

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13216 - L2 Version 2
Chandra X-Ray Center

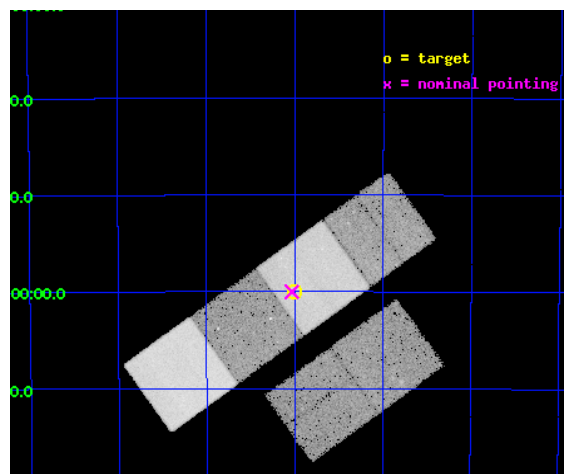
L2 Processing Date : Feb 2 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

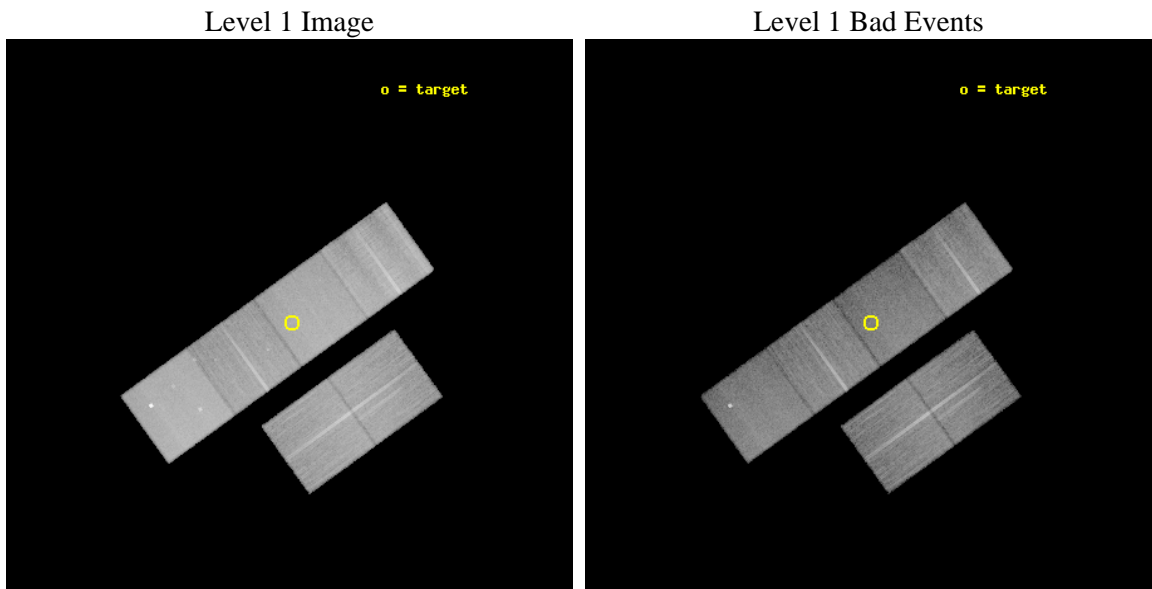
seq_num	900956	Sequence number
obs_id	13216	Observation id
title	Properties of the Warm-Hot Intergalactic Medium Using X-ray/SZ Cross-Correlation	Proposal title
observer	Dr. Massimiliano Galeazzi	Principal investigator
object	Blanco Cosmological Survey	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.25	Observer's specified target RA [deg]
dec_targ	-52.0	Observer's specified target Dec [deg]
ra_nom	79.257878195475	Nominal RA [deg]
dec_nom	-52.000363548863	Nominal Dec [deg]
roll_nom	324.16284304448	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27548.799897432	Sum of GTIs [s]
livetime	27199.960405235	Livetime [s]
ontime2	27548.799897432	Sum of GTIs [s]
ontime3	27548.799897432	Sum of GTIs [s]
ontime5	27548.799897432	Sum of GTIs [s]
ontime6	27545.558966696	Sum of GTIs [s]
ontime7	27548.799897432	Sum of GTIs [s]
ontime8	27548.799897432	Sum of GTIs [s]
l2events	316655	Number of level 2 events



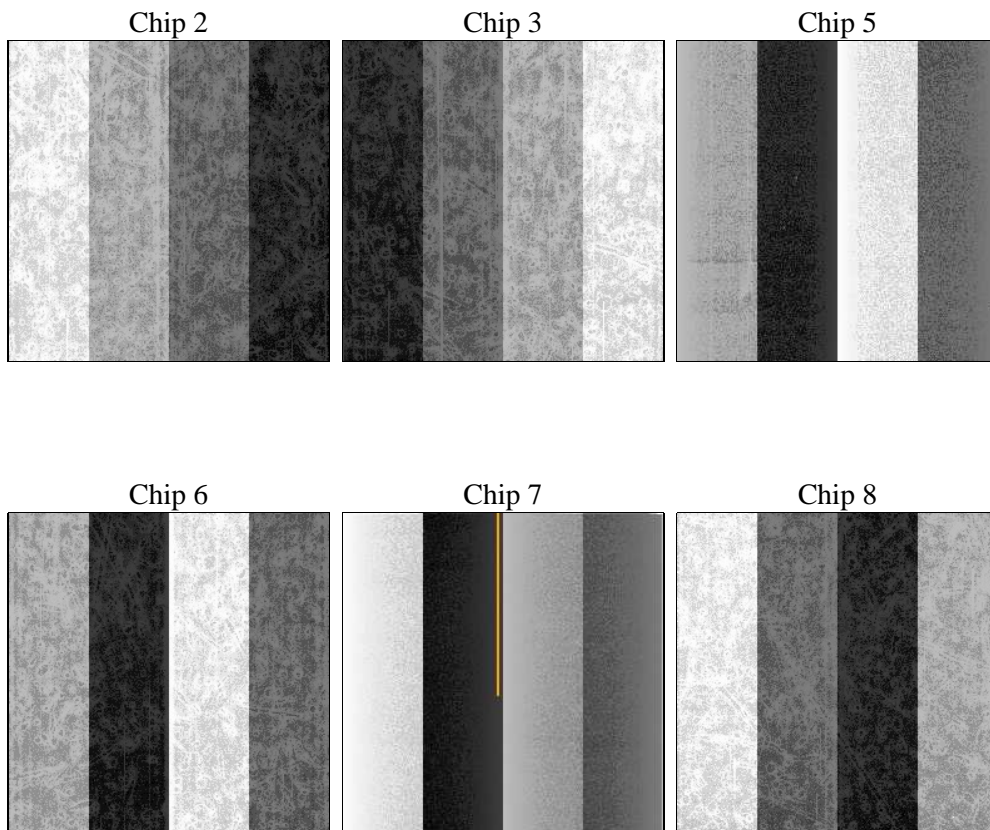
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	27548.799897432	Sum of GTIs [s]
caldbver	4.4.7	 	ontime2	27548.799897432	Sum of GTIs [s]
date	2012-02-02T05:18:47	Date and time of file creation	ontime3	27548.799897432	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	27548.799897432	Sum of GTIs [s]
			ontime6	27545.558966696	Sum of GTIs [s]
			ontime7	27548.799897432	Sum of GTIs [s]
			ontime8	27548.799897432	Sum of GTIs [s]
			l1events	1369980	Number of level 1 events

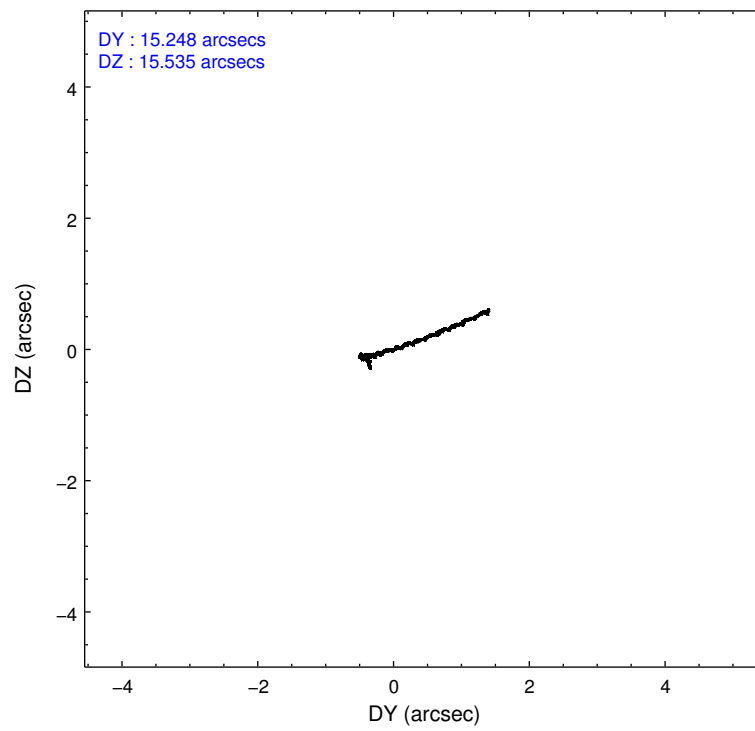
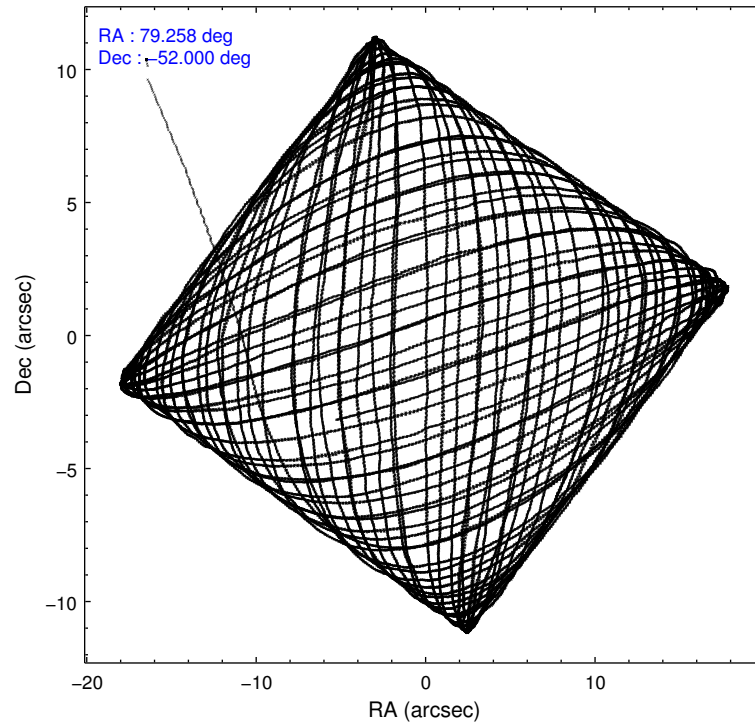
2.1.4 Events

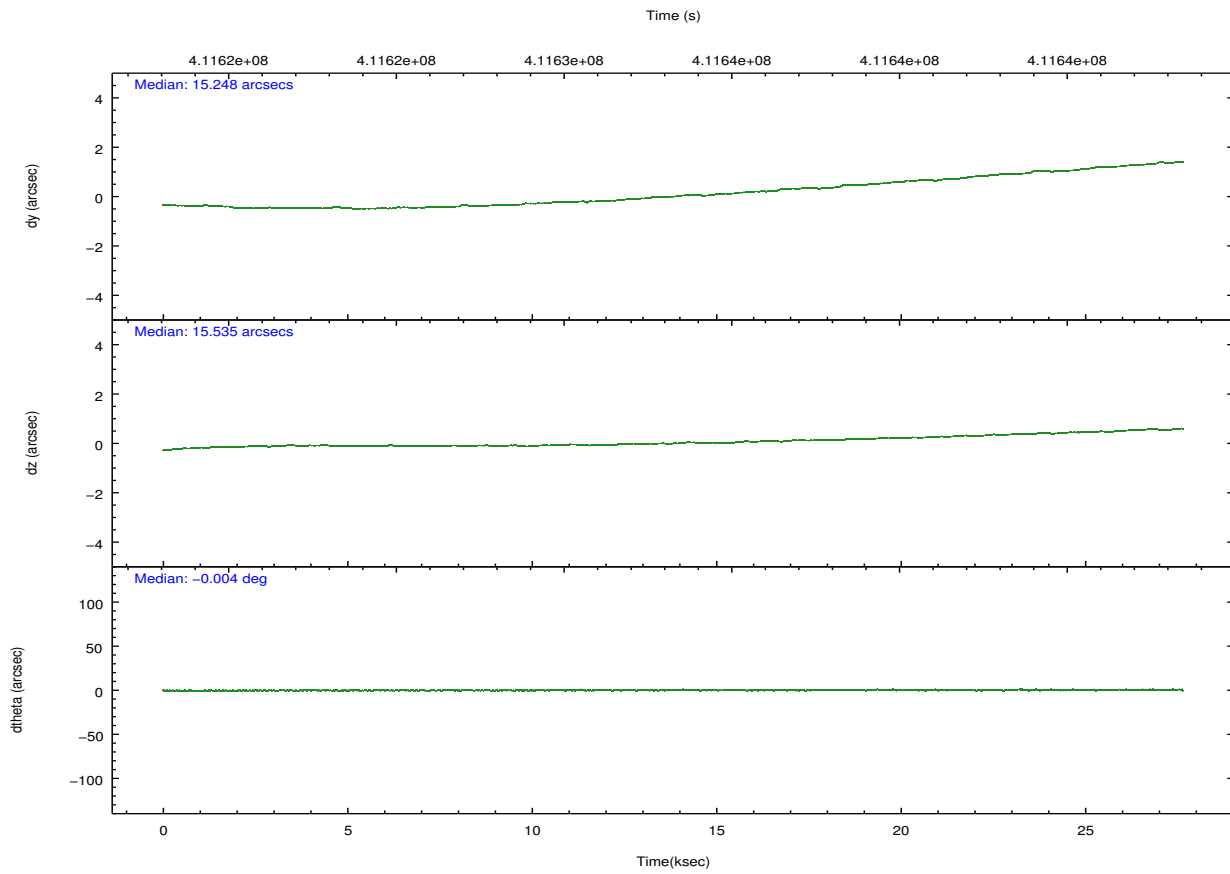
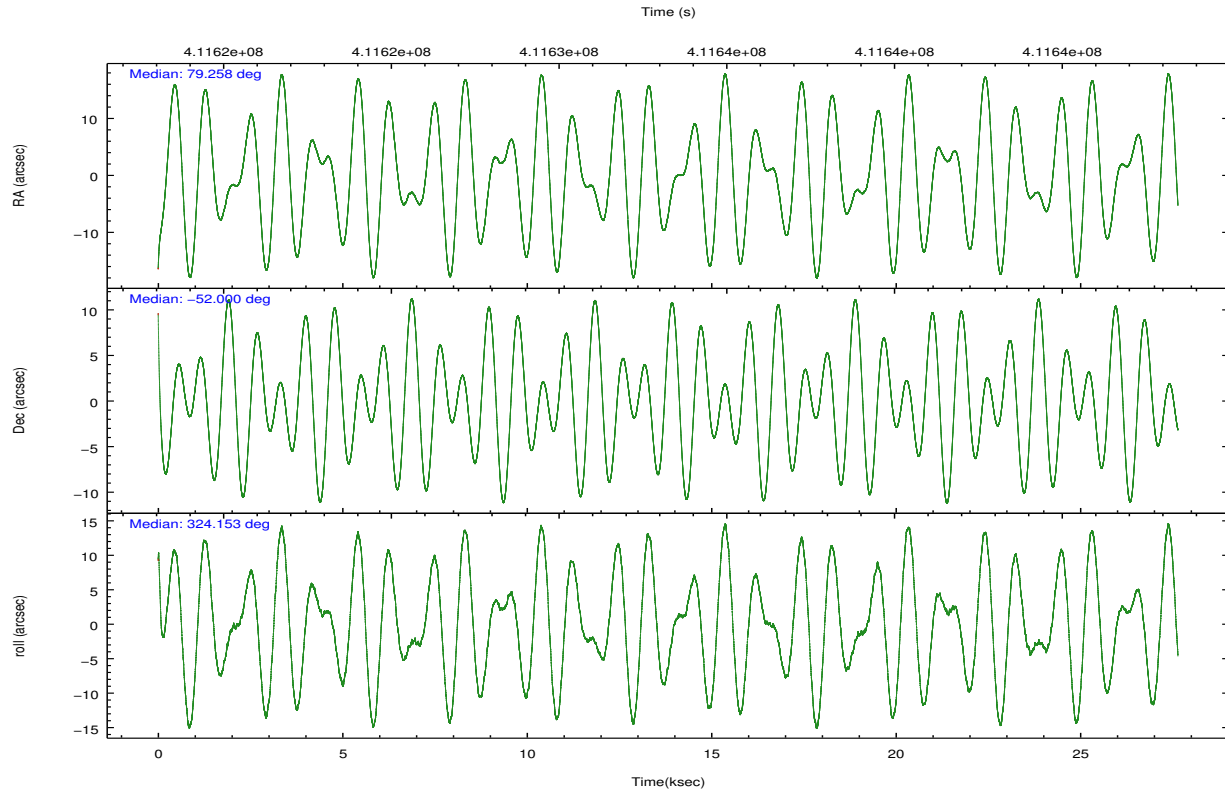
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	199354	185059	297563	191617	239273	257114	grade 0 events	7304	6902	14596	7820	9647	19465
rejected events	178509	165464	151652	169412	132868	190213		3%	3%	4%	4%	4%	7%
rejected %	89%	89%	50%	88%	55%	73%	grade 1 events	130	112	2662	109	283	234
								0%	0%	0%	0%	0%	0%
							grade 2 events	5118	4352	43681	4871	21875	16041
								2%	2%	14%	2%	9%	6%
							grade 3 events	2147	2233	5554	2301	9367	7090
								1%	1%	1%	1%	3%	2%
							grade 4 events	2216	2133	5402	2291	9203	6464
								1%	1%	1%	1%	3%	2%
							grade 5 events	7755	8897	22501	8838	25062	13033
								3%	4%	7%	4%	10%	5%
							grade 6 events	4065	3982	76722	4925	56341	17843
								2%	2%	25%	2%	23%	6%
							grade 7 events	170619	156448	126445	160462	107495	176944
								85%	84%	42%	83%	44%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	79.213619	79.25787819547496	CCD I2 on	O1	Y
[deg] Pointing Dec	-51.997933	-52.00036354886328	CCD I3 on	Y	Y
[deg] Pointing Roll	323.971332	324.16284304448	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[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	Y	Y
[s] Observation start time (MET)	411619561.184000	411618298.31946	CCD S5 on	N	N
Observation start date	2011-01-17T02:44:55	2011-01-17T02:24:58	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	411647061.184000	411647797.82098	On-chip summing requested	N	N
Observation end date	2011-01-17T10:23:15	2011-01-17T10:36:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



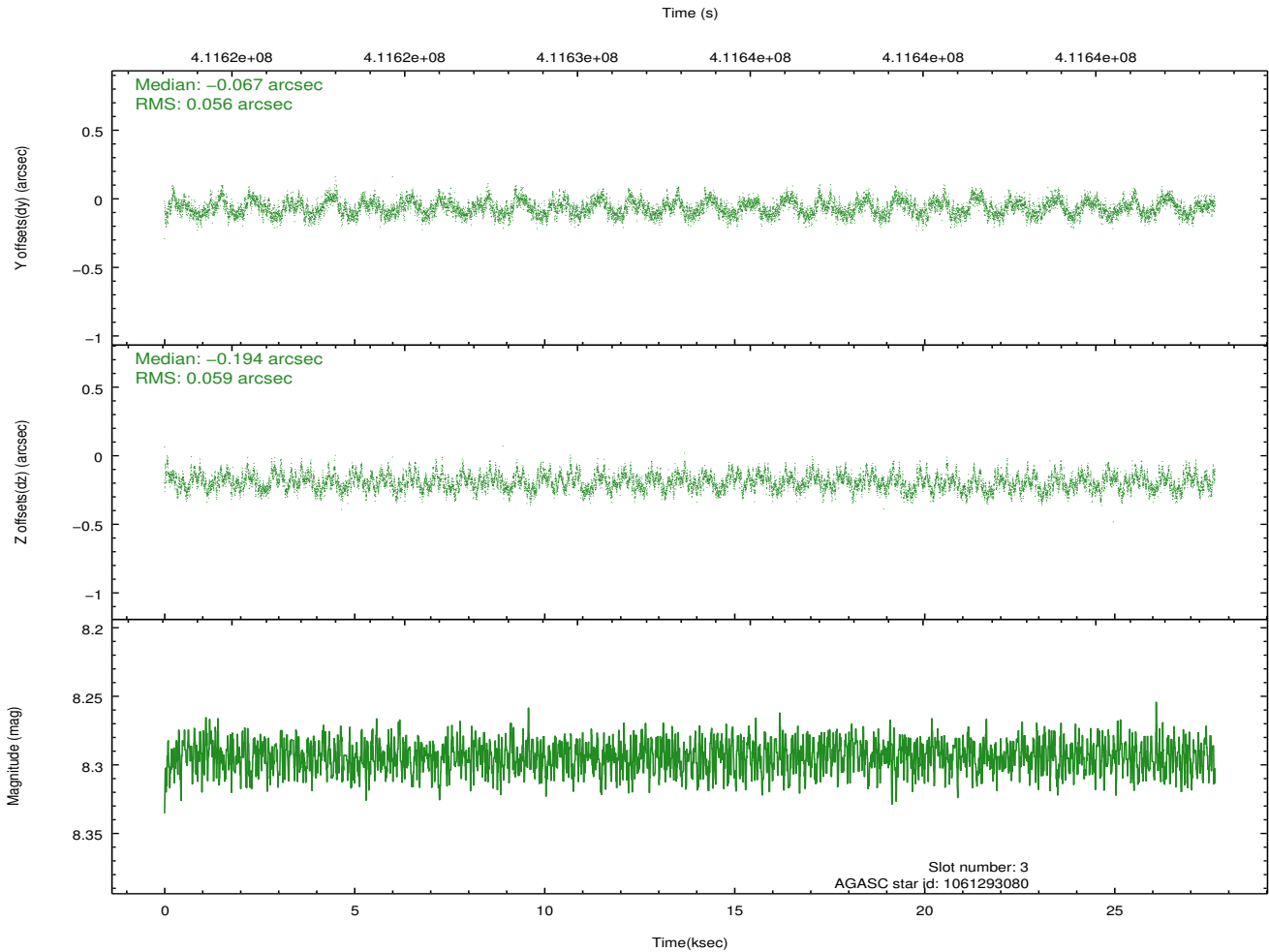
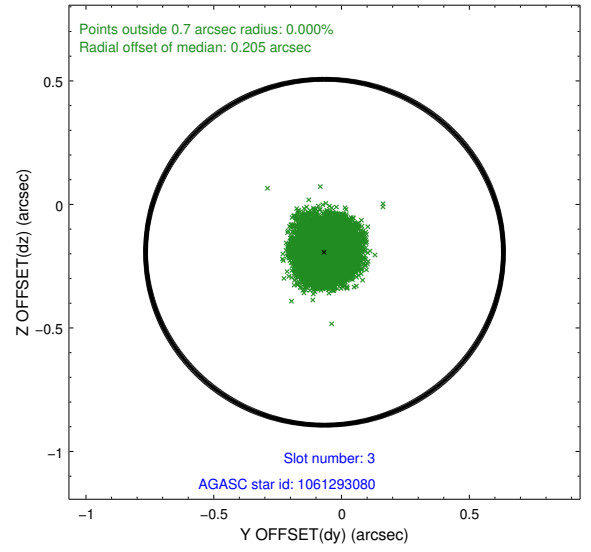
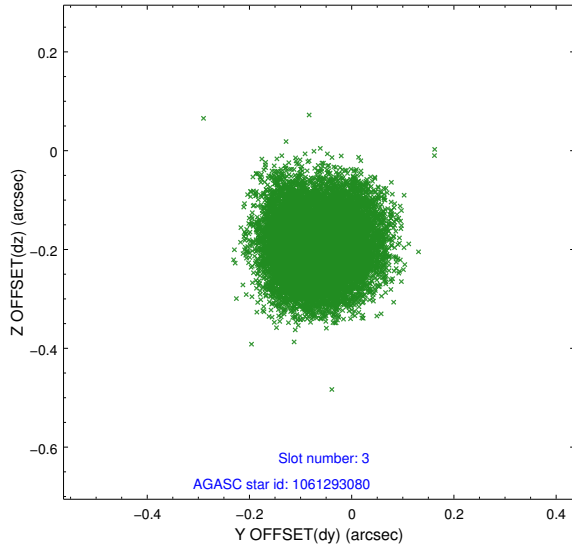


Slot Statistics

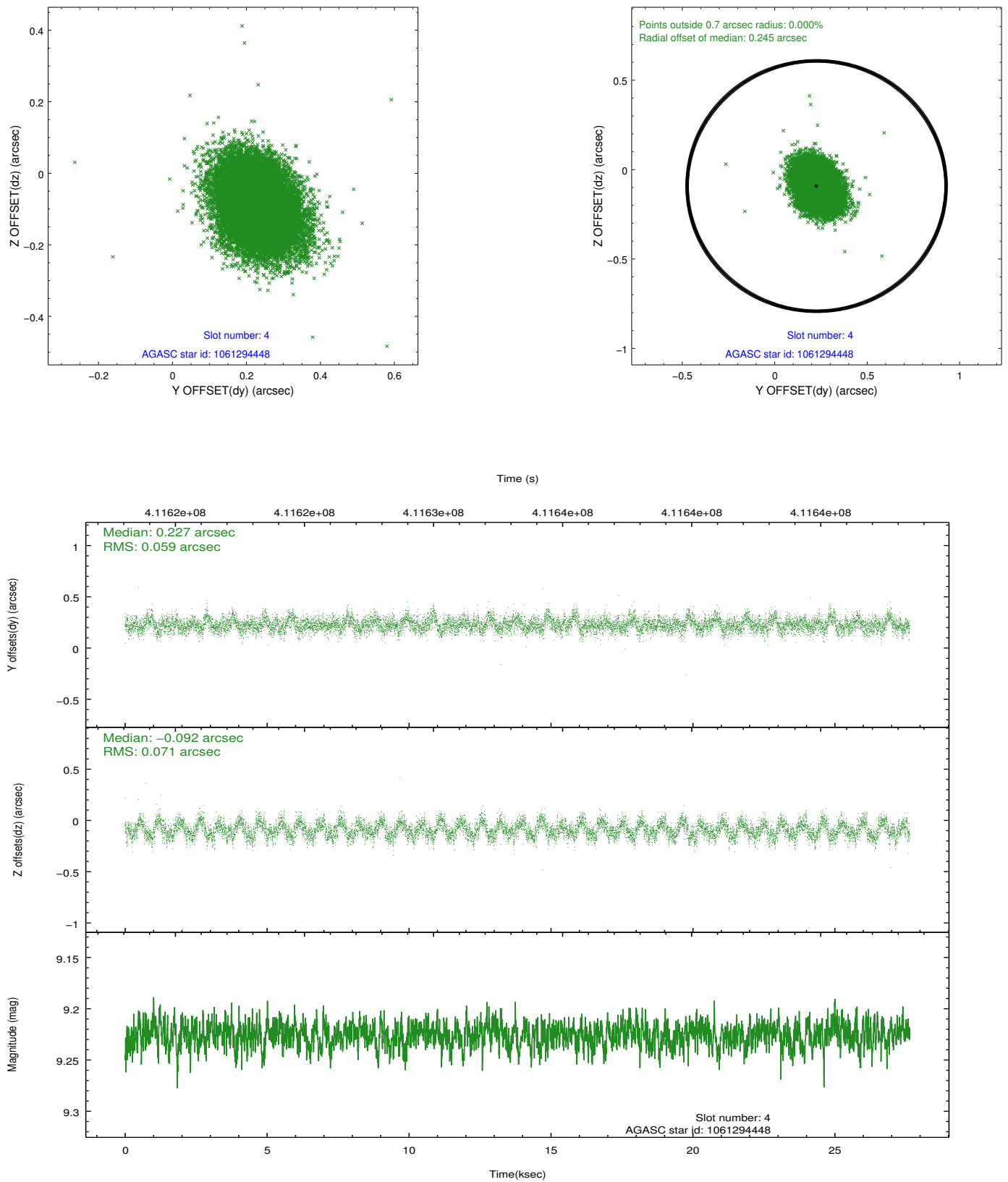
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.95	6742	-0.101	-0.022	0.010	0.016	0.000000	0.000000	-768.48	-1736.99
1	FID	ACIS-S-4	7.03	6742	0.210	0.054	0.015	0.037	0.000000	0.000000	2145.04	171.49
2	FID	ACIS-S-5	7.06	6743	-0.138	-0.024	0.016	0.030	0.000000	0.000000	-1821.25	165.16
3	GUIDE	1061293080	8.29	13482	-0.067	-0.194	0.088	0.136	79.617415	-51.426985	-473.90	2191.73
4	GUIDE	1061294448	9.23	13477	0.227	-0.092	0.098	0.158	79.302052	-51.902274	-43.18	394.22
5	GUIDE	1061296568	8.35	13483	-0.072	0.109	0.073	0.121	79.123429	-51.476040	-1268.62	1400.18
6	GUIDE	1061297288	8.42	13415	0.013	-0.021	0.079	0.128	79.226530	-52.452693	986.34	-1306.84
7	GUIDE	1115553880	7.14	13484	-0.110	0.202	0.080	0.132	78.817349	-52.665283	715.54	-2453.19

2.4 Star Slots

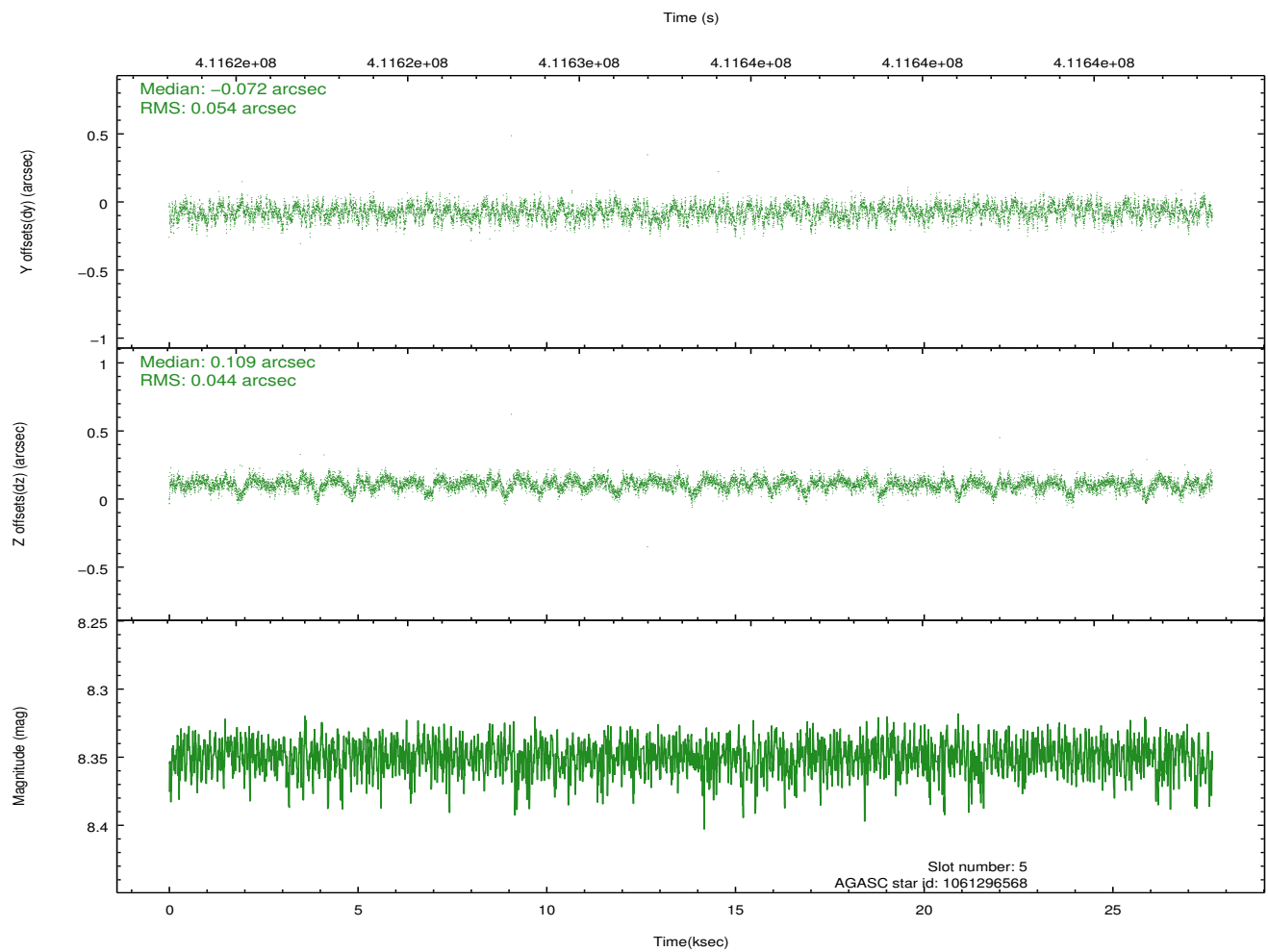
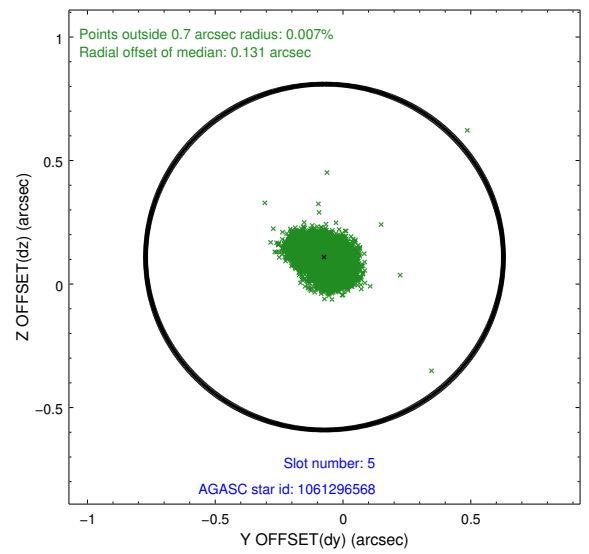
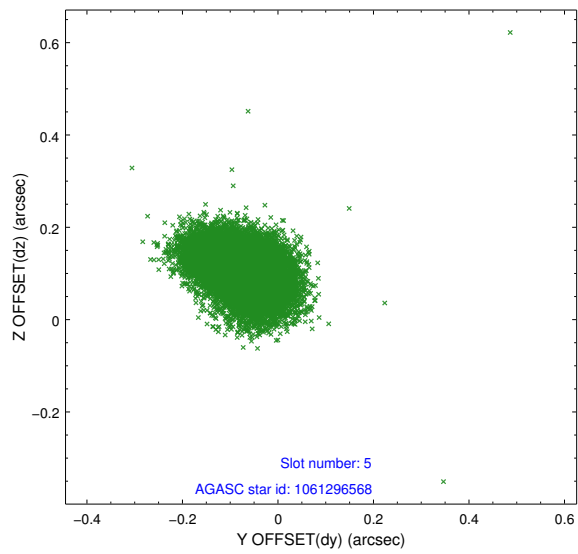
2.4.1 Slot 3



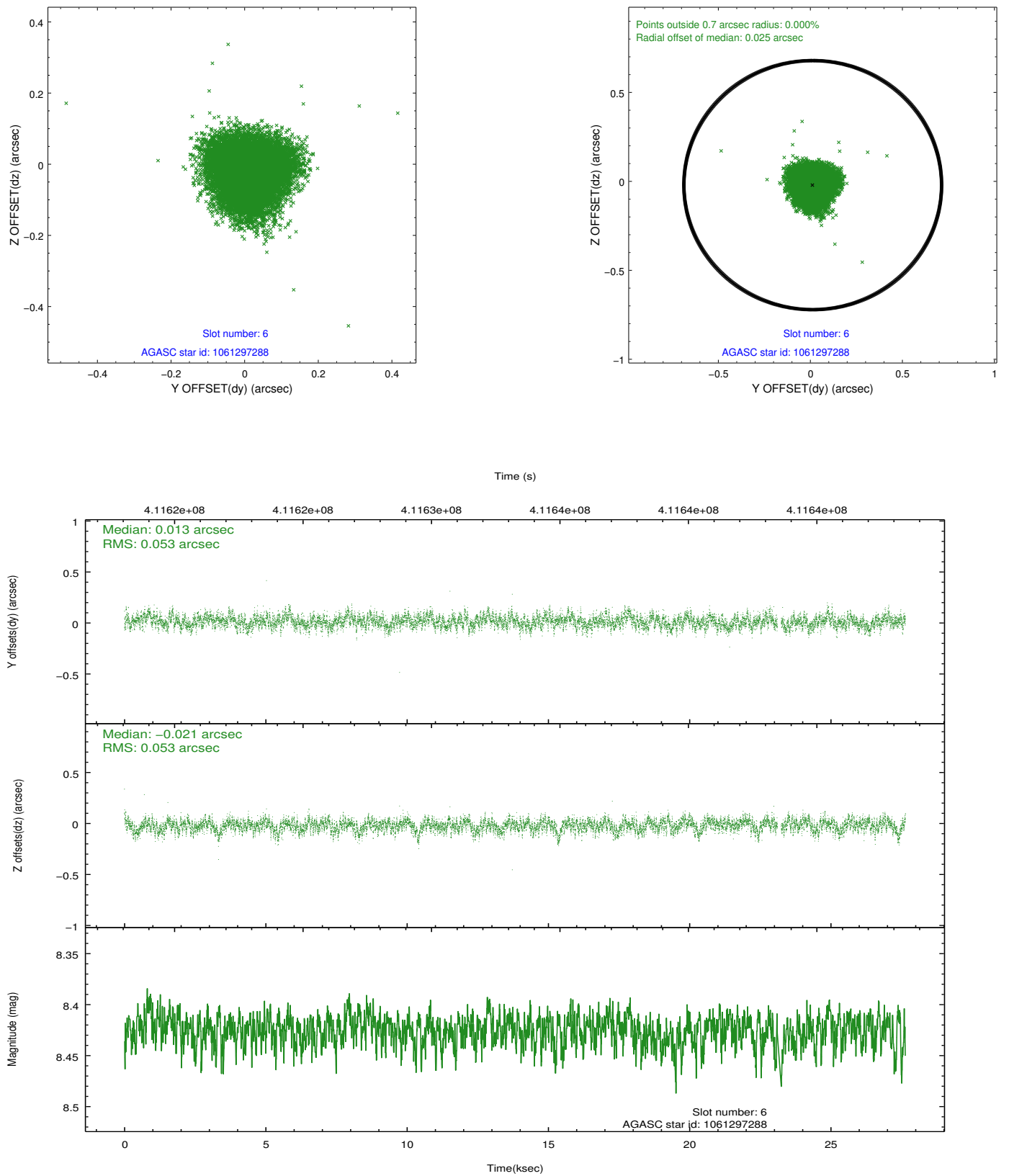
2.4.2 Slot 4



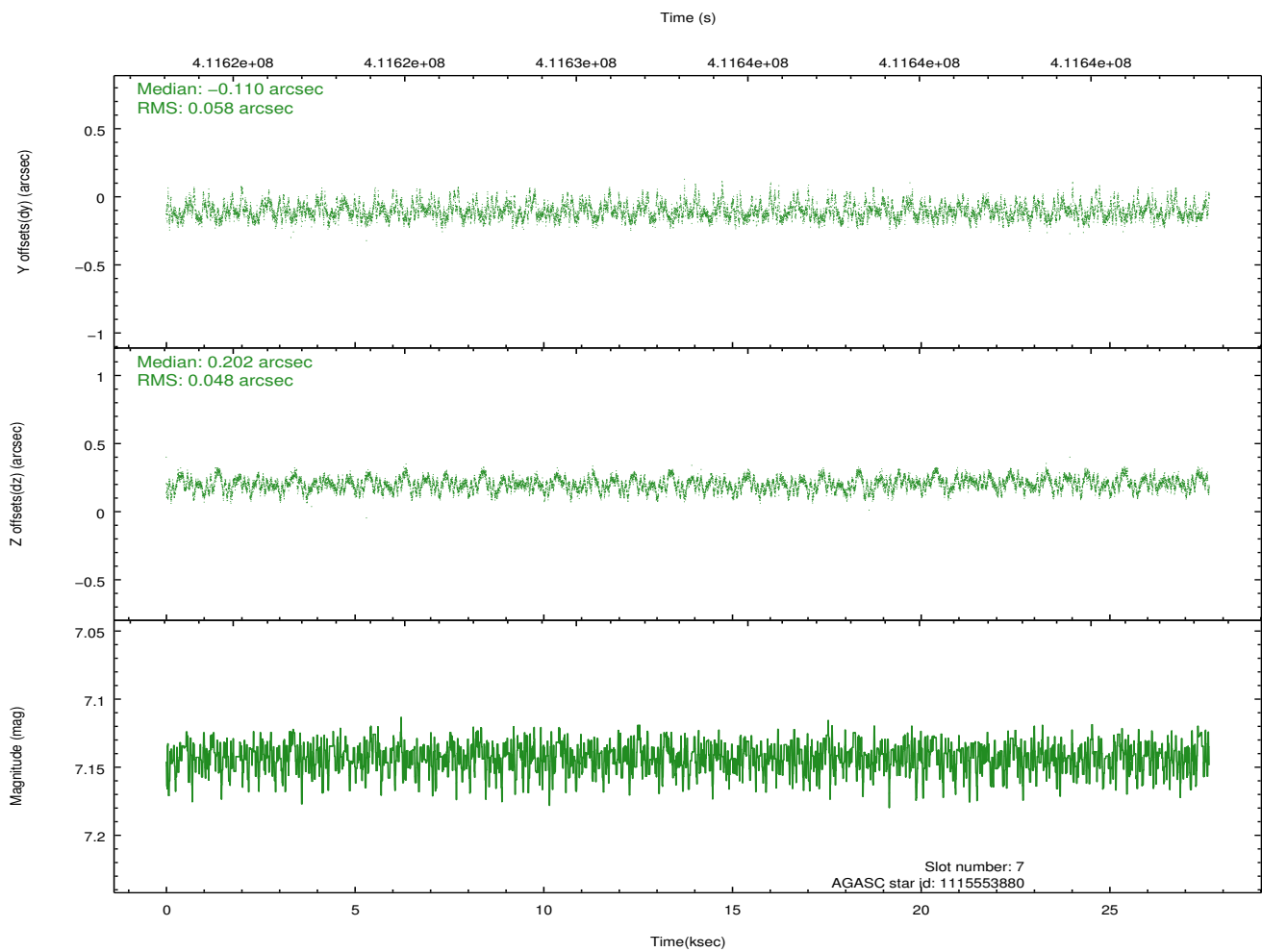
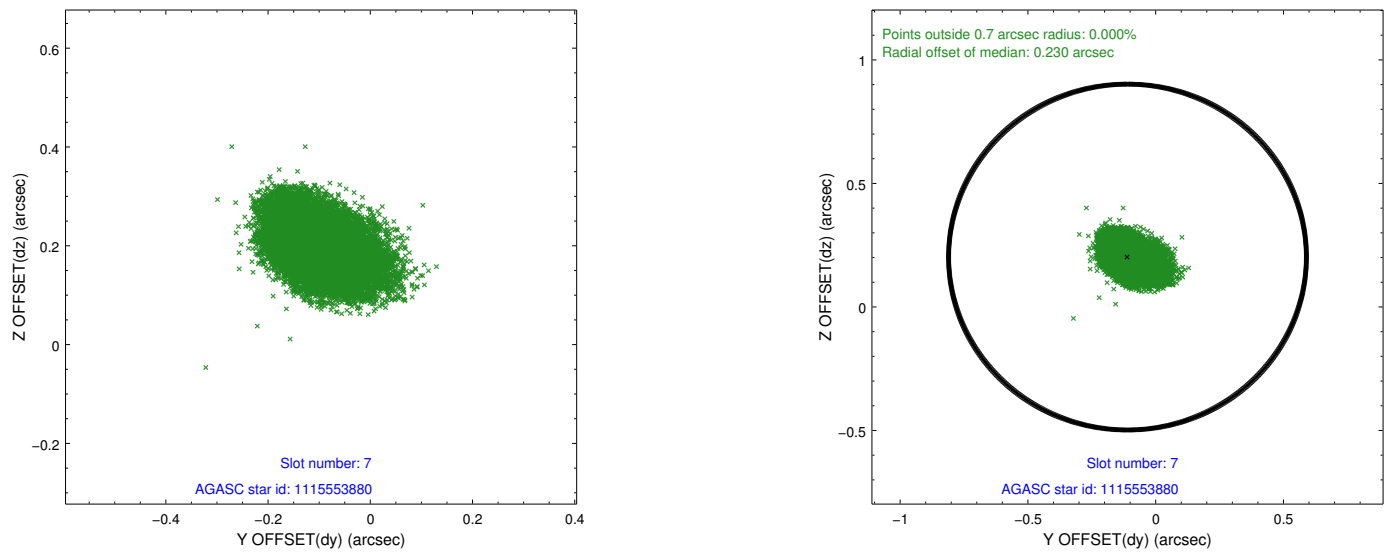
2.4.3 Slot 5



2.4.4 Slot 6

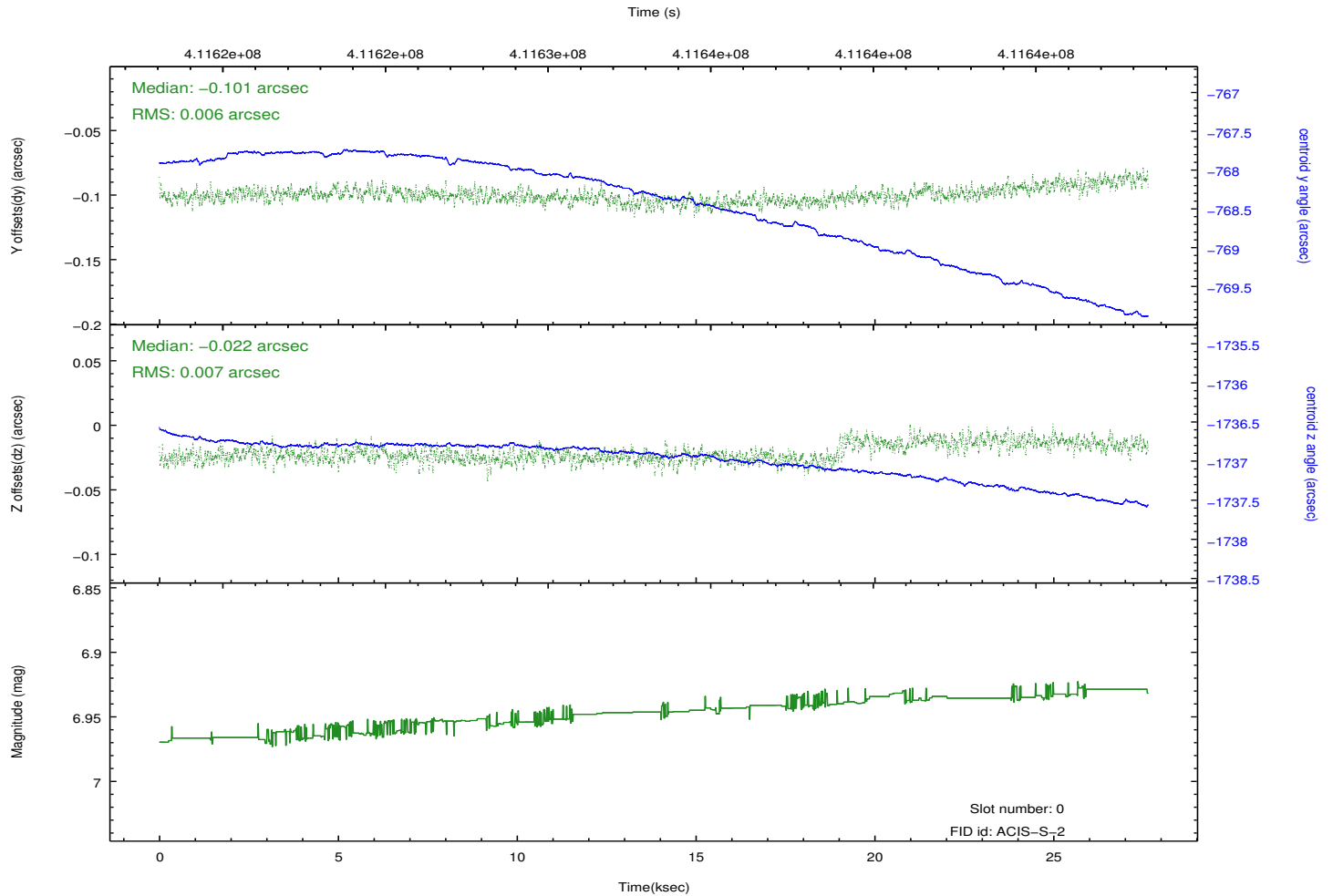
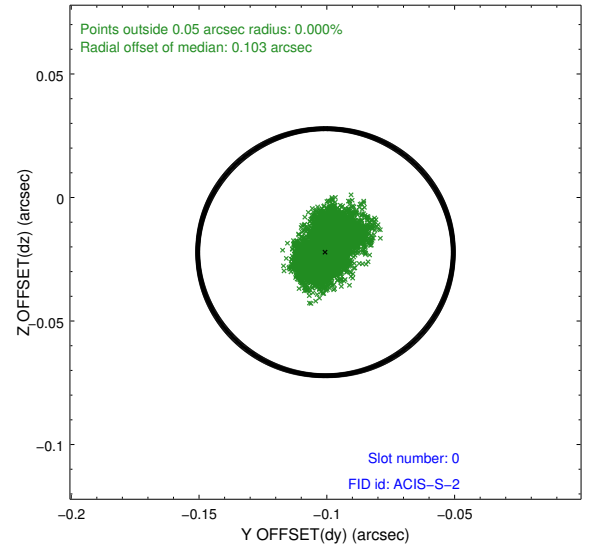
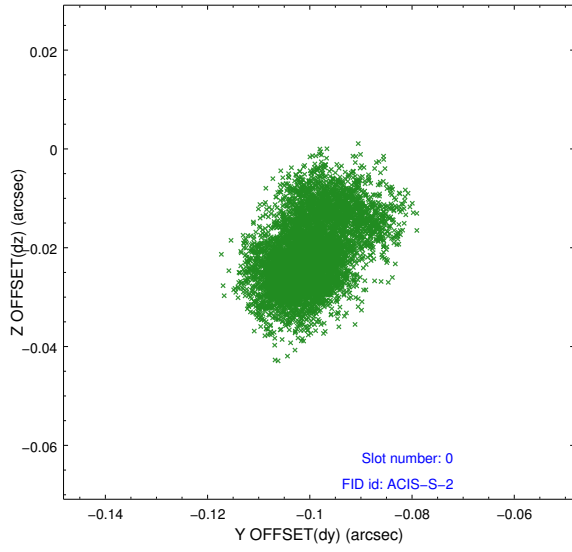


2.4.5 Slot 7

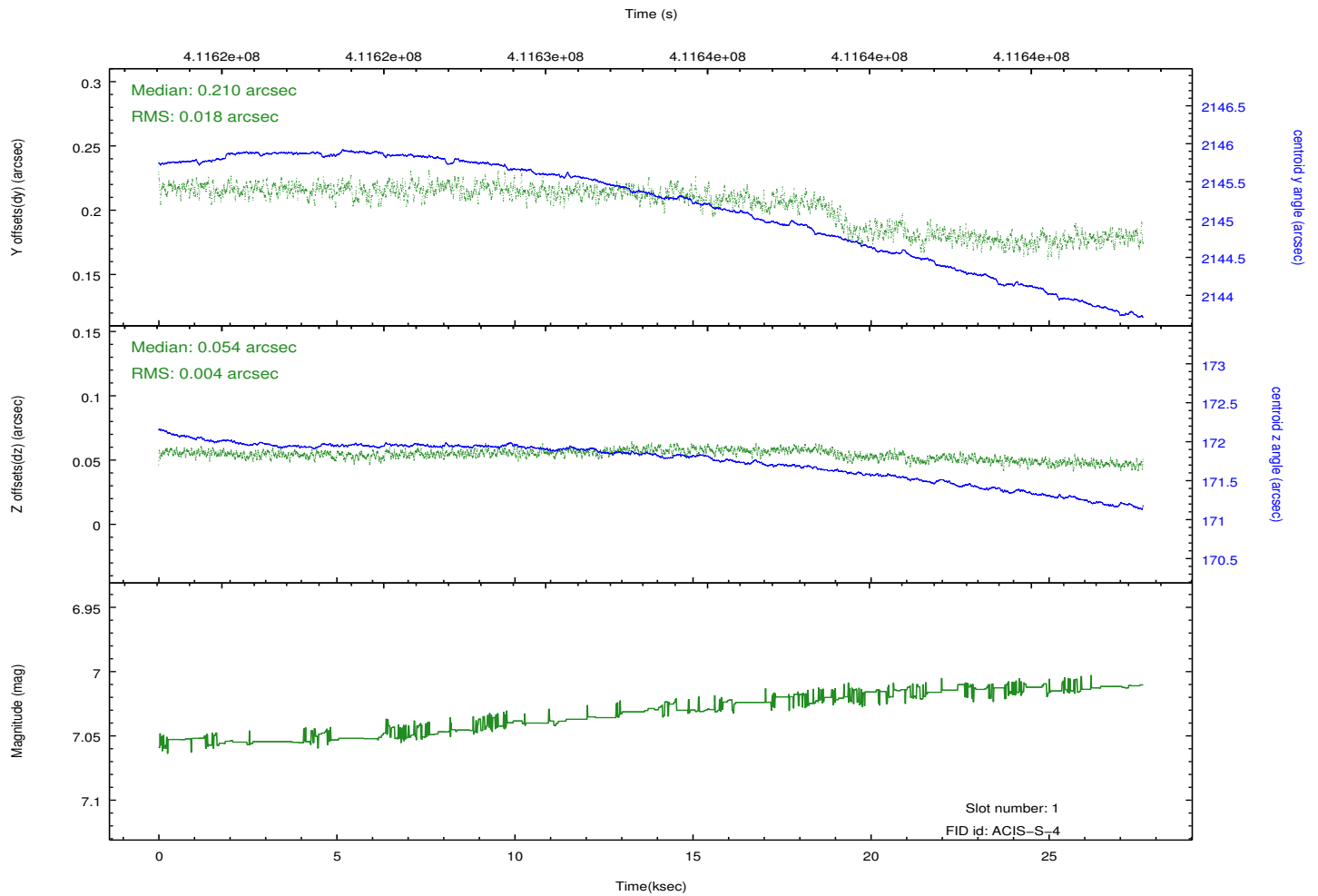
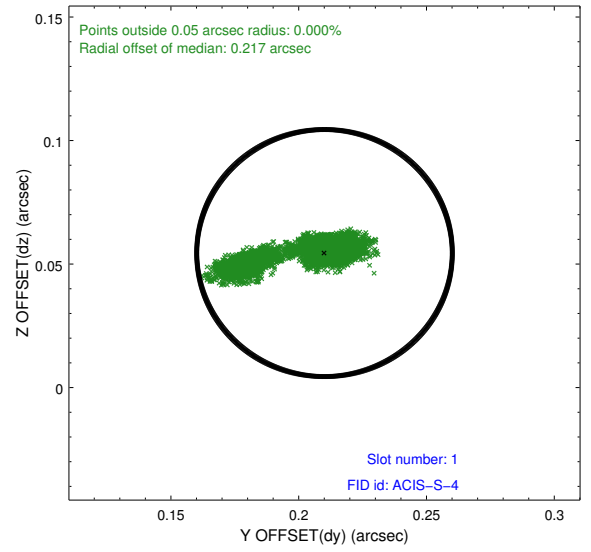
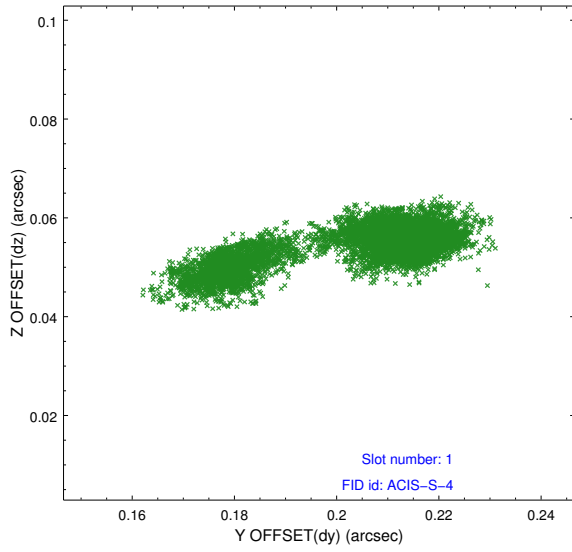


2.5 FID Slots

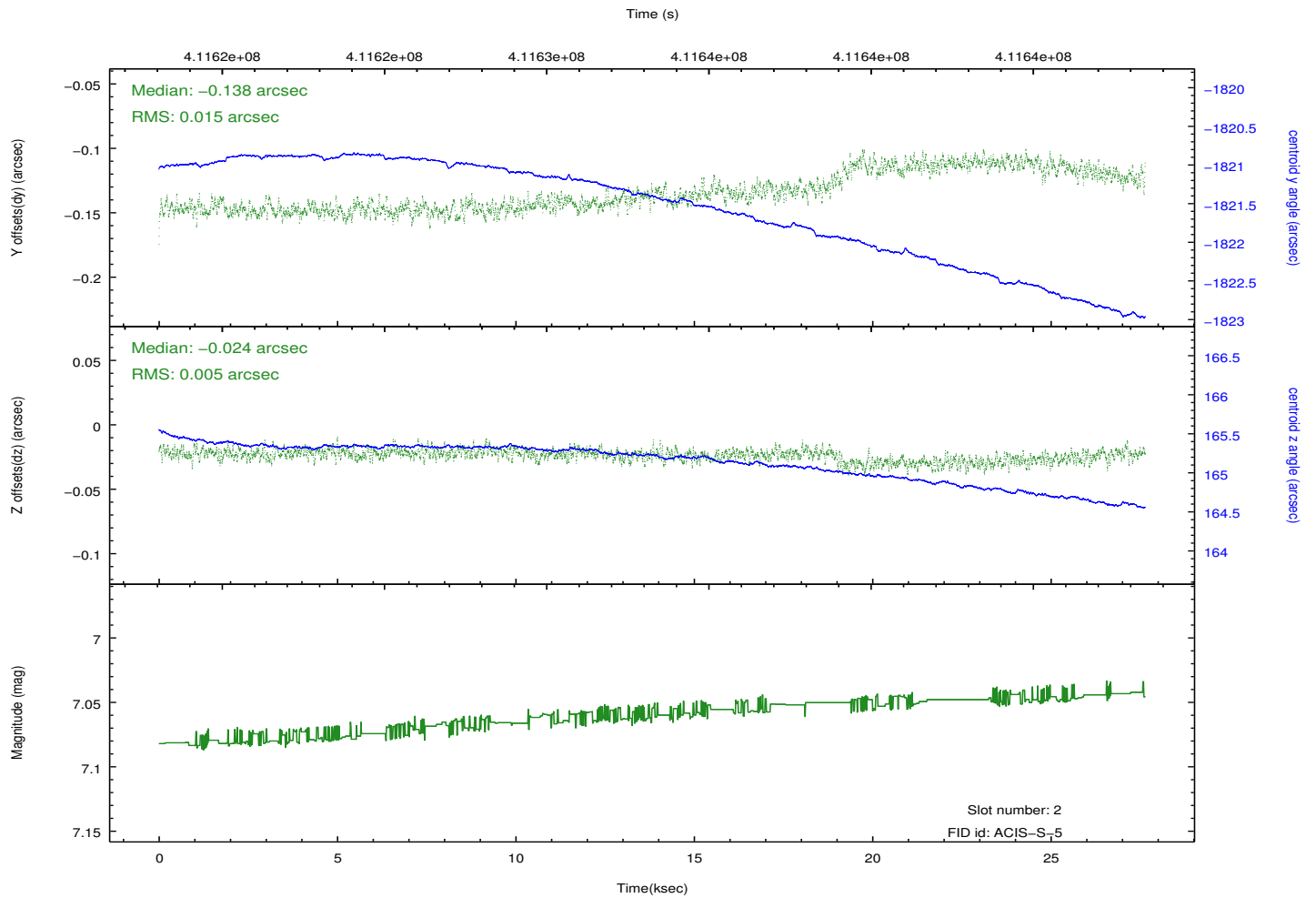
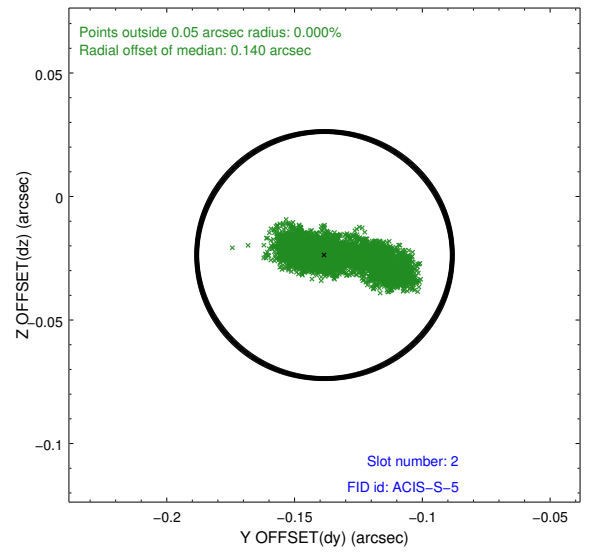
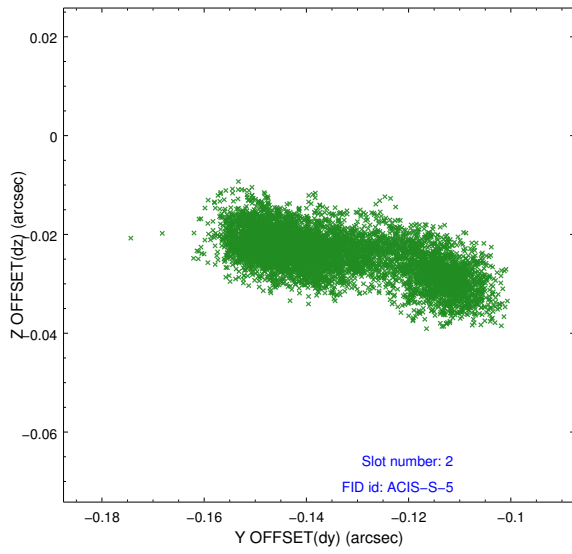
2.5.1 Slot 0



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	27.548799897432

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.