

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16366 - L2 Version 2
Chandra X-Ray Center

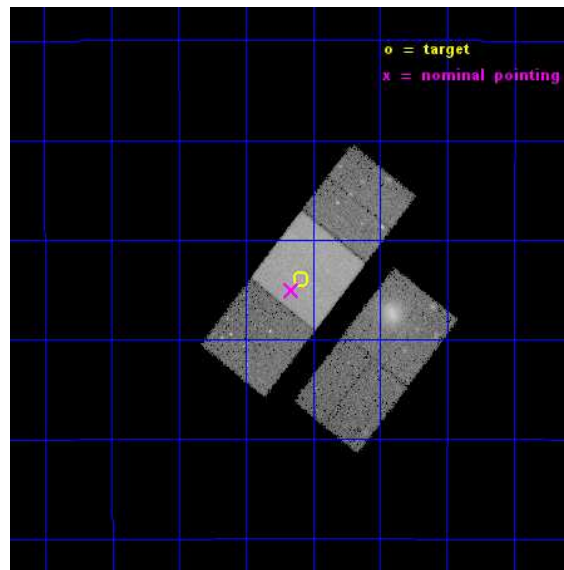
L2 Processing Date : Dec 8 2014

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1 Front

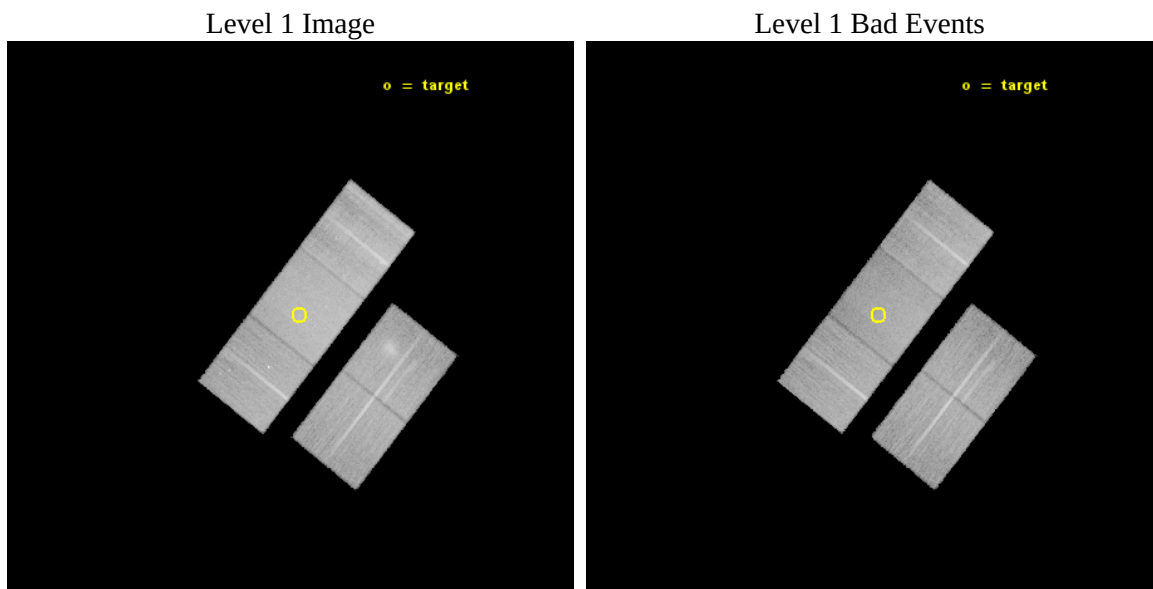
seq_num	801224	Sequence number
obs_id	16366	Observation id
title	Extreme constraints on ICM physics and cosmology: a deep observation of XMMUJ0044, the most distant massive cluster	Proposal title
observer	Dr Paolo Tozzi	Principal investigator
object	XMMUJ0044.0-2033	Source name
dtcycle	0	
cycle	P	events 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	11.04022764085	Nominal RA [deg]
dec_nom	-20.584657371111	Nominal Dec [deg]
roll_nom	308.16314800458	Nominal Roll [deg]
revision	2	Processing version of data
ontime	36068.5002774	Sum of GTIs [s]
livetime	35597.238768032	Livetime [s]
ontime2	36068.5002774	Sum of GTIs [s]
ontime3	36068.5002774	Sum of GTIs [s]
ontime6	36068.5002774	Sum of GTIs [s]
ontime7	36068.5002774	Sum of GTIs [s]
ontime8	36068.5002774	Sum of GTIs [s]
l2events	189766	Number of level 2 events



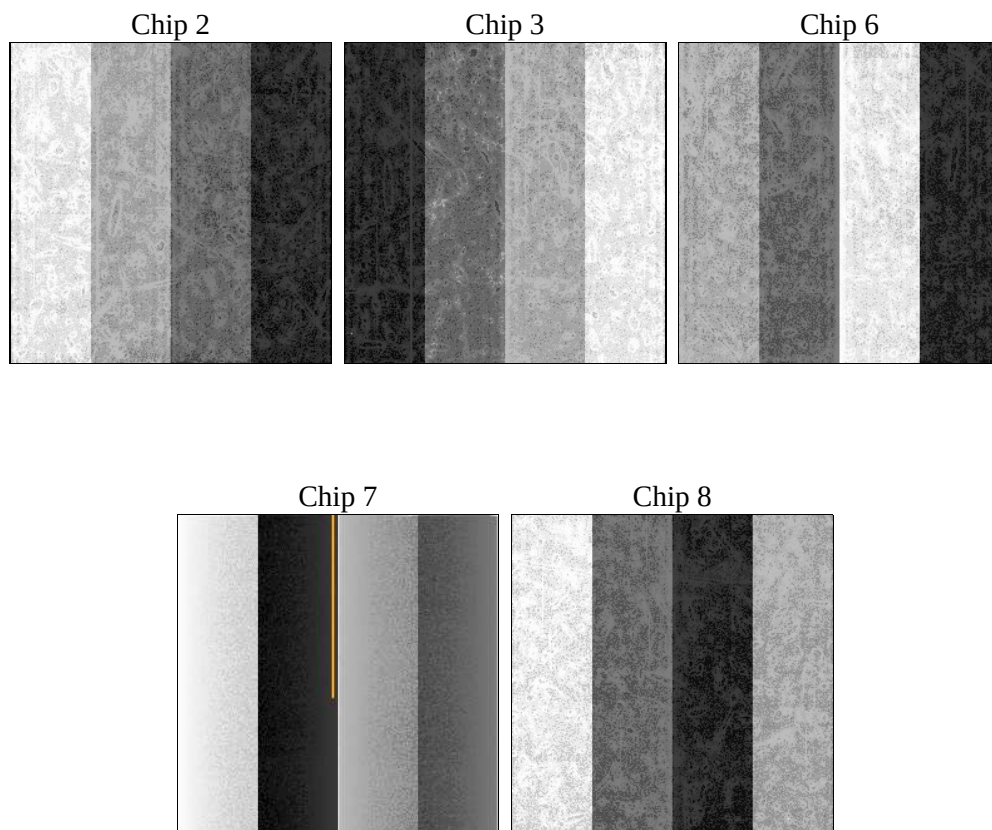
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	36000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	36068.5002774	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	36068.5002774	Sum of GTIs [s]
date	2014-12-08T06:33:14	Date and time of file creation	ontime3	36068.5002774	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	36068.5002774	Sum of GTIs [s]
			ontime7	36068.5002774	Sum of GTIs [s]
			ontime8	36068.5002774	Sum of GTIs [s]
			l1events	999205	Number of level 1 events

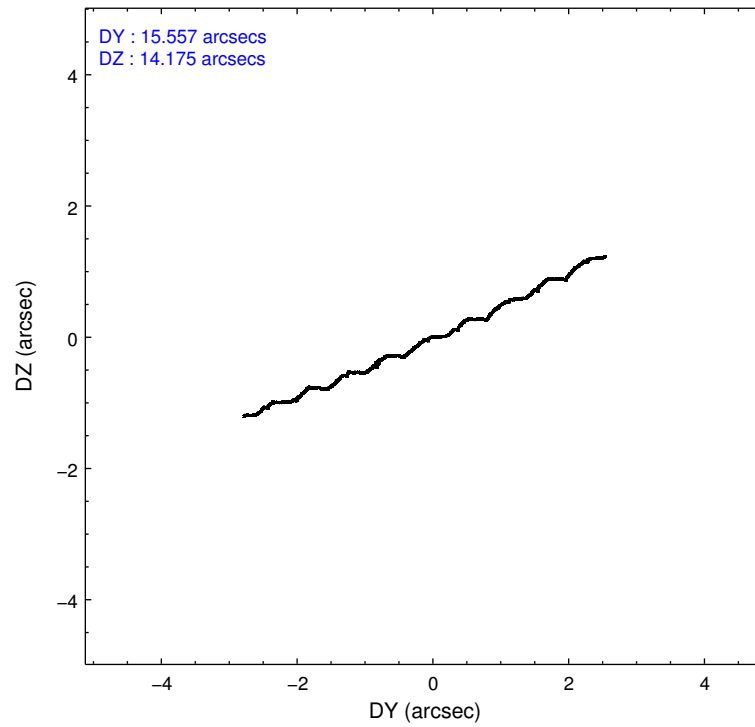
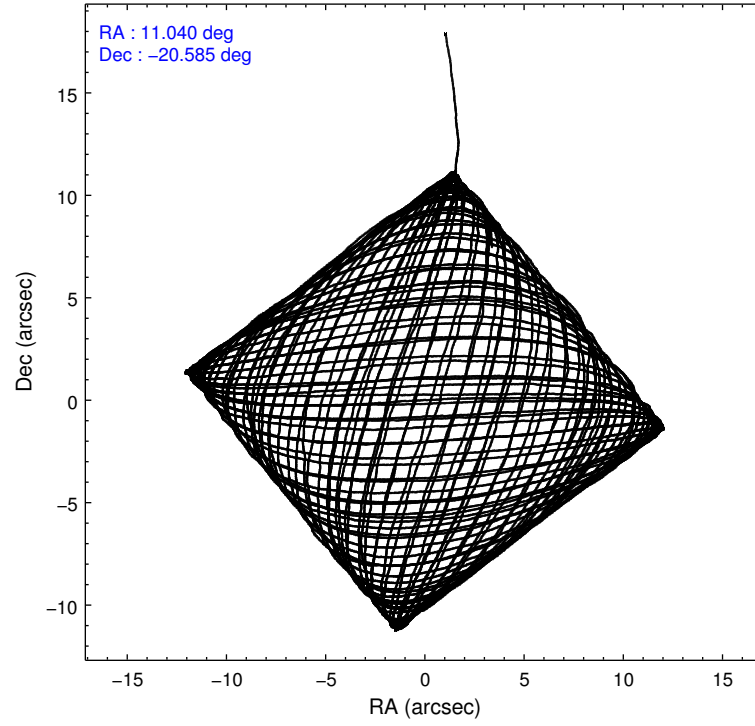
2.1.4 Events

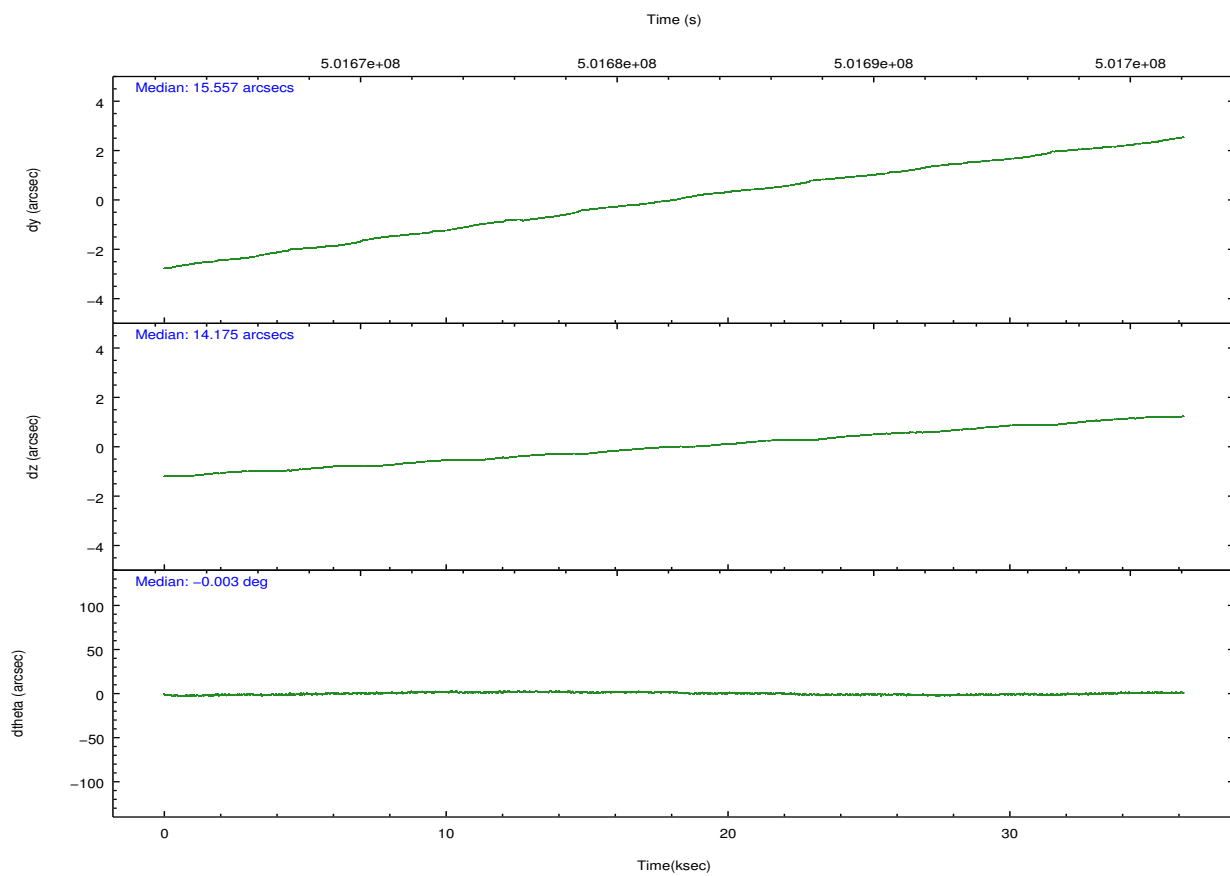
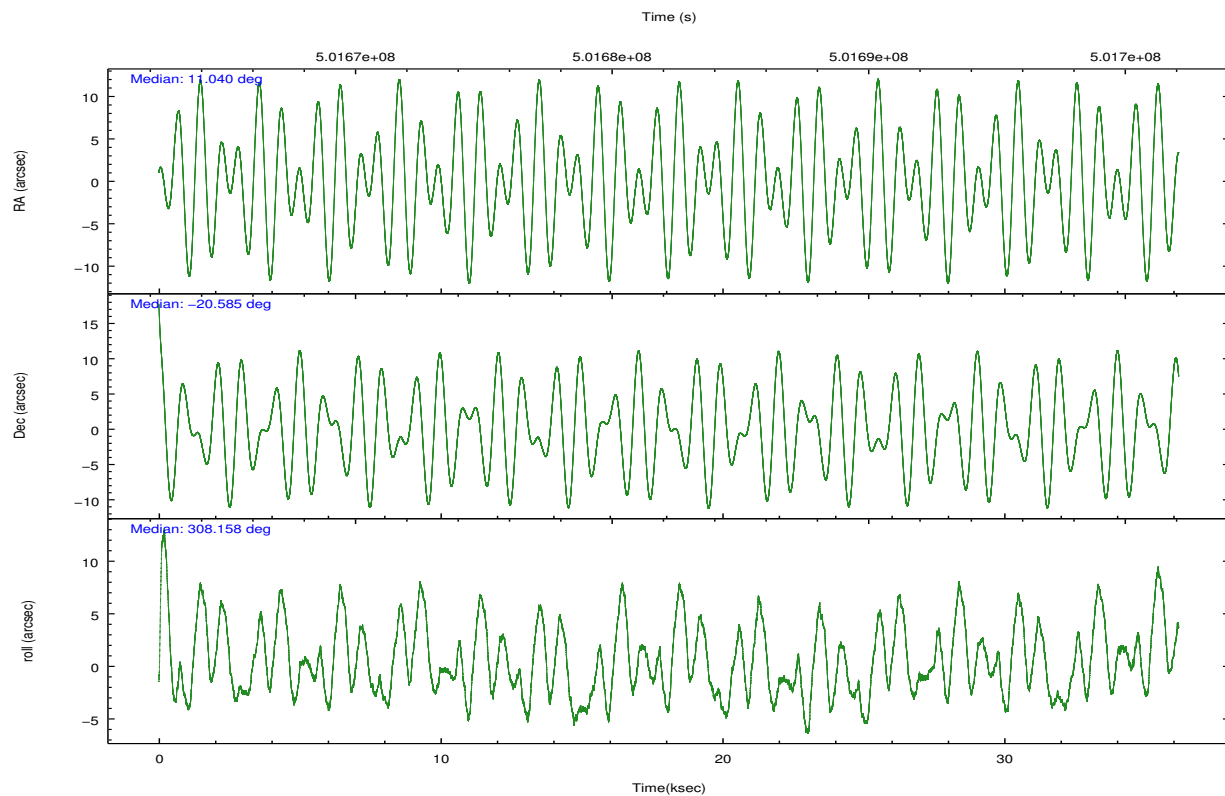
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	169424	177034	178808	238038	235901	grade 0 events	6861	16972	8012	8996	19324
rejected events	149939	144655	156326	134801	172429		4%	9%	4%	3%	8%
rejected %	88%	81%	87%	56%	73%	grade 1 events	87	125	98	303	167
							0%	0%	0%	0%	0%
						grade 2 events	4737	5756	5033	21150	14638
							2%	3%	2%	8%	6%
						grade 3 events	1990	2472	2246	8687	6644
							1%	1%	1%	3%	2%
						grade 4 events	1984	2607	2175	8614	6310
							1%	1%	1%	3%	2%
						grade 5 events	7403	9341	9092	24639	13211
							4%	5%	5%	10%	5%
						grade 6 events	3915	4577	5017	55810	16599
							2%	2%	2%	23%	7%
						grade 7 events	142447	135184	147135	109839	159008
							84%	76%	82%	46%	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	11.04022764084976	Subarray requested	NONE	NONE
[deg] Pointing Dec	-20.574843	-20.58465737111053	Alternating exposures requested	N	N
[deg] Pointing Roll	307.996943	308.1631480045834	[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)	501664296.184000	501663021.69021			
Observation start date	2013-11-24T07:10:29	2013-11-24T06:50:21			
[s] Observation end time (MET)	501700296.184000	501701686.74233			
Observation end date	2013-11-24T17:10:29	2013-11-24T17:34:46			
Read mode	TIMED	TIMED			

2.3 Aspect



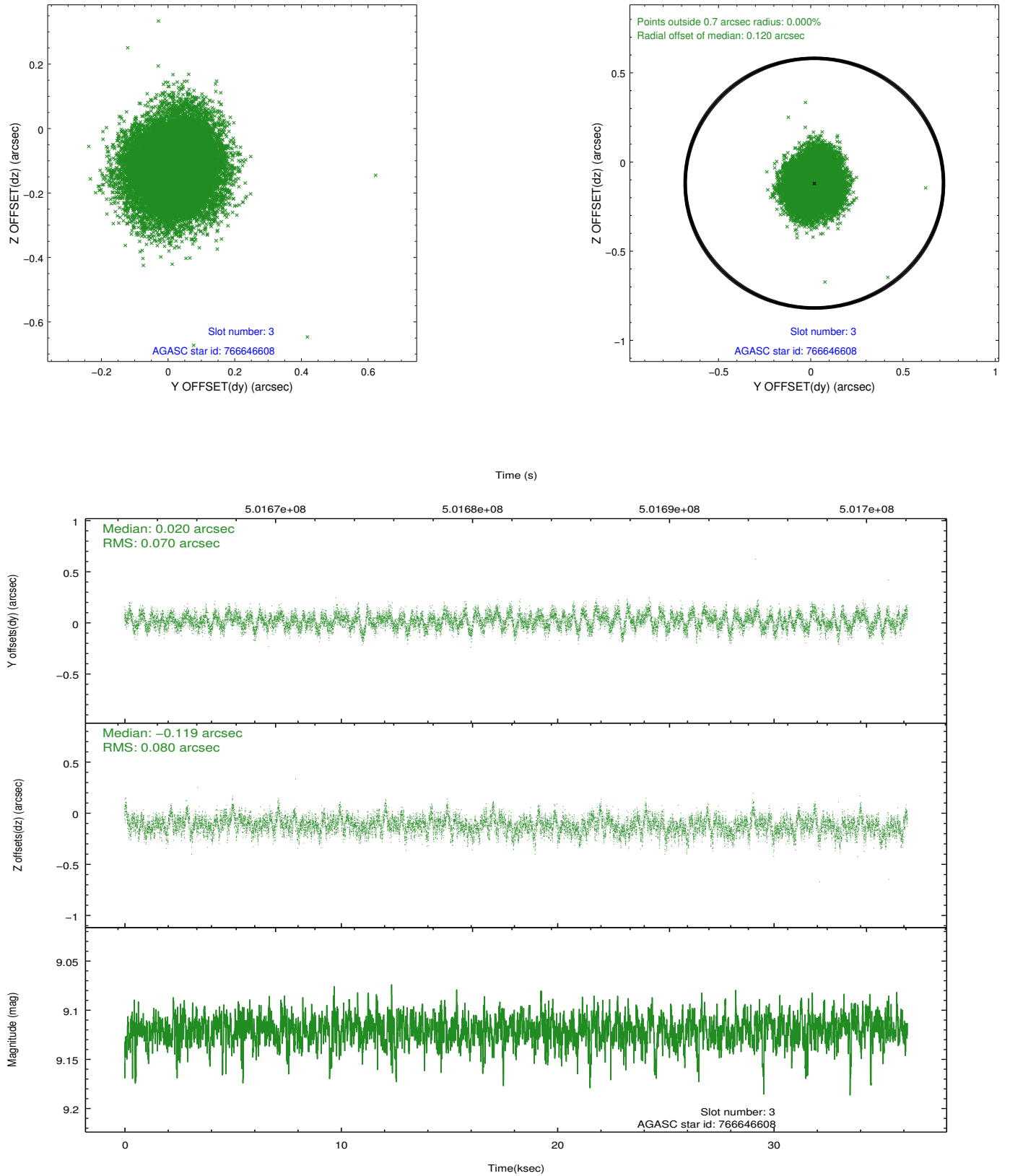


Slot Statistics

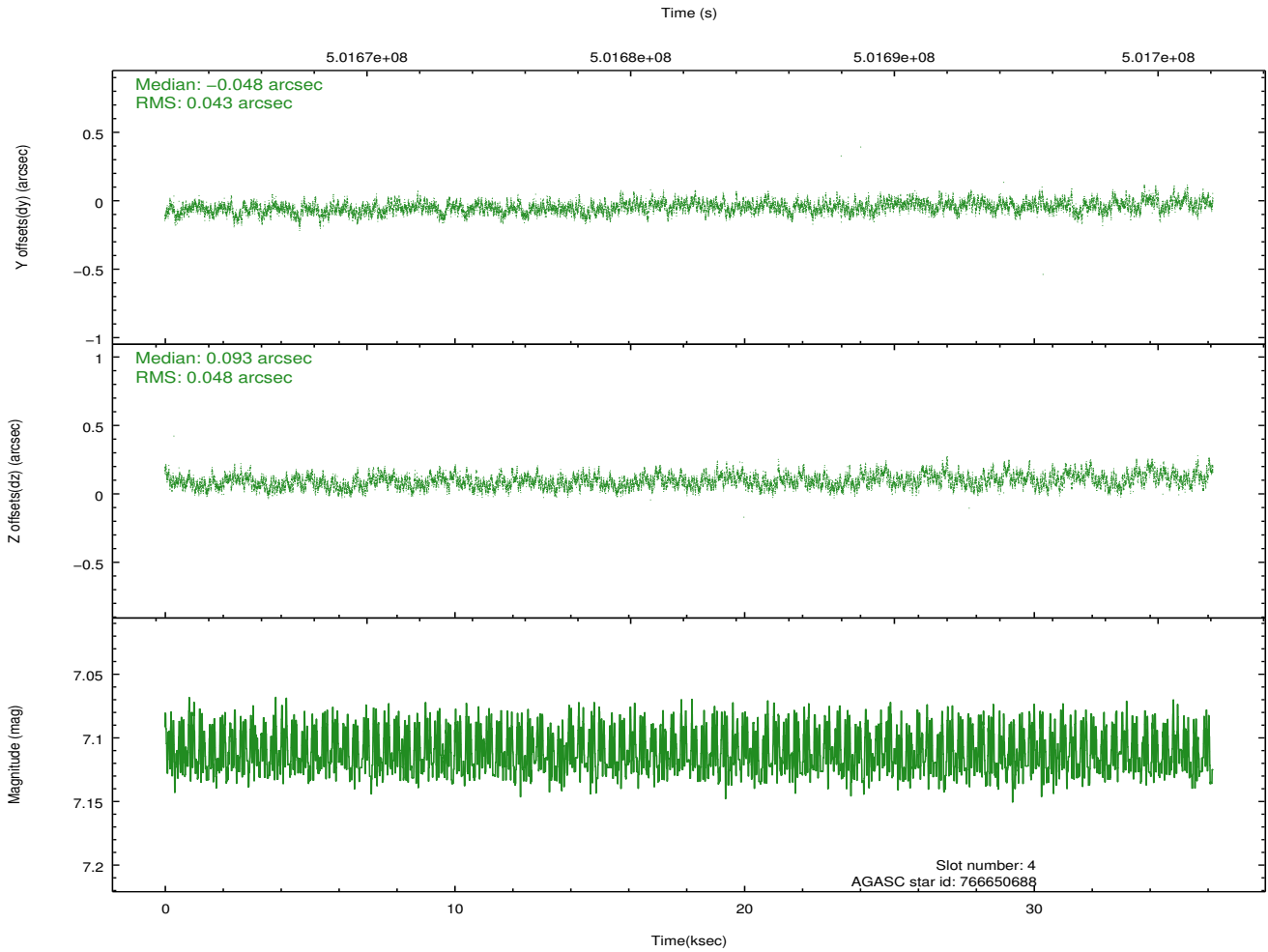
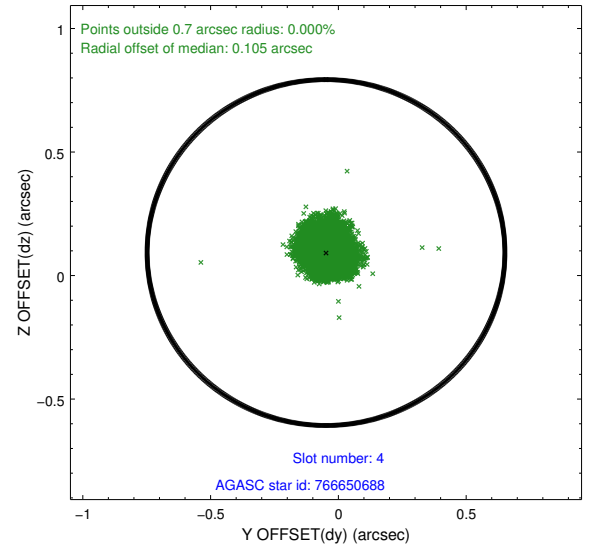
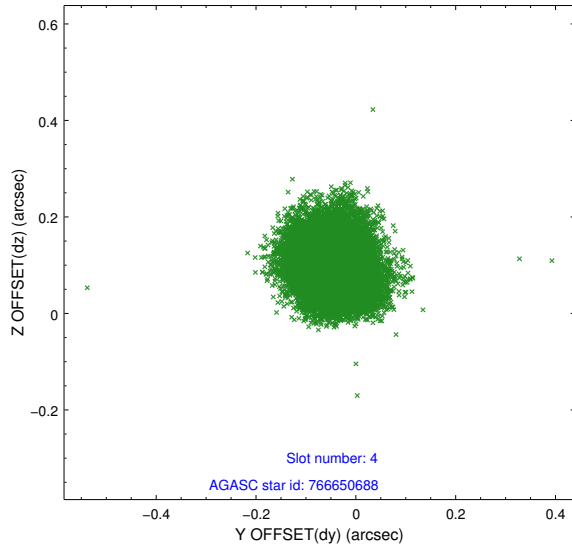
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.99	8824	-0.127	-0.073	0.022	0.056	0.000000	0.000000	-768.66	-1735.53
1	FID		ACIS-S-4	7.08	8825	0.172	0.059	0.012	0.043	0.000000	0.000000	2144.93	172.99
2	FID		ACIS-S-6	7.21	8825	-0.074	0.022	0.016	0.023	0.000000	0.000000	393.46	810.42
3	GUIDE	used	766646608	9.12	17639	0.020	-0.119	0.113	0.182	11.216160	-20.336771	-252.00	1067.68
4	GUIDE	used	766650688	7.11	17650	-0.048	0.093	0.069	0.110	10.374072	-20.299617	-2105.06	-1092.45
5	GUIDE	used	766654496	9.37	17637	-0.026	0.043	0.112	0.180	11.545095	-20.663870	1357.96	1212.05
6	GUIDE	used	766649880	9.76	17623	-0.002	-0.044	0.226	0.328	10.691593	-20.360135	-1275.06	-379.37
7	GUIDE	used	766653384	9.65	17623	0.046	0.028	0.144	0.226	10.985393	-21.081265	1380.35	-1195.87

2.4 Star Slots

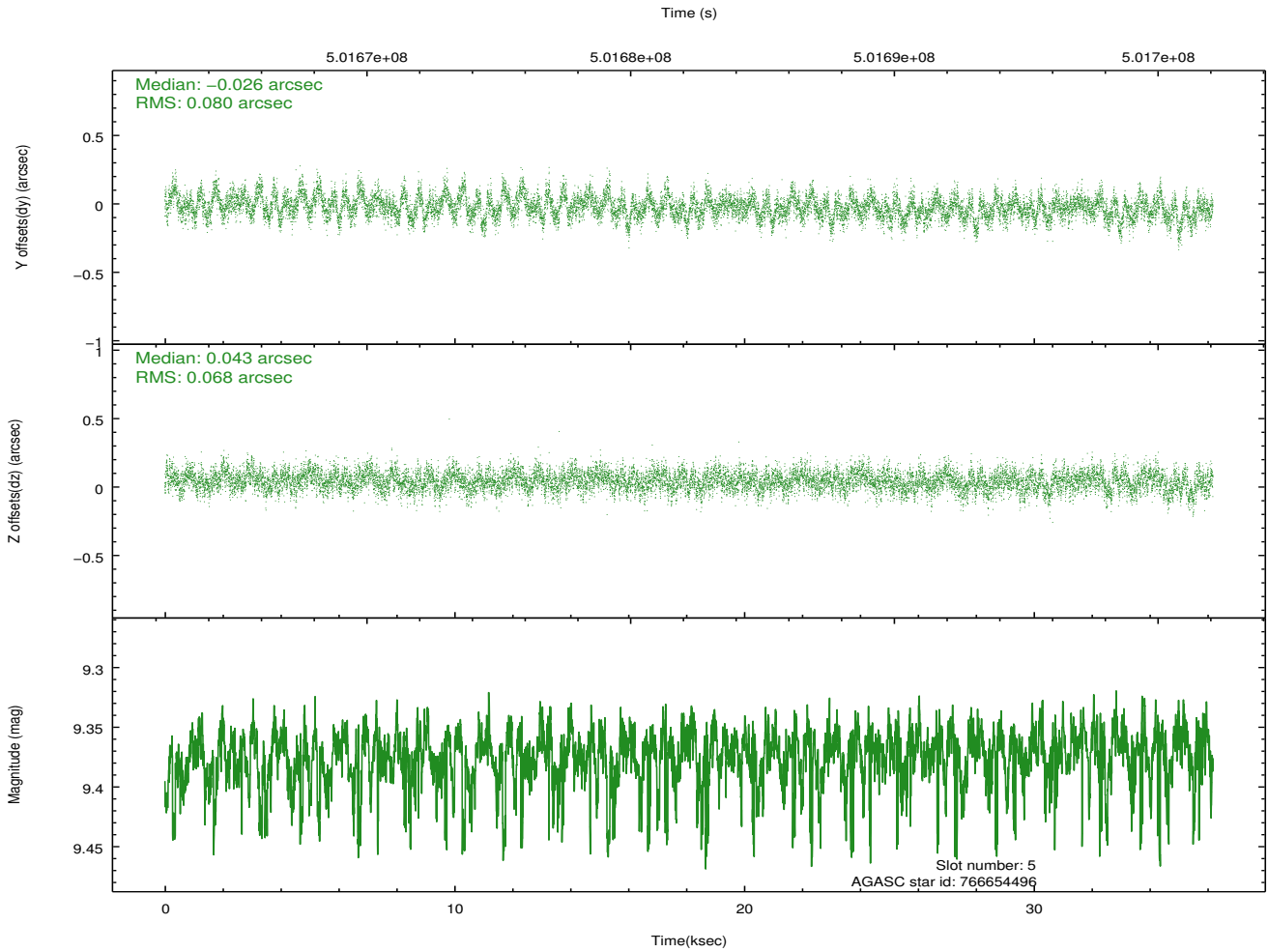
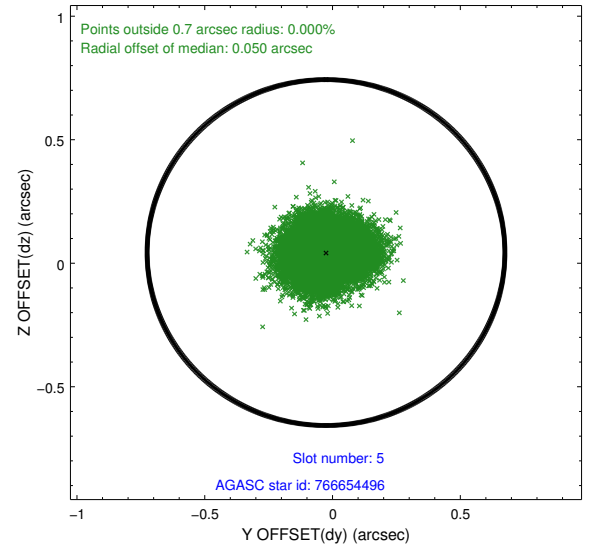
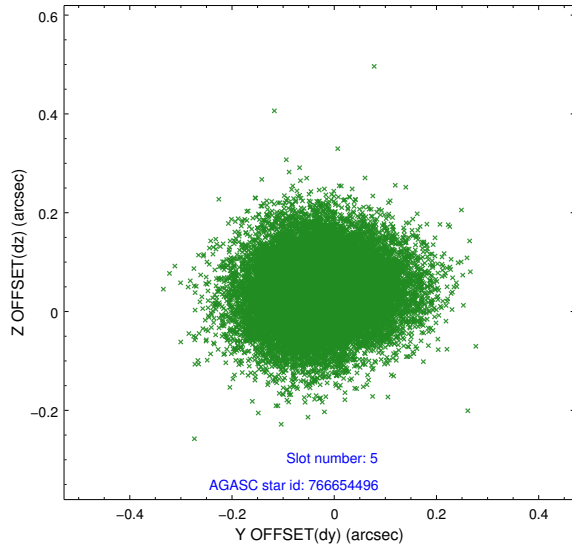
2.4.1 Slot 3



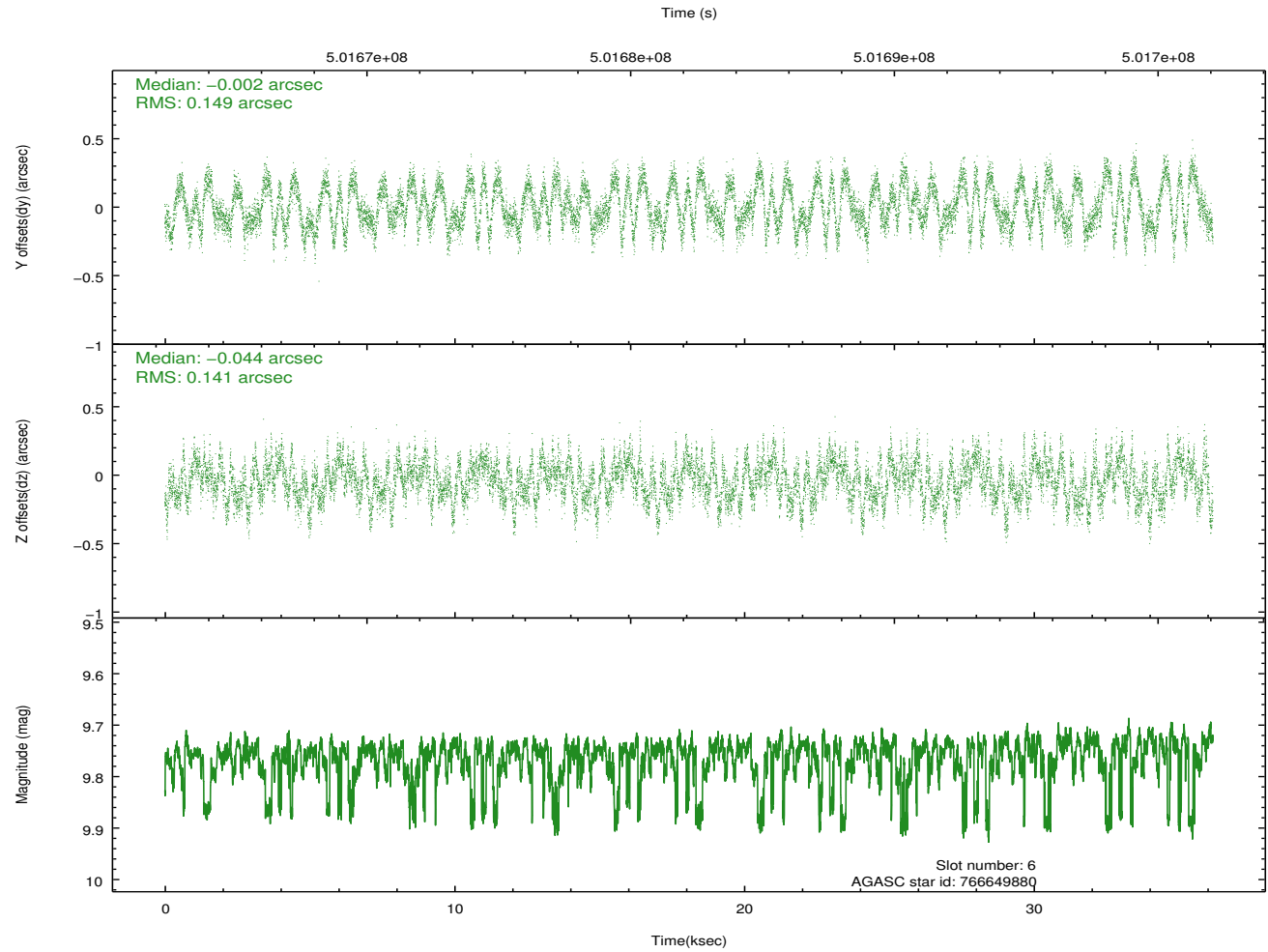
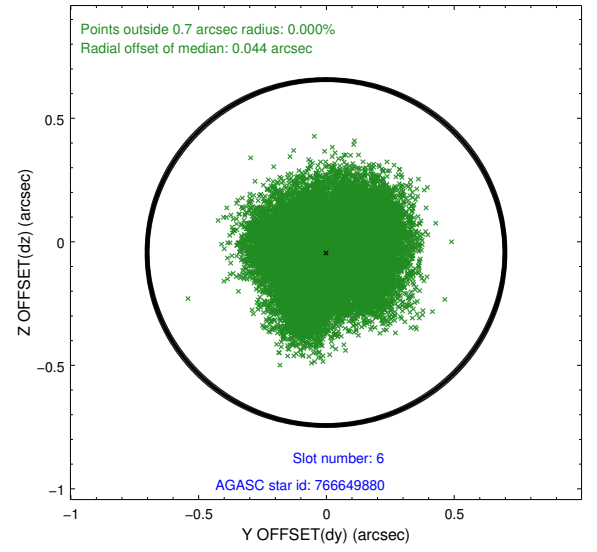
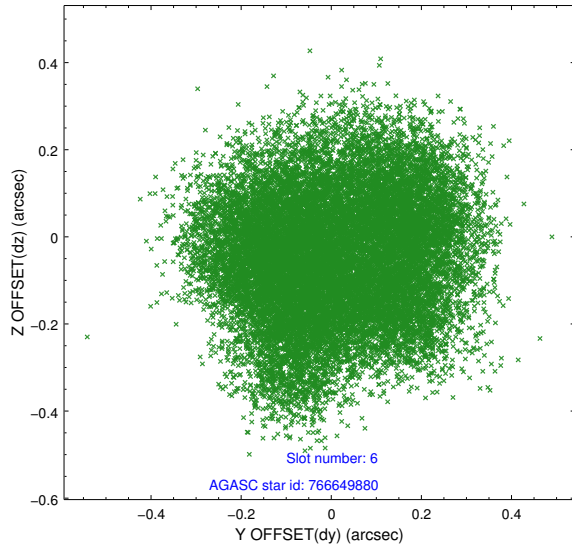
2.4.2 Slot 4



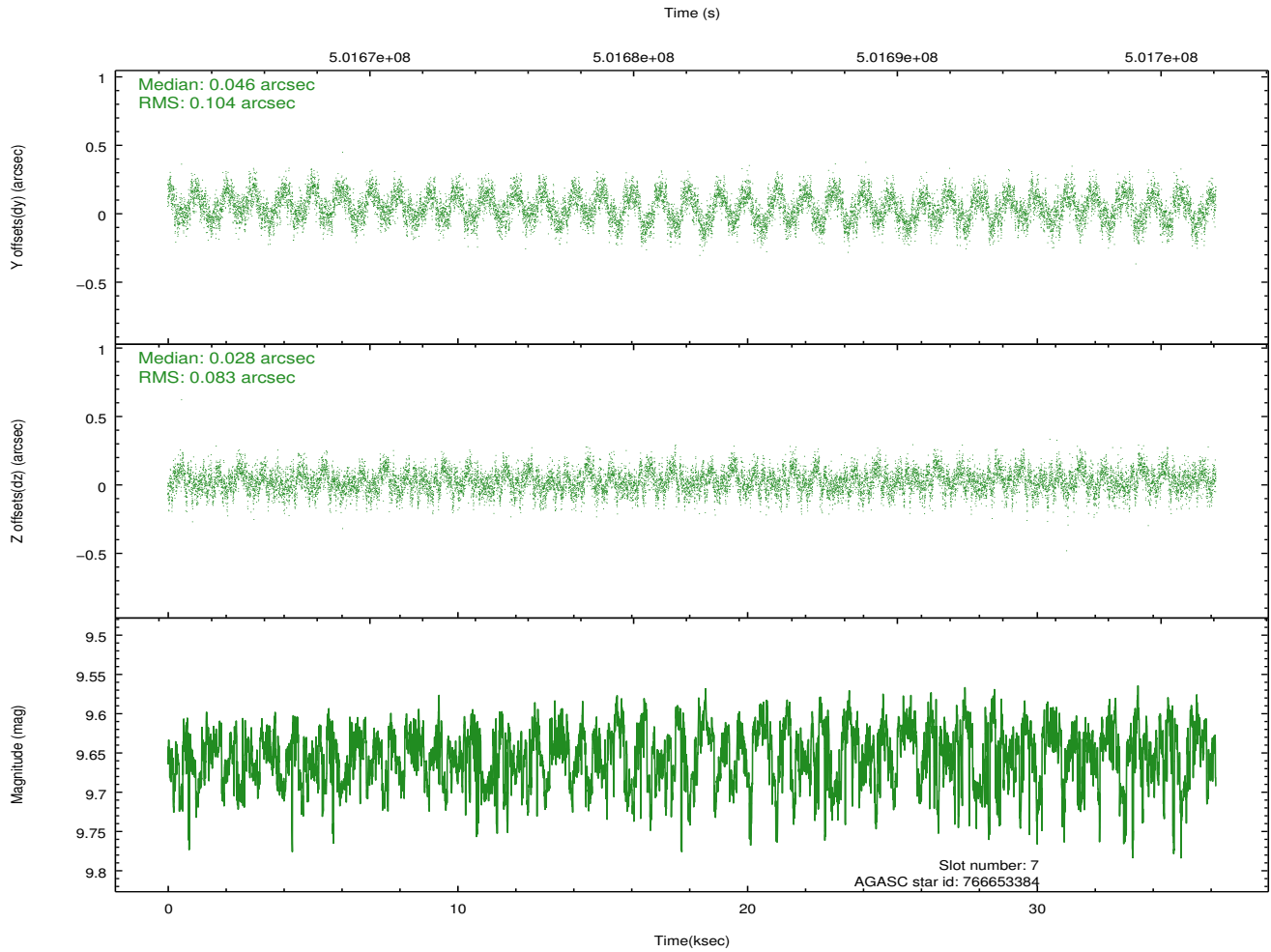
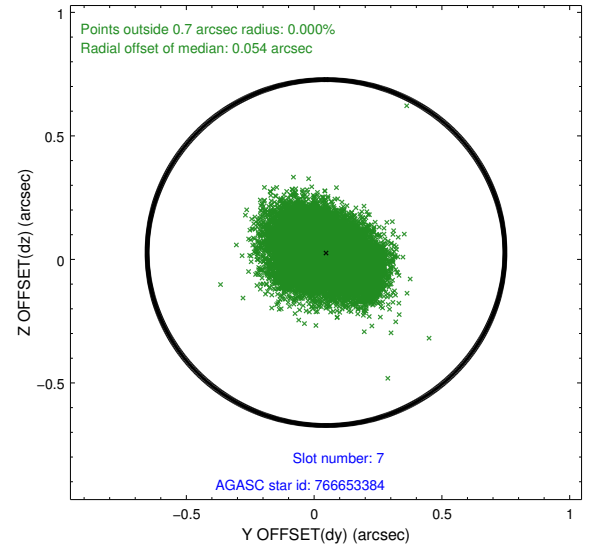
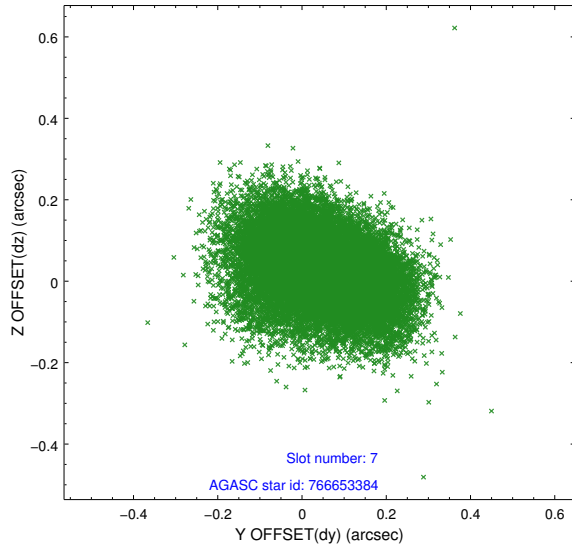
2.4.3 Slot 5



2.4.4 Slot 6

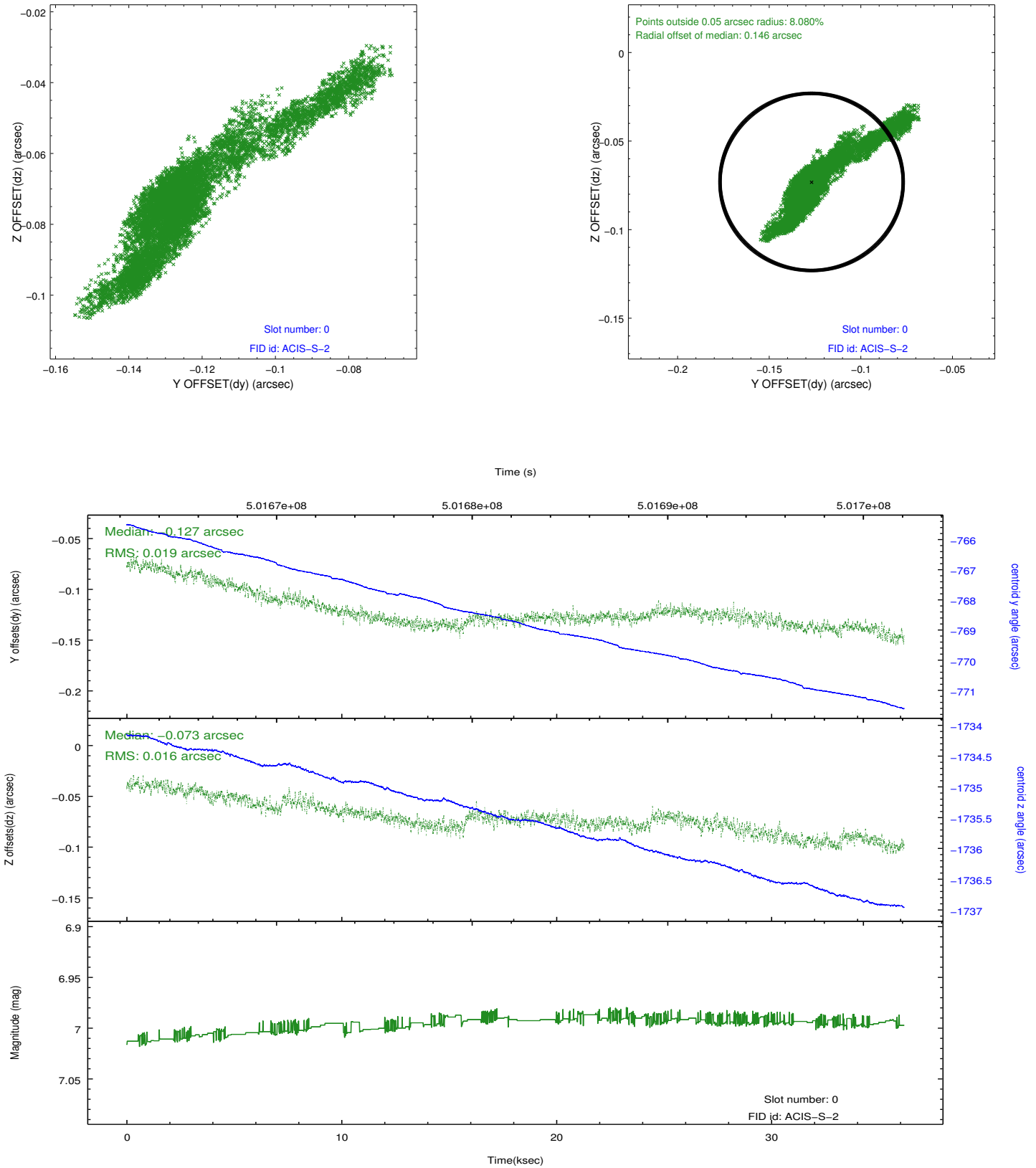


2.4.5 Slot 7

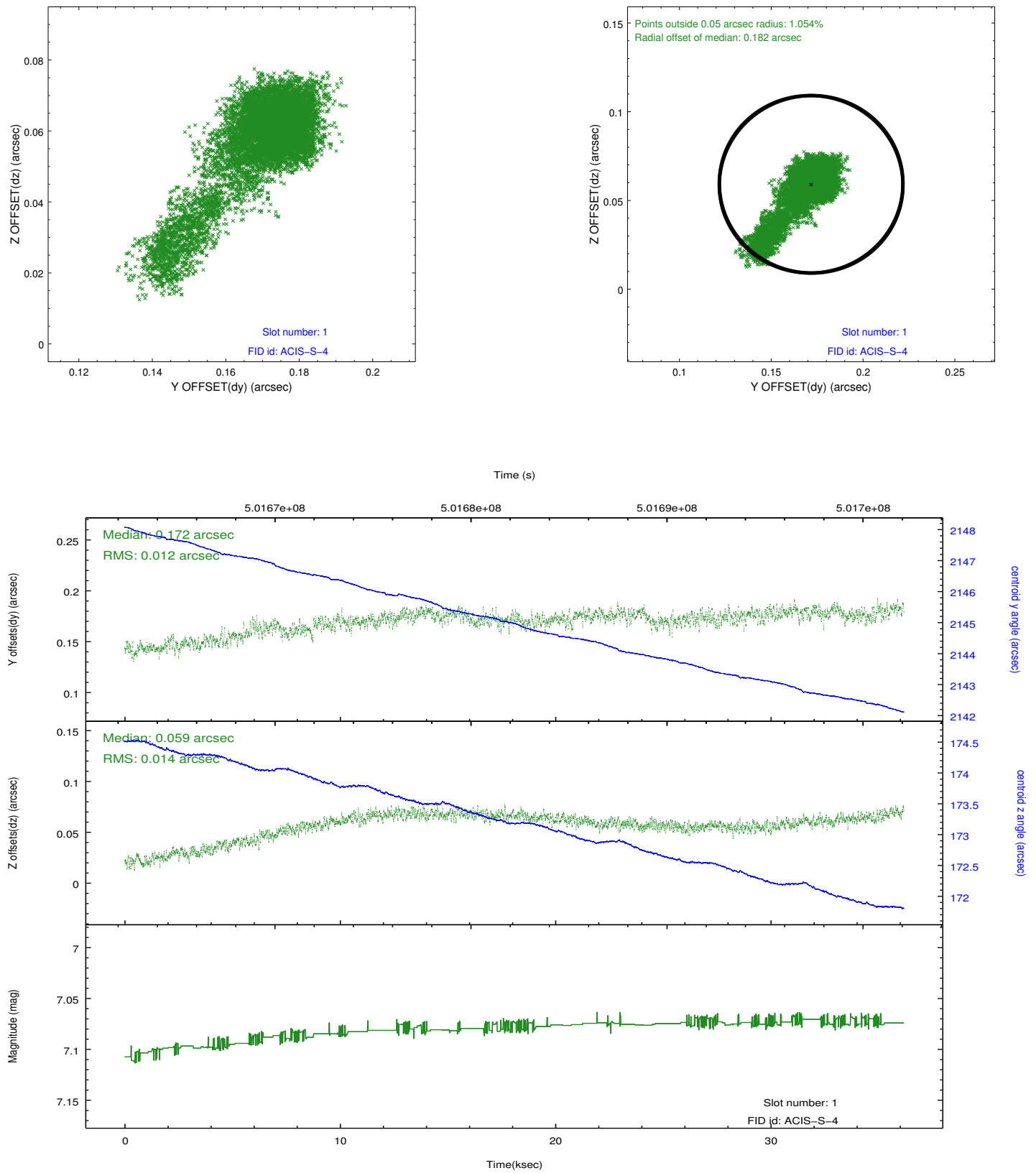


2.5 FID Slots

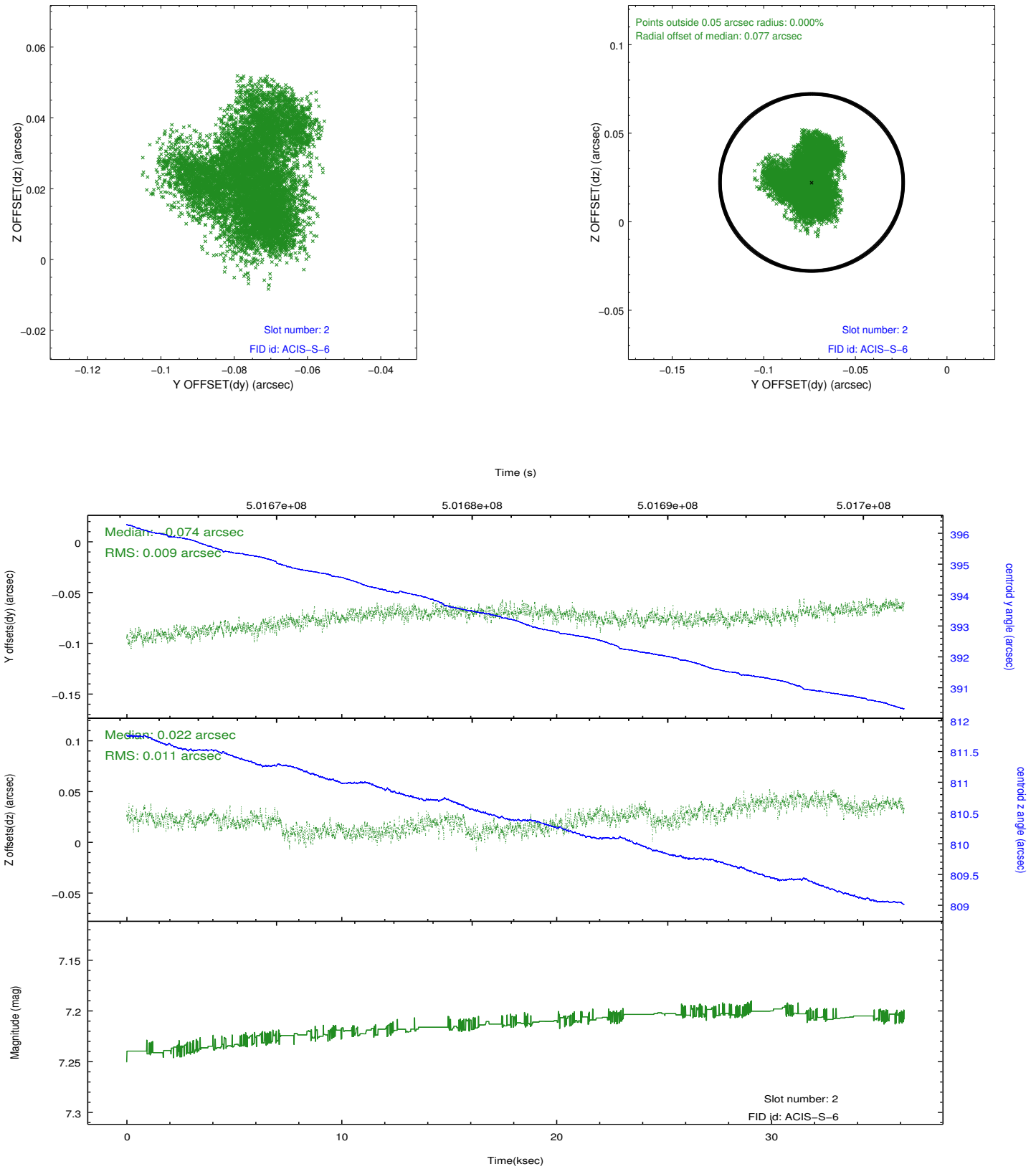
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	36.0685002774

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.