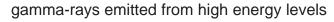
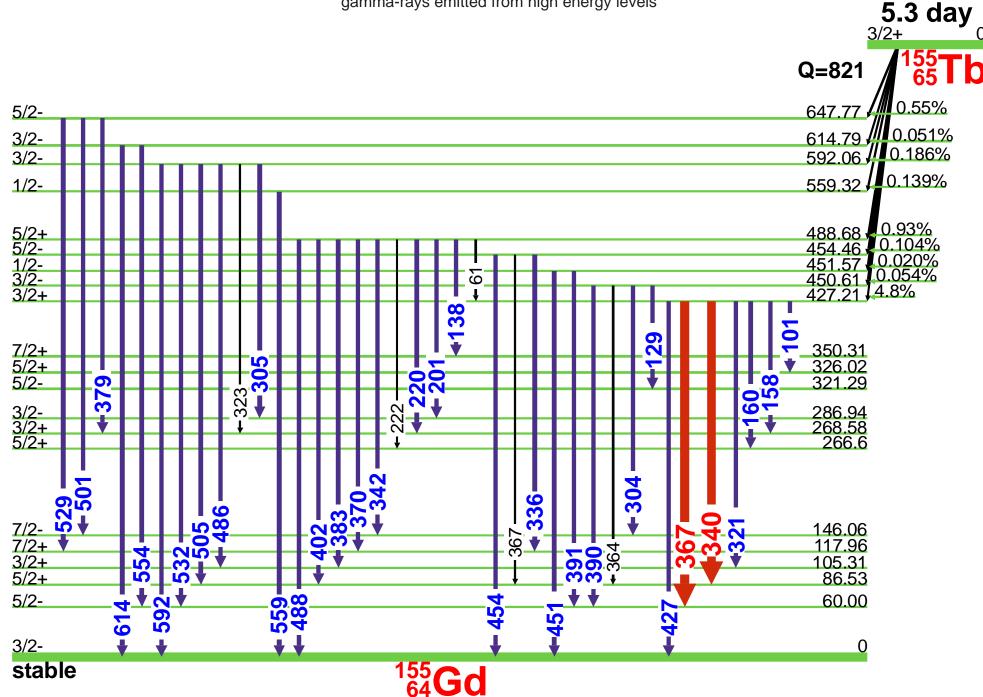






¹⁵⁵Tb(5.3 day) Decay Scheme

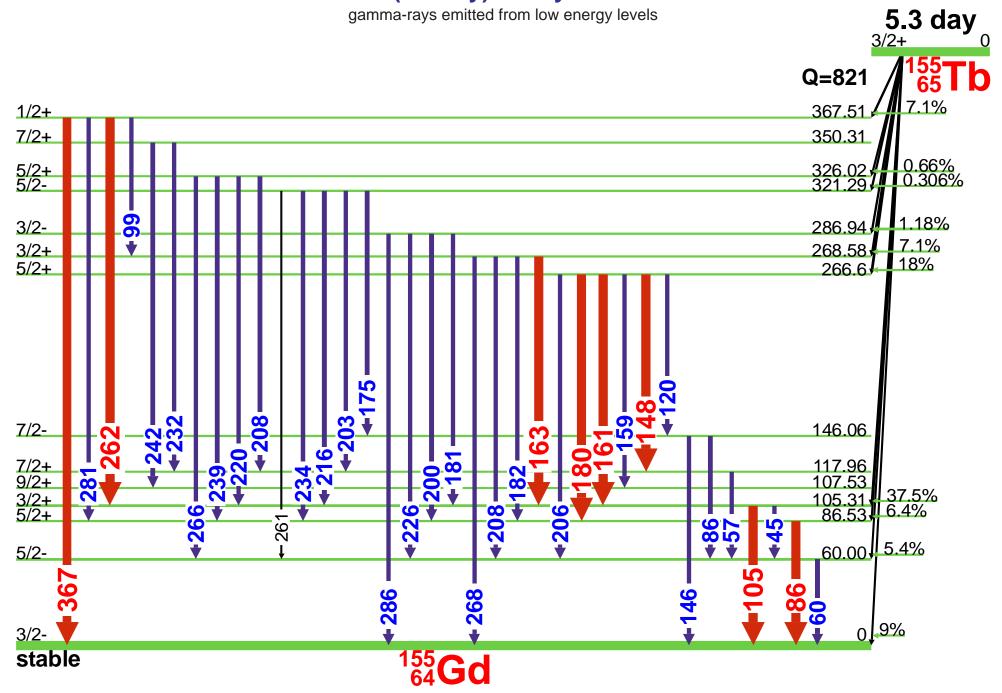








¹⁵⁵Tb(5.3 day) Decay Scheme







GAMMA-RAY ENERGIES AND INTENSITIES (page 1 of 2)

Nuclide: ^{155}Tb E $_{\gamma}$, σ E $_{\gamma}$, l_{γ} , σ I $_{\gamma}$ - 1998 ENSDF Data Half Life: 5.32(6) day

Detector: 2.5 cm² x 8 mm Ge (Li)

Method of Production: ¹⁵⁵Gd(p,n)

| | E _γ (keV) | σE_{γ} | l _γ (rel) | l _γ (%) | σ l $_{\gamma}$ | S |
|---|----------------------|---------------------|----------------------|--------------------|------------------------|---|
| | 10.49 | 0.04 | • | 0.015 | 0.005 | 4 |
| | 18.769 | 0.015 | | 0.063 | 0.005 | 4 |
| | 20.999 | 0.023 | | 0.0016 | 0.0001 | 4 |
| Ī | 26.533 | 0.006 | | 0.394 | 0.024 | 4 |
| | 31.43 | 0.09 | | 0.022 | 0.005 | 4 |
| | 39.80 | | | | | 4 |
| | 40.70 | | | | | 4 |
| | 45.299 | 0.005 | | 1.60 | 0.09 | 3 |
| | 55.650 | 0.008 | | 0.0020 | 0.0015 | 4 |
| | 57.983 | 0.005 | 14.0 | 0.205 | 0.012 | 4 |
| | 59.63 | | | 0.021 | 0.004 | 4 |
| | 60.012 | 0.003 | 30.0 | 1.11 | 0.07 | 3 |
| | 61.49 | 0.04 | 0.5 | 0.029 | 0.004 | 4 |
| | 79.2 | | | 0.0251 | 0.0013 | 4 |
| | 80.60 | 0.10 | | 0.015 | 0.010 | 4 |
| D | 86.00 | 0.20 | 1178. | 0.0151 | 0.0008 | 4 |
| ט | 86.55 | 0.03 | 1170. | 32.0 | 1.8 | 1 |
| | 99.02 | 0.25 | 2.1 | 0.087 | 0.006 | 4 |
| | 101.160 | 0.010 | 8.8 | 0.161 | 0.013 | 4 |
| D | 102.40 | 0.10 | 2.0 | 0.015 | 0.005 | 4 |
| ט | 103.30 | 0.10 | | 0.010 | 0.005 | 4 |
| | 105.318 | 0.003 | 1000. | 25.1 | 1.3 | 1 |
| | 118.0 | | | 0.0025 | 0.0001 | 4 |
| | 120.6 | 0.3 | 3.0 | 0.069 | 0.007 | 4 |
| | 125.10 | 0.10 | | 0.0050 | 0.0025 | 4 |
| D | 129.30 | 0.10 | 2.8 | 0.0005 | 0.0001 | 4 |
| | 129.30 | 0.10 | 2.0 | 0.006 | 0.004 | 4 |
| | 132.00 | 0.10 | | 0.0075 | 0.0025 | 4 |
| | 136.20 | 0.10 | 0.78 | 0.0038 | 0.0025 | 4 |
| | 138.29 | 0.07 | 0.92 | 0.0241 | 0.0026 | 4 |
| | 141.50 | 0.10 | | 0.0040 | 0.0020 | 4 |
| | 146.05 | 0.03 | 3.5 | 0.048 | 0.010 | 4 |
| | 148.640 | 0.010 | 105. | 2.65 | 0.14 | 1 |
| | 150.63 | 0.05 | 1.1 | 0.0299 | 0.0023 | 4 |
| | 158.57 | 0.05 | 2.6 | 0.043 | 0.003 | 4 |
| _ | 159.10 | 0.10 | | 0.0075 | 0.0025 | 2 |
| D | 160.51 | 0.10 | | 0.78 | 0.04 | 3 |
| | 161.290 | 0.010 | 124. | 2.76 | 0.15 | 1 |

| | E_{γ} (keV) | σE_{γ} | l _γ (rel) | Ι _γ (%) | σ l $_{\gamma}$ | S |
|---|--------------------|---------------------|----------------------|--------------------|------------------------|---|
| | 162.650 | 0.020 | | 0.0176 | 0.0009 | 4 |
| | 163.280 | 0.010 | 166. | 4.44 | 0.23 | 1 |
| | 169.00 | 0.10 | | 0.0025 | 0.0025 | 4 |
| | 175.290 | 0.020 | 1.3 | 0.044 | 0.005 | 4 |
| | 178.00 | 0.10 | | 0.008 | 0.005 | 4 |
| | 180.080 | 0.010 | 278. | 7.5 | 0.4 | 1 |
| | 181.69 | 0.09 | 20.1 | 0.422 | 0.022 | 3 |
| | 182.10 | 0.10 | 2.0 | 0.110 | 0.008 | 4 |
| | 185.30 | 0.10 | | 0.008 | 0.005 | 4 |
| | 186.00 | 0.10 | | 0.0013 | 0.0013 | 4 |
| | 188.30 | 0.10 | | 0.0025 | 0.0010 | 4 |
| | 191.40 | 0.10 | 1.6 | 0.0009 | 0.0004 | 4 |
| | 193.319 | 0.004 | | 0.0010 | 0.0002 | 4 |
| D | 200.411 | 0.004 | 0.5 | 0.230 | 0.013 | 3 |
| ח | 201.0 | 1.0 | 8.5 | 0.013 | 0.008 | |
| | 203.370 | 0.020 | 1.45 | 0.029 | 0.003 | 4 |
| | 206.540 | 0.020 | 7.2 | 0.171 | 0.015 | 3 |
| D | 208.05 | 0.05 | 11.9 | 0.231 | 0.017 | 3 |
| ט | 208.58 | 0.05 | | 0.058 | 0.013 | |
| | 216.02 | 0.05 | 5.5 | 0.136 | 0.012 | 3 |
| | 218.40 | 0.10 | 0.5 | 0.008 | 0.005 | 4 |
| Ъ | 220.07 | 0.05 | 25.8 | 0.166 | 0.010 | 2 |
| D | 220.70 | 0.05 | | 0.508 | 0.027 | |
| | 222.00 | 0.10 | 1.3 | 0.020 | 0.010 | 4 |
| | 226.950 | 0.010 | 5.9 | 0.148 | 0.008 | 3 |
| | 230.20 | 0.10 | | 0.0018 | 0.0008 | 4 |
| | 232.330 | 0.020 | 1.1 | 0.0173 | 0.0022 | 4 |
| | 234.780 | 0.010 | 2.5 | 0.0331 | 0.0026 | 4 |
| | 237.5 | 0.4 | | 0.0028 | 0.0020 | 4 |
| | 239.450 | 0.010 | 9.1 | 0.227 | 0.012 | 3 |
| | 242.800 | 0.020 | 0.75 | 0.0156 | 0.0011 | 4 |
| | 245.00 | 0.09 | | 0.0028 | 0.0015 | 4 |
| | 246.05 | 0.09 | 0.84 | 0.0013 | 0.0005 | 4 |
| | 248.60 | 0.10 | 1.04 | 0.0050 | 0.0025 | 4 |
| _ | 261.250 | 0.010 | 204. | 0.040 | 0.007 | |
| D | 262.270 | 0.010 | | 5.29 | 0.28 | 1 |
| | 266.02 | 0.08 | | 0.0028 | 0.0003 | 3 |
| | 268.560 | 0.010 | 26.6 | 0.71 | 0.06 | 2 |





GAMMA-RAY ENERGIES AND INTENSITIES (page 2 of 2)

Nuclide: ^{155}Tb E $_{\gamma}$, σ E $_{\gamma}$, I_{γ} , σ I $_{\gamma}$ - 1998 ENSDF Data Half Life: 5.32(6) day

Detector: 2.5 cm² x 8 mm Ge (Li)

Method of Production: ¹⁵⁵Gd(p,n)

 E_{γ} (keV)

 σE_{γ}

| | E _γ (keV) | σE_{γ} | l _γ (rel) | l _γ (%) | σ l $_{\gamma}$ | S |
|----|----------------------|---------------------|----------------------|--------------------|---|---|
| | 271.0 | 0.5 | , | 0.0020 | 0.0013 | 4 |
| | 275.38 | 0.08 | | 0.0030 | 0.0013 | 4 |
| | 278.60 | 0.10 | | 0.0025 | 0.0025 | 4 |
| Ī | 281.060 | 0.010 | 11.8 | 0.302 | 0.016 | 2 |
| | 286.960 | 0.010 | 12.0 | 0.317 | 0.018 | 2 |
| D | 290.20 | 0.10 | | 0.0020 | 0.0008 | 4 |
| יט | 290.20 | 0.10 | | 0.0020 | 0.0008 | 4 |
| | 294.75 | 0.15 | 0.17 | 0.0013 | 0.0005 | 4 |
| | 303.10 | 0.10 | | 0.0023 | 0.0015 | 4 |
| D | 304.6 | 0.5 | 0.74 | 0.0005 | 0.0020 0.0013 0.0030 0.0013 0.0025 0.0025 0.302 0.016 0.317 0.018 0.0020 0.0008 0.0020 0.0008 0.0013 0.0005 0.0003 0.0015 0.0005 0.0001 0.0030 0.0013 0.0048 0.0008 0.0020 0.0010 0.181 0.012 0.023 0.008 0.0045 0.0013 0.0020 0.0010 0.033 0.003 1.18 0.07 0.007 0.008 0.008 0.008 0.008 0.008 0.0010 0.004 0.0115 0.0021 0.78 0.13 1.48 0.19 0.050 0.006 0.228 0.013 0.0050 0.006 0.228 0.013 0.0053 0.0006 | 4 |
| וט | 305.11 | 0.10 | 0.74 | 0.0030 | 0.0013 | 4 |
| | 309.21 | 0.03 | | 0.0048 | 0.0008 | 4 |
| | 317.90 | 0.10 | | 0.0020 | 0.0010 | 4 |
| | 321.830 | 0.010 | 6.9 | 0.181 | 0.012 | 3 |
| | 323.53 | 0.08 | | 0.023 | 0.008 | 4 |
| | 325.44 | 0.09 | | 0.0045 | 0.0013 | 4 |
| | 328.1 | 0.3 | | 0.0020 | 0.0010 | 4 |
| | 336.560 | 0.010 | 0.67 | 0.033 | 0.003 | 4 |
| | 340.670 | 0.010 | 43.0 | 1.18 | 0.07 | 1 |
| | 342.58 | 0.05 | 3.43 | 0.0078 | 0.0020 | 3 |
| | 344.0 | 0.9 | | 0.008 | 0.008 | 4 |
| | 346.036 | 0.025 | | 0.0065 | 0.0011 | 4 |
| | 349.1 | 0.9 | 0.90 | 0.0010 | 0.0004 | 4 |
| | 364.060 | 0.010 | 0.8 | 0.0115 | 0.0021 | 4 |
| | 367.360 | 0.010 | | 0.78 | 0.13 | |
| D | 367.360 | 0.010 | 92.0 | 1.48 | 0.19 | 1 |
| | 367.929 | 0.001 | | 0.050 | 0.006 | |
| | 370.730 | 0.010 | 8.5 | 0.228 | 0.013 | 2 |
| | 379.14 | 0.03 | | 0.0070 | 0.0020 | 4 |
| Ī | 381.06 | 0.03 | | 0.0053 | 0.0006 | 4 |
| | 383.350 | 0.010 | 1.26 | 0.026 | 0.004 | 4 |
| | 390.620 | 0.010 | 0.74 | 0.019 | 0.004 | 4 |
| D | 391.600 | 0.010 | | 0.0030 | 0.0013 | |
| Ī | 394.6 | 0.5 | | 0.0020 | 0.0013 | 4 |
| _ | | | - | | | |

| | _γ (·) | Ο Ξγ | .γ (. σ.) | .γ (, σ, | Ο.γ | J |
|------|----------|-------|-----------|----------|--------|---|
| | 396.0 | 0.5 | | 0.0020 | 0.0003 | 4 |
| | 402.160 | 0.010 | 3.09 | 0.072 | 0.006 | 3 |
| | 427.180 | 0.010 | 1.96 | 0.0274 | 0.0016 | 4 |
| | 428.70 | 0.10 | | 0.0010 | 0.0005 | 4 |
| | 445.980 | 0.010 | | 0.0098 | 0.0023 | 4 |
| | 450.640 | 0.020 | | 0.0281 | 0.0027 | 4 |
| | 451.600 | 0.020 | 1.91 | 0.0098 | 0.0023 | 4 |
| | 454.450 | 0.010 | 0.89 | 0.0198 | 0.0023 | 4 |
| | 474.11 | 0.15 | | 0.0004 | | 4 |
| | 484.80 | 0.10 | | 0.0003 | 0.0002 | 4 |
| | 486.88 | 0.15 | | 0.0241 | 0.0024 | 4 |
| | 488.65 | 0.15 | 1.98 | 0.017 | 0.003 | 4 |
| | 493.90 | 0.10 | | 0.0004 | 0.0002 | 4 |
| | 496.10 | 0.10 | | 0.0005 | 0.0002 | 4 |
| | 499.24 | 0.06 | | 0.0009 | 0.0002 | 4 |
| | 501.70 | 0.07 | | 0.0115 | 0.0010 | 4 |
| | 505.520 | 0.010 | 2.00 | 0.045 | 0.004 | 3 |
| | 509.70 | 0.20 | | 0.0003 | 0.0001 | 4 |
| Ann. | 511.009 | | | | | |
| Ann. | 512.89 | 0.09 | | 0.0013 | 0.0002 | 4 |
| | 529.76 | 0.06 | 0.90 | 0.0118 | 0.0021 | 4 |
| Ann. | 532.09 | 0.05 | 1.7 | 0.045 | 0.007 | 4 |
| | 538.15 | 0.03 | | 0.0003 | 0.0002 | 4 |
| | 542.45 | 0.03 | | 0.0040 | 0.0020 | 4 |
| | 554.780 | 0.010 | 0.86 | 0.0198 | 0.0025 | 4 |
| | 559.320 | 0.010 | 5.1 | 0.136 | 0.010 | 3 |
| | 587.69 | 0.04 | | 0.0040 | 0.0008 | 4 |
| | 592.080 | 0.010 | 0.75 | 0.0196 | 0.0022 | 4 |
| | 598.96 | 0.06 | | 0.0023 | 0.0003 | 4 |
| | 603.25 | 0.15 | | 0.0008 | 0.0005 | 4 |
| D | 614.800 | 0.010 | 1.14 | 0.0304 | 0.0026 | 4 |
| D | 615.70 | 0.10 | | 0.0020 | 0.0015 | 7 |
| | 634.51 | 0.09 | | 0.0009 | 0.0004 | 4 |
| | 647.730 | 0.010 | | 0.0141 | 0.0015 | 4 |
| | 658.93 | 0.15 | | 0.0003 | 0.0001 | 4 |
| _ | | | | | | |

 I_{γ} (rel)

I_γ (%)

 σI_{γ}

S



