

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2567 - L2 Version 4
Chandra X-Ray Center

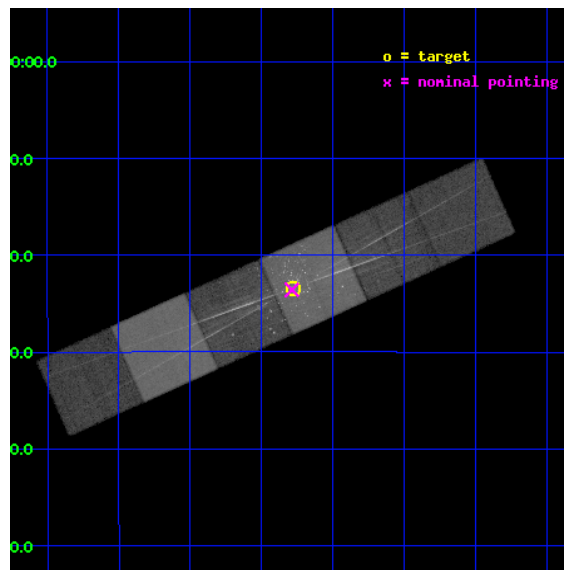
L2 Processing Date : Sep 29 2012

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1 Front

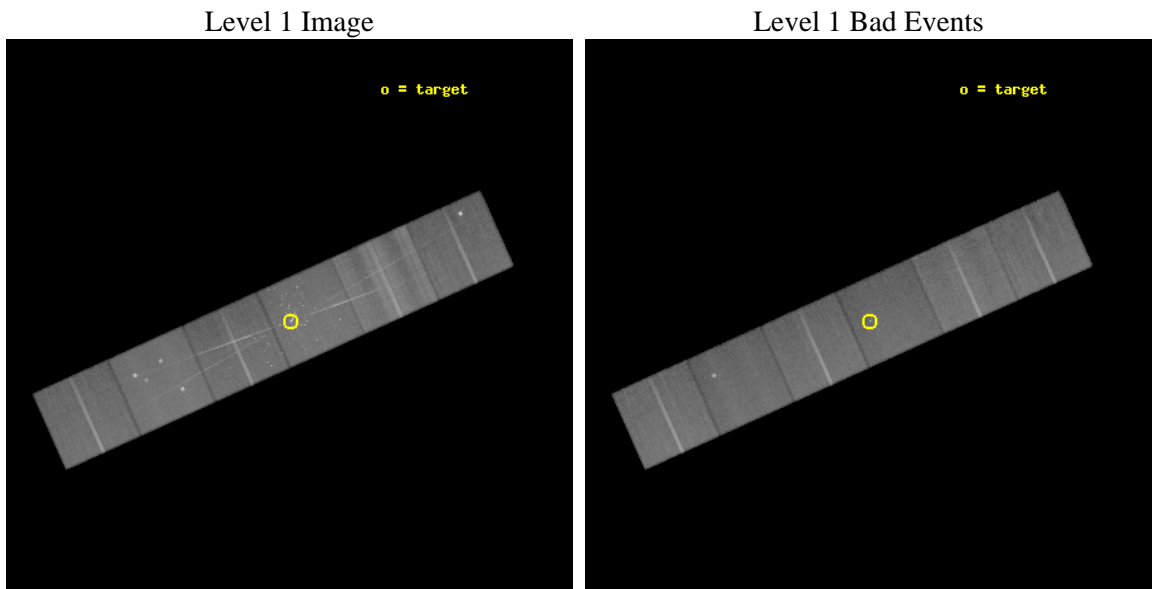
seq_num	200175	Sequence number
obs_id	2567	Observation id
title	PHASE-RESOLVED SPECTROSCOPY OF THETA-1 ORIONIS C (O7 V)	Proposal t
observer	Prof. Marc Gagne	Principal investigator
object	HD 37022	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.81875	Observer's specified target RA [deg]
dec_targ	-5.38975	Observer's specified target Dec [deg]
ra_nom	83.821764269918	Nominal RA [deg]
dec_nom	-5.3929652916494	Nominal Dec [deg]
roll_nom	335.74910284944	Nominal Roll [deg]
revision	4	Processing version of data
ontime	46950.259479076	Sum of GTIs [s]
livetime	46355.747023499	Livetime [s]
ontime4	46950.300568804	Sum of GTIs [s]
ontime5	46953.459389389	Sum of GTIs [s]
ontime6	46953.4183494	Sum of GTIs [s]
ontime7	46950.259479076	Sum of GTIs [s]
ontime8	46953.377309397	Sum of GTIs [s]
ontime9	46946.854318887	Sum of GTIs [s]
l2events	762631	Number of level 2 events



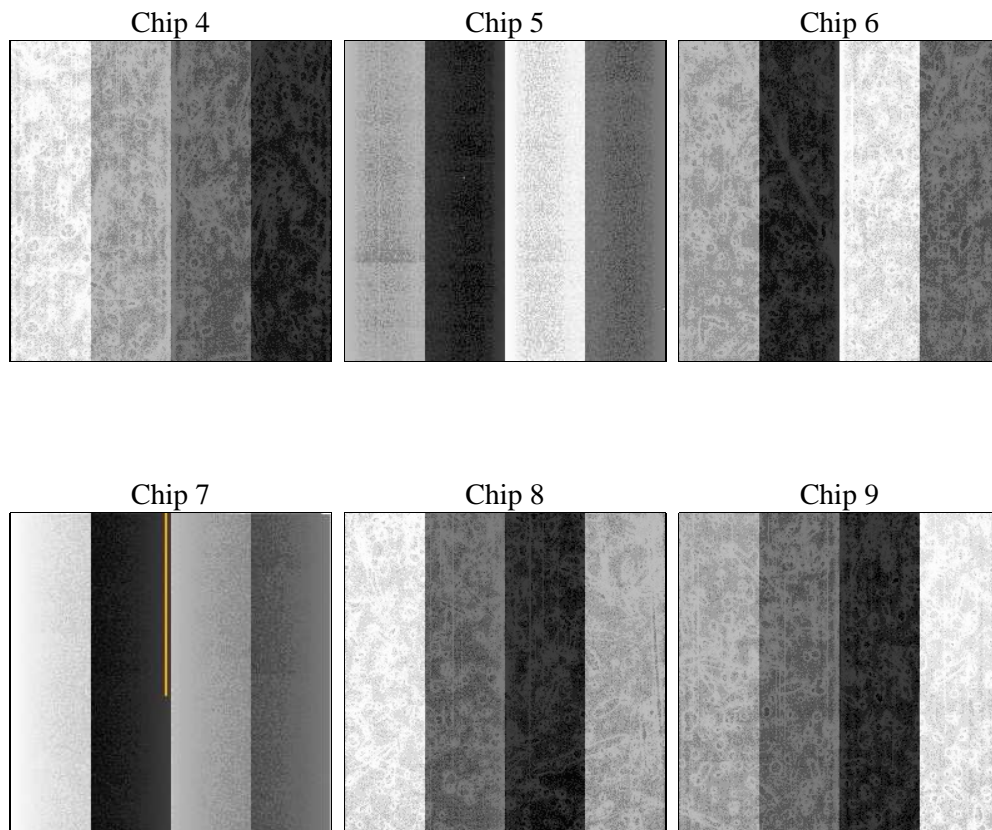
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	47000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	46950.259479076	Sum of GTIs [s]
caldbver	4.5.2	 	ontime4	46950.300568804	Sum of GTIs [s]
date	2012-09-29T15:54:48	Date and time of file creation	ontime5	46953.459389389	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	46953.4183494	Sum of GTIs [s]
			ontime7	46950.259479076	Sum of GTIs [s]
			ontime8	46953.377309397	Sum of GTIs [s]
			ontime9	46946.854318887	Sum of GTIs [s]
			l1events	2801493	Number of level 1 events

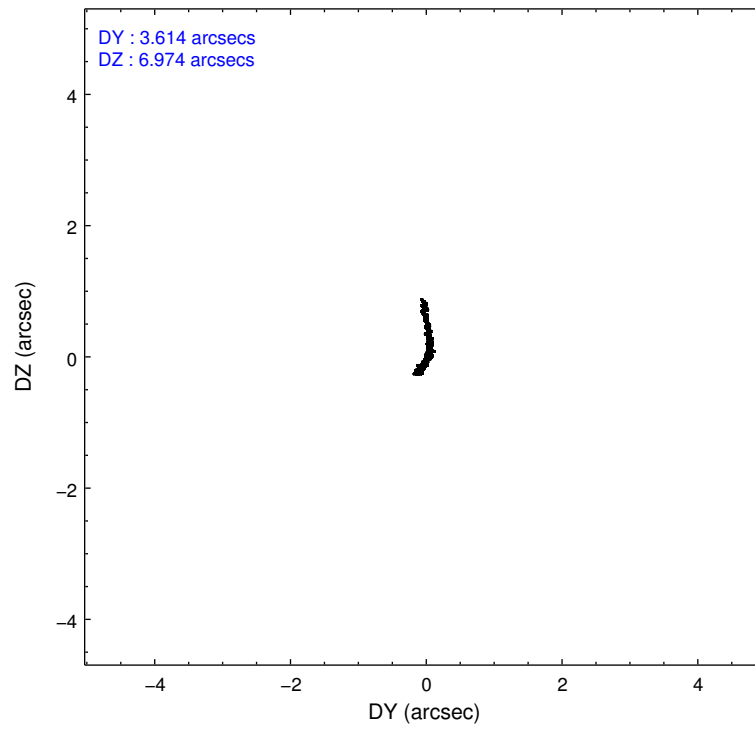
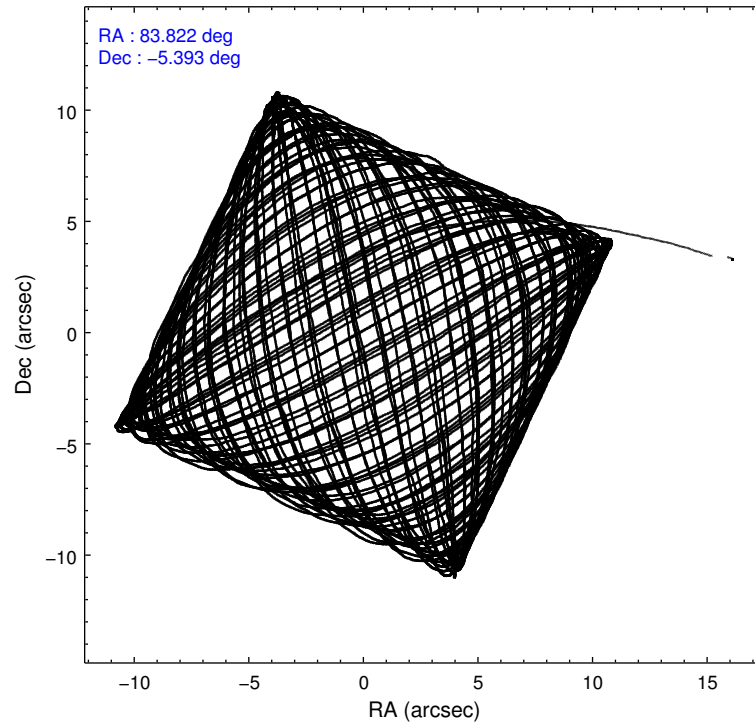
2.1.4 Events

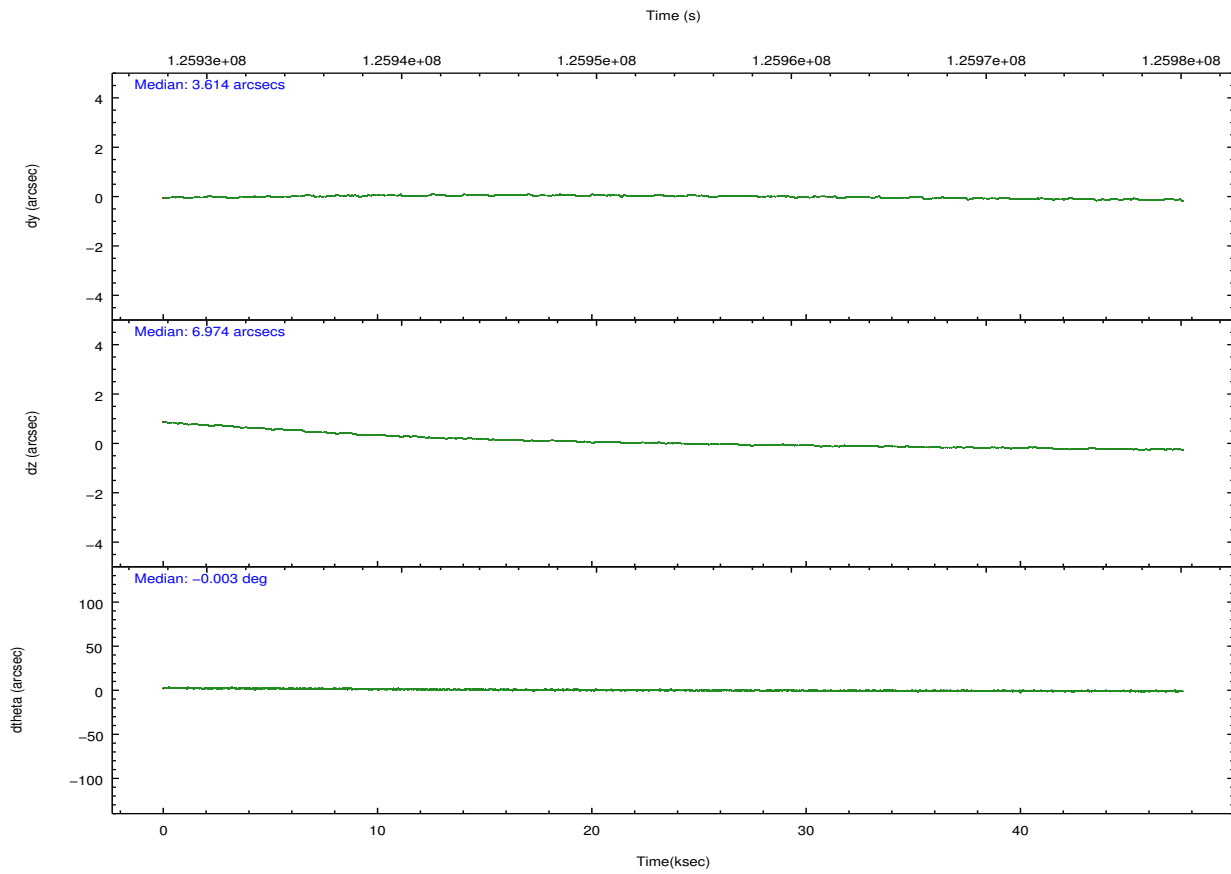
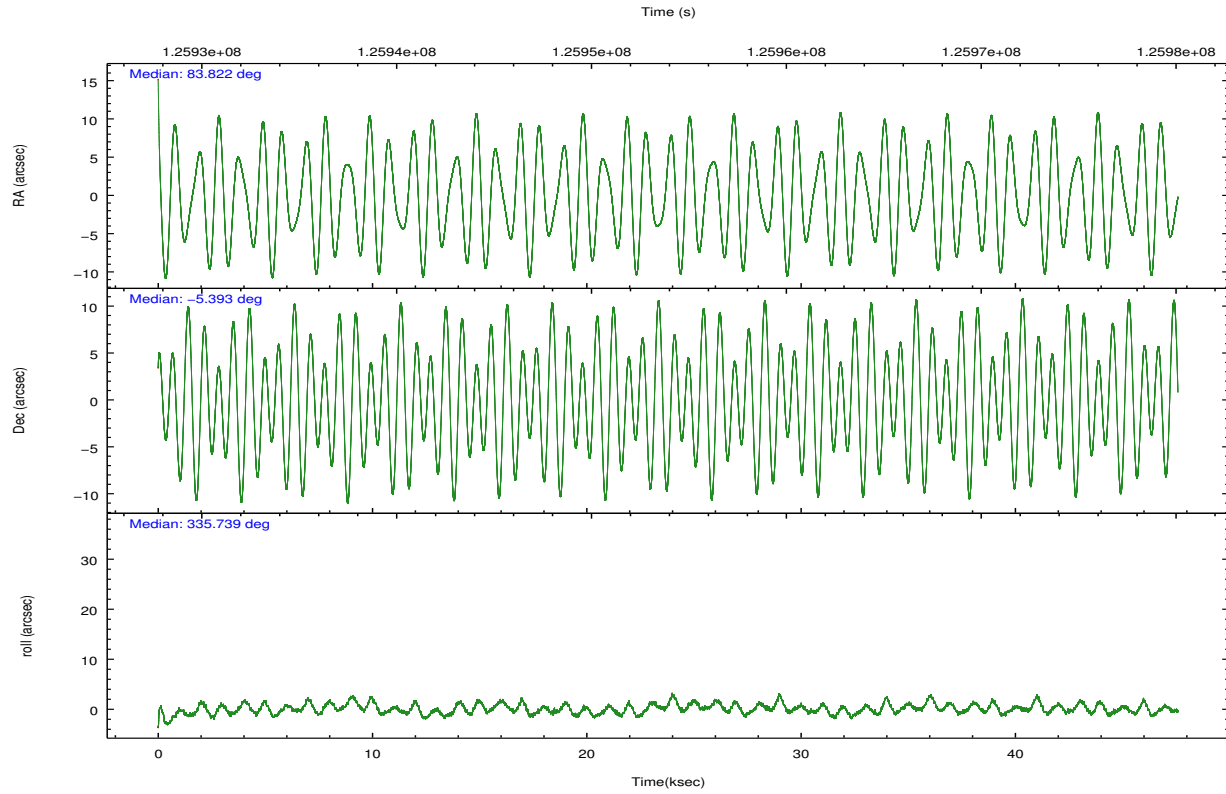
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	402899	498237	416319	520555	585467	378016	grade 0 events	27662	37522	60441	39343	90277	39961
rejected events	336878	254381	310730	247085	348314	301488		6%	7%	14%	7%	15%	10%
rejected %	83%	51%	74%	47%	59%	79%	grade 1 events	267	611	379	818	659	280
								0%	0%	0%	0%	0%	0%
							grade 2 events	16351	71957	17448	59606	35752	13181
								4%	14%	4%	11%	6%	3%
							grade 3 events	4650	11655	6140	26789	34142	4733
								1%	2%	1%	5%	5%	1%
							grade 4 events	4658	10684	6048	26400	30087	4710
								1%	2%	1%	5%	5%	1%
							grade 5 events	11698	36719	13724	41958	18745	13825
								2%	7%	3%	8%	3%	3%
							grade 6 events	12708	112067	15521	121367	46982	13961
								3%	22%	3%	23%	8%	3%
							grade 7 events	324905	217022	296618	204274	328823	287365
								80%	43%	71%	39%	56%	76%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	83.794563	83.82176426991812	Subarray requested	NONE	NONE
[deg] Pointing Dec	-5.396028	-5.392965291649376	Alternating exposures requested	N	N
[deg] Pointing Roll	335.589916	335.749102849443	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
Phase constraints	Y	Y			
[d] Phase period	15.422000	15.422000			
[d] Phase epoch (MJD)	51392.550000	51392.550000			
Phase start	0.979000	0.979000			
Phase end	0.021000	0.021000			
Phase start error	0.030000	0.030000			
Phase end error	0.030000	0.030000			
[s] Observation start time (MET)	125930720.184000	125929556.99976			
Observation start date	2001-12-28T12:44:16	2001-12-28T12:25:56			
[s] Observation end time (MET)	125977720.184000	125978453.08922			
Observation end date	2001-12-29T01:47:36	2001-12-29T02:00:53			
Read mode	TIMED	TIMED			

2.3 Aspect



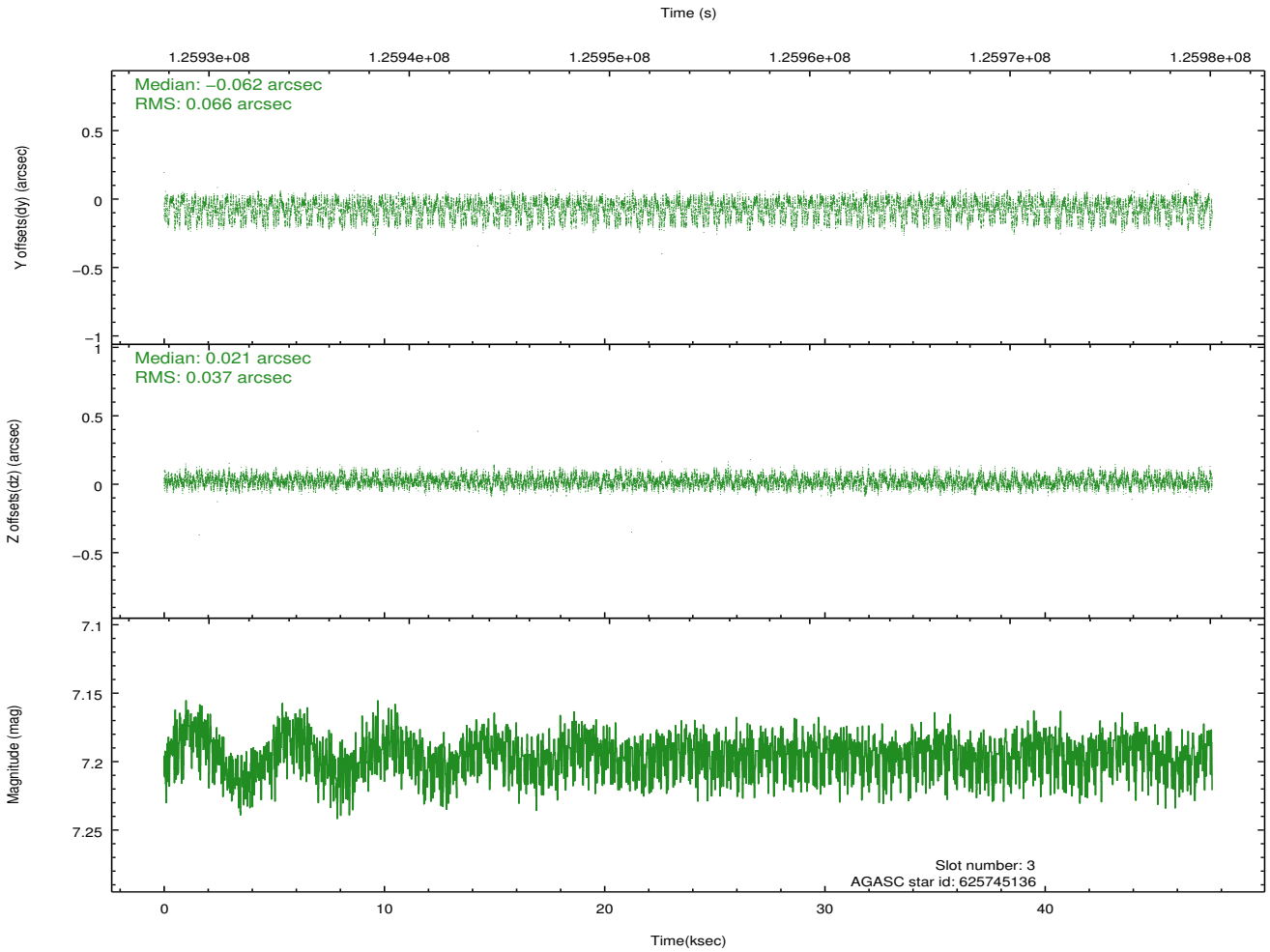
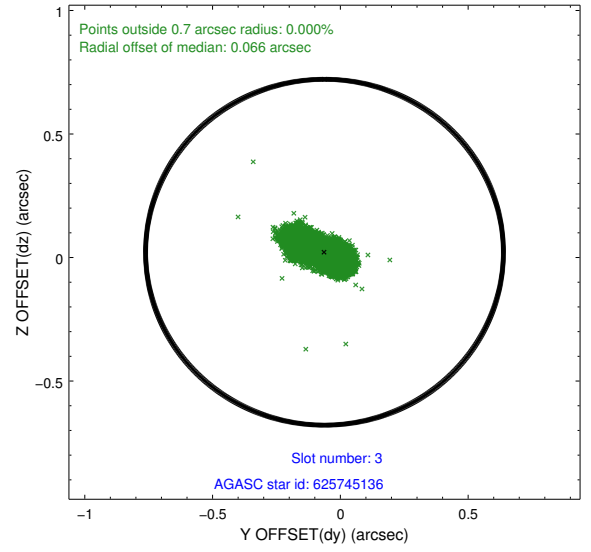
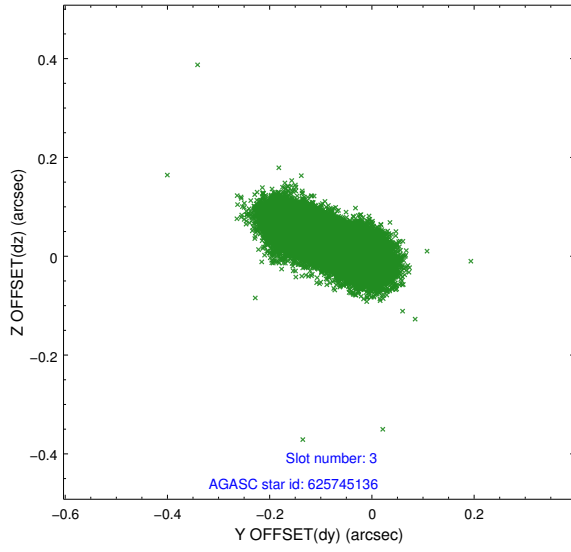


Slot Statistics

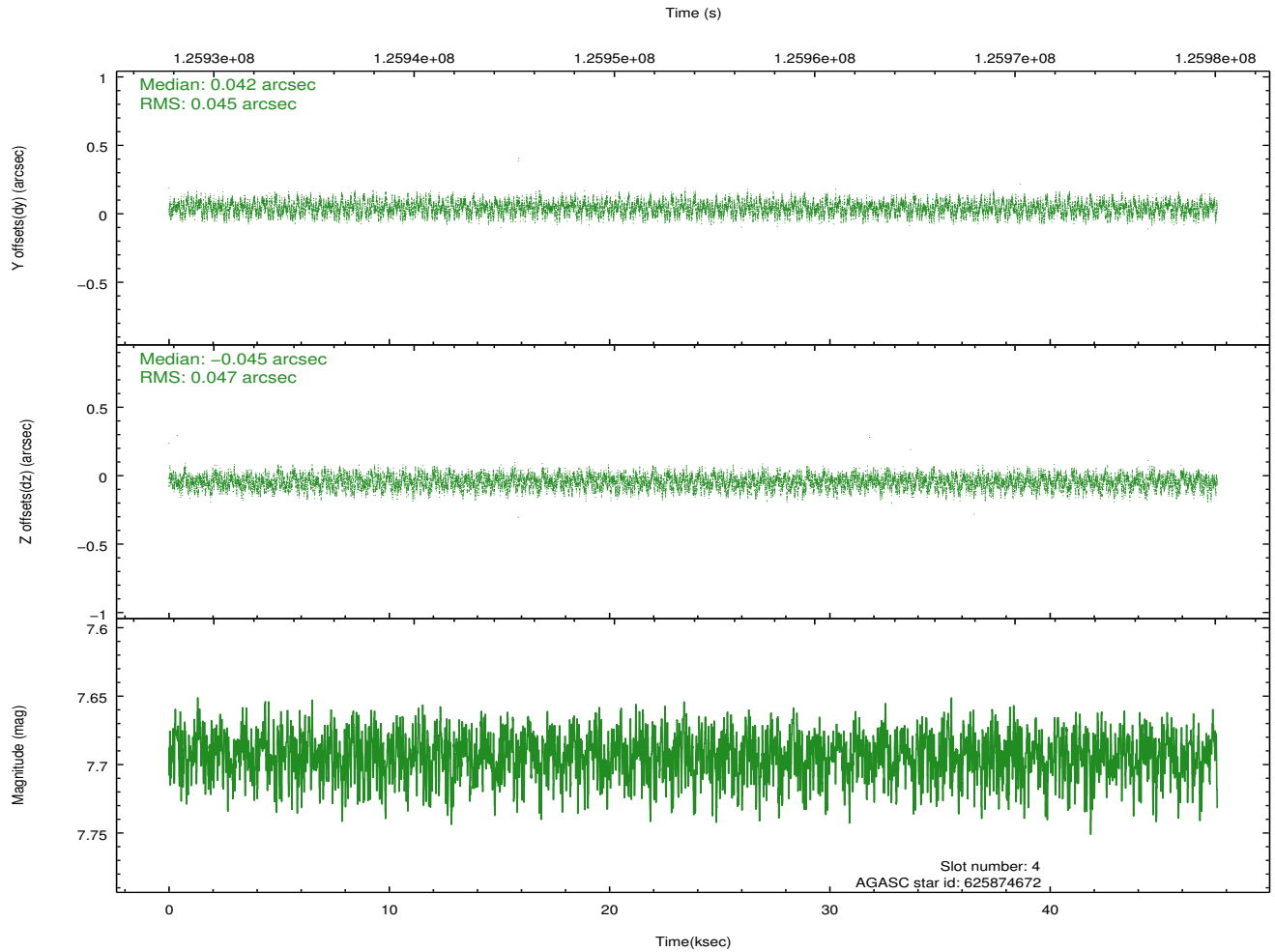
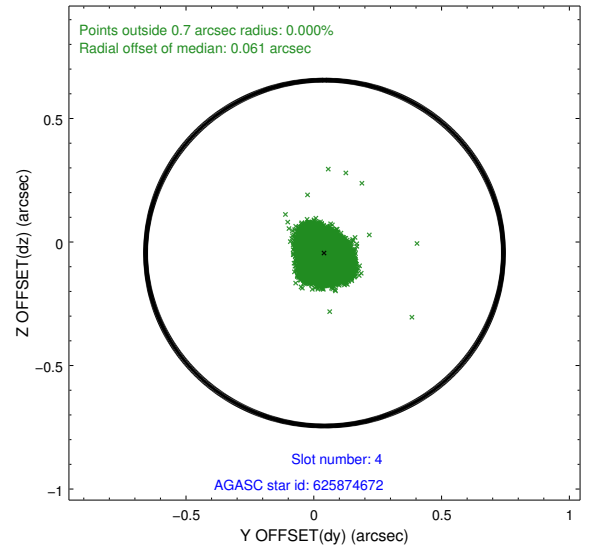
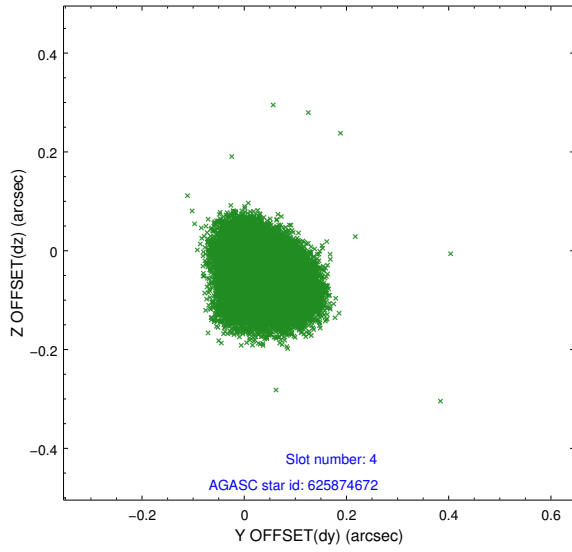
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.36	11605	-0.085	-0.092	0.010	0.024	0.000000	0.000000	56.83	-1857.39
1	FID	ACIS-S-4	7.20	11603	0.027	0.089	0.008	0.018	0.000000	0.000000	2157.12	180.31
2	FID	ACIS-S-5	7.24	11605	0.029	0.013	0.008	0.015	0.000000	0.000000	-1809.09	173.95
3	GUIDE	625745136	7.20	23207	-0.062	0.021	0.080	0.135	83.600341	-4.804339	-1515.34	1651.69
4	GUIDE	625874672	7.69	23208	0.042	-0.045	0.071	0.109	84.403143	-4.934124	1300.28	2415.86
5	GUIDE	625745128	7.81	23208	-0.004	-0.012	0.073	0.121	83.769930	-4.731835	-1069.23	2141.00
6	GUIDE	626272880	7.68	23209	-0.022	0.035	0.070	0.109	83.815609	-6.032748	1015.98	-2055.62
7	GUIDE	626272976	7.95	23209	0.045	0.003	0.062	0.102	83.795875	-5.926912	794.27	-1738.11

2.4 Star Slots

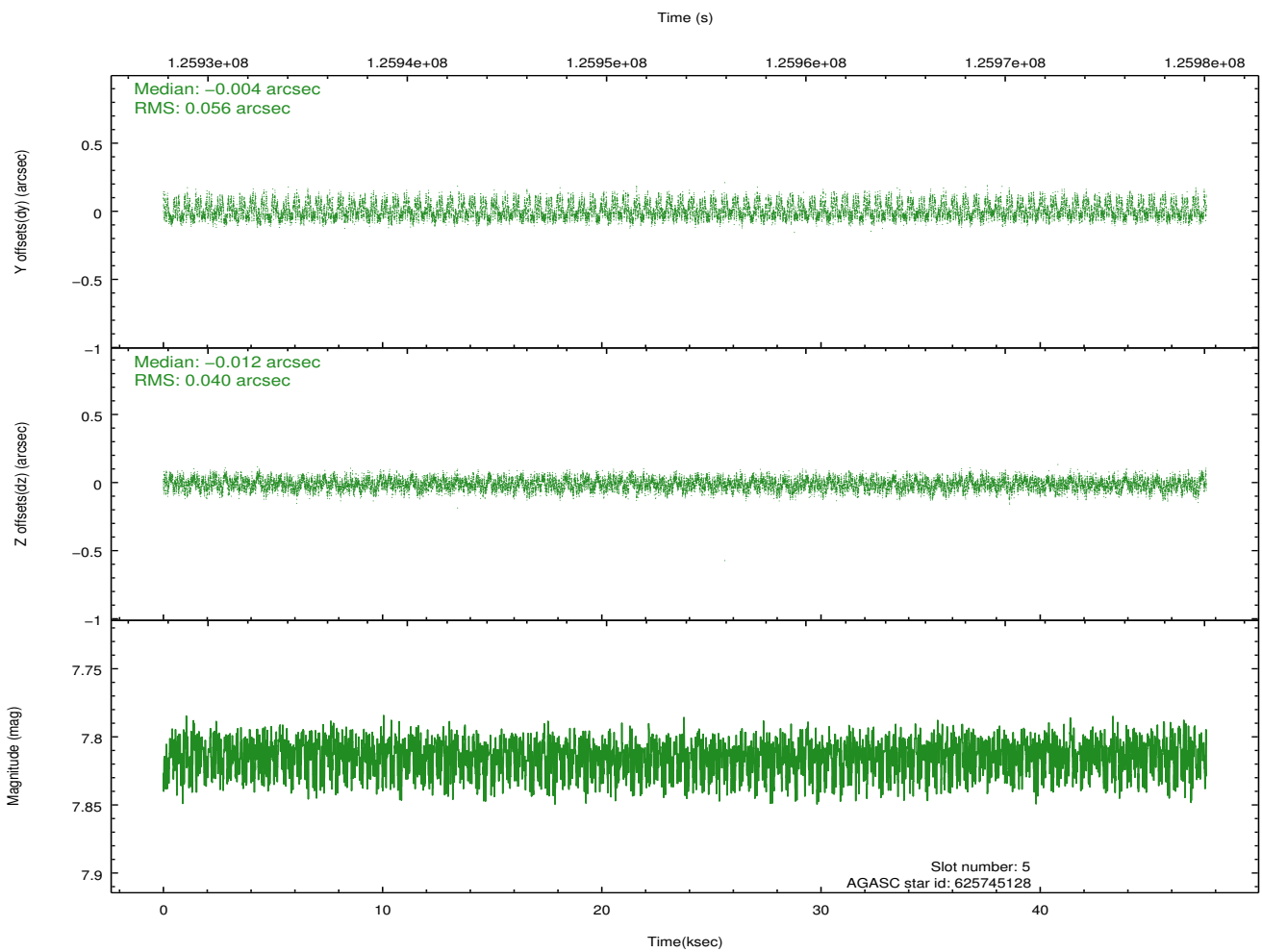
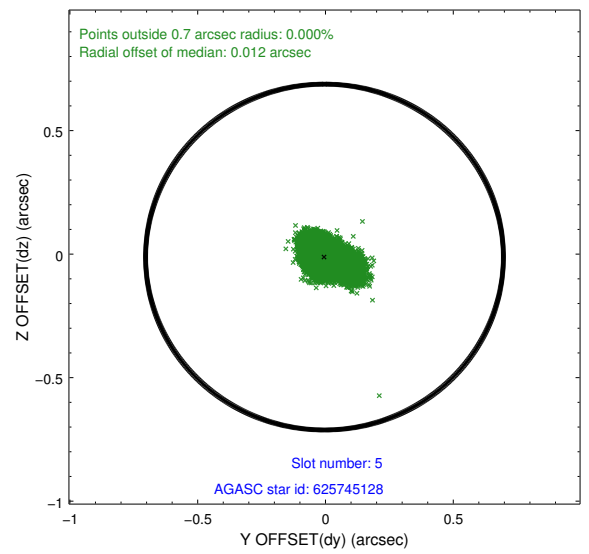
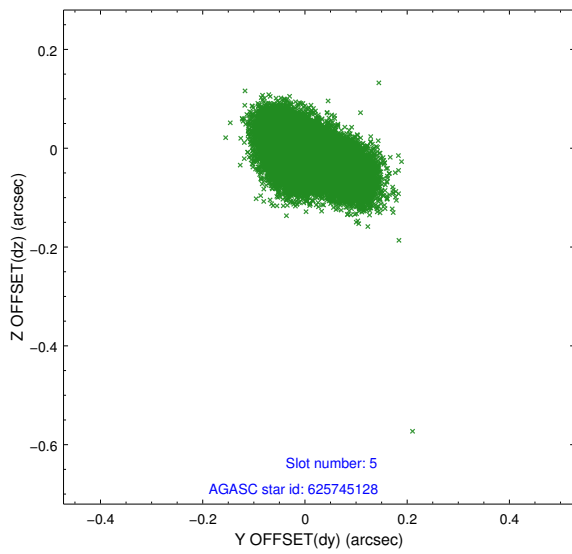
2.4.1 Slot 3



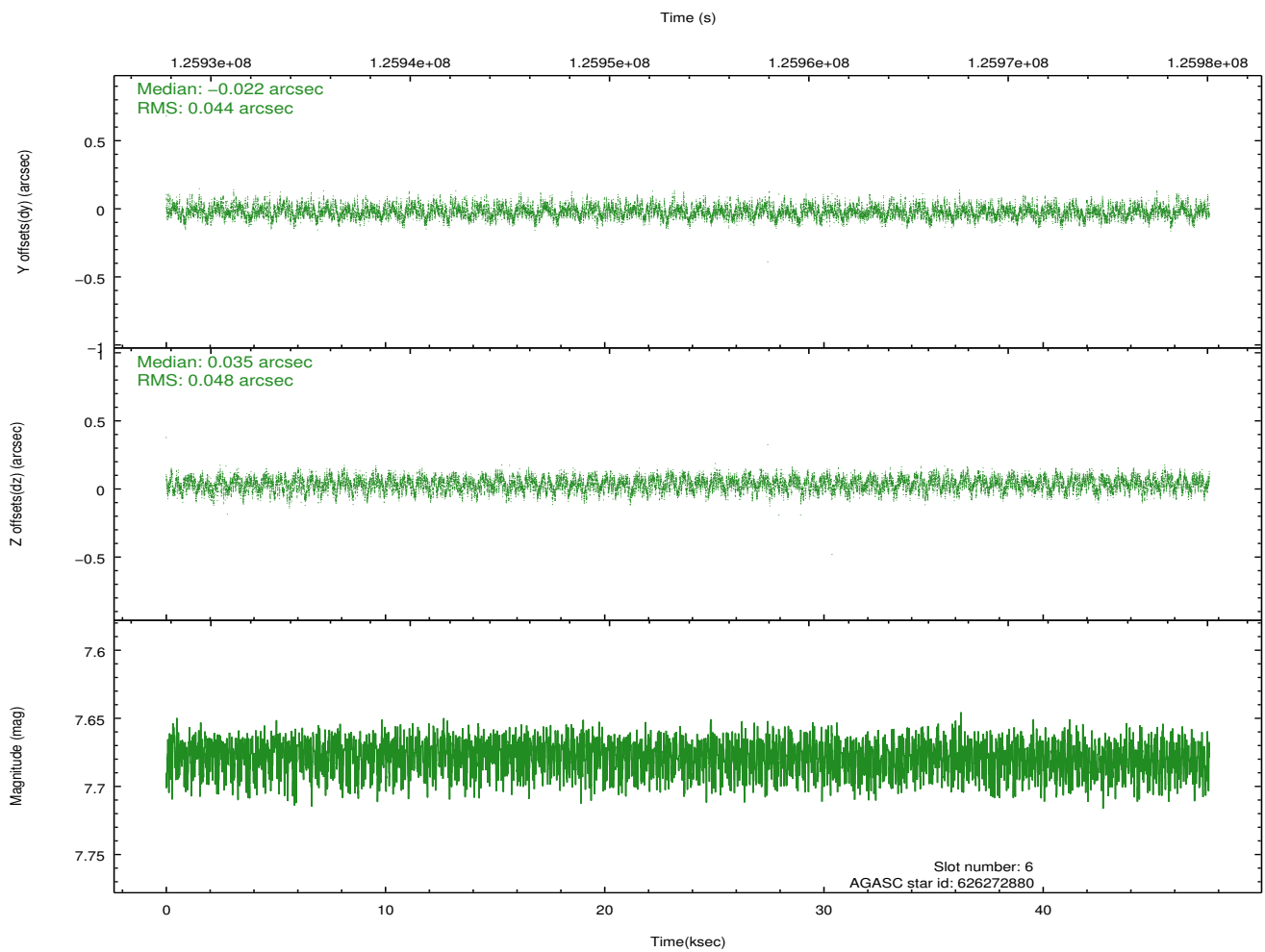
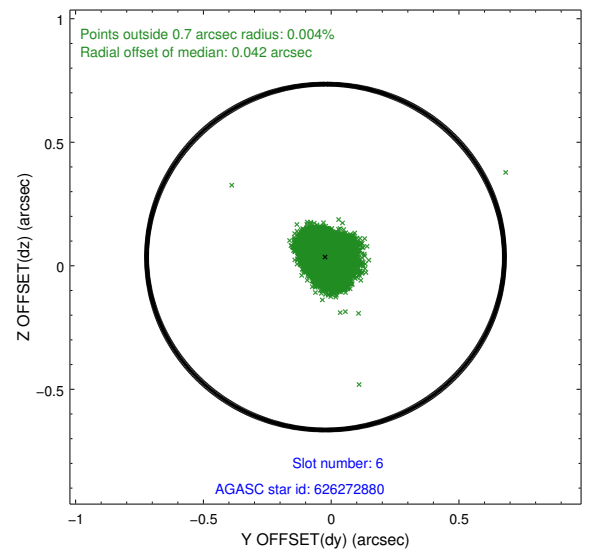
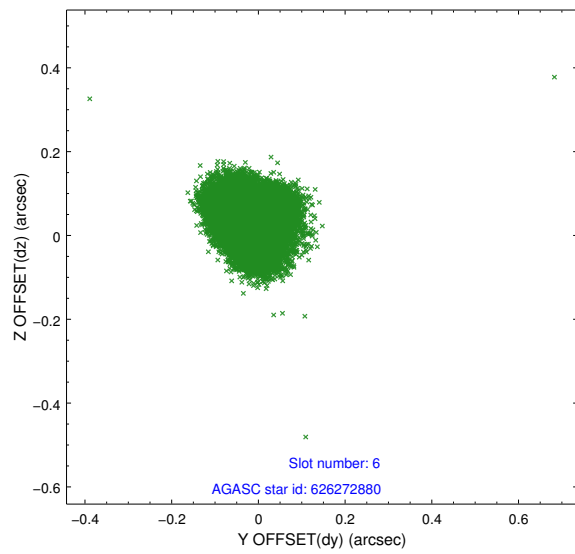
2.4.2 Slot 4



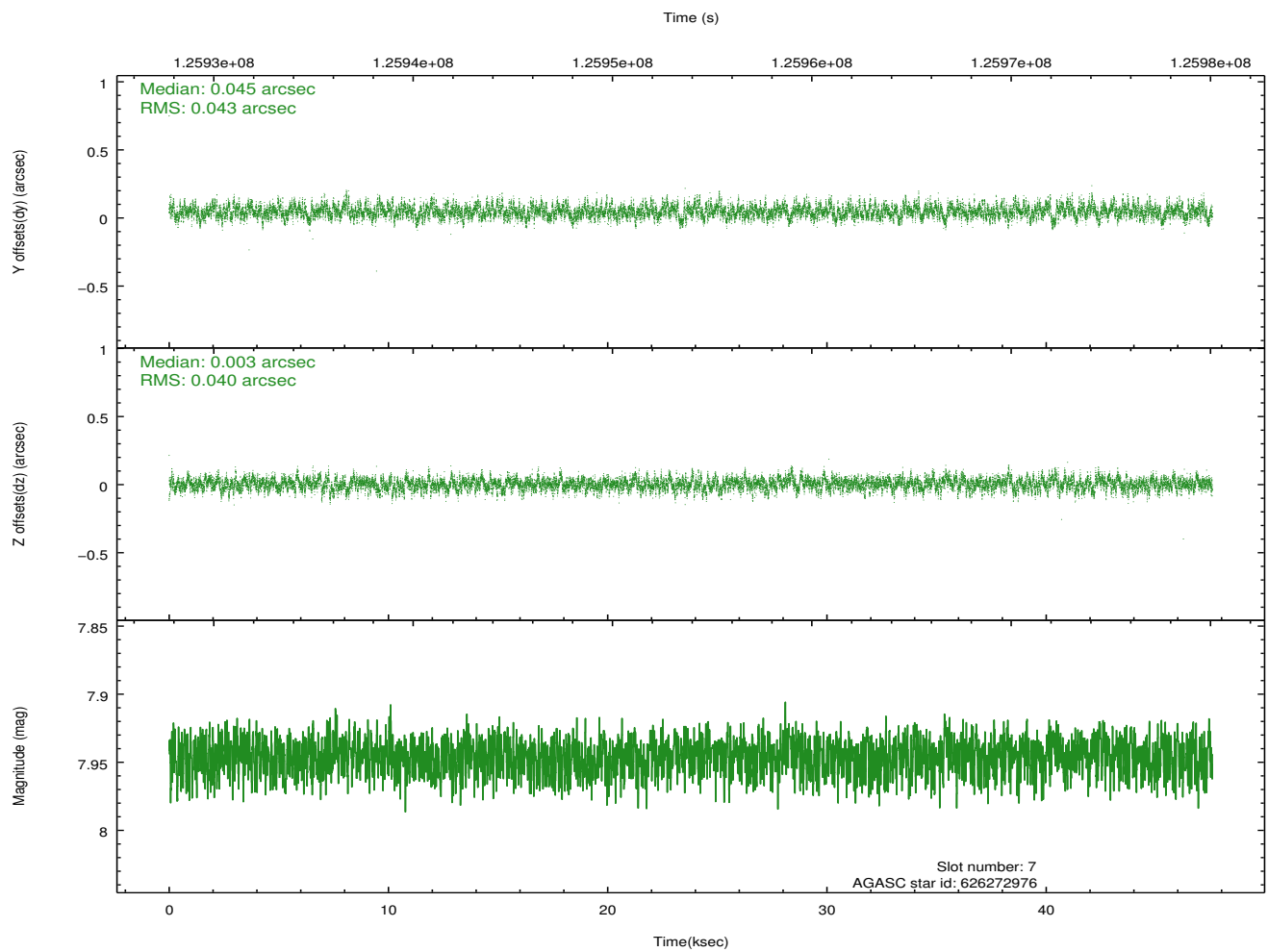
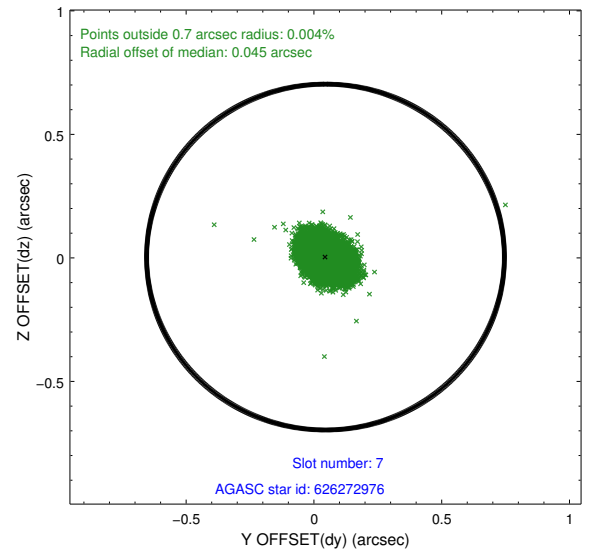
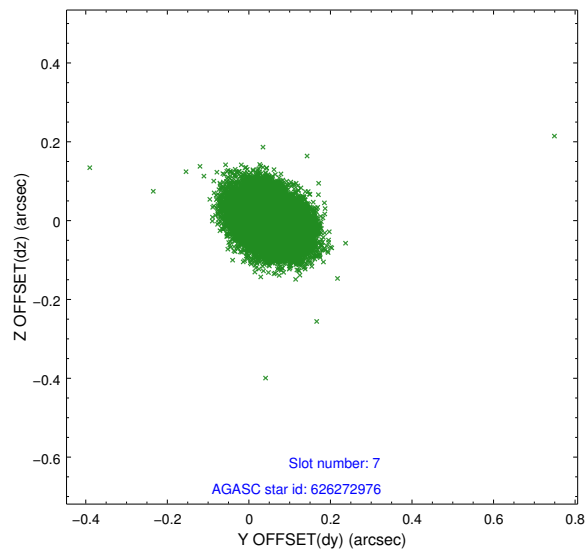
2.4.3 Slot 5



2.4.4 Slot 6

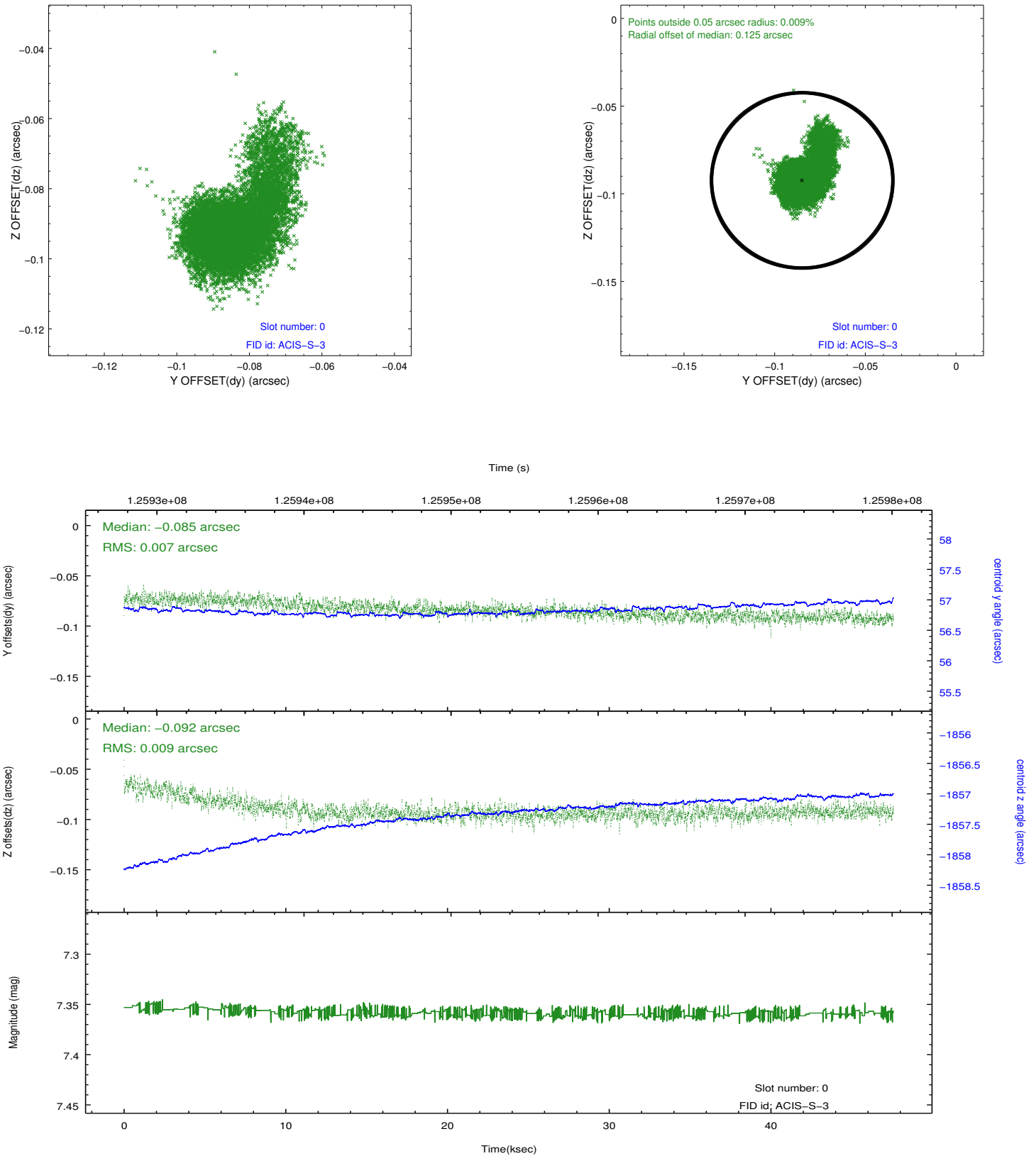


2.4.5 Slot 7

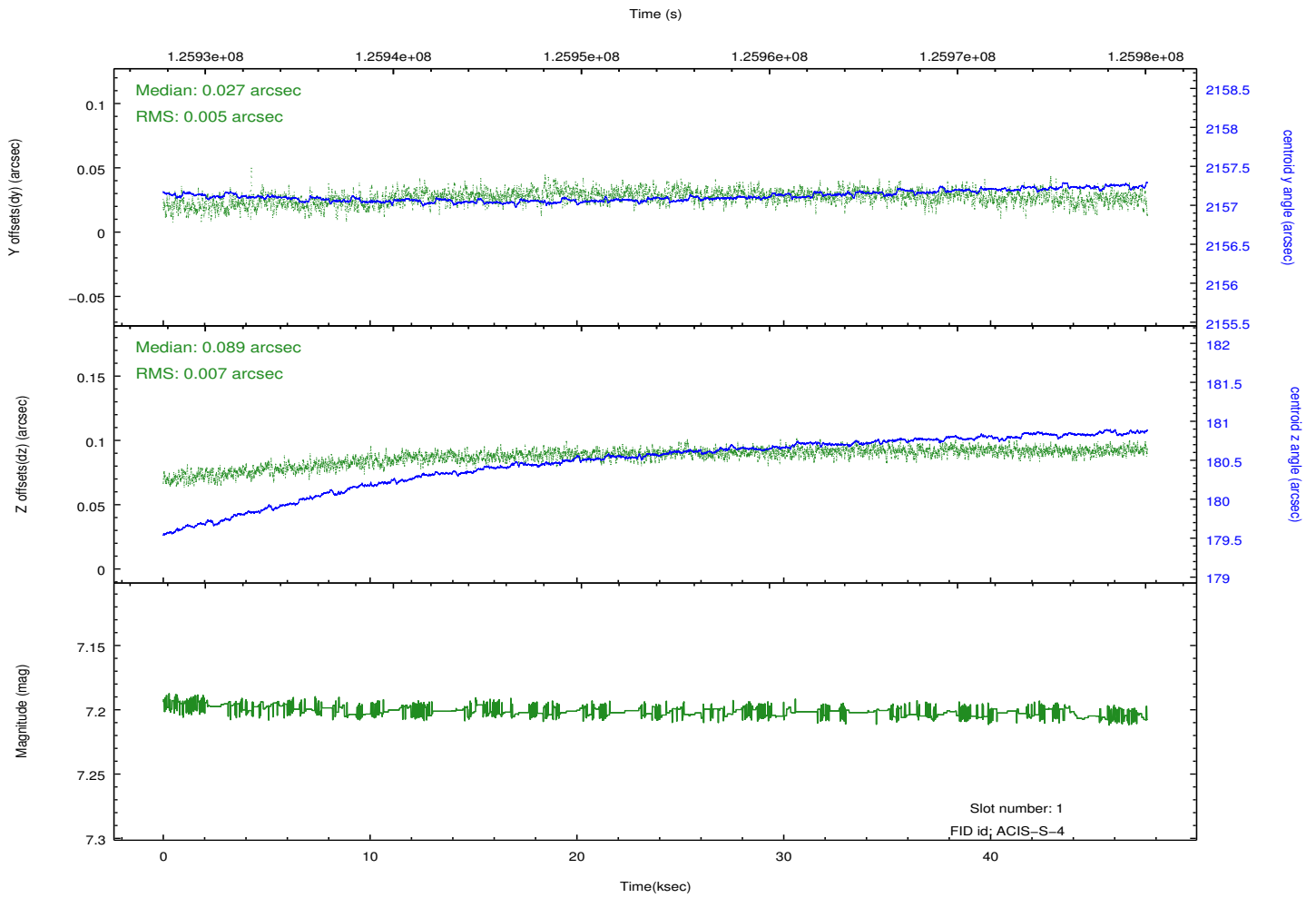
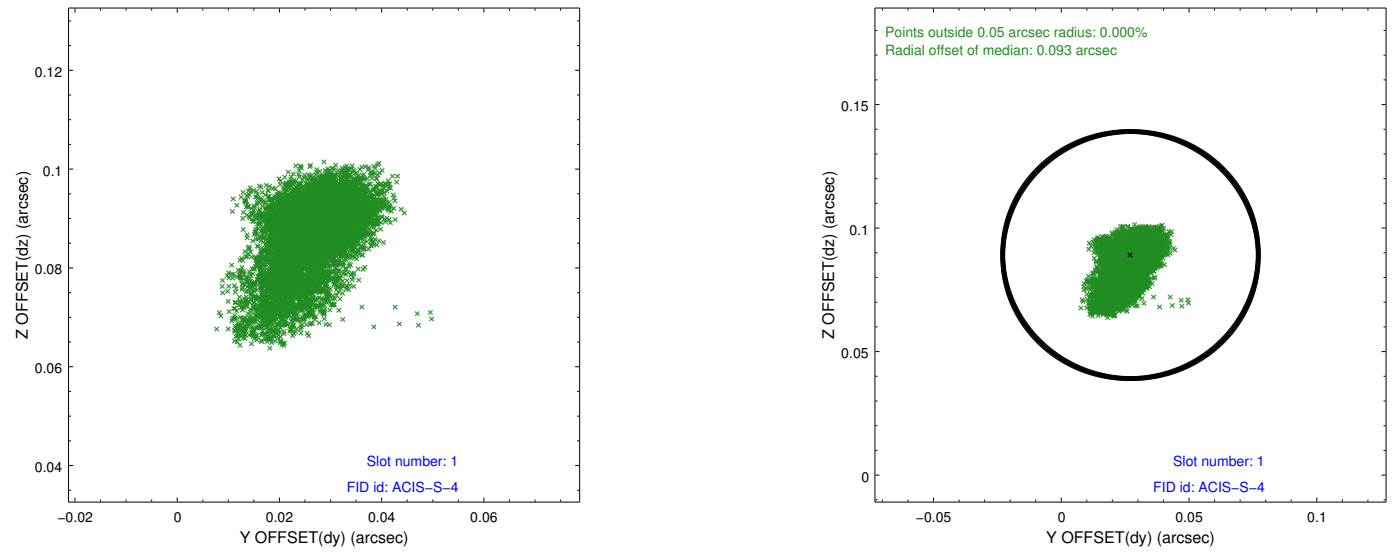


2.5 FID Slots

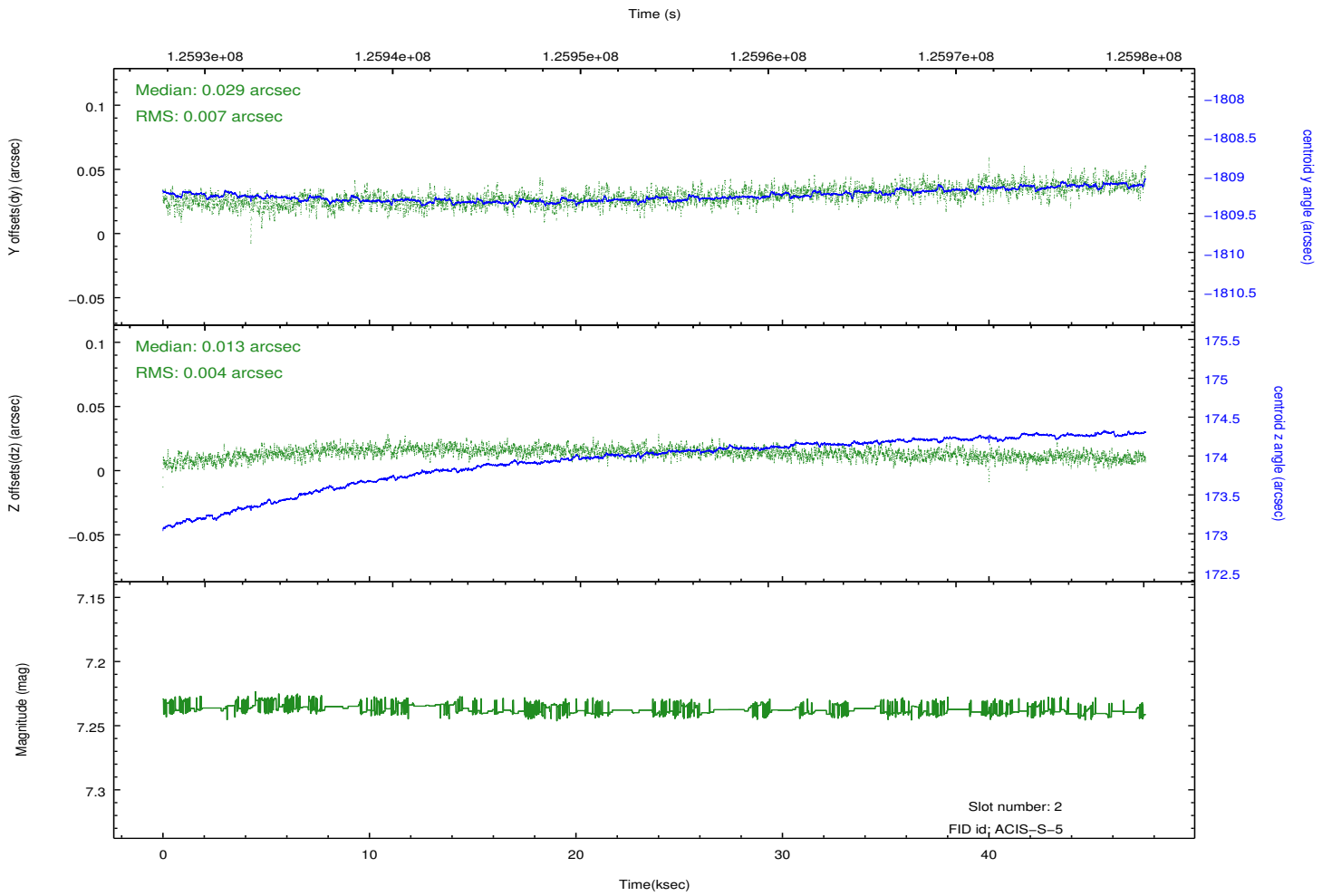
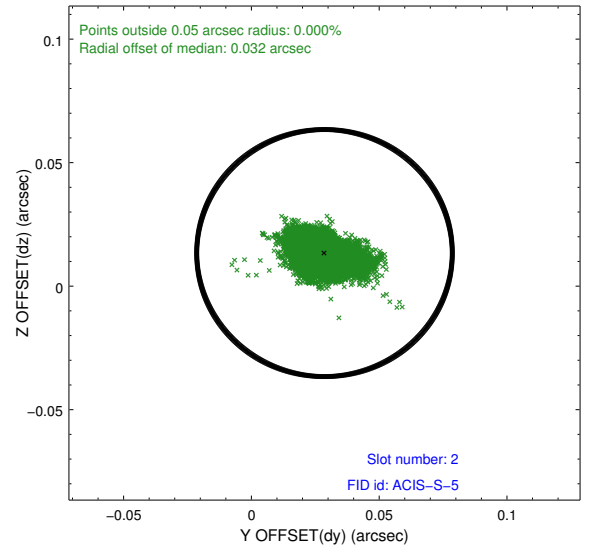
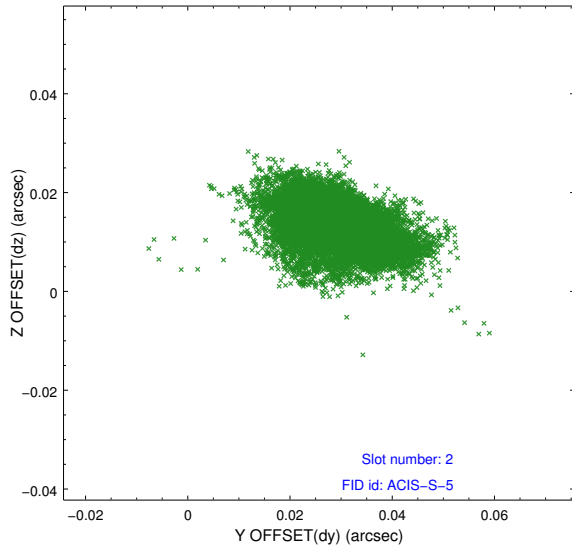
2.5.1 Slot 0



2.5.2 Slot 1

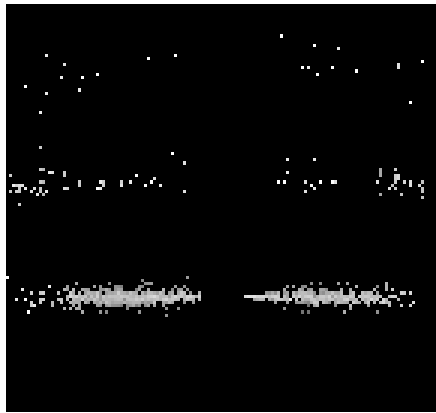


2.5.3 Slot 2

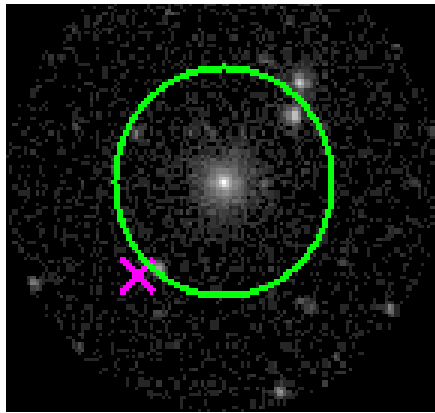


3 Gratings

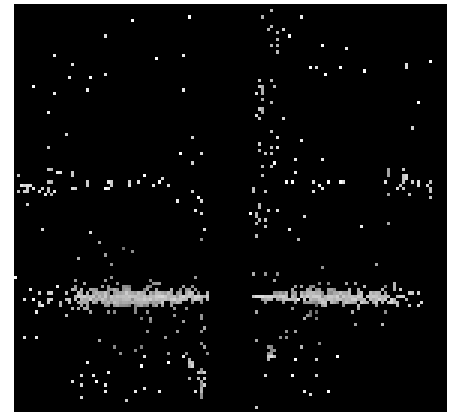
3.1 HEG Arm



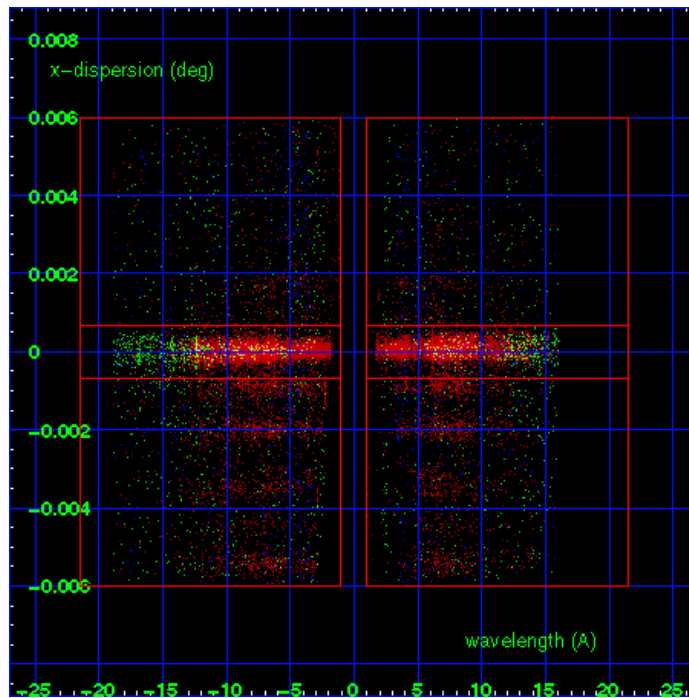
HEG Order Sort 123



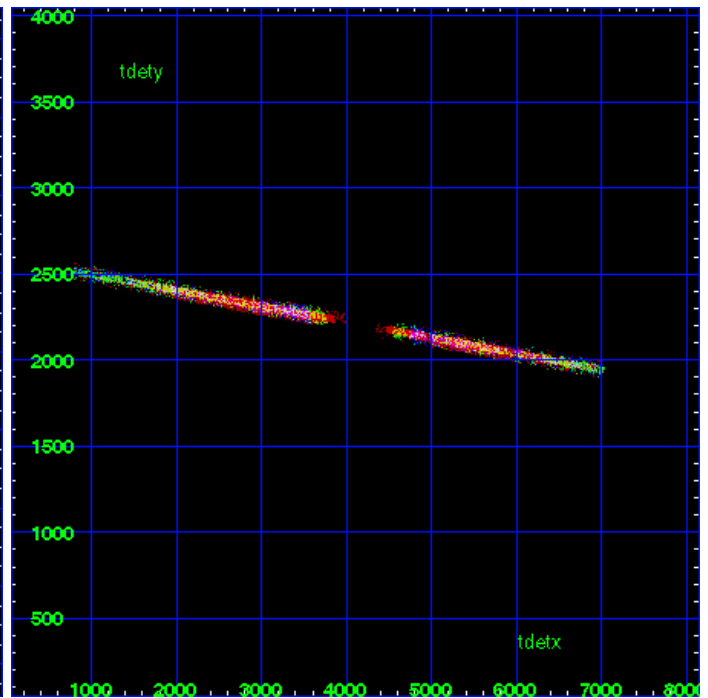
HEG Zero Order



HEG Order Sort ALL

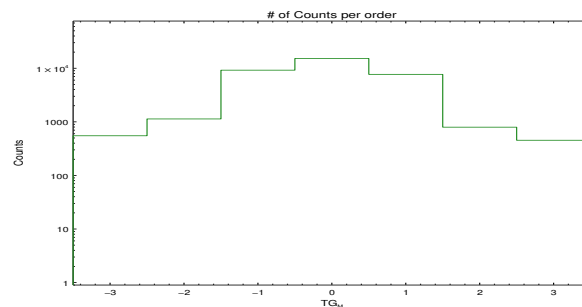


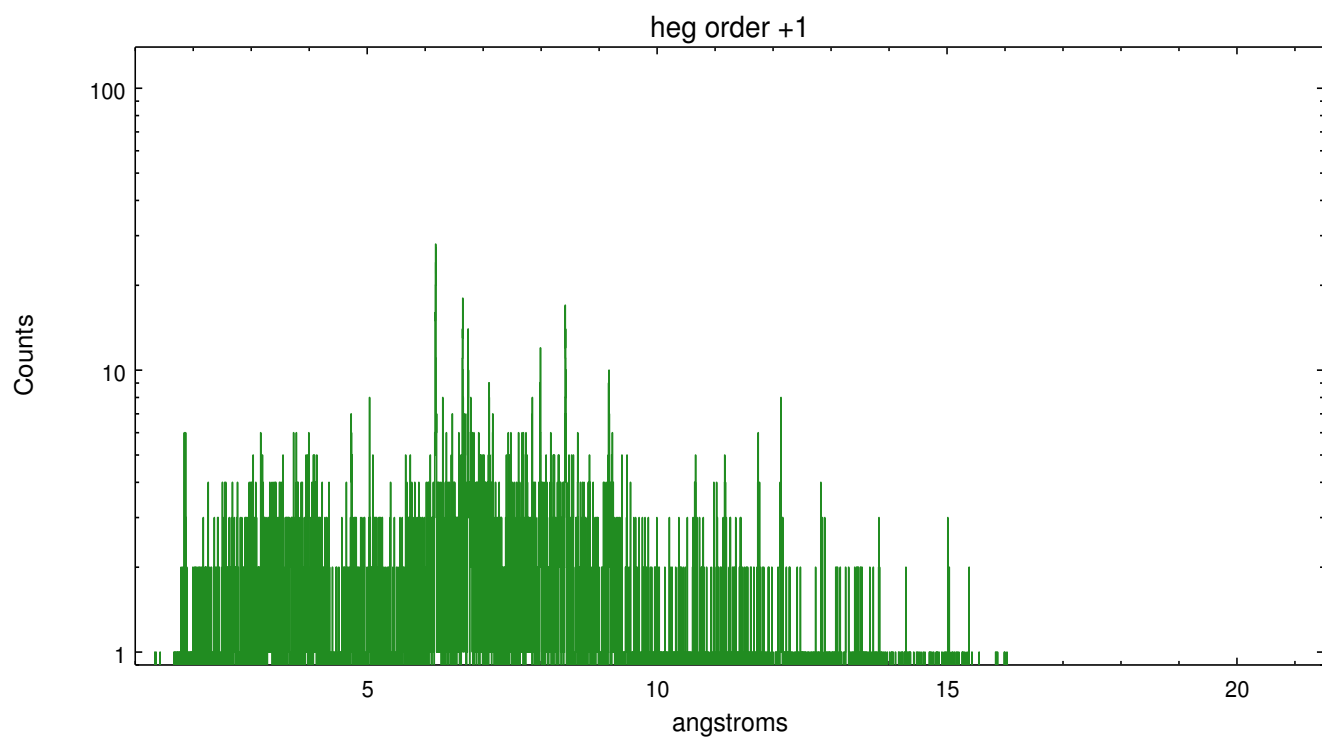
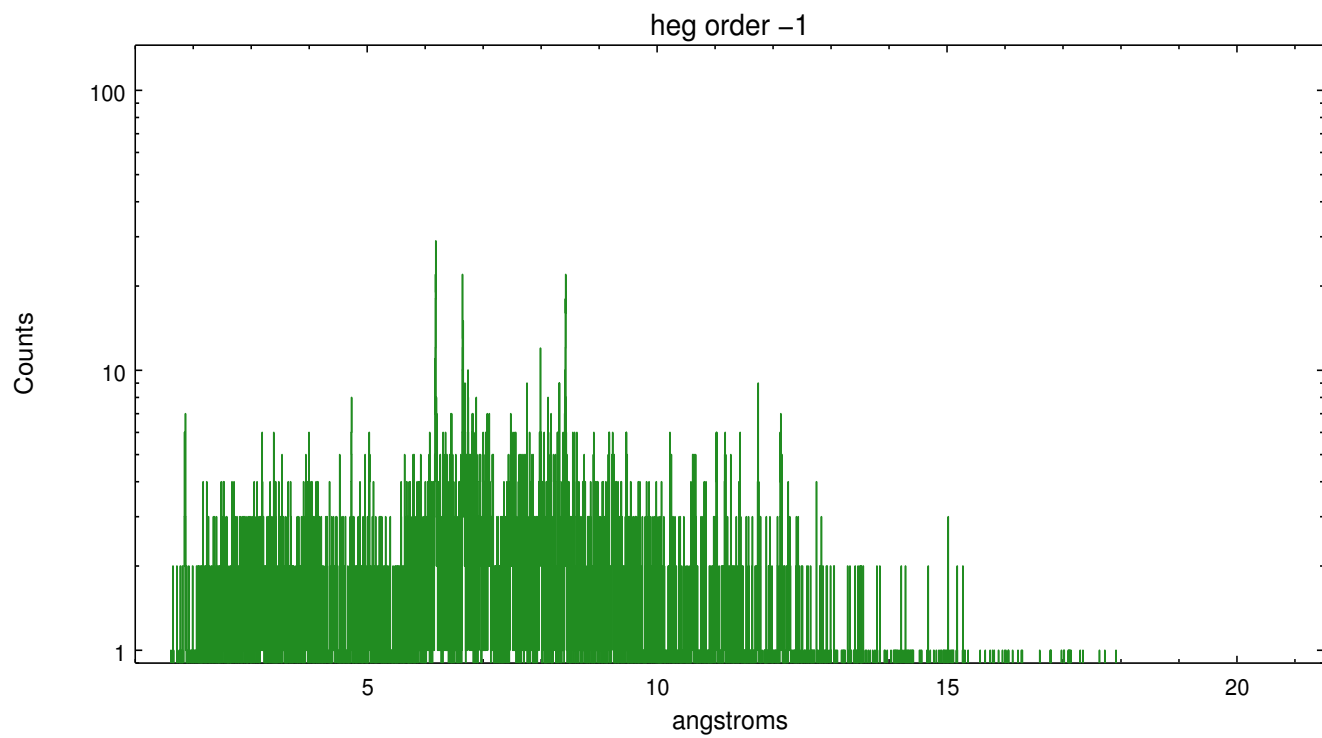
Spot Image HEG



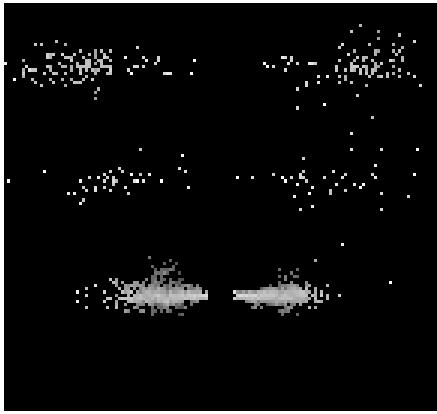
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	550	1133	9209	15212	7691	795	453

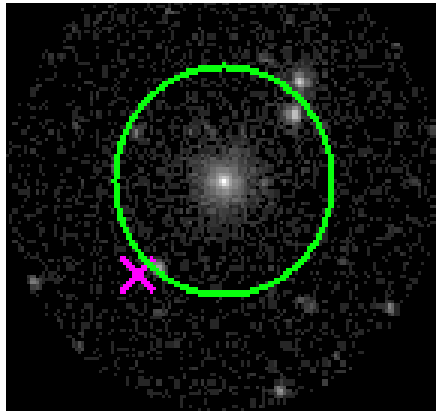




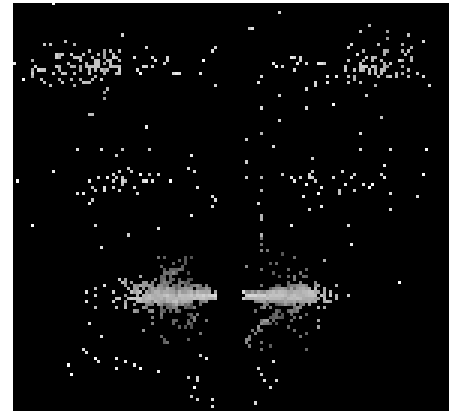
3.2 MEG Arm



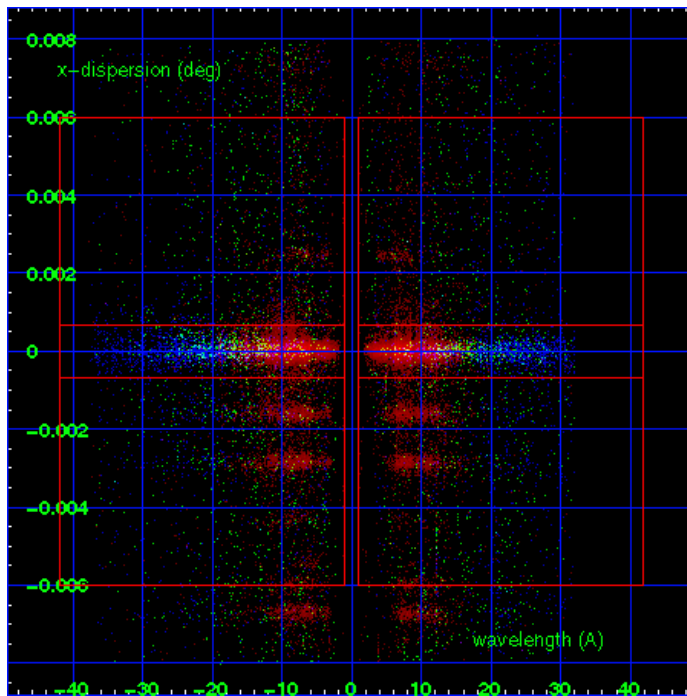
MEG Order Sort 123



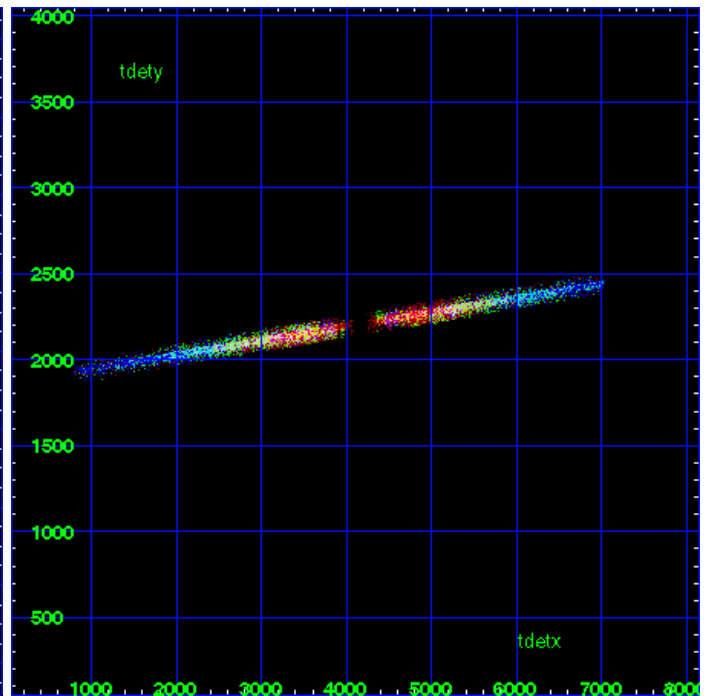
MEG Zero Order



MEG Order Sort ALL

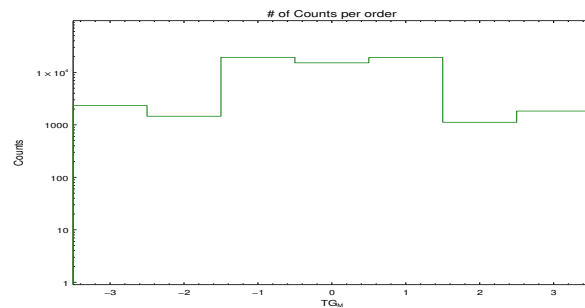


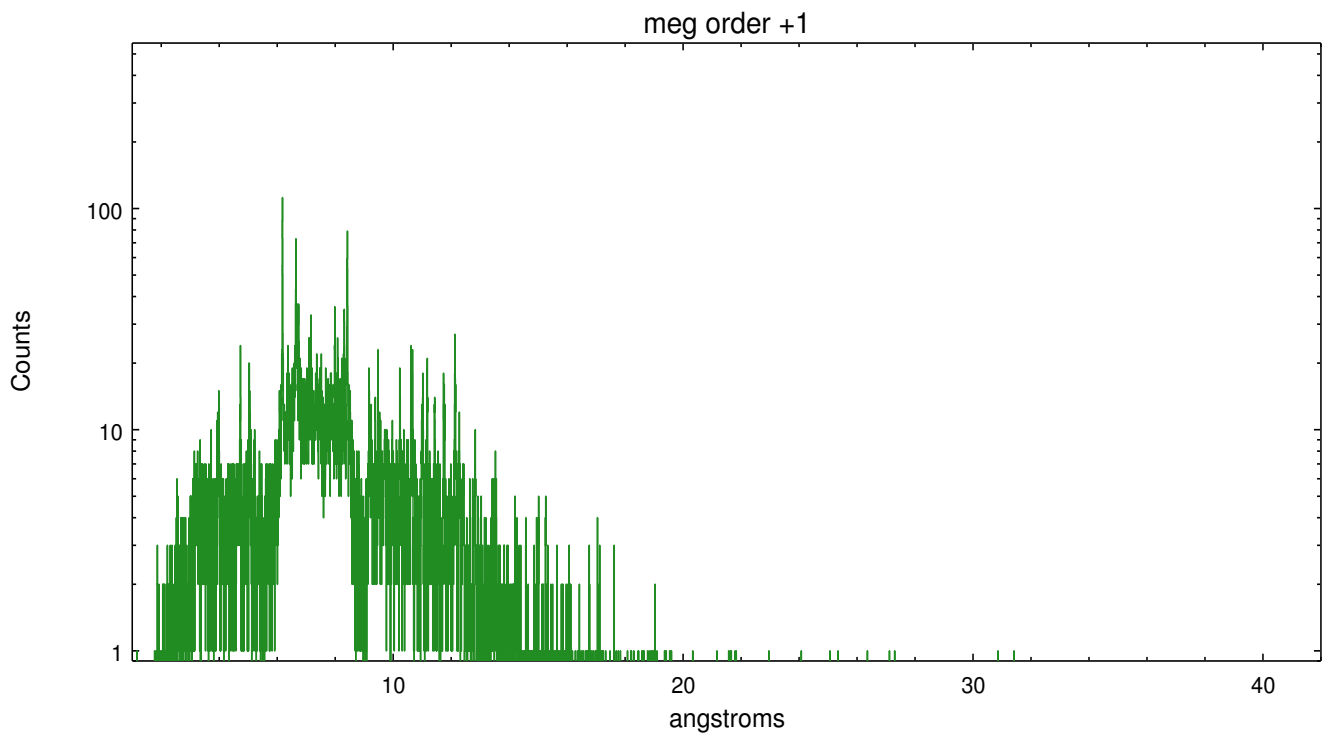
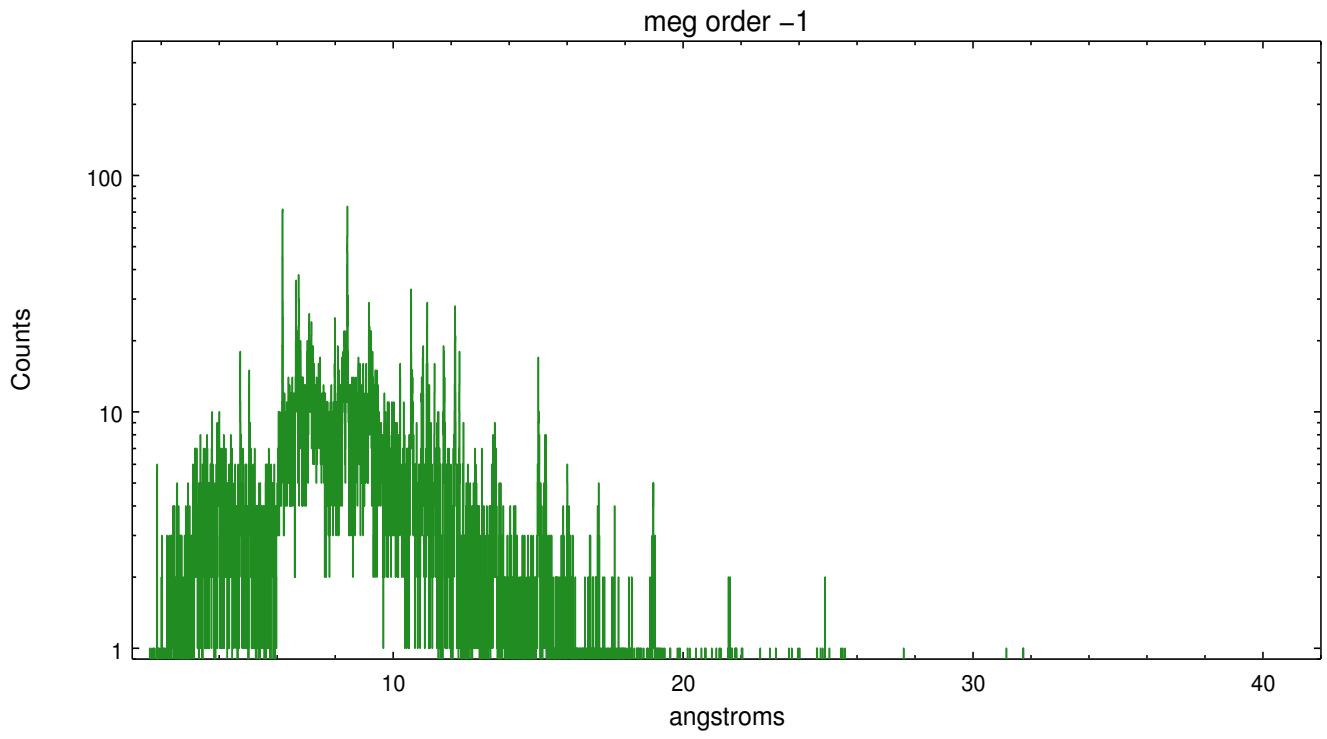
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2326	1459	19328	15212	19250	1119	1832





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	46.95

A.2 Comments

This field is extremely crowded. Extraction is centered on theta 1 Ori C. The dispersed spectral arms of the target and of several other sources are parallel to each other and separated by 3-4 pixels. The width of the extraction region is +/-6.6e-4 deg, which is about 8 pixels full width. The extracted spectral data will probably include data from several sources, but if the zeroth orders for these sources are sufficiently separated spatially, energy discrimination in the order sorting may reject neighboring spectral orders. Custom extraction of the dispersed spectral data is critical to analysis of these data.

===

Dispersed spectral data from a number of other sources can be extracted from this observation.