

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16491 - L2 Version 2
Chandra X-Ray Center

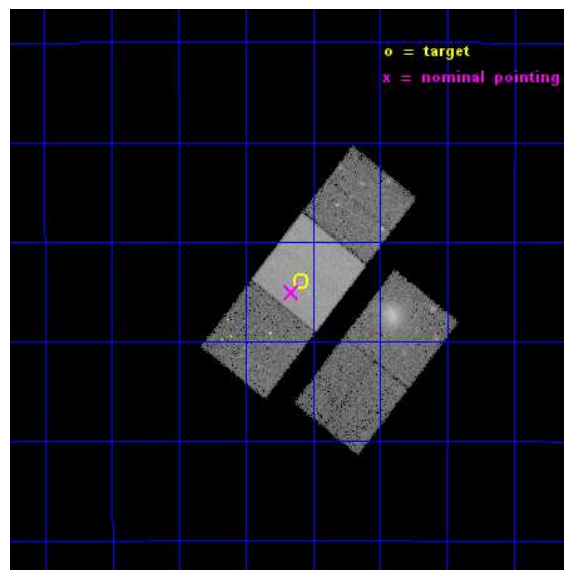
L2 Processing Date : Dec 7 2014

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1 Front

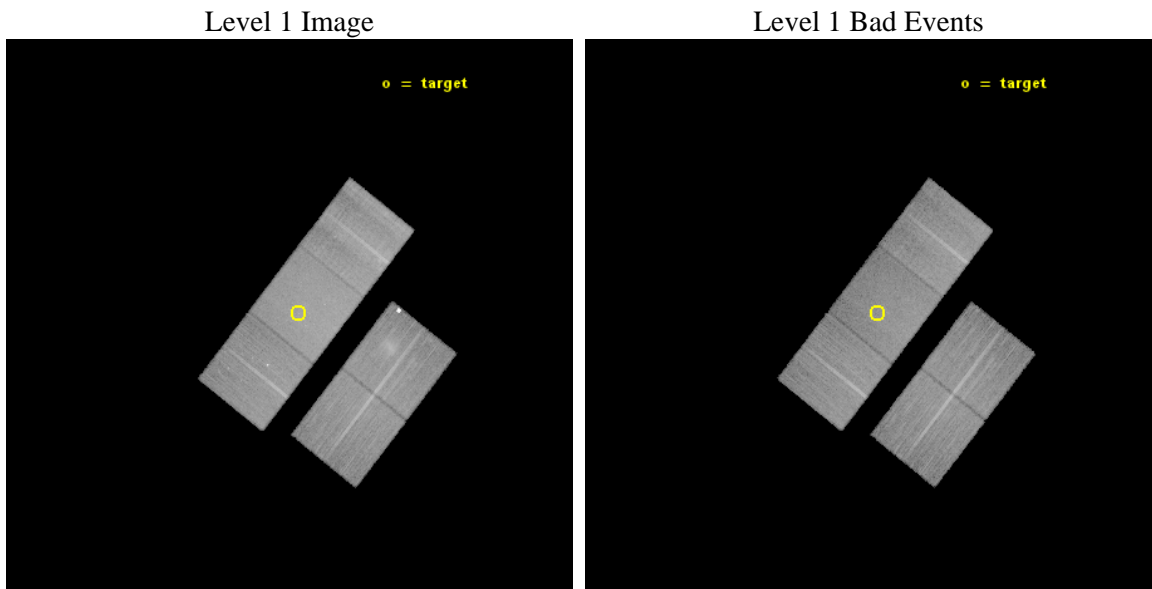
seq_num	801224	Sequence number
obs_id	16491	Observation id
title	Extreme constraints on ICM physics and cosmology: a deep observation of XMMUJ0044, the most distant massive cluster	Proposal title
observer	Dr Paolo Tozzi	Principal investigator
object	XMMUJ0044.0-2033	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	11.021667	Observer's specified target RA [deg]
dec_targ	-20.566583	Observer's specified target Dec [deg]
ra_nom	11.040223001111	Nominal RA [deg]
dec_nom	-20.584673900845	Nominal Dec [deg]
roll_nom	308.1631497668	Nominal Roll [deg]
revision	2	Processing version of data
ontime	34523.894915521	Sum of GTIs [s]
livetime	34072.814812328	Livetime [s]
ontime2	34523.730755508	Sum of GTIs [s]
ontime3	34523.812835515	Sum of GTIs [s]
ontime6	34520.712804794	Sum of GTIs [s]
ontime7	34523.894915521	Sum of GTIs [s]
ontime8	34523.771795511	Sum of GTIs [s]
l2events	186801	Number of level 2 events



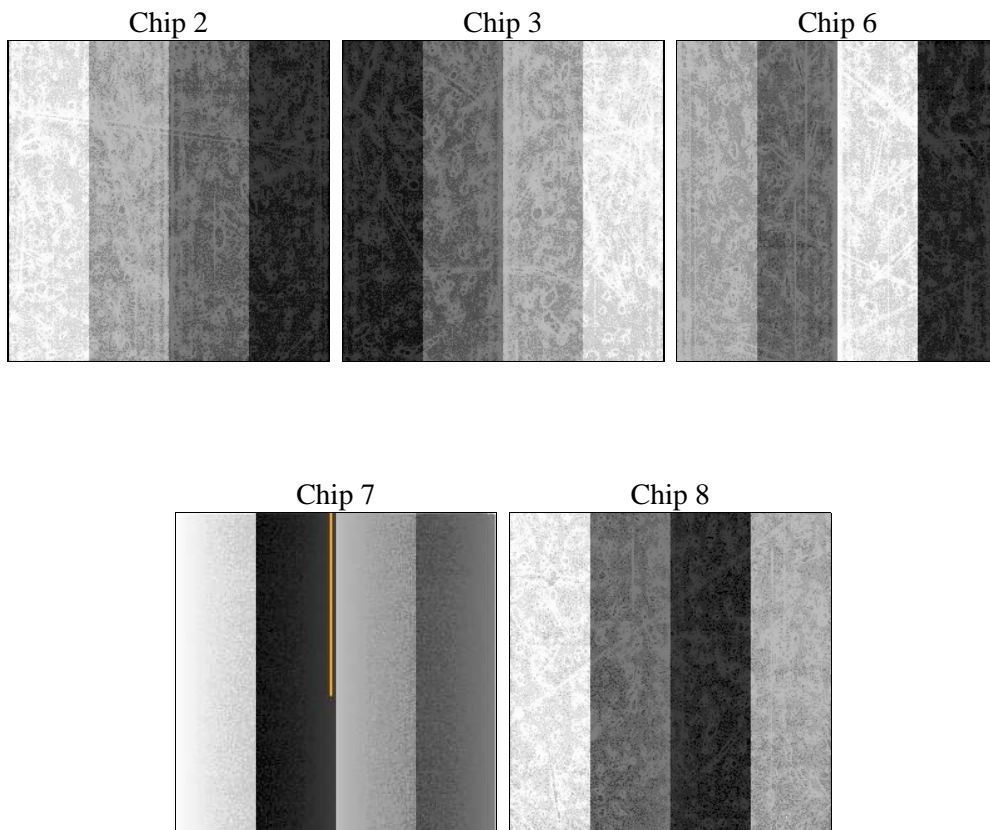
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	34457.201000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	34523.894915521	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	34523.730755508	Sum of GTIs [s]
date	2014-12-08T02:18:19	Date and time of file creation	ontime3	34523.812835515	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	34520.712804794	Sum of GTIs [s]
			ontime7	34523.894915521	Sum of GTIs [s]
			ontime8	34523.771795511	Sum of GTIs [s]
			l1events	990984	Number of level 1 events

2.1.4 Events

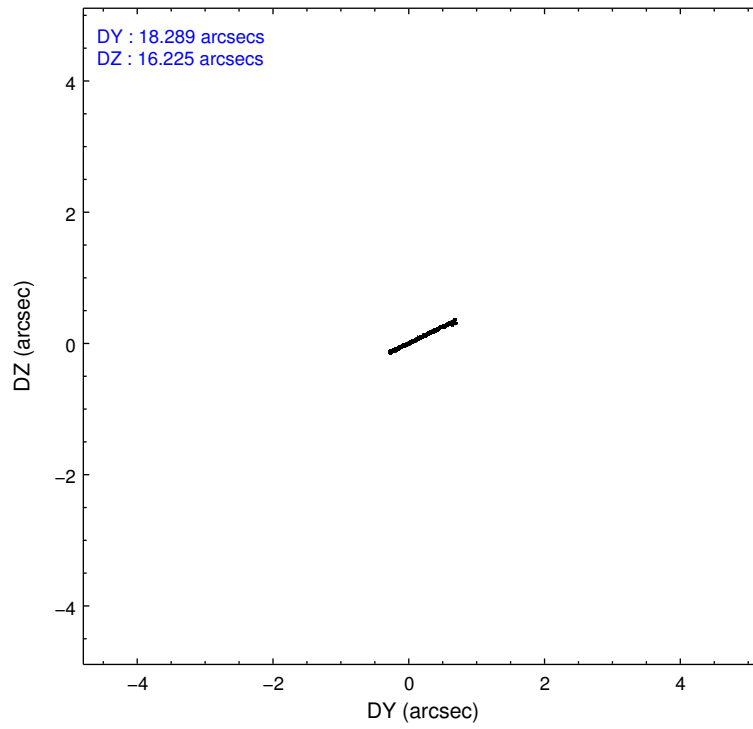
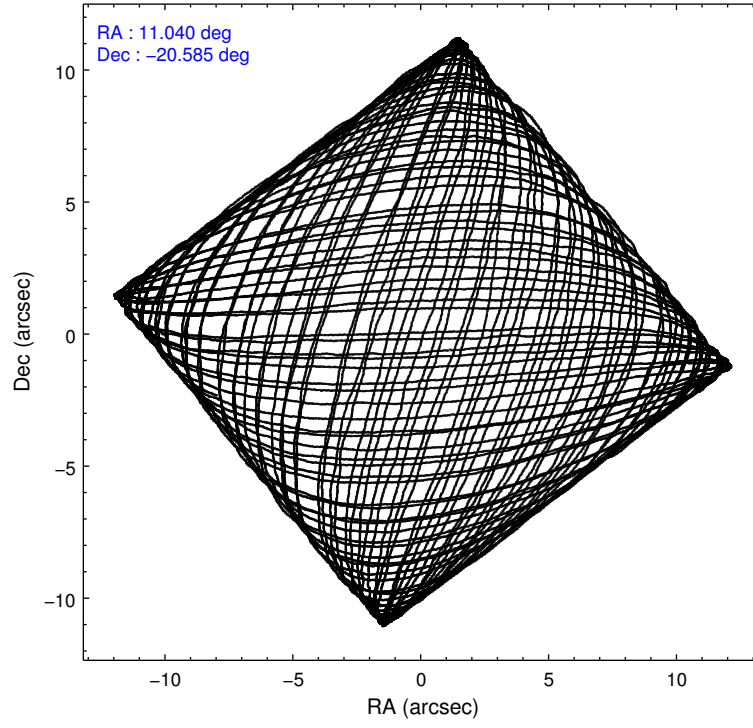
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	168619	190110	176996	233004	222255
rejected events	148697	147126	153483	133593	162993
rejected %	88%	77%	86%	57%	73%

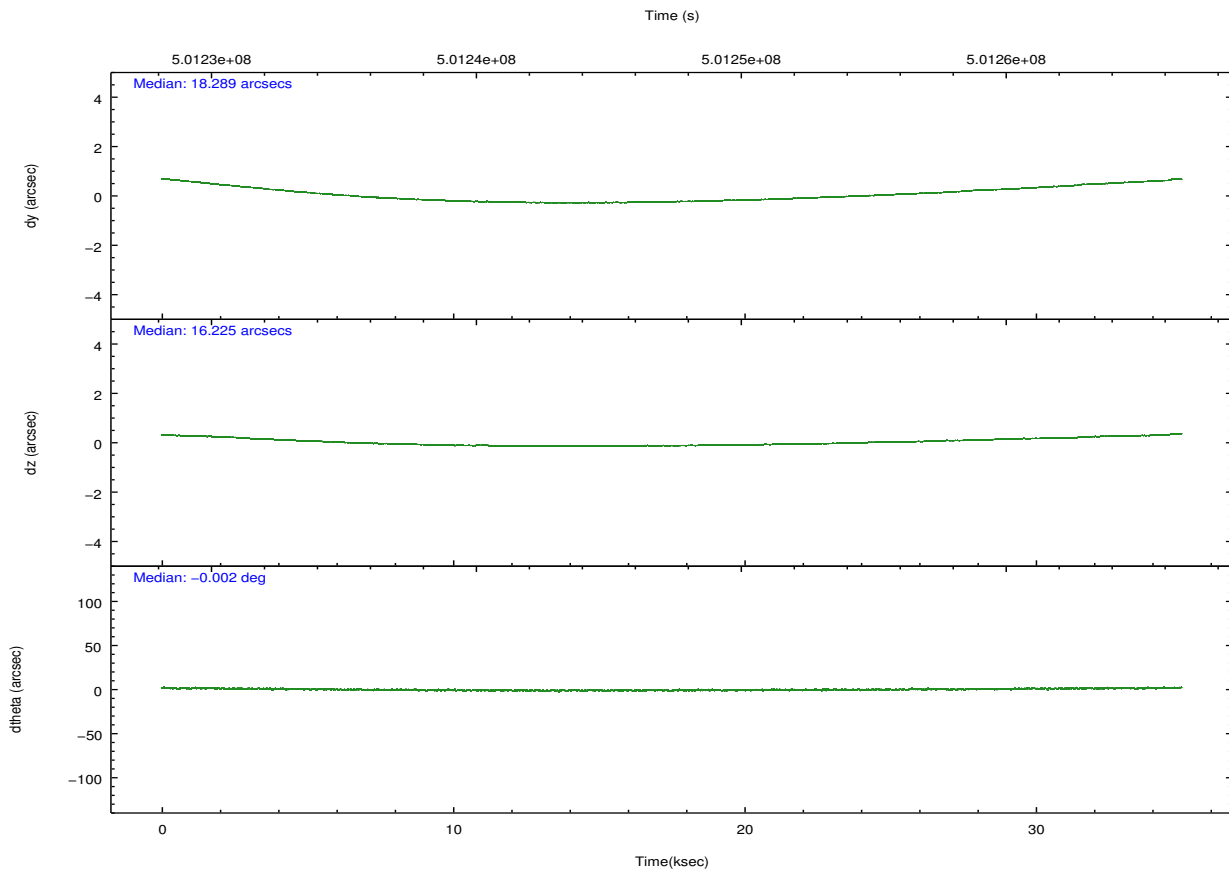
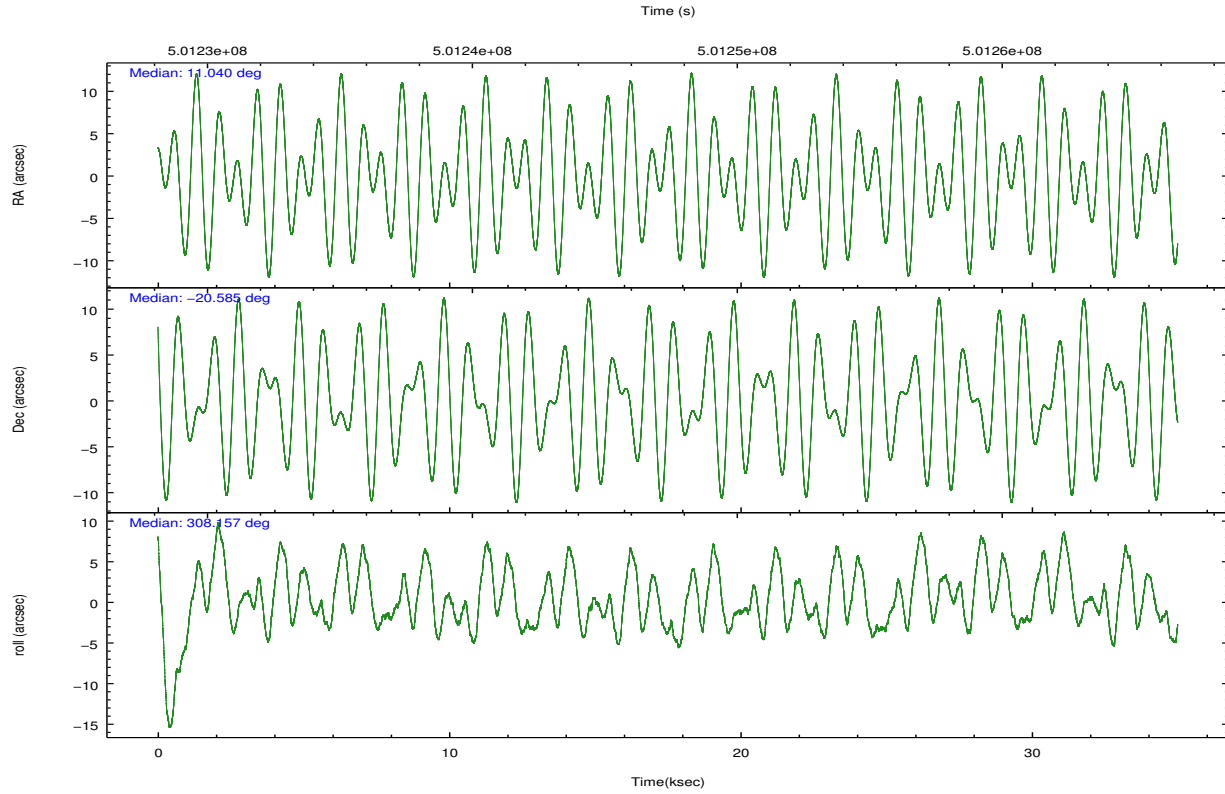
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	7099	27553	8418	8737	17023
	4%	14%	4%	3%	7%
grade 1 events	106	181	76	271	162
	0%	0%	0%	0%	0%
grade 2 events	4681	5582	5105	20324	14111
	2%	2%	2%	8%	6%
grade 3 events	2012	2597	2170	7957	6191
	1%	1%	1%	3%	2%
grade 4 events	2032	2523	2178	7868	5795
	1%	1%	1%	3%	2%
grade 5 events	6921	9129	8669	23020	12757
	4%	4%	4%	9%	5%
grade 6 events	4103	4735	5651	54542	16144
	2%	2%	3%	23%	7%
grade 7 events	141665	137810	144729	110285	150072
	84%	72%	81%	47%	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	11.012969	11.04022300111067	Subarray requested	NONE	NONE
[deg] Pointing Dec	-20.574843	-20.58467390084476	Alternating exposures requested	N	N
[deg] Pointing Roll	307.996943	308.1631497668019	[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)	501230416.184000	501229297.01647			
Observation start date	2013-11-19T06:39:09	2013-11-19T06:21:37			
[s] Observation end time (MET)	501264873.184000	501265099.24343			
Observation end date	2013-11-19T16:13:26	2013-11-19T16:18:19			
Read mode	TIMED	TIMED			

2.3 Aspect





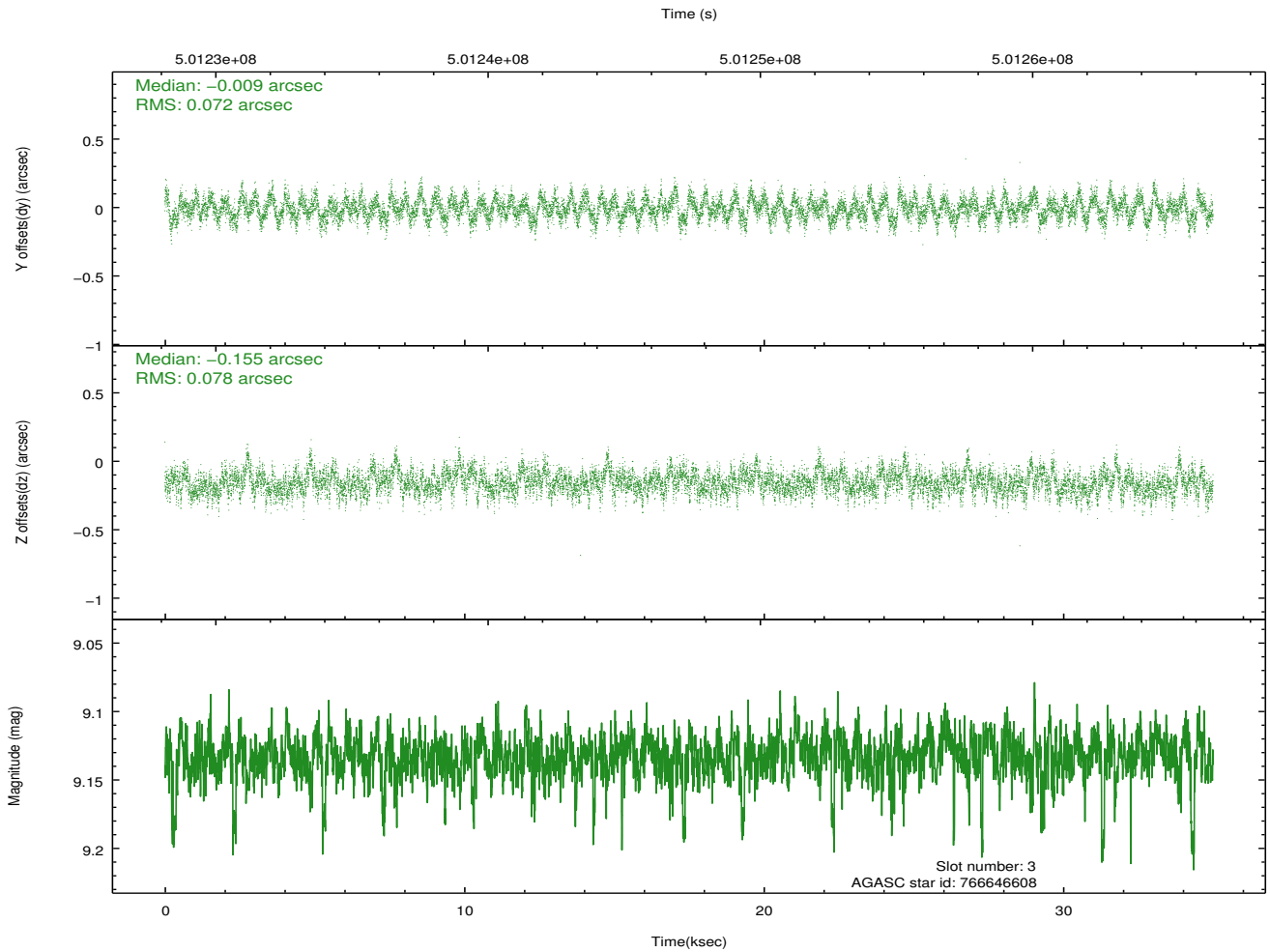
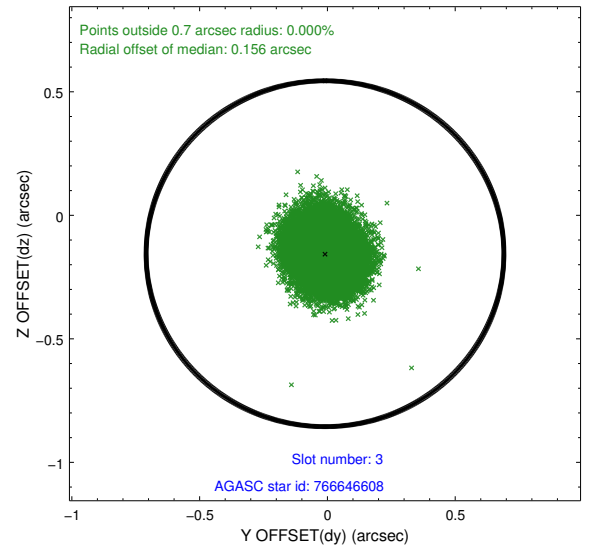
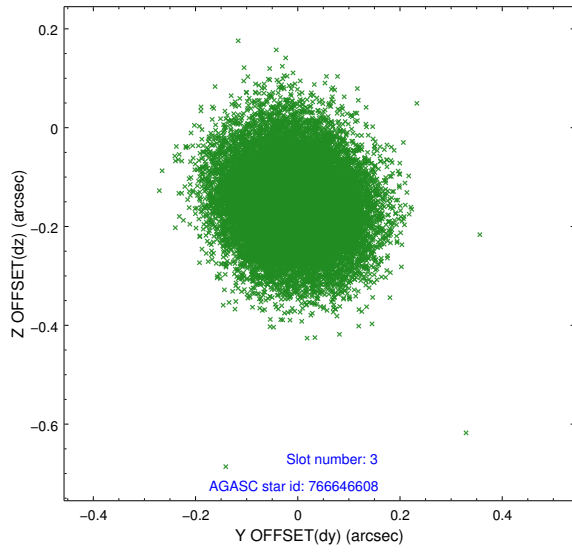
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.10	8537	-0.162	-0.120	0.008	0.017	0.000000	0.000000	-771.64	-1737.72
1	FID		ACIS-S-4	7.17	8536	0.204	0.069	0.009	0.015	0.000000	0.000000	2142.05	170.82
2	FID		ACIS-S-6	7.30	8537	-0.070	0.058	0.009	0.015	0.000000	0.000000	390.57	808.30
3	GUIDE	used	766646608	9.13	17060	-0.009	-0.155	0.115	0.181	11.216160	-20.336771	-252.05	1067.70
4	GUIDE	used	766650688	7.12	17072	-0.017	0.131	0.082	0.136	10.374072	-20.299617	-2105.01	-1092.40
5	GUIDE	used	766654496	9.37	17061	-0.061	0.003	0.118	0.189	11.545095	-20.663870	1357.89	1212.09
6	GUIDE	used	766649880	9.75	17056	-0.008	0.001	0.260	0.378	10.691593	-20.360135	-1275.06	-379.30
7	GUIDE	used	766653384	9.65	17061	0.088	0.032	0.153	0.240	10.985393	-21.081265	1380.41	-1195.78

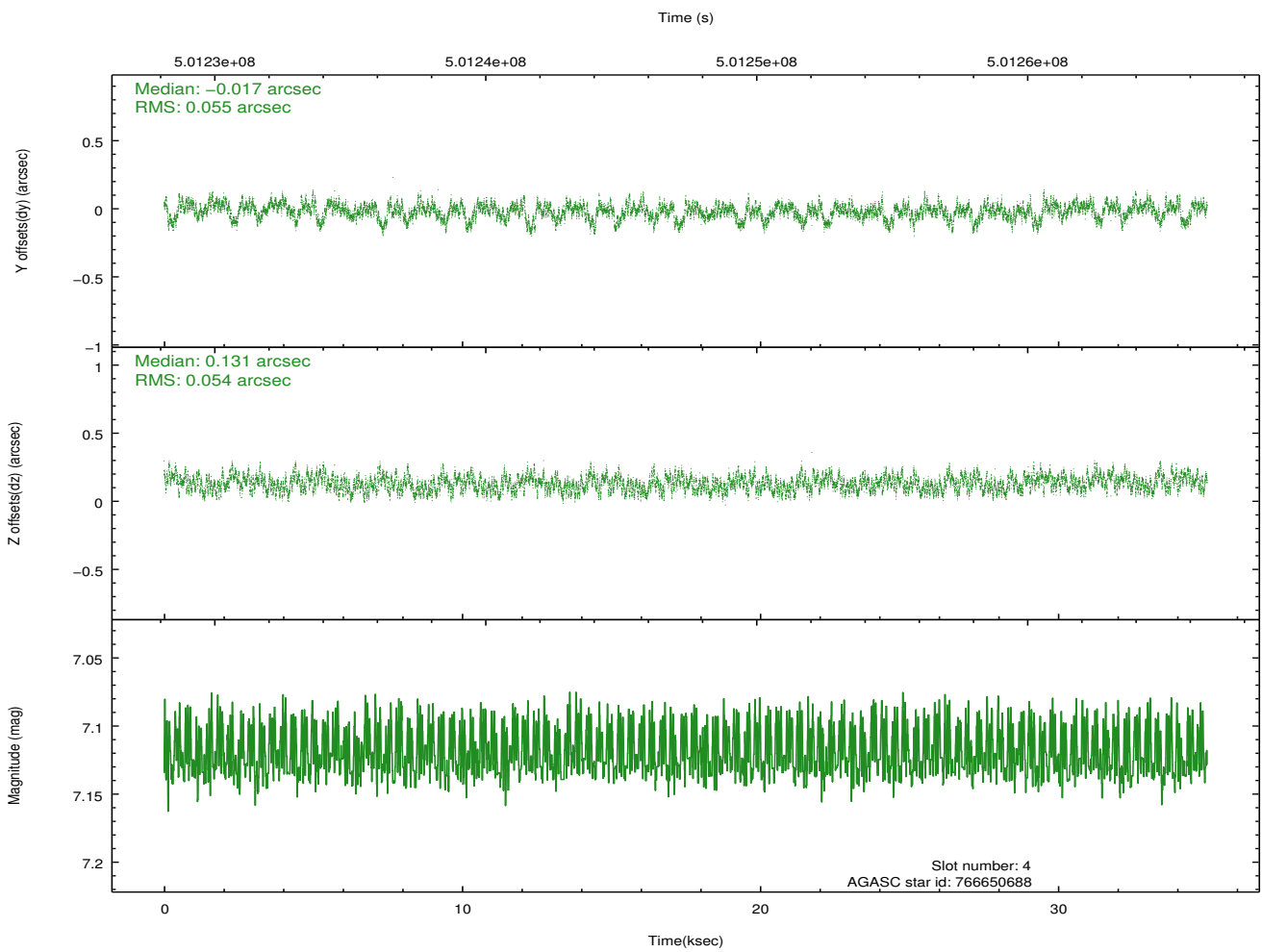
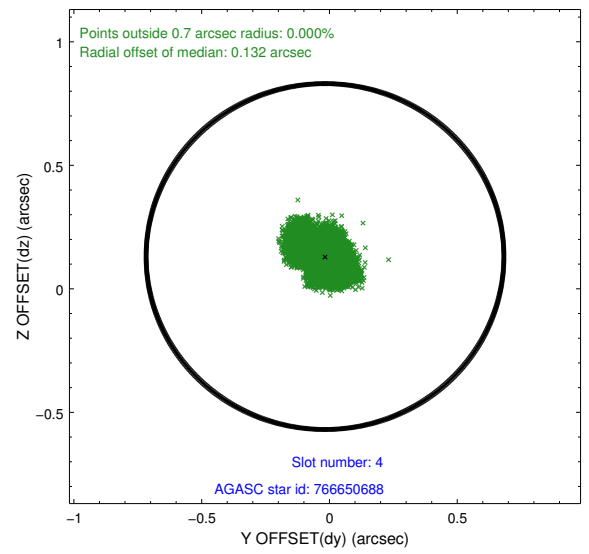
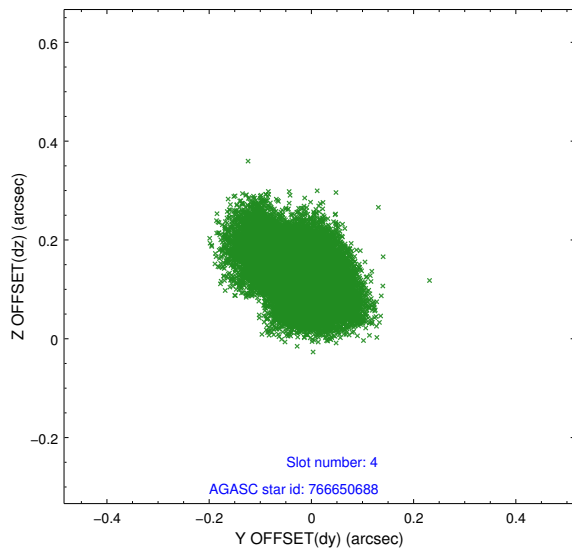
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2.4 Star Slots

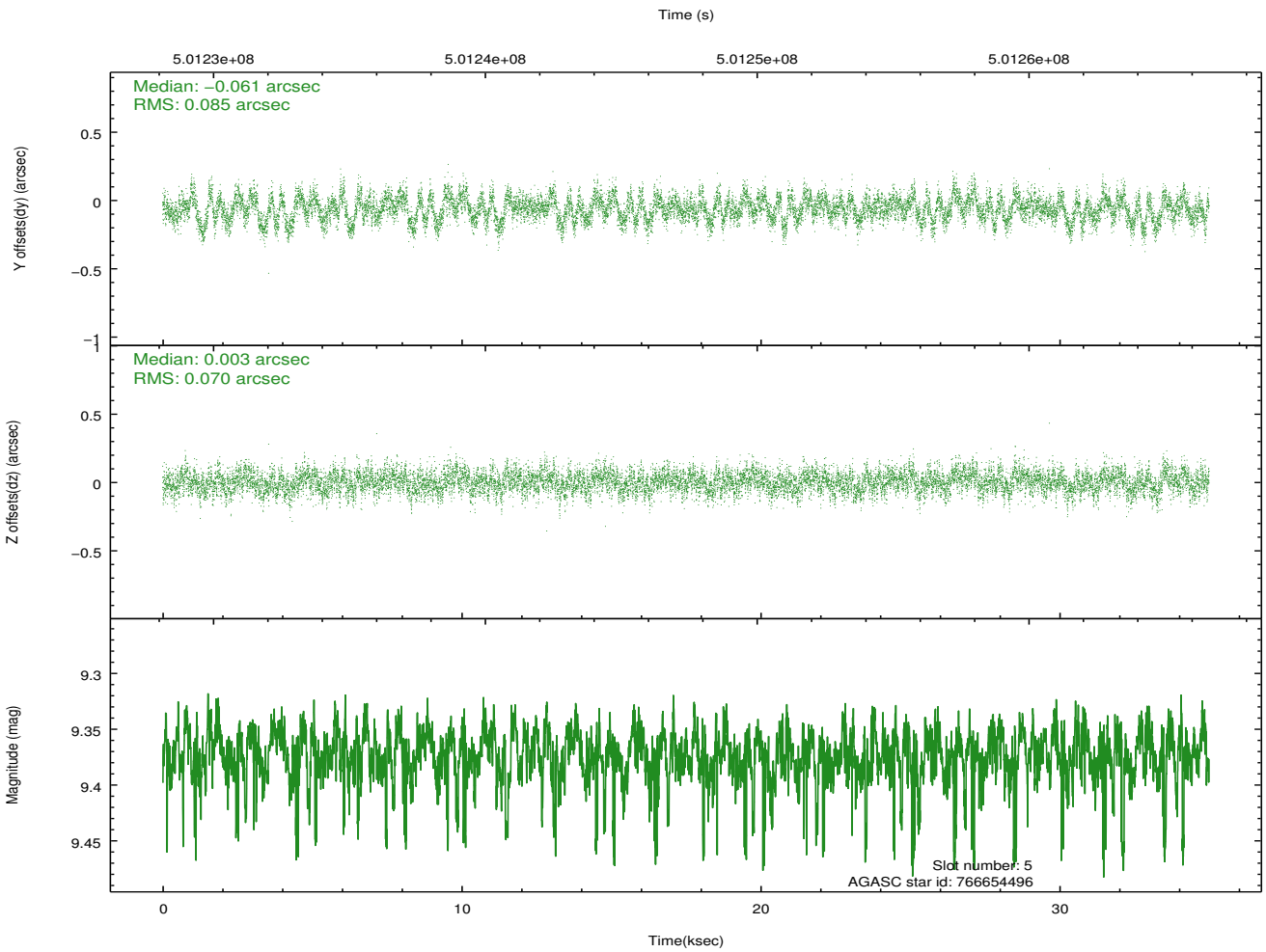
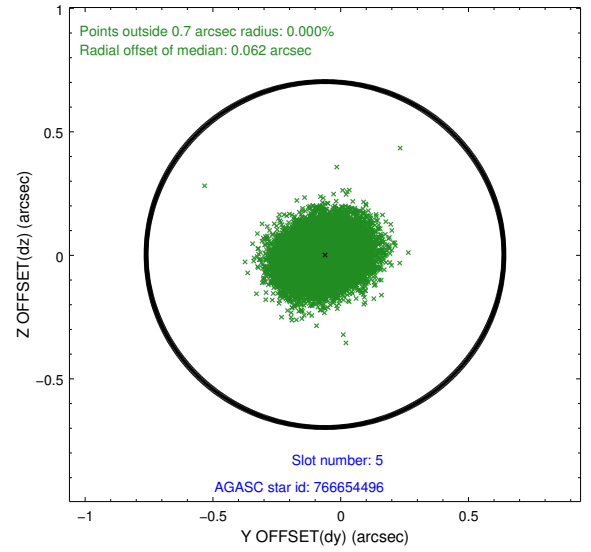
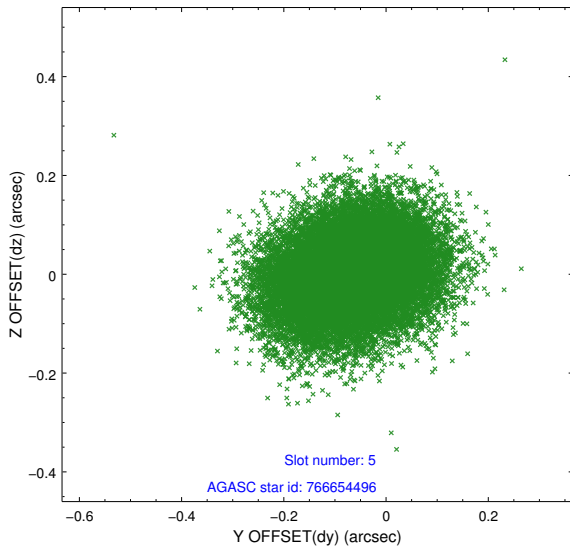
2.4.1 Slot 3



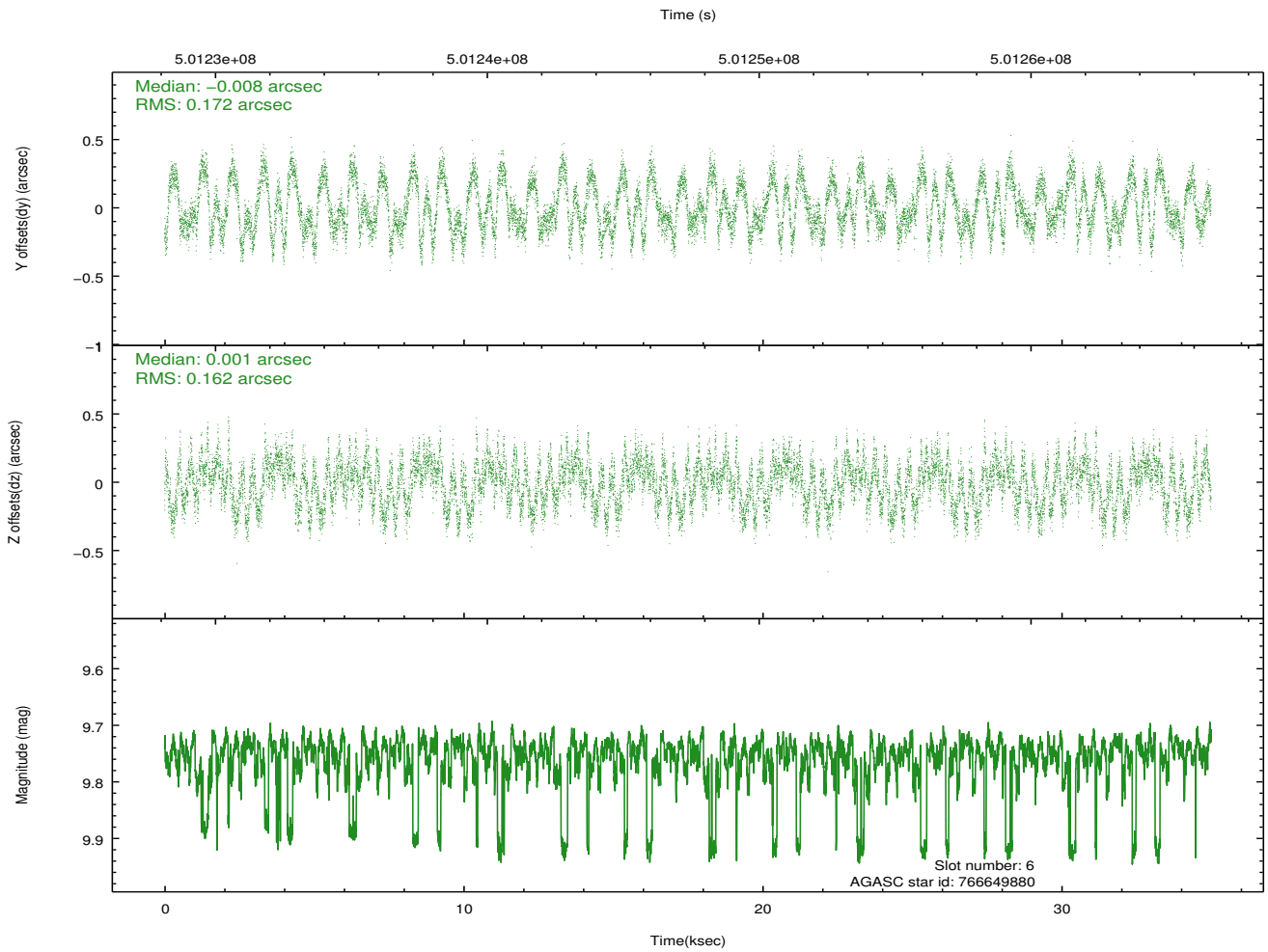
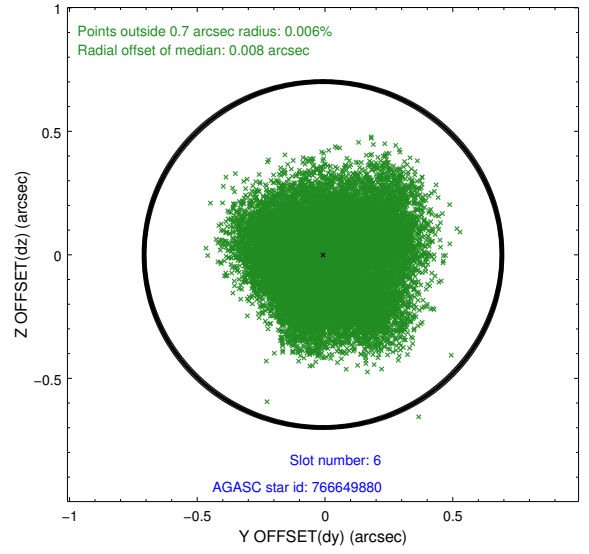
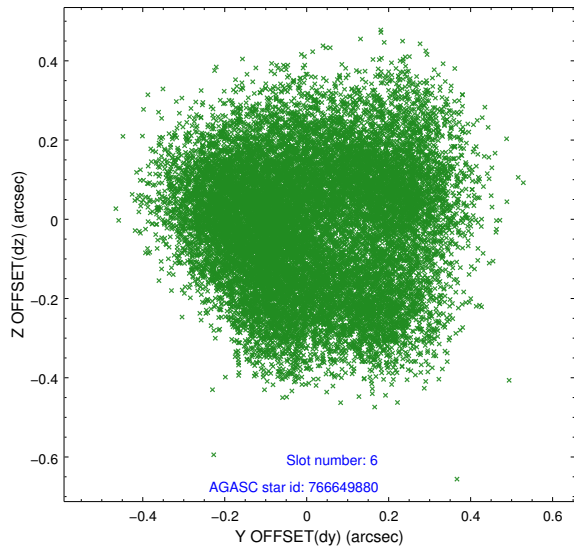
2.4.2 Slot 4



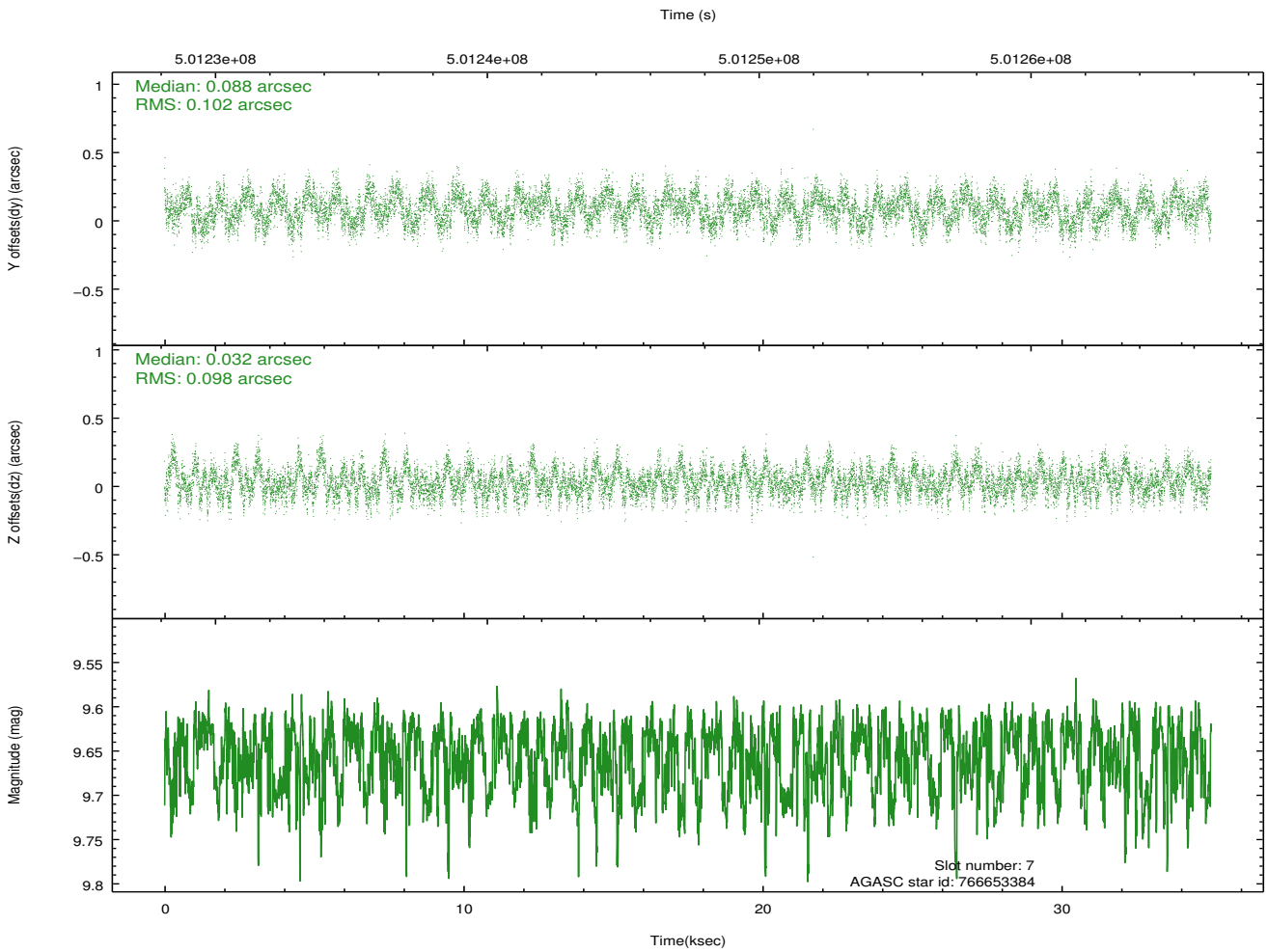
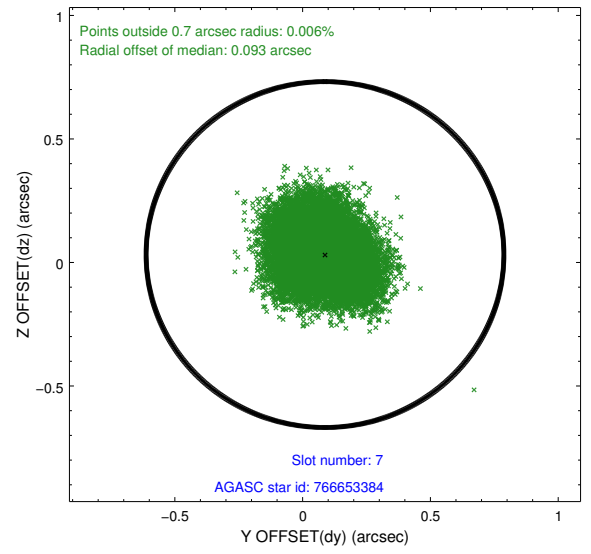
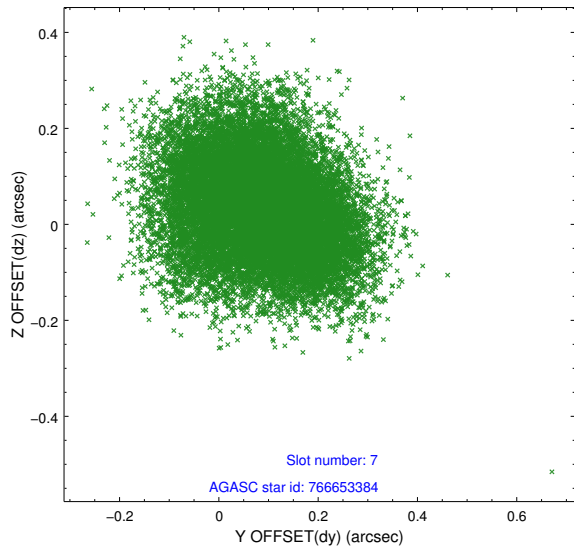
2.4.3 Slot 5



2.4.4 Slot 6

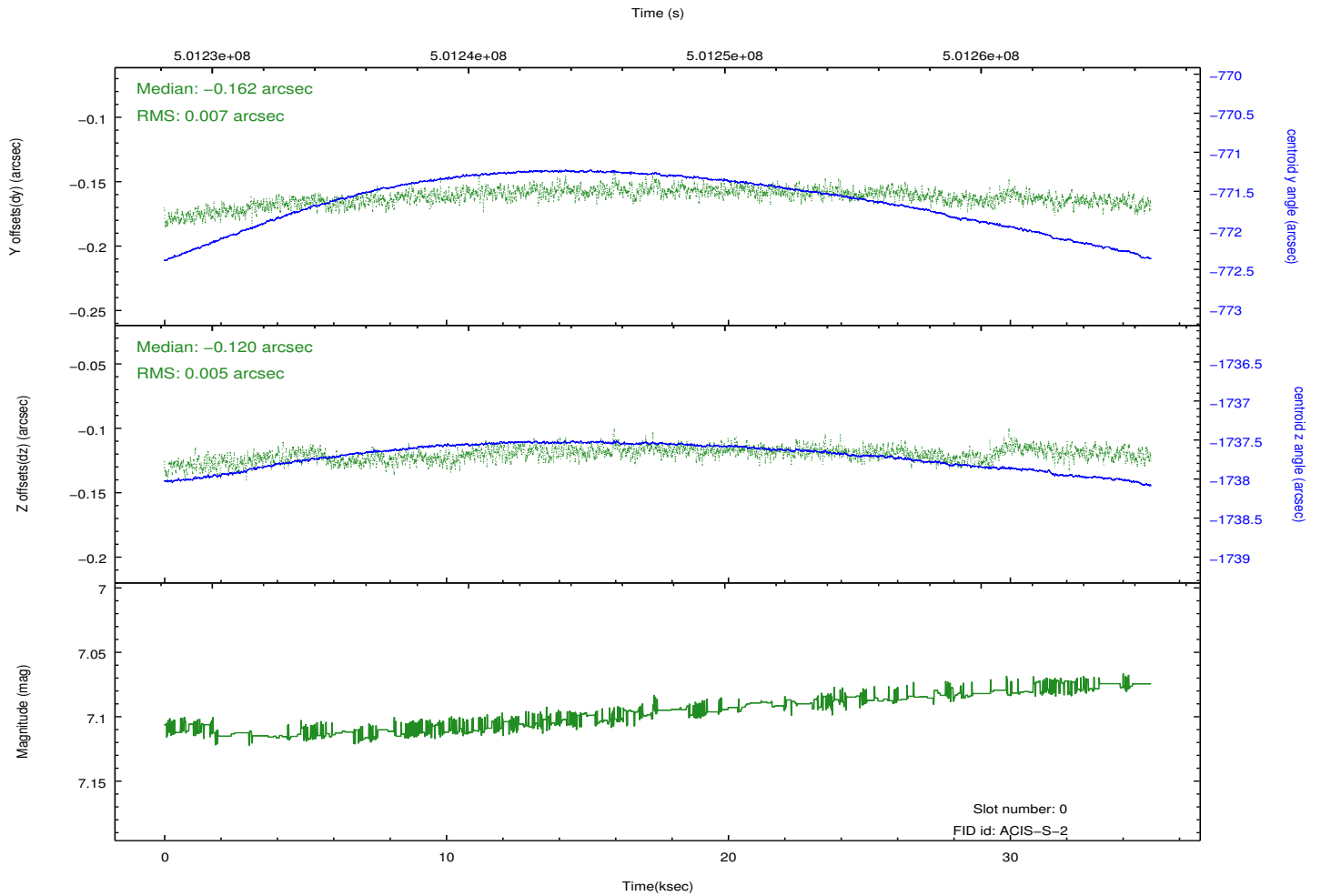
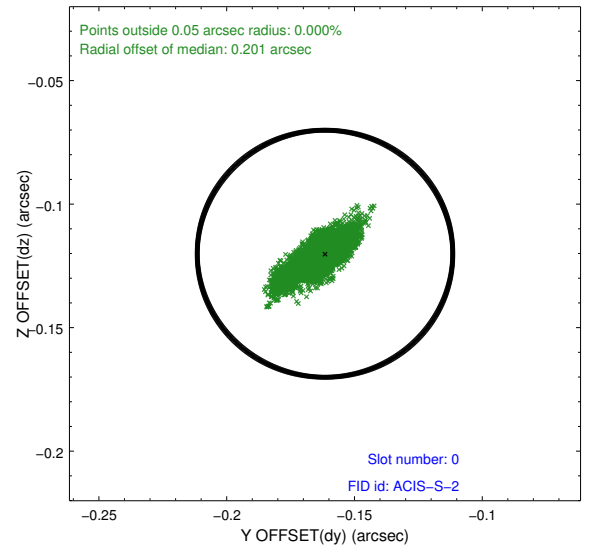
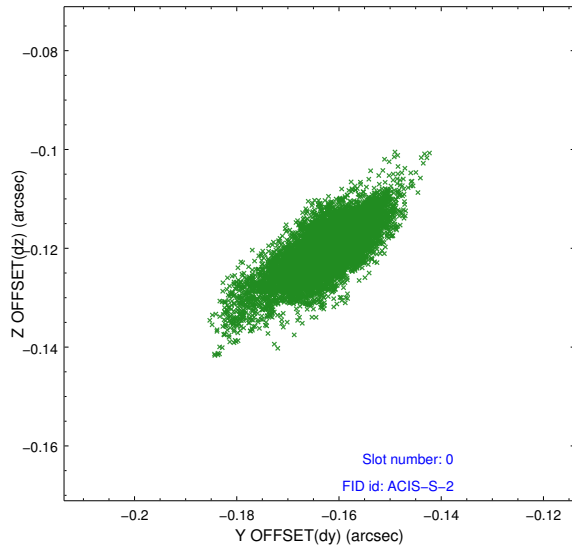


2.4.5 Slot 7

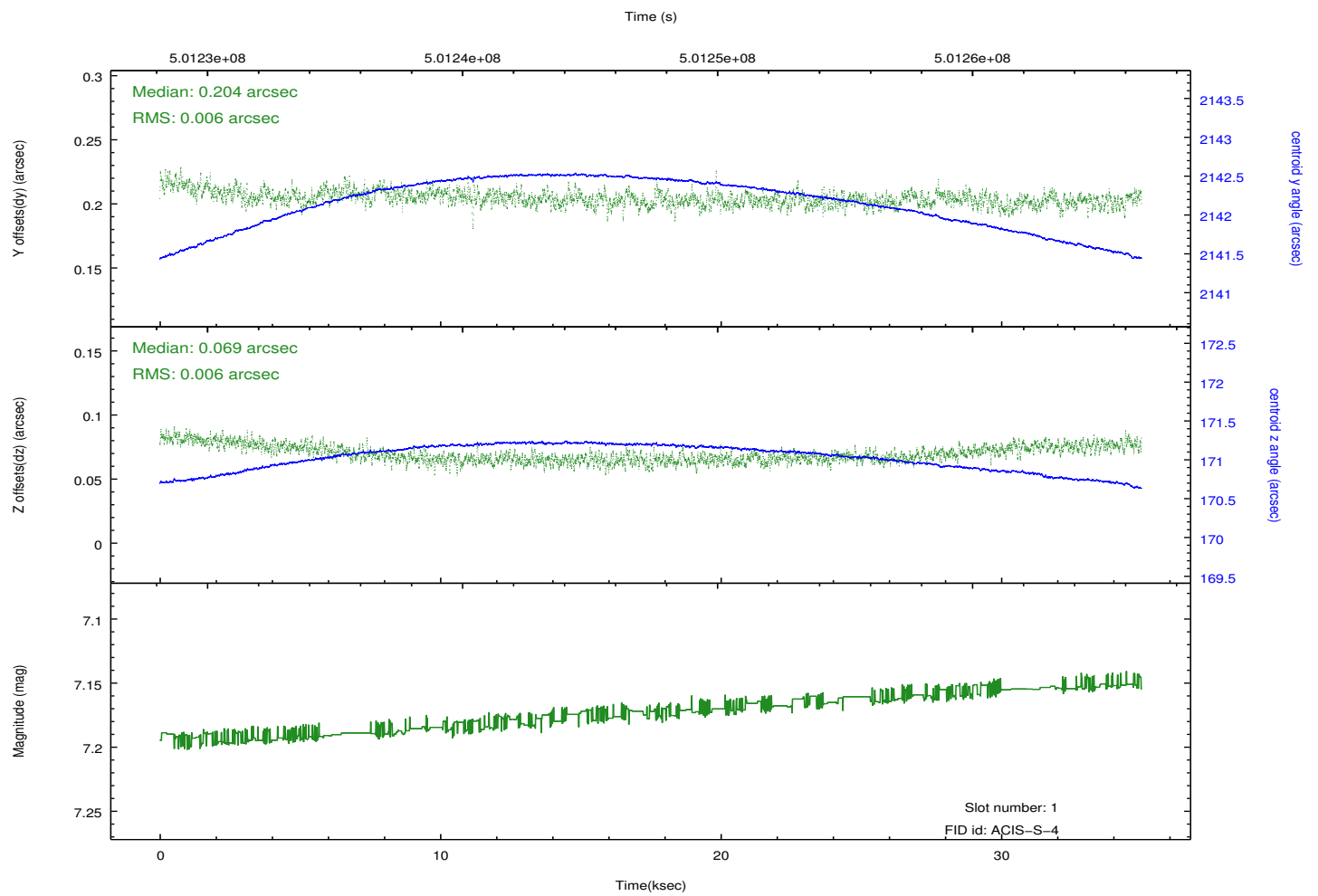
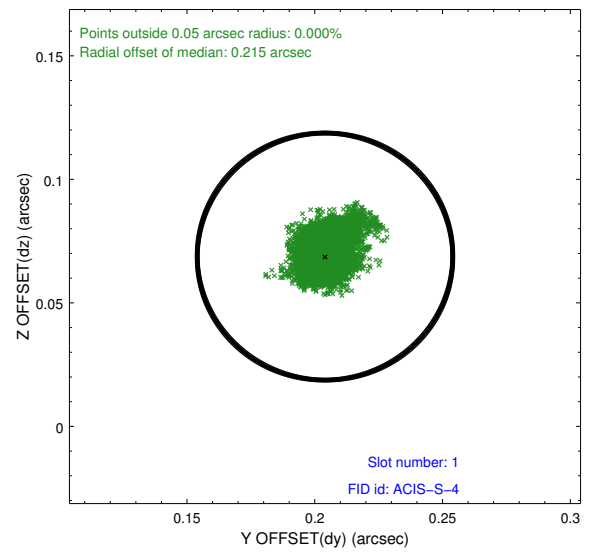
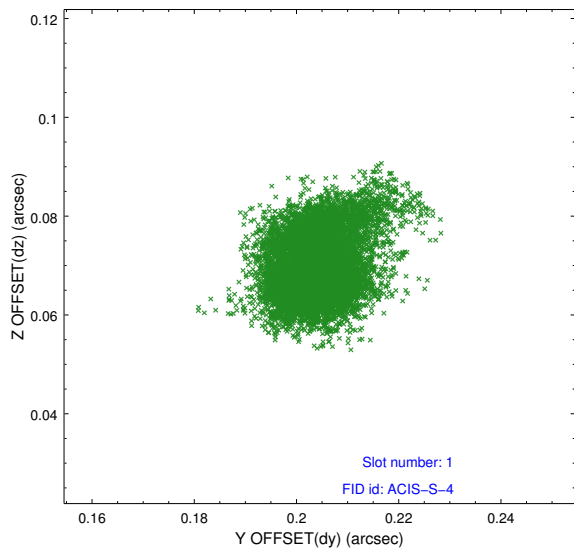


2.5 FID Slots

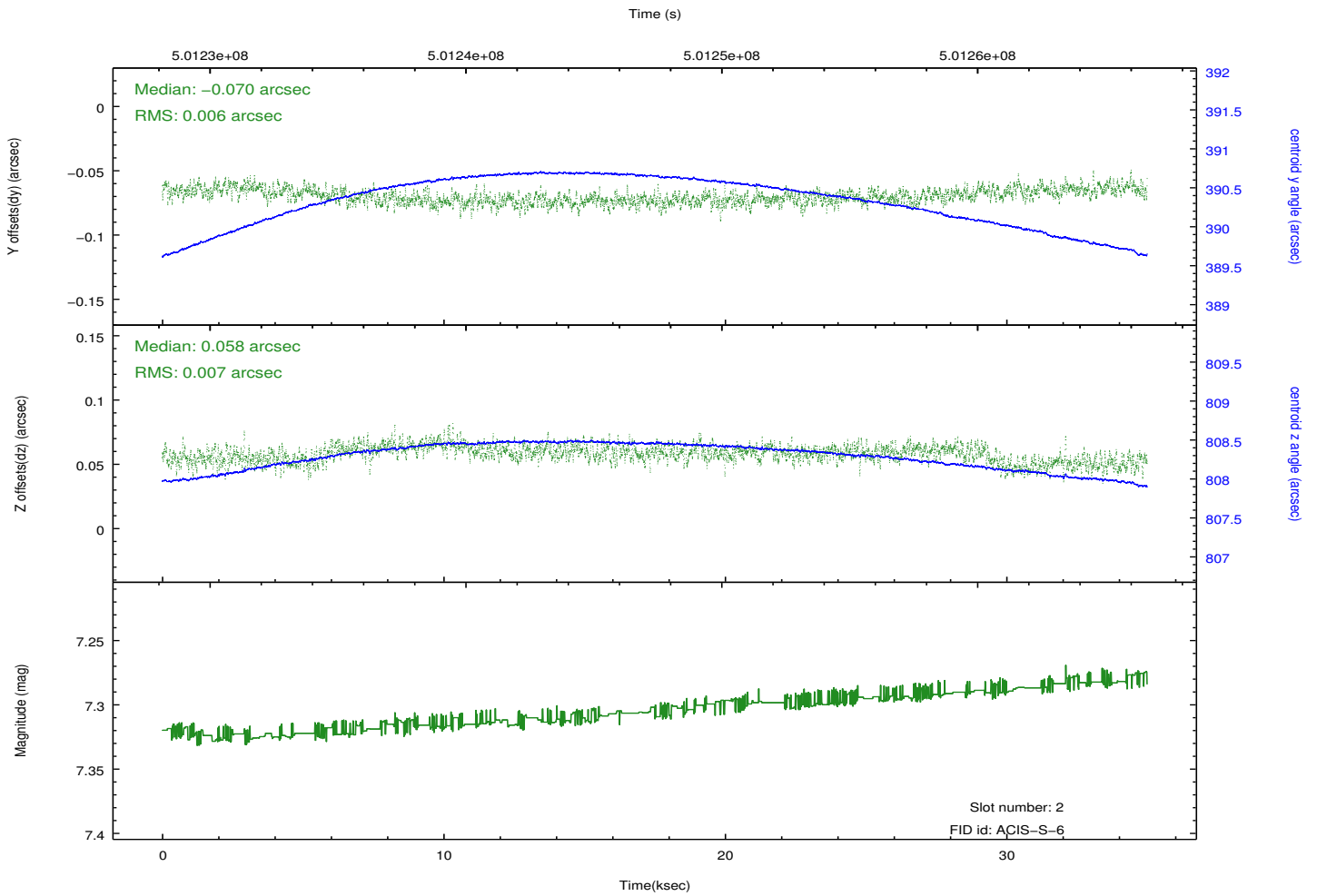
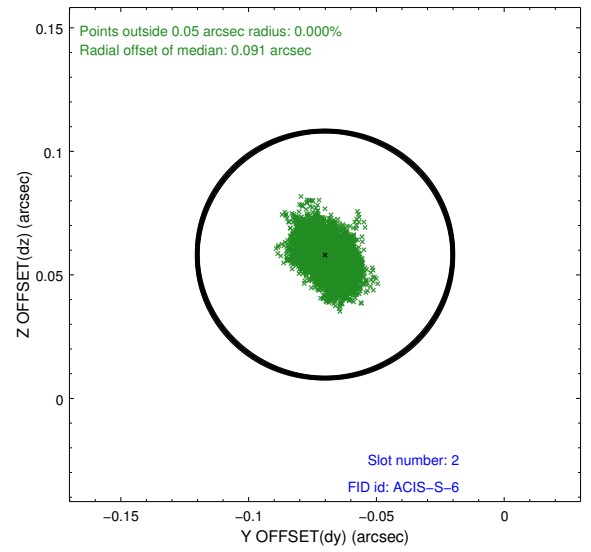
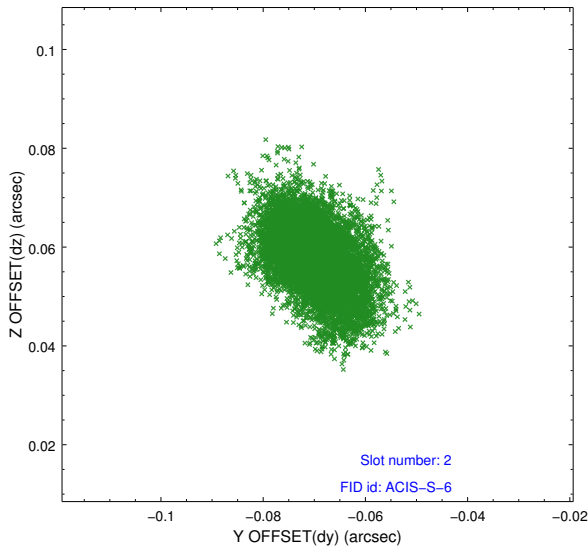
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.523894915521

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.