

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12856 - L2 Version 1
Chandra X-Ray Center

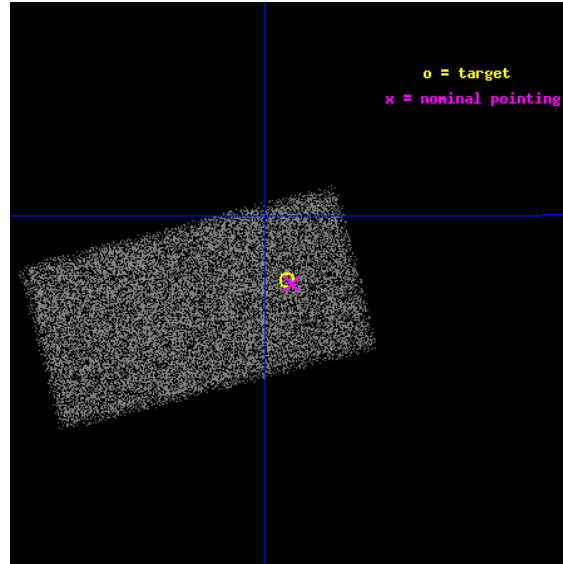
L2 Processing Date : Feb 6 2012

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1 Front

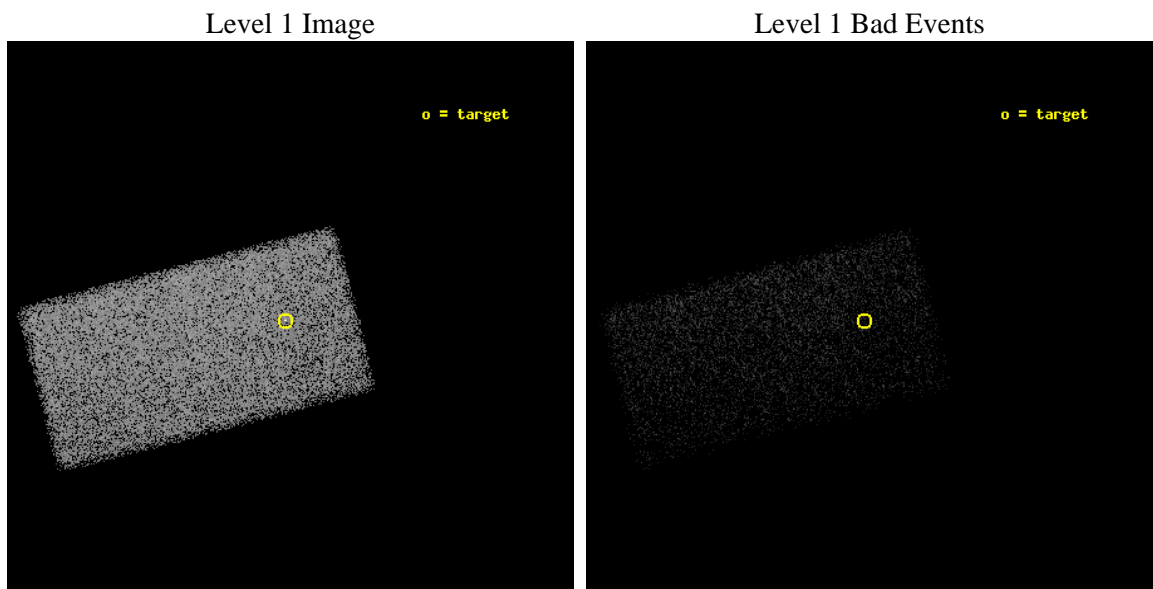
seq_num	702489	Sequence number
obs_id	12856	Observation id
title	Extreme Velocity Quasar Outflows and the Role of X-Ray Shielding	P
observer	Fred Hamann	Principal investigator
object	J093857.02+412821.19	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	144.7375	Observer's specified target RA [deg]
dec_targ	41.472556	Observer's specified target Dec [deg]
ra_nom	144.73453990055	Nominal RA [deg]
dec_nom	41.470504265126	Nominal Dec [deg]
roll_nom	165.52671669001	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15071.303615868	Sum of GTIs [s]
livetime	14669.934215726	Livetime [s]
ontime7	15071.303615868	Sum of GTIs [s]
l2events	27727	Number of level 2 events



2 OBI

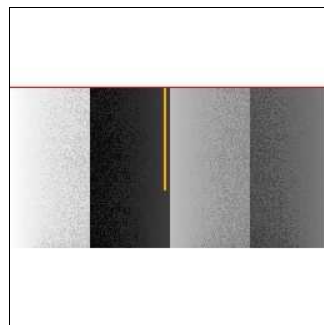
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.922000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	15071.303615868	Sum of GTIs [s]
caldsver	4.4.7	 	ontime7	15071.303615868	Sum of GTIs [s]
date	2012-02-06T04:56:49	Date and time of file creation	l1events	61420	Number of level 1 events
revision	1	Processing version of data			

2.1.4 Events

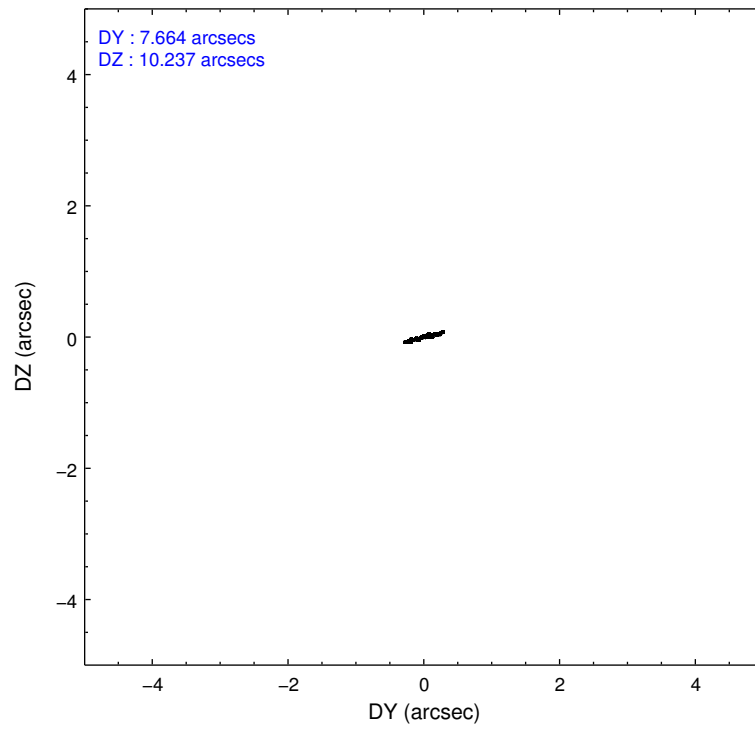
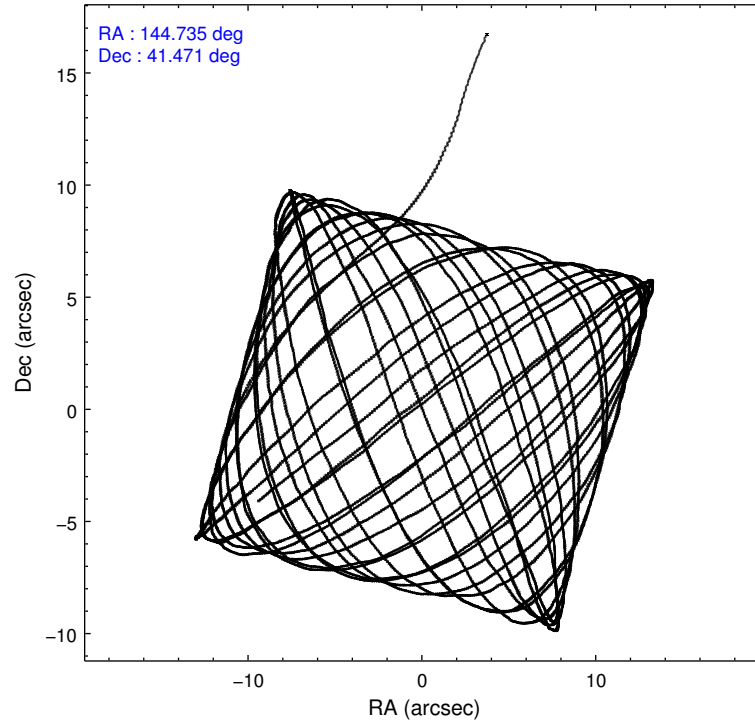
	ccd 7
level 1 events	61420
rejected events	32938
rejected %	53%

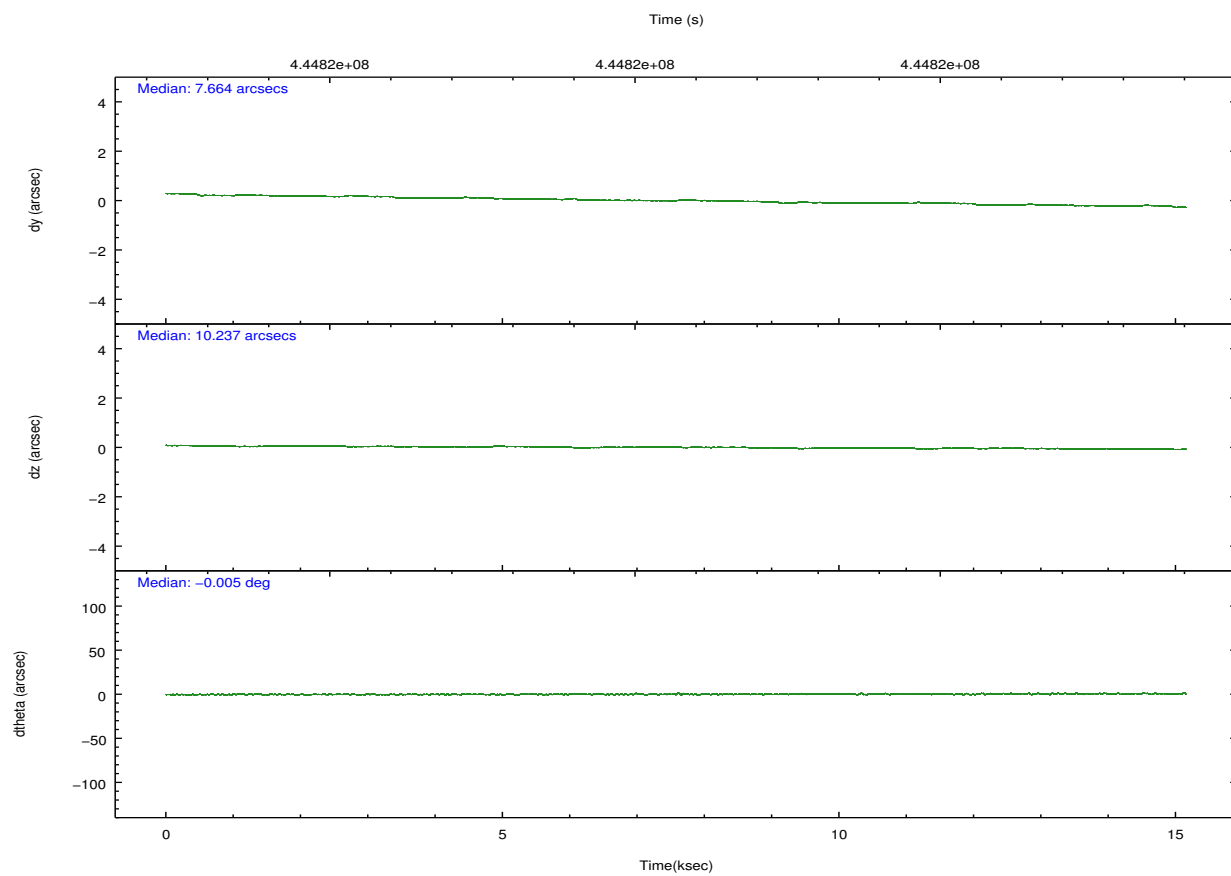
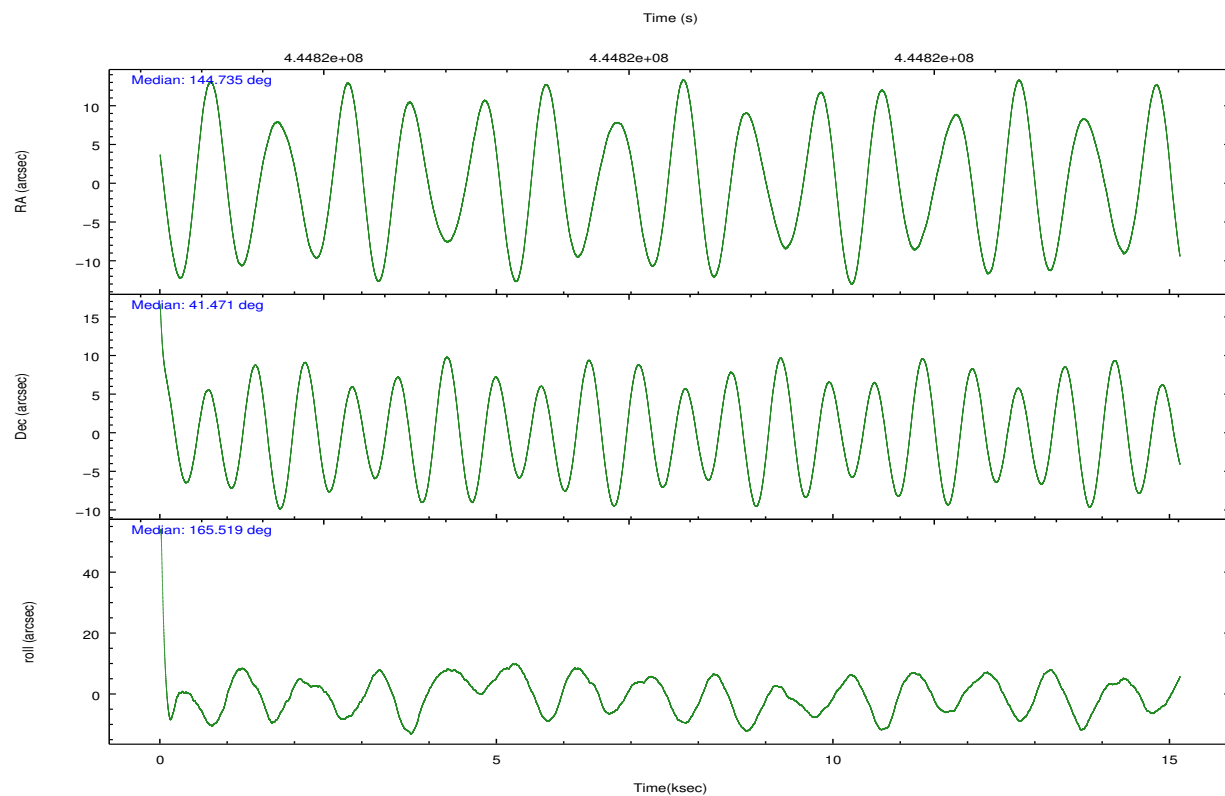
	ccd 7
grade 0 events	2703
	4%
grade 1 events	78
	0%
grade 2 events	5821
	9%
grade 3 events	2988
	4%
grade 4 events	2719
	4%
grade 5 events	6430
	10%
grade 6 events	14255
	23%
grade 7 events	26426
	43%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	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	144.769567	144.7345399005486	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	41.478167	41.47050426512637	Subarray start row	257	257
[deg] Pointing Roll	165.346829	165.5267166900141	Subarray row count	512	512
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	1.5
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	444813244.184000	444811756.48202			
Observation start date	2012-02-05T07:12:58	2012-02-05T06:49:16			
[s] Observation end time (MET)	444828245.184000	444828470.1329			
Observation end date	2012-02-05T11:22:59	2012-02-05T11:27:50			
Read mode	TIMED	TIMED			

2.3 Aspect



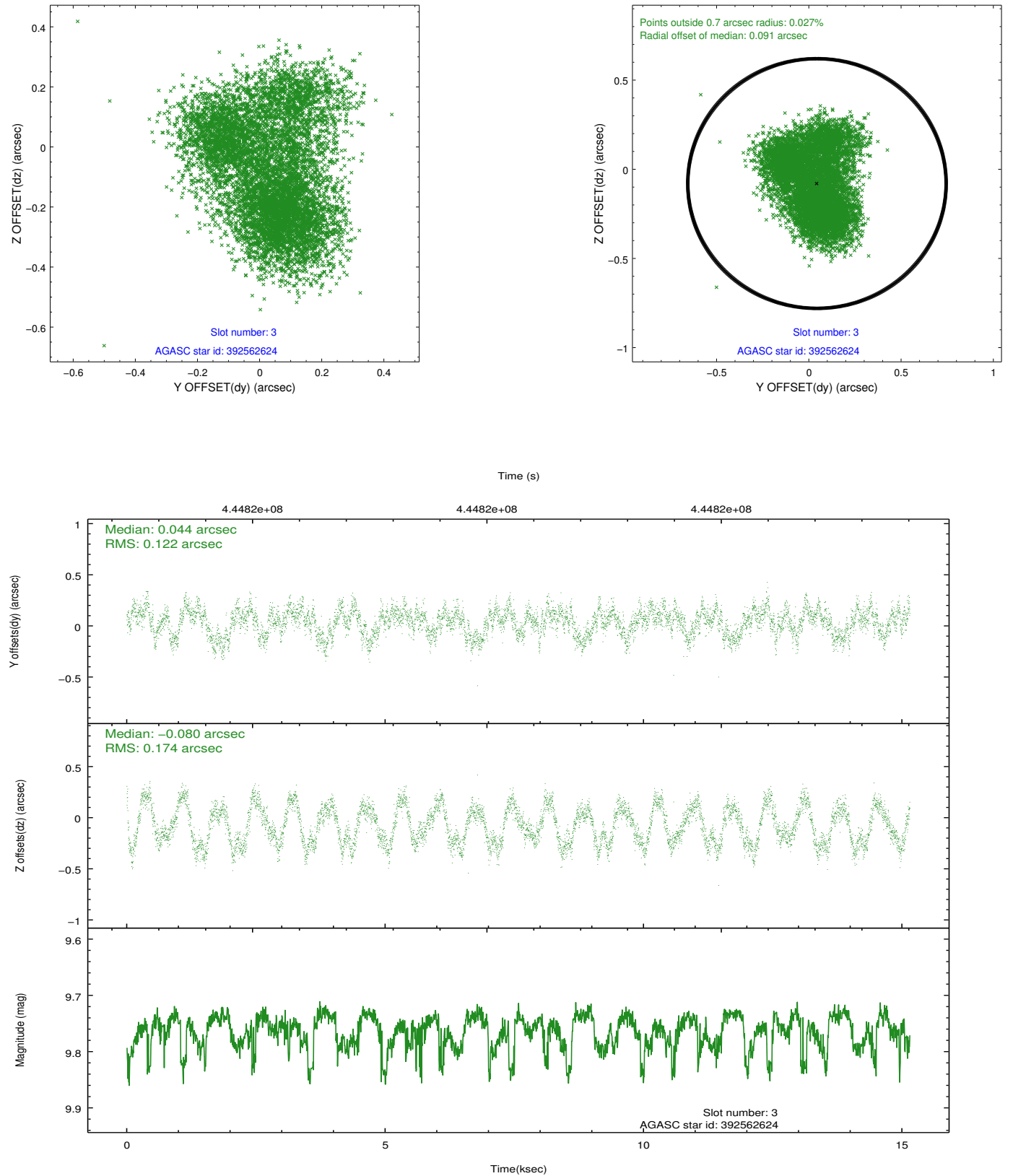


Slot Statistics

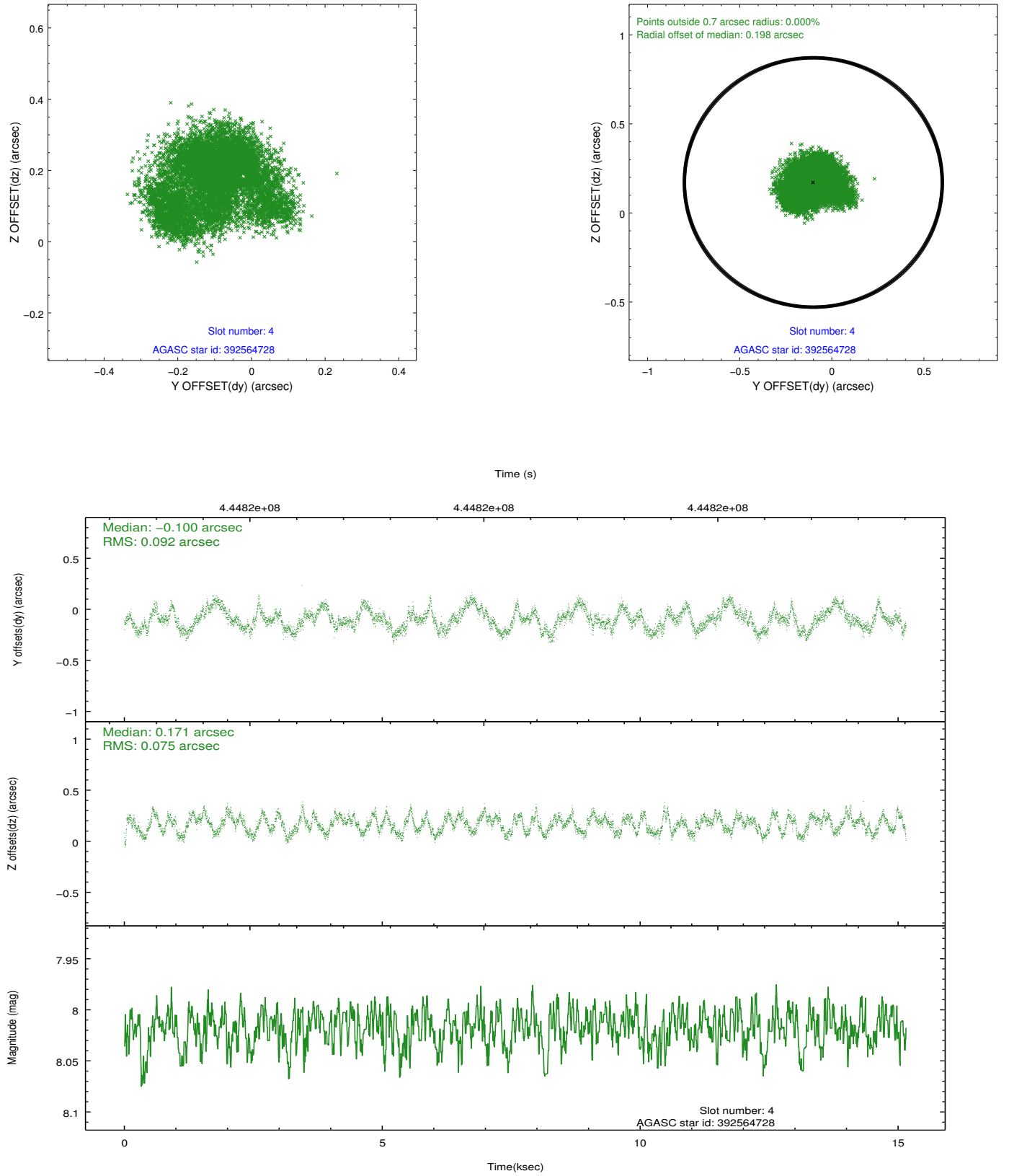
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.04	3696	-0.067	-0.043	0.007	0.011	0.000000	0.000000	-760.48	-1731.49
1	FID	ACIS-S-4	7.14	3696	0.202	0.044	0.007	0.012	0.000000	0.000000	2152.91	176.81
2	FID	ACIS-S-5	7.16	3696	-0.167	0.008	0.009	0.014	0.000000	0.000000	-1813.06	170.74
3	GUIDE	392562624	9.76	7374	0.044	-0.080	0.236	0.337	143.917782	41.073720	1870.46	1982.97
4	GUIDE	392564728	8.02	7391	-0.100	0.171	0.132	0.192	144.927557	42.064957	126.74	-2150.11
5	GUIDE	392566232	9.20	7338	0.007	0.139	0.140	0.232	143.981674	41.679348	2235.17	-173.62
6	GUIDE	392567456	10.25	7381	0.033	-0.184	0.216	0.331	145.130250	40.848254	-1523.24	1943.64
7	GUIDE	392572072	10.15	7382	0.035	-0.049	0.288	0.416	144.069504	41.060454	1459.76	1928.95

2.4 Star Slots

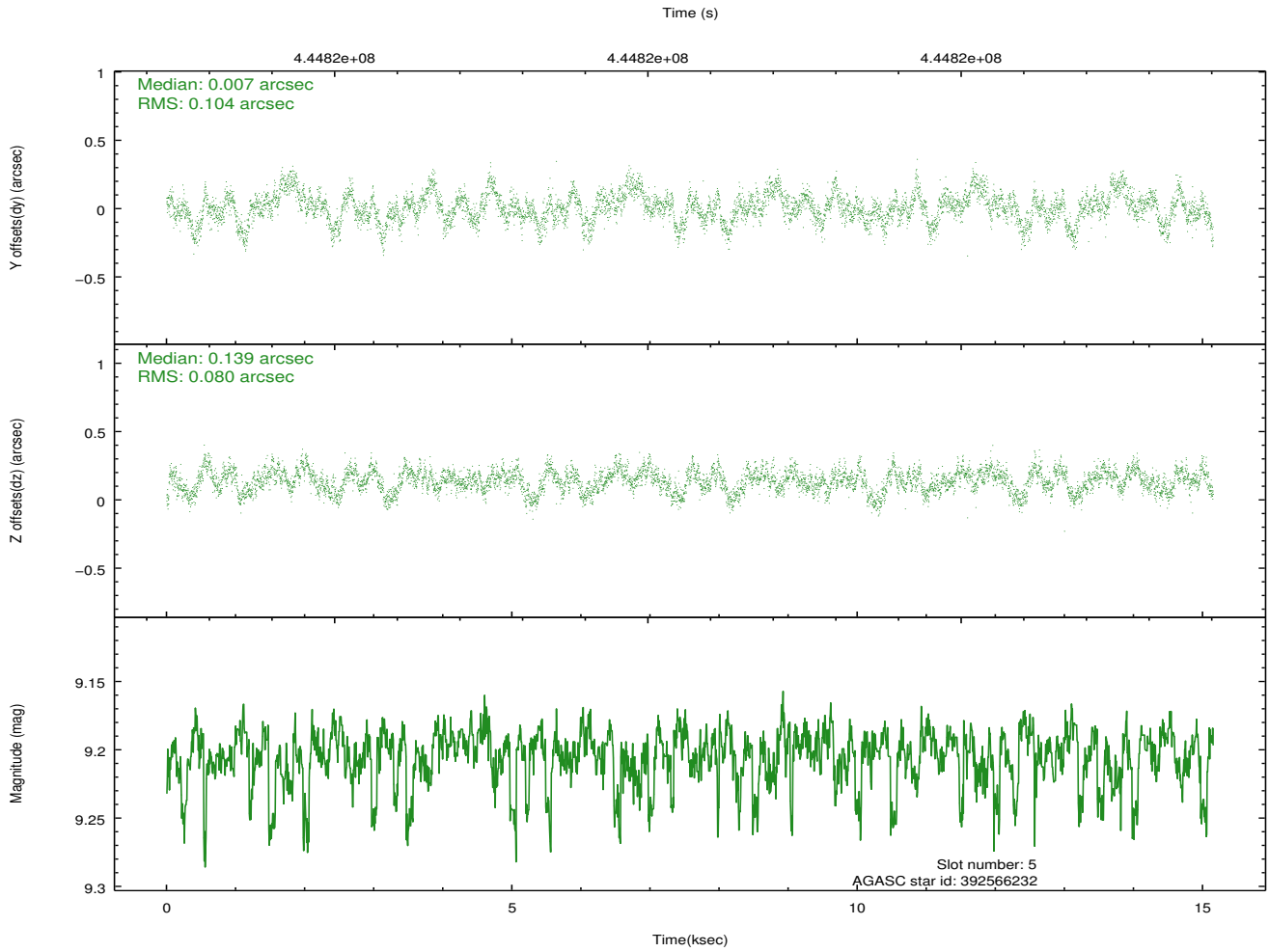
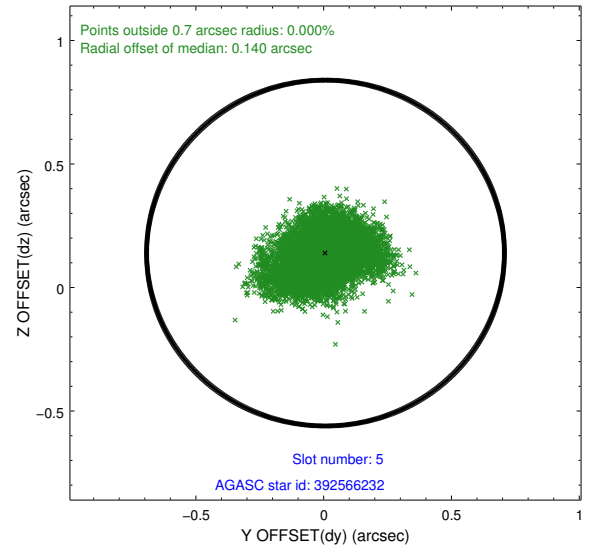
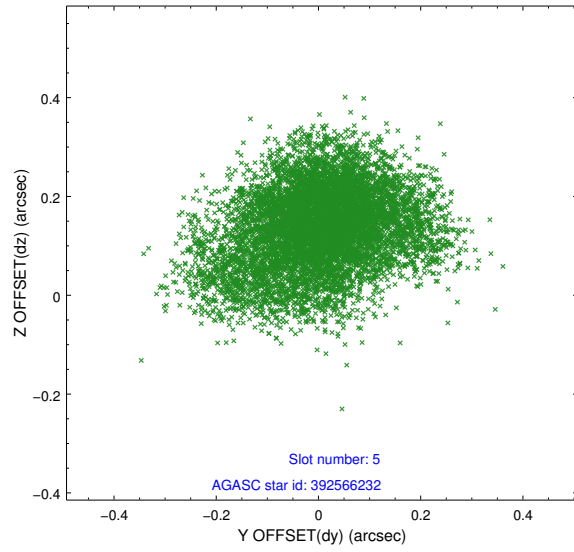
2.4.1 Slot 3



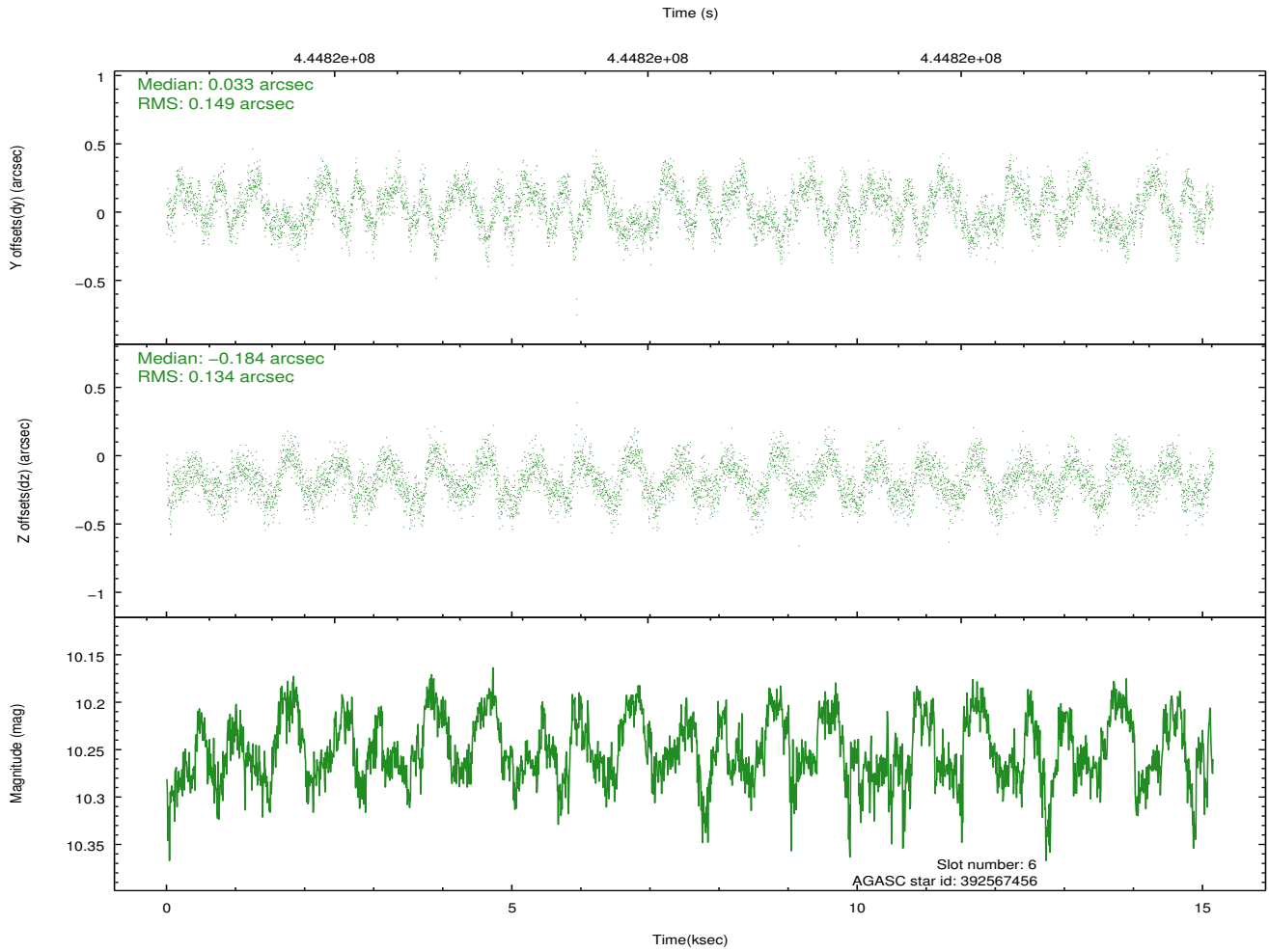
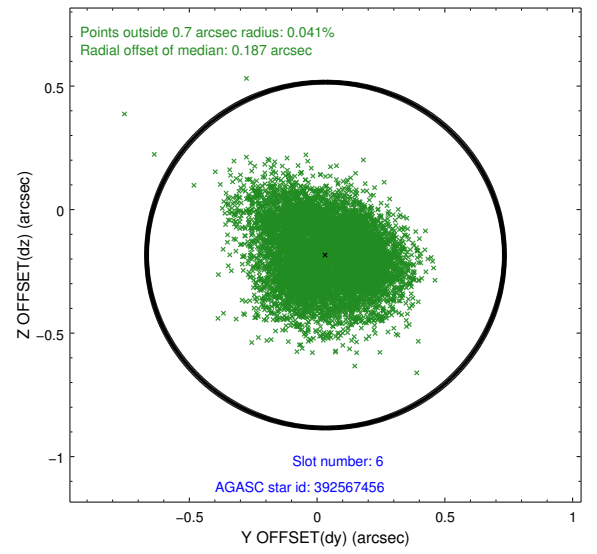
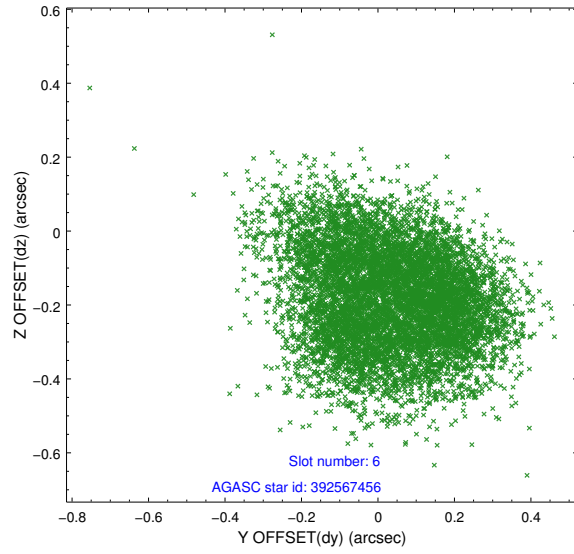
2.4.2 Slot 4



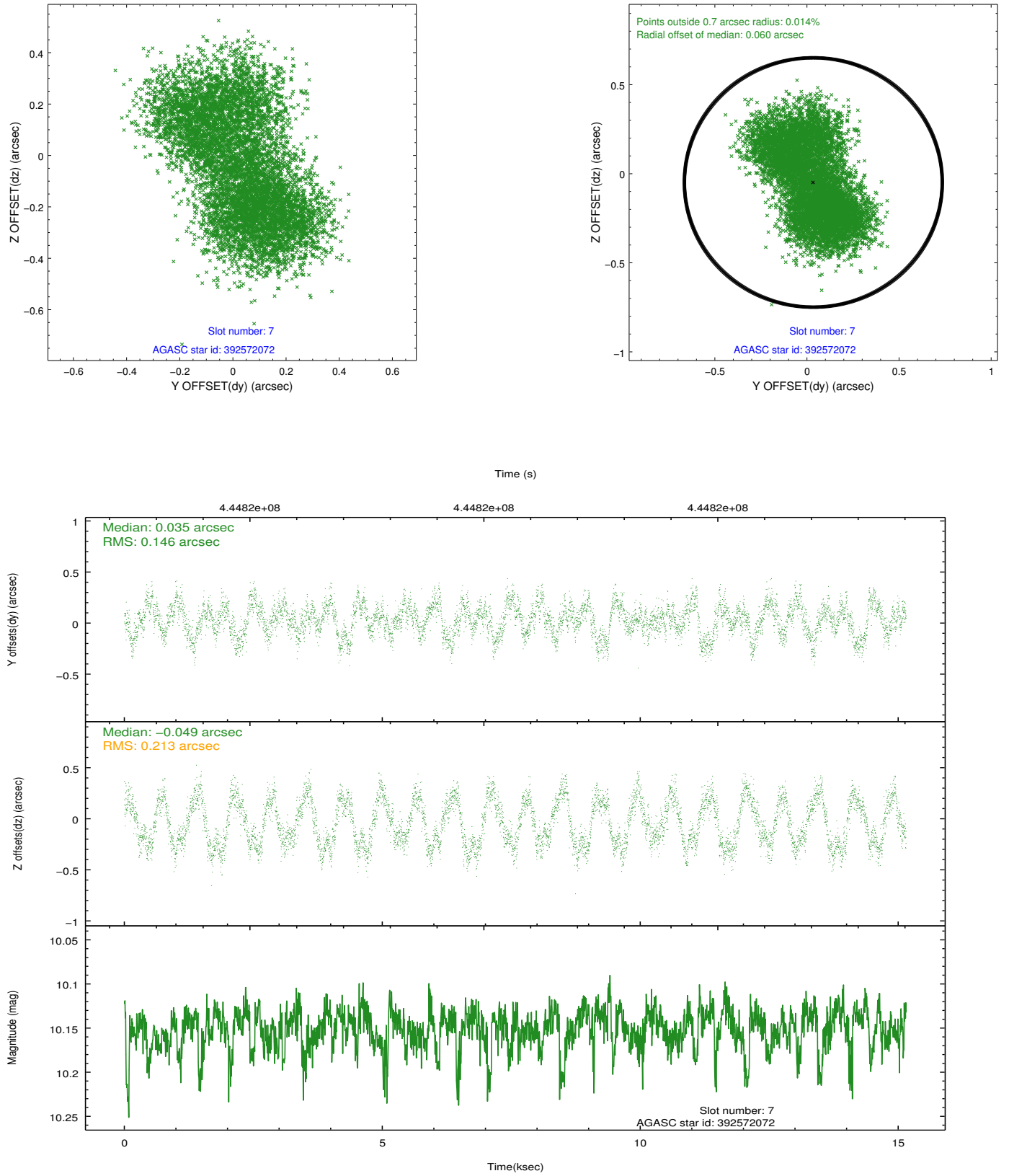
2.4.3 Slot 5



2.4.4 Slot 6

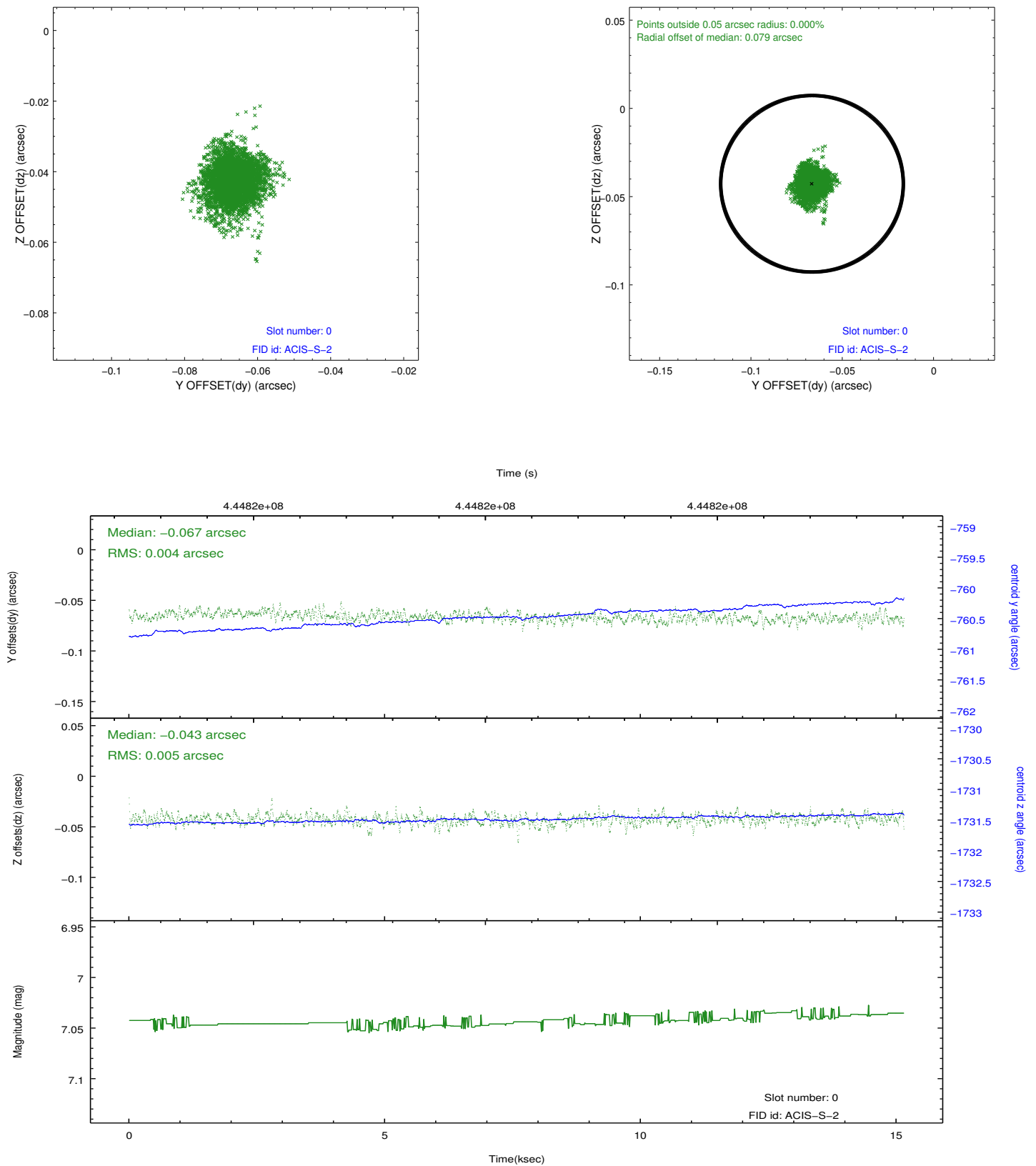


2.4.5 Slot 7

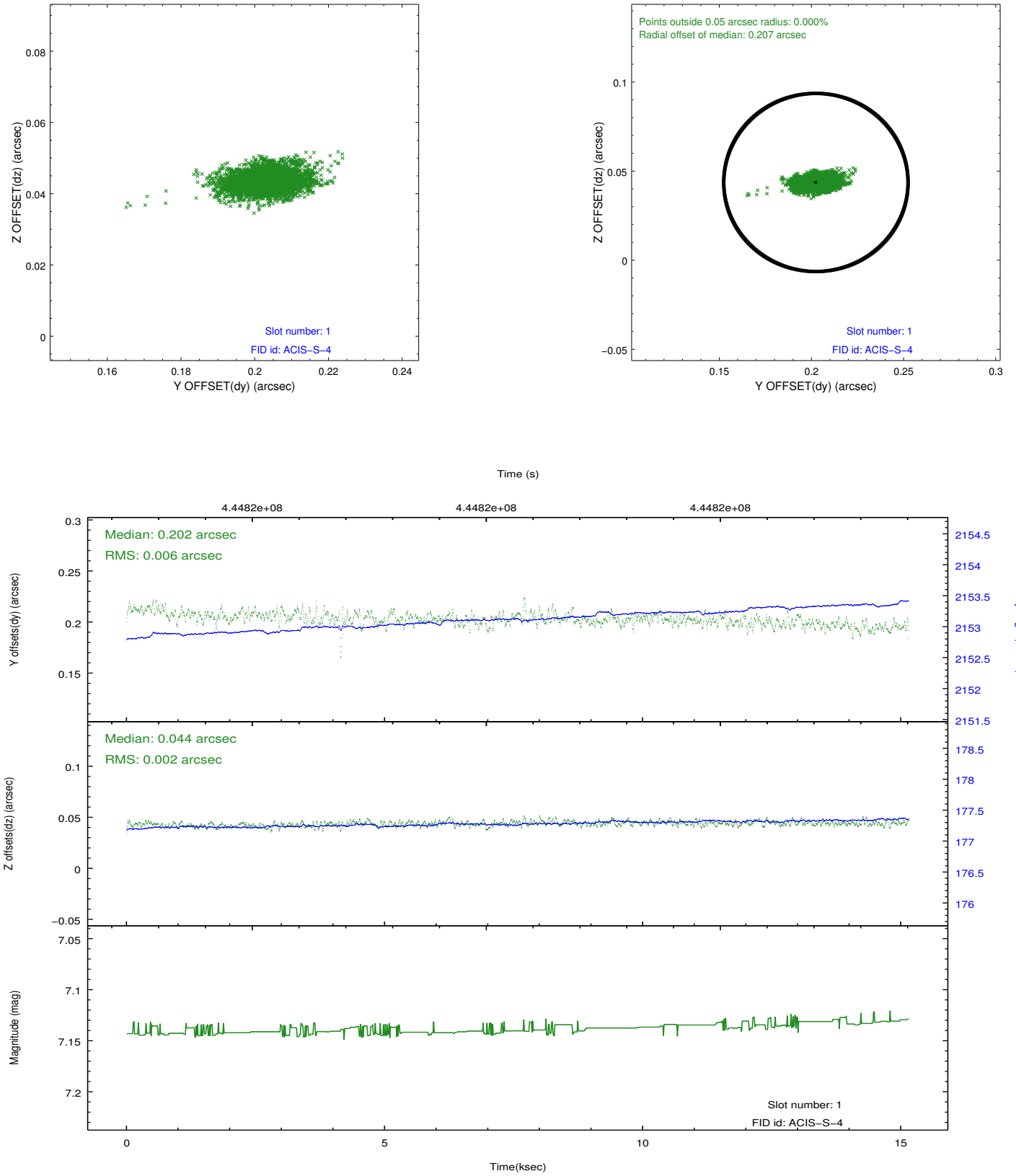


2.5 FID Slots

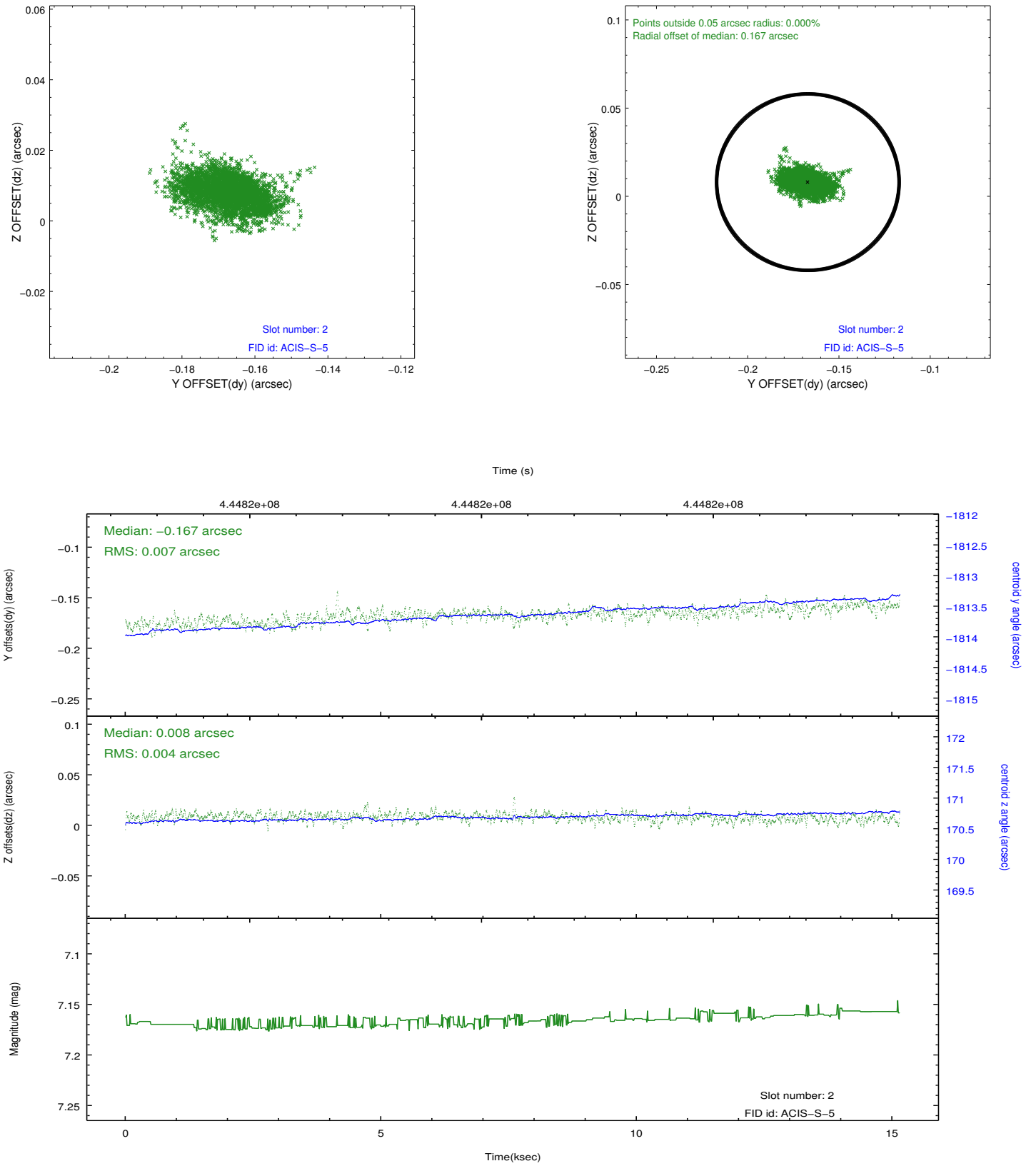
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.071303615868

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.