

Table of Isotopes (1998)

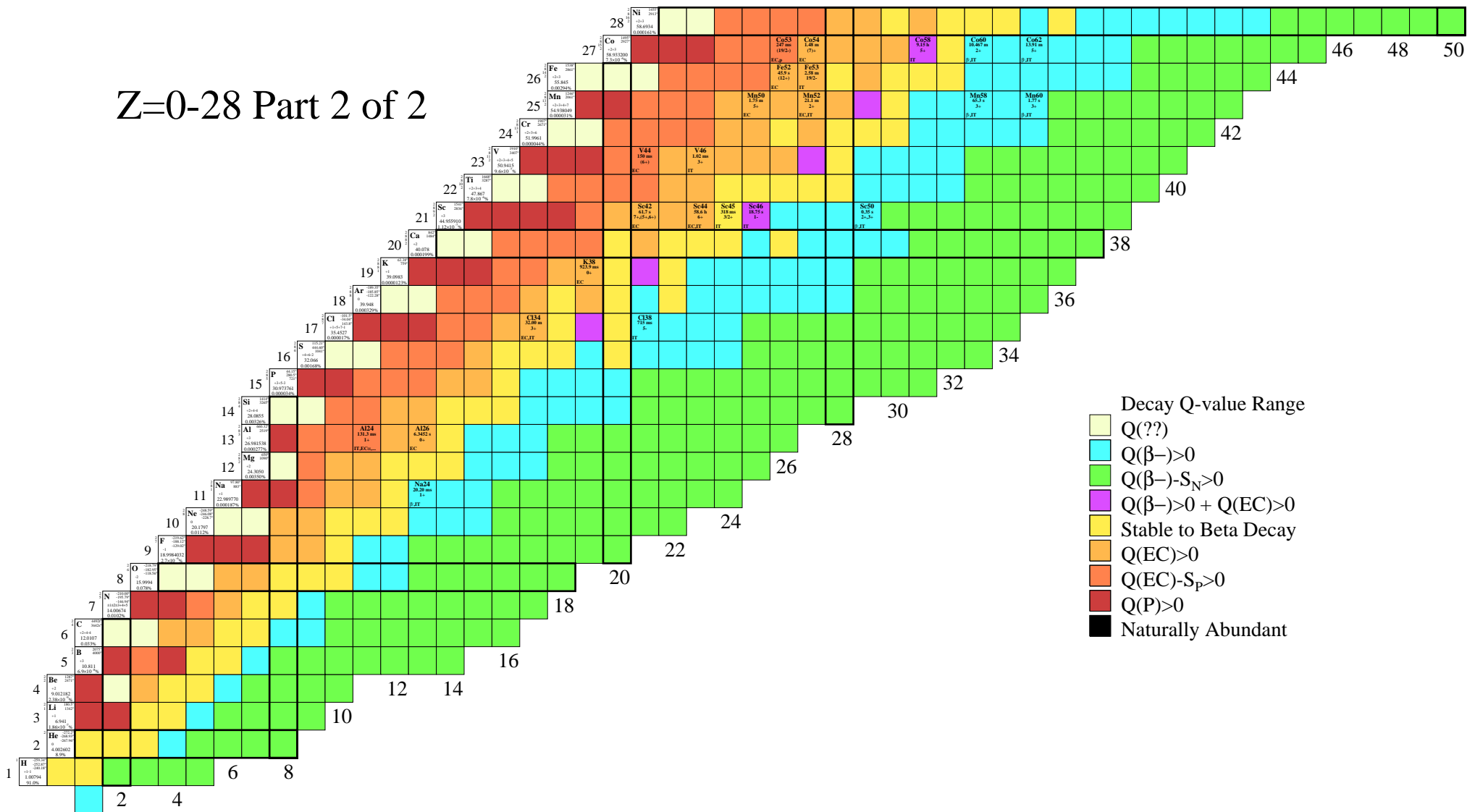
Z=0-28 Part 1 of 2

The table displays isotopes for atomic numbers Z=0 to 28. Each entry includes the element symbol, mass number, half-life, and decay mode. The table is color-coded as follows:

- White: Stable isotopes
- Red: Alpha decay
- Orange: Beta minus decay
- Yellow: Beta plus decay
- Green: Electron capture
- Purple: Other decay modes (e.g., alpha + beta)
- Cyan/Blue: Other decay modes

Key isotopes shown include ${}^1_0\text{n}$, ${}^2_0\text{n}$, ${}^3_0\text{n}$, ${}^4_0\text{n}$, ${}^6_0\text{n}$, ${}^7_0\text{n}$, ${}^8_0\text{n}$, ${}^9_0\text{n}$, ${}^{10}_0\text{n}$, ${}^{11}_0\text{n}$, ${}^{12}_0\text{n}$, ${}^{13}_0\text{n}$, ${}^{14}_0\text{n}$, ${}^{15}_0\text{n}$, ${}^{16}_0\text{n}$, ${}^{17}_0\text{n}$, ${}^{18}_0\text{n}$, ${}^{19}_0\text{n}$, ${}^{20}_0\text{n}$, ${}^{21}_0\text{n}$, ${}^{22}_0\text{n}$, ${}^{23}_0\text{n}$, ${}^{24}_0\text{n}$, ${}^{25}_0\text{n}$, ${}^{26}_0\text{n}$, ${}^{27}_0\text{n}$, ${}^{28}_0\text{n}$, ${}^1_1\text{H}$, ${}^2_1\text{H}$, ${}^3_1\text{H}$, ${}^4_1\text{H}$, ${}^5_1\text{H}$, ${}^6_1\text{H}$, ${}^7_1\text{H}$, ${}^8_1\text{H}$, ${}^9_1\text{H}$, ${}^{10}_1\text{H}$, ${}^{11}_1\text{H}$, ${}^{12}_1\text{H}$, ${}^{13}_1\text{H}$, ${}^{14}_1\text{H}$, ${}^{15}_1\text{H}$, ${}^{16}_1\text{H}$, ${}^{17}_1\text{H}$, ${}^{18}_1\text{H}$, ${}^{19}_1\text{H}$, ${}^{20}_1\text{H}$, ${}^{21}_1\text{H}$, ${}^{22}_1\text{H}$, ${}^{23}_1\text{H}$, ${}^{24}_1\text{H}$, ${}^{25}_1\text{H}$, ${}^{26}_1\text{H}$, ${}^{27}_1\text{H}$, ${}^{28}_1\text{H}$, ${}^1_2\text{He}$, ${}^2_2\text{He}$, ${}^3_2\text{He}$, ${}^4_2\text{He}$, ${}^5_2\text{He}$, ${}^6_2\text{He}$, ${}^7_2\text{He}$, ${}^8_2\text{He}$, ${}^9_2\text{He}$, ${}^{10}_2\text{He}$, ${}^{11}_2\text{He}$, ${}^{12}_2\text{He}$, ${}^{13}_2\text{He}$, ${}^{14}_2\text{He}$, ${}^{15}_2\text{He}$, ${}^{16}_2\text{He}$, ${}^{17}_2\text{He}$, ${}^{18}_2\text{He}$, ${}^{19}_2\text{He}$, ${}^{20}_2\text{He}$, ${}^{21}_2\text{He}$, ${}^{22}_2\text{He}$, ${}^{23}_2\text{He}$, ${}^{24}_2\text{He}$, ${}^{25}_2\text{He}$, ${}^{26}_2\text{He}$, ${}^{27}_2\text{He}$, ${}^{28}_2\text{He}$.

Z=0-28 Part 2 of 2



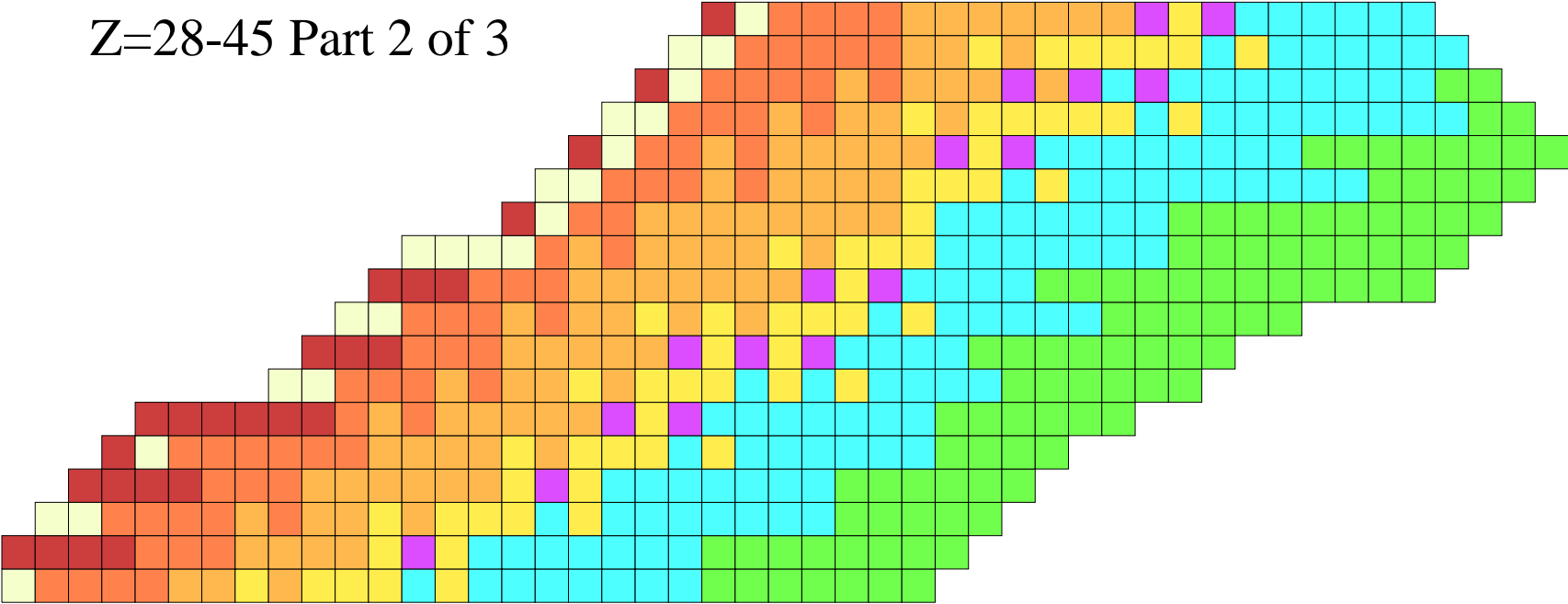
- Decay Q-value Range
- Q(??)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=28-45 Part 1 of 3

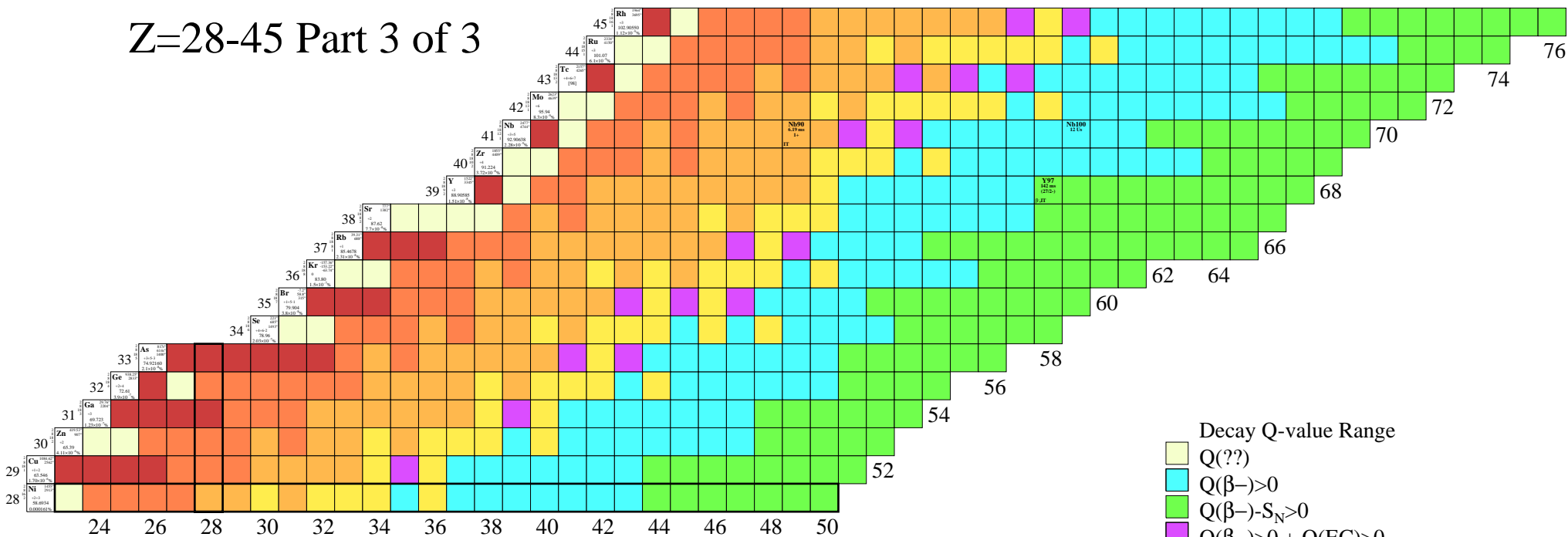
The image displays a periodic table for elements with atomic numbers Z=28 to 45. The table is color-coded by groups, with elements in the same group sharing a common color. A large grid of colored squares is overlaid on the table, representing a specific data set or classification. The grid is roughly triangular, starting from the top right and extending towards the bottom left. The colors range from red to green, with black squares indicating missing or specific data points. The grid is roughly triangular, starting from the top right and extending towards the bottom left.

Element	Symbol	Atomic Number	Group
Ni51	Ni	51	10
Ni52	Ni	52	10
Ni53	Ni	53	10
Ni54	Ni	54	10
Ni55	Ni	55	10
Ni56	Ni	56	10
Ni57	Ni	57	10
Ni58	Ni	58	10
Ni59	Ni	59	10
Cu52	Cu	52	11
Cu53	Cu	53	11
Cu54	Cu	54	11
Cu55	Cu	55	11
Cu56	Cu	56	11
Cu57	Cu	57	11
Cu58	Cu	58	11
Cu59	Cu	59	11
Cu60	Cu	60	11
Cu61	Cu	61	11
Cu62	Cu	62	11
Cu63	Cu	63	11
Cu64	Cu	64	11
Cu65	Cu	65	11
Cu66	Cu	66	11
Cu67	Cu	67	11
Cu68	Cu	68	11
Cu69	Cu	69	11
Cu70	Cu	70	11
Cu71	Cu	71	11
Cu72	Cu	72	11
Cu73	Cu	73	11
Cu74	Cu	74	11
Cu75	Cu	75	11
Cu76	Cu	76	11
Cu77	Cu	77	11
Cu78	Cu	78	11
Cu79	Cu	79	11
Cu80	Cu	80	11
Cu81	Cu	81	11
Cu82	Cu	82	11
Cu83	Cu	83	11
Cu84	Cu	84	11
Cu85	Cu	85	11
Cu86	Cu	86	11
Cu87	Cu	87	11
Cu88	Cu	88	11
Cu89	Cu	89	11
Cu90	Cu	90	11
Cu91	Cu	91	11
Cu92	Cu	92	11
Cu93	Cu	93	11
Cu94	Cu	94	11
Cu95	Cu	95	11
Cu96	Cu	96	11
Cu97	Cu	97	11
Cu98	Cu	98	11
Cu99	Cu	99	11
Cu100	Cu	100	11
Cu101	Cu	101	11
Cu102	Cu	102	11
Cu103	Cu	103	11
Cu104	Cu	104	11
Cu105	Cu	105	11
Cu106	Cu	106	11
Cu107	Cu	107	11
Cu108	Cu	108	11
Cu109	Cu	109	11
Cu110	Cu	110	11
Cu111	Cu	111	11
Cu112	Cu	112	11
Cu113	Cu	113	11
Cu114	Cu	114	11
Cu115	Cu	115	11
Cu116	Cu	116	11
Cu117	Cu	117	11
Cu118	Cu	118	11
Cu119	Cu	119	11
Cu120	Cu	120	11
Cu121	Cu	121	11
Cu122	Cu	122	11
Cu123	Cu	123	11
Cu124	Cu	124	11
Cu125	Cu	125	11
Cu126	Cu	126	11
Cu127	Cu	127	11
Cu128	Cu	128	11
Cu129	Cu	129	11
Cu130	Cu	130	11
Cu131	Cu	131	11
Cu132	Cu	132	11
Cu133	Cu	133	11
Cu134	Cu	134	11
Cu135	Cu	135	11
Cu136	Cu	136	11
Cu137	Cu	137	11
Cu138	Cu	138	11
Cu139	Cu	139	11
Cu140	Cu	140	11
Cu141	Cu	141	11
Cu142	Cu	142	11
Cu143	Cu	143	11
Cu144	Cu	144	11
Cu145	Cu	145	11
Cu146	Cu	146	11
Cu147	Cu	147	11
Cu148	Cu	148	11
Cu149	Cu	149	11
Cu150	Cu	150	11
Cu151	Cu	151	11
Cu152	Cu	152	11
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Cu381	Cu	381	11
Cu382	Cu	382	11
Cu383	Cu	383	11
Cu384	Cu	384	11
Cu385	Cu	385	11
Cu386	Cu	386	11
Cu387	Cu	387	11
Cu388	Cu	388	11
Cu389	Cu	389	11
Cu			

Z=28-45 Part 2 of 3

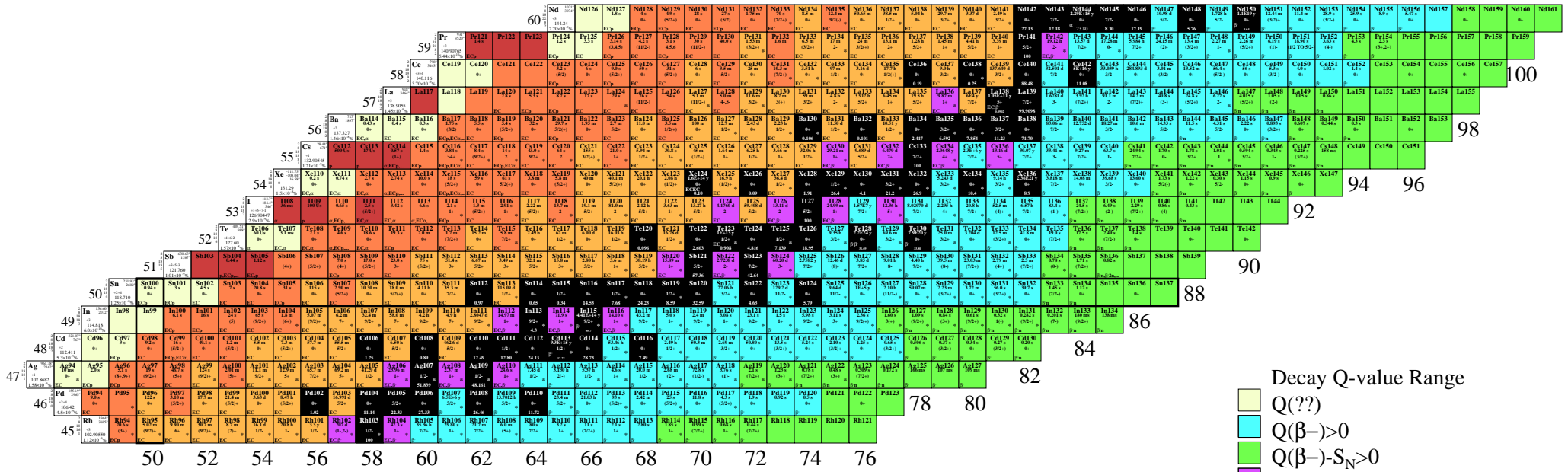


Z=28-45 Part 3 of 3



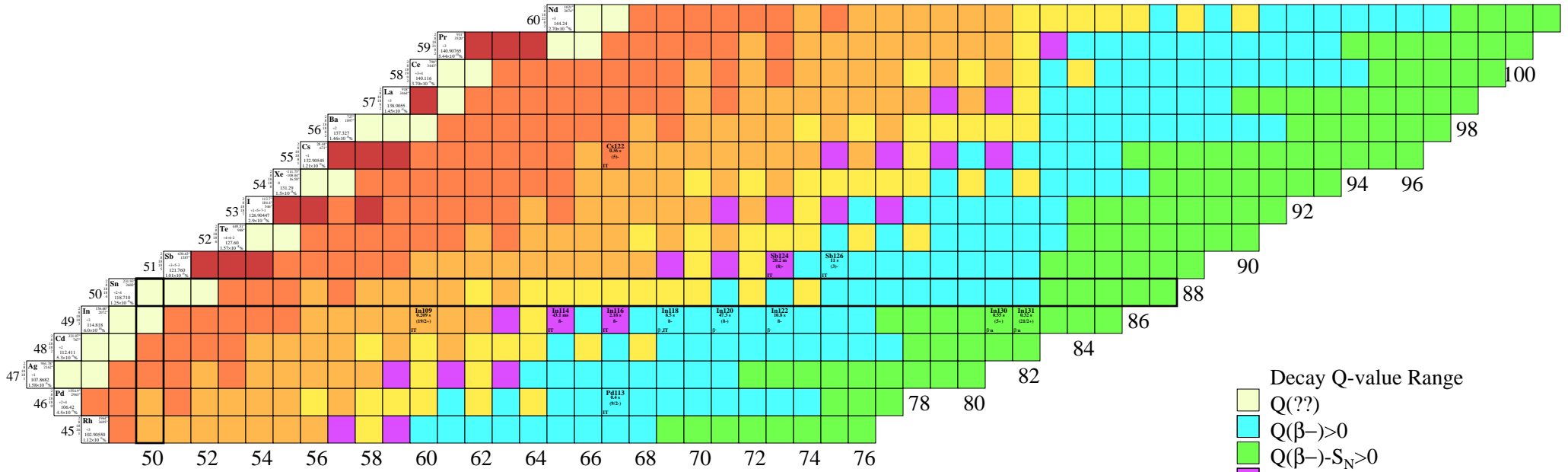
- Decay Q-value Range
- $Q(??)$
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=45-60 Part 1 of 3



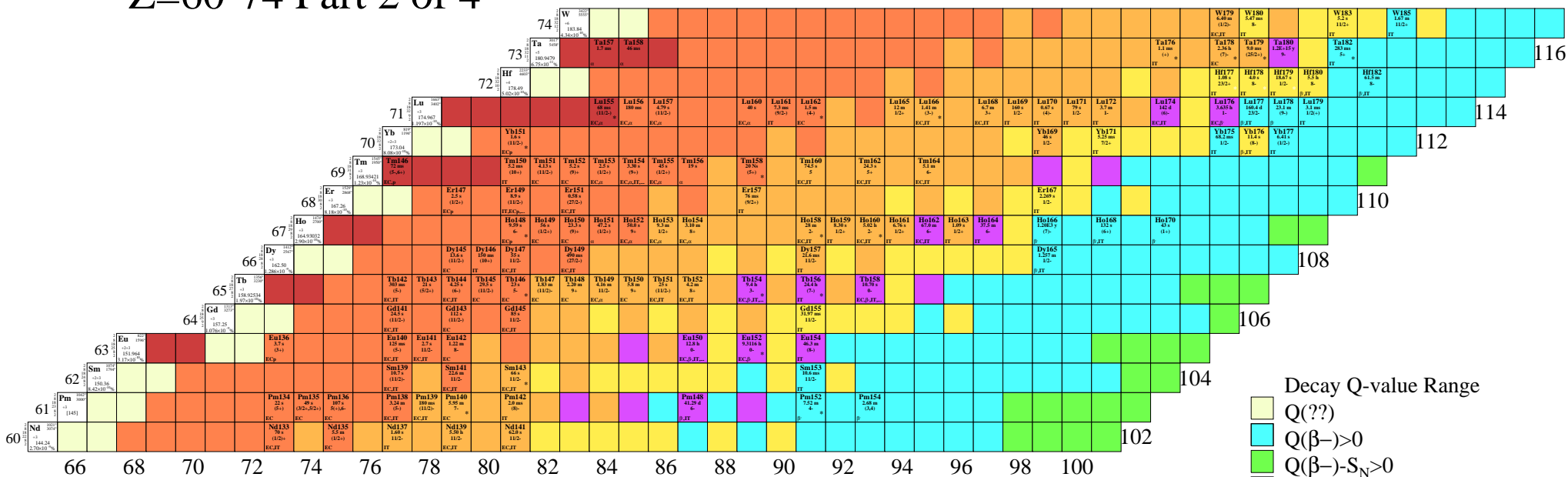
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=45-60 Part 3 of 3



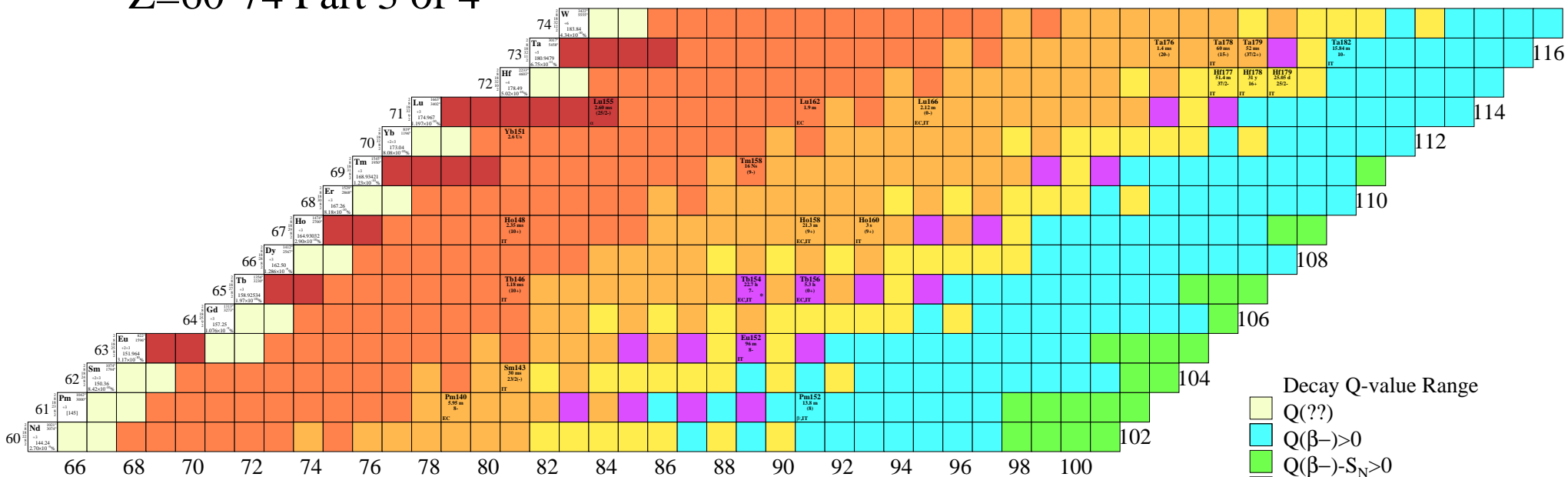
- Decay Q-value Range
- Q(??)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=60-74 Part 2 of 4



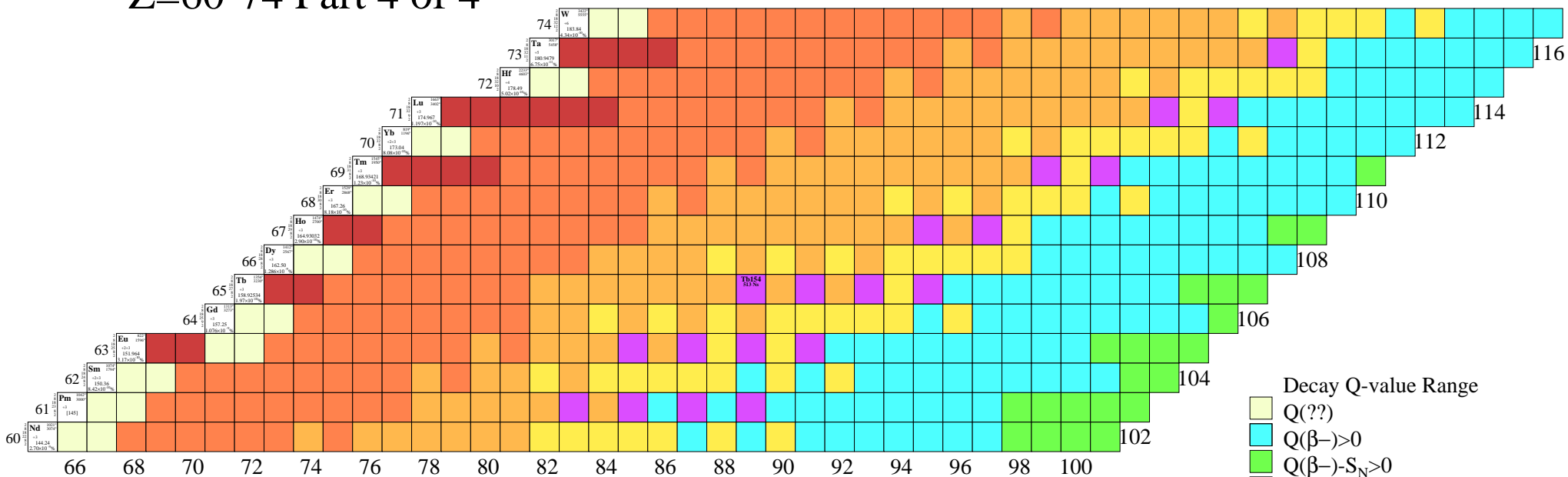
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=60-74 Part 3 of 4



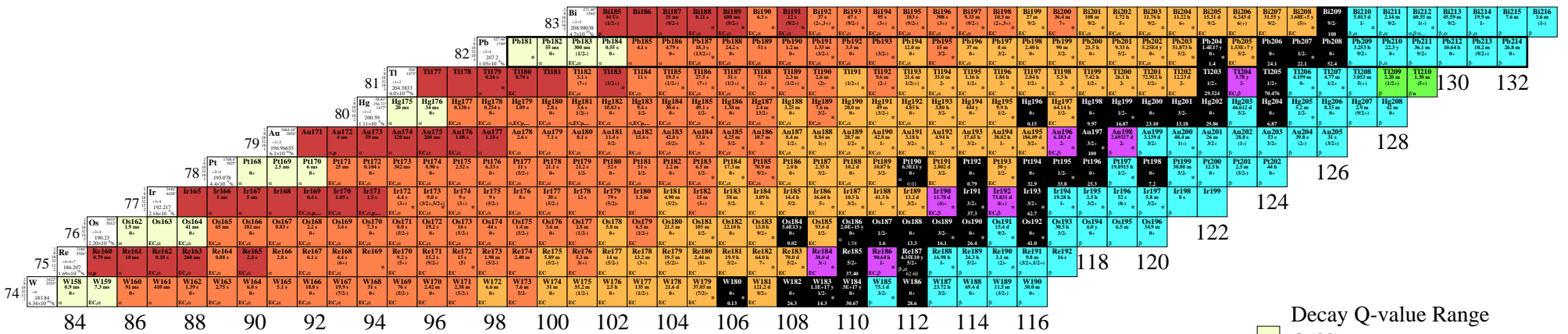
- Decay Q-value Range
- Q(??)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=60-74 Part 4 of 4



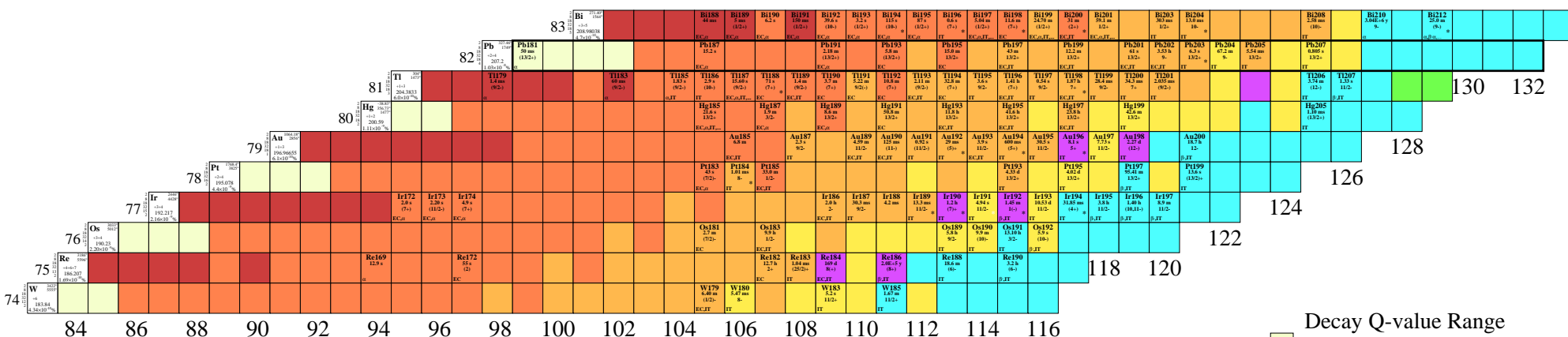
- Decay Q-value Range
- Q(??)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=74-83 Part 1 of 3



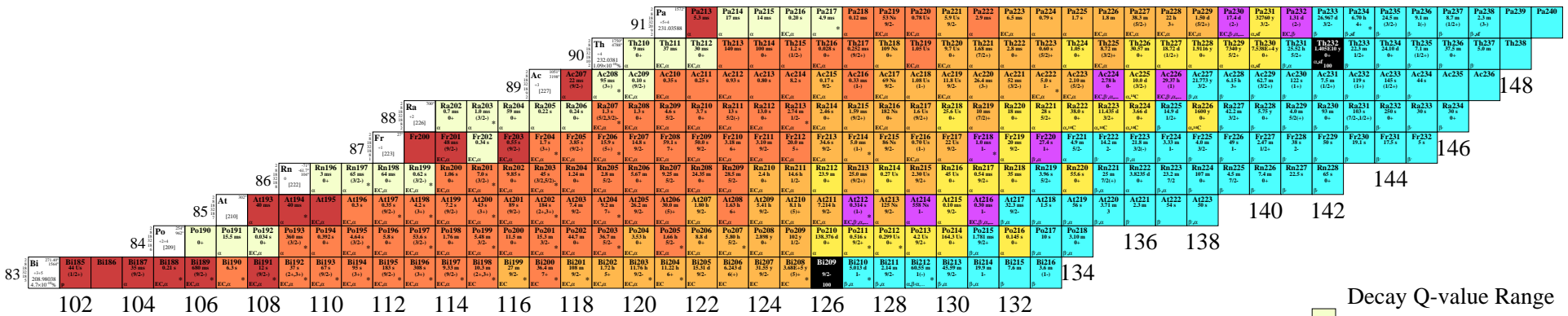
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=74-83 Part 2 of 3



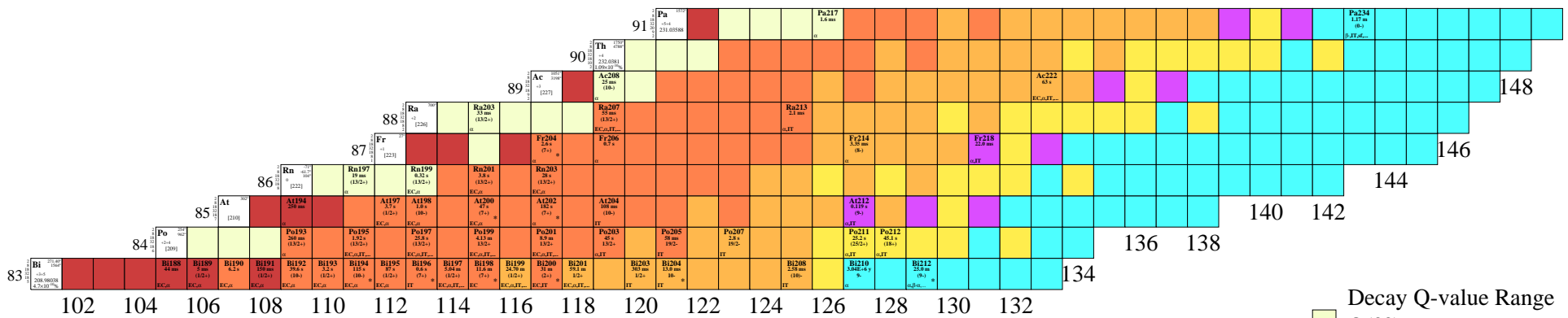
- Decay Q-value Range
- $Q(?)$
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=83-91 Part 1 of 3



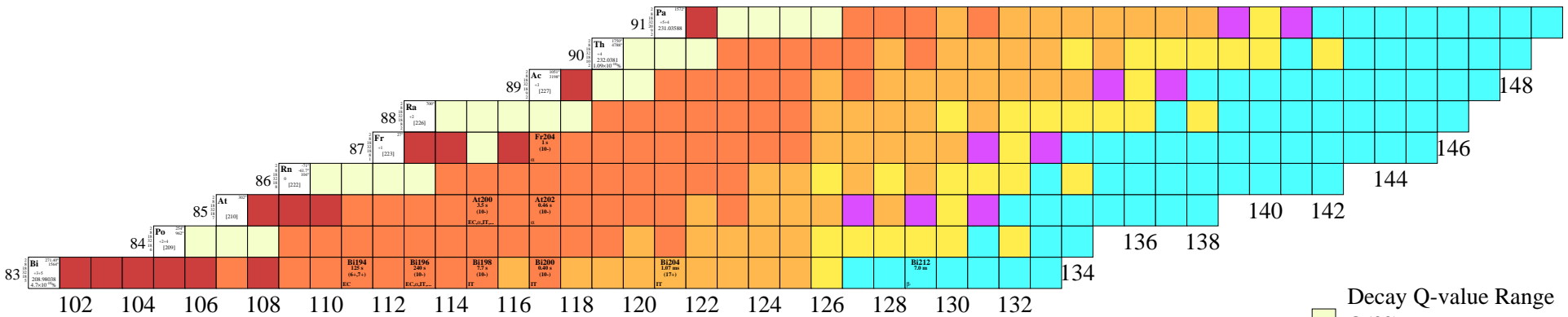
- Decay Q-value Range
- Q(?)
- Q(β-) > 0
- Q(β-) - S_N > 0
- Q(β-) > 0 + Q(EC) > 0
- Stable to Beta Decay
- Q(EC) > 0
- Q(EC) - S_p > 0
- Q(P) > 0
- Naturally Abundant

Z=83-91 Part 2 of 3



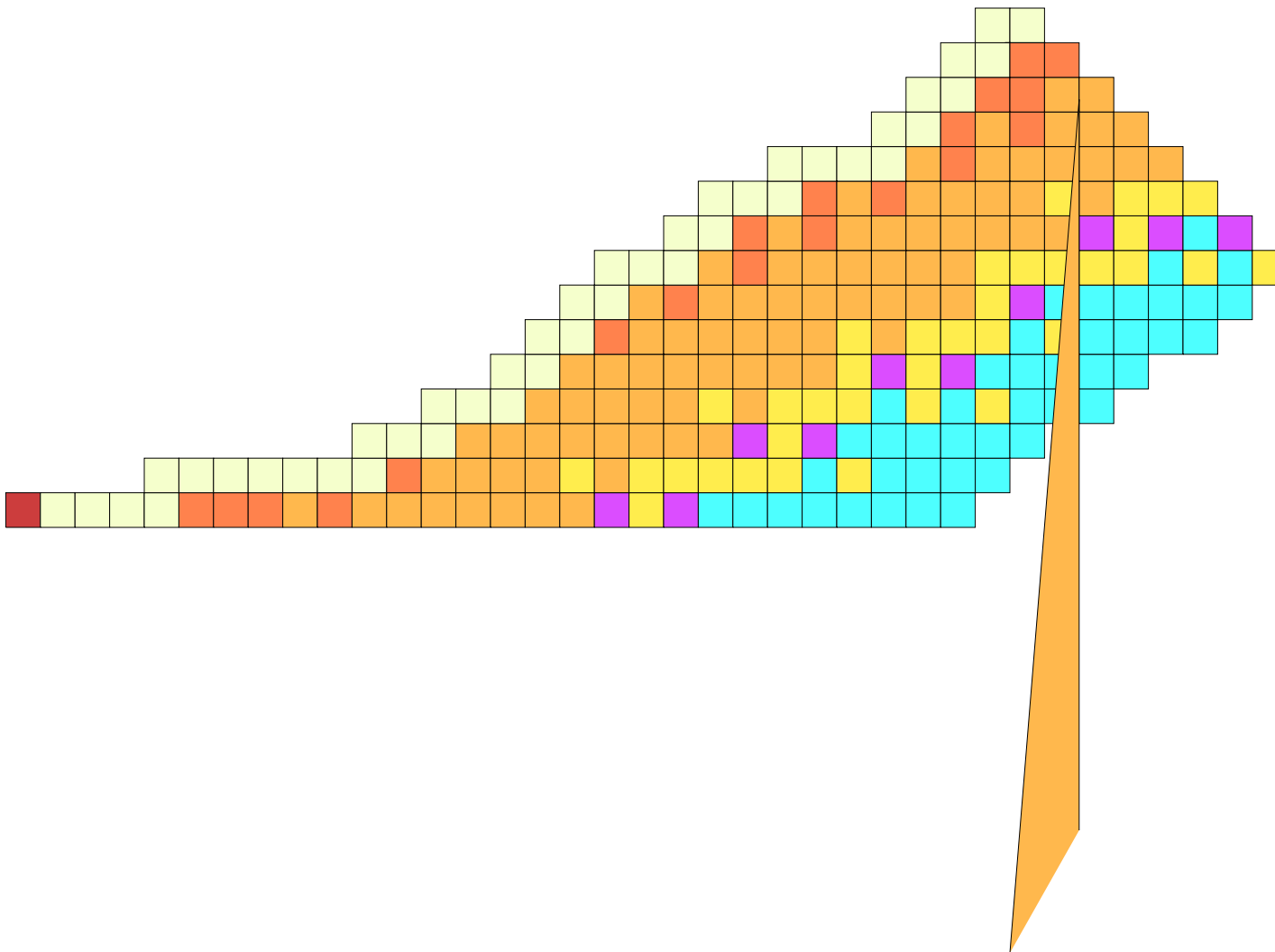
- Decay Q-value Range
- Q(?)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=83-91 Part 3 of 3

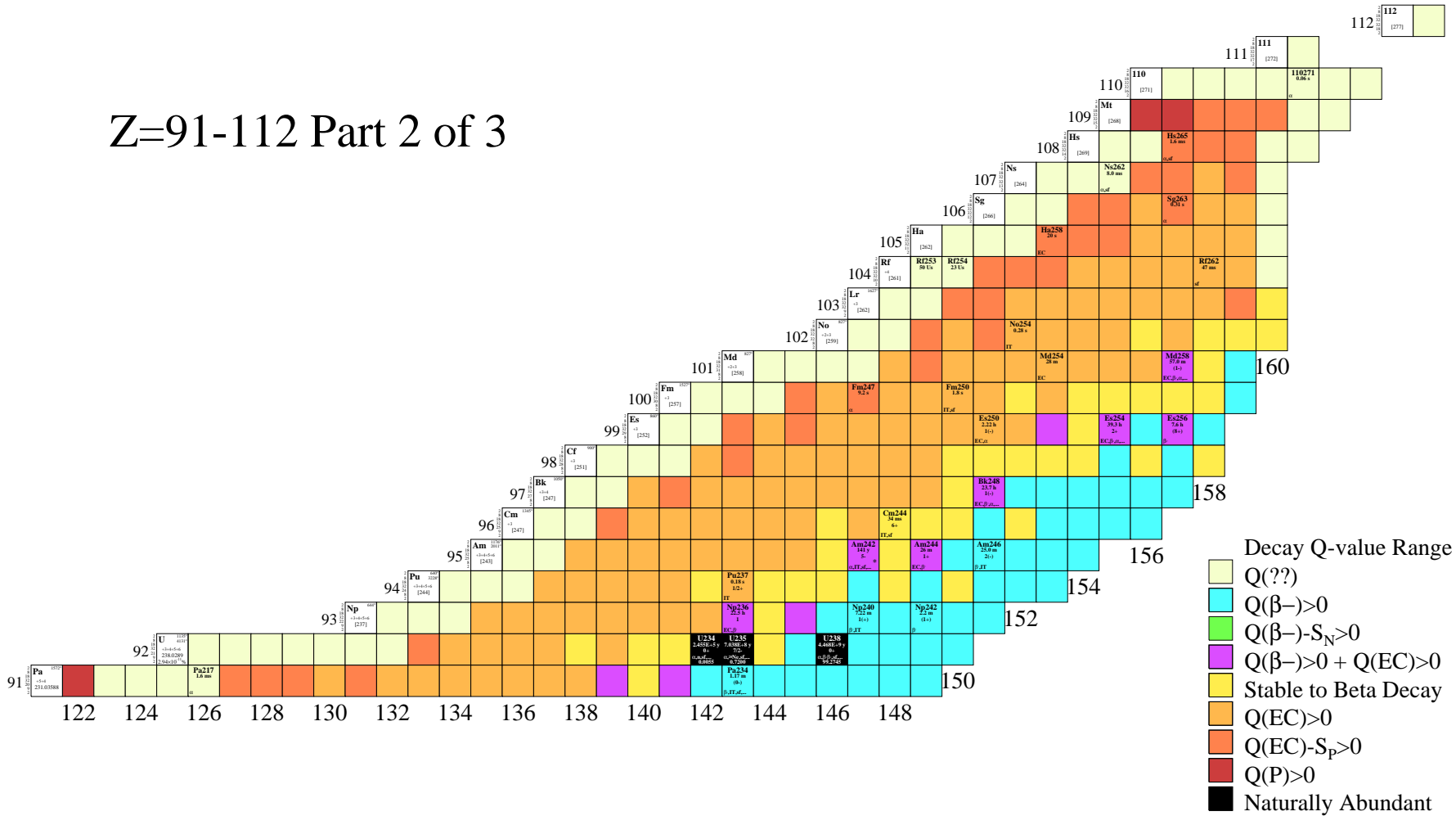


- Decay Q-value Range
- Q(??)
 - $Q(\beta^-) > 0$
 - $Q(\beta^-) - S_N > 0$
 - $Q(\beta^-) > 0 + Q(EC) > 0$
 - Stable to Beta Decay
 - $Q(EC) > 0$
 - $Q(EC) - S_p > 0$
 - $Q(P) > 0$
 - Naturally Abundant

Z=91-112 Part 1 of 3



Z=91-112 Part 2 of 3



Z=91-112 Part 3 of 3

