Analysis of Gamma Ray Spectra from Reference Isotopes with Multi-Channel Analyzers

Oliver Kirkpatrick
School of Engineering, RMIT University
Email: s3725341@student.rmit.edu.au

***Abstract*—stuff**

I. Results and Discussion

A. Calibration Process

B. Background Radiation

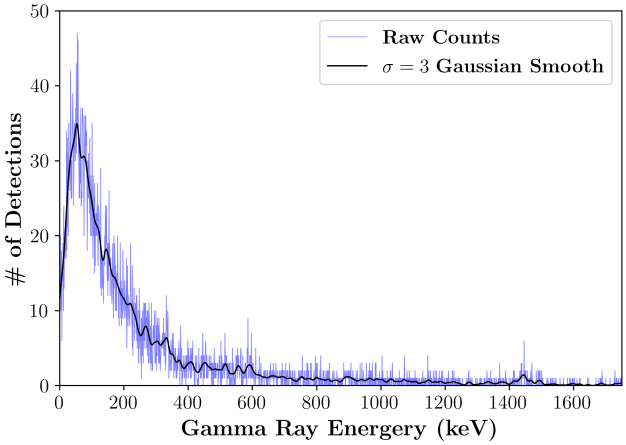


Fig. 1: Background radiation profile.

C. Analysis of Unknown Sample

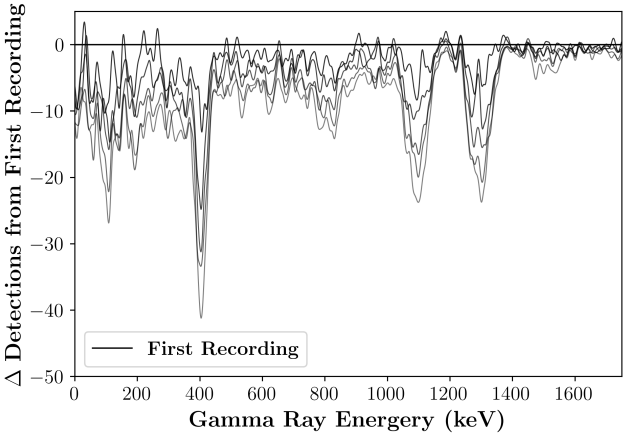
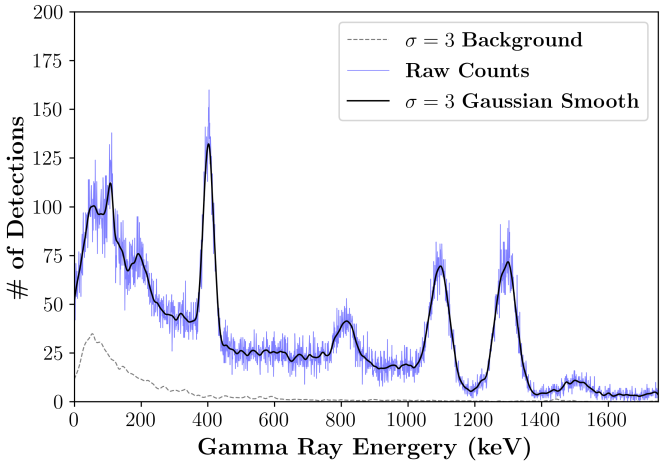


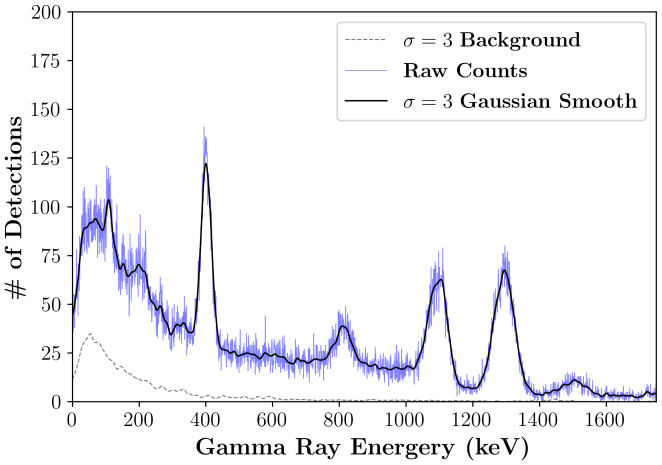
TABLE I: Total counts and peak energies with with increasing time since first measurement.

Sample Number	$T+$ **(s)**	**Total Counts**	**Peak 1 Energy**	**Peak 2 Energy**	**Peak 3 Energy**	**Peak 4 Energy**
1	0s	68493	401.24 keV	815.92 keV	1096.59 keV	1296.46 keV
2	420s	63755	400.52 keV	799.32 keV	1106.59 keV	1295.25 keV
3	819s	59850	401.25 keV	796.80 keV	1099.32 keV	1293.16 keV
4	1199s	56863	400.35 keV	759.04 keV	1097.07 keV	1295.73 keV
5	1559s	53111	401.94 keV	805.54 keV	1104.55 keV	1296.78 keV
6	1936s	50483	400.41 keV	812.17 keV	1085.92 keV	1292.84 keV

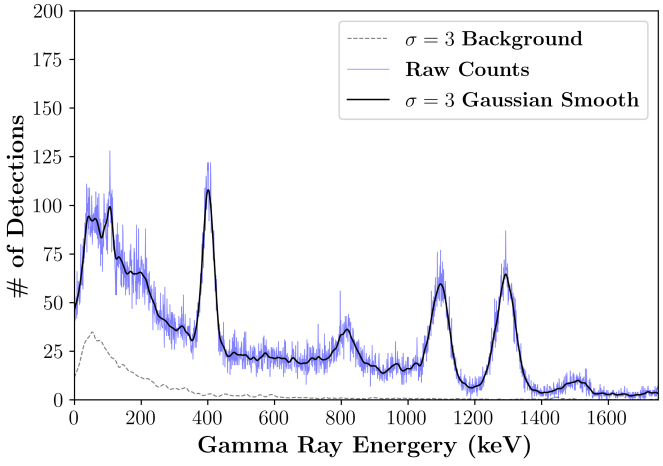
APPENDIX



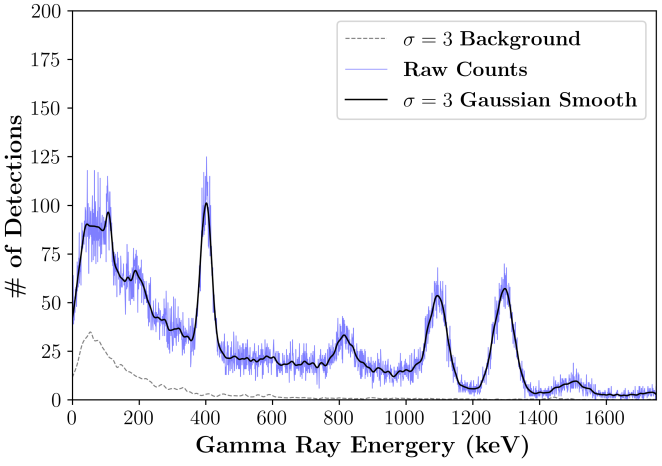
(a) Recording 1, hh:mm:ss, $T+$ minutes



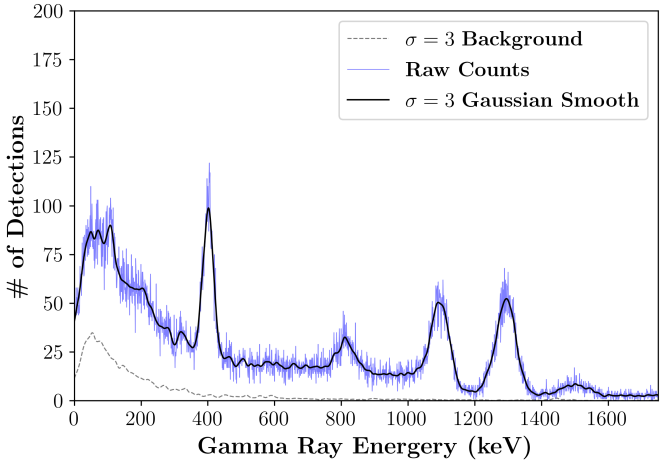
(b) Recording 2, hh:mm:ss, $T+$ minutes



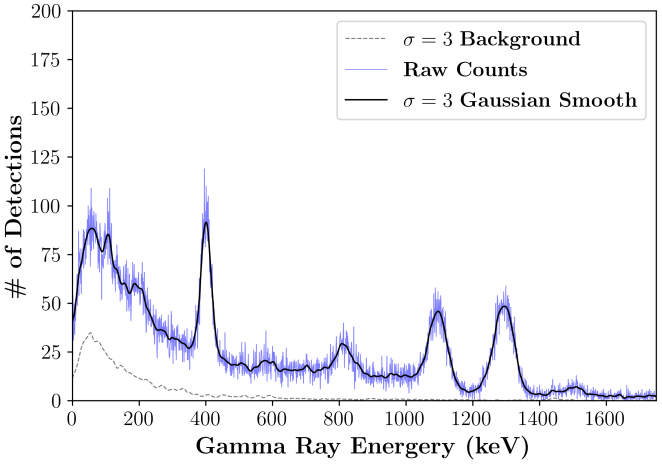
(c) Recording 3, hh:mm:ss, $T+$ minutes



(d) Recording 4, hh:mm:ss, $T+$ minutes



(e) Recording 5, hh:mm:ss, $T+$ minutes



(f) Recording 6, hh:mm:ss, $T+$ minutes

Fig. 2: Raw count data for each recording of gamma rays from the unknown isotope.

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