

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16331 - L2 Version 2
Chandra X-Ray Center

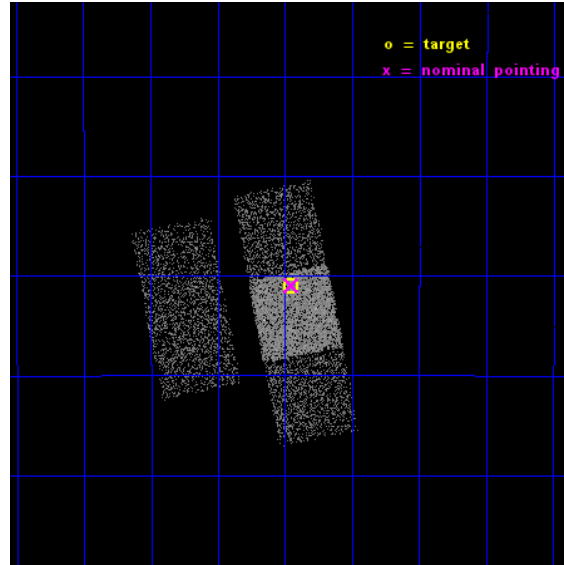
L2 Processing Date : Dec 9 2014

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1 Front

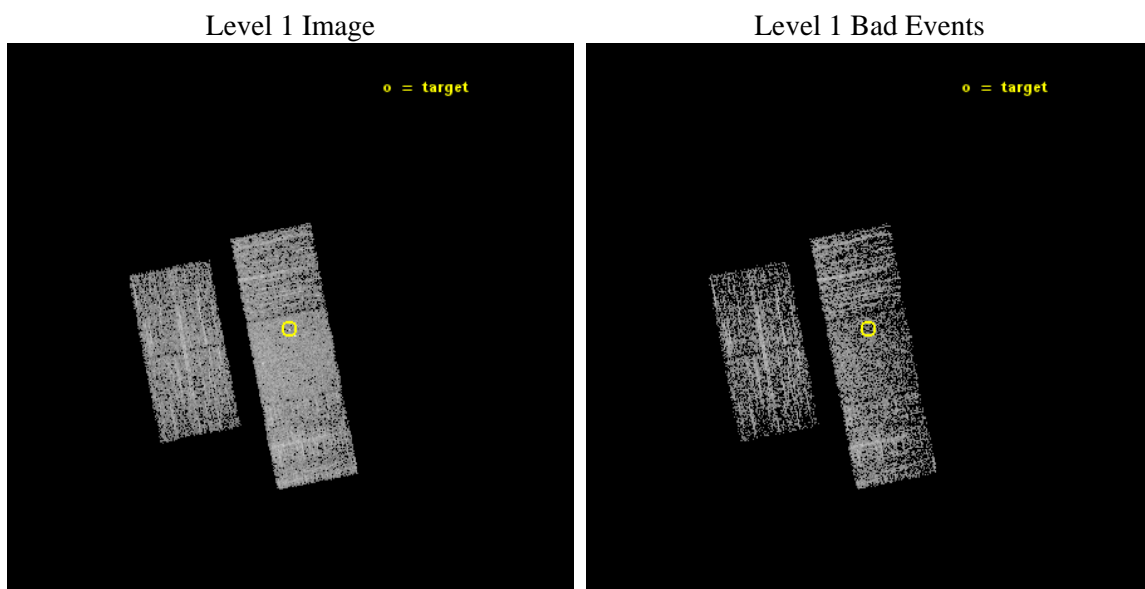
seq_num	200957	Sequence number
obs_id	16331	Observation id
title	X-rays and Disks around Upper Sco Stars	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	US 16035767-2031055	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	240.990417	Observer's specified target RA [deg]
dec_targ	-20.518194	Observer's specified target Dec [deg]
ra_nom	240.98823236448	Nominal RA [deg]
dec_nom	-20.516210100246	Nominal Dec [deg]
roll_nom	78.872202524255	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3065.9000235796	Sum of GTIs [s]
livetime	3025.8417826888	Livetime [s]
ontime2	3065.9000235796	Sum of GTIs [s]
ontime3	3065.9000235796	Sum of GTIs [s]
ontime6	3065.9000235796	Sum of GTIs [s]
ontime7	3065.9000235796	Sum of GTIs [s]
ontime8	3065.9000235796	Sum of GTIs [s]
l2events	14988	Number of level 2 events



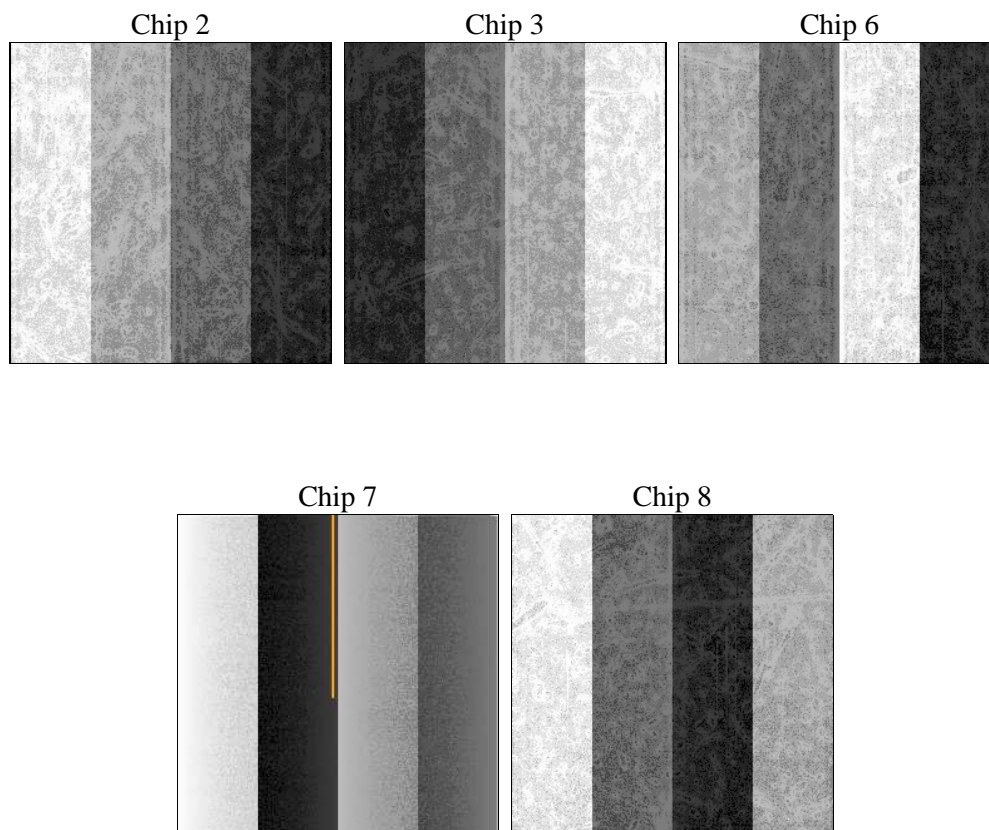
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	3065.9000235796	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	3065.9000235796	Sum of GTIs [s]
date	2014-12-10T03:37:40	Date and time of file creation	ontime3	3065.9000235796	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	3065.9000235796	Sum of GTIs [s]
			ontime7	3065.9000235796	Sum of GTIs [s]
			ontime8	3065.9000235796	Sum of GTIs [s]
			l1events	81310	Number of level 1 events

2.1.4 Events

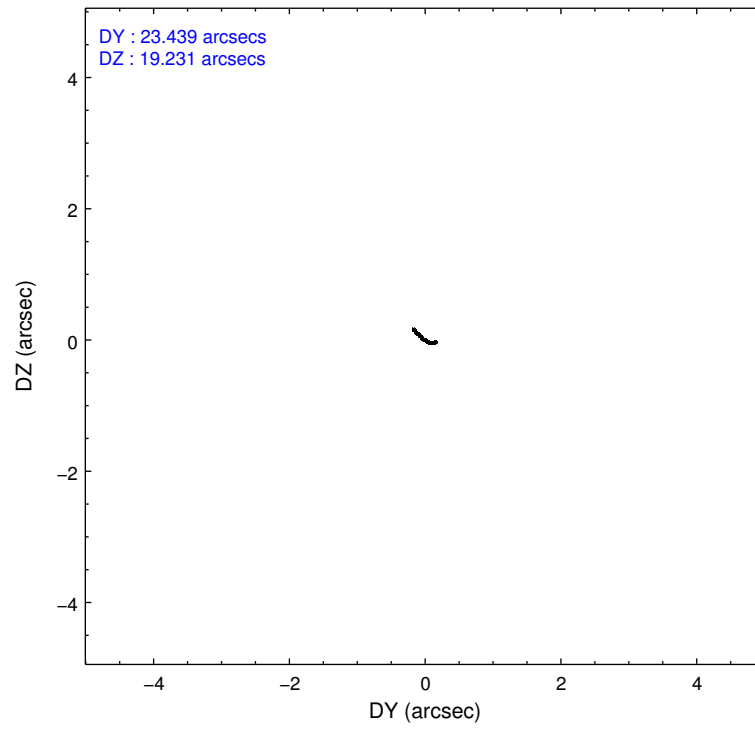
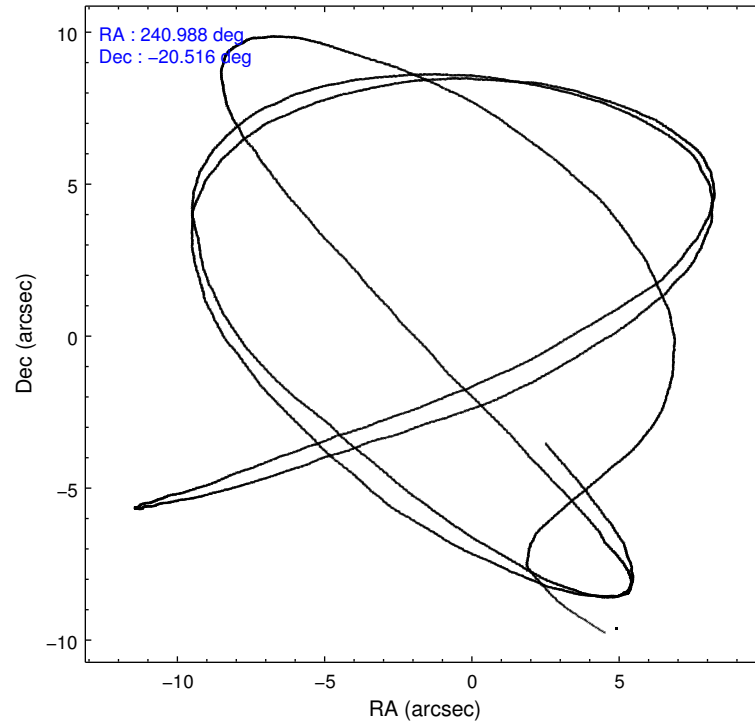
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	13784	13221	14871	20549	18885
rejected events	12163	11585	13023	11482	13919
rejected %	88%	87%	87%	55%	73%

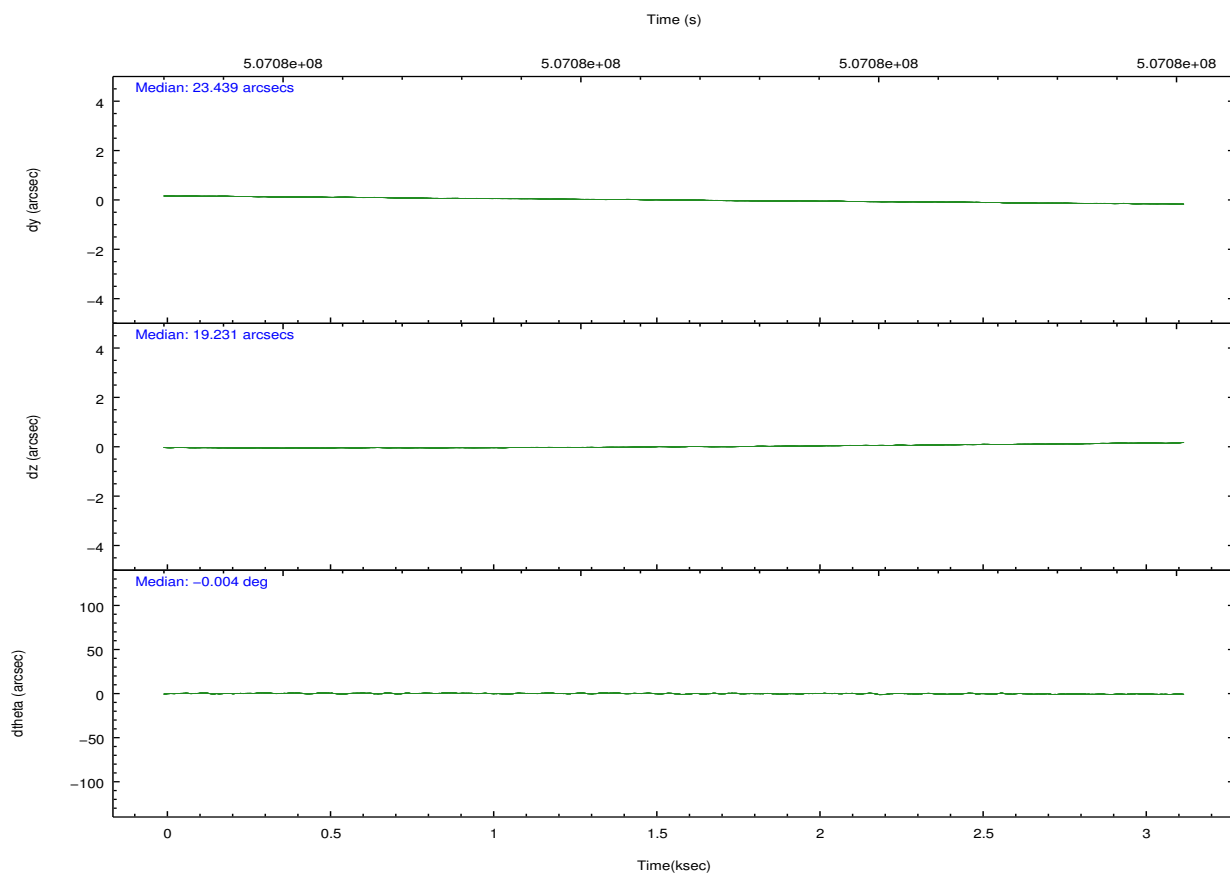
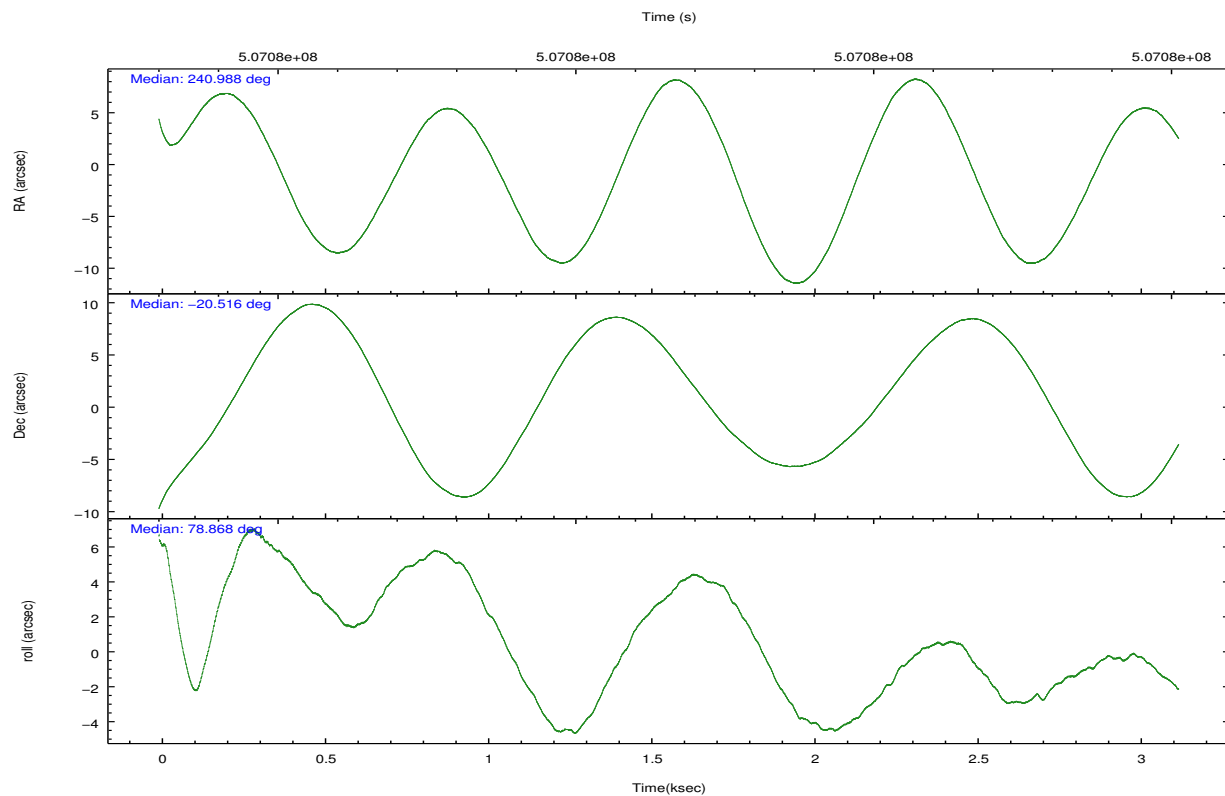
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	603	594	647	888	1461
	4%	4%	4%	4%	7%
grade 1 events	12	7	7	24	13
	0%	0%	0%	0%	0%
grade 2 events	369	348	388	1850	1183
	2%	2%	2%	9%	6%
grade 3 events	164	160	202	734	568
	1%	1%	1%	3%	3%
grade 4 events	147	186	170	764	518
	1%	1%	1%	3%	2%
grade 5 events	674	791	765	2015	1120
	4%	5%	5%	9%	5%
grade 6 events	347	355	446	4853	1245
	2%	2%	2%	23%	6%
grade 7 events	11468	10780	12246	9421	12777
	83%	81%	82%	45%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	240.997895	240.9882323644759	Subarray requested	NONE	NONE
[deg] Pointing Dec	-20.541856	-20.51621010024609	Alternating exposures requested	N	N
[deg] Pointing Roll	78.718946	78.87220252425487	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	507077875.184000	507076682.99997			
Observation start date	2014-01-25T22:56:48	2014-01-25T22:38:02			
[s] Observation end time (MET)	507080875.184000	507081488.71274			
Observation end date	2014-01-25T23:46:48	2014-01-25T23:58:08			
Read mode	TIMED	TIMED			

2.3 Aspect



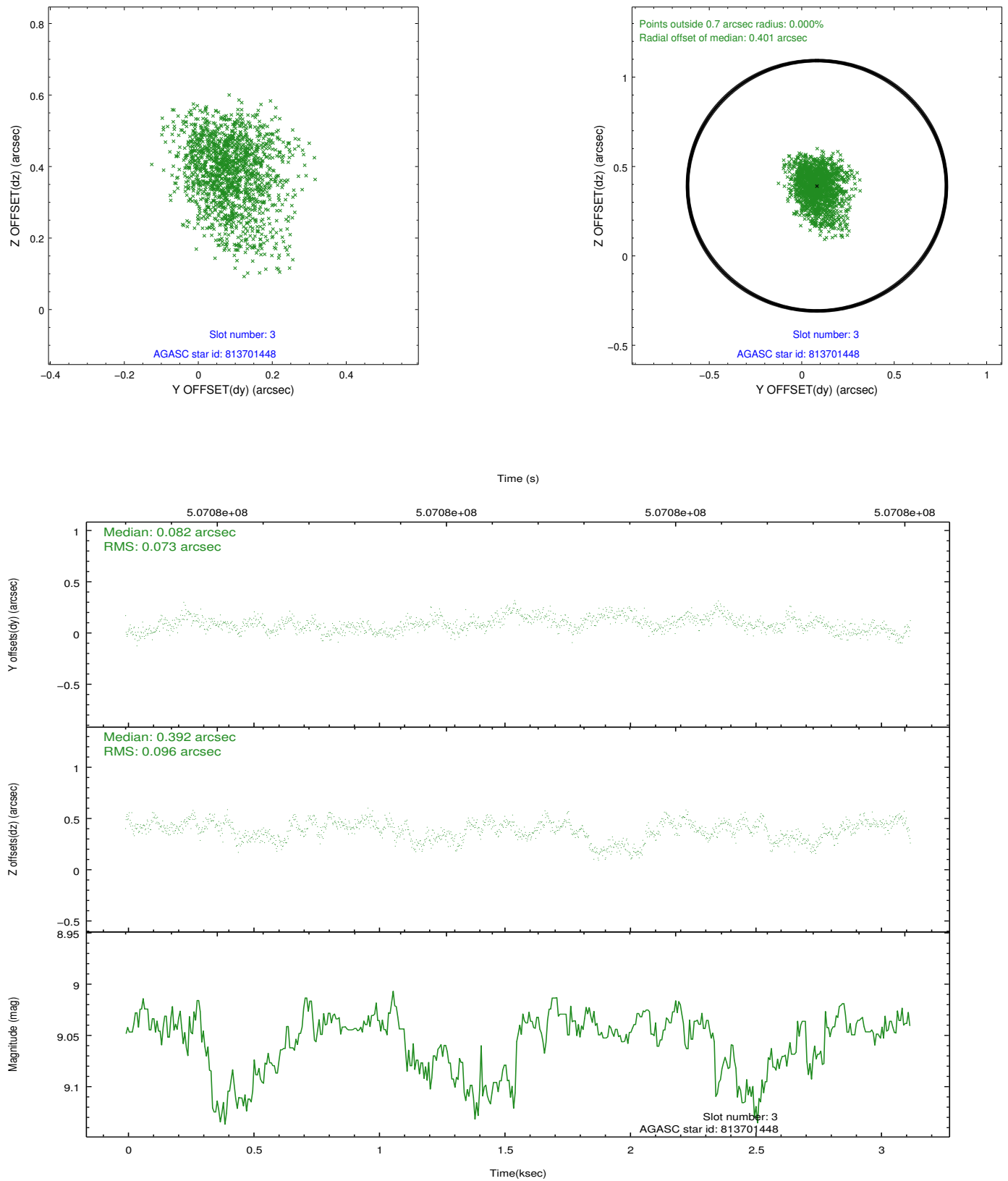


Slot Statistics

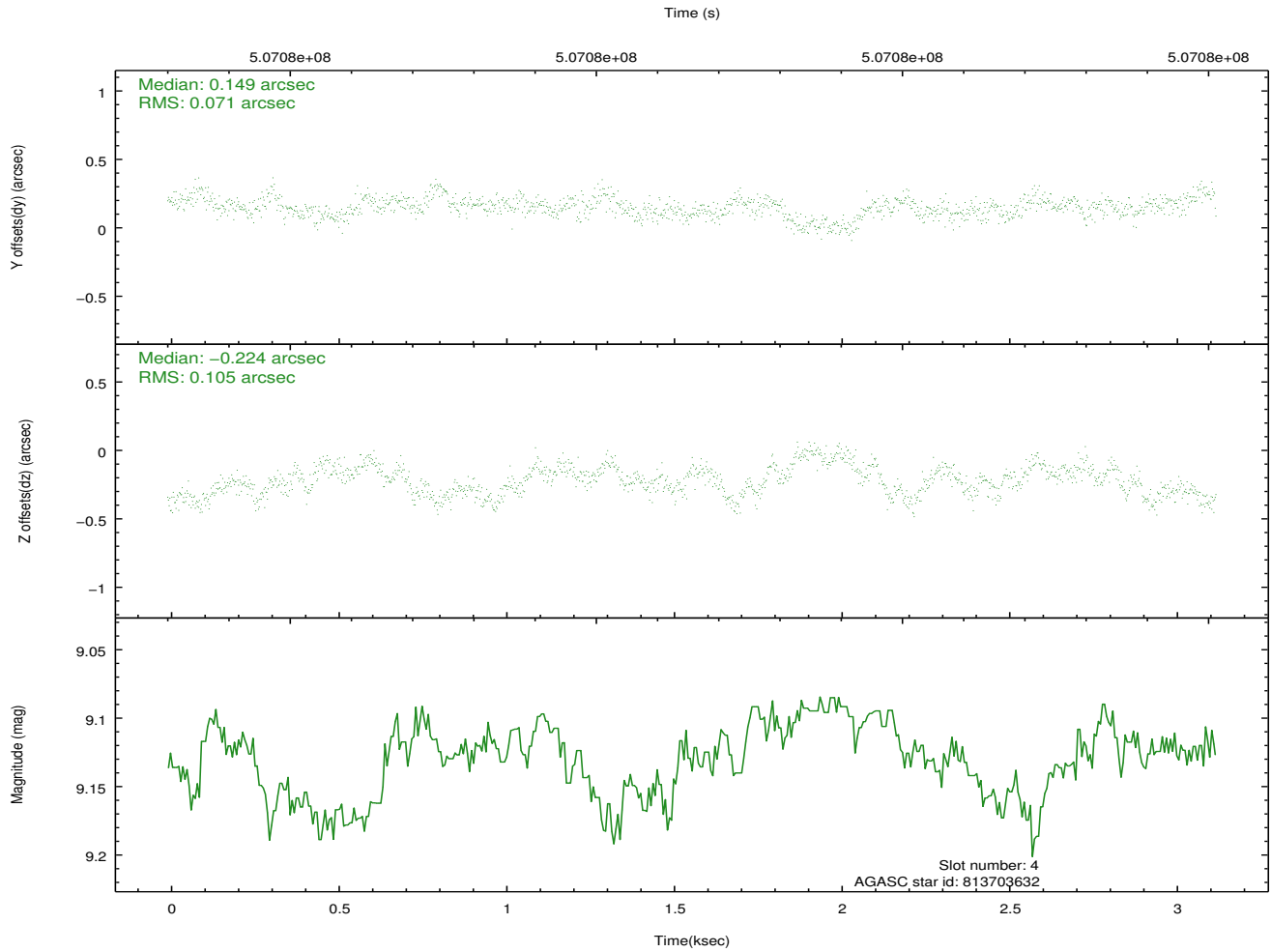
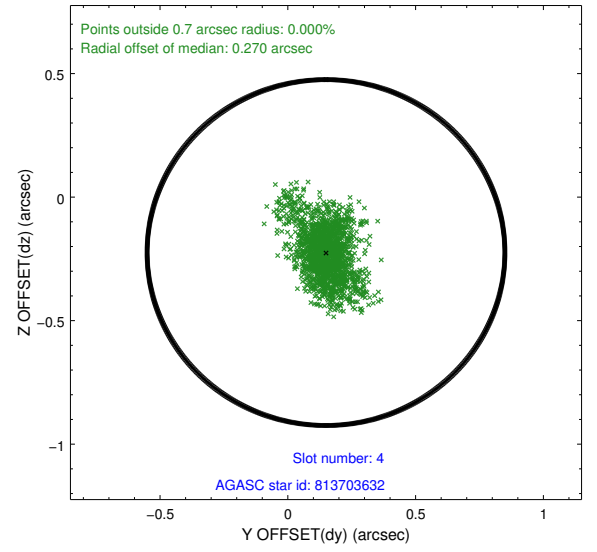
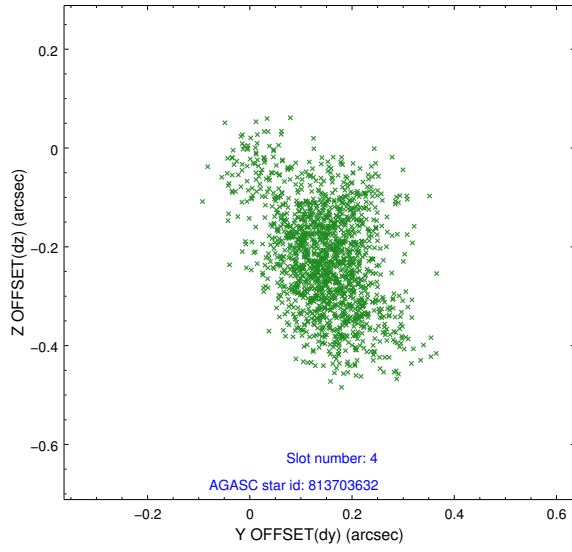
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.02	763	-0.146	-0.046	0.007	0.012	0.000000	0.000000	-776.78	-1740.74
1	FID		ACIS-S-4	7.11	763	0.335	0.083	0.005	0.011	0.000000	0.000000	2136.03	165.75
2	FID		ACIS-S-5	7.13	763	-0.221	-0.028	0.006	0.010	0.000000	0.000000	-1827.10	161.64
3	GUIDE	used	813701448	9.05	1524	0.082	0.392	0.128	0.214	241.215388	-20.307299	970.77	-553.74
4	GUIDE	used	813703632	9.13	1526	0.149	-0.224	0.131	0.231	240.756660	-19.998257	1759.48	1183.21
5	GUIDE	used	814219704	9.29	1524	0.369	-0.020	0.133	0.206	240.524130	-20.755558	-1066.57	1413.73
6	GUIDE	used	813706952	9.11	1524	-0.269	-0.012	0.112	0.171	240.522769	-19.781295	2367.41	2115.34
7	GUIDE	used	813704280	7.59	1525	-0.336	-0.131	0.083	0.119	240.779418	-19.840714	2331.66	1221.38

2.4 Star Slots

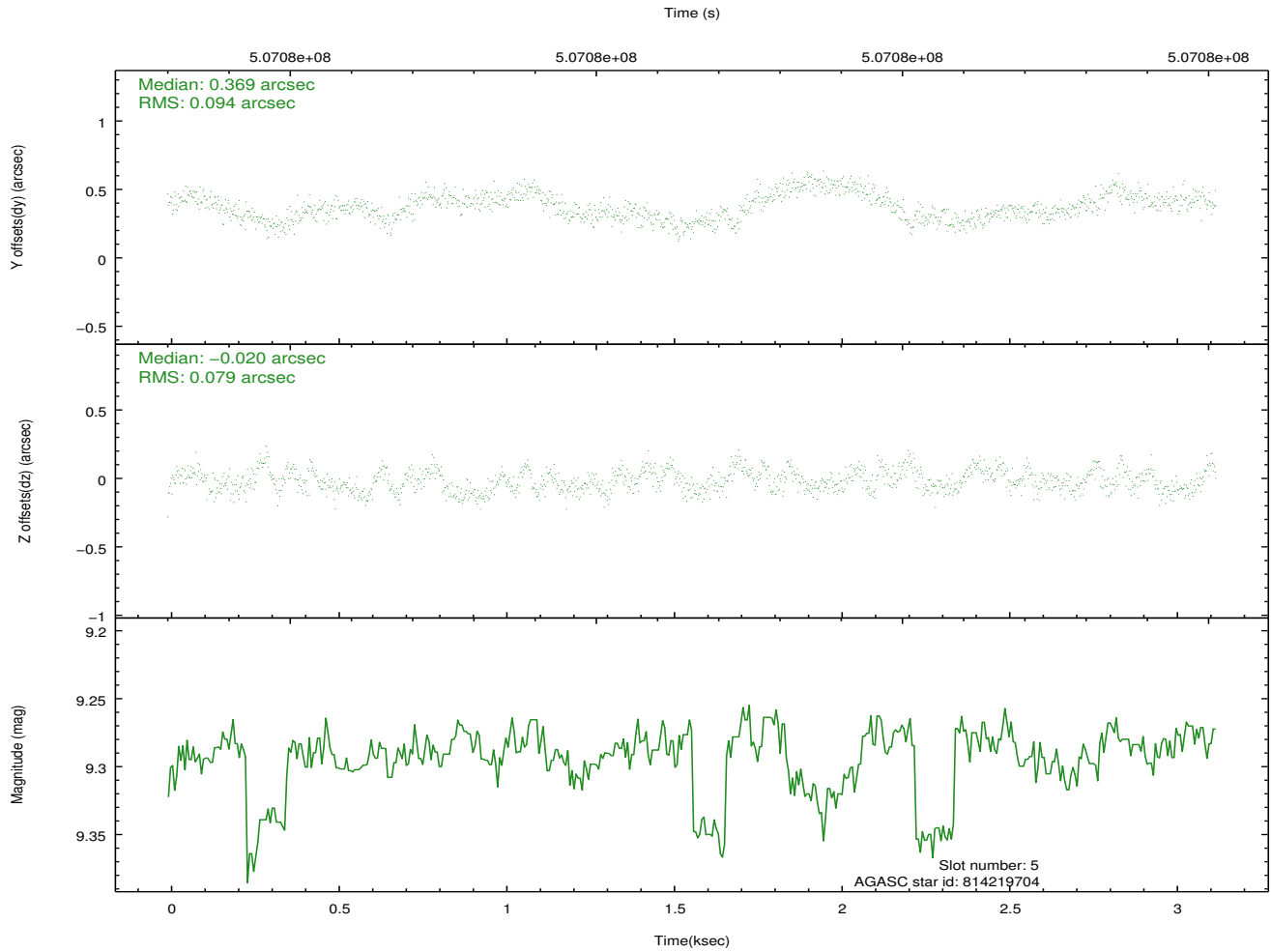
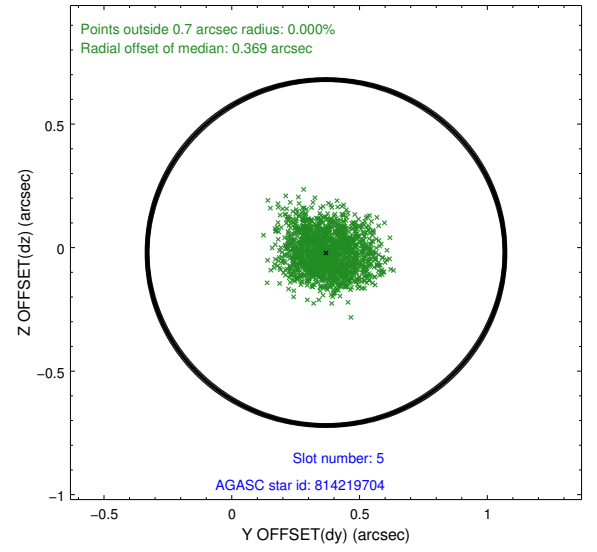
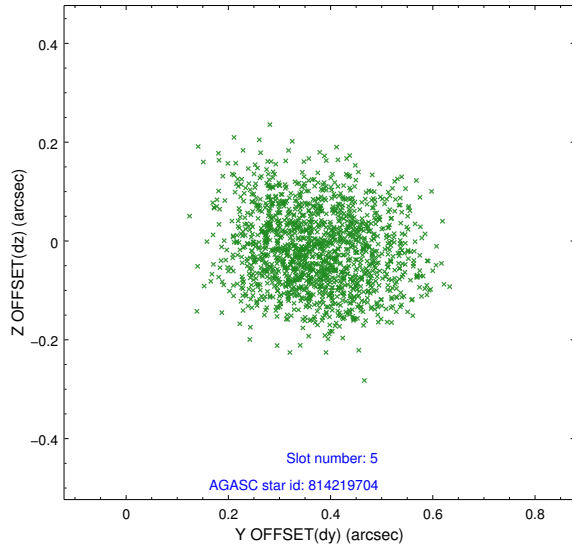
2.4.1 Slot 3



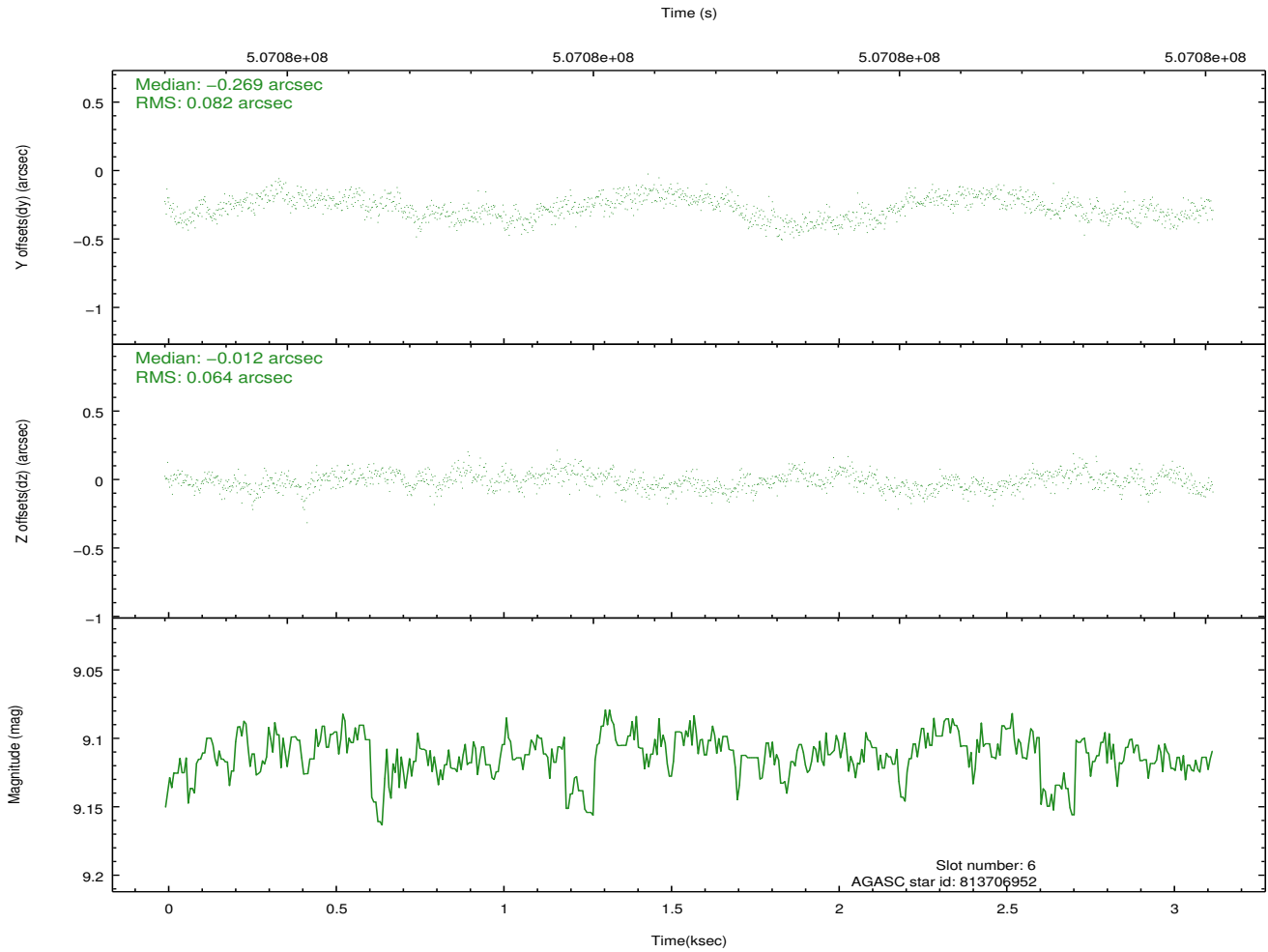
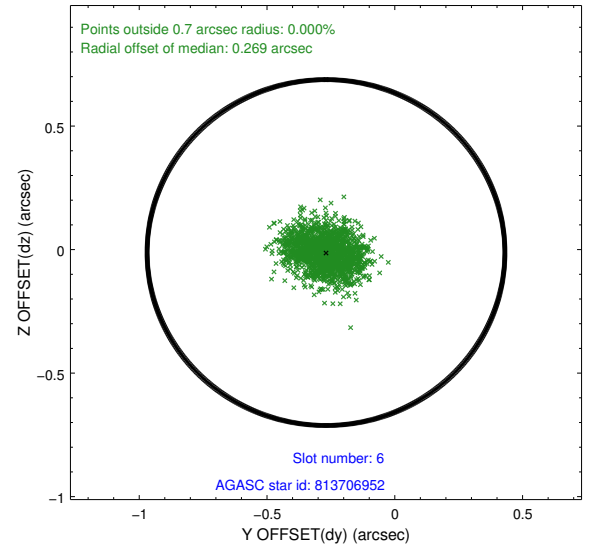
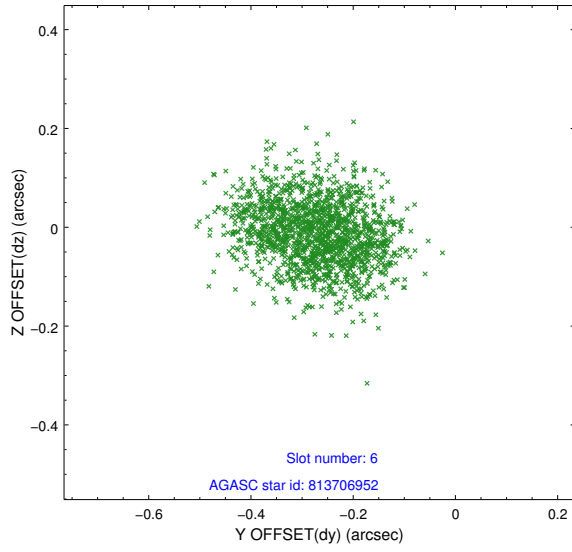
2.4.2 Slot 4



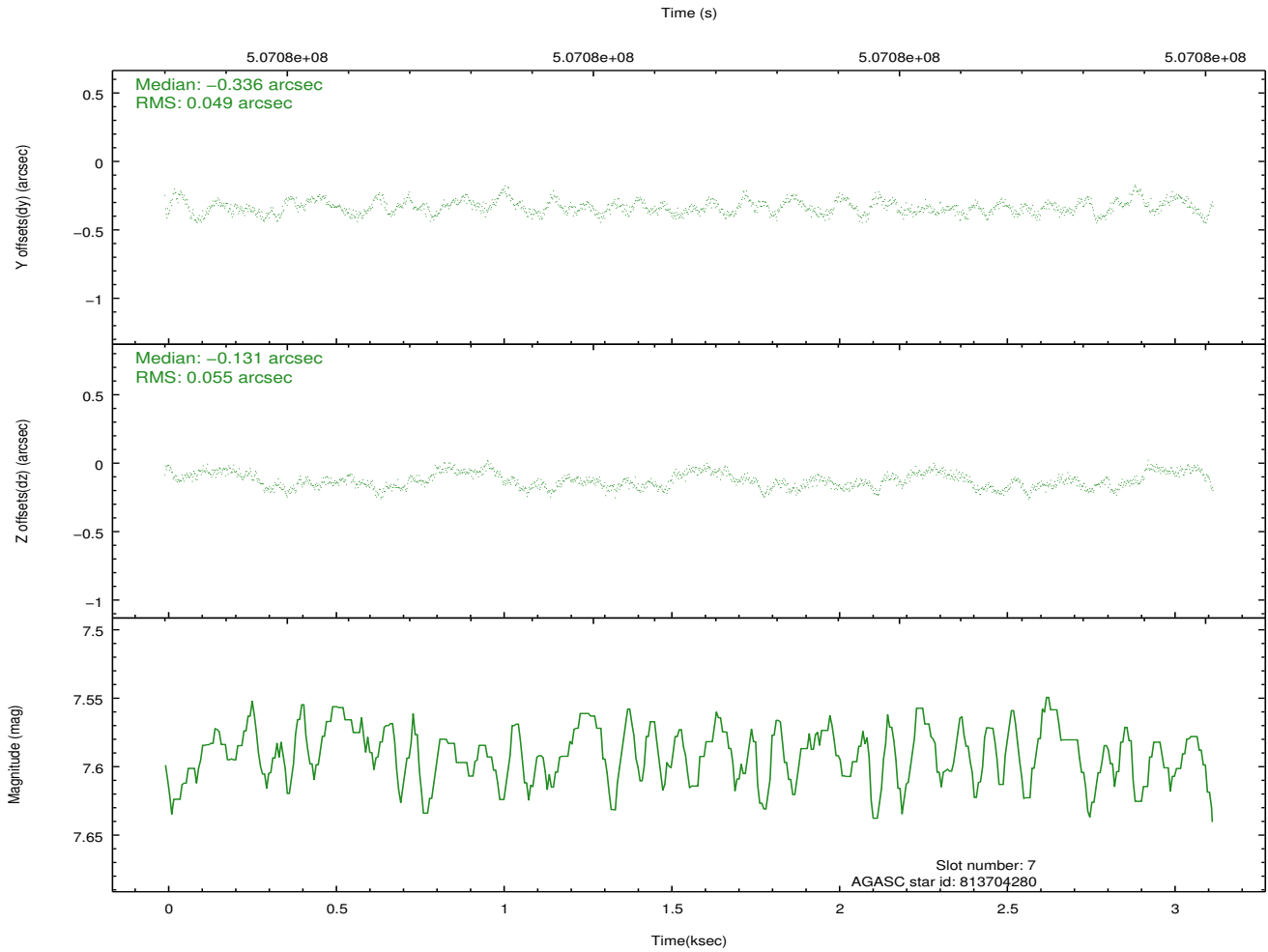
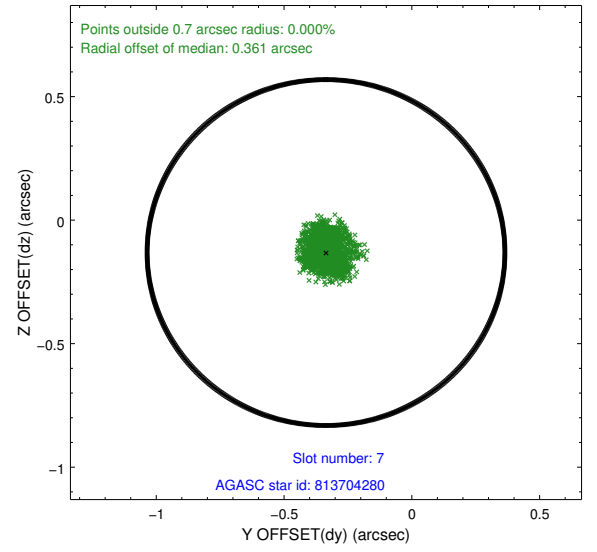
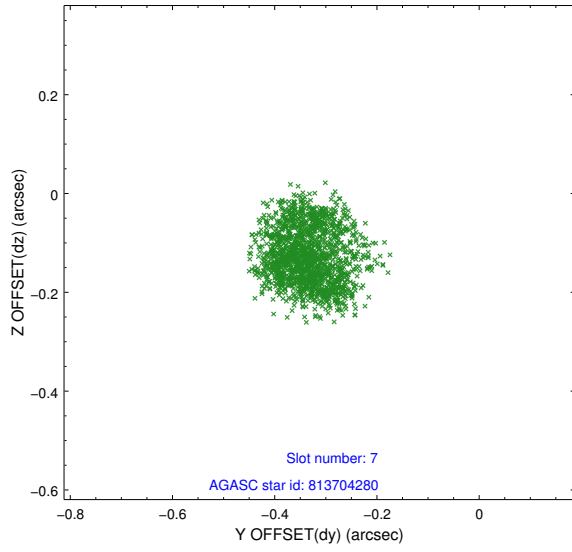
2.4.3 Slot 5



2.4.4 Slot 6

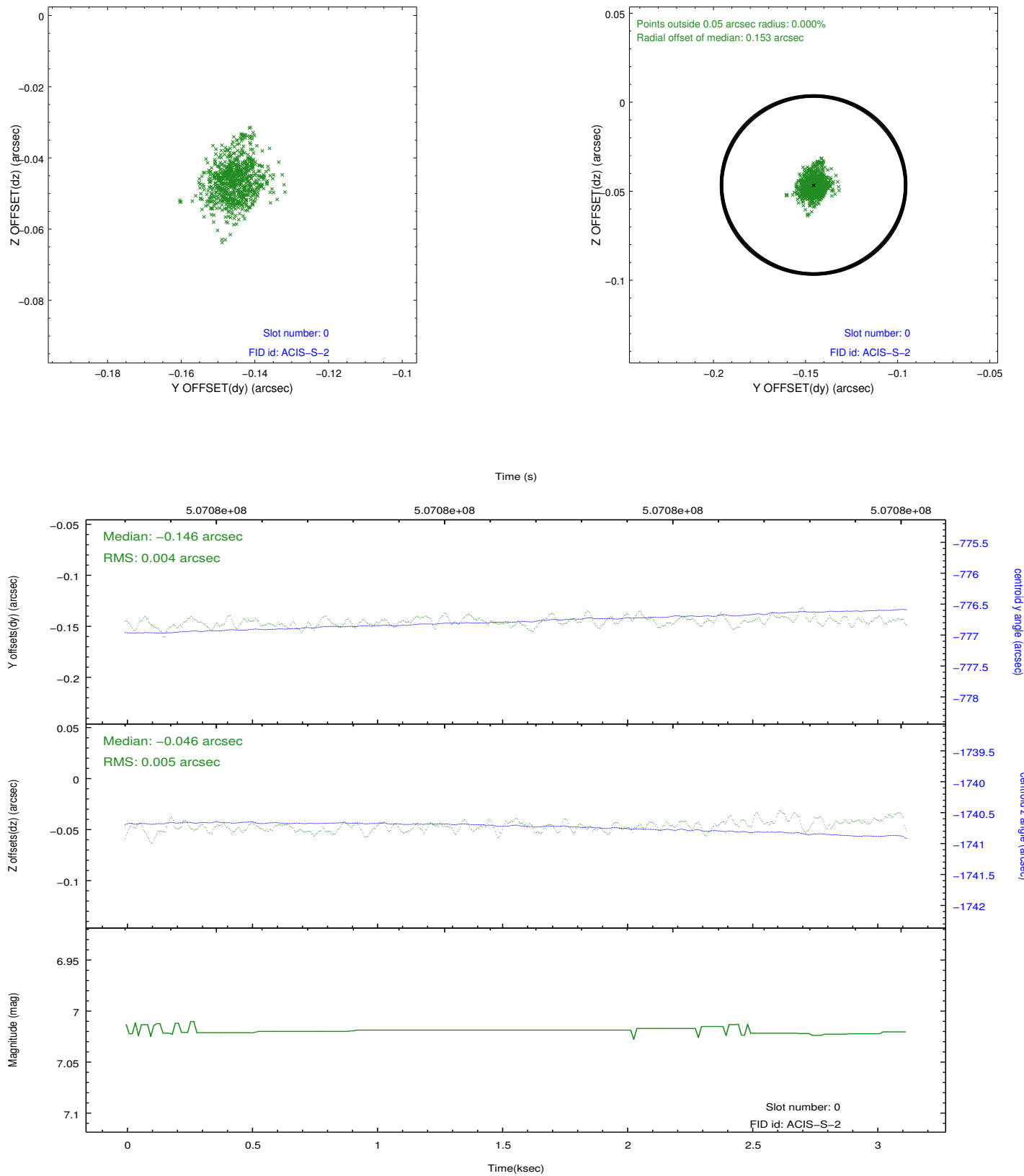


2.4.5 Slot 7

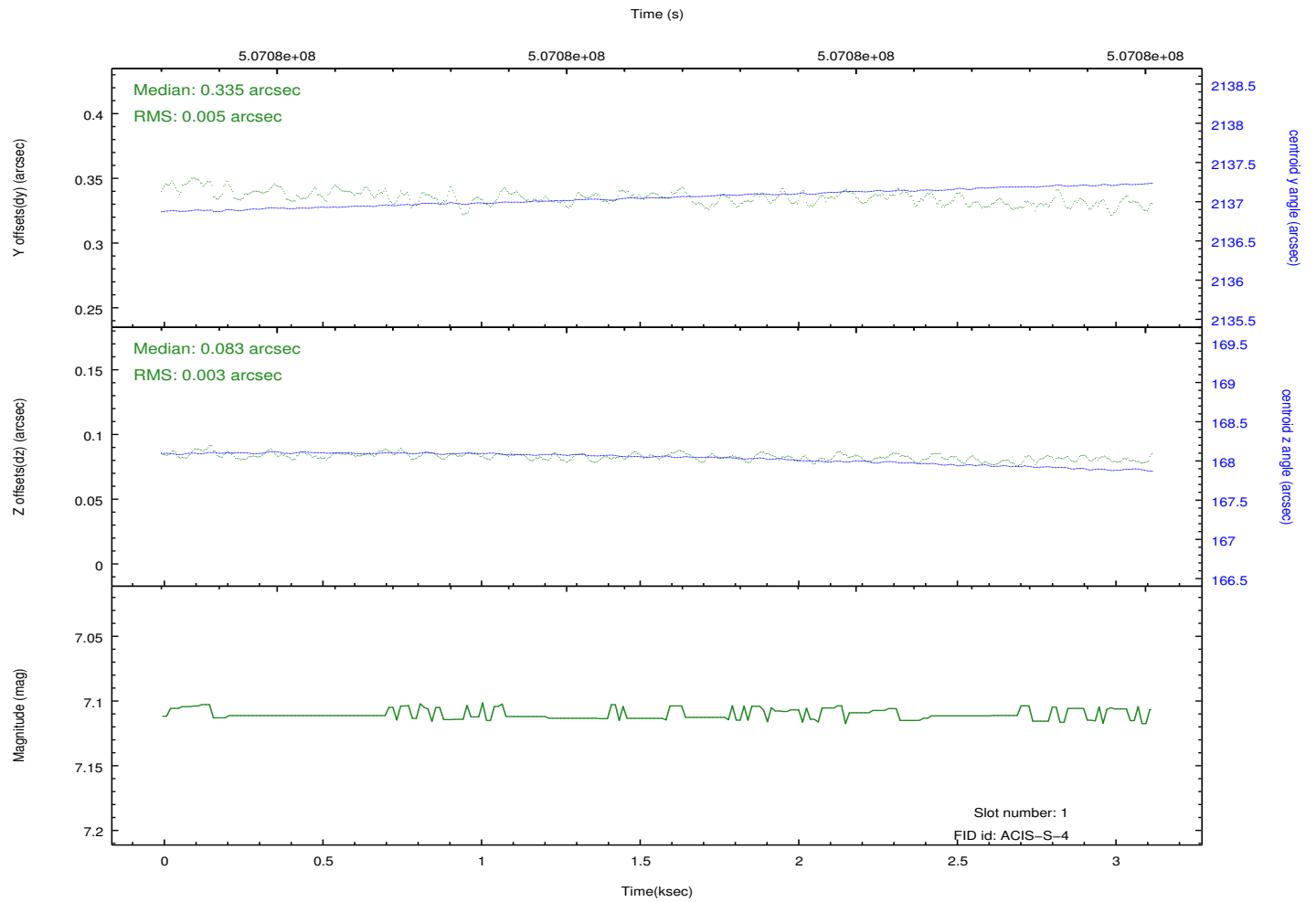
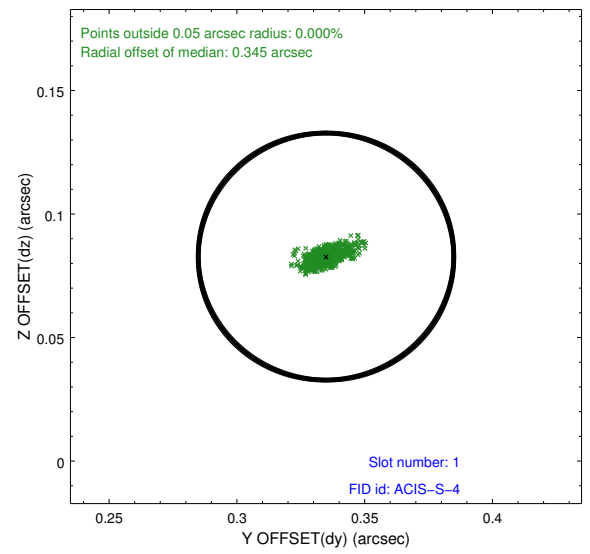
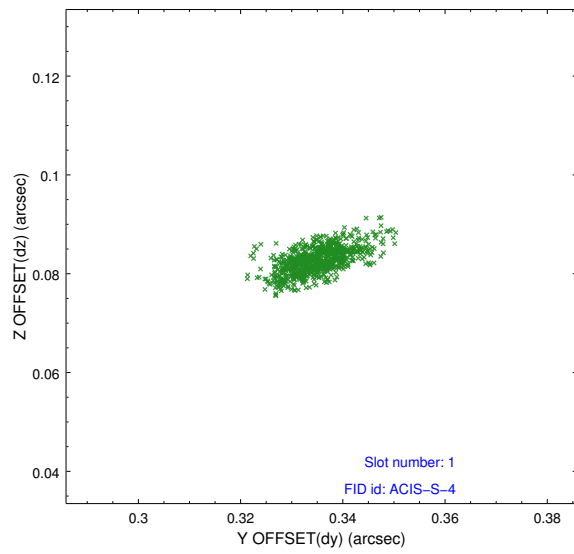


2.5 FID Slots

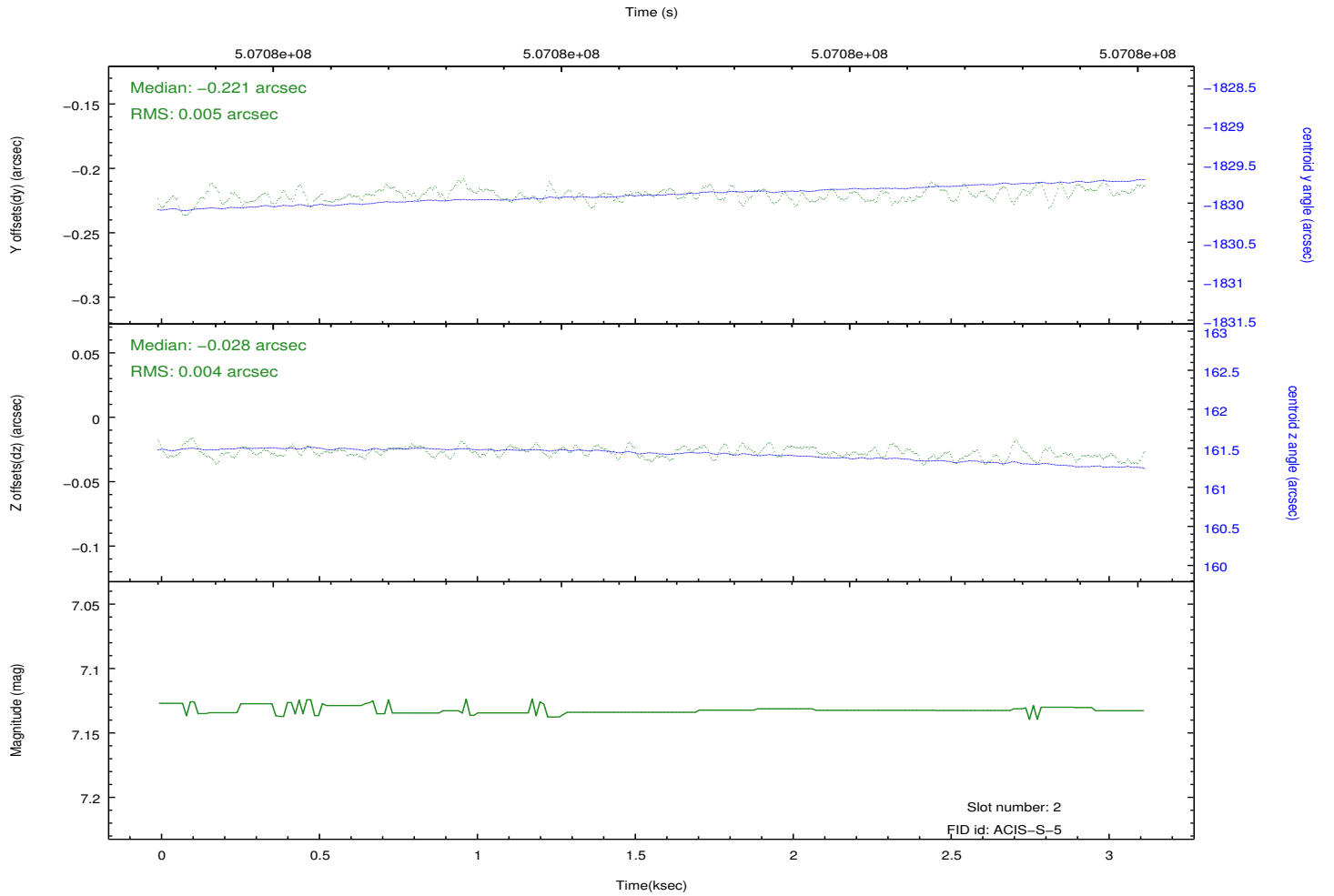
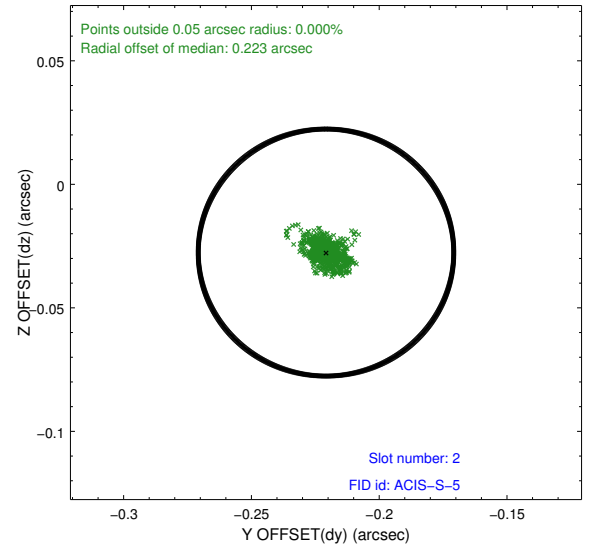
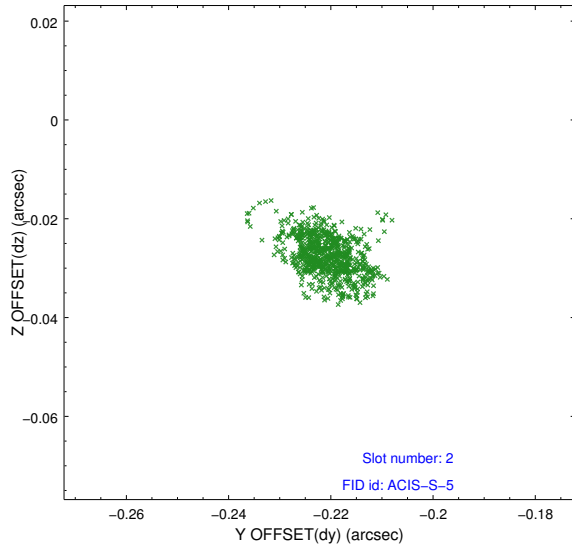
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.0659000235796

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.