

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 1082 - L2 Version 3

Chandra X-Ray Center

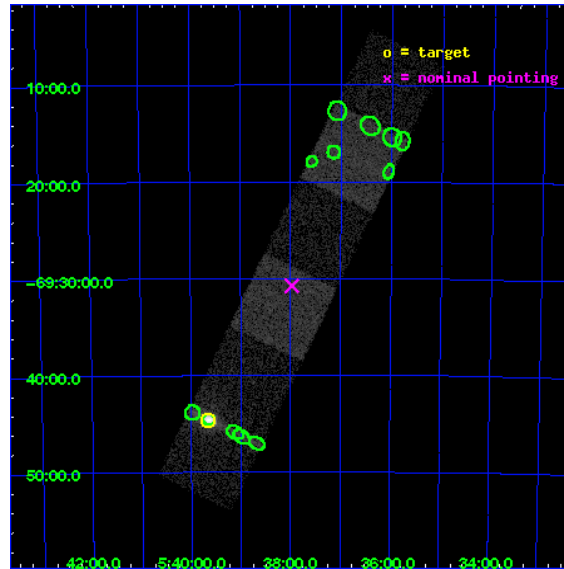
L2 Processing Date : Dec 16 2009

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1 Front

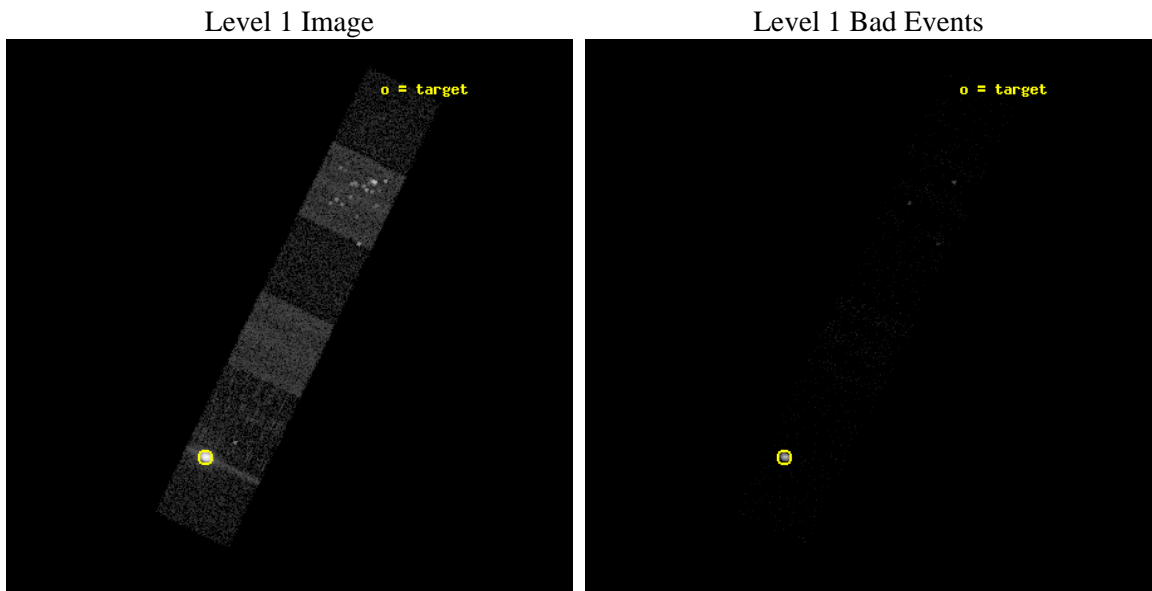
seq_num	480032	Sequence number
obs_id	1082	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	84.49339960982	Nominal RA
dec_nom	-69.512702246284	Nominal Dec
roll_nom	115.8339112653	Nominal Roll
revision	3	Processing version of data
ontime	1758.4075294659	Sum of GTIs [s]
livetime	1736.1415145419	Livetime [s]
ontime4	1758.489609465	Sum of GTIs [s]
ontime5	1758.5306494609	Sum of GTIs [s]
ontime6	1758.3664695397	Sum of GTIs [s]
ontime7	1758.5716695413	Sum of GTIs [s]
ontime8	1758.4485694617	Sum of GTIs [s]
ontime9	1758.4075294659	Sum of GTIs [s]
l2events	112692	Number of level 2 events



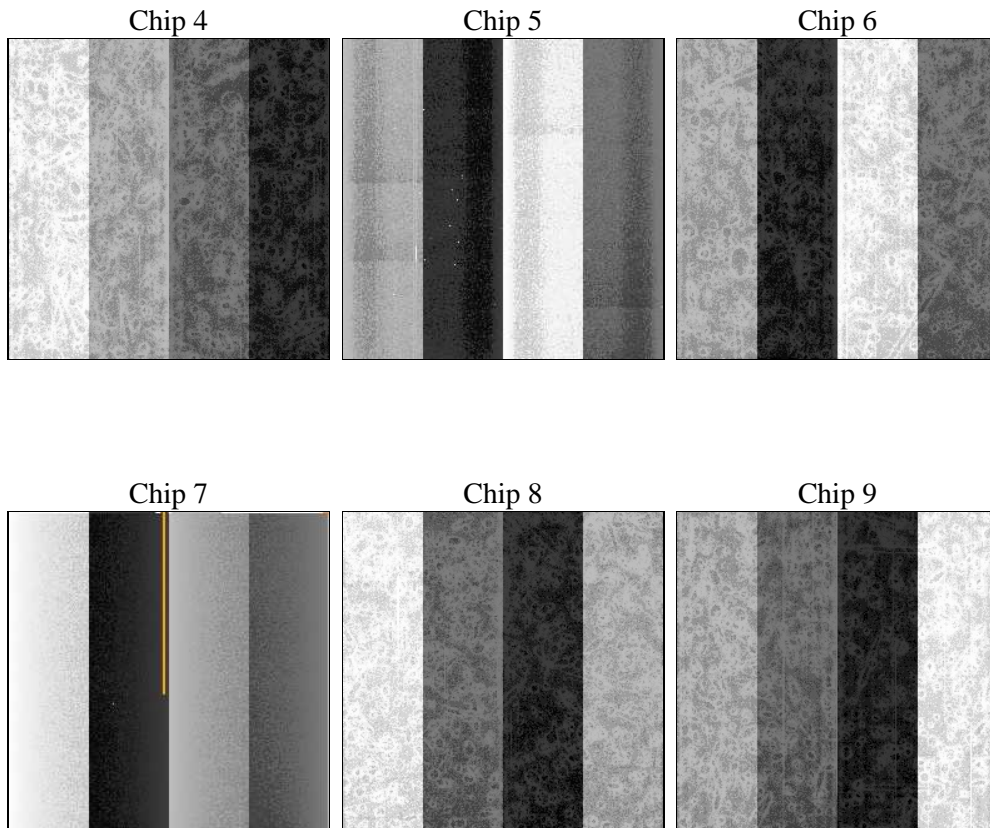
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	1758.4075294659	Sum of GTIs [s]
caldsver	4.1.4	 	ontime4	1758.489609465	Sum of GTIs [s]
date	2009-12-16T06:51:59	Date and time of file creation	ontime5	1758.5306494609	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	1758.3664695397	Sum of GTIs [s]
			ontime7	1758.5716695413	Sum of GTIs [s]
			ontime8	1758.4485694617	Sum of GTIs [s]
			ontime9	1758.4075294659	Sum of GTIs [s]
			l1events	134411	Number of level 1 events

2.1.4 Events

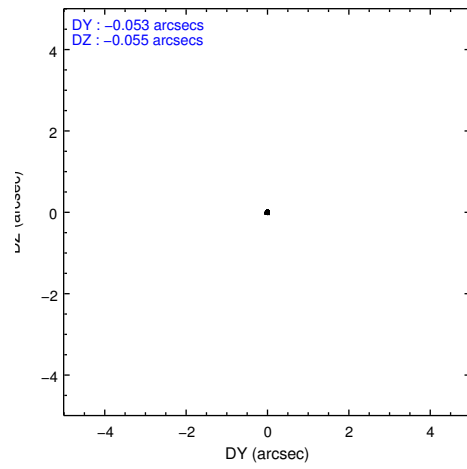
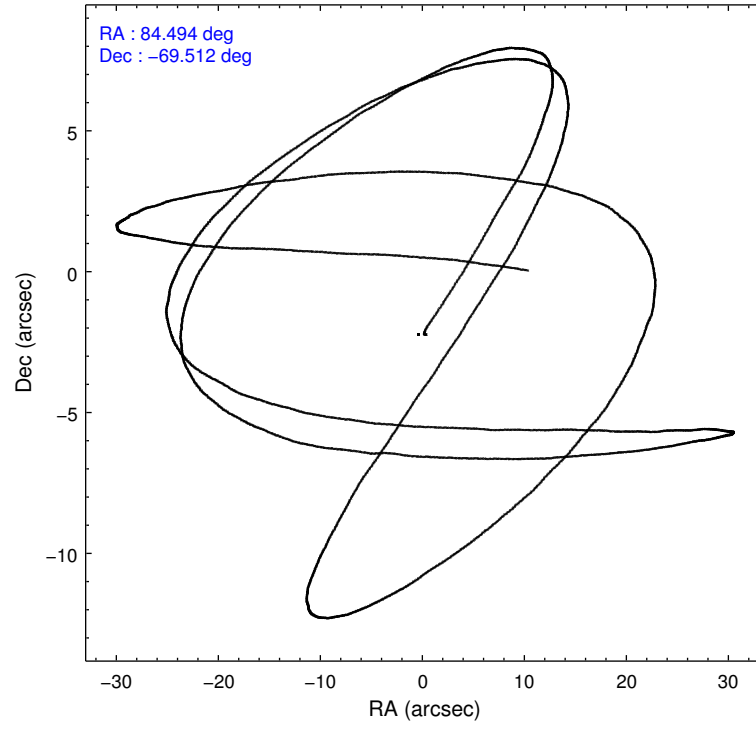
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	3815	21334	4295	13728	6391	84848
rejected events	830	1466	991	2008	1073	5681
rejected %	21%	6%	23%	14%	16%	6%

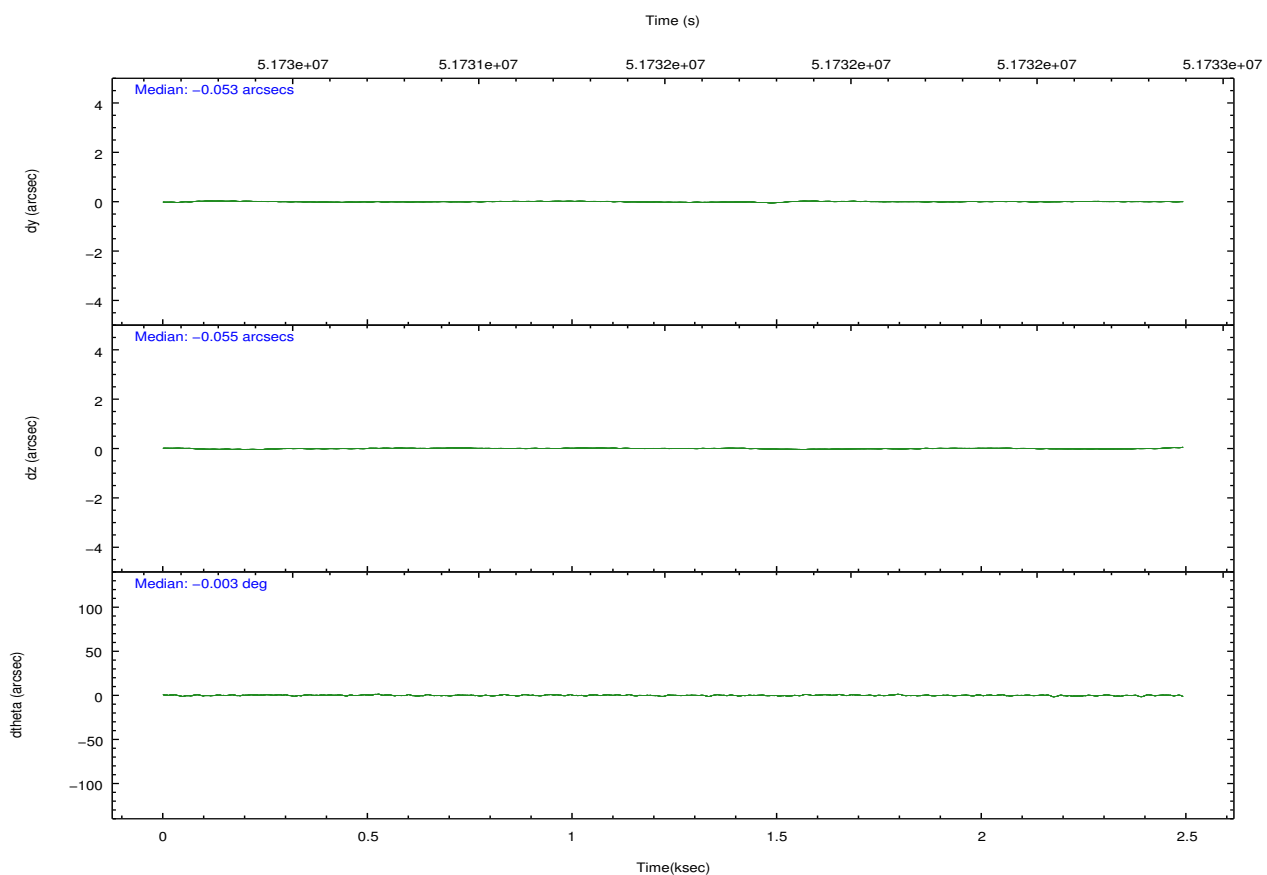
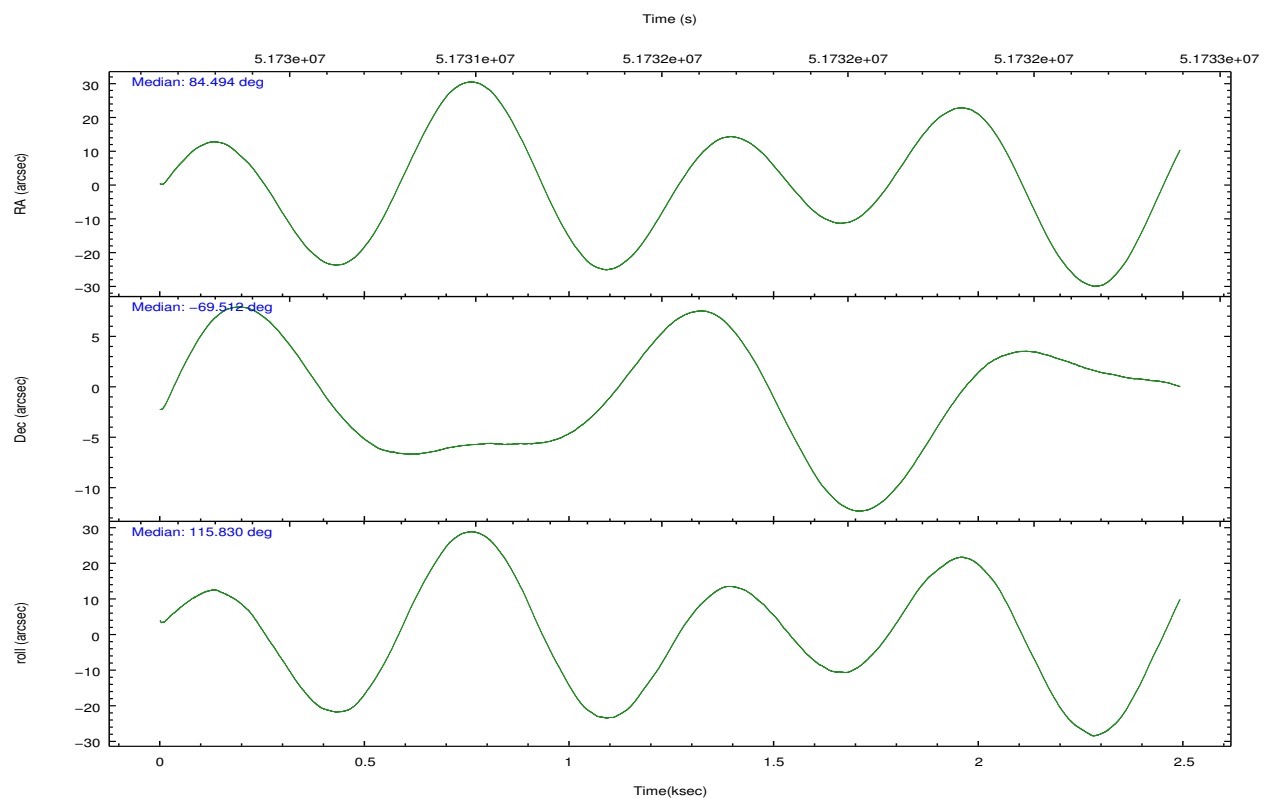
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	980	6006	1071	754	1890	57165
	25%	28%	24%	5%	29%	67%
grade 1 events	11	105	9	9	19	2920
	0%	0%	0%	0%	0%	3%
grade 2 events	673	3544	705	1532	1222	11831
	17%	16%	16%	11%	19%	13%
grade 3 events	223	833	218	1035	361	3316
	5%	3%	5%	7%	5%	3%
grade 4 events	221	757	197	771	349	3307
	5%	3%	4%	5%	5%	3%
grade 5 events	811	1319	974	1966	1050	2600
	21%	6%	22%	14%	16%	3%
grade 6 events	896	8770	1121	7661	1500	3709
	23%	41%	26%	55%	23%	4%
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-456789	ACIS-456789	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	84.558398	84.49339960982003	Subarray requested	NONE	NONE
Pointing Dec	-69.528843	-69.5127022462836	Alternating exposures requested	N	N
Pointing Roll	115.738173	115.8339112653045	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.865731118321573			
SIM defocus (mm)	0	-0.1814636570216768			
SIM translation stage pos (mm)	-190.132523	-190.1199515274594			
SIM translation stage offset (mm)	0	-0.012571055548392			
Observation start time	51730769.184000	51730096.258523			
Observation start date	1999-08-22T17:38:25	1999-08-22T17:28:16			
Observation end time	51732769.184000	51732895.533624			
Observation end date	1999-08-22T18:11:45	1999-08-22T18:14:55			
Read mode	TIMED	TIMED			

2.3 Aspect



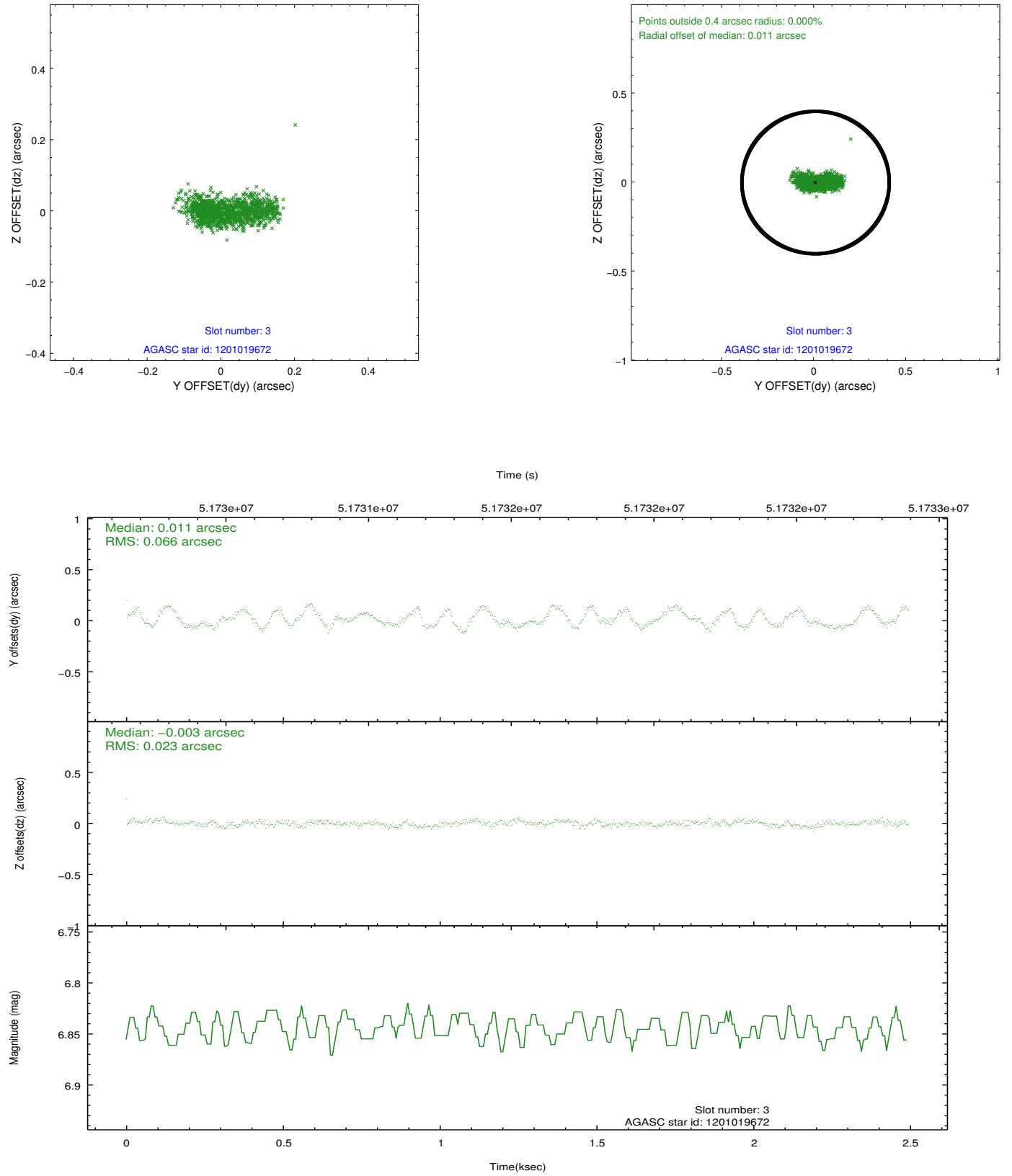


Slot Statistics

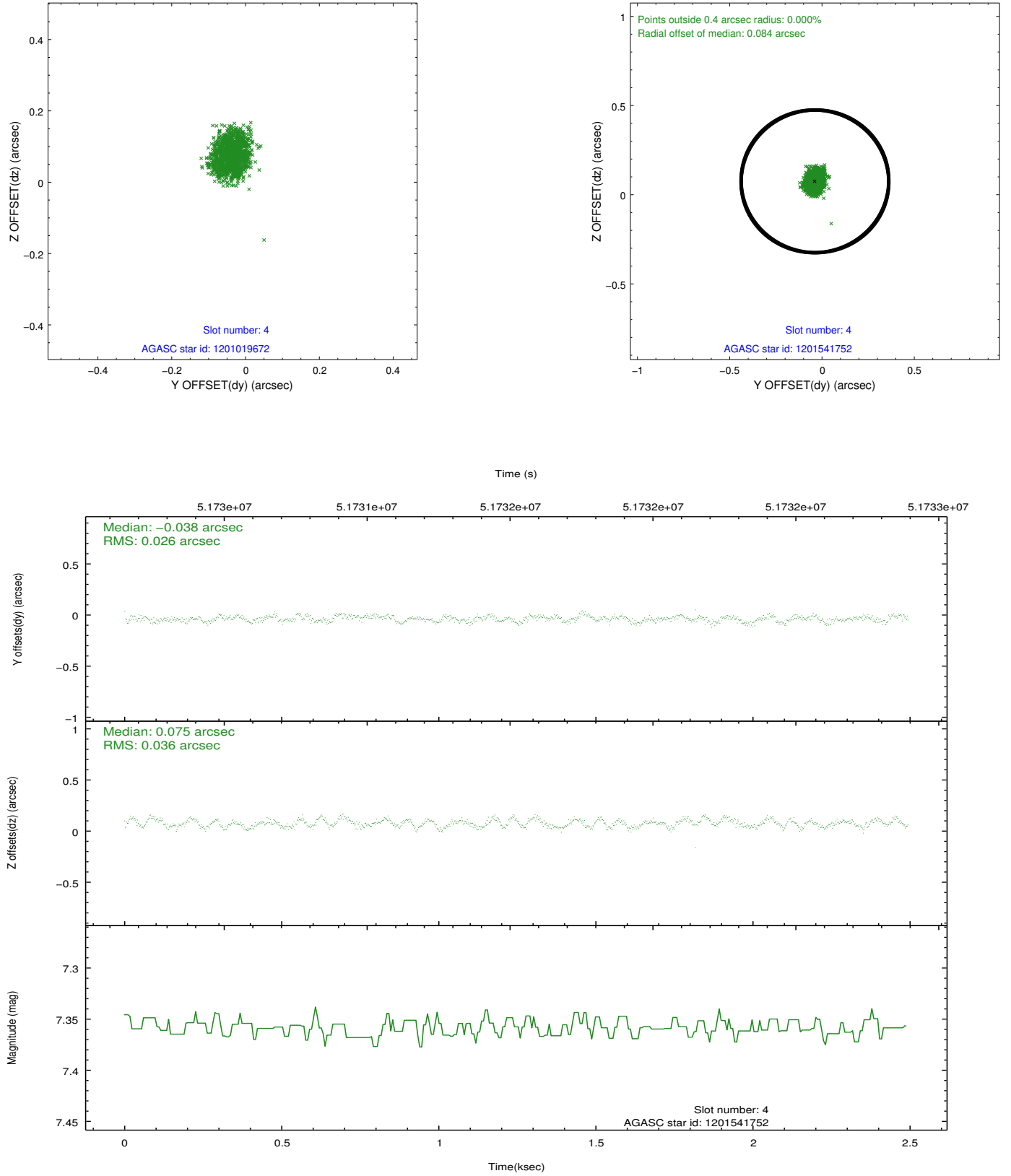
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-4	7.22	1217	0.129	-0.055	0.006	0.009	0.000000	0.000000	2160.94	187.23
1	FID	ACIS-S-5	7.25	1216	-0.145	-0.041	0.005	0.009	0.000000	0.000000	-1803.88	180.94
2	FID	ACIS-S-6	7.35	1216	-0.013	0.110	0.007	0.011	0.000000	0.000000	407.79	824.77
3	GUIDE	1201019672	6.84	1216	0.011	-0.003	0.076	0.127	85.312192	-68.770187	2027.44	-2067.82
4	GUIDE	1201541752	7.36	1217	-0.038	0.075	0.048	0.074	85.373891	-70.033762	-2077.95	-111.91
5	GUIDE	1201407840	7.97	1217	-0.044	-0.109	0.058	0.090	83.696303	-70.172201	-1638.68	1957.59
6	GUIDE	1200886544	9.58	1217	0.046	-0.007	0.087	0.135	82.995430	-69.160893	2037.09	1241.21
7	GUIDE	1201540776	9.61	1216	0.017	0.046	0.079	0.127	85.107945	-69.858480	-1366.71	-95.40

2.4 Star Slots

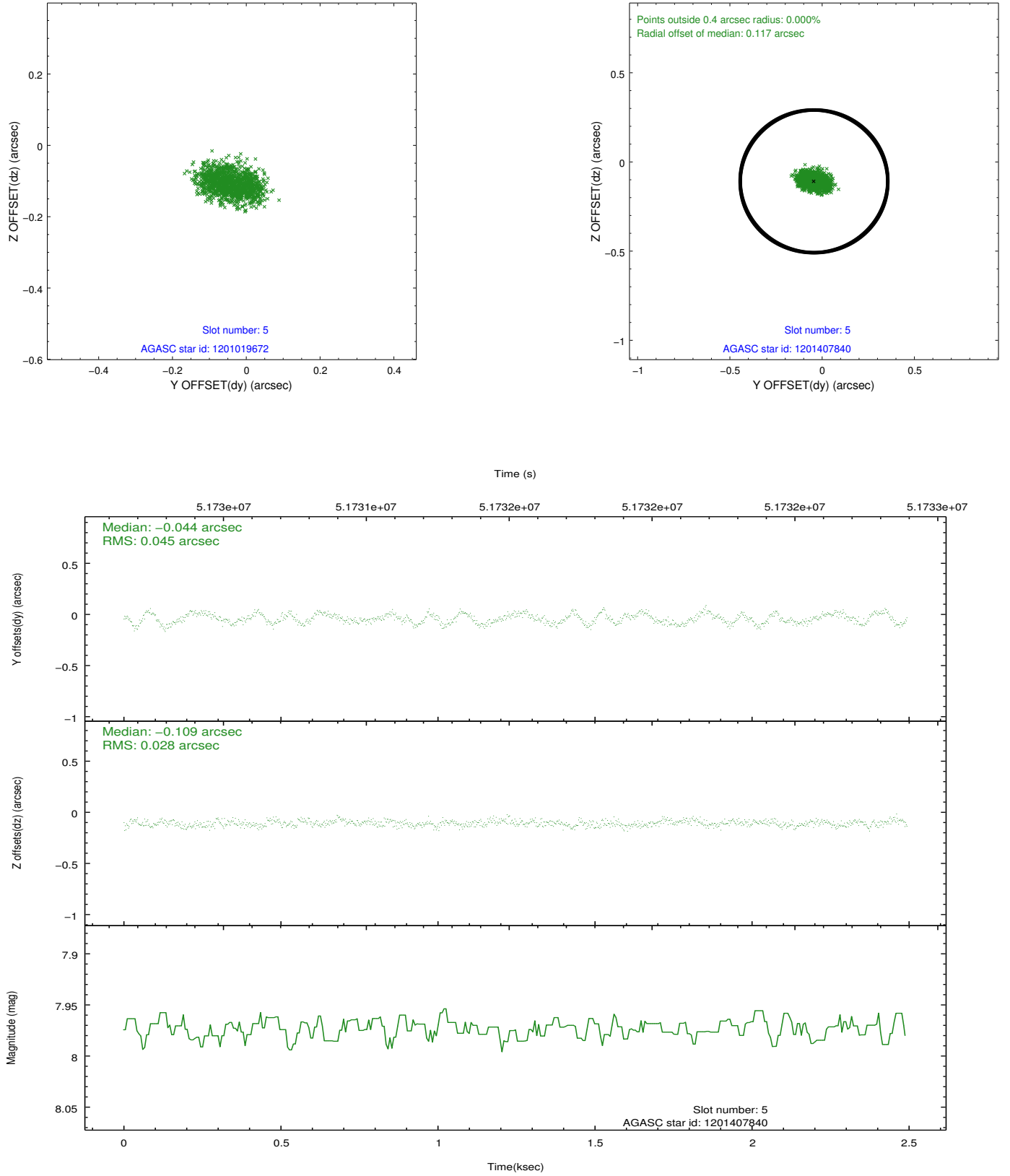
2.4.1 Slot 3



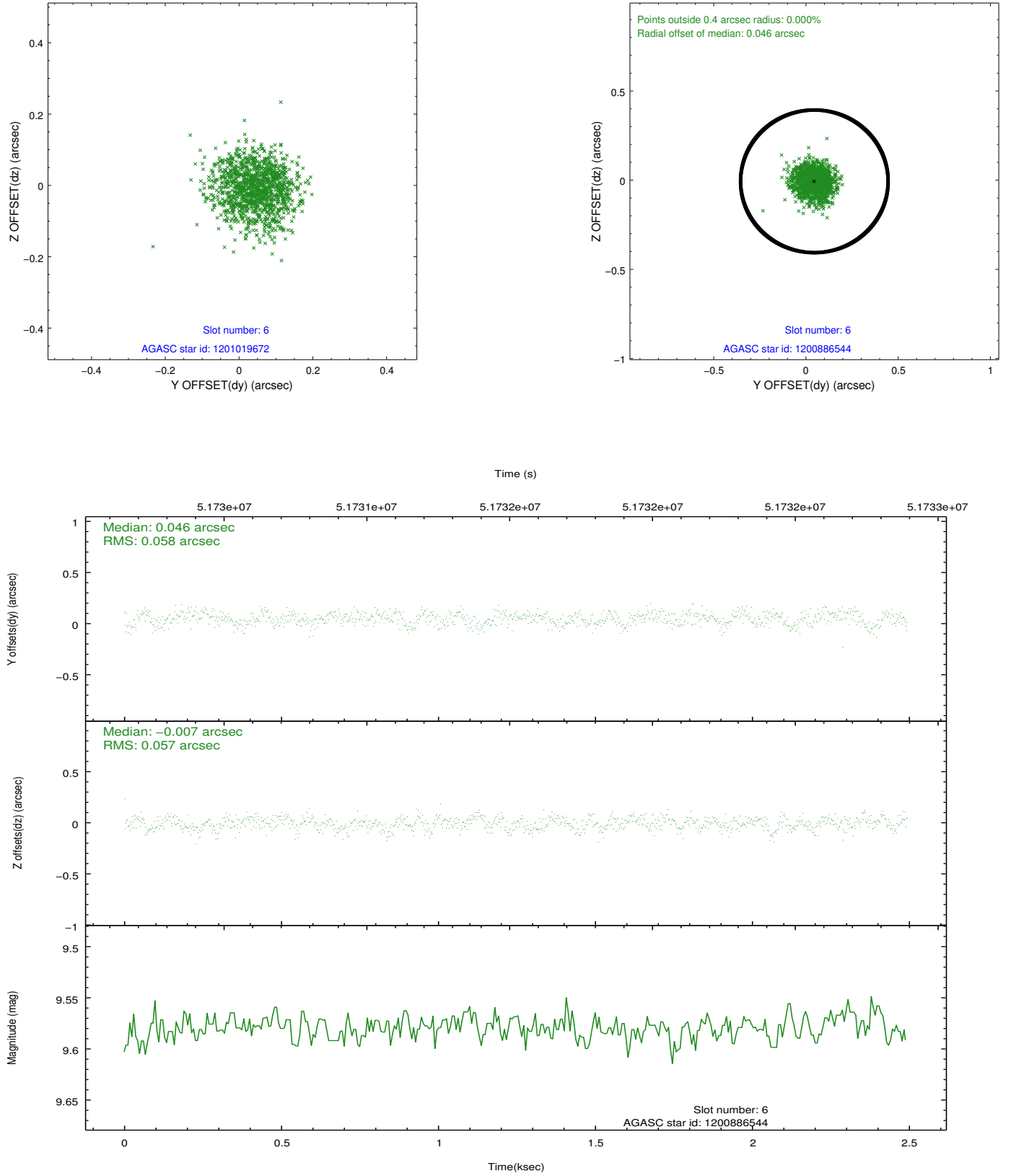
2.4.2 Slot 4



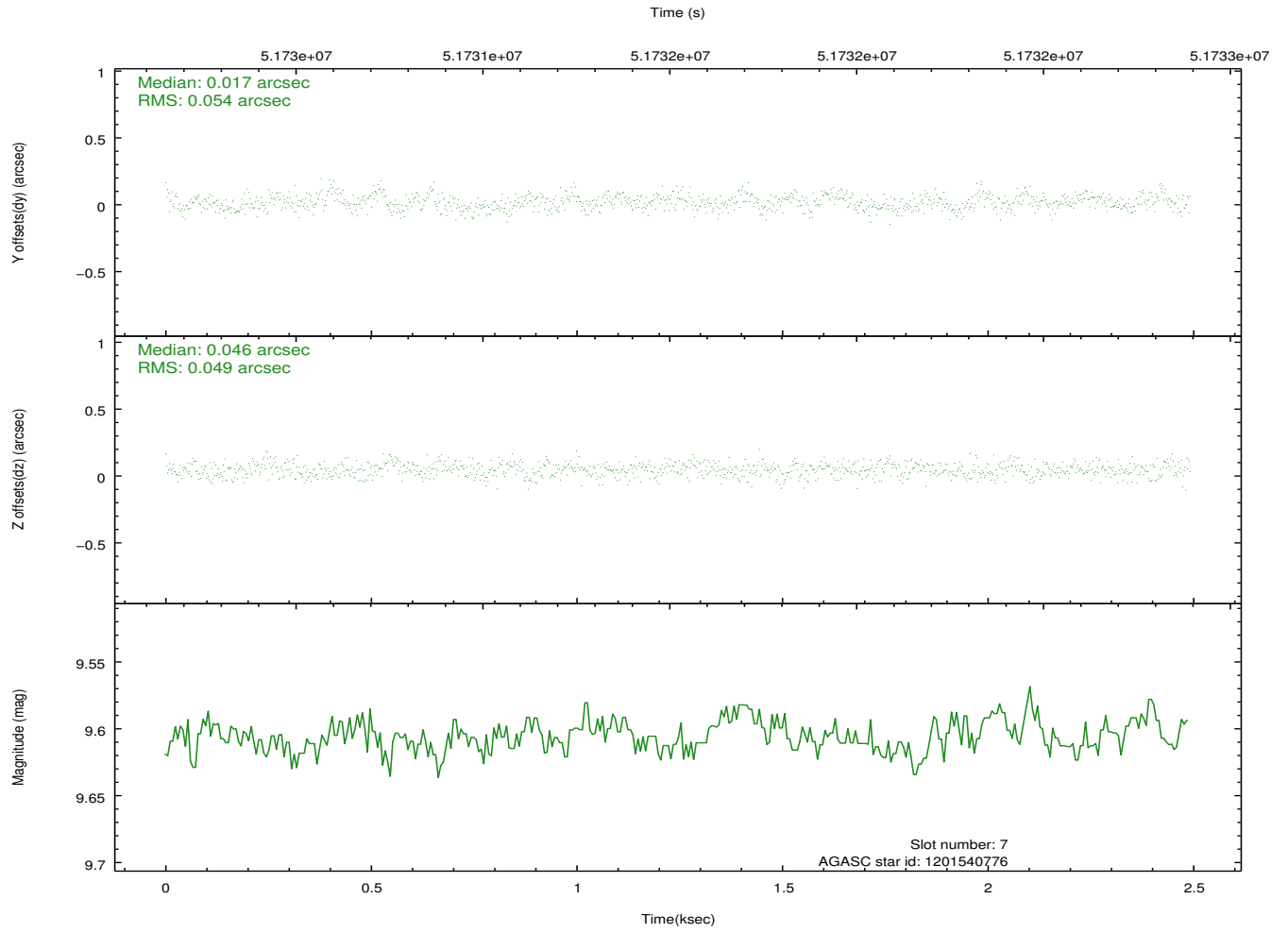
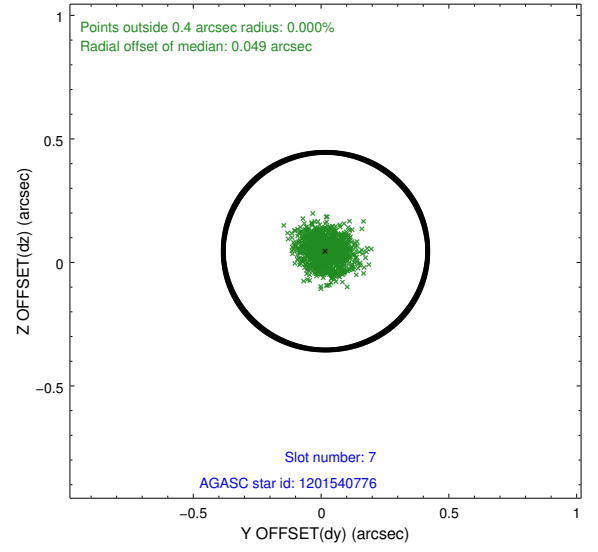
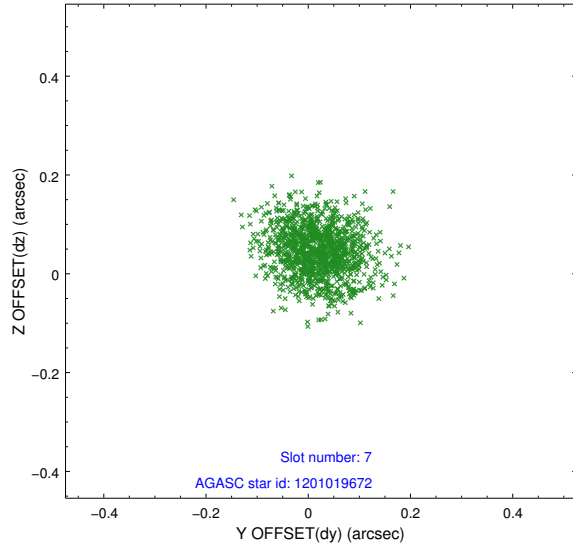
2.4.3 Slot 5



2.4.4 Slot 6

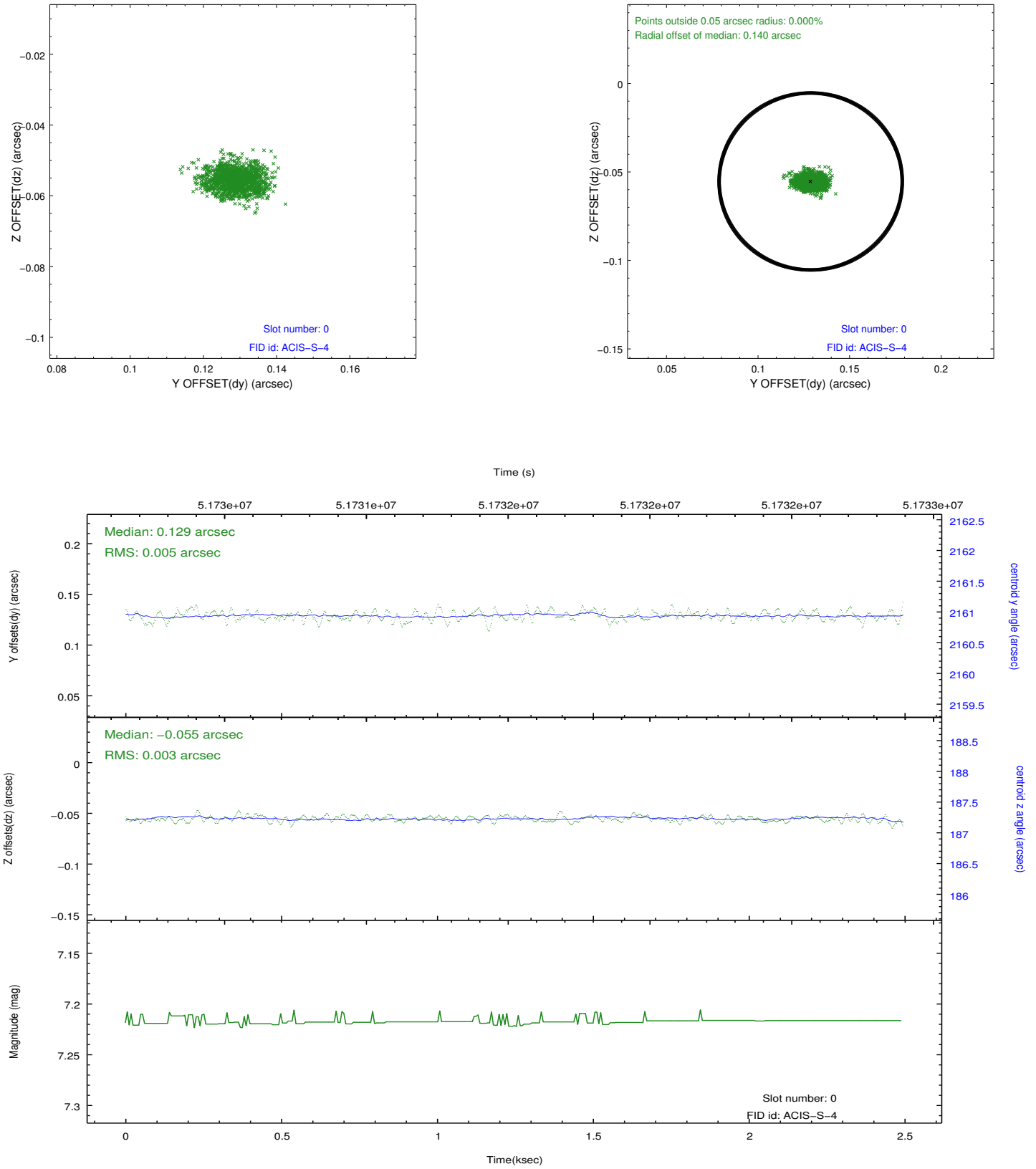


2.4.5 Slot 7

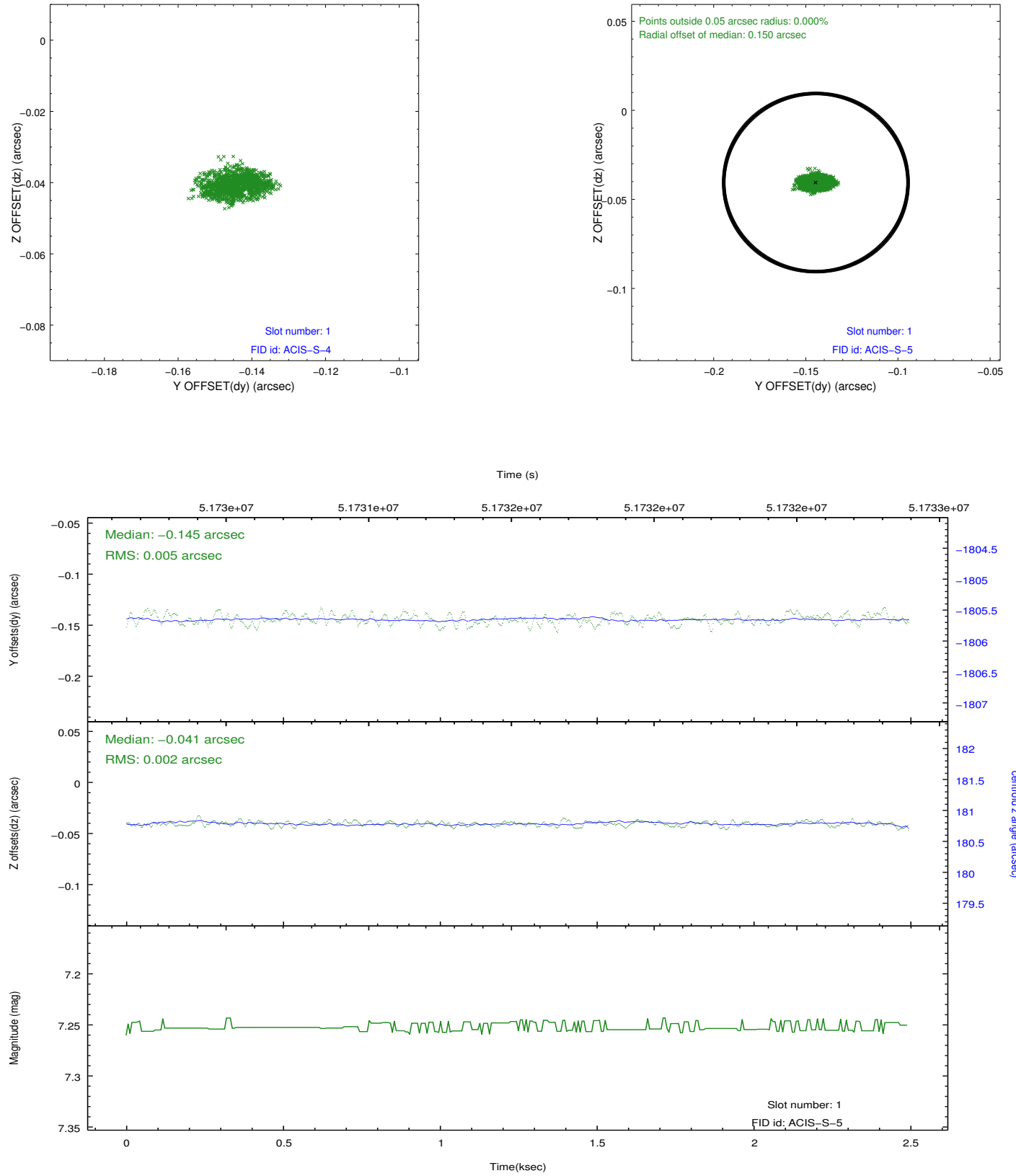


2.5 FID Slots

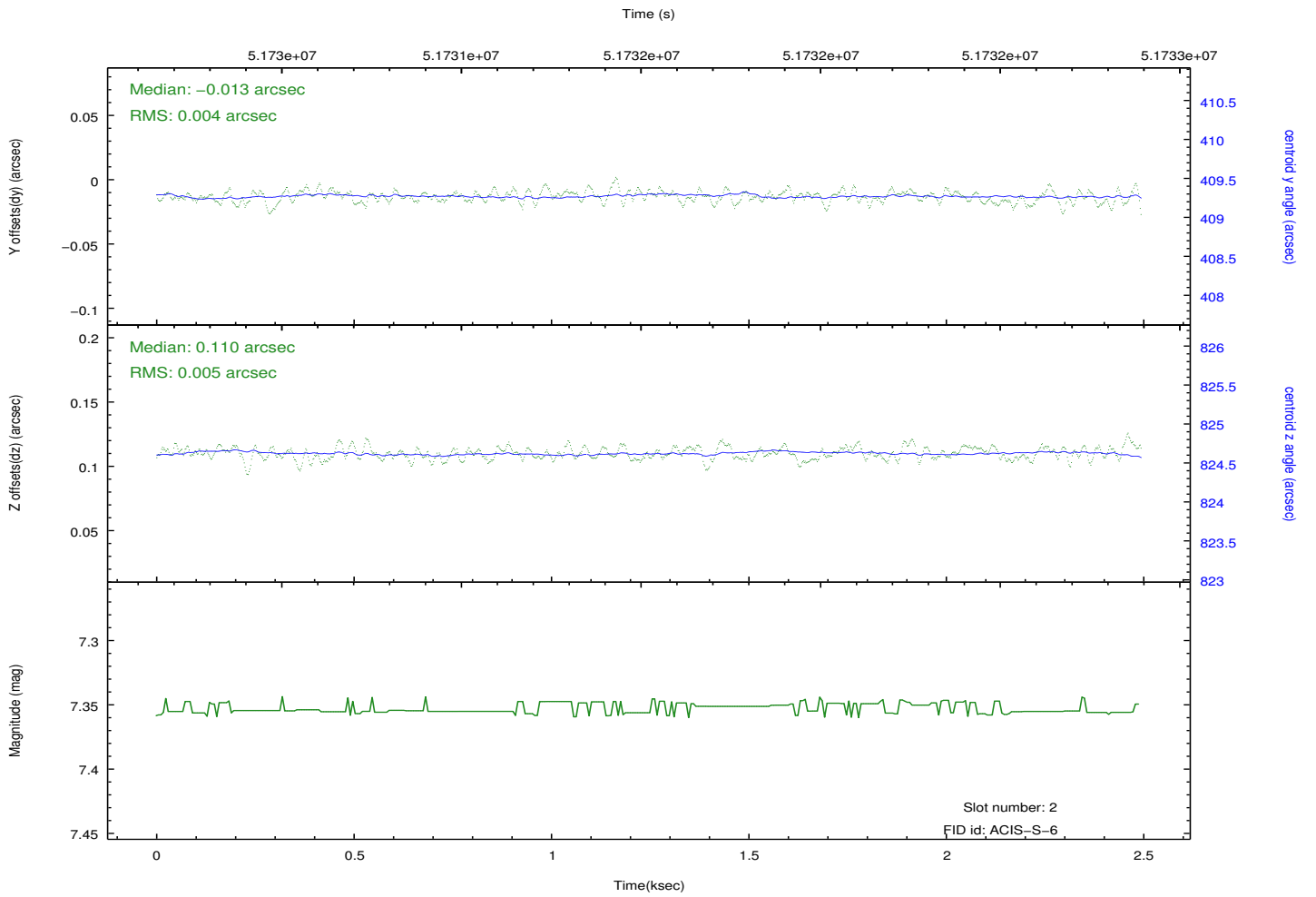
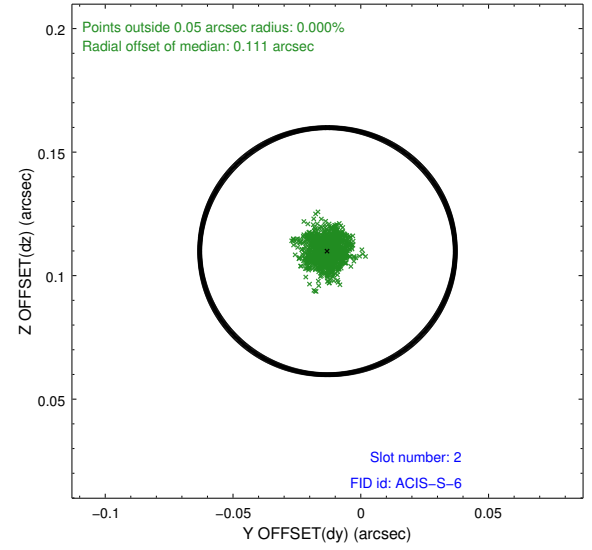
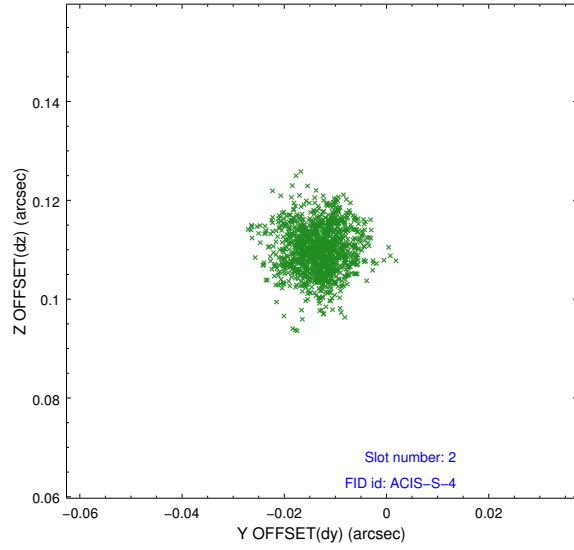
2.5.1 Slot 0



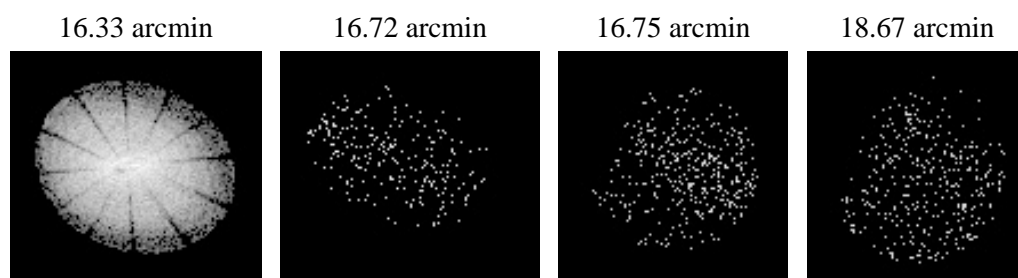
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.76

A.2 Comments

Target is very off-axis on S5.

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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.