

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 8484 - L2 Version 2
Chandra X-Ray Center

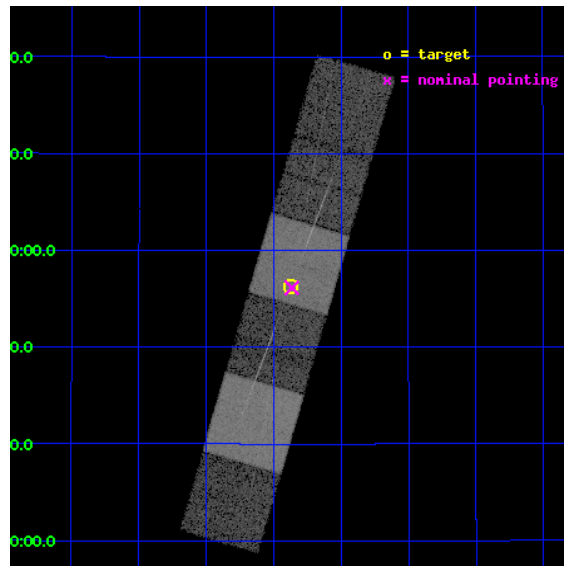
L2 Processing Date : Apr 14 2012

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1 Front

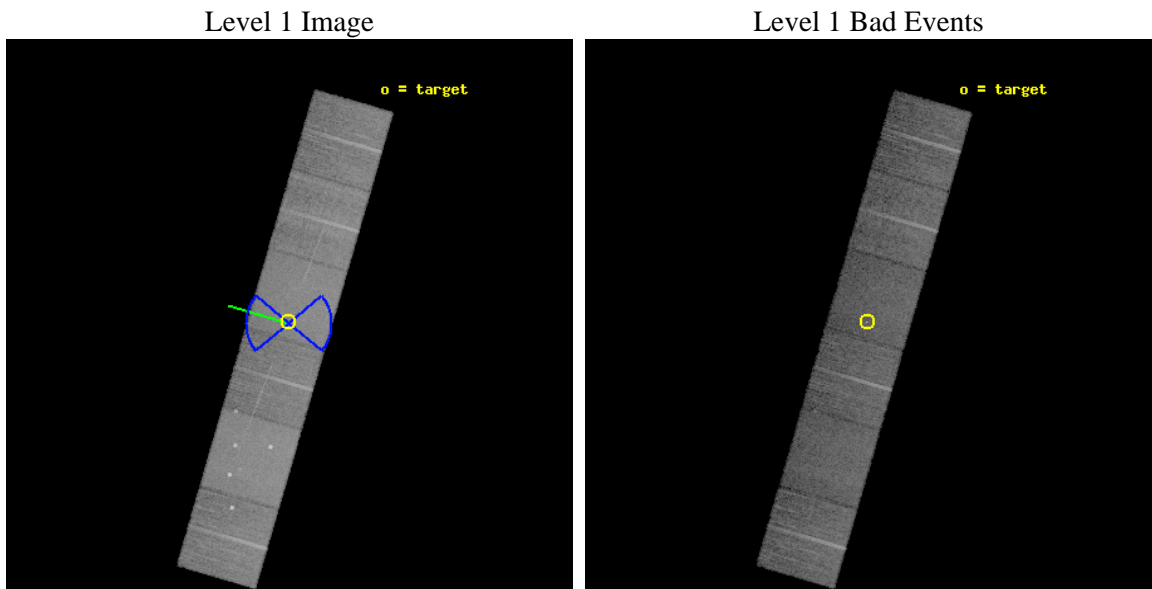
seq_num	200381	Sequence number
obs_id	8484	Observation id
title	Probing spectral changes in variable active M dwarfs	Proposal titl
observer	Dr. Jan-Uwe Ness	Principal investigator
object	EQ Peg	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	352.9675	Observer's specified target RA [deg]
dec_targ	19.93725	Observer's specified target Dec [deg]
ra_nom	352.9661577175	Nominal RA [deg]
dec_nom	19.935582686538	Nominal Dec [deg]
roll_nom	286.26706964257	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10946.16188103	Sum of GTIs [s]
livetime	10807.554988305	Livetime [s]
ontime4	10946.202921033	Sum of GTIs [s]
ontime5	10946.120841026	Sum of GTIs [s]
ontime6	10946.079801023	Sum of GTIs [s]
ontime7	10946.16188103	Sum of GTIs [s]
ontime8	10946.03876102	Sum of GTIs [s]
ontime9	10945.997721016	Sum of GTIs [s]
l2events	165676	Number of level 2 events



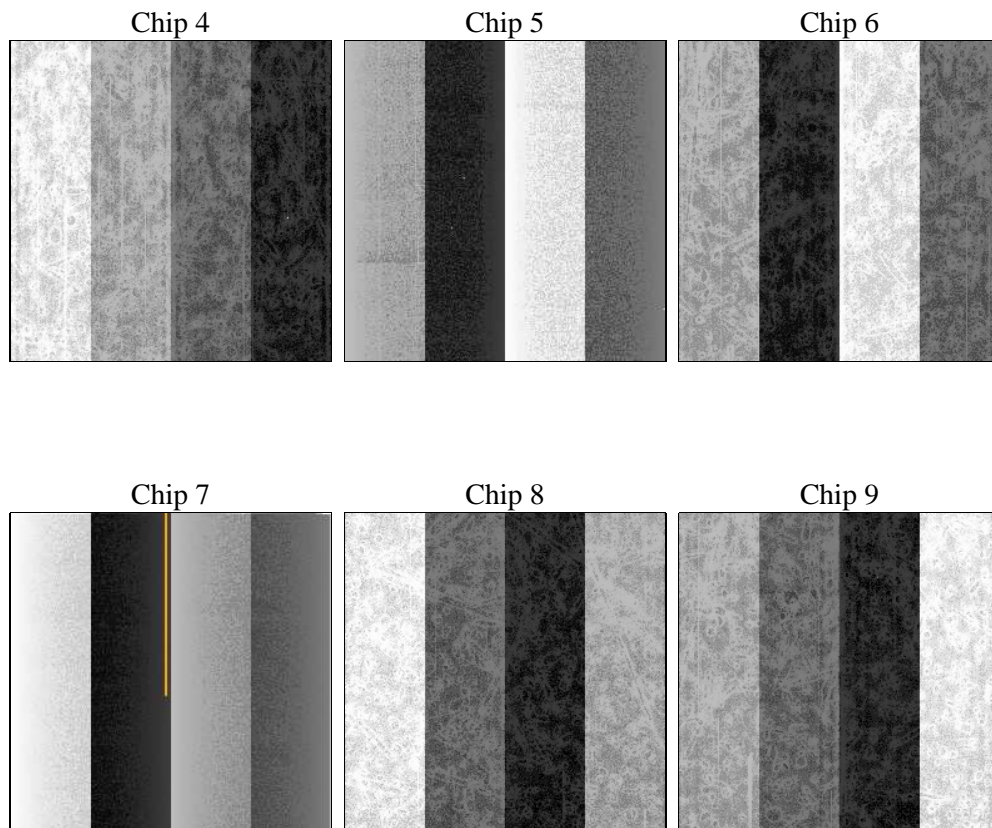
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	10946.16188103	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	10946.202921033	Sum of GTIs [s]
date	2012-04-14T05:48:42	Date and time of file creation	ontime5	10946.120841026	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10946.079801023	Sum of GTIs [s]
			ontime7	10946.16188103	Sum of GTIs [s]
			ontime8	10946.03876102	Sum of GTIs [s]
			ontime9	10945.997721016	Sum of GTIs [s]
			l1events	736854	Number of level 1 events

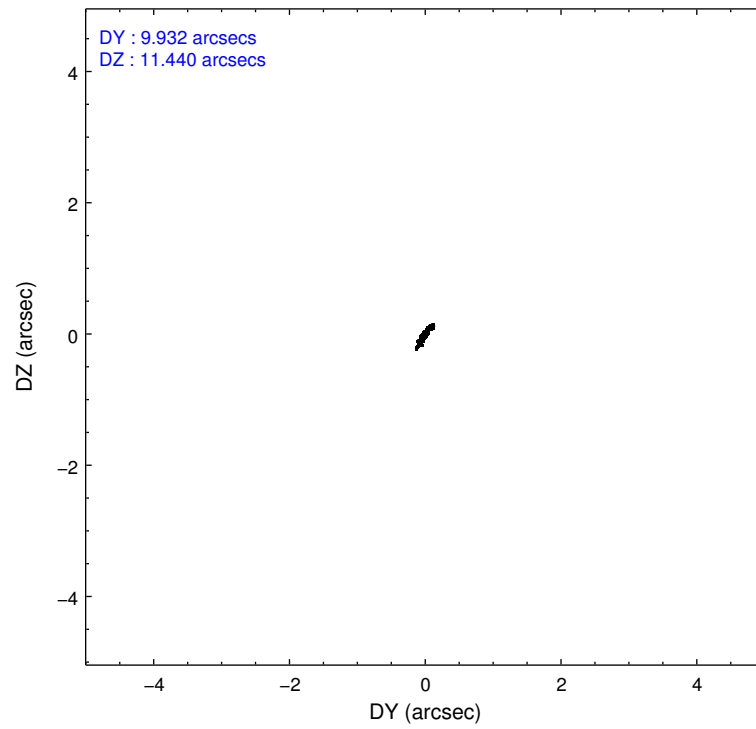
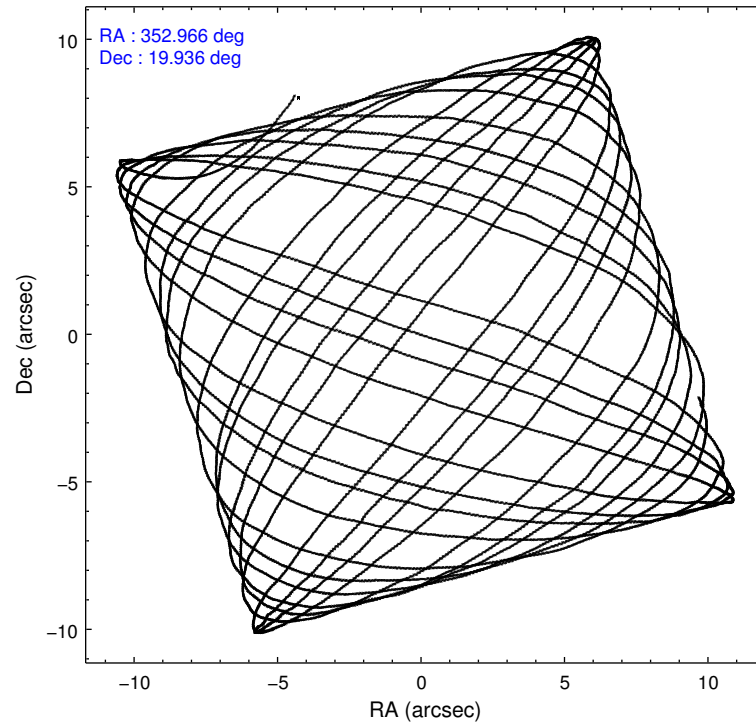
2.1.4 Events

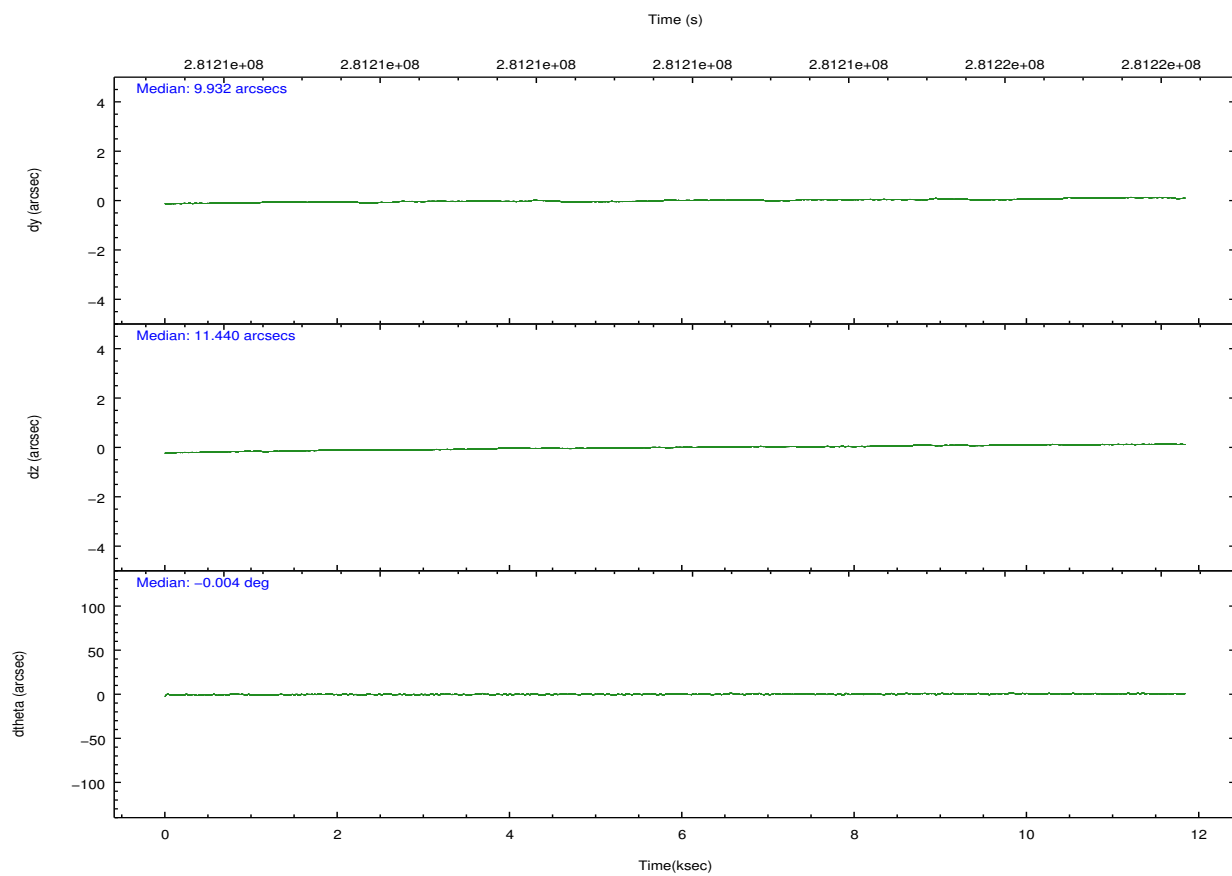
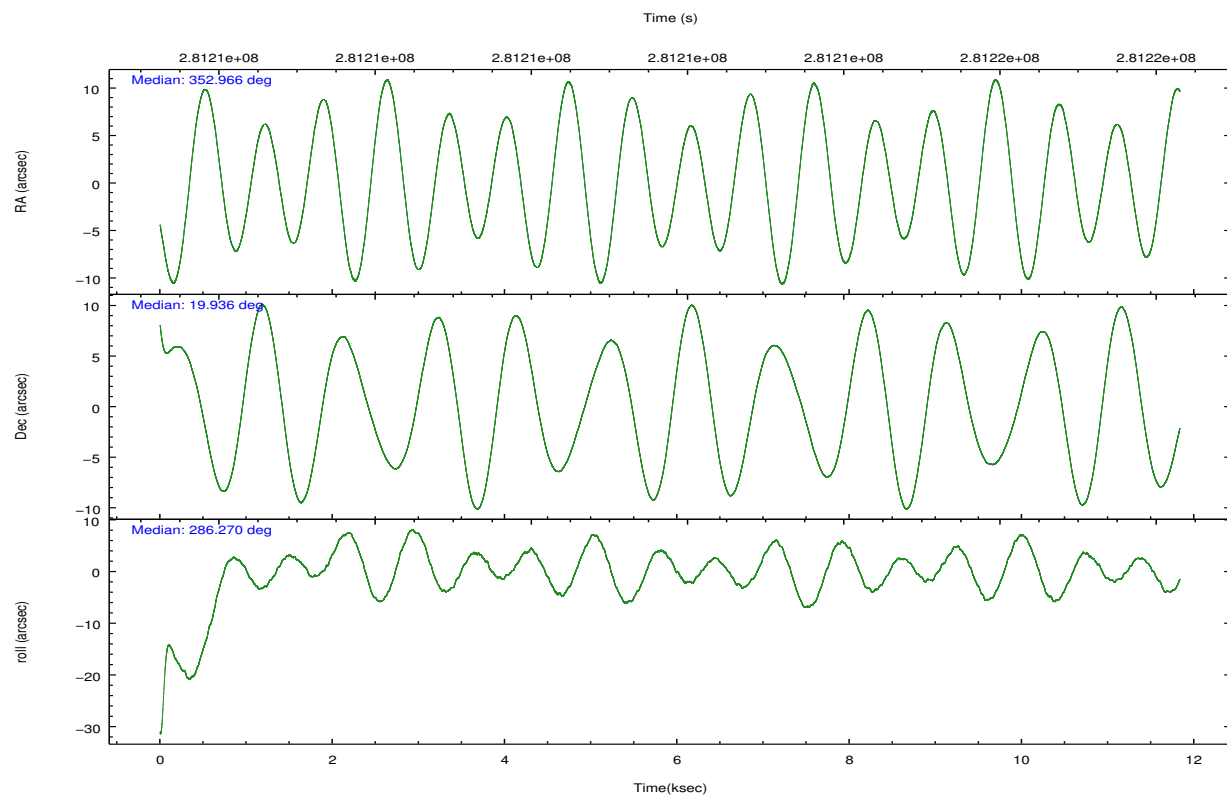
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	114252	154972	103865	137457	125617	100691	grade 0 events	7898	9816	5436	5289	9514	5107
rejected events	99511	82704	90883	79587	97500	88390		6%	6%	5%	3%	7%	5%
rejected %	87%	53%	87%	57%	77%	87%	grade 1 events	104	346	58	201	98	78
								0%	0%	0%	0%	0%	0%
							grade 2 events	2528	21309	2816	11786	6003	2403
								2%	13%	2%	8%	4%	2%
							grade 3 events	1167	2260	1166	4914	2820	1151
								1%	1%	1%	3%	2%	1%
							grade 4 events	1222	2128	1153	5083	2659	1168
								1%	1%	1%	3%	2%	1%
							grade 5 events	4470	10173	4459	12690	5948	4771
								3%	6%	4%	9%	4%	4%
							grade 6 events	1939	36790	2422	30831	7136	2487
								1%	23%	2%	22%	5%	2%
							grade 7 events	94924	72150	86355	66663	91439	83526
								83%	46%	83%	48%	72%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	352.944961	352.9661577174986	Subarray requested	NONE	NONE
[deg] Pointing Dec	19.954148	19.93558268653802	Alternating exposures requested	N	N
[deg] Pointing Roll	286.117688	286.2670696425726	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	90.000000	90.000000			
[deg] Roll tolerance	40.000000	40.000000			
Roll constraint allows 180D rotation	Y	Y			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.145094680475			
[mm] SIM translation stage offset	0	0.01257209746719923			
[s] Observation start time (MET)	281206695.184000	281205263.52301			
Observation start date	2006-11-29T16:57:10	2006-11-29T16:34:23			
[s] Observation end time (MET)	281217695.184000	281218149.82362			
Observation end date	2006-11-29T20:00:30	2006-11-29T20:09:09			
Read mode	TIMED	TIMED			

2.3 Aspect



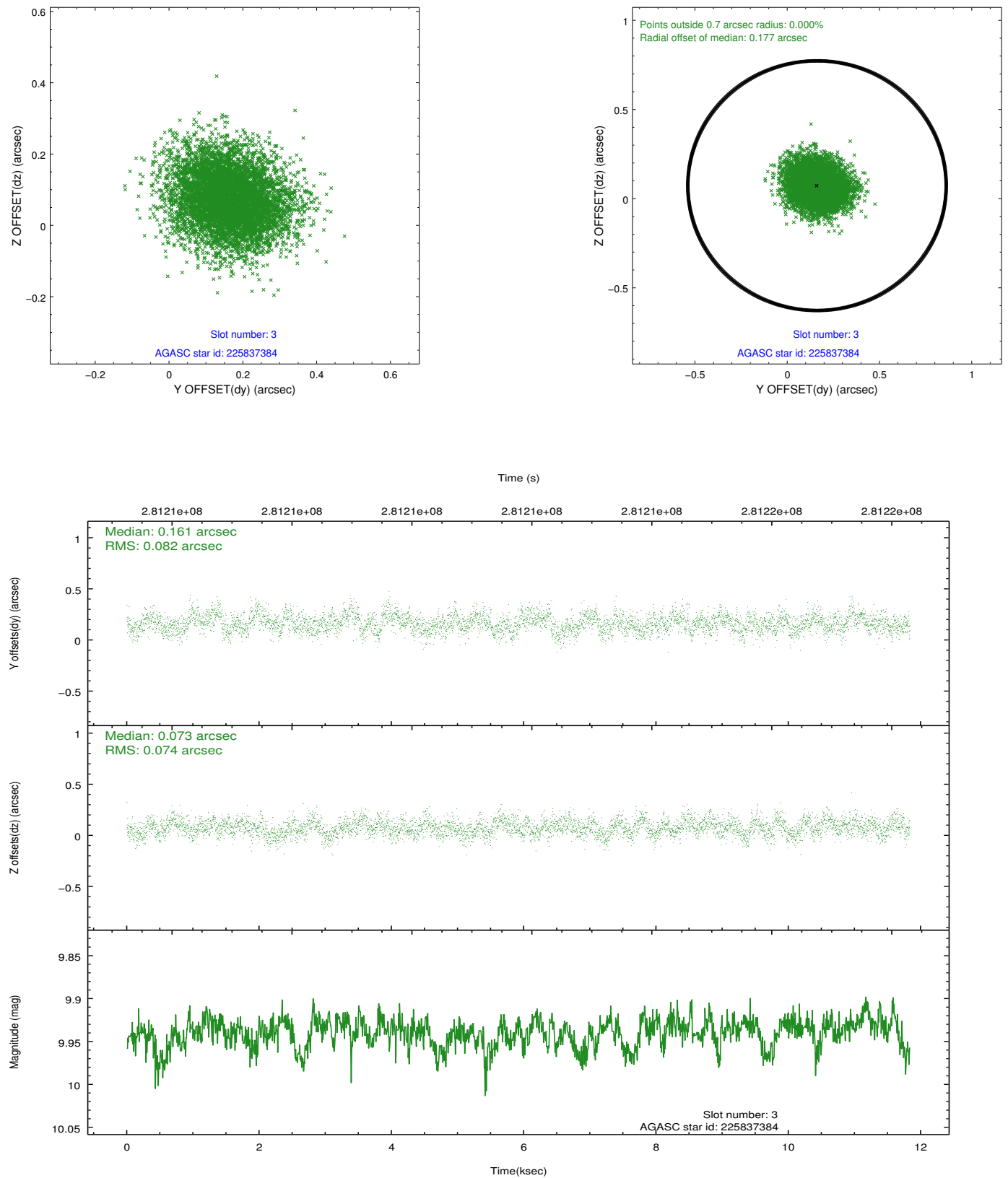


Slot Statistics

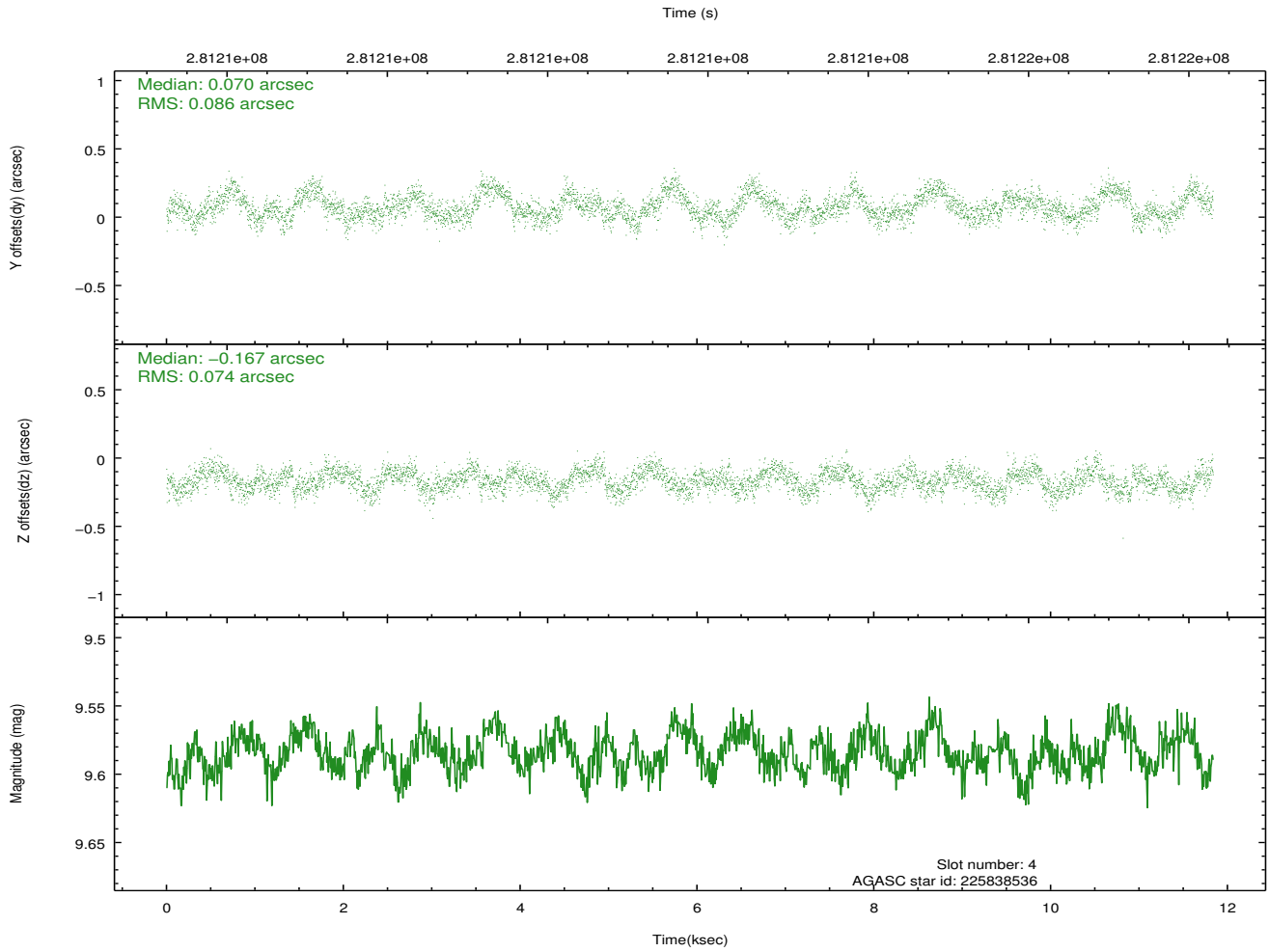
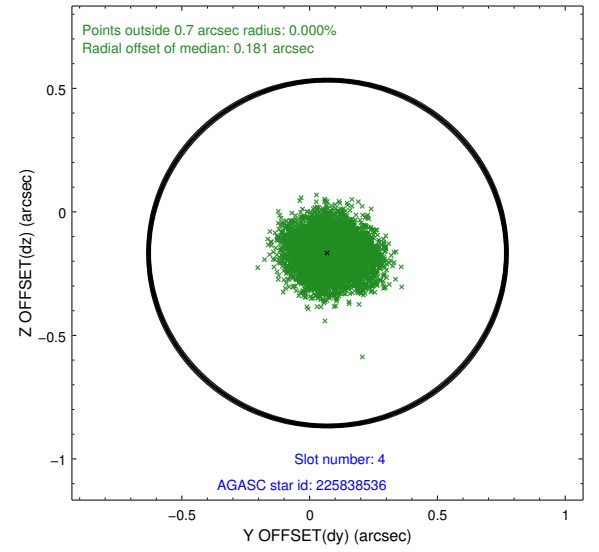
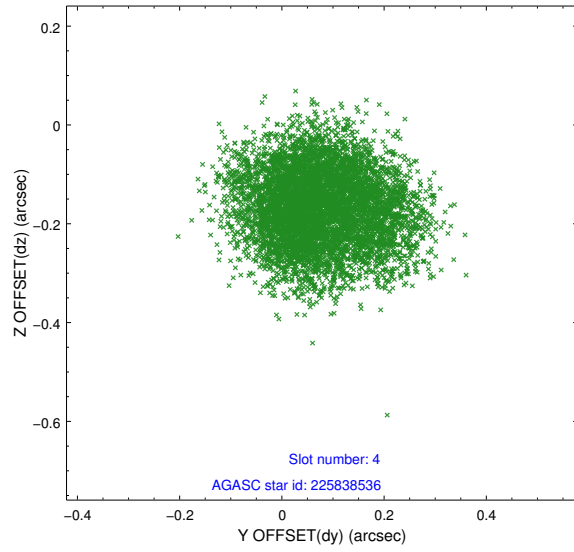
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2886	-0.056	-0.034	0.007	0.011	0.000000	0.000000	-762.80	-1732.65
1	FID	ACIS-S-4	7.22	2887	0.175	0.036	0.005	0.010	0.000000	0.000000	2150.50	175.49
2	FID	ACIS-S-5	7.23	2887	-0.150	0.007	0.007	0.011	0.000000	0.000000	-1815.21	169.58
3	GUIDE	225837384	9.94	5764	0.161	0.073	0.117	0.192	352.987146	19.537840	1479.85	-278.49
4	GUIDE	225838536	9.59	5769	0.070	-0.167	0.122	0.191	353.052122	19.704878	963.34	99.63
5	GUIDE	225843792	9.27	5766	-0.024	0.031	0.099	0.155	353.581433	19.686286	1522.07	1806.12
6	GUIDE	226240768	8.88	5773	-0.072	0.060	0.094	0.145	353.030892	20.523748	-1889.19	848.16
7	GUIDE	226240232	8.83	5773	-0.144	0.003	0.070	0.113	352.730108	20.581655	-2372.19	-67.89

2.4 Star Slots

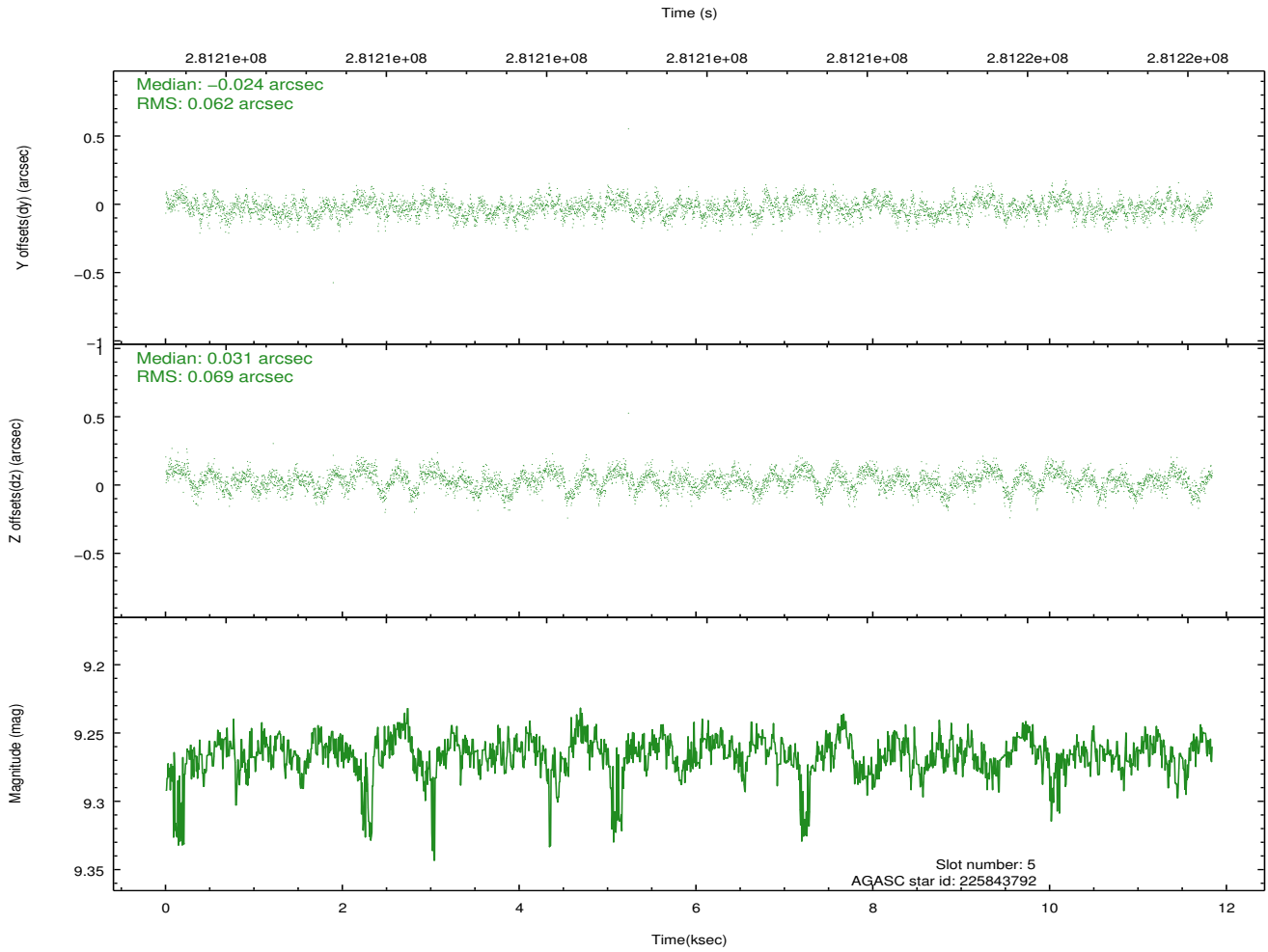
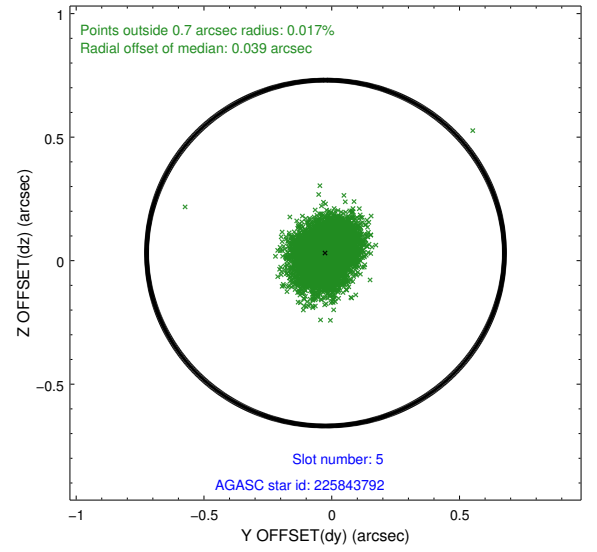
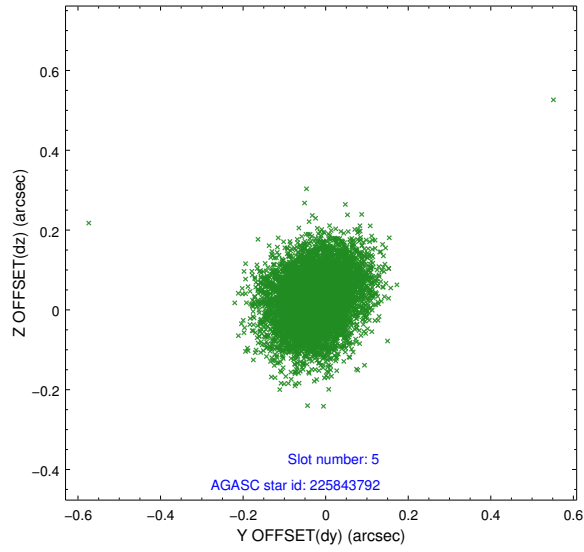
2.4.1 Slot 3



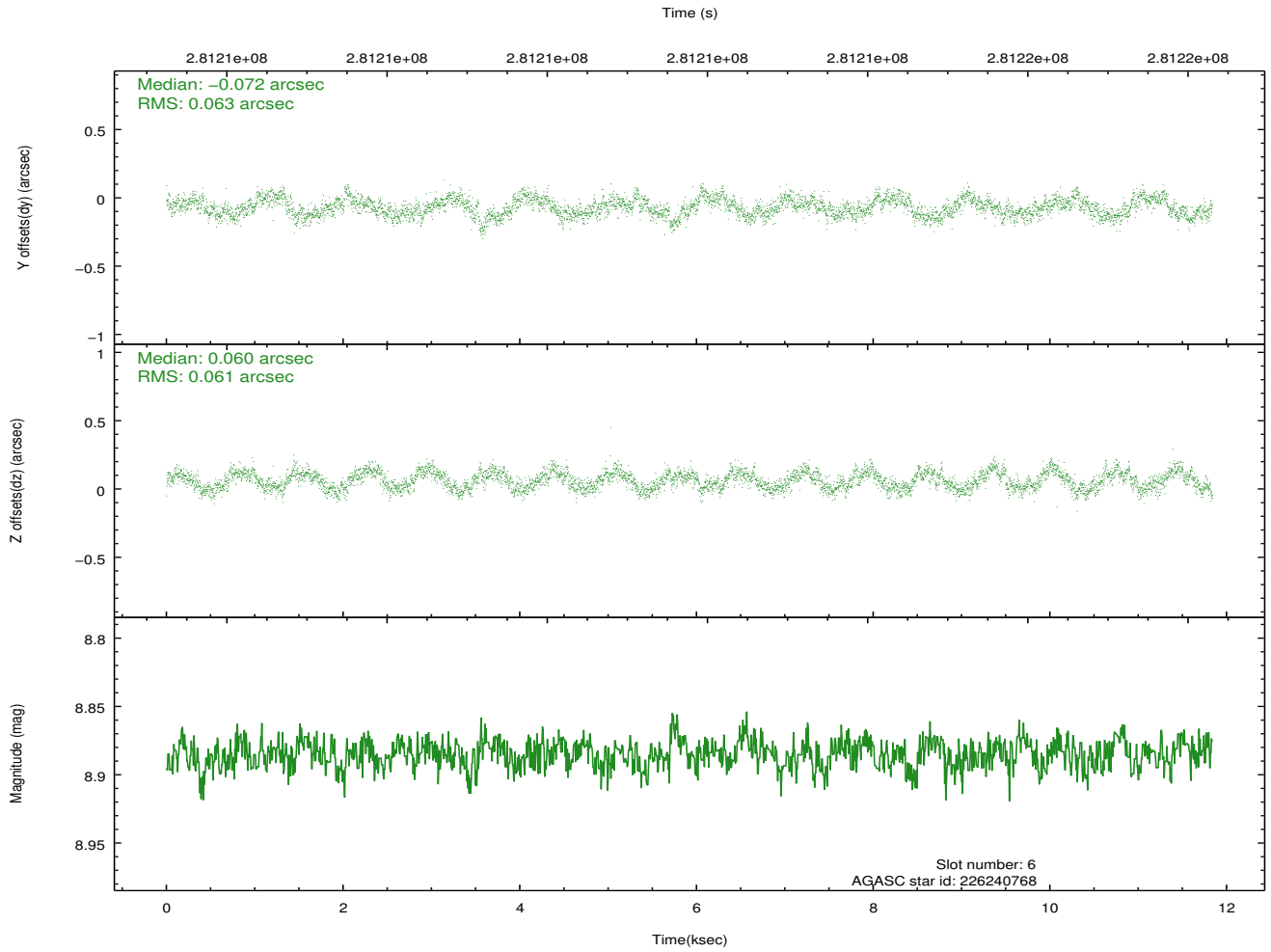
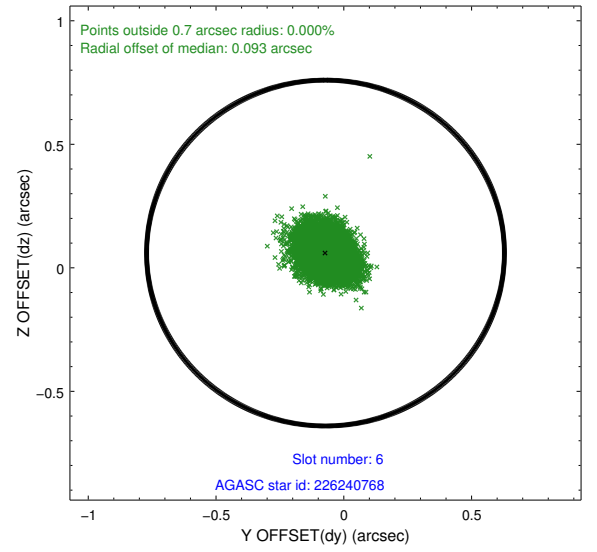
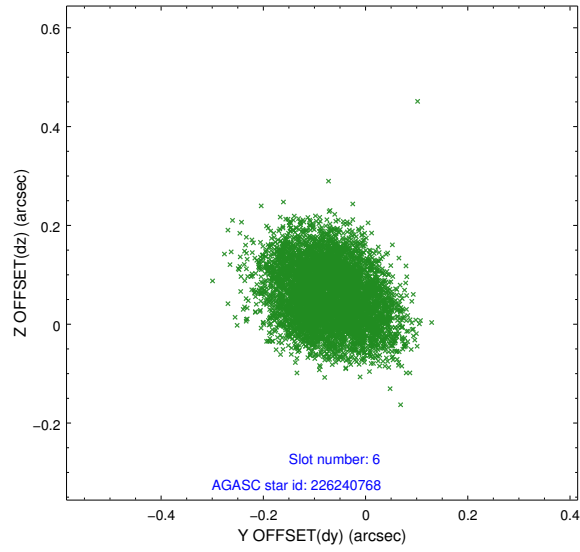
2.4.2 Slot 4



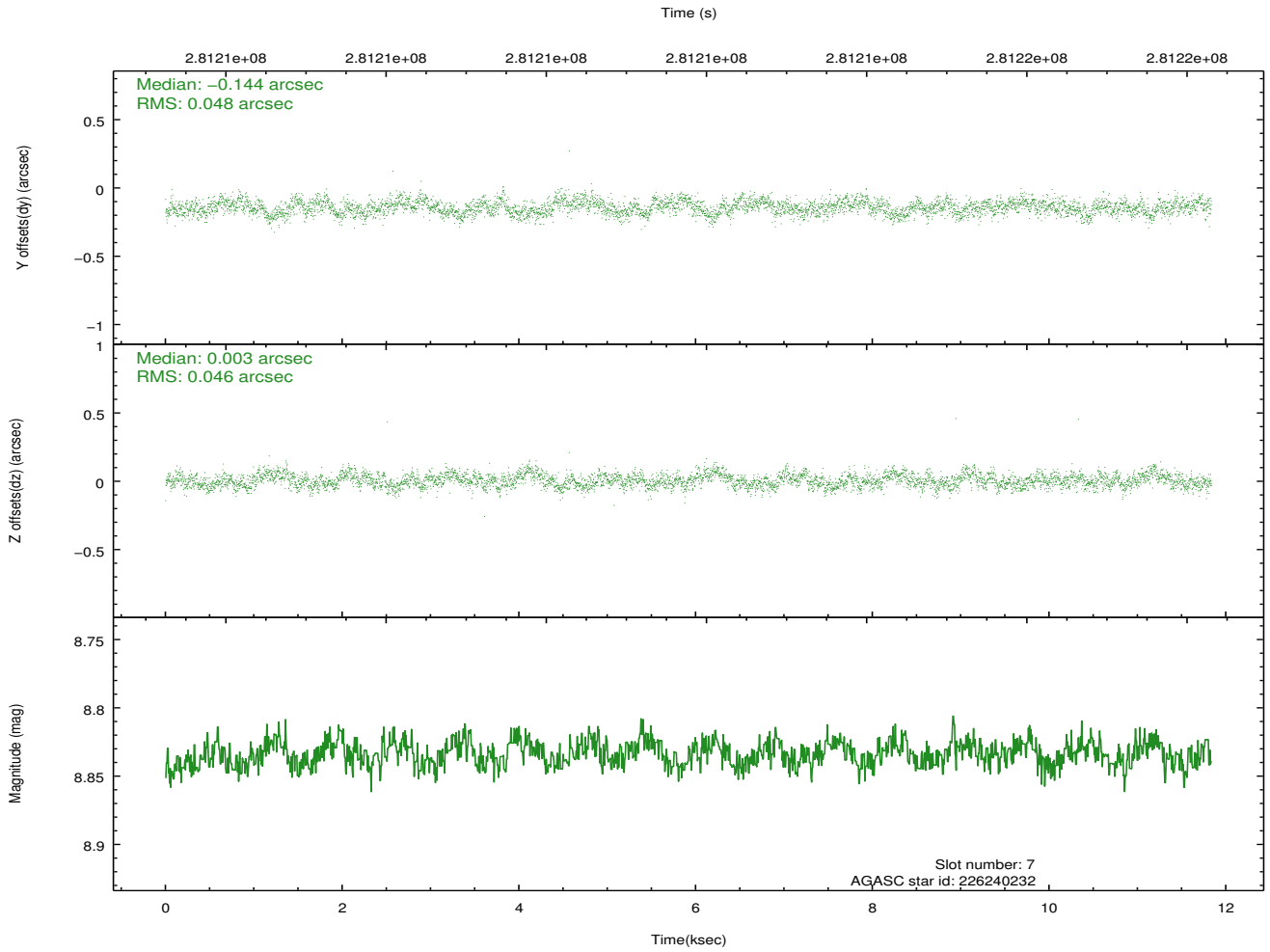
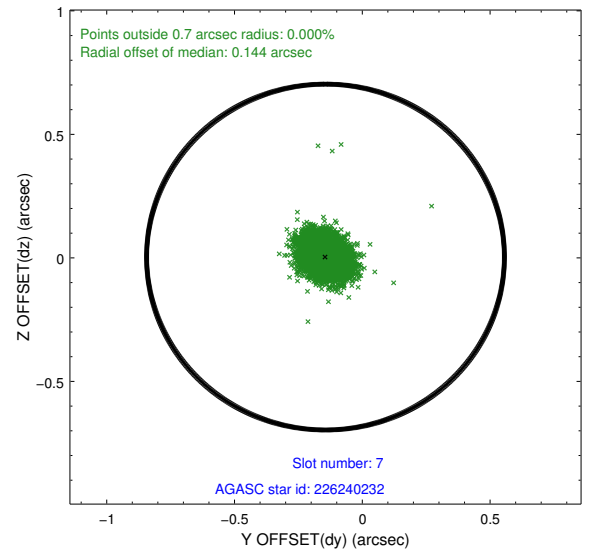
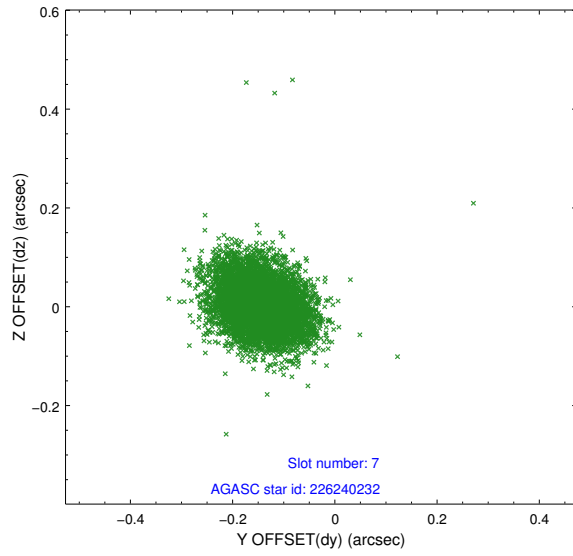
2.4.3 Slot 5



2.4.4 Slot 6

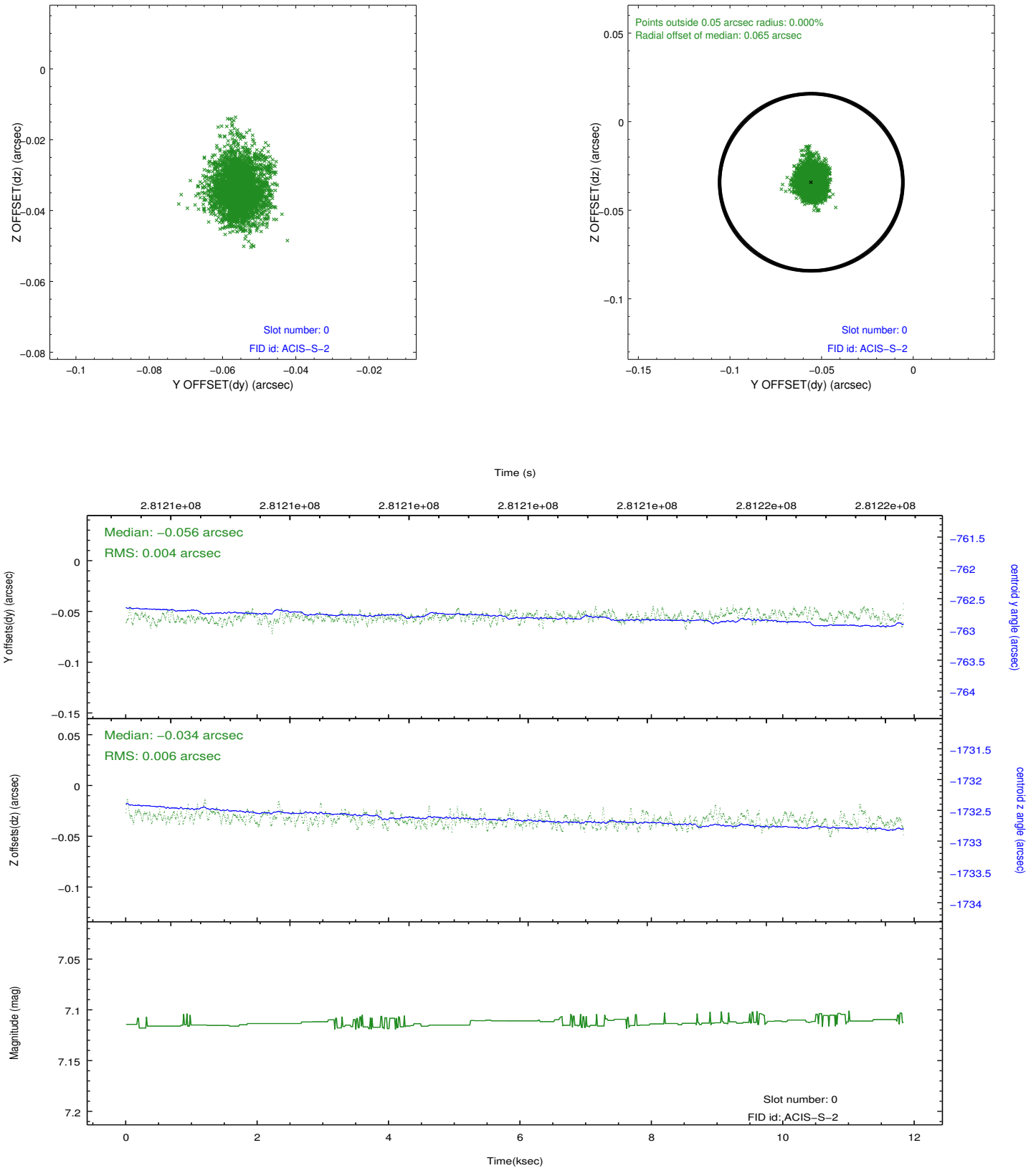


2.4.5 Slot 7

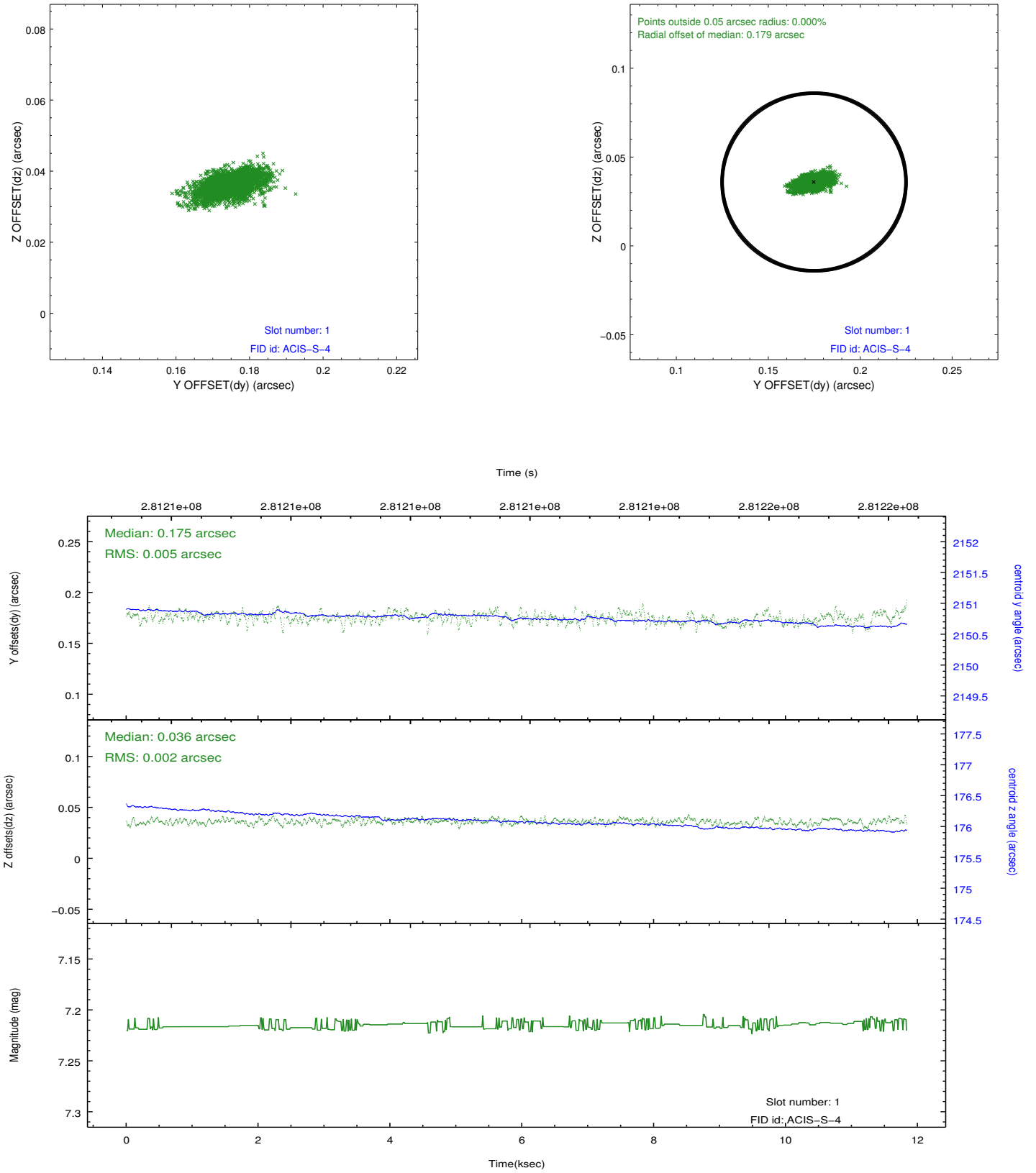


2.5 FID Slots

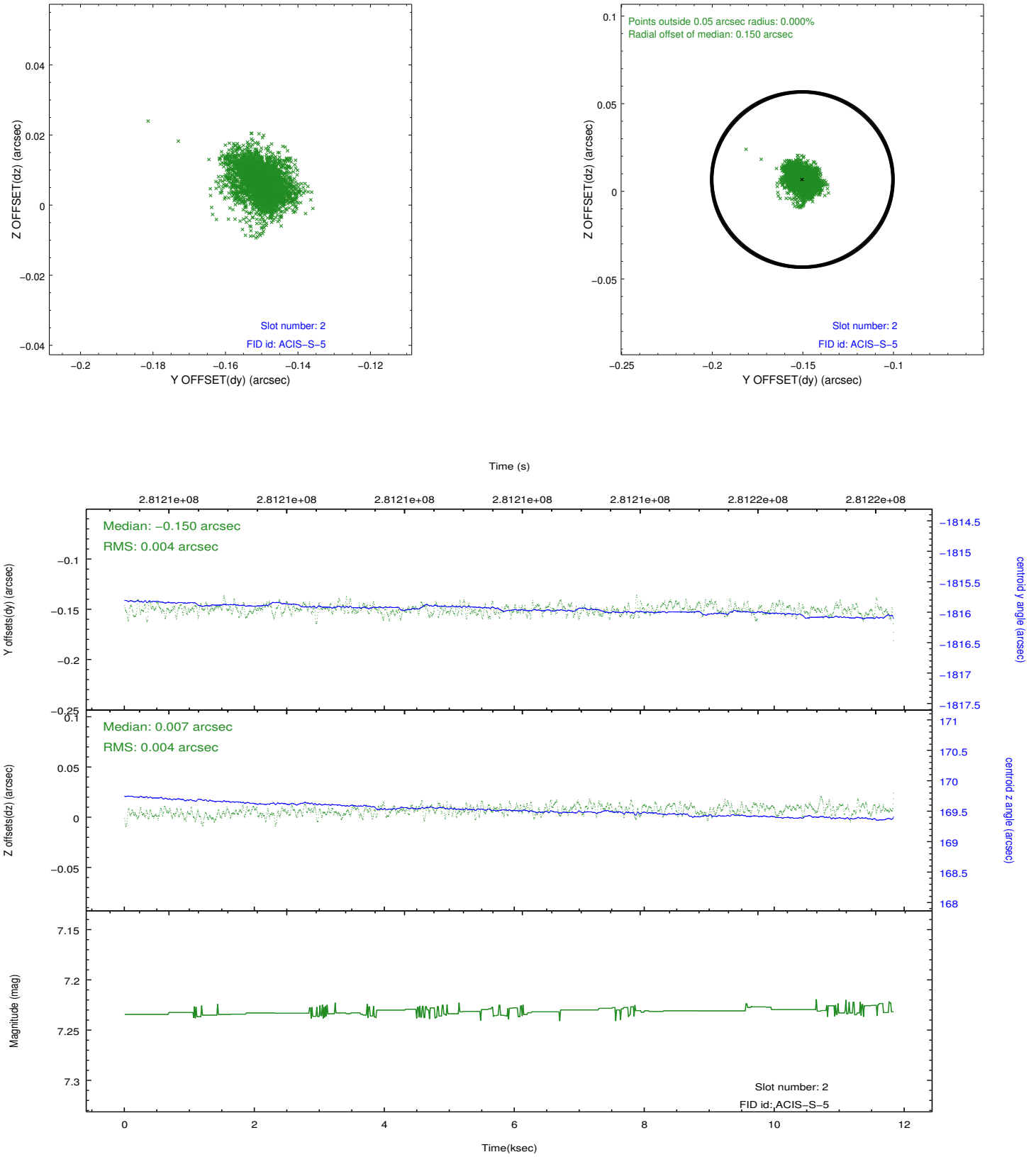
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

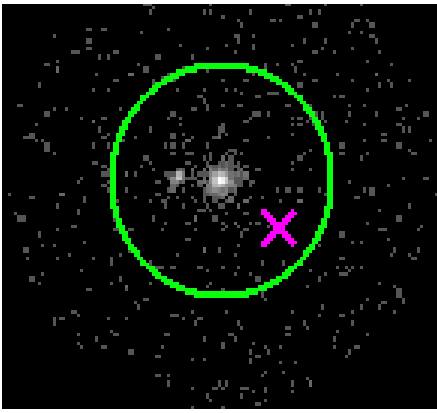


3 Gratings

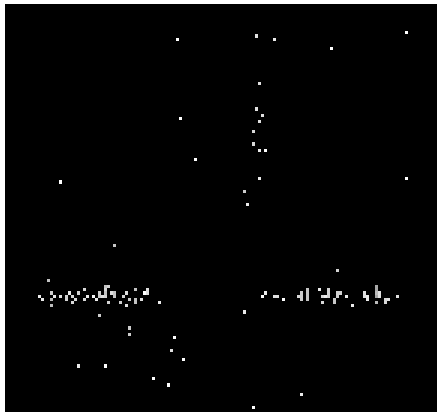
3.1 HEG Arm



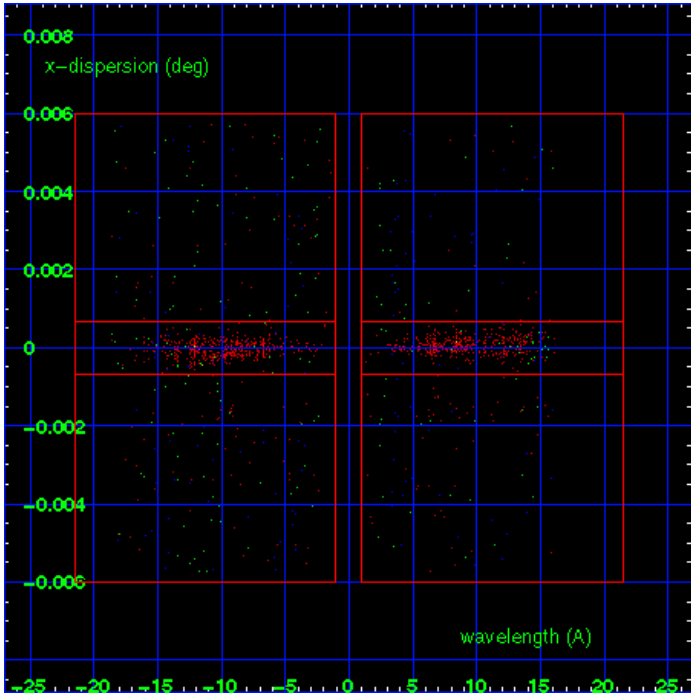
HEG Order Sort 123



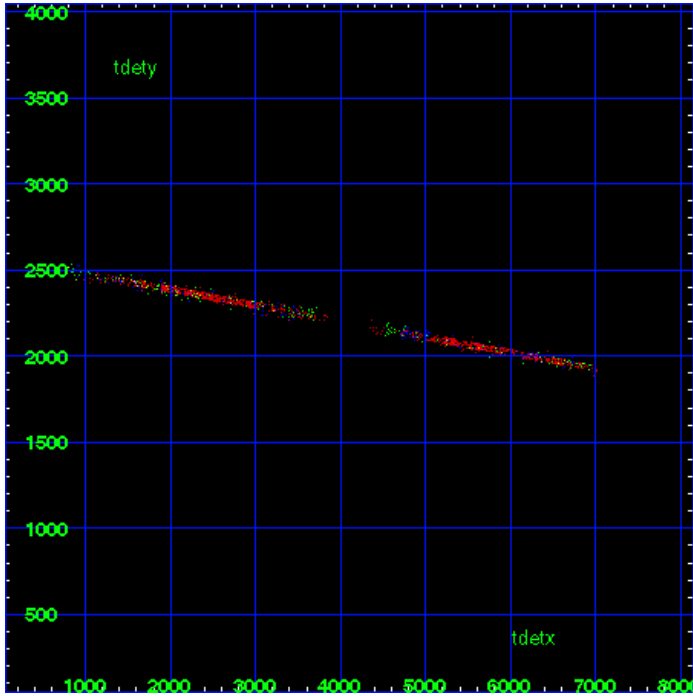
HEG Zero Order



HEG Order Sort ALL

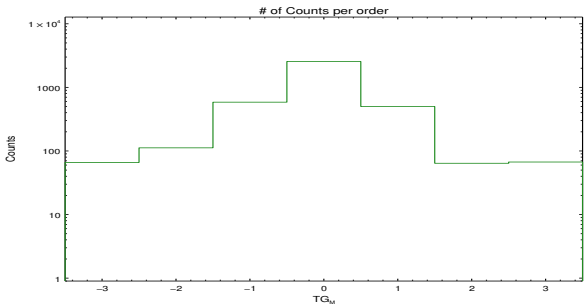


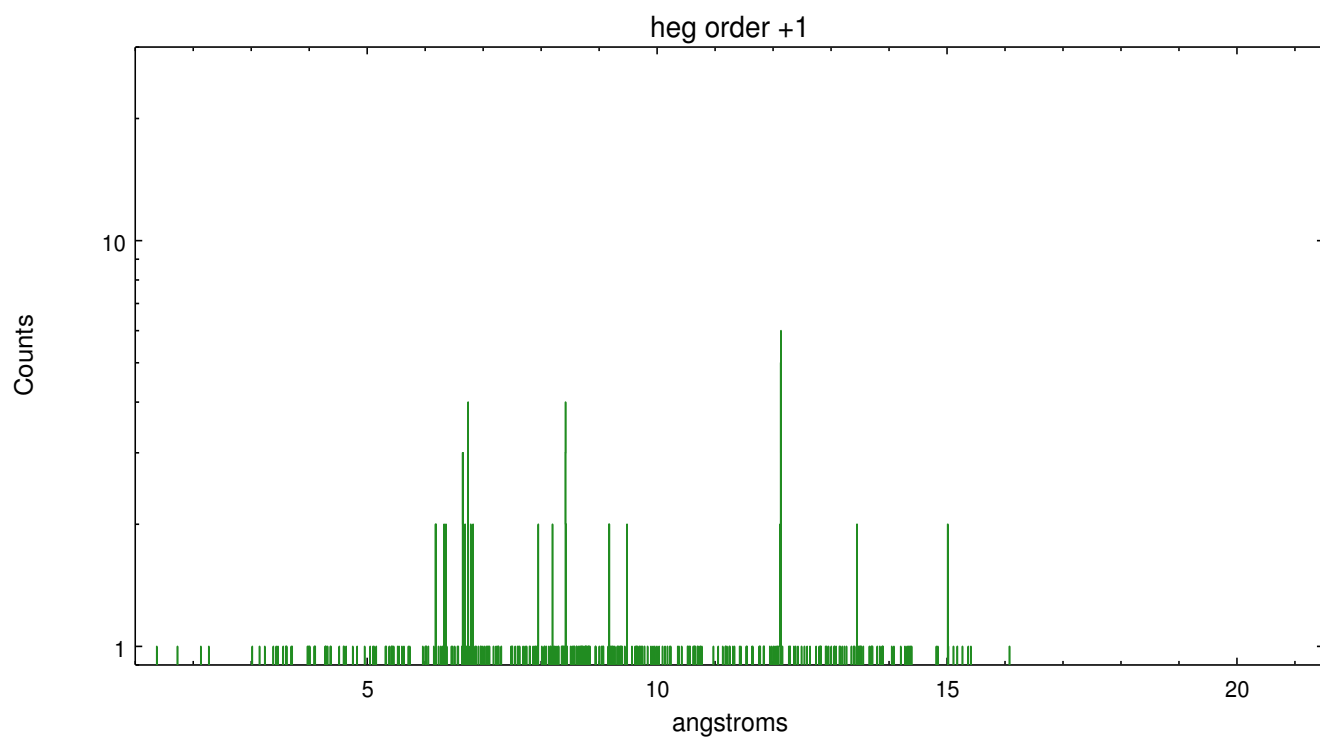
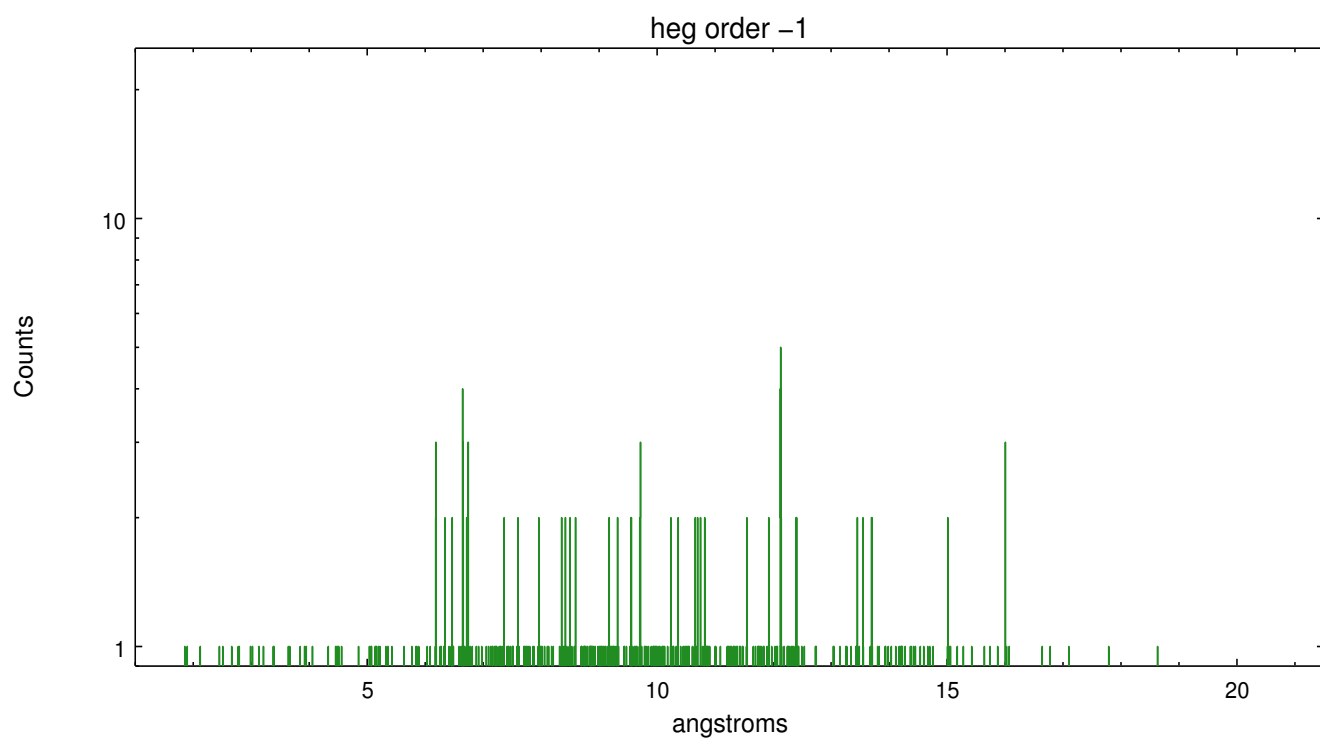
Spot Image HEG



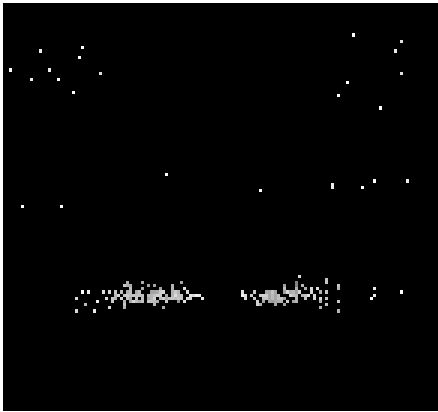
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	66	112	585	2553	500	64	67

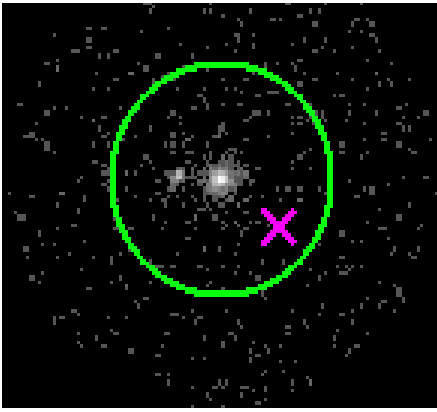




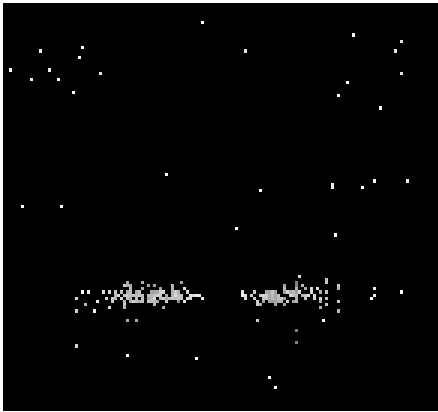
3.2 MEG Arm



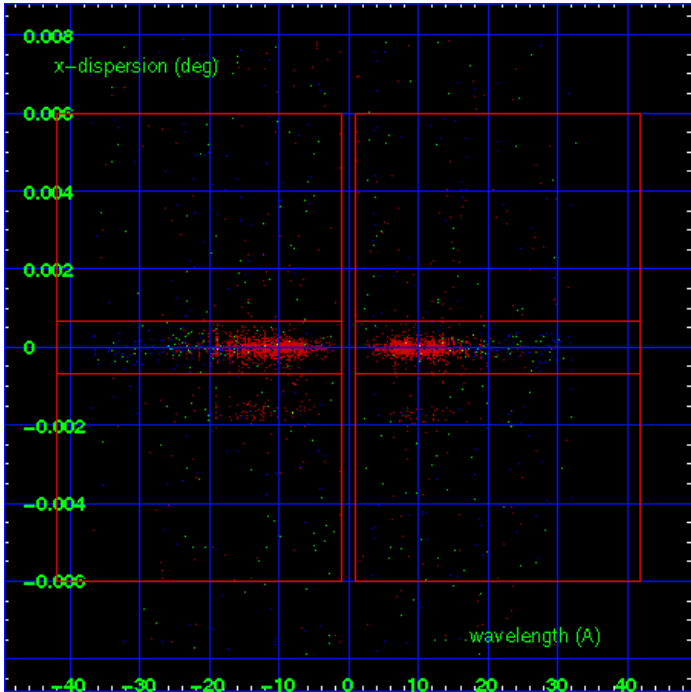
MEG Order Sort 123



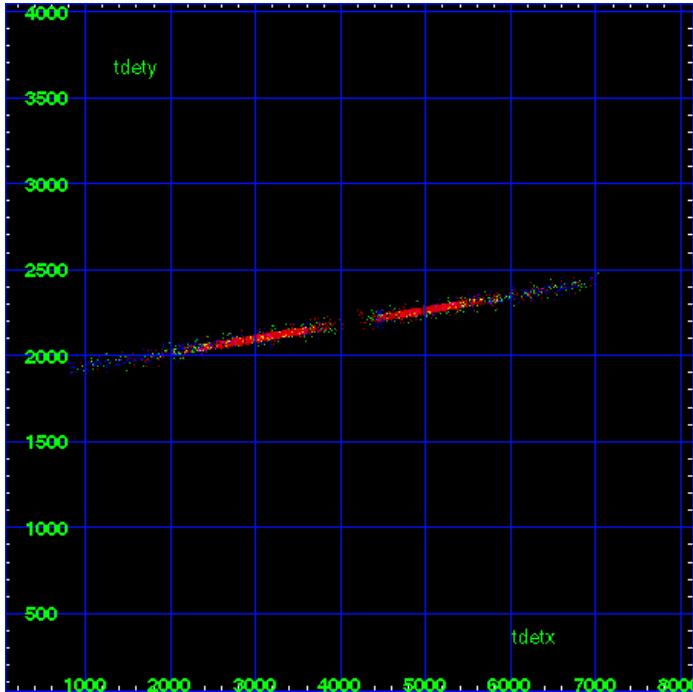
MEG Zero Order



MEG Order Sort ALL

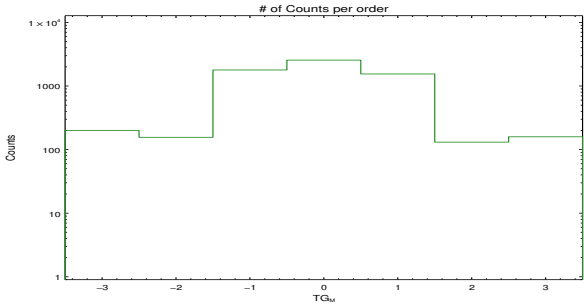


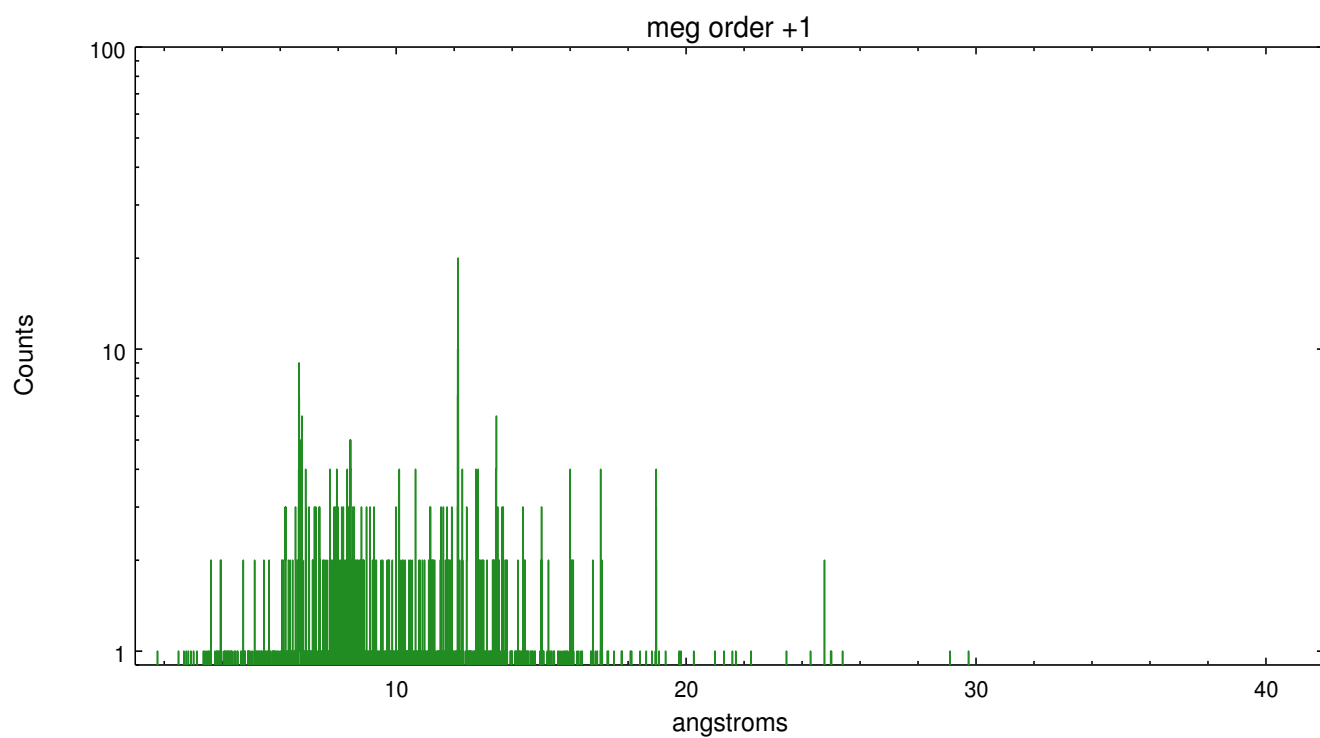
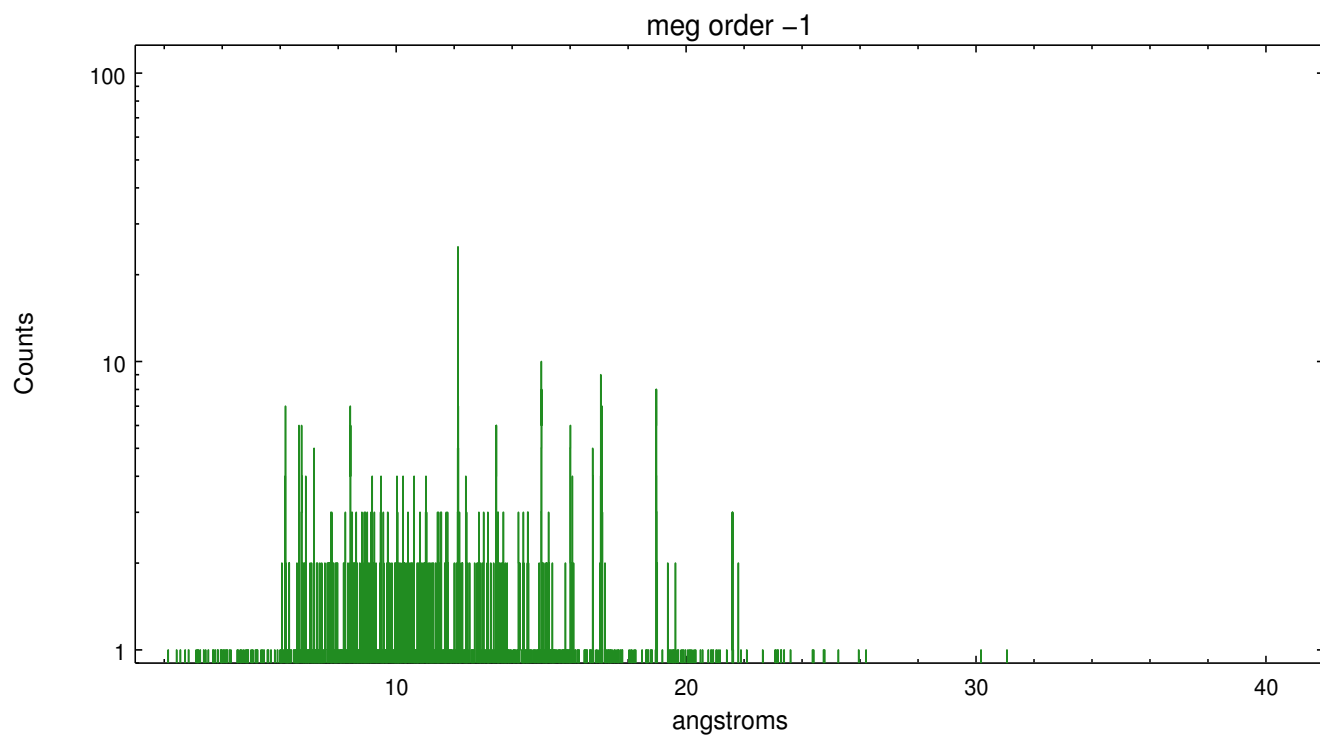
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	200	156	1788	2553	1547	131	159





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.9471999

A.2 Comments

Roll constraint met. Target coordinates are measured as ra=23:31:52.4. dec=+19:56:13.7, which differ from the SIMBAD coordinates by an amount consistent with the large proper motion. Binary companion is about 6-8 arcsec east of the target. Flux from the companion might be included in the extracted spectral data of the target. A custom extraction with a narrower width extraction region placed such that the spectral data from only one of the two stars is included would allow analysis of each star separately.