

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12927 - L2 Version 2
Chandra X-Ray Center

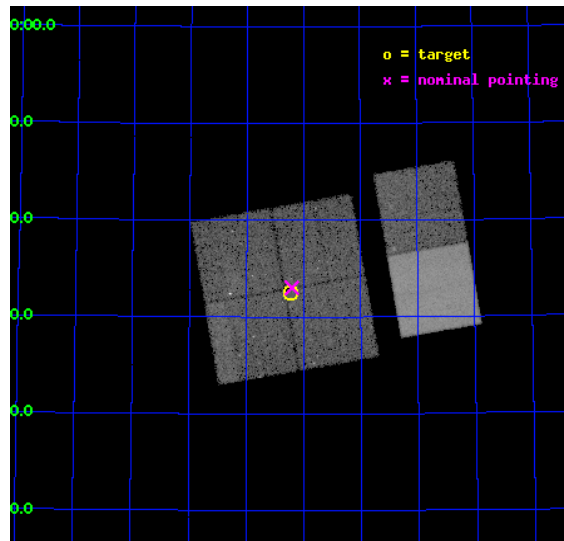
L2 Processing Date : Feb 5 2012

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1 Front

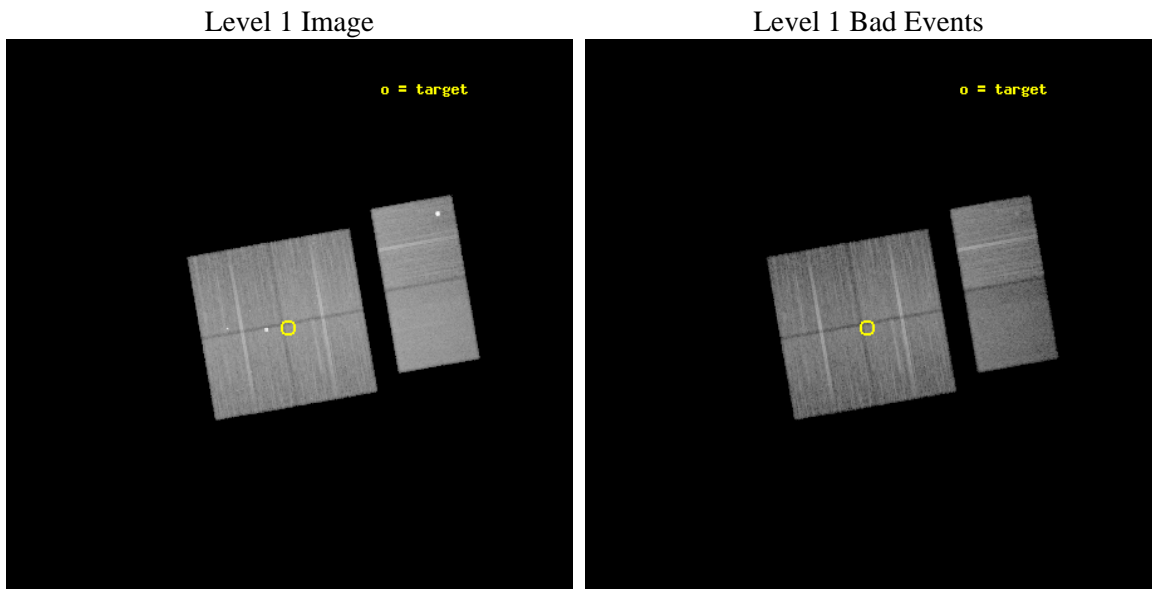
seq_num	900959	Sequence number
obs_id	12927	Observation id
title	Filling the 15 micron Gap: Search for Compton-thick Accretion with Chandra and AKARI in the NEP Deep Field	Proposal title
observer	Dr. Mirko Krumpe	Principal investigator
object	AKARI-NEP-Deep Field	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	268.55417	Observer's specified target RA [deg]
dec_targ	66.5425	Observer's specified target Dec [deg]
ra_nom	268.55158878511	Nominal RA [deg]
dec_nom	66.550511719657	Nominal Dec [deg]
roll_nom	80.111067350678	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24038.277128756	Sum of GTIs [s]
livetime	23733.889989639	Livetime [s]
ontime0	24047.999910474	Sum of GTIs [s]
ontime1	24041.518049419	Sum of GTIs [s]
ontime2	24047.999910474	Sum of GTIs [s]
ontime3	24038.277128756	Sum of GTIs [s]
ontime6	24044.75894016	Sum of GTIs [s]
ontime7	24047.999910474	Sum of GTIs [s]
l2events	178926	Number of level 2 events



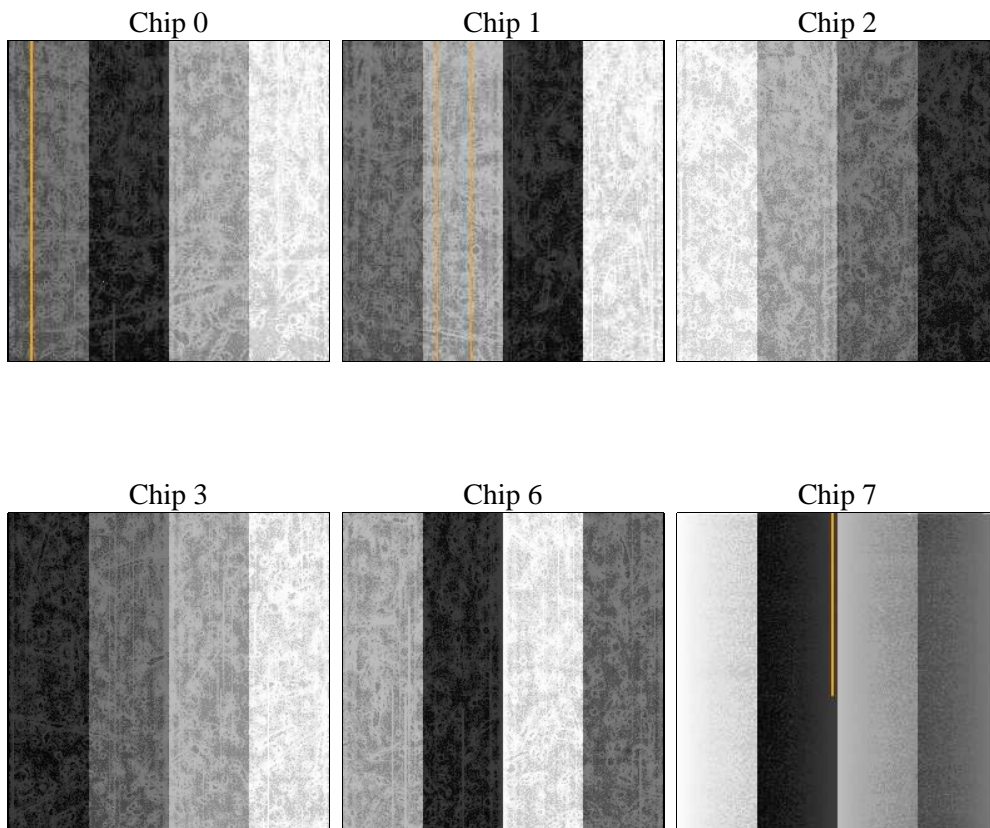
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	24000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	24038.277128756	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	24047.999910474	Sum of GTIs [s]
date	2012-02-05T16:49:06	Date and time of file creation	ontime1	24041.518049419	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	24047.999910474	Sum of GTIs [s]
			ontime3	24038.277128756	Sum of GTIs [s]
			ontime6	24044.75894016	Sum of GTIs [s]
			ontime7	24047.999910474	Sum of GTIs [s]
			l1events	1138534	Number of level 1 events

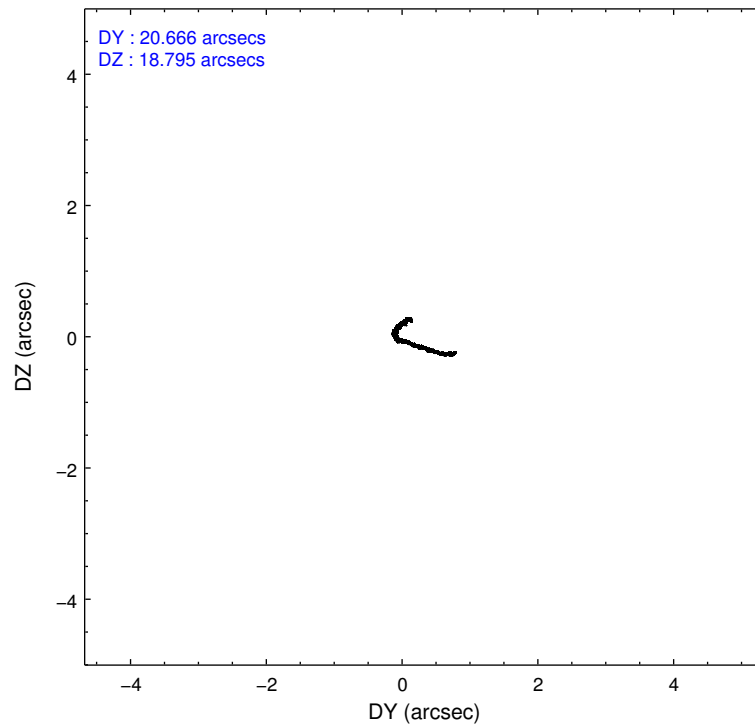
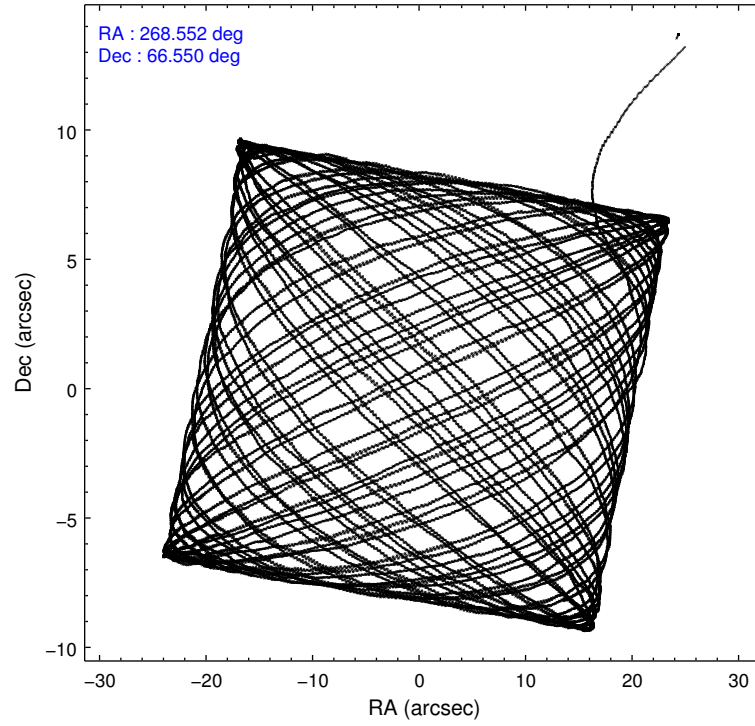
2.1.4 Events

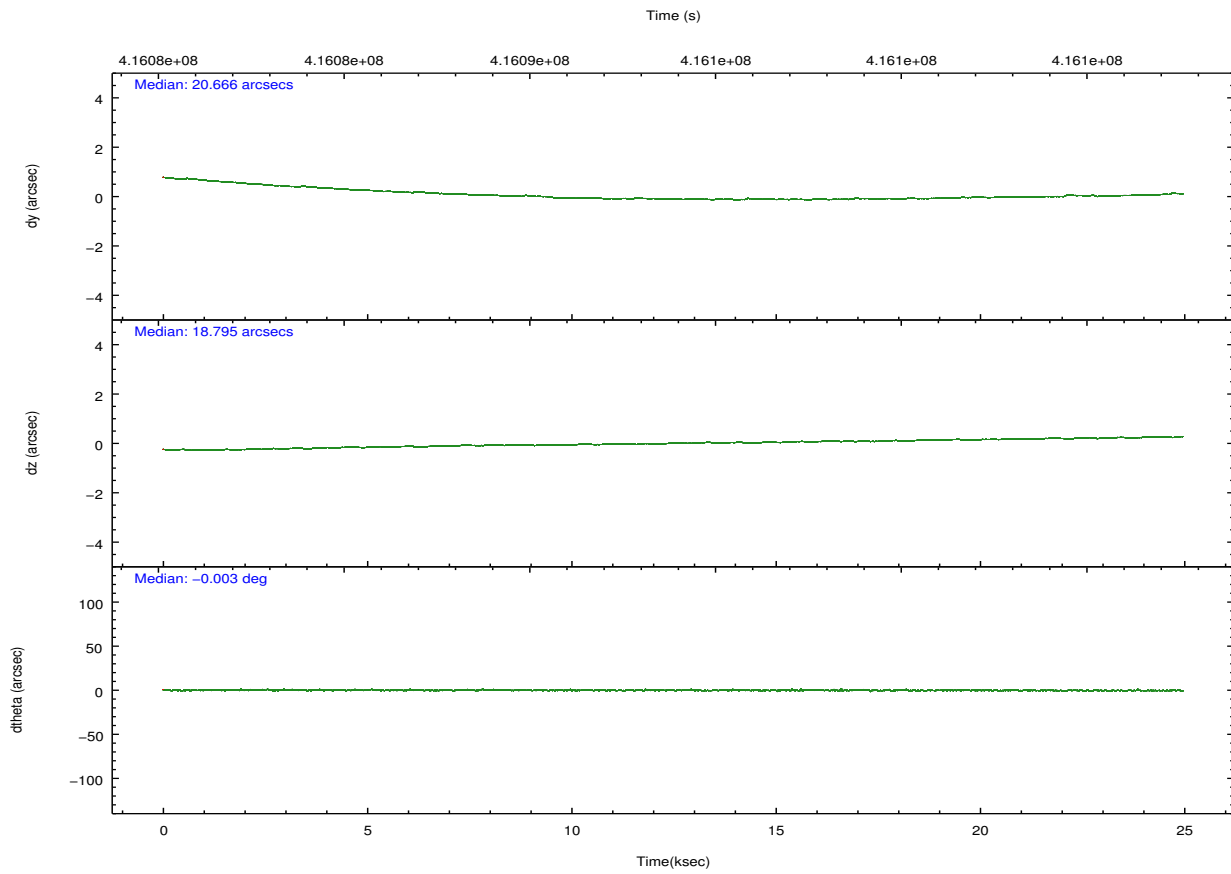
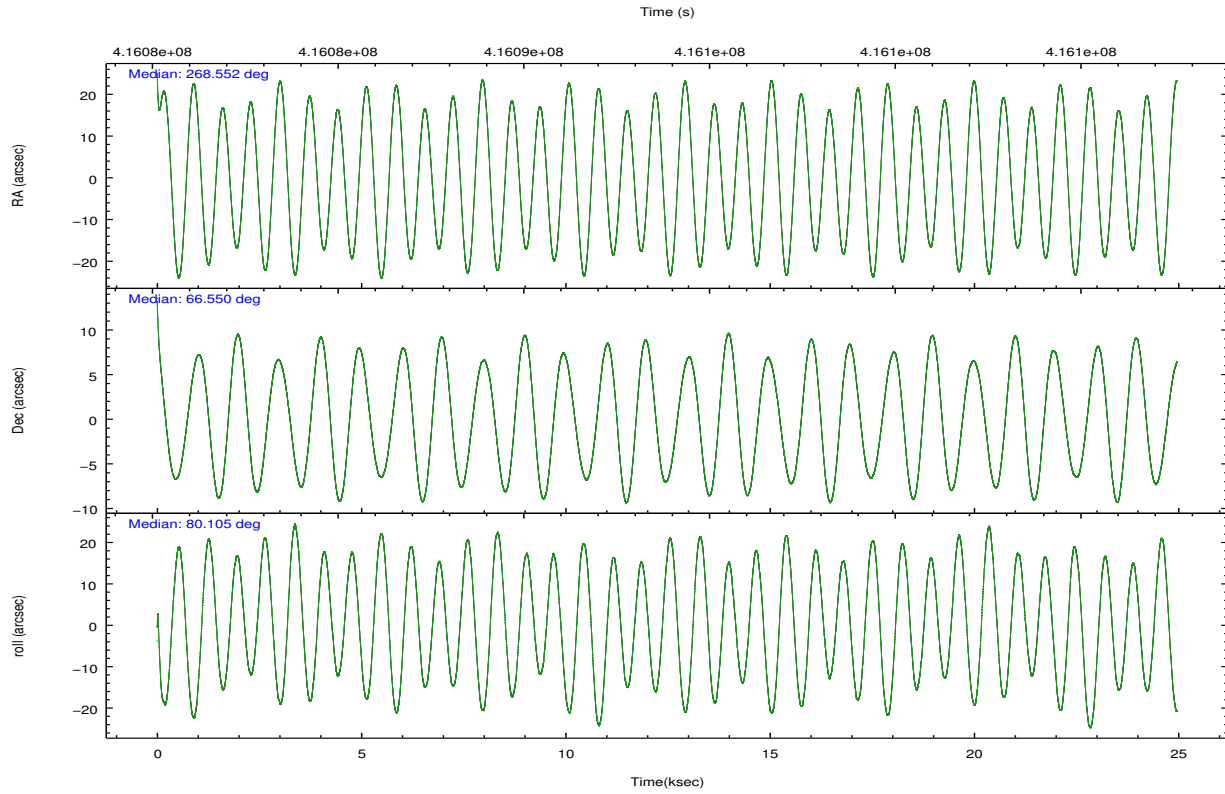
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	163866	179016	189731	180407	211060	214454	grade 0 events	9034	8151	7950	6435	22078	8820
rejected events	141421	149724	168431	162421	175217	117987		5%	4%	4%	3%	10%	4%
rejected %	86%	83%	88%	90%	83%	55%	grade 1 events	110	90	126	112	174	302
								0%	0%	0%	0%	0%	0%
							grade 2 events	5490	12361	5543	4060	5363	20436
								3%	6%	2%	2%	2%	9%
							grade 3 events	2127	2187	1939	1894	1967	8583
								1%	1%	1%	1%	0%	4%
							grade 4 events	1915	2096	2106	1944	1998	8367
								1%	1%	1%	1%	0%	3%
							grade 5 events	7072	7412	6745	7936	8048	22445
								4%	4%	3%	4%	3%	10%
							grade 6 events	3881	4503	3765	3660	4450	50298
								2%	2%	1%	2%	2%	23%
							grade 7 events	134237	142216	161557	154366	166982	95203
								81%	79%	85%	85%	79%	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	268.575534	268.5515887851142	CCD I2 on	Y	Y
[deg] Pointing Dec	66.524737	66.55051171965719	CCD I3 on	Y	Y
[deg] Pointing Roll	79.880402	80.11106735067824	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)	416082332.184000	416080504.33789	CCD S5 on	N	N
Observation start date	2011-03-09T18:24:26	2011-03-09T17:55:04	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	416106332.184000	416106617.75174	On-chip summing requested	N	N
Observation end date	2011-03-10T01:04:26	2011-03-10T01:10:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



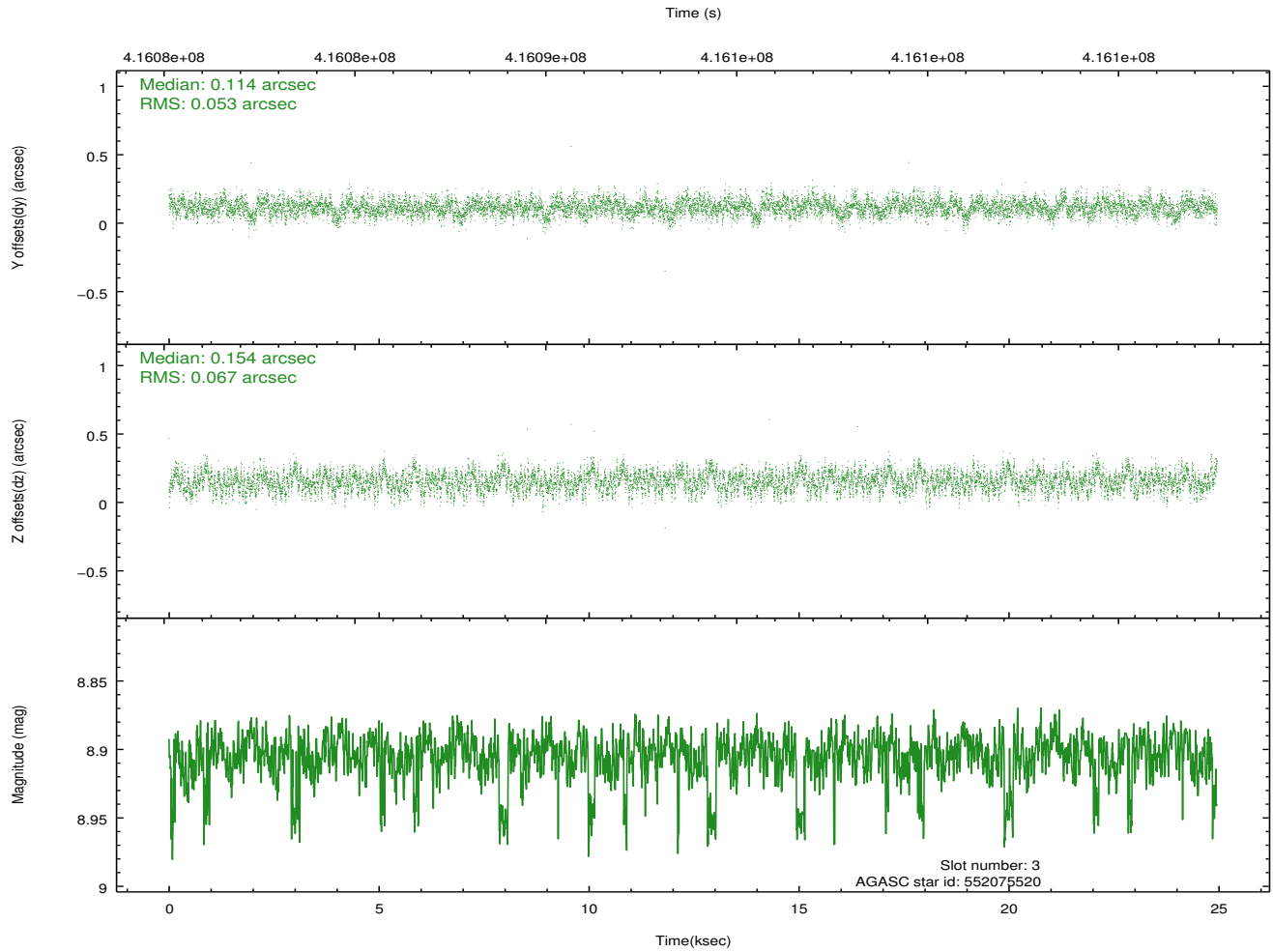
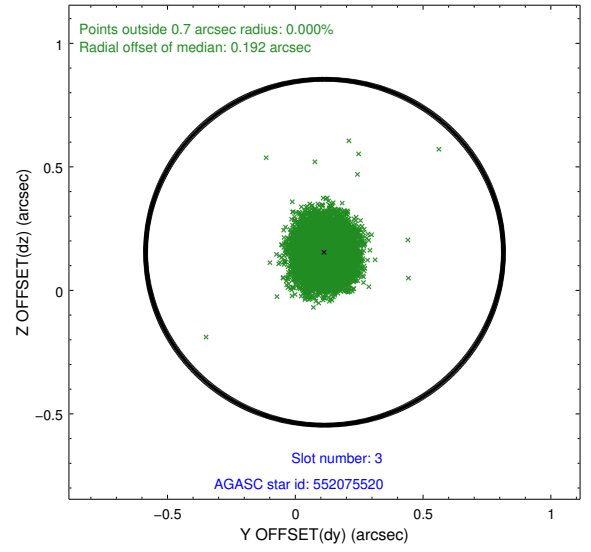
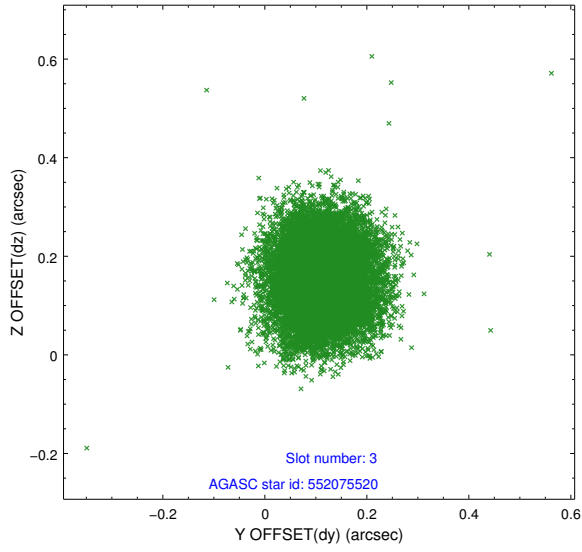


Slot Statistics

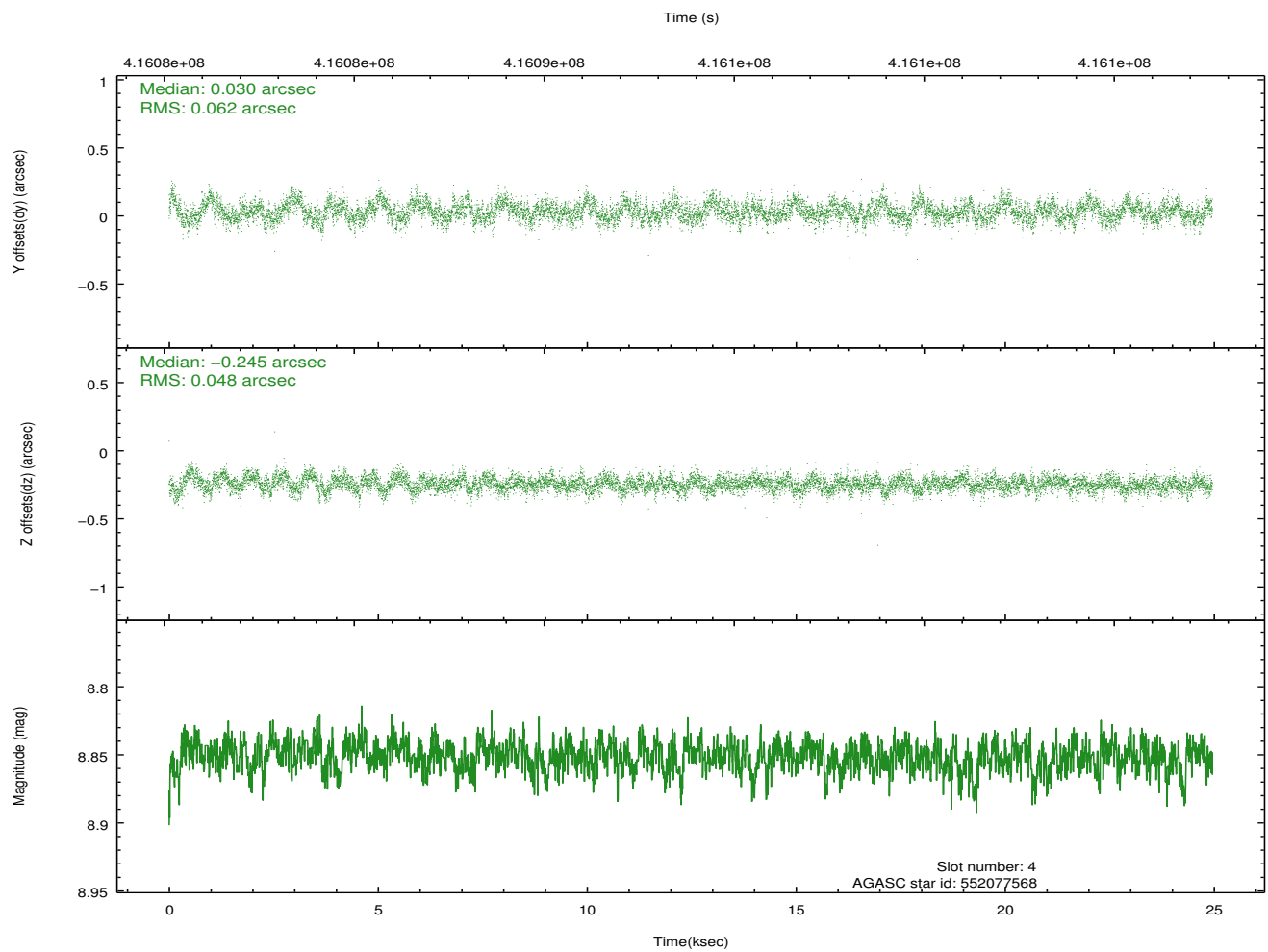
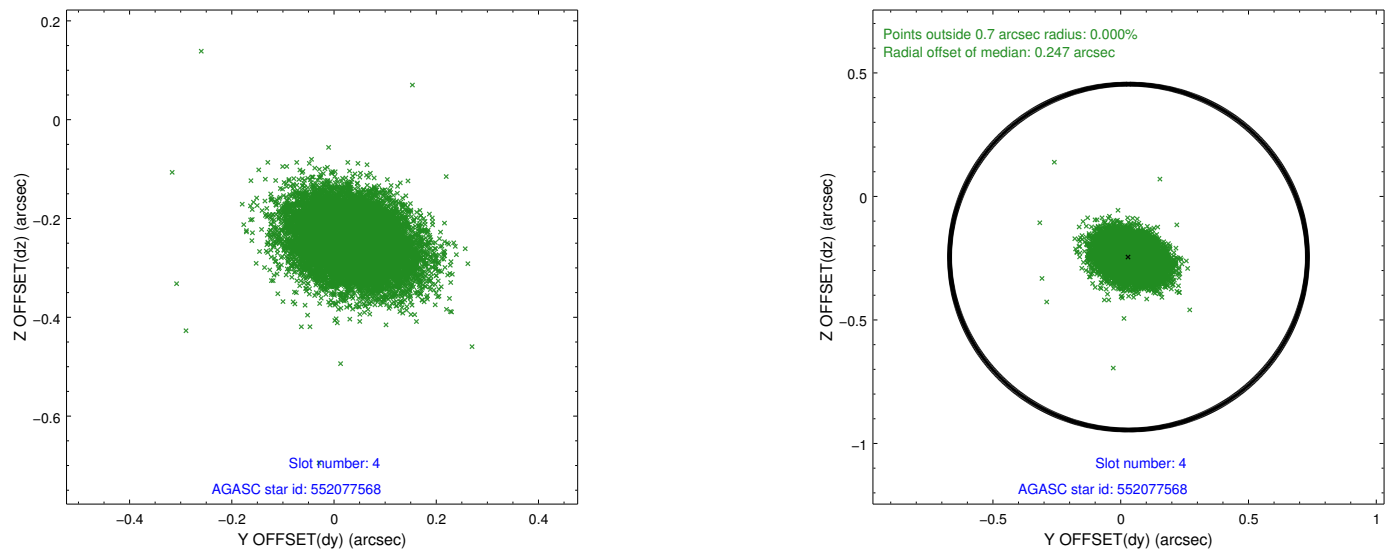
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.05	6089	0.010	0.065	0.007	0.013	0.000000	0.000000	918.58	-842.40
1	FID	ACIS-I-5	7.03	6088	-0.213	0.028	0.007	0.012	0.000000	0.000000	-1829.73	1054.92
2	FID	ACIS-I-6	7.06	6087	0.111	-0.022	0.007	0.011	0.000000	0.000000	384.03	1699.57
3	GUIDE	552075520	8.90	12121	0.114	0.154	0.092	0.146	269.430358	66.310622	-532.91	-1350.65
4	GUIDE	552077568	8.85	12168	0.030	-0.245	0.083	0.137	267.032146	66.073912	-1966.08	1937.92
5	GUIDE	552081976	9.22	12150	-0.065	0.104	0.105	0.167	269.000724	66.928627	1538.79	-333.83
6	GUIDE	552084280	7.64	12174	0.043	-0.247	0.082	0.132	268.233478	66.419076	-459.36	418.49
7	GUIDE	552086952	8.94	12173	-0.126	0.235	0.088	0.147	269.244808	65.818715	-2323.40	-1416.80

2.4 Star Slots

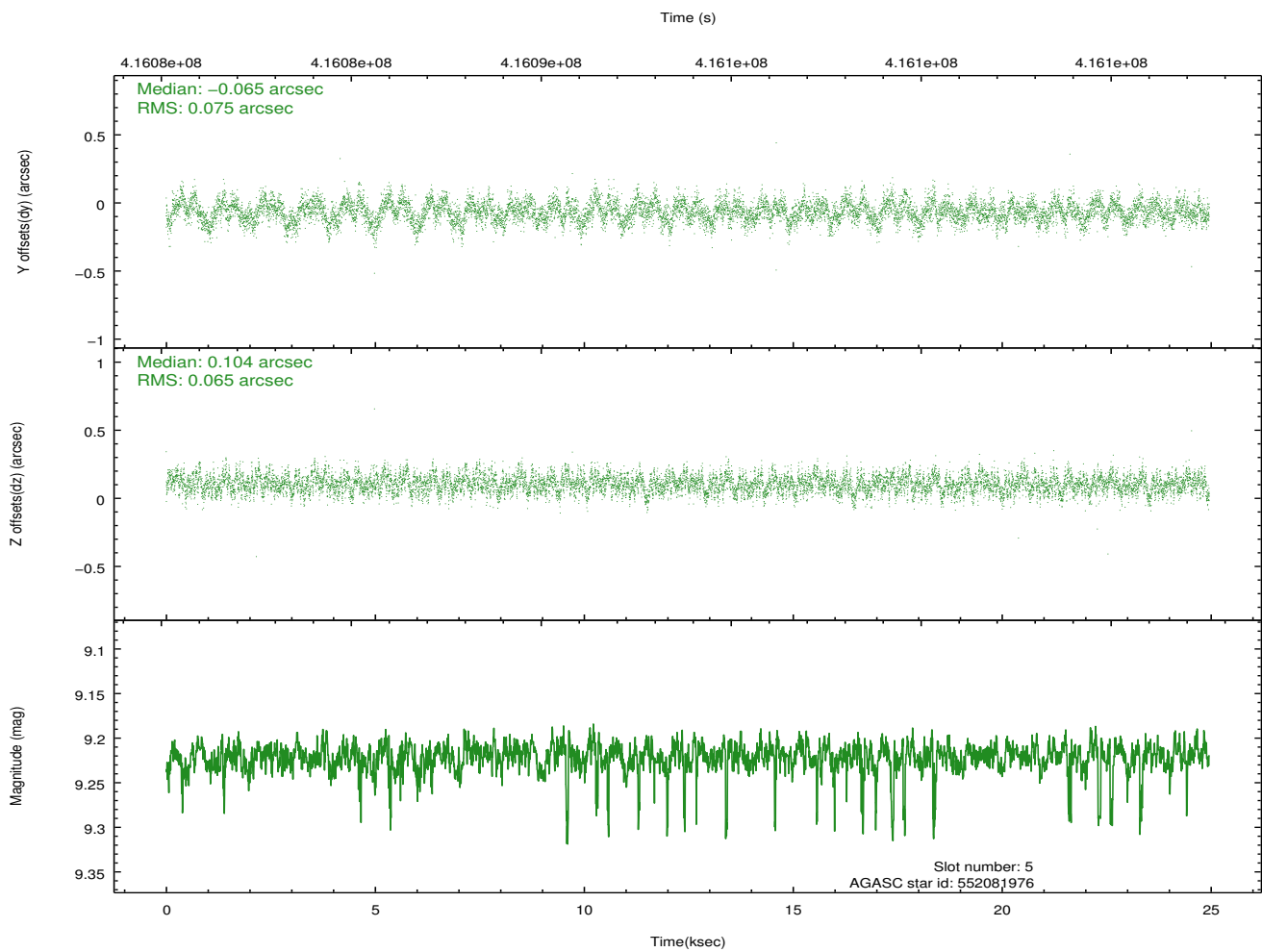
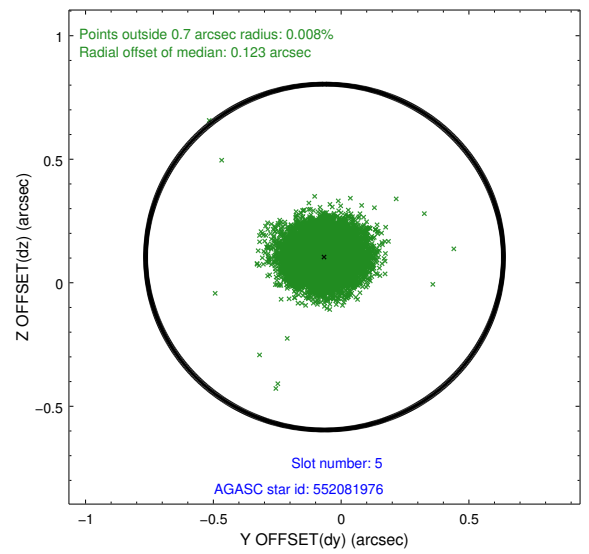
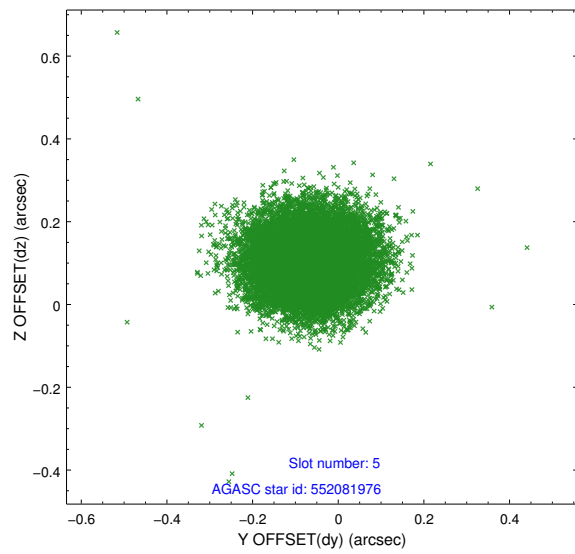
2.4.1 Slot 3



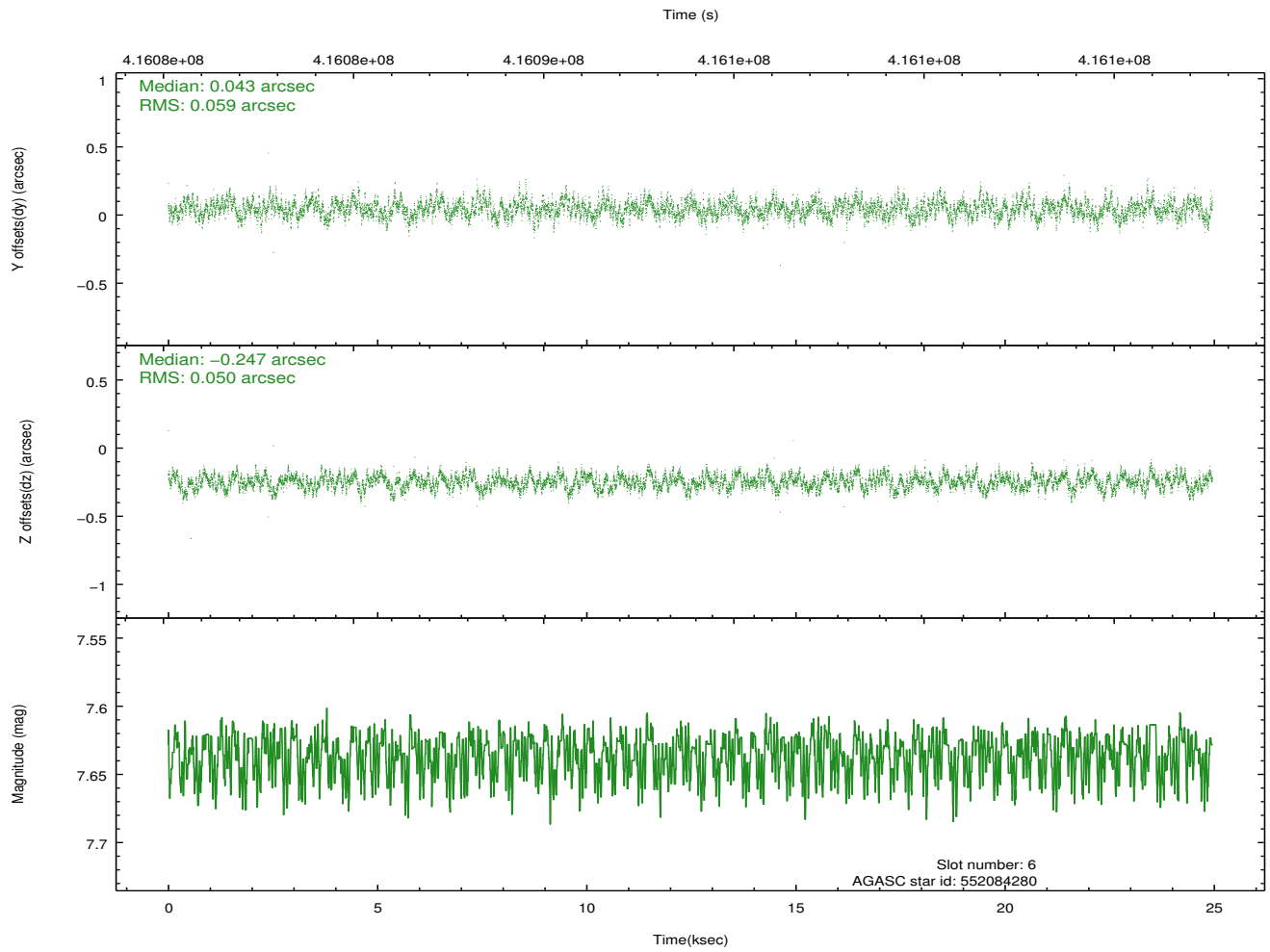
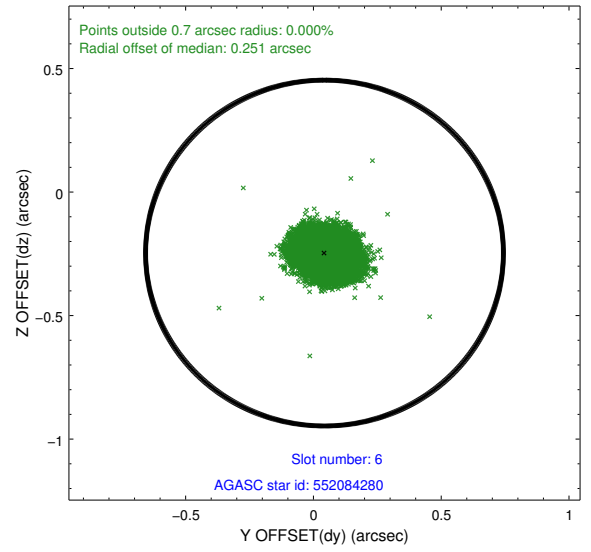
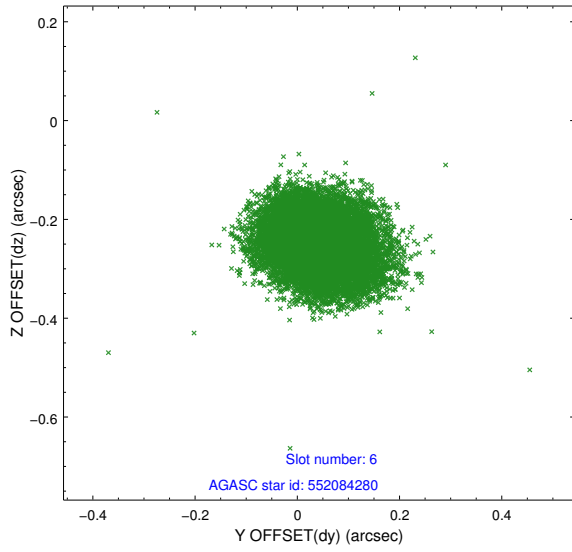
2.4.2 Slot 4



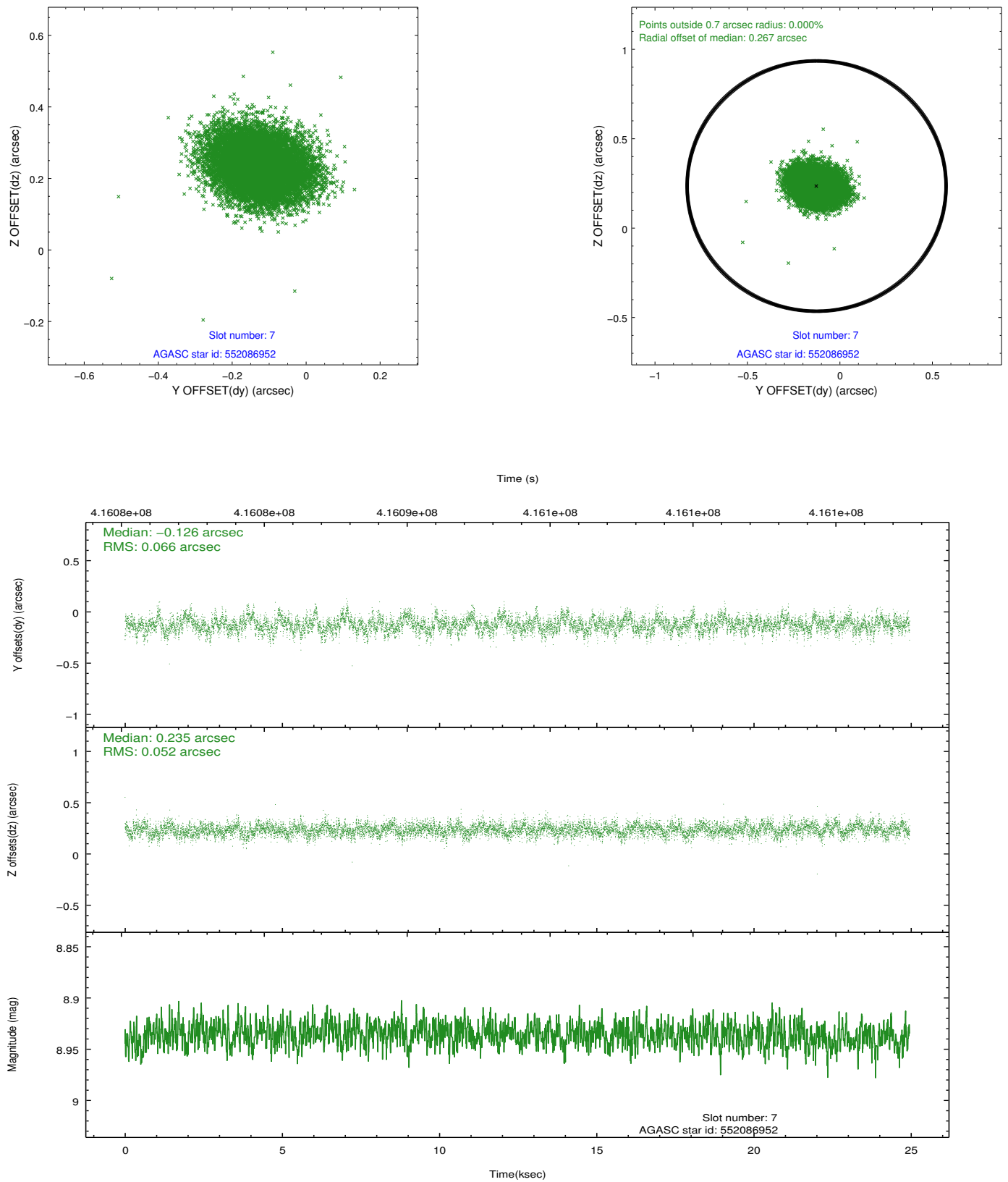
2.4.3 Slot 5



2.4.4 Slot 6

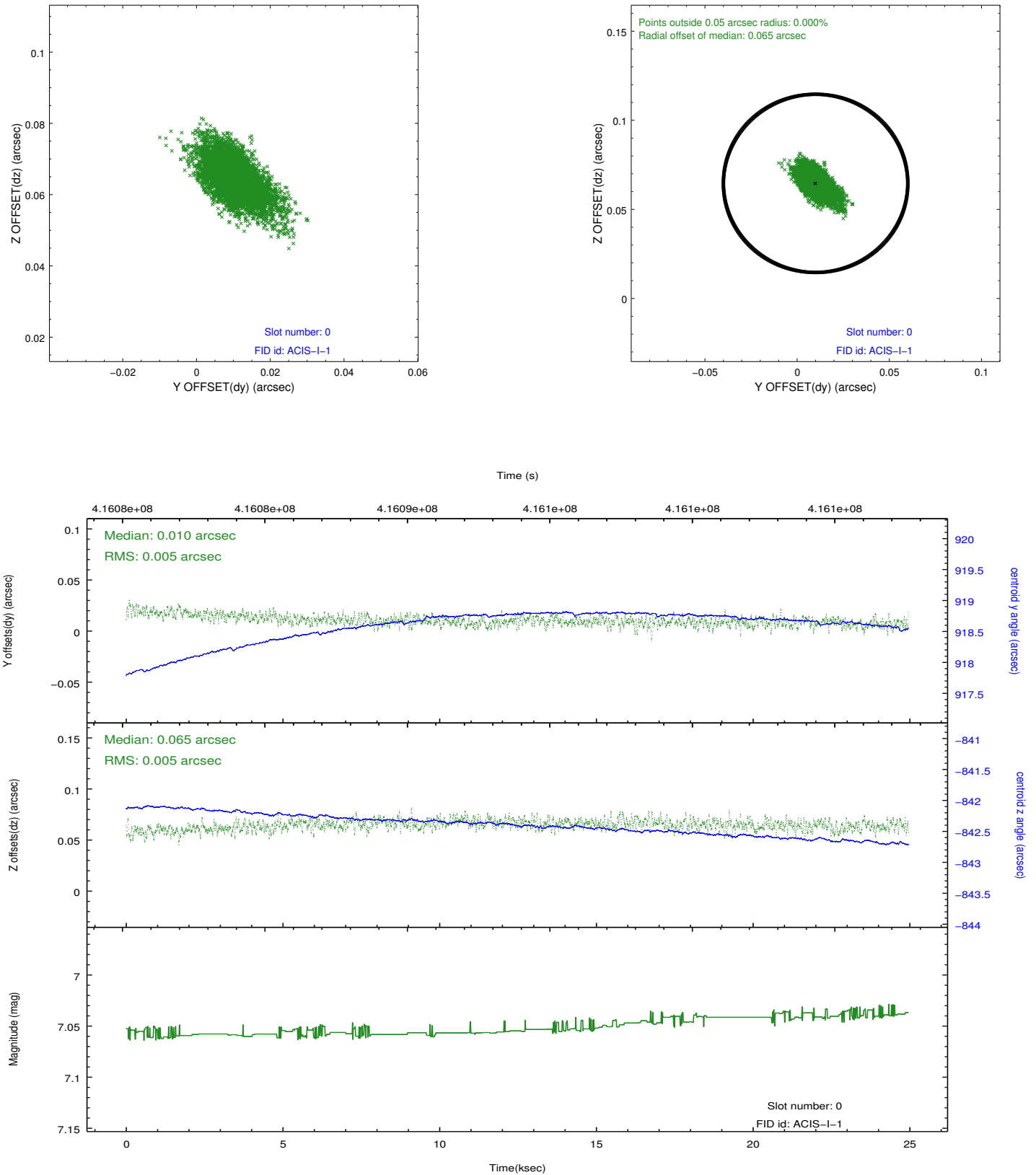


2.4.5 Slot 7

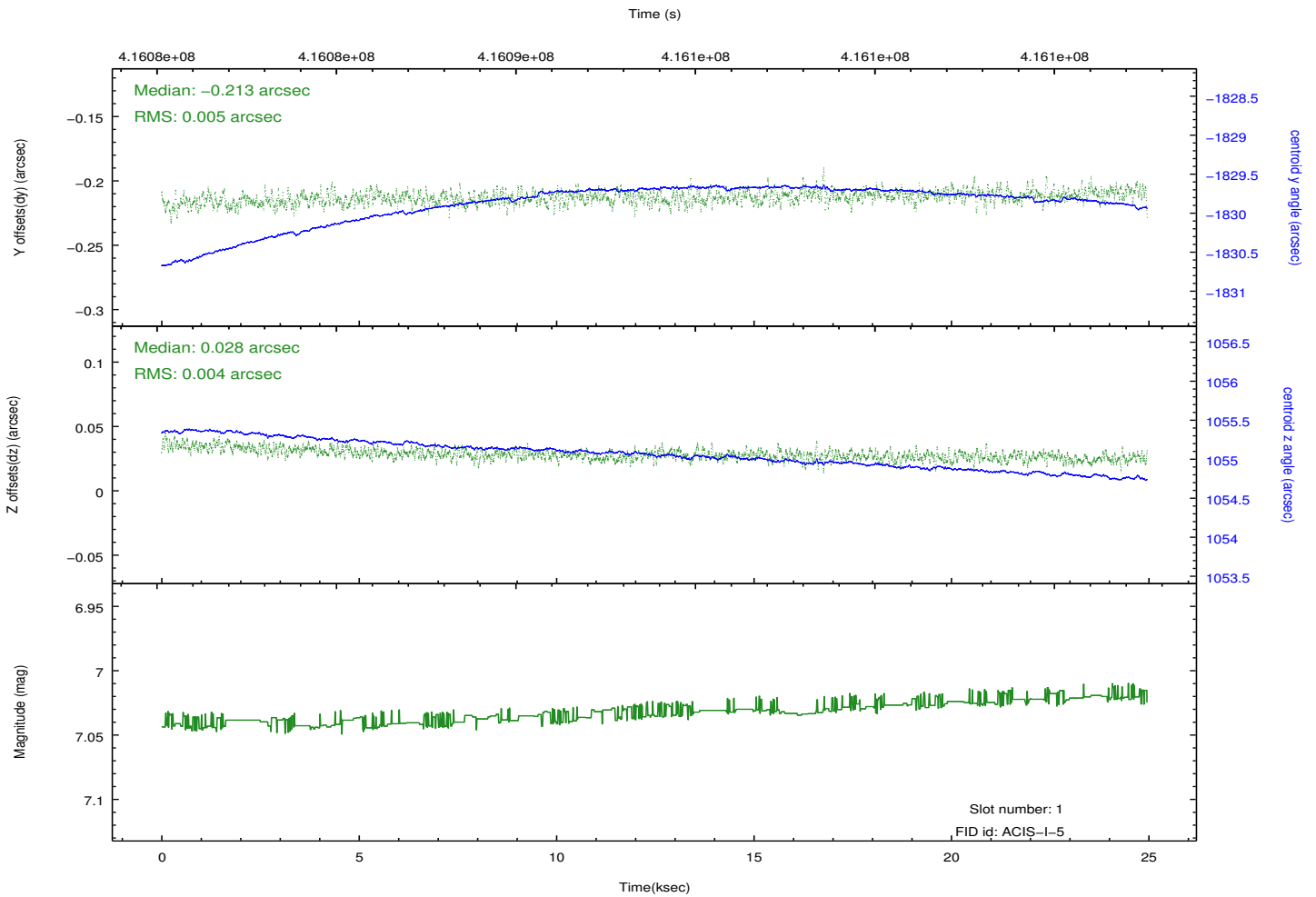
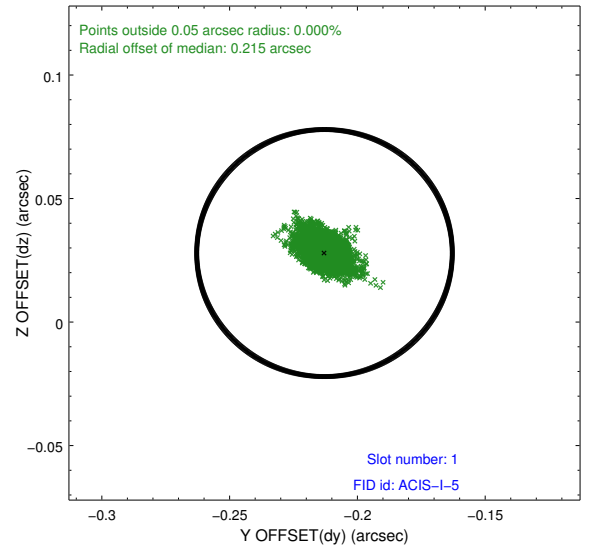
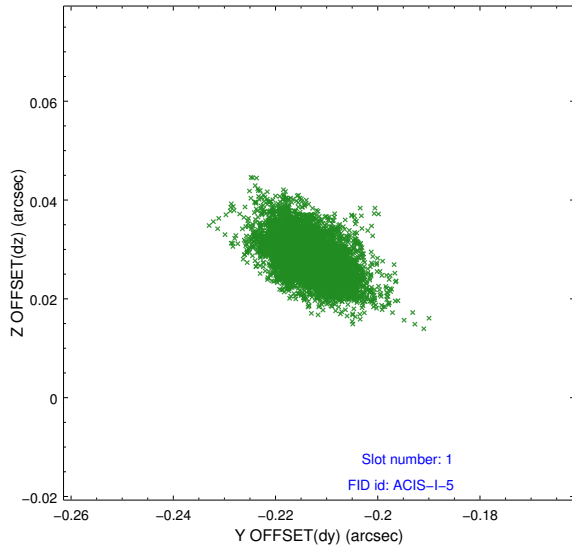


2.5 FID Slots

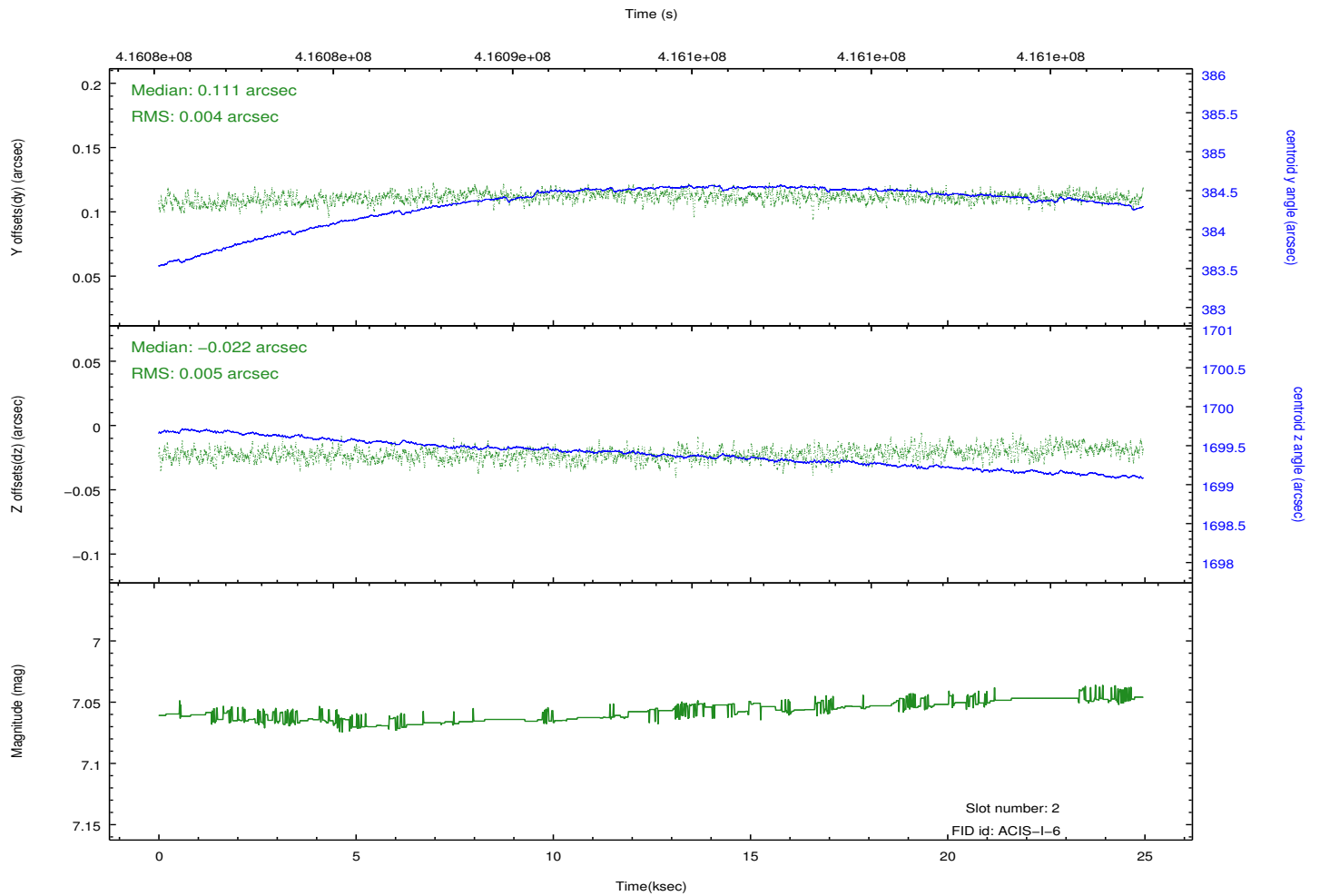
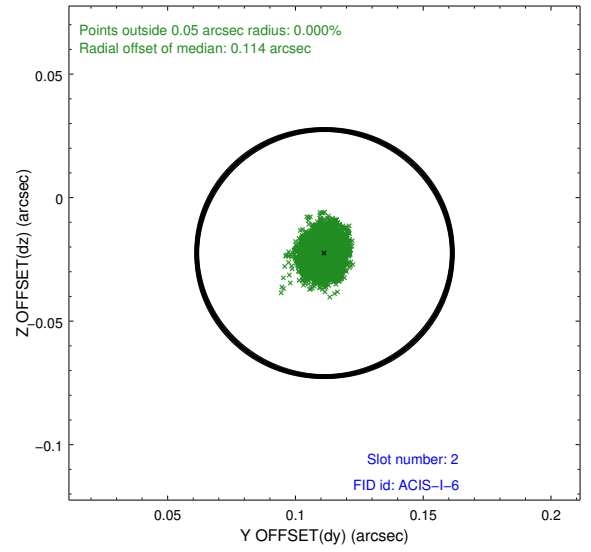
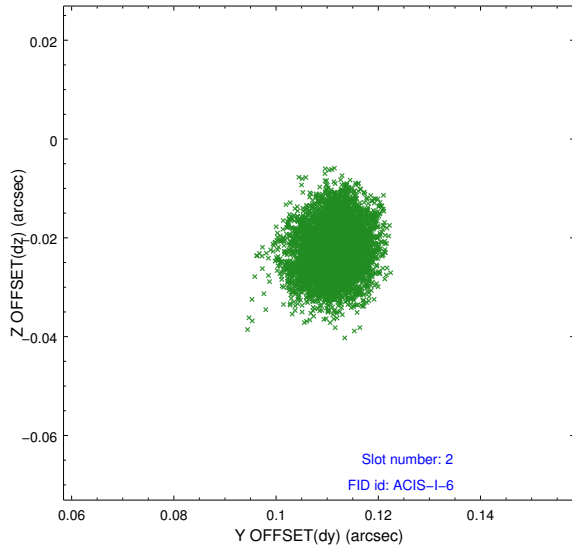
2.5.1 Slot 0



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)	2012.02.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.038277128756

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.