

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 66 - L2 Version 4

Chandra X-Ray Center

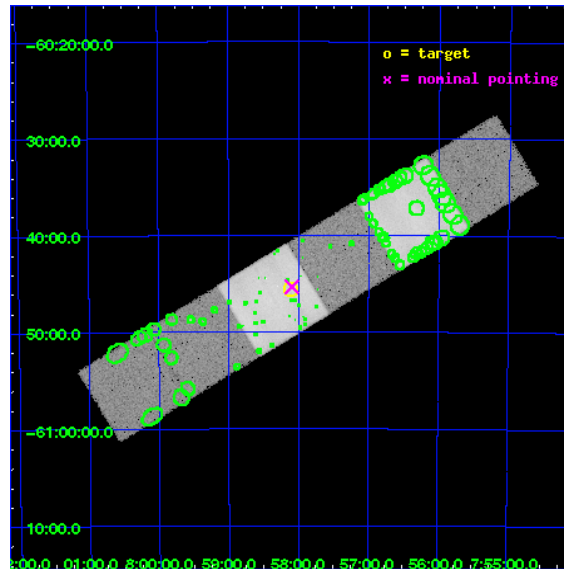
L2 Processing Date : Dec 16 2009

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1 Front

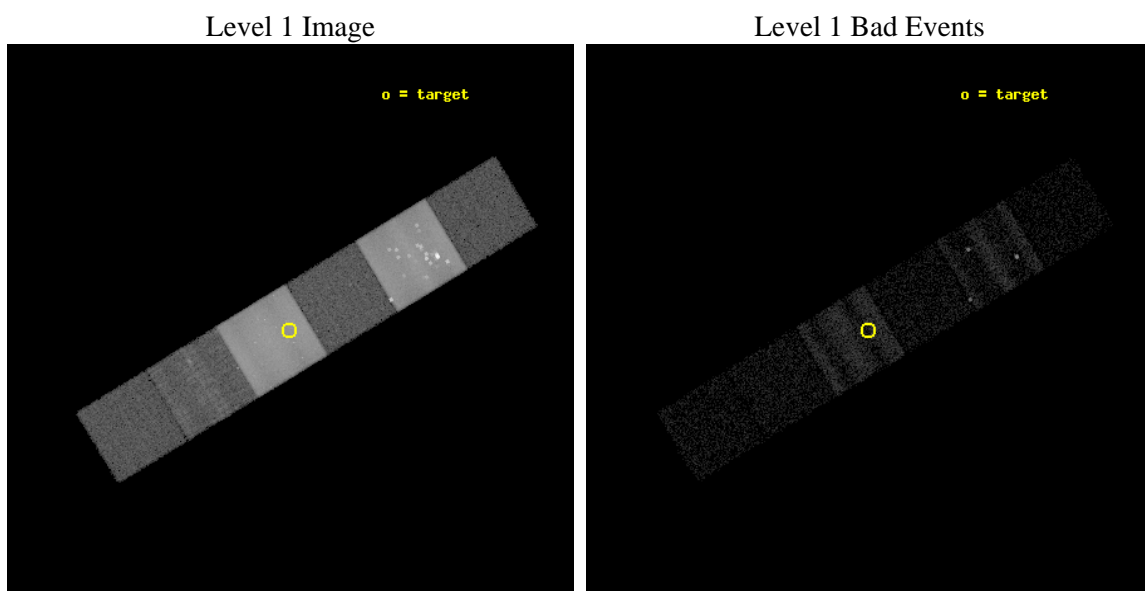
seq_num	290035	Sequence number
obs_id	66	Observation id
title	CALIBRATION OBSERVATION NGC 2516 FOR BORESIGHTING AND PLATE SCALE	
observer	Dr. CXC Calibration	Principal investigator
object	NGC 2516	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	119.529583	Observer's specified target RA
dec_targ	-60.76	Observer's specified target Dec
ra_nom	119.52346272379	Nominal RA
dec_nom	-60.755591359886	Nominal Dec
roll_nom	148.71277452647	Nominal Roll
revision	4	Processing version of data
ontime	10031.040272236	Sum of GTIs [s]
livetime	9904.0212003415	Livetime [s]
ontime4	10034.199142456	Sum of GTIs [s]
ontime5	10034.240182452	Sum of GTIs [s]
ontime6	10034.076022454	Sum of GTIs [s]
ontime7	10031.040272236	Sum of GTIs [s]
ontime8	10030.917152233	Sum of GTIs [s]
ontime9	10034.117062457	Sum of GTIs [s]
l2events	521683	Number of level 2 events



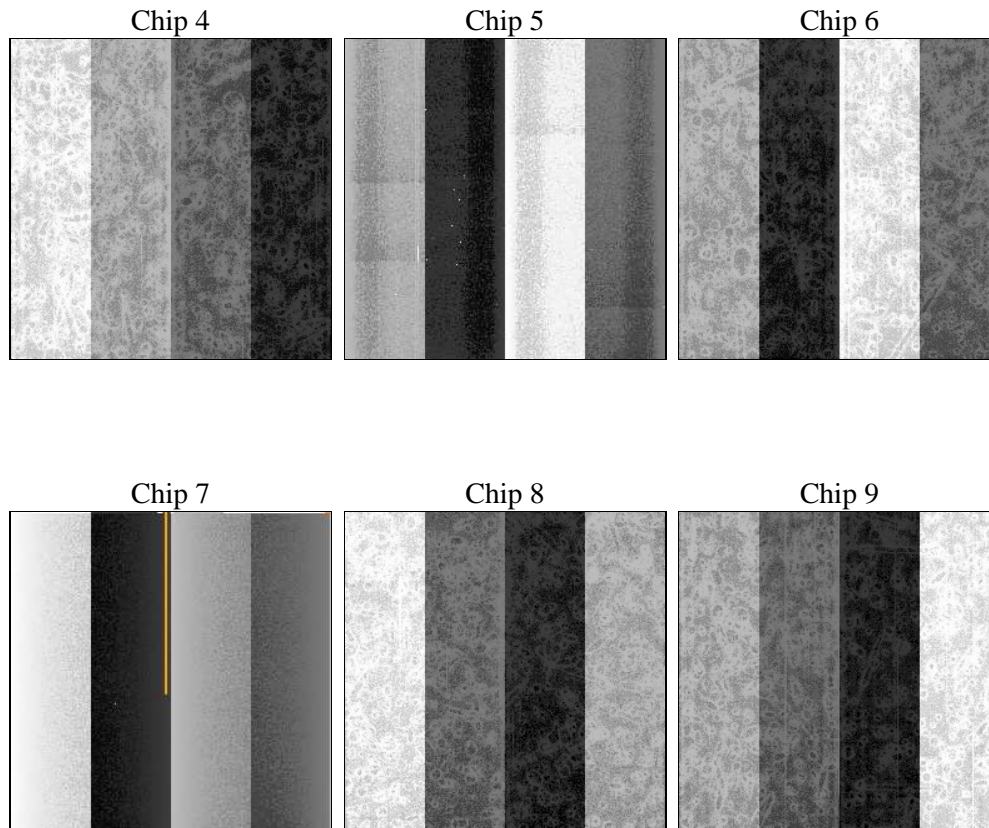
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	10031.040272236	Sum of GTIs [s]
caldsver	4.1.4	 	ontime4	10034.199142456	Sum of GTIs [s]
date	2009-12-16T06:00:13	Date and time of file creation	ontime5	10034.240182452	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	10034.076022454	Sum of GTIs [s]
			ontime7	10031.040272236	Sum of GTIs [s]
			ontime8	10030.917152233	Sum of GTIs [s]
			ontime9	10034.117062457	Sum of GTIs [s]
			l1events	628199	Number of level 1 events

2.1.4 Events

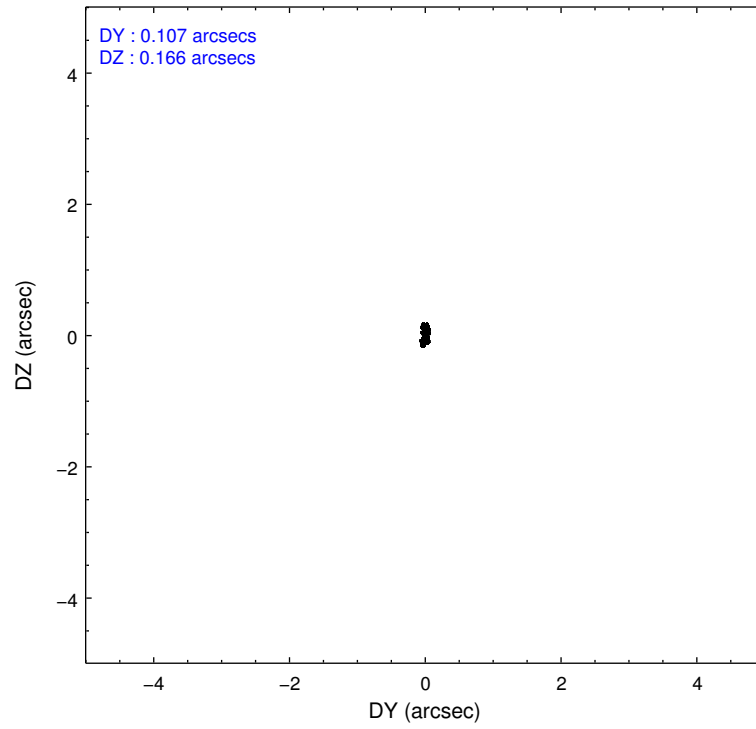
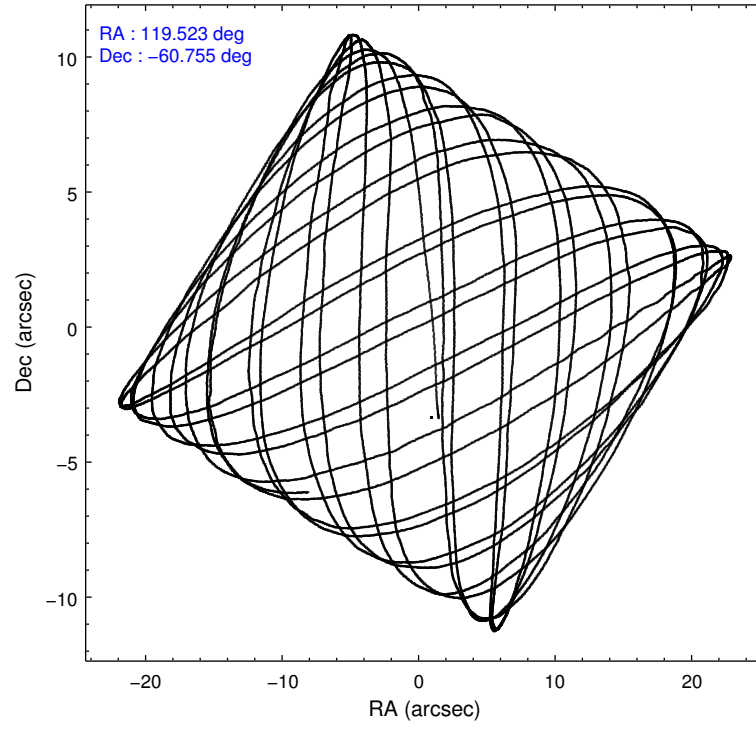
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	25818	262855	32168	240136	39088	28134
rejected events	4870	10478	6231	13015	6748	6100
rejected %	18%	3%	19%	5%	17%	21%

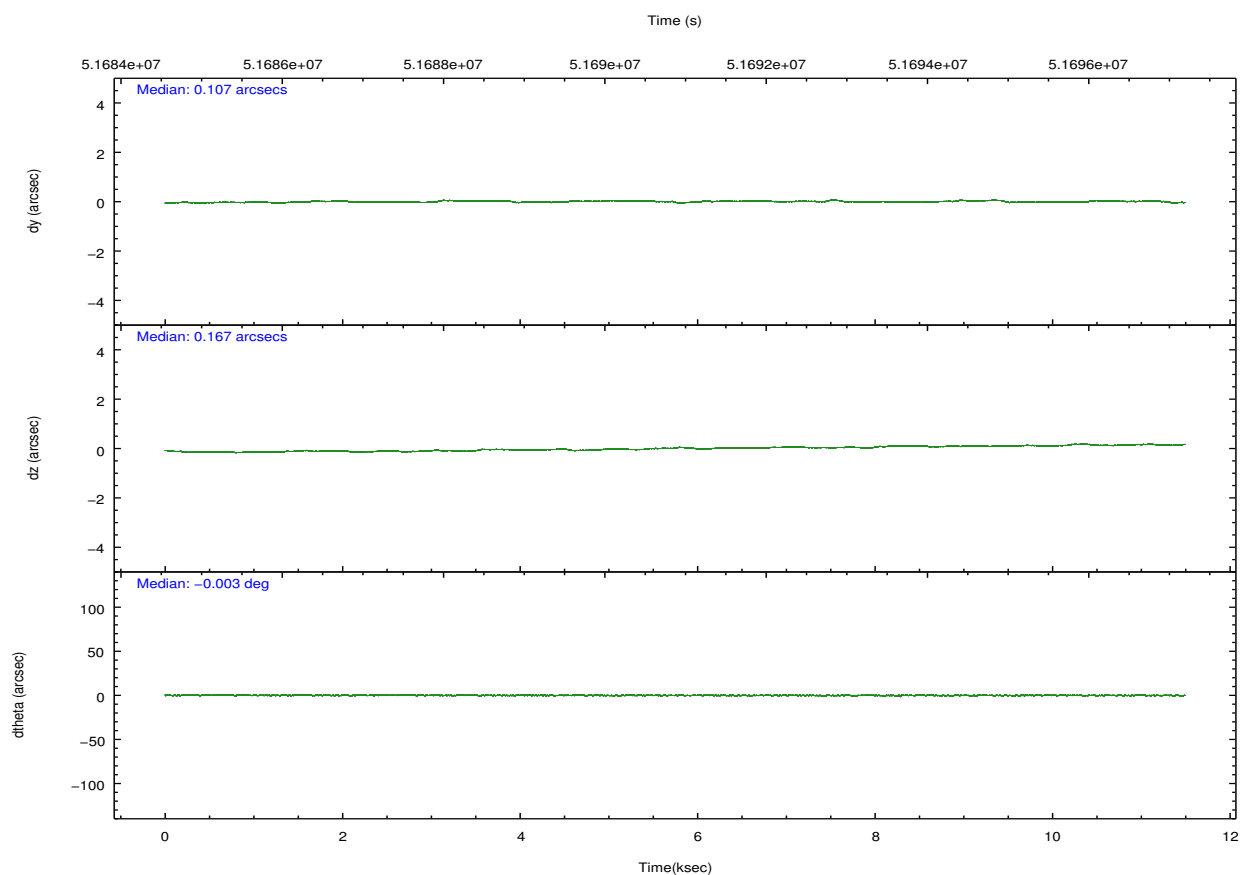
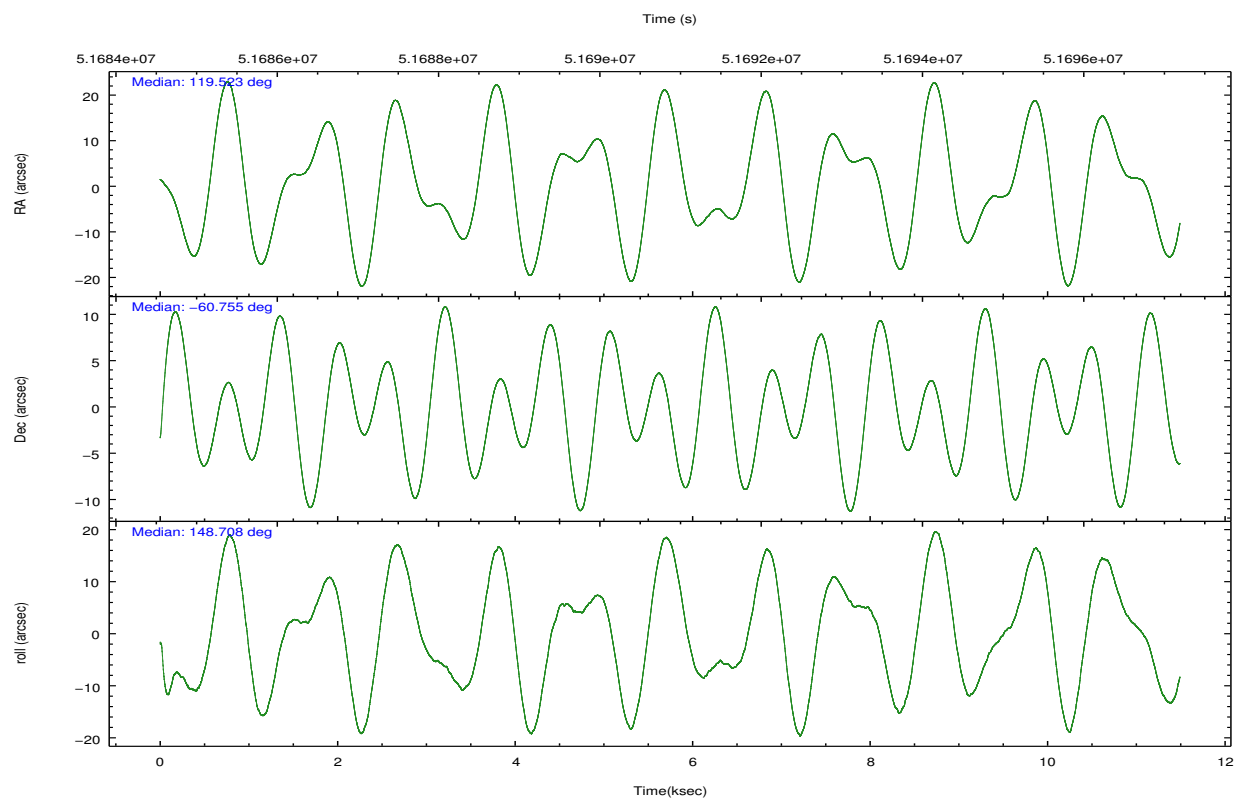
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	7958	54280	10388	20509	11757	8030
	30%	20%	32%	8%	30%	28%
grade 1 events	54	681	48	76	65	53
	0%	0%	0%	0%	0%	0%
grade 2 events	4807	40912	6200	30685	7516	4795
	18%	15%	19%	12%	19%	17%
grade 3 events	1300	18797	1362	17395	2138	1438
	5%	7%	4%	7%	5%	5%
grade 4 events	1266	16783	1286	15335	2018	1311
	4%	6%	3%	6%	5%	4%
grade 5 events	4801	9637	6161	12730	6668	6038
	18%	3%	19%	5%	17%	21%
grade 6 events	5632	121765	6723	143406	8926	6469
	21%	46%	20%	59%	22%	22%
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	119.580069	119.5234627237904	Subarray requested	NONE	NONE
Pointing Dec	-60.756702	-60.75559135988625	Alternating exposures requested	N	N
Pointing Roll	148.605529	148.712774526465	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	51685616.184000	51684666.206888			
Observation start date	1999-08-22T05:05:52	1999-08-22T04:51:06			
Observation end time	51696616.184000	51696742.757323			
Observation end date	1999-08-22T08:09:12	1999-08-22T08:12:22			
Read mode	TIMED	TIMED			

2.3 Aspect



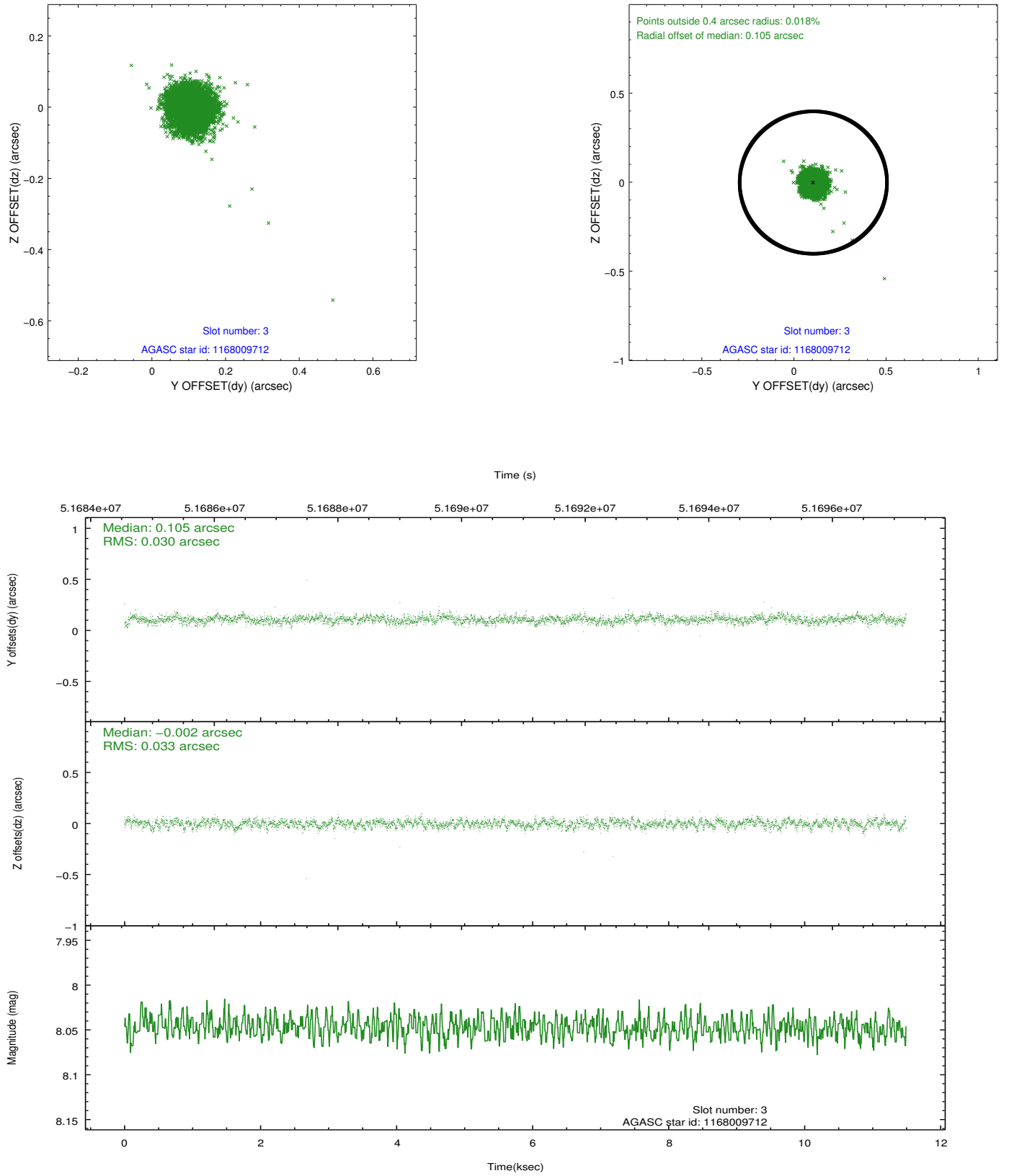


Slot Statistics

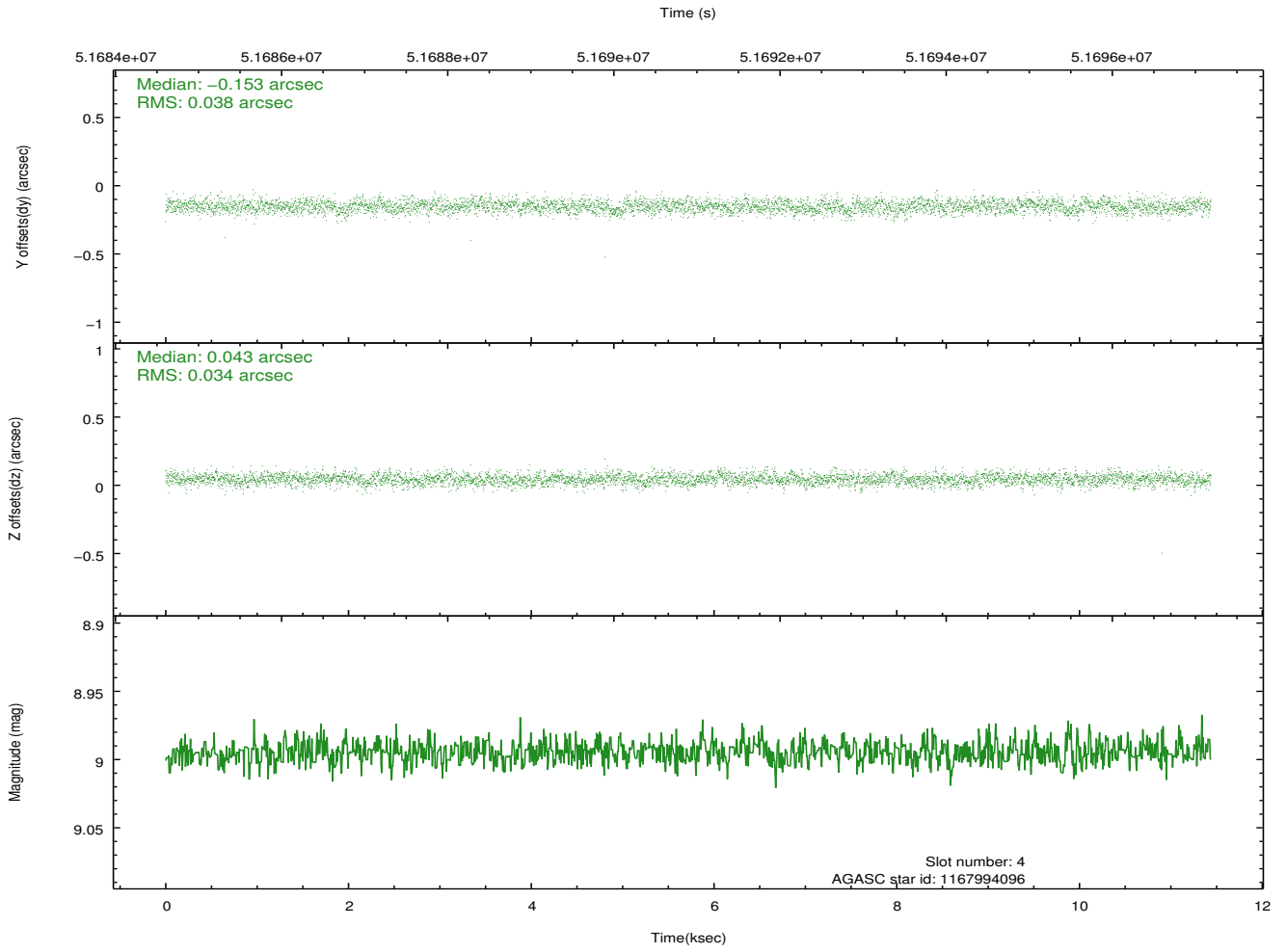
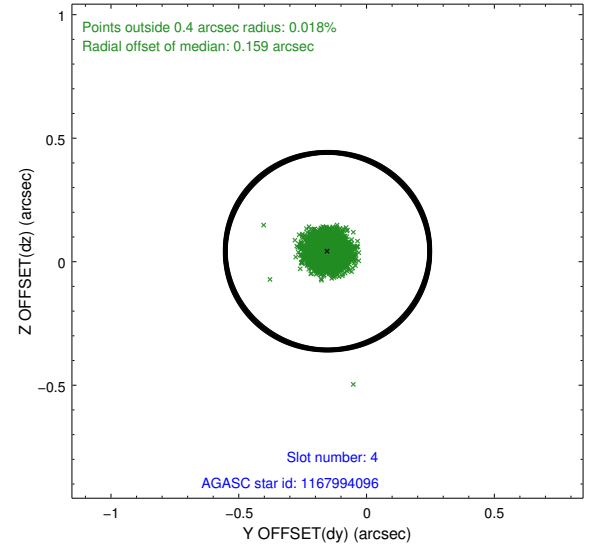
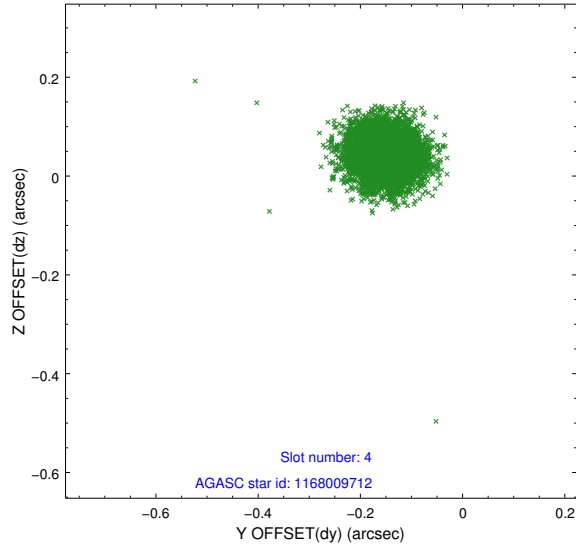
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	5605	-0.034	-0.020	0.007	0.012	0.000000	0.000000	-752.72	-1721.53
1	FID	ACIS-S-4	7.22	5602	0.135	0.022	0.007	0.012	0.000000	0.000000	2160.64	186.76
2	FID	ACIS-S-5	7.25	5602	-0.132	0.007	0.007	0.012	0.000000	0.000000	-1805.42	180.65
3	GUIDE	1168009712	8.05	5604	0.105	-0.002	0.046	0.075	119.512143	-60.614801	368.11	-372.82
4	GUIDE	1167994096	8.99	5577	-0.153	0.043	0.053	0.087	118.437093	-60.572614	2060.99	503.22
5	GUIDE	1169708032	9.09	5600	-0.018	-0.187	0.078	0.128	121.148638	-60.486116	-1884.27	-2251.86
6	GUIDE	1167993512	8.75	5603	0.044	-0.047	0.056	0.091	118.780061	-60.545451	1599.67	96.27
7	GUIDE	1168007992	9.74	5593	0.018	0.197	0.115	0.177	119.985345	-61.468910	-1932.05	1828.14

2.4 Star Slots

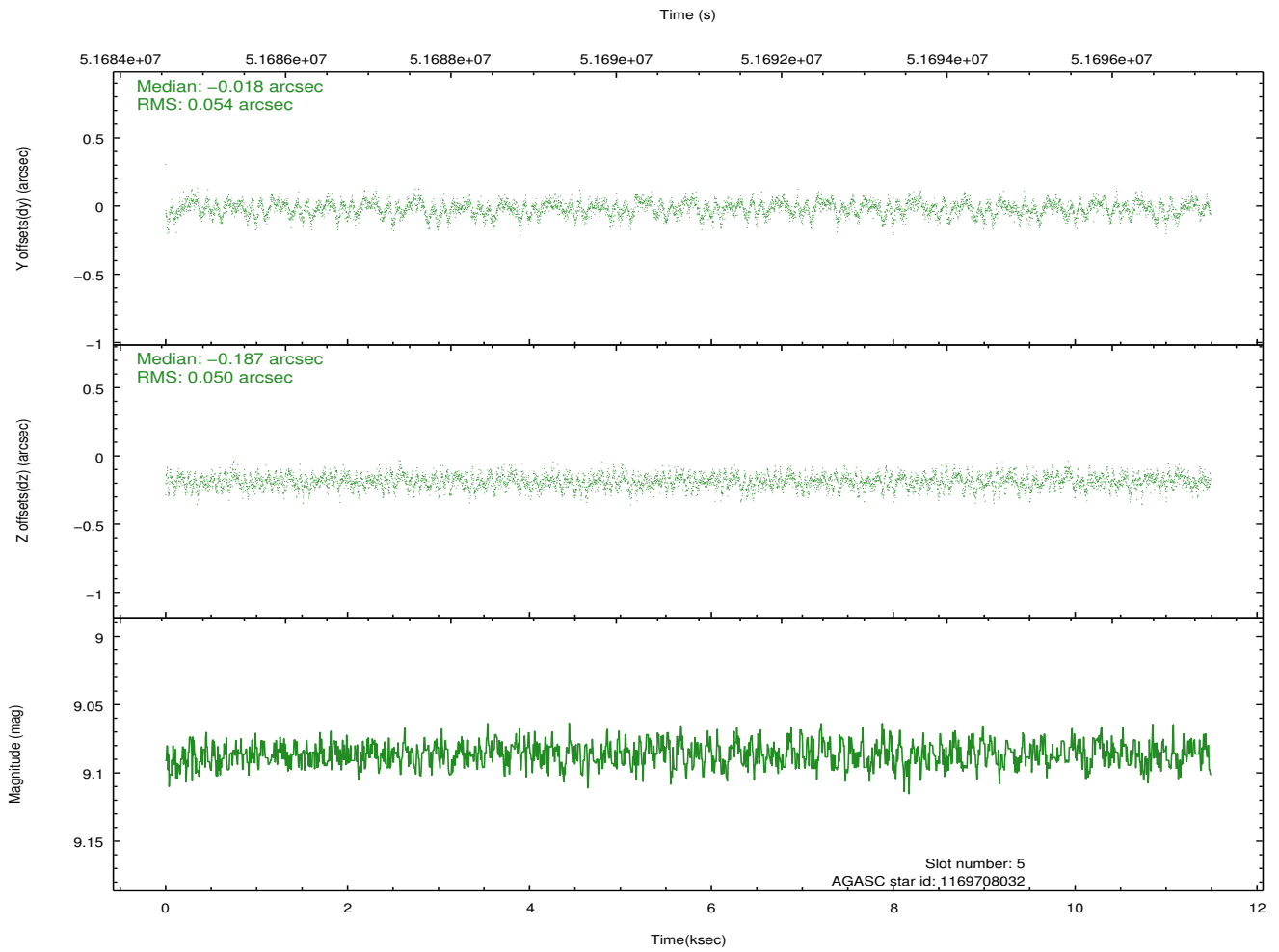
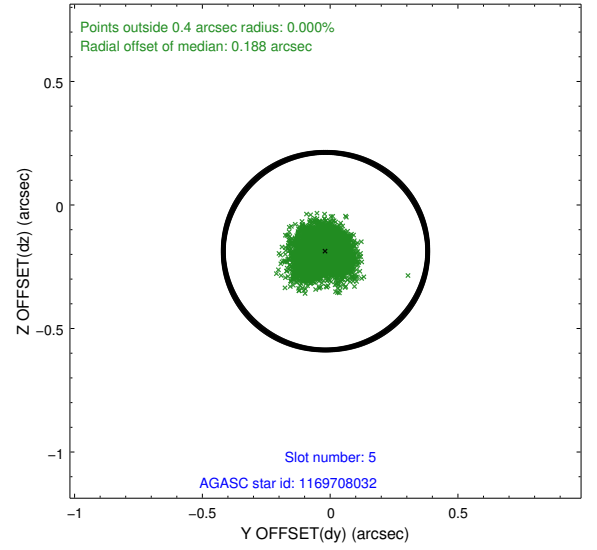
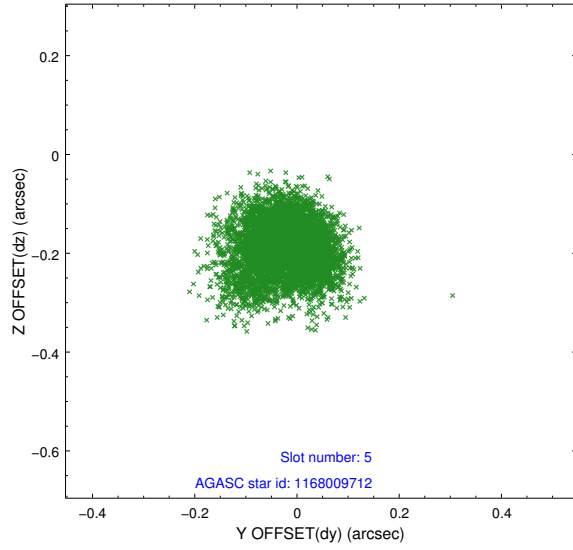
2.4.1 Slot 3



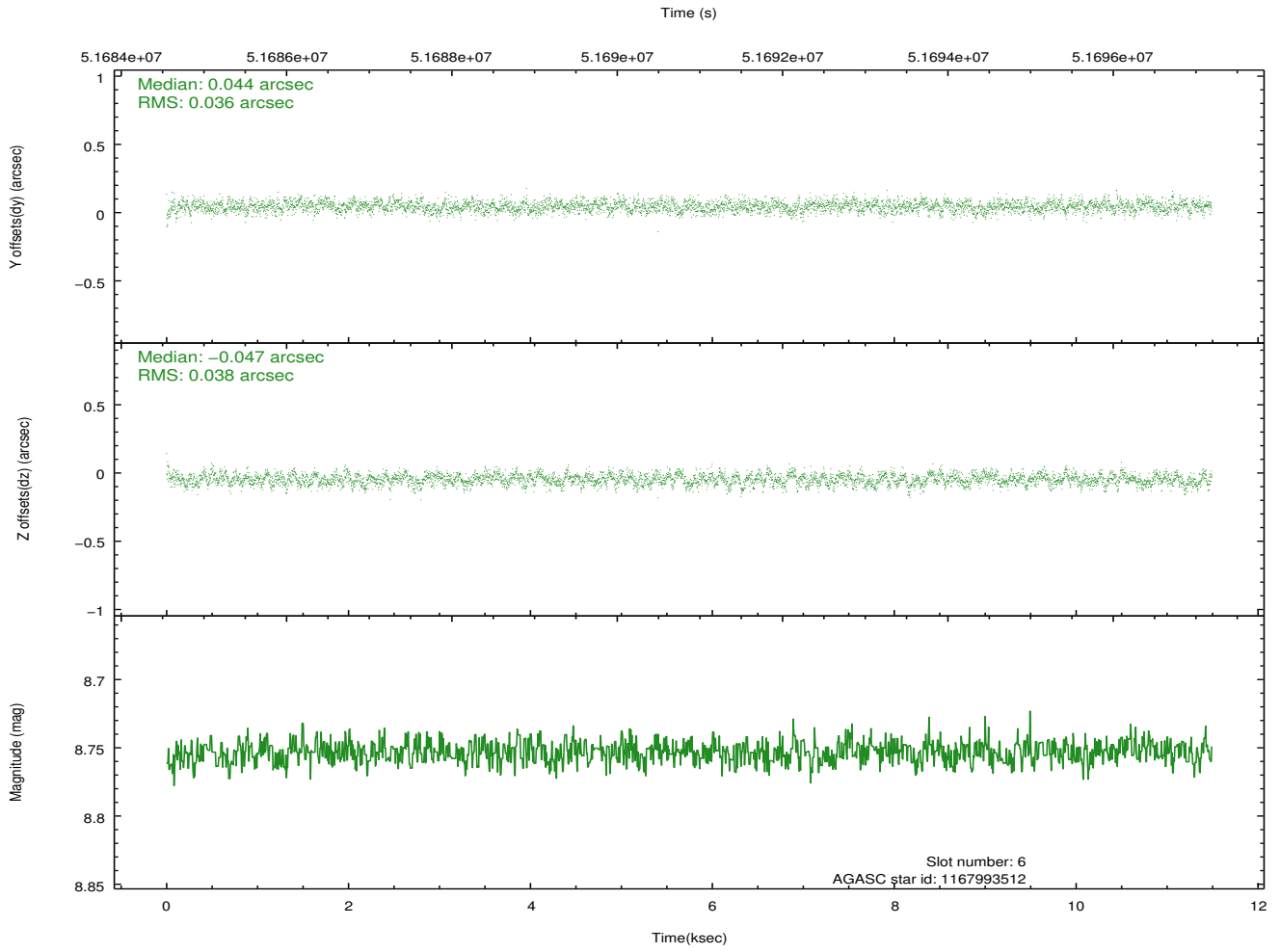
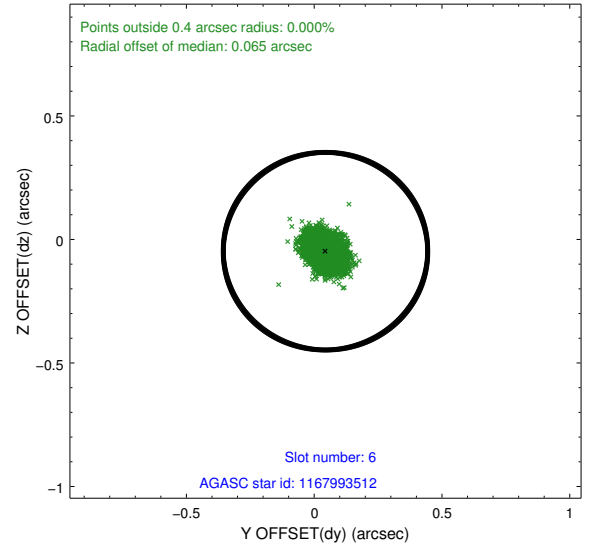
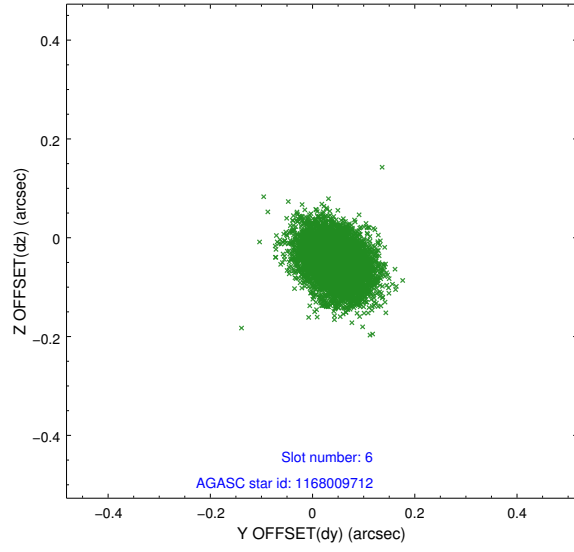
2.4.2 Slot 4



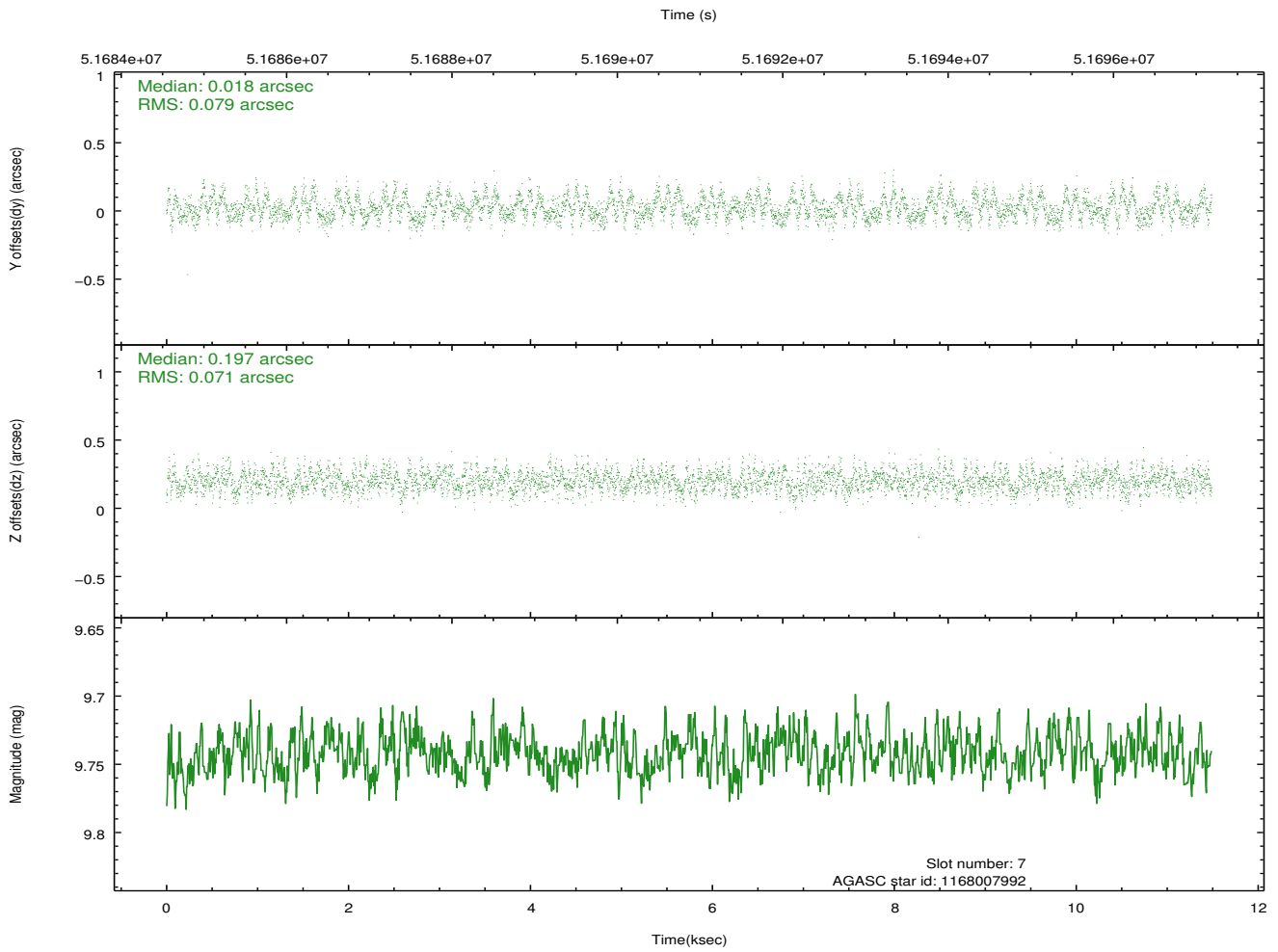
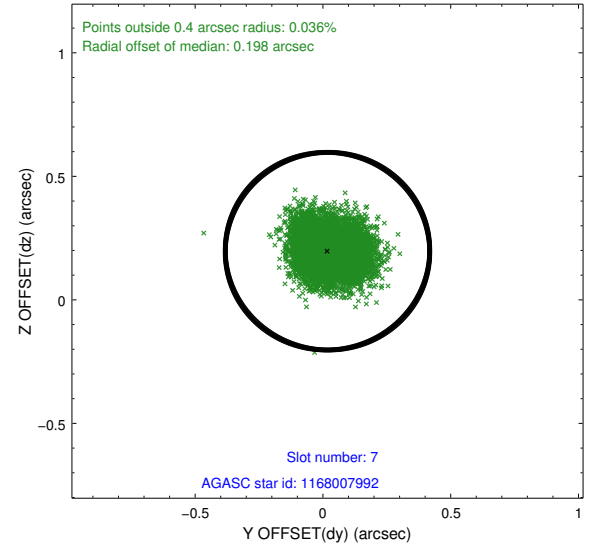
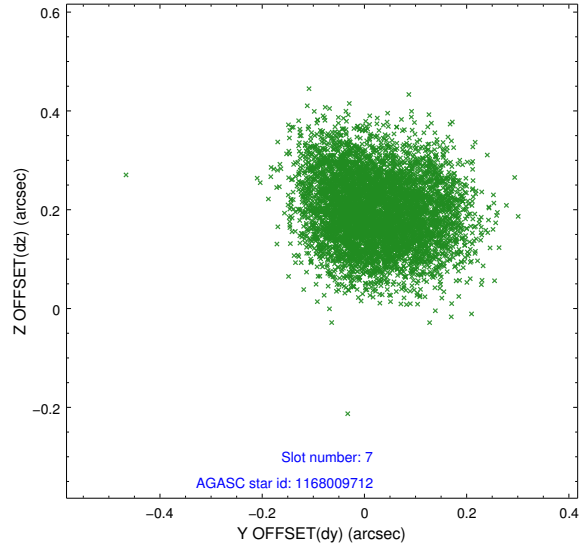
2.4.3 Slot 5



2.4.4 Slot 6

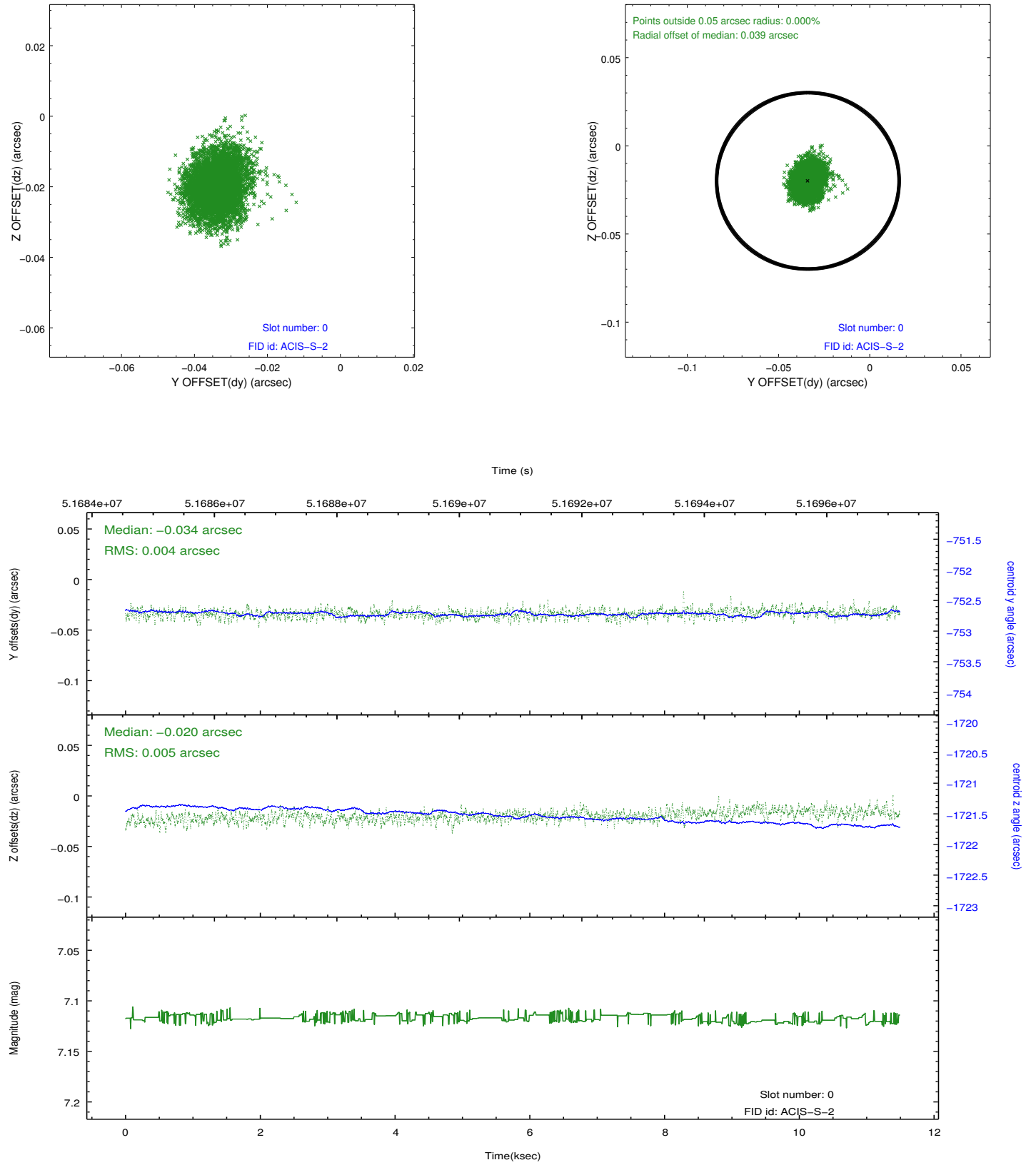


2.4.5 Slot 7

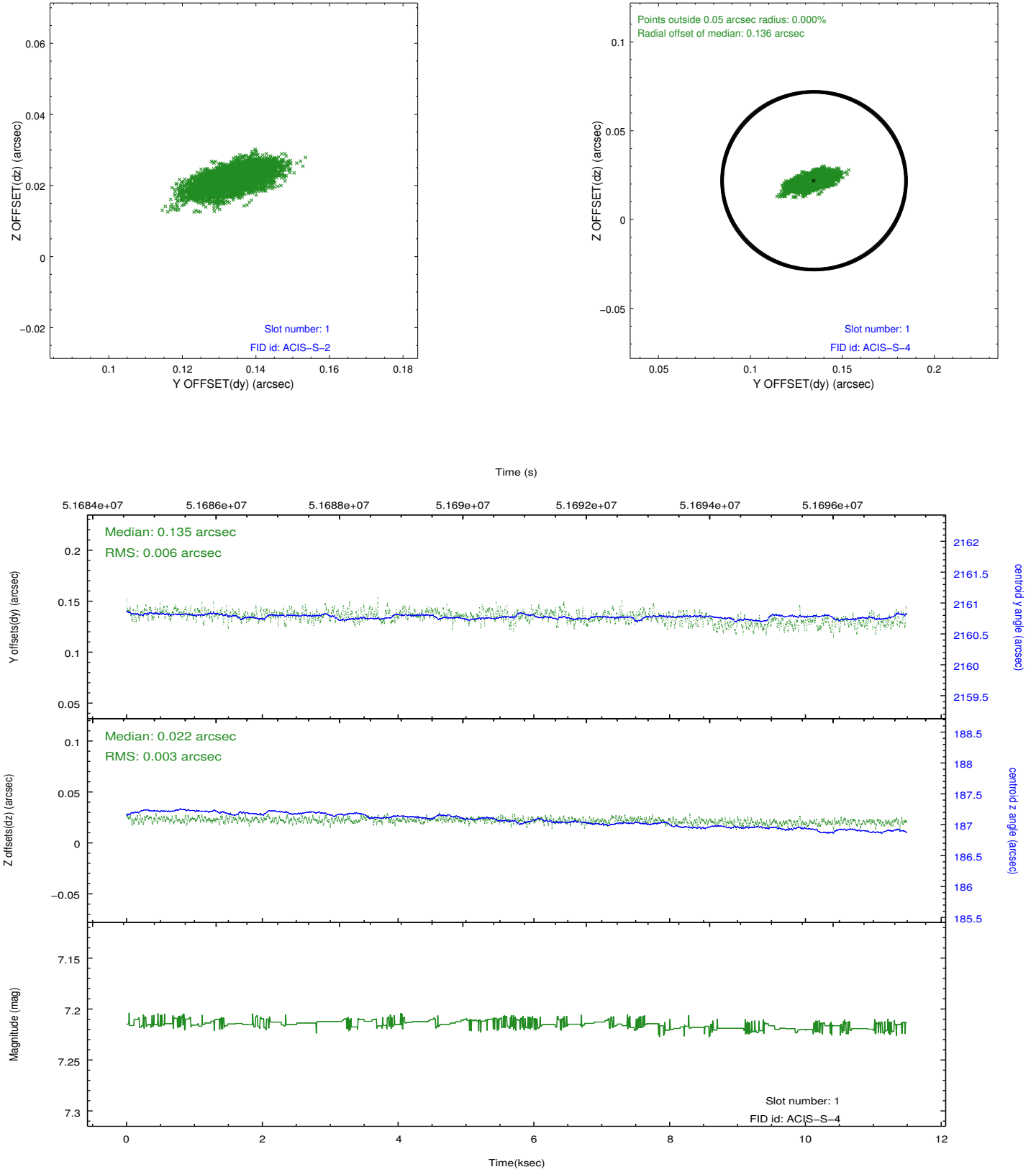


2.5 FID Slots

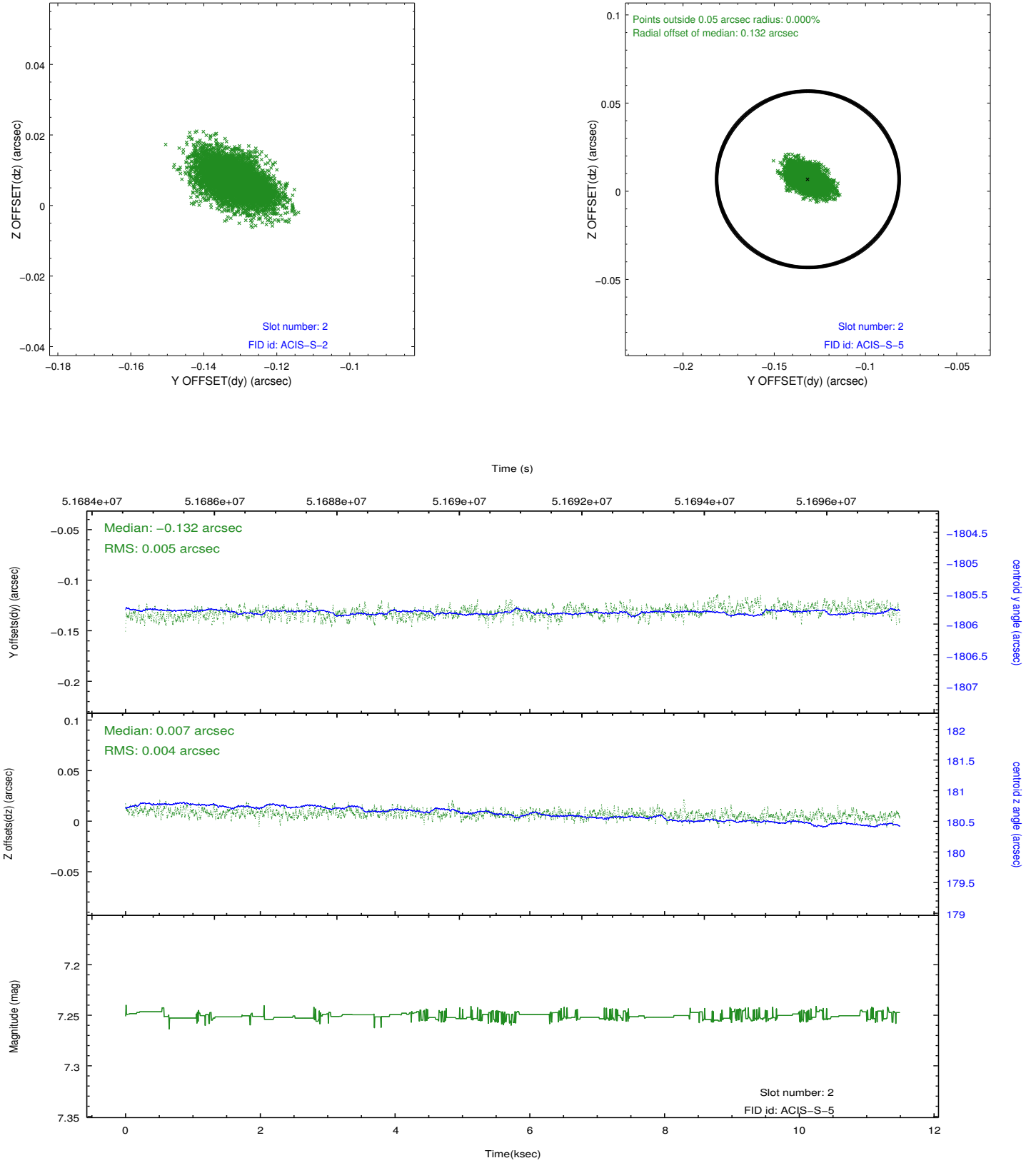
2.5.1 Slot 0



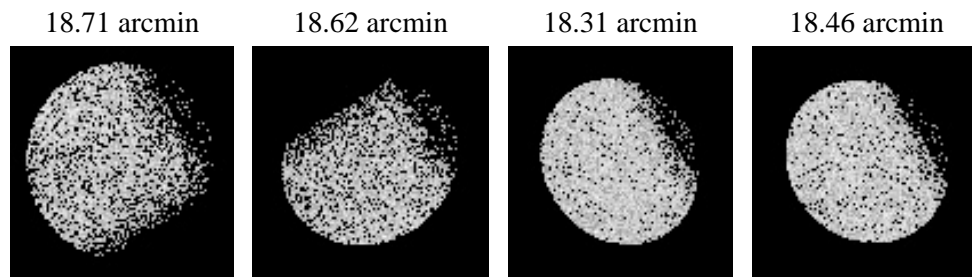
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.02.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.99

A.2 Comments

ACIS boresight and plate scale series.====

Charge time for this ObsId remains at previous value of 9.99 ksec, although with the current processing the charge time would have been 10.03 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.