

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12982 - L2 Version 2
Chandra X-Ray Center

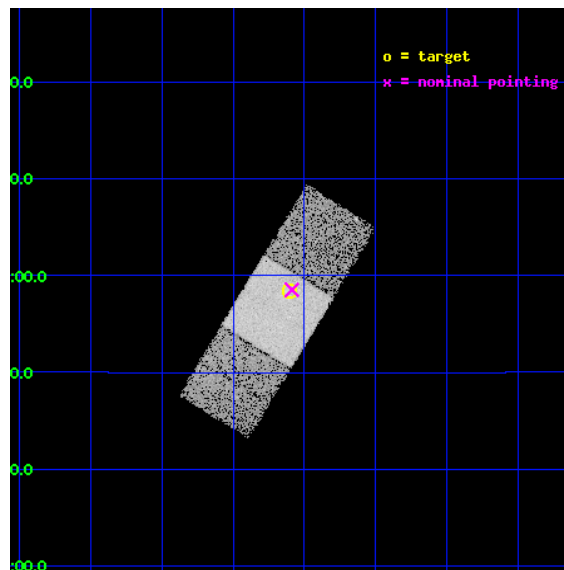
L2 Processing Date : Feb 8 2012

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1 Front

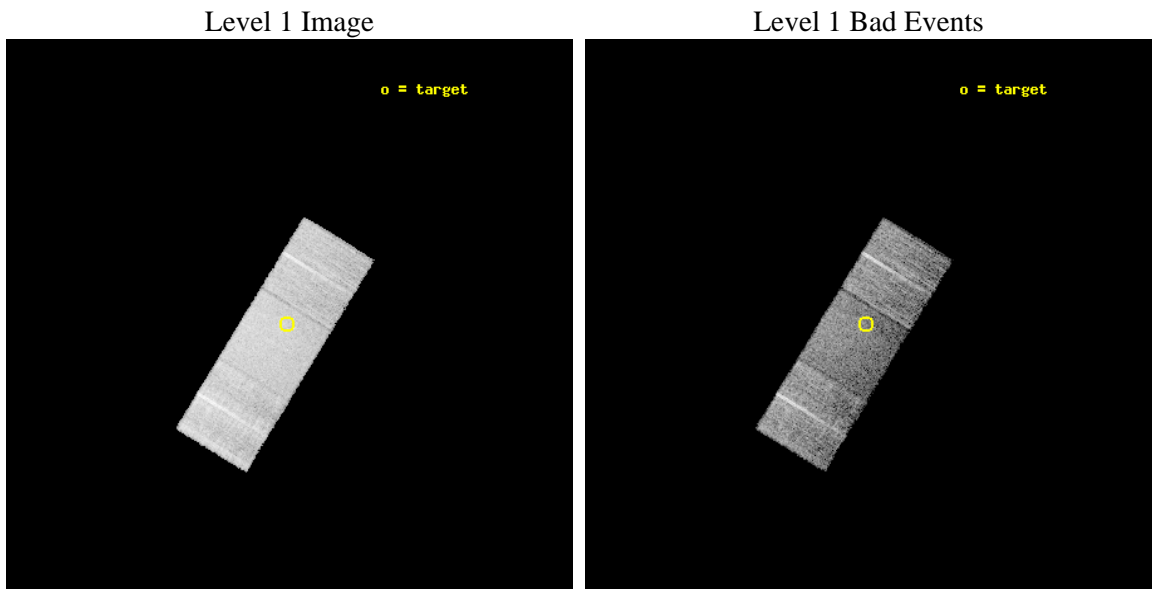
seq_num	600950	Sequence number
obs_id	12982	Observation id
title	Black-hole--galaxy co-evolution at the end of the Hubble sequence	
observer	Prof. Smita Mathur	Principal investigator
object	NGC 5964	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	234.40125	Observer's specified target RA [deg]
dec_targ	5.973333	Observer's specified target Dec [deg]
ra_nom	234.3969487025	Nominal RA [deg]
dec_nom	5.9755057408027	Nominal Dec [deg]
roll_nom	121.46763757409	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10059.500077367	Sum of GTIs [s]
livetime	9928.0653031598	Livetime [s]
ontime6	10056.359067082	Sum of GTIs [s]
ontime7	10059.500077367	Sum of GTIs [s]
ontime8	10059.500077367	Sum of GTIs [s]
l2events	50963	Number of level 2 events



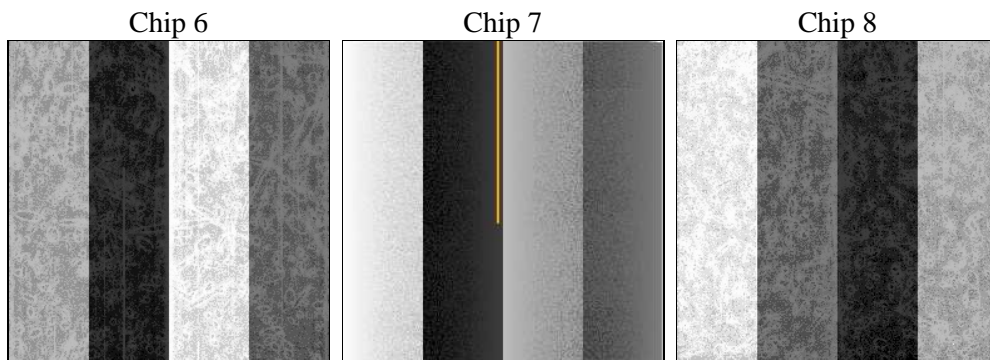
2 OBI

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	10056.359067082	Sum of GTIs [s]
date	2012-02-08T05:56:31	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	232307	Number of level 1 events

2.1.4 Events

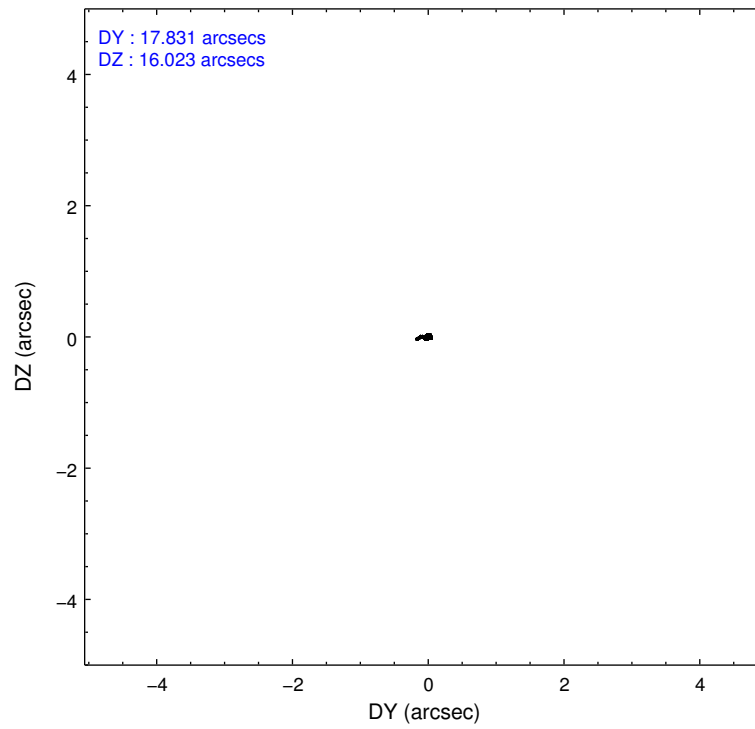
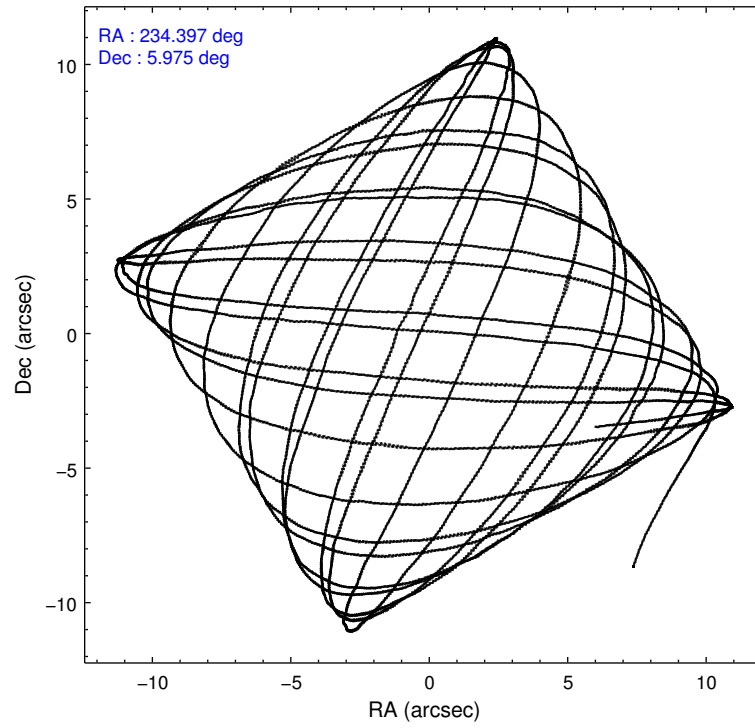
	ccd 6	ccd 7	ccd 8
level 1 events	66099	81759	84449
rejected events	58186	44689	62157
rejected %	88%	54%	73%

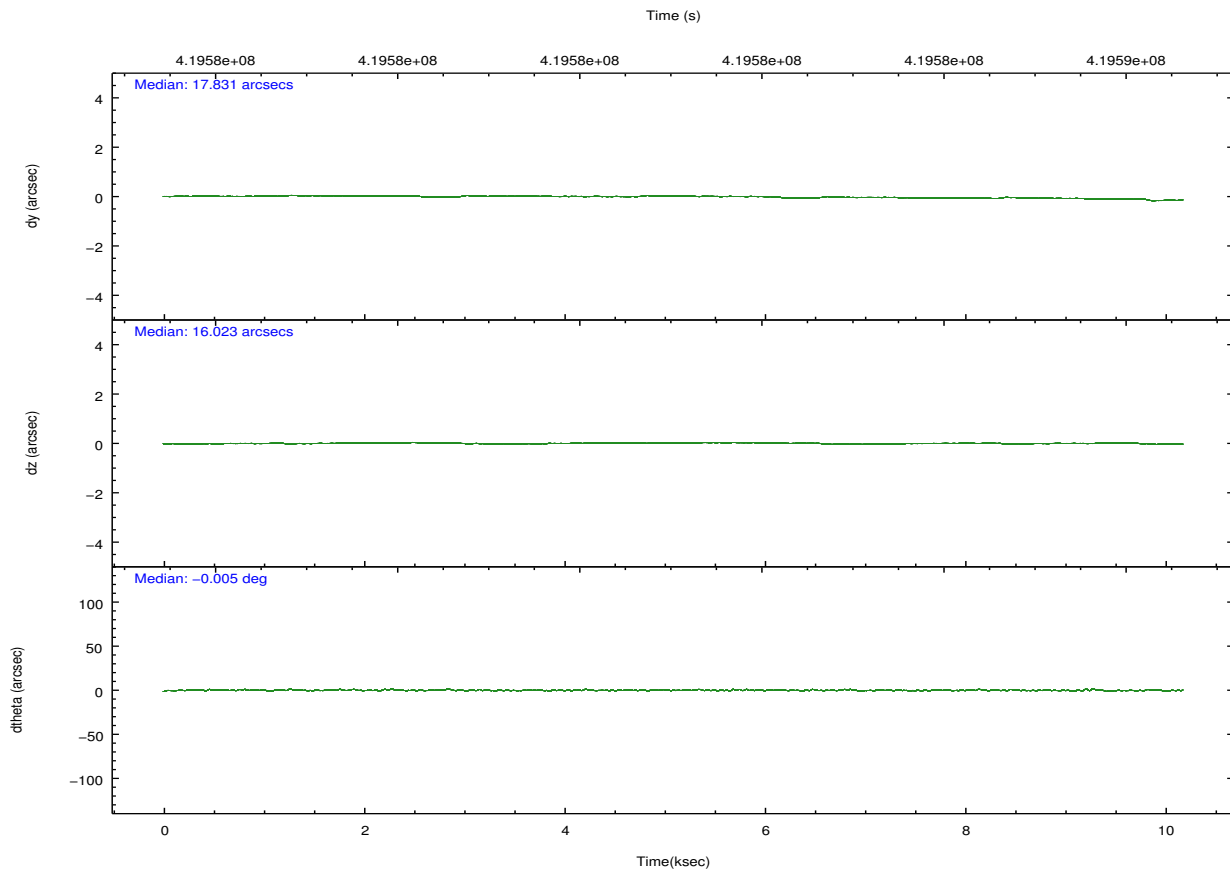
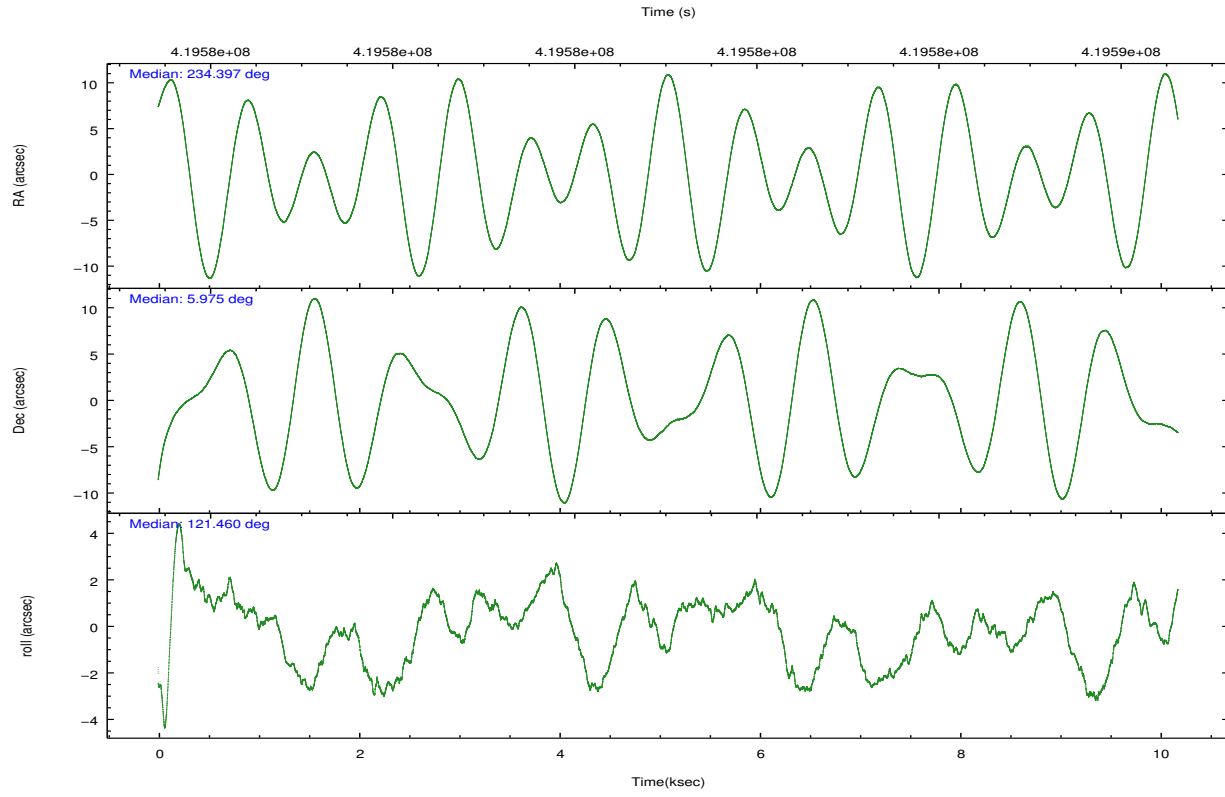
	ccd 6	ccd 7	ccd 8
grade 0 events	2932	3452	6832
	4%	4%	8%
grade 1 events	24	82	66
	0%	0%	0%
grade 2 events	1724	7534	5220
	2%	9%	6%
grade 3 events	833	3353	2406
	1%	4%	2%
grade 4 events	772	3262	2310
	1%	3%	2%
grade 5 events	3022	8550	4408
	4%	10%	5%
grade 6 events	1654	19483	5528
	2%	23%	6%
grade 7 events	55138	36043	57679
	83%	44%	68%

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	234.421231	234.3969487025045	CCD I2 on	N	N
[deg] Pointing Dec	5.962797	5.975505740802651	CCD I3 on	N	N
[deg] Pointing Roll	121.308484	121.4676375740883	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)	419576104.184000	419575147.71903	CCD S5 on	N	N
Observation start date	2011-04-19T04:53:58	2011-04-19T04:39:07	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	419586104.184000	419586945.46964	On-chip summing requested	N	N
Observation end date	2011-04-19T07:40:38	2011-04-19T07:55:45	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



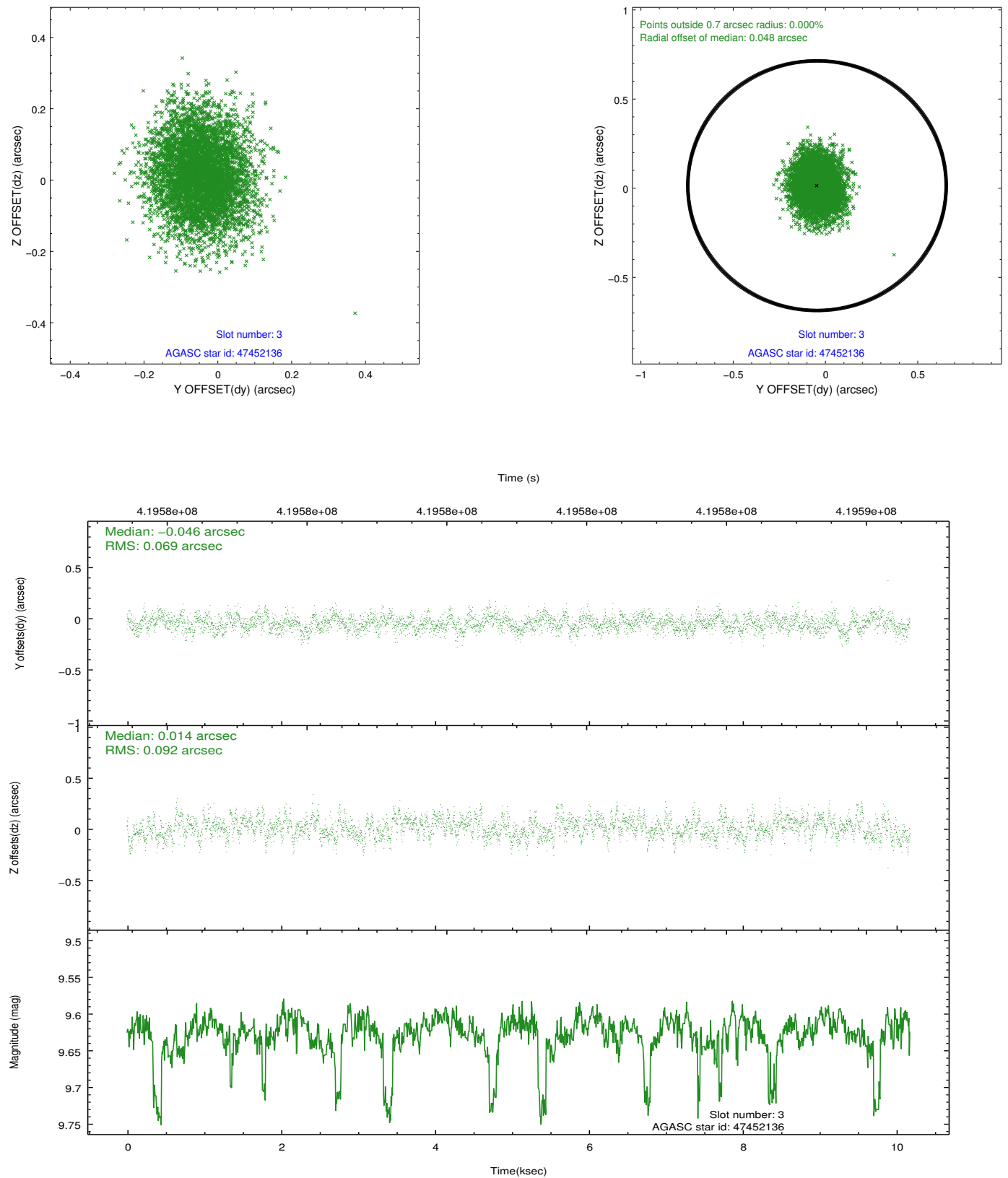


Slot Statistics

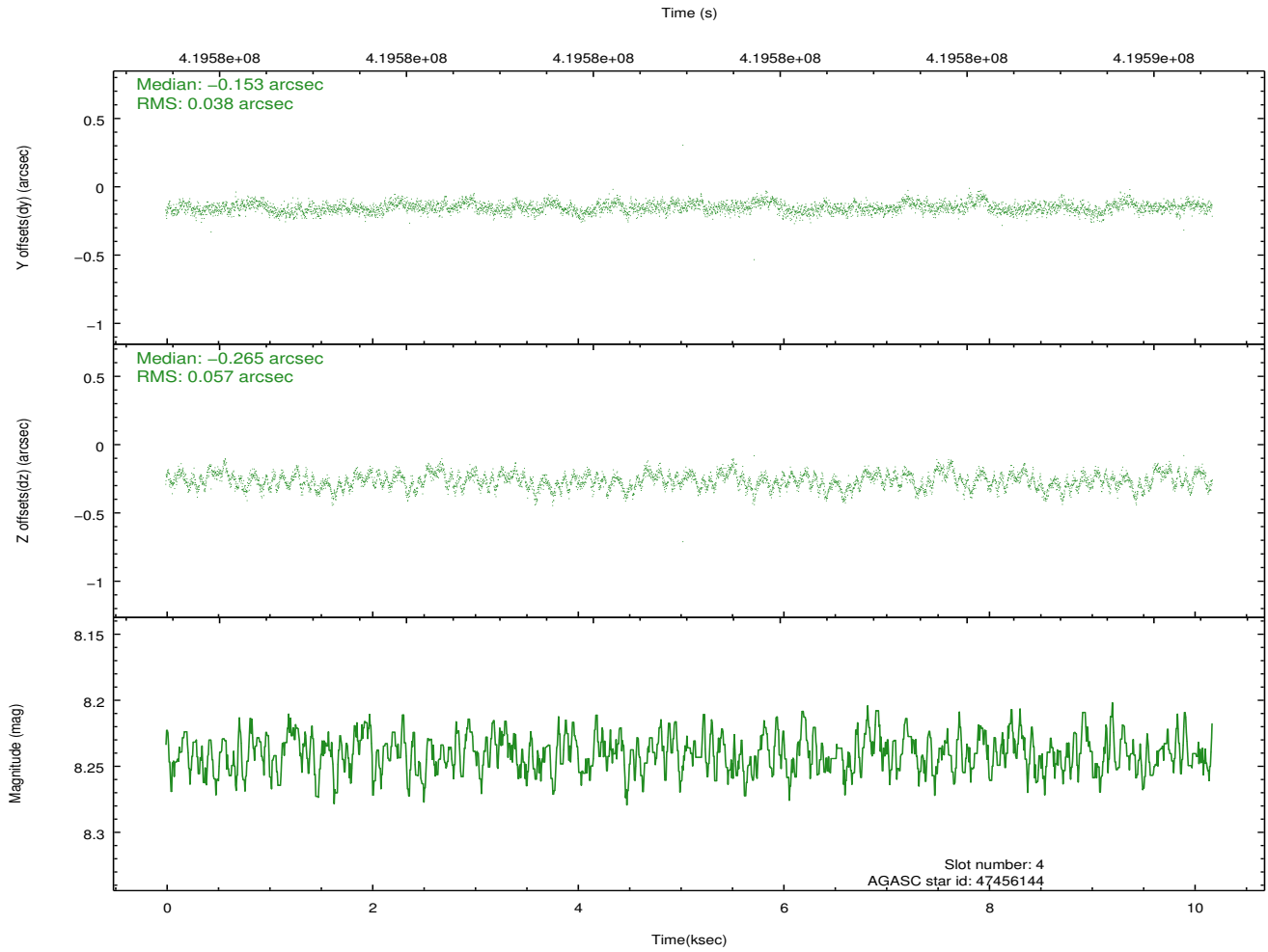
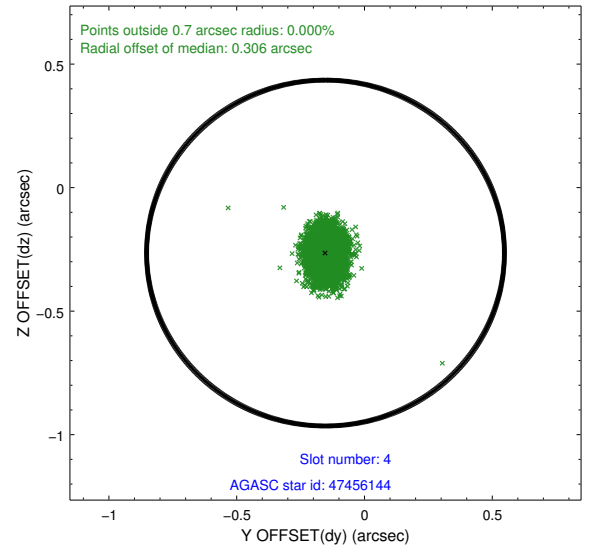
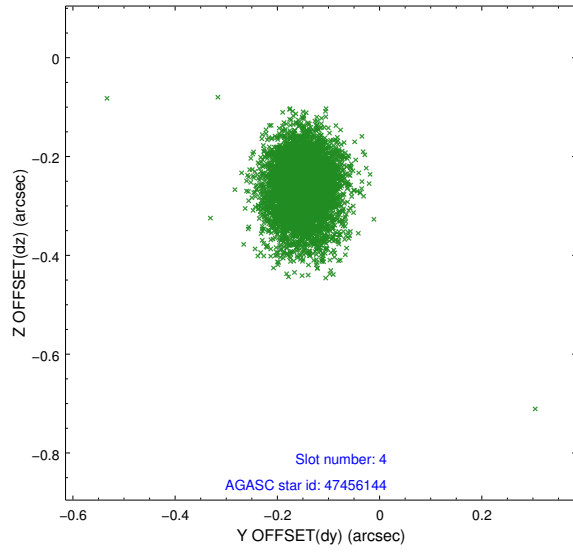
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.01	2482	0.131	-0.078	0.006	0.010	0.000000	0.000000	925.31	-1733.08
1	FID	ACIS-S-2	6.94	2483	-0.121	0.012	0.006	0.009	0.000000	0.000000	-770.56	-1738.08
2	FID	ACIS-S-6	7.16	2483	-0.030	0.071	0.005	0.010	0.000000	0.000000	390.57	807.86
3	GUIDE	47452136	9.62	4950	-0.046	0.014	0.122	0.198	233.920259	5.857337	608.83	1730.12
4	GUIDE	47456144	8.24	4967	-0.153	-0.265	0.072	0.119	233.891093	6.057536	1276.62	1443.67
5	GUIDE	47582944	7.72	4966	-0.074	0.008	0.065	0.102	234.665559	6.239936	399.39	-1264.64
6	GUIDE	47587120	8.55	4964	0.207	0.012	0.072	0.112	234.731851	6.138935	-35.26	-1279.41
7	GUIDE	47587128	8.87	4963	0.065	0.233	0.111	0.179	235.143017	5.994319	-1243.54	-2267.87

2.4 Star Slots

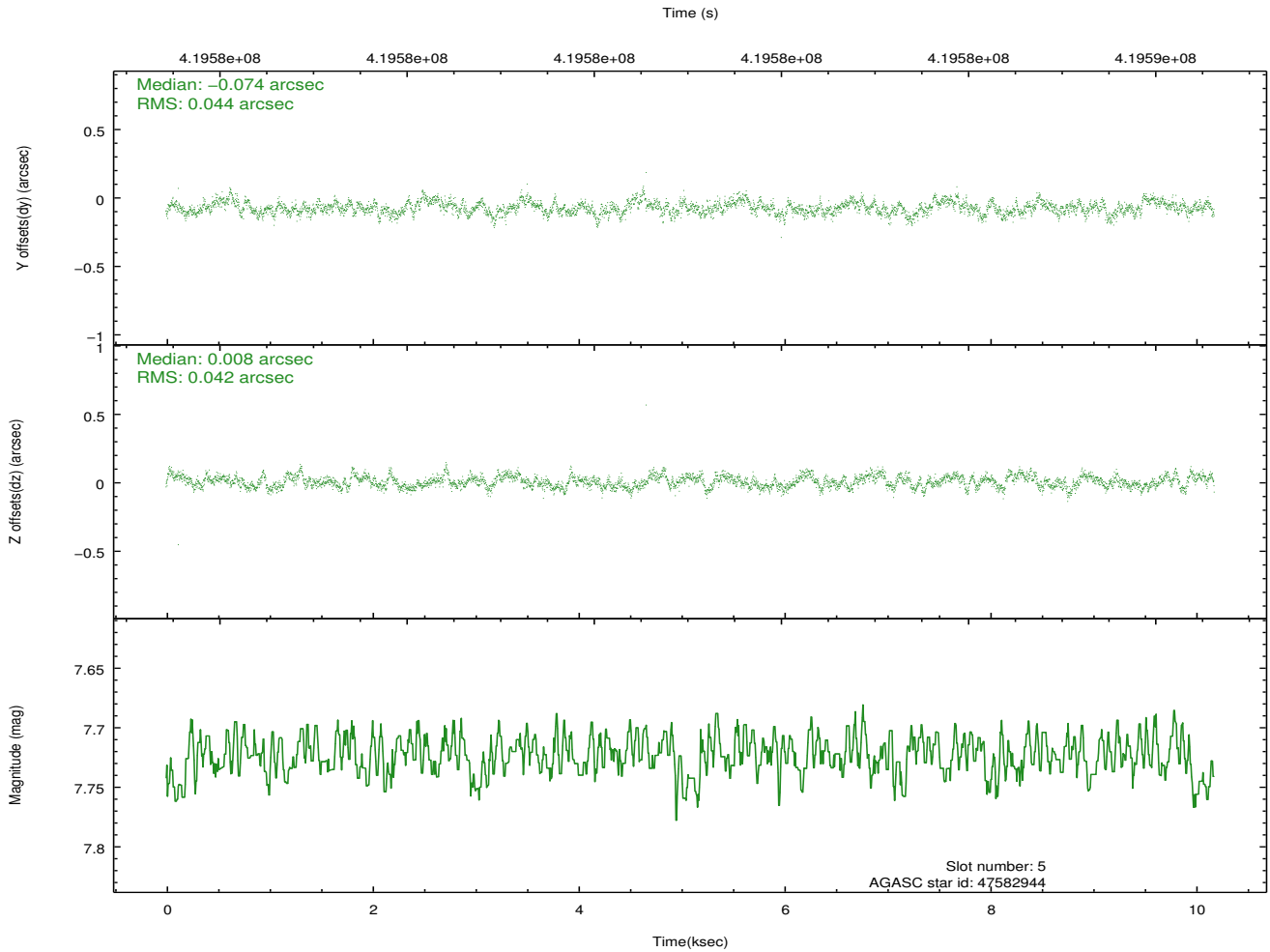
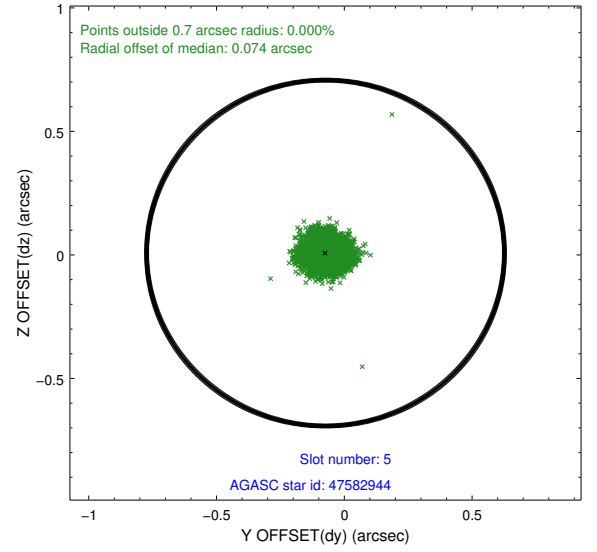
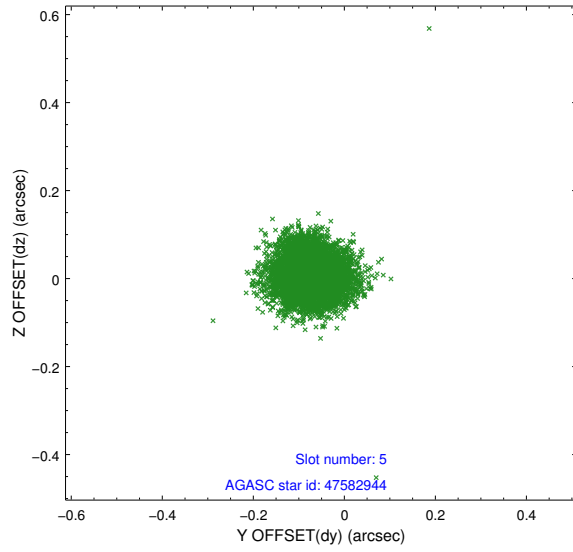
2.4.1 Slot 3



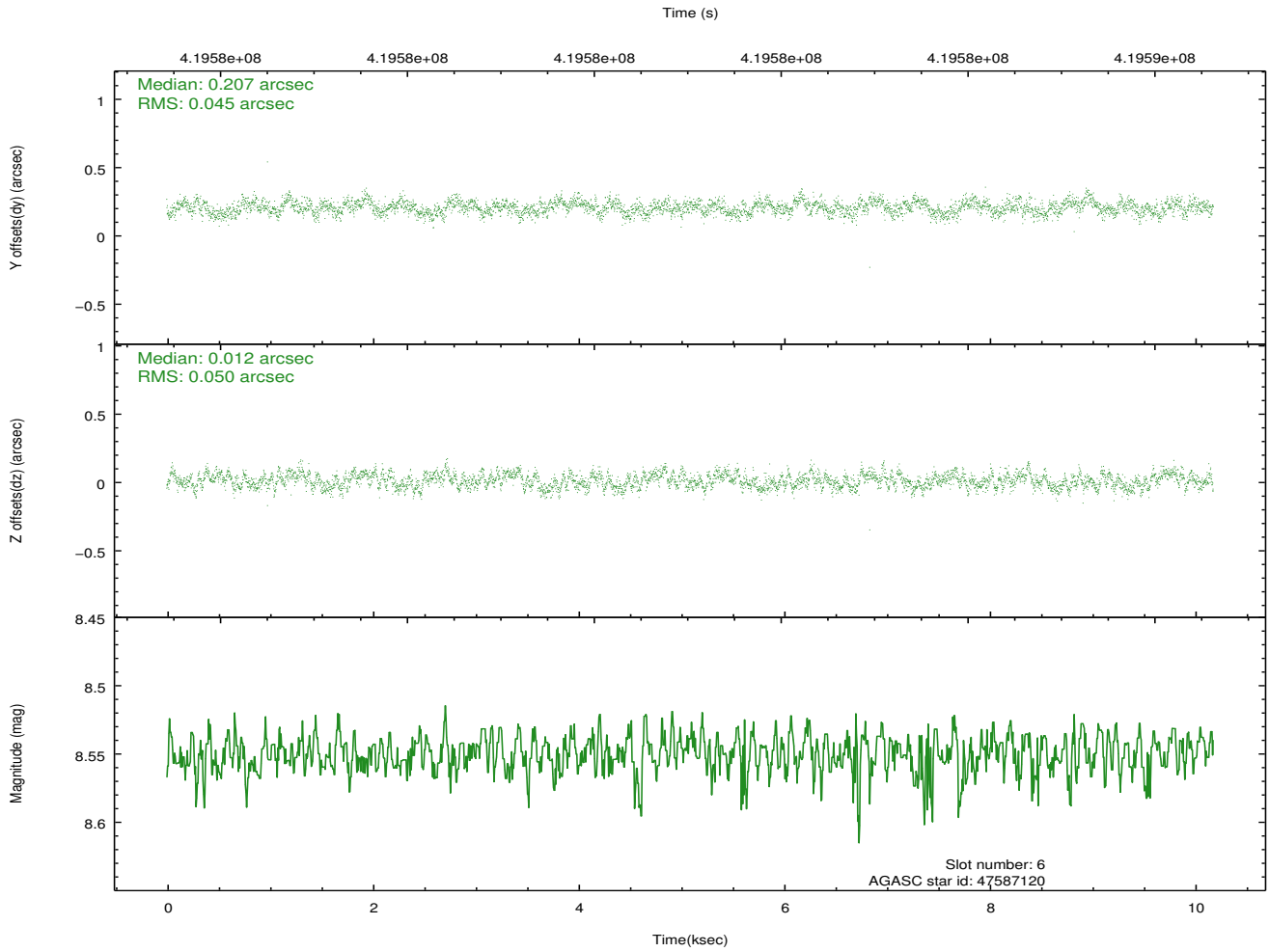
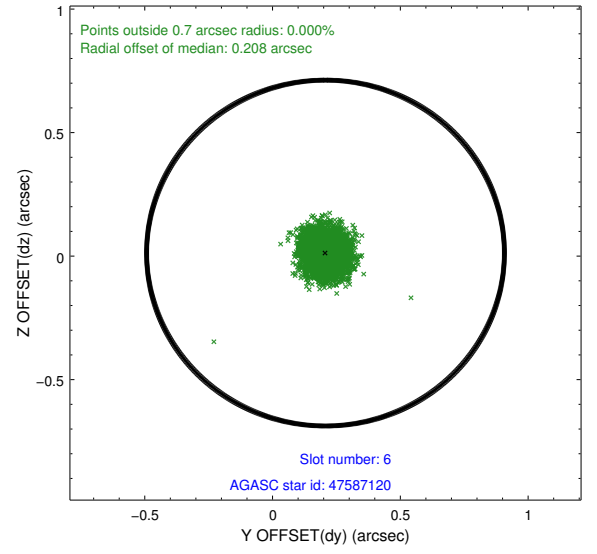
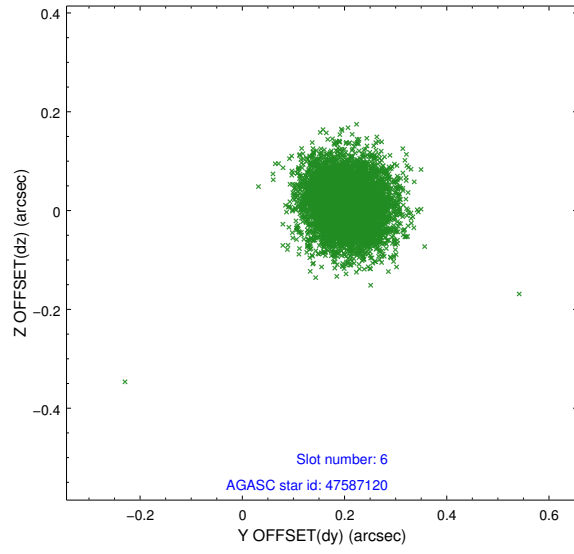
2.4.2 Slot 4



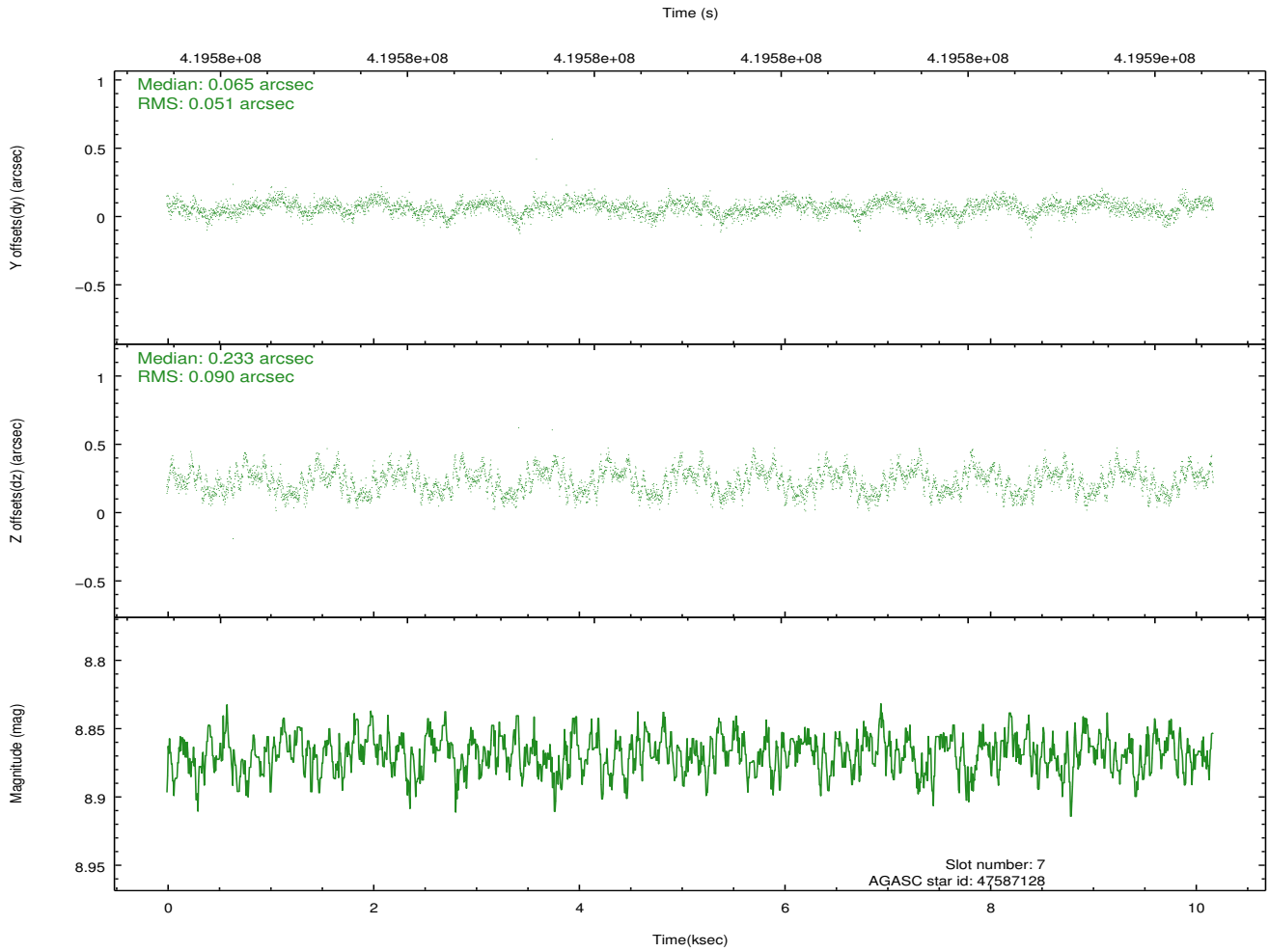
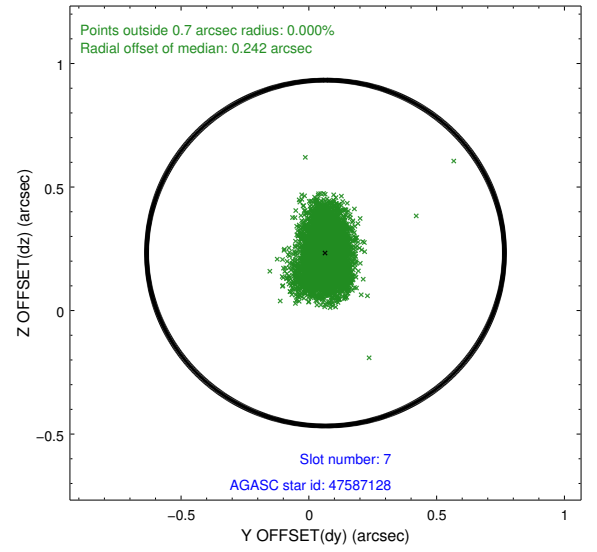
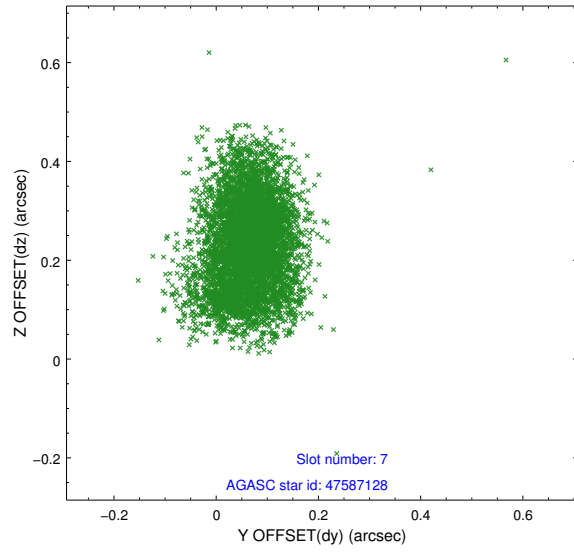
2.4.3 Slot 5



2.4.4 Slot 6

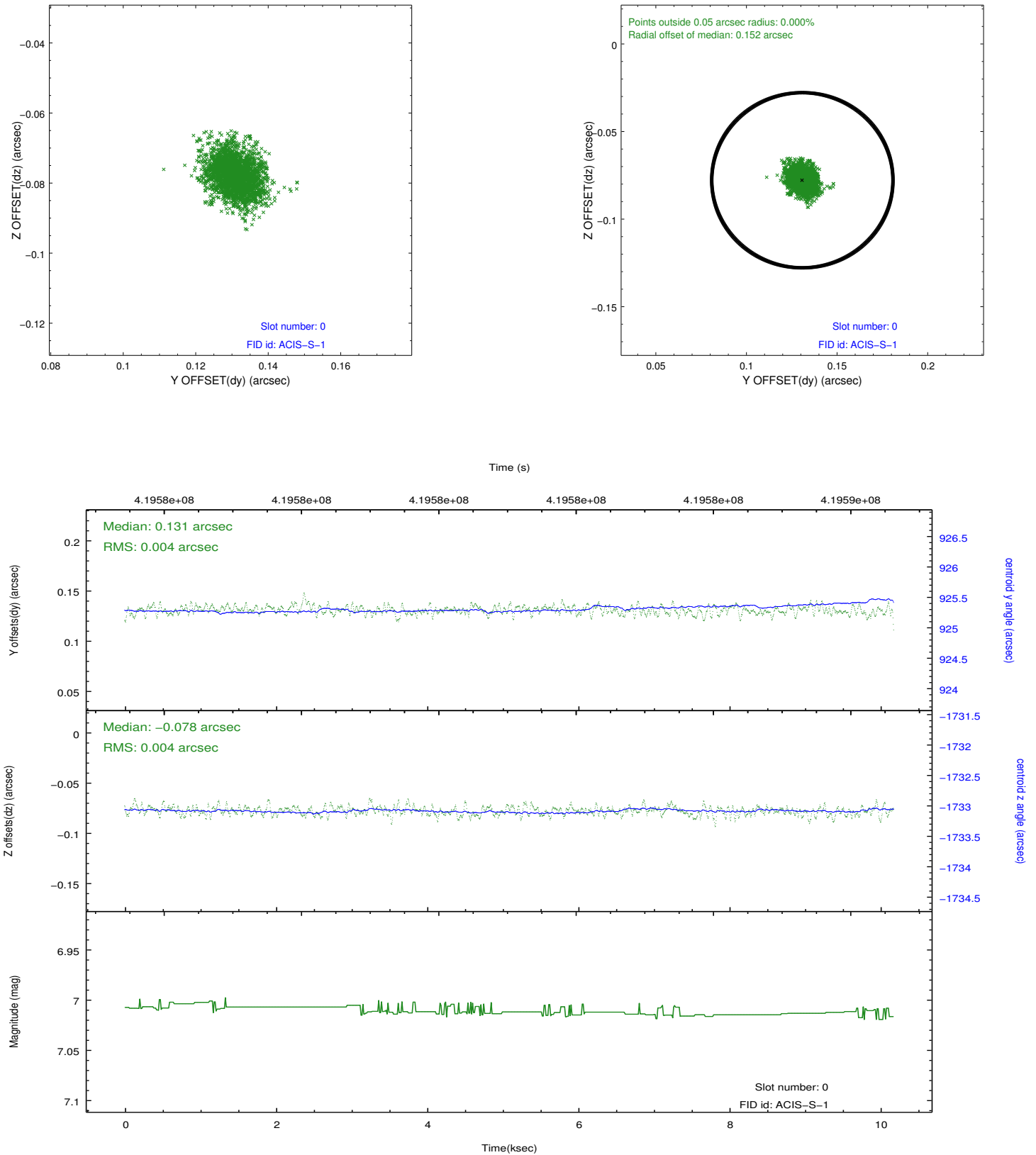


2.4.5 Slot 7

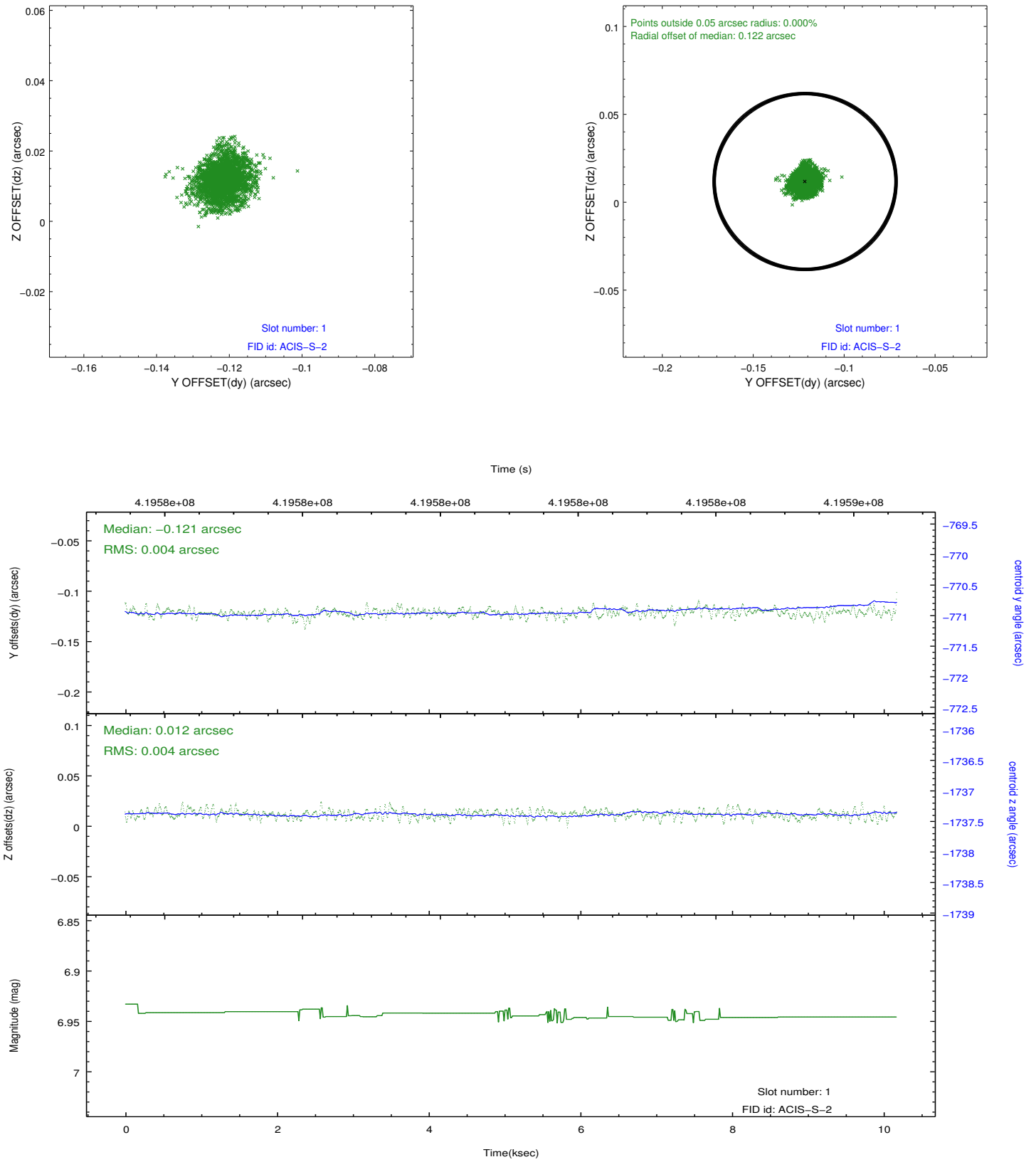


2.5 FID Slots

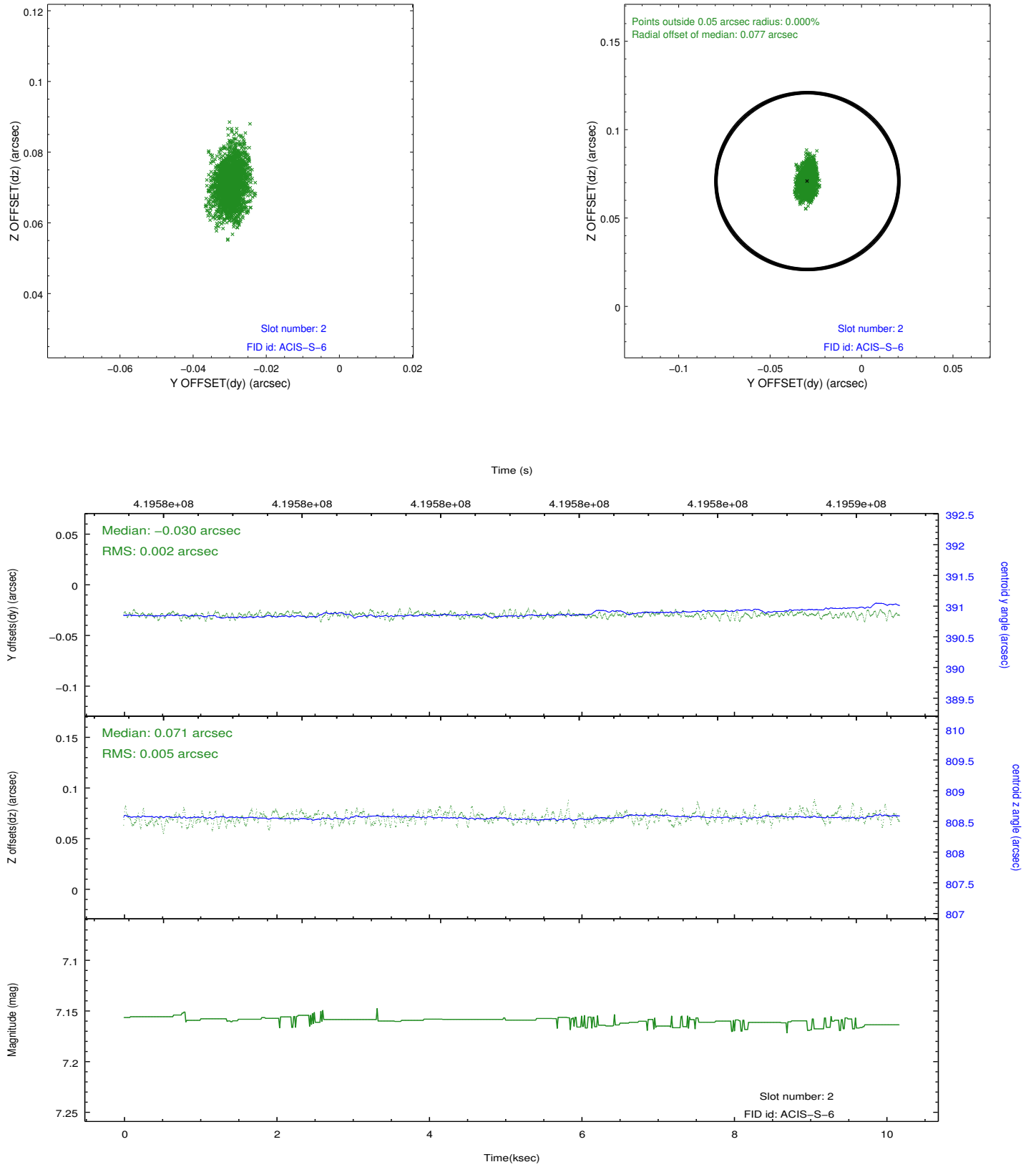
2.5.1 Slot 0



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)	2012.02.10
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.