Small Ice Crystals in Ice Clouds: Combining In Situ and IR Remote Sensing Measurements**
Mitchell David, Subhashree Mishra, Bryan Pilson, Qixu Mo. *Speaker Mitchell David*

04:45 pm **Small ice particles: myth or reality?**
Korolev Alexei, J.W. Strapp, G.A. Isaac. *Speaker Korolev Alexei*

Alexei Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Rocca Paolina - CERP CERP
Chairpersons: -
Some peculiarities of freezing of metastable water, influencing cloud ice development
Nevzorov Anatoly. *Speaker Nevzorov Anatoly*

JPS001 Interannual and Interdecadal Climate Variability Conveners: McPhaden Michael, Holbrook Neil
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Economics Room 6
Chairpersons: -
09:00 am **Mechanism of biannual cyclicity of ocean and atmosphere processes and phenomenon**
Barkin Yury. *Speaker Barkin Yury*

09:18 am **Decadal variability in the zonal structure of the Hadley circulation**
Baines Peter. *Speaker Baines Peter*

09:36 am **Impact of Indian Ocean Variability on Australian Rainfall Patterns**
Ummenhofer Caroline, Alexander Sen Gupta, Matthew H. England. *Speaker Ummenhofer Caroline*

09:54 am **Pacific bi decadal variability induced by tidal mixing along the Kuril Islands**
Hasumi Hiroyasu, Ichiro Yasuda, Hiroaki Tatebe. *Speaker Hasumi Hiroyasu*

Hasumi Hiroyasu Decadal variations and long-term trends in the Southeast Indian Ocean
Feng Ming, Gary Meyers, Arne Biastoch. *Speaker Feng Ming*

10:30 am **Coffee Break (30 minutes)**

11:00 am **Interannual and interdecadal variability in the Northeast Asia, Northwest Pacific and its marginal seas**
Ponomarev Vladimir, Elena Dmitrieva, Nina Savelieva, Natalya Rudykh. *Speaker Ponomarev Vladimir*

11:18 am **Evidence for the Atlantic Multidecadal Oscillation as an internal climate mode from coupled GCM simulations.**
Knight Jeff. *Speaker Knight Jeff*

11:36 am **Interannual variability in ventilation of the Okhotsk Sea and North Pacific, linked with sea ice production in the Okhotsk Sea**
Ohshima Kay, Takuya Nakanowatari, Masaaki Wakatsuchi, Stephen C. Riser. *Speaker Ohshima Kay*

11:54 am **Kuroshio Large Meander Evolution in an Eddy-Resolving Global General Circulation Model**
Schneider Niklas, Bo Qiu, Hideharu Sasaki. *Speaker Schneider Niklas*

Niklas Formation of decadal SST variations in middle latitude Pacific during positive SST anomaly in the Eastern Equatorial Pacific
Sun Jilin. *Speaker Sun Jilin*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Economics Room 6
Chairpersons: -
02:00 pm **Simulating El Nino in an eddy-resolving coupled ocean-ecosystem model**
Lptien Ulrike, Carsten Eden, Axel Timmermann. *Speaker Lptien Ulrike*

02:18 pm **Role of the re-emerging SST anomalies on the winter-to-winter persistence of the NAO**
Cassou Christophe, Clara Deser, Mike Alexander. *Speaker Cassou Christophe*

02:36 pm **Influence of ENSO on Europe in an atmospheric model**
Ineson Sarah. *Speaker Ineson Sarah*

02:54 pm **Reconstructing Tropical Sea Surface Temperatures Using Precipitation Proxy Records: Methods and Uncertainties**
Furtado Jason, Emanuele Di Lorenzo, Kim M. Cobb. *Speaker Furtado Jason*

03:12 pm **Interannual trends of some atmospheric and sea surface parameters of the southern ocean on satellite radiometry, scatterometry and altimetry data**
Lebedev Sergey. *Speaker Lebedev Sergey*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Interdecadal fluctuations of precipitation over South America: seasonality and linkages with SST**
Grimm Alice, Joo Paulo Jankowski Saboi. *Speaker Grimm Alice*

04:18 pm **A decade of acoustic thermometry in the North Pacific Ocean, Part A: Using long-range acoustic travel times to test gyre-scale temperature variability derived from other observations and ocean models**
Worcester Peter, Brian D. Dushaw, Rex K. Andrew, Bruce M. Howe, James A. Mercer, Robert C. Spindel, Bruce D. Cornuelle, Matthew A. Dzieciuch, Theodore G. Birdsall, Kurt Metzger, Jr., Dimitris Menemenlis. *Speaker Worcester Peter*

04:36 pm **A decade of acoustic thermometry in the North Pacific Ocean, Part B: Understanding basin-wide averages of temperature by comparisons to a high-resolution numerical ocean model (POP).**
Dushaw Brian. *Speaker Dushaw Brian*

04:54 pm **Consecutive wet days and consecutive dry days as useful climatic indicators, case study over Iran**
Asgari Ahmad, Fatemeh Rahimzadeh, Nooshin Mohammadian. *Speaker Asgari Ahmad*

Speaker Asgari Ahmad July 6, 2007 from 02:00 pm to 05:30 pm
JPS003 Environmental Controls on Marine Biota Conveners: Smythe-Wright Denise
Oral
02:00 pm **Impact of Sea Level Rise on Hydrodynamics of Estuarine System: Case Study of MtWava Creek, Kenya**
Magori Charles. *Speaker Magori Charles*

02:15 pm **An analytical model for smal-scale thermally forced upwelling; with application to Bahia de Concepcion, Chile**
Rodhe Johan. *Speaker Rodhe Johan*

02:30 pm **Implications of lazy plumes for entrainment of vent larvae into seafloor hydrothermal vents**
Bemis Karen, Peter Rona. *Speaker Bemis Karen*

02:45 pm **Modelling the influence of mussel farming on benthic and pelagic biogeochemical processes**
Brigolin Daniele, Roberto Pastres, Tomas Lovato, Gabriele Dal Maschio, Alexey Davydov, Angelo Rubino, Pierre Regnier. *Speaker Brigolin Daniele*

03:00 pm **Three-dimensional simulation of a coupled hydrodynamic-biogeochemical model in the Java Sea**
Koropitan Alan Frendy, Motoyoshi Ikeda. *Speaker Koropitan Alan Frendy*

03:15 pm **Concomitant top-down and bottom-up controls and associated regime shifts in the Black Sea**
Oguz Temel. *Speaker Oguz Temel*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Simulating ice-ocean-ecosystem in response to a changing climate in the Bering-Chukchi-Beaufort seas using the Physical-Ecosystem Molde (PhEcoM)**
Wang Jia, Meibing Jin, Clara Deal, Haoguo Hu, Kohei Mizobata. *Speaker Wang Jia*

04:15 pm **Relationship between fronts of the Antarctic Circumpolar Current and surface chlorophyll concentrations in the Southern Ocean**
Sokolov Serguei, Stephen R. Rintoul. *Speaker Sokolov Serguei*

04:30 pm **Influence of Oceanic eddies on Chlorophyll-a distribution in the tropical marine waters derived from Satellite Altimetry and Ocean Color data**
Joseph.K Ajith, Roshin P. Raj. *Speaker Joseph.K Ajith*

04:45 pm **Phytoplankton distributions in the Eastern Equatorial Pacific: patterns governed by FE-limited growth and microzooplankton grazing**
Selph Karen, Michael R. Landry, Robert R. Bidigare, Stephanie Christensen, Christopher I. Measures. *Speaker Selph Karen*

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall
Seasonal along-isobath geostrophic flows on the West Florida Shelf with application to Kerenia Brevis red tide blooms
Carlson Daniel, Allan J. Clarke. *Speaker Carlson Daniel*

Phytoplankton feedbacks in a water column (Guinea dome)

Duteil Olaf, Yves Dandonneau, Alban Lazar, Ilana Wainer. Speaker Duteil Olaf

Ecosystem model optimization
Losa Svetlana, Jens Schrter, Yann Ourmires, Pierre Brasseur, Iris Kriest, Andreas Oschlies. *Speaker Losa Svetlana*

Interannual Variability in the Gulf of Alaska: A perspective based on a coupled bio-physical model
Cheng Wei, Albert Hermann, Sarah Hinckley, Ken Coyle, Phyllis Stabeno. *Speaker Cheng Wei*

PS002 Variability of the Antarctic Circulation and Water Masses and Their Sensitivity to Climate Change
Conveners: Bergamasco Andrea
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Academy of Fine Arts Room 14
Chairpersons: -
09:00 am **Multiple jets of the Antarctic Circumpolar Current**
Rintoul Stephen. *Speaker Rintoul Stephen*

09:30 am **Variability and Adjustment in the Transport of the Antarctic Circumpolar Current**
Allison Lesley, David Marshall, Helen Johnson. *Speaker Allison Lesley*

10:00 am **Constraints of PO4* on the change in Antarctic Bottom Water production over the last 8 centuries**
Grant Hazel, A. C. Naveira Garabato, K. J. Heywood, D. P. Stevens. *Speaker Grant Hazel*

10:30 am **Coffee Break (30 minutes)**

11:00 am **Variability and transport of the Antarctic circumpolar Current South of Africa**
Swart Sebastiaan, Isabelle Ansorge, Sabrina Speich. *Speaker Swart Sebastiaan*

11:30 am **Submarine geomorphology and bottom current signature on antarctic sediment: examples from the George Vth continental shelf and slope (East Antarctica)**
George Vth, Holocene, Geomorphology
De Santis Laura, Andrea Caburlotto, Massimo Presti, Daniela Accettella, Andrea Cova. *Speaker Andrea Caburlotto*

12:00 pm **Circulation at the Southwest Indian Ridge in a high-resolution global ocean model**
Durgadoo Jonathan, Ansorge I.J., Lutjeharms J.R.E., Coward A.C., *Speaker Durgadoo Jonathan*

12:30 pm **Interannual variability of the heat fluxes in the Ross and Weddell Seas**
Fusco Giannetta, Tiziana Peluso, Giorgio Budiillon, Giancarlo Spezie. *Speaker Fusco Giannetta*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Academy of Fine Arts Room 14
Chairpersons: -
02:00 pm **CANOPO Project: Vertical profiles of temperature in the Weddell Sea**
Rupolo Volfango, Artale Vincenzo, Balestrini Carlos, Bianchi Alejandro, Budillon Giorgio, Busdraghi Fabiano, Charo Marcela, De Alteris Arturo, Iudicone Daniele, Ochoa Hector, Ruiz Pino Diana, Schloss Irene, Ullrich Alejandro. *Speaker Rupolo Volfango*

02:30 pm **Dynamics of the wind-driven sea level variation around Antarctica**
Kusahara Kazuya, Kay I. Ohshima. *Speaker Kusahara Kazuya*

03:00 pm **The Agulhas Current System in a global high-resolution OGCM simulation**
Tsugawa Motohiko, Mikiko Ikeda, Hiroyasu Hasumi. *Speaker Tsugawa Motohiko*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **The Dynamics of the Antarctic Slope Front**
Baines Peter. *Speaker Baines Peter*

04:30 pm **Decadal changes in Ross Sea waters**
Orsi Alejandro, Christina L Wiederwohl. *Speaker Orsi Alejandro*

05:00 pm **High Salinity Shelf Water Variability and its oxygen isotopic signature**
Bergamasco Andrea, Stefano Aliani, Mariachiara Chiantore, Olaf Heilmayer. *Speaker Bergamasco Andrea*

PS005 Flows and Waves in Straits Conveners: Morozov Eugene, Parrilla Gregorio
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Department of Mathematics Room A2
Chairpersons: -
09:00 am **The effect of meteorologically forced subinertial flows on internal waves generation in the Strait of Gibraltar**
Mejias Miguel, Agueda Viquez Lpez-Escobar, Alfredo Izquierdo Gonzalez. *Speaker Mejias Miguel*

09:25 am **Seasonal and tidal transports through the Strait of Gibraltar simulated by a 3D numerical model**
Sannino Gianmaria, Vincenzo Artale, Adriana Carillo, Jesus Garcia Lafuente, Antonio Sanchez Roman. *Speaker Sannino Gianmaria*

09:40 am **What we can learn from a 1d two-layer shallow-water model of the Strait of Gibraltar?**
Gonzlez-Vida Jos Manuel, Jorge Macas Schez, Manuel Jess Castro Daz, Carlos Pars Madroal. *Speaker Gonzalez-Vida Jos Manuel*

09:55 am **Numerical modeling of tidal baroclinic exchange in the Strait of Gibraltar**
Macas Snchez Jorge, Manuel J. Castro, Carlos Pars, Jos M. Gonzalez-Vida. *Speaker Macas Snchez Jorge*

10:10 am **The Mediterranean outflow in Espartel sill, westernmost section of the Strait of Gibraltar**
Garcia Lafuente Jesus, Antonio Jesus Snchez Romn, Jos Carlos Snchez Garrido, Juan Miguel Vargas Dominguez, Francisco Criado Aldeanueva, Javier Delgado Cabello, Guillermo Daz Del Ro, Gianmaria Sannino. *Speaker Garcia Lafuente Jesus*

10:25 am **Study of the supercritical stratified tidal flow in a strait**
Stashchuk Nataliya, Vasilii Vlasenko. *Speaker Stashchuk Nataliya*

Nataliya 10:50 am Numerical study of internal tide transformation and dissipation
Cuypers Yannis, Pascale Bouruet Aubertot. *Speaker Cuypers Yannis*

Yannis 11:05 am Adapting the Marginal Sea Boundary Condition (MSBC) to the Faroe Bank Channel Overflow
Riemenschneider Ulrike, Sonya A. Legg, James F. Price. *Speaker Riemenschneider Ulrike*

11:20 am **The analysis of temperature, salinity and transport distributions in the Indonesian Seas based on results of simulations with a regional model.**
O'Driscoll Kieran, Vladimir M. Kamenkovich. *Speaker O'Driscoll Kieran*

Kieran 11:35 am Modelling of internal wave generation in the area of a stratified plume
Stashchuk Nataliya, Vasilii Vlasenko. *Speaker Stashchuk Nataliya*

Nataliya 11:50 am Coffee Break (30 minutes)

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Department of Mathematics Room A2
Chairpersons: -
02:00 pm **Variability of the Kuroshio in the East China Sea and its volume transport through the Tokara Strait during 2000**
Yuan Yaochu, Chenghao Yang. *Speaker Yuan Yaochu*

02:15 pm **Eddy Formation off the Entrance to Juan de Fuca Strait**
Foreman Michael, Wendy Wiggins, Amy Macfadyen, Barbara Hickey, Richard Thomson, Emanuele Di Lorenzo. *Speaker Foreman Michael*

02:30 pm **Energetic Internal Oscillations in the Straits of Florida**
Preceding Formation of Strong Hurricanes in the Tropical Atlantic Region
Soloviev Alexander, Alexander V. Soloviev, Richard E. Dodge, Tom Gustafson. *Speaker Soloviev Alexander*

02:45 pm **The role of internal waves in the formation of layered structure in exchange flows between two basins (Middle and Southern basins of the Caspian Sea)**
Bidokhti A. A., A. Shekarbaghani. *Speaker Bidokhti A. A.*

03:00 pm **The Structure of the Persian Gulf Outflow**
Bidokhti A. A., M. Ezam. *Speaker Bidokhti A. A.*

03:15 pm **Observations of turbulent interfacial mixing in the Saint John River estuary, New Brunswick Canada**
Delpeche Nicole, John Hughes Clarke, Susan Haigh. *Speaker Delpeche Nicole*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Five years of Florida Current Structure and Transport**
Beal Lisa, Jules Hummon, Elizabeth Williams. *Speaker Beal Lisa*

04:15 pm **Recent changes in the inlets of the Venetian lagoon**
Mancero-Mosquera Isaac, Miro Gacic, Andrea Mazzoldi. *Speaker Mancero-Mosquera Isaac*

04:30 pm **A Note on the Deep-Water Inflow to the Bothnian Sea**
Nilsson Jenny, Riikka Hietala, Peter Lundberg. *Speaker Nilsson Jenny*

Jenny 04:45 pm A soliton wave packet that travels in the opposite direction to the flow in the Saint John River Estuary, New Brunswick Canada
Delpeche Nicole, John Hughes Clarke, Susan Haigh. *Speaker Delpeche Nicole*

05:00 pm **The influence of ocean ridges on ocean circulation in the Mozambique Channel and South of Madagascar**
Halo Issufo, I. J. Ansorge, J. R. E. Lutjeharms, Pierre Florenchie. *Speaker Halo Issufo*

S009 July 6, 2007 from 09:00 am to 12:30 am
Impact of CO2 Changes on Biogeochemical Processes and Ecosystem Functioning
Convener: **Smythe-Wright Denise**
Oral
09:00 am **Ocean Ecosystems in a Warmer World**
Chavez Francisco. *Speaker Chavez Francisco*
09:15 am **Simulations of plankton functional types response to CO2 increase**
Vichi Marcello, Pier Giuseppe Fogli, Lavinia Patara, Simona Masina, Elisa Manzini. *Speaker Vichi Marcello*
09:30 am **The role of Subantarctic Mode Water in global biological production**
Sarmiento Jorge, J. Simeon, A. Gnanadesikan. *Speaker Sarmiento Jorge*
09:45 am **Relation between pteropod shells dissolution above the chemical lysocline and TCO2 concentration in the water column (Ross Sea, Antarctica)**
Manno Clara, Silvai Sandrini, Laura Tositti, Alessandra Accornero. *Speaker Manno Clara*
10:00 am **Modelling the effect of increasing PCO2 on pelagic aragonite production**
Gangsto Reidun, Marion Gehlen, Laurent Bopp, Birgit Schneider, Fortunat Joos, Olivier Aumont. *Speaker Gangsto Reidun*
10:30 am **Coffee Break (30 minutes)**
11:00 am **Investigating the effects of changing CO2 concentration on a natural marine plankton community using a chemostat system**
Piontek Judith, Nicole Hndel, Mirko Lunau, Anja Engel. *Speaker Piontek Judith*
11:15 am **The influence of increasing carbon dioxide concentrations on the release of halocarbon by phytoplankton**
Smythe-Wright Denise, Young – Nam Kim. *Speaker Smythe-Wright Denise*
11:30 am **Real-Time Measurements of Ocean pH and Sensor Calibration at Depth from a Remotely Operated Vehicle**
Peltzer Edward, Peter G. Brewer, Rachel M. Dunk, William J. Kirkwood, Peter M. Walz. *Speaker Peltzer Edward*
11:45 am **Design and Field Testing of a Prototype Free Ocean CO2 Enrichment (FOCE) System for Assessment of Impacts of Ocean Acidification**
Kirkwood William, Edward T. Peltzer, Rachel M. Dunk, Peter M. Walz, Peter G. Brewer. *Speaker Kirkwood William*
12:00 pm **Natural hazards in the lake Kivu Basin, Western Rift Valley of Africa**
Mifundu Dieudonne Wafula, Augustin Menga Kwetuenda, Matthieu Mapendano Yalire. *Speaker Mifundu Dieudonne Wafula*
JSS001 Physics and Chemistry of Earth Materials
Convener: **Jackson Ian**
Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall
Feature of the analyses of heterogeneous ores
Tamrazyan Artush. *Speaker Tamrazyan Artush*
Natural magnetite nanoparticles from an iron-ore deposit: grain size effects in magnetic properties
Alva-Valdivia Luis M.. *Speaker Alva-Valdivia Luis M.*
Halite fluid inclusion geochemistry of evaporite deposits in central Iran
Shariatnia Zeinab, Cendon Dion I, Pueyo Juan Jose, Rahimpour- Bonab Hussain, Hezarhani Ardeshir. *Speaker Shariatnia Zeinab*
Effect of mineral content of granitoids of the ukrainian shield on the change of their elastic parameters in different thermobaric conditions of the lithosphere (by experimental data)
Karnaukhova Elena, Korchin Valery. *Speaker Karnaukhova Elena*
Reconstruction of the complicated stress state of a massif using data of elastic anisotropy as well as structural and textural measures of rocks
Korchin Valery, Burtyn Peter, Karnaukhova Elena. *Speaker Korchin Valery*
Analysis of P-V-T relationship and melting of the pyrope mineral
Singh Kripa Shanker. *Speaker Singh Kripa Shanker*
Comparison between different microscopic properties of a 2D lattice on its macroscopic behaviours
Mehrabian Shayesteh, Ahmad Amini. *Speaker Mehrabian Shayesteh*
Progress in electromagnetic studies on earthquakes and volcanoes - Electromagnetic fields associated with earthquakes and active faulting
Convener: **Johnston Malcolm**
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Law School Room 7
Chairpersons: -
09:00 am **On the complex earthquake precursors research and reliability test of predictions regional/global NETWORK- collaboration**
PrEqTIPIaMagInt
Mavrodiev Strachimir Cht.. *Speaker Mavrodiev Strachimir Cht.*
09:15 am **ULF seismomagnetic signals analysis**
Korepanov Valery, Baldev Arora, Fedir Dudkin, Gautam Rawat, Ashok Sharma. *Speaker Korepanov Valery*
09:30 am **Re-examining the reported magnetic precursor to the 1989 Loma Prieta earthquake using magnetic field data collected in the US and Japan during September and October 1989**
Thomas Jeremy, Jeffrey J. Love, Malcolm J. S. Johnston. *Speaker Thomas Jeremy*
09:45 am **Comments on seismomagnetic effects from the long-awaited 28 September 2004 M6.0 Parkfield earthquake by M.J.S. Johnston, Y. Sasai, G.D. Egbert, R.J. Miller**
Varotsos Panayiotis, Seiya Uyeda. *Speaker Varotsos Panayiotis*
New approaches of the monitoring of porosity, permeability, shear and bulk modulus and dynamic viscosity of the pore fluid in vicinity of seismogenic fault zone
Gokhberg Mikhail, Igor Garagash, Nikolai Kolosnitsin. *Speaker Gokhberg Mikhail*
10:15 am **Dynamic Seismo-Electromagnetic Effects.**
Johnston Malcolm, Karl Kappler. *Speaker Johnston Malcolm*
10:30 am **Coffee Break (30 minutes)**
11:00 am **MT 3D modeling of seismogenic zone Duzce in NW Turkey.**
Rokityansky I.I., Savchenko T.S., Tank S.B.
Savchenko Tymur. *Speaker Savchenko Tymur*
11:15 am **Three dimensional resistivity structures in intra-plate earthquake zones in Hokkaido, northern Japan**
Ichihara Hiroshi, Toru Mogi, Ryo Honda, Yusuke Yamaya. *Speaker Ichihara Hiroshi*
11:30 am **Seismomagnetic investigations in Serbia and its future**
Cukavac Milena. *Speaker Cukavac Milena*
11:45 am **Luminescence Associated With Uni-Axial Rock Fracture Experiments**
Kato Mamoru, Yuta Mitsui, Takashi Yanagidani. *Speaker Kato Mamoru*
12:00 pm **Effect of seismic activities in the F2 region ionospheric electron and ion temperature**
Chand Ramesh, M. Israil, D.K. Sharma, J. Rai. *Speaker Chand Ramesh*
12:15 pm **Seismo-electromagnetic emissions and VHF pulsed radio signals (P-H pulses) observations over one solar orbit - More questions than answers.**
Hollis-Watts Phillip, Christopher R Windsor. *Speaker Hollis-Watts Phillip*
Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Law School Room 7
Chairpersons: -
02:00 pm **On the physical mechanism of vertical electric field generation over active tectonic faults**
Pulinets Sergey. *Speaker Pulinets Sergey*
02:15 pm **Statistical relation of Pc1 pulsations at low latitude to Earthquake occurrence**
Bortnik Jacob, James W. Cutler, Clark Dunson, Thomas E. Bleier. *Speaker Bortnik Jacob*
02:30 pm **Understanding Electromagnetic Properties of Dry and Wet, Stressed and Unstressed Igneous Rocks: Progress Report**
Freund Friedemann, Vern Vanderbilt, Akihiro Takeuchi, Bobby W.S. Lau, Milton Bose. *Speaker Vern Vanderbilt*
02:45 pm **ULF magnetic transfer function approach for monitoring of crustal activity**
Hattori Katsumi, H. Ishikawa, M. Harada, I. Takahashi, C. Yoshino, N. Isezaki, T. Nagao. *Speaker Hattori Katsumi*
03:00 pm **Electromagnetic wave Anomaly of Earthquake and Signal Processing to Detect Precursor**
Hata Masayasu, Takashi Fujii, Ichi Takumi, Hiroshi Yasukawa. *Speaker Hata Masayasu*
03:15 pm **Magnetotelluric survey around source region of the 2003 Tokachi-Oki earthquake**
Mogi Toru, Kengo Tanimoto, Yusuke Yamaya, Hiroyuki Kamiyama, Takeshi Hashimoto, Venera Dobliza, Takanori Kajiwara, Makoto Uyeshima, Yasuo Ogawa. *Speaker Mogi Toru*
03:30 pm **Coffee Break (30 minutes)**
04:00 pm **Multipoint measurements of ULF magnetic field activity in south-eastern Europe during August 2004-February 2005: DFA approach and results**
Nenovski Petko, Massimo Vellante, Irina Pilarska, Konrad

Schwingenschuh, Umberto Villante, Mohamed Boudjada, Viktor Wesztergom, Elena Cristea, I. Cholakov, Emil Botev. *Speaker Nenovski Petko*
04:15 pm **ULF common mode signal estimation with a network of sensors in California**
Dunson Clark, Tom Bleier, Dr. James Cutler, Dr. Jacob Bortnik. *Speaker Dunson Clark*
04:30 pm **Formation of Carbon Films on New Fracture Surfaces: Implications for Continental-Collision-Zone Conductivity Anomalies**
Duba Al, E. Mathez, S. Karner, A. Kronenberg, J. Roberts. *Speaker Duba Al*
04:45 pm **A method for parameterization of magnetic ULF signals**
Cutler James, Jacob Bortnik, Clark Dunson, Tom Bleier. *Speaker Cutler James*
05:00 pm **Short and long range impact of seismoelectromagnetic effects**
Karimov Farshed. *Speaker Karimov Farshed*
JSS010 Progress in electromagnetic studies on earthquakes and volcanoes - Seismo-electromagnetic studies using space technology
Convener: **Ouzounov Dimitar, Tramutoli Valerio, Parrot Michel, Singh Ramesh**
Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall
Chairpersons: -
TEC variations over the Mediterranean during the seismic activity period of Kythera earthquake of 12th January, 2006
Condadakis Michael, D. N. Arabelos, G. Asteriadis, S.D. Spatalas, Ch. Pikridas. *Speaker Condadakis Michael*
Comparison of foF2 variations observed prior to two major earthquakes in Italy and during a magnetic storm
Khegai Valeri, Legenka Anna Dmitrievna, Kim Vitaly Pavlovich. *Speaker Khegai Valeri*
Earthquake Clouds
Kaynak Ugur, Roland Karel. *Speaker Ronald Karel*
Simultaneous disturbances of high-frequency geoaoustic emission and of electric field in the near-ground air
Marapulets Yury, Oleg Rulenko, Mihail Mischenko, Albert Scherbin. *Speaker Marapulets Yury*
Occurrence of precursory effects of Kythira 2006 earthquake in GPS TEC variations
Zakharenkova Irina, Irk Shagimuratov, Andrzej Krankowski, Galina Yakimova. *Speaker Zakharenkova Irina*
Modification of the ionosphere before strong earthquakes of Japan region on the base of GPS measurements
Zakharenkova Irina, Irk Shagimuratov, Yuriy Ruzhin, Nadezhda Tepenitsina. *Speaker Zakharenkova Irina*
Spacial distribution of ionospheric GPS-TEC and NmF2 disturbances prior to the 1999 Chi-Chi and Chia-Yi Earthquakes
Nishihashi Masahide, Hau-Kun Jhuang, Katsumi Hattori, Jann-Yenq Liu. *Speaker Nishihashi Masahide*
Joint Satellite and Ground Based EM observation and Search for Earthquake Precursors
Ouzounov Dimitar, Katsumi Hattori, Sergey Pulinets, Masashi Kamogawa, Masahide Nishihashi, Michel Parrot, J.Y. Liu. *Speaker Ouzounov Dimitar*
On the physical causes of enhanced infrared emission known as Thermal Anomalies
Freund Friedemann, Akihiro Takeuchi, Bobby W.S. Lau, Nevin A. Bryant. *Speaker Freund Friedemann*
Analysis of thermal neutron ground observations in accordance with space observations of seismo-electromagnetic phenomena
Sigaeva Ekaterina, Irina Myagkova, Ekaterina Muravieva, Yuri Kuzmin. *Speaker Sigaeva Ekaterina*
Analysis of ionospheric electrostatic turbulence over seismic regions using DEMETER plasma and wave measurements
Onishi Tatsuo, Jean-Jacques Berthelier. *Speaker Onishi Tatsuo*
Statistical study of anomalous fluctuations of whistler data recorded by DEMETER
Buzzi Aurora, Livio Conti, Michel Parrot, Jean-Louis Pincon, Vittorio Sgrigna, David Zilpimiani. *Speaker Buzzi Aurora*
Possible physical mechanisms of the TEC enhancements observed before earthquakes
Zakharenkova Irina, Alexander Namgaladze, Irk Shagimuratov, Oleg Zolotov, Oleg Martynenko. *Speaker Zakharenkova Irina*
Seismo-anomalies of ground- and space-based observations during M>=5.0 earthquakes in Taiwan
Ho Yi-Ying. *Speaker Ho Yi-Ying*
JSS011 Earth Structure and Geodynamics
Convener: **Lay Thorne**
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Law School Room 3
Chairpersons: -
09:00 am **Geodynamic development of the European lithosphere imprinted in its structure and topography of the lithosphere-asthenosphere boundary**
Plomerova Jaroslava, Vladislav Babuska. *Speaker Plomerova Jaroslava*
09:12 am **Seismic observations of mantle discontinuities, and their mineral physical interpretation**
Deuss Arwen, Jennifer Andrews. *Speaker Deuss Arwen*
09:24 am **Strain rate field calculated from GPS measurements in Chinese Continent**
Zhu Shoubiao, Yongen Cai, Yaolin Shi. *Speaker Zhu Shoubiao*
09:36 am **Mantle derived CO2 degassing in Italy**
Cardellini Carlo, Chiodini Giovanni, Fondini Francesco, Caliro Stefano, Avino Rosario, Baldini Angela, Granieri Domenico, Morgantini Nicola. *Speaker Cardellini Carlo*
09:48 am **Interaction between mantle upwellings and lithosphere as derived from seismic anisotropy in Africa and Pacific**
Montagner Jean-Paul, Jean-Paul Montagner, Michel Cara, Eleonore Stutzmann, Eric Debayle, Genevieve Roul, Jean-Jacques Lvque. *Speaker Montagner Jean-Paul*
10:00 am **The effect of plate boundary evolution in 3D Cartesian geometry mantle convection models**
Lowman Julian, Andrew D. Gait, Carl W. Gable. *Speaker Lowman Julian*
10:12 am **Global modelling of the dynamic geoid: a role of the transition zone.**
Kaban Mikhail, Valery Trubitsyn, Irina Rogozhina. *Speaker Kaban Mikhail*
10:24 am **New constraints on structure and dynamics of the lithosphere and asthenosphere from global upper-mantle tomography**
Lebedev Sergei, Rob D Van Der Hilst. *Speaker Lebedev Sergei*
10:36 am **Coffee Break (30 minutes)**
11:06 am **When hot thermochemical instabilities trigger subduction and continental growth**
Davaille Anne, Nicholas Arndt. *Speaker Davaille Anne*
11:18 am **Post-Perovskite in the Deep Mantle - What Can it do for You?**
Lay Thorne. *Speaker Lay Thorne*
11:30 am **Regional Scale Variation of the top Layer of the Inner Core Beneath Pacific**
Watada Shingo. *Speaker Watada Shingo*
Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall
The evolution of mantle viscous stresses caused by supercontinental cycle: numerical modelling
Bobrov Alexander. *Speaker Bobrov Alexander*
Geodynamics of the Active continental Margins of the Far East, Russia
Rodnikov Alexander. *Speaker Rodnikov Alexander*
Disjunctive-plicative lateral structures of Tien-Shan; their delineation and role in pre-mesozoic geology of the region
Mordvintsev Oleg. *Speaker Mordvintsev Oleg*
The investigation of aftershock process of strong earthquakes of the Eastern-Anatolian fractured zone
Mkrtychyan Mariam. *Speaker Mkrtychyan Mariam*
Normal Modes for Kinematics of A Triaxial Earth
Wang Wen-Jun, Wenbin Shen, Han-Wei Zhang. *Speaker Wang Wen-Jun*
Complex geophysical research of earth CTUST deep structures and geodynamics of territory of Armenia
Hovhannissian Hmayak, Karine Vardanyan. *Speaker Hovhannissian Hmayak*
Earth's structure with the gravimetric tomography method
Greku Rudolf, Alexander A. Kulikov, Tatyana R. Greku. *Speaker Greku Rudolf*
Behavior of the high-dam building and surrounding areas derived from leveling and GPS measurements, Aswan-Egypt
Mohamed Abdel-Monem. *Speaker Mohamed Abdel-Monem*
The Joint Inversion Study on the Driving Forces Acting on the Block Boundaries and Tectonic Stress Field of China Mainland and Its Adjacent Areas
Du Zhixing, Fanlin Yang, Xiushuan Lu. *Speaker Du Zhixing*
The stress field of the Hyuga-Nada Region, Southwest Japan, deduced from ocean-bottom seismic observations
Uehira Kenji, Hiroshi Yakiwara, Tomoaki Yamada, Masanao Shinohara, Toshihiko Kanazawa, Kodo Umakoshi, Kazuhiko Goto, Hiroki Miyamachi, Ryota Hino, Kimihiro Mochizuki, Kazuo Nakahigashi, Masaji Goda, Hiroshi Shimizu. *Speaker Uehira Kenji*
Influence of the atmospheric and oceanic circulation on the movement of the lithosphere plates and on the earthquakes
Sidorenkov Nikolay. *Speaker Sidorenkov Nikolay*
Three-dimensional seismic velocity structure in the Off-Miyagi and Off-

Fukushima forearc Region
Yamamoto Yojiro, Ryota Hino, Kensuke Suzuki, Tomoaki Yamada, Masanao Shinohara, Toshihiko Kanazawa, Masayuki Tanaka, Yoshiyuki Kaneda, Kenji Uehira. *Speaker Yamamoto Yojiro*
Crustal and upper mantle structure beneath central South America deduced from ScS reverberation waveforms and receiver functions
Kuge Keiko, Yusuke Okaue. *Speaker Kuge Keiko*
Shear wave splitting and subduction structure in Southern Italy
Margheriti Lucia, Paola Baccheschi, Michael S. Steckler. *Speaker Paola Baccheschi*
Electrical conductivity of wadsleyite
Mantihalake M.A. Geeth Mahinda, T. Matsuzaki, T. Yoshino, S. Yamashita, E. Ito, T. Katsura. *Speaker Mantihalake M.A. Geeth Mahinda*
Comparative study concerning intermediate seismicity dynamics within some seismic nests of the world
Zlagnean Luminita, Lucian Besutiu. *Speaker Zlagnean Luminita*
3-D geomagnetic impulses: Synpsis of field components at the CMB
Ballani Ludwig, Hans Greiner-Mai, Dietrich Stromeyer, Ingo Wardinski, Jan Hagedorn, Aude Chambodut. *Speaker Ballani Ludwig*
Origin and evolution of Northwest indian conductor derived from geomagnetic deep sounding and thermo-geodynamical processes
Prasad S N. *Speaker Prasad S N*
Celestial geodynamics and solution of the fundamental problems of geodesy, gravimetry and geophysics
Barkin Yury. *Speaker Barkin Yury*
Mantle wedge dynamics versus crustal seismicity in the Apennines (Italy)
Cinti Francesca R., Guido Ventura, Francesca Di Luccio, N. Alessandro Pino. *Speaker Cinti Francesca R.*
Some regularities of the plate motion and space redistribution of big earthquakes
Barkin Yury, Jose Manuel Ferrandiz, Miguel Garcia Ferrandez. *Speaker Barkin Yury*
Earthquakes and the State of Stress in the Outer Rise
Polet Jascha, Hong Kie Thio. *Speaker Polet Jascha*
Roles of lateral viscosity variations caused by stiff subducting slabs and weak plate margins on long-wavelength geoid anomaly
Yoshida Masaki, Tomoeaki Nakakuki, Motoyuki Kido. *Speaker Yoshida Masaki*
Folds evolution and basin development in the hinterland of an orogen: the Almazora neogene-quaternary corridor (SE Betic Cordillera, Spain)
Pedra Antonio, Jess Galindo-Zaldvar, Ana Ruz-Constn, Carlos Duque-Calvache, Ngel Carlos Lpez-Garrido, Carlos Marn-Lechado, Carlos Sanz De Galeano, Inmaculada Serrano. *Speaker Pedra Antonio*
3D Seismic Velocity Structure and geometry of plate boundary around the rupture area of the 1968 Tokachi-Oki Earthquake
Kuwano Asako, Ryota Hino, Masanao Shinohara, Tomoaki Yamada, Kimihiro Mochizuki, Kazuo Nakahigashi, Shinichi Sakai, Toshihiko Kanazawa, Yojiro Yamamoto, Akira Hasegawa, Shinichiro Amamiya, Yoshio Murai, Tetsuotakanami. *Speaker Kuwano Asako*
Seismic tomography model on Google Earth
Yamaqishi Yasuko, Hiroshi Yanaka, Seiji Tsuboi. *Speaker Yamaqishi Yasuko*
To the problem of mechanism definition of earthquakes focuses of Armenia
Mkrtychyan Mariam. *Speaker Mkrtychyan Mariam*
Surface Wave Tomography beneath the Gulf of California Rift Zone
Zhang Xiaomei, Hanneke Paulssen, Sergei Lebedev, Thomas Meier. *Speaker Zhang Xiaomei*
Upper Mantle Anisotropy from Shear Wave Splitting on the Southeastern Passive Margin of Arabia, Dhofar Region, Oman
Al-Lazki Ali, Cindy Ebinger, Michael Kendall, George Helffrich, Sylvie Leroy, Christel Tiberi, Graham Stuart, Khalfan Al-Toobi. *Speaker Al-Lazki Ali*
Local-scale surface wave tomography of the Japanese islands I: A two-station approach
Yoshizawa Kazunori, Kazuaki Miyake, Kiyoshi Yomogida. *Speaker Yoshizawa Kazunori*
Local-scale surface wave tomography of the Japanese islands II: A multi-station approach
Yoshizawa Kazunori, Haruka Takezoe, Kiyoshi Yomogida. *Speaker Yoshizawa Kazunori*
Seismic structure and seismicity of the rupture areas of the Tonkai, Nankai earthquakes derived from long-term sea floor earthquake observation
Nakahigashi Kazuo, Asako Kuwano, Tomoaki Yamada, Kimihiro Mochizuki, Masanao Shinohara, Shinichi Sakai, Toshihiko Kanazawa, Kenji Uehira, Hiroshi Shimizu. *Speaker Nakahigashi Kazuo*
Determining the Location of the Fault Plane for the Nankai Subduction Zone, Southwest Japan
Enescu Bogdan, Jim Mori. *Speaker Enescu Bogdan*
Seismotectonics of the southern Tyrrhenian compressive region, Italy
Presti Debora, Andrea Billi, Claudio Faccenna, Giancarlo Neri, Barbara Orecchio. *Speaker Presti Debora*
SKS splitting measurements beneath Northern Apennines region: a case of oblique trench retreat
Pondrelli Silvia, Salimbeni Simone, Margheriti Lucia, Park Jeffrey, Levin Vadim. *Speaker Pondrelli Silvia*
3D models of the upper mantle developed using the coupled spectral element method
Lekic Vedran. *Speaker Lekic Vedran*
P-wave mantle tomography with a focus on the South Pacific superswell obtained from traveltine and relative traveltine data
Obayashi Masayuki, Satoru Tanaka, Junko Yoshimitsu, Daisuke Suetugu, Hajime Shiohara, Hiroko Sugiyaka, Toshihiko Kanazawa, Yoshio Fukao, Guilhem Barruol. *Speaker Obayashi Masayuki*
Deformation experiments on Marble under true triaxial stress states
Nakayama Shotaro, Hiromine Mochizuki, Masao Nakatani, Shingo Yoshida. *Speaker Nakayama Shotaro*
The analysis of the strained state of main seismotectonic zones of Menian upland
Gyodakyan Eduard, Naira Geodakyan. *Speaker Gyodakyan Eduard*
Complex anisotropy structure beneath the Po-Plain and Northern Apennines (Italy): measurements and modelling
Salimbeni Simone, Margheriti Lucia, Levin Vadim, Park Jeffrey. *Speaker Salimbeni Simone*
Crustal and upper mantle structure beneath the Deccan Volcanic Province of India
Gollapally Mohan, Pankaj Kr. Tiwari. *Speaker Gollapally Mohan*
What parameters make up, what we call site effects
Kerimov Ikram. *Speaker Kerimov Ikram*
Error analysis of strain rates from GPS measurements based on Monte-Carlo method
Zhu Shoubiao, Yaolin Shi. *Speaker Zhu Shoubiao*
Investigation of Moho depth and its variations in Kope Dagh
Mohammadi Elham, Mohammad Reza Gheitanchi. *Speaker Mohammadi Elham*
D" structure investigated using source array migration
Chaloner Jeremy, Christine Thomas, Andreas Rietbrock. *Speaker Chaloner Jeremy*
Lower mantle structure from scattered and diffracted PKP waves
Thomas Christine, J.-Michael Kendall. *Speaker Thomas Christine*
Shear-wave splitting analysis using aftershocks of the 28th May 2004 Baladeh-Iran earthquake
Dilmaghani Masoumeh, Seyed Mojtaba Mirmajidi, Dr.Ahmad Sadikhuy, Prof.Mohammad Reza Gheitanchi. *Speaker Dilmaghani Masoumeh*
Determination of minimum 1-D velocity model for north west Iran region, using simultaneous inversion of local earthquake travel times.
Bayramnejad Esmaeil. *Speaker Bayramnejad Esmaeil*
Estimation of the crustal structure beneath Isfahan(Iran) obtained from receiver functions of short period data.
Alikhani Zahra, Dr.Forough Sodudi, Dr.Ahmad Sadid Khuy. *Speaker Alikhani Zahra*
Kirchhoff migration imaging of reflectors and scatterers in the lowermost mantle beneath Central America
Hutko Alexander, Thorne Lay. *Speaker Hutko Alexander*
Current state of deformation processes in an earth's crust of the Caucasian region
Naira Gedakian. *Speaker Naira Gedakian*
Mantle Convection Models with Temperature and Depth-dependent Thermal Expansivity
R. Ghias Sanaz, Gary T. Jarvis. *Speaker R. Ghias Sanaz*
Comparison of Long Term Normal Modes from the Sumatra Earthquake Using Superconducting Gravimeters and GSN Seismometers
Crossley David, Yan Xu. *Speaker Crossley David*
The Earth's seismicity statistics
Bulatova Natalja. *Speaker Bulatova Natalja*
Geodynamical significance of the 105 meridian of eastern longitude.
Ioganson Lidia. *Speaker Ioganson Lidia*
Fiat to normal subduction Nazca Plate transition between latitudes 31.5-33.5S as seen from small earthquakes (M < 4.5)
Furlani Renzo. *Speaker Furlani Renzo*
JSS012 Earth Structure and Geodynamics - Dynamics of Deep Mantle Slabs
Convener: **Yoshioka Shoichi, Kawakatsu Hitoshi, Irifune Tetsuo, Morelli Andrea**
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Law School Room 11
Chairpersons: -
09:00 am **Seismic Evidence for Deep Water Transportation in the**

Hitoshi Kawakatsu Hitoshi, Shingo Watada. *Speaker Kawakatsu*

09:12 am **Variation of Seismic Discontinuity Depths at ~660 km: Role of Garnet Associated with Stagnant Slab**
Tajima Fumiko, Ikuo Katayama, Tsuyoshi Nakagawa. *Speaker Tajima Fumiko*

09:24 am **Seismic reflectors in the lower mantle beneath the Mariana subduction zone**
Suetsugu Daisuke, Masayuki Obayashi, Hiroko Sugioka. *Speaker Suetsugu Daisuke*

09:36 am **Correlation between seismic and electric parameters in stagnant slabs**
Tarits Pascal. *Speaker Tarits Pascal*

09:48 am **Three-dimensional shear-wave speed structure beneath the Philippine Sea by land and ocean bottom broadband data**
Isse Takehi, Hajime Shiobara, Hiroko Sugioka, Kazunori Yoshizawa, Daisuka Suetsugu, Aki Ito, Hitoshi Kawakatsu, Azusa Shito, Adam Claudia, Toshihiko Kanazawa, Yoshio Fukao. *Speaker Isse Takehi*

10:00 am **The fate of morb crust at the core-mantle boundary**
Hirose Kei, Kenji Ohta, Thorne Lay, Nagayoshi Sata, Yasuo Ohishi. *Speaker Hirose Kei*

10:12 am **Elastic wave velocities of pyrolite and MORB at P, T conditions of the mantle transition region**
Irifune Tetsuo, Yuji Higo, Yoshio Kono, Toru Inoue, Ken-ichi Funakoshi. *Speaker Irifune Tetsuo*

10:24 am **The influence of water on seismic wave speeds and attenuation in the mantle wedge: an exploratory experimental study**
Aizawa Yoshitaka, Auke Barnhoorn, Ulrich H. Faul, John D. Fitz Gerald. *Speaker Aizawa Yoshitaka*

10:36 am **Coffee Break (30 minutes)**

11:06 am **Challenge to image deep mantle slab by seafloor electromagnetic survey**
Baba Kiyoshi, Tada-Nori Goto, Takafumi Kasaya, Takeo Ichikita, Takao Koyama, Hisayoshi Shimizu, Makoto Uyeshima, Hisashi Utada. *Speaker Baba Kiyoshi*

11:18 am **Deep azimuthal seismic anisotropy in the western Anatolia and Aegean subduction zone**
Polat Gulten. *Speaker Polat Gulten*

11:30 am **Stagnant slab configuration in the vicinity of the 660-km discontinuity**
Obayashi Masayuki, Junko Yoshimitsu, Yoshio Fukao. *Speaker Obayashi Masayuki*

11:42 am **Phase relations in stagnant slabs: Seismic velocity structure and bending moments**
Bina Craig. *Speaker Bina Craig*

11:54 am **Stagnant slab: A review**
Fukao Yoshio, Masayuki Obayashi, Deep Slab Project Group. *Speaker Fukao Yoshio*

12:06 pm **Numerical Models of the Fate of Detached Slabs**
Jarvis Gary, Julian P. Lowman, Hosein Shahnas. *Speaker Jarvis Gary*

Poster 6 July, 2007 from 06:00 PM to 08:00 PM - Baldeschi Palace Main Hall

The mantle discontinuity depths in the stagnant Pacific slab beneath the Philippine Sea
Suetsugu Daisuke, Hajime Shiobara, Hiroko Sugioka, Aki Ito, Hitoshi Kawakatsu, Azusa Shito, Claudia Adam, Toshihiko Kanazawa, Yoshio Fukao. *Speaker Suetsugu Daisuke*

Effect of superhydrous phase B and phase D on the density of hydrated slabs in the deep mantle
Litasov Konstantin, Eiji Ohtani. *Speaker Litasov Konstantin*

Upper boundary of the pacific plate subducting under Hokkaido, Japan, estimated from ScSp phase
Yomogida Kiyoshi, Kinue Osada, Kazunori Yoshizawa. *Speaker Yomogida Kiyoshi*

Preliminary study on formulation of a slab stagnation model unifying thermal convection and kinetics
Yoshioka Shoichi. *Speaker Yoshioka Shoichi*

Anelasticity in the mantle surrounding Izu-Bonin subduction zone inferred from BBOBS waveform data
Shito Azusa, Hajime Shiobara, Hiroko Sugioka, Aki Ito, Claudia Adam, Hitoshi Kawakatsu, Toshihiko Kanazawa. *Speaker Shito Azusa*

Detailed Structure of Upper Mantle Discontinuities in the Tonga and Mariana Subduction Zones
Tibi Rigobert, Dougla A. Wiens. *Speaker Tibi Rigobert*

The crystallographic preferred orientation of MGSIO3 Ilmenite and its implications for the anisotropy of the subducted slab
Shiraishi Rei, Eiji Ohtani, Kyuichi Kanagawa, Akira Shimojuku, Masaaki Miyahara. *Speaker Shiraishi Rei*

Sensitivity of geomagnetic transfer functions to stagnant-SLAB-type electrical conductivity heterogeneity
Shimizu Hisayoshi, Yuta Baba, Takao Koyama, Kiyoshi Baba, Hisashi Utada. *Speaker Shimizu Hisayoshi*

Gaussian-beam receiver function synthetics in a 3-D heterogeneous medium with velocity discontinuities at the Japan subduction zone
Hirahara Kazuro, Takashi Tonegawa, Takuro Shibutani. *Speaker Hirahara Kazuro*

Upper mantle structure beneath Japan and Okhotsk Sea from Rayleigh wave analysis
Litvina Ekaterina, Kiyoshi Yomogida. *Speaker Litvina Ekaterina*

Body wave travel time anomalies caused by the stagnant slab

Sugioka Hiroko, Daisuke Suetsugu, Masayuki Obayashi, Yoshio Fukao, Yuan Gao. *Speaker Sugioka Hiroko*

Implication of low velocity anomaly found beneath the oceanward side of Honshu subduction zone: Interaction between the sinking hot anomaly and exothermic phase change
Honda Satoru, Manabu Morishige, Yuji Orihashi. *Speaker Honda Satoru*

Mantle anisotropy beneath the eastern Asia
Tono Yoko, Yoshio Fukao, Takashi Kunugi, Seiji Tsuboi. *Speaker Tono Yoko*

Thermal conductivity and thermal diffusivity of slab materials under high pressure
Osako Masahiro, Akira Yoneda, Eiji Ito. *Speaker Osako Masahiro*

Instantaneous mantle flow induced by subduction of a freely sinking slab
Piomallo Claudia, Thorsten W. Becker, Francesca Funiello, Claudio Faccenna. *Speaker Piomallo Claudia*

JSS016 Underwater observatories
Conveners: Romanowicz Barbara
Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Law School Room 11
02:00 pm **Inexpensive ocean bottom long-term geomagnetic observatory**
Korepanov Valery, Andriy Prystai, Yevhen Klymovych, Oleksandr Kuznetsov. *Speaker Korepanov Valery*

02:15 pm **A New Method for the Mosaic of Multibeam Bathymetry Data**
Yang Fanlin, Cuiyu Sun, Xiangwei Zhao, Xinzhou Wang. *Speaker Yang Fanlin*

02:30 pm **MOBB: A Long Term Broadband Seafloor Observatory in Monterey Bay:**
Romanowicz Barbara, Paul McGill, Doug Neuhauser, David Dolenc, Debra Stakes, Robert Uhrhammer, Tony Ramirez. *Speaker Romanowicz Barbara*

02:45 pm **Development of a pop-up ocean bottom station for investigations of groundwater seepage and underwater earthquakes**
Kontar Aleksey. *Speaker Kontar Aleksey*

03:00 pm **Surprising Science Arising from Exploring the Earth from Deep Ocean Observatories**
Butler Rhett, Fred Duennebier, Cinna Lomnitz. *Speaker Butler Rhett*

03:15 pm **A new ocean bottom cable system for dense observations of earthquakes on the seafloor**
Kanazawa Toshihiko, Masanao Shinohara, Shinichi Sakai, Osamu Sano, Hisashi Utada, Hajime Shiobara, Yuichi Morita, Tomoaki Yamada, Katsuyuki Yamazaki. *Speaker Kanazawa Toshihiko*

03:30 pm **Coffee Break (30 minutes)**

04:00 pm **Present status of seafloor electromagnetic stations in the northwest Pacific**
Toh Hiroaki, Yozo Hamano. *Speaker Toh Hiroaki*

04:15 pm **The NEMO station deployment first result**
Musumeci Mario Salvatore, The Nemo Collaboration. *Speaker Musumeci Mario Salvatore*

04:30 pm **European experience on Multiparameter Seafloor Observatories, technical-scientific solutions and open questions on sensors and data**
Favali Paolo, L. Beranzoli, M. Calcara, A. De Santis, G. Etiopo, F. Gasparoni, N. Lo Bue, G. Marinaro, S. Monna. *Speaker Favali Paolo*

04:45 pm **Multiparameter seafloor observatory deployed for tsunami warning**
Chierici Francesco, Luca Pignagnoli, Laura Beranzoli, Francesco Gasparoni, Luis Manuel Marques Matias, Davide Embriaco, Paolo Favali, Giuditta Marinaro, Nevio Zitellini. *Speaker Chierici Francesco*

05:00 pm **Permanent (OBS ALBORAN) and long term (RED FOMAR) OBS deployment at Gulf of Cadiz Alboran Sea (Ibero-Maghrebian Region).**
Pazos Garca Antonio, Jos Martn Davila, Elisa Buforn, Agustn Udas, Winfried Hanka. *Speaker Pazos Garca Antonio*

05:15 pm **Long-term Seismic Monitoring of the East Pacific Rise at 950 N --- Scientific Findings and Implications for Future Permanent Ocean Observatories**
Waldhauser Felix, Maya Tolstoy. *Speaker Waldhauser Felix*

JSS017 **Lithosphere thermal state and geodynamic processes: from measurements to models**
Conveners: Chapman David
Oral 6 July, 2007 from 09:00 AM to 12:30 AM - Law School Room 12
Chairpersons: -
09:00 am **Temperature-time series, thermal regime and the instability of the fluid column in a borehole**
Cermak Vladimir. *Speaker Cermak Vladimir*

09:13 am **withdrawn**
Majorowicz Jacek. *Speaker Majorowicz Jacek*

09:26 am **Heat flow variation with depth in Poland and Central Europe from deep equilibrium temperature logs and lithosphere thermal state**
Majorowicz Jacek, Jan Safanda, Vladimir Cermak, Marta Wroblewska, Jan Szewczyk, Stanislaw Wybraniec, Marek Grad, Aleksander Guterch. *Speaker Majorowicz Jacek*

09:39 am **Interpretation and mathematical modelling of temporal changes of temperature observed in borehole YAXCOPOIL-1 within the CHICXULUB impact structure, Mexico**
Safanda Jan, Helmut Wilhelm, Philipp Heidinger, Vladimir

Cermak. *Speaker Safanda Jan*

09:52 am **Evolution of shallow crustal thermal structures from subduction to collision in Taiwan Region**
Chi Wu-Cheng, Donald L. Reed. *Speaker Chi Wu-Cheng*

10:05 am **Altiplano-Puna Elevation and the role of thermal isostasy**
Prezzi Claudia, Hans-Jrgen Gtze, Sabine Schmidt. *Speaker Prezzi Claudia*

Prezzi Claudia

10:18 am **Thermal diffusivity of granulite rocks at elevated temperatures**
Ray Labani, H.-J. Frster, F.R. Schilling, A. Frster. *Speaker Ray Labani*

Labani

10:31 am **Coffee Break (30 minutes)**

11:01 am **Brittle-ductile transition and cutoff depth of seismicity in the Apennines belt**
Pasquale Vincenzo, Paolo Chiozzi, Gianluca Gola. *Speaker Pasquale Vincenzo*

Pasquale Vincenzo

11:14 am **Mantle contributions to elevation in China continent: results of thermal isostasy analysis**
Bin Shan, Xiong Xiong. *Speaker Bin Shan*

11:27 am **Thermal evolution and stability of the cratonic lithosphere**
Mareschal Jean-Claude, Claire Perry, Claude Jaupart. *Speaker Mareschal Jean-Claude*

Mareschal Jean-Claude

11:40 am **New heat flow data in the Indian Shield: implications for mantle heterogeneity beneath different terranes**
Roy Sukanta, R. Srinivasan. *Speaker Roy Sukanta*

11:53 am **High mantle heat flow and thermally induced stresses below Latur and Koyna seismogenic regions of Deccan volcanic Province, India: a case study**
Pandey O.P.. *Speaker Pandey O.P.*

12:06 pm **Thinning of hot indian lithosphere : causes and consequences**
Pandey O.P.. *Speaker Pandey O.P.*

Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Law School Room 12

02:00 pm **Characterising the influence of latent heat effects on GST history**
Clauser Christoph, Darius Mottaghy. *Speaker Clauser Christoph*

Christoph

02:13 pm **The influence of deformations on the P-T-t conditions in collisional structures**
Olga Parphenuk. *Speaker Olga Parphenuk*

02:26 pm **Continental crust-rheology, thermal state and petrology of the Uralian orogen**
Milanovskiy Svyatoslav, Nikolaevisky Viktor Nikolaevich, Kaban Popov Yuri, Dmitriy Miklashevskiy, Raisa Romushkevich. *Speaker Milanovskiy Svyatoslav*

Mihail Konstantinovich. *Speaker Milanovskiy Svyatoslav*

02:39 pm **Surface elevation and stress regime derived from the thermal and compositional structure of continental lithosphere**
Perry Claire, Jean-Claude Mareschal. *Speaker Perry Claire*

02:52 pm **Transient effect of the last glaciation on the continental heat flow**
Huang Shaopeng. *Speaker Huang Shaopeng*

03:05 pm **Thermal state of the upper mantle beneath the Japanese Islands inferred from seismic tomography**
Ismail-Zadeh Alik, Satoru Honda. *Speaker Ismail-Zadeh Alik*

03:18 pm **New geothermal data from URAL SUPERDEEP WELL SG-4**
Popov Yuri, Dmitriy Miklashevskiy, Raisa Romushkevich, Dmitriy Korobkov, Oleg Esipko. *Speaker Popov Yuri*

03:31 pm **Coffee Break (30 minutes)**

04:01 pm **Continental Elevation and Upper Crustal Radioactivity**
Chapman David, Derrick Hasterok. *Speaker Chapman David*

04:14 pm **The Carpathian Basins Project: an investigation of the evolution of the Pannonian-Carpathian orogenic system**
Houseman Gregory, G. Stuart, E. Hegeds, E. Brckl, S. Radovanovic, U. Achauer, A. Brisbane, A. Horleston, D. Hawthorn, P. Lorinczi, B. Dando, G. Falus, A. Kovcs, I. Trk, H. Hausmann, W. Loderer, V. Kovacevic, S. Petrovic, D. Valcic. *Speaker Houseman Gregory*

04:27 pm **Heat flow and thermal models of a hot craton in the South American continental lithosphere**
Hamza Valiya. *Speaker Hamza Valiya*

04:40 pm **The Post-Glacial Warming Signal in Heat Flow**
Gosnold Will, Jacek Majorowicz. *Speaker Gosnold Will*

04:53 pm **Conductive heat flow in the mediterranean region: pitfalls in low degree harmonic representations**
Hamza Valiya. *Speaker Hamza Valiya*

JSW001 **Subduction zone related volcanism and hazard mitigation**
Conveners: Widiyantoro Sri
Oral 6 July, 2007 from 02:00 PM to 05:30 PM - Law School Room 8
Chairpersons: -
02:00 pm **Volcanic gases in subduction zones : Documentation of temperature measurements of the fumaroles at Vulcano island, Italy - a case study**
Reiter Eric. *Speaker Reiter Eric*

02:36 pm **Ancient subduction zone in the Sakhalin Island (the Sea of Okhotsk)**
Rodnikov Alexander. *Speaker Rodnikov Alexander*

03:12 pm **Tomographic Inversion of Local P and S Data for Structure below the Toba Caldera Complex in North Sumatra**
Widiyantoro Sri, Wandono. *Speaker Widiyantoro Sri*

03:48 pm **Coffee Break (30 minutes)**

04:18 pm **Drift of the earth core to the North and inversion of global volcanic process**
Barkin Yuri. *Speaker Barkin Yuri*

04:54 pm **Temporal evolution and migration of volcanism in Northern Martinique Island (Lesser Antilles, French West Indies)**
Germa Aurelie, Quidelleur Xavier, Labanieh Shasa, Chauvel Catherine. *Speaker Germa Aurelie*



Scientific Program