

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12746 - L2 Version 2
Chandra X-Ray Center

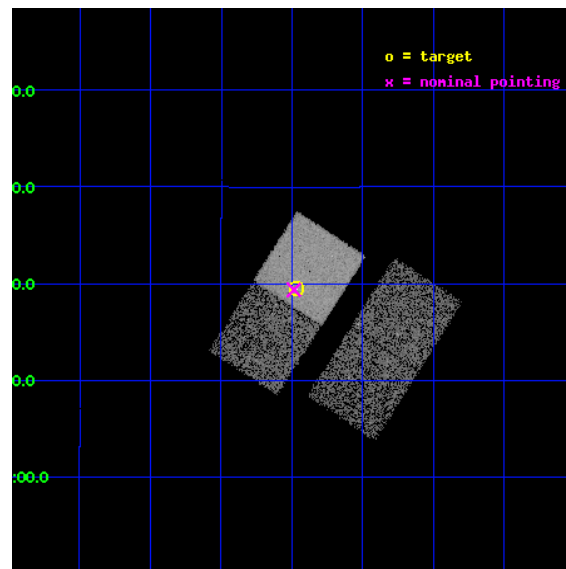
L2 Processing Date : Feb 2 2012

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1 Front

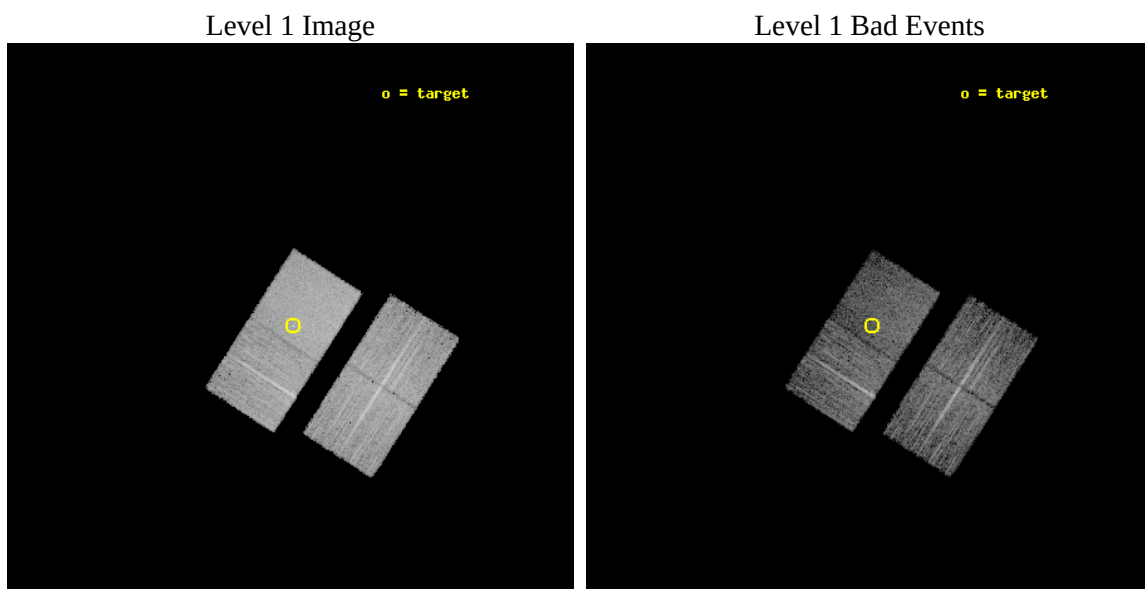
seq_num	702382	Sequence number
obs_id	12746	Observation id
title	Completing the Chandra 3C Snapshot Survey: Extragalactic Radio Sources with $z < 0.3$	Proposal title
observer	Dr. Daniel Harris	Principal investigator
object	3C 456	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	348.117083	Observer's specified target RA [deg]
dec_targ	9.324944	Observer's specified target Dec [deg]
ra_nom	348.12148908879	Nominal RA [deg]
dec_nom	9.3228453792721	Nominal Dec [deg]
roll_nom	302.66256281976	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8050.7000619173	Sum of GTIs [s]
livetime	7945.5117387692	Livetime [s]
ontime2	8050.7000619173	Sum of GTIs [s]
ontime3	8050.7000619173	Sum of GTIs [s]
ontime6	8050.7000619173	Sum of GTIs [s]
ontime7	8050.7000619173	Sum of GTIs [s]
l2events	47425	Number of level 2 events



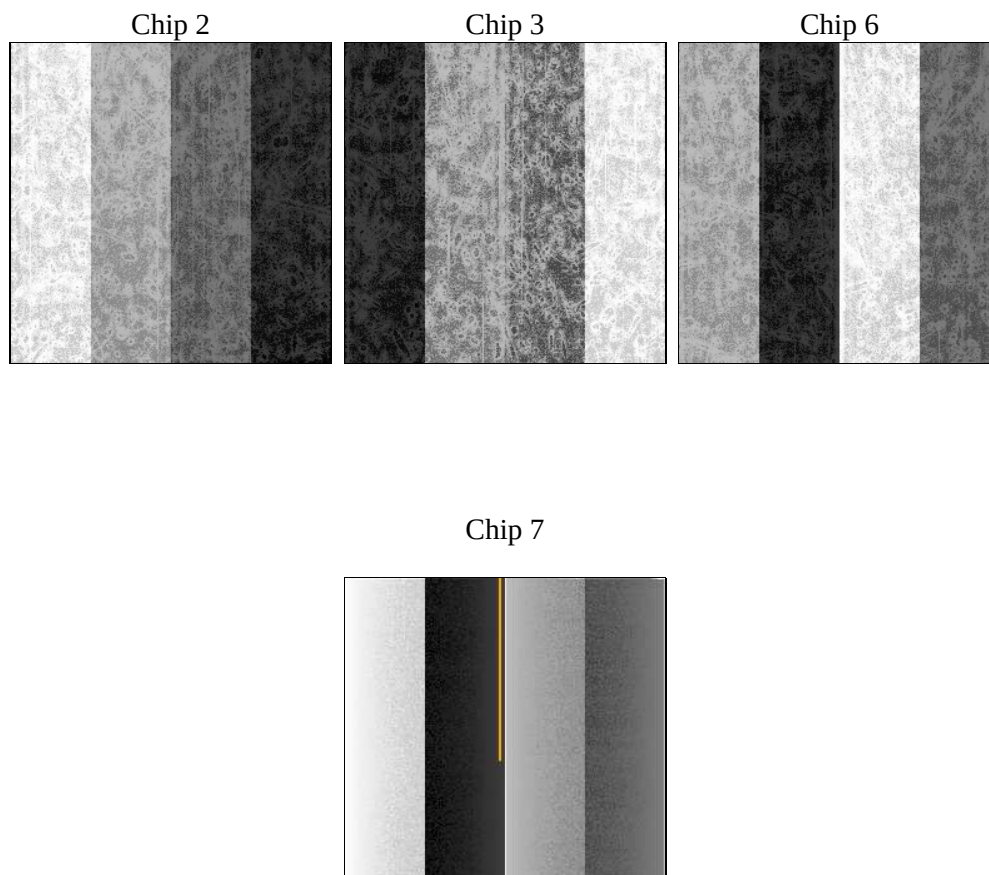
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	8050.7000619173	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	8050.7000619173	Sum of GTIs [s]
date	2012-02-02T04:31:17	Date and time of file creation	ontime3	8050.7000619173	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	8050.7000619173	Sum of GTIs [s]
			ontime7	8050.7000619173	Sum of GTIs [s]
			l1events	237289	Number of level 1 events

2.1.4 Events

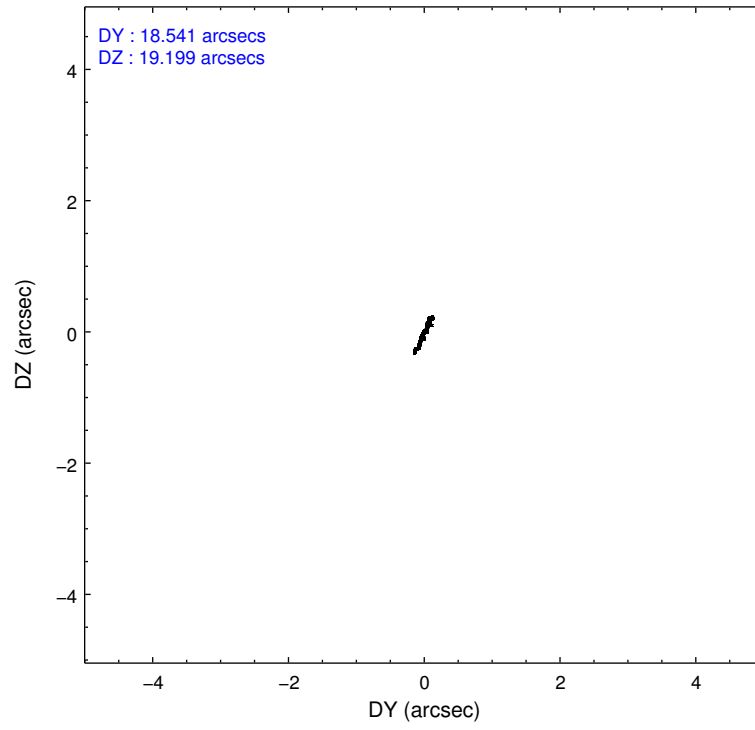
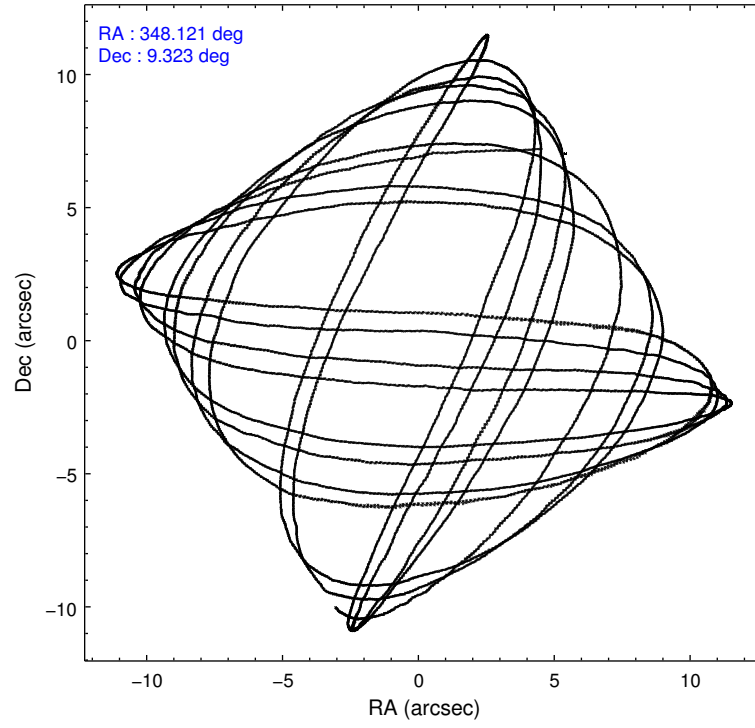
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	56015	53650	56752	70872
rejected events	49811	47727	50187	38669
rejected %	88%	88%	88%	54%

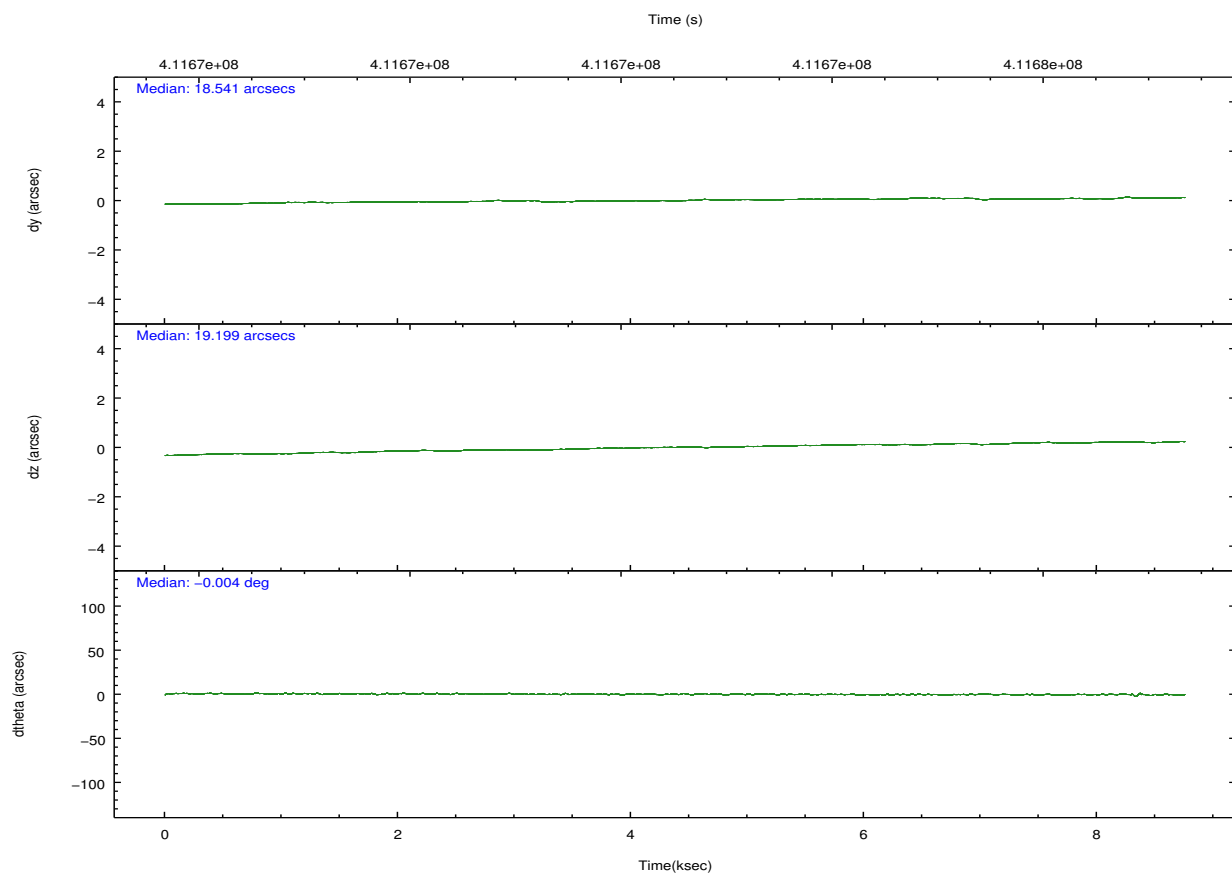
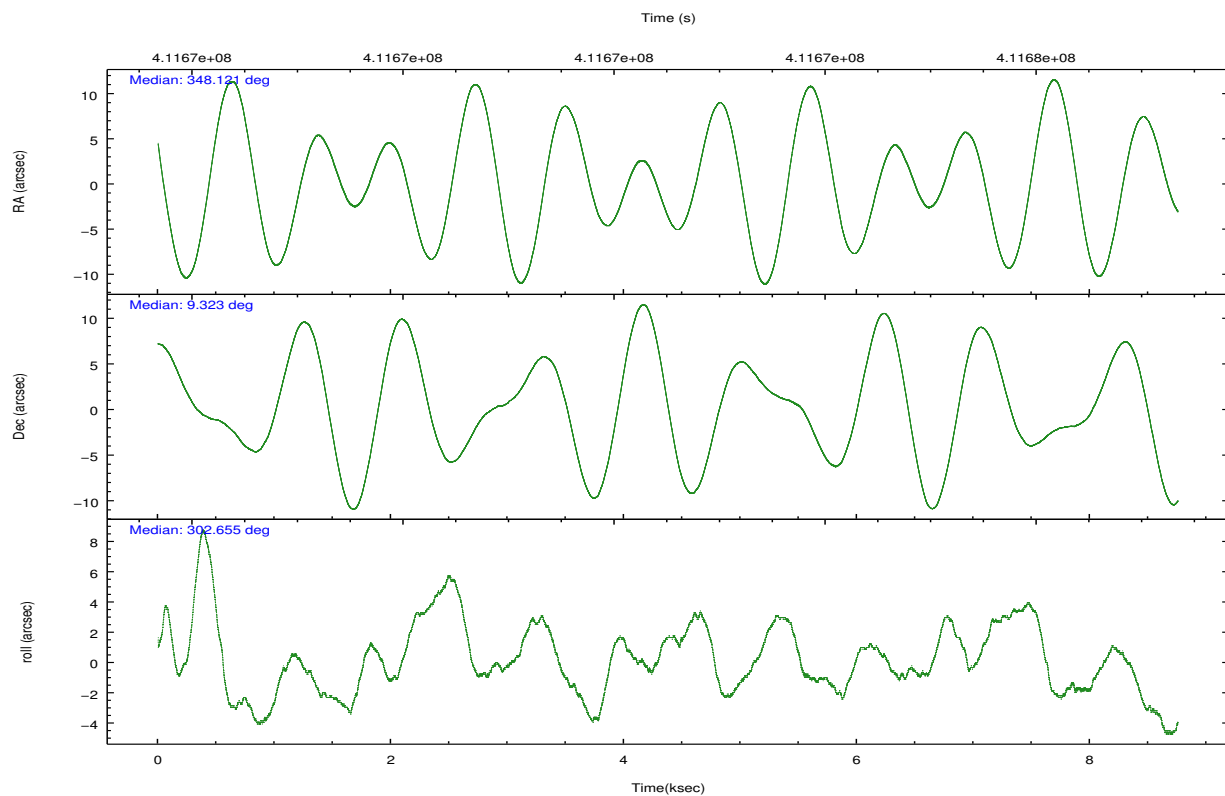
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2211	2090	2299	3014
	3%	3%	4%	4%
grade 1 events	30	30	35	71
	0%	0%	0%	0%
grade 2 events	1475	1240	1438	6502
	2%	2%	2%	9%
grade 3 events	673	727	657	2957
	1%	1%	1%	4%
grade 4 events	661	630	715	2797
	1%	1%	1%	3%
grade 5 events	2151	2636	2555	7247
	3%	4%	4%	10%
grade 6 events	1189	1237	1459	16956
	2%	2%	2%	23%
grade 7 events	47625	45060	47594	31328
	85%	83%	83%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	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	348.096730	348.1214890887867	CCD I2 on	O1	Y
[deg] Pointing Dec	9.335062	9.32284537927214	CCD I3 on	O2	Y
[deg] Pointing Roll	302.509951	302.6625628197645	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	Y	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	N	N
[s] Observation start time (MET)	411668889.184000	411667733.04701	CCD S5 on	N	N
Observation start date	2011-01-17T16:27:03	2011-01-17T16:08:53	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	411676889.184000	411677185.085	On-chip summing requested	N	N
Observation end date	2011-01-17T18:40:23	2011-01-17T18:46:25	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



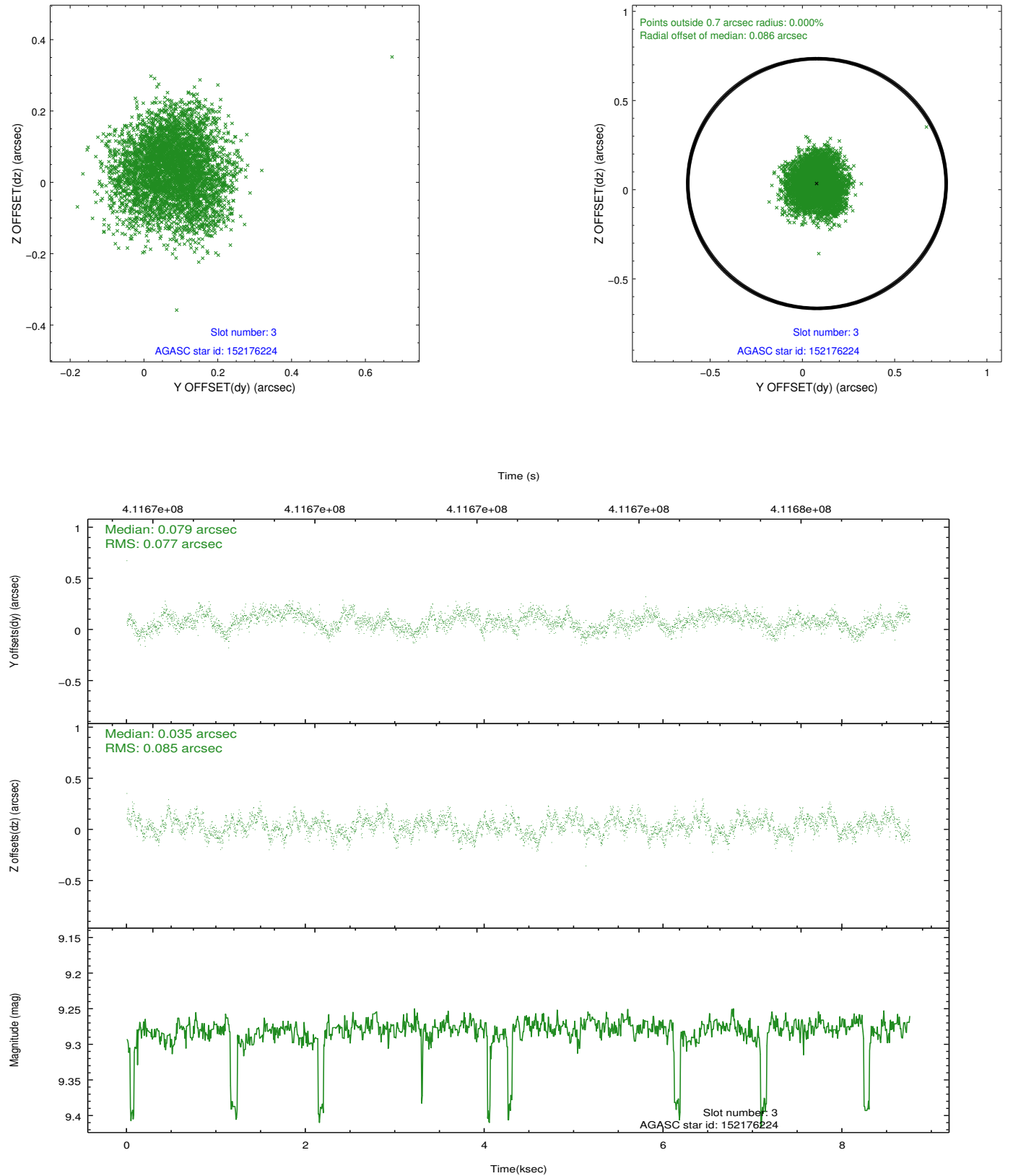


Slot Statistics

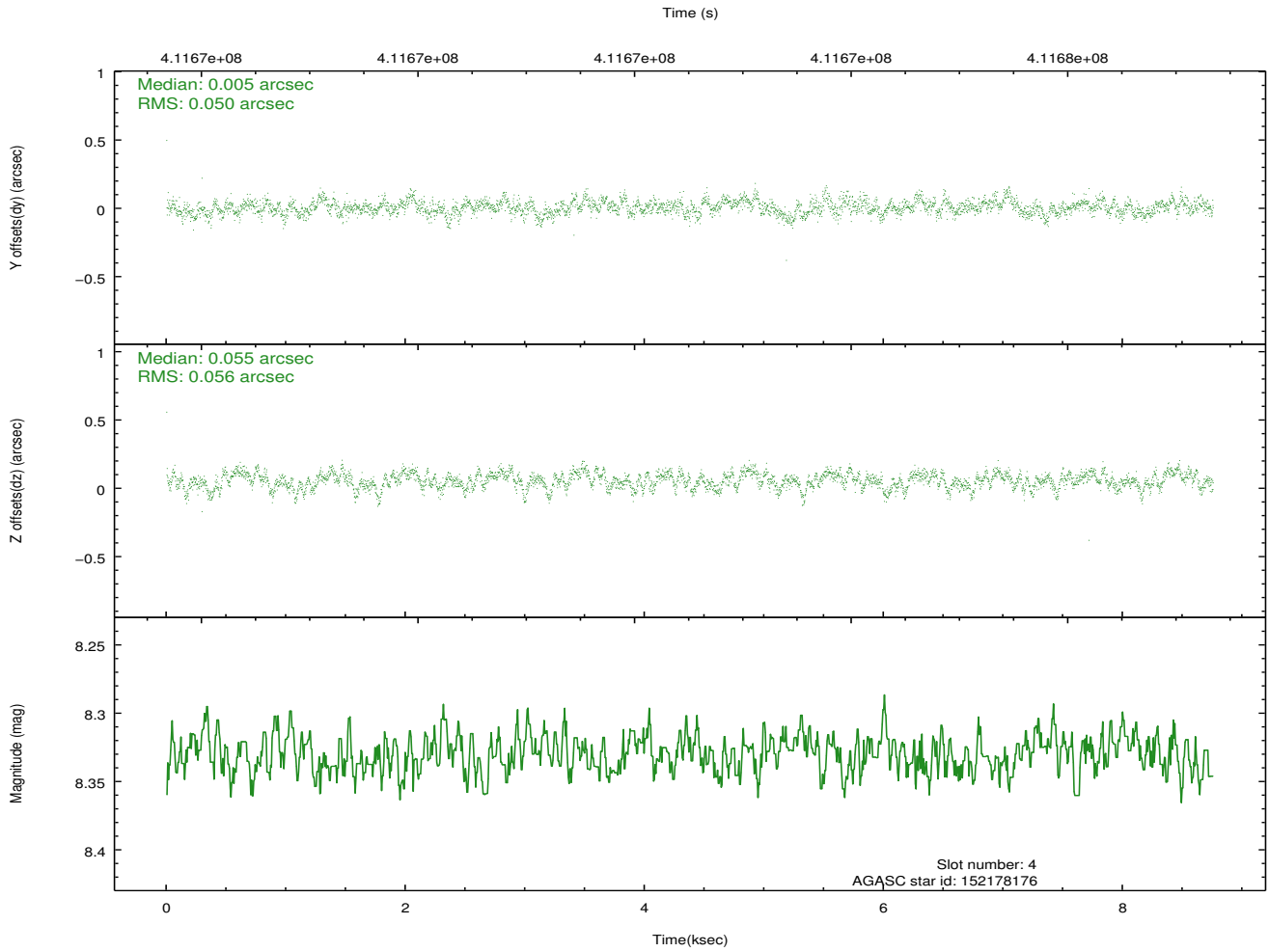
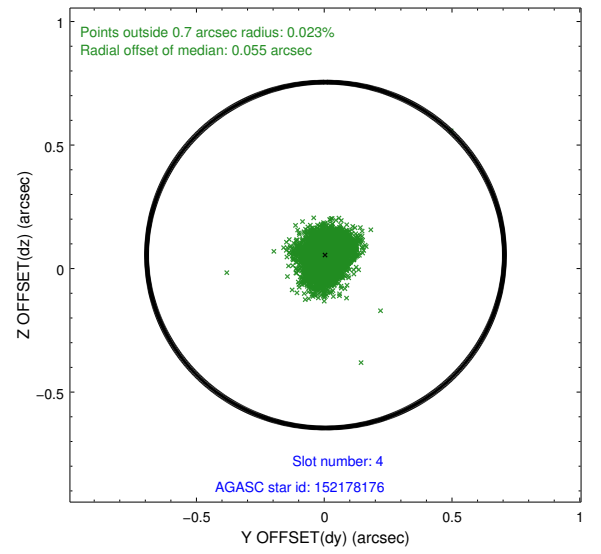
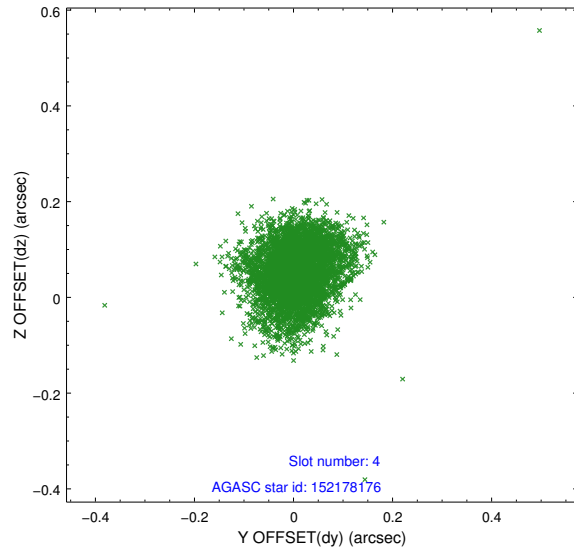
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	2136	-0.090	-0.052	0.009	0.015	0.000000	0.000000	-771.71	-1740.67
1	FID	ACIS-S-4	6.98	2136	0.237	0.057	0.007	0.013	0.000000	0.000000	2141.62	167.25
2	FID	ACIS-S-5	7.00	2136	-0.179	0.003	0.008	0.013	0.000000	0.000000	-1823.83	161.60
3	GUIDE	152176224	9.28	4236	0.079	0.035	0.124	0.190	347.443863	9.591399	-2024.83	-1457.20
4	GUIDE	152178176	8.33	4272	0.005	0.055	0.079	0.126	348.090571	9.029273	917.01	-610.32
5	GUIDE	152179744	9.37	4270	-0.071	-0.117	0.109	0.179	347.686109	8.938786	418.77	-1997.54
6	GUIDE	152180736	9.48	4257	-0.094	0.024	0.114	0.188	348.075286	9.120446	611.41	-478.96
7	GUIDE	152182808	9.30	4265	0.077	0.002	0.149	0.221	347.960321	8.802005	1358.42	-1440.37

2.4 Star Slots

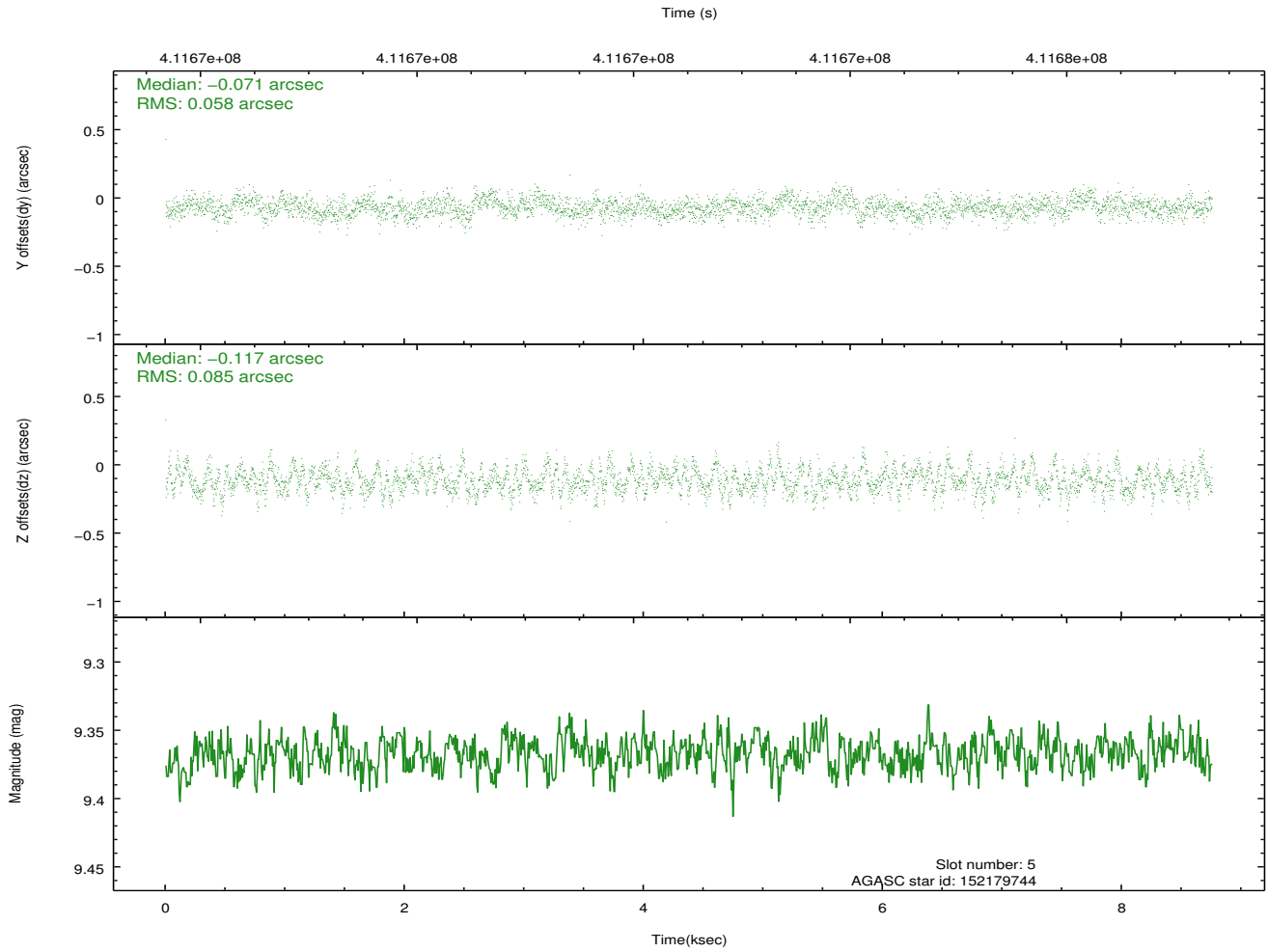
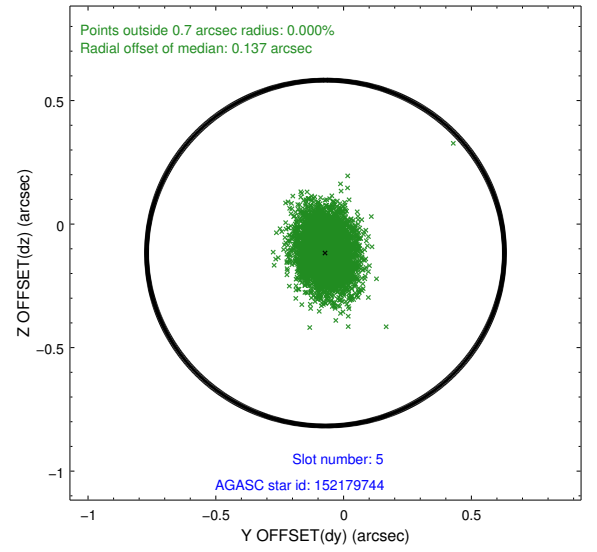
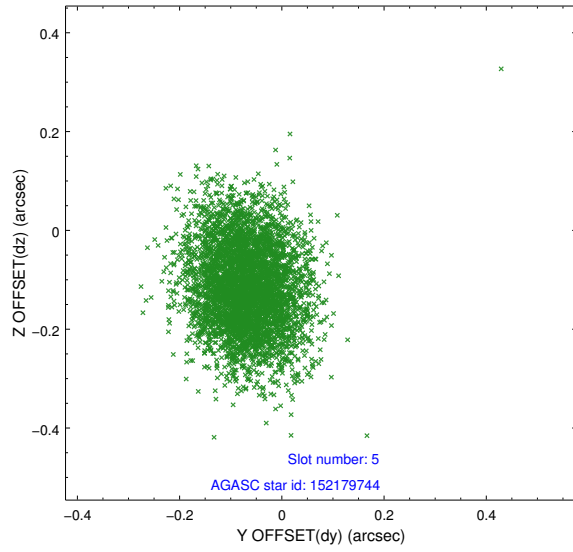
2.4.1 Slot 3



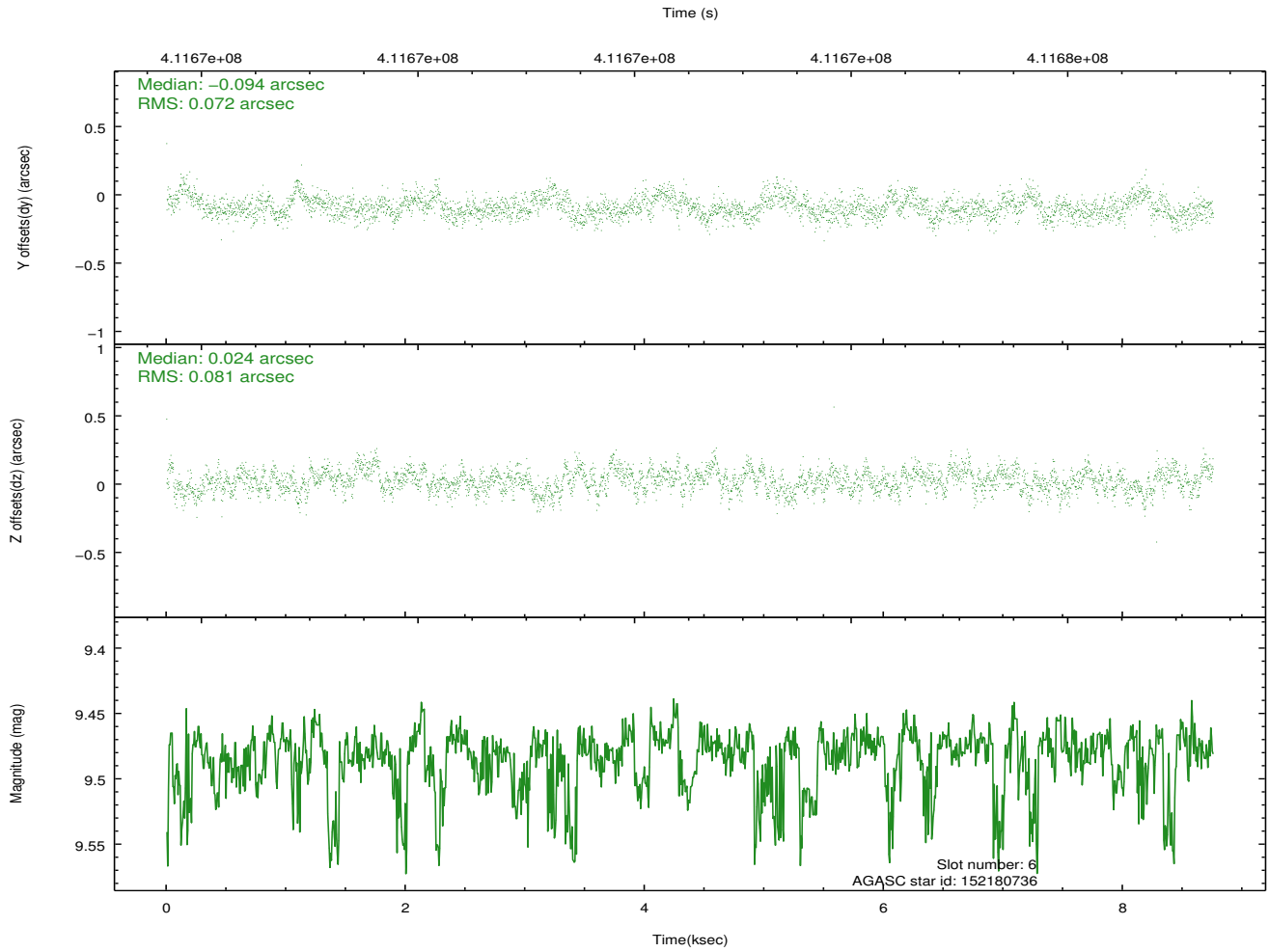
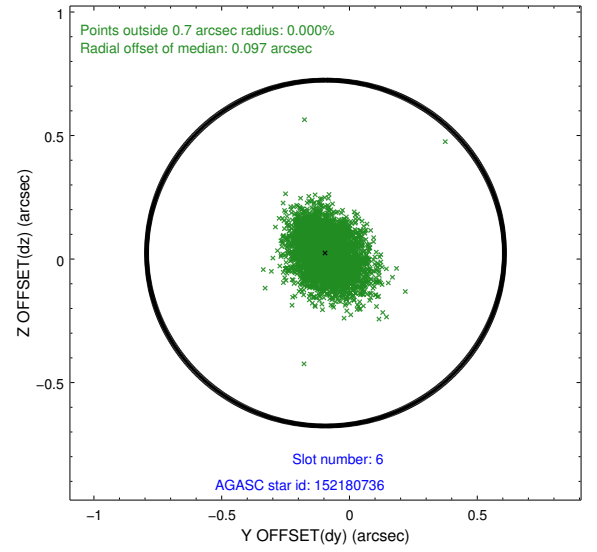
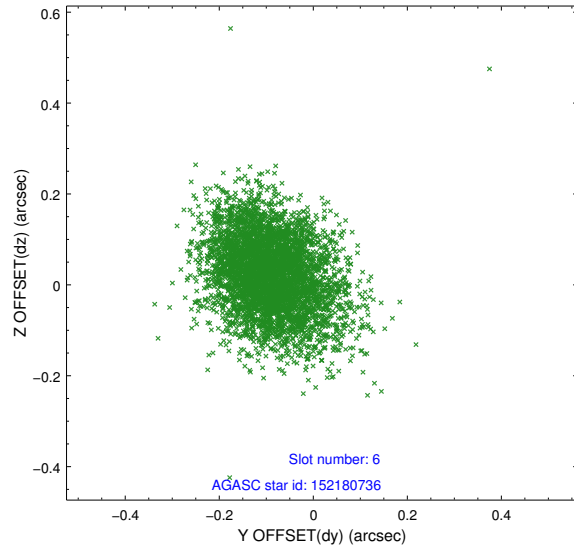
2.4.2 Slot 4



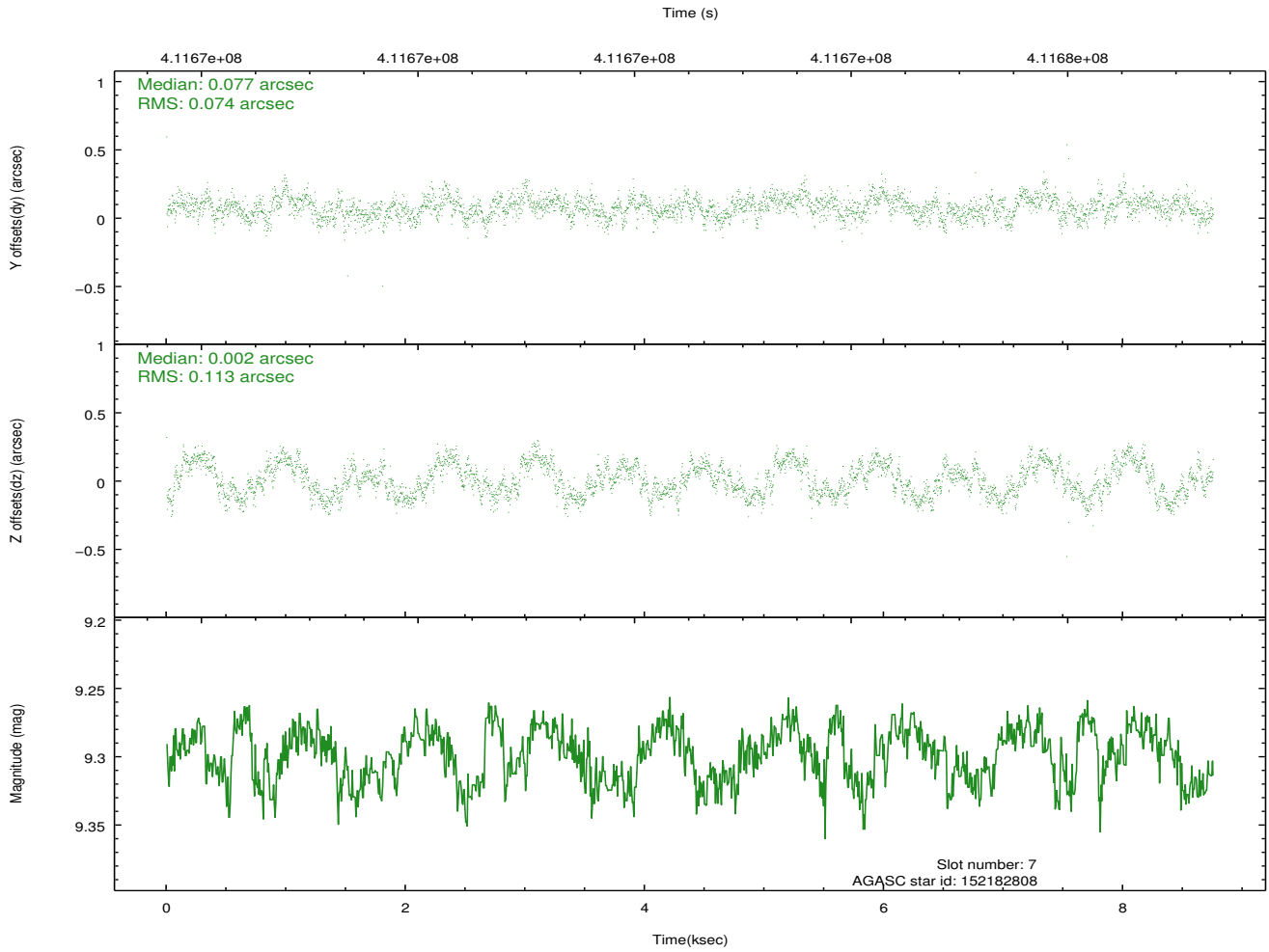
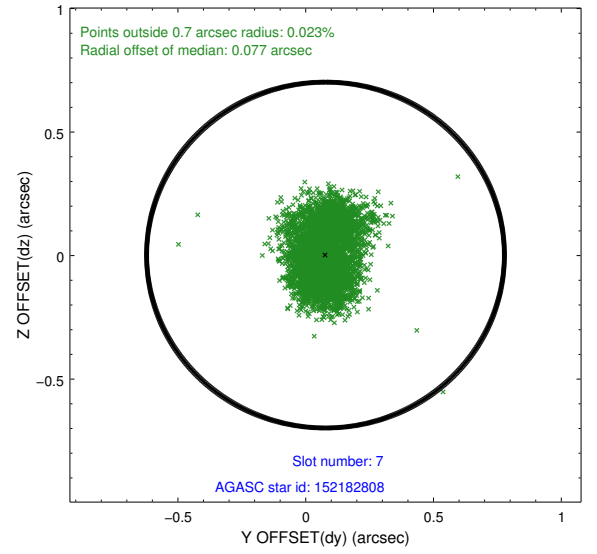
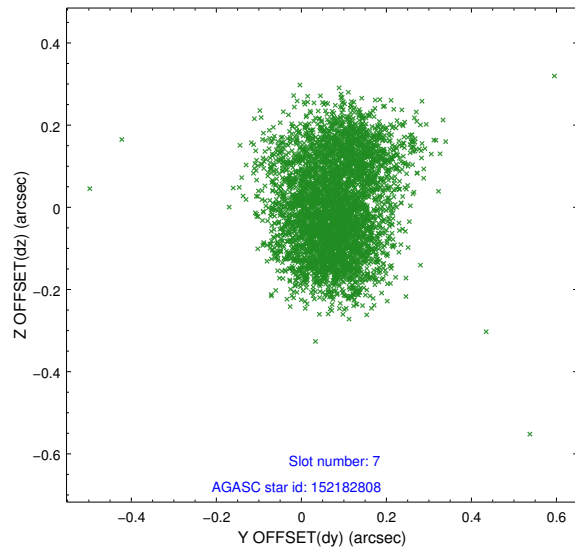
2.4.3 Slot 5



2.4.4 Slot 6

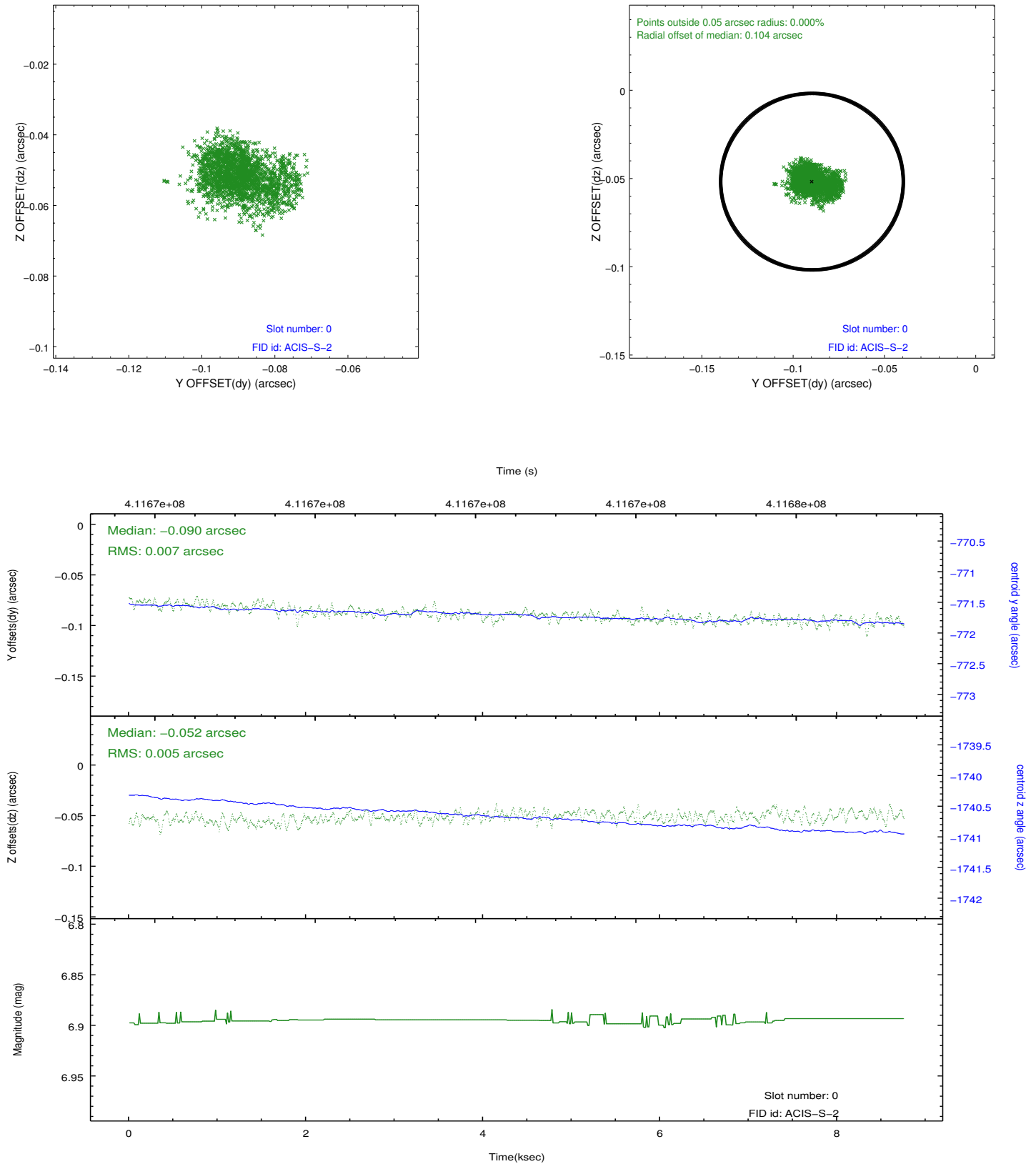


2.4.5 Slot 7

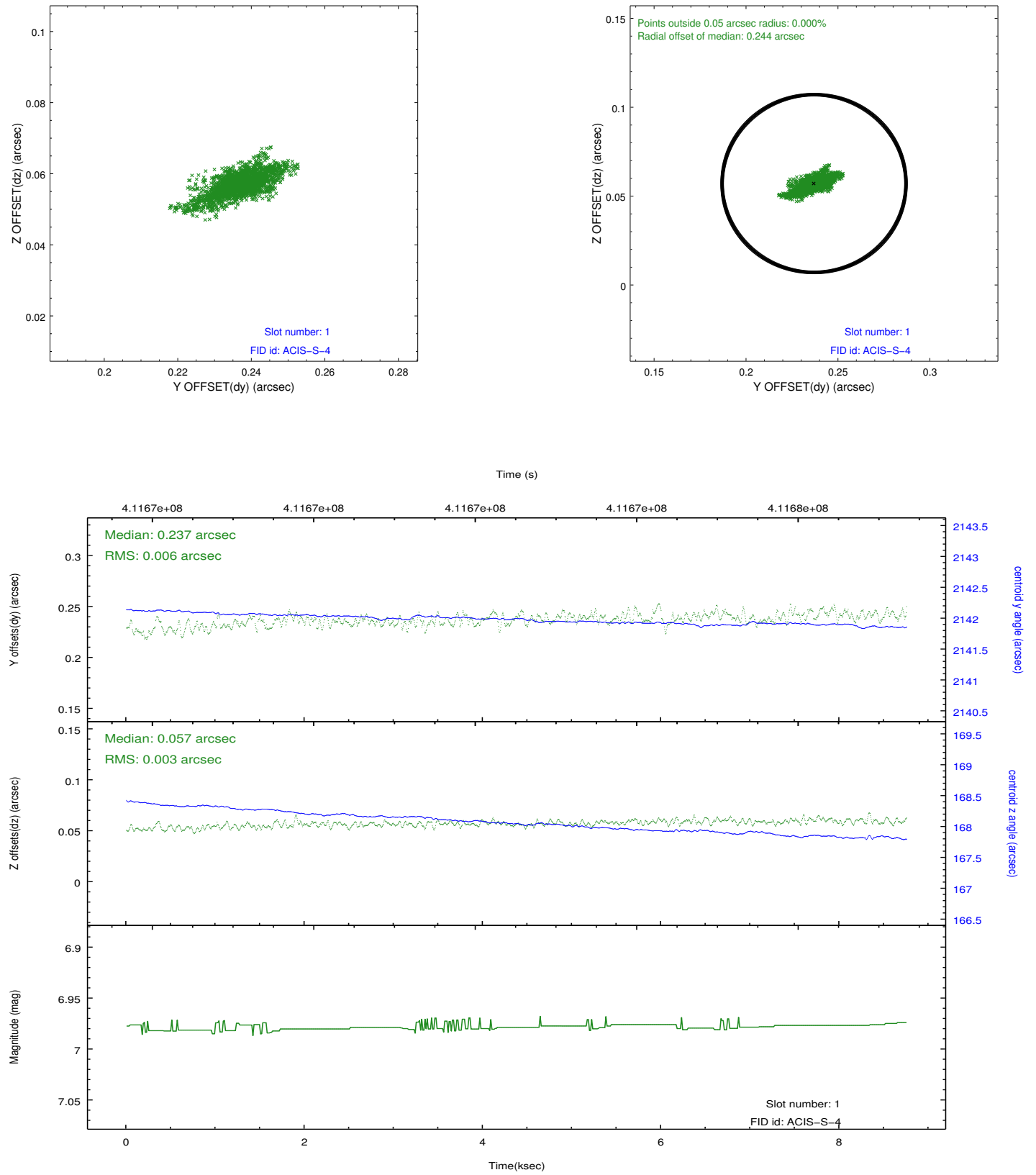


2.5 FID Slots

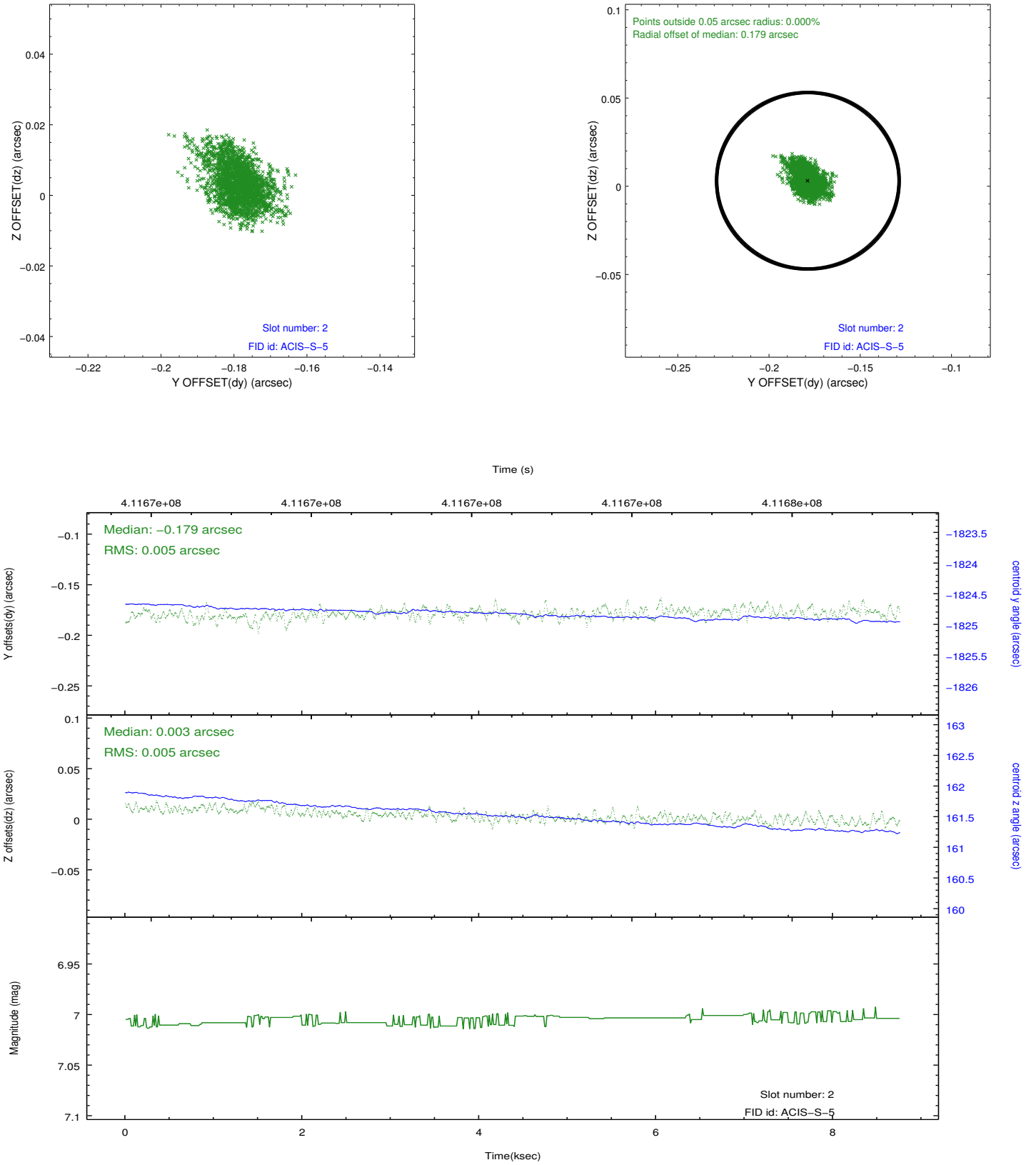
2.5.1 Slot 0



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)	2012.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.0507000619173

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.