

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1442 - L2 Version 4

Chandra X-Ray Center

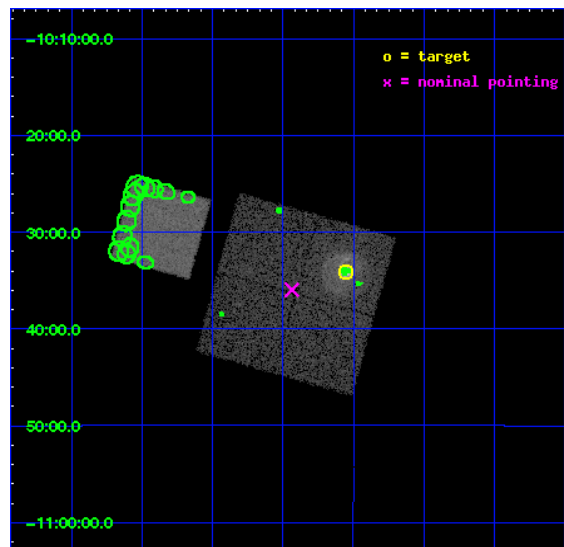
L2 Processing Date : Nov 24 2009

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1 Front

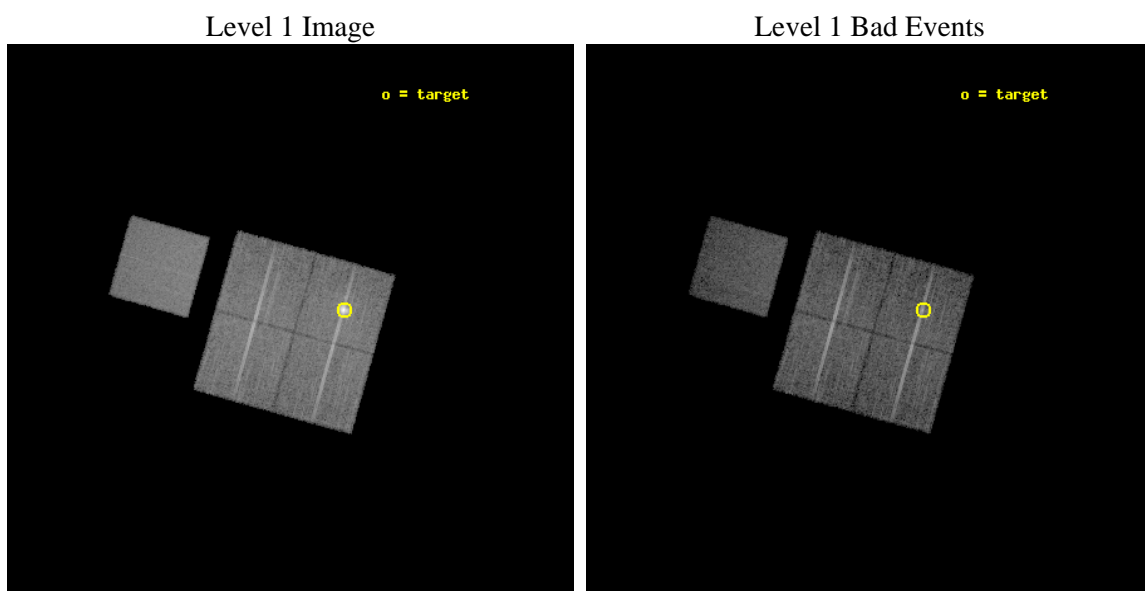
seq_num	580392	Sequence number
obs_id	1442	Observation id
title	ACIS CHIP RESPONSE TO A CONTINUUM SOURCE	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip I1, T=110, Offsets=-3,-5,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA
dec_targ	-10.568528	Observer's specified target Dec
ra_nom	278.48420227216	Nominal RA
dec_nom	-10.599652347701	Nominal Dec
roll_nom	285.7406365236	Nominal Roll
revision	4	Processing version of data
ontime	9772.2943377793	Sum of GTIs [s]
livetime	9648.5516627051	Livetime [s]
ontime0	9772.3353777751	Sum of GTIs [s]
ontime1	9772.2943377793	Sum of GTIs [s]
ontime2	9772.253297776	Sum of GTIs [s]
ontime3	9772.2122577801	Sum of GTIs [s]
ontime7	9772.3764177784	Sum of GTIs [s]
l2events	89833	Number of level 2 events



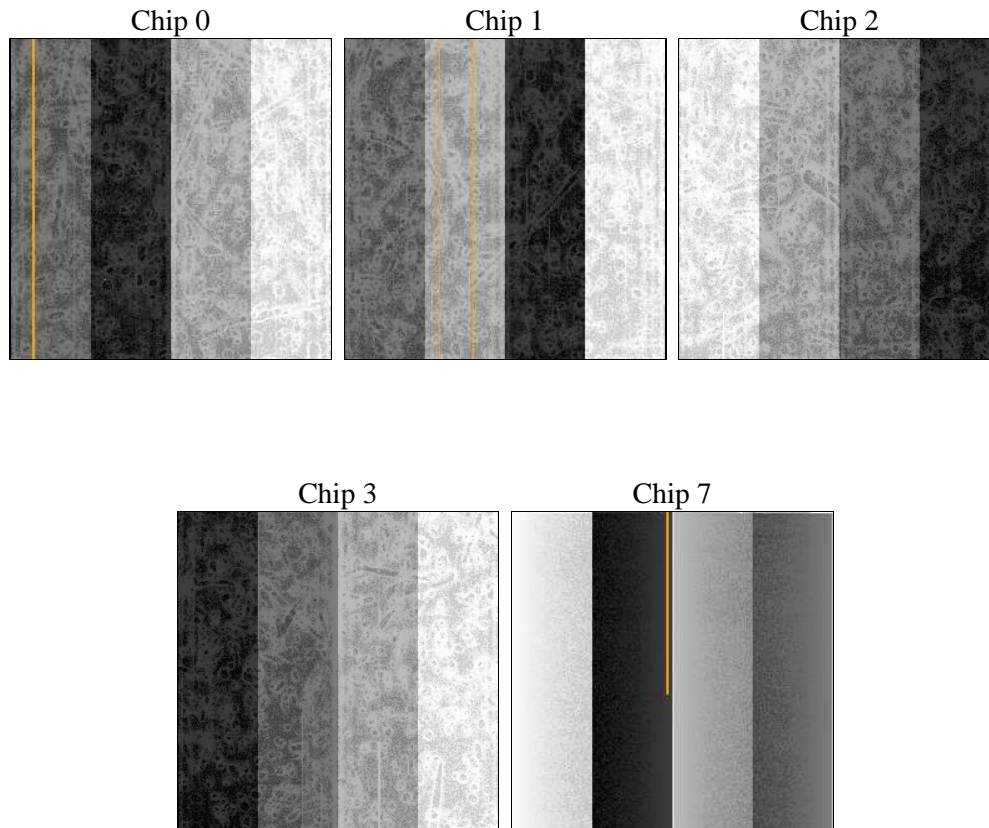
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	9772.2943377793	Sum of GTIs [s]
caldsver	4.1.4	 	ontime0	9772.3353777751	Sum of GTIs [s]
date	2009-11-24T11:12:10	Date and time of file creation	ontime1	9772.2943377793	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9772.253297776	Sum of GTIs [s]
			ontime3	9772.2122577801	Sum of GTIs [s]
			ontime7	9772.3764177784	Sum of GTIs [s]
			l1events	443922	Number of level 1 events

2.1.4 Events

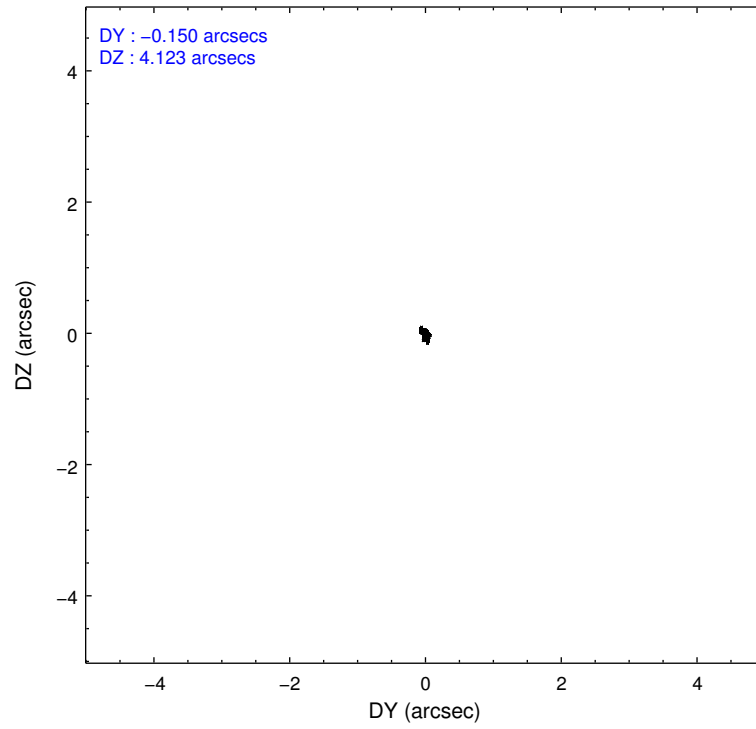
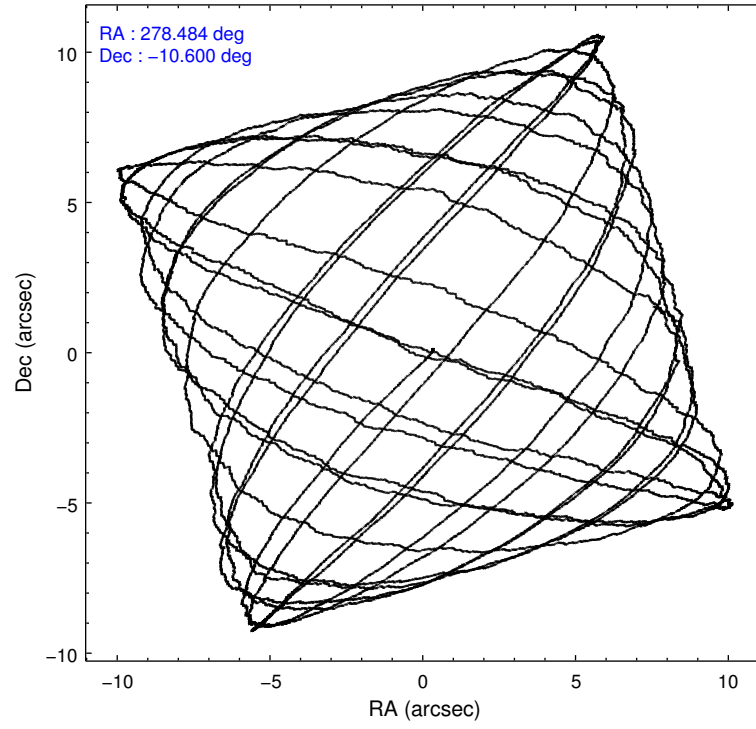
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	78739	107620	85689	82944	88930
rejected events	70040	71067	77858	74680	55344
rejected %	88%	66%	90%	90%	62%

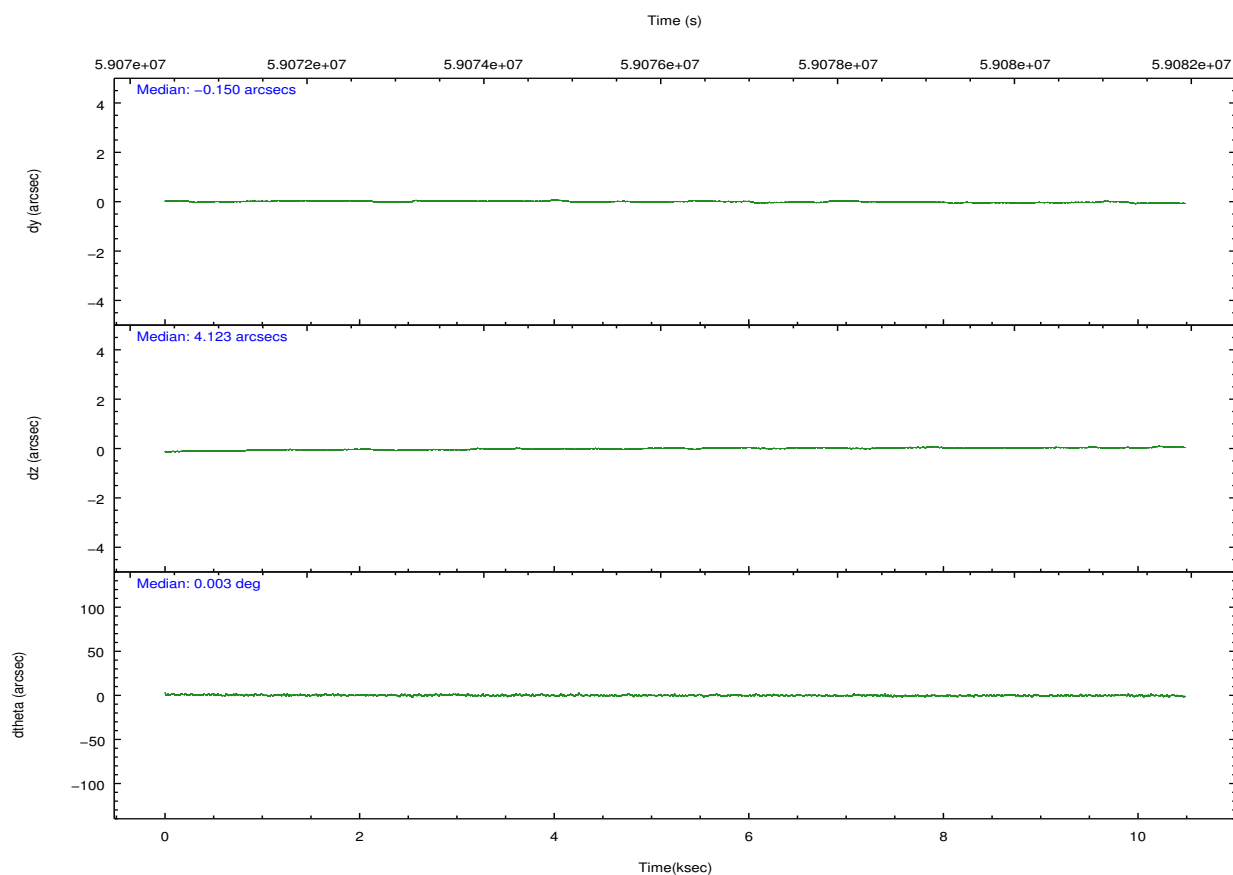
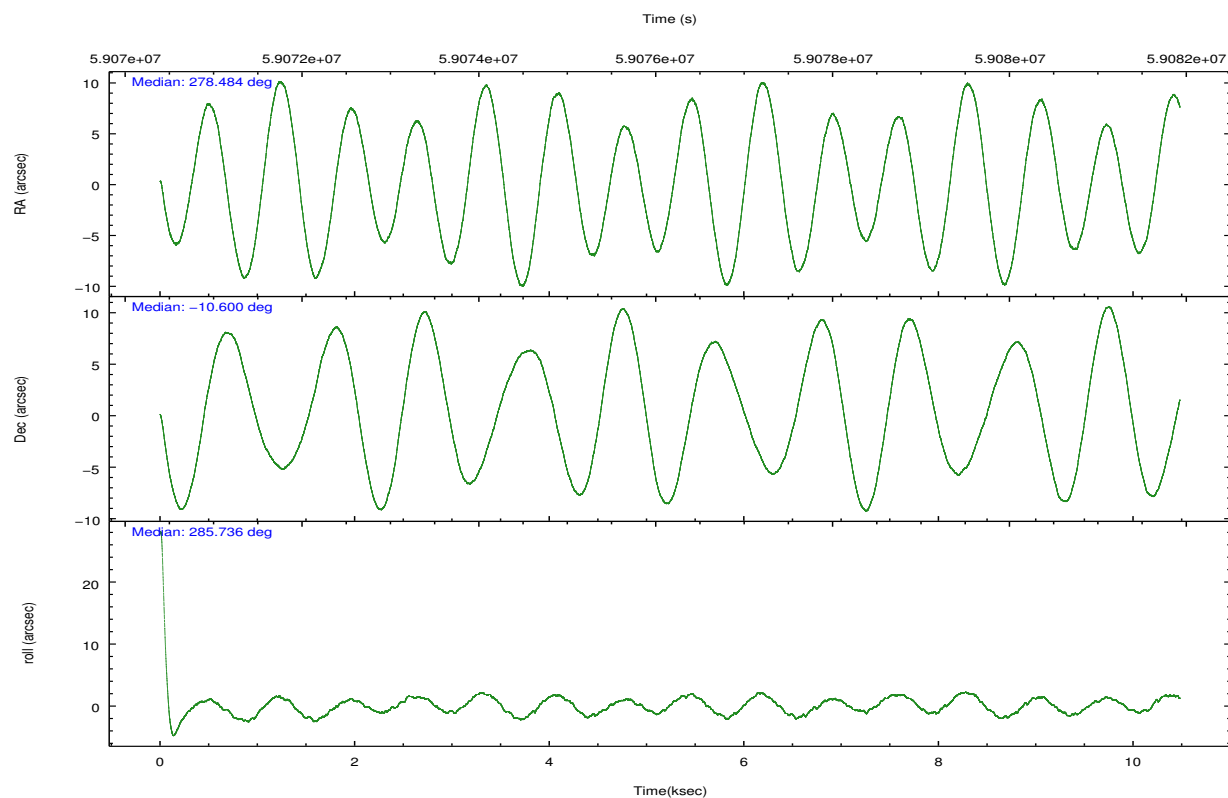
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	2396	15151	1948	1995	2064
	3%	14%	2%	2%	2%
grade 1 events	25	97	6	20	59
	0%	0%	0%	0%	0%
grade 2 events	3238	14607	2963	3204	7136
	4%	13%	3%	3%	8%
grade 3 events	650	1353	520	555	1935
	0%	1%	0%	0%	2%
grade 4 events	600	1351	516	527	1756
	0%	1%	0%	0%	1%
grade 5 events	1677	1890	1387	1628	5242
	2%	1%	1%	1%	5%
grade 6 events	1822	4119	1889	1984	20720
	2%	3%	2%	2%	23%
grade 7 events	68331	69052	76460	73031	50018
	86%	64%	89%	88%	56%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01237	ACIS-01237	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	278.464259	278.4842022721626	Subarray requested	NONE	NONE
Pointing Dec	-10.579972	-10.59965234770143	Alternating exposures requested	N	N
Pointing Roll	285.528283	285.7406365236046	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	59071402.184000	59070736.528103			
Observation start date	1999-11-15T16:42:18	1999-11-15T16:32:16			
Observation end time	59081402.184000	59081536.440993			
Observation end date	1999-11-15T19:28:58	1999-11-15T19:32:16			
Read mode	TIMED	TIMED			

2.3 Aspect



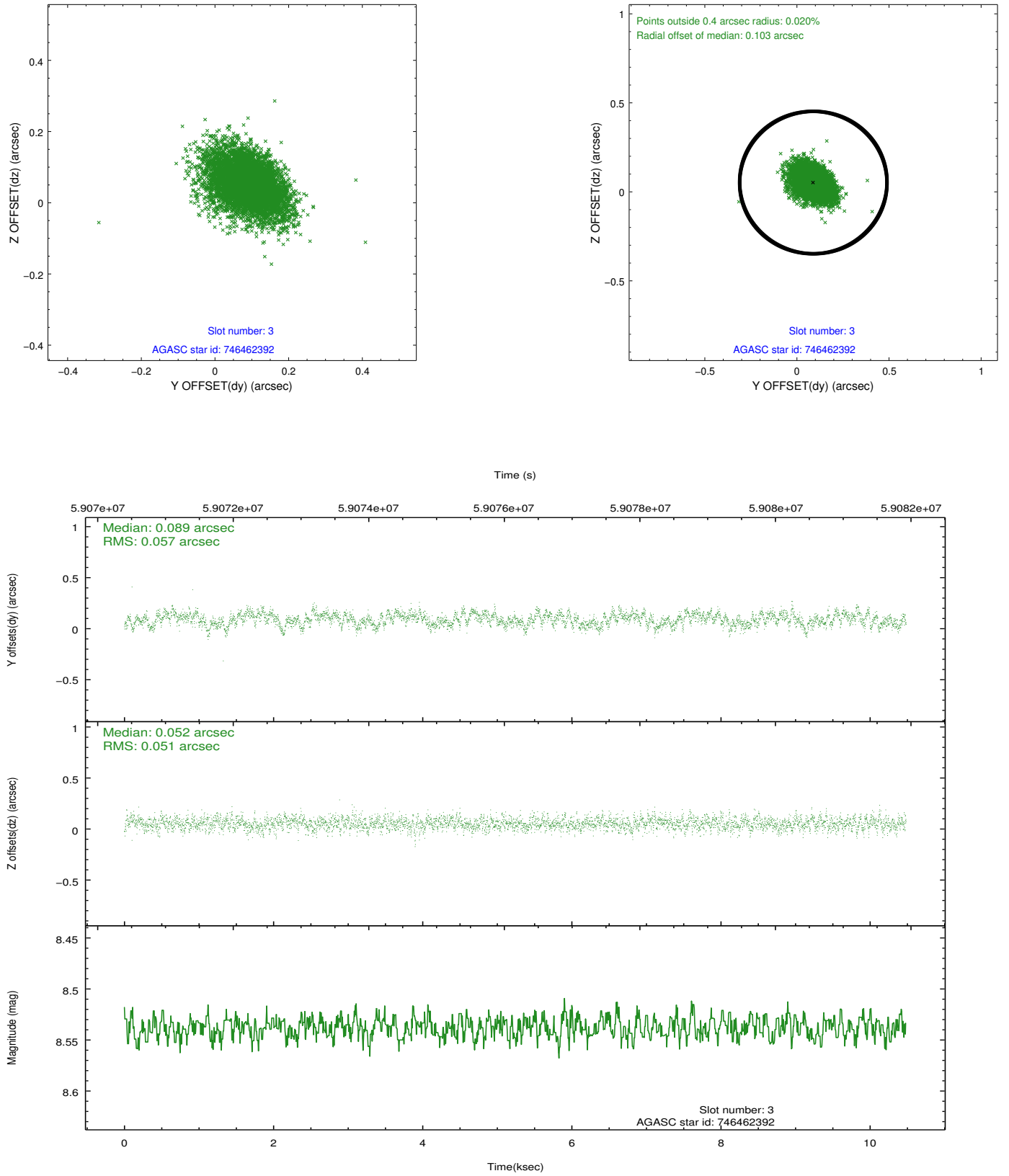


Slot Statistics

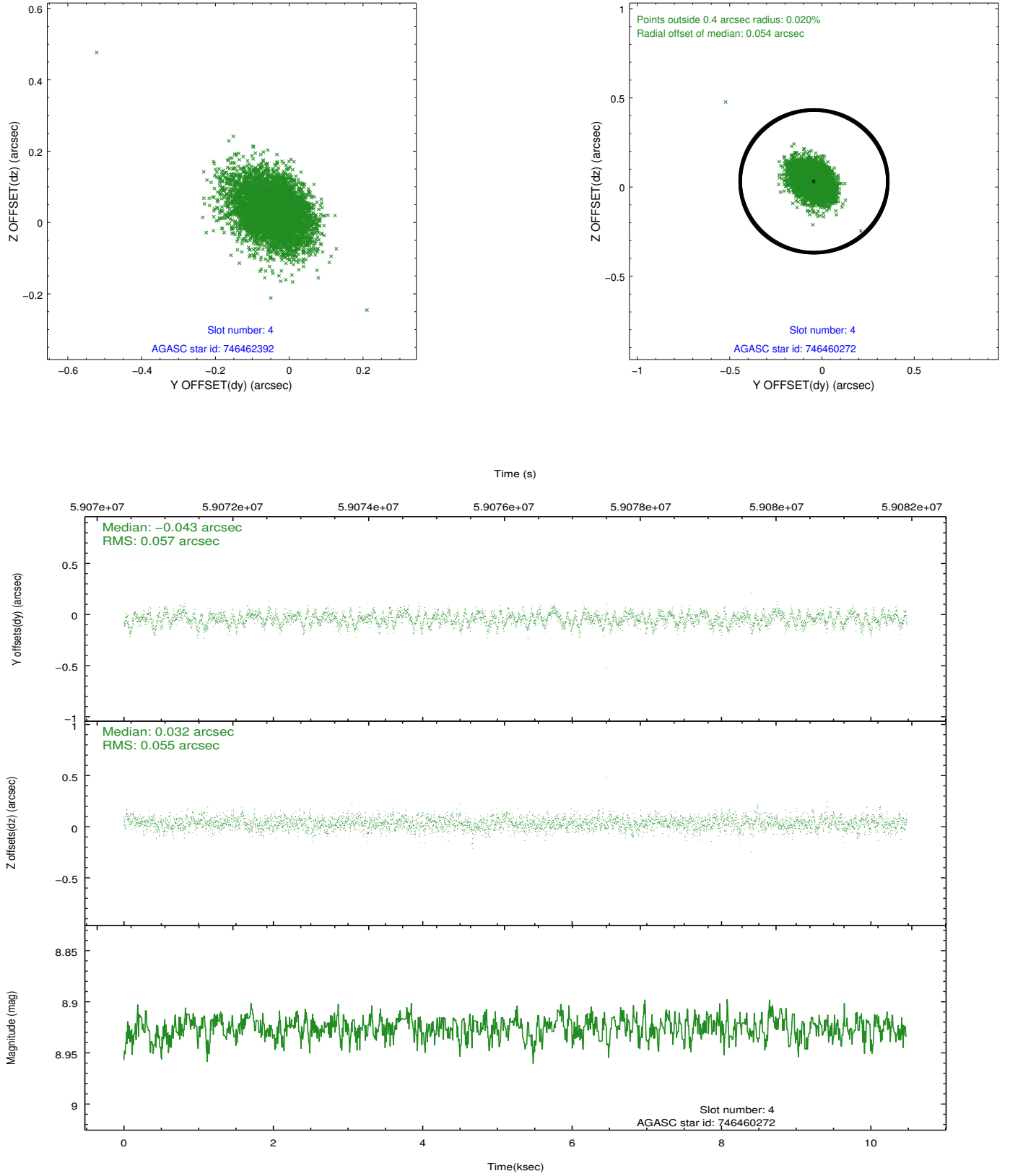
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.19	5113	-0.024	0.086	0.009	0.015	0.000000	0.000000	-754.25	-833.63
1	FID	ACIS-I-4	7.24	5114	0.096	0.000	0.006	0.011	0.000000	0.000000	2160.03	1072.09
2	FID	ACIS-I-5	7.23	5112	-0.172	-0.018	0.009	0.015	0.000000	0.000000	-1807.82	1070.49
3	GUIDE	746462392	8.54	5111	0.089	0.052	0.081	0.136	279.038421	-10.890715	1623.17	1656.54
4	GUIDE	746460272	8.93	5110	-0.043	0.032	0.083	0.137	278.847488	-10.152127	-1119.40	1721.51
5	GUIDE	746460328	9.81	5111	-0.121	0.024	0.133	0.217	278.603974	-9.898096	-2232.70	1135.44
6	GUIDE	746995400	9.57	5112	0.122	-0.188	0.110	0.177	278.078957	-11.289885	2099.13	-1994.27
7	GUIDE	746461728	9.77	5108	-0.049	0.072	0.127	0.212	278.986921	-10.530755	326.40	1829.75

2.4 Star Slots

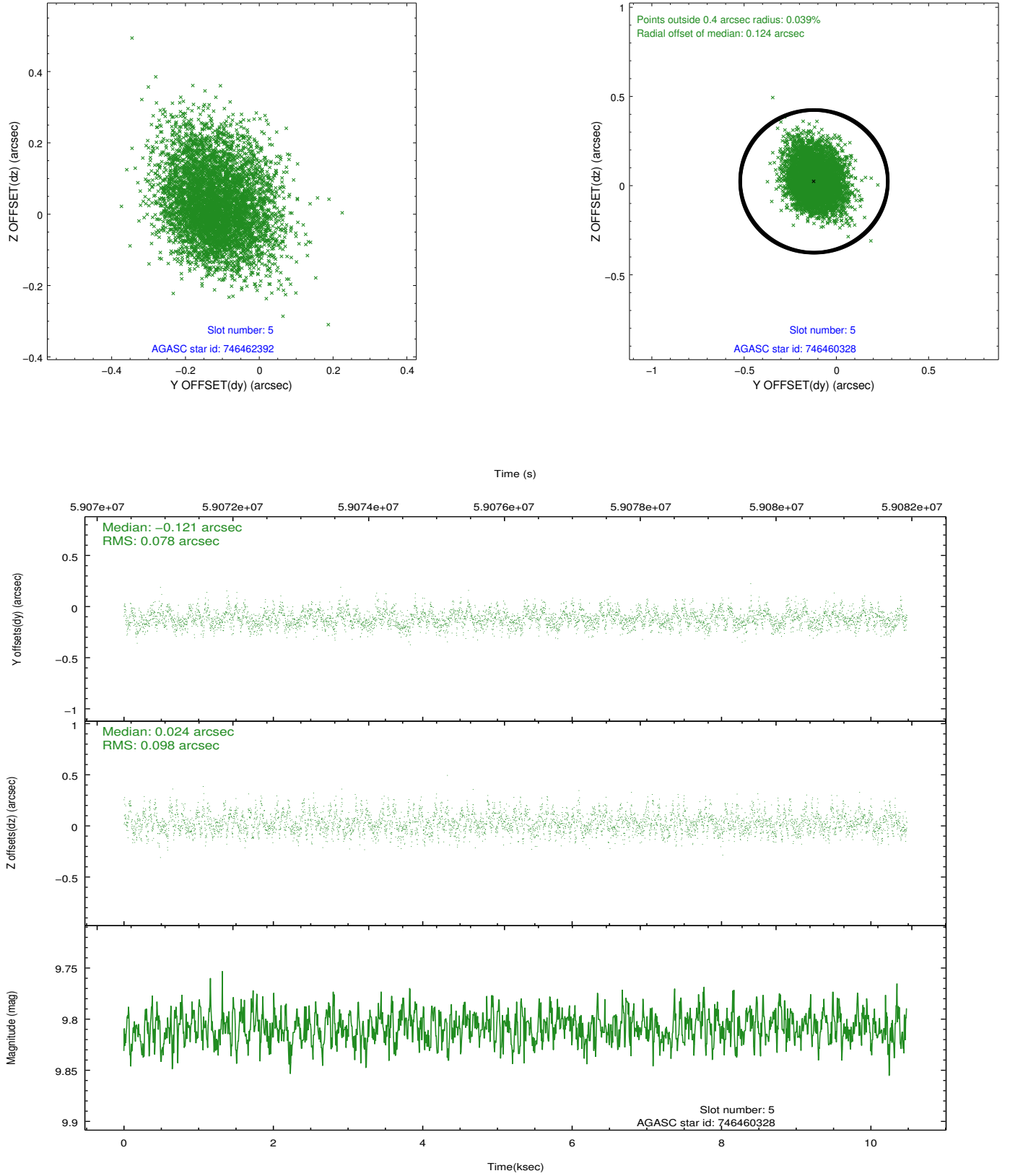
2.4.1 Slot 3



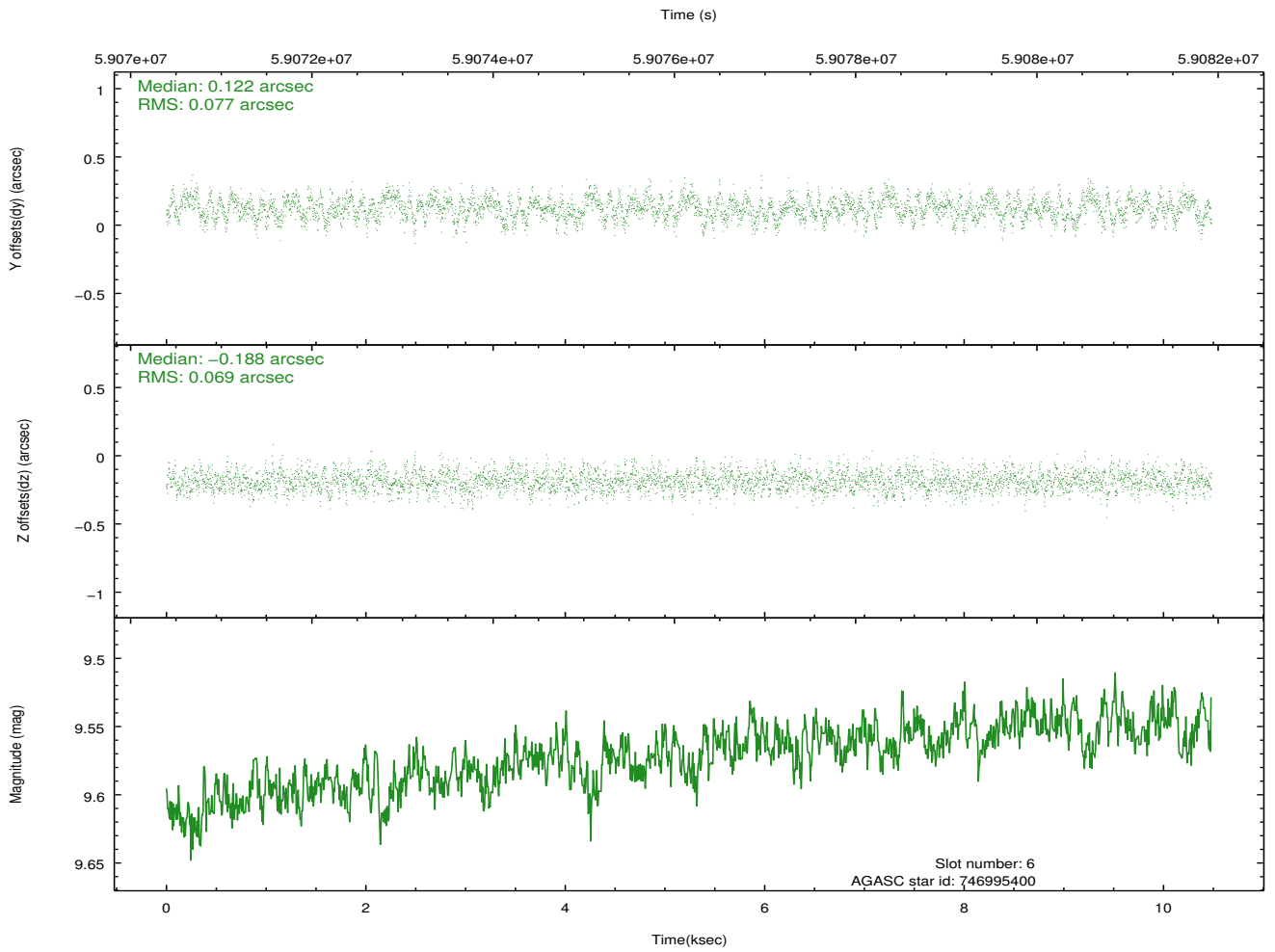
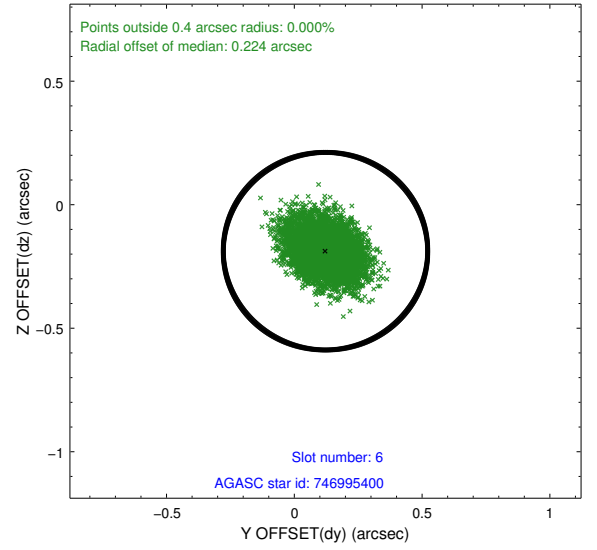
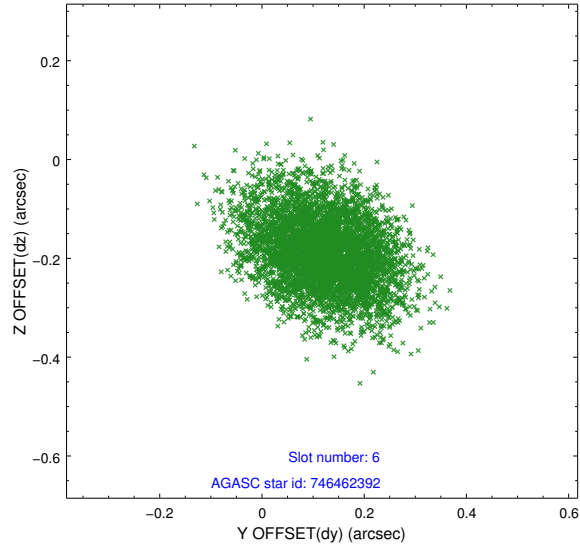
2.4.2 Slot 4



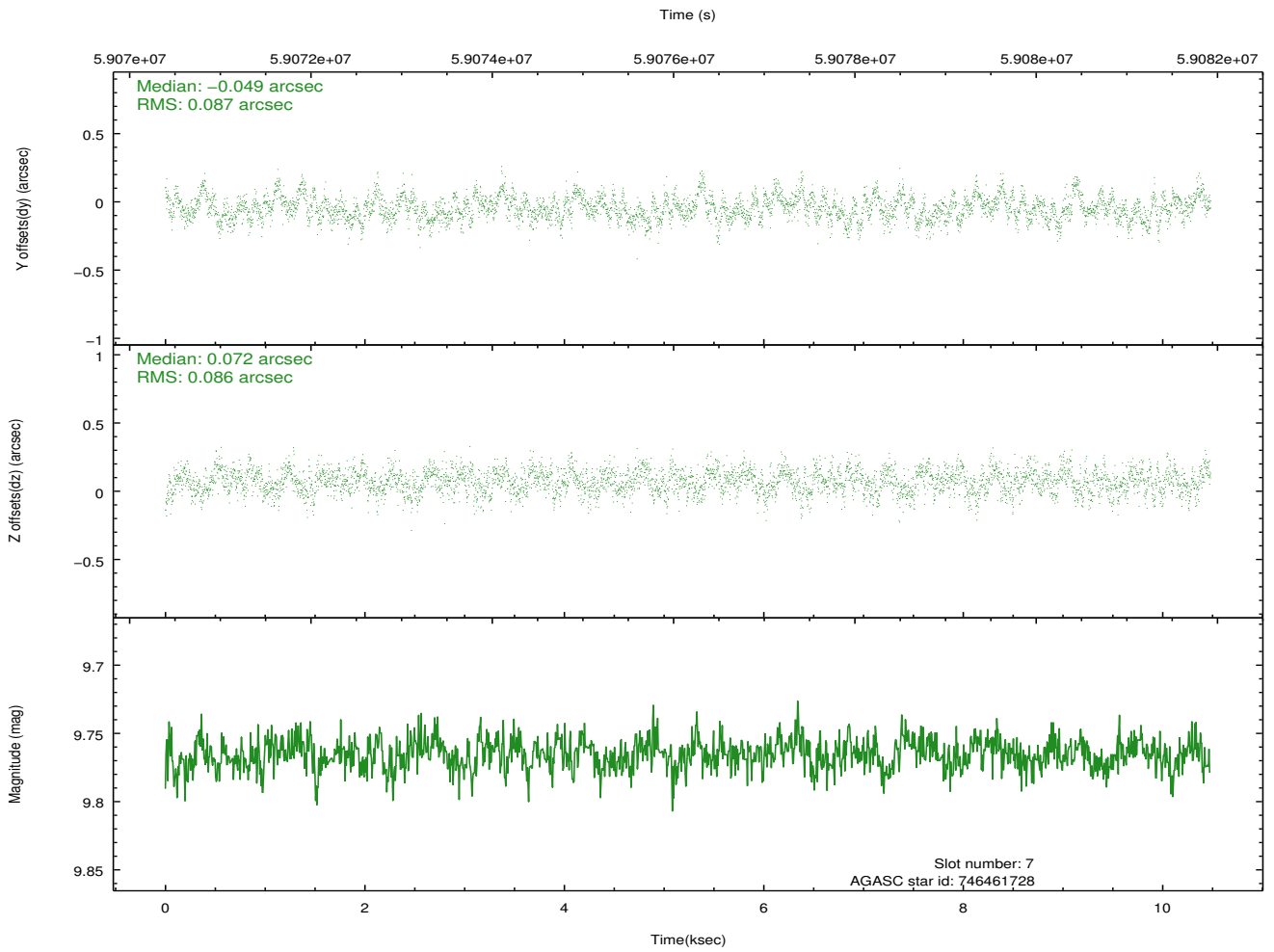
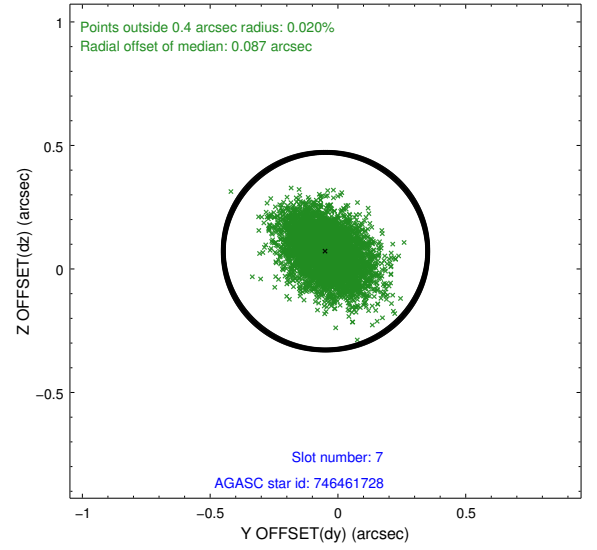
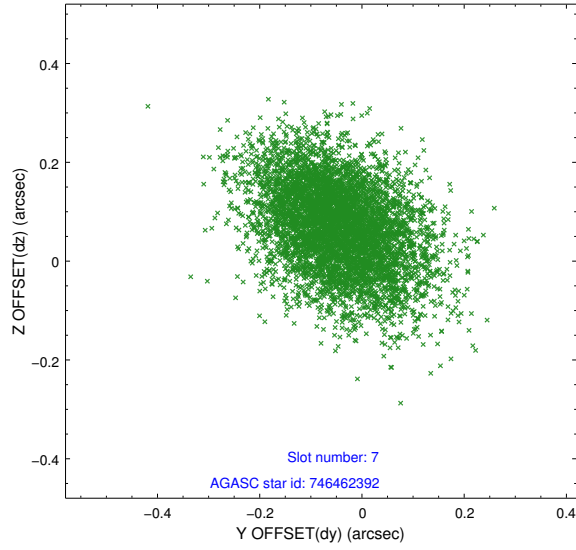
2.4.3 Slot 5



2.4.4 Slot 6

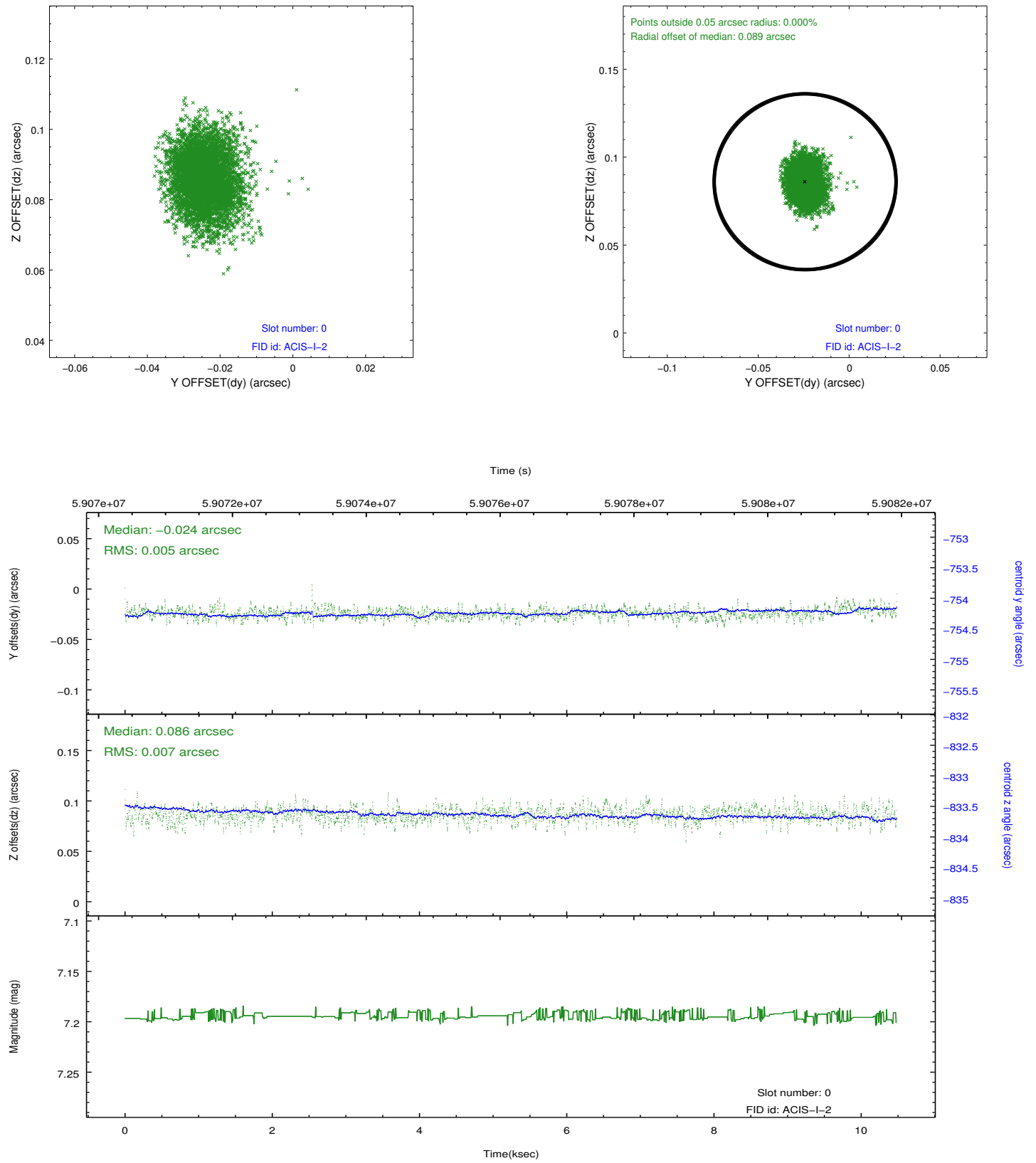


2.4.5 Slot 7

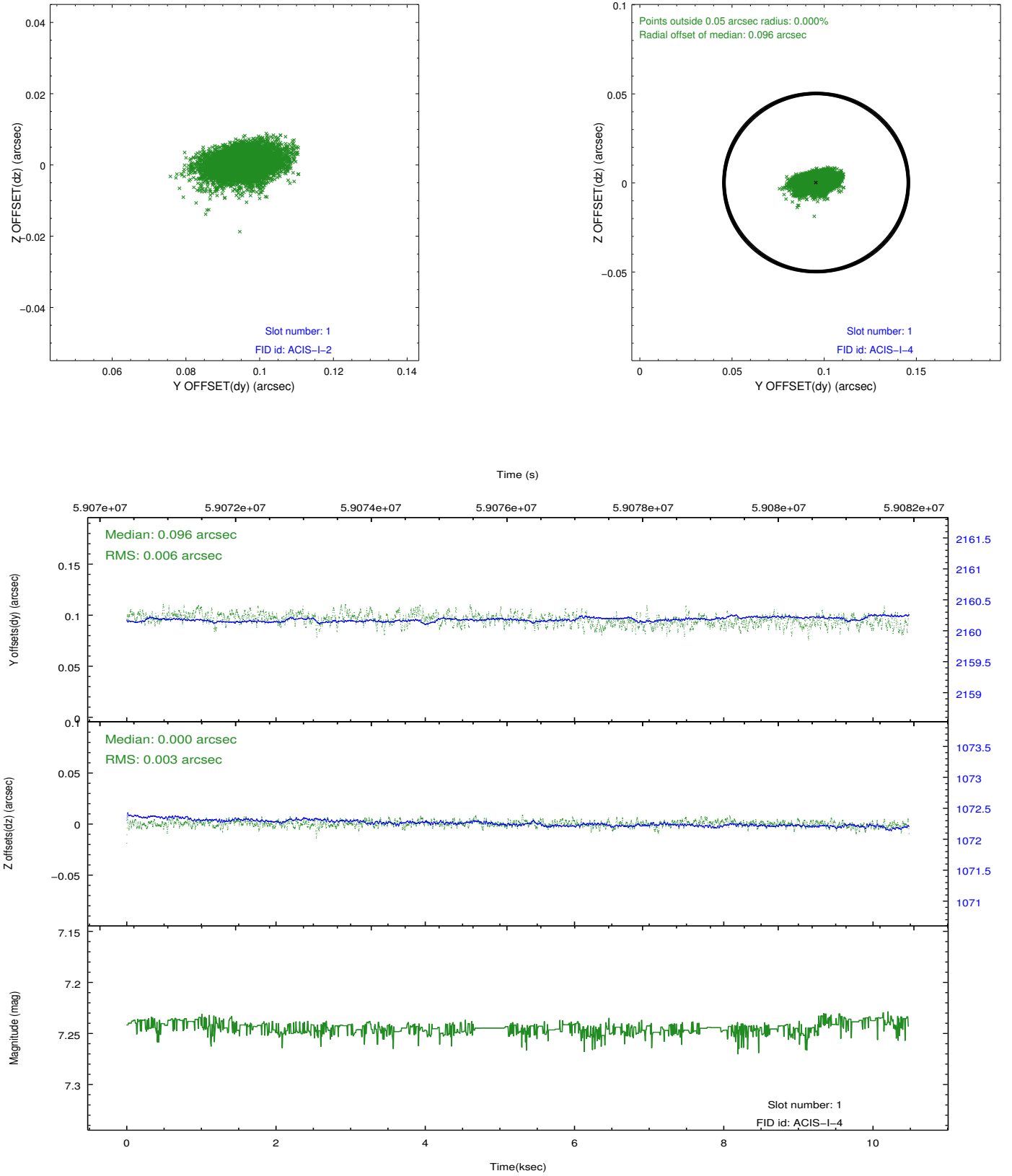


2.5 FID Slots

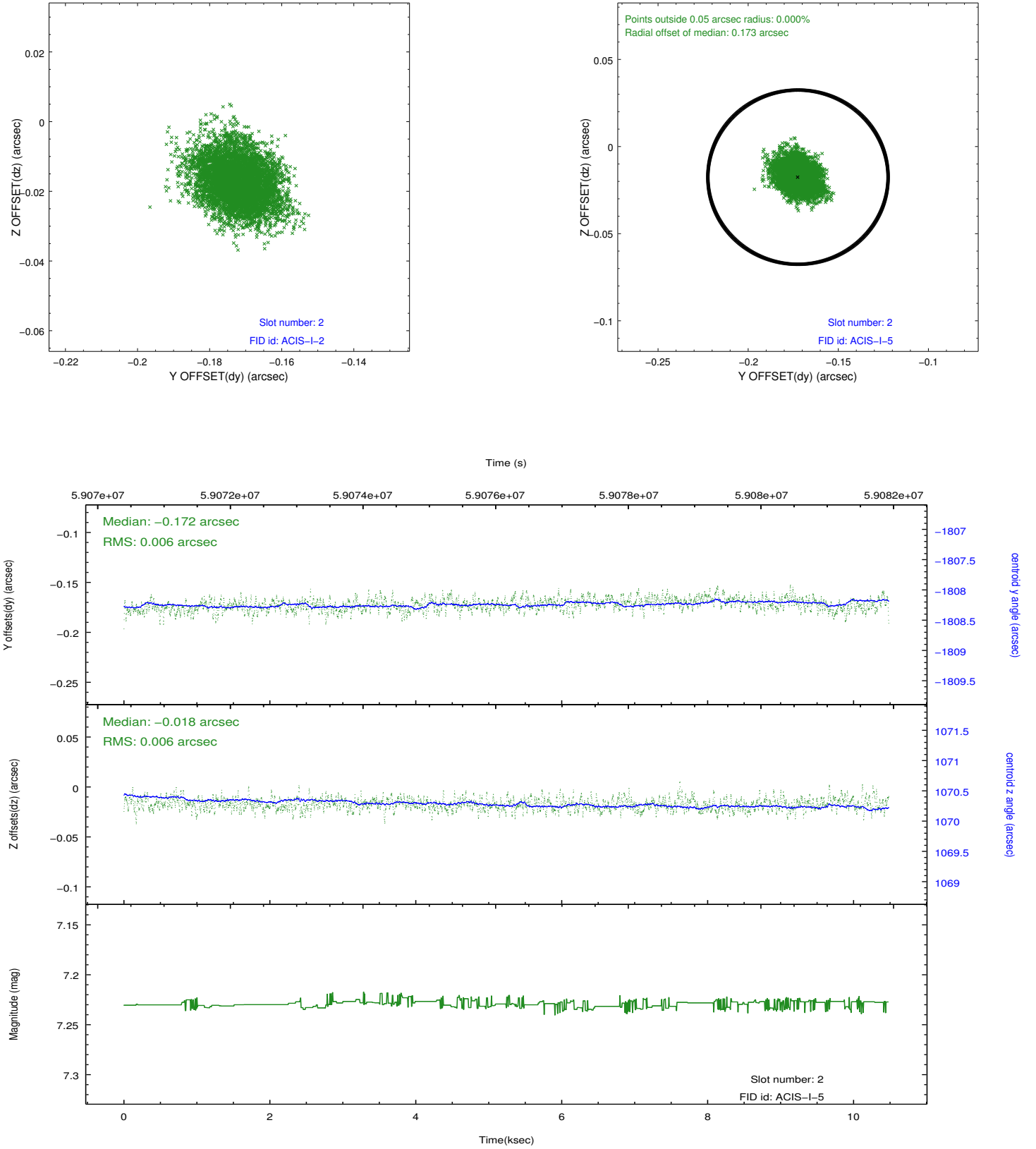
2.5.1 Slot 0



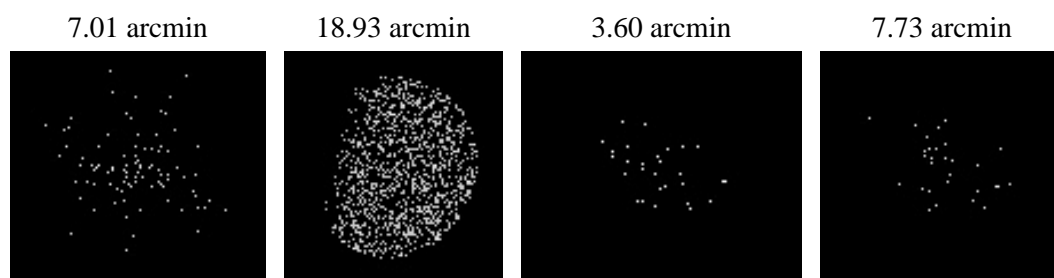
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.772

A.2 Comments

Off-axis effective area measurement on I1.

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The focal plane temperature is approximately -110 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.