

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 14352 - L2 Version 1
Chandra X-Ray Center

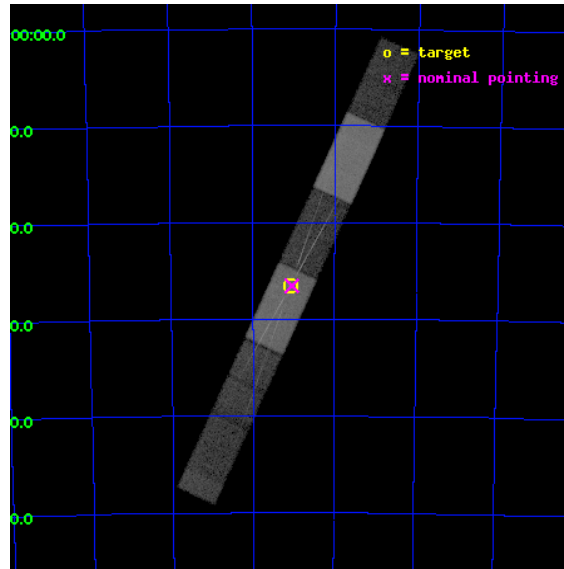
L2 Processing Date : Jun 23 2012

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1 Front

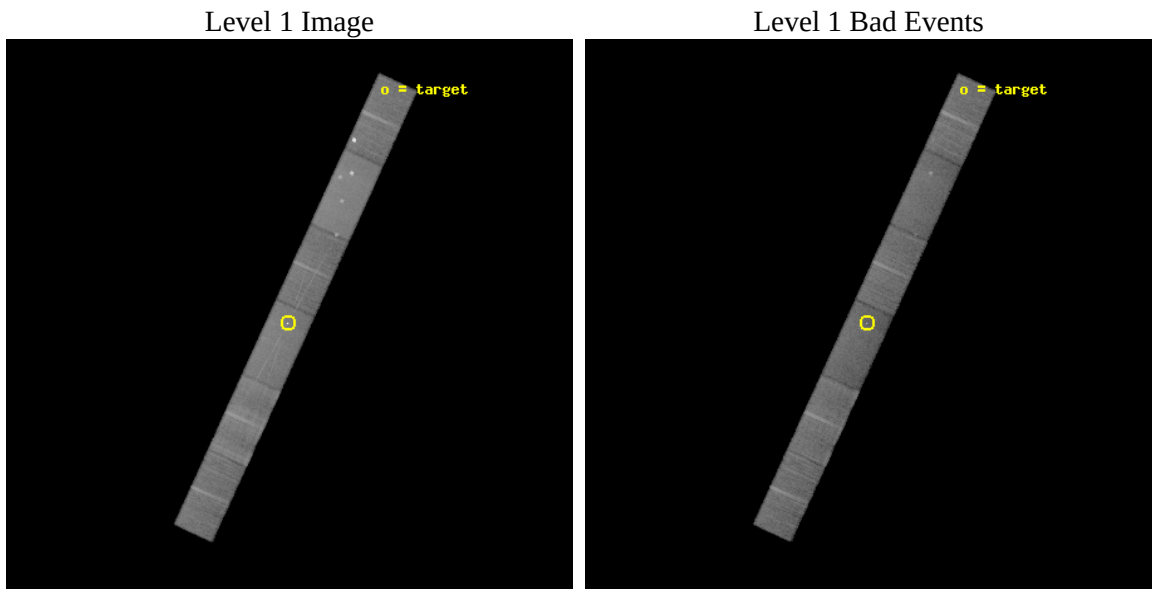
seq_num	401302	Sequence number
obs_id	14352	Observation id
title	The Wind and Warp of SMC X-1	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	SMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	19.271667	Observer's specified target RA [deg]
dec_targ	-73.442944	Observer's specified target Dec [deg]
ra_nom	19.261108134759	Nominal RA [deg]
dec_nom	-73.44252535242	Nominal Dec [deg]
roll_nom	114.64650516344	Nominal Roll [deg]
revision	1	Processing version of data
ontime	40182.899718285	Sum of GTIs [s]
livetime	39235.703671991	Livetime [s]
ontime4	40182.899718285	Sum of GTIs [s]
ontime5	40182.899718285	Sum of GTIs [s]
ontime6	40182.899718285	Sum of GTIs [s]
ontime7	40182.899718285	Sum of GTIs [s]
ontime8	40182.899718285	Sum of GTIs [s]
ontime9	40182.899718285	Sum of GTIs [s]
l2events	219928	Number of level 2 events



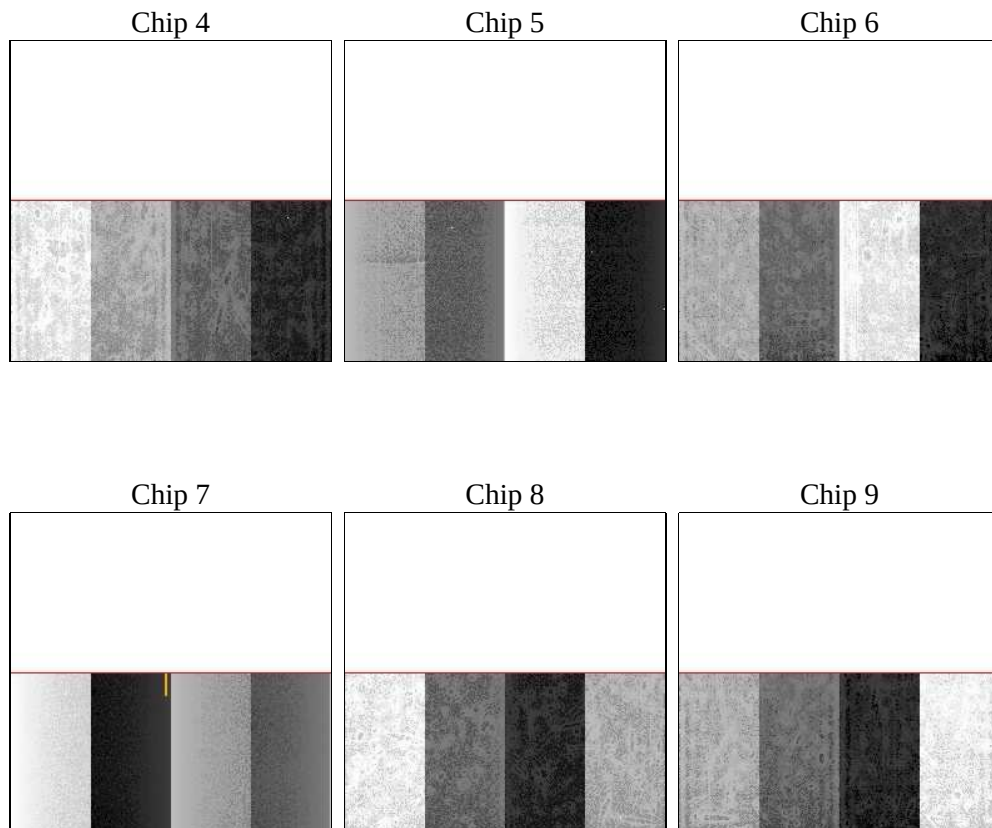
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	40182.899718285	Sum of GTIs [s]
caldsver	4.4.10	 	ontime4	40182.899718285	Sum of GTIs [s]
date	2012-06-23T15:14:42	Date and time of file creation	ontime5	40182.899718285	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	40182.899718285	Sum of GTIs [s]
			ontime7	40182.899718285	Sum of GTIs [s]
			ontime8	40182.899718285	Sum of GTIs [s]
			ontime9	40182.899718285	Sum of GTIs [s]
			l1events	926413	Number of level 1 events

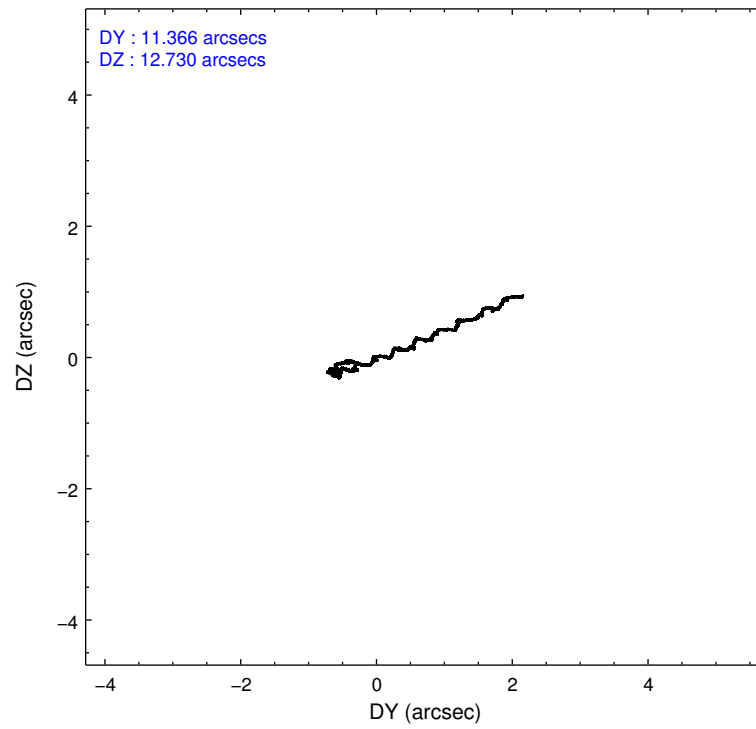
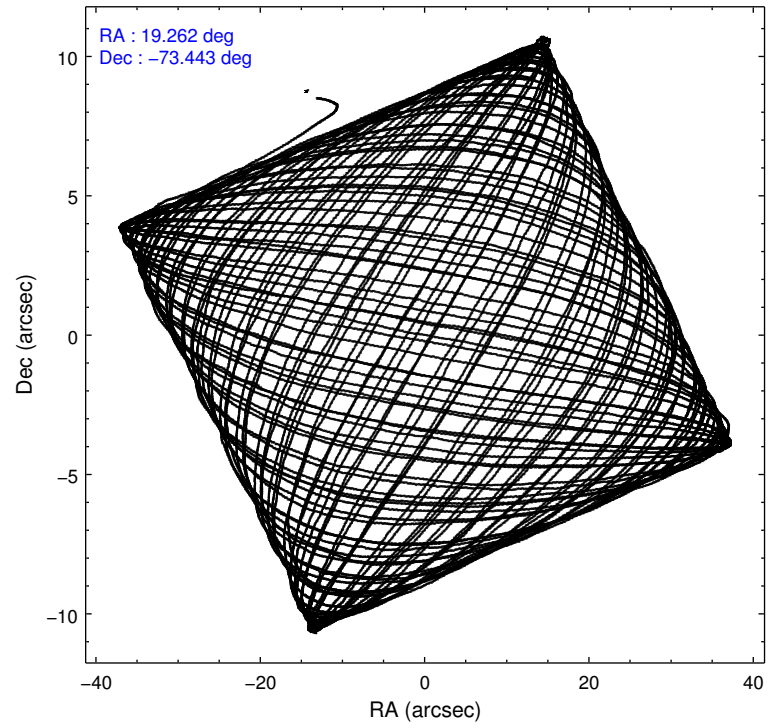
2.1.4 Events

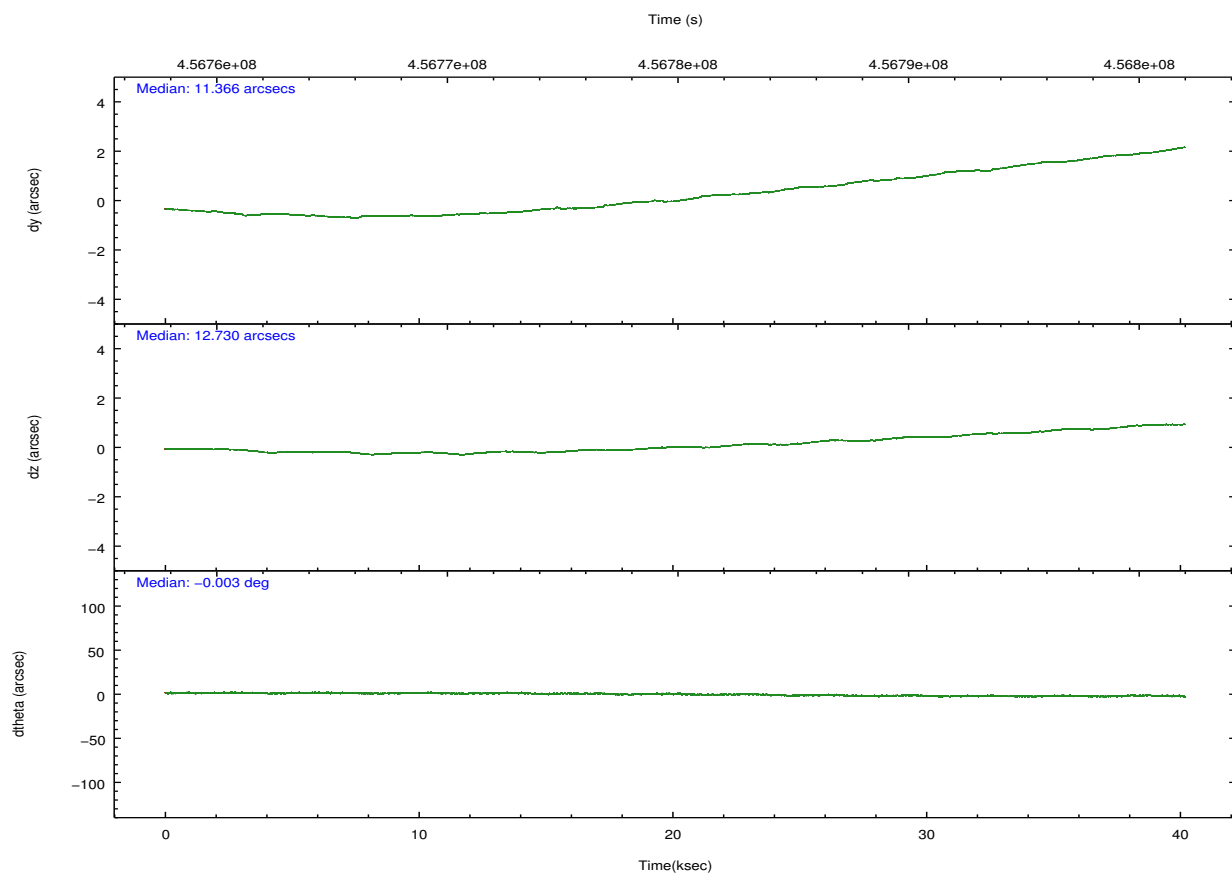
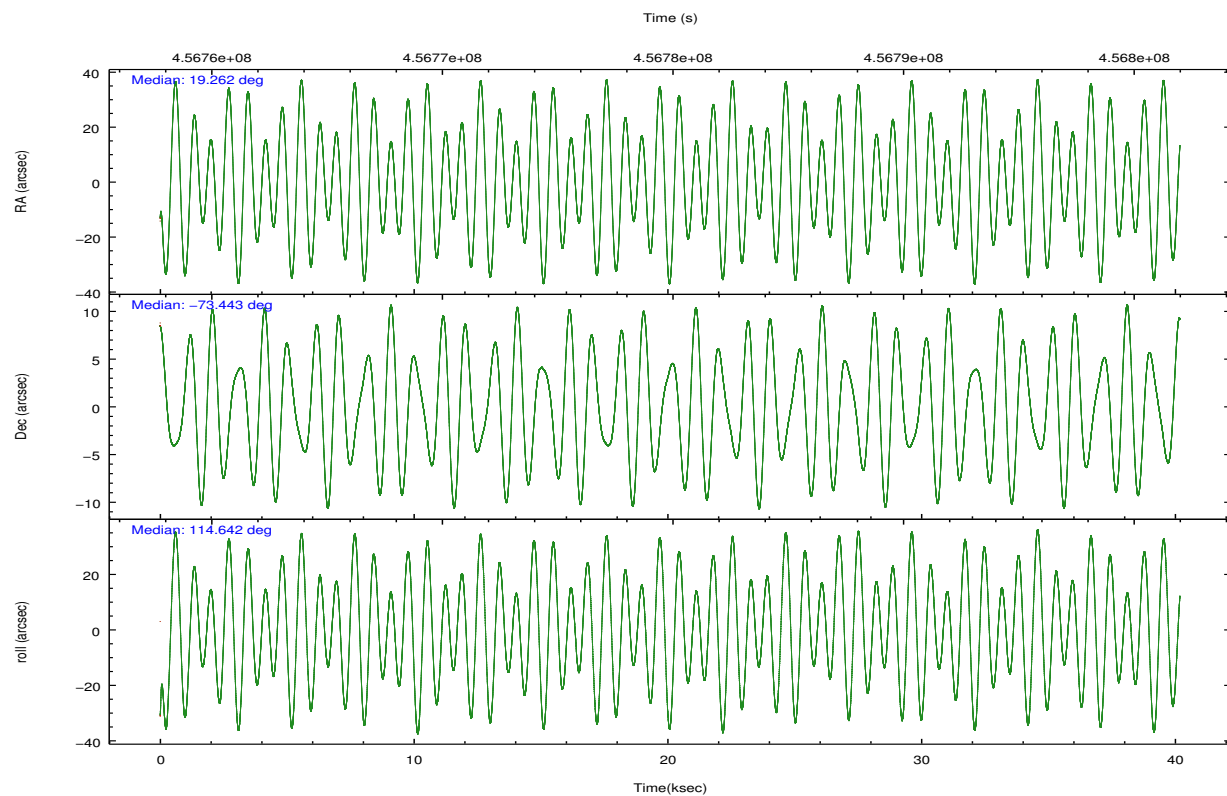
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	153106	197838	128413	162409	166114	118533	grade 0 events	23723	16979	7073	8436	13217	5315
rejected events	119546	97101	110665	83446	120850	103302		15%	8%	5%	5%	7%	4%
rejected %	78%	49%	86%	51%	72%	87%	grade 1 events	139	1479	56	213	86	49
								0%	0%	0%	0%	0%	0%
							grade 2 events	3775	26932	3643	16579	10001	3269
								2%	13%	2%	10%	6%	2%
							grade 3 events	1824	5099	1900	7682	5161	1823
								1%	2%	1%	4%	3%	1%
							grade 4 events	1666	4848	1855	7547	4887	1733
								1%	2%	1%	4%	2%	1%
							grade 5 events	5633	15739	5644	15872	7938	5899
								3%	7%	4%	9%	4%	4%
							grade 6 events	2723	47368	3335	39042	12149	3150
								1%	23%	2%	24%	7%	2%
							grade 7 events	113623	79394	104907	67038	112675	97295
								74%	40%	81%	41%	67%	82%

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	19.340236	19.26110813475907	CCD I2 on	N	N
[deg] Pointing Dec	-73.458017	-73.44252535241974	CCD I3 on	N	N
[deg] Pointing Roll	114.565731	114.6465051634384	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)	456759953.184000	456758917.26242	CCD S5 on	Y	Y
Observation start date	2012-06-22T13:44:47	2012-06-22T13:28:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	456799953.184000	456801067.31468	On-chip summing requested	N	N
Observation end date	2012-06-23T00:51:27	2012-06-23T01:11:07	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



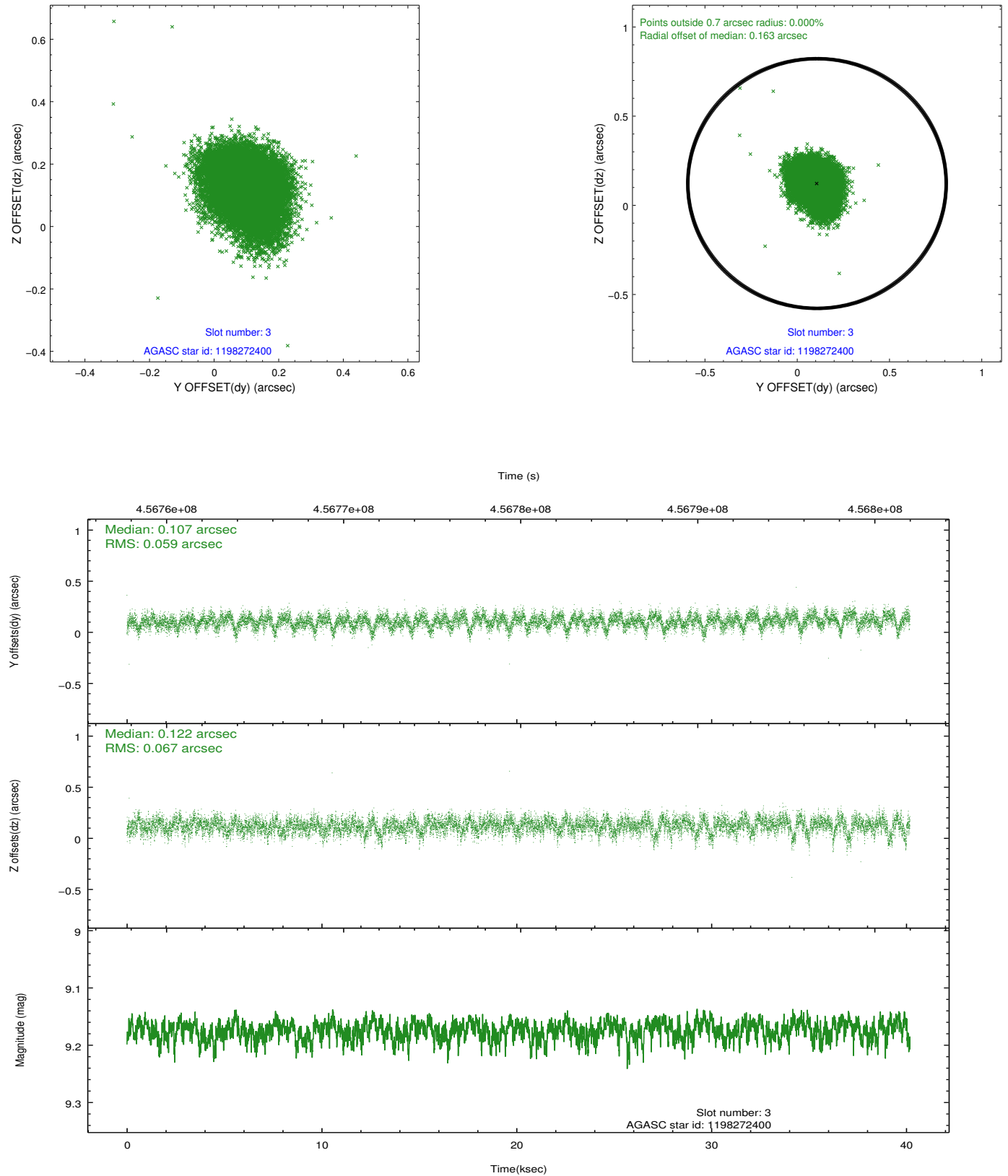


Slot Statistics

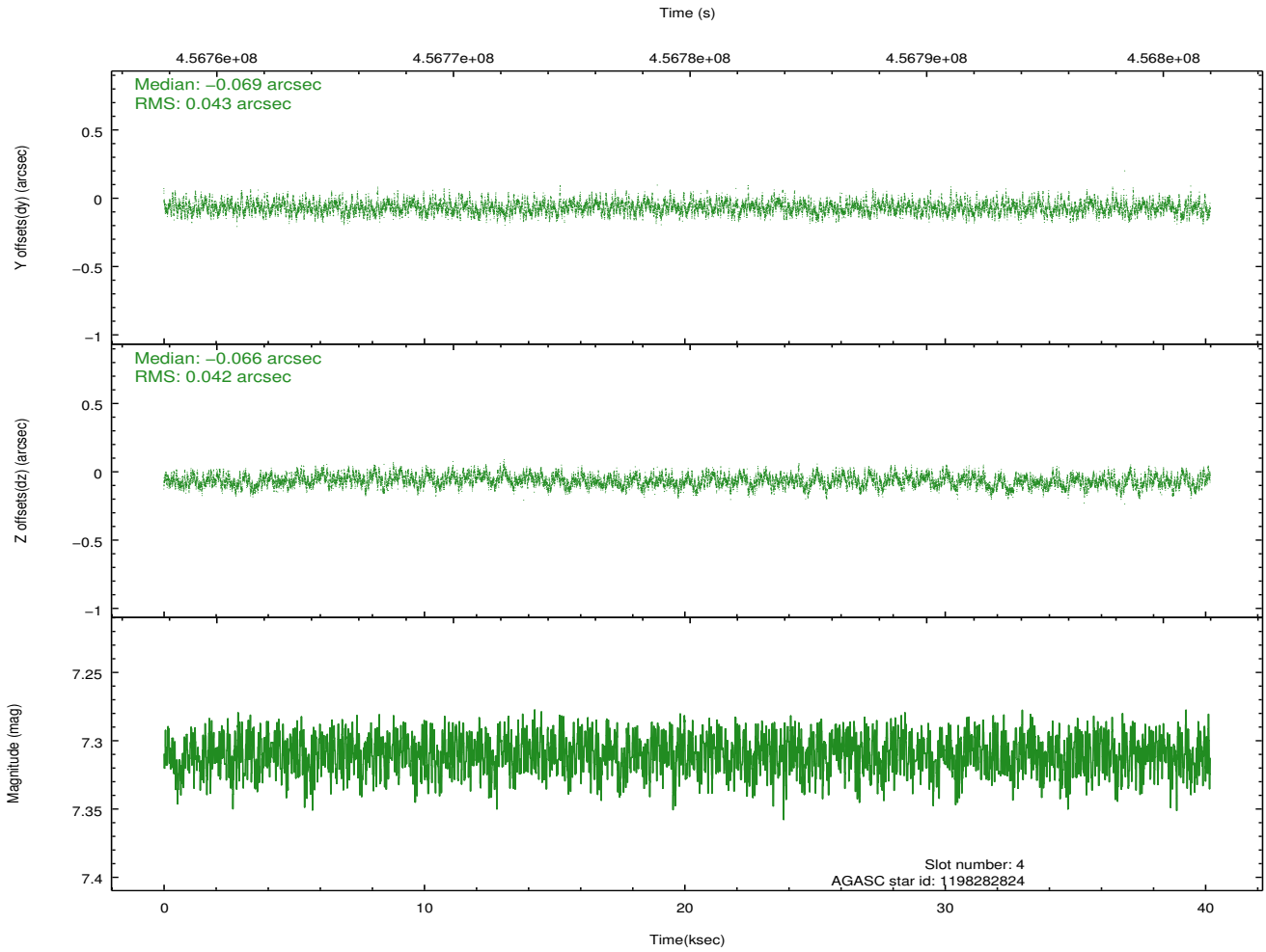
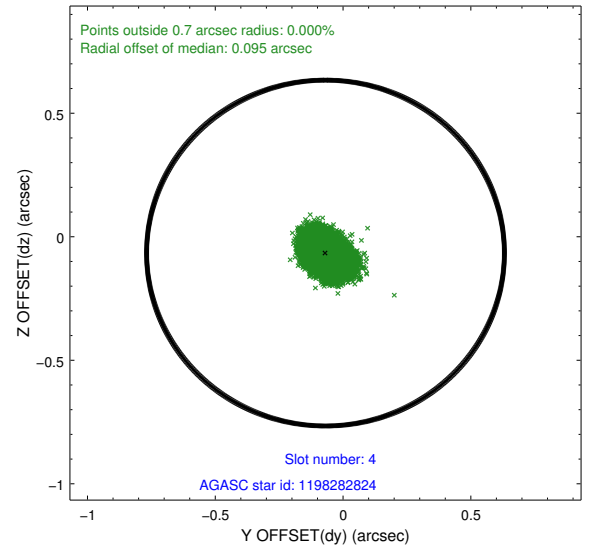
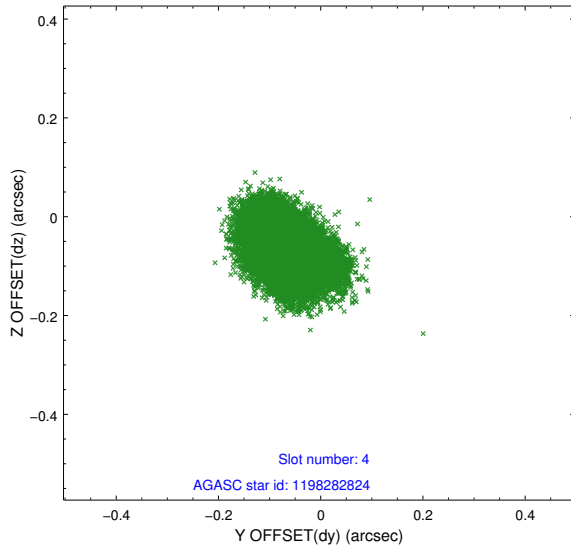
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.95	9802	-0.122	-0.094	0.019	0.027	0.000000	0.000000	-764.25	-1860.93
1	FID	ACIS-S-4	7.03	9802	0.254	0.084	0.025	0.037	0.000000	0.000000	2149.42	47.65
2	FID	ACIS-S-5	7.07	9802	-0.167	0.019	0.018	0.028	0.000000	0.000000	-1817.09	41.33
3	GUIDE	1198272400	9.17	19585	0.107	0.122	0.094	0.155	20.411923	-73.620598	-993.05	-741.66
4	GUIDE	1198282824	7.31	19602	-0.069	-0.066	0.065	0.103	18.044095	-73.907062	-945.49	1853.07
5	GUIDE	1198282744	9.00	19540	-0.010	-0.113	0.075	0.123	17.028326	-73.013356	2423.66	1565.53
6	GUIDE	1198276744	8.59	19594	0.026	-0.050	0.074	0.123	19.489008	-74.153493	-2337.75	908.18
7	GUIDE	1198269920	8.27	19597	-0.061	0.109	0.095	0.145	20.316466	-73.033728	955.38	-1563.97

2.4 Star Slots

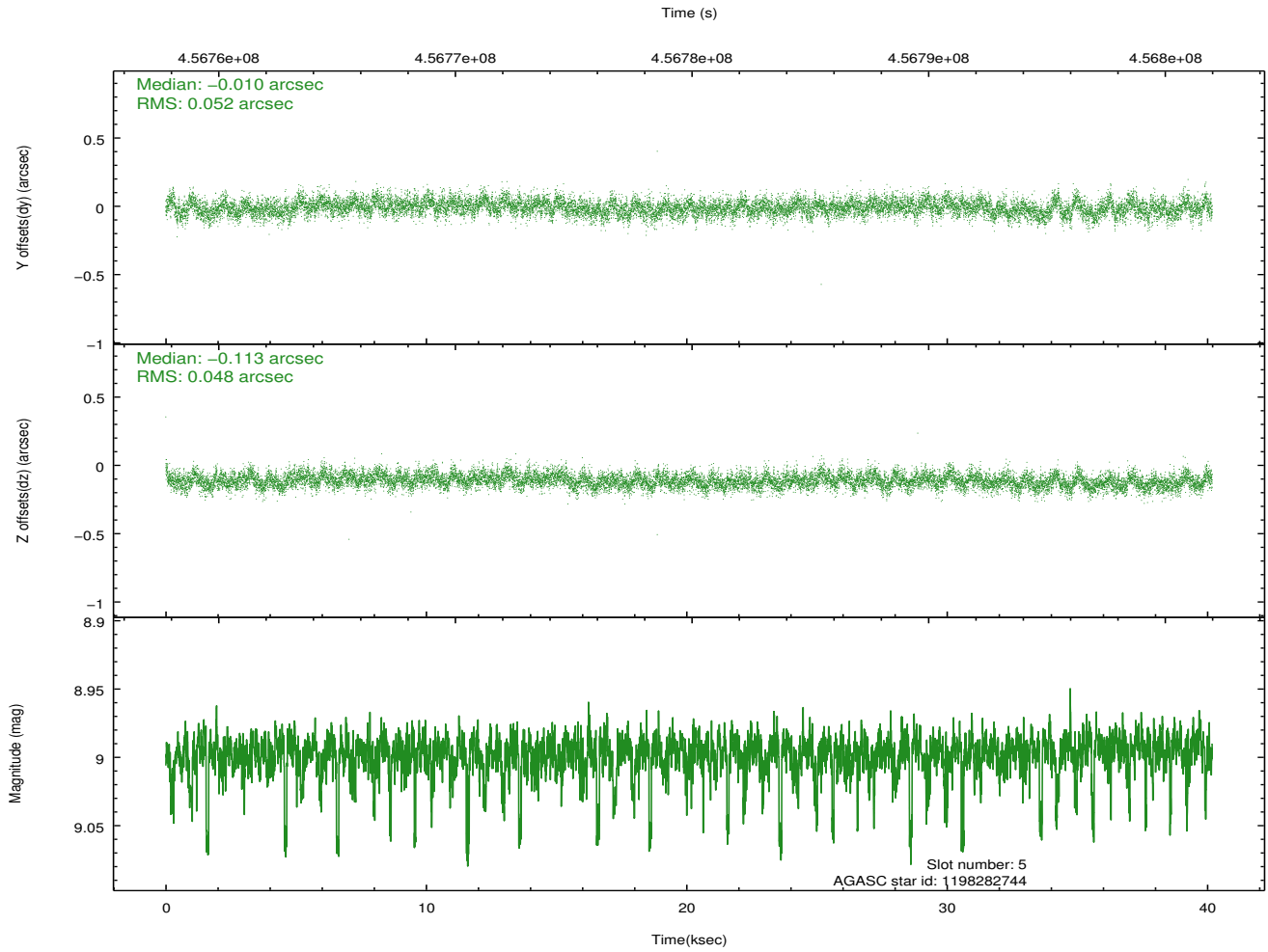
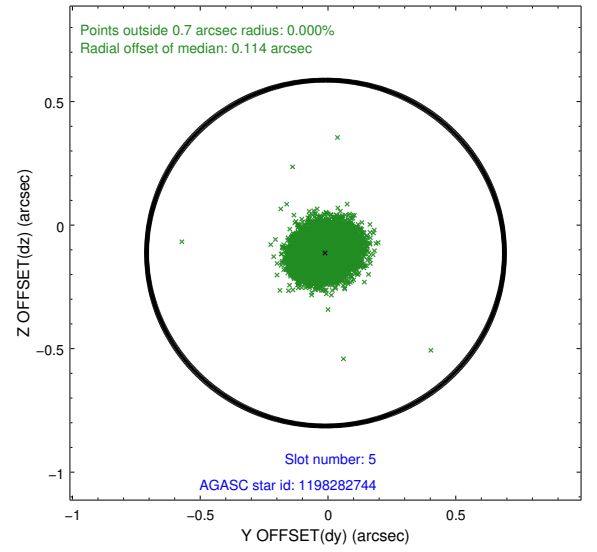
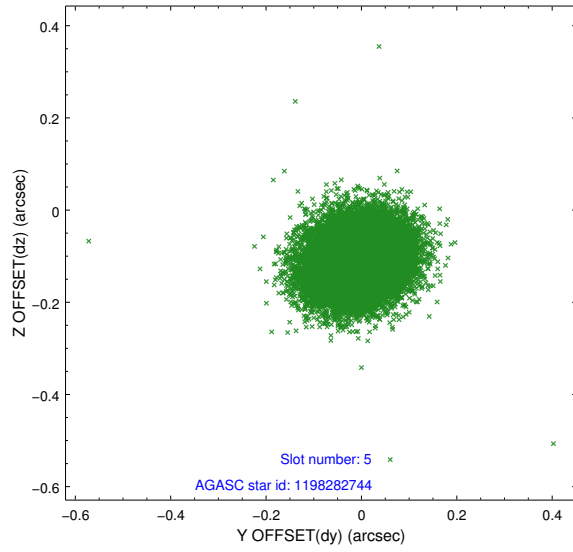
2.4.1 Slot 3



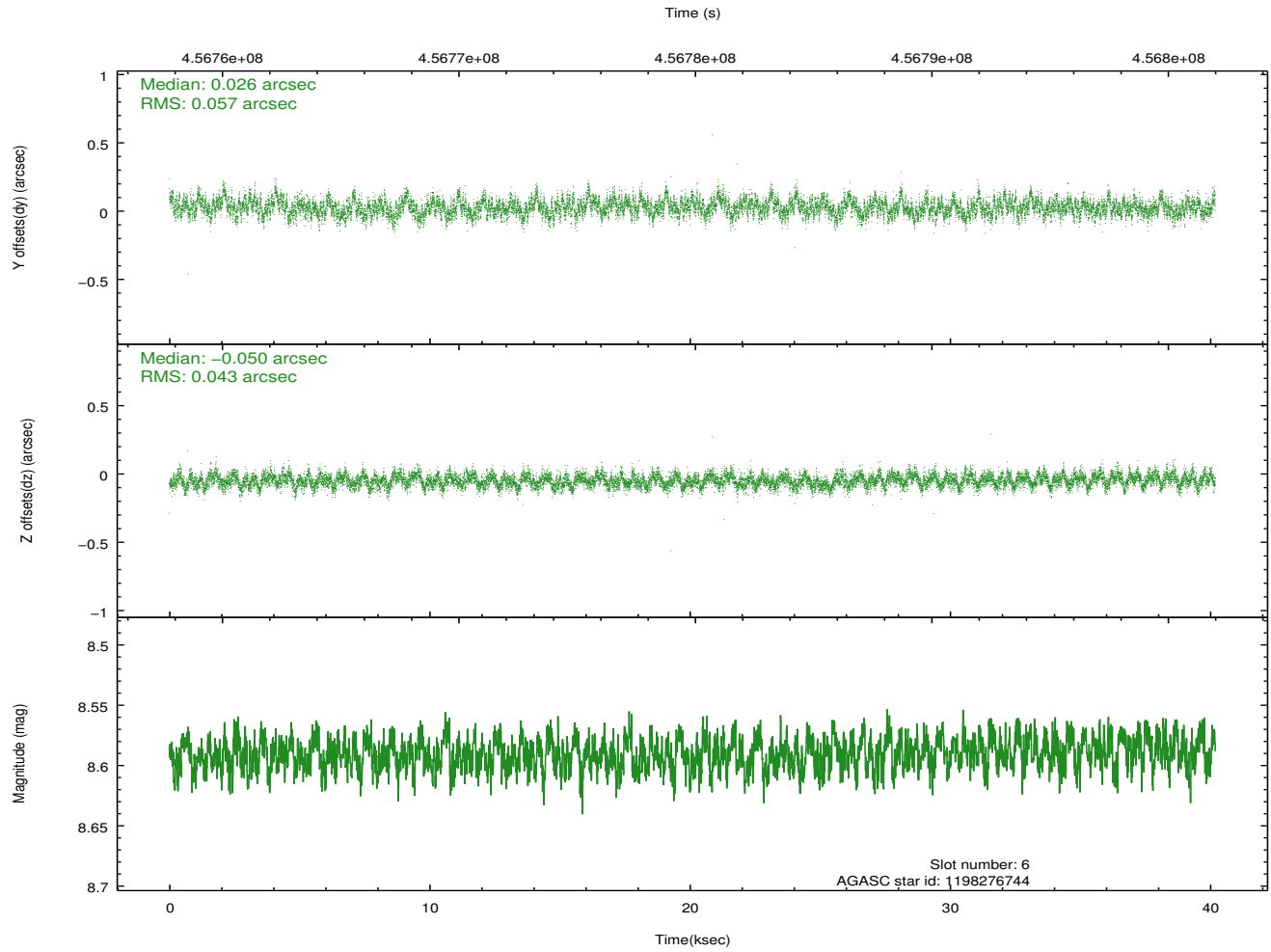
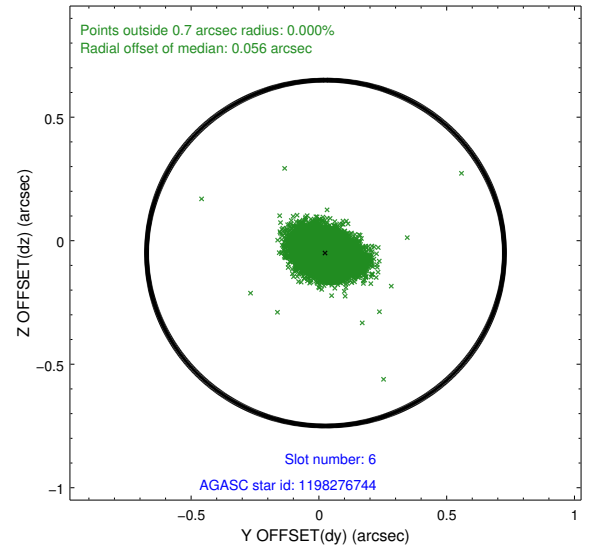
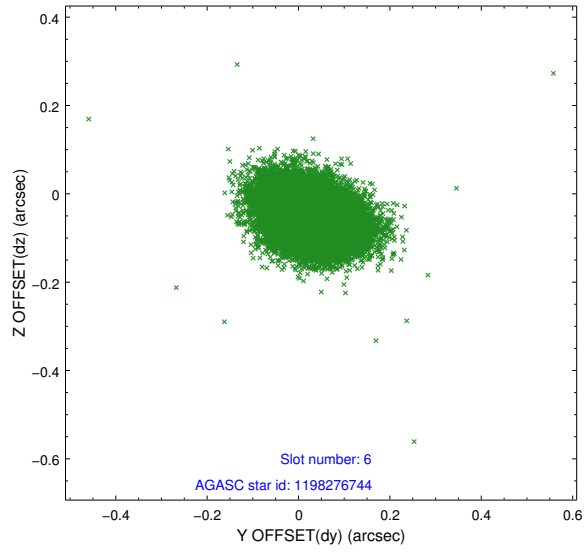
2.4.2 Slot 4



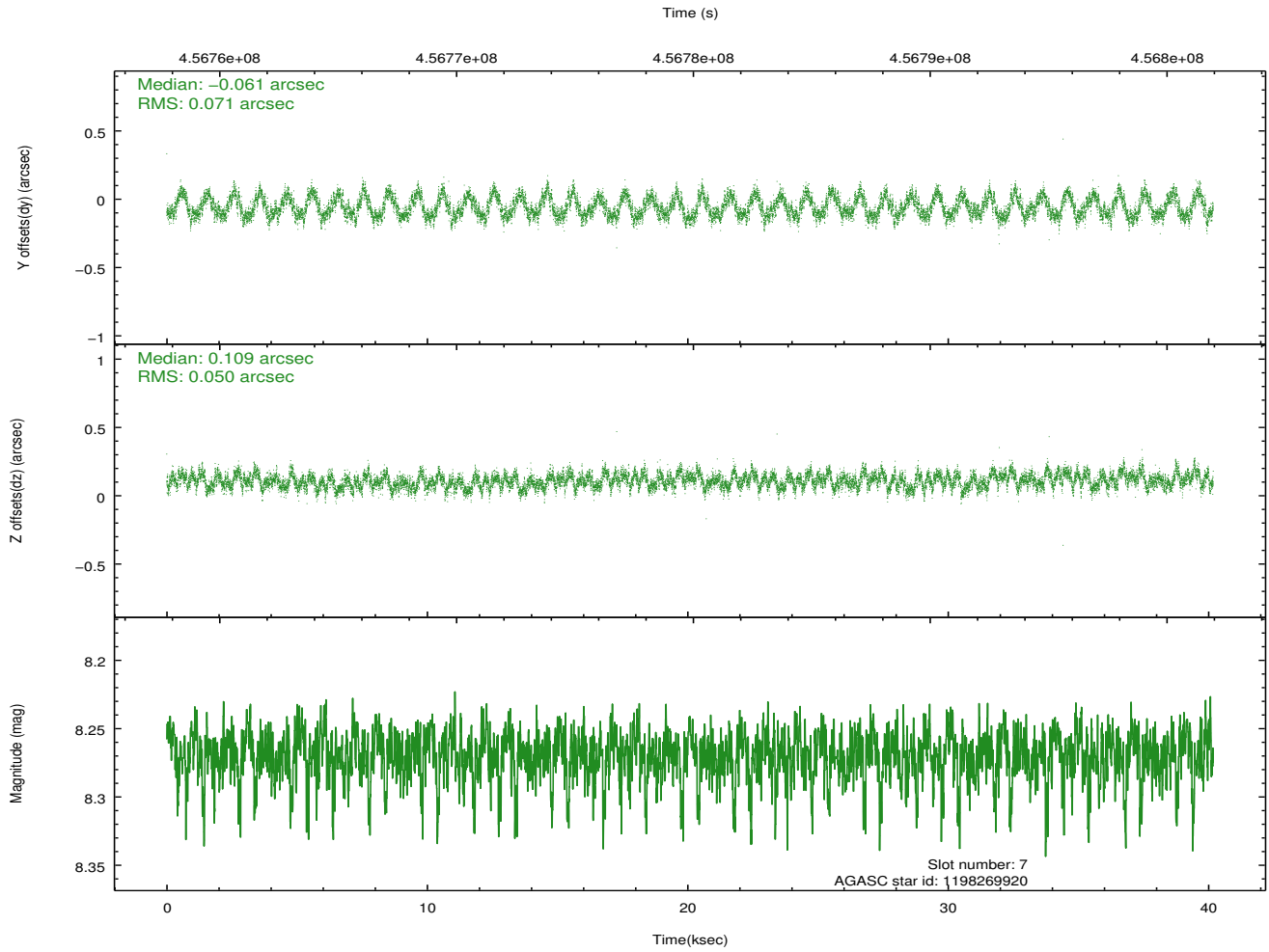
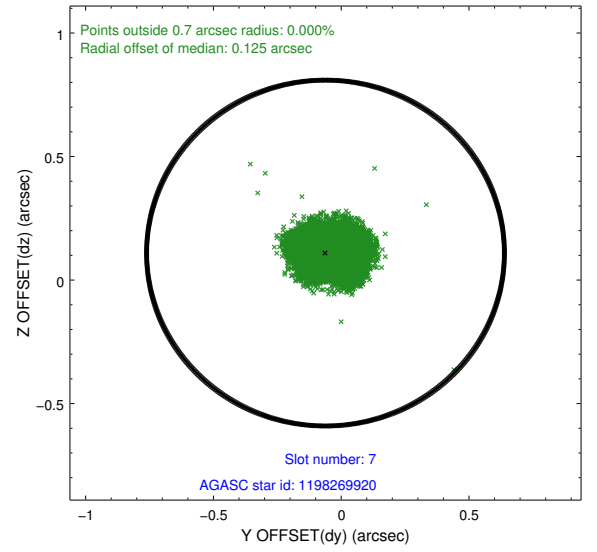
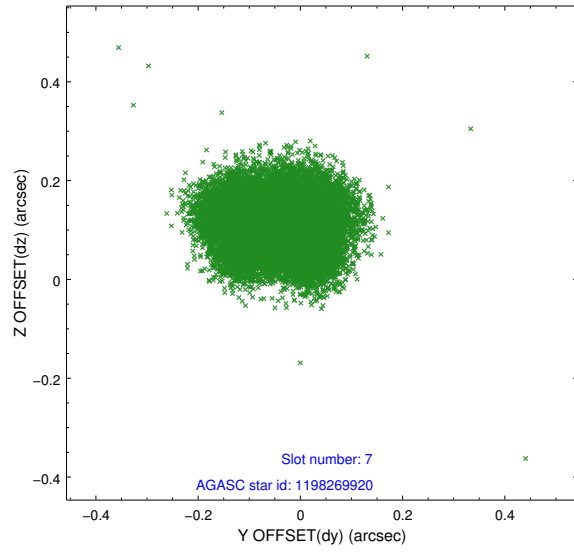
2.4.3 Slot 5



2.4.4 Slot 6

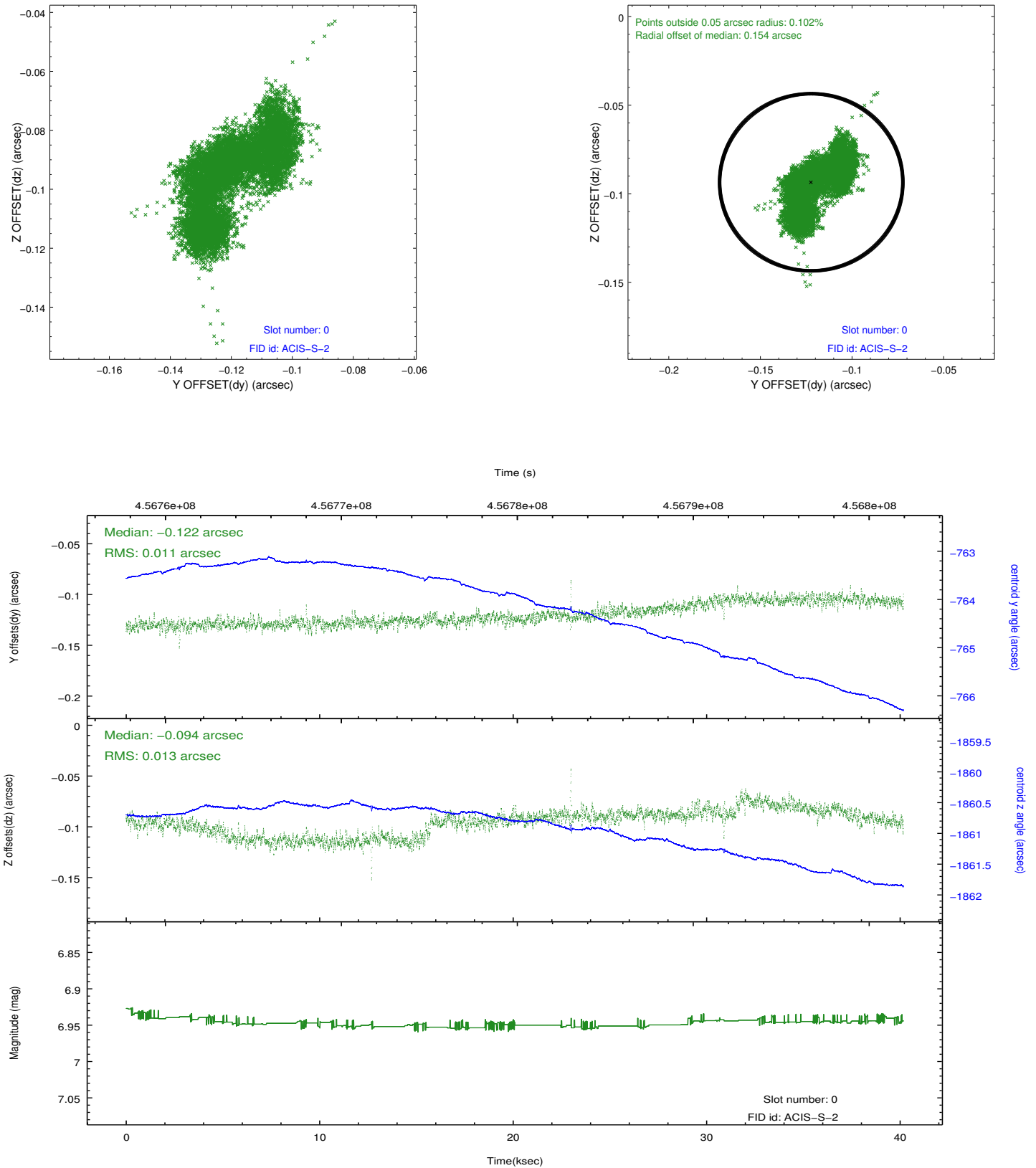


2.4.5 Slot 7

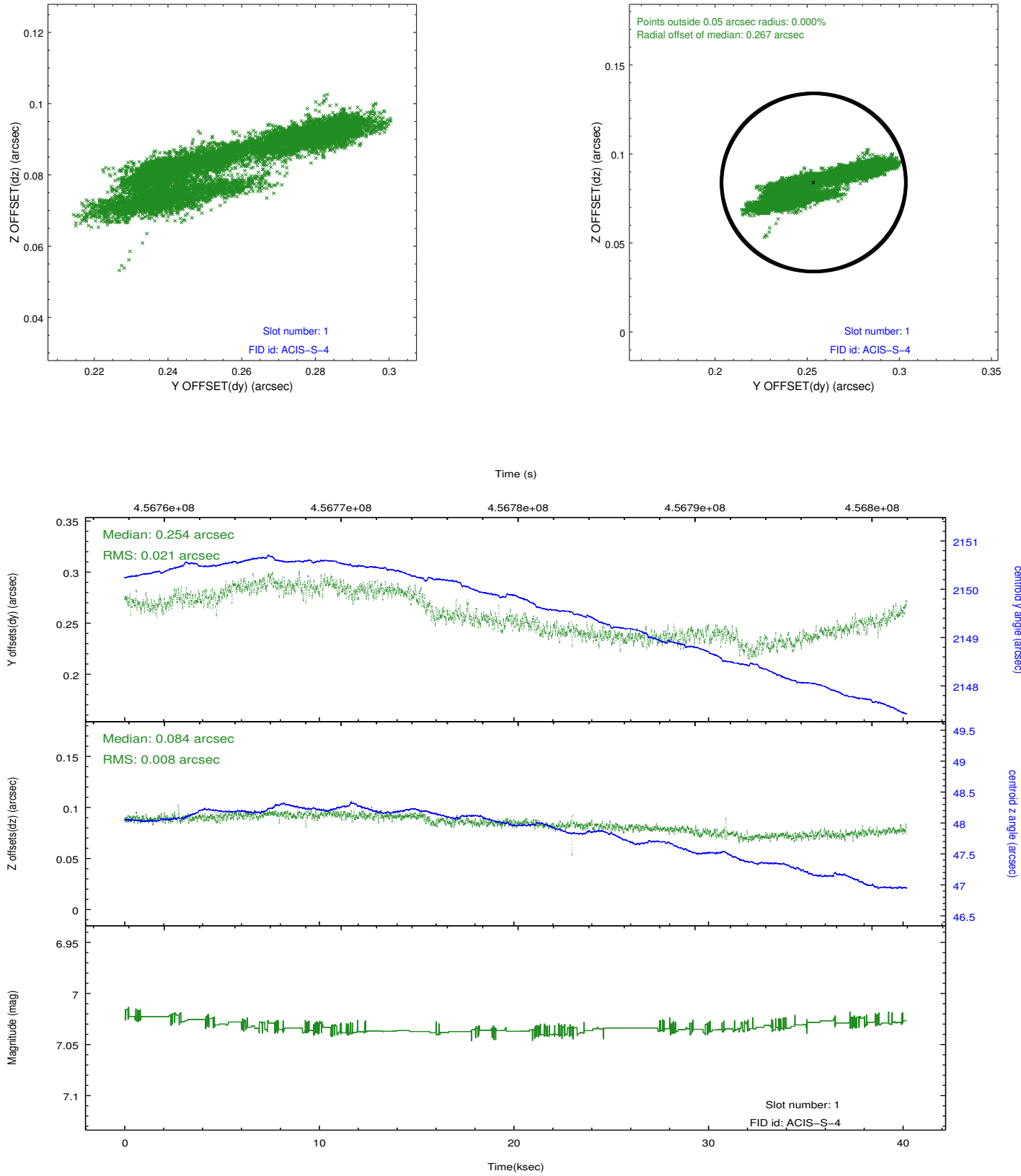


2.5 FID Slots

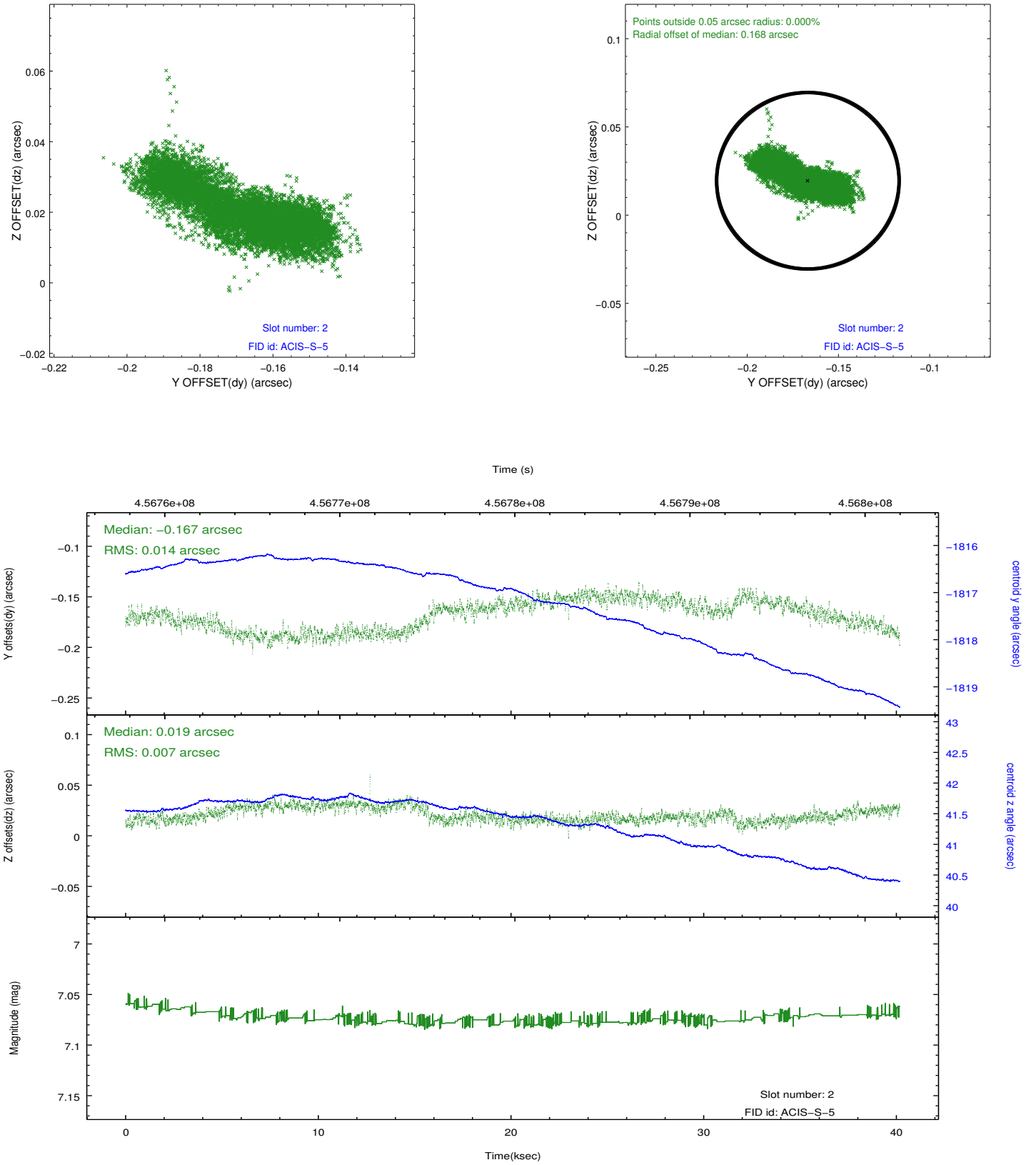
2.5.1 Slot 0



2.5.2 Slot 1

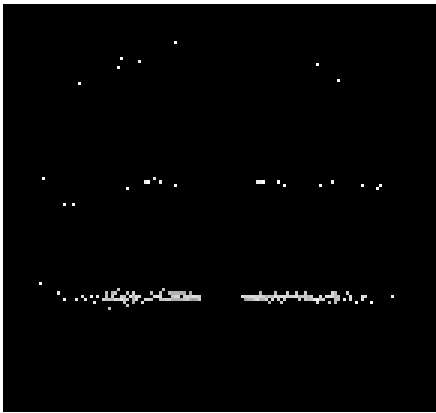


2.5.3 Slot 2

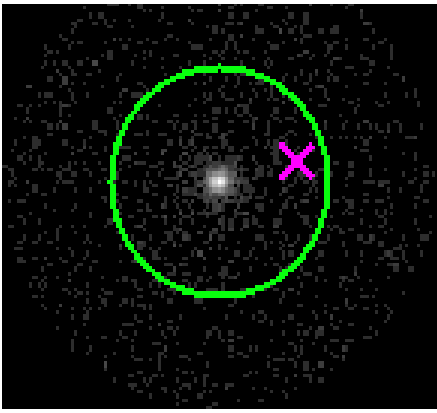


3 Gratings

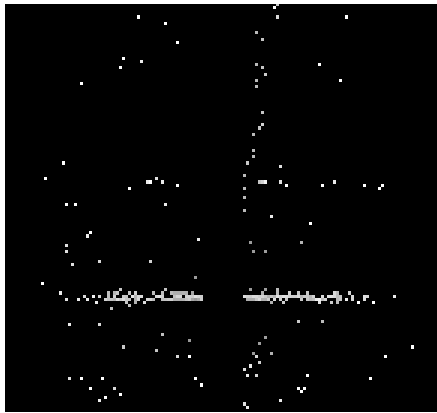
3.1 HEG Arm



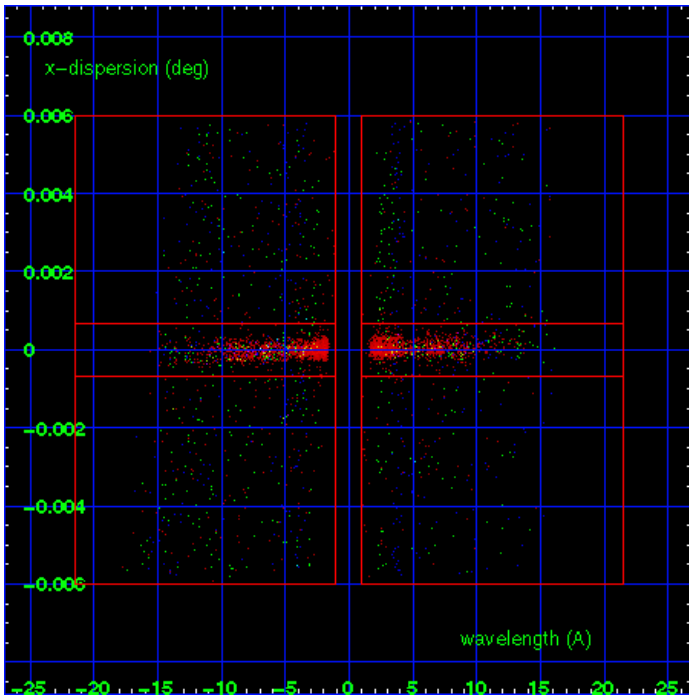
HEG Order Sort 123



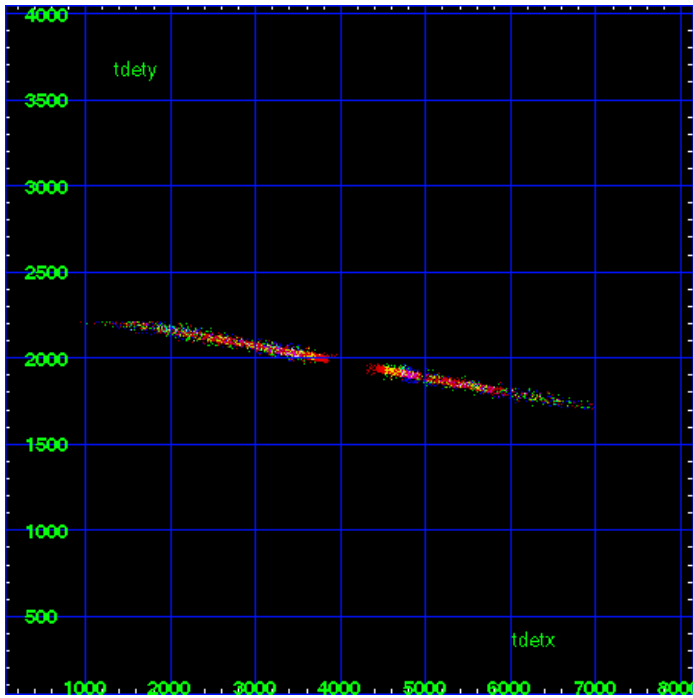
HEG Zero Order



HEG Order Sort ALL

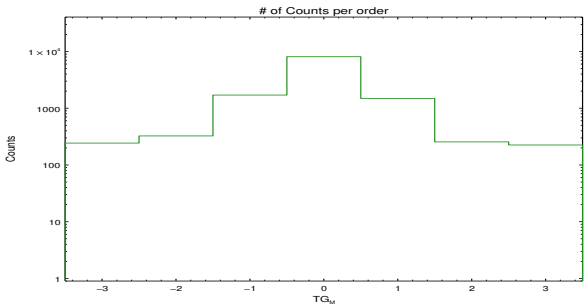


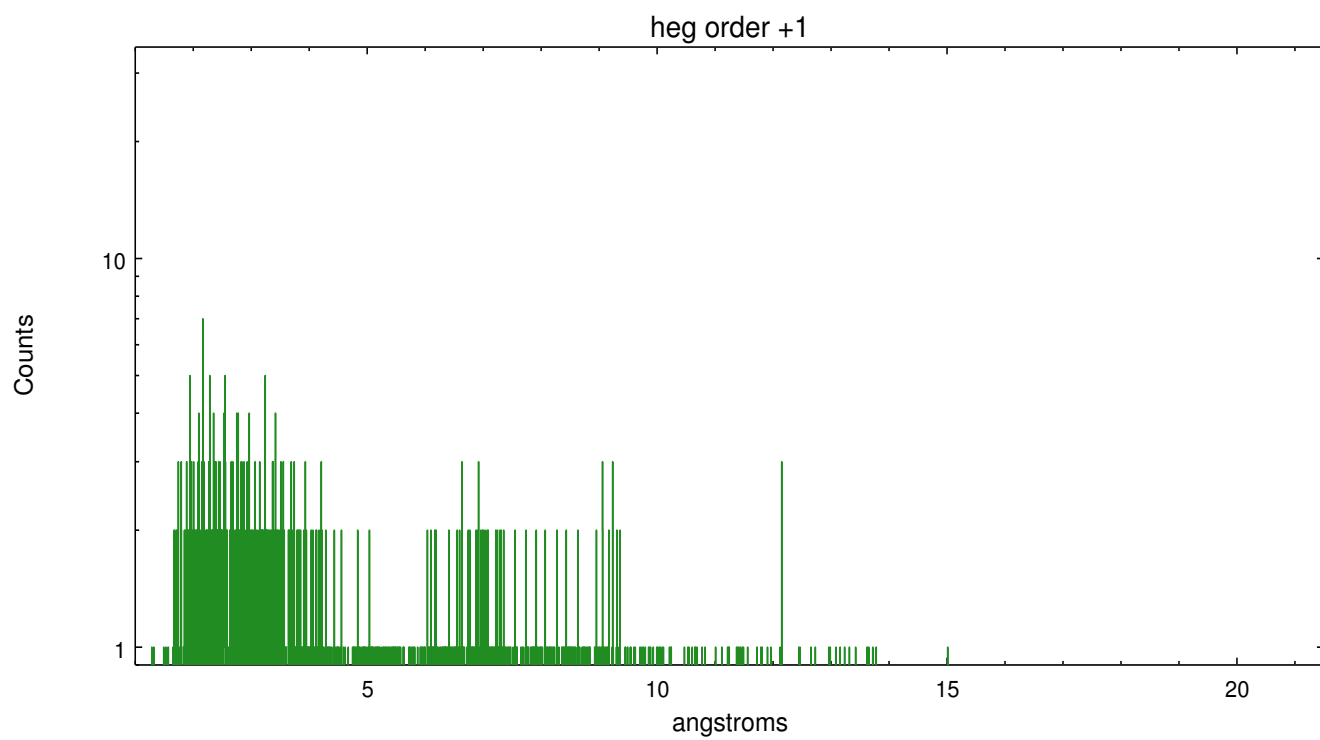
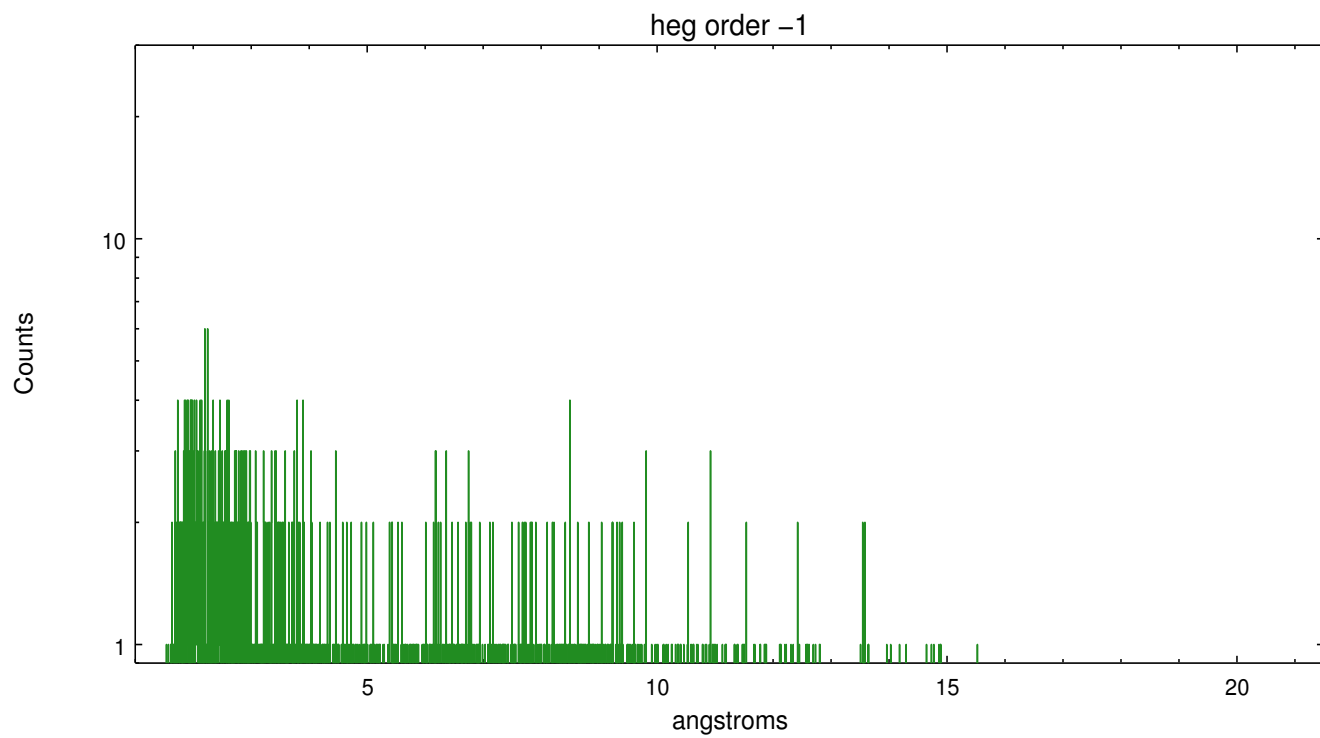
Spot Image HEG



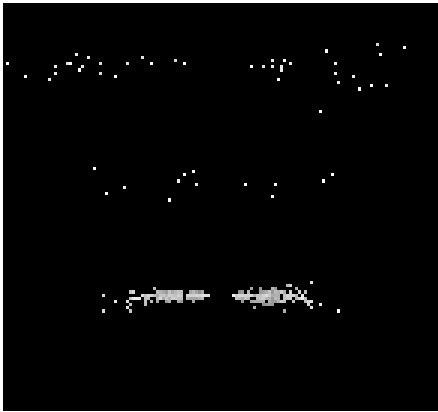
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	243	325	1706	8090	1490	255	225

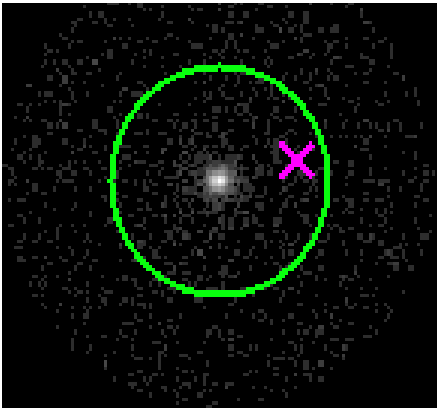




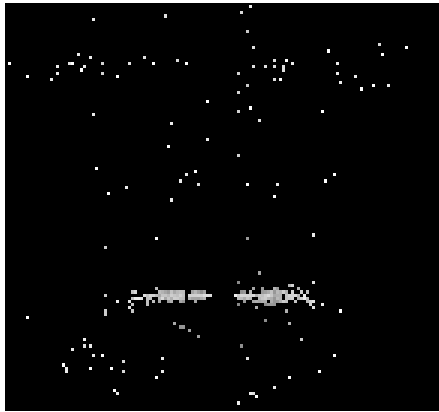
3.2 MEG Arm



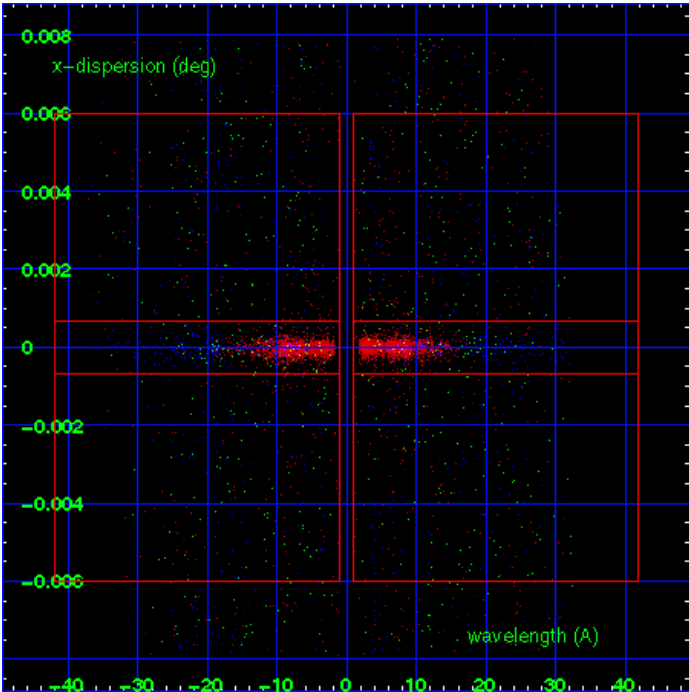
MEG Order Sort 123



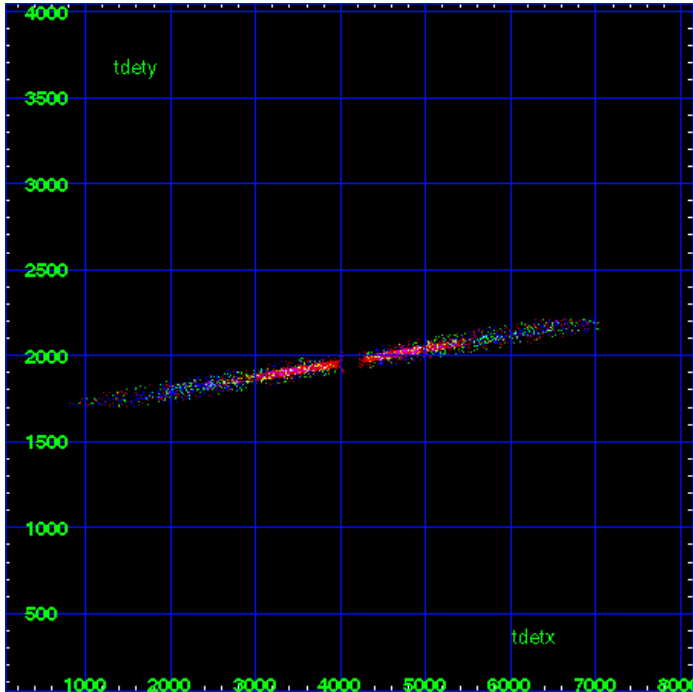
MEG Zero Order



MEG Order Sort ALL

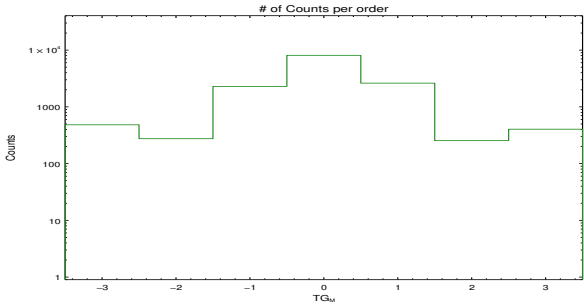


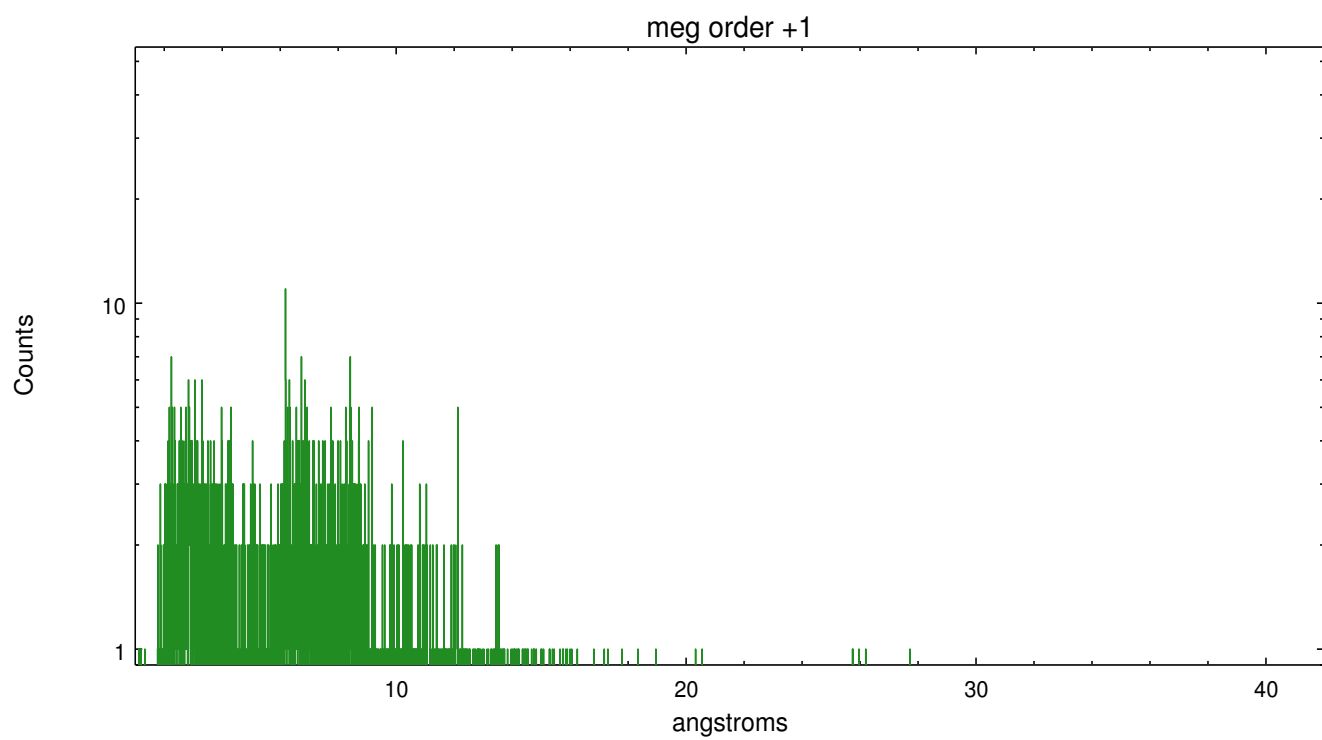
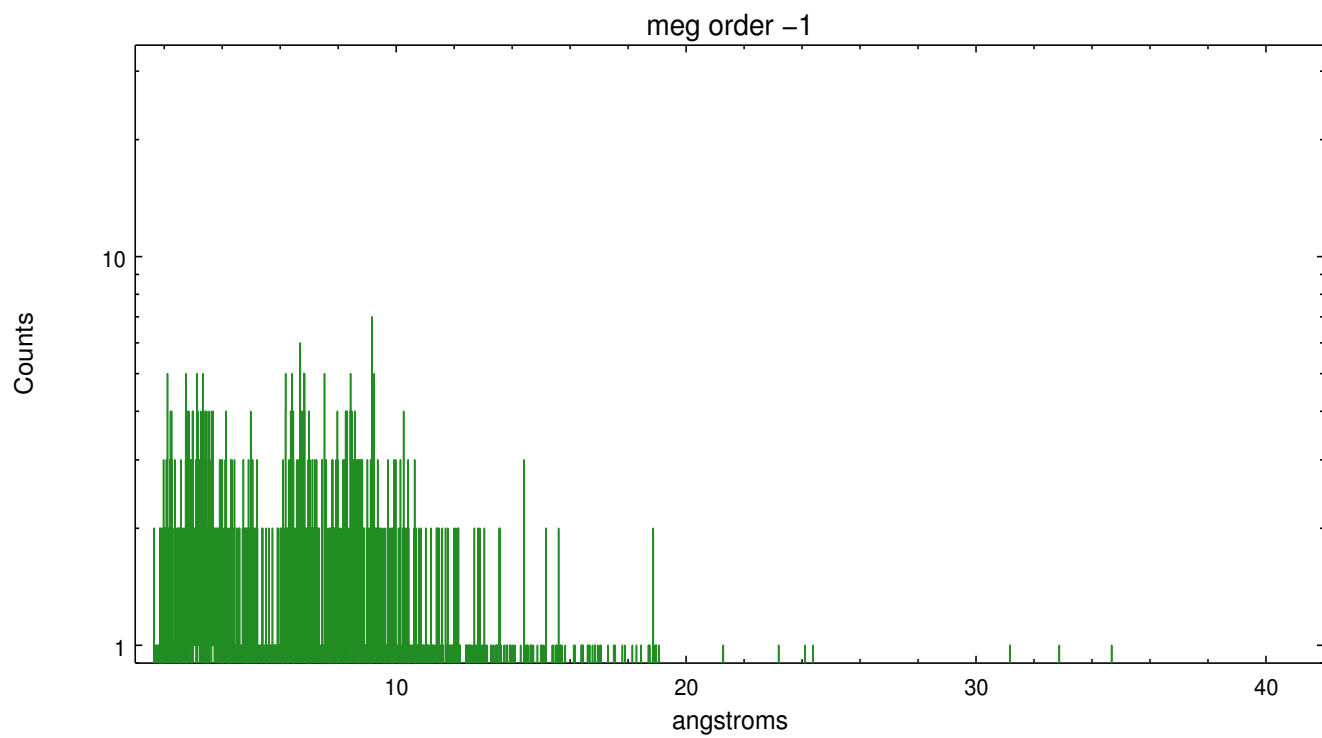
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	483	275	2296	8090	2618	254	404





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.182899718285

A.2 Comments