

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12677 - L2 Version 2
Chandra X-Ray Center

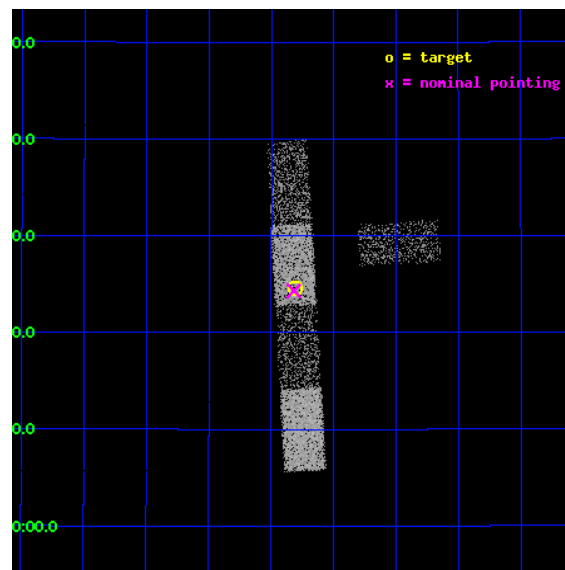
L2 Processing Date : Feb 1 2012

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1 Front

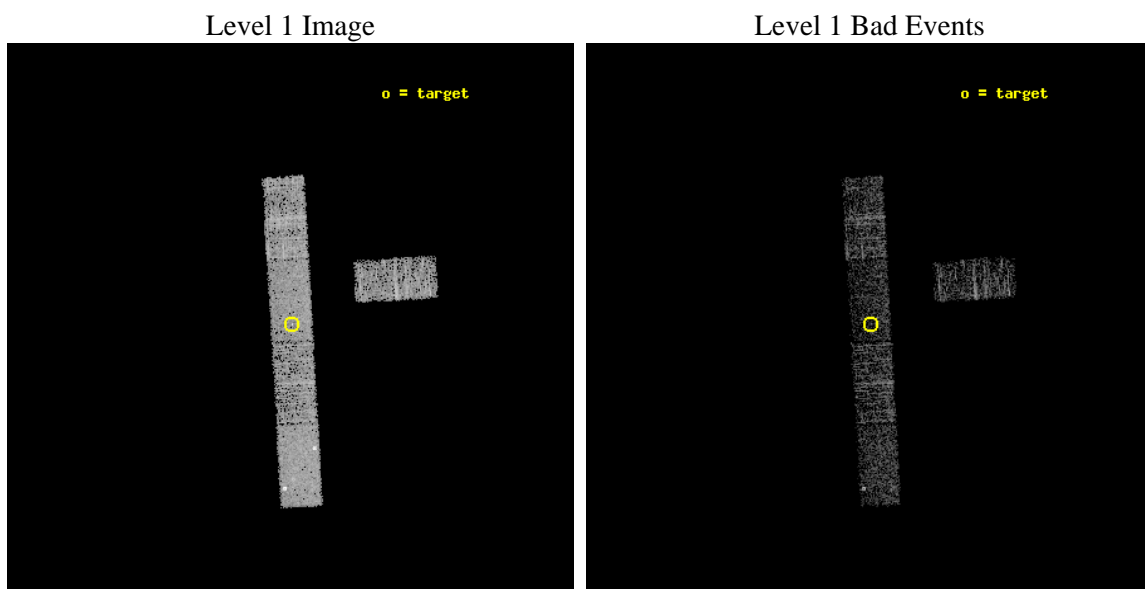
seq_num	501510	Sequence number
obs_id	12677	Observation id
title	Completing Identification of the Nearest and Brightest Neutron Stars	
observer	Prof. Derek Fox	Principal investigator
object	1RXSJ044048.0+292440	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	70.202083	Observer's specified target RA [deg]
dec_targ	29.409583	Observer's specified target Dec [deg]
ra_nom	70.204826762164	Nominal RA [deg]
dec_nom	29.405186420356	Nominal Dec [deg]
roll_nom	266.75911170362	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2063.7999855876	Sum of GTIs [s]
livetime	2015.1518491815	Livetime [s]
ontime3	2062.0589953661	Sum of GTIs [s]
ontime5	2063.7999855876	Sum of GTIs [s]
ontime6	2063.7999855876	Sum of GTIs [s]
ontime7	2063.7999855876	Sum of GTIs [s]
ontime8	2063.7999855876	Sum of GTIs [s]
l2events	12184	Number of level 2 events



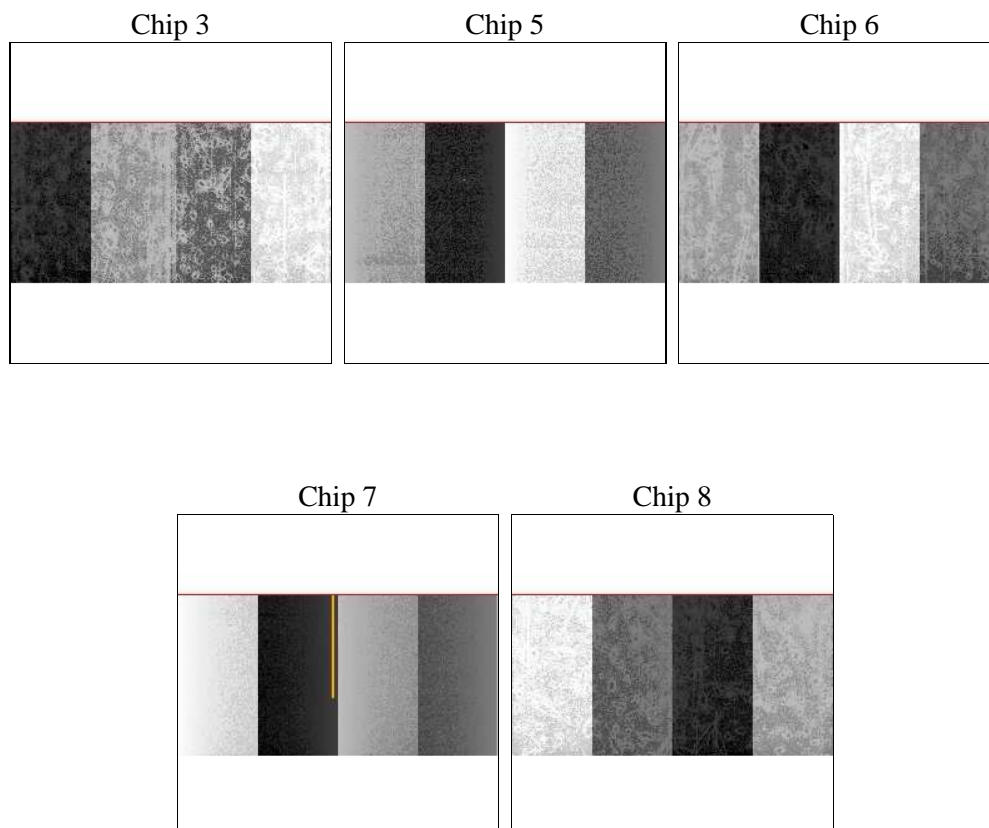
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	2063.7999855876	Sum of GTIs [s]
caldsver	4.4.7	 	ontime3	2062.0589953661	Sum of GTIs [s]
date	2012-02-01T08:00:04	Date and time of file creation	ontime5	2063.7999855876	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	2063.7999855876	Sum of GTIs [s]
			ontime7	2063.7999855876	Sum of GTIs [s]
			ontime8	2063.7999855876	Sum of GTIs [s]
			l1events	49234	Number of level 1 events

2.1.4 Events

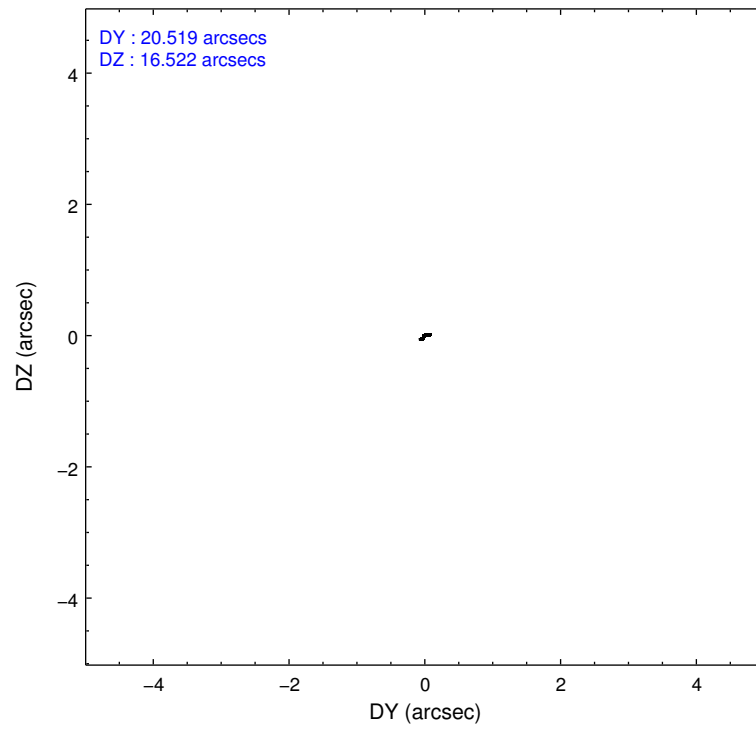
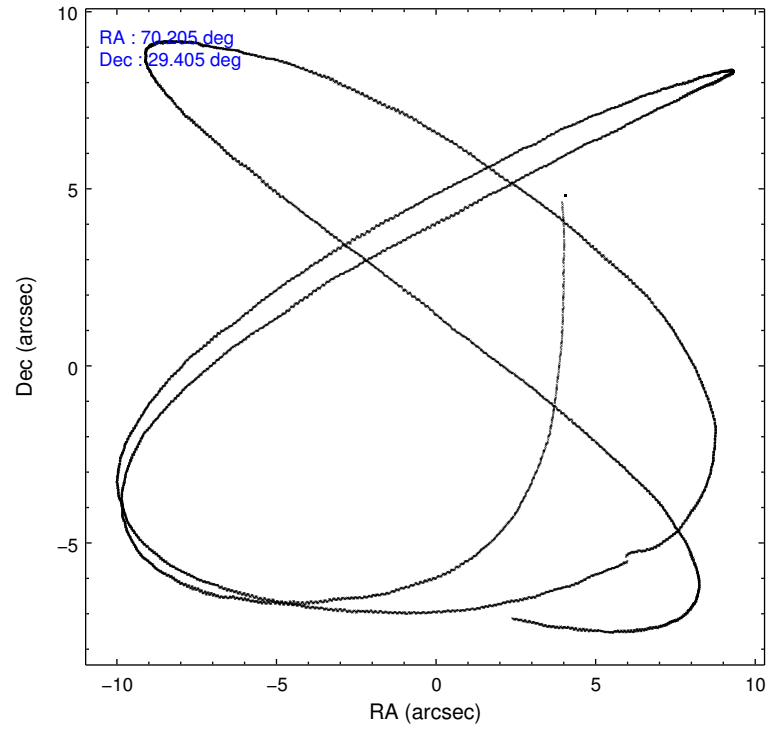
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	7920	13002	8222	9445	10645
rejected events	7125	6189	7273	5071	7892
rejected %	89%	47%	88%	53%	74%

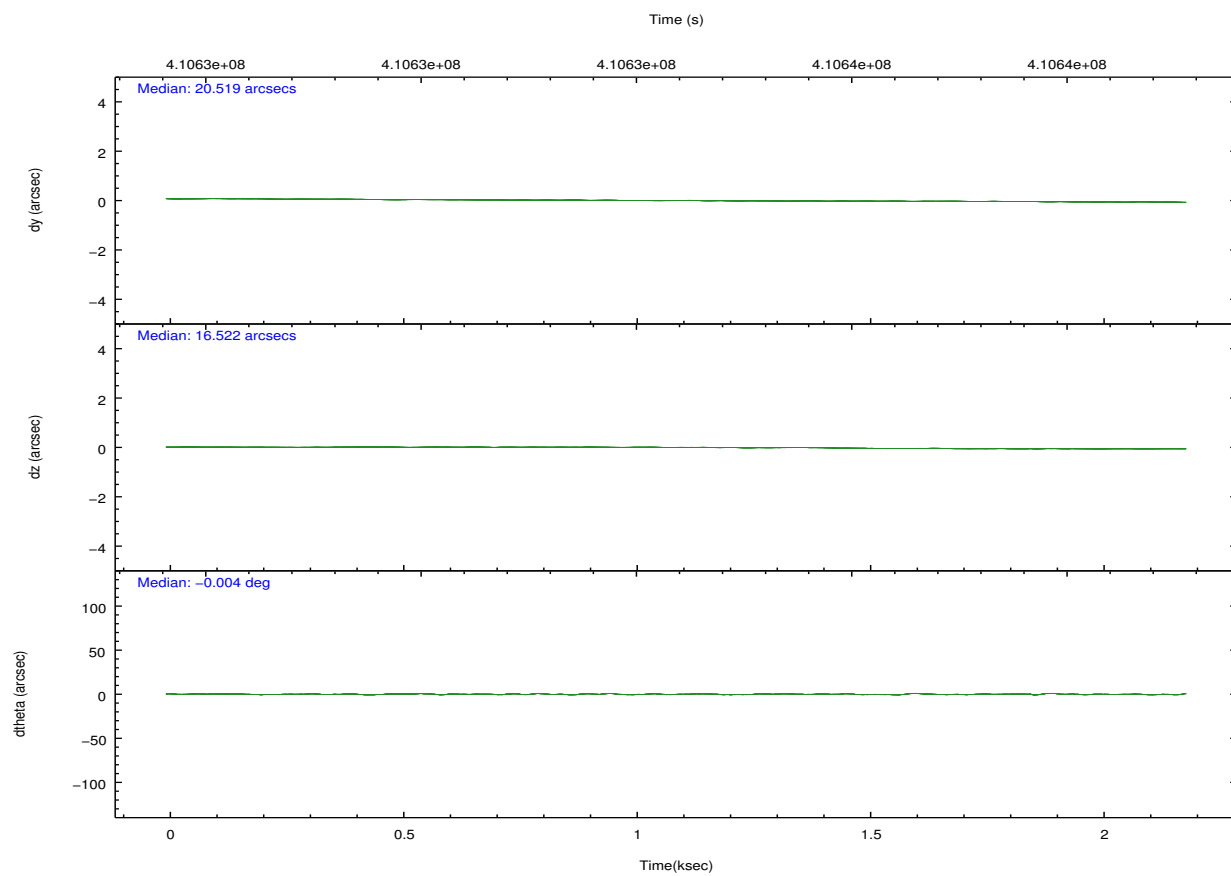
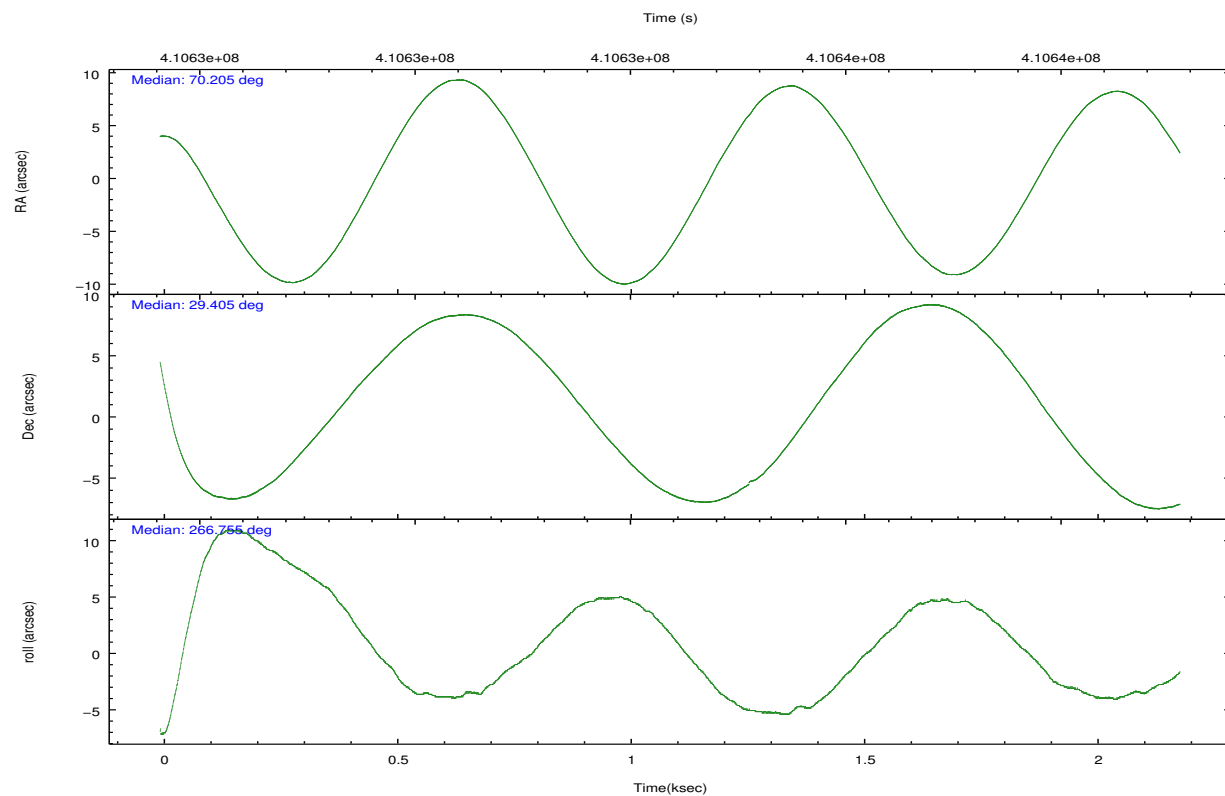
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	263	1346	322	435	761
	3%	10%	3%	4%	7%
grade 1 events	4	28	3	13	5
	0%	0%	0%	0%	0%
grade 2 events	158	1950	210	946	632
	1%	14%	2%	10%	5%
grade 3 events	108	332	96	407	313
	1%	2%	1%	4%	2%
grade 4 events	102	265	101	405	281
	1%	2%	1%	4%	2%
grade 5 events	357	1051	376	1019	494
	4%	8%	4%	10%	4%
grade 6 events	165	2927	222	2183	767
	2%	22%	2%	23%	7%
grade 7 events	6763	5103	6892	4037	7392
	85%	39%	83%	42%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	70.190224	70.20482676216376	CCD I2 on	N	N
[deg] Pointing Dec	29.429563	29.4051864203556	CCD I3 on	Y	Y
[deg] Pointing Roll	266.609720	266.7591117036167	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	410633679.184000	410631911.55598	CCD S5 on	N	N
Observation start date	2011-01-05T16:53:33	2011-01-05T16:25:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	410635679.184000	410636889.98124	On-chip summing requested	N	N
Observation end date	2011-01-05T17:26:53	2011-01-05T17:48:09	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	257	257
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

2.3 Aspect



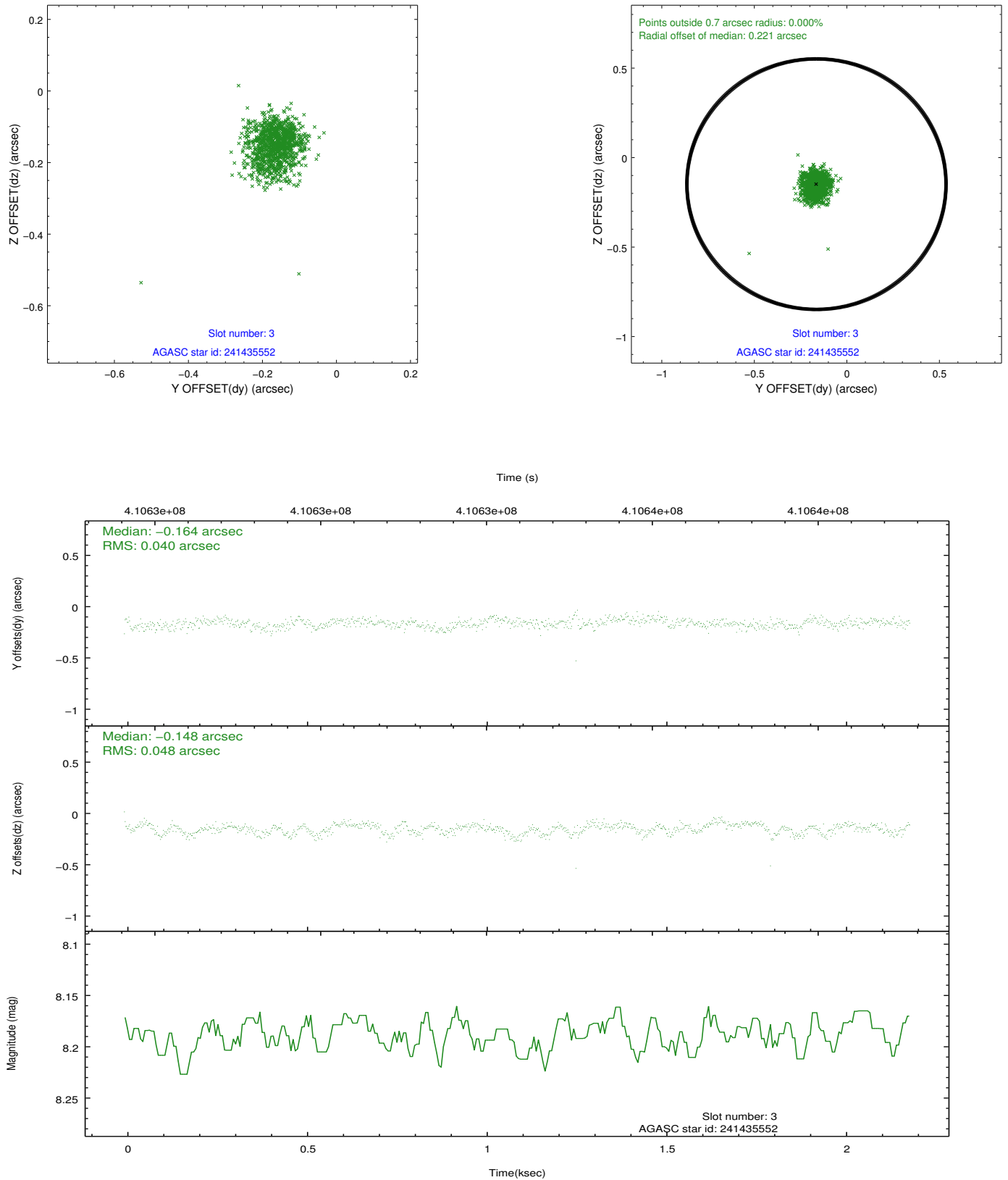


Slot Statistics

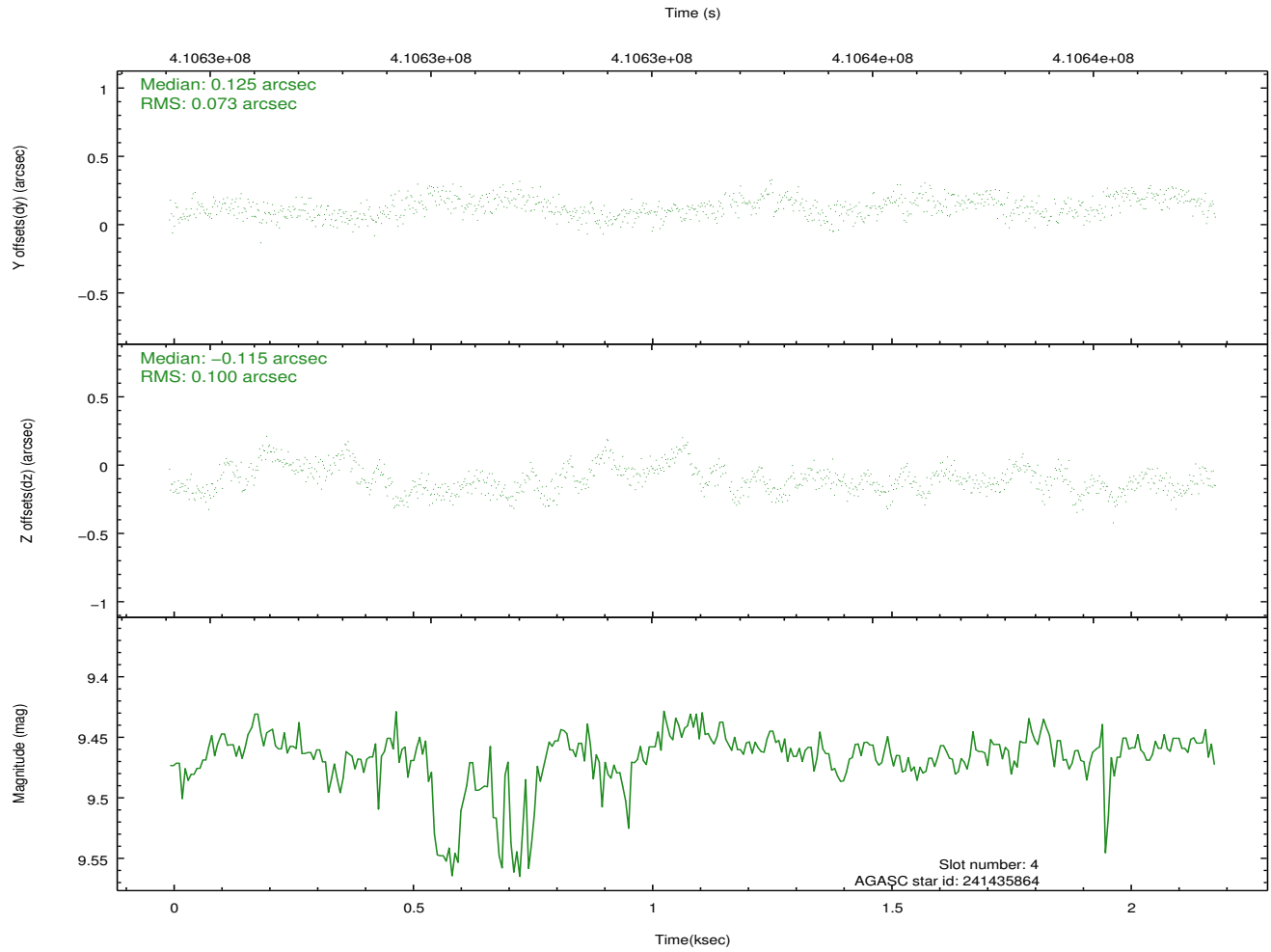
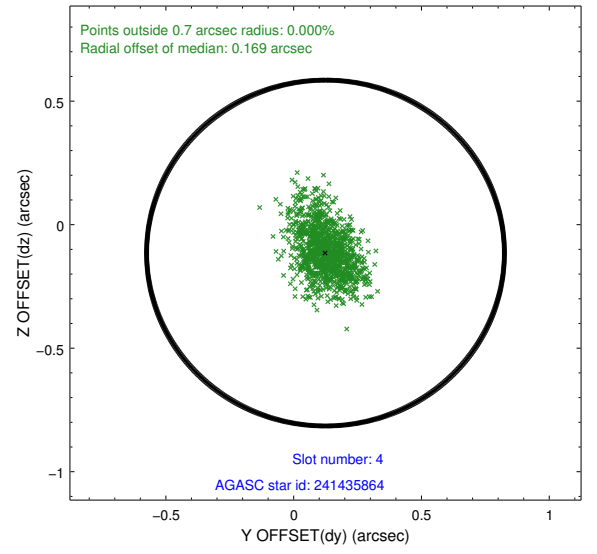
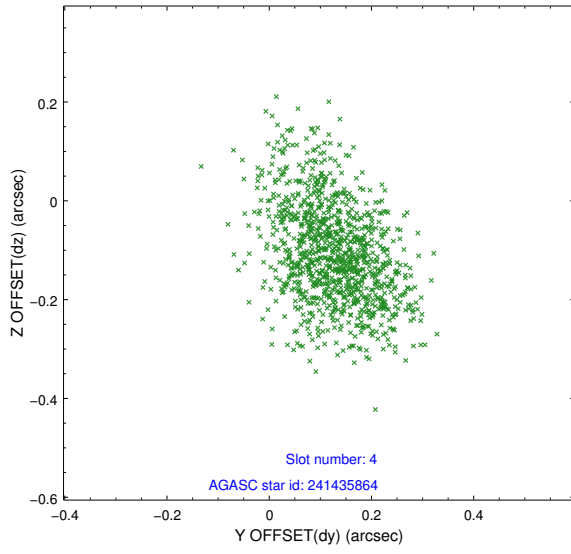
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	533	-0.107	-0.027	0.006	0.009	0.000000	0.000000	-773.76	-1737.95
1	FID	ACIS-S-4	6.99	533	0.237	0.059	0.005	0.010	0.000000	0.000000	2138.49	167.50
2	FID	ACIS-S-5	7.02	533	-0.162	-0.023	0.006	0.010	0.000000	0.000000	-1822.83	164.52
3	GUIDE	241435552	8.19	1067	-0.164	-0.148	0.064	0.105	70.427105	29.208135	751.13	790.34
4	GUIDE	241435864	9.46	1059	0.125	-0.115	0.131	0.218	70.262478	29.727932	-1084.57	162.97
5	GUIDE	241443304	8.70	1061	-0.002	-0.013	0.086	0.145	69.608317	29.387359	254.08	-1813.24
6	GUIDE	241444736	7.06	1066	-0.139	0.188	0.075	0.123	70.094527	29.972219	-1932.18	-414.51
7	GUIDE	241440016	8.92	1066	0.170	0.081	0.117	0.195	69.911517	28.783870	2369.70	-740.67

2.4 Star Slots

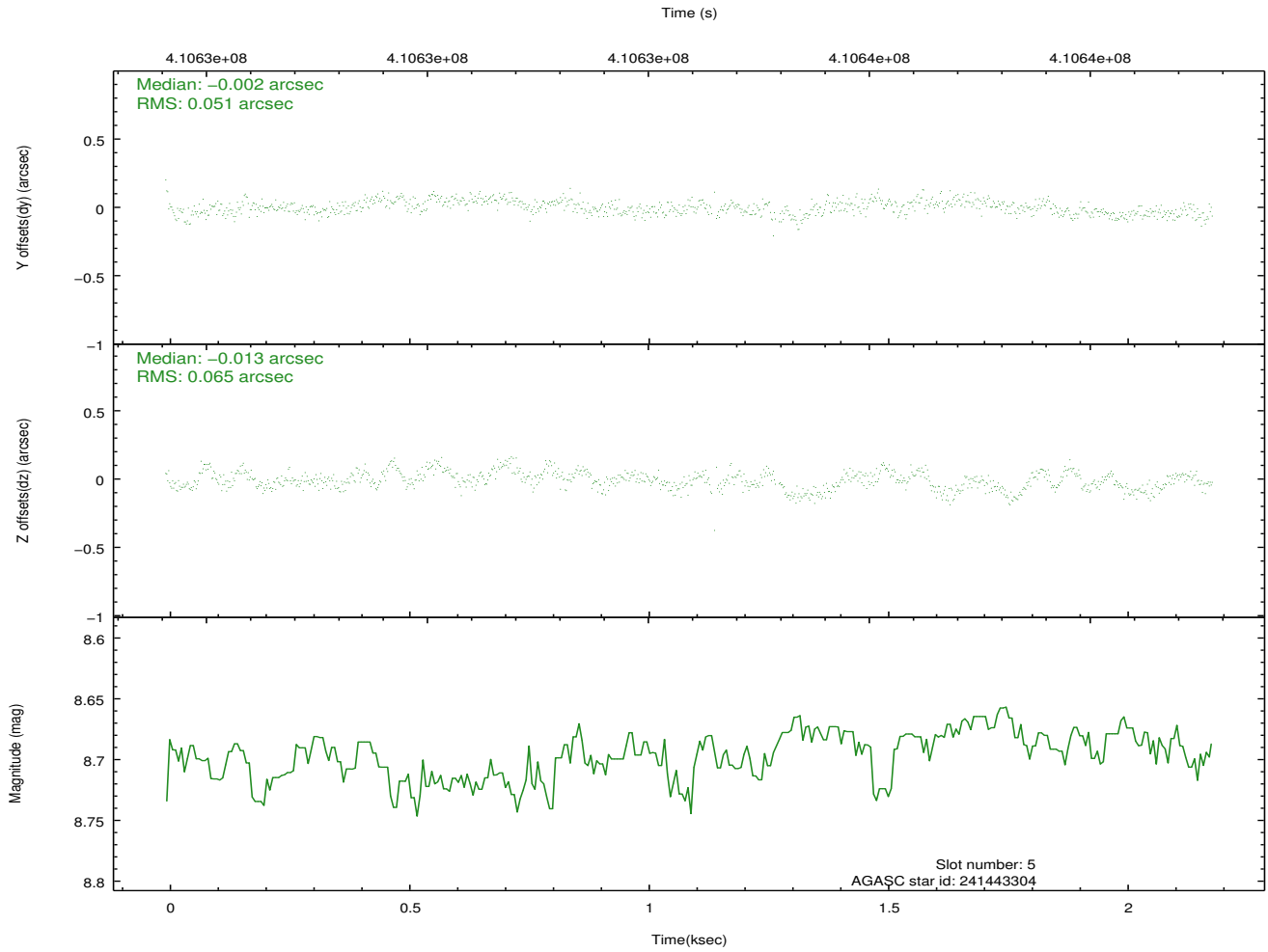
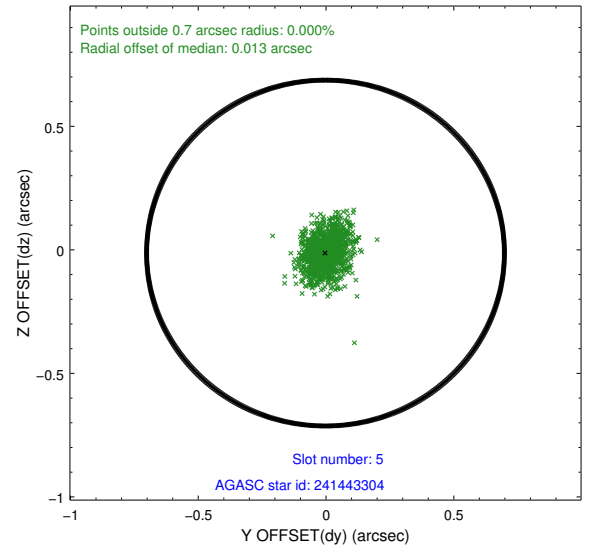
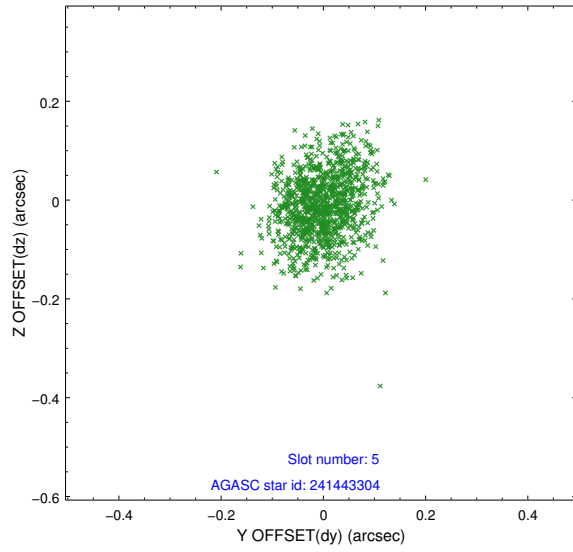
2.4.1 Slot 3



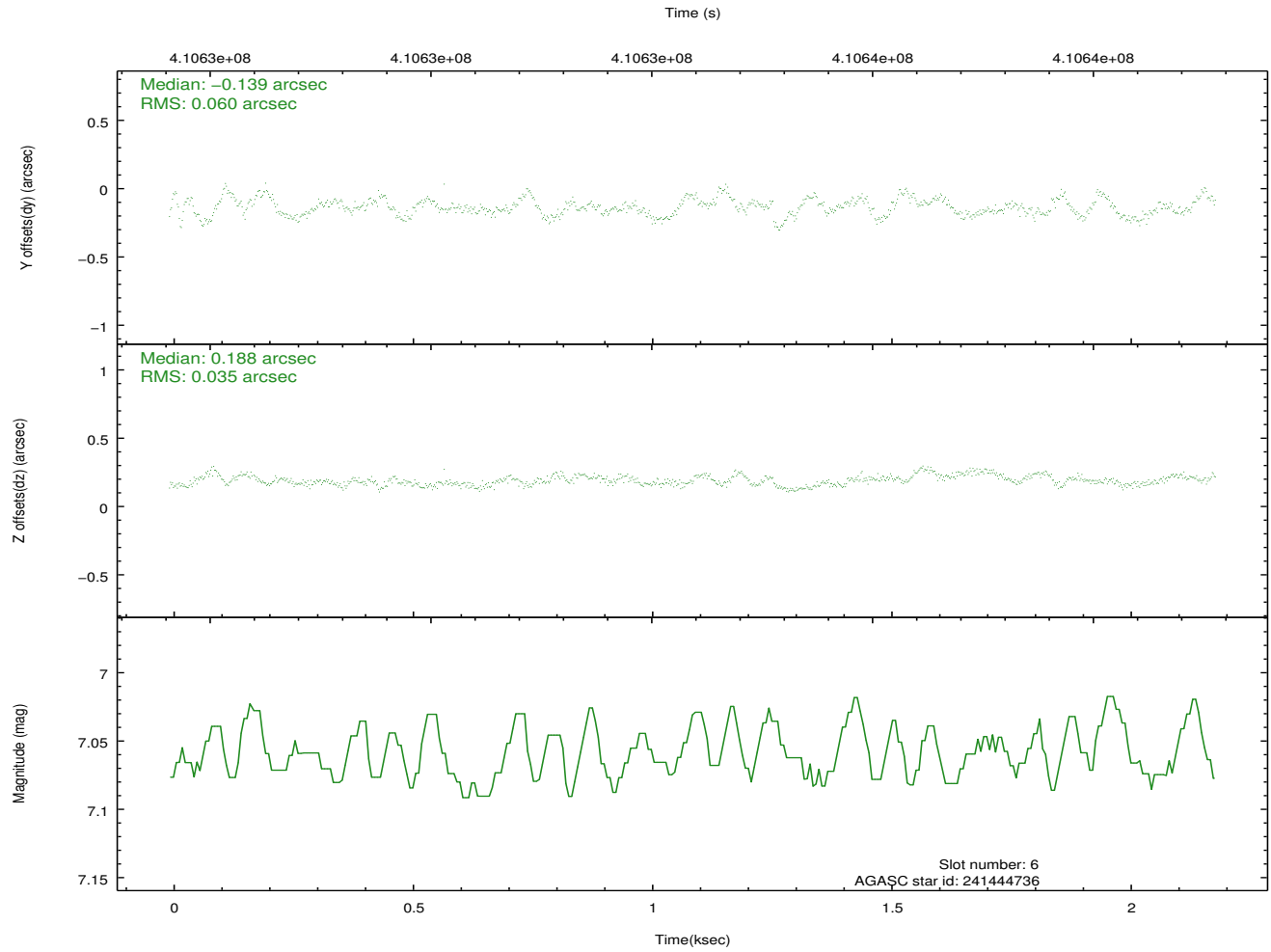
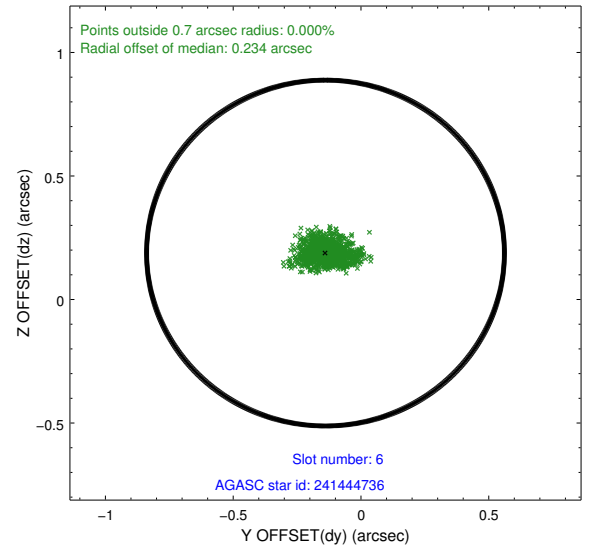
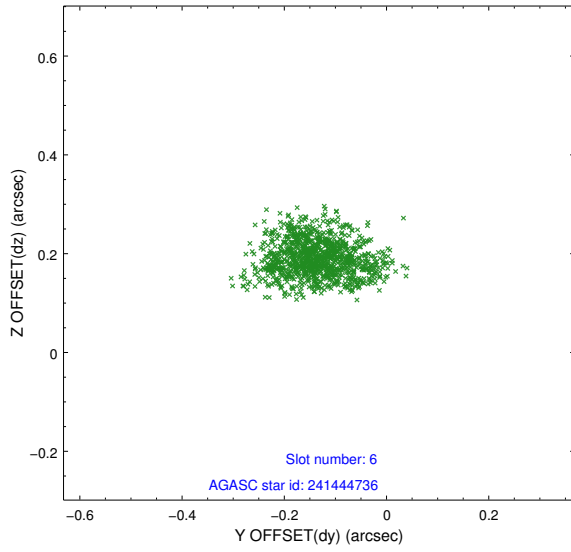
2.4.2 Slot 4



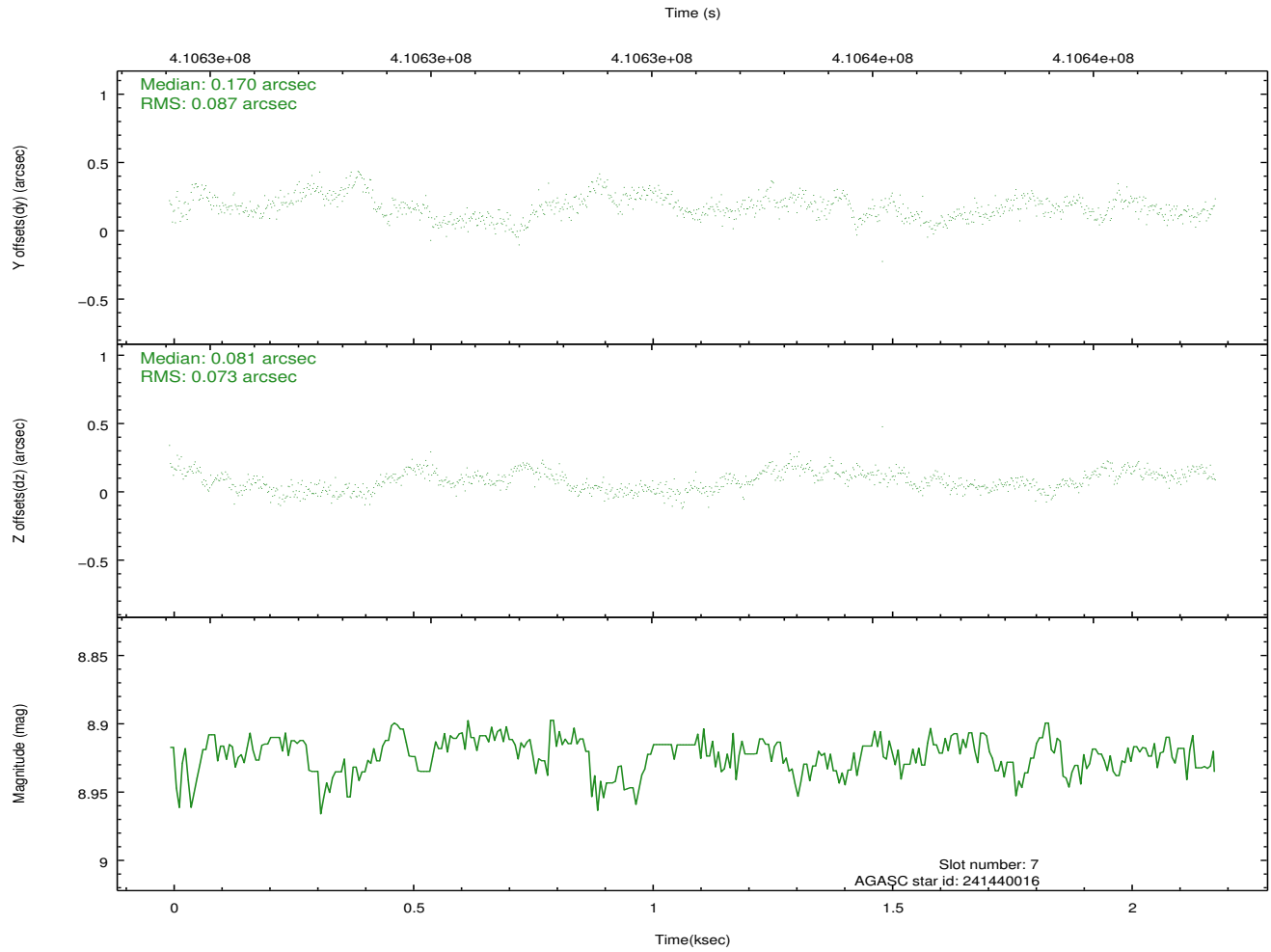
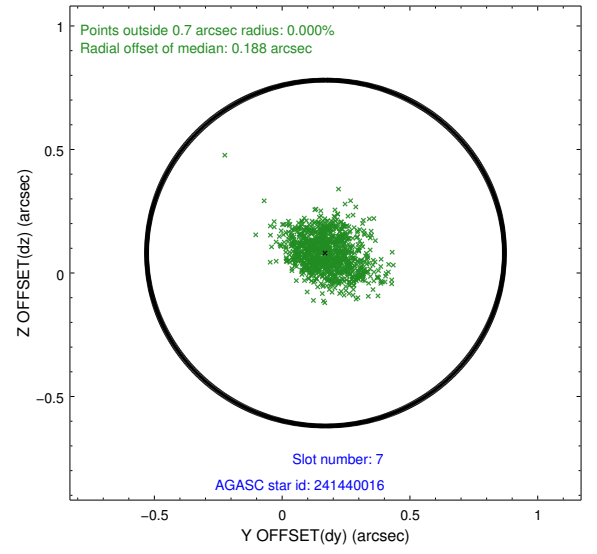
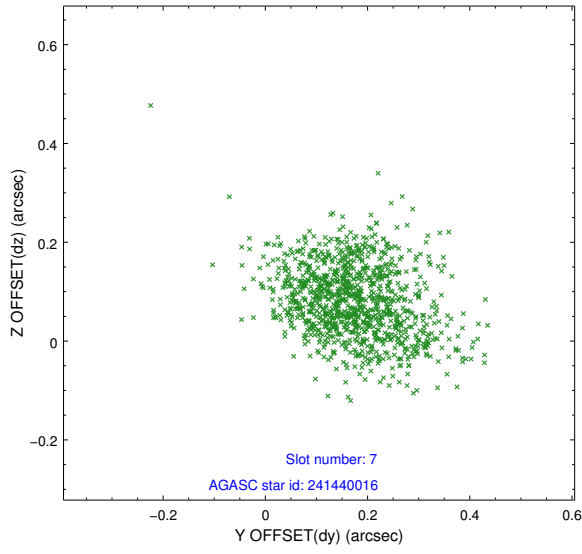
2.4.3 Slot 5



2.4.4 Slot 6

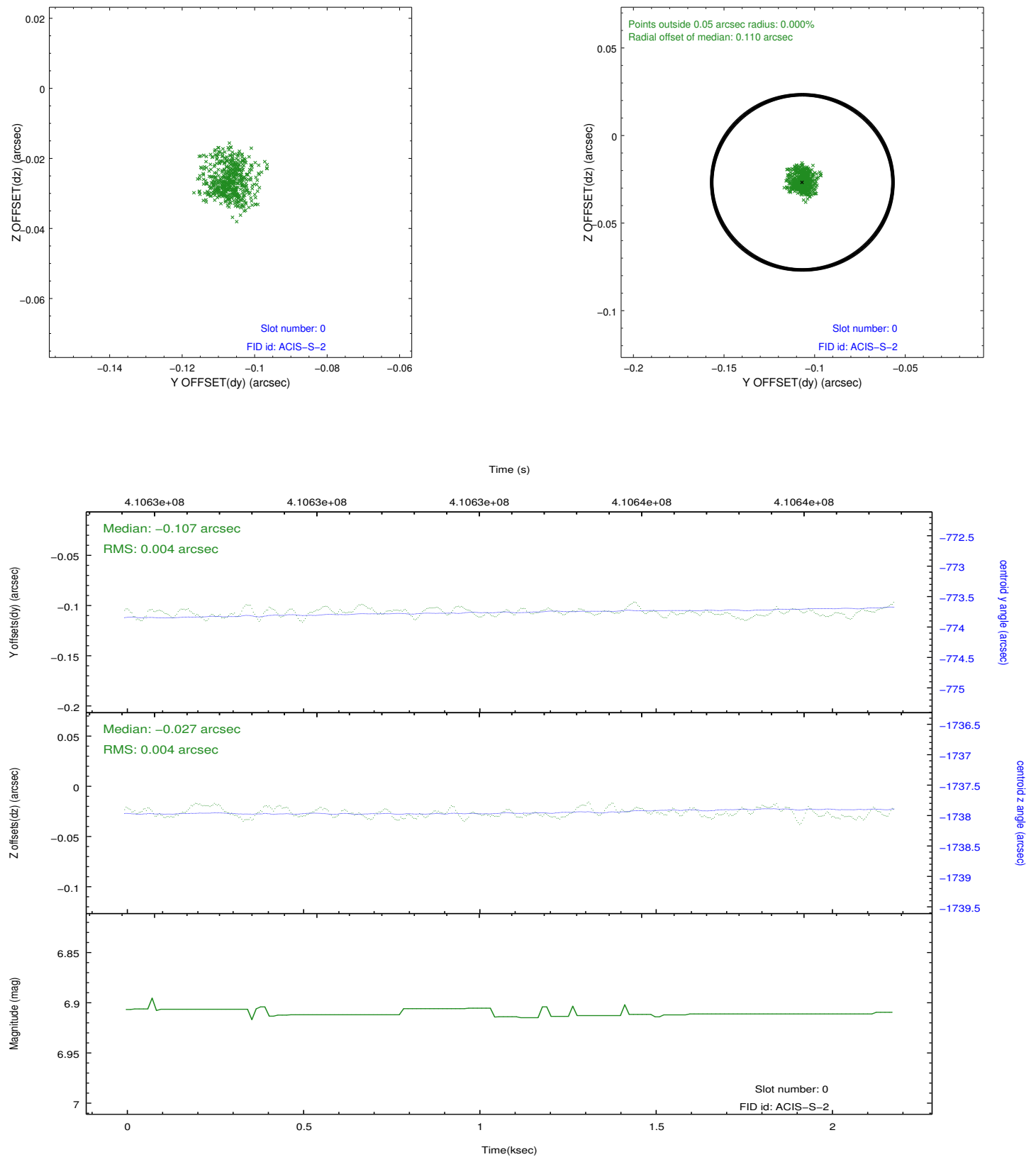


2.4.5 Slot 7

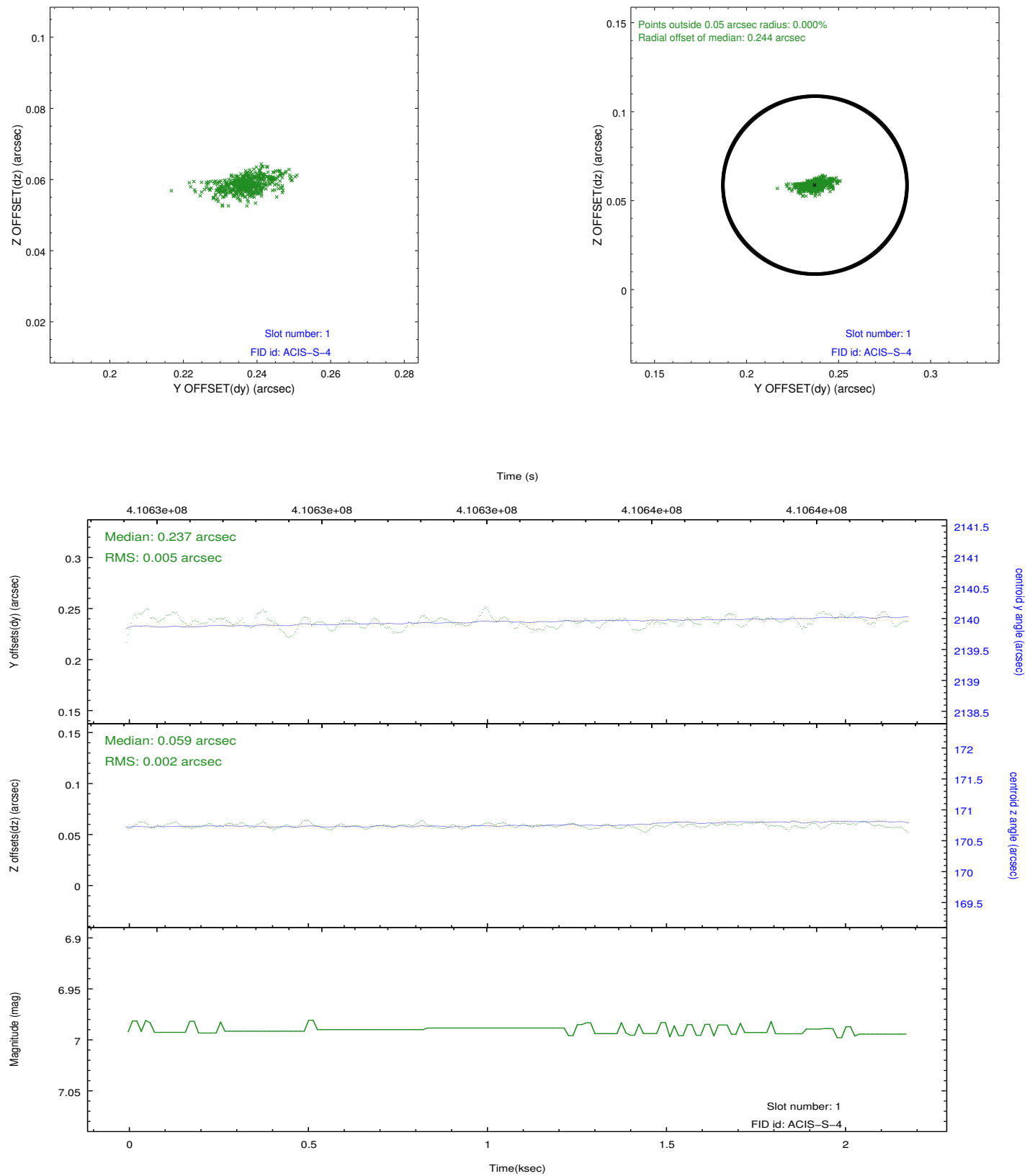


2.5 FID Slots

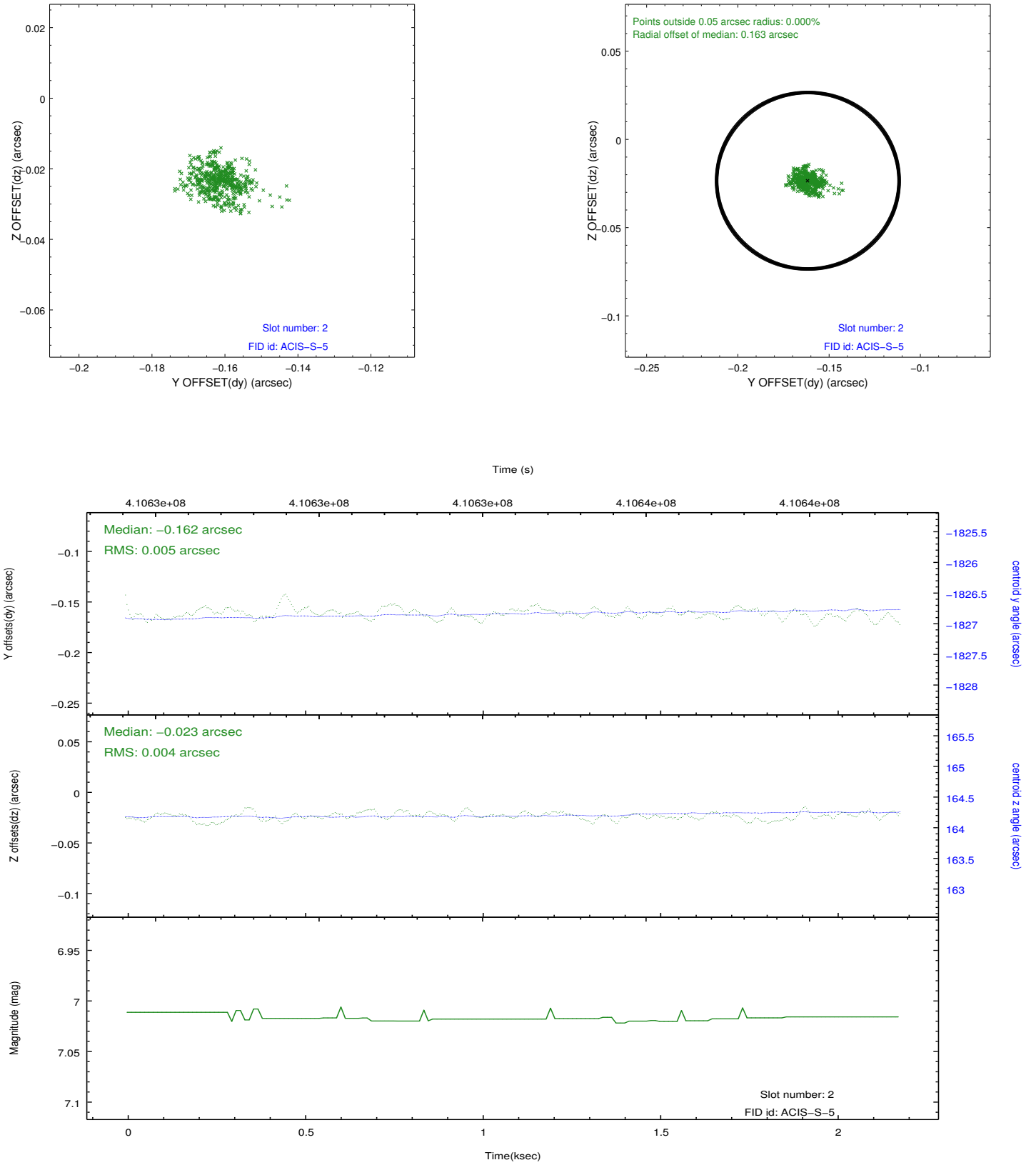
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.02.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.0637999855876

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.