

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 158 - L2 Version 3

Chandra X-Ray Center

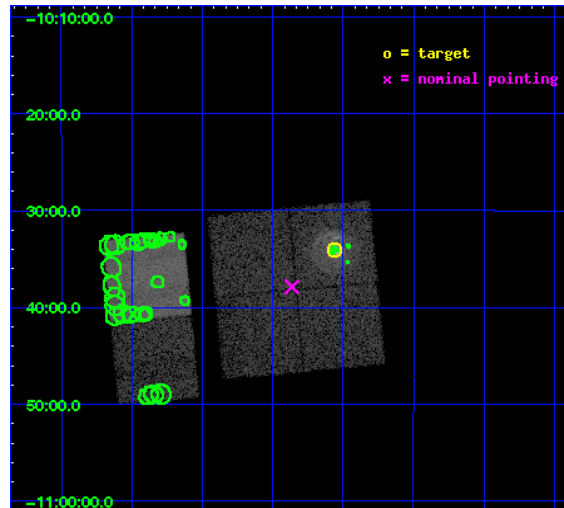
L2 Processing Date : Dec 17 2009

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1 Front

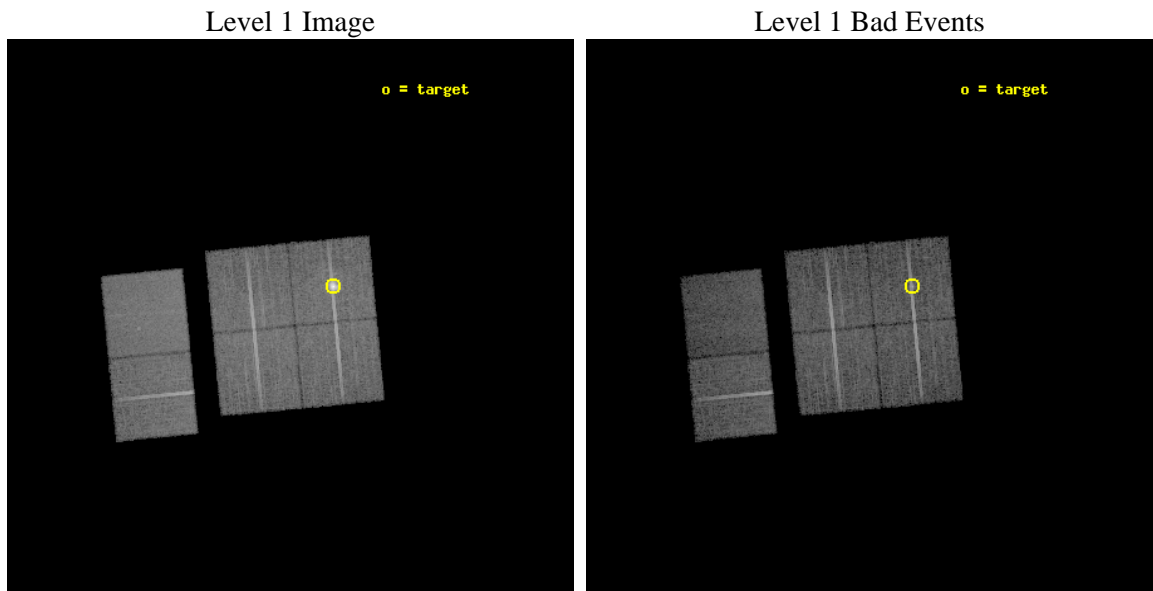
seq_num	590026	Sequence number
obs_id	158	Observation id
title	ACIS CHIP RESPONSE TO A CONTINUUM SOURCE	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip I1, T=100, Offsets=-3,-5,0 Off-ax]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA
dec_targ	-10.568528	Observer's specified target Dec
ra_nom	278.46606015928	Nominal RA
dec_nom	-10.631488512883	Nominal Dec
roll_nom	264.54265623125	Nominal Roll
revision	3	Processing version of data
ontime	9760.0000090897	Sum of GTIs [s]
livetime	9636.4130122082	Livetime [s]
ontime0	9756.7590488717	Sum of GTIs [s]
ontime1	9760.0000090897	Sum of GTIs [s]
ontime2	9760.0000090897	Sum of GTIs [s]
ontime3	9760.0000090897	Sum of GTIs [s]
ontime6	9760.0000090897	Sum of GTIs [s]
ontime7	9760.0000090897	Sum of GTIs [s]
l2events	107326	Number of level 2 events



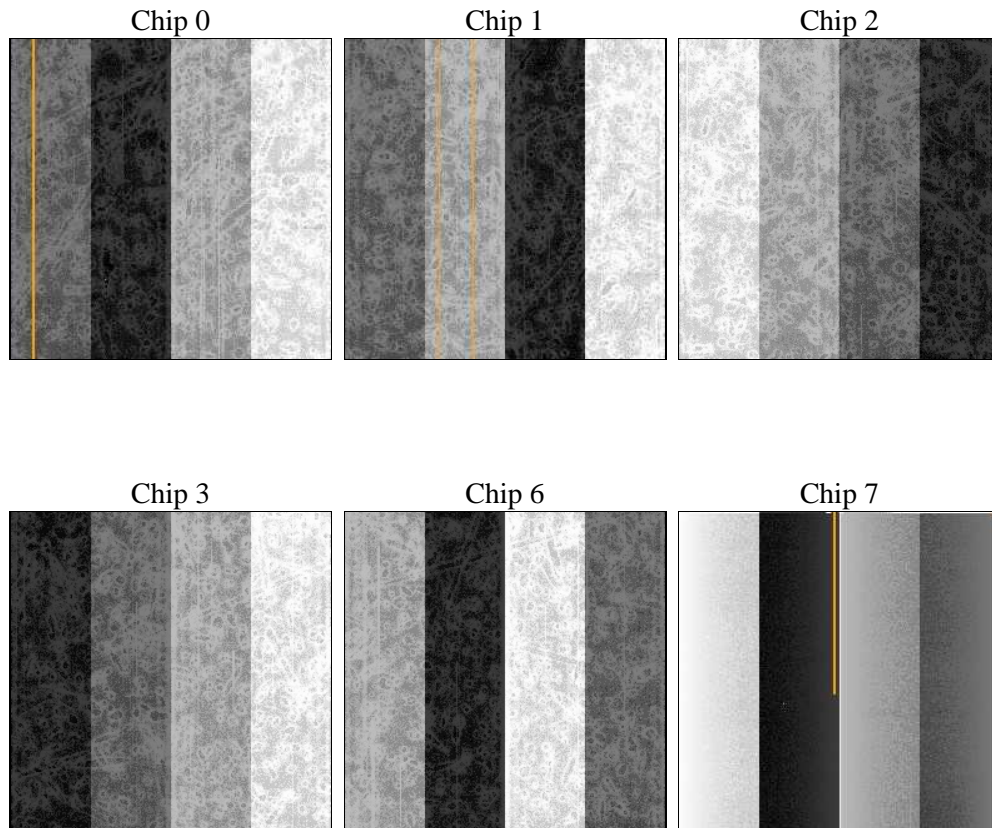
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	9760.0000090897	Sum of GTIs [s]
caldsver	4.1.4	 	ontime0	9756.7590488717	Sum of GTIs [s]
date	2009-12-17T07:22:02	Date and time of file creation	ontime1	9760.0000090897	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9760.0000090897	Sum of GTIs [s]
			ontime3	9760.0000090897	Sum of GTIs [s]
			ontime6	9760.0000090897	Sum of GTIs [s]
			ontime7	9760.0000090897	Sum of GTIs [s]
			l1events	587594	Number of level 1 events

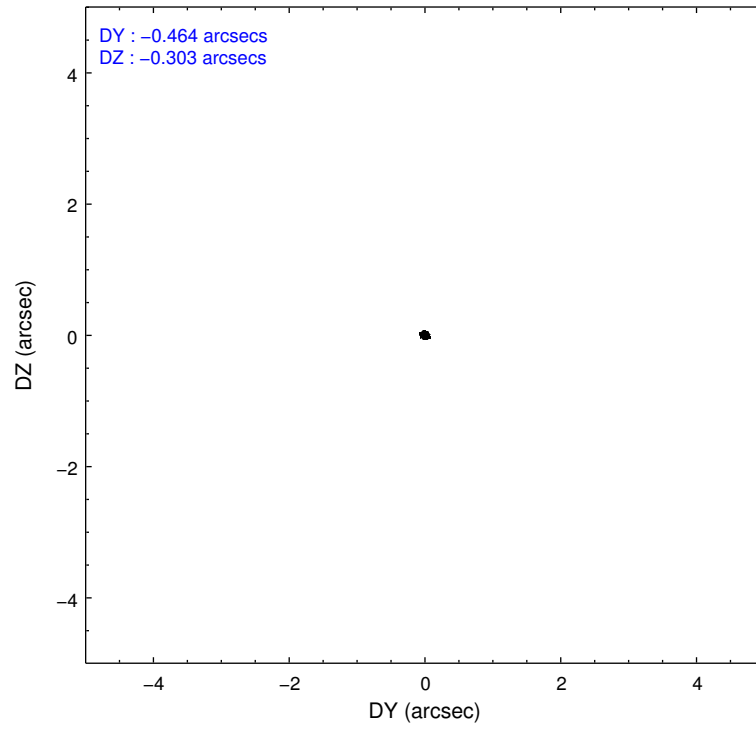
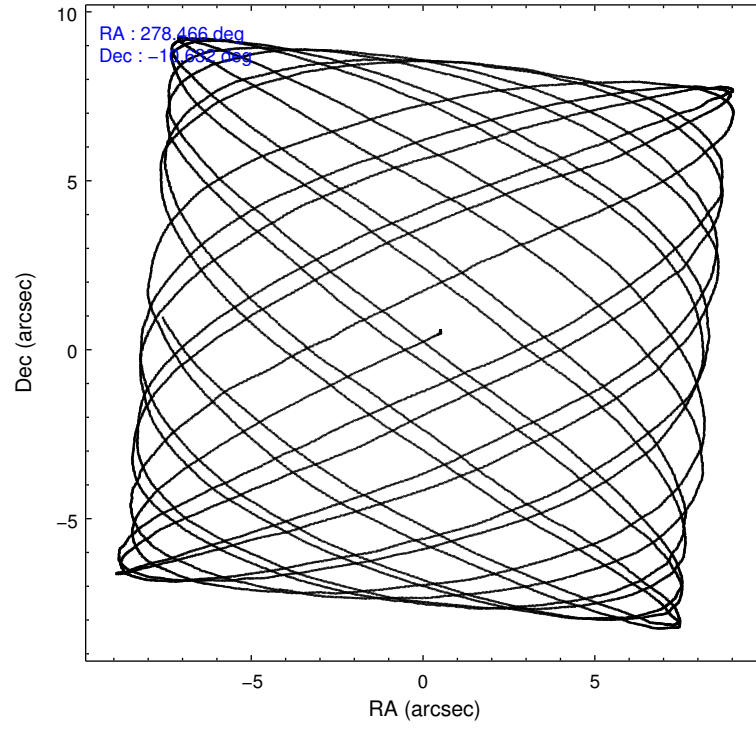
2.1.4 Events

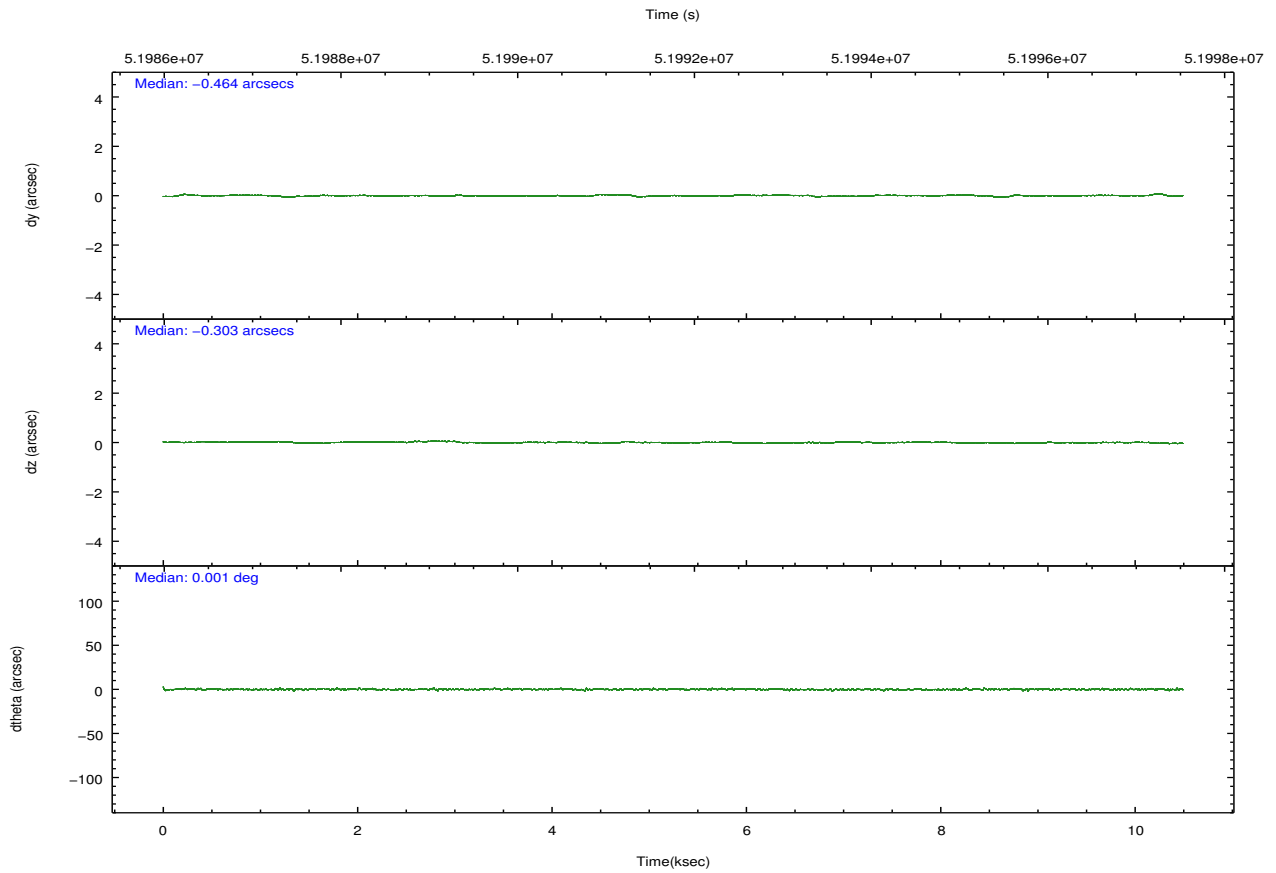
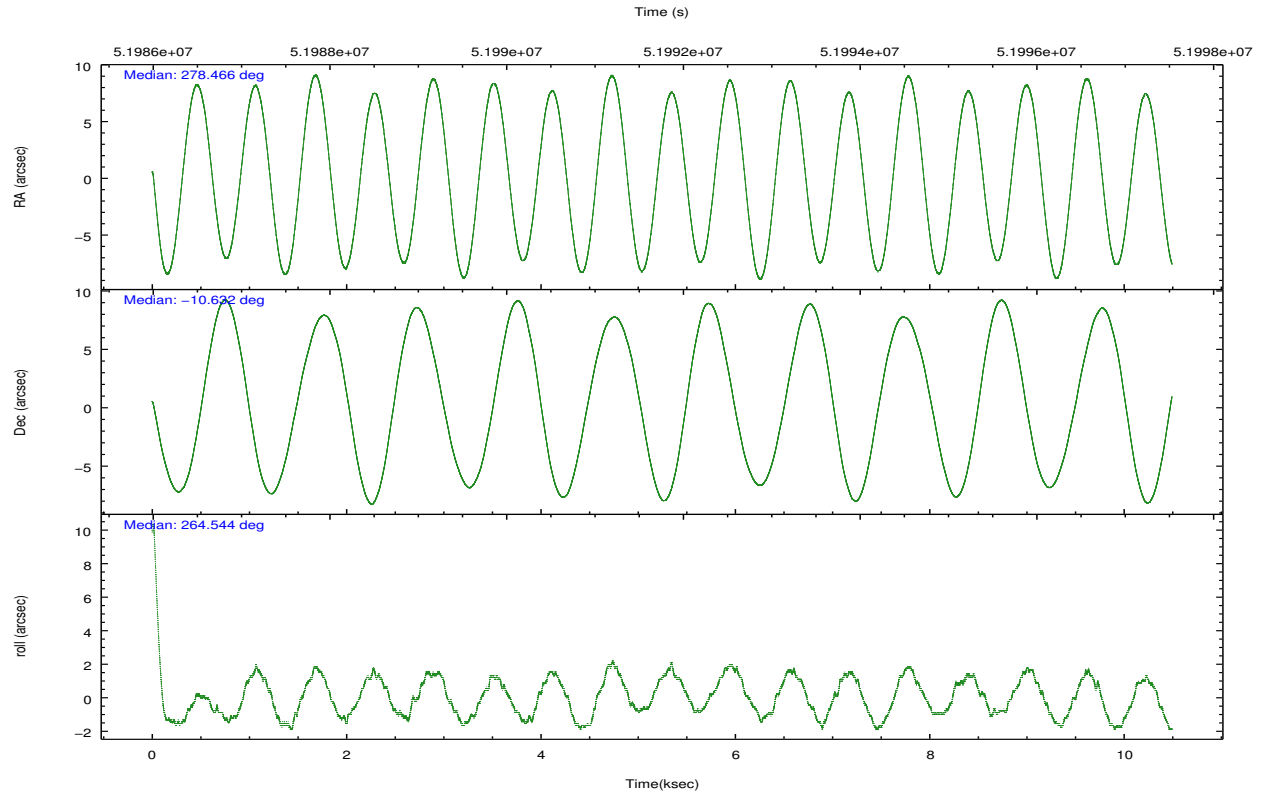
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	90250	116891	96910	91996	91961	99586	grade 0 events	3931	23845	3409	3767	2926	2908
rejected events	80697	79311	88359	82839	82968	59236		4%	20%	3%	4%	3%	2%
rejected %	89%	67%	91%	90%	90%	59%	grade 1 events	38	191	33	37	22	63
								0%	0%	0%	0%	0%	0%
							grade 2 events	2182	6101	2055	2071	2607	6242
								2%	5%	2%	2%	2%	6%
							grade 3 events	905	2170	781	830	788	3980
								1%	1%	0%	0%	0%	3%
							grade 4 events	859	2174	737	815	766	3272
								0%	1%	0%	0%	0%	3%
							grade 5 events	2301	2618	2053	2321	2434	6658
								2%	2%	2%	2%	2%	6%
							grade 6 events	1676	3306	1572	1677	1910	23948
								1%	2%	1%	1%	2%	24%
							grade 7 events	78358	76486	86270	80478	80508	52515
								86%	65%	89%	87%	87%	52%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	278.455005	278.4660601592773	Subarray requested	NONE	NONE
Pointing Dec	-10.605736	-10.63148851288329	Alternating exposures requested	N	N
Pointing Roll	264.331928	264.5426562312504	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7362356599963374			
SIM defocus (mm)	0	0.04611255558364913			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	51987005.184000	51986331.405242			
Observation start date	1999-08-25T16:49:01	1999-08-25T16:38:51			
Observation end time	51997005.184000	51997131.318131			
Observation end date	1999-08-25T19:35:41	1999-08-25T19:38:51			
Read mode	TIMED	TIMED			

2.3 Aspect



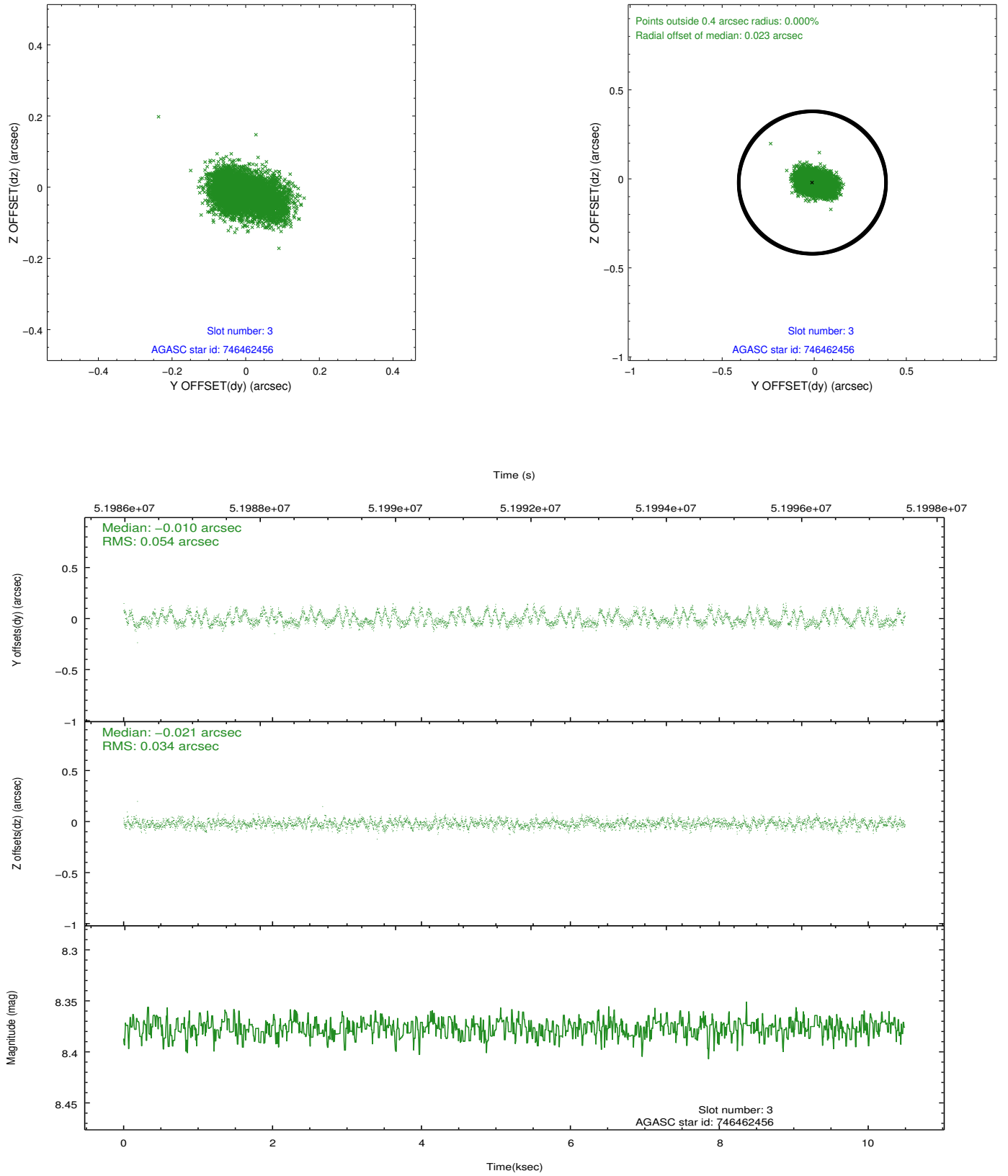


Slot Statistics

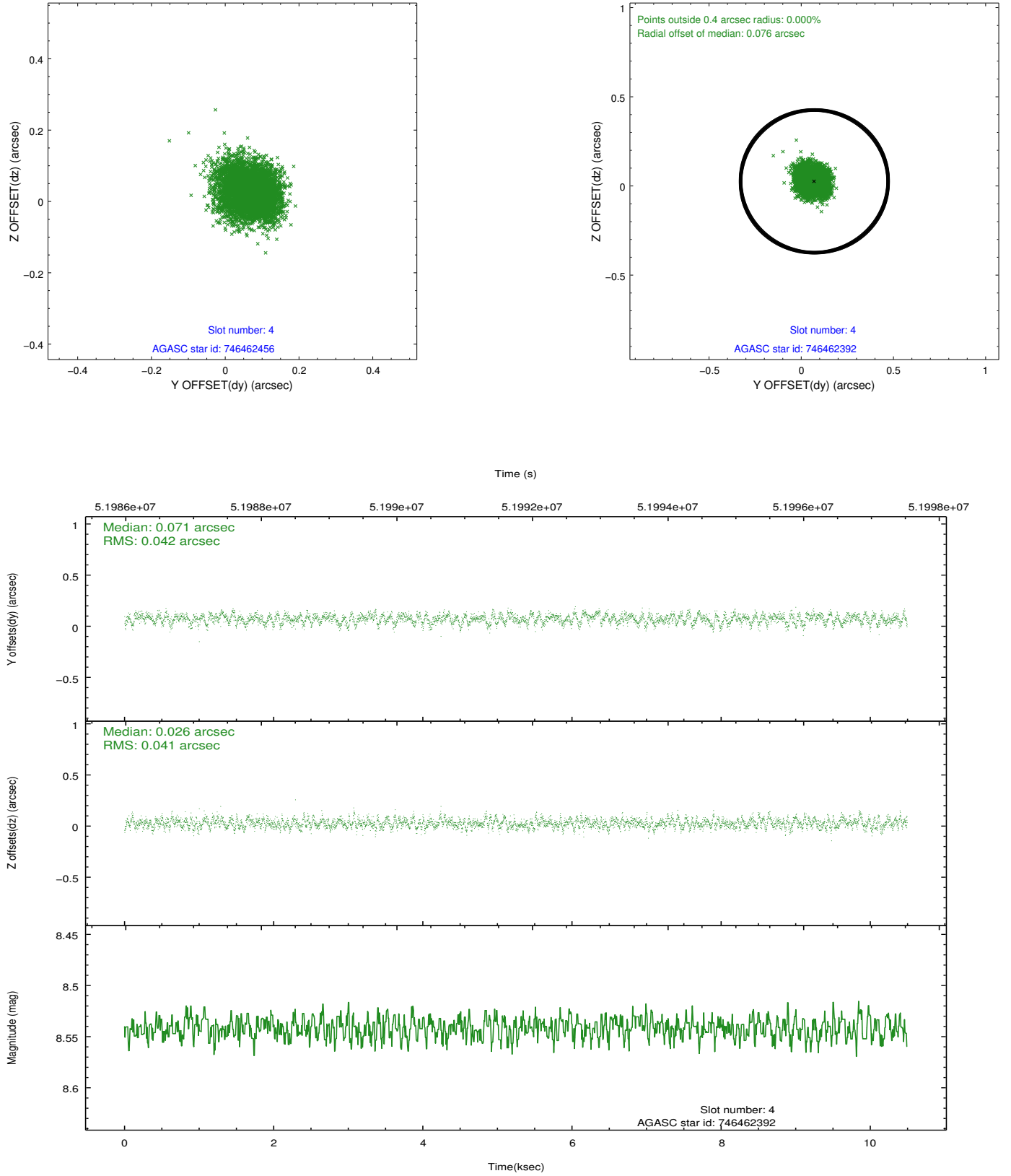
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	5118	-0.037	0.052	0.009	0.015	0.000000	0.000000	-753.91	-829.16
1	FID	ACIS-I-4	7.24	5120	0.147	0.016	0.006	0.011	0.000000	0.000000	2160.38	1076.73
2	FID	ACIS-I-5	7.23	5120	-0.211	0.001	0.009	0.014	0.000000	0.000000	-1807.58	1074.99
3	GUIDE	746462456	8.38	5119	-0.010	-0.021	0.068	0.112	278.652171	-10.530173	-339.68	668.12
4	GUIDE	746462392	8.54	5118	0.071	0.026	0.063	0.102	279.038421	-10.890715	818.93	2154.57
5	GUIDE	746460272	8.92	5118	-0.051	-0.016	0.062	0.099	278.847488	-10.152127	-1761.64	1223.87
6	GUIDE	746461728	9.78	5117	-0.017	0.012	0.085	0.137	278.986921	-10.530755	-453.53	1847.76
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

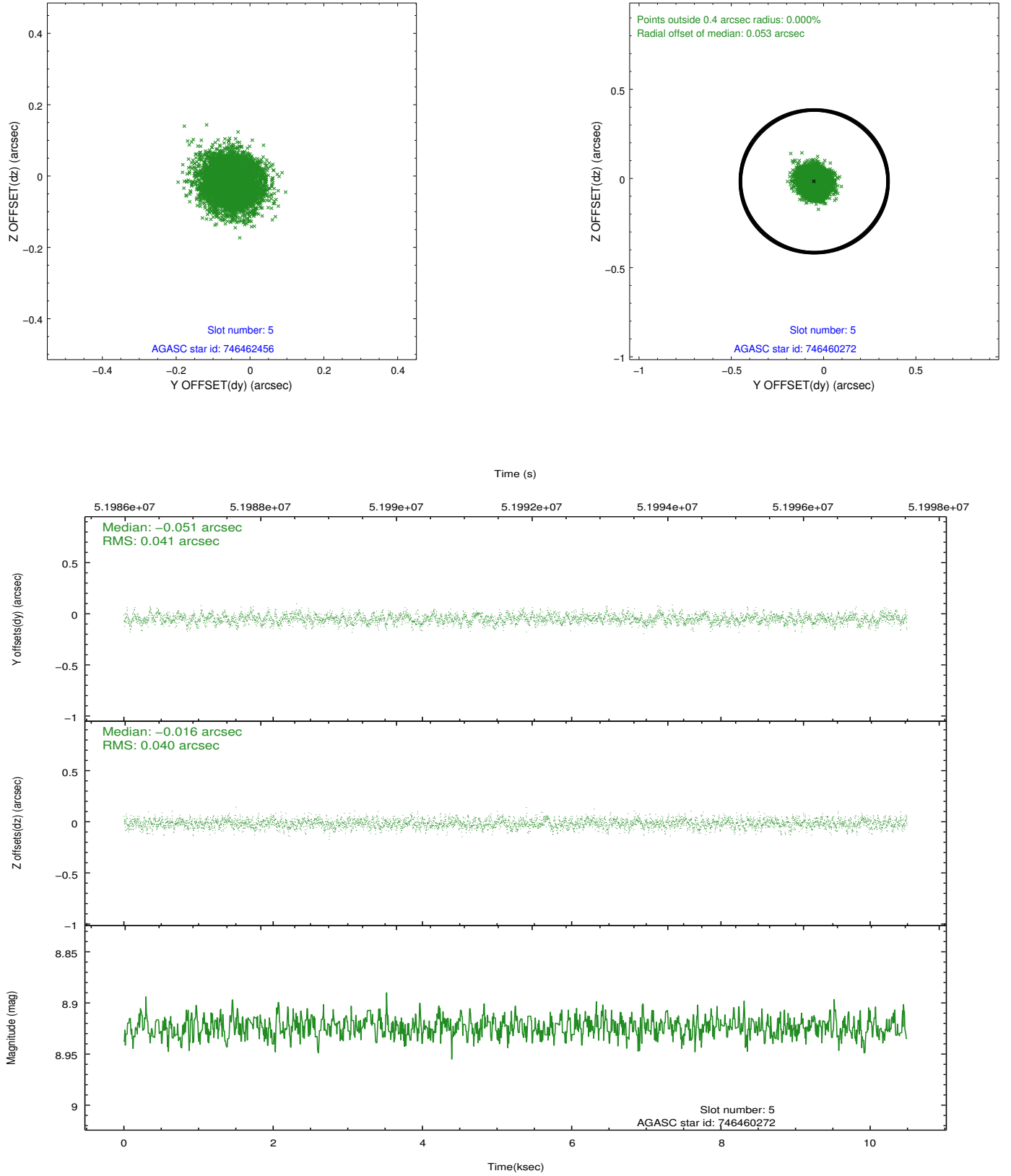
2.4.1 Slot 3



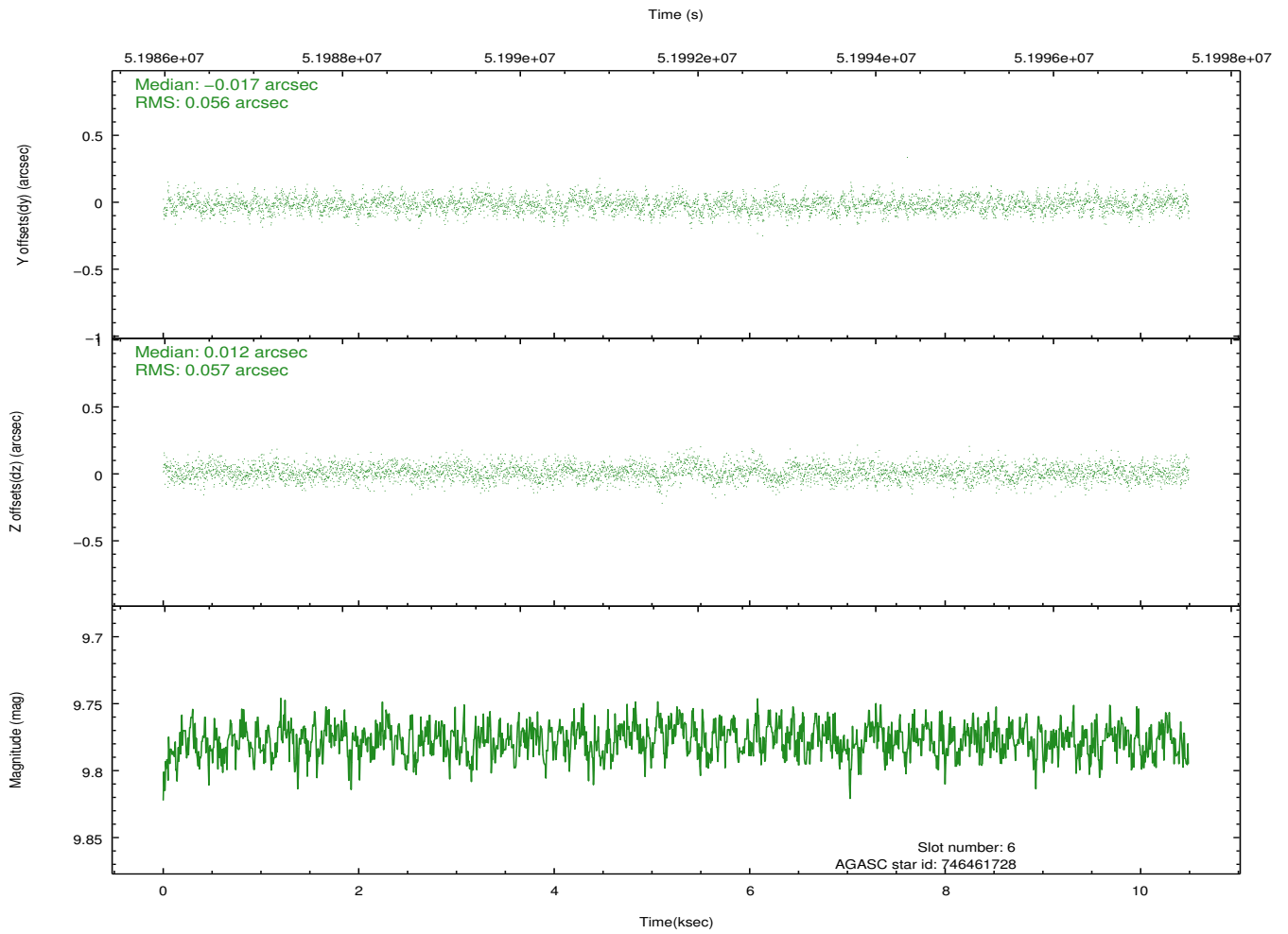
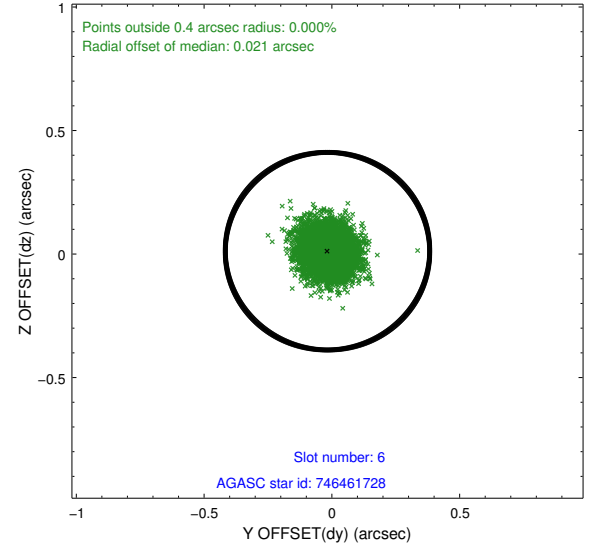
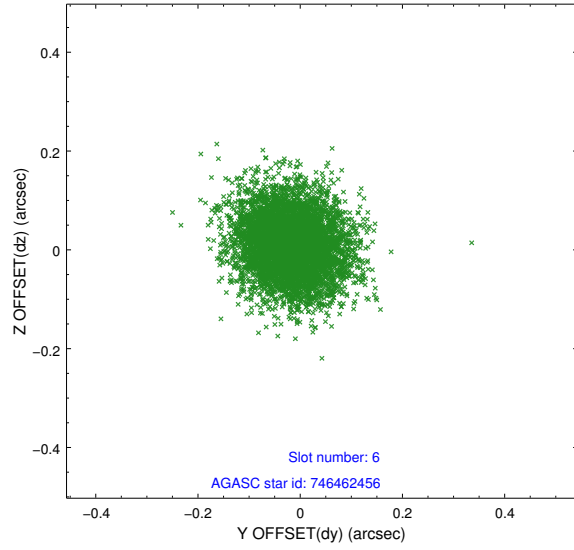
2.4.2 Slot 4



2.4.3 Slot 5

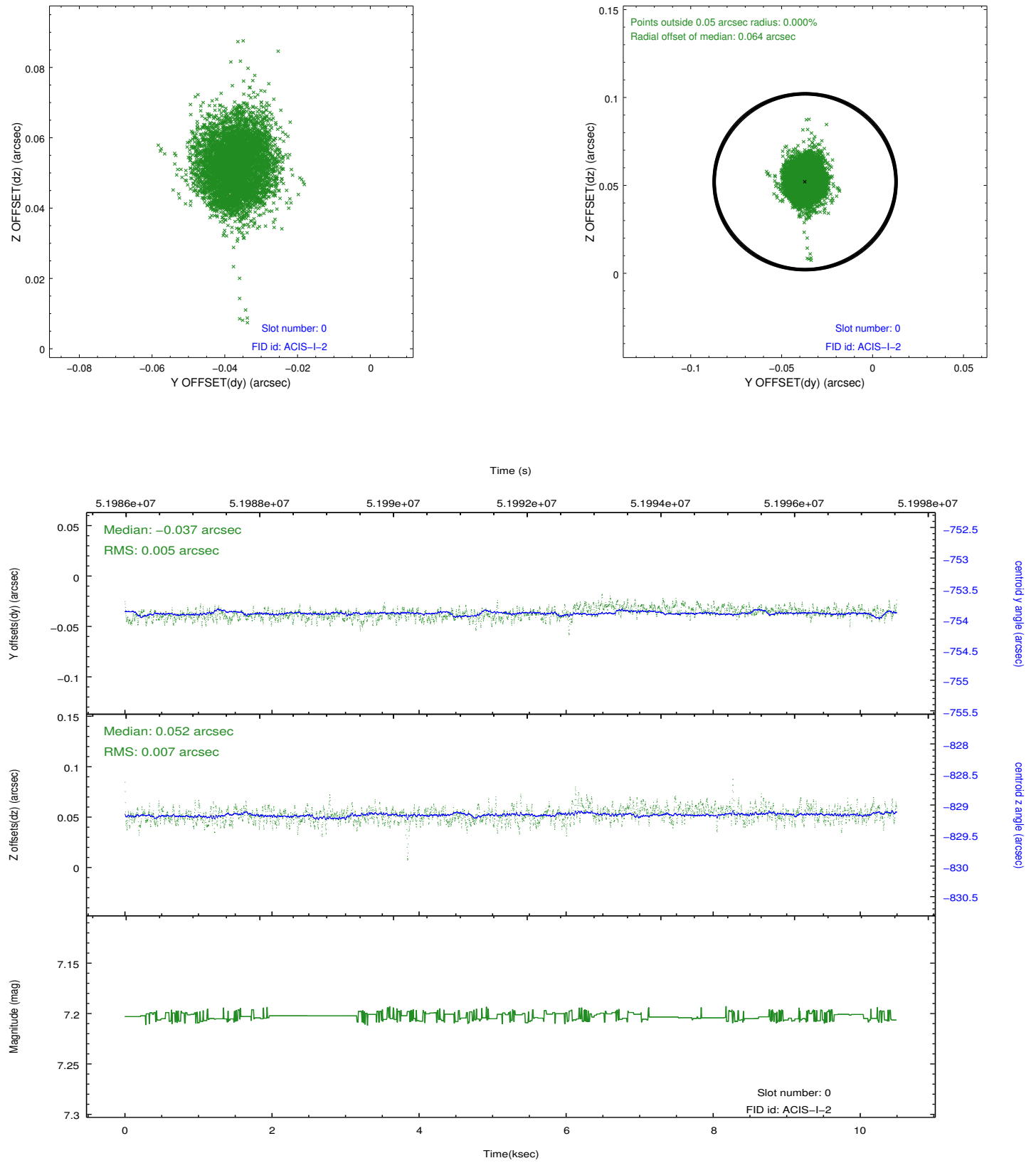


2.4.4 Slot 6

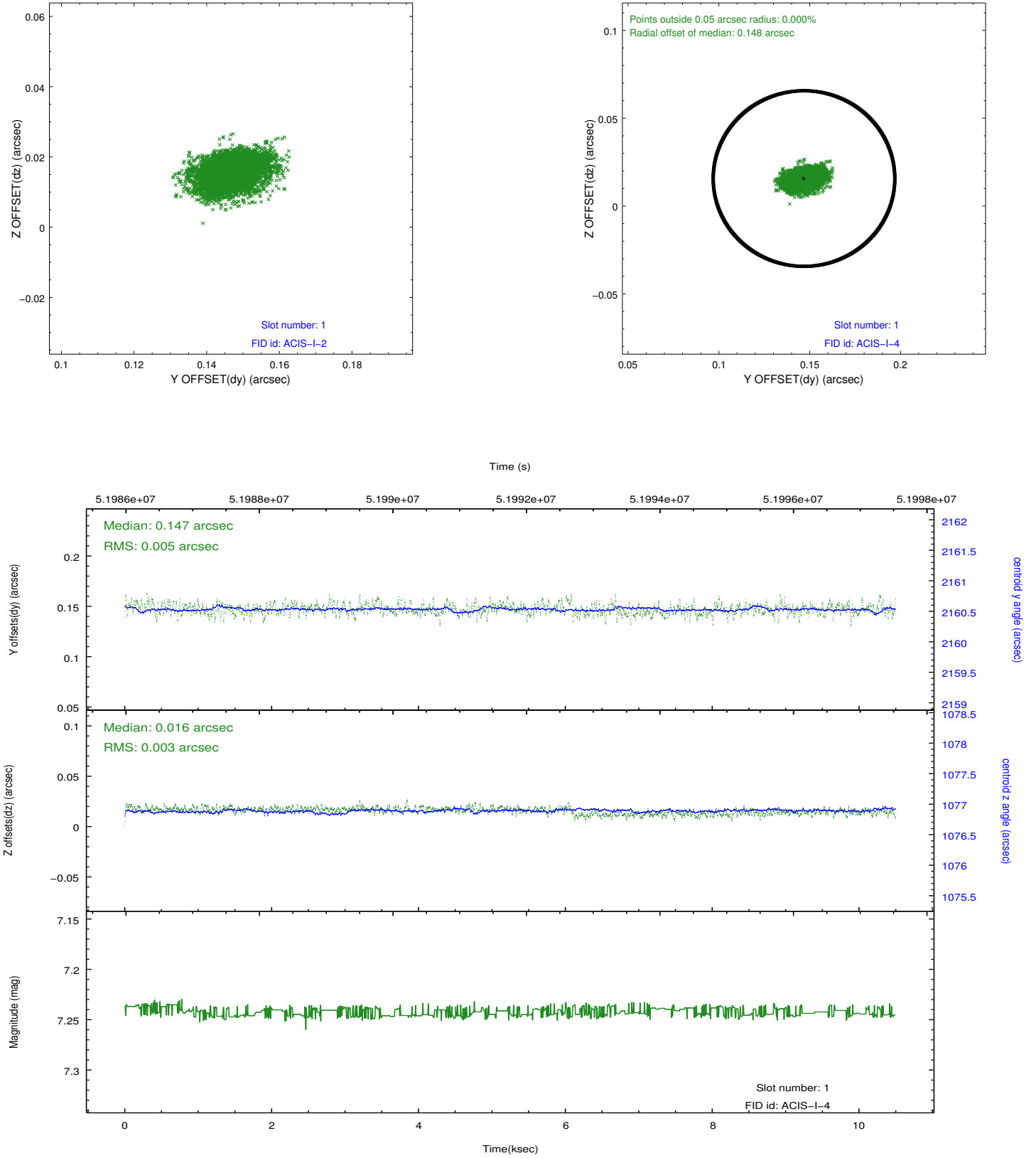


2.5 FID Slots

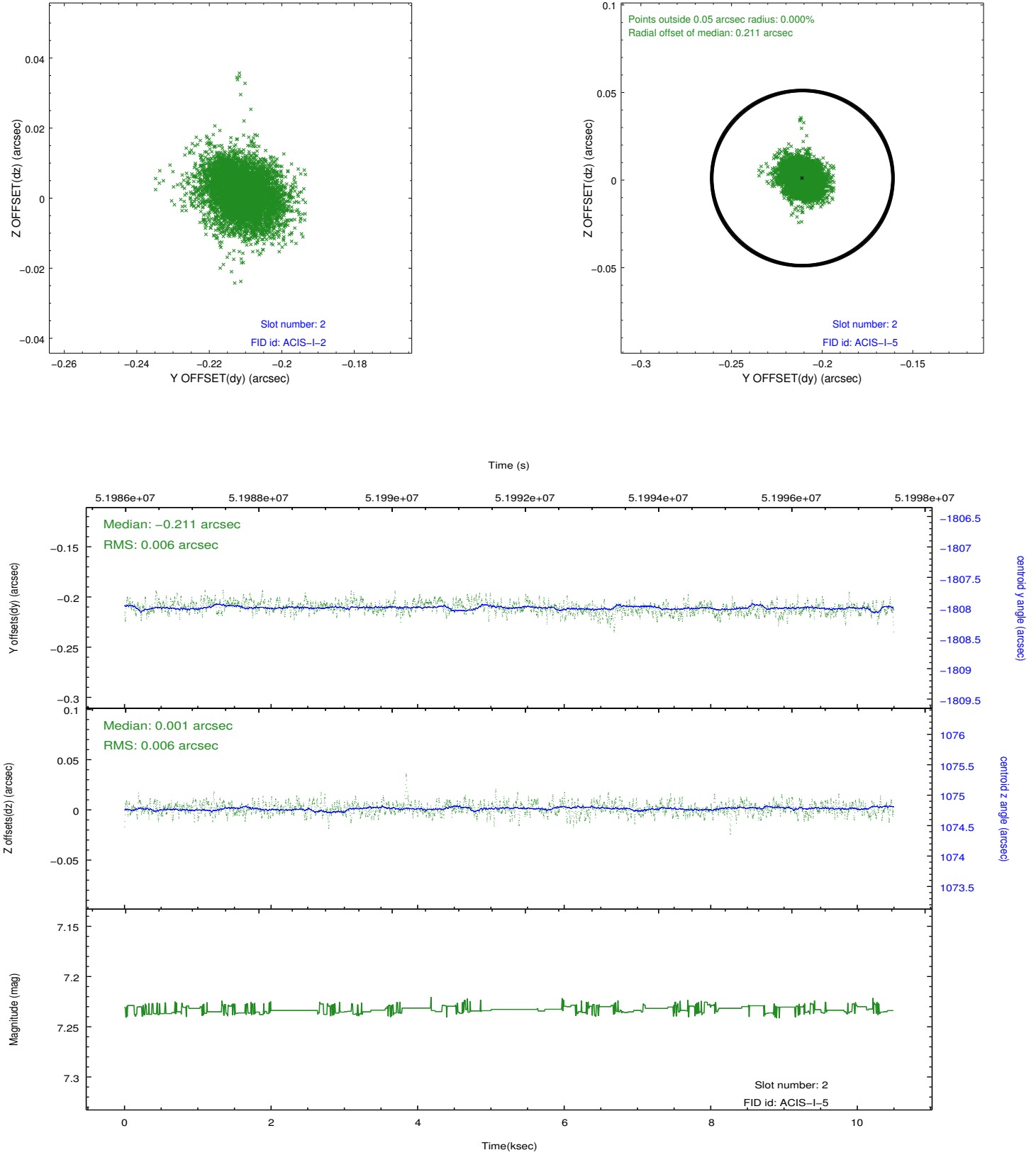
2.5.1 Slot 0



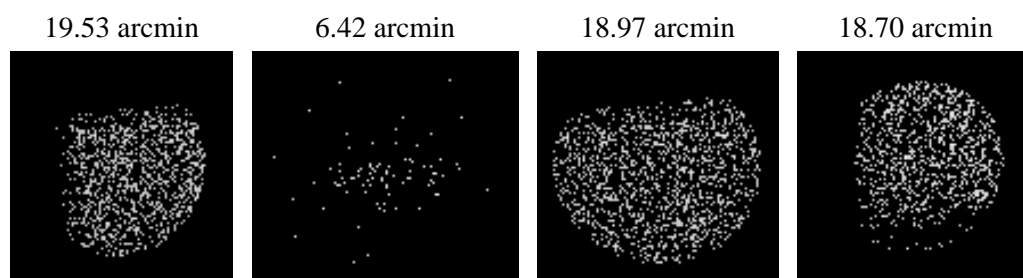
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.763

A.2 Comments

ACIS chip response to continuum source.===

The guide star in slot 7 was not tracked during this observation. The aspect solution is not expected to be degraded by removing one guide star from the solution.

===

The focal plane temperature is approximately -100 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.