

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 1069 - L2 Version 3

Chandra X-Ray Center

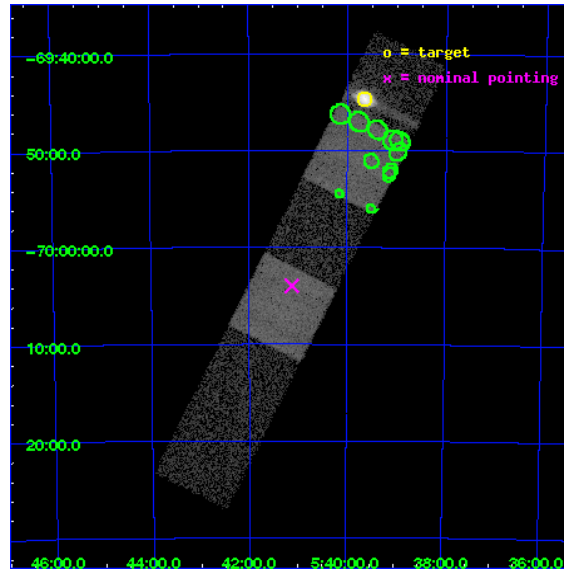
L2 Processing Date : Dec 16 2009

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1 Front

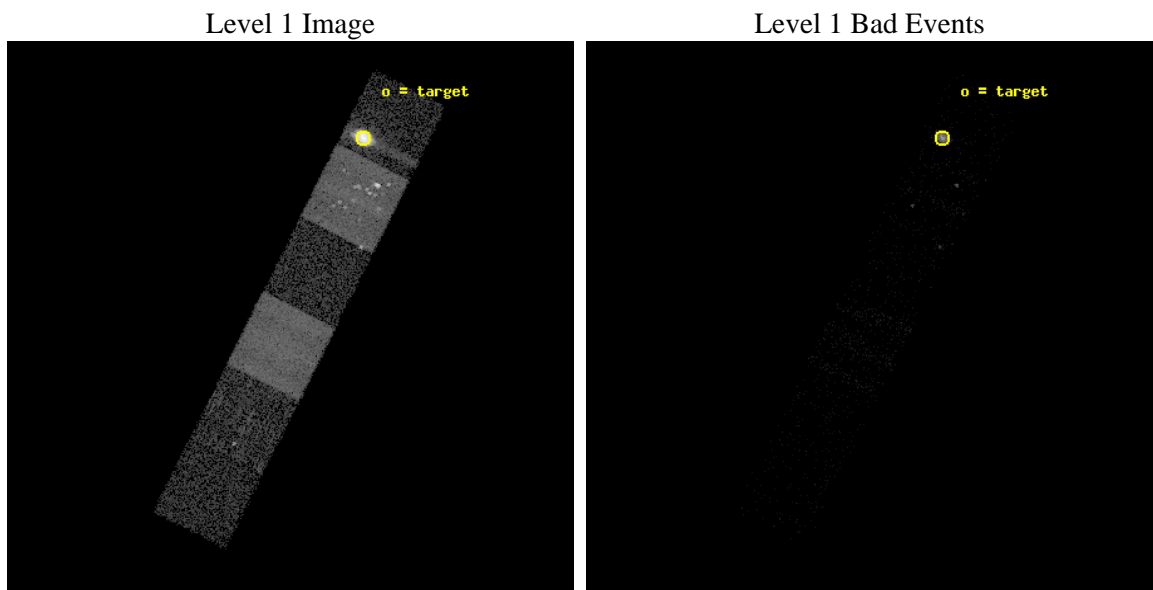
seq_num	480019	Sequence number
obs_id	1069	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	85.280160423475	Nominal RA
dec_nom	-70.066360612991	Nominal Dec
roll_nom	116.75286262627	Nominal Roll
revision	3	Processing version of data
ontime	1756.8000016361	Sum of GTIs [s]
livetime	1734.5543421975	Livetime [s]
ontime4	1756.8000016361	Sum of GTIs [s]
ontime5	1756.8000016361	Sum of GTIs [s]
ontime6	1756.8000016361	Sum of GTIs [s]
ontime7	1756.8000016361	Sum of GTIs [s]
ontime8	1756.8000016361	Sum of GTIs [s]
ontime9	1756.8000016361	Sum of GTIs [s]
l2events	133257	Number of level 2 events



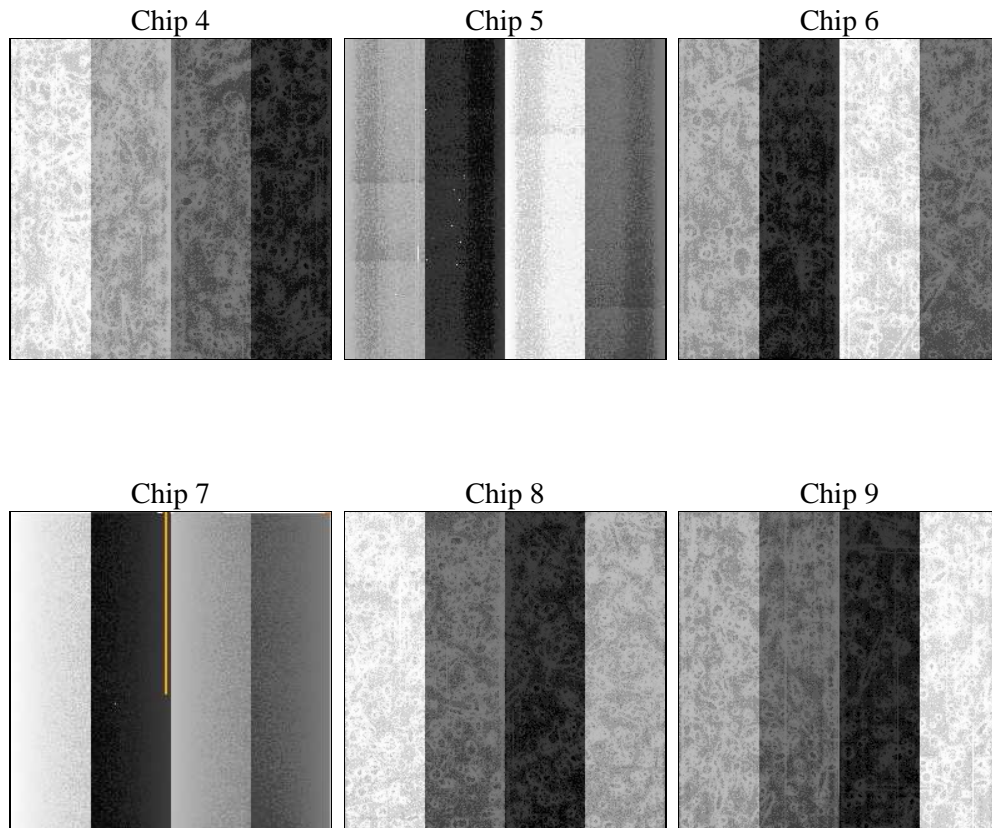
2 OBI

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	1756.8000016361	Sum of GTIs [s]
caldsver	4.1.4	 	ontime4	1756.8000016361	Sum of GTIs [s]
date	2009-12-16T05:54:13	Date and time of file creation	ontime5	1756.8000016361	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	1756.8000016361	Sum of GTIs [s]
			ontime7	1756.8000016361	Sum of GTIs [s]
			ontime8	1756.8000016361	Sum of GTIs [s]
			ontime9	1756.8000016361	Sum of GTIs [s]
			l1events	154299	Number of level 1 events

2.1.4 Events

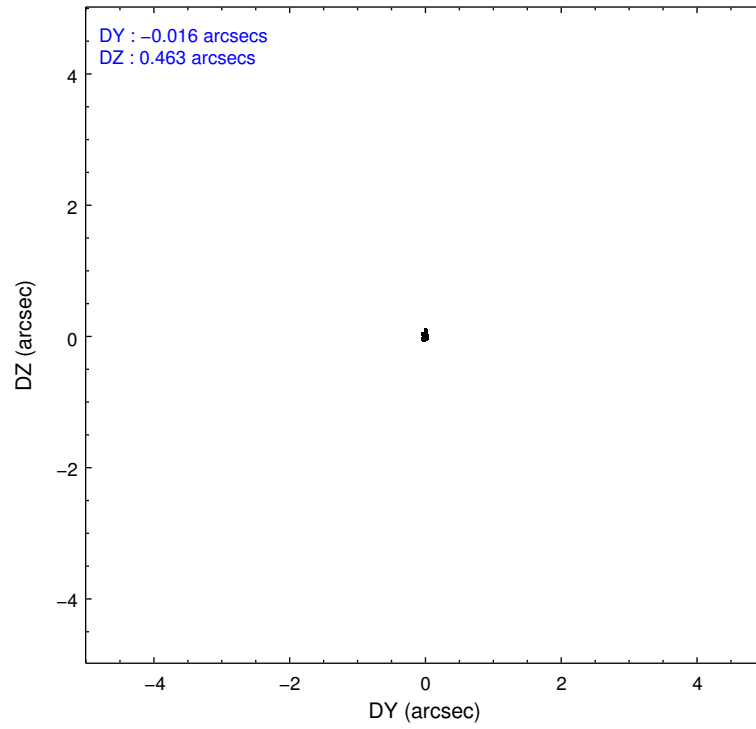
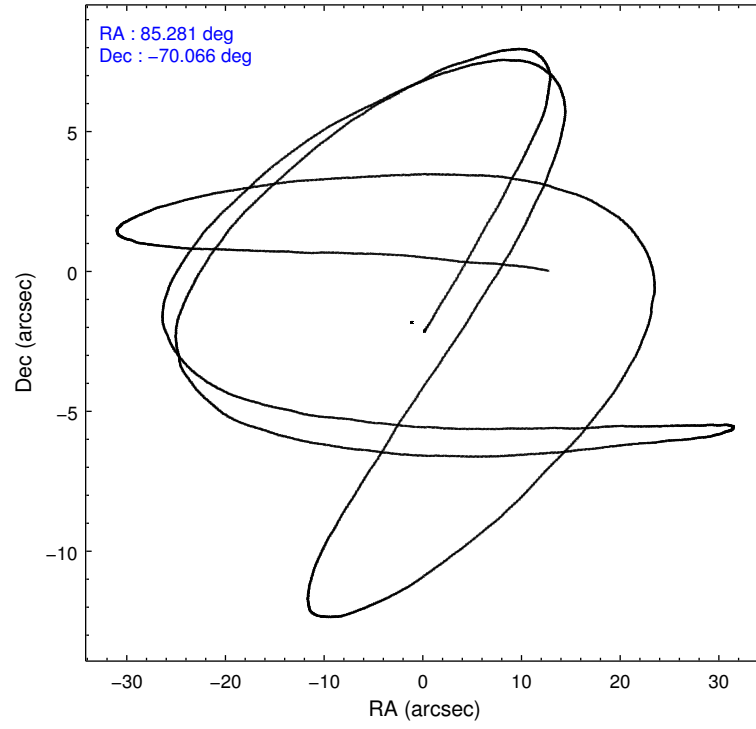
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	76312	33130	5472	27892	6746	4747
rejected events	3158	1648	1064	2182	1170	1039
rejected %	4%	4%	19%	7%	17%	21%

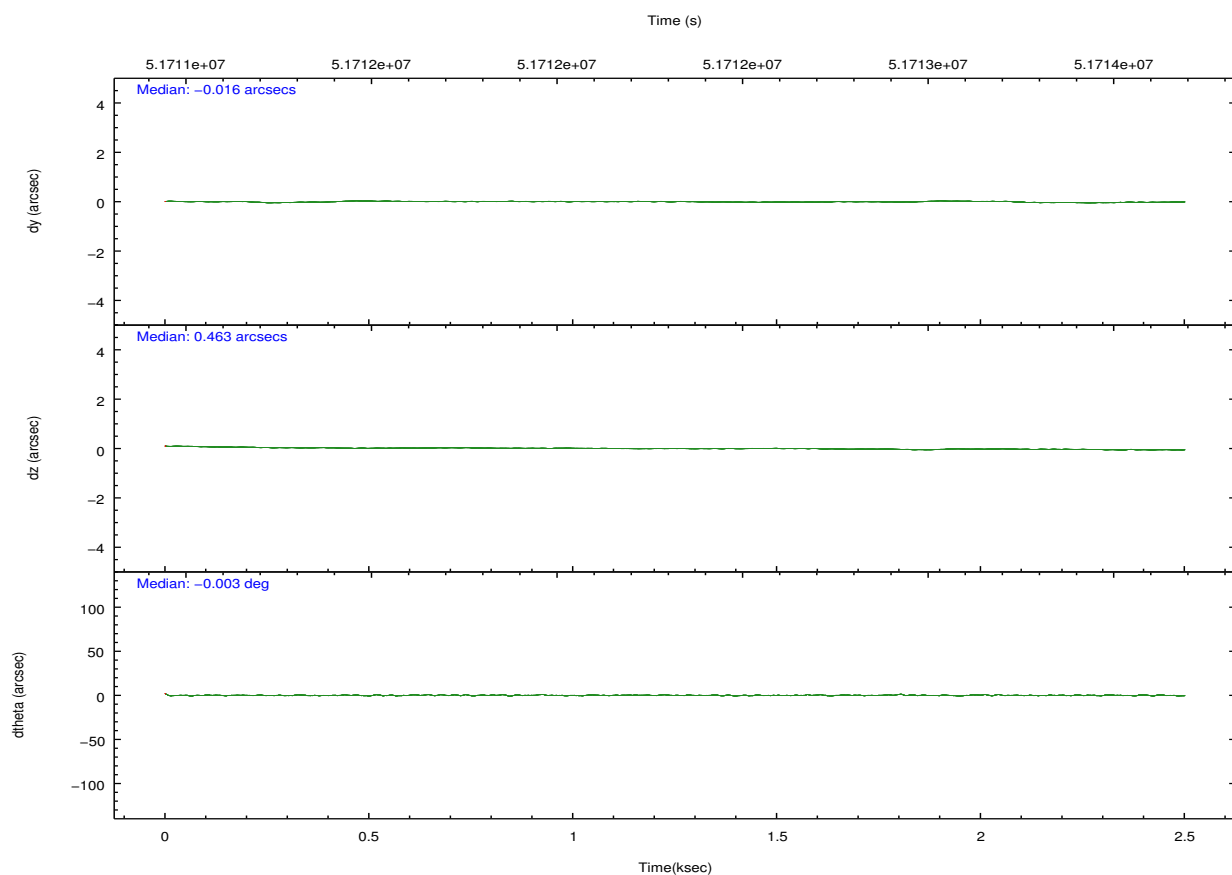
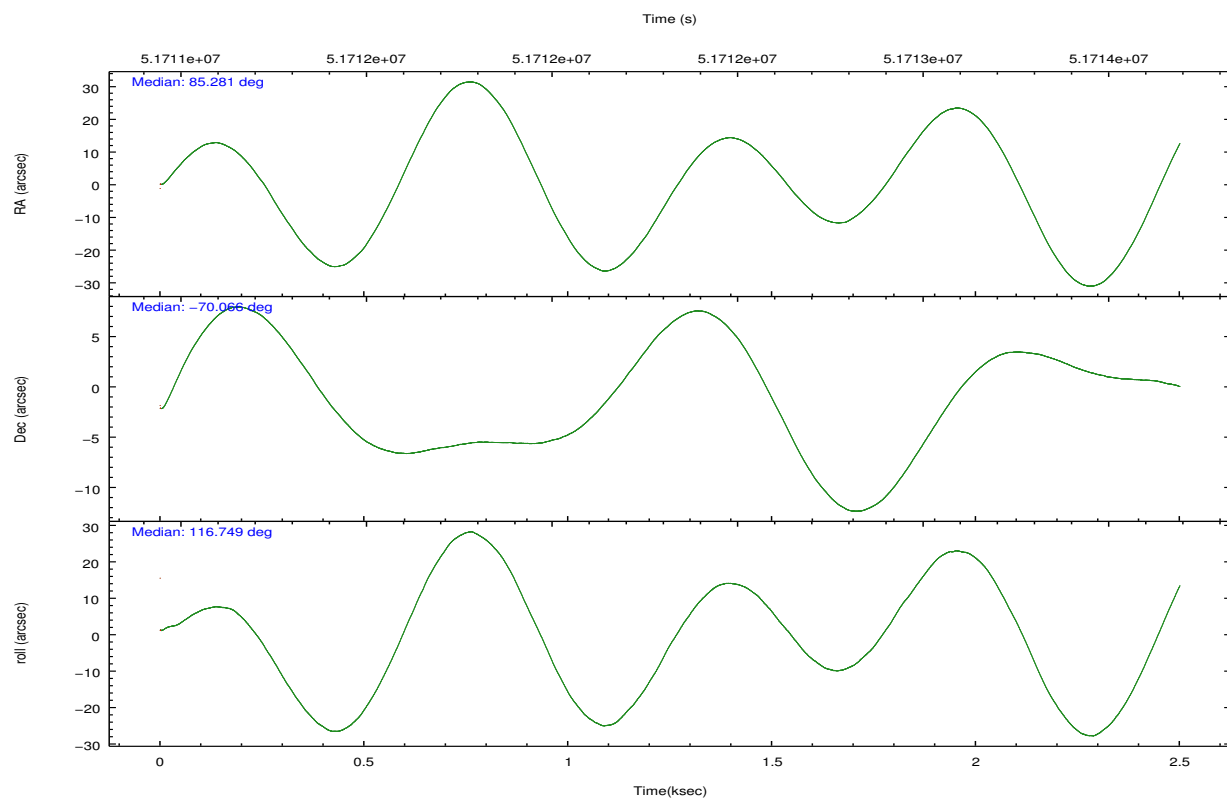
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	55099	7234	1757	1983	2055	1329
	72%	21%	32%	7%	30%	27%
grade 1 events	1198	111	5	15	22	10
	1%	0%	0%	0%	0%	0%
grade 2 events	9871	5072	991	3305	1329	794
	12%	15%	18%	11%	19%	16%
grade 3 events	2786	1893	229	1837	348	229
	3%	5%	4%	6%	5%	4%
grade 4 events	2675	1717	218	1646	347	235
	3%	5%	3%	5%	5%	4%
grade 5 events	1684	1458	1043	2123	1139	1021
	2%	4%	19%	7%	16%	21%
grade 6 events	2999	15645	1229	16983	1506	1129
	3%	47%	22%	60%	22%	23%
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	85.347620	85.2801604234747	Subarray requested	NONE	NONE
Pointing Dec	-70.082117	-70.06636061299082	Alternating exposures requested	N	N
Pointing Roll	116.659656	116.7528626262673	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	51711569.184000	51710895.957832			
Observation start date	1999-08-22T12:18:25	1999-08-22T12:08:15			
Observation end time	51713569.184000	51713696.257933			
Observation end date	1999-08-22T12:51:45	1999-08-22T12:54:56			
Read mode	TIMED	TIMED			

2.3 Aspect



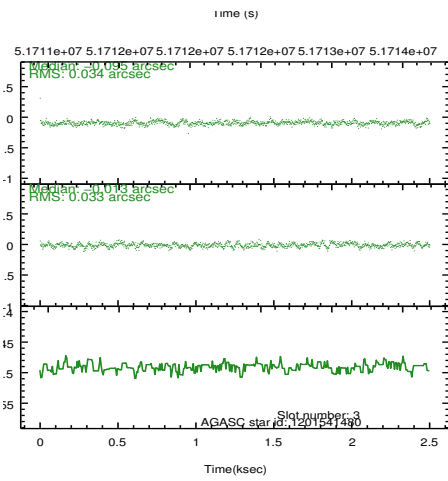
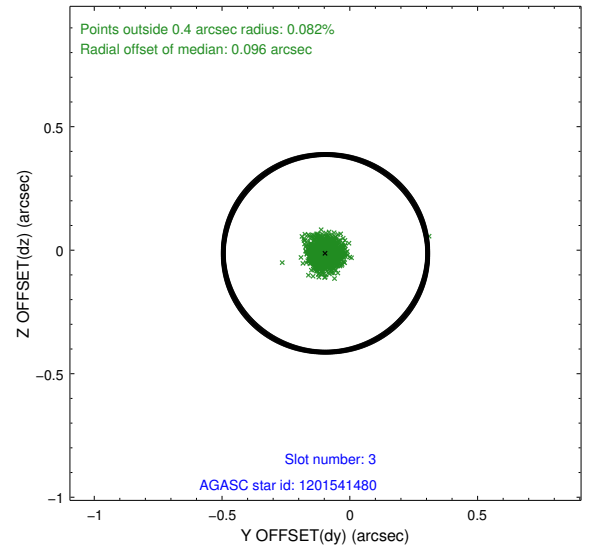
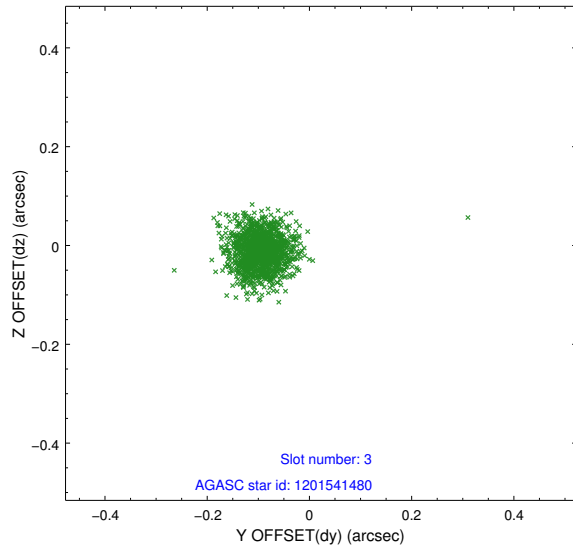


Slot Statistics

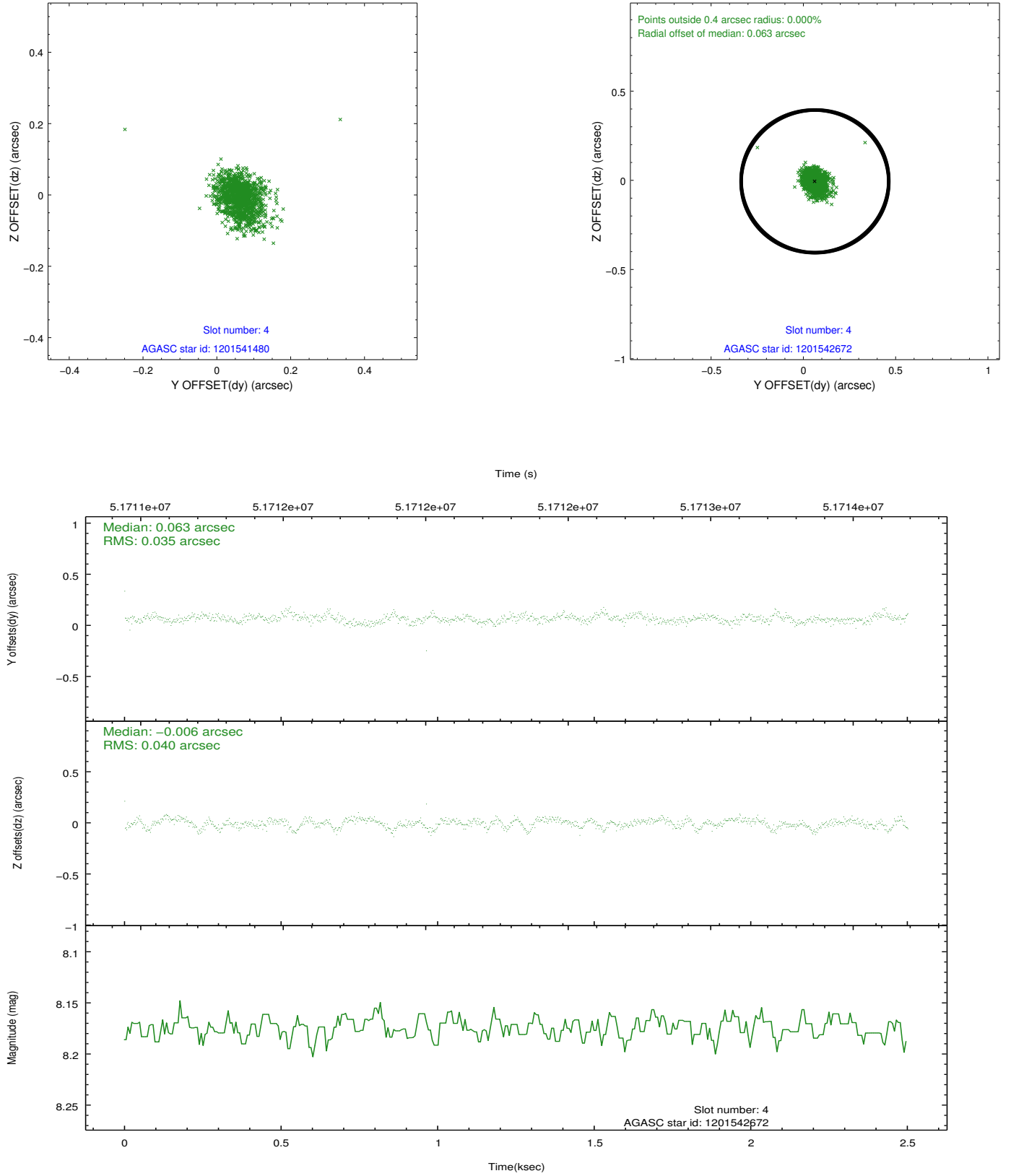
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.36	1221	-0.037	0.011	0.007	0.012	0.000000	0.000000	60.58	-1850.88
1	FID	ACIS-S-4	7.22	1221	0.136	0.016	0.006	0.011	0.000000	0.000000	2160.96	185.23
2	FID	ACIS-S-5	7.25	1220	-0.127	-0.017	0.006	0.011	0.000000	0.000000	-1803.90	180.44
3	GUIDE	1201541480	8.49	1221	-0.095	-0.013	0.050	0.080	87.080483	-70.345903	-1817.51	-1434.96
4	GUIDE	1201542672	8.17	1221	0.063	-0.006	0.054	0.090	84.492488	-69.957531	865.19	744.51
5	GUIDE	1201407840	7.96	1220	-0.054	-0.005	0.067	0.107	83.696303	-70.172201	590.05	1960.91
6	BAD	1201542416	10.08	940	0.093	-0.017	0.133	0.205	85.297276	-70.356353	-854.22	500.09
7	GUIDE	1201540568	9.97	1217	0.091	0.022	0.091	0.150	85.901764	-70.070643	-272.37	-623.78

2.4 Star Slots

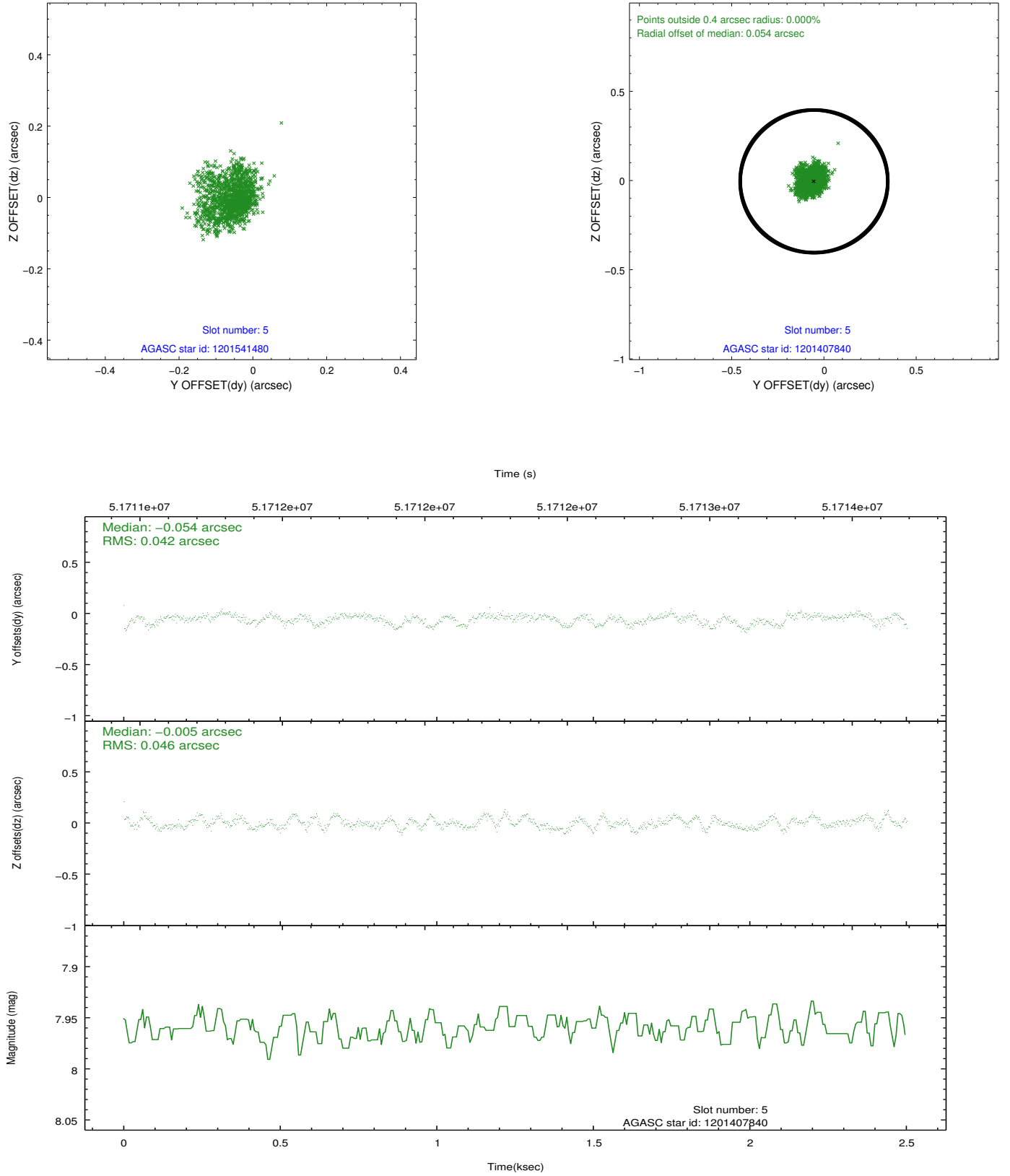
2.4.1 Slot 3



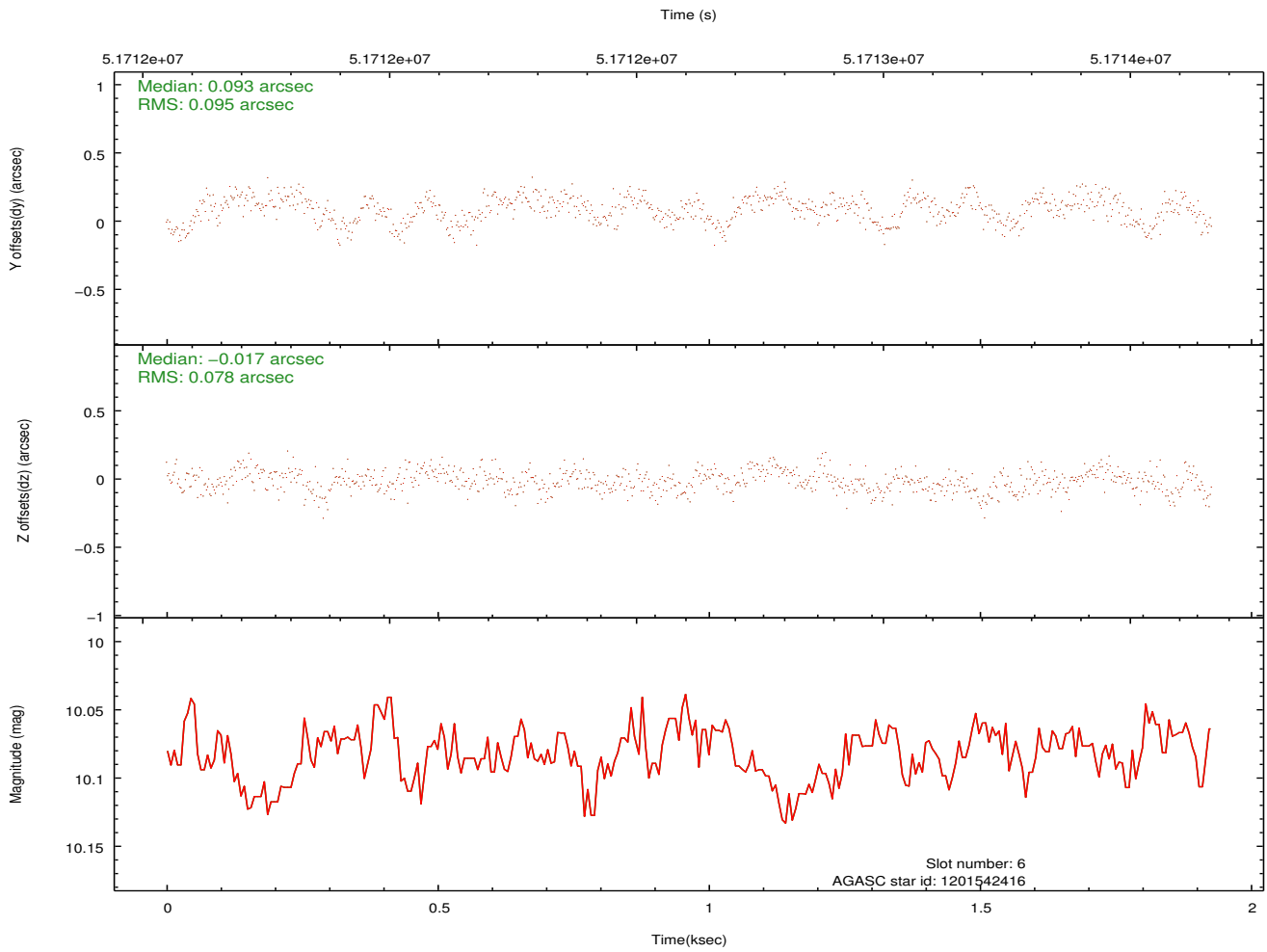
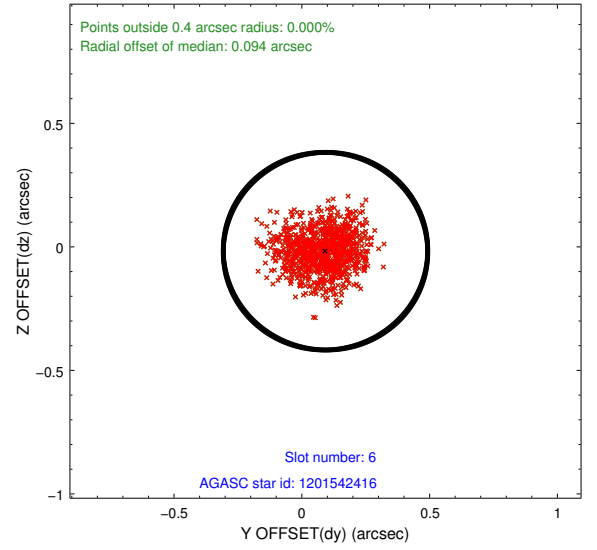
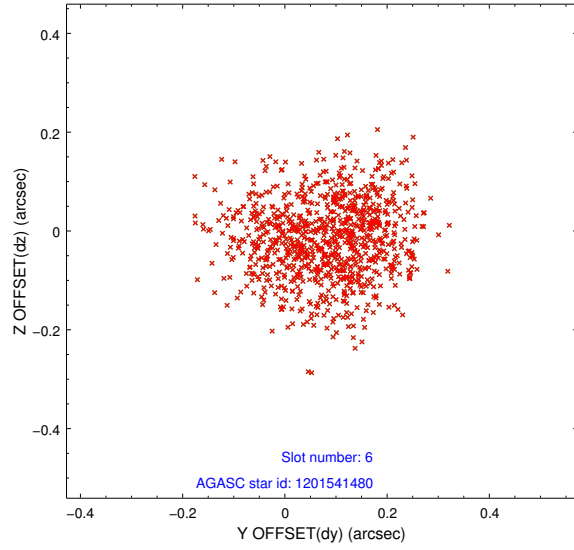
2.4.2 Slot 4



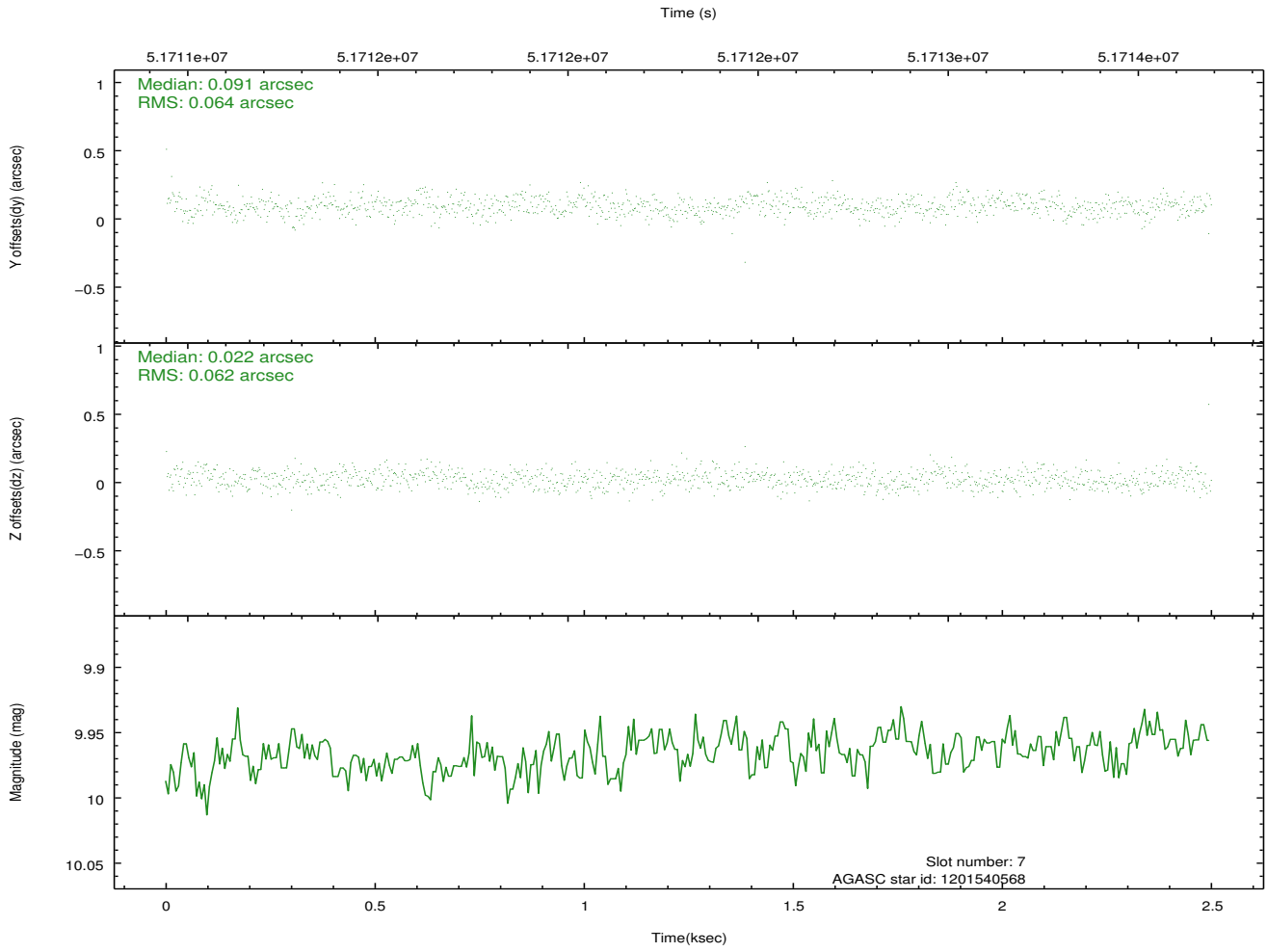
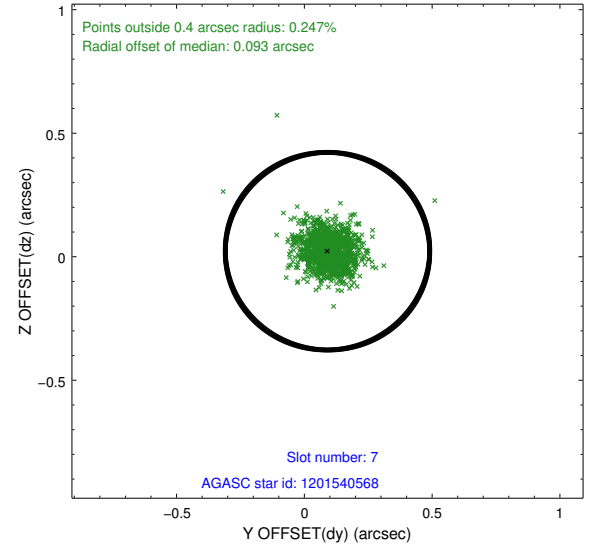
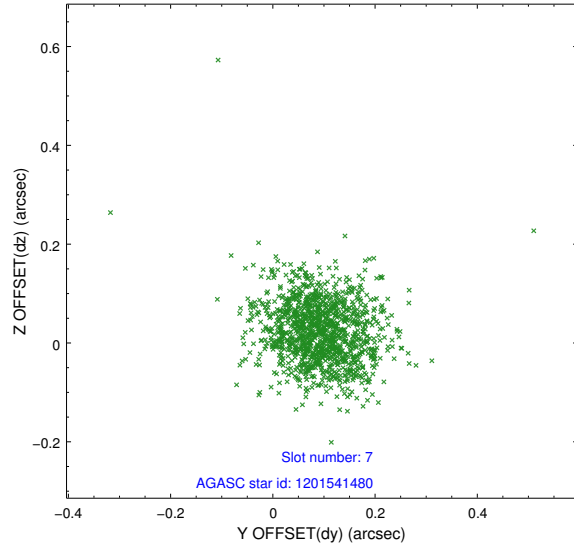
2.4.3 Slot 5



2.4.4 Slot 6

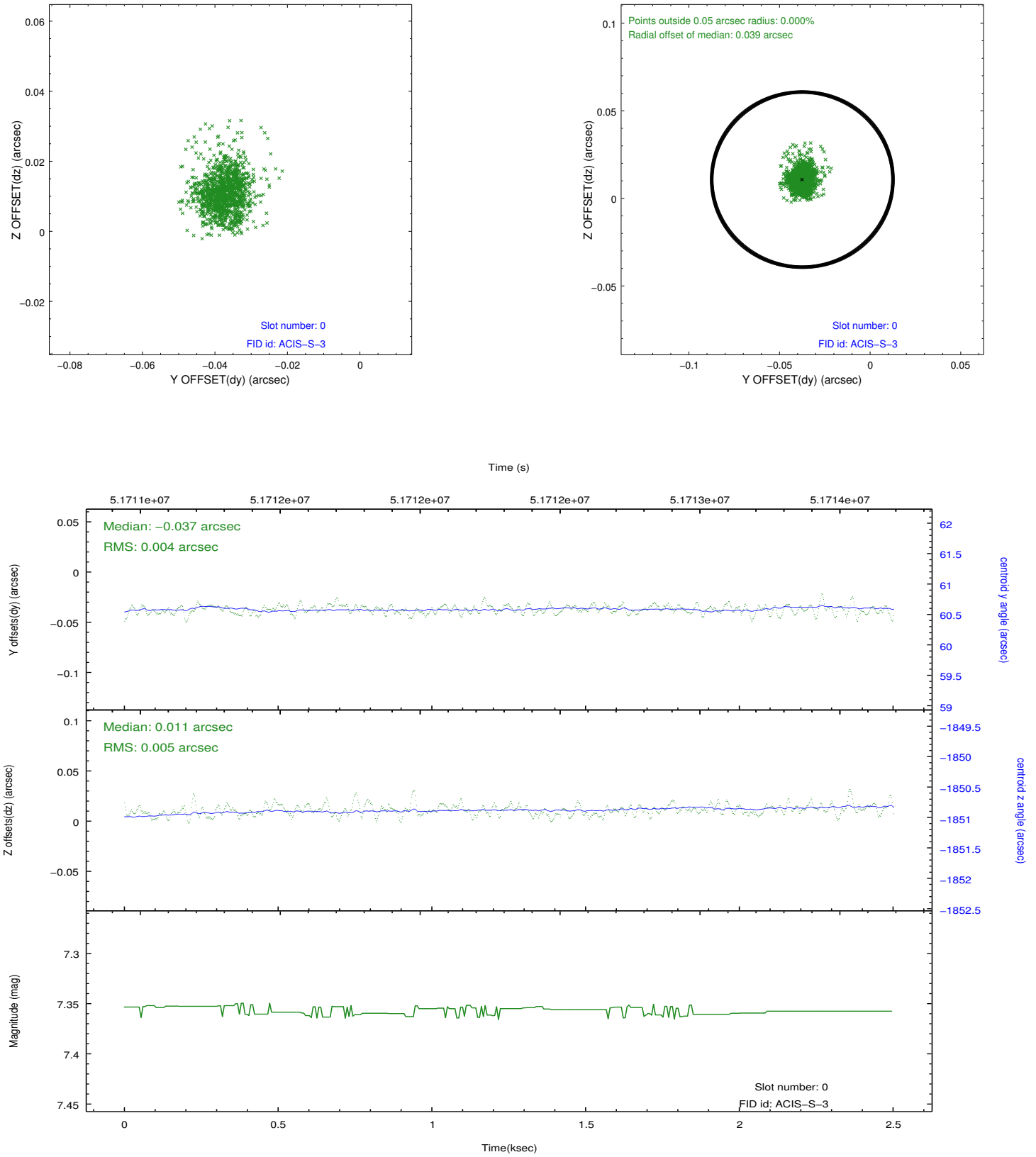


2.4.5 Slot 7

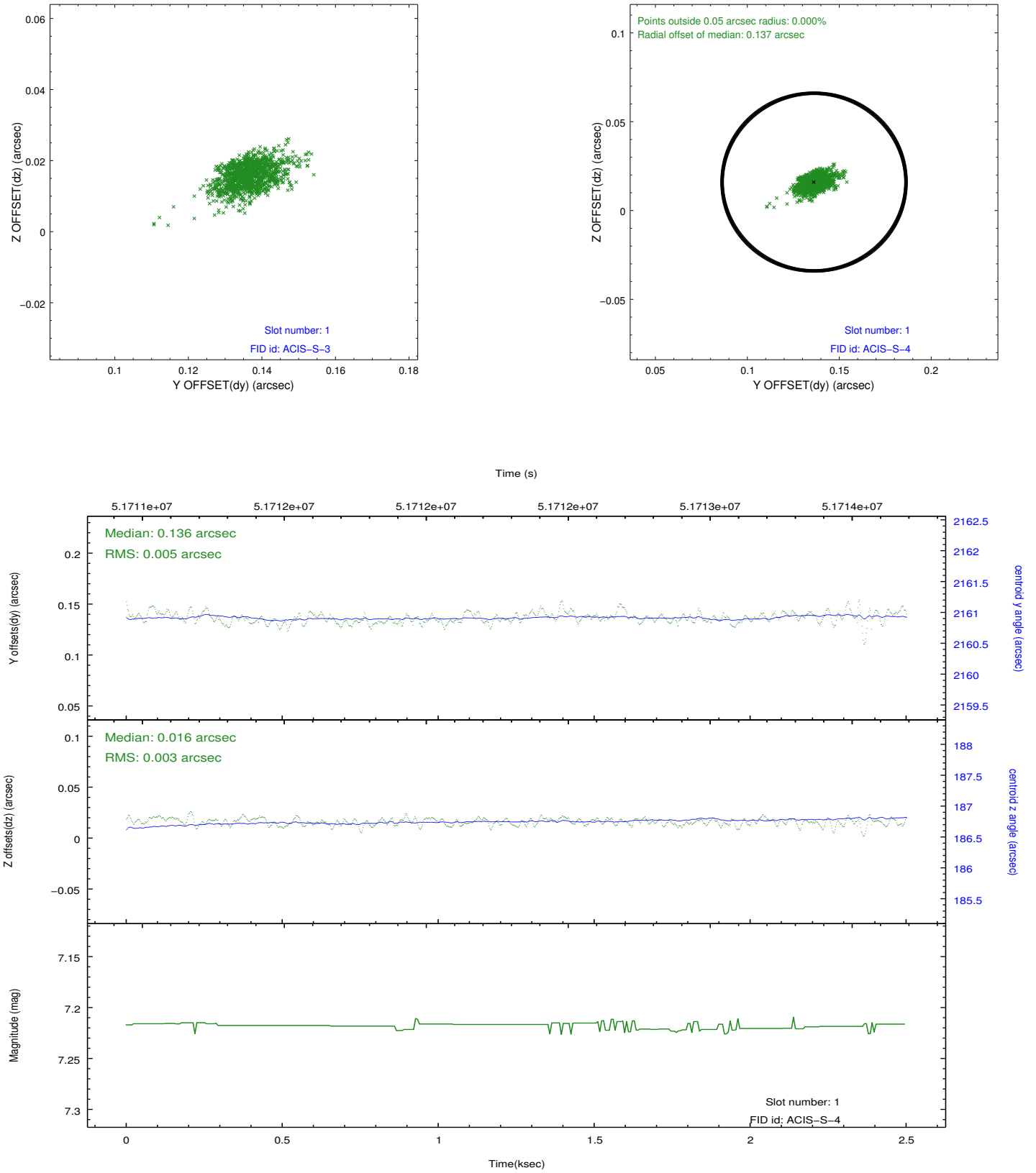


2.5 FID Slots

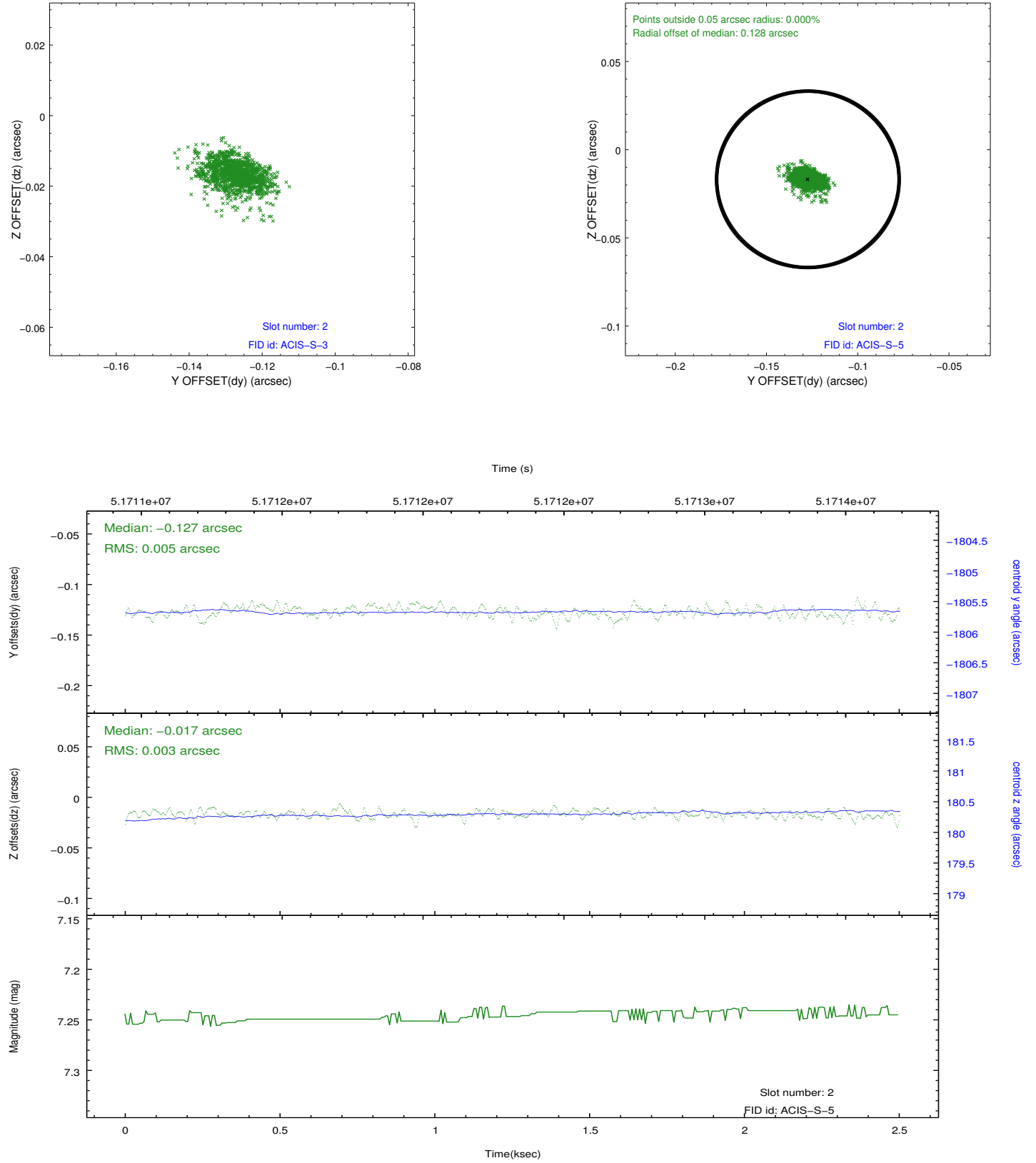
2.5.1 Slot 0



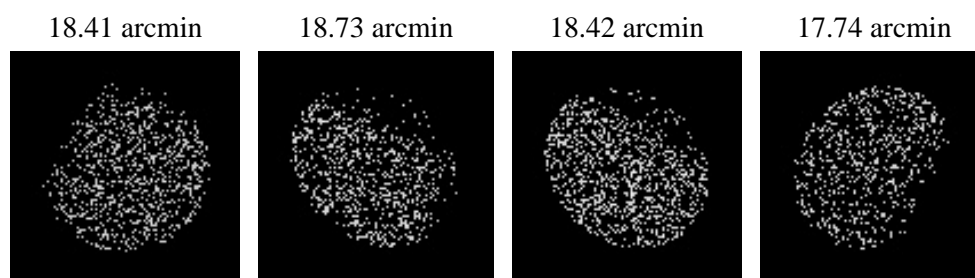
2.5.2 Slot 1



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.

===

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one guide star from the solution.

===

Charge time for this ObsId remains at previous value of 1.76 ksec, although with the current processing the charge time would have been 1.75 ksec.

===

High radiation environment contributed to elevated count rate.

===

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.