

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15270 - L2 Version 1
Chandra X-Ray Center

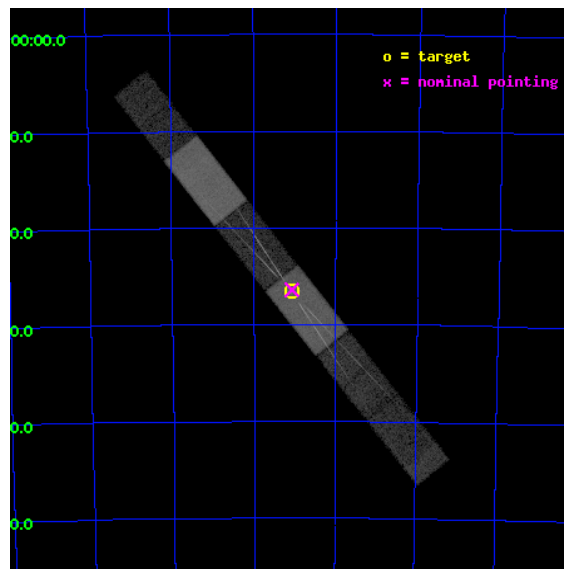
L2 Processing Date : Aug 21 2012

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1 Front

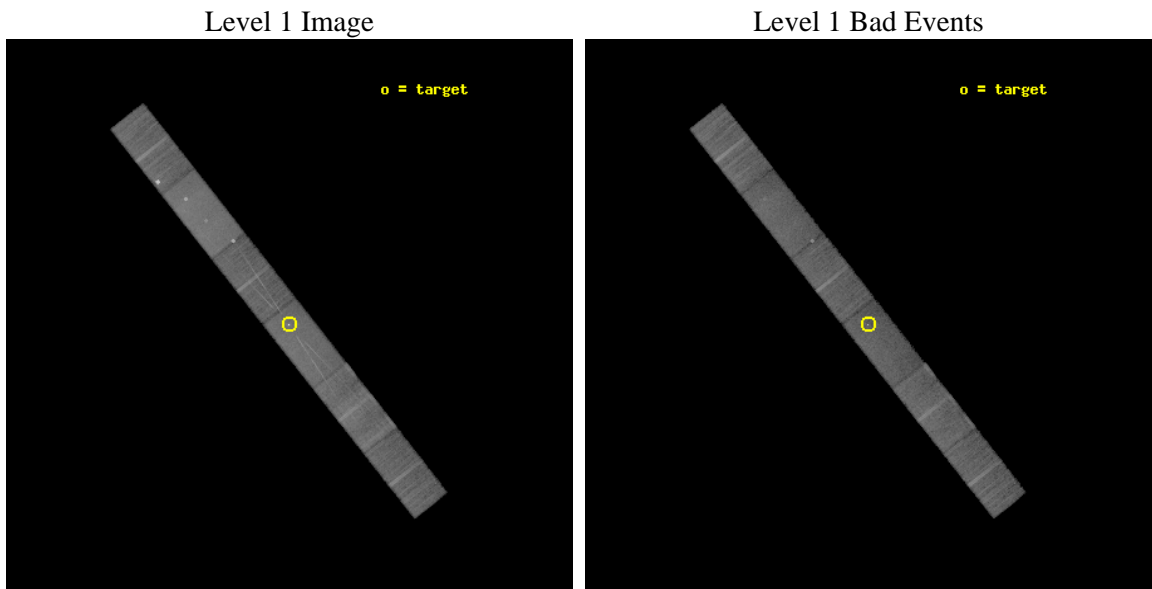
seq_num	401302	Sequence number
obs_id	15270	Observation id
title	The Wind and Warp of SMC X-1	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	SMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	19.271667	Observer's specified target RA [deg]
dec_targ	-73.442944	Observer's specified target Dec [deg]
ra_nom	19.268138143521	Nominal RA [deg]
dec_nom	-73.440087293439	Nominal Dec [deg]
roll_nom	51.653249061889	Nominal Roll [deg]
revision	1	Processing version of data
ontime	35050.023870111	Sum of GTIs [s]
livetime	34223.820578038	Livetime [s]
ontime4	35050.064910114	Sum of GTIs [s]
ontime5	35049.982830107	Sum of GTIs [s]
ontime6	35049.941790104	Sum of GTIs [s]
ontime7	35050.023870111	Sum of GTIs [s]
ontime8	35049.900750101	Sum of GTIs [s]
ontime9	35049.859710097	Sum of GTIs [s]
l2events	181532	Number of level 2 events



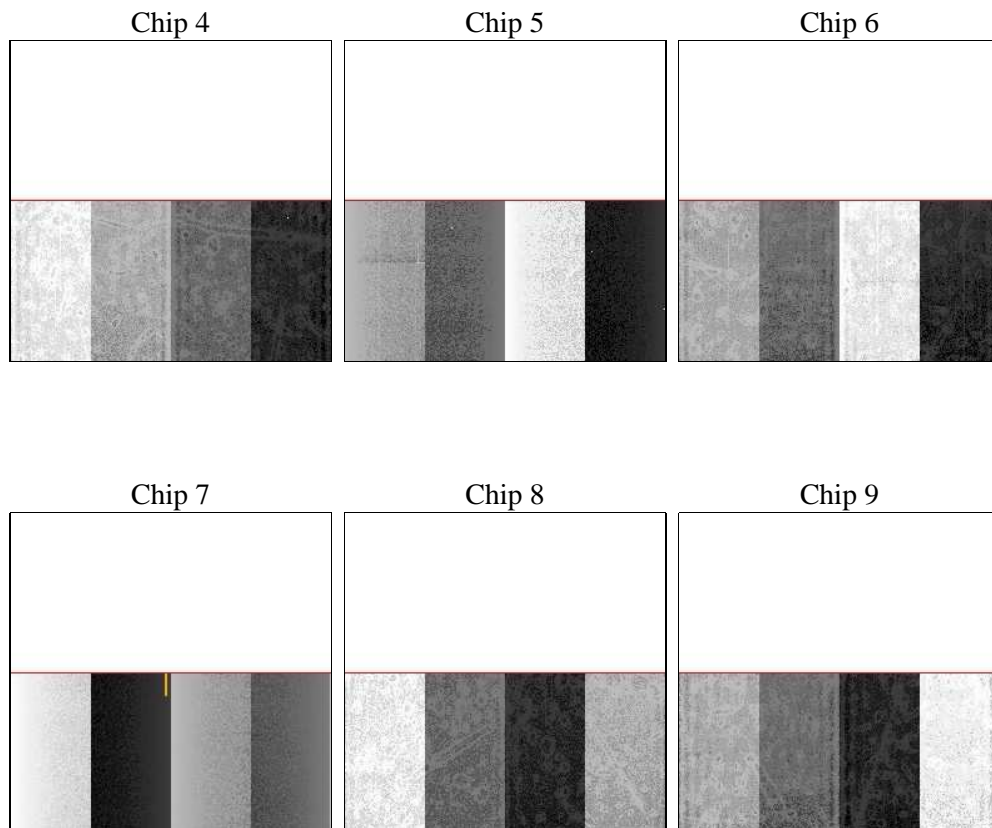
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	35050.023870111	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime4	35050.064910114	Sum of GTIs [s]
date	2012-08-21T19:42:21	Date and time of file creation	ontime5	35049.982830107	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	35049.941790104	Sum of GTIs [s]
			ontime7	35050.023870111	Sum of GTIs [s]
			ontime8	35049.900750101	Sum of GTIs [s]
			ontime9	35049.859710097	Sum of GTIs [s]
			l1events	718722	Number of level 1 events

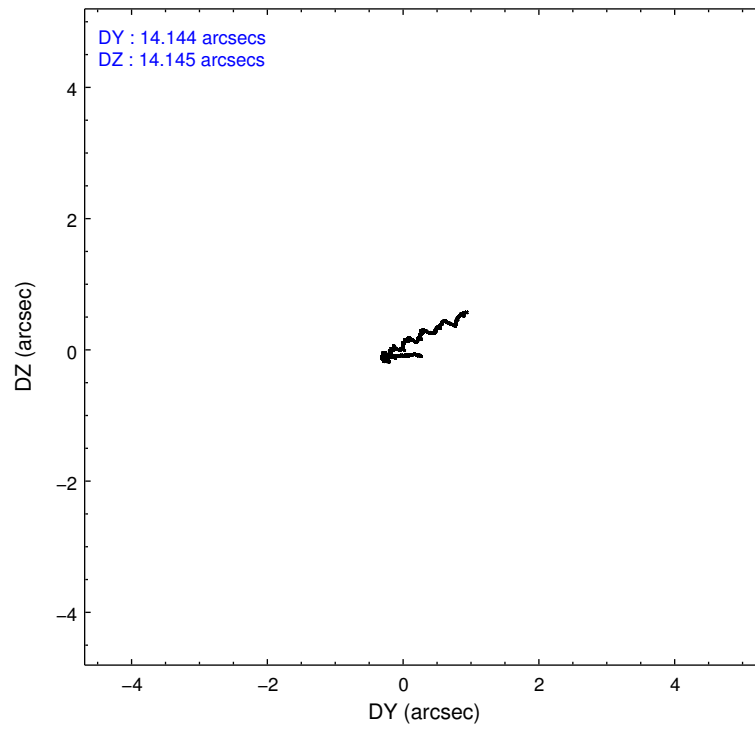
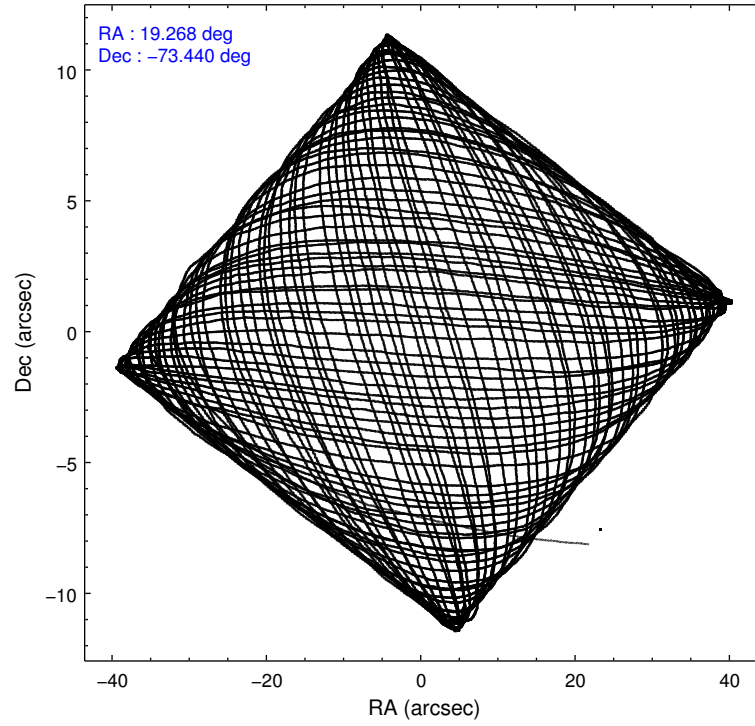
2.1.4 Events

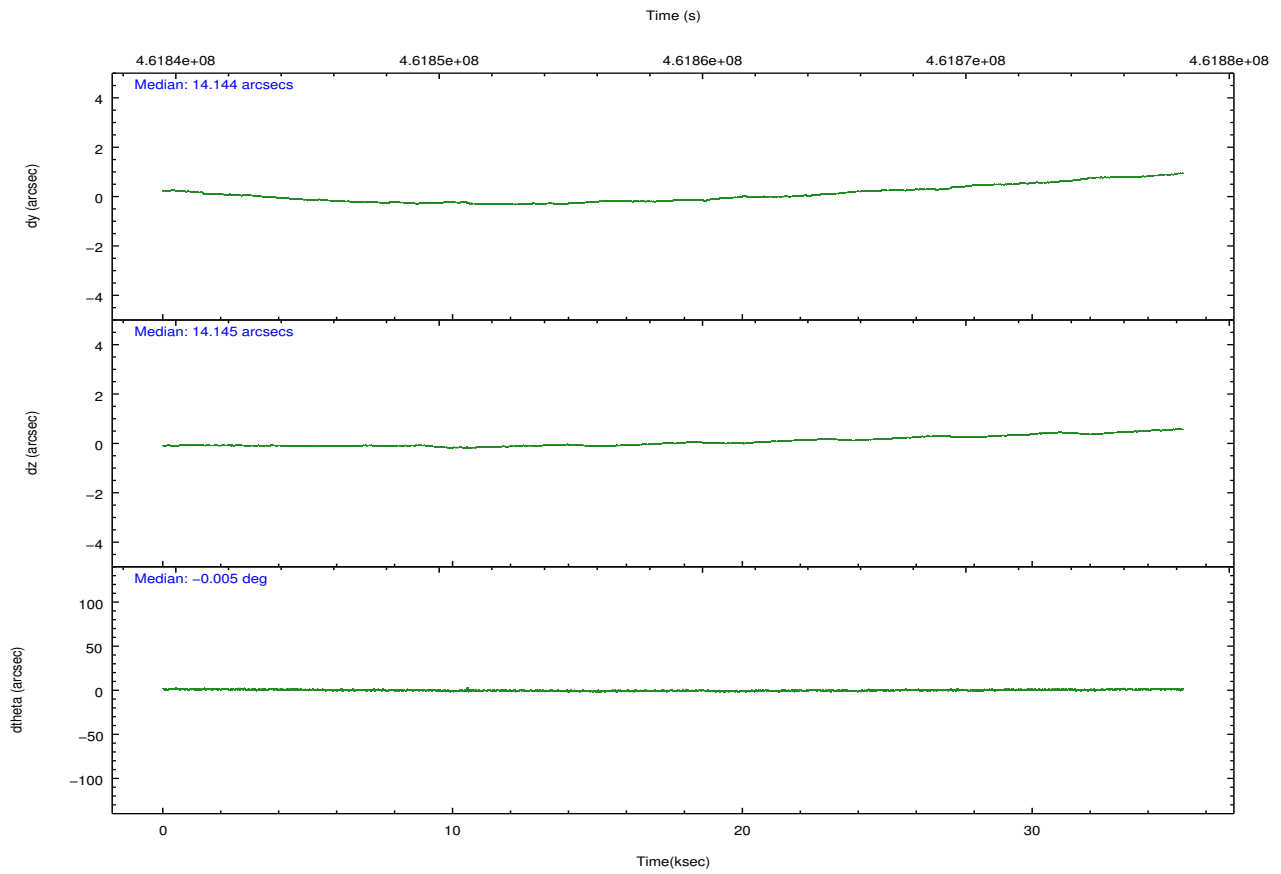
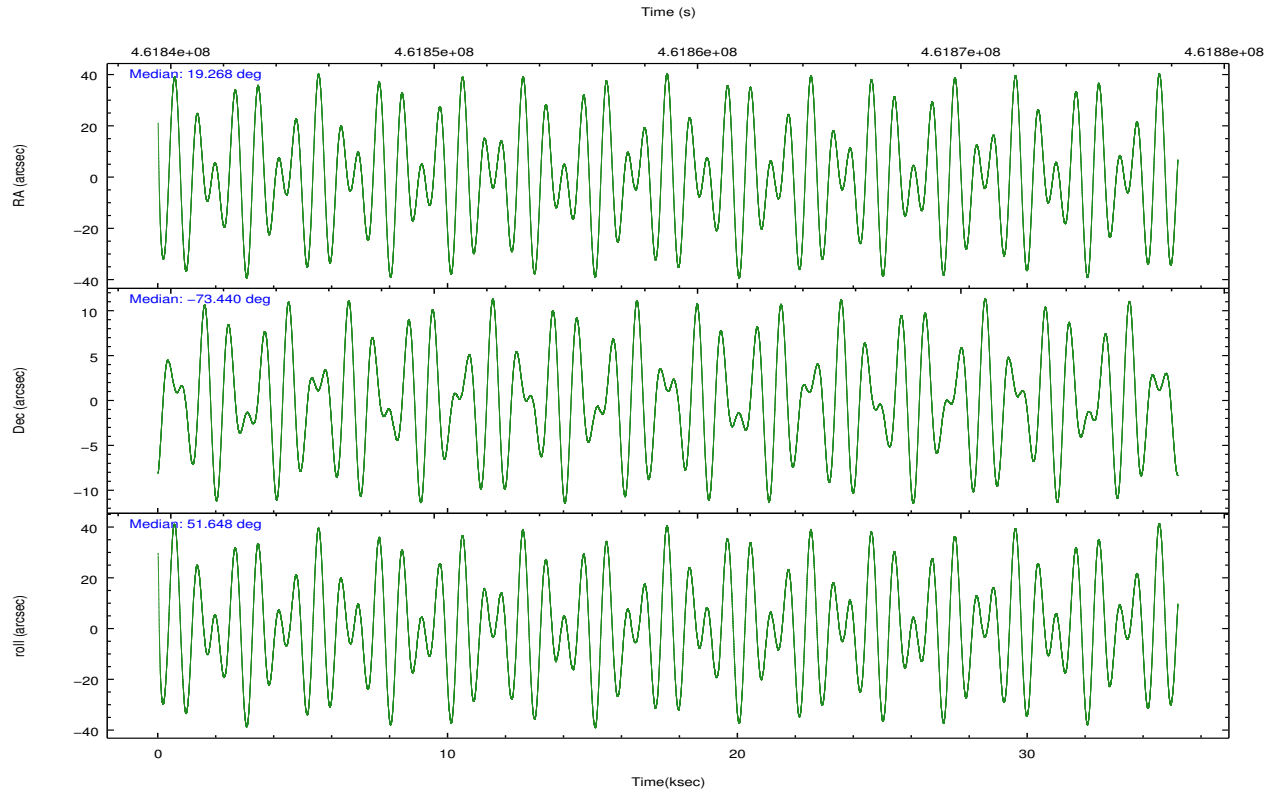
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	114709	152472	97353	135556	127473	91159	grade 0 events	13223	9821	7318	7694	10439	4251
rejected events	93682	76727	80825	67245	91781	78869		11%	6%	7%	5%	8%	4%
rejected %	81%	50%	83%	49%	72%	86%	grade 1 events	57	846	45	225	78	52
								0%	0%	0%	0%	0%	0%
							grade 2 events	2964	20700	3279	14396	7987	2685
								2%	13%	3%	10%	6%	2%
							grade 3 events	1424	3844	1618	6510	4000	1520
								1%	2%	1%	4%	3%	1%
							grade 4 events	1288	3734	1591	6573	3732	1380
								1%	2%	1%	4%	2%	1%
							grade 5 events	4263	12612	4355	12860	6402	4753
								3%	8%	4%	9%	5%	5%
							grade 6 events	2129	37650	2723	33143	9535	2454
								1%	24%	2%	24%	7%	2%
							grade 7 events	89361	63265	76424	54155	85300	74064
								77%	41%	78%	39%	66%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	19.255545	19.26813814352146	CCD I2 on	N	N
[deg] Pointing Dec	-73.467182	-73.44008729343874	CCD I3 on	N	N
[deg] Pointing Roll	51.484541	51.65324906188908	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-183.992523	-183.9875365069546	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-6.14	-6.144986076053243	CCD S4 on	Y	Y
[s] Observation start time (MET)	461841482.184000	461840503.65878	CCD S5 on	Y	Y
Observation start date	2012-08-20T09:16:55	2012-08-20T09:01:43	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	461876482.184000	461876979.82323	On-chip summing requested	N	N
Observation end date	2012-08-20T19:00:15	2012-08-20T19:09:39	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

2.3 Aspect



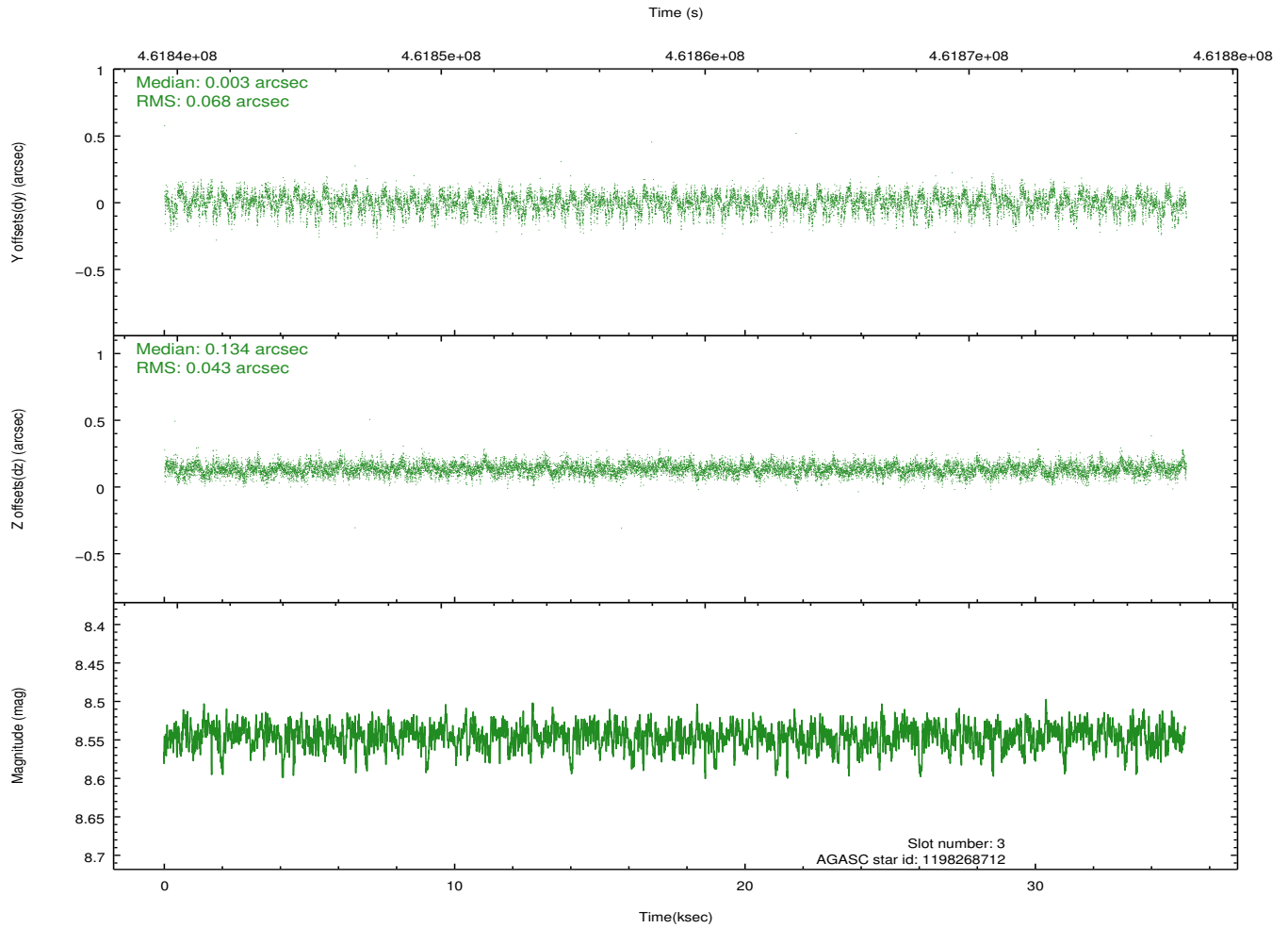
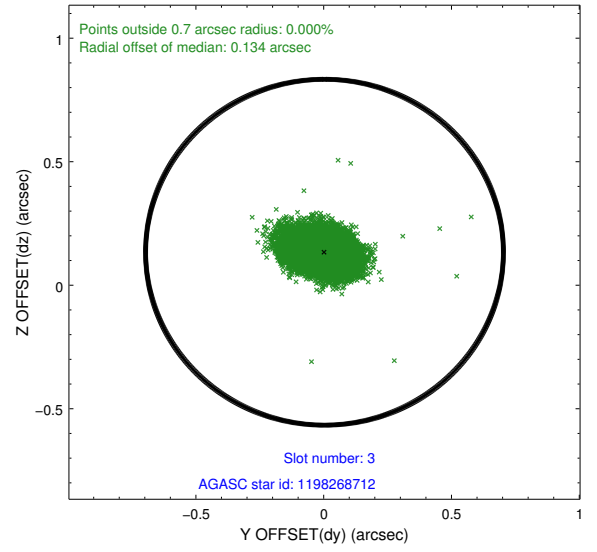
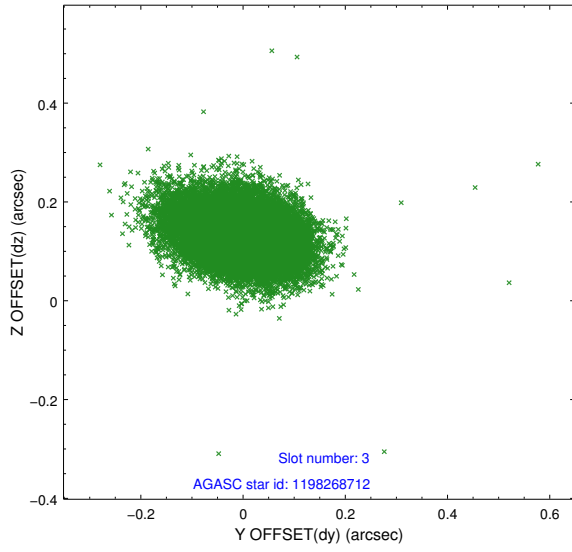


Slot Statistics

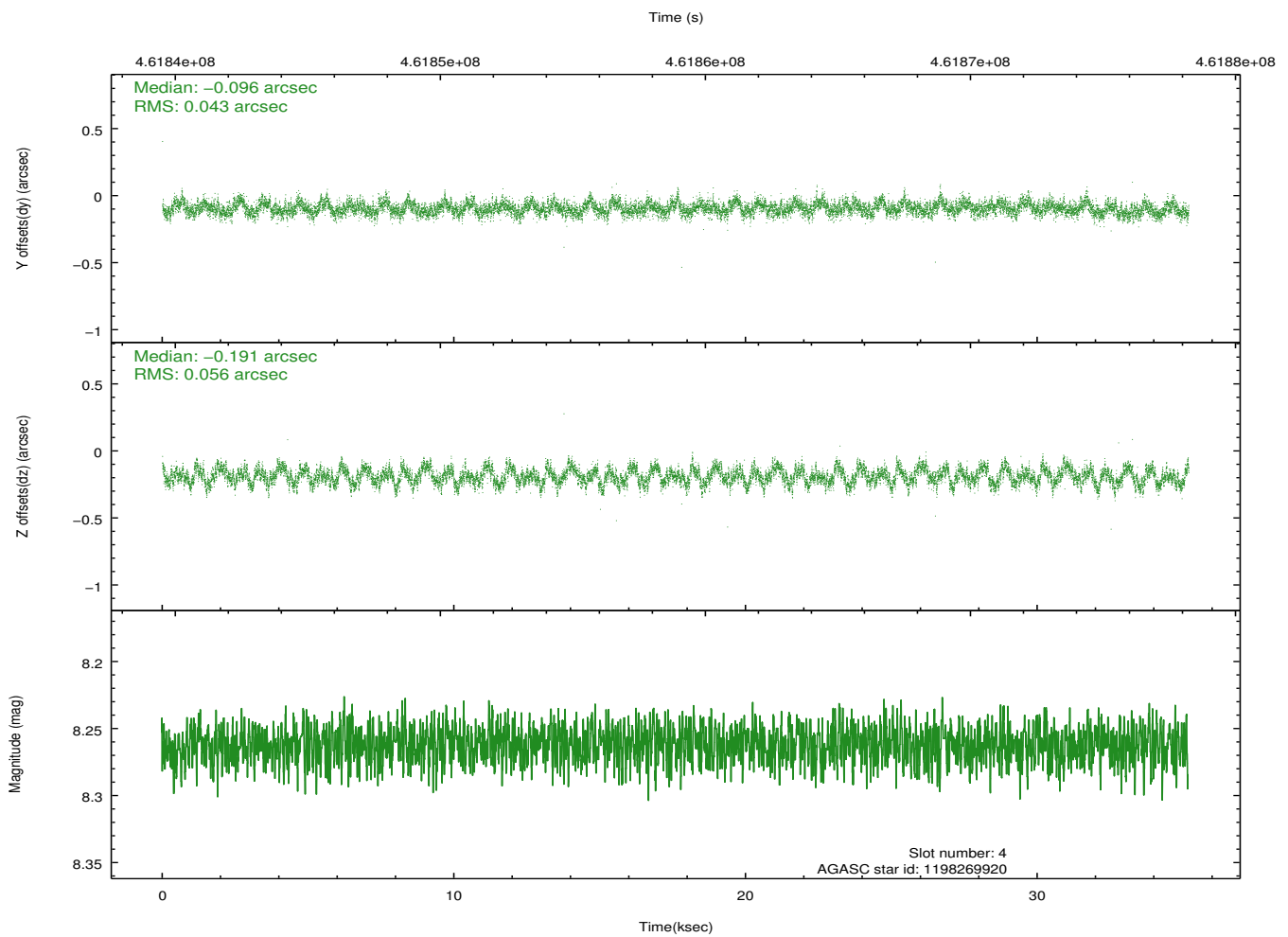
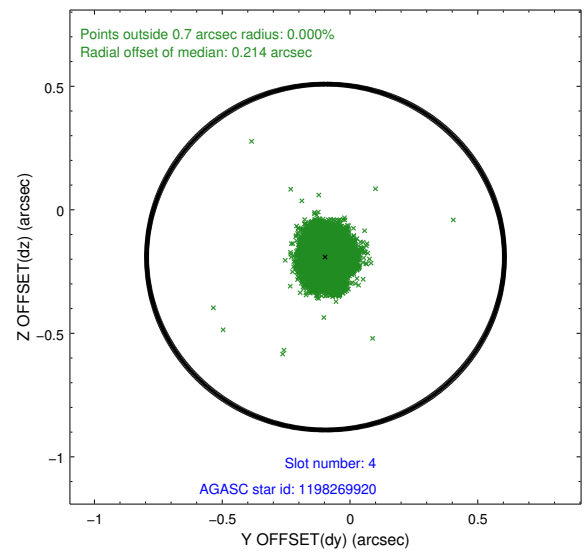
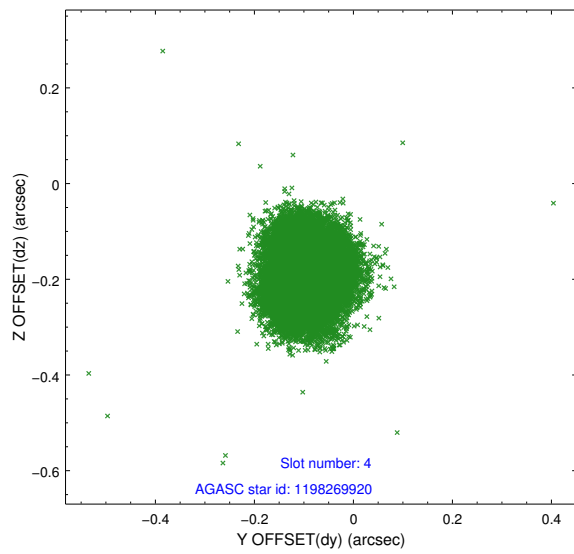
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.09	8582	0.135	0.110	0.012	0.039	0.000000	0.000000	929.41	-1857.76
1	FID	ACIS-S-2	7.00	8583	-0.218	-0.103	0.014	0.023	0.000000	0.000000	-766.83	-1862.57
2	FID	ACIS-S-6	7.29	8583	0.062	-0.004	0.009	0.026	0.000000	0.000000	394.99	683.40
3	GUIDE	1198268712	8.54	17157	0.003	0.134	0.084	0.142	21.961983	-73.269598	2253.82	-1790.22
4	GUIDE	1198269920	8.26	17162	-0.096	-0.191	0.076	0.118	20.316466	-73.033728	1907.87	93.45
5	GUIDE	1198272400	9.17	17132	0.007	-0.013	0.117	0.192	20.411923	-73.620598	290.54	-1269.23
6	GUIDE	1198273408	9.30	17149	-0.004	-0.000	0.098	0.159	17.532323	-73.621495	-1543.08	1006.81
7	GUIDE	1198276744	8.59	17157	0.098	0.072	0.090	0.139	19.489008	-74.153493	-1790.15	-1718.27

2.4 Star Slots

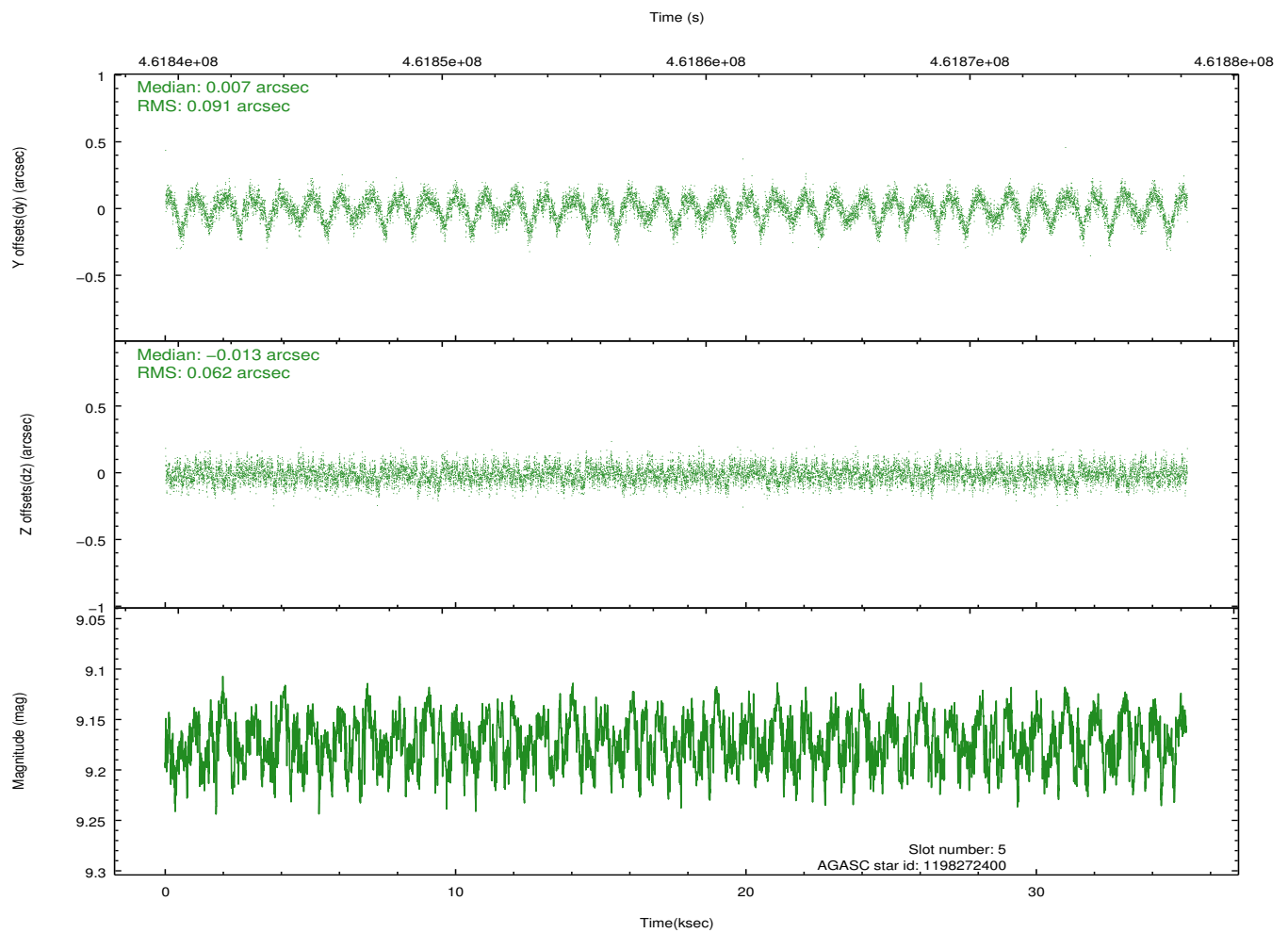
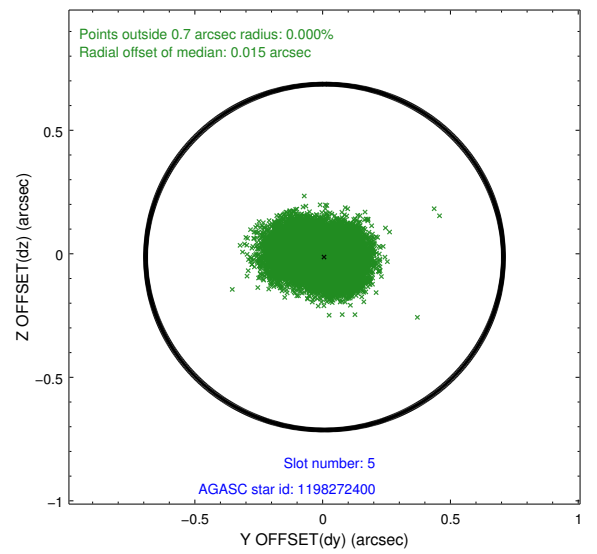
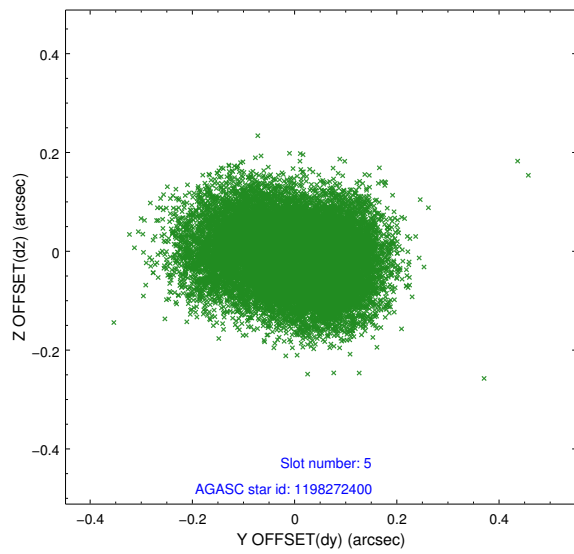
2.4.1 Slot 3



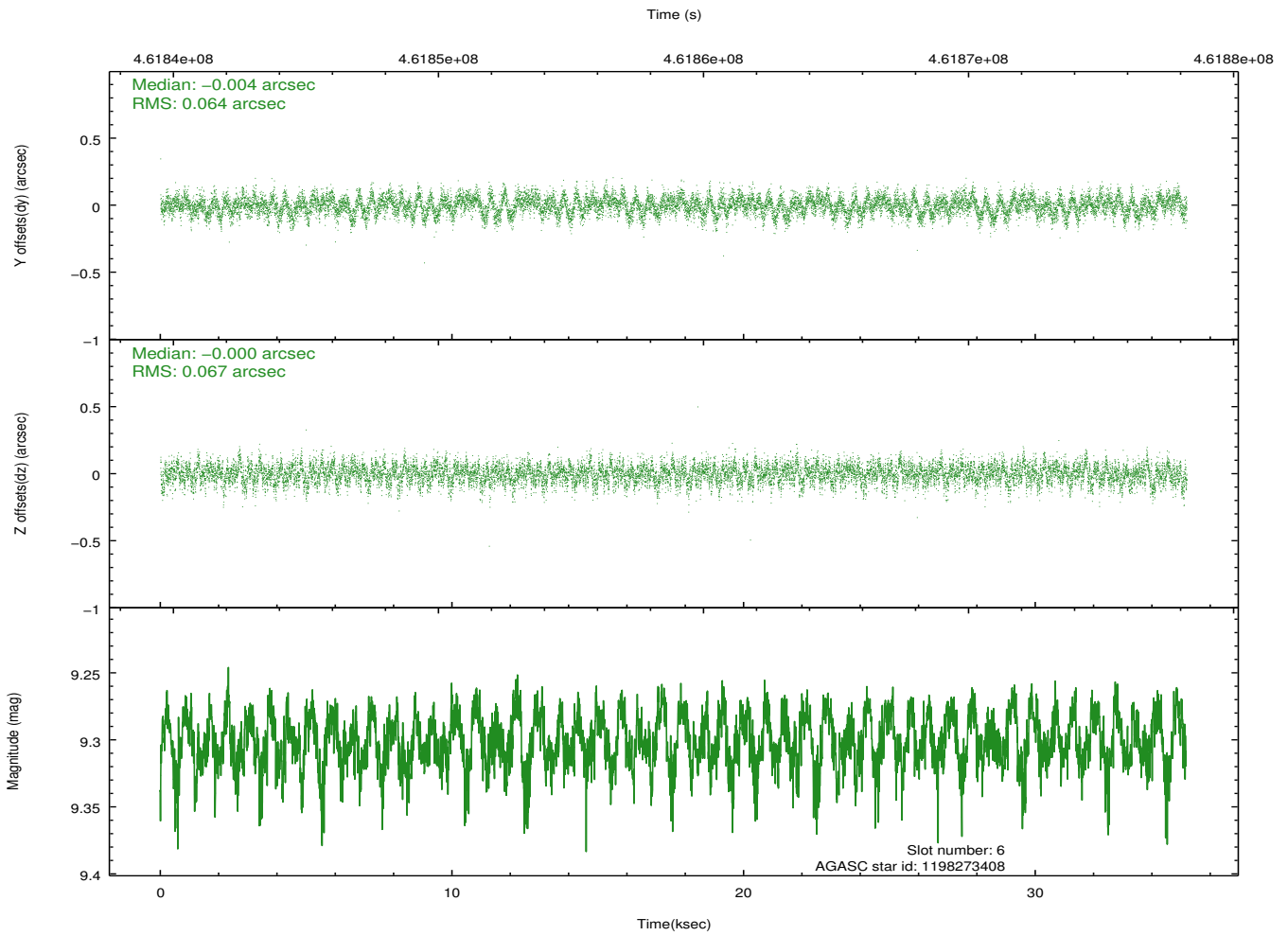
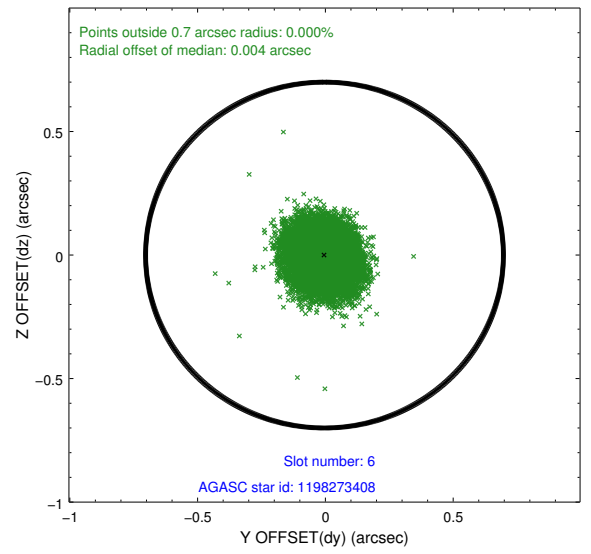
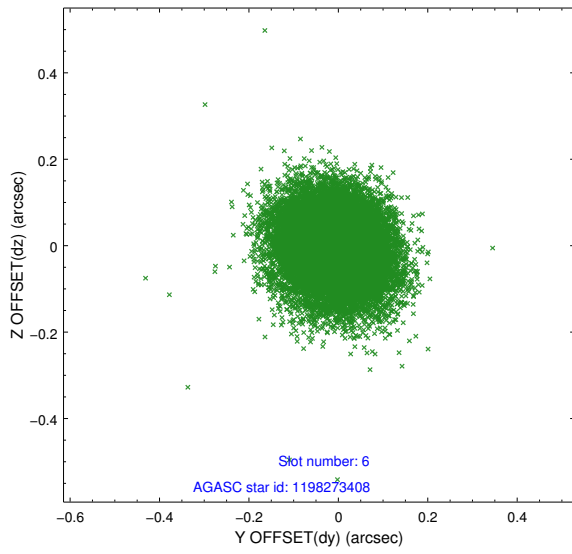
2.4.2 Slot 4



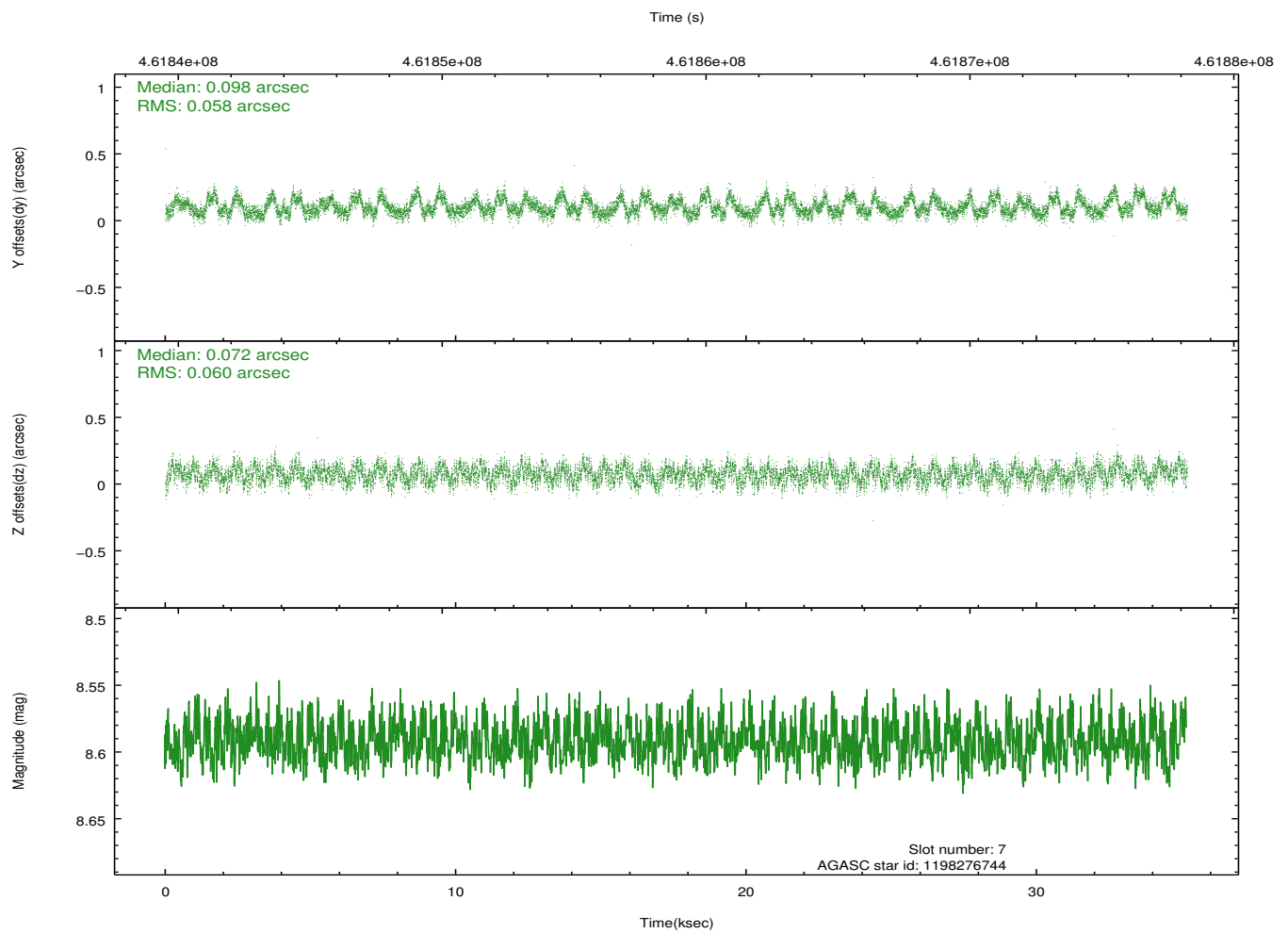
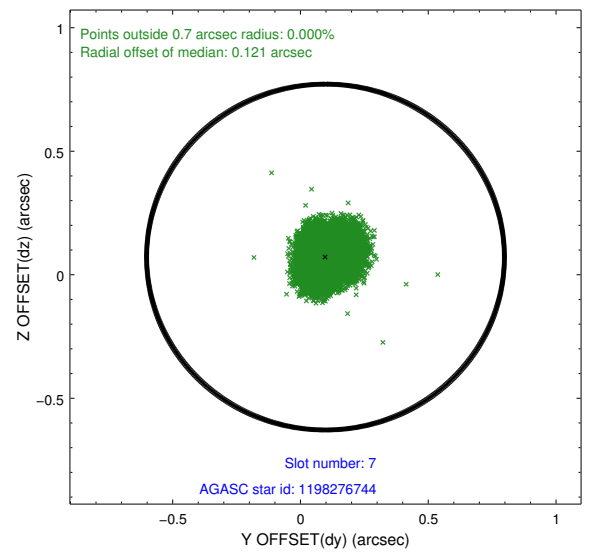
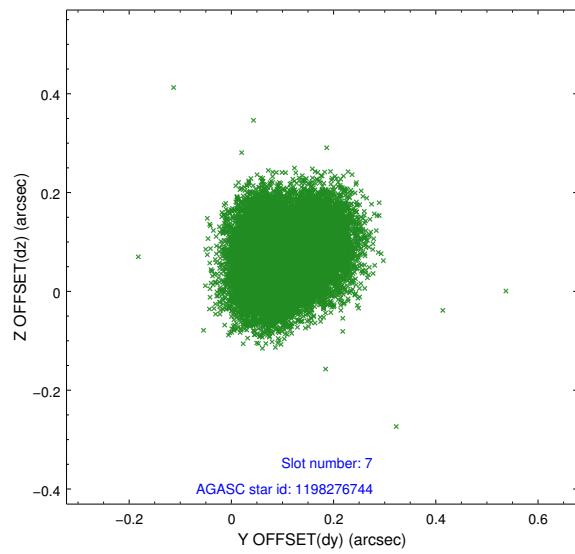
2.4.3 Slot 5



2.4.4 Slot 6

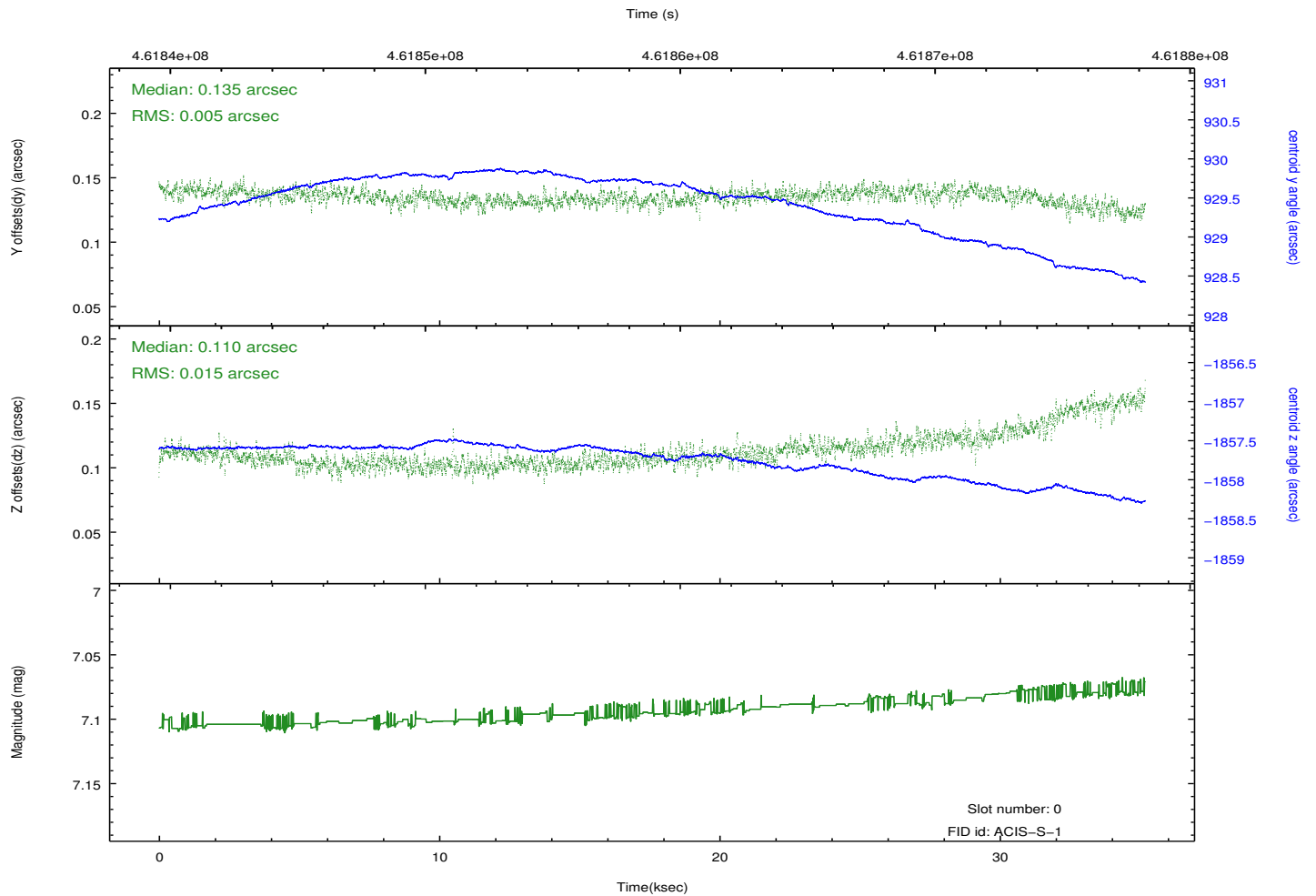
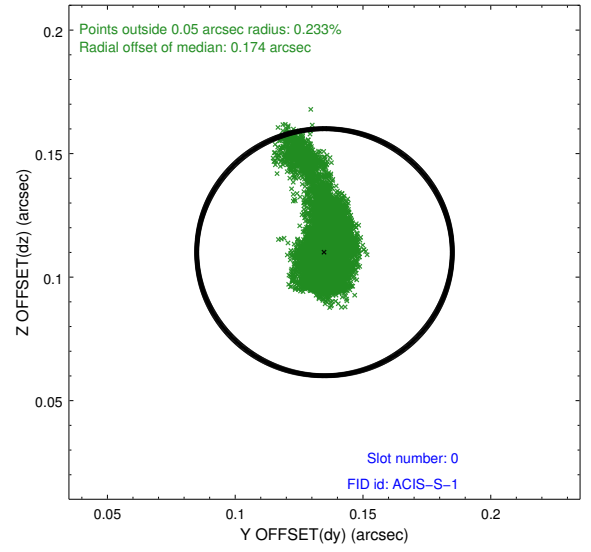
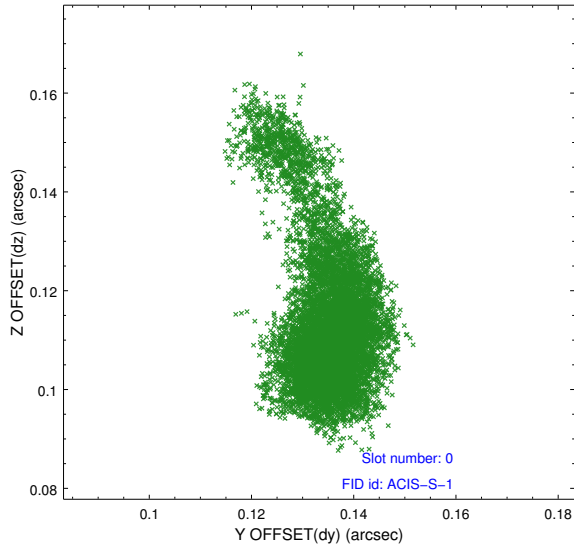


2.4.5 Slot 7

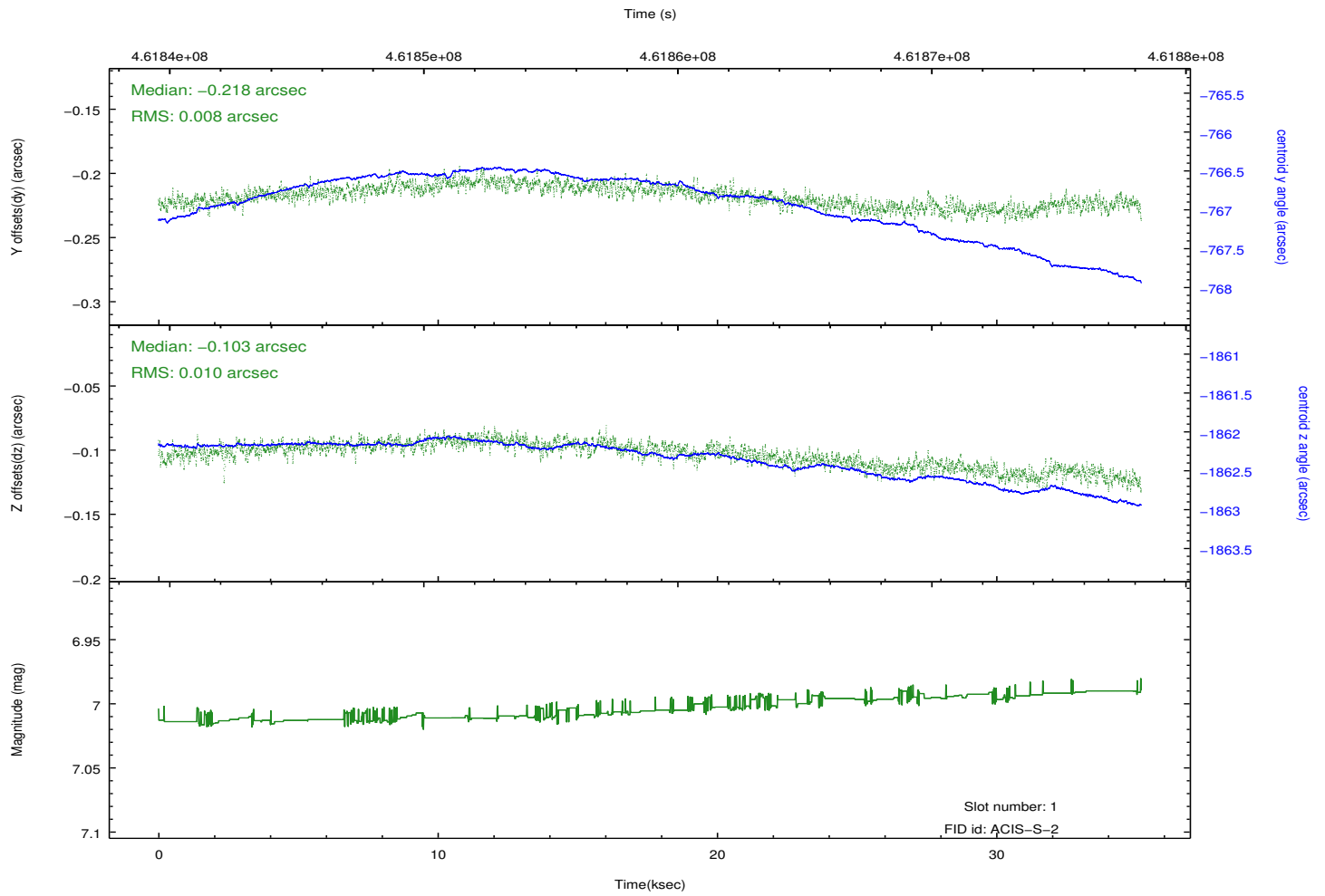
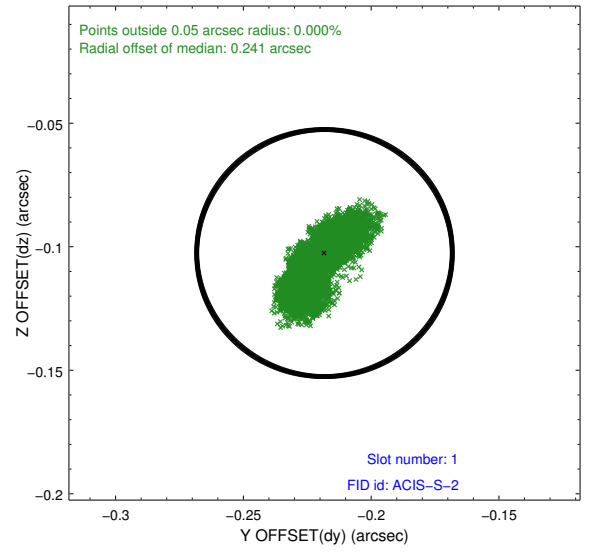
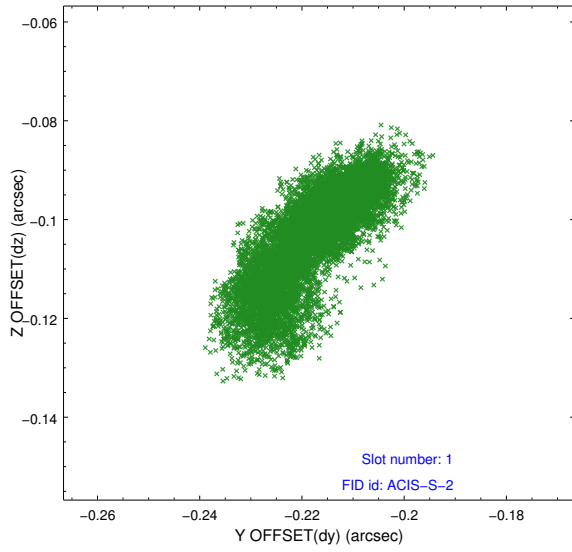


2.5 FID Slots

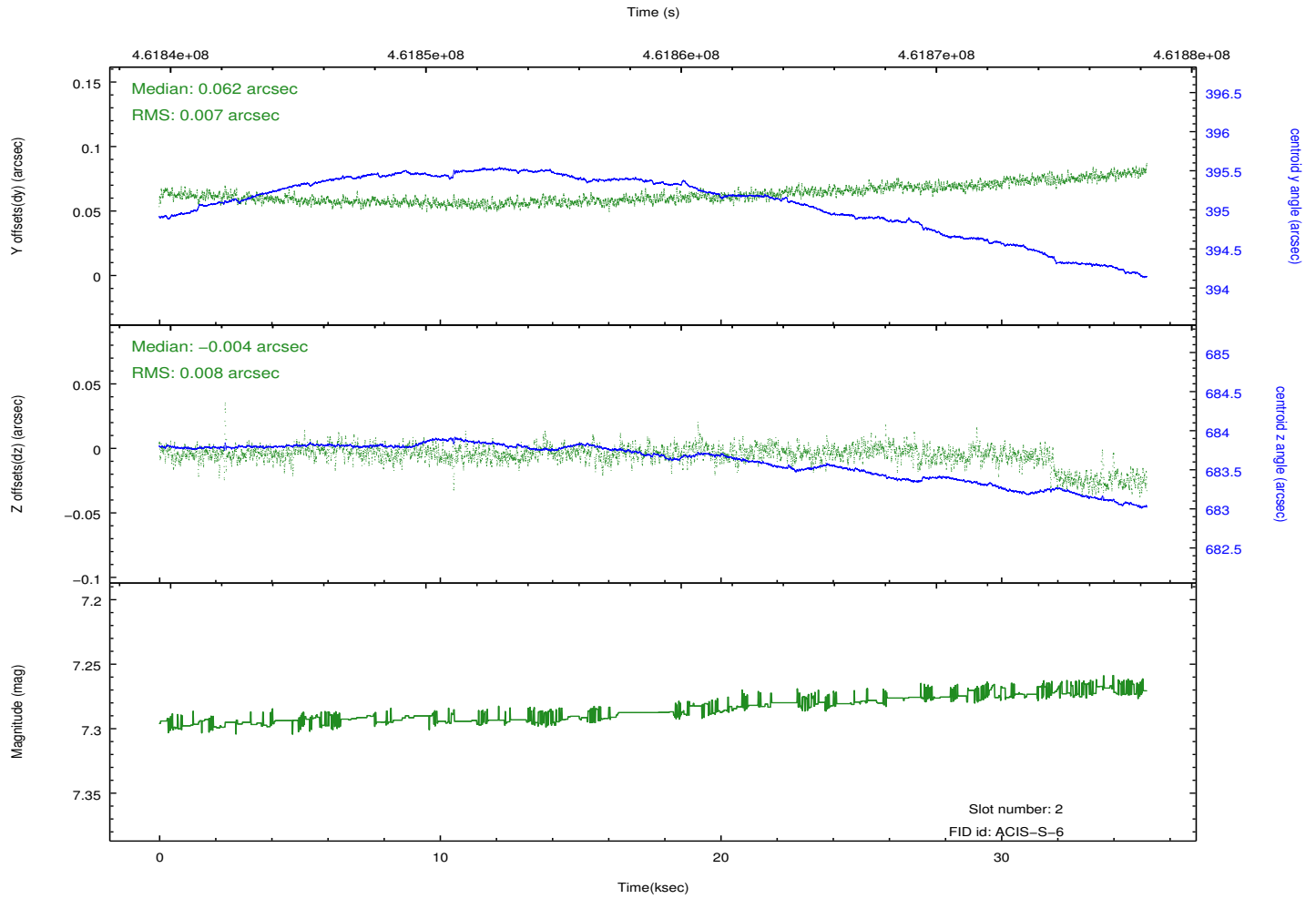
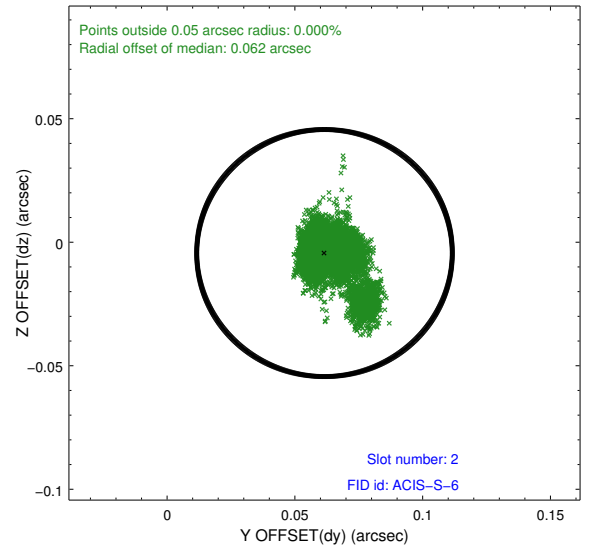
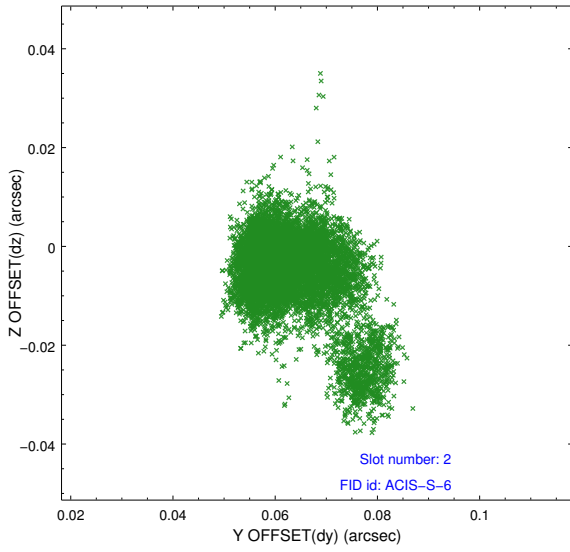
2.5.1 Slot 0



2.5.2 Slot 1

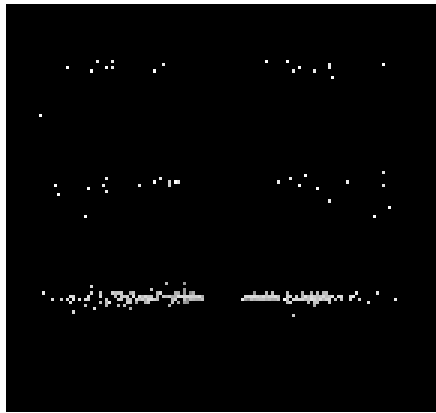


2.5.3 Slot 2

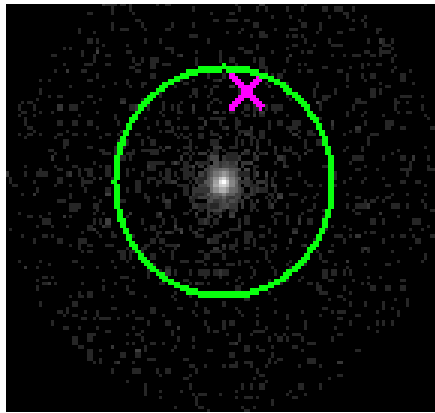


3 Gratings

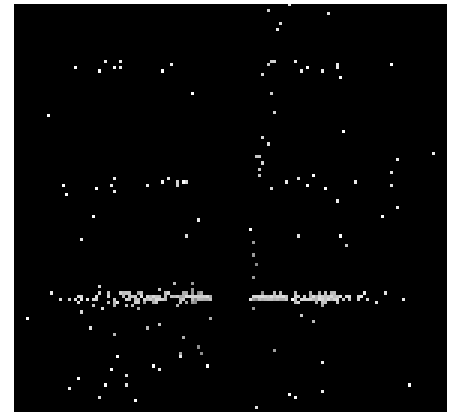
3.1 HEG Arm



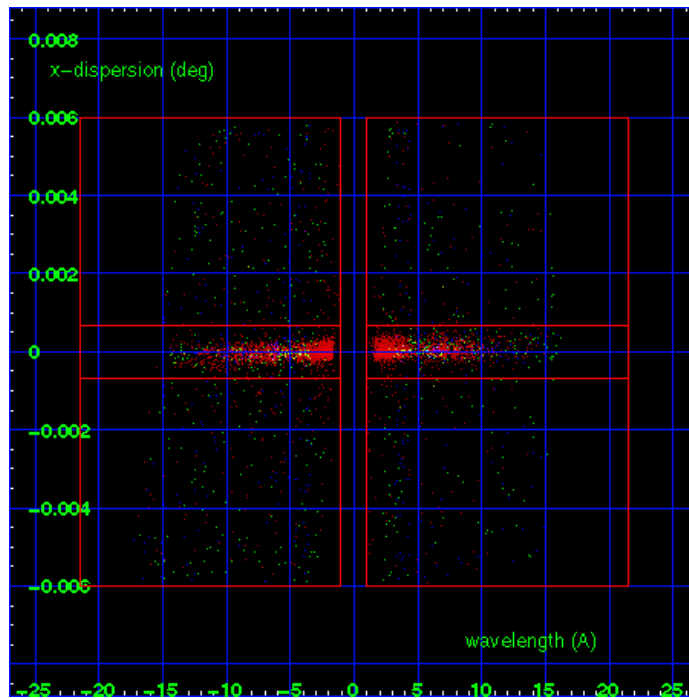
HEG Order Sort 123



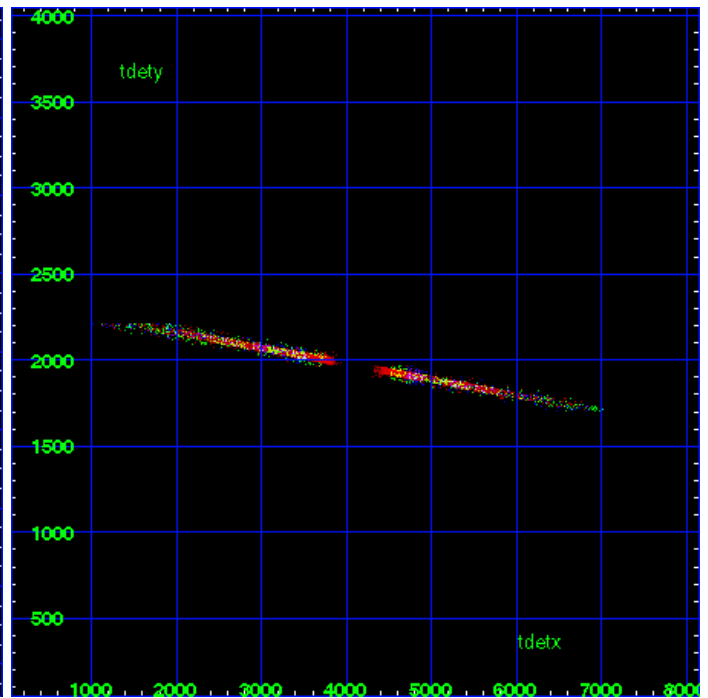
HEG Zero Order



HEG Order Sort ALL

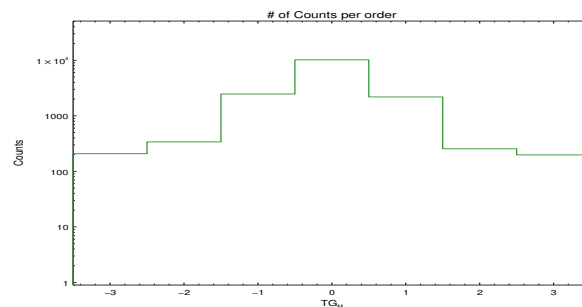


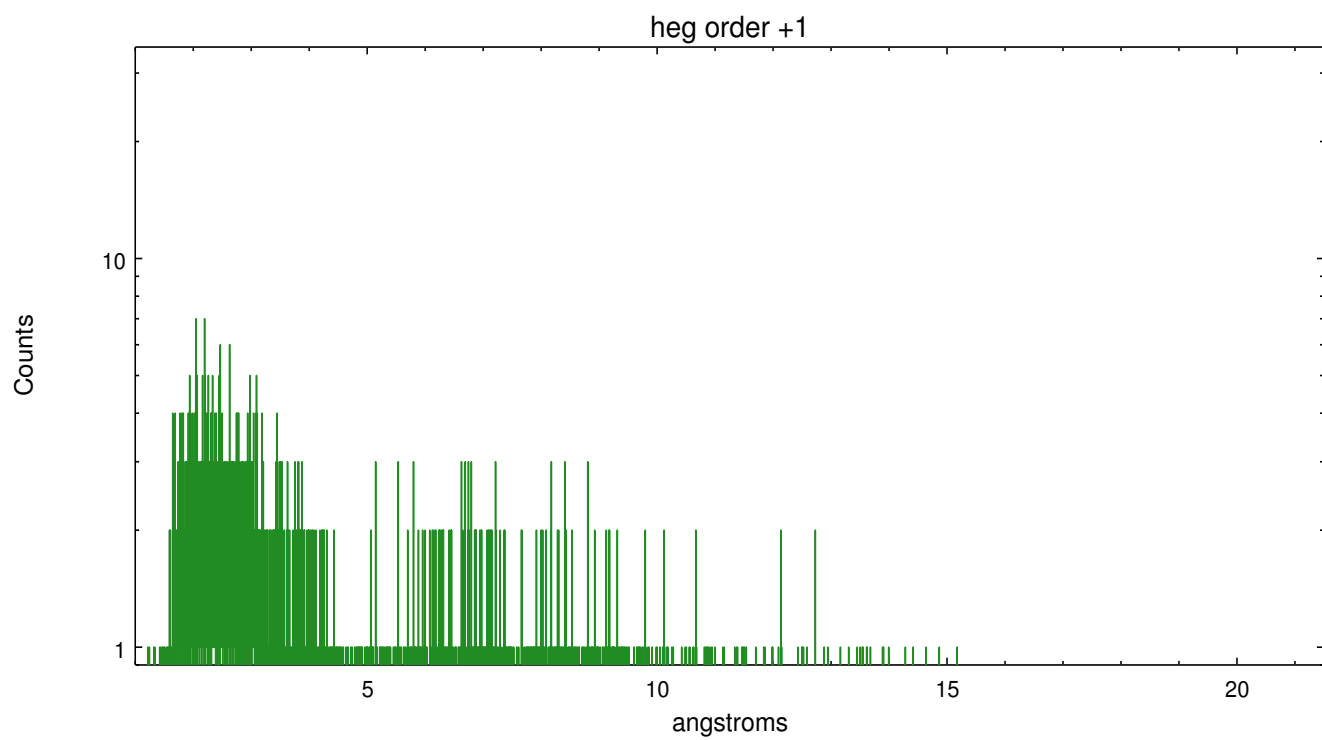
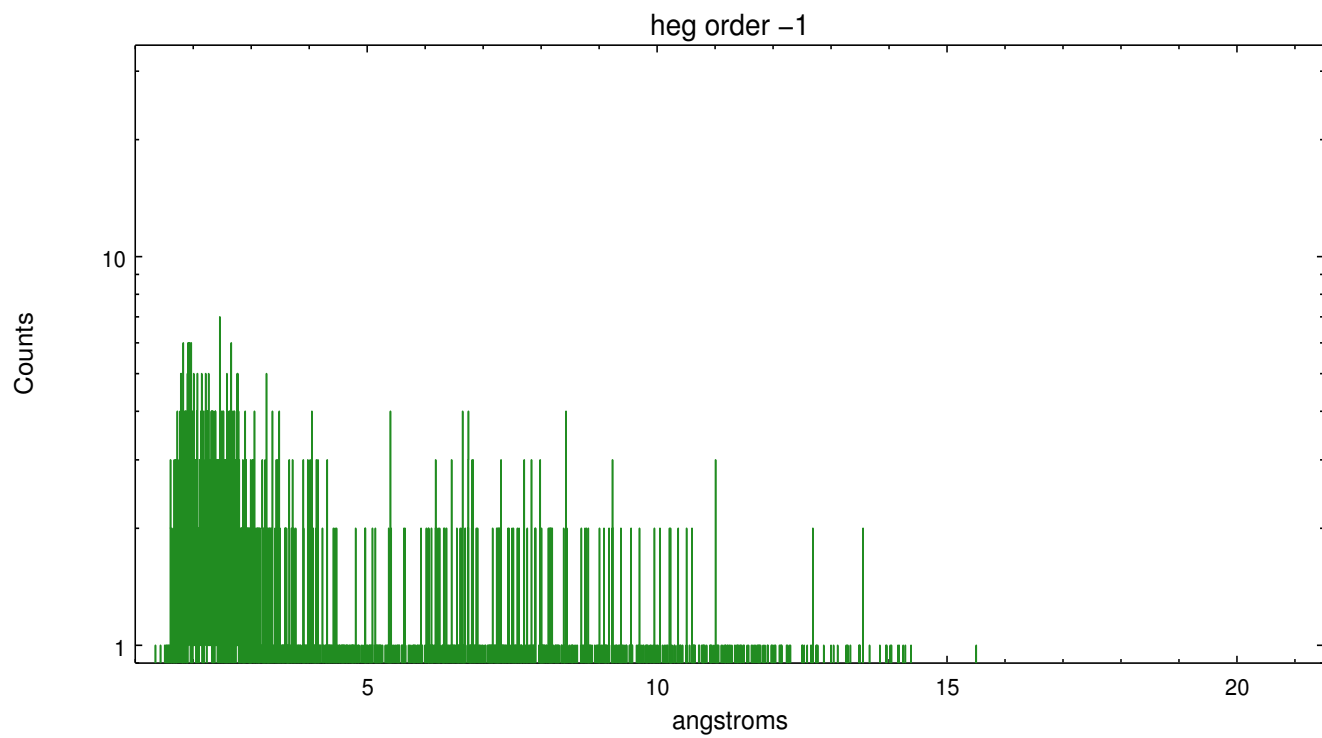
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	208	339	2469	10151	2185	255	198

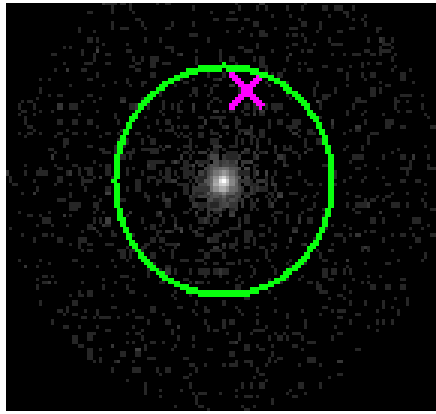




3.2 MEG Arm



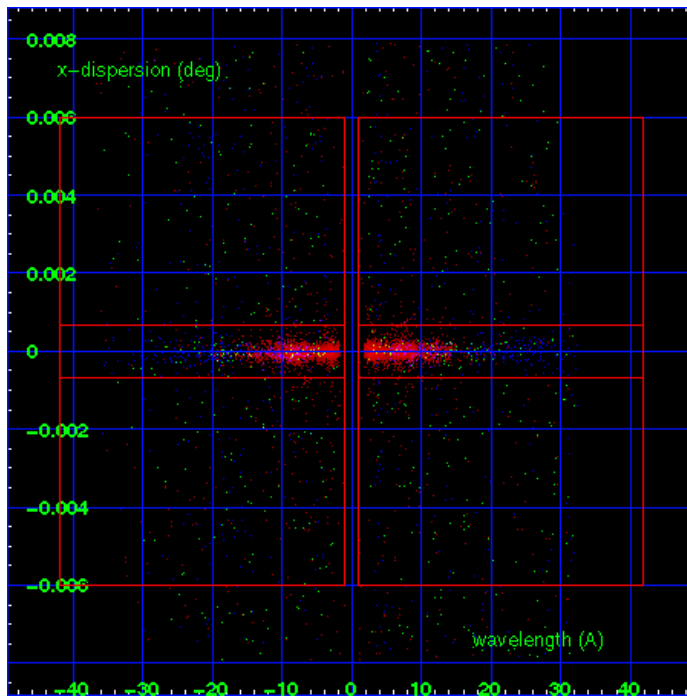
MEG Order Sort 123



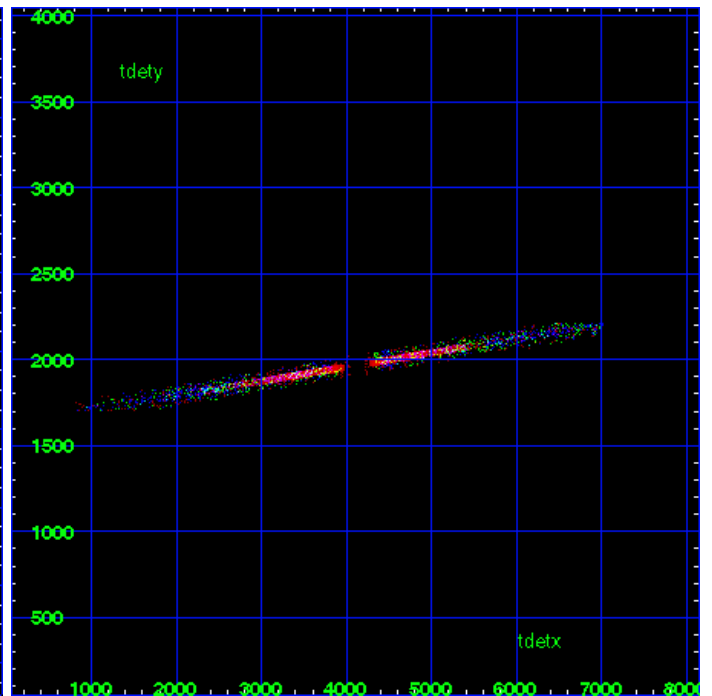
MEG Zero Order



MEG Order Sort ALL

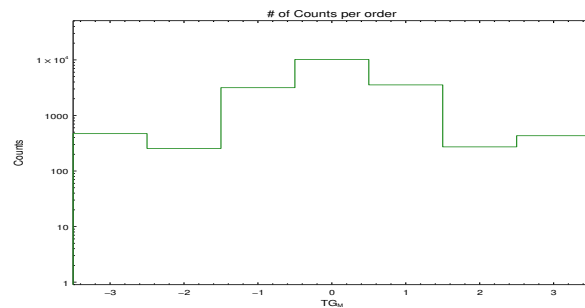


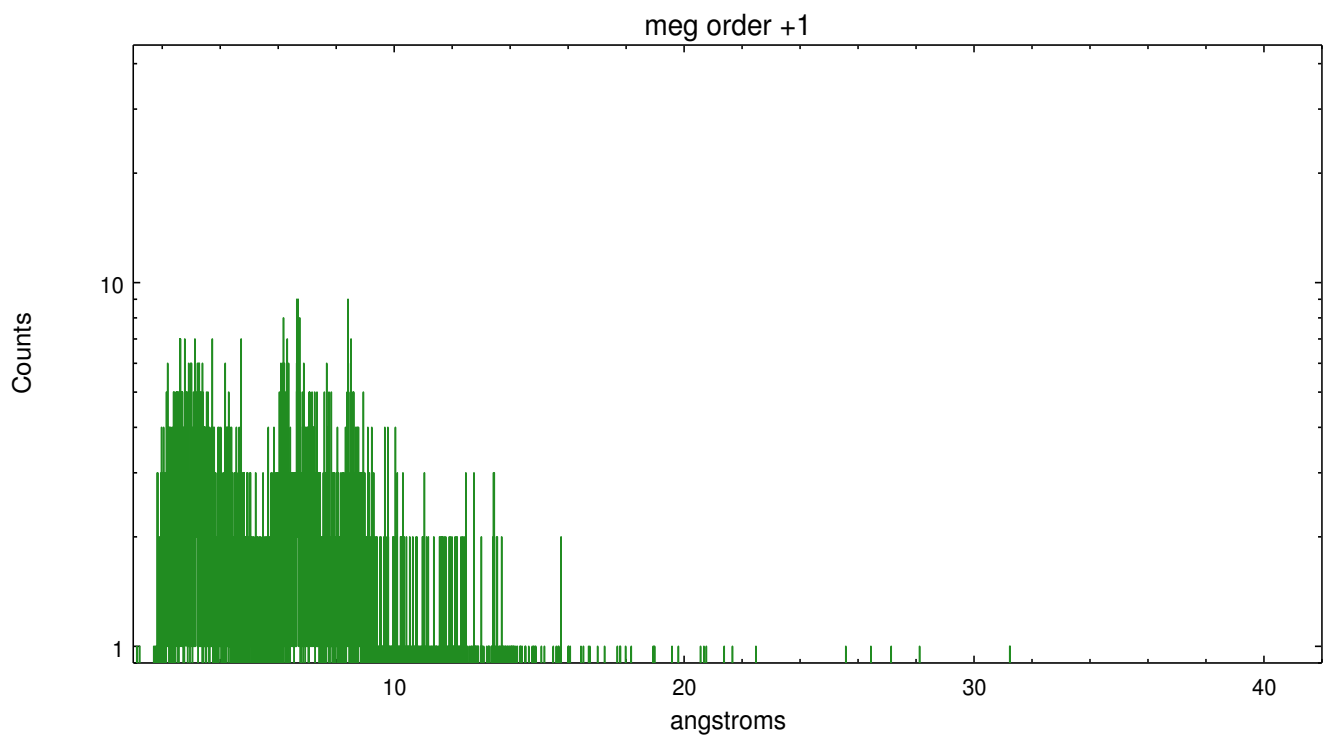
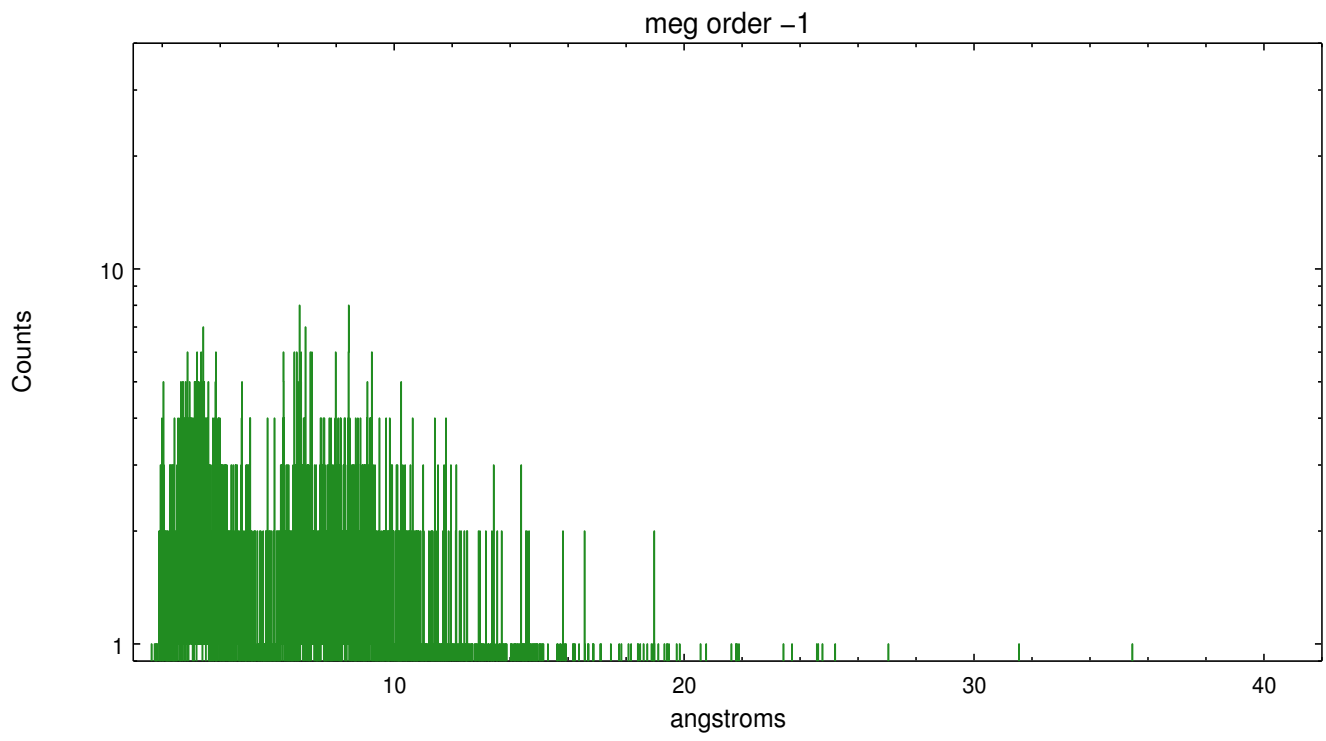
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	471	255	3162	10151	3549	272	432





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.050023870111

A.2 Comments