Identification of Non-Poissonian Peak

By:

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Input files
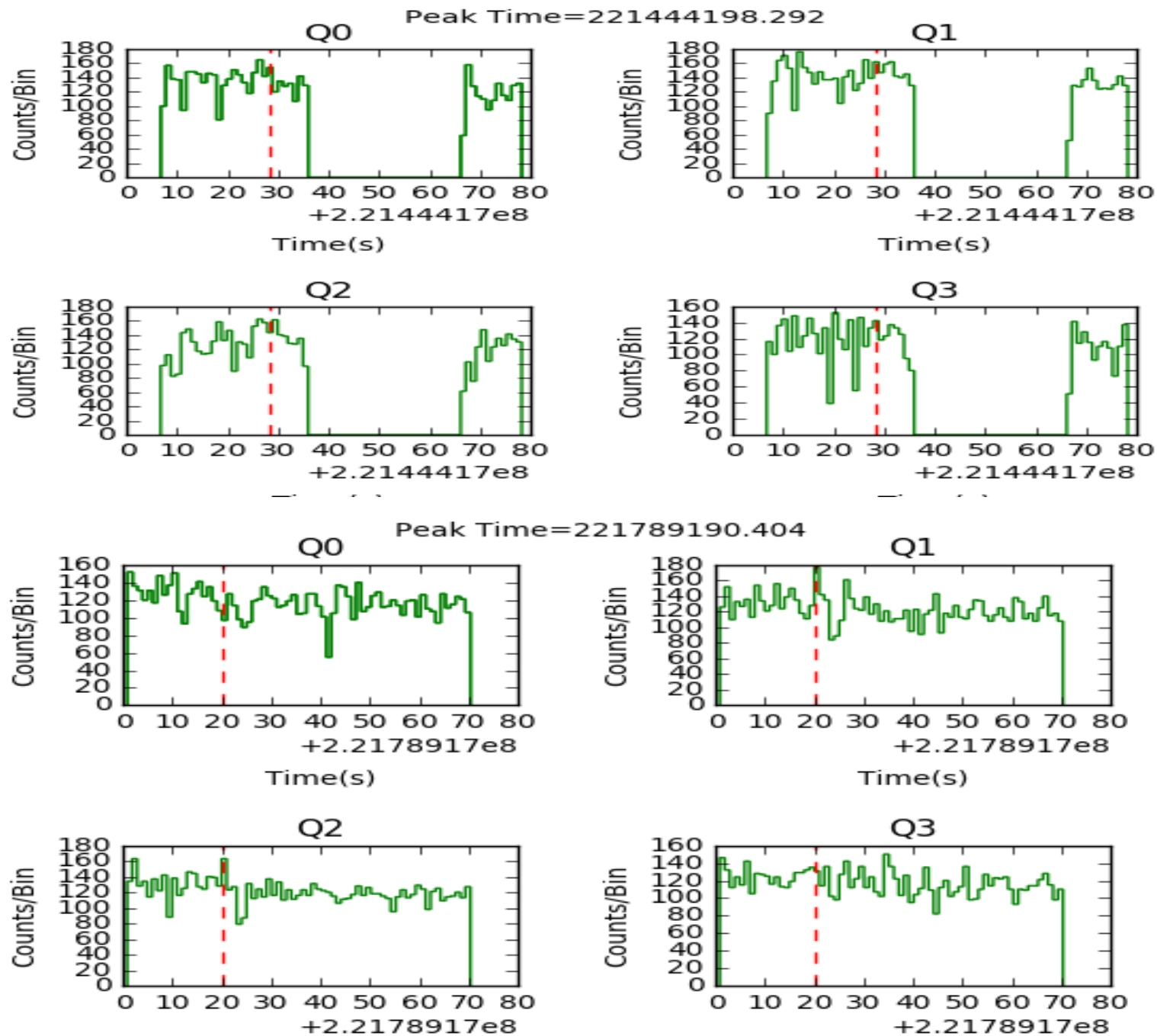
- Generated Quad_clean.evt from Noise reduced

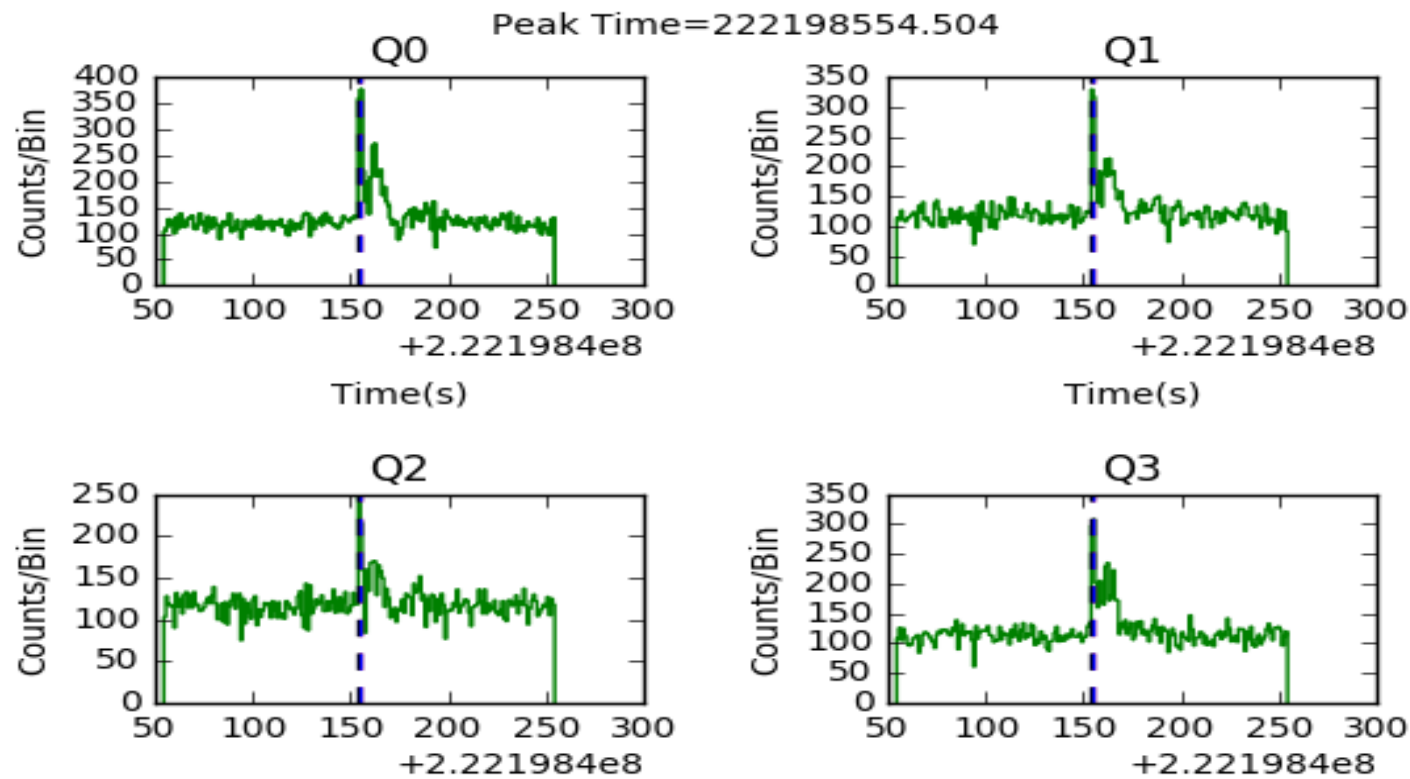| orbit	No Of Peaks			Astrosat GRB Trigger Time	Detected Peak Time	Detected peak time with noise reduced	Difference
	3 (Sigma)	5 (Sigma)	7 (Sigma)				
948-06913	2	0	0	221440429.824	Not Detected	221444198.292	3768.488
956-06971	2	0	0	221785971.030	Not detected	221789190.404	3219.374

Results of Peak_search with noise reduced file

orbit	No Of Peaks			Astrosat GRB Trigger Time	Detected Peak Time	Detected peak time with noise reduced	Difference
	3 (Sigma)	5 (Sigma)	7 (Sigma)				
GRB170109137 950_06942	1	0	0	221627855.378	221625401.356	No detection	2454.022
GRB170101116 GRB170101B 938_06826	0	0	0	220934837.867	220934844.26 220933561.26	No detection	6.393 1276.607
GRB170115662 964_07039	0	0	0	222191556.933	222196335.388 222196345.388	No detection	4778.455 4788.455
GRB170115743 GRB170115B 964_07040	9	4	2	222198554.034	222198554.394	222198554.554	0.36
GRB170121614 972_07133 GRB170121B	0	0	0	222705862.414	222705869.617 222705871.617	No detection	7.203 9.203
GRB170131969 996_07281	0	0	0	223600499.358	223602118.719	No detection	1619.361

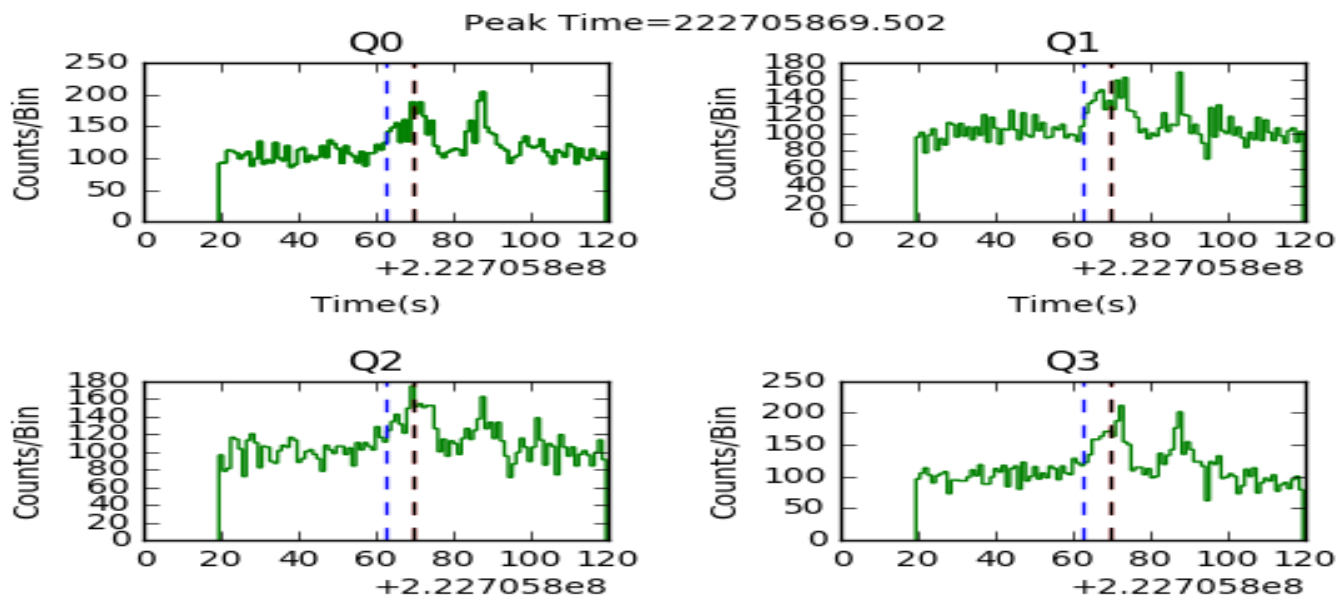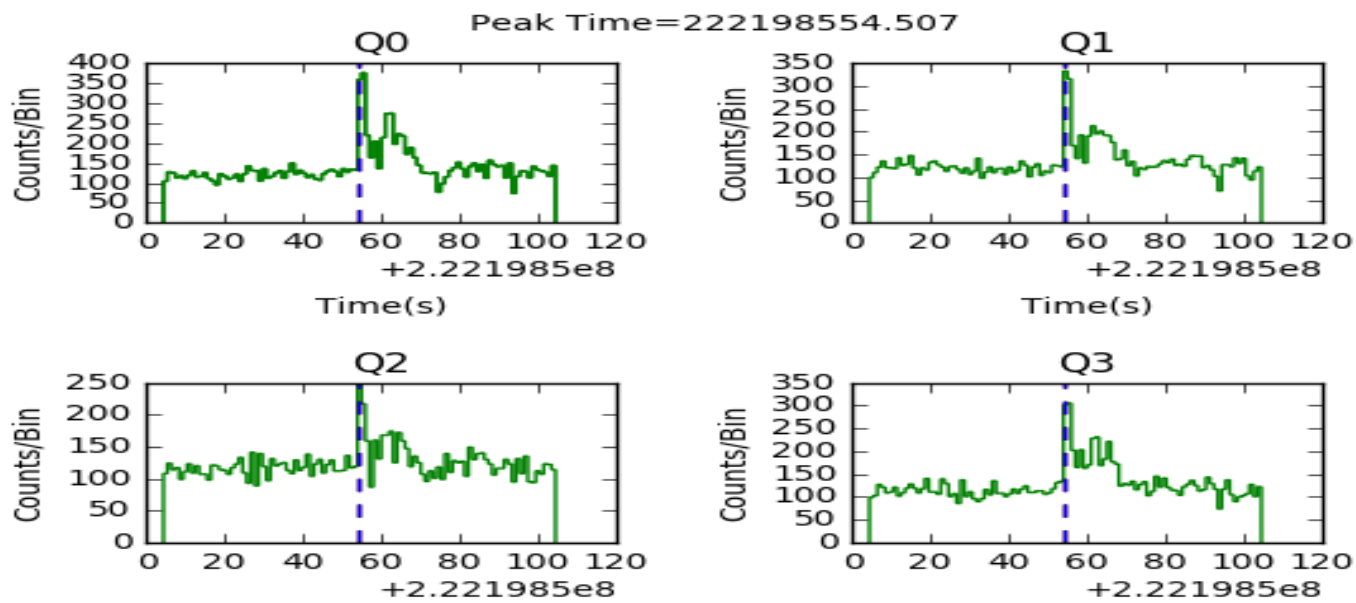# Detected new peaks in orbit 948-06913 and 956-06971

Detected peaks

Input files

orbit	No Of Peaks			Astrosat GRB Trigger Time	Detected Peak Time	Detected peak time with noise reduced	Difference
	3 (Sigma)	5 (Sigma)	7 (Sigma)				
948-06913	0	0	0	221440429.824	Not Detected	Not detected	NA
956-06971	2	0	0	221785971.030	Not detected	221800648.501	14677.471

Result of code with noise reduced with SAA

orbit	No Of Peaks			Astrosat GRB Trigger Time	Detected Peak Time	Detected peak time with noise reduced	Difference
	3 (Sigma)	5 (Sigma)	7 (Sigma)				
GRB170105A 948_06884	2	2	0	221292847.0	221292847.241	221292847.5	0.5
GRB170115662 964_07039	2	0	0	222191556.933	222196335.388 222196345.388	222196335.388 222196345.388	4778.455 4788.455
GRB170115743 GRB170115B 964_07040	10	5	3	222198554.034	222198554.394	222198554.507	0.36 0.113
GRB170121614 972_07133 GRB170121B	6	1	0	222705862.414	222705869.617 222705871.617	222705869.502 222705871.502	7.203 9.203 7.088 9.088
GRB170131969 996_07281	0	0	0	223600499.358	223602118.719	No detection	1619.361

Detected peak of orbit 964_07040 and 972_07133

Veto code result

orbit	No Of Peaks			Astrosat GRB Trigger Time	Detected Peak Time in veto code	Difference
	3 (Sigma)	5 (Sigma)	7 (Sigma)			
GRB170115B **964_07040**	124	84	69	222198554.034	222198554.0	0.034

Thank You!