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CAPTURE; CROSS SECTIONS; DATA; ENERGY LEVELS; HEAVY NUCLEI; INTERMEDIATE MASS NUCLEI; LIGHT NUCLEI; NEUTRONS; NUCLEAR REACTIONS; P WAVES; RESONANCE; S WAVES; STRENGTH FUNCTIONS; TABLES

A COMPILATION OF S AND P WAVE NEUTRON STRENGTH FUNCTION DATA

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A. R. DE L. MUSGROVE

ABSTRACT : A COMPILATION OF EXPERIMENTAL DATA ON S- AND P- WAVE NEUTRON STRENGTH FUNCTIONS HAS BEEN MADE TO BRING UP TO DATE AN EARLIER SURVEY OF K.K. SETH (1966). THE DATA ARE PRESENTED IN TABULAR FORM WITH RECOMMENDED VALUES.

INTRODUCTION.

AS PART OF A GENERAL OVERHAUL AND UPDATING OF THE A.A.E.C. STATISTICAL RESONANCE PARAMETER LIBRARY THE PRESENT REPORT GIVES TABULATED EXPERIMENTAL DATA ON S- AND P-WAVE NEUTRON STRENGTH FUNCTIONS. AS AN AID TO THE USER OF THESE TABLES, RECOMMENDED VALUES ARE GIVEN FOR THE S-WAVE NEUTRON STRENGTH FUNCTION AND PLOTTED VERSUS MASS NUMBER IN FIGURE 1. THE RECOMMENDED VALUES HAVE BEEN CALCULATED FROM A WEIGHTED AVERAGE OF THE EXPERIMENTAL VALUES. THE WEIGHT FOR

EACH EXPERIMENTAL VALUE WAS ASSIGNED SOMEWHAT SUBJECTIVELY TO GIVE RELATIVELY LARGER WEIGHT TO STRENGTH FUNCTION DETERMINATIONS BASED ON RESOLVED RESONANCES.

IT IS NOW OVER SIX YEARS SINCE A SIMILAR COMPILATION WAS MADE BY SETH (1966) AND IN THIS PERIOD MUCH NEW DATA HAVE BECOME AVAILABLE. AN ATTEMPT HAS BEEN MADE TO BE AS EXHAUSTIVE AS POSSIBLE IN SEARCHING THE LITERATURE SINCE 1966 AND IT IS OUR INTENTION TO KEEP THIS FILE UP TO DATE. SINCE IT IS INTENDED THAT THIS REPORT BE READ IN CONJUNCTION WITH THE EARLIER COMPILATION OF SETH, NO SYSTEMATIC ATTEMPT TO INCLUDE DATA EARLIER THAN 1966 WAS MADE.

IN THIS REPORT DETERMINATIONS OF THE P-WAVE STRENGTH FUNCTION ARE INCLUDED WHICH WERE NOT COVERED IN THE EARLIER REPORT. MANY OF THESE WERE DET--ERMINED BY FITTING THE KEV NEUTRON CAPTURE CROSS SECTION. THE P-WAVE STRENGTH FUNCTION EXTRACTED FROM THIS FIT IS KNOWN TO BE A COMPLICATED ENERGY DEPENDENT AVERAGE OVER SPIN STATES OF A QUANTITY WHICH COULD BE HIGHLY J DEPENDENT. IT IS FOR THIS REASON THAT LYNN (1968) REJECTS THIS METHOD OF OBTAINING THE P-WAVE STRENGTH-FUNCTION. NEVERTHELESS WE HAVE RECORDED A NUMBER OF FITS OF THIS KIND AS VALUABLE QUALITATIVE INFORMATION ON THE P-WAVE STRENGTH FUNCTION BEHAVIOUR NOT AVAILABLE AT PRESENT FROM MORE ACCURATE DETERMINATIONS. IT IS NOT POSSIBLE TO GIVE RECOMMENDED VALUES FOR THE P-WAVE STRENGTH FUNCTION AS THERE IS CONSID--ERABLE DISAGREEMENT IN THE STRENGTH FUNCTION DERIVED BY DIFFERENT METHODS. IN FIGURE 2 A PLOT OF ALL THE GATHERED P-WAVE DATA VERSUS MASS NUMBER IS GIVEN FROM WHICH IT IS POSSIBLE TO DISCERN THE GENERAL TREND. WHERE NO ERRORS WERE QUOTED IN THE ORIGINAL SOURCE THE DATA POINT HAS BEEN PLOTTED WITH AN ASSUMED 50% ERROR

REFERENCES.

LYNN, J.E. - (1968) 'THE THEORY OF NEUTRON RESONANCE REACTIONS' CLARENDON PRESS, OXFORD.

SETH,K.K. - (1966) NUCLEAR DATA 2,299

TABLE 1 : S- AND P- WAVE NEUTRON STRENGTH FUNCTION MEASUREMENTS. (* INDICATES RECOMMENDED VALUE).

NUCLIDE	S(0) ($X10^4$)	S(1) ($X10^4$)	REFERENCE	COMMENTS
9 F 19	0.7 ± 0.5		64HIB	5 LVLS < 300 KEV
9 F 19		14.31 ±12.53	71SGRHW	3 RES .1-200KEV
12MG 24		14.55 ± 5.81	71SGRHW	3 RES .1-500KEV
12MG 25		1.05	71SGRHW	1 RES ONLY TO 500KEV
13AL 27	0.9 ± 0.6		59HIB	6 LVLS < 450 KEV
13AL 27	0.34	10.13 ± 5.81	71SGRHW	8 RES (1S) .1-225KEV
16 S 32	1.60	0.58 ± 0.44	71SGRHW	6 RES (1S) .1-400KEV
17CL 35	0.43 ± 0.20		66SETH	RECOMMENDED VALUE
17CL 35	0.12 ± 0.09	0.8	69MAJS	4S,5P 14-115K
17CL 35	0.08 ± 0.07	1.65 ± 0.54	71SGRHW	23 RES .1-200KEV
17CL 35	* 0.33 ± 0.17			RECOMMENDED
17CL 37	0.63 ± 0.20		66SETH	RECOMMENDED VALUE
17CL 37	0.55 ± 0.49	0.6	69MAJS	6S, 2P 14-115K
17CL 37	0.12 ± 0.09	2.87 ± 1.05	71SGRHW	21 RES .1-200KEV
17CL 37	* 0.55 ± 0.26			RECOMMENDED
19 K 39	1.3 ± 0.4		66SETH	RECOMMENDED VALUE
19 K 39	0.37 ± 0.23	2.70 ± 0.82	71SGRHW	30RES .1-200KEV
19 K 39	* 0.9 ± 0.5			RECOMMENDED
19 K 41	0.12 ± 0.06	4.52 ± 1.17	71SGRHW	39 RES .1-200KEV
19 K 41	* 0.12 ± 0.06			RECOMMENDED
20CA 40	3.4 ± 1.5		61WMSL	12 LVLS TO 630 KEV
20CA 40	2.9		64DUKE	13S 0-685K
20CA 40	3.12 ± 2.37	0.33 ± 0.20	71SGRHW	10 RES .1-300KEV
20CA 40	0.87 ± 0.40	0.036	73CAM	8S, 53P < 350 KEV
20CA 40	* 2.10 ± 1.2			RECOMMENDED
20CA 42	2.2 ± 0.7		66FBN	23 LVLS TO 571 KEV
20CA 42	2.2 ± 0.7		66SETH	RECOMMENDED VALUE
20CA 42	1.57 ± 0.3	0.036	73CAM	15S, 80P < 330 KEV
20CA 42	* 1.85 ± 0.4			RECOMMENDED
20CA 43	1.4 ± 0.7		66GPWT	11S 0-36.5KEV
20CA 43	1.4 ± 0.6		66SETH	RECOMMENDED VALUE
20CA 43	1.40 ± 0.2	0.087	73CAM	46S, 181P < 360 KEV
20CA 43	* 1.40 ± 0.2			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
20CA 44	2.65		64DUKE	16S 100-600K
20CA 44	2.7 ± 1.0		66SETH	RECOMMENDED VALUE
20CA 44	0.02	1.68 ± 1.47	71SGRHW	4 RES (1S)300KEV
20CA 44	0.80 ± 0.50	0.02	73CAM	4S, 28P < 190 KEV
20CA 44	* 2.0 ± 1.0			RECOMMENDED
21SC 45	4.5 ± 2.0		66SETH	RECOMMENDED VALUE
21SC 45	5.1		70CFKMR	50S (+30MISS) 19-107K
21SC 45		0.03	70MUS	FROM N,GAMMA FIT
21SC 45	* 4.80 ± 2.0			RECOMMENDED
22TI 46	2.7		64DUKE	11S 40-340K
22TI 46	2.6 ± 1.1		66SETH	RECOMMENDED VALUE
22TI 46	2.34 ± 1.20		71GRH	9S <200KEV
22TI 46	* 2.48 ± 1.10			RECOMMENDED
22TI 47	2.6 ± 0.9		66SETH	RECOMMENDED VALUE
22TI 47	2.57 ± 1.7		66GPWT	20S 0-57KEV
22TI 47	3.6		70CFKMR	30S (+13MISS) 8-76KEV
22TI 47	5.55 ± 4.65		71GRH	3S <10K
22TI 47	* 3.15 ± 1.0			RECOMMENDED
22TI 48	3.7		64DUKE	17S 0-365K
22TI 48	3.6 ± 1.4		66SETH	RECOMMENDED VALUE
22TI 48	15.8 ±11.5		71GRH	4S <50KEV
22TI 48	4.92 ± 2.18		71GRH	11S <200KEV
22TI 48	* 4.2 ± 1.7			RECOMMENDED
22TI 49	2.66 ± 1.3		66GPWT	10S <60KEV
22TI 49	2.7 ± 1.3		66SETH	RECOMMENDED VALUE
22TI 49	3.2 ± 0.7		69MR	27S (+11MISSED) 17-250K
22TI 49	2.64 ± 1.85		71GRH	4S <35KEV
22TI 49	* 2.95 ± 1.0			RECOMMENDED
22TI 50	1.4 ± 1.2		66FBN	3 LVLS < 307 KEV
23 V 50	4.5 ± 1.7		66SETH	RECOMMENDED VALUE
23 V 51	4.20 ± 1.	< 0.25	64STBN	AV. N,TOTAL XN ANAL.
23 V 51	4.2 ± 1.0		66SETH	RECOMMENDED VALUE
23 V 51	8.1 ± 0.7		67RF	26S (5 MISS) <160KEV
23 V 51	10.6 ± 4.8 - 2.8	0.5 ± 0.2	69MAJS	20S, 2P 25-130K
23 V 51	7.51 ± 2.53	0.08 ± 0.04	71SHB	17S <88K, 18P <46K
23 V 51	* 7.50 ± 3.0			RECOMMENDED
24CR 50	3.94		64DUKE	34S 90-550K
24CR 50	4.0 ± 1.0		66SETH	RECOMMENDED VALUE
24CR 50	2.18 ± 0.75	0.26 ± 0.15	71SHB	17S <356K, 13P <59K
24CR 50	* 3.0 ± 0.9			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
24CR 52	2.5		64DUKE	14S 0-650K
24CR 52	2.5 ± 1.0		66SETH	RECOMMENDED VALUE
24CR 52	2.10 ± 1.05	0.05 ± 0.02	71SHB	8S <331K, 17P <132K
24CR 52	* 2.4 ± 1.0			RECOMMENDED
24CR 53	5.1 ± 2.6		66GPWT	10S 3-40KEV
24CR 53	5.1 ± 2.6		66SETH	RECOMMENDED VALUE
24CR 53	4.1 ± 0.9		69MR	30S (+11MISSED) 17-250K
24CR 53	5.03 ± 2.06	0.07 ± 0.05	71SHB	12S <95K, 18P <67K
24CR 53	* 4.60 ± 1.0			RECOMMENDED
24CR 54	2.2 ± 0.9		66SETH	RECOMMENDED VALUE
24CR 54	1.79 ± 1.03	0.04 ± 0.02	71SHB	6S <355K, 6P <68K
24CR 54	* 2.05 ± 0.9			RECOMMENDED
25MN 55	4.50 ± 1.	< 0.25	64STBN	AV. N,TOTAL XN ANAL.
25MN 55	4.2 ± 1.0		66SETH	RECOMMENDED VALUE
25MN 55	6.2 ± 2.2		67GRH	16 LVLS < 41.2 KEV
25MN 55	3.3 ± 0.3		67RF	42S (42MISS) 50-210K
25MN 55	4.08 + 1.0 - 0.7		68MOR	16S 15-80KEV
25MN 55		0.01	70MUS	FROM N,GAMMA FIT
25MN 55	* 4.65 ± 1.2			RECOMMENDED
26FE 54	5.2		64DUKE	21S 0-514K
26FE 54	5.2 ± 1.7		66SETH	RECOMMENDED VALUE
26FE 54	3.2 ± 1.65		71GRH	10S <200K
26FE 54	* 4.5 ± 1.3			RECOMMENDED
26FE 56	1.6		64DUKE	21S 0-650K
26FE 56	1.6 ± 0.5		66SETH	RECOMMENDED VALUE
26FE 56	1.88 ± 0.95		71GRH	9S <225K
26FE 56		0.10 ± 0.04	69HBTMB	PROB UPPER LT.
26FE 56	* 1.7 ± 0.5			RECOMMENDED
26FE 57	3.7 ± 2.6		66GPWT	5S 2-55KEV
26FE 57	4.5 ± 0.7		69RM	21S
26FE 57	* 4.3 ± 1.0			RECOMMENDED
27CO 59	4.50 ± 1.	< 0.25	64STBN	AV. N,TOTAL XN ANAL.
27CO 59	3.5 ± 1.0		66SETH	RECOMMENDED VALUE
27CO 59	4.2 ± 1.2		67GRH	14 LVLS < 30.1 KEV
27CO 59	3.8 ± 1.6	< 0.41	67SACL	65 RES <120KEV
27CO 59		0.01	70MUS	FROM N,GAMMA FIT
27CO 59	* 3.85 ± 1.0			RECOMMENDED
28NI 58	3.0		64DUKE	26S 0-550K
28NI 58	3.0 ± 0.9		66SETH	RECOMMENDED VALUE
28NI 58	4.2 ± 1.9		71GRH	11S <200K
28NI 58	*	0.04 ± 0.03	69HBTMB	PROB UPPER LT.
28NI 58	* 3.5 ± 1.0			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(Ø) ($X10^4$)	S(1) ($X10^4$)	REFERENCE	COMMENTS
28NI 60	2.76		64DUKE	34S Ø-6ØØK
28NI 60	2.8 ± Ø.7		66SETH	RECOMMENDED VALUE
28NI 60	3.5 ± 1.4		71GRH	12S <2ØØK
28NI 60	2.95 ± 1.Ø4	Ø.Ø8 ± Ø.Ø3	71SHB	16S <339K, 21P <8ØK
28NI 60	* 3.Ø ± Ø.7			RECOMMENDED
28NI 61	2.5 ± Ø.9		66SETH	RECOMMENDED VALUE
28NI 61	2.5 ± Ø.9		66GPWT	19S 2-5ØKEV
28NI 61	3.2		7ØCFKMR	31S (+16MISS) 7-69KEV
28NI 61	* 2.9 ± Ø.9			RECOMMENDED
28NI 62	2.91		64DUKE	28S 9Ø-6ØØK
28NI 62	2.9 ± Ø.8		66SETH	RECOMMENDED VALUE
28NI 62	2.68 ± 1.69		71GRH	5S <2ØØK
28NI 62	* 2.9 ± Ø.8			RECOMMENDED
28NI 64	1.98		64DUKE	19S 1ØØ-6ØØK
28NI 64	2.Ø ± Ø.7		66SETH	RECOMMENDED VALUE
29CU 63	2.5 ± Ø.8		66SETH	RECOMMENDED VALUE
29CU 63	2.7 ± Ø.8		66GPWT	28S 2-6ØKEV
29CU 63	2.4 + Ø.7 - Ø.5		69ADCJMS	3ØS Ø.5-31.5KEV
29CU 63	* 2.5 ± Ø.7			RECOMMENDED
29CU 65	1.7 ± Ø.7		66SETH	RECOMMENDED VALUE
29CU 65	1.5 ± Ø.5		66GPWT	22S 2-6ØKEV
29CU 65	1.2 + Ø.5 - Ø.3		69ADCJMS	14S Ø.2-3ØKEV
29CU 65		Ø.Ø2	7ØMUS	FROM N,GAMMA FIT
29CU 65	* 1.5 ± Ø.5			RECOMMENDED
3ØZN 64	1.1 ± Ø.6		66SETH	RECOMMENDED VALUE
3ØZN 64		Ø.Ø3	71BKMA	EST. FROM GAM INTENSITY
3ØZN 64	* 1.1 ± Ø.6			RECOMMENDED
3ØZN 66	2.8 ± 1.9		59MGGM	5 LVLS < 31 KEV
3ØZN 66	* 1.1 ± Ø.6		66BF	9 LVLS < 93 KEV
3ØZN 67	3.1 ± 2.3		56DB	4 RES TO 3 KEV
3ØZN 68	4.34		64DUKE	28 5Ø-3ØØK
3ØZN 68	* 3.Ø ± Ø.8		66SETH	RECOMMENDED VALUE
31GA 69	1.42 + 1.61- Ø.66		65MA	7 LVLS, J=2
31GA 69	1.2 ± Ø.5		66SETH	RECOMMENDED VALUE
31GA 69	1.2 + 1.2 - Ø.4		68MOR	Ø-2.5 KEV
31GA 69	1.2		7ØMPSS	6 RES J+
31GA 69	1.Ø		7ØMPSS	3 RES J-
31GA 69	* 1.15 ± Ø.6			RECOMMENDED
31GA 71	*1.5		7ØMPSS	5 RES J+
31GA 71	1.3		7ØMPSS	4 RES J-
31GA 71	* 1.4 ± Ø.7			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(Ø) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
32GE 70	1.8 ± Ø.7		66NMGG	17 LVLS 3-43 KEV
32GE 70	1.8 ± Ø.7		66SETH	RECOMMENDED VALUE
32GE 70	2.3 + 1.Ø - Ø.9		67MPSS	Ø.Ø1-3Ø KEV
32GE 70	* 2.Ø ± Ø.8			RECOMMENDED
32GE 72	Ø.7 ± Ø.4		66NMGG	8 LVLS 3-31 KEV
32GE 72	1. + Ø.6 - Ø.4		67MPSS	Ø.Ø1-3Ø KEV
32GE 72	* Ø.9Ø ± Ø.4			RECOMMENDED
32GE 73	2.Ø + Ø.7 - Ø.6		67MPSS	Ø.Ø1-9 KEV
32GE 73	* 2.Ø ± Ø.7			RECOMMENDED
32GE 74	Ø.6 ± Ø.5		66NMGG	3 LVLS 3-3Ø KEV
32GE 74	1.3 + 1.1 - Ø.6		67MPSS	Ø.Ø1-3Ø KEV
32GE 74	* 1.Ø ± Ø.8			RECOMMENDED
32GE 76	1.2 ± 1.1		66NMGG	3 LVLS 3-3Ø KEV
32GE 76	2.3 + 2.1 - 1.Ø		67MPSS	Ø.Ø1-3Ø KEV
32GE 76	* 1.8 ± 1.5			RECOMMENDED
33AS 75	1.6Ø ± Ø.5Ø	Ø.5Ø ± Ø.5Ø	64STBN	AV. N,TOTAL XN ANAL.
33AS 75	1.15 + Ø.9Ø- Ø.45		65MA	11 LVLS J=1
33AS 75	2.15 + 1.37- Ø.73		65MA	15 LVLS J=2
33AS 75	1.7 ± Ø.3		66SETH	RECOMMENDED VALUE
33AS 75	2.5 + Ø.7 - Ø.4		68JUL	15LVLS J=2
33AS 75	1. + Ø.4 - Ø.2		68JUL	12LVLS J=1
33AS 75		Ø.35	7ØMUS	FROM N,GAMMA FIT
33AS 75	* 1.75 ± Ø.3			RECOMMENDED
34SE 74	2.6 ± 3		68MPSS	Ø-7KEV
34SE 76	1.6 + 3.2 - Ø.7		64CBT	4 LVLS
34SE 76	1.Ø ± Ø.6		66NMGG	7 LVLS Ø-26 KEV
34SE 76	1.7 ± 1.1		68MPSS	Ø-13KEV
34SE 76	* 1.3 ± Ø.8			RECOMMENDED
34SE 77	1.7 + 1.8 - Ø.4		64CBT	12 LVLS
34SE 77	1.6 ± Ø.5		66SETH	RECOMMENDED VALUE
34SE 77	Ø.4		68JUL	6LVLS J=1
3:SE 77	2.85		68JØL	3LVLS J=Ø
34SE 77	1.4 ± 1.6		68MPSS	Ø-4KEV, J=Ø
34SE 77	1.1 ± Ø.6		68MPSS	Ø-4KEV, J=1
34SE 77	* 1.4 ± Ø.7			RECOMMENDED
34SE 78	Ø.9 ± Ø.4		66NMGG	1Ø LVLS < 42 KEV
34SE 78	Ø.9 ± Ø.4		66SETH	RECOMMENDED VALUE
34SE 78	1.9 ± 1.3		68MPSS	Ø-2ØKEV
34SE 78	* 1.25 ± Ø.6			RECOMMENDED
34SE 8Ø	2.4 + 2.5 - 1.Ø		64CBT	3 LVLS
34SE 8Ø	1.2 ± Ø.6		66NMGG	8 LVLS 3-42 KEV
34SE 8Ø	2.Ø ± 2		68MPSS	Ø-23KEV
34SE 8Ø	* 1.3 ± Ø.6			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) ($X10^4$)	S(1) ($X10^4$)	REFERENCE	COMMENTS
34SE 82	1.0 ± 0.8		66NMGG	4 LVLS 3.5-28 KEV
35BR 79	* 1.5 ± 0.6		66SETH	RECOMMENDED VALUE
35BR 81	1.3 ± 1.1		59LCB	3 LVLS TO 200 EV
37RB 85	0.5 ± 0.3		65IKPSS	10S <1.3KEV
37RB 85	1.1 + 0.5 - 0.3		69GRE	
37RB 85		1.07	70MUS	FROM N,GAMMA FIT
37RB 85	* 0.8 ± 0.4			RECOMMENDED
37RB 87	2.4 ± 1.8		58GNG	4 LVLS 4.5-15 KEV
37RB 87	1.6 + 1.4 - 0.5		69GRE	< 23 KEV
38SR 84	0.65 ± 0.3		65ADMMS	10 LVLS TO 3.4 KEV
38SR 84	* 0.65 ± 0.3		66SETH	RECOMMENDED VALUE
38SR 86	1.0 ± 0.5		65ADMMS	9 LVLS TO 18.8 KEV
38SR 86		6.03	70MUS	FROM N,GAMMA FIT
38SR 86	* 1.0 ± 0.5			RECOMMENDED
38SR 87	0.36 ± 0.13		65ADMMS	19 LVLS TO 3.7 KEV
38SR 87	0.36 ± 0.13		66SETH	RECOMMENDED VALUE
38SR 87	0.25 ± 0.08		70COL	37 LVLS TO 10 KEV
38SR 87		8.00	70MUS	FROM N,GAMMA FIT
38SR 87	* 0.28 ± 0.1			RECOMMENDED
38SR 88		1.2 ± 0.5	61DUKE	14 LVLS
38SR 88	0.9 ± 0.7		65ADMMS	4 LVLS TO 23.8 KEV
38SR 88		8.50	70MUS	FROM N,GAMMA FIT
38SR 88	* 0.9 ± 0.7			RECOMMENDED
39 Y 89	0.25 ± 0.15	3.30 ± 0.50	64STBN	AV. N,TOTAL XN ANAL.
39 Y 89	0.4 ± 0.2		66SETH	RECOMMENDED VALUE
39 Y 89	0.39 + 0.27- 0.12	4.4 ± 2.0	69MAJS	9S, 18P <30KEV
39 Y 89		8.50	70MUS	FROM N,GAMMA FIT
39 Y 89	* 0.4 ± 0.2			RECOMMENDED
40ZR 90	0.85 ± 0.65		64MMA	4S TO 17.9 KEV
40ZR 90	1.00 ± 0.30	4.00 ± 1.00	64STBN	AV. N,TOTAL XN ANAL.
40ZR 90	0.92 + 1.64- 0.55		65MA	4 LVLS 64MMA REANAL.
40ZR 90	0.93 ± 0.6		68GK	5S 0-28 KEV
40ZR 90	2.46 ± 1.2		68GK	8S? 28-70 KEV
40ZR 90	2.0 ± 1.4	7. ± 4.	69BHMTB	4S, 6P
40ZR 90		2.00	70MUS	FROM N,GAMMA FIT
40ZR 90	* 1.16 ± 0.8			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(Ø) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
40ZR 91	1.Ø ± Ø.46		64MMA	11S TO 5.6 KEV
40ZR 91		4.2 ± Ø.5	65BL	1-6Ø KEV
40ZR 91	Ø.5 ± Ø.3		66SETH	RECOMMENDED VALUE
40ZR 91	1.2 ± Ø.4	3. ± 2.	69BHMTB	17S, 3P
40ZR 91	Ø.8 + 1.3 - Ø.3	5.8 ± 7.9	69MAJS	4S, 5P <2KEV
40ZR 91		11.1Ø	7ØMUS	FROM N,GAMMA FIT
40ZR 91	* Ø.81 ± Ø.3			RECOMMENDED
40ZR 92	1.2 ± Ø.8		64MMA	5S TO 6.9 KEV
40ZR 92	Ø.4Ø ± Ø.2Ø	6.ØØ ± 1.ØØ	64STBN	AV. N,TOTAL XN ANAL.
40ZR 92	1.97 + 2.84- 1.07		65MA	5 LVLS 64MMA REANAL.
40ZR 92	1.5 ± Ø.9		68GK	5S Ø-12 KEV
40ZR 92	1.82 ± Ø.9		68GK	1ØS? 12-52 KEV
40ZR 92	2.6 ± 1.5	7. ± 5.	69BHMTB	6S, 4P
40ZR 92		6.ØØ	7ØMUS	FROM N,GAMMA FIT
40ZR 92	* 1.7 ± Ø.9			RECOMMENDED
40ZR 94	1.1 ± Ø.7		64MMA	5S TO 2Ø KEV
40ZR 94	Ø.2Ø ± Ø.2Ø	5.ØØ ± 1.ØØ	64STBN	AV. N,TOTAL XN ANAL.
40ZR 94	Ø.9Ø + 1.29- Ø.49		65MA	5 LVLS 64MMA REANAL.
40ZR 94	1.1 ± Ø.8		68GK	8S Ø-21 KEV
40ZR 94	2.84 ± 1.		68GK	14S? 21-44 KEV
40ZR 94	1.Ø ± Ø.8	4. ± 2.	69BHMTB	3S, 8P
40ZR 94		5.3Ø	7ØMUS	FROM N,GAMMA FIT
40ZR 94	* 1.1 ± Ø.9			RECOMMENDED
40ZR 96	Ø.9 ± Ø.6		64MMA	5S TO 5.5 KEV
40ZR 96	Ø.69 + 1.ØØ- Ø.38		65MA	5 LVLS 64MMA REANAL.
40ZR 96	1.Ø ± Ø.6		68GK	6S Ø-5.8 KEV
40ZR 96	2.62 ± 1		68GK	16S? 5.8-58 KEV
40ZR 96		6.2Ø	7ØMUS	FROM N,GAMMA FIT
40ZR 96	* 1.25 ± 1.Ø			RECOMMENDED
41NB 93	Ø.4Ø ± Ø.15	5.8Ø ± Ø.5Ø	64STBN	AV. N,TOTAL XN ANAL.
41NB 93	Ø.4Ø ± Ø.Ø9	3.Ø ± 1.5	65GRH	Ø-7.5 KEV
41NB 93	Ø.4 ± Ø.1		66SETH	RECOMMENDED VALUE
41NB 93	Ø.17 ± Ø.Ø6	5.16 ± Ø.24	66UND	N,TOT ANAL TO 1Ø MEV
41NB 93	Ø.35 + Ø.1Ø- Ø.Ø7	5.Ø ± 1.5	68MOR	Ø-4.1 KEV
41NB 93		3.3 ± 1.8	68SBB	N,GAMMA FIT TO 3Ø KEV
41NB 93		11.Ø ± 3.2	69KOM	N,GAMMA FIT TO 15Ø KEV
41NB 93		11.4Ø	7ØMUS	FROM N,GAMMA FIT
41NB 93	* Ø.35 ± Ø.Ø7			RECOMMENDED
42MO 92	1.Ø ± Ø.7		63PADEMM	6 LVLS TO 16.7 KEV
42MO 92	Ø.78 + 1.14- Ø.4Ø		65MA	5 LVLS 63PADEMM REANAL
42MO 92		6.8Ø ± Ø.5	66UND	N,TOT ANAL TO 1Ø MEV
42MO 92	Ø.65 ± Ø.26	3.3 ± 1.1	72WAWMH	12S, 25P TO 31 KEV
42MO 92	* Ø.7Ø ± Ø.3			RECOMMENDED
42MO 94	Ø.5 ± Ø.4		63PADEMM	3 LVLS TO 5.4 KEV
42MO 94	*Ø.26 + Ø.65- Ø.18		65MA	3 LVLS 63PADEMM REANAL

TABLE 1 (CONTINUED)

NUCLIDE	S(Ø) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
42MO 95	Ø.55 ± Ø.4	6.3 ± 4.Ø	63PADEMM	15 LVLS TO 9 KEV
42MO 95	Ø.55 ± Ø.22		66SETH	RECOMMENDED VALUE
42MO 95	Ø.38 ± Ø.15		68WGHR	12 LEVELS
42MO 95	Ø.5 + Ø.5 - Ø.2	5. ± 5.	69SC	22 LVLS
42MO 95		5.Ø6	7ØMUS	FROM N,GAMMA FIT
42MO 95		1Ø. ± 2.5	71WRW	
42MO 95	* Ø.45 ± Ø.2Ø			RECOMMENDED
42MO 96	Ø.8 ± Ø.7		63PADEMM	5 LVLS TO 3.7^c KEV
42MO 96	Ø.6Ø + 1.4Ø- Ø.37		65MA	3 LVLS 63PADEMM REANAL
42MO 96		5.11	7ØMUS	FROM N,GAMMA FIT
42MO 97	Ø.6 ± Ø.3		63PADEMM	14 LVLS TO 2 KEV
42MO 97	Ø.6 ± Ø.24		66SETH	RECOMMENDED VALUE
42MO 97	Ø.8 ± Ø.4		68WGHR	1Ø LEVELS
42MO 97	Ø.5 + Ø.4- Ø.2	6. ± 6.	69SC	19 LVLS
42MO 97		14.6Ø	7ØMUS	FROM N,GAMMA FIT
42MO 97		1Ø. ± 2.5	71WRW	
42MO 97	* Ø.64 ± Ø.3			RECOMMENDED
42MO 98	Ø.8 ± Ø.5		63PADEMM	1Ø LVLS TO 9 KEV
42MO 98	Ø.42 + Ø.65- Ø.2Ø		65MA	7 LVLS 63PADEMM REANAL
42MO 98	Ø.8 ± Ø.4		66SETH	RECOMMENDED VALUE
42MO 98		6.8 ± Ø.5	66UND	N,TOTAL FIT TO 1 MEV
42MO 98	Ø.41 ± Ø.24		68WGHR	7 LEVELS
42MO 98	2. + 4. - 1.		69SC	6 LVLS
42MO 98		6.98	7ØMUS	FROM N,GAMMA FIT
42MO 98	* Ø.5 ± Ø.3			RECOMMENDED
42MO1ØØ	Ø.9 ± Ø.6		63PADEMM	6 LVLS TO 2 KEV
42MO1ØØ	Ø.55 + Ø.8Ø- Ø.3Ø		65MA	6 LVLS 63PADEMM REANAL
42MO1ØØ		4.6Ø ± Ø.5	66UND	N,TOT ANAL TO 1Ø MEV
42MO1ØØ	Ø.21 ± Ø.12		68WGHR	6 LEVELS
42MO1ØØ		6.54	7ØMUS	FROM N,GAMMA FIT
42MO1ØØ	* Ø.4 ± Ø.25			RECOMMENDED
43TC 99	Ø.45 ± Ø.18		66SETH	RECOMMENDED VALUE
43TC 99		4.6	7ØCFW	2 RES (5,6,2ØEV)
43TC 99		3.88	7ØCFW	QUOTED IN CINDA 72
43TC 99	* Ø.45 ± Ø.18			RECOMMENDED
44RU 99	Ø.15		71PJ	J=2 ESTIMATE FROM 3 LVL
44RU 99	Ø.31 + Ø.3 - Ø.1		71PJ	J=3 7 LVLS
44RU 99	* Ø.26 ± Ø.15			RECOMMENDED
44RU1ØØ	Ø.2		71PJ	EST. FROM 1 LVL
44RU1Ø1	Ø.4 ± Ø.28		66SETH	RECOMMENDED VALUE
44RU1Ø1	Ø.27 + Ø.2 - Ø.1		71PJ	J=2 7 LVLS
44RU1Ø1	1.ØØ + Ø.7 - Ø.4		71PJ	J=3 12 LVLS
44RU1Ø1	* Ø.62 ± Ø.25			RECOMMENDED
44RU1Ø2	Ø.Ø6 + Ø.16- Ø.Ø4		71PJ	3 LVLS

TABLE 1 (CONTINUED)

NUCLIDE	S(0) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
44RU104	0.11 + 0.12- 0.04		71PJ	
45RH103	0.40 ± 0.10	2.20 ± 0.50	64STBN	AV. N,TOTAL XN ANAL.
45RH103	0.43 ± 0.15		66SETH	RECOMMENDED VALUE
45RH103	0.40 + 0.05- 0.08	5.07 ± 0.5	66UND	N,TOT ANAL TO 10 MEV
45RH103		6.60	70MUS	FROM N,GAMMA FIT
45RH103	0.54 + 0.07- 0.06	6. ± 1.6	70RGT	160 S LVLS TO 4 KEV
45RH103	0.44	5.6	71CARL	FROM NG FIT TO 1000KEV
45RH103 *	0.47 ± 0.07			RECOMMENDED
46PD105 *	0.35 ± 0.15		66SETH	RECOMMENDED VALUE
47AG107	0.43 + 0.17- 0.12	1.9 ± 1.3	66MA	0-1 KEV
47AG107	0.4 ± 0.1		66SETH	RECOMMENDED VALUE
47AG107	0.37 + 0.10- 0.07		68MOR	0-760 EV
47AG107	0.35 ± 0.07		69PJ	<2600 EV. E-DEPENDENT
47AG107		1.81	70MUS	FROM N,GAMMA FIT
47AG107	0.60 ± 0.24	4.8 ± 1.9	71LIN	ACTIVATION METHOD
47AG107 *	0.37 ± 0.10			RECOMMENDED
47AG109	0.54 ± 0.1		66CHR	FROM N,TOTAL FIT <30K
47AG109	0.83 + 0.23- 0.19	1.4 ± 1.1	66MA	0-1 KEV
47AG109	0.8 ± 0.3		66SETH	RECOMMENDED VALUE
47AG109	0.75 + 0.16- 0.14		68MOR	0-760 EV
47AG109	0.46 ± 0.09		69PJ	<2600 EV. E-DEPENDENT
47AG109	0.96 ± 0.39	7.7 ± 3.1	71LIN	ACTIVATION METHOD
47AG109 *	0.60 ± 0.15			RECOMMENDED
48CD111	0.26 + 0.28- 0.12		61JB	8 LVLS
48CD111	0.46 + 0.29- 0.15		66SADM	21 LVLS
48CD111	0.15 ± 0.02	0.9 ± 0.3	73WA	S1 LOWER LT FROM 13LVLS
48CD111 *	0.22 ± 0.10			RECOMMENDED
48CD112	0.35 + 0.38- 0.16		66SADM	8 LVLS
48CD112	0.72 + 0.40- 0.23	3.9 ± 2.5	72SMA	29 LVLS
48CD112 *	0.6 ± 0.3			RECOMMENDED
48CD113	0.39 + 0.33- 0.15		61JB	9 LVLS
48CD113	0.50 + 0.26- 0.16		66SADM	22 LVLS
48CD113 *	0.5 ± 0.2			RECOMMENDED
48CD114	0.91 + 1.25- 0.47		66SADM	7 LVLS
49IN113	0.6 ± 0.3		66SETH	RECOMMENDED VALUE
49IN113	0.28 ± 0.06		70COL2	48 LVLS < 2 KEV
49IN113 *	0.3 ± 0.1			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(Ø) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
49IN115	Ø.3 ± Ø.15		66SETH	RECOMMENDED VALUE
49IN115	Ø.09 ± Ø.03	3.9 ± 1.4	69FT	ACTIVATION METHOD
49IN115		1.42	7ØMUS	FROM N,GAMMA FIT
49IN115	Ø.26 ± Ø.Ø27	2.Ø ± Ø.5	71COL2	227 LVLS <2KEV
49IN115	* Ø.26 ± Ø.Ø3			RECOMMENDED
5ØSN112	Ø.5 ± Ø.2		63FKH	12 LVLS
5ØSN112	Ø.92 + 1.33- Ø.5Ø		65MA	6 LVLS 63FKH REANAL.
5ØSN112	* Ø.5 ± Ø.2		66SETH	RECOMMENDED VALUE
5ØSN114	* Ø.7 ± Ø.3		63FKH	6 LVLS
5ØSN115	Ø.3 ± Ø.2		63FKH	4 LVLS
5ØSN116	Ø.37 ± Ø.14		63FKH	9 LVLS
5ØSN116	Ø.46 + Ø.41- Ø.19		66AMM	11 LVLS < 4.64 KEV
5ØSN116	Ø.5 ± Ø.2		66SETH	RECOMMENDED VALUE
5ØSN116	Ø.26 ± Ø.Ø5		7ØHSH	56 RES < 11 KEV.
5ØSN116		1.35	7ØMUS	FROM N,GAMMA FIT
5ØSN116	* Ø.37 ± Ø.15			RECOMMENDED
5ØSN117	Ø.19 ± Ø.Ø5		63FKH	24 LVLS
5ØSN117	Ø.2 ± Ø.Ø6		66SETH	RECOMMENDED VALUE
5ØSN117		Ø.61	7ØMUS	FROM N,GAMMA FIT
5ØSN117	* Ø.2 ± Ø.Ø6			RECOMMENDED
5ØSN118	Ø.32 ± Ø.12		63FKH	1Ø LVLS
5ØSN118	Ø.36 + Ø.41- Ø.15		66AMM	12 LVLS < 4.73 KEV
5ØSN118	Ø.4 ± Ø.2		66SETH	RECOMMENDED VALUE
5ØSN118		4.47	7ØMUS	FROM N,GAMMA FIT
5ØSN118	* Ø.35 ± Ø.2Ø			RECOMMENDED
5ØSN119	Ø.Ø8 ± Ø.Ø3		63FKH	16 LVLS
5ØSN119	* Ø.Ø8 ± Ø.Ø3		66SETH	RECOMMENDED VALUE
5ØSN119		6.68	7ØMUS	FROM N,GAMMA FIT
5ØSN12Ø	Ø.Ø9 ± Ø.Ø4		63FKH	7 LVLS
5ØSN12Ø	Ø.12 + Ø.Ø9- Ø.Ø5		66AMM	15 LVLS < 12.7 KEV
5ØSN12Ø	Ø.15 ± Ø.Ø7		66SETH	RECOMMENDED VALUE
5ØSN12Ø		Ø.Ø2	7ØMUS	FROM N,GAMMA FIT
5ØSN12Ø	Ø.Ø7 + Ø.12- Ø.Ø4	3.7 ± 1.8	7ØMSAA	< 1Ø KEV
5ØSN12Ø	* Ø.Ø9 ± Ø.Ø5			RECOMMENDED
5ØSN122	Ø.2Ø ± Ø.1Ø		63FKH	5 LVLS
5ØSN122	Ø.49 + Ø.62- Ø.22		66AMM	6 LVLS < 6.9 KEV
5ØSN122	* Ø.4 ± Ø.25			RECOMMENDED
5ØSN124	Ø.Ø4 ± Ø.Ø2		63FKH	5 LVLS
5ØSN124	Ø.13 + Ø.22- Ø.Ø8		66AMM	7 LVLS < 1Ø KEV
5ØSN124	* Ø.1 ± Ø.Ø7			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(Ø) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
51SB121	Ø.29 + Ø.05- Ø.04	1.1 ± 1.5	69MAS	< 7ØØ EV
51SB121	Ø.8 ± Ø.2		7ØMACS	9 LVLS TO 150 EV
51SB121	Ø.23 ± Ø.07		72ØANAF	< 35Ø EV
51SB121	* Ø.3 ± Ø.1			RECOMMENDED
51SB123	Ø.22 + Ø.Ø8- Ø.Ø5	2. ± 2.	69MAS	< 11ØØ EV
51SB123	Ø.28 ± Ø.10		72ØANAF	< 35Ø EV
51SB123	* Ø.3Ø ± Ø.1			RECOMMENDED
52TE122	Ø.79 ± Ø.2Ø		71TN	42 LVLS < 1Ø.8 KEV
52TE122	* Ø.8 ± Ø.2			RECOMMENDED
52TE123	1.6 ± Ø.7		63DE	8 LVLS TO 157 EV
52TE123	Ø.98 ± Ø.2Ø		71TN	26 LVLS < Ø.66 KEV
52TE123	1.2 ± Ø.7		71TN	SØ(J-)
52TE123	Ø.9 ± Ø.4		71TN	SØ(J+)
52TE123	* 1.1Ø ± Ø.25			RECOMMENDED
52TE124		2.ØØ	7ØMUS	FROM N,GAMMA FIT
52TE124	Ø.68 ± Ø.2Ø		71TN	84 LVLS < 28 KEV
52TE124	* Ø.7Ø ± Ø.2			RECOMMENDED
52TE125	Ø.55 ± Ø.4		63DE	8 LVLS TO 452 EV
52TE125		5.1 ± 1.5	65BL	1-6Ø KEV
52TE125		2.53	7ØMUS	FROM N,GAMMA FIT
52TE125	Ø.49 ± Ø.1Ø		71TN	114 LVLS < 7.8 KEV
52TE125	Ø.5 ± Ø.3		71TN	SØ(J-)
52TE125	Ø.5 ± Ø.15		71TN	SØ(J+)
52TE125	* Ø.5Ø ± Ø.1			RECOMMENDED
52TE126		1.64	7ØMUS	FROM N,GAMMA FIT
52TE126	Ø.3Ø ± Ø.1Ø		71TN	65 LVLS < 17.7 KEV
52TE126	* Ø.3Ø ± Ø.1			RECOMMENDED
52TE128		1.64	7ØMUS	FROM N,GAMMA FIT
52TE128	Ø.25 ± Ø.1Ø		71TN	38 LVLS < 21.8 KEV
52TE128	* Ø.25 ± Ø.1			RECOMMENDED
52TE13Ø	Ø.8 ± Ø.4		66SETH	RECOMMENDED VALUE
52TE13Ø		2.ØØ	7ØMUS	FROM N,GAMMA FIT
52TE13Ø	Ø.15 ± Ø.Ø5		71TN	22 LVLS < 3Ø.1 KEV
52TE13Ø	* Ø.5Ø ± Ø.25			RECOMMENDED
53 I127	Ø.55 ± Ø.2Ø	1.3Ø ± Ø.25	64STBN	AV. N,TOTAL XN ANAL.
53 I127	Ø.62 ± Ø.Ø9		65GRH	Ø-4 KEV
53 I127	Ø.6 ± Ø.1		66SETH	RECOMMENDED VALUE
53 I127	Ø.55 ± Ø.2Ø	1.3Ø ± Ø.25	68TS	ANAL. TRANS. DATA <65ØK
53 I127	Ø.42	Ø.83 ± Ø.2Ø	69FT	ACTIVATION METHOD
53 I127		6.51	7ØMUS	FROM N,GAMMA FIT
53 I127	* Ø.55 ± Ø.15			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) ($X10^4$)	S(1) ($X10^4$)	REFERENCE	COMMENTS
54XE129	0.82		68MBC	J+ 4000 EV
54XE129	0.73		68MBC	J- 4000 EV
54XE129	* 0.8 ± 0.3			RECOMMENDED
54XE131	0.79		68MBC	J+ 2600 EV
54XE131	0.44		68MBC	J- 2600 EV
54XE131	* 0.7 ± 0.3			RECOMMENDED
55CS133	0.68 ± 0.09	•	65GRH	0-3.5 KEV
55CS133	0.7 ± 0.1		66SETH	RECOMMENDED VALUE
55CS133		3.9 ± 1.0	69KOM	N,GAMMA FIT TO 150 KEV
55CS133	1.15 ± 0.1		70JPS	1.7-1100 EV
55CS133		1.30	70MUS	FROM N,GAMMA FIT
55CS133	* 0.80 ± 0.1			RECOMMENDED
56BA134	0.25 ± 0.12		71VP	8 LVLS
56BA134	1.10 ± 0.3		73MAM	< 10.6 KEV
56BA134	* 1.0 ± 0.35			RECOMMENDED
56BA135	0.8 ± 0.3		66SETH	RECOMMENDED VALUE
56BA135	0.8 + 0.35-0.20		69ADCJMS	17S 20-940 EV
56BA135	1.0 ± 0.3		71VP	24 LVLS
56BA135	0.84 ± 0.5		73MAM	3-4 KEV
56BA135	* 0.9 ± 0.3			RECOMMENDED
56BA136	0.13 ± 0.13		71VP	2 LVLS
56BA136	* 1.08 ± 0.3	0.07 ± 0.06	73MAM	>50S LVLS TO 50KEV,>20P
56BA137	0.3 + 0.7 - 0.18		69ADCJMS	2 LVLS TO 900 EV
56BA137	0.33 ± 0.17		71VP	8 LVLS
56BA137	0.71 ± 0.15	0.20 ± 0.10	73MAM	19S, 70P < 17.5 KEV
56BA137	* 0.63 ± 0.15			RECOMMENDED
56BA138	1.8 ± 0.6		66SETH	RECOMMENDED VALUE
56BA138	0.85 ± 0.5		73MAM	< 70 KEV
56BA138	* 1.0 ± 0.6			RECOMMENDED
57LA138	* 1.0 ± 0.5		66SETH	RECOMMENDED VALUE
57LA139	0.75 ± 0.25	0.25	64STBN	AV. N,TOTAL XN ANAL.
57LA139	0.8 ± 0.3		66SETH	RECOMMENDED VALUE
57LA139	0.7 + 0.2 - 0.14 <	0.7	69MAJS	28S <10.4KEV
57LA139		2.00	70MUS	FROM N,GAMMA FIT
57LA139	0.70 ± 0.23	0.50 ± 2.5	71COL2	81 LVLS <10 KEV
57LA139	0.62		72COL	0-21 KEV
57LA139	* 0.7 ± 0.2			RECOMMENDED
58CE140	* 1.0 ± 0.4		59DUKE	
58CE142	* 1.2 ± 0.5		59DUKE	

TABLE 1 (CONTINUED)

NUCLIDE	S(Ø) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
59PR141	3.6 ± 1.4		65JINR	14 LVLS
59PR141	2.1 ± Ø.4		66SETH	RECOMMENDED VALUE
59PR141	2.01 ± Ø.36		68WGHR	Ø-5.8 KEV
59PR141	1.72 ± Ø.25		68WGHR	Ø-1Ø KEV
59PR141	1.2		68WGHR	5-1Ø KEV, E-DEP. 'REAL'
59PR141	2.04 + Ø.47- Ø.35		69MAJS	33S <1KEV
59PR141		Ø.8Ø	7ØMUS	FROM N,GAMMA FIT
59PR141	* 1.95 ± Ø.25			RECOMMENDED
6ØND142	1.Ø + 1.2 - Ø.5		68PIK	Ø-1ØKEV
6ØND142	Ø.6 ± Ø.3		69KPPT	6 LVLS
6ØND142	1.4 ± Ø.35		71TN	37 LVLS < 31 KEV
6ØND142	* 1.3 ± Ø.4			RECOMMENDED
6ØND143	4.3 ± 1.4		68PIK	Ø-1KEV
6ØND143	4.5 + 1.5 - 1.1		69ADCJMS	11 LVLS 3-74Ø EV
6ØND143	4.3 ± 1.4		69KPPT	23 LVLS
6ØND143	3.1 ± Ø.5		71TN	1Ø9 LVLS < 5.5 KEV
6ØND143	8.4 ± 4.Ø		71TN	SØ(J-)
6ØND143	4.1 ± 2.2		71TN	SØ(J+)
6ØND143	2.6 ± 1.3Ø		72SNRGS	J=3, 1Ø LVLS
6ØND143	5.5 ± 2.3Ø		72SNRGS	J=4, 14 LVLS
6ØND143	* 3.6 ± Ø.6			RECOMMENDED
6ØND144	4.5 + 3.1 - 1.6		68PIK	Ø-14KEV
6ØND144	4.8 ± 2.Ø		69KPPT	14 LVLS
6ØND144	4.Ø ± 1.2		71TN	35 LVLS < 19.4 KEV
6ØND144	* 4.Ø ± 1.2			RECOMMENDED
6ØND145	3 ± Ø.7		68PIK	Ø-1KEV
6ØND145	2.8 + Ø.9 - Ø.6		69ADCJMS	22 LVLS 3-74Ø EV
6ØND145	3.Ø ± Ø.7		69KPPT	5Ø LVLS
6ØND145	4.2 ± Ø.5		71TN	179 LVLS < 4.65 KEV
6ØND145	Ø.6 ± Ø.3		71TN	SØ(J-)
6ØND145	1.7 ± Ø.7		71TN	SØ(J+)
6ØND145	2.4 ± Ø.9Ø		72SNRGS	J=3, 14 LVLS
6ØND145	2.8 ± Ø.9Ø		72SNRGS	J=4, 22 LVLS
6ØND145	* 4.Ø ± Ø.6			RECOMMENDED
6ØND146	4.6 + 3.2 - 1.6		68PIK	Ø-7KEV
6ØND146	4.5 ± 1.9		69KPPT	13 LVLS
6ØND146		Ø.25 ± Ø.Ø7	7ØTRK	25KEV N,GAM XN. ANAL.
6ØND146	2.3 ± Ø.6		71TN	44 LVLS < 18.Ø KEV
6ØND146	* 2.8 ± Ø.8			RECOMMENDED
6ØND148	3.5 + 1.7 - 1.1		68PIK	Ø-9KEV
6ØND148	3.6 ± 1.1		69KPPT	23 LVLS
6ØND148		Ø.45 ± Ø.12	7ØTRK	25KEV N,GAM XN. ANAL.
6ØND148	3.Ø ± Ø.6		71TN	67 LVLS < 12. KEV
6ØND148	* 3.2 ± Ø.7			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) ($X10^4$)	S(1) ($X10^4$)	REFERENCE	COMMENTS
60ND150	1.8 + 1.1 - 0.6		68PIK	0-4KEV
60ND150	2.0 ± 0.8		69KPPT	16 LVLS
60ND150		0.86 ± 0.22	70TRK	25KEV N,GAM XN. ANAL.
60ND150	3.2 ± 0.6		71TN	79 LVLS < 14. KEV
60ND150	* 3.2 ± 0.6			RECOMMENDED
61PM147	4.2 ± 1.8		66SETH	RECOMMENDED VALUE
61PM147	3.1 ± 0.8		68KESCS	15 LVLS TO 115 EV
61PM147	2.37		71CTS	21 LVLS TO 100 EV
61PM147	* 2.90 ± 0.75			RECOMMENDED
62SM144		0.80	70MUS	FROM N,GAMMA FIT
62SM147		0.58	70MUS	FROM N,GAMMA FIT
62SM147	4.6 ± 0.4		71EWS	<1.2 KEV
62SM147	3.7 ± 0.8		72KP	< 420 EV
62SM147	* 4.35 ± 0.5			RECOMMENDED
62SM148		0.08	70MUS	FROM N,GAMMA FIT
62SM149	3.0 ± 1.0		66SETH	RECOMMENDED VALUE
62SM149		0.35	70MUS	FROM N,GAMMA FIT
62SM149	5.1 ± 0.9		72KP	< 250 EV, E-DEP. NOTED
62SM149	* 4.5 ± 1.0			RECOMMENDED
62SM150		0.10	70MUS	FROM N,GAMMA FIT
62SM150	3.6 ± 0.3		71EWS	127S <1.6 KEV
62SM150	* 3.6 ± 0.3			RECOMMENDED
62SM151	* 3.5 ± 1.9		66SETH	RECOMMENDED VALUE
62SM152		0.15	70MUS	FROM N,GAMMA FIT
62SM152	2.72 ± 0.83		71COL	90 LVLS
62SM152	1.1 + 0.9 - 0.3	3.7 ± 1.0	71FAW	ACTIVATION METHOD
62SM152	* 2.7 ± 0.8			RECOMMENDED
62SM154		0.08	70MUS	FROM N,GAMMA FIT
62SM154	1.90 ± 0.66		71COL	33 LVLS
62SM154	1.1 + 0.9 - 0.3	3.7 ± 1.0	72FFL	N,GAMMA FIT
62SM154	* 1.9 ± 0.7			RECOMMENDED
63EU151	2.4 ± 0.7		66SETH	RECOMMENDED VALUE
63EU151		1.0 ± 0.8	68KPF	N,GAMMA FIT TO 50 KEV
63EU151		0.37	70CHOU	
63EU151	3.25 ± 0.51		70COL	
63EU151		0.40	70MUS	FROM N,GAMMA FIT
63EU151	* 3.0 ± 0.60			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(Ø) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
63EU153	2.2 ± Ø.7		66SETH	RECOMMENDED VALUE
63EU153		Ø.6 ± Ø.4	68KPF	N,GAMMA FIT TO 50 KEV
63EU153	2.42 ± Ø.47		7ØCOL	
63EU153		Ø.25	7ØMUS	FROM N,GAMMA FIT
63EU153	* 2.4 ± Ø.5Ø			RECOMMENDED
64GD152	4.Ø + 2.6 - 1.5		68PIK	Ø-Ø.23KEV
64GD152	4.6 ± 1.8		69KPP	14 LVLS < 23Ø EV
64GD152	* 4.6 ± 2.Ø			RECOMMENDED
6 G&15	2.1 + 1.5 - Ø.7		68PIK	Ø-Ø.23KEV
64GD154	2.4 ± 1.Ø		69KPP	13 LVLS < 23Ø EV
64GD154	1.4		71COL3	41 LVLS Ø-1 KEV
64GD154	2.Ø ± Ø.4		72COL	19 LVLS < 25Ø EV
64GD154	* 2.Ø ± Ø.4			RECOMMENDED
64GD155	2.6 ± 1.Ø		66SETH	RECOMMENDED VALUE
64GD155	2.1Ø ± Ø.35		68PIK	Ø-Ø.18KEV
64GD155	2.1Ø ± Ø.35		69KPP	8Ø LVLS < 18Ø EV
64GD155	2.17 + Ø.3Ø- Ø.14		69FCLFC	
64GD155	2.4 ± Ø.3		69MC	<25Ø EV
64GD155	1.72 ± Ø.6Ø		7ØARST	J=2, 2Ø LVLS
64GD155	1.38 ± Ø.73		7ØARST	J=1, 1Ø LVLS
64GD155	* 2.1 ± Ø.3			RECOMMENDED
64GD156	1.9 ± Ø.9		66SETH	RECOMMENDED VALUE
64GD156	1.6 + Ø.8 - Ø.5		68PIK	Ø-1.2KEV
64GD156	1.8 ± Ø.6		69KPP	24 LVLS < 12ØØ EV
64GD156	1.8 ± Ø.8		69MC	11 LVLS
64GD156	* 1.8 ± Ø.7			RECOMMENDED
64GD157	1.6 ± Ø.6		66SETH	RECOMMENDED VALUE
64GD157	2.16 ± Ø.45		68PIK	Ø-Ø.3KEV
64GD157	2.28 + Ø.92- Ø.53		69FCLFC	
64GD157	2.16 ± Ø.45		69KPP	54 LVLS < 3ØØ EV
64GD157	2.4 ± Ø.3		69MC	<6ØØ EV
64GD157	2.26 ± Ø.88		7ØARST	J=2, 15 LVLS
64GD157	2.94 ± 1.56		7ØARST	J=1, 8 LVLS
64GD157	* 2.25 ± Ø.3Ø			RECOMMENDED
64GD158	1.4 + Ø.7 - Ø.4		68PIK	Ø-2KEV
64GD158	1.5 ± Ø.5		69KPP	22 LVLS < 2ØØØ EV
64GD158	1.6 ± Ø.6		69MC	1Ø LVLS
64GD158		7.6 ± 2.	7ØTRK	25KEV N,GAM XN. ANAL.
64GD158	1.4		71COL3	64 LVLS 1-1Ø KEV
64GD158	1.5 ± Ø.2		72COL	UP TO 1Ø KEV
64GD158	* 1.45 ± Ø.5			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) ($X10^4$)	S(1) ($X10^4$)	REFERENCE	COMMENTS
64GD160	2.7 + 1.7 - 0.9		68PIK	0-2.5KEV
64GD160	2.6 ± 1.0		69KPP	16 LVLS < 2500 EV
64GD160	2.5 ± 1.3		69MC	8 LVLS
64GD160	0.95 + 0.75- 0.42	0.07 ± 0.01	71FAW	ACTIVATION METHOD
64GD160	1.2 ± 0.5	0.09 ± 0.04	71LIN	ACTIVATION METHOD
64GD160	0.95 + 0.75- 0.42	0.073± 0.007	72FFL	N,GAMMA FIT
64GD160	1.8 ± 0.4		72COL	< 4 KEV
64GD160	* 1.90 ± 0.5			RECOMMENDED
65TB159	0.9 ± 0.30		65JINR	24 LVLS
65TB159	* 1.6 ± 0.6		66SETH	RECOMMENDED VALUE
65TB159		0.17	70MUS	FROM N,GAMMA FIT
66DY161	1.8 ± 0.5		66SETH	RECOMMENDED VALUE
66DY161	1.85 ± 0.15		70MC	42 LVLS
66DY161	* 1.85 ± 0.15			RECOMMENDED
66DY162	2.3 ± 0.5		70MC	14 LVLS
66DY162	* 2.3 ± 0.5			RECOMMENDED
66DY163	2.0 ± 0.5		66SETH	RECOMMENDED VALUE
66DY163	1.7 ± 0.2		70MC	18 LVLS
66DY163	* 1.9 ± 0.3			RECOMMENDED
66DY164	1.2 ± 0.5		70MC	7 LVLS
66DY164	4.0 + 3.0 - 2.0	4.0 ± 2.5	71FAW	ACTIVATION METHOD
66DY164	* 2.0 ± 1.0			RECOMMENDED
67HO165	1.9 ± 0.3		66SETH	RECOMMENDED VALUE
67HO165	1.9 ± 0.3		67KPYES	< 350 EV
67HO165		1.5 ± 0.9	68KPF	N,GAMMA FIT TO 50 KEV
67HO165	1.9 ± 0.3		68PIK	0-0.5KEV
67HO165		2.01	70MUS	FROM N,GAMMA FIT
67HO165	4.8 + 1.2 - 0.8	0.63 ± 0.07	71FAW	ACTIVATION METHOD
67HO165	1.77 ± 0.15		71TN	278 LVLS < 1.35 KEV
67HO165	* 1.80 ± 0.15			RECOMMENDED
68ER162	2.0 ± 0.8		67CMBJ	
68ER162	2.1 ± 0.7		67MCB	17 LVLS
68ER162	2.1 ± 0.6		67MCB	FROM N,TOT < 80 KEV
68ER162	* 2.1 ± 0.7			RECOMMENDED
68ER164	1.5 ± 0.6		67CMBJ	
68ER164	1.6 ± 0.5		67MCB	12 LVLS
68ER164	1.4 ± 0.3		67MCB	FROM N,TOT < 80 KEV
68ER164	1.2 + 0.9 - 0.4		68PIK	0-0.6KEV
68ER164	* 1.4 ± 0.5			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
68ER166	1.9 ± 0.8		66SETH	RECOMMENDED VALUE
68ER166	1.9 ± 0.7		67CMBJ	
68ER166	1.9 ± 0.7		67MCB	13 LVLS
68ER166	1.7 ± 0.2		67MCB	FROM N,TOT < 80 KEV
68ER166	1.8 + 0.9 - 0.4		68PIK	0-1.4KEV
68ER166	1.70 ± 0.30	< 0.75	71COL	112 LVLS
68ER166	* 1.70 ± 0.30			RECOMMENDED
68ER167	1.7 ± 0.5		66SETH	RECOMMENDED VALUE
68ER167	2.6 + 0.4		67CMBJ	
68ER167	2.6 ± 0.4		67MCB	28 LVLS
68ER167	1.8 ± 0.4		68PIK	0-0.32KEV
68ER167	1.89 ± 0.30		71COL	179 LVLS
68ER167	* 1.90 ± 0.30			RECOMMENDED
68ER168	1.4 ± 0.7		67CMBJ	
68ER168	1.4 ± 0.7		67MCB	8 LVLS
68ER168	1.6 + 1.0 - 0.5		68PIK	0-1.5KEV
68ER168	1.50 ± 0.30	0.70 ± 0.20	71COL	105 LVLS
68ER168	* 1.50 ± 0.30			RECOMMENDED
68ER170	1.3 + 0.8 - 0.5		68PIK	0-3KEV
68ER170	1.54 ± 0.3	0.80 ± 0.25	71COL	94 LVLS
68ER170	* 1.50 ± 0.30			RECOMMENDED
69TM169	1.5 ± 0.3		66SETH	RECOMMENDED VALUE
69TM169	1.25 + 0.25- 0.15		68JUL	48LVLS J=1
69TM169	1.40 + 0.50- 0.30		68JUL	16LVLS J=0
69TM169		0.13	70MUS	FROM N,GAMMA FIT
69TM169	1.3 ± 0.45		71TN	0-1.75 KEV, PRELIM. VAL
69TM169	* 1.30 ± 0.2			RECOMMENDED
69TM170	1.5 ± 0.2		69SSS	13 LVLS
69TM170	* 1.50 ± 0.2			RECOMMENDED
70YB170	1.3 ± 0.2		67CMBJ	FROM AV SIG.
70YB170	2.46 ± 0.67		68MC	FROM RESONANCES
70YB170	2.40 ± 0.27		68MC	FROM AV N,TOT
70YB170	* 2.4 ± 0.3			RECOMMENDED
70YB171	1.3 ± 0.5		66SETH	RECOMMENDED VALUE
70YB171	1.1 ± 0.4		66WKPYY	22 LVLS
70YB171	1.4 ± 0.4		67CMBJ	
70YB171	1.59 ± 0.31		68MC	FROM RESONANCES
70YB171	1.21 ± 0.15		68MC	FROM AV N,TOT
70YB171	1.83 ± 0.28		70COL	165 LVLS 0-1.7 KEV
70YB171	* 1.80 ± 0.3			RECOMMENDED
70YB172	1.6 ± 0.4		67CMBJ	FROM AV SIG.
70YB172	0.84 ± 0.34		68MC	FROM RESONANCES
70YB172	1.60 ± 0.40		68MC	FROM AV N,TOT
70YB172	1.68		71COL	100 LVLS
70YB172	* 1.60 ± 0.3			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) ($X10^4$)	S(1) ($X10^4$)	REFERENCE	COMMENTS
70YB173	1.9 ± 0.8		66SETH	RECOMMENDED VALUE
70YB173	2.4 ± 0.9		66WKPYY	16 LVLS
70YB173	1.8 ± 1.0		67CMBJ	
70YB173	1.62 ± 0.30		68MC	FROM RESONANCES
70YB173	1.86 ± 0.21		68MC	FROM AV N,TOT
70YB173	* 1.8 ± 0.3			RECOMMENDED
70YB174	1.56 ± 0.3		71COL	78 LVLS
70YB174	* 1.56 ± 0.3			RECOMMENDED
70YB176	2.4 ± 0.7		67CMBJ	
70YB176	1.70 ± 0.54		68MC	FROM RESONANCES
70YB176	2.29 ± 0.4		71COL	70 LVLS
70YB176	* 2.2 ± 0.4			RECOMMENDED
71LU175	1.9 ± 0.7		66SETH	RECOMMENDED VALUE
71LU175	1.36 ± 0.32		70COL2	214 LVLS
71LU175		0.00	70MUS	FROM N,GAMMA FIT
71LU175	* 1.36 ± 0.32			RECOMMENDED
71LU176	* 1.7 ± 0.7		66SETH	RECOMMENDED VALUE
71LU176		0.5 ± 0.4	68KPF	N,GAMMA FIT TO 50 KEV
72HF174	2.8 ± 1.0		64FH	10 LVLS
72HF174	* 2.8 ± 1.0			RECOMMENDED
72HF176	1.4 ± 0.6		64FH	6 LVLS
72HF176	* 1.44 ± 0.5		66SETH	RECOMMENDED VALUE
72HF177	* 2.8 ± 0.4		64FH	46 LVLS
72HF178	1.1 ± 0.7		64FH	3 LVLS
72HF178	* 2.1 ± 0.7		66SETH	RECOMMENDED VALUE
72HF179	* 2.1 ± 0.4		64FH	33 LVLS
72HF180	0.7 ± 0.5		64FH	2 LVLS
72HF180		0.46	70MUS	FROM N,GAMMA FIT
73TA180	* 2.0 ± 0.24		58SFS	N,TOTAL ANAL. TO 1 KEV
73TA181	2.50 ± 0.50	0.50 ± 0.25	64STBN	AV. N,TOTAL XN ANAL.
73TA181	2.1 ± 0.5		66SETH	RECOMMENDED VALUE
73TA181		0.1 ± 0.04	69KOM	N,GAMMA FIT TO 150 KEV
73TA181		0.21	70MUS	FROM N,GAMMA FIT
73TA181	2.2 ± 1.2	1.1 ± 0.7	71FMFCN	FROM NG FIT TO 1000 KEV
73TA181	* 2.1 ± 0.4			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
74 W182	2.9 ± 0.9		66SETH	RECOMMENDED VALUE
74 W182	2.60 ± 0.54	0.28	69BHMTB	43S, S1 EST ALL W ISOT.
74 W182		0.34	70MUS	FROM N,GAMMA FIT
74 W182	2.42 ± 0.30		71COL	
74 W182	* 2.5 ± 0.4			RECOMMENDED
74 W183		0.7 ± 0.3	65BL	
74 W183	2.0 ± 0.5		66SETH	RECOMMENDED VALUE
74 W183	2.41 ± 0.48		69BHMTB	50S
74 W183		0.05	70MUS	FROM N,GAMMA FIT
74 W183	* 2.4 ± 0.5			RECOMMENDED
74 W184		2.0 ± 0.5	65BL	
74 W184	2.6 ± 0.8		66SETH	RECOMMENDED VALUE
74 W184	3.0 ± 0.6		69BHMTB	38S, S1 EST ALL W ISOT.
74 W184		0.82	70MUS	FROM N,GAMMA FIT
74 W184	2.37 ± 0.32		71COL	
74 W184	* 2.5 ± 0.4			RECOMMENDED
74 W186		0.76 ± 0.30	65BL	
74 W186	1.8 ± 0.5		66SETH	RECOMMENDED VALUE
74 W186	2.15 ± 0.46	0.28	69BHMTB	40S, S1 EST ALL W ISOT.
74 W186	2.29 ± 0.32		70COL	< 15 KEV
74 W186		1.40	70MUS	FROM N,GAMMA FIT
74 W186	* 2.2 ± 0.4			RECOMMENDED
75RE185	1.8 + 2.0 - 1.4		65IFU	7 LVLS
75RE185	2.6 ± 1.0		66SETH	RECOMMENDED VALUE
75RE185	1.8 ± 0.5	2.04 ± 1.0	68FGHFL	30 LVLS
75RE185		1.99	70MUS	FROM N,GAMMA FIT
75RE185	1.8 ± 0.6		72IANOF	< 120 EV
75RE185	* 1.8 ± 0.6			RECOMMENDED
75RE187	0.9 + 0.6 - 0.2		65IFU	5 LVLS
75RE187	1.7 ± 0.8		66SETH	RECOMMENDED VALUE
75RE187	2.3 ± 0.7	1.96 ± 1.0	68FGHFL	24 LVLS
75RE187		1.19	70MUS	FROM N,GAMMA FIT
75RE187	1.5 ± 0.5		72IANOF	< 120 EV
75RE187	* 1.9 ± 0.6			RECOMMENDED
76OS189	2.0 + 2.2 - 0.7		61JB	13 LVLS
76OS189	* 2.0 ± 1.0			RECOMMENDED
77IR191	* 2.1 ± 0.8		66SETH	RECOMMENDED VALUE
77IR191			72LMPSS	
77IR193	* 2.0 ± 0.5		66SETH	RECOMMENDED VALUE
77IR193			72LMPSS	
78PT192	1.7 + 1.9 - 0.6		68MOR	0-580 EV
78PT192	* 1.7 ± 1.0			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
78PT194	1.4 + 2.4 - 0.5		68MOR	0-700 EV
78PT194	* 1.4 ± 1.0			RECOMMENDED
78PT195	1.6 ± 0.4		66SETH	RECOMMENDED VALUE
78PT195	1.9 + 0.50- 0.30		68JUL	31LVLS J=1
78PT195	2 + 0.9 - 0.5		68JUL	11LVLS J=0
78PT195	* 1.9 ± 0.3			RECOMMENDED
79AU197	1.50 ± 0.20	< 0.25	64STBN	AV. N,TOTAL XN ANAL.
79AU197	1.6 ± 0.3		66SETH	RECOMMENDED VALUE
79AU197		0.70 ± 0.45	67DU	ANAL TOTAL XN TO 1 MEV
79AU197	2.30 + 0.7 - 0.4		68JUL	30LVLS J=2
79AU197	0.91 + 0.35- 0.2		68JUL	16LVLS J=1
79AU197	1.8 + 0.39- 0.30		68MOR	0-1 KEV
79AU197		0.69 ± 0.4	68SBB	N,GAMMA FIT TO 30 KEV
79AU197		0.19 ± 0.04	69KOM	N,GAMMA FIT TO 150 KEV
79AU197	2.05 + 0.24- 0.21		70FRO	EVALUATION
79AU197	1.8	0.7	70FRO	BEST FIT TO TOTAL XN.
79AU197		0.23	70MUS	FROM N,GAMMA FIT
77AU197	2.4 ± 1.7	0.65 ± 1.2	71FMFCN	FROM NG FIT TO 1000 KEV
79AU197	1.40 ± 0.5	0.38 ± 0.2	71LIN	ACTIVATION METHOD
79AU197	* 1.8 ± 0.2			RECOMMENDED
80HG198	1.5 + 2.1 - 0.5		68MOR	0-420 EV
80HG198	* 1.2 ± 0.6			RECOMMENDED
80HG199	2.2 + 2.2 - 0.7		68MOR	0-700 EV
80HG199	* 2.0 ± 1.0			RECOMMENDED
80HG201	1.3 + 1.3 - 0.4		68MOR	0-700 EV
80HG201	* 1.3 ± 0.8			RECOMMENDED
82PB204	0.55 ± 0.2		66SETH	RECOMMENDED VALUE
82PB204	* 0.55 ± 0.2		67GM	10 S LVLS
82PB206		0.24 ± 0.17	61DUKE	5 LVLS
82PB207		0.17 ± 0.15	61DUKE	3 LVLS
82PB207		1.1	71AM	TO 700 KEV
82PB208		0.32 ± 0.15	61DUKE	3 LVLS
83BI209	0.57 ± 0.17		59NBN	18 LVLS
83BI209	0.5 ± 0.2		66SETH	RECOMMENDED VALUE
83BI209	0.65 + 0.39- 0.17	0.25 ± 0.09	69MAJS	13S,26P 4-70KEV
83BI209	* 0.6 ± 0.2			RECOMMENDED
88RA226	0.38 + 0.42- 0.18		72ITEP	7 LVLS
88RA226	* 0.4 ± 0.3			RECOMMENDED

TABLE 1 (CONTINUED)

NUCLIDE	S(0) (X10^4)	S(1) (X10^4)	REFERENCE	COMMENTS
90TH229	0.62 ± 0.25		66SETH	RECOMMENDED VALUE
90TH230	* 1.3 ± 0.5		66SETH	RECOMMENDED VALUE
90TH230	1.3 ± 0.6 - 0.3		68CDGS	20 LVLS
90TH232	1.20 ± 0.50	0.50 ± 0.25	64STBN	AV. N,TOTAL XN ANAL.
90TH232	0.9 ± 0.1		66SETH	RECOMMENDED VALUE
90TH232		1.66 ± 0.25	66UND	N,TOT ANAL TO 10 MEV
90TH232	0.92	1.4	68RDMS	TO 3 KEV
90TH232	1.30 ± 0.30		69ITEP	29 LVLS < 563 EV
90TH232		0.914± 0.3	70STE	EVALUATION OF XN <15MEV
90TH232	0.84 ± 0.08		71COL	< 5KEV
90TH232		0.9 ± 0.4	72COL3	
90TH232	* 0.85 ± 0.08			RECOMMENDED
91PA231	0.63		62SBEK	25 LVLS
91PA231	0.85 ± 0.15		66SETH	RECOMMENDED VALUE
91PA231	0.60		70HIN	EVALUATION
91PA231	* 0.80 ± 0.15			RECOMMENDED
92 U232	1.0 ± 0.5		64JAM	8 LVLS
92 U232	1.0		70HIN	EVALUATION
92 U232	* 0.95 ± 0.5			RECOMMENDED
92 U233	0.9 ± 0.2		66SETH	RECOMMENDED VALUE
92 U233	1.0	1.3	70GAR	2 XN FIT < 100 KEV
92 U233	1.13 ± 0.28		70KCN	<30 EV
92 U233	1.39 ± 0.90- 0.39		71RSCY	13 LVLS
92 U233	* 1.10 ± 0.15			RECOMMENDED
92 U234	1.09 ± 0.36		70JS	38 LVLS < 687 EV
92 U234	1.2		70HIN	EVALUATION
92 U234	* 1.13 ± 0.3			RECOMMENDED
92 U235	0.915±0.05		65MDRS	< 50 EV
92 U235	0.9 ± 0.1		66SETH	RECOMMENDED VALUE
92 U235		1.76 ± 0.25	66UND	N,TOT ANAL TO 10 MEV
92 U235	1.1	1.5	70GAR	2 XN FIT < 100 KEV
92 U235	0.936± 0.018	2.08 ± 0.22	71RF	N,TOT ANAL TO 30 KEV
92 U235	1.29 + 0.54- 0.29		71RSCY	78 LVLS
92 U235	* 1.10 ± 0.15			RECOMMENDED
92 U236	1.3 ± 0.5		66SETH	RECOMMENDED VALUE
92 U236	1.02 + 0.4 - 0.2		70CFLF	29 LVLS
92 U236	1.35 ± 0.3	2.3 ± 0.6	70CFLF	FROM N,GAMMA FIT
92 U236	1.3	2.0	70HIN	EVALUATION
92 U236	* 1.20 ± 0.3			RECOMMENDED
92 U237	1.0		70HIN	EVALUATION

TABLE 1 (CONTINUED)

NUCLIDE	S(0) ($X10^4$)	S(1) ($X10^4$)	REFERENCE	COMMENTS
92 U238	1.30 ± 0.50	0.50 ± 0.25	64STBN	AV. N,TOTAL XN ANAL.
92 U238	0.70 ± 0.15		66ACM	46 LVLS < 823 EV
92 U238	0.9 ± 0.1		66SETH	RECOMMENDED VALUE
92 U238		2.47 ± 0.25	66UND	N,TOT ANAL TO 10 MEV
92 U238		2.14 ± 1.5	68BT	16 LVLS
92 U238		1.8 ± 0.3	68GSTW	ABOUT 200 WK LVLS
92 U238	1.09 ± 0.15		70CK	60-2000 EV
92 U238	1.02 ± 0.10		71COL	<4.3 KEV
92 U238	1.13 ± 0.13		71CK	60-2000 EV
92 U238	1.0 ± 0.6	1.2 ± 0.8	71FMFCN	FROM NG FIT TO 1000 KEV
92 U238	0.91 ± 0.12	2.3 ± 0.6	72BBS	ANAL TRANS. DATA < 70 K
92 U238		1.43 ± 0.3	72COL3	
92 U238	* 1.05 ± 0.10			RECOMMENDED
93NP237	* 1.0 ± 0.15		66SETH	RECOMMENDED VALUE
93NP237	1.0		70HIN	EVALUATION
93NP238	1.3		70HIN	EVALUATION
94PU236	1.0		70HIN	EVALUATION
94PU238	1.3 ± 0.2		66SETH	RECOMMENDED VALUE
94PU238	1.10 ± 0.20		67YSBC	16 LVLS
94PU238	1.2 ± 0.2		71SB	11 LVLS
94PU238	1.1		70HIN	EVALUATION
94PU238	* 1.2 ± 0.2			RECOMMENDED
94PU239	1.2 ± 0.2		66SETH	RECOMMENDED VALUE
94PU239	1.24 ± 0.17		67RWDC	0-205 EV
94PU239	1.0	1.3	70GAR	2 XN FIT < 100 KEV
94PU239	1.13 ± 0.12		70TDLM	J=1 < 650 EV
94PU239	1.56 ± 0.28		70TDLM	J=0 < 650 EV
94PU239	0.879± 0.029	1.99 ± 0.48	71RF	N,TOT ANAL TO 30 KEV
94PU239	1.43 + 0.68- 0.34		71RSCY	32 LVLS
94PU239	* 1.25 ± 0.15			RECOMMENDED
94PU240	0.93 ± 0.25		67AMPJP	17 RES 20-290 EV.
94PU240	1.05 ± 0.16		68KB	102 LVLS
94PU240	1.10 ± 0.27		71HMB	20-500 EV
94PU240		2.8	72HMB	FIT TO KEV N,GAMMA XN.
94PU240	* 1.05 ± 0.15			RECOMMENDED
94PU241	1.10 ± 0.2		66SETH	RECOMMENDED VALUE
94PU241	0.99 ± 0.14		71BDM	
94PU241	1.25 ± 0.35		71KC	12-100 EV
94PU241	* 1.10 ± 0.2			RECOMMENDED
94PU242	0.95 ± 0.40		66ABCF	14 LVLS
94PU242	0.85 ± 0.30		66SETH	RECOMMENDED VALUE
94PU242	0.85 ± 0.10		68YOU	
94PU242	* 0.85 ± 0.15			RECOMMENDED

TABLE 1 (CONCLUDED)

NUCLIDE	S(0) ($X10^4$)	S(1) ($X10^4$)	REFERENCE	COMMENTS
95AM241	* 1.1 ± 0.20		66SETH	RECOMMENDED VALUE
95AM241	1.1		70HIN	EVALUATION
95AM242	* 1.4		68BAFH	6 LVLS
95AM243	0.84 ± 0.25		66SETH	RECOMMENDED VALUE
95AM243	0.88 ± 0.09		70ORNL	156 LVLS < 180 EV
95AM243	0.96 ± 0.10		72ANCR	24 LVLS
95AM243	* 0.90 ± 0.10			RECOMMENDED
96CM242	0.76		70HIN	EVALUATION
96CM243	* 2.2 ± 0.2		72BSR	
96CM244	* 0.76 ± 0.30		66SETH	RECOMMENDED VALUE
96CM244	0.82 ± 0.2		72BSR	DEDUCED FROM 7 LVLS
96CM245	* 0.83 ± 0.08		72BSR	

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FIGURE 1: RECOMMENDED S-WAVE STRENGTH FUNCTIONS VERSUS MASS NUMBER

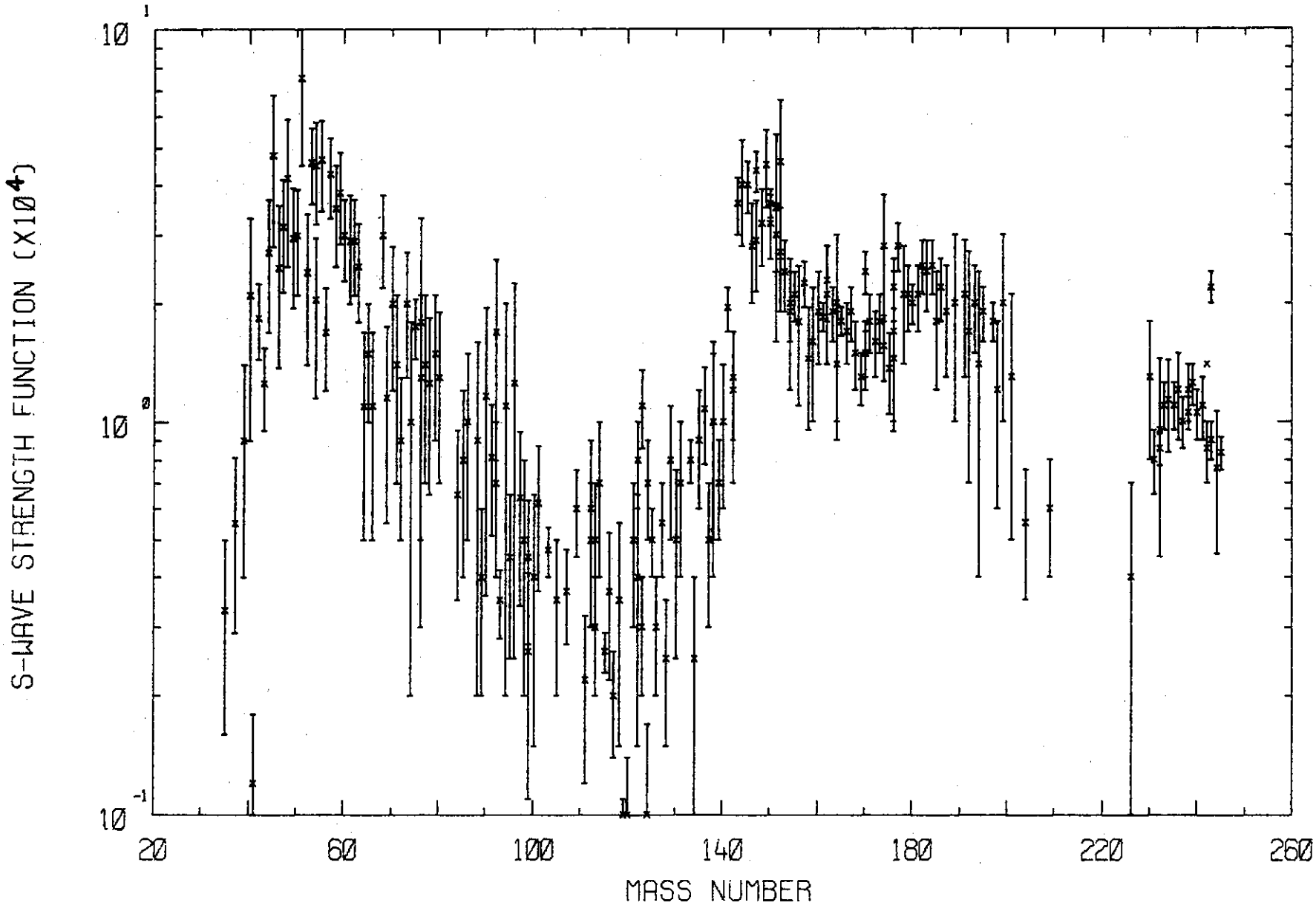

FIGURE 2: P-WAVE STRENGTH FUNCTION DATA VERSUS MASS NUMBER