

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 642 - L2 Version 5
Chandra X-Ray Center

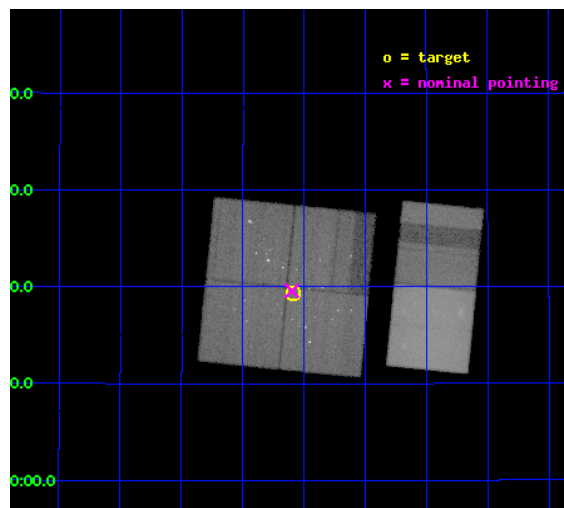
L2 Processing Date : Oct 3 2012

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

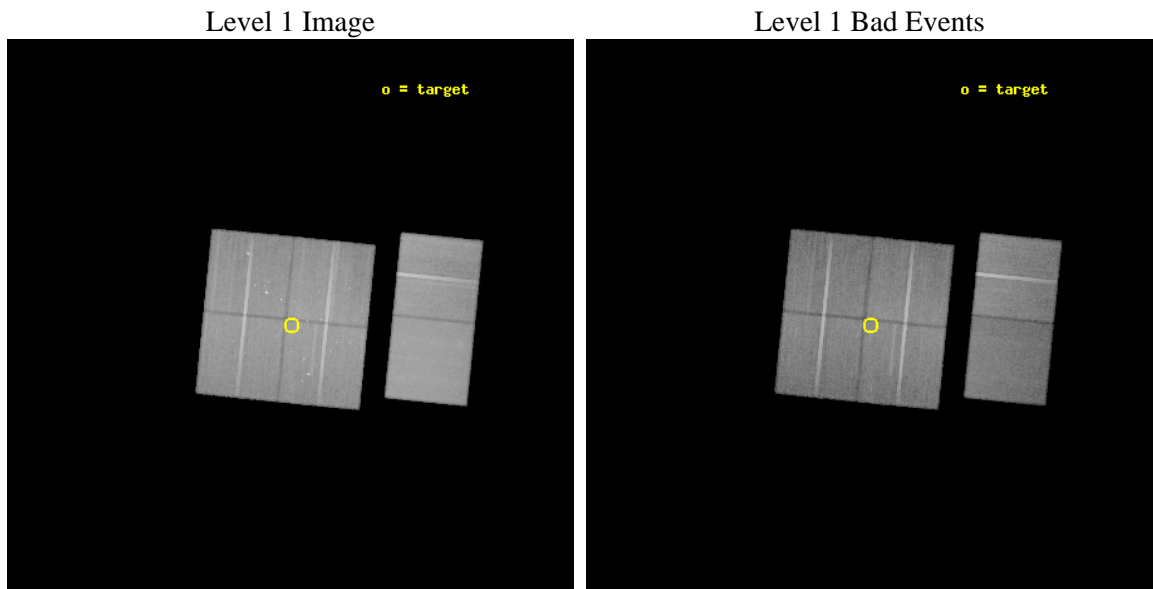
seq_num	200067	Sequence number
obs_id	642	Observation id
title	ACIS STUDY OF THE PERSEUS STAR FORMING CLOUD	Proposal title
observer	Prof. Eric Feigelson	Principal investigator
object	NGC 1333	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	52.273333	Observer's specified target RA [deg]
dec_targ	31.321944	Observer's specified target Dec [deg]
ra_nom	52.275046883091	Nominal RA [deg]
dec_nom	31.326645804129	Nominal Dec [deg]
roll_nom	95.716845828309	Nominal Roll [deg]
revision	5	Processing version of data
ontime	43779.159110442	Sum of GTIs [s]
livetime	43224.801037141	Livetime [s]
ontime0	43779.159090534	Sum of GTIs [s]
ontime1	43779.15908052	Sum of GTIs [s]
ontime2	43779.15908052	Sum of GTIs [s]
ontime3	43779.159110442	Sum of GTIs [s]
ontime6	43779.15908052	Sum of GTIs [s]
ontime7	43775.918100372	Sum of GTIs [s]
l2events	599596	Number of level 2 events



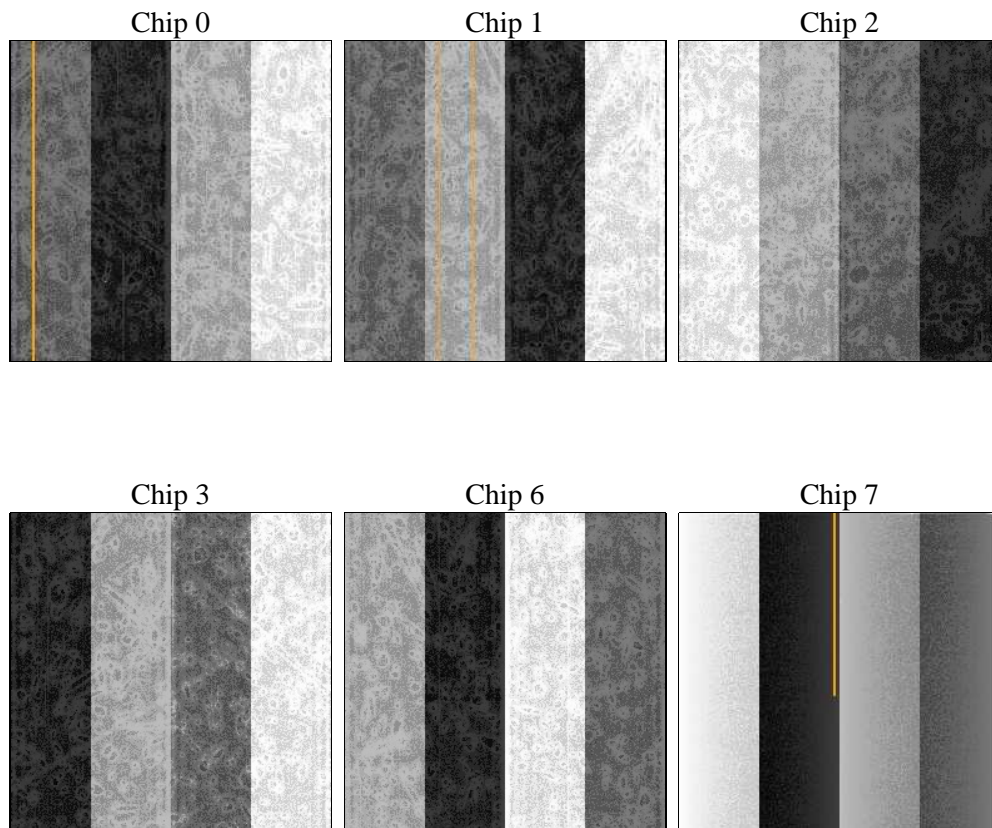
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	43779.159110442	Sum of GTIs [s]
caldbver	4.5.2	 	ontime0	43779.159090534	Sum of GTIs [s]
date	2012-10-03T22:45:12	Date and time of file creation	ontime1	43779.15908052	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	43779.15908052	Sum of GTIs [s]
			ontime3	43779.159110442	Sum of GTIs [s]
			ontime6	43779.15908052	Sum of GTIs [s]
			ontime7	43775.918100372	Sum of GTIs [s]
			l1events	2253949	Number of level 1 events

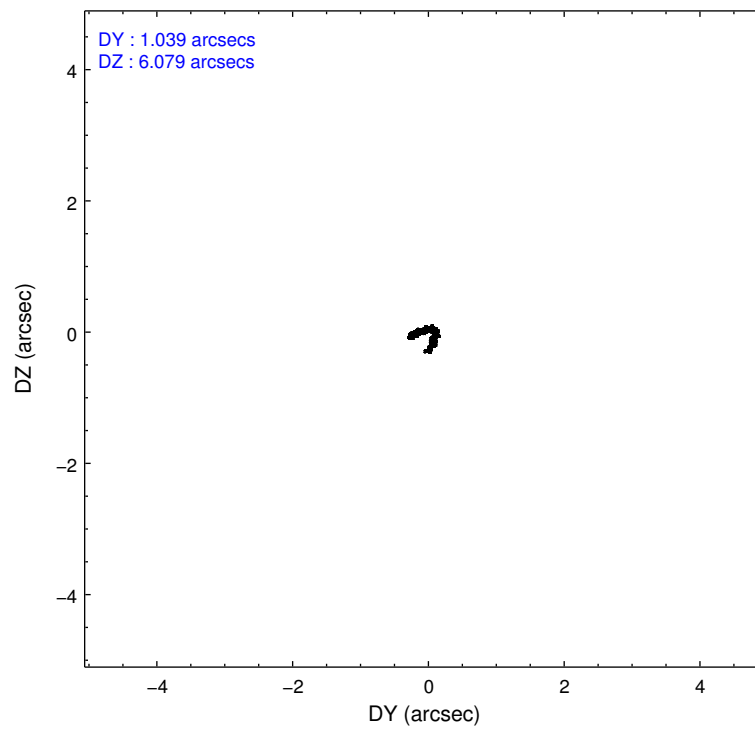
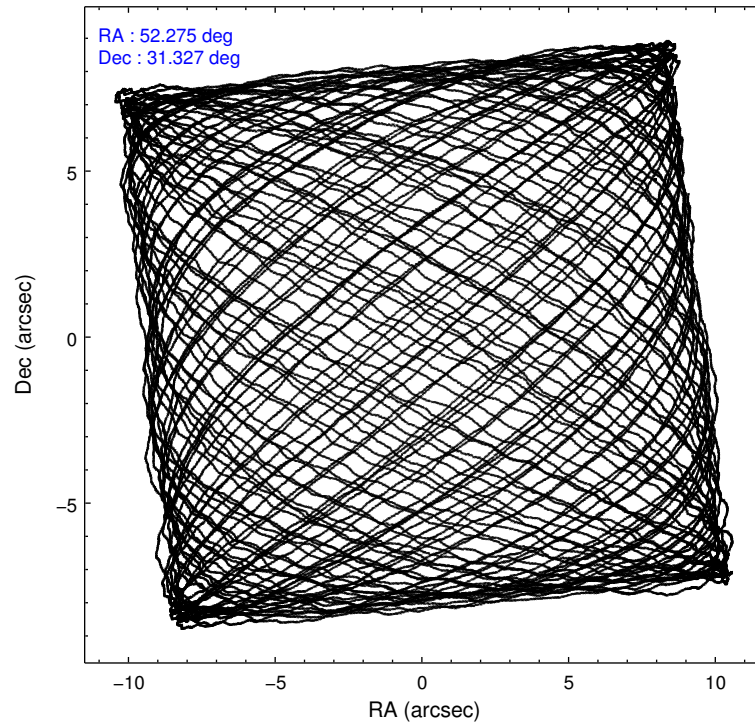
2.1.4 Events

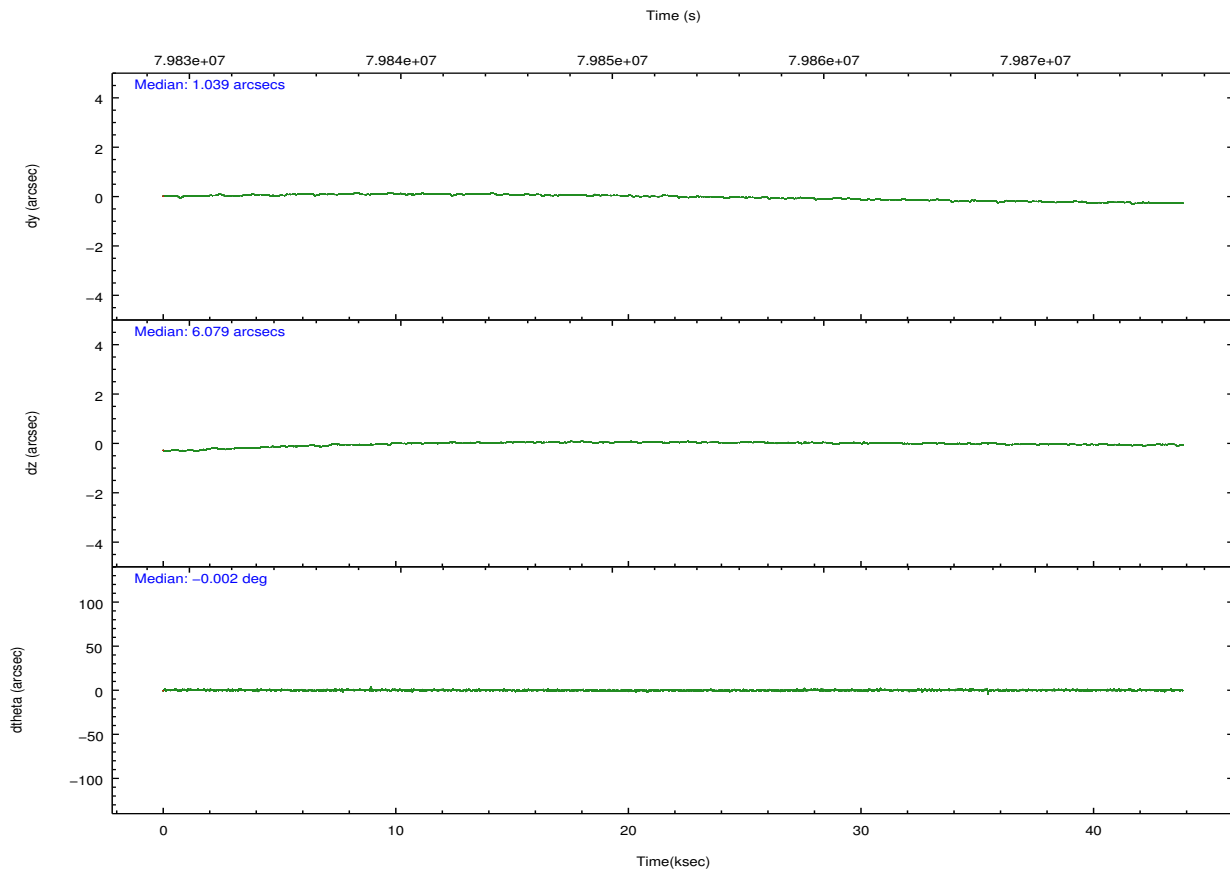
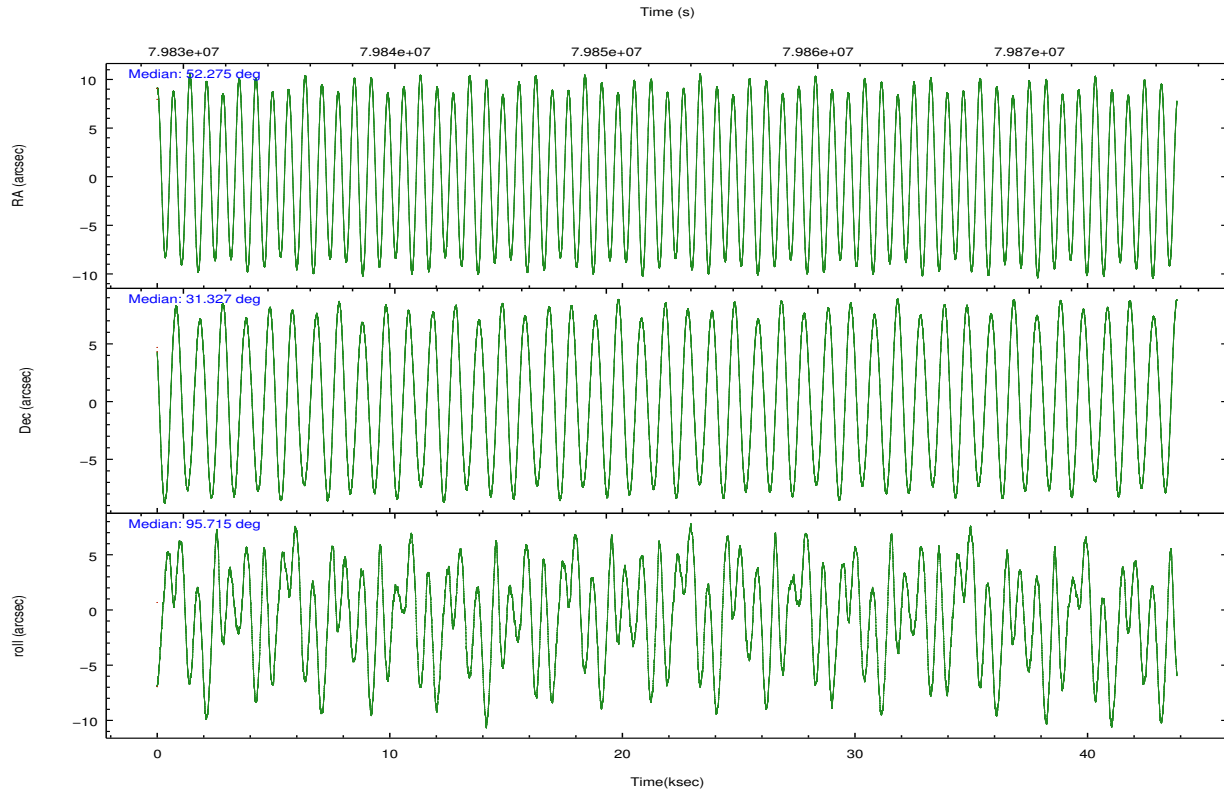
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	341049	344059	377419	379701	384614	427107	grade 0 events	44768	36244	37218	39631	40306	24626
rejected events	248571	258782	296892	291709	299133	196968		13%	10%	9%	10%	10%	5%
rejected %	72%	75%	78%	76%	77%	46%	grade 1 events	297	220	258	240	277	445
								0%	0%	0%	0%	0%	0%
							grade 2 events	24338	25610	20417	24632	23182	44957
								7%	7%	5%	6%	6%	10%
							grade 3 events	3983	4408	3413	3768	3707	19988
								1%	1%	0%	0%	0%	4%
							grade 4 events	4377	4231	4892	4306	4068	20413
								1%	1%	1%	1%	1%	4%
							grade 5 events	9193	9693	8527	9513	10733	32945
								2%	2%	2%	2%	2%	7%
							grade 6 events	15292	15046	14847	15941	14540	120684
								4%	4%	3%	4%	3%	28%
							grade 7 events	238801	248607	287847	281670	287801	163049
								70%	72%	76%	74%	74%	38%

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	OVERRIDE	OVERRIDE
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	52.293752	52.27504688309138	Subarray requested	NONE	NONE
[deg] Pointing Dec	31.304203	31.32664580412883	Alternating exposures requested	N	N
[deg] Pointing Roll	95.498441	95.71684582830926	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-0.7809083437167272	-0.7809083437167272			
[mm] SIM defocus	0.001439854621705816	0.001439854621705816			
[mm] SIM translation stage pos	-233.5874344608287	-233.5874344608287			
[mm] SIM translation stage offset	-0.005028630603106876	-0.005028630603106876			
[s] Observation start time (MET)	79830949.184000	79830949.184			
Observation start date	2000-07-12T23:14:45	2000-07-12T23:15:49			
[s] Observation end time (MET)	79874795.000000	79874795			
Observation end date	2000-07-13T11:26:35	2000-07-13T11:26:34			
Read mode	TIMED	TIMED			

2.3 Aspect



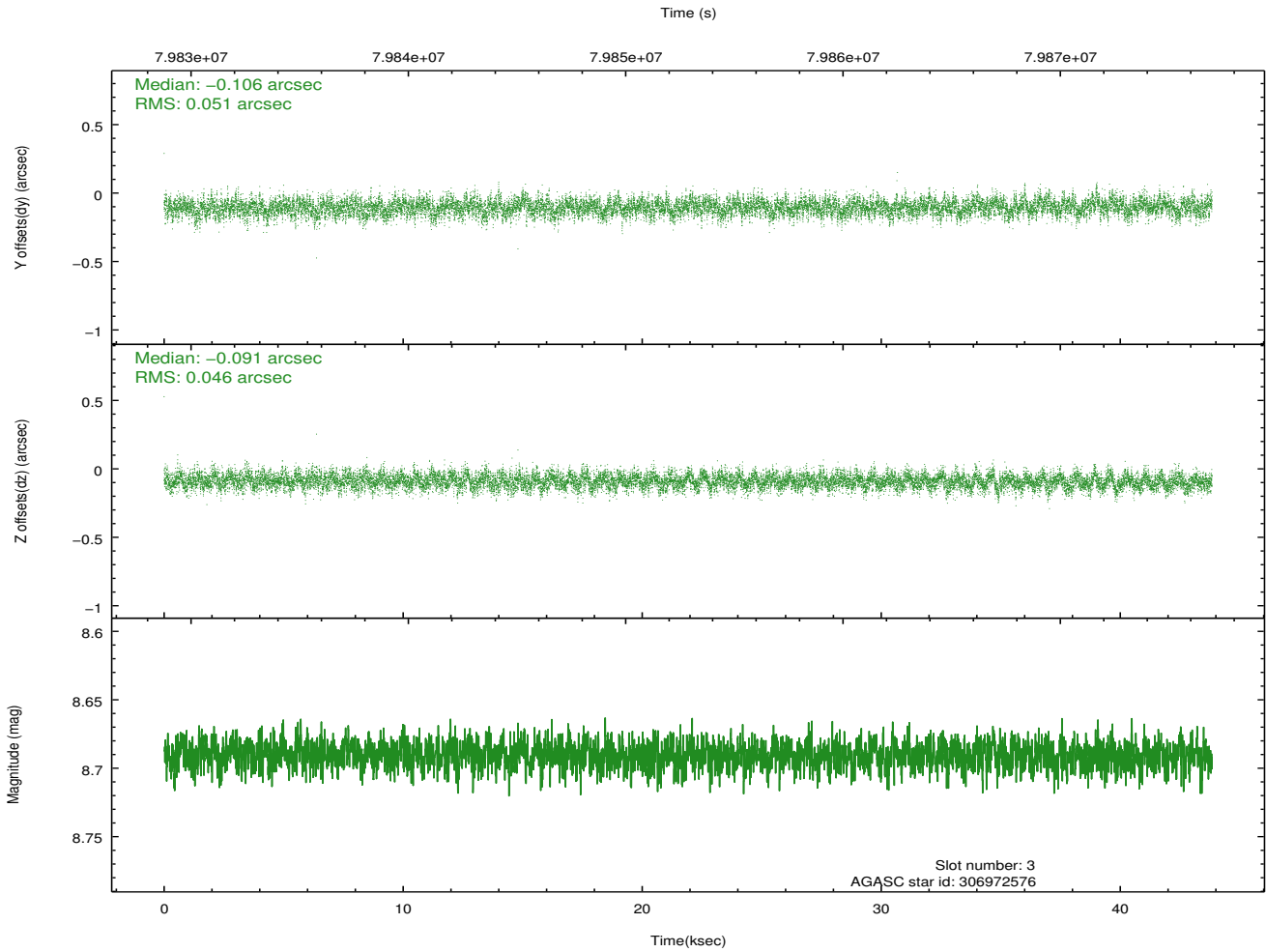
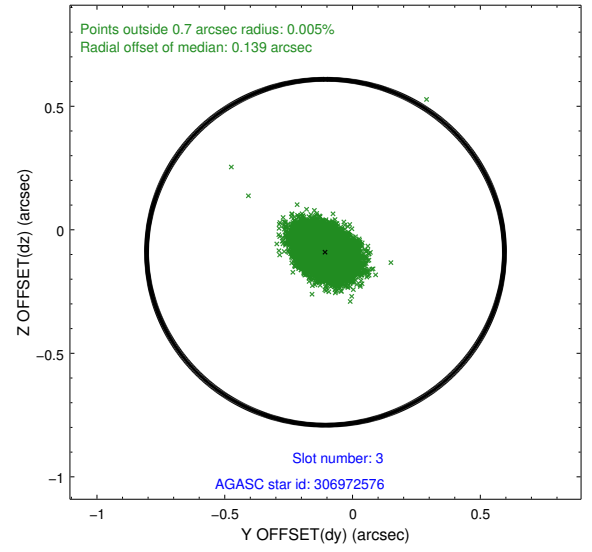
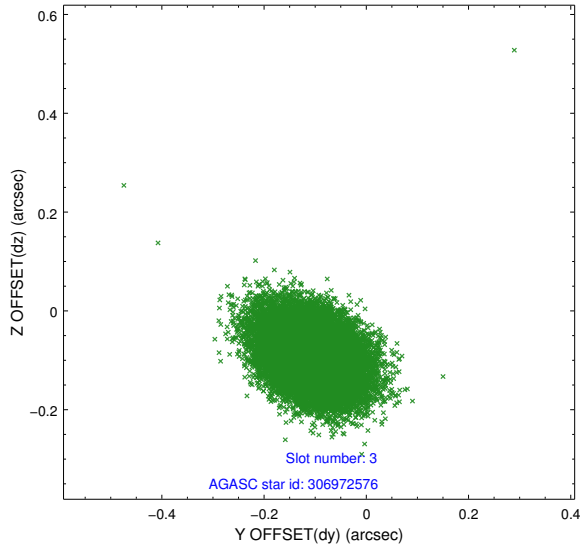


Slot Statistics

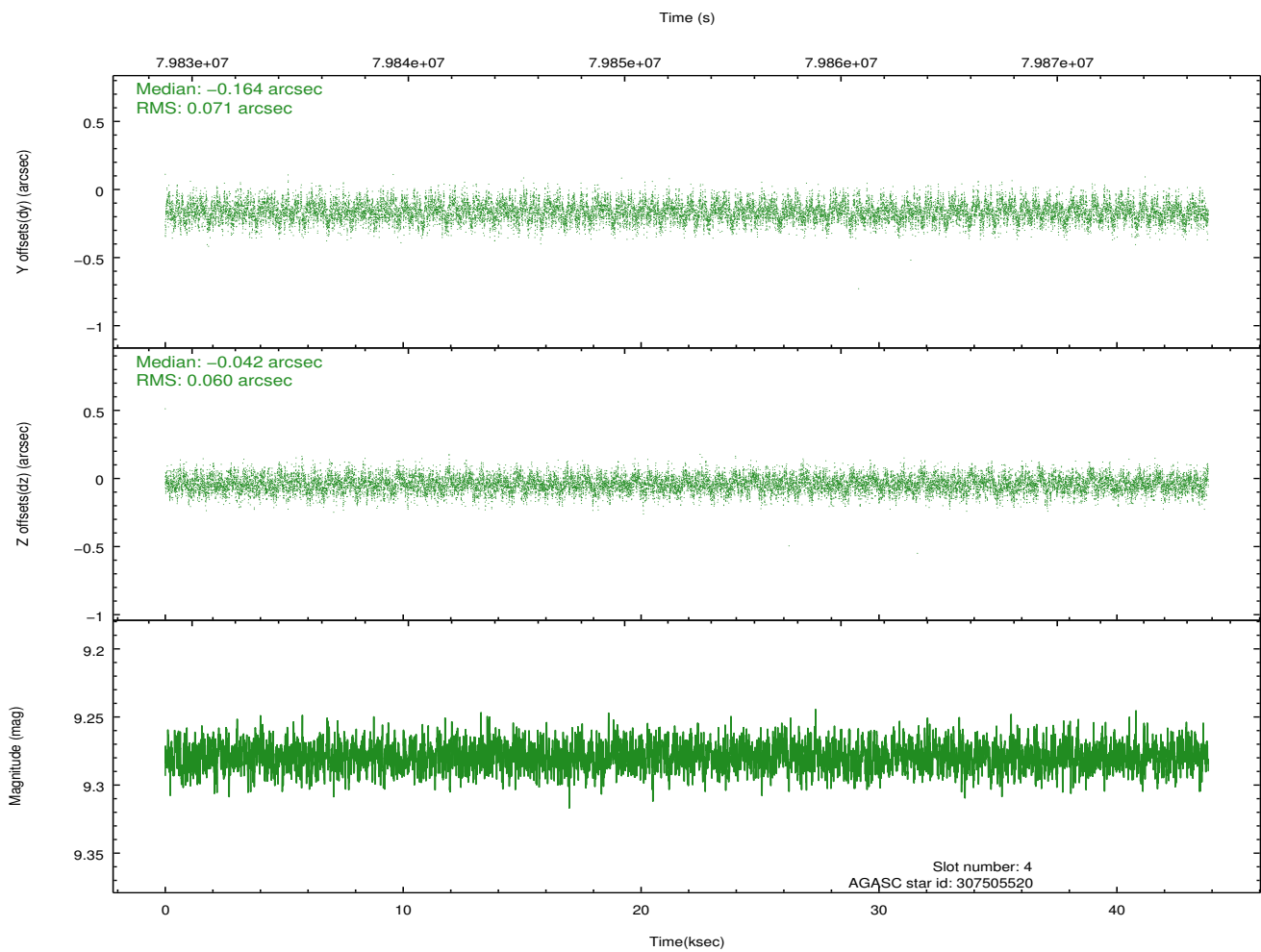
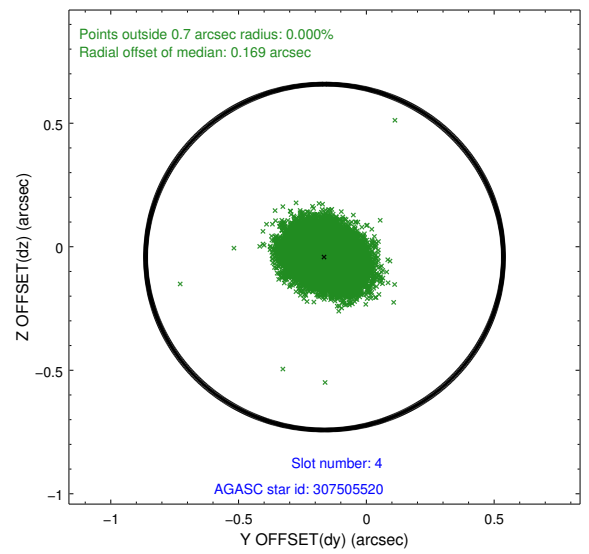
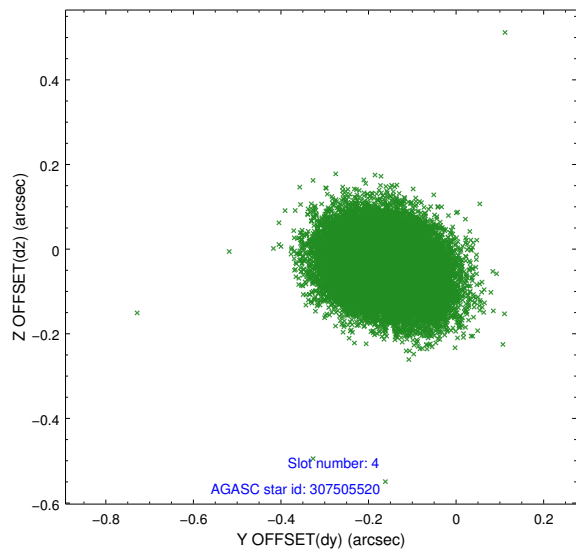
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-3	7.44	10691	0.006	0.125	0.010	0.016	0.000000	0.000000	56.27	-962.53
1	FID	ACIS-I-4	7.18	10691	-0.075	-0.045	0.008	0.013	0.000000	0.000000	2158.73	1070.33
2	FID	ACIS-I-5	7.23	10692	-0.029	-0.010	0.007	0.012	0.000000	0.000000	-1809.18	1068.23
3	GUIDE	306972576	8.69	21377	-0.106	-0.091	0.072	0.120	51.922068	31.396670	442.73	1105.38
4	GUIDE	307505520	9.28	21372	-0.164	-0.042	0.099	0.160	52.061709	31.914080	2254.17	496.13
5	GUIDE	306972472	9.17	21371	0.274	-0.045	0.093	0.156	51.872030	30.721015	-1961.82	1500.69
6	GUIDE	306974976	9.64	21265	-0.096	0.257	0.103	0.169	52.769116	31.792982	1615.30	-1615.78
7	GUIDE	306972496	9.78	21369	0.093	-0.075	0.108	0.182	52.238376	31.238636	-218.25	192.76

2.4 Star Slots

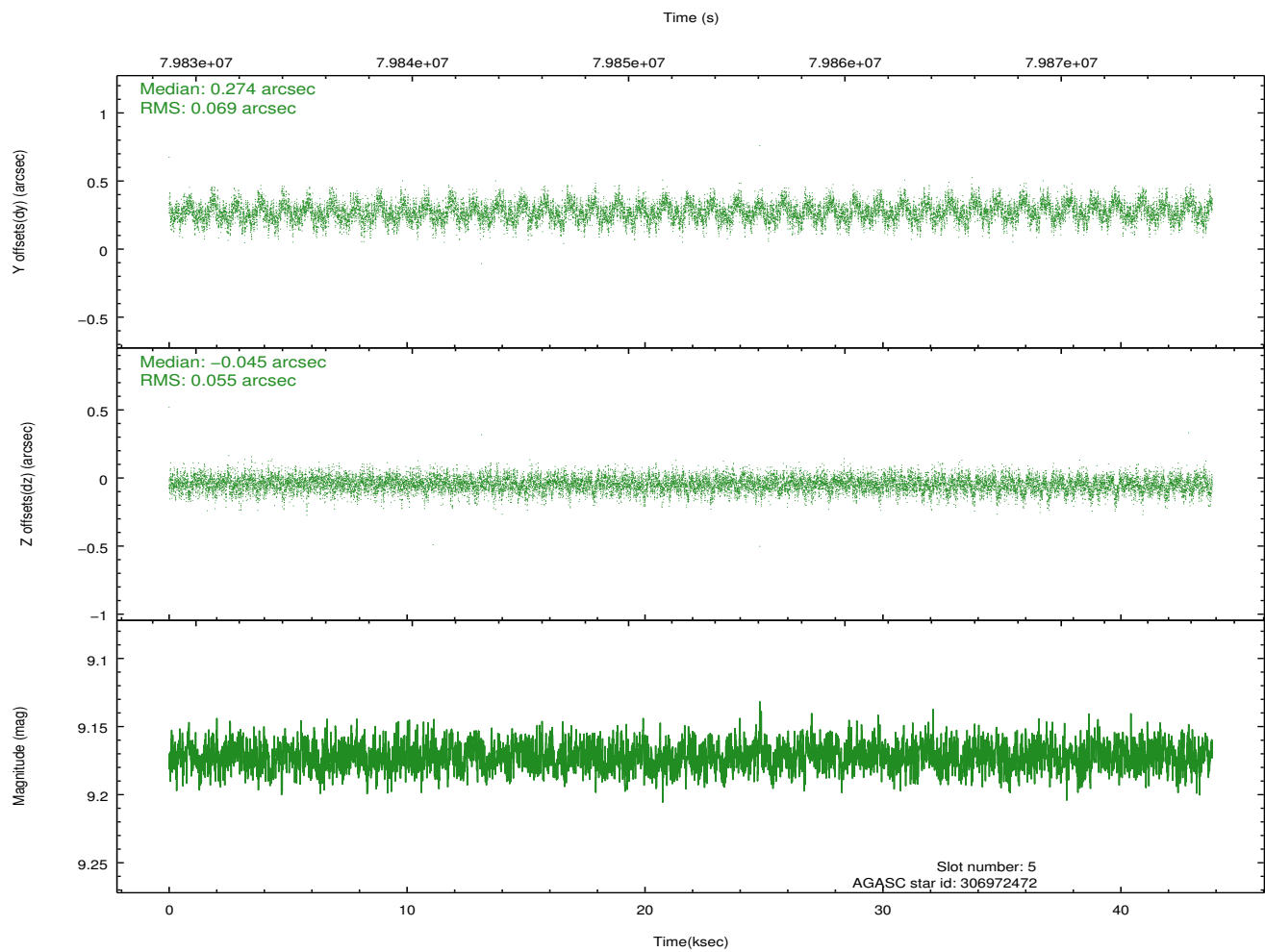
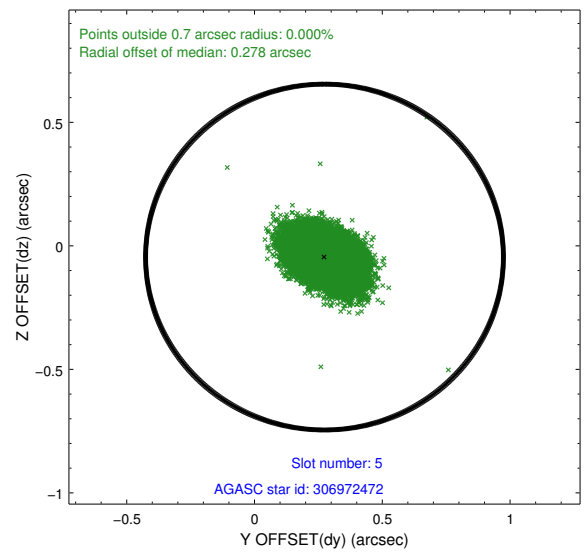
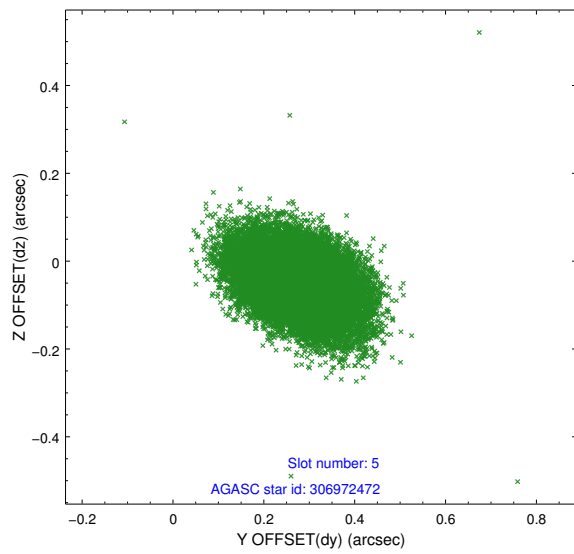
2.4.1 Slot 3



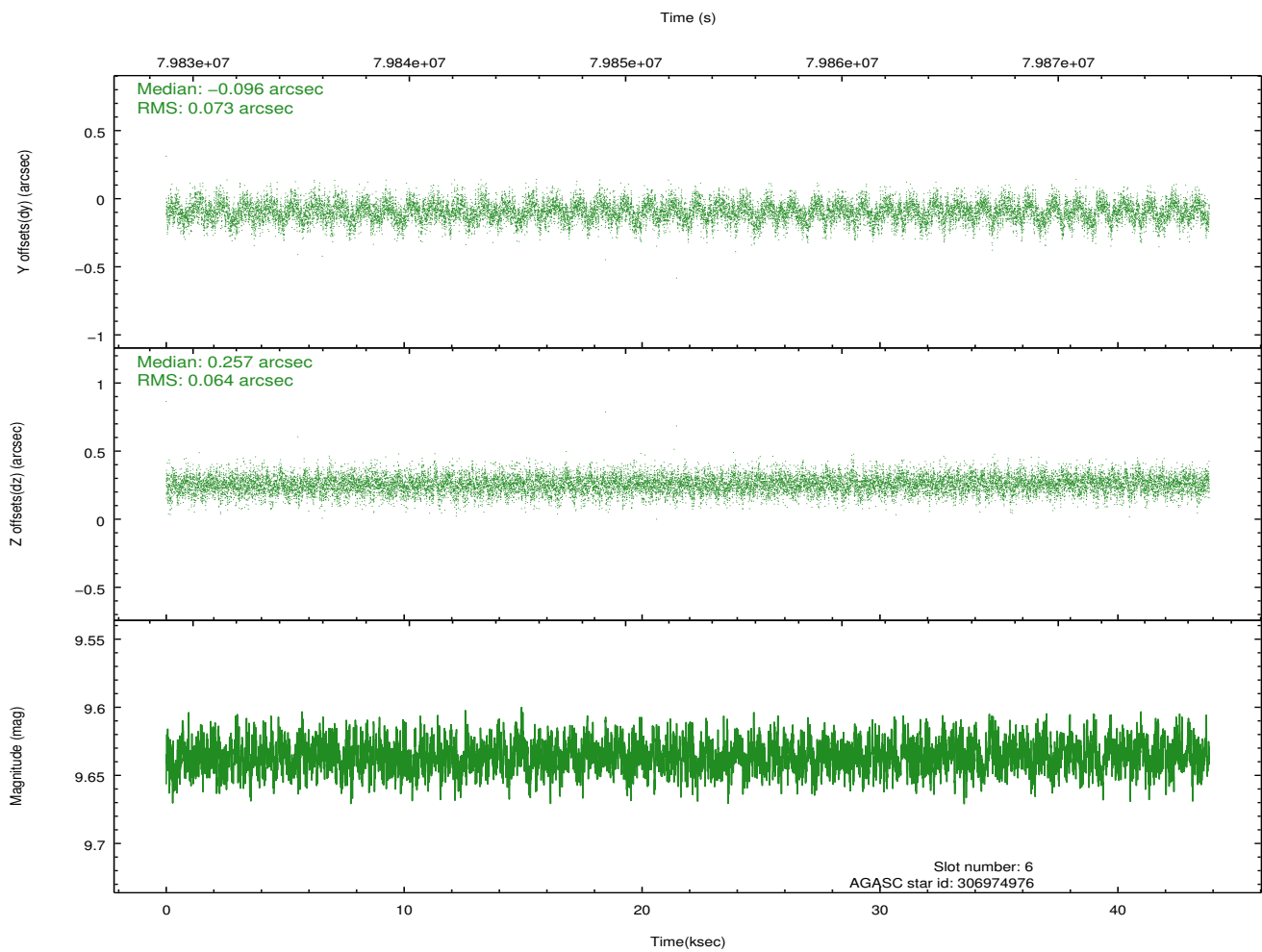
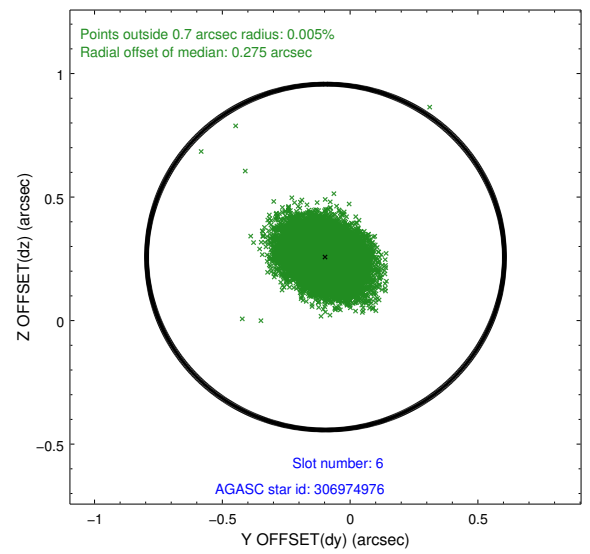
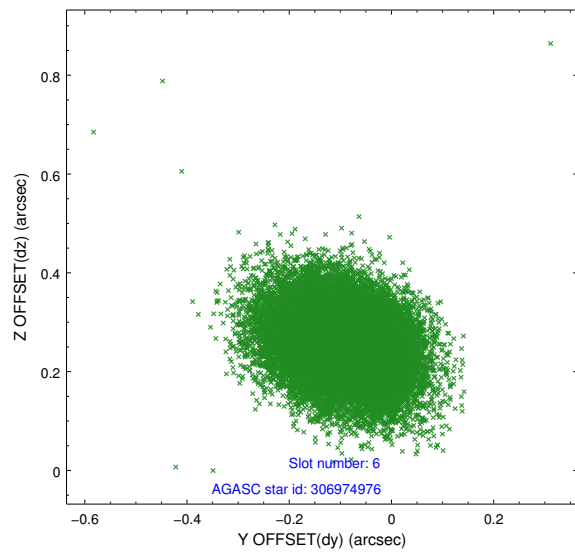
2.4.2 Slot 4



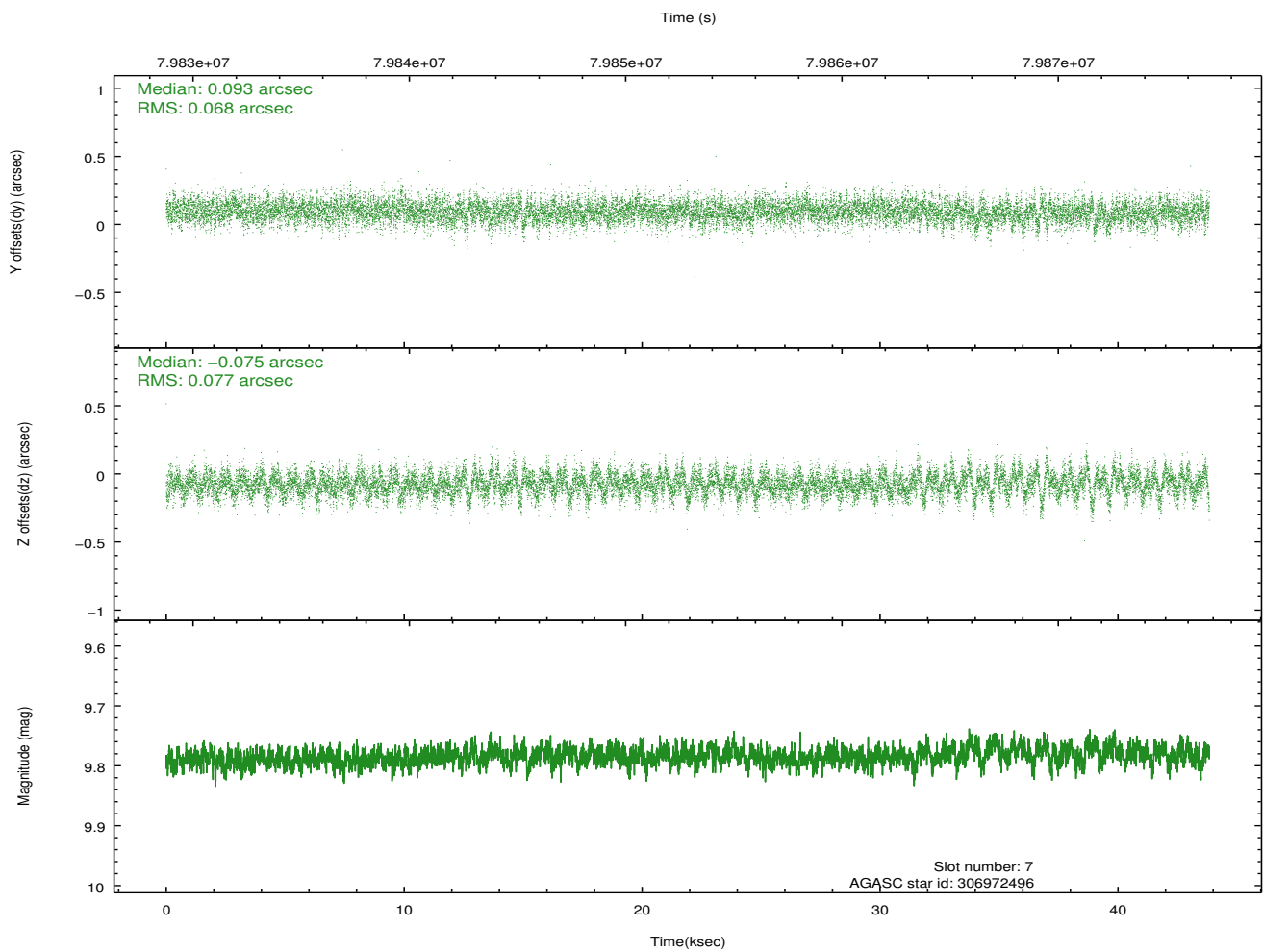
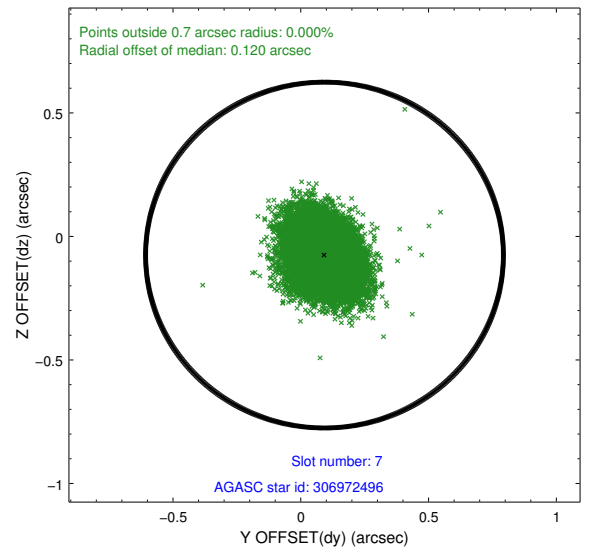
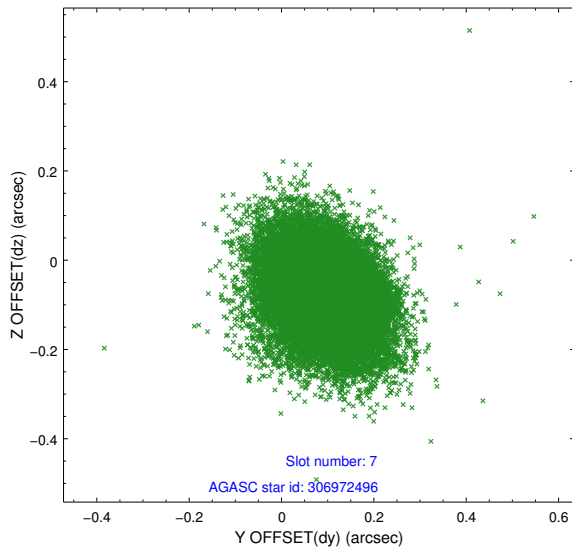
2.4.3 Slot 5



2.4.4 Slot 6

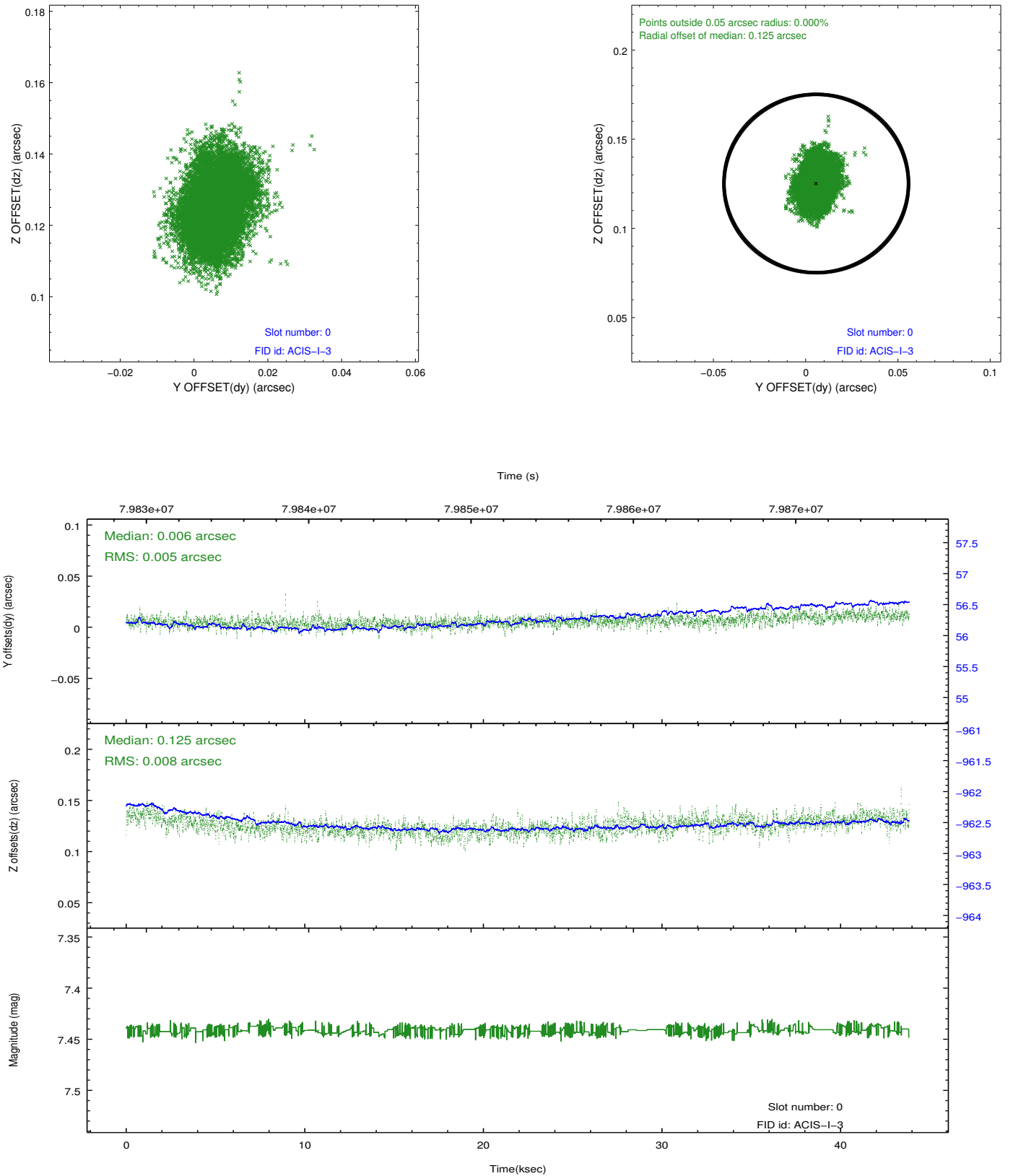


2.4.5 Slot 7

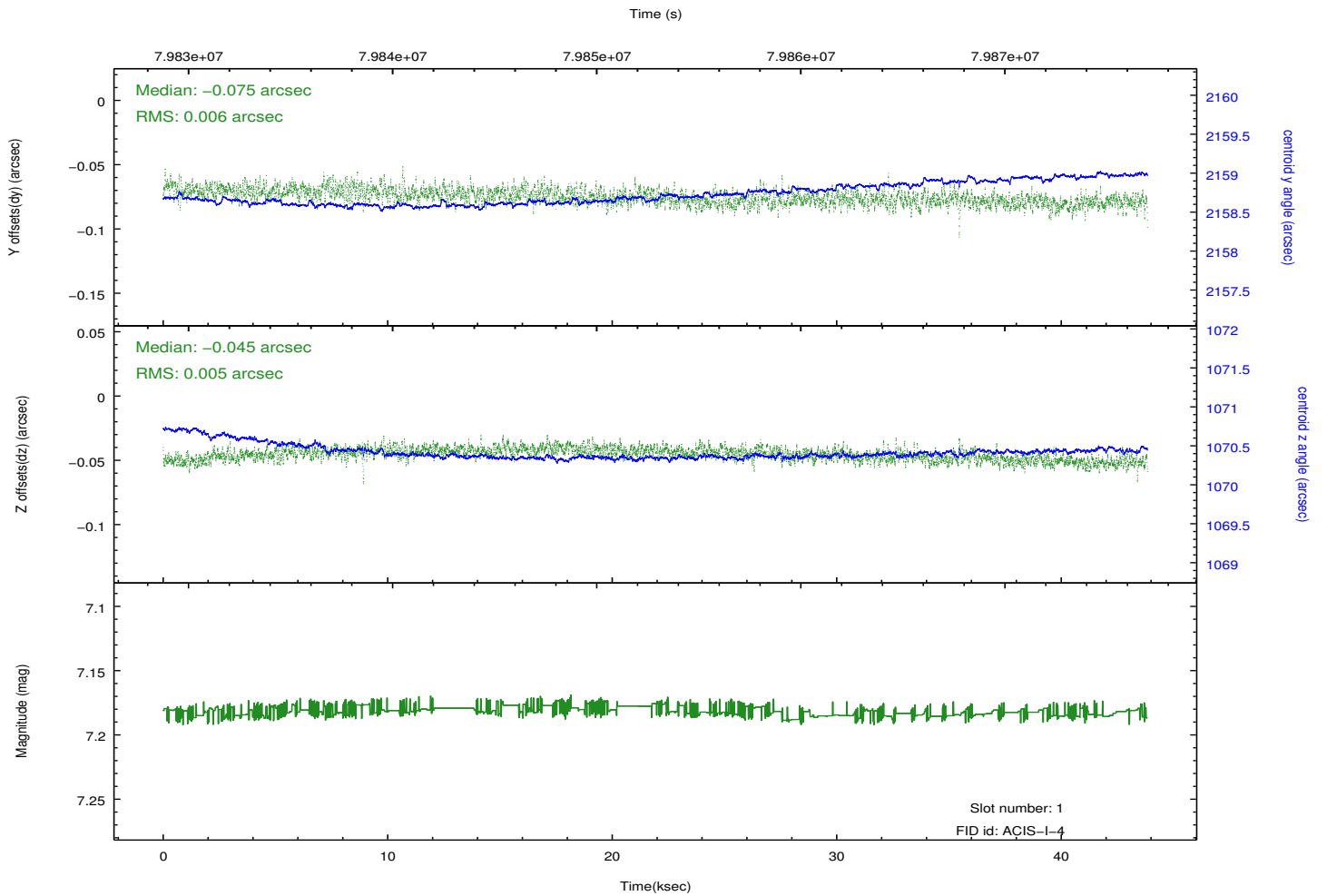
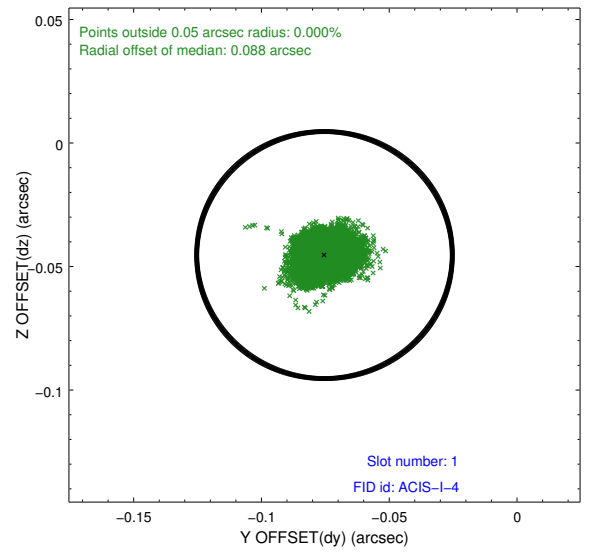
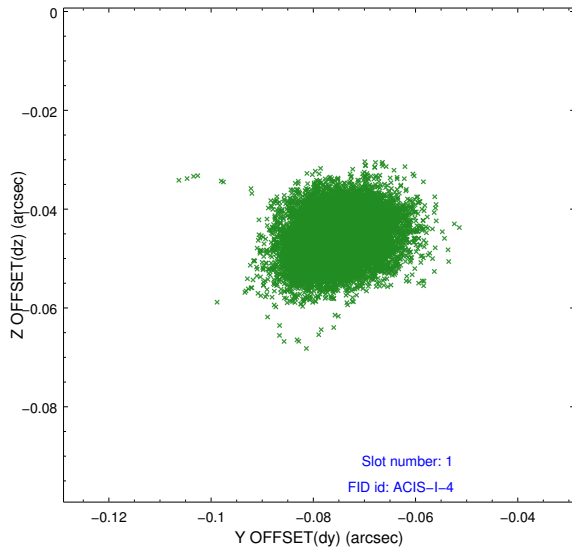


2.5 FID Slots

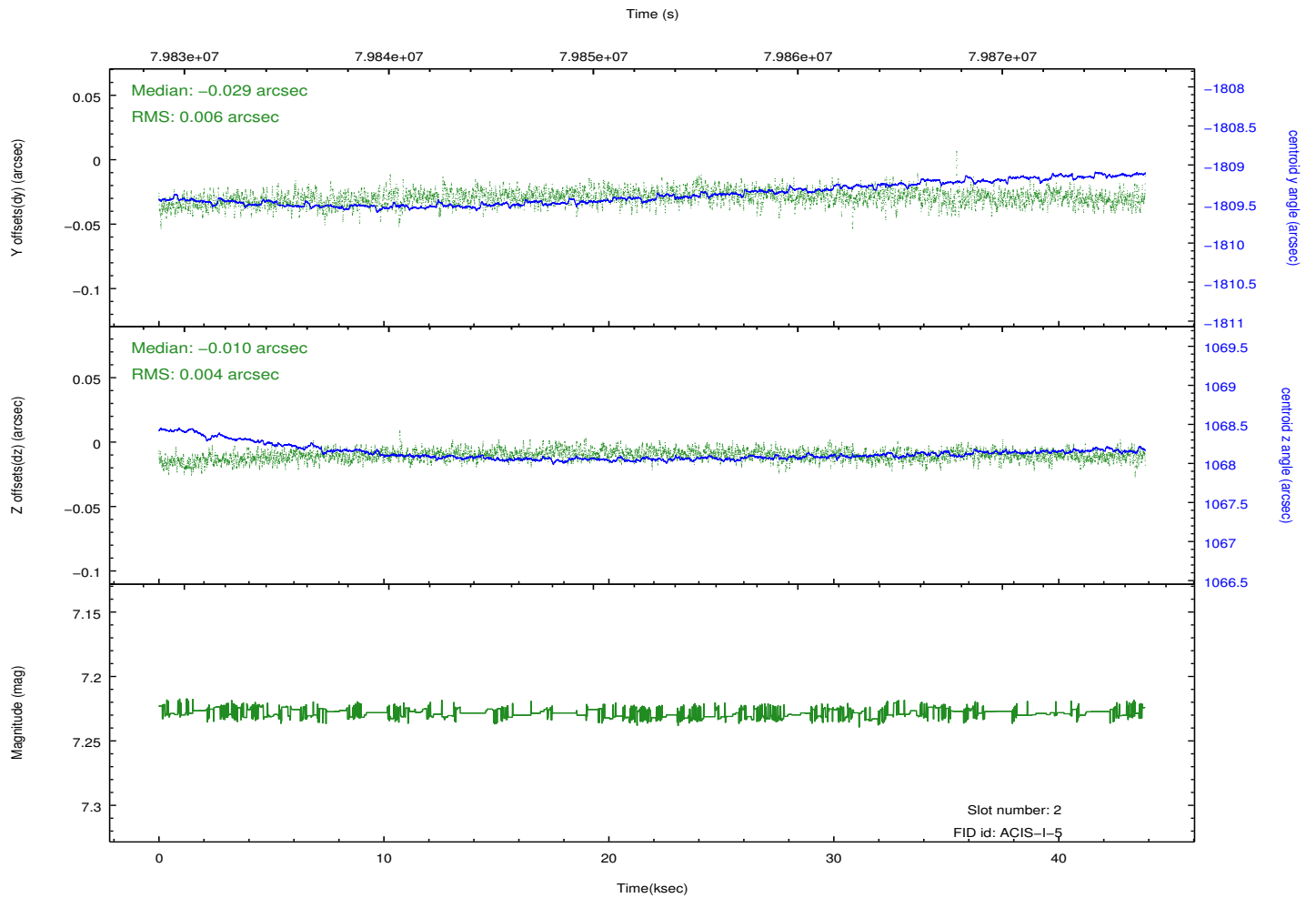
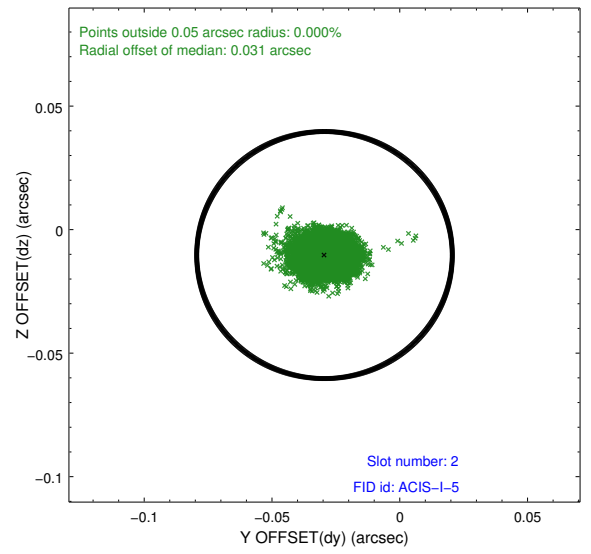
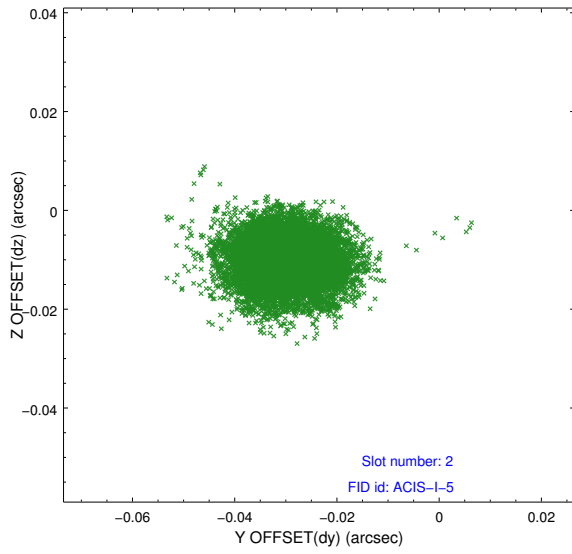
2.5.1 Slot 0



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)	2012.10.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.907

A.2 Comments

This observation was interrupted by safing of the science instruments due to high solar radiation environment. The observation was interrupted at 195:11:29 GMT. Due to a high radiation environment, the instruments were safed and the observation terminated early. This observation was reprocessed so that the aspect solution correctly handles the instrument safing and maneuver activities at the end of the observation.

===

High radiation environment is evident during the last approximately 8 ks of this observation in the elevated count rate.

===

Charge time for this ObsId remains at previous value of 43.907 ks, although with the current processing the charge time would be 43.779 ks.