

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12422 - L2 Version 2
Chandra X-Ray Center

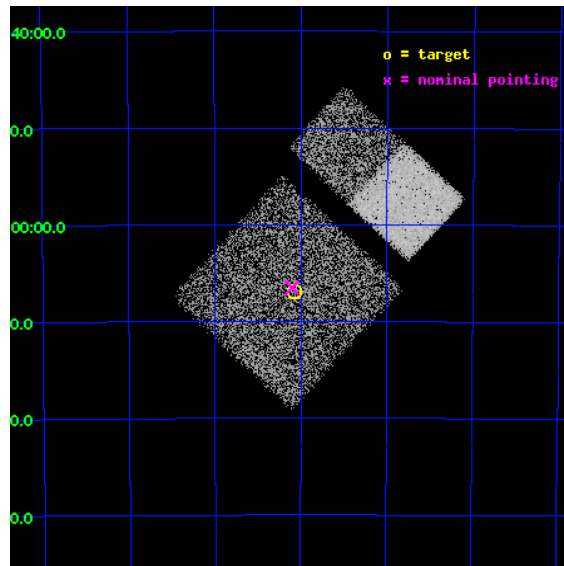
L2 Processing Date : Feb 7 2012

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1 Front

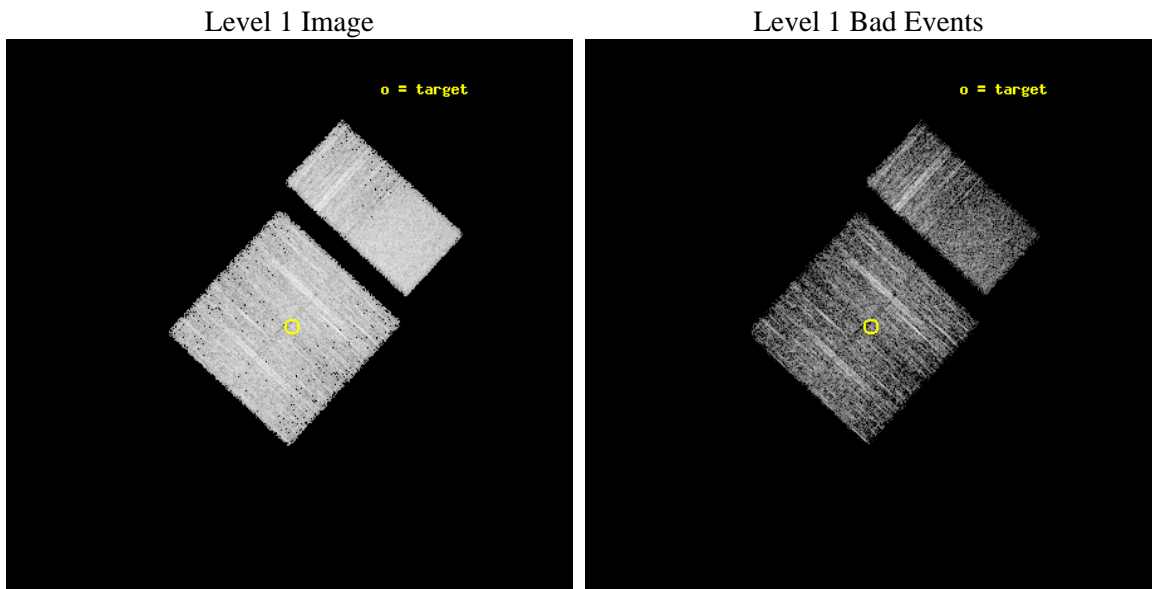
seq_num	401163	Sequence number
obs_id	12422	Observation id
title	The Nature of INTEGRAL Sources in the Galactic Plane	Proposal titl
observer	Dr. John Tomsick	Principal investigator
object	IGR J15391-5307	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	234.769167	Observer's specified target RA [deg]
dec_targ	-53.116	Observer's specified target Dec [deg]
ra_nom	234.77583124652	Nominal RA [deg]
dec_nom	-53.108773681592	Nominal Dec [deg]
roll_nom	42.877689436222	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5055.9999812245	Sum of GTIs [s]
livetime	4991.9778651046	Livetime [s]
ontime0	5055.9736630321	Sum of GTIs [s]
ontime1	5055.9999812245	Sum of GTIs [s]
ontime2	5055.9999812245	Sum of GTIs [s]
ontime3	5055.9999812245	Sum of GTIs [s]
ontime6	5055.9999812245	Sum of GTIs [s]
ontime7	5055.9999812245	Sum of GTIs [s]
l2events	33153	Number of level 2 events



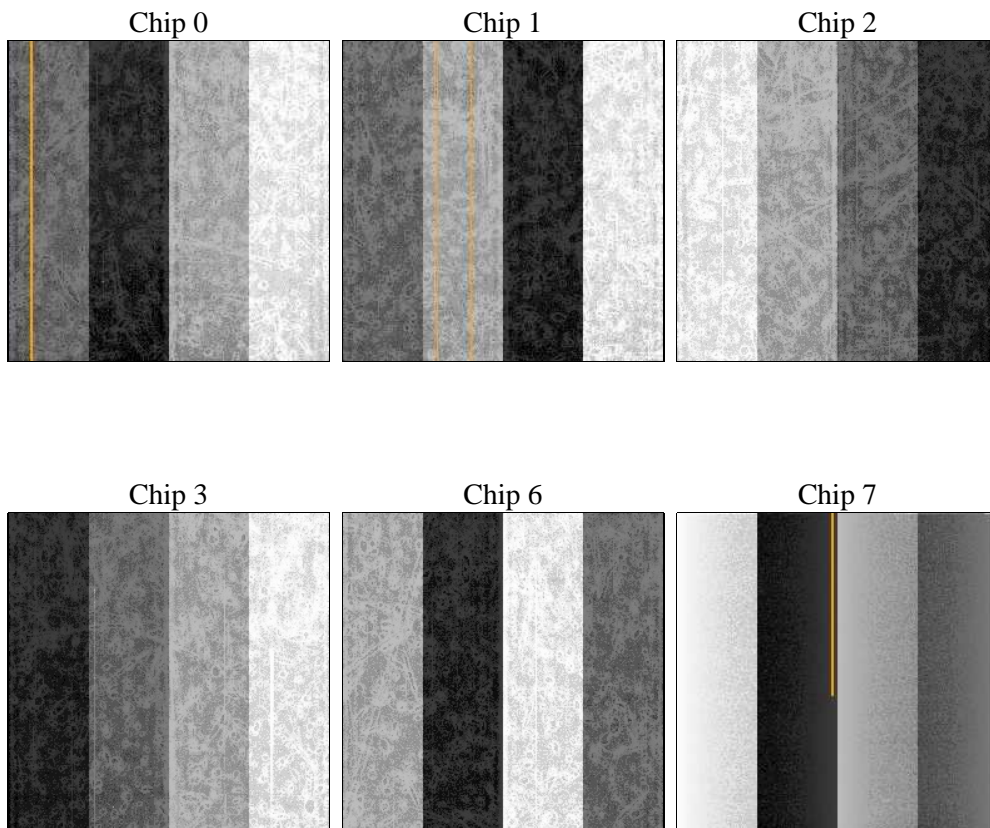
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	5055.9999812245	Sum of GTIs [s]
caldsver	4.4.7	 	ontime0	5055.9736630321	Sum of GTIs [s]
date	2012-02-08T03:18:15	Date and time of file creation	ontime1	5055.9999812245	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5055.9999812245	Sum of GTIs [s]
			ontime3	5055.9999812245	Sum of GTIs [s]
			ontime6	5055.9999812245	Sum of GTIs [s]
			ontime7	5055.9999812245	Sum of GTIs [s]
			l1events	198352	Number of level 1 events

2.1.4 Events

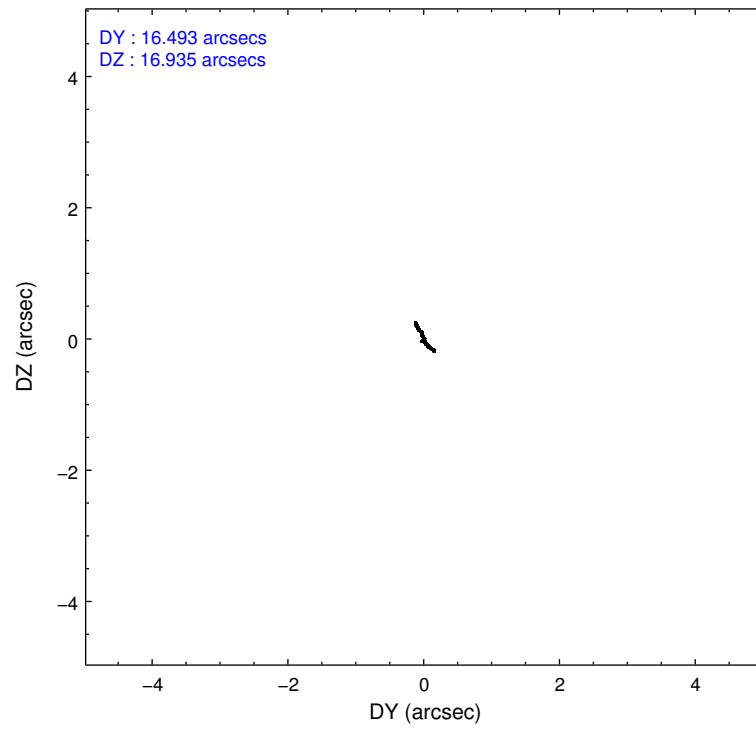
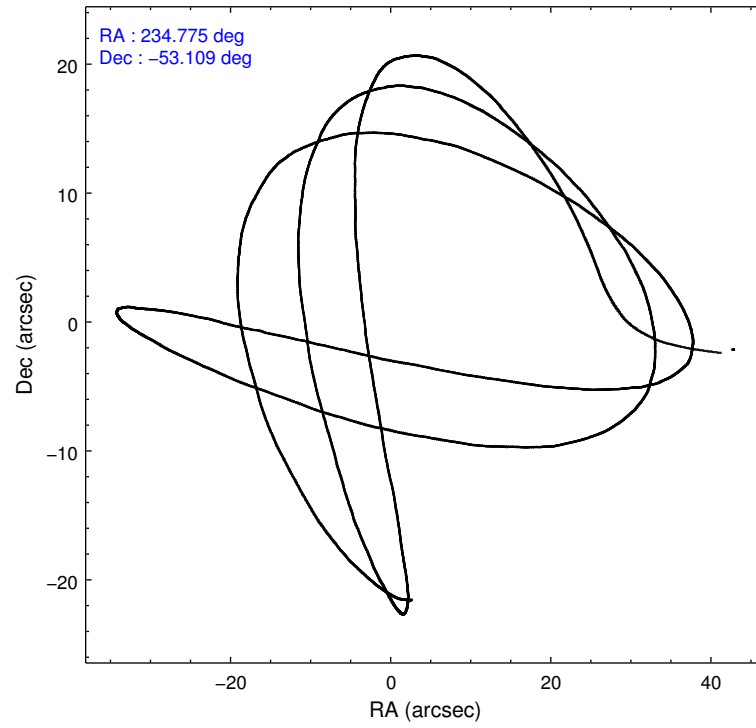
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	29840	29677	32462	31985	33812	40576	grade 0 events	1283	1432	1339	1180	1357	1626
rejected events	26154	25773	28748	28584	30031	22445		4%	4%	4%	3%	4%	4%
rejected %	87%	86%	88%	89%	88%	55%	grade 1 events	20	18	29	23	17	49
								0%	0%	0%	0%	0%	0%
							grade 2 events	939	893	911	815	858	3773
								3%	3%	2%	2%	2%	9%
							grade 3 events	386	386	374	414	394	1634
								1%	1%	1%	1%	1%	4%
							grade 4 events	369	385	375	353	386	1638
								1%	1%	1%	1%	1%	4%
							grade 5 events	1374	1419	1233	1477	1532	4197
								4%	4%	3%	4%	4%	10%
							grade 6 events	712	811	719	641	787	9476
								2%	2%	2%	2%	2%	23%
							grade 7 events	24757	24333	27482	27082	28481	18183
								82%	81%	84%	84%	84%	44%

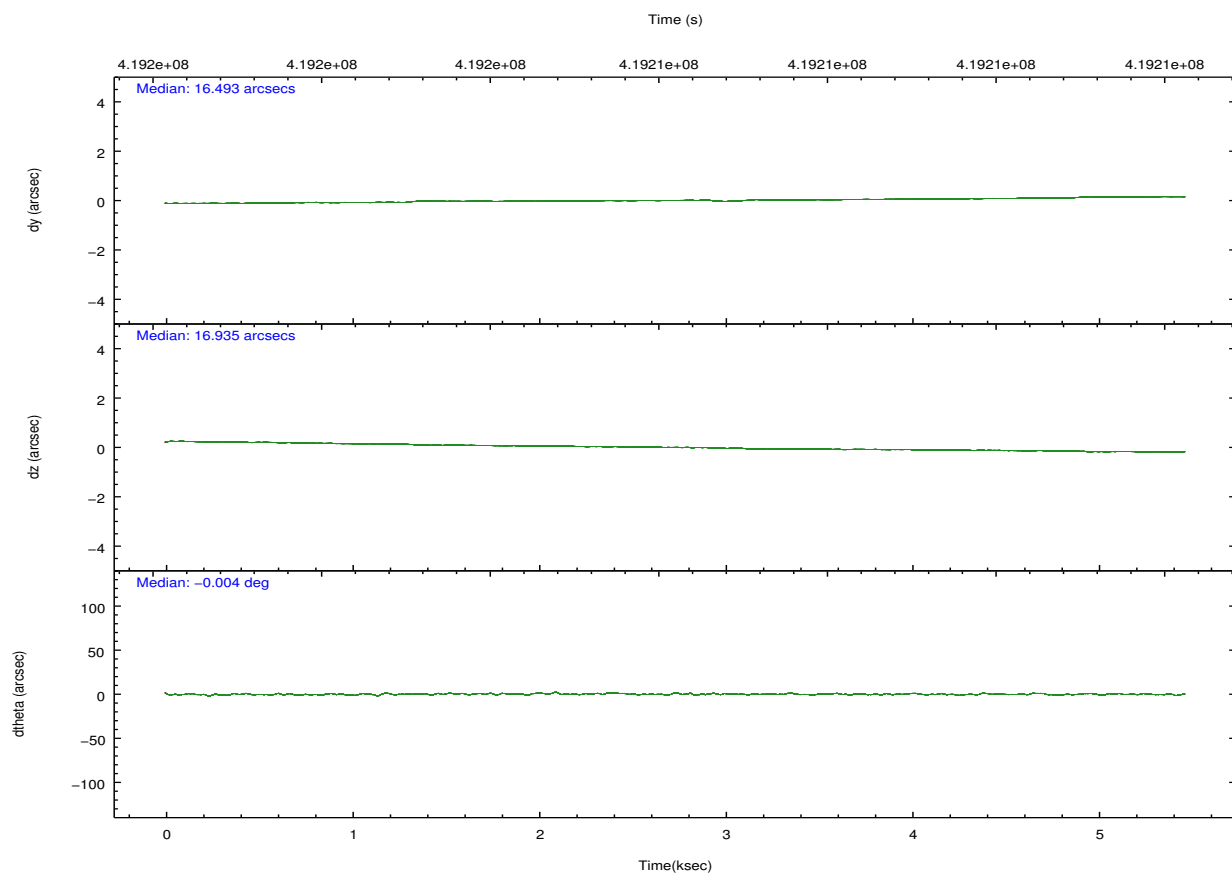
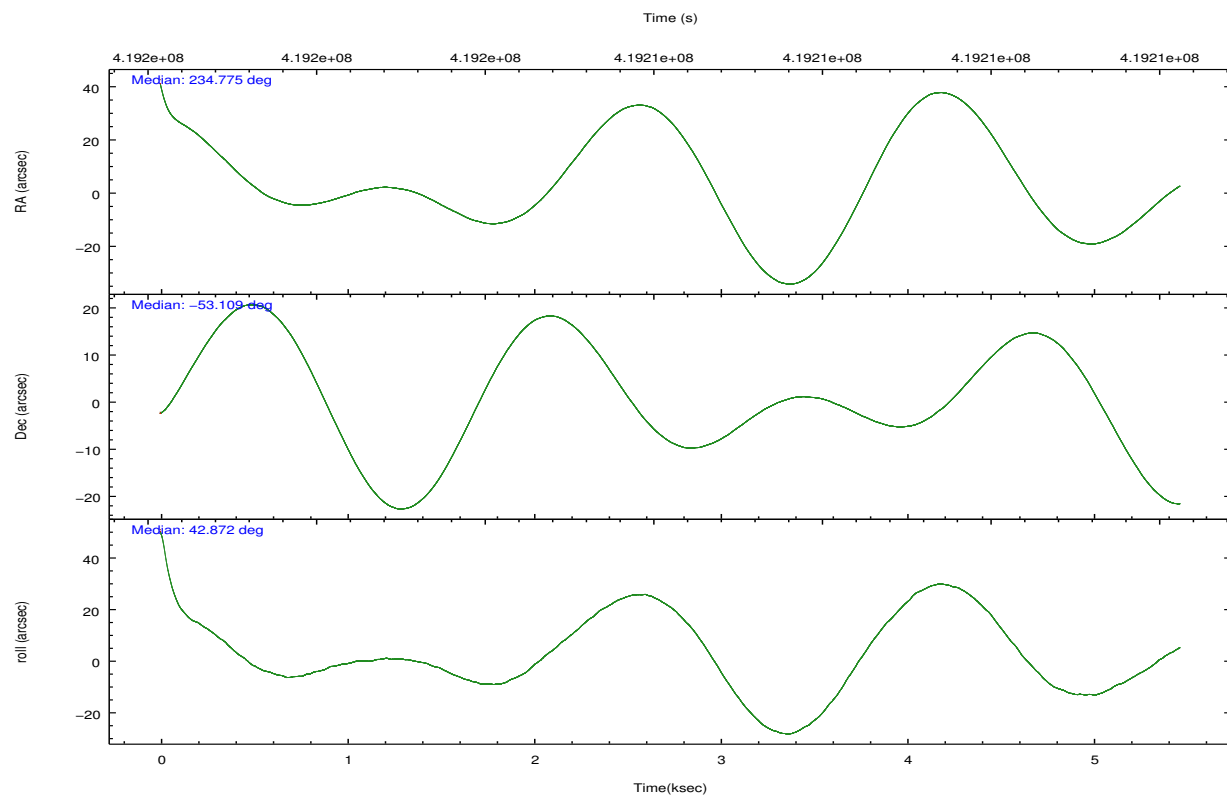
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	234.762543	234.77583124652
[deg] Pointing Dec	-53.135296	-53.10877368159218
[deg] Pointing Roll	42.658328	42.87768943622249
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	419203817.184000	419202656.5497
Observation start date	2011-04-14T21:29:11	2011-04-14T21:10:56
[s] Observation end time (MET)	419208817.184000	419209518.92505
Observation end date	2011-04-14T22:52:31	2011-04-14T23:05:18
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	O2	Y
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



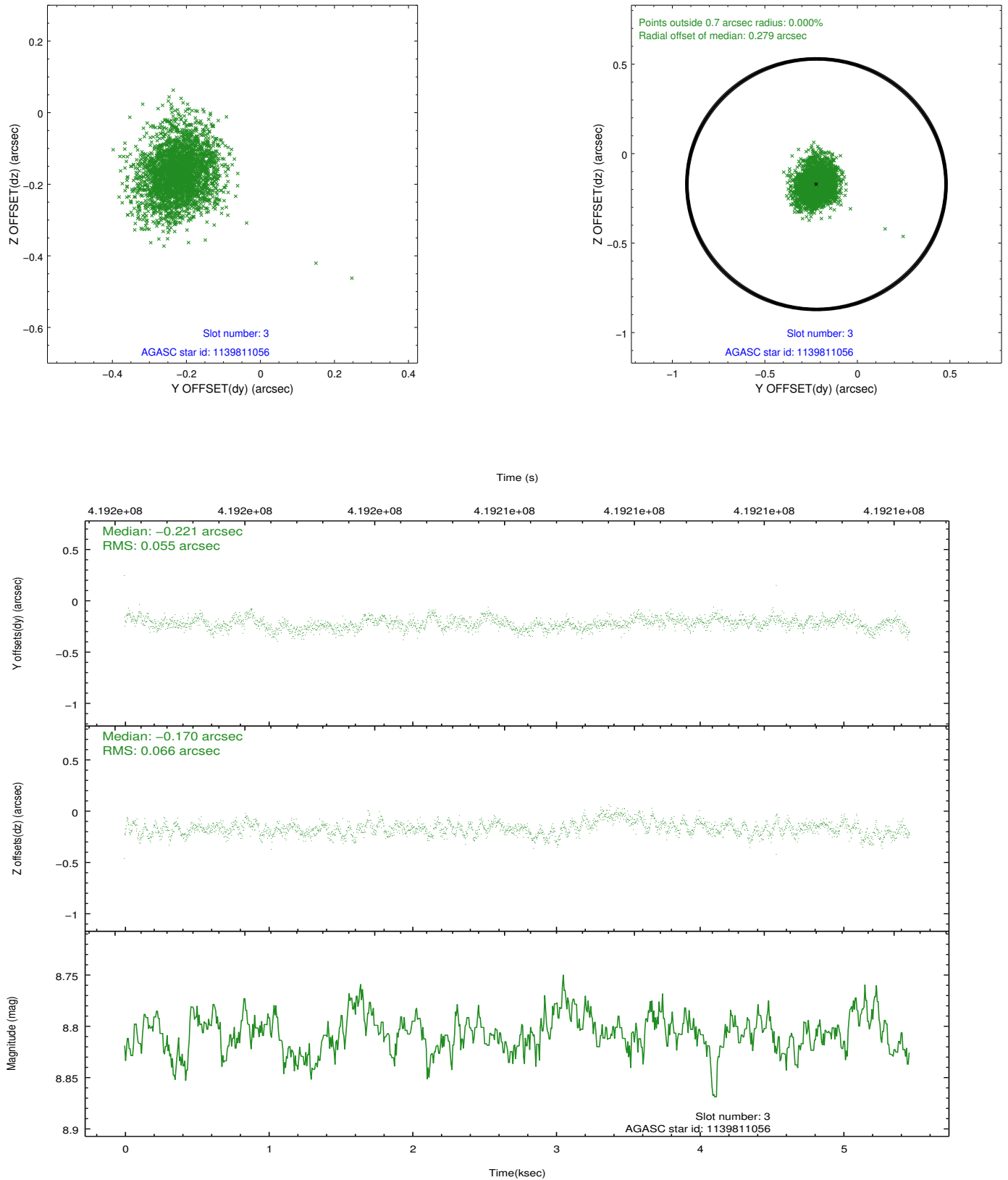


Slot Statistics

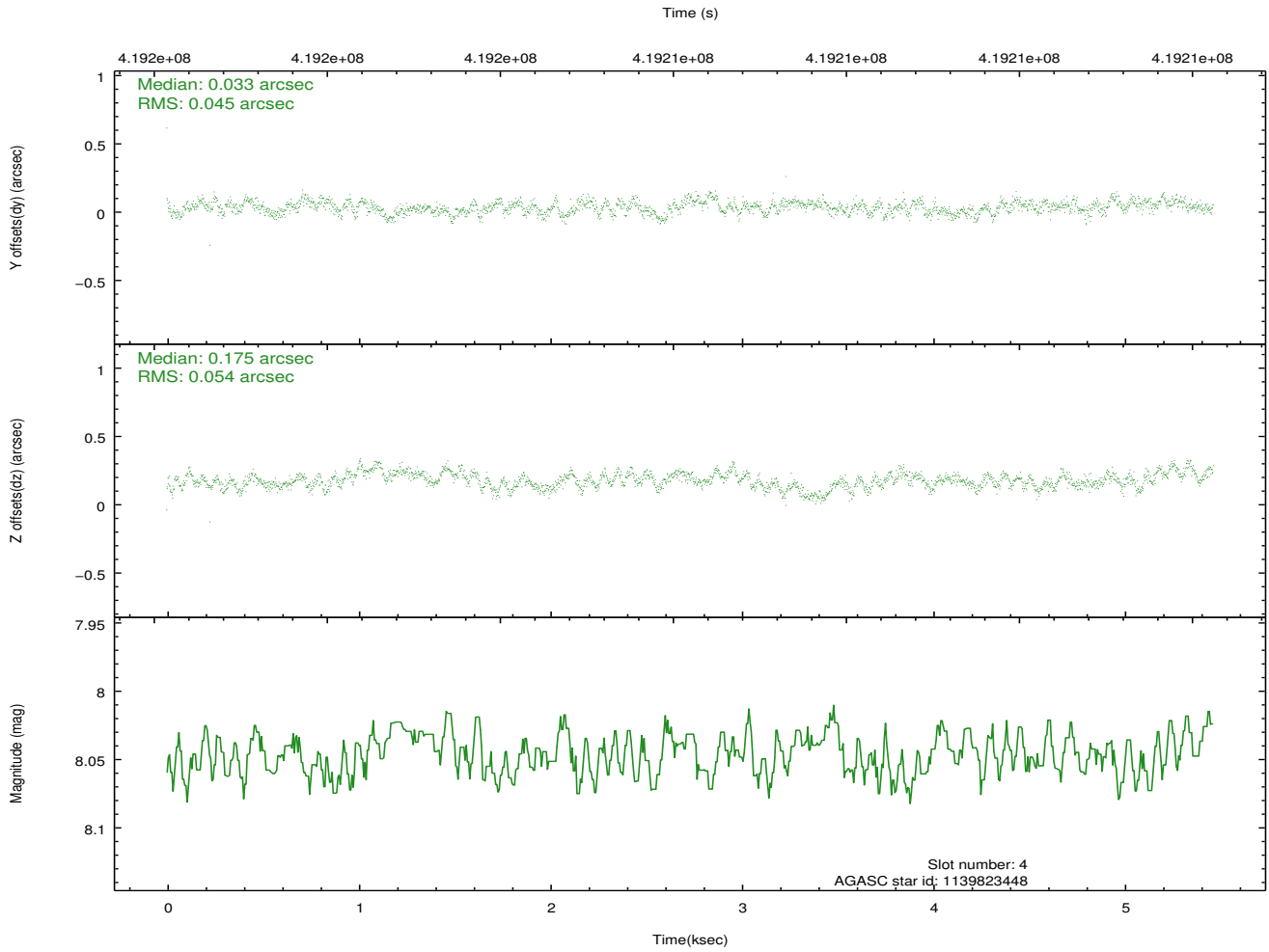
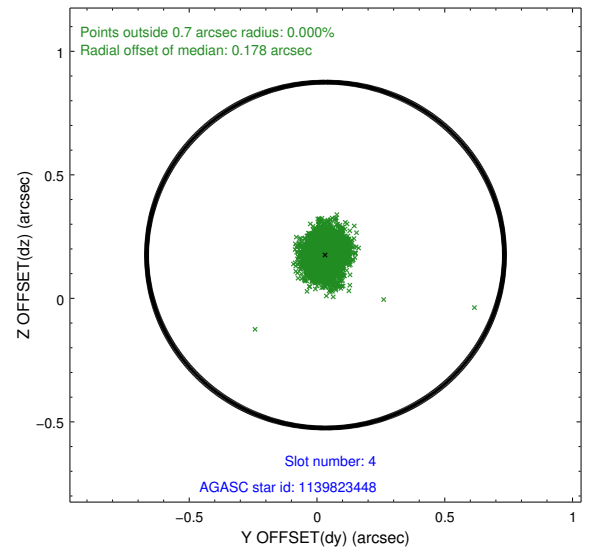
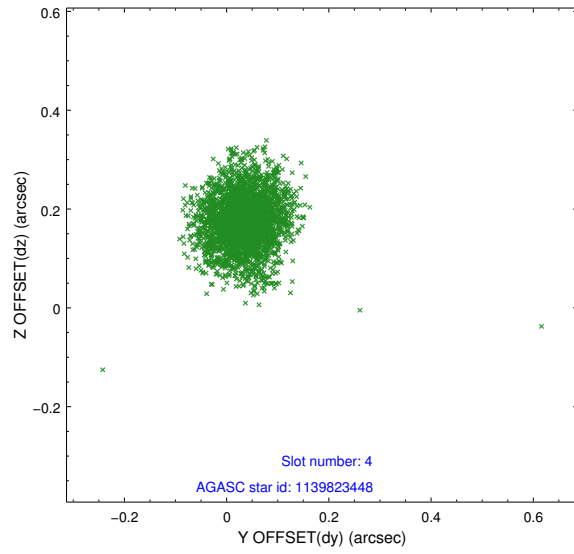
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	6.95	1333	-0.085	-0.096	0.013	0.025	0.000000	0.000000	-771.32	-847.07
1	FID	ACIS-I-4	6.96	1334	0.186	0.078	0.010	0.017	0.000000	0.000000	2142.46	1058.80
2	FID	ACIS-I-5	7.02	1334	-0.203	0.087	0.015	0.023	0.000000	0.000000	-1823.91	1057.80
3	GUIDE	1139811056	8.81	2665	-0.221	-0.170	0.090	0.150	234.319089	-52.747445	232.43	1678.80
4	GUIDE	1139823448	8.05	2667	0.033	0.175	0.074	0.119	234.220489	-53.718640	-2275.02	-765.03
5	GUIDE	1139825624	7.36	2667	-0.081	0.103	0.077	0.120	235.377653	-53.391269	341.84	-1577.35
6	GUIDE	1139820936	9.10	2665	0.191	-0.058	0.089	0.147	234.100143	-53.487194	-1906.45	23.54
7	GUIDE	1139805424	8.58	2663	0.079	-0.051	0.095	0.156	236.144577	-53.087549	2293.67	-1919.92

2.4 Star Slots

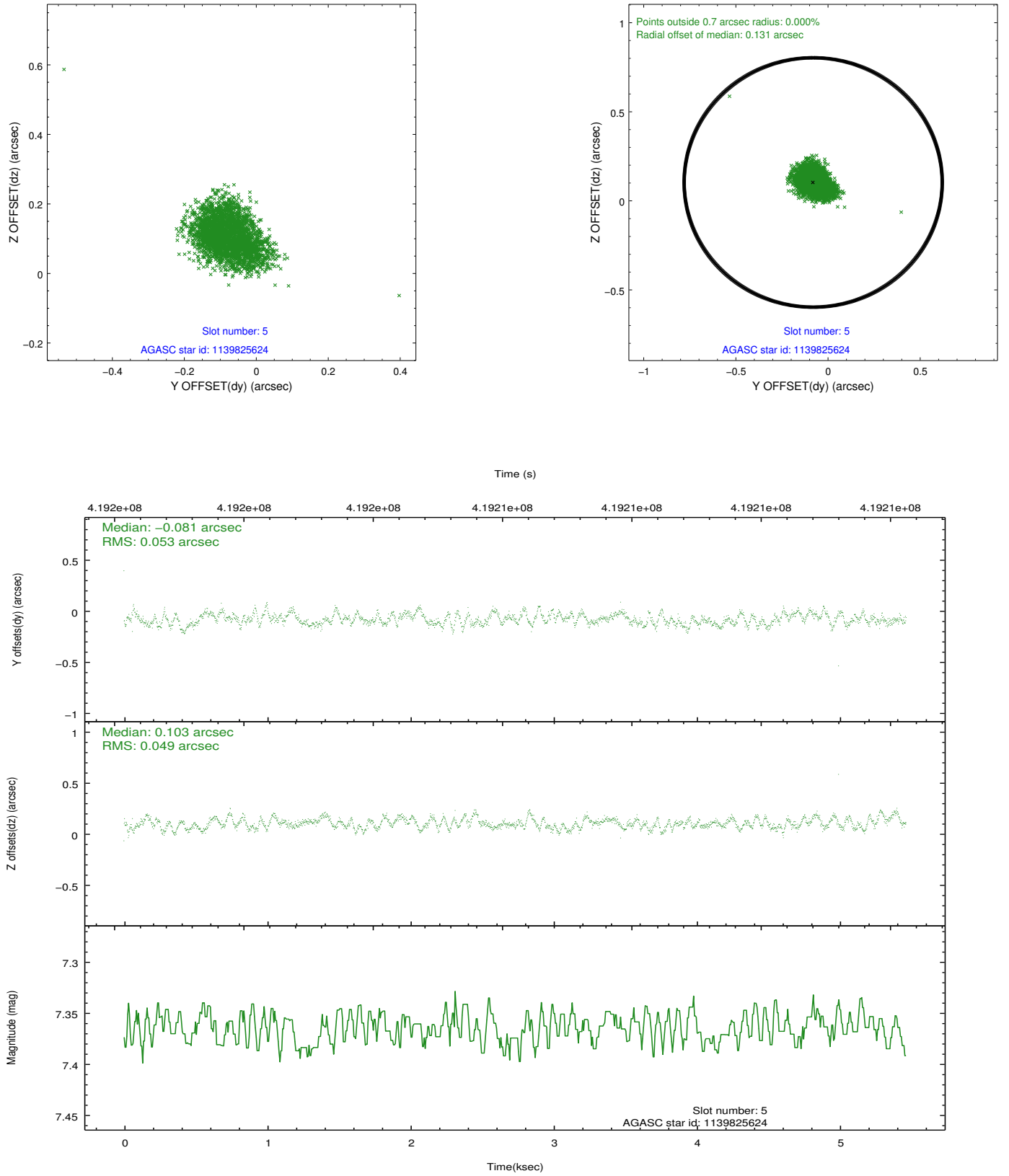
2.4.1 Slot 3



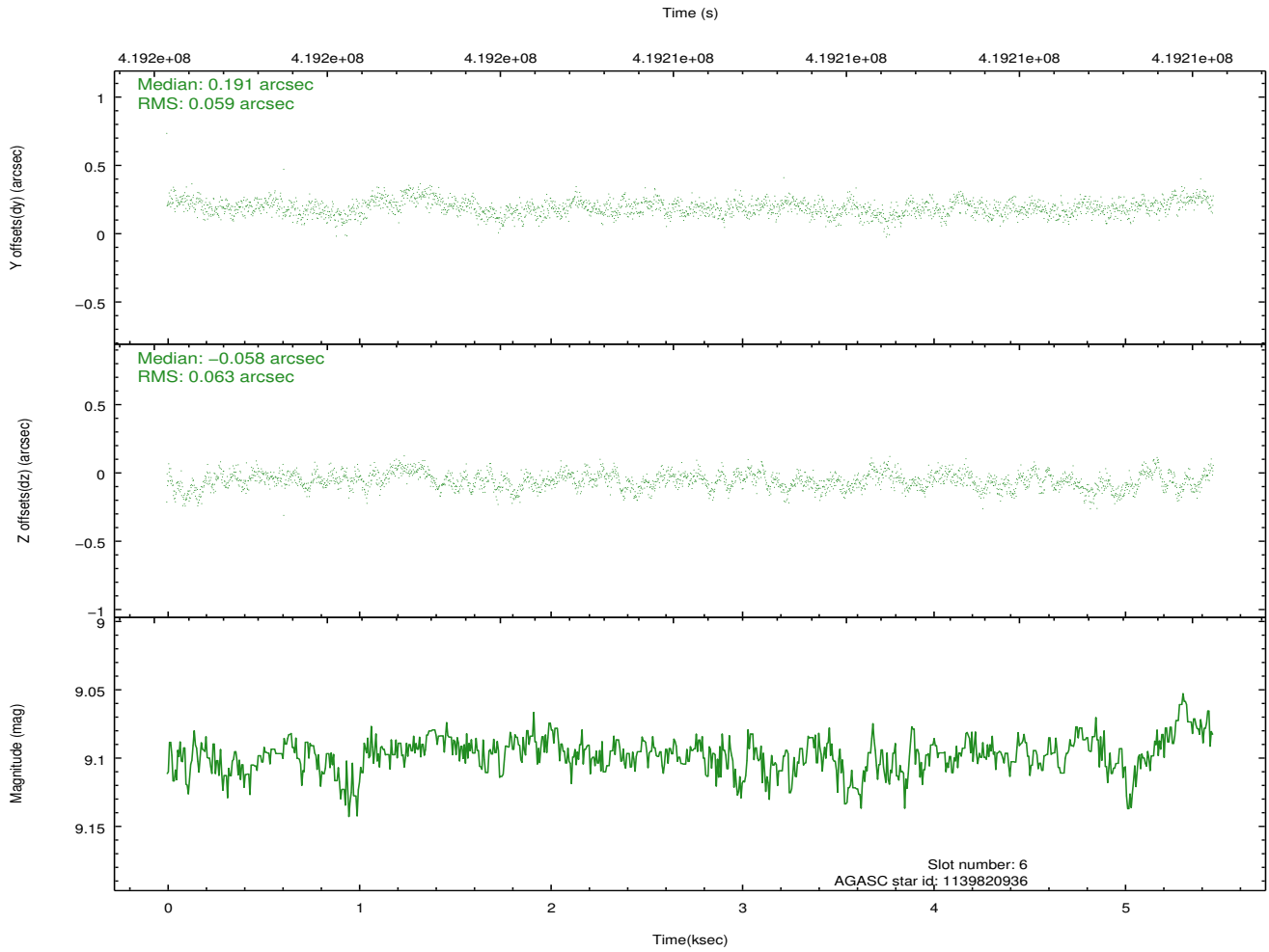
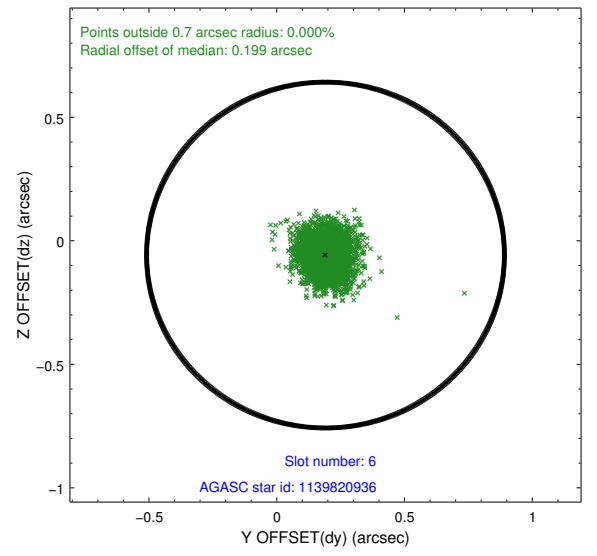
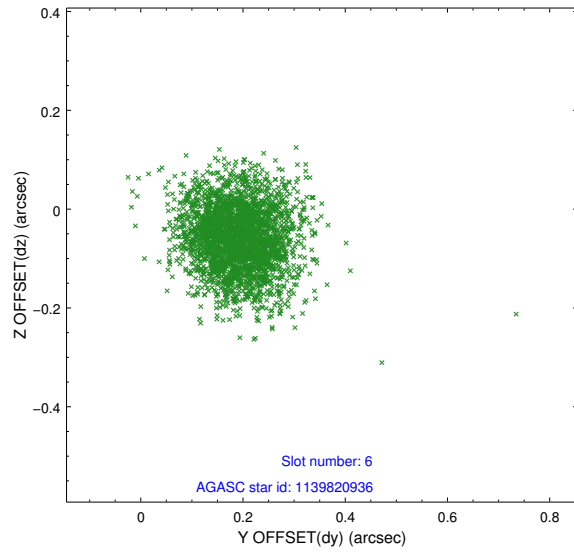
2.4.2 Slot 4



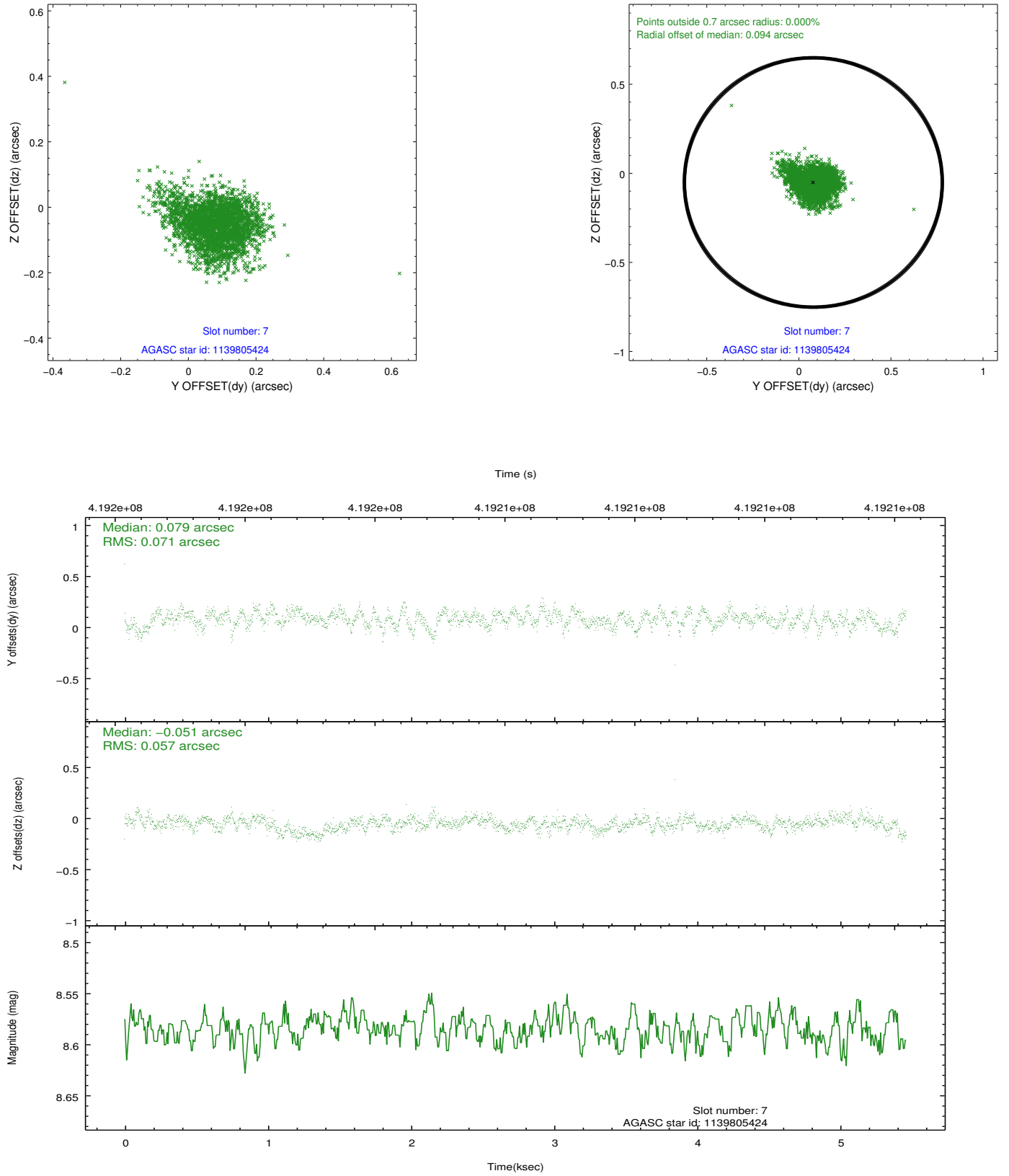
2.4.3 Slot 5



2.4.4 Slot 6

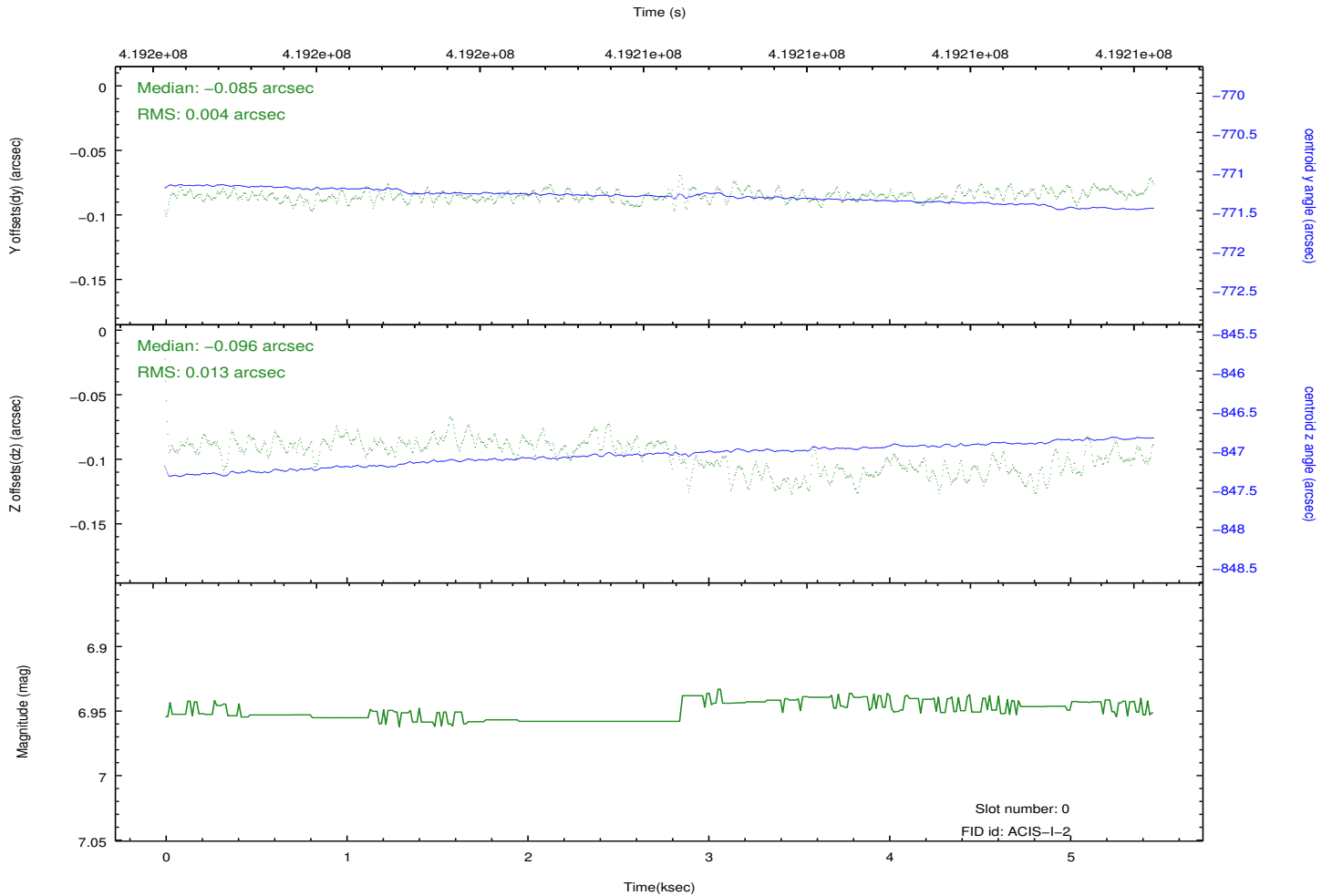
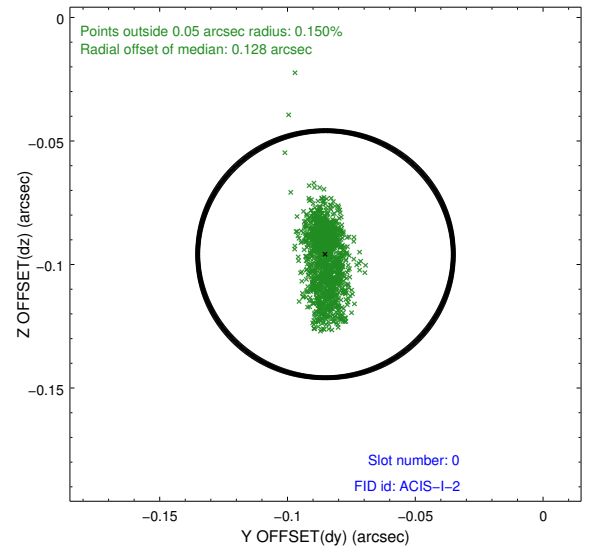
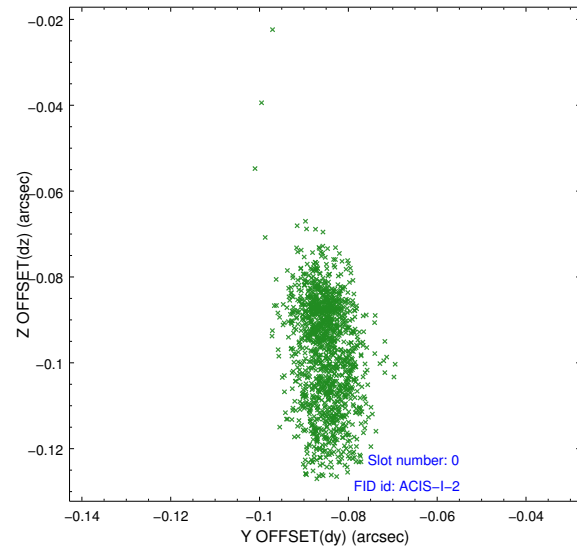


2.4.5 Slot 7

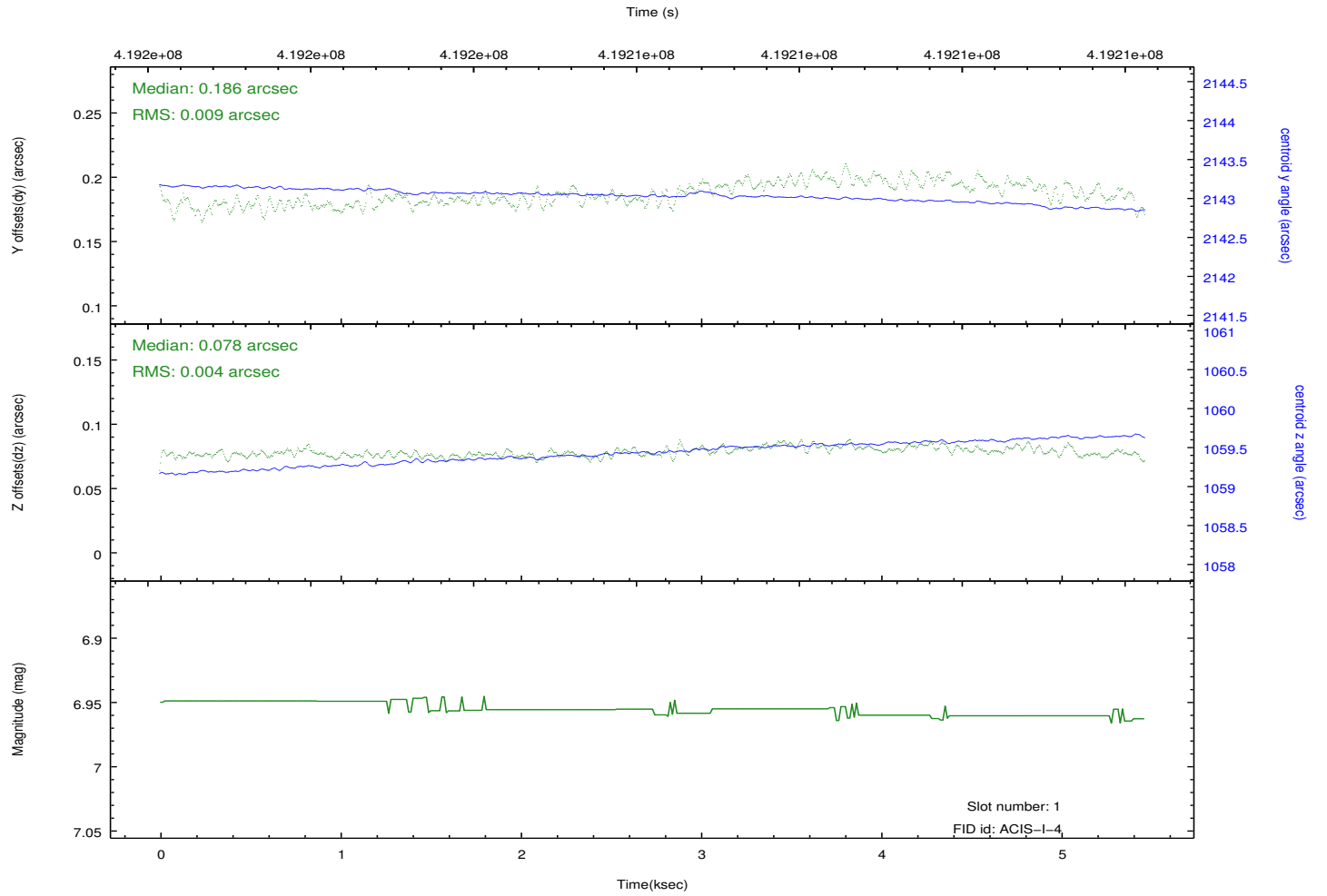
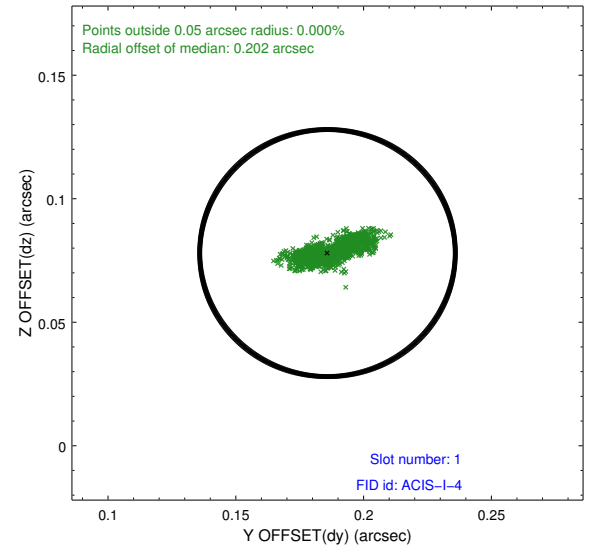
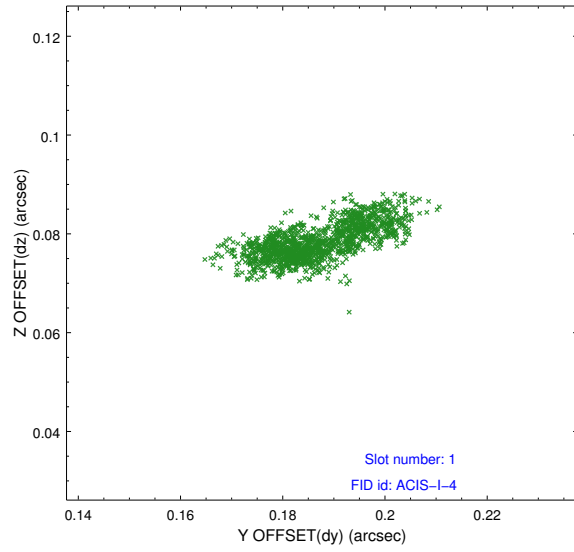


2.5 FID Slots

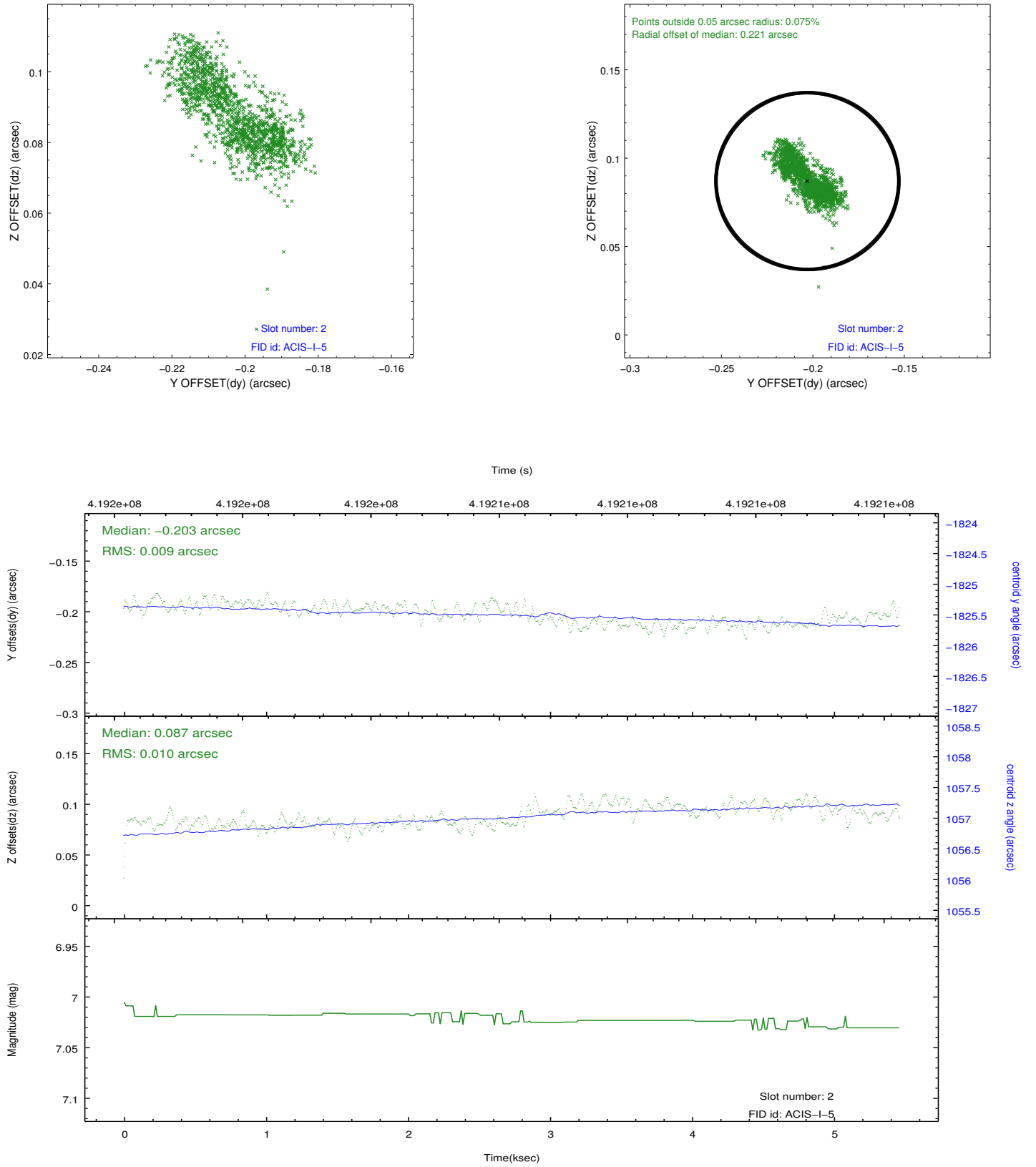
2.5.1 Slot 0



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)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0559999812245

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.