

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12931 - L2 Version 2
Chandra X-Ray Center

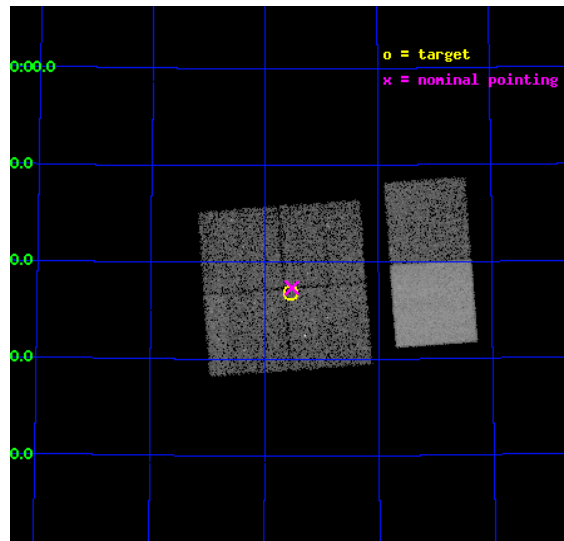
L2 Processing Date : Feb 6 2012

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

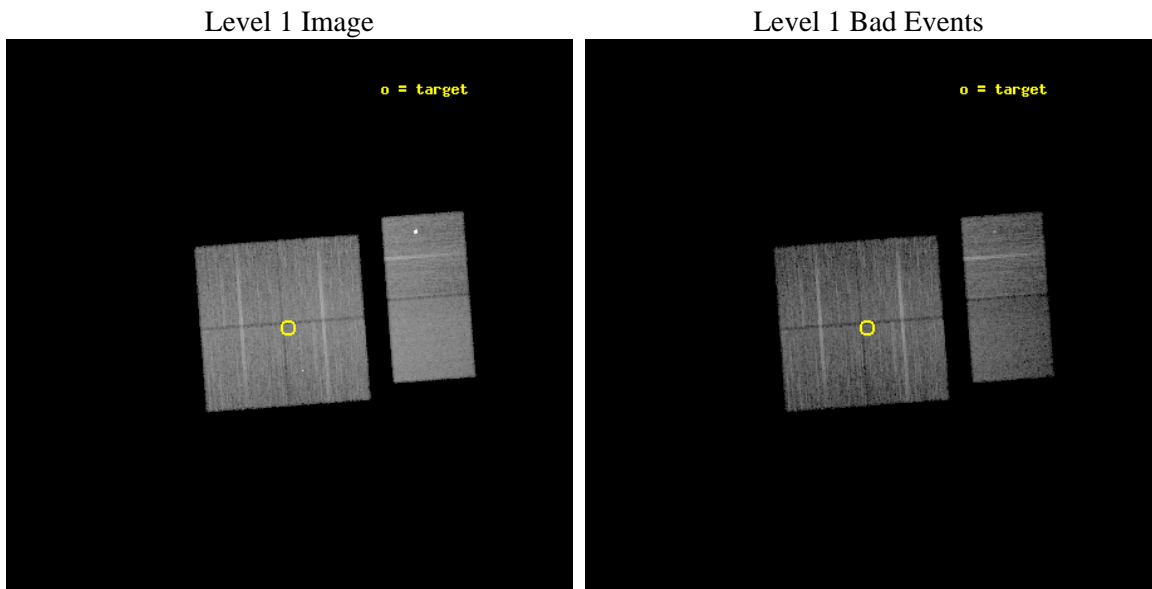
seq_num	900963	Sequence number
obs_id	12931	Observation id
title	Filling the 15 micron Gap: Search for Compton-thick Accretion with Chandra and AKARI in the NEP Deep Field	Proposal title
observer	Dr. Mirko Krumpe	Principal investigator
object	AKARI-NEP-Deep Field	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	268.885	Observer's specified target RA [deg]
dec_targ	66.615	Observer's specified target Dec [deg]
ra_nom	268.88042179193	Nominal RA [deg]
dec_nom	66.62286220092	Nominal Dec [deg]
roll_nom	85.712896811656	Nominal Roll [deg]
revision	2	Processing version of data
ontime	13753.599948823	Sum of GTIs [s]
livetime	13579.443584848	Livetime [s]
ontime0	13753.599948823	Sum of GTIs [s]
ontime1	13753.599948823	Sum of GTIs [s]
ontime2	13750.35897845	Sum of GTIs [s]
ontime3	13753.599948823	Sum of GTIs [s]
ontime6	13750.35897851	Sum of GTIs [s]
ontime7	13753.599948823	Sum of GTIs [s]
l2events	94297	Number of level 2 events



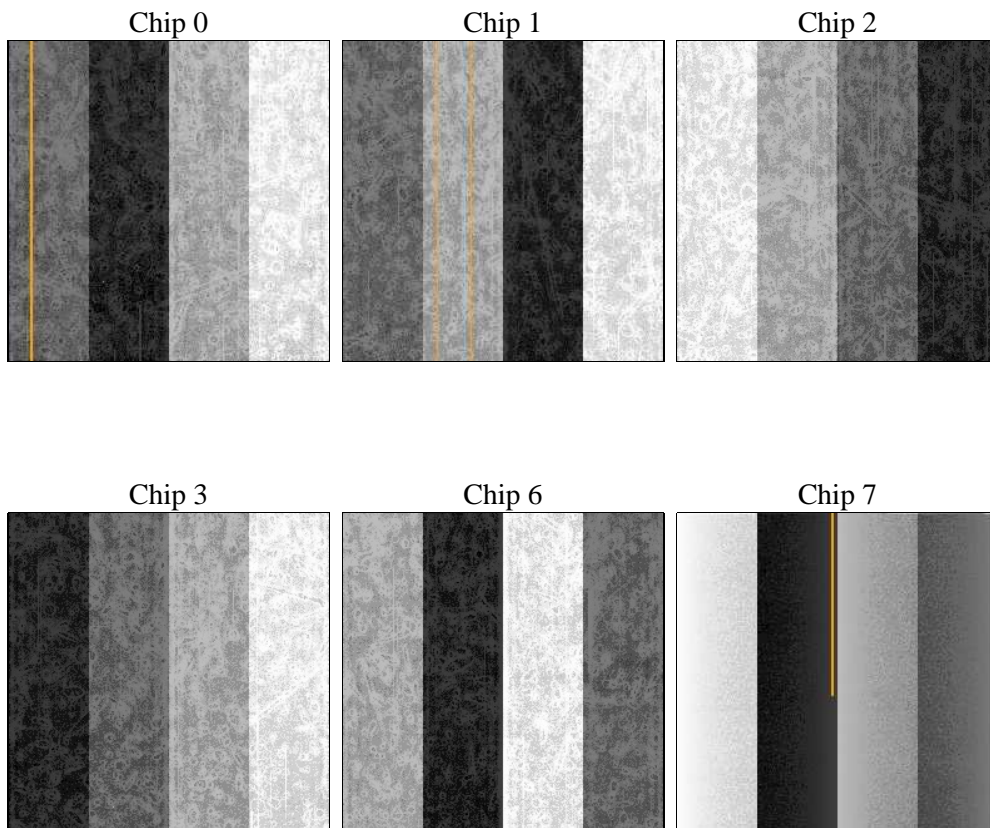
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	13753.599948823	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	13753.599948823	Sum of GTIs [s]
date	2012-02-06T06:55:17	Date and time of file creation	ontime1	13753.599948823	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	13750.35897845	Sum of GTIs [s]
			ontime3	13753.599948823	Sum of GTIs [s]
			ontime6	13750.35897851	Sum of GTIs [s]
			ontime7	13753.599948823	Sum of GTIs [s]
			l1events	570228	Number of level 1 events

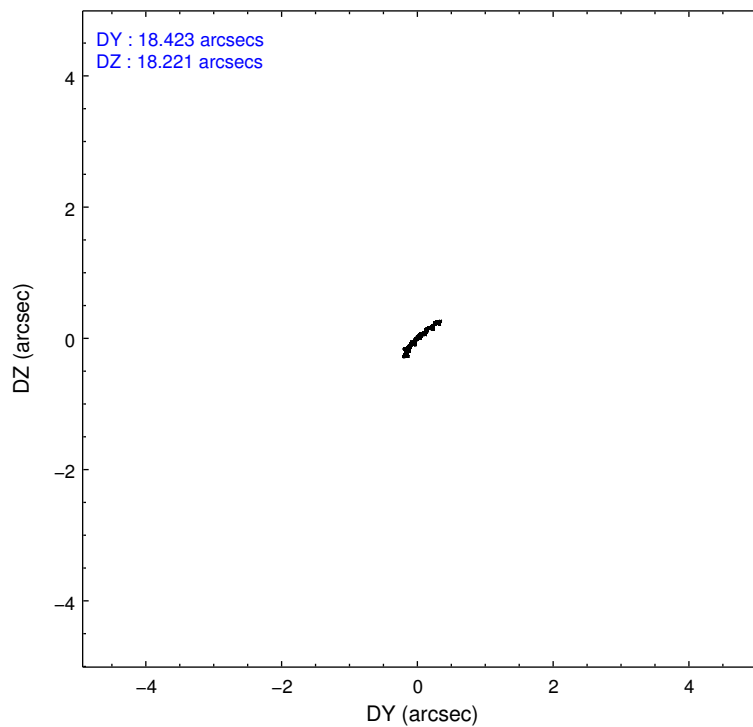
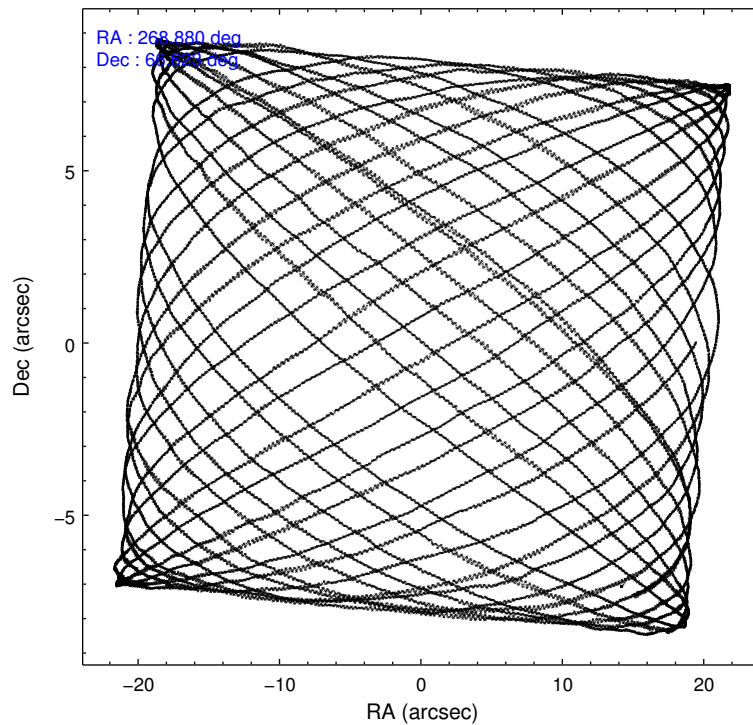
2.1.4 Events

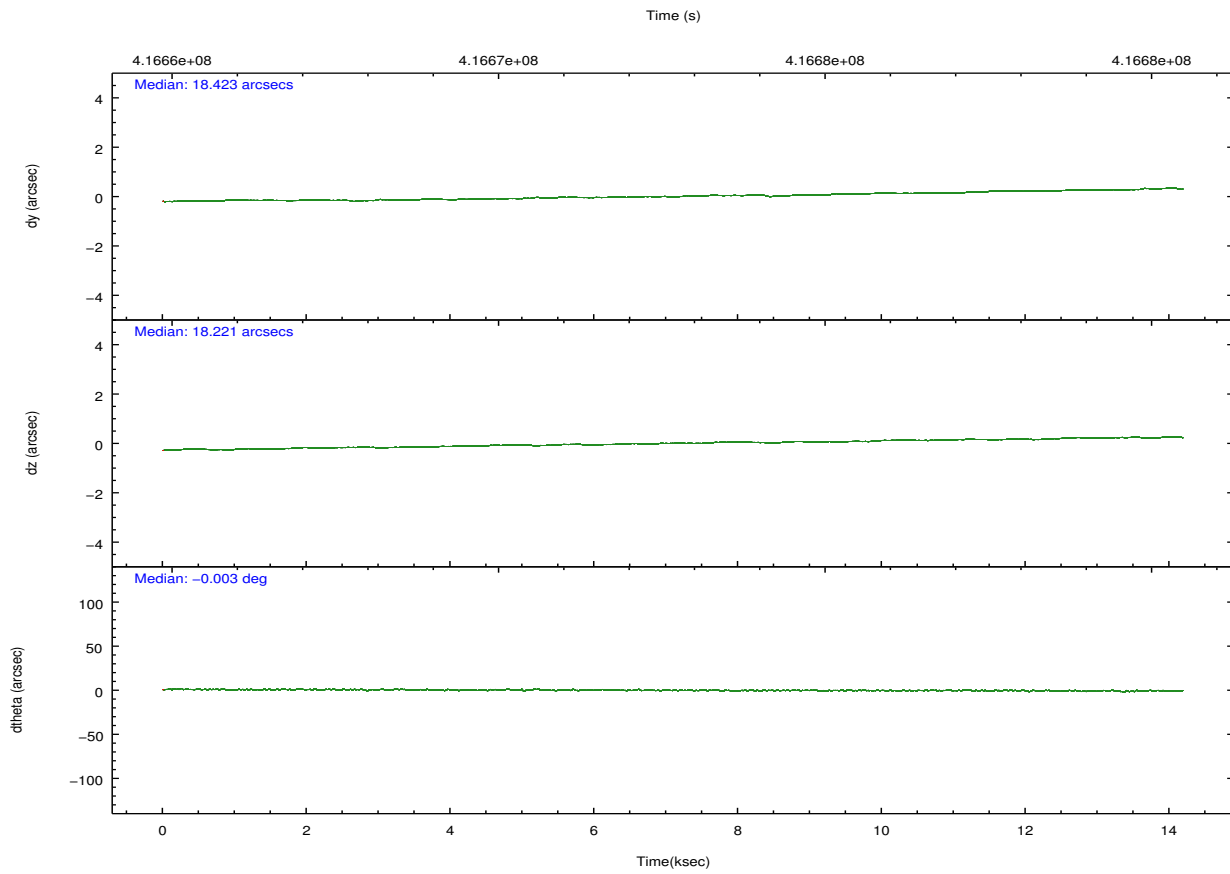
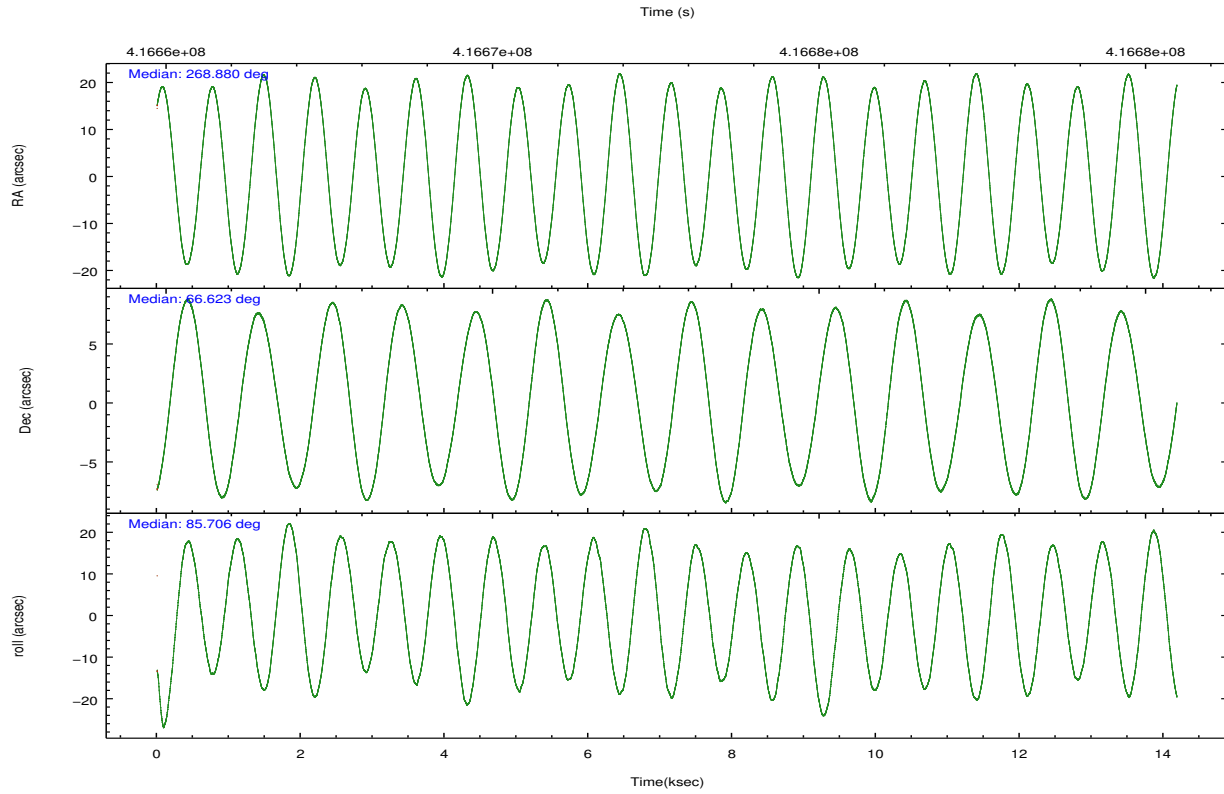
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	81744	86310	90515	92414	104782	114463	grade 0 events	3519	4210	3588	4108	15645	4639
rejected events	71567	74787	80583	81825	82214	63325		4%	4%	3%	4%	14%	4%
rejected %	87%	86%	89%	88%	78%	55%	grade 1 events	57	50	62	59	135	146
								0%	0%	0%	0%	0%	0%
							grade 2 events	2562	2718	2374	2252	2343	10402
								3%	3%	2%	2%	2%	9%
							grade 3 events	1094	1143	1048	1127	1069	4551
								1%	1%	1%	1%	1%	3%
							grade 4 events	981	1137	1027	1072	1136	4467
								1%	1%	1%	1%	1%	3%
							grade 5 events	3841	4077	3779	4338	4425	12002
								4%	4%	4%	4%	4%	10%
							grade 6 events	2022	2318	1897	2030	2379	27098
								2%	2%	2%	2%	2%	23%
							grade 7 events	67668	70657	76740	77428	77650	51158
								82%	81%	84%	83%	74%	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	268.910710	268.8804217919319	CCD I2 on	Y	Y
[deg] Pointing Dec	66.598161	66.62286220092027	CCD I3 on	Y	Y
[deg] Pointing Roll	85.476408	85.71289681165601	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)	416665764.184000	416665388.33069	CCD S5 on	N	N
Observation start date	2011-03-16T12:28:18	2011-03-16T12:23:08	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	416679764.184000	416680617.78148	On-chip summing requested	N	N
Observation end date	2011-03-16T16:21:38	2011-03-16T16:36:57	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



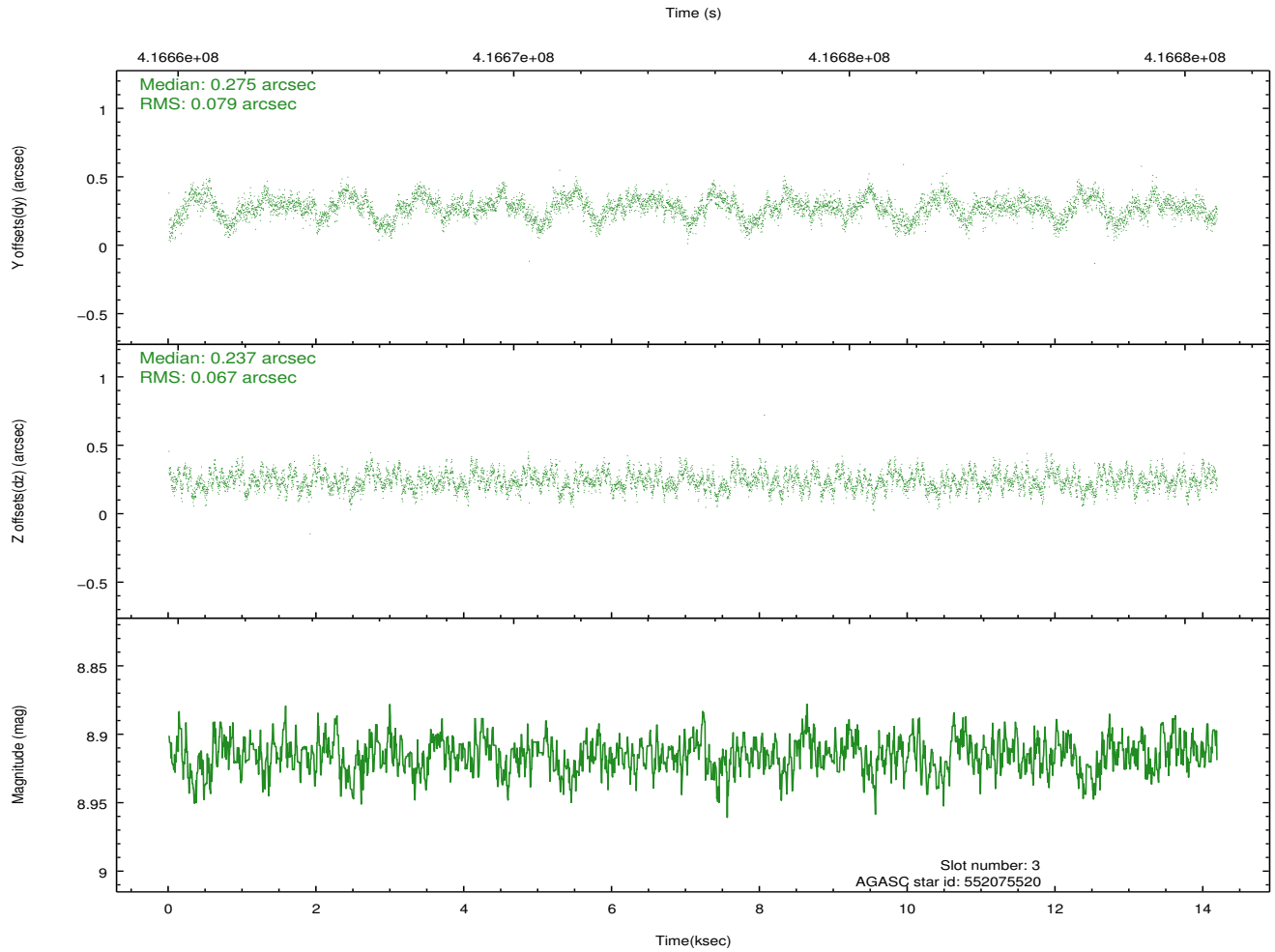
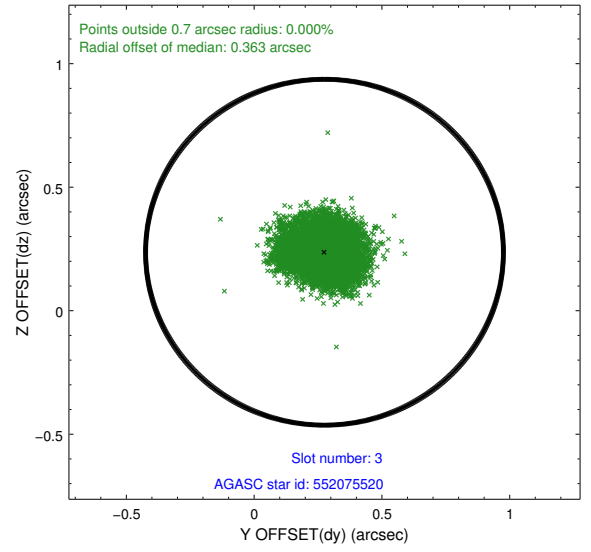
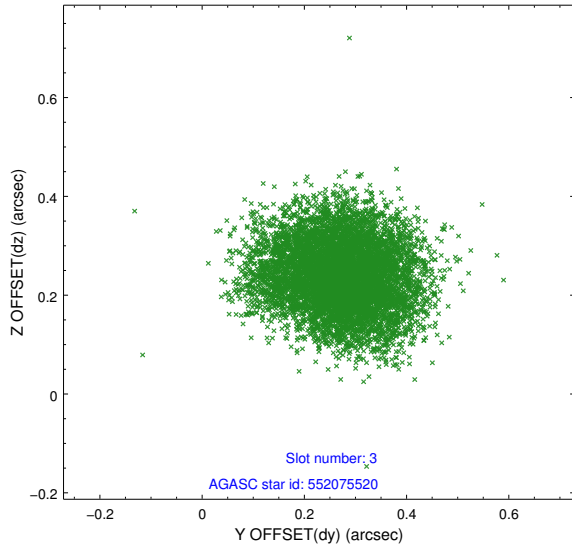


Slot Statistics

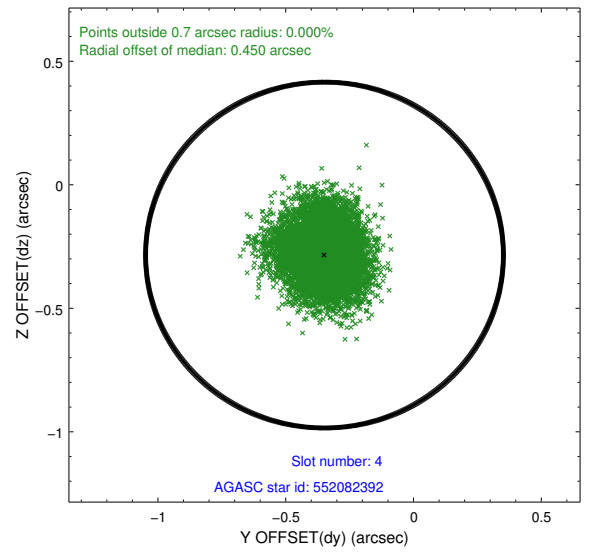
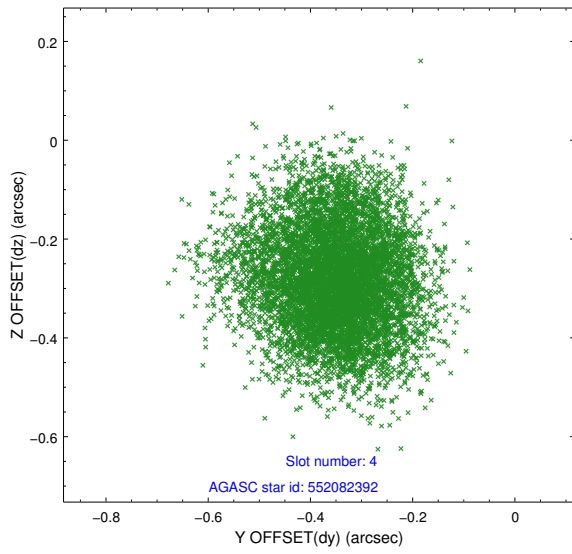
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.03	3460	0.052	0.015	0.007	0.013	0.000000	0.000000	920.98	-841.87
1	FID	ACIS-I-5	7.01	3460	-0.252	0.052	0.007	0.012	0.000000	0.000000	-1827.28	1055.45
2	FID	ACIS-I-6	7.04	3460	0.109	0.003	0.008	0.013	0.000000	0.000000	386.19	1700.31
3	GUIDE	552075520	8.92	6916	0.275	0.237	0.112	0.176	269.430358	66.310622	-968.89	-830.50
4	GUIDE	552082392	9.75	6903	-0.348	-0.285	0.143	0.227	267.761612	66.950878	1152.67	1715.70
5	GUIDE	552084280	7.63	6919	0.094	-0.145	0.085	0.132	268.233478	66.419076	-713.82	922.00
6	GUIDE	552206400	8.64	6918	0.005	0.148	0.084	0.133	270.193803	65.897301	-2346.75	-2077.77
7	GUIDE	552216648	9.77	6867	-0.028	0.042	0.150	0.269	270.130141	67.075369	1863.97	-1567.52

2.4 Star Slots

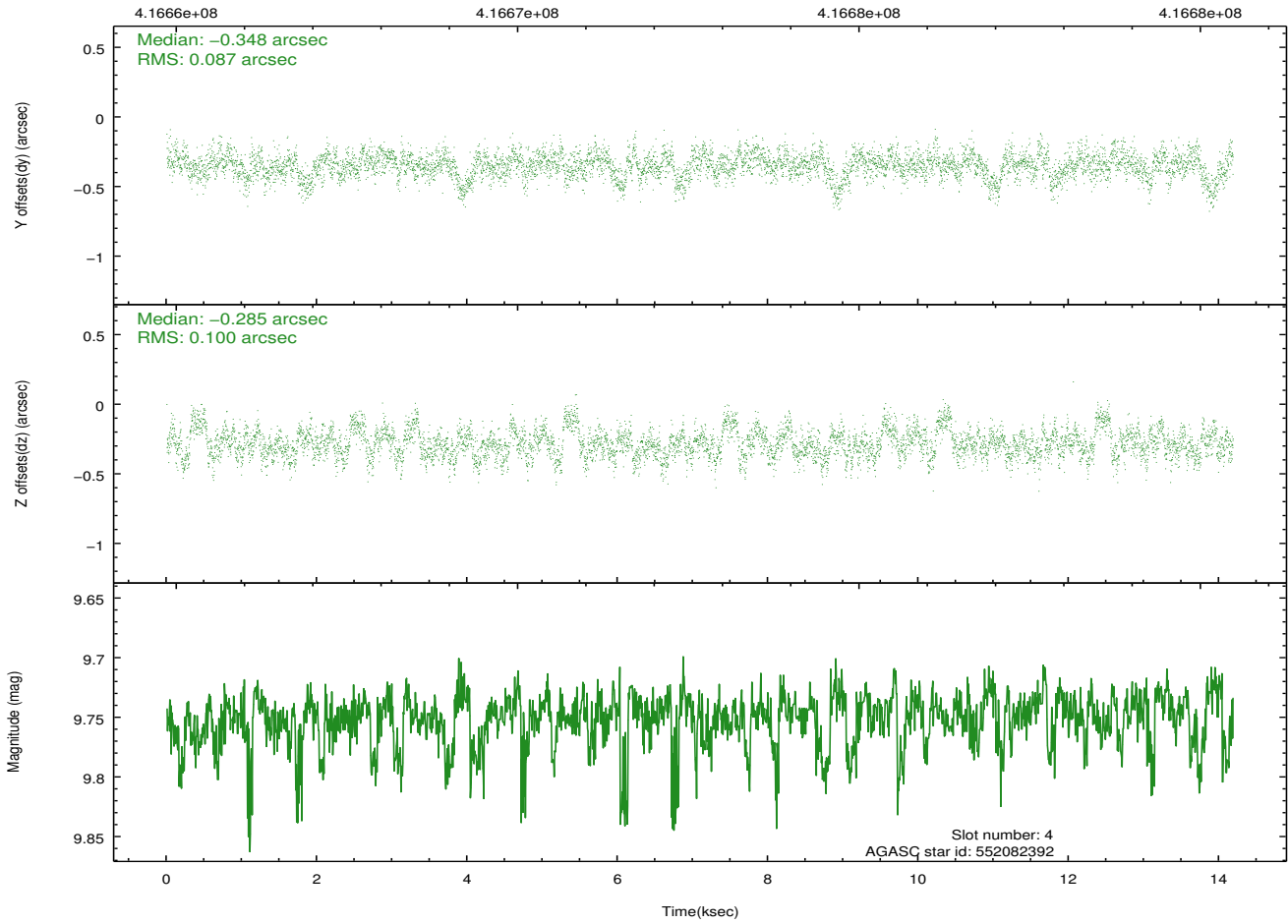
2.4.1 Slot 3



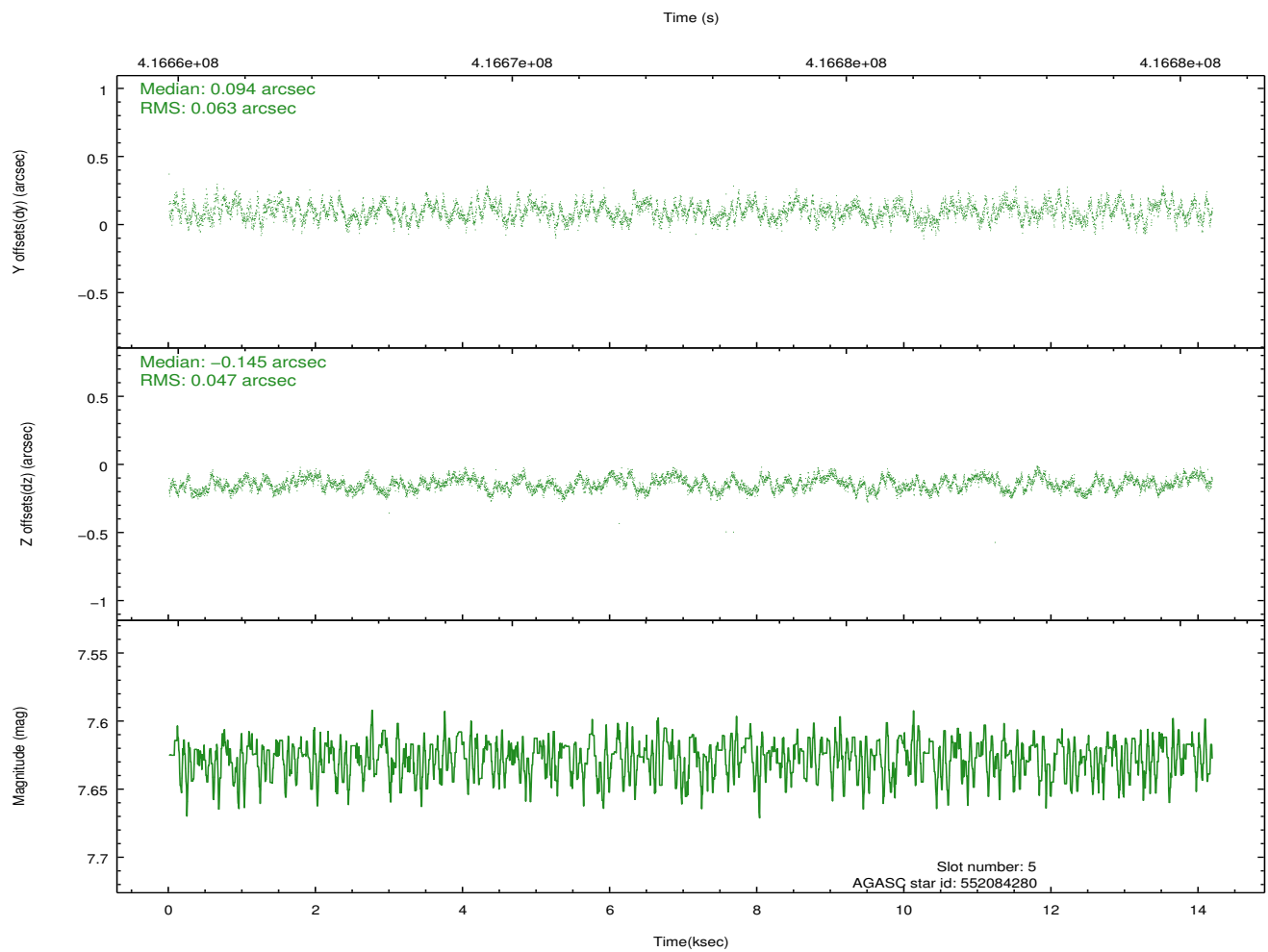
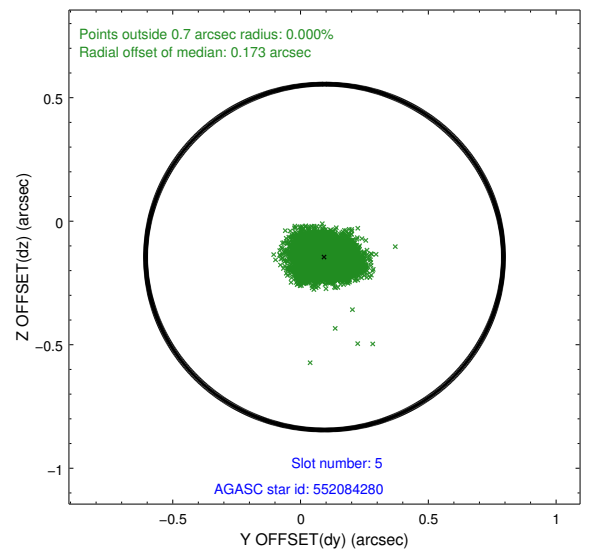
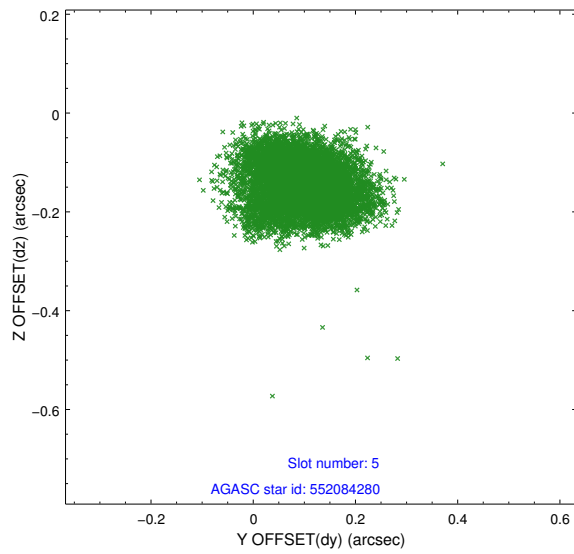
2.4.2 Slot 4



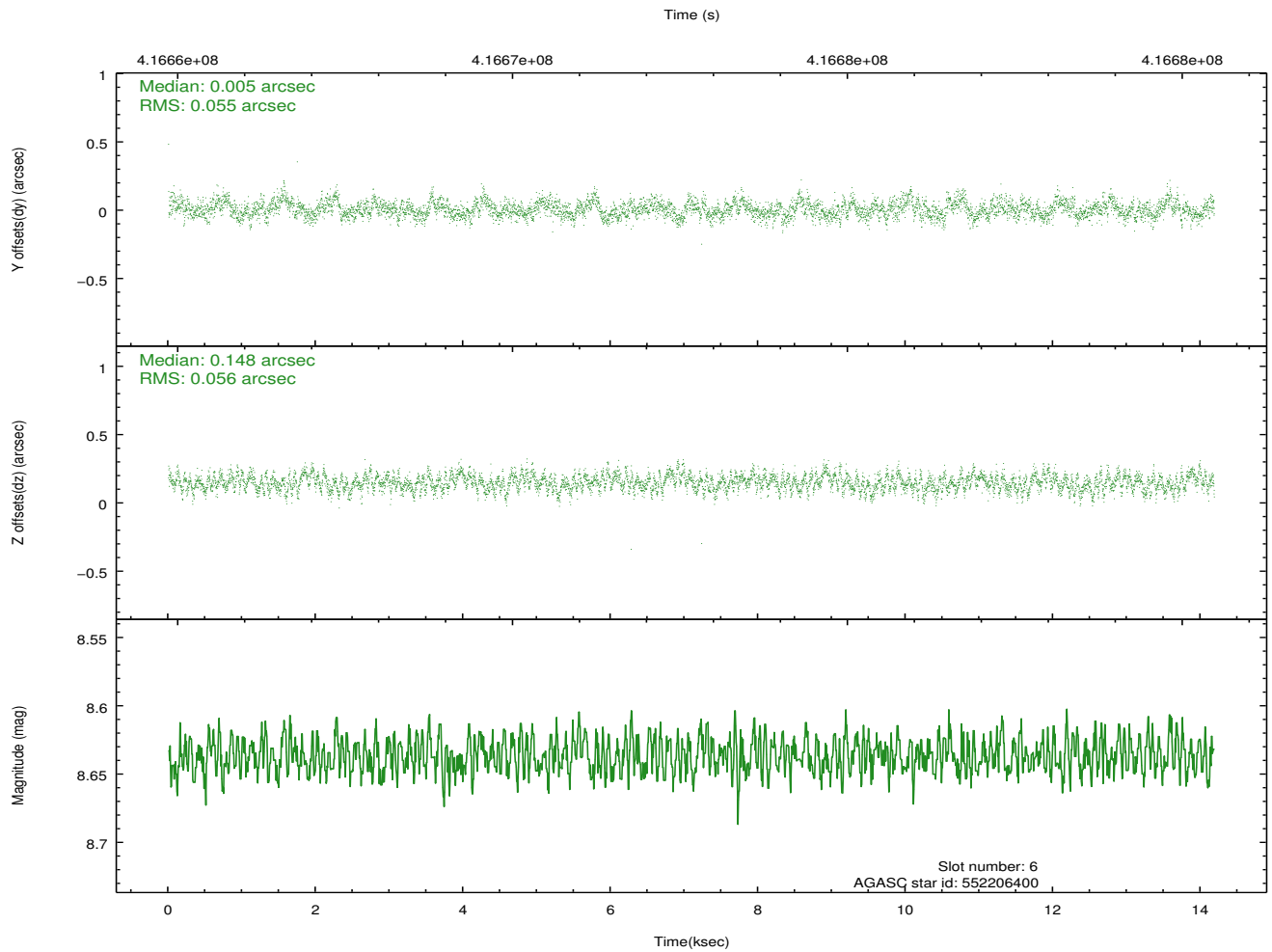
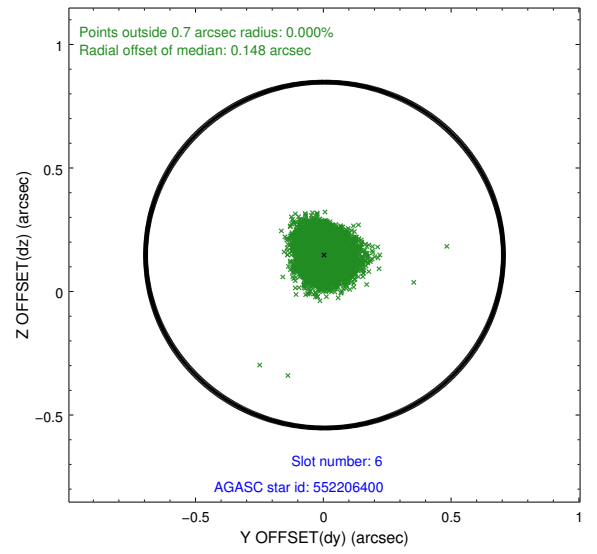
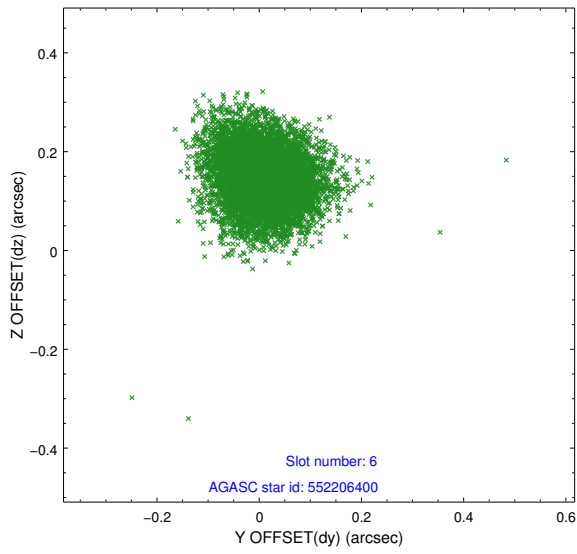
Time (s)



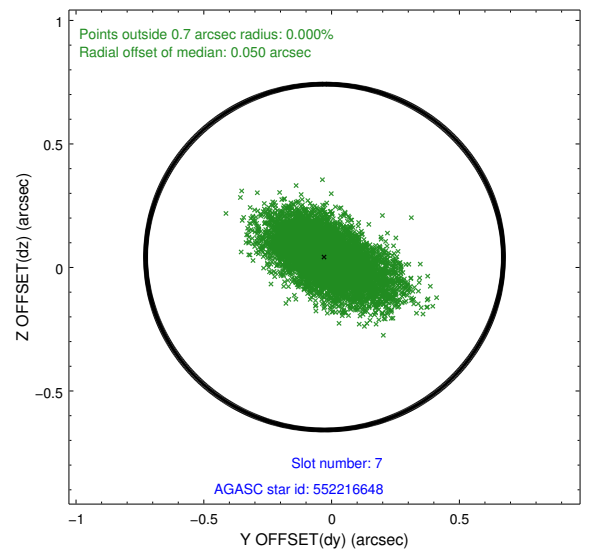
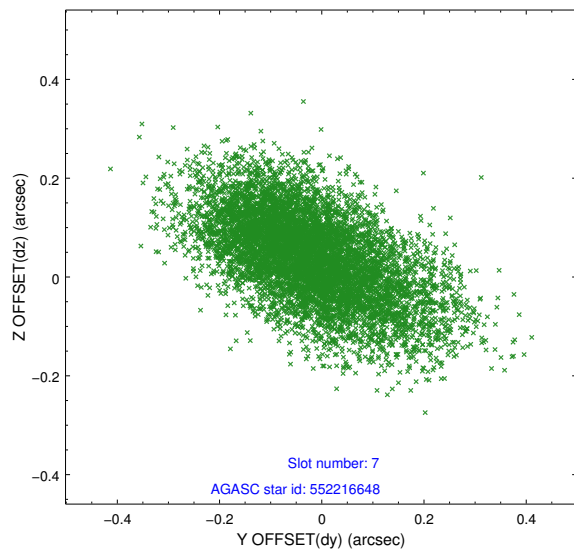
2.4.3 Slot 5



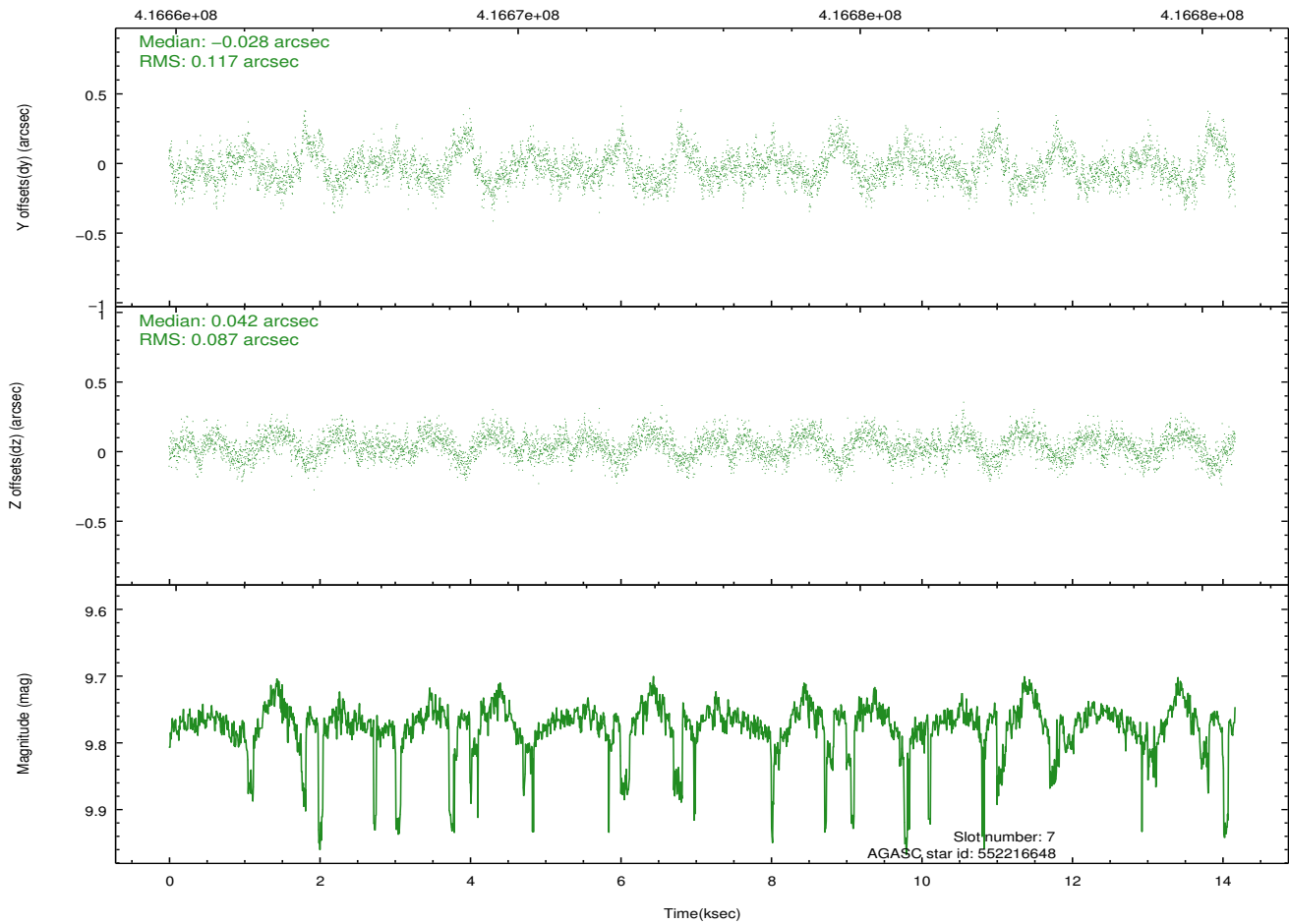
2.4.4 Slot 6



2.4.5 Slot 7

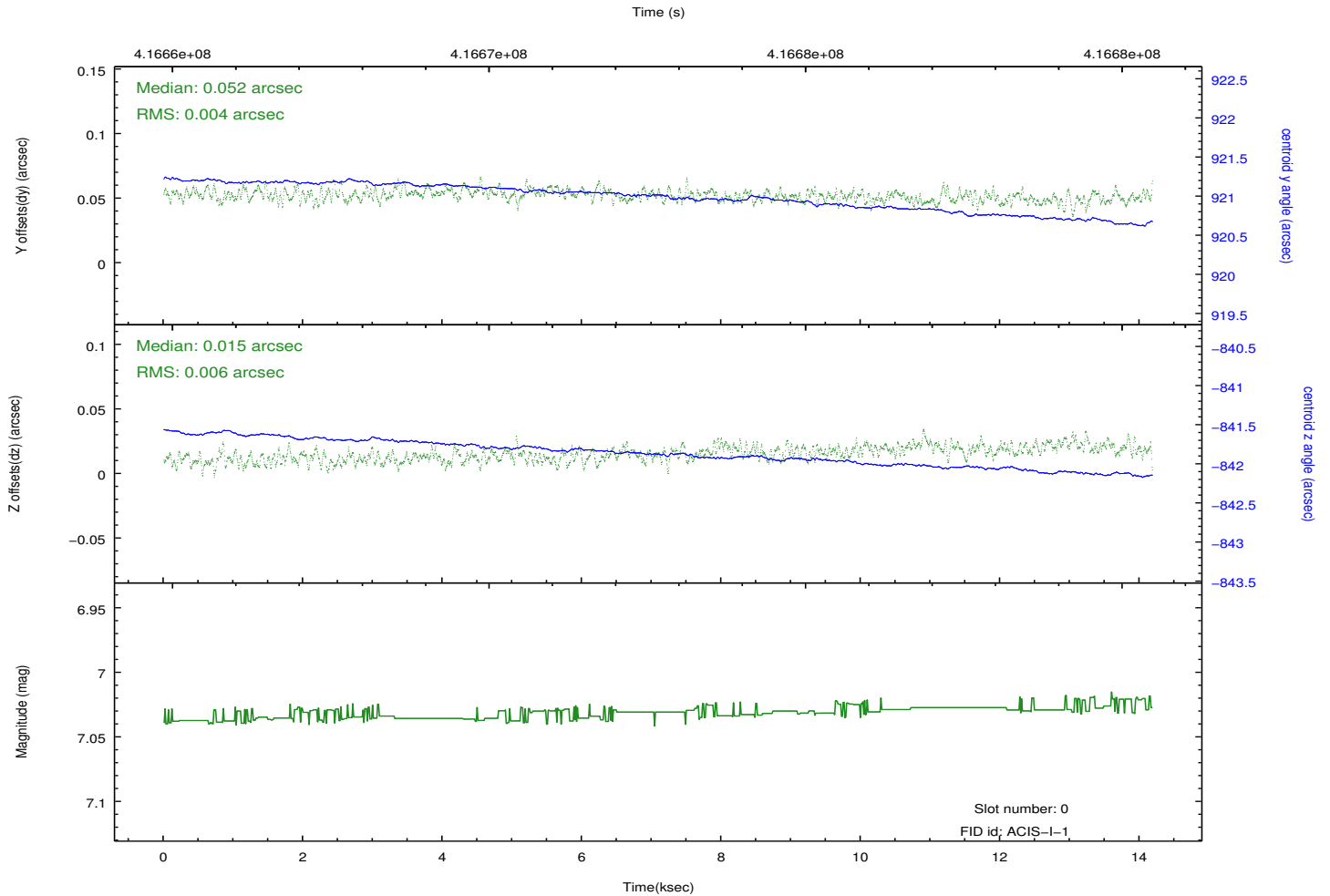
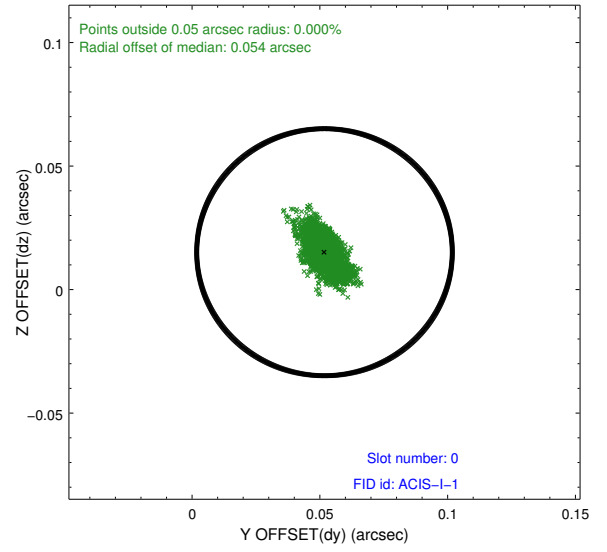
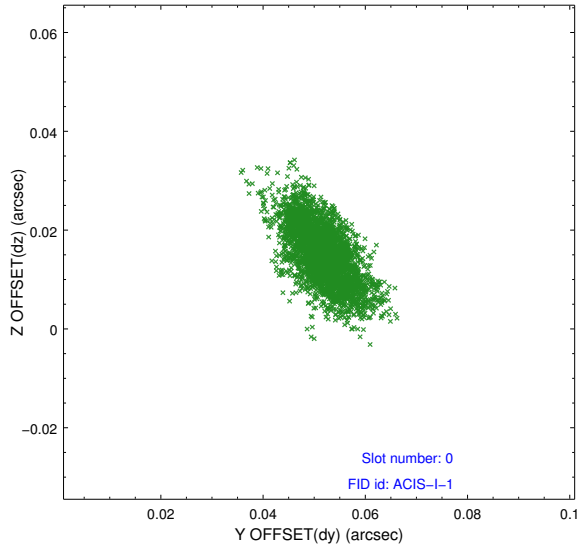


Time (s)

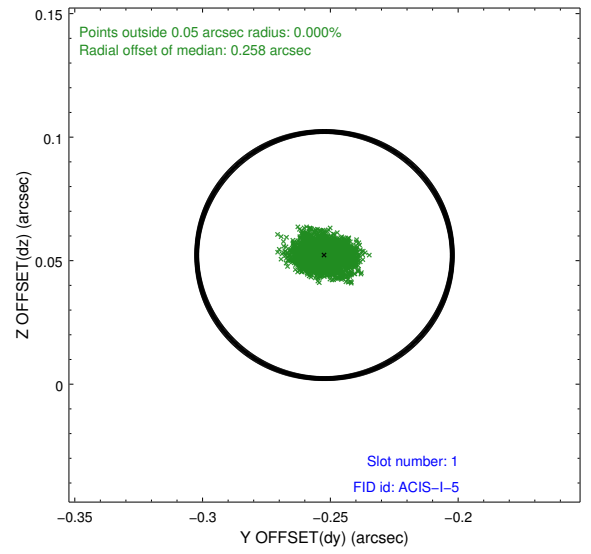
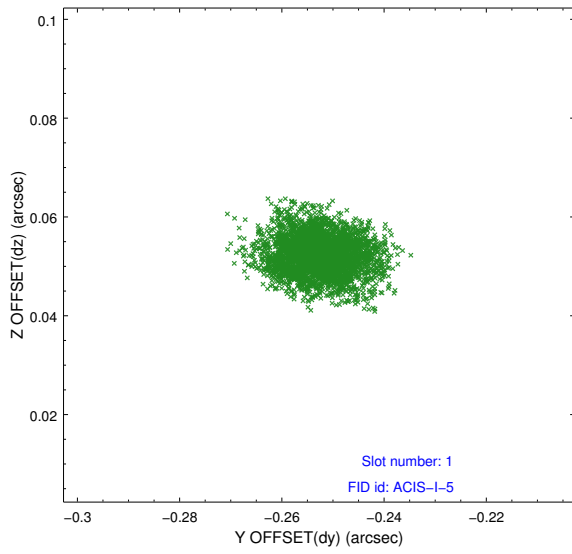


2.5 FID Slots

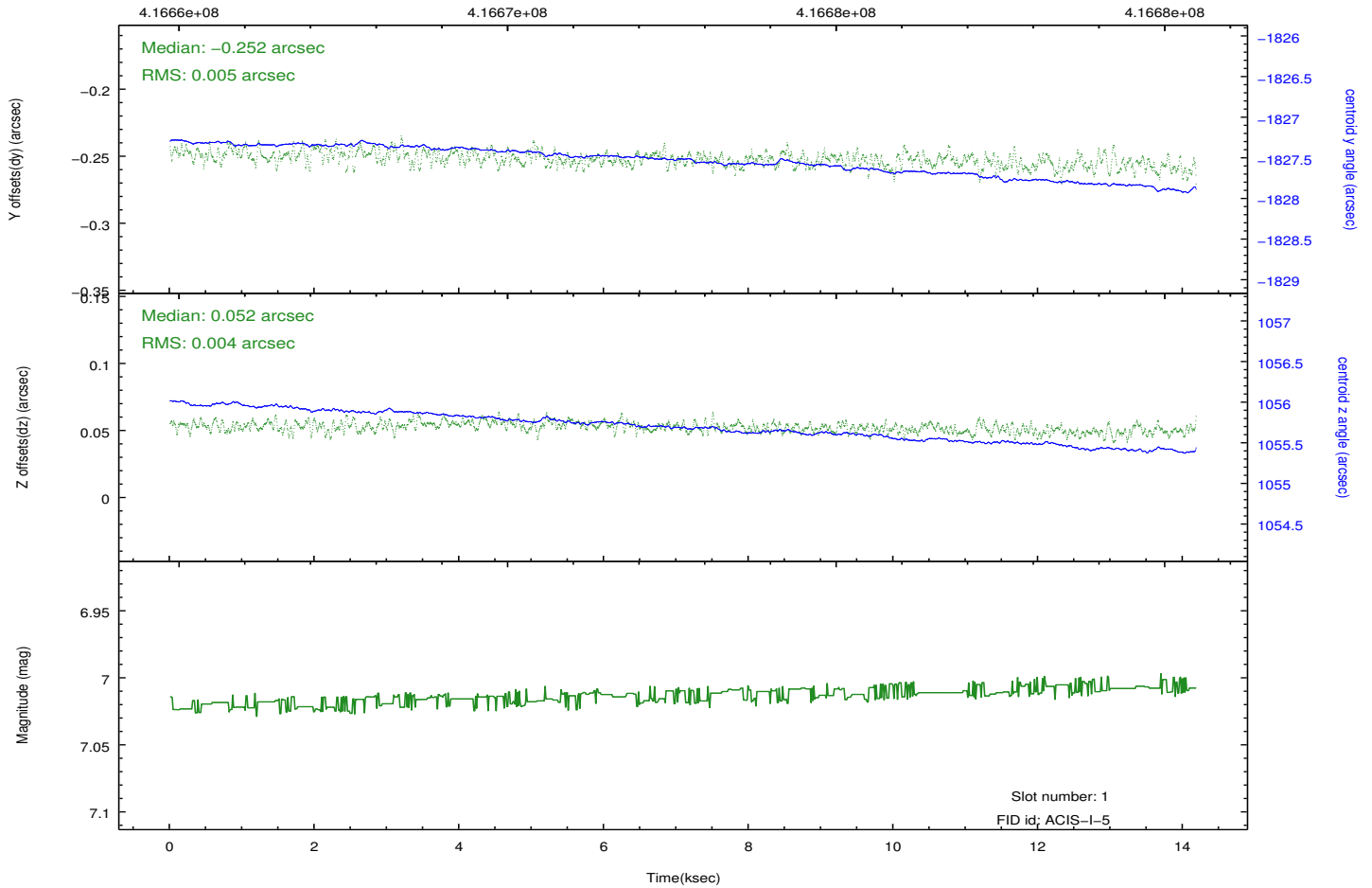
2.5.1 Slot 0



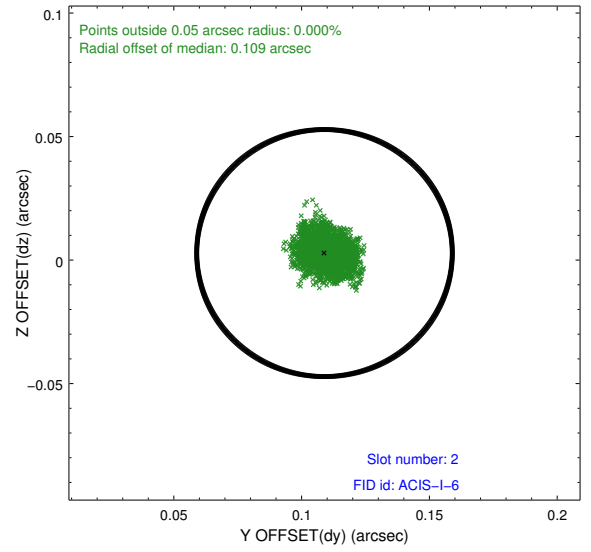
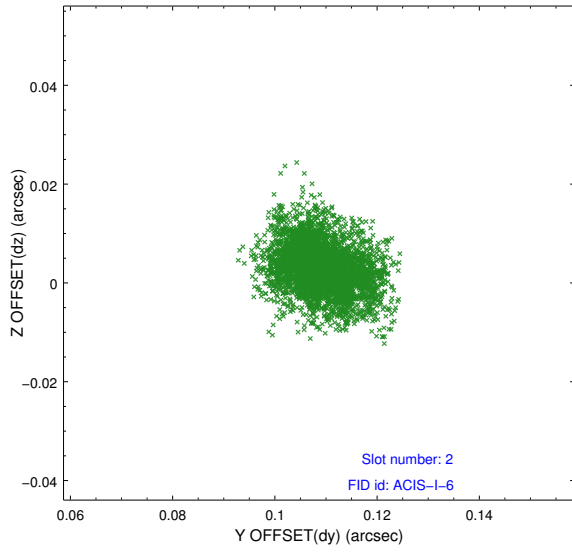
2.5.2 Slot 1



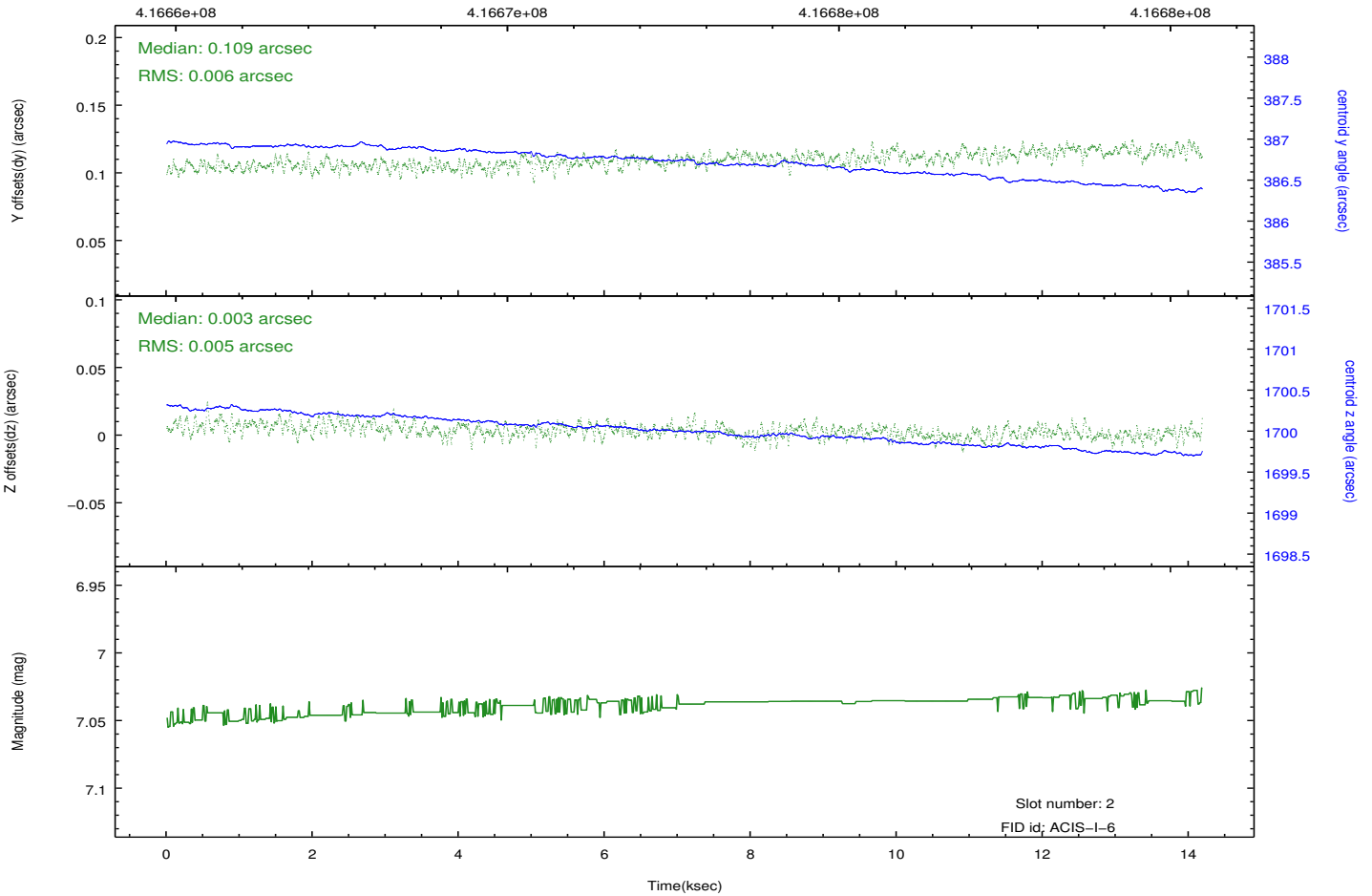
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.753599948823

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 met.