

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12714 - L2 Version 2
Chandra X-Ray Center

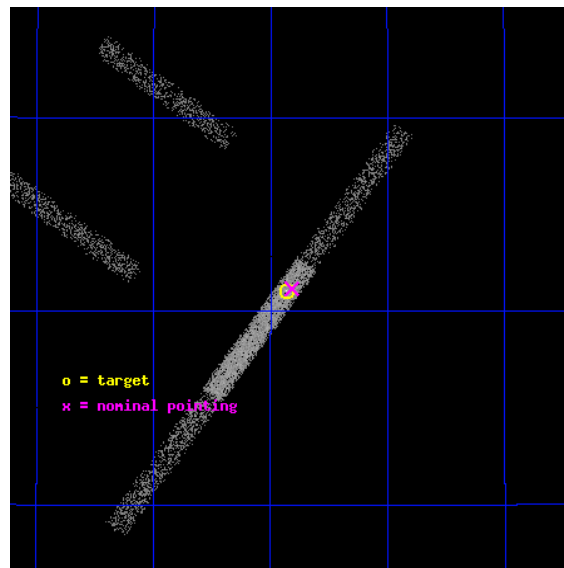
L2 Processing Date : Feb 2 2012

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1 Front

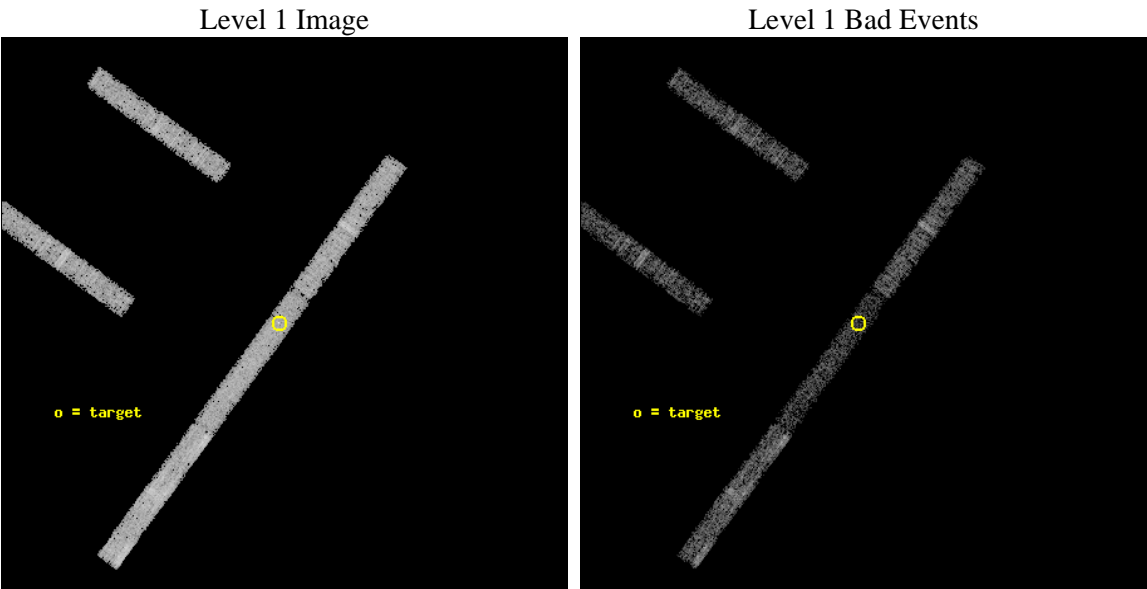
seq_num	702350	Sequence number
obs_id	12714	Observation id
title	First X-ray observations of Low-Power Compact Steep Spectrum Sources	
observer	Dr Magdalena Kunert-Bajraszewska	Principal investigator
object	0942+355	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	146.357917	Observer's specified target RA [deg]
dec_targ	35.350972	Observer's specified target Dec [deg]
ra_nom	146.35232142755	Nominal RA [deg]
dec_nom	35.352794969766	Nominal Dec [deg]
roll_nom	126.18059060254	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10064.599828541	Sum of GTIs [s]
livetime	9507.2059267771	Livetime [s]
ontime2	10064.505327702	Sum of GTIs [s]
ontime3	10064.587407708	Sum of GTIs [s]
ontime6	10064.599828541	Sum of GTIs [s]
ontime7	10064.599828541	Sum of GTIs [s]
ontime8	10064.546367705	Sum of GTIs [s]
l2events	9897	Number of level 2 events



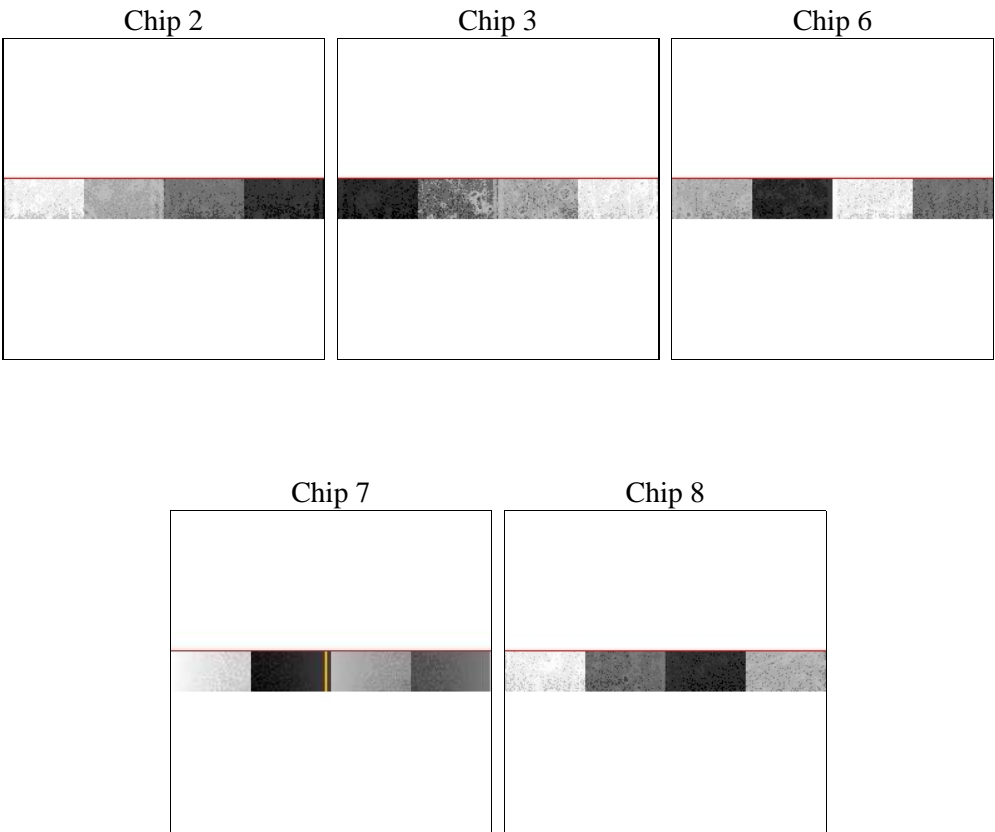
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



Chip 7



Chip 8



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	10064.599828541	Sum of GTIs [s]
caldsver	4.4.7	 	ontime2	10064.505327702	Sum of GTIs [s]
date	2012-02-02T22:50:40	Date and time of file creation	ontime3	10064.587407708	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10064.599828541	Sum of GTIs [s]
			ontime7	10064.599828541	Sum of GTIs [s]
			ontime8	10064.546367705	Sum of GTIs [s]
			l1events	65851	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	11591	11029	12580	12715	17936
rejected events	10395	9864	11246	6704	13831
rejected %	89%	89%	89%	52%	77%

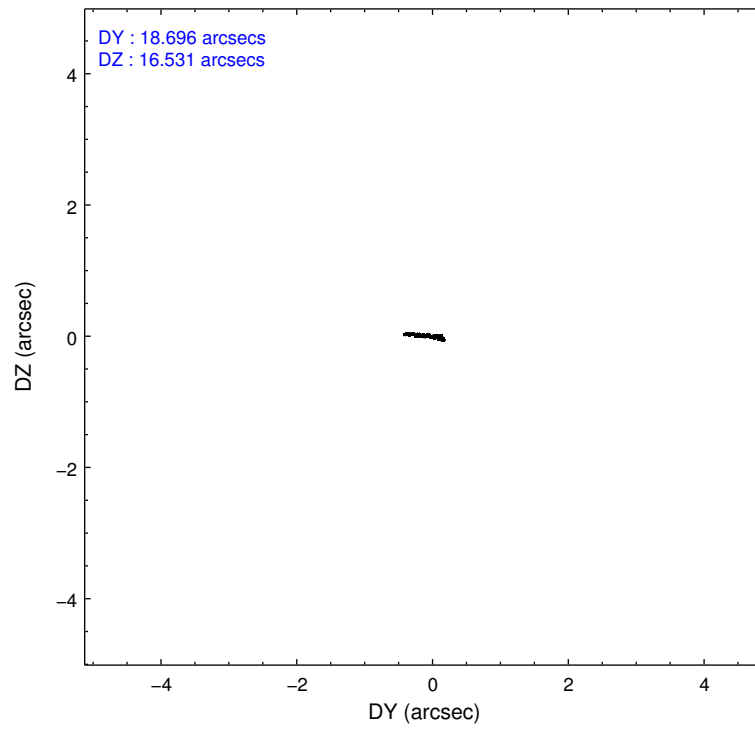
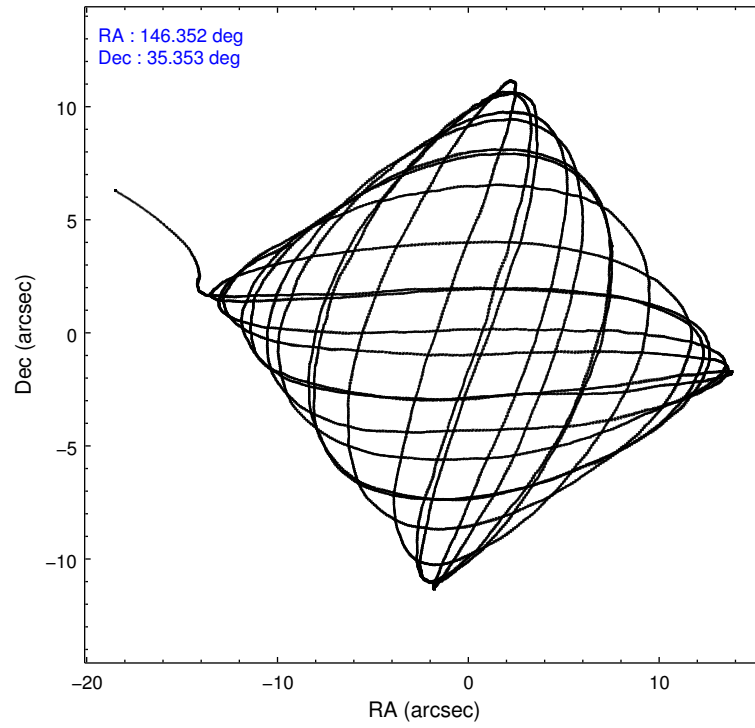
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	362	302	355	665	890
	3%	2%	2%	5%	4%
grade 1 events	4	4	5	19	4
	0%	0%	0%	0%	0%
grade 2 events	228	231	258	1289	890
	1%	2%	2%	10%	4%
grade 3 events	196	218	235	675	407
	1%	1%	1%	5%	2%
grade 4 events	204	211	248	681	382
	1%	1%	1%	5%	2%
grade 5 events	341	419	462	1341	641
	2%	3%	3%	10%	3%
grade 6 events	206	203	238	2701	1537
	1%	1%	1%	21%	8%
grade 7 events	10050	9441	10779	5344	13185
	86%	85%	85%	42%	73%

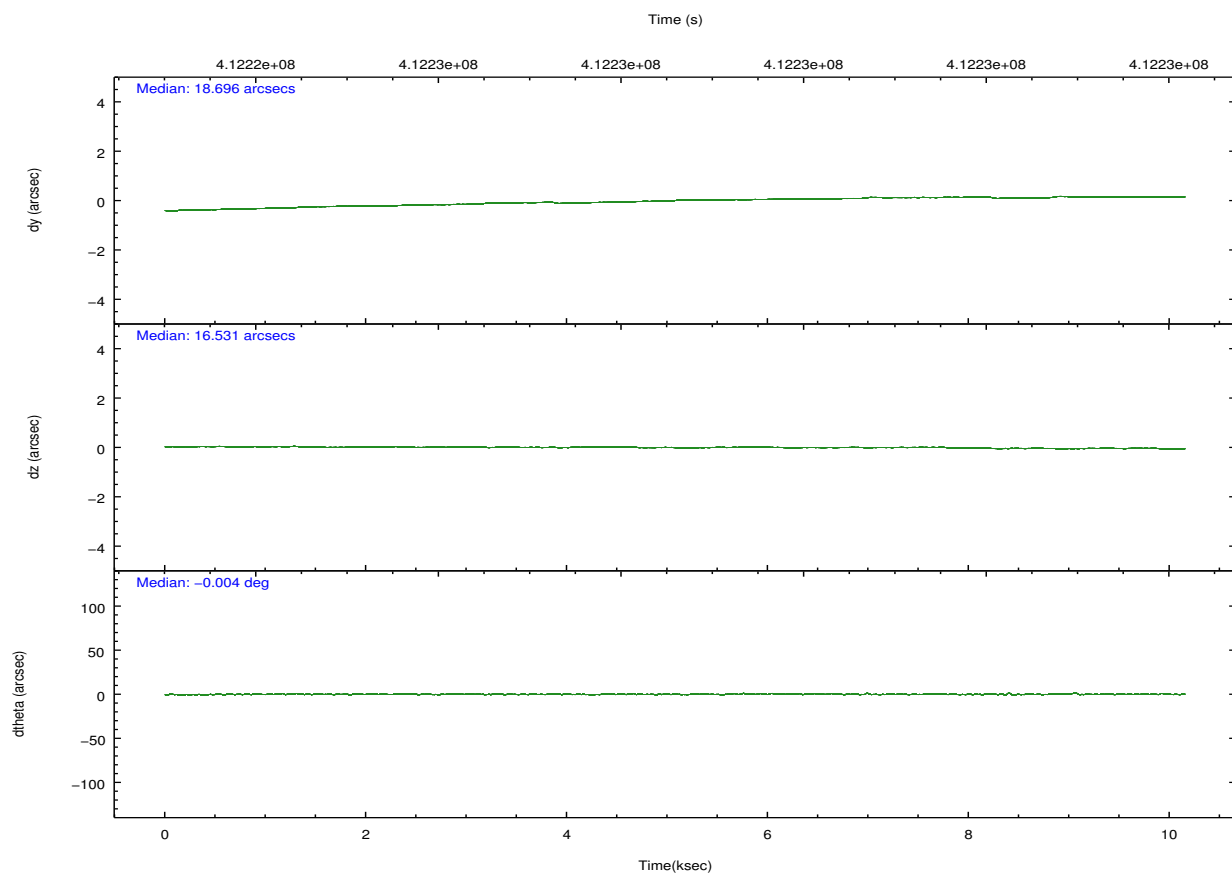
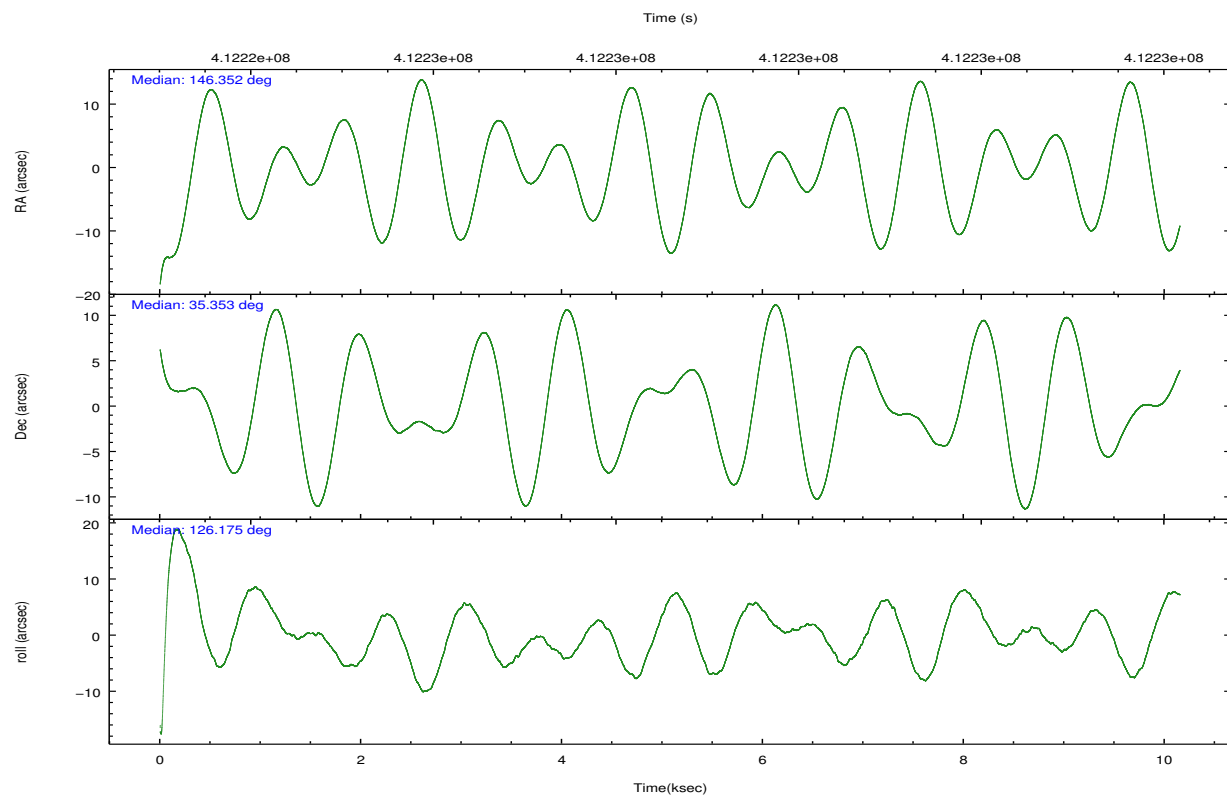
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	146.383251	146.3523214275478
[deg] Pointing Dec	35.342100	35.35279496976601
[deg] Pointing Roll	126.006119	126.1805906025357
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	412223677.184000	412222702.4132
Observation start date	2011-01-24T02:33:31	2011-01-24T02:18:22
[s] Observation end time (MET)	412233677.184000	412234547.31381
Observation end date	2011-01-24T05:20:11	2011-01-24T05:35:47
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O4	Y
CCD I3 on	O2	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	Y	Y
CCD S4 on	O3	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/8
Subarray start row	449	449
Subarray row count	128	128
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0.7

2.3 Aspect



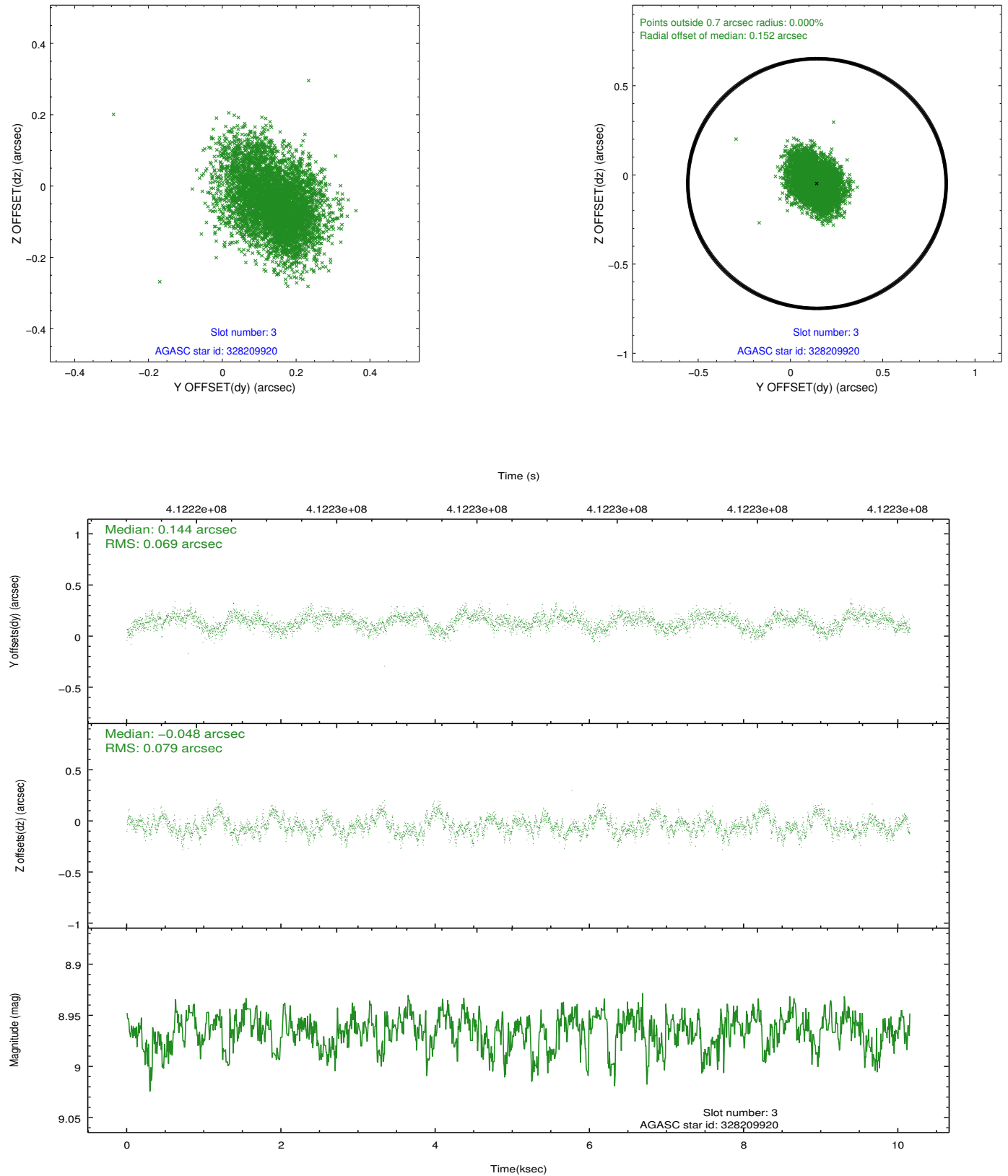


Slot Statistics

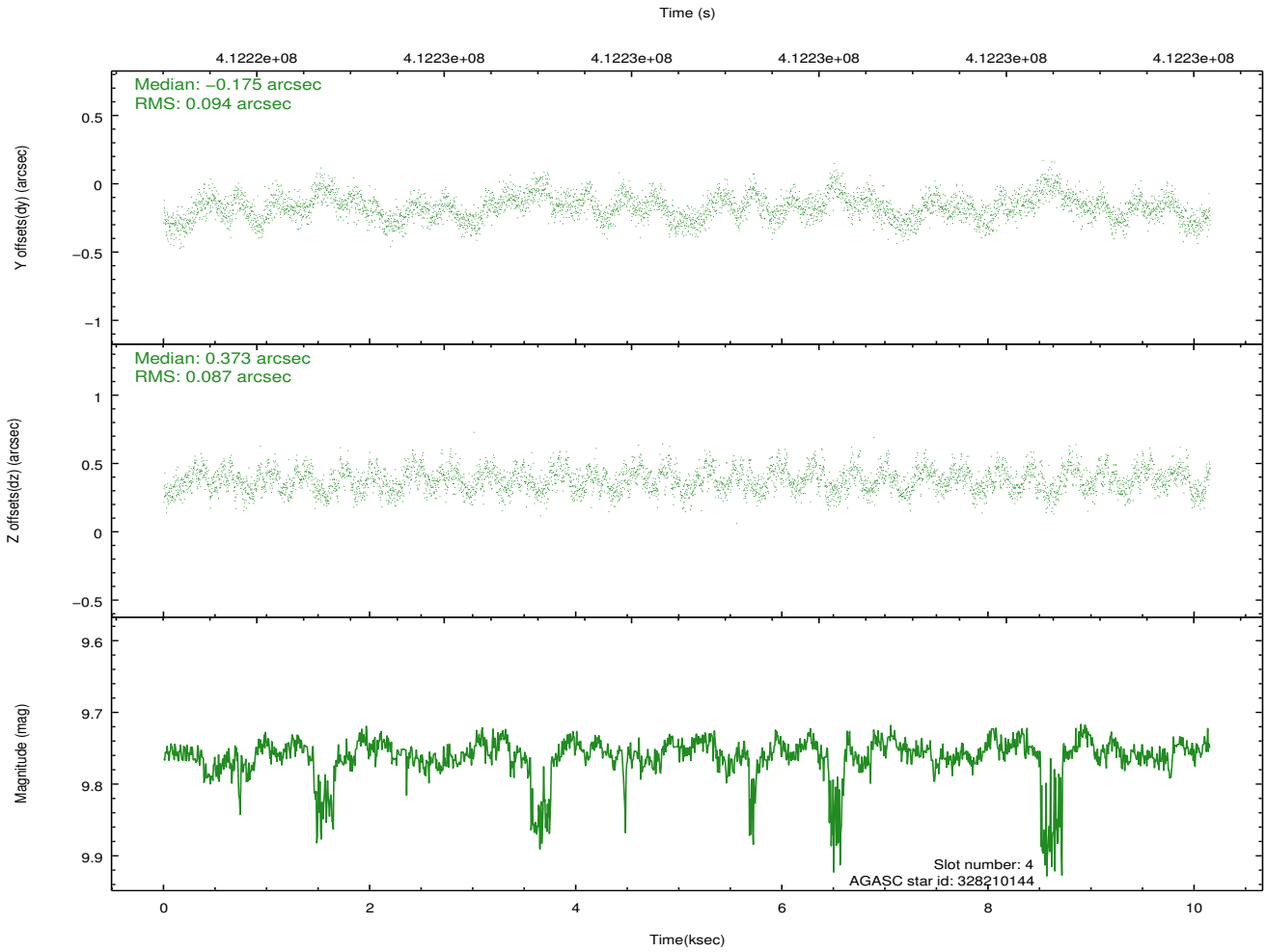
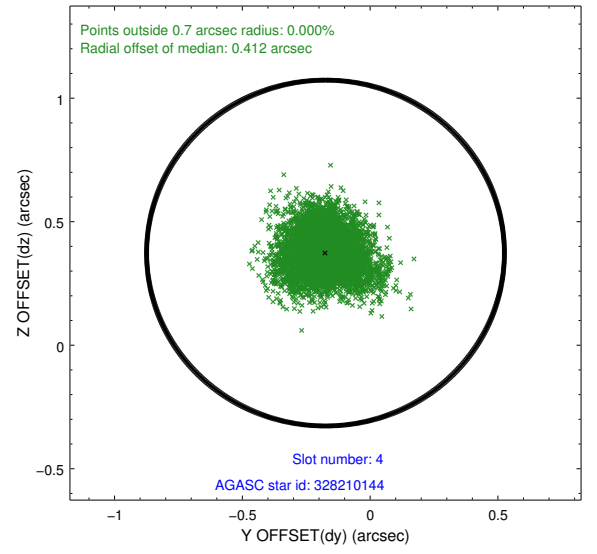
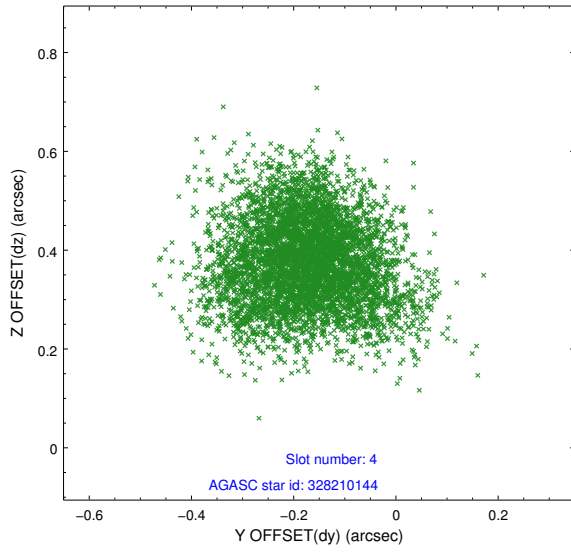
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	2477	-0.086	-0.020	0.009	0.014	0.000000	0.000000	-771.81	-1737.91
1	FID	ACIS-S-4	6.98	2477	0.249	0.047	0.006	0.011	0.000000	0.000000	2141.57	170.08
2	FID	ACIS-S-5	7.02	2477	-0.193	-0.019	0.009	0.015	0.000000	0.000000	-1824.09	164.30
3	GUIDE	328209920	8.96	4950	0.144	-0.048	0.111	0.182	146.188093	34.971120	-741.51	1250.68
4	GUIDE	328210144	9.76	4937	-0.175	0.373	0.137	0.217	146.389915	34.937169	-1191.30	841.56
5	GUIDE	328210320	6.91	4954	-0.071	-0.345	0.070	0.110	146.064796	34.720741	-1255.26	2076.17
6	GUIDE	328597800	9.52	4950	0.077	-0.079	0.153	0.226	145.508389	35.468701	1885.41	1800.94
7	GUIDE	328599104	9.64	4927	0.030	0.087	0.137	0.218	146.319208	35.735785	1256.74	-681.30

2.4 Star Slots

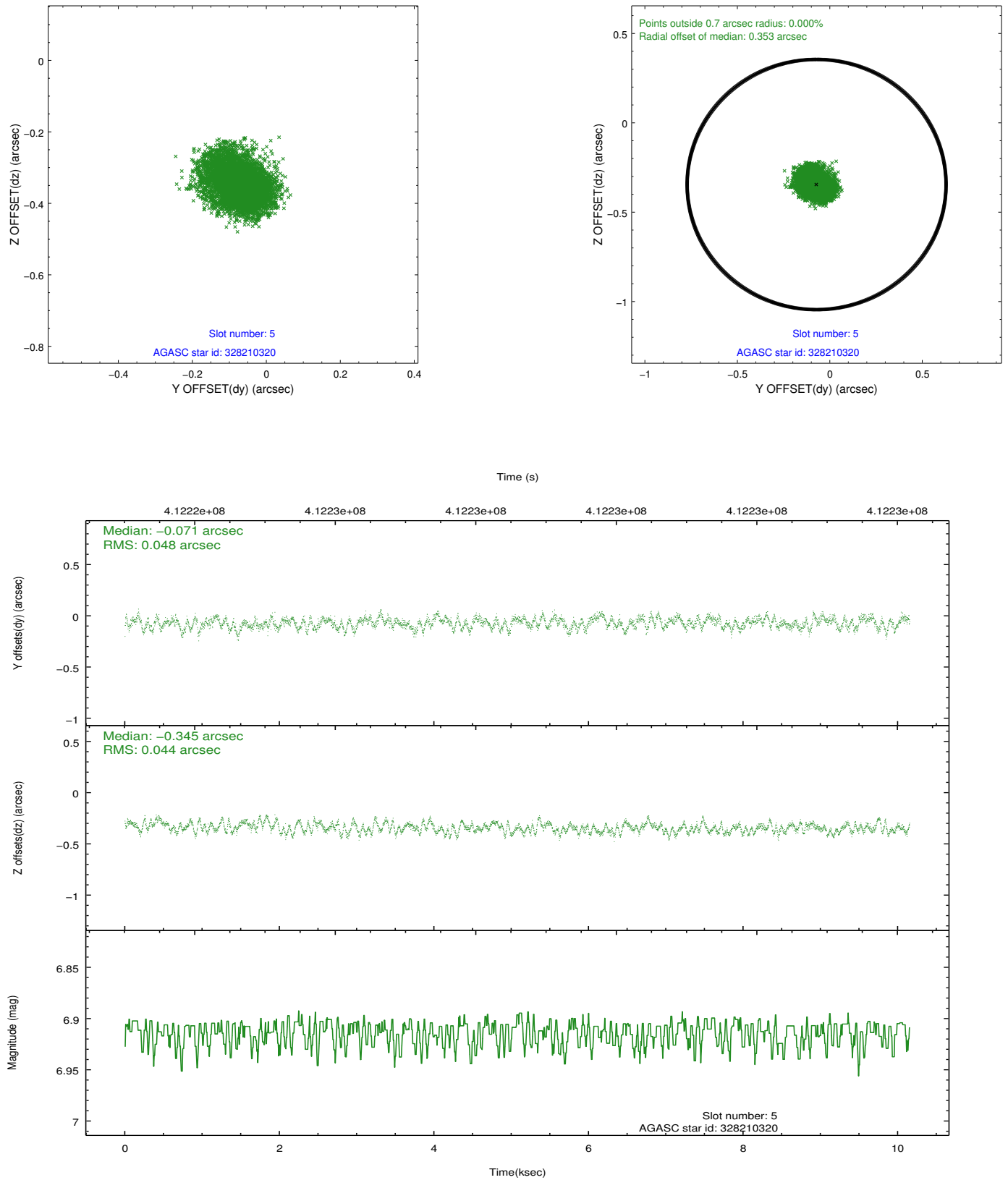
2.4.1 Slot 3



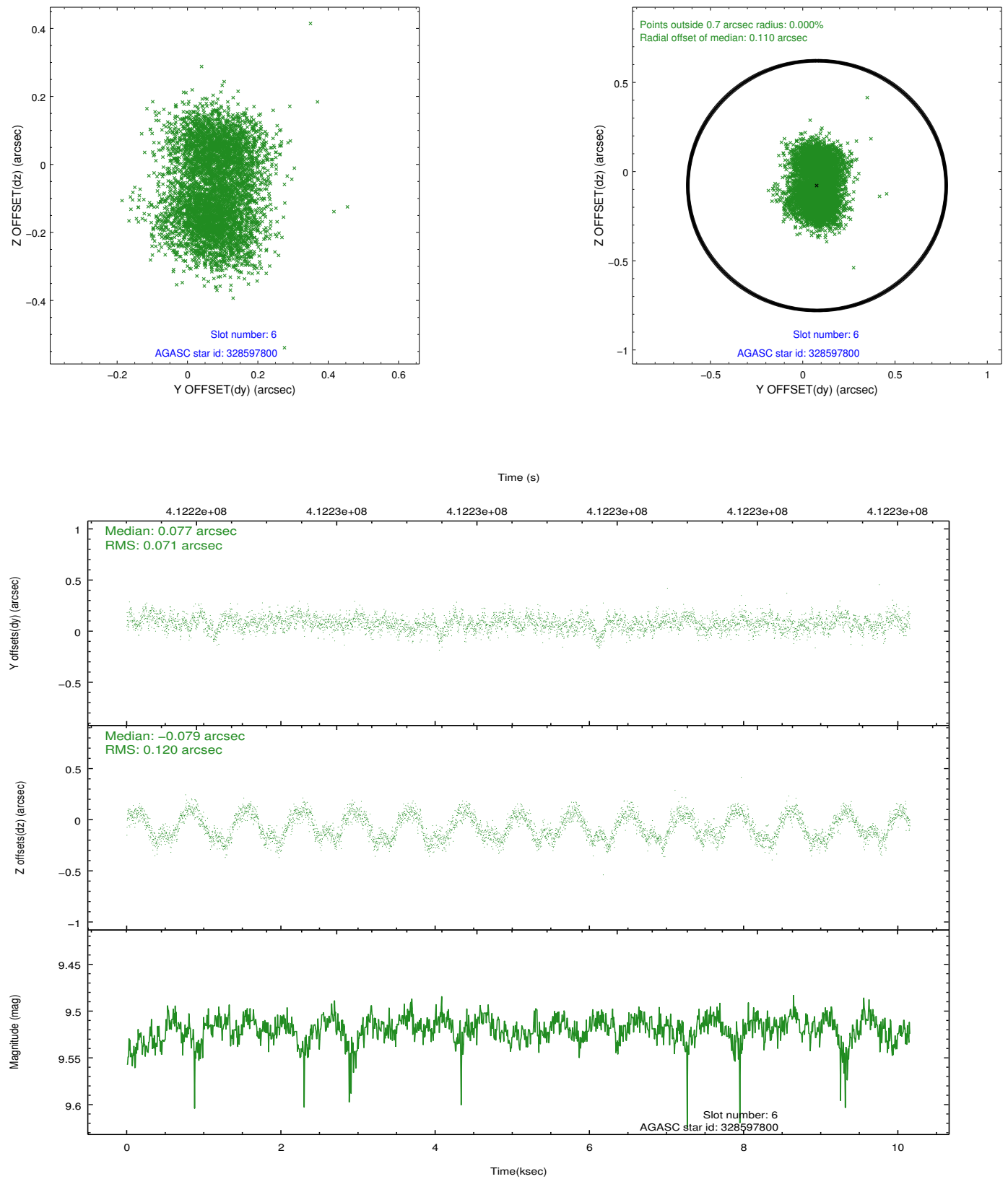
2.4.2 Slot 4



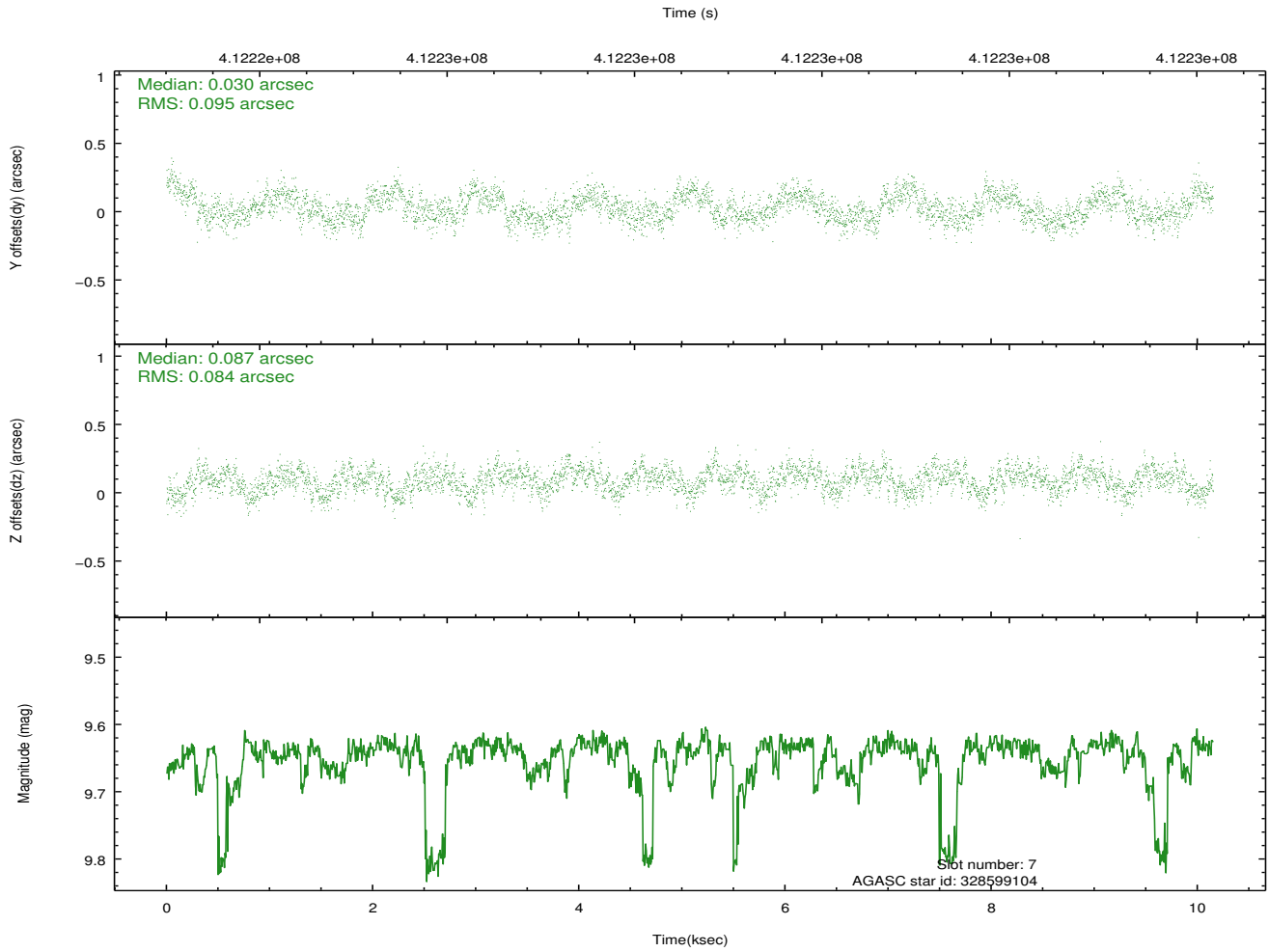
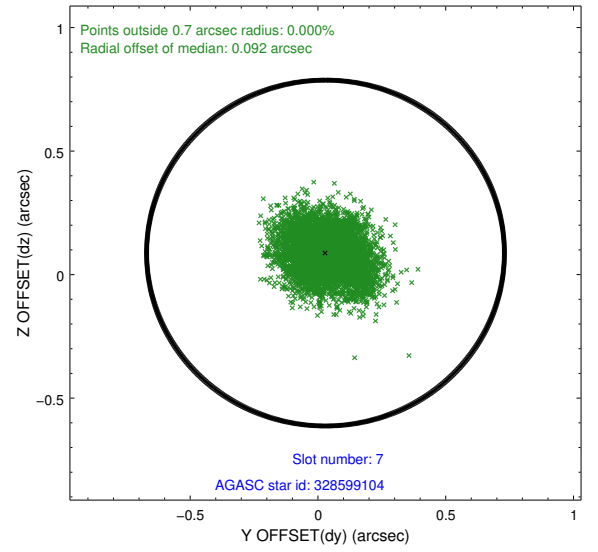
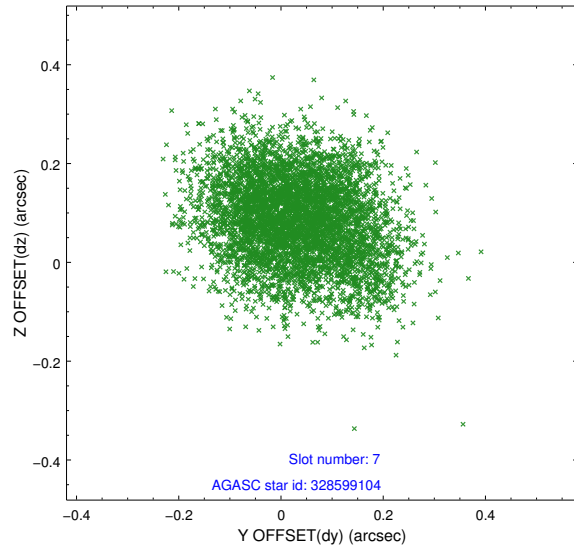
2.4.3 Slot 5



2.4.4 Slot 6

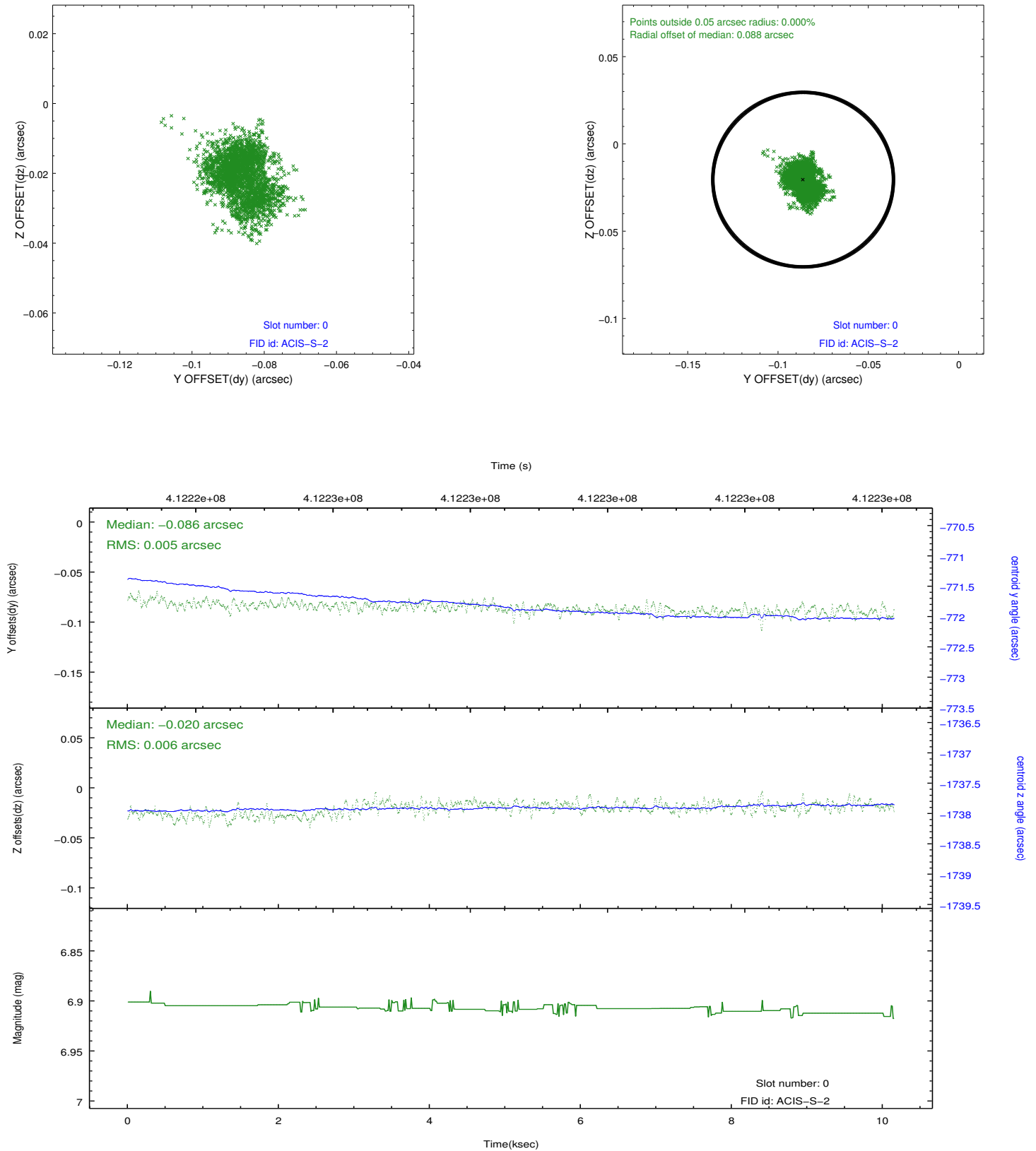


2.4.5 Slot 7

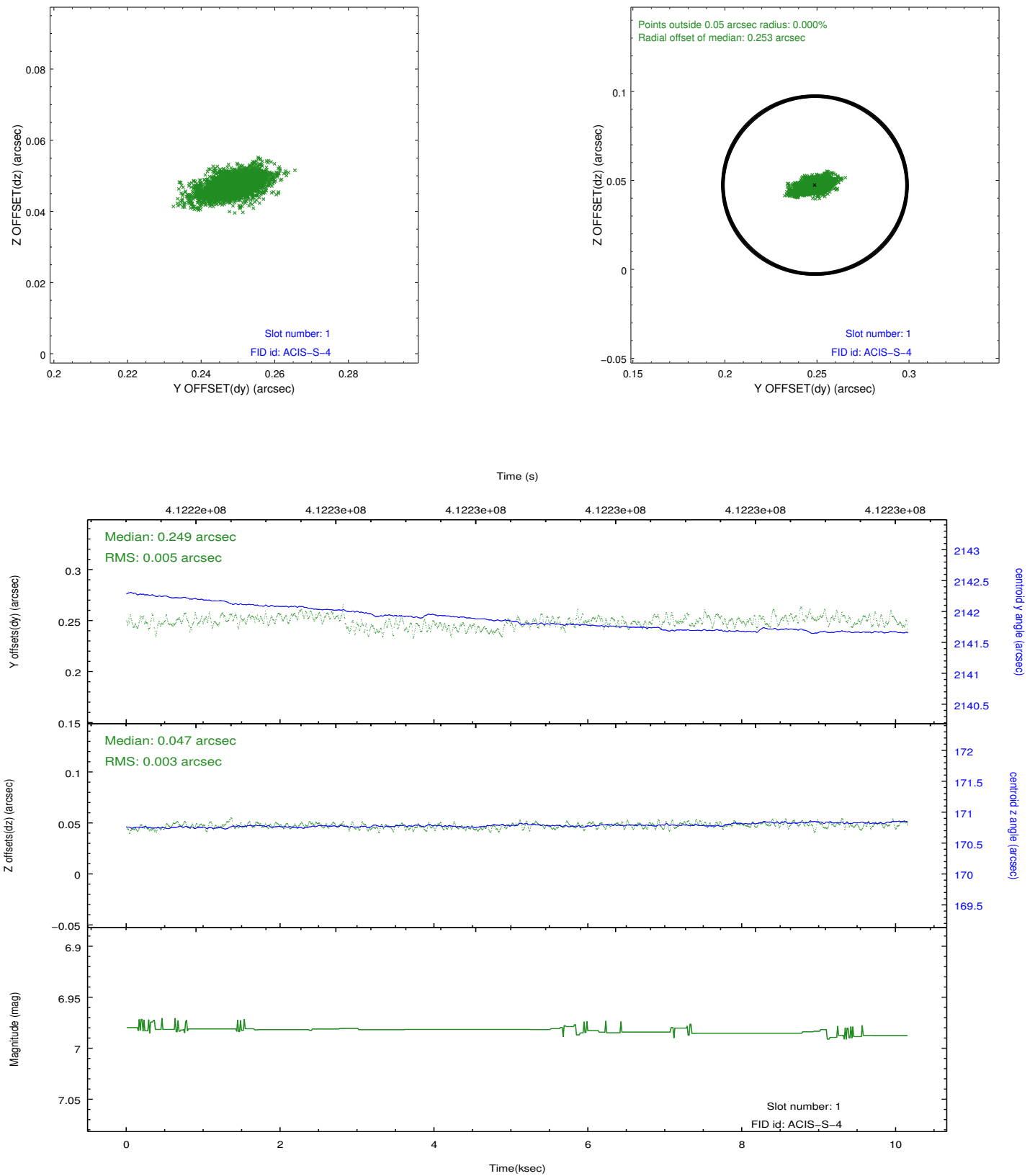


2.5 FID Slots

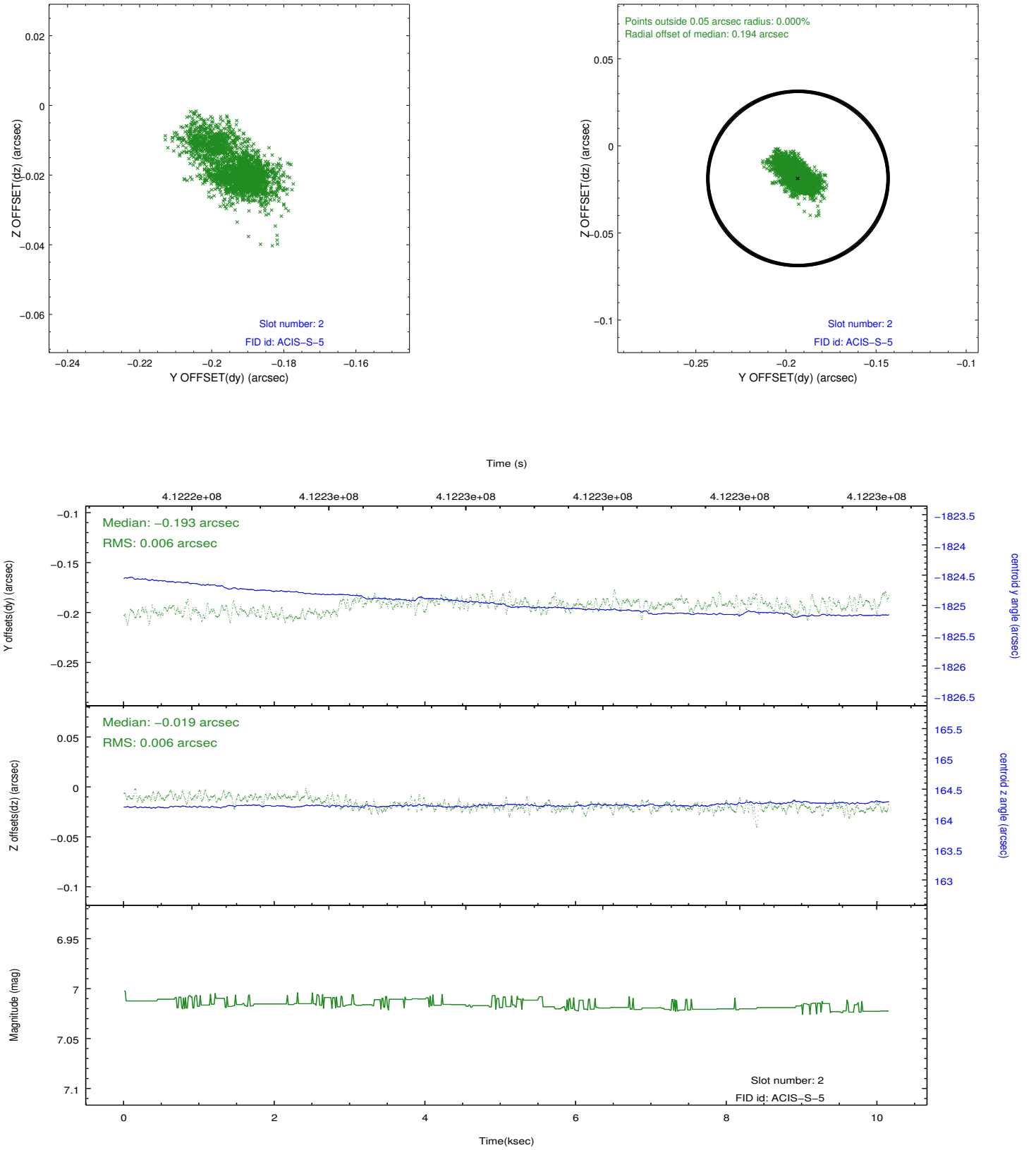
2.5.1 Slot 0



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)	2012.02.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.064599828541

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.