

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 1070 - L2 Version 3

Chandra X-Ray Center

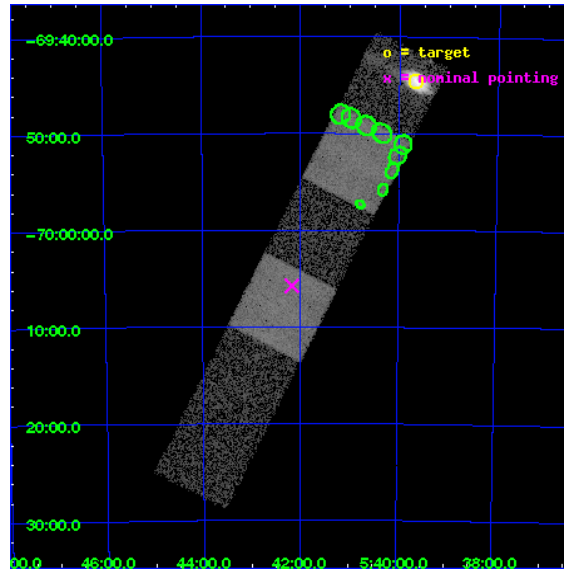
L2 Processing Date : Dec 16 2009

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1 Front

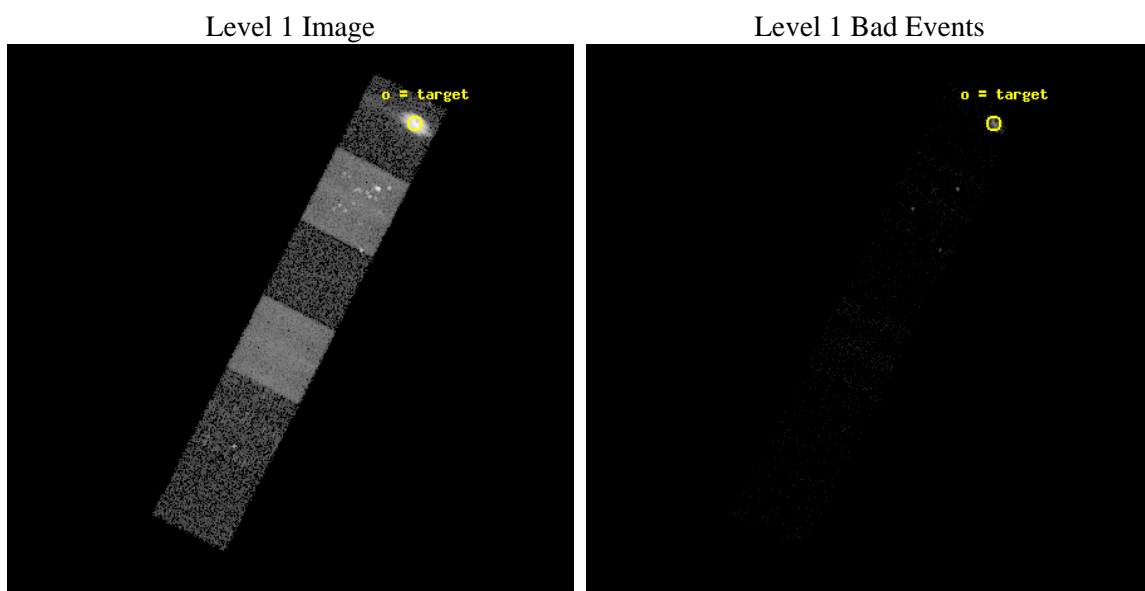
seq_num	480020	Sequence number
obs_id	1070	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	85.542298180257	Nominal RA
dec_nom	-70.096068173168	Nominal Dec
roll_nom	116.96449530342	Nominal Roll
revision	3	Processing version of data
ontime	1758.4618396908	Sum of GTIs [s]
livetime	1736.195137058	Livetime [s]
ontime4	1758.4618396908	Sum of GTIs [s]
ontime5	1758.5028796867	Sum of GTIs [s]
ontime6	1758.3386997655	Sum of GTIs [s]
ontime7	1758.5438997671	Sum of GTIs [s]
ontime8	1758.4207996875	Sum of GTIs [s]
ontime9	1758.3797397688	Sum of GTIs [s]
l2events	133048	Number of level 2 events



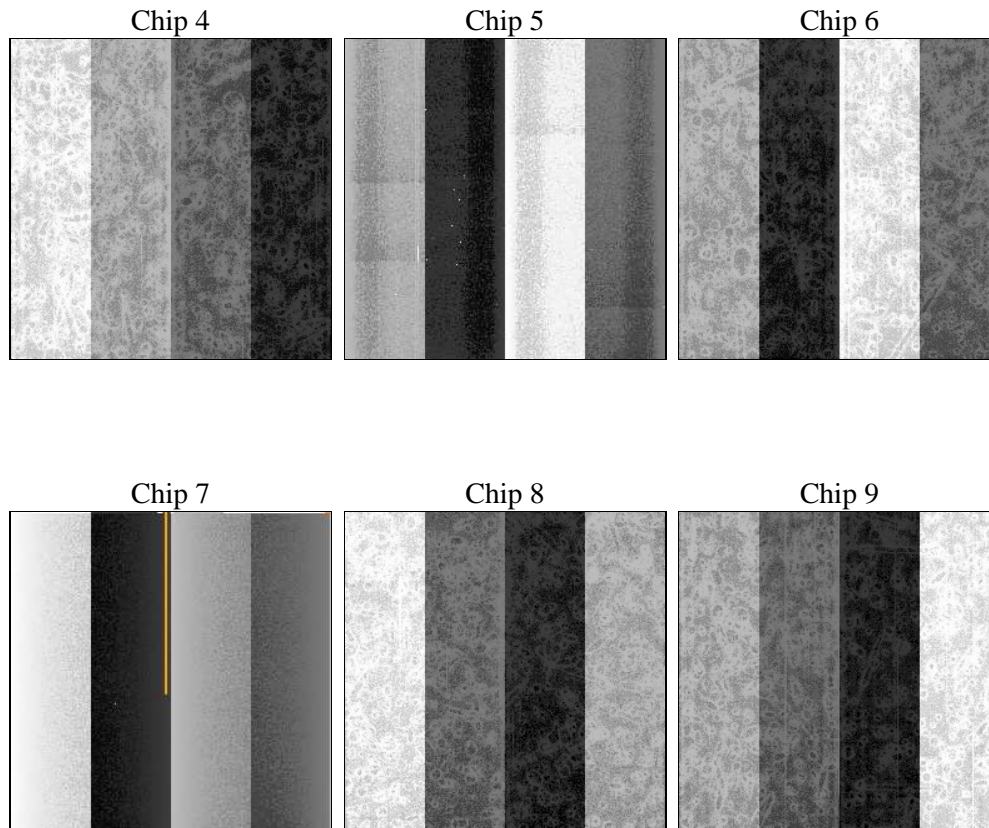
2 OBI

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	1758.4618396908	Sum of GTIs [s]
caldbver	4.1.4	 	ontime4	1758.4618396908	Sum of GTIs [s]
date	2009-12-16T05:49:56	Date and time of file creation	ontime5	1758.5028796867	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	1758.3386997655	Sum of GTIs [s]
			ontime7	1758.5438997671	Sum of GTIs [s]
			ontime8	1758.4207996875	Sum of GTIs [s]
			ontime9	1758.3797397688	Sum of GTIs [s]
			l1events	152994	Number of level 1 events

2.1.4 Events

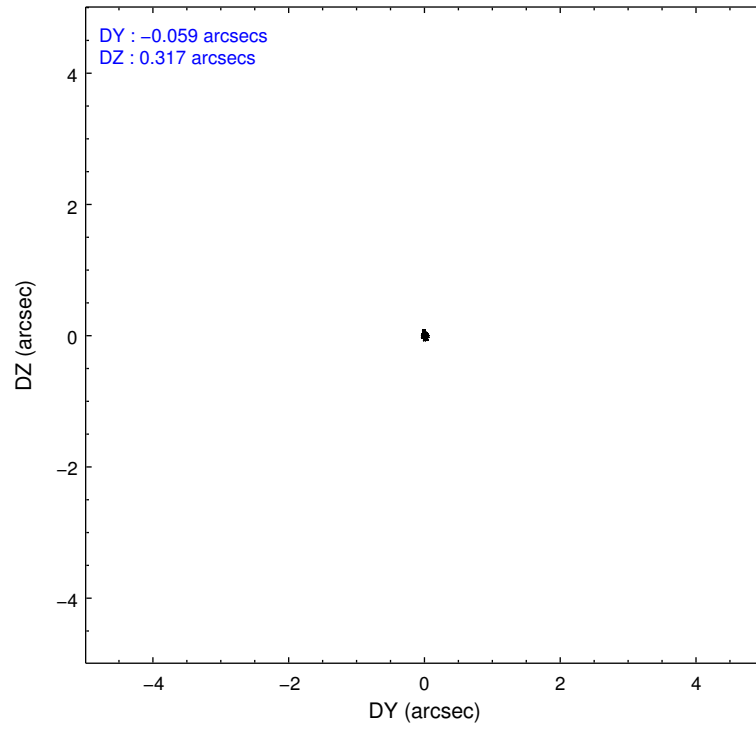
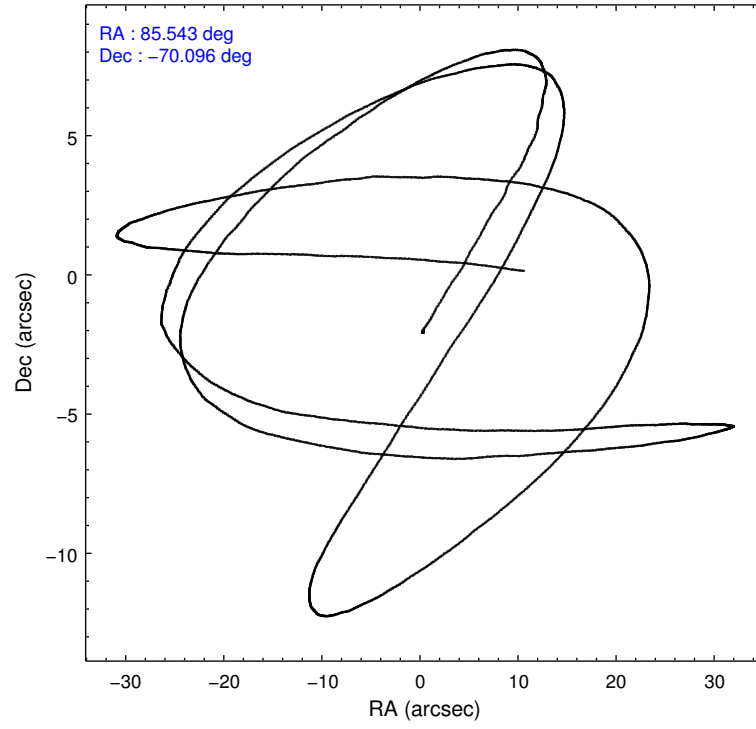
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	68289	36271	5426	31367	6824	4817
rejected events	2046	1786	1071	2211	1129	1079
rejected %	2%	4%	19%	7%	16%	22%

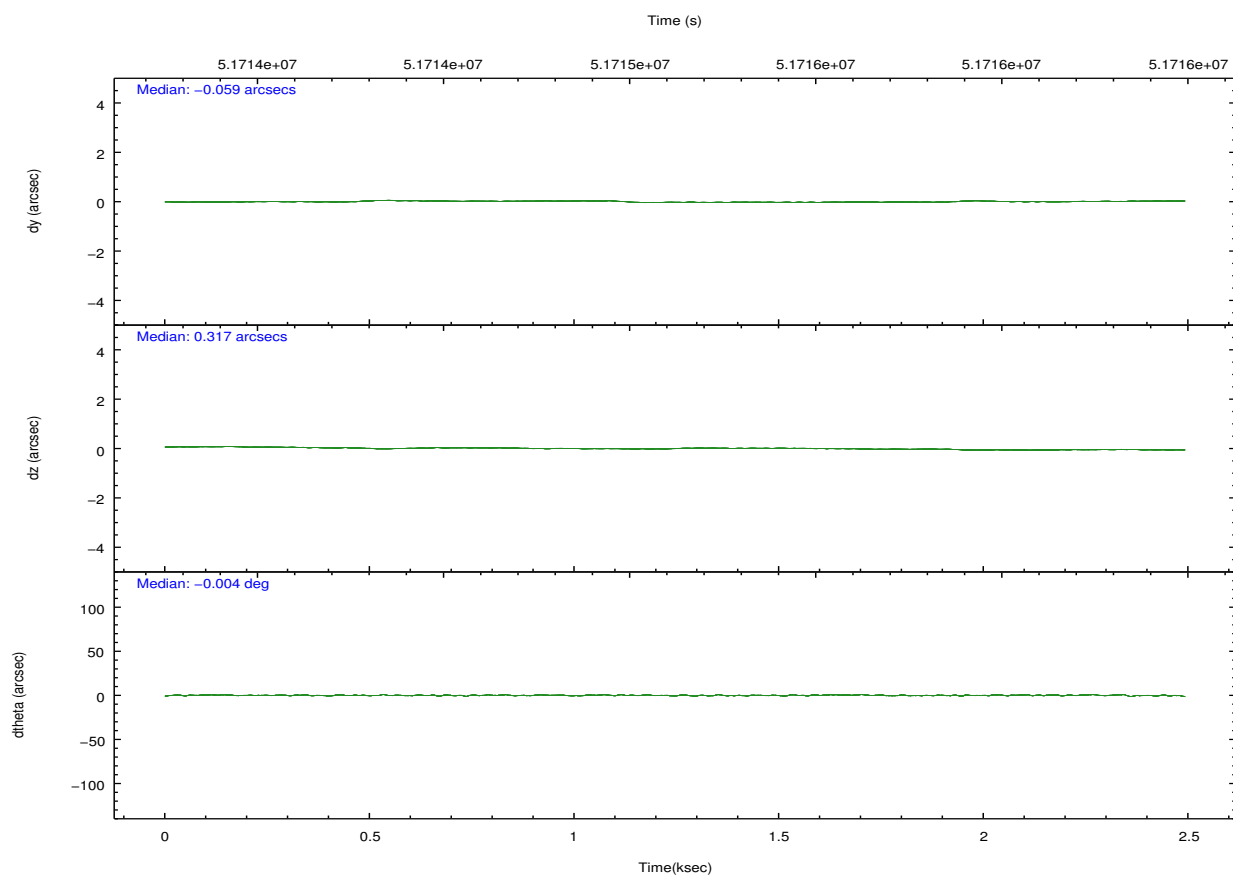
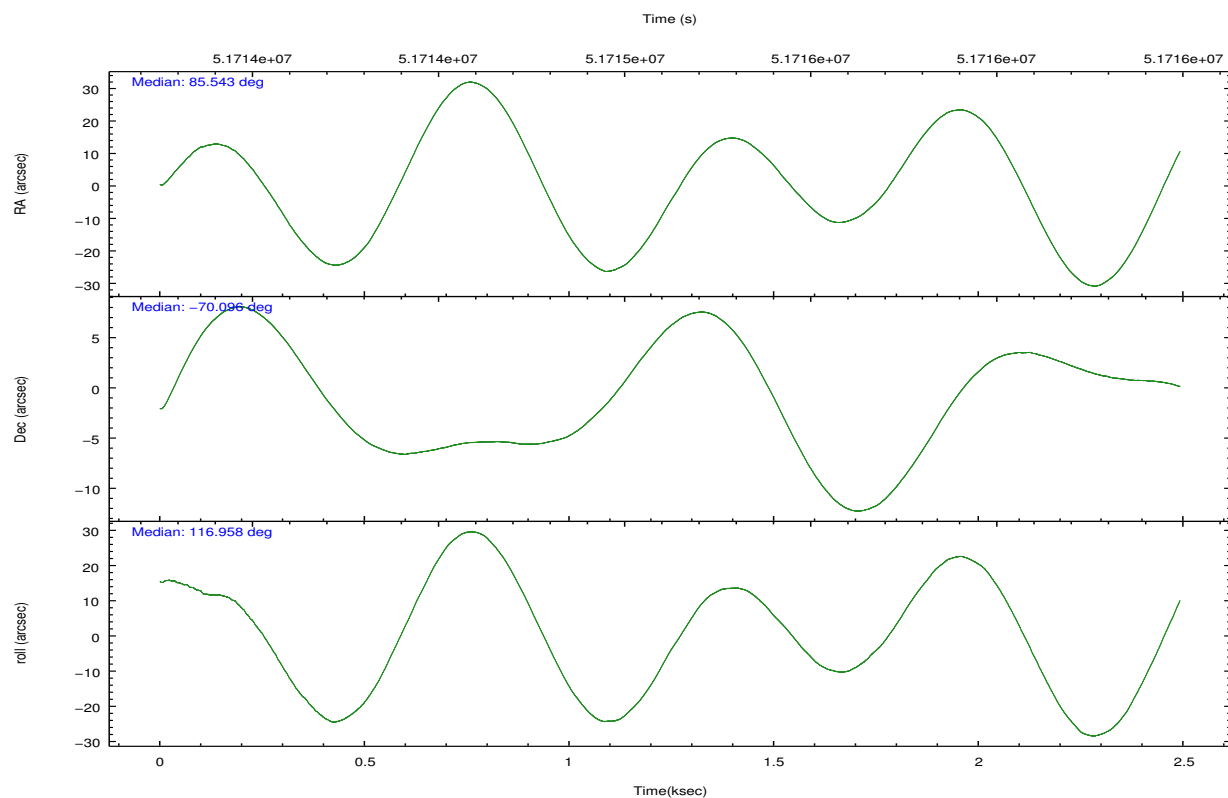
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	50763	8004	1851	2595	2145	1345
	74%	22%	34%	8%	31%	27%
grade 1 events	677	134	10	12	19	14
	0%	0%	0%	0%	0%	0%
grade 2 events	7932	5661	904	4066	1309	775
	11%	15%	16%	12%	19%	16%
grade 3 events	2540	2351	232	2206	373	240
	3%	6%	4%	7%	5%	4%
grade 4 events	2488	2107	209	2011	337	216
	3%	5%	3%	6%	4%	4%
grade 5 events	1257	1568	1050	2131	1094	1055
	1%	4%	19%	6%	16%	21%
grade 6 events	2632	16446	1170	18346	1547	1172
	3%	45%	21%	58%	22%	24%
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	85.610030	85.54229818025676	Subarray requested	NONE	NONE
Pointing Dec	-70.111759	-70.09606817316768	Alternating exposures requested	N	N
Pointing Roll	116.871545	116.9644953034191	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	51714369.184000	51713696.257933			
Observation start date	1999-08-22T13:05:05	1999-08-22T12:54:56			
Observation end time	51716369.184000	51716495.533034			
Observation end date	1999-08-22T13:38:25	1999-08-22T13:41:35			
Read mode	TIMED	TIMED			

2.3 Aspect



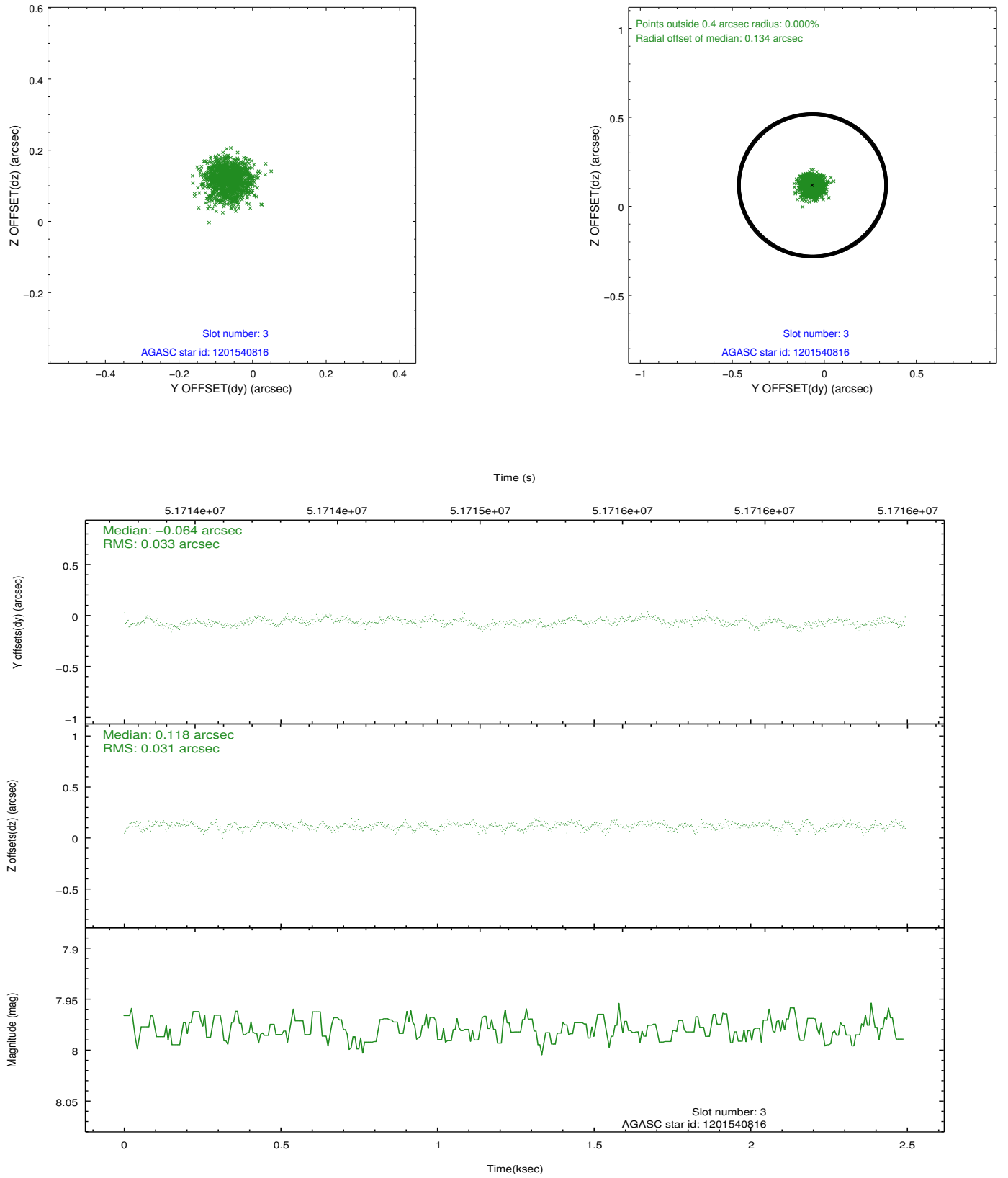


Slot Statistics

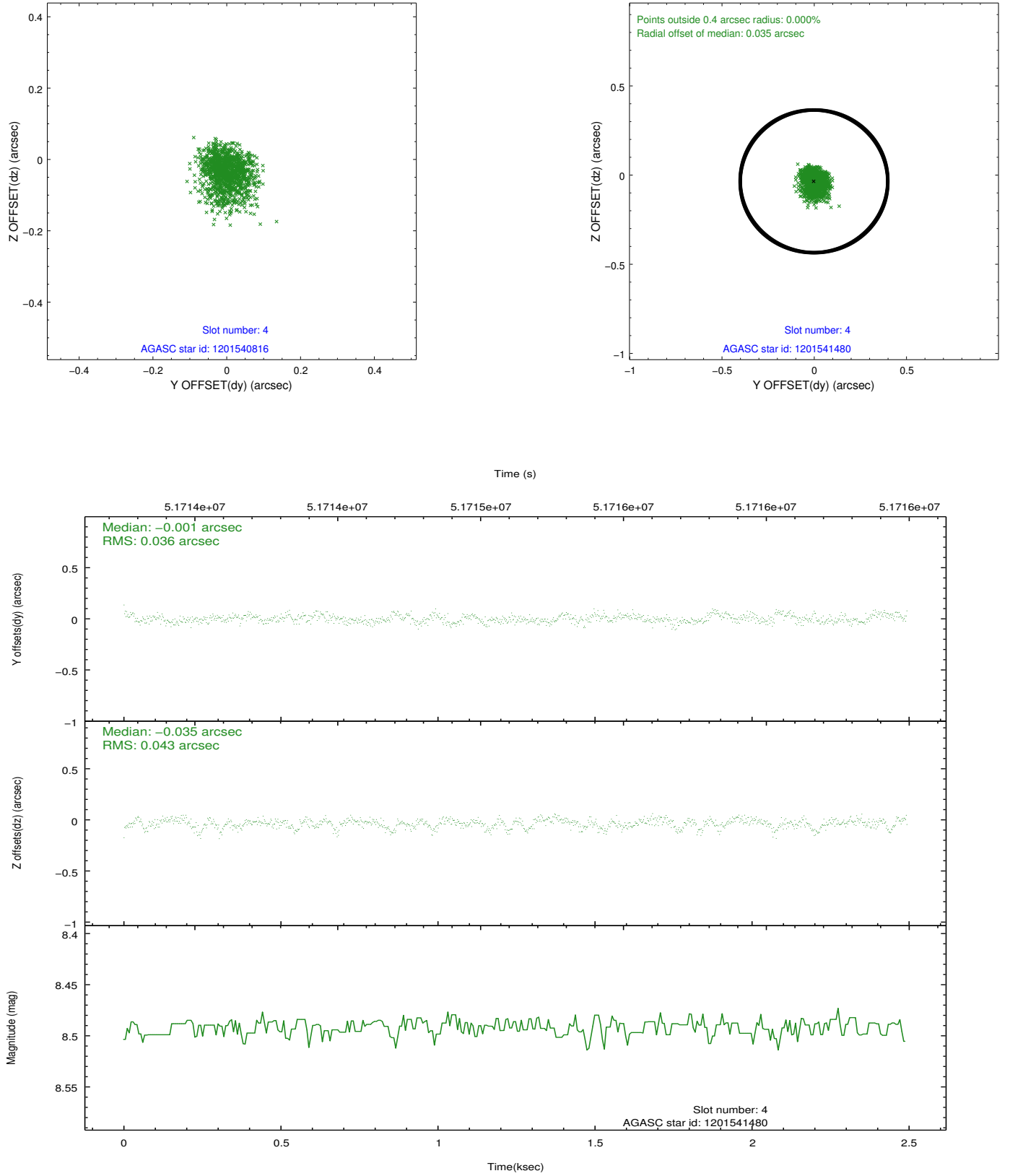
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.20	1217	0.001	0.066	0.007	0.011	0.000000	0.000000	943.46	-1717.27
1	FID	ACIS-S-4	7.22	1217	0.119	-0.042	0.006	0.011	0.000000	0.000000	2161.70	185.46
2	FID	ACIS-S-5	7.25	1217	-0.147	-0.012	0.006	0.012	0.000000	0.000000	-1803.88	180.57
3	GUIDE	1201540816	7.98	1217	-0.064	0.118	0.048	0.076	86.998494	-69.749817	362.07	-2122.40
4	GUIDE	1201541480	8.49	1217	-0.001	-0.035	0.059	0.096	87.080483	-70.345903	-1576.26	-1198.73
5	GUIDE	1201542672	8.18	1217	0.078	0.033	0.045	0.072	84.492488	-69.957531	1104.86	984.46
6	GUIDE	1201407840	7.97	1217	-0.021	-0.057	0.076	0.135	83.696303	-70.172201	828.94	2200.60
7	GUIDE	1201539448	8.92	1216	0.023	-0.055	0.066	0.112	85.635707	-70.382152	-882.63	414.57

2.4 Star Slots

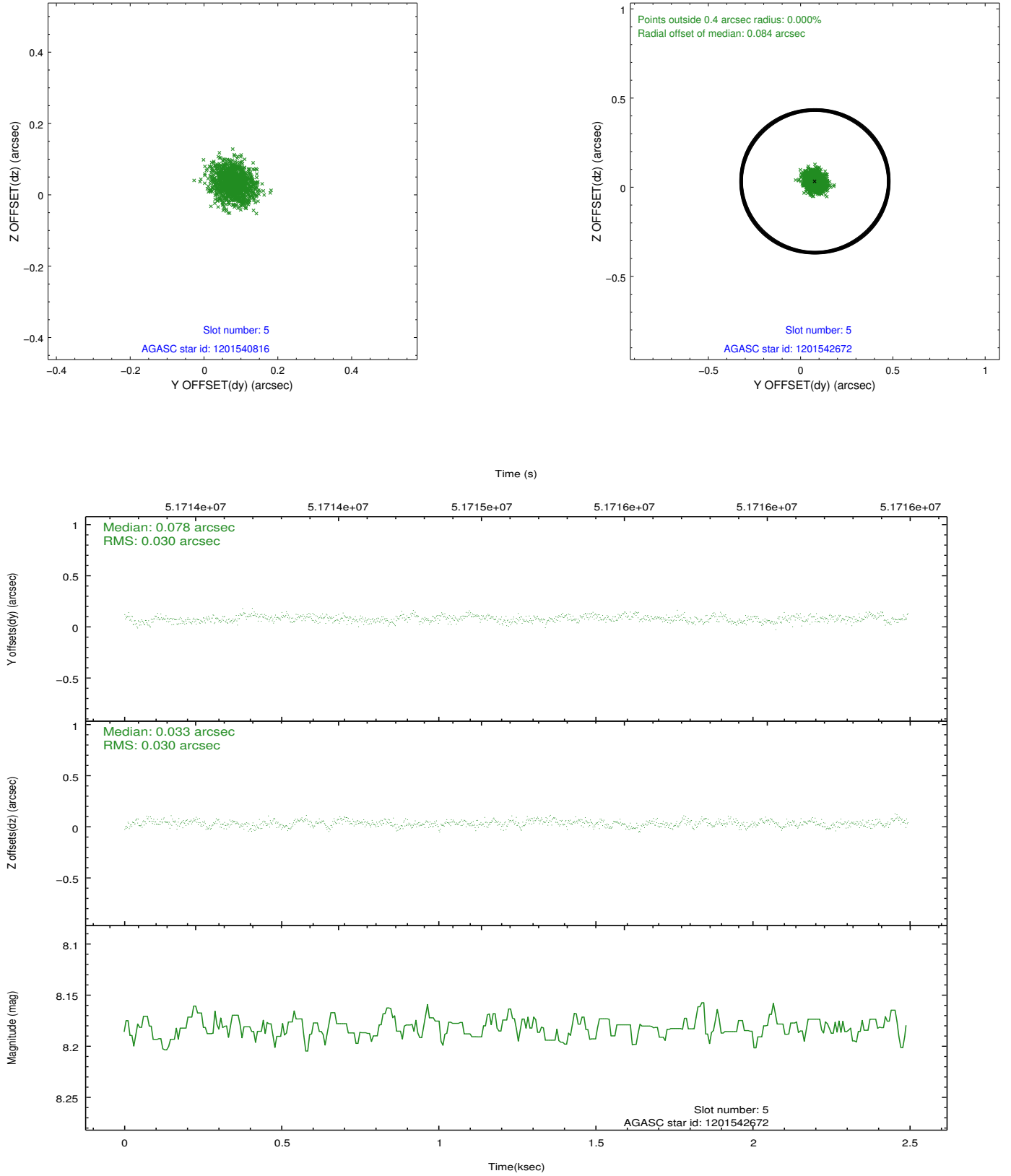
2.4.1 Slot 3



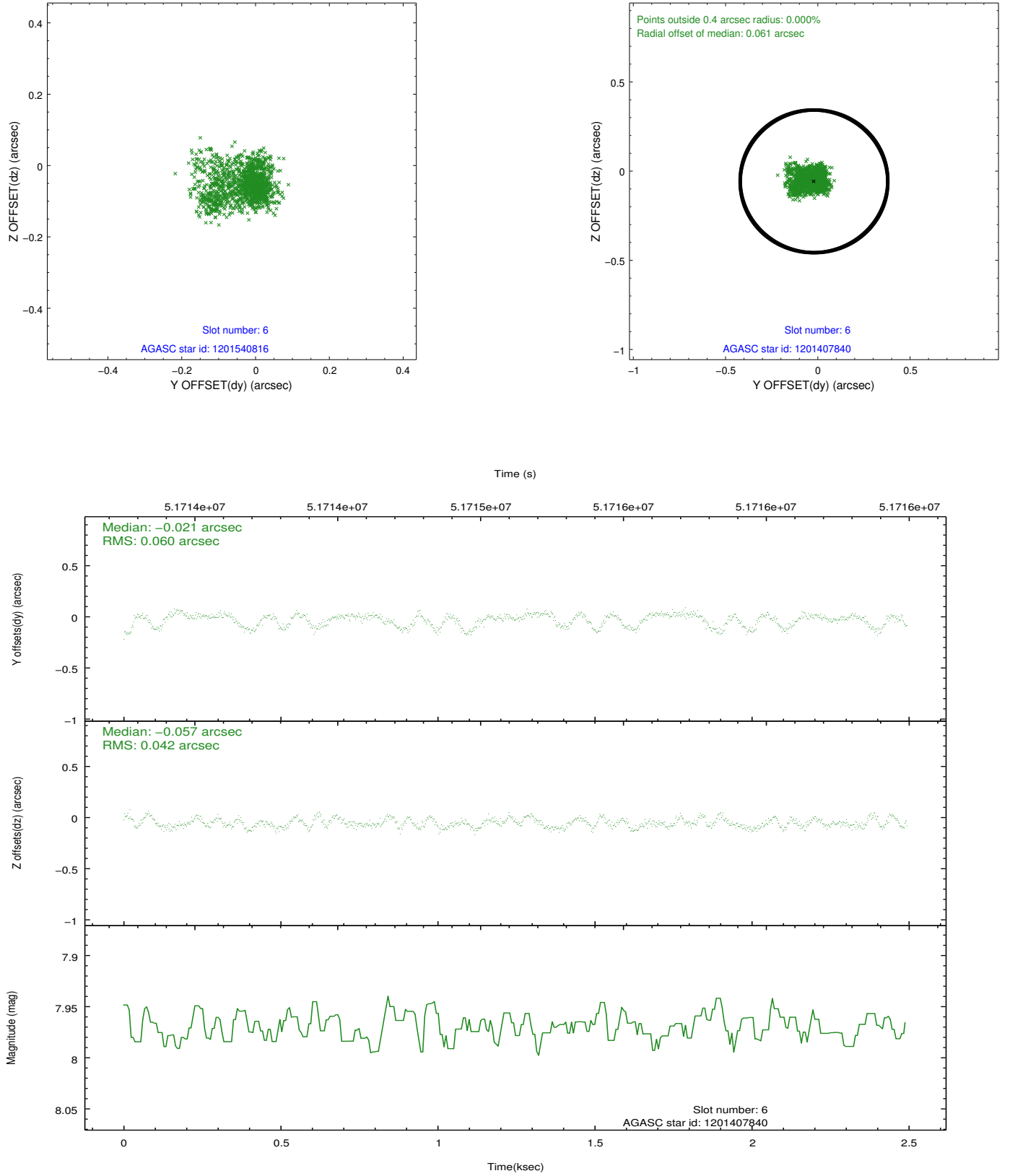
2.4.2 Slot 4



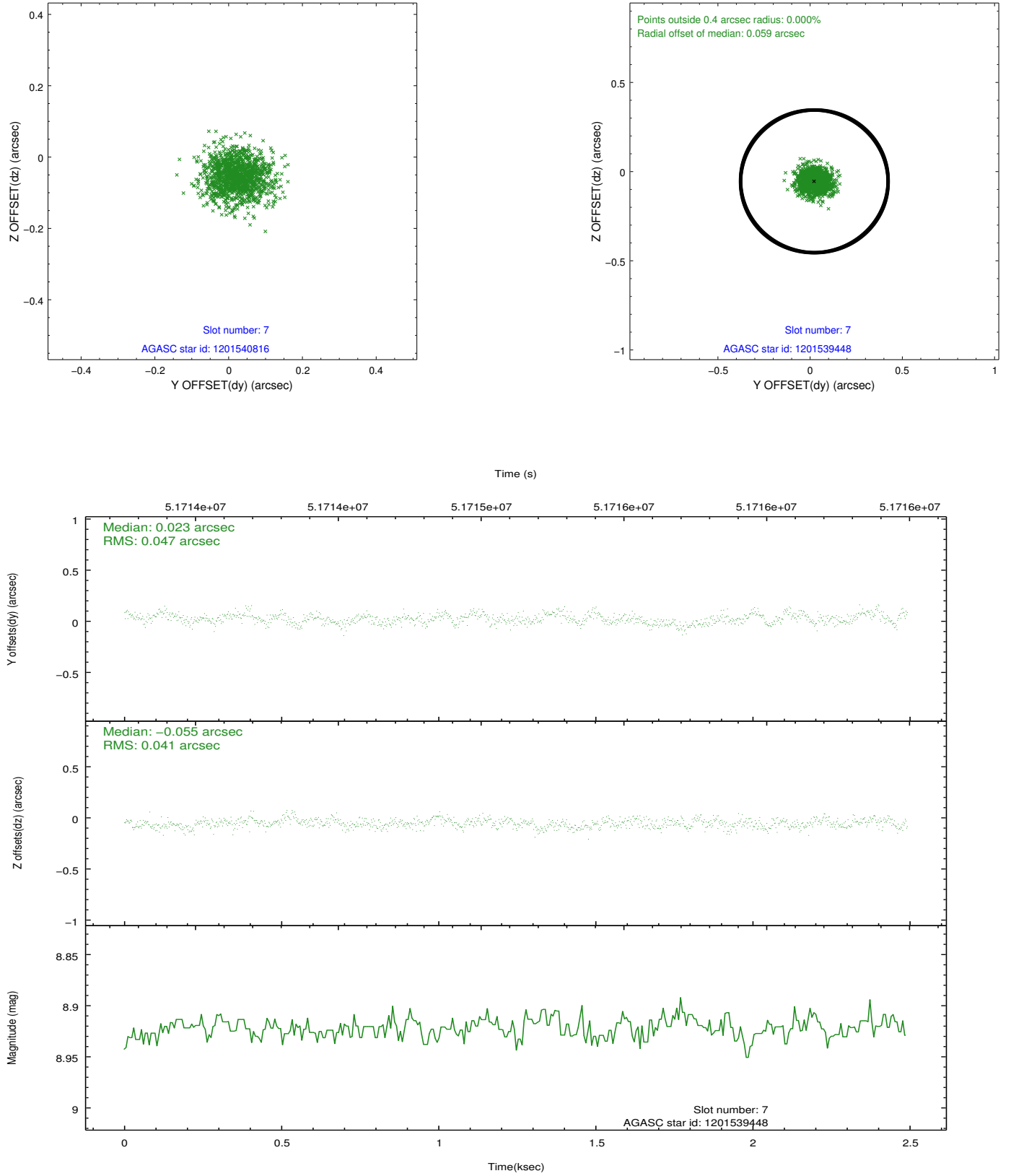
2.4.3 Slot 5



2.4.4 Slot 6

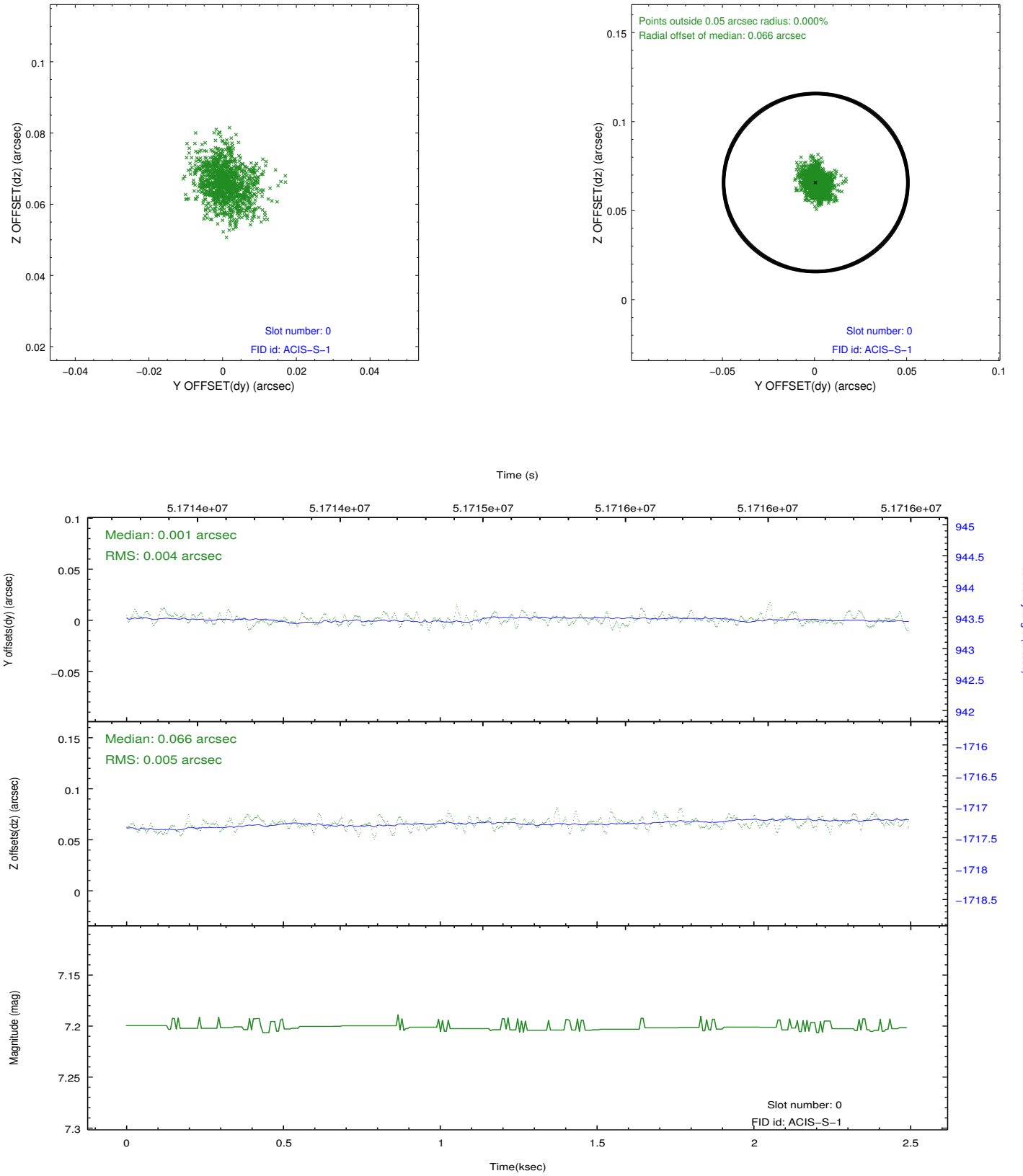


2.4.5 Slot 7

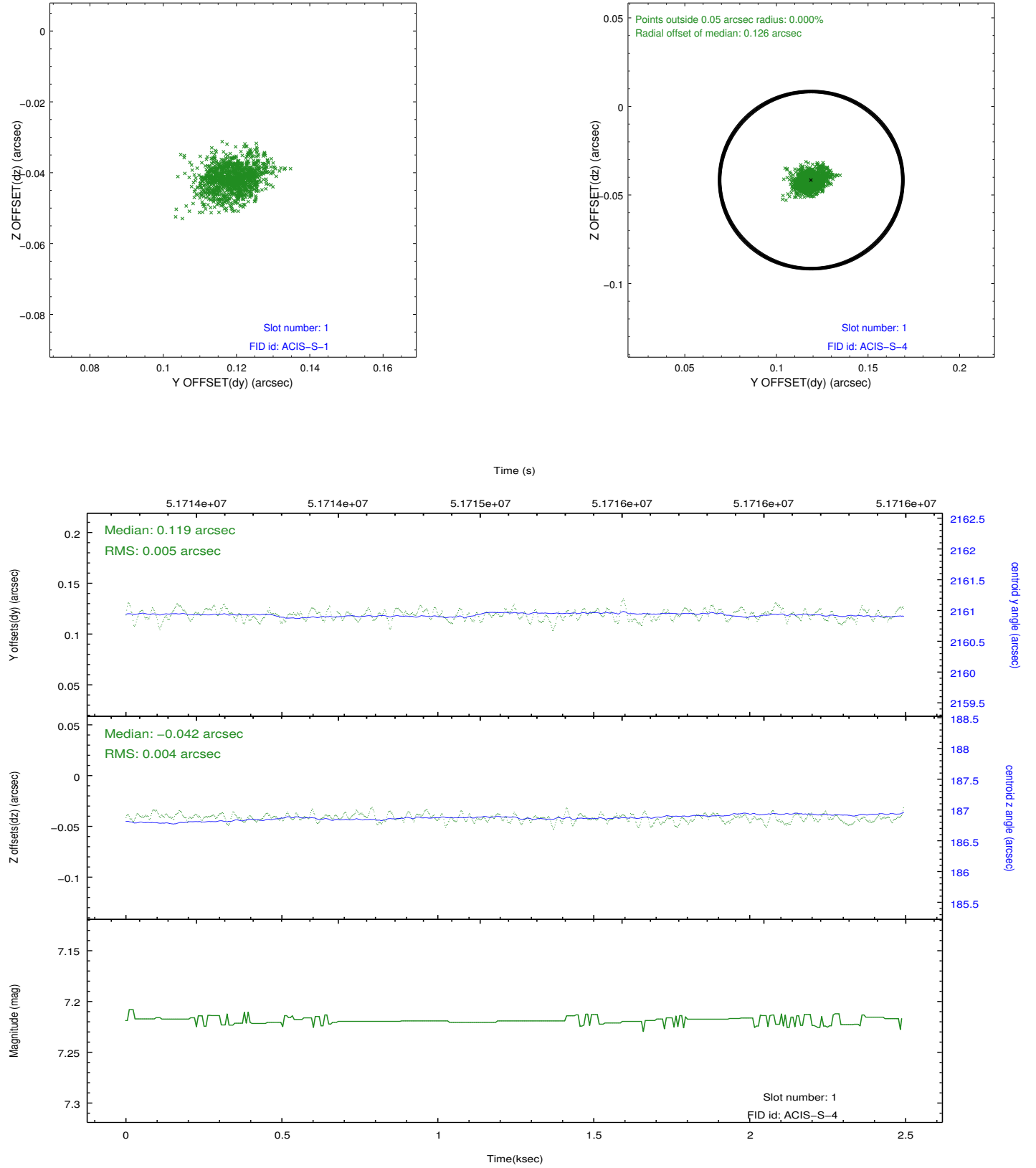


2.5 FID Slots

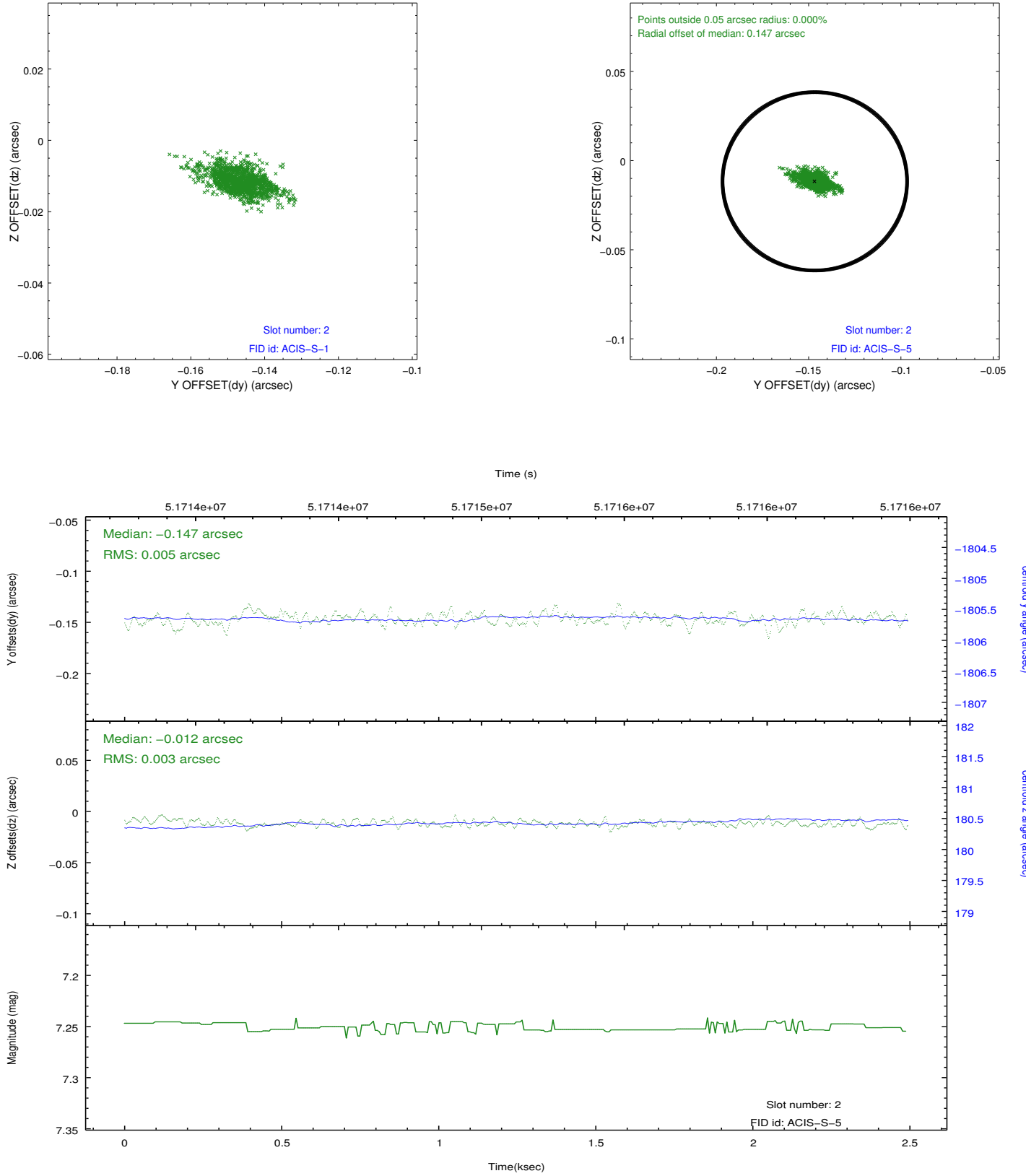
2.5.1 Slot 0



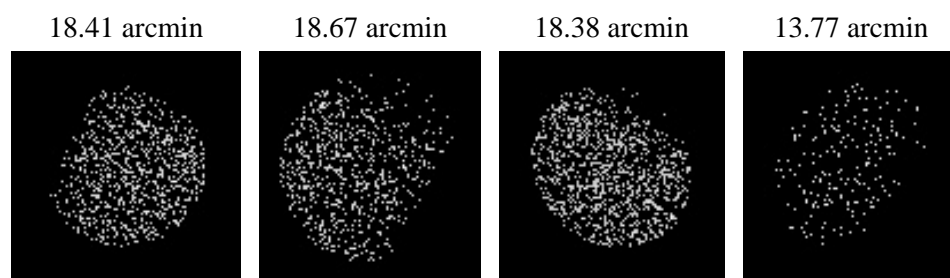
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.05.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.76

A.2 Comments

Target very off-axis, on chip S0.

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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.