

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 556 - L2 Version 4
Chandra X-Ray Center

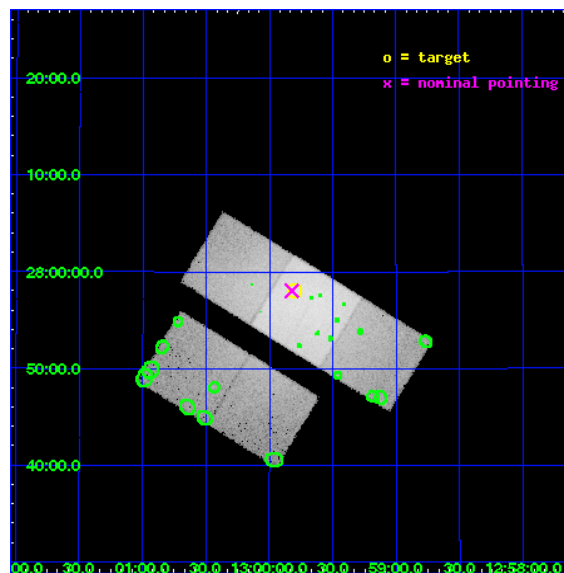
L2 Processing Date : Nov 21 2009

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1 Front

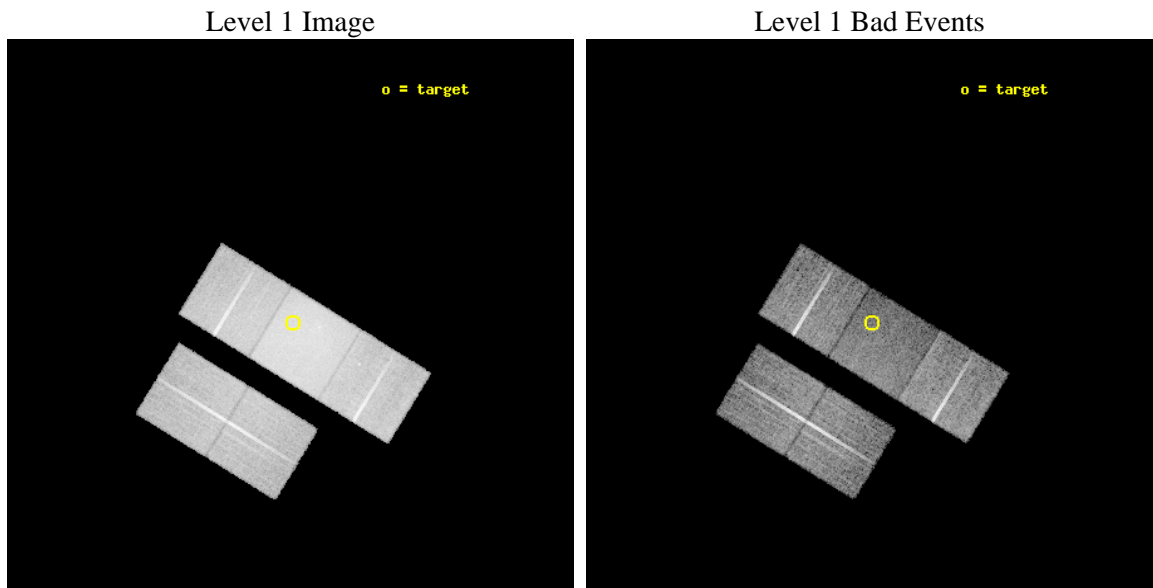
seq_num	890001	Sequence number
obs_id	556	Observation id
title	CALIBRATION OBSERVATION OF AN EXTENDED HARD SOURCE: THE COMA CLUSTER	
observer	Dr. CXC Calibration	Principal investigator
object	COMA CLUSTER	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.95	Observer's specified target RA
dec_targ	27.966667	Observer's specified target Dec
ra_nom	194.95563691174	Nominal RA
dec_nom	27.967441308849	Nominal Dec
roll_nom	31.545027980067	Nominal Roll
revision	4	Processing version of data
ontime	9772.4802271351	Sum of GTIs [s]
livetime	9648.735198218	Livetime [s]
ontime2	9772.4391871318	Sum of GTIs [s]
ontime3	9769.1161768362	Sum of GTIs [s]
ontime6	9772.398147136	Sum of GTIs [s]
ontime7	9772.4802271351	Sum of GTIs [s]
ontime8	9772.315957427	Sum of GTIs [s]
l2events	323516	Number of level 2 events



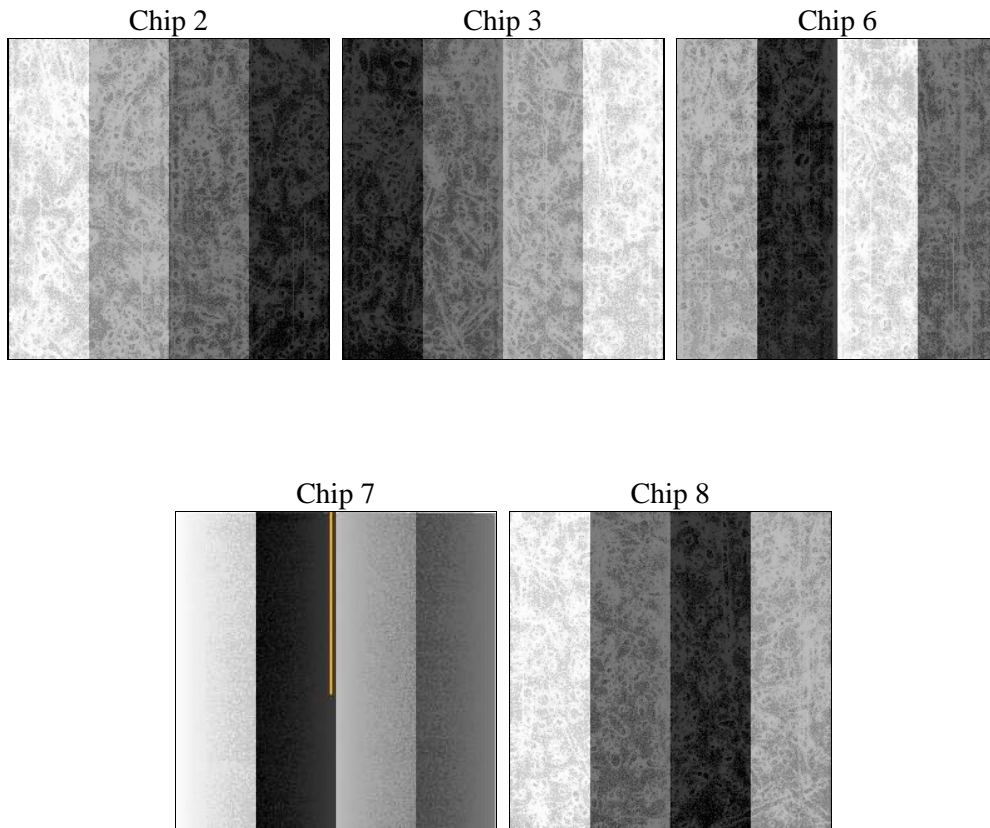
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	9772.4802271351	Sum of GTIs [s]
caldbver	4.1.4	 	ontime2	9772.4391871318	Sum of GTIs [s]
date	2009-11-21T10:27:12	Date and time of file creation	ontime3	9769.1161768362	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	9772.398147136	Sum of GTIs [s]
			ontime7	9772.4802271351	Sum of GTIs [s]
			ontime8	9772.315957427	Sum of GTIs [s]
			l1events	737473	Number of level 1 events

2.1.4 Events

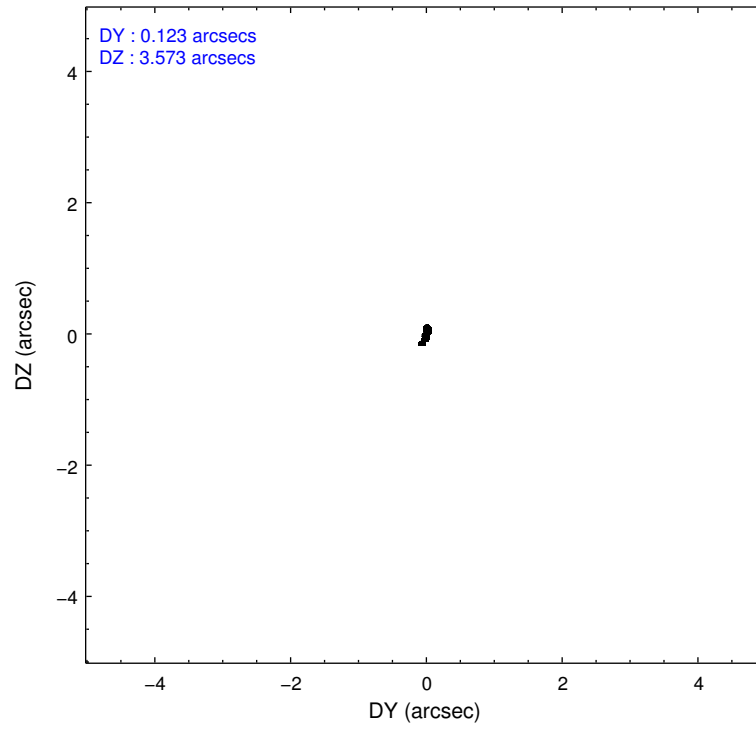
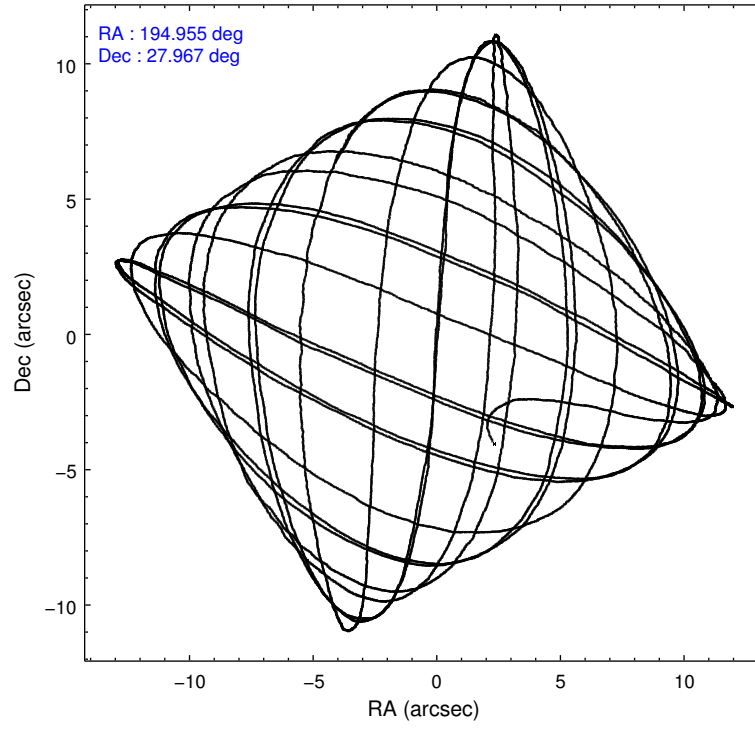
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	110107	108533	138267	237601	142965
rejected events	84303	81323	82224	59640	92557
rejected %	76%	74%	59%	25%	64%

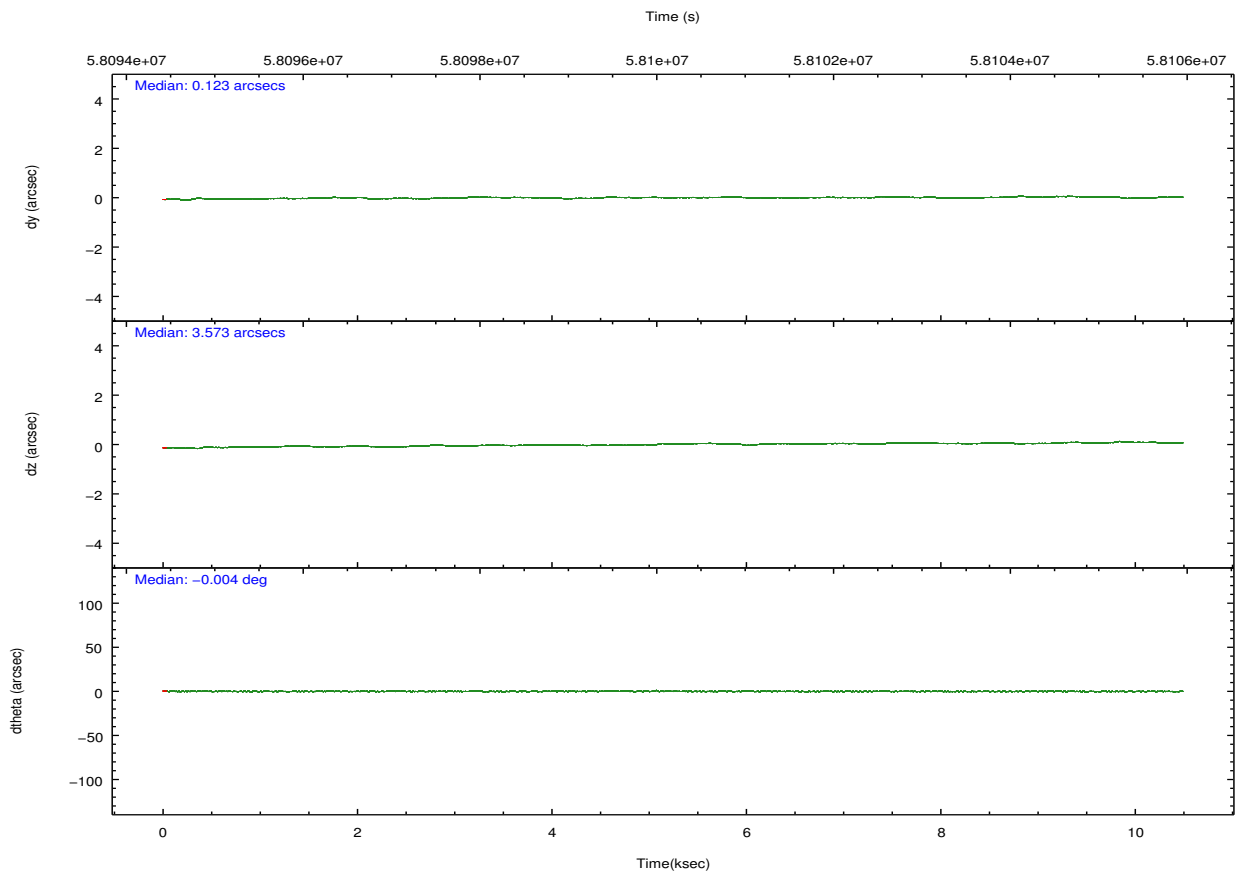
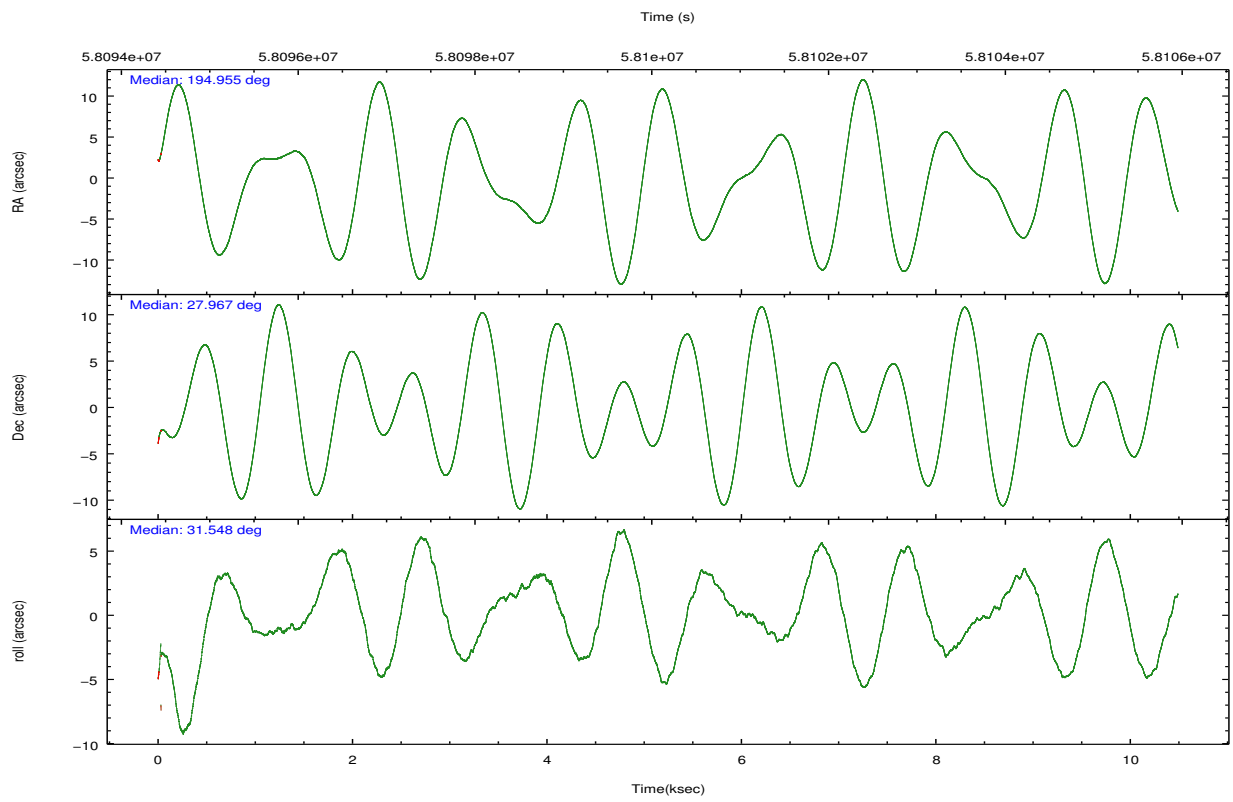
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	13489	14528	31583	45406	28526
	12%	13%	22%	19%	19%
grade 1 events	48	49	90	85	135
	0%	0%	0%	0%	0%
grade 2 events	7994	8102	17411	45957	11826
	7%	7%	12%	19%	8%
grade 3 events	864	1013	1473	17817	2132
	0%	0%	1%	7%	1%
grade 4 events	910	974	1511	16963	2110
	0%	0%	1%	7%	1%
grade 5 events	1629	1759	2001	6690	2544
	1%	1%	1%	2%	1%
grade 6 events	2561	2617	4097	51928	5842
	2%	2%	2%	21%	4%
grade 7 events	82612	79491	80101	52755	89850
	75%	73%	57%	22%	62%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-23678	ACIS-23678	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	194.940552	194.9556369117363	Subarray requested	NONE	NONE
Pointing Dec	27.943228	27.9674413088486	Alternating exposures requested	N	N
Pointing Roll	31.395483	31.54502798006721	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-186.897363	-186.9041422567642			
SIM translation stage offset (mm)	-3.23516	-3.228380326243638			
Observation start time	58095430.184000	58094764.292855			
Observation start date	1999-11-04T09:36:06	1999-11-04T09:26:04			
Observation end time	58105430.184000	58105778.943253			
Observation end date	1999-11-04T12:22:46	1999-11-04T12:29:38			
Read mode	TIMED	TIMED			

2.3 Aspect



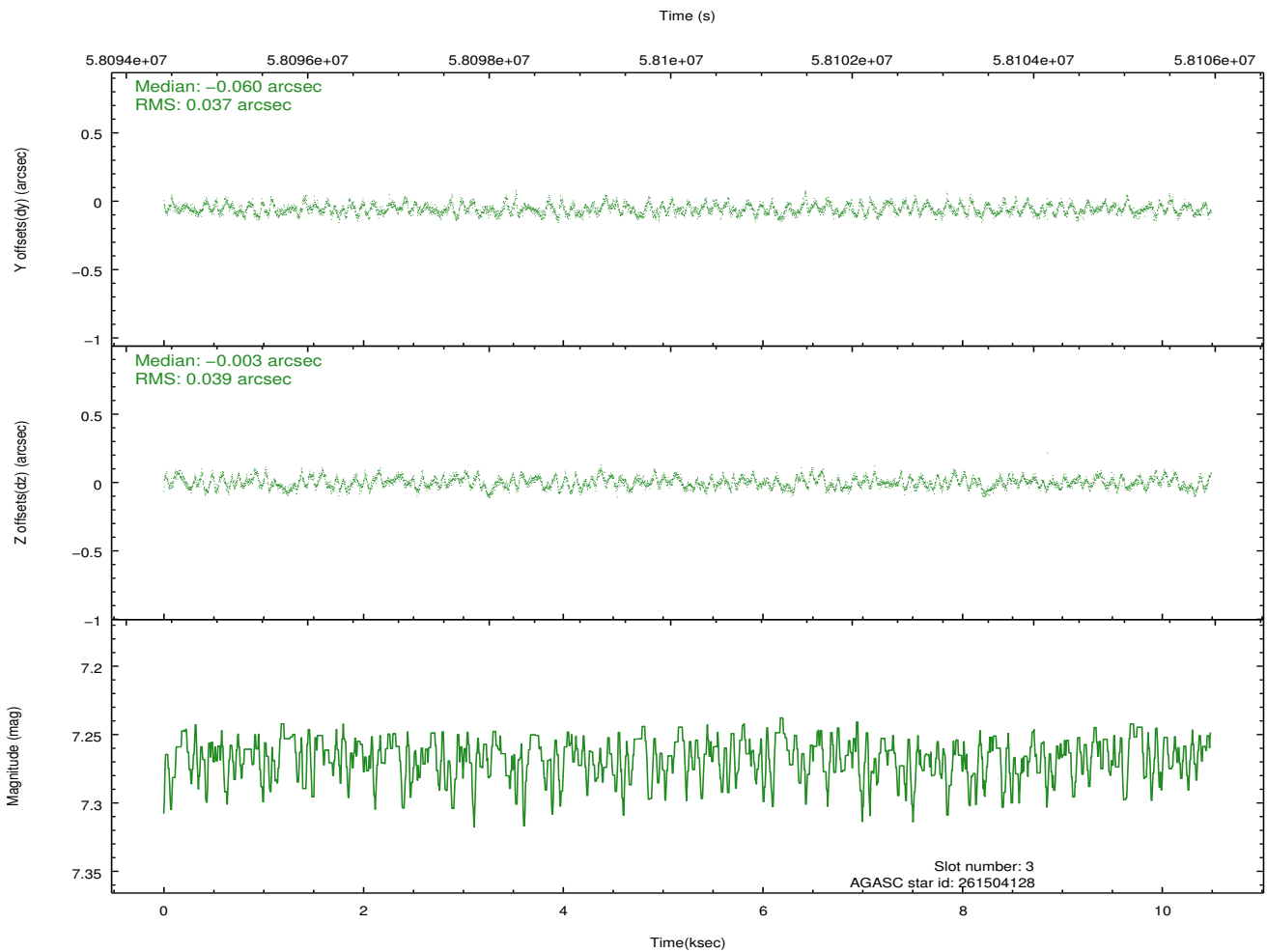
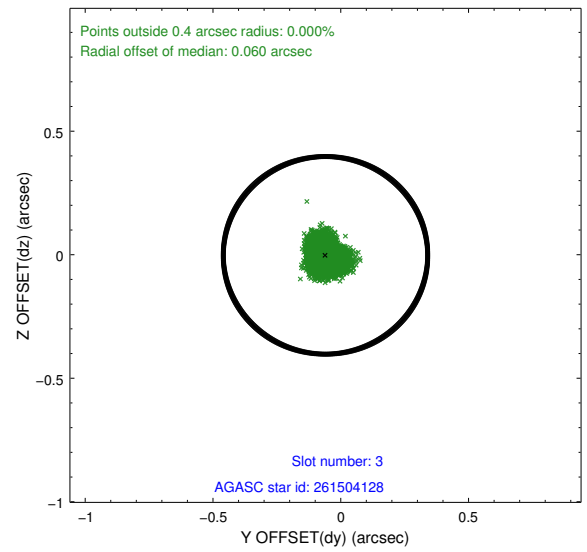
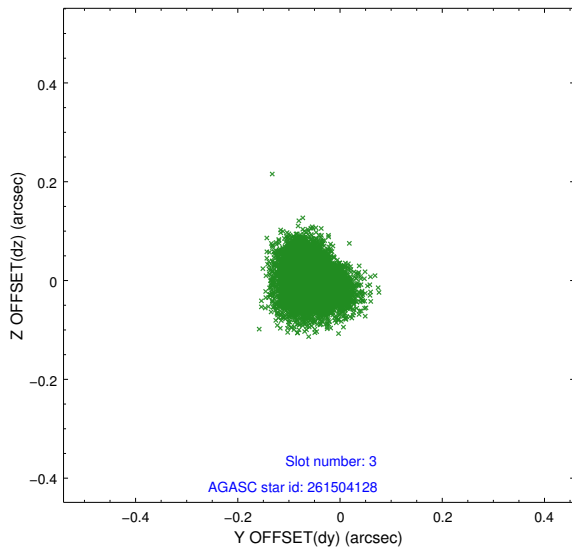


Slot Statistics

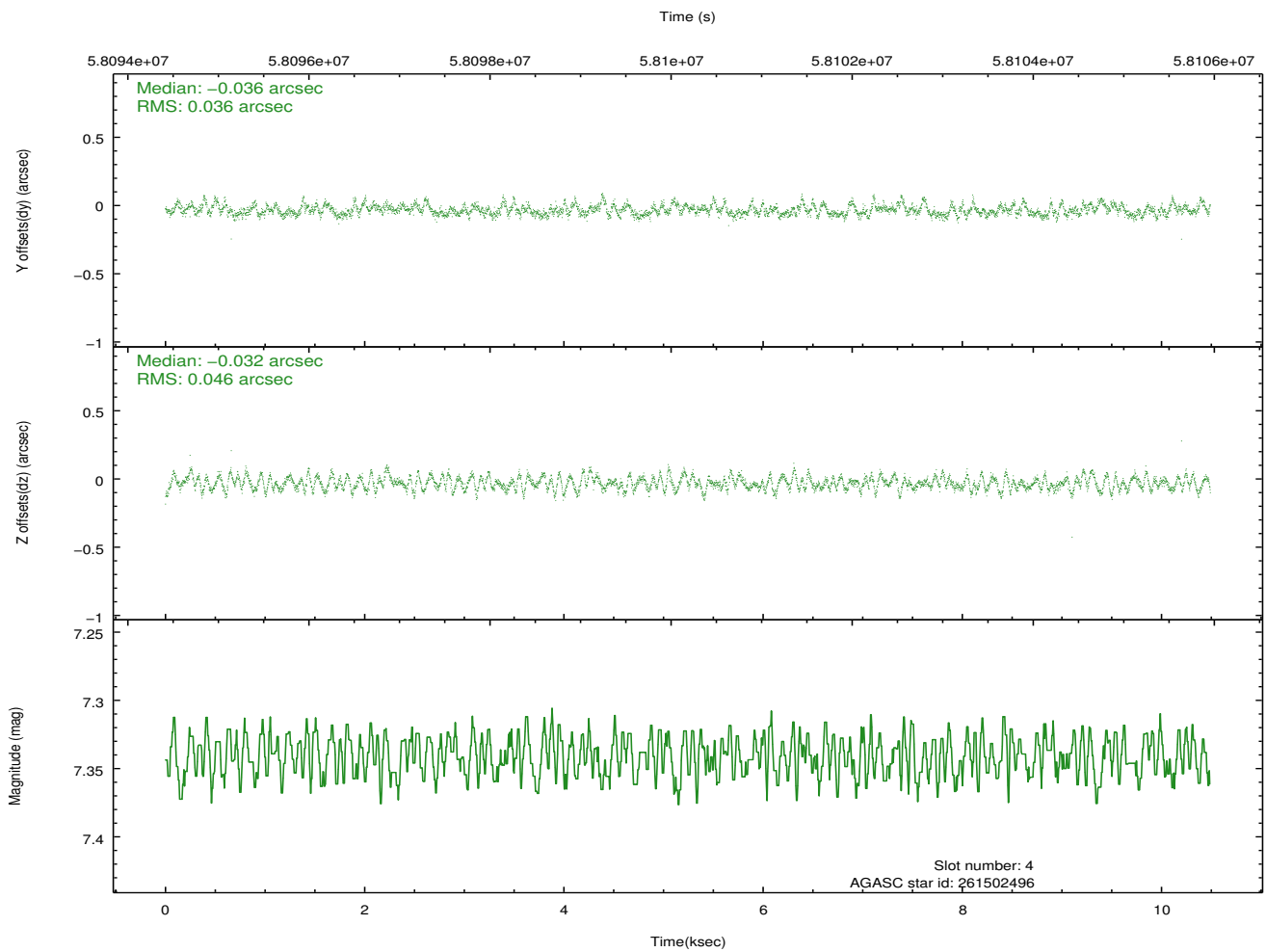
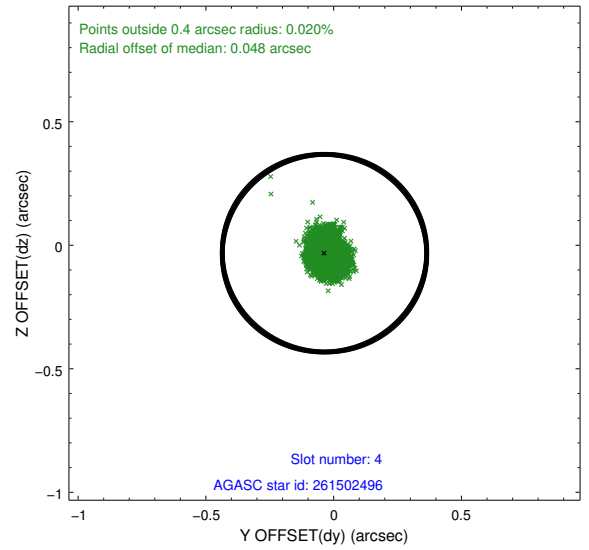
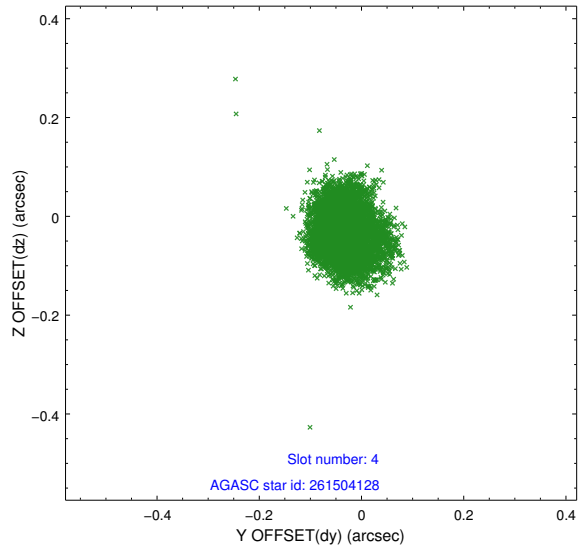
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5117	-0.044	-0.027	0.006	0.011	0.000000	0.000000	-752.51	-1791.30
1	FID	ACIS-S-4	7.20	5117	0.058	0.029	0.006	0.011	0.000000	0.000000	2160.80	117.03
2	FID	ACIS-S-5	7.23	5117	-0.045	0.007	0.007	0.011	0.000000	0.000000	-1805.12	110.89
3	GUIDE	261504128	7.27	5117	-0.060	-0.003	0.058	0.088	194.640935	28.319570	-103.48	1652.21
4	GUIDE	261502496	7.34	5117	-0.036	-0.032	0.063	0.098	194.887297	28.065668	85.81	464.80
5	GUIDE	261498392	8.30	5115	-0.009	0.004	0.053	0.086	194.888587	28.238913	414.52	994.68
6	GUIDE	261492080	9.28	5110	-0.082	-0.027	0.091	0.144	194.976344	28.631585	1388.22	2056.61
7	GUIDE	261505232	9.78	5112	0.183	0.050	0.109	0.175	194.216553	27.802521	-2227.21	775.16

2.4 Star Slots

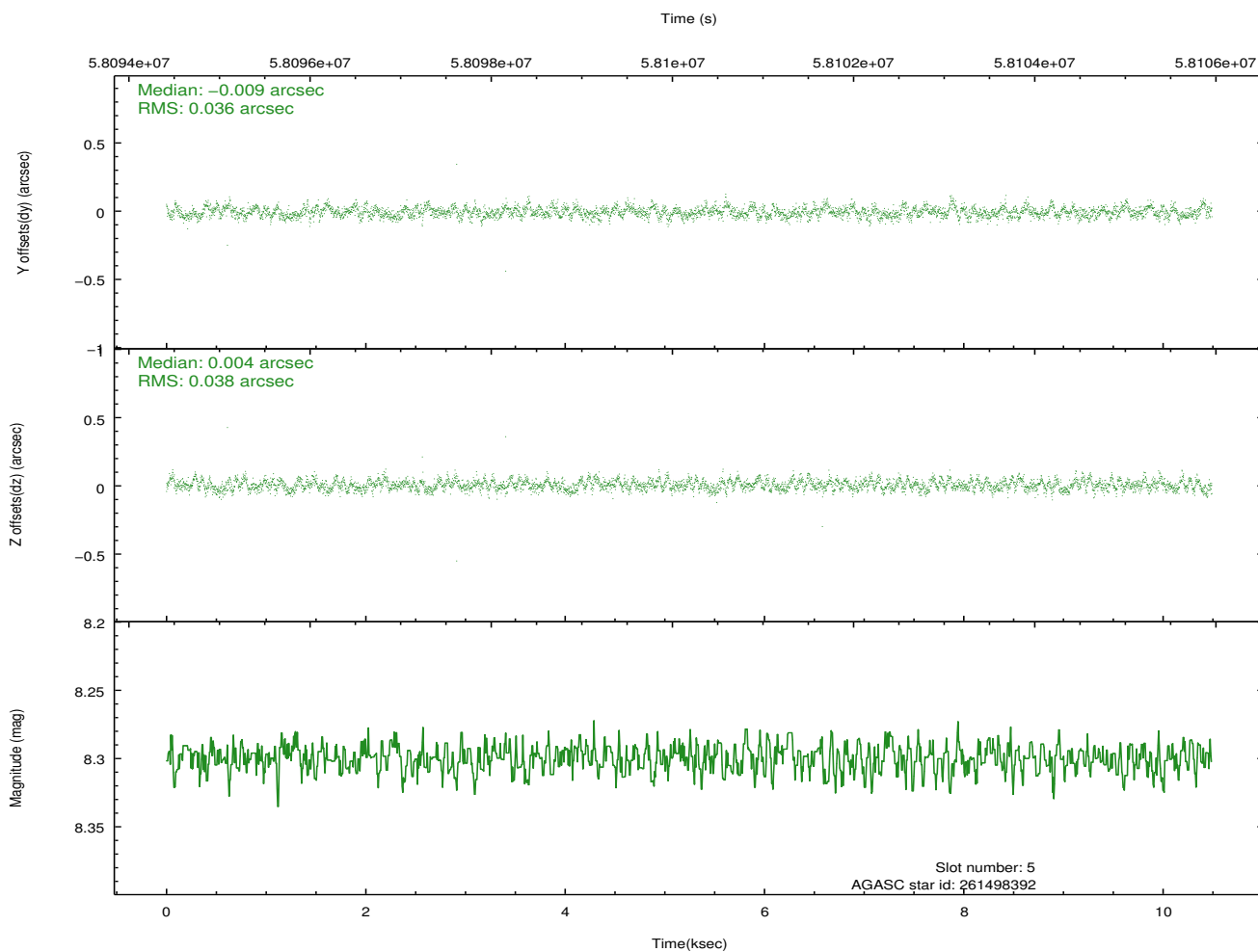
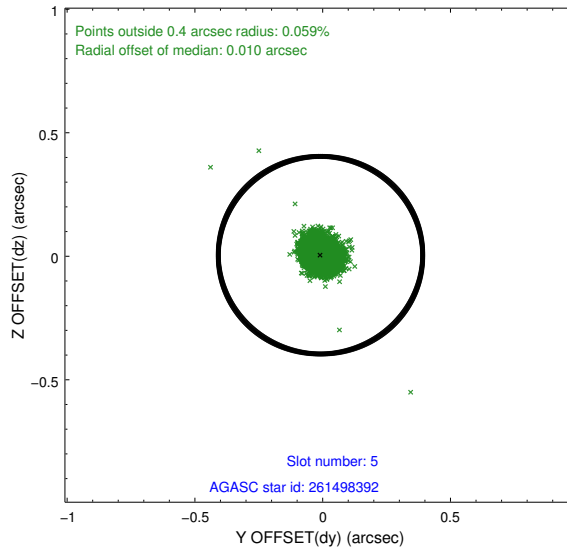
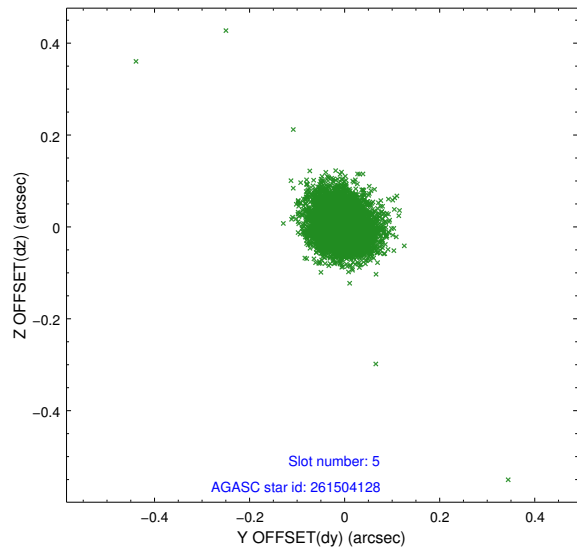
2.4.1 Slot 3



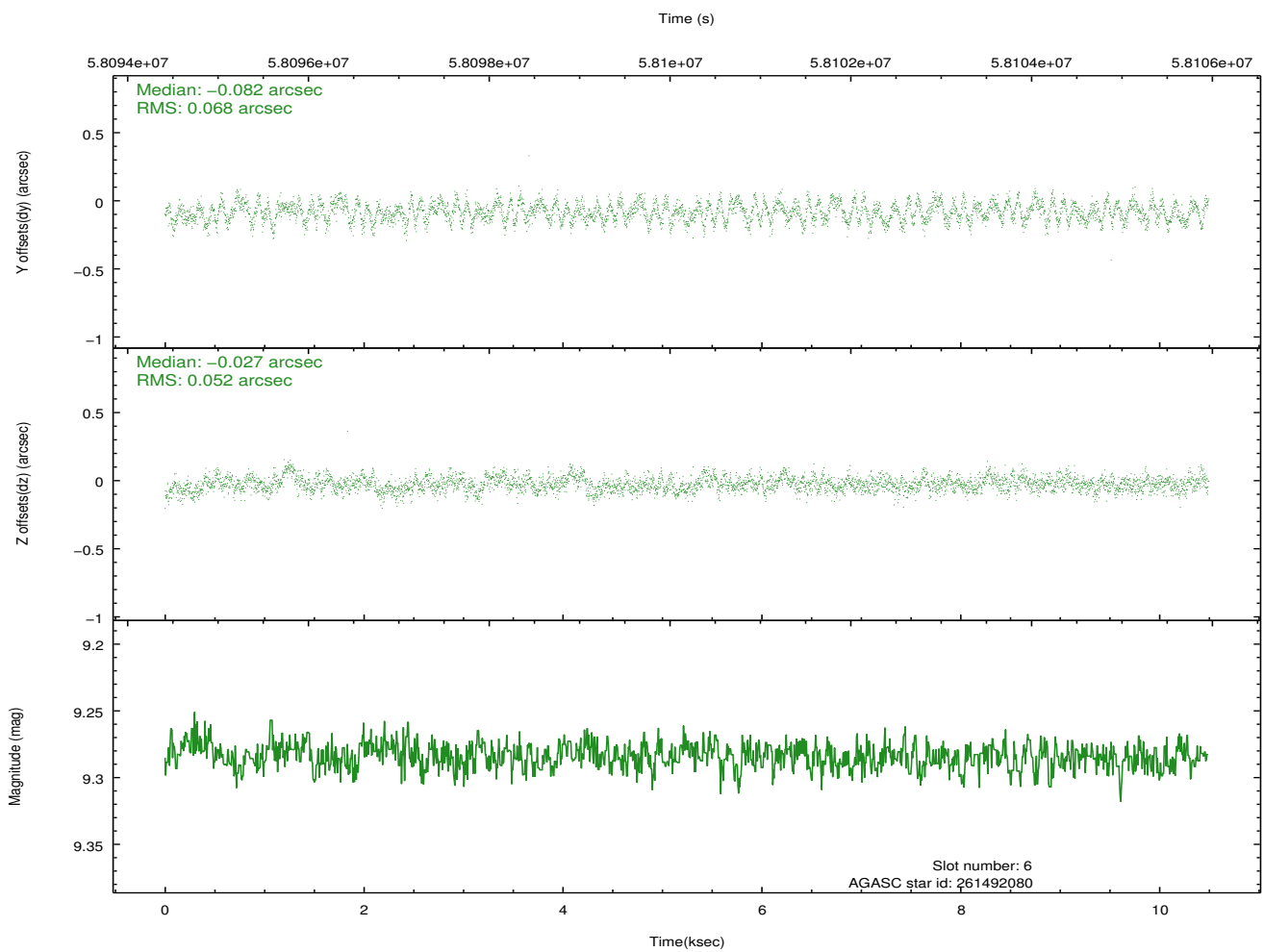
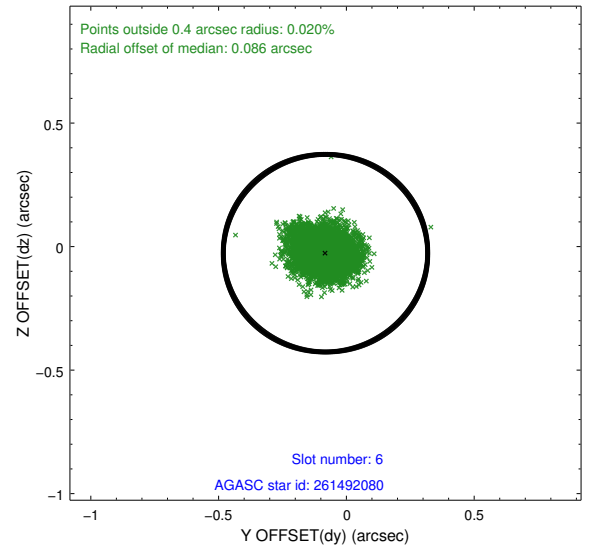
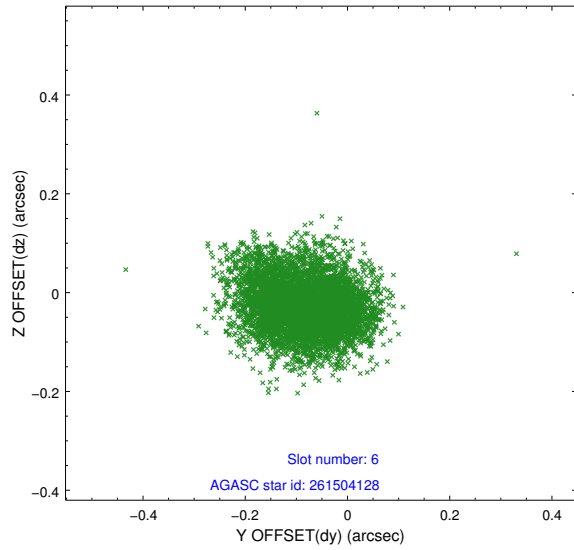
2.4.2 Slot 4



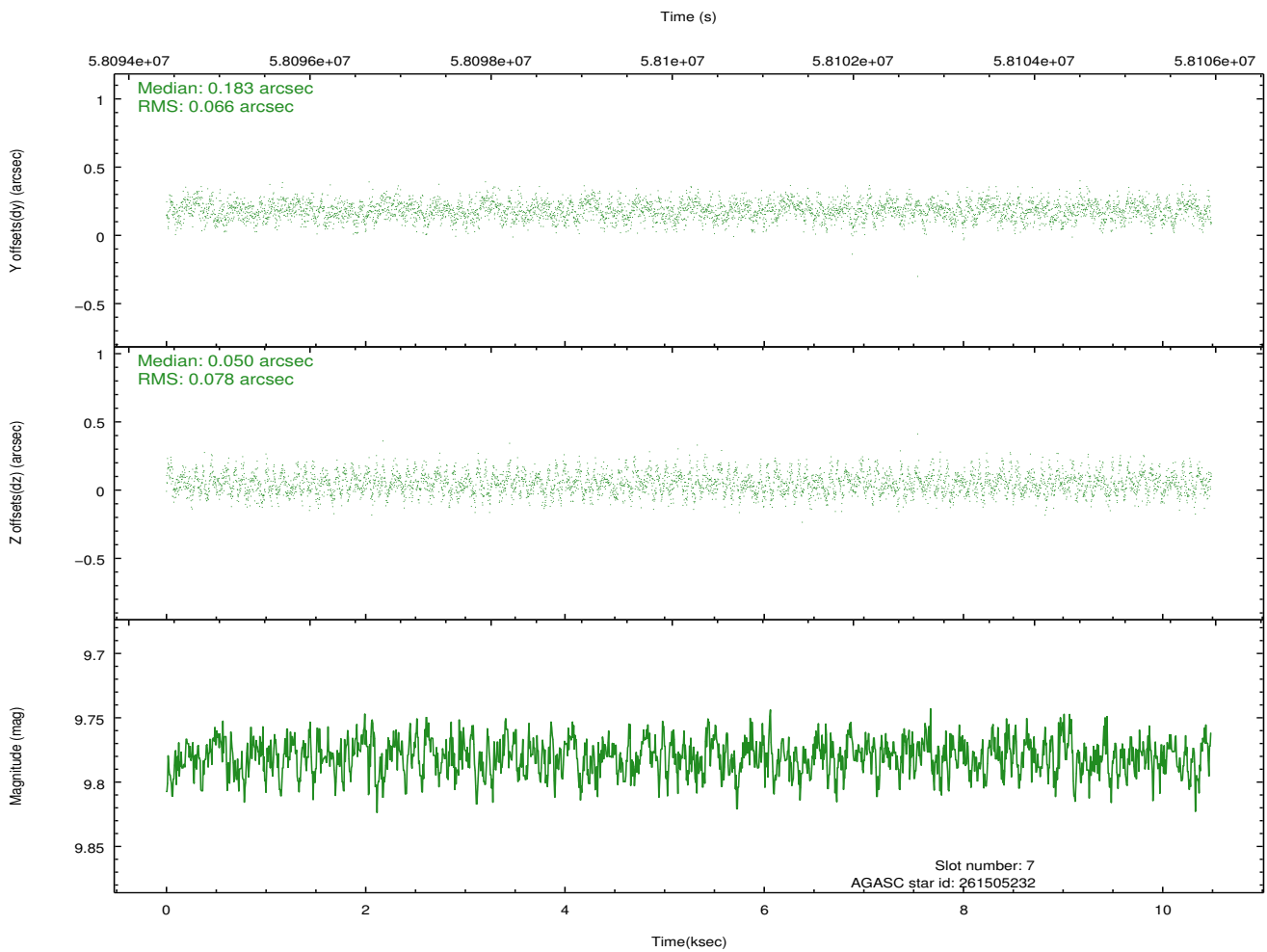
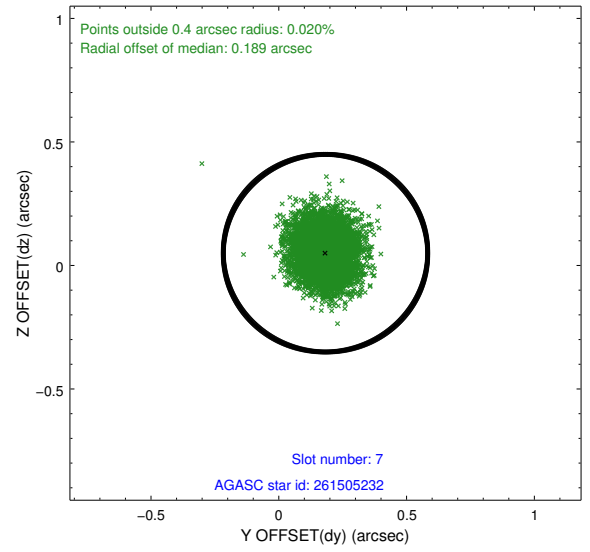
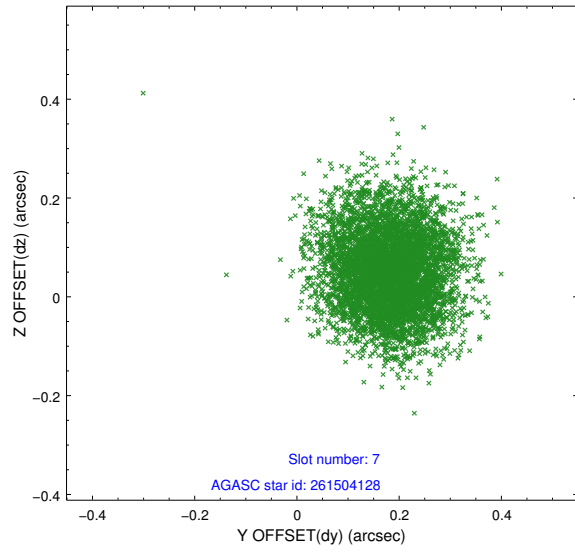
2.4.3 Slot 5



2.4.4 Slot 6

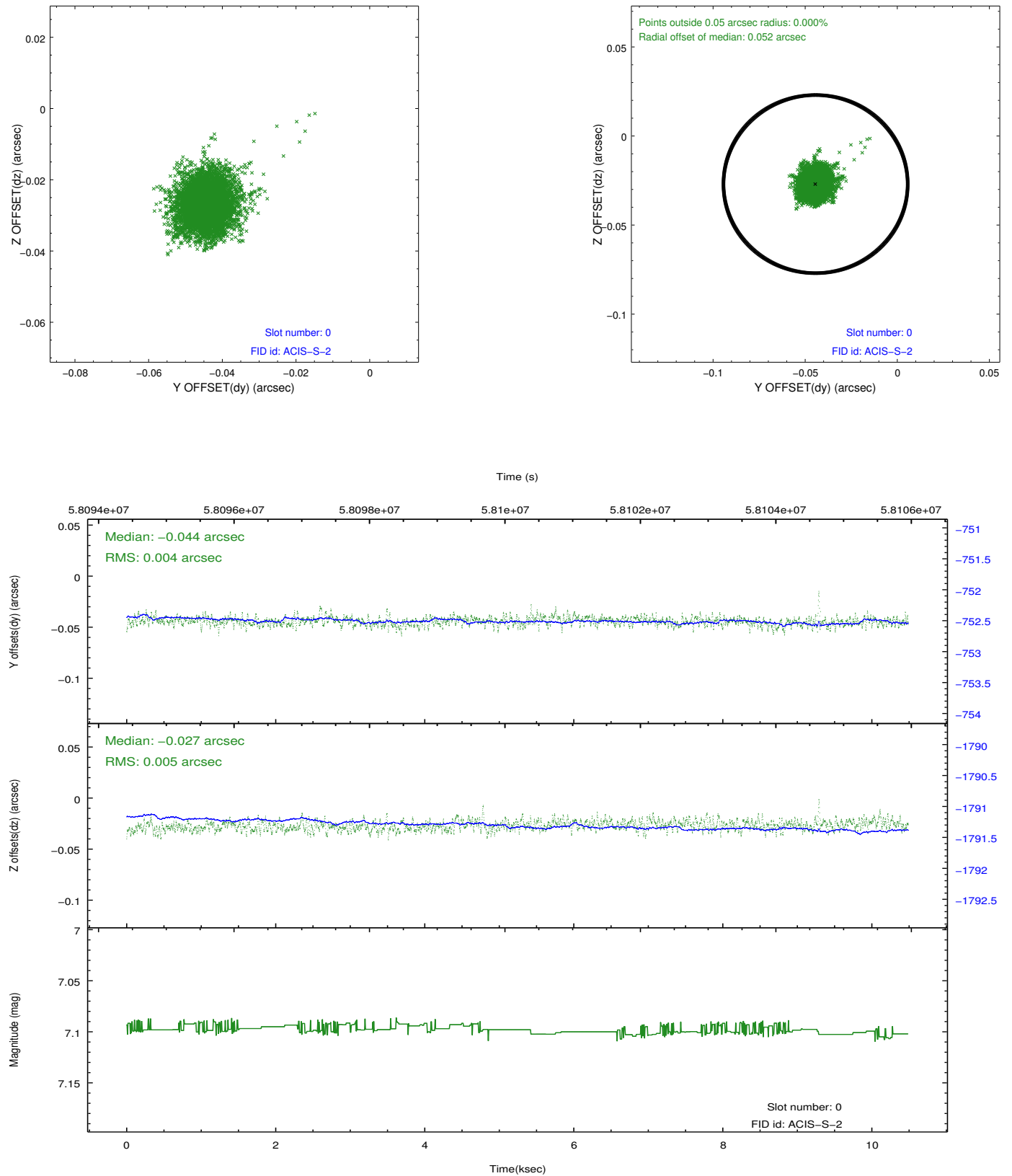


2.4.5 Slot 7

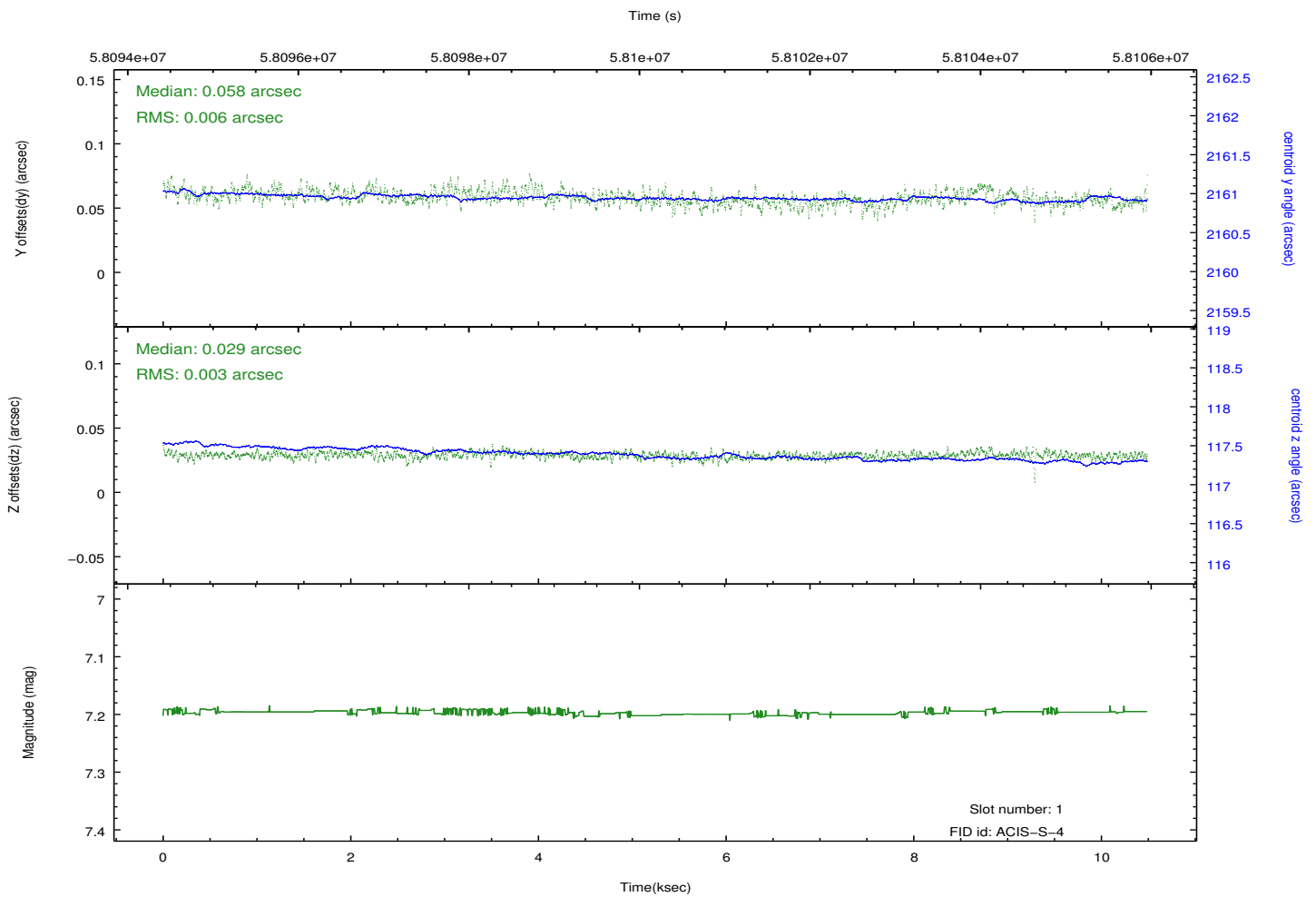
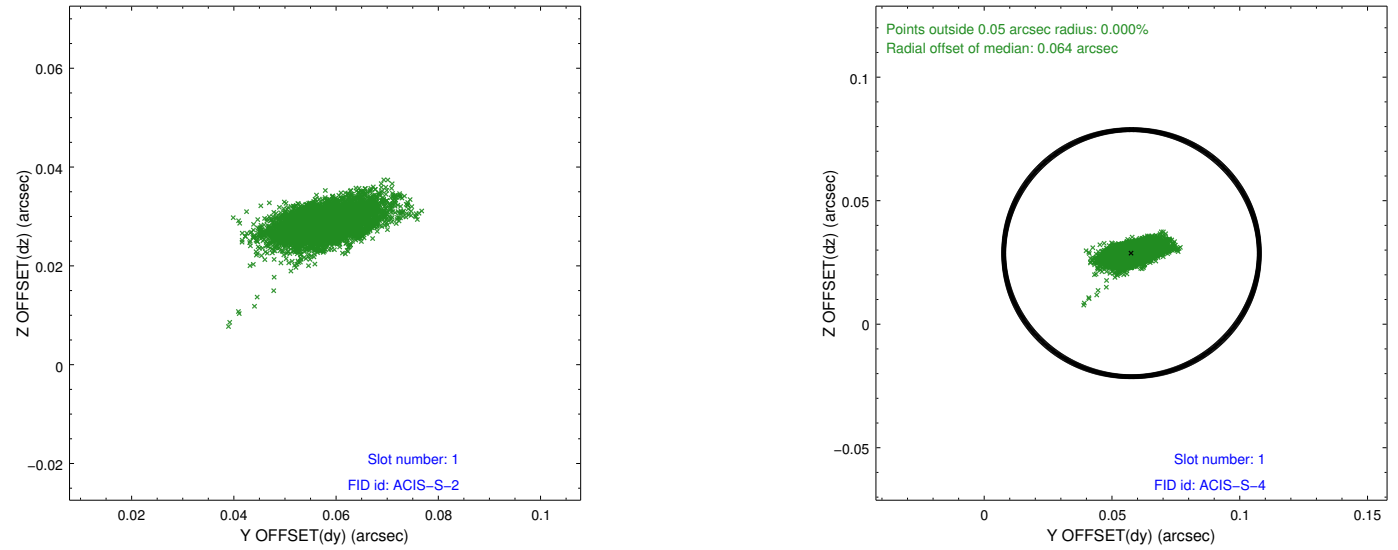


2.5 FID Slots

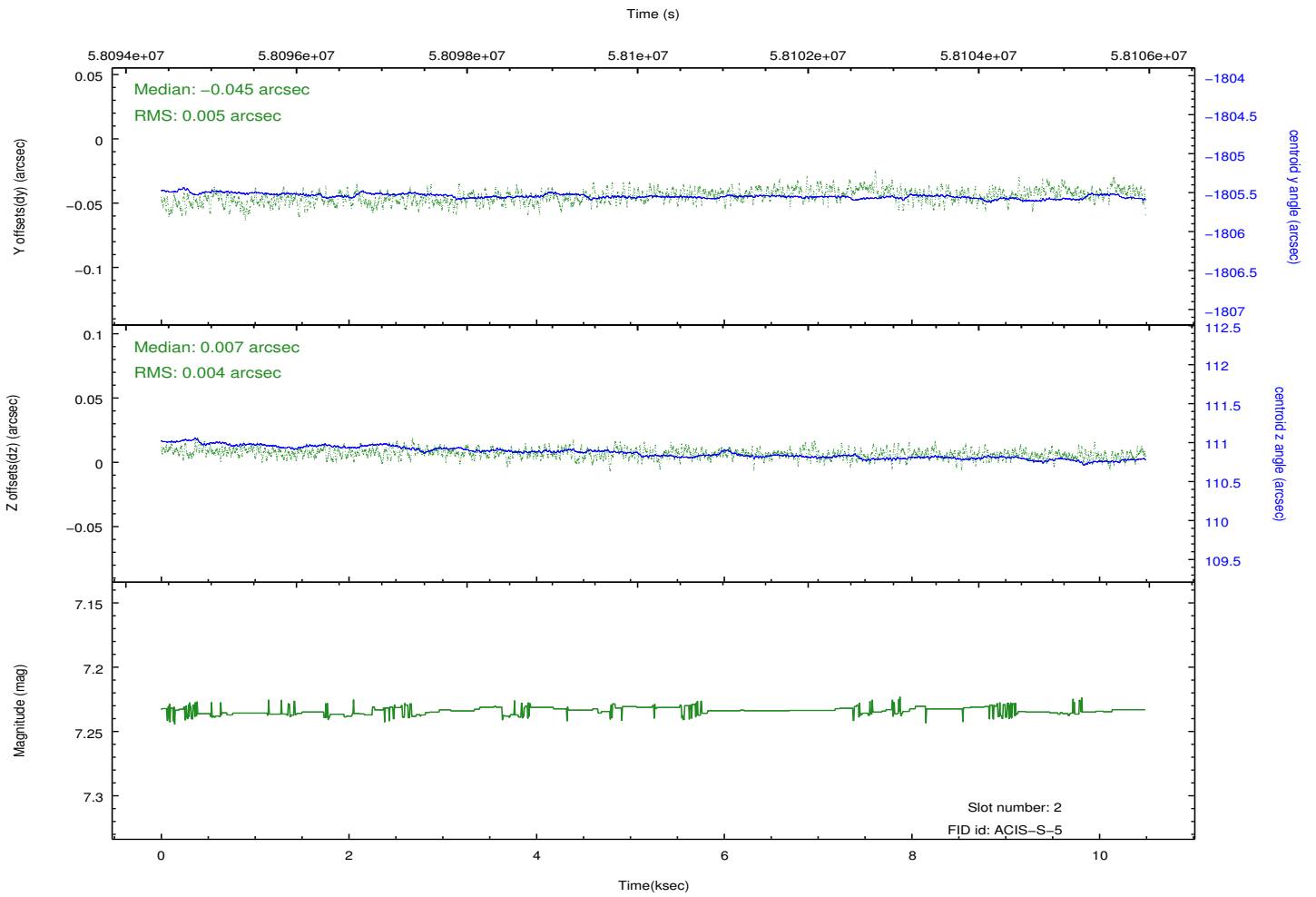
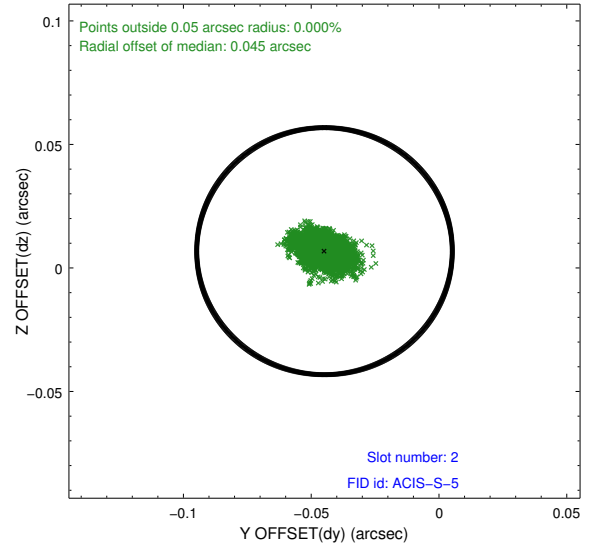
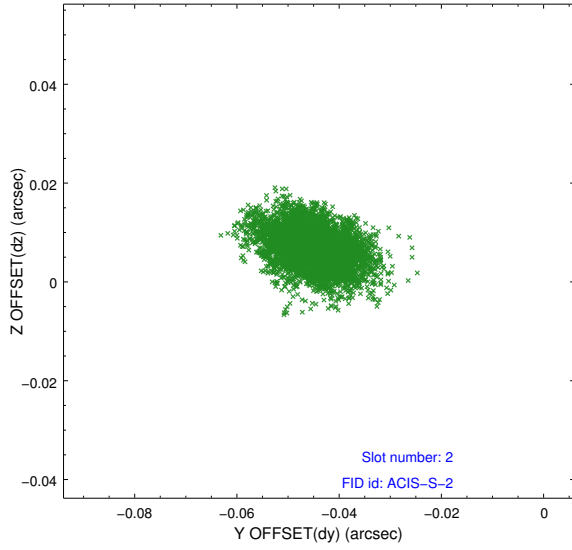
2.5.1 Slot 0



2.5.2 Slot 1

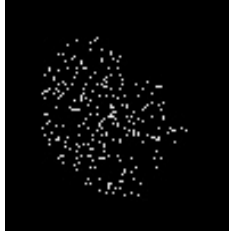


2.5.3 Slot 2



3 Point Sources

15.02 arcmin



17.57 arcmin



17.83 arcmin



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.05.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.772

A.2 Comments

ACIS-S calibration of extended hard source.

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The focal plane temperature is approximately -110 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.