

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12936 - L2 Version 2
Chandra X-Ray Center

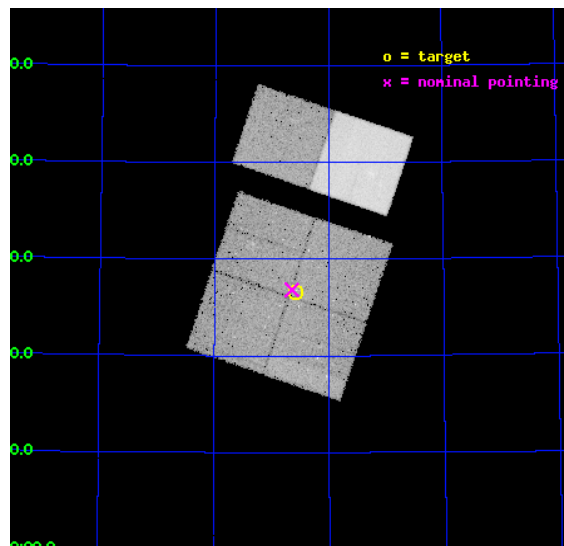
L2 Processing Date : Feb 1 2012

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

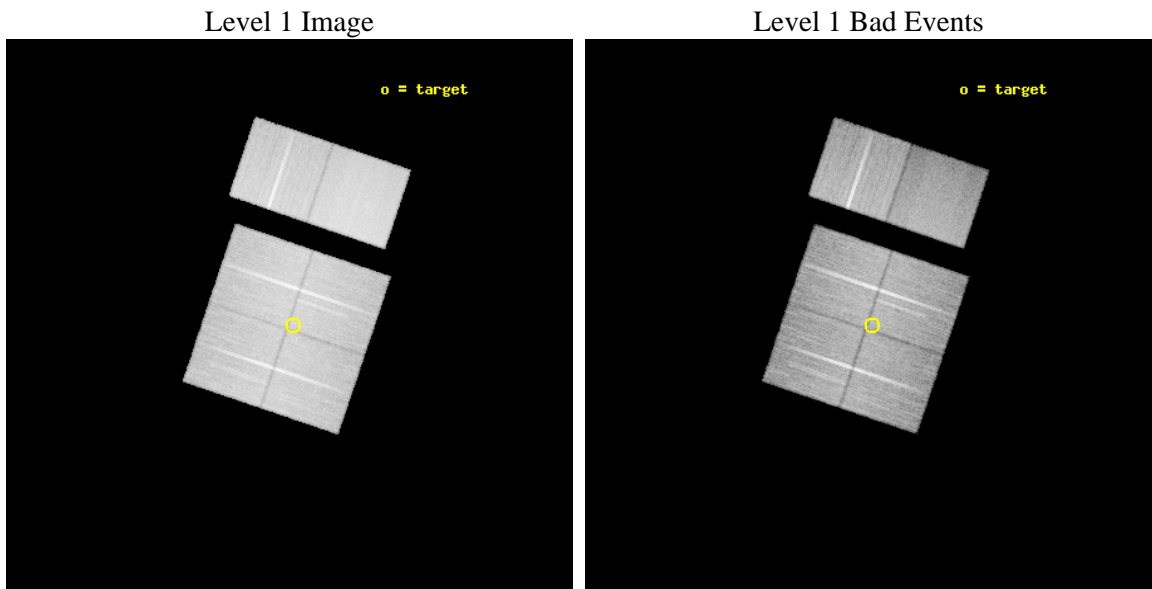
seq_num	900968	Sequence number
obs_id	12936	Observation id
title	Filling the 15 micron Gap: Search for Compton-thick Accretion with Chandra and AKARI in the NEP Deep Field	Proposal title
observer	Dr. Mirko Krumpe	Principal investigator
object	AKARI-NEP-Deep Field	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	269.14583	Observer's specified target RA [deg]
dec_targ	66.4425	Observer's specified target Dec [deg]
ra_nom	269.16219661798	Nominal RA [deg]
dec_nom	66.447242104572	Nominal Dec [deg]
roll_nom	18.707641723243	Nominal Roll [deg]
revision	2	Processing version of data
ontime	35052.799869478	Sum of GTIs [s]
livetime	34608.940211268	Livetime [s]
ontime0	35052.799869478	Sum of GTIs [s]
ontime1	35052.799869478	Sum of GTIs [s]
ontime2	35043.076908767	Sum of GTIs [s]
ontime3	35052.799869478	Sum of GTIs [s]
ontime6	35049.558899105	Sum of GTIs [s]
ontime7	35052.799869478	Sum of GTIs [s]
l2events	249114	Number of level 2 events



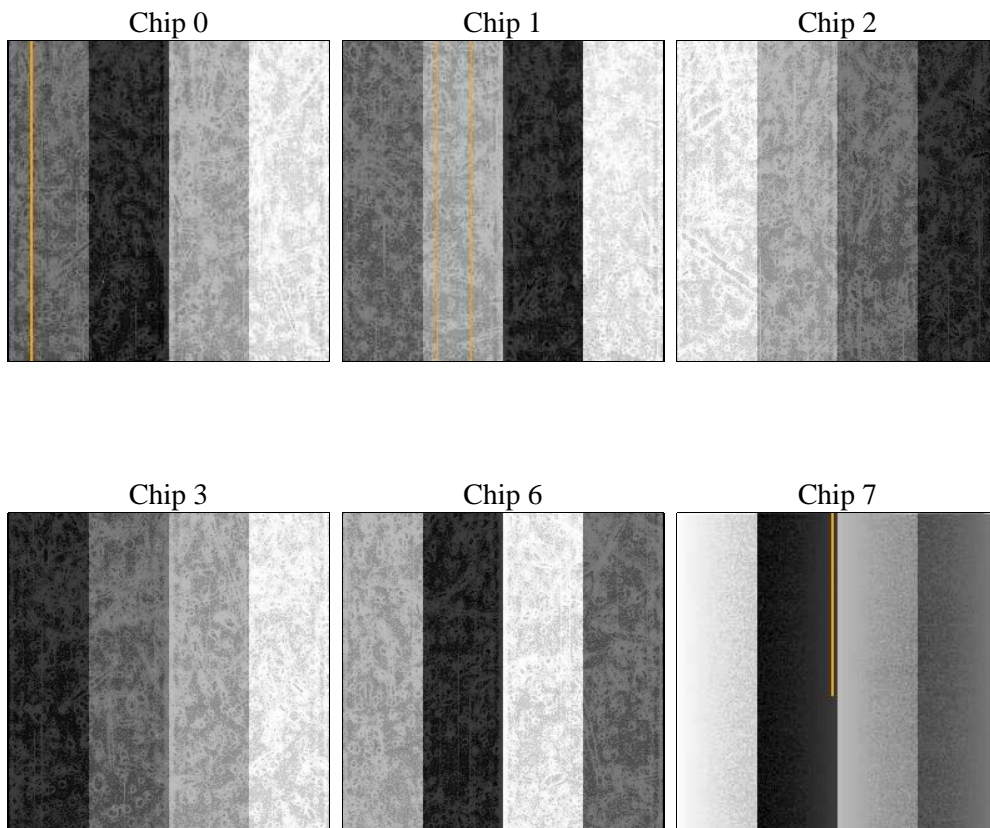
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	35052.799869478	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	35052.799869478	Sum of GTIs [s]
date	2012-02-01T10:51:35	Date and time of file creation	ontime1	35052.799869478	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	35043.076908767	Sum of GTIs [s]
			ontime3	35052.799869478	Sum of GTIs [s]
			ontime6	35049.558899105	Sum of GTIs [s]
			ontime7	35052.799869478	Sum of GTIs [s]
			l1events	1490377	Number of level 1 events

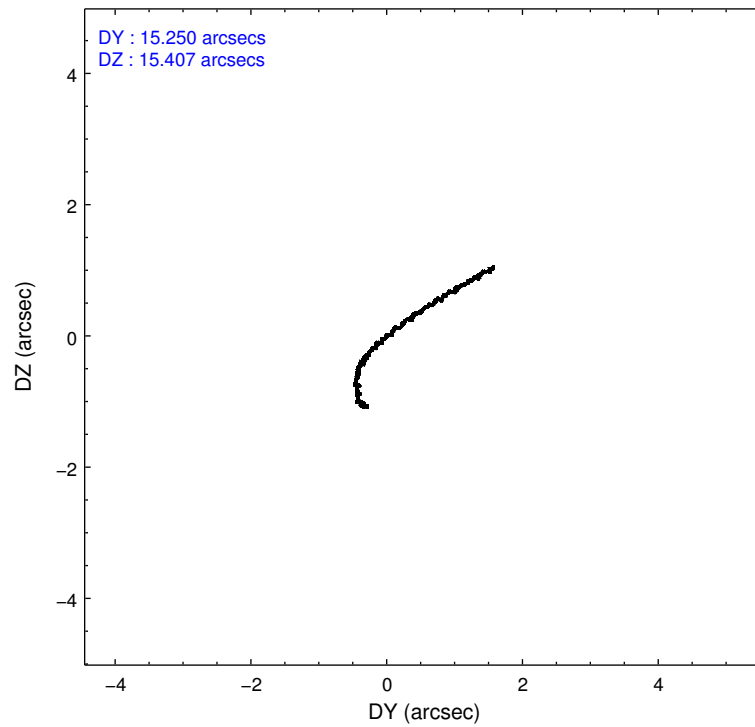
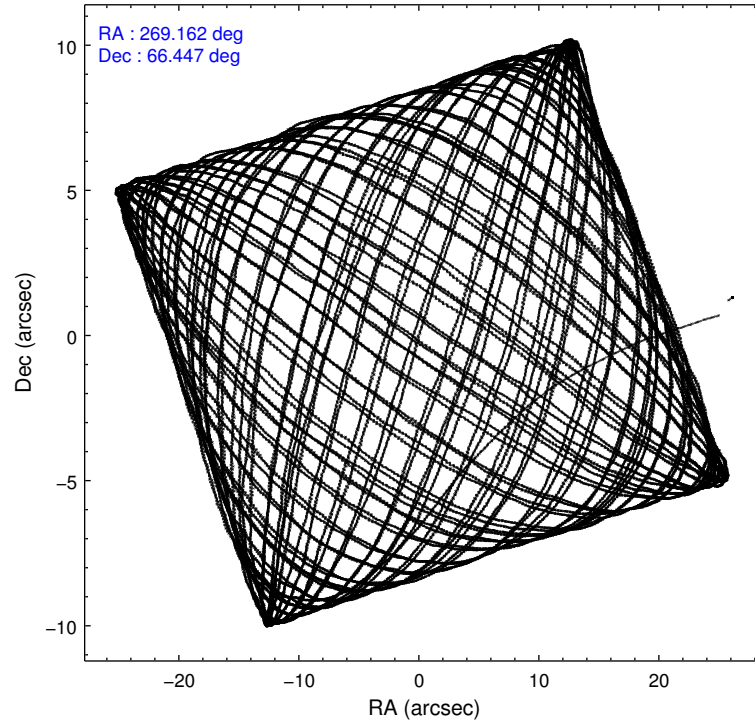
2.1.4 Events

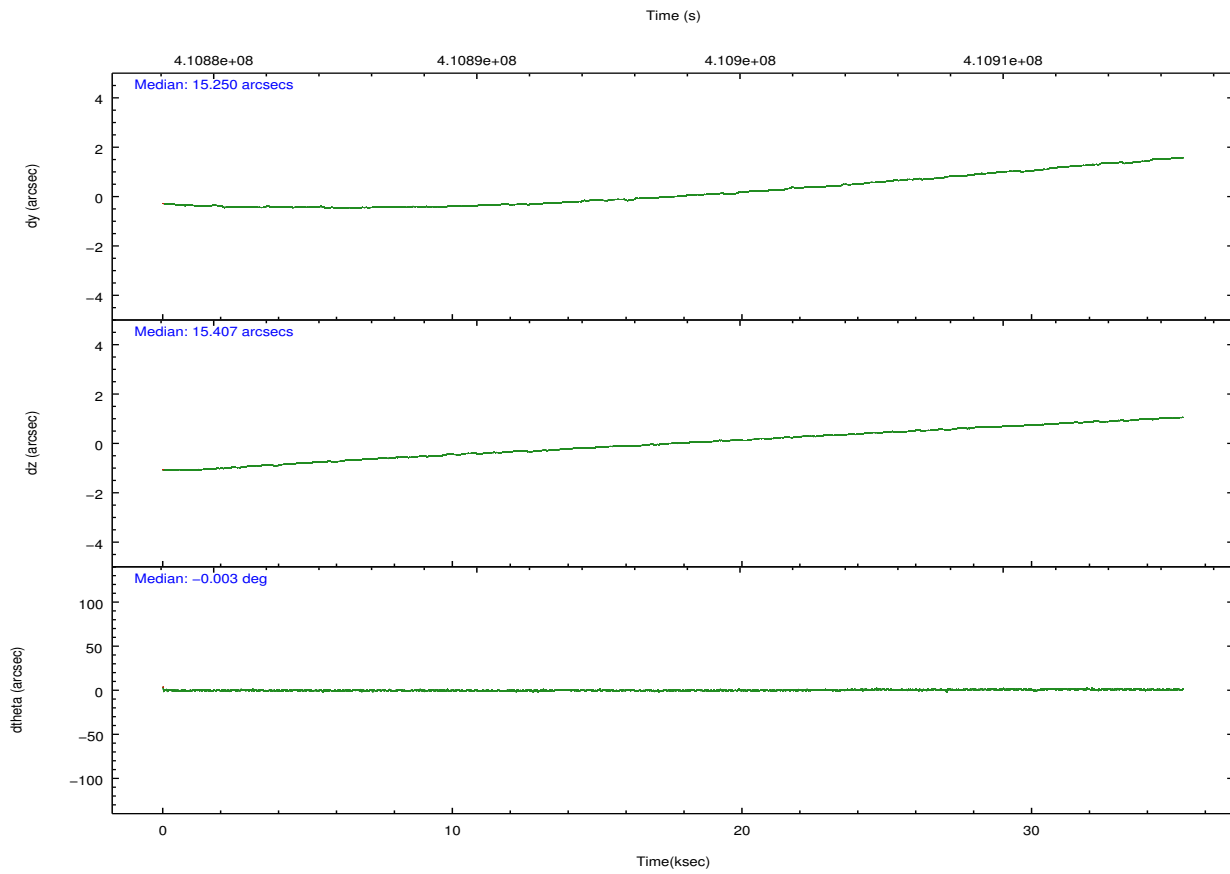
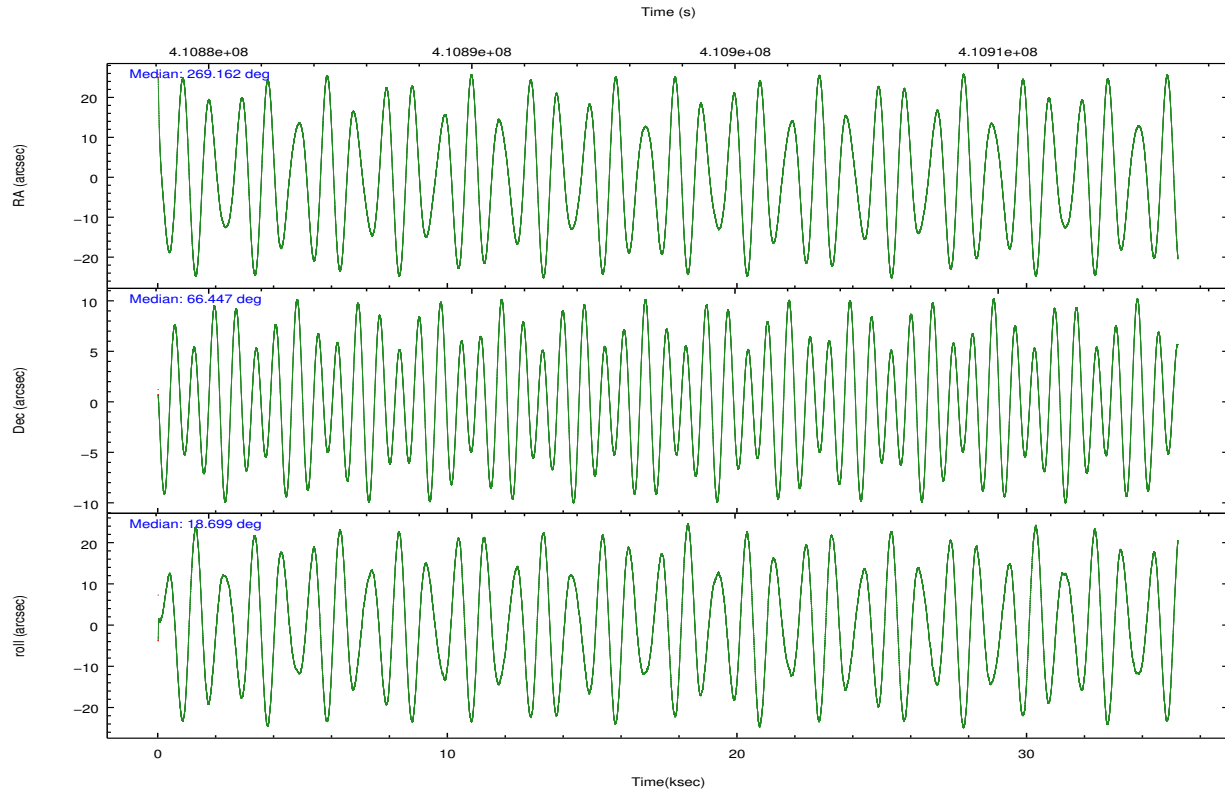
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	224467	225255	247154	234518	252986	305997	grade 0 events	9347	11013	9818	9059	9603	12351
rejected events	197279	194599	220318	209126	224861	169034		4%	4%	3%	3%	3%	4%
rejected %	87%	86%	89%	89%	88%	55%	grade 1 events	131	105	135	148	139	370
								0%	0%	0%	0%	0%	0%
							grade 2 events	6688	7286	6487	5668	6361	28080
								2%	3%	2%	2%	2%	9%
							grade 3 events	2958	3075	2837	2715	2912	11813
								1%	1%	1%	1%	1%	3%
							grade 4 events	2820	3019	2669	2740	2905	12061
								1%	1%	1%	1%	1%	3%
							grade 5 events	10292	10628	9853	11660	11649	32214
								4%	4%	3%	4%	4%	10%
							grade 6 events	5385	6267	5034	5216	6351	72675
								2%	2%	2%	2%	2%	23%
							grade 7 events	186846	183862	210321	197312	213066	136433
								83%	81%	85%	84%	84%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	269.117025	269.1621966179753	CCD I2 on	Y	Y
[deg] Pointing Dec	66.426508	66.44724210457153	CCD I3 on	Y	Y
[deg] Pointing Roll	18.540353	18.70764172324294	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	410880068.184000	410879049.83125	CCD S5 on	N	N
Observation start date	2011-01-08T13:20:02	2011-01-08T13:04:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	410915068.184000	410915623.88315	On-chip summing requested	N	N
Observation end date	2011-01-08T23:03:22	2011-01-08T23:13:43	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



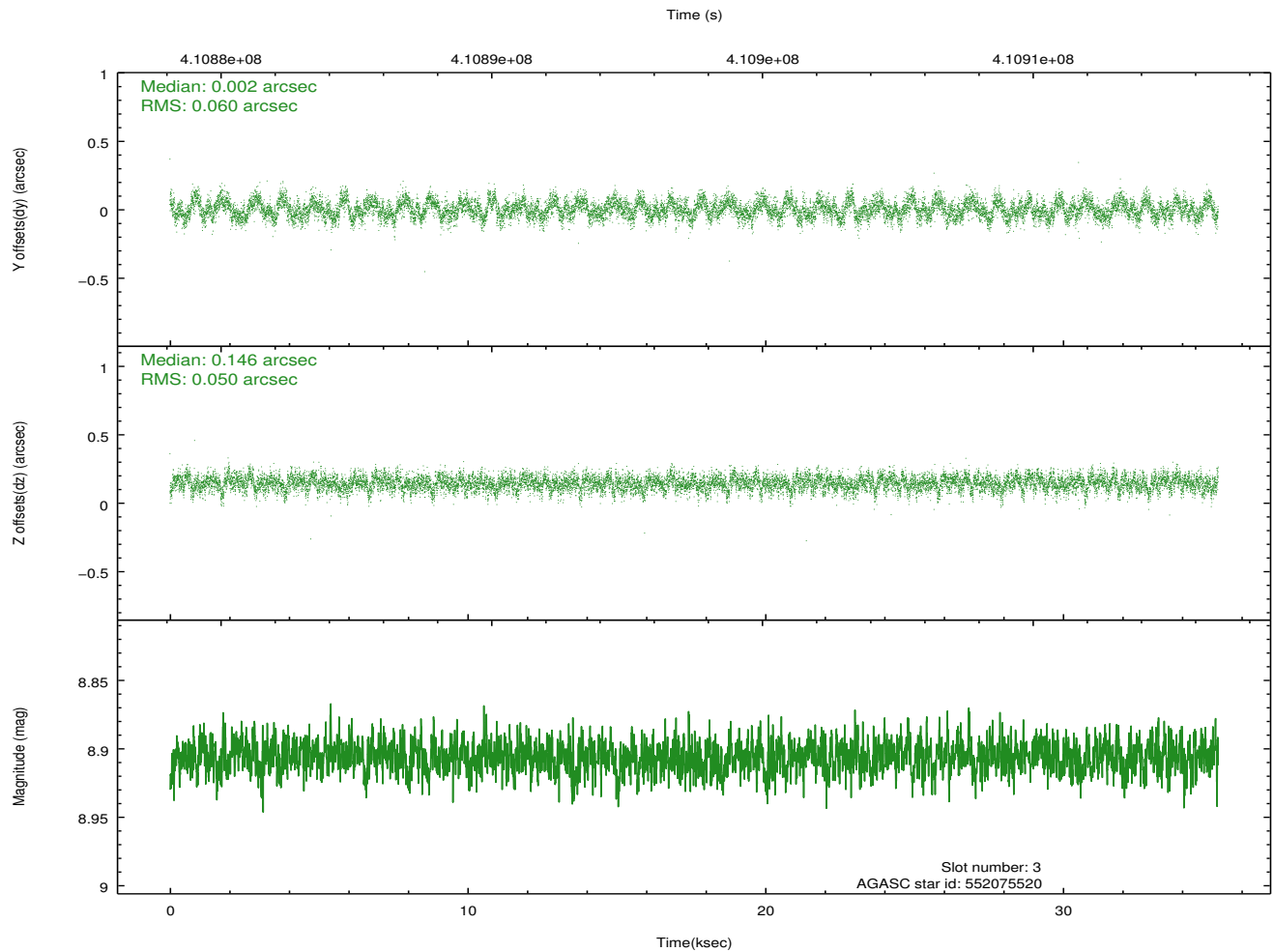
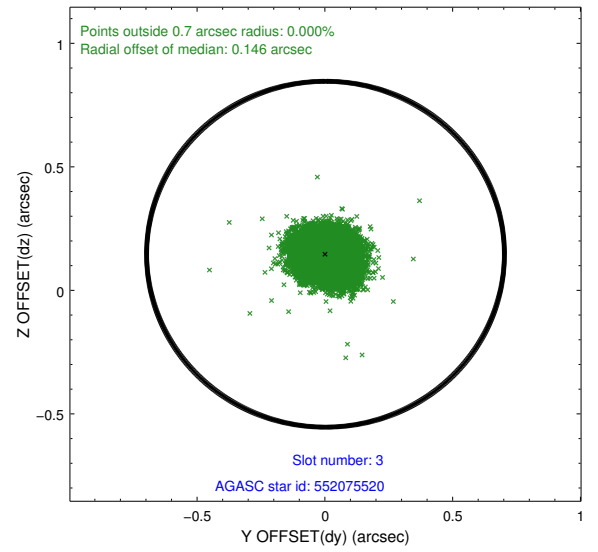
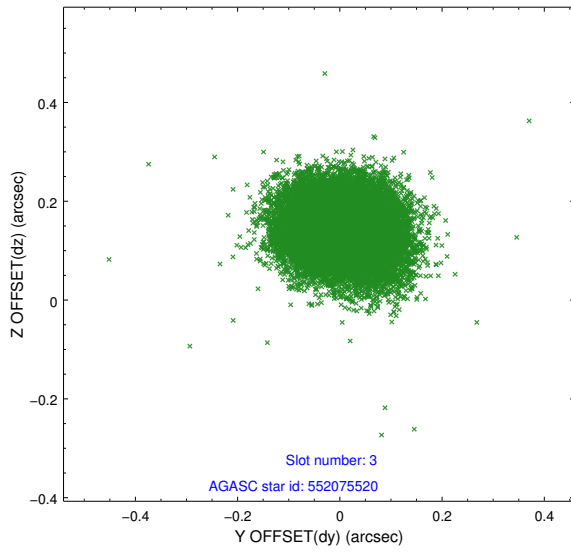


Slot Statistics

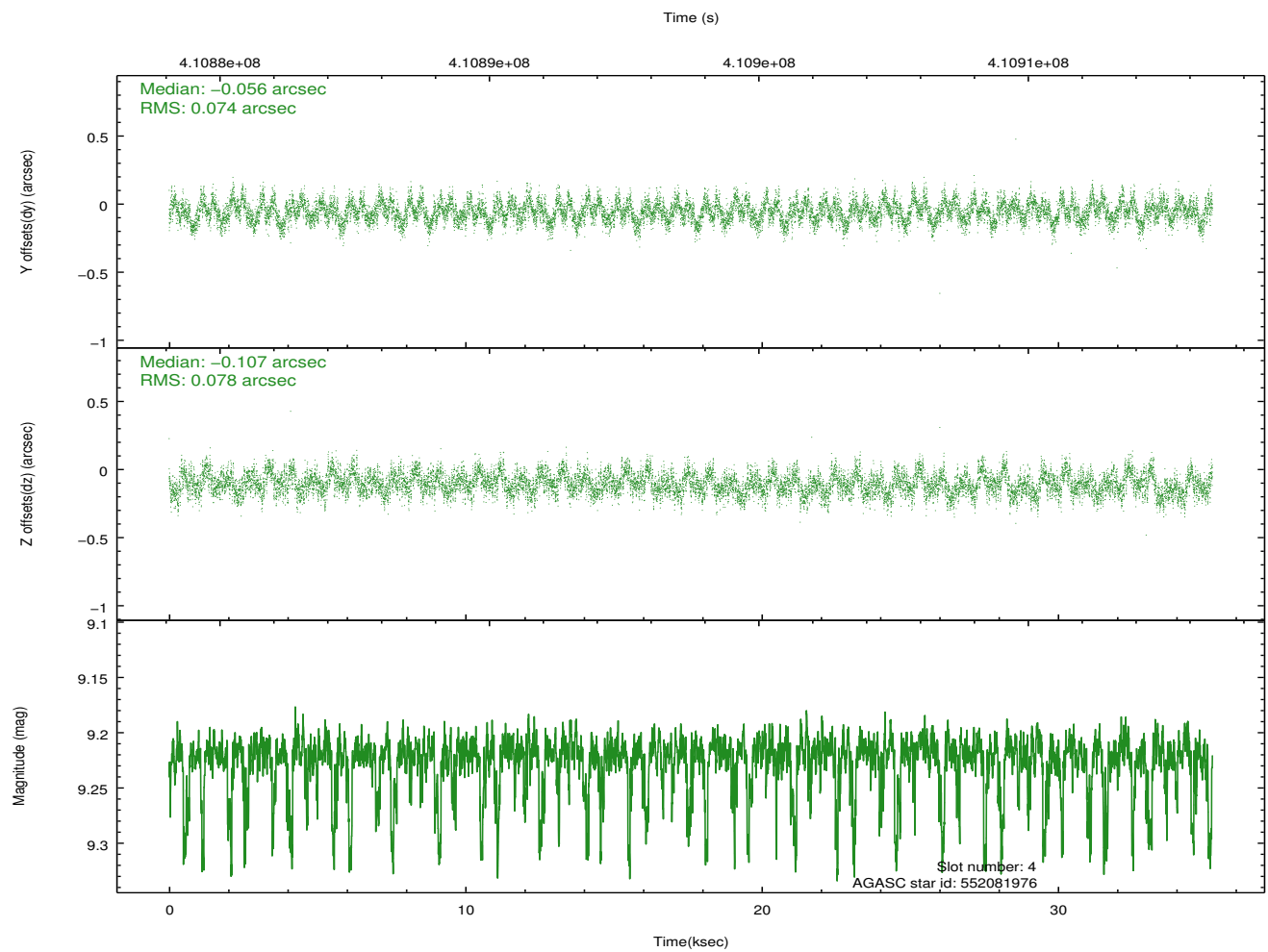
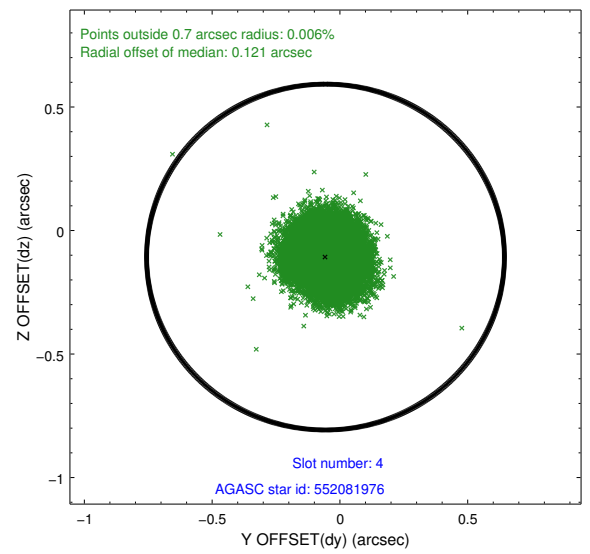
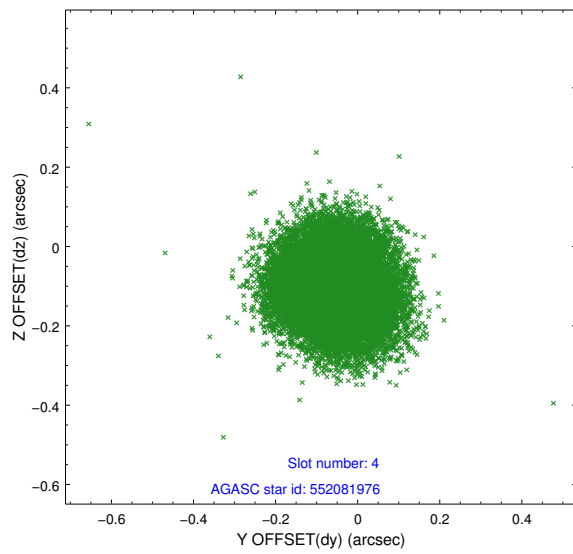
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.05	8589	-0.001	-0.041	0.046	0.065	0.000000	0.000000	924.00	-839.03
1	FID	ACIS-I-4	6.97	8589	0.146	0.051	0.035	0.055	0.000000	0.000000	2144.18	1060.87
2	FID	ACIS-I-5	7.03	8589	-0.245	0.060	0.020	0.028	0.000000	0.000000	-1824.22	1058.71
3	GUIDE	552075520	8.91	17168	0.002	0.146	0.083	0.134	269.430358	66.310622	297.94	-538.43
4	GUIDE	552081976	9.22	17135	-0.056	-0.107	0.116	0.179	269.000724	66.928627	419.38	1766.14
5	GUIDE	552084280	7.64	17174	0.084	-0.056	0.067	0.111	268.233478	66.419076	-1211.55	387.69
6	GUIDE	552206400	8.63	17166	-0.021	0.075	0.074	0.120	270.193803	65.897301	900.07	-2296.40
7	GUIDE	552213664	8.85	17164	-0.013	-0.056	0.098	0.153	270.812461	66.341359	2235.60	-1037.67

2.4 Star Slots

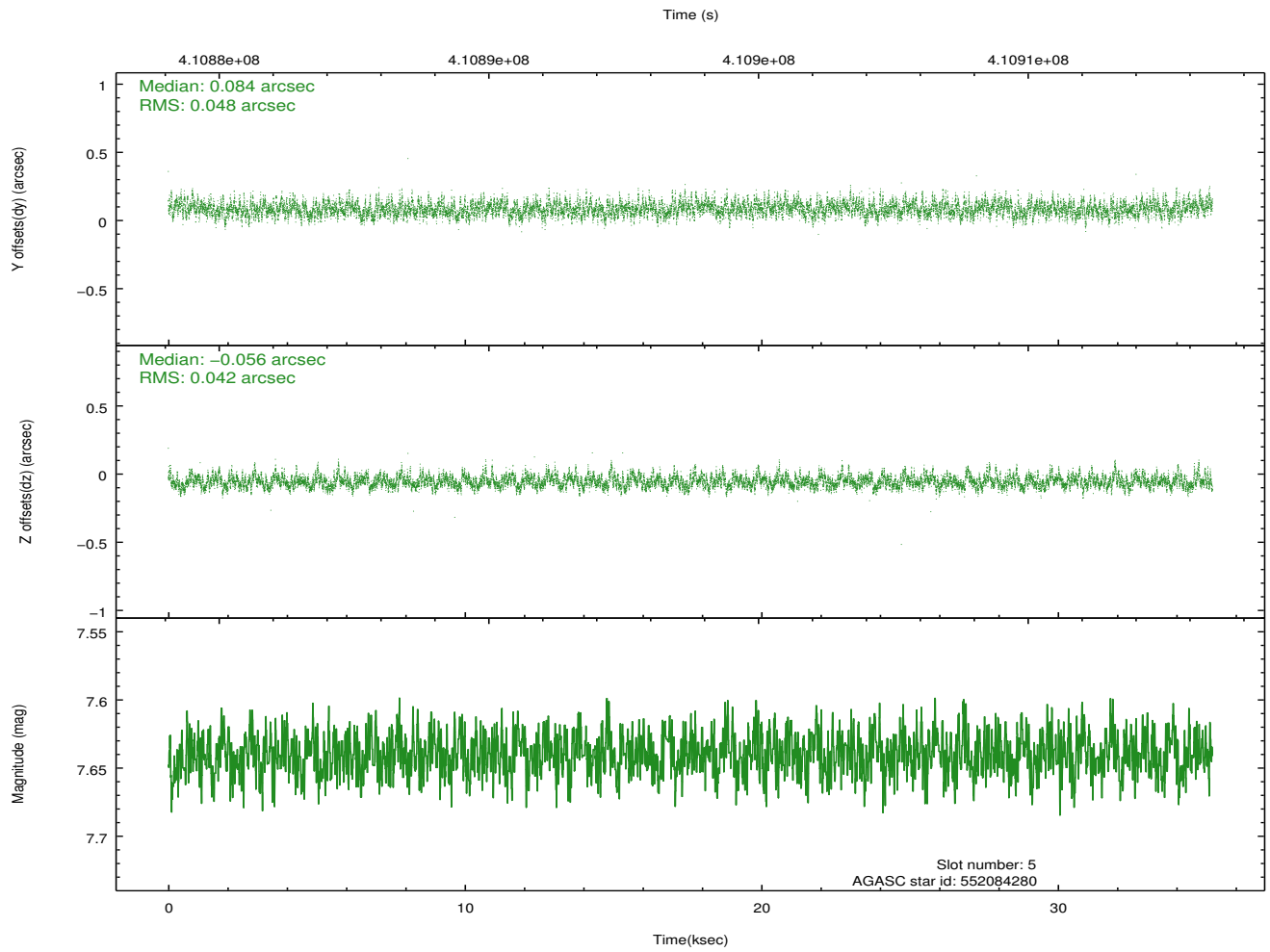
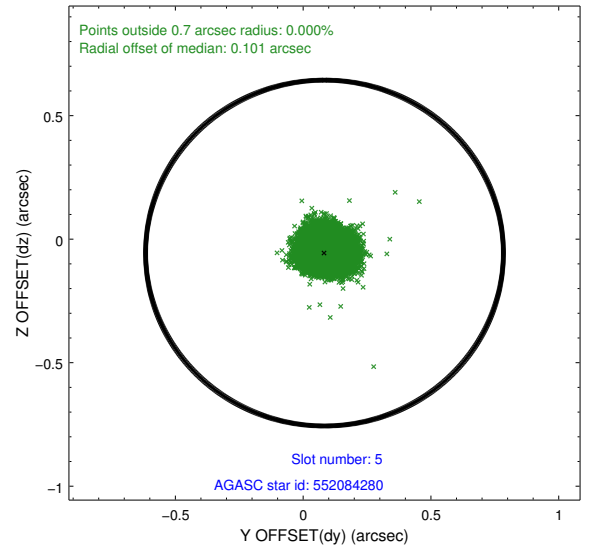
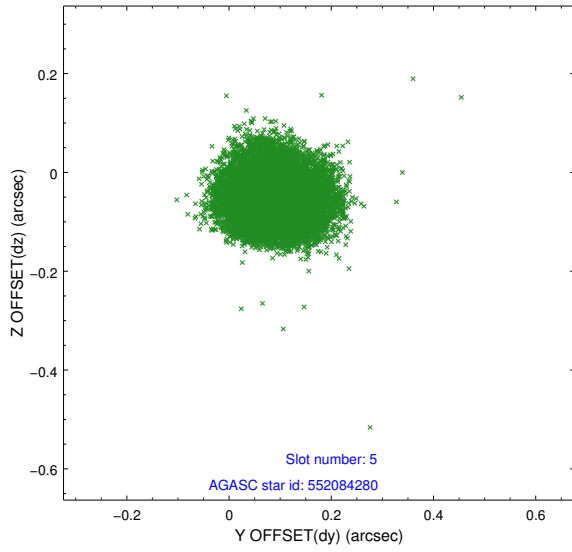
2.4.1 Slot 3



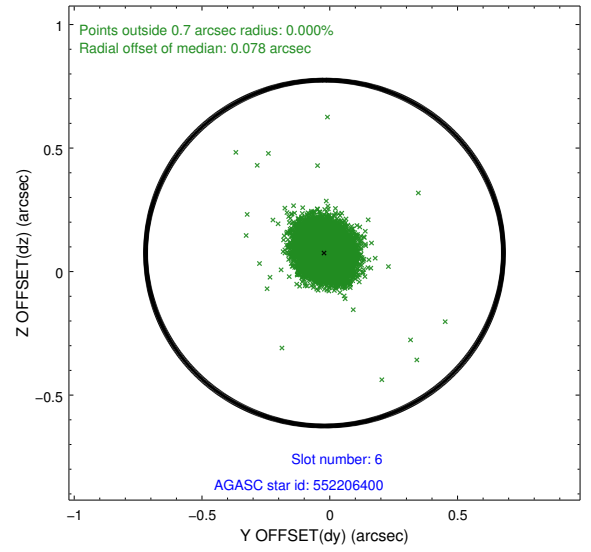
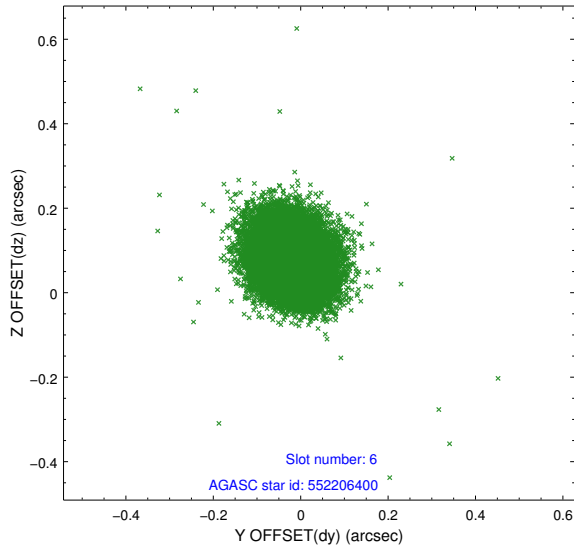
2.4.2 Slot 4



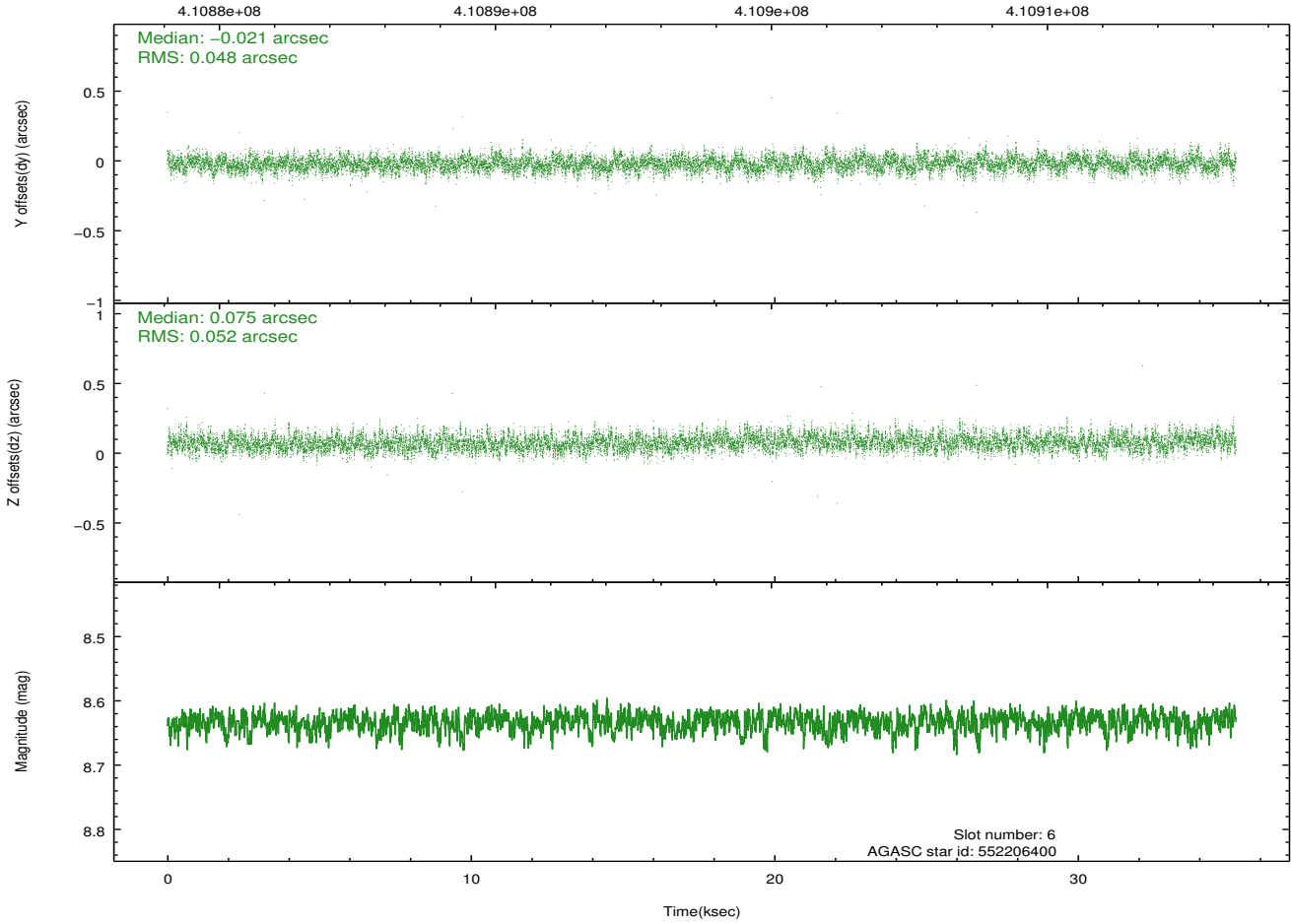
2.4.3 Slot 5



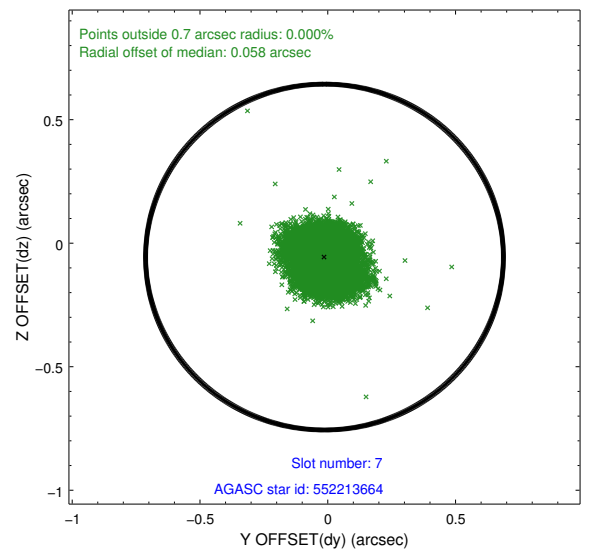
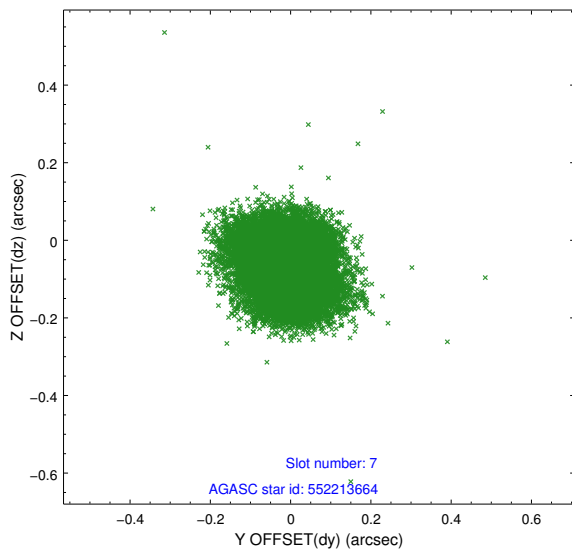
2.4.4 Slot 6



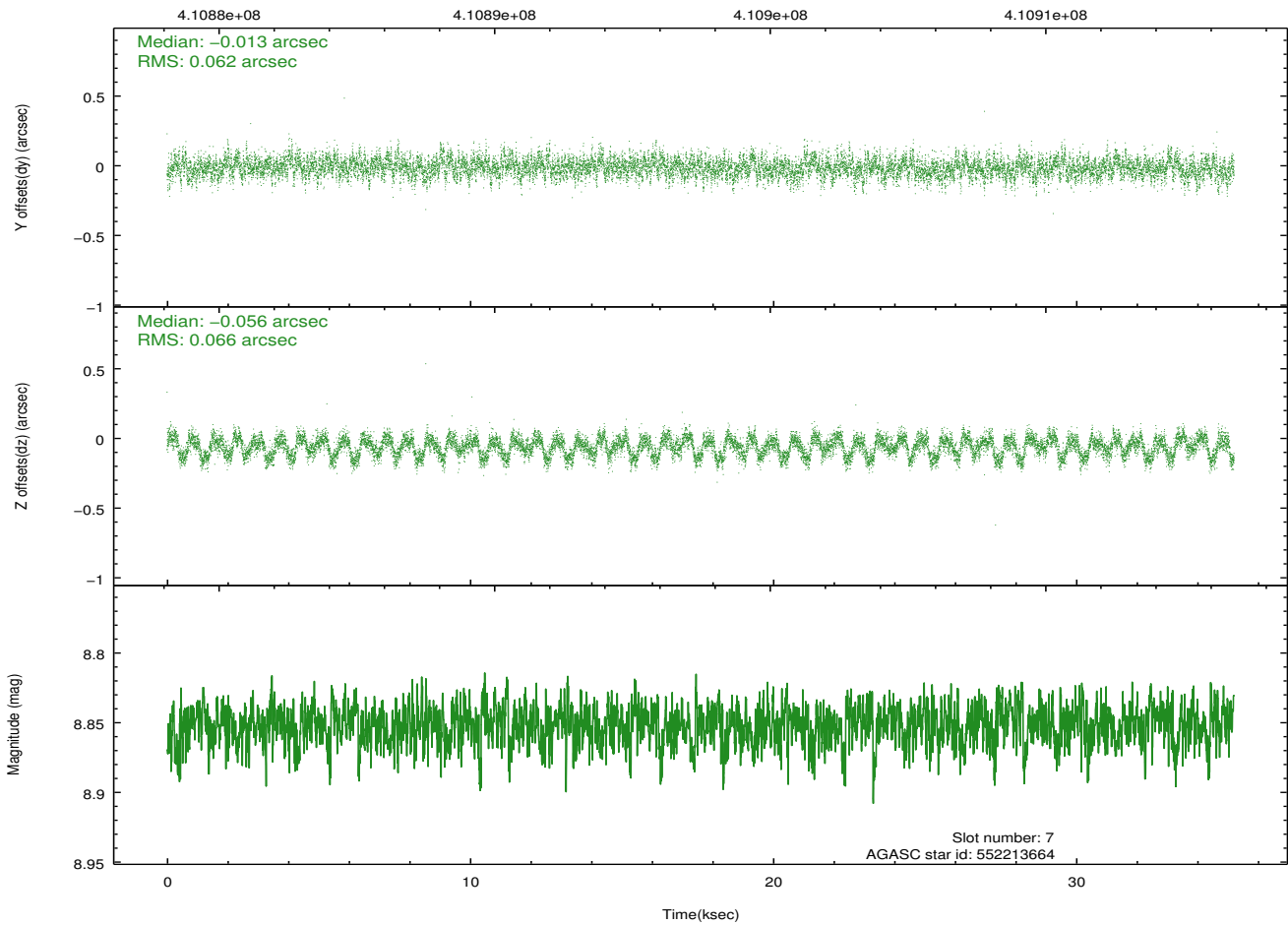
Time (s)



2.4.5 Slot 7

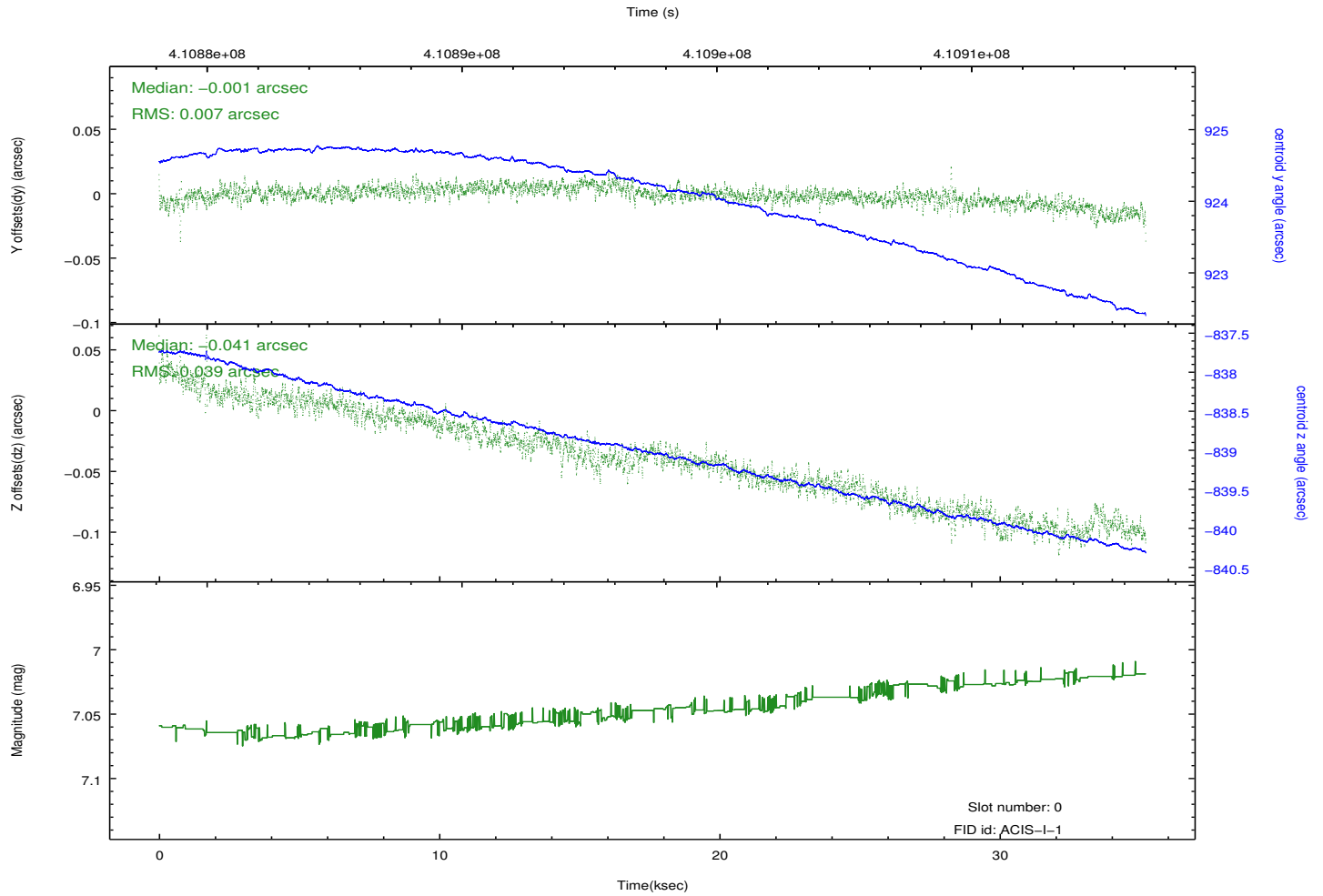
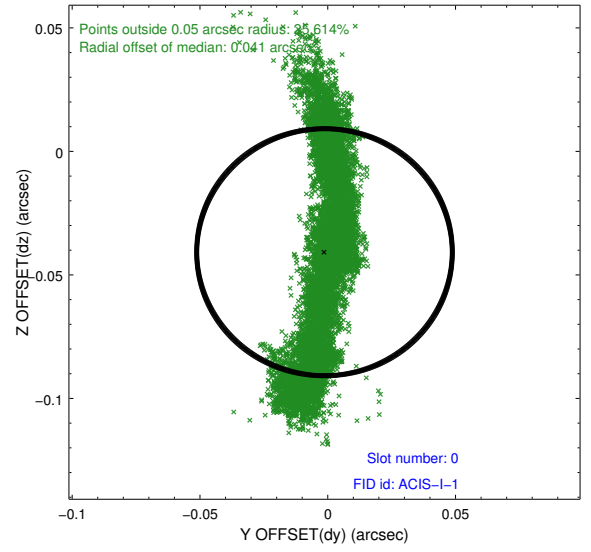
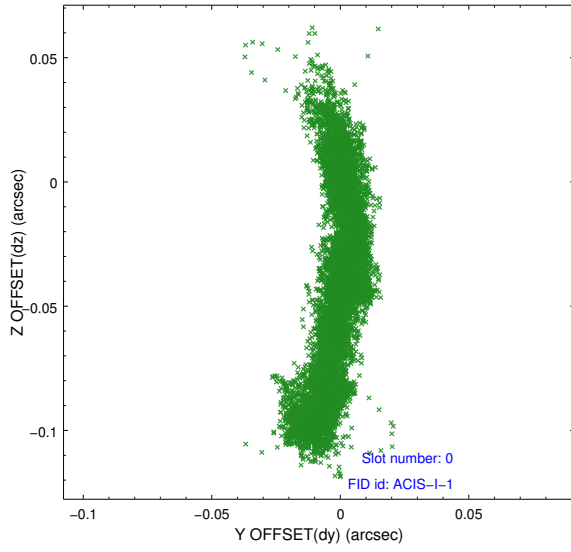


Time (s)

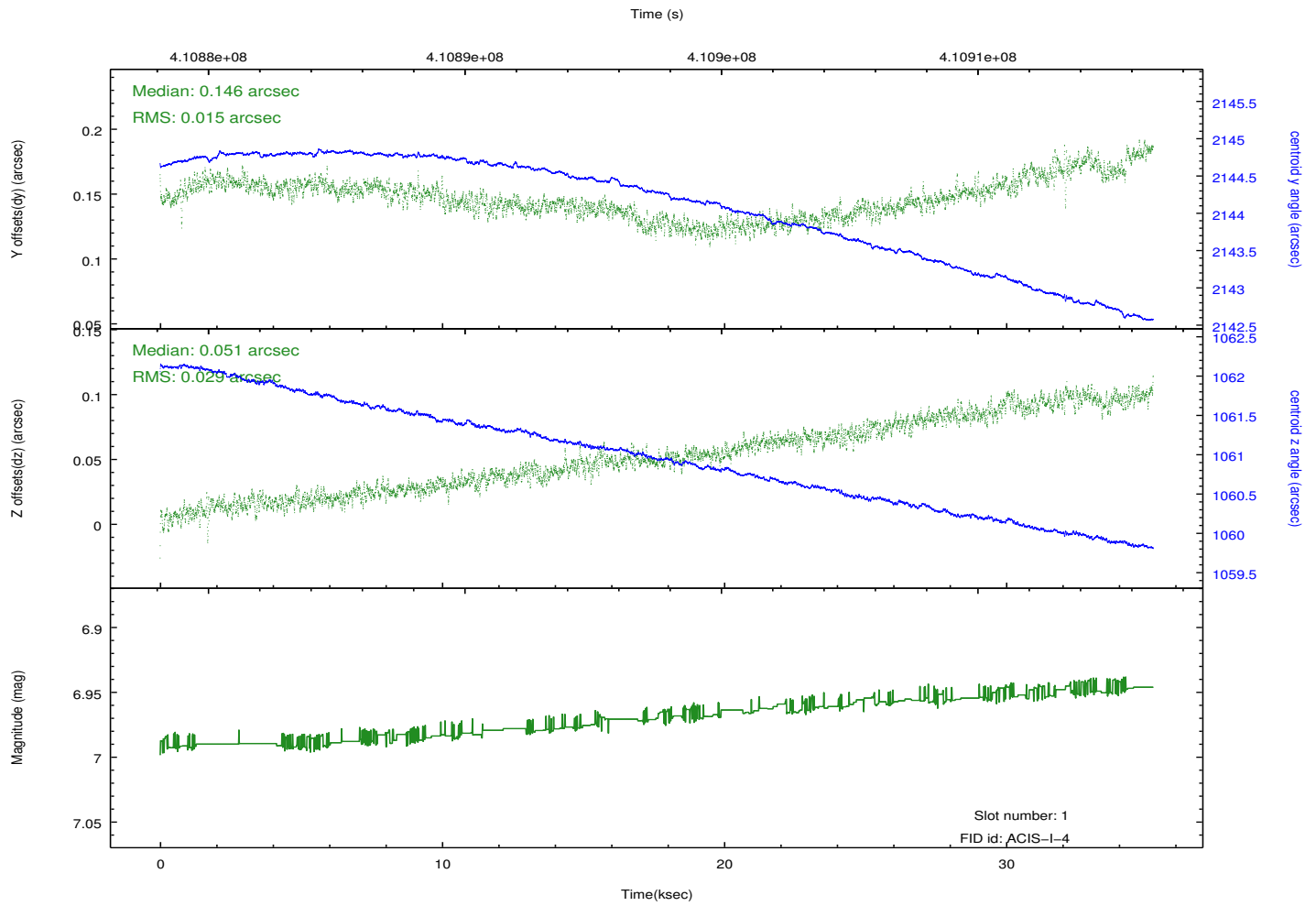
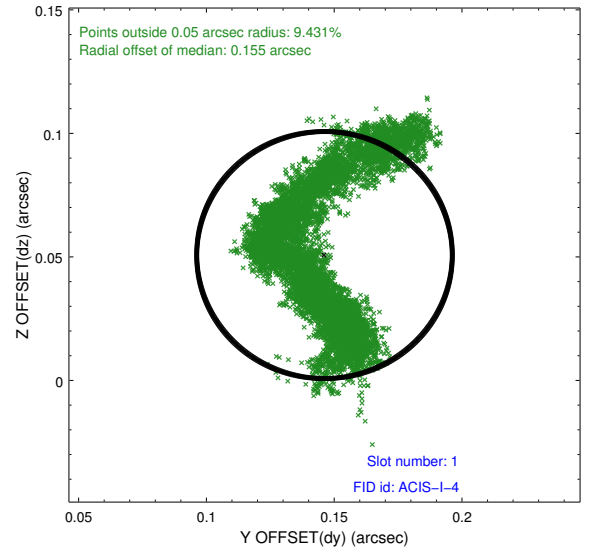
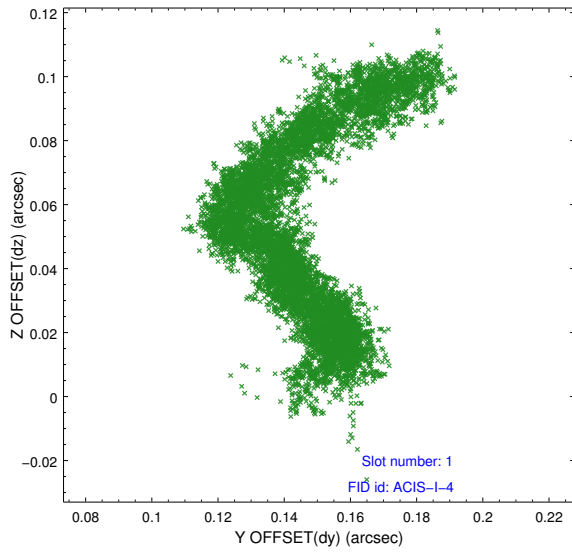


2.5 FID Slots

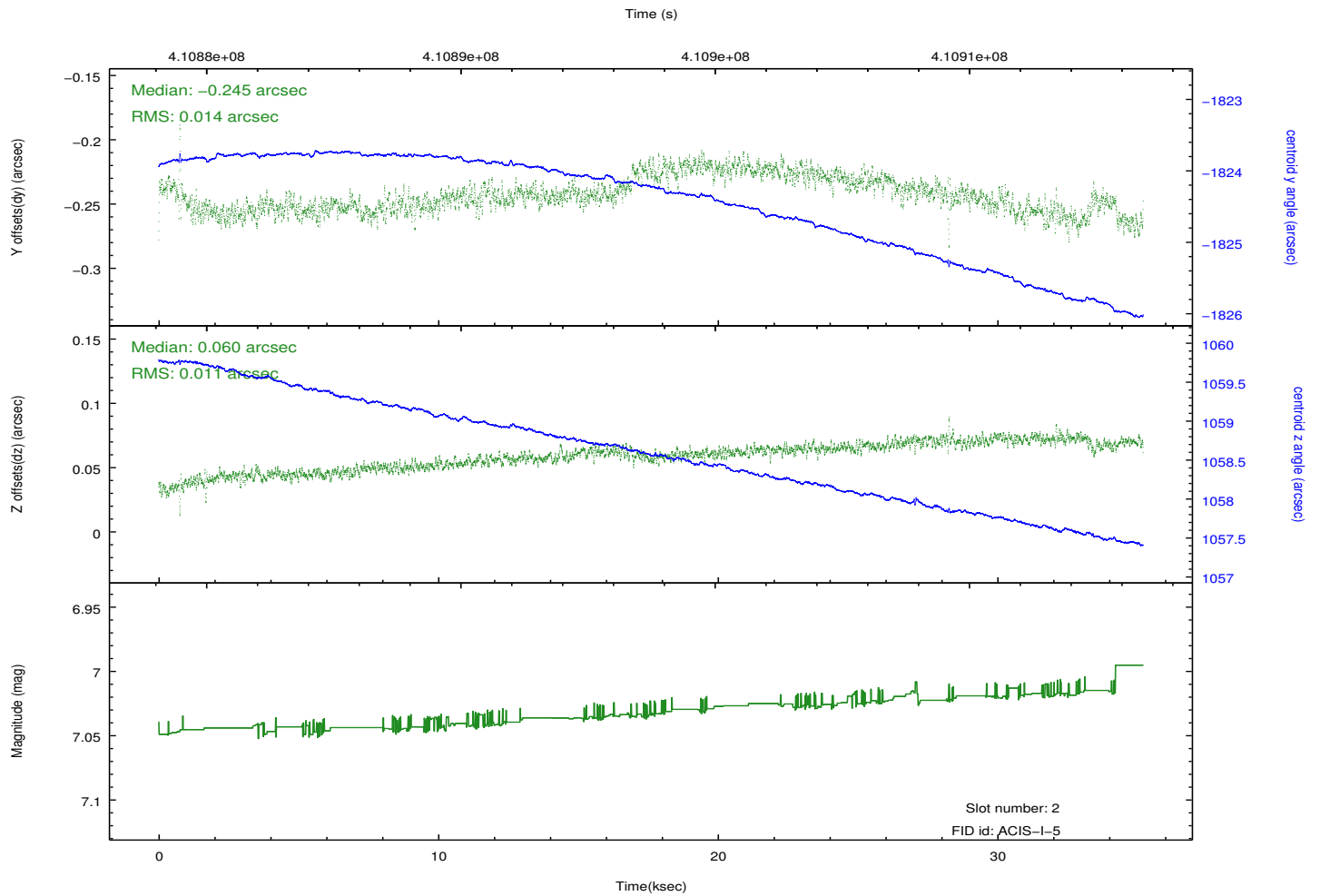
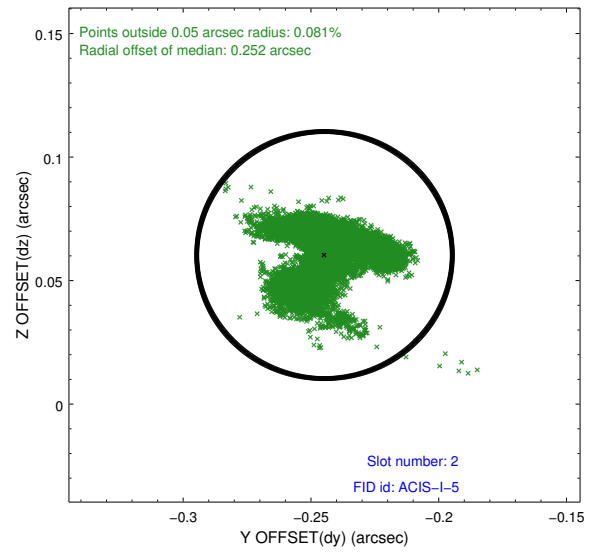
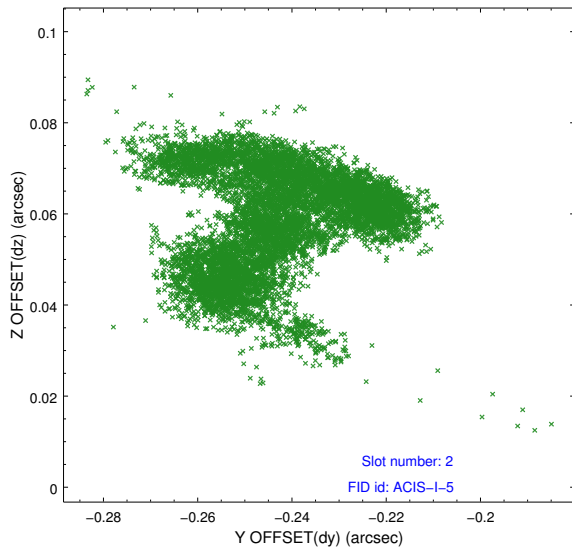
2.5.1 Slot 0



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	35.052799869478

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.

===

Roll preference not met, preferred roll 0 +/- 15 degrees, actual roll 19 degrees.