

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 164 - L2 Version 4

Chandra X-Ray Center

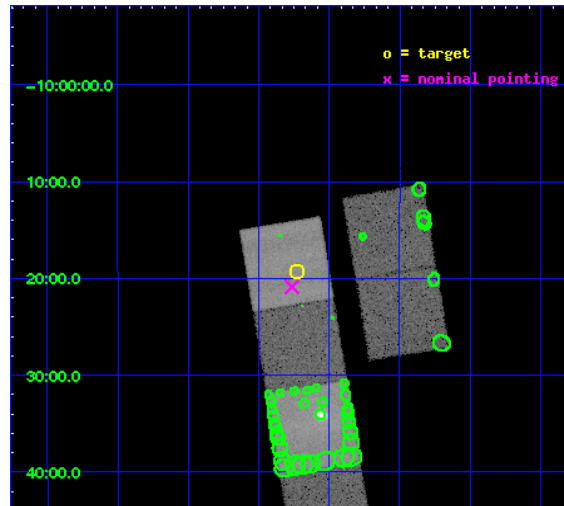
L2 Processing Date : Dec 14 2009

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1 Front

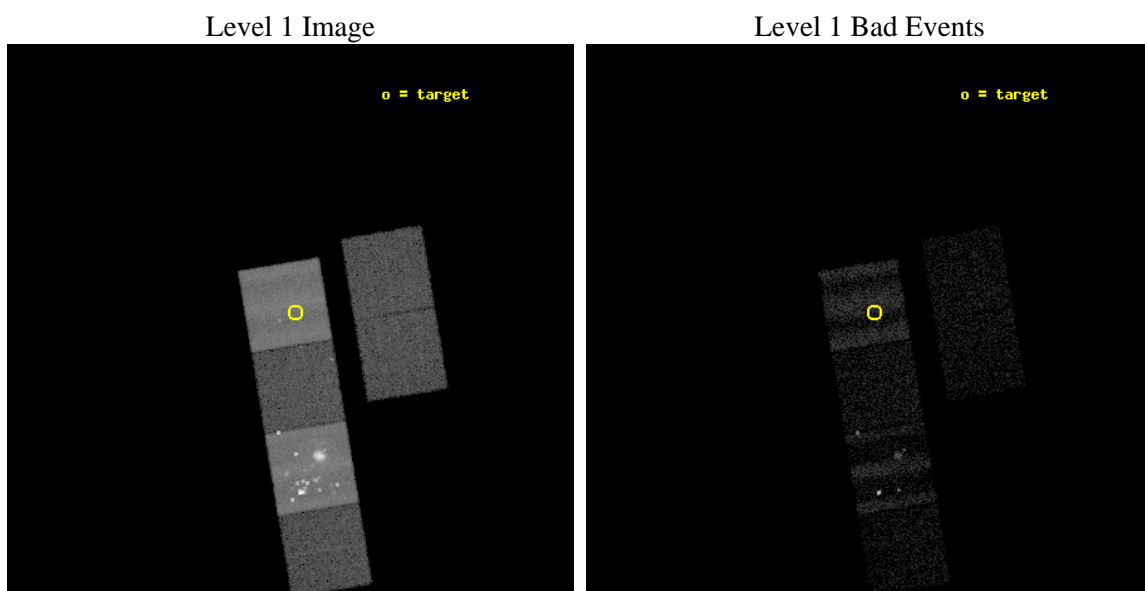
seq_num	590032	Sequence number
obs_id	164	Observation id
title	ACIS CHIP RESPONSE TO A CONTINUUM SOURCE	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip S1, T=100, Offsets=15,0,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.431768	Observer's specified target RA
dec_targ	-10.321994	Observer's specified target Dec
ra_nom	278.44113743103	Nominal RA
dec_nom	-10.348134248598	Nominal Dec
roll_nom	260.58083540972	Nominal Roll
revision	4	Processing version of data
ontime	9747.1180886626	Sum of GTIs [s]
livetime	9623.6942104141	Livetime [s]
ontime2	9753.6000090837	Sum of GTIs [s]
ontime3	9753.6000090837	Sum of GTIs [s]
ontime4	9753.6000090837	Sum of GTIs [s]
ontime5	9753.6000090837	Sum of GTIs [s]
ontime6	9753.6000090837	Sum of GTIs [s]
ontime7	9747.1180886626	Sum of GTIs [s]
l2events	241383	Number of level 2 events



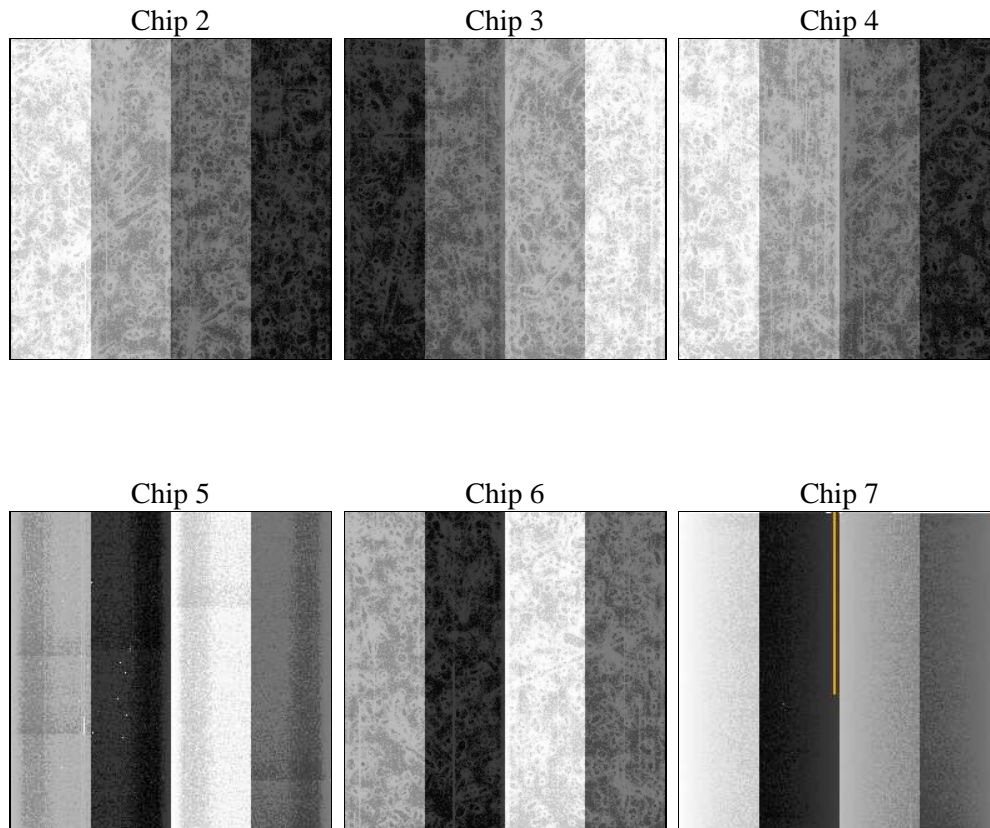
2 OBI

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	8.1.2	ASCDS version number	ontime	9747.1180886626	Sum of GTIs [s]
caldbver	4.1.4	 	ontime2	9753.6000090837	Sum of GTIs [s]
date	2009-12-14T06:32:33	Date and time of file creation	ontime3	9753.6000090837	Sum of GTIs [s]
revision	4	Processing version of data	ontime4	9753.6000090837	Sum of GTIs [s]
			ontime5	9753.6000090837	Sum of GTIs [s]
			ontime6	9753.6000090837	Sum of GTIs [s]
			ontime7	9747.1180886626	Sum of GTIs [s]
			l1events	340734	Number of level 1 events

2.1.4 Events

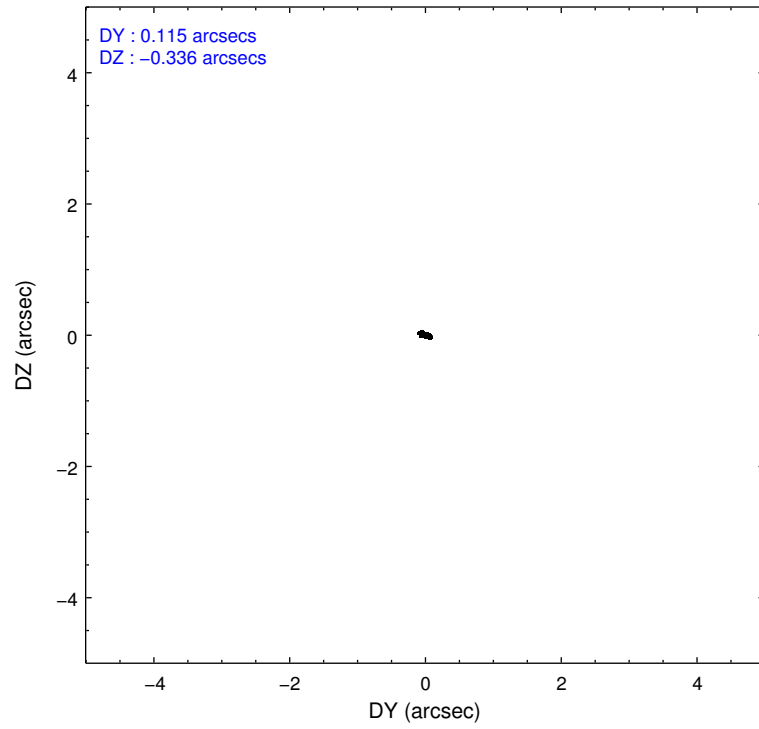
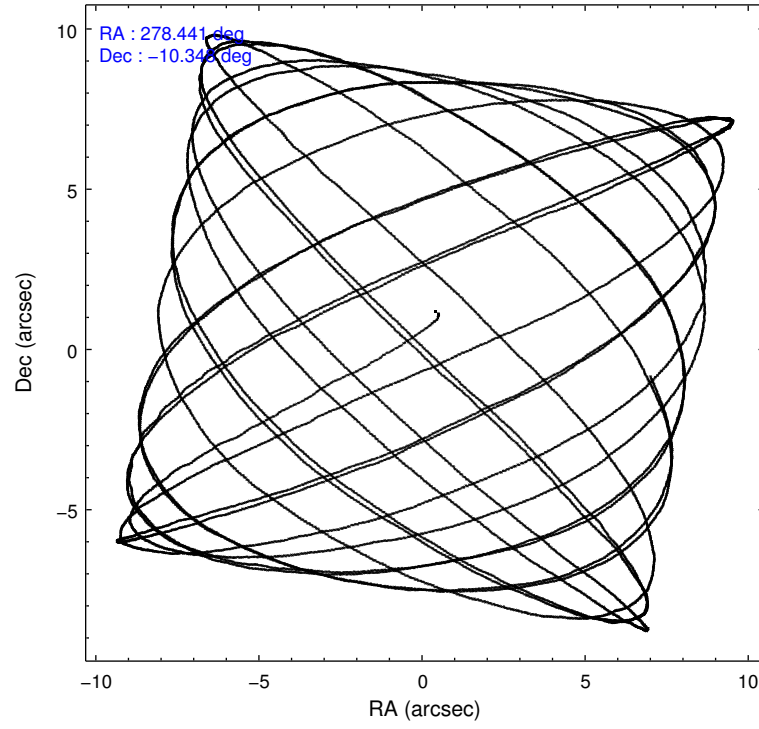
	ccd 2	ccd 3	ccd 4	ccd 5	ccd 6	ccd 7
level 1 events	24340	24950	23532	152336	28451	87125
rejected events	6395	6829	6065	11750	7860	13331
rejected %	26%	27%	25%	7%	27%	15%

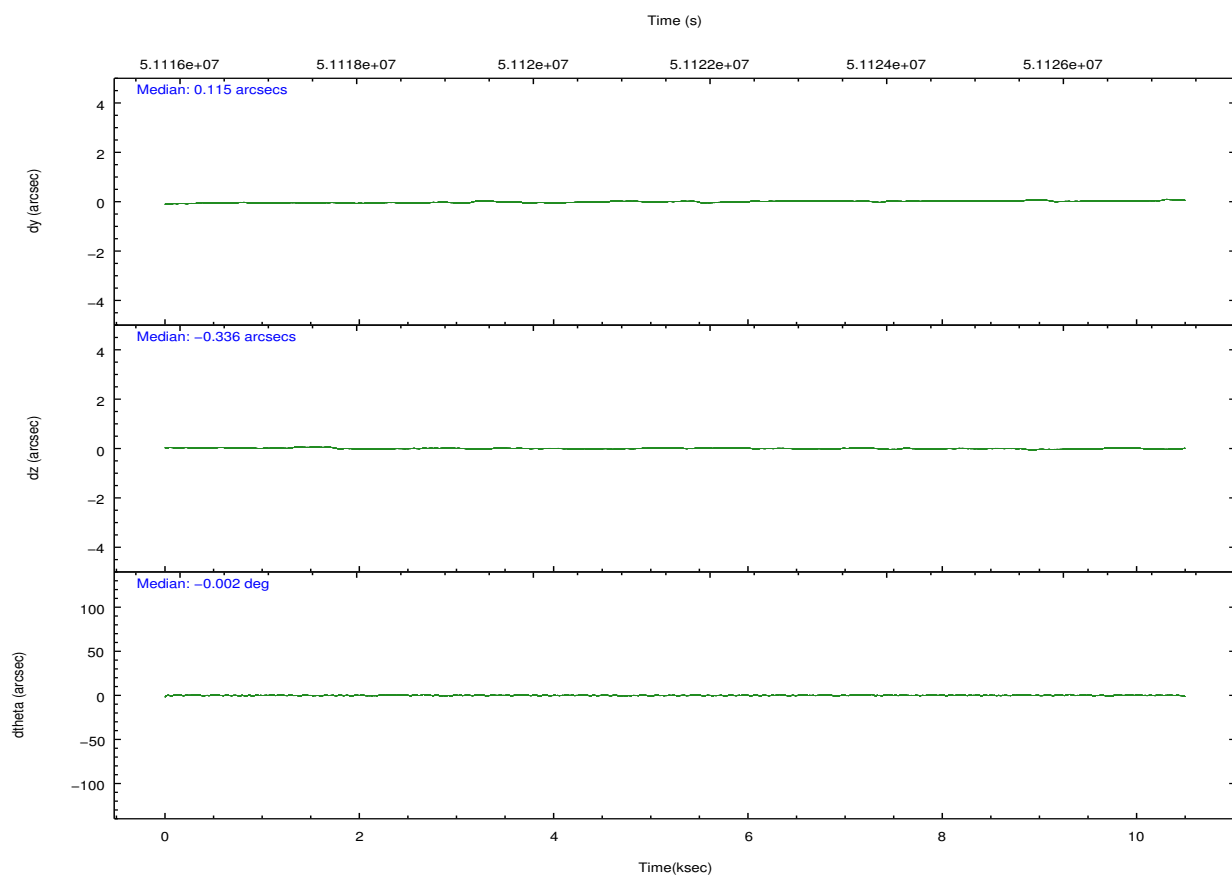
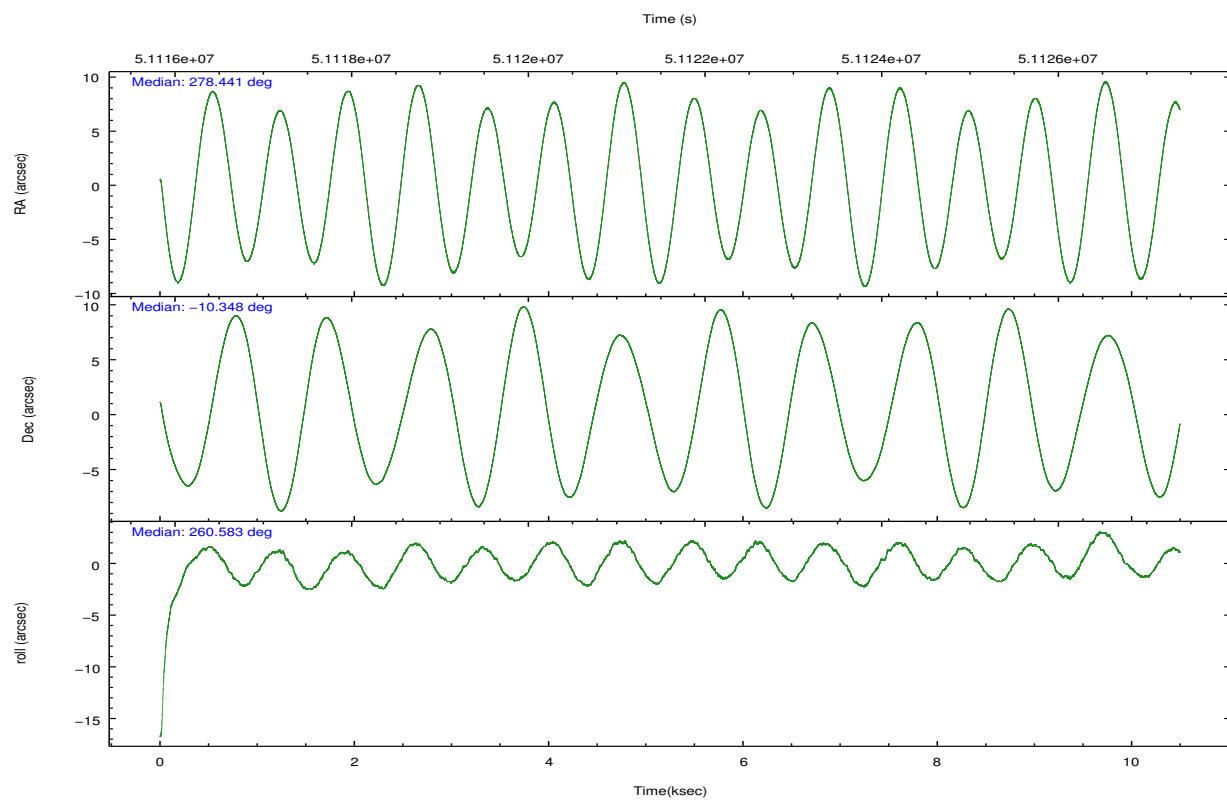
	ccd 2	ccd 3	ccd 4	ccd 5	ccd 6	ccd 7
grade 0 events	4814	5106	4773	33252	5569	3383
	19%	20%	20%	21%	19%	3%
grade 1 events	45	58	60	187	41	64
	0%	0%	0%	0%	0%	0%
grade 2 events	3777	3667	3654	24486	4049	8837
	15%	14%	15%	16%	14%	10%
grade 3 events	1660	1622	1599	7325	1887	5486
	6%	6%	6%	4%	6%	6%
grade 4 events	1514	1643	1509	9719	1732	4365
	6%	6%	6%	6%	6%	5%
grade 5 events	6340	6763	6005	9874	7808	13237
	26%	27%	25%	6%	27%	15%
grade 6 events	6190	6091	5932	65866	7365	51741
	25%	24%	25%	43%	25%	59%
grade 7 events	0	0	0	1627	0	12
	0%	0%	0%	1%	0%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-234567	ACIS-234567	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	278.431771	278.4411374310263	Subarray requested	NONE	NONE
Pointing Dec	-10.321988	-10.34813424859773	Alternating exposures requested	N	N
Pointing Roll	260.422524	260.5808354097221	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	51116853.184000	51116199.190467			
Observation start date	1999-08-15T15:06:29	1999-08-15T14:56:39			
Observation end time	51126853.184000	51126979.628347			
Observation end date	1999-08-15T17:53:09	1999-08-15T17:56:19			
Read mode	TIMED	TIMED			

2.3 Aspect



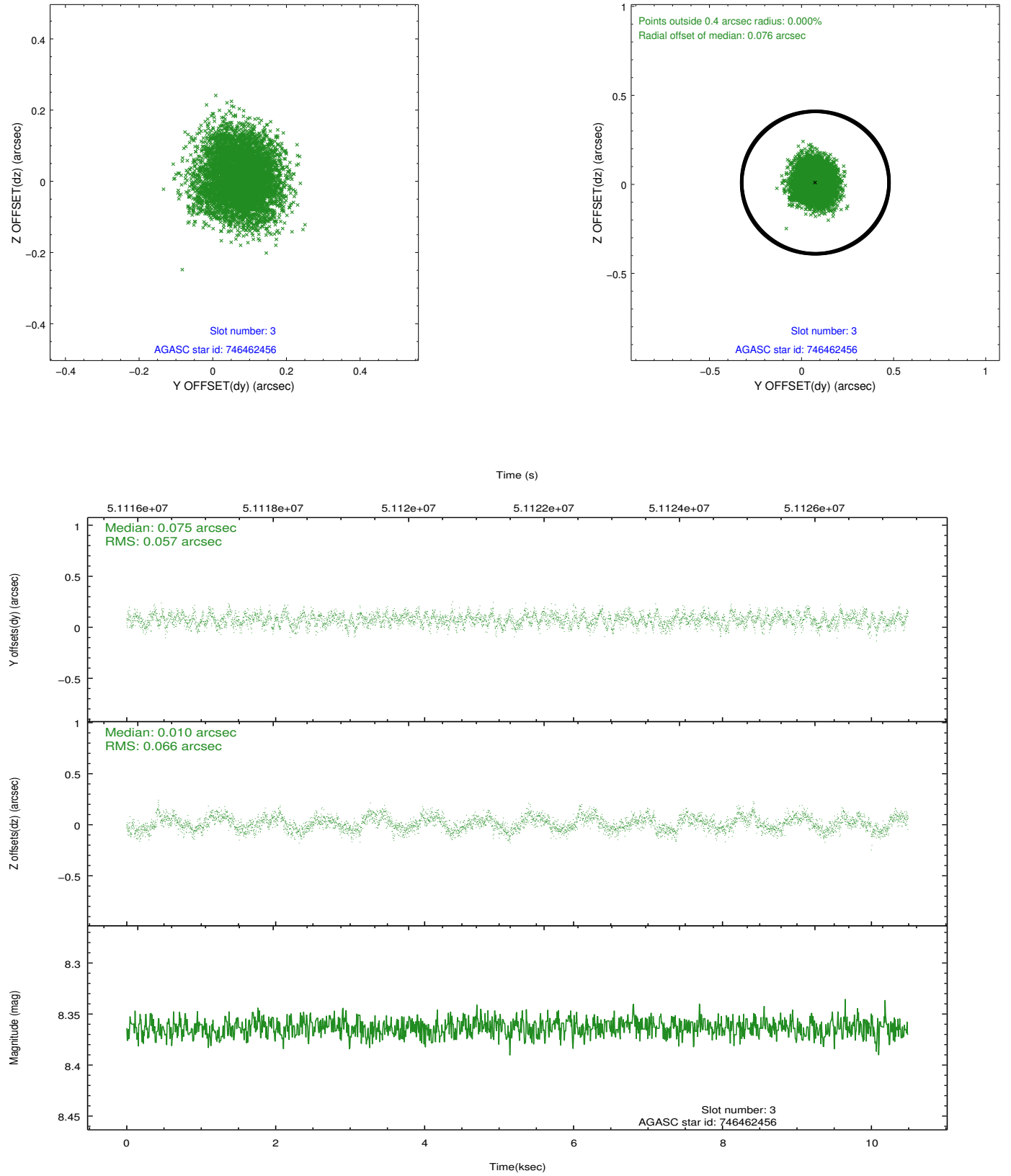


Slot Statistics

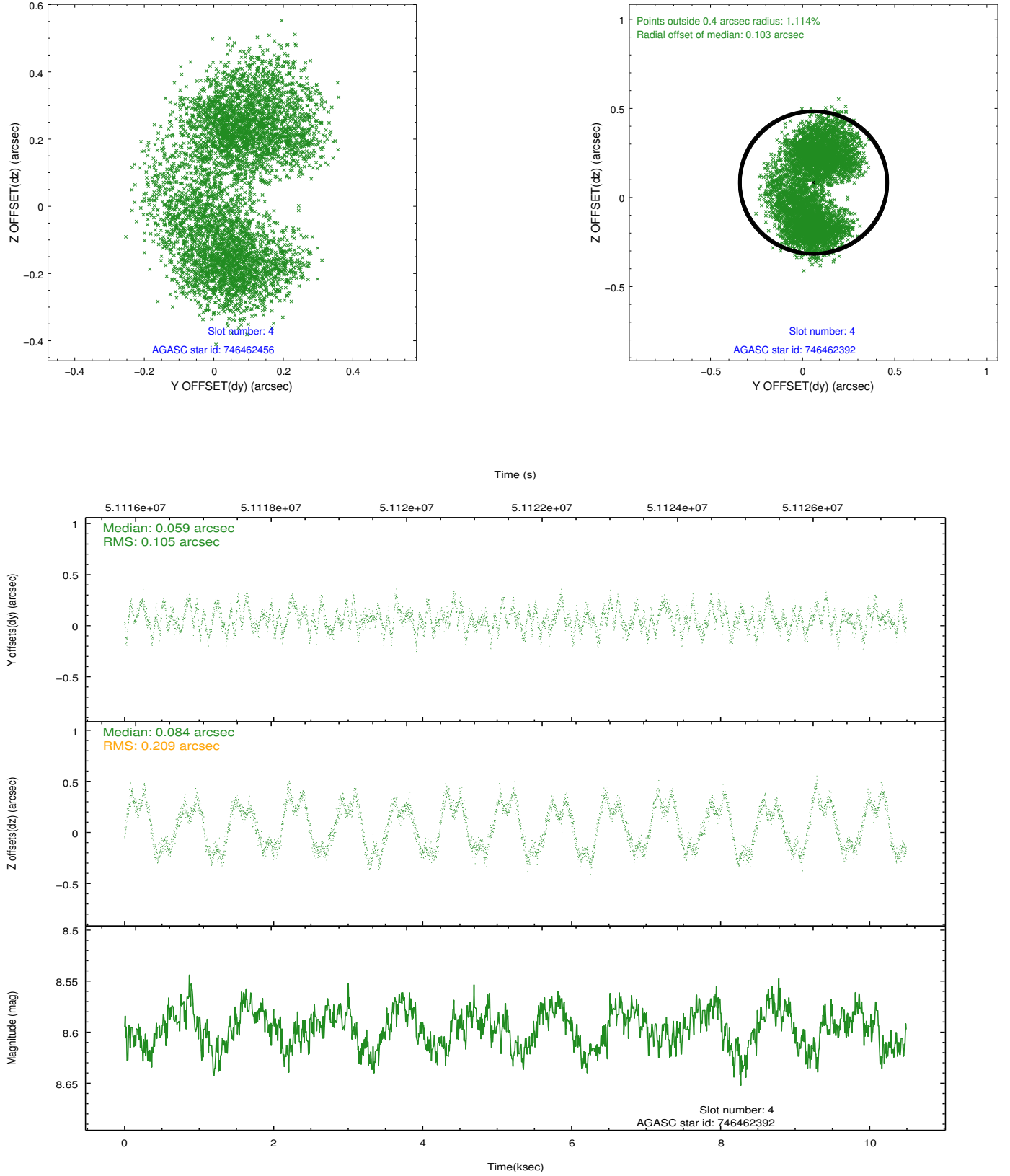
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.14	5121	-0.002	-0.033	0.005	0.009	0.000000	0.000000	-752.80	-1720.96
1	FID	ACIS-S-4	7.23	5118	0.062	0.010	0.004	0.008	0.000000	0.000000	2160.79	187.48
2	FID	ACIS-S-5	7.27	5119	-0.092	0.032	0.005	0.009	0.000000	0.000000	-1805.55	181.48
3	GUIDE	746462456	8.36	5115	0.075	0.010	0.095	0.145	278.652171	-10.530173	609.77	894.39
4	GUIDE	746462392	8.60	5115	0.059	0.084	0.261	0.356	279.038421	-10.890715	1664.60	2456.38
5	GUIDE	746458288	10.02	4987	-0.047	-0.017	0.194	0.329	278.591405	-9.671581	-2402.40	170.01
6	GUIDE	746460328	9.80	5099	-0.109	-0.039	0.150	0.247	278.603974	-9.898096	-1606.57	348.87
7	GUIDE	746461728	9.78	5113	0.015	-0.014	0.166	0.265	278.986921	-10.530755	415.87	2063.35

2.4 Star Slots

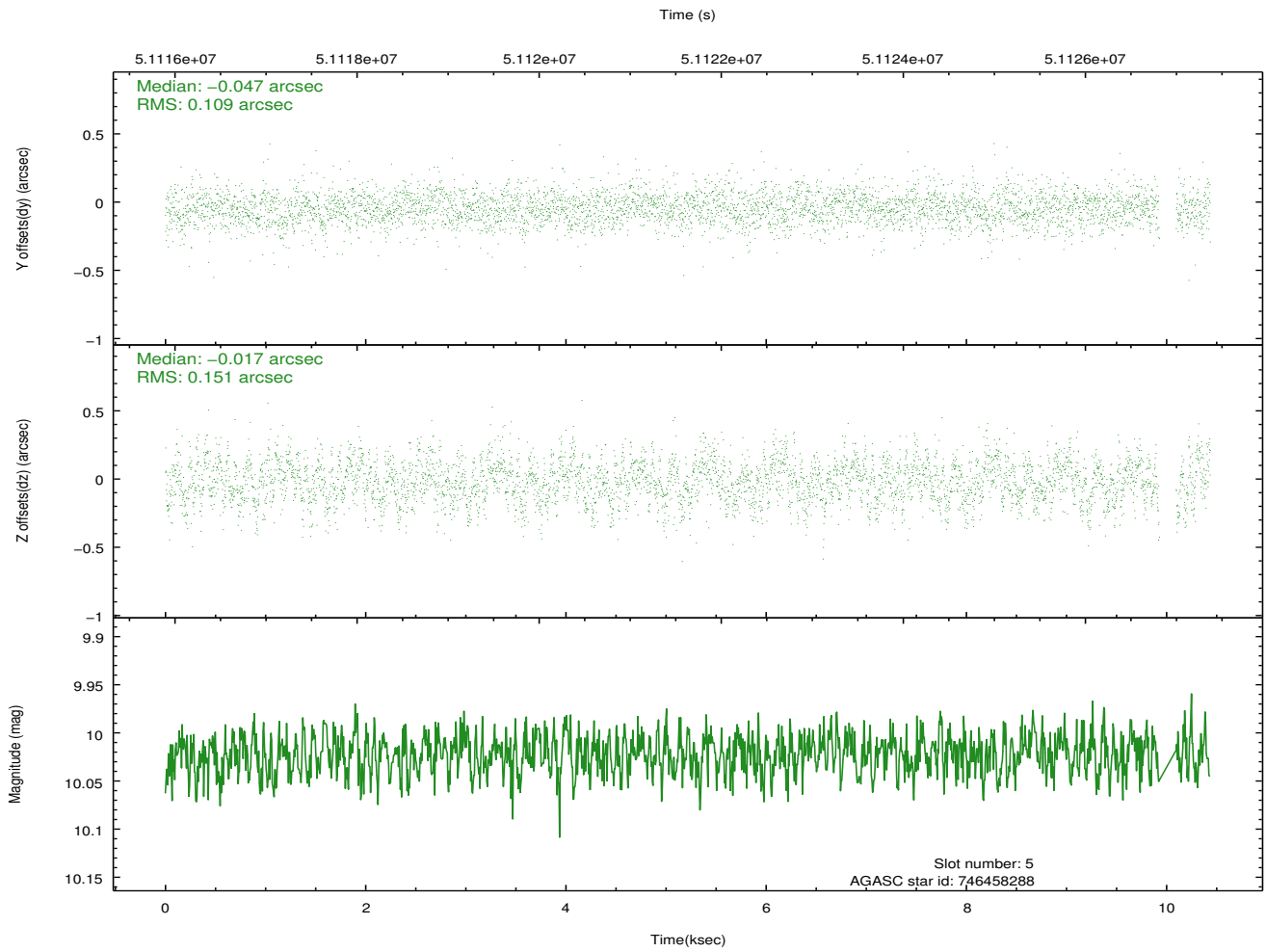
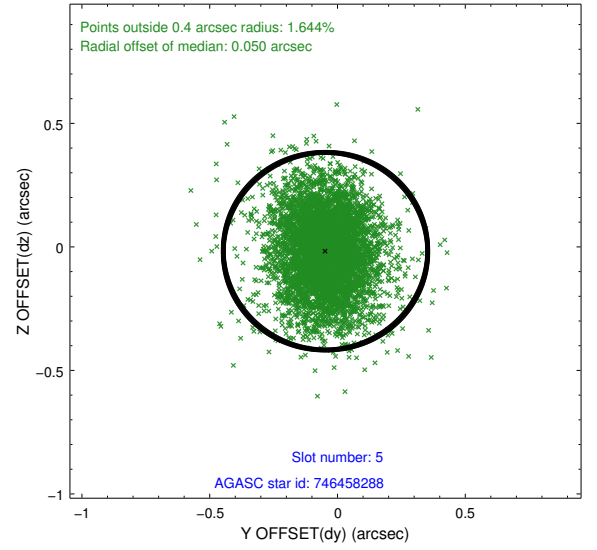
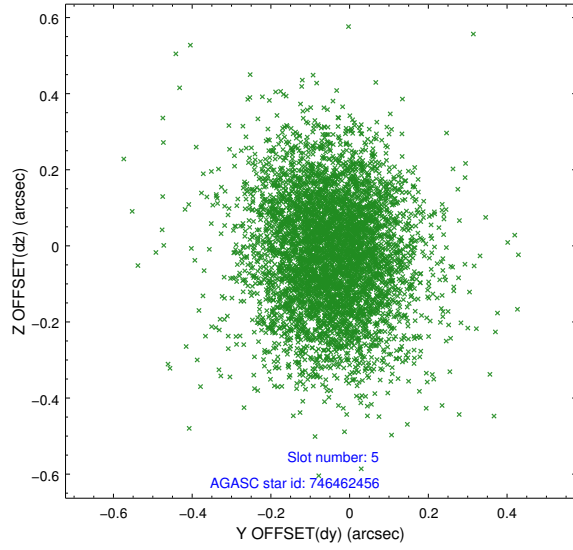
2.4.1 Slot 3



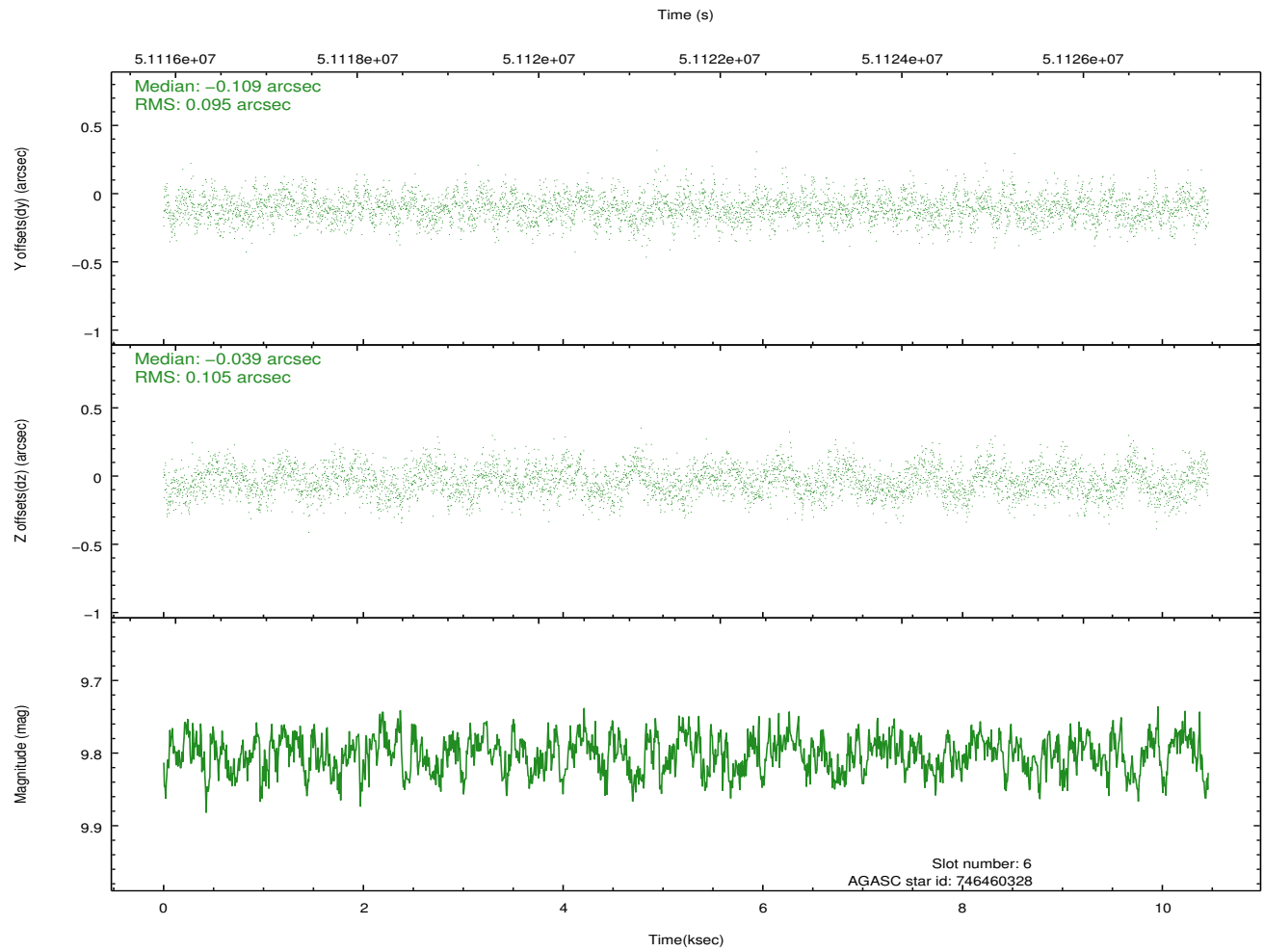
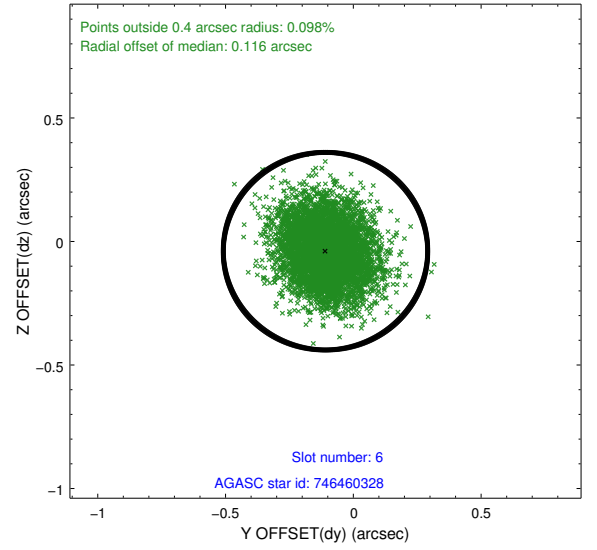
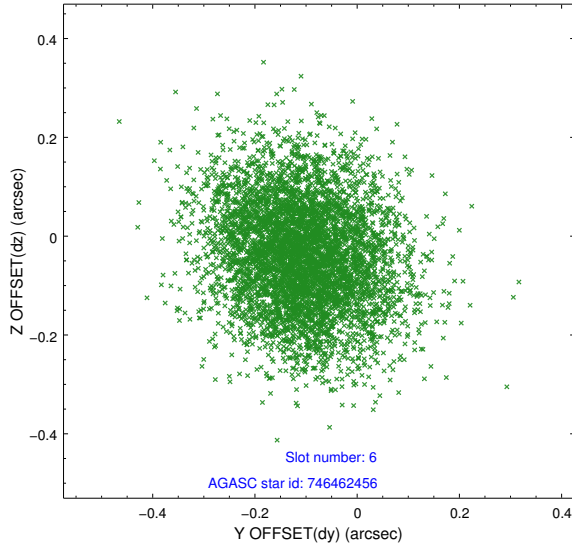
2.4.2 Slot 4



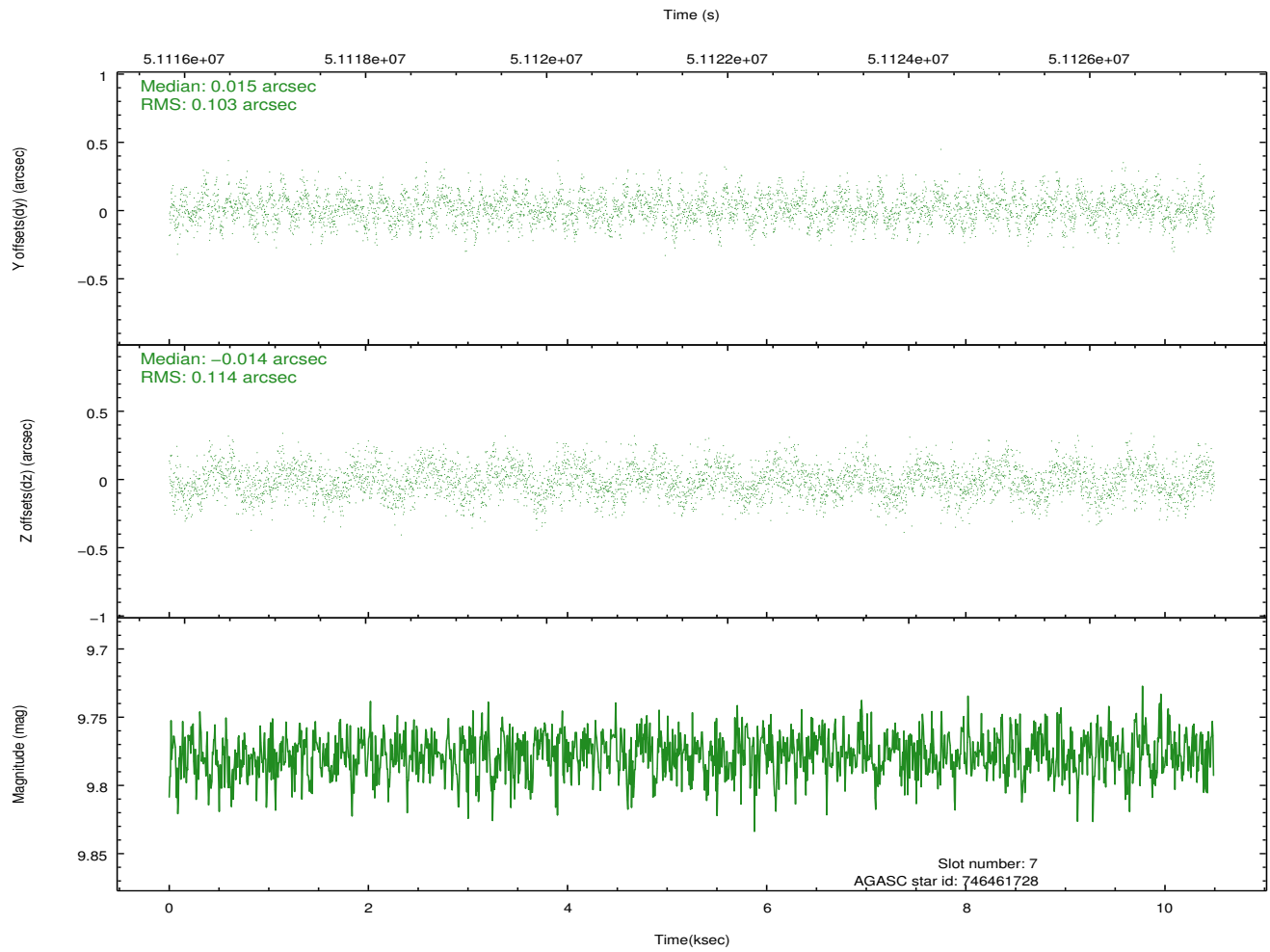
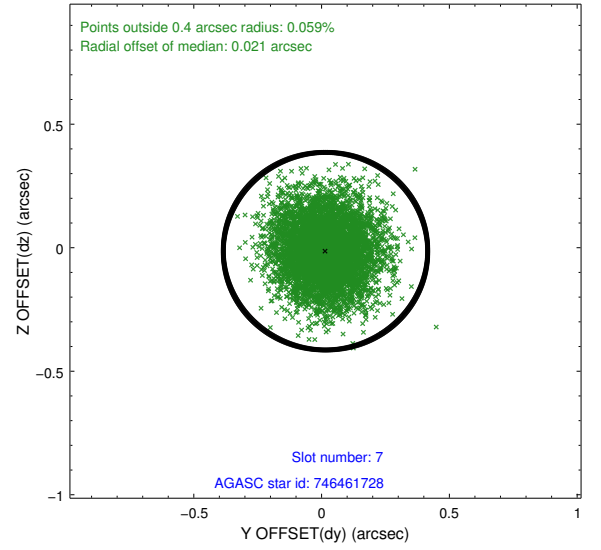
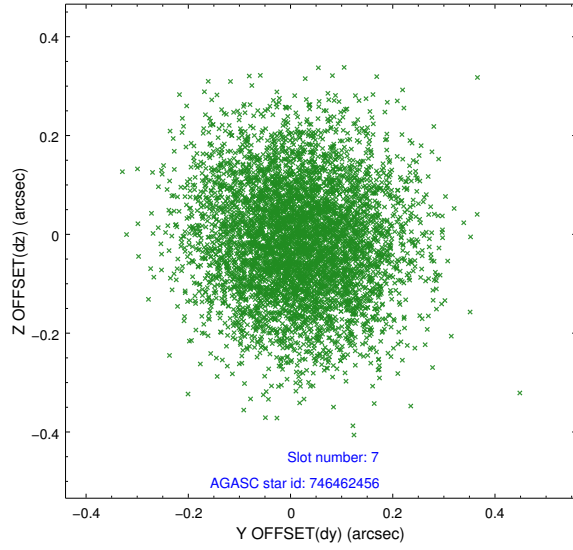
2.4.3 Slot 5



2.4.4 Slot 6

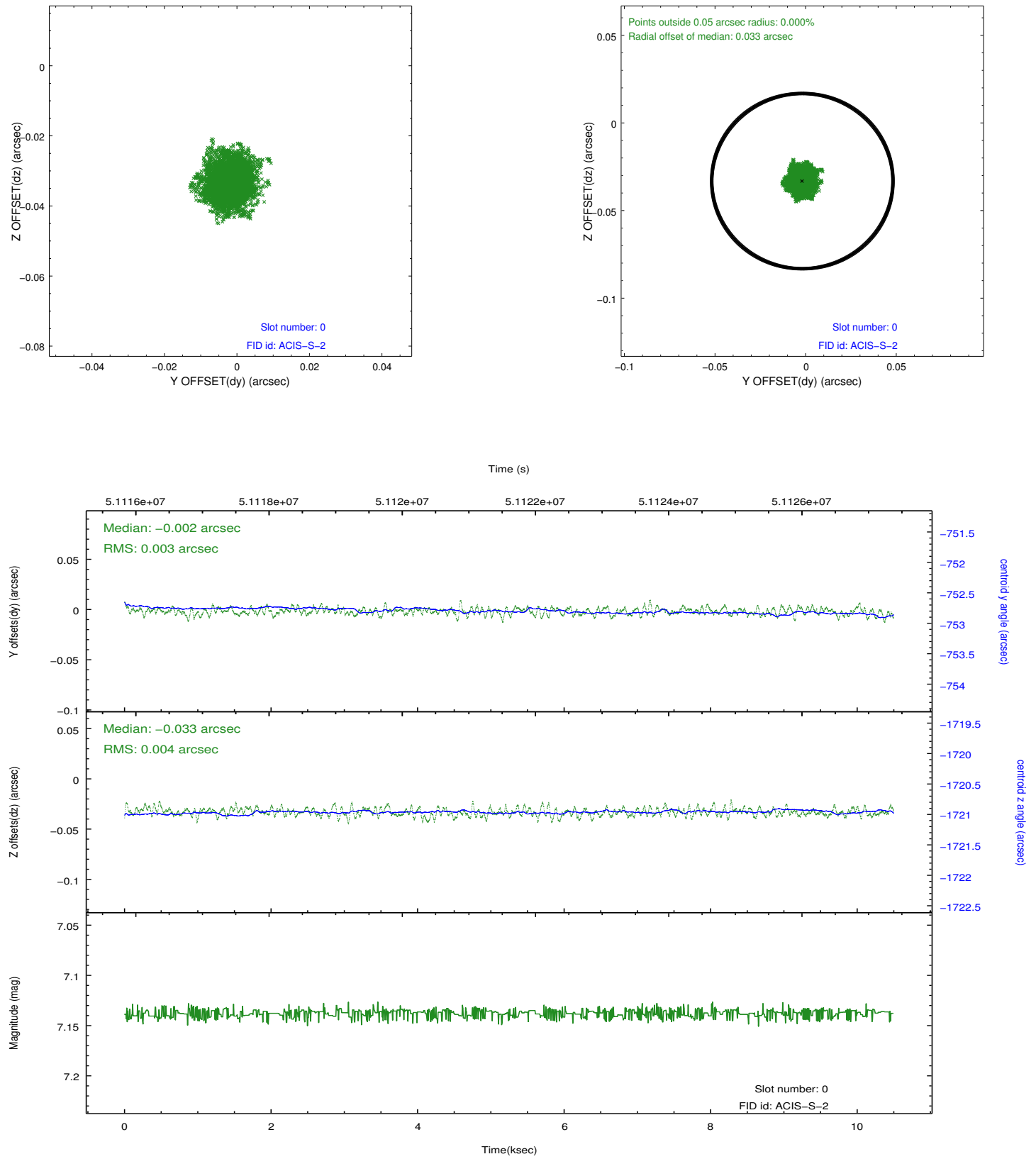


2.4.5 Slot 7

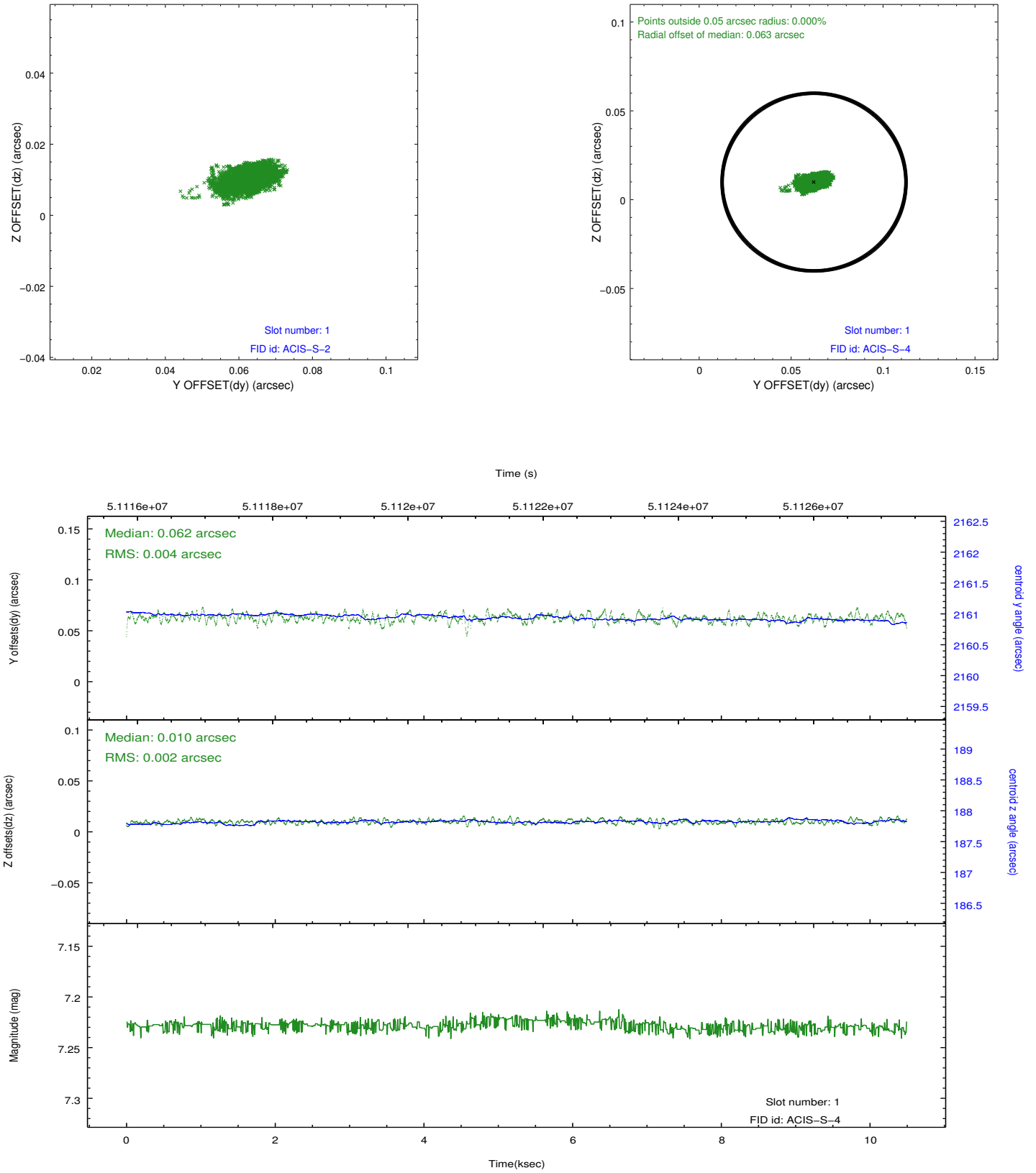


2.5 FID Slots

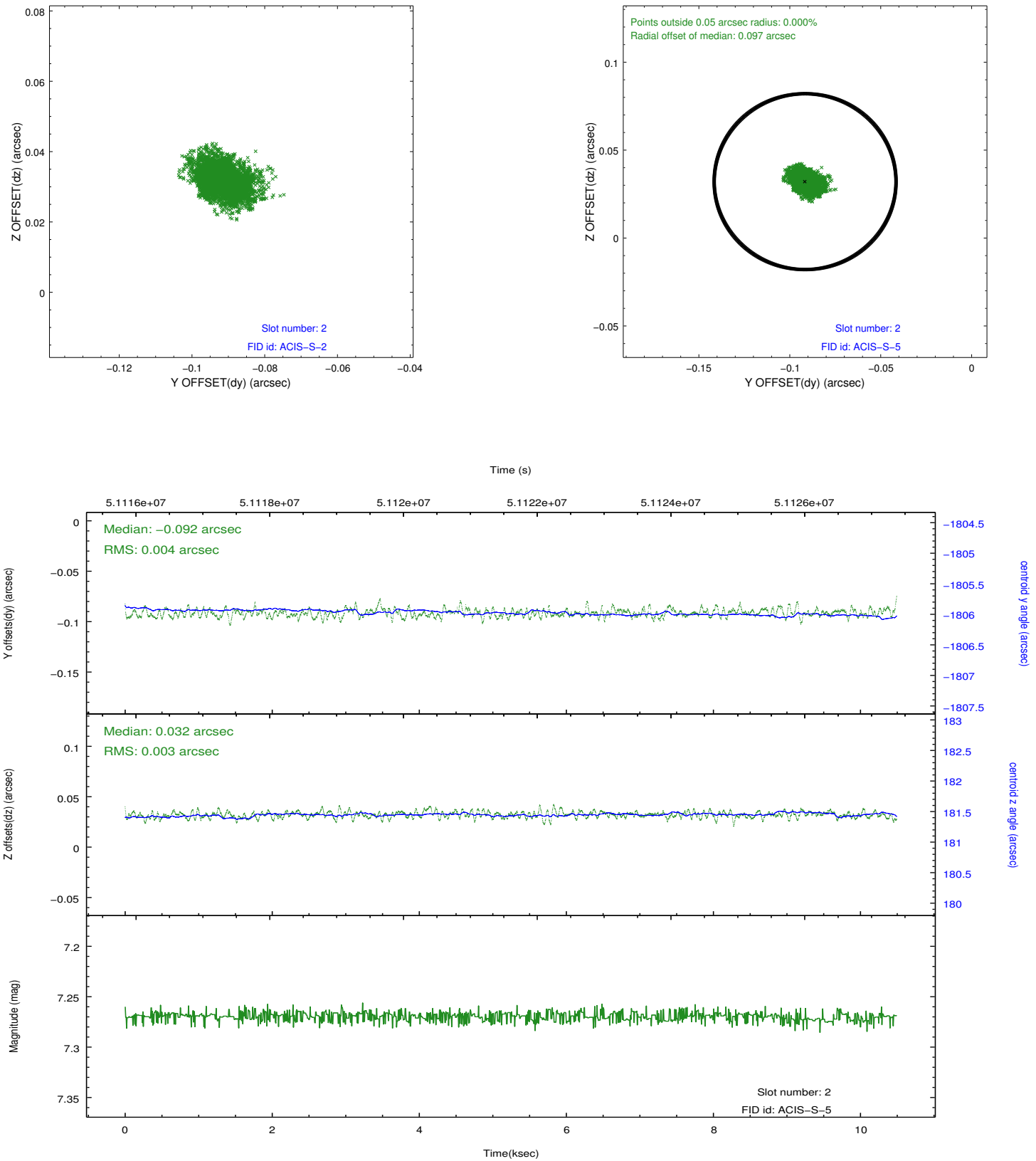
2.5.1 Slot 0



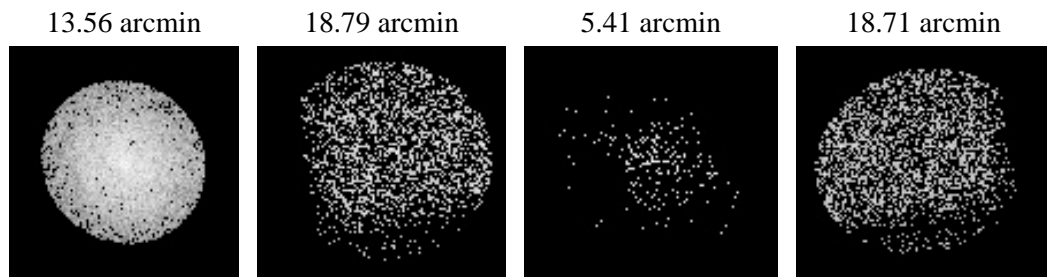
2.5.2 Slot 1



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	9.75

A.2 Comments

Off-axis effective area measurements in chip S1.

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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.