

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 1232 - L2 Version 3
Chandra X-Ray Center

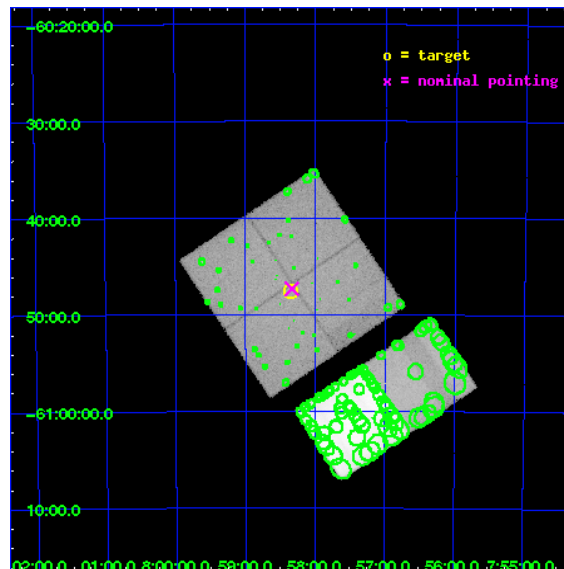
L2 Processing Date : Dec 17 2009

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1 Front

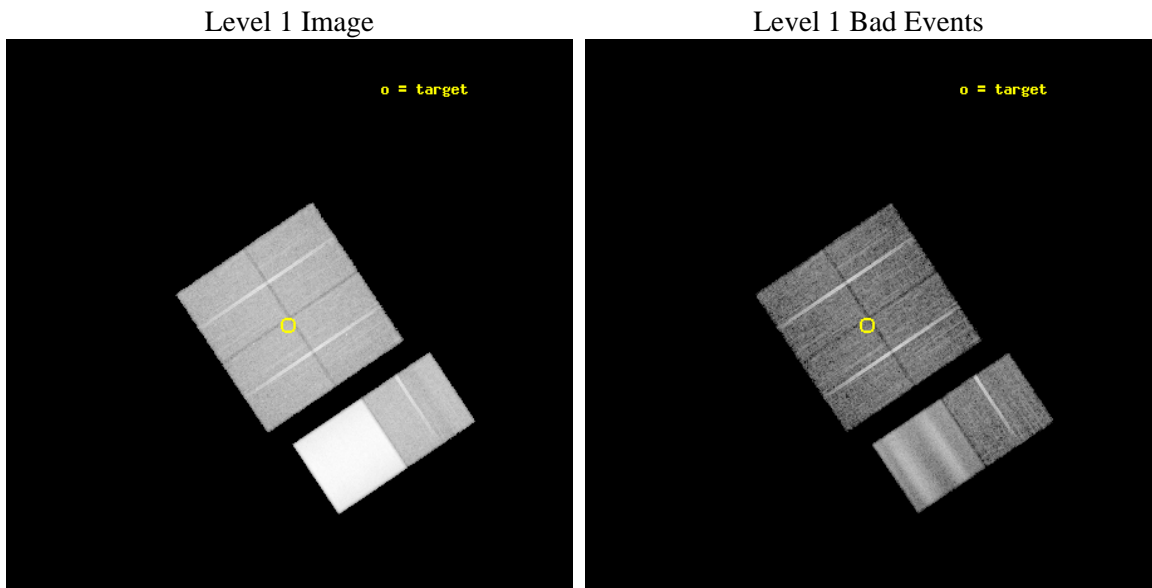
seq_num	280182	Sequence number
obs_id	1232	Observation id
title	CALIBRATION OBSERVATION NGC 2516 FOR BORESIGHTING AND PLATE SCALE	
observer	Dr. CXC Calibration	Principal investigator
object	NGC 2516	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	119.59	Observer's specified target RA
dec_targ	-60.7939	Observer's specified target Dec
ra_nom	119.5838230773	Nominal RA
dec_nom	-60.789051885001	Nominal Dec
roll_nom	146.20329430712	Nominal Roll
revision	3	Processing version of data
ontime	8575.5399930701	Sum of GTIs [s]
livetime	8466.9513421076	Livetime [s]
ontime0	8575.6623648405	Sum of GTIs [s]
ontime1	8747.3941807225	Sum of GTIs [s]
ontime2	8335.748840563	Sum of GTIs [s]
ontime3	8575.5399930701	Sum of GTIs [s]
ontime6	9003.3067777008	Sum of GTIs [s]
ontime7	9479.9338261411	Sum of GTIs [s]
l2events	1242864	Number of level 2 events



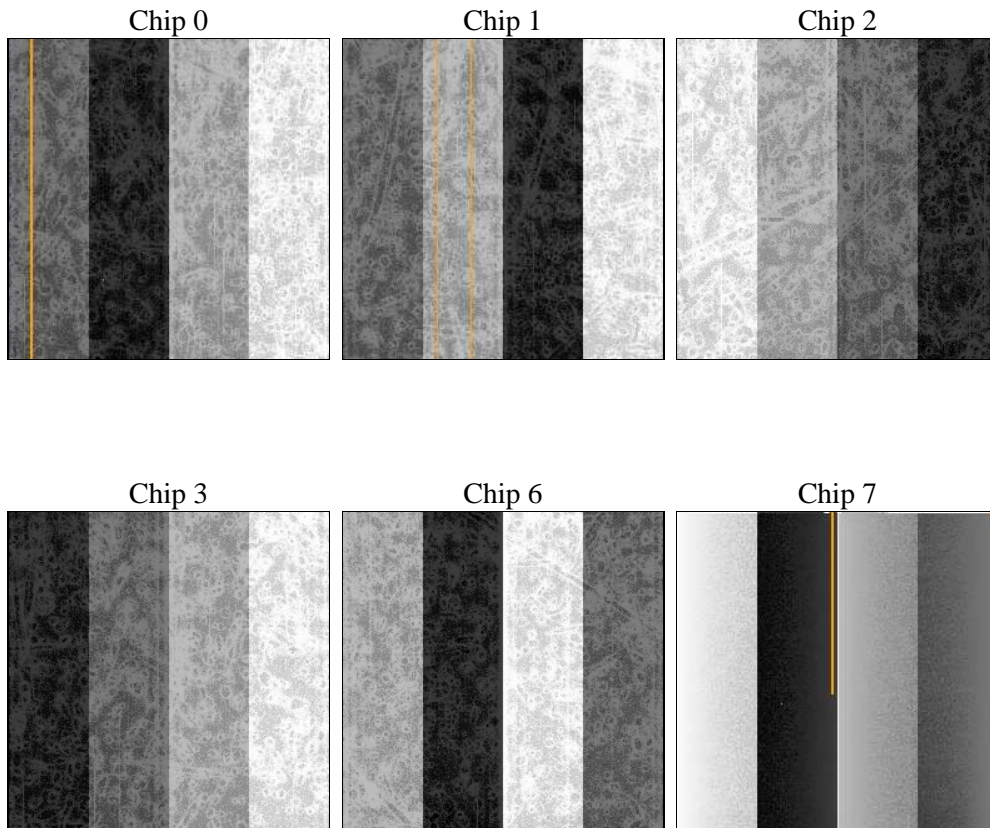
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	8575.5399930701	Sum of GTIs [s]
caldbver	4.1.4	 	ontime0	8575.6623648405	Sum of GTIs [s]
date	2009-12-17T09:42:24	Date and time of file creation	ontime1	8747.3941807225	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8335.748840563	Sum of GTIs [s]
			ontime3	8575.5399930701	Sum of GTIs [s]
			ontime6	9003.3067777008	Sum of GTIs [s]
			ontime7	9479.9338261411	Sum of GTIs [s]
			l1events	1807826	Number of level 1 events

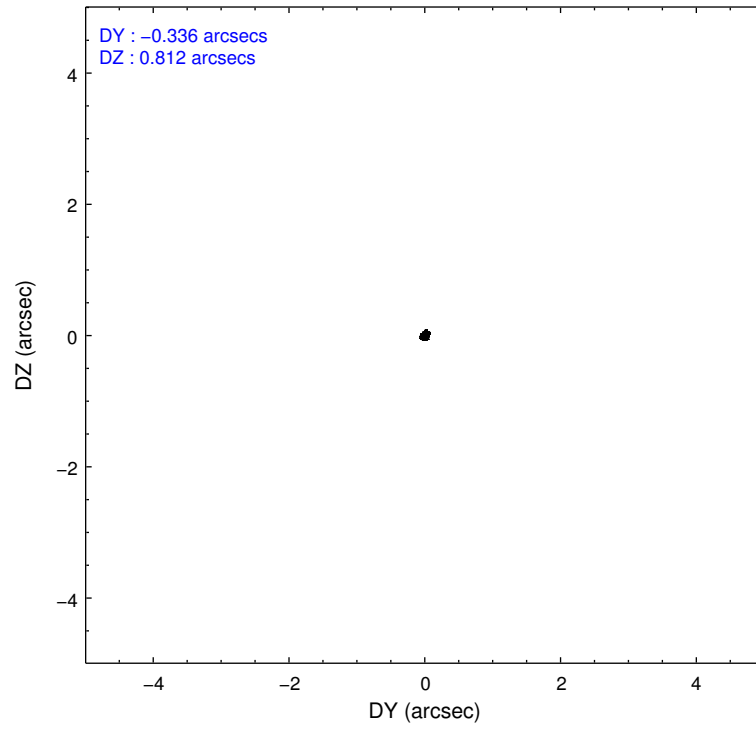
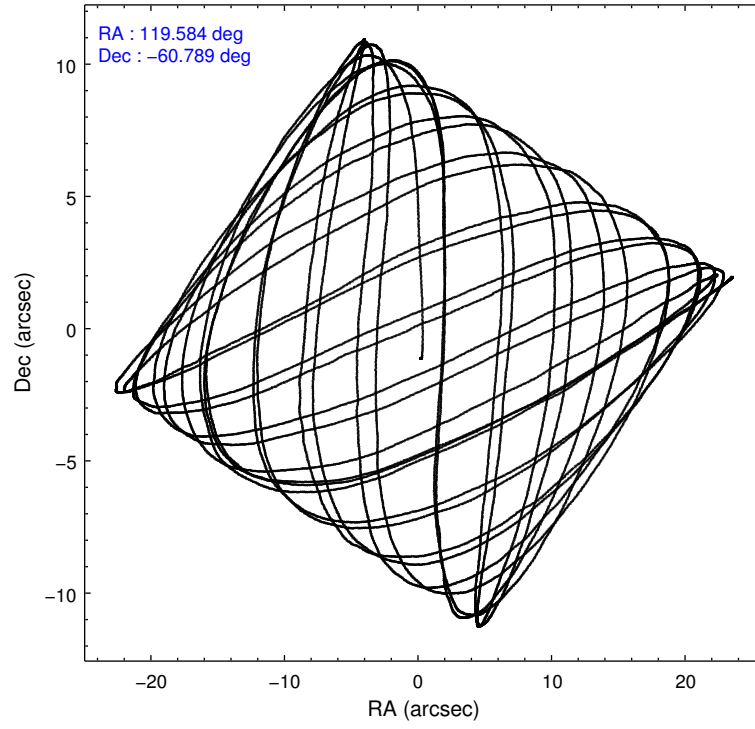
2.1.4 Events

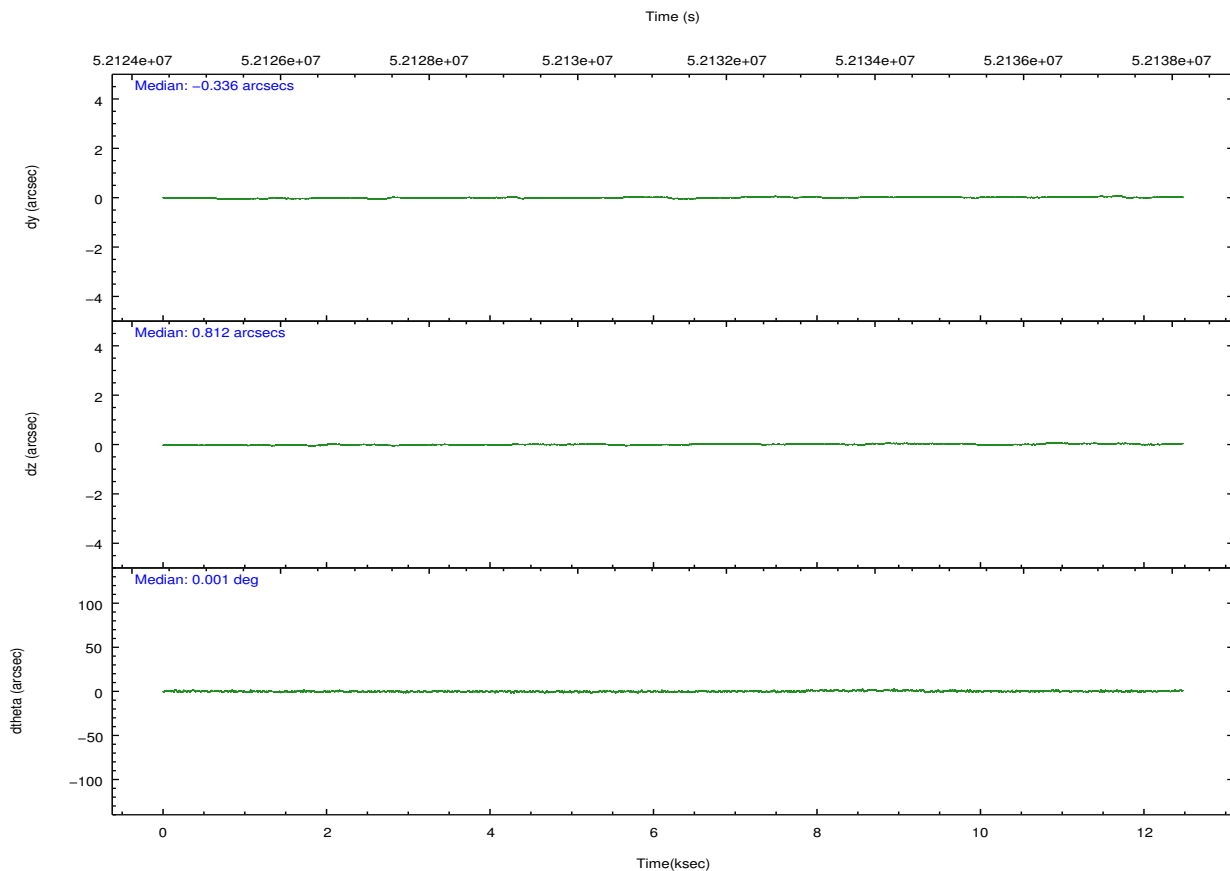
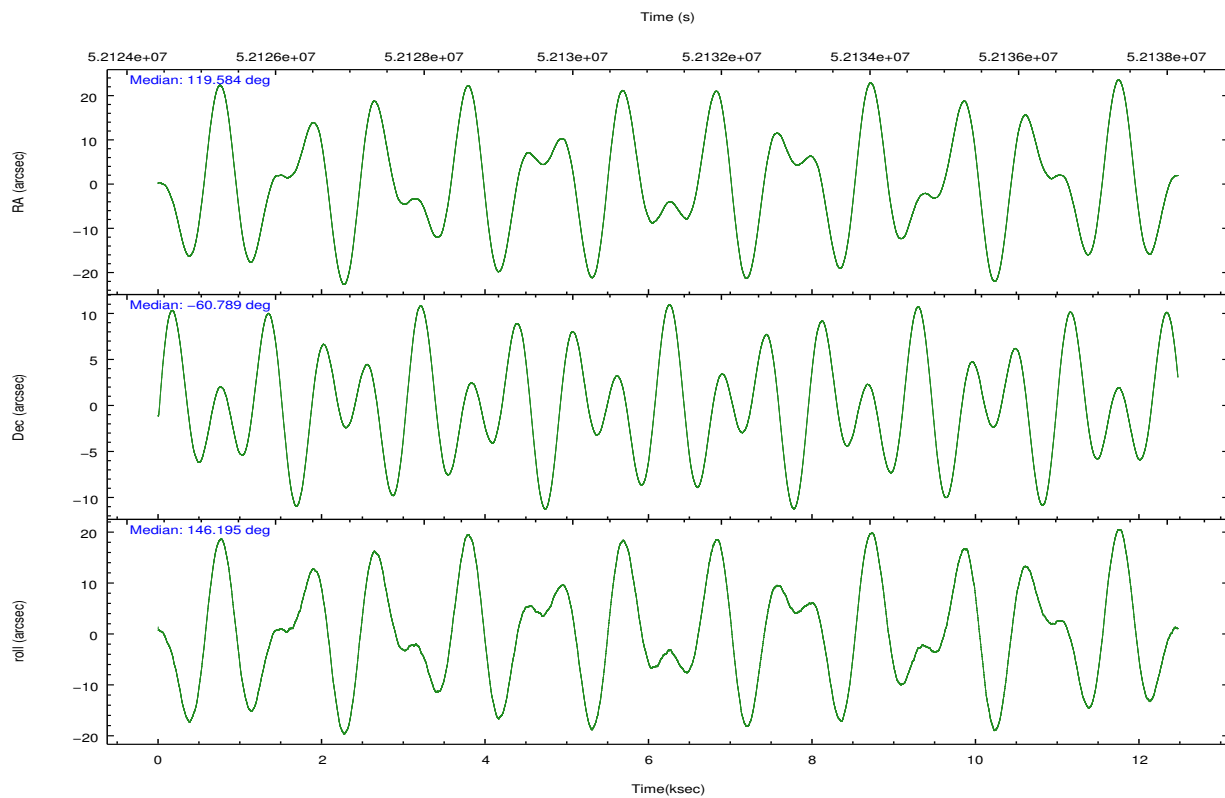
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	126306	135716	129642	132865	175373	1107924	grade 0 events	30162	33387	30118	31016	48853	95708
rejected events	73596	77083	76605	76985	82351	161717		23%	24%	23%	23%	27%	8%
rejected %	58%	56%	59%	57%	46%	14%	grade 1 events	116	127	136	149	188	196
								0%	0%	0%	0%	0%	0%
							grade 2 events	16908	18153	17303	19504	37263	137180
								13%	13%	13%	14%	21%	12%
							grade 3 events	1322	1516	1157	1280	1342	77784
								1%	1%	0%	0%	0%	7%
							grade 4 events	1298	1615	1246	1213	1352	69677
								1%	1%	0%	0%	0%	6%
							grade 5 events	2177	2314	1907	2158	2317	13062
								1%	1%	1%	1%	1%	1%
							grade 6 events	3024	3966	3218	2873	4220	566011
								2%	2%	2%	2%	2%	51%
							grade 7 events	71299	74638	74557	74672	79838	148306
								56%	54%	57%	56%	45%	13%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	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	119.640793	119.583823077298	Subarray requested	NONE	NONE
Pointing Dec	-60.791707	-60.78905188500124	Alternating exposures requested	N	N
Pointing Roll	146.044336	146.2032943071227	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	52125522.184000	52124856.572724			
Observation start date	1999-08-27T07:17:38	1999-08-27T07:07:36			
Observation end time	52137522.184000	52138113.923201			
Observation end date	1999-08-27T10:37:38	1999-08-27T10:48:33			
Read mode	TIMED	TIMED			

2.3 Aspect



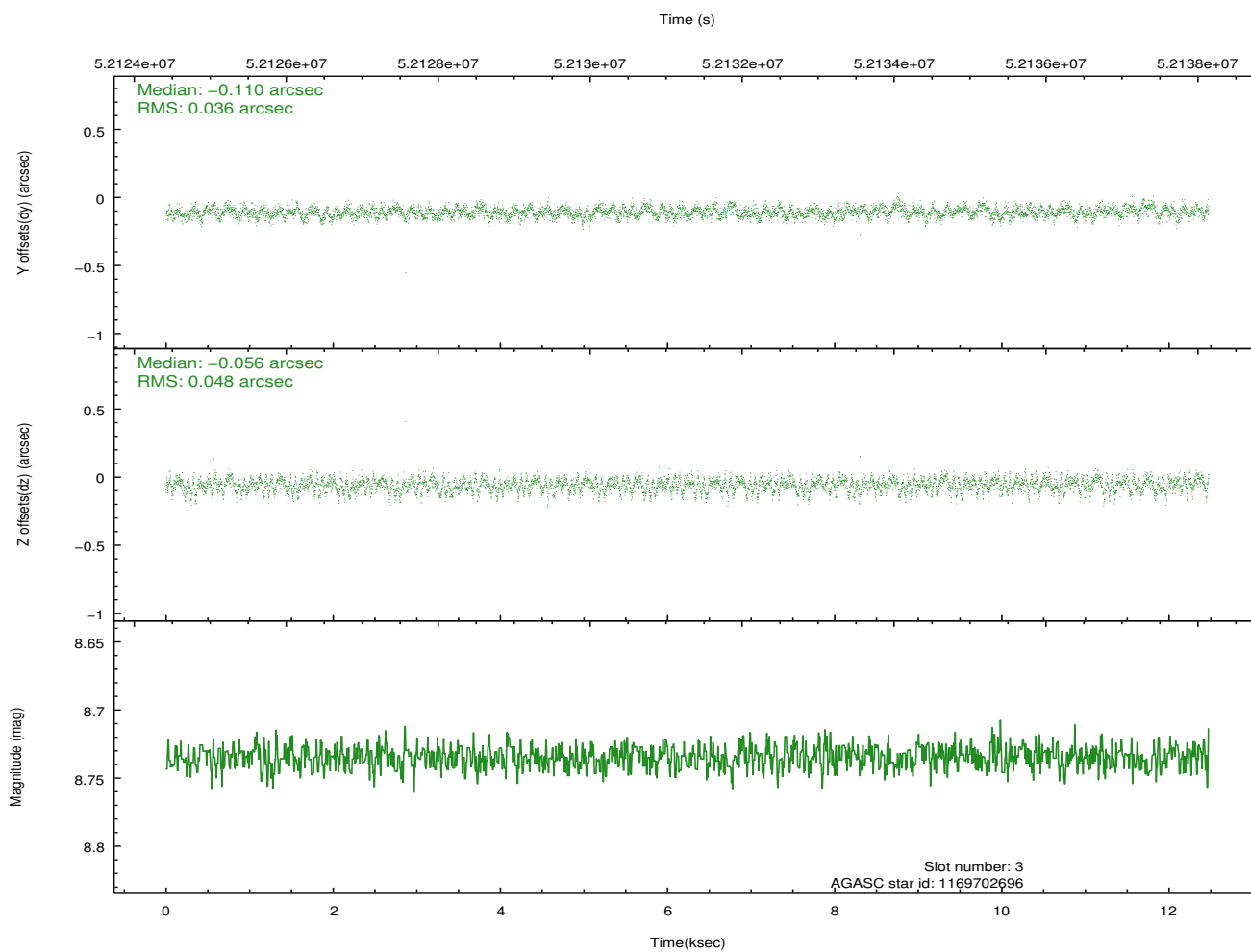
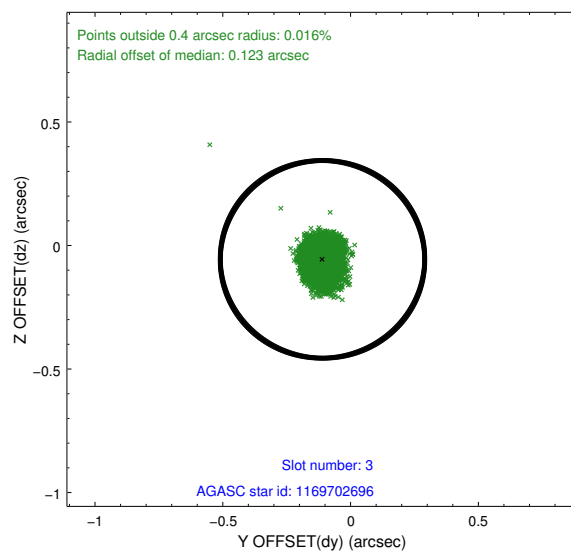
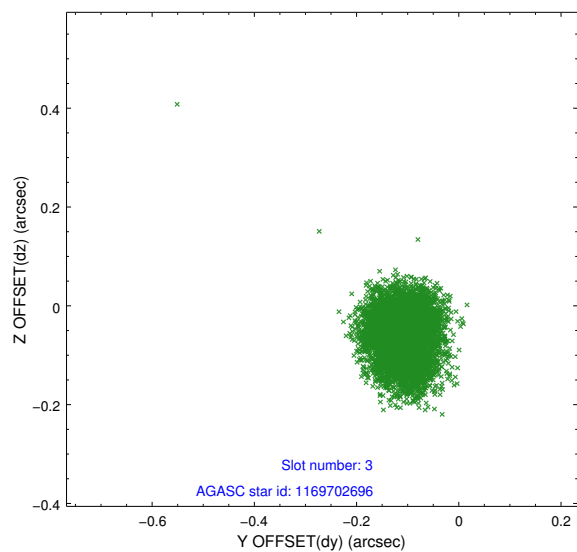


Slot Statistics

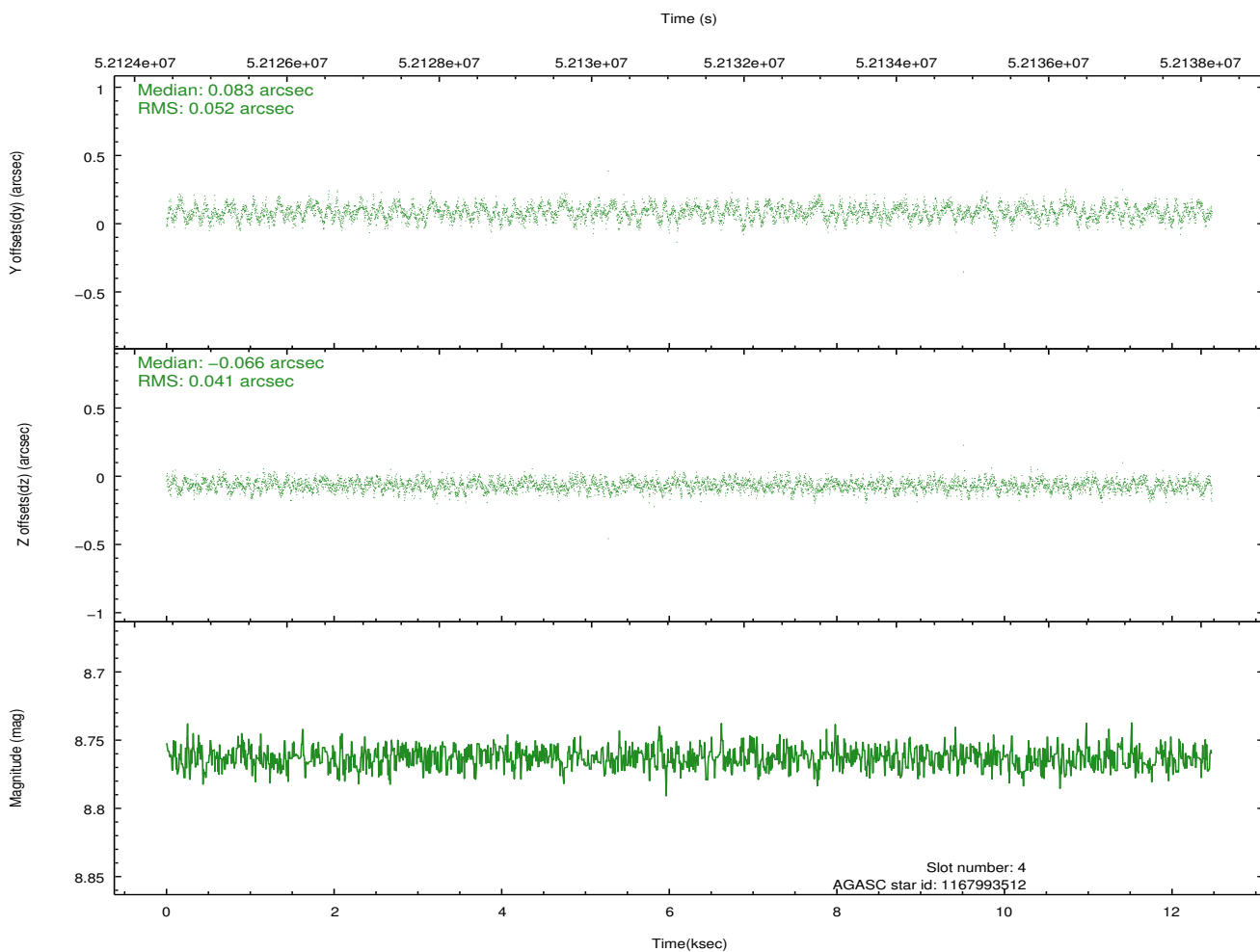
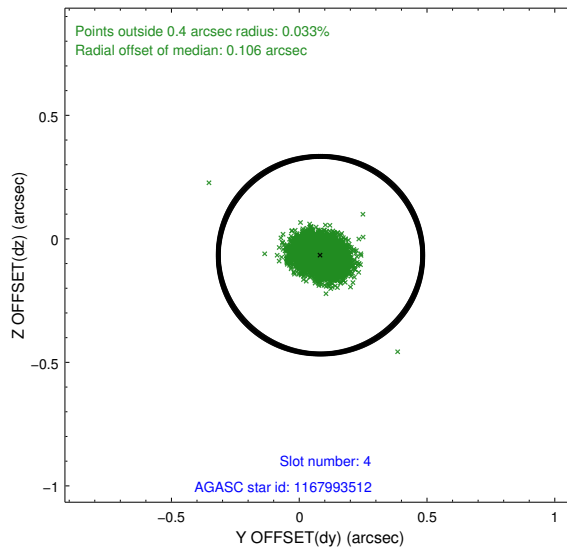
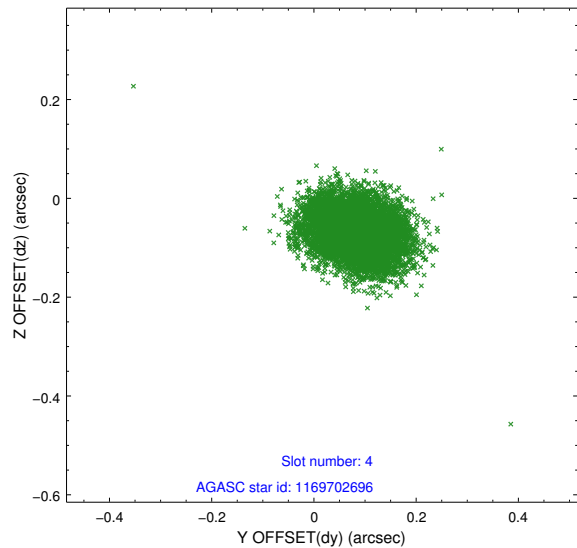
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.21	6087	-0.039	0.033	0.010	0.016	0.000000	0.000000	-754.03	-830.33
1	FID	ACIS-I-4	7.23	6086	0.114	0.021	0.007	0.014	0.000000	0.000000	2160.22	1075.62
2	FID	ACIS-I-5	7.23	6087	-0.176	0.014	0.009	0.015	0.000000	0.000000	-1807.74	1073.80
3	GUIDE	1169702696	8.73	6083	-0.110	-0.056	0.063	0.103	120.944763	-60.544109	-1430.40	-2009.27
4	GUIDE	1167993512	8.76	6087	0.083	-0.066	0.071	0.110	118.780061	-60.545451	1752.30	124.52
5	GUIDE	1167997272	9.29	6087	-0.237	-0.101	0.084	0.133	118.927163	-61.353075	-112.17	2370.37
6	GUIDE	1122633360	9.23	6078	0.172	-0.062	0.096	0.171	119.617986	-59.961517	1703.09	-2454.87
7	GUIDE	1168007992	9.75	6080	0.075	0.291	0.101	0.161	119.985345	-61.468910	-1854.89	1692.89

2.4 Star Slots

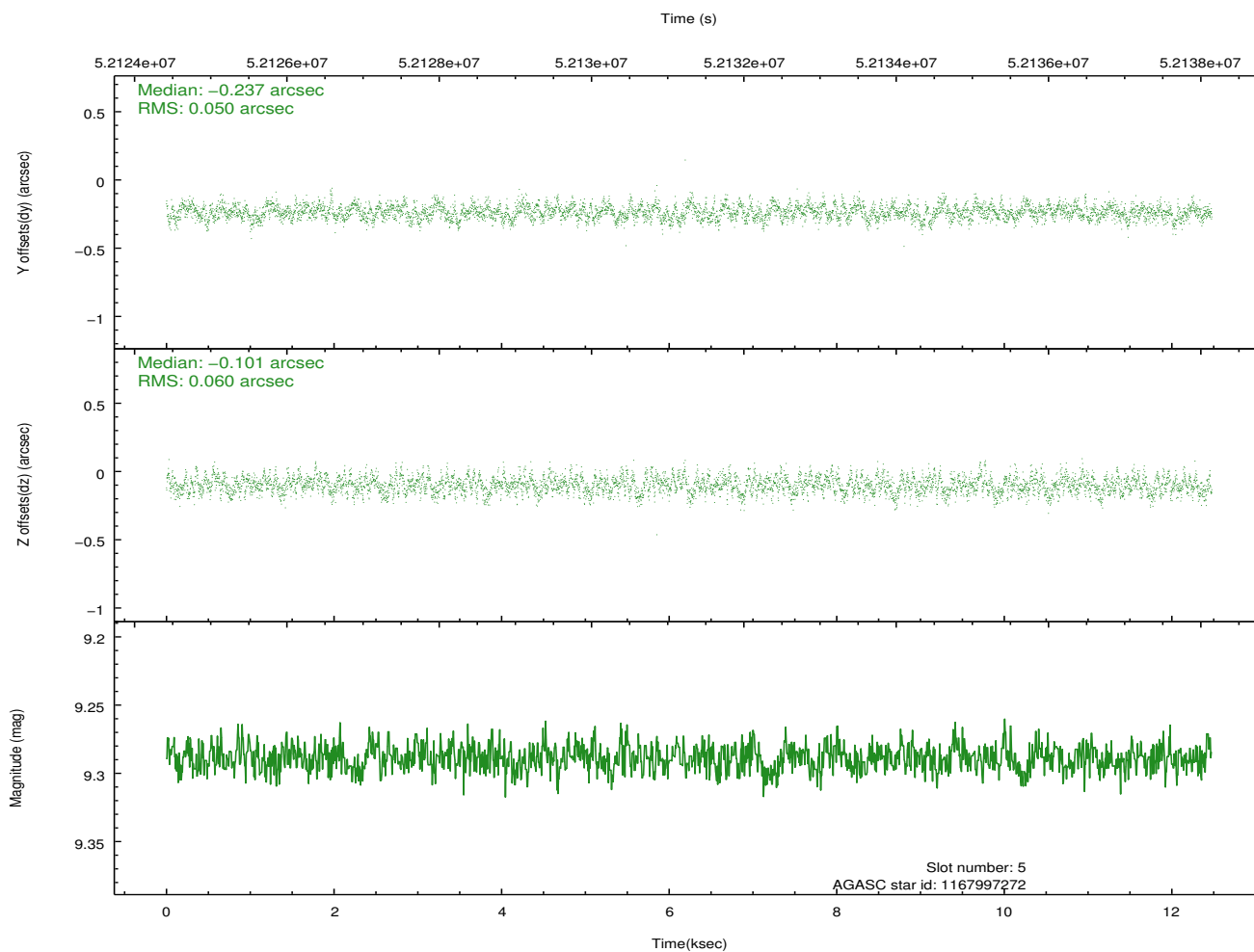
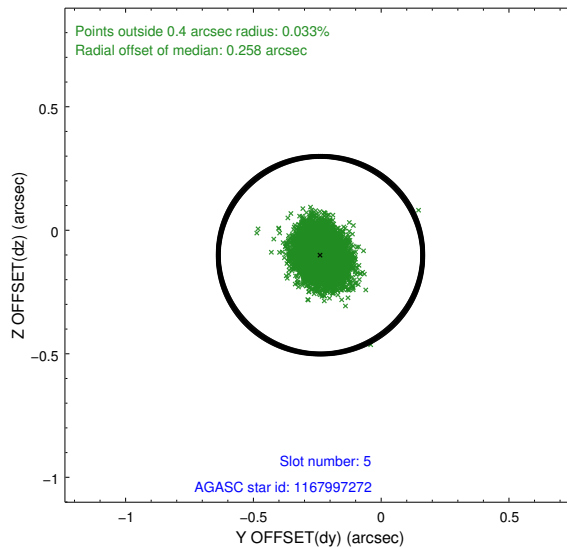
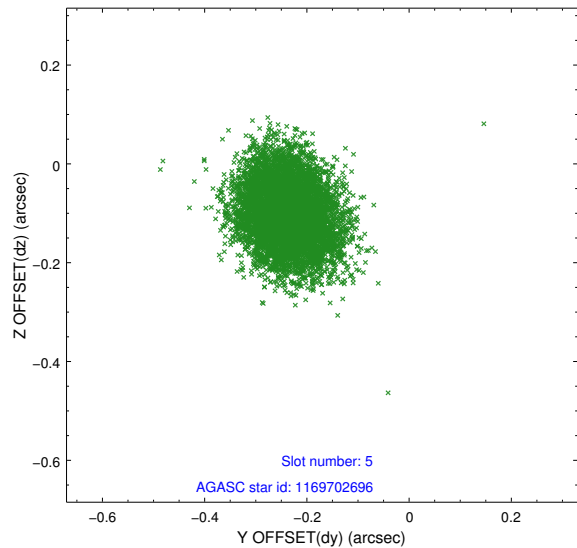
2.4.1 Slot 3



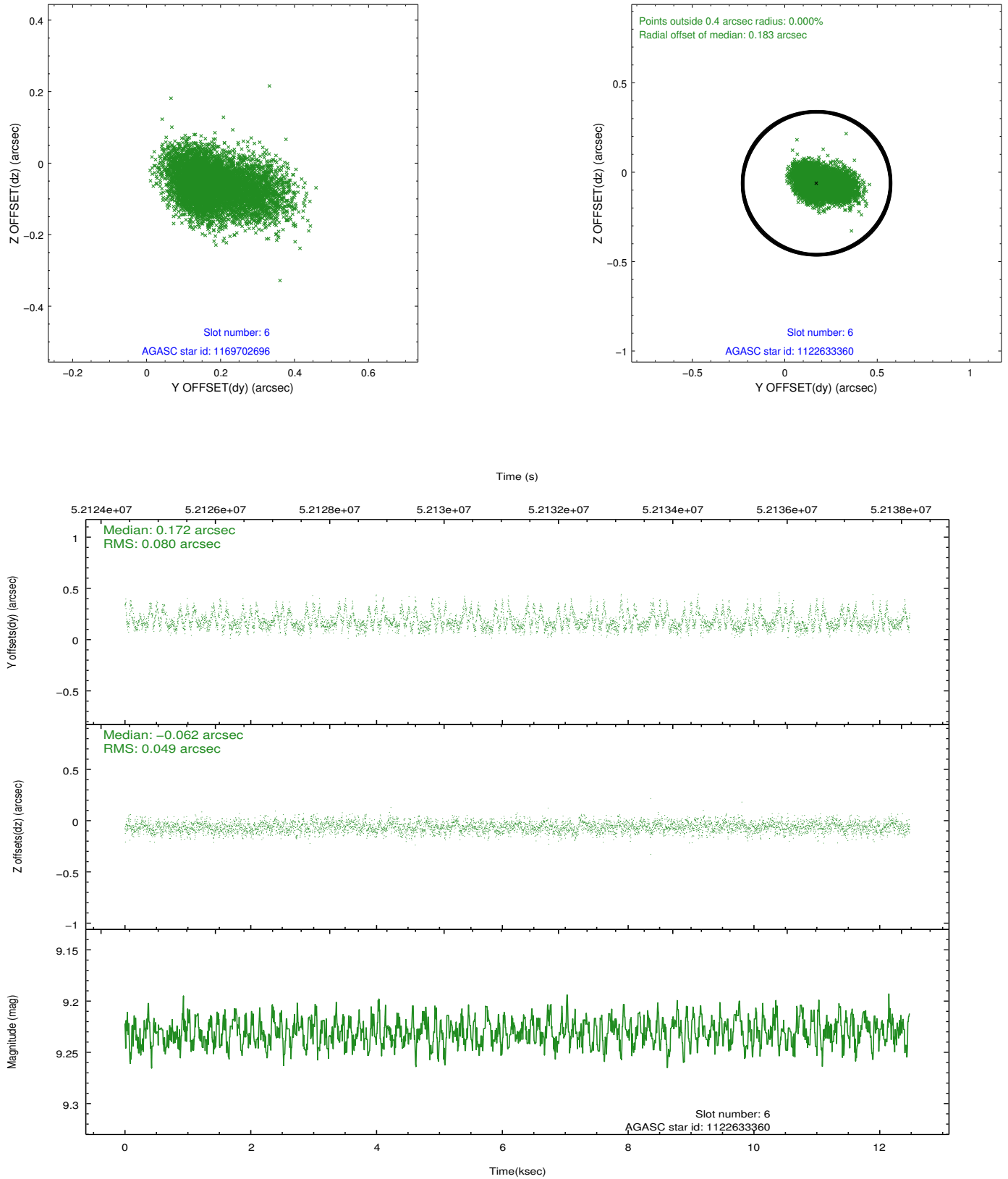
2.4.2 Slot 4



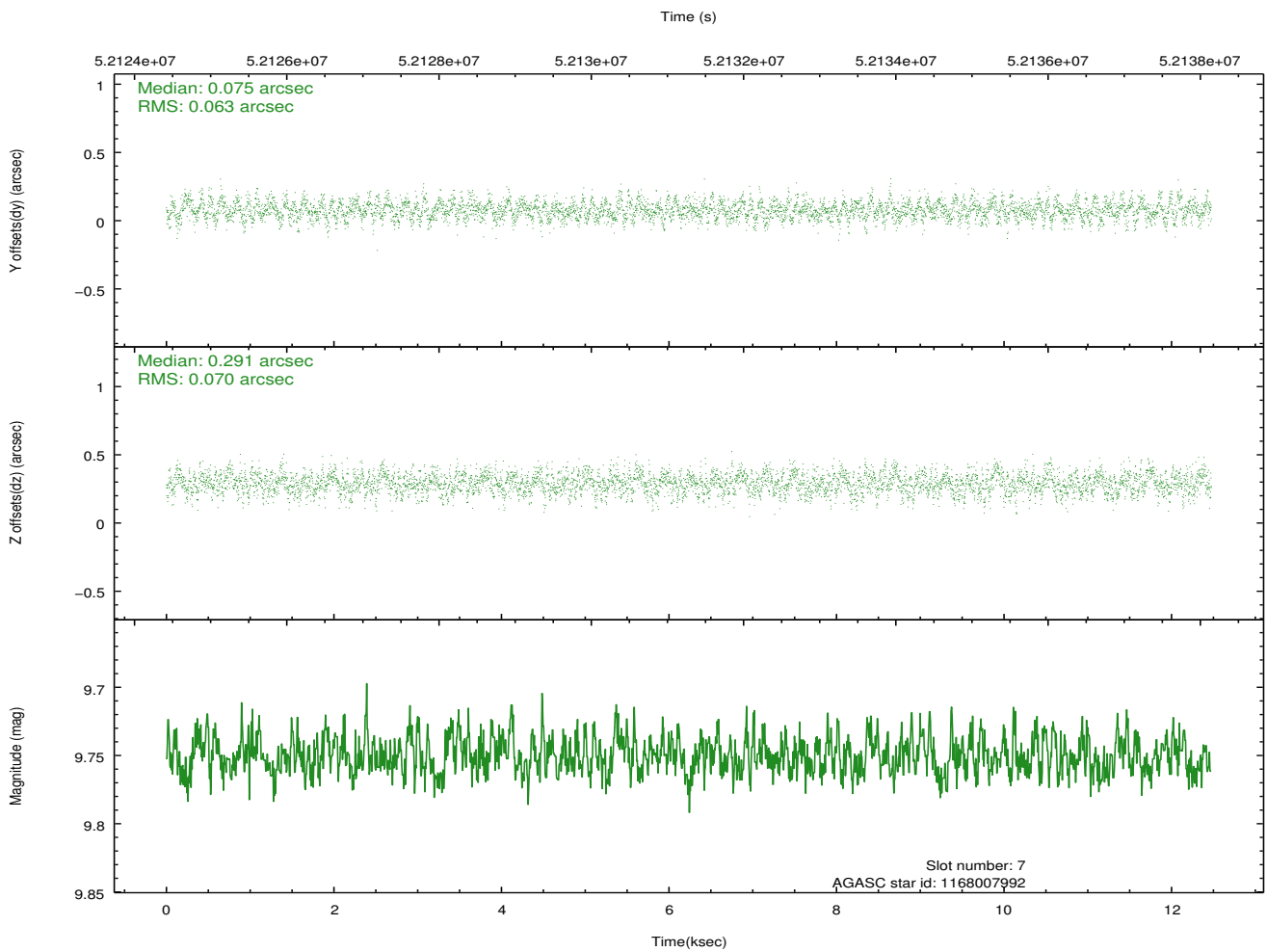
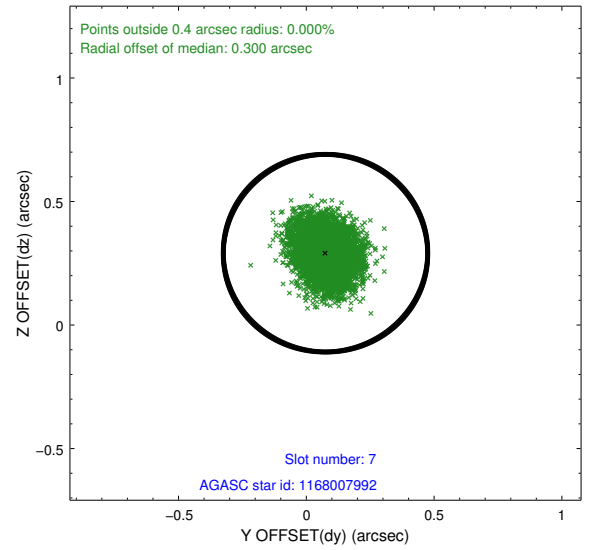
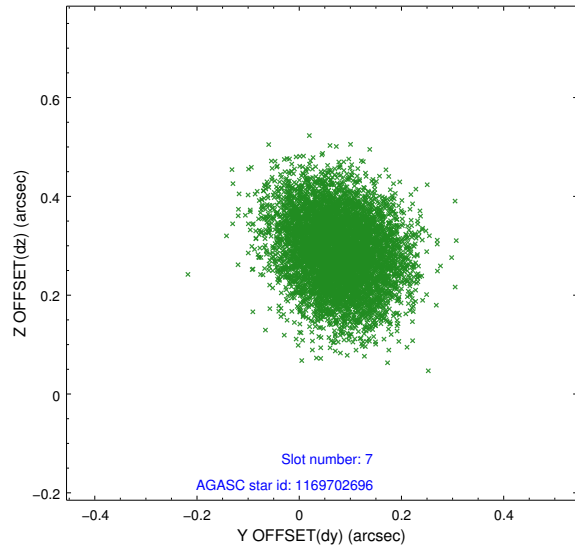
2.4.3 Slot 5



2.4.4 Slot 6

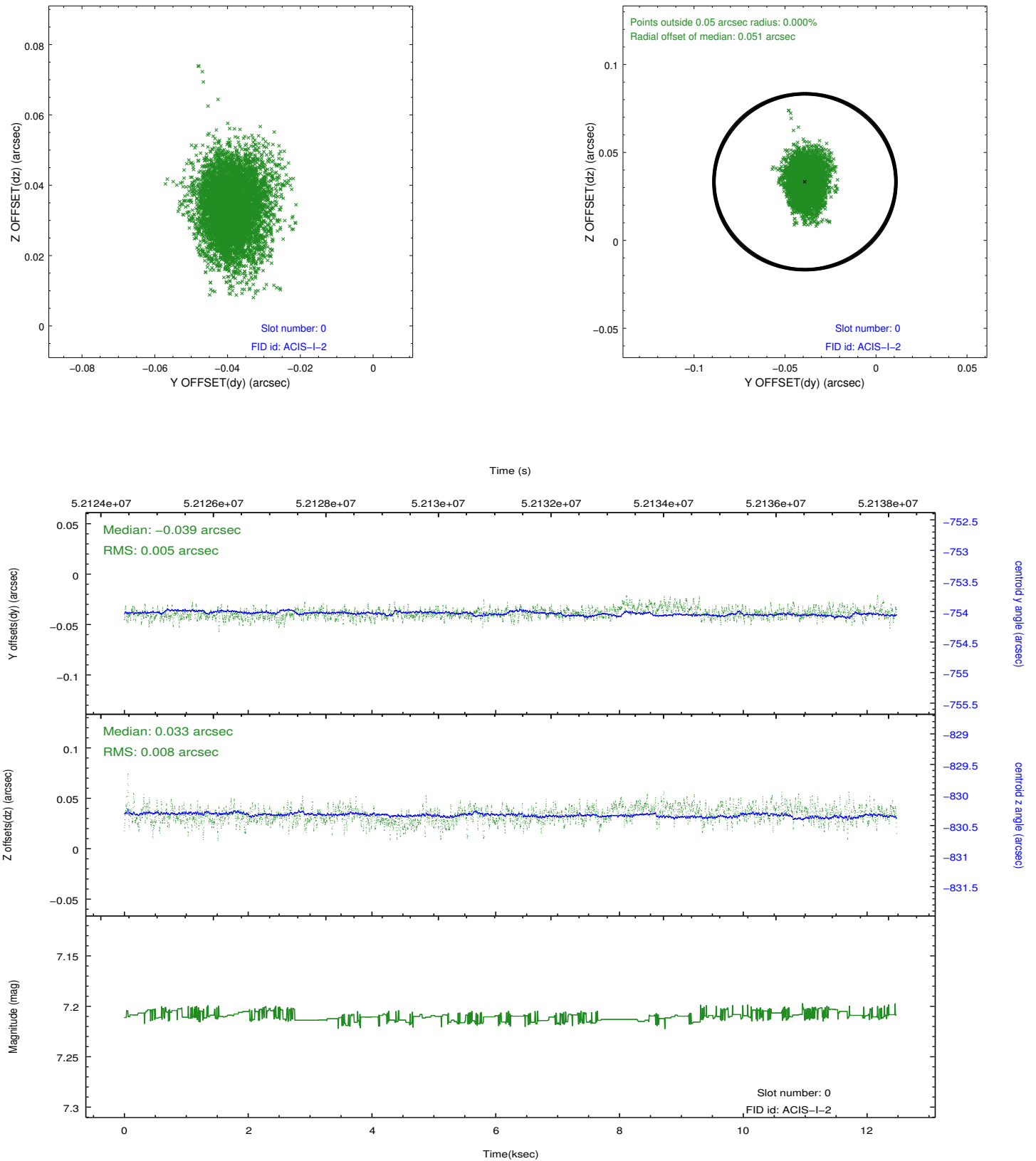


2.4.5 Slot 7

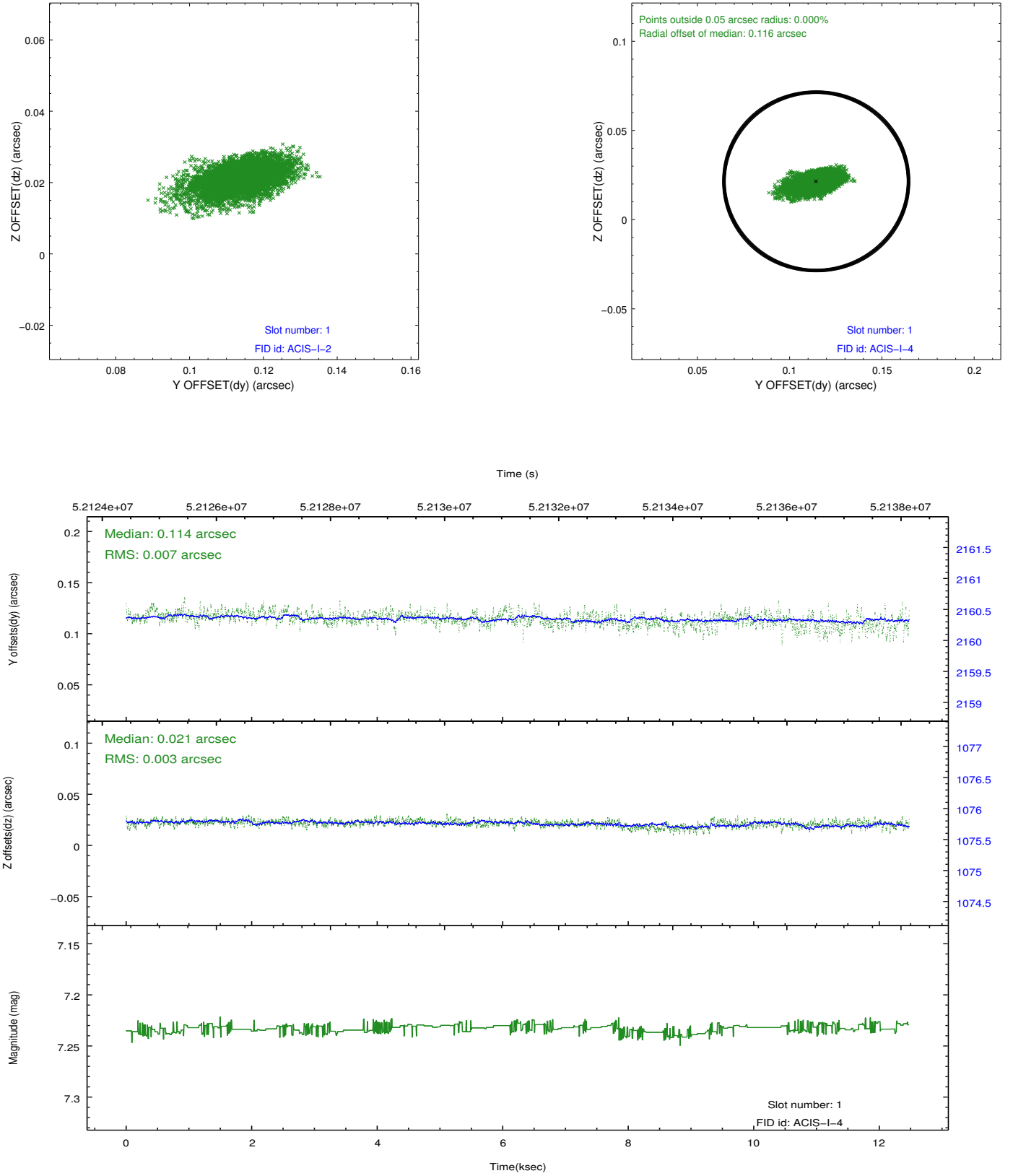


2.5 FID Slots

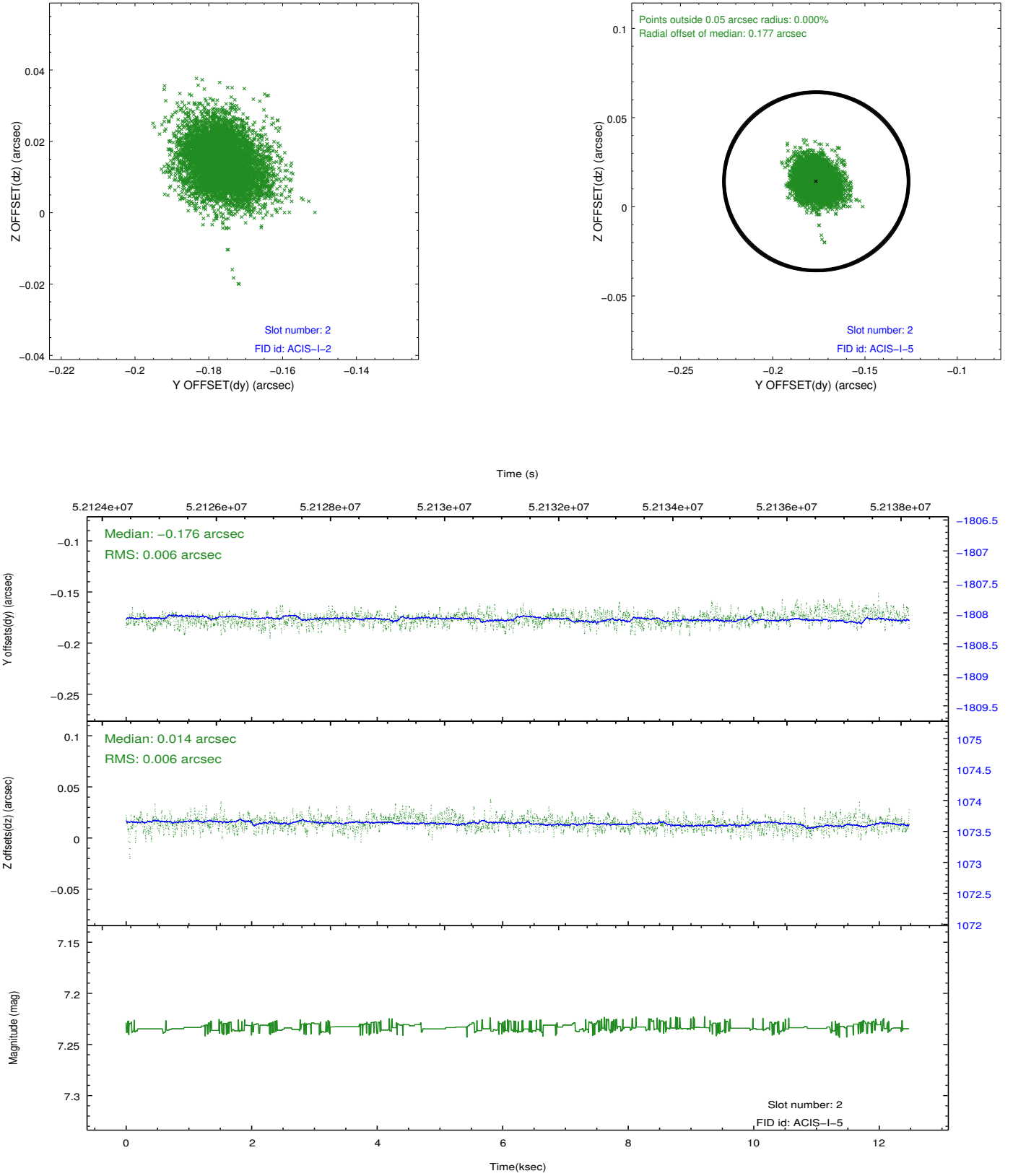
2.5.1 Slot 0



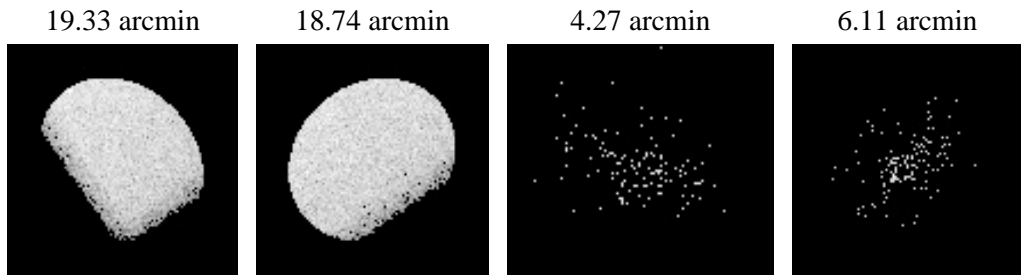
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.608

A.2 Comments

A very high radiation environment existed during the first approximately 6 ksec of this observation. An enhanced count rate resulted from this situation

and is reflected in the GTI. Chip 7 is particularly affected with a very high background.

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Charge time for this ObsId remains at original value of 8.608 ksec, although with the current processing the charge time would have been 8.576 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.