## Dataset #1:

Author: F.G. Kondev Citation: Nuclear Data Sheets 109, 1527 (2008)

| Parent<br>Nucleus               | Parent I<br>E(level) |    | Parent<br>T <sub>1/2</sub> | Decay Mode | GS-GS Q-value (keV) | Daughter<br>Nucleus             |                 |  |
|---------------------------------|----------------------|----|----------------------------|------------|---------------------|---------------------------------|-----------------|--|
| <sup>210</sup> <sub>86</sub> Rn | 0.0                  | 0+ | 2.4 h 1                    | α: 96 1 %  | 6158.9 22           | <sup>206</sup> <sub>84</sub> Po | Decay<br>Scheme |  |

## Alphas:

| Energy<br>(keV) | Intensity<br>(%) | Dose<br>( MeV/Bq-s ) |  |  |
|-----------------|------------------|----------------------|--|--|
| 5351 3          | 0.0054 % 3       | 2.88E-4 16           |  |  |
| 6041 <i>3</i>   | 96.0 % 10        | 5.80 6               |  |  |

# Dataset #2:

Author: M. Shamsuzzoha Basunia Citation: Nuclear Data Sheets 121, 561 (2014)

|                                 | Parent F<br>E(level) |    | Parent<br>T <sub>1/2</sub> | Decay Mode | GS-GS Q-value (keV) | Daughter<br>Nucleus             |                 |  |
|---------------------------------|----------------------|----|----------------------------|------------|---------------------|---------------------------------|-----------------|--|
| <sup>210</sup> <sub>86</sub> Rn | 0.0                  | 0+ | 2.4 h 1                    | ε: 4 1 %   | 2367 9              | <sup>210</sup> <sub>85</sub> At | Decay<br>Scheme |  |

### Electrons:

|         | Energy<br>(keV) | Intensity<br>(%) | Dose<br>( MeV/Bq-s ) |  |  |
|---------|-----------------|------------------|----------------------|--|--|
| Auger L | 8.52            | 4.9 % 4          | 4.1E-4 4             |  |  |
| CE L    | 55.21 8         | 2.9 % 7          | 0.0016 4             |  |  |
| Auger K | 61.2            | 0.17 % 3         | 1.04E-4 17           |  |  |
| CE M    | 68.38 7         | 0.69 % 18        | 4.7E-4 <i>12</i>     |  |  |
| CE N    | 71.66 7         | 0.18 % 5         | 1.3E-4 3             |  |  |
| CE O    | 72.59 7         | 0.038 % 10       | 2.8E-5 7             |  |  |
| CE P    | 72.69 7         | 0.0053 % 14      | 3.9E-6 <i>10</i>     |  |  |
| CE K    | 94.62 7         | 0.26 % 7         | 2.4E-4 6             |  |  |
| CE K    | 100.57 10       | 0.53 % 14        | 5.4E-4 <i>14</i>     |  |  |
| CE K    | 129.37 10       | 0.056 % 15       | 7.2E-5 <i>19</i>     |  |  |
| CE K    | 137.57 10       | 0.52 % 13        | 7.1E-4 <i>18</i>     |  |  |
| CE K    | 142.37 10       | 0.14 % 4         | 2.0E-4 5             |  |  |
| CE K    | 159.77 10       | 0.076 % 19       | 1.2E-4 3             |  |  |
| CE L    | 172.86 8        | 0.046 % 12       | 7.9E-5 <i>20</i>     |  |  |
| CE L    | 178.81 10       | 0.095 % 24       | 1.7E-4 4             |  |  |
| CE M    | 186.03 7        | 0.011 % 3        | 2.0E-5 5             |  |  |

| CE | K | 188.02 | 7  | 0.029 % 8          | 5.5E-5 | 14 |
|----|---|--------|----|--------------------|--------|----|
| CE | N | 189.31 | 7  | 0.0028 % 7         | 5.3E-6 | 13 |
| CE | 0 | 190.24 | 7  | 6.0E-4 % 15        | 1.1E-6 | 3  |
| CE | P | 190.34 | 7  | 8.3E-5 % <i>21</i> | 1.6E-7 | 4  |
| CE | М | 191.98 | 10 | 0.023 % 6          | 4.3E-5 | 11 |
| CE | N | 195.26 | 10 | 0.0058 % 15        | 1.1E-5 | 3  |
| CE | 0 | 196.19 | 10 | 0.0012 % 3         | 2.4E-6 | 6  |
| CE | P | 196.29 | 10 | 1.7E-4 % 4         | 3.4E-7 | 9  |
| CE | L | 207.61 | 10 | 0.010 % 3          | 2.1E-5 | 6  |
| CE | K | 211.57 | 10 | 0.037 % 10         | 7.8E-5 | 20 |
| CE | L | 215.81 | 10 | 0.092 % 23         | 2.0E-4 | 5  |
| CE | K | 218.27 | 10 | 0.17 % 4           | 3.7E-4 | 9  |
| CE | L | 220.61 | 10 | 0.025 % 6          | 5.5E-5 | 14 |
| CE | М | 220.78 | 10 | 0.0023 % 6         | 5.2E-6 | 14 |
| CE | N | 224.06 | 10 | 6.1E-4 % 16        | 1.4E-6 | 4  |
| CE | 0 | 224.99 | 10 | 1.3E-4 % 4         | 2.9E-7 | 8  |
| CE | P | 225.09 | 10 | 1.8E-5 % 5         | 4.0E-8 | 11 |
| CE | М | 228.98 | 10 | 0.022 % 6          | 5.0E-5 | 13 |
| CE | N | 232.26 | 10 | 0.0056 % 14        | 1.3E-5 | 3  |
| CE | 0 | 233.19 | 10 | 0.0012 % 3         | 2.8E-6 | 7  |
| CE | P | 233.29 | 10 | 1.7E-4 % 4         | 3.9E-7 | 10 |
| CE | М | 233.78 | 10 | 0.0059 % 15        | 1.4E-5 | 4  |
| CE | N | 237.06 | 10 | 0.0015 % 4         | 3.6E-6 | 9  |
| CE | 0 | 237.99 | 10 | 3.3E-4 % 8         | 7.8E-7 | 20 |
| CE | L | 238.01 | 10 | 0.013 % 3          | 3.2E-5 | 8  |
| CE | P | 238.09 | 10 | 4.5E-5 % 11        | 1.1E-7 | 3  |
| CE | М | 251.18 | 10 | 0.0032 % 8         | 8.0E-6 | 20 |
| CE | N | 254.46 | 10 | 8.3E-4 % 21        | 2.1E-6 | 5  |
| CE | 0 | 255.39 | 10 | 1.8E-4 % 5         | 4.5E-7 | 12 |
| CE | P | 255.49 | 10 | 2.4E-5 % 6         | 6.2E-8 | 16 |
| CE | K | 264.27 | 7  | 0.015 % 4          | 3.9E-5 | 10 |
| CE | L | 266.26 | 8  | 0.0052 % 14        | 1.4E-5 | 4  |
| CE | М | 279.43 | 7  | 0.0012 % 3         | 3.4E-6 | 9  |
| CE | N | 282.71 | 7  | 3.2E-4 % 8         | 9.0E-7 | 23 |
| CE | 0 | 283.64 | 7  | 6.8E-5 % 18        | 1.9E-7 | 5  |
| CE | P | 283.74 | 7  | 9.4E-6 % 25        | 2.7E-8 | 7  |
| CE | L | 289.81 | 10 | 0.0065 % 17        | 1.9E-5 | 5  |
| CE | L | 296.51 | 10 | 0.030 % 8          | 8.8E-5 | 23 |
| CE | K | 300.82 | 7  | 0.011 % 3          | 3.3E-5 | 8  |
| CE | M | 302.98 | 10 | 0.0015 % 4         | 4.7E-6 | 12 |
| CE | N | 306.26 | 10 | 4.0E-4 % 10        | 1.2E-6 | 3  |
| CE | 0 | 307.19 | 10 | 8.6E-5 % 22        | 2.6E-7 | 7  |
|    |   |        |    |                    |        |    |

| CE P | 307.29 10       | 1.2E-5 % 3         | 3.6E-8 9         |
|------|-----------------|--------------------|------------------|
| CE M | 309.68 10       | 0.0070 % 18        | 2.2E-5 6         |
| CE N | 312.96 10       | 0.0018 % 5         | 5.7E-6 <i>15</i> |
| CE O | 313.89 10       | 3.9E-4 % 10        | 1.2E-6 3         |
| CE P | 313.99 10       | 5.4E-5 % 14        | 1.7E-7 4         |
| CE K | 327.77 10       | 0.030 % 8          | 9.9E-5 <i>25</i> |
| CE L | 342.51 8        | 0.0026 % 7         | 8.9E-6 <i>23</i> |
| CE M | 355.68 7        | 6.1E-4 % <i>16</i> | 2.2E-6 6         |
| CE N | 358.96 7        | 1.6E-4 % 4         | 5.7E-7 15        |
| CE O | 359.89 7        | 3.4E-5 % 9         | 1.2E-7 3         |
| CE P | 359.99 7        | 4.7E-6 % <i>12</i> | 1.7E-8 4         |
| CE K | 362.52 7        | 0.199 %            | 7.2E-4           |
| CE K | 377.07 7        | 0.018 % 5          | 7.0E-5 <i>18</i> |
| CE L | 379.06 8        | 0.0019 % 5         | 7.2E-6 <i>18</i> |
| CE M | 392.23 7        | 4.5E-4 % 12        | 1.8E-6 5         |
| CE K | 392.97 10       | 0.0029 % 22        | 1.1E-5 9         |
| CE N | 395.51 7        | 1.2E-4 % 3         | 4.6E-7 <i>12</i> |
| CE O | 396.44 7        | 2.5E-5 % 6         | 1.0E-7 3         |
| CE P | 396.54 7        | 3.5E-6 % 9         | 1.4E-8 3         |
| CE K | 400.42 7        | 0.019 % 5          | 7.5E-5 <i>19</i> |
| CE L | 406.01 10       | 0.0053 % 13        | 2.1E-5 5         |
| CE M | 419.18 10       | 0.0012 % 3         | 5.2E-6 <i>13</i> |
| CE N | 422.46 10       | 3.2E-4 % 8         | 1.4E-6 3         |
| CE O | 423.39 10       | 6.9E-5 % 17        | 2.9E-7 7         |
| CE P | 423.49 10       | 9.6E-6 % 24        | 4.1E-8 <i>10</i> |
| CE K | 426.17 20       | 0.013 % 4          | 5.7E-5 <i>15</i> |
| CE L | 440.76 8        | 0.038 %            | 1.69E-4          |
| CE K | 444.27 20       | 0.004 % 3          | 1.9E-5 <i>14</i> |
| CE M | 453.93 7        | 0.0092 %           | 4.2E-5           |
| CE L | 455.31 8        | 0.0032 % 8         | 1.5E-5 4         |
| CE N | 457.21 7        | 0.00238 %          | 1.09E-5          |
| CE O | 458.14 7        | 5.0E-4 %           | 2.31E-6          |
| CE P | 458.24 7        | 6.8E-5 %           | 3.1E-7           |
| CE M | 468.48 7        | 7.6E-4 % 19        | 3.6E-6 9         |
| CE L | 471.21 10       | 6E-4 % 3           | 2.9E-6 <i>16</i> |
| CE N | 471.76 7        | 2.0E-4 % 5         | 9.3E-7 <i>24</i> |
| CE O | 472.69 7        | 4.2E-5 % 11        | 2.0E-7 5         |
| CE P | 472.79 7        | 5.8E-6 % 15        | 2.8E-8 7         |
| CE K | 475.22 7        | 0.074 % 19         | 3.5E-4 9         |
| CE L | 478.66 <i>8</i> | 0.0033 % 8         | 1.6E-5 4         |
| CE M | 484.38 10       | 1.5E-4 % 7         | 7E-7 3           |
| CE N | 487.66 10       | 3.7E-5 % 19        | 1.8E-7 9         |

| CE O | 488.59 10        | 8E-6 % 4           | 3.8E-8 19        |
|------|------------------|--------------------|------------------|
| CE P | 488.69 10        | 1.1E-6 % 6         | 5E-9 <i>3</i>    |
| CE M | 491.83 7         | 7.7E-4 % 19        | 3.8E-6 10        |
| CE N | 495.11 7         | 2.0E-4 % 5         | 9.9E-7 <i>25</i> |
| CE O | 496.04 7         | 4.3E-5 % 11        | 2.1E-7 5         |
| CE P | 496.14 7         | 5.9E-6 % 15        | 2.9E-8 7         |
| CE K | 502.47 10        | 0.003 % 3          | 1.7E-5 <i>14</i> |
| CE L | 504.41 20        | 0.0023 % 6         | 1.2E-5 3         |
| CE M | 517.58 20        | 5.5E-4 % 14        | 2.9E-6 7         |
| CE N | 520.86 20        | 1.4E-4 % 4         | 7.5E-7 19        |
| CE O | 521.79 20        | 3.1E-5 % 8         | 1.6E-7 4         |
| CE P | 521.89 20        | 4.3E-6 % <i>11</i> | 2.2E-8 6         |
| CE L | 522.51 20        | 8E-4 % 4           | 4.1E-6 <i>22</i> |
| CE M | 535.68 20        | 1.9E-4 % 10        | 1.0E-6 5         |
| CE N | 538.96 <i>20</i> | 5E-5 % 3           | 2.7E-7 14        |
| CE O | 539.89 20        | 1.1E-5 % 6         | 6E-8 3           |
| CE P | 539.99 20        | 1.4E-6 % 8         | 8E-9 4           |
| CE K | 552.97 7         | 0.053 % 13         | 2.9E-4 7         |
| CE L | 553.46 8         | 0.013 % 3          | 7.1E-5 <i>18</i> |
| CE M | 566.63 7         | 0.0030 % 8         | 1.7E-5 4         |
| CE N | 569.91 7         | 7.8E-4 % 20        | 4.5E-6 11        |
| CE O | 570.84 7         | 1.7E-4 % 4         | 9.6E-7 <i>24</i> |
| CE P | 570.94 7         | 2.3E-5 % 6         | 1.3E-7 3         |
| CE L | 580.71 10        | 7E-4 % 4           | 3.9E-6 <i>22</i> |
| CE M | 593.88 10        | 1.7E-4 % 9         | 1.0E-6 5         |
| CE N | 597.16 10        | 4.4E-5 % 22        | 2.6E-7 13        |
| CE O | 598.09 10        | 9E-6 % 5           | 6E-8 3           |
| CE P | 598.19 10        | 1.3E-6 % 8         | 8E-9 5           |
| CE K | 600.52 7         | 0.0039 % 10        | 2.3E-5 6         |
| CE K | 625.47 10        | 8.5E-4 % <i>22</i> | 5.3E-6 <i>14</i> |
| CE L | 631.21 8         | 0.0092 % 23        | 5.8E-5 <i>15</i> |
| CE M | 644.38 7         | 0.0022 % 5         | 1.4E-5 4         |
| CE N | 647.66 7         | 5.6E-4 % 14        | 3.6E-6 9         |
| CE O | 648.59 7         | 1.2E-4 % 3         | 7.8E-7 20        |
| CE P | 648.69 7         | 1.7E-5 % 4         | 1.1E-7 3         |
| CE K | 660.87 10        | 0.0070 % 18        | 4.6E-5 <i>12</i> |
| CE K | 665.67 10        | 0.022 % 6          | 1.5E-4 4         |
| CE K | 671.57 7         | 0.0036 % 9         | 2.4E-5 6         |
| CE L | 678.76 8         | 0.0010 % 3         | 6.8E-6 17        |
| CE M | 691.93 7         | 2.5E-4 % 6         | 1.7E-6 4         |
| CE N | 695.21 7         | 6.4E-5 % 16        | 4.4E-7 11        |
| CE O | 696.14 7         | 1.3E-5 % <i>3</i>  | 9.2E-8 <i>23</i> |
|      |                  |                    |                  |

| CE | P | 696.24 | 7  | 1.7E-6 | 용  | 4  | 1.2E-8 | 3  |
|----|---|--------|----|--------|----|----|--------|----|
| CE | L | 703.71 | 10 | 2.1E-4 | 용  | 5  | 1.5E-6 | 4  |
| CE | K | 708.47 | 10 | 0.0014 | 용  | 4  | 1.0E-5 | 3  |
| CE | M | 716.88 | 10 | 5.3E-5 | 용  | 13 | 3.8E-7 | 10 |
| CE | N | 720.16 | 10 | 1.4E-5 | 양  | 3  | 1.0E-7 | 3  |
| CE | 0 | 721.09 | 10 | 2.8E-6 | 용  | 7  | 2.1E-8 | 5  |
| CE | P | 721.19 | 10 | 3.6E-7 | 용  | 9  | 2.6E-9 | 7  |
| CE | L | 739.11 | 10 | 0.0012 | 양  | 3  | 8.9E-6 | 23 |
| CE | L | 743.91 | 10 | 0.0038 | 용  | 10 | 2.9E-5 | 7  |
| CE | L | 749.81 | 8  | 8.8E-4 | 양  | 22 | 6.6E-6 | 17 |
| CE | M | 752.28 | 10 | 2.8E-4 | 양  | 7  | 2.1E-6 | 5  |
| CE | N | 755.56 | 10 | 7.4E-5 | 90 | 19 | 5.6E-7 | 14 |
| CE | 0 | 756.49 | 10 | 1.6E-5 | 양  | 4  | 1.2E-7 | 3  |
| CE | P | 756.59 | 10 | 2.2E-6 | 양  | 6  | 1.7E-8 | 4  |
| CE | M | 757.08 | 10 | 9.1E-4 | 양  | 23 | 6.9E-6 | 17 |
| CE | N | 760.36 | 10 | 2.3E-4 | 90 | 6  | 1.8E-6 | 5  |
| CE | 0 | 761.29 | 10 | 5.0E-5 | 양  | 13 | 3.8E-7 | 10 |
| CE | P | 761.39 | 10 | 7.0E-6 | 90 | 18 | 5.3E-8 | 13 |
| CE | М | 762.98 | 7  | 2.2E-4 | 90 | 5  | 1.6E-6 | 4  |
| CE | N | 766.26 | 7  | 5.6E-5 | 양  | 14 | 4.3E-7 | 11 |
| CE | 0 | 767.19 | 7  | 1.2E-5 | 용  | 3  | 8.9E-8 | 22 |
| CE | P | 767.29 | 7  | 1.5E-6 | 양  | 4  | 1.1E-8 | 3  |
| CE | L | 786.71 | 10 | 3.3E-4 | 용  | 8  | 2.6E-6 | 7  |
| CE | М | 799.88 | 10 | 8.0E-5 | 용  | 20 | 6.4E-7 | 16 |
| CE | N | 803.16 | 10 | 2.1E-5 | 양  | 5  | 1.7E-7 | 4  |
| CE | 0 | 804.09 | 10 | 4.3E-6 | 엉  | 11 | 3.5E-8 | 9  |
| CE | P | 804.19 | 10 | 5.5E-7 | 용  | 14 | 4.5E-9 | 11 |
| CE | K | 818.42 | 7  | 9.0E-4 | 엉  | 23 | 7.4E-6 | 19 |
| CE | K | 862.02 | 7  | 0.0021 | 용  | 5  | 1.8E-5 | 4  |
| CE | K | 868.32 | 7  | 0.0019 | 용  | 11 | 1.6E-5 | 10 |
| CE | K | 884.42 | 7  | 0.0019 | 용  | 5  | 1.7E-5 | 4  |
| CE | L | 896.66 | 8  | 1.4E-4 | 90 | 4  | 1.3E-6 | 3  |
| CE | K | 898.87 | 7  | 0.0020 | 90 | 5  | 1.8E-5 | 5  |
| CE | М | 909.83 | 7  | 3.3E-5 | 엉  | 8  | 3.0E-7 | 8  |
| CE | N | 913.11 | 7  | 8.6E-6 | 용  | 22 | 7.8E-8 | 20 |
| CE | 0 | 914.04 | 7  | 1.8E-6 | 용  | 5  | 1.7E-8 | 4  |
| CE |   | 914.14 |    | 2.5E-7 | 90 | 6  | 2.3E-9 | 6  |
| CE | L | 940.26 | 8  | 4.4E-4 | 양  | 11 | 4.1E-6 | 10 |
| CE | L | 946.56 | 8  | 3.4E-4 | 용  | 18 | 3.3E-6 |    |
| CE | М | 953.43 | 7  | 1.1E-4 | 양  | 3  | 1.0E-6 | 3  |
| CE | N | 956.71 | 7  | 2.7E-5 | 90 | 7  | 2.6E-7 | 7  |
| CE | 0 | 957.64 | 7  | 5.7E-6 | 양  | 15 | 5.5E-8 | 14 |
|    |   |        |    |        |    |    |        |    |

| CE | P | 957.74  | 7 | 7.4E-7 | 용기  | 19 | 7.1E-9 | 18 |
|----|---|---------|---|--------|-----|----|--------|----|
| CE | M | 959.73  | 7 | 8E-5 % | 4   |    | 8E-7 4 |    |
| CE | L | 962.66  | 8 | 4.1E-4 | 왕   | 11 | 3.9E-6 | 10 |
| CE | N | 963.01  | 7 | 2.1E-5 | 왕   | 11 | 2.1E-7 | 11 |
| CE | 0 | 963.94  | 7 | 4.6E-6 | 왕 2 | 23 | 4.4E-8 | 22 |
| CE | P | 964.04  | 7 | 6E-7 % | 3   |    | 6E-9 3 |    |
| CE | M | 975.83  | 7 | 1.0E-4 | % 3 | 3  | 9.5E-7 | 25 |
| CE | L | 977.11  | 8 | 4.2E-4 | % 1 | 11 | 4.1E-6 | 10 |
| CE | N | 979.11  | 7 | 2.5E-5 | %   | 7  | 2.5E-7 | 6  |
| CE | 0 | 980.04  | 7 | 5.3E-6 | %   | 14 | 5.2E-8 | 14 |
| CE | P | 980.14  | 7 | 6.9E-7 | %   | 18 | 6.8E-9 | 18 |
| CE | M | 990.28  | 7 | 1.0E-4 | % 3 | 3  | 1.0E-6 | 3  |
| CE | N | 993.56  | 7 | 2.6E-5 | % ? | 7  | 2.6E-7 | 7  |
| CE | 0 | 994.49  | 7 | 5.4E-6 | %   | 14 | 5.4E-8 | 14 |
| CE | P | 994.59  | 7 | 7.1E-7 | 왕 ] | 18 | 7.1E-9 | 18 |
| CE | K | 1102.32 | 7 | 4.4E-4 | 왕   | 11 | 4.9E-6 | 12 |
| CE | L | 1180.56 | 8 | 6.9E-5 | 왕   | 18 | 8.1E-7 | 21 |
| CE | M | 1193.73 | 7 | 1.6E-5 | 응 4 | 4  | 1.9E-7 | 5  |
| CE | N | 1197.01 | 7 | 4.1E-6 | 왕   | 11 | 5.0E-8 | 13 |
| CE | 0 | 1197.94 | 7 | 8.8E-7 | 왕 2 | 22 | 1.1E-8 | 3  |
| CE | P | 1198.04 | 7 | 1.2E-7 | 용 3 | 3  | 1.4E-9 | 4  |

# Gamma and X-ray radiation:

| J      | Energy<br>(keV) | Intensity<br>(%) | Dose<br>( MeV/Bq-s ) |  |  |
|--------|-----------------|------------------|----------------------|--|--|
| XR l   | 11.4            | 3.5 % 4          | 3.9E-4 5             |  |  |
|        | 72.70 7         | 0.65 % 17        | 4.8E-4 <i>12</i>     |  |  |
| XR kα2 | 78.948          | 1.40 % 16        | 0.00110 12           |  |  |
| XR kα1 | 81.517          | 2.3 % 3          | 0.00188 21           |  |  |
| XR kβ3 | 91.73           | 0.28 % 3         | 2.6E-4 3             |  |  |
| XR kβ1 | 92.315          | 0.54 % 6         | 5.0E-4 5             |  |  |
| XR kβ2 | 94.9            | 0.199 % 22       | 1.89E-4 <i>21</i>    |  |  |
|        | 190.35 7        | 0.16 % 4         | 3.1E-4 8             |  |  |
|        | 196.3 1         | 0.37 % 9         | 7.2E-4 18            |  |  |
|        | 225.1 1         | 0.057 % 15       | 1.3E-4 3             |  |  |
|        | 233.3 1         | 0.58 % 15        | 0.0014 3             |  |  |
|        | 238.1 1         | 0.17 % 4         | 3.9E-4 10            |  |  |
|        | 239.5 10        | 0.019 % 5        | 4.5E-5 <i>12</i>     |  |  |
|        | 255.5 1         | 0.11 % 3         | 2.8E-4 7             |  |  |
|        | 283.75 7        | 0.057 % 15       | 1.6E-4 4             |  |  |
|        | 307.3 1         | 0.089 % 23       | 2.7E-4 7             |  |  |

| 314.0 1        | 0.43 % 11  | 0.0013 | 3  |
|----------------|------------|--------|----|
| 331.7 3        | 0.019 % 5  | 6.2E-5 | 18 |
| 360.00 7       | 0.054 % 14 | 1.9E-4 | 5  |
| 396.55 7       | 0.052 % 13 | 2.1E-4 | 5  |
| 423.5 1        | 0.17 % 4   | 7.3E-4 | 18 |
| 458.25 7       | 1.9 %      | 0.0086 |    |
| 472.80 7       | 0.14 % 4   | 6.7E-4 | 17 |
| 488.7 1        | 0.041 % 11 | 2.0E-4 | 5  |
| 496.15 7       | 0.16 % 4   | 8.0E-4 | 20 |
| 521.9 <i>2</i> | 0.13 % 3   | 7.0E-4 | 18 |
| 540.0 2        | 0.072 % 20 | 3.9E-4 | 11 |
| 570.95 7       | 0.93 % 23  | 0.0053 | 13 |
| 598.2 1        | 0.085 % 22 | 5.1E-4 | 13 |
| 648.70 7       | 0.93 % 23  | 0.0061 | 15 |
| 696.25 7       | 0.32 % 8   | 0.0023 | 6  |
| 721.2 1        | 0.076 % 19 | 5.5E-4 | 14 |
| 756.6 1        | 0.18 % 5   | 0.0014 | 4  |
| 761.4 1        | 0.60 % 15  | 0.0045 | 11 |
| 767.30 7       | 0.37 % 9   | 0.0028 | 7  |
| 796            | 0.015 % 4  | 1.2E-4 | 3  |
| 804.2 1        | 0.15 % 4   | 0.0012 | 3  |
| 837            | 0.017 % 5  | 1.4E-4 | 4  |
| 911.9 1        | 0.066 % 18 | 6.0E-4 | 17 |
| 914.15 7       | 0.33 % 8   | 0.0030 | 8  |
| 957.75 7       | 0.31 % 8   | 0.0030 | 8  |
| 964.05 7       | 0.14 % 4   | 0.0014 | 4  |
| 980.15 7       | 0.31 % 8   | 0.0030 | 8  |
| 994.60 7       | 0.33 % 8   | 0.0032 | 8  |
| 1198.05 7      | 0.26 % 7   | 0.0031 | 8  |
|                |            |        |    |

### Gamma Coincidence Data:

For each gamma, the list of gammas in coincidence is given. If experimentally known, an estimate of the average time interval (in seconds) between both gammas is given

#### E(γ) Coincidence

72.70 190.35, 190.35, 196.3, 196.3, 225.1, 225.1, 233.3, 233.3, 238.1, 238.1, 239.5, 239.5, 248, 255.5, 255.5, 283.75, 283.75, 307.3, 307.3, 314.0, 314.0, 331.7, 331.7, 360.00, 360.00, 396.55, 396.55, 423.5, 423.5, 437.85, 458.25, 458.25, 472.80, 472.80, 484.5, 488.7, 488.7, 521.9, 521.9, 540.0, 540.0, 570.95, 570.95, 591.9, 598.2, 598.2, 648.70, 648.70, 673, 689, 696.25, 696.25, 756.6, 756.6, 761.4, 761.4, 767.30, 767.30, 796, 796, 804.2, 804.2, 828, 837, 837, 879.65, 911.9, 911.9, 914.15, 914.15, 957.75, 957.75, 964.05, 964.05, 980.15, 980.15, 994.60, 994.60, 1164.5, 1198.05, 1198.05, 1202.5, 1743

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190.35 72.70, 458.25

196.3

- 72.70, 190.35, 225.1, 238.1, 239.5, 255.5, 283.75, 307.3, 331.7, 423.5, 458.25, 488.7, 496.15, 521.9, 540.0, 570.95, 648.70, 696.25, 721.2, 761.4, 796, 828, 879.65, 911.9, 964.05, 980.15
- 196.3 72.70, 190.35, 225.1, 238.1, 239.5, 255.5, 283.75, 307.3, 331.7, 423.5, 458.25, 488.7, 496.15, 521.9, 540.0, 570.95, 648.70, 696.25, 721.2, 761.4, 796, 911.9, 964.05, 980.15
- 225.1 72.70, 196.3, 196.3, 233.3, 233.3, 239.5, 239.5, 248, 314.0, 314.0, 331.7, 331.7, 423.5, 437.85, 472.80, 472.80, 484.5, 496.15, 570.95, 570.95, 591.9, 673, 689, 767.30, 767.30, 804.2, 804.2, 828, 879.65, 914.15, 914.15, 1202.5
- 225.1 72.70, 423.5, 496.15
- 233.3 72.70, 190.35, 225.1, 238.1, 239.5, 255.5, 283.75, 307.3, 331.7, 423.5, 458.25, 488.7, 496.15, 521.9, 540.0, 570.95, 591.9, 648.70, 673, 689, 696.25, 721.2, 761.4, 796, 911.9, 964.05, 980.15
- 233.3 72.70, 190.35, 225.1, 238.1, 239.5, 255.5, 283.75, 307.3, 331.7, 423.5, 458.25, 488.7, 496.15, 521.9, 540.0, 570.95, 648.70, 696.25, 721.2, 761.4, 796, 911.9, 964.05, 980.15
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- 239.5 72.70, 190.35, 196.3, 196.3, 225.1, 233.3, 233.3, 238.1, 283.75, 331.7, 423.5, 458.25, 496.15, 521.9, 591.9, 648.70, 673, 689, 696.25, 721.2, 828, 879.65, 980.15
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- 248 72.70, 190.35, 225.1, 238.1, 283.75, 331.7, 360.00, 423.5, 458.25, 496.15, 521.9, 598.2, 648.70, 696.25, 721.2, 837, 914.15, 980.15, 1198.05
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- 255.5 72.70, 423.5, 496.15, 540.0, 964.05
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- 283.75 72.70, 238.1, 458.25, 696.25
- 307.3 72.70, 196.3, 196.3, 233.3, 233.3, 423.5, 488.7, 496.15, 591.9, 673, 689, 828, 879.65, 911.9
- 307.3 72.70, 423.5, 488.7, 496.15, 911.9
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