

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 166 - L2 Version 4

Chandra X-Ray Center

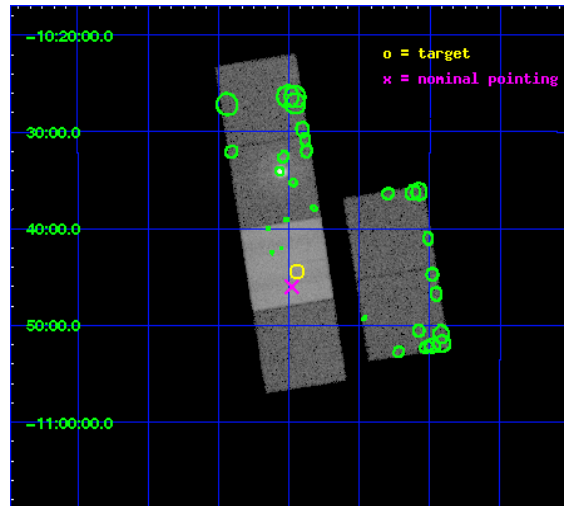
L2 Processing Date : Dec 14 2009

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1 Front

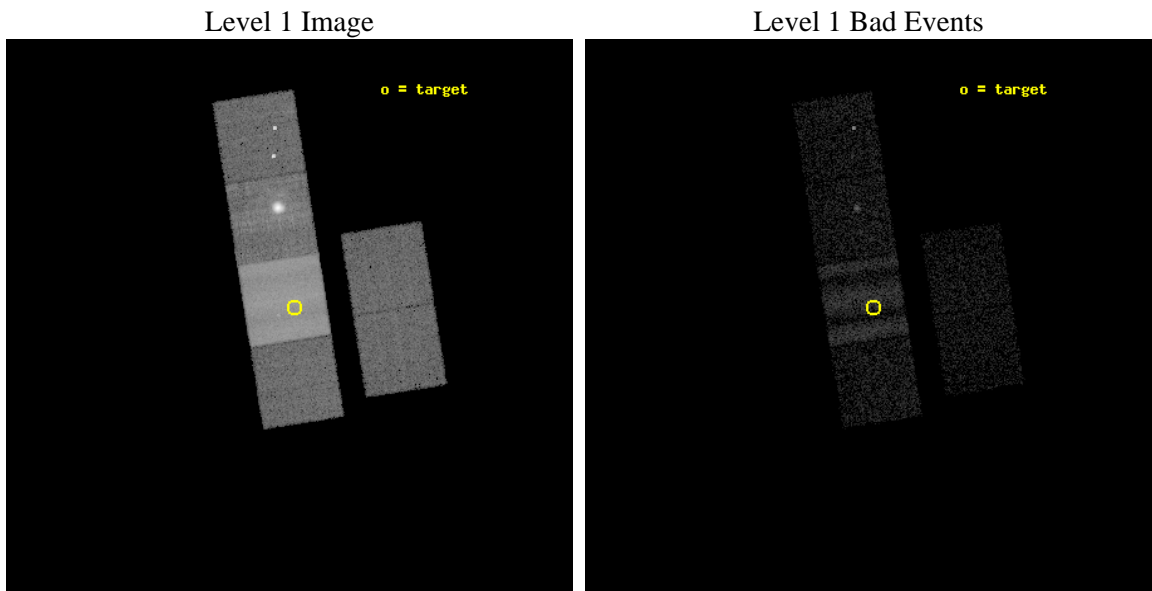
seq_num	590034	Sequence number
obs_id	166	Observation id
title	ACIS CHIP RESPONSE TO A CONTINUUM SOURCE	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip S4, T=100, Offsets=-10,0,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.36016	Observer's specified target RA
dec_targ	-10.741123	Observer's specified target Dec
ra_nom	278.36974326832	Nominal RA
dec_nom	-10.767181280777	Nominal Dec
roll_nom	261.03641563186	Nominal Roll
revision	4	Processing version of data
ontime	10033.882263519	Sum of GTIs [s]
livetime	9906.8272046196	Livetime [s]
ontime2	10033.841223516	Sum of GTIs [s]
ontime3	10033.80018352	Sum of GTIs [s]
ontime6	10033.677063517	Sum of GTIs [s]
ontime7	10033.882263519	Sum of GTIs [s]
ontime8	10033.759143516	Sum of GTIs [s]
ontime9	10033.718103521	Sum of GTIs [s]
l2events	231599	Number of level 2 events



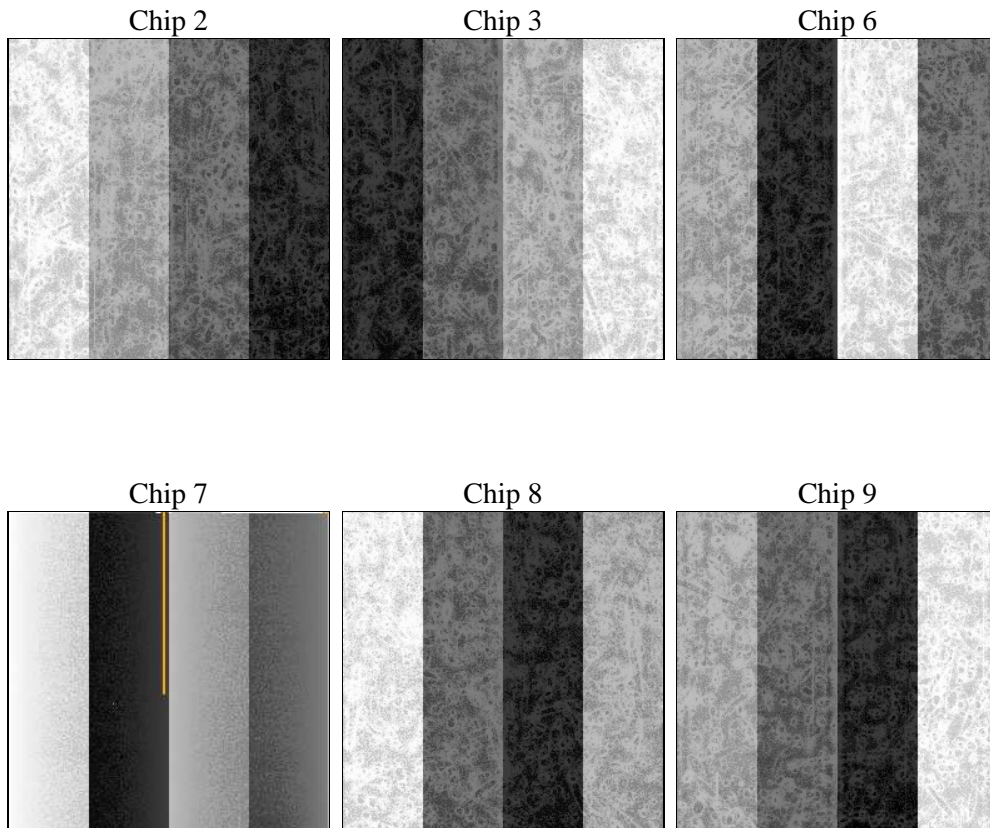
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	10033.882263519	Sum of GTIs [s]
caldbver	4.1.4	 	ontime2	10033.841223516	Sum of GTIs [s]
date	2009-12-14T06:31:34	Date and time of file creation	ontime3	10033.80018352	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	10033.677063517	Sum of GTIs [s]
			ontime7	10033.882263519	Sum of GTIs [s]
			ontime8	10033.759143516	Sum of GTIs [s]
			ontime9	10033.718103521	Sum of GTIs [s]
			l1events	305193	Number of level 1 events

2.1.4 Events

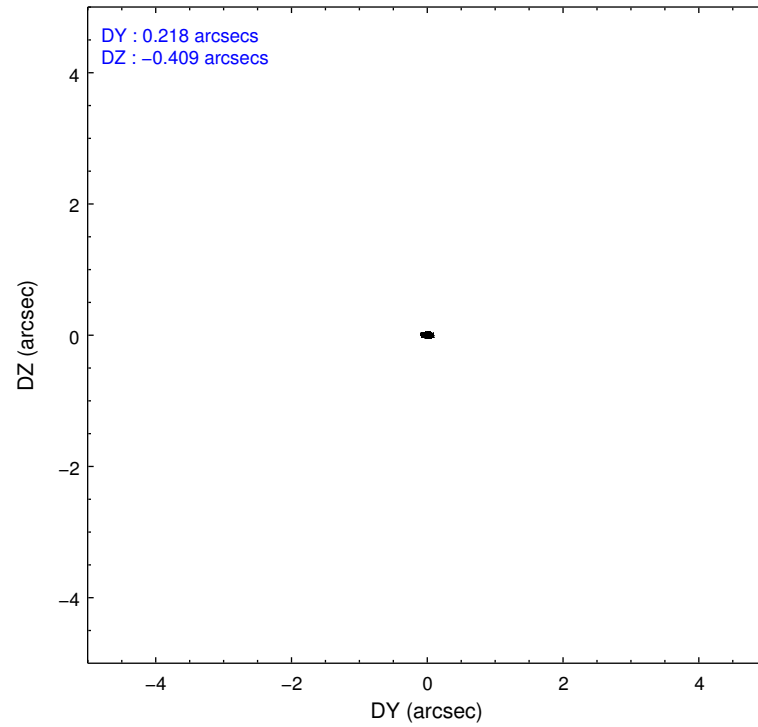
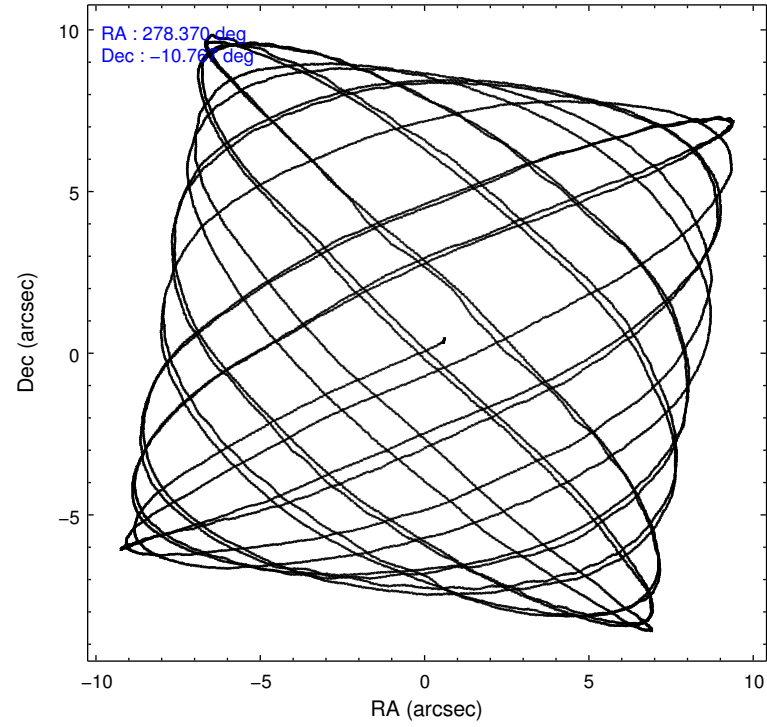
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	26204	26222	30350	123206	64532	34679
rejected events	6634	6971	8188	13748	8586	8273
rejected %	25%	26%	26%	11%	13%	23%

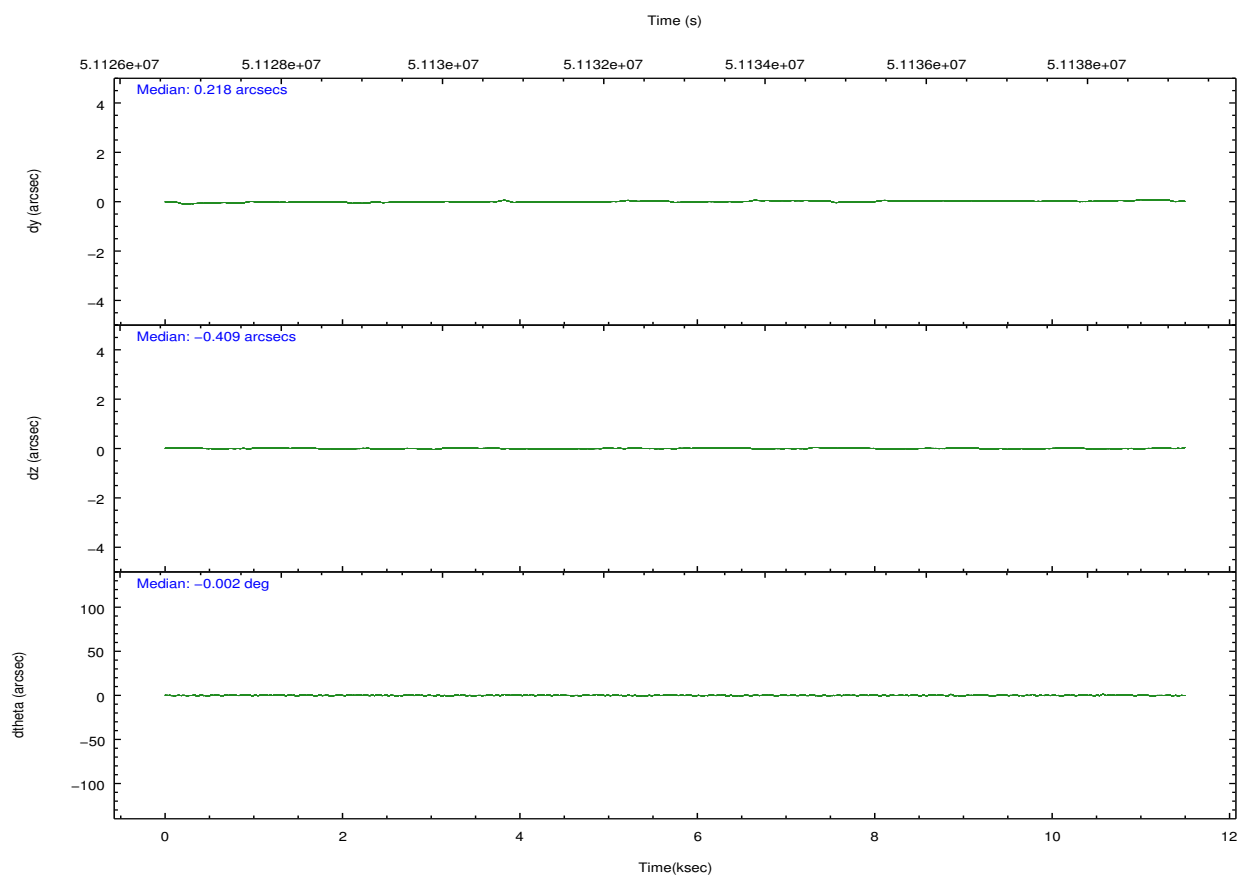
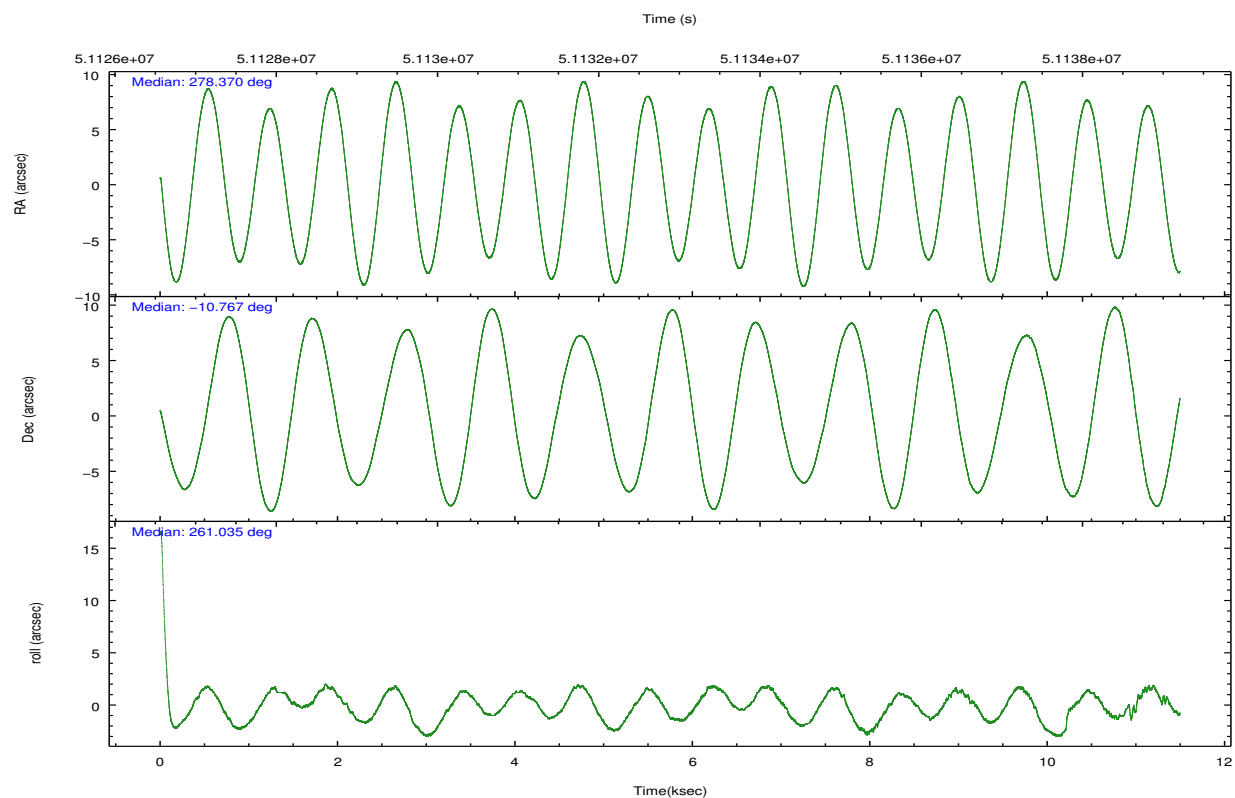
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	5893	5747	7046	7059	27288	10562
	22%	21%	23%	5%	42%	30%
grade 1 events	55	60	51	74	238	229
	0%	0%	0%	0%	0%	0%
grade 2 events	3964	3844	4122	13594	10576	4259
	15%	14%	13%	11%	16%	12%
grade 3 events	1672	1673	1812	8114	3784	1897
	6%	6%	5%	6%	5%	5%
grade 4 events	1573	1610	1789	6880	3494	2570
	6%	6%	5%	5%	5%	7%
grade 5 events	6571	6909	8127	13661	8333	8036
	25%	26%	26%	11%	12%	23%
grade 6 events	6476	6379	7403	73824	10819	7126
	24%	24%	24%	59%	16%	20%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-236789	ACIS-236789	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	278.360156	278.3697432683231	Subarray requested	NONE	NONE
Pointing Dec	-10.741126	-10.76718128077654	Alternating exposures requested	N	N
Pointing Roll	260.877981	261.036415631865	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	0.255451383487682			
SIM defocus (mm)	0	0.9397188447875782			
SIM translation stage pos (mm)	-190.132523	-190.1325231039672			
SIM translation stage offset (mm)	0	5.209593894051068e-07			
Observation start time	51127633.184000	51126979.628347			
Observation start date	1999-08-15T18:06:09	1999-08-15T17:56:19			
Observation end time	51138633.184000	51138758.928763			
Observation end date	1999-08-15T21:09:29	1999-08-15T21:12:38			
Read mode	TIMED	TIMED			

2.3 Aspect



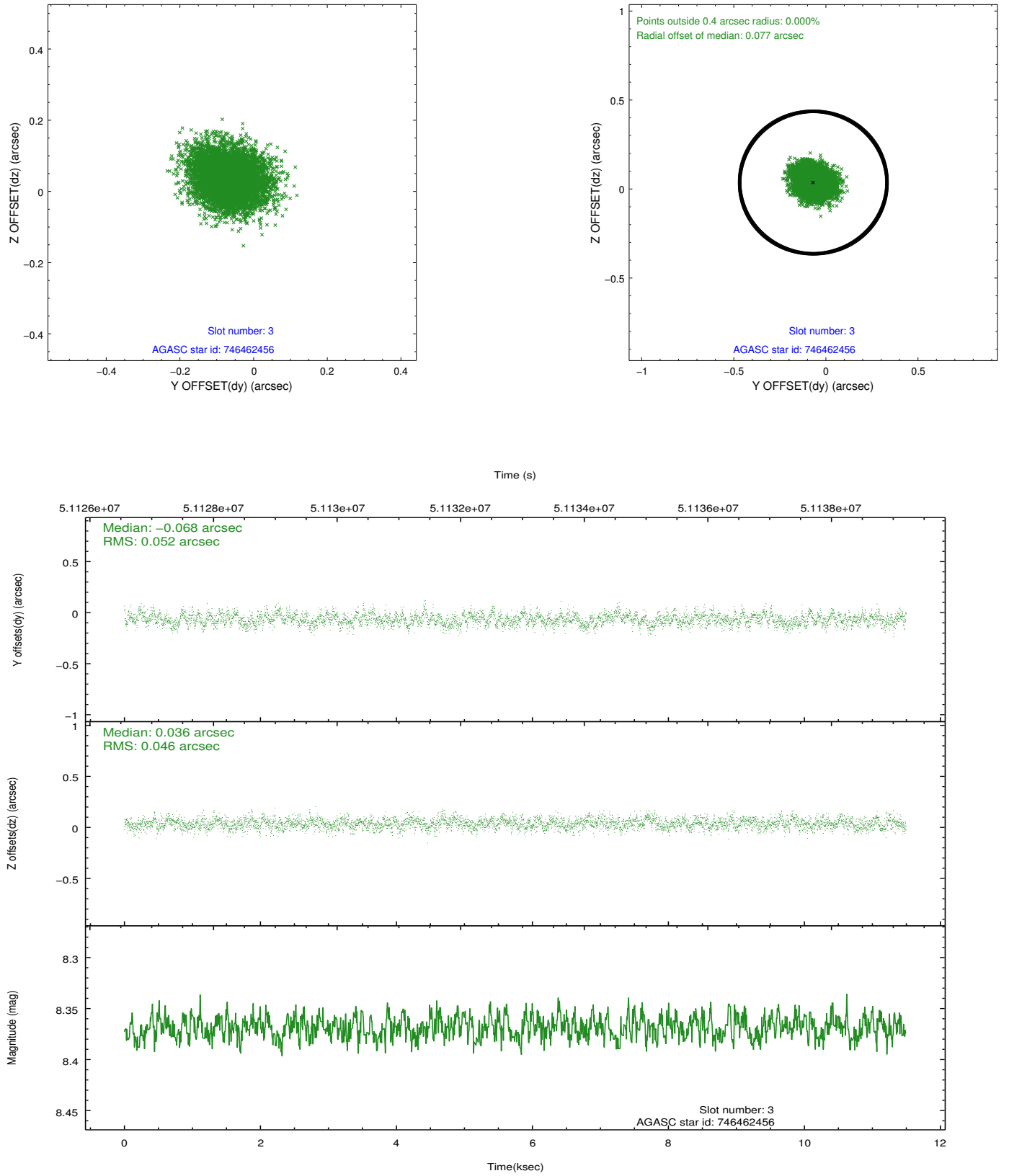


Slot Statistics

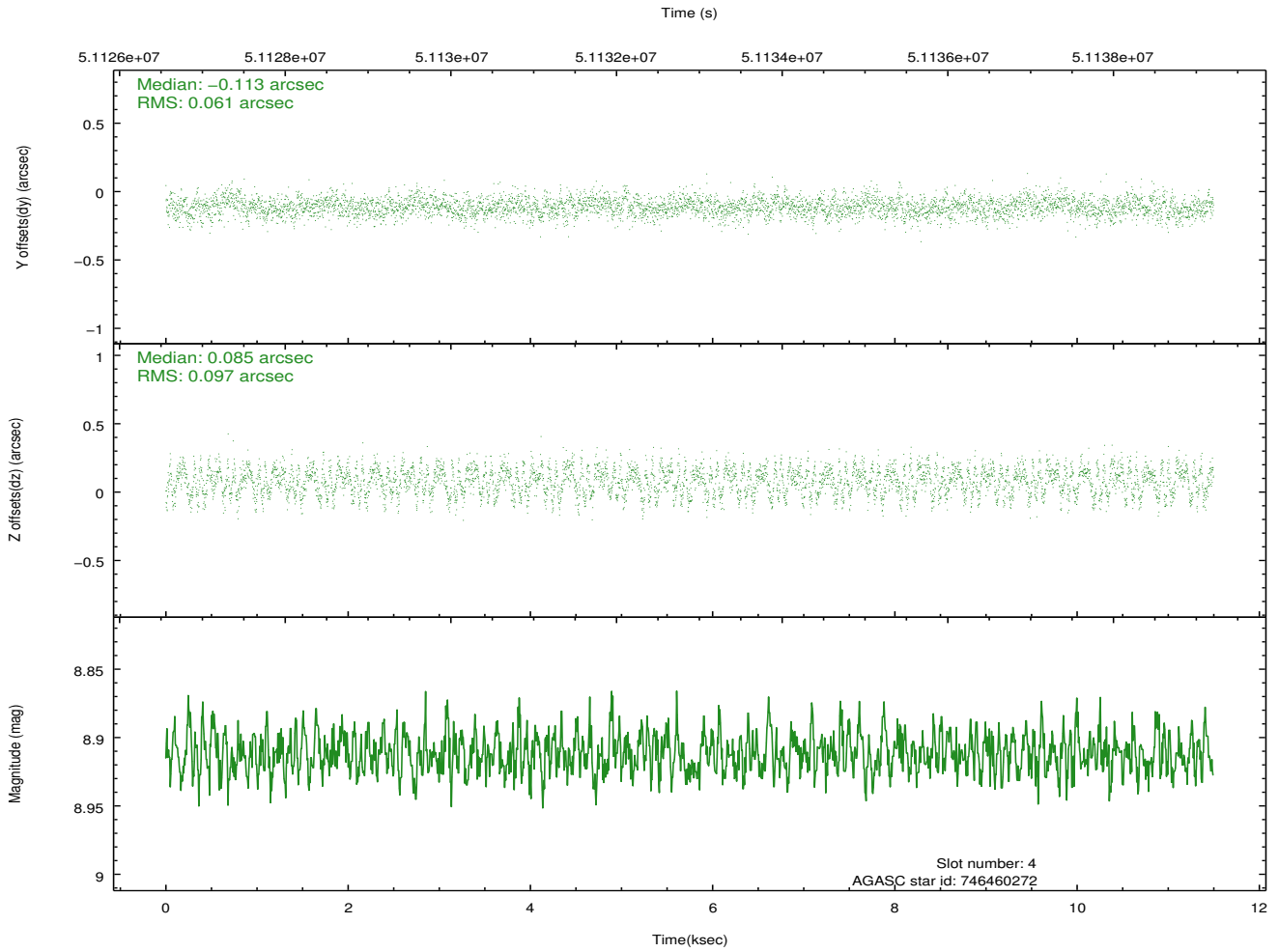
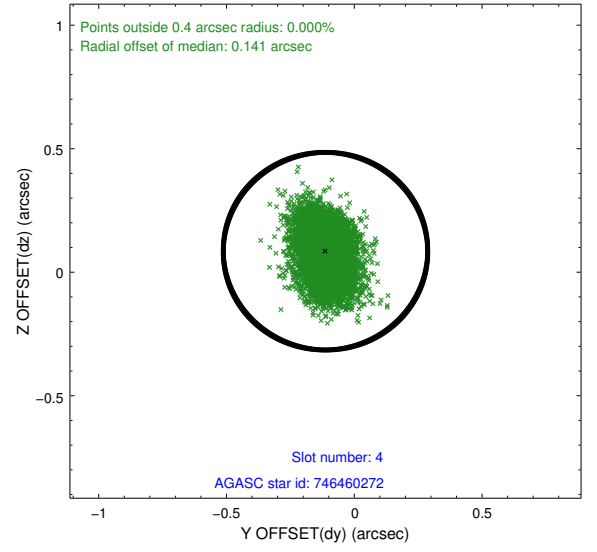
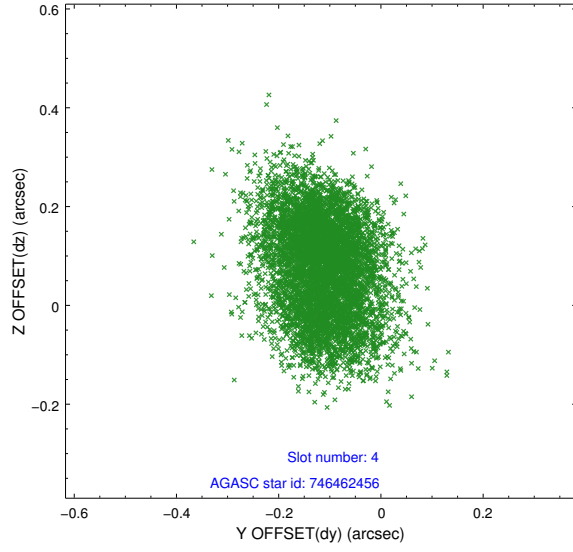
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-4	7.23	5607	0.083	-0.054	0.005	0.009	0.000000	0.000000	2160.84	187.83
1	FID	ACIS-S-5	7.28	5605	-0.071	-0.032	0.004	0.008	0.000000	0.000000	-1805.69	181.49
2	FID	ACIS-S-6	7.37	5609	-0.041	0.100	0.006	0.010	0.000000	0.000000	408.69	825.34
3	GUIDE	746462456	8.37	5607	-0.068	0.036	0.074	0.121	278.652171	-10.530173	-912.83	900.75
4	GUIDE	746460272	8.91	5607	-0.113	0.085	0.123	0.199	278.847488	-10.152127	-2365.87	1369.98
5	GUIDE	746995400	9.71	5604	0.127	-0.023	0.152	0.239	278.078957	-11.289885	2108.64	-666.06
6	GUIDE	746461728	9.81	5604	-0.048	-0.022	0.150	0.238	278.986921	-10.530755	-1096.49	2071.03
7	GUIDE	746456864	9.69	5600	0.101	-0.067	0.142	0.227	278.447021	-11.192395	1555.84	561.40

2.4 Star Slots

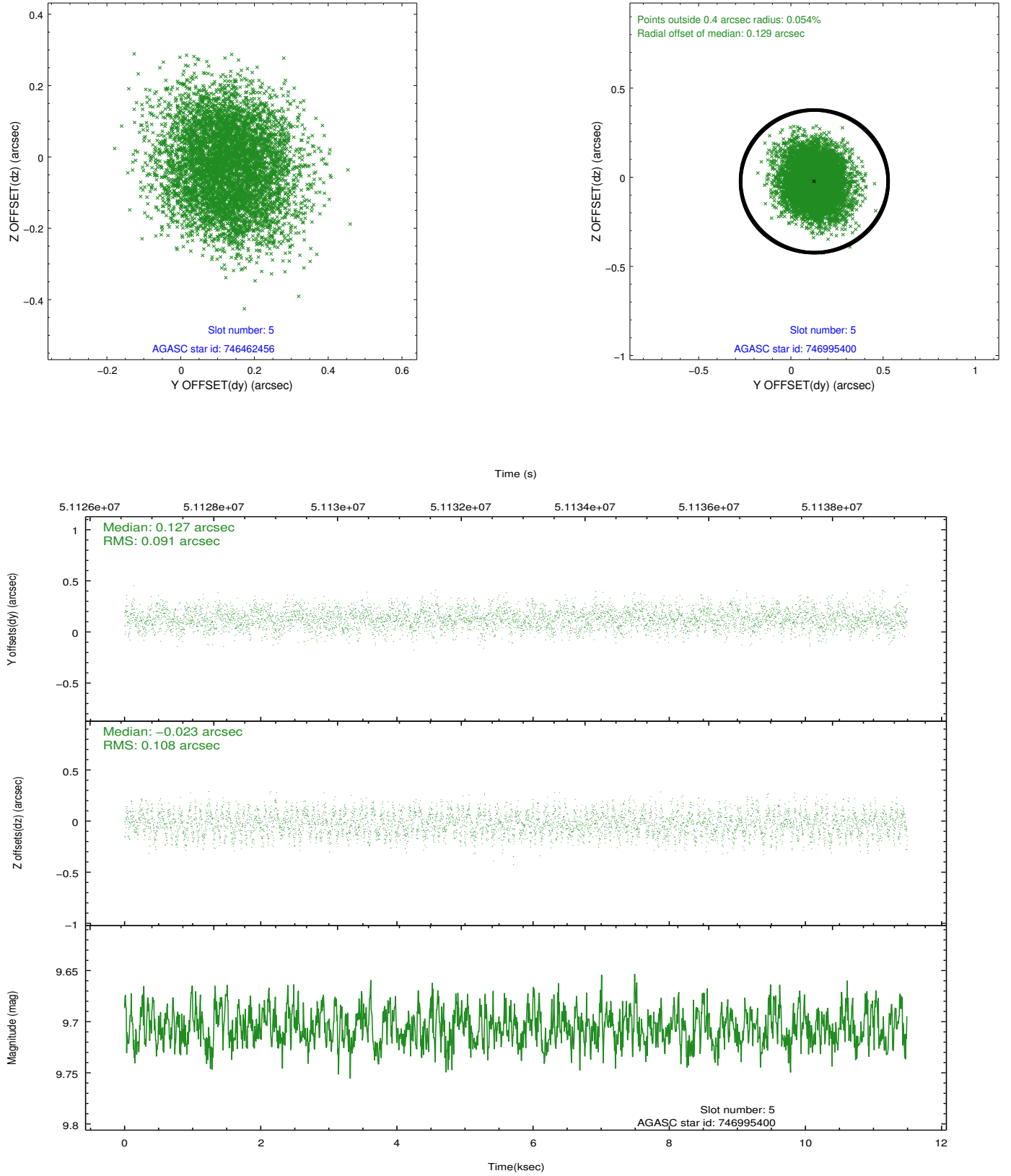
2.4.1 Slot 3



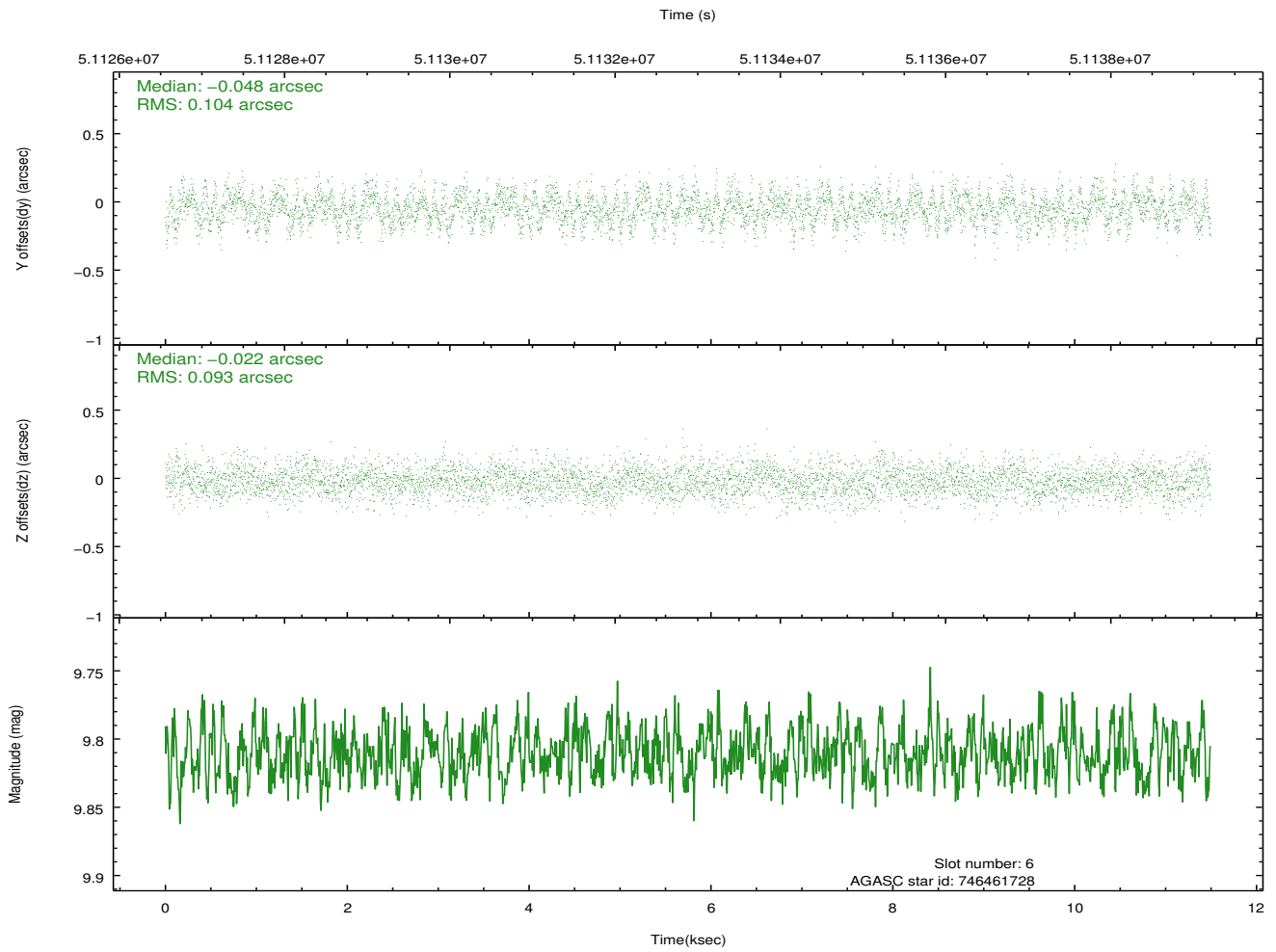
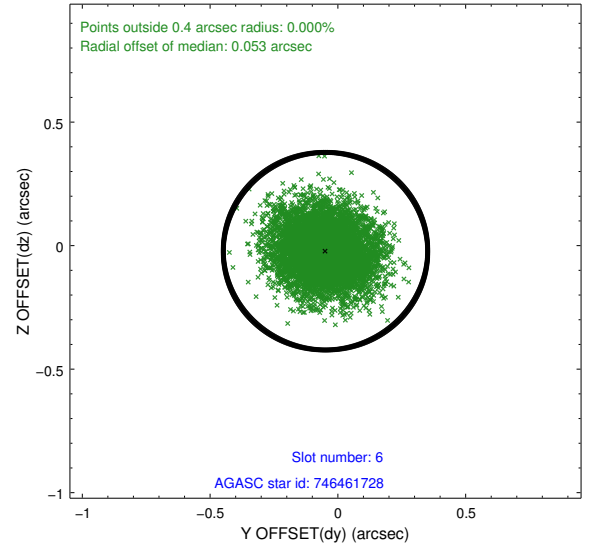
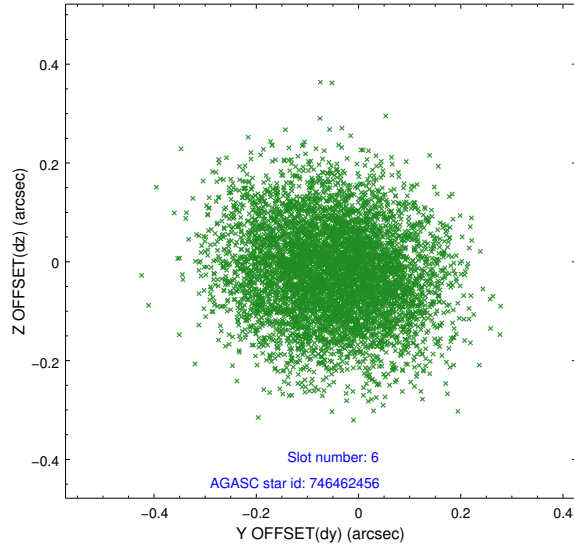
2.4.2 Slot 4



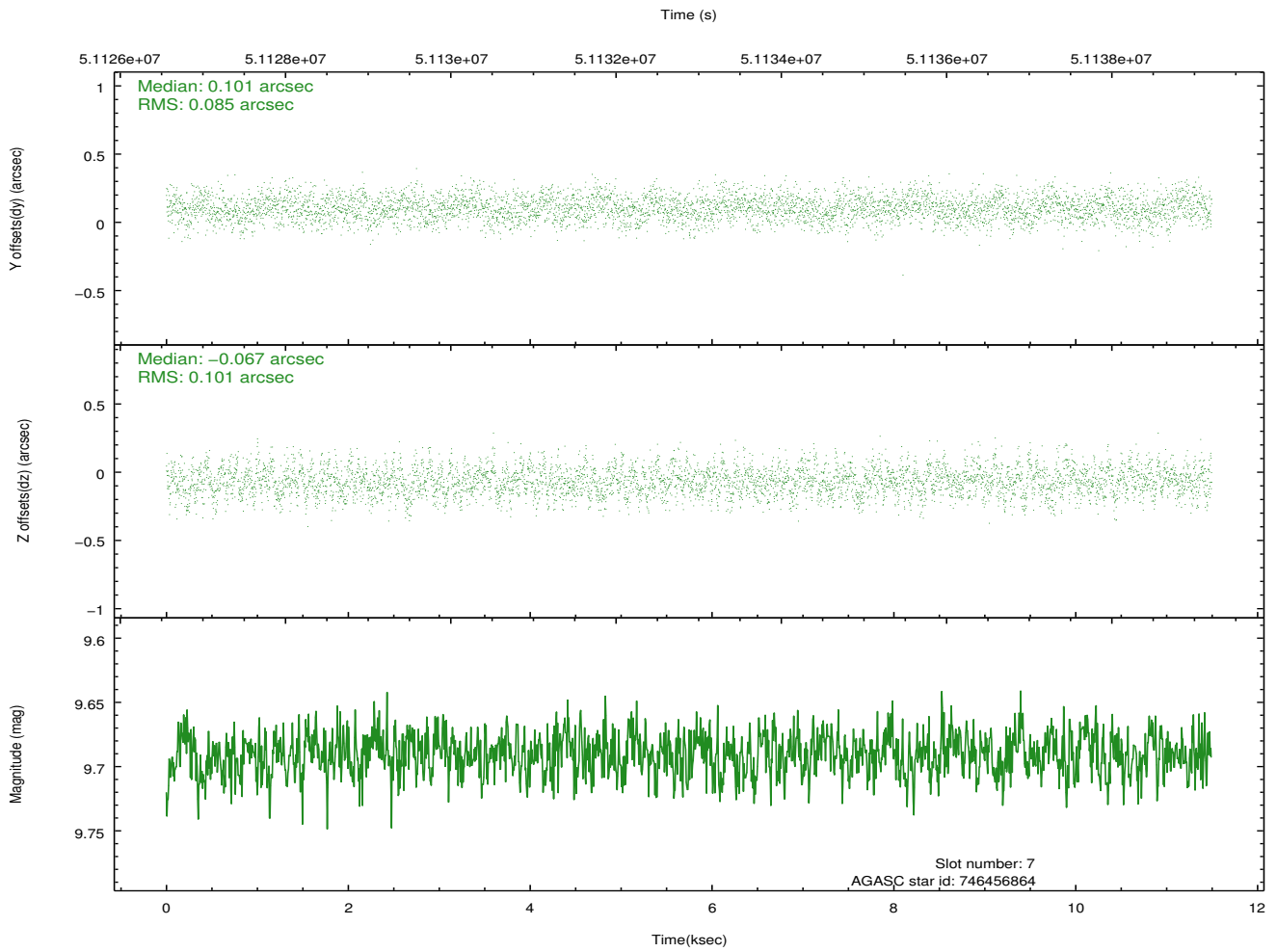
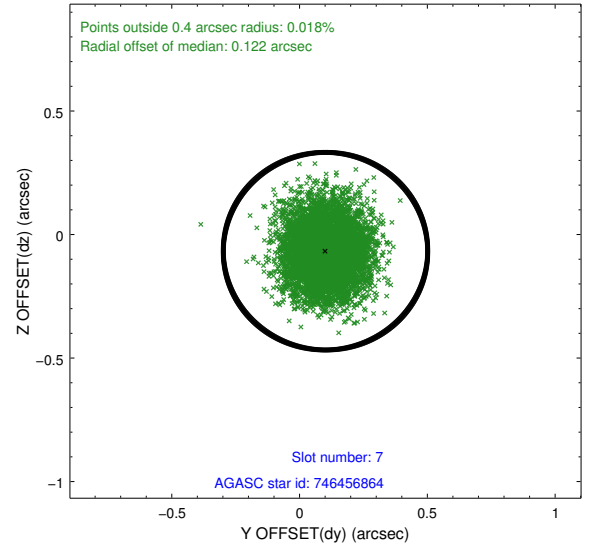
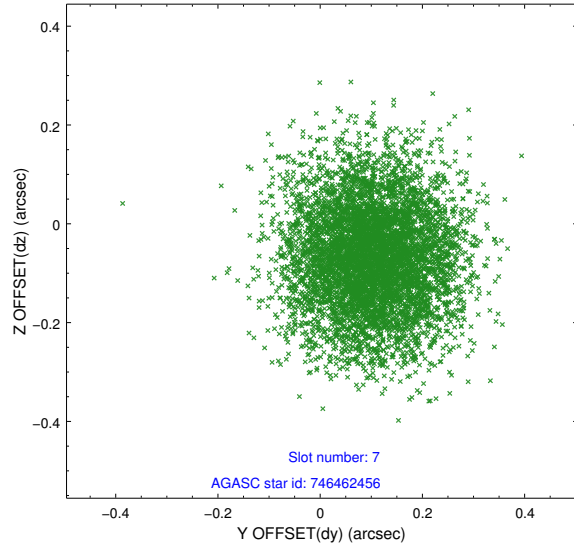
2.4.3 Slot 5



2.4.4 Slot 6

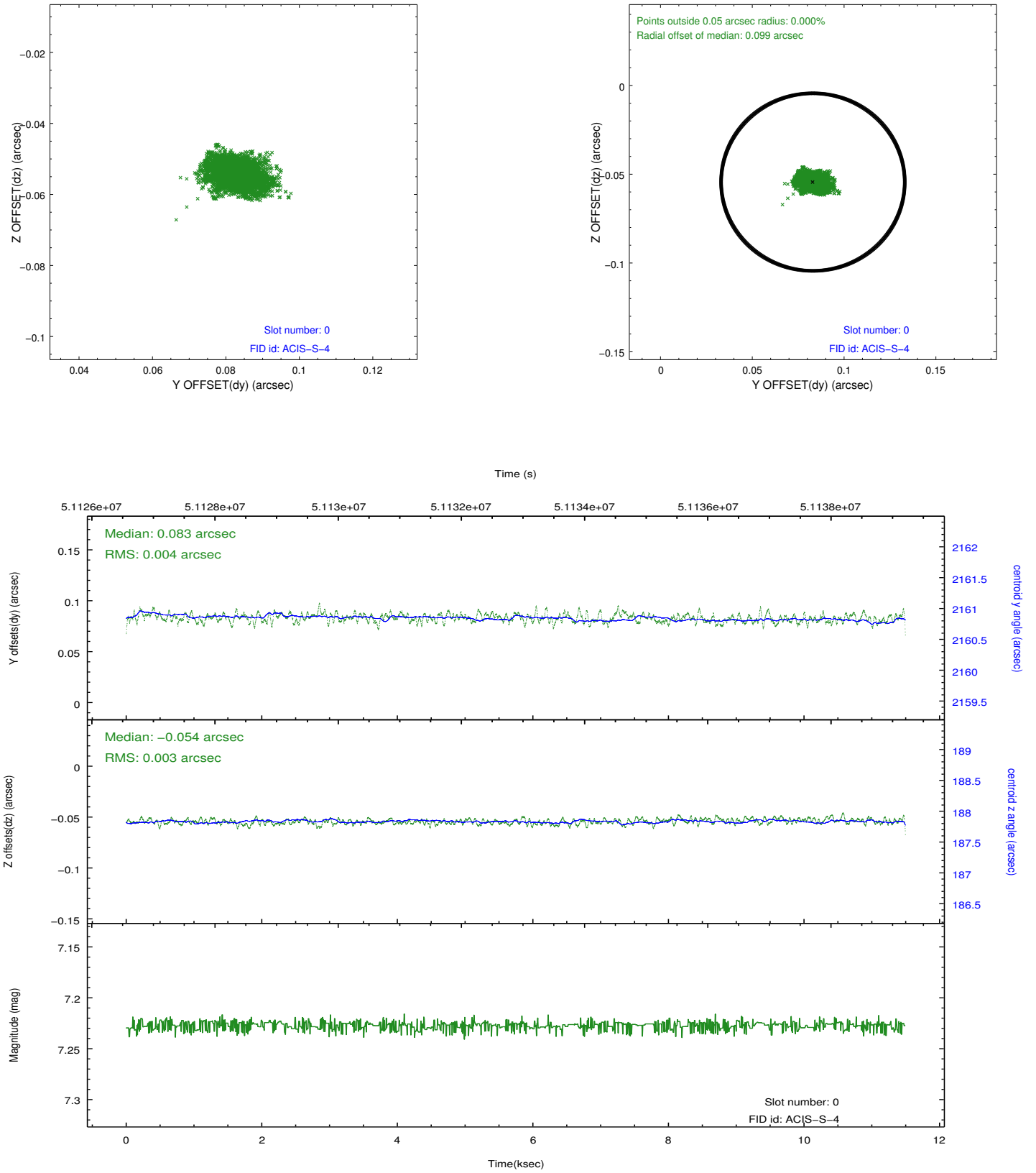


2.4.5 Slot 7

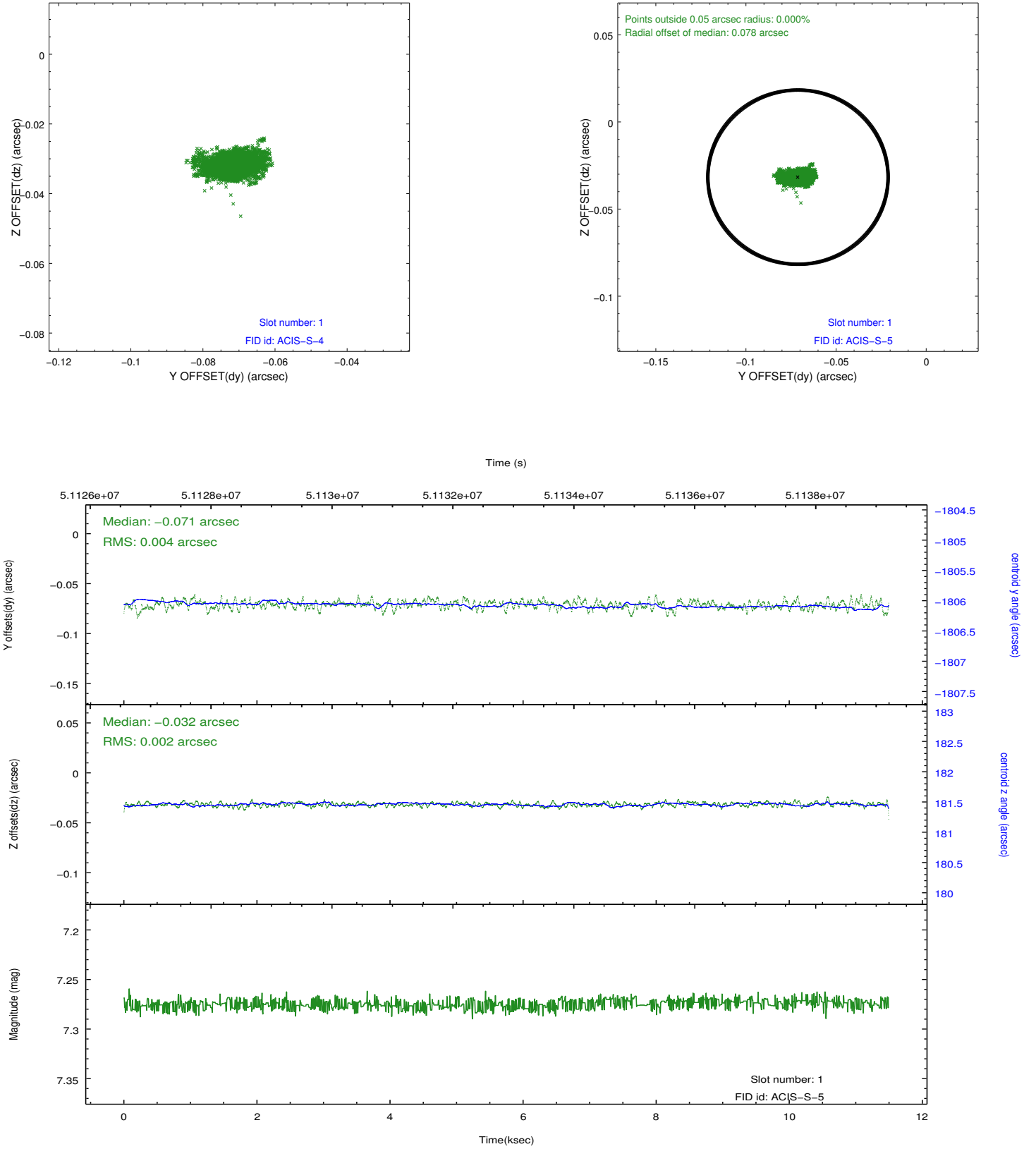


2.5 FID Slots

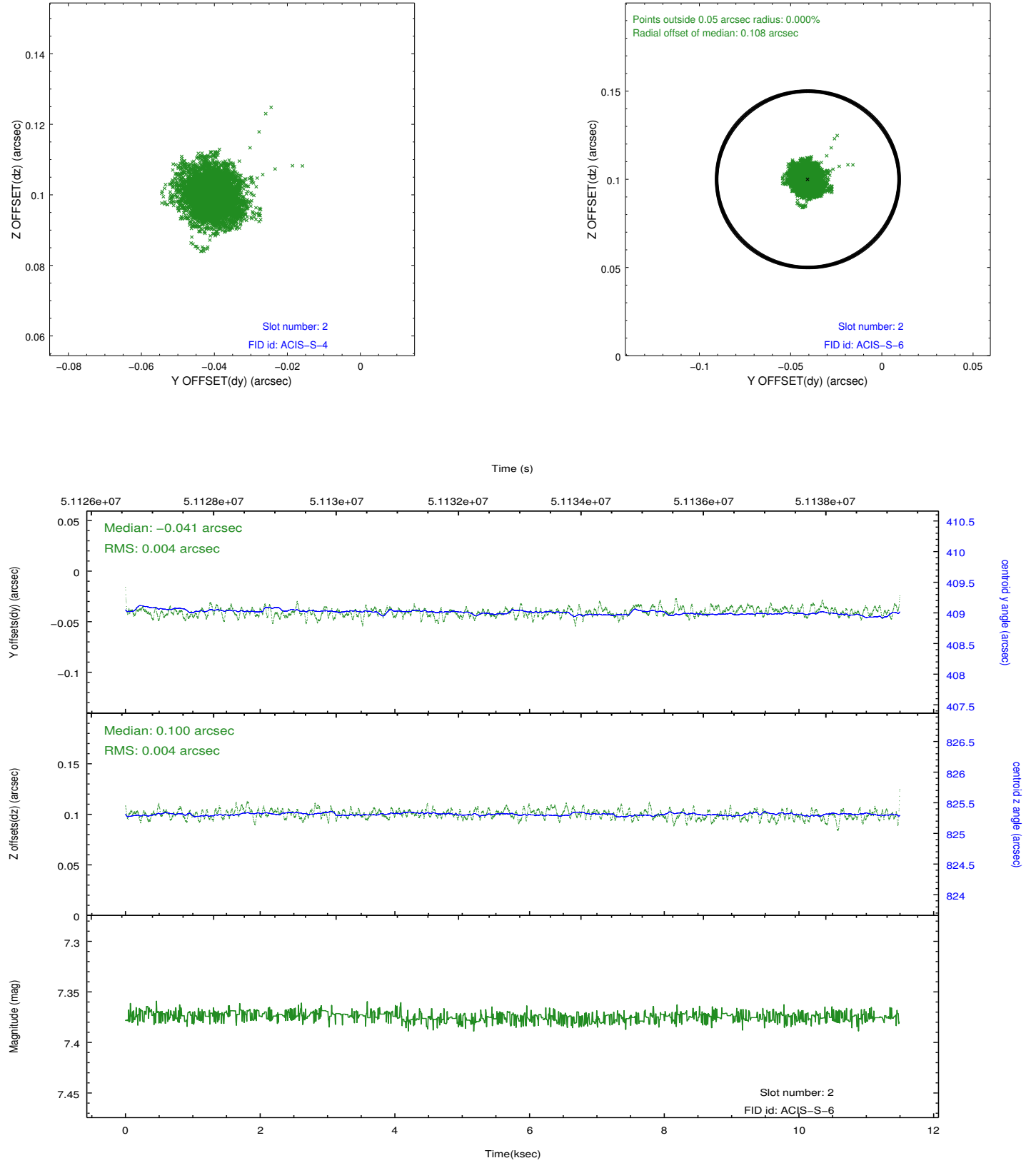
2.5.1 Slot 0



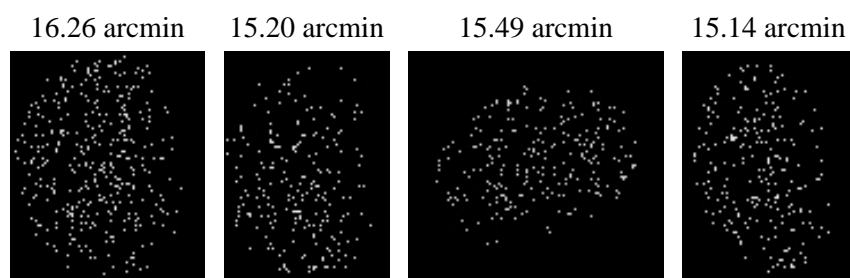
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.035

A.2 Comments

Off-axis effective area measurement on chip S4.

===

Count rate is elevated by about a factor of 5 due to a high radiation environment

during the first 2 ksec of this observation and again between 4.5 and 5.5 ksec into the observation.

===

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.