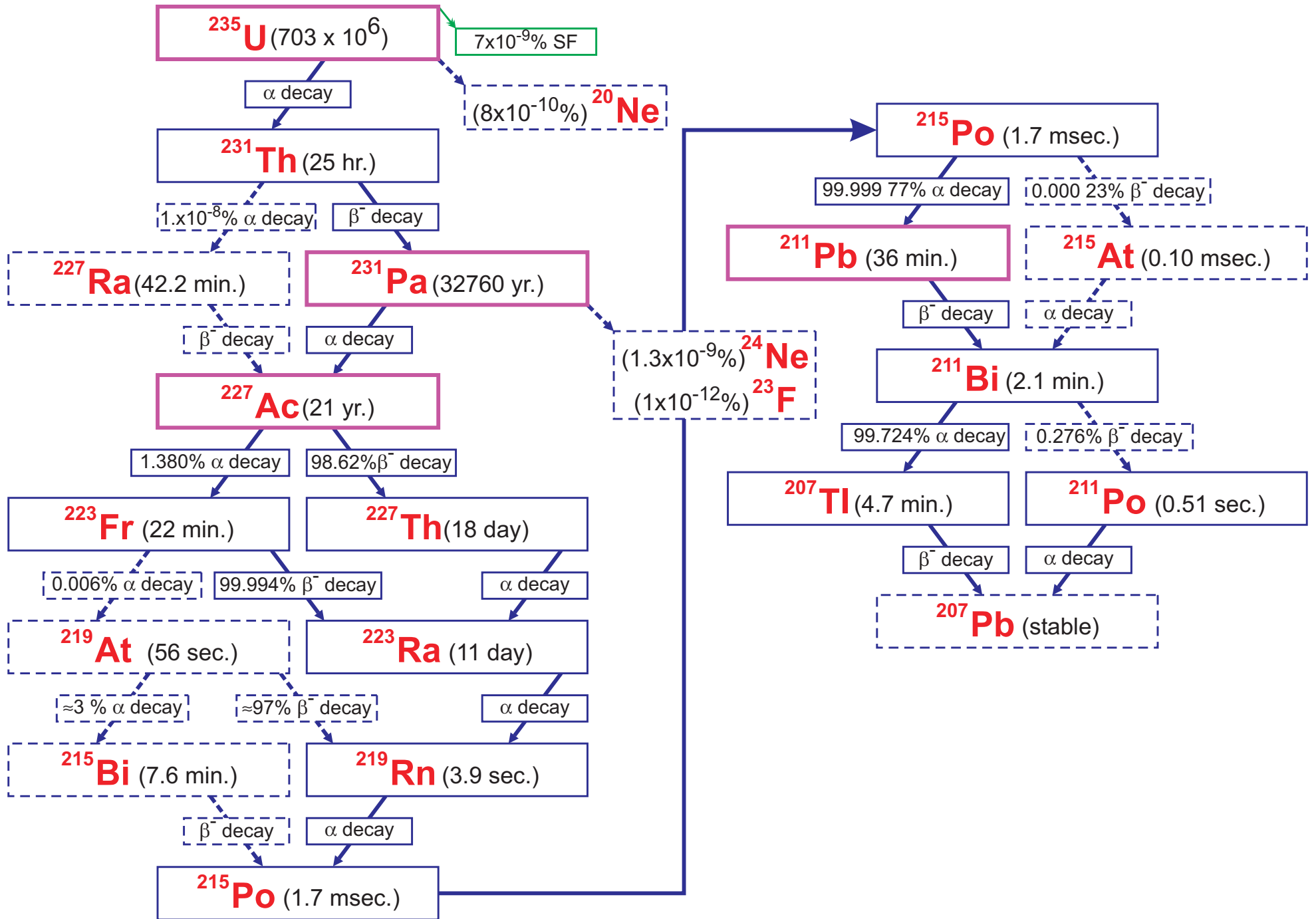
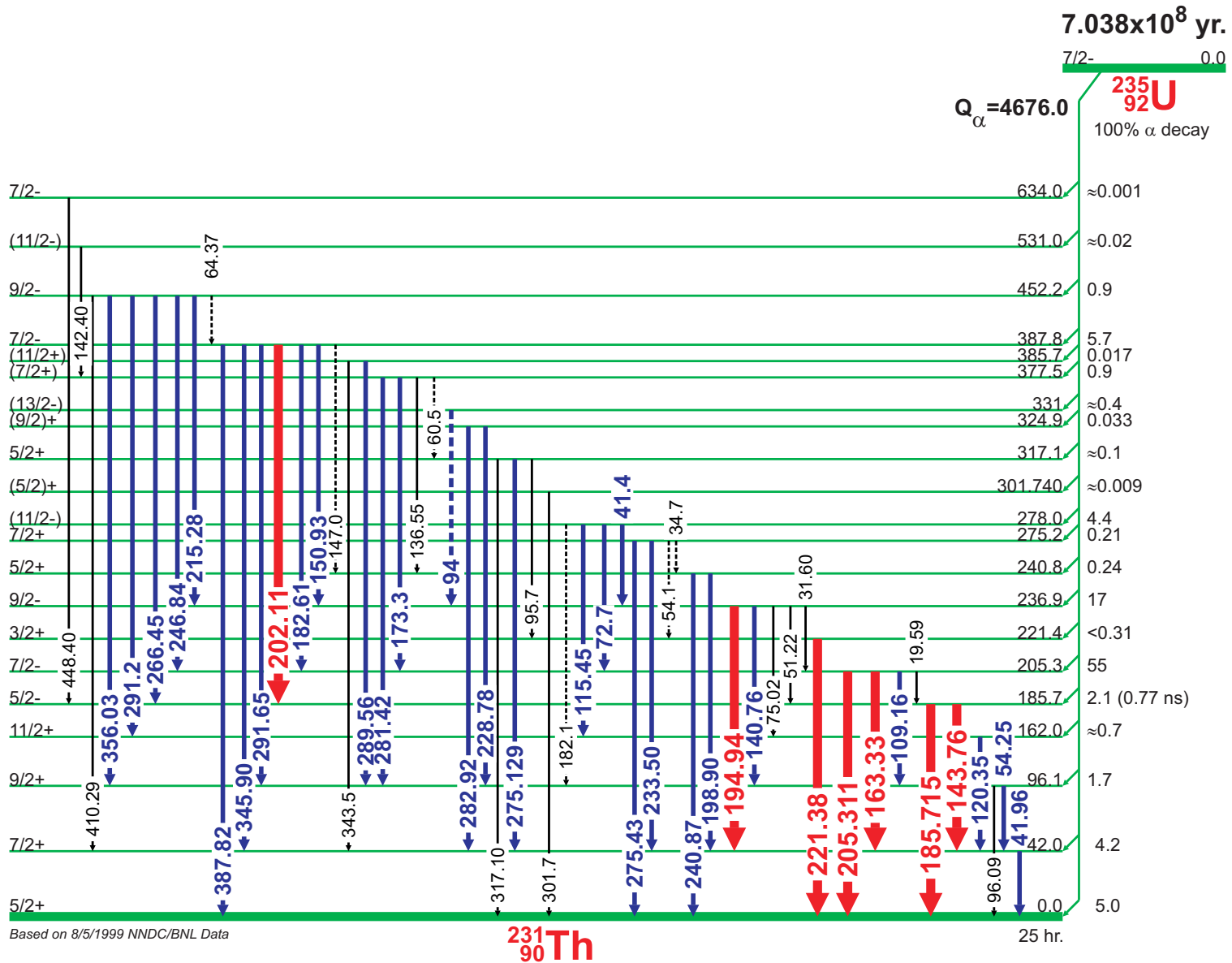


²³⁵U Decay Chain



²³⁵U (7x10⁸ yr.) Decay Scheme



GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide: **²³⁵U**E_γ, σE_γ, I_γ, σI_γ, Levels- from ENSDF Database as of August 5, 1999Half Life: 7.038x10⁸(5) yr.

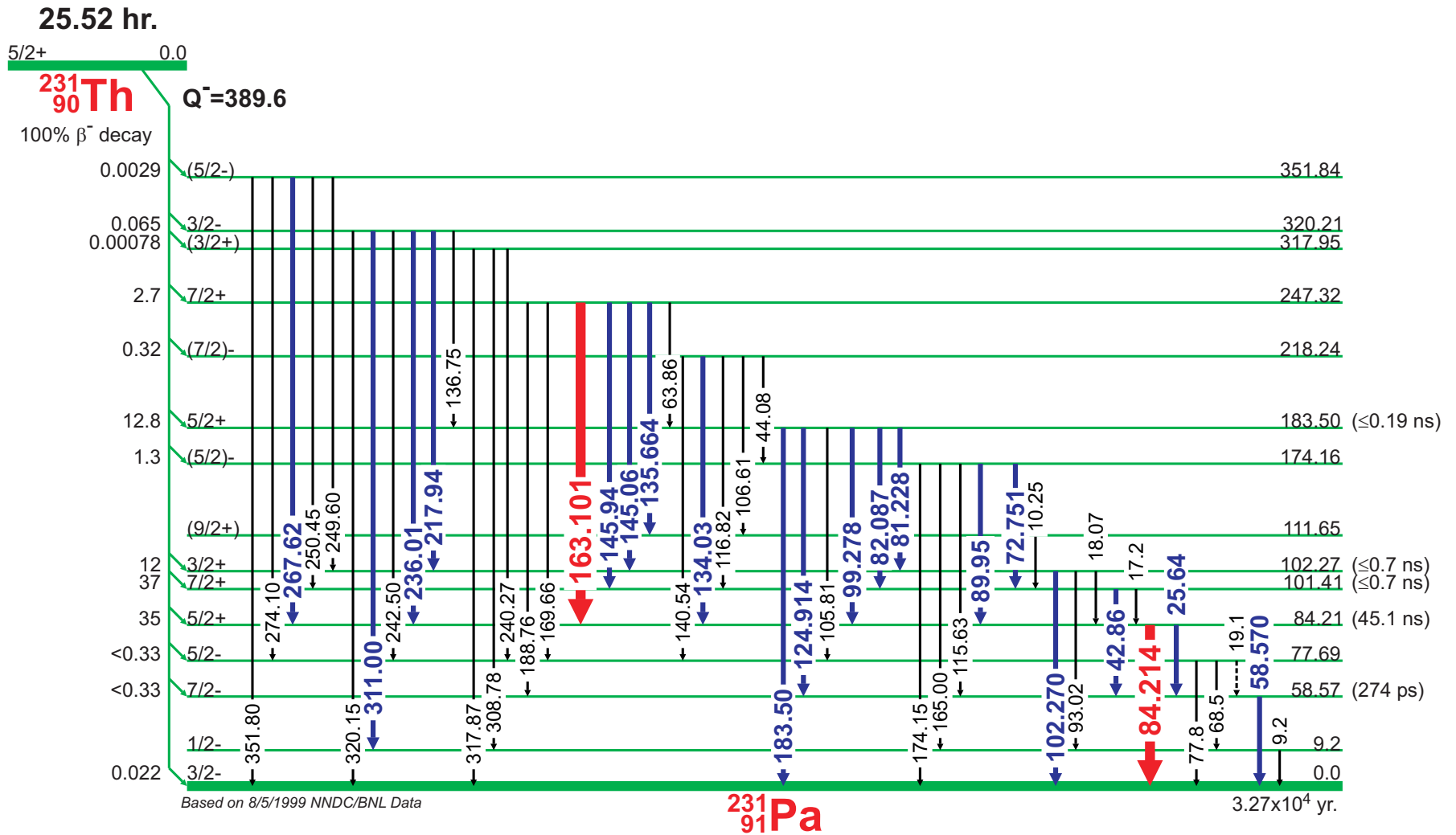
E _γ (keV)	σ E _γ	① I _γ	② σ I _γ	Level		E _γ (keV)	σ E _γ	① I _γ	② σ I _γ	Level	
19.59				205.3	α	205.311	0.010	5.01	0.05	205.3	α
31.60	0.05	0.016	0.005	236.9	α	215.28	0.03	0.027	0.003	452.2	α
34.7	0.1	0.037	≈	275.2	α	221.38	0.02	0.12	0.01	221.4	α
41.4	0.3	0.03	0.02	278.0	α	228.78	0.05	0.008	0.003	324.9	α
41.96	0.15	0.06	0.01	42.0	α	233.50	0.03	0.029	0.005	275.2	α
51.22	0.10	0.020	0.015	236.9	α	240.87	0.03	0.075	0.006	240.8	α
54.1	0.1	0.002	0.000	275.2	α	246.84	0.04	0.053	0.003	452.2	α
54.25	0.05	0.03	≤	96.1	α	251.5	0.1	0.04	≤		α
60.5				377.5	α	266.45	0.05	0.006	0.002	452.2	α
64.37	0.02	0.04	≈	452.2	α	275.129		0.042	0.005	317.1	α
72.7	0.2	0.11	≈	278.0	α	275.43	0.10	0.007	0.002	275.2	α
73.72	0.05	0.01	≈		α	279.50	0.05	0.27	≈		α
75.02	0.05	0.06	0.01	236.9	α	281.42	0.05	0.006	≈	377.5	α
94	5			331	α	282.92	0.05	0.005	0.002	324.9	α
95.7				317.1	α	289.56	0.04	0.007	≈	385.7	α
96.09	0.02	0.086	0.011	96.1	α	291.2				452.2	α
109.16	0.02	1.54	0.05	205.3	α	291.65	0.03	0.038	0.005	387.8	α
115.45	0.05	0.07	0.04	278.0	α	301.7	0.1	0.005	≈	301.740	α
120.35	0.05	0.026	≈	162.0	α	310.69	0.06	0.004	≈		α
136.55	0.05	0.012	≈	377.5	α	317.10	0.08	0.001	≈	317.1	α
140.76	0.04	0.22	0.02	236.9	α	325.80	0.10	0.000 4	≈		α
142.40	0.05	0.005	≈	531.0	α	343.5	0.2	0.003	≈	385.7	α
143.76	0.02	10.96	0.08	185.7	α	345.90	0.03	0.038	0.005	387.8	α
147.0				387.8	α	356.03	0.05	0.005	≈	452.2	α
150.93	0.02	0.076	0.010	387.8	α	387.82	0.03	0.038	0.005	387.8	α
163.33	0.02	5.08	0.04	205.3	α	390.3	0.2	0.04	0.01		α
173.3	1.0	0.010	0.005	377.5	α	410.29	0.04	0.003	≈	452.2	α
182.1				278.0	α	433.0	0.5	0.004	≈		α
182.61	0.05	0.34	0.02	387.8	α	448.40	0.06	0.001	≈	634.0	α
185.715	0.005	57.2	0.5	185.7	α	455.1	0.1	0.008	≈		α
194.94	0.01	0.63	0.01	236.9	α	517.2		0.000 4	≈		α
198.90	0.02	0.042	0.006	240.8	α	742.5	0.2	0.000 4	≈		α
202.11	0.02	1.08	0.02	387.8	α	794.7	0.1	0.000 6	≈		α

① These I_γ are per 100 Decays of ²³⁵U.

② For total uncertainty add systematic component of 1% in quadrature, based on the normalization factor 1.00(1)



²³¹Th (25 hr.) Decay Scheme



GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide: **²³¹Th**E_γ, σE_γ, I_γ, σI_γ, Levels- from ENSDF Database as of August 5, 1999

Half Life: 25.52(1) hr.

E _γ (keV)	σ E _γ	① I _γ	② σ I _γ	Level	
9.2				9.2	β-
10.25				111.65	β-
17.2				101.41	β-
18.07		0.33	≤	102.27	β-
19.1				77.69	β-
25.64	0.02	14.5	0.3	84.21	β-
26.55	0.05	0.54	0.03		β-
29.30	0.05	0.035	0.002		β-
32.73	0.05	0.073	0.004		β-
33.32	0.05	0.030	0.002		β-
38.90	0.05	0.110	0.006		β-
41.55	0.05	0.016	0.001		β-
42.22	0.05	0.052	0.003		β-
42.86	0.07	0.058	0.004	101.41	β-
44.08	0.17	0.000 7	0.000 2	218.24	β-
45.34	0.05	0.034	0.002		β-
58.570	0.003	0.48	0.02	58.57	β-
63.86	0.03	0.023	0.002	247.32	β-
68.5	0.1	0.005 7	0.001 4	77.69	β-
72.751	0.003	0.251	0.015	174.16	β-
77.8				77.69	β-
81.228	0.003	0.89	0.05	183.50	β-
82.087	0.003	0.40	0.03	183.50	β-
84.214	0.003	6.6	0.3	84.21	β-
85.80	0.05	0.005 8	0.000 6		β-
89.95	0.02	0.94	0.06	174.16	β-
93.02	0.04	0.045	0.005	102.27	β-
97.55	0.05	0.023	0.001		β-
99.278	0.004	0.120	0.007	183.50	β-
102.270	0.003	0.41	0.03	102.27	β-
105.81	0.03	0.007 1	0.000 7	183.50	β-
106.61	0.03	0.017	0.001	218.24	β-

E _γ (keV)	σ E _γ	① I _γ	② σ I _γ	Level	
106.85	0.10	0.03	0.00		β-
115.63	0.03	0.001 0	0.000 2	174.16	β-
116.82	0.02	0.020 7	0.001 3	218.24	β-
124.914	0.017	0.056	0.003	183.50	β-
134.03	0.02	0.024	0.001	218.24	β-
135.664	0.011	0.078	0.005	247.32	β-
136.75	0.07	0.004 2	0.000 2	320.21	β-
140.54	0.04	0.000 71	0.000 07	218.24	β-
145.06	0.04	0.005 8	0.000 4	247.32	β-
145.94	0.02	0.032	0.002	247.32	β-
163.101	0.005	0.155	0.009	247.32	β-
165.00	0.05	0.003 9	0.000 4	174.16	β-
169.66	0.03	0.001 2	0.000 1	247.32	β-
173.0	0.1	0.04	0.00		β-
174.15	0.02	0.018 1	0.001 1	174.16	β-
183.50	0.02	0.032 9	0.001 3	183.50	β-
188.76	0.02	0.003 2	0.000 2	247.32	β-
217.94	0.03	0.040	0.003	320.21	β-
224.1	0.1	0.008 9	0.000 8		β-
236.01	0.03	0.009	0.006	320.21	β-
237.8	0.1	0.09	0.00		β-
240.27	0.05	0.000 28	0.000 03	317.95	β-
242.50	0.04	0.000 84	0.000 08	320.21	β-
249.60	0.07	0.000 78	0.000 08	351.84	β-
250.45	0.07	0.000 65	0.000 07	351.84	β-
267.62	0.08	0.001 16	0.000 13	351.84	β-
274.10	0.10	0.000 03	0.000 01	351.84	β-
308.78	0.07	0.000 39	0.000 04	317.95	β-
311.00	0.05	0.002 9	0.000 2	320.21	β-
317.87	0.08	0.000 08	0.000 01	317.95	β-
320.15	0.08	0.000 11	0.000 01	320.21	β-
351.80	0.10	0.000 07	0.000 01	351.84	β-

① These I_γ are per 100 Decays of ²³¹Th.

② For total uncertainty add systematic component of 5% in quadrature, based on the normalization factor 1.00(5)

