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An Overview of the XGAM Code and Related Software for Gamma-ray Analysis

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An overview of the XGAM code and related software for gamma-ray analysis

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The XGAM spectrum-fitting code and associated software were developed specifically to analyze the complex gamma-ray spectra that can result from neutron-induced reactions. The XGAM code is designed to fit a spectrum over the entire available gamma-ray energy range as a single entity, in contrast to the more traditional piecewise approaches. This global-fit philosophy enforces background continuity as well as consistency between local and global behavior throughout the spectrum, and in a natural way. This report presents XGAM and the suite of programs built around it with an emphasis on how they fit into an overall analysis methodology for complex gamma-ray data. An application to the analysis of time-dependent delayed gamma-ray yields from ^{235}U fission is shown in order to showcase the codes and how they interact.

Contents

I. INTRODUCTION

The analysis of gamma-ray spectra is a fundamental activity in a great deal of low-energy nuclear experimental work. As a result, a variety of computer programs have been developed over the years for the analysis of gamma-ray spectra. The analysis methodology then tends to be dictated by the features available in the fitting program being used. In particular, it is common practice to fit gamma-ray spectra in a "piecewise" approach, focusing on one small energy range at a time and then combining the results from these individual fits to deduce overall peak shape parameters (e.g., widths, tails, Gaussian asymmetry, etc.). This process can (and should) be iterated to improve the individual fits and global peak shape parameters.

There is an alternate approach to peak fitting, and it is the one that will be emphasized in this report. Instead of treating the spectrum as a piecewise collection of regions of interest, we can view the entire spectrum as a single entity. There are several advantages to such a global-fitting approach, but in particular:

- it is easier to ensure that the background is smooth and continuous over the entire range of the spectrum when a single continuous function is used to describe it

- local features of the spectrum (whether or not a peak consists of a single or multiple lines, what the peak heights and centroids are, etc.) and the global peak shape parameters are intricately linked, and it is natural to fit them simultaneously

- the ability to vary all the parameters in the fit simultaneously means that the complete covariance matrix can be constructed, reflecting all the correlations between the parameters and their associated uncertainties (for example, in a piecewise approach, if the peak width function is kept fixed while the individual peak heights and centroids are fitted, the resulting uncertainties on these centroids and heights will not automatically contain the contribution from the variance in the widths or from the covariance between the widths and peak parameters)

The `XGAM` code was written to incorporate these global-fitting principles, and to the treat all parts of the spectrum on an equal footing. In addition to `XGAM`, a suite of codes has been developed by the author to process the `XGAM` fits into publication-ready results and figures[15]. The emphasis in writing this suite of programs has been placed on automating the analysis process as much as possible, while still allowing the user to intervene at any point. In practice, this means that the entire analysis process can be inspected, reproduced, and improved upon. In addition, treating the entire spectrum on an equal footing can reduce user bias and make it easier to detect systematic problems with the data or the analysis.

This report is not intended as a manual or user's guide, but rather to present the codes that have been developed and show how they can be used within a unified analysis methodology. In section II A, the `XGAM` code itself is discussed. In section II B, the `XGAMCAL` code is presented which takes output from the `XGAM` fit and provides the user with a graphical interface to identify and calibrate the peaks using well-known gamma-ray energies. The `XGAMPLOT` code described in section II C can then be used to produce plots of the spectra and their fits. Additional codes described in section II D were developed to automate the rest of the analysis as much as possible and generate tables and figures of gamma-ray yields, and compare them to model calculations. Finally, these tools are applied in section III to extract delayed gamma-ray yields following neutron-induced fission on ^{235}U.

II. ANALYSIS TOOLS

A. Spectrum fitting using `XGAM`

Fitting large gamma-ray energy ranges presents its own unique challenges. a 1-MeV wide fit can contain hundreds of peaks, depending on the reaction studied. In practical terms, the program may need to describe thousands of channels with hundreds of free parameters. If the fit extends to low energies, it may include both gamma- and x-rays. The fitted range can also include neutron bumps, Doppler-broadened peaks and other local features that do not display the same peak-shape behavior as the rest of the spectrum.

The `XGAM` code was developed to handle these challenges, and was first applied to the analysis of gamma-ray data following neutron-induced reactions on ^{235}U measured using the GEANIE spectrometer at LANSCE/WNR [1]. It has since been used in the analysis of other complex data sets [2–6]. The `XGAM` code can be run interactively, although it is preferable to run it in batch mode using input command files. By running in batch mode, the command file provides a record of the details of the fit that can be easily modified or used as a template for other fits (e.g., for fitting gamma-ray spectra evolving over successive time bins). The code provides two basic peak shapes: Gaussian (for γ-rays) and Voigt profile (for x-rays). These basic peak shapes can be modified by including tails (both low- and high-energy) and Gaussian asymmetries [7]. The peak shape parameters (width, tails, Gaussian asymmetries) can be specified globally, as a function of channel number, or locally for individual peaks. For example, the triangular shape of neutron bumps can be modeled using local parameters as a pure high-energy tail. The background is modeled by a polynomial function over the entire spectrum and a Compton step (given by an error function) under the individual peaks.

Once the parameters of the fit have been defined and initialized, `XGAM` uses the Levenberg-Marquardt algorithm [8] to minimize the χ^2 between the fit function and the data. The code also provides an option to use a gradient-search or a Poisson Maximum-likelihood algorithm to minimize the χ^2. The code provides commands to write out the following information to output files:

- a calibration file that serves as a starting point for `XGAMCAL` (see section II B)

- a new command file with the optimized values of the fitting parameters that can be used to start a new fit

- a file containing the covariance matrix for the parameters

- files containing the fit function and residual, e.g. for display purposes

- a report file listing the best fit parameters and deduced photopeak areas

In practice, the fit requires several passes (i.e., separate runs of the `XGAM` code). At each pass, the fitting function is improved (e.g., by adding peaks, adding terms to the background polynomial, etc.). For the first pass, the user can specify the peaks and background manually, or use an option in the code to find peaks and trace the background function automatically given a few user-specified search parameters (mainly a threshold for peak area, rough width parameters to help identify localized features, and the polynomial order for the background).

B. Energy calibration and peak identification using `XGAMCAL`

A rough calibration can be used in `XGAM` specifying energy as a polynomial function of channel number, but `XGAMCAL` provides a graphical interface to extract a very precise energy calibration from the `XGAM` fit to the data. When `XGAM` is run, an output file can be written out using the "writecal" command that contains fitted centroids along with their (roughly) calibrated energies. `XGAMCAL` reads in that file and the user can then step through each peak, decide whether it corresponds to a well-known line, and specify an accepted energy and uncertainty for that peak (e.g., from the ENSDF database). With the click of a button, `XGAMCAL` will then fit a linear calibration to the selected peaks using the fiducial energies, calculate the residual energies (the fiducial energies, e.g. from ENSDF, minus the linear fit value), and fit the residuals with a polynomial of order specified by the user. Uncertainties from the linear and polynomial fits are automatically propagated. Figure 1 shows a screen shot from an `XGAMCAL` session.

Typically, the user would first identify a few strong clean peaks as calibration lines, covering as much as possible of the full energy range of the spectrum. Then hitting the "update" button will cause `XGAMCAL` to perform the linear and non-linear fits, and clicking "save" will write this new fit to the calibration file. Looking through the calibration file, the user can now identify more peaks in the spectrum and add more calibration lines to better constrain the `XGAMCAL` fits. In this way, the calibration can be gradually improved, and more and more peaks in the spectrum can be given potential identifications. Using this approach, and depending on the spectrum, energy uncertainties of as few as tens of electron volts can be achieved for HPGe data. The ASCII calibration file produced at the end contains all the fit information, along with optional textual descriptions of the individual lines provided by the user.

C. Plotting spectra and fits using `XGAMPLOT`

`XGAM` produces an output file that can be read in by the `XGAMPLOT` code to generate publication-quality plots of the spectra and fits. `XGAMPLOT` first creates a command file for the IDL commercial plotting package (Exelis Visual Information Solutions, Boulder, Colorado), which is used for visualization in a variety of scientific fields. Then `XGAMPLOT` automatically runs the command file to produce a multi-page postscript file for viewing. The user can choose what to display on the final plot through command-line options to `XGAMPLOT`, or by editing the IDL command file it generates and re-running IDL. Through the command-line options to `XGAMPLOT` the user can, for example,

- specify output names for the IDL and postscript files
- specify a title for the plot
- specify one or more energy ranges to display (each energy range will be shown on a different page of the postscript output)
- decide whether or not to automatically label the peaks with markers showing their centroid energy (and optionally the corresponding channel number)
- choose whether to use a linear or logarithmic axis
- specify individual peaks that should be shaded in a solid color for emphasis

For each energy range of interest, `XGAMPLOT` shows the data, the fit function, the background from the fit, and the individual fitted peaks. In addition, a normalized residual spectrum (data minus fit, divided by square root of data) is shown at the bottom of each plot. An example generated by `XGAMPLOT` is shown in Fig. 2.

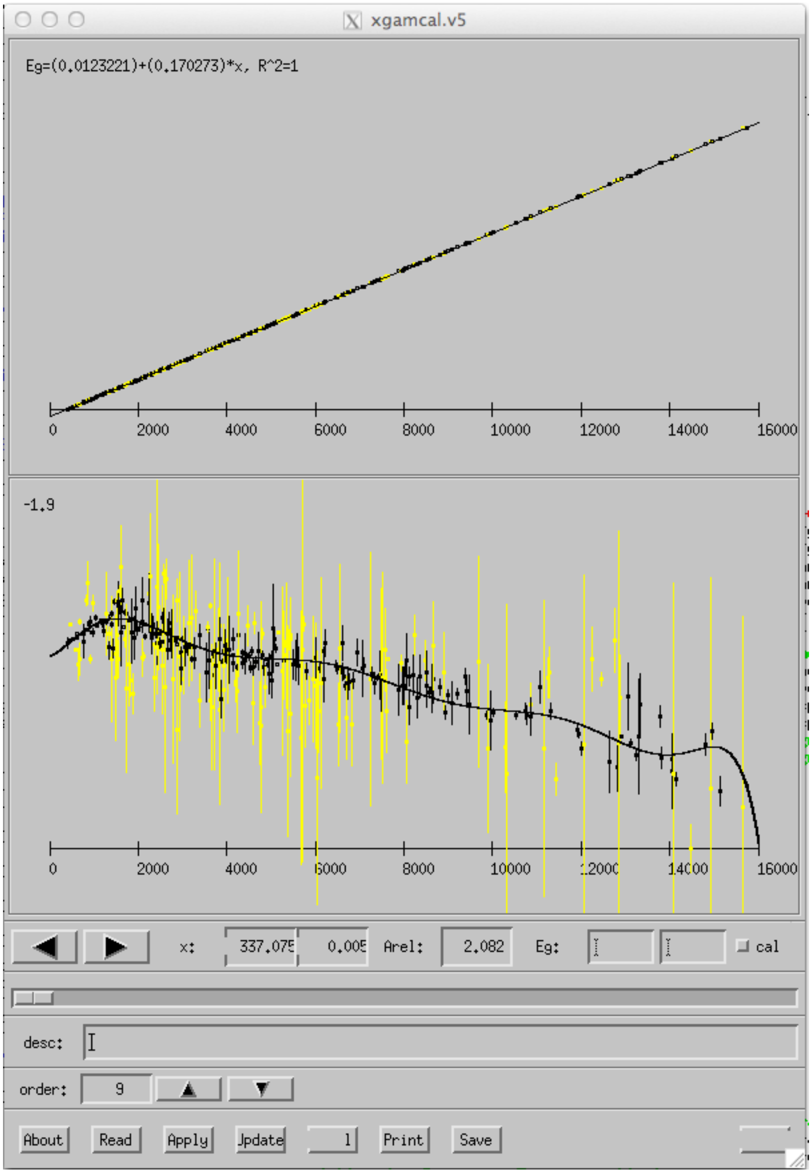


Figure 1: Screen shot of the XGAMCAL graphical interface. The top plot shows the linear fit to the calibration data and the bottom part shows a polynomial fit to the residuals (in this case of order 9). Black points are lines considered reliable enough for calibration, while the yellow points represent lines that were excluded by the user from the fits.

D. Miscellaneous tools for automated analysis of gamma-ray yields

While XGAM, XGAMCAL, and XGAMPLOT are the main tools to analyze gamma-ray spectra, a series of codes and scripts have been developed by the author specifically to analyze and extract gamma-ray yields from the fits. The main tools developed for this analysis are described in this section.

1. Retrieving fission-product information from the NUDAT database using the GETDECAYS web scraper and the PARSEDECAY parser

The NUDAT database is an excellent resource for crucial information about fission fragments (e.g., gamma-ray energies, intensities, and their uncertainties, half lives of the parent nuclei, branching ratios), but at present the most convenient way to retrieve this information is through the web-based form interface at http://www.nndc.bnl.gov/nudat2/indx_dec.jsp. Unfortunately if these data are required for a large number of fission fragments, retrieving

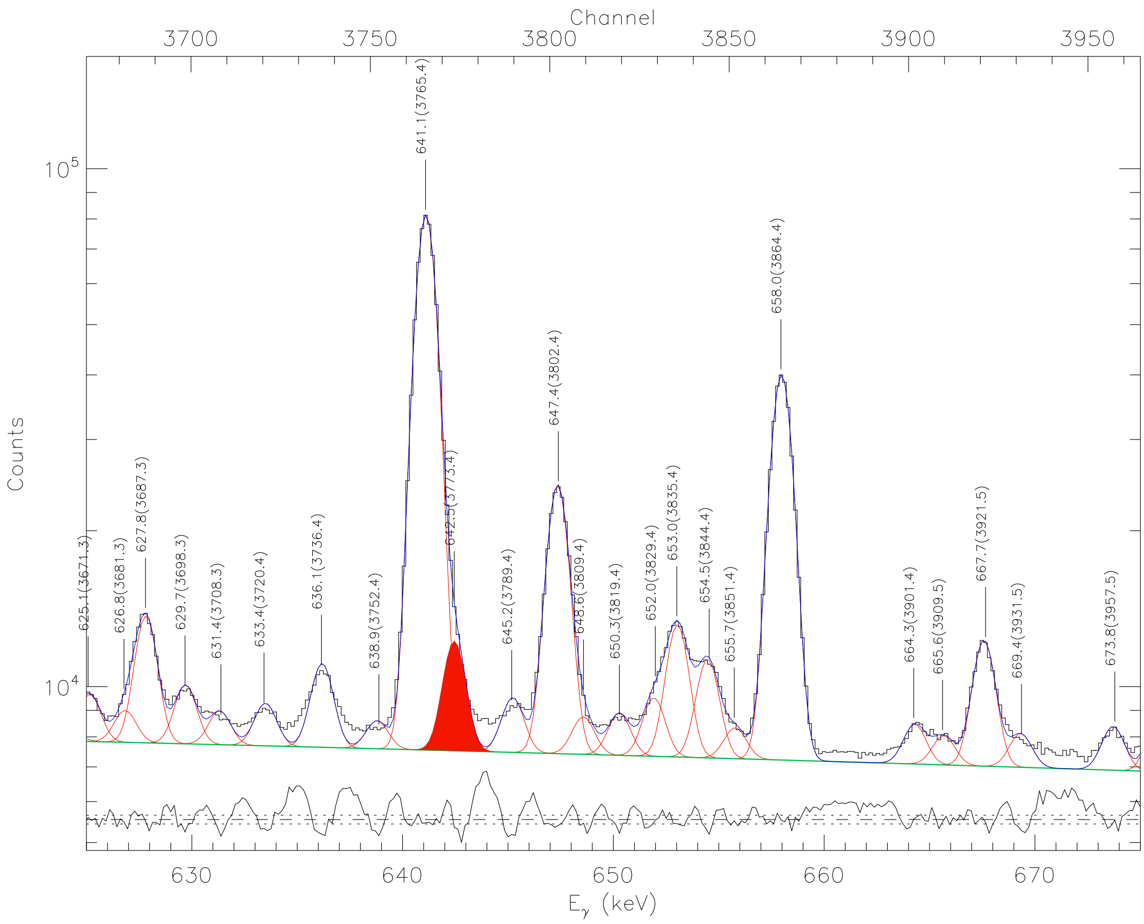


Figure 2: Sample postscript file output generated by **XGAMPLOT**. The data histogram is plotted in black, the total fit is a blue line, the background is shown as a green line, and the individual peaks are shown as red lines. The peak at 642.5 keV has been intentionally shaded in red for emphasis. Peak markers give the energy (and channel number in parentheses) for each peak. A normalized residual is plotted at the bottom: the gray curve is the normalized residual, the dashed line marks the zero level, and the dotted lines above and below it mark the ±1 values.

them manually becomes time-consuming and error-prone. A web scraper is a program that automatically retrieves information from websites by performing all the same interactions with the website that a human user would. Thus, the **GETDECAYS** python script was written as a web scraper to fill in the NUDAT search forms online and retrieve the requested files for any number of fission fragments. These NUDAT files are stored in a single zip file by **GETDECAYS** to save disk space. The following information is supplied by the user through command-line arguments

- the range of charge numbers (Z) for the desired fragments
- the range of mass numbers (A) for the desired fragments

- the range of parent half lives (and their units) for the desired fragments
- the name of the output zip file

The `GETDECAYS` script uses the selenium python module to drive an instance of the firefox browser and interact with the NUDAT website. The information can then be retrieved either by expanding the required NUDAT file and reading through the information it contains, or by using the `PARSEDECAY` script which does the same thing automatically. `PARSEDECAY` takes as input the name of the zip file, the name of the parent nucleus, whether the decaying state is metastable or not, the gamma-ray energy of interest, and an energy tolerance to match the correct gamma-ray energy in the NUDAT file. `PARSEDECAY` will then access the appropriate NUDAT file, retrieve the available information and print it out to the screen. The `MAPNUDAT` code described below (see section II D 4) performs essentially the same functions as `PARSEDECAY` but for a list of gamma-rays and produces a table at the end.

2. Standalone peak finder FINDPEAKS1D

Although `XGAM` contains its own peak-finding routine, a standalone command-line peak finder is also provided which can be used without invoking the full machinery of `XGAM`. The `FINDPEAKS1D` code uses the FUL algorithm [9] to subtract a background from the spectrum. The code then automatically fits the most significant peaks with Gaussians and subtracts them from the spectrum. This process is iterated until no significant peak (as defined by user input parameters) are left. This tool is not intended as a substitute for a proper analysis of the spectrum (e.g. using `XGAM`). Rather, it can be used to quickly label peaks. Whether or not a feature in the spectrum is recognized as a peak depends to some extent on the peak-search parameters specified by the user. Therefore care should be taken to visually confirm the peak identifications, and perhaps also to quantify the sensitivity of the results to the peak-search parameters.

3. Automated fitting of large number of spectra from a template: the AUTOFIT script

The `XGAM` code was originally written to fit large numbers of spectra from a common template in order to generate excitation functions and partial gamma-ray cross sections [1]. Thus, if a data set is broken up into individual bins (identified, e.g., by a time index), the total spectrum can serve as a template that is applied to data from the individual bins. In this way, hundreds of spectra can be fit very efficiently. Furthermore, since all the details of the fit are saved in individual command files, they can be subsequently revisited and improved.

A relatively straightforward bash script (`AUTOFIT`) was written that modifies the original `XGAM` template and fits the individual bin spectra in three successive stages, with more parameters freed at each stage:

1. peak heights and background polynomial are free to vary, peak centroids and peak-shape parameters are kept fixed
2. peak centroids are freed
3. peak-width parameters are freed

Of course there are many other possible ways of fitting the individual spectra from the template, and the user should decide which parameters to free up and in what sequence depending on the particular data set. The `AUTOFIT` script can serve as an example that should be tailored to the specific analysis needs.

4. Processing FIER data files using MAPNUDAT and MATCHEDFIER

Although experimental data must ultimately stand on their own merits, it is nevertheless useful to compare them to model predictions both to gain confidence in the analysis of the data and to identify potential problems in the data, their analysis, or the models. In section III, measured gamma-ray yields are compared to model predictions from the `FIER` code [10]. The code uses yields from the England and Rider compilation and gamma-ray information from several databases (CINDER 2008, ENSDF-2, TORI, and ENDF) to solve the Bateman equations and produce time-dependent fission-product gamma-ray yields. Therefore, we discuss here some scripts that parse `FIER` output and prepare it for further processing to generate comparisons between data and model.

The `FIER` predictions can be output as files of comma-separated values (CSV) where each line corresponds to one gamma ray from one parent nucleus and follows the format

$$ZZMAAA,\ E_\gamma,\ C_1,\ C_2,\ldots$$

where $ZZMAAA$ is an integer which can be parsed to extract the Z, A, and metastable-state information for the parent, E_γ is the gamma-ray energy in keV, and the C_i are the average number of gammas emitted in successive time bins. The `MAPNUDAT` script reads this `FIER` output file and the zipped collection of NUDAT files for the fragments (see section II D 1) To generate an ASCII table containing, for each gamma-ray, the parent and daughter nucleus names, the gamma-ray energy and its uncertainty, the half life of the parent state and its uncertainty, the branching ratio and its uncertainty, and the relative gamma-ray intensity and its uncertainty. The `MATCHEDFIER` script then reads this table, and generates a new `FIER` output file in CSV format for those gamma-rays for which NUDAT information is available. The file generated by `MAPNUDAT` is a general-purpose table of fission-fragment information, and the CSV file generated by `MATCHEDFIER` will be used by the `AUTOPLOT` code (see section II D 5) to compare experimental yields to the `FIER` predictions.

5. *Extracting and plotting time-dependent gamma-ray yields using* `AUTOPLOT`

The final step in the analysis consists in converting gamma-ray photopeak areas, obtained using `XGAM`, to yields and generating plots comparing them to `FIER` predictions. This can be done automatically using the `AUTOPLOT` script. `AUTOPLOT` reads the `XGAM` output files containing peak areas for the individual spectra, as well as the detector efficiency and livetime fraction (as a function of time bin) for the detector, and uses them to calculate time-dependent gamma-ray yields. `AUTOPLOT` also reads the `FIER` predictions prepared by the `MATCHEDFIER` script (see section II D 4) and matches them to the experimental yields by gamma-ray energy. The matching algorithm between the data and `FIER` uses the width function, fitted using `XGAM`, and a matching parameter supplied by the user: if a peak's centroid energy in the experimental data (determined by, e.g., `XGAMCAL`) and a gamma-ray energy in the `FIER` output file are separated by less than the peak width times the matching parameter (which should be a small number, like 0.2), then the experimental and `FIER` lines are considered to be a match. Note that several `FIER` lines can match a single measured gamma-ray; in this case the `FIER` yields are added before comparing them to the experimental yield. This is essentially a statement of the fact that several gamma-rays may contribute to a measured yield, but cannot be disentangled given the detector resolution.

Once the photopeak areas have been converted to gamma-ray yields and matched to corresponding `FIER` predictions, `AUTOPLOT` generates a postscript file showing plots of the individual gamma-ray yields compared to the `FIER` predictions. The plots are sorted in order of decreasing time-integrated strength of the gamma-ray yield (i.e., the strongest yields are plotted first). `AUTOPLOT` generates the postscript file by first creating a script for the IDL plotting package (Exelis Visual Information Solutions, Boulder, Colorado), and then running that script through IDL. The user can modify the IDL script to customize the output, if needed. In order to make it easier to find the plot for a specific gamma-ray, `AUTOPLOT` also produces an index file for the plots, sorted by A, then Z, then metastable index, then gamma-ray energy.

III. EXAMPLE: ANALYSIS OF TIME-DEPENDENT FISSION GAMMA-RAY YIELDS

In order to illustrate the analysis tools and methodology outlined in section II, we show here highlights from a preliminary analysis of delayed gamma-ray yields following irradiation of a ^{235}U sample in the Godiva reactor. The gamma-ray data discussed here were obtained as a result of a PNNL-LLNL-LANL collaborative effort. The data were measured using two HPGe detectors (referred to as 8815 and 8816 hereafter) and are of extremely high quality. Since the purpose of this section is to showcase the analysis tools and methodology, the details of the measurement and data reduction will not be discussed here and can be found elsewhere [11, 12]. The analysis presented here is preliminary.

Single-fold spectra were sorted for the two detectors and analyzed using `XGAM`. In all, 564 peaks and a background polynomial of order 39 were used in the fit to detector 8815 data, with an overall χ^2/d.o.f. = 10.8. For detector 8816, 557 peaks and a background polynomial of order 30 were used, with an overall χ^2/d.o.f. = 8.0. The fits, plotted using `XGAMPLOT` are shown in Figs. 3 and 4 for detectors 8815 and 8816, respectively.

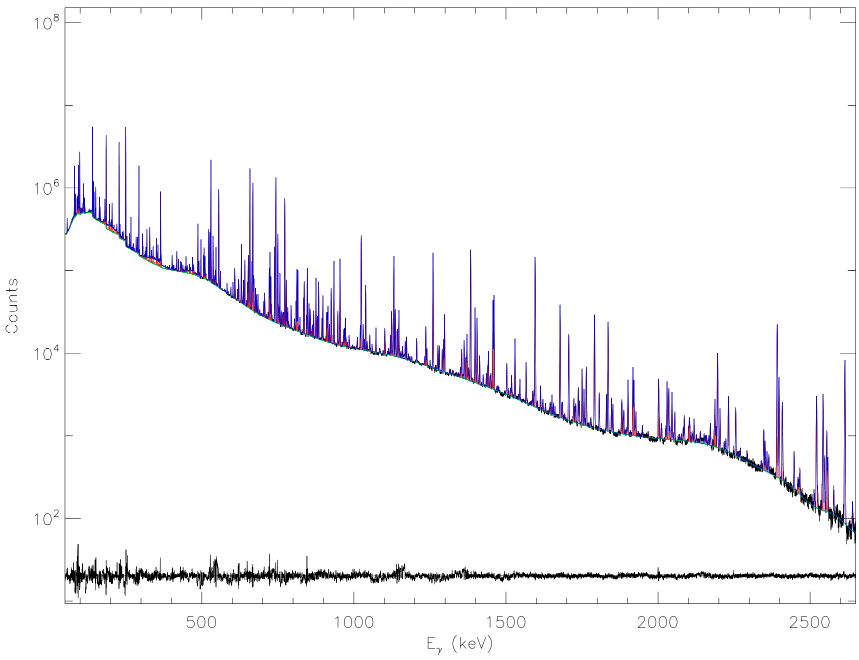


Figure 3: Fit to the time-integrated spectrum for detector 8815. The data are shown in black, individual peaks in red, the background polynomial in green, and the total fit (peaks + background) in blue. The normalized residual from the fit is plotted at the bottom.

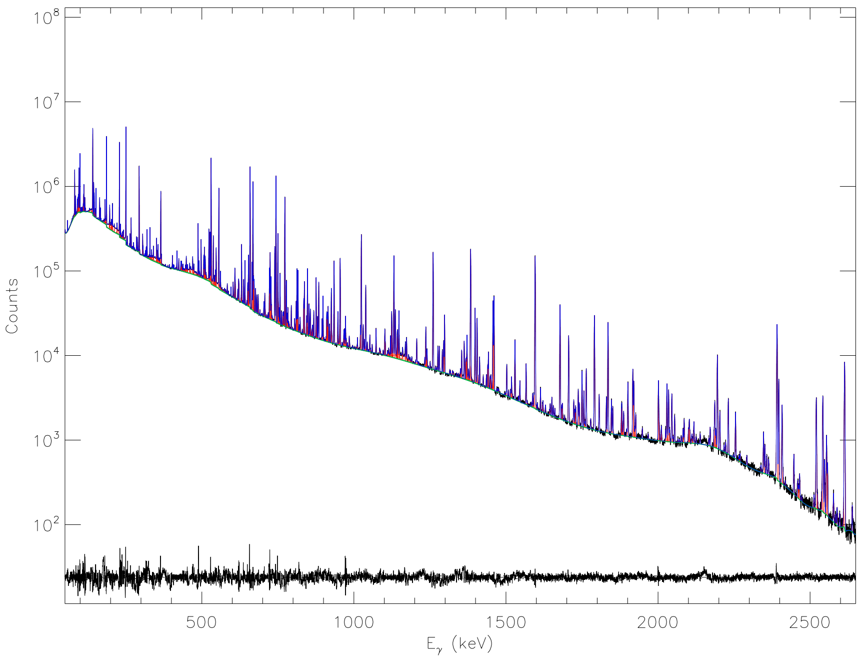


Figure 4: Fit to the time-integrated spectrum for detector 8816. The data are shown in black, individual peaks in red, the background polynomial in green, and the total fit (peaks + background) in blue. The normalized residual from the fit is plotted at the bottom.

Fission lines with well-known energies were used to calibrate these fits using `XGAMCAL`. The reference energies and their uncertainties were taken from the ENSDF online database. For detector 8815, 210 calibration gamma-rays were used (out of a total of 341 potential reference lines) and the non-linearity in the residuals was fitted with a polynomial of order 9. The root-mean-square deviation between calibrated and ENSDF energies for the 210 calibration lines obtained in this way is 63.3 eV. For detector 8816, 189 calibration gamma-rays were used (out of a total of 308 potential reference lines) and the non-linearity in the residuals was fitted with a polynomial of order 8. The root-mean-square deviation between calibrated and ENSDF energies for the 210 calibration lines obtained in this way is 56.3 eV. The linear and non-linear contributions to the calibrations are shown in Figs. 5 and 6 for detectors 8815 and 8816, respectively.

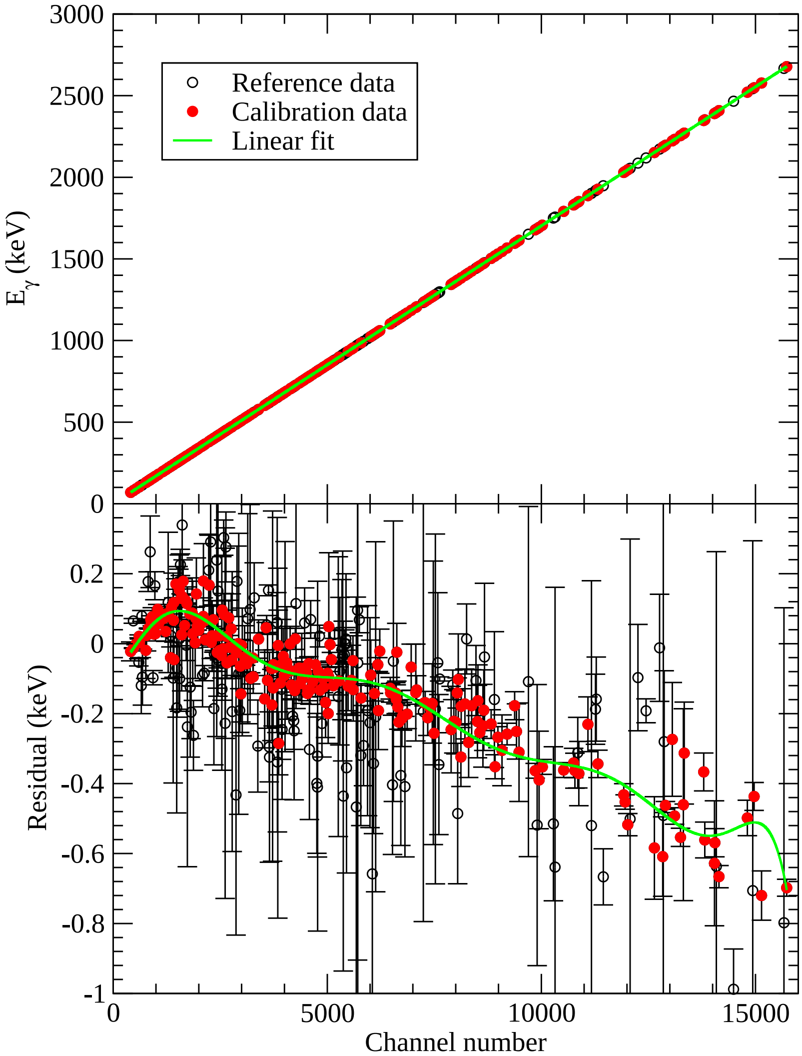


Figure 5: Energy calibration for detector 8815 obtained using XGAMCAL. The top panel shows the linear calibration, while the bottom gives a polynomial fit to the residual from that linear calibration.

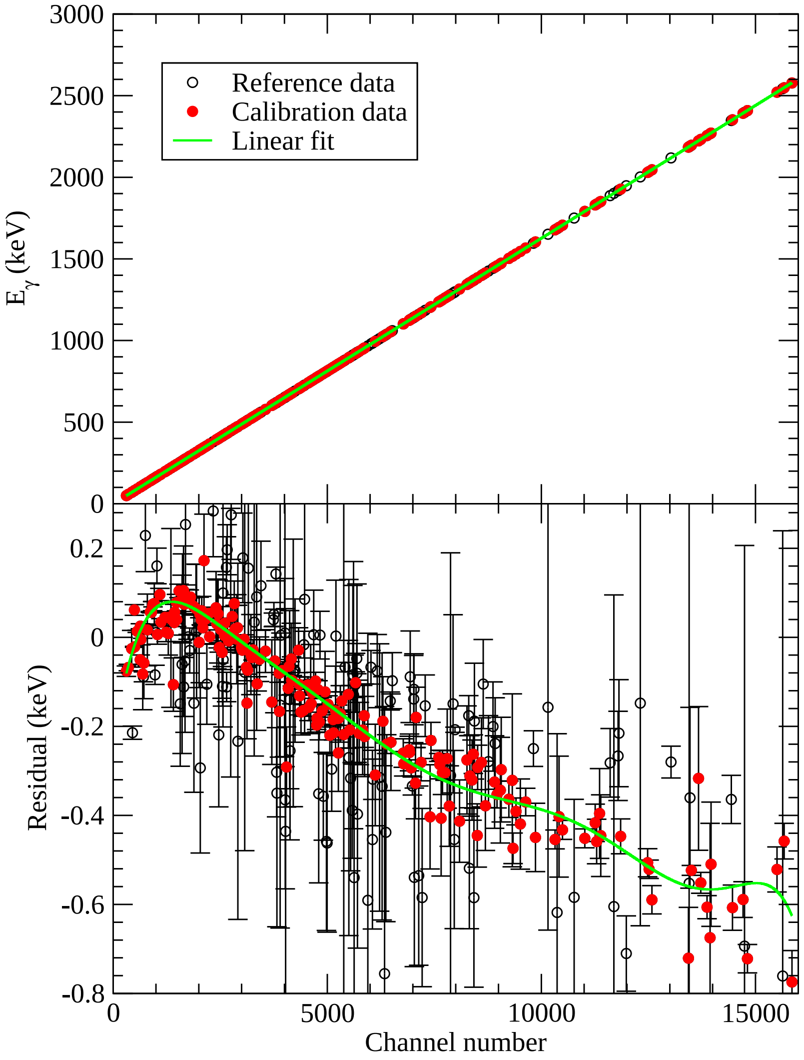


Figure 6: Energy calibration for detector 8816 obtained using `XGAMCAL`. The top panel shows the linear calibration, while the bottom gives a polynomial fit to the residual from that linear calibration.

The data were then sorted into individual one-hour spectra. In total, 163 spectra were generated for each detector, spanning the time range from 291 to 10124 minutes after irradiation. The `XGAM` fits described above were used as a template for the `AUTOFIT` script, which was applied to the individual spectra using parallel processing. `FIER` calculations of gamma-ray yields were performed by E. Matthews [14] for fission-spectrum neutrons incident on a ^{235}U target, with the resulting gamma yields binned in 15-minute increments from immediately after irradiation to 7 days later. A total of 19730 gamma-rays were included in the `FIER` calculation, and we selected a subset of 3992 among the stronger lines. The results from the `FIER` calculation were scaled to match the number of fission for the Godiva run, which was taken to be 5.3×10^{10}, based on witness-foil analysis [11].

The `GETDECAYS` script was used to retrieve fragment information from the NUDAT database with the parent half-life constraint of 1 hour $\leq T_{1/2} \leq$ 30 days, and particle-number constraints for the light fragment $32 \leq Z \leq 50$ and $76 \leq A \leq 117$, and for the heavy fragment $50 \leq Z \leq 64$ and $126 \leq A \leq 157$. Using this NUDAT information, the FIER output file was further processed using the `MAPNUDAT` and `MATCHEDFIER` scripts. Finally, the `AUTOPLOT` script was used to generate, plot, and compare experimental gamma-ray yields to the `FIER` calculations. Inside the

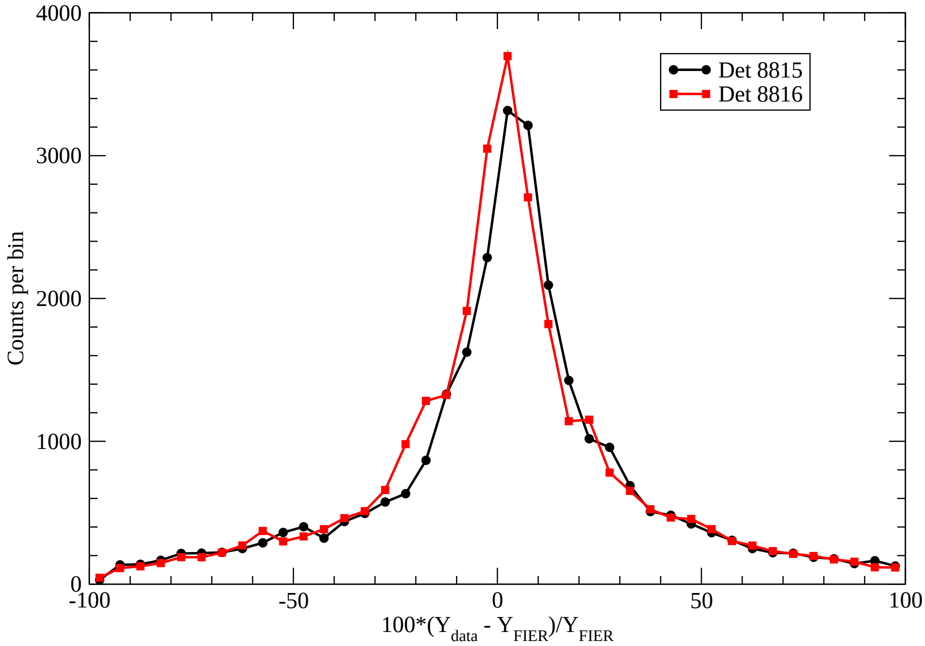


Figure 7: Summary of comparison between gamma-ray yields obtained from the data and calculated by `FIER` for both detectors. See text for details.

`AUTOPLOT` script, the photopeak areas obtained from the fits to the individual one-hour spectra were divided by the absolute detection efficiencies (extracted through the analysis of calibration sources by A. Tonchev [13]) and time-dependent livetime fractions to produce time-dependent gamma-ray yields. A matching parameter of 0.2 was used in the `AUTOPLOT` script to associate each experimental yield with a `FIER` calculation. In some cases, more than one FIER line could be matched to a single line in the data. Thus for example, the 249.8-keV line in the large-sample data could be matched to the 249.794-keV line from the decay of ^{135}Xe, the 249.700-keV line from ^{128}Sb, and the 249.805-keV line from ^{77}As. When more than one `FIER` line matched an experimental line, the calculated yields were automatically added together by `AUTOPLOT`, and the total was compared to the data. The resulting gamma-ray yields compared to `FIER` calculations are shown in appendices A and B for detectors 8815 and 8816, respectively.

Figure 7 summarizes the deviations between the experimental yields and the `FIER` calculations for each detector. The histograms plotted in Fig. 7 are built from the differences for each gamma-ray and within each time bin. In general, the yields deduced from both detectors 8815 and 8816 agree quite well with the `FIER` calculations and with each other.

IV. CONCLUSION

A suite of codes and analysis methodology has been presented to parse gamma-ray data, with an emphasis on extracting gamma-ray yields. The codes are designed to work together to process the data starting from sorted spectra to publication-quality plots of gamma-ray yields. The analysis software encourages a global approach, treating all parts of the spectrum on equal footing. At each stage, output and command files are generated so that the individual steps in the analysis can be inspected and modified and repeated if necessary. A preliminary analysis of delayed fission gamma-ray yields has been used to showcase the analysis software and methodology, and to emphasize the advantages that such an approach can offer.

Appendix A: Experimental gamma-ray yields compared to FIER predictions for detector 8815

1. Index of plots

The first three columns in the table identify the decaying state in the parent nucleus. The last column lists the gamma-ray energies for the decay line in the daughter nucleus, with the number of the corresponding gamma-ray yield plot in section A 2 given in parentheses.

A	Z	Meta	Gammas
76	33	0	358.3826 (#256),575.3182 (#439),602.4725 (#110),695.3091 (#467),726.9981 (#60),809.8048 (#372),863.5881 (#466),867.7944 (#103),954.5794 (#23),1030.6461 (#468)
77	32	0	264.4530 (#395),430.5564 (#121),439.6195 (#424),470.3344 (#418),531.0501 (#88),556.9288 (#328),680.2596 (#114),743.3854 (#4),749.7805 (#17),875.3520 (#50),884.1514 (#30),925.7008 (#65),966.7638 (#363),985.8303 (#246),1354.5089 (#143),1455.2133 (#236),1476.4536 (#338),1569.6865 (#414),1643.2815 (#405),1727.1518 (#369),1881.8390 (#460),1948.7829 (#361),2076.9623 (#452),2126.2458 (#358)
77	33	0	139.1443 (#303),249.7162 (#1),439.6195 (#424)
78	33	0	497.0796 (#38),613.8450 (#345),636.9814 (#94),1240.4583 (#163),1290.6511 (#161),1529.7354 (#76),1836.0129 (#49),1920.8723 (#159)
83	35	0	552.8153 (#434)
85	36	1	151.1819 (#40),304.8736 (#73)
87	36	0	402.6653 (#87),901.2803 (#346),1337.9143 (#382),1382.5283 (#280),2011.8115 (#320),2408.7700 (#157),2555.0460 (#219),2558.3612 (#294)
88	36	0	165.8758 (#57),196.2955 (#44),362.3787 (#193),390.5941 (#297),471.8556 (#287),677.3291 (#134),730.9102 (#270),834.8334 (#70),862.2329 (#301),985.8303 (#246),1054.6744 (#282),1184.8601 (#290),1250.6969 (#259),1352.5906 (#331),1369.7457 (#232),1518.4433 (#199),1529.7354 (#76),1603.7206 (#329),1661.1752 (#374),1685.7852 (#300),1892.5123 (#373),1908.9995 (#387),2029.8685 (#133),2035.4574 (#148),2195.8100 (#69),2231.7535 (#158),2352.0927 (#292),2364.3226 (#349),2392.1309 (#31),2408.7700 (#157),2548.3259 (#311)
88	37	0	898.0382 (#58),1382.5283 (#280),1836.0129 (#49),2111.6411 (#377),2118.6101 (#327),2577.9948 (#362),2677.8860 (#198),2733.7263 (#379)
91	38	0	261.2806 (#220),272.4677 (#195),358.9909 (#366),379.7503 (#283),631.4096 (#203),652.1674 (#77),653.1661 (#234),749.7805 (#17),761.2495 (#168),793.7650 (#131),901.2803 (#346),925.7008 (#65),1024.2789 (#12),1054.6744 (#282),1280.8879 (#153),1413.4229 (#152),1473.7067 (#312),1545.8983 (#191),1645.6818 (#335),1651.1796 (#264)
91	39	1	555.5757 (#8)
92	38	0	241.6975 (#128),430.5564 (#121),953.2567 (#116),1383.8626 (#11)
92	39	0	492.4192 (#211),560.9309 (#86),844.3721 (#126),912.7362 (#96),934.4914 (#21),972.5715 (#135),1405.1308 (#55),1847.2598 (#238),2339.6214 (#400),2473.6436 (#398)
93	39	0	266.8234 (#36),387.6654 (#436),680.2596 (#114),947.1035 (#93),1184.8601 (#290),1203.2753 (#337),1425.3130 (#279),1450.3885 (#254),1470.0526 (#308),1917.6220 (#112),2184.7225 (#316),2190.5907 (#309),2473.6436 (#398)
95	40	0	724.1994 (#29),756.7132 (#52)
95	41	1	235.5557 (#252),820.3890 (#285)

A	Z	Meta	Gammas
97	40	0	218.8688 (#288),254.3331 (#117),272.4677 (#195),355.5622 (#79),507.7726 (#43),513.4768 (#183),602.4725 (#110),690.4940 (#269),703.6774 (#132),804.4858 (#172),829.9227 (#273),854.9932 (#230),1021.3154 (#130),1110.7124 (#322),1148.0406 (#74),1276.1297 (#140),1362.6681 (#115),1750.4143 (#122),1851.6288 (#206)
97	41	0	658.1516 (#2),719.6928 (#314),857.3146 (#141),1024.2789 (#12),1268.5980 (#291),1515.5222 (#318)
97	41	1	743.3854 (#4)
99	42	0	140.5101 (#5),181.0811 (#45),366.4764 (#125),739.4807 (#24),777.8855 (#56),822.8176 (#182),961.0062 (#333)
99	43	1	140.5101 (#5)
103	44	0	295.1281 (#392),443.7975 (#381),497.0796 (#38),514.2522 (#255),556.9288 (#328),610.2211 (#218)
105	44	0	163.3562 (#397),262.7698 (#89),316.4971 (#129),326.2202 (#330),330.7890 (#354),343.1850 (#412),393.3907 (#225),413.5976 (#274),469.3382 (#98),499.3797 (#281),656.1423 (#258),676.3183 (#106),724.1994 (#29),805.8712 (#371),847.0787 (#22),852.1983 (#104),984.4144 (#224),1209.2031 (#435),1448.2990 (#262)
105	45	1	129.6228 (#188)
106	45	0	1127.8480 (#350)
109	46	0	390.5941 (#297),423.7358 (#108),497.0796 (#38),602.4725 (#110),636.2594 (#261),724.1994 (#29),822.8176 (#182)
111	47	0	278.3441 (#355),509.5476 (#411),620.3331 (#456)
111	47	1	278.3441 (#355),620.3331 (#456)
112	47	0	410.6305 (#365),647.6361 (#215),751.6481 (#123),815.7567 (#37),947.1035 (#93),1613.7379 (#184),1683.5802 (#342),1908.9995 (#387),2066.1694 (#455),2155.6032 (#445),2753.2337 (#442)
113	47	0	133.5826 (#450),364.4902 (#16),410.6305 (#365),809.8048 (#372),1084.2511 (#457)
115	49	1	336.2796 (#334)
117	48	0	71.1562 (#443),132.6997 (#343),462.9446 (#239),1120.2562 (#447)
117	48	1	408.0138 (#209),730.9102 (#270),995.2750 (#305),1209.2031 (#435),1442.3940 (#144)
126	51	0	278.3441 (#355),656.1423 (#258)
127	50	0	143.7656 (#416),181.0811 (#45),194.9454 (#440),205.3020 (#429),208.0556 (#341),220.5096 (#111),228.2891 (#7),284.3451 (#107),390.5941 (#297),446.1938 (#208),509.5476 (#411),565.7936 (#260),583.1497 (#394),609.2845 (#396),631.4096 (#203),773.7103 (#75),805.8712 (#371),1114.2179 (#298),1141.9295 (#430),1160.1610 (#226),1720.3490 (#433),1750.4143 (#122),2447.6219 (#422),2513.6459 (#404),2696.2721 (#406)
127	51	0	293.2423 (#10),473.2024 (#190),652.1674 (#77),667.6985 (#6),721.9767 (#46),820.3890 (#285),1155.1258 (#432)
127	52	0	417.7202 (#71)
128	50	0	80.9975 (#13),482.2125 (#304)
128	51	0	249.7162 (#1),278.3441 (#355),314.0983 (#200),459.5424 (#205),526.5847 (#26),636.2594 (#261),743.3854 (#4),753.7748 (#176),773.7103 (#75),860.7230 (#423),972.5715 (#135),1250.6969 (#259),1685.7852 (#300)
128	51	1	314.0983 (#200),743.3854 (#4),753.7748 (#176)
129	51	0	544.5722 (#138),633.7548 (#307),654.5120 (#275),669.8543 (#66),683.5289 (#241),761.2495 (#168),813.0269 (#81),950.8696 (#306),984.4144 (#224),995.2750 (#305),1125.4831 (#151),1272.7742 (#324),1280.8879 (#153),1435.7866 (#204)
129	52	0	209.0486 (#313),210.5378 (#240),278.3441 (#355),459.5424 (#205),773.7103 (#75),804.4858 (#172),829.9227 (#273),1169.0904 (#169),1233.1170 (#244),1260.4041 (#15)
129	52	1	278.3441 (#355),459.5424 (#205)
131	51	0	326.2202 (#330),911.1026 (#417),1455.2133 (#236),1470.0526 (#308),2167.3922 (#454),2255.4885 (#201)

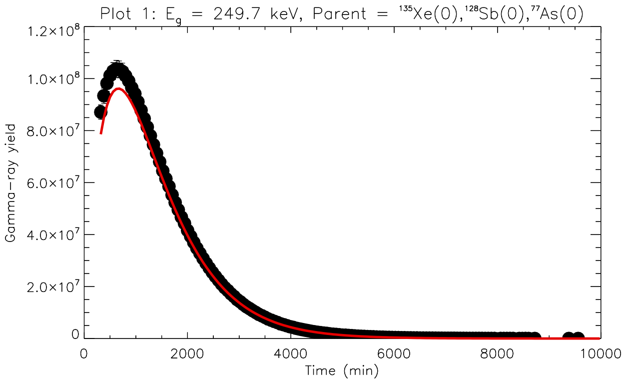
A	Z	Meta	Gammas
131	52	0	149.6903 (#102),151.1819 (#40),452.3753 (#210),852.1983 (#104),856.2747 (#105),1035.2296 (#221)
131	52	1	102.1213 (#181),111.8974 (#415),149.6903 (#102),151.1819 (#40),155.8505 (#278),177.1299 (#227),183.1611 (#391),200.6384 (#187),240.9044 (#186),261.2806 (#220),290.3658 (#266),334.3001 (#145),362.3787 (#193),408.0138 (#209),452.3753 (#210),462.9446 (#239),546.6250 (#48),609.2845 (#396),713.2221 (#326),773.7103 (#75),782.5298 (#185),793.7650 (#131),822.8176 (#182),852.1983 (#104),856.2747 (#105),910.0182 (#150),920.6105 (#299),995.2750 (#305),1035.2296 (#221),1059.9735 (#237),1114.2179 (#298),1125.4831 (#151),1127.8480 (#350),1206.5666 (#164),1315.1898 (#360),1645.6818 (#335),1830.6818 (#207),1880.3194 (#407),1887.5717 (#321),2270.4344 (#380)
131	53	0	80.1057 (#174),177.1299 (#227),272.4677 (#195),284.3451 (#107),358.3826 (#256),364.4902 (#16),503.1866 (#339),636.9814 (#94)
132	52	0	116.4173 (#120),228.2891 (#7)
132	53	0	262.7698 (#89),278.3441 (#355),416.6902 (#242),431.8886 (#248),446.1938 (#208),505.8444 (#64),522.6696 (#25),535.3029 (#231),630.1958 (#28),650.4827 (#97),667.6985 (#6),669.8543 (#66),671.5684 (#62),726.9981 (#60),772.6501 (#9),780.2097 (#156),910.0182 (#150),927.6550 (#250),954.5794 (#23),984.4144 (#224),1035.2296 (#221),1136.0852 (#68),1143.5350 (#147),1148.0406 (#74),1272.7742 (#324),1290.6511 (#161),1295.2403 (#118),1298.1173 (#63),1371.9313 (#101),1398.4894 (#53),1442.3940 (#144),1476.4536 (#338),1661.1752 (#374),1727.1518 (#369),1760.0771 (#399),1920.8723 (#159),2001.9207 (#165),2086.4856 (#295),2187.2036 (#180),2222.9370 (#347),2390.5594 (#325),2408.7700 (#157),2524.8733 (#385)
132	55	0	505.8444 (#64),630.1958 (#28),667.6985 (#6),772.6501 (#9),1136.0852 (#68),1298.1173 (#63),1317.9278 (#465)
133	52	0	183.1611 (#391),312.0325 (#229),338.3436 (#425),717.8545 (#245),719.6928 (#314),721.9767 (#46),726.9981 (#60),777.8855 (#56),787.1621 (#378),844.3721 (#126),884.1514 (#30),910.0182 (#150),912.7362 (#96),914.9367 (#271),927.6550 (#250),995.2750 (#305),1021.3154 (#130),1124.0063 (#72),1371.9313 (#101),1405.1308 (#55),1455.2133 (#236),1473.7067 (#312),1502.7262 (#149),1630.0860 (#448),1683.5802 (#342),1737.9551 (#441),1741.2833 (#233),1806.8287 (#166),1897.6152 (#438),2025.6365 (#296),2105.1205 (#427),2255.4885 (#201)
133	52	1	92.3579 (#408),116.4173 (#120),177.1299 (#227),200.6384 (#187),240.9044 (#186),312.0325 (#229),314.0983 (#200),334.3001 (#145),355.5622 (#79),414.9121 (#268),435.2071 (#253),471.8556 (#287),478.4350 (#389),574.1122 (#368),621.4623 (#403),647.6361 (#215),653.1661 (#234),698.1217 (#390),724.1994 (#29),756.7132 (#52),912.7362 (#96),914.9367 (#271),972.5715 (#135),995.2750 (#305),1059.9735 (#237),1405.1308 (#55),1455.2133 (#236),1569.6865 (#414),1587.9906 (#376),1643.2815 (#405),1683.5802 (#342),1693.3551 (#367),1885.5745 (#388),1967.9328 (#409),2049.9478 (#384)
133	53	0	262.7698 (#89),381.4820 (#357),417.7202 (#71),422.9664 (#223),510.5222 (#84),529.8833 (#3),617.7604 (#175),680.2596 (#114),706.5717 (#91),768.3726 (#189),820.3890 (#285),856.2747 (#105),875.3520 (#50),1052.2398 (#171),1059.9735 (#237),1236.4319 (#95),1298.1173 (#63),1350.2666 (#289)
133	53	1	647.6361 (#215),912.7362 (#96)
133	54	0	80.9975 (#13)
133	54	1	233.1545 (#235)

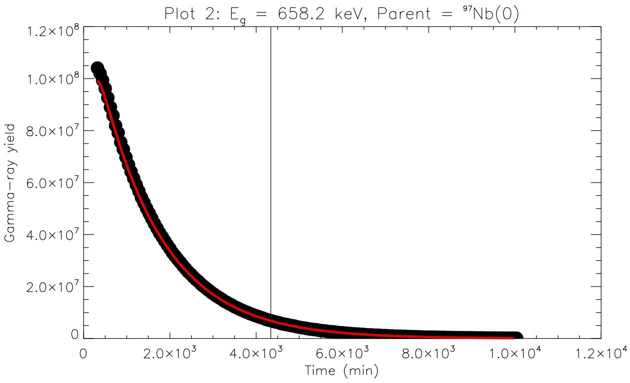
A	Z	Meta	Gammas
134	52	0	79.3668 (#249),130.9675 (#413),183.1611 (#391),210.5378 (#240),277.7839 (#247),435.2071 (#253),565.7936 (#260),636.2594 (#261),767.1115 (#217),925.7008 (#65)
134	53	0	135.3891 (#196),139.1443 (#303),188.4912 (#332),235.5557 (#252),405.4337 (#142),514.2522 (#255),540.7457 (#137),595.3719 (#109),677.3291 (#134),706.5717 (#91),730.9102 (#270),847.0787 (#22),857.3146 (#141),884.1514 (#30),966.7638 (#363),974.6797 (#179),1040.1869 (#267),1052.2398 (#171),1072.6683 (#92),1103.2615 (#192),1136.0852 (#68),1352.5906 (#331),1407.7044 (#401),1455.2133 (#236),1470.0526 (#308),1613.7379 (#184),1741.2833 (#233),1806.8287 (#166),2159.5512 (#383),2262.3503 (#402),2408.7700 (#157),2513.6459 (#404)
135	53	0	162.6919 (#80),165.8758 (#57),220.5096 (#111),229.7864 (#284),288.4192 (#78),290.3658 (#266),304.8736 (#73),414.9121 (#268),417.7202 (#71),433.6761 (#214),451.6301 (#263),546.6250 (#48),656.1423 (#258),707.9538 (#194),785.3177 (#317),795.3202 (#393),836.8323 (#51),971.7606 (#167),972.5715 (#135),995.2750 (#305),1038.7891 (#39),1101.5788 (#119),1124.0063 (#72),1131.5542 (#18),1160.1610 (#226),1169.0904 (#169),1240.4583 (#163),1260.4041 (#15),1343.6776 (#352),1367.7918 (#202),1448.2990 (#262),1457.5368 (#35),1502.7262 (#149),1566.3564 (#136),1613.7379 (#184),1678.0577 (#34),1706.4753 (#67),1791.2125 (#42),1830.6818 (#207),1927.2758 (#272),1948.7829 (#361),2045.9863 (#170),2151.6165 (#370),2255.4885 (#201),2408.7700 (#157)
135	54	0	249.7162 (#1),358.3826 (#256),408.0138 (#209),608.0819 (#59),654.5120 (#275)
135	54	1	526.5847 (#26)
138	55	0	462.9446 (#239),683.5289 (#241),717.8545 (#245),765.9116 (#431),813.0269 (#81),953.2567 (#116),1343.6776 (#352),1435.7866 (#204),1806.8287 (#166),2114.0100 (#449),2217.7847 (#340),2639.6057 (#364)
138	55	1	462.9446 (#239),1435.7866 (#204)
139	56	0	165.8758 (#57),1476.4536 (#338),1920.8723 (#159)
140	56	0	132.6997 (#343),162.6919 (#80),304.8736 (#73),423.7358 (#108),437.6185 (#162),537.2777 (#27)
140	57	0	328.7714 (#47),432.6546 (#154),445.3521 (#428),487.0330 (#19),751.6481 (#123),815.7567 (#37),867.7944 (#103),919.4823 (#160),925.0756 (#90),950.8696 (#306),1405.1308 (#55),1596.0686 (#14),1924.5419 (#421),2083.0554 (#410),2347.6985 (#265),2521.3838 (#139)
141	57	0	834.8334 (#70),1354.5089 (#143),1693.3551 (#367),2029.8685 (#133),2266.9334 (#386)
141	58	0	145.4467 (#33)
142	57	0	578.0312 (#276),641.2846 (#32),894.9534 (#113),947.1035 (#93),1011.4828 (#177),1043.7944 (#212),1160.1610 (#226),1233.1170 (#244),1352.5906 (#331),1389.1634 (#351),1455.2133 (#236),1545.8983 (#191),1756.6977 (#213),1887.5717 (#321),1901.4585 (#124),2004.1068 (#310),2025.6365 (#296),2038.7718 (#302),2055.2855 (#228),2100.6788 (#293),2126.2458 (#358),2139.0680 (#344),2151.6165 (#370),2187.2036 (#180),2347.6985 (#265),2364.3226 (#349),2397.8892 (#85),2460.1673 (#348),2542.8948 (#100),2666.9352 (#251),2672.5976 (#375)
143	58	0	57.3699 (#20),231.5364 (#83),293.2423 (#10),350.6347 (#61),416.6902 (#242),446.1938 (#208),490.3925 (#82),556.9288 (#328),664.6081 (#41),721.9767 (#46),787.1621 (#378),809.8048 (#372),880.3362 (#127),1059.9735 (#237),1103.2615 (#192),1324.6069 (#419)
145	59	0	91.1029 (#54),130.9675 (#413),262.7698 (#89),492.4192 (#211),707.9538 (#194),713.2221 (#326),780.2097 (#156),920.6105 (#299),978.7963 (#319),1150.3215 (#336)

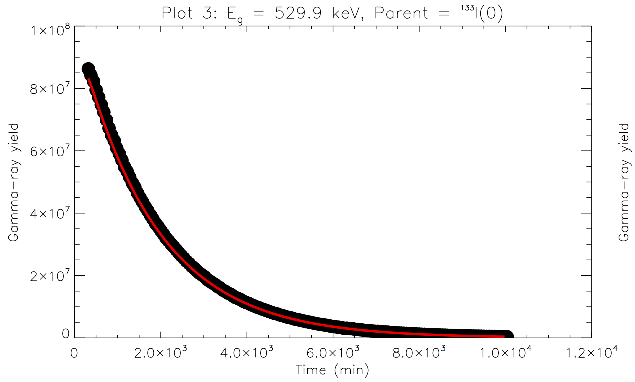
A	Z	Meta	Gammas
147	60	0	91.1029 (#54),319.2469 (#243),398.1373 (#315),410.6305 (#365),531.0501 (#88)
149	60	0	96.9401 (#359),114.2544 (#173),139.1443 (#303),155.8505 (#278),208.0556 (#341),211.3080 (#146),240.1149 (#216),254.3331 (#117),258.0270 (#356),267.5604 (#277),270.1296 (#222),358.3826 (#256),361.3386 (#444),366.4764 (#125),423.7358 (#108),432.6546 (#154),439.6195 (#424),443.7975 (#381),470.3344 (#418),556.9288 (#328),575.3182 (#439),583.1497 (#394),617.7604 (#175),630.1958 (#28),636.2594 (#261),671.5684 (#62),743.3854 (#4),749.7805 (#17),761.2495 (#168),768.3726 (#189),813.0269 (#81),854.9932 (#230),907.9351 (#446),971.7606 (#167),978.7963 (#319),1125.4831 (#151),1136.0852 (#68),1141.9295 (#430),1150.3215 (#336),1190.3665 (#451),1298.1173 (#63),1448.2990 (#262)
150	61	0	492.4192 (#211),499.3797 (#281),565.7936 (#260),586.8120 (#461),730.9102 (#270),761.2495 (#168),812.3152 (#463),911.1026 (#417),1024.2789 (#12),1179.8454 (#462),1324.6069 (#419),1499.6398 (#464),1630.0860 (#448),1727.1518 (#369),2195.8100 (#69)
151	61	0	69.6704 (#286),104.8484 (#257),139.1443 (#303),167.7838 (#178),177.1299 (#227),202.0837 (#353),209.0486 (#313),240.1149 (#216),254.3331 (#117),258.0270 (#356),261.2806 (#220),275.1688 (#197),277.7839 (#247),278.3441 (#355),295.1281 (#392),340.1196 (#99),358.3826 (#256),379.7503 (#283),390.5941 (#297),400.6550 (#437),410.6305 (#365),416.6902 (#242),440.7936 (#323),443.7975 (#381),452.3753 (#210),470.3344 (#418),487.0330 (#19),490.3925 (#82),575.3182 (#439),583.1497 (#394),609.2845 (#396),636.2594 (#261),661.4480 (#420),713.2221 (#326),717.8545 (#245),726.9981 (#60),772.6501 (#9),785.3177 (#317),856.2747 (#105),911.1026 (#417),919.4823 (#160),953.2567 (#116),969.0474 (#426)
152	63	1	266.8234 (#36),272.4677 (#195),340.1196 (#99),387.6654 (#436),411.9046 (#453),443.7975 (#381),703.6774 (#132),961.0062 (#333),1389.1634 (#351),1460.6701 (#469)
153	62	0	69.6704 (#286),96.9401 (#359),103.1680 (#155),411.9046 (#453),574.1122 (#368),609.2845 (#396),617.7604 (#175)
156	62	0	165.8758 (#57),218.8688 (#288)
156	63	0	290.3658 (#266),490.3925 (#82),768.3726 (#189),777.8855 (#56),820.3890 (#285),961.0062 (#333),1040.1869 (#267),1101.5788 (#119),1169.0904 (#169),2255.4885 (#201)
157	63	0	116.4173 (#120),129.6228 (#188),158.3506 (#458),209.0486 (#313),334.3001 (#145),358.9909 (#366),379.7503 (#283),393.3907 (#225),410.6305 (#365),470.3344 (#418),552.8153 (#434),613.8450 (#345),728.7266 (#459),739.4807 (#24),934.4914 (#21),969.0474 (#426),985.8303 (#246),1059.9735 (#237)

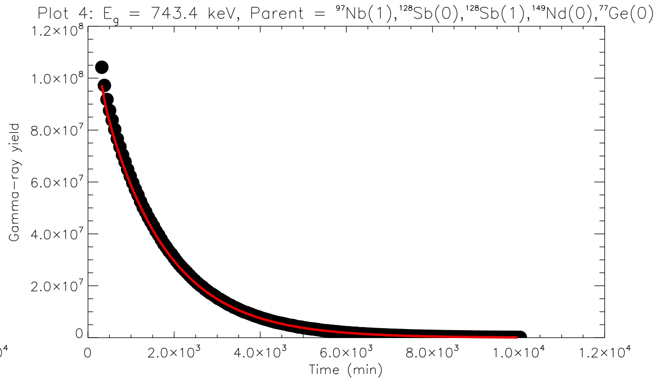
2. Plots

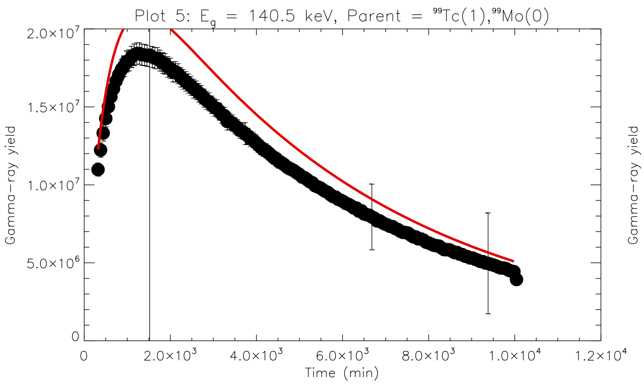
The gamma-ray yields obtained from detector 8815 are compared to `FIER` predictions in the figures below. The title of each plot gives the plot number, the gamma-ray energy, and the parent nuclei matched to that gamma-ray energy. The number in parentheses after the name of a parent nucleus indicates whether it is in a ground or excited state (with “(0)” ⇒ ground state). The data are shown as solid points with uncertainties, and the `FIER` prediction is plotted as a solid red line. The quantity plotted in each case is a number of gammas in a given time bin.

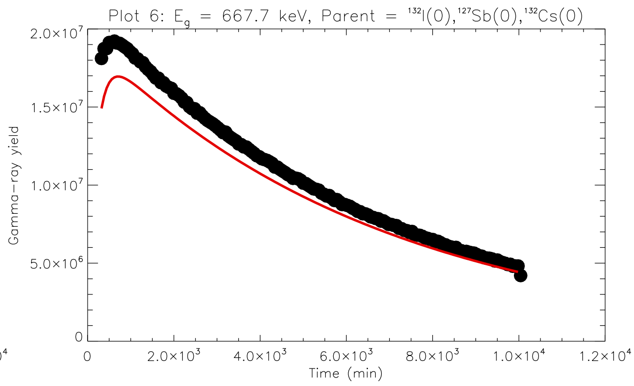

Plot 1: E_g = 249.7 keV, Parent = ^{135}Xe(0),^{128}Sb(0),^{77}As(0)
Gamma-ray yield
Time (min)

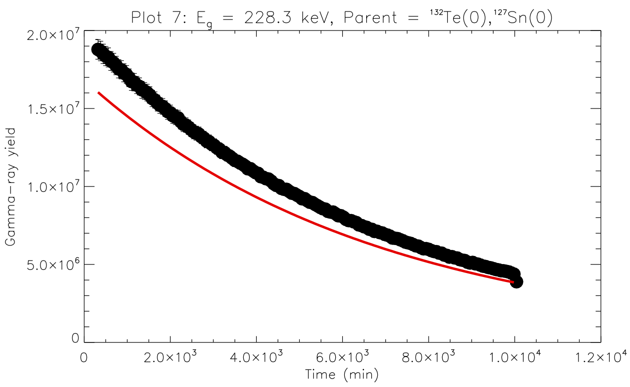

Plot 2: E_g = 658.2 keV, Parent = ^{97}Nb(0)
Gamma-ray yield
Time (min)

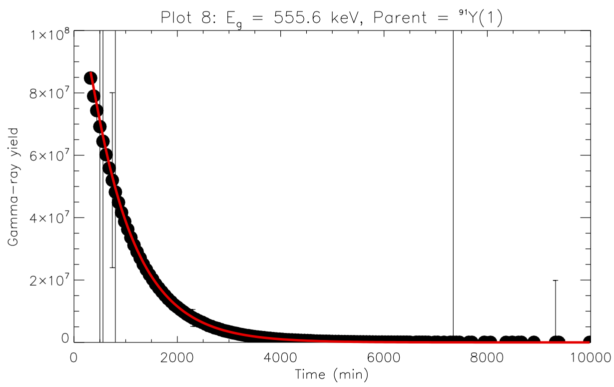

Plot 3: E_g = 529.9 keV, Parent = ^{133}I(0)
Gamma-ray yield
Time (min)

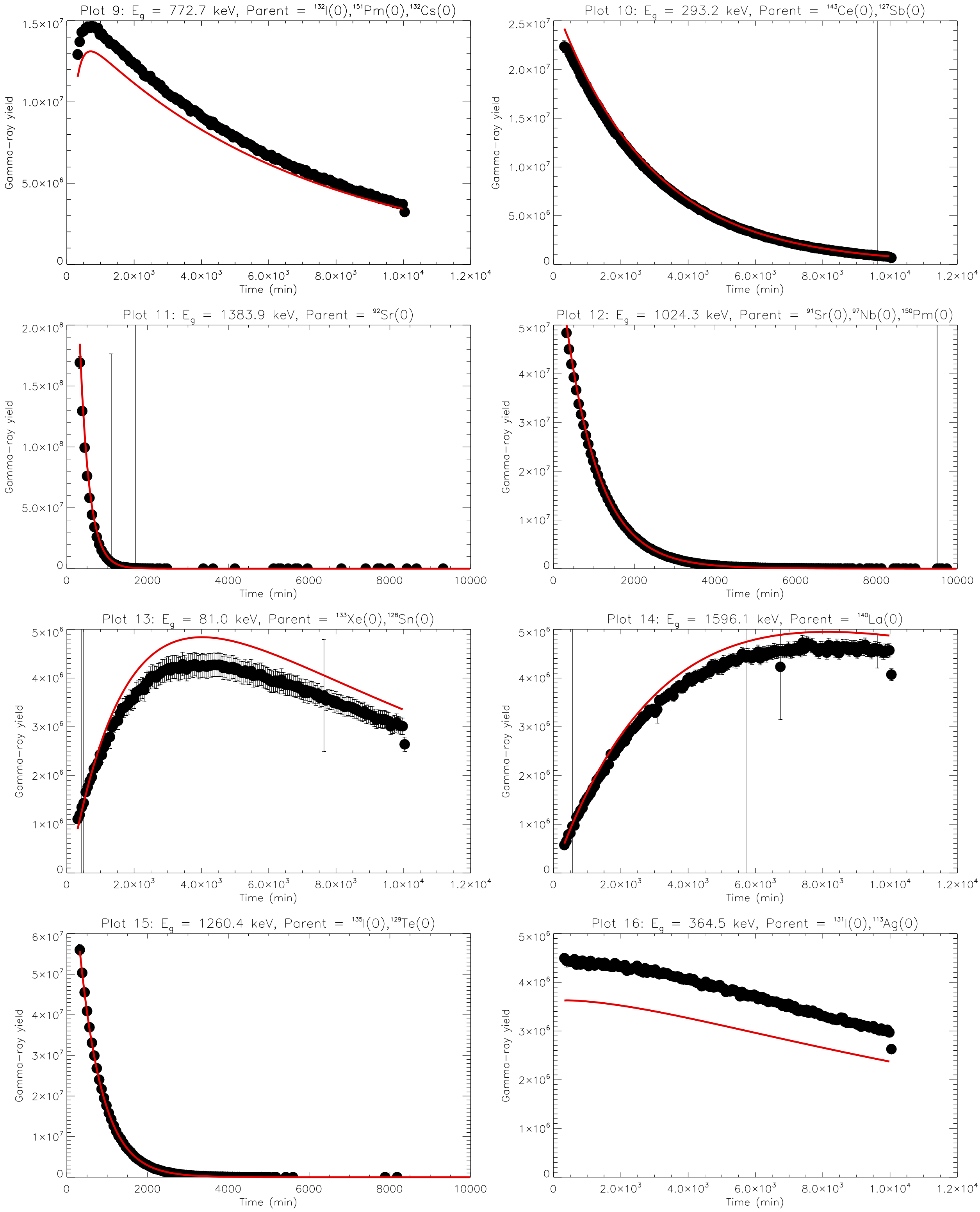

Plot 4: E_g = 743.4 keV, Parent = ^{97}Nb(1),^{128}Sb(0),^{128}Sb(1),^{149}Nd(0),^{77}Ge(0)
Gamma-ray yield
Time (min)


Plot 5: E_g = 140.5 keV, Parent = ^{99}Tc(1),^{99}Mo(0)
Gamma-ray yield
Time (min)


Plot 6: E_g = 667.7 keV, Parent = ^{132}I(0),^{127}Sb(0),^{132}Cs(0)
Gamma-ray yield
Time (min)

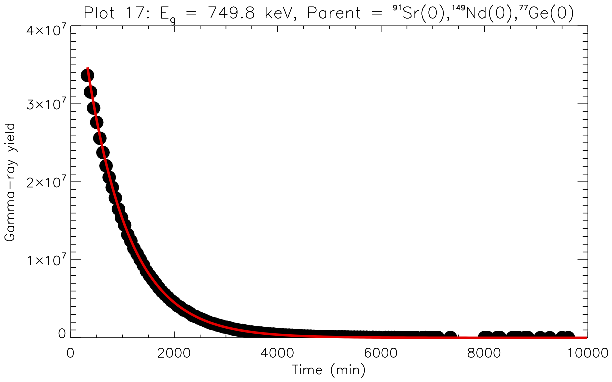

Plot 7: E_g = 228.3 keV, Parent = ^{132}Te(0),^{127}Sn(0)
Gamma-ray yield
Time (min)


Plot 8: E_g = 555.6 keV, Parent = ^{91}Y(1)
Gamma-ray yield
Time (min)

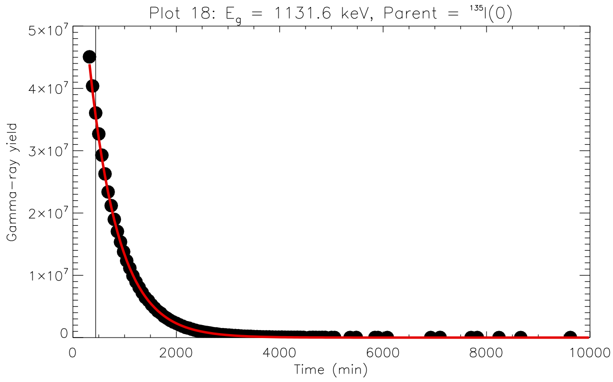


Plot 9: E_g = 772.7 keV, Parent = ^{132}I(0),^{151}Pm(0),^{132}Cs(0)
Plot 10: E_g = 293.2 keV, Parent = ^{143}Ce(0),^{127}Sb(0)
Plot 11: E_g = 1383.9 keV, Parent = ^{92}Sr(0)
Plot 12: E_g = 1024.3 keV, Parent = ^{91}Sr(0),^{97}Nb(0),^{150}Pm(0)
Plot 13: E_g = 81.0 keV, Parent = ^{133}Xe(0),^{128}Sn(0)
Plot 14: E_g = 1596.1 keV, Parent = ^{140}La(0)
Plot 15: E_g = 1260.4 keV, Parent = ^{135}I(0),^{129}Te(0)
Plot 16: E_g = 364.5 keV, Parent = ^{131}I(0),^{113}Ag(0)
Gamma-ray yield
Time (min)

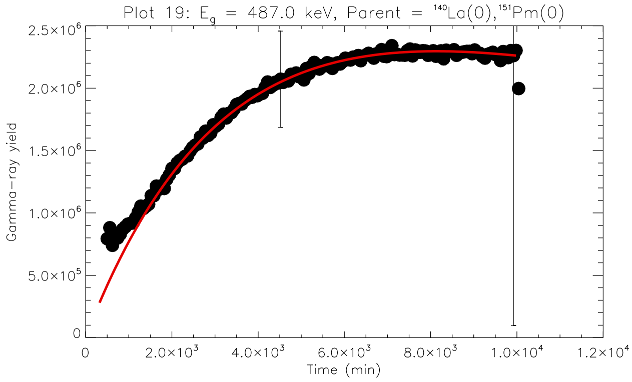
Plot 17: E_g = 749.8 keV, Parent = ^{91}Sr(0),^{149}Nd(0),^{77}Ge(0)



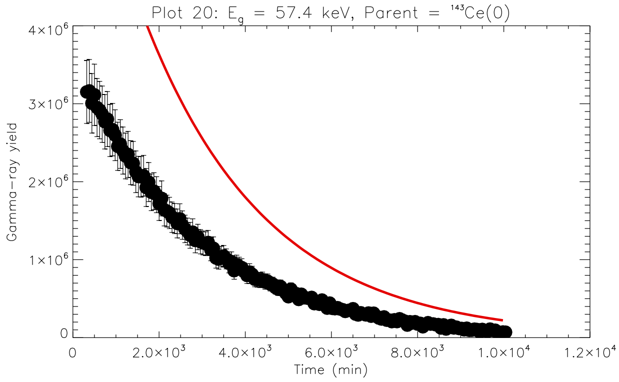
Plot 18: E_g = 1131.6 keV, Parent = ^{135}I(0)



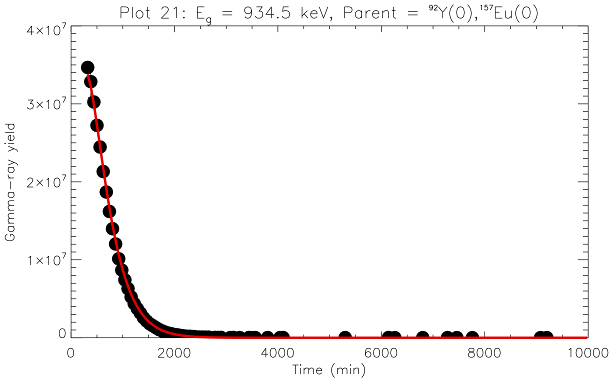
Plot 19: E_g = 487.0 keV, Parent = ^{140}La(0),^{151}Pm(0)



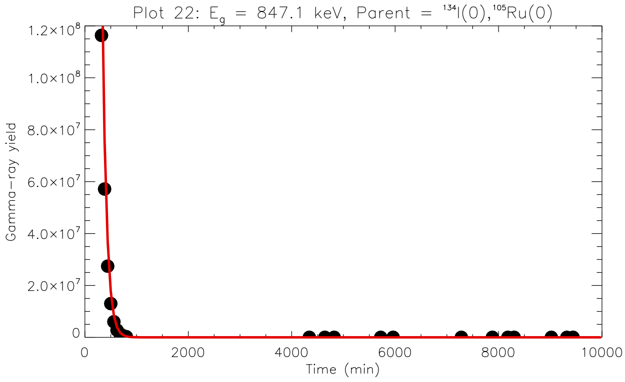
Plot 20: E_g = 57.4 keV, Parent = ^{143}Ce(0)



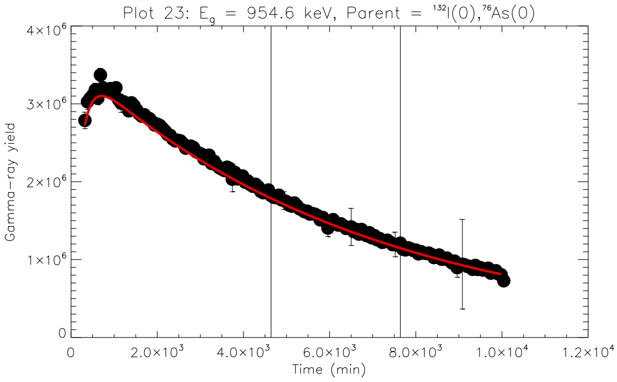
Plot 21: E_g = 934.5 keV, Parent = ^{92}Y(0),^{157}Eu(0)



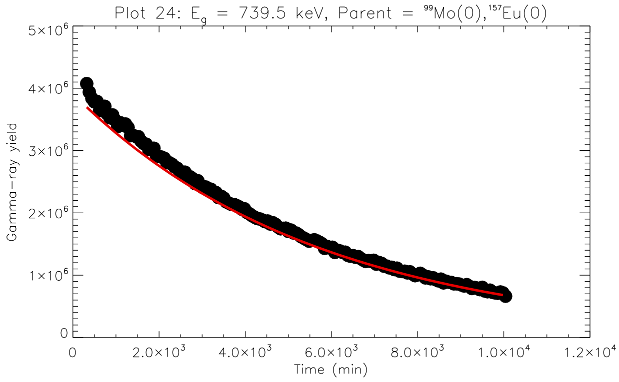
Plot 22: E_g = 847.1 keV, Parent = ^{134}I(0),^{105}Ru(0)



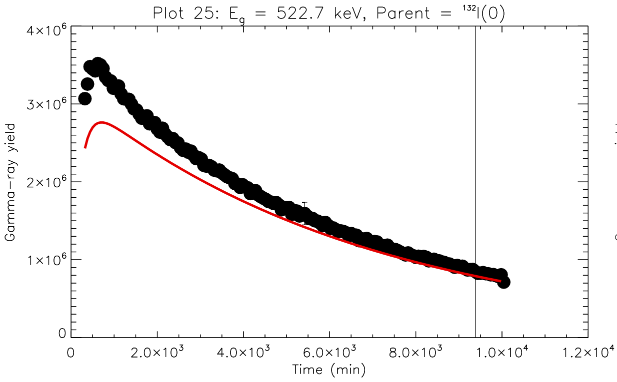
Plot 23: E_g = 954.6 keV, Parent = ^{132}I(0),^{76}As(0)



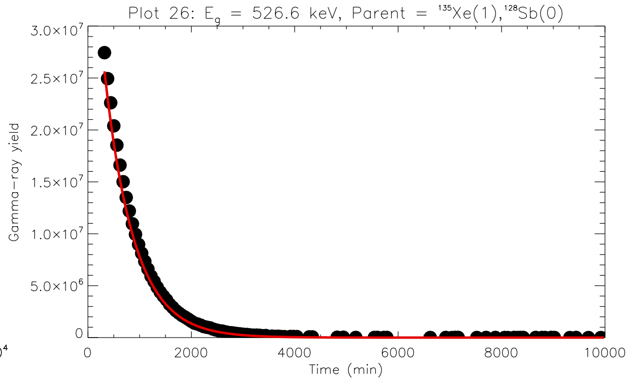
Plot 24: E_g = 739.5 keV, Parent = ^{99}Mo(0),^{157}Eu(0)



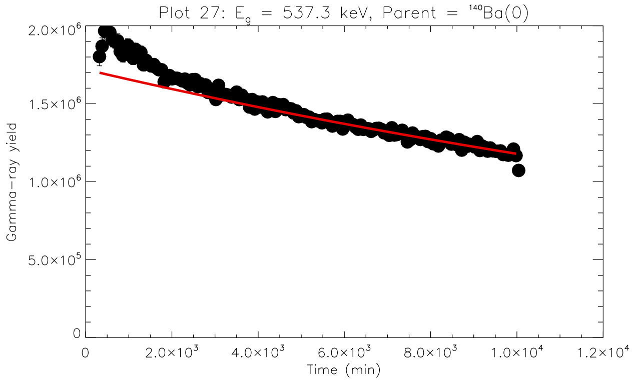
Plot 25: E_g = 522.7 keV, Parent = ^{132}I(0)



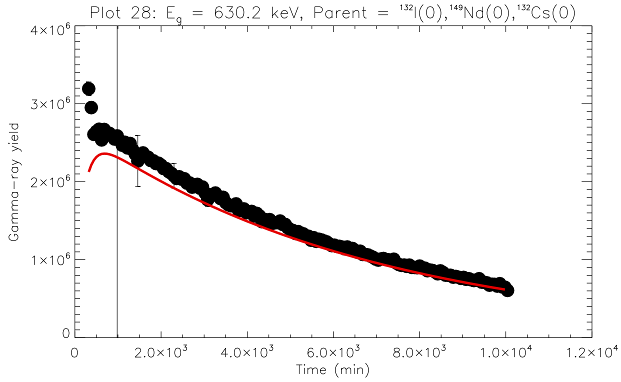
Plot 26: E_g = 526.6 keV, Parent = ^{135}Xe(1),^{128}Sb(0)



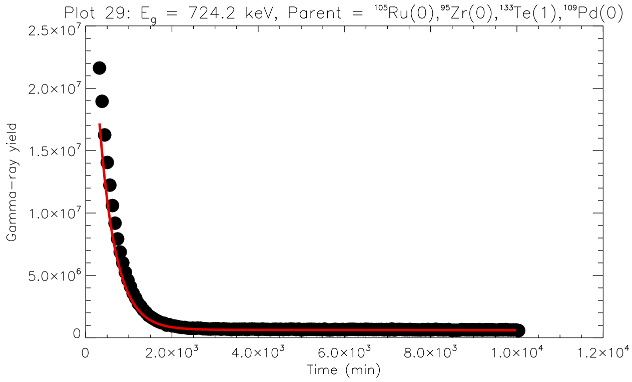
Plot 27: E_g = 537.3 keV, Parent = ^{140}Ba(0)



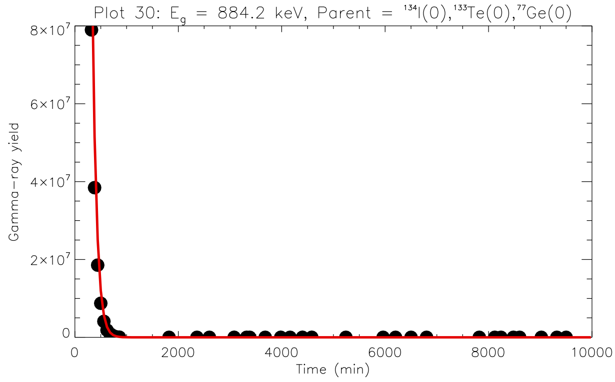
Plot 28: E_g = 630.2 keV, Parent = ^{132}I(0),^{149}Nd(0),^{132}Cs(0)



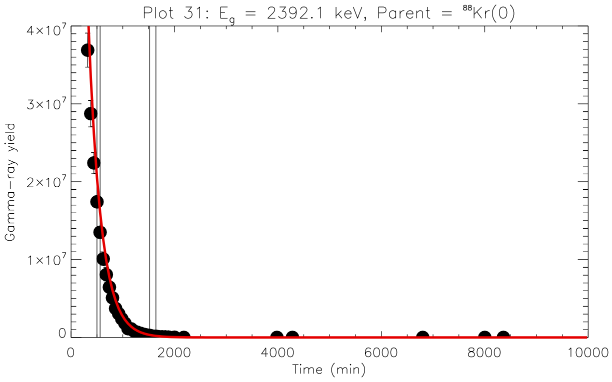
Plot 29: E_g = 724.2 keV, Parent = ^{105}Ru(0),^{95}Zr(0),^{133}Te(1),^{109}Pd(0)



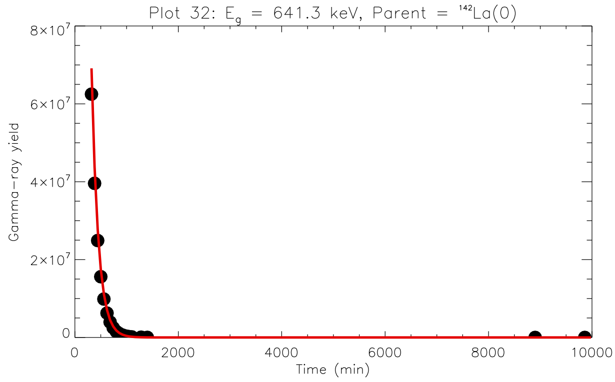
Plot 30: E_g = 884.2 keV, Parent = ^{134}I(0),^{133}Te(0),^{77}Ge(0)



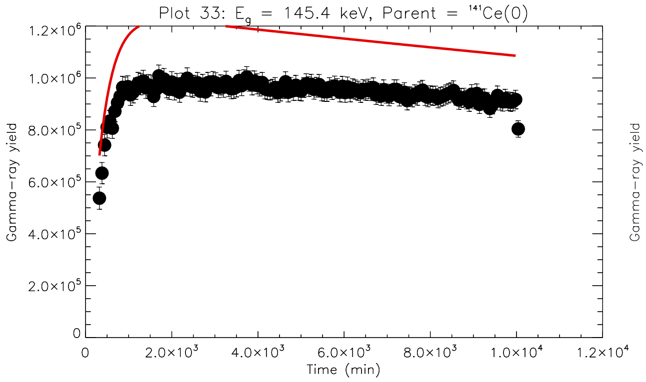
Plot 31: E_g = 2392.1 keV, Parent = ^{88}Kr(0)



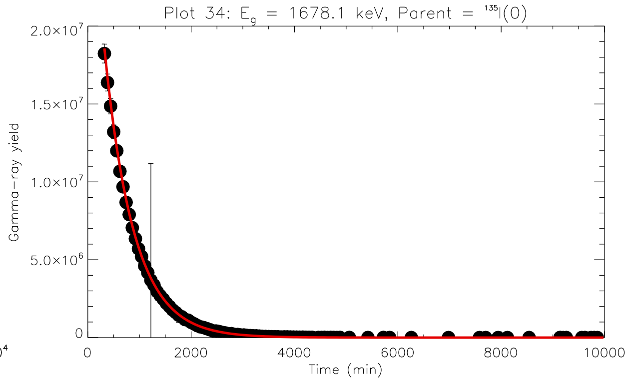
Plot 32: E_g = 641.3 keV, Parent = ^{142}La(0)



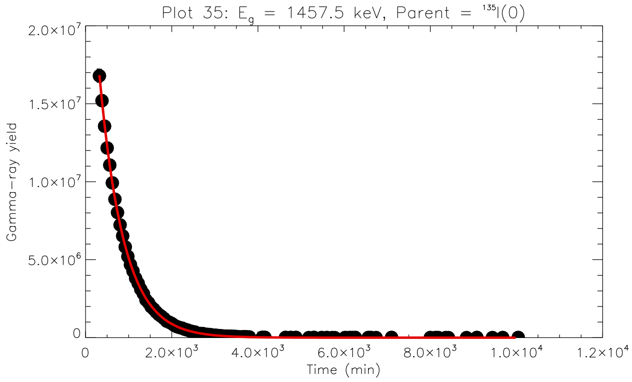
Plot 33: E_g = 145.4 keV, Parent = ^{141}Ce(0)



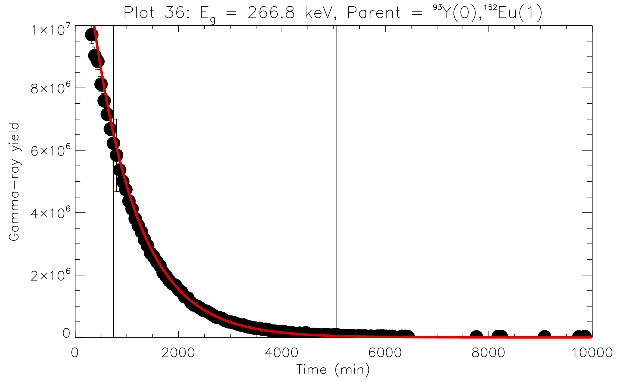
Plot 34: E_g = 1678.1 keV, Parent = ^{135}I(0)



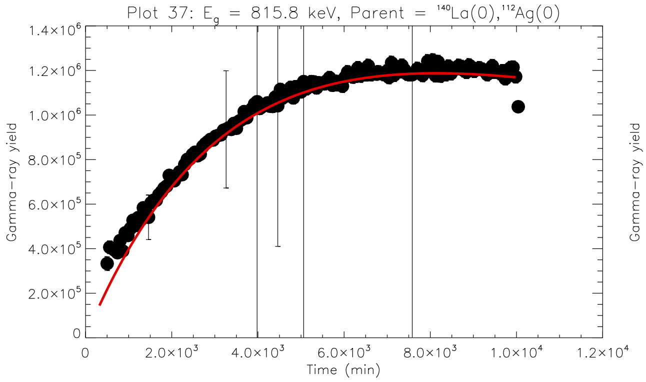
Plot 35: E_g = 1457.5 keV, Parent = ^{135}I(0)



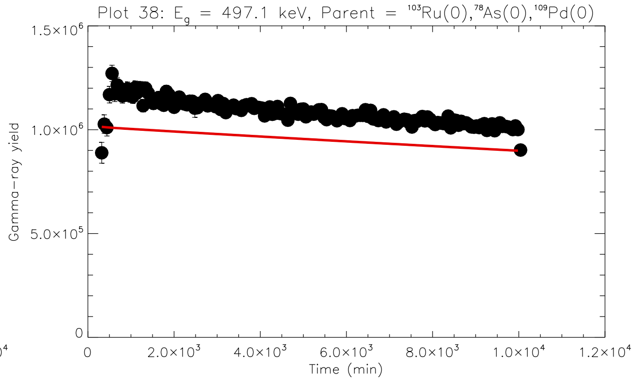
Plot 36: E_g = 266.8 keV, Parent = ^{93}Y(0),^{152}Eu(1)



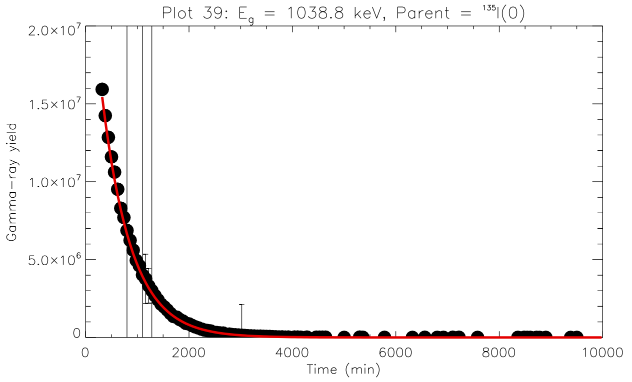
Plot 37: E_g = 815.8 keV, Parent = ^{140}La(0),^{112}Ag(0)



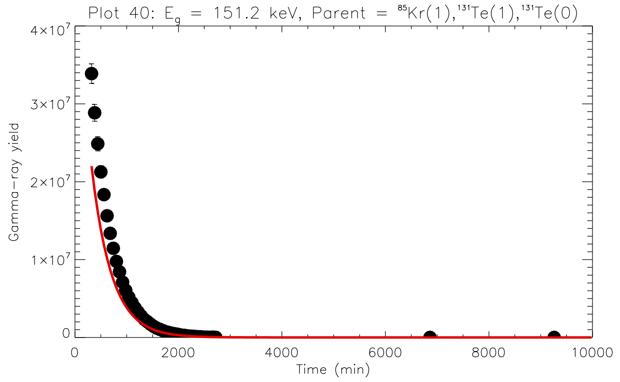
Plot 38: E_g = 497.1 keV, Parent = ^{103}Ru(0),^{78}As(0),^{109}Pd(0)



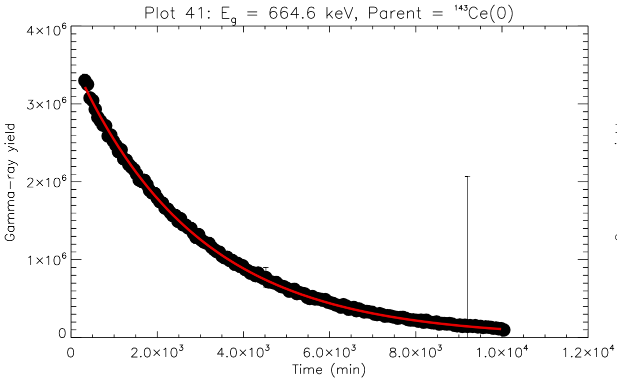
Plot 39: E_g = 1038.8 keV, Parent = ^{135}I(0)



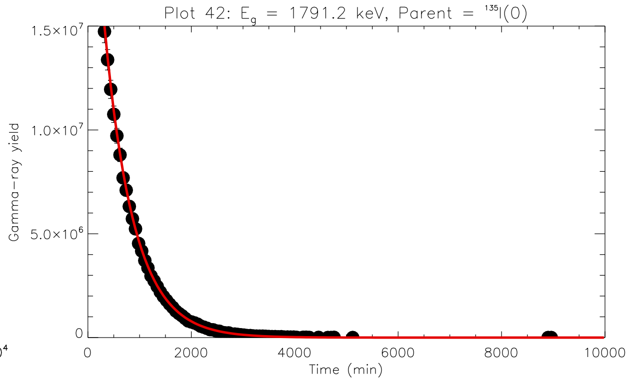
Plot 40: E_g = 151.2 keV, Parent = ^{85}Kr(1),^{131}Te(1),^{131}Te(0)



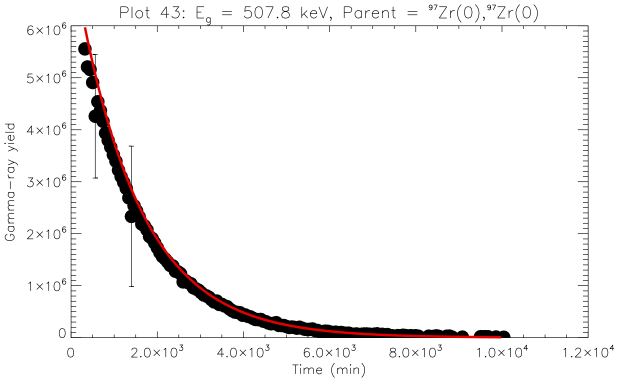
Plot 41: E_g = 664.6 keV, Parent = ^{143}Ce(0)



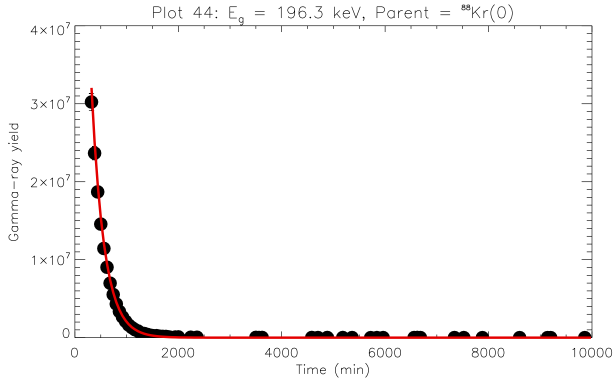
Plot 42: E_g = 1791.2 keV, Parent = ^{135}I(0)



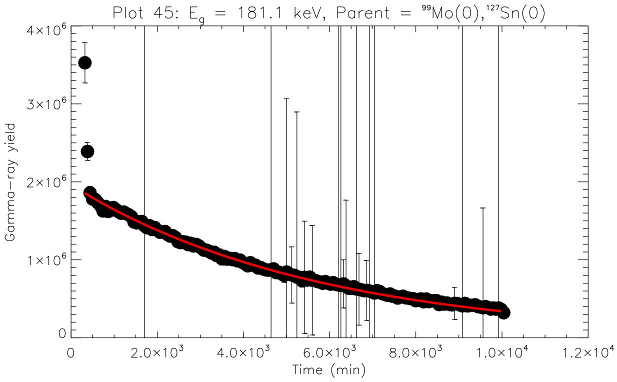
Plot 43: E_g = 507.8 keV, Parent = ^{97}Zr(0),^{97}Zr(0)



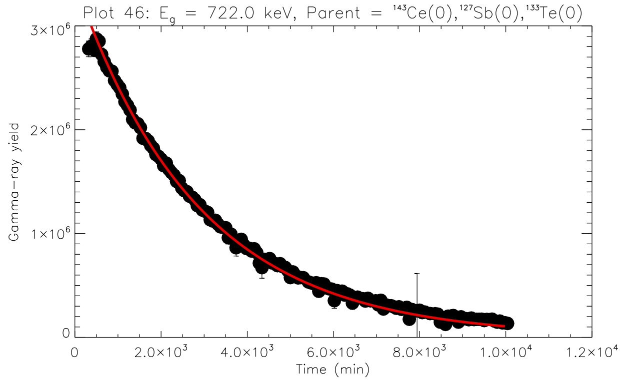
Plot 44: E_g = 196.3 keV, Parent = ^{88}Kr(0)



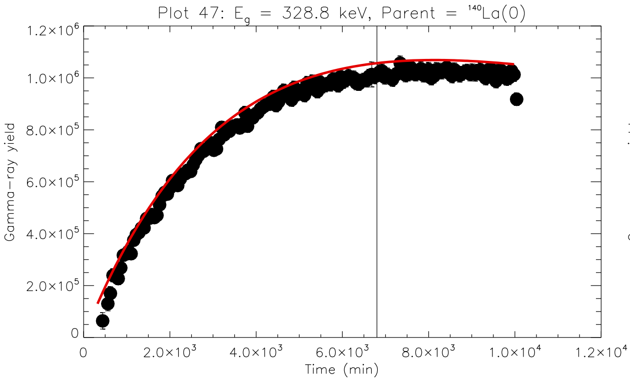
Plot 45: E_g = 181.1 keV, Parent = ^{99}Mo(0),^{127}Sn(0)



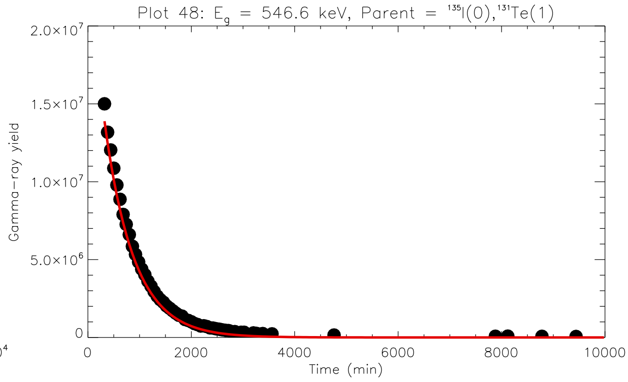
Plot 46: E_g = 722.0 keV, Parent = ^{143}Ce(0),^{127}Sb(0),^{133}Te(0)

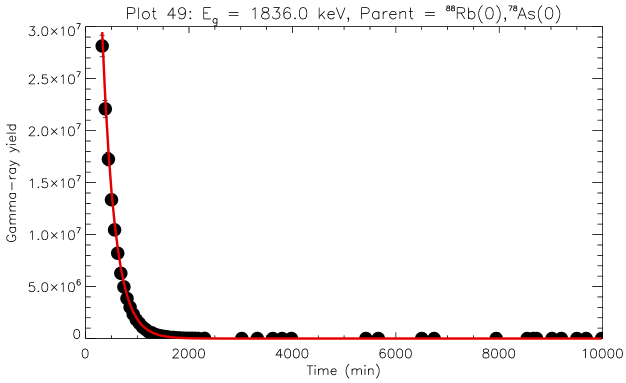


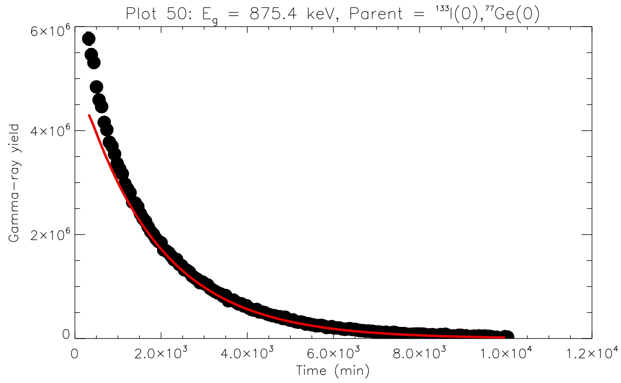
Plot 47: E_g = 328.8 keV, Parent = ^{140}La(0)

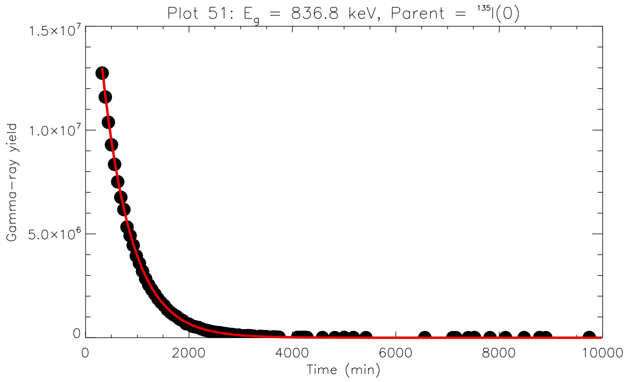


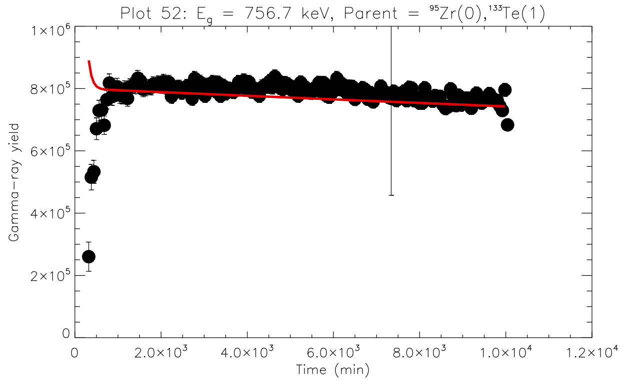
Plot 48: E_g = 546.6 keV, Parent = ^{135}I(0),^{131}Te(1)

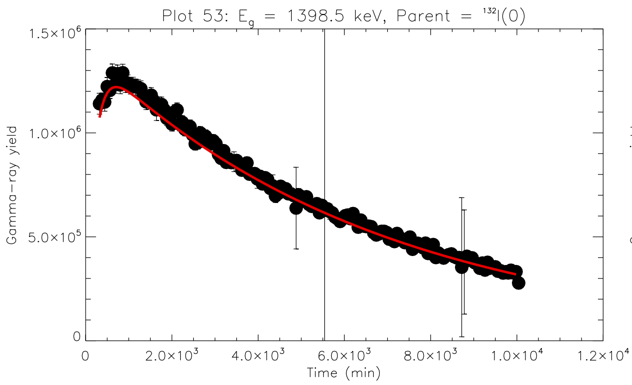


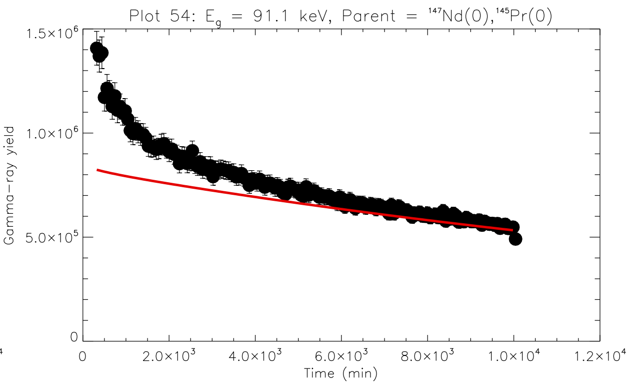

Plot 49: E$_g$ = 1836.0 keV, Parent = ^{88}Rb(0),^{78}As(0)
Gamma-ray yield
Time (min)

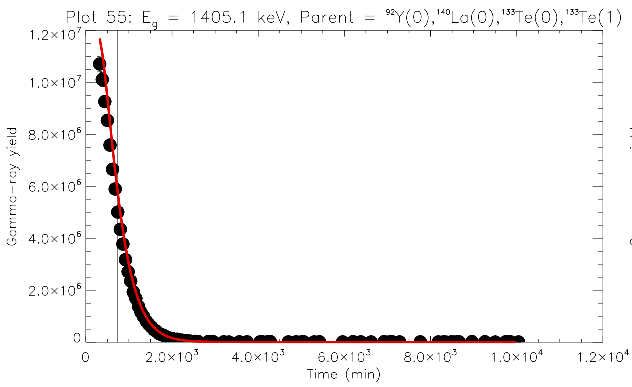

Plot 50: E$_g$ = 875.4 keV, Parent = ^{133}I(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

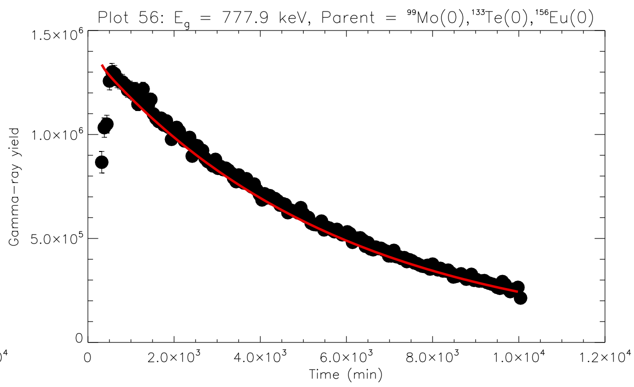

Plot 51: E$_g$ = 836.8 keV, Parent = ^{135}I(0)
Gamma-ray yield
Time (min)


Plot 52: E$_g$ = 756.7 keV, Parent = ^{95}Zr(0),^{133}Te(1)
Gamma-ray yield
Time (min)

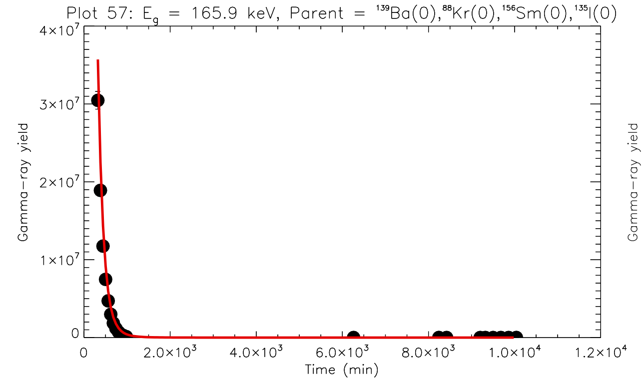

Plot 53: E$_g$ = 1398.5 keV, Parent = ^{132}I(0)
Gamma-ray yield
Time (min)


Plot 54: E$_g$ = 91.1 keV, Parent = ^{147}Nd(0),^{145}Pr(0)
Gamma-ray yield
Time (min)

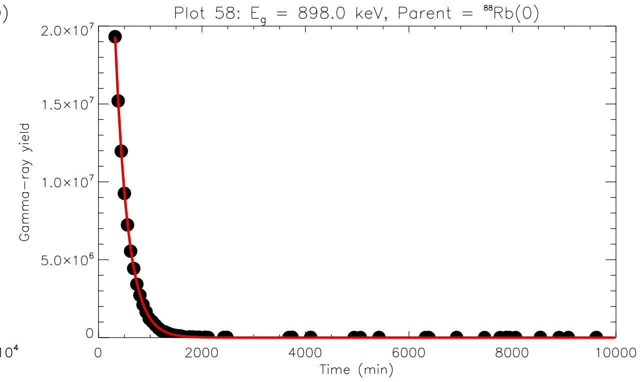

Plot 55: E$_g$ = 1405.1 keV, Parent = ^{92}Y(0),^{140}La(0),^{133}Te(0),^{133}Te(1)
Gamma-ray yield
Time (min)


Plot 56: E$_g$ = 777.9 keV, Parent = ^{99}Mo(0),^{133}Te(0),^{156}Eu(0)
Gamma-ray yield
Time (min)

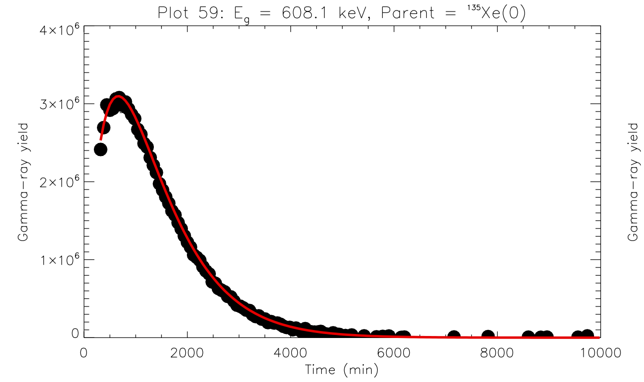
Plot 57: E_g = 165.9 keV, Parent = ^{139}Ba(0),^{88}Kr(0),^{156}Sm(0),^{135}I(0)



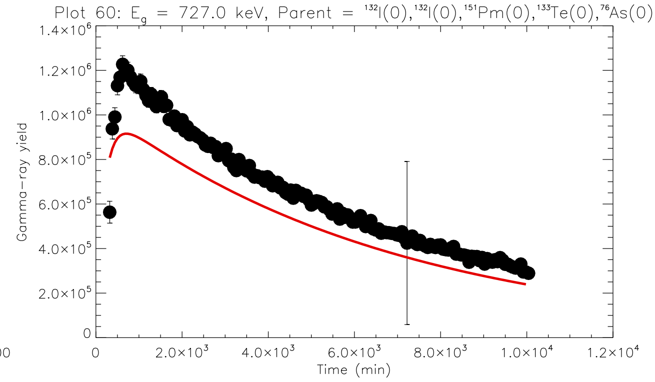
Plot 58: E_g = 898.0 keV, Parent = ^{88}Rb(0)



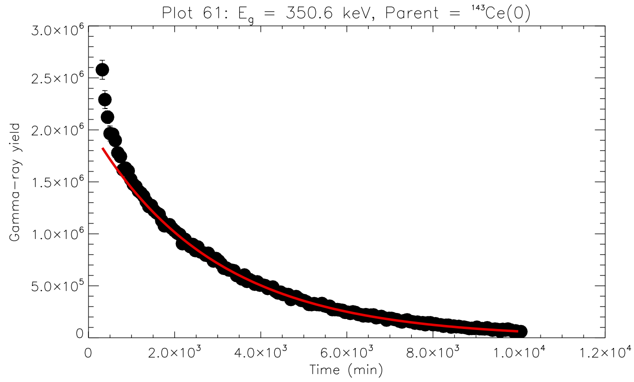
Plot 59: E_g = 608.1 keV, Parent = ^{135}Xe(0)



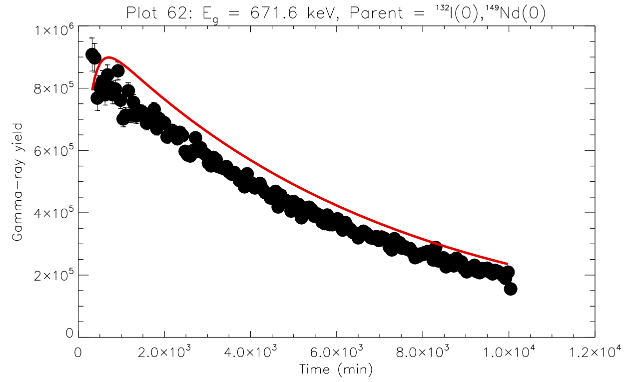
Plot 60: E_g = 727.0 keV, Parent = ^{132}I(0),^{132}I(0),^{151}Pm(0),^{133}Te(0),^{76}As(0)



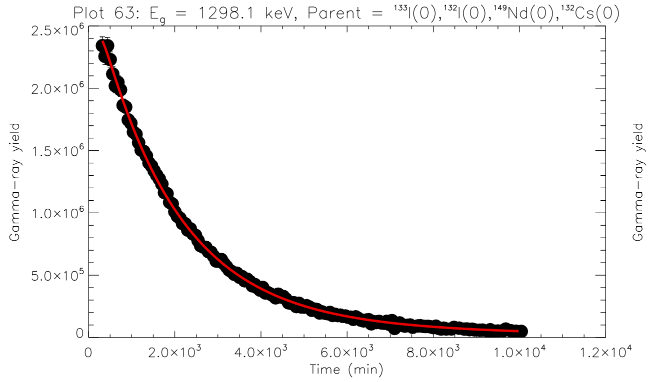
Plot 61: E_g = 350.6 keV, Parent = ^{143}Ce(0)



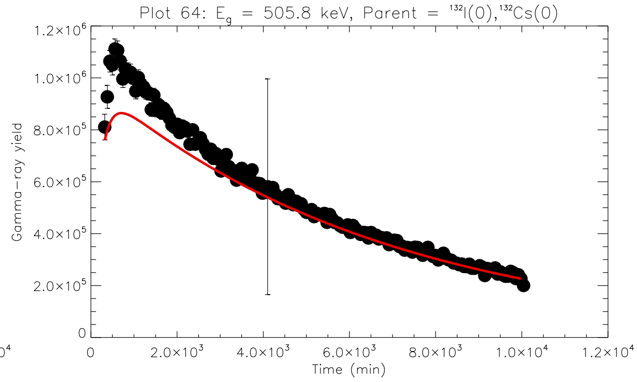
Plot 62: E_g = 671.6 keV, Parent = ^{132}I(0),^{149}Nd(0)



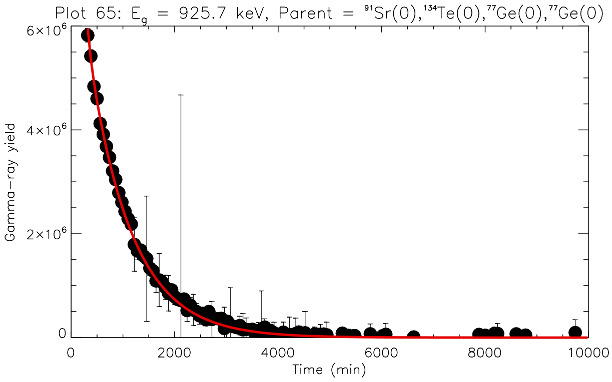
Plot 63: E_g = 1298.1 keV, Parent = ^{133}I(0),^{132}I(0),^{149}Nd(0),^{132}Cs(0)



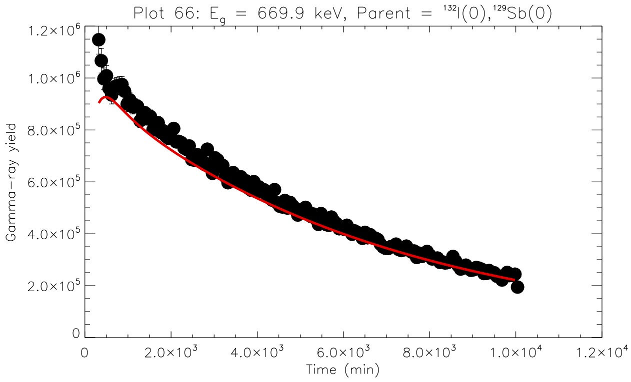
Plot 64: E_g = 505.8 keV, Parent = ^{132}I(0),^{132}Cs(0)



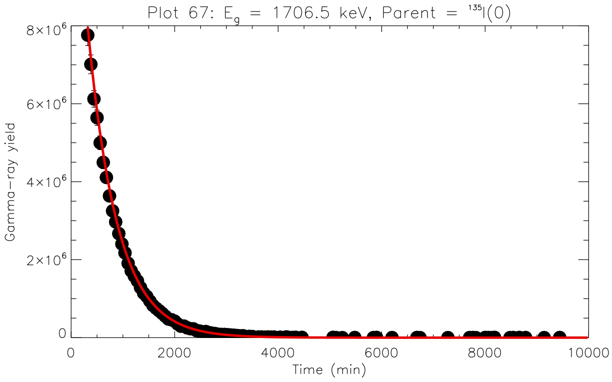
Plot 65: E_g = 925.7 keV, Parent = ^{91}Sr(0),^{134}Te(0),^{77}Ge(0),^{77}Ge(0)



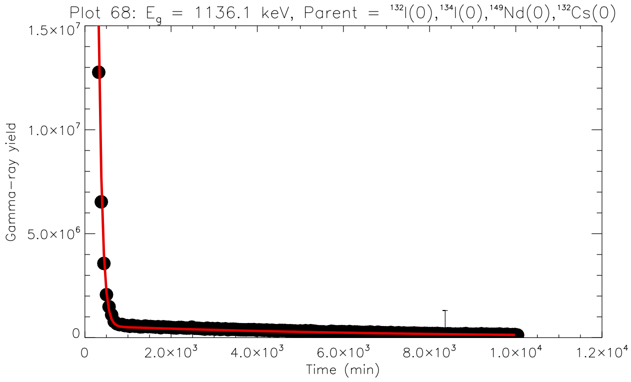
Plot 66: E_g = 669.9 keV, Parent = ^{132}I(0),^{129}Sb(0)



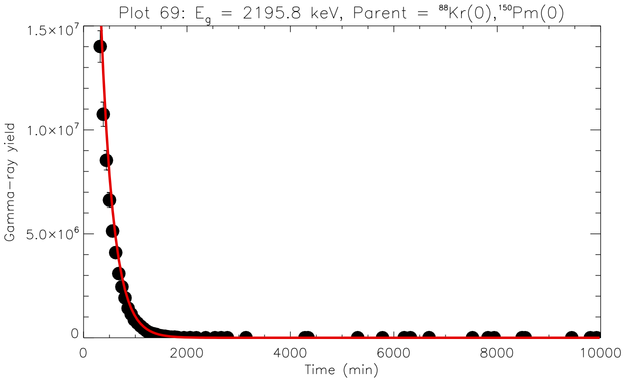
Plot 67: E_g = 1706.5 keV, Parent = ^{135}I(0)



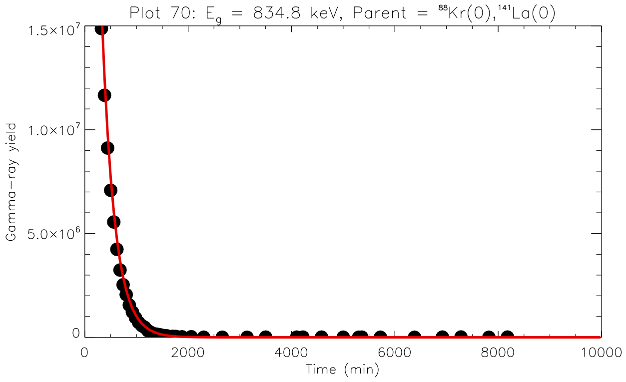
Plot 68: E_g = 1136.1 keV, Parent = ^{132}I(0),^{134}I(0),^{149}Nd(0),^{132}Cs(0)



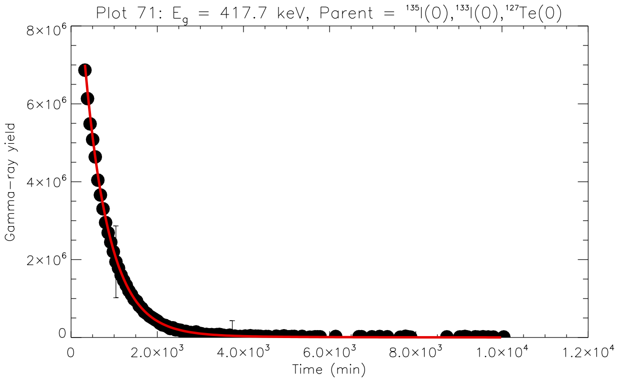
Plot 69: E_g = 2195.8 keV, Parent = ^{88}Kr(0),^{150}Pm(0)



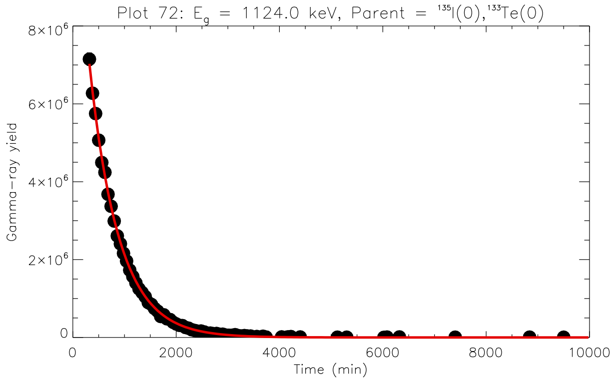
Plot 70: E_g = 834.8 keV, Parent = ^{88}Kr(0),^{141}La(0)



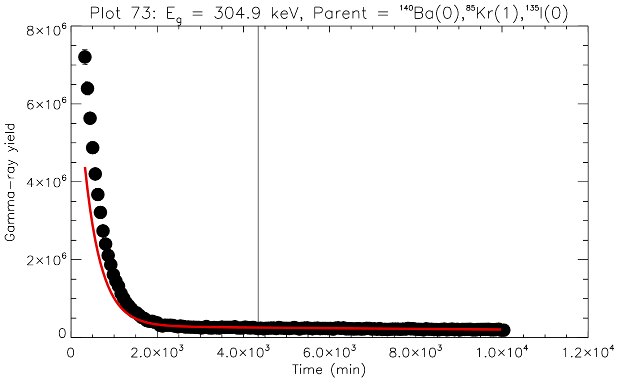
Plot 71: E_g = 417.7 keV, Parent = ^{135}I(0),^{133}I(0),^{127}Te(0)



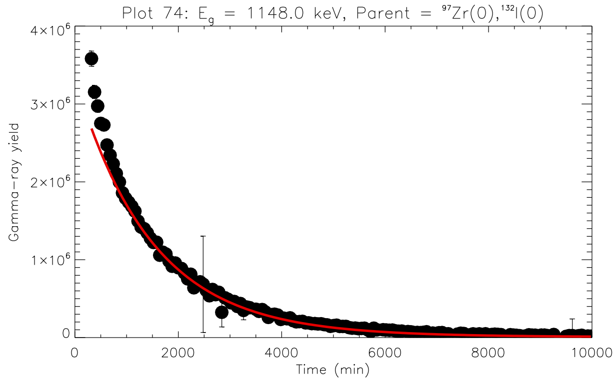
Plot 72: E_g = 1124.0 keV, Parent = ^{135}I(0),^{133}Te(0)



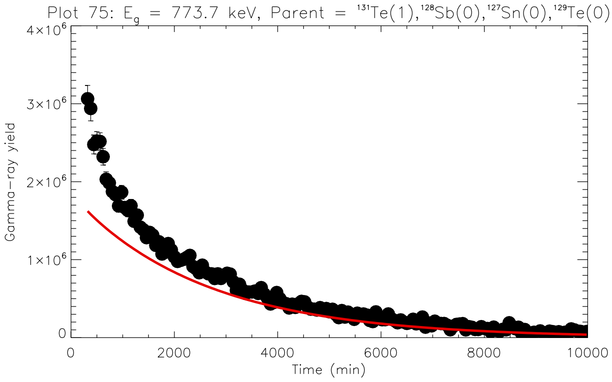
Plot 73: E_g = 304.9 keV, Parent = ^{140}Ba(0),^{85}Kr(1),^{135}I(0)



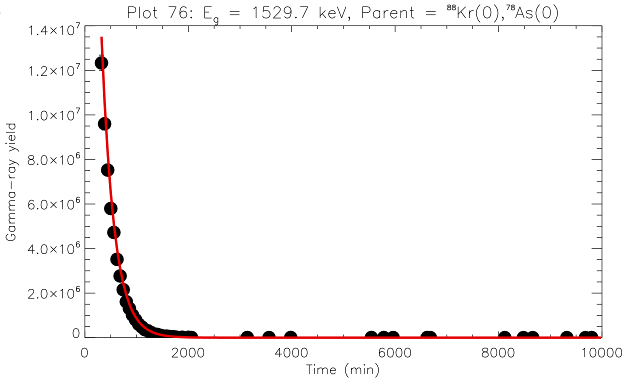
Plot 74: E_g = 1148.0 keV, Parent = ^{97}Zr(0),^{132}I(0)



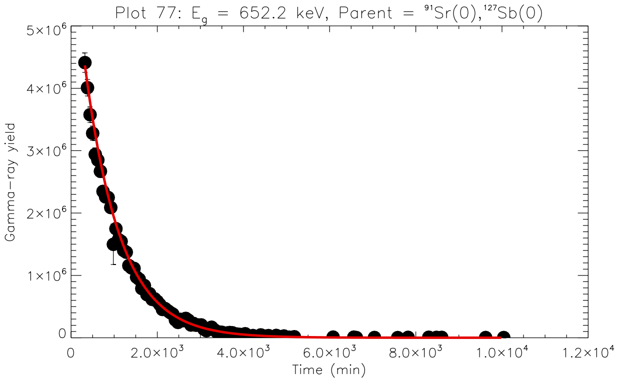
Plot 75: E_g = 773.7 keV, Parent = ^{131}Te(1),^{128}Sb(0),^{127}Sn(0),^{129}Te(0)



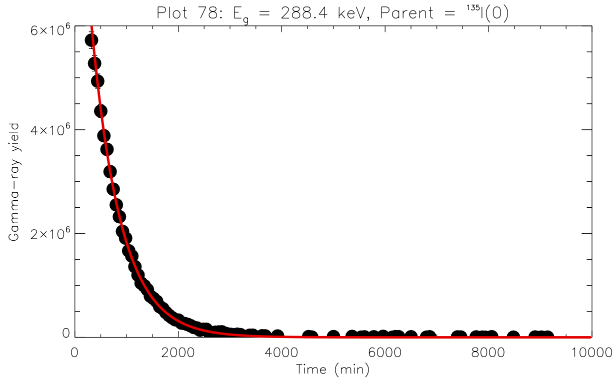
Plot 76: E_g = 1529.7 keV, Parent = ^{88}Kr(0),^{78}As(0)



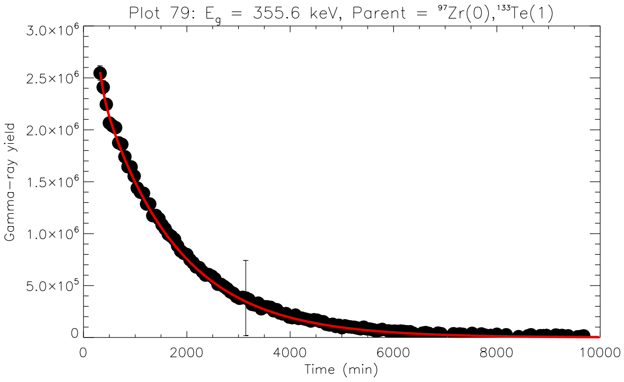
Plot 77: E_g = 652.2 keV, Parent = ^{91}Sr(0),^{127}Sb(0)



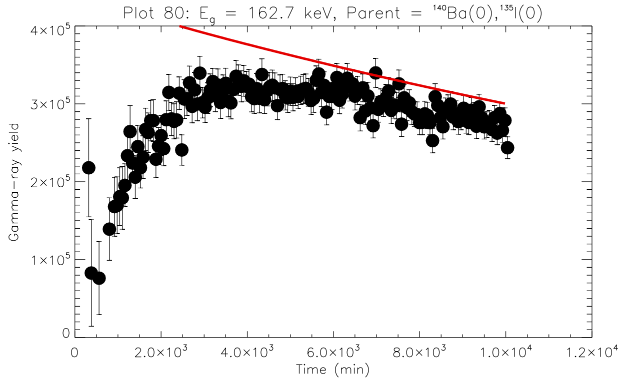
Plot 78: E_g = 288.4 keV, Parent = ^{135}I(0)



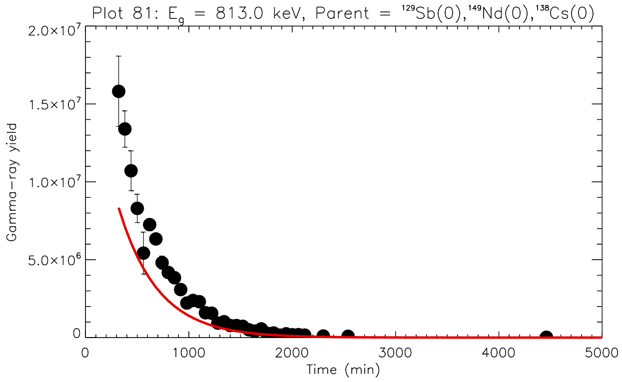
Plot 79: E_g = 355.6 keV, Parent = ^{97}Zr(0),^{133}Te(1)



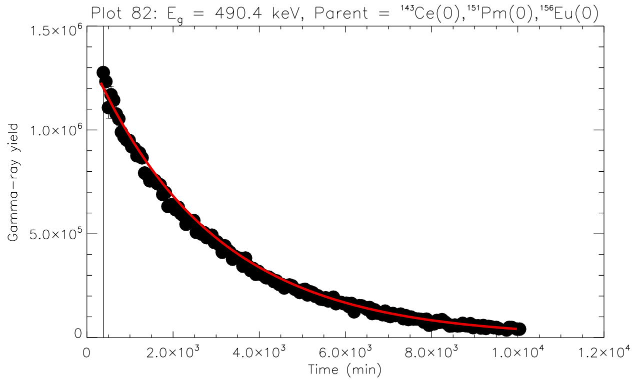
Plot 80: E_g = 162.7 keV, Parent = ^{140}Ba(0),^{135}I(0)



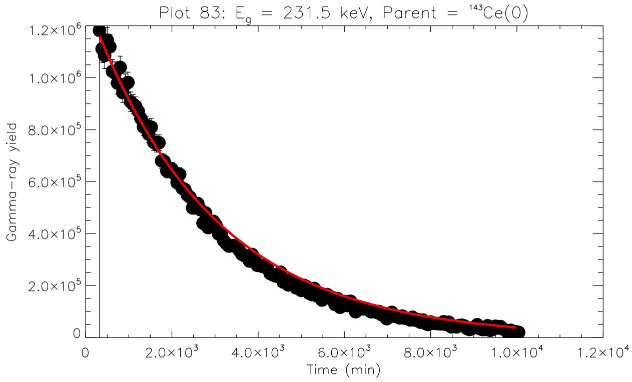
Plot 81: E_g = 813.0 keV, Parent = ^{129}Sb(0),^{149}Nd(0),^{138}Cs(0)



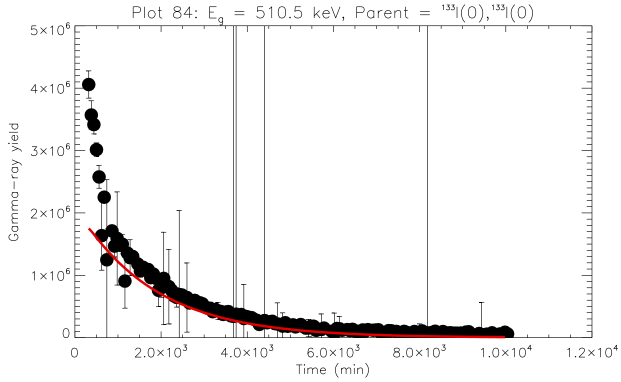
Plot 82: E_g = 490.4 keV, Parent = ^{143}Ce(0),^{151}Pm(0),^{156}Eu(0)



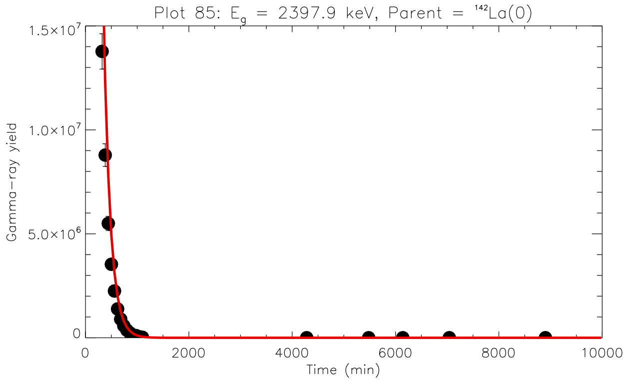
Plot 83: E_g = 231.5 keV, Parent = ^{143}Ce(0)



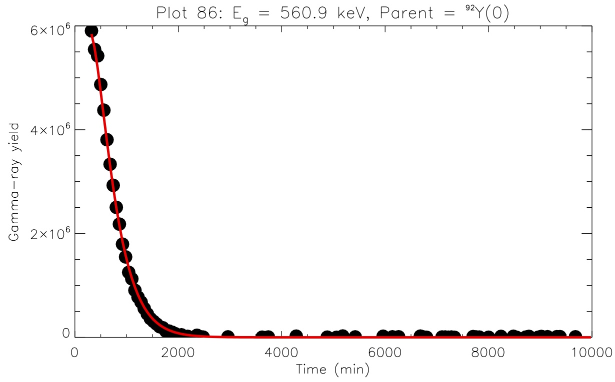
Plot 84: E_g = 510.5 keV, Parent = ^{133}I(0),^{133}I(0)



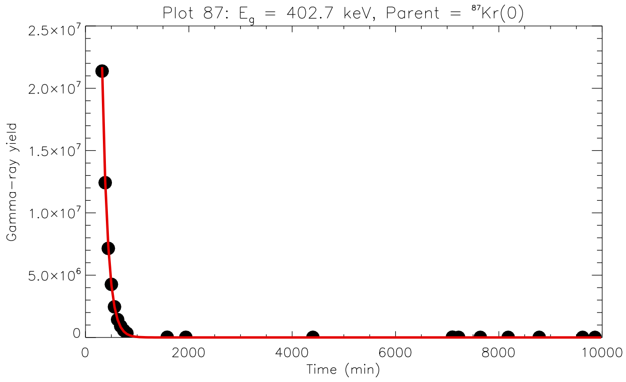
Plot 85: E_g = 2397.9 keV, Parent = ^{142}La(0)



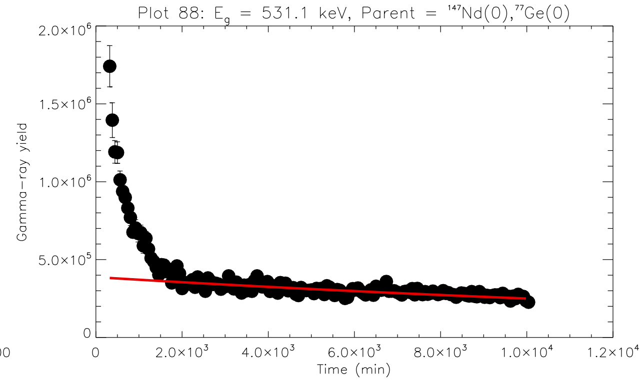
Plot 86: E_g = 560.9 keV, Parent = ^{92}Y(0)



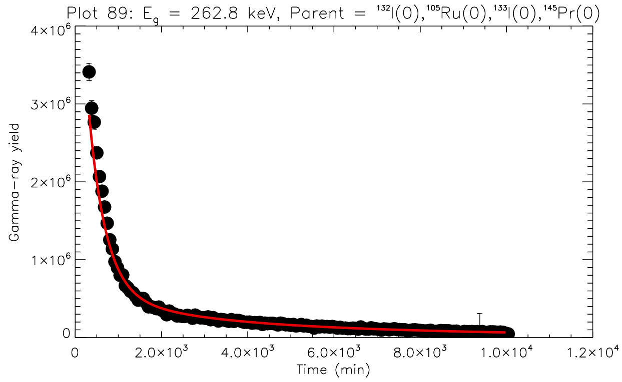
Plot 87: E_g = 402.7 keV, Parent = ^{87}Kr(0)



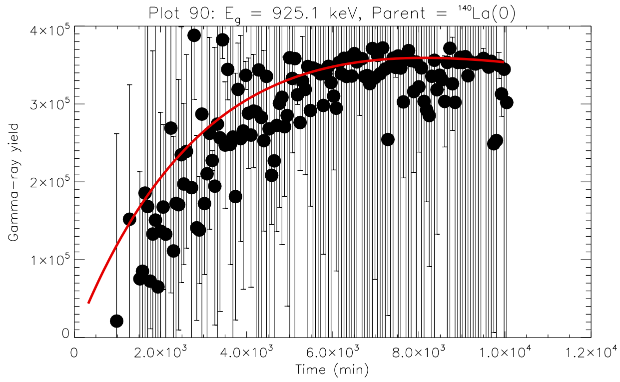
Plot 88: E_g = 531.1 keV, Parent = ^{147}Nd(0),^{77}Ge(0)



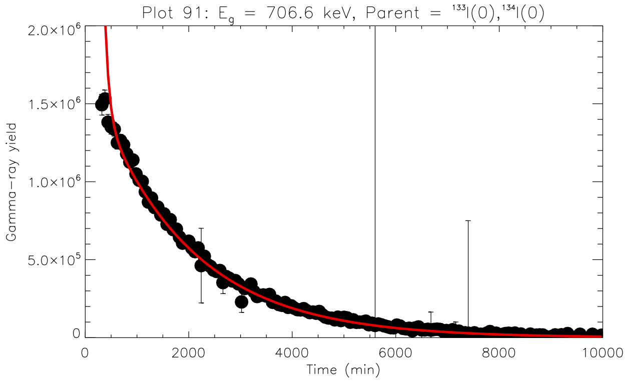
Plot 89: E_g = 262.8 keV, Parent = ^{132}I(0),^{105}Ru(0),^{133}I(0),^{145}Pr(0)



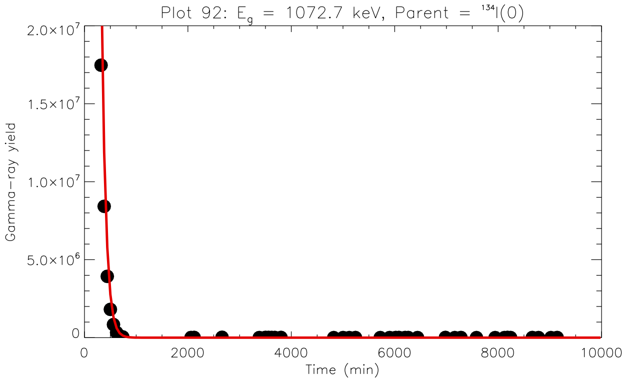
Plot 90: E_g = 925.1 keV, Parent = ^{140}La(0)



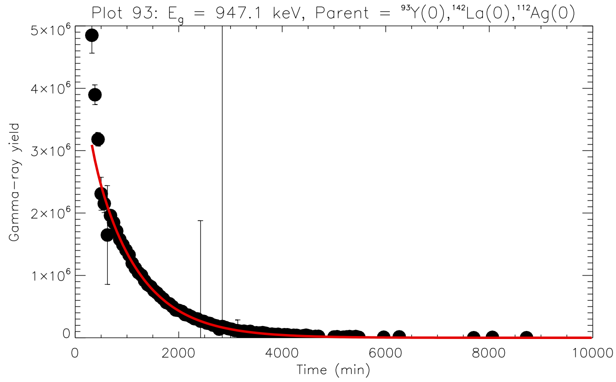
Plot 91: E_g = 706.6 keV, Parent = ^{133}I(0),^{134}I(0)



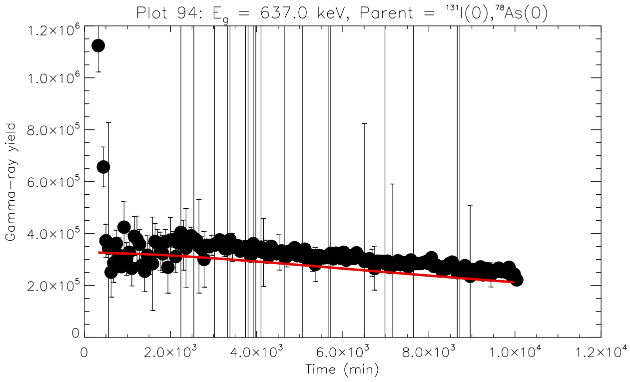
Plot 92: E_g = 1072.7 keV, Parent = ^{134}I(0)



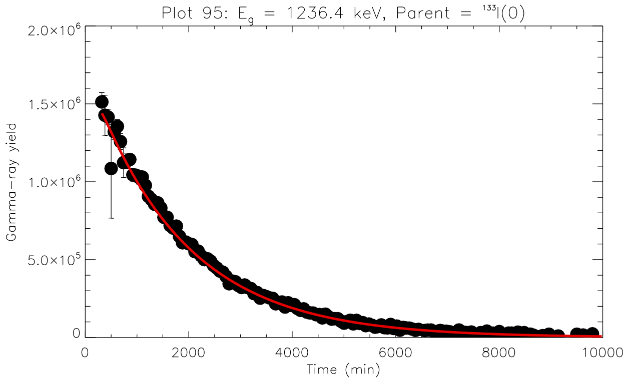
Plot 93: E_g = 947.1 keV, Parent = ^{93}Y(0),^{142}La(0),^{112}Ag(0)



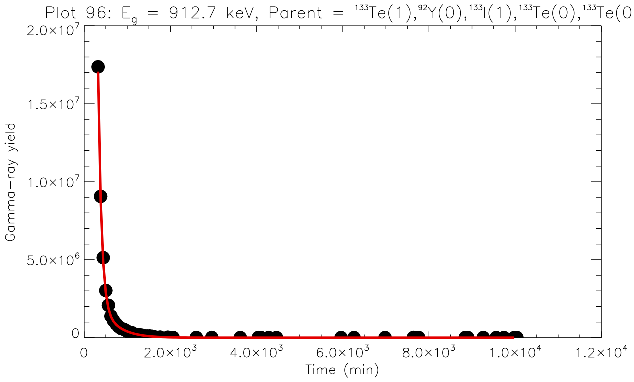
Plot 94: E_g = 637.0 keV, Parent = ^{131}I(0),^{78}As(0)

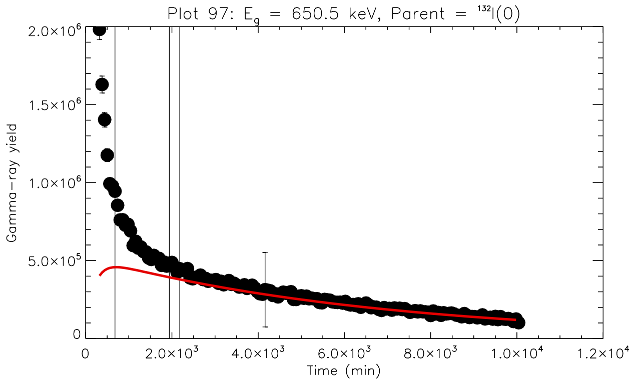


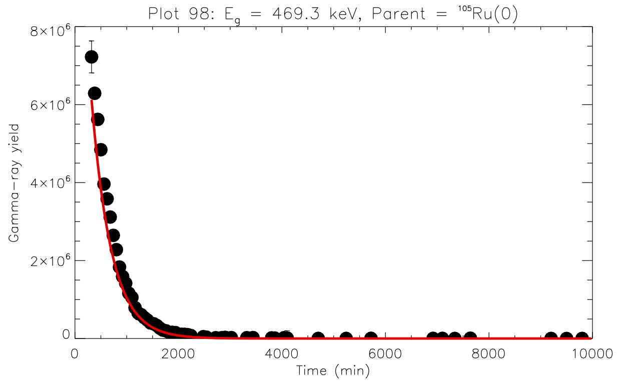
Plot 95: E_g = 1236.4 keV, Parent = ^{133}I(0)

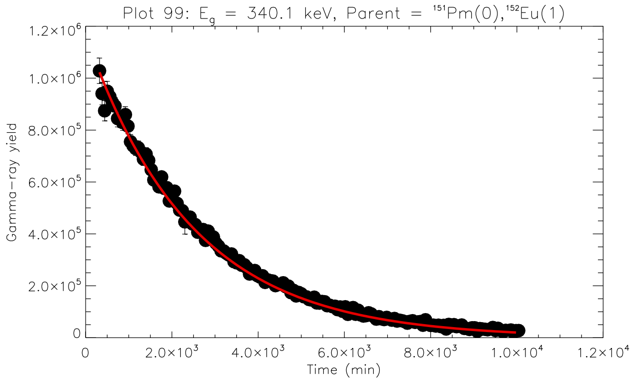


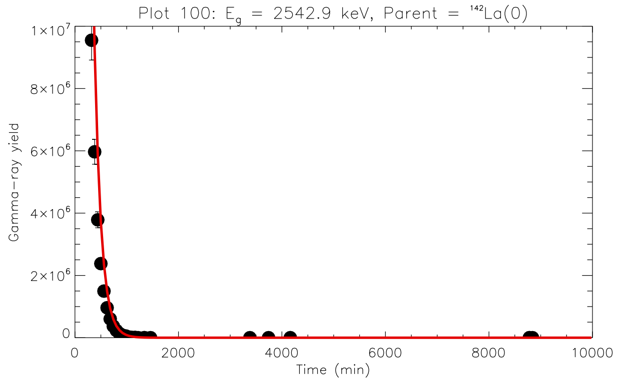
Plot 96: E_g = 912.7 keV, Parent = ^{133}Te(1),^{92}Y(0),^{133}I(1),^{133}Te(0),^{133}Te(0)

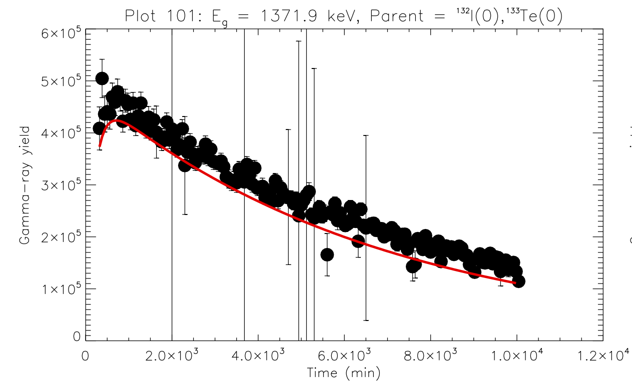


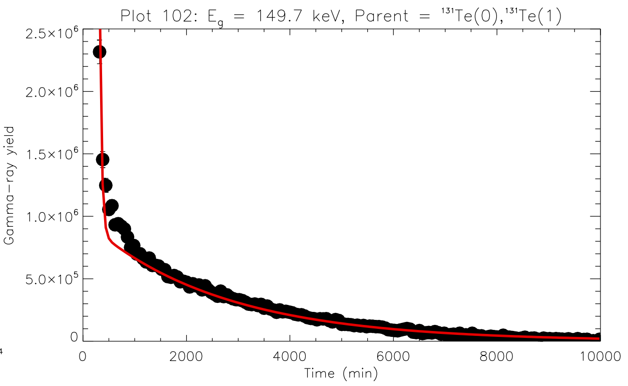

Plot 97: E_g = 650.5 keV, Parent = ^{132}I(0)
Gamma-ray yield
Time (min)

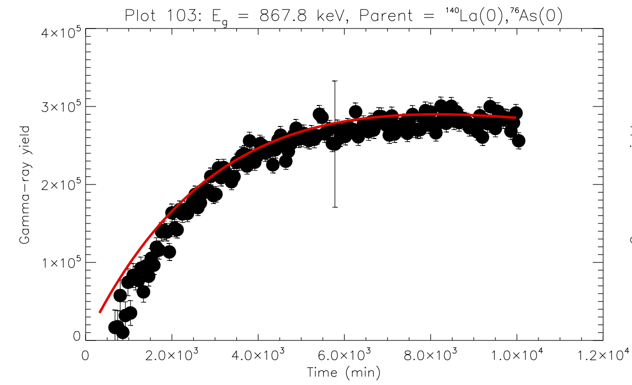

Plot 98: E_g = 469.3 keV, Parent = ^{105}Ru(0)
Gamma-ray yield
Time (min)

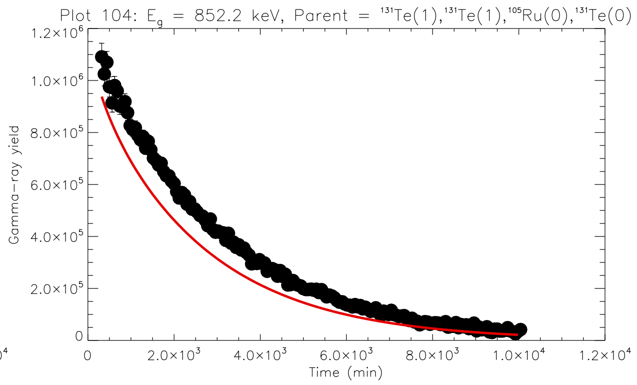

Plot 99: E_g = 340.1 keV, Parent = ^{151}Pm(0),^{152}Eu(1)
Gamma-ray yield
Time (min)


Plot 100: E_g = 2542.9 keV, Parent = ^{142}La(0)
Gamma-ray yield
Time (min)

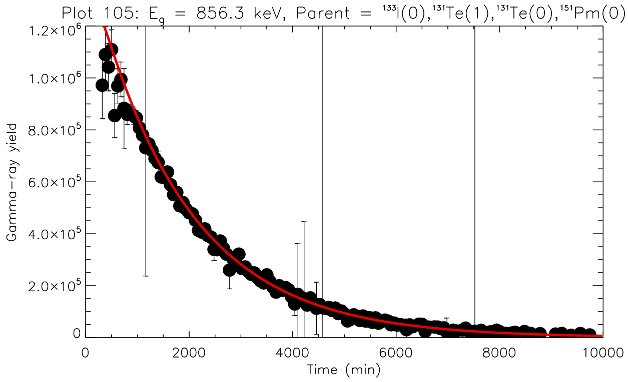

Plot 101: E_g = 1371.9 keV, Parent = ^{132}I(0),^{133}Te(0)
Gamma-ray yield
Time (min)


Plot 102: E_g = 149.7 keV, Parent = ^{131}Te(0),^{131}Te(1)
Gamma-ray yield
Time (min)

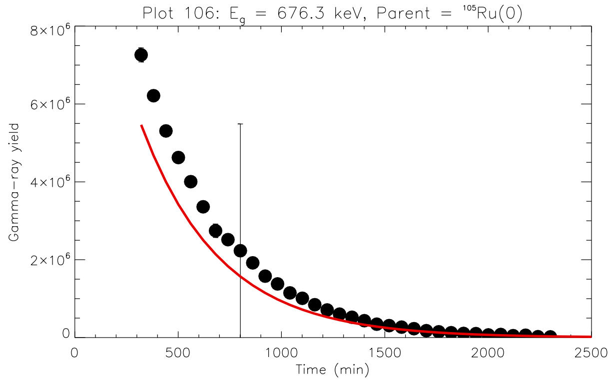

Plot 103: E_g = 867.8 keV, Parent = ^{140}La(0),^{76}As(0)
Gamma-ray yield
Time (min)


Plot 104: E_g = 852.2 keV, Parent = ^{131}Te(1),^{131}Te(1),^{105}Ru(0),^{131}Te(0)
Gamma-ray yield
Time (min)

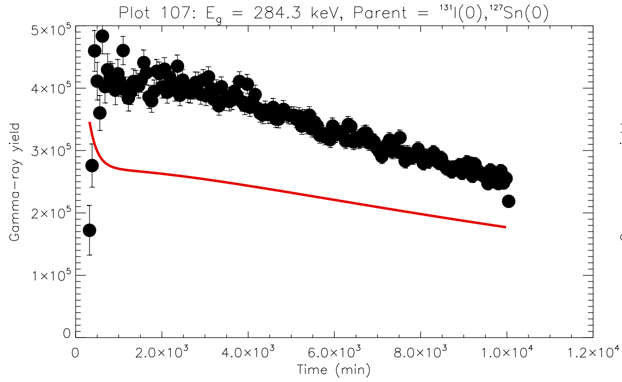
Plot 105: E_g = 856.3 keV, Parent = ^{133}I(0),^{131}Te(1),^{131}Te(0),^{151}Pm(0)



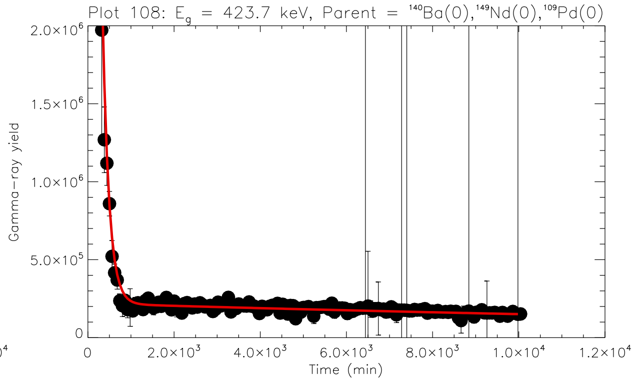
Plot 106: E_g = 676.3 keV, Parent = ^{105}Ru(0)



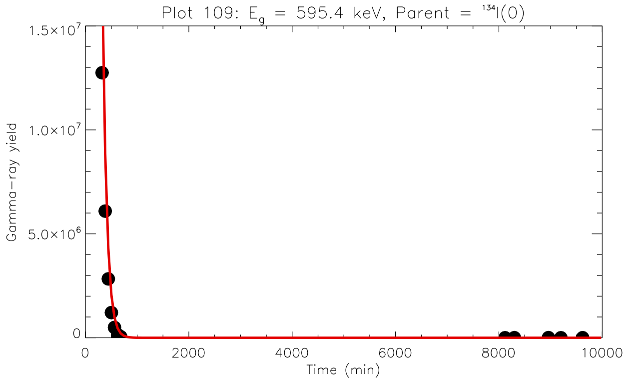
Plot 107: E_g = 284.3 keV, Parent = ^{131}I(0),^{127}Sn(0)



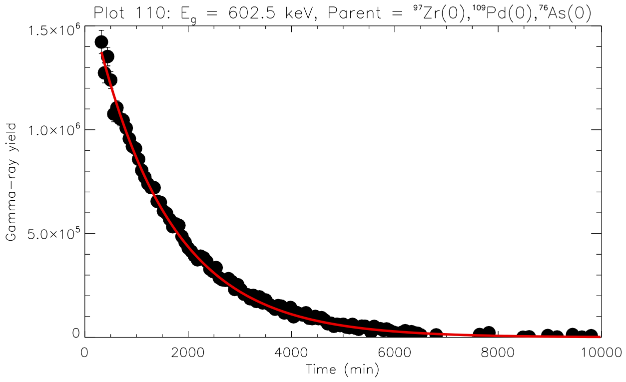
Plot 108: E_g = 423.7 keV, Parent = ^{140}Ba(0),^{149}Nd(0),^{109}Pd(0)



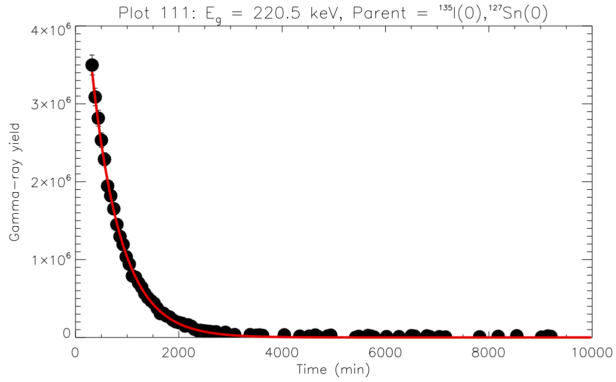
Plot 109: E_g = 595.4 keV, Parent = ^{134}I(0)



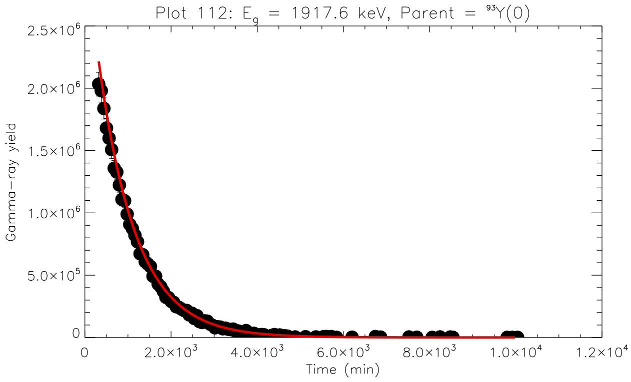
Plot 110: E_g = 602.5 keV, Parent = ^{97}Zr(0),^{109}Pd(0),^{76}As(0)

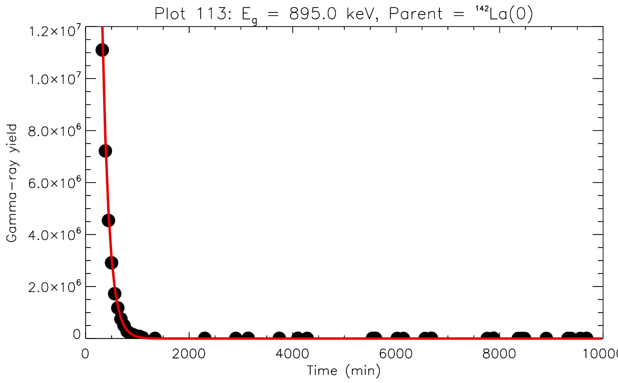


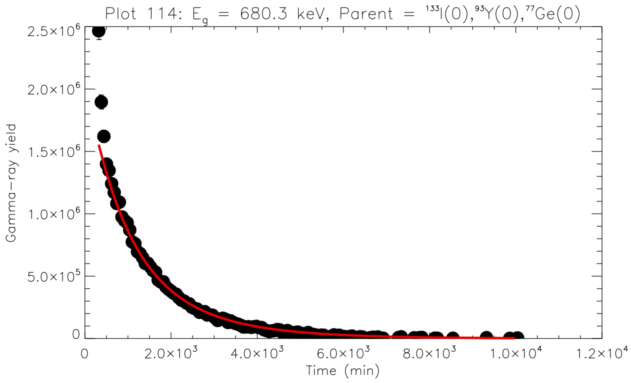
Plot 111: E_g = 220.5 keV, Parent = ^{135}I(0),^{127}Sn(0)

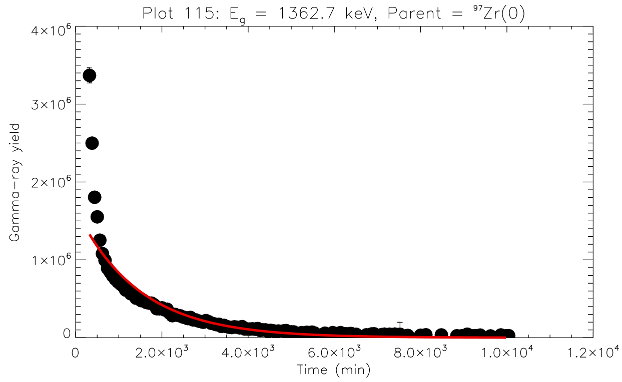


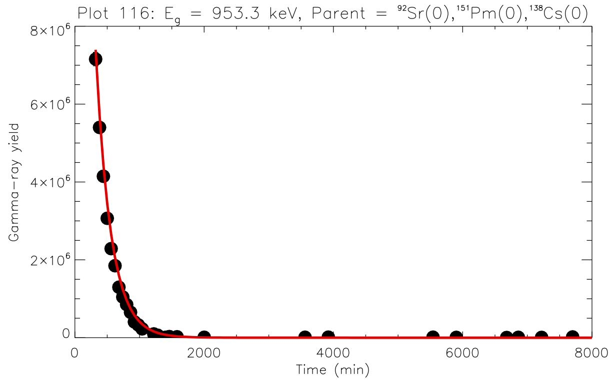
Plot 112: E_g = 1917.6 keV, Parent = ^{93}Y(0)

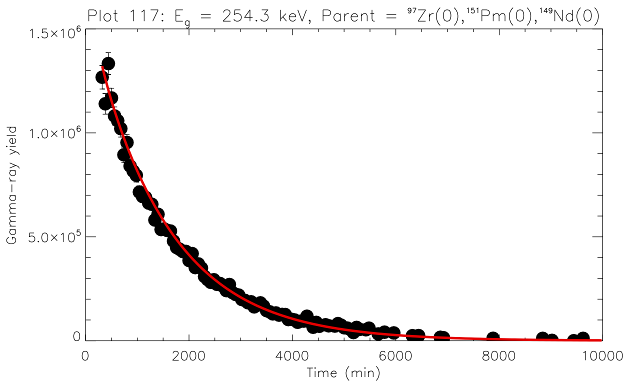


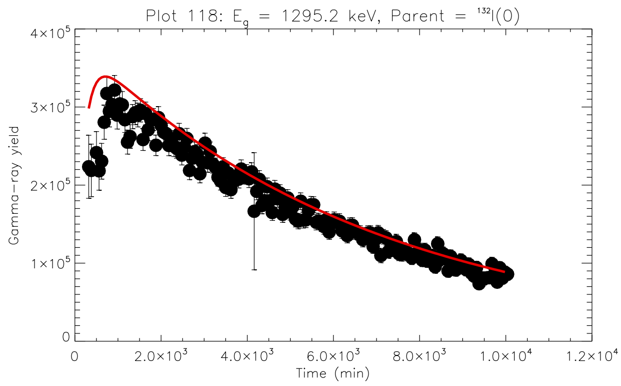

Plot 113: E_g = 895.0 keV, Parent = ^{142}La(0)
Gamma-ray yield
Time (min)
0
2.0×10^6
4.0×10^6
6.0×10^6
8.0×10^6
1.0×10^7
1.2×10^7
2000
4000
6000
8000
10000

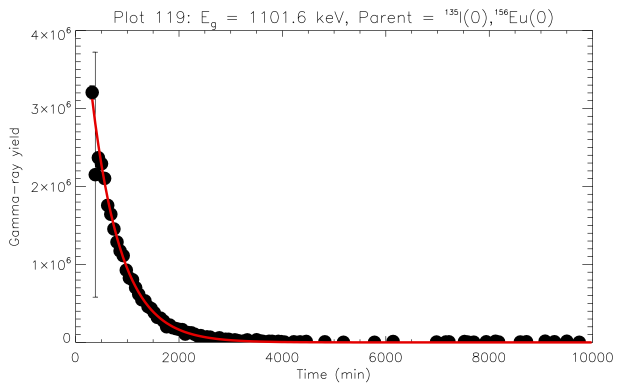

Plot 114: E_g = 680.3 keV, Parent = ^{133}I(0),^{93}Y(0),^{77}Ge(0)
Gamma-ray yield
Time (min)
5.0×10^5
1.0×10^6
1.5×10^6
2.0×10^6
2.5×10^6
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4

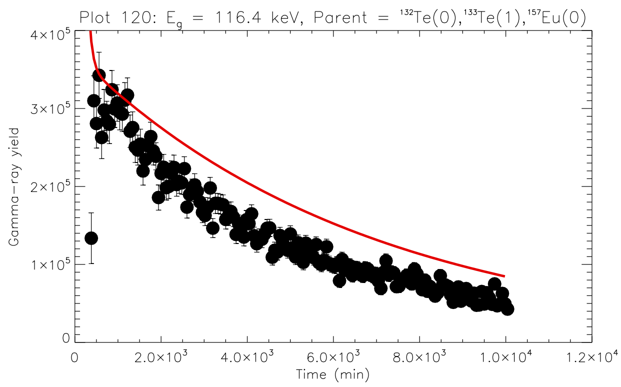

Plot 115: E_g = 1362.7 keV, Parent = ^{97}Zr(0)
Gamma-ray yield
Time (min)
1×10^6
2×10^6
3×10^6
4×10^6
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4

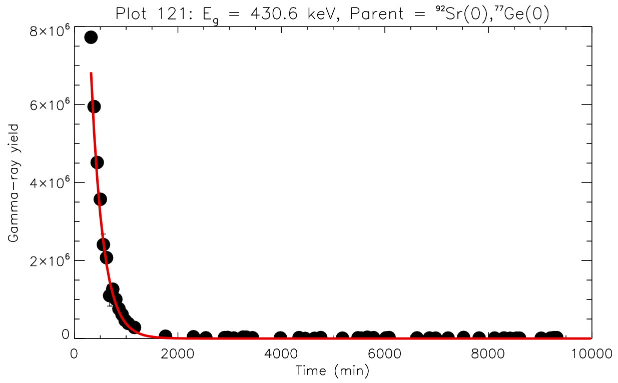

Plot 116: E_g = 953.3 keV, Parent = ^{92}Sr(0),^{151}Pm(0),^{138}Cs(0)
Gamma-ray yield
Time (min)
2×10^6
4×10^6
6×10^6
8×10^6
2000
4000
6000
8000

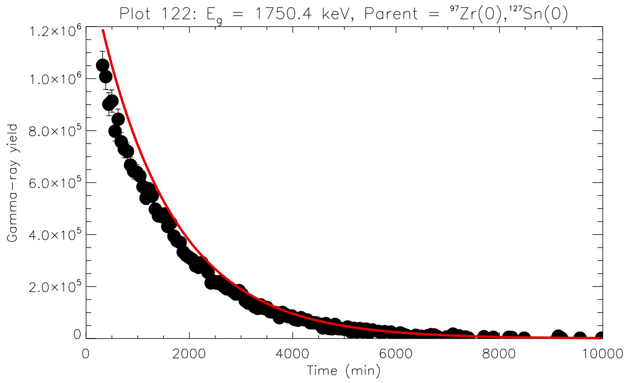

Plot 117: E_g = 254.3 keV, Parent = ^{97}Zr(0),^{151}Pm(0),^{149}Nd(0)
Gamma-ray yield
Time (min)
5.0×10^5
1.0×10^6
1.5×10^6
2000
4000
6000
8000
10000

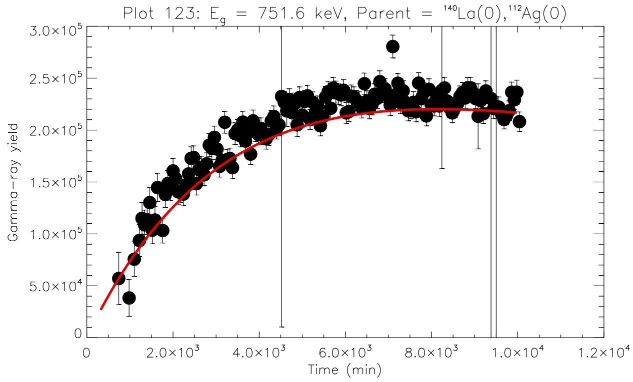

Plot 118: E_g = 1295.2 keV, Parent = ^{132}I(0)
Gamma-ray yield
Time (min)
1×10^5
2×10^5
3×10^5
4×10^5
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4

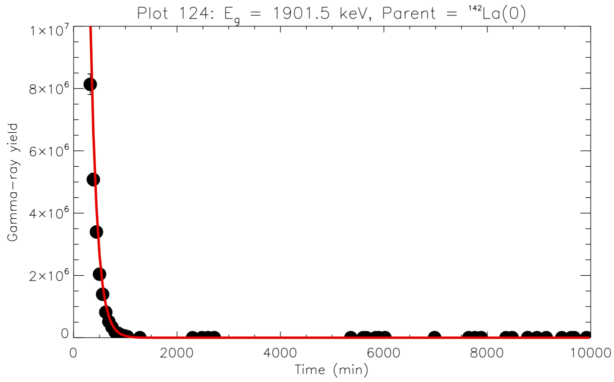

Plot 119: E_g = 1101.6 keV, Parent = ^{135}I(0),^{156}Eu(0)
Gamma-ray yield
Time (min)
1×10^6
2×10^6
3×10^6
4×10^6
2000
4000
6000
8000
10000

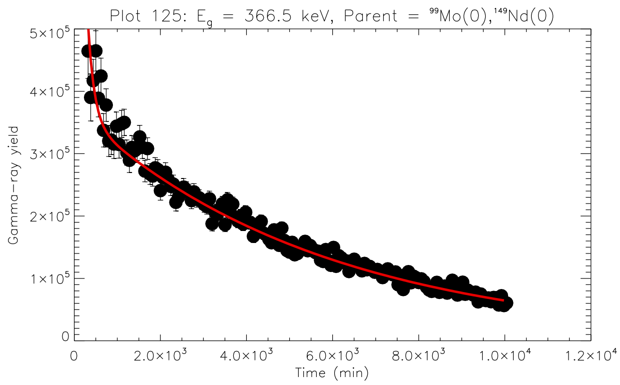

Plot 120: E_g = 116.4 keV, Parent = ^{132}Te(0),^{133}Te(1),^{157}Eu(0)
Gamma-ray yield
Time (min)
1×10^5
2×10^5
3×10^5
4×10^5
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4

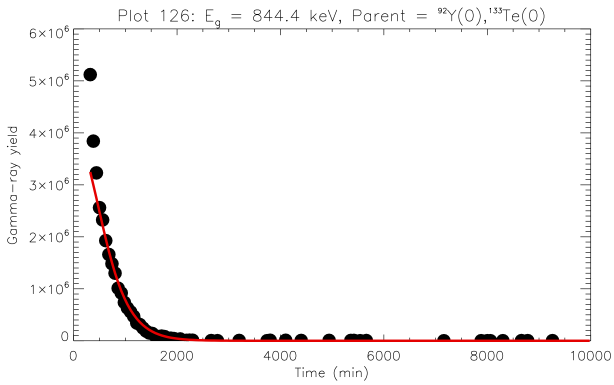

Plot 121: E_g = 430.6 keV, Parent = 92Sr(0),77Ge(0)
Gamma-ray yield
Time (min)

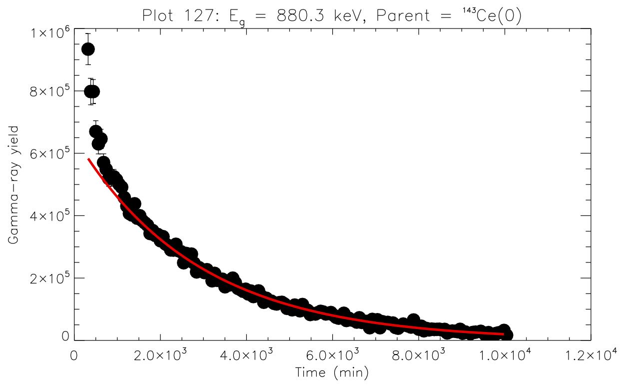

Plot 122: E_g = 1750.4 keV, Parent = 97Zr(0),127Sn(0)
Gamma-ray yield
Time (min)

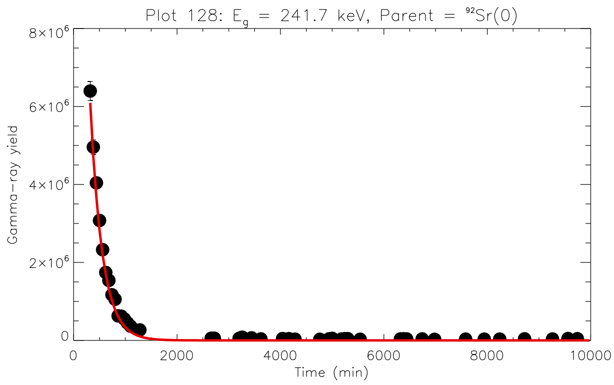

Plot 123: E_g = 751.6 keV, Parent = 140La(0),112Ag(0)
Gamma-ray yield
Time (min)

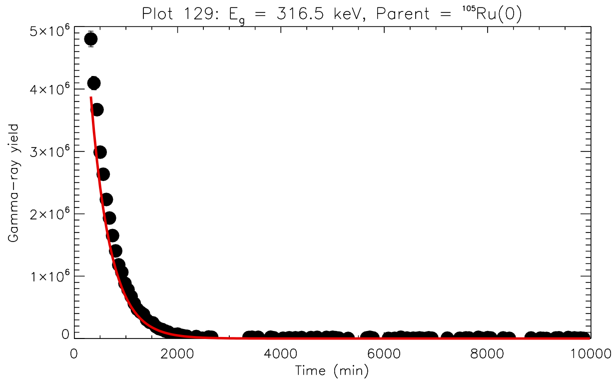

Plot 124: E_g = 1901.5 keV, Parent = 142La(0)
Gamma-ray yield
Time (min)

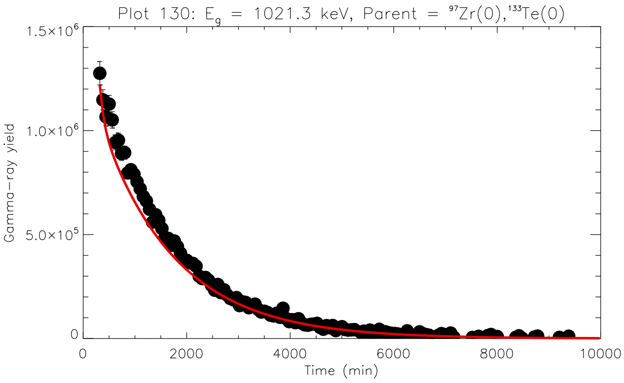

Plot 125: E_g = 366.5 keV, Parent = 99Mo(0),149Nd(0)
Gamma-ray yield
Time (min)

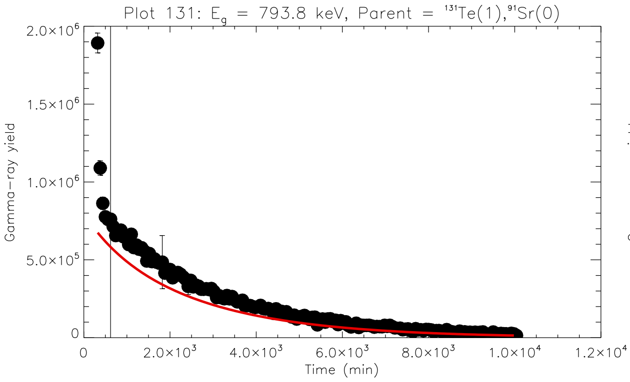

Plot 126: E_g = 844.4 keV, Parent = 92Y(0),133Te(0)
Gamma-ray yield
Time (min)

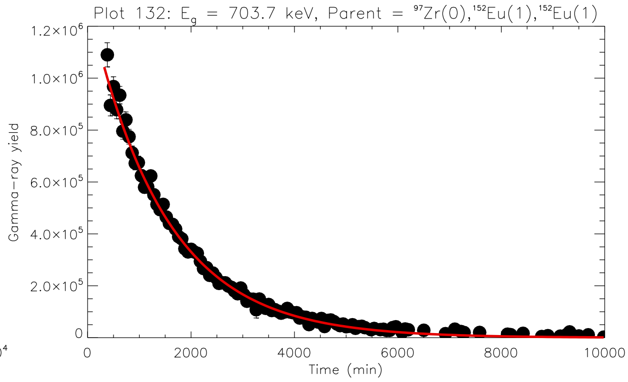

Plot 127: E_g = 880.3 keV, Parent = 143Ce(0)
Gamma-ray yield
Time (min)

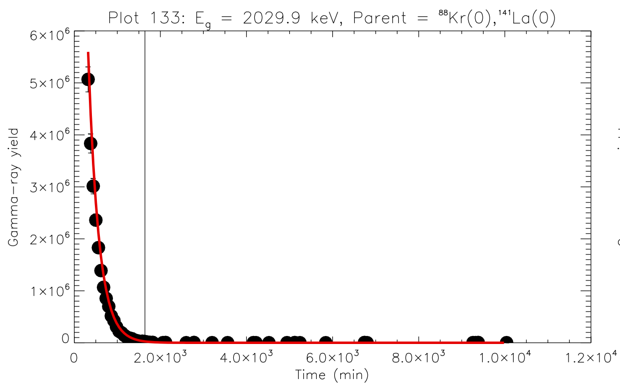

Plot 128: E_g = 241.7 keV, Parent = 92Sr(0)
Gamma-ray yield
Time (min)

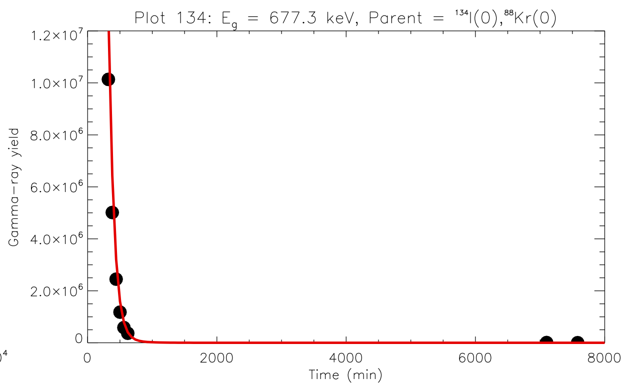

Plot 129: E_g = 316.5 keV, Parent = ^{105}Ru(0)
Gamma-ray yield
Time (min)

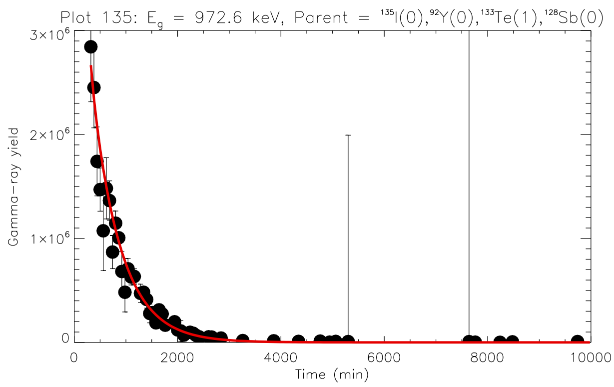

Plot 130: E_g = 1021.3 keV, Parent = ^{97}Zr(0),^{133}Te(0)
Gamma-ray yield
Time (min)

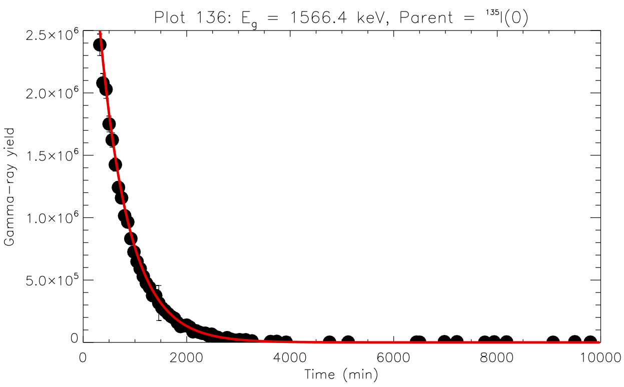

Plot 131: E_g = 793.8 keV, Parent = ^{131}Te(1),^{91}Sr(0)
Gamma-ray yield
Time (min)


Plot 132: E_g = 703.7 keV, Parent = ^{97}Zr(0),^{152}Eu(1),^{152}Eu(1)
Gamma-ray yield
Time (min)

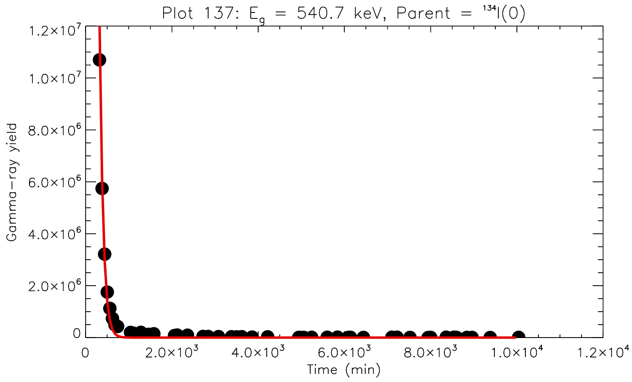

Plot 133: E_g = 2029.9 keV, Parent = ^{88}Kr(0),^{141}La(0)
Gamma-ray yield
Time (min)


Plot 134: E_g = 677.3 keV, Parent = ^{134}I(0),^{88}Kr(0)
Gamma-ray yield
Time (min)

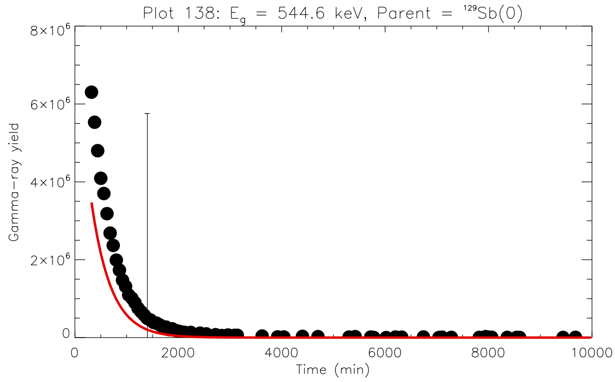

Plot 135: E_g = 972.6 keV, Parent = ^{135}I(0),^{92}Y(0),^{133}Te(1),^{128}Sb(0)
Gamma-ray yield
Time (min)


Plot 136: E_g = 1566.4 keV, Parent = ^{135}I(0)
Gamma-ray yield
Time (min)

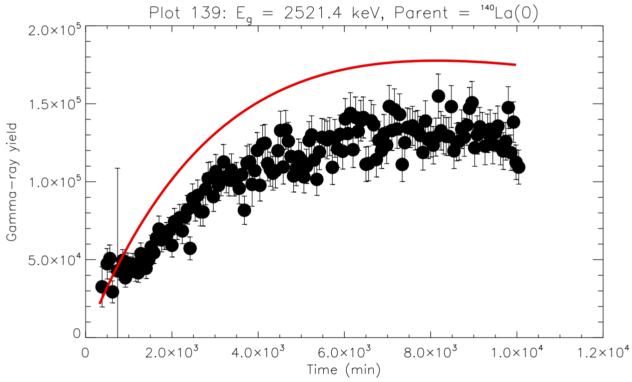
Plot 137: E_g = 540.7 keV, Parent = ^{134}I(0)



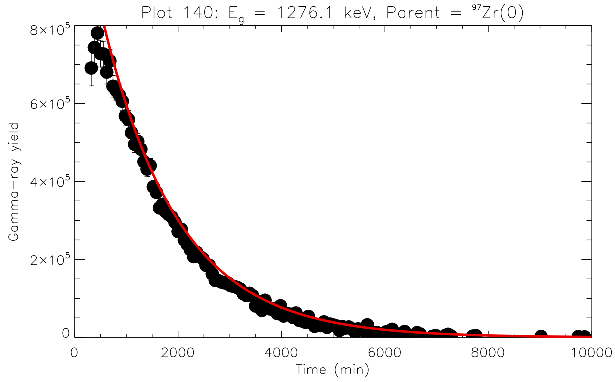
Plot 138: E_g = 544.6 keV, Parent = ^{129}Sb(0)



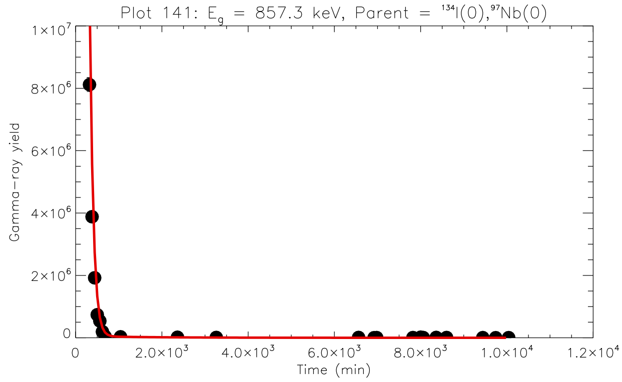
Plot 139: E_g = 2521.4 keV, Parent = ^{140}La(0)



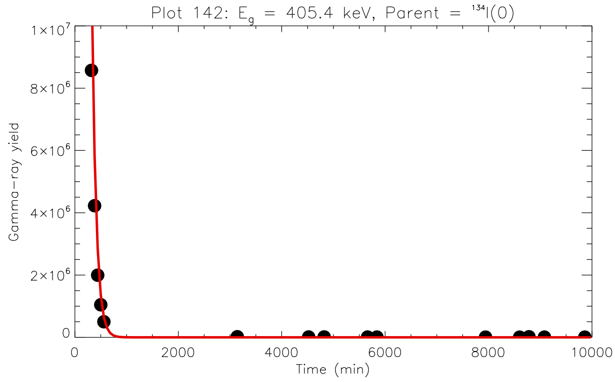
Plot 140: E_g = 1276.1 keV, Parent = ^{97}Zr(0)



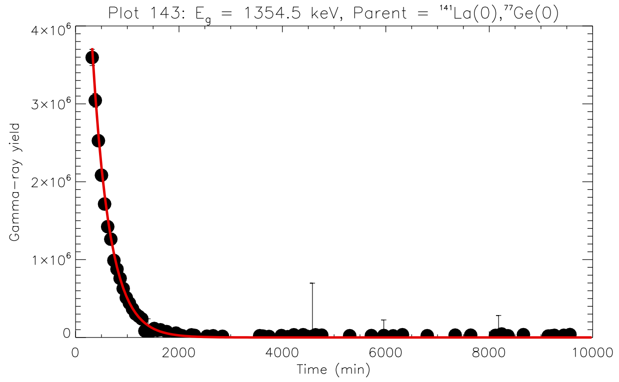
Plot 141: E_g = 857.3 keV, Parent = ^{134}I(0),^{97}Nb(0)



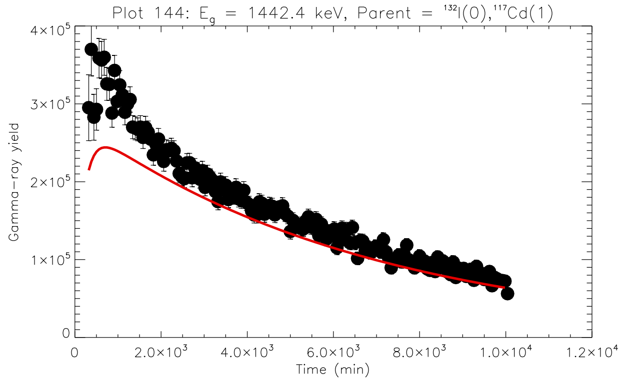
Plot 142: E_g = 405.4 keV, Parent = ^{134}I(0)



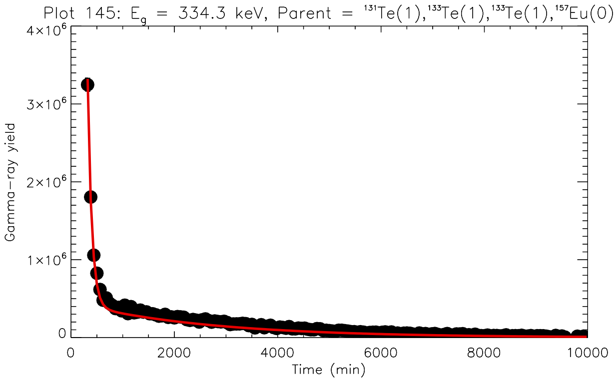
Plot 143: E_g = 1354.5 keV, Parent = ^{141}La(0),^{77}Ge(0)



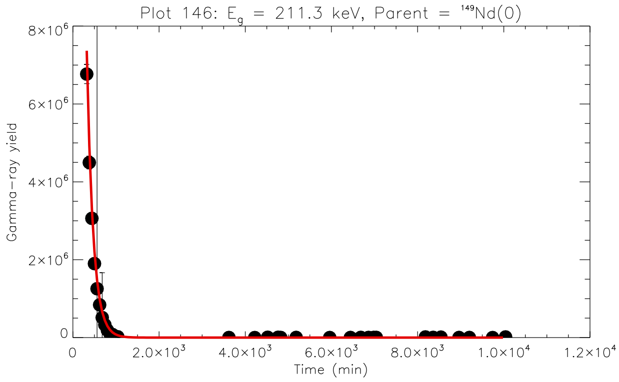
Plot 144: E_g = 1442.4 keV, Parent = ^{132}I(0),^{117}Cd(1)



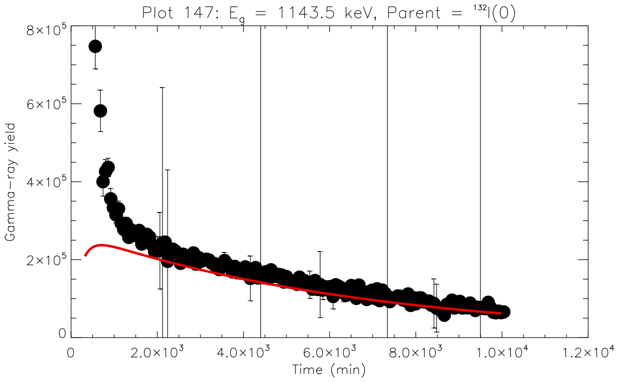
Plot 145: E_g = 334.3 keV, Parent = ^{131}Te(1),^{133}Te(1),^{133}Te(1),^{157}Eu(0)



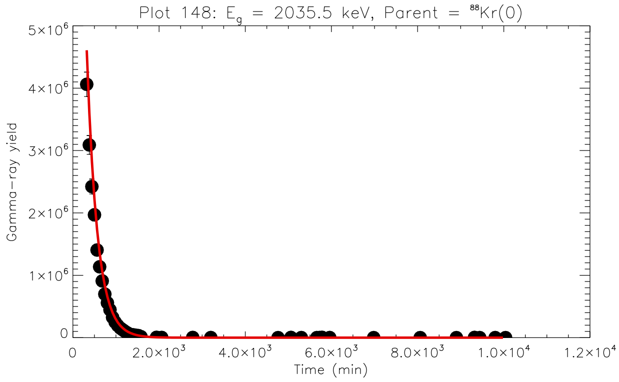
Plot 146: E_g = 211.3 keV, Parent = ^{149}Nd(0)



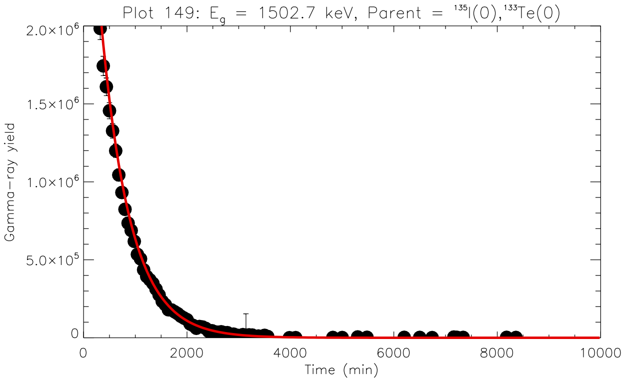
Plot 147: E_g = 1143.5 keV, Parent = ^{132}I(0)



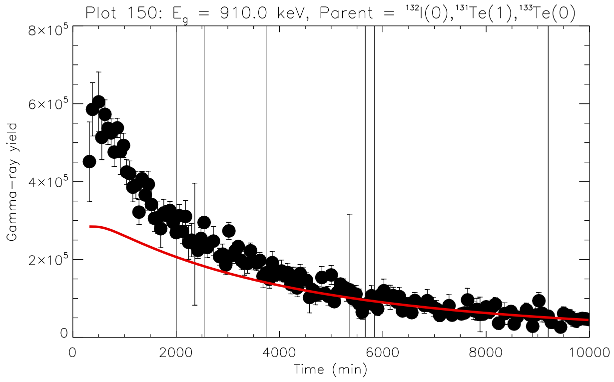
Plot 148: E_g = 2035.5 keV, Parent = ^{88}Kr(0)



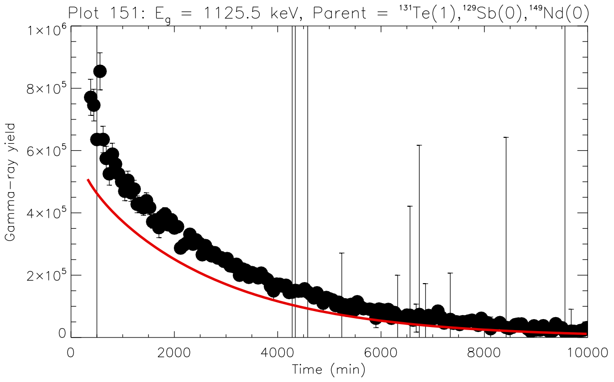
Plot 149: E_g = 1502.7 keV, Parent = ^{135}I(0),^{133}Te(0)



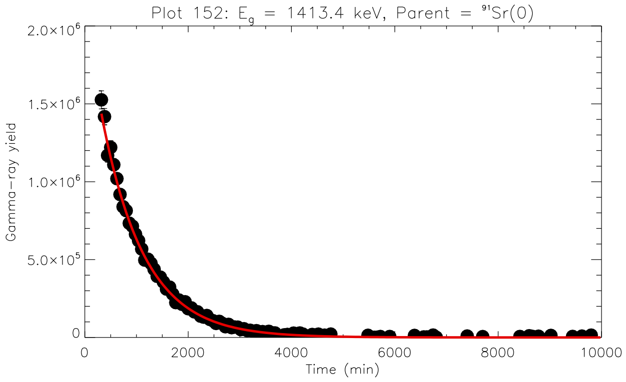
Plot 150: E_g = 910.0 keV, Parent = ^{132}I(0),^{131}Te(1),^{133}Te(0)



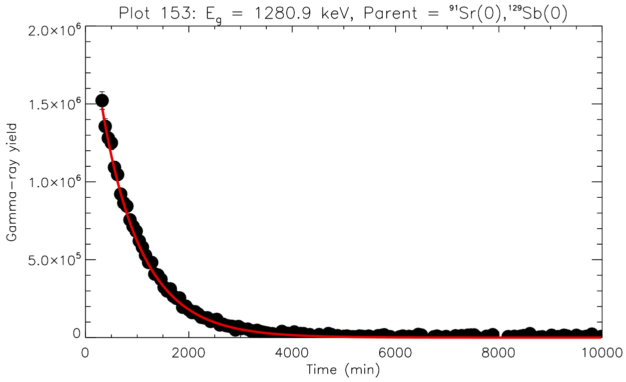
Plot 151: E_g = 1125.5 keV, Parent = ^{131}Te(1),^{129}Sb(0),^{149}Nd(0)



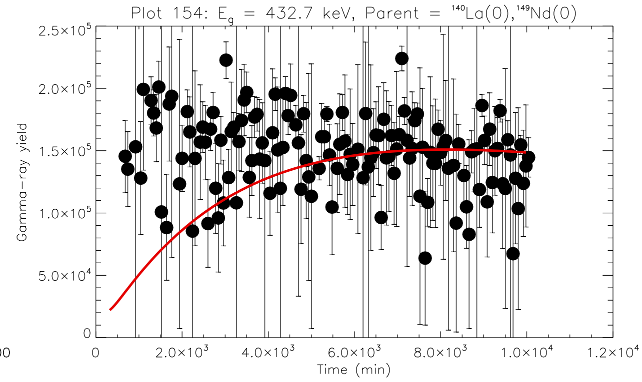
Plot 152: E_g = 1413.4 keV, Parent = ^{91}Sr(0)



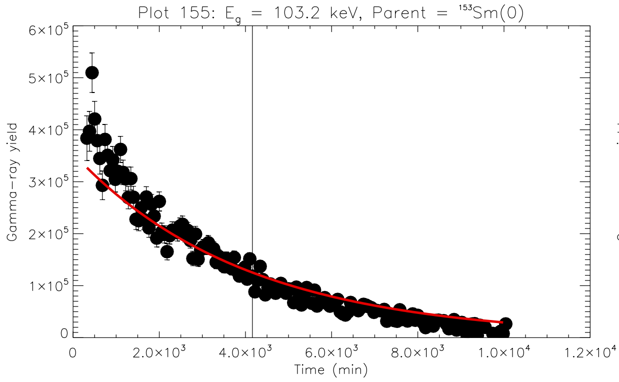
Plot 153: E_g = 1280.9 keV, Parent = ^{91}Sr(0),^{129}Sb(0)



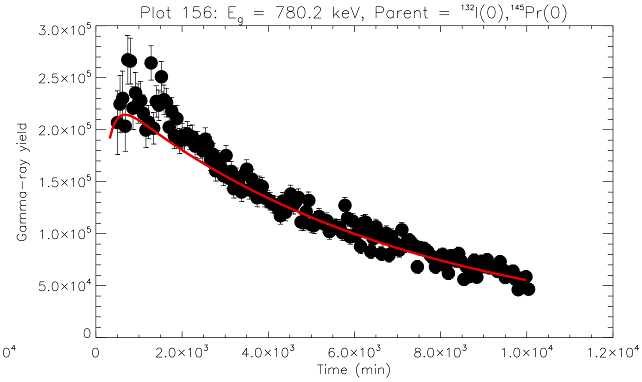
Plot 154: E_g = 432.7 keV, Parent = ^{140}La(0),^{149}Nd(0)



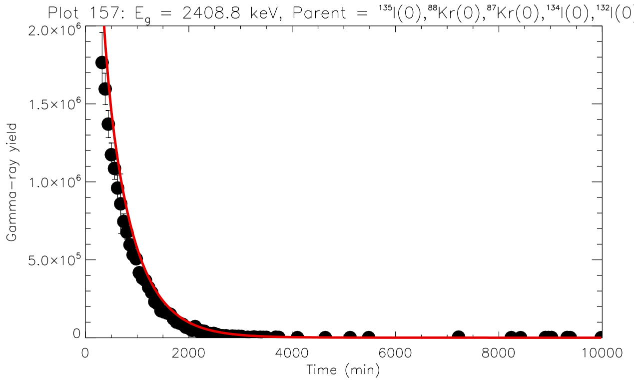
Plot 155: E_g = 103.2 keV, Parent = ^{153}Sm(0)



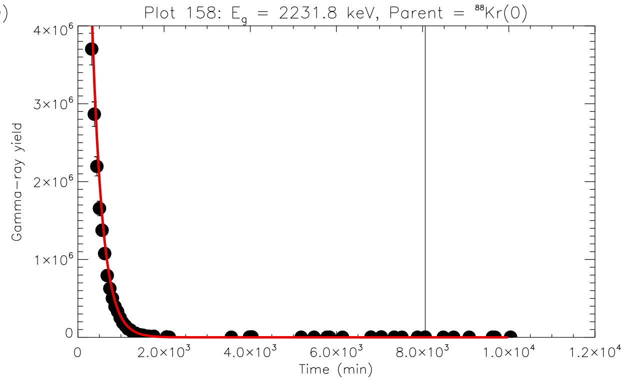
Plot 156: E_g = 780.2 keV, Parent = ^{132}I(0),^{145}Pr(0)



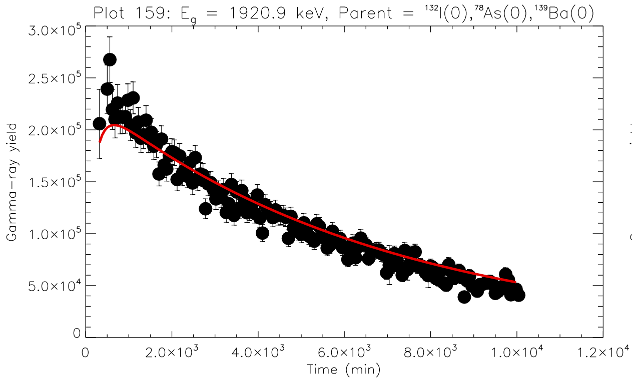
Plot 157: E_g = 2408.8 keV, Parent = ^{135}I(0),^{88}Kr(0),^{87}Kr(0),^{134}I(0),^{132}I(0)



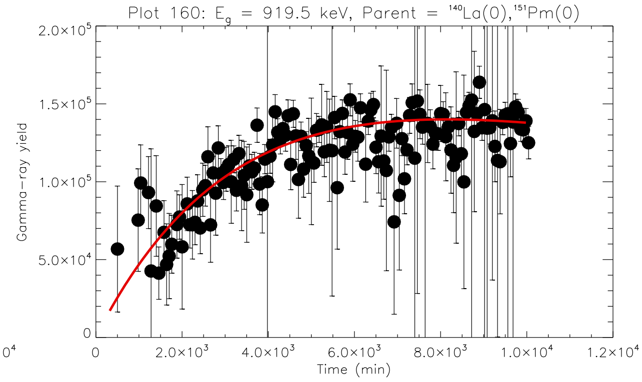
Plot 158: E_g = 2231.8 keV, Parent = ^{88}Kr(0)



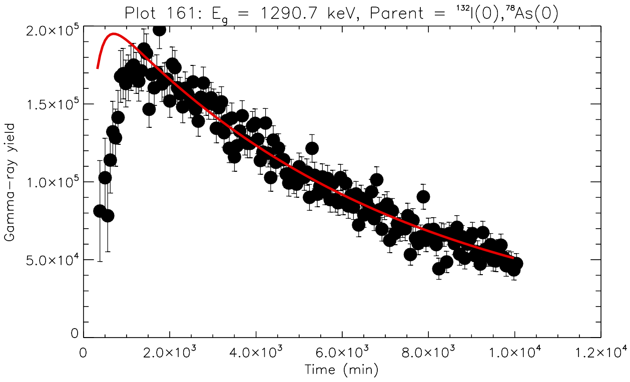
Plot 159: E_g = 1920.9 keV, Parent = ^{132}I(0),^{78}As(0),^{139}Ba(0)



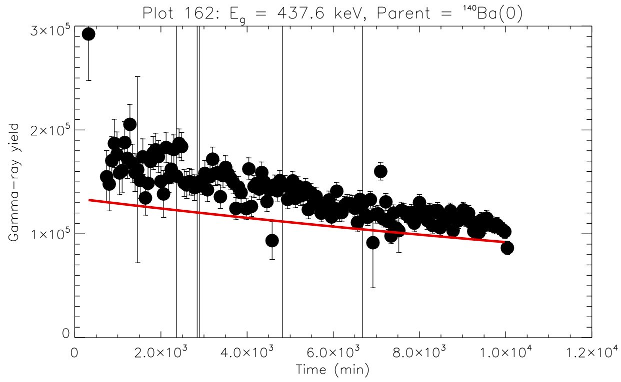
Plot 160: E_g = 919.5 keV, Parent = ^{140}La(0),^{151}Pm(0)



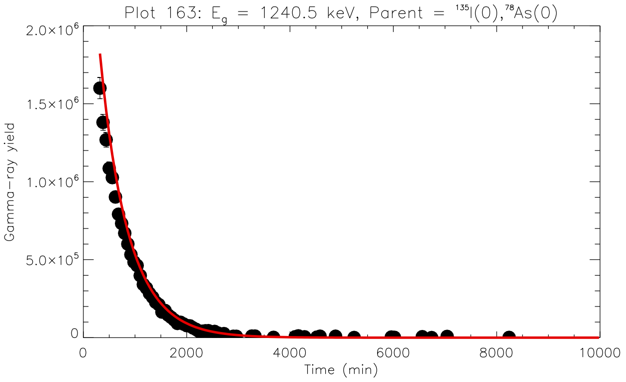
Plot 161: E_g = 1290.7 keV, Parent = ^{132}I(0),^{78}As(0)



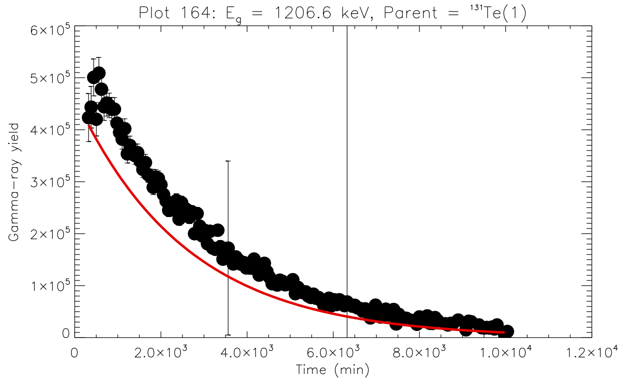
Plot 162: E_g = 437.6 keV, Parent = ^{140}Ba(0)



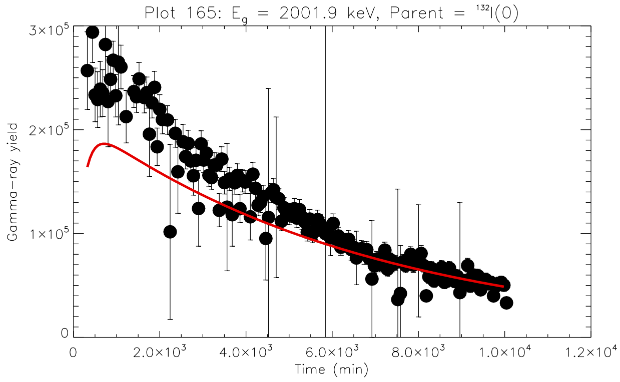
Plot 163: E_g = 1240.5 keV, Parent = ^{135}I(0),^{78}As(0)



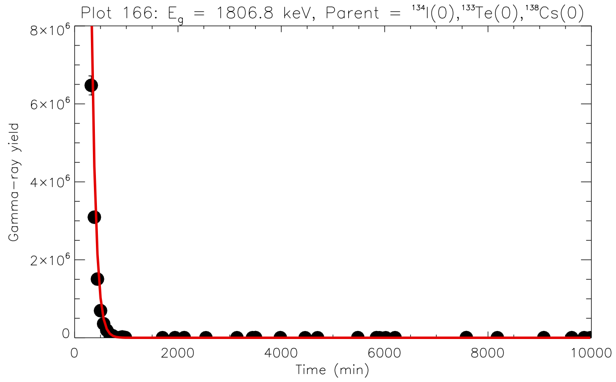
Plot 164: E_g = 1206.6 keV, Parent = ^{131}Te(1)



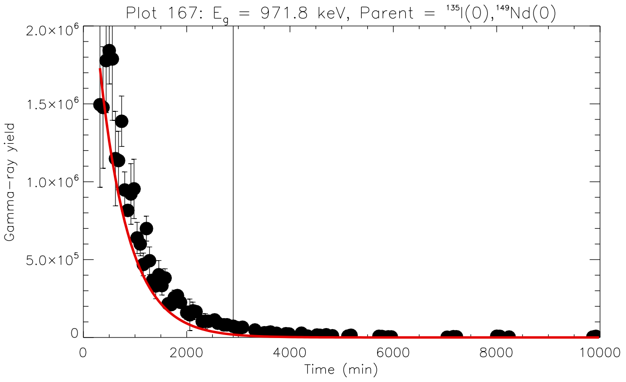
Plot 165: E_g = 2001.9 keV, Parent = ^{132}I(0)



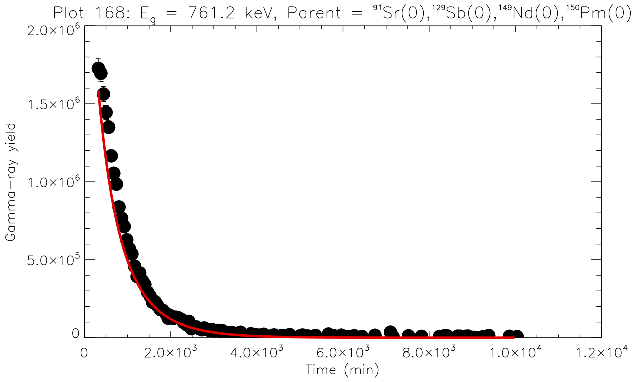
Plot 166: E_g = 1806.8 keV, Parent = ^{134}I(0),^{133}Te(0),^{138}Cs(0)

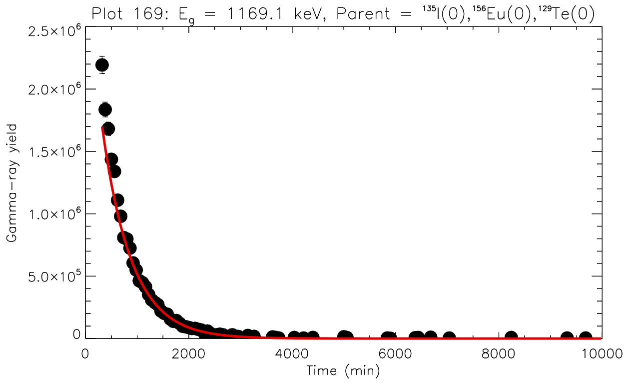


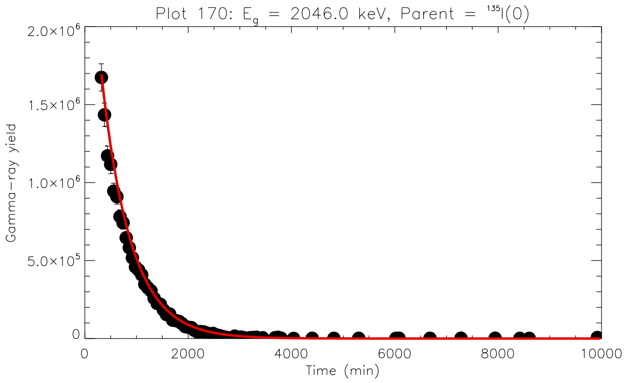
Plot 167: E_g = 971.8 keV, Parent = ^{135}I(0),^{149}Nd(0)

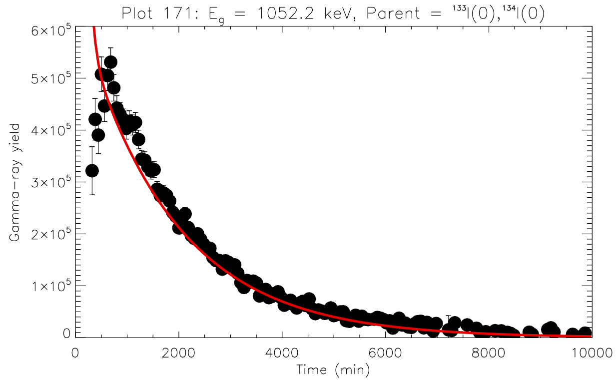


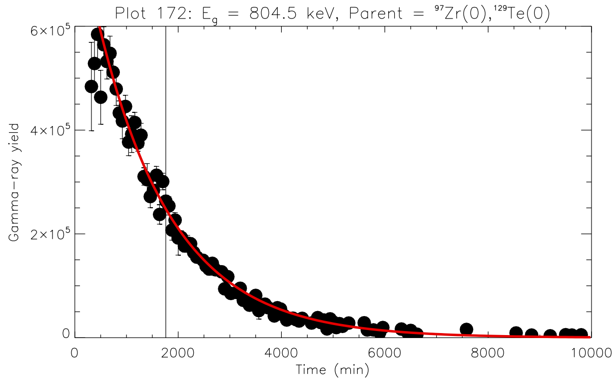
Plot 168: E_g = 761.2 keV, Parent = ^{91}Sr(0),^{129}Sb(0),^{149}Nd(0),^{150}Pm(0)

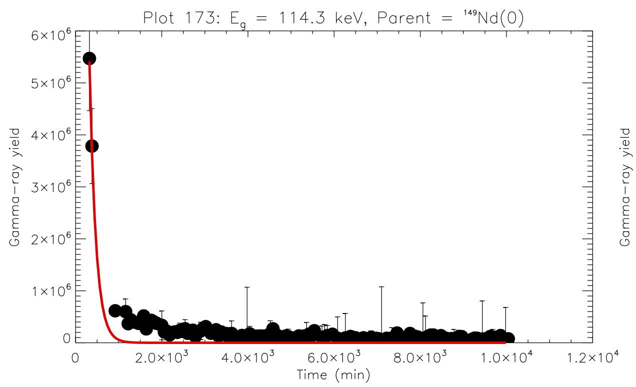


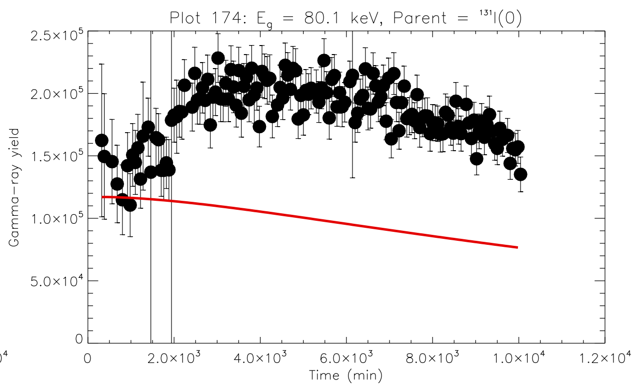

Plot 169: E_g = 1169.1 keV, Parent = ^{135}I(0),^{156}Eu(0),^{129}Te(0)
Gamma-ray yield
0
5.0×10^5
1.0×10^6
1.5×10^6
2.0×10^6
2.5×10^6
0
2000
4000
6000
8000
10000
Time (min)

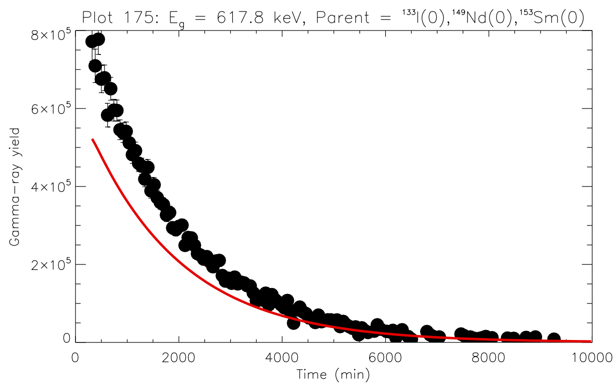

Plot 170: E_g = 2046.0 keV, Parent = ^{135}I(0)
Gamma-ray yield
0
5.0×10^5
1.0×10^6
1.5×10^6
2.0×10^6
0
2000
4000
6000
8000
10000
Time (min)

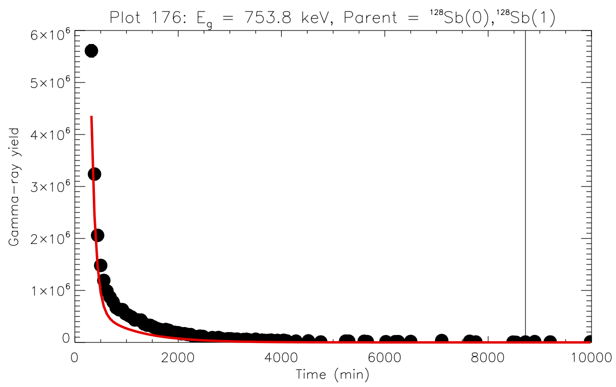

Plot 171: E_g = 1052.2 keV, Parent = ^{133}I(0),^{134}I(0)
Gamma-ray yield
0
1×10^5
2×10^5
3×10^5
4×10^5
5×10^5
6×10^5
0
2000
4000
6000
8000
10000
Time (min)

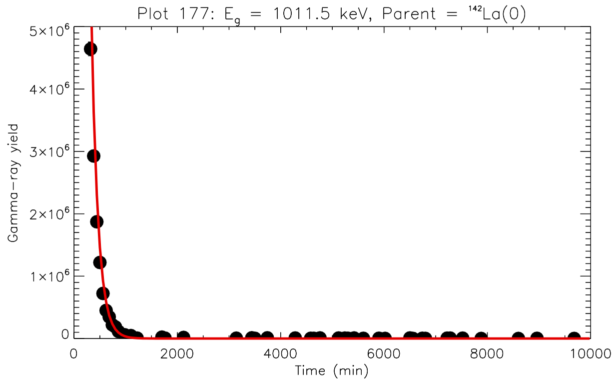

Plot 172: E_g = 804.5 keV, Parent = ^{97}Zr(0),^{129}Te(0)
Gamma-ray yield
0
2×10^5
4×10^5
6×10^5
0
2000
4000
6000
8000
10000
Time (min)

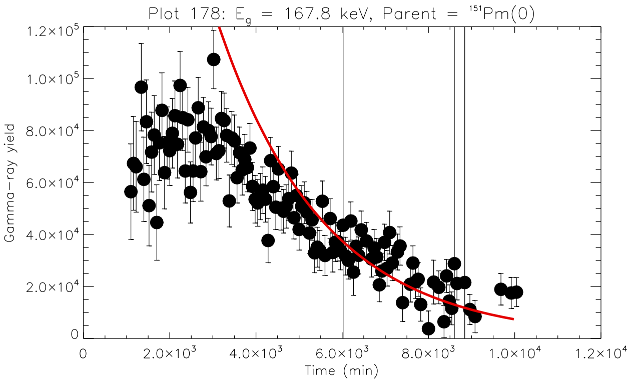

Plot 173: E_g = 114.3 keV, Parent = ^{149}Nd(0)
Gamma-ray yield
0
1×10^6
2×10^6
3×10^6
4×10^6
5×10^6
6×10^6
0
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4
Time (min)

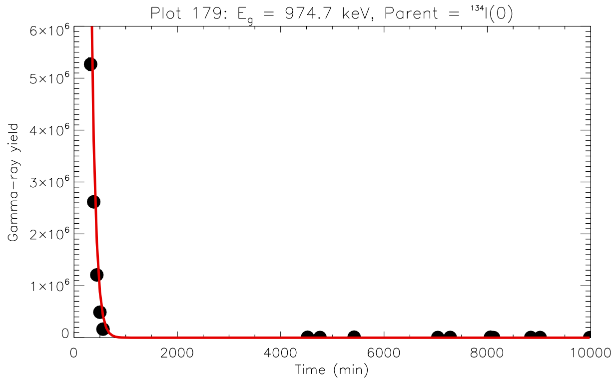

Plot 174: E_g = 80.1 keV, Parent = ^{131}I(0)
Gamma-ray yield
0
5.0×10^4
1.0×10^5
1.5×10^5
2.0×10^5
2.5×10^5
0
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4
Time (min)

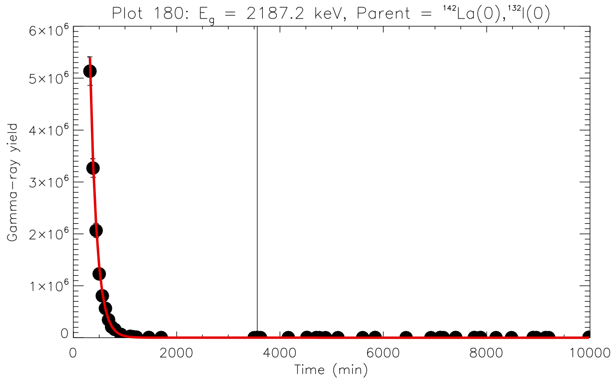

Plot 175: E_g = 617.8 keV, Parent = ^{133}I(0),^{149}Nd(0),^{153}Sm(0)
Gamma-ray yield
0
2×10^5
4×10^5
6×10^5
8×10^5
0
2000
4000
6000
8000
10000
Time (min)

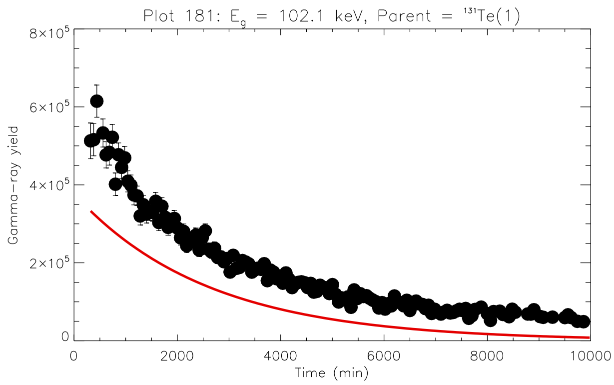

Plot 176: E_g = 753.8 keV, Parent = ^{128}Sb(0),^{128}Sb(1)
Gamma-ray yield
0
1×10^6
2×10^6
3×10^6
4×10^6
5×10^6
6×10^6
0
2000
4000
6000
8000
10000
Time (min)

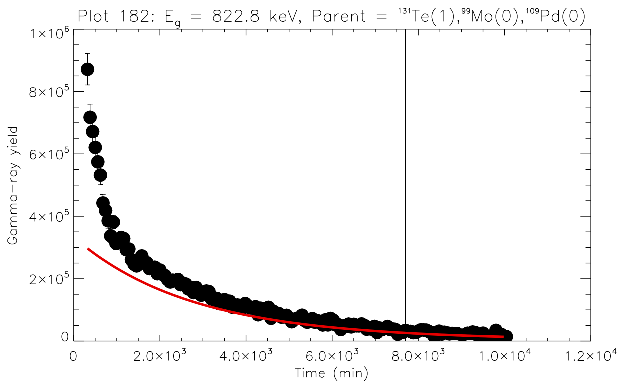

Plot 177: E_g = 1011.5 keV, Parent = ^{142}La(0)
Gamma−ray yield
Time (min)

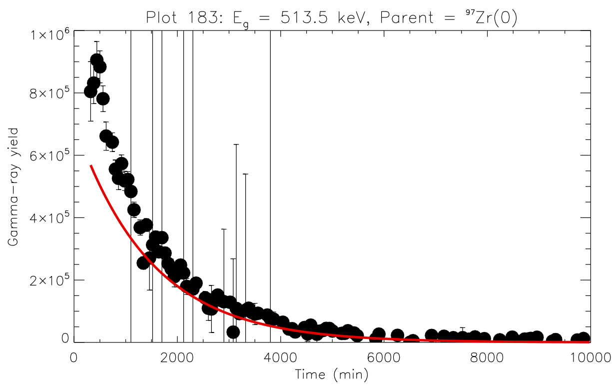

Plot 178: E_g = 167.8 keV, Parent = ^{151}Pm(0)
Gamma−ray yield
Time (min)

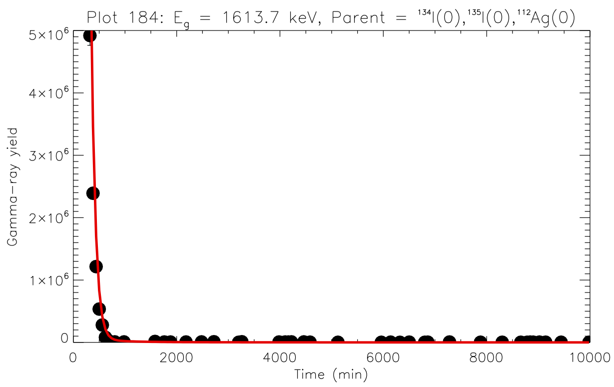

Plot 179: E_g = 974.7 keV, Parent = ^{134}I(0)
Gamma−ray yield
Time (min)

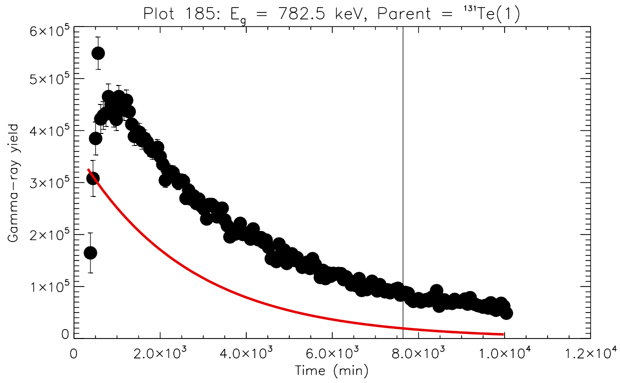

Plot 180: E_g = 2187.2 keV, Parent = ^{142}La(0),^{132}I(0)
Gamma−ray yield
Time (min)

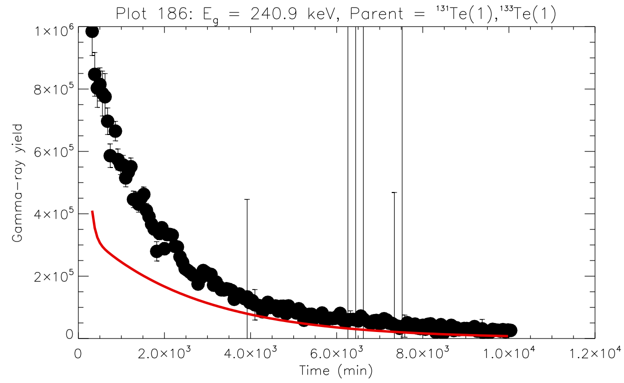

Plot 181: E_g = 102.1 keV, Parent = ^{131}Te(1)
Gamma−ray yield
Time (min)

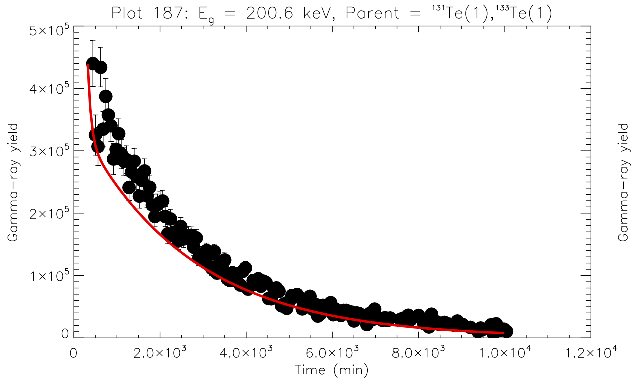

Plot 182: E_g = 822.8 keV, Parent = ^{131}Te(1),^{99}Mo(0),^{109}Pd(0)
Gamma−ray yield
Time (min)

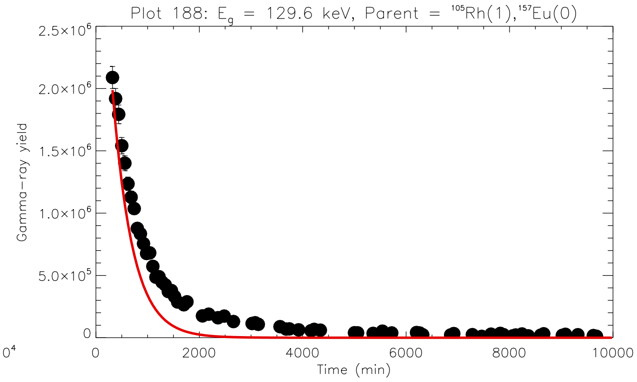

Plot 183: E_g = 513.5 keV, Parent = ^{97}Zr(0)
Gamma−ray yield
Time (min)

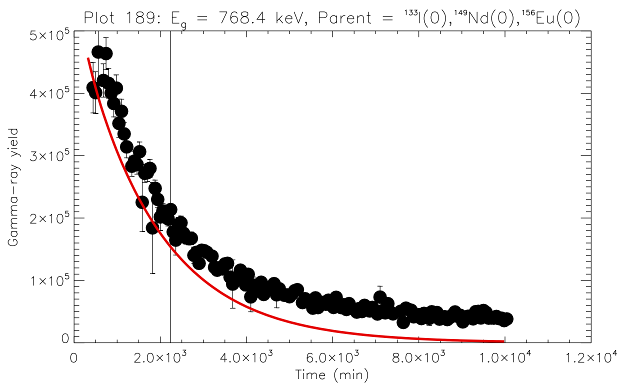

Plot 184: E_g = 1613.7 keV, Parent = ^{134}I(0),^{135}I(0),^{112}Ag(0)
Gamma−ray yield
Time (min)

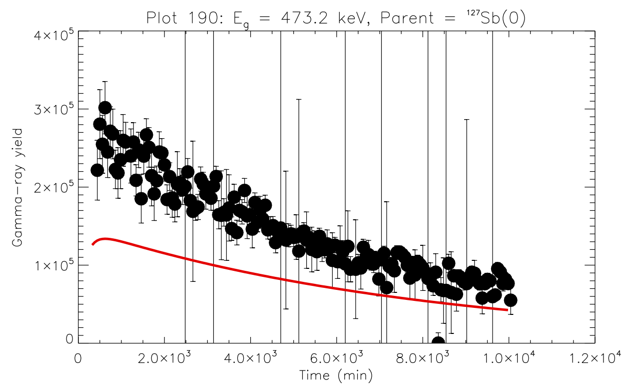

Plot 185: E_g = 782.5 keV, Parent = ^{131}Te(1)
Gamma−ray yield
Time (min)

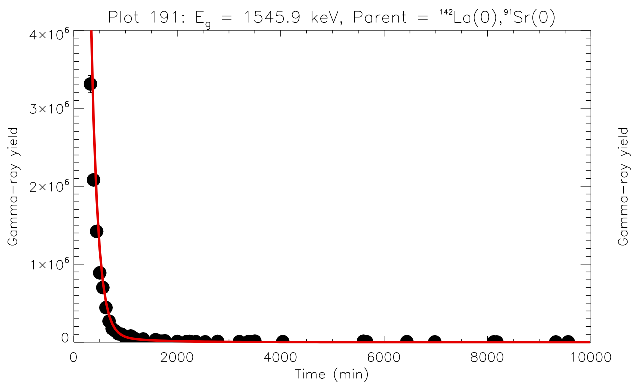

Plot 186: E_g = 240.9 keV, Parent = ^{131}Te(1),^{133}Te(1)
Gamma−ray yield
Time (min)

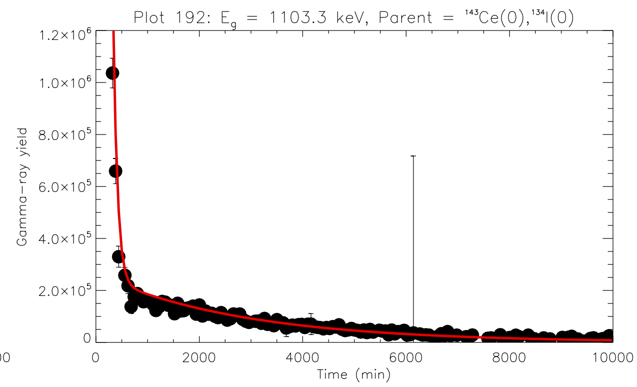

Plot 187: E_g = 200.6 keV, Parent = ^{131}Te(1),^{133}Te(1)
Gamma−ray yield
Time (min)

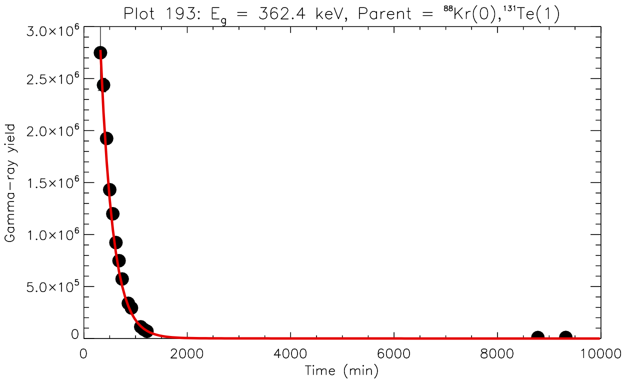

Plot 188: E_g = 129.6 keV, Parent = ^{105}Rh(1),^{157}Eu(0)
Gamma−ray yield
Time (min)

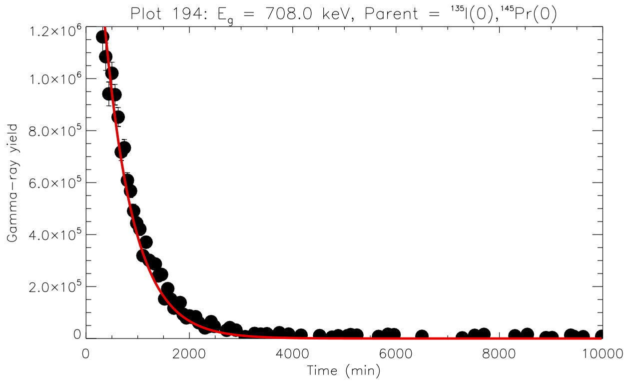

Plot 189: E_g = 768.4 keV, Parent = ^{133}I(0),^{149}Nd(0),^{156}Eu(0)
Gamma−ray yield
Time (min)

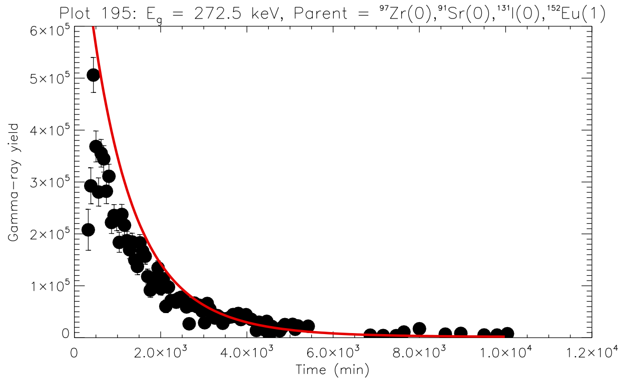

Plot 190: E_g = 473.2 keV, Parent = ^{127}Sb(0)
Gamma−ray yield
Time (min)

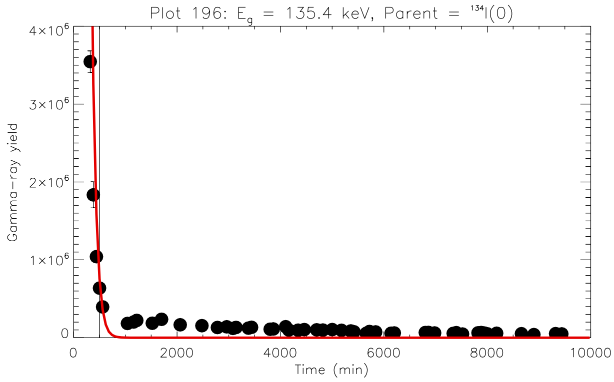

Plot 191: E_g = 1545.9 keV, Parent = ^{142}La(0),^{91}Sr(0)
Gamma−ray yield
Time (min)

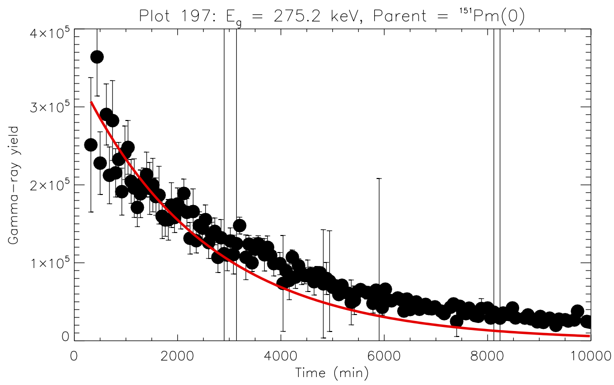

Plot 192: E_g = 1103.3 keV, Parent = ^{143}Ce(0),^{134}I(0)
Gamma−ray yield
Time (min)

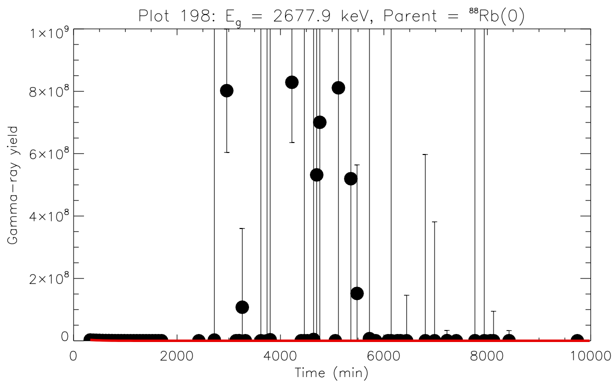

Plot 193: E_g = 362.4 keV, Parent = ^{88}Kr(0),^{131}Te(1)
Gamma-ray yield
Time (min)

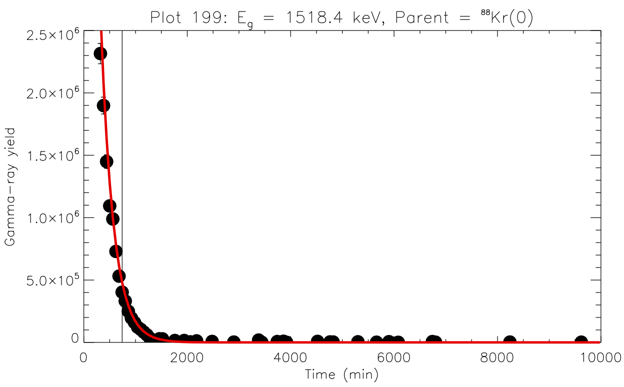

Plot 194: E_g = 708.0 keV, Parent = ^{135}I(0),^{145}Pr(0)
Gamma-ray yield
Time (min)

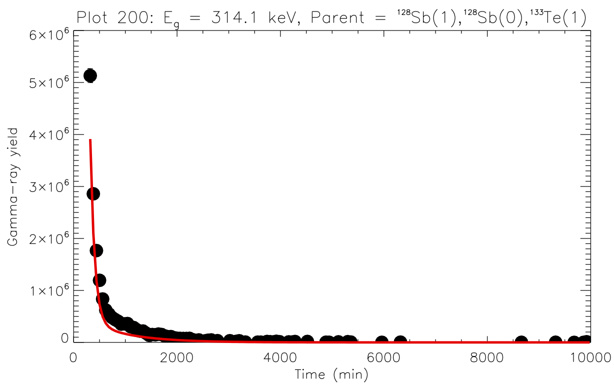

Plot 195: E_g = 272.5 keV, Parent = ^{97}Zr(0),^{91}Sr(0),^{131}I(0),^{152}Eu(1)
Gamma-ray yield
Time (min)


Plot 196: E_g = 135.4 keV, Parent = ^{134}I(0)
Gamma-ray yield
Time (min)

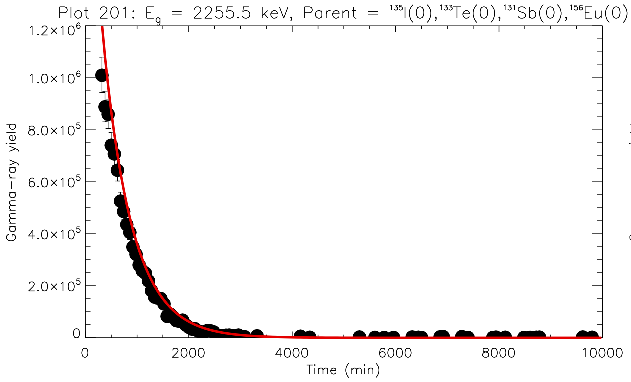

Plot 197: E_g = 275.2 keV, Parent = ^{151}Pm(0)
Gamma-ray yield
Time (min)


Plot 198: E_g = 2677.9 keV, Parent = ^{88}Rb(0)
Gamma-ray yield
Time (min)

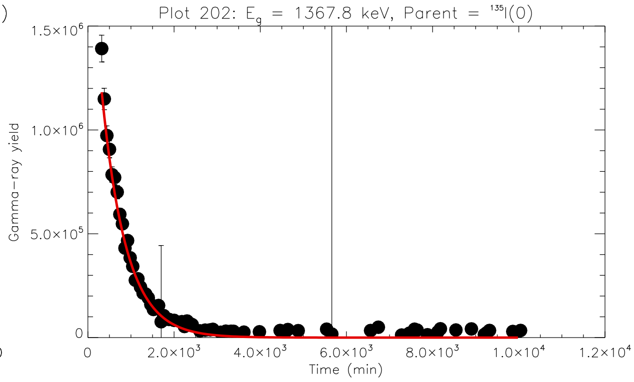

Plot 199: E_g = 1518.4 keV, Parent = ^{88}Kr(0)
Gamma-ray yield
Time (min)


Plot 200: E_g = 314.1 keV, Parent = ^{128}Sb(1),^{128}Sb(0),^{133}Te(1)
Gamma-ray yield
Time (min)

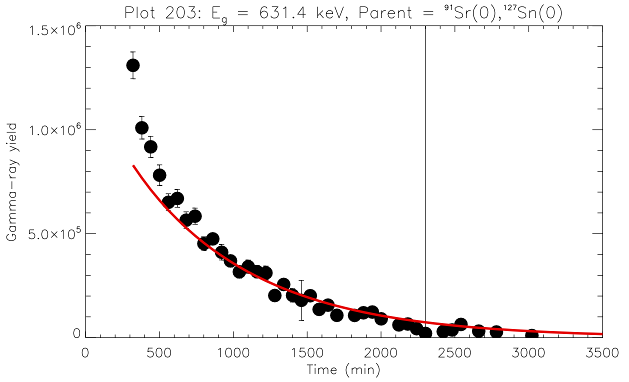
Plot 201: E_g = 2255.5 keV, Parent = ^{135}I(0),^{133}Te(0),^{131}Sb(0),^{156}Eu(0)



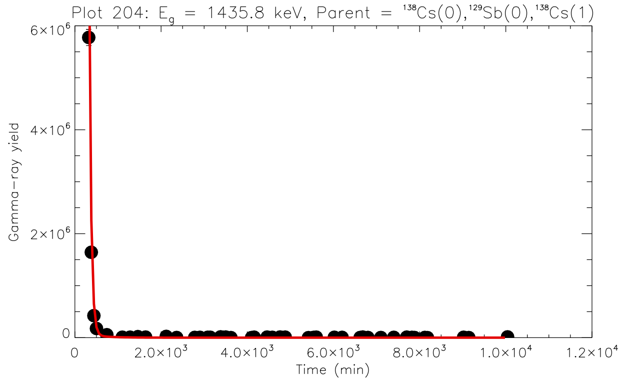
Plot 202: E_g = 1367.8 keV, Parent = ^{135}I(0)



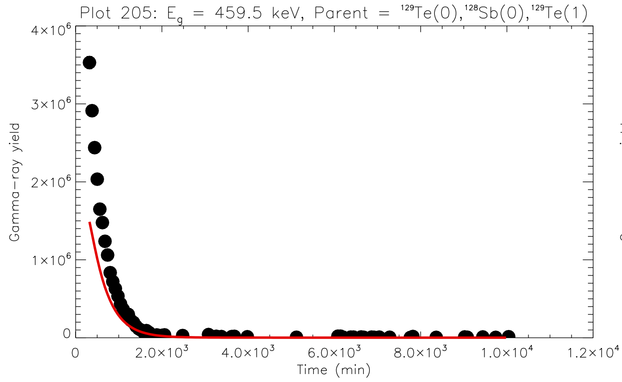
Plot 203: E_g = 631.4 keV, Parent = ^{91}Sr(0),^{127}Sn(0)



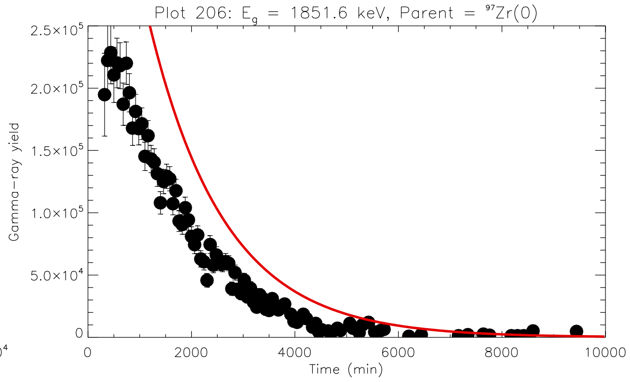
Plot 204: E_g = 1435.8 keV, Parent = ^{138}Cs(0),^{129}Sb(0),^{138}Cs(1)



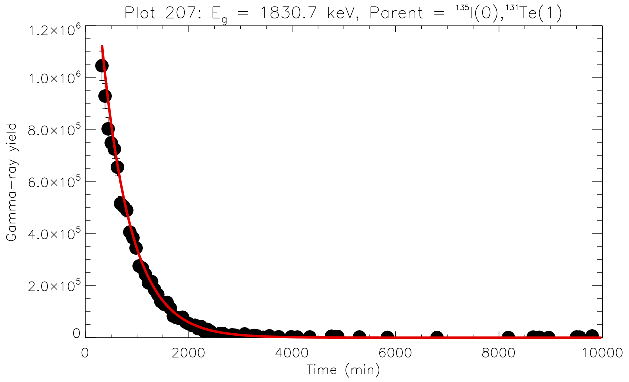
Plot 205: E_g = 459.5 keV, Parent = ^{129}Te(0),^{128}Sb(0),^{129}Te(1)



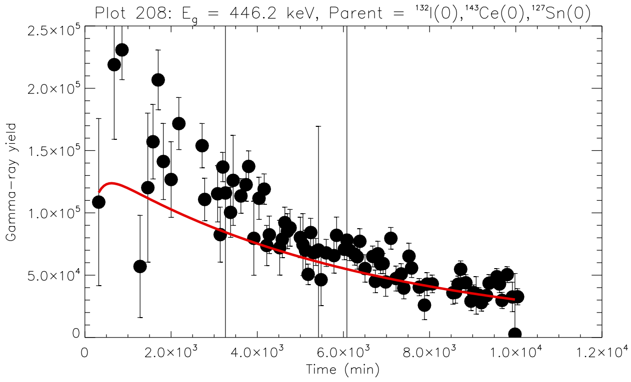
Plot 206: E_g = 1851.6 keV, Parent = ^{97}Zr(0)

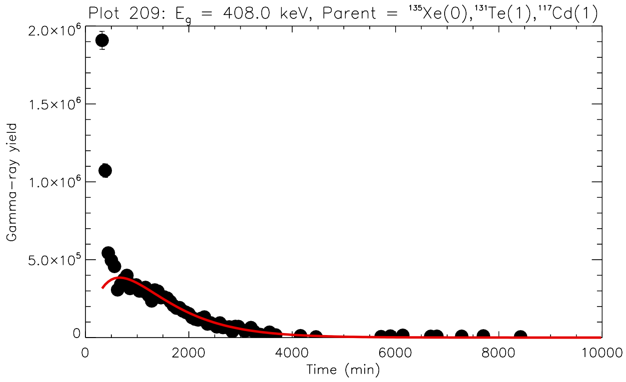


Plot 207: E_g = 1830.7 keV, Parent = ^{135}I(0),^{131}Te(1)

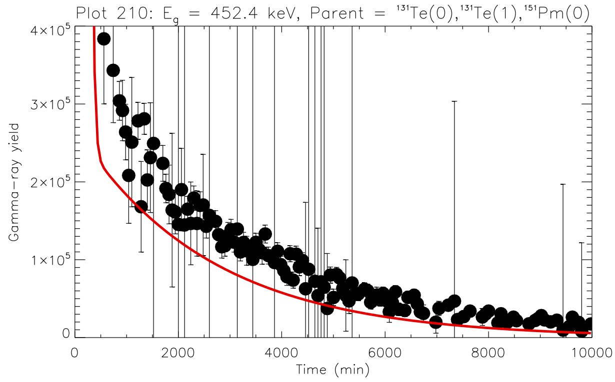


Plot 208: E_g = 446.2 keV, Parent = ^{132}I(0),^{143}Ce(0),^{127}Sn(0)

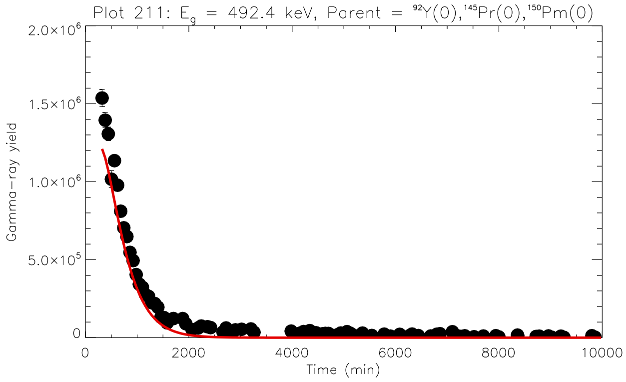




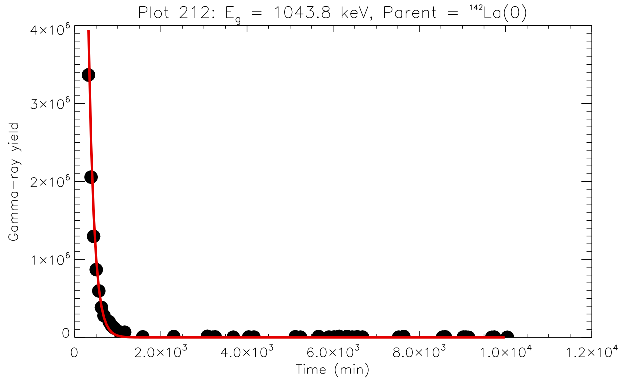
Plot 209: E_g = 408.0 keV, Parent = ^{135}Xe(0),^{131}Te(1),^{117}Cd(1)



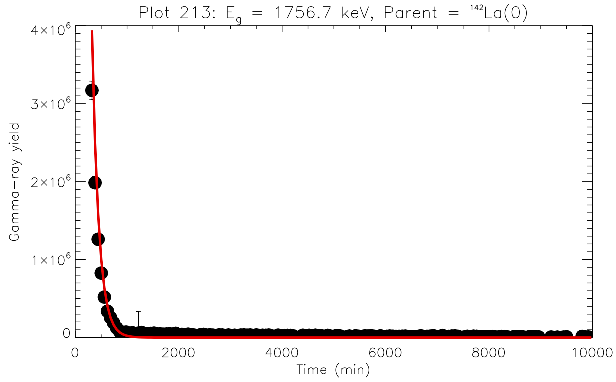
Plot 210: E_g = 452.4 keV, Parent = ^{131}Te(0),^{131}Te(1),^{151}Pm(0)



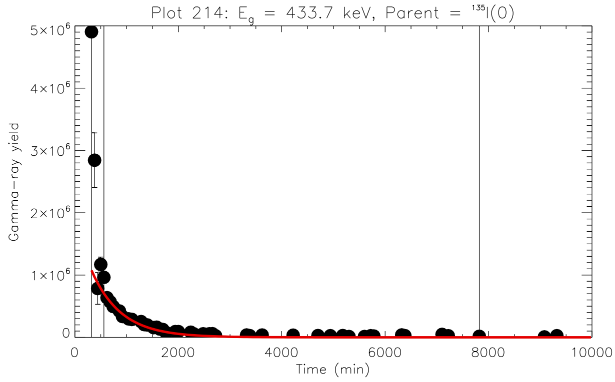
Plot 211: E_g = 492.4 keV, Parent = ^{92}Y(0),^{145}Pr(0),^{150}Pm(0)



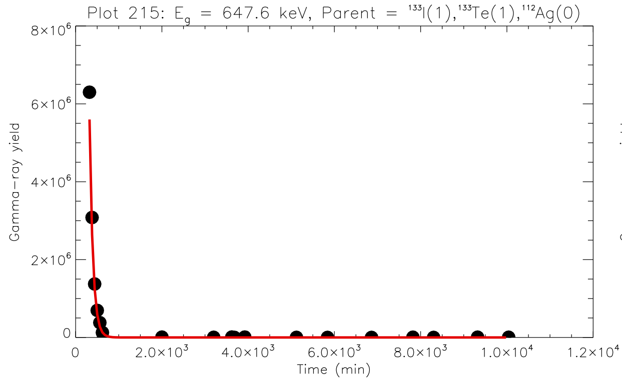
Plot 212: E_g = 1043.8 keV, Parent = ^{142}La(0)



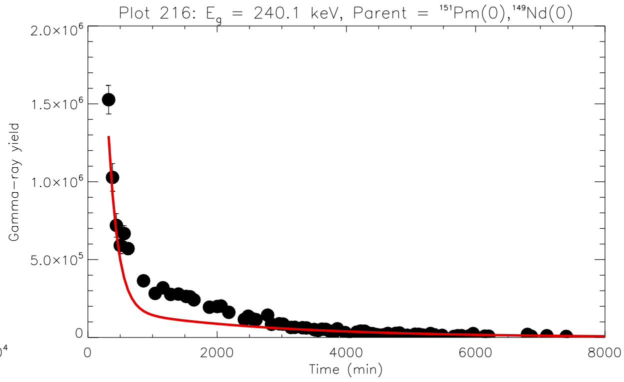
Plot 213: E_g = 1756.7 keV, Parent = ^{142}La(0)



Plot 214: E_g = 433.7 keV, Parent = ^{135}I(0)

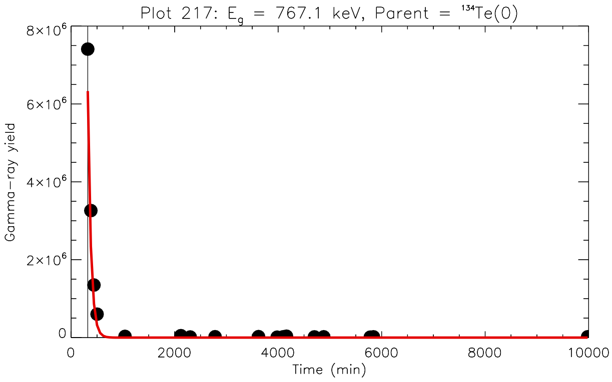


Plot 215: E_g = 647.6 keV, Parent = ^{133}I(1),^{133}Te(1),^{112}Ag(0)

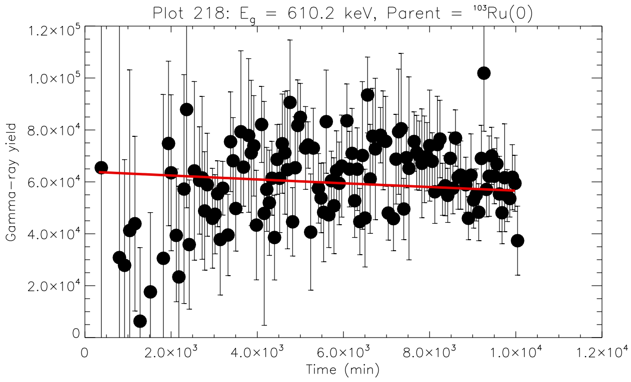


Plot 216: E_g = 240.1 keV, Parent = ^{151}Pm(0),^{149}Nd(0)

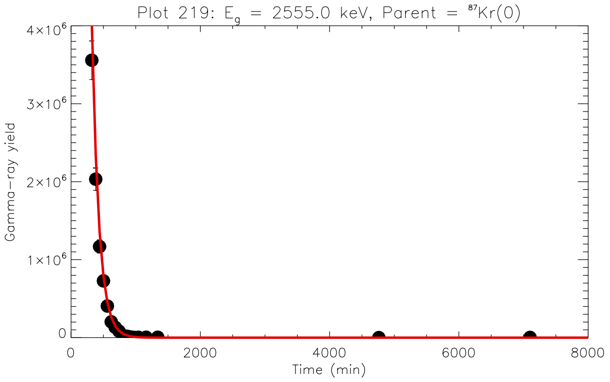
Plot 217: E_g = 767.1 keV, Parent = ^{134}Te(0)



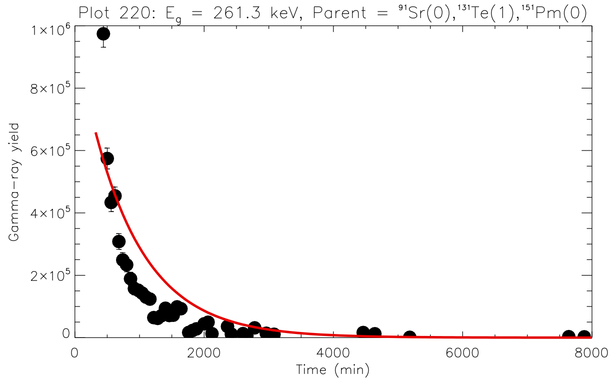
Plot 218: E_g = 610.2 keV, Parent = ^{103}Ru(0)



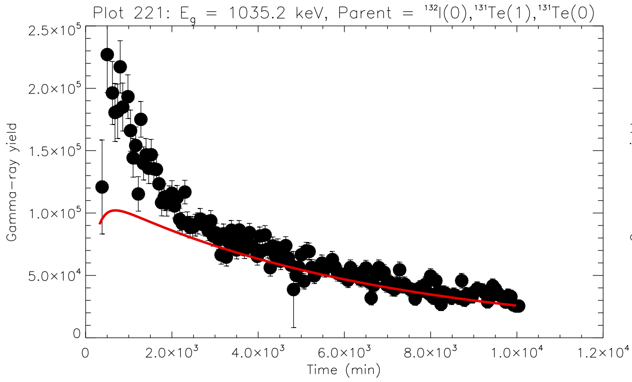
Plot 219: E_g = 2555.0 keV, Parent = ^{87}Kr(0)



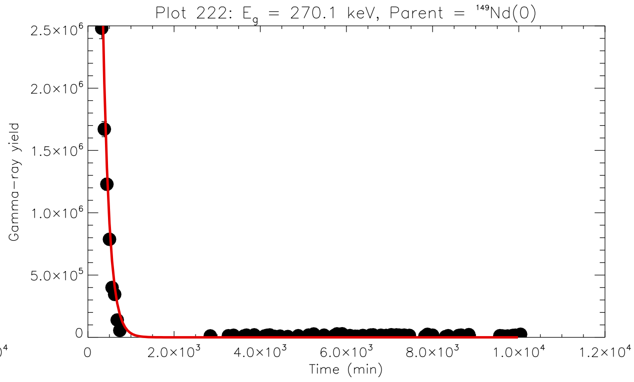
Plot 220: E_g = 261.3 keV, Parent = ^{91}Sr(0),^{131}Te(1),^{151}Pm(0)



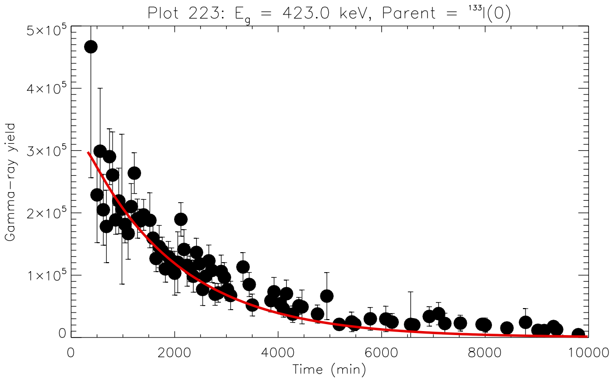
Plot 221: E_g = 1035.2 keV, Parent = ^{132}I(0),^{131}Te(1),^{131}Te(0)



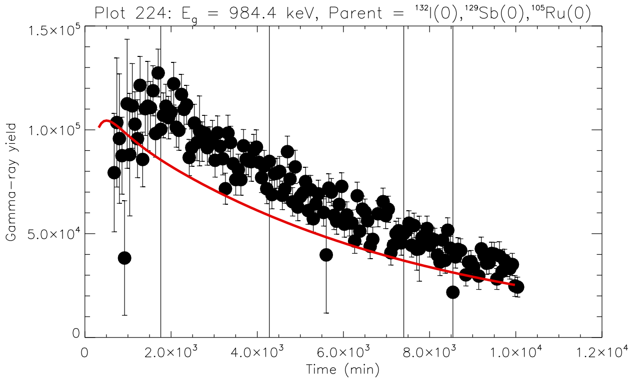
Plot 222: E_g = 270.1 keV, Parent = ^{149}Nd(0)

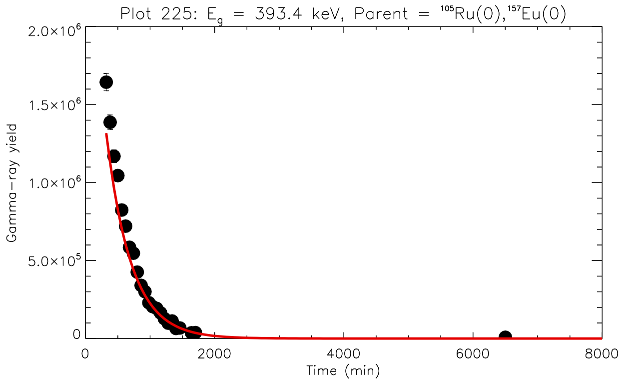


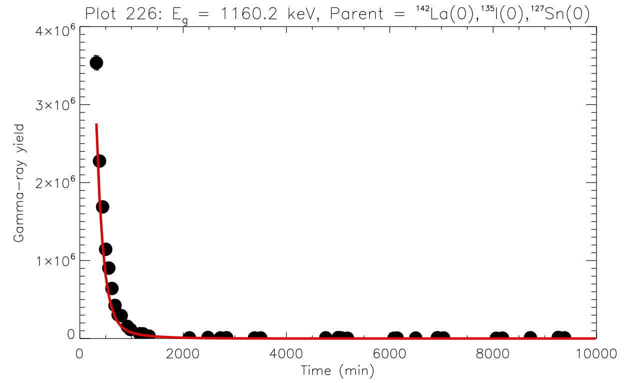
Plot 223: E_g = 423.0 keV, Parent = ^{133}I(0)

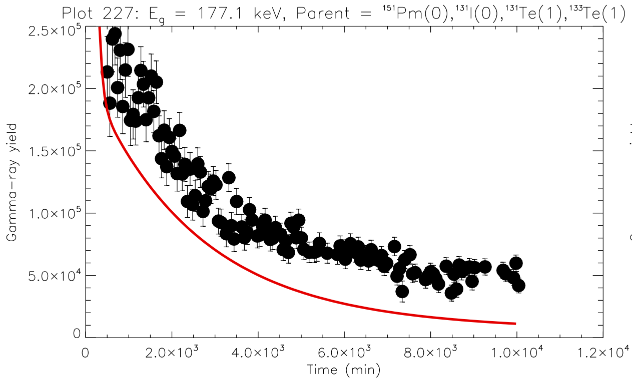


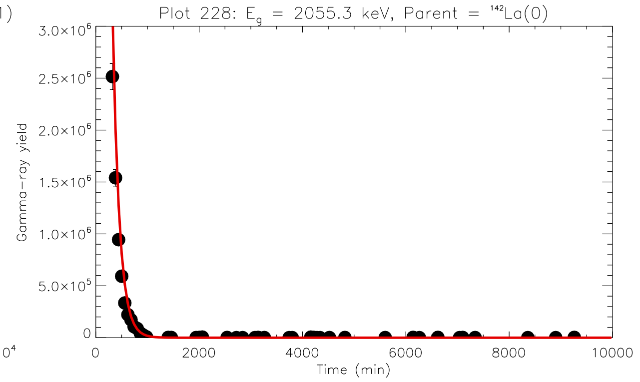
Plot 224: E_g = 984.4 keV, Parent = ^{132}I(0),^{129}Sb(0),^{105}Ru(0)

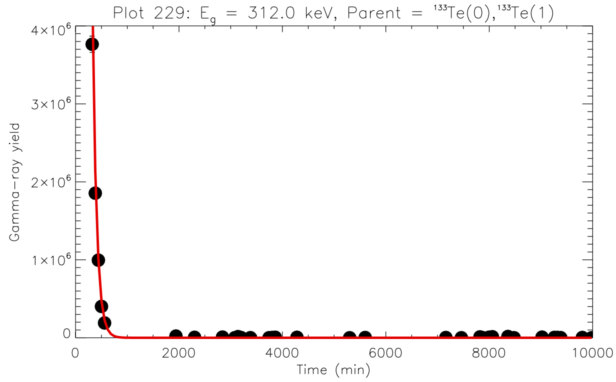


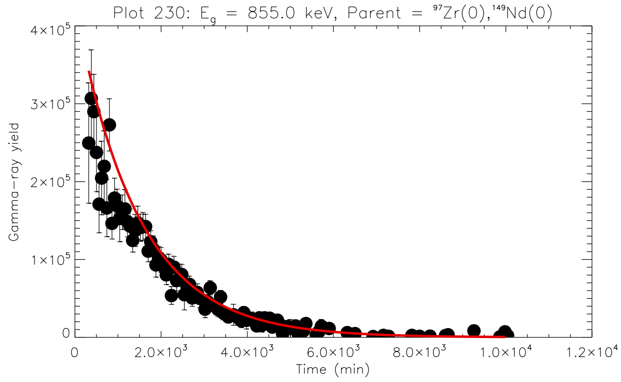

Plot 225: E_g = 393.4 keV, Parent = ^{105}Ru(0),^{157}Eu(0)
Gamma-ray yield
Time (min)

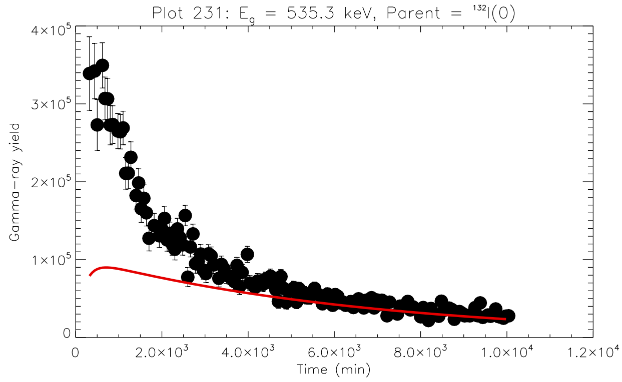

Plot 226: E_g = 1160.2 keV, Parent = ^{142}La(0),^{135}I(0),^{127}Sn(0)
Gamma-ray yield
Time (min)

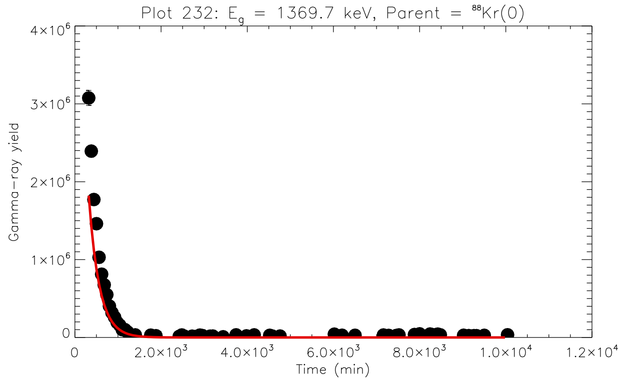

Plot 227: E_g = 177.1 keV, Parent = ^{151}Pm(0),^{131}I(0),^{131}Te(1),^{133}Te(1)
Gamma-ray yield
Time (min)

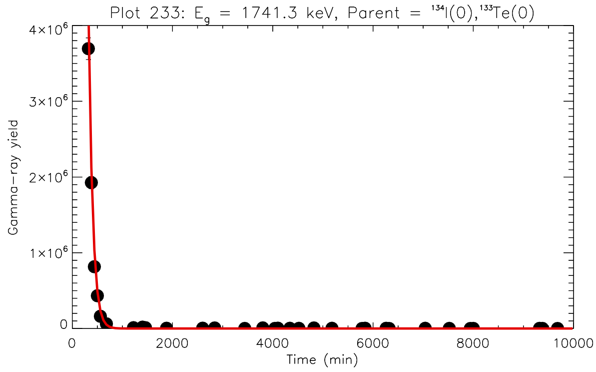

Plot 228: E_g = 2055.3 keV, Parent = ^{142}La(0)
Gamma-ray yield
Time (min)

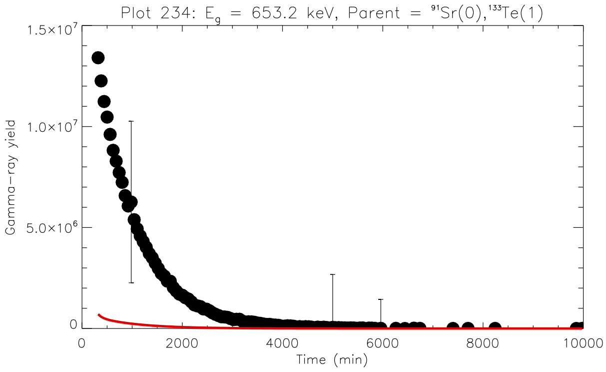

Plot 229: E_g = 312.0 keV, Parent = ^{133}Te(0),^{133}Te(1)
Gamma-ray yield
Time (min)

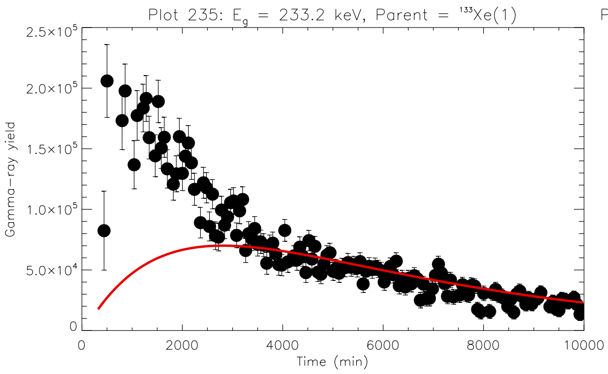

Plot 230: E_g = 855.0 keV, Parent = ^{97}Zr(0),^{149}Nd(0)
Gamma-ray yield
Time (min)

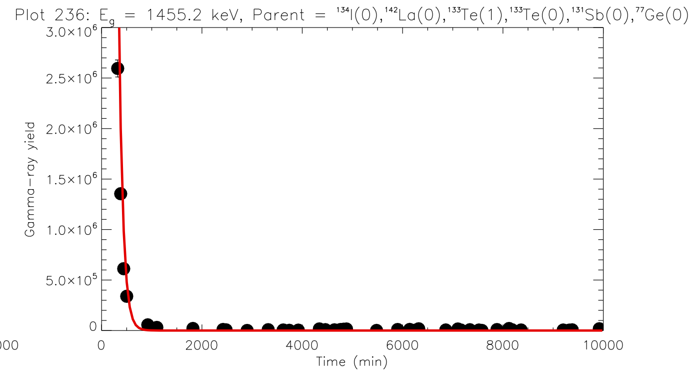

Plot 231: E_g = 535.3 keV, Parent = ^{132}I(0)
Gamma-ray yield
Time (min)

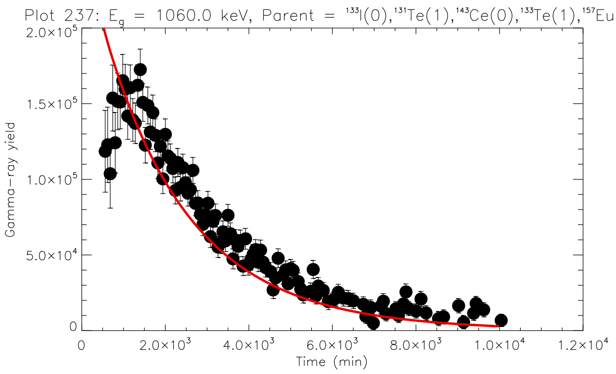

Plot 232: E_g = 1369.7 keV, Parent = ^{88}Kr(0)
Gamma-ray yield
Time (min)

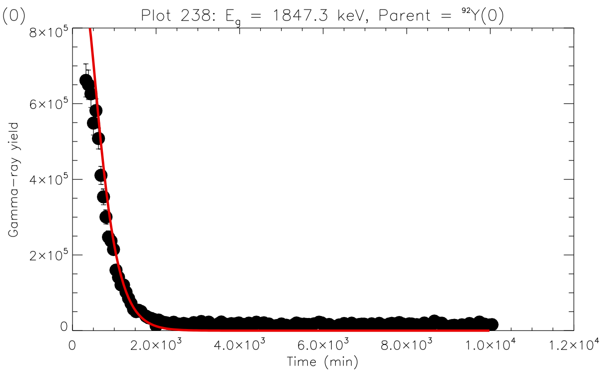

Plot 233: E_g = 1741.3 keV, Parent = ^{134}I(0),^{133}Te(0)
Gamma-ray yield
Time (min)

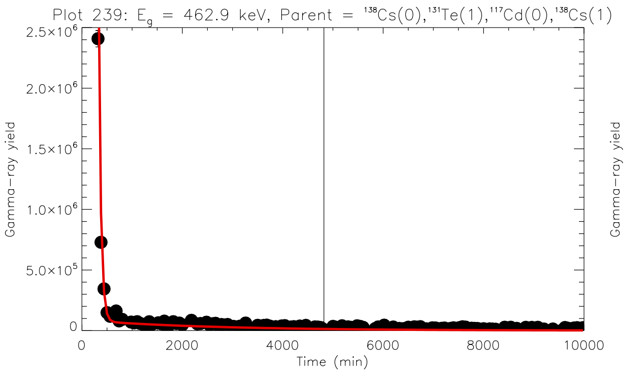

Plot 234: E_g = 653.2 keV, Parent = ^{91}Sr(0),^{133}Te(1)
Gamma-ray yield
Time (min)

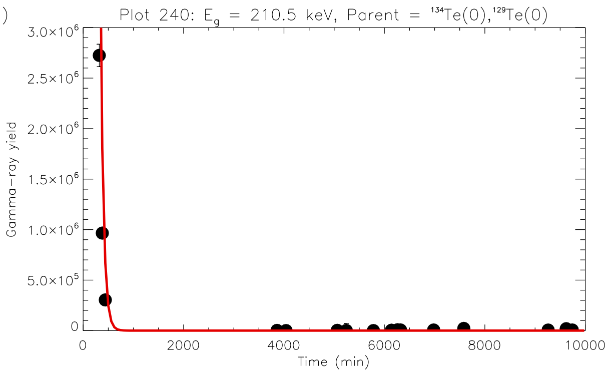

Plot 235: E_g = 233.2 keV, Parent = ^{133}Xe(1)
Gamma-ray yield
Time (min)

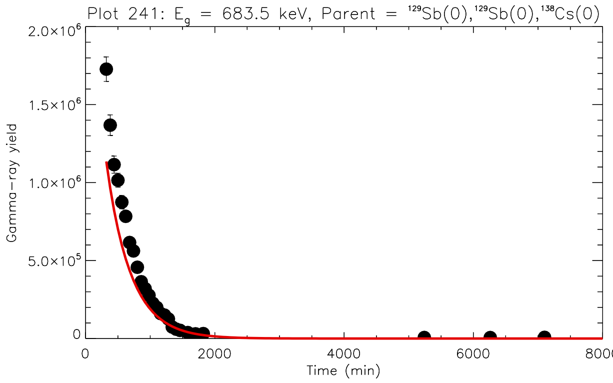

Plot 236: E_g = 1455.2 keV, Parent = ^{134}I(0),^{142}La(0),^{133}Te(1),^{133}Te(0),^{131}Sb(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

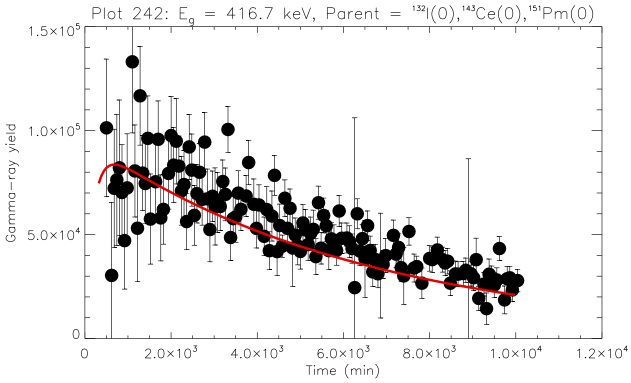

Plot 237: E_g = 1060.0 keV, Parent = ^{133}I(0),^{131}Te(1),^{143}Ce(0),^{133}Te(1),^{157}Eu(0)
Gamma-ray yield
Time (min)

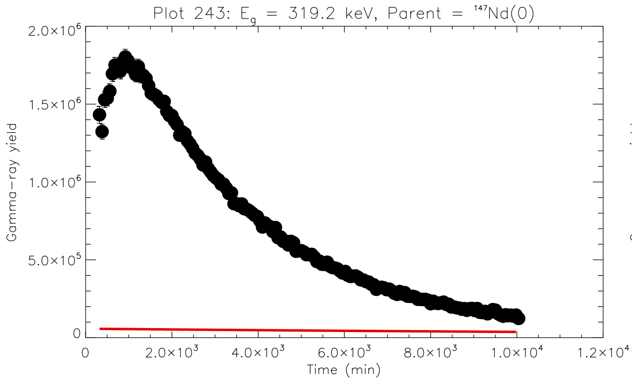

Plot 238: E_g = 1847.3 keV, Parent = ^{92}Y(0)
Gamma-ray yield
Time (min)

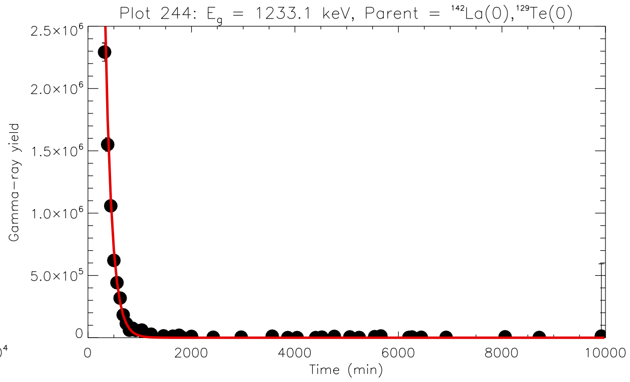

Plot 239: E_g = 462.9 keV, Parent = ^{138}Cs(0),^{131}Te(1),^{117}Cd(0),^{138}Cs(1)
Gamma-ray yield
Time (min)

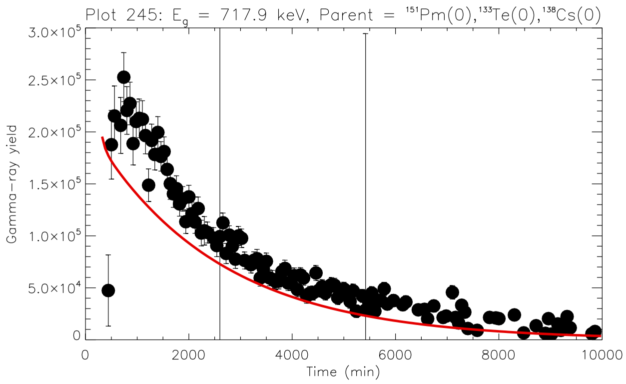

Plot 240: E_g = 210.5 keV, Parent = ^{134}Te(0),^{129}Te(0)
Gamma-ray yield
Time (min)

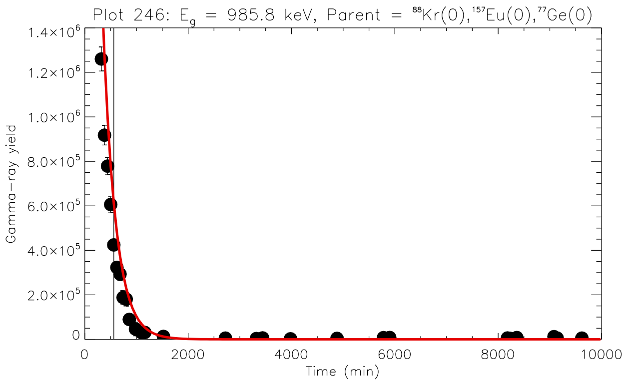

Plot 241: E_g = 683.5 keV, Parent = ^{129}Sb(0),^{129}Sb(0),^{138}Cs(0)
Gamma-ray yield
Time (min)

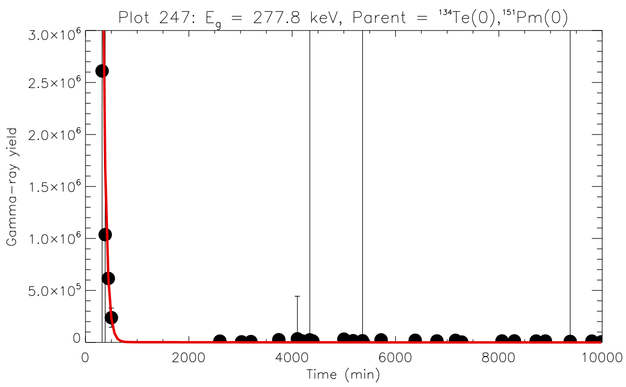

Plot 242: E_g = 416.7 keV, Parent = ^{132}I(0),^{143}Ce(0),^{151}Pm(0)
Gamma-ray yield
Time (min)

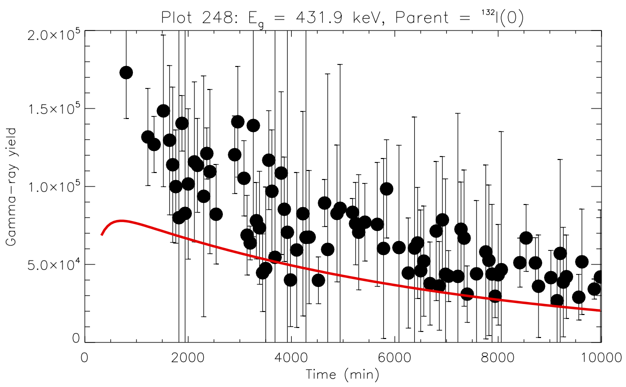

Plot 243: E_g = 319.2 keV, Parent = ^{147}Nd(0)
Gamma-ray yield
Time (min)


Plot 244: E_g = 1233.1 keV, Parent = ^{142}La(0),^{129}Te(0)
Gamma-ray yield
Time (min)

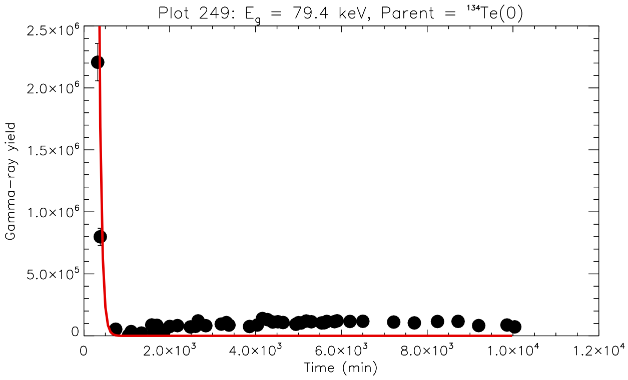

Plot 245: E_g = 717.9 keV, Parent = ^{151}Pm(0),^{133}Te(0),^{138}Cs(0)
Gamma-ray yield
Time (min)


Plot 246: E_g = 985.8 keV, Parent = ^{88}Kr(0),^{157}Eu(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

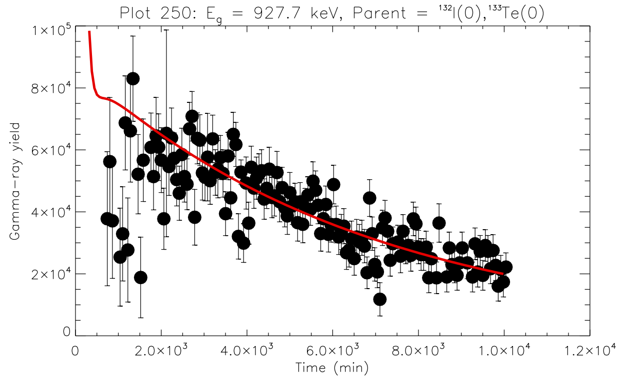

Plot 247: E_g = 277.8 keV, Parent = ^{134}Te(0),^{151}Pm(0)
Gamma-ray yield
Time (min)


Plot 248: E_g = 431.9 keV, Parent = ^{132}I(0)
Gamma-ray yield
Time (min)

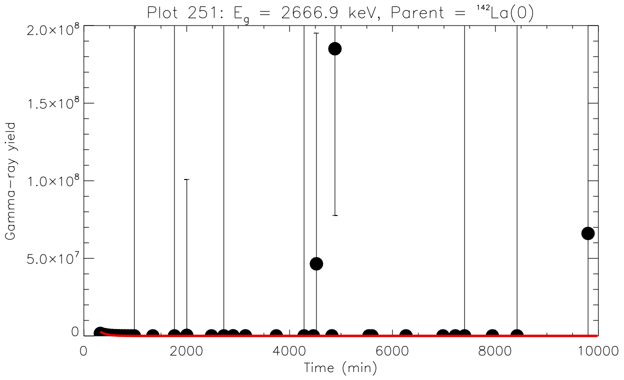
Plot 249: E_g = 79.4 keV, Parent = ^{134}Te(0)



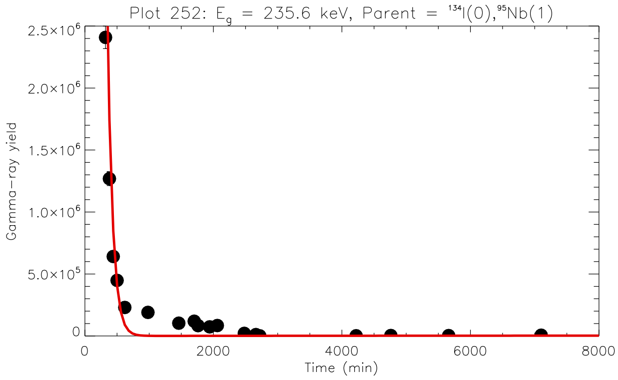
Plot 250: E_g = 927.7 keV, Parent = ^{132}I(0),^{133}Te(0)



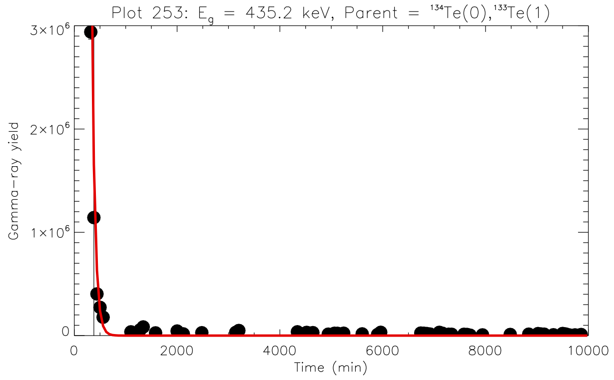
Plot 251: E_g = 2666.9 keV, Parent = ^{142}La(0)



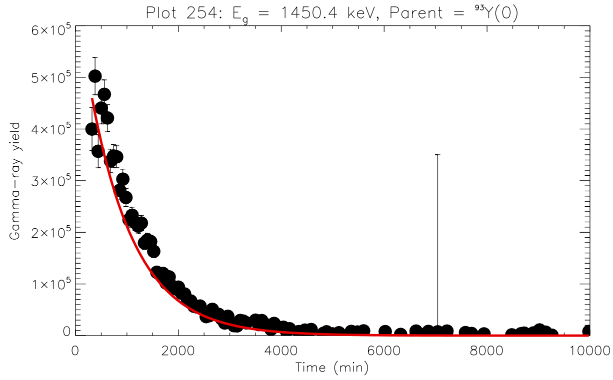
Plot 252: E_g = 235.6 keV, Parent = ^{134}I(0),^{95}Nb(1)



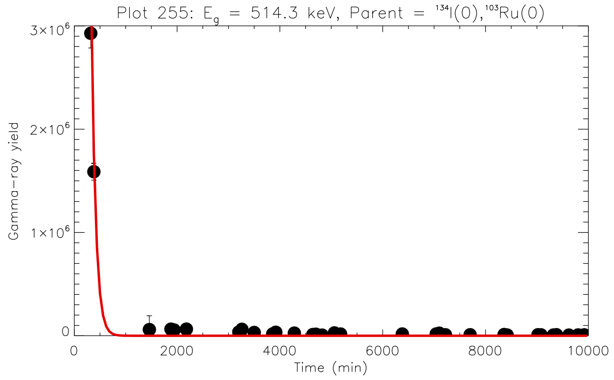
Plot 253: E_g = 435.2 keV, Parent = ^{134}Te(0),^{133}Te(1)



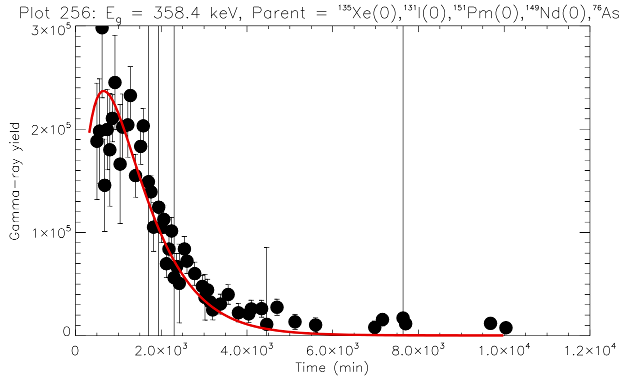
Plot 254: E_g = 1450.4 keV, Parent = ^{93}Y(0)

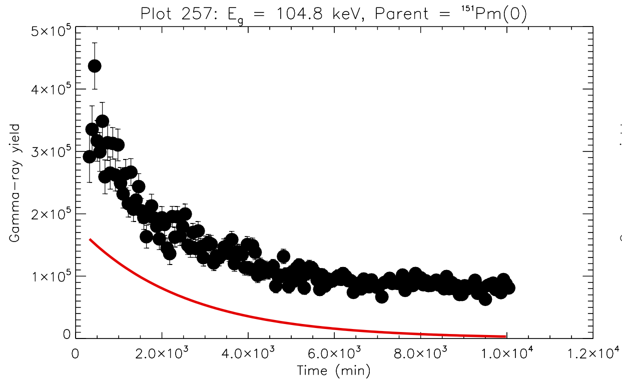


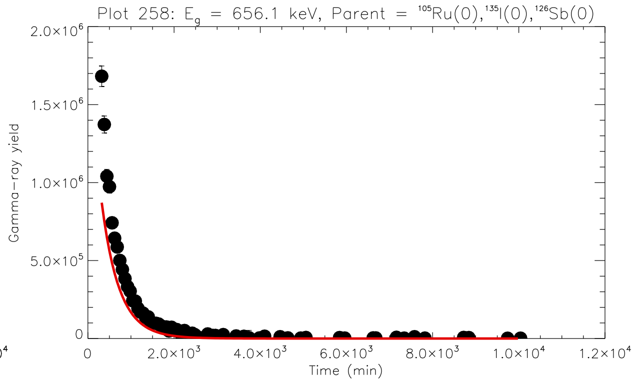
Plot 255: E_g = 514.3 keV, Parent = ^{134}I(0),^{103}Ru(0)

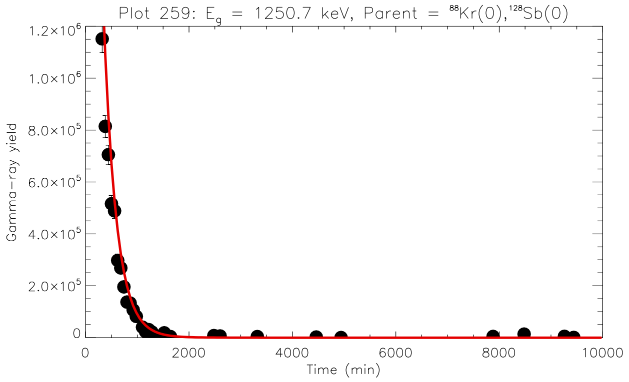


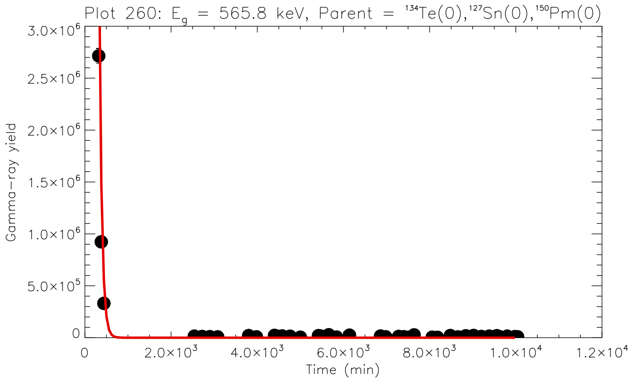
Plot 256: E_g = 358.4 keV, Parent = ^{135}Xe(0),^{131}I(0),^{151}Pm(0),^{149}Nd(0),^{76}As(0)

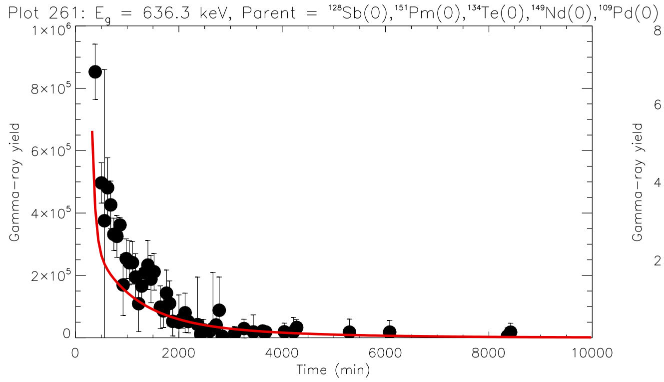


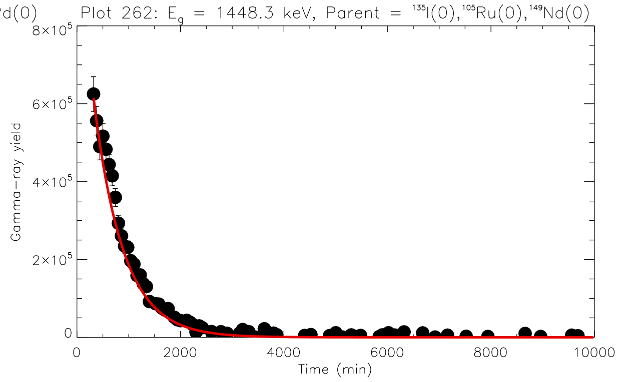

Plot 257: E_g = 104.8 keV, Parent = ^{151}Pm(0)
Gamma-ray yield
Time (min)

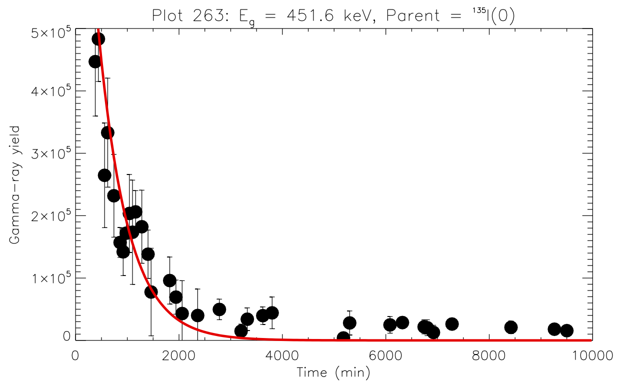

Plot 258: E_g = 656.1 keV, Parent = ^{105}Ru(0),^{135}I(0),^{126}Sb(0)
Gamma-ray yield
Time (min)

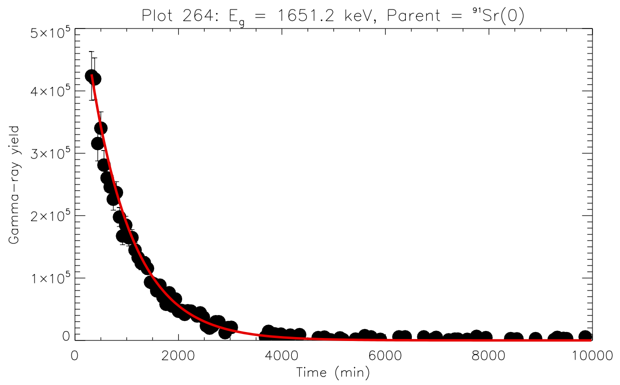

Plot 259: E_g = 1250.7 keV, Parent = ^{88}Kr(0),^{128}Sb(0)
Gamma-ray yield
Time (min)

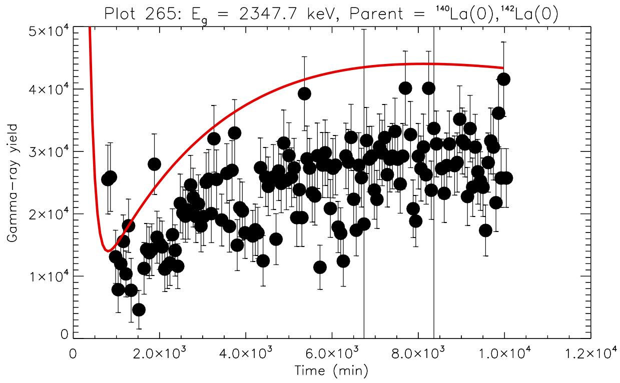

Plot 260: E_g = 565.8 keV, Parent = ^{134}Te(0),^{127}Sn(0),^{150}Pm(0)
Gamma-ray yield
Time (min)

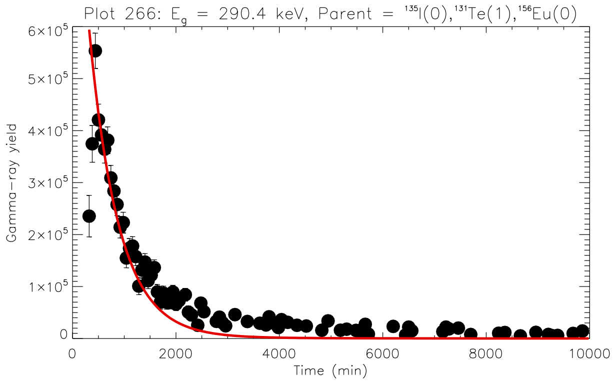

Plot 261: E_g = 636.3 keV, Parent = ^{128}Sb(0),^{151}Pm(0),^{134}Te(0),^{149}Nd(0),^{109}Pd(0)
Gamma-ray yield
Time (min)

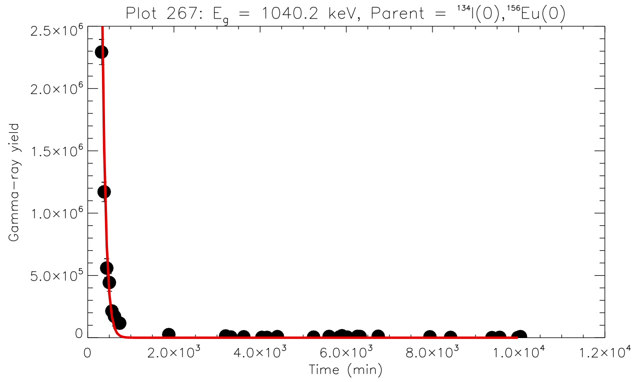

Plot 262: E_g = 1448.3 keV, Parent = ^{135}I(0),^{105}Ru(0),^{149}Nd(0)
Gamma-ray yield
Time (min)

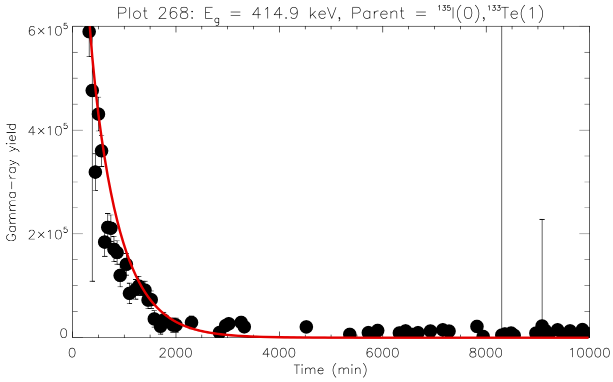

Plot 263: E_g = 451.6 keV, Parent = ^{135}I(0)
Gamma-ray yield
Time (min)

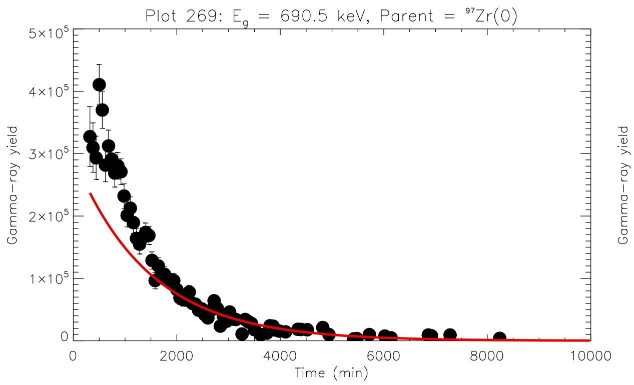

Plot 264: E_g = 1651.2 keV, Parent = ^{91}Sr(0)
Gamma-ray yield
Time (min)

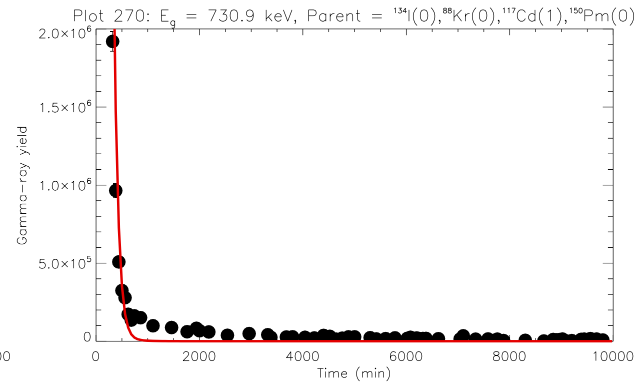

Plot 265: E_g = 2347.7 keV, Parent = 140La(0),142La(0)
Gamma-ray yield
Time (min)

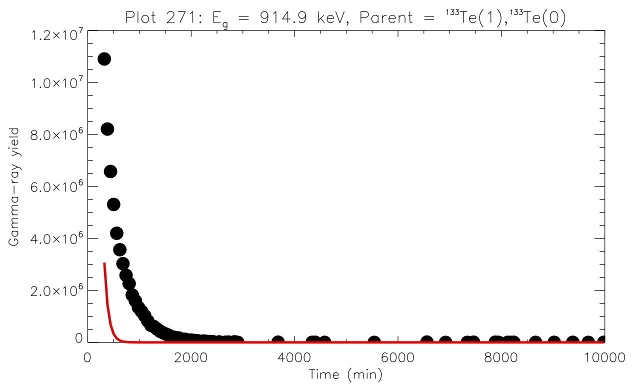

Plot 266: E_g = 290.4 keV, Parent = 135I(0),131Te(1),156Eu(0)
Gamma-ray yield
Time (min)

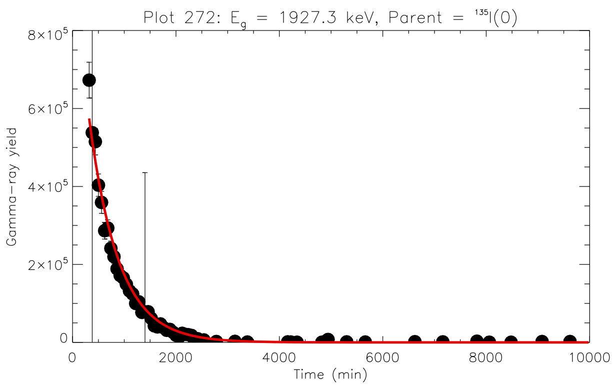

Plot 267: E_g = 1040.2 keV, Parent = 134I(0),156Eu(0)
Gamma-ray yield
Time (min)


Plot 268: E_g = 414.9 keV, Parent = 135I(0),133Te(1)
Gamma-ray yield
Time (min)

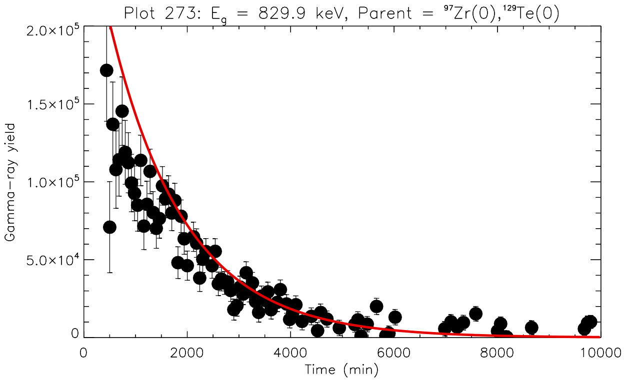

Plot 269: E_g = 690.5 keV, Parent = 97Zr(0)
Gamma-ray yield
Time (min)


Plot 270: E_g = 730.9 keV, Parent = 134I(0),88Kr(0),117Cd(1),150Pm(0)
Gamma-ray yield
Time (min)

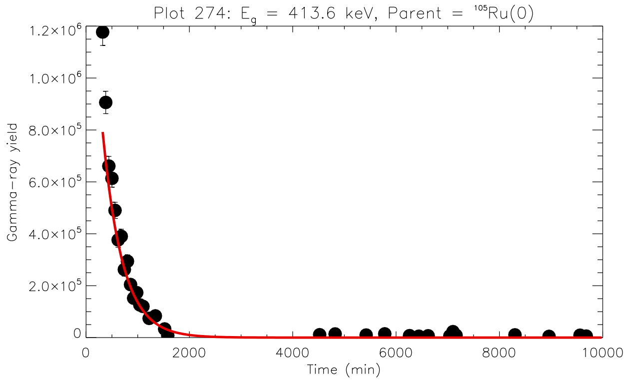

Plot 271: E_g = 914.9 keV, Parent = 133Te(1),133Te(0)
Gamma-ray yield
Time (min)


Plot 272: E_g = 1927.3 keV, Parent = 135I(0)
Gamma-ray yield
Time (min)

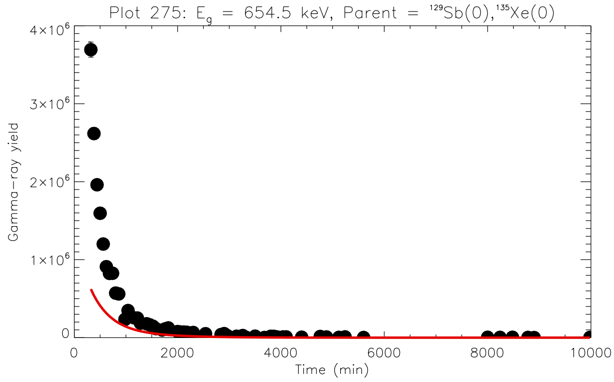
Plot 273: E_g = 829.9 keV, Parent = ^{97}Zr(0),^{129}Te(0)



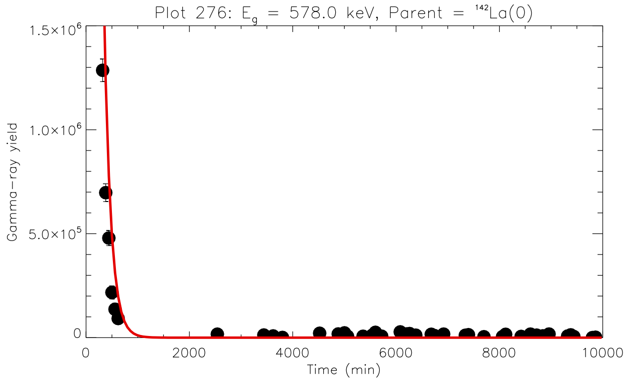
Plot 274: E_g = 413.6 keV, Parent = ^{105}Ru(0)



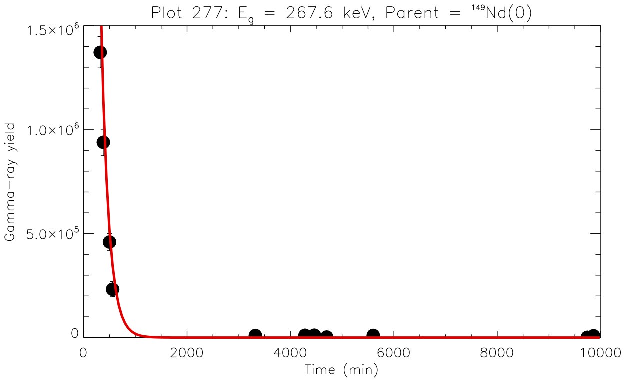
Plot 275: E_g = 654.5 keV, Parent = ^{129}Sb(0),^{135}Xe(0)



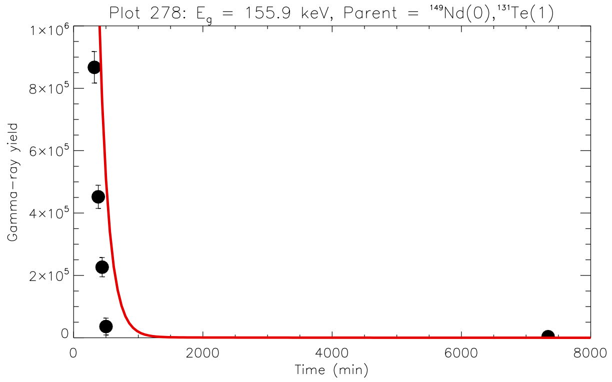
Plot 276: E_g = 578.0 keV, Parent = ^{142}La(0)



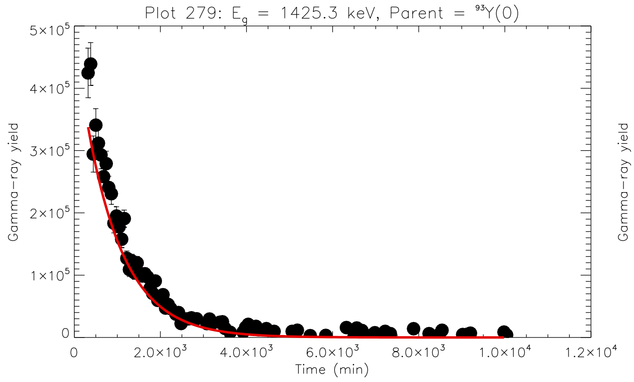
Plot 277: E_g = 267.6 keV, Parent = ^{149}Nd(0)



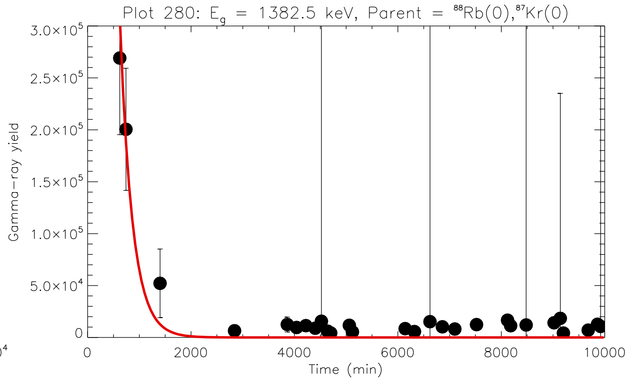
Plot 278: E_g = 155.9 keV, Parent = ^{149}Nd(0),^{131}Te(1)



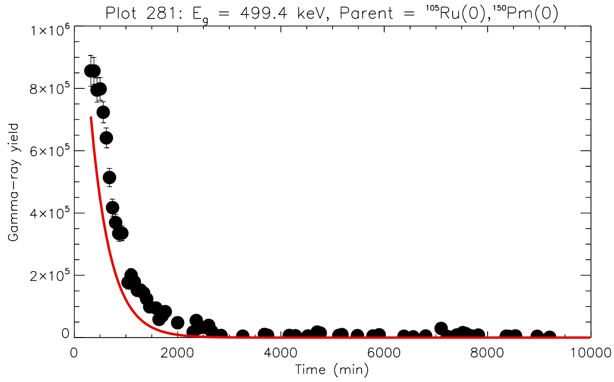
Plot 279: E_g = 1425.3 keV, Parent = ^{93}Y(0)



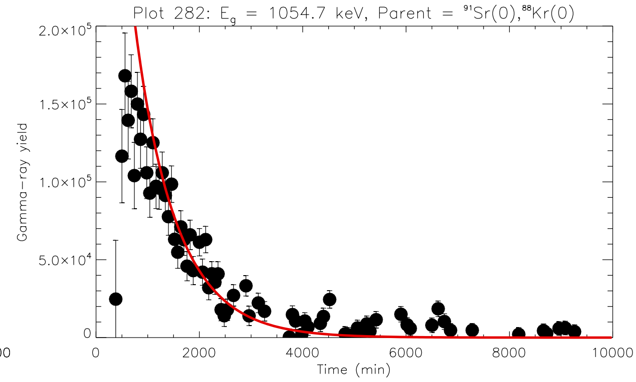
Plot 280: E_g = 1382.5 keV, Parent = ^{88}Rb(0),^{87}Kr(0)



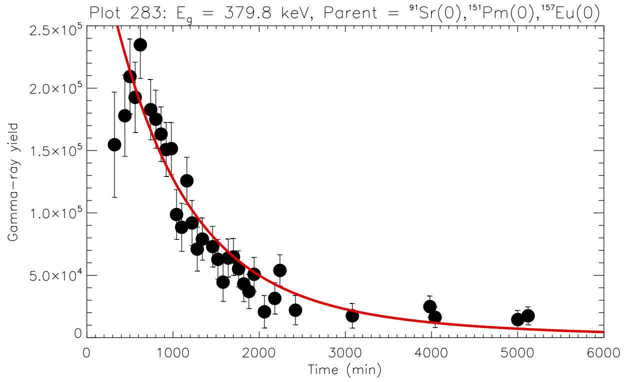
Plot 281: E_g = 499.4 keV, Parent = ^{105}Ru(0),^{150}Pm(0)



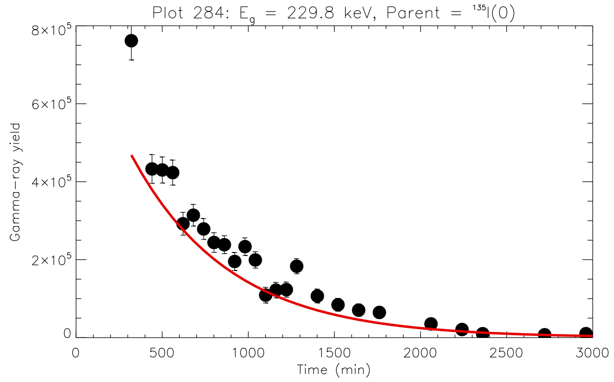
Plot 282: E_g = 1054.7 keV, Parent = ^{91}Sr(0),^{88}Kr(0)



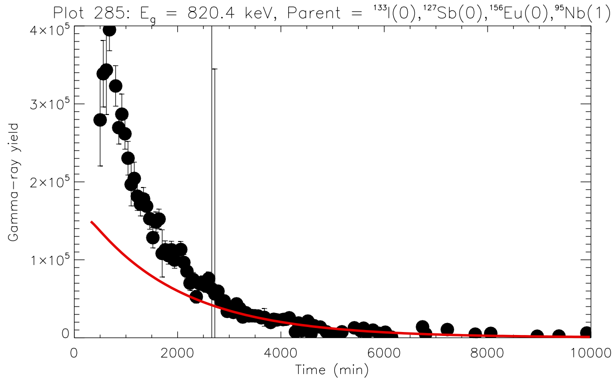
Plot 283: E_g = 379.8 keV, Parent = ^{91}Sr(0),^{151}Pm(0),^{157}Eu(0)



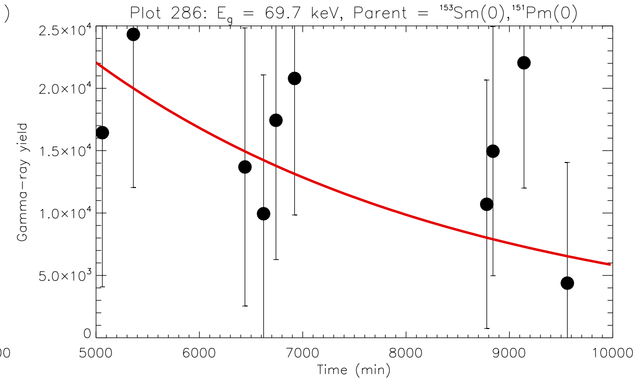
Plot 284: E_g = 229.8 keV, Parent = ^{135}I(0)



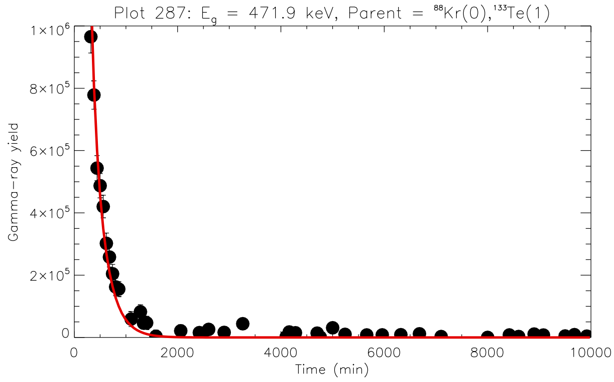
Plot 285: E_g = 820.4 keV, Parent = ^{133}I(0),^{127}Sb(0),^{156}Eu(0),^{95}Nb(1)



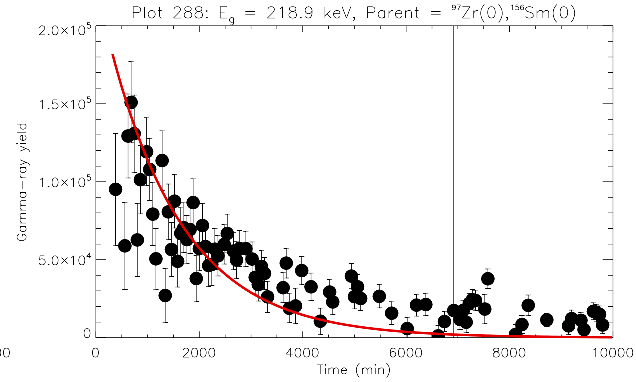
Plot 286: E_g = 69.7 keV, Parent = ^{153}Sm(0),^{151}Pm(0)



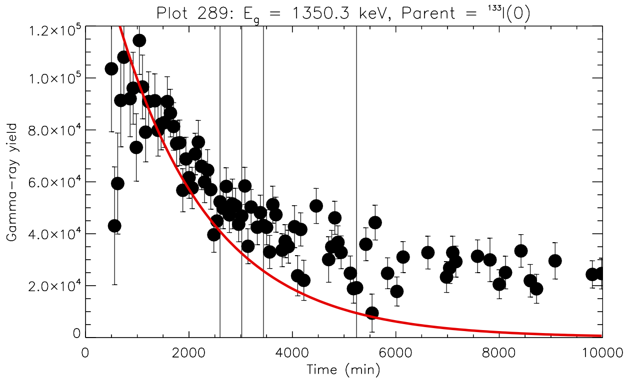
Plot 287: E_g = 471.9 keV, Parent = ^{88}Kr(0),^{133}Te(1)



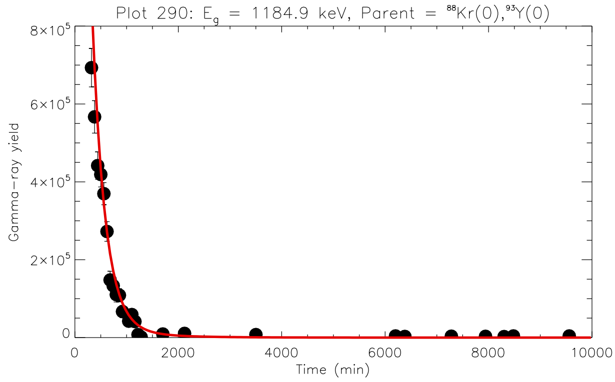
Plot 288: E_g = 218.9 keV, Parent = ^{97}Zr(0),^{156}Sm(0)



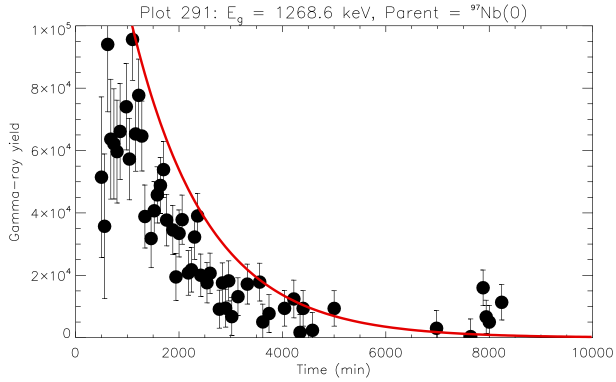
Plot 289: E_g = 1350.3 keV, Parent = ^{133}I(0)



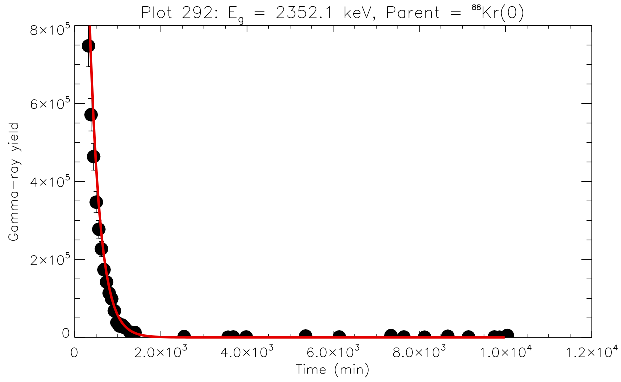
Plot 290: E_g = 1184.9 keV, Parent = ^{88}Kr(0),^{93}Y(0)



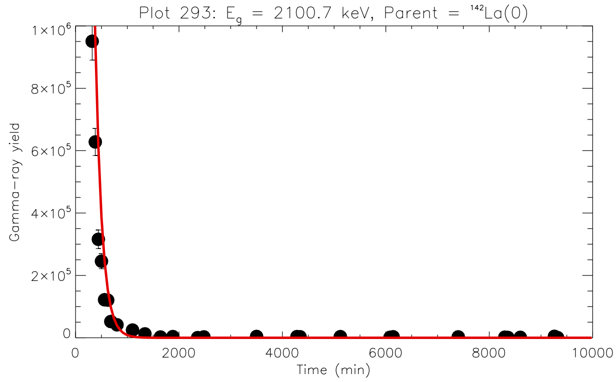
Plot 291: E_g = 1268.6 keV, Parent = ^{97}Nb(0)



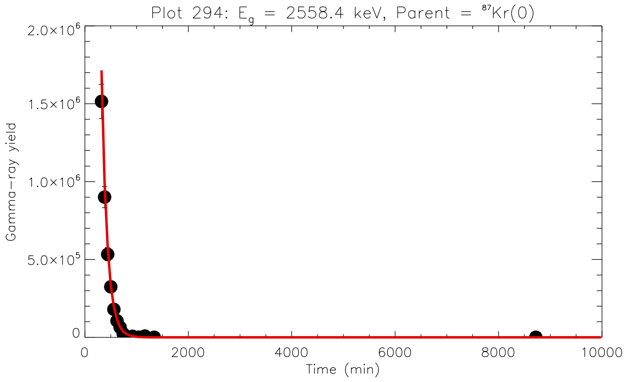
Plot 292: E_g = 2352.1 keV, Parent = ^{88}Kr(0)



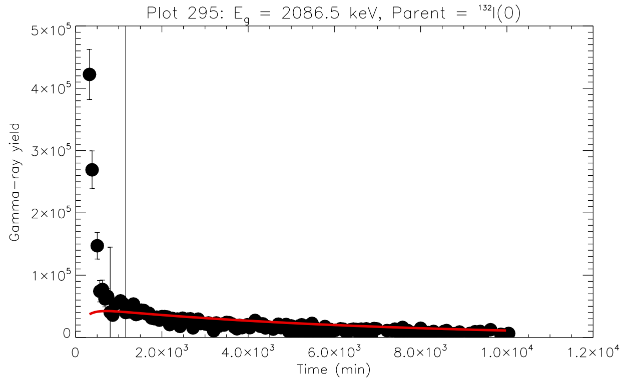
Plot 293: E_g = 2100.7 keV, Parent = ^{142}La(0)



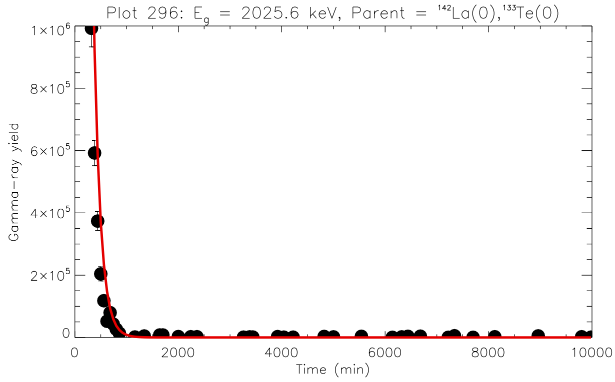
Plot 294: E_g = 2558.4 keV, Parent = ^{87}Kr(0)

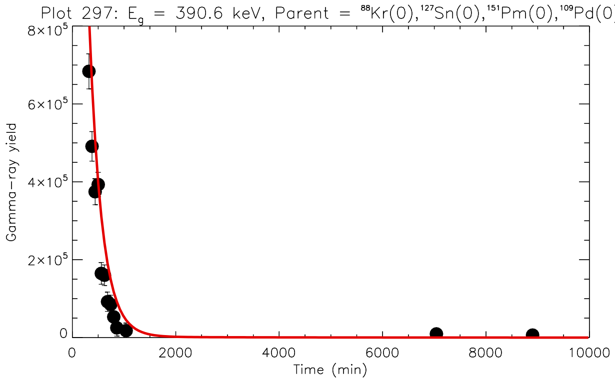


Plot 295: E_g = 2086.5 keV, Parent = ^{132}I(0)

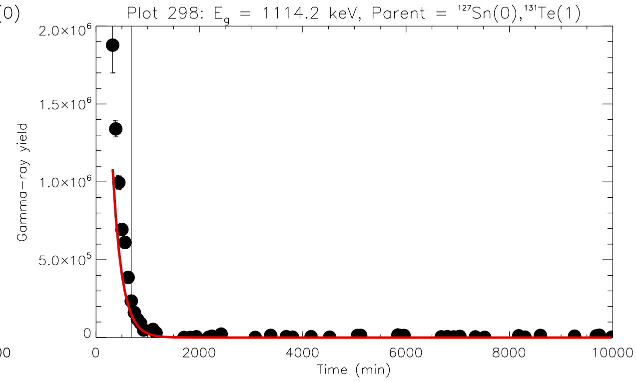


Plot 296: E_g = 2025.6 keV, Parent = ^{142}La(0),^{133}Te(0)

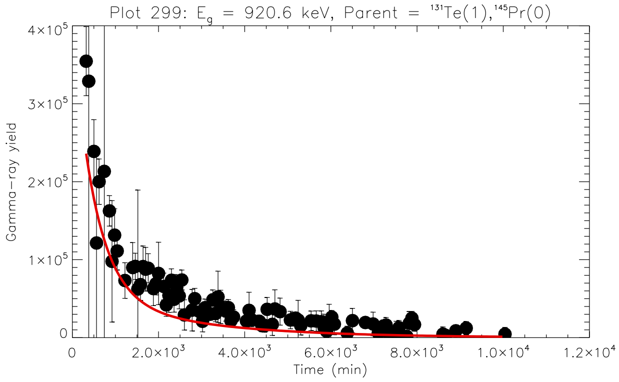




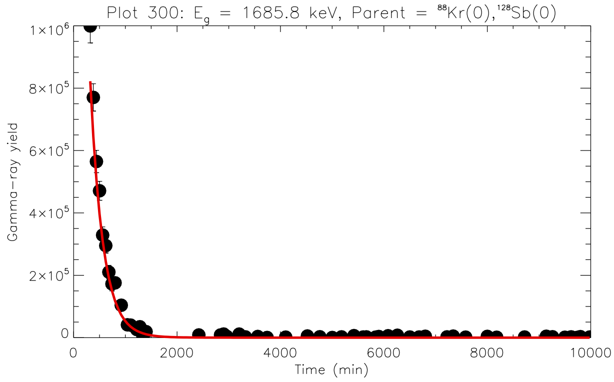
Plot 297: E_g = 390.6 keV, Parent = ^{88}Kr(0),^{127}Sn(0),^{151}Pm(0),^{109}Pd(0)



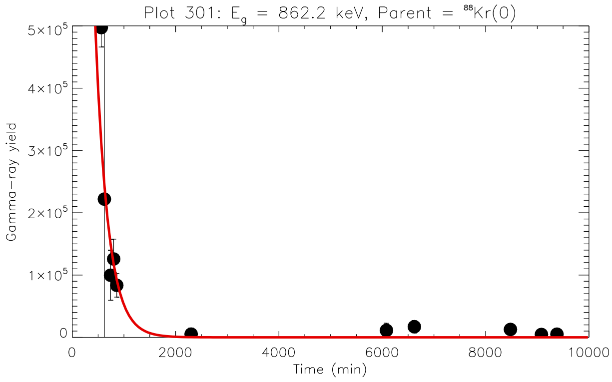
Plot 298: E_g = 1114.2 keV, Parent = ^{127}Sn(0),^{131}Te(1)



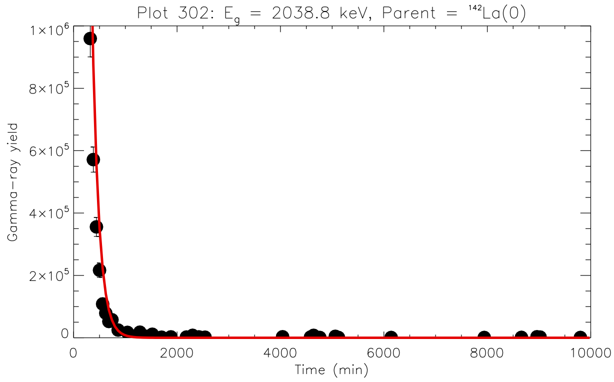
Plot 299: E_g = 920.6 keV, Parent = ^{131}Te(1),^{145}Pr(0)



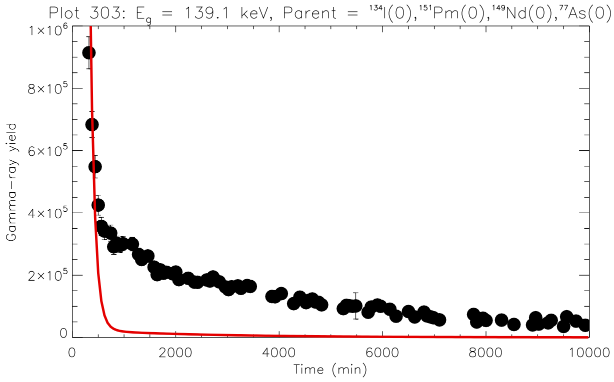
Plot 300: E_g = 1685.8 keV, Parent = ^{88}Kr(0),^{128}Sb(0)



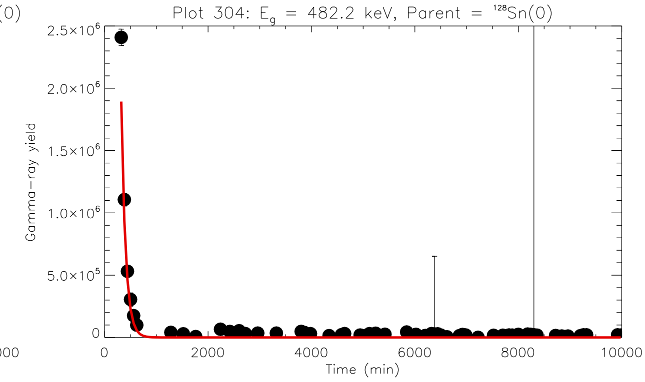
Plot 301: E_g = 862.2 keV, Parent = ^{88}Kr(0)



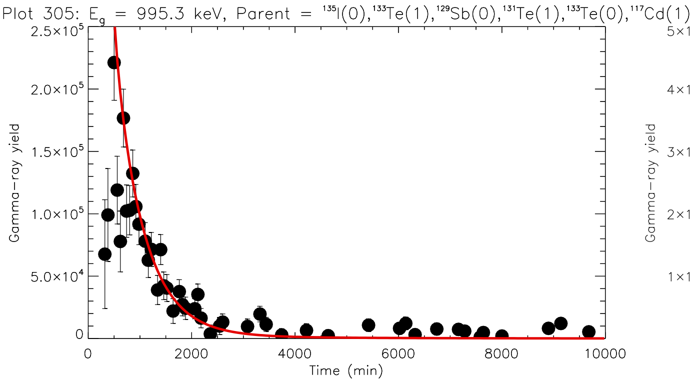
Plot 302: E_g = 2038.8 keV, Parent = ^{142}La(0)

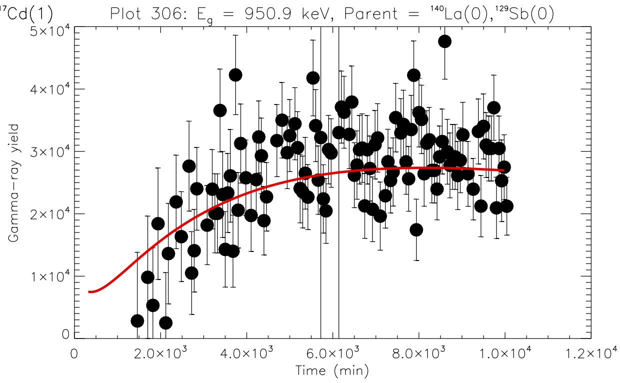


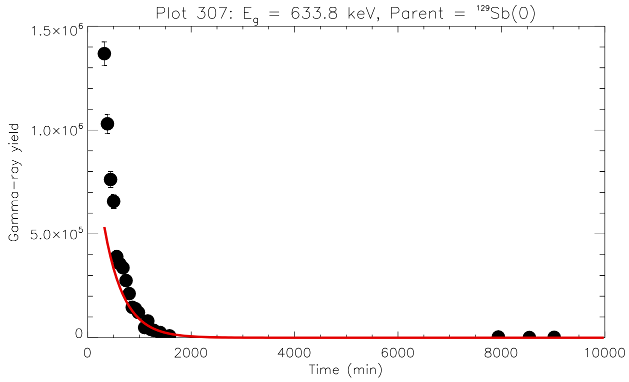
Plot 303: E_g = 139.1 keV, Parent = ^{134}I(0),^{151}Pm(0),^{149}Nd(0),^{77}As(0)

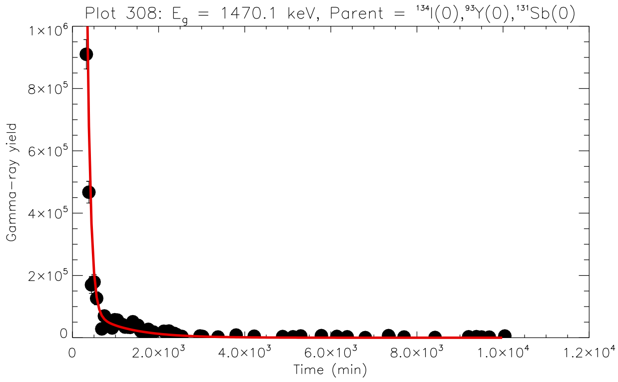


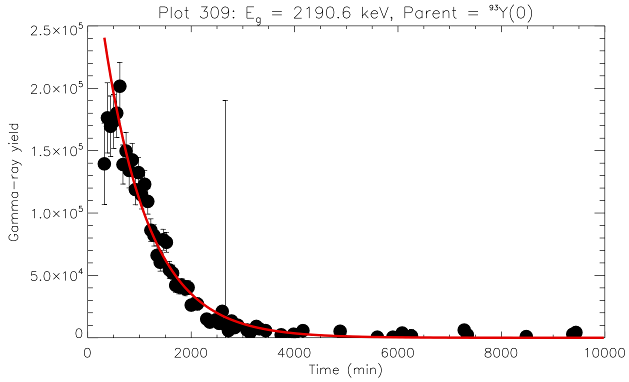
Plot 304: E_g = 482.2 keV, Parent = ^{128}Sn(0)

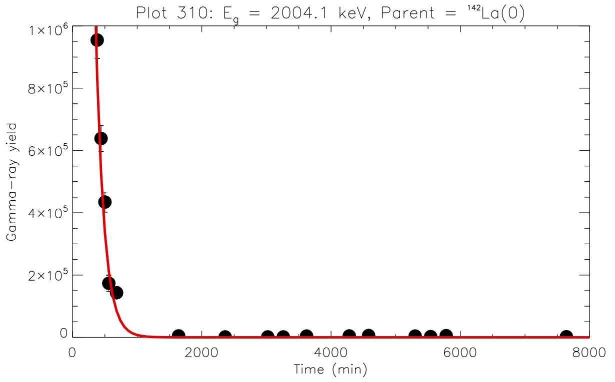

Plot 305: E_g = 995.3 keV, Parent = 135I(0),133Te(1),129Sb(0),131Te(1),133Te(0),117Cd(1)
Gamma-ray yield
Time (min)

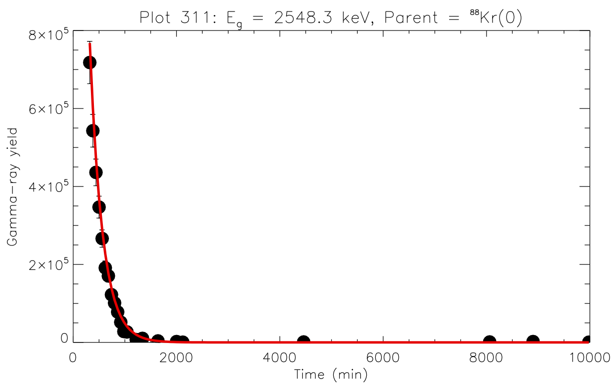

Plot 306: E_g = 950.9 keV, Parent = 140La(0),129Sb(0)
Gamma-ray yield
Time (min)

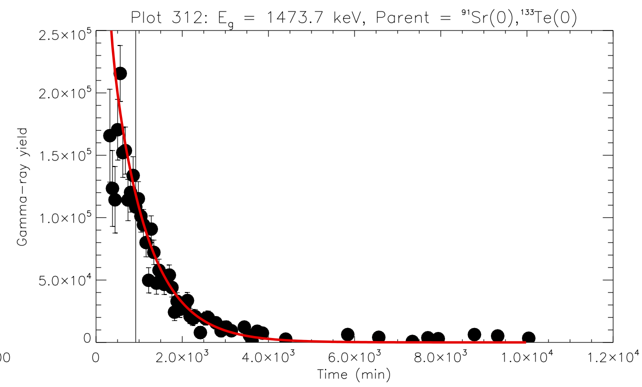

Plot 307: E_g = 633.8 keV, Parent = 129Sb(0)
Gamma-ray yield
Time (min)


Plot 308: E_g = 1470.1 keV, Parent = 134I(0),93Y(0),131Sb(0)
Gamma-ray yield
Time (min)

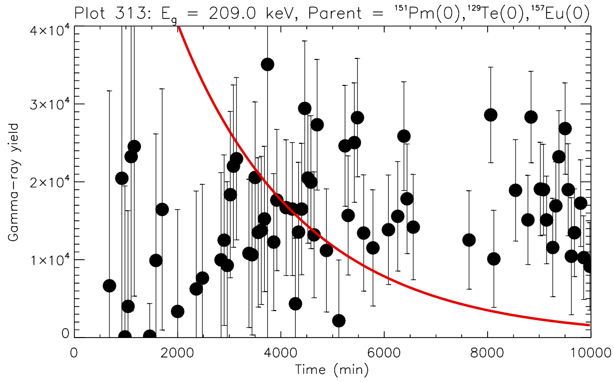

Plot 309: E_g = 2190.6 keV, Parent = 93Y(0)
Gamma-ray yield
Time (min)


Plot 310: E_g = 2004.1 keV, Parent = 142La(0)
Gamma-ray yield
Time (min)

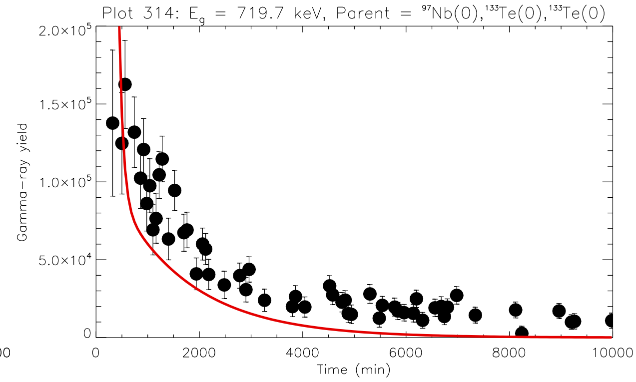

Plot 311: E_g = 2548.3 keV, Parent = 88Kr(0)
Gamma-ray yield
Time (min)


Plot 312: E_g = 1473.7 keV, Parent = 91Sr(0),133Te(0)
Gamma-ray yield
Time (min)

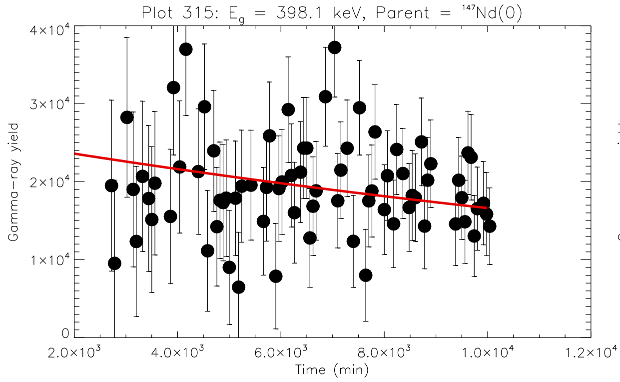
Plot 313: E_g = 209.0 keV, Parent = ^{151}Pm(0),^{129}Te(0),^{157}Eu(0)



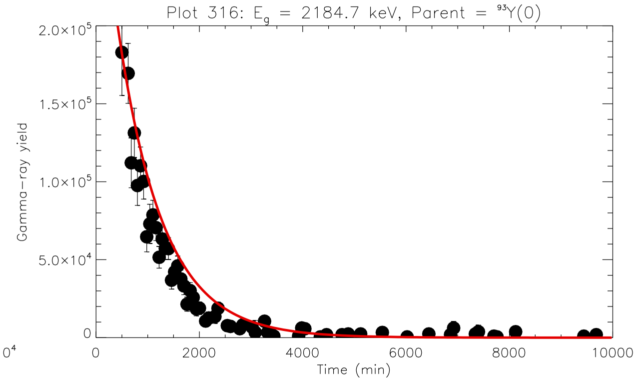
Plot 314: E_g = 719.7 keV, Parent = ^{97}Nb(0),^{133}Te(0),^{133}Te(0)



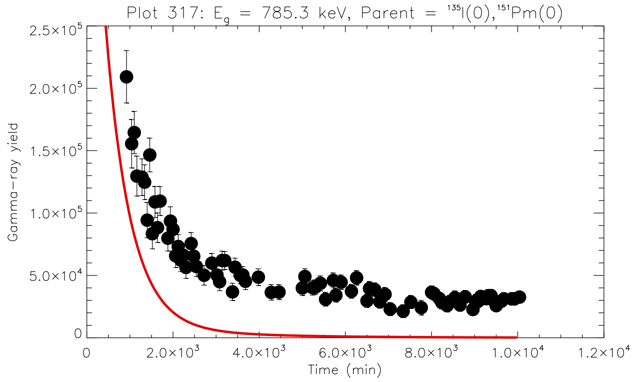
Plot 315: E_g = 398.1 keV, Parent = ^{147}Nd(0)



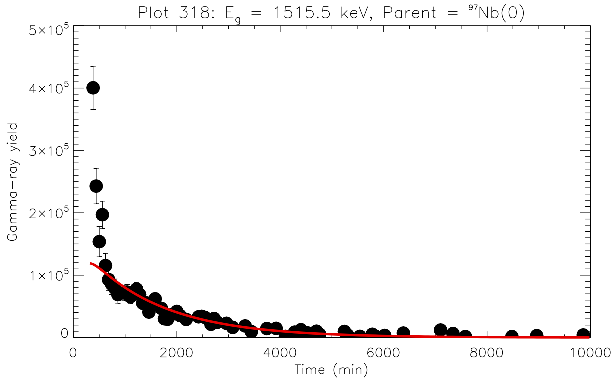
Plot 316: E_g = 2184.7 keV, Parent = ^{93}Y(0)



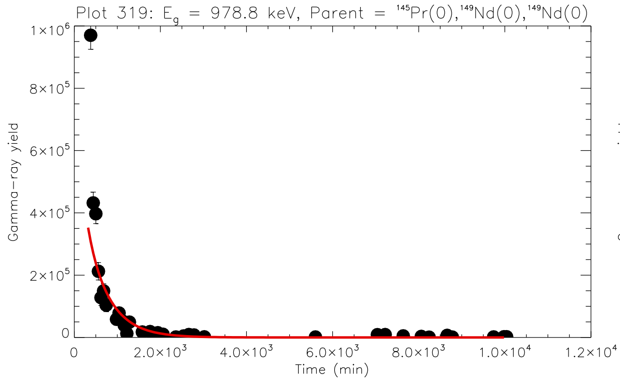
Plot 317: E_g = 785.3 keV, Parent = ^{135}I(0),^{151}Pm(0)



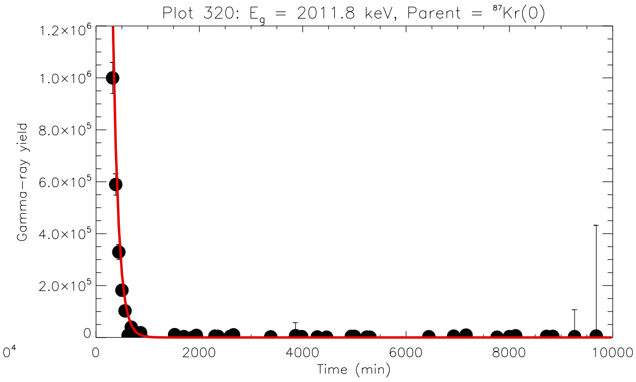
Plot 318: E_g = 1515.5 keV, Parent = ^{97}Nb(0)

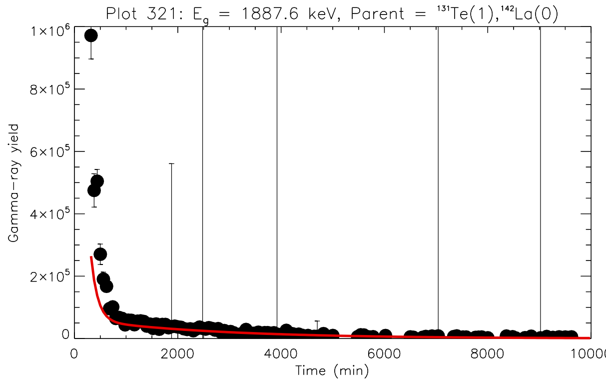


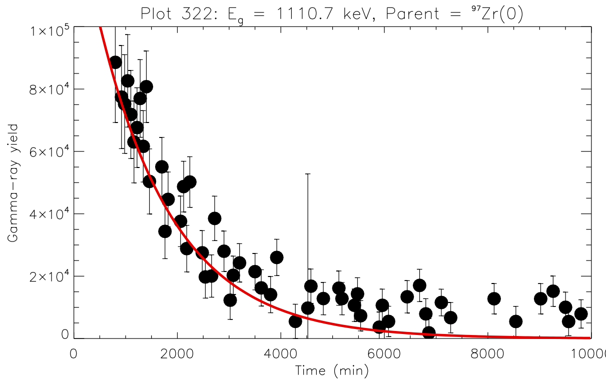
Plot 319: E_g = 978.8 keV, Parent = ^{145}Pr(0),^{149}Nd(0),^{149}Nd(0)

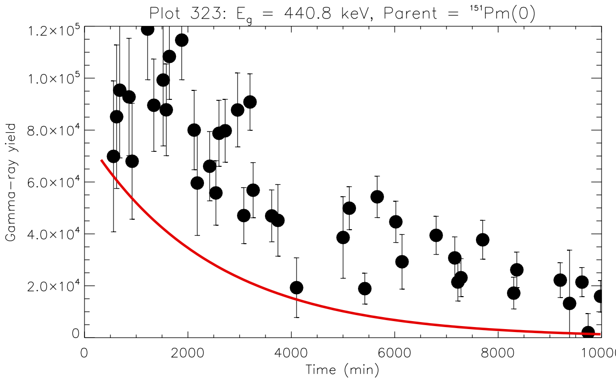


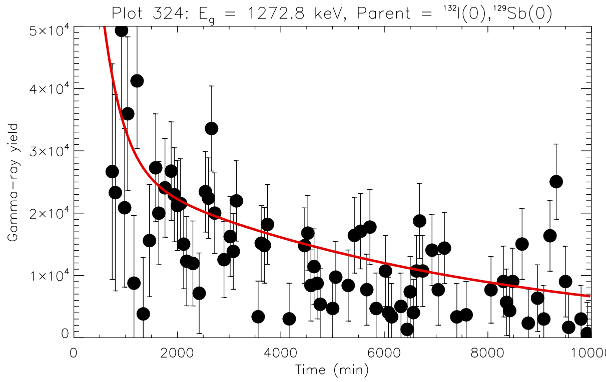
Plot 320: E_g = 2011.8 keV, Parent = ^{87}Kr(0)

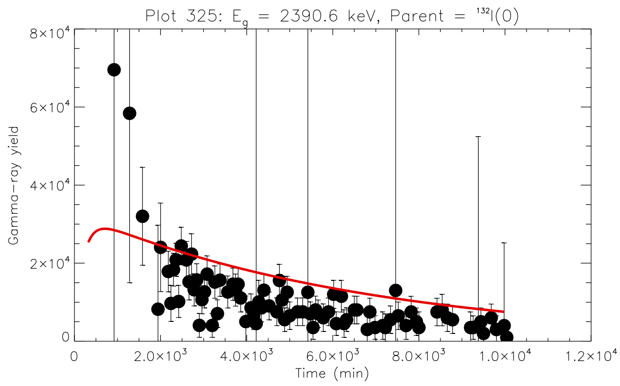


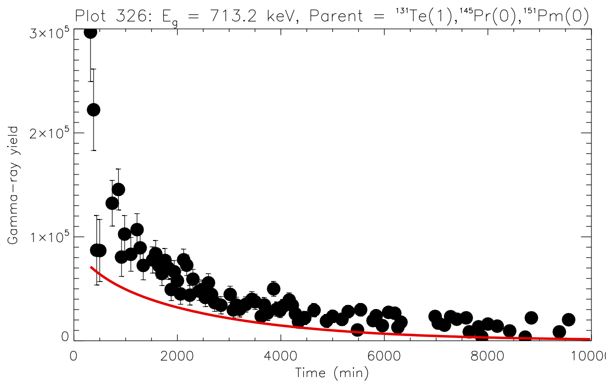

Plot 321: E_g = 1887.6 keV, Parent = ^{131}Te(1),^{142}La(0)
Gamma-ray yield
Time (min)

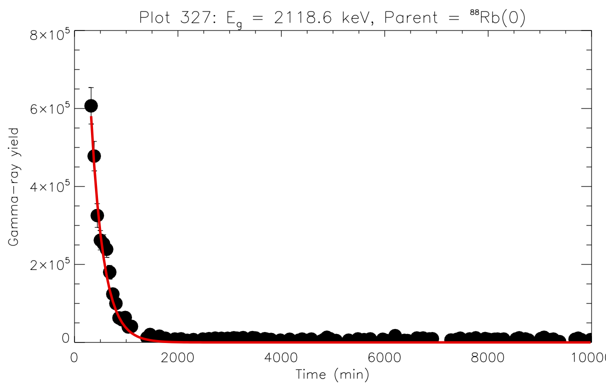

Plot 322: E_g = 1110.7 keV, Parent = ^{97}Zr(0)
Gamma-ray yield
Time (min)

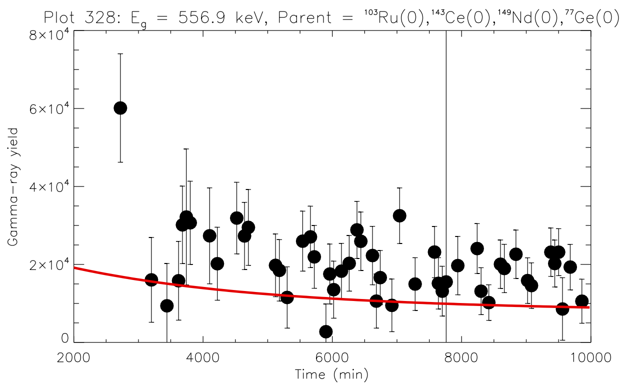

Plot 323: E_g = 440.8 keV, Parent = ^{151}Pm(0)
Gamma-ray yield
Time (min)


Plot 324: E_g = 1272.8 keV, Parent = ^{132}I(0),^{129}Sb(0)
Gamma-ray yield
Time (min)

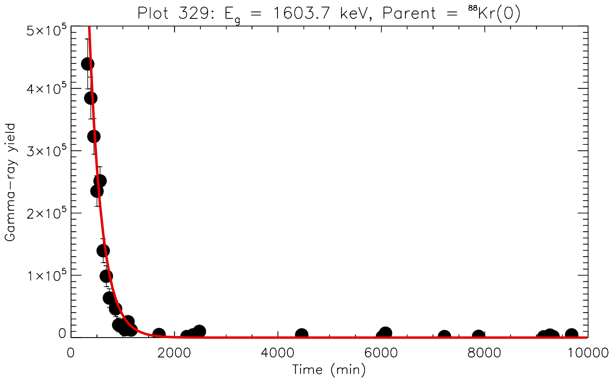

Plot 325: E_g = 2390.6 keV, Parent = ^{132}I(0)
Gamma-ray yield
Time (min)


Plot 326: E_g = 713.2 keV, Parent = ^{131}Te(1),^{145}Pr(0),^{151}Pm(0)
Gamma-ray yield
Time (min)

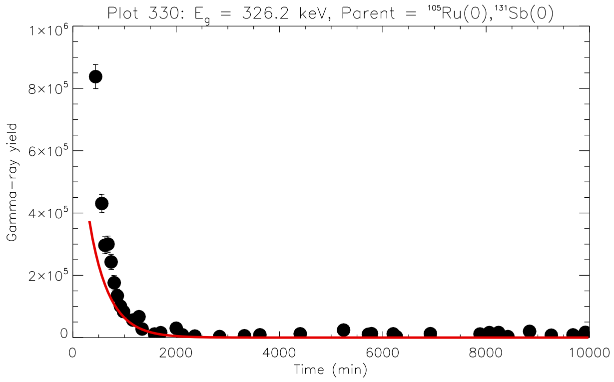

Plot 327: E_g = 2118.6 keV, Parent = ^{88}Rb(0)
Gamma-ray yield
Time (min)


Plot 328: E_g = 556.9 keV, Parent = ^{103}Ru(0),^{143}Ce(0),^{149}Nd(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

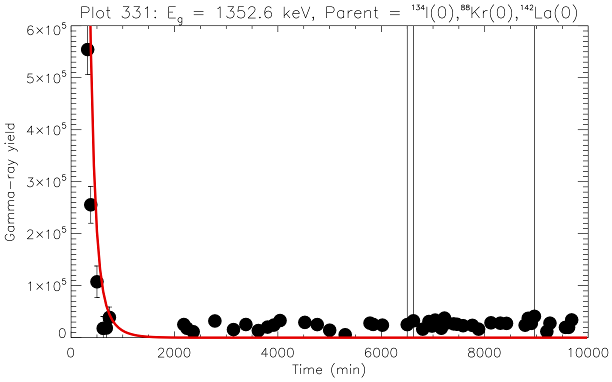
Plot 329: E_g = 1603.7 keV, Parent = ^{88}Kr(0)



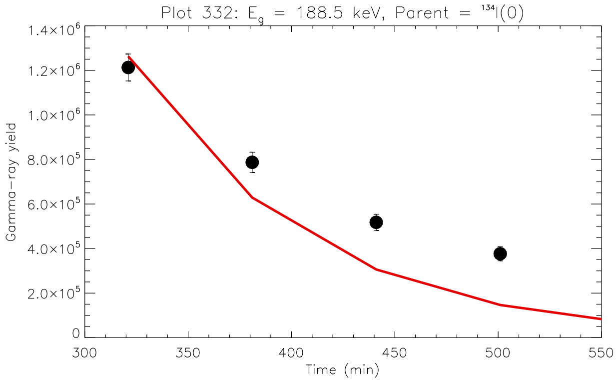
Plot 330: E_g = 326.2 keV, Parent = ^{105}Ru(0),^{131}Sb(0)



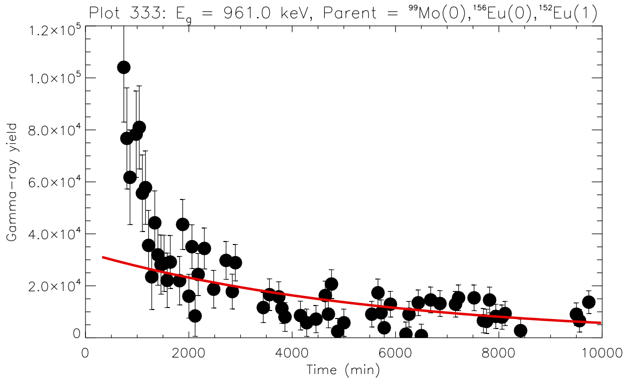
Plot 331: E_g = 1352.6 keV, Parent = ^{134}I(0),^{88}Kr(0),^{142}La(0)



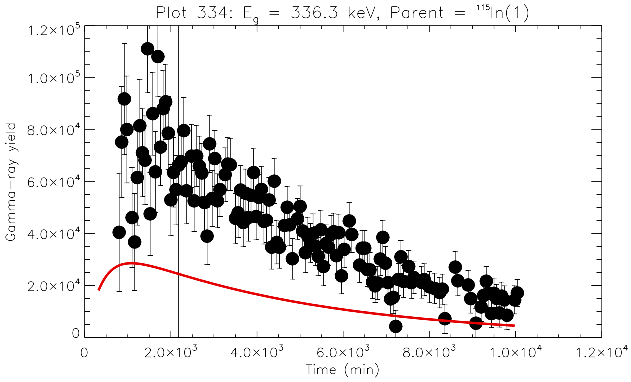
Plot 332: E_g = 188.5 keV, Parent = ^{134}I(0)



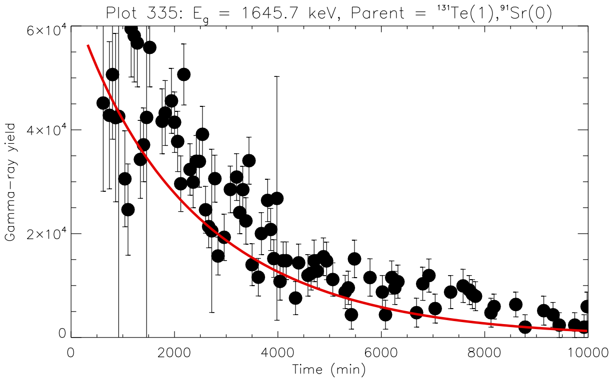
Plot 333: E_g = 961.0 keV, Parent = ^{99}Mo(0),^{156}Eu(0),^{152}Eu(1)



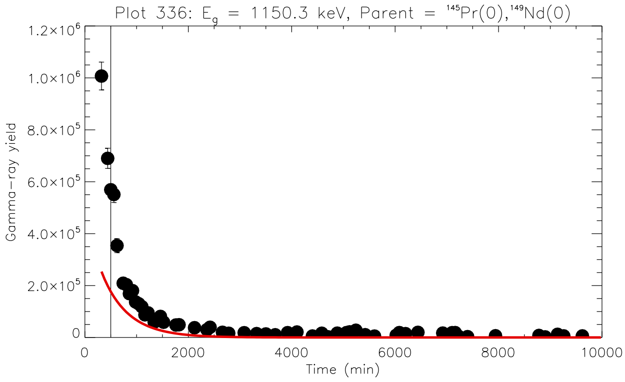
Plot 334: E_g = 336.3 keV, Parent = ^{115}In(1)

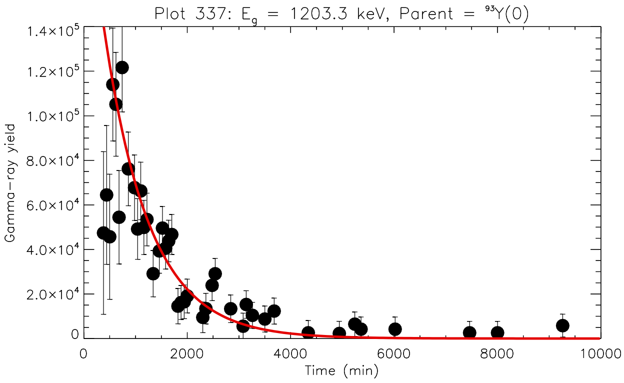


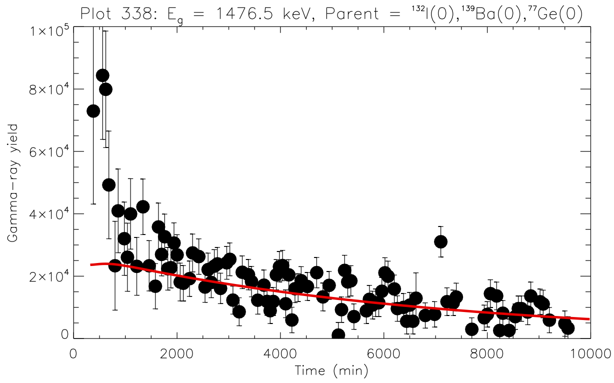
Plot 335: E_g = 1645.7 keV, Parent = ^{131}Te(1),^{91}Sr(0)

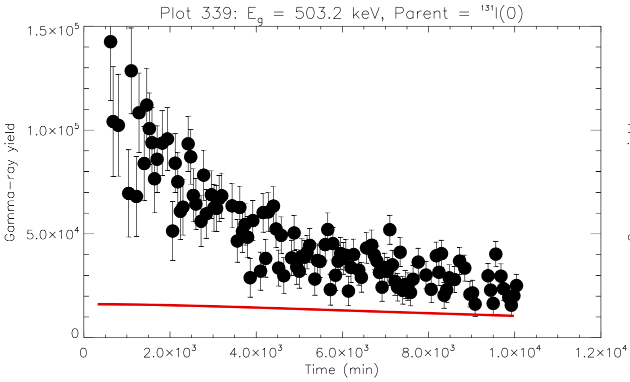


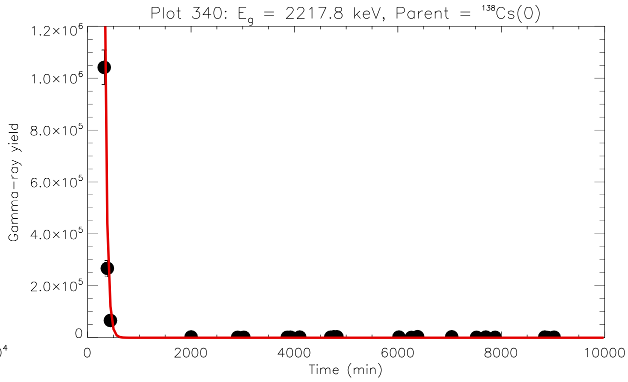
Plot 336: E_g = 1150.3 keV, Parent = ^{145}Pr(0),^{149}Nd(0)

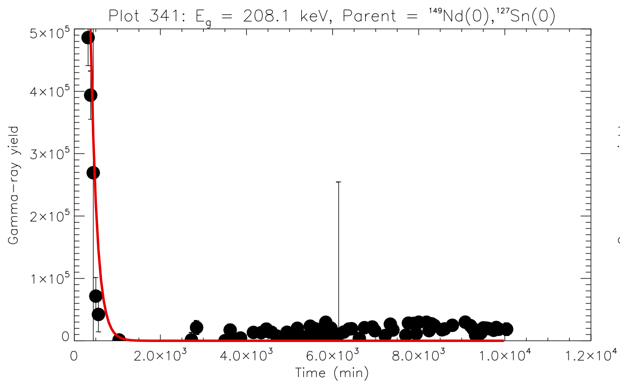


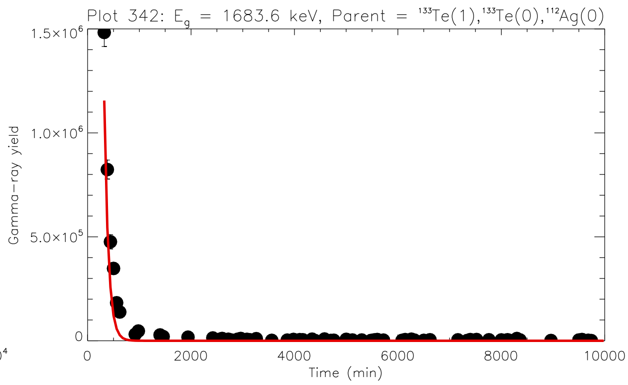

Plot 337: E_g = 1203.3 keV, Parent = ^{93}Y(0)
Gamma-ray yield
Time (min)

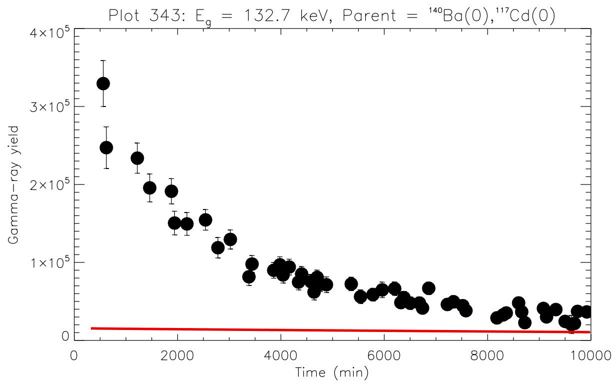

Plot 338: E_g = 1476.5 keV, Parent = ^{132}I(0),^{139}Ba(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

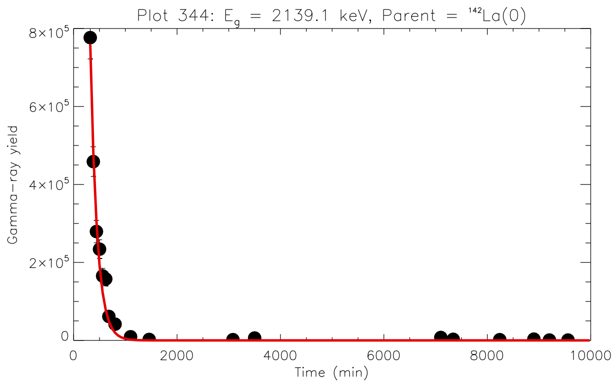

Plot 339: E_g = 503.2 keV, Parent = ^{131}I(0)
Gamma-ray yield
Time (min)


Plot 340: E_g = 2217.8 keV, Parent = ^{138}Cs(0)
Gamma-ray yield
Time (min)

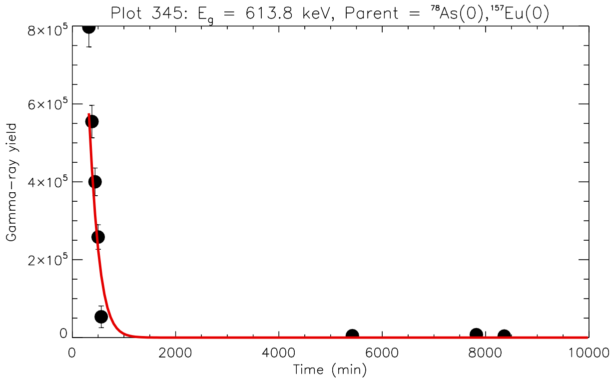

Plot 341: E_g = 208.1 keV, Parent = ^{149}Nd(0),^{127}Sn(0)
Gamma-ray yield
Time (min)


Plot 342: E_g = 1683.6 keV, Parent = ^{133}Te(1),^{133}Te(0),^{112}Ag(0)
Gamma-ray yield
Time (min)

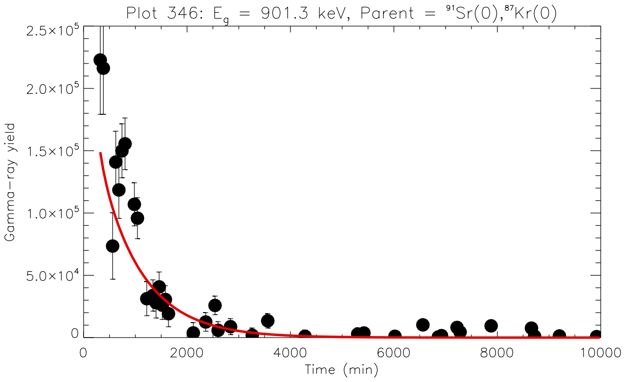

Plot 343: E_g = 132.7 keV, Parent = ^{140}Ba(0),^{117}Cd(0)
Gamma-ray yield
Time (min)


Plot 344: E_g = 2139.1 keV, Parent = ^{142}La(0)
Gamma-ray yield
Time (min)

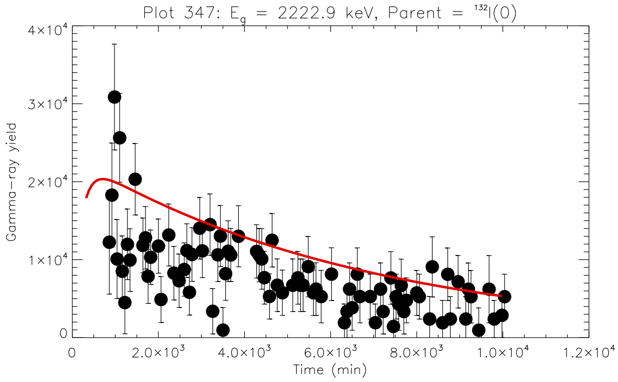
Plot 345: E_g = 613.8 keV, Parent = ^{78}As(0),^{157}Eu(0)



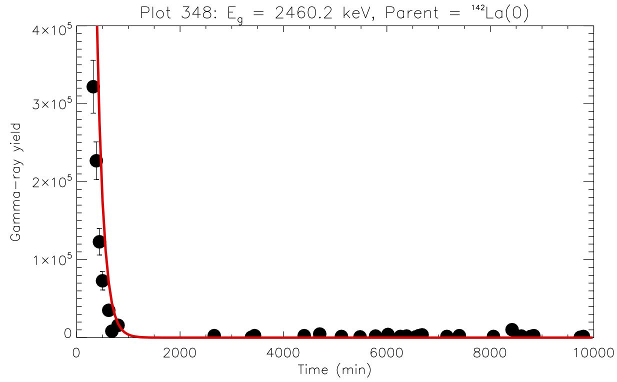
Plot 346: E_g = 901.3 keV, Parent = ^{91}Sr(0),^{87}Kr(0)



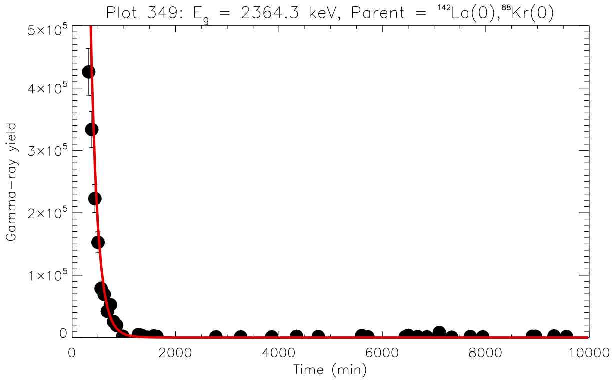
Plot 347: E_g = 2222.9 keV, Parent = ^{132}I(0)



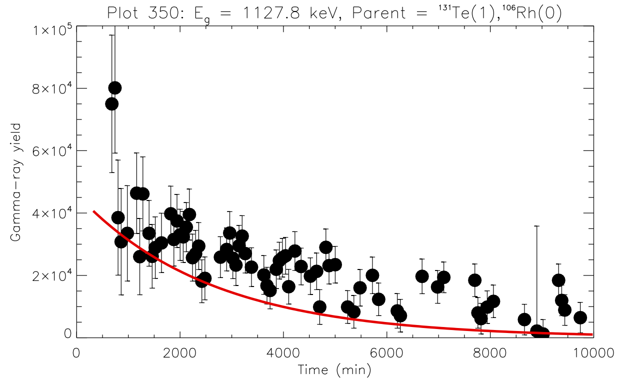
Plot 348: E_g = 2460.2 keV, Parent = ^{142}La(0)



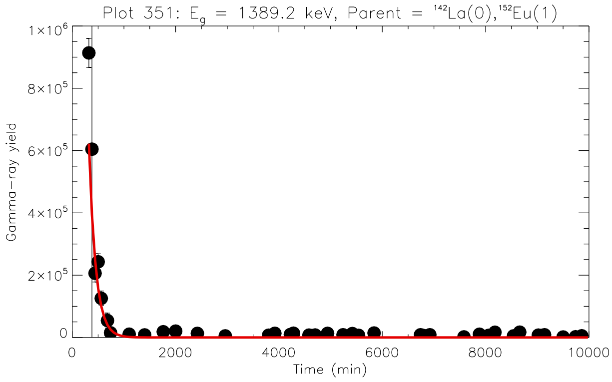
Plot 349: E_g = 2364.3 keV, Parent = ^{142}La(0),^{88}Kr(0)



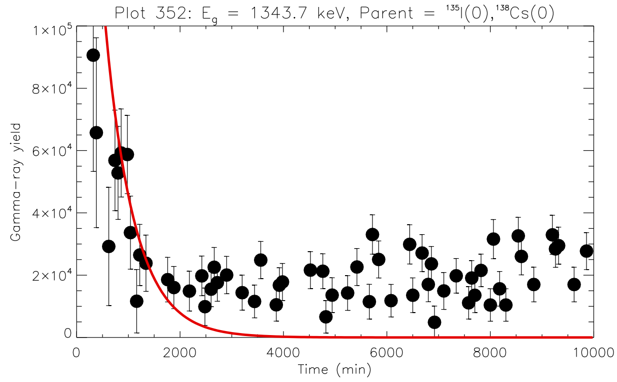
Plot 350: E_g = 1127.8 keV, Parent = ^{131}Te(1),^{106}Rh(0)



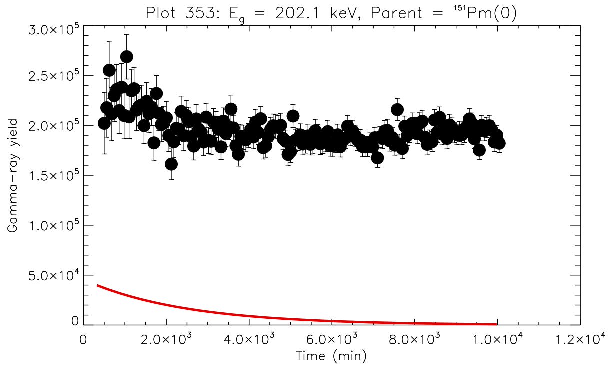
Plot 351: E_g = 1389.2 keV, Parent = ^{142}La(0),^{152}Eu(1)



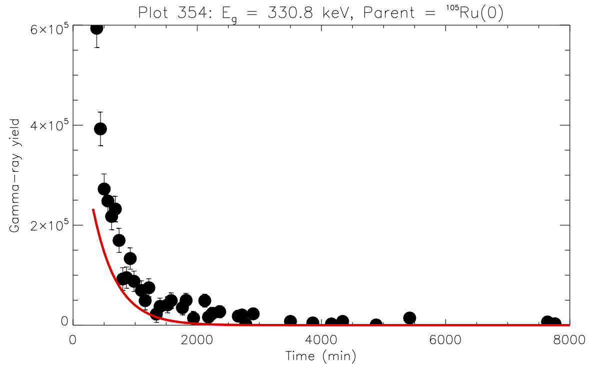
Plot 352: E_g = 1343.7 keV, Parent = ^{135}I(0),^{138}Cs(0)



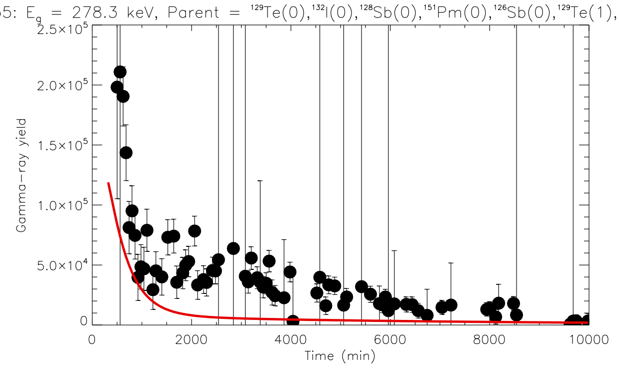
Plot 353: E_g = 202.1 keV, Parent = ^{151}Pm(0)



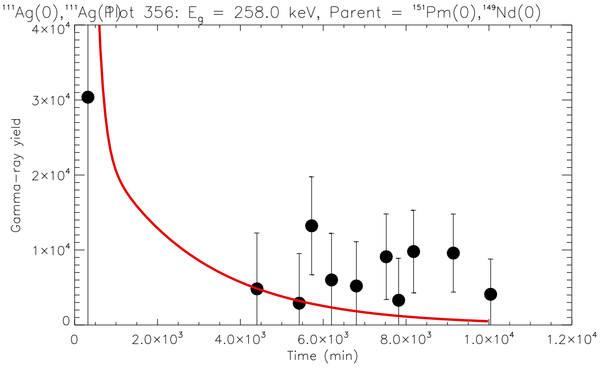
Plot 354: E_g = 330.8 keV, Parent = ^{105}Ru(0)



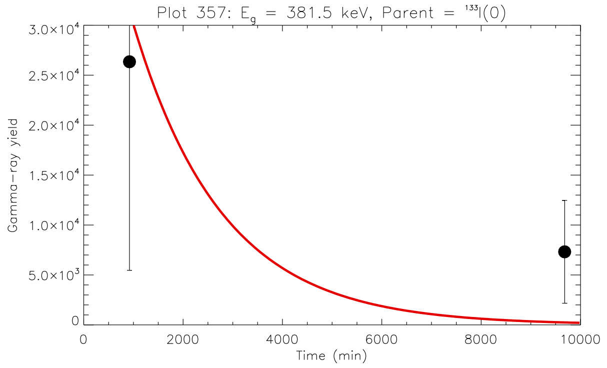
Plot 355: E_g = 278.3 keV, Parent = ^{129}Te(0),^{132}I(0),^{128}Sb(0),^{151}Pm(0),^{126}Sb(0),^{129}Te(1),^{111}Ag(0),^{111}Ag(1)



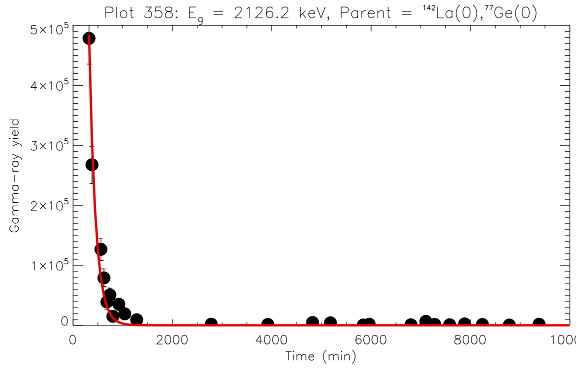
Plot 356: E_g = 258.0 keV, Parent = ^{151}Pm(0),^{149}Nd(0)



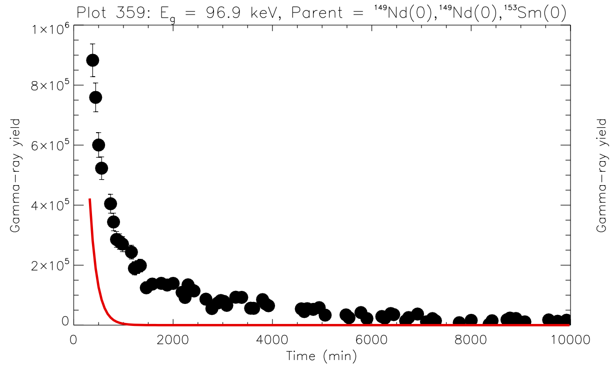
Plot 357: E_g = 381.5 keV, Parent = ^{133}I(0)



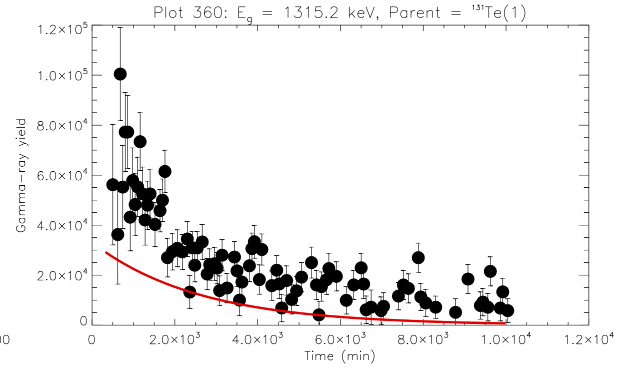
Plot 358: E_g = 2126.2 keV, Parent = ^{142}La(0),^{77}Ge(0)

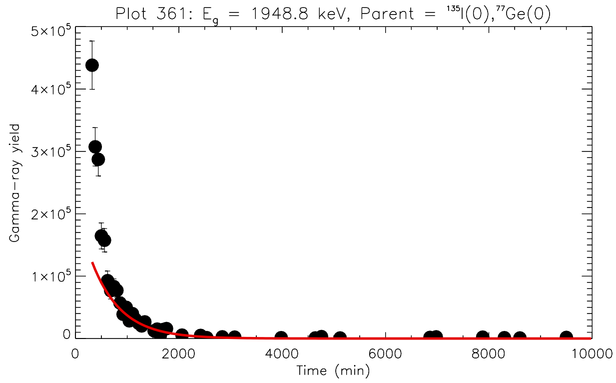


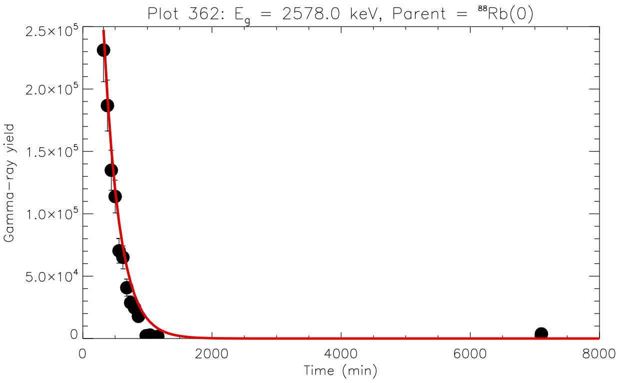
Plot 359: E_g = 96.9 keV, Parent = ^{149}Nd(0),^{149}Nd(0),^{153}Sm(0)

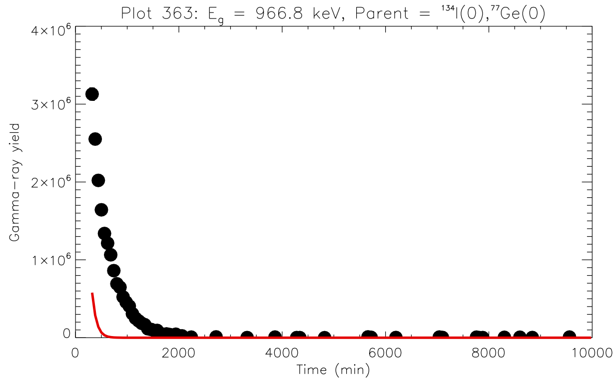


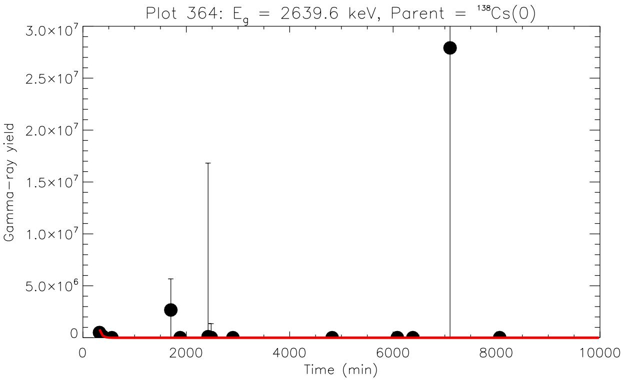
Plot 360: E_g = 1315.2 keV, Parent = ^{131}Te(1)

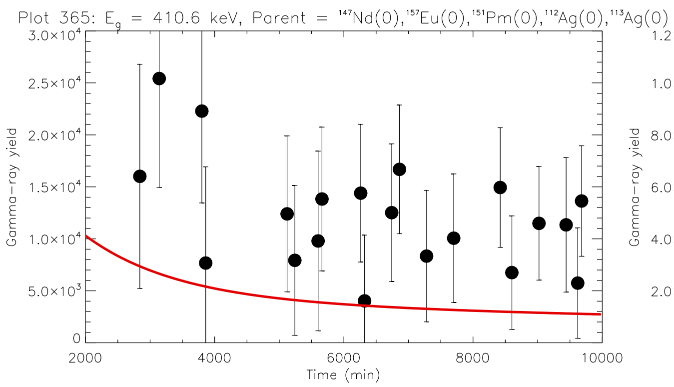


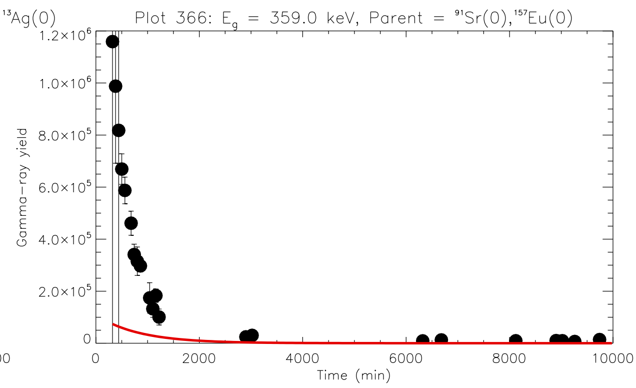

Plot 361: E_g = 1948.8 keV, Parent = ^{135}I(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

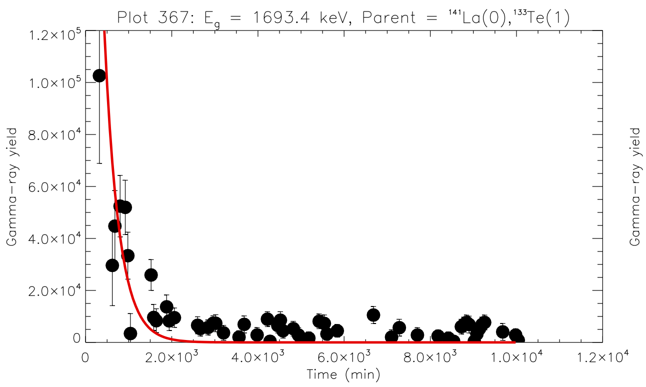

Plot 362: E_g = 2578.0 keV, Parent = ^{88}Rb(0)
Gamma-ray yield
Time (min)

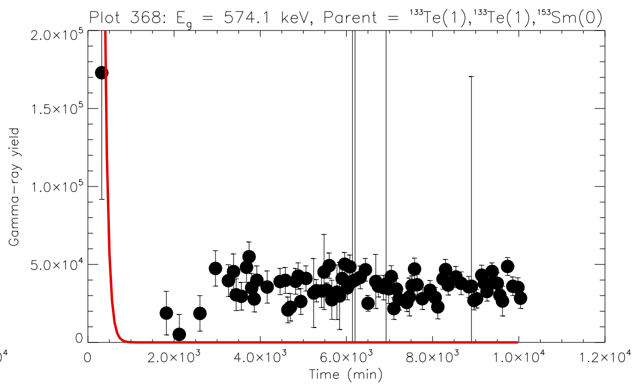

Plot 363: E_g = 966.8 keV, Parent = ^{134}I(0),^{77}Ge(0)
Gamma-ray yield
Time (min)


Plot 364: E_g = 2639.6 keV, Parent = ^{138}Cs(0)
Gamma-ray yield
Time (min)

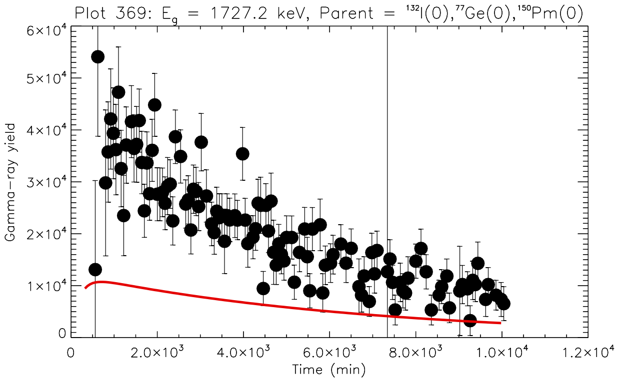

Plot 365: E_g = 410.6 keV, Parent = ^{147}Nd(0),^{157}Eu(0),^{151}Pm(0),^{112}Ag(0),^{113}Ag(0)
Gamma-ray yield
Time (min)


Plot 366: E_g = 359.0 keV, Parent = ^{91}Sr(0),^{157}Eu(0)
Gamma-ray yield
Time (min)

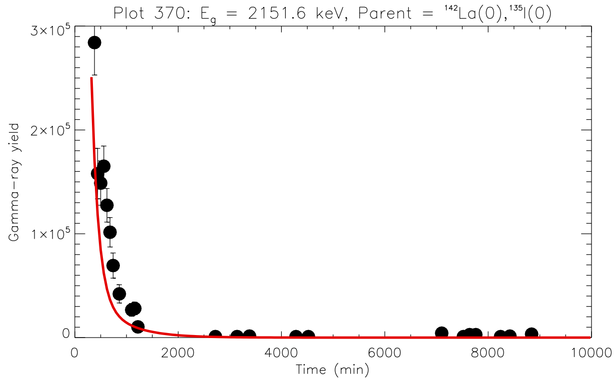

Plot 367: E_g = 1693.4 keV, Parent = ^{141}La(0),^{133}Te(1)
Gamma-ray yield
Time (min)


Plot 368: E_g = 574.1 keV, Parent = ^{133}Te(1),^{133}Te(1),^{153}Sm(0)
Gamma-ray yield
Time (min)

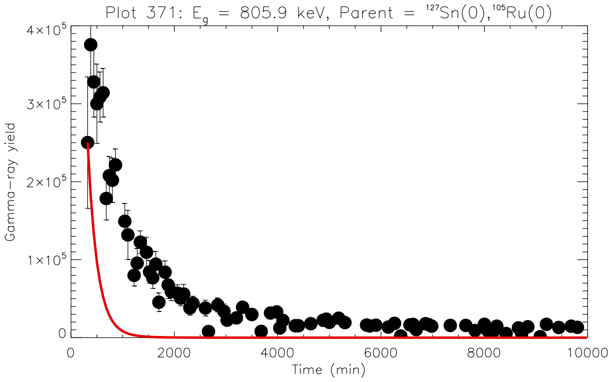
Plot 369: E_g = 1727.2 keV, Parent = ^{132}I(0),^{77}Ge(0),^{150}Pm(0)



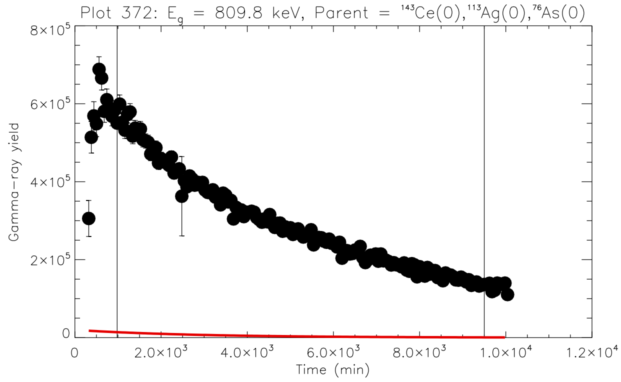
Plot 370: E_g = 2151.6 keV, Parent = ^{142}La(0),^{135}I(0)



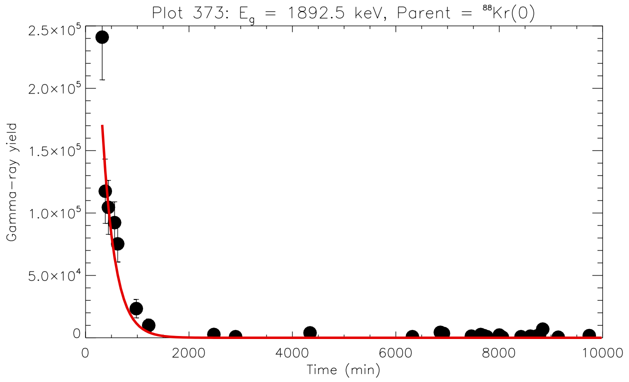
Plot 371: E_g = 805.9 keV, Parent = ^{127}Sn(0),^{105}Ru(0)



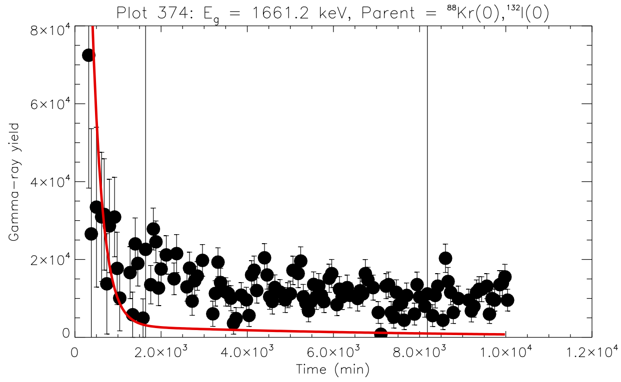
Plot 372: E_g = 809.8 keV, Parent = ^{143}Ce(0),^{113}Ag(0),^{76}As(0)



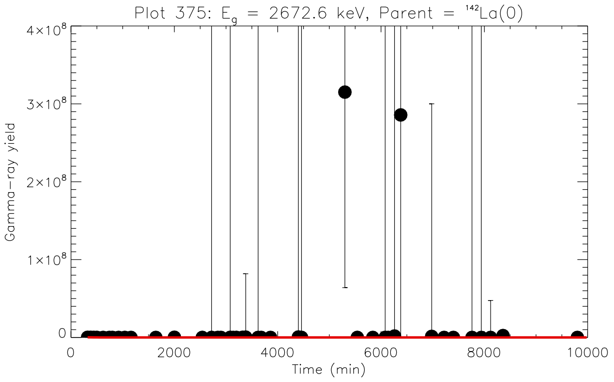
Plot 373: E_g = 1892.5 keV, Parent = ^{88}Kr(0)



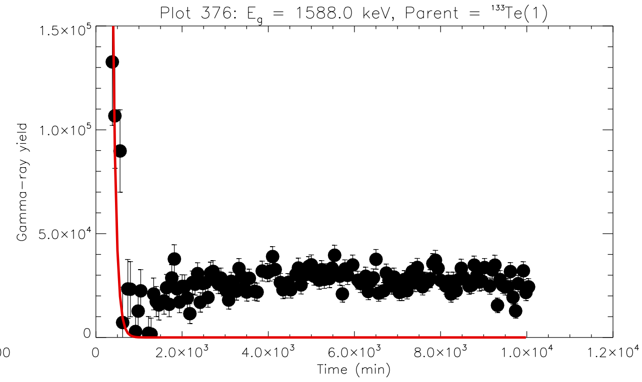
Plot 374: E_g = 1661.2 keV, Parent = ^{88}Kr(0),^{132}I(0)

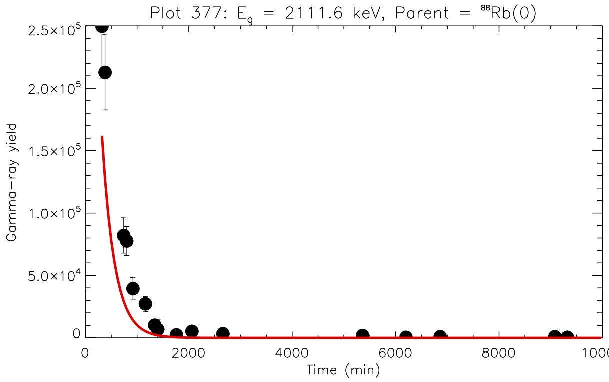


Plot 375: E_g = 2672.6 keV, Parent = ^{142}La(0)

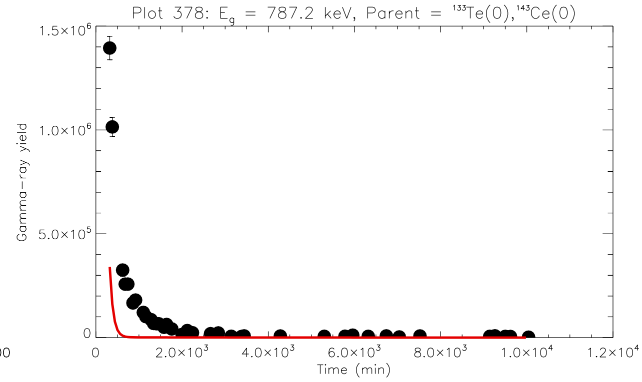


Plot 376: E_g = 1588.0 keV, Parent = ^{133}Te(1)

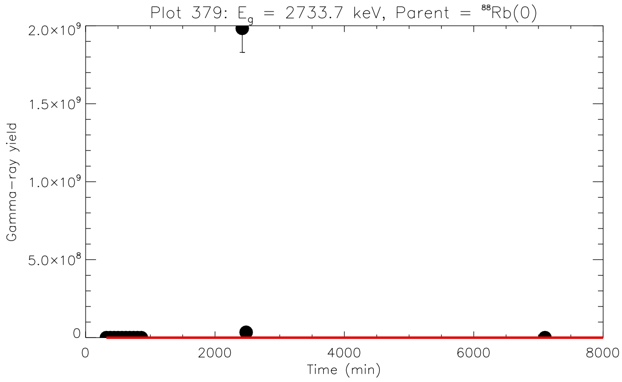




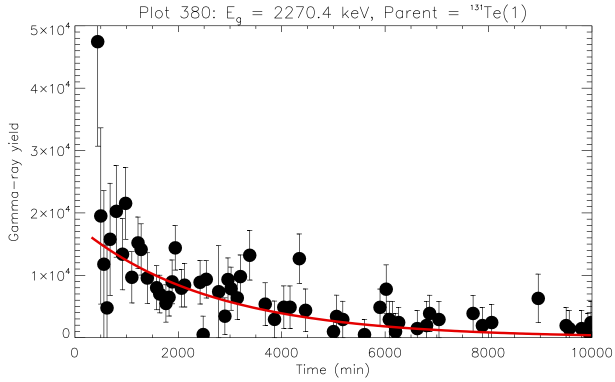
Plot 377: E_g = 2111.6 keV, Parent = ^{88}Rb(0)



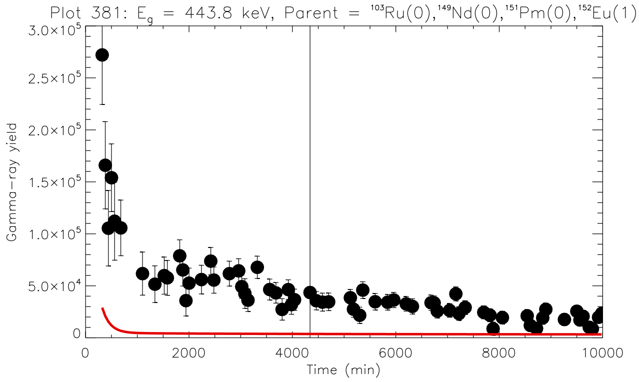
Plot 378: E_g = 787.2 keV, Parent = ^{133}Te(0),^{143}Ce(0)



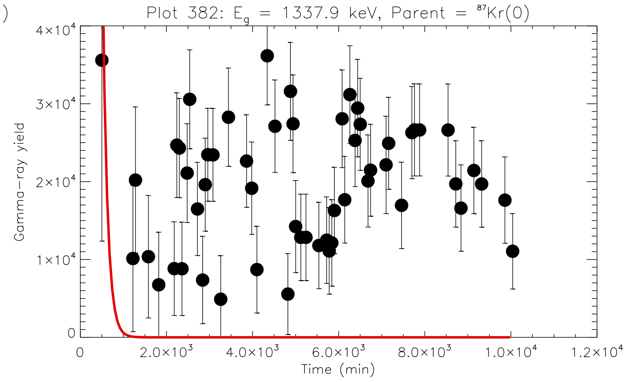
Plot 379: E_g = 2733.7 keV, Parent = ^{88}Rb(0)



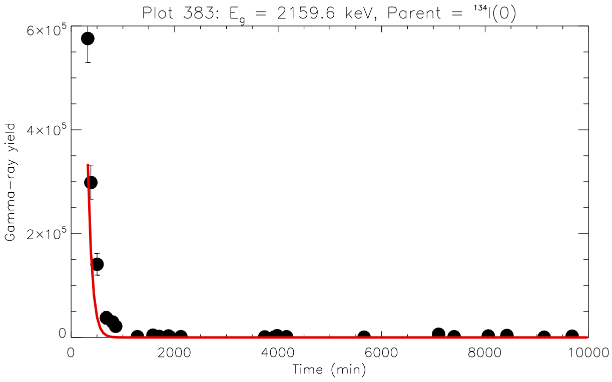
Plot 380: E_g = 2270.4 keV, Parent = ^{131}Te(1)



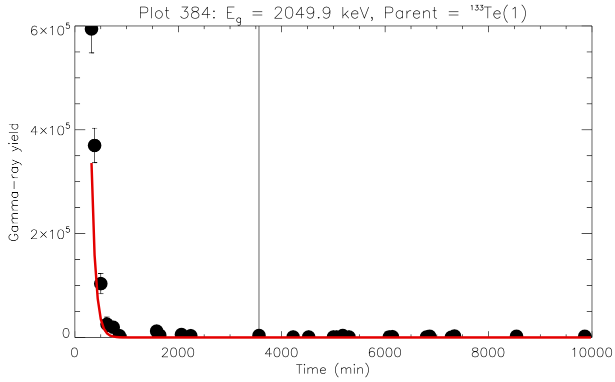
Plot 381: E_g = 443.8 keV, Parent = ^{103}Ru(0),^{149}Nd(0),^{151}Pm(0),^{152}Eu(1)



Plot 382: E_g = 1337.9 keV, Parent = ^{87}Kr(0)

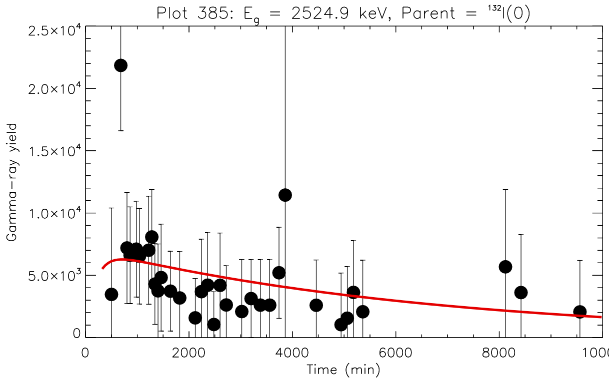


Plot 383: E_g = 2159.6 keV, Parent = ^{134}I(0)

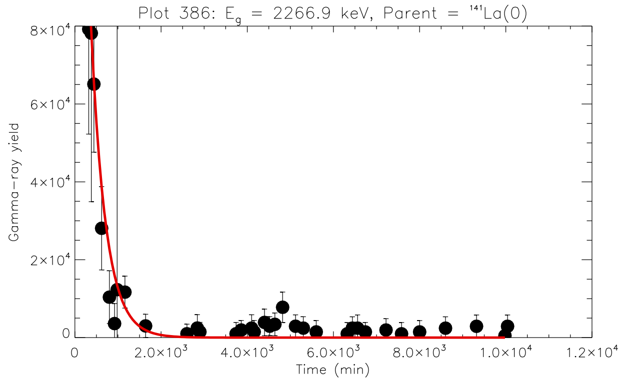


Plot 384: E_g = 2049.9 keV, Parent = ^{133}Te(1)

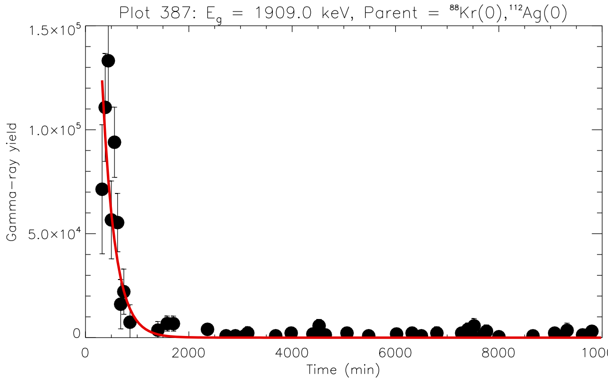
Plot 385: E_g = 2524.9 keV, Parent = ^{132}I(0)



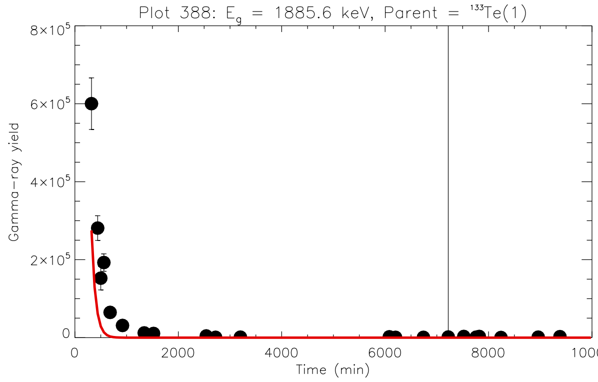
Plot 386: E_g = 2266.9 keV, Parent = ^{141}La(0)



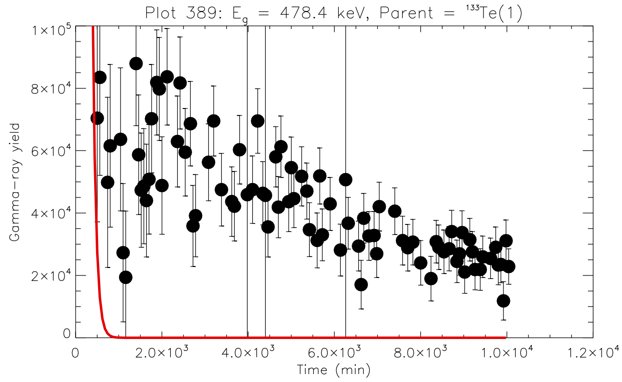
Plot 387: E_g = 1909.0 keV, Parent = ^{88}Kr(0),^{112}Ag(0)



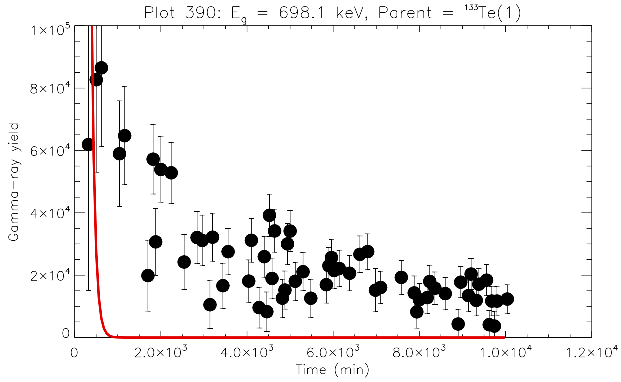
Plot 388: E_g = 1885.6 keV, Parent = ^{133}Te(1)



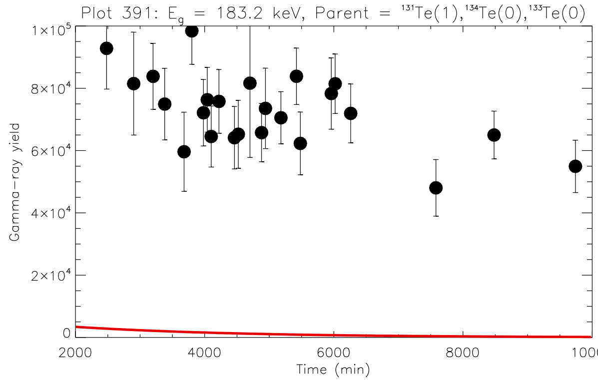
Plot 389: E_g = 478.4 keV, Parent = ^{133}Te(1)



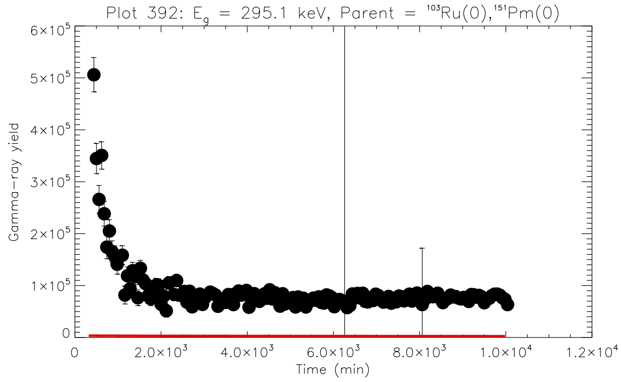
Plot 390: E_g = 698.1 keV, Parent = ^{133}Te(1)



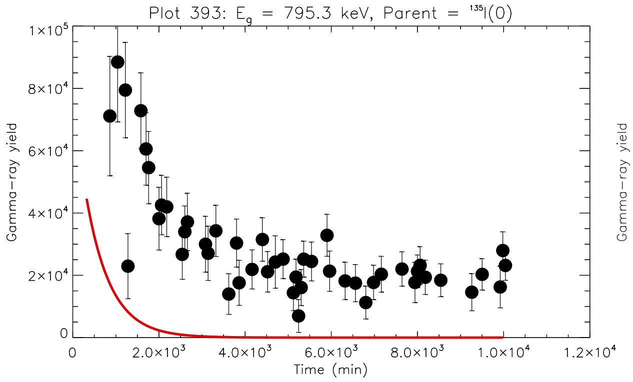
Plot 391: E_g = 183.2 keV, Parent = ^{131}Te(1),^{134}Te(0),^{133}Te(0)



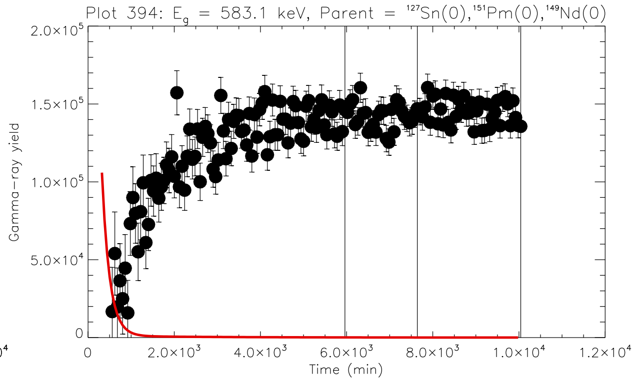
Plot 392: E_g = 295.1 keV, Parent = ^{103}Ru(0),^{151}Pm(0)



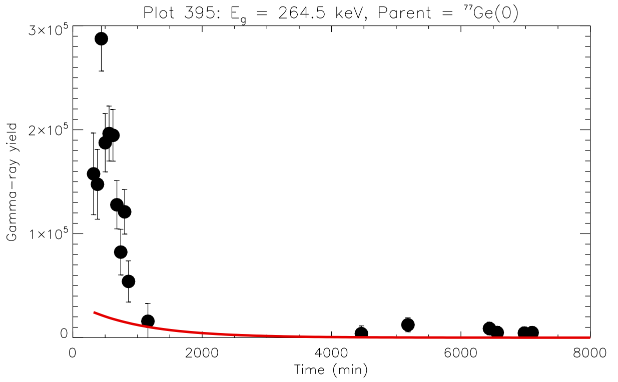
Plot 393: E_g = 795.3 keV, Parent = ^{135}I(0)



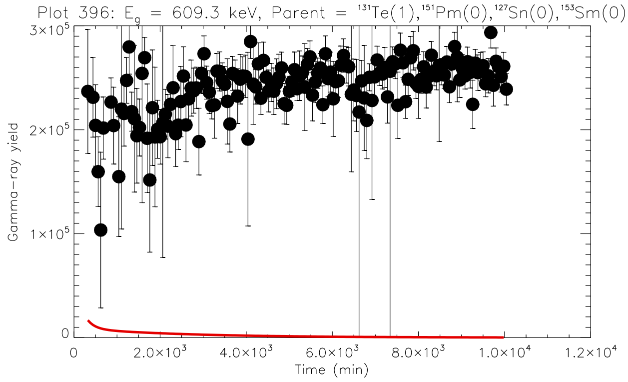
Plot 394: E_g = 583.1 keV, Parent = ^{127}Sn(0),^{151}Pm(0),^{149}Nd(0)



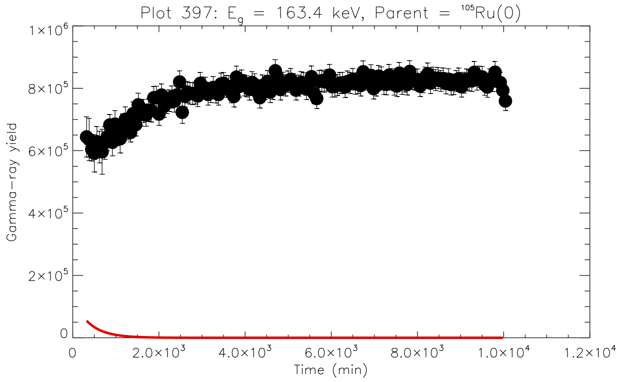
Plot 395: E_g = 264.5 keV, Parent = ^{77}Ge(0)



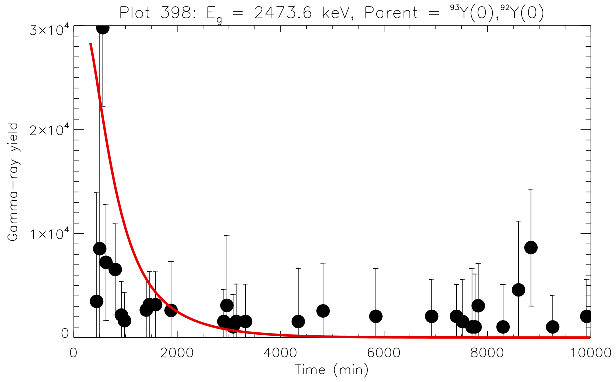
Plot 396: E_g = 609.3 keV, Parent = ^{131}Te(1),^{151}Pm(0),^{127}Sn(0),^{153}Sm(0)



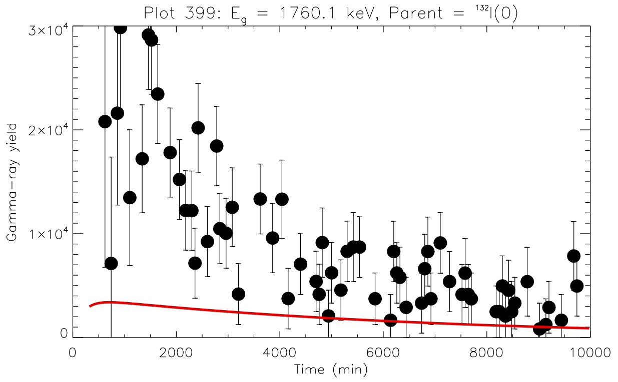
Plot 397: E_g = 163.4 keV, Parent = ^{105}Ru(0)



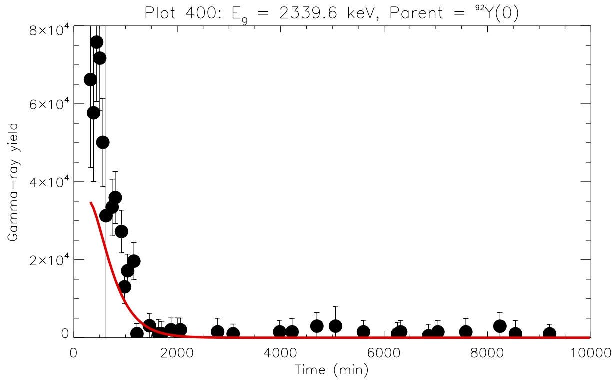
Plot 398: E_g = 2473.6 keV, Parent = ^{93}Y(0),^{92}Y(0)



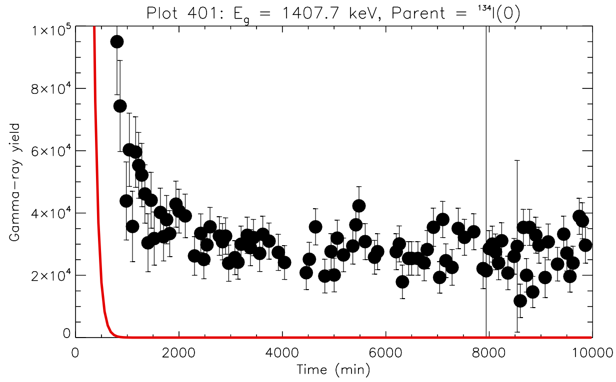
Plot 399: E_g = 1760.1 keV, Parent = ^{132}I(0)



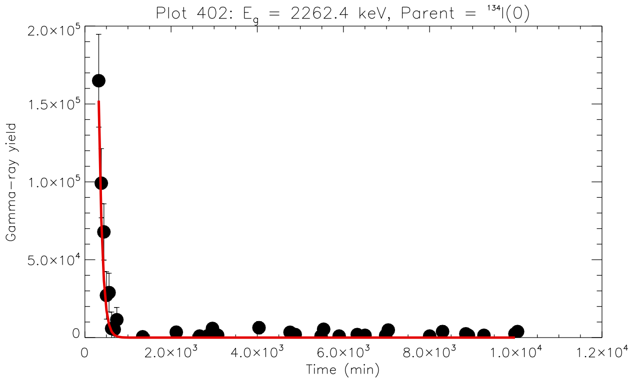
Plot 400: E_g = 2339.6 keV, Parent = ^{92}Y(0)



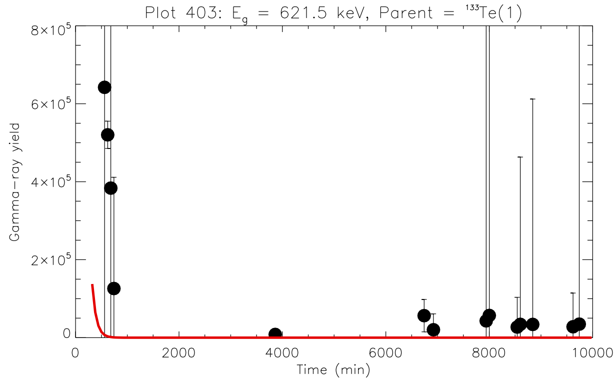
Plot 401: E_g = 1407.7 keV, Parent = ^{134}I(0)



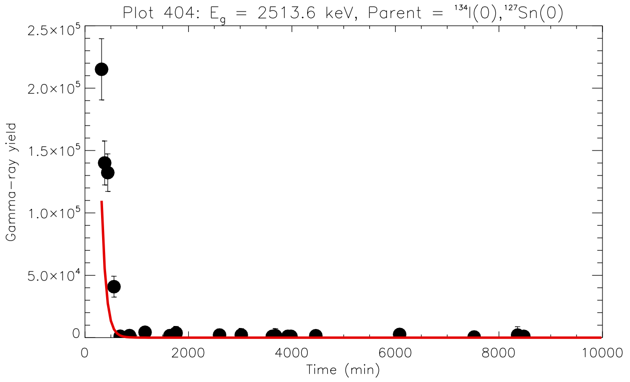
Plot 402: E_g = 2262.4 keV, Parent = ^{134}I(0)



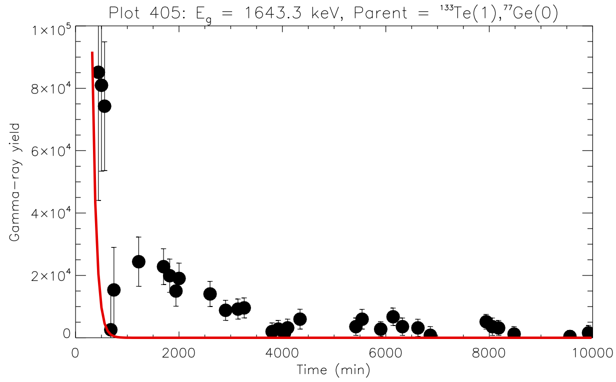
Plot 403: E_g = 621.5 keV, Parent = ^{133}Te(1)



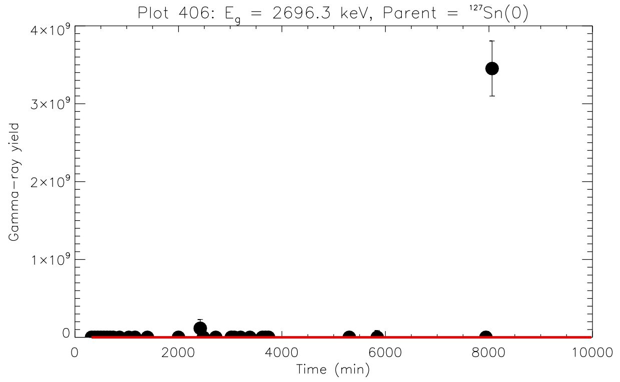
Plot 404: E_g = 2513.6 keV, Parent = ^{134}I(0),^{127}Sn(0)



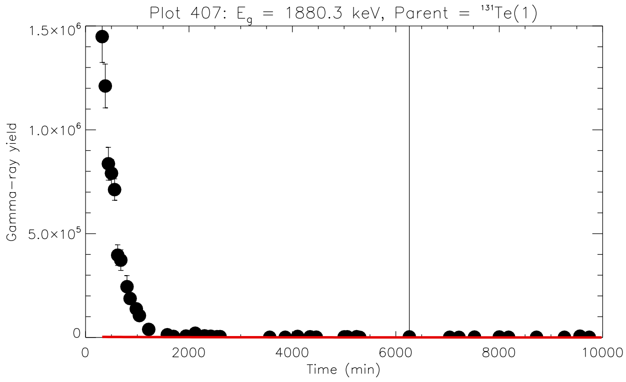
Plot 405: E_g = 1643.3 keV, Parent = ^{133}Te(1),^{77}Ge(0)



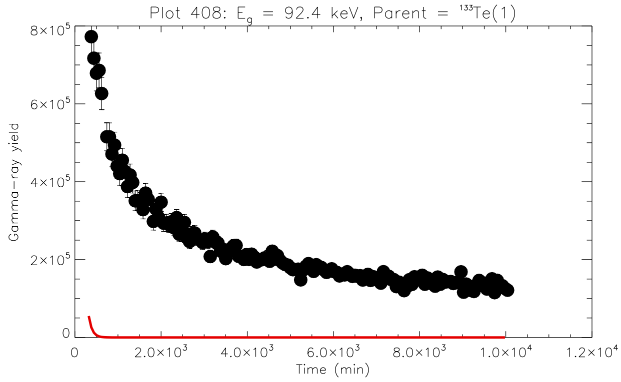
Plot 406: E_g = 2696.3 keV, Parent = ^{127}Sn(0)



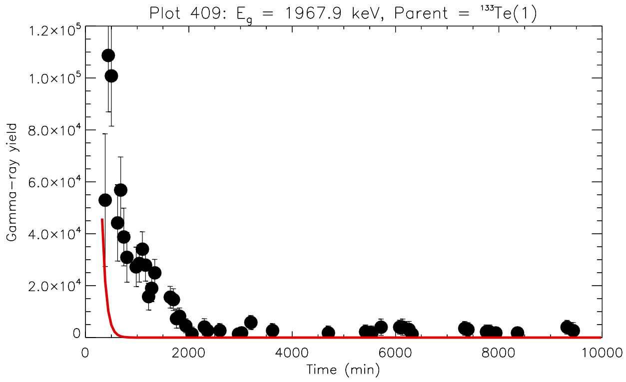
Plot 407: E_g = 1880.3 keV, Parent = ^{131}Te(1)



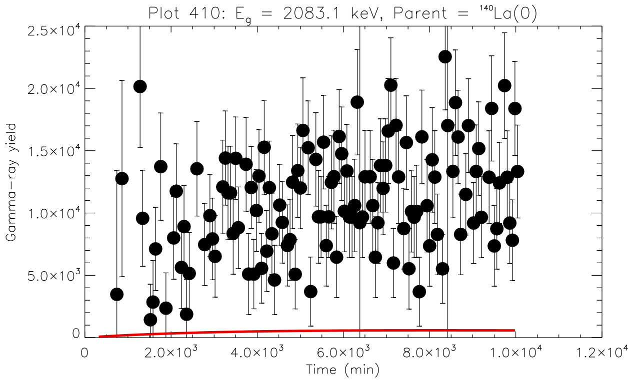
Plot 408: E_g = 92.4 keV, Parent = ^{133}Te(1)



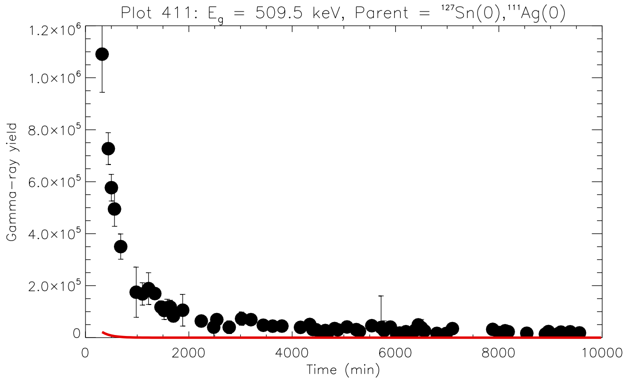
Plot 409: E_g = 1967.9 keV, Parent = ^{133}Te(1)



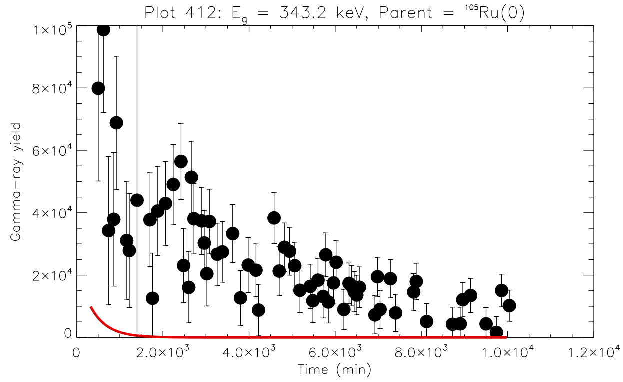
Plot 410: E_g = 2083.1 keV, Parent = ^{140}La(0)



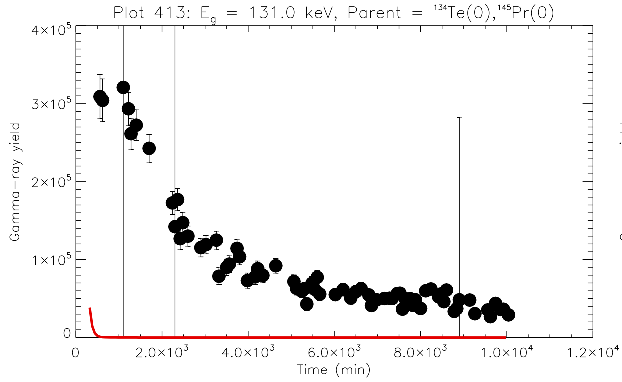
Plot 411: E_g = 509.5 keV, Parent = ^{127}Sn(0),^{111}Ag(0)



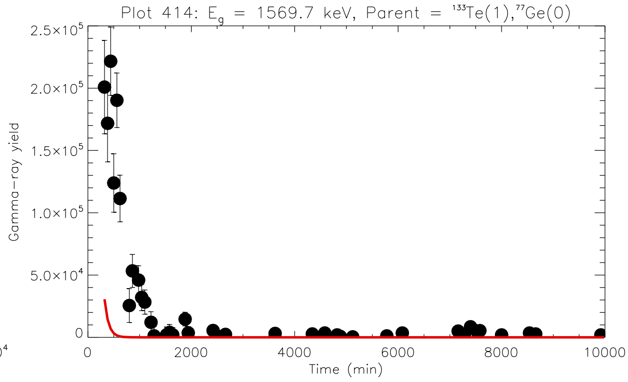
Plot 412: E_g = 343.2 keV, Parent = ^{105}Ru(0)



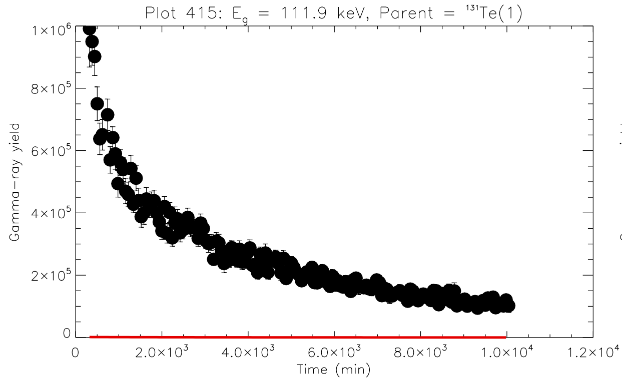
Plot 413: E_g = 131.0 keV, Parent = ^{134}Te(0),^{145}Pr(0)



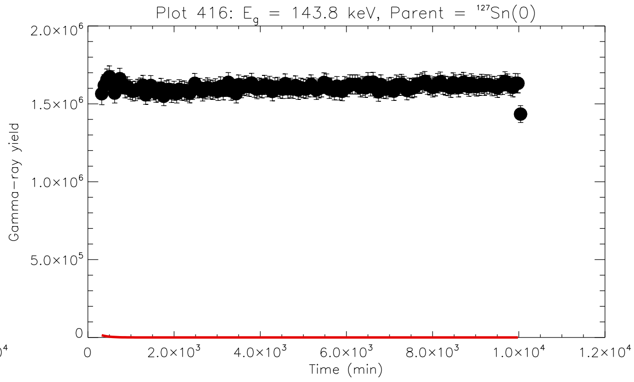
Plot 414: E_g = 1569.7 keV, Parent = ^{133}Te(1),^{77}Ge(0)



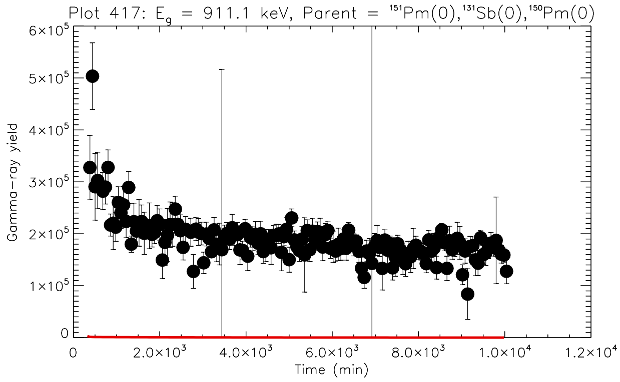
Plot 415: E_g = 111.9 keV, Parent = ^{131}Te(1)



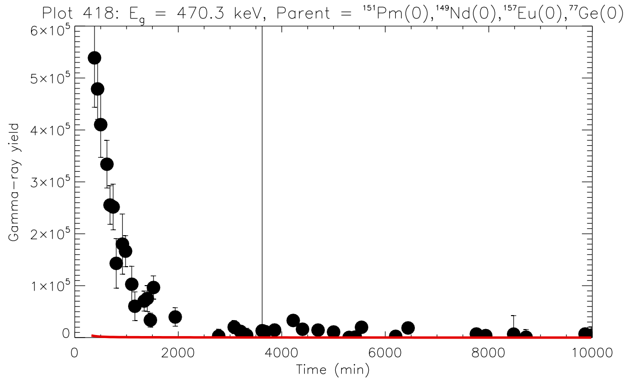
Plot 416: E_g = 143.8 keV, Parent = ^{127}Sn(0)



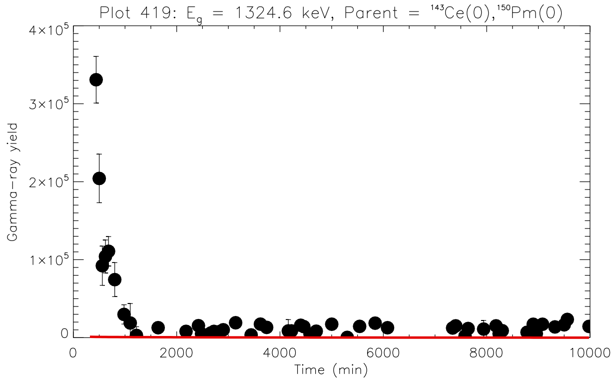
Plot 417: E_g = 911.1 keV, Parent = ^{151}Pm(0),^{131}Sb(0),^{150}Pm(0)



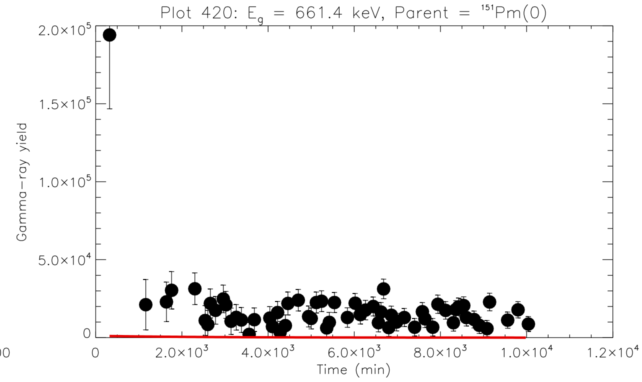
Plot 418: E_g = 470.3 keV, Parent = ^{151}Pm(0),^{149}Nd(0),^{157}Eu(0),^{77}Ge(0)



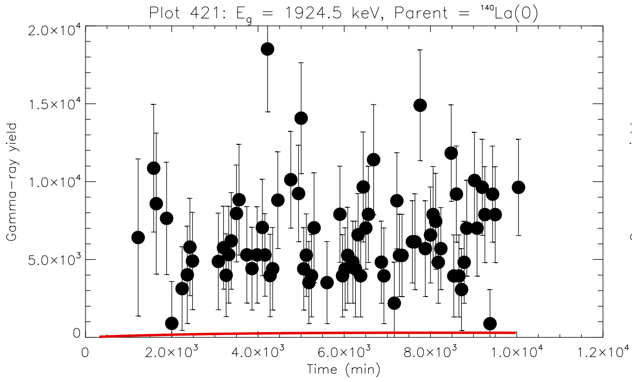
Plot 419: E_g = 1324.6 keV, Parent = ^{143}Ce(0),^{150}Pm(0)



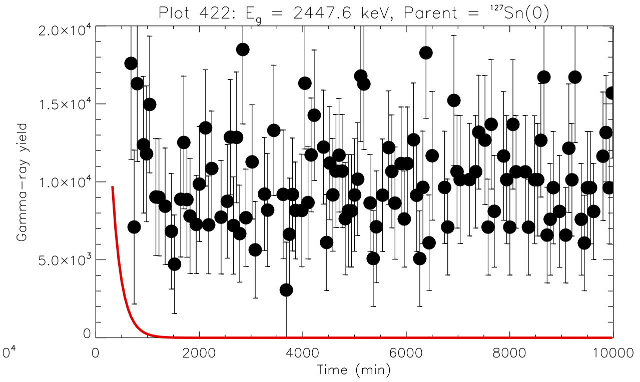
Plot 420: E_g = 661.4 keV, Parent = ^{151}Pm(0)



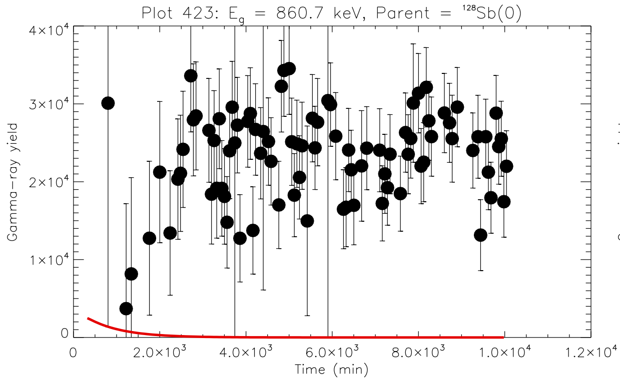
Plot 421: E_g = 1924.5 keV, Parent = ^{140}La(0)



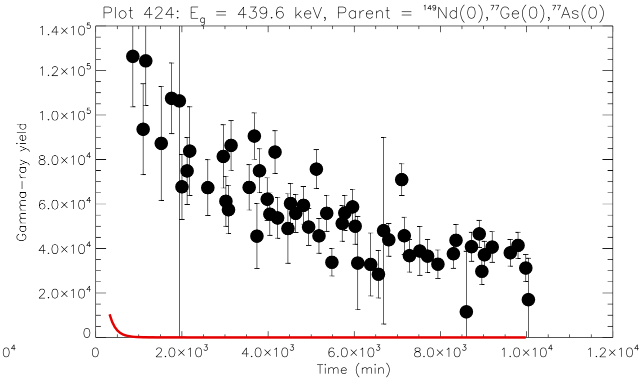
Plot 422: E_g = 2447.6 keV, Parent = ^{127}Sn(0)



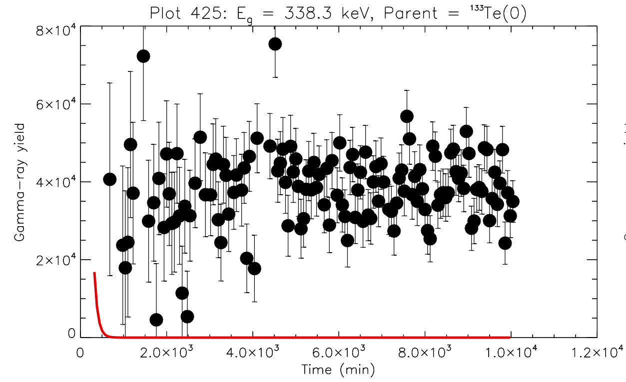
Plot 423: E_g = 860.7 keV, Parent = ^{128}Sb(0)



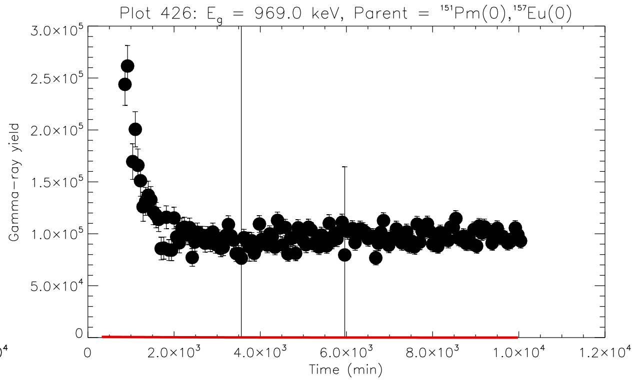
Plot 424: E_g = 439.6 keV, Parent = ^{149}Nd(0),^{77}Ge(0),^{77}As(0)



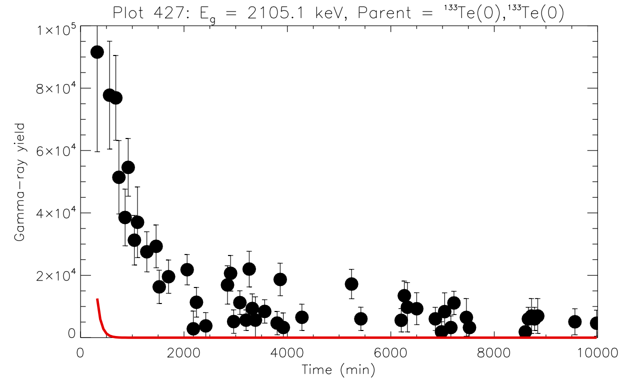
Plot 425: E_g = 338.3 keV, Parent = ^{133}Te(0)



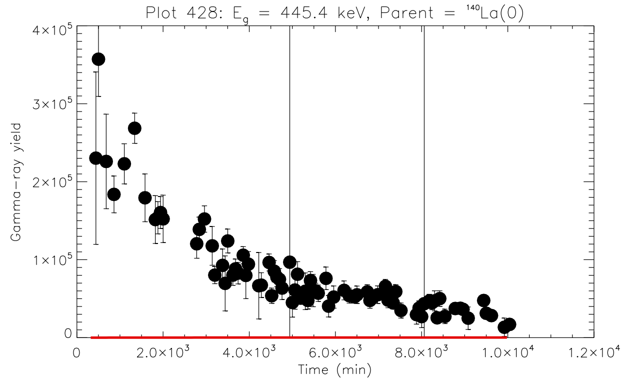
Plot 426: E_g = 969.0 keV, Parent = ^{151}Pm(0),^{157}Eu(0)



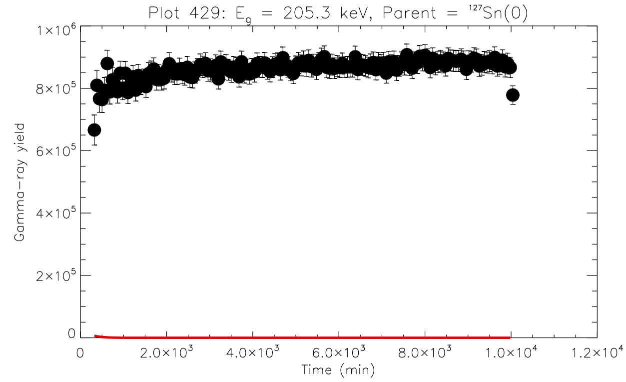
Plot 427: E_g = 2105.1 keV, Parent = ^{133}Te(0),^{133}Te(0)



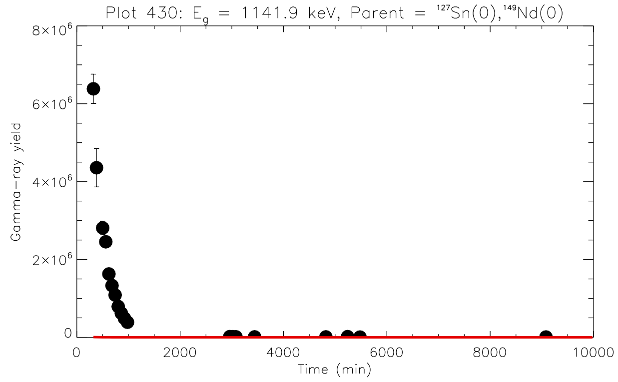
Plot 428: E_g = 445.4 keV, Parent = ^{140}La(0)



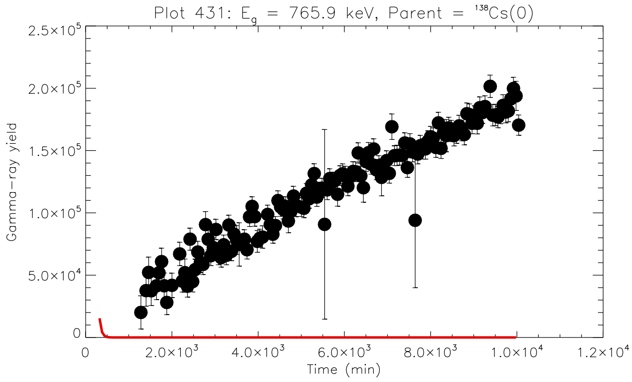
Plot 429: E_g = 205.3 keV, Parent = ^{127}Sn(0)



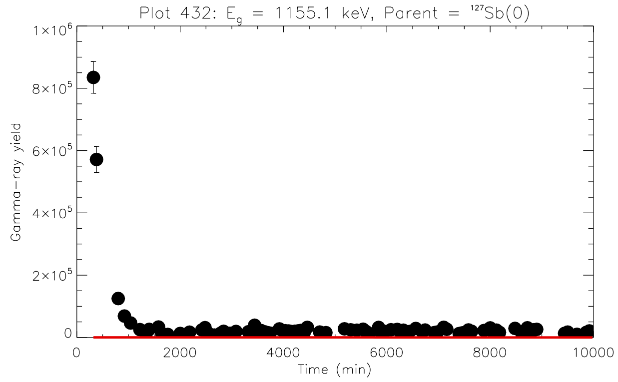
Plot 430: E_g = 1141.9 keV, Parent = ^{127}Sn(0),^{149}Nd(0)



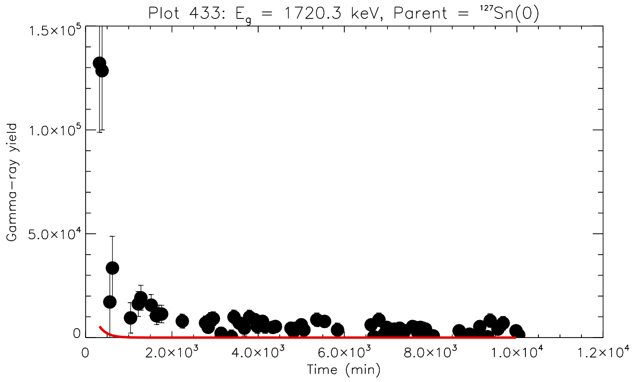
Plot 431: E_g = 765.9 keV, Parent = ^{138}Cs(0)



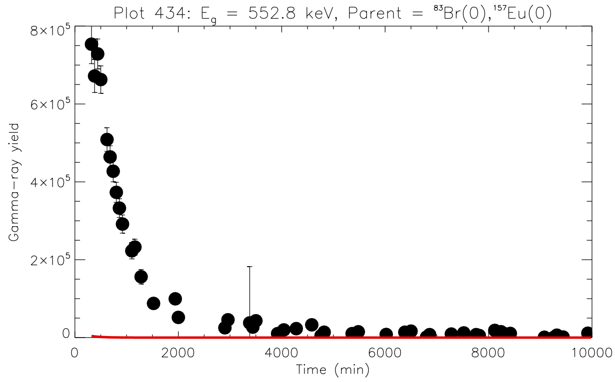
Plot 432: E_g = 1155.1 keV, Parent = ^{127}Sb(0)



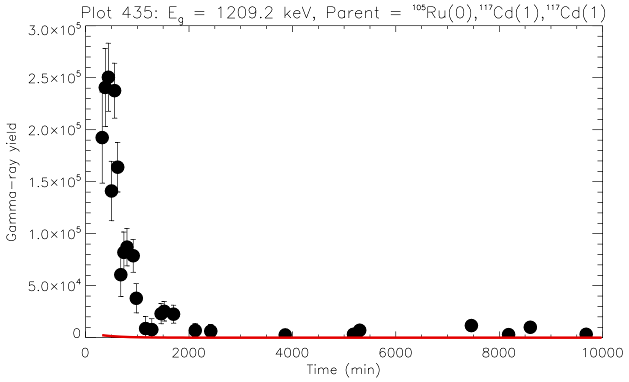
Plot 433: E_g = 1720.3 keV, Parent = ^{127}Sn(0)



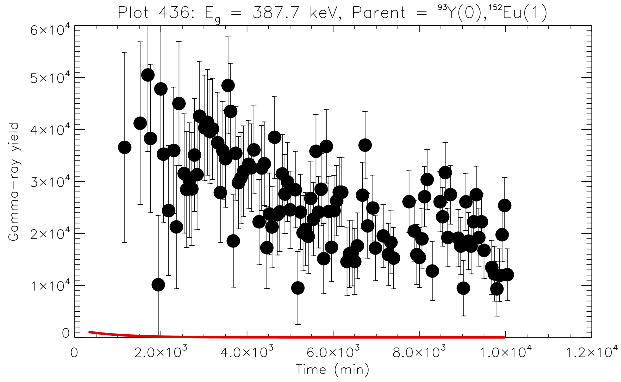
Plot 434: E_g = 552.8 keV, Parent = ^{83}Br(0),^{157}Eu(0)



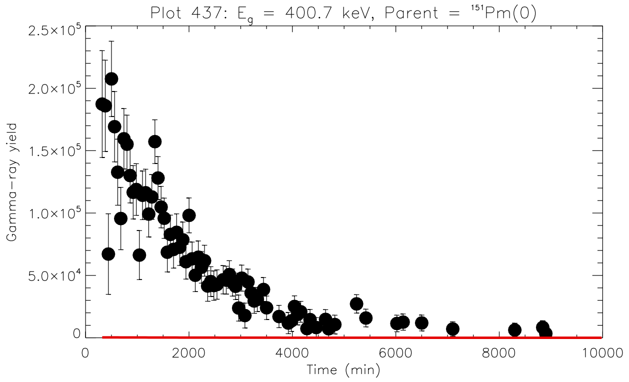
Plot 435: E_g = 1209.2 keV, Parent = ^{105}Ru(0),^{117}Cd(1),^{117}Cd(1)



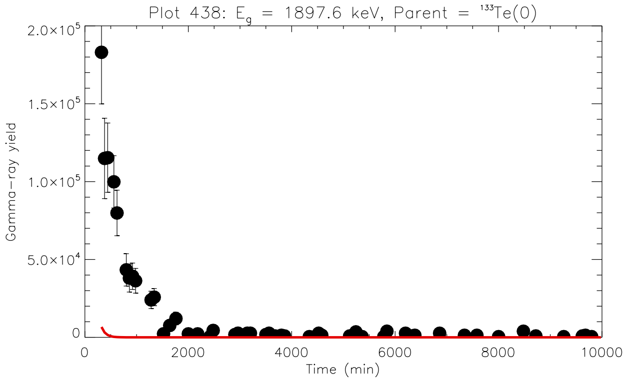
Plot 436: E_g = 387.7 keV, Parent = ^{93}Y(0),^{152}Eu(1)



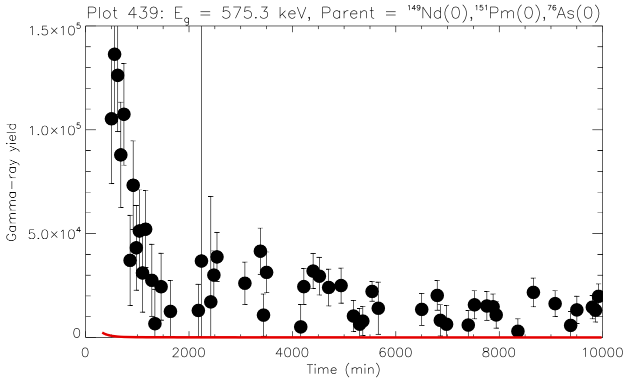
Plot 437: E_g = 400.7 keV, Parent = ^{151}Pm(0)



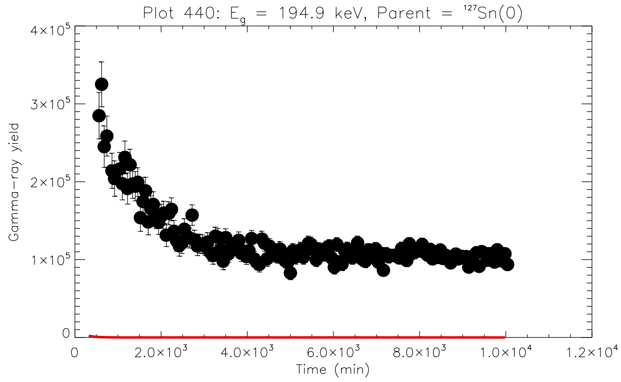
Plot 438: E_g = 1897.6 keV, Parent = ^{133}Te(0)



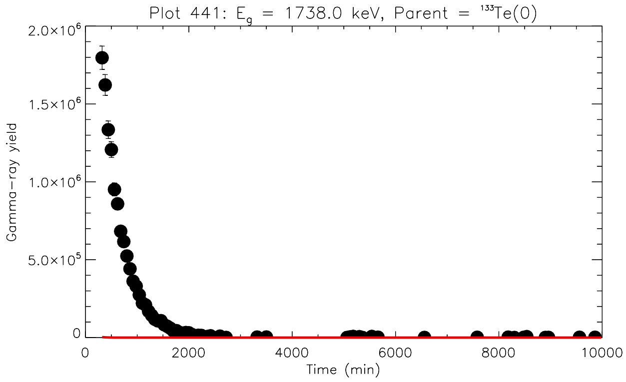
Plot 439: E_g = 575.3 keV, Parent = ^{149}Nd(0),^{151}Pm(0),^{76}As(0)



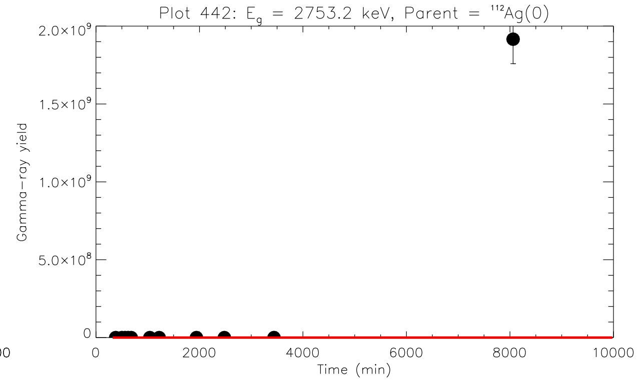
Plot 440: E_g = 194.9 keV, Parent = ^{127}Sn(0)



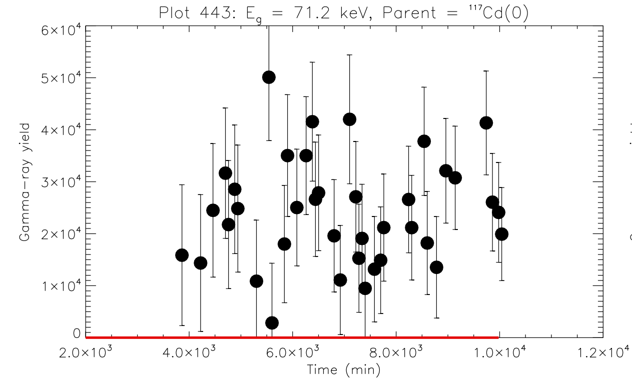
Plot 441: E_g = 1738.0 keV, Parent = ^{133}Te(0)



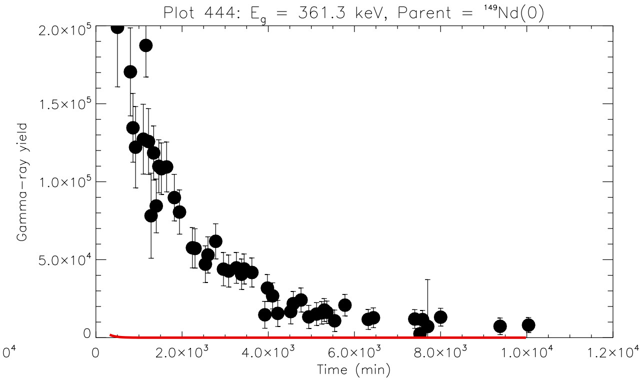
Plot 442: E_g = 2753.2 keV, Parent = ^{112}Ag(0)



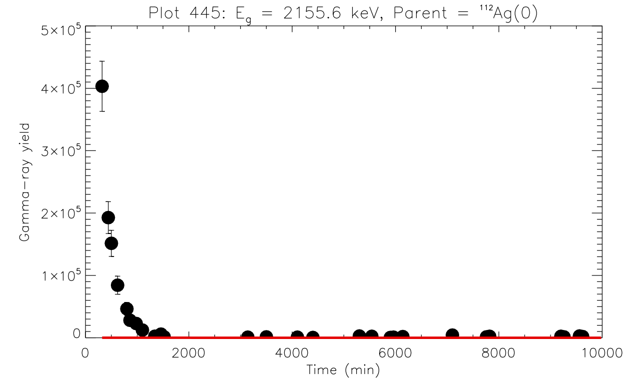
Plot 443: E_g = 71.2 keV, Parent = ^{117}Cd(0)



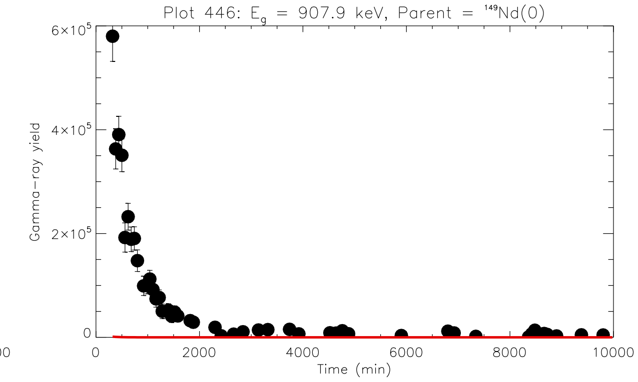
Plot 444: E_g = 361.3 keV, Parent = ^{149}Nd(0)



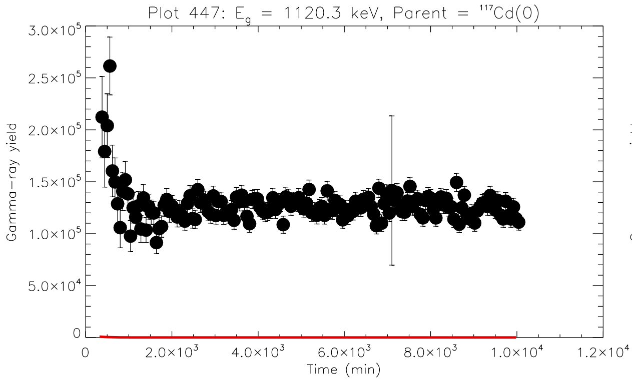
Plot 445: E_g = 2155.6 keV, Parent = ^{112}Ag(0)



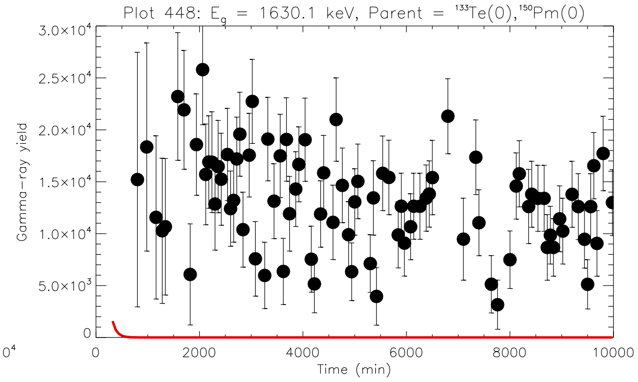
Plot 446: E_g = 907.9 keV, Parent = ^{149}Nd(0)



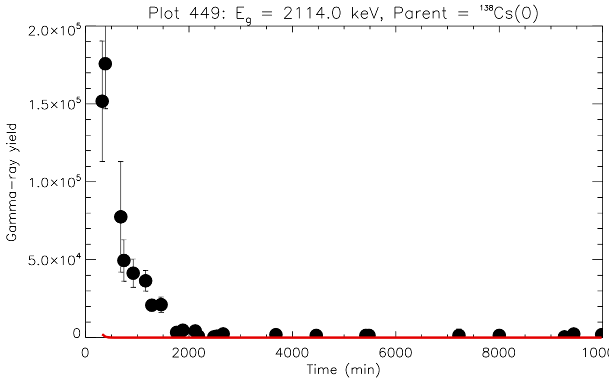
Plot 447: E_g = 1120.3 keV, Parent = ^{117}Cd(0)



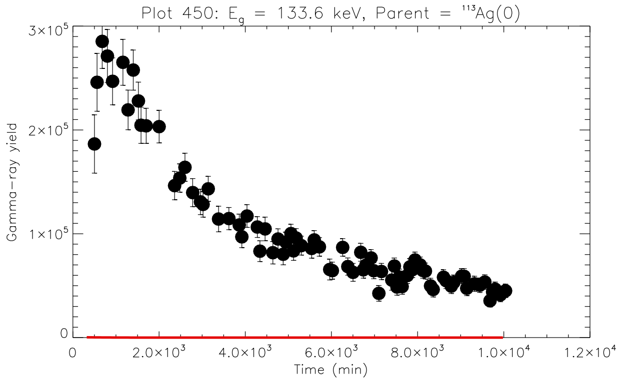
Plot 448: E_g = 1630.1 keV, Parent = ^{133}Te(0),^{150}Pm(0)



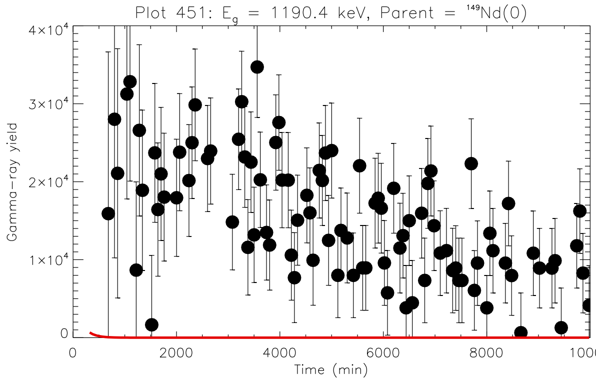
Plot 449: E_g = 2114.0 keV, Parent = ^{138}Cs(0)



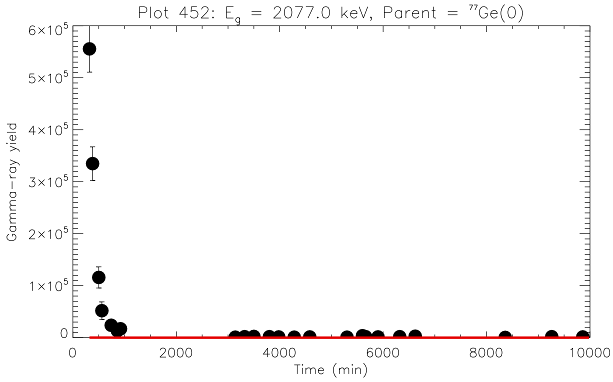
Plot 450: E_g = 133.6 keV, Parent = ^{113}Ag(0)



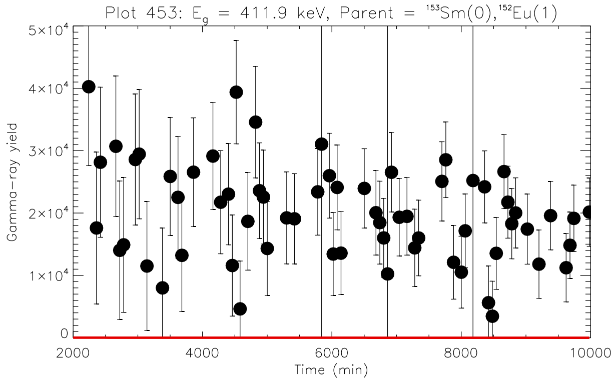
Plot 451: E_g = 1190.4 keV, Parent = ^{149}Nd(0)



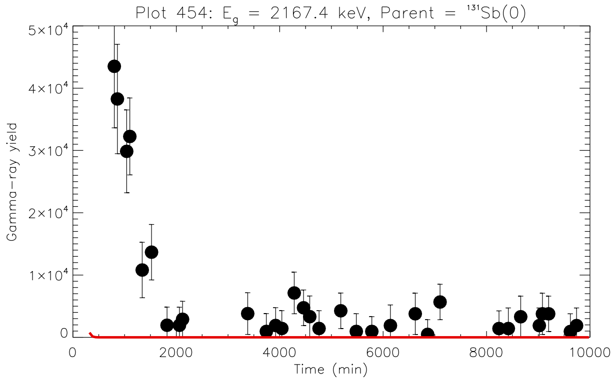
Plot 452: E_g = 2077.0 keV, Parent = ^{77}Ge(0)



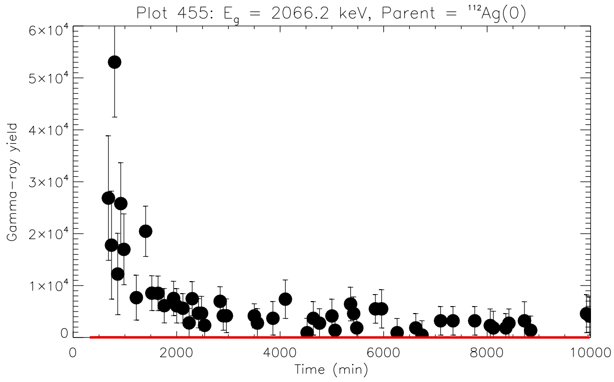
Plot 453: E_g = 411.9 keV, Parent = ^{153}Sm(0),^{152}Eu(1)



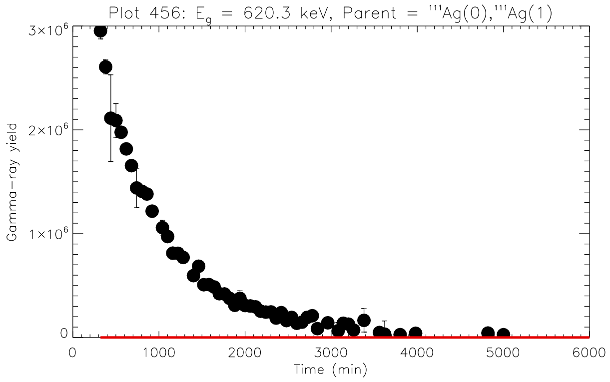
Plot 454: E_g = 2167.4 keV, Parent = ^{131}Sb(0)



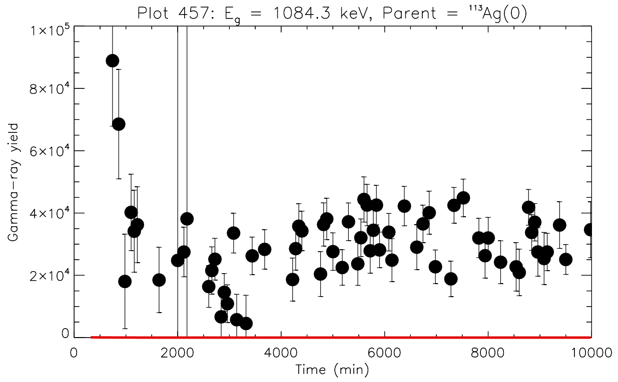
Plot 455: E_g = 2066.2 keV, Parent = ^{112}Ag(0)



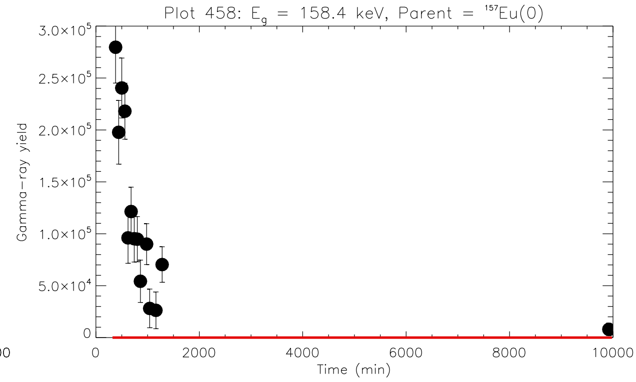
Plot 456: E_g = 620.3 keV, Parent = ^{111}Ag(0),^{111}Ag(1)



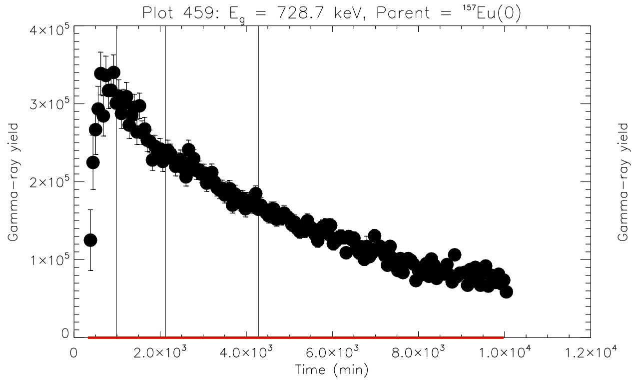
Plot 457: E_g = 1084.3 keV, Parent = ^{113}Ag(0)



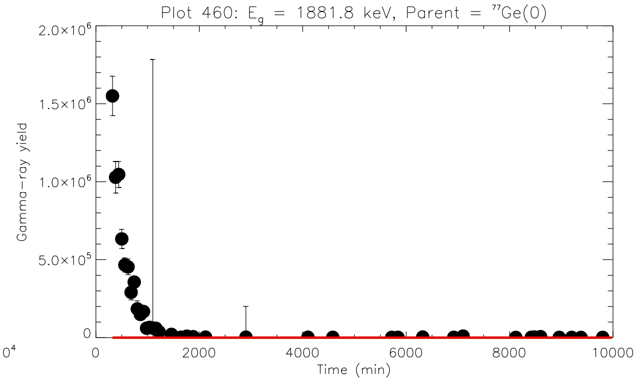
Plot 458: E_g = 158.4 keV, Parent = ^{157}Eu(0)



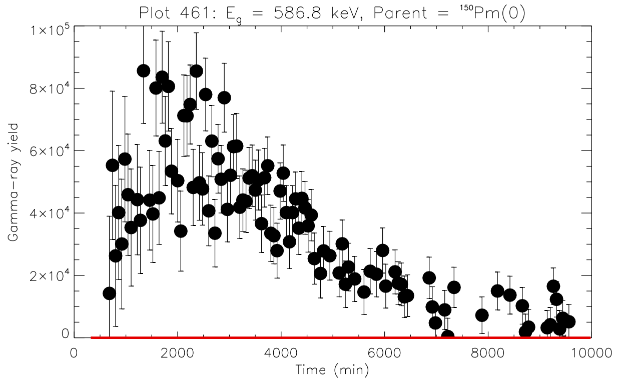
Plot 459: E_g = 728.7 keV, Parent = ^{157}Eu(0)



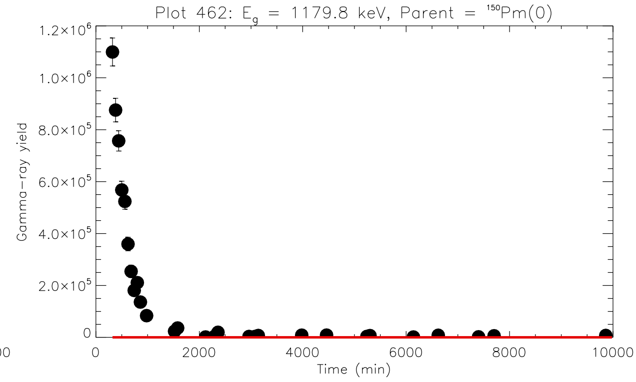
Plot 460: E_g = 1881.8 keV, Parent = ^{77}Ge(0)



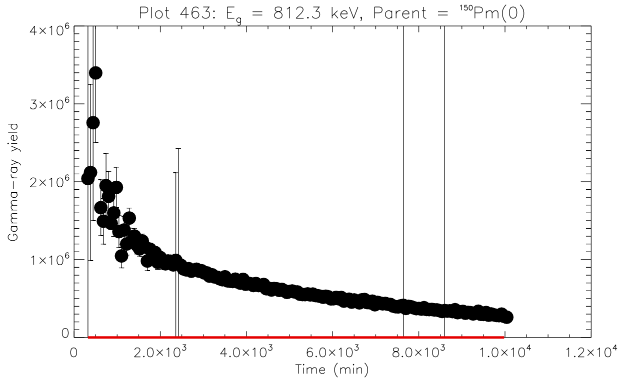
Plot 461: E_g = 586.8 keV, Parent = ^{150}Pm(0)



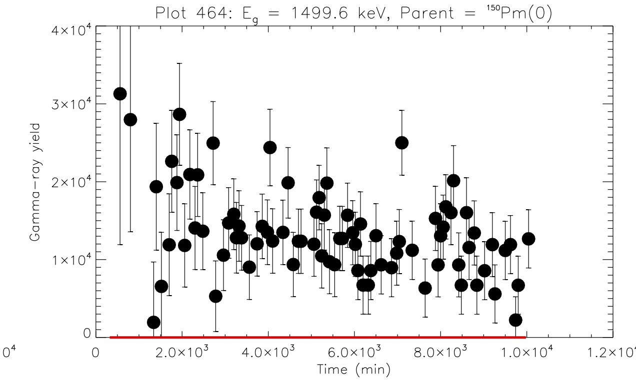
Plot 462: E_g = 1179.8 keV, Parent = ^{150}Pm(0)



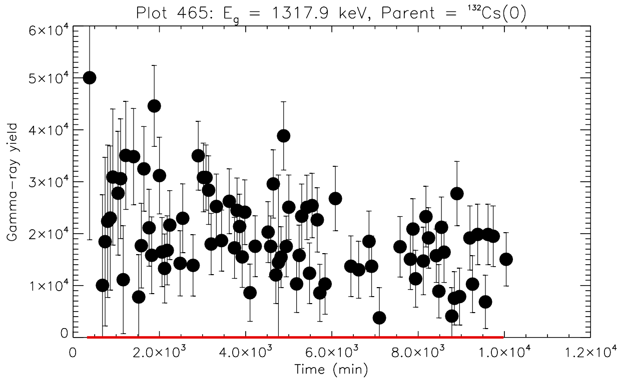
Plot 463: E_g = 812.3 keV, Parent = ^{150}Pm(0)



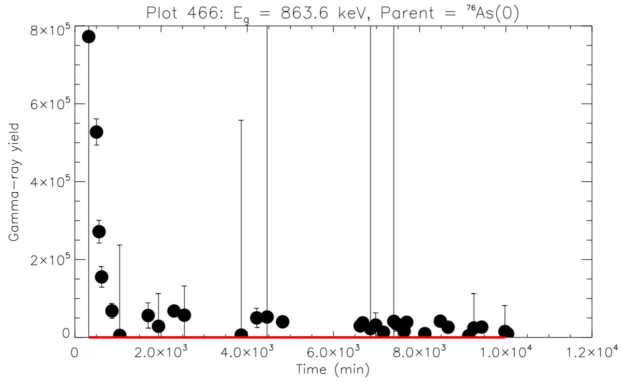
Plot 464: E_g = 1499.6 keV, Parent = ^{150}Pm(0)



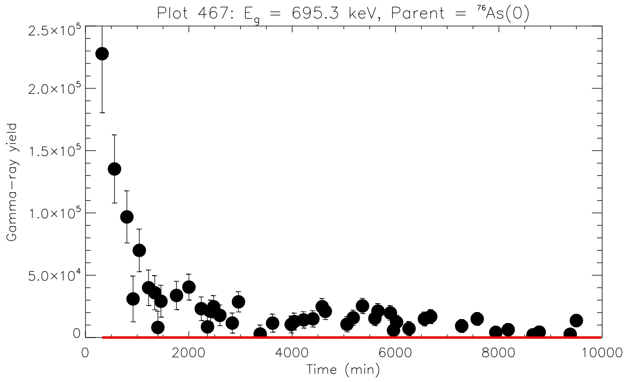
Plot 465: E_g = 1317.9 keV, Parent = ^{132}Cs(0)



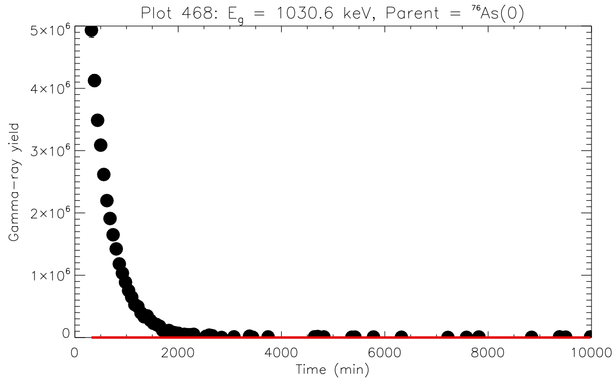
Plot 466: E_g = 863.6 keV, Parent = ^{76}As(0)



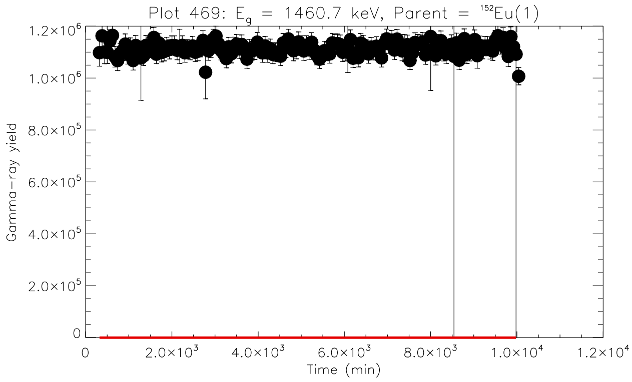
Plot 467: E_g = 695.3 keV, Parent = ^{76}As(0)



Plot 468: E_g = 1030.6 keV, Parent = ^{76}As(0)



Plot 469: E_g = 1460.7 keV, Parent = ^{152}Eu(1)



Appendix B: Experimental gamma-ray yields compared to FIER predictions for detector 8816

1. Index of plots

The first three columns in the table identify the decaying state in the parent nucleus. The last column lists the gamma-ray energies for the decay line in the daughter nucleus, with the number of the corresponding gamma-ray yield plot in section B 2 given in parentheses.

A	Z	Meta	Gammas
76	33	0	602.4562 (#114),695.3688 (#381),727.0026 (#61),809.8106 (#374),863.6491 (#467),867.8156 (#105),954.5611 (#23),1030.6115 (#468),1212.9912 (#375)
77	32	0	177.1363 (#209),430.6162 (#122),439.3730 (#415),531.0152 (#89),680.2523 (#113),743.3980 (#4),749.7944 (#17),857.3172 (#142),875.3707 (#51),884.1678 (#31),925.6814 (#67),966.7737 (#364),985.8737 (#248),1354.4877 (#144),1455.2891 (#238),1476.3582 (#336),1495.7084 (#431),1643.2028 (#410),1727.1593 (#372),1881.7589 (#462),1948.7174 (#362),2076.9015 (#456),2126.0271 (#359),2248.9629 (#395)
77	33	0	139.1252 (#299),249.7676 (#1),439.3730 (#415)
78	33	0	497.0751 (#39),613.7891 (#344),636.9105 (#95),658.1486 (#2),1240.4387 (#165),1290.6196 (#163),1529.7895 (#77),1836.0178 (#50),1920.8234 (#160)
83	35	0	529.8784 (#3)
85	36	1	151.1808 (#41),304.8649 (#74)
87	36	0	402.6365 (#88),510.5839 (#85),901.4280 (#346),1382.5463 (#275),2011.7294 (#318),2408.8181 (#158),2555.0286 (#220),2558.3640 (#288)
88	36	0	165.8878 (#58),196.3337 (#45),390.5087 (#293),471.7751 (#279),677.3457 (#137),730.9208 (#265),834.8559 (#71),862.3279 (#297),985.8737 (#248),1054.5819 (#276),1141.1824 (#249),1179.8534 (#268),1184.8030 (#282),1212.9912 (#375),1245.3079 (#343),1250.6539 (#255),1352.4955 (#329),1369.7384 (#233),1518.4941 (#200),1529.7895 (#77),1603.8563 (#328),1661.1203 (#376),1685.8192 (#296),2029.8318 (#136),2035.4154 (#150),2195.8023 (#70),2231.7584 (#159),2352.1268 (#286),2364.4929 (#349),2392.1436 (#32),2408.8181 (#158),2548.2671 (#307)
88	37	0	439.3730 (#415),898.0515 (#59),1382.5463 (#275),1836.0178 (#50),2111.9349 (#379),2118.6028 (#327),2577.9395 (#363)
91	38	0	261.3368 (#221),272.5268 (#198),274.5200 (#149),620.3363 (#110),631.3948 (#204),652.2101 (#78),653.1843 (#236),749.7944 (#17),761.2674 (#170),793.7744 (#134),892.8434 (#332),901.4280 (#346),925.6814 (#67),1024.2471 (#12),1054.5819 (#276),1280.8828 (#155),1413.4244 (#154),1473.7338 (#308),1545.9454 (#194),1645.6692 (#334),1651.1654 (#258)
91	39	1	555.5797 (#8)
92	38	0	430.6162 (#122),892.8434 (#332),953.2749 (#118),1142.1802 (#133),1383.8732 (#11)
92	39	0	492.4092 (#196),560.9423 (#87),844.3020 (#129),912.7364 (#97),934.4831 (#21),972.1850 (#161),1405.1523 (#56),1847.2510 (#240),1885.4873 (#365),2105.2965 (#398),2339.4710 (#405),2473.6396 (#403)
93	39	0	266.8699 (#37),387.5943 (#442),680.2523 (#113),947.0999 (#94),1184.8030 (#282),1203.3968 (#333),1425.3233 (#274),1450.3787 (#253),1470.0805 (#303),1917.5957 (#116),2184.7612 (#314),2190.5999 (#305),2473.6396 (#403)
95	40	0	724.2057 (#30),756.7252 (#53)
95	41	1	235.6922 (#408)

A	Z	Meta	Gammas
97	40	0	218.9363 (#280),272.5268 (#198),355.5518 (#80),507.7690 (#44),513.2335 (#186),602.4562 (#114),690.4983 (#264),703.6868 (#135),804.4970 (#174),829.9295 (#269),854.9820 (#231),1021.2948 (#132),1110.4469 (#321),1148.0090 (#75),1276.1226 (#141),1362.6556 (#101),1750.4095 (#124),1851.6093 (#207)
97	41	0	658.1486 (#2),857.3172 (#142),1024.2471 (#12),1268.5678 (#284),1515.6117 (#316)
97	41	1	743.3980 (#4)
99	42	0	140.5070 (#5),181.1078 (#46),366.4619 (#128),739.4891 (#24),777.9045 (#57),822.8464 (#182),960.9975 (#330)
99	43	1	140.5070 (#5)
103	44	0	241.8029 (#320),295.1229 (#396),443.7875 (#384),497.0751 (#39),514.1335 (#427),610.2189 (#219)
105	44	0	163.3703 (#401),262.8184 (#90),316.4872 (#131),326.2090 (#324),330.7792 (#356),393.3608 (#226),413.5861 (#270),469.3720 (#99),499.3633 (#272),676.3181 (#108),724.2057 (#30),805.9485 (#373),820.2658 (#278),845.7434 (#353),847.1272 (#22),852.2259 (#106),907.8377 (#360),984.4298 (#225),1059.9115 (#239),1209.3089 (#441),1377.3639 (#413),1448.3155 (#257)
105	45	1	129.5976 (#191)
106	45	0	433.7483 (#215),511.7270 (#389),1127.7671 (#352)
109	46	0	390.5087 (#293),423.7080 (#111),497.0751 (#39),602.4562 (#114),724.2057 (#30),822.8464 (#182),862.3279 (#297)
111	47	0	278.1566 (#402),509.6008 (#421),620.3363 (#110)
111	47	1	278.1566 (#402),620.3363 (#110)
112	47	0	647.6278 (#216),751.6636 (#125),797.9244 (#312),815.7719 (#38),947.0999 (#94),1613.7877 (#187),1683.4989 (#339),2066.0245 (#459)
113	47	0	316.4872 (#131),364.4782 (#16),410.9960 (#350),809.8106 (#374),1084.3089 (#460)
113	47	1	316.4872 (#131)
115	49	1	336.2355 (#331)
117	48	0	71.2665 (#450),439.3730 (#415),462.9014 (#241),1120.2174 (#452)
117	48	1	407.9970 (#211),439.3730 (#415),460.8652 (#311),617.7660 (#177),730.9208 (#265),995.1701 (#301),1209.3089 (#441),1442.4017 (#145)
117	50	1	155.8600 (#273),314.0975 (#201)
126	51	0	278.1566 (#402),1212.9912 (#375)
127	50	0	143.7625 (#423),181.1078 (#46),194.9978 (#448),205.3519 (#435),211.3433 (#147),220.5416 (#115),228.3460 (#7),284.3748 (#109),390.5087 (#293),420.7621 (#416),446.2199 (#210),452.2585 (#212),509.6008 (#421),514.1335 (#427),565.8909 (#256),583.1585 (#390),609.2666 (#400),631.3948 (#204),773.7200 (#76),805.9485 (#373),822.8464 (#182),1002.6934 (#323),1114.2897 (#294),1142.1802 (#133),1160.1425 (#227),1599.9087 (#443),1720.3985 (#438),1750.4095 (#124),2447.6303 (#428),2513.8790 (#446),2584.8968 (#411)
127	51	0	293.2440 (#10),309.7982 (#414),411.8880 (#345),473.2296 (#193),652.2101 (#78),667.6925 (#6),721.9835 (#47),1155.1750 (#437),1290.6196 (#163)
127	52	0	417.7036 (#72)
128	50	0	81.0021 (#13),404.5797 (#391),482.1668 (#300),680.2523 (#113)
128	51	0	249.7676 (#1),278.1566 (#402),314.0975 (#201),459.5263 (#206),526.5793 (#26),583.1585 (#390),743.3980 (#4),753.7941 (#178),773.7200 (#76),845.7434 (#353),860.8133 (#429),972.1850 (#161),1047.6034 (#406),1112.5351 (#366),1250.6539 (#255),1685.8192 (#296)
128	51	1	314.0975 (#201),743.3980 (#4),753.7941 (#178)

A	Z	Meta	Gammas
129	51	0	499.3633 (#272),544.5743 (#139),633.7797 (#302),669.8523 (#65),683.5864 (#243),761.2674 (#170),813.0336 (#82),984.4298 (#225),995.1701 (#301),1125.4378 (#153),1272.6652 (#326),1280.8828 (#155),1435.8087 (#205),1499.6493 (#417)
129	52	0	209.0708 (#310),210.6400 (#242),459.5263 (#206),773.7200 (#76),804.4970 (#174),829.9295 (#269),1169.0252 (#171),1233.0884 (#246),1260.3906 (#15)
129	52	1	459.5263 (#206)
131	51	0	326.2090 (#324),911.0703 (#424),1455.2891 (#238),1470.0805 (#303),2167.5817 (#457),2255.4969 (#202)
131	52	0	149.6992 (#104),151.1808 (#41),267.3594 (#309),452.2585 (#212),492.4092 (#196),852.2259 (#106),856.2916 (#107),1035.1922 (#222),1924.4894 (#425)
131	52	1	81.0021 (#13),98.4343 (#433),102.1249 (#185),103.1708 (#156),104.8625 (#254),111.8688 (#126),149.6992 (#104),151.1808 (#41),155.8600 (#273),177.1363 (#209),182.4305 (#322),183.0908 (#394),200.6968 (#190),240.9694 (#189),261.3368 (#221),267.3594 (#309),290.3688 (#260),334.2855 (#146),362.4760 (#412),407.9970 (#211),452.2585 (#212),462.9014 (#241),546.6258 (#49),609.2666 (#400),695.3688 (#381),713.1619 (#283),773.7200 (#76),782.5442 (#188),793.7744 (#134),822.8464 (#182),852.2259 (#106),856.2916 (#107),909.9919 (#152),920.5251 (#295),940.9822 (#358),995.1701 (#301),1035.1922 (#222),1059.9115 (#239),1072.6280 (#93),1114.2897 (#294),1125.4378 (#153),1127.7671 (#352),1206.5242 (#166),1315.2374 (#361),1645.6692 (#334),1830.6678 (#208),1880.2390 (#418),1887.5227 (#319),1924.4894 (#425),2270.5934 (#383)
131	53	0	80.1048 (#176),177.1363 (#209),272.5268 (#198),284.3748 (#109),364.4782 (#16),503.2145 (#337),636.9105 (#95)
132	52	0	49.7150 (#28),111.8688 (#126),116.3890 (#121),228.3460 (#7)
132	53	0	262.8184 (#90),416.7211 (#244),446.2199 (#210),505.8392 (#66),522.6633 (#25),535.3351 (#232),630.1998 (#29),650.4884 (#98),667.6925 (#6),669.8523 (#65),671.5664 (#63),727.0026 (#61),772.6654 (#9),780.2164 (#157),909.9919 (#152),927.5972 (#251),954.5611 (#23),984.4298 (#225),1002.6934 (#323),1035.1922 (#222),1086.2317 (#367),1112.5351 (#366),1136.0496 (#69),1143.5521 (#148),1148.0090 (#75),1173.1876 (#167),1272.6652 (#326),1290.6196 (#163),1295.2232 (#119),1298.0989 (#64),1371.9114 (#103),1398.4993 (#54),1442.4017 (#145),1476.3582 (#336),1661.1203 (#376),1727.1593 (#372),1760.1404 (#404),1920.8234 (#160),2001.8441 (#168),2086.4583 (#290),2187.1926 (#184),2222.9225 (#347),2248.9629 (#395),2408.8181 (#158),2525.1296 (#386)
132	55	0	505.8392 (#66),630.1998 (#29),667.6925 (#6),772.6654 (#9),1136.0496 (#69),1298.0989 (#64),1317.8415 (#466)
133	52	0	312.0144 (#230),338.3501 (#430),358.7288 (#439),717.9425 (#247),721.9835 (#47),727.0026 (#61),777.9045 (#57),787.1705 (#382),844.3020 (#129),884.1678 (#31),909.9919 (#152),912.7364 (#97),914.9455 (#266),927.5972 (#251),995.1701 (#301),1021.2948 (#132),1123.9725 (#73),1371.9114 (#103),1405.1523 (#56),1455.2891 (#238),1473.7338 (#308),1502.7860 (#151),1630.1173 (#453),1683.4989 (#339),1737.9790 (#449),1741.3001 (#234),1806.8709 (#169),1897.7336 (#445),2025.5545 (#291),2105.2965 (#398),2255.4969 (#202),2525.1296 (#386)

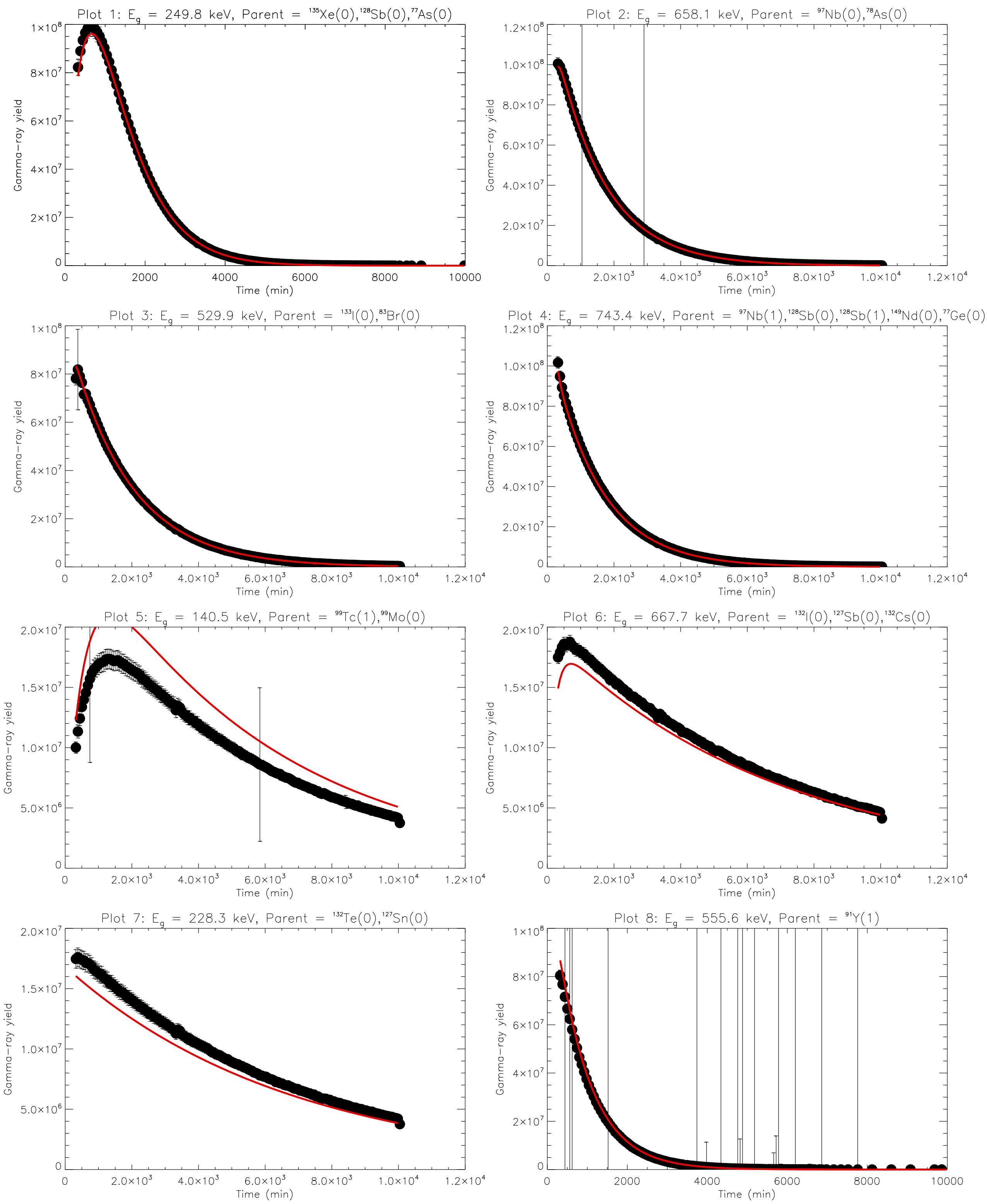
A	Z	Meta	Gammas
133	52	1	116.3890 (#121),168.8842 (#325),177.1363 (#209),200.6968 (#190),240.9694 (#189),278.1566 (#402),312.0144 (#230),314.0975 (#201),326.2090 (#324),334.2855 (#146),355.5518 (#80),414.9615 (#262),435.2154 (#252),471.7751 (#279),478.4515 (#392),574.2056 (#371),621.4826 (#409),647.6278 (#216),653.1843 (#236),698.1179 (#393),724.2057 (#30),756.7252 (#53),912.7364 (#97),914.9455 (#266),995.1701 (#301),1059.9115 (#239),1405.1523 (#56),1455.2891 (#238),1569.9161 (#422),1587.9423 (#378),1643.2028 (#410),1683.4989 (#339),1693.3023 (#370),1885.4873 (#365),1967.9706 (#419),2049.7800 (#385)
133	53	0	177.1363 (#209),262.8184 (#90),267.3594 (#309),417.7036 (#72),422.9244 (#224),510.5839 (#85),529.8784 (#3),617.7660 (#177),669.8523 (#65),680.2523 (#113),706.5805 (#92),768.3504 (#192),820.2658 (#278),856.2916 (#107),875.3707 (#51),1052.1862 (#173),1059.9115 (#239),1236.3948 (#96),1298.0989 (#64),1350.2132 (#281)
133	53	1	647.6278 (#216),912.7364 (#97)
133	54	0	81.0021 (#13)
133	54	1	233.2440 (#237)
134	52	0	79.3837 (#250),183.0908 (#394),210.6400 (#242),435.2154 (#252),460.8652 (#311),565.8909 (#256),713.1619 (#283),767.0968 (#218),844.3020 (#129),925.6814 (#67)
134	53	0	135.4794 (#199),139.1252 (#299),188.5355 (#289),405.4424 (#143),410.9960 (#350),540.7468 (#123),595.3568 (#112),677.3457 (#137),706.5805 (#92),730.9208 (#265),847.1272 (#22),857.3172 (#142),884.1678 (#31),966.7737 (#364),974.4739 (#183),1040.2462 (#261),1052.1862 (#173),1072.6280 (#93),1100.0339 (#341),1103.2615 (#195),1136.0496 (#69),1190.3397 (#369),1352.4955 (#329),1407.7281 (#407),1455.2891 (#238),1470.0805 (#303),1541.2266 (#357),1613.7877 (#187),1741.3001 (#234),1806.8709 (#169),2408.8181 (#158)
135	53	0	162.7159 (#81),165.8878 (#58),220.5416 (#115),288.4305 (#79),290.3688 (#260),304.8649 (#74),326.2090 (#324),414.9615 (#262),417.7036 (#72),429.7878 (#263),433.7483 (#215),531.0152 (#89),546.6258 (#49),707.9476 (#197),785.3379 (#315),795.3544 (#397),797.9244 (#312),836.8586 (#52),972.1850 (#161),995.1701 (#301),1038.7525 (#40),1101.5680 (#120),1123.9725 (#73),1131.5215 (#18),1160.1425 (#227),1169.0252 (#171),1240.4387 (#165),1260.3906 (#15),1343.5941 (#354),1367.8064 (#203),1448.3155 (#257),1457.5522 (#36),1502.7860 (#151),1566.4029 (#138),1613.7877 (#187),1678.0839 (#35),1706.4881 (#68),1791.2212 (#43),1830.6678 (#208),1927.2726 (#267),1948.7174 (#362),2045.9491 (#172),2255.4969 (#202),2408.8181 (#158)
135	54	0	158.3456 (#228),249.7676 (#1),407.9970 (#211),608.0841 (#60),654.6546 (#235)
135	54	1	526.5793 (#26)
138	55	0	408.9898 (#380),462.9014 (#241),575.6232 (#447),683.5864 (#243),717.9425 (#247),765.9128 (#436),797.9244 (#312),813.0336 (#82),953.2749 (#118),1054.5819 (#276),1203.3968 (#333),1343.5941 (#354),1435.8087 (#205),1495.7084 (#431),1613.7877 (#187),1806.8709 (#169),2114.4942 (#454),2217.8121 (#338),2639.5434 (#368)
138	55	1	408.9898 (#380),462.9014 (#241),1435.8087 (#205)
139	56	0	165.8878 (#58),1476.3582 (#336),1683.4989 (#339),1920.8234 (#160)
140	56	0	162.7159 (#81),304.8649 (#74),423.7080 (#111),437.5948 (#164),537.2709 (#27)

A	Z	Meta	Gammas
140	57	0	241.8029 (#320),328.7668 (#48),445.3986 (#434),487.0345 (#19),751.6636 (#125),815.7719 (#38),867.8156 (#105),919.4599 (#162),925.0381 (#91),950.9288 (#304),1405.1523 (#56),1596.0781 (#14),1924.4894 (#425),2082.8868 (#420),2347.6834 (#259),2521.3506 (#140)
141	57	0	435.2154 (#252),834.8559 (#71),1354.4877 (#144),1693.3023 (#370),2029.8318 (#136),2267.1084 (#387)
141	58	0	145.4434 (#34)
142	57	0	578.0720 (#271),641.2840 (#33),894.9845 (#117),947.0999 (#94),1011.4788 (#179),1043.7660 (#213),1160.1425 (#227),1233.0884 (#246),1352.4955 (#329),1362.6556 (#101),1455.2891 (#238),1545.9454 (#194),1756.7119 (#214),1887.5227 (#319),1901.4402 (#127),2004.0803 (#306),2025.5545 (#291),2038.8021 (#298),2055.2232 (#229),2100.7230 (#287),2126.0271 (#359),2139.1534 (#342),2187.1926 (#184),2347.6834 (#259),2364.4929 (#349),2397.9390 (#86),2419.7361 (#377),2460.2382 (#348),2542.8747 (#102),2598.2585 (#388)
143	58	0	57.3605 (#20),231.5964 (#84),293.2440 (#10),350.6265 (#62),416.7211 (#244),432.8160 (#285),446.2199 (#210),490.3854 (#83),664.6002 (#42),669.8523 (#65),721.9835 (#47),787.1705 (#382),809.8106 (#374),880.3479 (#130),1002.6934 (#323),1059.9115 (#239),1103.2615 (#195),1324.4985 (#426)
145	59	0	91.0904 (#55),262.8184 (#90),492.4092 (#196),707.9476 (#197),713.1619 (#283),780.2164 (#157),920.5251 (#295),978.8140 (#317),1150.1483 (#335),1212.9912 (#375)
147	60	0	91.0904 (#55),275.1900 (#180),319.2410 (#245),398.1312 (#313),531.0152 (#89),680.2523 (#113)
149	60	0	114.4320 (#175),139.1252 (#299),155.8600 (#273),188.5355 (#289),208.2451 (#340),211.3433 (#147),240.0910 (#217),254.3968 (#399),270.1663 (#223),361.3821 (#451),366.4619 (#128),423.7080 (#111),432.8160 (#285),439.3730 (#415),443.7875 (#384),540.7468 (#123),575.6232 (#447),583.1585 (#390),617.7660 (#177),630.1998 (#29),654.6546 (#235),671.5664 (#63),743.3980 (#4),749.7944 (#17),761.2674 (#170),768.3504 (#192),813.0336 (#82),854.9820 (#231),907.8377 (#360),920.5251 (#295),978.8140 (#317),1052.1862 (#173),1125.4378 (#153),1136.0496 (#69),1150.1483 (#335),1190.3397 (#369),1298.0989 (#64),1448.3155 (#257),1495.7084 (#431)
150	61	0	358.7288 (#439),439.3730 (#415),465.2547 (#465),492.4092 (#196),499.3633 (#272),565.8909 (#256),586.8058 (#463),730.9208 (#265),761.2674 (#170),812.3131 (#464),911.0703 (#424),972.1850 (#161),1024.2471 (#12),1179.8534 (#268),1324.4985 (#426),1499.6493 (#417),1630.1173 (#453),1727.1593 (#372),2195.8023 (#70)
151	61	0	69.6608 (#277),104.8625 (#254),139.1252 (#299),167.8126 (#181),177.1363 (#209),202.1259 (#355),209.0708 (#310),240.0910 (#217),254.3968 (#399),261.3368 (#221),275.1900 (#180),278.1566 (#402),295.1229 (#396),340.1110 (#100),345.1060 (#292),379.6529 (#351),390.5087 (#293),400.6669 (#444),404.5797 (#391),416.7211 (#244),420.7621 (#416),443.7875 (#384),452.2585 (#212),487.0345 (#19),490.3854 (#83),583.1585 (#390),603.7946 (#440),609.2666 (#400),620.3363 (#110),713.1619 (#283),717.9425 (#247),727.0026 (#61),772.6654 (#9),785.3379 (#315),856.2916 (#107),911.0703 (#424),919.4599 (#162),953.2749 (#118),969.0726 (#432)
152	63	1	266.8699 (#37),272.5268 (#198),340.1110 (#100),387.5943 (#442),411.8880 (#345),443.7875 (#384),703.6868 (#135),960.9975 (#330),1460.6744 (#469)
153	62	0	69.6608 (#277),103.1708 (#156),411.8880 (#345),574.2056 (#371),603.7946 (#440),609.2666 (#400),617.7660 (#177)
156	62	0	165.8878 (#58),218.9363 (#280)

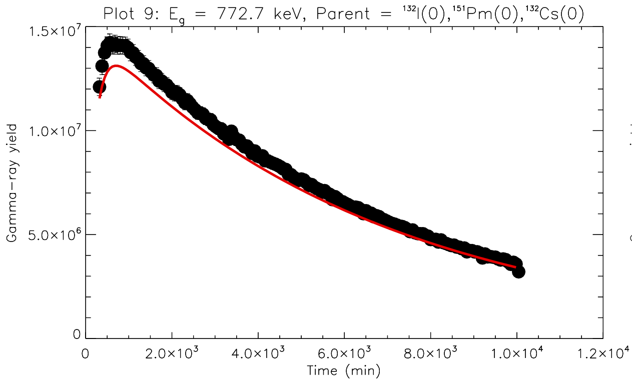
A	Z	Meta	Gammas
156	63	0	290.3688 (#260),490.3854 (#83),768.3504 (#192),777.9045 (#57),797.9244 (#312),820.2658 (#278),960.9975 (#330),1040.2462 (#261),1101.5680 (#120),1169.0252 (#171),2032.1793 (#455),2255.4969 (#202)
157	63	0	116.3890 (#121),129.5976 (#191),158.3456 (#228),209.0708 (#310),334.2855 (#146),358.7288 (#439),393.3608 (#226),408.9898 (#380),460.8652 (#311),553.1406 (#458),613.7891 (#344),728.7519 (#461),739.4891 (#24),934.4831 (#21),969.0726 (#432),985.8737 (#248),1059.9115 (#239)

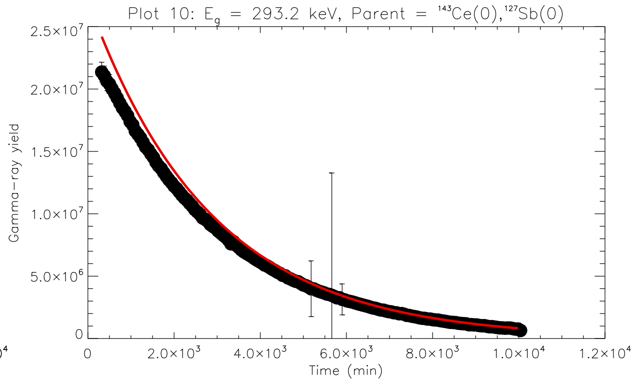
2. plots

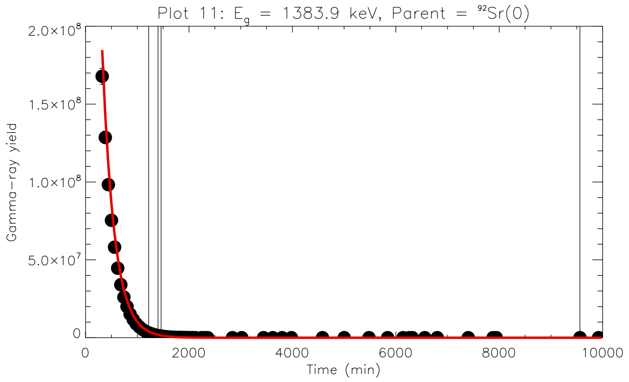
The gamma-ray yields obtained from detector 8816 are compared to FIER predictions in the figures below. The title of each plot gives the plot number, the gamma-ray energy, and the parent nuclei matched to that gamma-ray energy. The number in parentheses after the name of a parent nucleus indicates whether it is in a ground or excited state (with "(0)" ⇒ ground state). The data are shown as solid points with uncertainties, and the FIER prediction is plotted as a solid red line. The quantity plotted in each case is a number of gammas in a given time bin.

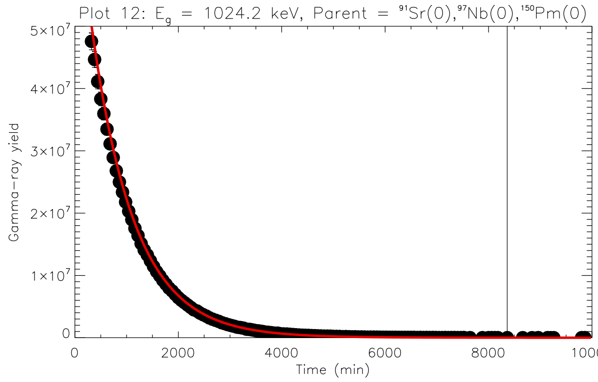


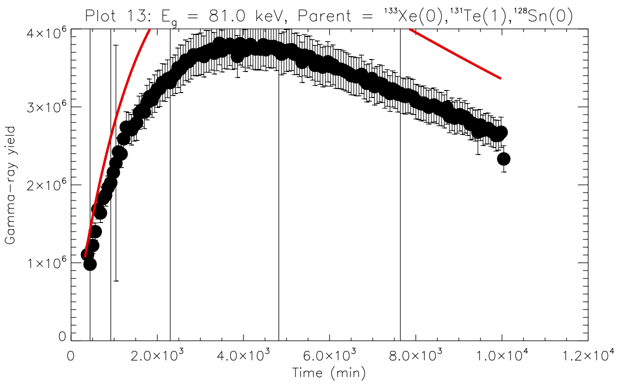
Plot 1: E_g = 249.8 keV, Parent = ^{135}Xe(0),^{128}Sb(0),^{77}As(0)
Plot 2: E_g = 658.1 keV, Parent = ^{97}Nb(0),^{78}As(0)
Plot 3: E_g = 529.9 keV, Parent = ^{133}I(0),^{83}Br(0)
Plot 4: E_g = 743.4 keV, Parent = ^{97}Nb(1),^{128}Sb(0),^{128}Sb(1),^{149}Nd(0),^{77}Ge(0)
Plot 5: E_g = 140.5 keV, Parent = ^{99}Tc(1),^{99}Mo(0)
Plot 6: E_g = 667.7 keV, Parent = ^{132}I(0),^{127}Sb(0),^{132}Cs(0)
Plot 7: E_g = 228.3 keV, Parent = ^{132}Te(0),^{127}Sn(0)
Plot 8: E_g = 555.6 keV, Parent = ^{91}Y(1)
Gamma-ray yield
Time (min)

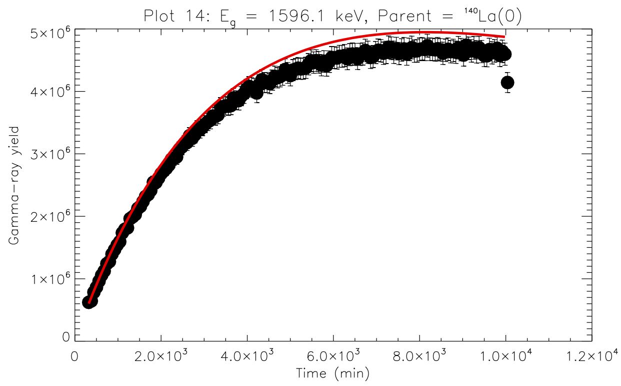

Plot 9: E_g = 772.7 keV, Parent = ^{132}I(0),^{151}Pm(0),^{132}Cs(0)
Gamma-ray yield
Time (min)

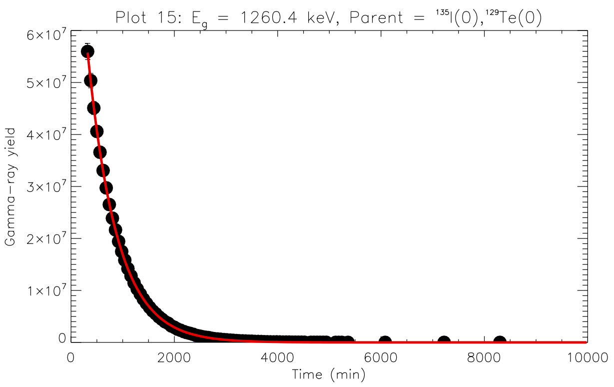

Plot 10: E_g = 293.2 keV, Parent = ^{143}Ce(0),^{127}Sb(0)
Gamma-ray yield
Time (min)

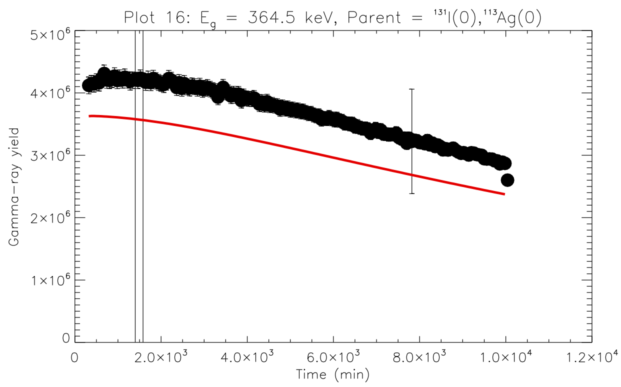

Plot 11: E_g = 1383.9 keV, Parent = ^{92}Sr(0)
Gamma-ray yield
Time (min)


Plot 12: E_g = 1024.2 keV, Parent = ^{91}Sr(0),^{97}Nb(0),^{150}Pm(0)
Gamma-ray yield
Time (min)

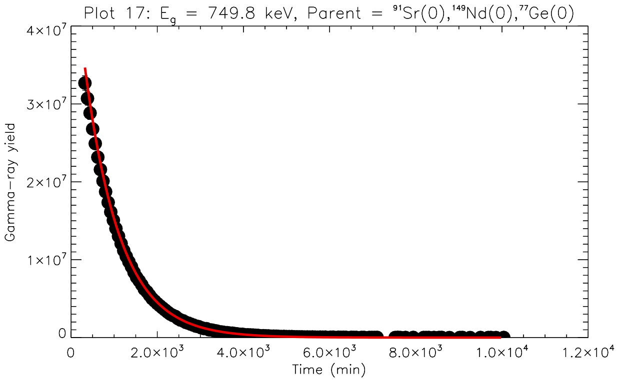

Plot 13: E_g = 81.0 keV, Parent = ^{133}Xe(0),^{131}Te(1),^{128}Sn(0)
Gamma-ray yield
Time (min)


Plot 14: E_g = 1596.1 keV, Parent = ^{140}La(0)
Gamma-ray yield
Time (min)

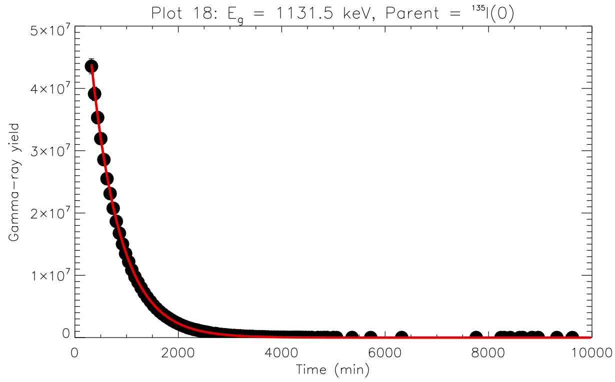

Plot 15: E_g = 1260.4 keV, Parent = ^{135}I(0),^{129}Te(0)
Gamma-ray yield
Time (min)


Plot 16: E_g = 364.5 keV, Parent = ^{131}I(0),^{113}Ag(0)
Gamma-ray yield
Time (min)

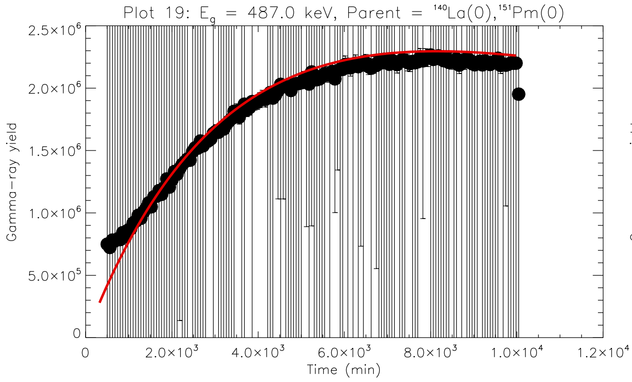
Plot 17: E_g = 749.8 keV, Parent = ^{91}Sr(0),^{149}Nd(0),^{77}Ge(0)



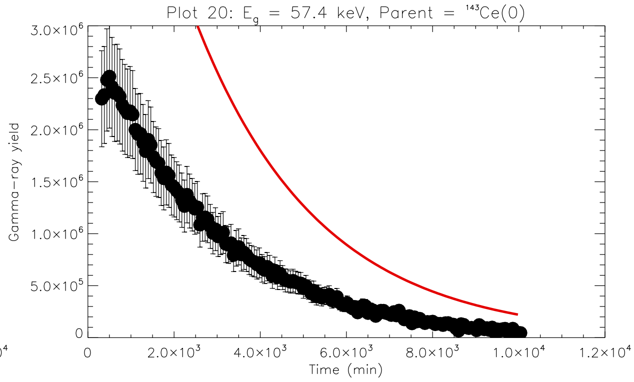
Plot 18: E_g = 1131.5 keV, Parent = ^{135}I(0)



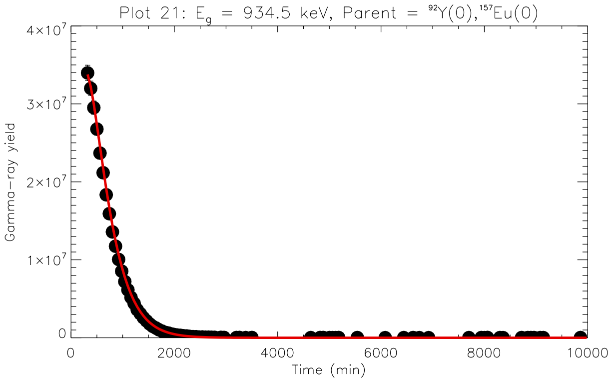
Plot 19: E_g = 487.0 keV, Parent = ^{140}La(0),^{151}Pm(0)



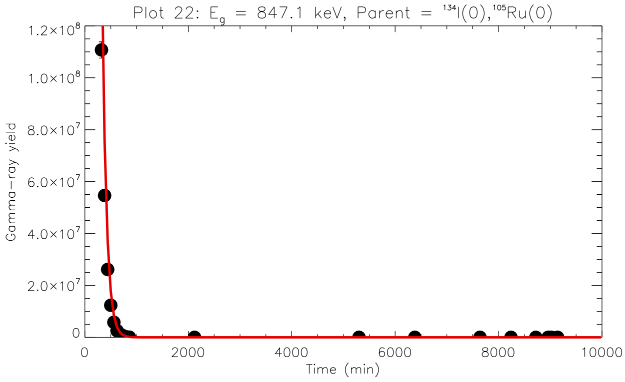
Plot 20: E_g = 57.4 keV, Parent = ^{143}Ce(0)



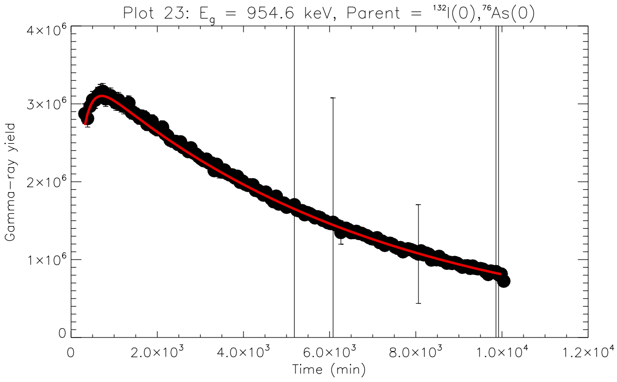
Plot 21: E_g = 934.5 keV, Parent = ^{92}Y(0),^{157}Eu(0)



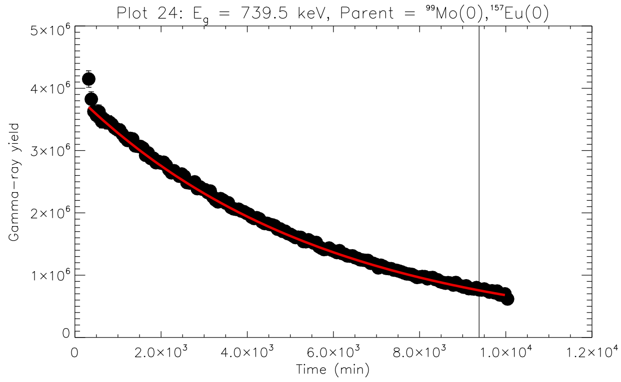
Plot 22: E_g = 847.1 keV, Parent = ^{134}I(0),^{105}Ru(0)



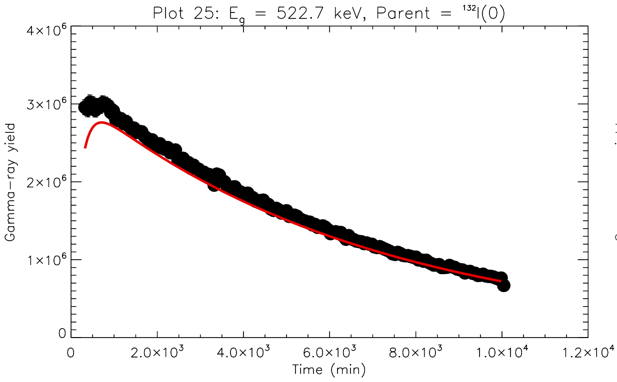
Plot 23: E_g = 954.6 keV, Parent = ^{132}I(0),^{76}As(0)



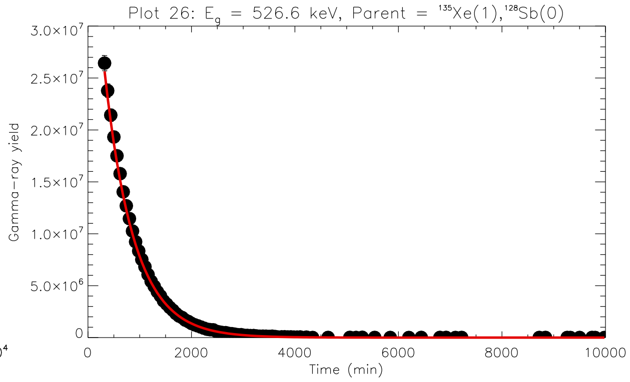
Plot 24: E_g = 739.5 keV, Parent = ^{99}Mo(0),^{157}Eu(0)



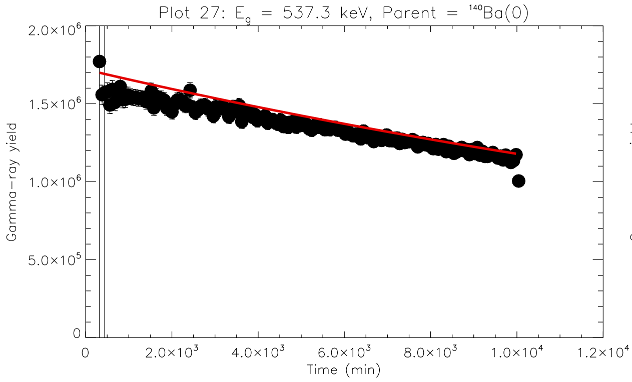
Plot 25: E_g = 522.7 keV, Parent = ^{132}I(0)



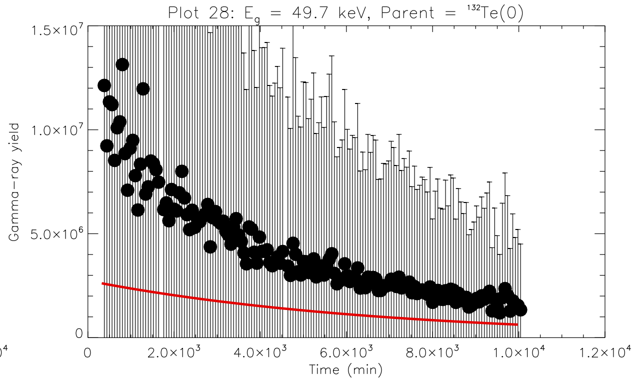
Plot 26: E_g = 526.6 keV, Parent = ^{135}Xe(1),^{128}Sb(0)



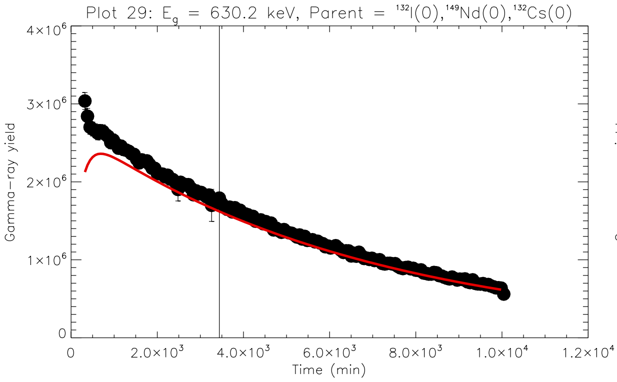
Plot 27: E_g = 537.3 keV, Parent = ^{140}Ba(0)



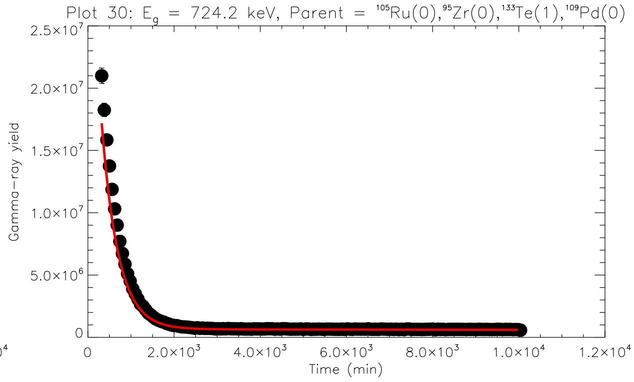
Plot 28: E_g = 49.7 keV, Parent = ^{132}Te(0)



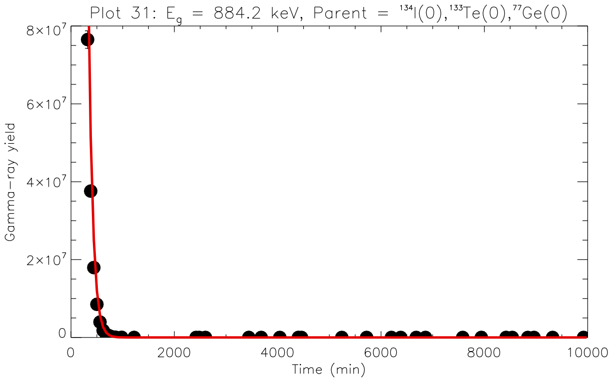
Plot 29: E_g = 630.2 keV, Parent = ^{132}I(0),^{149}Nd(0),^{132}Cs(0)



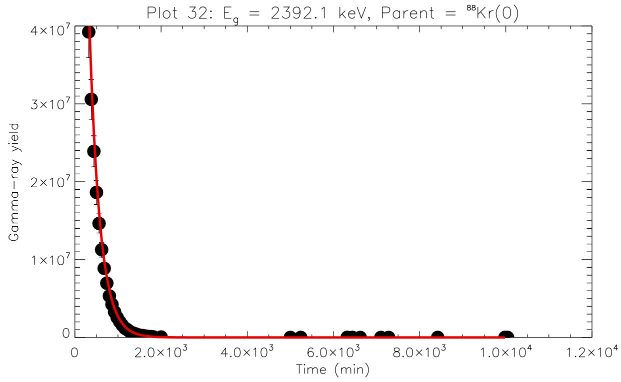
Plot 30: E_g = 724.2 keV, Parent = ^{105}Ru(0),^{95}Zr(0),^{133}Te(1),^{109}Pd(0)

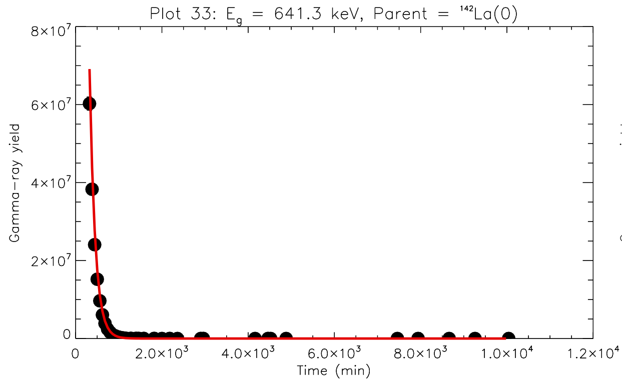


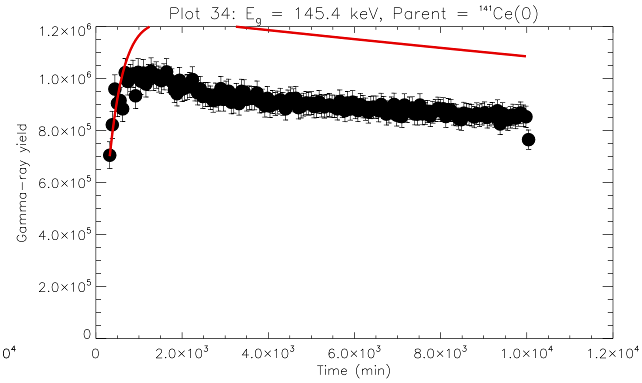
Plot 31: E_g = 884.2 keV, Parent = ^{134}I(0),^{133}Te(0),^{77}Ge(0)

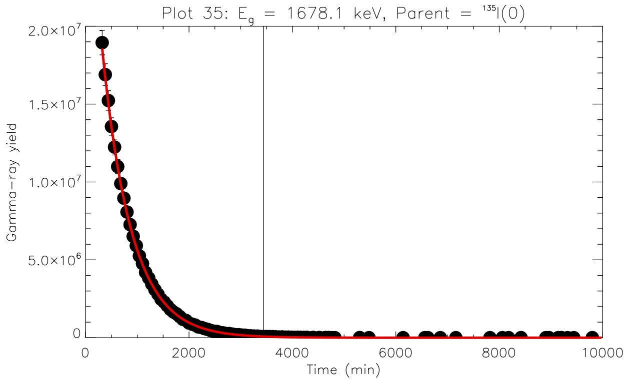


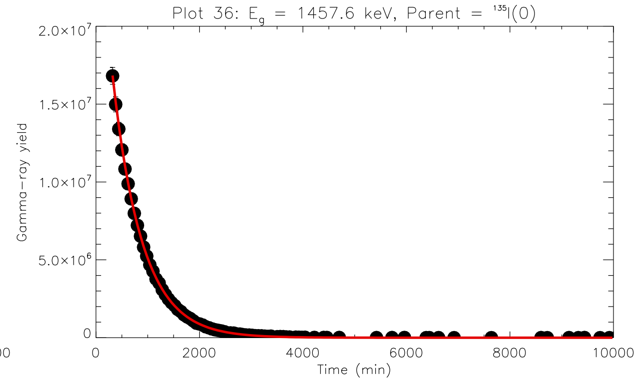
Plot 32: E_g = 2392.1 keV, Parent = ^{88}Kr(0)

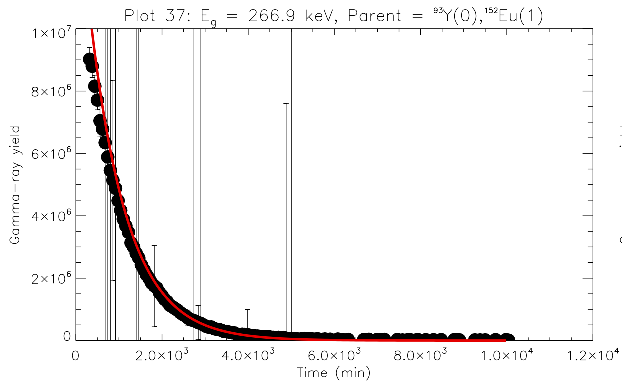


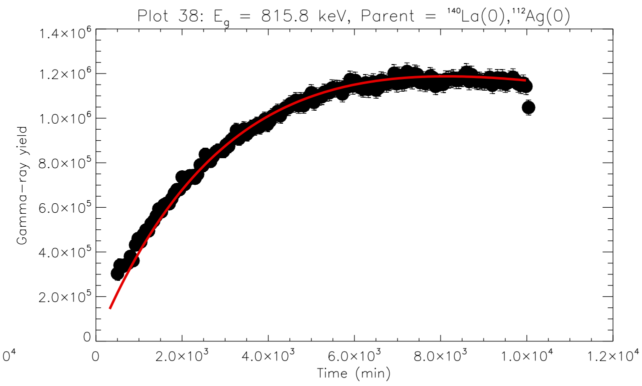

Plot 33: Eg = 641.3 keV, Parent = 142La(0)
Gamma-ray yield
Time (min)

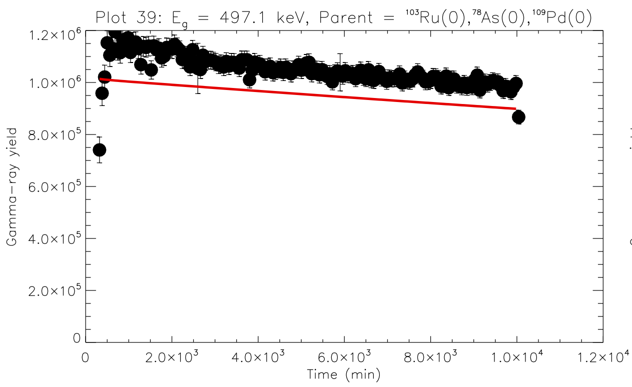

Plot 34: Eg = 145.4 keV, Parent = 141Ce(0)
Gamma-ray yield
Time (min)

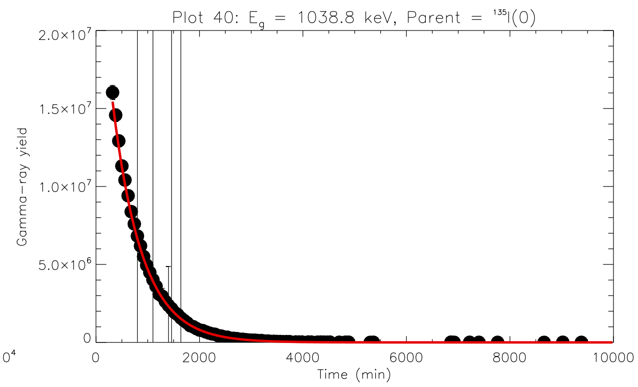

Plot 35: Eg = 1678.1 keV, Parent = 135I(0)
Gamma-ray yield
Time (min)


Plot 36: Eg = 1457.6 keV, Parent = 135I(0)
Gamma-ray yield
Time (min)

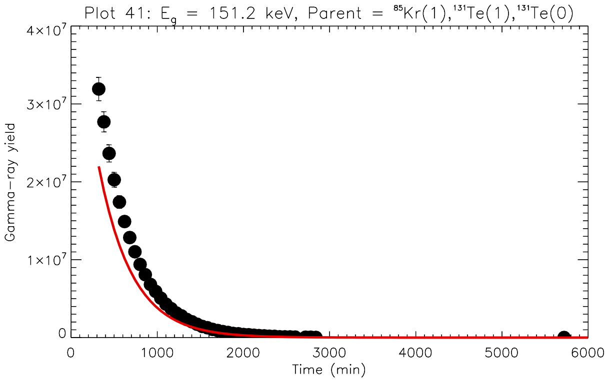

Plot 37: Eg = 266.9 keV, Parent = 93Y(0),152Eu(1)
Gamma-ray yield
Time (min)


Plot 38: Eg = 815.8 keV, Parent = 140La(0),112Ag(0)
Gamma-ray yield
Time (min)

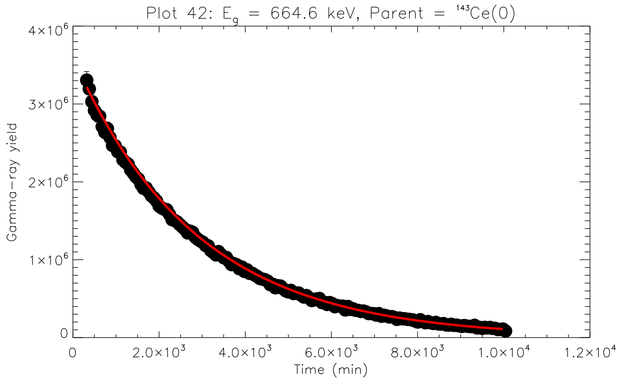

Plot 39: Eg = 497.1 keV, Parent = 103Ru(0),78As(0),109Pd(0)
Gamma-ray yield
Time (min)


Plot 40: Eg = 1038.8 keV, Parent = 135I(0)
Gamma-ray yield
Time (min)

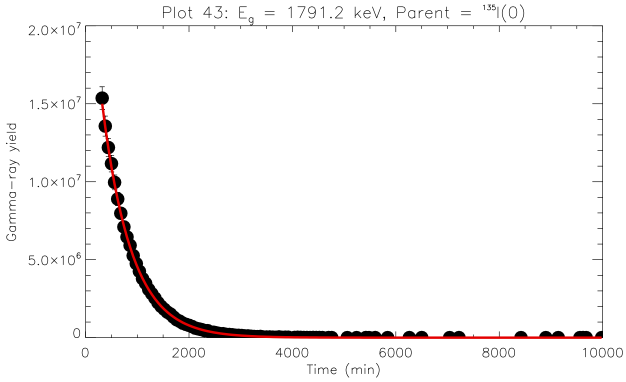
Plot 41: E_g = 151.2 keV, Parent = ^{85}Kr(1),^{131}Te(1),^{131}Te(0)



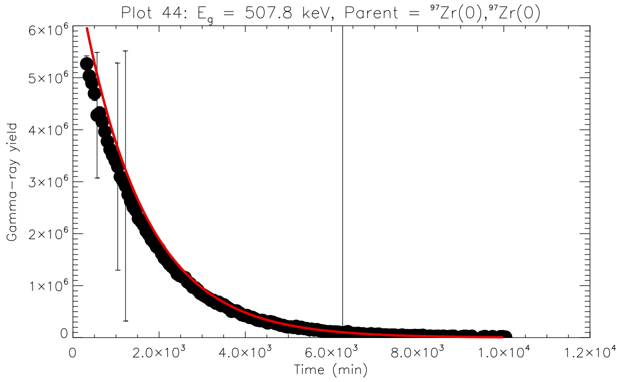
Plot 42: E_g = 664.6 keV, Parent = ^{143}Ce(0)



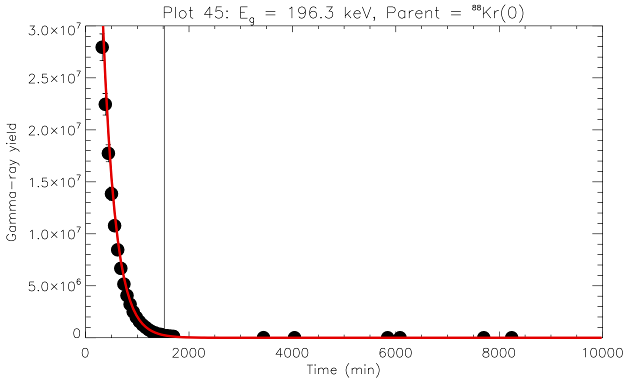
Plot 43: E_g = 1791.2 keV, Parent = ^{135}I(0)



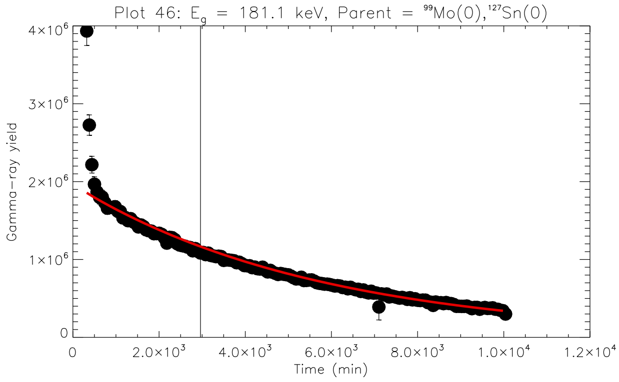
Plot 44: E_g = 507.8 keV, Parent = ^{97}Zr(0),^{97}Zr(0)



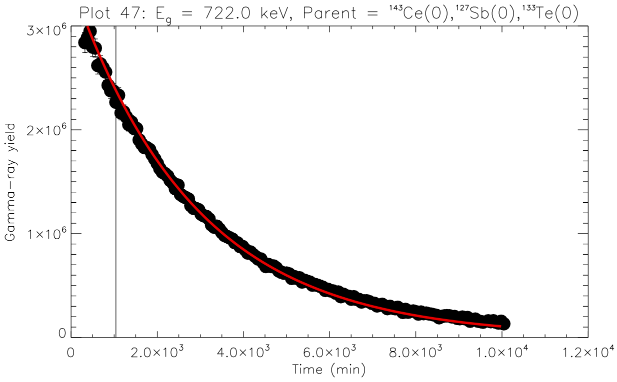
Plot 45: E_g = 196.3 keV, Parent = ^{88}Kr(0)



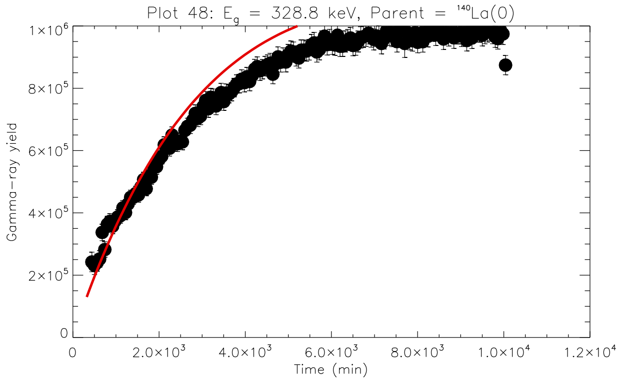
Plot 46: E_g = 181.1 keV, Parent = ^{99}Mo(0),^{127}Sn(0)

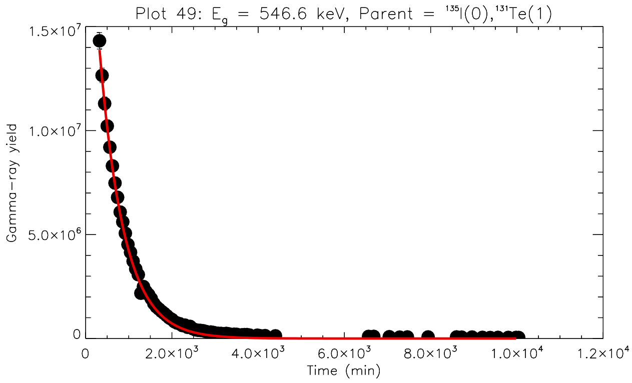


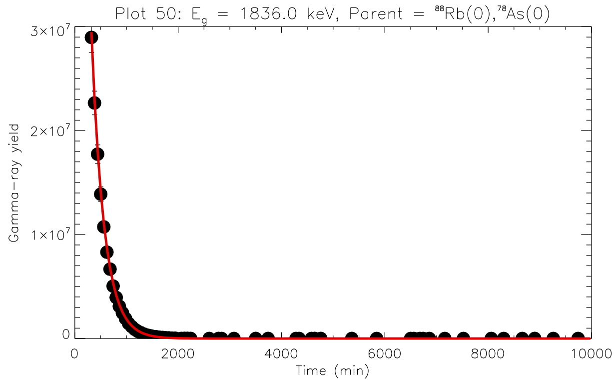
Plot 47: E_g = 722.0 keV, Parent = ^{143}Ce(0),^{127}Sb(0),^{133}Te(0)

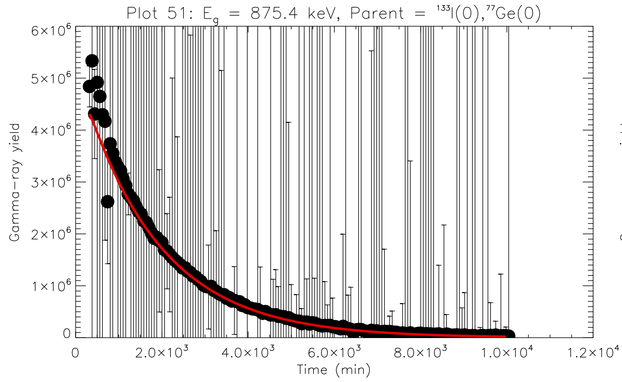


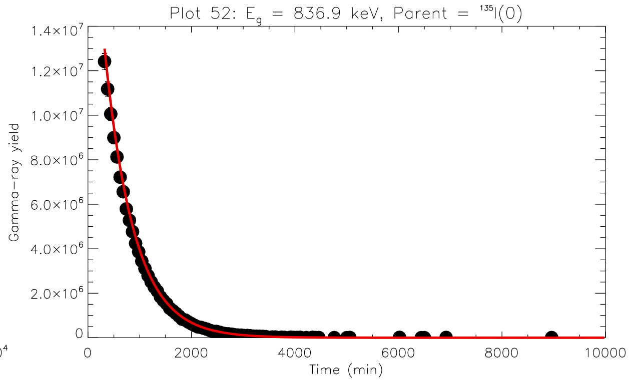
Plot 48: E_g = 328.8 keV, Parent = ^{140}La(0)

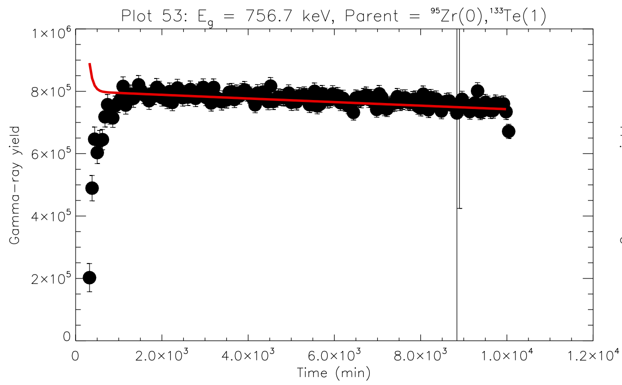


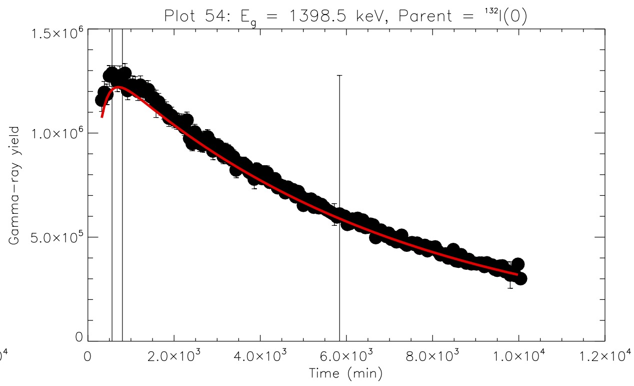

Plot 49: E_g = 546.6 keV, Parent = ^{135}I(0),^{131}Te(1)
Gamma-ray yield
Time (min)

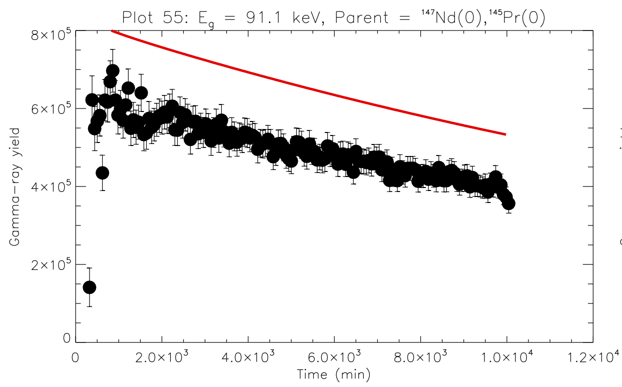

Plot 50: E_g = 1836.0 keV, Parent = ^{88}Rb(0),^{78}As(0)
Gamma-ray yield
Time (min)

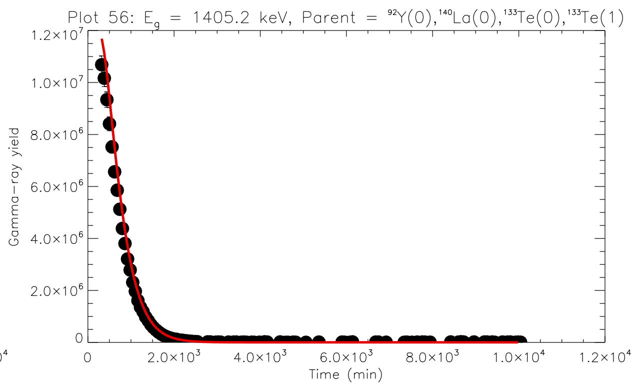

Plot 51: E_g = 875.4 keV, Parent = ^{133}I(0),^{77}Ge(0)
Gamma-ray yield
Time (min)


Plot 52: E_g = 836.9 keV, Parent = ^{135}I(0)
Gamma-ray yield
Time (min)

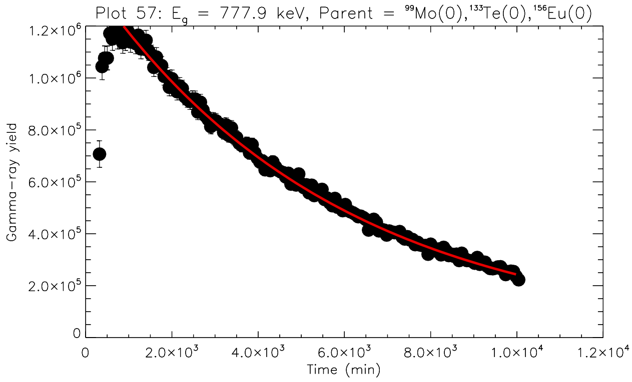

Plot 53: E_g = 756.7 keV, Parent = ^{95}Zr(0),^{133}Te(1)
Gamma-ray yield
Time (min)


Plot 54: E_g = 1398.5 keV, Parent = ^{132}I(0)
Gamma-ray yield
Time (min)

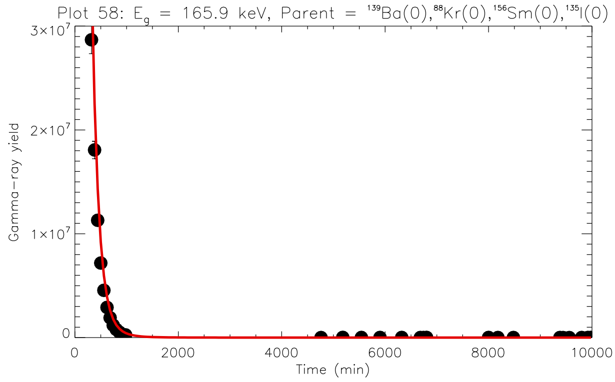

Plot 55: E_g = 91.1 keV, Parent = ^{147}Nd(0),^{145}Pr(0)
Gamma-ray yield
Time (min)


Plot 56: E_g = 1405.2 keV, Parent = ^{92}Y(0),^{140}La(0),^{133}Te(0),^{133}Te(1)
Gamma-ray yield
Time (min)

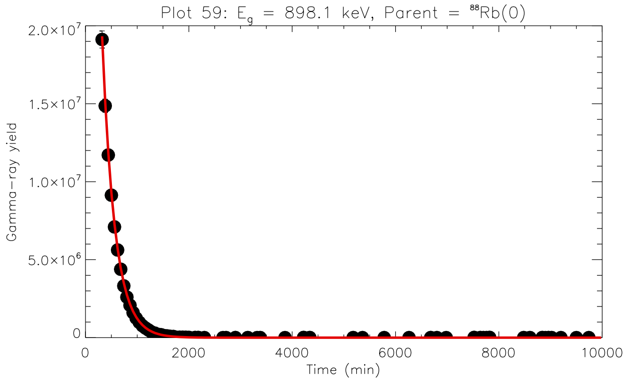
Plot 57: E_g = 777.9 keV, Parent = ^{99}Mo(0),^{133}Te(0),^{156}Eu(0)



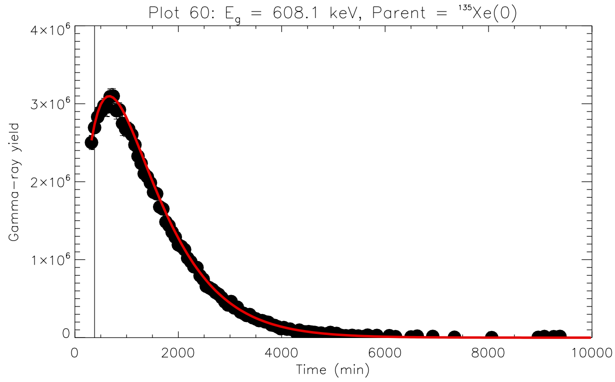
Plot 58: E_g = 165.9 keV, Parent = ^{139}Ba(0),^{88}Kr(0),^{156}Sm(0),^{135}I(0)



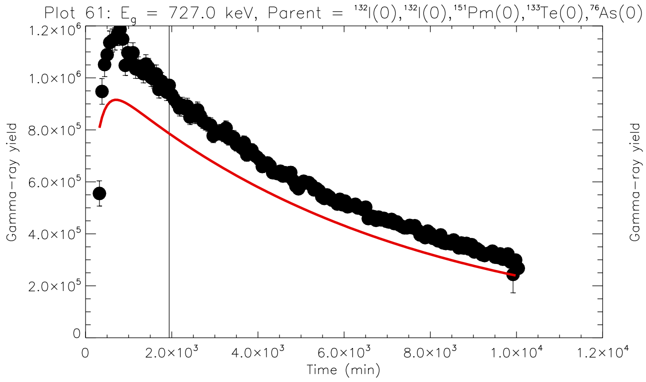
Plot 59: E_g = 898.1 keV, Parent = ^{88}Rb(0)



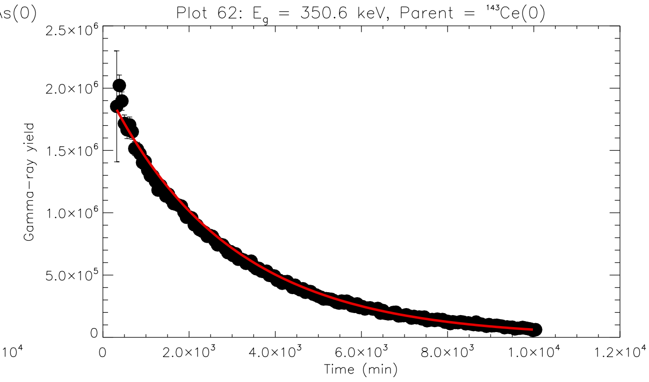
Plot 60: E_g = 608.1 keV, Parent = ^{135}Xe(0)



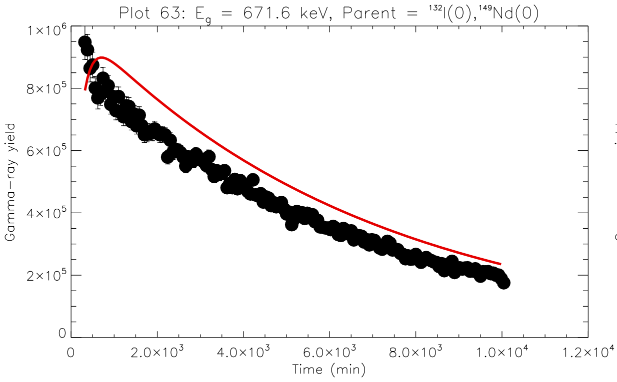
Plot 61: E_g = 727.0 keV, Parent = ^{132}I(0),^{132}I(0),^{151}Pm(0),^{133}Te(0),^{76}As(0)



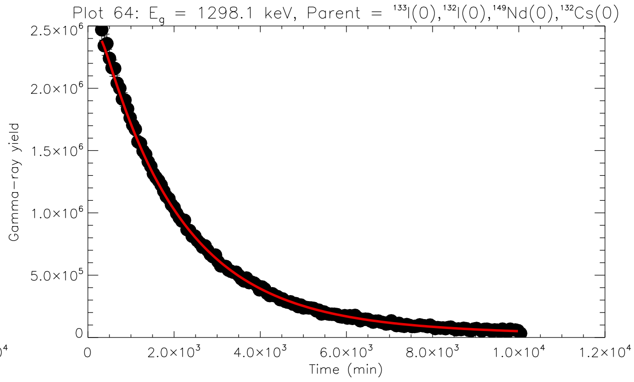
Plot 62: E_g = 350.6 keV, Parent = ^{143}Ce(0)

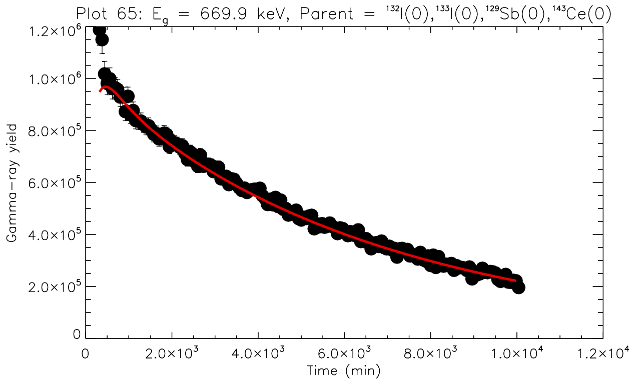


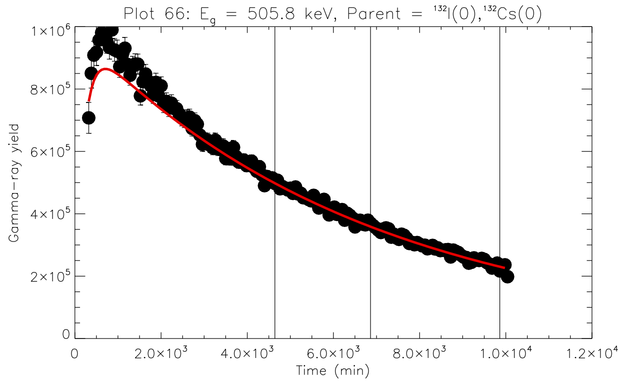
Plot 63: E_g = 671.6 keV, Parent = ^{132}I(0),^{149}Nd(0)

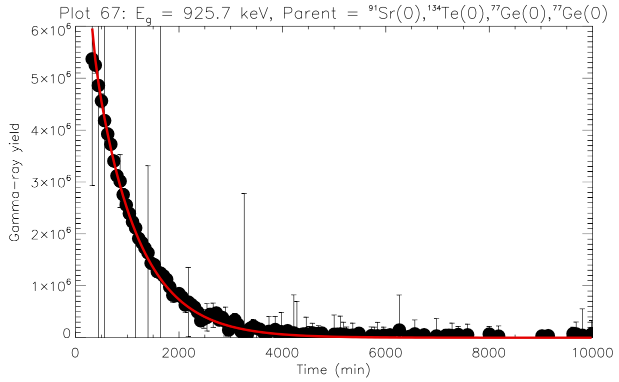


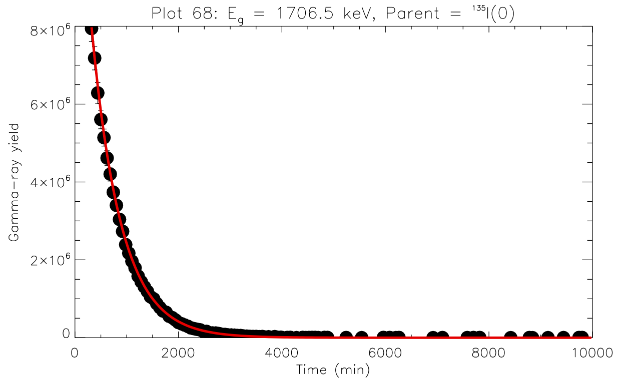
Plot 64: E_g = 1298.1 keV, Parent = ^{133}I(0),^{132}I(0),^{149}Nd(0),^{132}Cs(0)

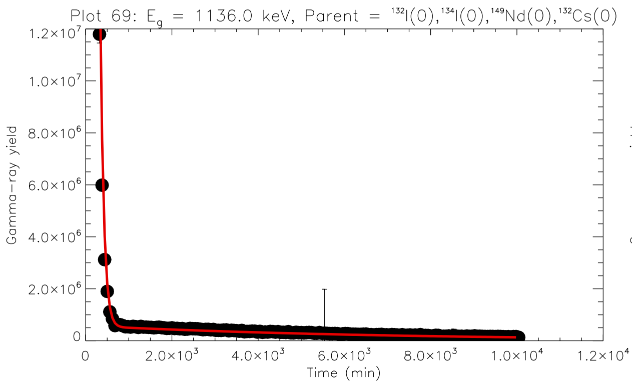


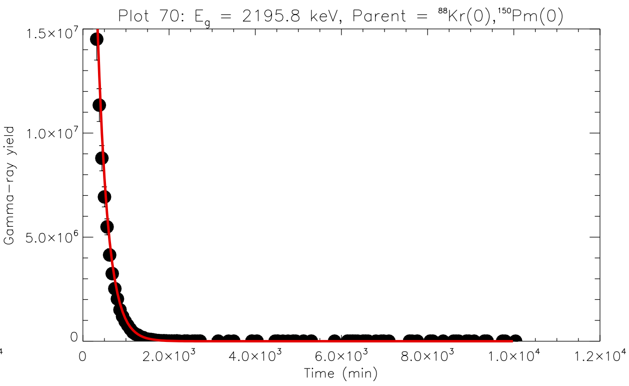

Plot 65: E_g = 669.9 keV, Parent = ^{132}I(0),^{133}I(0),^{129}Sb(0),^{143}Ce(0)
Gamma-ray yield
Time (min)

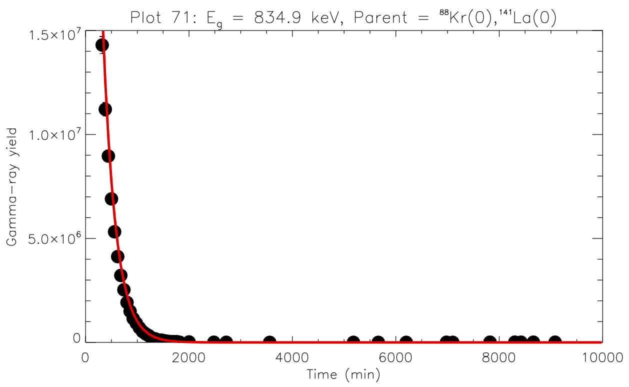

Plot 66: E_g = 505.8 keV, Parent = ^{132}I(0),^{132}Cs(0)
Gamma-ray yield
Time (min)

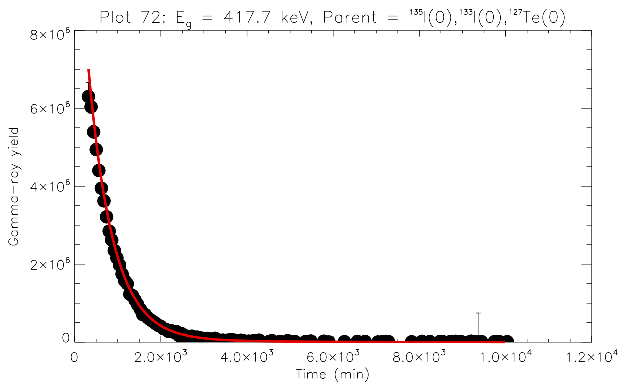

Plot 67: E_g = 925.7 keV, Parent = ^{91}Sr(0),^{134}Te(0),^{77}Ge(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

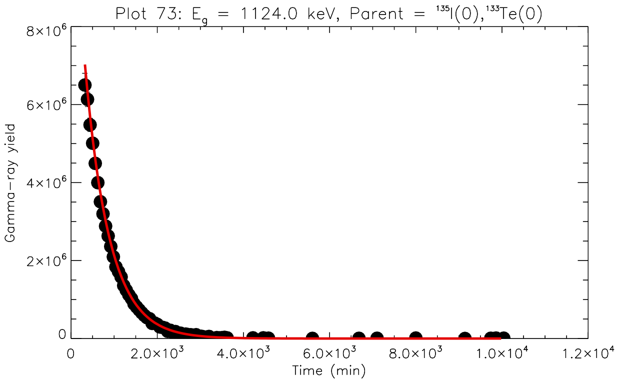

Plot 68: E_g = 1706.5 keV, Parent = ^{135}I(0)
Gamma-ray yield
Time (min)

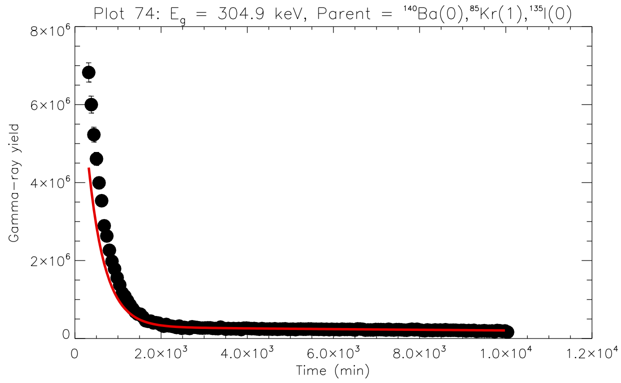

Plot 69: E_g = 1136.0 keV, Parent = ^{132}I(0),^{134}I(0),^{149}Nd(0),^{132}Cs(0)
Gamma-ray yield
Time (min)

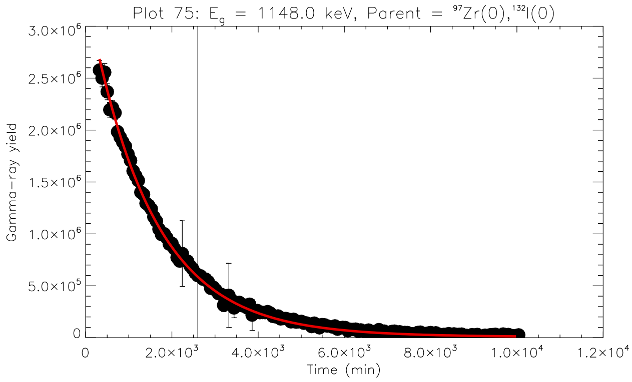

Plot 70: E_g = 2195.8 keV, Parent = ^{88}Kr(0),^{150}Pm(0)
Gamma-ray yield
Time (min)

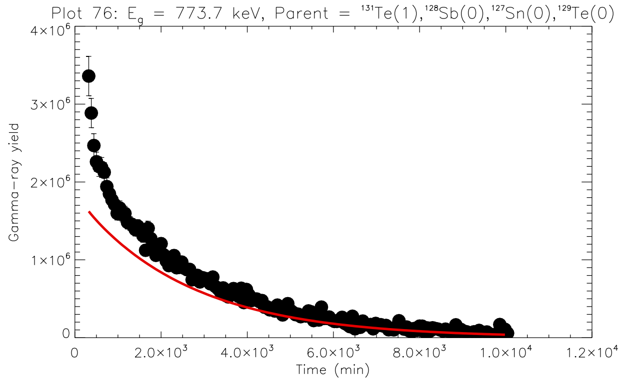

Plot 71: E_g = 834.9 keV, Parent = ^{88}Kr(0),^{141}La(0)
Gamma-ray yield
Time (min)

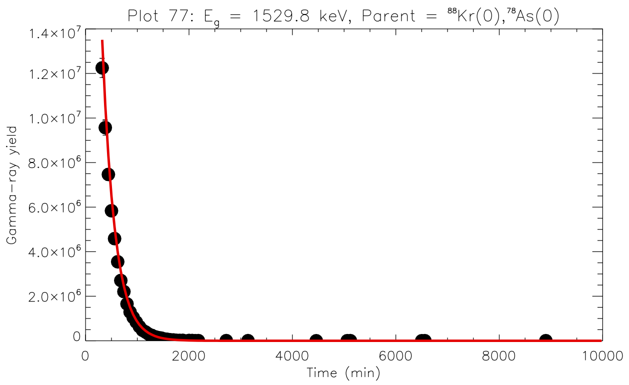

Plot 72: E_g = 417.7 keV, Parent = ^{135}I(0),^{133}I(0),^{127}Te(0)
Gamma-ray yield
Time (min)

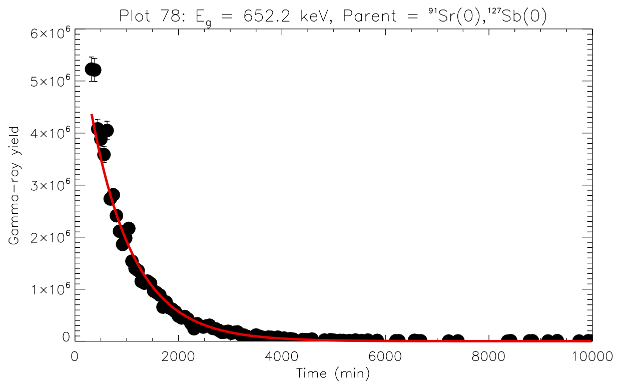

Plot 73: E_g = 1124.0 keV, Parent = ^{135}I(0),^{133}Te(0)
Gamma-ray yield
Time (min)

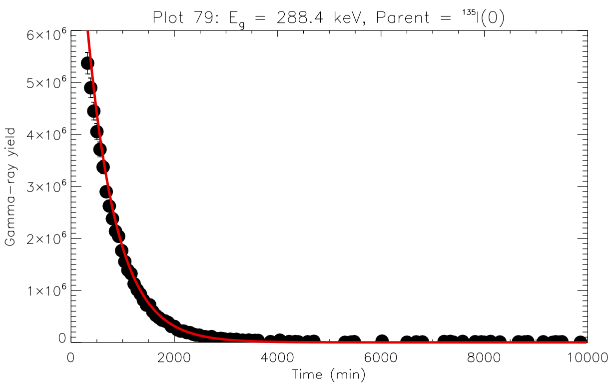

Plot 74: E_g = 304.9 keV, Parent = ^{140}Ba(0),^{85}Kr(1),^{135}I(0)
Gamma-ray yield
Time (min)

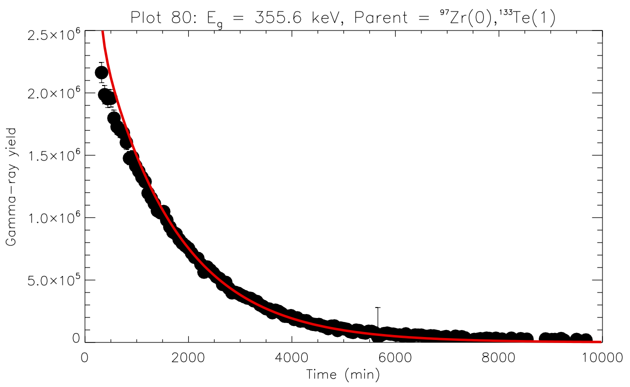

Plot 75: E_g = 1148.0 keV, Parent = ^{97}Zr(0),^{132}I(0)
Gamma-ray yield
Time (min)


Plot 76: E_g = 773.7 keV, Parent = ^{131}Te(1),^{128}Sb(0),^{127}Sn(0),^{129}Te(0)
Gamma-ray yield
Time (min)

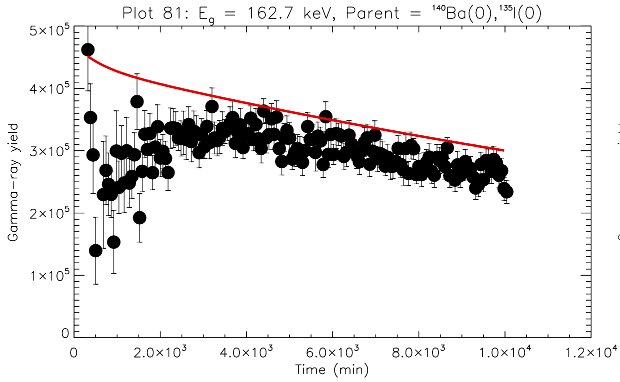

Plot 77: E_g = 1529.8 keV, Parent = ^{88}Kr(0),^{78}As(0)
Gamma-ray yield
Time (min)


Plot 78: E_g = 652.2 keV, Parent = ^{91}Sr(0),^{127}Sb(0)
Gamma-ray yield
Time (min)

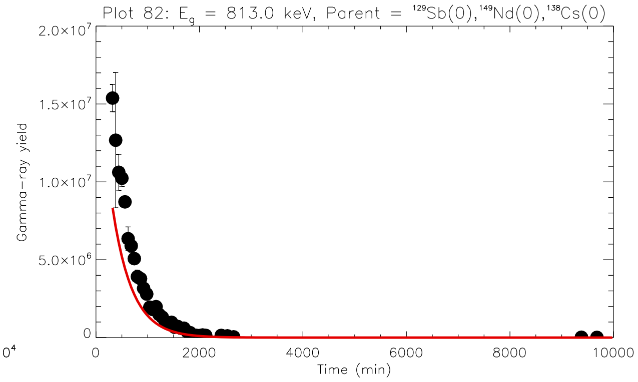

Plot 79: E_g = 288.4 keV, Parent = ^{135}I(0)
Gamma-ray yield
Time (min)


Plot 80: E_g = 355.6 keV, Parent = ^{97}Zr(0),^{133}Te(1)
Gamma-ray yield
Time (min)

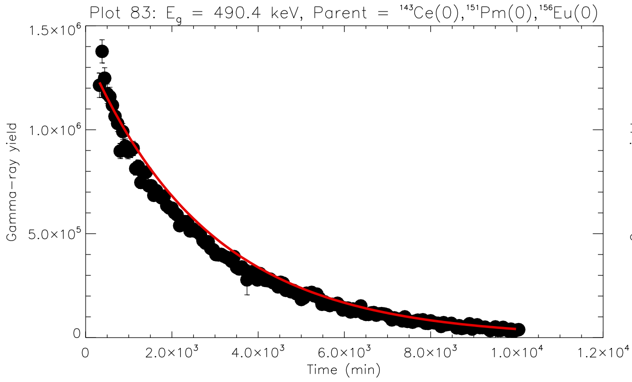
Plot 81: E_g = 162.7 keV, Parent = ^{140}Ba(0),^{135}I(0)



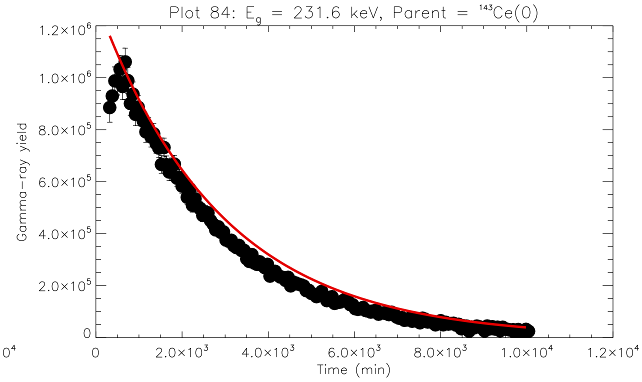
Plot 82: E_g = 813.0 keV, Parent = ^{129}Sb(0),^{149}Nd(0),^{138}Cs(0)



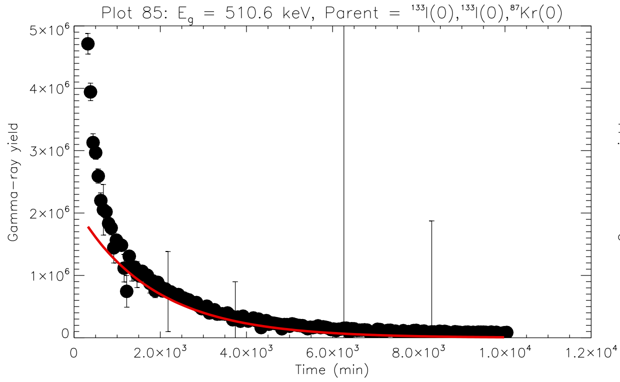
Plot 83: E_g = 490.4 keV, Parent = ^{143}Ce(0),^{151}Pm(0),^{156}Eu(0)



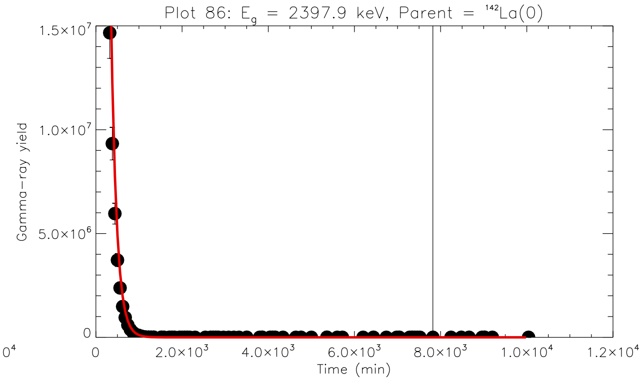
Plot 84: E_g = 231.6 keV, Parent = ^{143}Ce(0)



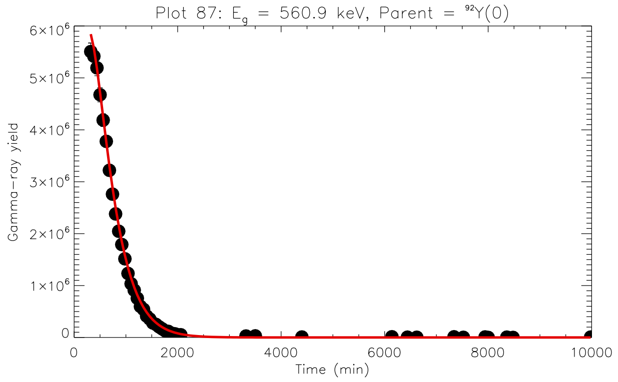
Plot 85: E_g = 510.6 keV, Parent = ^{133}I(0),^{133}I(0),^{87}Kr(0)



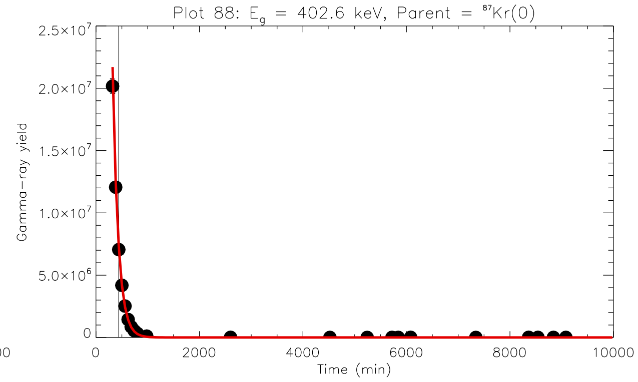
Plot 86: E_g = 2397.9 keV, Parent = ^{142}La(0)

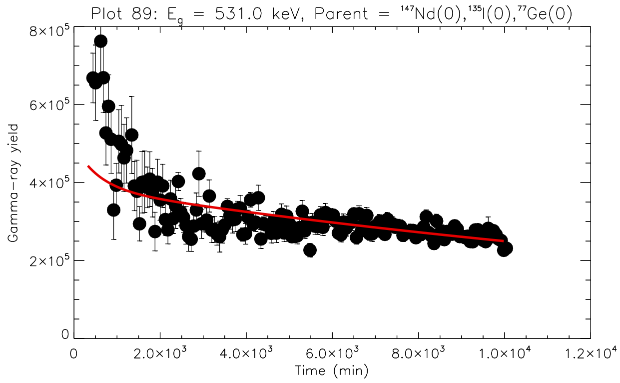


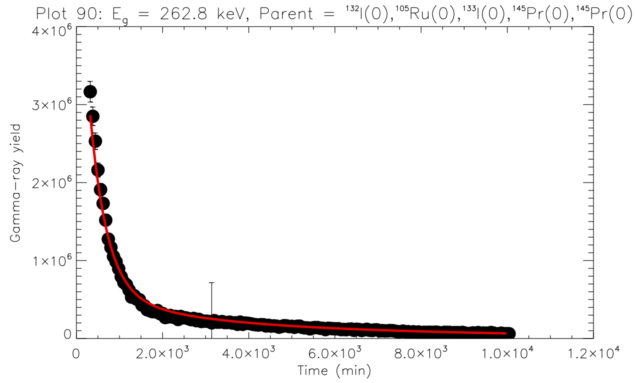
Plot 87: E_g = 560.9 keV, Parent = ^{92}Y(0)

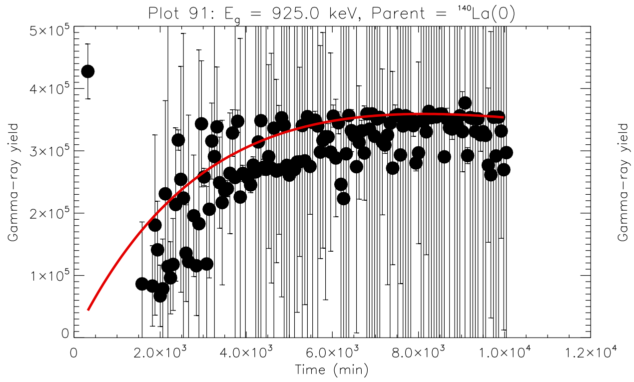


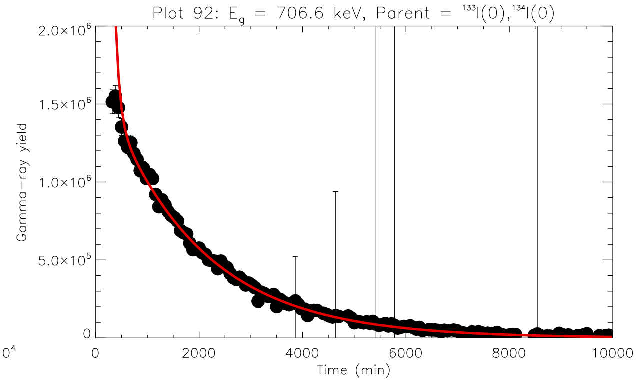
Plot 88: E_g = 402.6 keV, Parent = ^{87}Kr(0)

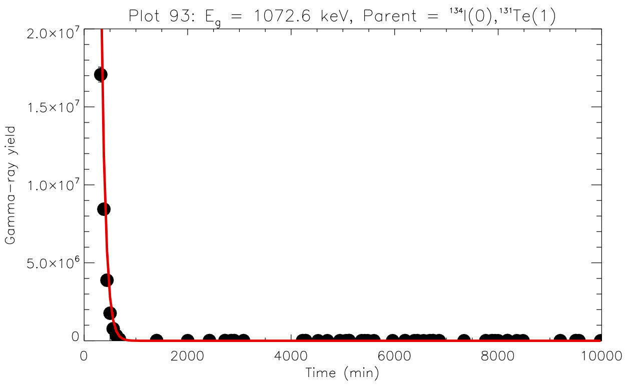


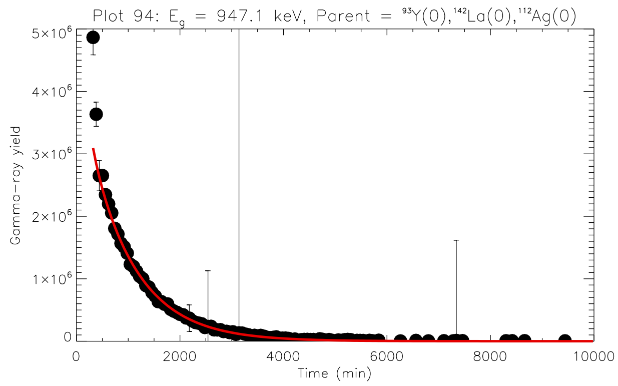

Plot 89: E_g = 531.0 keV, Parent = ^{147}Nd(0),^{135}I(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

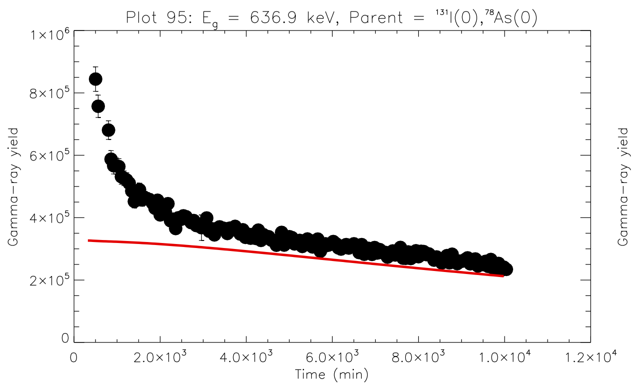

Plot 90: E_g = 262.8 keV, Parent = ^{132}I(0),^{105}Ru(0),^{133}I(0),^{145}Pr(0),^{145}Pr(0)
Gamma-ray yield
Time (min)

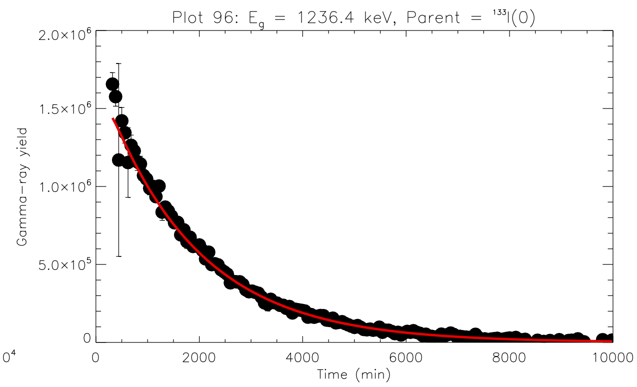

Plot 91: E_g = 925.0 keV, Parent = ^{140}La(0)
Gamma-ray yield
Time (min)


Plot 92: E_g = 706.6 keV, Parent = ^{133}I(0),^{134}I(0)
Gamma-ray yield
Time (min)

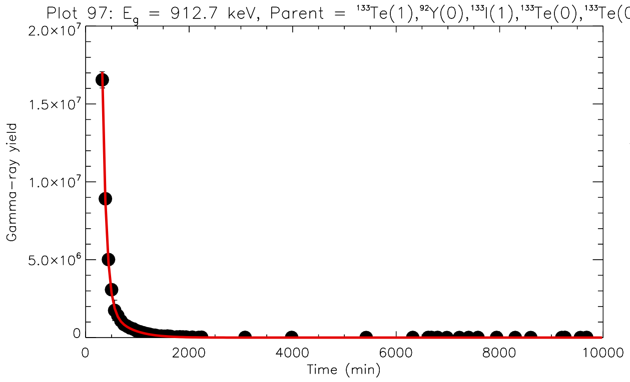

Plot 93: E_g = 1072.6 keV, Parent = ^{134}I(0),^{131}Te(1)
Gamma-ray yield
Time (min)


Plot 94: E_g = 947.1 keV, Parent = ^{93}Y(0),^{142}La(0),^{112}Ag(0)
Gamma-ray yield
Time (min)

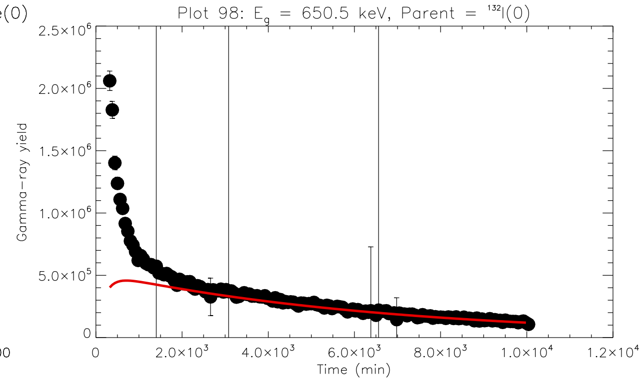

Plot 95: E_g = 636.9 keV, Parent = ^{131}I(0),^{78}As(0)
Gamma-ray yield
Time (min)


Plot 96: E_g = 1236.4 keV, Parent = ^{133}I(0)
Gamma-ray yield
Time (min)

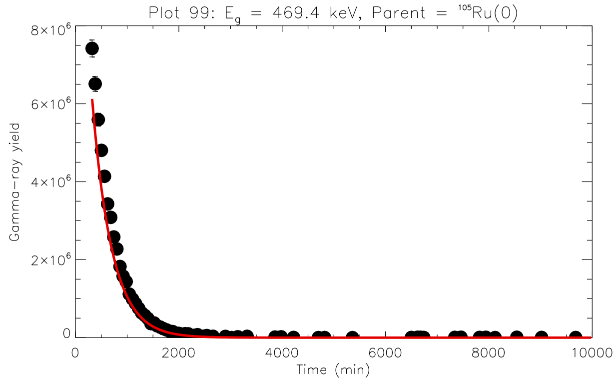
Plot 97: E_g = 912.7 keV, Parent = $^{133}Te(1)$,$^{92}Y(0)$,$^{133}I(1)$,$^{133}Te(0)$,$^{133}Te(0)$



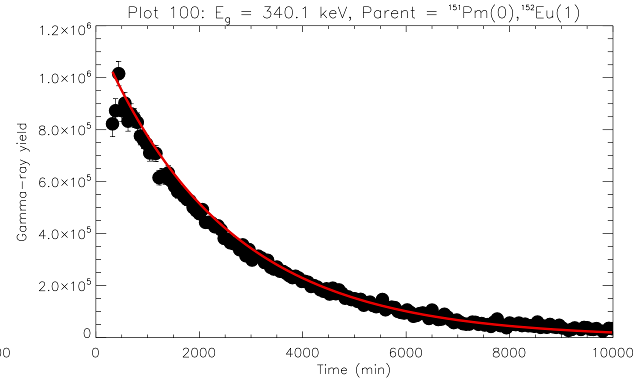
Plot 98: E_g = 650.5 keV, Parent = $^{132}I(0)$



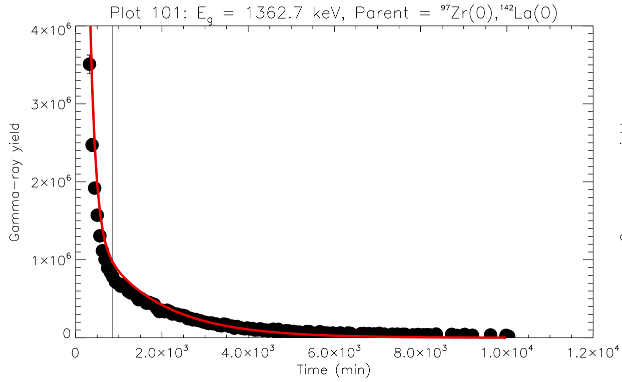
Plot 99: E_g = 469.4 keV, Parent = $^{105}Ru(0)$



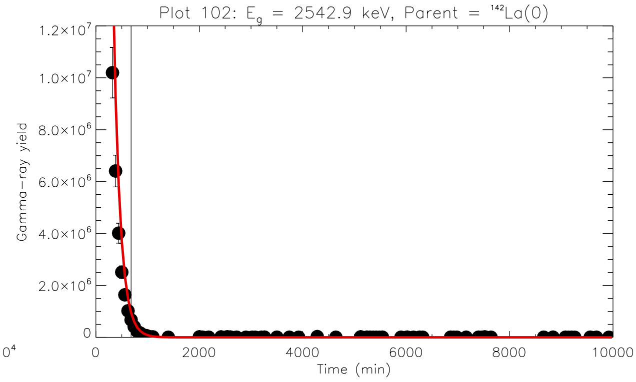
Plot 100: E_g = 340.1 keV, Parent = $^{151}Pm(0)$,$^{152}Eu(1)$



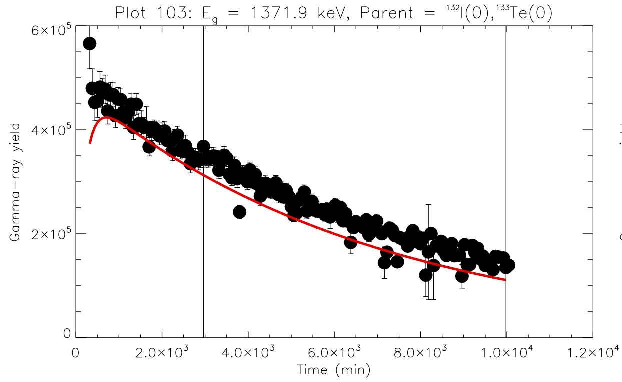
Plot 101: E_g = 1362.7 keV, Parent = $^{97}Zr(0)$,$^{142}La(0)$



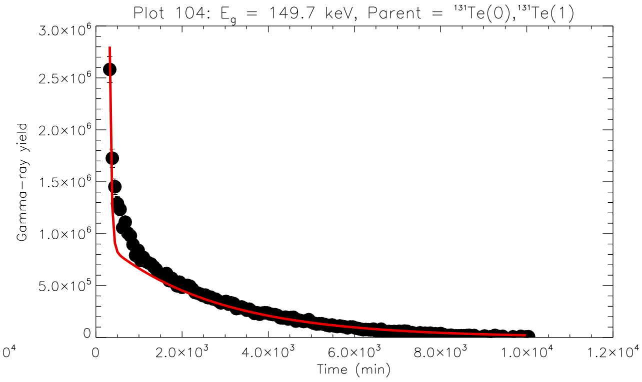
Plot 102: E_g = 2542.9 keV, Parent = $^{142}La(0)$

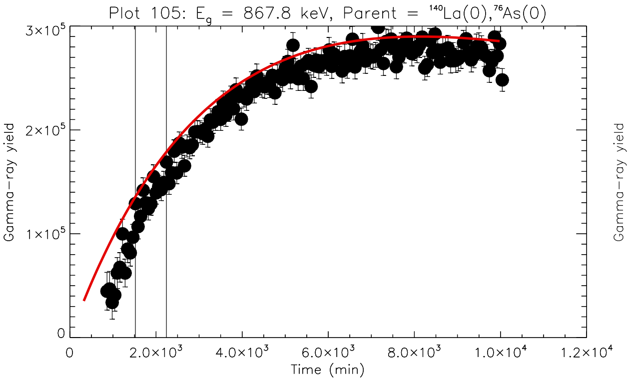


Plot 103: E_g = 1371.9 keV, Parent = $^{132}I(0)$,$^{133}Te(0)$

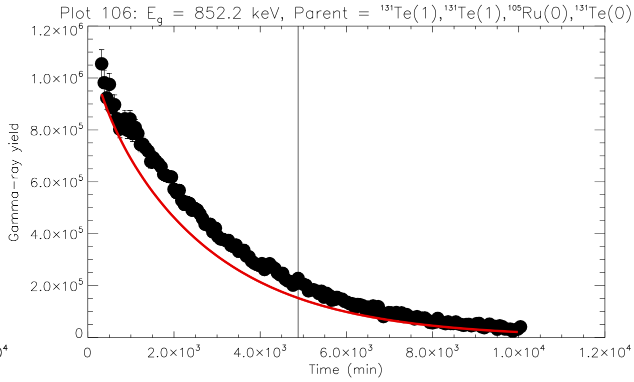


Plot 104: E_g = 149.7 keV, Parent = $^{131}Te(0)$,$^{131}Te(1)$

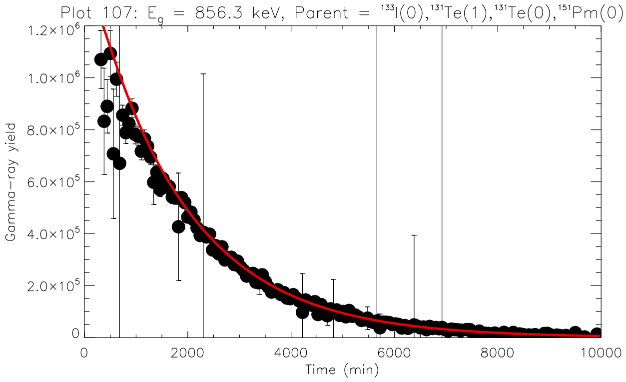




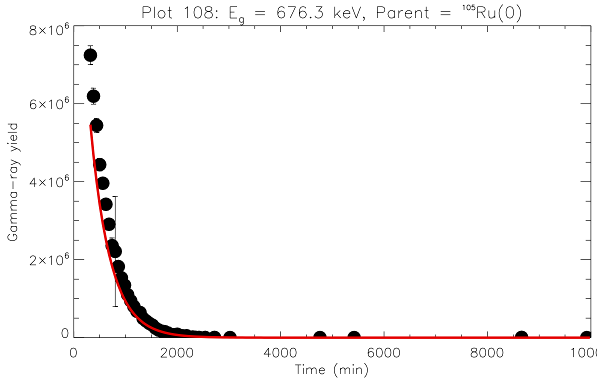
Plot 105: E_g = 867.8 keV, Parent = ^{140}La(0),^{76}As(0)



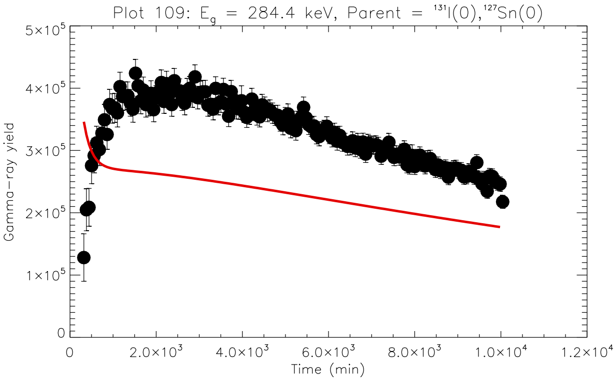
Plot 106: E_g = 852.2 keV, Parent = ^{131}Te(1),^{131}Te(1),^{105}Ru(0),^{131}Te(0)



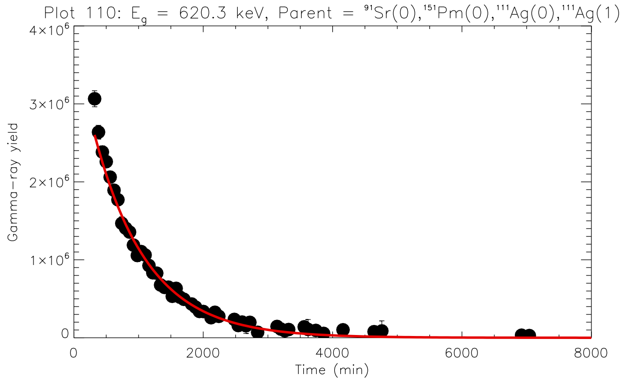
Plot 107: E_g = 856.3 keV, Parent = ^{133}I(0),^{131}Te(1),^{131}Te(0),^{151}Pm(0)



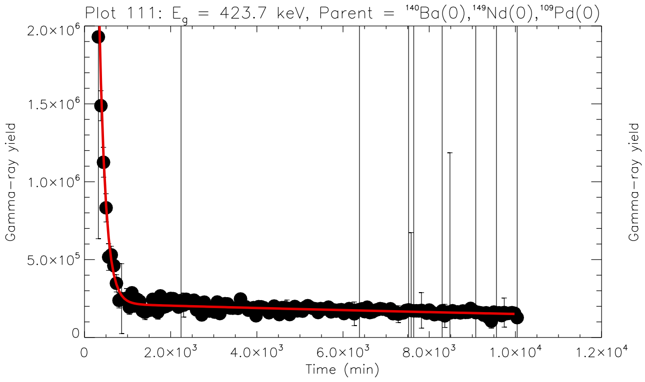
Plot 108: E_g = 676.3 keV, Parent = ^{105}Ru(0)



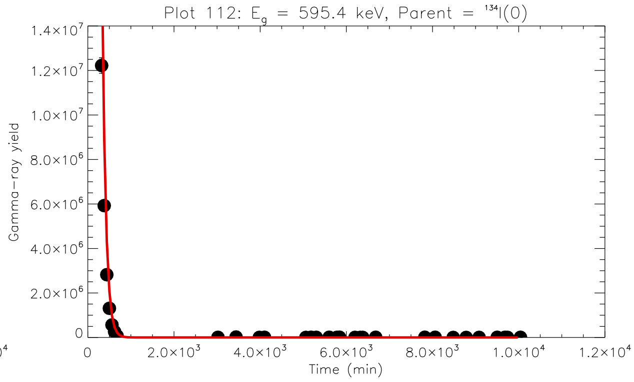
Plot 109: E_g = 284.4 keV, Parent = ^{131}I(0),^{127}Sn(0)



Plot 110: E_g = 620.3 keV, Parent = ^{91}Sr(0),^{151}Pm(0),^{111}Ag(0),^{111}Ag(1)

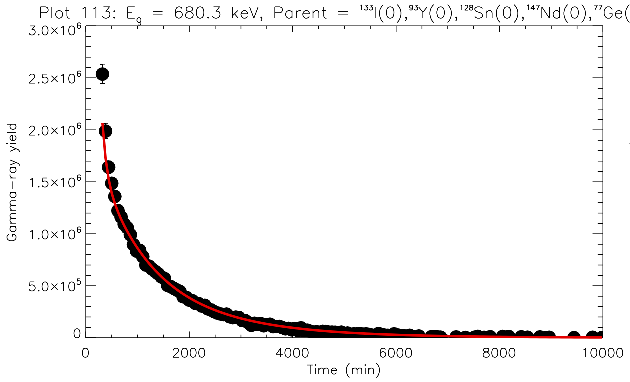


Plot 111: E_g = 423.7 keV, Parent = ^{140}Ba(0),^{149}Nd(0),^{109}Pd(0)

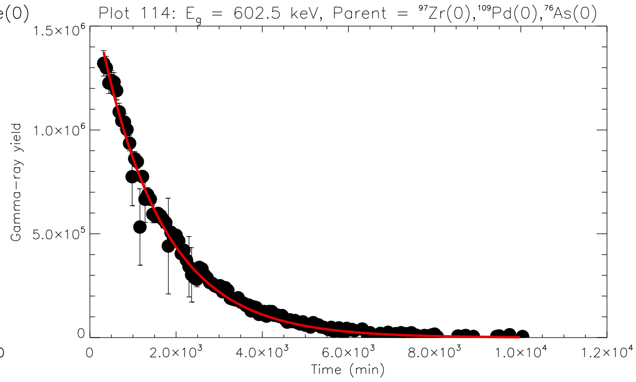


Plot 112: E_g = 595.4 keV, Parent = ^{134}I(0)

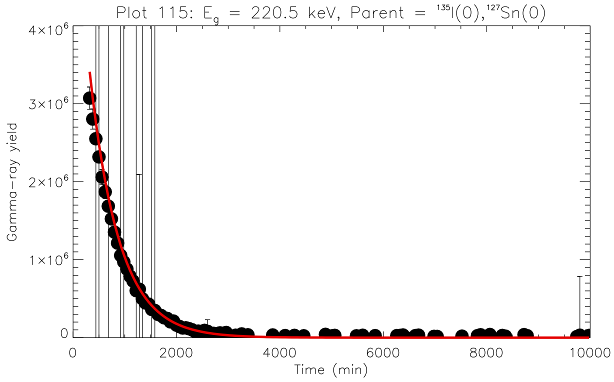
Plot 113: E_g = 680.3 keV, Parent = ^{133}I(0),^{93}Y(0),^{128}Sn(0),^{147}Nd(0),^{77}Ge(0)



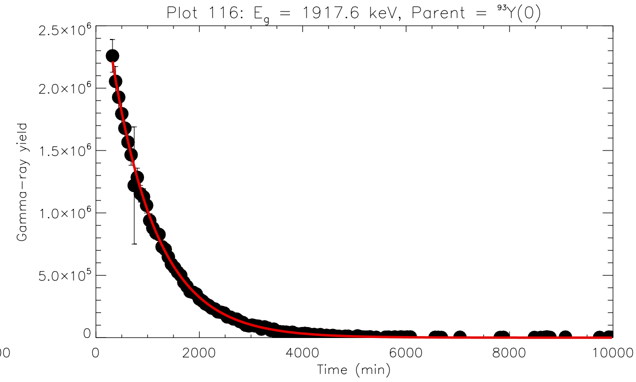
Plot 114: E_g = 602.5 keV, Parent = ^{97}Zr(0),^{109}Pd(0),^{76}As(0)



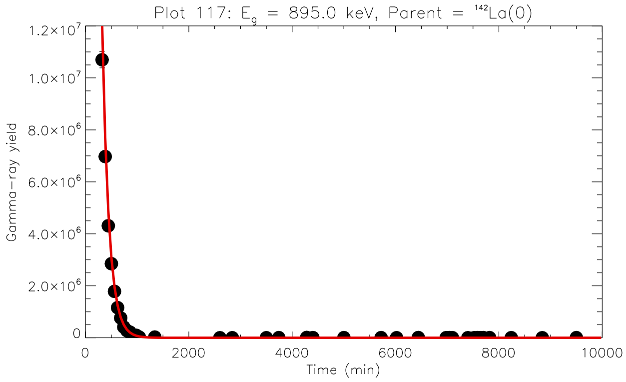
Plot 115: E_g = 220.5 keV, Parent = ^{135}I(0),^{127}Sn(0)



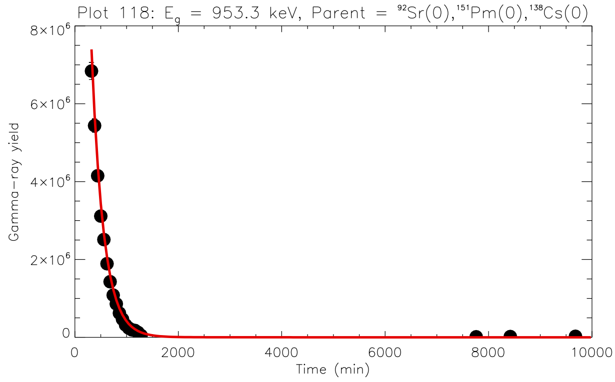
Plot 116: E_g = 1917.6 keV, Parent = ^{93}Y(0)



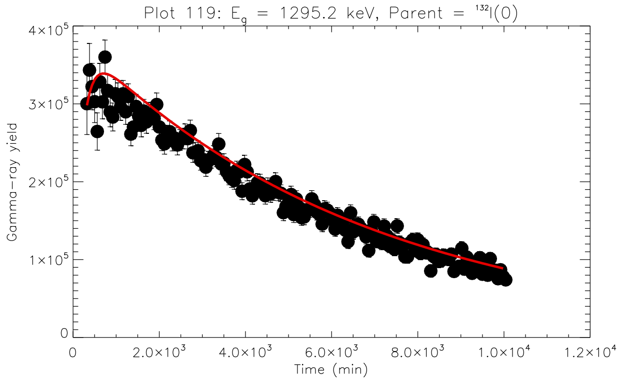
Plot 117: E_g = 895.0 keV, Parent = ^{142}La(0)



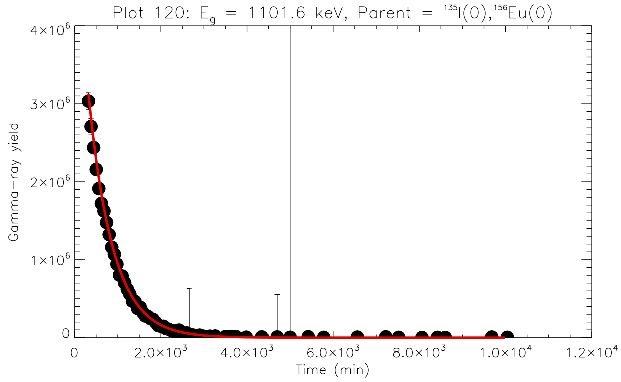
Plot 118: E_g = 953.3 keV, Parent = ^{92}Sr(0),^{151}Pm(0),^{138}Cs(0)



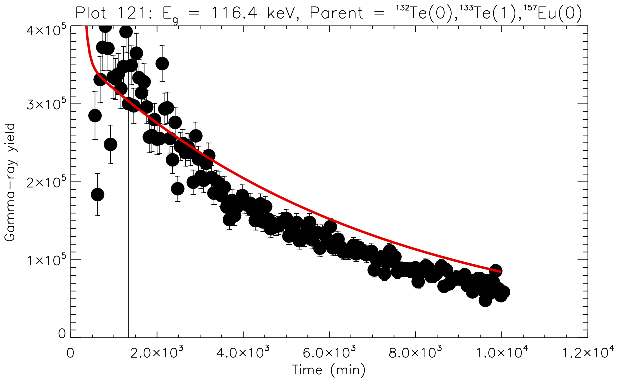
Plot 119: E_g = 1295.2 keV, Parent = ^{132}I(0)



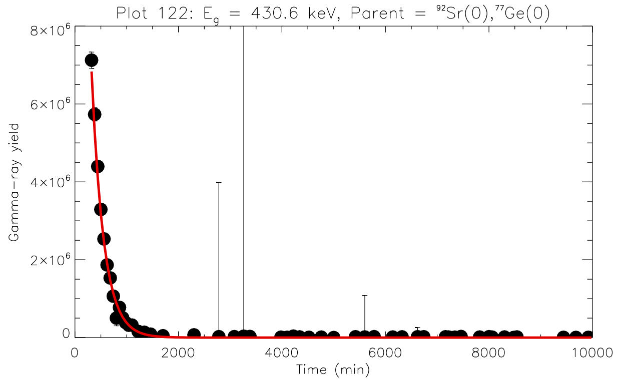
Plot 120: E_g = 1101.6 keV, Parent = ^{135}I(0),^{156}Eu(0)



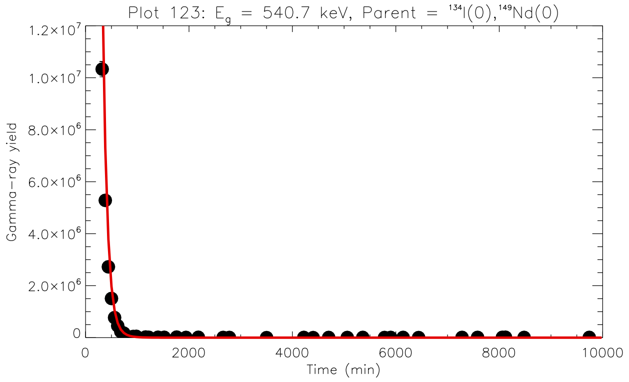
Plot 121: E_g = 116.4 keV, Parent = ^{132}Te(0),^{133}Te(1),^{157}Eu(0)



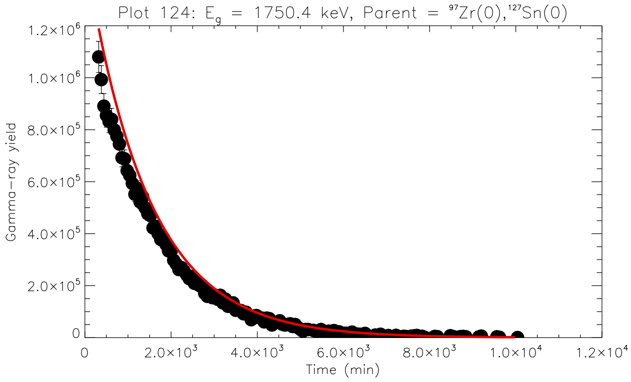
Plot 122: E_g = 430.6 keV, Parent = ^{92}Sr(0),^{77}Ge(0)



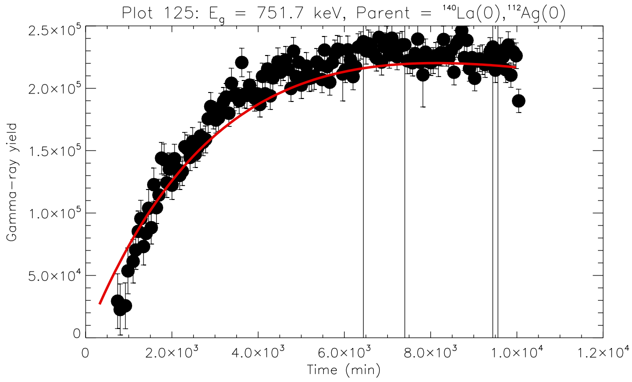
Plot 123: E_g = 540.7 keV, Parent = ^{134}I(0),^{149}Nd(0)



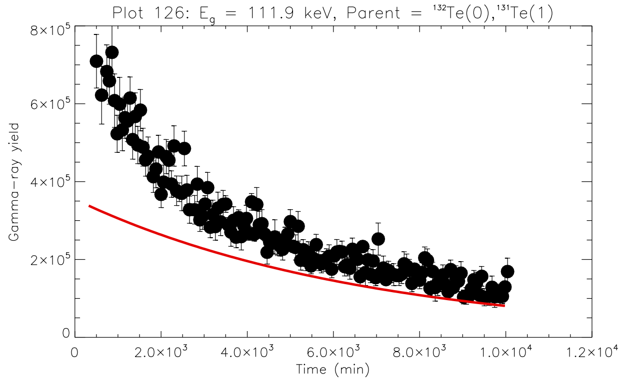
Plot 124: E_g = 1750.4 keV, Parent = ^{97}Zr(0),^{127}Sn(0)



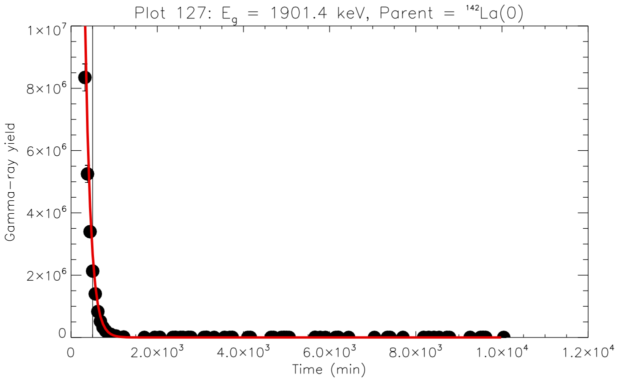
Plot 125: E_g = 751.7 keV, Parent = ^{140}La(0),^{112}Ag(0)



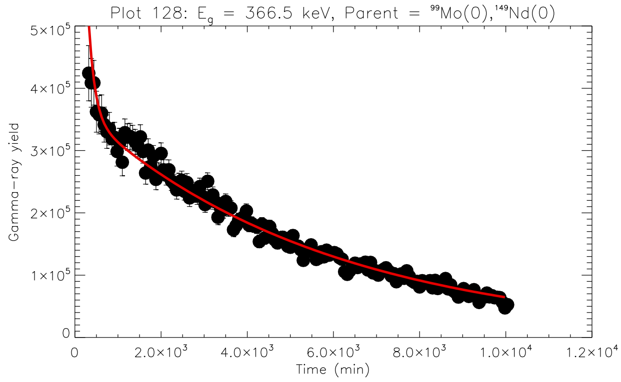
Plot 126: E_g = 111.9 keV, Parent = ^{132}Te(0),^{131}Te(1)

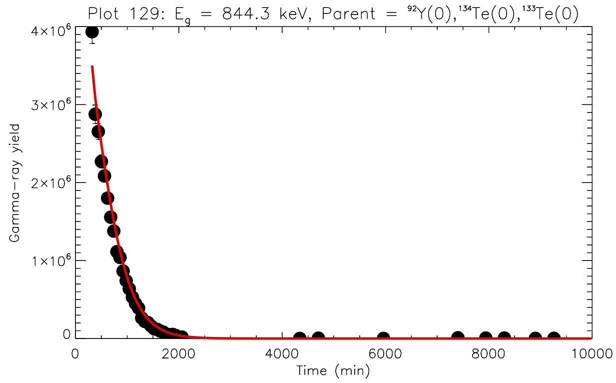


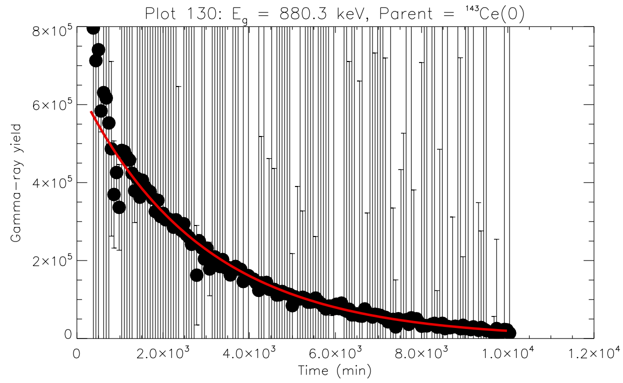
Plot 127: E_g = 1901.4 keV, Parent = ^{142}La(0)

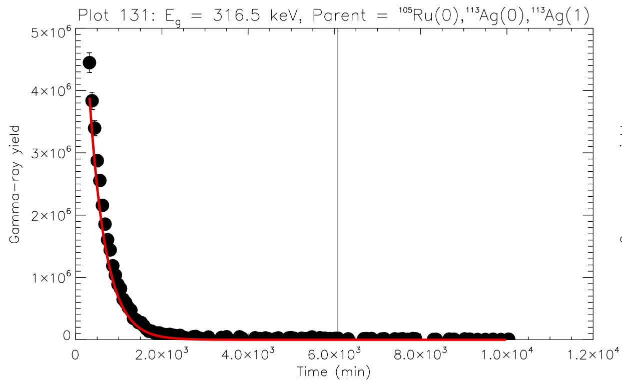


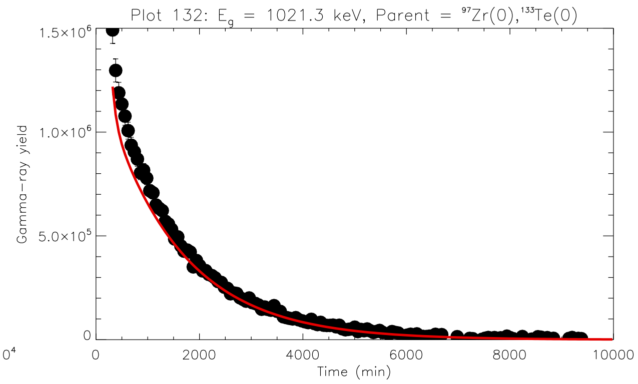
Plot 128: E_g = 366.5 keV, Parent = ^{99}Mo(0),^{149}Nd(0)

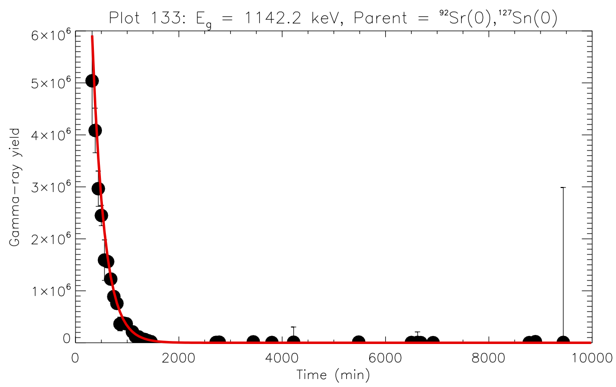


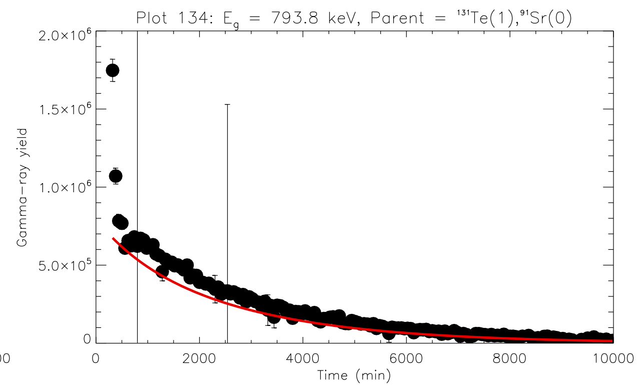

Plot 129: E_g = 844.3 keV, Parent = ^{92}Y(0),^{134}Te(0),^{133}Te(0)
Gamma−ray yield
Time (min)

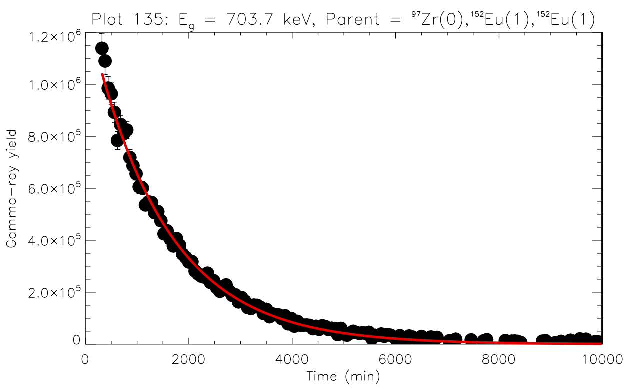

Plot 130: E_g = 880.3 keV, Parent = ^{143}Ce(0)
Gamma−ray yield
Time (min)

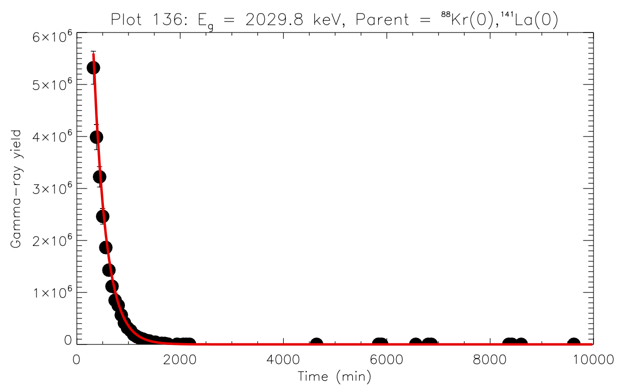

Plot 131: E_g = 316.5 keV, Parent = ^{105}Ru(0),^{113}Ag(0),^{113}Ag(1)
Gamma−ray yield
Time (min)


Plot 132: E_g = 1021.3 keV, Parent = ^{97}Zr(0),^{133}Te(0)
Gamma−ray yield
Time (min)

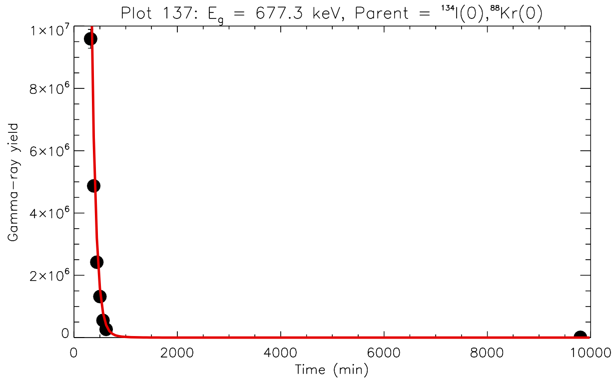

Plot 133: E_g = 1142.2 keV, Parent = ^{92}Sr(0),^{127}Sn(0)
Gamma−ray yield
Time (min)


Plot 134: E_g = 793.8 keV, Parent = ^{131}Te(1),^{91}Sr(0)
Gamma−ray yield
Time (min)

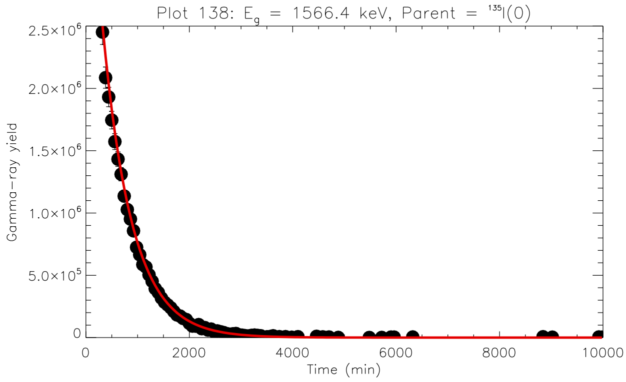

Plot 135: E_g = 703.7 keV, Parent = ^{97}Zr(0),^{152}Eu(1),^{152}Eu(1)
Gamma−ray yield
Time (min)


Plot 136: E_g = 2029.8 keV, Parent = ^{88}Kr(0),^{141}La(0)
Gamma−ray yield
Time (min)

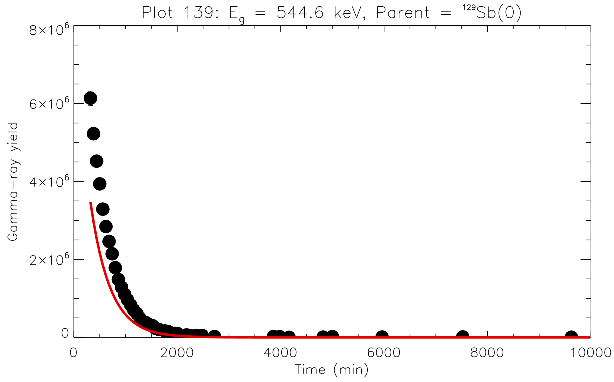
Plot 137: E_g = 677.3 keV, Parent = ^{134}I(0),^{88}Kr(0)



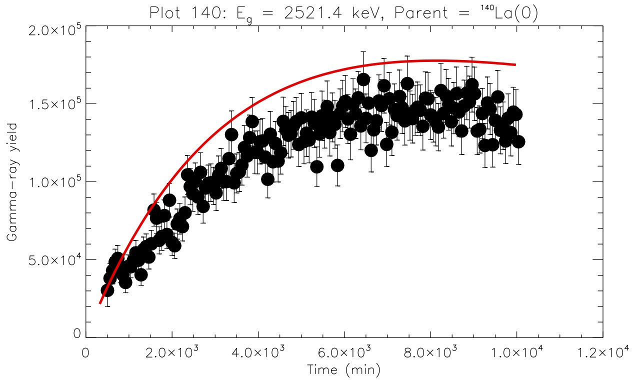
Plot 138: E_g = 1566.4 keV, Parent = ^{135}I(0)



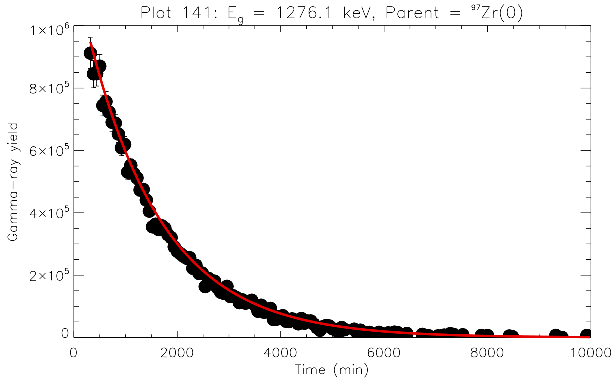
Plot 139: E_g = 544.6 keV, Parent = ^{129}Sb(0)



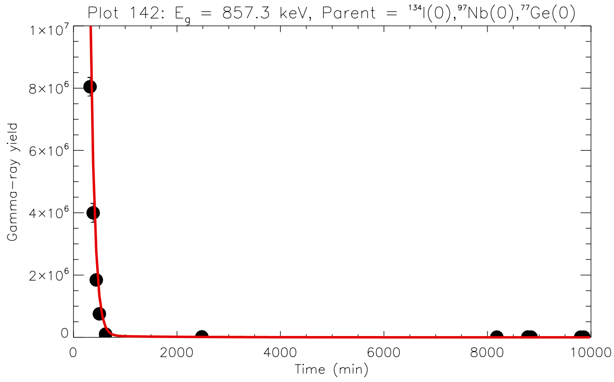
Plot 140: E_g = 2521.4 keV, Parent = ^{140}La(0)



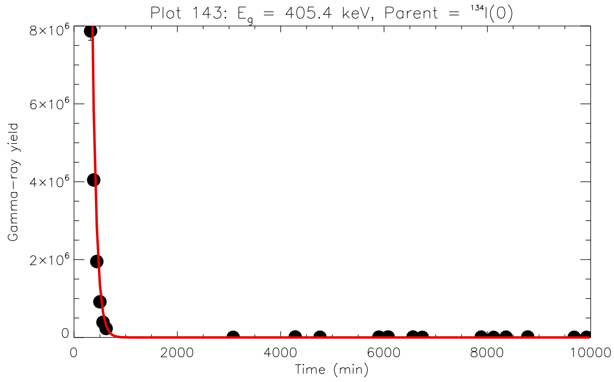
Plot 141: E_g = 1276.1 keV, Parent = ^{97}Zr(0)



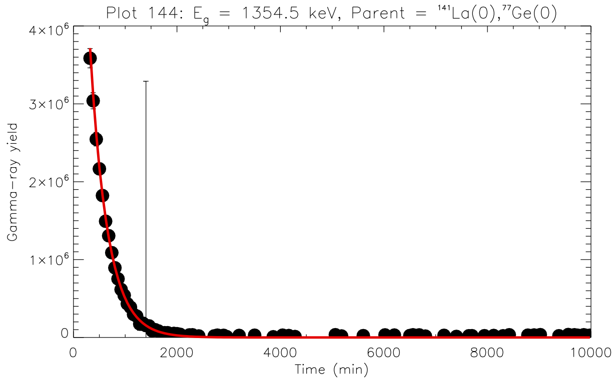
Plot 142: E_g = 857.3 keV, Parent = ^{134}I(0),^{97}Nb(0),^{77}Ge(0)

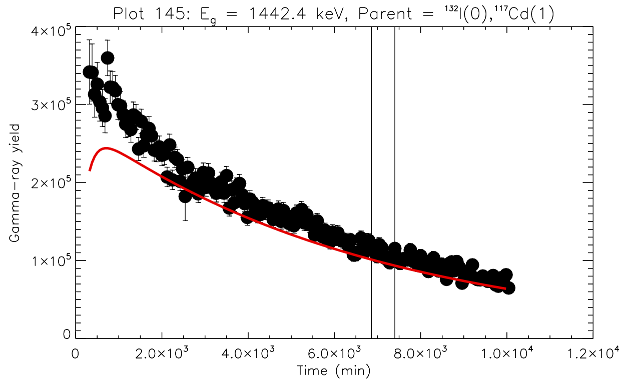


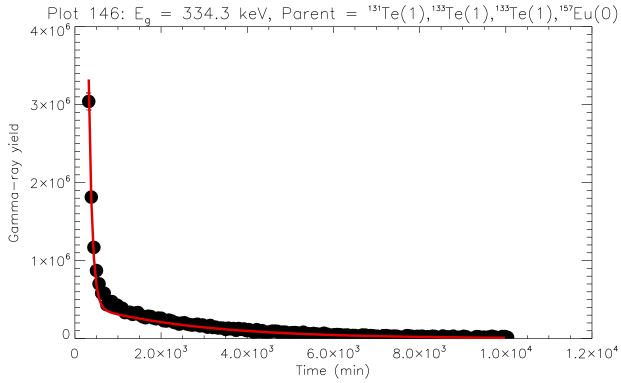
Plot 143: E_g = 405.4 keV, Parent = ^{134}I(0)

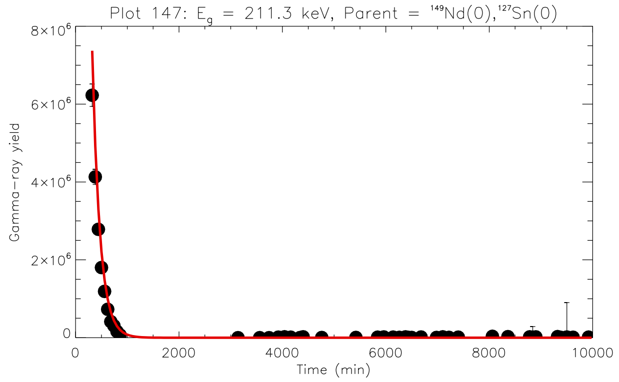


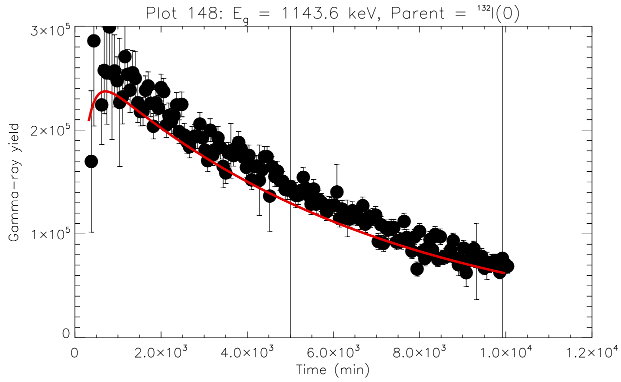
Plot 144: E_g = 1354.5 keV, Parent = ^{141}La(0),^{77}Ge(0)

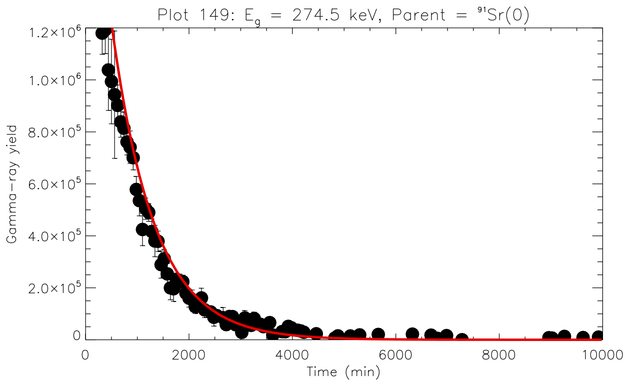


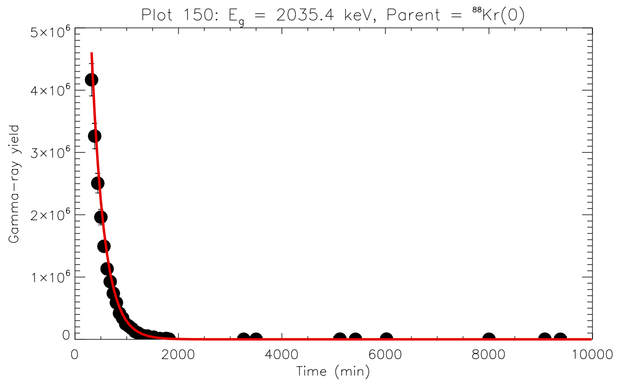

Plot 145: E_g = 1442.4 keV, Parent = ^{132}I(0),^{117}Cd(1)
Gamma-ray yield
Time (min)

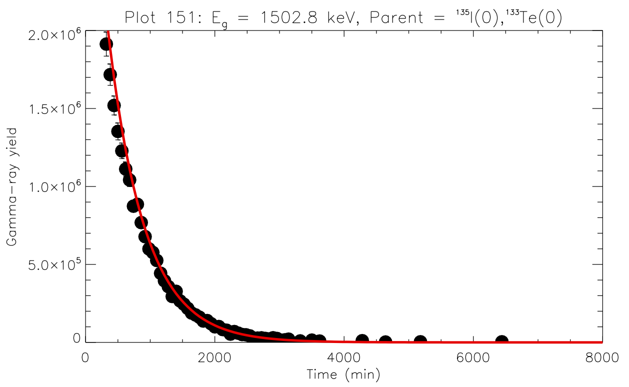

Plot 146: E_g = 334.3 keV, Parent = ^{131}Te(1),^{133}Te(1),^{133}Te(1),^{157}Eu(0)
Gamma-ray yield
Time (min)

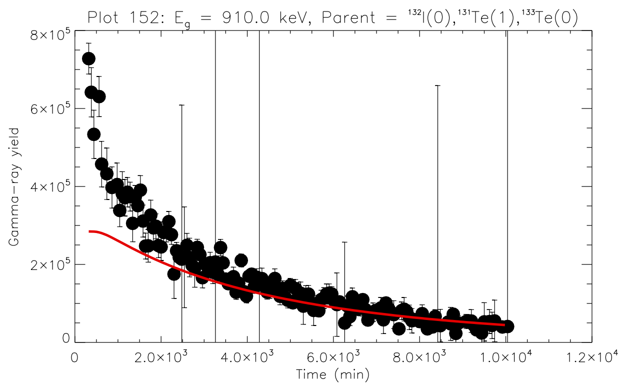

Plot 147: E_g = 211.3 keV, Parent = ^{149}Nd(0),^{127}Sn(0)
Gamma-ray yield
Time (min)

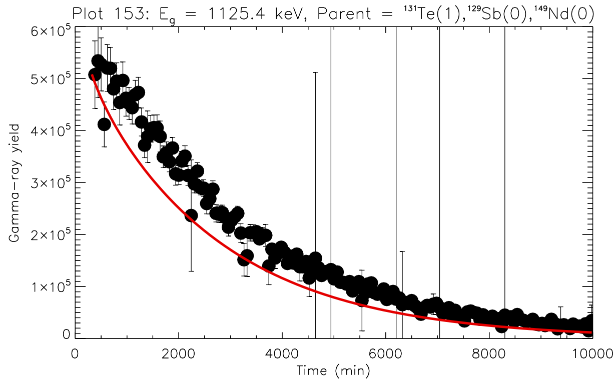

Plot 148: E_g = 1143.6 keV, Parent = ^{132}I(0)
Gamma-ray yield
Time (min)

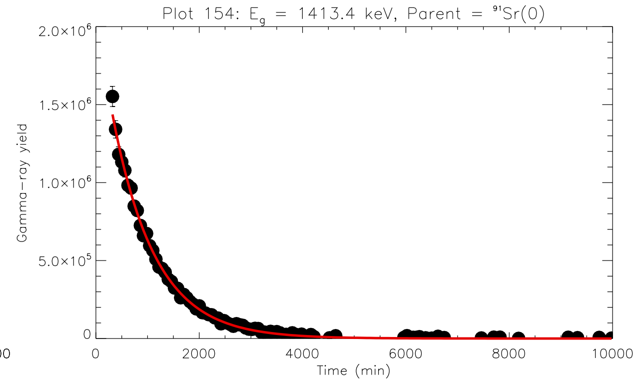

Plot 149: E_g = 274.5 keV, Parent = ^{91}Sr(0)
Gamma-ray yield
Time (min)

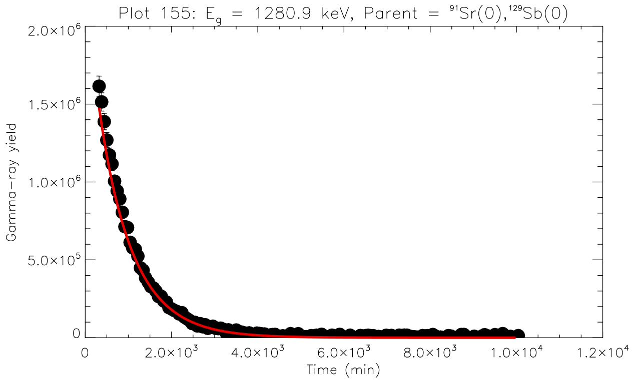

Plot 150: E_g = 2035.4 keV, Parent = ^{88}Kr(0)
Gamma-ray yield
Time (min)

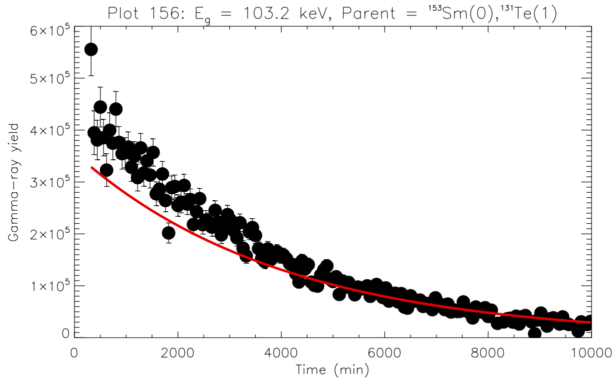

Plot 151: E_g = 1502.8 keV, Parent = ^{135}I(0),^{133}Te(0)
Gamma-ray yield
Time (min)

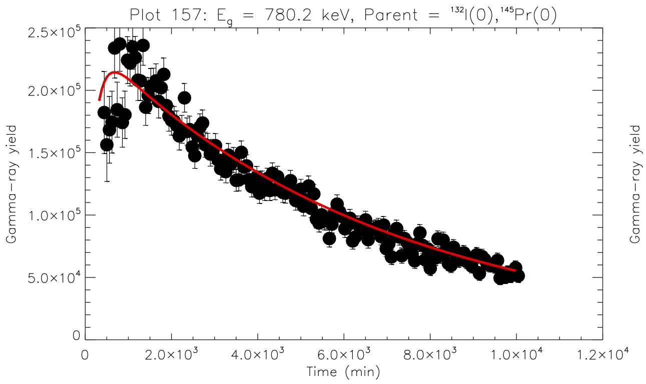

Plot 152: E_g = 910.0 keV, Parent = ^{132}I(0),^{131}Te(1),^{133}Te(0)
Gamma-ray yield
Time (min)

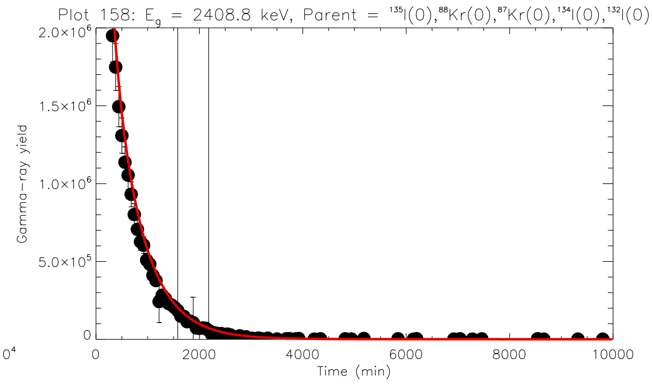

Plot 153: E_g = 1125.4 keV, Parent = ^{131}Te(1),^{129}Sb(0),^{149}Nd(0)
Gamma-ray yield
Time (min)

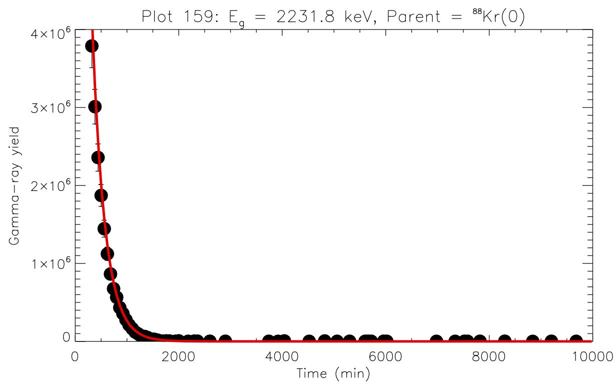

Plot 154: E_g = 1413.4 keV, Parent = ^{91}Sr(0)
Gamma-ray yield
Time (min)

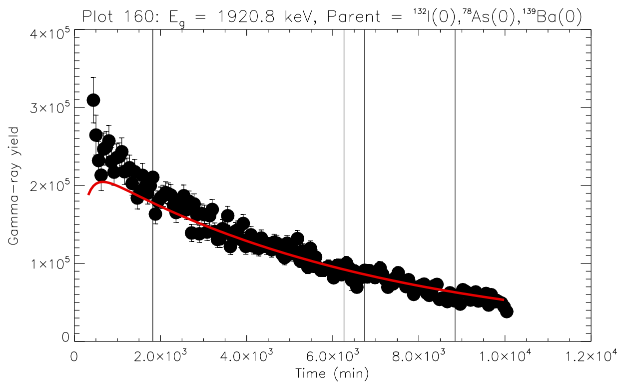

Plot 155: E_g = 1280.9 keV, Parent = ^{91}Sr(0),^{129}Sb(0)
Gamma-ray yield
Time (min)

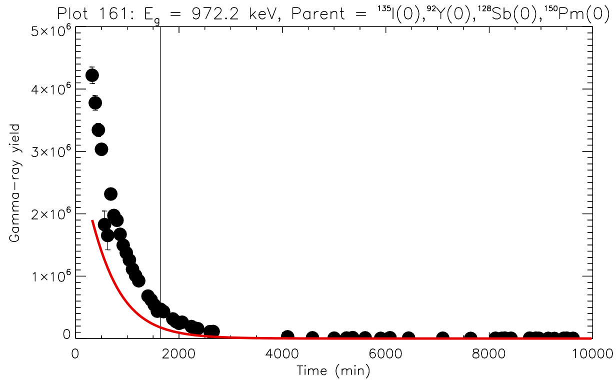

Plot 156: E_g = 103.2 keV, Parent = ^{153}Sm(0),^{131}Te(1)
Gamma-ray yield
Time (min)

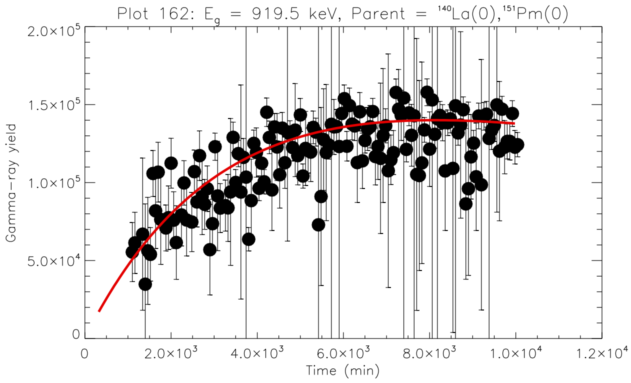

Plot 157: E_g = 780.2 keV, Parent = ^{132}I(0),^{145}Pr(0)
Gamma-ray yield
Time (min)

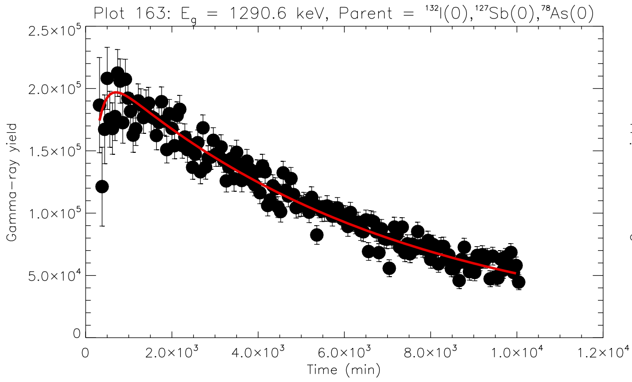

Plot 158: E_g = 2408.8 keV, Parent = ^{135}I(0),^{88}Kr(0),^{87}Kr(0),^{134}I(0),^{132}I(0)
Gamma-ray yield
Time (min)

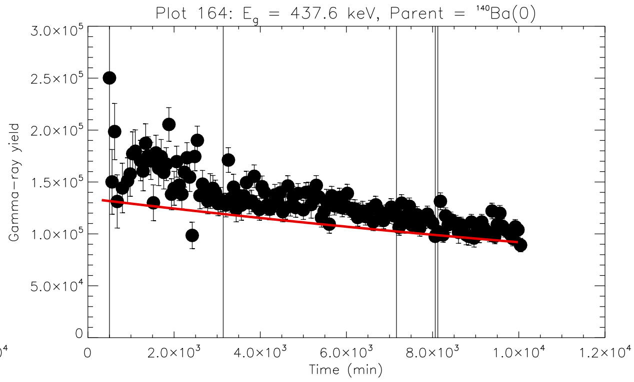

Plot 159: E_g = 2231.8 keV, Parent = ^{88}Kr(0)
Gamma-ray yield
Time (min)

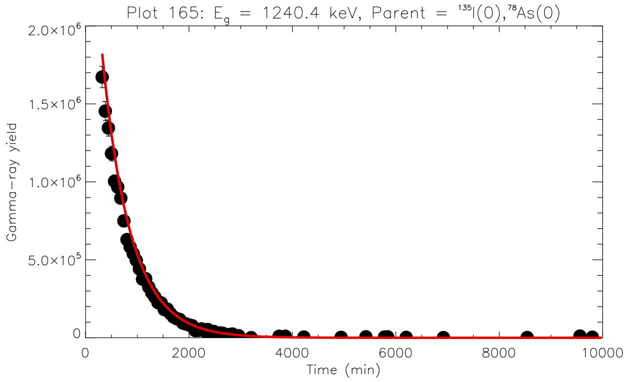

Plot 160: E_g = 1920.8 keV, Parent = ^{132}I(0),^{78}As(0),^{139}Ba(0)
Gamma-ray yield
Time (min)

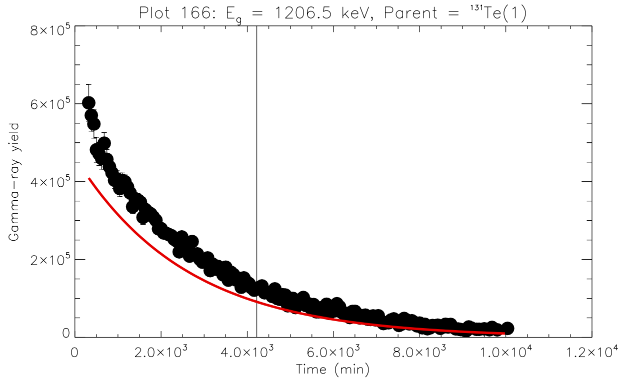

Plot 161: E_g = 972.2 keV, Parent = 135I(0),92Y(0),128Sb(0),150Pm(0)
Gamma-ray yield
Time (min)

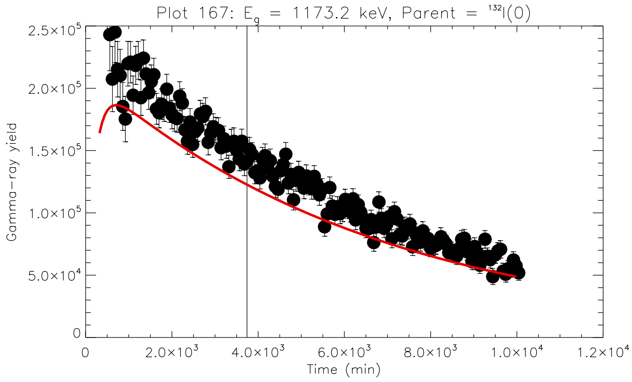

Plot 162: E_g = 919.5 keV, Parent = 140La(0),151Pm(0)
Gamma-ray yield
Time (min)

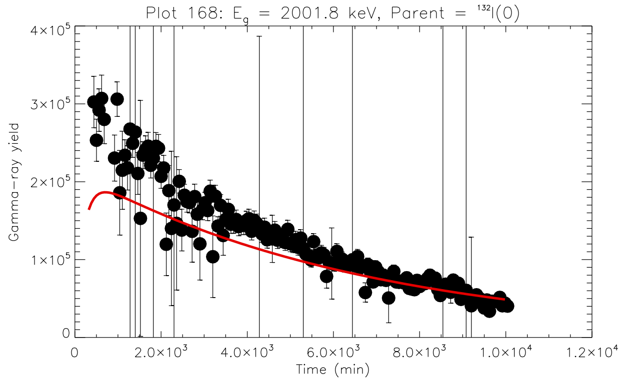

Plot 163: E_g = 1290.6 keV, Parent = 132I(0),127Sb(0),78As(0)
Gamma-ray yield
Time (min)

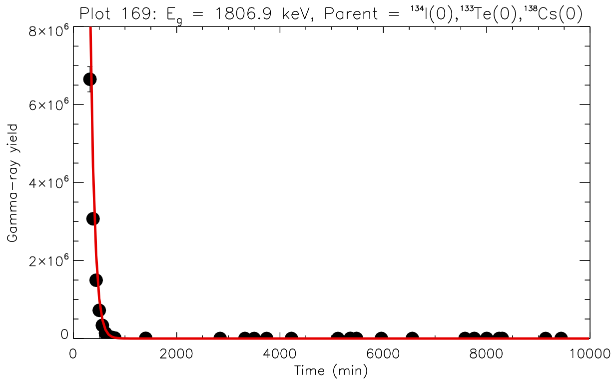

Plot 164: E_g = 437.6 keV, Parent = 140Ba(0)
Gamma-ray yield
Time (min)

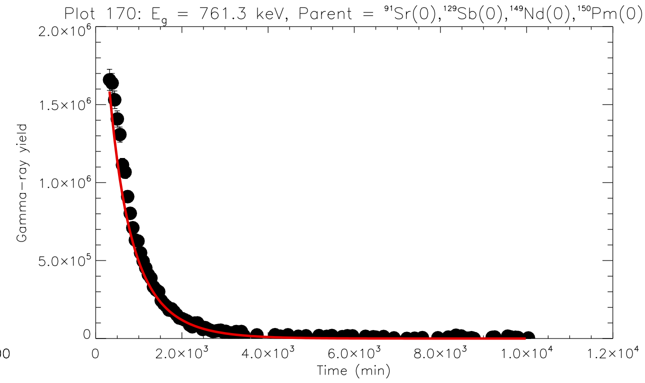

Plot 165: E_g = 1240.4 keV, Parent = 135I(0),78As(0)
Gamma-ray yield
Time (min)

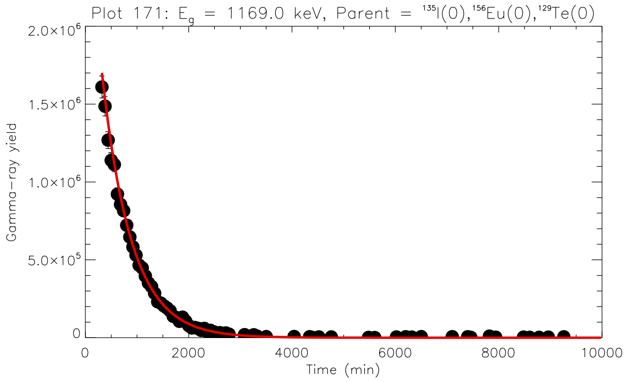

Plot 166: E_g = 1206.5 keV, Parent = 131Te(1)
Gamma-ray yield
Time (min)

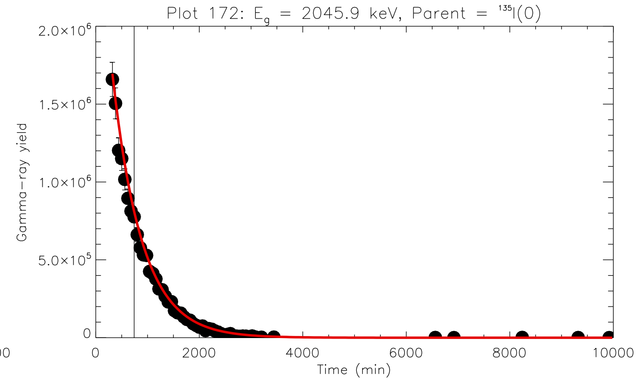

Plot 167: E_g = 1173.2 keV, Parent = 132I(0)
Gamma-ray yield
Time (min)

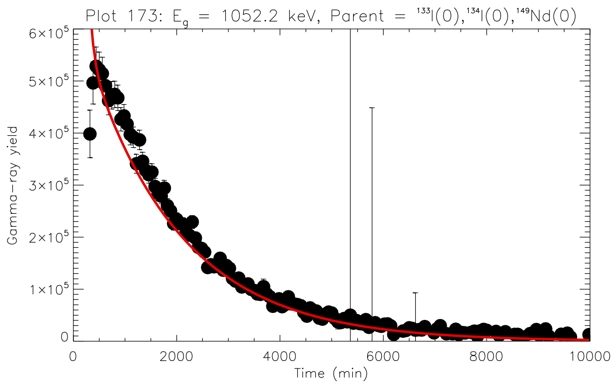

Plot 168: E_g = 2001.8 keV, Parent = 132I(0)
Gamma-ray yield
Time (min)

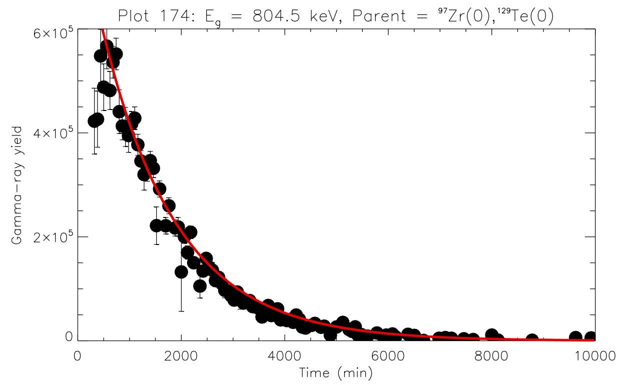

Plot 169: E_g = 1806.9 keV, Parent = ^{134}I(0),^{133}Te(0),^{138}Cs(0)
Gamma-ray yield
Time (min)

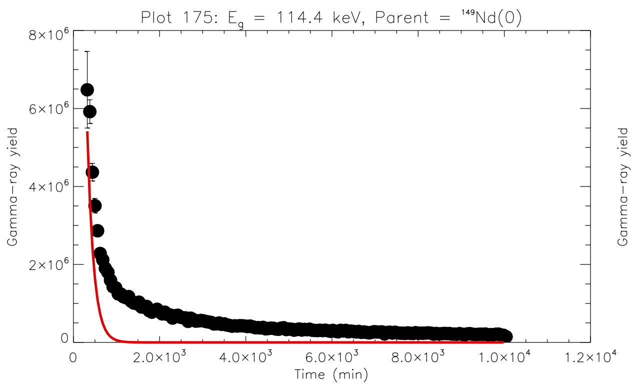

Plot 170: E_g = 761.3 keV, Parent = ^{91}Sr(0),^{129}Sb(0),^{149}Nd(0),^{150}Pm(0)
Gamma-ray yield
Time (min)

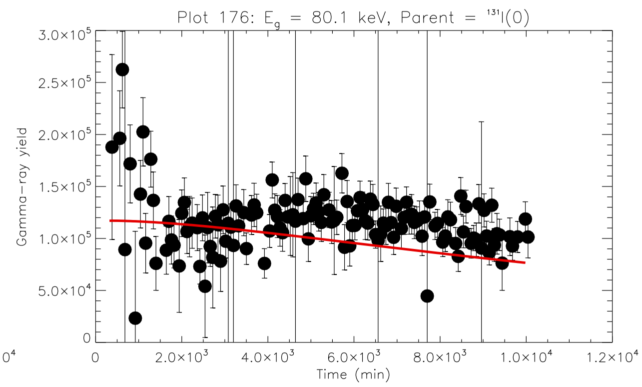

Plot 171: E_g = 1169.0 keV, Parent = ^{135}I(0),^{156}Eu(0),^{129}Te(0)
Gamma-ray yield
Time (min)


Plot 172: E_g = 2045.9 keV, Parent = ^{135}I(0)
Gamma-ray yield
Time (min)

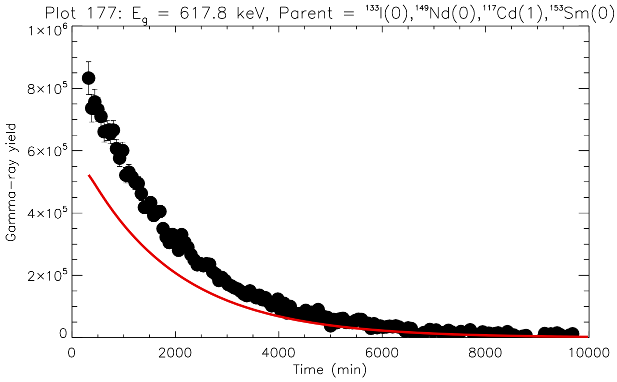

Plot 173: E_g = 1052.2 keV, Parent = ^{133}I(0),^{134}I(0),^{149}Nd(0)
Gamma-ray yield
Time (min)


Plot 174: E_g = 804.5 keV, Parent = ^{97}Zr(0),^{129}Te(0)
Gamma-ray yield
Time (min)

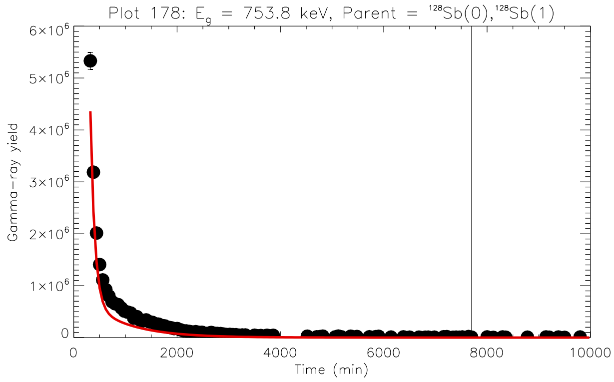

Plot 175: E_g = 114.4 keV, Parent = ^{149}Nd(0)
Gamma-ray yield
Time (min)


Plot 176: E_g = 80.1 keV, Parent = ^{131}I(0)
Gamma-ray yield
Time (min)

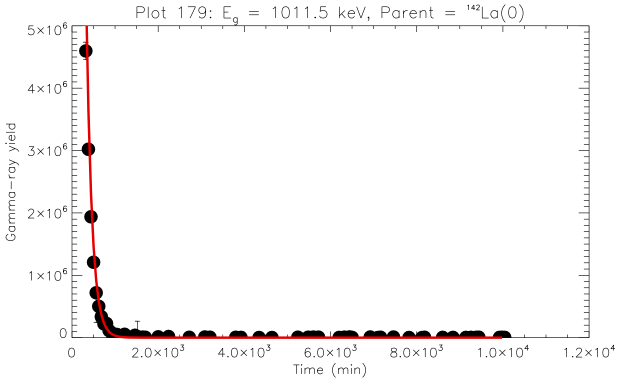
Plot 177: E_g = 617.8 keV, Parent = ^{133}I(0),^{149}Nd(0),^{117}Cd(1),^{153}Sm(0)



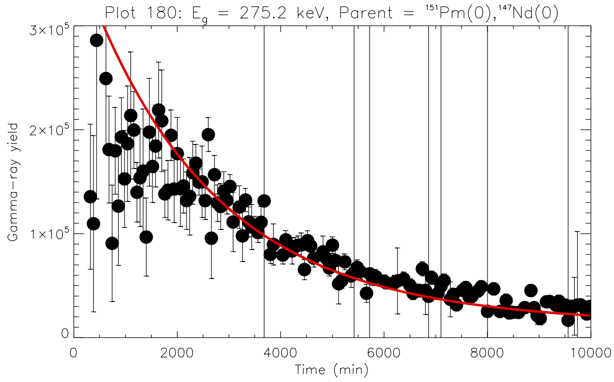
Plot 178: E_g = 753.8 keV, Parent = ^{128}Sb(0),^{128}Sb(1)



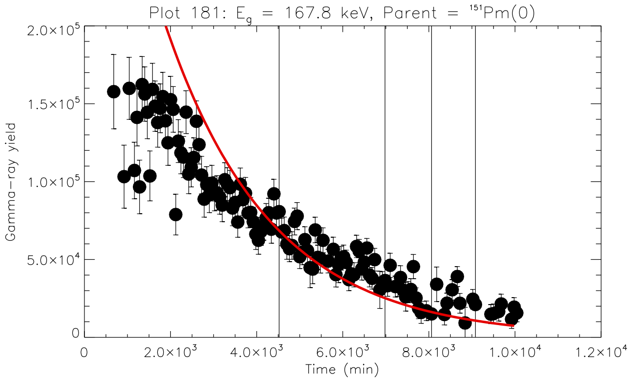
Plot 179: E_g = 1011.5 keV, Parent = ^{142}La(0)



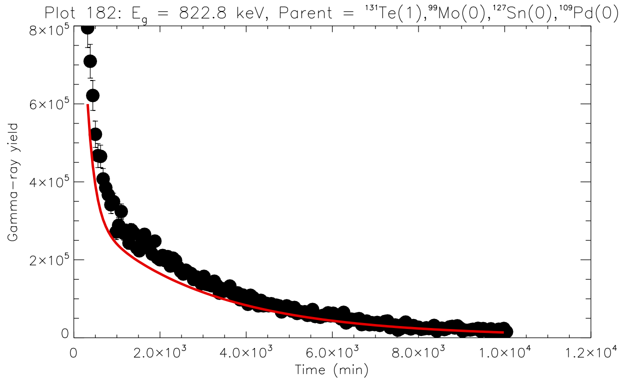
Plot 180: E_g = 275.2 keV, Parent = ^{151}Pm(0),^{147}Nd(0)



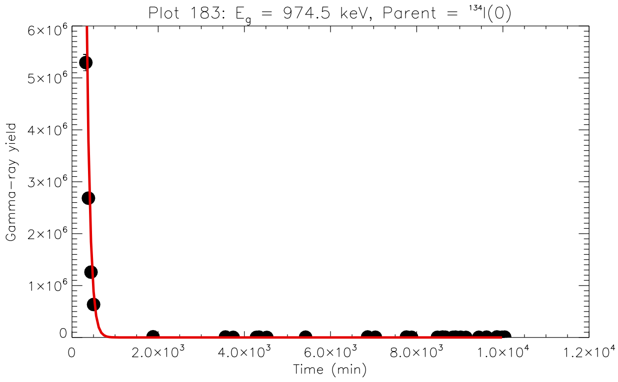
Plot 181: E_g = 167.8 keV, Parent = ^{151}Pm(0)



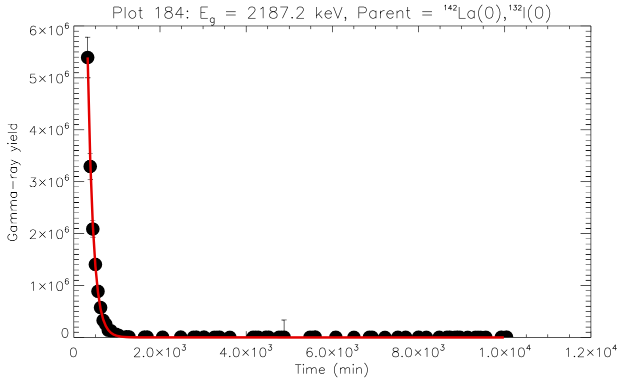
Plot 182: E_g = 822.8 keV, Parent = ^{131}Te(1),^{99}Mo(0),^{127}Sn(0),^{109}Pd(0)



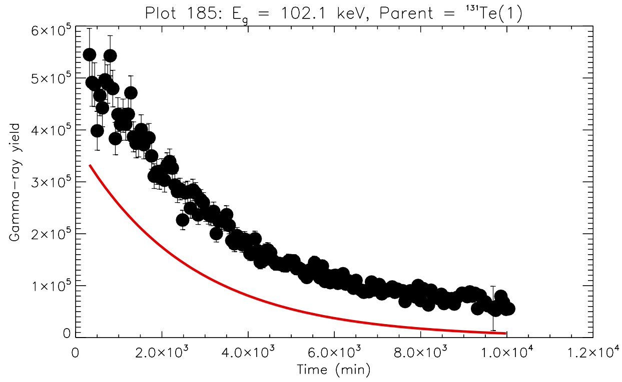
Plot 183: E_g = 974.5 keV, Parent = ^{134}I(0)



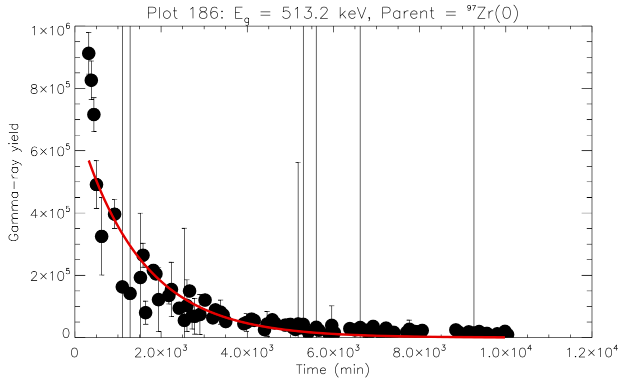
Plot 184: E_g = 2187.2 keV, Parent = ^{142}La(0),^{132}I(0)



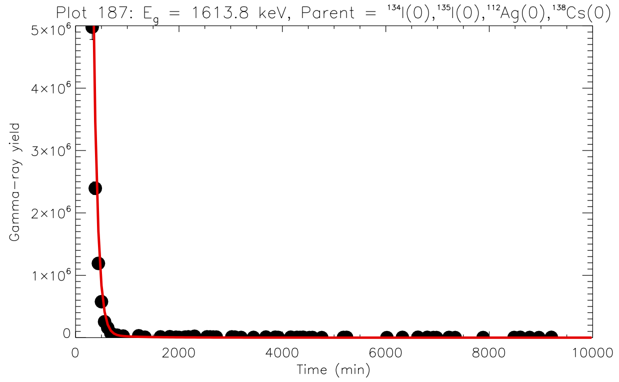
Plot 185: E_g = 102.1 keV, Parent = ^{131}Te(1)



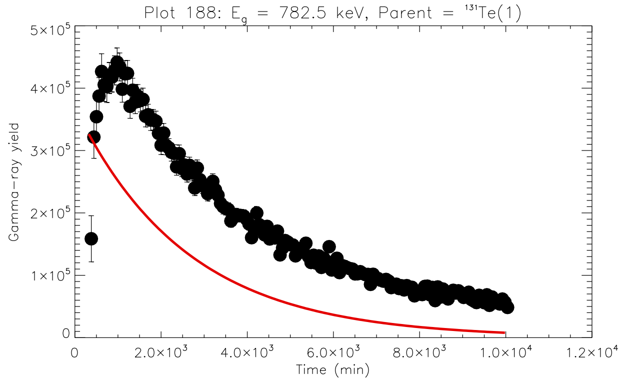
Plot 186: E_g = 513.2 keV, Parent = ^{97}Zr(0)



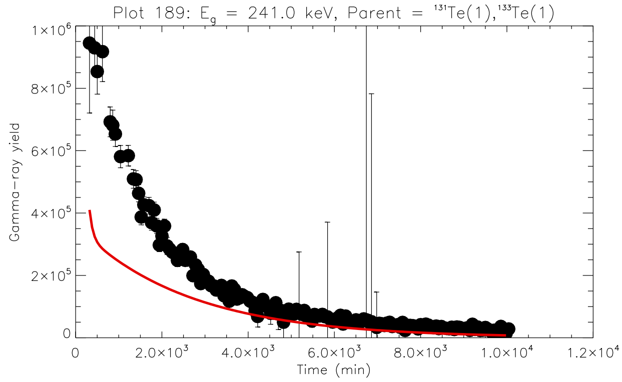
Plot 187: E_g = 1613.8 keV, Parent = ^{134}I(0),^{135}I(0),^{112}Ag(0),^{138}Cs(0)



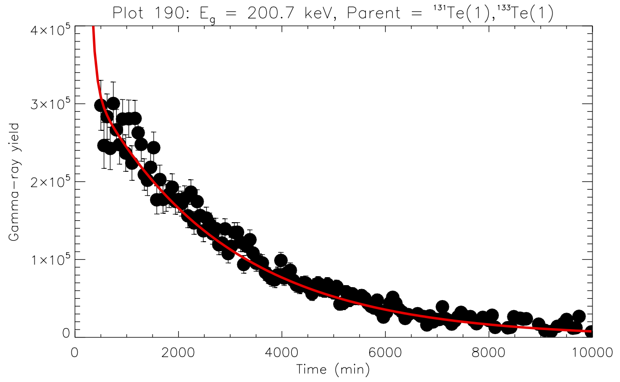
Plot 188: E_g = 782.5 keV, Parent = ^{131}Te(1)



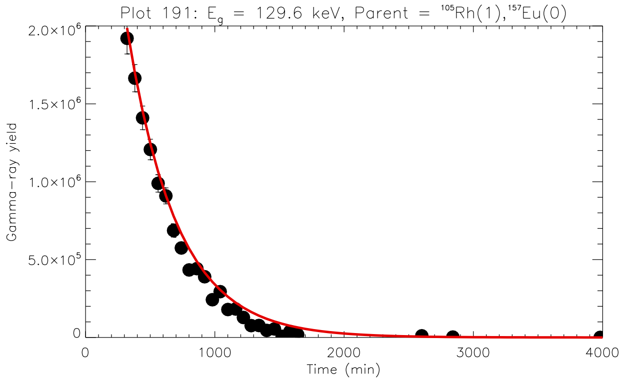
Plot 189: E_g = 241.0 keV, Parent = ^{131}Te(1),^{133}Te(1)



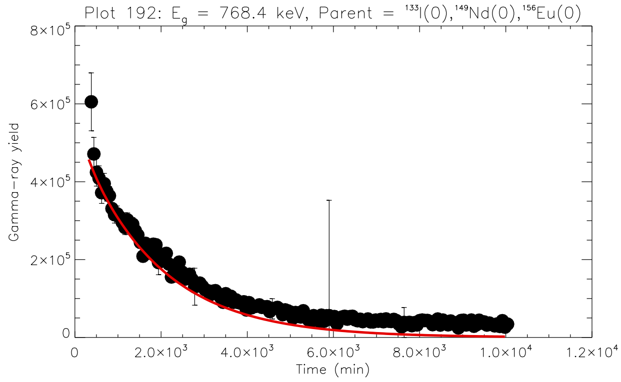
Plot 190: E_g = 200.7 keV, Parent = ^{131}Te(1),^{133}Te(1)



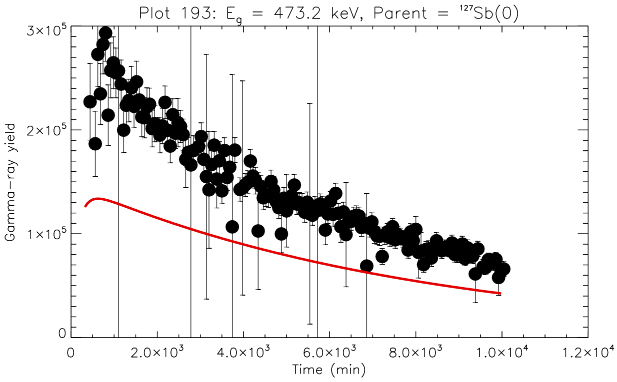
Plot 191: E_g = 129.6 keV, Parent = ^{105}Rh(1),^{157}Eu(0)



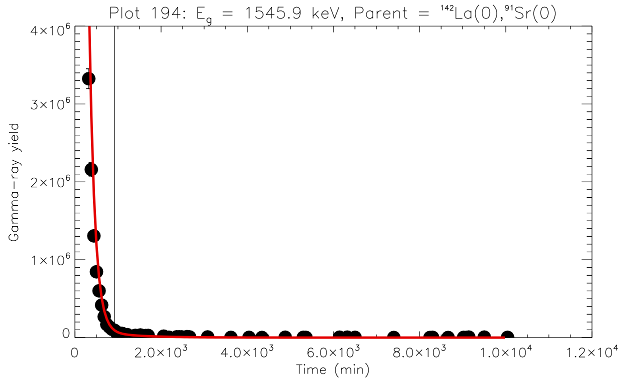
Plot 192: E_g = 768.4 keV, Parent = ^{133}I(0),^{149}Nd(0),^{156}Eu(0)



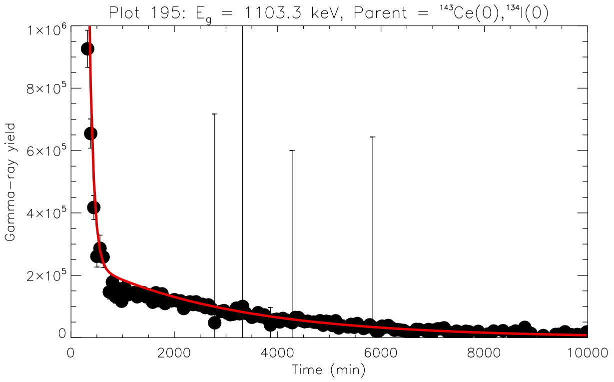
Plot 193: E_g = 473.2 keV, Parent = ^{127}Sb(0)



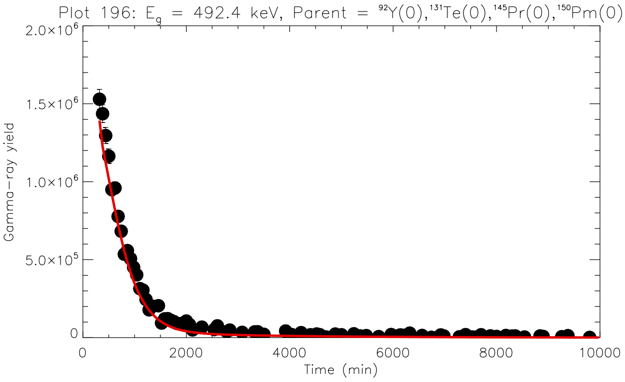
Plot 194: E_g = 1545.9 keV, Parent = ^{142}La(0),^{91}Sr(0)



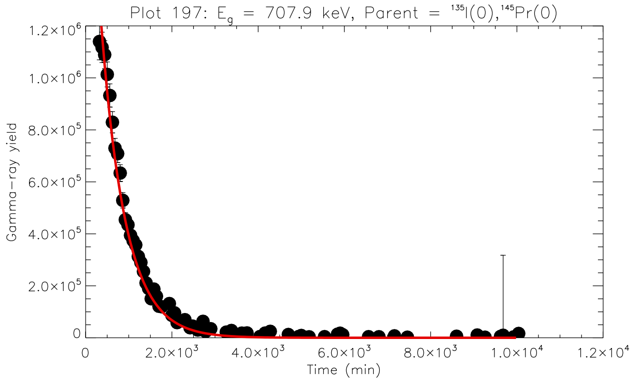
Plot 195: E_g = 1103.3 keV, Parent = ^{143}Ce(0),^{134}I(0)



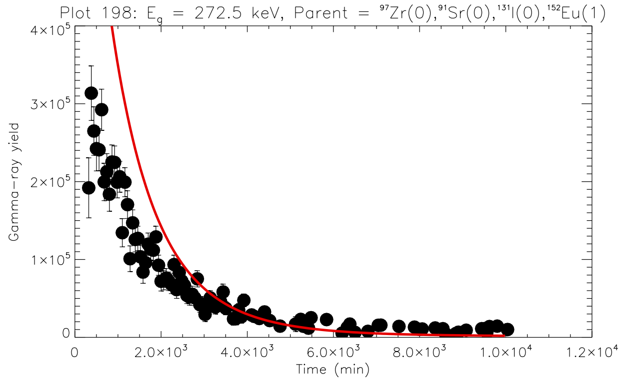
Plot 196: E_g = 492.4 keV, Parent = ^{92}Y(0),^{131}Te(0),^{145}Pr(0),^{150}Pm(0)



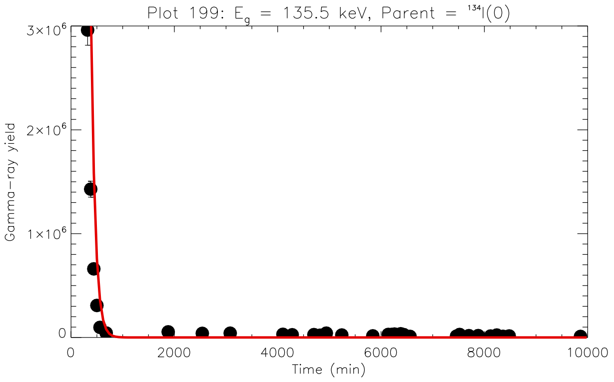
Plot 197: E_g = 707.9 keV, Parent = ^{135}I(0),^{145}Pr(0)



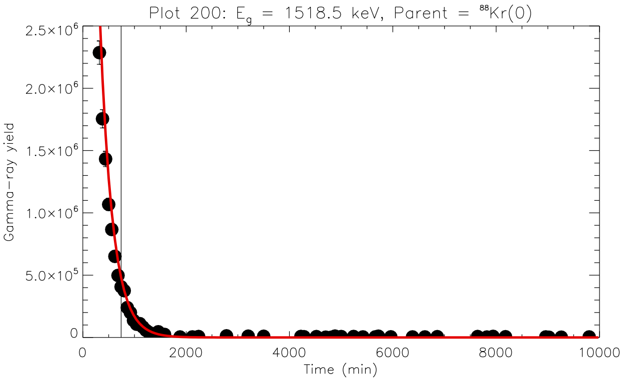
Plot 198: E_g = 272.5 keV, Parent = ^{97}Zr(0),^{91}Sr(0),^{131}I(0),^{152}Eu(1)

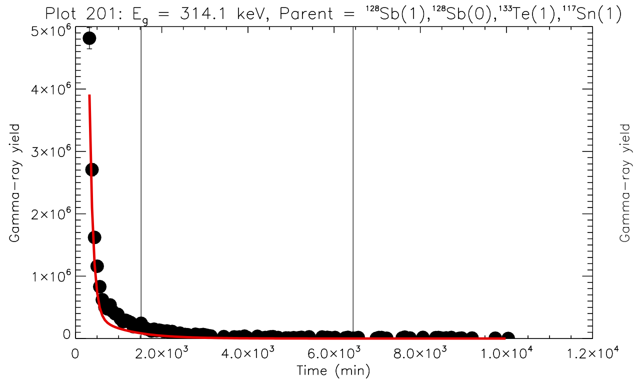


Plot 199: E_g = 135.5 keV, Parent = ^{134}I(0)

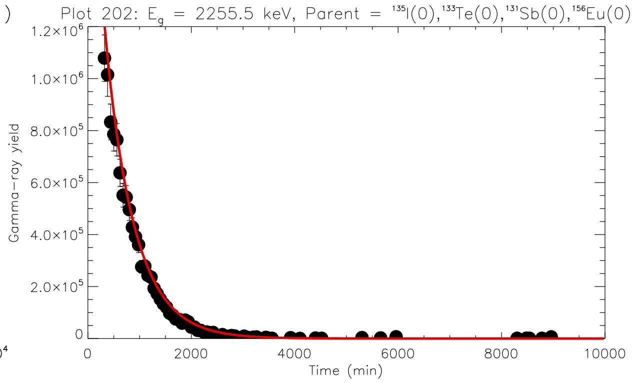


Plot 200: E_g = 1518.5 keV, Parent = ^{88}Kr(0)

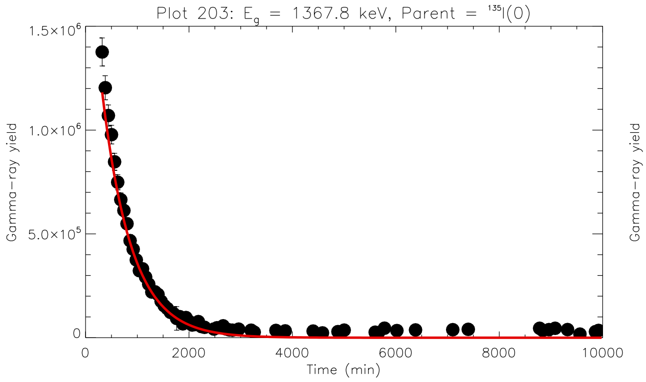




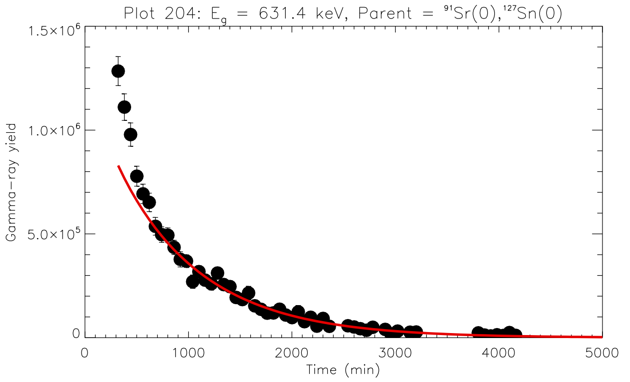
Plot 201: E_g = 314.1 keV, Parent = ^{128}Sb(1),^{128}Sb(0),^{133}Te(1),^{117}Sn(1)
Gamma−ray yield
Time (min)



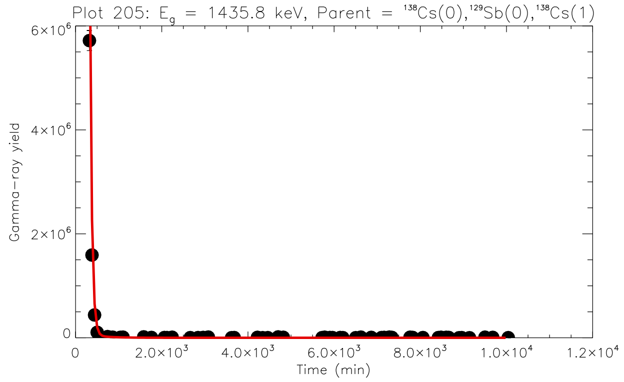
Plot 202: E_g = 2255.5 keV, Parent = ^{135}I(0),^{133}Te(0),^{131}Sb(0),^{156}Eu(0)
Gamma−ray yield
Time (min)



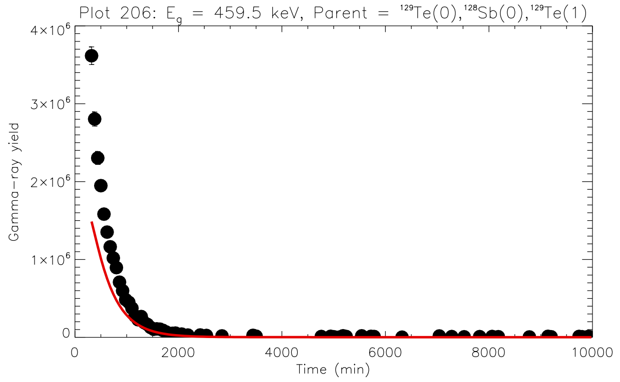
Plot 203: E_g = 1367.8 keV, Parent = ^{135}I(0)
Gamma−ray yield
Time (min)



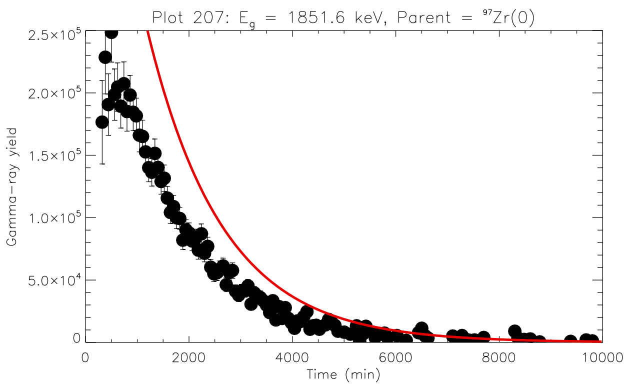
Plot 204: E_g = 631.4 keV, Parent = ^{91}Sr(0),^{127}Sn(0)
Gamma−ray yield
Time (min)



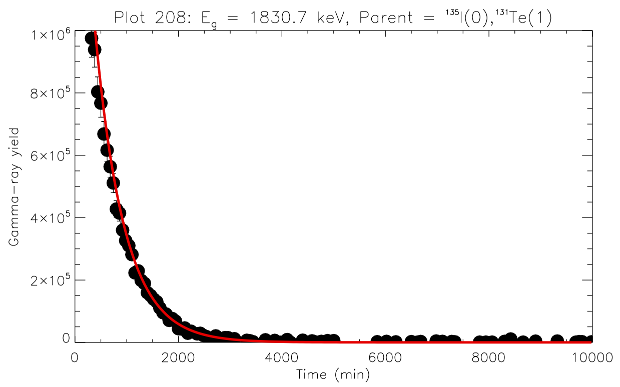
Plot 205: E_g = 1435.8 keV, Parent = ^{138}Cs(0),^{129}Sb(0),^{138}Cs(1)
Gamma−ray yield
Time (min)



Plot 206: E_g = 459.5 keV, Parent = ^{129}Te(0),^{128}Sb(0),^{129}Te(1)
Gamma−ray yield
Time (min)

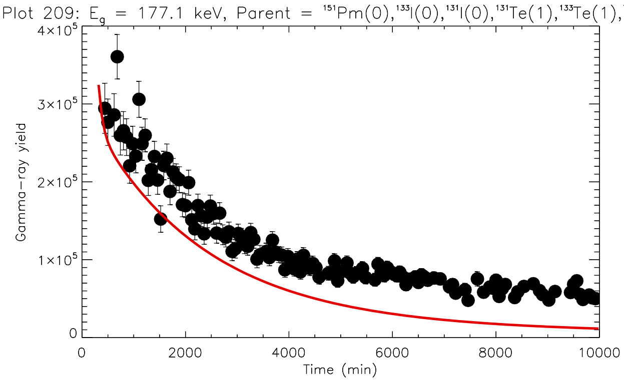


Plot 207: E_g = 1851.6 keV, Parent = ^{97}Zr(0)
Gamma−ray yield
Time (min)

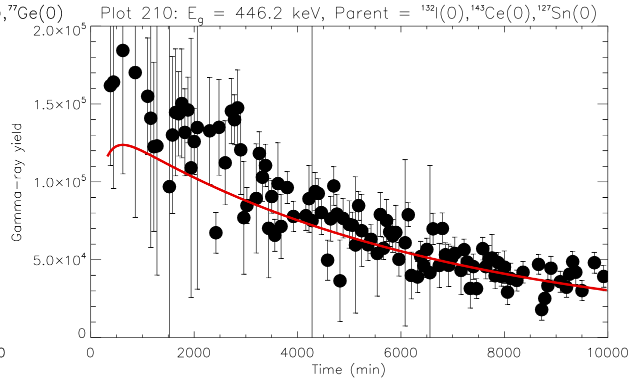


Plot 208: E_g = 1830.7 keV, Parent = ^{135}I(0),^{131}Te(1)
Gamma−ray yield
Time (min)

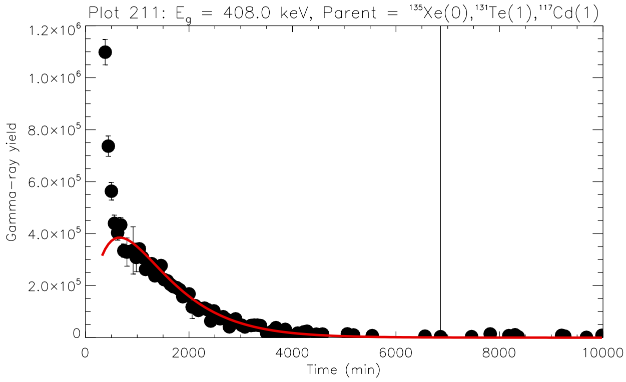
Plot 209: E_g = 177.1 keV, Parent = ^{151}Pm(0),^{133}I(0),^{131}I(0),^{131}Te(1),^{133}Te(1),^{77}Ge(0)



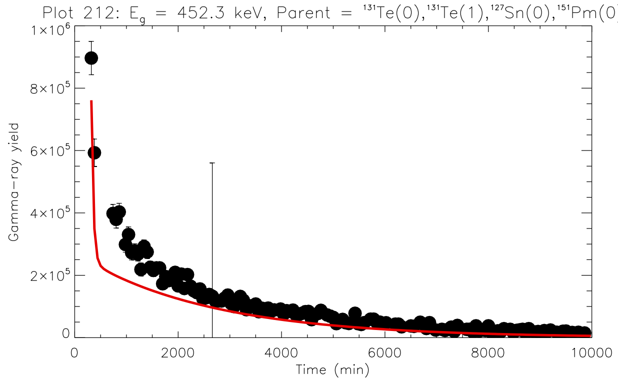
Plot 210: E_g = 446.2 keV, Parent = ^{132}I(0),^{143}Ce(0),^{127}Sn(0)



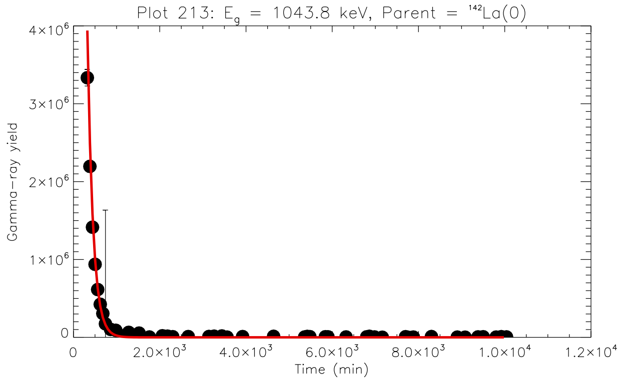
Plot 211: E_g = 408.0 keV, Parent = ^{135}Xe(0),^{131}Te(1),^{117}Cd(1)



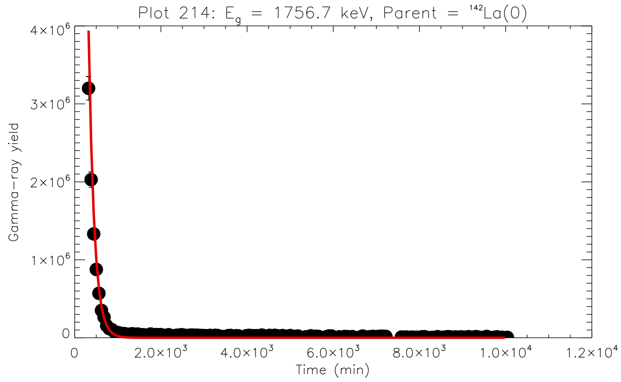
Plot 212: E_g = 452.3 keV, Parent = ^{131}Te(0),^{131}Te(1),^{127}Sn(0),^{151}Pm(0)



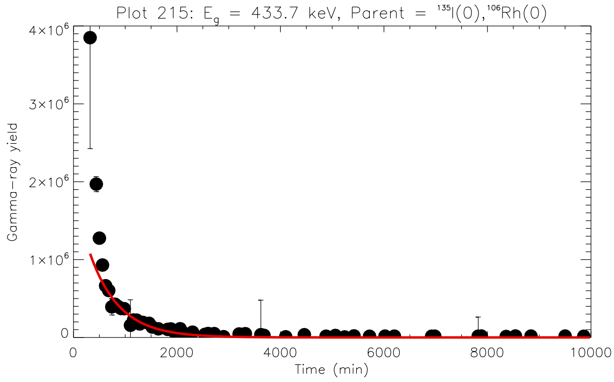
Plot 213: E_g = 1043.8 keV, Parent = ^{142}La(0)



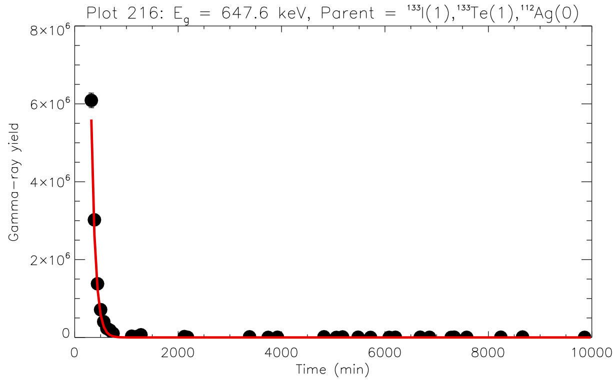
Plot 214: E_g = 1756.7 keV, Parent = ^{142}La(0)

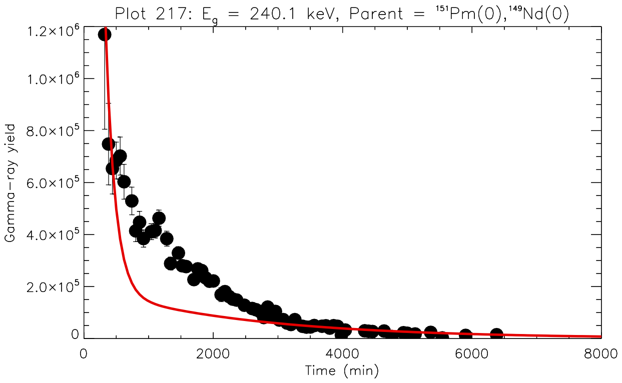


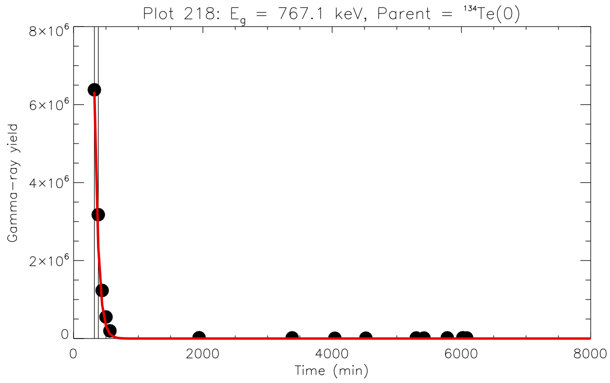
Plot 215: E_g = 433.7 keV, Parent = ^{135}I(0),^{106}Rh(0)

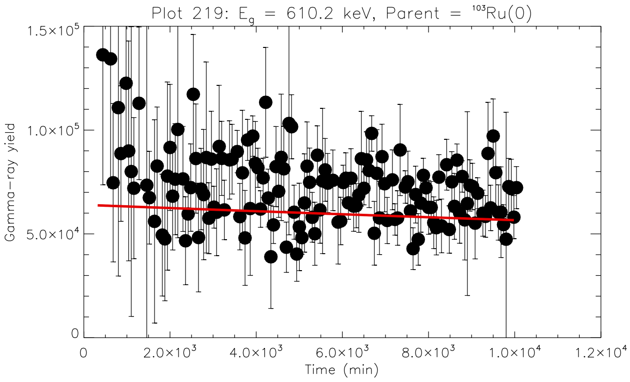


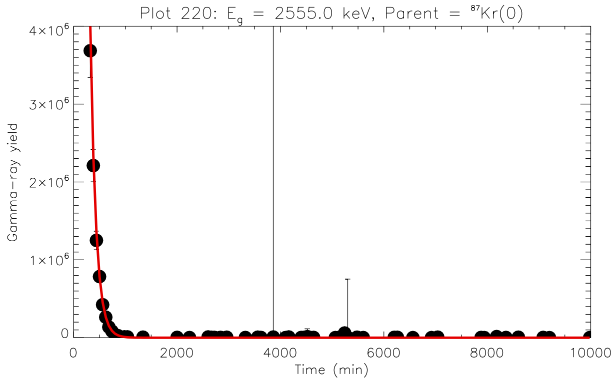
Plot 216: E_g = 647.6 keV, Parent = ^{133}I(1),^{133}Te(1),^{112}Ag(0)

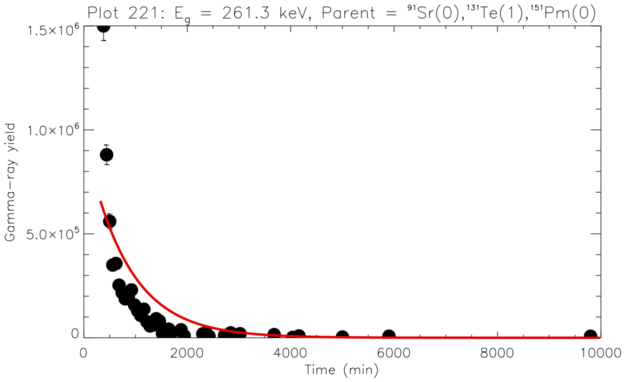


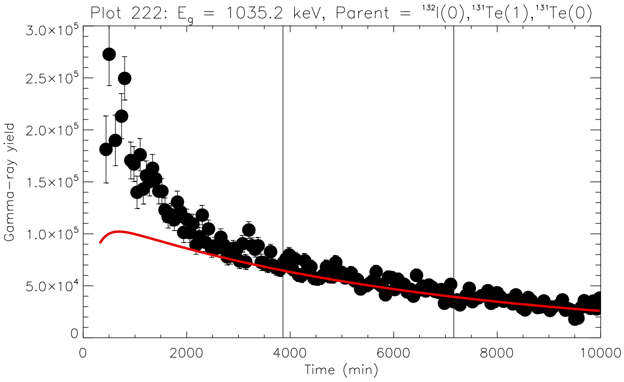

Plot 217: E_g = 240.1 keV, Parent = ^{151}Pm(0),^{149}Nd(0)
Gamma−ray yield
Time (min)
0
2.0×10^5
4.0×10^5
6.0×10^5
8.0×10^5
1.0×10^6
1.2×10^6
0
2000
4000
6000
8000

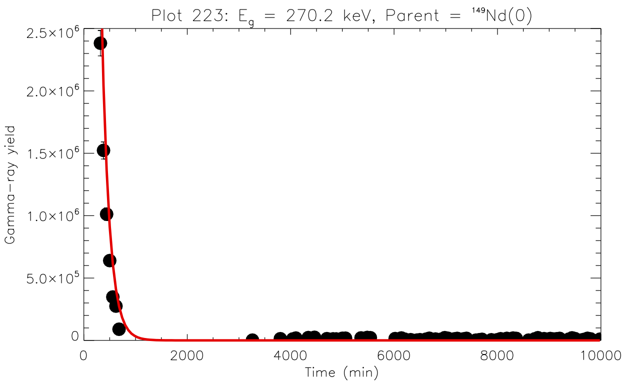

Plot 218: E_g = 767.1 keV, Parent = ^{134}Te(0)
Gamma−ray yield
Time (min)
0
2×10^6
4×10^6
6×10^6
8×10^6
0
2000
4000
6000
8000

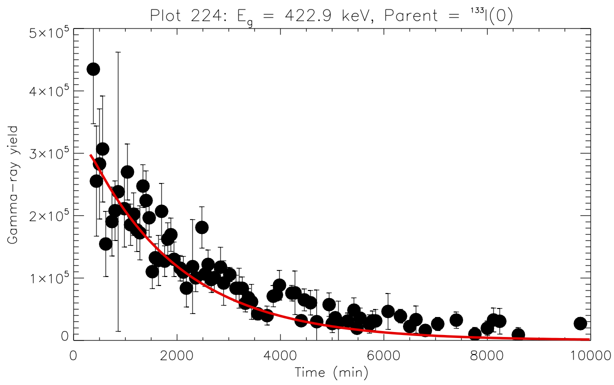

Plot 219: E_g = 610.2 keV, Parent = ^{103}Ru(0)
Gamma−ray yield
Time (min)
0
5.0×10^4
1.0×10^5
1.5×10^5
0
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4


Plot 220: E_g = 2555.0 keV, Parent = ^{87}Kr(0)
Gamma−ray yield
Time (min)
0
1×10^6
2×10^6
3×10^6
4×10^6
0
2000
4000
6000
8000
10000

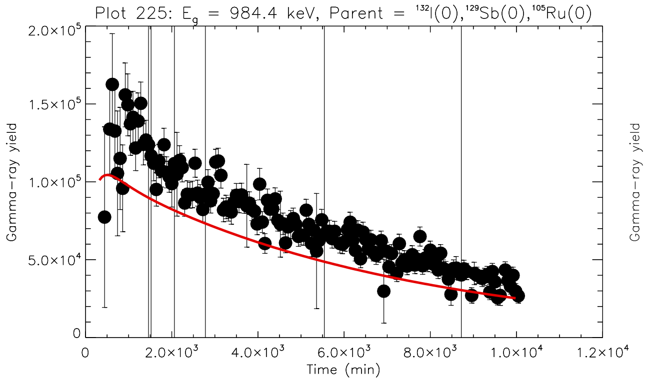

Plot 221: E_g = 261.3 keV, Parent = ^{91}Sr(0),^{131}Te(1),^{151}Pm(0)
Gamma−ray yield
Time (min)
0
5.0×10^5
1.0×10^6
1.5×10^6
0
2000
4000
6000
8000
10000


Plot 222: E_g = 1035.2 keV, Parent = ^{132}I(0),^{131}Te(1),^{131}Te(0)
Gamma−ray yield
Time (min)
0
5.0×10^4
1.0×10^5
1.5×10^5
2.0×10^5
2.5×10^5
3.0×10^5
0
2000
4000
6000
8000
10000

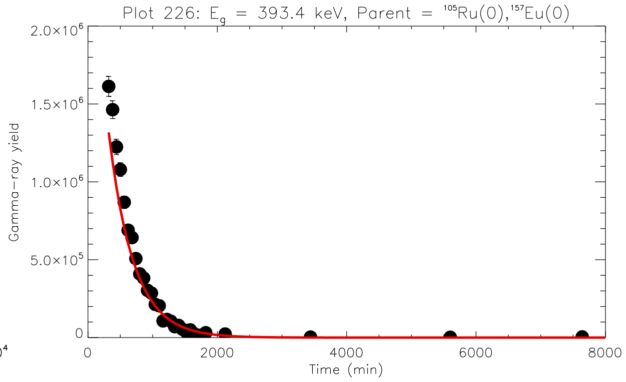

Plot 223: E_g = 270.2 keV, Parent = ^{149}Nd(0)
Gamma−ray yield
Time (min)
0
5.0×10^5
1.0×10^6
1.5×10^6
2.0×10^6
2.5×10^6
0
2000
4000
6000
8000
10000


Plot 224: E_g = 422.9 keV, Parent = ^{133}I(0)
Gamma−ray yield
Time (min)
0
1×10^5
2×10^5
3×10^5
4×10^5
5×10^5
0
2000
4000
6000
8000
10000

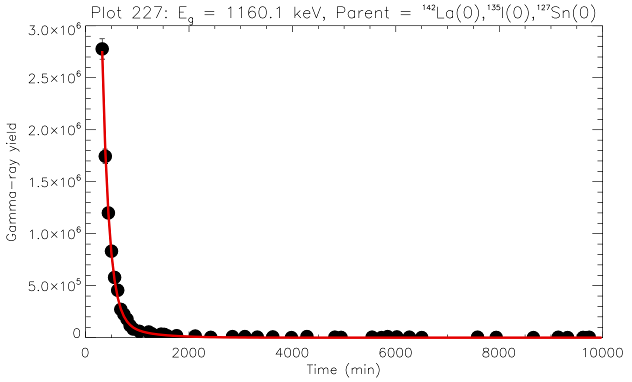
Plot 225: E_g = 984.4 keV, Parent = ^{132}I(0),^{129}Sb(0),^{105}Ru(0)



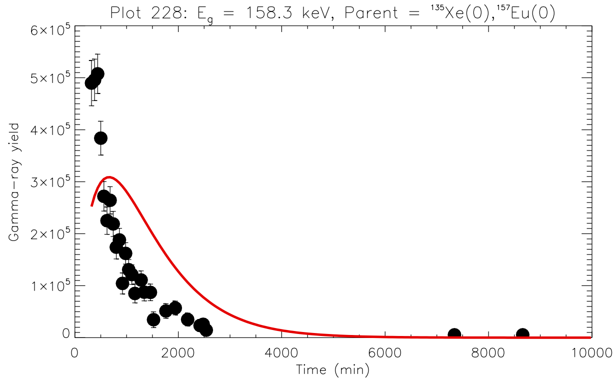
Plot 226: E_g = 393.4 keV, Parent = ^{105}Ru(0),^{157}Eu(0)



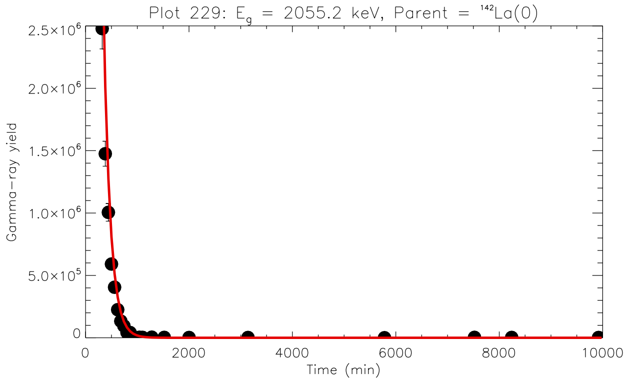
Plot 227: E_g = 1160.1 keV, Parent = ^{142}La(0),^{135}I(0),^{127}Sn(0)



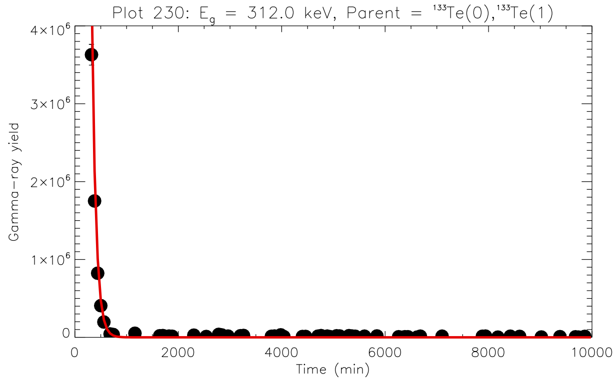
Plot 228: E_g = 158.3 keV, Parent = ^{135}Xe(0),^{157}Eu(0)



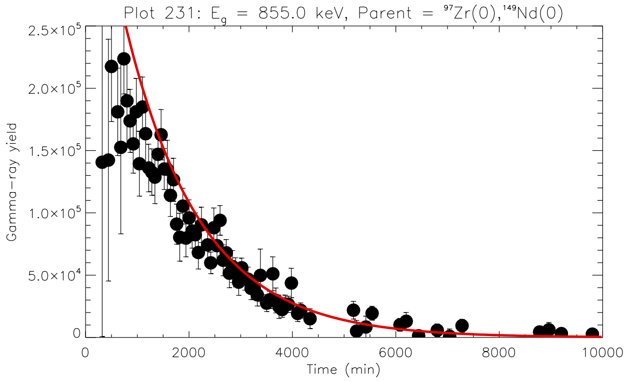
Plot 229: E_g = 2055.2 keV, Parent = ^{142}La(0)



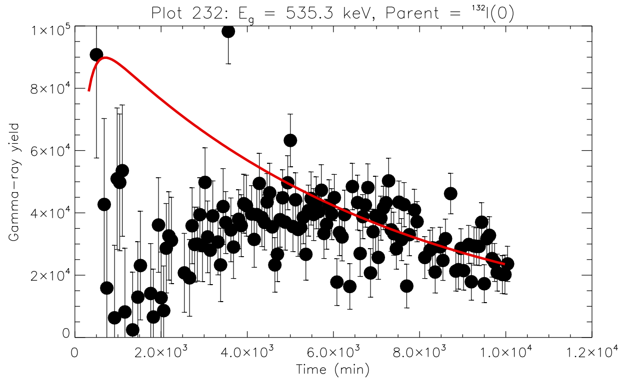
Plot 230: E_g = 312.0 keV, Parent = ^{133}Te(0),^{133}Te(1)

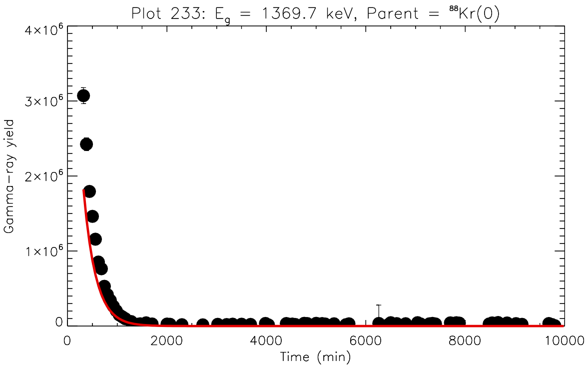


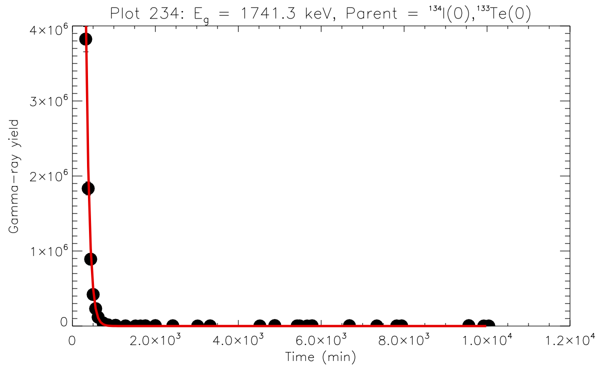
Plot 231: E_g = 855.0 keV, Parent = ^{97}Zr(0),^{149}Nd(0)

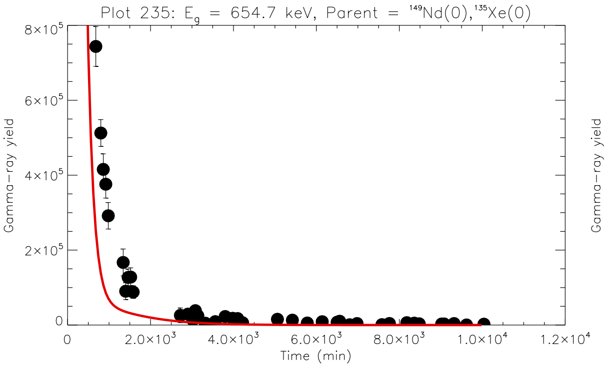


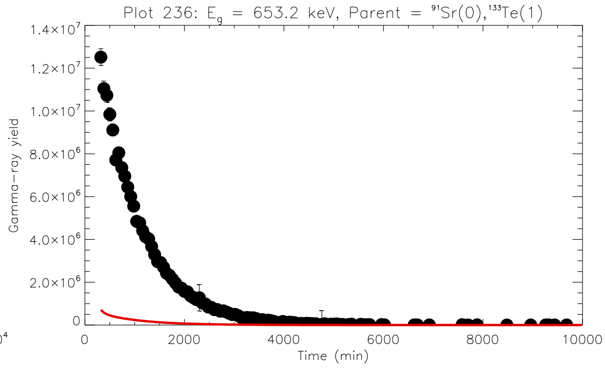
Plot 232: E_g = 535.3 keV, Parent = ^{132}I(0)

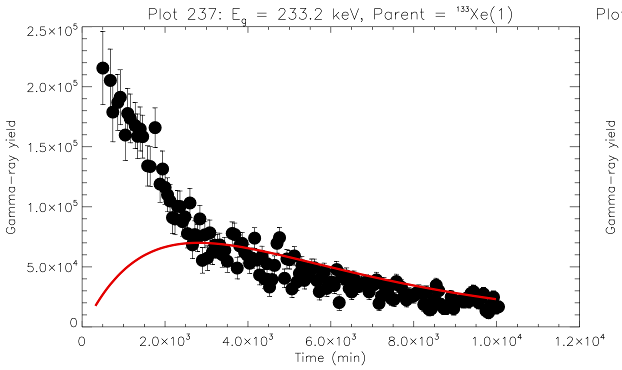


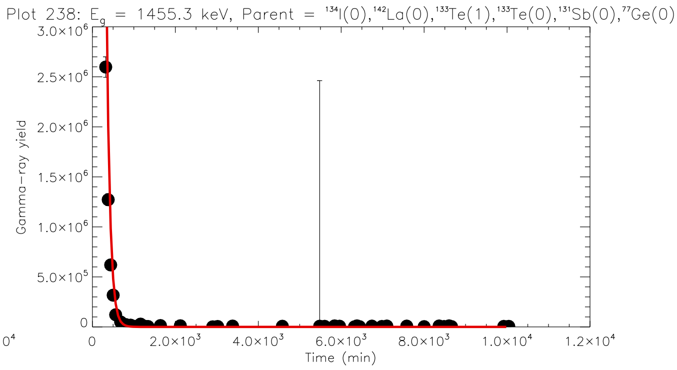

Plot 233: E_g = 1369.7 keV, Parent = ^{88}Kr(0)
Gamma−ray yield
Time (min)
0
2000
4000
6000
8000
10000
1×10^6
2×10^6
3×10^6
4×10^6

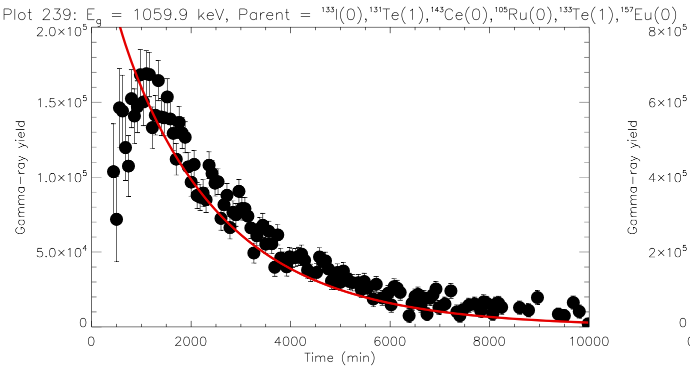

Plot 234: E_g = 1741.3 keV, Parent = ^{134}I(0),^{133}Te(0)
Gamma−ray yield
Time (min)
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4
1×10^6
2×10^6
3×10^6
4×10^6

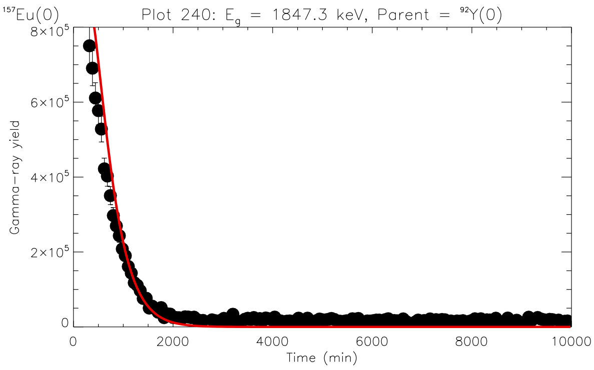

Plot 235: E_g = 654.7 keV, Parent = ^{149}Nd(0),^{135}Xe(0)
Gamma−ray yield
Time (min)
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4
2×10^5
4×10^5
6×10^5
8×10^5

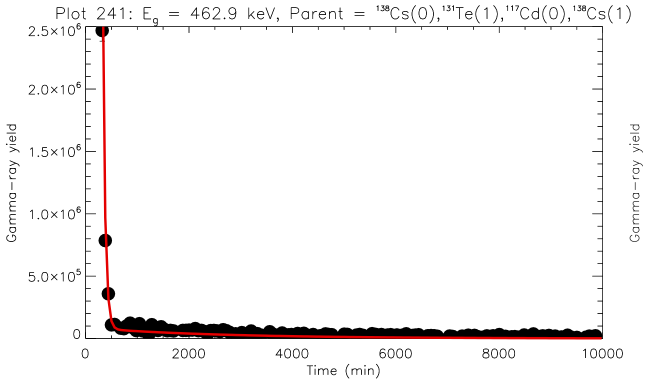

Plot 236: E_g = 653.2 keV, Parent = ^{91}Sr(0),^{133}Te(1)
Gamma−ray yield
Time (min)
2000
4000
6000
8000
10000
2.0×10^6
4.0×10^6
6.0×10^6
8.0×10^6
1.0×10^7
1.2×10^7
1.4×10^7

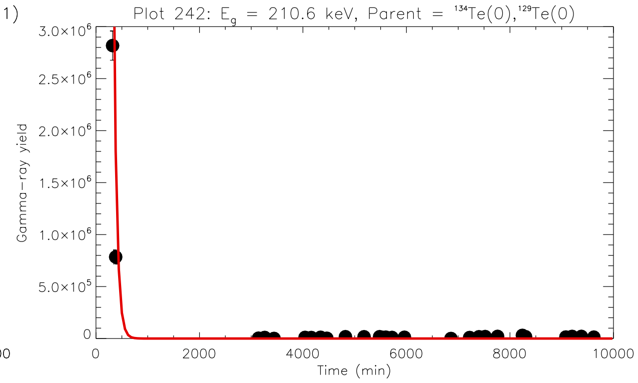

Plot 237: E_g = 233.2 keV, Parent = ^{133}Xe(1)
Gamma−ray yield
Time (min)
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4
5.0×10^4
1.0×10^5
1.5×10^5
2.0×10^5
2.5×10^5

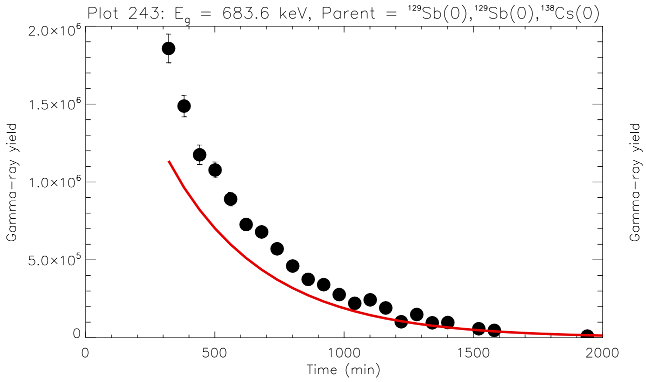

Plot 238: E_g = 1455.3 keV, Parent = ^{134}I(0),^{142}La(0),^{133}Te(1),^{133}Te(0),^{131}Sb(0),^{77}Ge(0)
Gamma−ray yield
Time (min)
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4
5.0×10^5
1.0×10^6
1.5×10^6
2.0×10^6
2.5×10^6
3.0×10^6

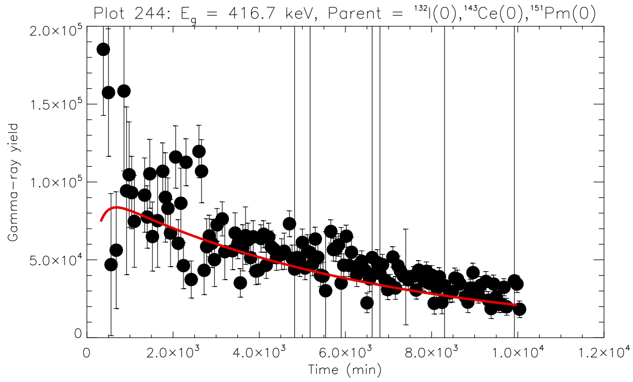

Plot 239: E_g = 1059.9 keV, Parent = ^{133}I(0),^{131}Te(1),^{143}Ce(0),^{105}Ru(0),^{133}Te(1),^{157}Eu(0)
Gamma−ray yield
Time (min)
2000
4000
6000
8000
10000
5.0×10^4
1.0×10^5
1.5×10^5
2.0×10^5

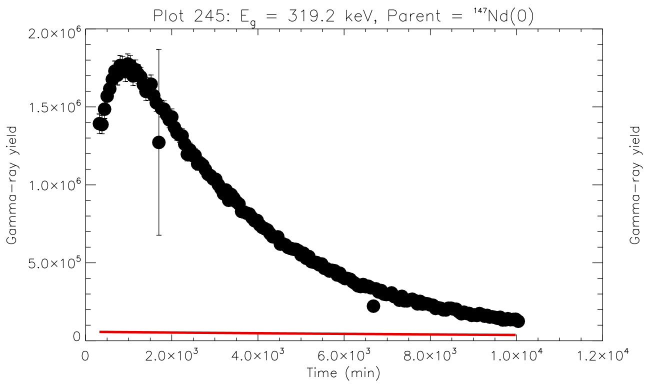

Plot 240: E_g = 1847.3 keV, Parent = ^{92}Y(0)
Gamma−ray yield
Time (min)
2000
4000
6000
8000
10000
2×10^5
4×10^5
6×10^5
8×10^5

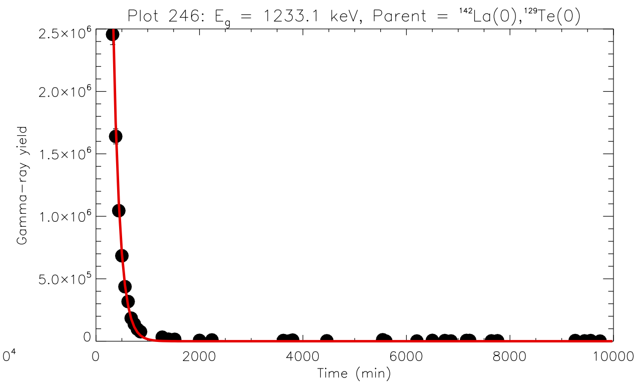

Plot 241: E_g = 462.9 keV, Parent = ^{138}Cs(0),^{131}Te(1),^{117}Cd(0),^{138}Cs(1)
Gamma−ray yield
Time (min)

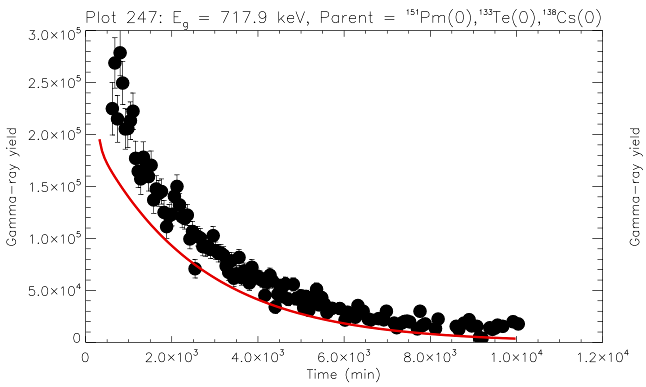

Plot 242: E_g = 210.6 keV, Parent = ^{134}Te(0),^{129}Te(0)
Gamma−ray yield
Time (min)

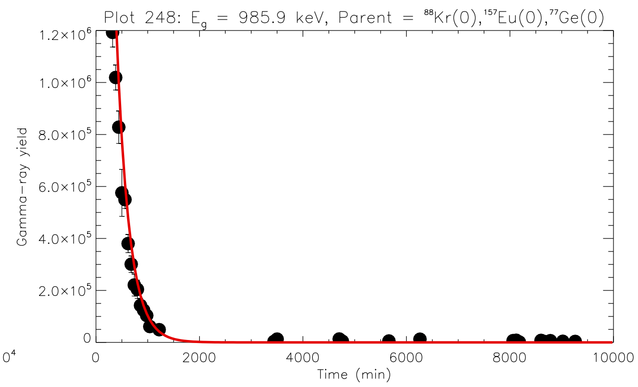

Plot 243: E_g = 683.6 keV, Parent = ^{129}Sb(0),^{129}Sb(0),^{138}Cs(0)
Gamma−ray yield
Time (min)

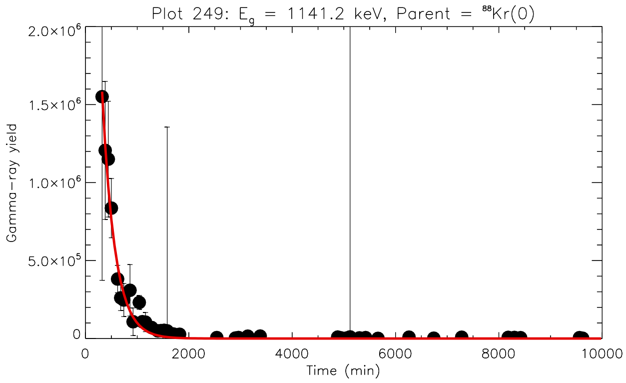

Plot 244: E_g = 416.7 keV, Parent = ^{132}I(0),^{143}Ce(0),^{151}Pm(0)
Gamma−ray yield
Time (min)

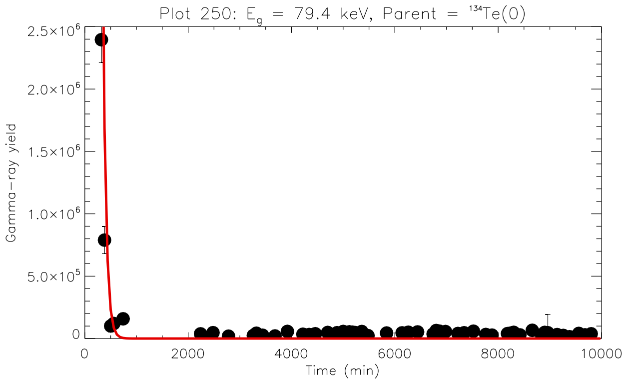

Plot 245: E_g = 319.2 keV, Parent = ^{147}Nd(0)
Gamma−ray yield
Time (min)

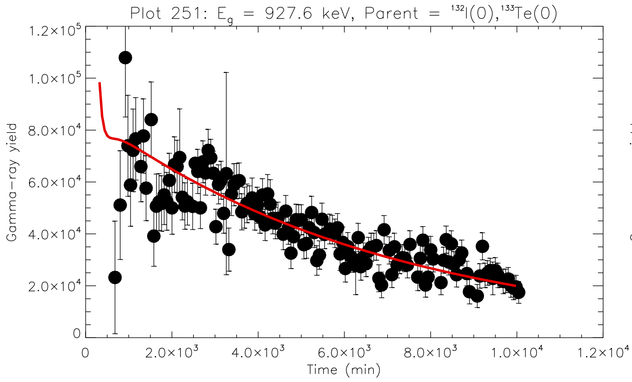

Plot 246: E_g = 1233.1 keV, Parent = ^{142}La(0),^{129}Te(0)
Gamma−ray yield
Time (min)

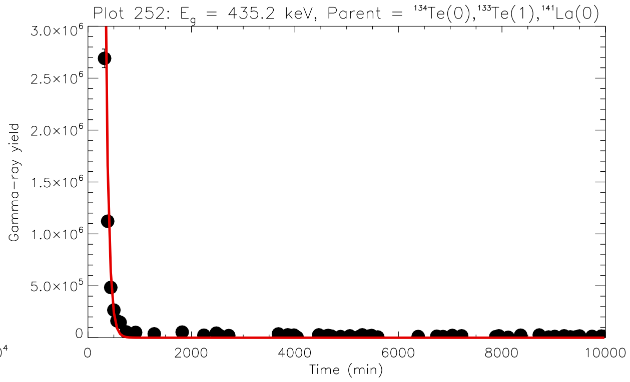

Plot 247: E_g = 717.9 keV, Parent = ^{151}Pm(0),^{133}Te(0),^{138}Cs(0)
Gamma−ray yield
Time (min)

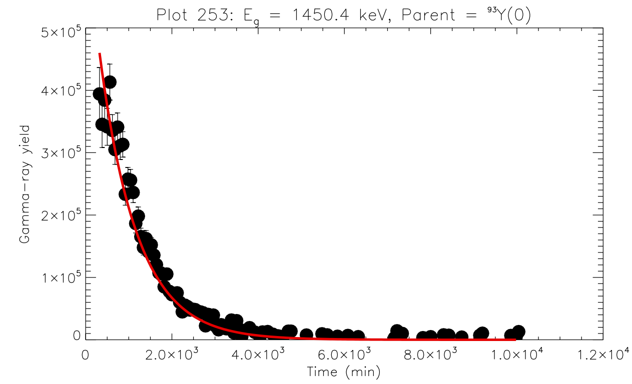

Plot 248: E_g = 985.9 keV, Parent = ^{88}Kr(0),^{157}Eu(0),^{77}Ge(0)
Gamma−ray yield
Time (min)

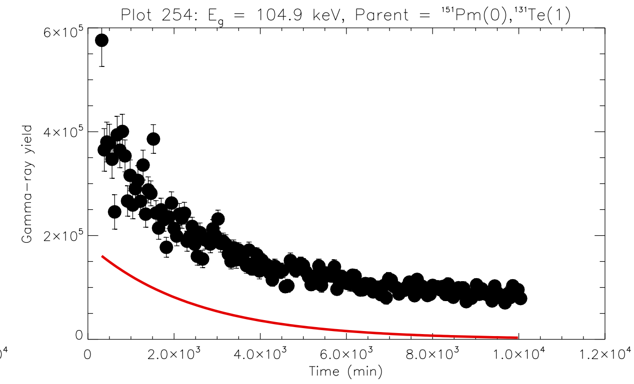

Plot 249: E_g = 1141.2 keV, Parent = ^{88}Kr(0)
Gamma-ray yield
Time (min)

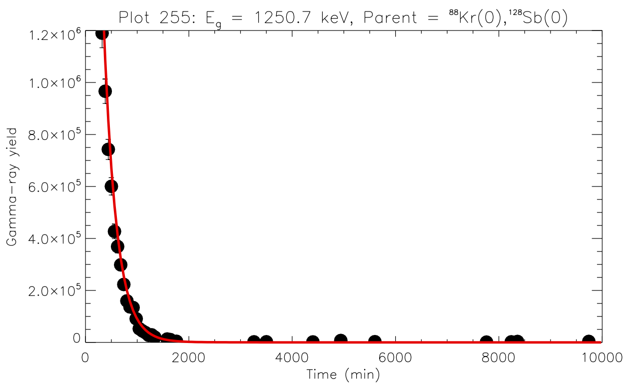

Plot 250: E_g = 79.4 keV, Parent = ^{134}Te(0)
Gamma-ray yield
Time (min)

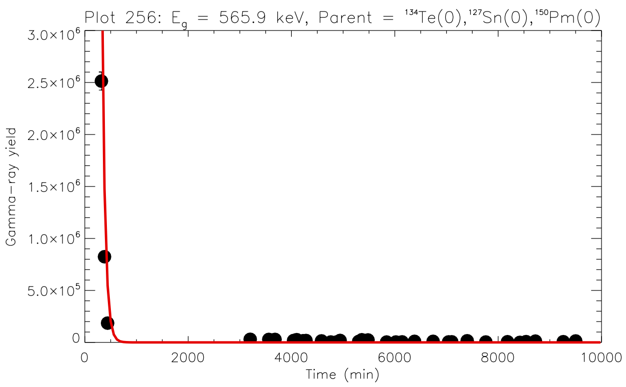

Plot 251: E_g = 927.6 keV, Parent = ^{132}I(0),^{133}Te(0)
Gamma-ray yield
Time (min)


Plot 252: E_g = 435.2 keV, Parent = ^{134}Te(0),^{133}Te(1),^{141}La(0)
Gamma-ray yield
Time (min)

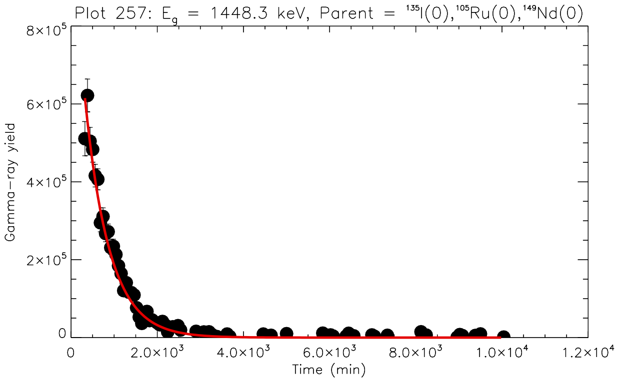

Plot 253: E_g = 1450.4 keV, Parent = ^{93}Y(0)
Gamma-ray yield
Time (min)


Plot 254: E_g = 104.9 keV, Parent = ^{151}Pm(0),^{131}Te(1)
Gamma-ray yield
Time (min)

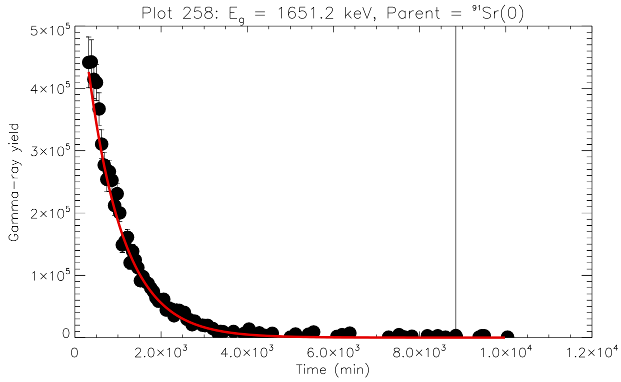

Plot 255: E_g = 1250.7 keV, Parent = ^{88}Kr(0),^{128}Sb(0)
Gamma-ray yield
Time (min)


Plot 256: E_g = 565.9 keV, Parent = ^{134}Te(0),^{127}Sn(0),^{150}Pm(0)
Gamma-ray yield
Time (min)

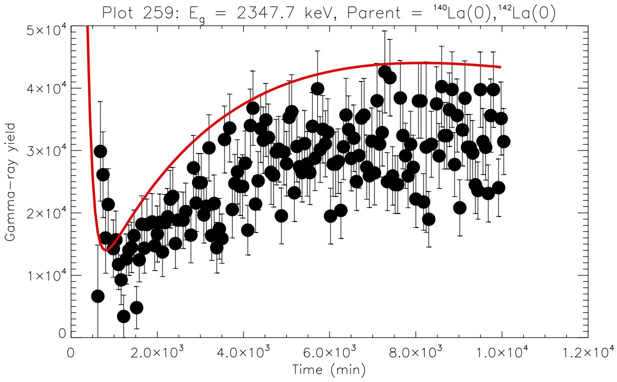
Plot 257: E_g = 1448.3 keV, Parent = ^{135}I(0),^{105}Ru(0),^{149}Nd(0)



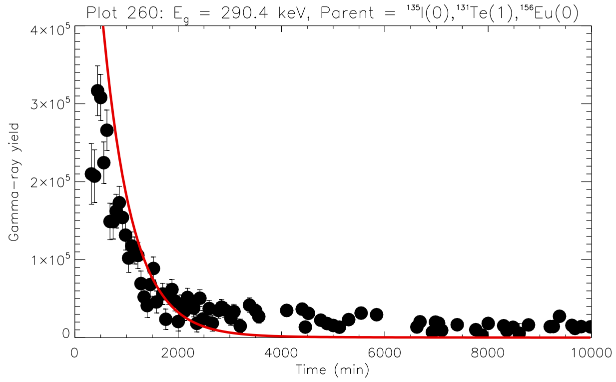
Plot 258: E_g = 1651.2 keV, Parent = ^{91}Sr(0)



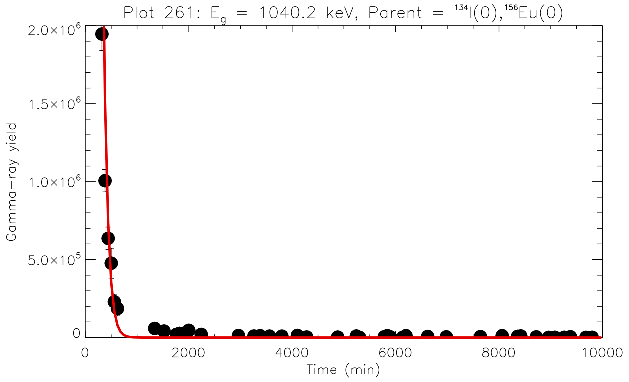
Plot 259: E_g = 2347.7 keV, Parent = ^{140}La(0),^{142}La(0)



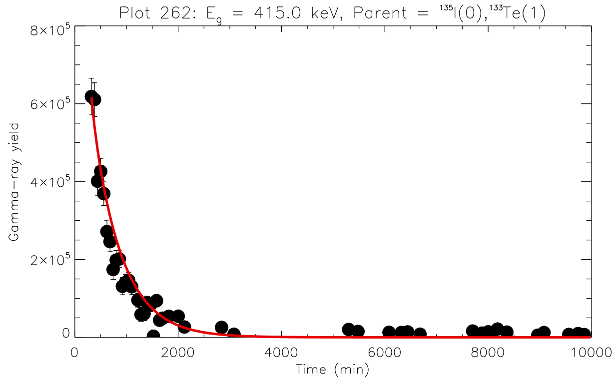
Plot 260: E_g = 290.4 keV, Parent = ^{135}I(0),^{131}Te(1),^{156}Eu(0)



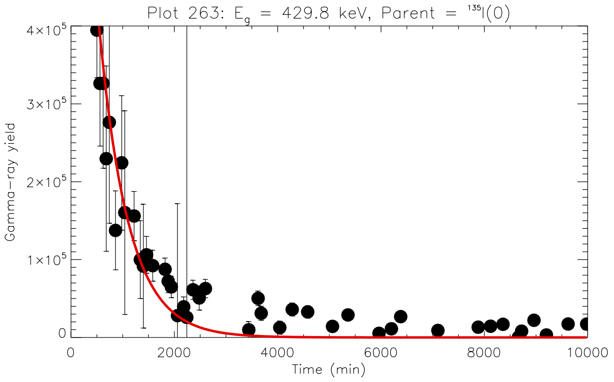
Plot 261: E_g = 1040.2 keV, Parent = ^{134}I(0),^{156}Eu(0)



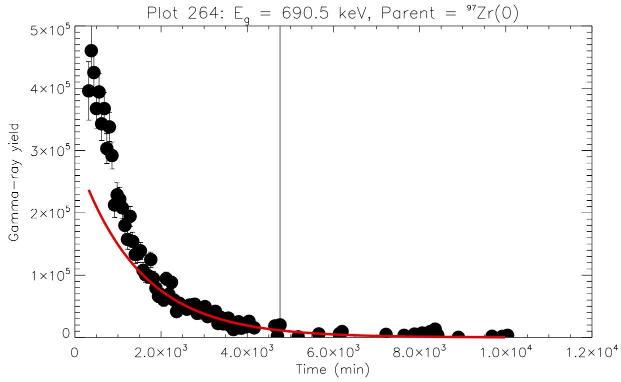
Plot 262: E_g = 415.0 keV, Parent = ^{135}I(0),^{133}Te(1)



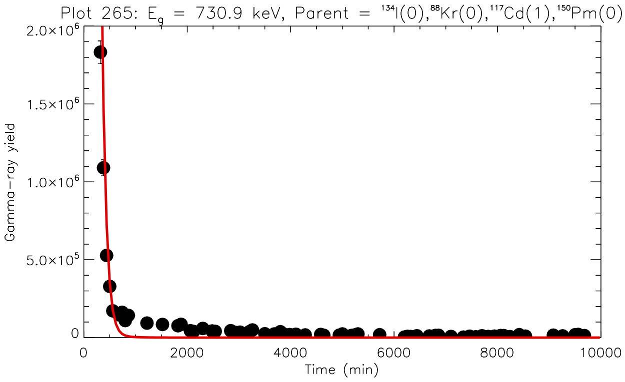
Plot 263: E_g = 429.8 keV, Parent = ^{135}I(0)



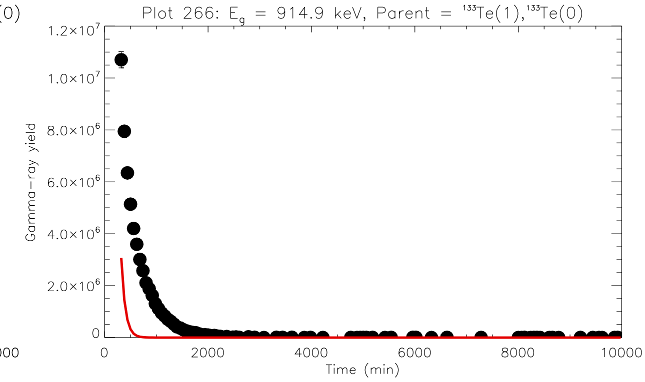
Plot 264: E_g = 690.5 keV, Parent = ^{97}Zr(0)



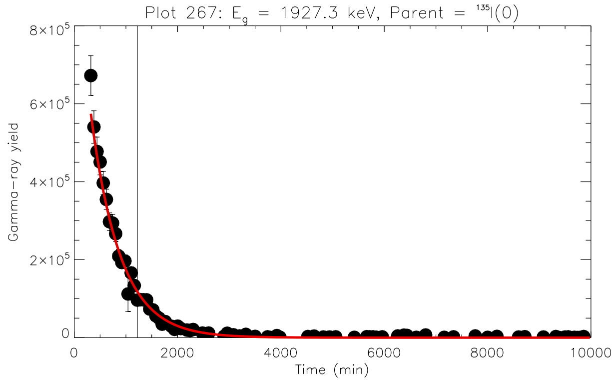
Plot 265: E_g = 730.9 keV, Parent = ^{134}I(0),^{88}Kr(0),^{117}Cd(1),^{150}Pm(0)



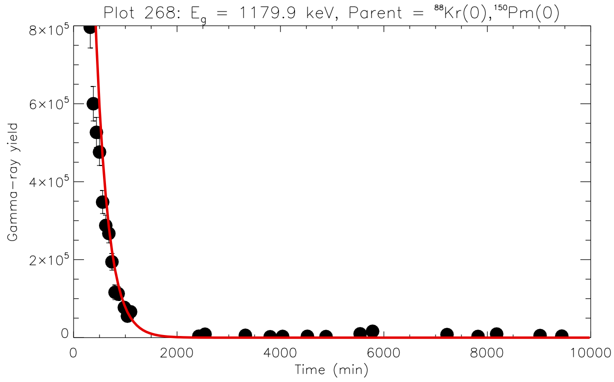
Plot 266: E_g = 914.9 keV, Parent = ^{133}Te(1),^{133}Te(0)



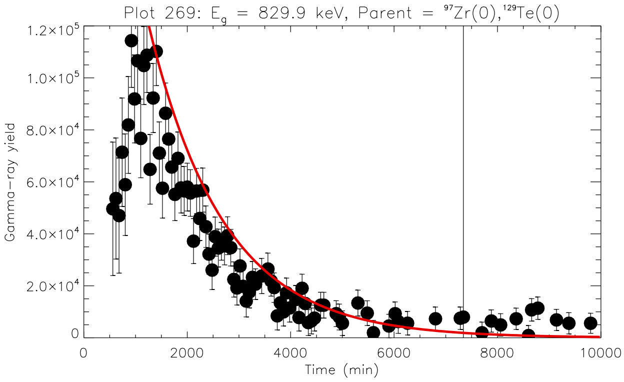
Plot 267: E_g = 1927.3 keV, Parent = ^{135}I(0)



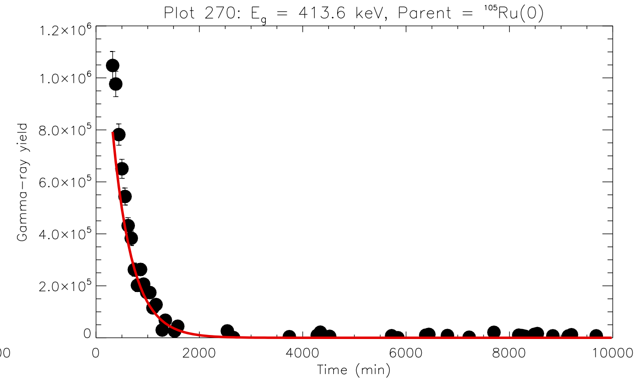
Plot 268: E_g = 1179.9 keV, Parent = ^{88}Kr(0),^{150}Pm(0)



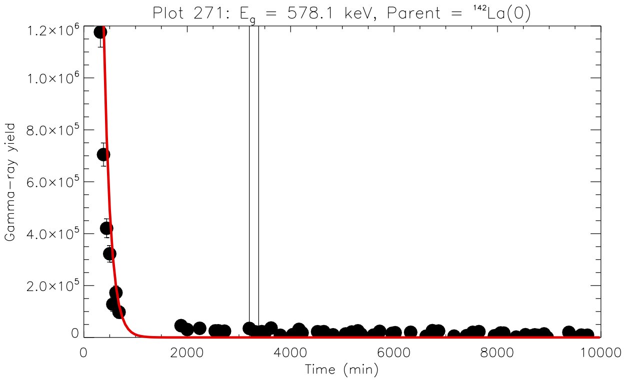
Plot 269: E_g = 829.9 keV, Parent = ^{97}Zr(0),^{129}Te(0)



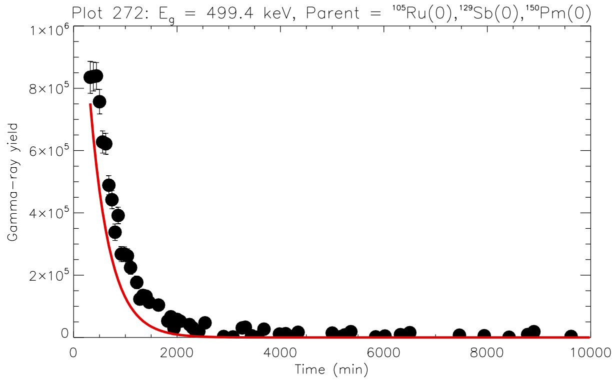
Plot 270: E_g = 413.6 keV, Parent = ^{105}Ru(0)

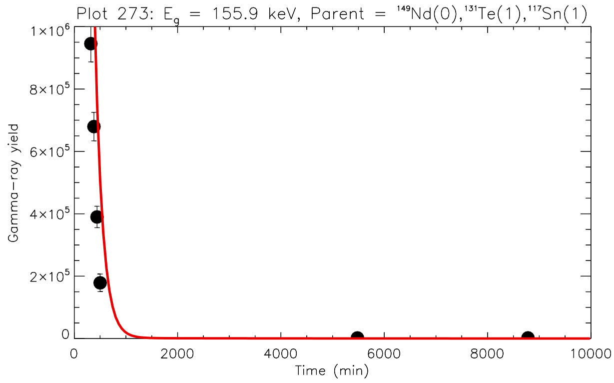


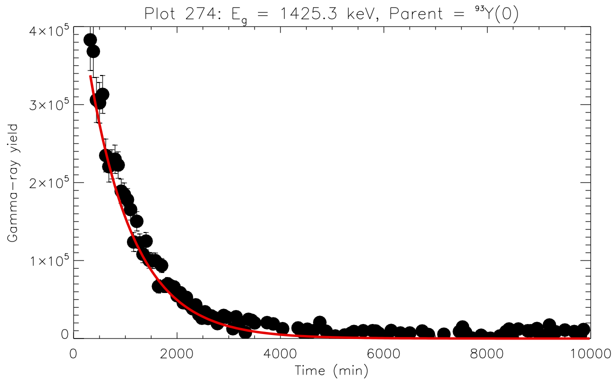
Plot 271: E_g = 578.1 keV, Parent = ^{142}La(0)

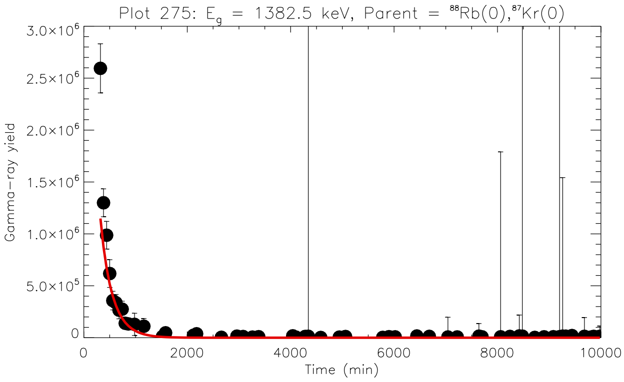


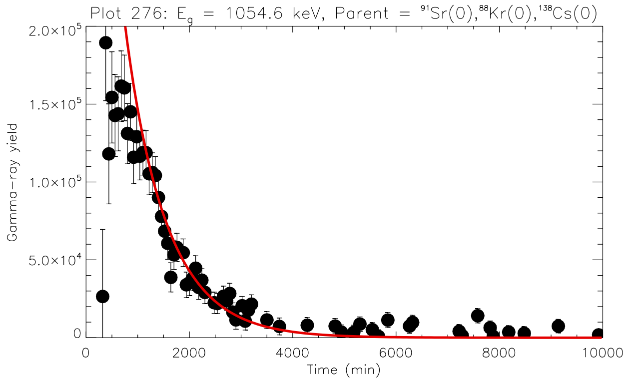
Plot 272: E_g = 499.4 keV, Parent = ^{105}Ru(0),^{129}Sb(0),^{150}Pm(0)

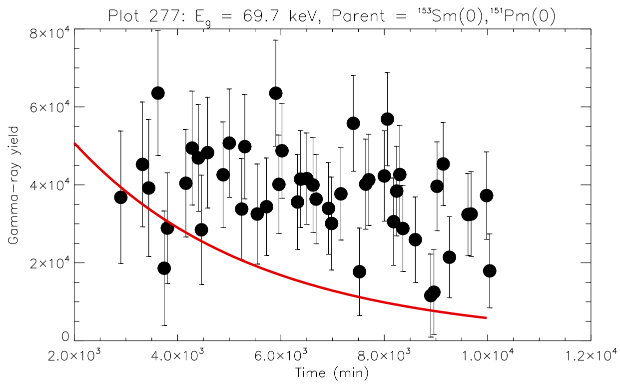


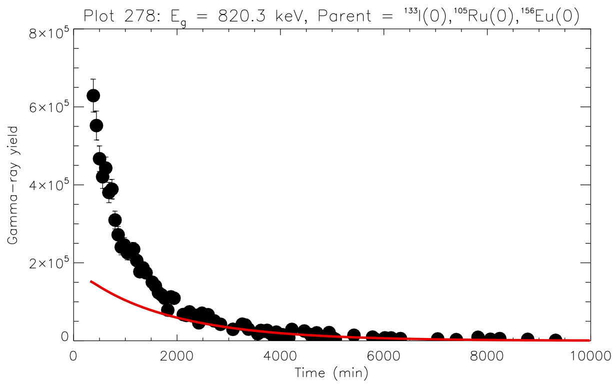

Plot 273: E_g = 155.9 keV, Parent = ^{149}Nd(0),^{131}Te(1),^{117}Sn(1)
Gamma-ray yield
Time (min)

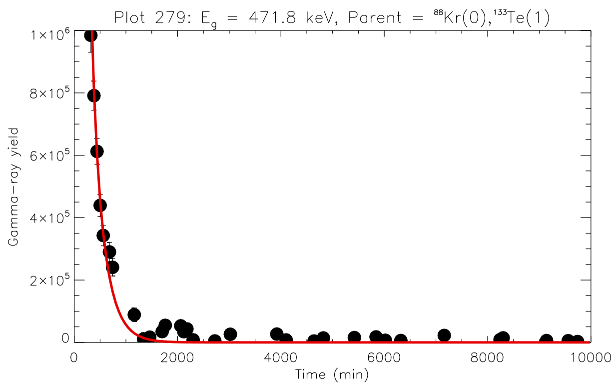

Plot 274: E_g = 1425.3 keV, Parent = ^{93}Y(0)
Gamma-ray yield
Time (min)

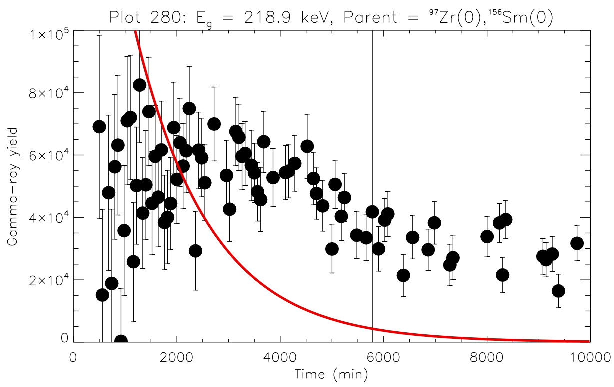

Plot 275: E_g = 1382.5 keV, Parent = ^{88}Rb(0),^{87}Kr(0)
Gamma-ray yield
Time (min)


Plot 276: E_g = 1054.6 keV, Parent = ^{91}Sr(0),^{88}Kr(0),^{138}Cs(0)
Gamma-ray yield
Time (min)

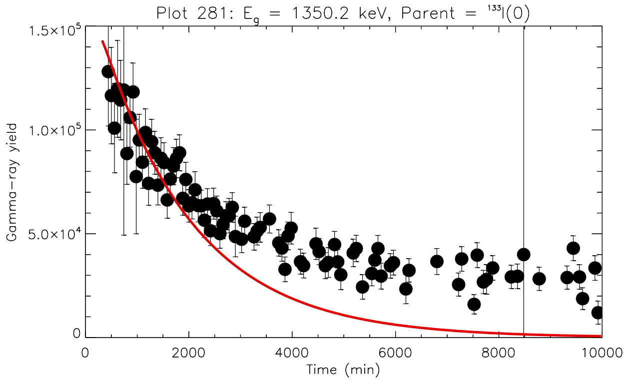

Plot 277: E_g = 69.7 keV, Parent = ^{153}Sm(0),^{151}Pm(0)
Gamma-ray yield
Time (min)


Plot 278: E_g = 820.3 keV, Parent = ^{133}I(0),^{105}Ru(0),^{156}Eu(0)
Gamma-ray yield
Time (min)

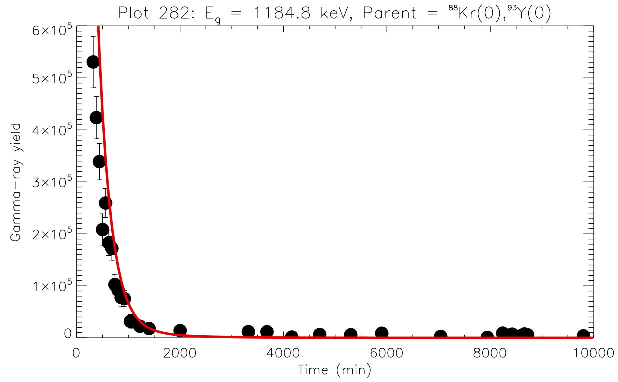

Plot 279: E_g = 471.8 keV, Parent = ^{88}Kr(0),^{133}Te(1)
Gamma-ray yield
Time (min)


Plot 280: E_g = 218.9 keV, Parent = ^{97}Zr(0),^{156}Sm(0)
Gamma-ray yield
Time (min)

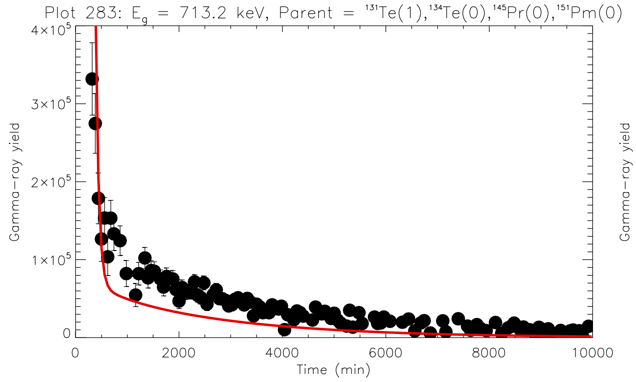
Plot 281: E_g = 1350.2 keV, Parent = ^{133}I(0)



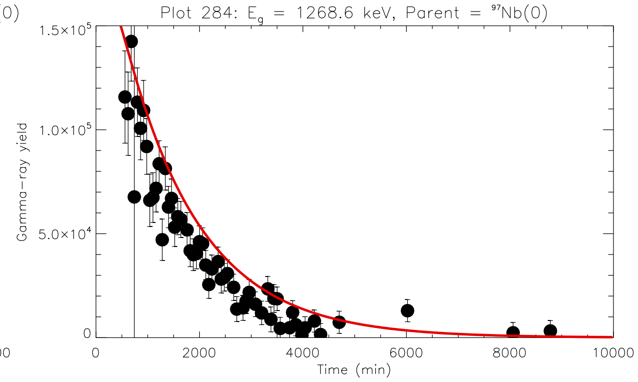
Plot 282: E_g = 1184.8 keV, Parent = ^{88}Kr(0),^{93}Y(0)



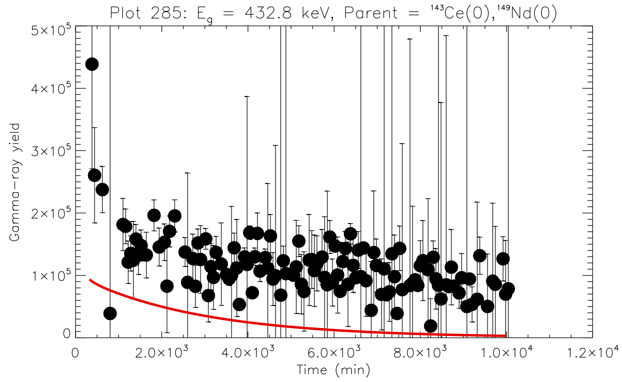
Plot 283: E_g = 713.2 keV, Parent = ^{131}Te(1),^{134}Te(0),^{145}Pr(0),^{151}Pm(0)



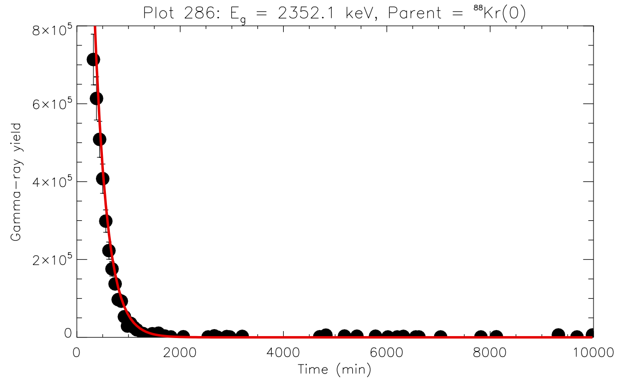
Plot 284: E_g = 1268.6 keV, Parent = ^{97}Nb(0)



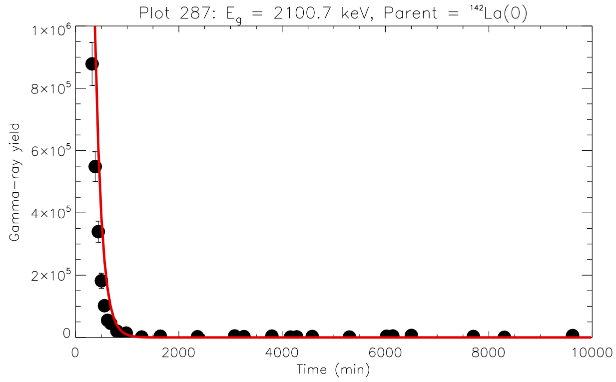
Plot 285: E_g = 432.8 keV, Parent = ^{143}Ce(0),^{149}Nd(0)



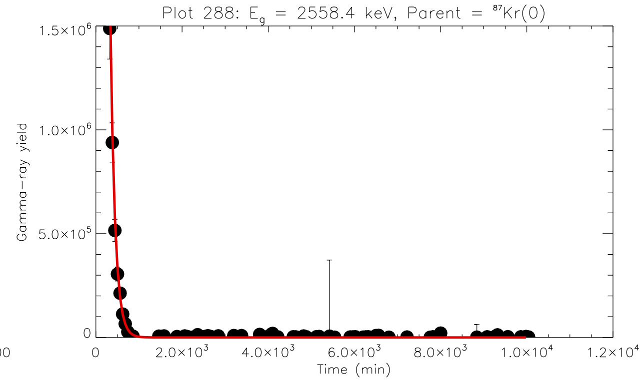
Plot 286: E_g = 2352.1 keV, Parent = ^{88}Kr(0)



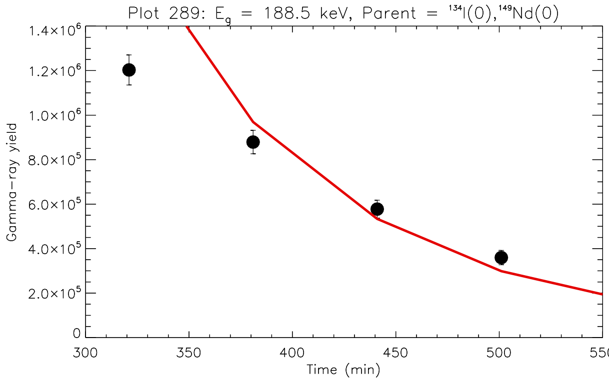
Plot 287: E_g = 2100.7 keV, Parent = ^{142}La(0)



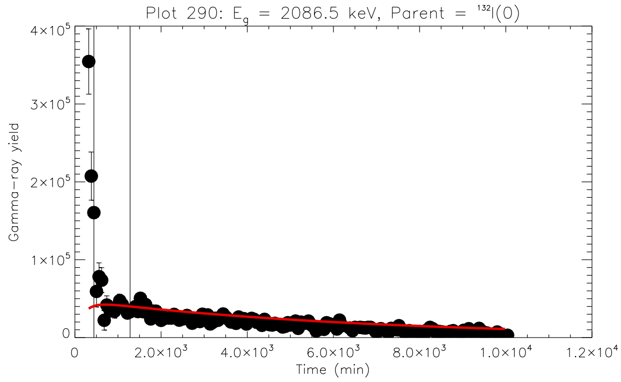
Plot 288: E_g = 2558.4 keV, Parent = ^{87}Kr(0)



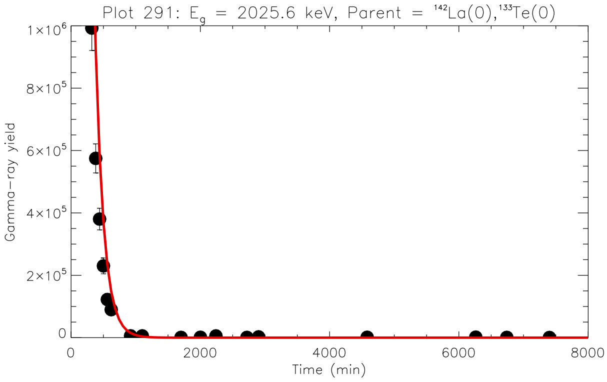
Plot 289: E_g = 188.5 keV, Parent = ^{134}I(0),^{149}Nd(0)



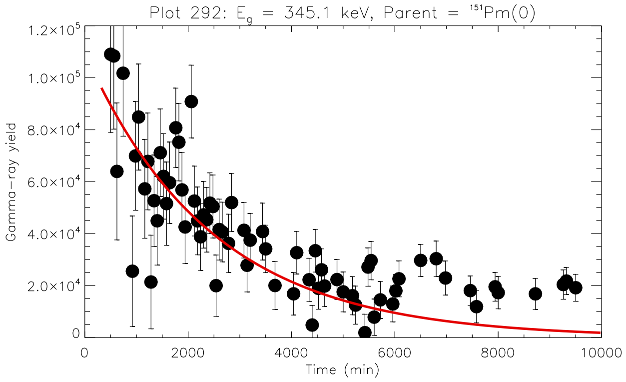
Plot 290: E_g = 2086.5 keV, Parent = ^{132}I(0)



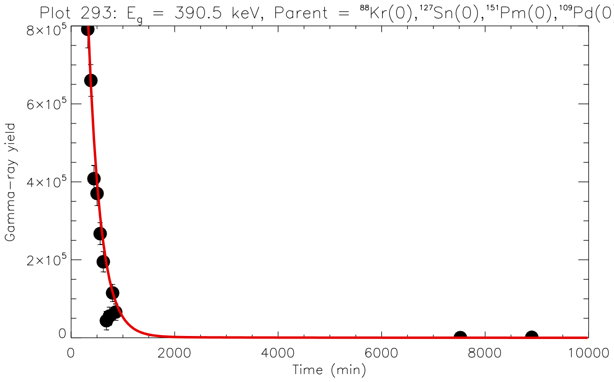
Plot 291: E_g = 2025.6 keV, Parent = ^{142}La(0),^{133}Te(0)



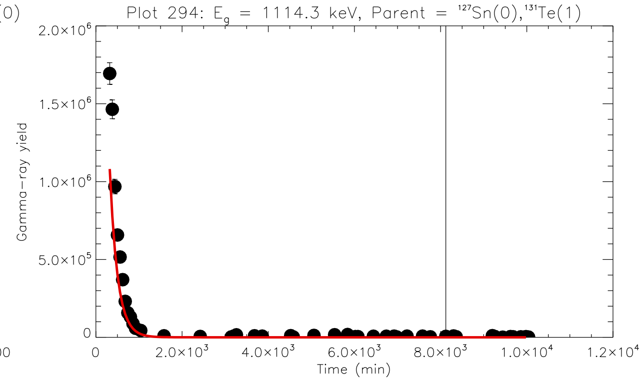
Plot 292: E_g = 345.1 keV, Parent = ^{151}Pm(0)



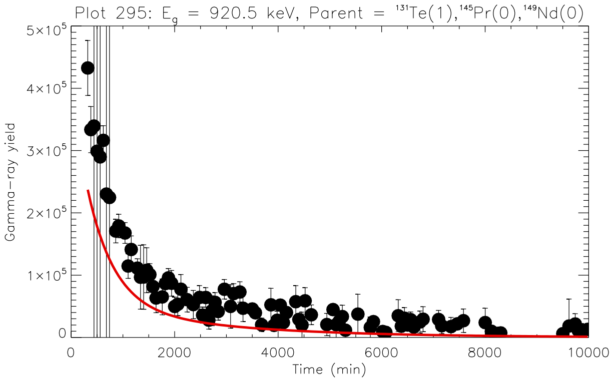
Plot 293: E_g = 390.5 keV, Parent = ^{88}Kr(0),^{127}Sn(0),^{151}Pm(0),^{109}Pd(0)



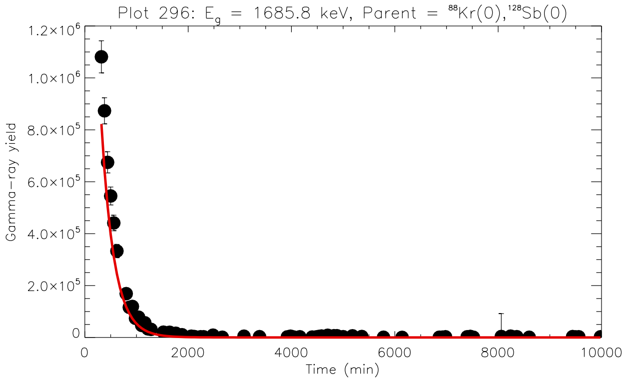
Plot 294: E_g = 1114.3 keV, Parent = ^{127}Sn(0),^{131}Te(1)



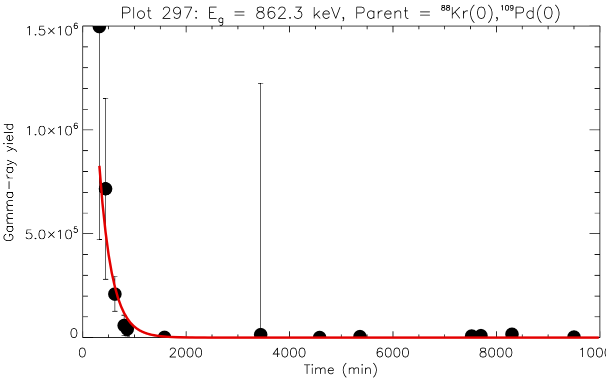
Plot 295: E_g = 920.5 keV, Parent = ^{131}Te(1),^{145}Pr(0),^{149}Nd(0)



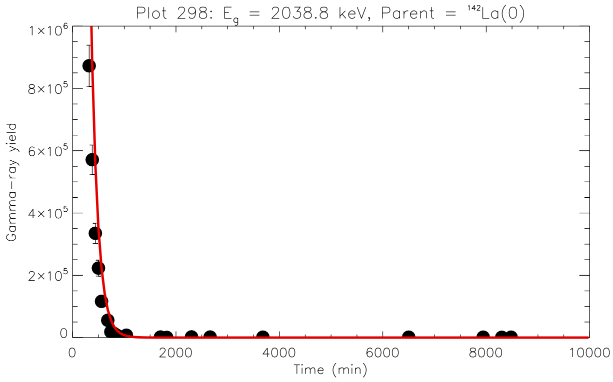
Plot 296: E_g = 1685.8 keV, Parent = ^{88}Kr(0),^{128}Sb(0)



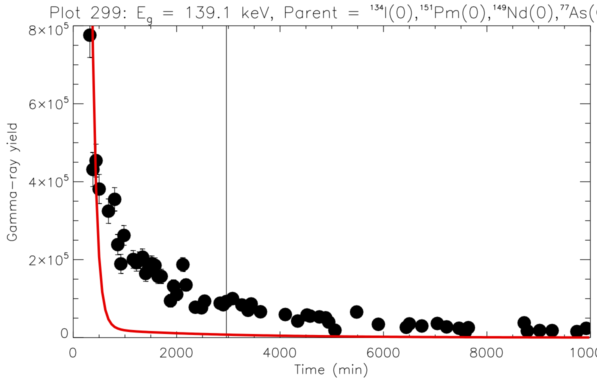
Plot 297: E_g = 862.3 keV, Parent = ^{88}Kr(0),^{109}Pd(0)



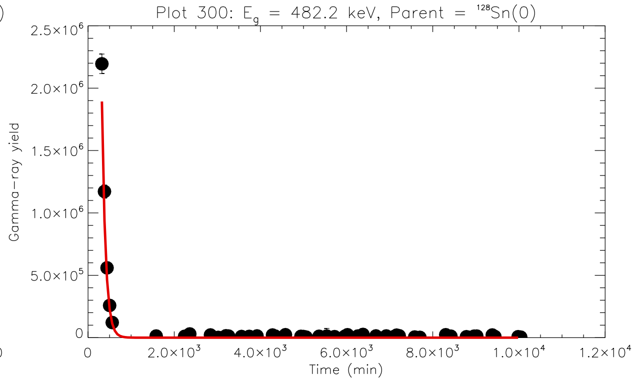
Plot 298: E_g = 2038.8 keV, Parent = ^{142}La(0)



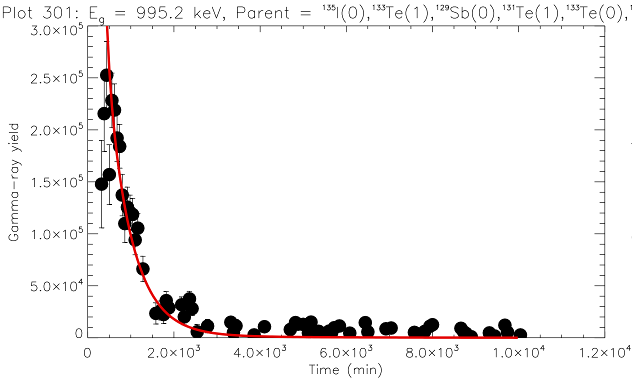
Plot 299: E_g = 139.1 keV, Parent = ^{134}I(0),^{151}Pm(0),^{149}Nd(0),^{77}As(0)



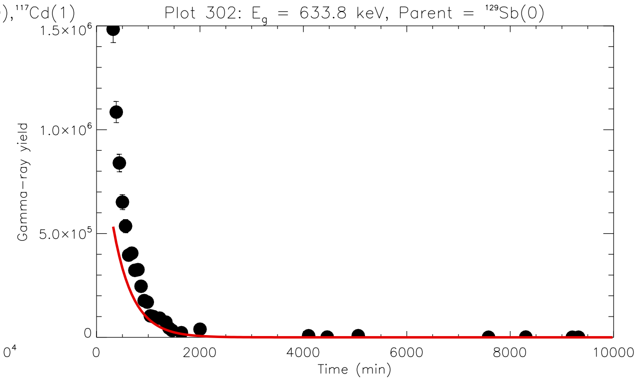
Plot 300: E_g = 482.2 keV, Parent = ^{128}Sn(0)



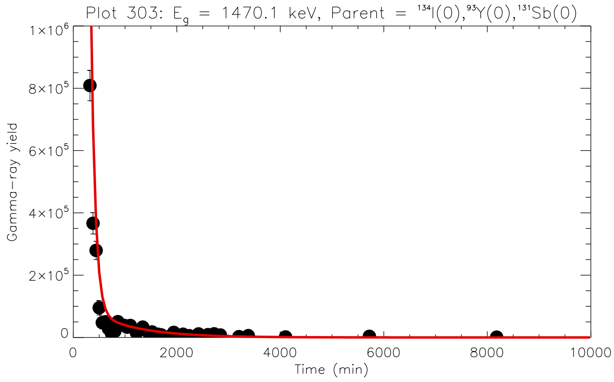
Plot 301: E_g = 995.2 keV, Parent = ^{135}I(0),^{133}Te(1),^{129}Sb(0),^{131}Te(1),^{133}Te(0),^{117}Cd(1)



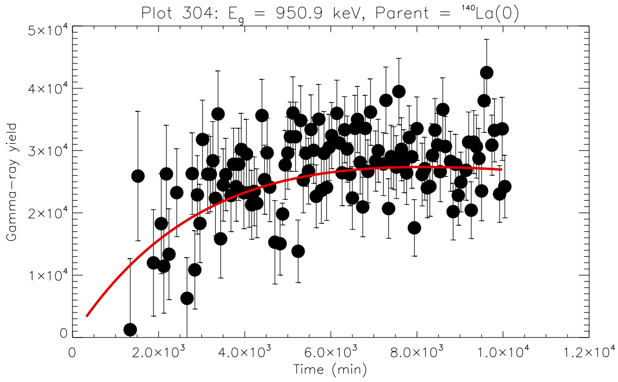
Plot 302: E_g = 633.8 keV, Parent = ^{129}Sb(0)

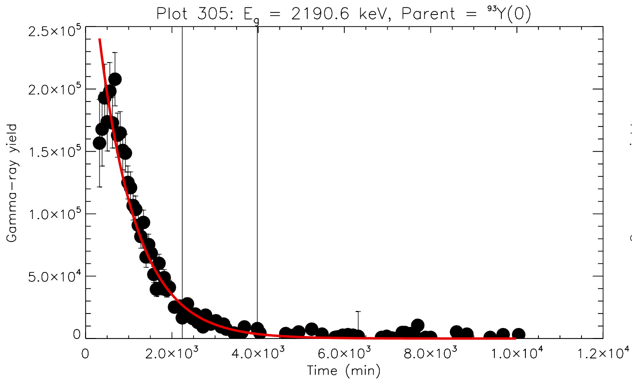


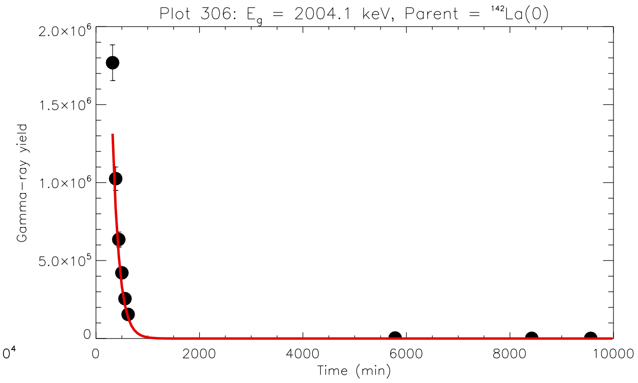
Plot 303: E_g = 1470.1 keV, Parent = ^{134}I(0),^{93}Y(0),^{131}Sb(0)

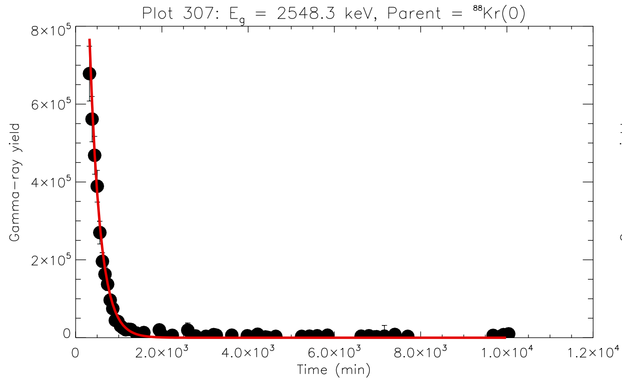


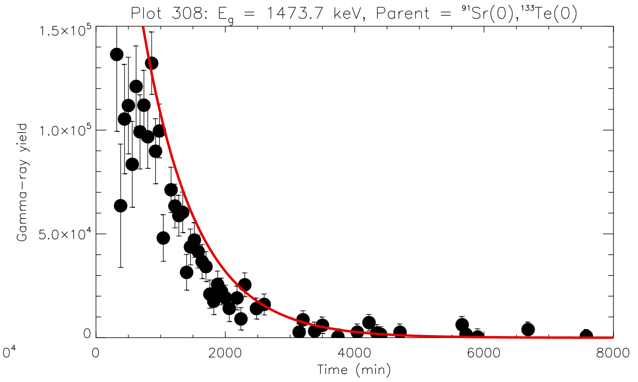
Plot 304: E_g = 950.9 keV, Parent = ^{140}La(0)

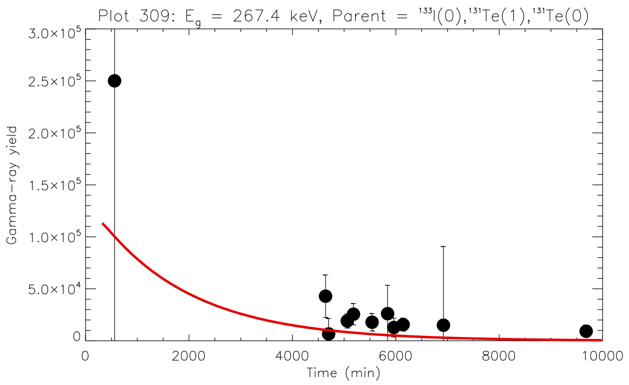


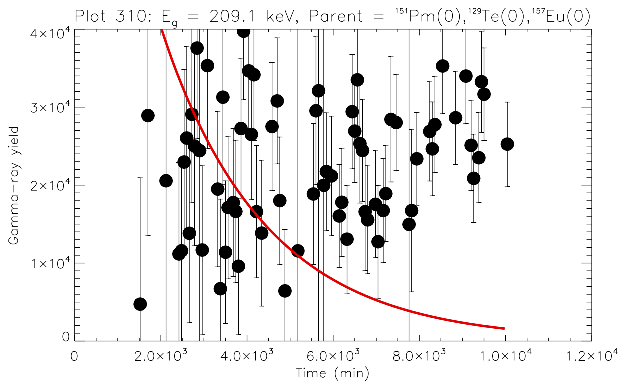

Plot 305: E_g = 2190.6 keV, Parent = 93Y(0)
Gamma-ray yield
Time (min)

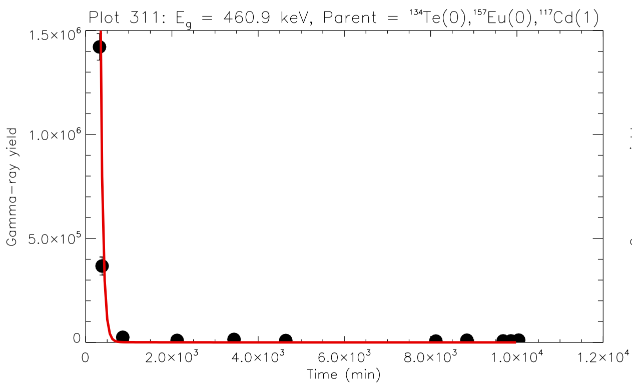

Plot 306: E_g = 2004.1 keV, Parent = 142La(0)
Gamma-ray yield
Time (min)

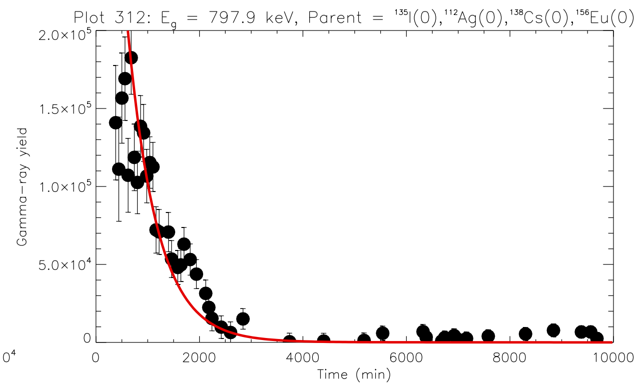

Plot 307: E_g = 2548.3 keV, Parent = 88Kr(0)
Gamma-ray yield
Time (min)


Plot 308: E_g = 1473.7 keV, Parent = 91Sr(0),133Te(0)
Gamma-ray yield
Time (min)

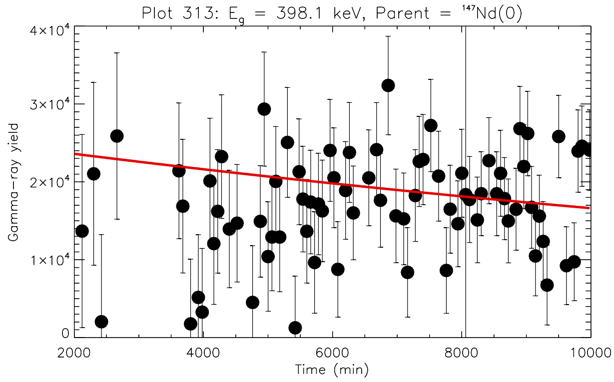

Plot 309: E_g = 267.4 keV, Parent = 133I(0),131Te(1),131Te(0)
Gamma-ray yield
Time (min)


Plot 310: E_g = 209.1 keV, Parent = 151Pm(0),129Te(0),157Eu(0)
Gamma-ray yield
Time (min)

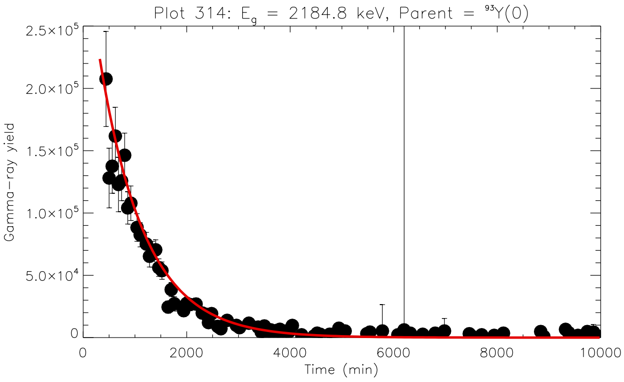

Plot 311: E_g = 460.9 keV, Parent = 134Te(0),157Eu(0),117Cd(1)
Gamma-ray yield
Time (min)


Plot 312: E_g = 797.9 keV, Parent = 135I(0),112Ag(0),138Cs(0),156Eu(0)
Gamma-ray yield
Time (min)

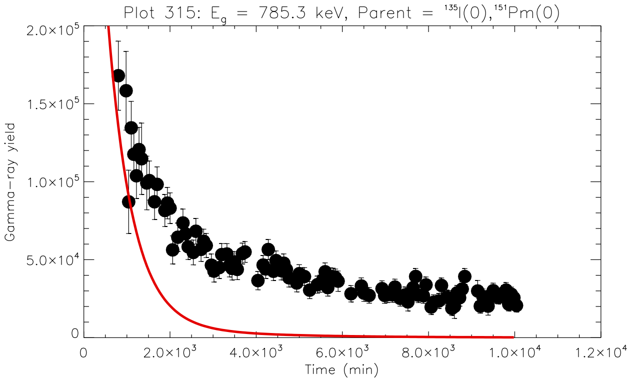
Plot 313: E_g = 398.1 keV, Parent = ^{147}Nd(0)



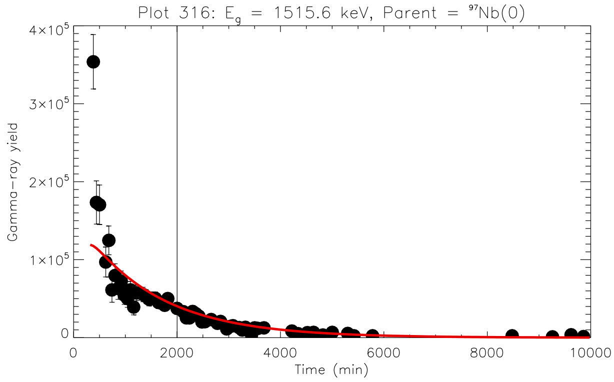
Plot 314: E_g = 2184.8 keV, Parent = ^{93}Y(0)



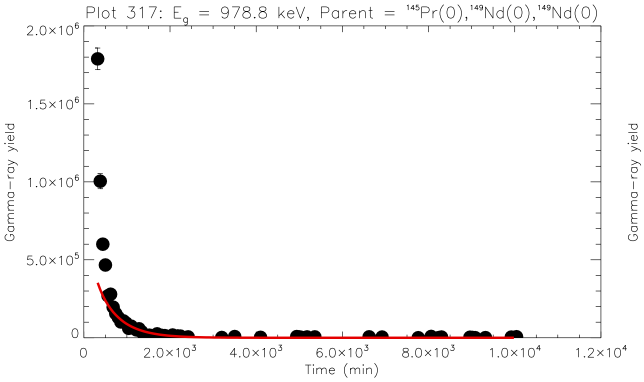
Plot 315: E_g = 785.3 keV, Parent = ^{135}I(0),^{151}Pm(0)



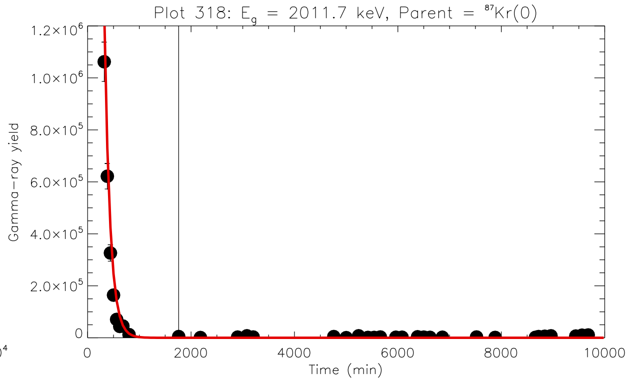
Plot 316: E_g = 1515.6 keV, Parent = ^{97}Nb(0)



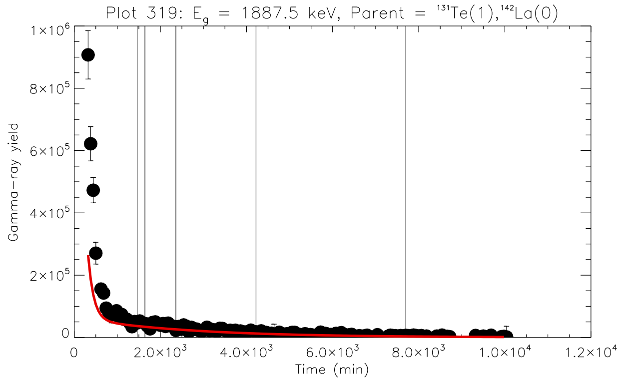
Plot 317: E_g = 978.8 keV, Parent = ^{145}Pr(0),^{149}Nd(0),^{149}Nd(0)



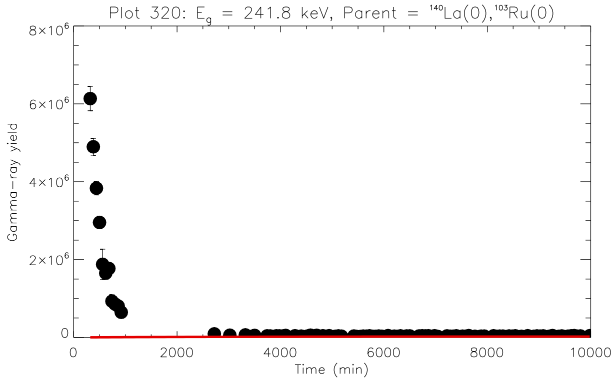
Plot 318: E_g = 2011.7 keV, Parent = ^{87}Kr(0)



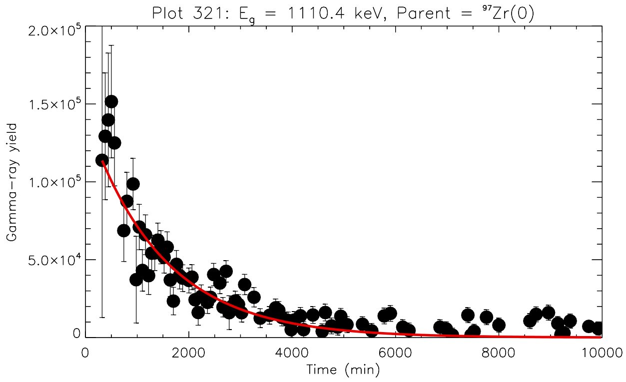
Plot 319: E_g = 1887.5 keV, Parent = ^{131}Te(1),^{142}La(0)



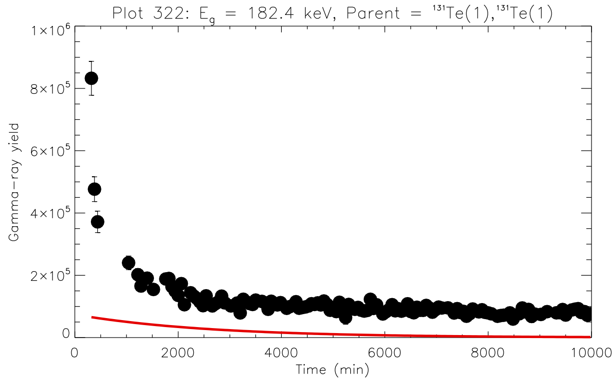
Plot 320: E_g = 241.8 keV, Parent = ^{140}La(0),^{103}Ru(0)



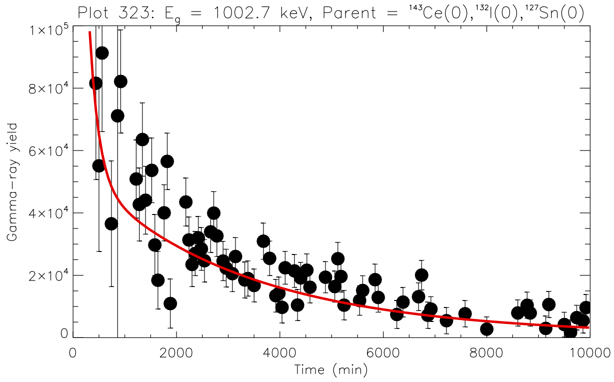
Plot 321: E_g = 1110.4 keV, Parent = ^{97}Zr(0)



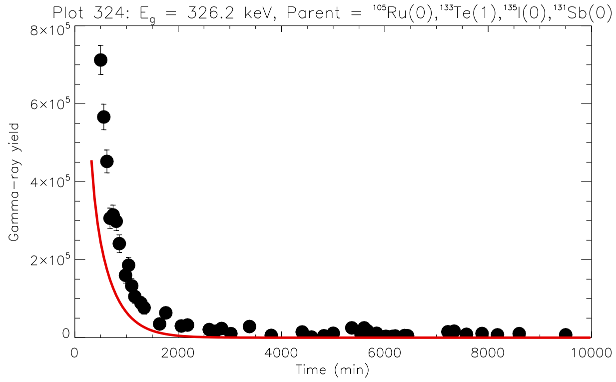
Plot 322: E_g = 182.4 keV, Parent = ^{131}Te(1),^{131}Te(1)



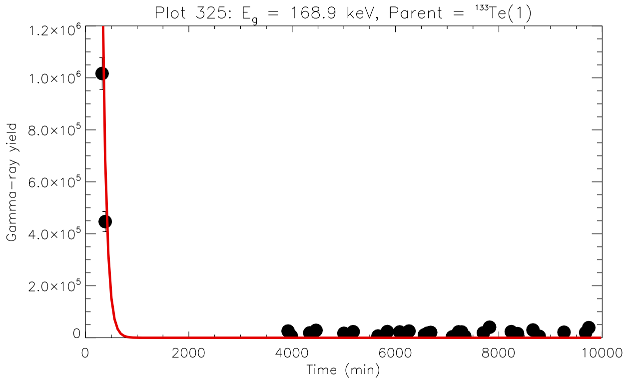
Plot 323: E_g = 1002.7 keV, Parent = ^{143}Ce(0),^{132}I(0),^{127}Sn(0)



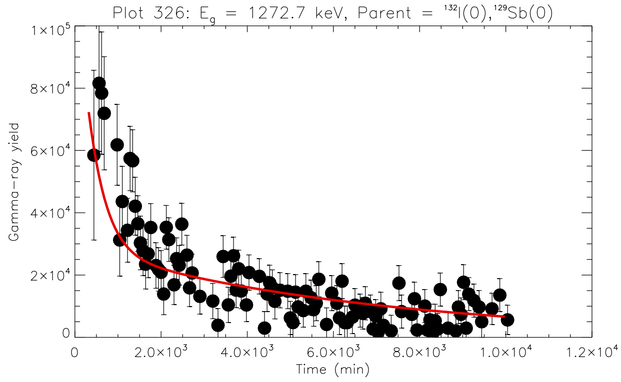
Plot 324: E_g = 326.2 keV, Parent = ^{105}Ru(0),^{133}Te(1),^{135}I(0),^{131}Sb(0)



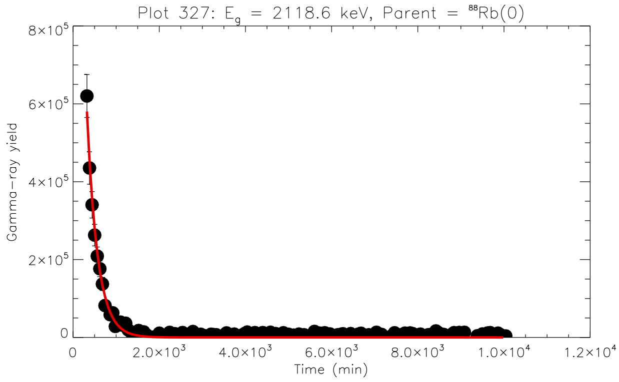
Plot 325: E_g = 168.9 keV, Parent = ^{133}Te(1)



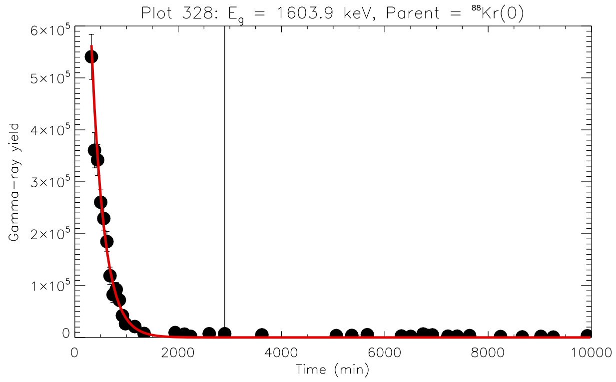
Plot 326: E_g = 1272.7 keV, Parent = ^{132}I(0),^{129}Sb(0)



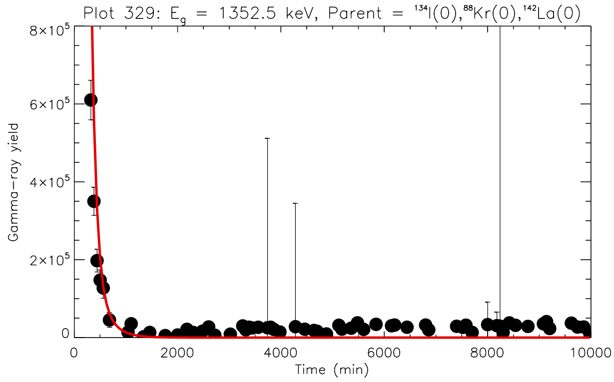
Plot 327: E_g = 2118.6 keV, Parent = ^{88}Rb(0)



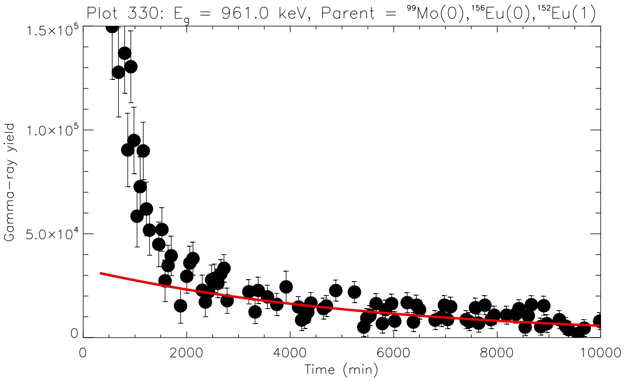
Plot 328: E_g = 1603.9 keV, Parent = ^{88}Kr(0)



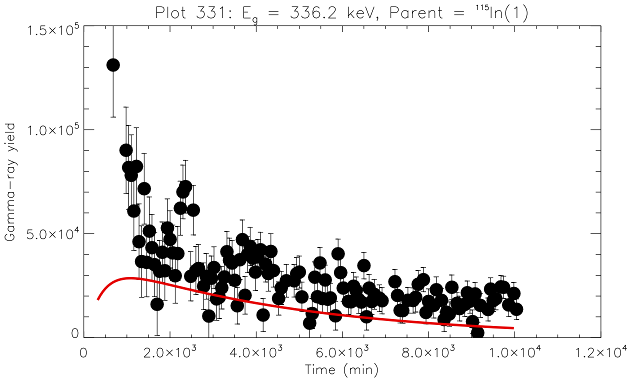
Plot 329: E_g = 1352.5 keV, Parent = ^{134}I(0),^{88}Kr(0),^{142}La(0)



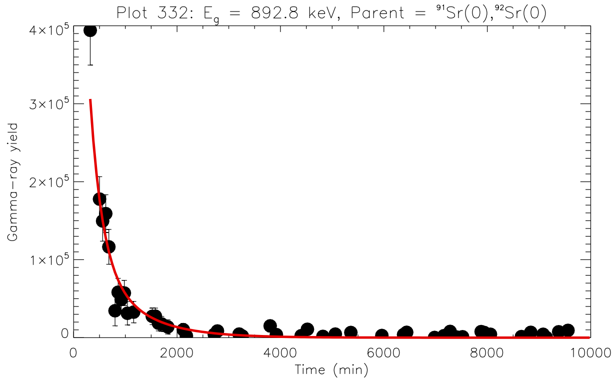
Plot 330: E_g = 961.0 keV, Parent = ^{99}Mo(0),^{156}Eu(0),^{152}Eu(1)



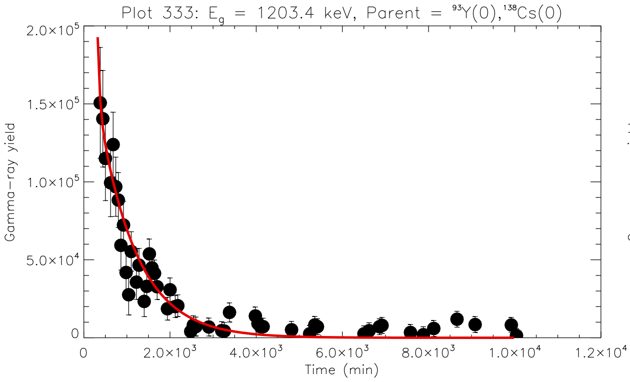
Plot 331: E_g = 336.2 keV, Parent = ^{115}In(1)



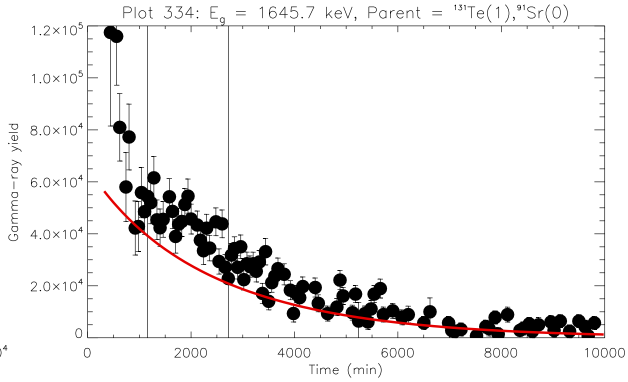
Plot 332: E_g = 892.8 keV, Parent = ^{91}Sr(0),^{92}Sr(0)



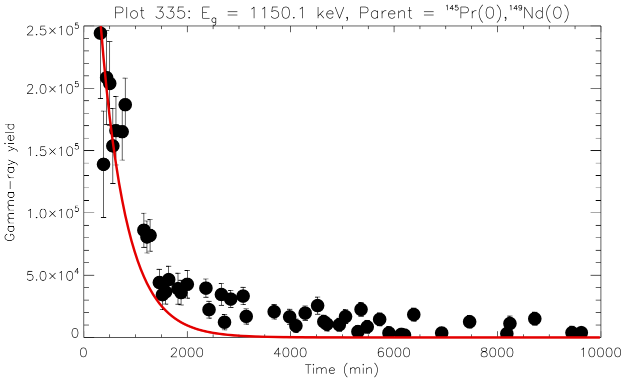
Plot 333: E_g = 1203.4 keV, Parent = ^{93}Y(0),^{138}Cs(0)



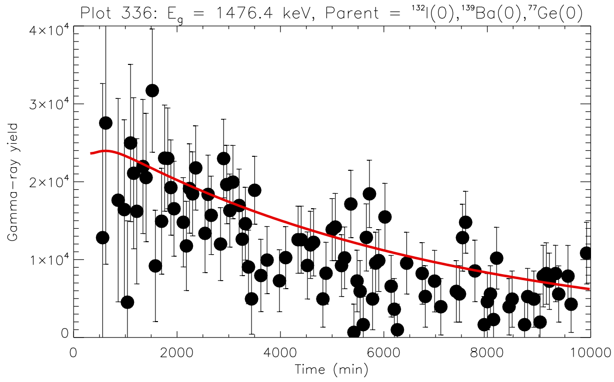
Plot 334: E_g = 1645.7 keV, Parent = ^{131}Te(1),^{91}Sr(0)



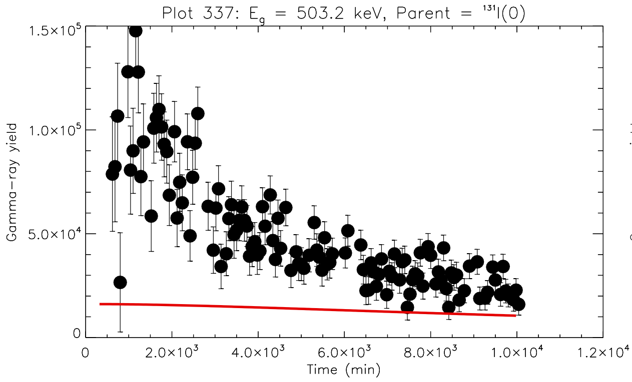
Plot 335: E_g = 1150.1 keV, Parent = ^{145}Pr(0),^{149}Nd(0)



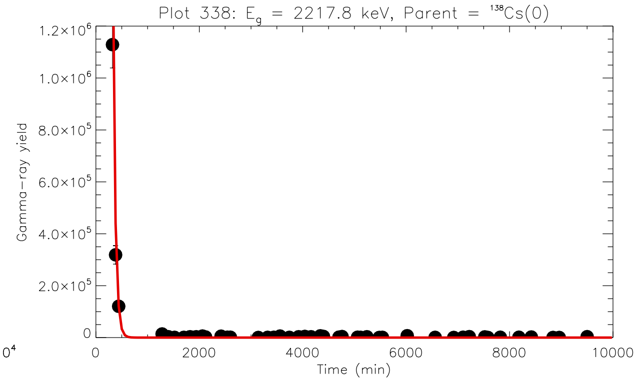
Plot 336: E_g = 1476.4 keV, Parent = ^{132}I(0),^{139}Ba(0),^{77}Ge(0)



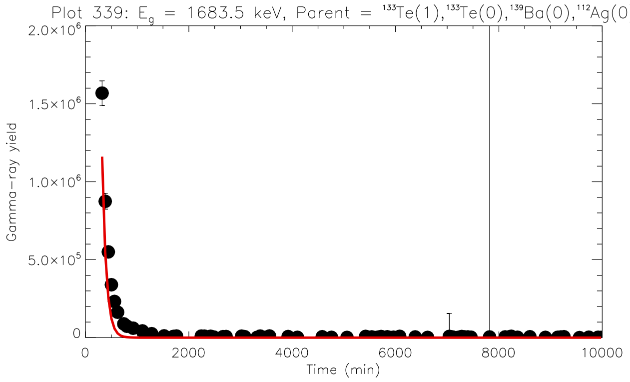
Plot 337: E_g = 503.2 keV, Parent = ^{131}I(0)



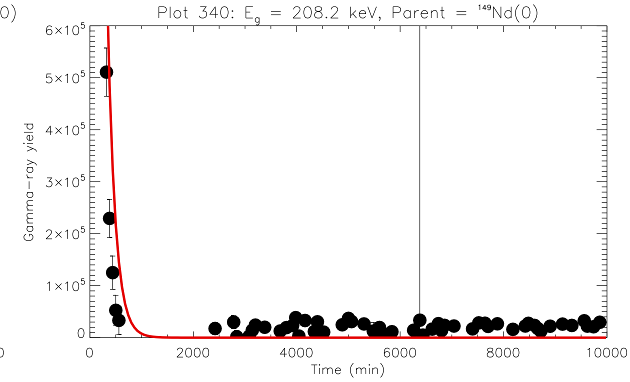
Plot 338: E_g = 2217.8 keV, Parent = ^{138}Cs(0)



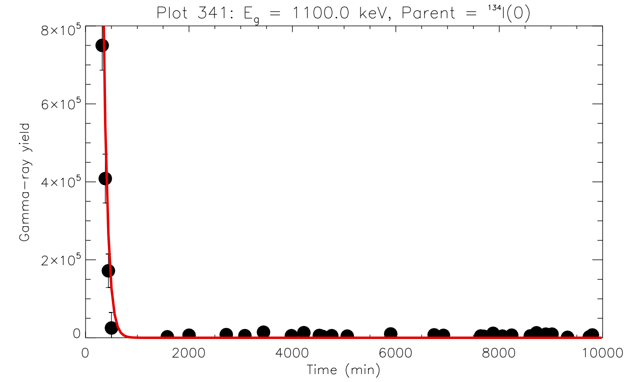
Plot 339: E_g = 1683.5 keV, Parent = ^{133}Te(1),^{133}Te(0),^{139}Ba(0),^{112}Ag(0)



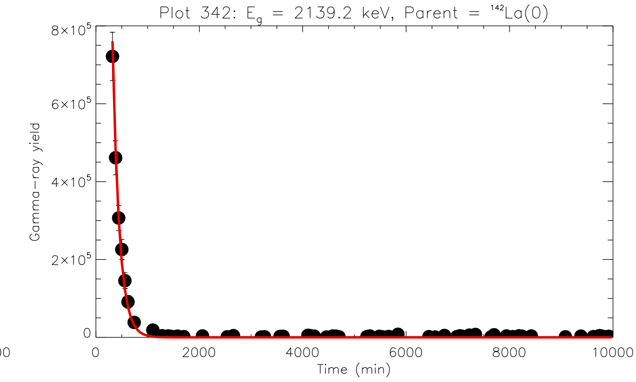
Plot 340: E_g = 208.2 keV, Parent = ^{149}Nd(0)



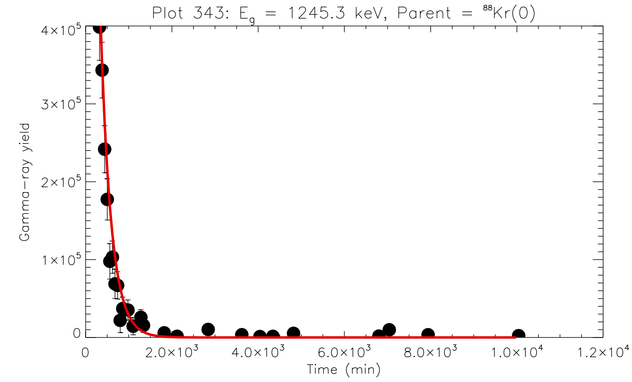
Plot 341: E_g = 1100.0 keV, Parent = ^{134}I(0)



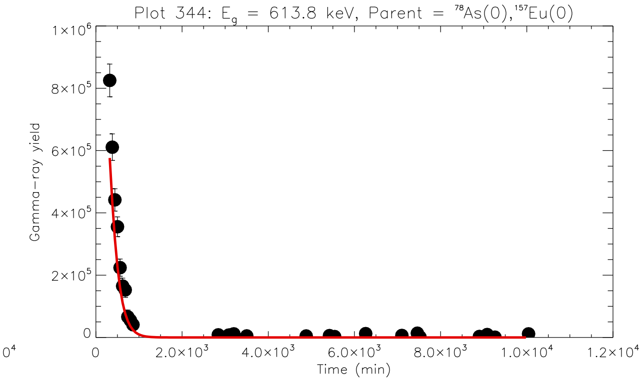
Plot 342: E_g = 2139.2 keV, Parent = ^{142}La(0)

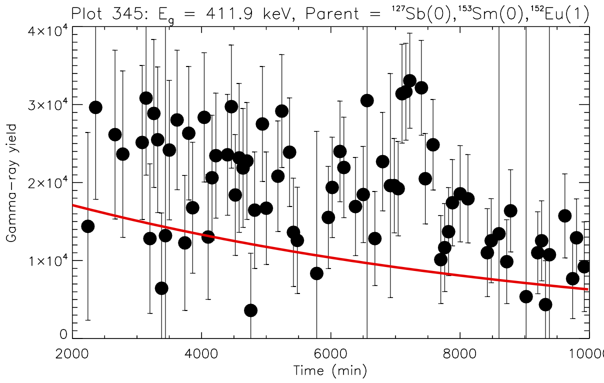


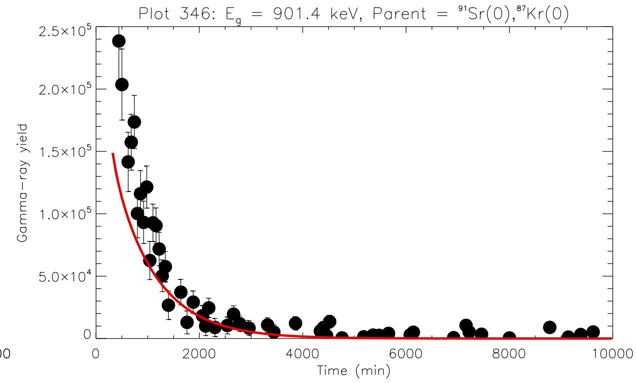
Plot 343: E_g = 1245.3 keV, Parent = ^{88}Kr(0)

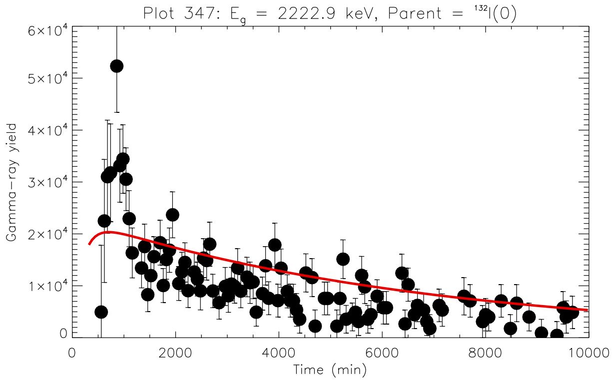


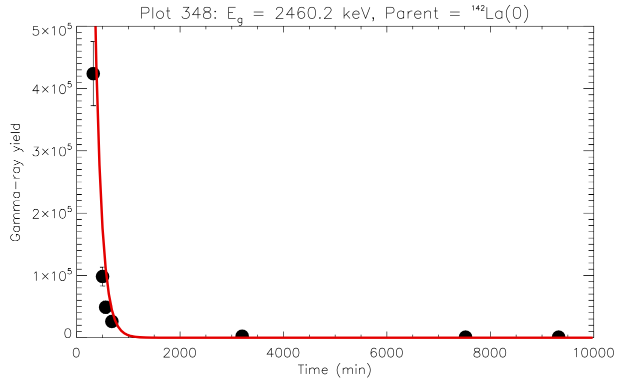
Plot 344: E_g = 613.8 keV, Parent = ^{78}As(0),^{157}Eu(0)

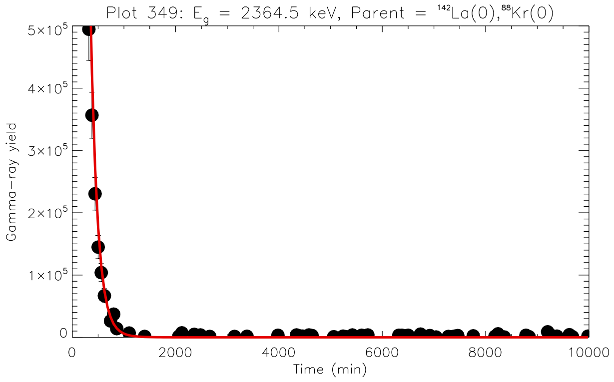


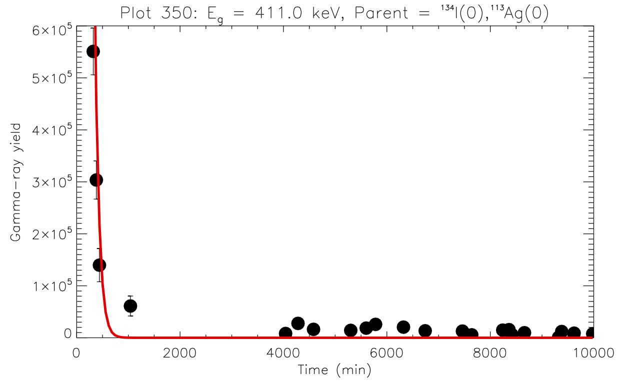

Plot 345: E_g = 411.9 keV, Parent = ^{127}Sb(0),^{153}Sm(0),^{152}Eu(1)
Gamma-ray yield
Time (min)

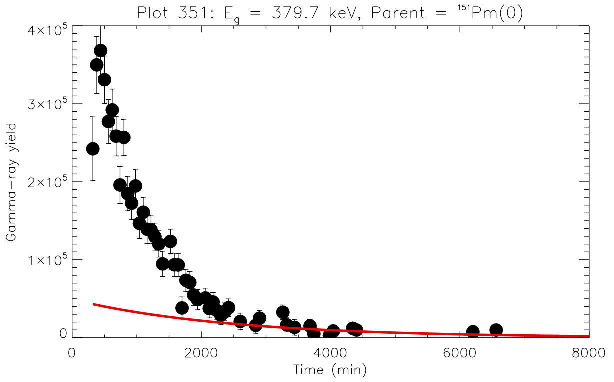

Plot 346: E_g = 901.4 keV, Parent = ^{91}Sr(0),^{87}Kr(0)
Gamma-ray yield
Time (min)

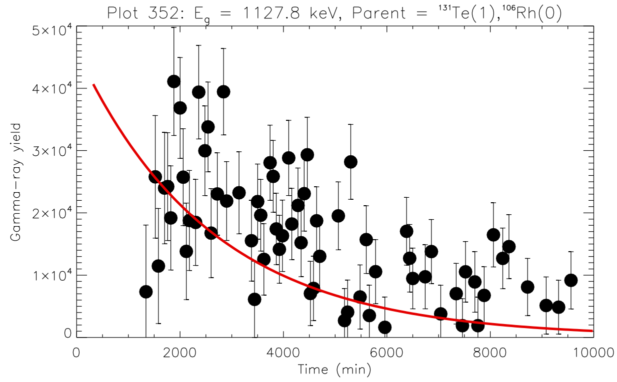

Plot 347: E_g = 2222.9 keV, Parent = ^{132}I(0)
Gamma-ray yield
Time (min)

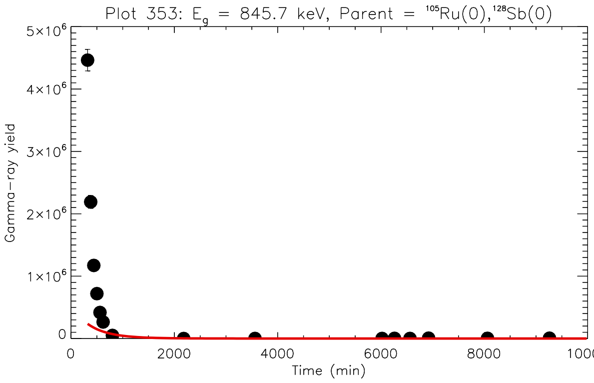

Plot 348: E_g = 2460.2 keV, Parent = ^{142}La(0)
Gamma-ray yield
Time (min)

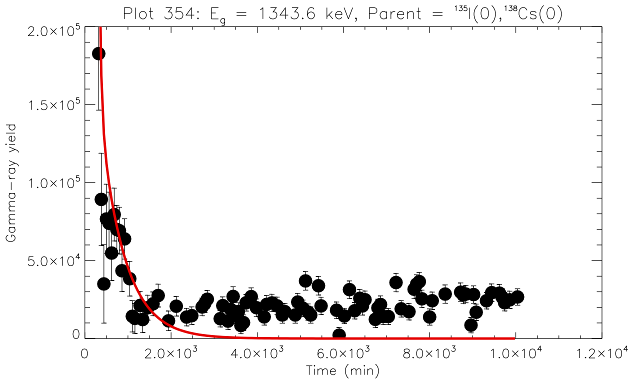

Plot 349: E_g = 2364.5 keV, Parent = ^{142}La(0),^{88}Kr(0)
Gamma-ray yield
Time (min)

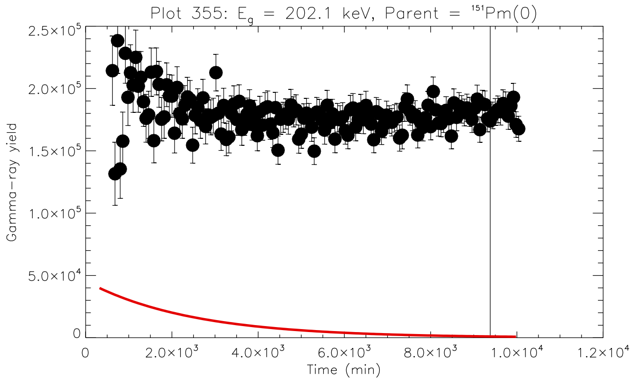

Plot 350: E_g = 411.0 keV, Parent = ^{134}I(0),^{113}Ag(0)
Gamma-ray yield
Time (min)

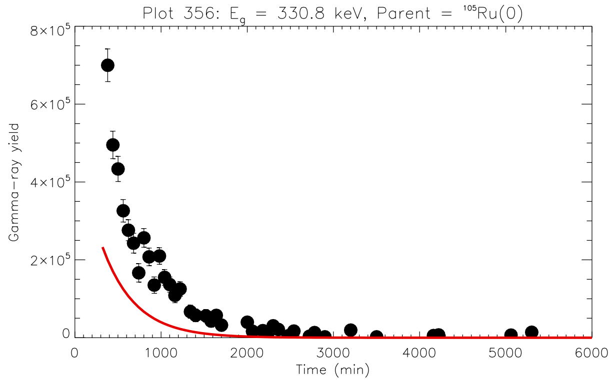

Plot 351: E_g = 379.7 keV, Parent = ^{151}Pm(0)
Gamma-ray yield
Time (min)

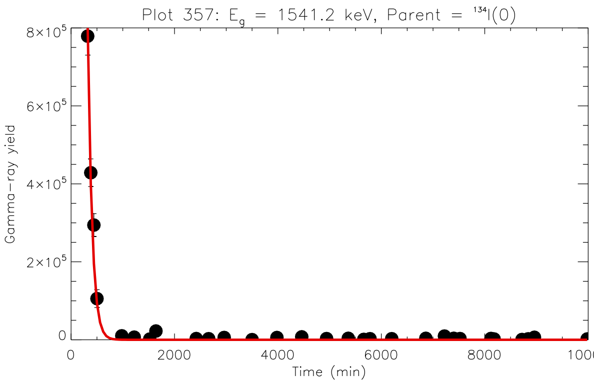

Plot 352: E_g = 1127.8 keV, Parent = ^{131}Te(1),^{106}Rh(0)
Gamma-ray yield
Time (min)

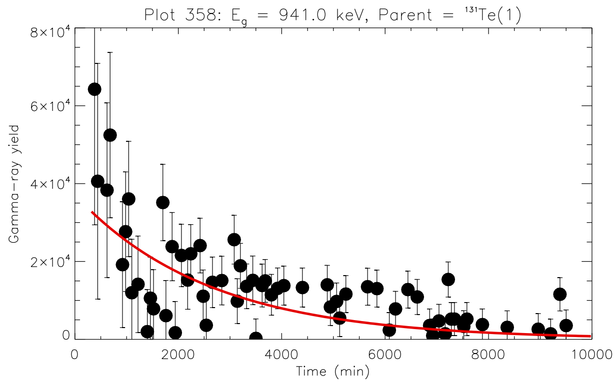

Plot 353: E$_g$ = 845.7 keV, Parent = ^{105}Ru(0),^{128}Sb(0)
Gamma-ray yield
Time (min)

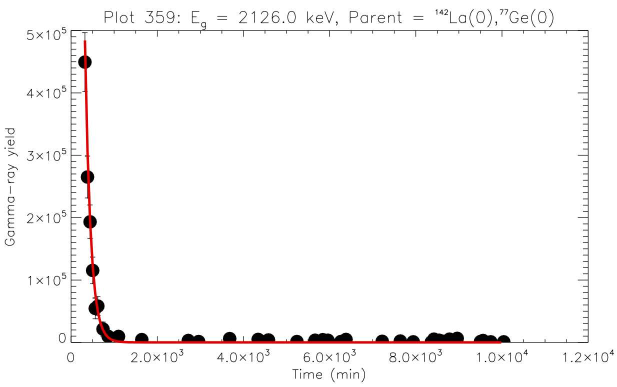

Plot 354: E$_g$ = 1343.6 keV, Parent = ^{135}I(0),^{138}Cs(0)
Gamma-ray yield
Time (min)

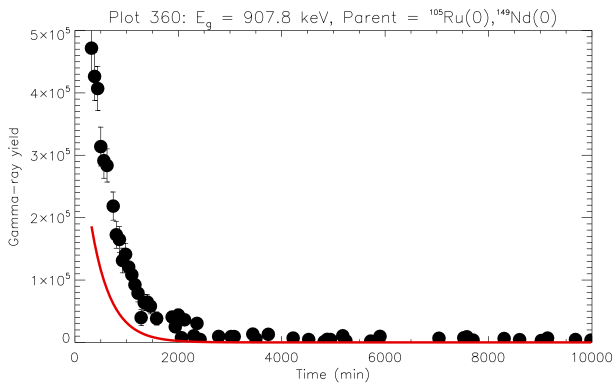

Plot 355: E$_g$ = 202.1 keV, Parent = ^{151}Pm(0)
Gamma-ray yield
Time (min)

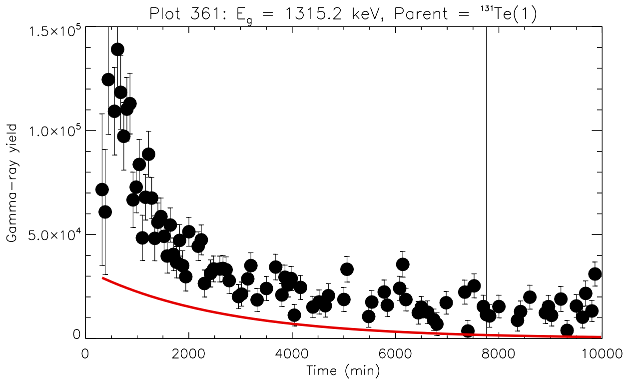

Plot 356: E$_g$ = 330.8 keV, Parent = ^{105}Ru(0)
Gamma-ray yield
Time (min)

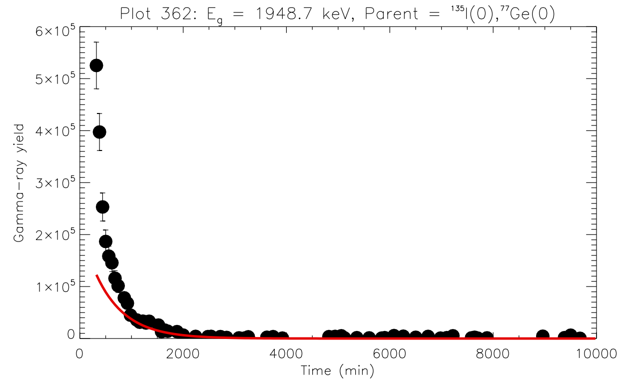

Plot 357: E$_g$ = 1541.2 keV, Parent = ^{134}I(0)
Gamma-ray yield
Time (min)

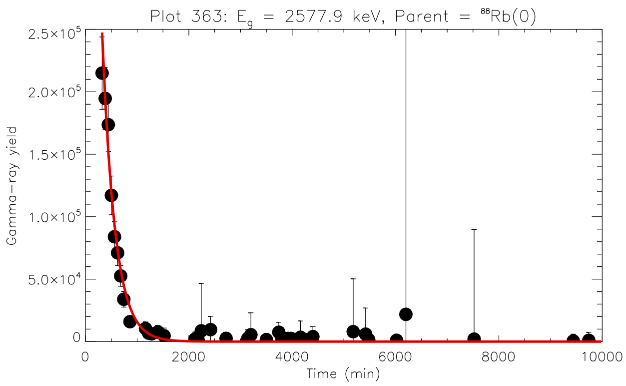

Plot 358: E$_g$ = 941.0 keV, Parent = ^{131}Te(1)
Gamma-ray yield
Time (min)

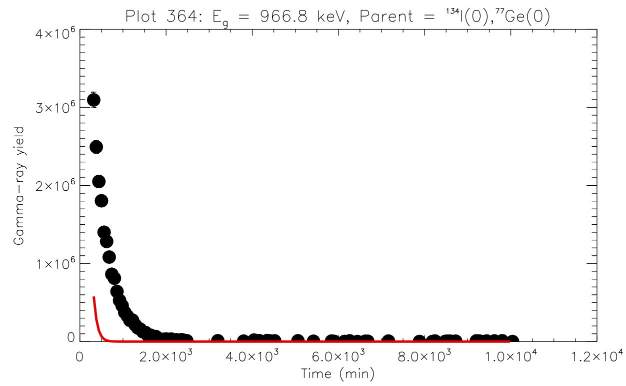

Plot 359: E$_g$ = 2126.0 keV, Parent = ^{142}La(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

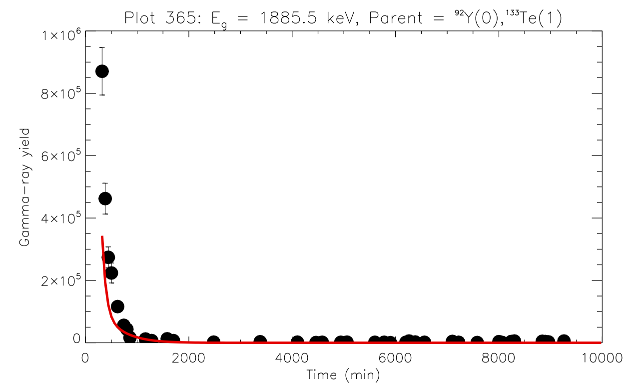

Plot 360: E$_g$ = 907.8 keV, Parent = ^{105}Ru(0),^{149}Nd(0)
Gamma-ray yield
Time (min)

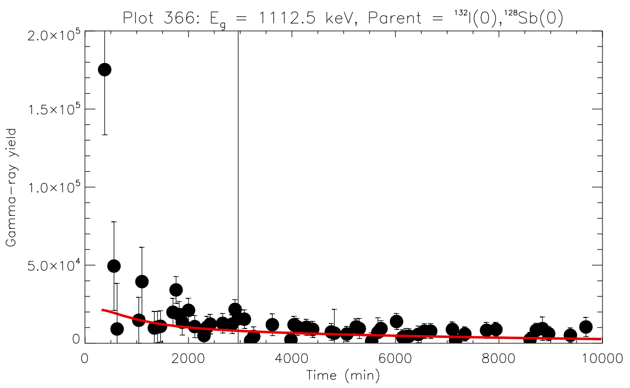

Plot 361: E_g = 1315.2 keV, Parent = ^{131}Te(1)
Gamma-ray yield
Time (min)

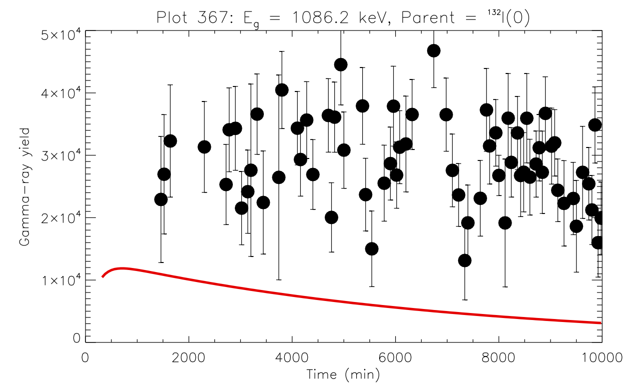

Plot 362: E_g = 1948.7 keV, Parent = ^{135}I(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

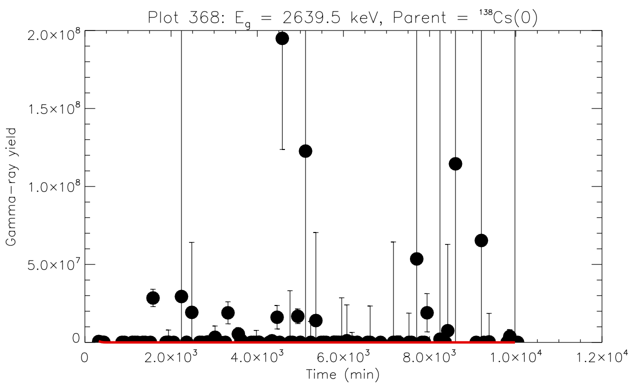

Plot 363: E_g = 2577.9 keV, Parent = ^{88}Rb(0)
Gamma-ray yield
Time (min)


Plot 364: E_g = 966.8 keV, Parent = ^{134}I(0),^{77}Ge(0)
Gamma-ray yield
Time (min)

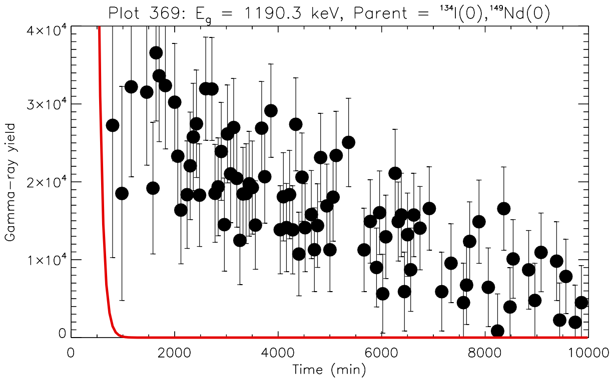

Plot 365: E_g = 1885.5 keV, Parent = ^{92}Y(0),^{133}Te(1)
Gamma-ray yield
Time (min)


Plot 366: E_g = 1112.5 keV, Parent = ^{132}I(0),^{128}Sb(0)
Gamma-ray yield
Time (min)

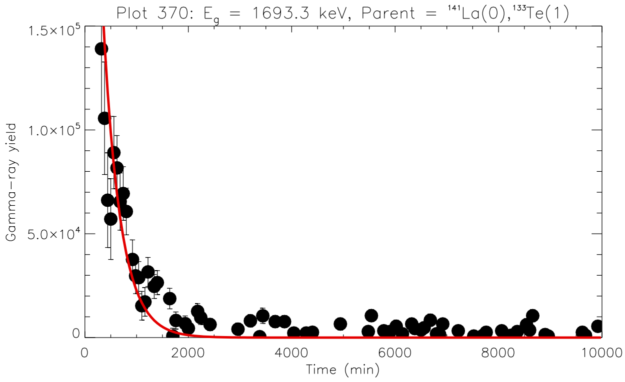

Plot 367: E_g = 1086.2 keV, Parent = ^{132}I(0)
Gamma-ray yield
Time (min)


Plot 368: E_g = 2639.5 keV, Parent = ^{138}Cs(0)
Gamma-ray yield
Time (min)

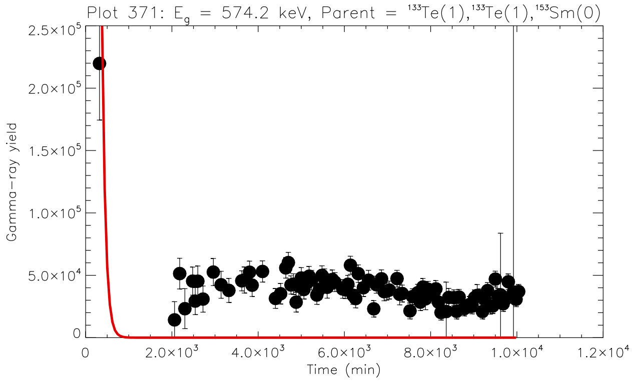
Plot 369: E_g = 1190.3 keV, Parent = ^{134}I(0),^{149}Nd(0)



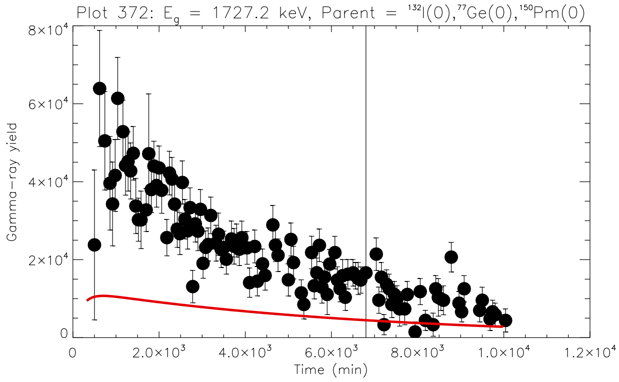
Plot 370: E_g = 1693.3 keV, Parent = ^{141}La(0),^{133}Te(1)



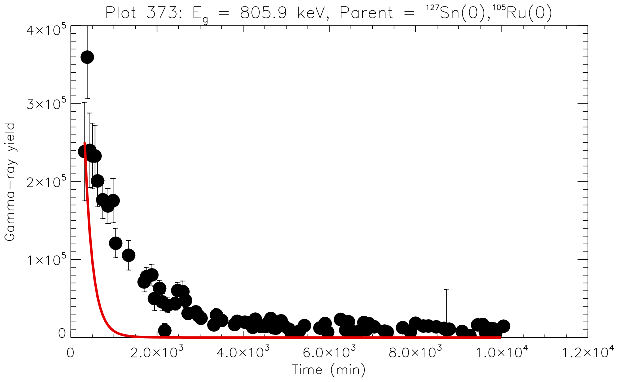
Plot 371: E_g = 574.2 keV, Parent = ^{133}Te(1),^{133}Te(1),^{153}Sm(0)



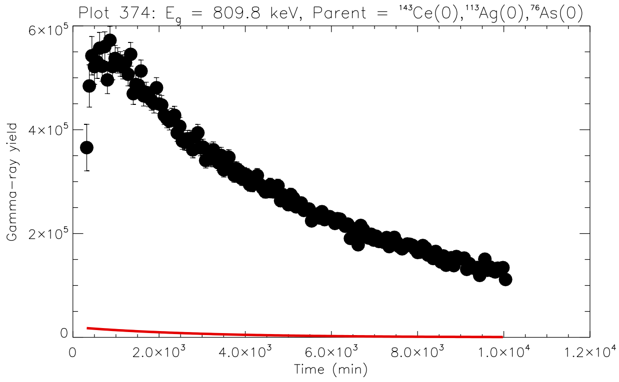
Plot 372: E_g = 1727.2 keV, Parent = ^{132}I(0),^{77}Ge(0),^{150}Pm(0)



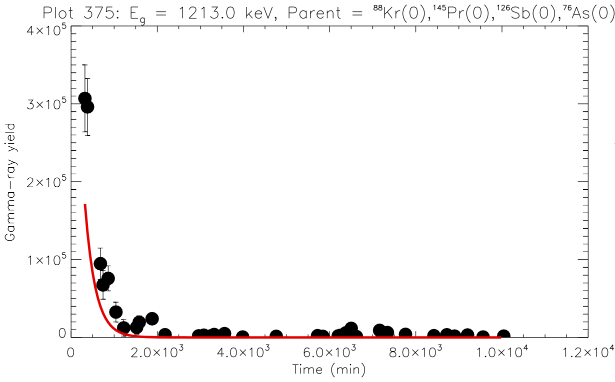
Plot 373: E_g = 805.9 keV, Parent = ^{127}Sn(0),^{105}Ru(0)



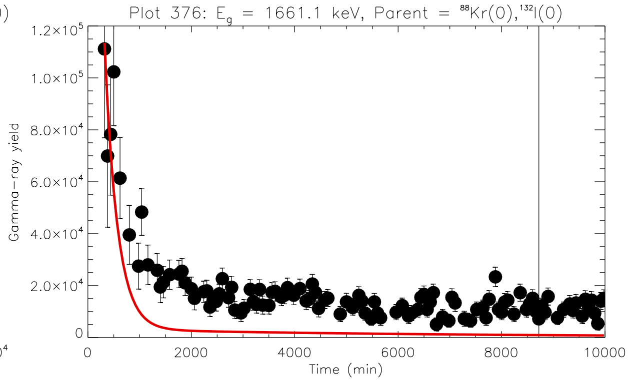
Plot 374: E_g = 809.8 keV, Parent = ^{143}Ce(0),^{113}Ag(0),^{76}As(0)



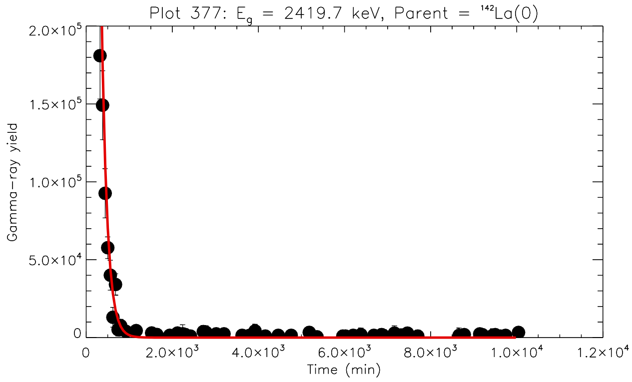
Plot 375: E_g = 1213.0 keV, Parent = ^{88}Kr(0),^{145}Pr(0),^{126}Sb(0),^{76}As(0)



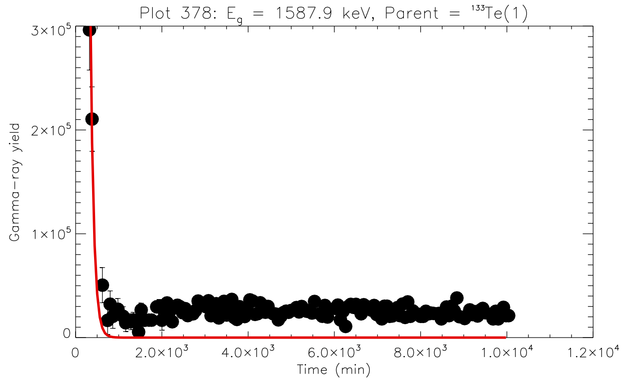
Plot 376: E_g = 1661.1 keV, Parent = ^{88}Kr(0),^{132}I(0)



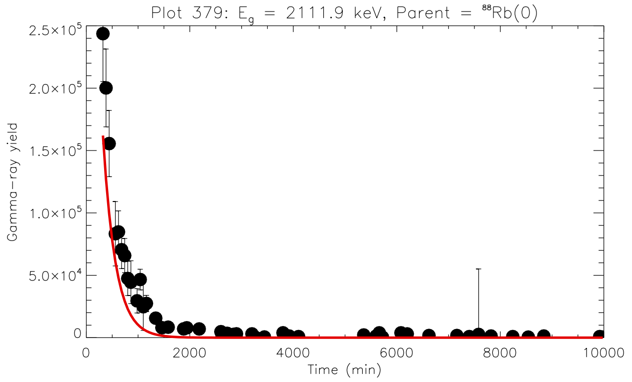
Plot 377: E_g = 2419.7 keV, Parent = ^{142}La(0)



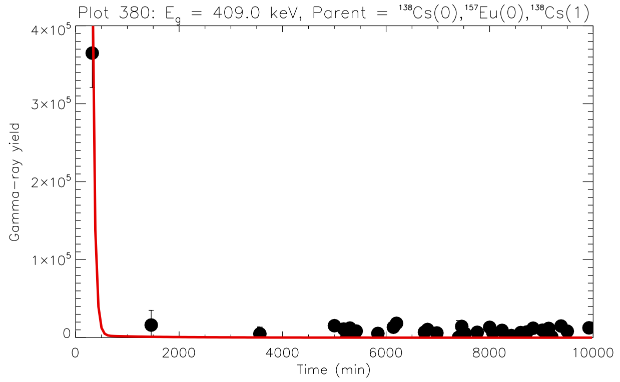
Plot 378: E_g = 1587.9 keV, Parent = ^{133}Te(1)



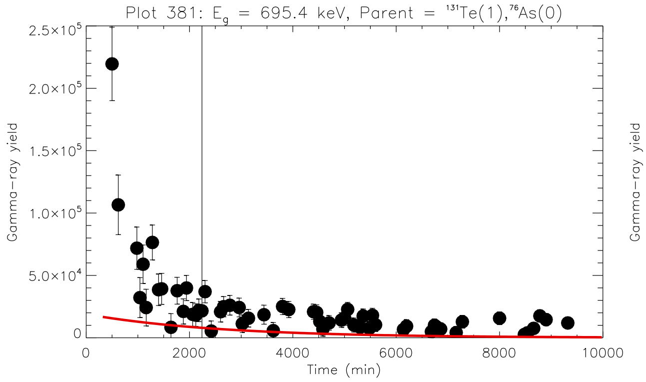
Plot 379: E_g = 2111.9 keV, Parent = ^{88}Rb(0)



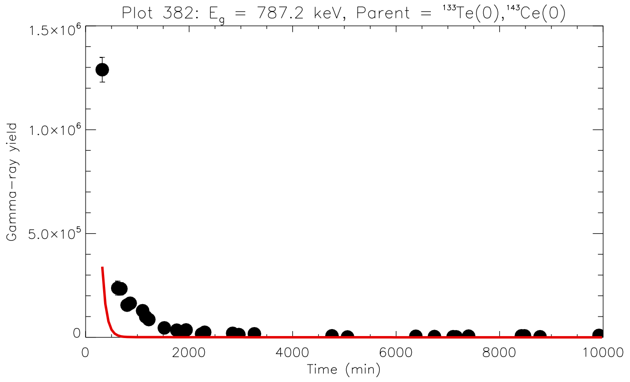
Plot 380: E_g = 409.0 keV, Parent = ^{138}Cs(0),^{157}Eu(0),^{138}Cs(1)



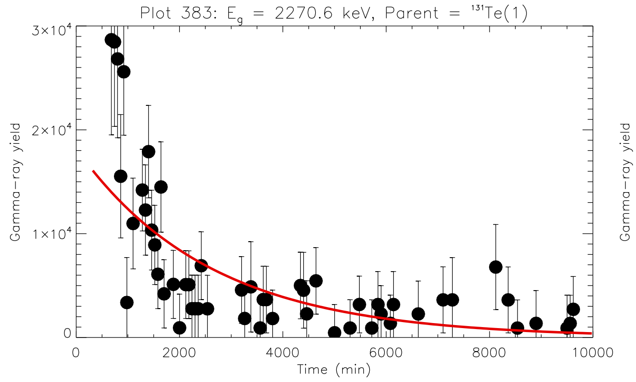
Plot 381: E_g = 695.4 keV, Parent = ^{131}Te(1),^{76}As(0)



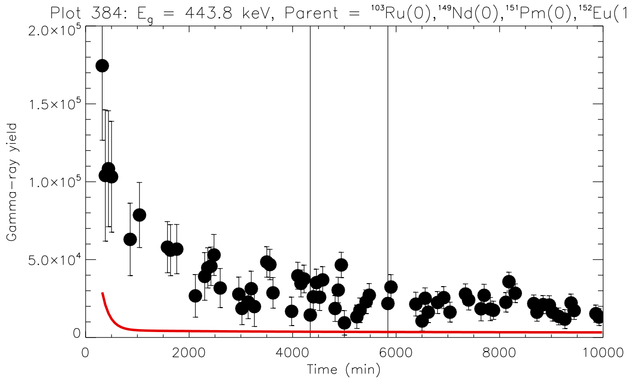
Plot 382: E_g = 787.2 keV, Parent = ^{133}Te(0),^{143}Ce(0)



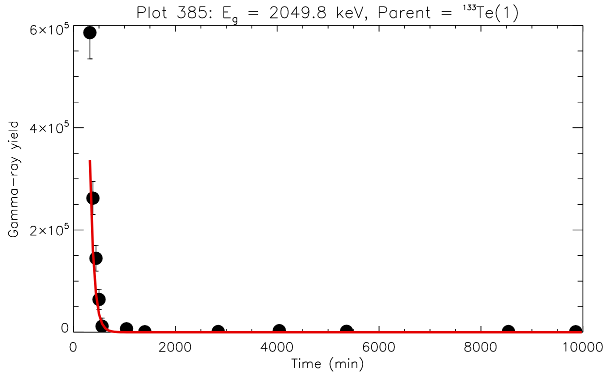
Plot 383: E_g = 2270.6 keV, Parent = ^{131}Te(1)



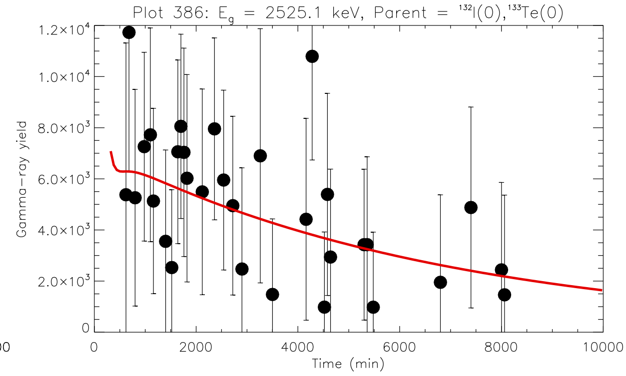
Plot 384: E_g = 443.8 keV, Parent = ^{103}Ru(0),^{149}Nd(0),^{151}Pm(0),^{152}Eu(1)



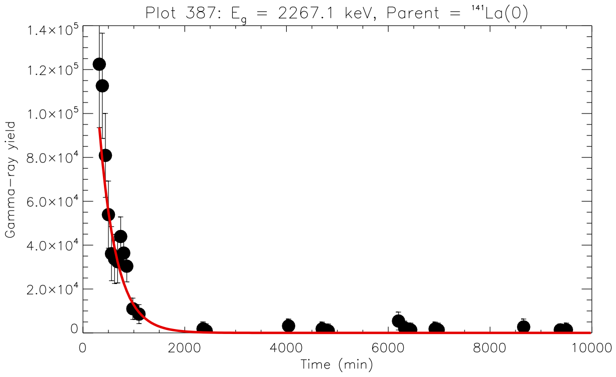
Plot 385: E_g = 2049.8 keV, Parent = ^{133}Te(1)



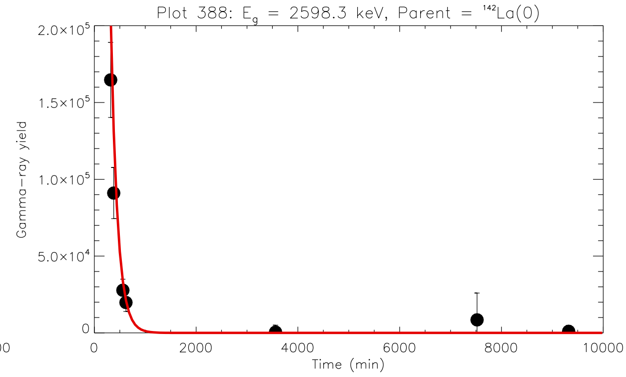
Plot 386: E_g = 2525.1 keV, Parent = ^{132}I(0),^{133}Te(0)



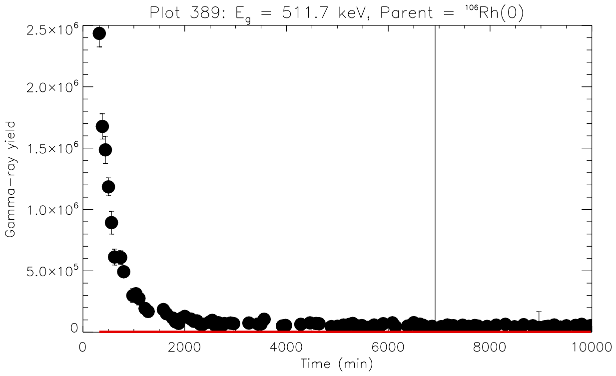
Plot 387: E_g = 2267.1 keV, Parent = ^{141}La(0)



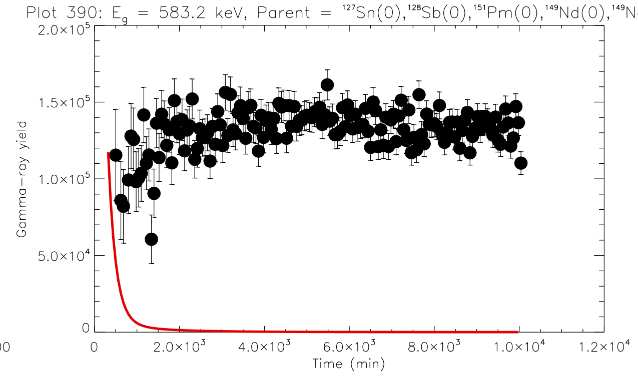
Plot 388: E_g = 2598.3 keV, Parent = ^{142}La(0)



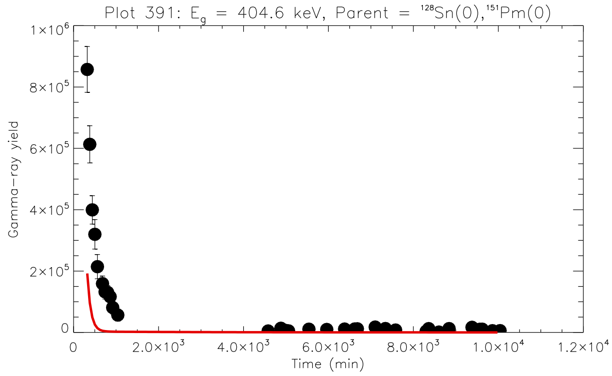
Plot 389: E_g = 511.7 keV, Parent = ^{106}Rh(0)



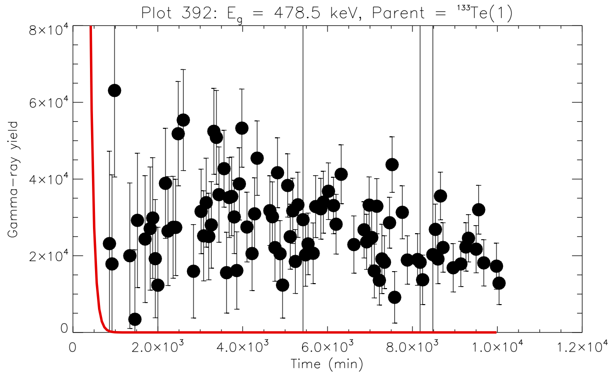
Plot 390: E_g = 583.2 keV, Parent = ^{127}Sn(0),^{128}Sb(0),^{151}Pm(0),^{149}Nd(0),^{149}Nd(0)

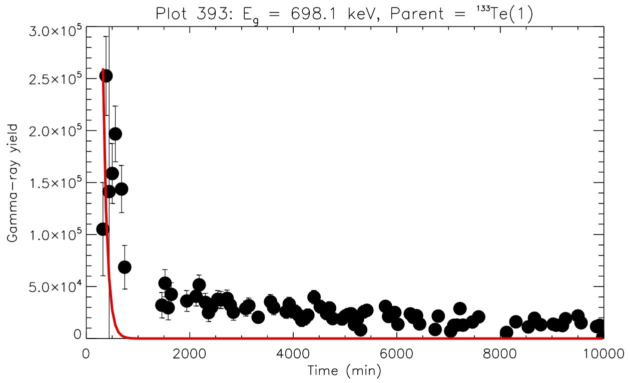


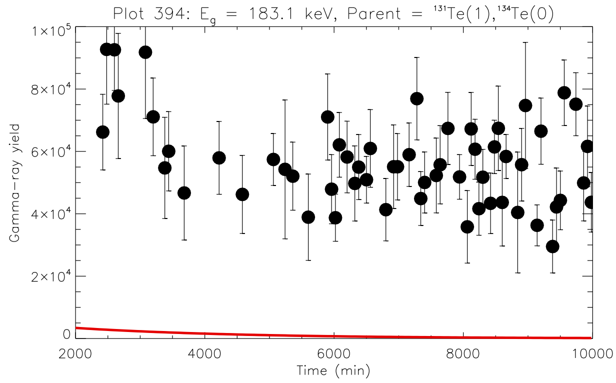
Plot 391: E_g = 404.6 keV, Parent = ^{128}Sn(0),^{151}Pm(0)

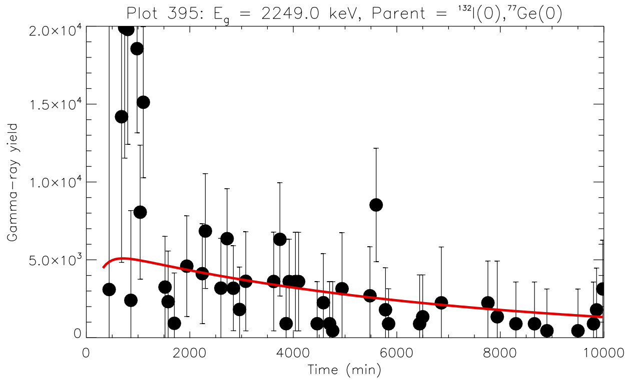


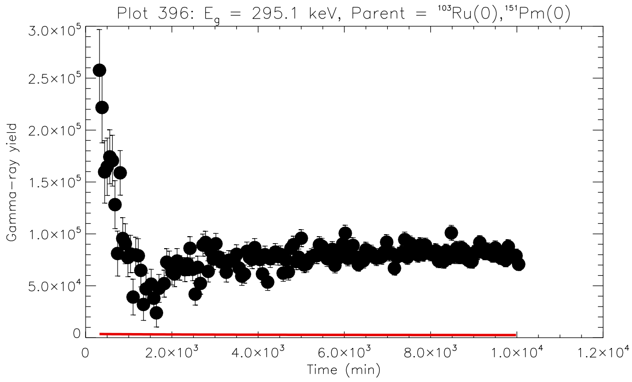
Plot 392: E_g = 478.5 keV, Parent = ^{133}Te(1)

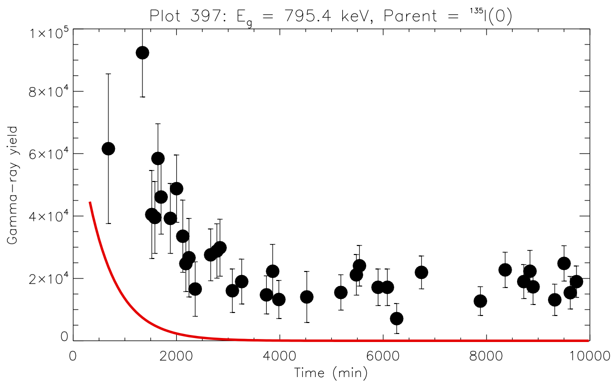


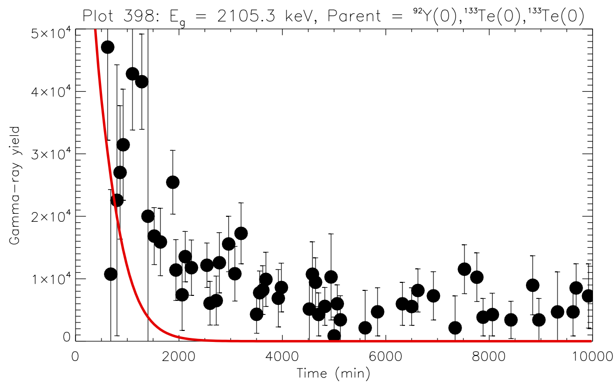

Plot 393: E_g = 698.1 keV, Parent = ^{133}Te(1)
Gamma-ray yield
Time (min)

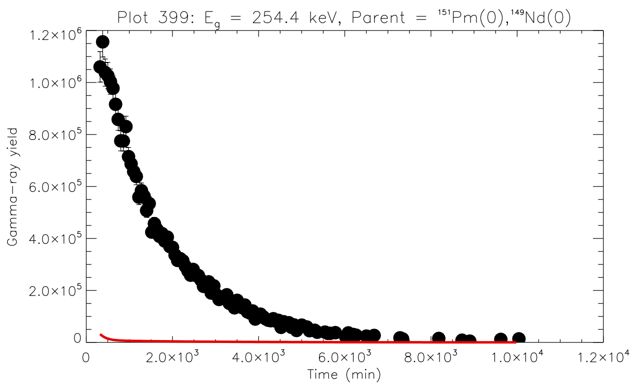

Plot 394: E_g = 183.1 keV, Parent = ^{131}Te(1),^{134}Te(0)
Gamma-ray yield
Time (min)

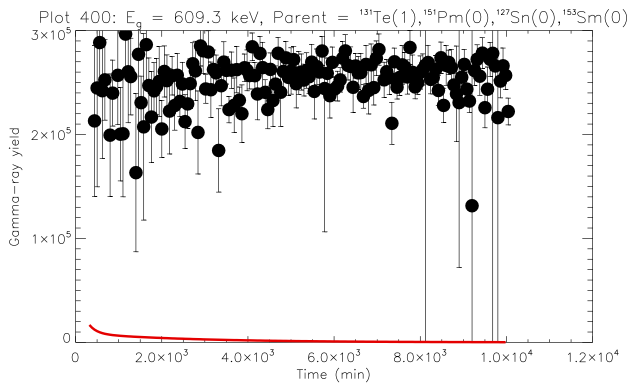

Plot 395: E_g = 2249.0 keV, Parent = ^{132}I(0),^{77}Ge(0)
Gamma-ray yield
Time (min)


Plot 396: E_g = 295.1 keV, Parent = ^{103}Ru(0),^{151}Pm(0)
Gamma-ray yield
Time (min)

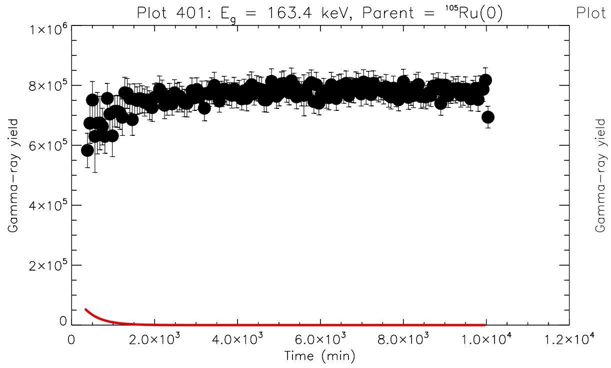

Plot 397: E_g = 795.4 keV, Parent = ^{135}I(0)
Gamma-ray yield
Time (min)


Plot 398: E_g = 2105.3 keV, Parent = ^{92}Y(0),^{133}Te(0),^{133}Te(0)
Gamma-ray yield
Time (min)

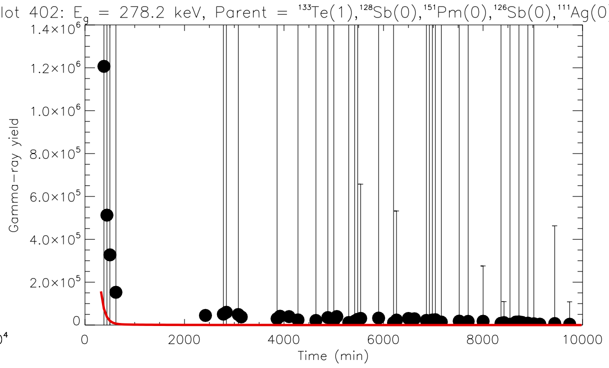

Plot 399: E_g = 254.4 keV, Parent = ^{151}Pm(0),^{149}Nd(0)
Gamma-ray yield
Time (min)


Plot 400: E_g = 609.3 keV, Parent = ^{131}Te(1),^{151}Pm(0),^{127}Sn(0),^{153}Sm(0)
Gamma-ray yield
Time (min)

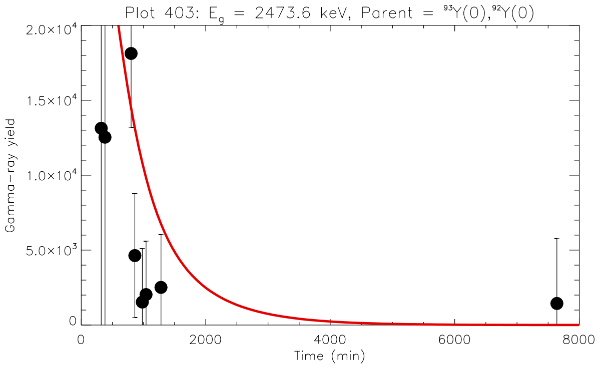
Plot 401: E_g = 163.4 keV, Parent = ^{105}Ru(0)



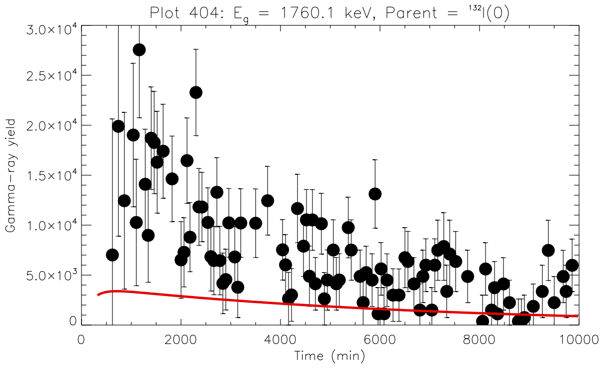
Plot 402: E_g = 278.2 keV, Parent = ^{133}Te(1),^{128}Sb(0),^{151}Pm(0),^{126}Sb(0),^{111}Ag(0),^{111}Ag(1)



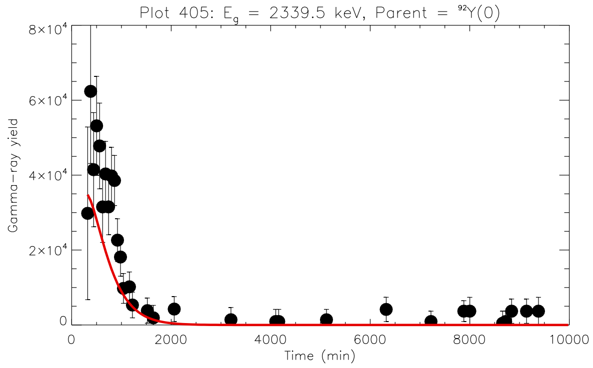
Plot 403: E_g = 2473.6 keV, Parent = ^{93}Y(0),^{92}Y(0)



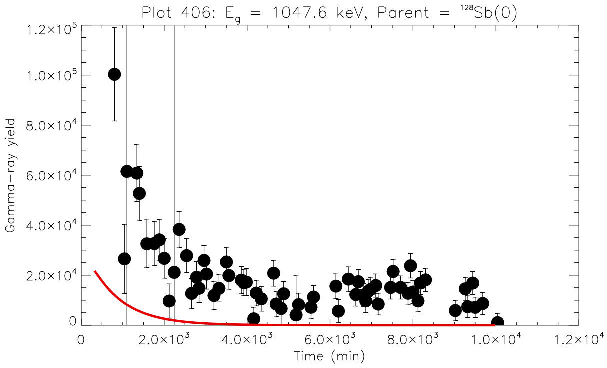
Plot 404: E_g = 1760.1 keV, Parent = ^{132}I(0)



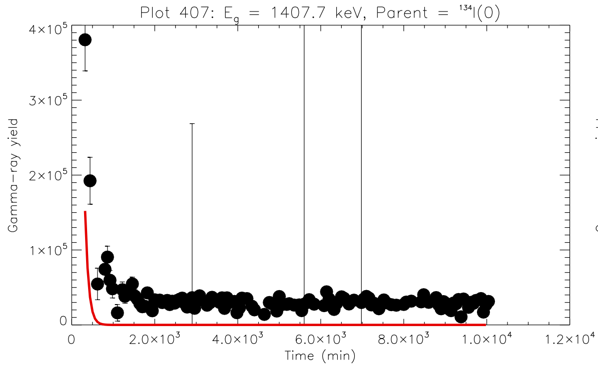
Plot 405: E_g = 2339.5 keV, Parent = ^{92}Y(0)



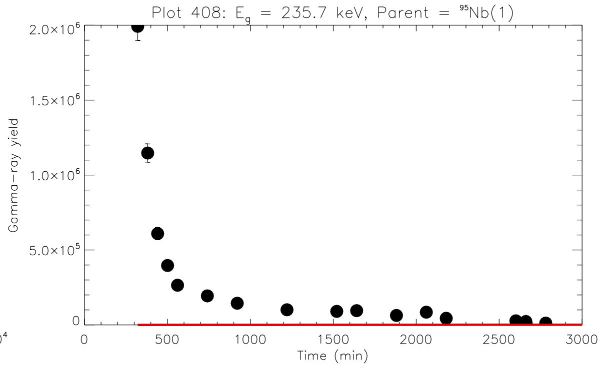
Plot 406: E_g = 1047.6 keV, Parent = ^{128}Sb(0)



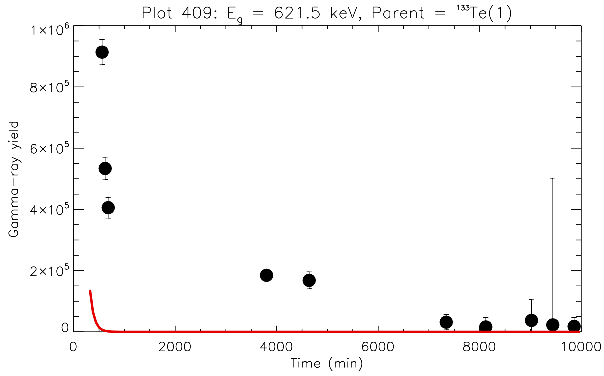
Plot 407: E_g = 1407.7 keV, Parent = ^{134}I(0)



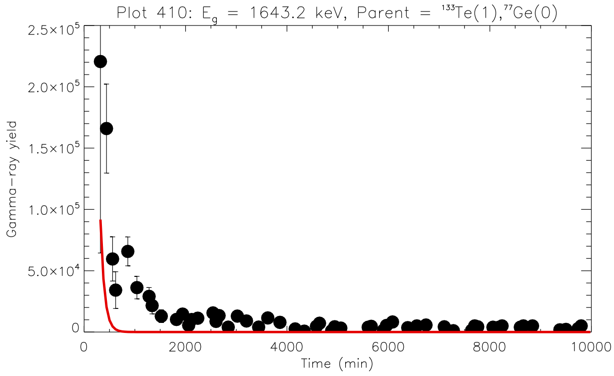
Plot 408: E_g = 235.7 keV, Parent = ^{95}Nb(1)



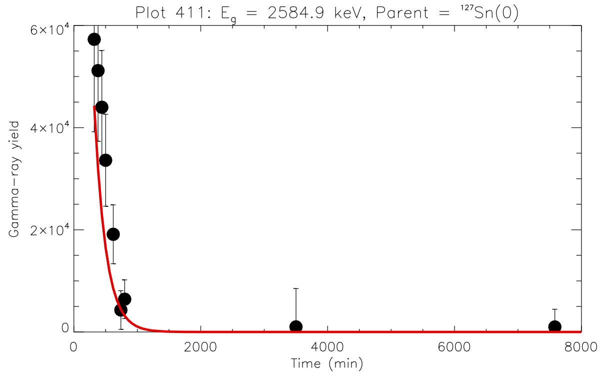
Plot 409: E_g = 621.5 keV, Parent = ^{133}Te(1)



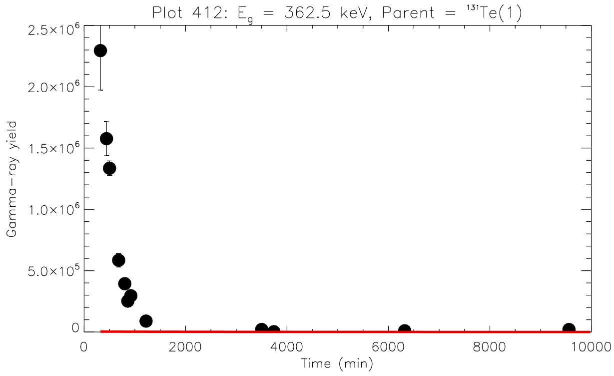
Plot 410: E_g = 1643.2 keV, Parent = ^{133}Te(1),^{77}Ge(0)



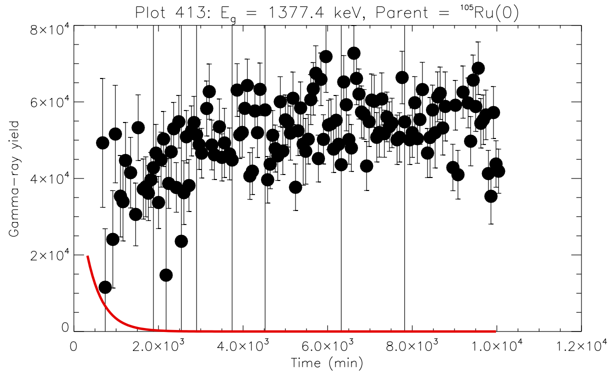
Plot 411: E_g = 2584.9 keV, Parent = ^{127}Sn(0)



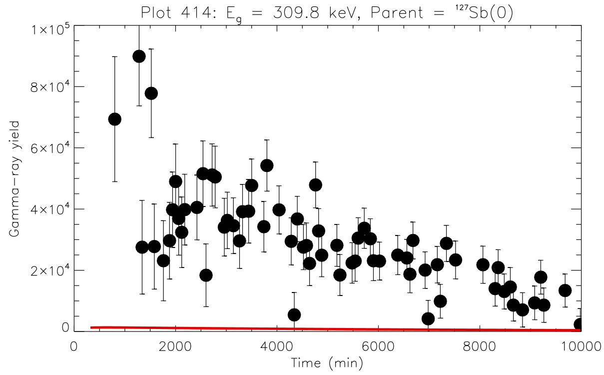
Plot 412: E_g = 362.5 keV, Parent = ^{131}Te(1)



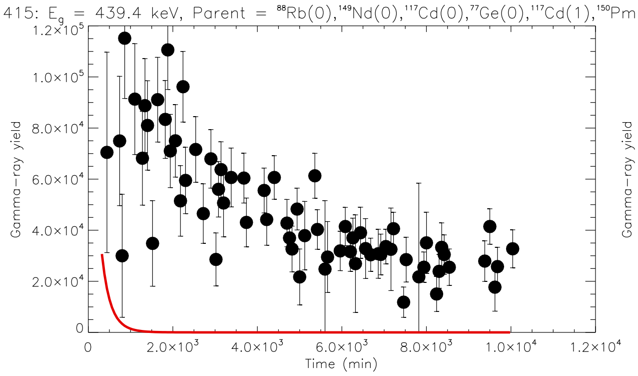
Plot 413: E_g = 1377.4 keV, Parent = ^{105}Ru(0)



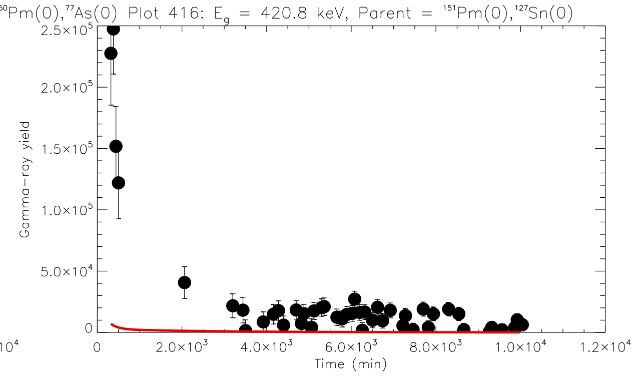
Plot 414: E_g = 309.8 keV, Parent = ^{127}Sb(0)



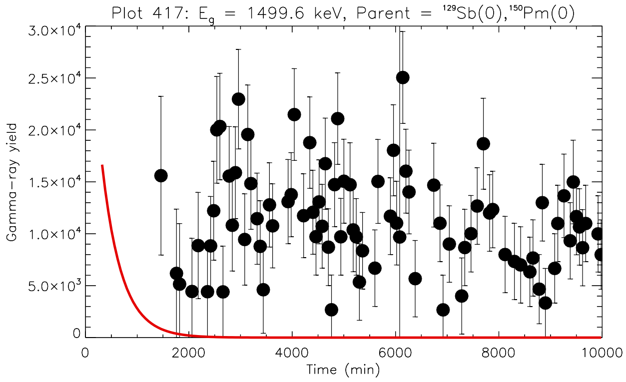
Plot 415: E_g = 439.4 keV, Parent = ^{88}Rb(0),^{149}Nd(0),^{117}Cd(0),^{77}Ge(0),^{117}Cd(1),^{150}Pm(0),^{77}As(0)



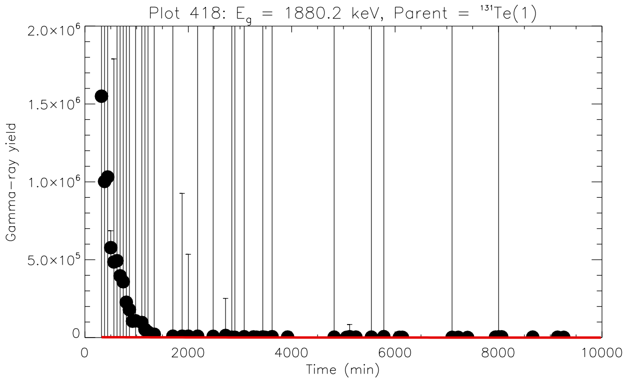
Plot 416: E_g = 420.8 keV, Parent = ^{151}Pm(0),^{127}Sn(0)



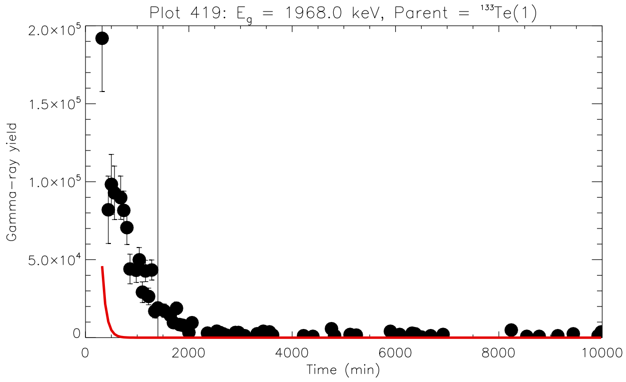
Plot 417: E_g = 1499.6 keV, Parent = ^{129}Sb(0),^{150}Pm(0)



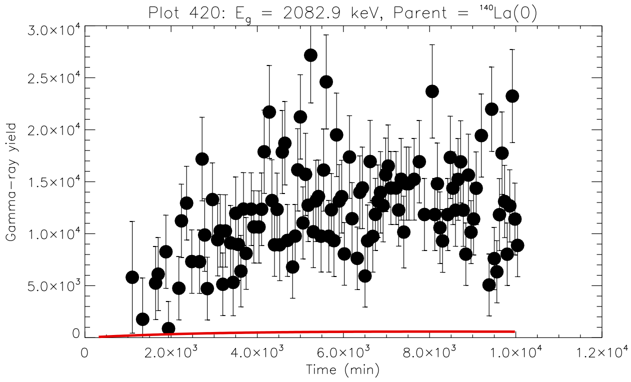
Plot 418: E_g = 1880.2 keV, Parent = ^{131}Te(1)



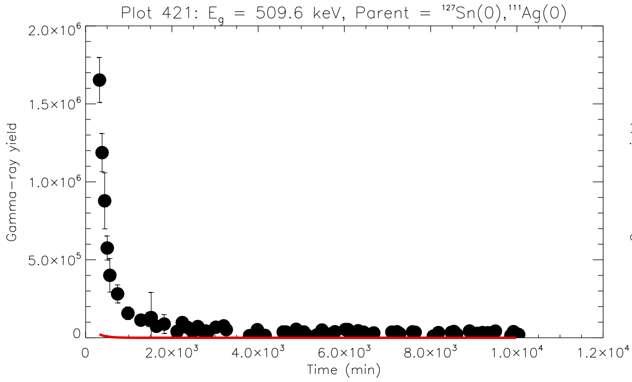
Plot 419: E_g = 1968.0 keV, Parent = ^{133}Te(1)



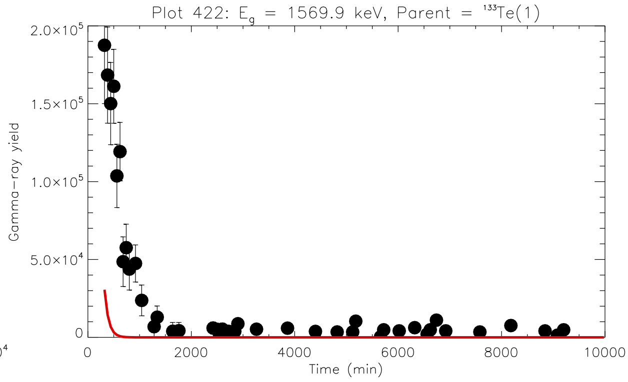
Plot 420: E_g = 2082.9 keV, Parent = ^{140}La(0)



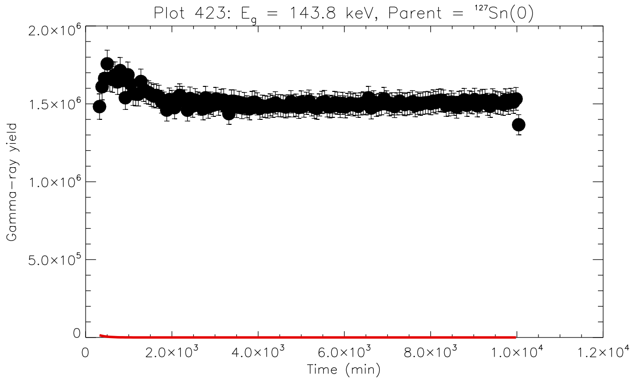
Plot 421: E_g = 509.6 keV, Parent = ^{127}Sn(0),^{111}Ag(0)



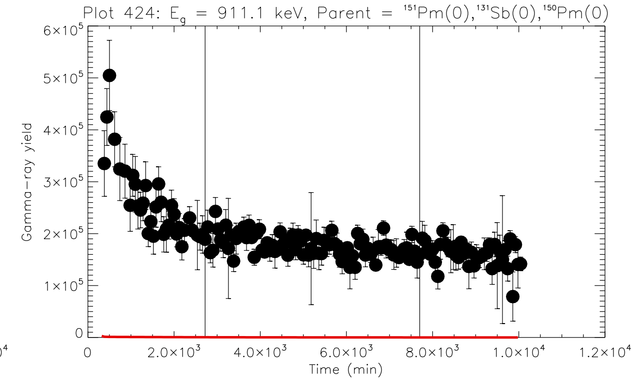
Plot 422: E_g = 1569.9 keV, Parent = ^{133}Te(1)

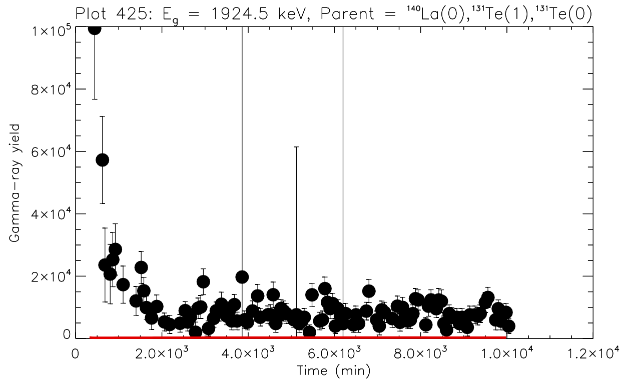


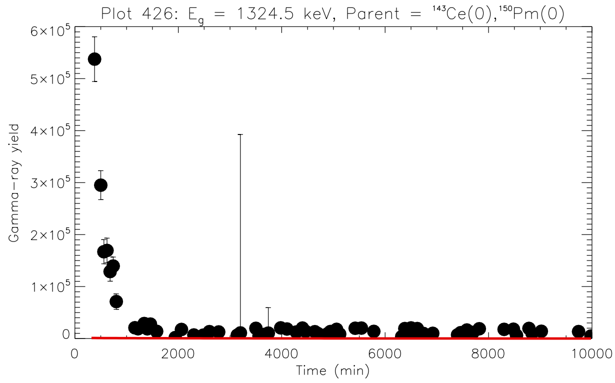
Plot 423: E_g = 143.8 keV, Parent = ^{127}Sn(0)

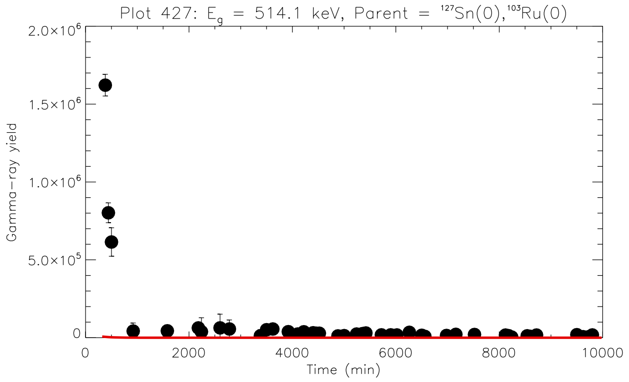


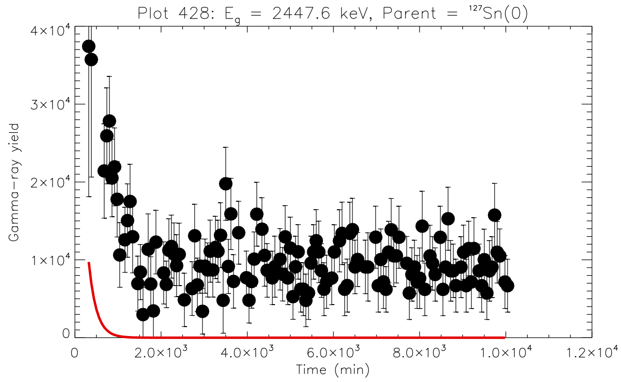
Plot 424: E_g = 911.1 keV, Parent = ^{151}Pm(0),^{131}Sb(0),^{150}Pm(0)

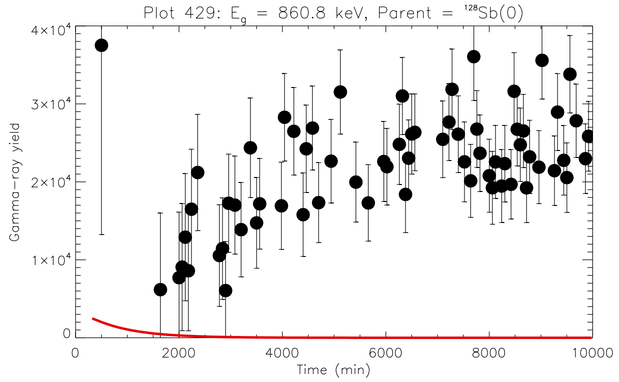


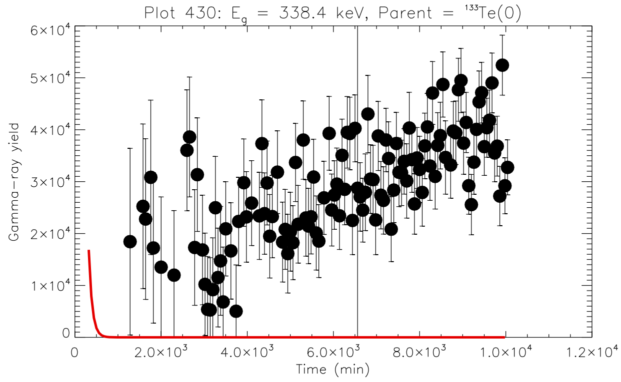

Plot 425: E_g = 1924.5 keV, Parent = ^{140}La(0),^{131}Te(1),^{131}Te(0)
Gamma-ray yield
Time (min)

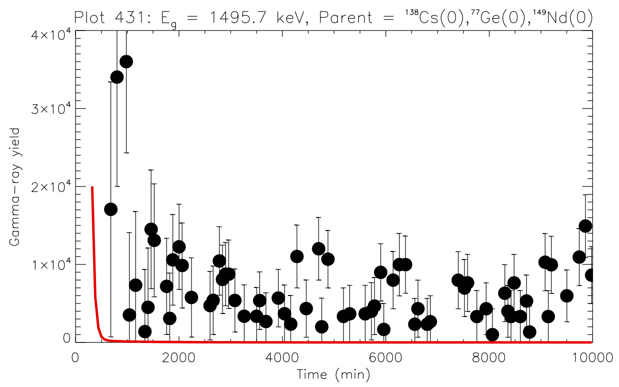

Plot 426: E_g = 1324.5 keV, Parent = ^{143}Ce(0),^{150}Pm(0)
Gamma-ray yield
Time (min)

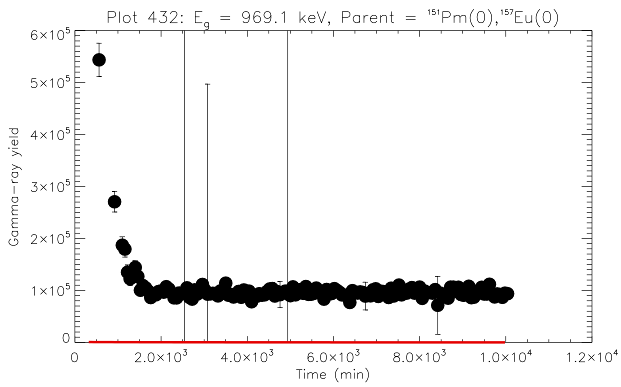

Plot 427: E_g = 514.1 keV, Parent = ^{127}Sn(0),^{103}Ru(0)
Gamma-ray yield
Time (min)


Plot 428: E_g = 2447.6 keV, Parent = ^{127}Sn(0)
Gamma-ray yield
Time (min)

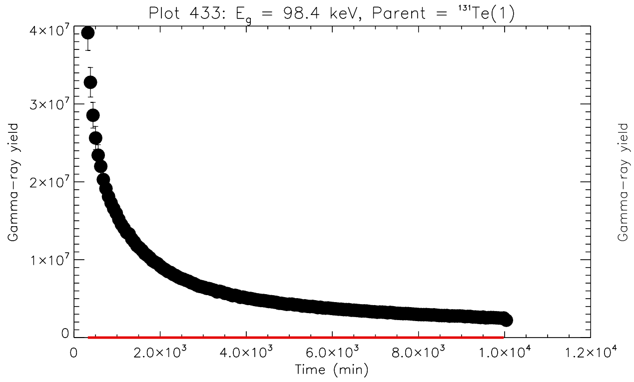

Plot 429: E_g = 860.8 keV, Parent = ^{128}Sb(0)
Gamma-ray yield
Time (min)


Plot 430: E_g = 338.4 keV, Parent = ^{133}Te(0)
Gamma-ray yield
Time (min)

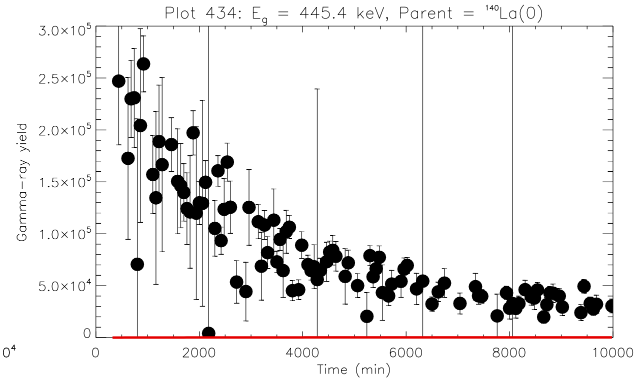

Plot 431: E_g = 1495.7 keV, Parent = ^{138}Cs(0),^{77}Ge(0),^{149}Nd(0)
Gamma-ray yield
Time (min)


Plot 432: E_g = 969.1 keV, Parent = ^{151}Pm(0),^{157}Eu(0)
Gamma-ray yield
Time (min)

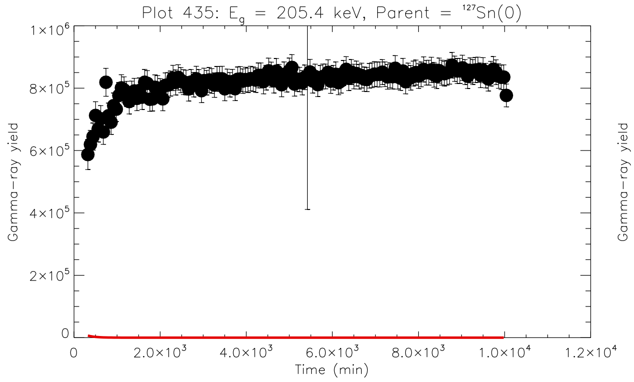
Plot 433: E_g = 98.4 keV, Parent = ^{131}Te(1)



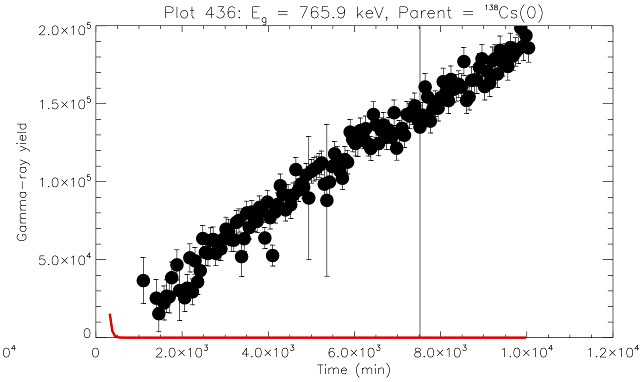
Plot 434: E_g = 445.4 keV, Parent = ^{140}La(0)



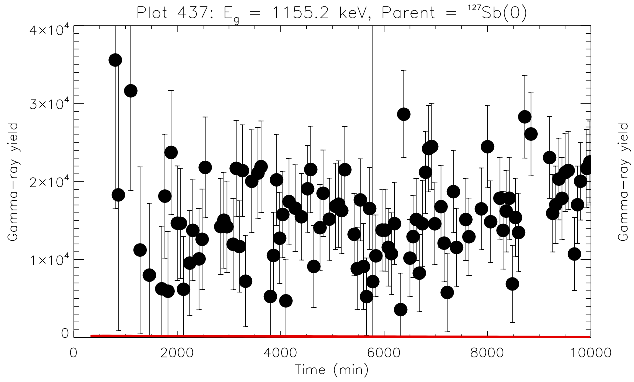
Plot 435: E_g = 205.4 keV, Parent = ^{127}Sn(0)



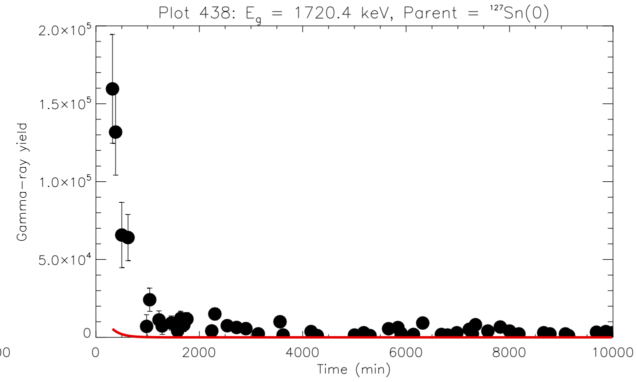
Plot 436: E_g = 765.9 keV, Parent = ^{138}Cs(0)



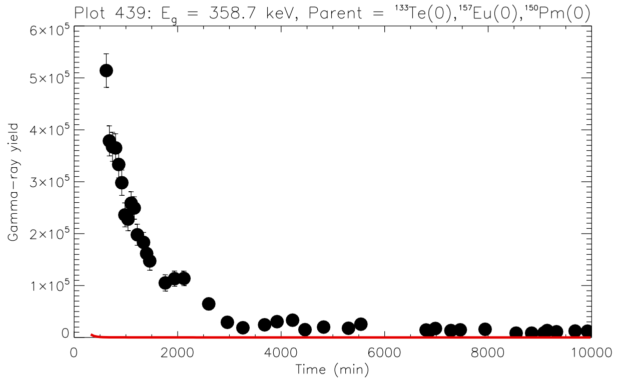
Plot 437: E_g = 1155.2 keV, Parent = ^{127}Sb(0)



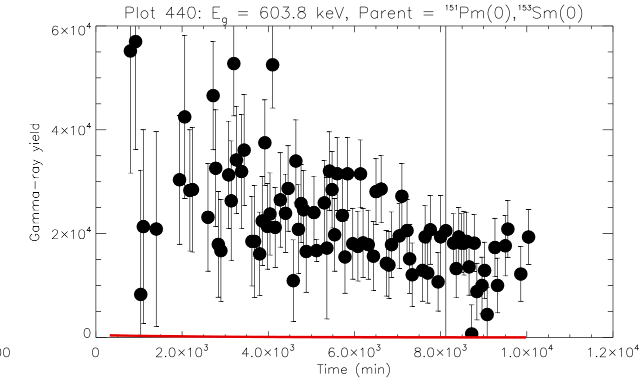
Plot 438: E_g = 1720.4 keV, Parent = ^{127}Sn(0)

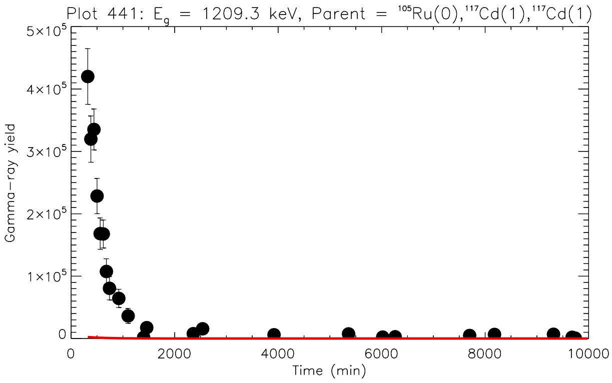


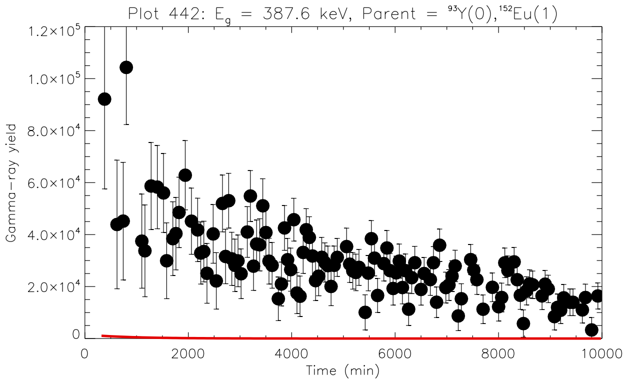
Plot 439: E_g = 358.7 keV, Parent = ^{133}Te(0),^{157}Eu(0),^{150}Pm(0)

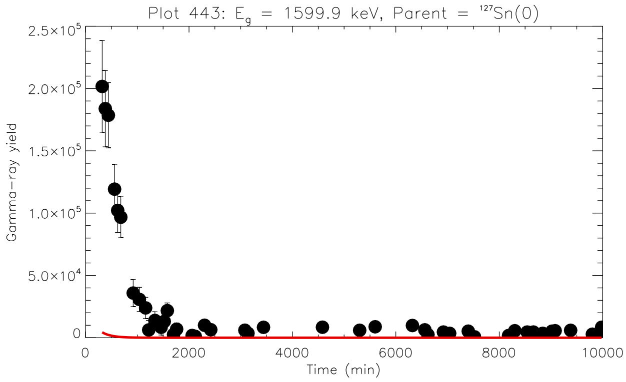


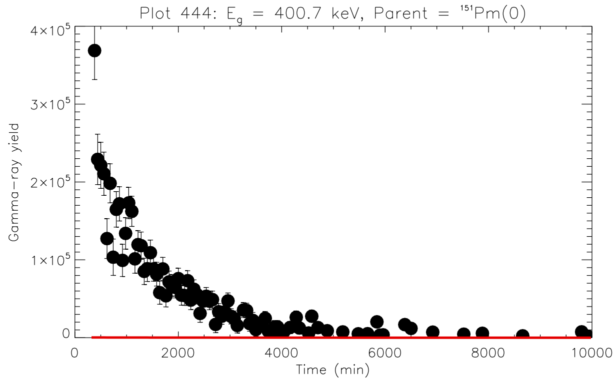
Plot 440: E_g = 603.8 keV, Parent = ^{151}Pm(0),^{153}Sm(0)

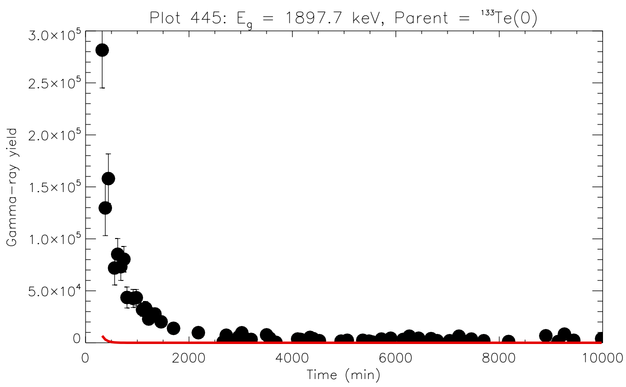


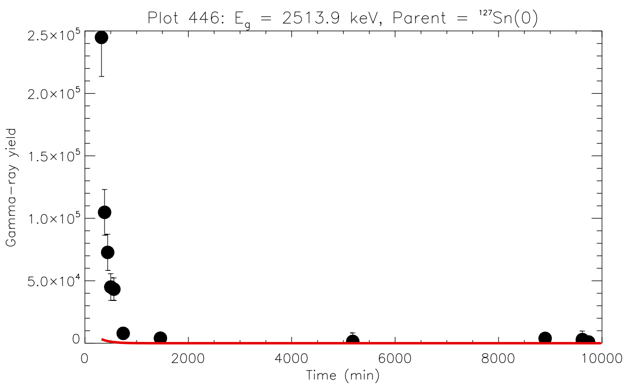

Plot 441: E_g = 1209.3 keV, Parent = ^{105}Ru(0),^{117}Cd(1),^{117}Cd(1)
Gamma-ray yield
Time (min)

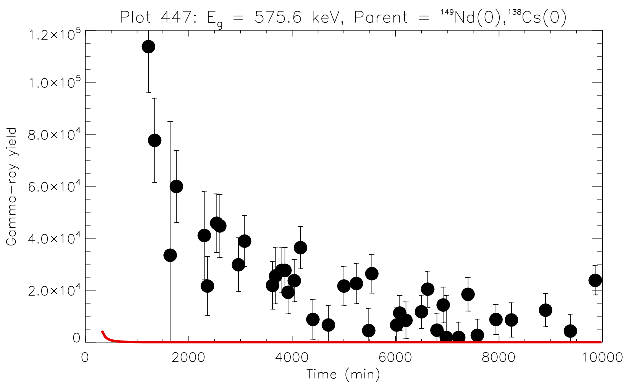

Plot 442: E_g = 387.6 keV, Parent = ^{93}Y(0),^{152}Eu(1)
Gamma-ray yield
Time (min)

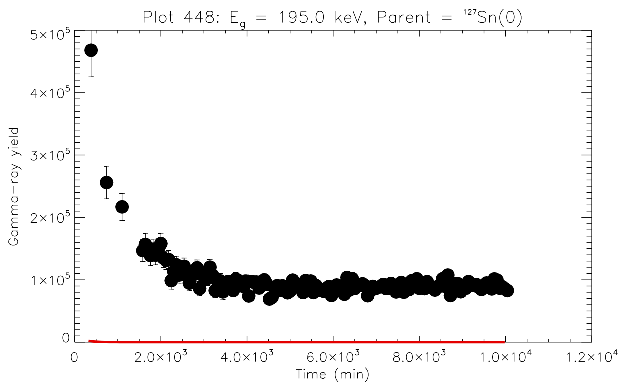

Plot 443: E_g = 1599.9 keV, Parent = ^{127}Sn(0)
Gamma-ray yield
Time (min)

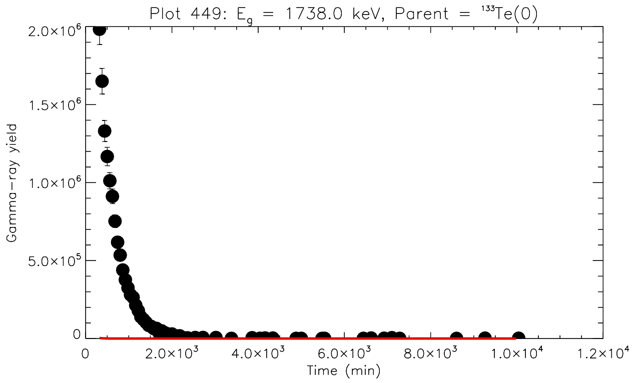

Plot 444: E_g = 400.7 keV, Parent = ^{151}Pm(0)
Gamma-ray yield
Time (min)

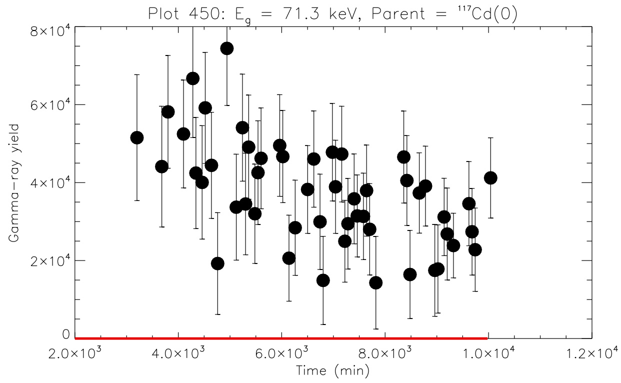

Plot 445: E_g = 1897.7 keV, Parent = ^{133}Te(0)
Gamma-ray yield
Time (min)

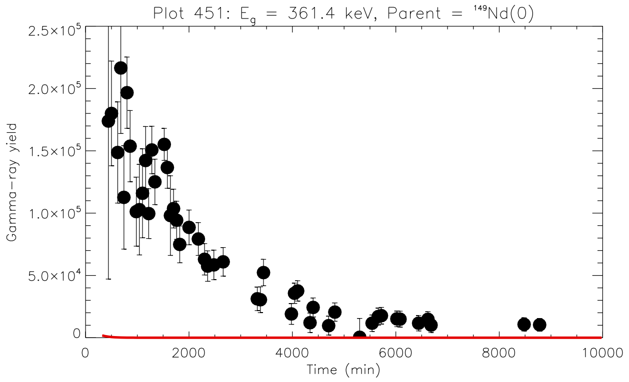

Plot 446: E_g = 2513.9 keV, Parent = ^{127}Sn(0)
Gamma-ray yield
Time (min)

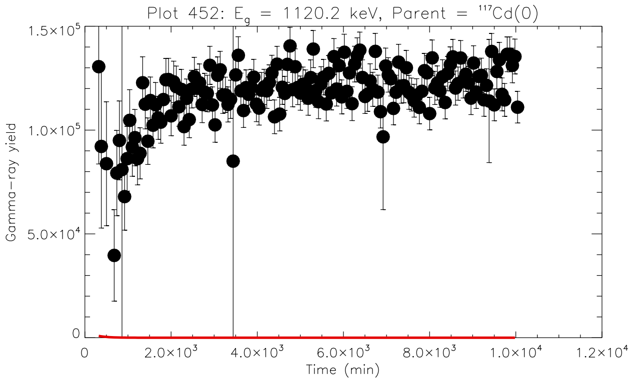

Plot 447: E_g = 575.6 keV, Parent = ^{149}Nd(0),^{138}Cs(0)
Gamma-ray yield
Time (min)

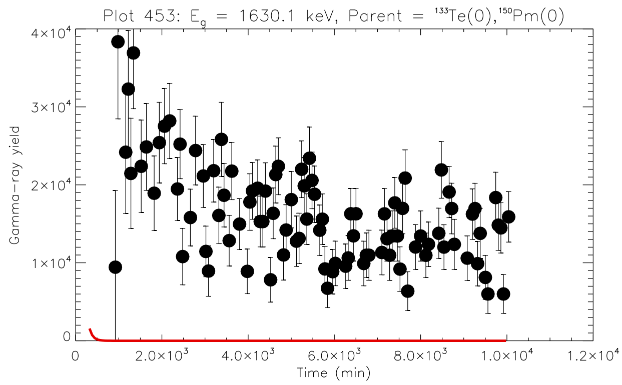

Plot 448: E_g = 195.0 keV, Parent = ^{127}Sn(0)
Gamma-ray yield
Time (min)

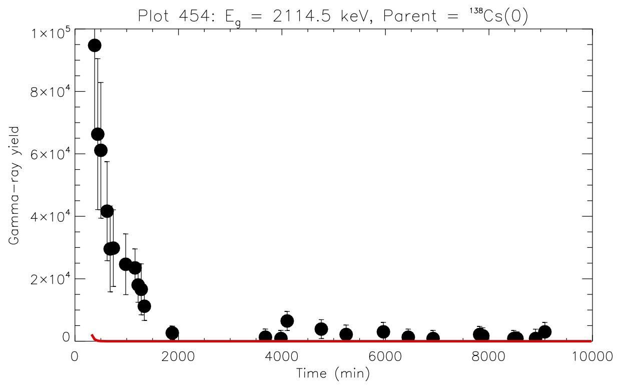

Plot 449: E_g = 1738.0 keV, Parent = ^{133}Te(0)
Gamma-ray yield
Time (min)

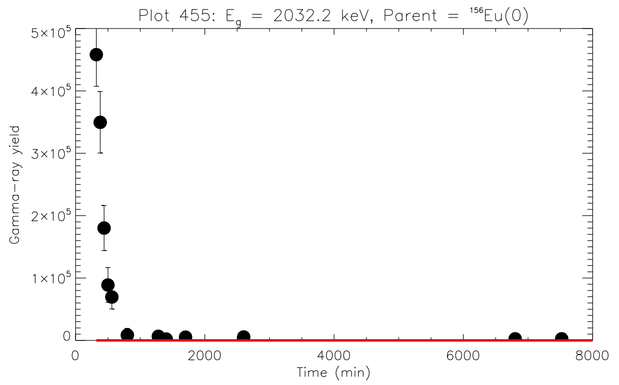

Plot 450: E_g = 71.3 keV, Parent = ^{117}Cd(0)
Gamma-ray yield
Time (min)

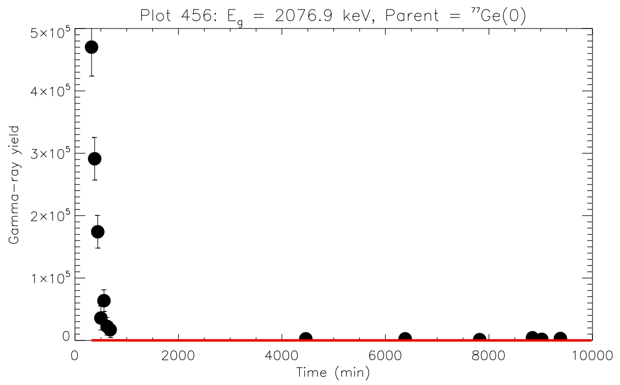

Plot 451: E_g = 361.4 keV, Parent = ^{149}Nd(0)
Gamma-ray yield
Time (min)


Plot 452: E_g = 1120.2 keV, Parent = ^{117}Cd(0)
Gamma-ray yield
Time (min)

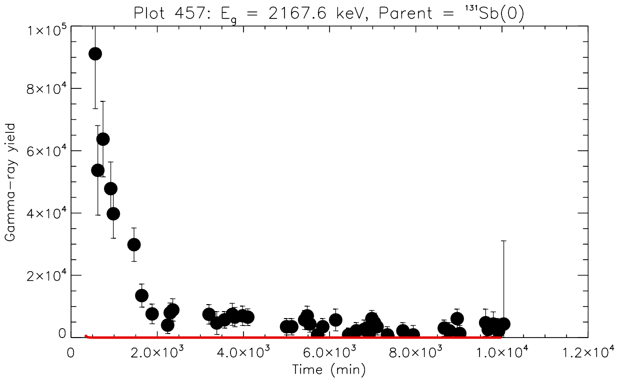

Plot 453: E_g = 1630.1 keV, Parent = ^{133}Te(0),^{150}Pm(0)
Gamma-ray yield
Time (min)


Plot 454: E_g = 2114.5 keV, Parent = ^{138}Cs(0)
Gamma-ray yield
Time (min)

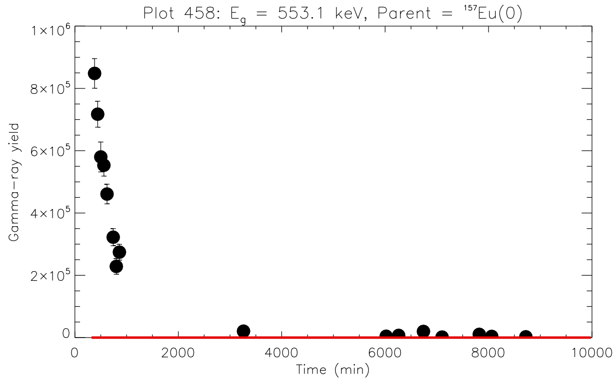

Plot 455: E_g = 2032.2 keV, Parent = ^{156}Eu(0)
Gamma-ray yield
Time (min)


Plot 456: E_g = 2076.9 keV, Parent = ^{77}Ge(0)
Gamma-ray yield
Time (min)

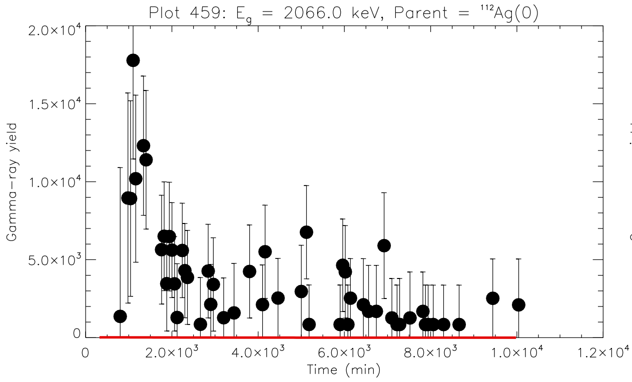
Plot 457: E_g = 2167.6 keV, Parent = ^{131}Sb(0)



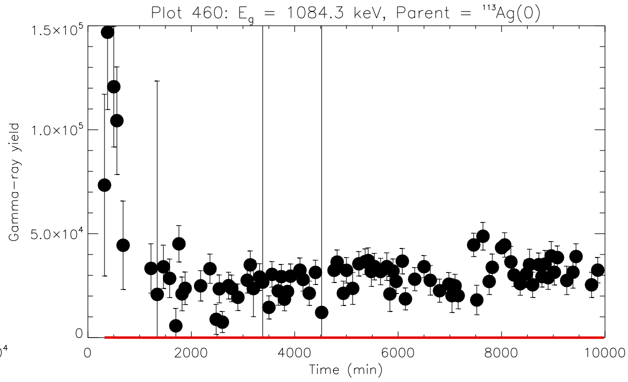
Plot 458: E_g = 553.1 keV, Parent = ^{157}Eu(0)



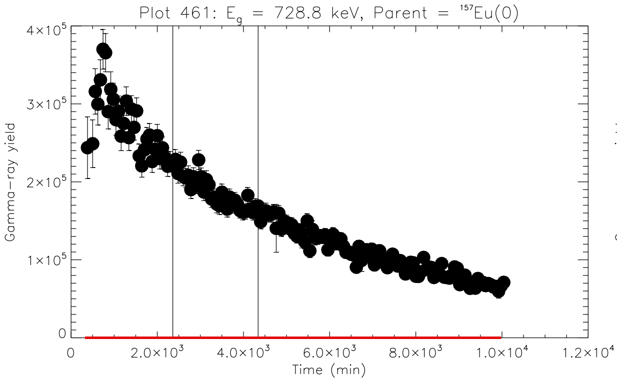
Plot 459: E_g = 2066.0 keV, Parent = ^{112}Ag(0)



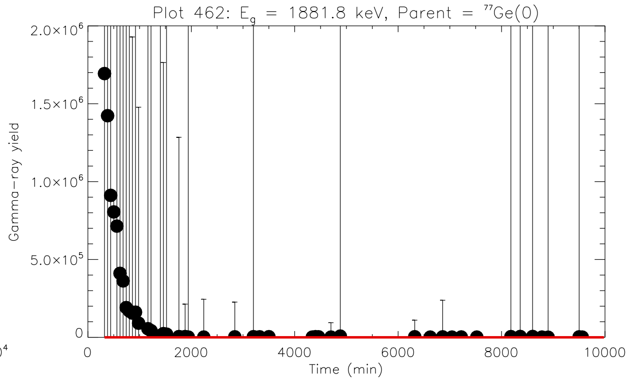
Plot 460: E_g = 1084.3 keV, Parent = ^{113}Ag(0)



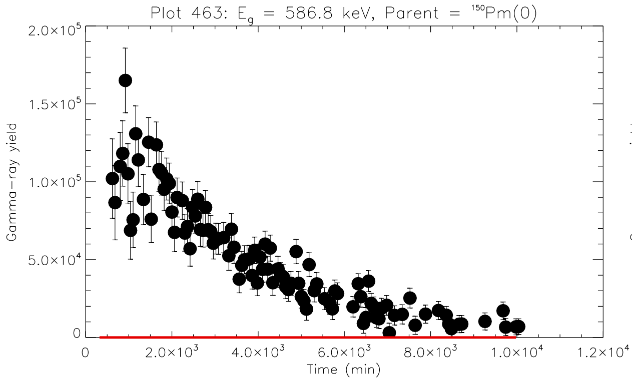
Plot 461: E_g = 728.8 keV, Parent = ^{157}Eu(0)



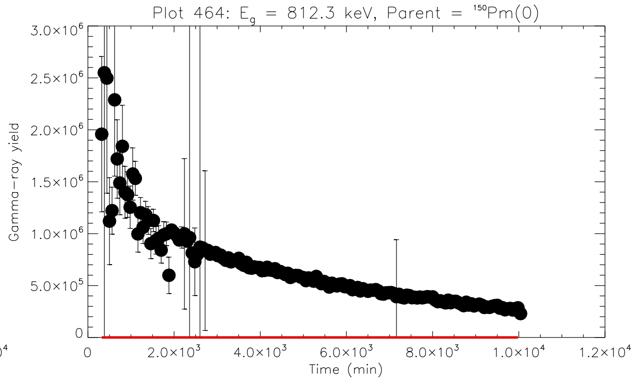
Plot 462: E_g = 1881.8 keV, Parent = ^{77}Ge(0)

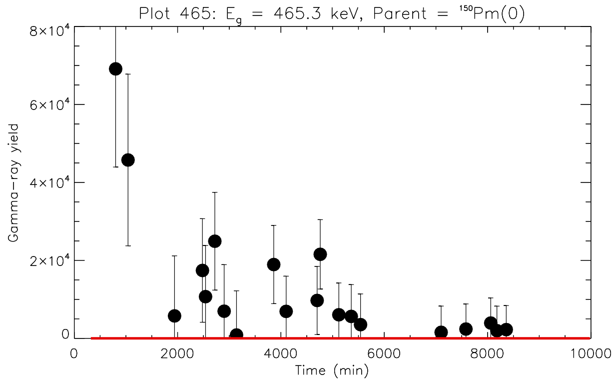


Plot 463: E_g = 586.8 keV, Parent = ^{150}Pm(0)

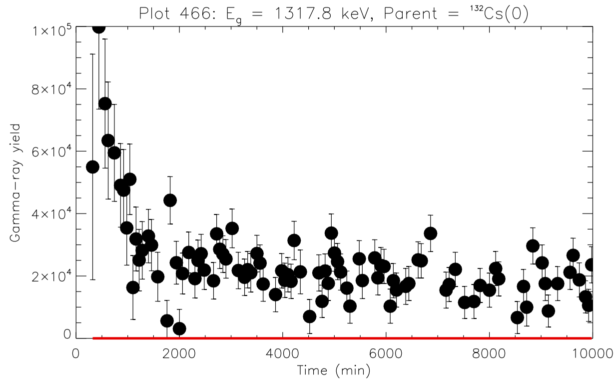


Plot 464: E_g = 812.3 keV, Parent = ^{150}Pm(0)

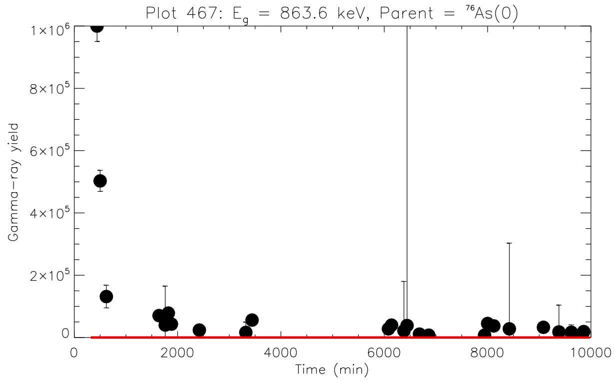




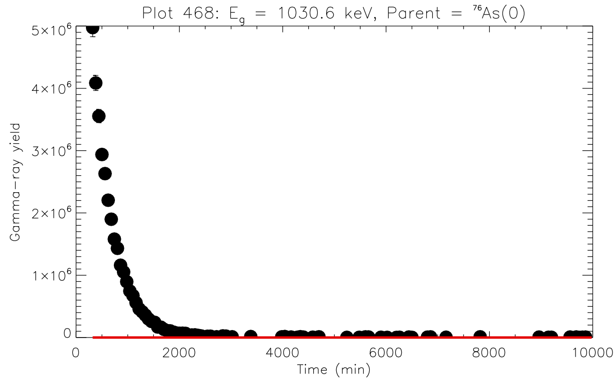
Plot 465: E_g = 465.3 keV, Parent = ^{150}Pm(0)
Gamma-ray yield
Time (min)



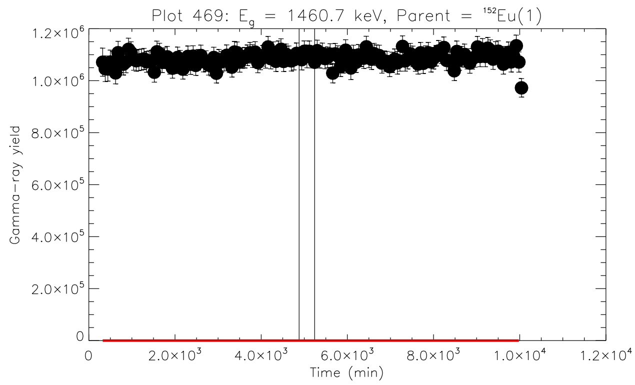
Plot 466: E_g = 1317.8 keV, Parent = ^{132}Cs(0)
Gamma-ray yield
Time (min)



Plot 467: E_g = 863.6 keV, Parent = ^{76}As(0)
Gamma-ray yield
Time (min)



Plot 468: E_g = 1030.6 keV, Parent = ^{76}As(0)
Gamma-ray yield
Time (min)



Plot 469: E_g = 1460.7 keV, Parent = ^{152}Eu(1)
Gamma-ray yield
Time (min)

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[15] The codes and scripts described in this report were written by the author, with the following notable exceptions: the `FIER` code was developed by Chivers et al. [10], and the IDL commercial graphics package was developed by Exelis Visual Information Solutions.