

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 1075 - L2 Version 3

Chandra X-Ray Center

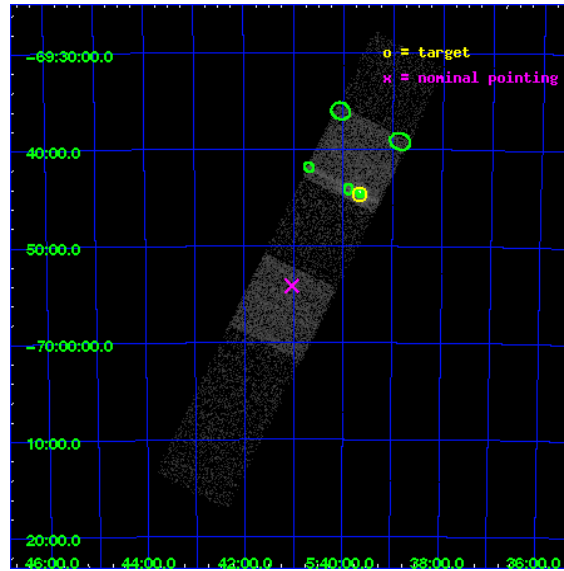
L2 Processing Date : Dec 16 2009

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1 Front

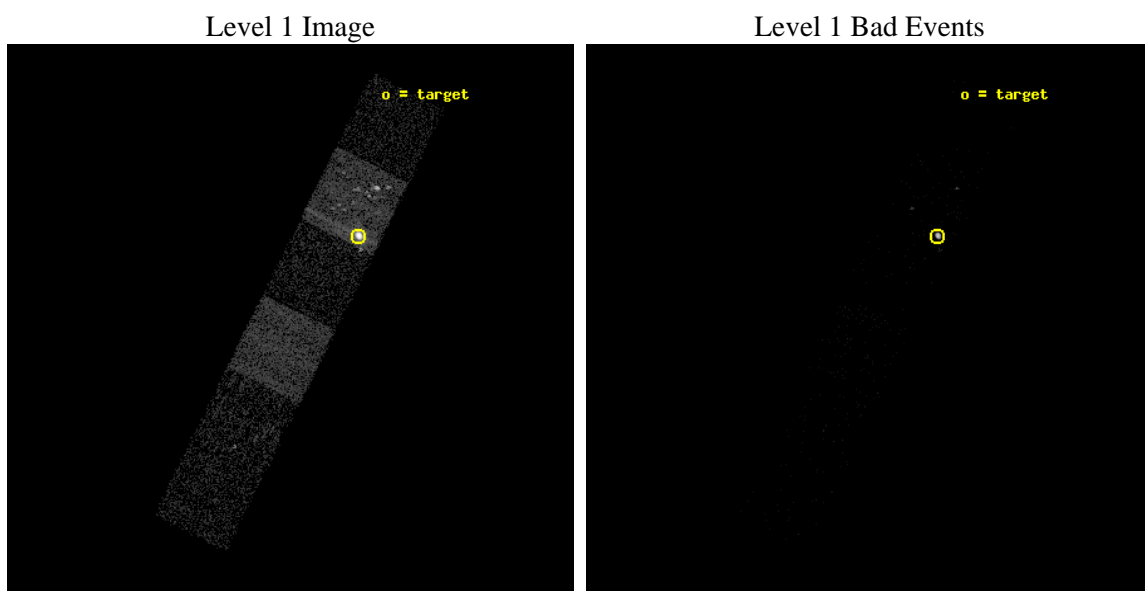
seq_num	480025	Sequence number
obs_id	1075	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	85.257435477321	Nominal RA
dec_nom	-69.902409686643	Nominal Dec
roll_nom	116.58514502555	Nominal Roll
revision	3	Processing version of data
ontime	758.40000070632	Sum of GTIs [s]
livetime	748.79668324372	Livetime [s]
ontime4	758.40000070632	Sum of GTIs [s]
ontime5	758.40000070632	Sum of GTIs [s]
ontime6	758.40000070632	Sum of GTIs [s]
ontime7	758.40000070632	Sum of GTIs [s]
ontime8	758.40000070632	Sum of GTIs [s]
ontime9	758.40000070632	Sum of GTIs [s]
l2events	48553	Number of level 2 events



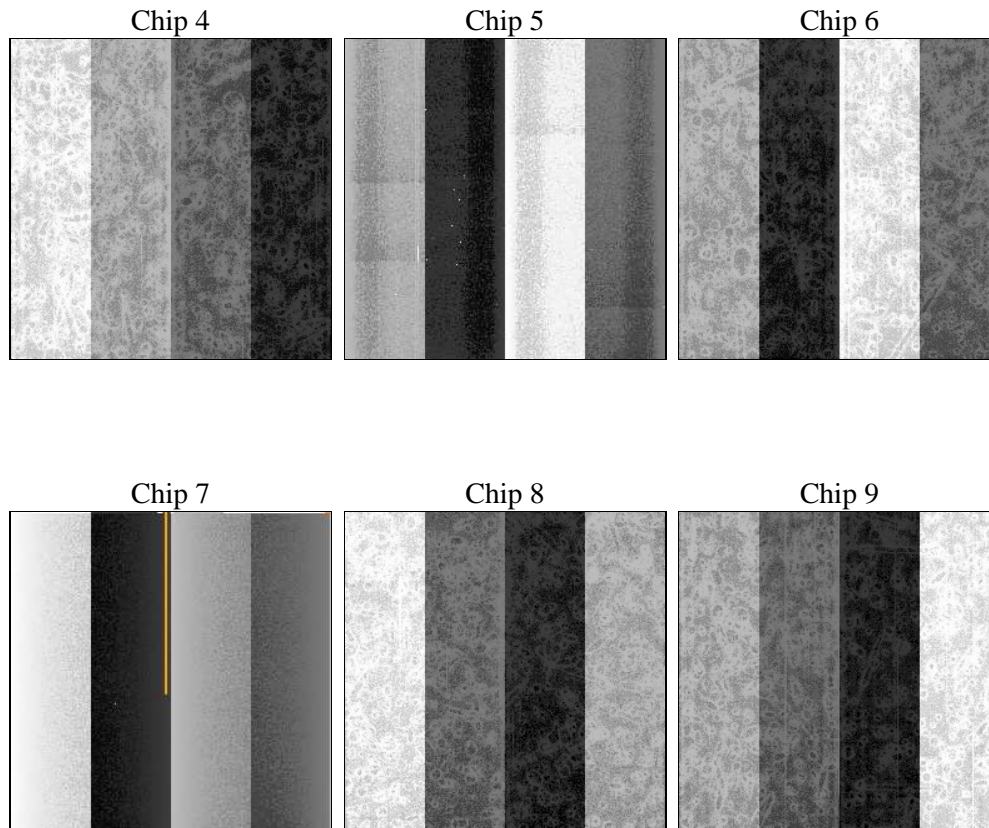
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	758.40000070632	Sum of GTIs [s]
caldsver	4.1.4	 	ontime4	758.40000070632	Sum of GTIs [s]
date	2009-12-16T06:09:06	Date and time of file creation	ontime5	758.40000070632	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	758.40000070632	Sum of GTIs [s]
			ontime7	758.40000070632	Sum of GTIs [s]
			ontime8	758.40000070632	Sum of GTIs [s]
			ontime9	758.40000070632	Sum of GTIs [s]
			l1events	60013	Number of level 1 events

2.1.4 Events

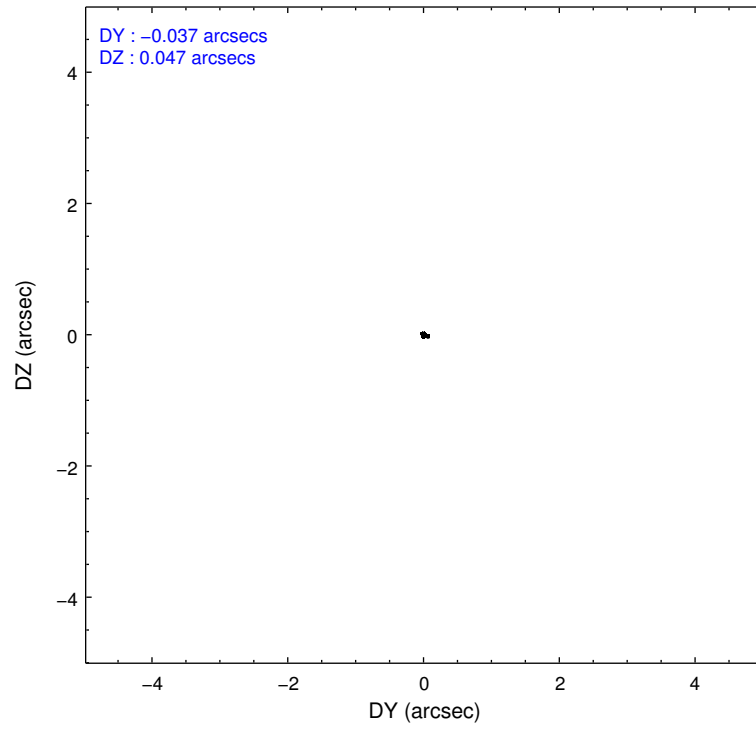
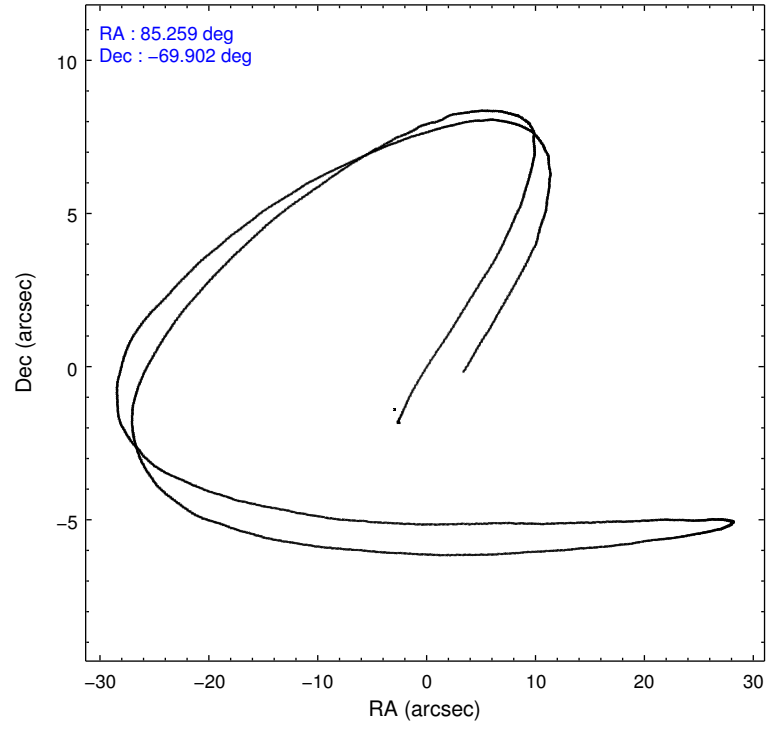
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	1768	43643	2237	7944	2530	1891
rejected events	346	4677	483	934	453	454
rejected %	19%	10%	21%	11%	17%	24%

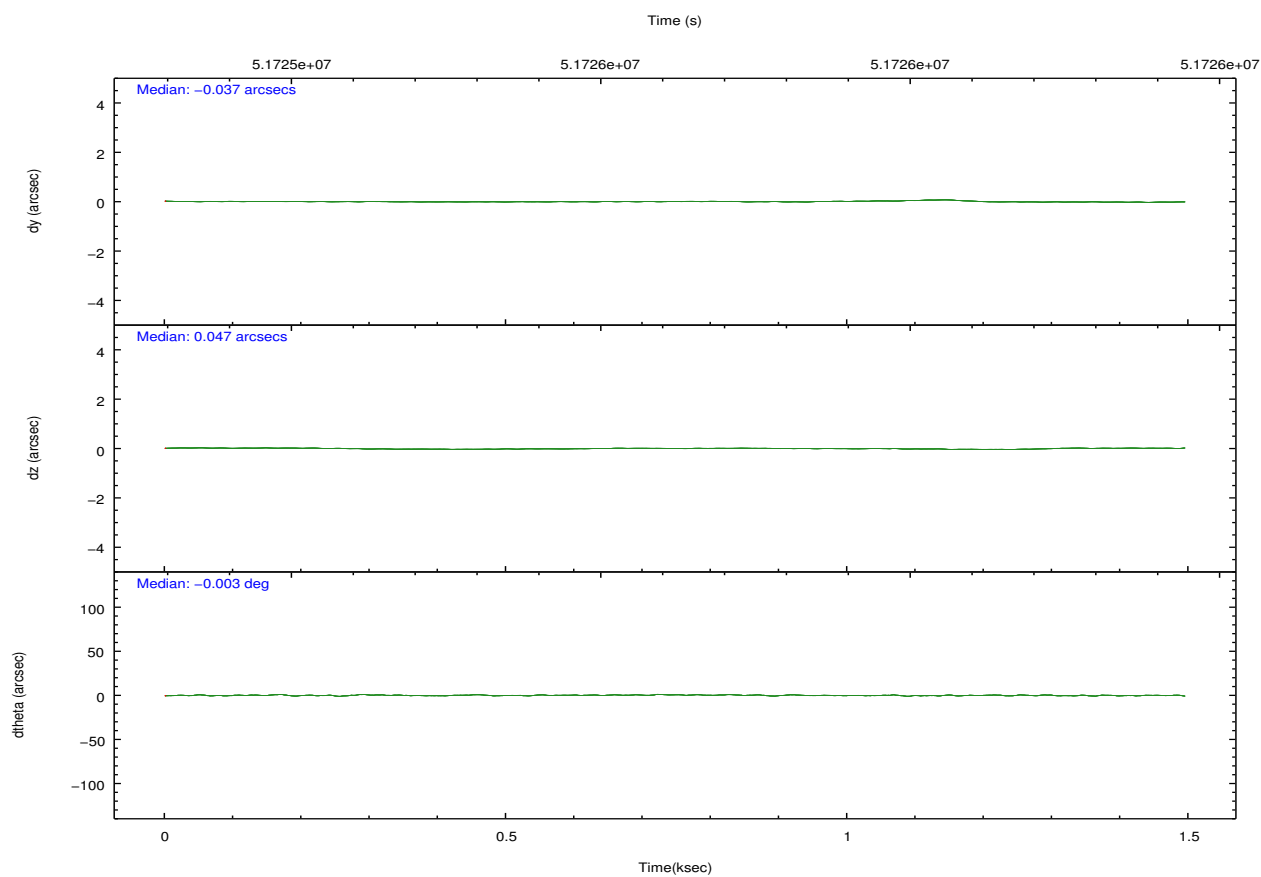
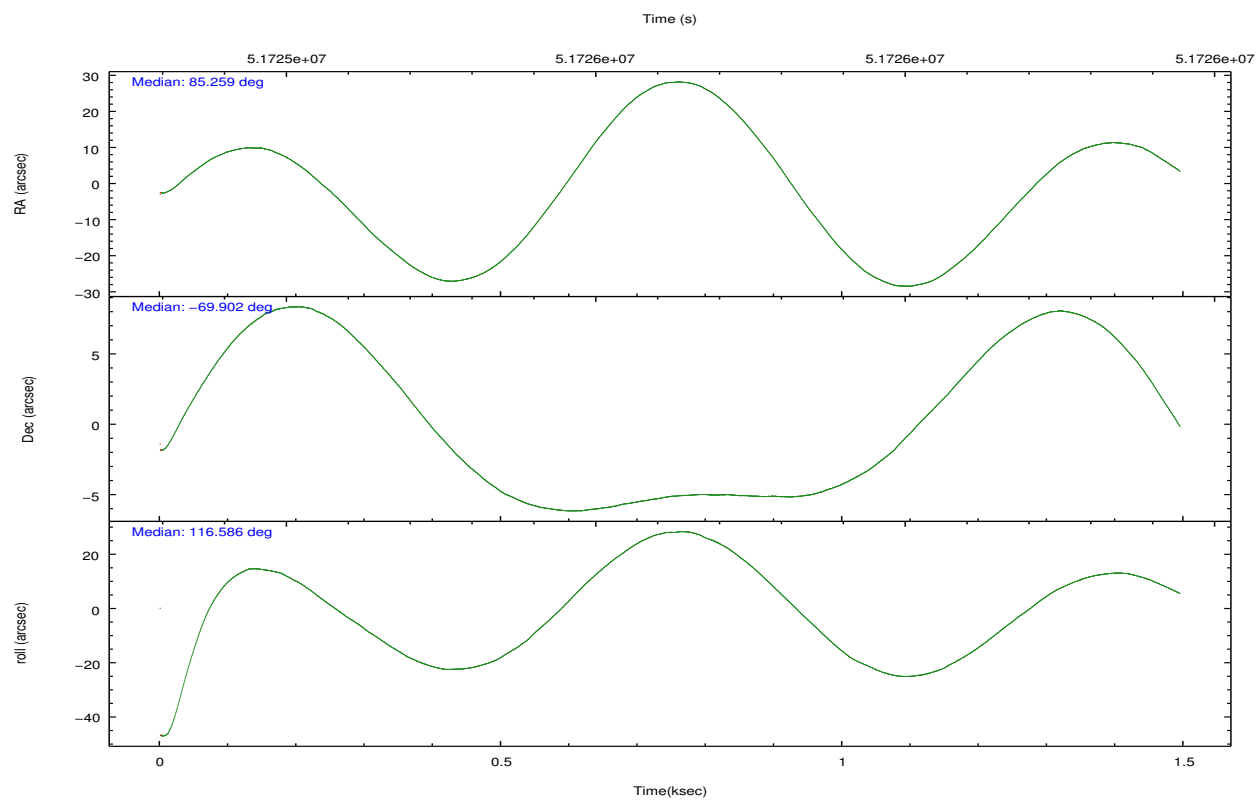
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	488	9840	607	504	728	468
	27%	22%	27%	6%	28%	24%
grade 1 events	6	1010	2	7	13	2
	0%	2%	0%	0%	0%	0%
grade 2 events	333	8185	398	957	466	323
	18%	18%	17%	12%	18%	17%
grade 3 events	116	5278	110	592	151	94
	6%	12%	4%	7%	5%	4%
grade 4 events	85	3474	95	473	136	107
	4%	7%	4%	5%	5%	5%
grade 5 events	327	3318	465	847	422	439
	18%	7%	20%	10%	16%	23%
grade 6 events	413	12538	560	4564	614	458
	23%	28%	25%	57%	24%	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	85.323843	85.25743547732084	Subarray requested	NONE	NONE
Pointing Dec	-69.918539	-69.90240968664304	Alternating exposures requested	N	N
Pointing Roll	116.491323	116.5851450255507	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	51725369.184000	51724695.533329			
Observation start date	1999-08-22T16:08:25	1999-08-22T15:58:15			
Observation end time	51726369.184000	51726495.433393			
Observation end date	1999-08-22T16:25:05	1999-08-22T16:28:15			
Read mode	TIMED	TIMED			

2.3 Aspect



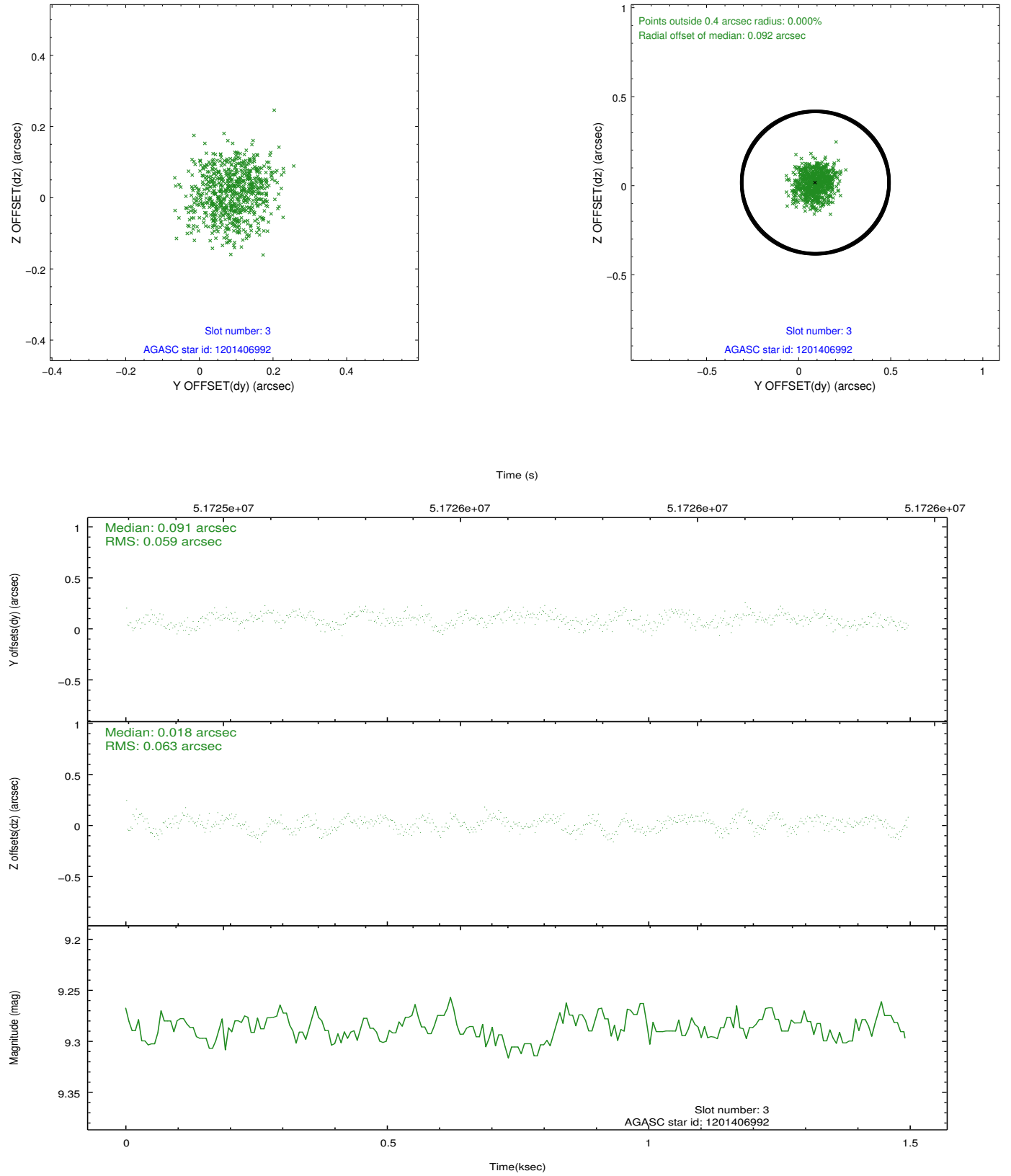


Slot Statistics

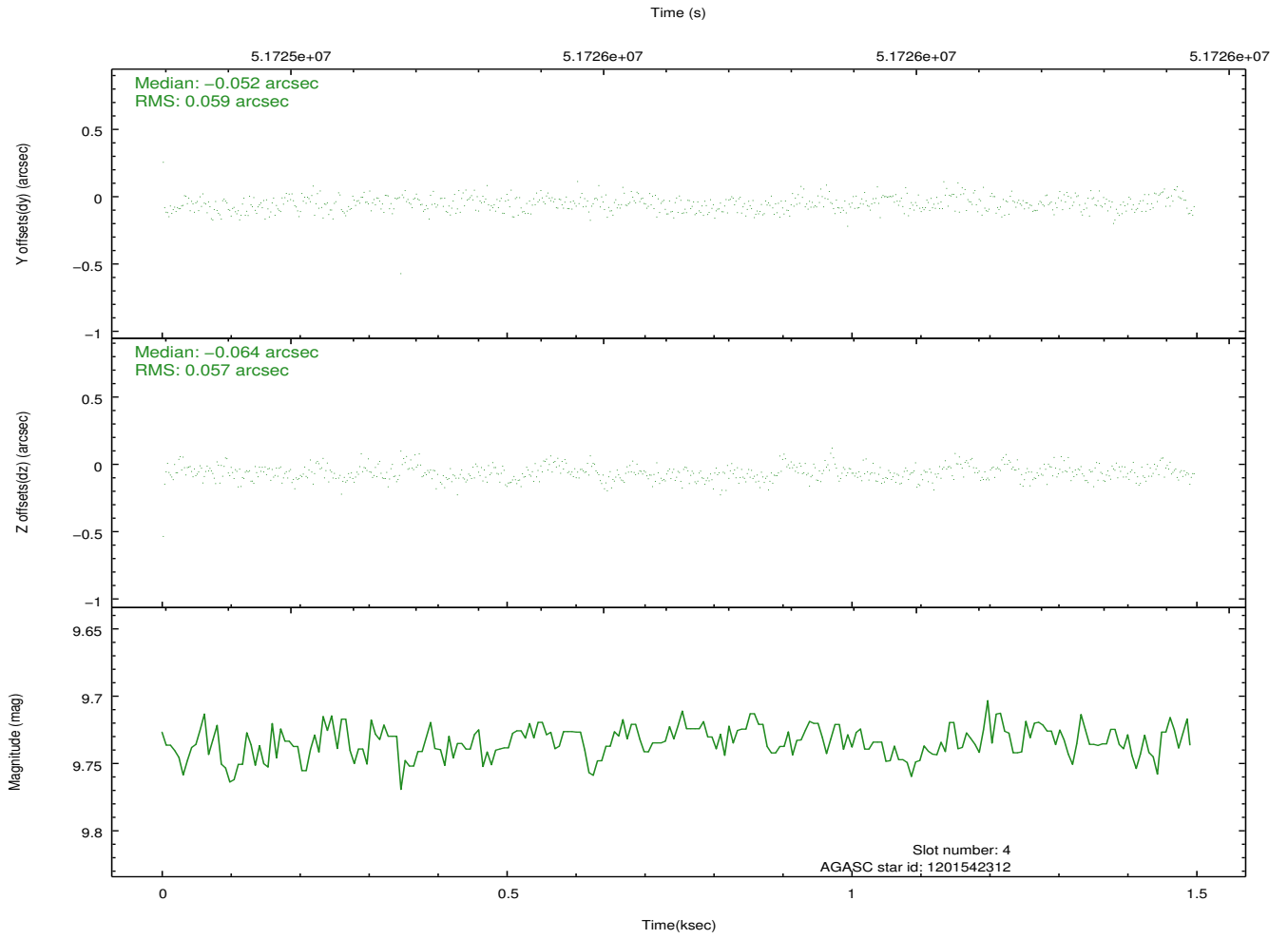
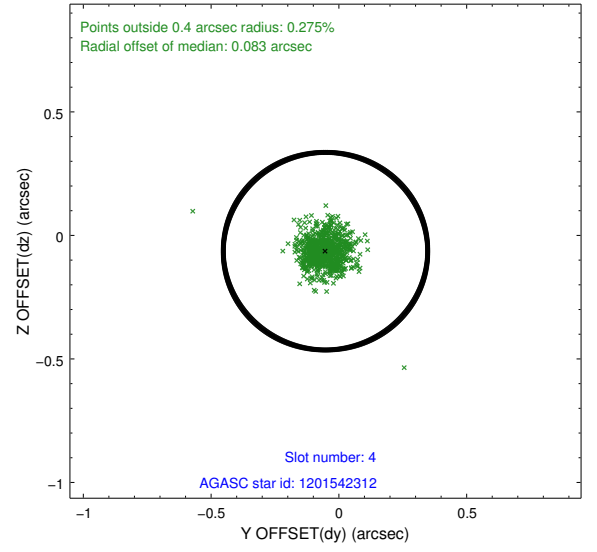
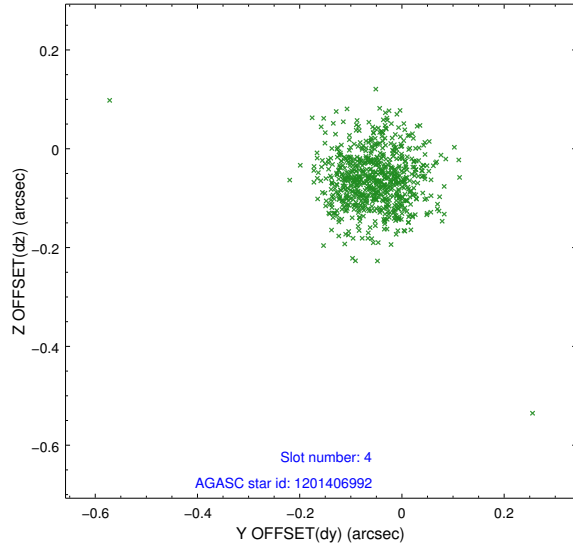
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.35	730	-0.036	0.032	0.008	0.012	0.000000	0.000000	60.59	-1850.43
1	FID	ACIS-S-4	7.21	730	0.141	0.005	0.006	0.011	0.000000	0.000000	2161.01	184.63
2	FID	ACIS-S-5	7.25	730	-0.133	-0.027	0.006	0.010	0.000000	0.000000	-1802.70	180.97
3	GUIDE	1201406992	9.29	730	0.091	0.018	0.093	0.143	83.682859	-69.471866	2336.76	1150.63
4	GUIDE	1201542312	9.73	728	-0.052	-0.064	0.082	0.133	86.031967	-70.422284	-2006.95	49.68
5	BAD	1201542416	10.08	412	0.011	0.026	0.124	0.182	85.297276	-70.356353	-1401.71	734.27
6	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	1201540568	9.97	729	-0.037	0.051	0.097	0.157	85.901764	-70.070643	-812.94	-386.36

2.4 Star Slots

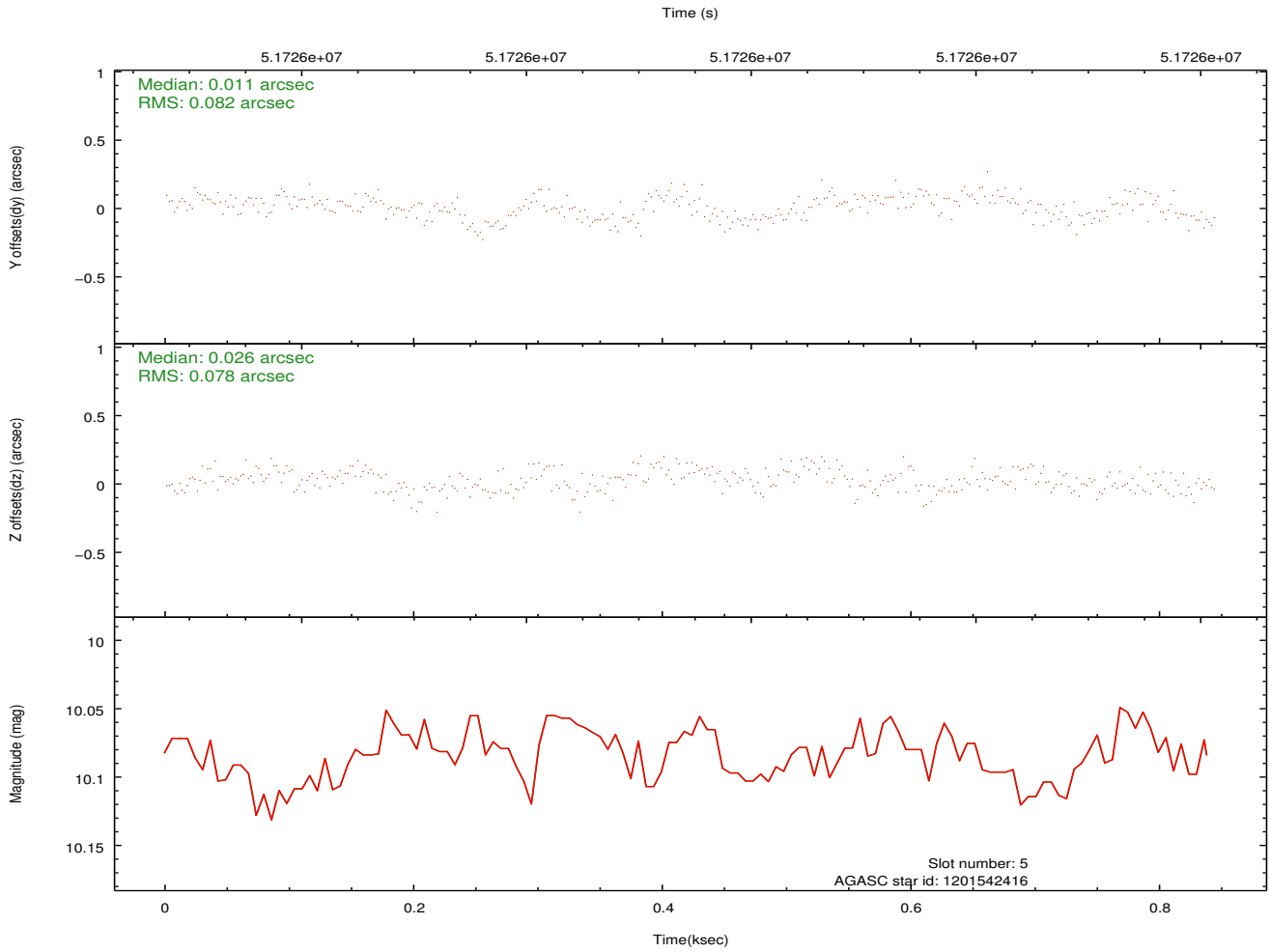
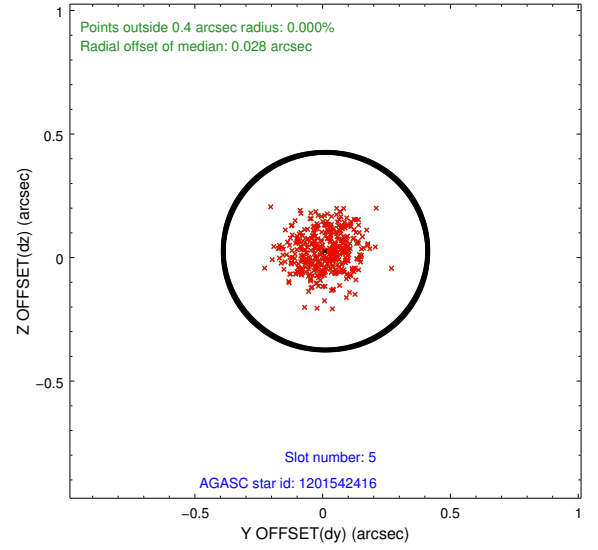
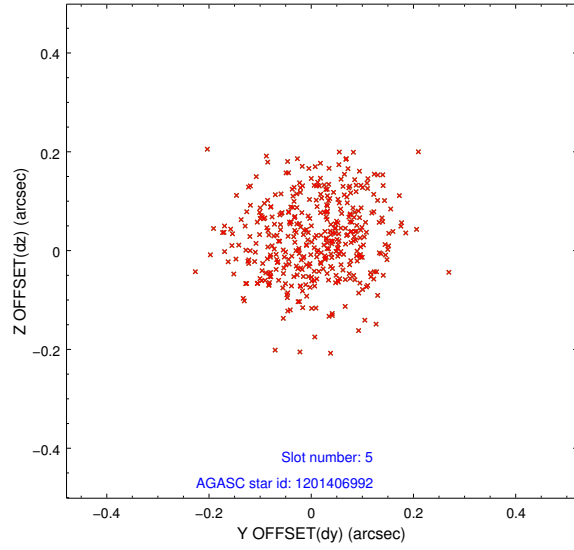
2.4.1 Slot 3



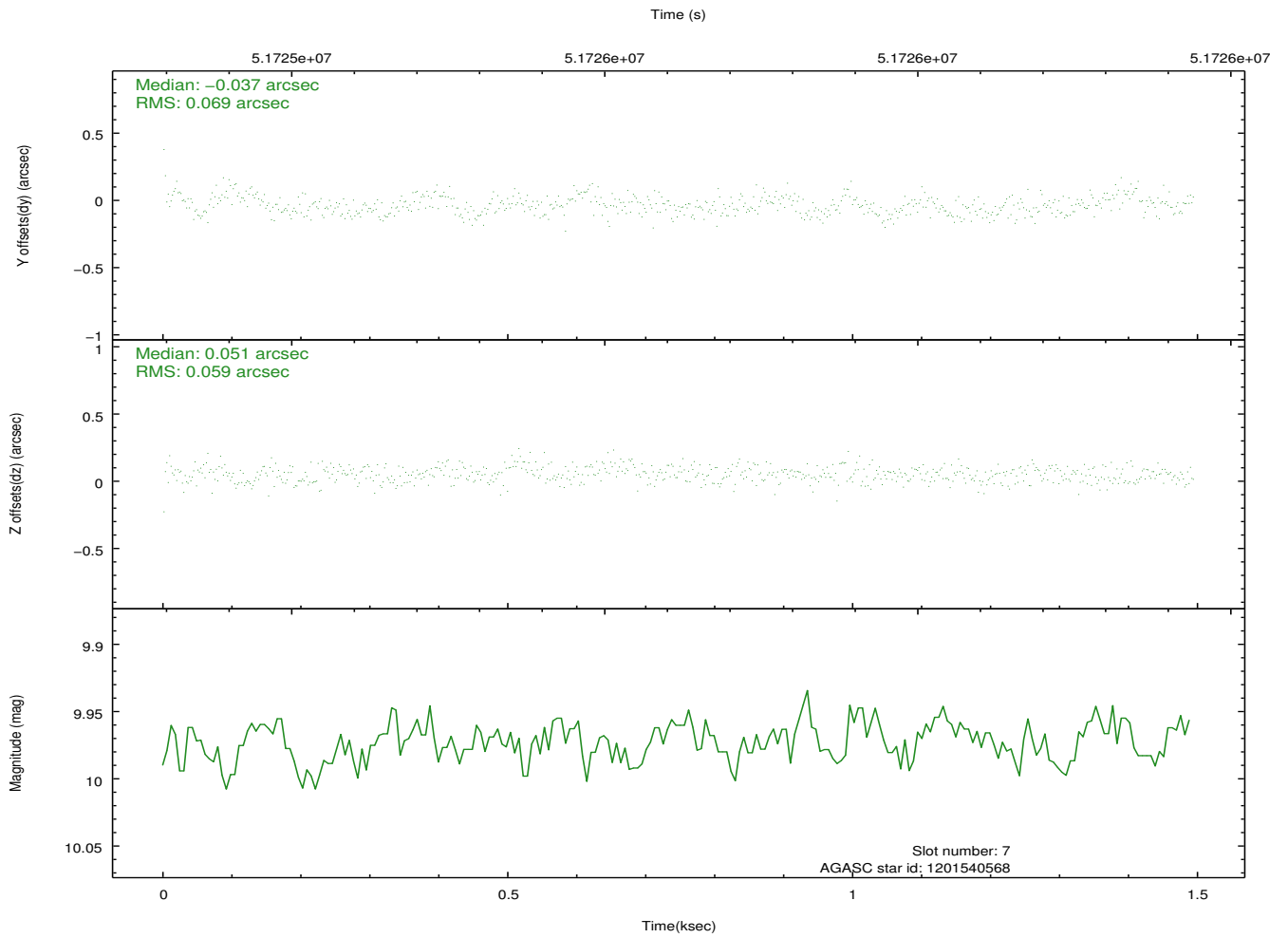
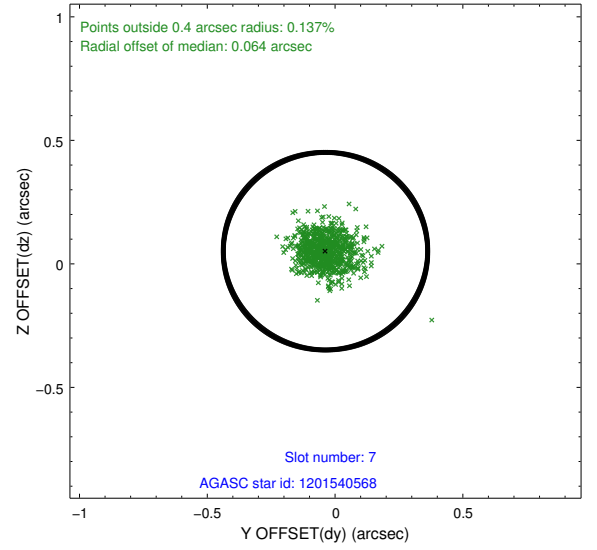
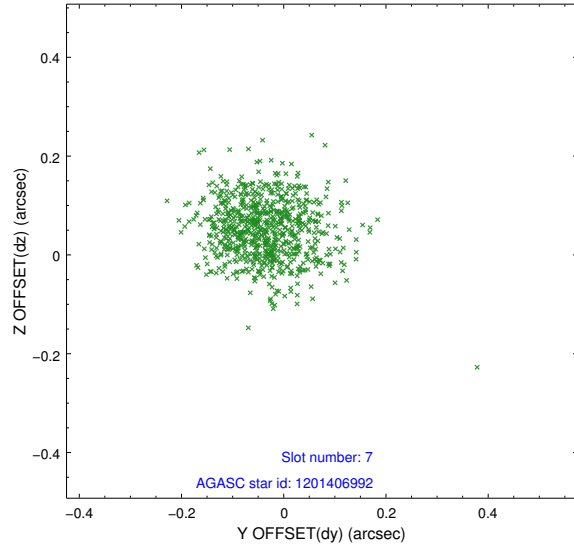
2.4.2 Slot 4



2.4.3 Slot 5

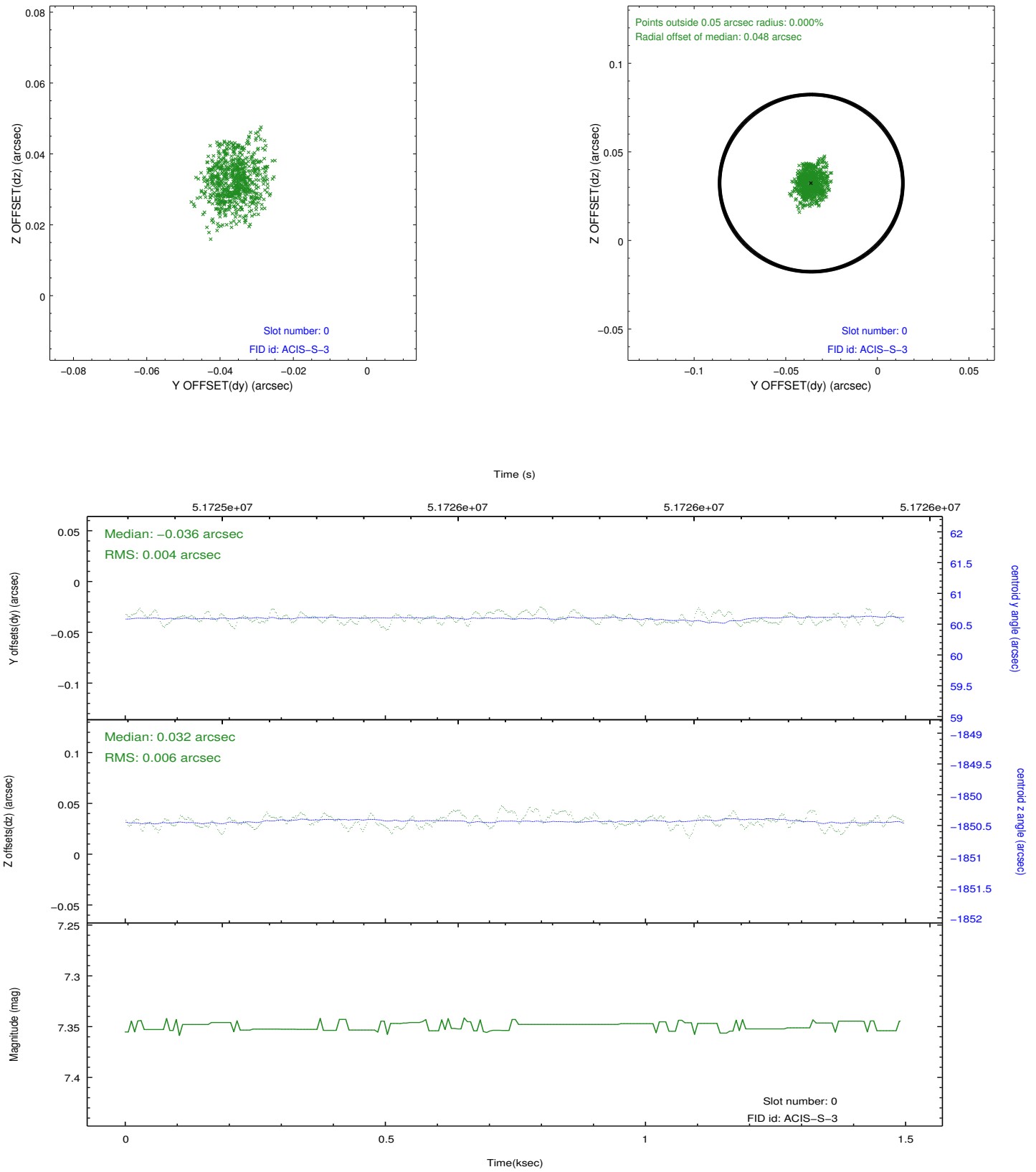


2.4.4 Slot 7

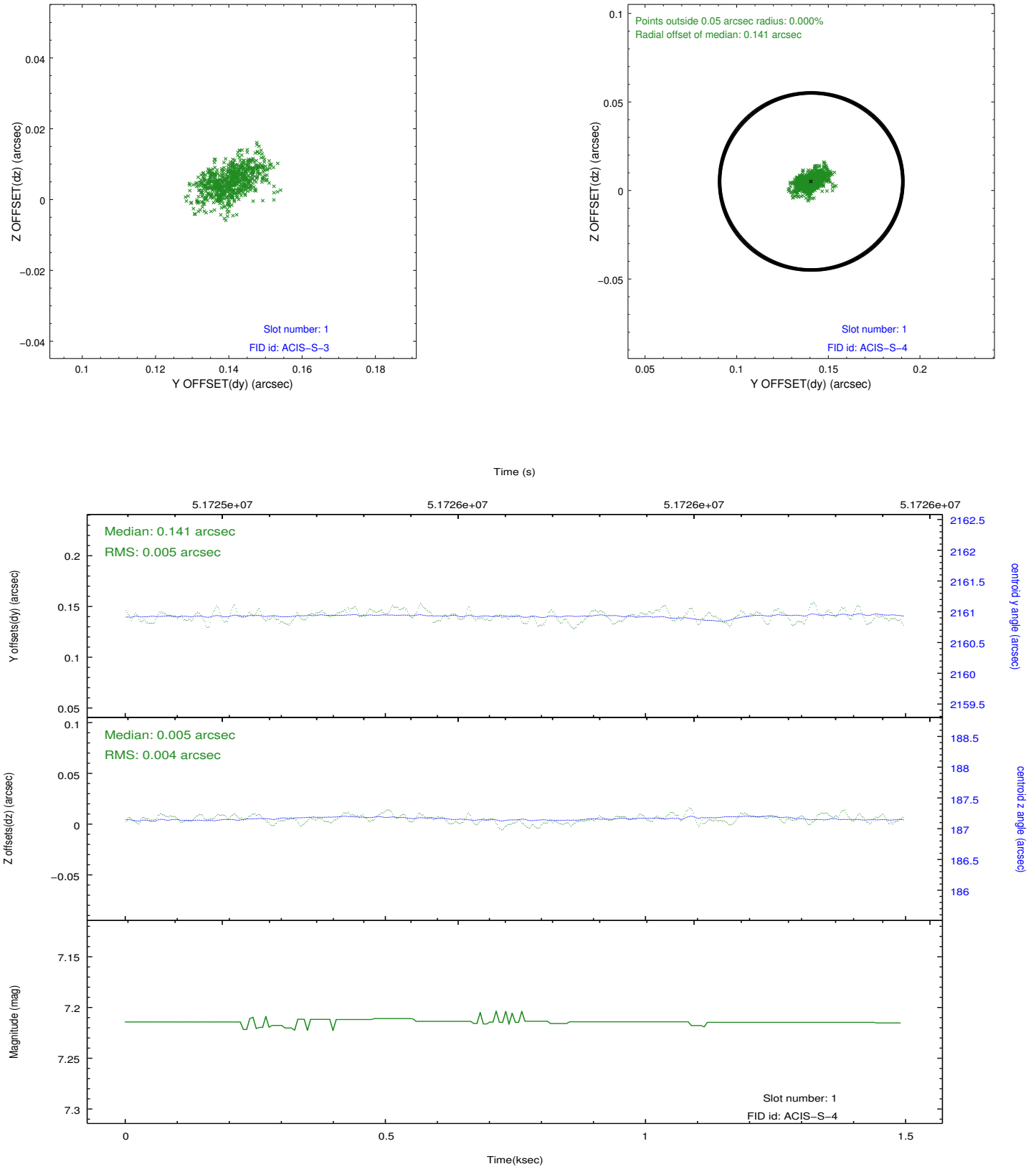


2.5 FID Slots

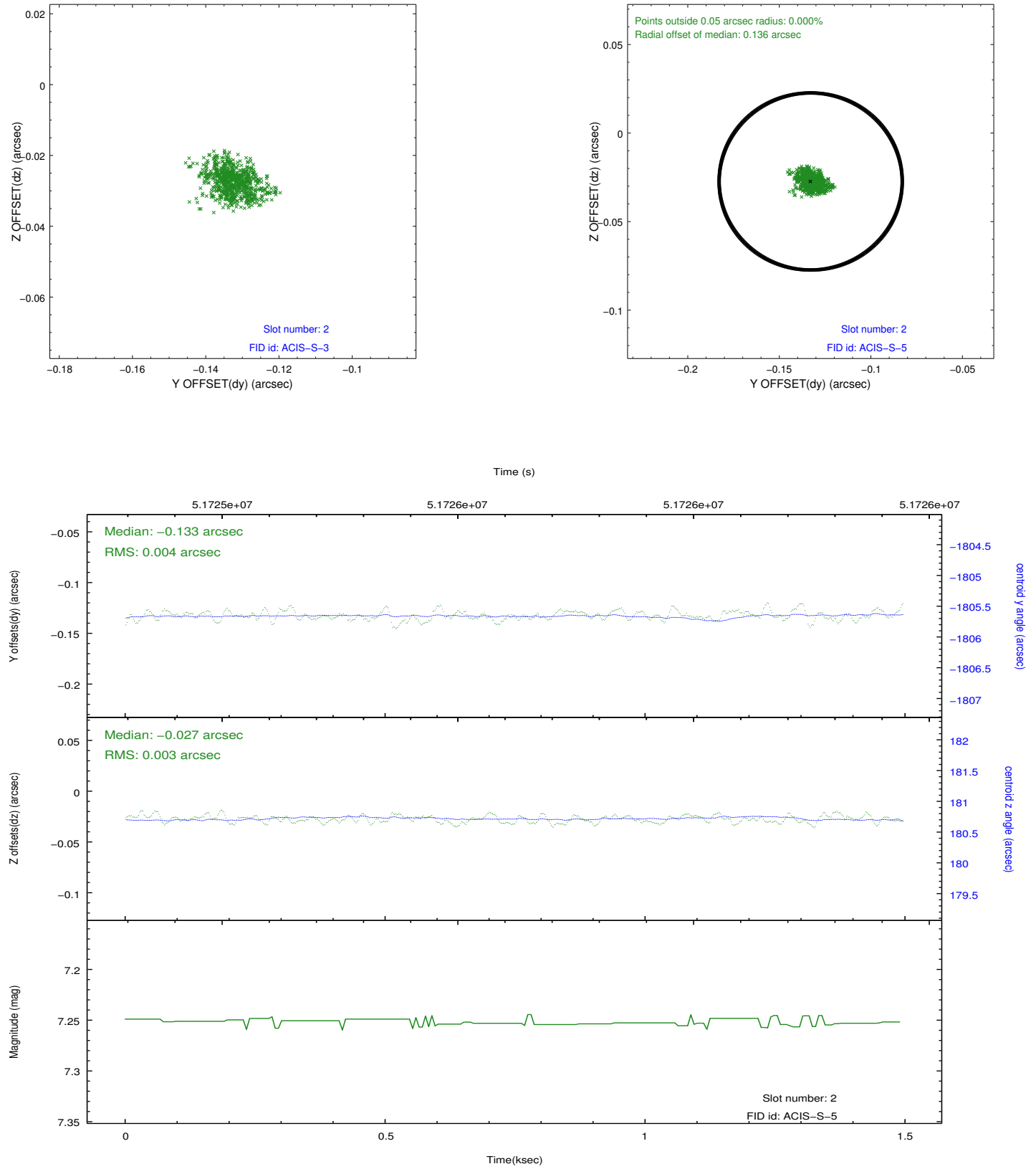
2.5.1 Slot 0



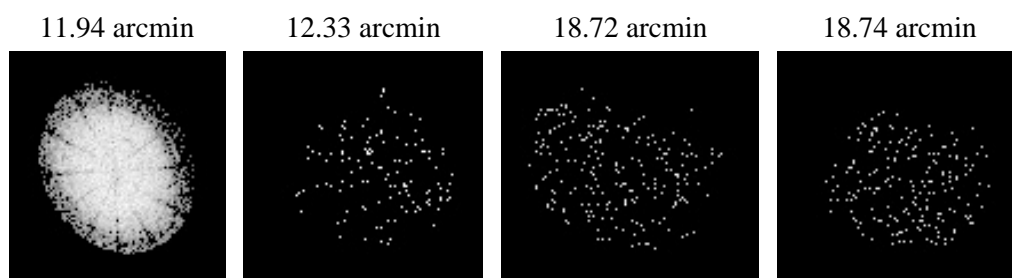
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	0.761

A.2 Comments

Target is very off-axis on S1.

===

Slot 6 for guide star was not used in this observation. The guide star in slot 5 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 0.761 ksec, although with the current processing the charge time would have been 0.758 ksec.

==

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.

Slot 5 was excluded from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one fid light or guide star from the solution.
Slot 6 was not utilized in this observation.