

# NASA Dawn Mission

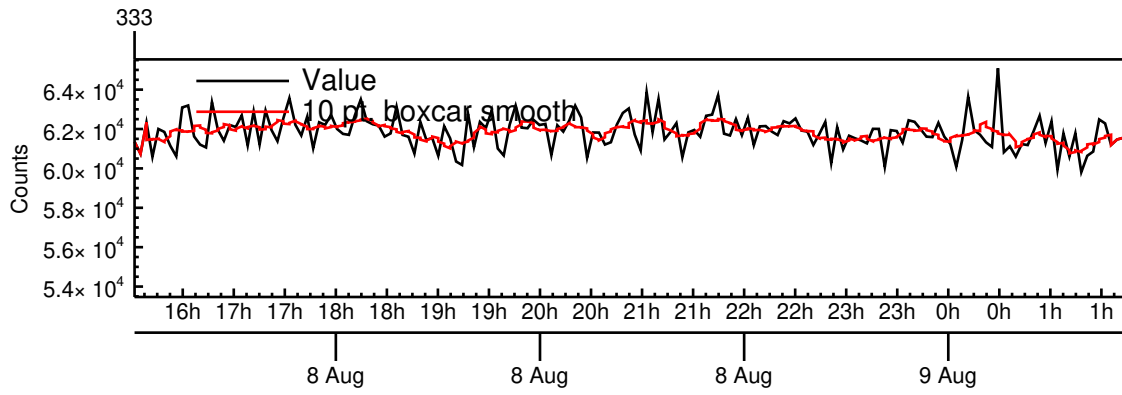
## GRaND@Vesta Browse Charts

### GRD-L1A-120808-120809\_130718

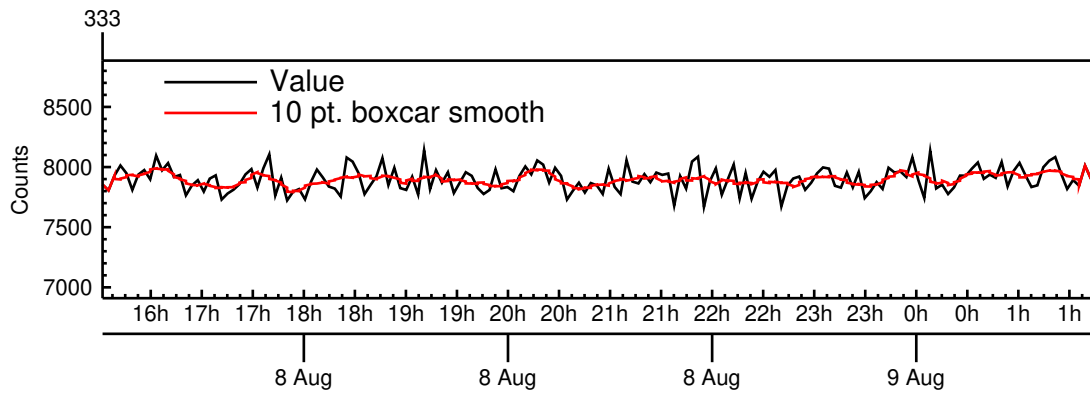
- Number of science records: 334  
2732287 missing science packets with 167 gaps.  
Start/End: 2012-08-08T16:02:18 to 2012-08-09T01:43:18
- Number of SOH records: 2010  
9600019 missing SOH packets with 586 gaps.  
Start/End: 2012-08-08T16:00:11 to 2012-08-09T01:45:11
- Comments: Browse charts.
  - Provides an overview of data contained within this directory.
  - Refer to the .STA file for detailed state information.
  - The energy scale for calibrated spectra may not be accurate.
- Number of states = 5
- Instrument settings for first state (STATE\_INDEX 0):

TELREADOUT	210	NEMG_TOT_EVTS	3876
TELSOH	35	NEMG_CZT_EVTS	3376
MODE	1	NEMN_TOT_EVTS	2800
HVPS1	1	L_BGO_CW	7
HVPS1_SET	185	H_BGO_CW	25
HVPS2	1	L_BGO_ROI	1
HVPS2_SET	170	H_BGO_ROI	64
HVPS3	1	L_BLP_MY_CW	1
HVPS3_SET	175	H_BLP_MY_CW	64
HVPS4	1	L_BLP_MY_ROI	1
HVPS4_SET	180	H_BLP_MY_ROI	64
HVPS5	1	L_BLP_PY_CW	1
HVPS5_SET	125	H_BLP_PY_CW	64
HVPS6	1	L_BLP_PY_ROI	1
HVPS6_SET	170	H_BLP_PY_ROI	64
PM5_LVPS	1	L_BLP_MZ_CW	1
P12_LVPS	1	H_BLP_MZ_CW	64
HEATERS_ENABLE	0	L_BLP_MZ_ROI	1
CZT_PM5_LVPS	1	H_BLP_MZ_ROI	64
CZT_ENABLES		L_BLP_PZ_CW	1
0010001000000010		H_BLP_PZ_CW	64
		L_BLP_PZ_ROI	1
		H_BLP_PZ_ROI	64

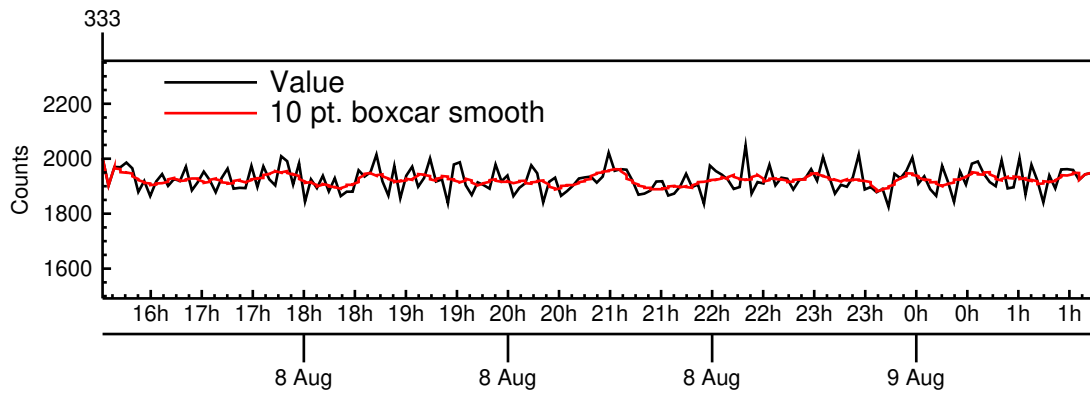
Dead time counts



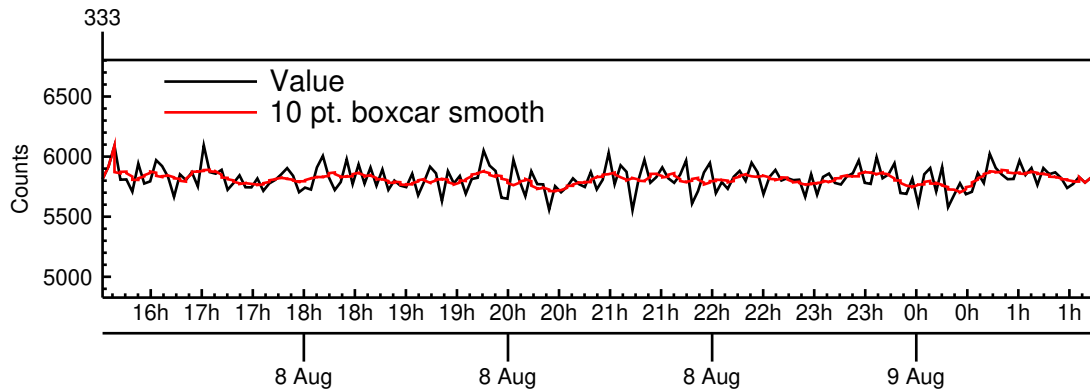
BGO overload events



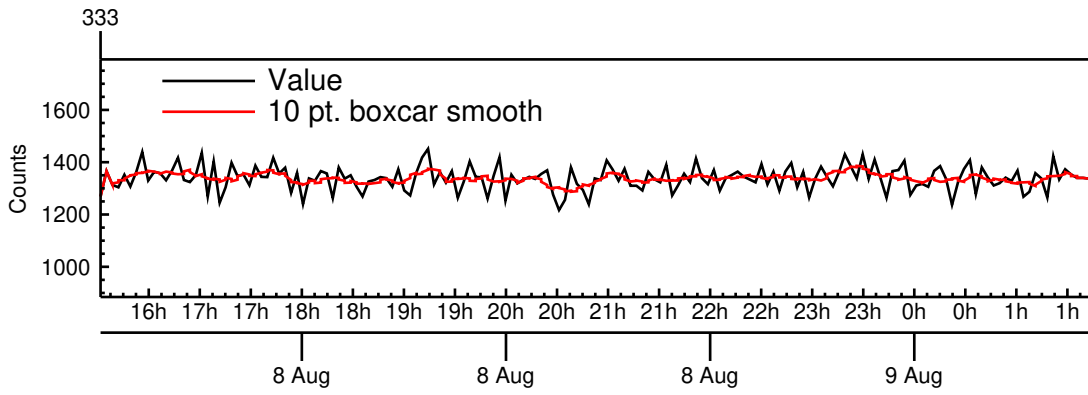
CZT overload events



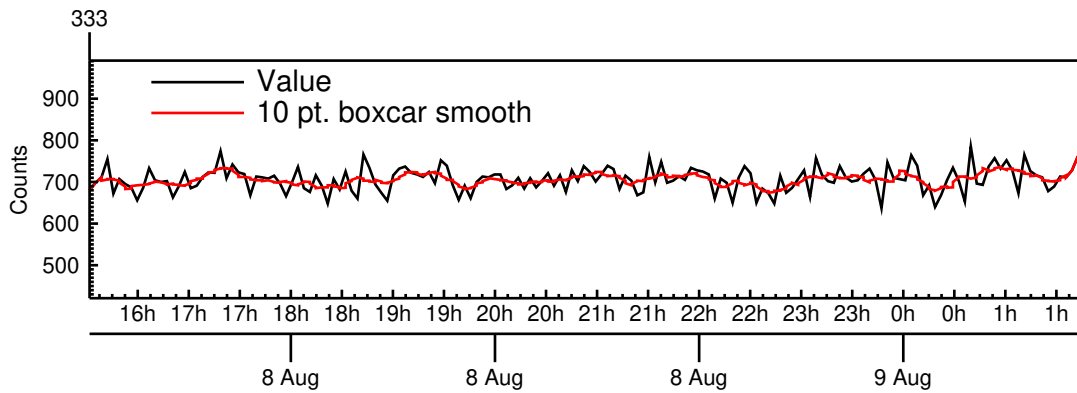
+Z phoswich overload events



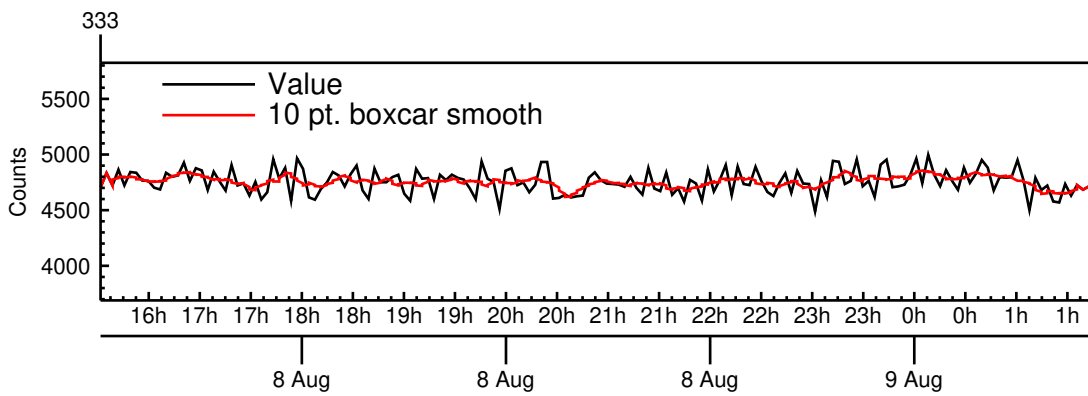
-Y BLP overload events



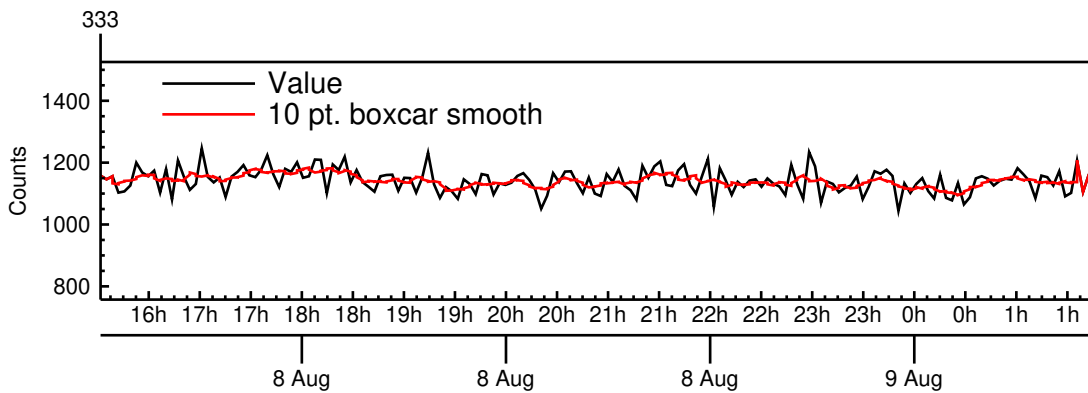
+Y BLP overload events



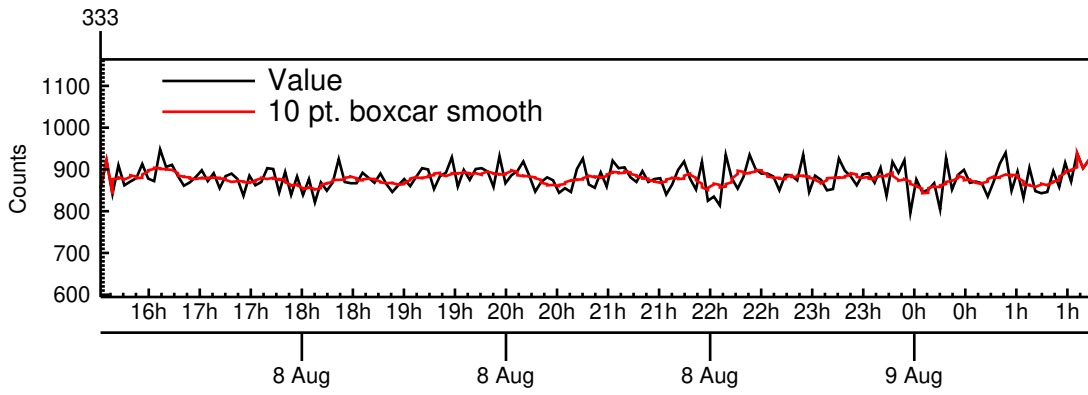
-Z phoswich overload events



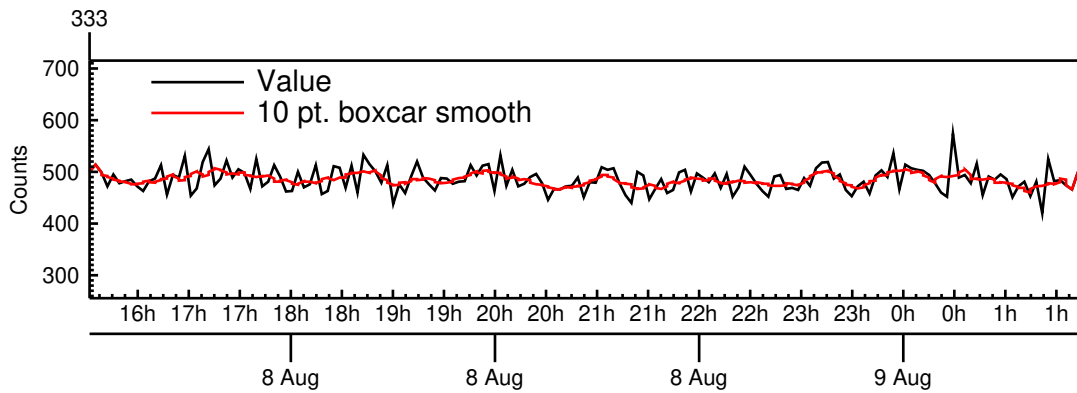
+Z phoswich CAT4 events



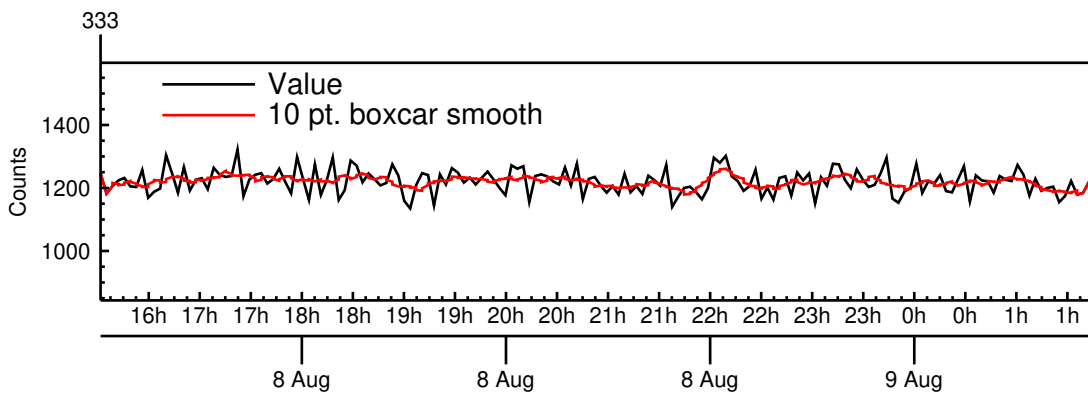
-Y BLP CAT4 events



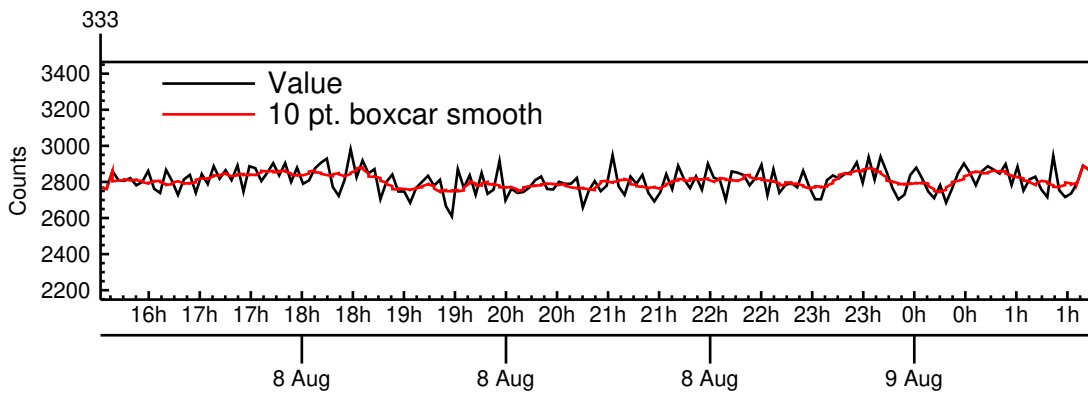
+Y BLP CAT4 events



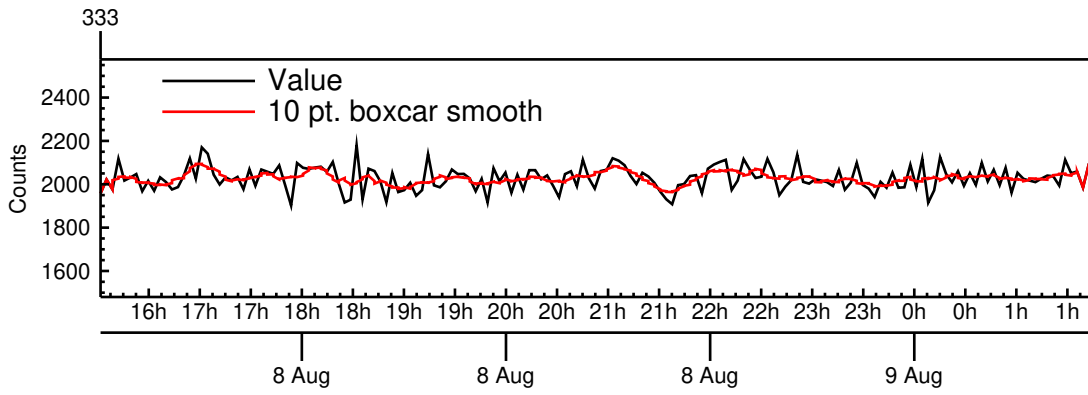
-Z phoswich CAT4 events



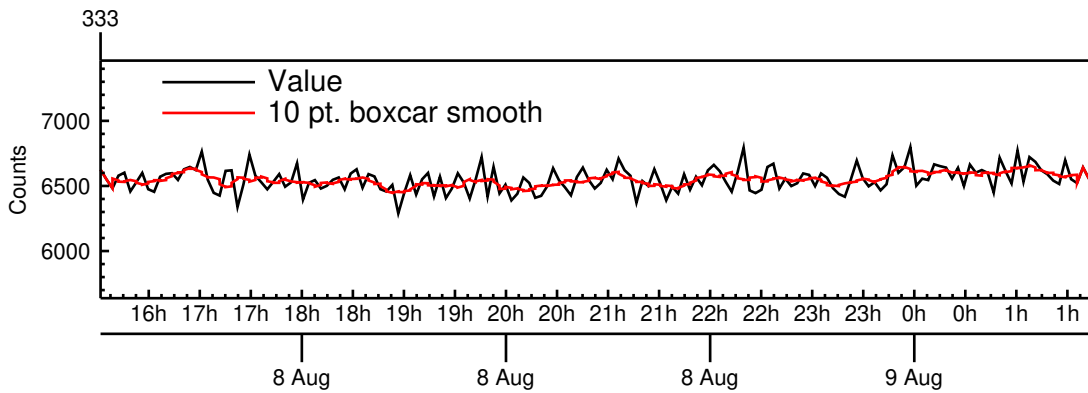
Early second interaction events



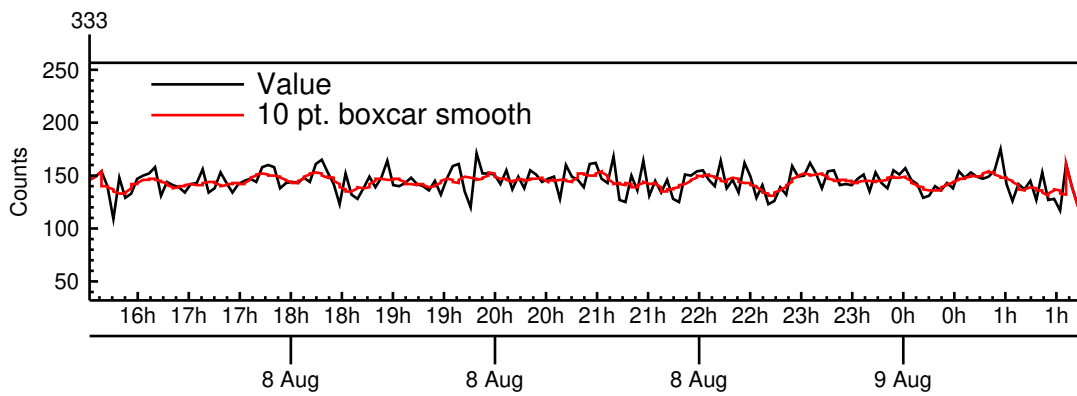
### Multiple-crystal CZT events



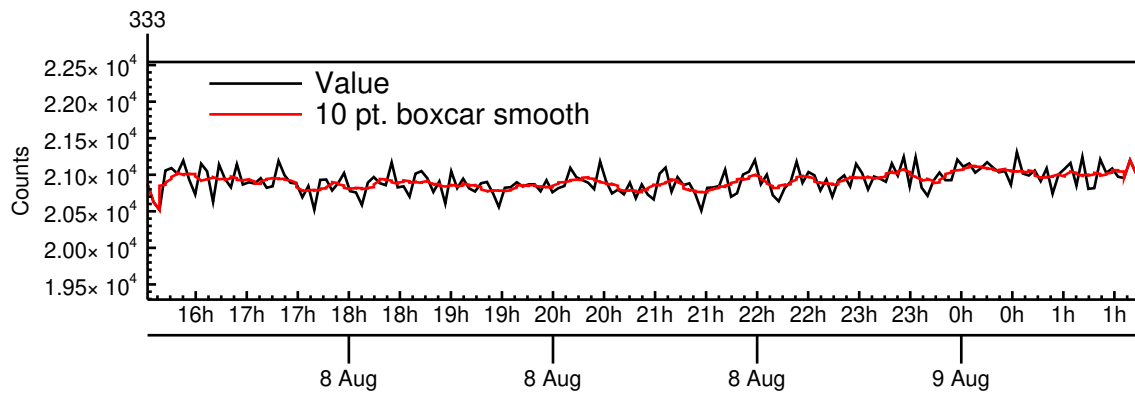
### Valid CZT events (CAT10)



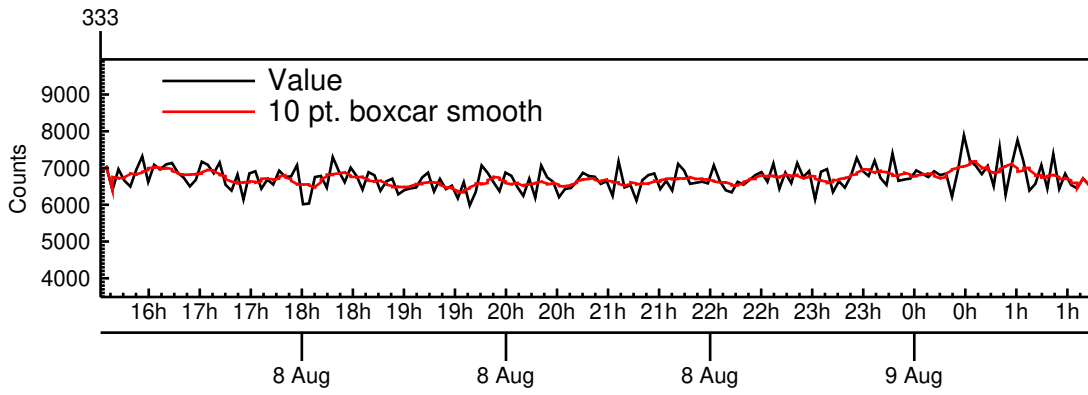
### Coincidence BGO and CZT events (CAT7)



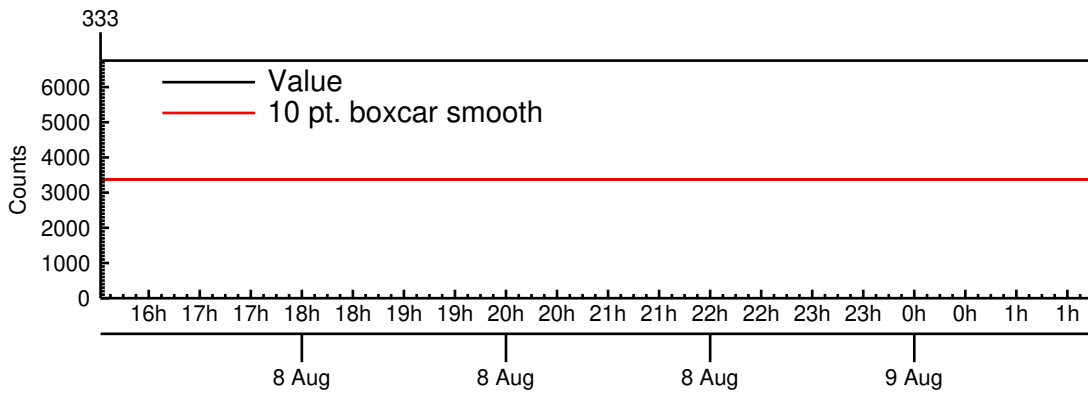
### Coincidence of three or more sensor elements



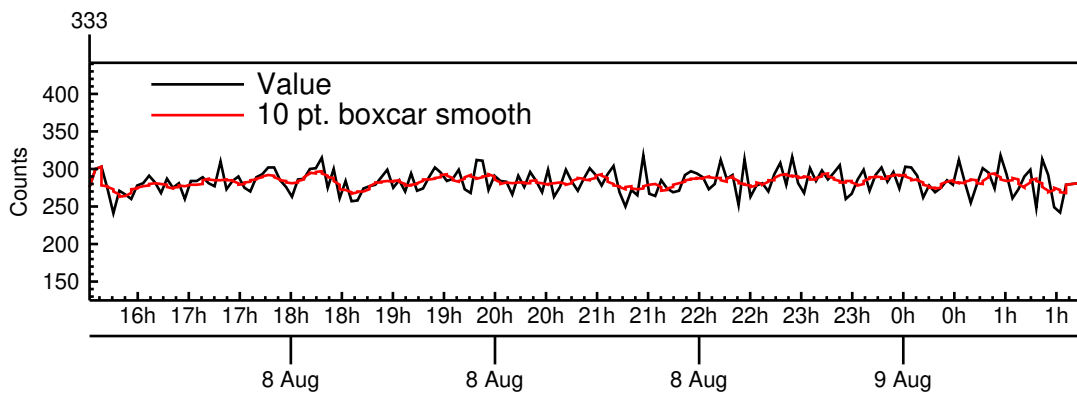
### Total events processed by GRaND



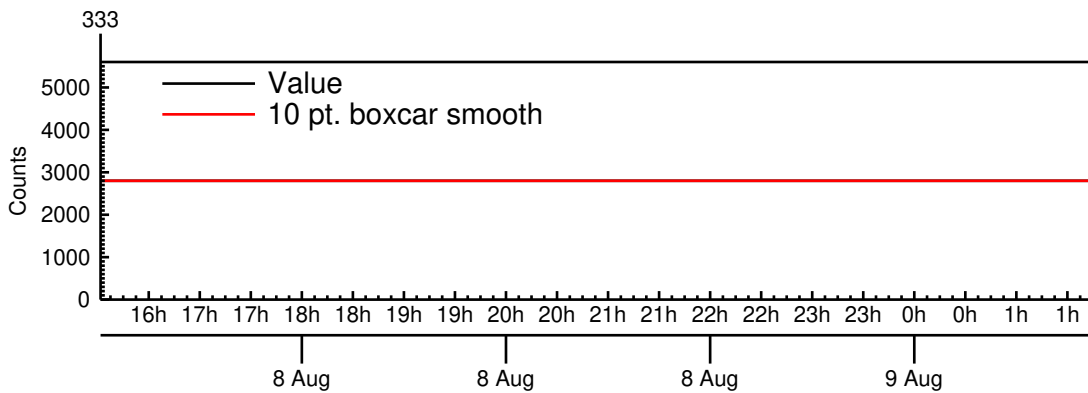
### Number of single CZT events (CAT10) in the gamma ray event buffer



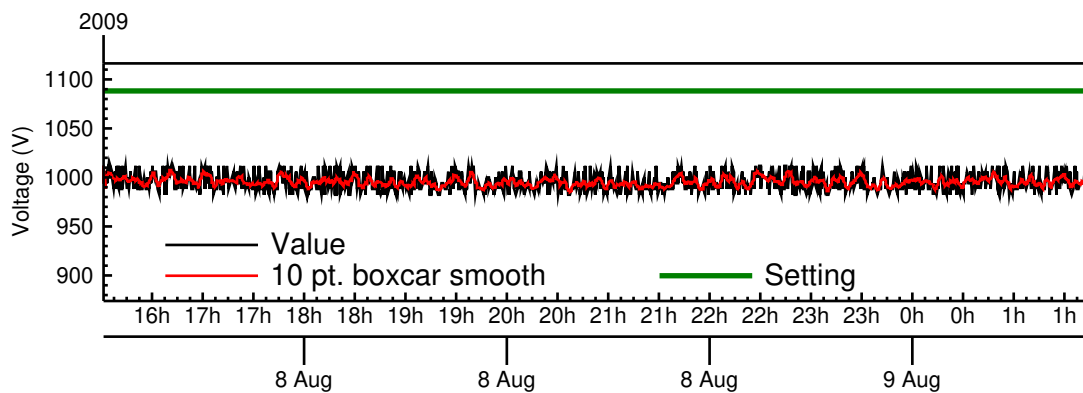
### Number of BGO-CZT events (CAT7) in the gamma ray event buffer



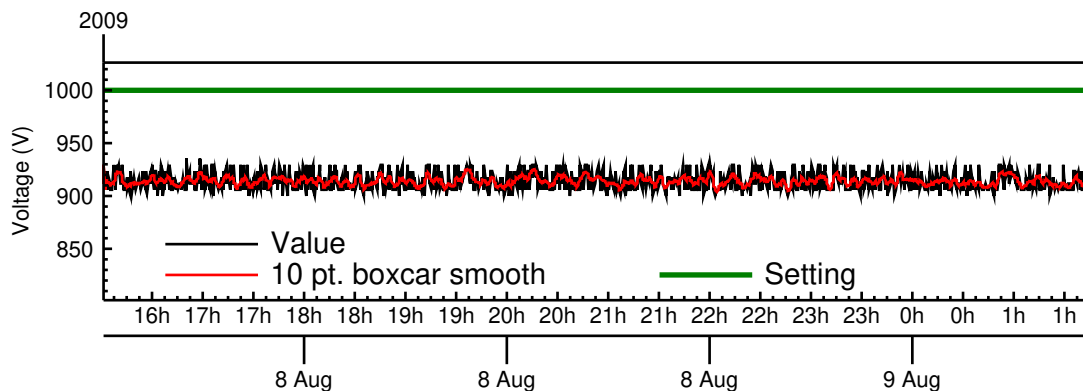
### Number of events (CAT4) in the neutron event buffer



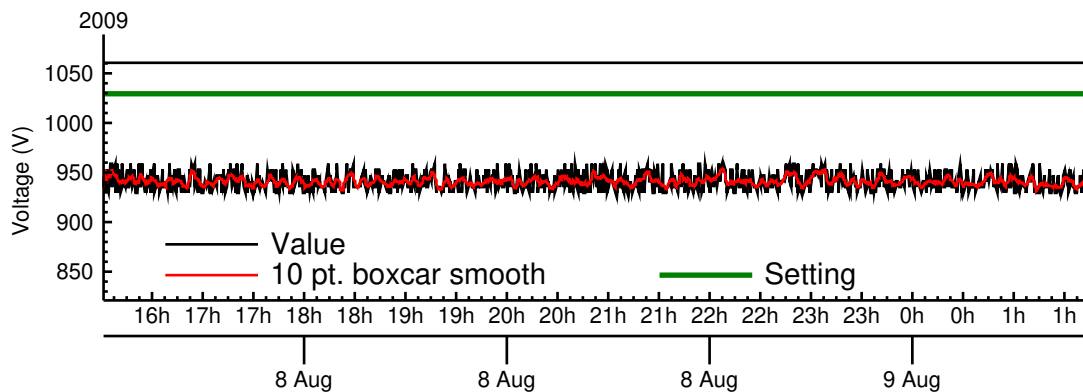
HVPS1 (+Z)



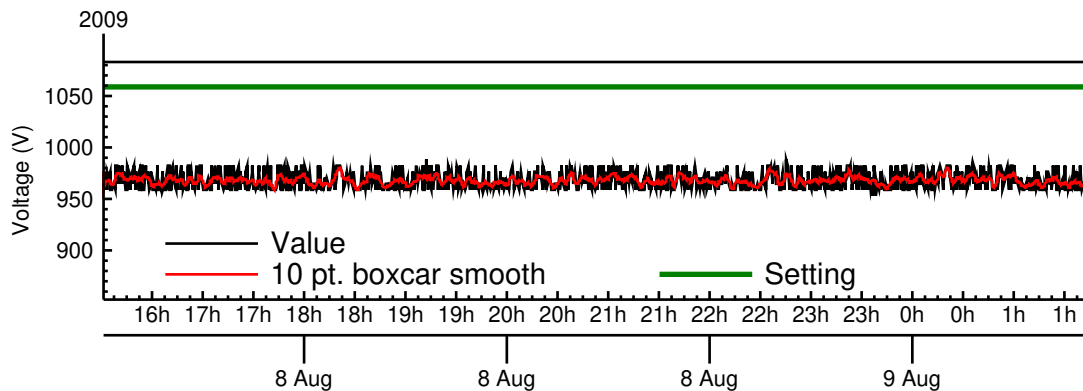
HVPS2 (-Y)



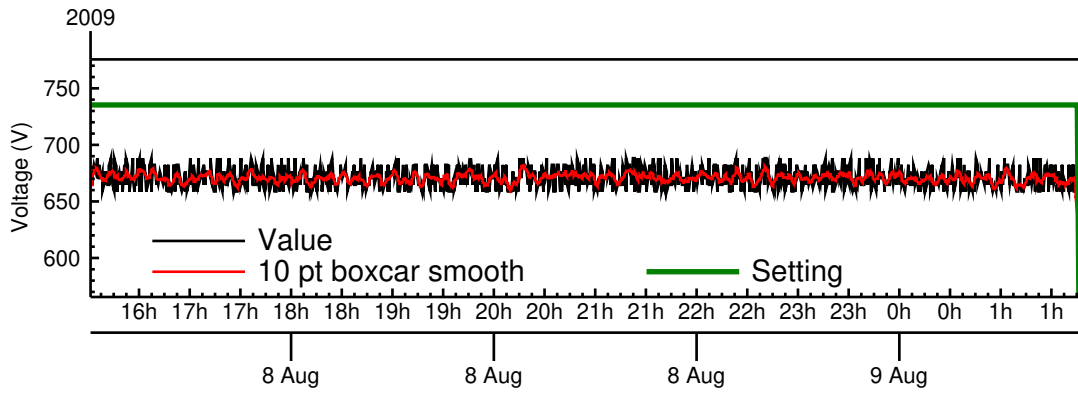
HVPS3 (+Y)



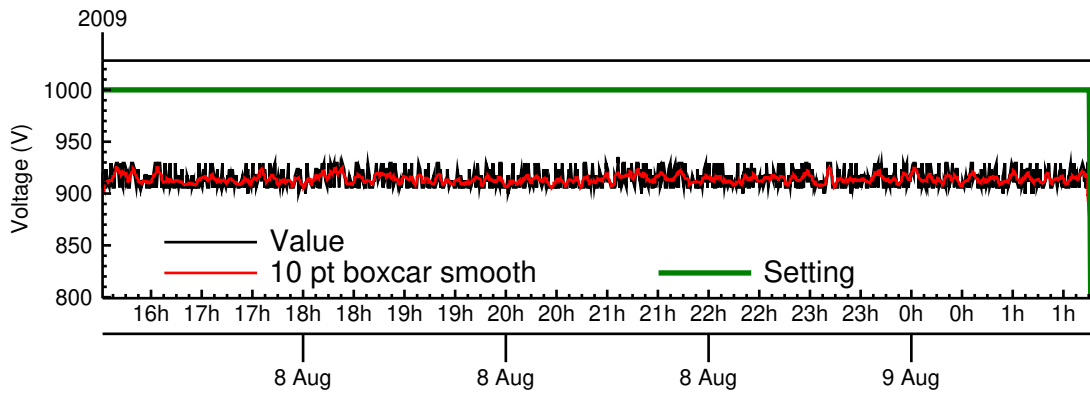
HVPS4 (-Z)



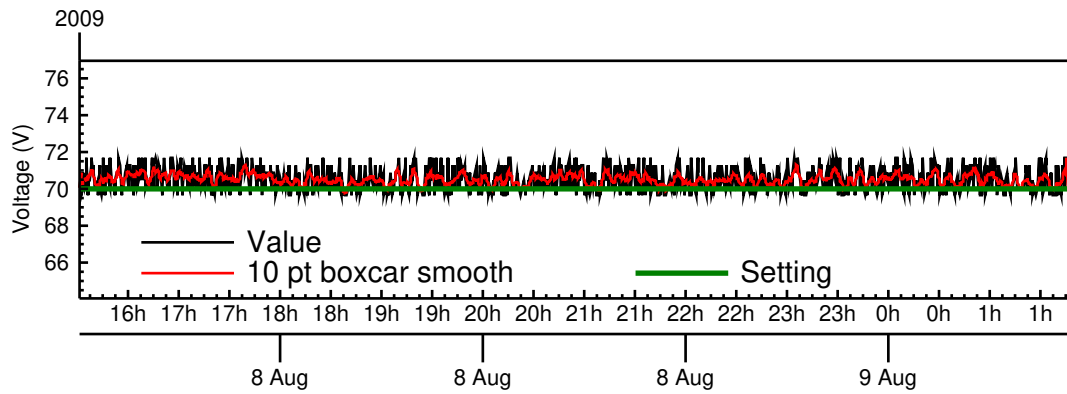
### HVPS5 (BGO)



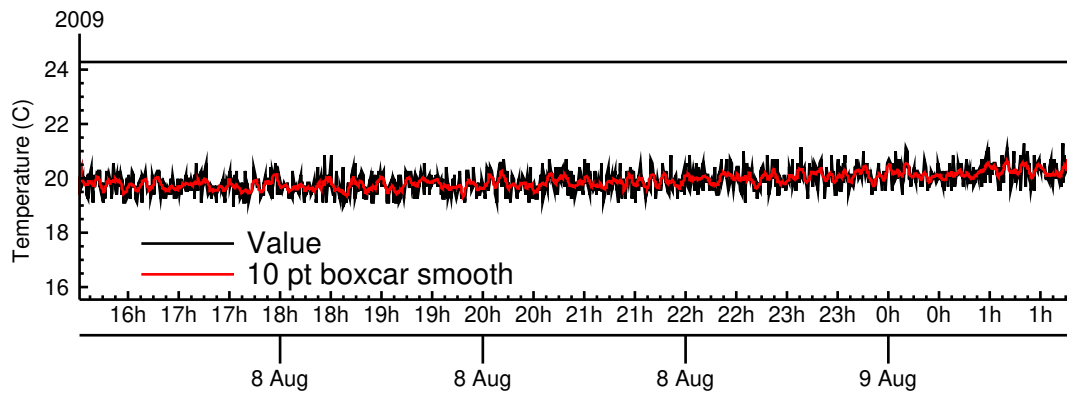
### HVPS6 (CZT)



### HVPS70 (CZT grid bias)

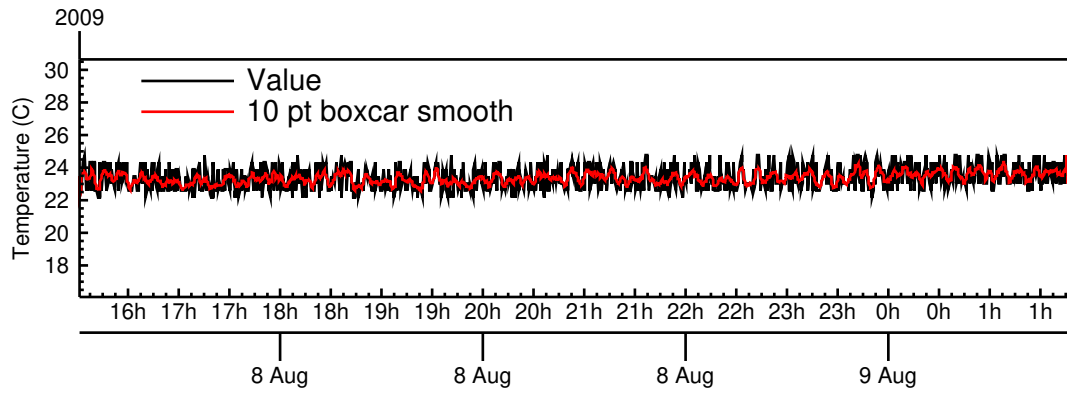


### TCZT<1,2,3>

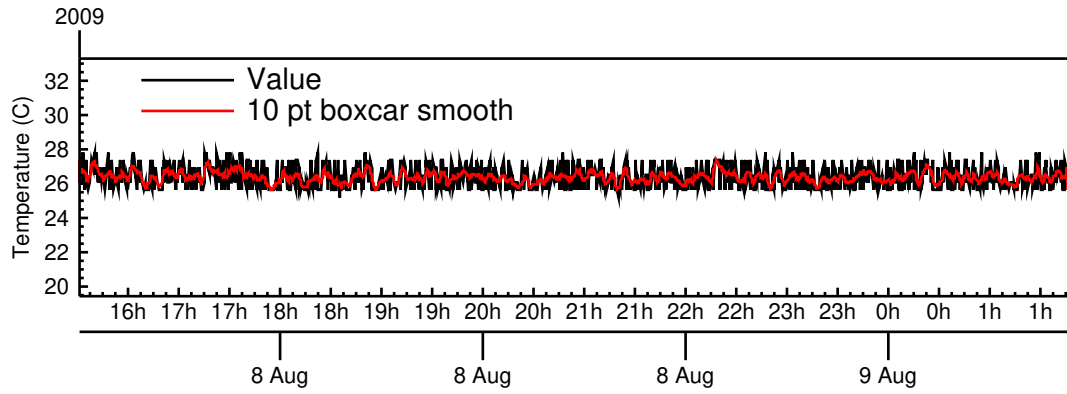




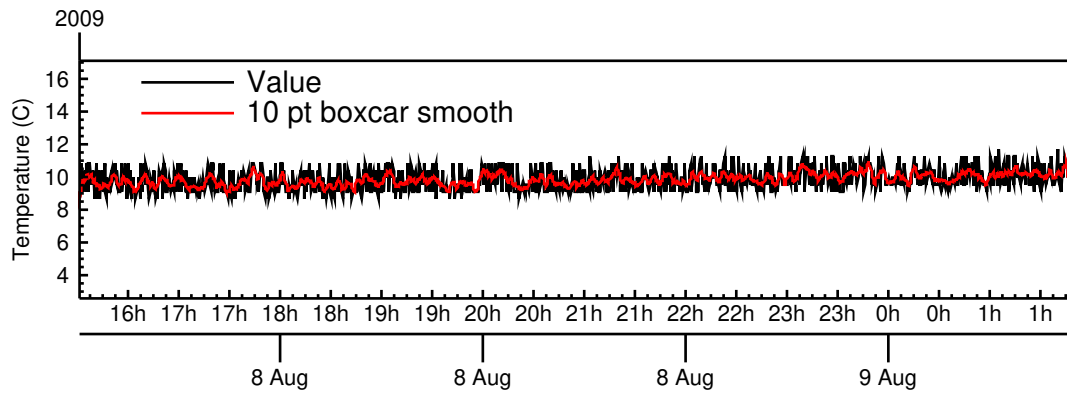
### TCZT4



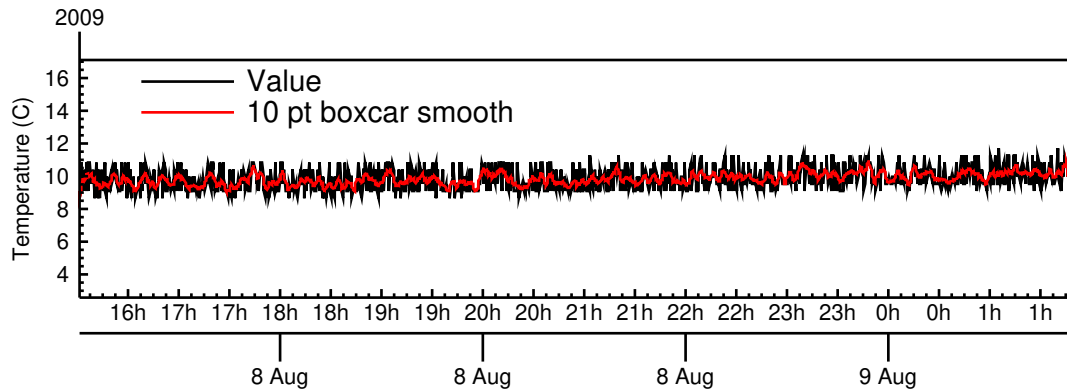
### TLVPS



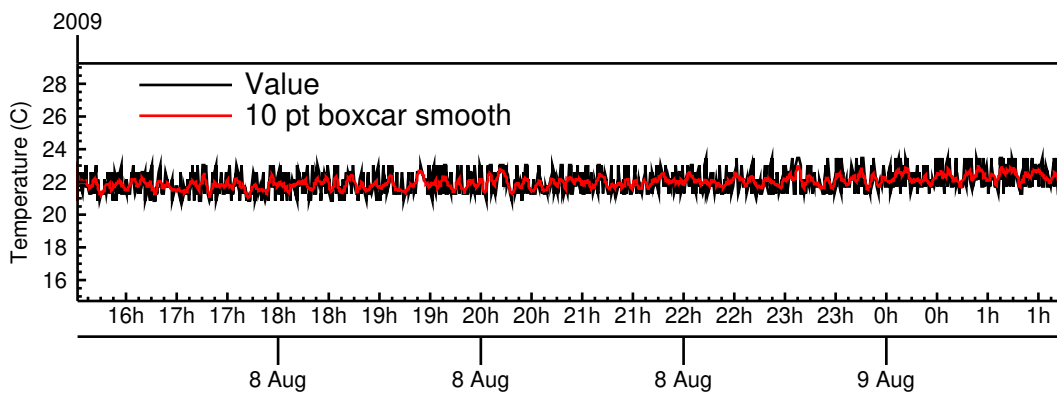
### THVPS



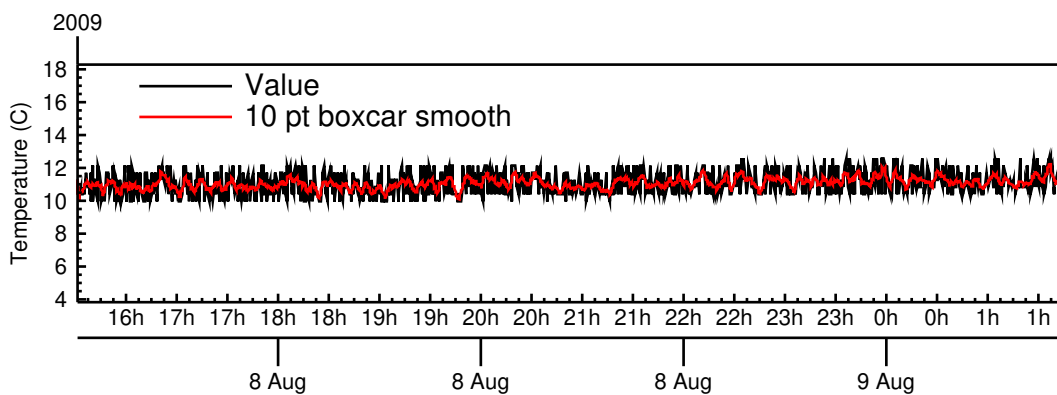
### TBGO



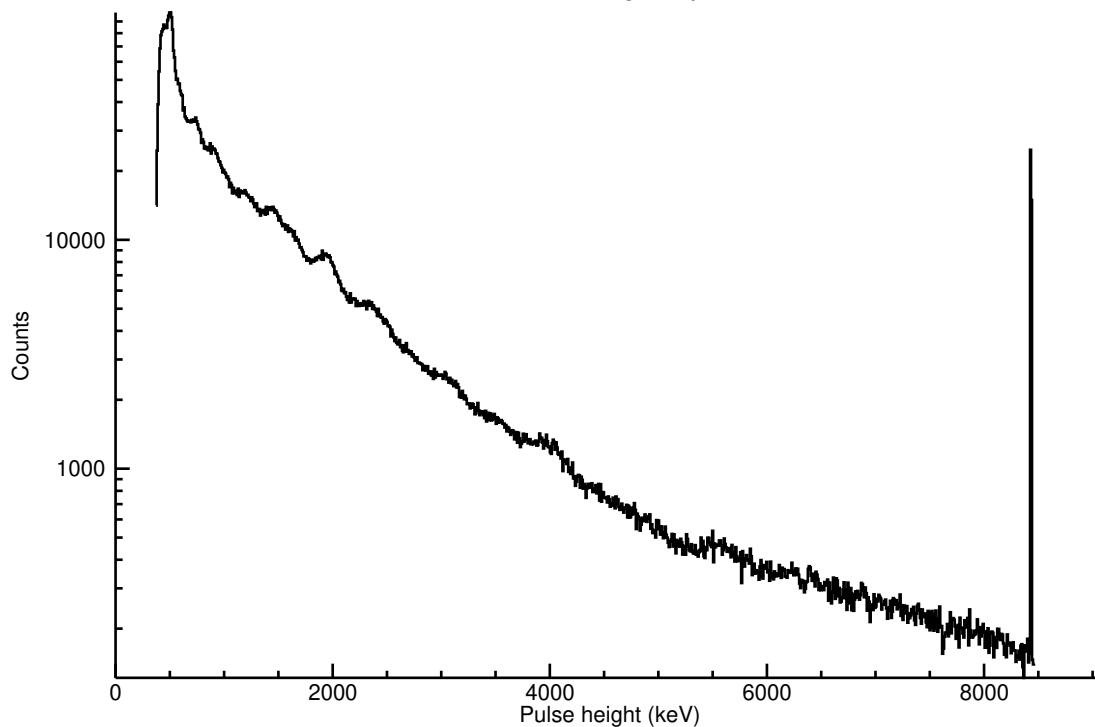
### TPMT



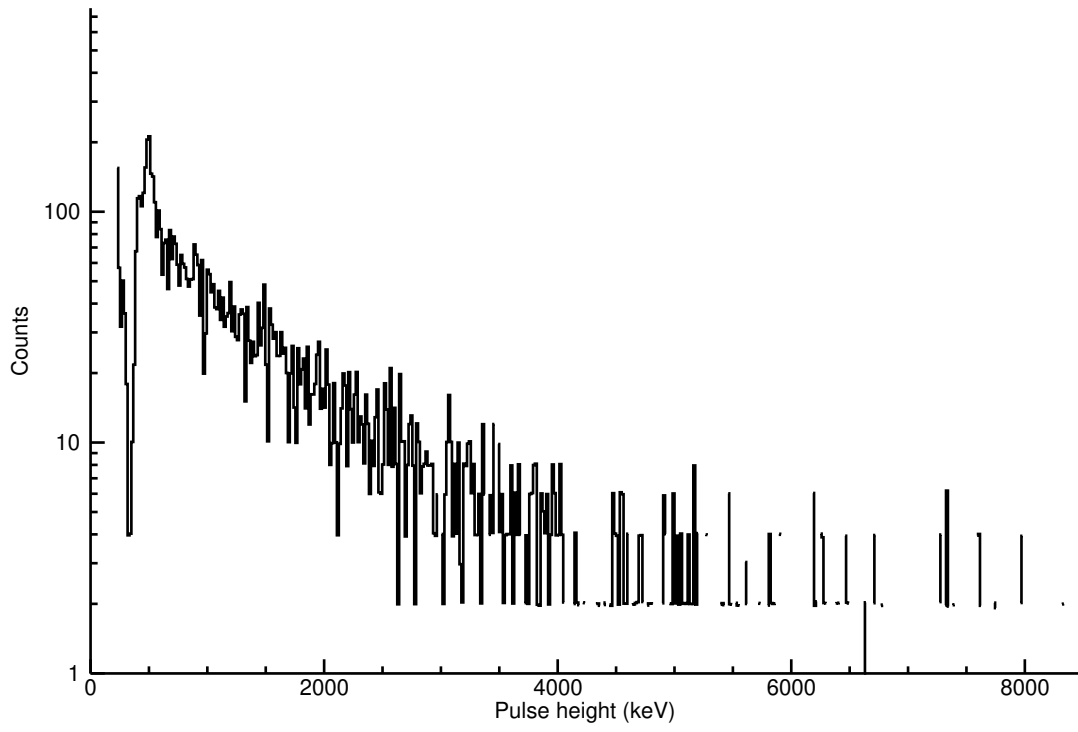
### TINTERFACE



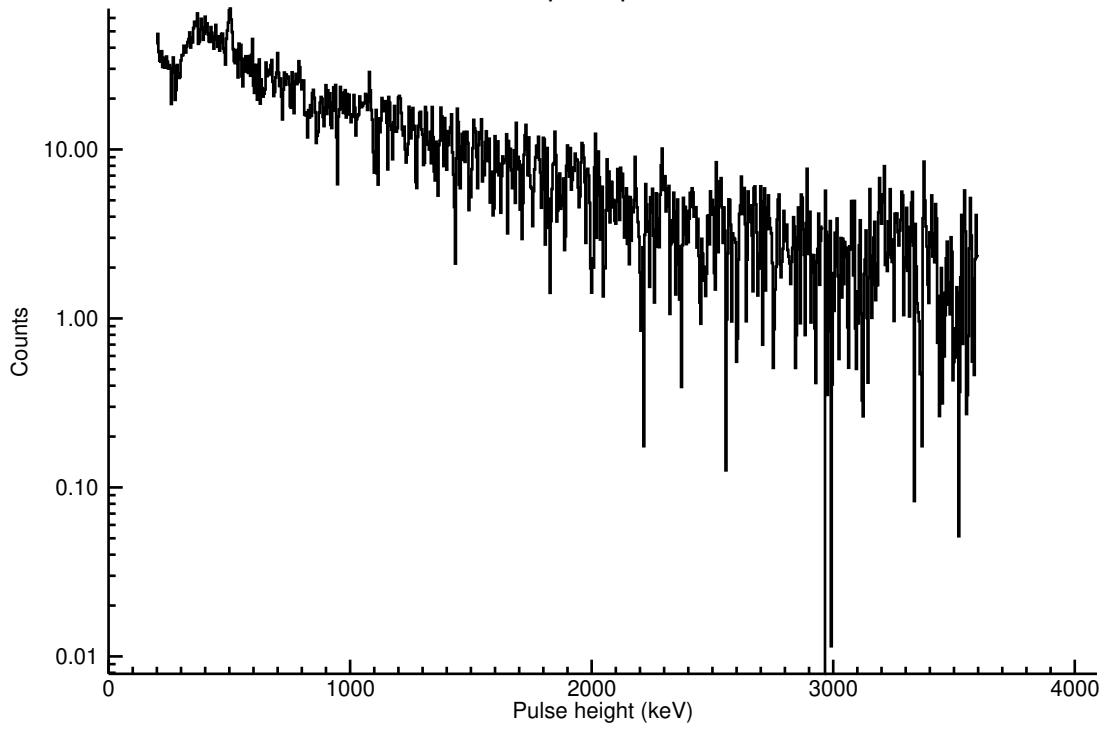
### BGO Pulse Height Spectrum



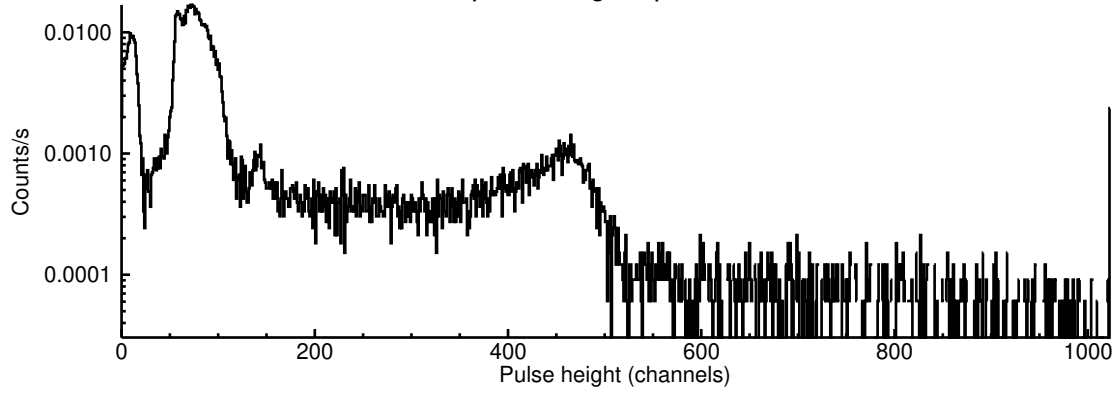
BGO-CZT pair spectrum: BGO



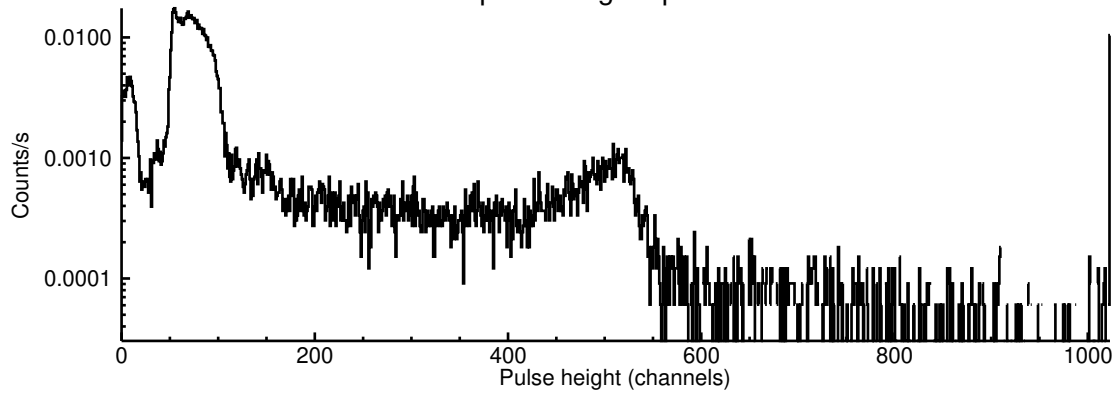
BGO-CZT pair spectrum: CZT



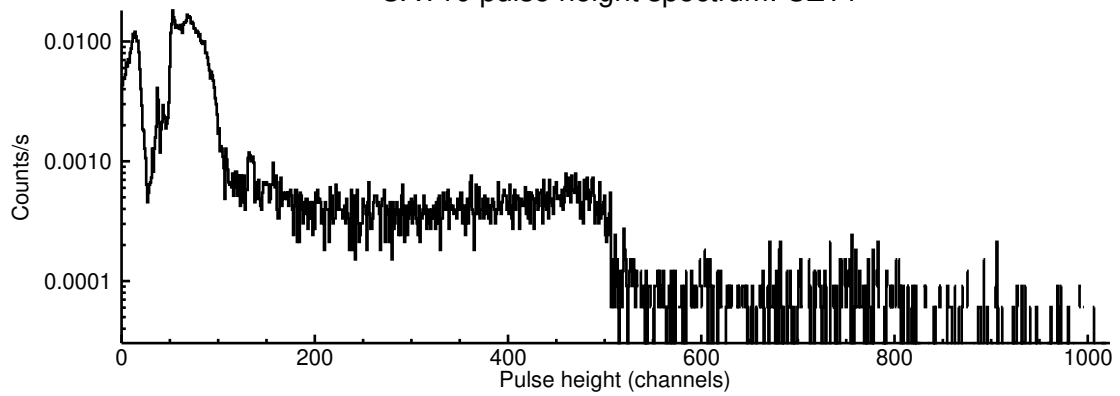
CAT10 pulse height spectrum: CZT11



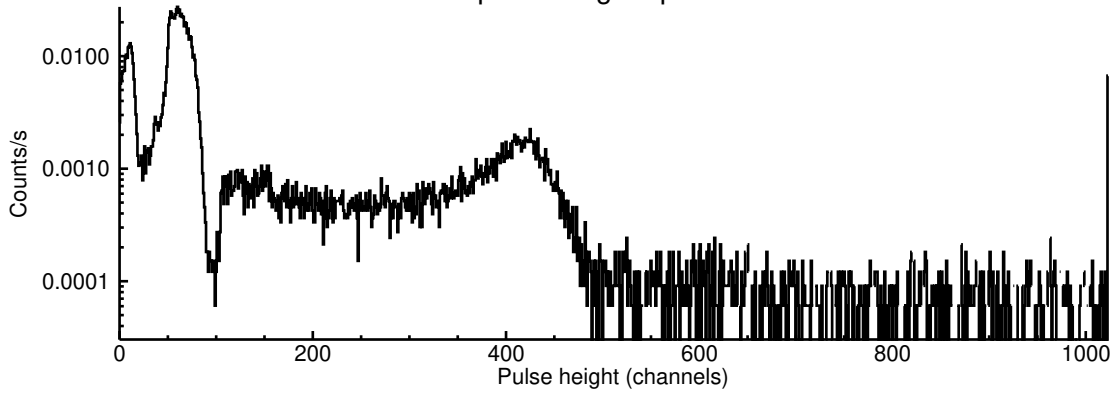
CAT10 pulse height spectrum: CZT3



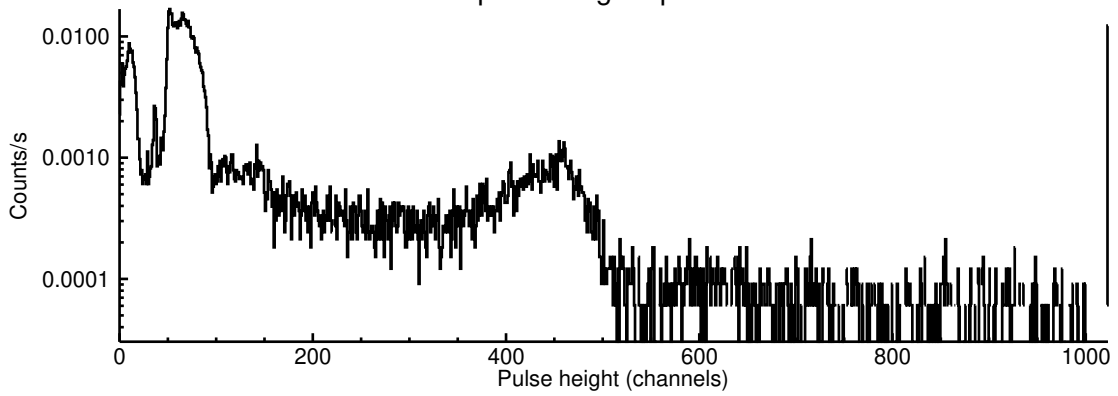
CAT10 pulse height spectrum: CZT1



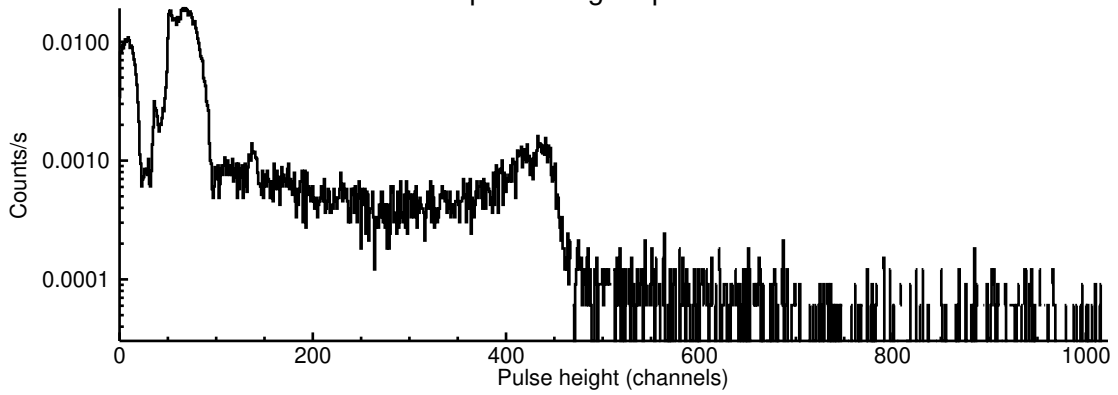
CAT10 pulse height spectrum: CZT2



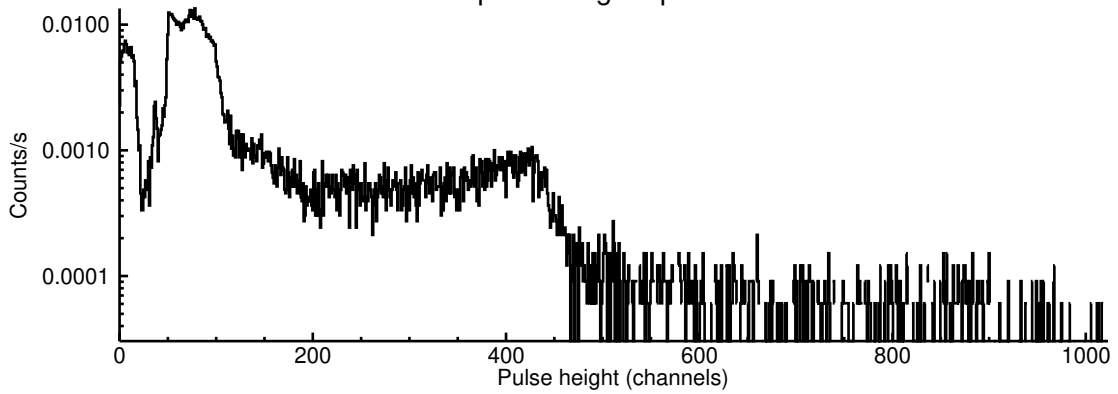
CAT10 pulse height spectrum: CZT8



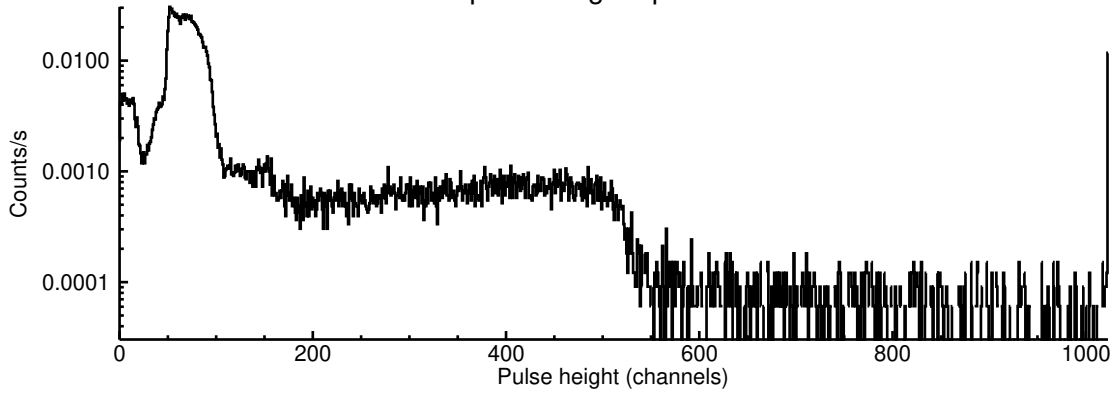
CAT10 pulse height spectrum: CZT10



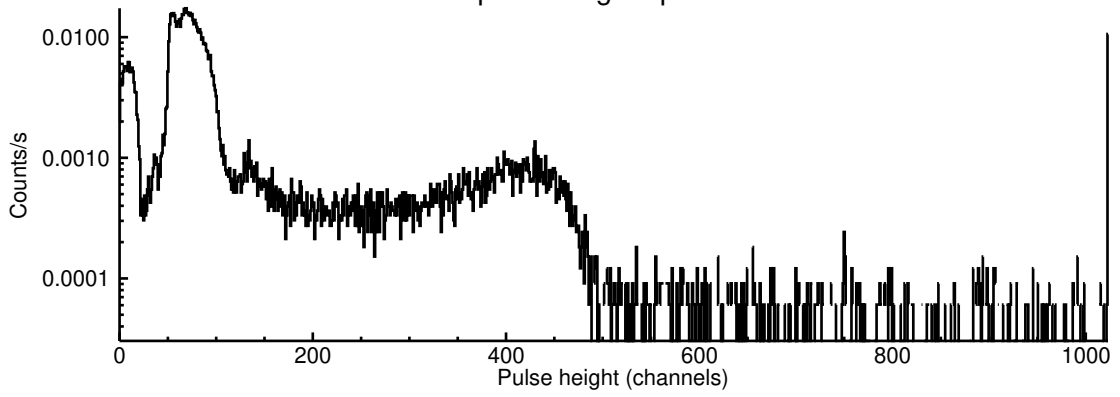
CAT10 pulse height spectrum: CZT0



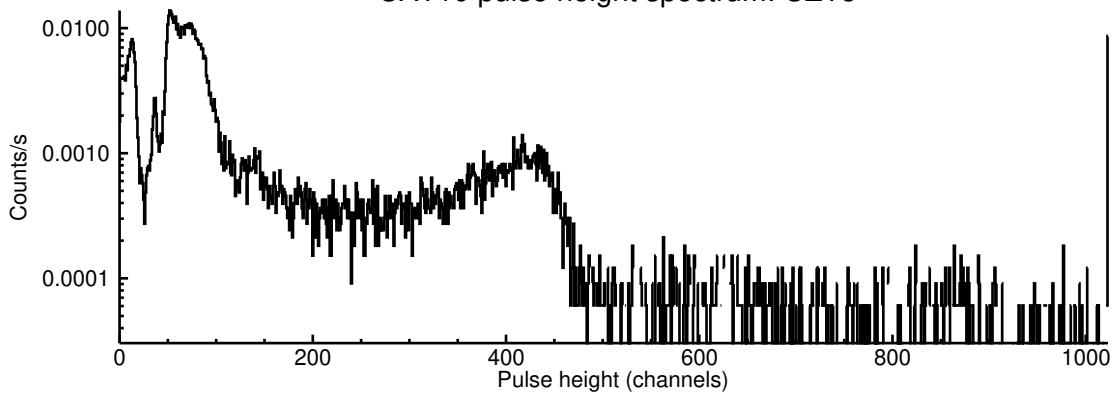
CAT10 pulse height spectrum: CZT15



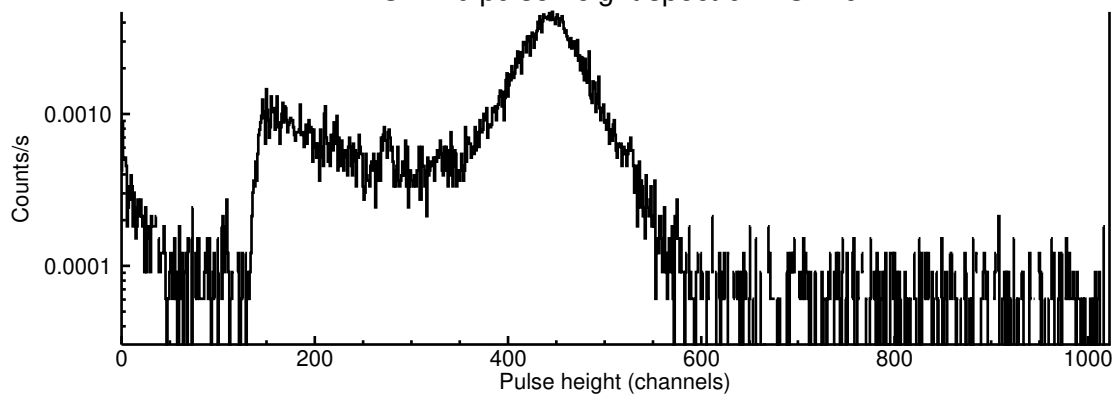
CAT10 pulse height spectrum: CZT7



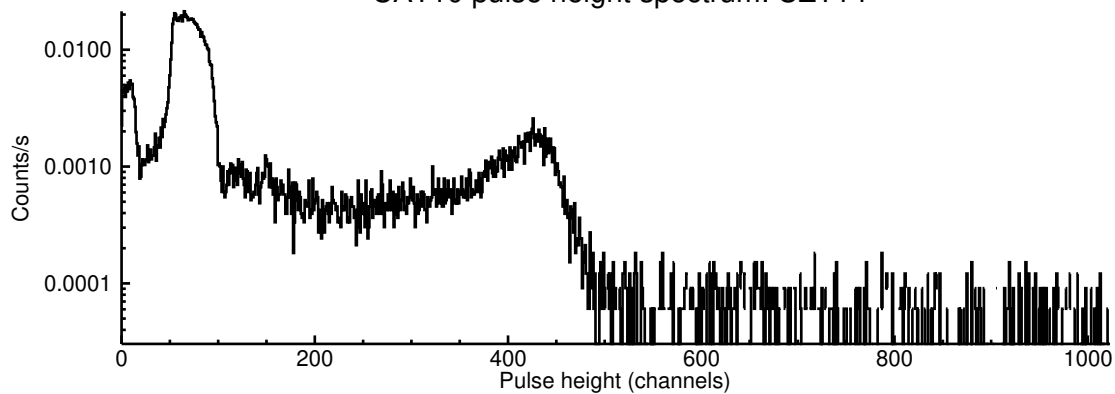
CAT10 pulse height spectrum: CZT5



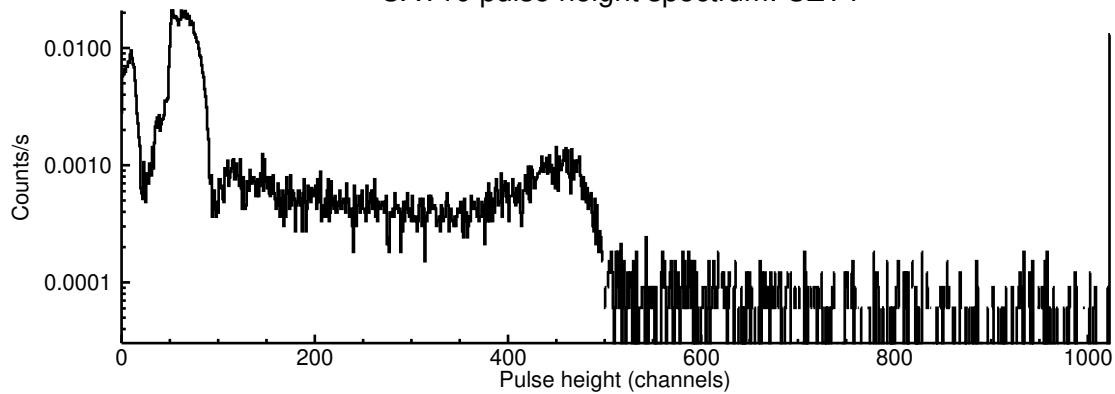
CAT10 pulse height spectrum: CZT6



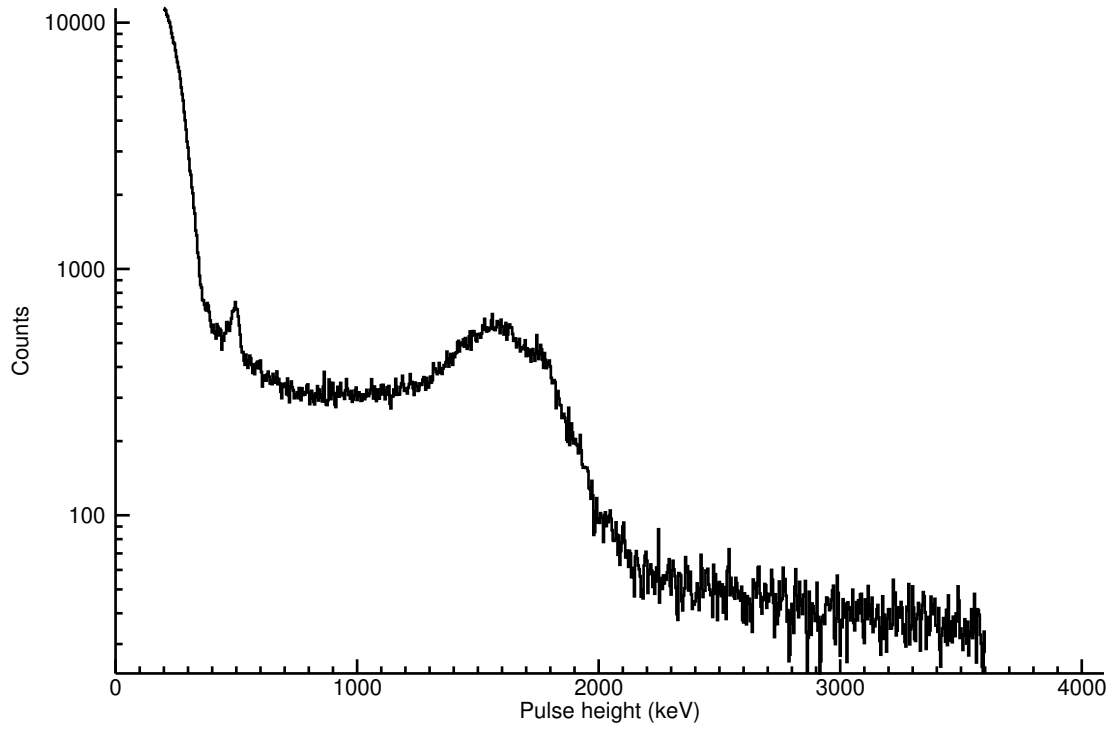
CAT10 pulse height spectrum: CZT14



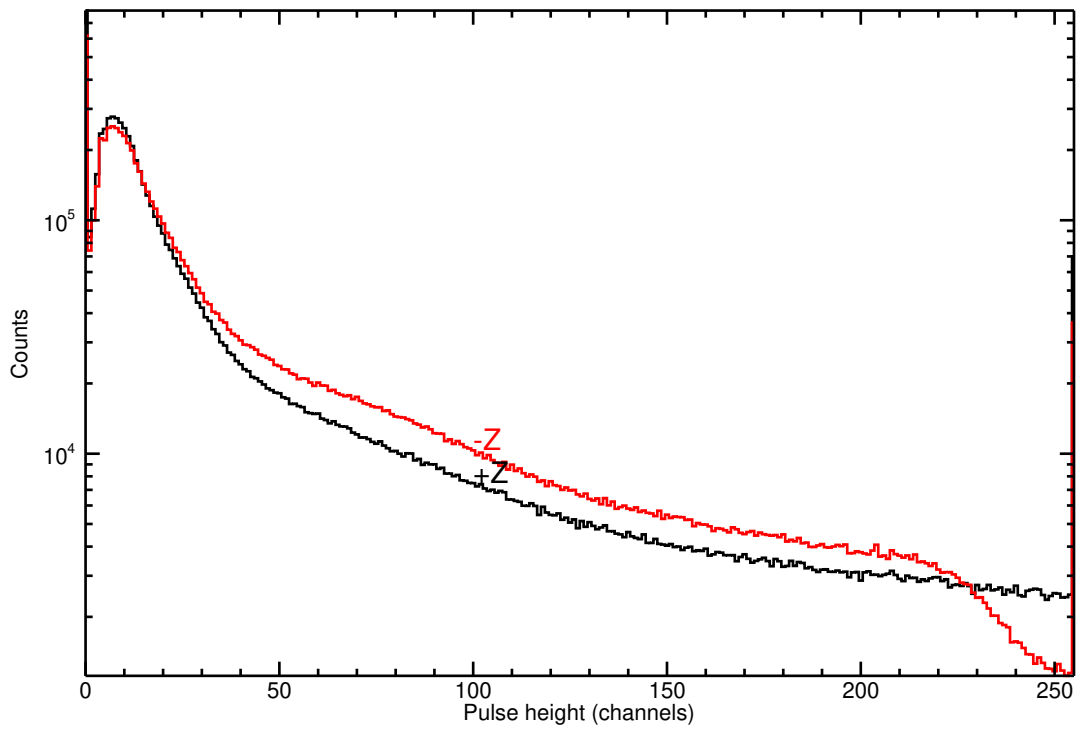
CAT10 pulse height spectrum: CZT4



CAT10 CZT composite

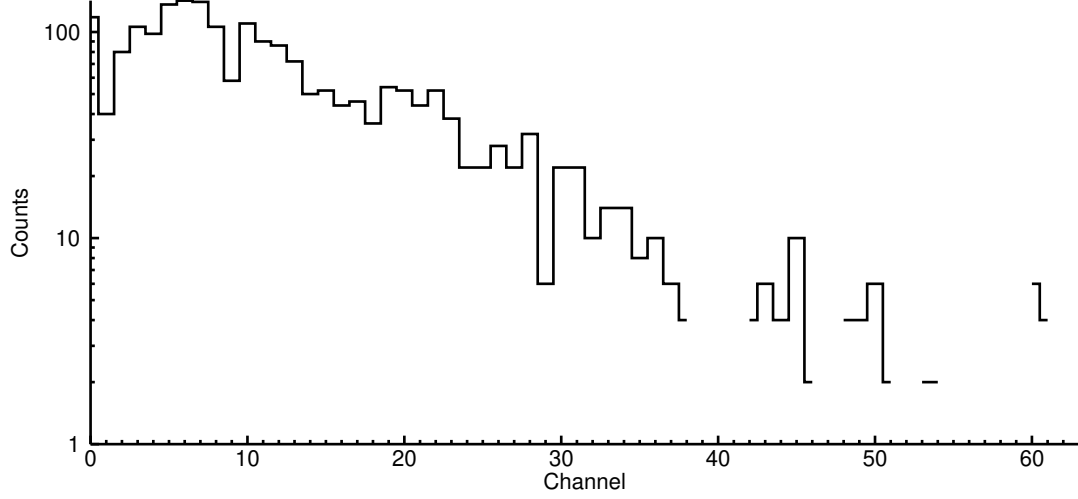


CAT1 histograms

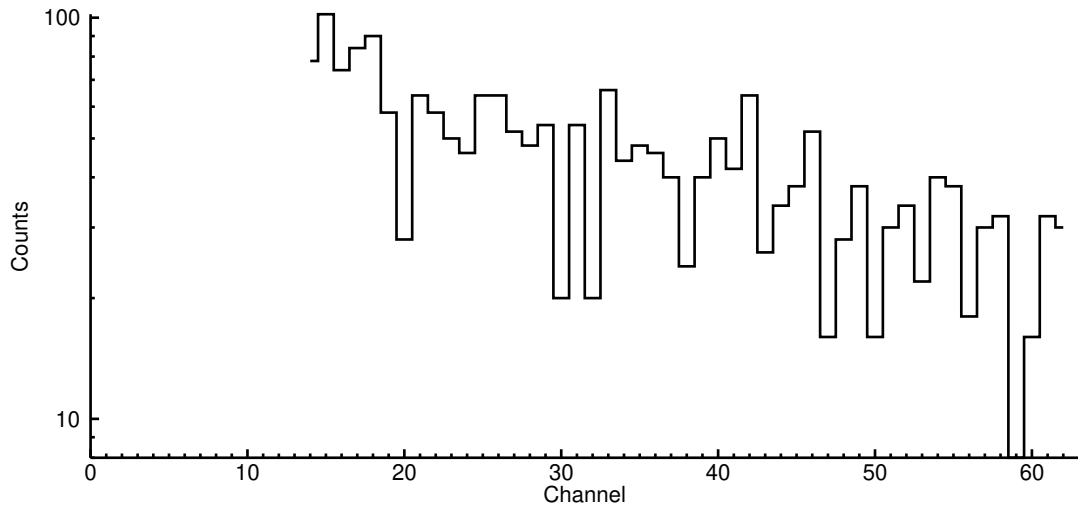




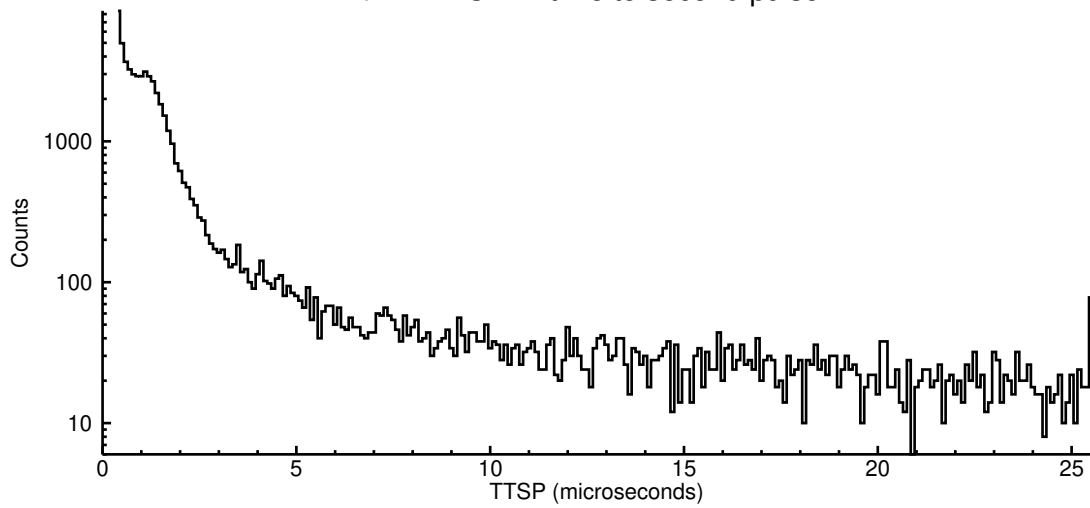
+Z BLP CAT4 first pulse

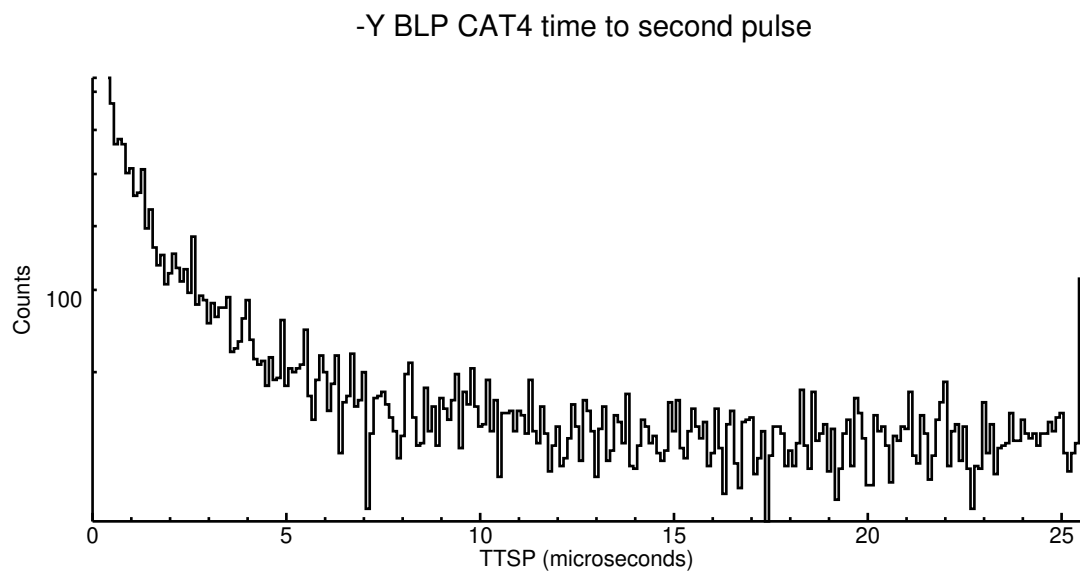
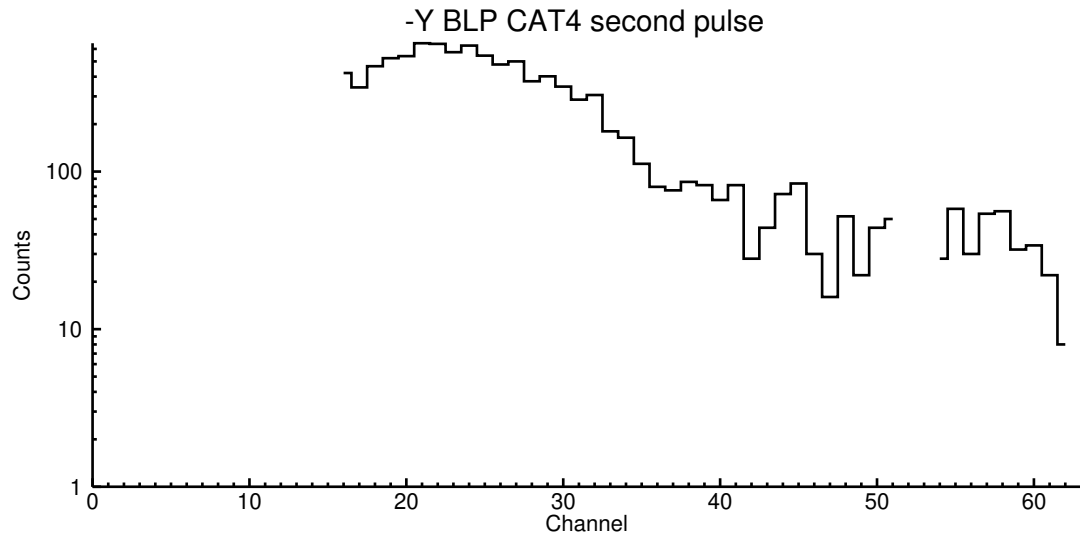
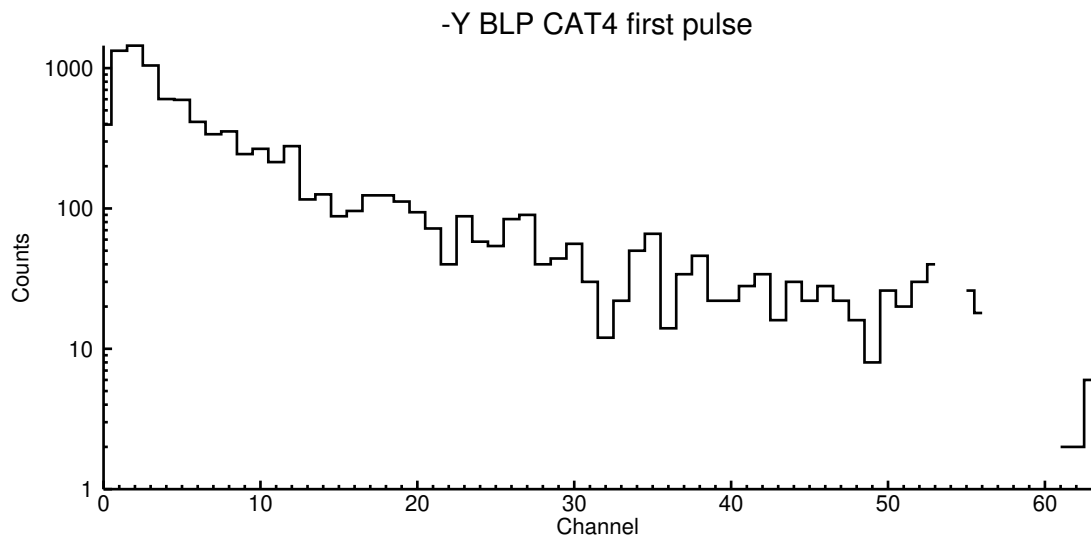


+Z BLP CAT4 second pulse

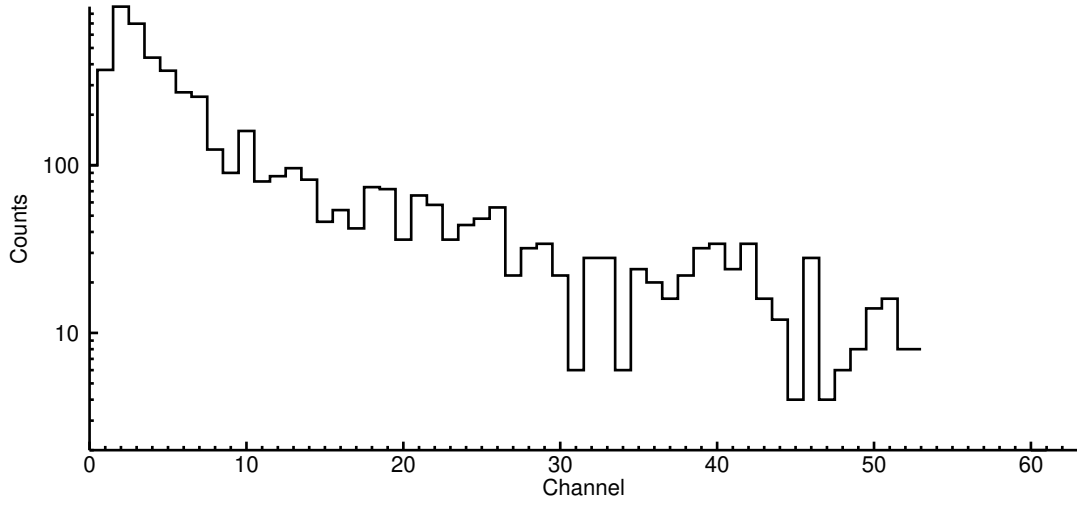


+Z BLP CAT4 time to second pulse

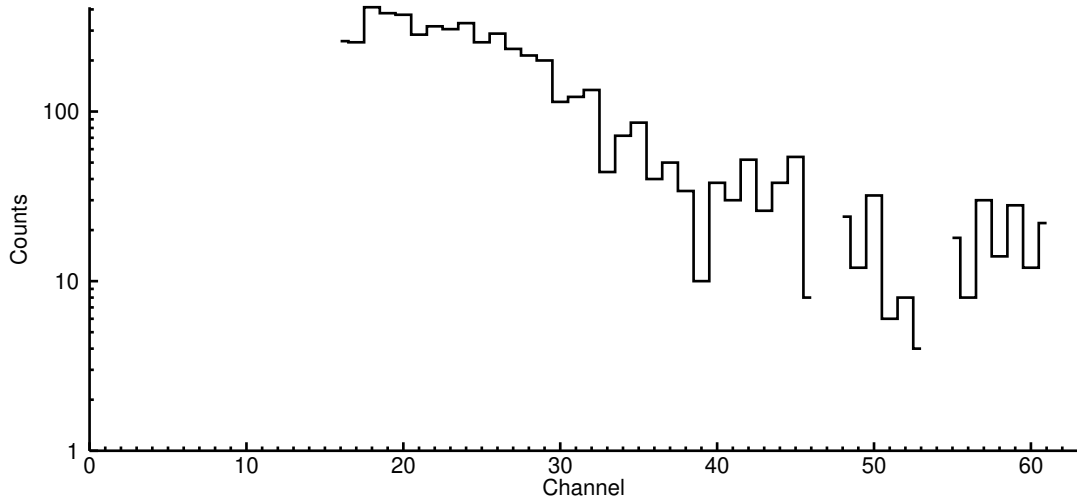




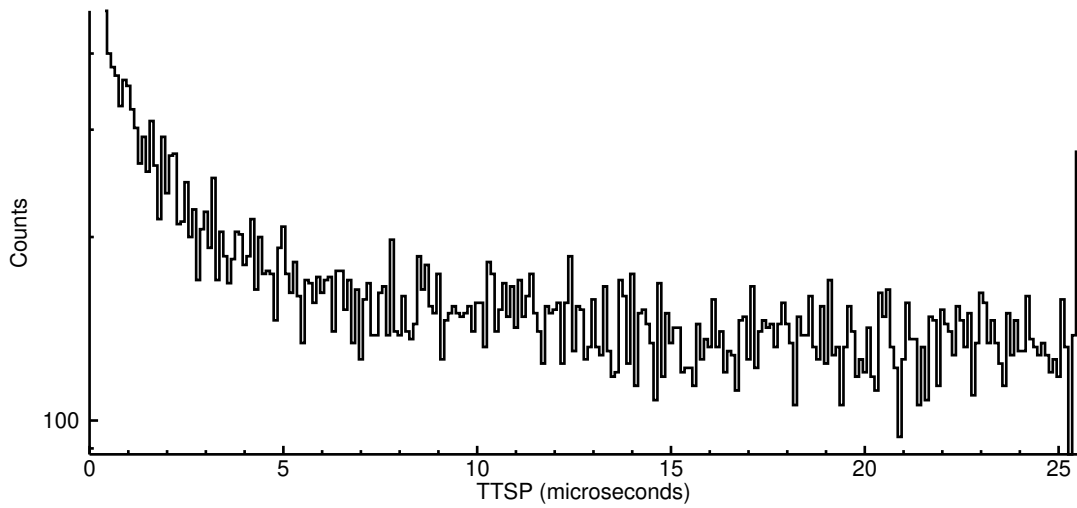
+Y BLP CAT4 first pulse



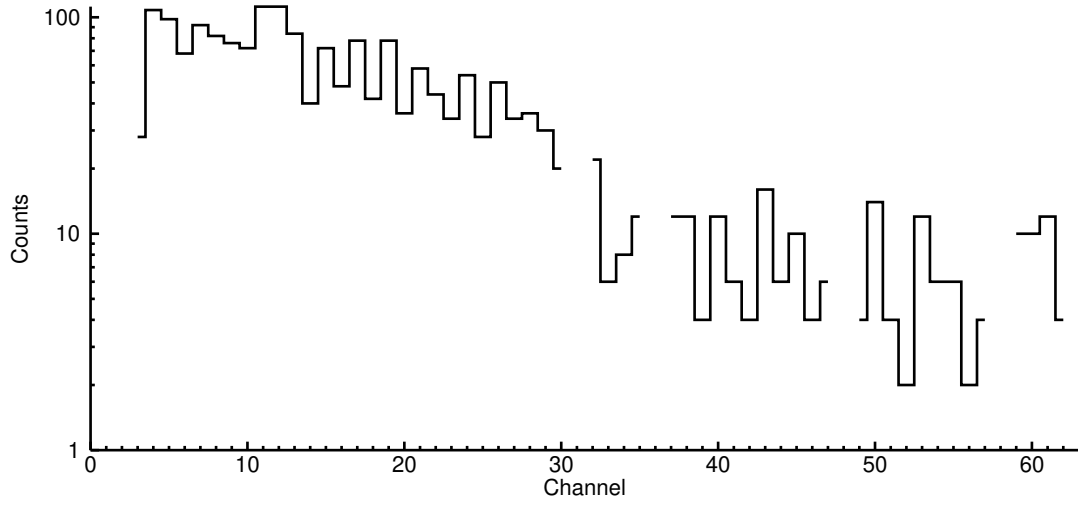
+Y BLP CAT4 second pulse



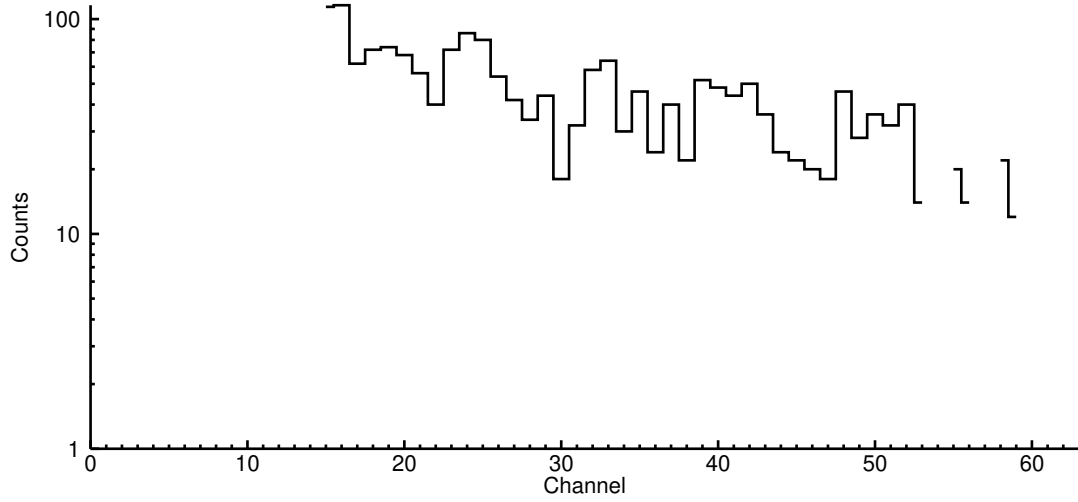
+Y BLP CAT4 time to second pulse



-Z BLP CAT4 first pulse



-Z BLP CAT4 second pulse



-Z BLP CAT4 time to second pulse

