

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13003 - L2 Version 3
Chandra X-Ray Center

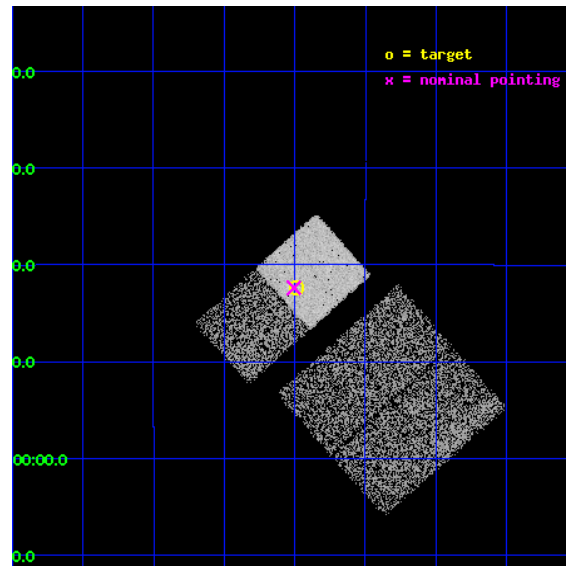
L2 Processing Date : Jul 5 2012

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1 Front

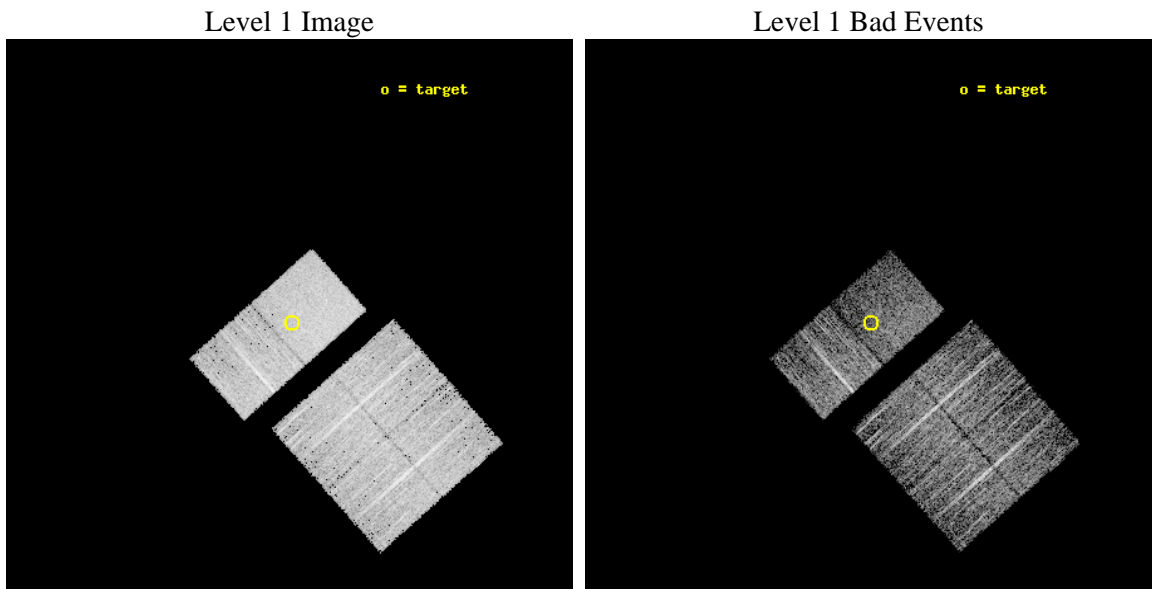
seq_num	600967	Sequence number
obs_id	13003	Observation id
title	The brightest ultraluminous X-ray sources across the sky	Proposal
observer	Dr Jifeng Liu	Principal investigator
object	J003359.2-094220	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	8.496667	Observer's specified target RA [deg]
dec_targ	-9.705556	Observer's specified target Dec [deg]
ra_nom	8.5014693878891	Nominal RA [deg]
dec_nom	-9.7063389851985	Nominal Dec [deg]
roll_nom	318.33009248936	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4963.1999815702	Sum of GTIs [s]
livetime	4900.3529549234	Livetime [s]
ontime0	4963.1999815702	Sum of GTIs [s]
ontime1	4963.193683207	Sum of GTIs [s]
ontime2	4963.1999815702	Sum of GTIs [s]
ontime3	4963.1999815702	Sum of GTIs [s]
ontime6	4963.1999815702	Sum of GTIs [s]
ontime7	4963.1999815702	Sum of GTIs [s]
l2events	36797	Number of level 2 events



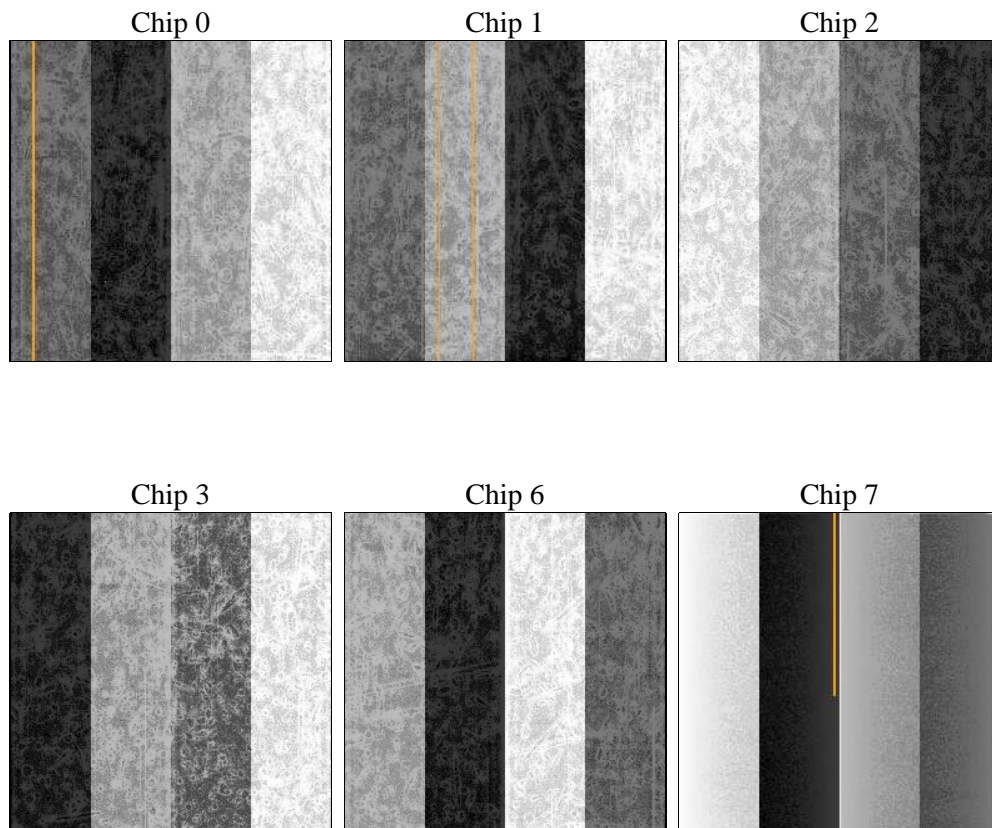
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.823000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4963.1999815702	Sum of GTIs [s]
caldbver	4.5.0	 	ontime0	4963.1999815702	Sum of GTIs [s]
date	2012-07-05T18:51:13	Date and time of file creation	ontime1	4963.193683207	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4963.1999815702	Sum of GTIs [s]
			ontime3	4963.1999815702	Sum of GTIs [s]
			ontime6	4963.1999815702	Sum of GTIs [s]
			ontime7	4963.1999815702	Sum of GTIs [s]
			l1events	218396	Number of level 1 events

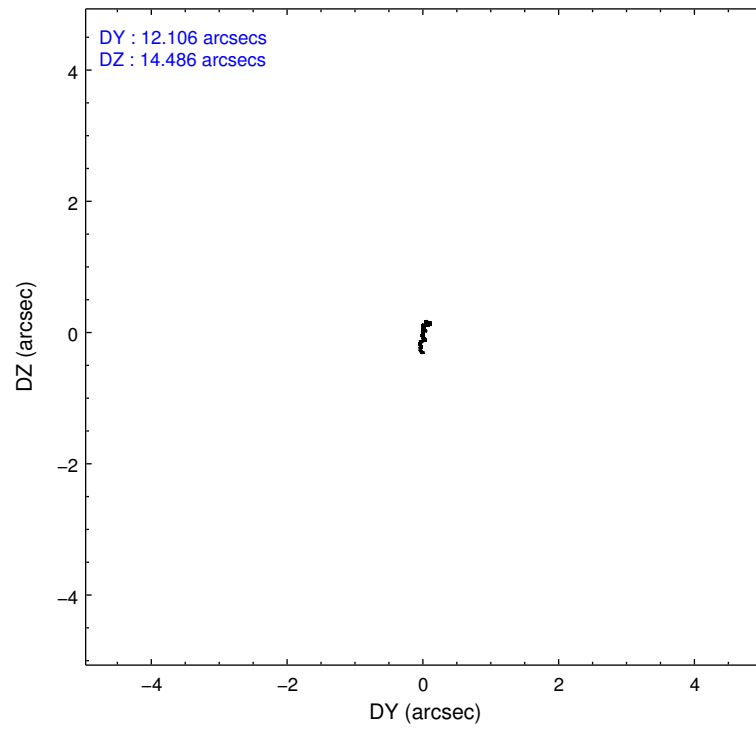
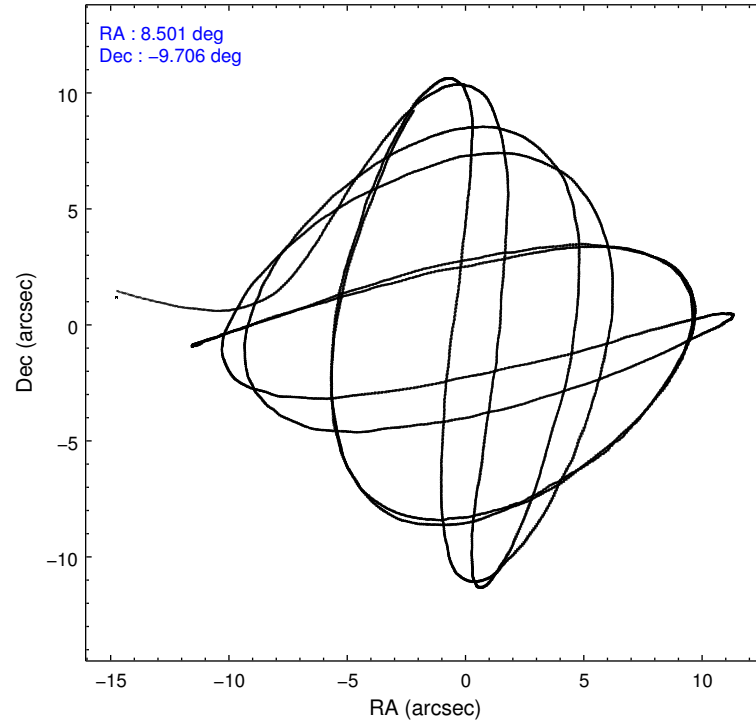
2.1.4 Events

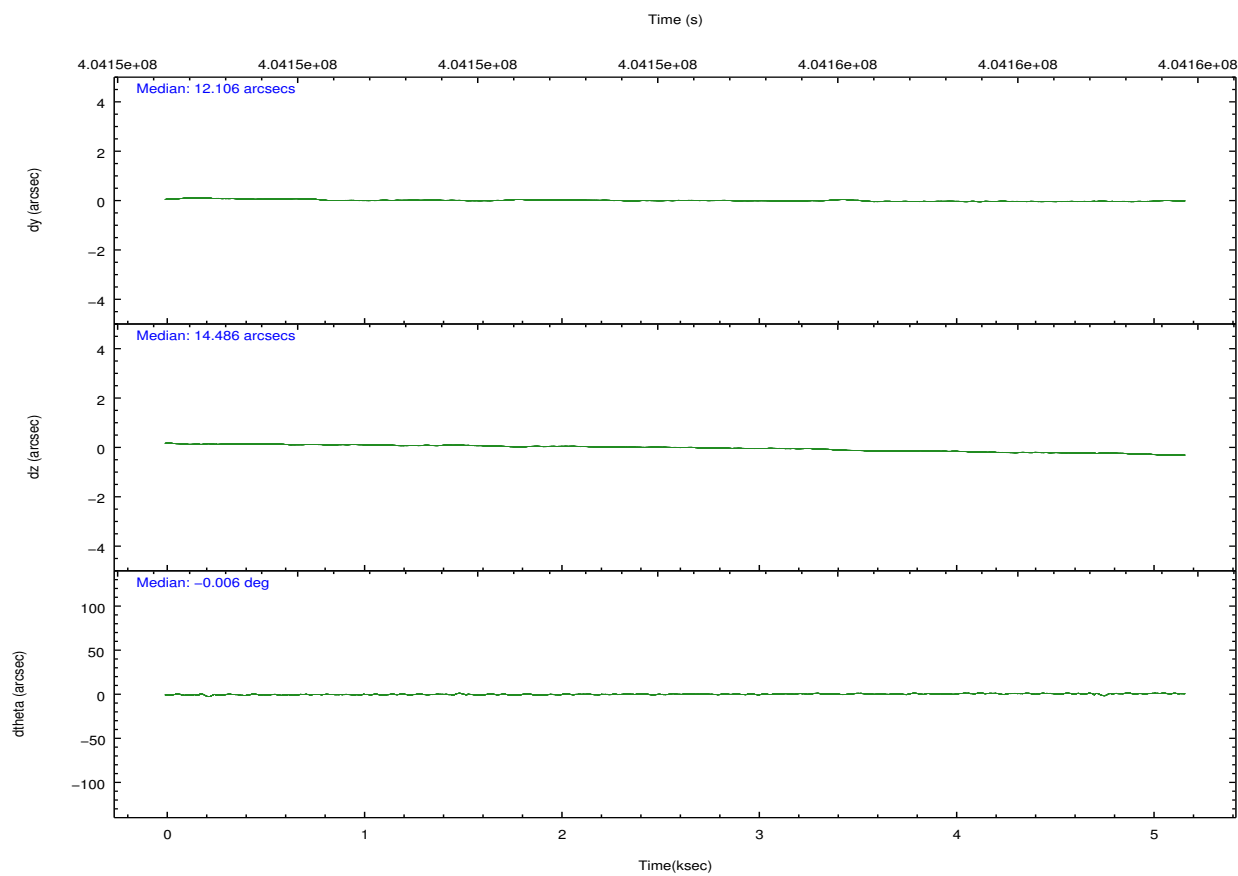
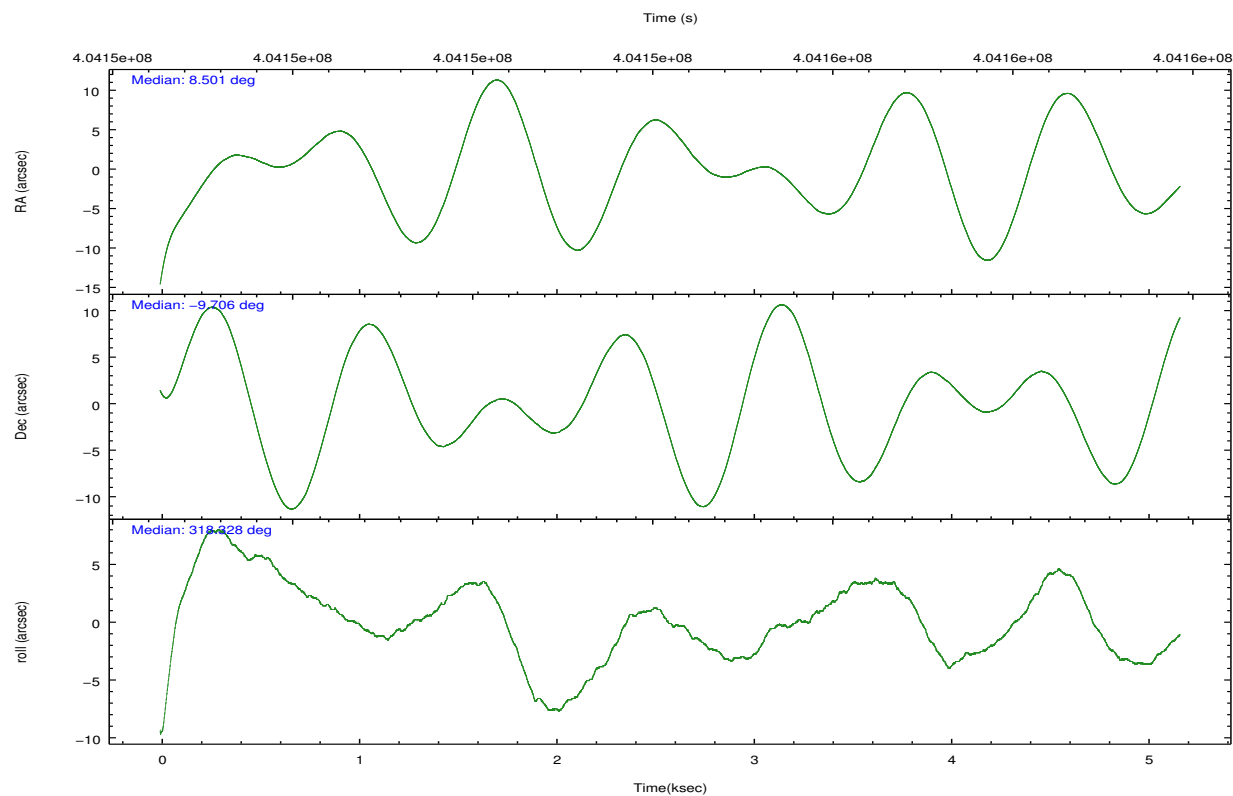
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	34501	31945	35747	34739	36482	44982	grade 0 events	1471	1526	1492	1316	1588	1924
rejected events	30396	27619	31829	31147	32211	24393		4%	4%	4%	3%	4%	4%
rejected %	88%	86%	89%	89%	88%	54%	grade 1 events	17	16	23	11	20	64
								0%	0%	0%	0%	0%	0%
							grade 2 events	1038	1018	896	772	913	4369
								3%	3%	2%	2%	2%	9%
							grade 3 events	418	468	407	389	402	1856
								1%	1%	1%	1%	1%	4%
							grade 4 events	386	450	441	385	431	1837
								1%	1%	1%	1%	1%	4%
							grade 5 events	1513	1481	1327	1678	1647	4663
								4%	4%	3%	4%	4%	10%
							grade 6 events	798	867	689	735	942	10630
								2%	2%	1%	2%	2%	23%
							grade 7 events	28860	26119	30472	29453	30539	19639
								83%	81%	85%	84%	83%	43%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	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	8.474271	8.501469387889131	Subarray requested	NONE	NONE
[deg] Pointing Dec	-9.701232	-9.706338985198457	Alternating exposures requested	N	N
[deg] Pointing Roll	318.168903	318.3300924893618	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	404151676.184000	404150385.73435			
Observation start date	2010-10-22T16:20:10	2010-10-22T15:59:45			
[s] Observation end time (MET)	404156677.184000	404156902.68468			
Observation end date	2010-10-22T17:43:31	2010-10-22T17:48:22			
Read mode	TIMED	TIMED			

2.3 Aspect



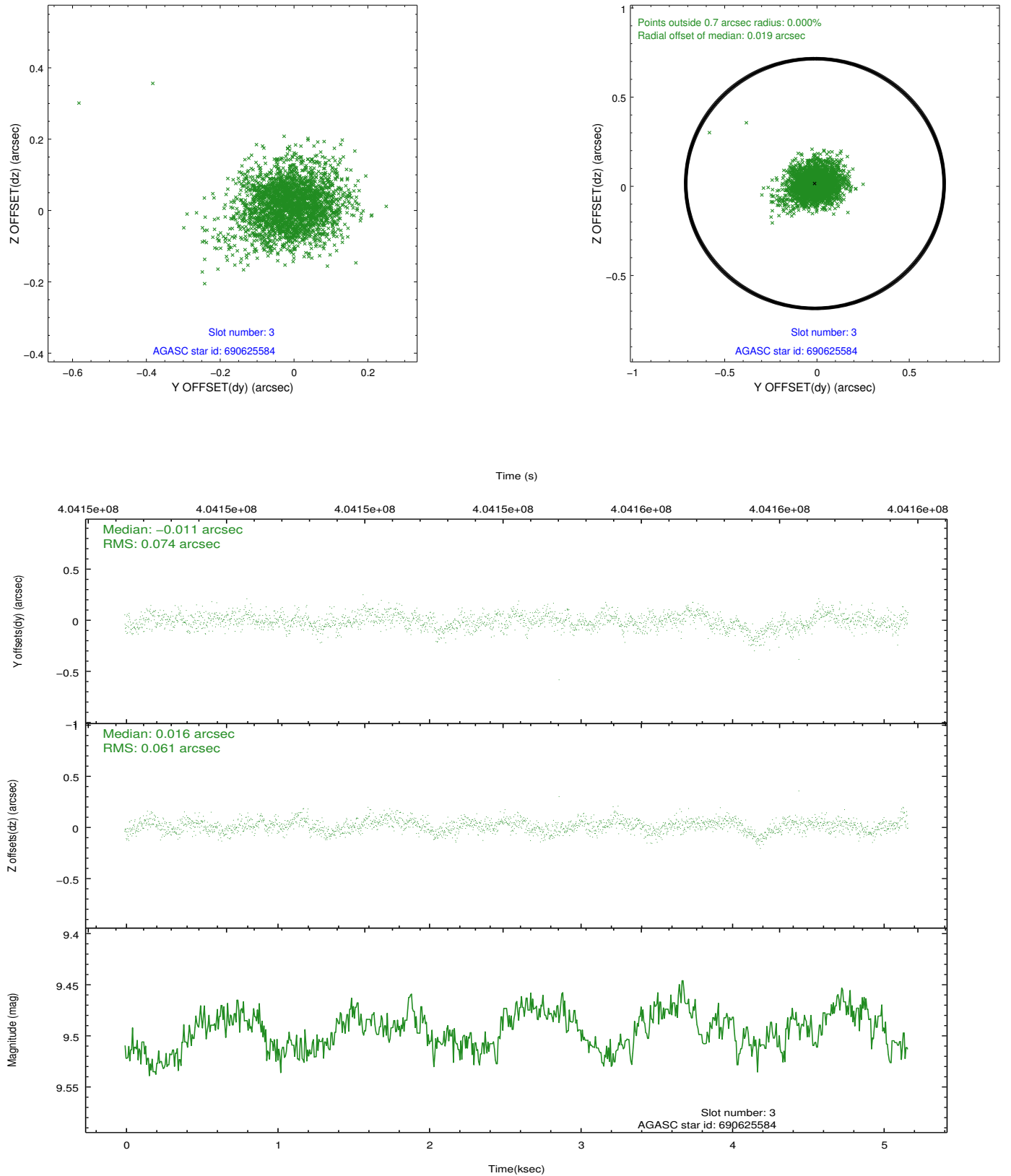


Slot Statistics

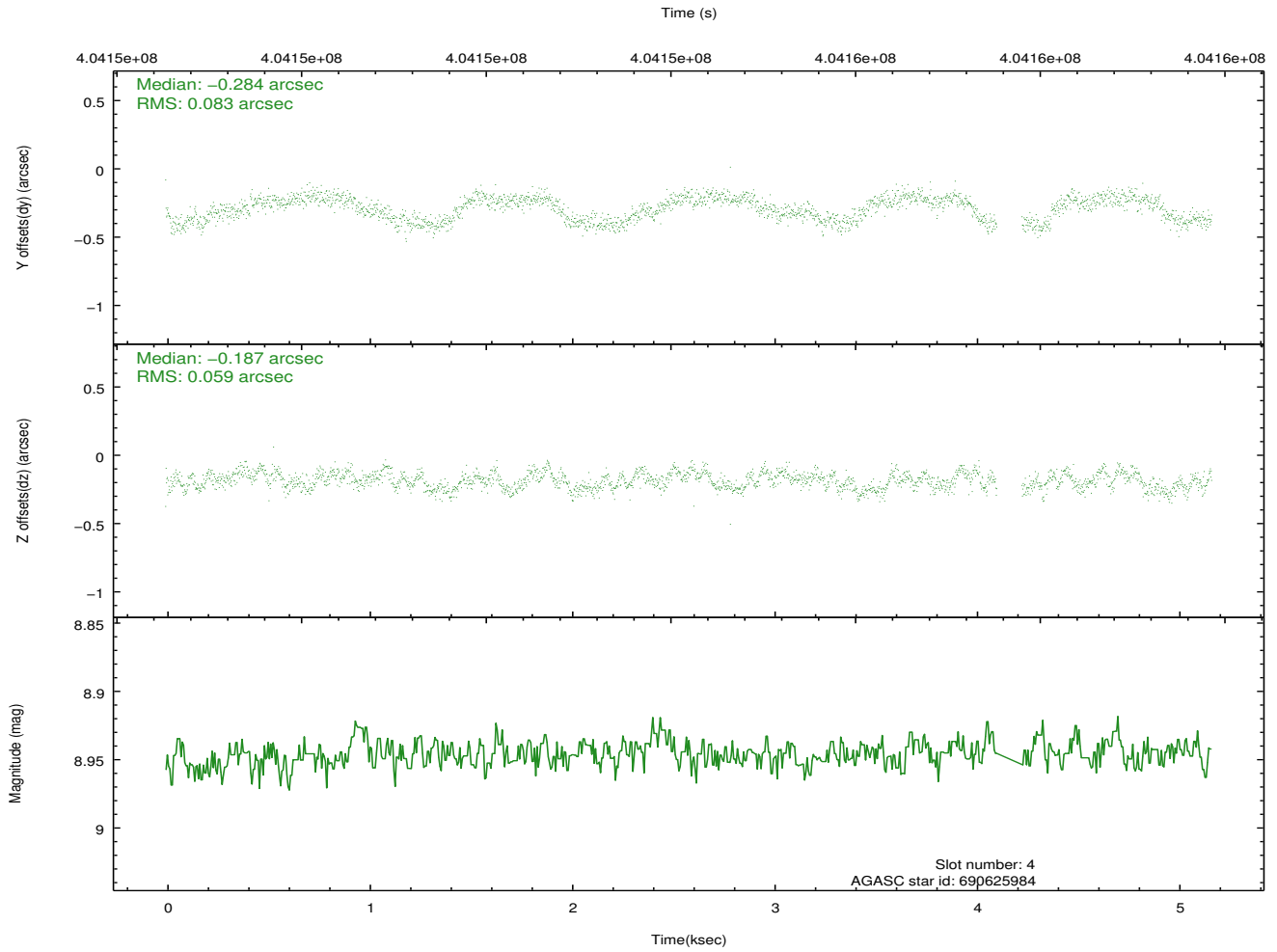
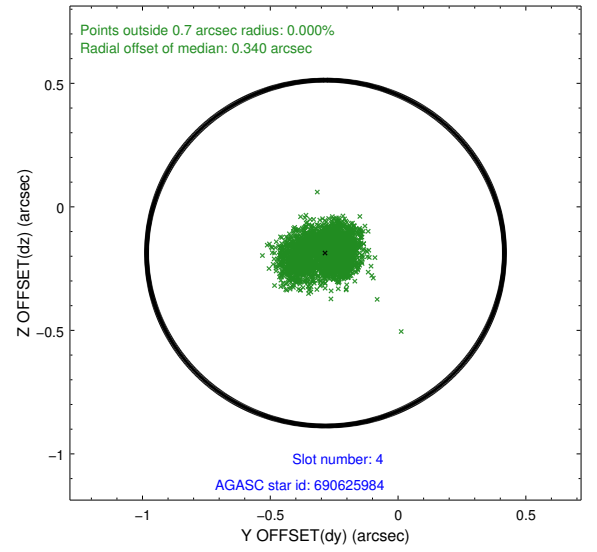
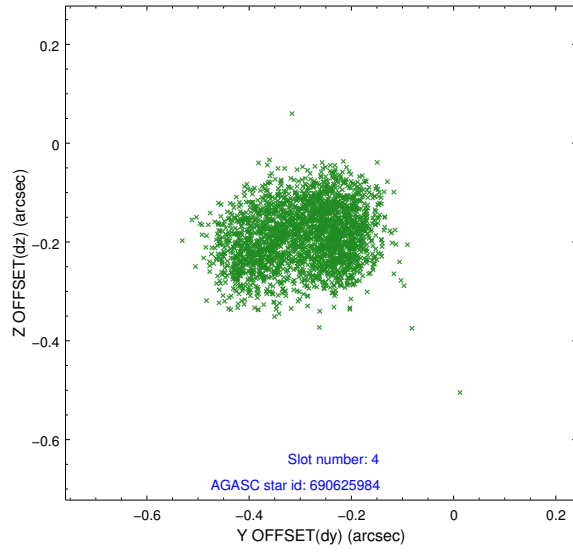
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.99	1261	0.038	0.005	0.008	0.014	0.000000	0.000000	931.08	-1731.44
1	FID	ACIS-S-4	7.00	1261	0.082	-0.017	0.007	0.011	0.000000	0.000000	2149.16	171.50
2	FID	ACIS-S-5	7.03	1261	-0.147	0.025	0.006	0.011	0.000000	0.000000	-1816.49	166.43
3	GUIDE	690625584	9.49	2519	-0.011	0.016	0.098	0.169	9.049786	-10.008288	2259.25	535.92
4	GUIDE	690625984	8.95	2460	-0.284	-0.187	0.110	0.167	8.011467	-9.410648	-1920.60	-317.71
5	GUIDE	690629272	9.05	2521	0.089	0.166	0.080	0.133	7.960487	-9.389463	-2107.40	-381.88
6	GUIDE	690629456	8.34	2521	0.165	-0.103	0.077	0.123	8.281141	-9.988018	178.49	-1226.23
7	GUIDE	689702160	9.22	2515	0.039	0.109	0.111	0.183	7.629797	-9.673354	-2296.08	-1927.03

2.4 Star Slots

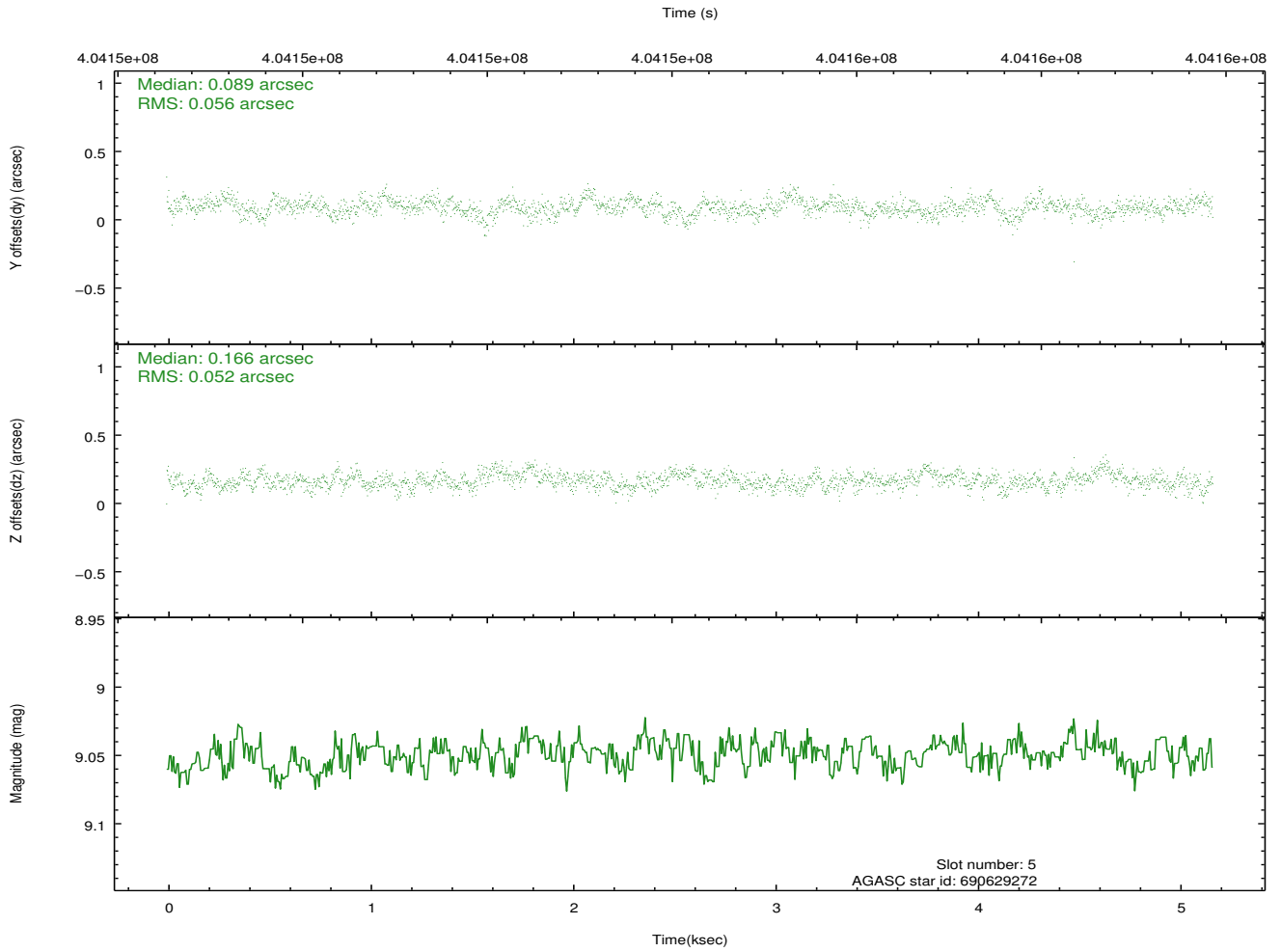
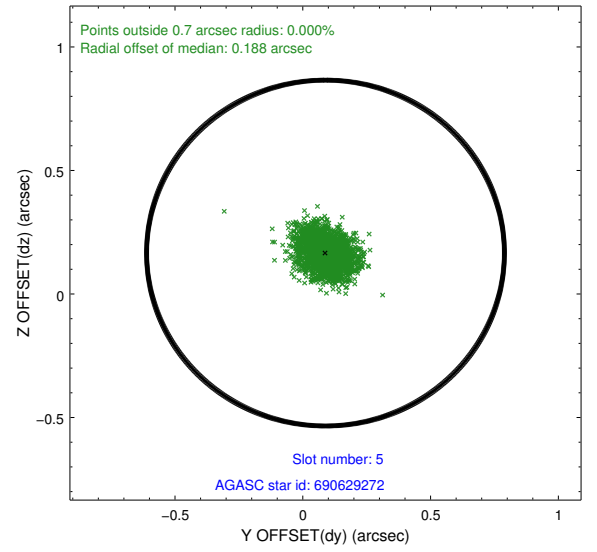
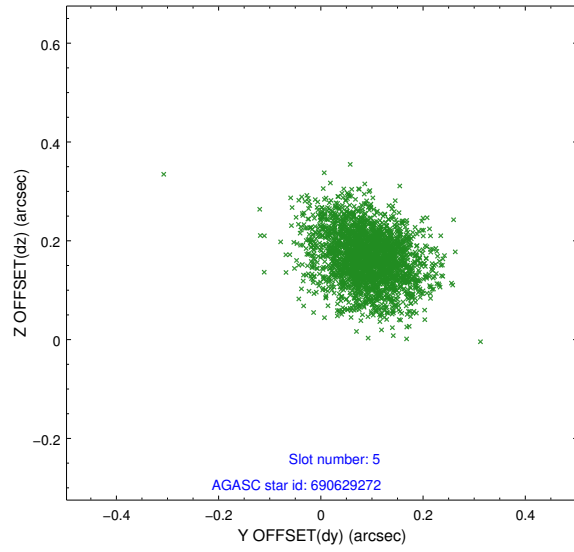
2.4.1 Slot 3



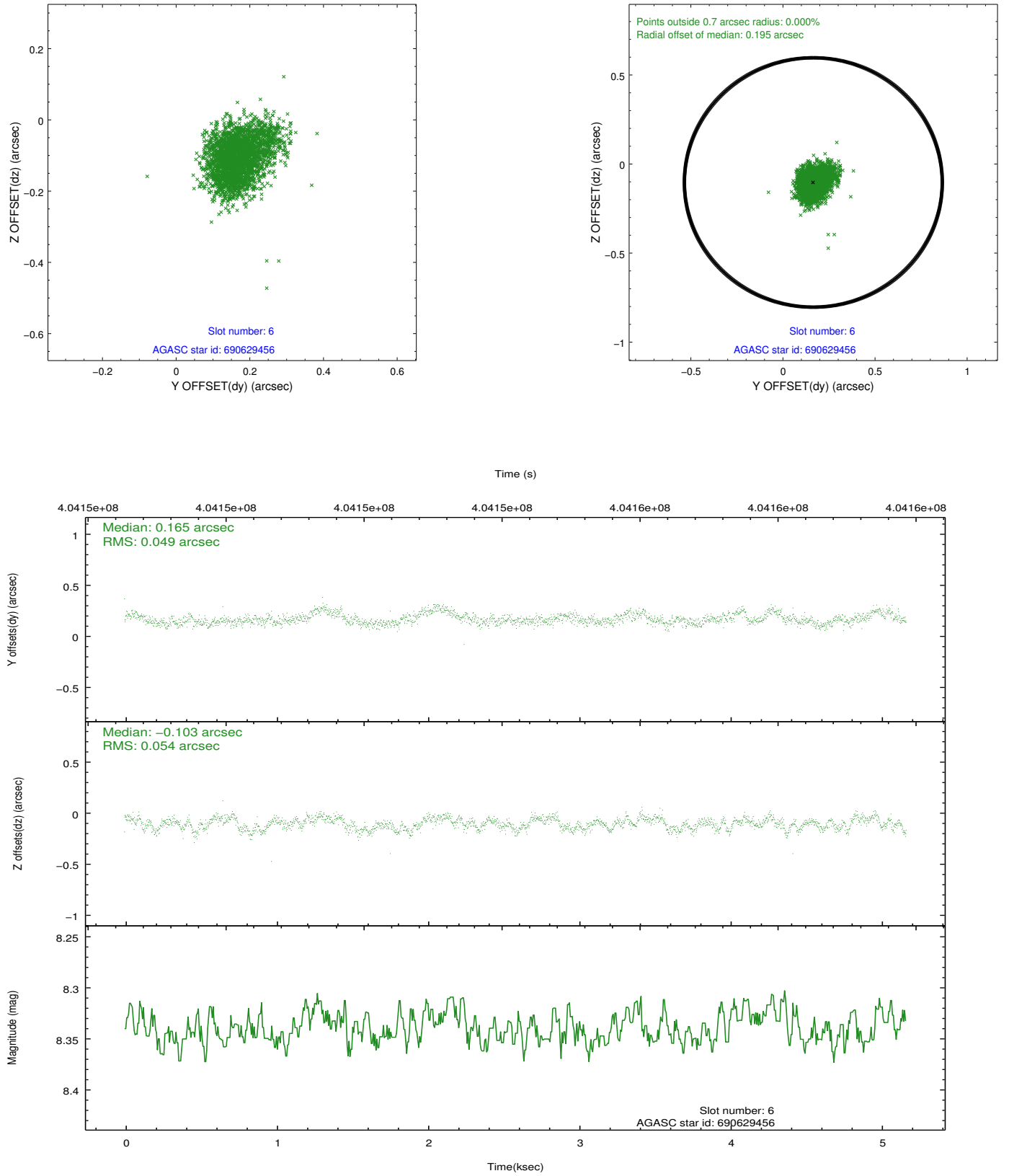
2.4.2 Slot 4



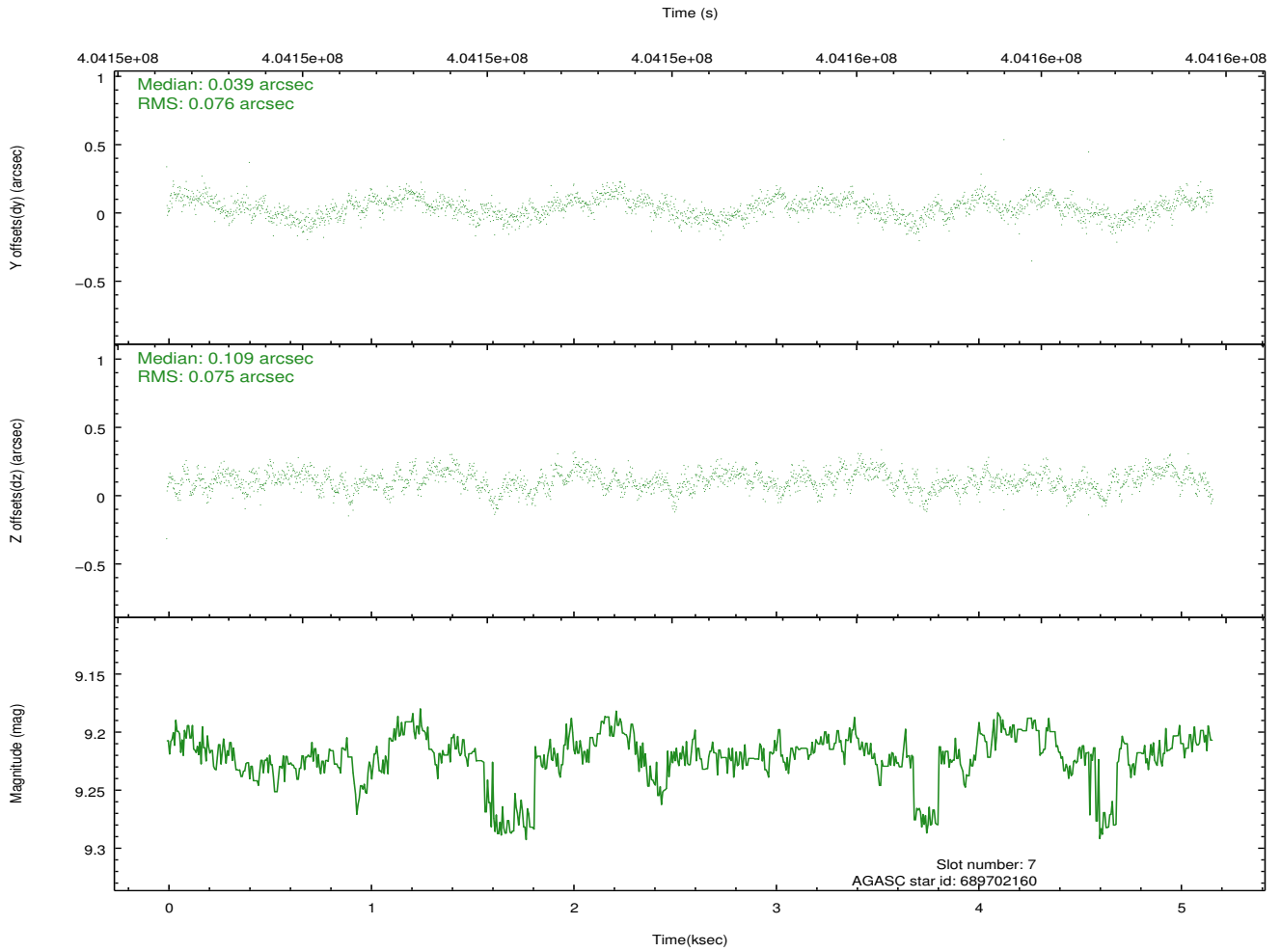
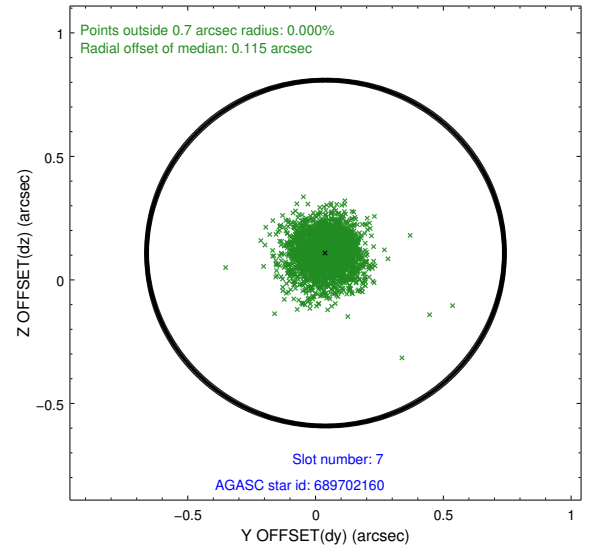
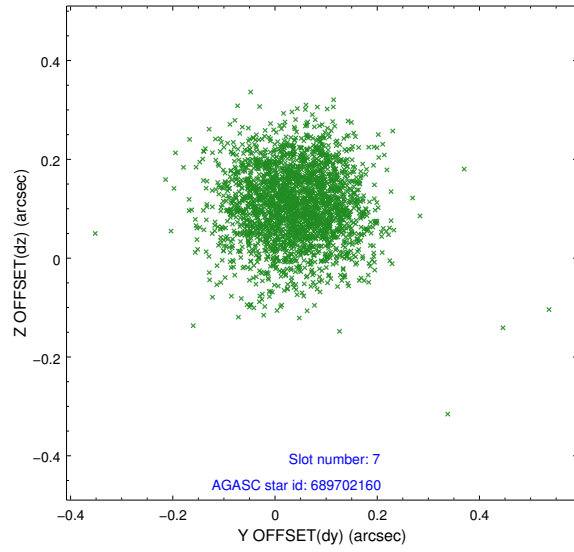
2.4.3 Slot 5



2.4.4 Slot 6

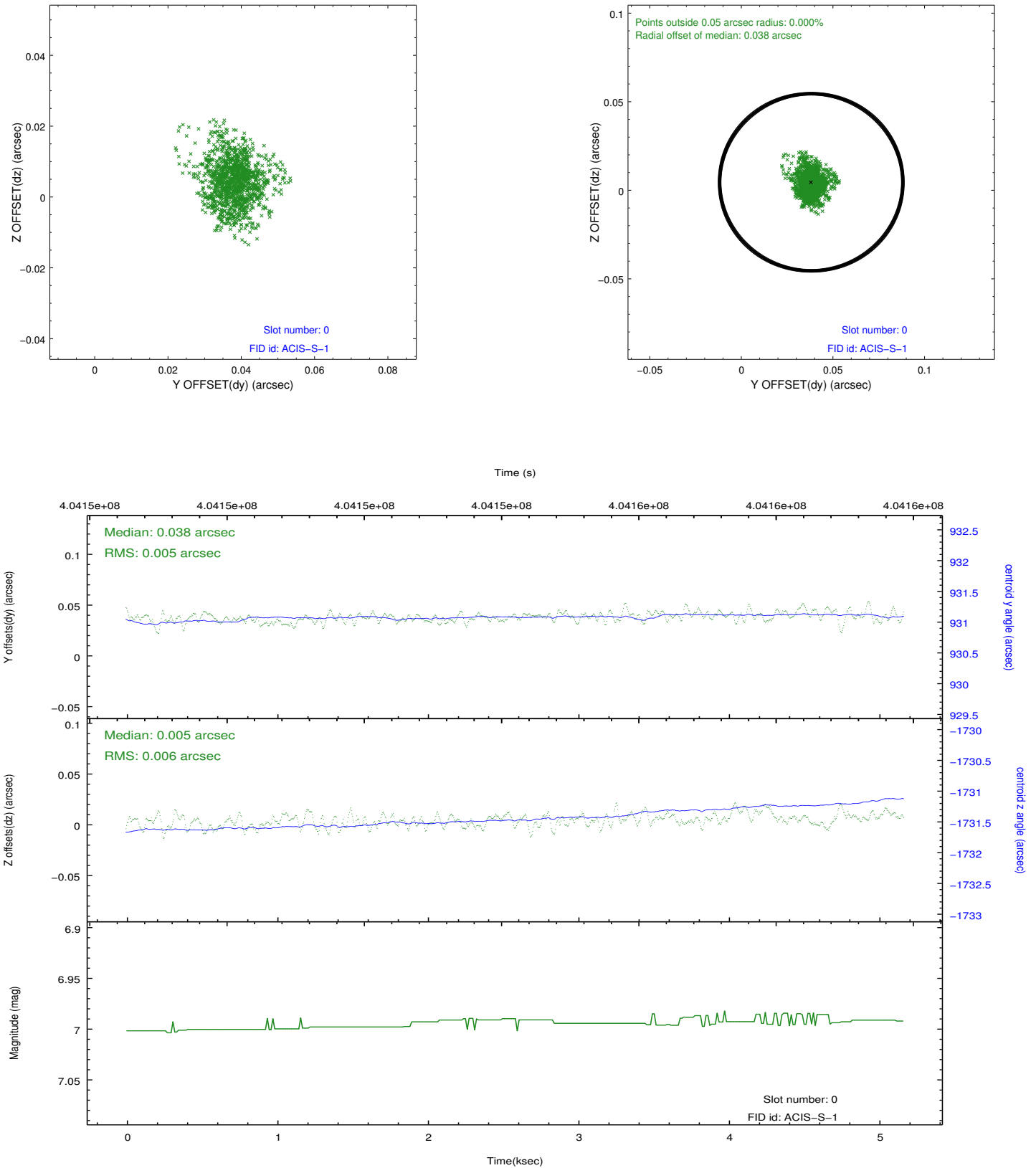


2.4.5 Slot 7

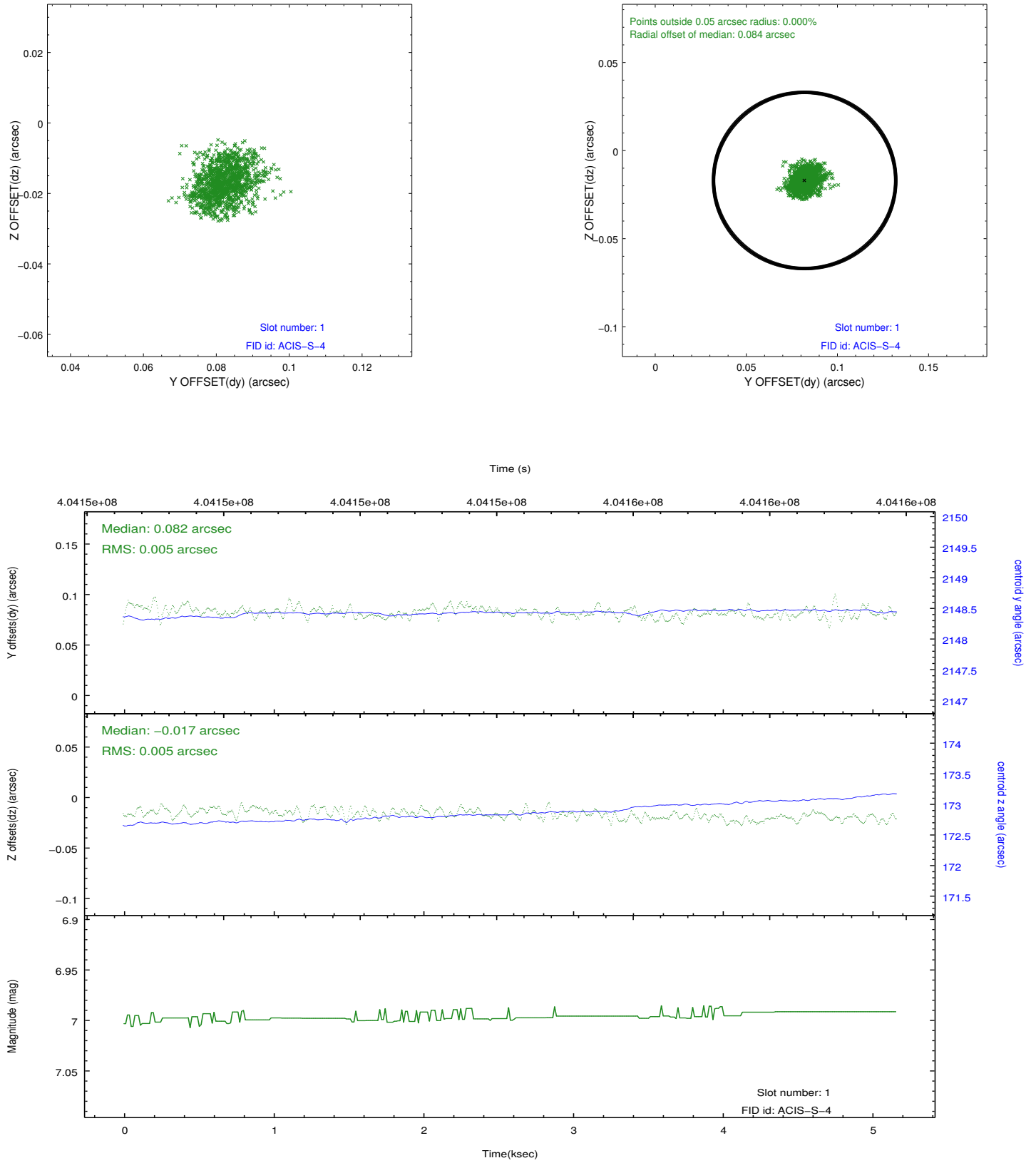


2.5 FID Slots

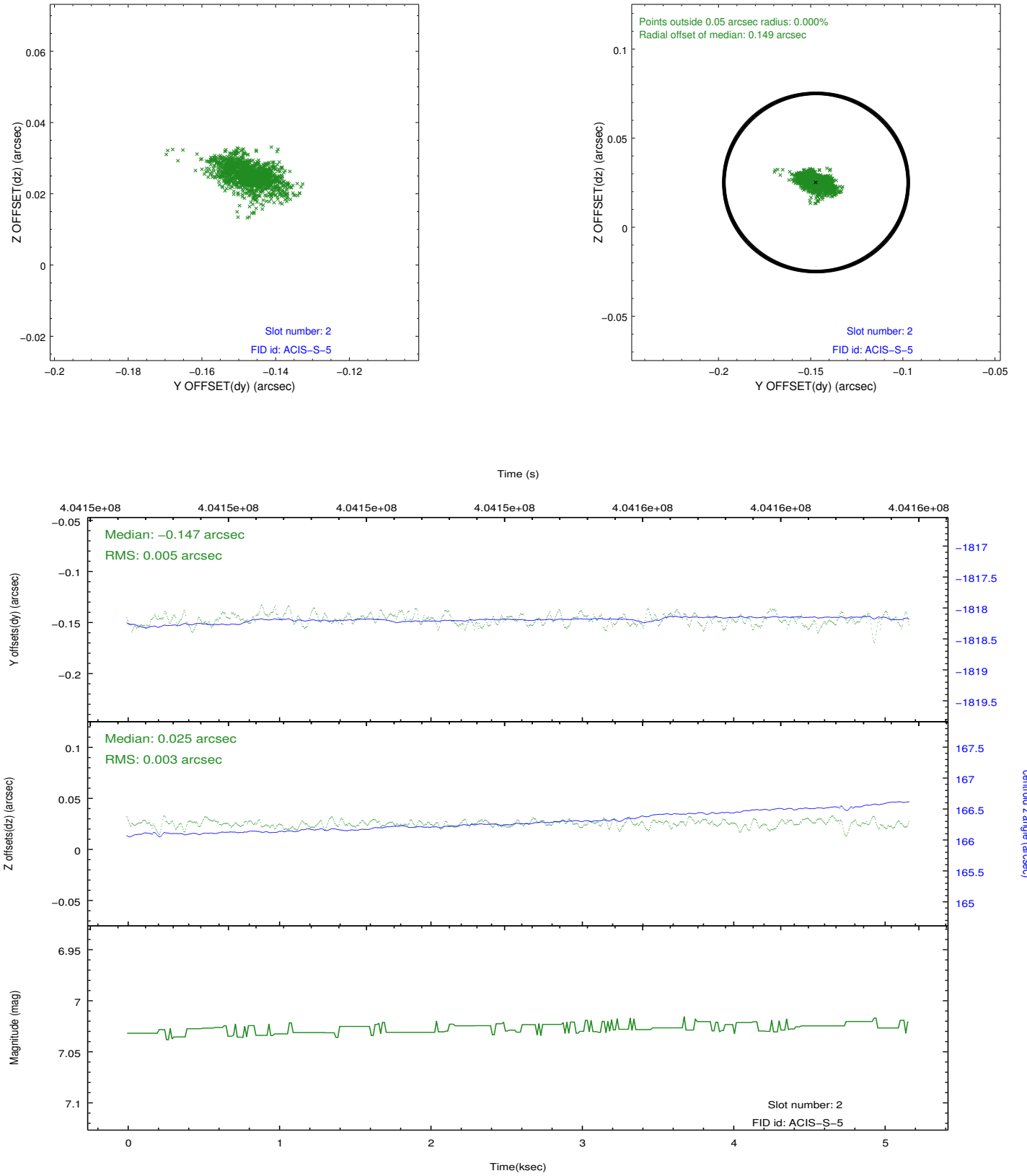
2.5.1 Slot 0



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)	2012.07.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9631999815702

A.2 Comments

A spatial region of the original bias map for CCD = 1 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 1 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(8.20663, -9.96014), (8.20479, -9.96218), (8.23187, -9.98594), (8.23174, -9.98218)