

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12980 - L2 Version 2
Chandra X-Ray Center

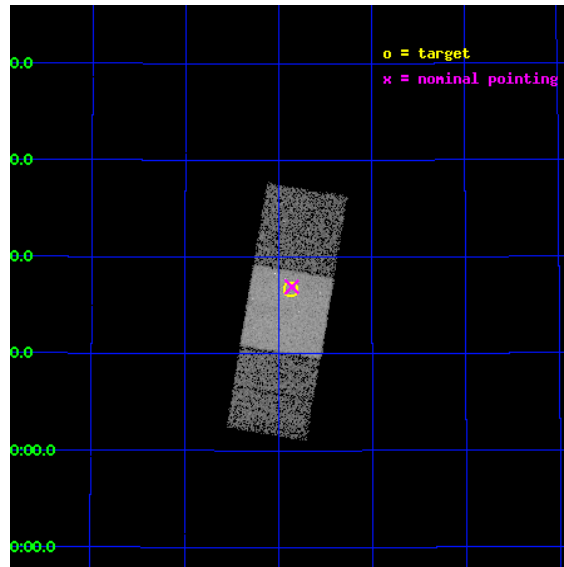
L2 Processing Date : Feb 7 2012

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1 Front

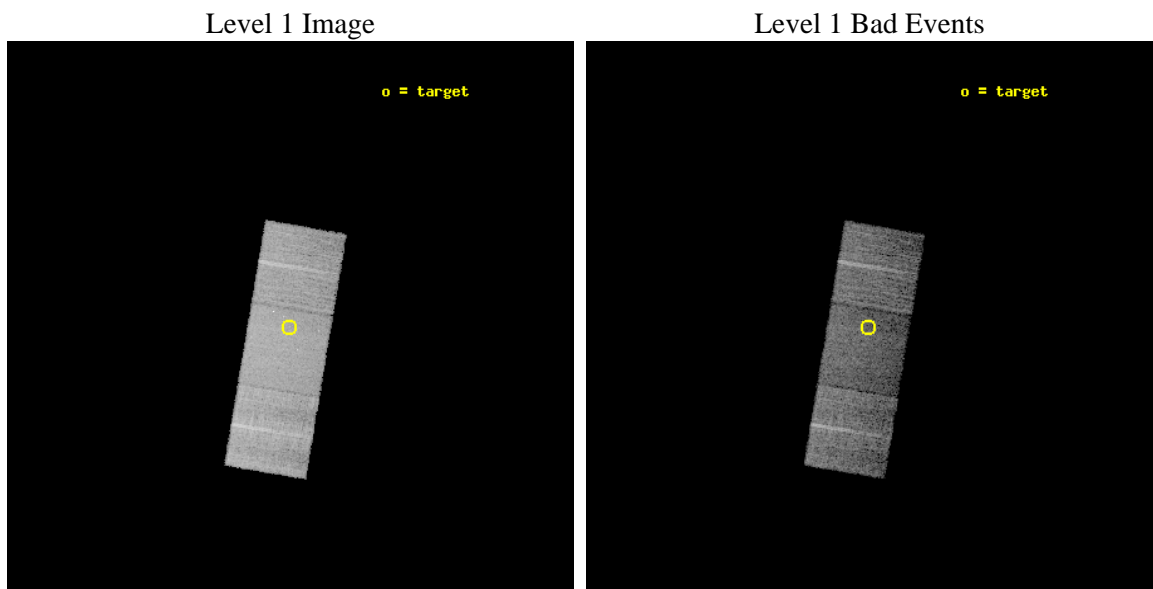
seq_num	600948	Sequence number
obs_id	12980	Observation id
title	Black-hole--galaxy co-evolution at the end of the Hubble sequence	
observer	Prof. Smita Mathur	Principal investigator
object	IC 1291	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.469167	Observer's specified target RA [deg]
dec_targ	49.278611	Observer's specified target Dec [deg]
ra_nom	278.46429214559	Nominal RA [deg]
dec_nom	49.282243669842	Nominal Dec [deg]
roll_nom	99.585289365394	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10059.500077367	Sum of GTIs [s]
livetime	9928.0653031598	Livetime [s]
ontime6	10059.500077367	Sum of GTIs [s]
ontime7	10059.500077367	Sum of GTIs [s]
ontime8	10059.500077367	Sum of GTIs [s]
l2events	47209	Number of level 2 events



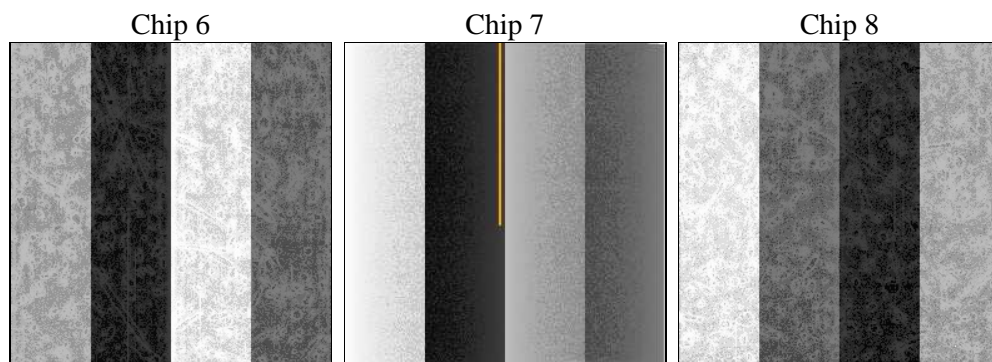
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	10059.500077367	Sum of GTIs [s]
caldsver	4.4.7	 	ontime6	10059.500077367	Sum of GTIs [s]
date	2012-02-07T14:00:21	Date and time of file creation	ontime7	10059.500077367	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	10059.500077367	Sum of GTIs [s]
			l1events	223405	Number of level 1 events

2.1.4 Events

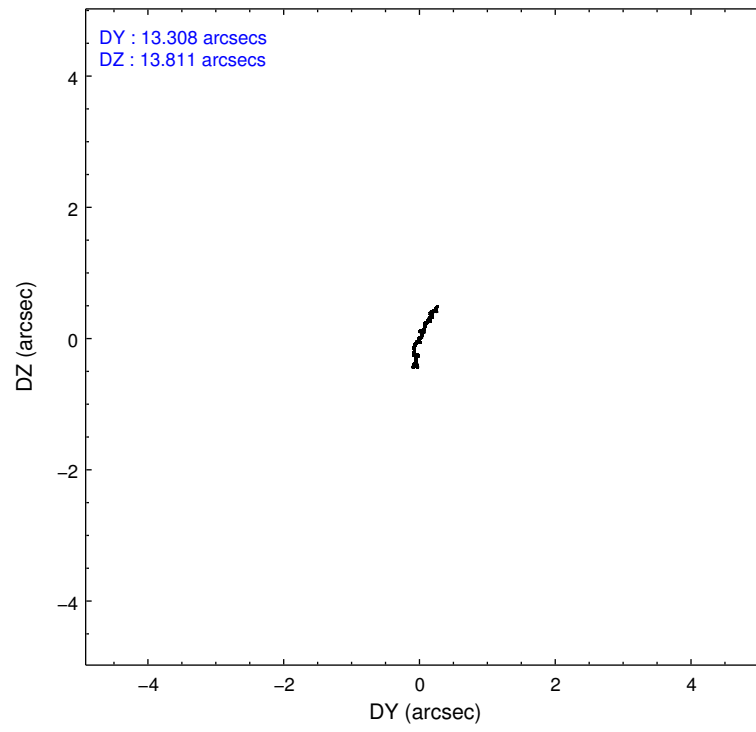
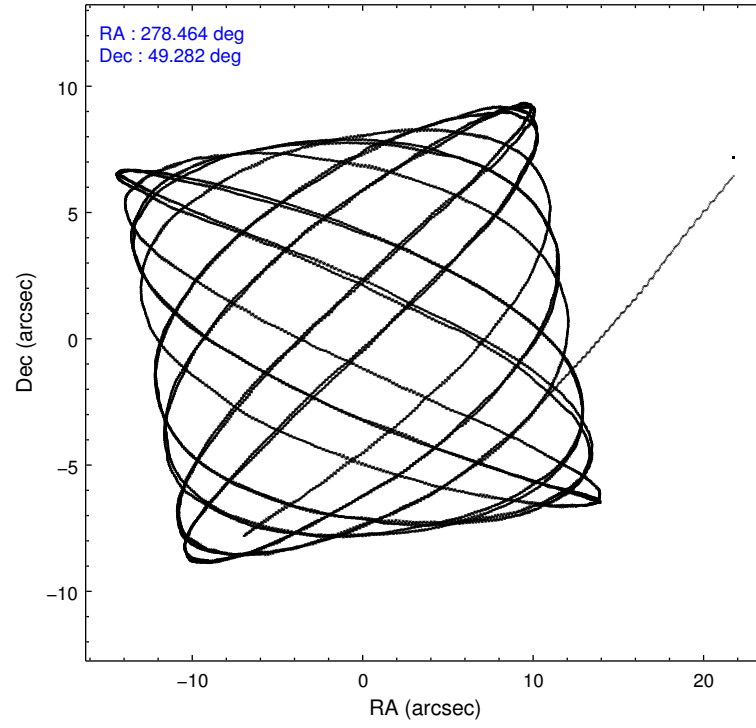
	ccd 6	ccd 7	ccd 8
level 1 events	63034	78107	82264
rejected events	55757	43139	61314
rejected %	88%	55%	74%

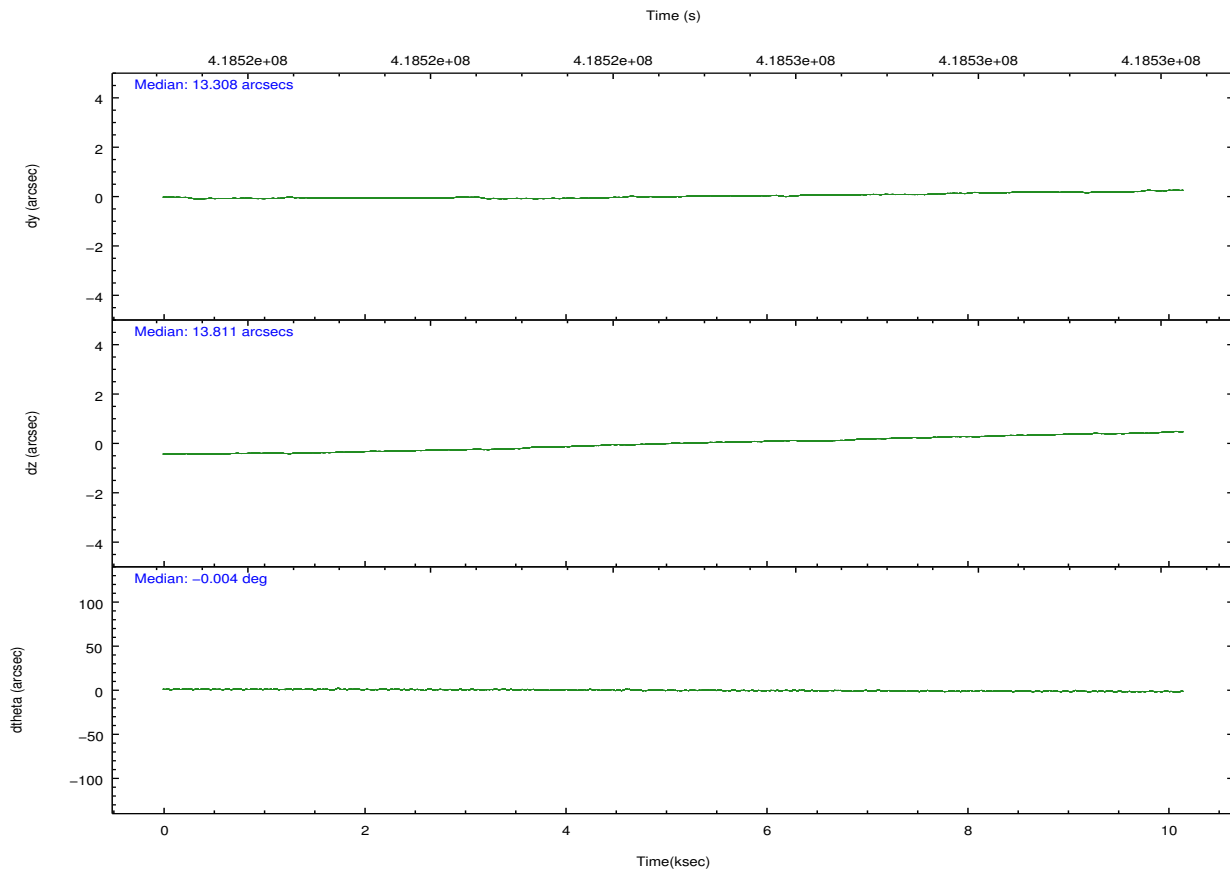
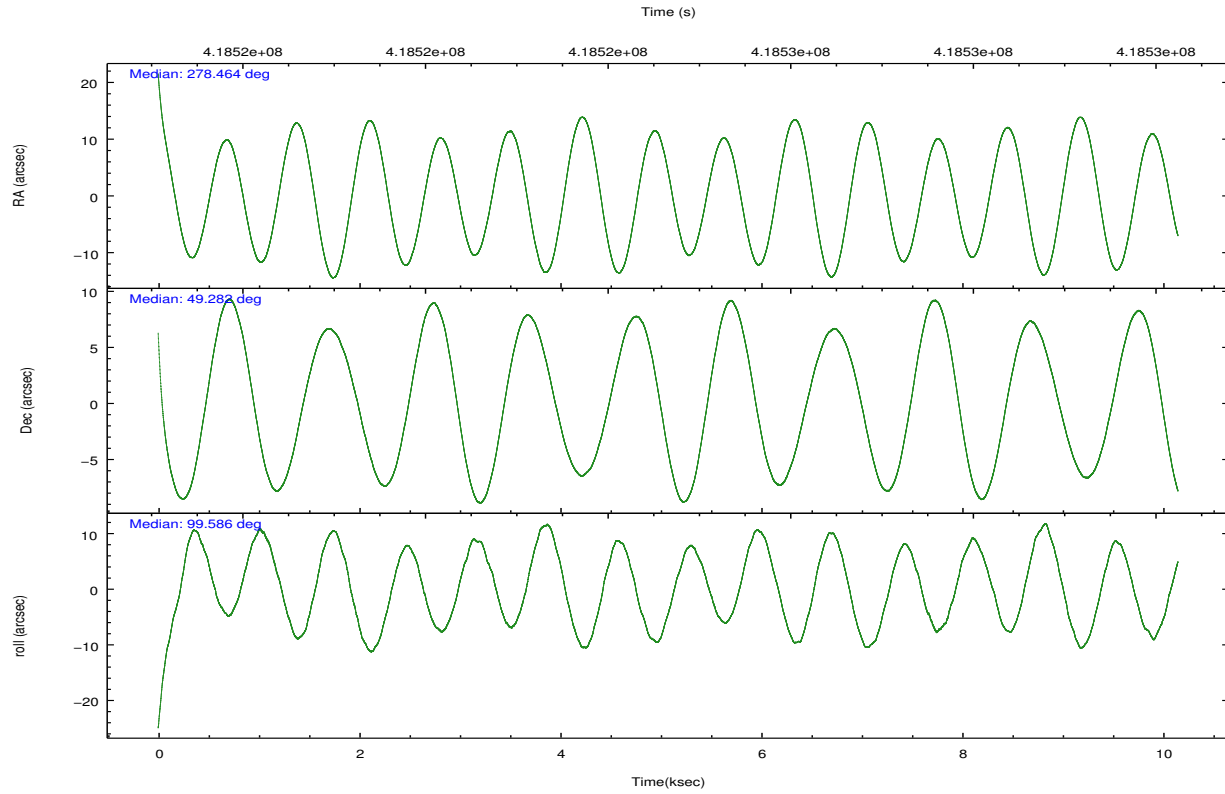
	ccd 6	ccd 7	ccd 8
grade 0 events	2527	3092	5894
	4%	3%	7%
grade 1 events	28	95	68
	0%	0%	0%
grade 2 events	1669	7113	4851
	2%	9%	5%
grade 3 events	785	2998	2142
	1%	3%	2%
grade 4 events	721	2985	2006
	1%	3%	2%
grade 5 events	2802	8026	4204
	4%	10%	5%
grade 6 events	1577	18793	6058
	2%	24%	7%
grade 7 events	52925	35005	57041
	83%	44%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	278.491398	278.4642921455882	CCD I2 on	N	N
[deg] Pointing Dec	49.261420	49.28224366984248	CCD I3 on	N	N
[deg] Pointing Roll	99.408127	99.58528936539373	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	418519724.184000	418518756.52672	CCD S5 on	N	N
Observation start date	2011-04-06T23:27:38	2011-04-06T23:12:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	418529724.184000	418531265.11487	On-chip summing requested	N	N
Observation end date	2011-04-07T02:14:18	2011-04-07T02:41:05	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



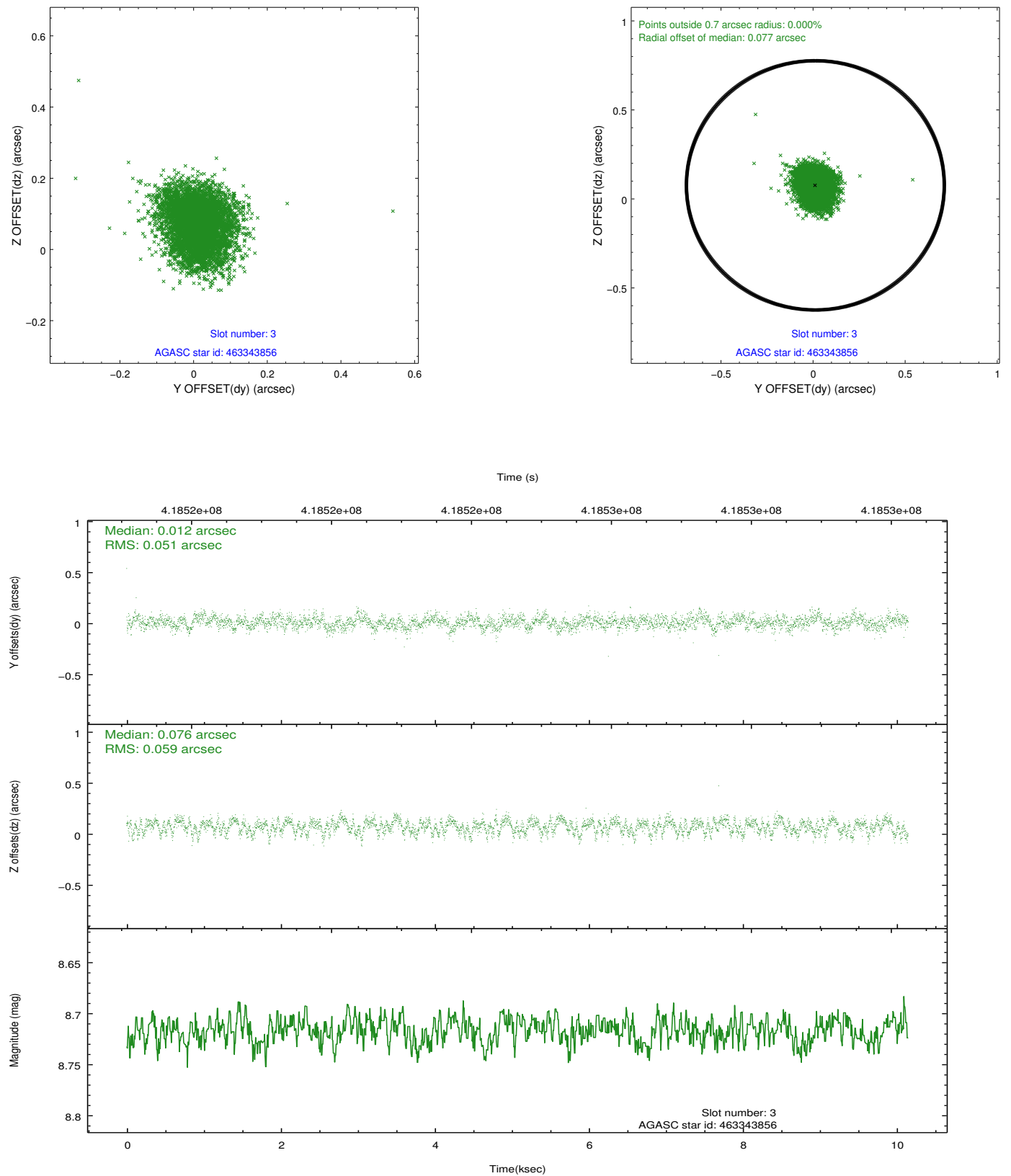


Slot Statistics

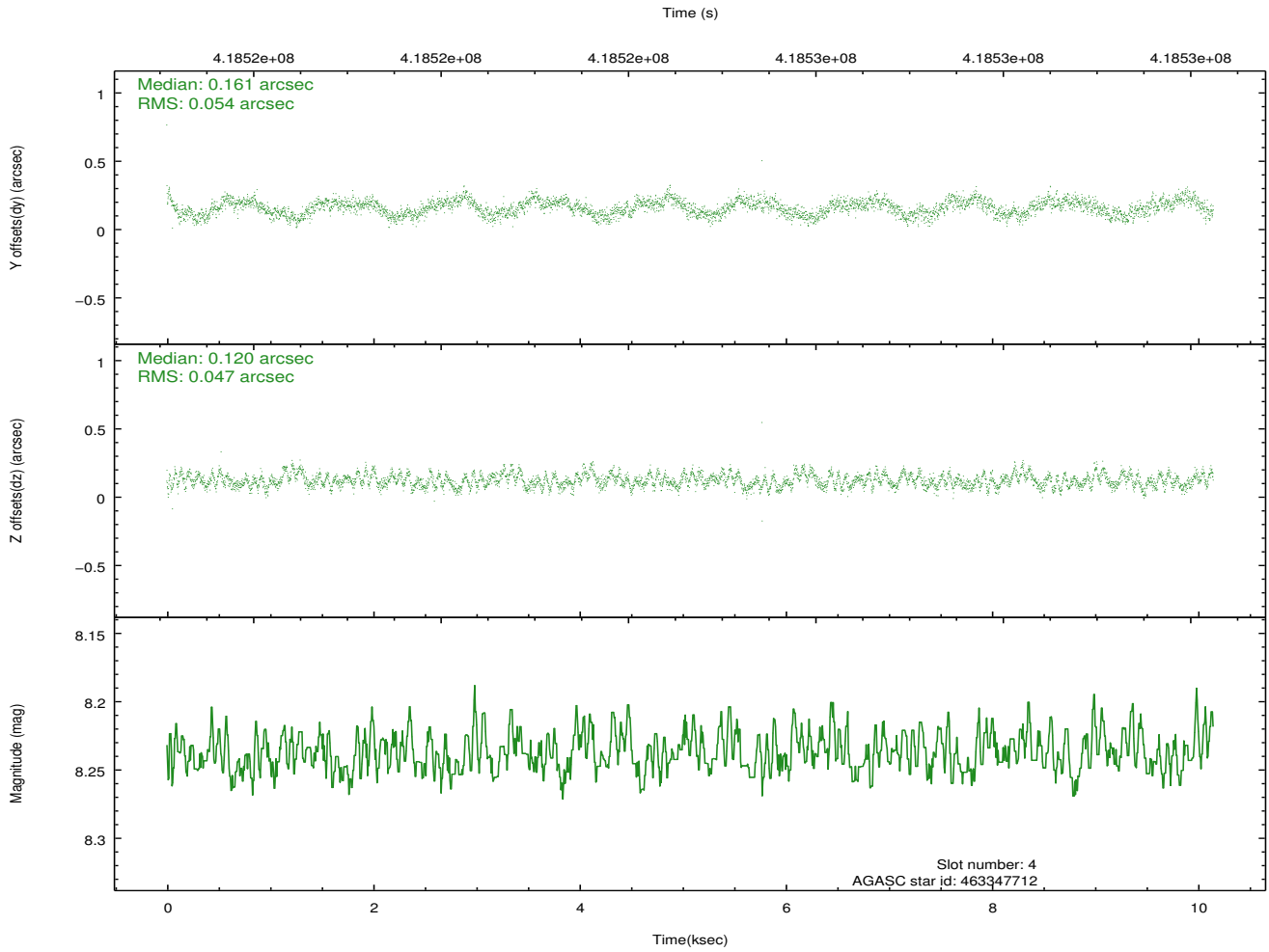
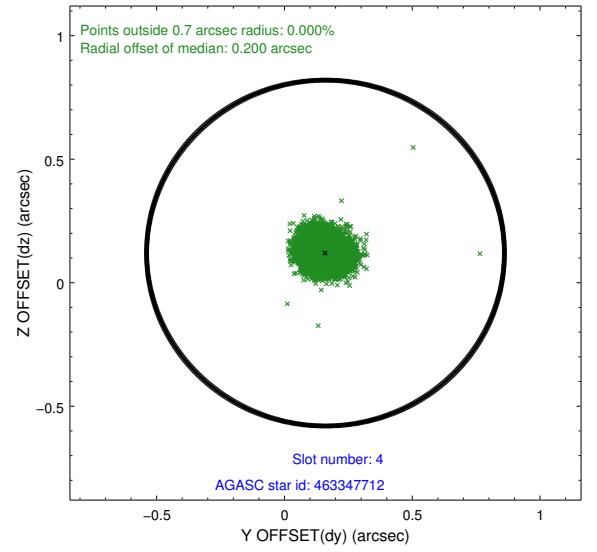
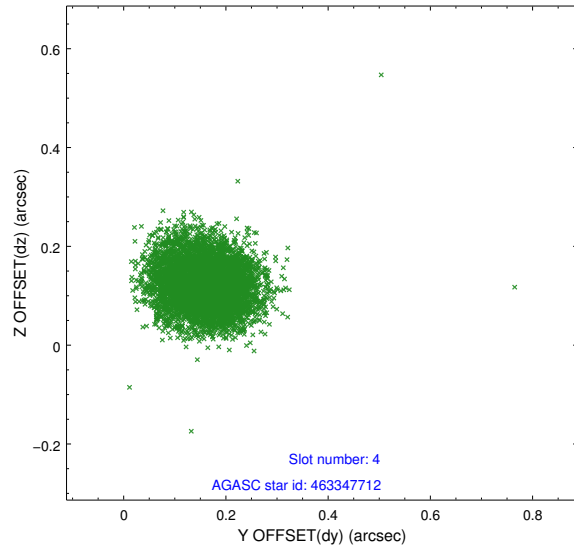
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.04	2476	-0.043	-0.081	0.011	0.018	0.000000	0.000000	-766.30	-1735.17
1	FID	ACIS-S-4	7.12	2476	0.202	0.043	0.014	0.025	0.000000	0.000000	2146.98	172.90
2	FID	ACIS-S-5	7.16	2476	-0.191	0.047	0.009	0.014	0.000000	0.000000	-1818.63	167.16
3	GUIDE	463343856	8.72	4949	0.012	0.076	0.083	0.132	278.527903	49.537675	967.58	-246.41
4	GUIDE	463347712	8.24	4950	0.161	0.120	0.077	0.118	279.140429	48.855271	-1686.61	-1278.43
5	GUIDE	463352848	8.21	4950	0.015	-0.181	0.069	0.111	278.455993	49.051196	-733.24	206.36
6	GUIDE	462820840	8.93	4950	0.059	-0.001	0.084	0.139	278.584525	48.627978	-2285.22	154.27
7	GUIDE	463346280	8.25	4949	-0.245	-0.010	0.077	0.123	278.615568	49.951173	2402.47	-689.41

2.4 Star Slots

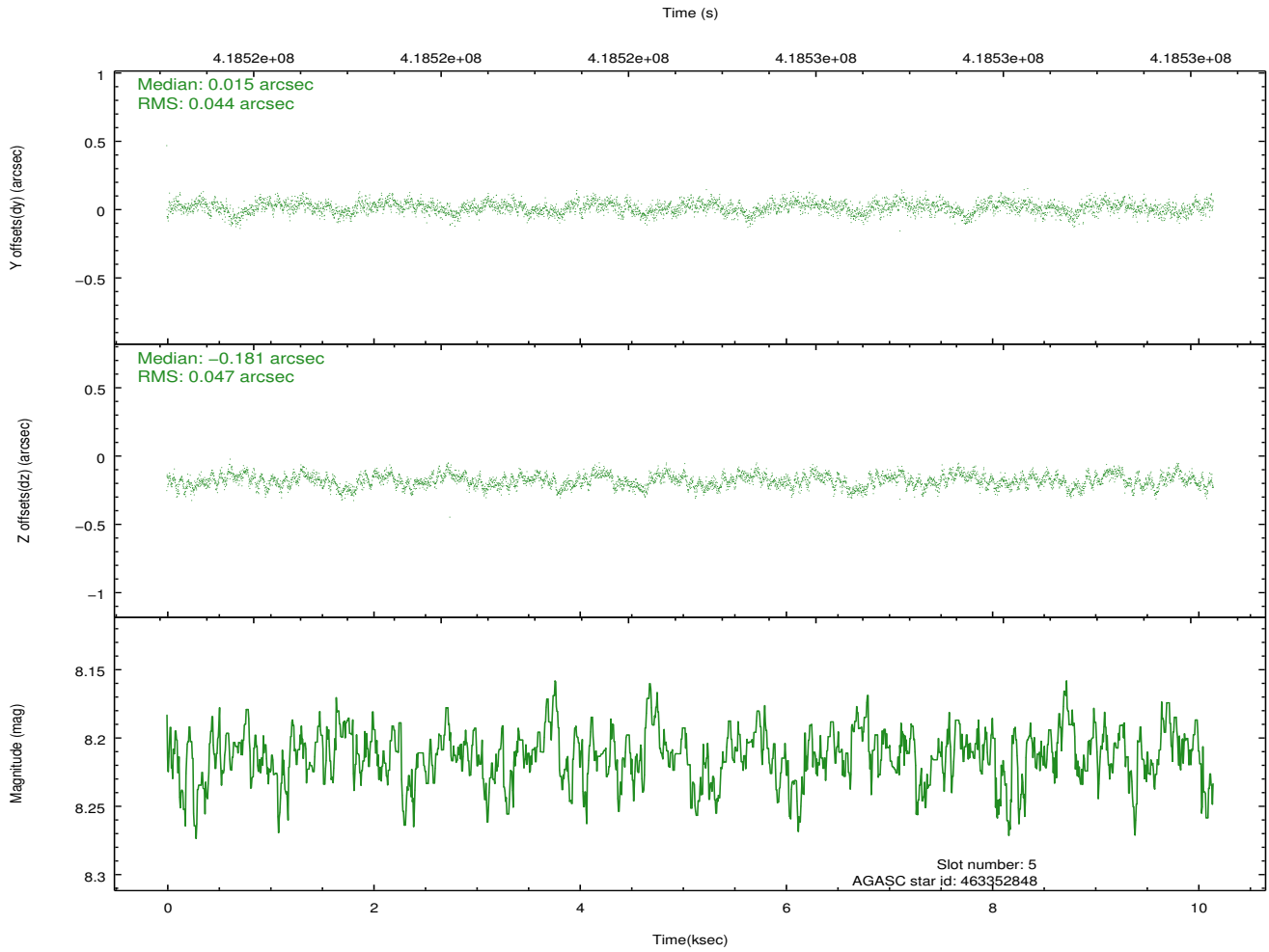
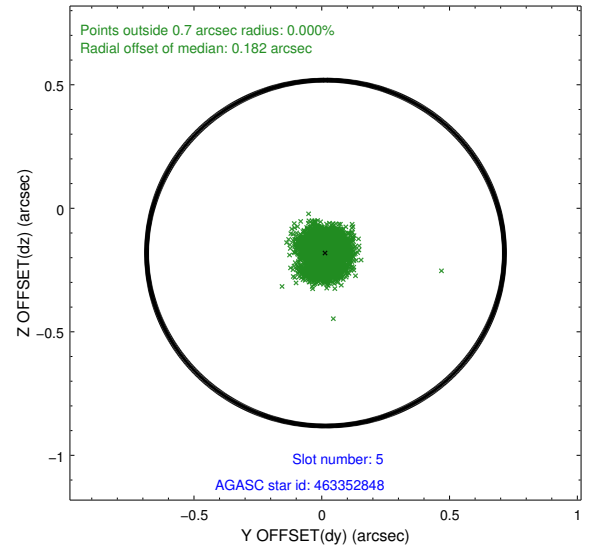
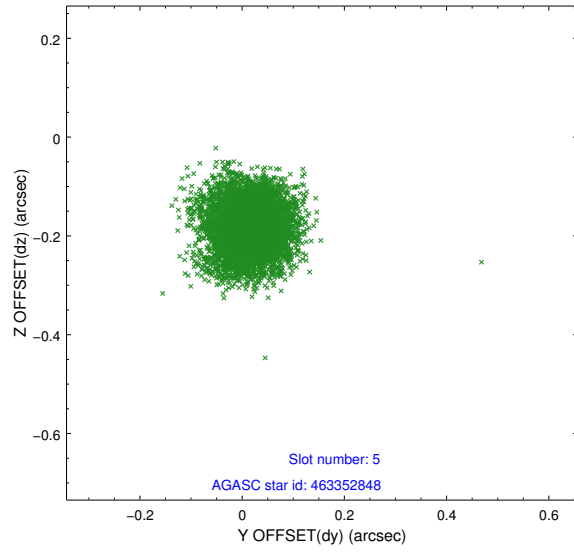
2.4.1 Slot 3



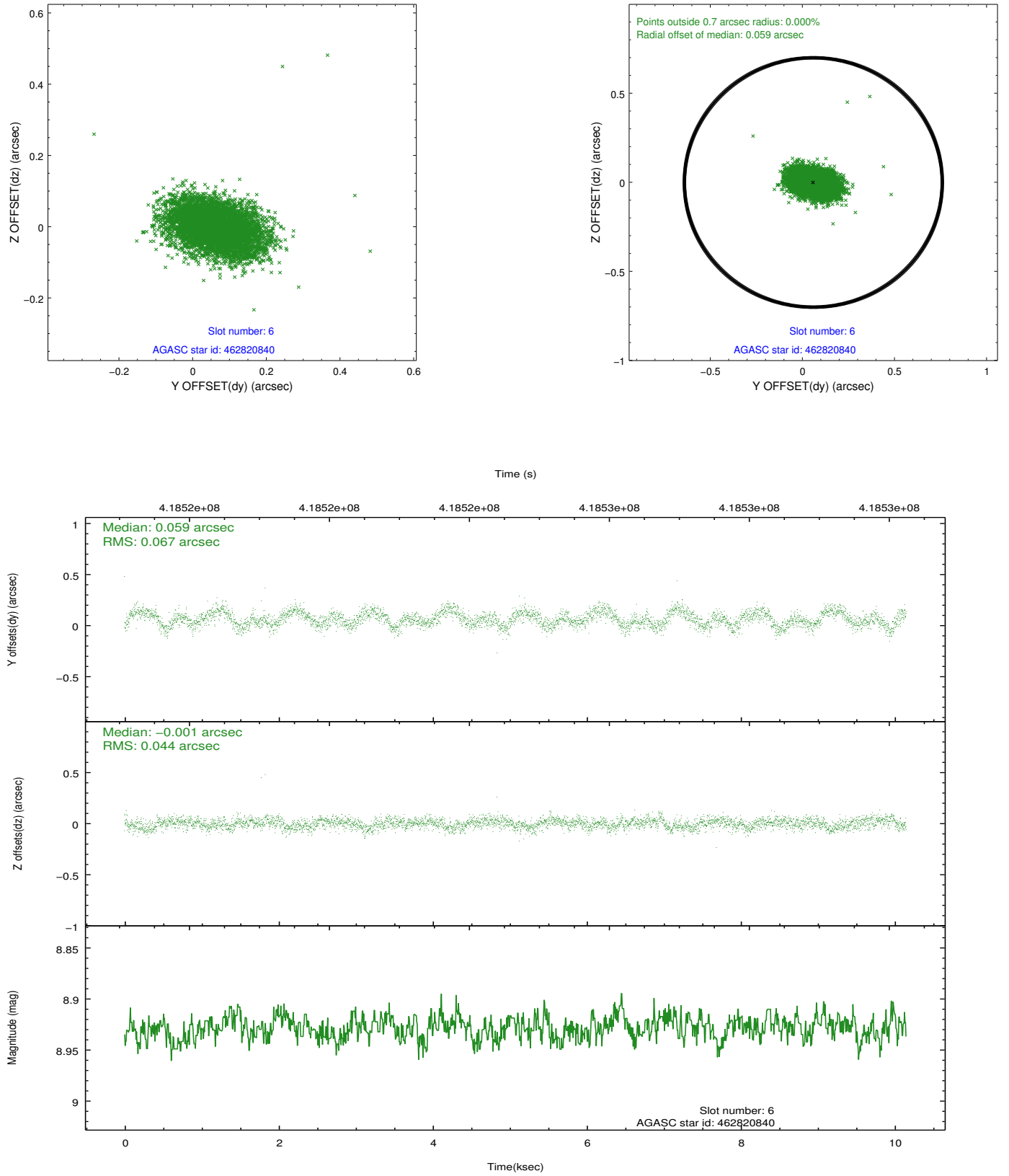
2.4.2 Slot 4



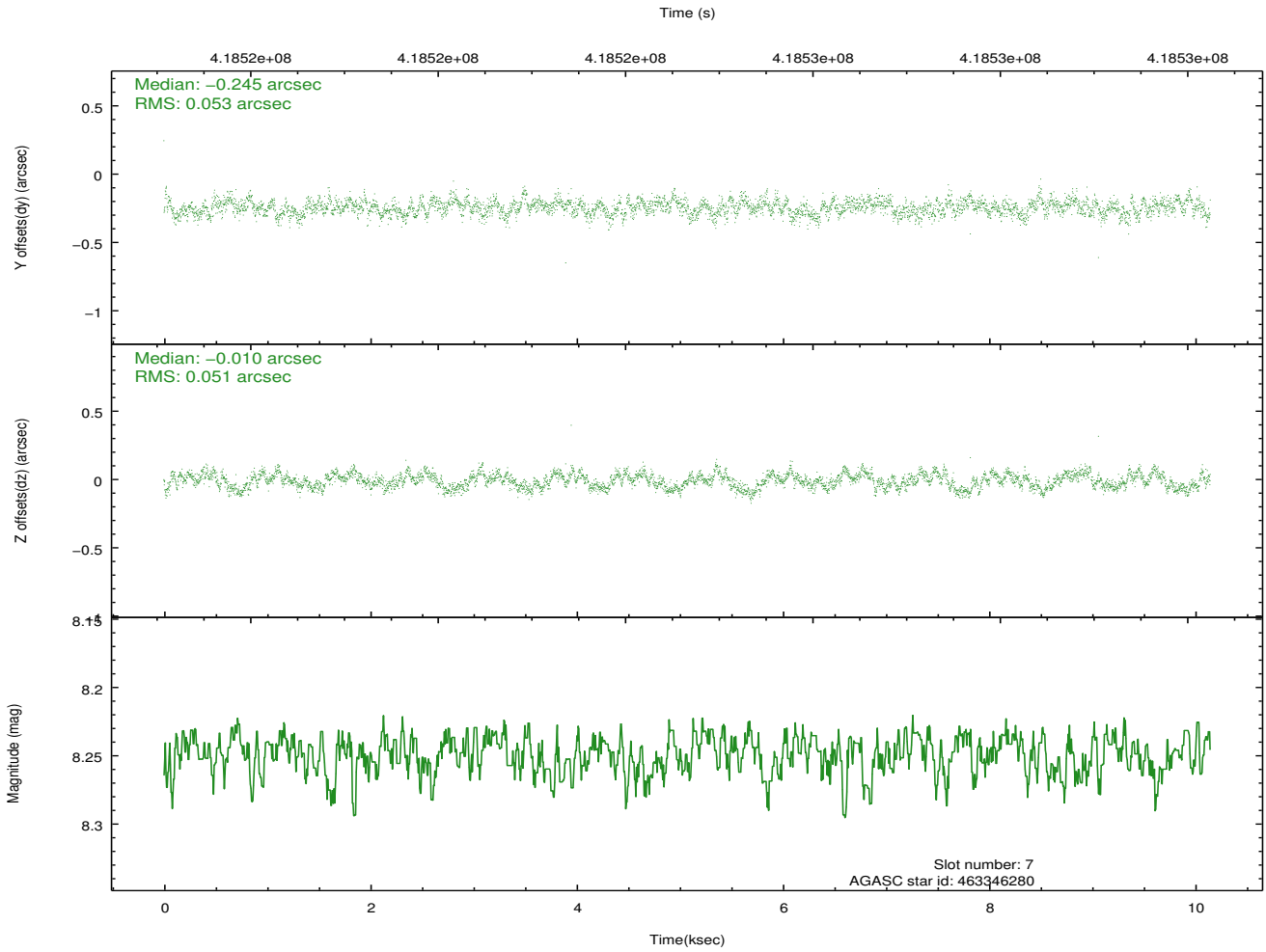
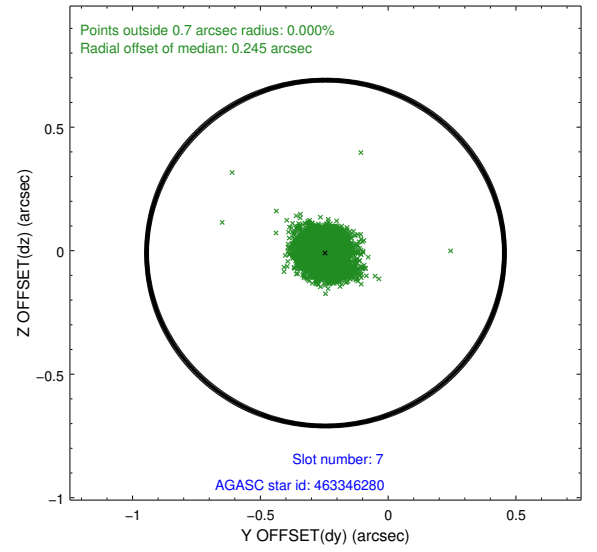
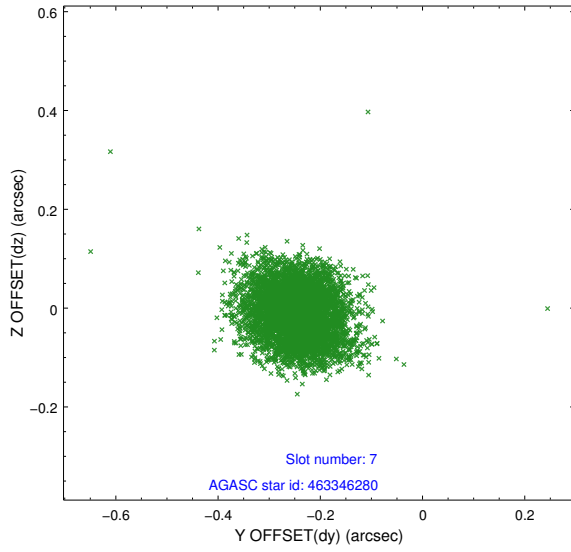
2.4.3 Slot 5



2.4.4 Slot 6

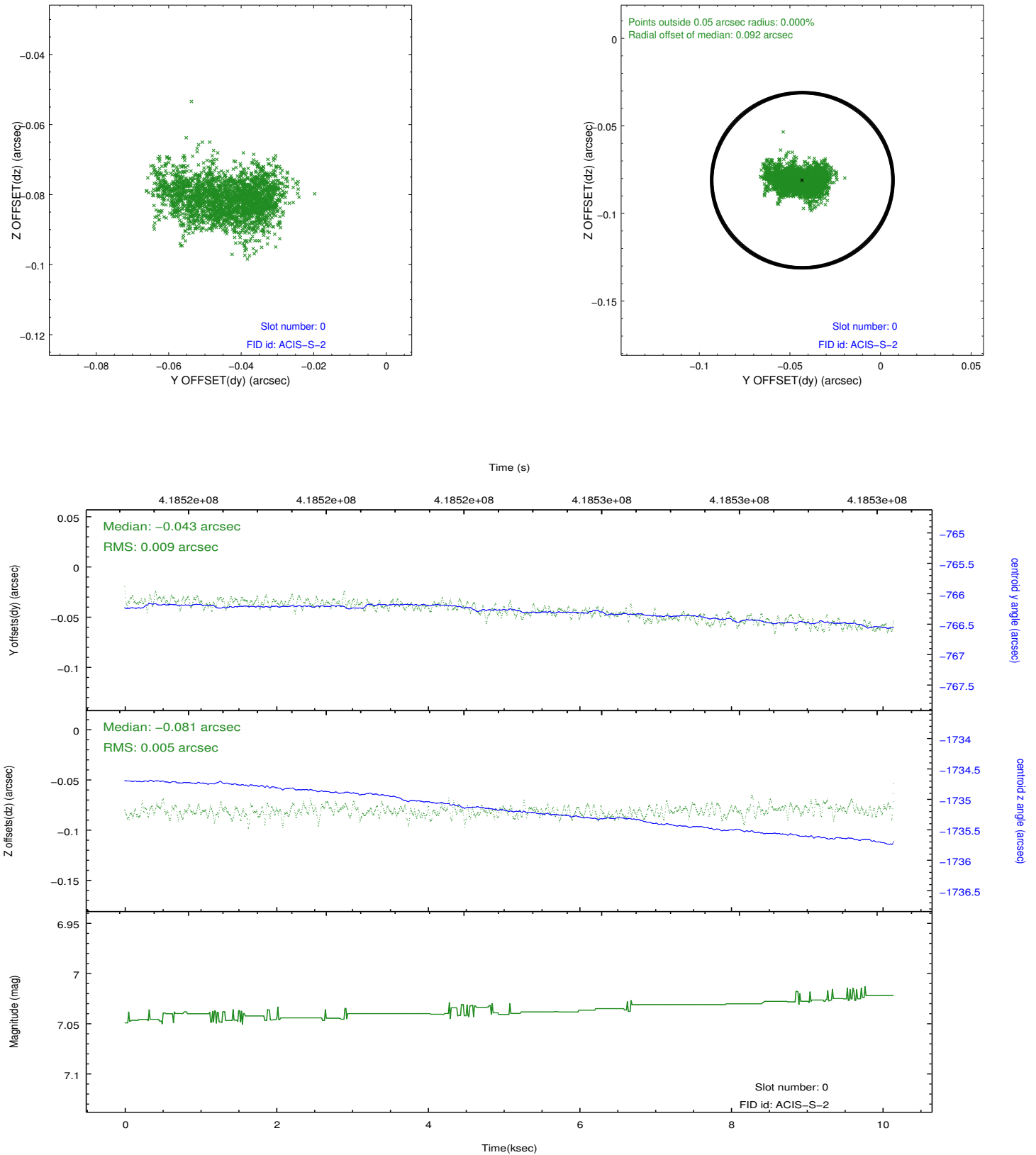


2.4.5 Slot 7

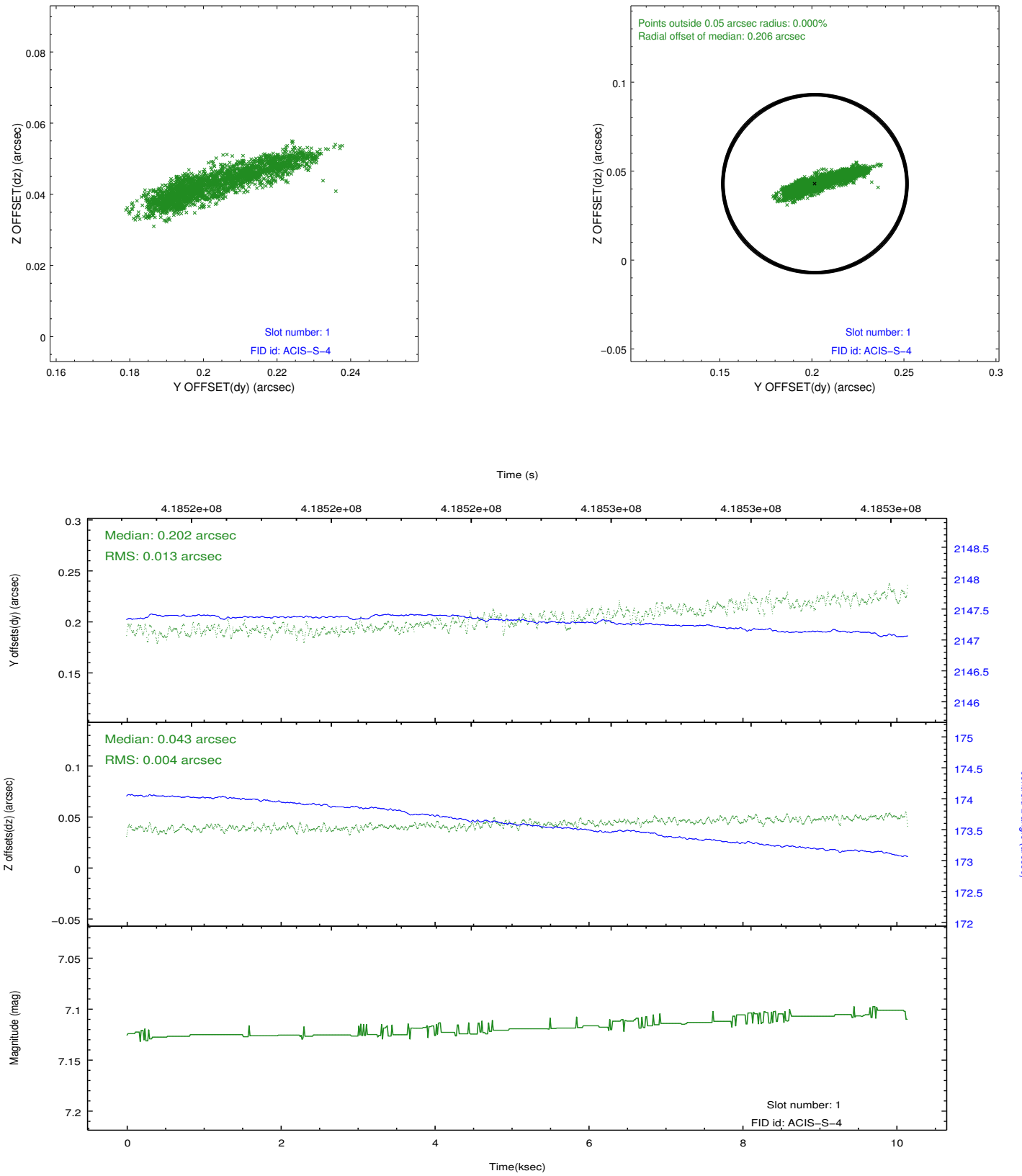


2.5 FID Slots

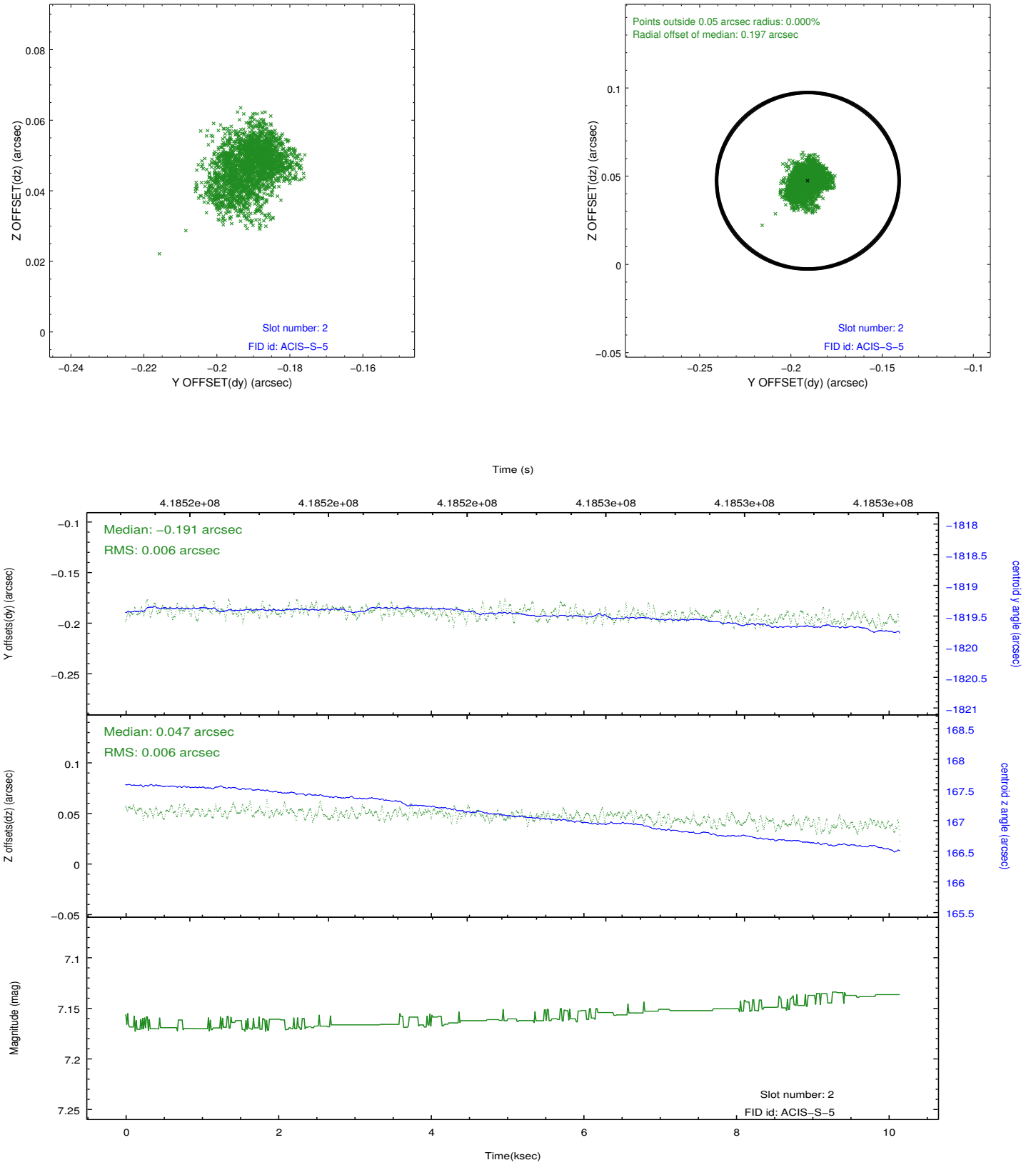
2.5.1 Slot 0



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)	2012.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.059500077367

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.