

V&V Reference Report

L2 ASCDS Version : 8.3.2.1

Observation 1318 - L2 Version 4
Chandra X-Ray Center

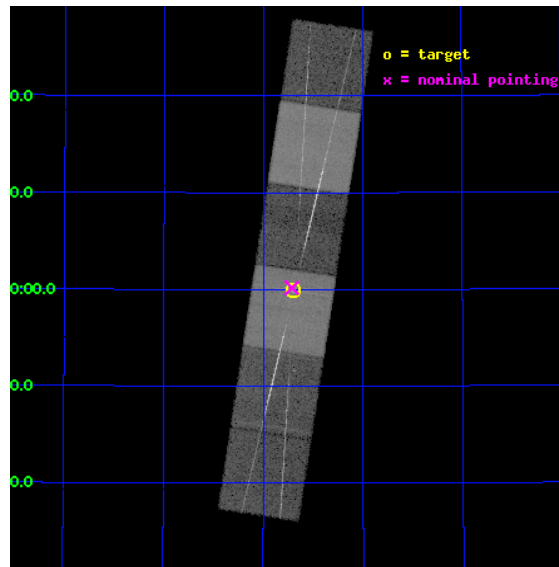
L2 Processing Date : Oct 14 2010

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1 Front

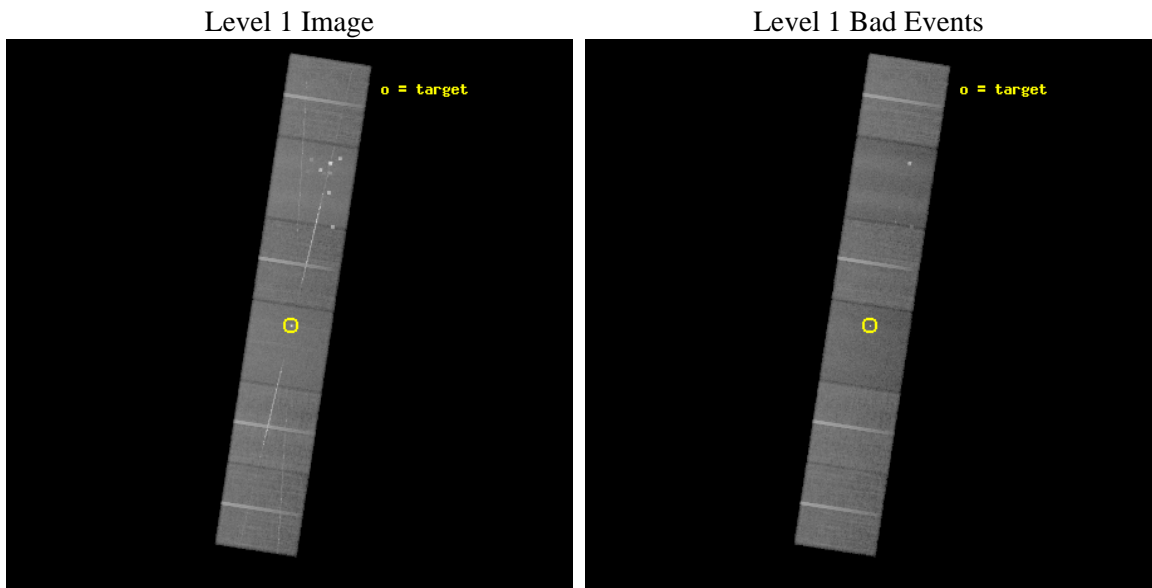
seq_num	280268	Sequence number
obs_id	1318	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAPELLA	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.17625	Observer's specified target RA
dec_targ	45.997889	Observer's specified target Dec
ra_nom	79.178246060278	Nominal RA
dec_nom	46.002814804949	Nominal Dec
roll_nom	98.762989248149	Nominal Roll
revision	4	Processing version of data
ontime	27040.000025183	Sum of GTIs [s]
livetime	26697.603263331	Livetime [s]
ontime4	27040.000025183	Sum of GTIs [s]
ontime5	27036.759094894	Sum of GTIs [s]
ontime6	27040.000025183	Sum of GTIs [s]
ontime7	27040.000025183	Sum of GTIs [s]
ontime8	27040.000025183	Sum of GTIs [s]
ontime9	27036.75906498	Sum of GTIs [s]
l2events	383642	Number of level 2 events



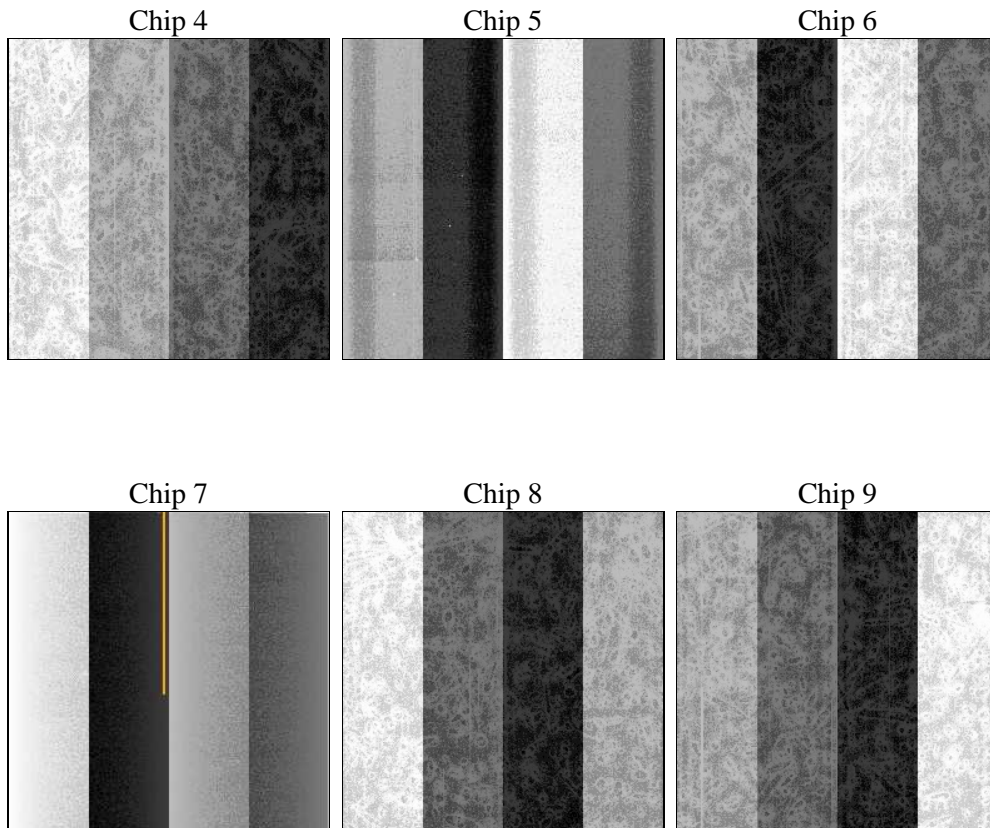
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	Scheduled observation exposure time
ascdsver	8.3.2.1	ASCDS version number	ontime	27040.000025183	Sum of GTIs [s]
caldbver	4.3.1	 	ontime4	27040.000025183	Sum of GTIs [s]
date	2010-09-28T12:44:17	Date and time of file creation	ontime5	27036.759094894	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	27040.000025183	Sum of GTIs [s]
			ontime7	27040.000025183	Sum of GTIs [s]
			ontime8	27040.000025183	Sum of GTIs [s]
			ontime9	27036.75906498	Sum of GTIs [s]
			l1events	1846307	Number of level 1 events

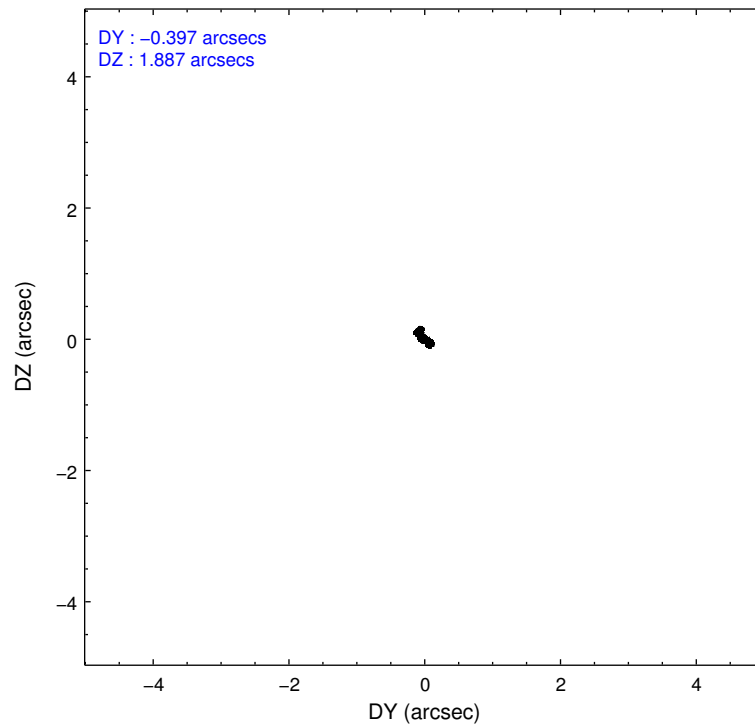
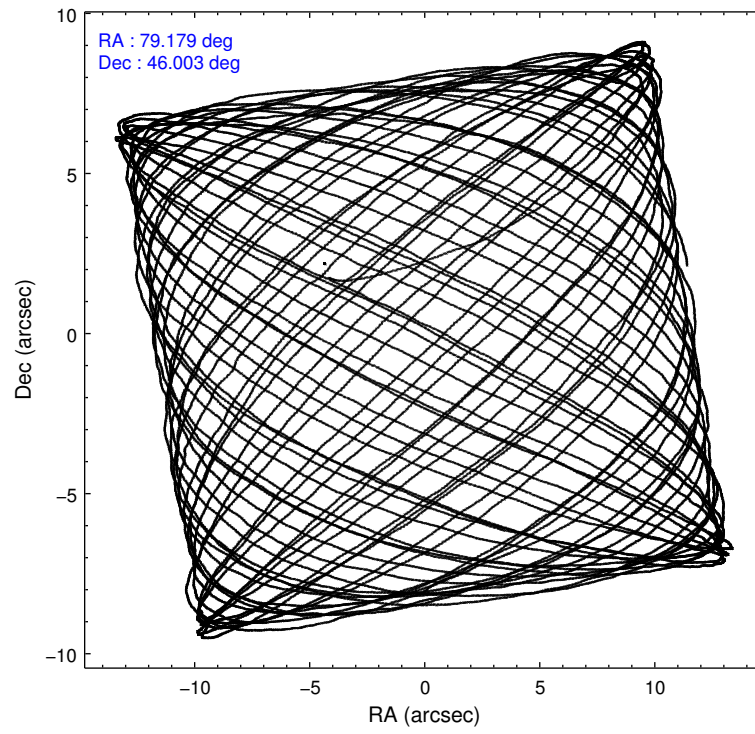
2.1.4 Events

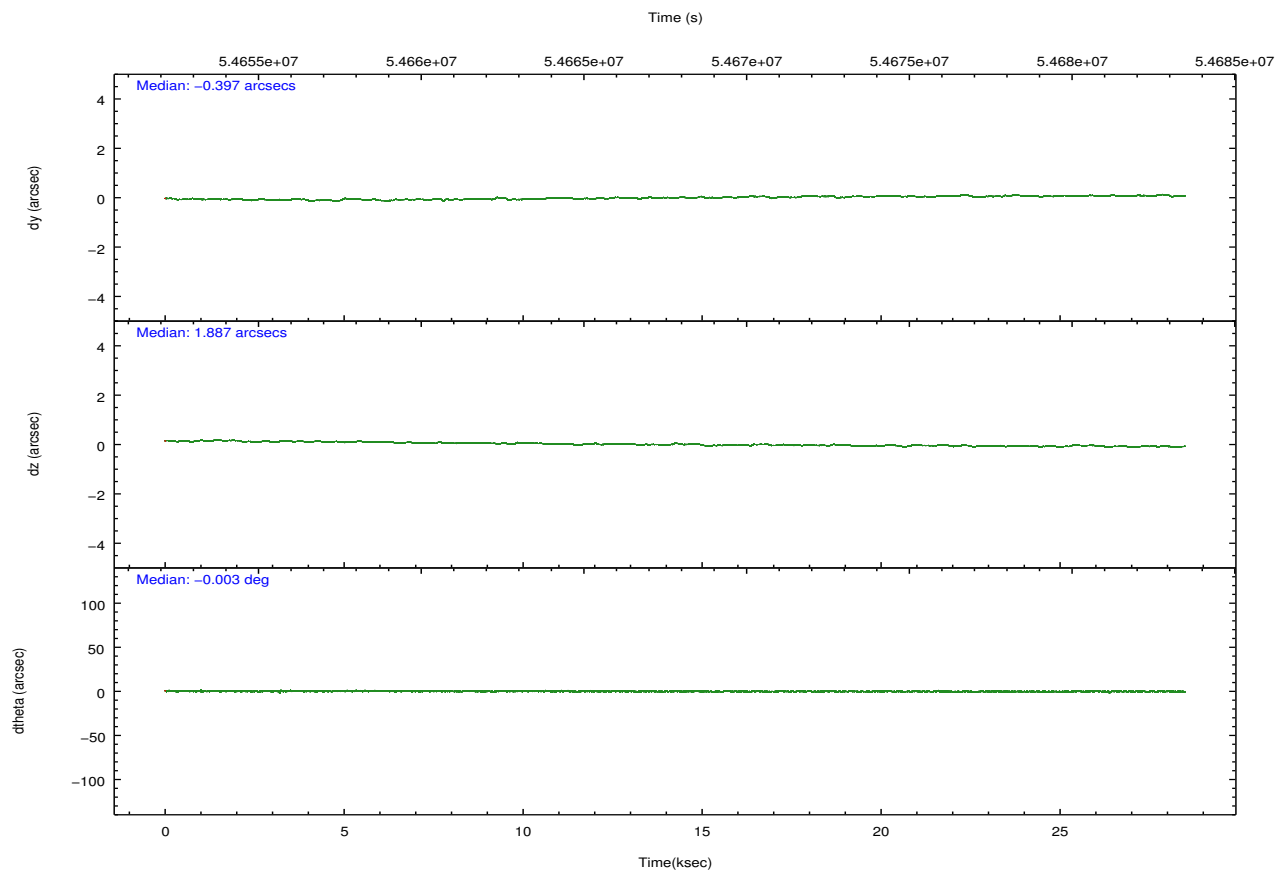
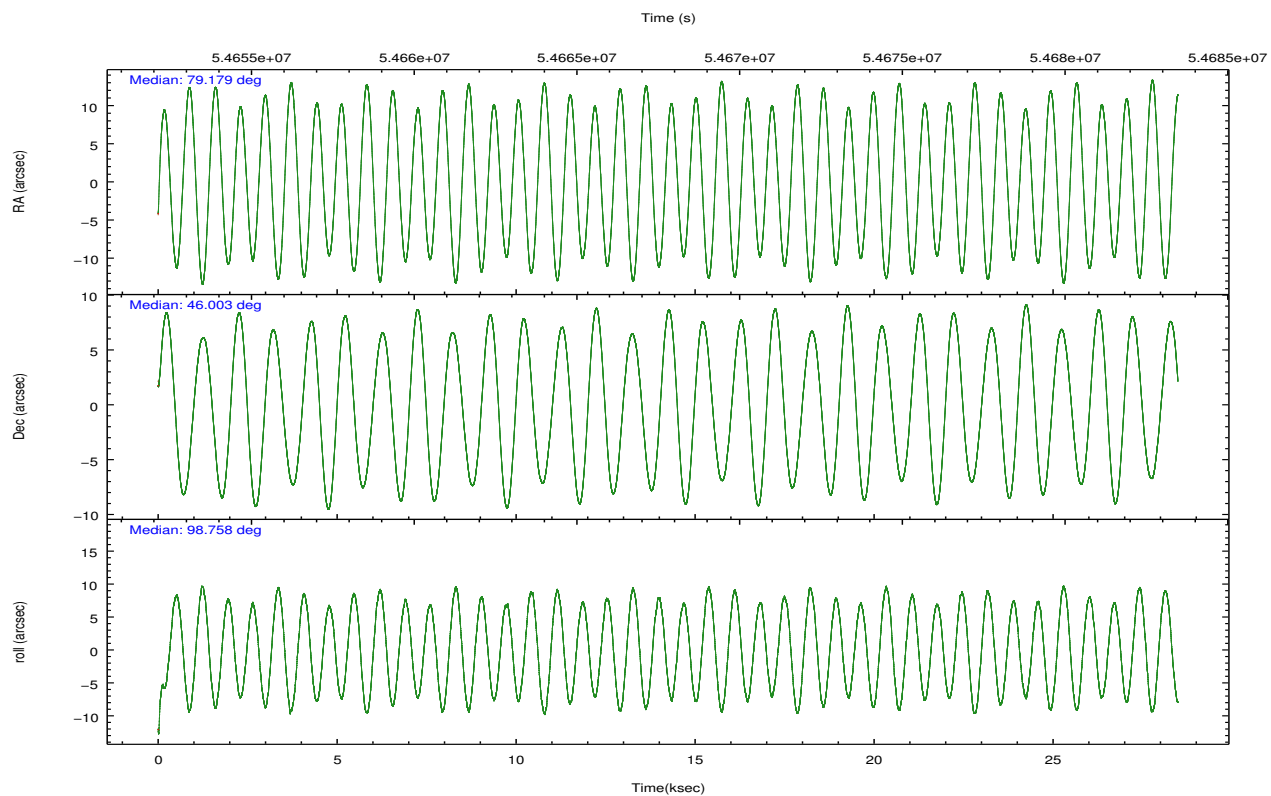
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	310164	359595	282737	290227	337225	266359	grade 0 events	7031	36545	17998	7519	29449	8681
rejected events	281800	189091	242308	177184	265682	237208		2%	10%	6%	2%	8%	3%
rejected %	90%	52%	85%	61%	78%	89%	grade 1 events	60	3386	112	269	193	54
								0%	0%	0%	0%	0%	0%
							grade 2 events	11999	37644	11827	24027	18457	10408
								3%	10%	4%	8%	5%	3%
							grade 3 events	1543	6133	1998	7140	4573	1688
								0%	1%	0%	2%	1%	0%
							grade 4 events	1495	5978	1905	6351	4146	1595
								0%	1%	0%	2%	1%	0%
							grade 5 events	4206	12896	5379	16900	7362	5630
								1%	3%	1%	5%	2%	2%
							grade 6 events	6305	84239	6712	68040	14946	6785
								2%	23%	2%	23%	4%	2%
							grade 7 events	277525	172774	236806	159981	258099	231518
								89%	48%	83%	55%	76%	86%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
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
Pointing RA	79.202710	79.17824606027789	Subarray requested	NONE	NONE
Pointing Dec	45.981126	46.00281480494905	Alternating exposures requested	N	N
Pointing Roll	98.590787	98.76298924814917	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	54654571.184000	54653199.56349			
Observation start date	1999-09-25T13:48:27	1999-09-25T13:26:39			
Observation end time	54682571.184000	54683477.039577			
Observation end date	1999-09-25T21:35:07	1999-09-25T21:51:17			
Read mode	TIMED	TIMED			

2.3 Aspect



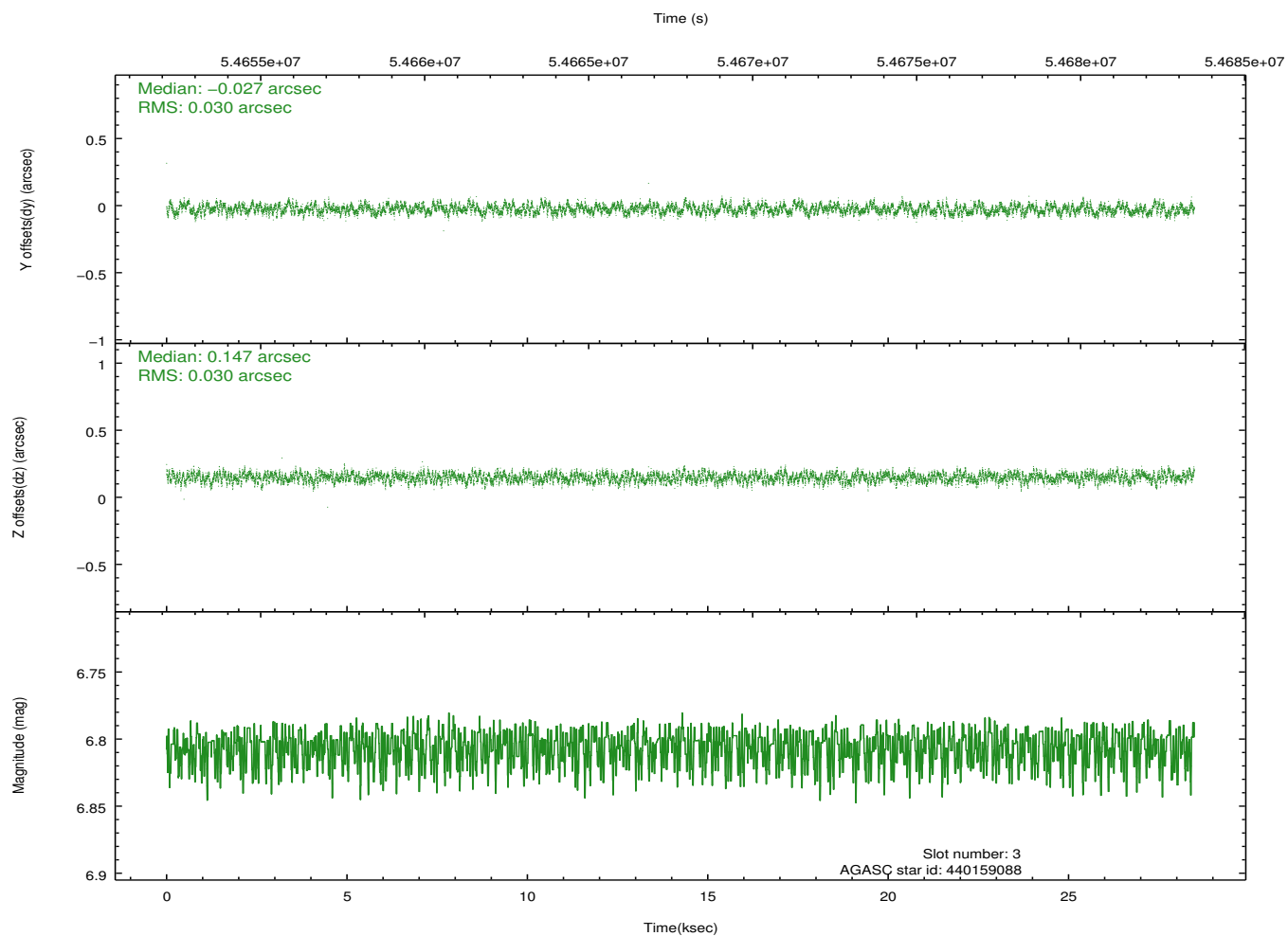
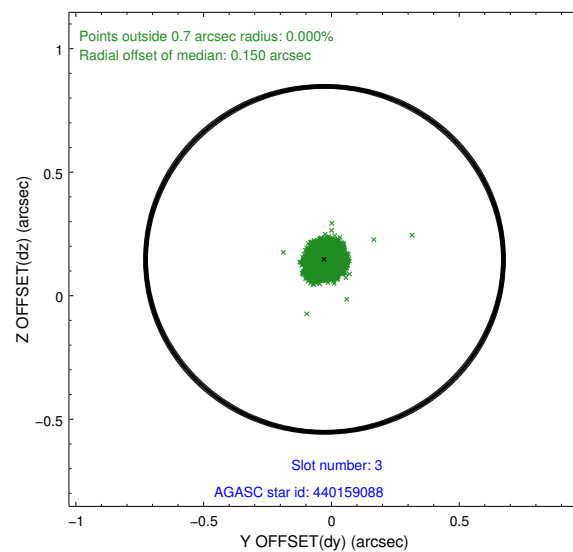
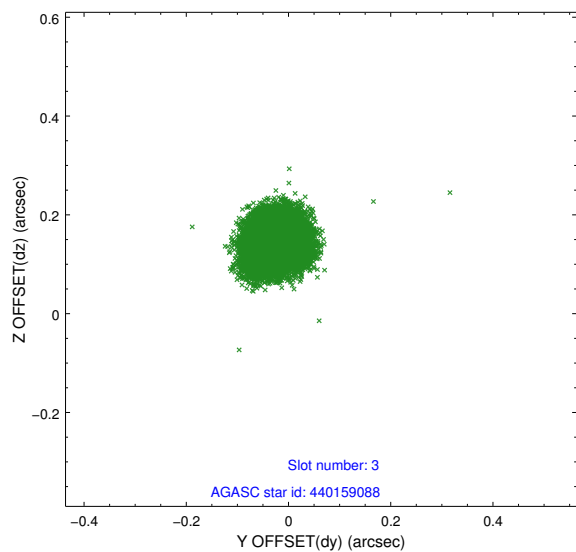


Slot Statistics

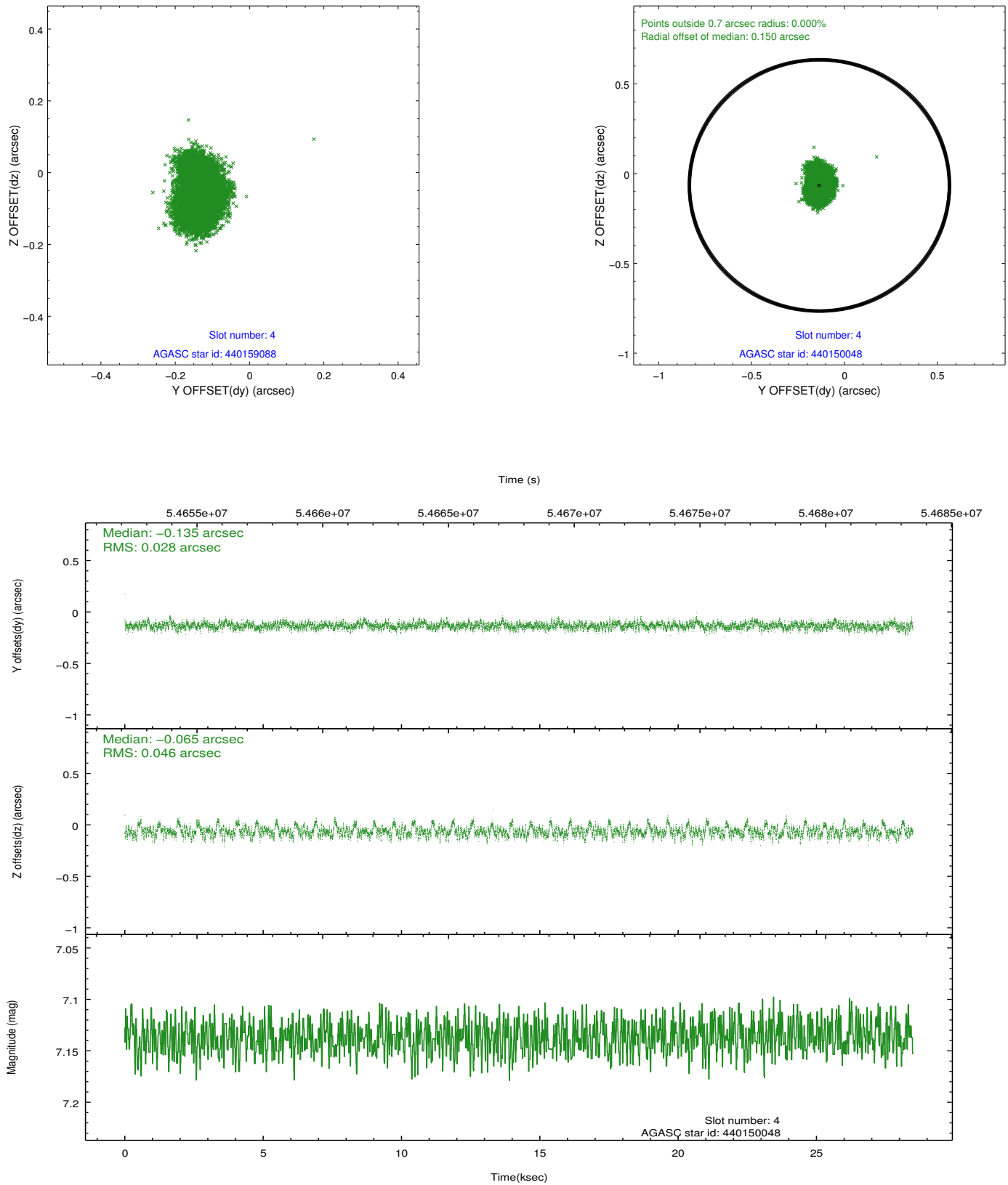
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	13895	-0.007	-0.005	0.007	0.012	0.000000	0.000000	-752.19	-1722.92
1	FID	ACIS-S-4	7.21	13895	0.087	0.005	0.006	0.013	0.000000	0.000000	2161.23	185.55
2	FID	ACIS-S-5	7.24	13897	-0.110	0.009	0.007	0.013	0.000000	0.000000	-1805.14	179.27
3	GUIDE	440159088	6.81	13896	-0.027	0.147	0.046	0.071	79.453034	46.128063	431.87	-695.90
4	GUIDE	440150048	7.14	13897	-0.135	-0.065	0.057	0.097	79.112838	46.416060	1582.64	-12.68
5	GUIDE	440149808	8.42	13891	-0.035	0.011	0.057	0.091	78.873930	46.405955	1636.93	579.10
6	GUIDE	438460832	8.99	13889	0.083	-0.263	0.095	0.156	78.414614	45.554782	-1210.16	2192.43
7	GUIDE	440145944	9.09	13892	0.124	0.167	0.063	0.103	80.083717	45.428844	-2284.98	-1905.08

2.4 Star Slots

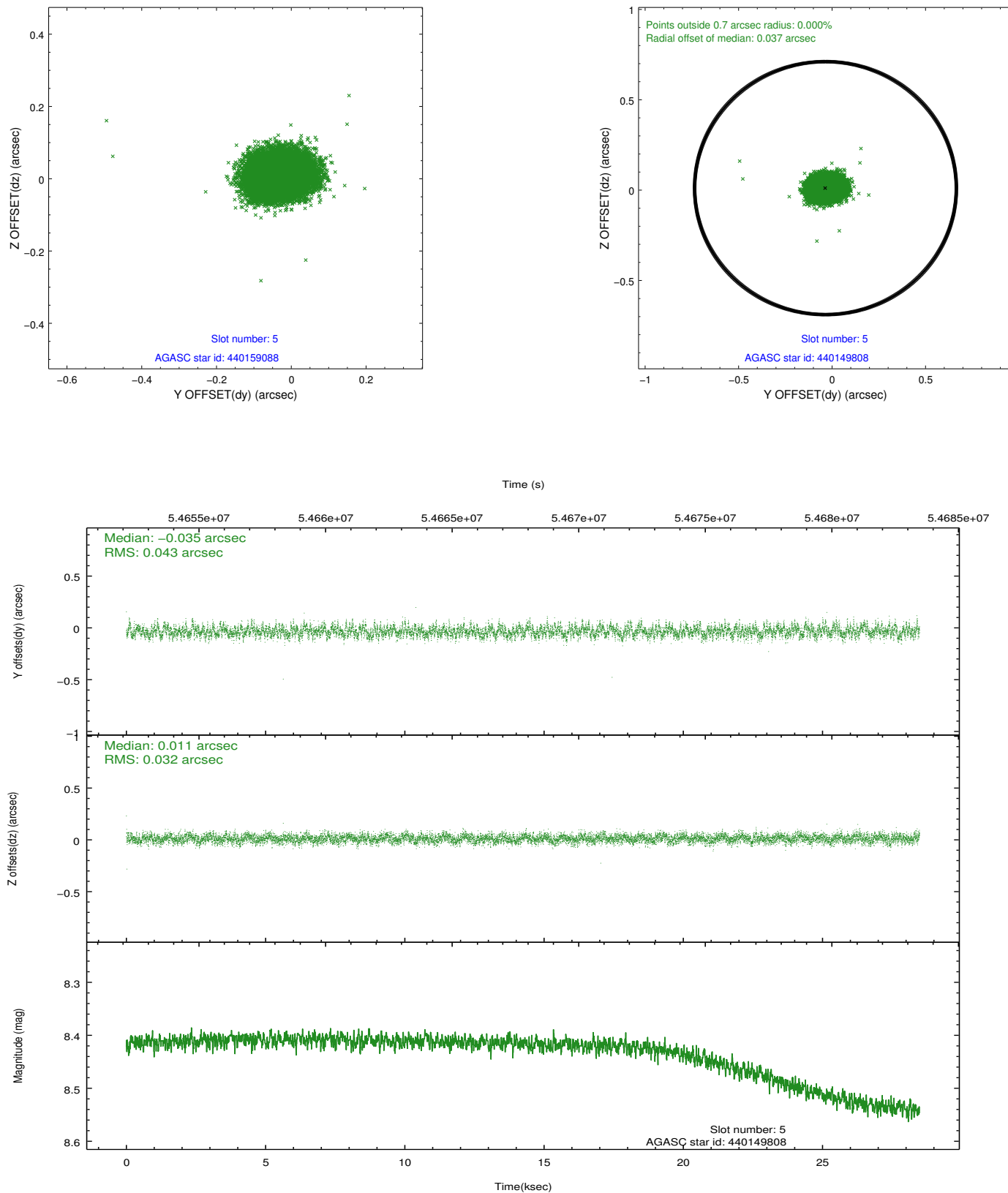
2.4.1 Slot 3



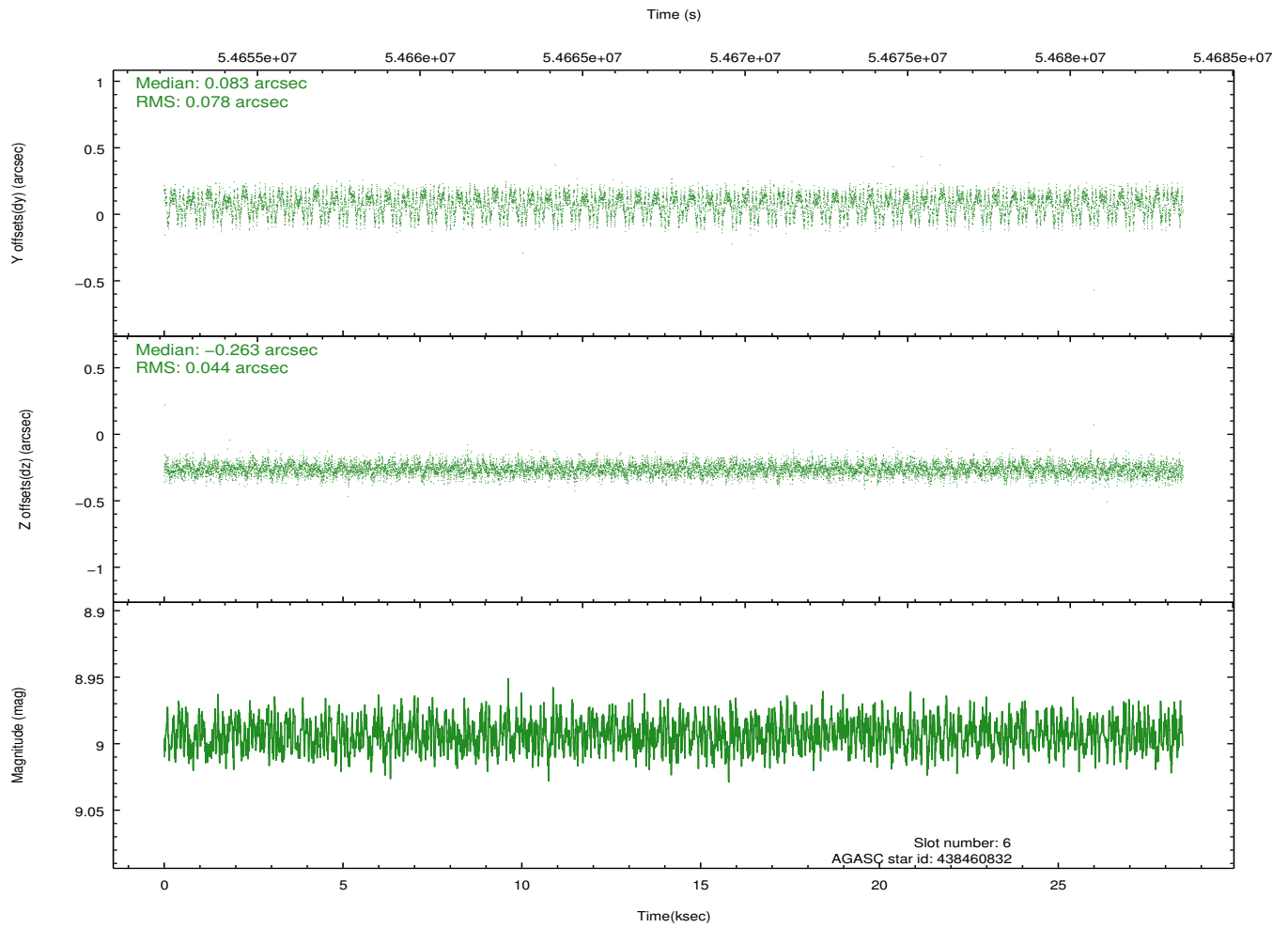
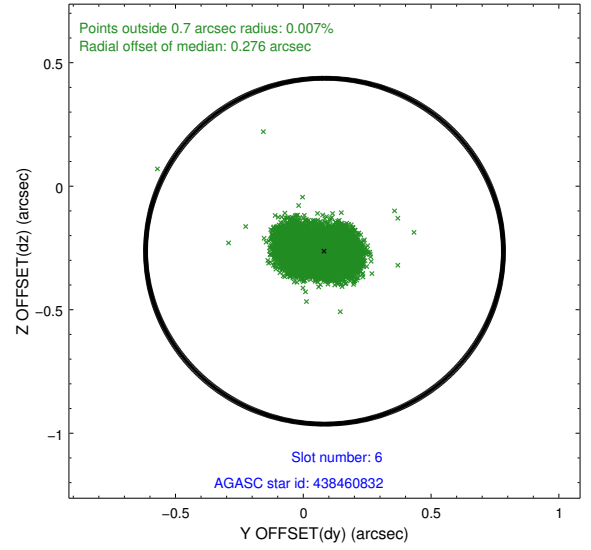
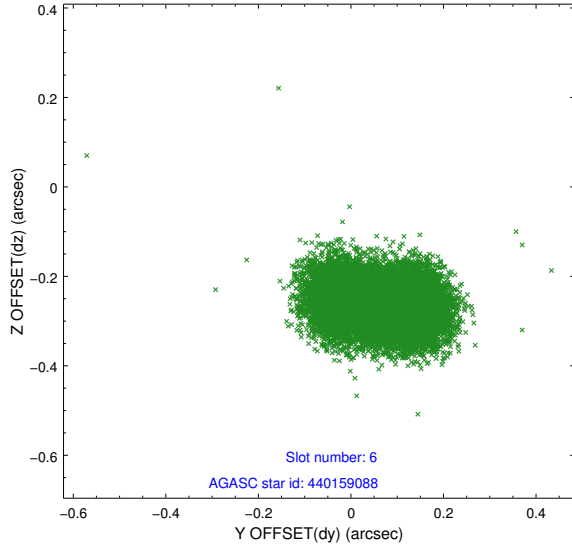
2.4.2 Slot 4



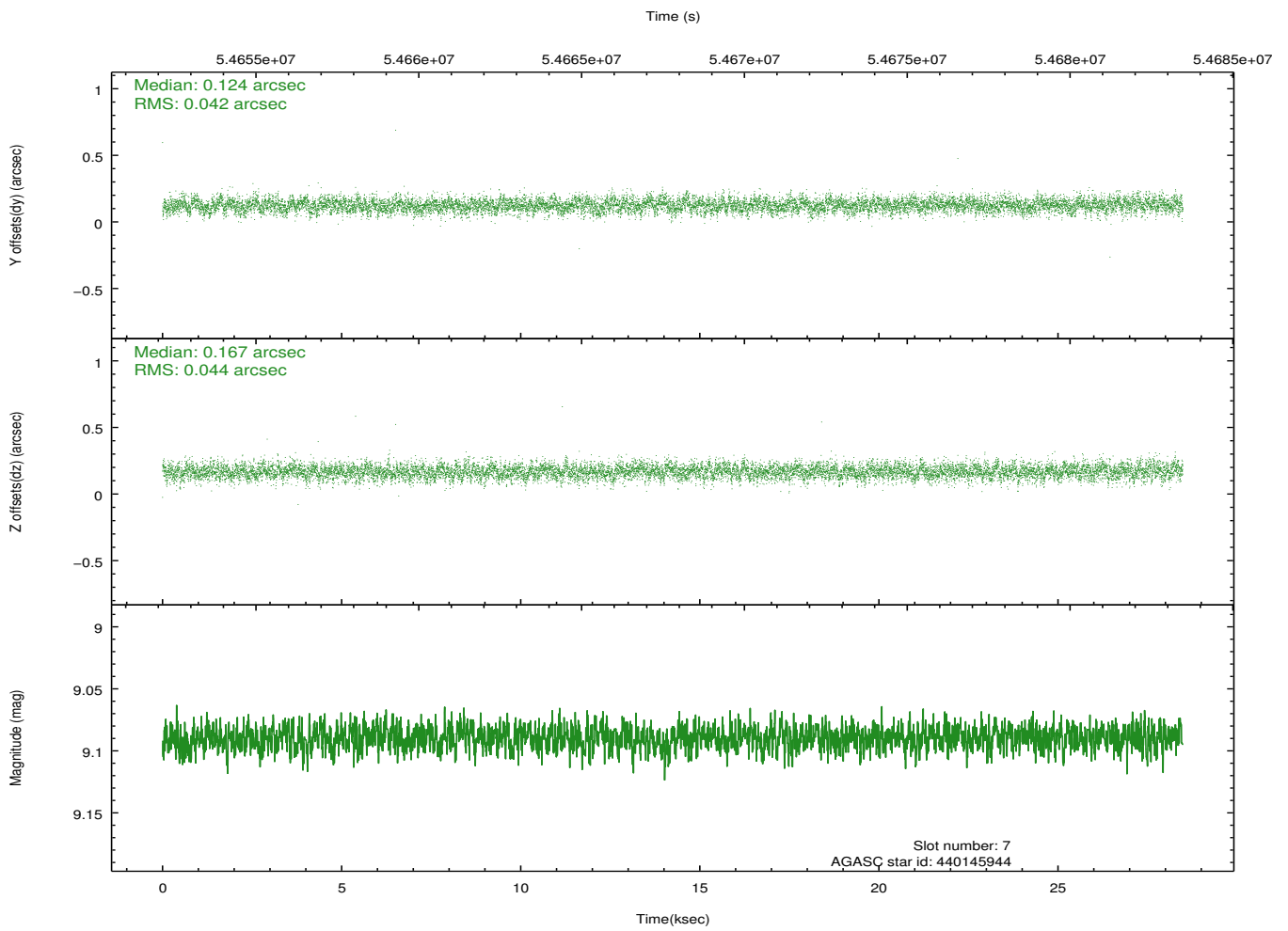
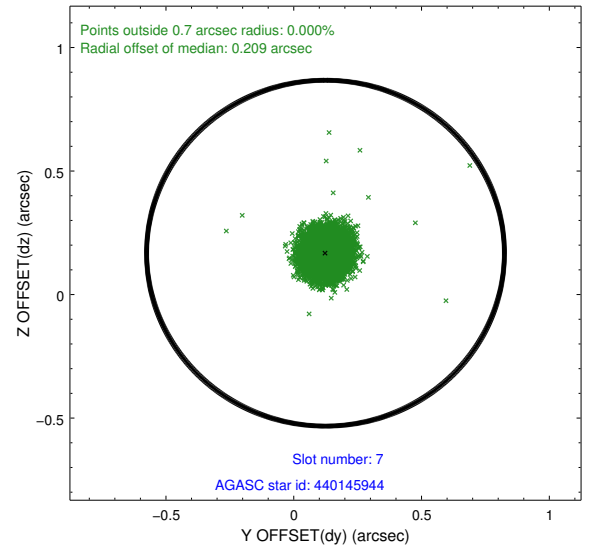
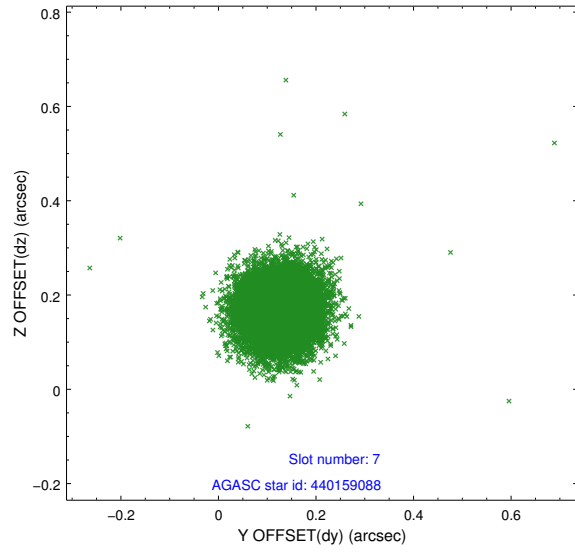
2.4.3 Slot 5



2.4.4 Slot 6

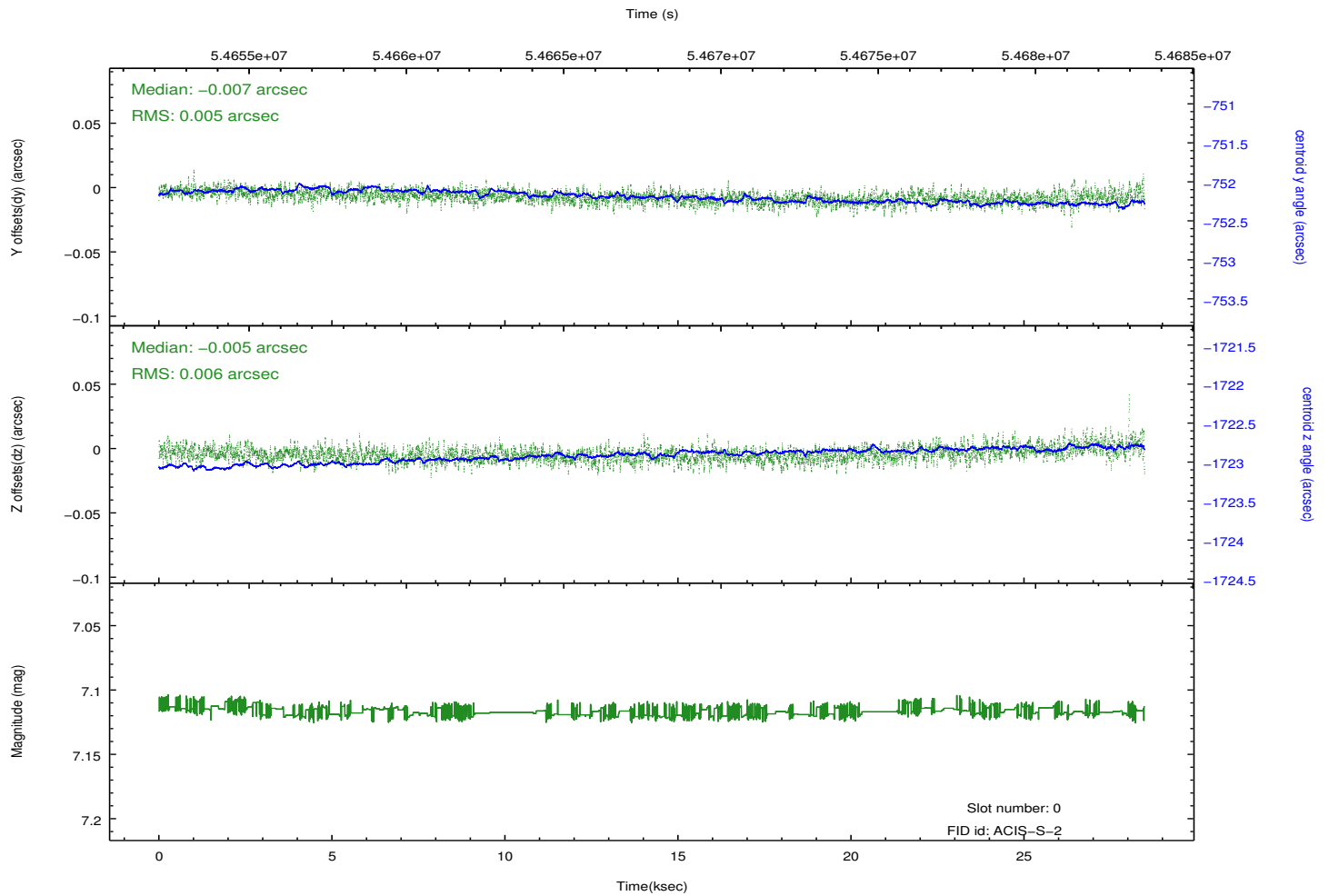
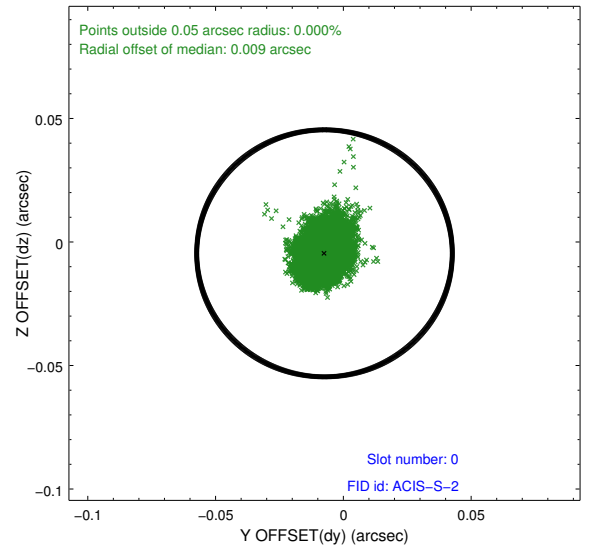
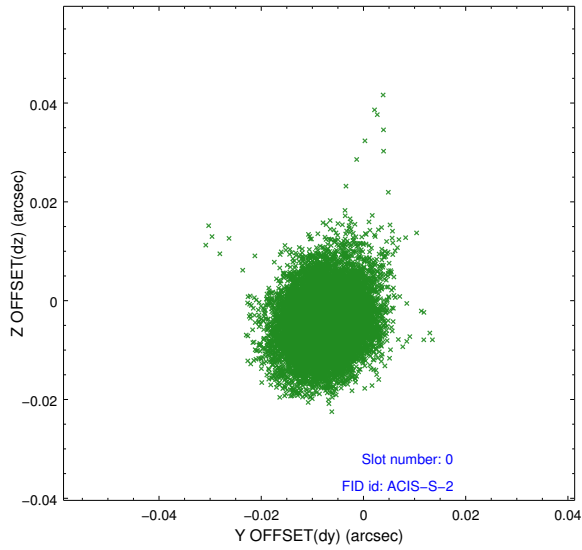


2.4.5 Slot 7

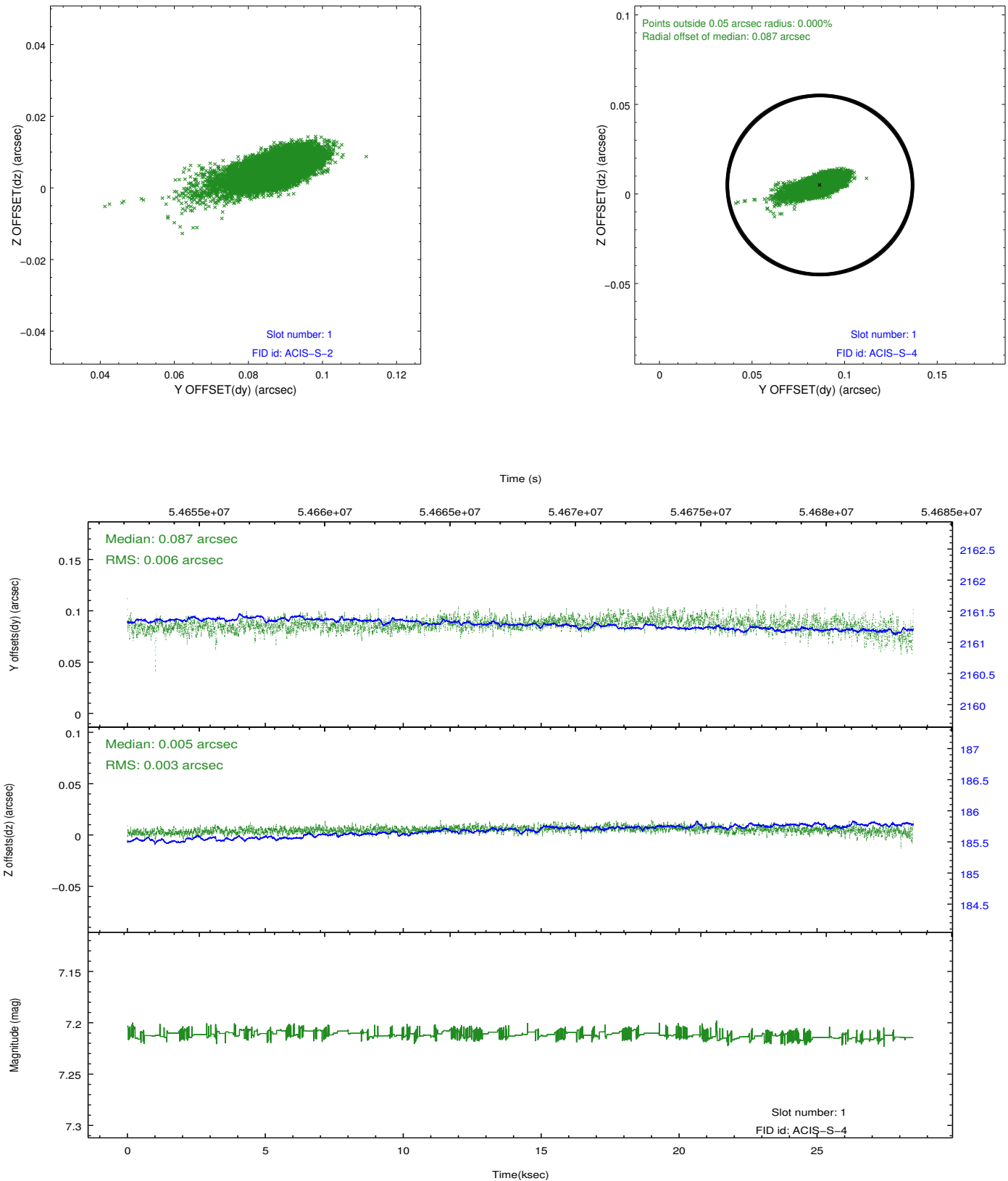


2.5 FID Slots

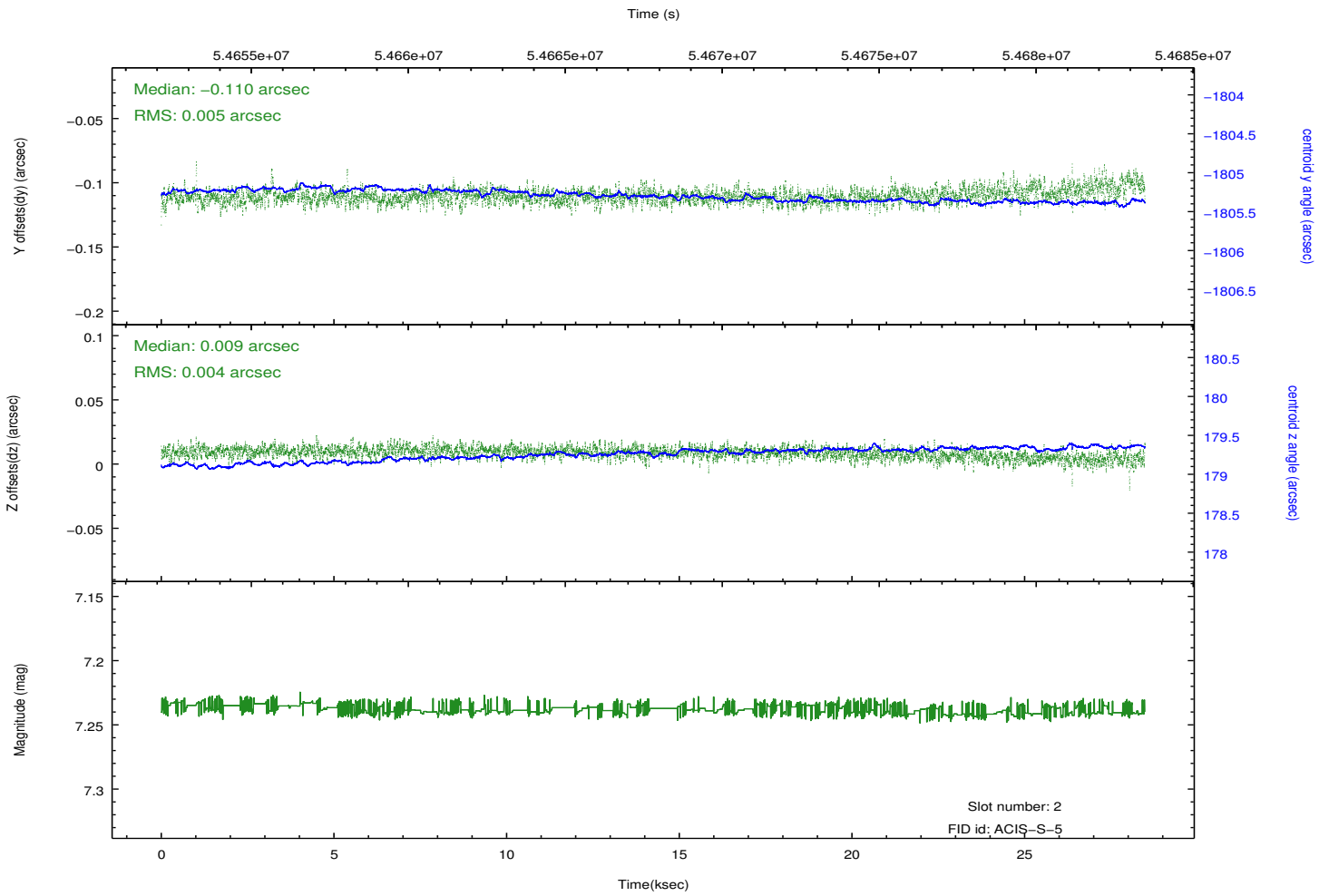
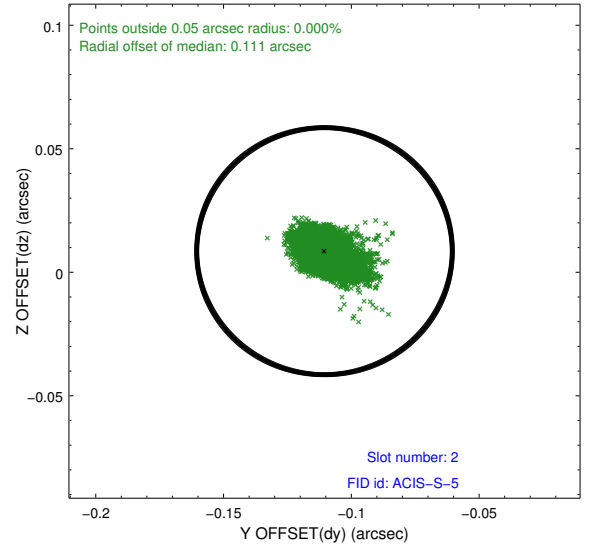
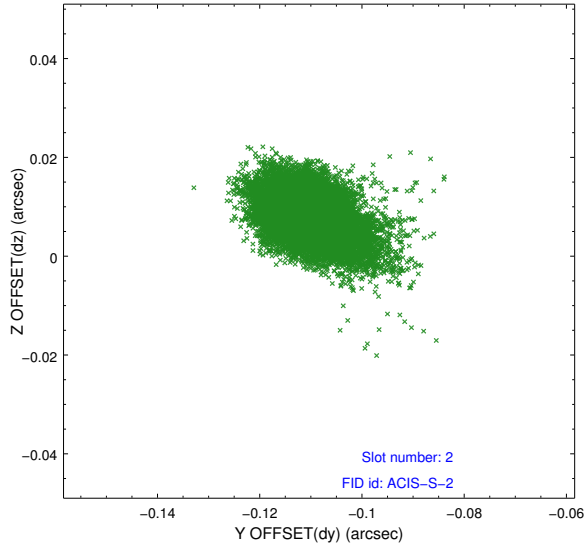
2.5.1 Slot 0



2.5.2 Slot 1

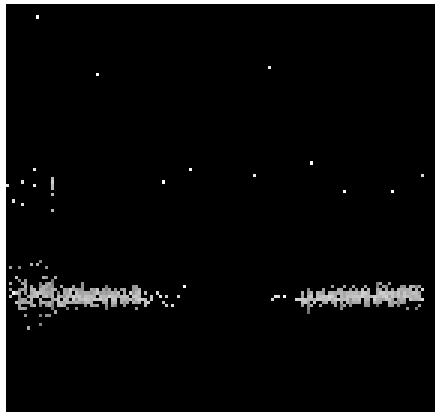


2.5.3 Slot 2

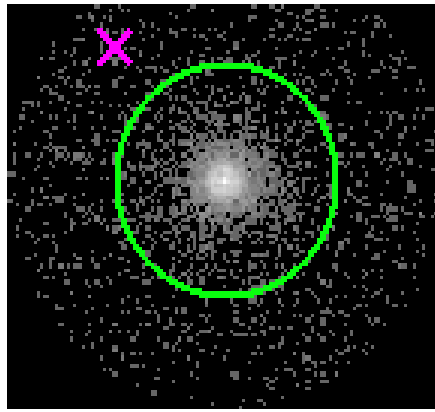


3 Gratings

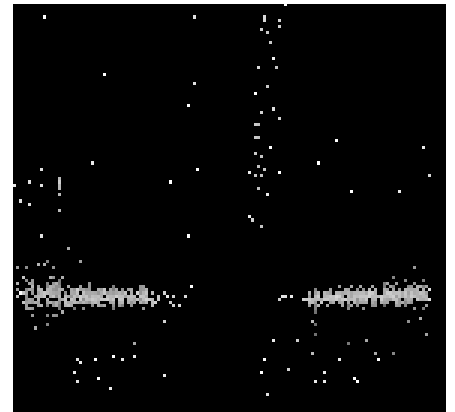
3.1 HEG Arm



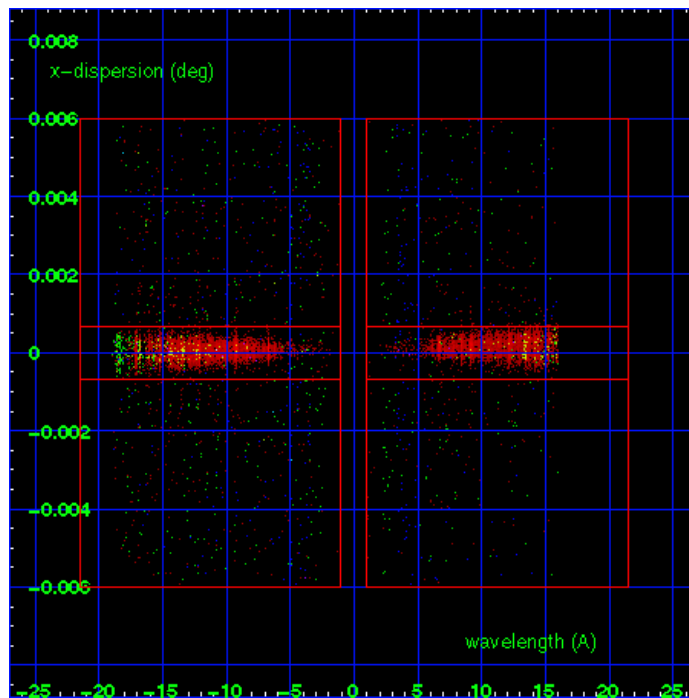
HEG Order Sort 123



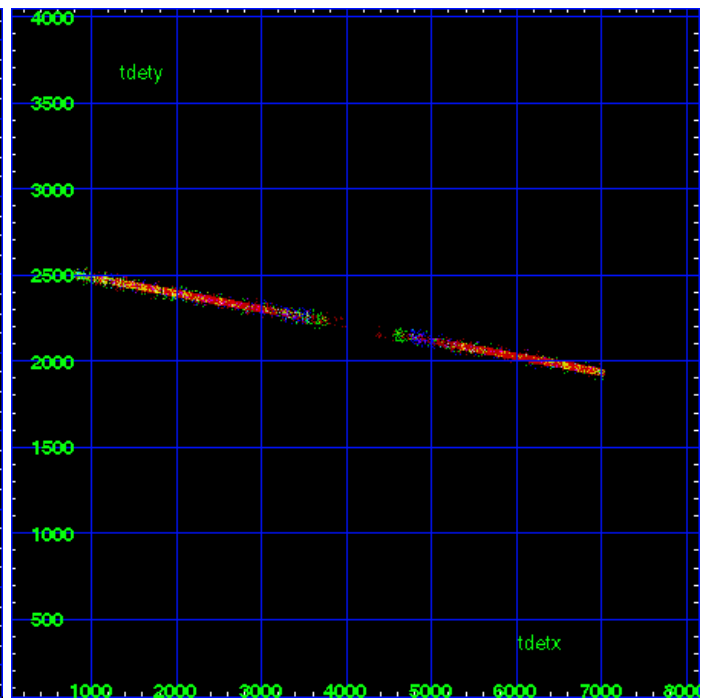
HEG Zero Order



HEG Order Sort ALL

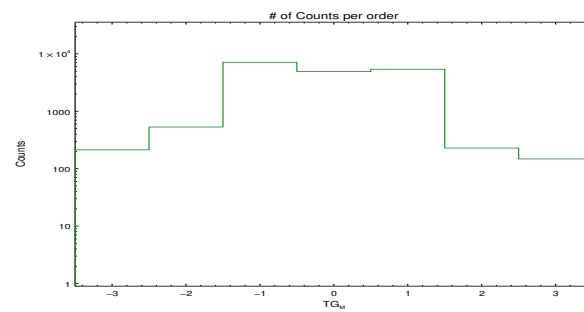


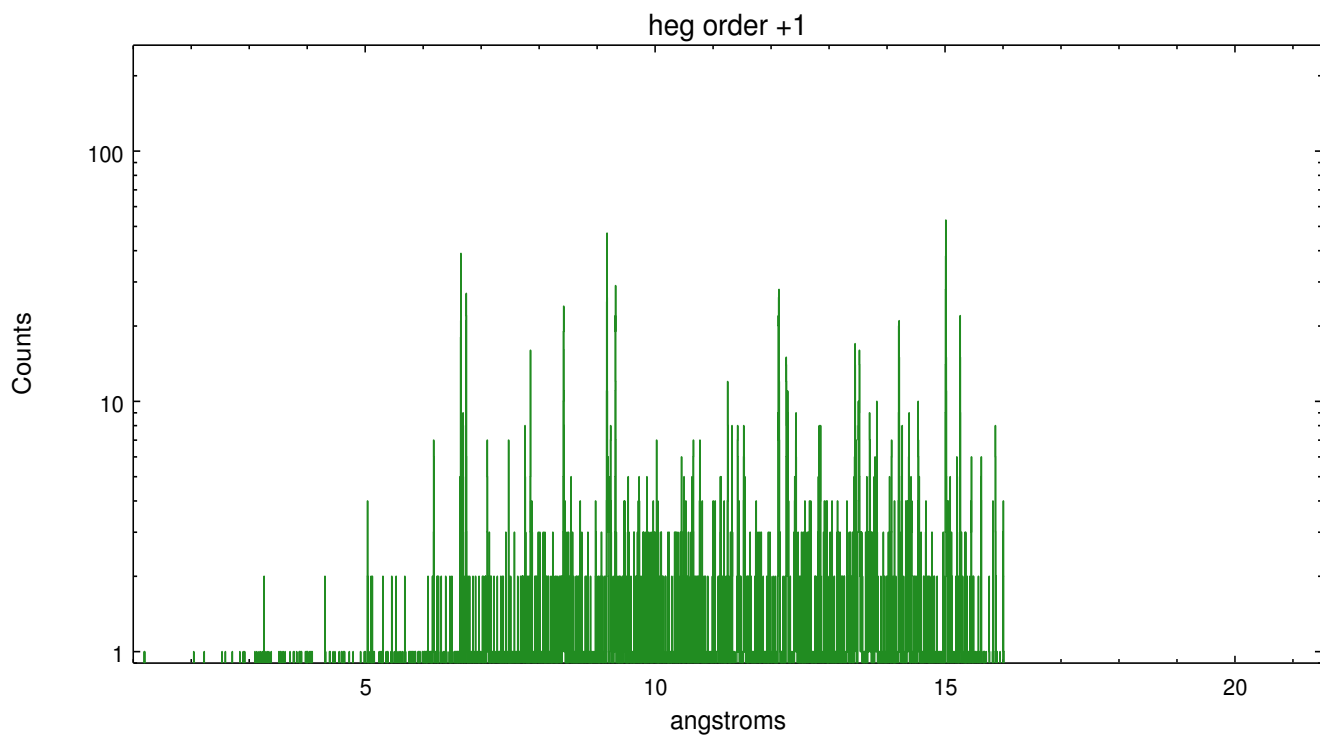
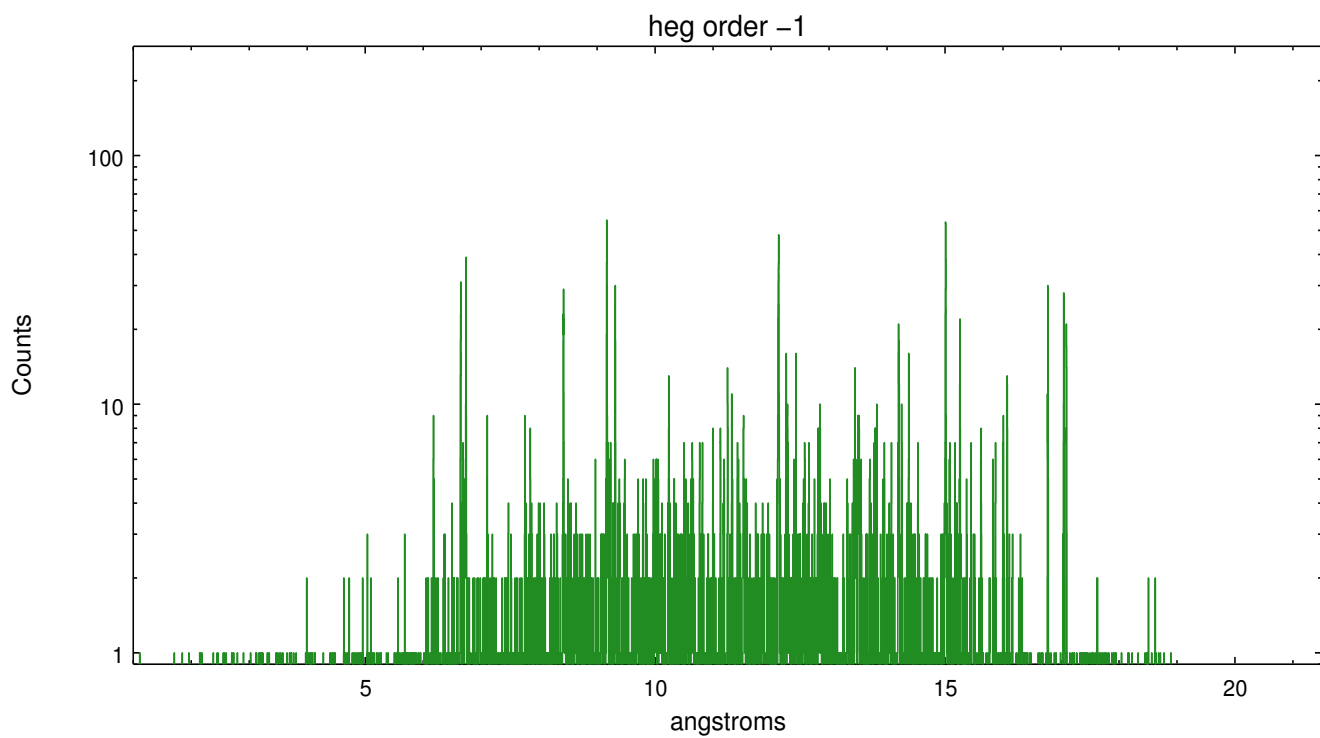
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	213	532	7127	4928	5387	229	148

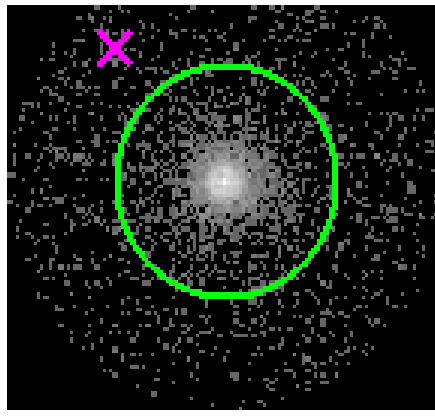




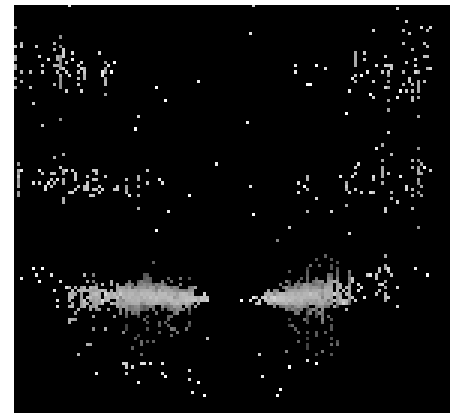
3.2 MEG Arm



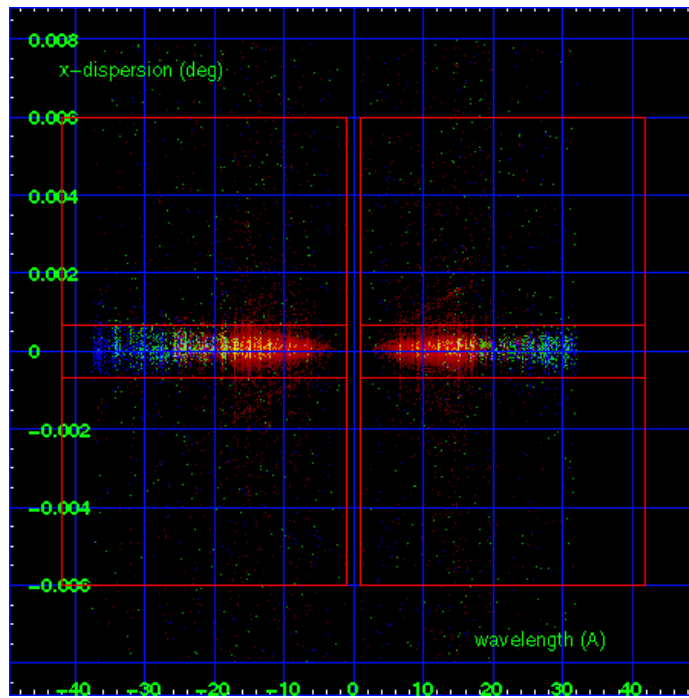
MEG Order Sort 123



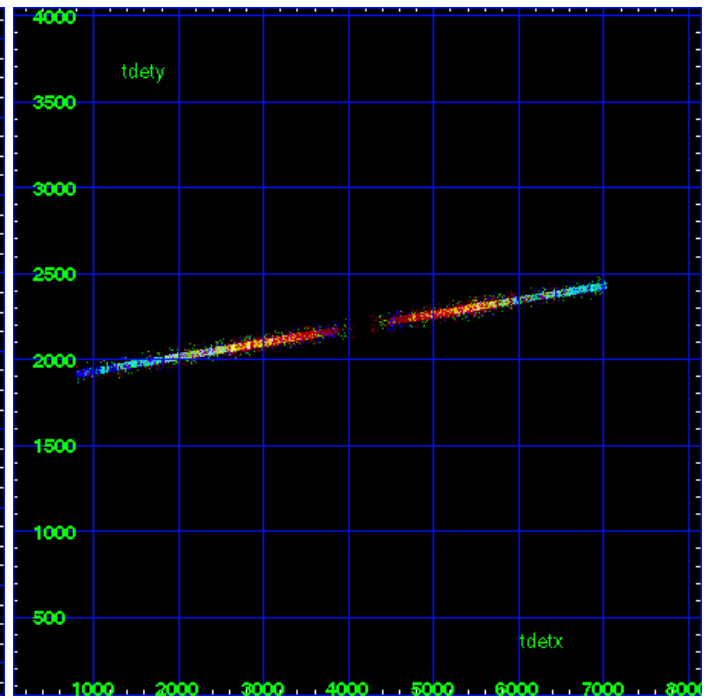
MEG Zero Order



MEG Order Sort ALL

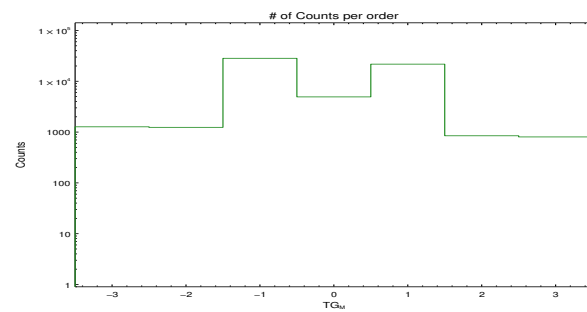


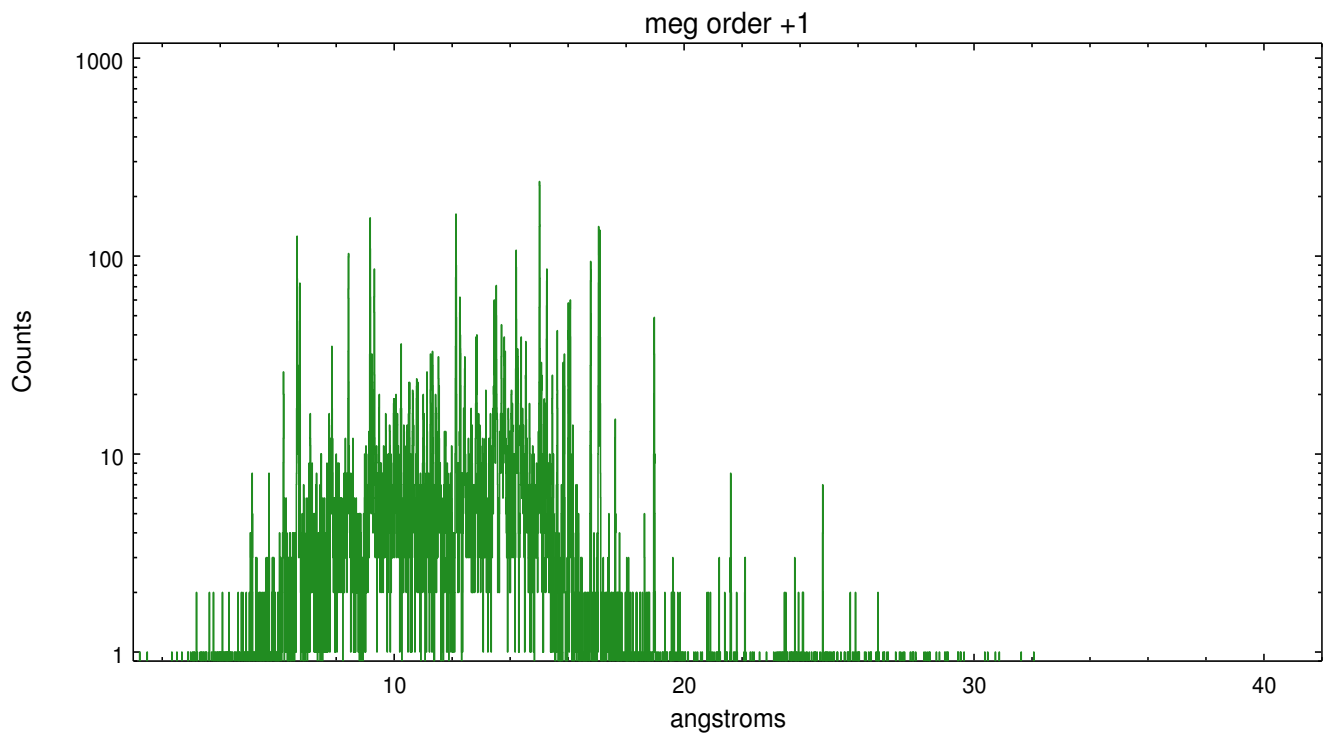
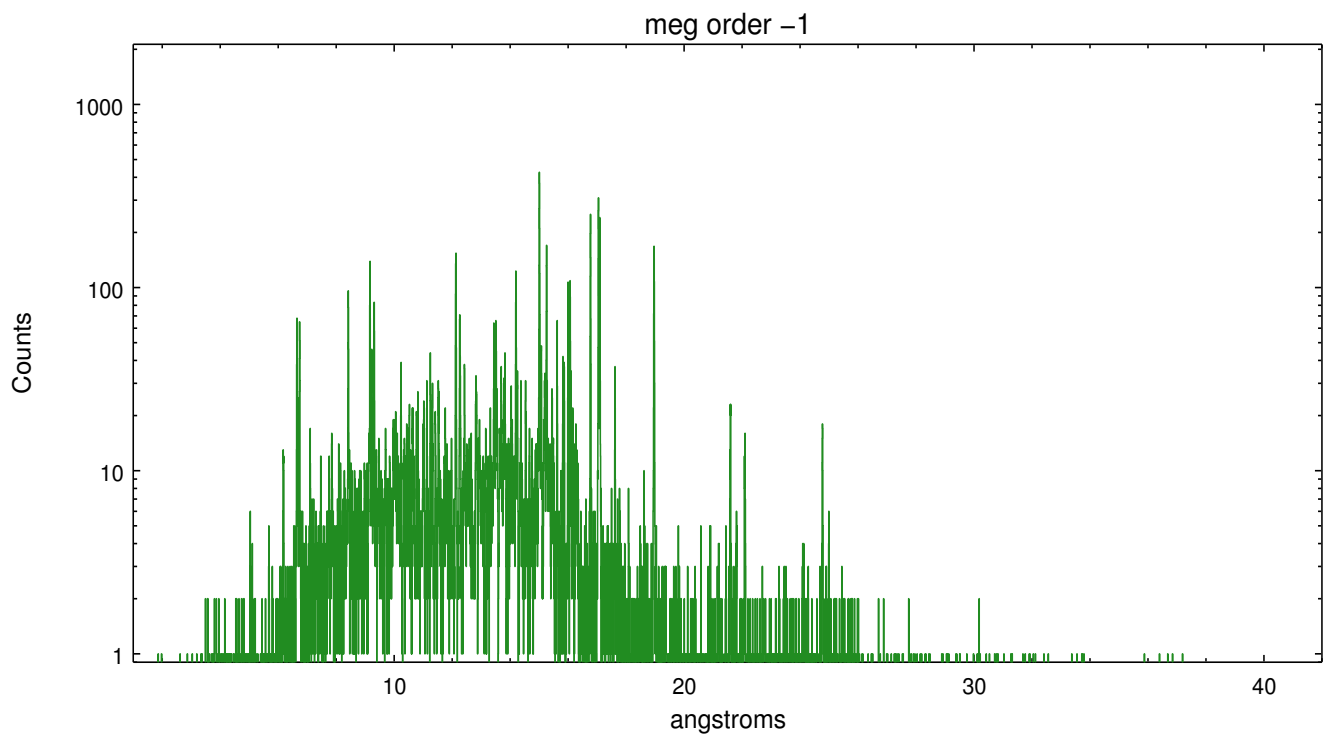
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1270	1239	28319	4928	21738	846	803





A Summary

A.1 Status

V&V Scientist	John Houck
V&V Date (YYYY-MM-DD)	2010.10.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.043

A.2 Comments

Comments for Obi 0

The ACIS focal plane temperature is warmer than -118.7 C degrees during the interval 54654996.36 - 54682036.36 (MET s) of this observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -116.7 C during the interval 54654996.36 - 54682036.36 (MET s) of this observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (e.g., fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.