

V&V Reference Report

L2 ASCDS Version : 8.2.1

Observation 1109 - L2 Version 3
Chandra X-Ray Center

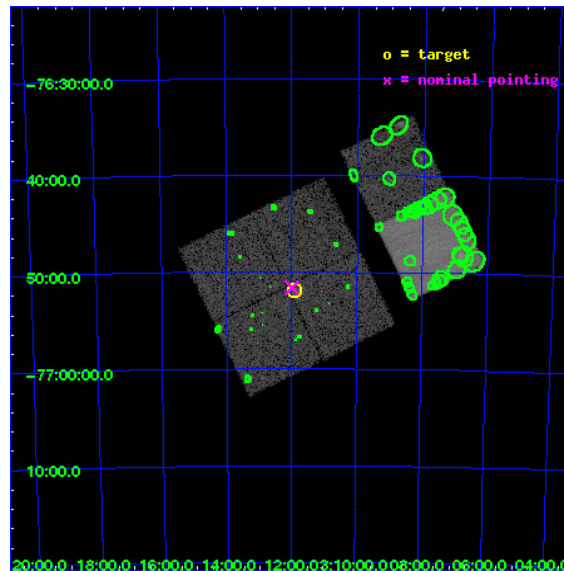
L2 Processing Date : Jan 13 2010

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1 Front

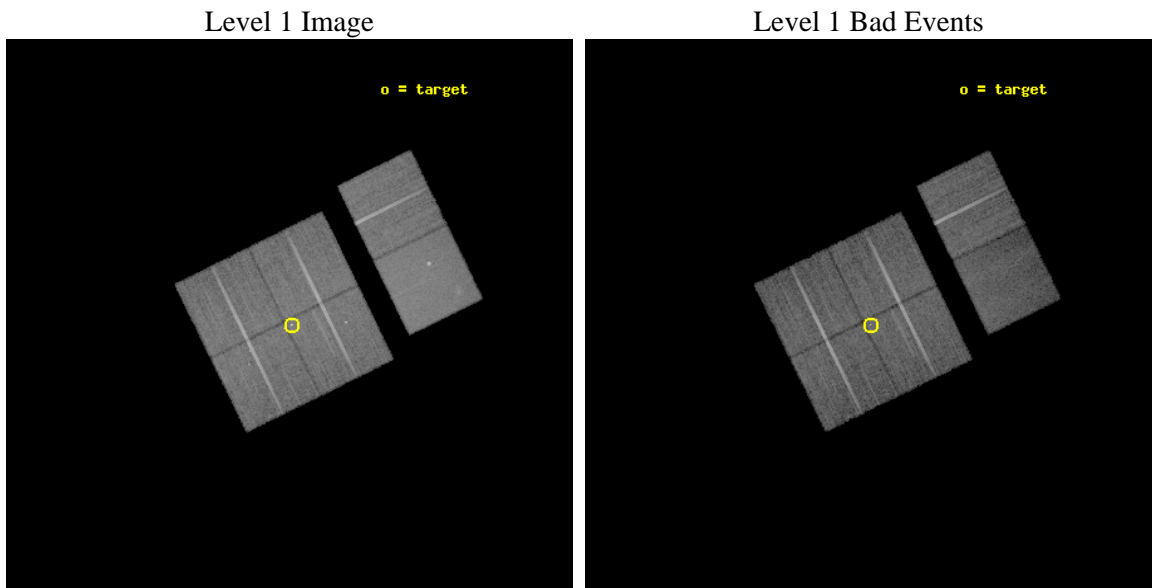
seq_num	780059	Sequence number
obs_id	1109	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS0312-770	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	47.98	Observer's specified target RA
dec_targ	-76.864167	Observer's specified target Dec
ra_nom	47.998878803095	Nominal RA
dec_nom	-76.860611072673	Nominal Dec
roll_nom	63.858838574423	Nominal Roll
revision	3	Processing version of data
ontime	13000.846953943	Sum of GTIs [s]
livetime	12836.222401642	Livetime [s]
ontime0	12994.48815351	Sum of GTIs [s]
ontime1	12994.447103582	Sum of GTIs [s]
ontime2	13000.887993939	Sum of GTIs [s]
ontime3	13000.846953943	Sum of GTIs [s]
ontime6	12997.564953722	Sum of GTIs [s]
ontime7	13001.011113942	Sum of GTIs [s]
l2events	130122	Number of level 2 events



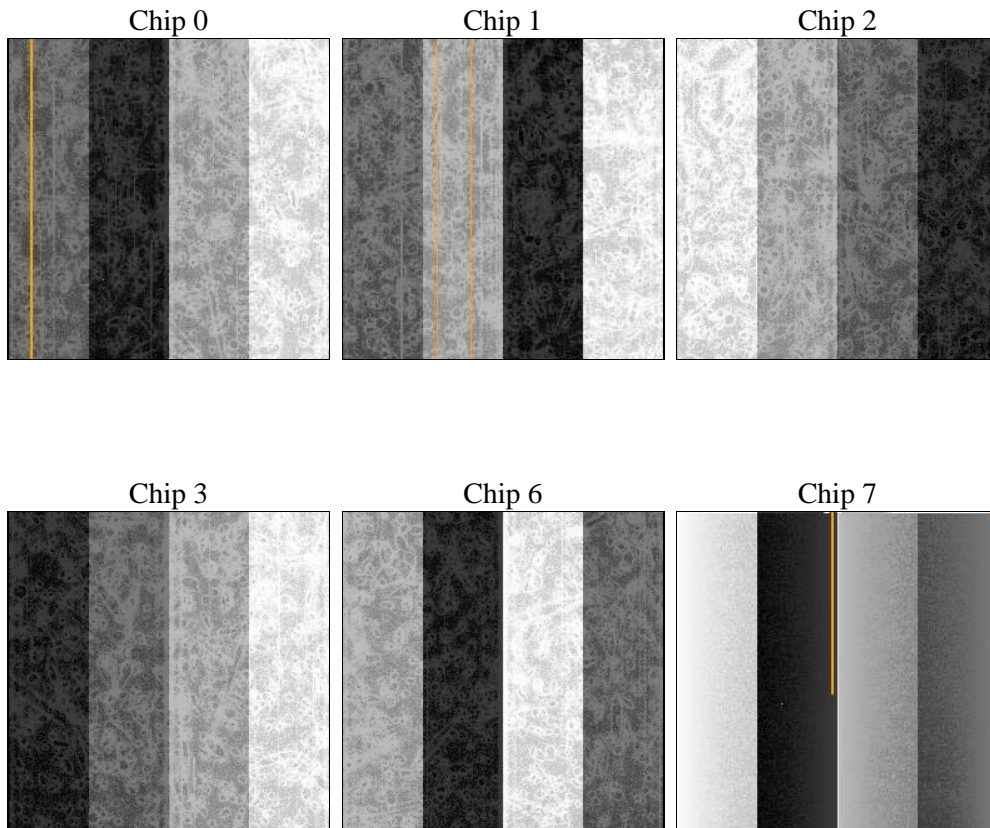
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.000000	Scheduled observation exposure time
ascdsver	8.2.1	ASCDS version number	ontime	13000.846953943	Sum of GTIs [s]
caldbver	4.1.5	 	ontime0	12994.48815351	Sum of GTIs [s]
date	2010-01-13T09:24:26	Date and time of file creation	ontime1	12994.447103582	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	13000.887993939	Sum of GTIs [s]
			ontime3	13000.846953943	Sum of GTIs [s]
			ontime6	12997.564953722	Sum of GTIs [s]
			ontime7	13001.011113942	Sum of GTIs [s]
			l1events	791615	Number of level 1 events

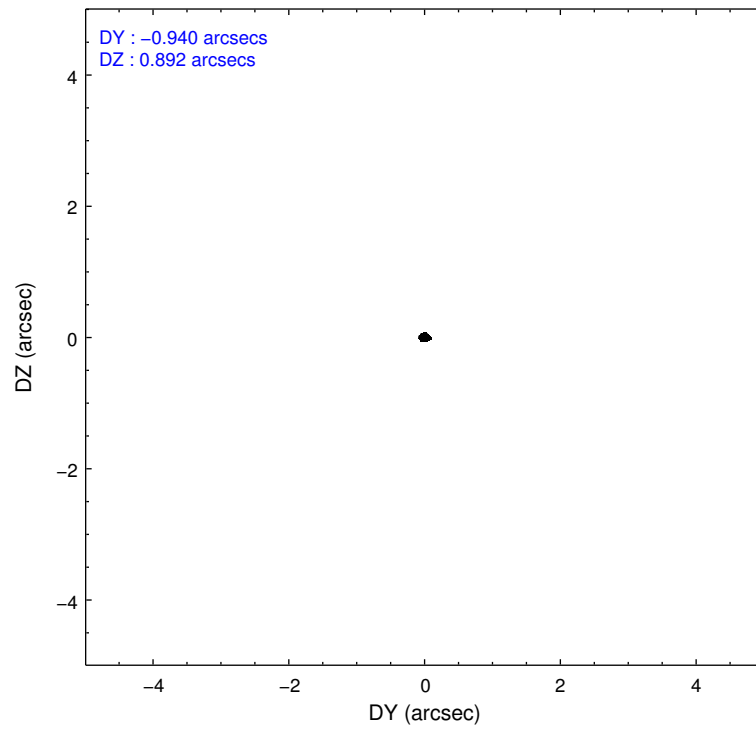
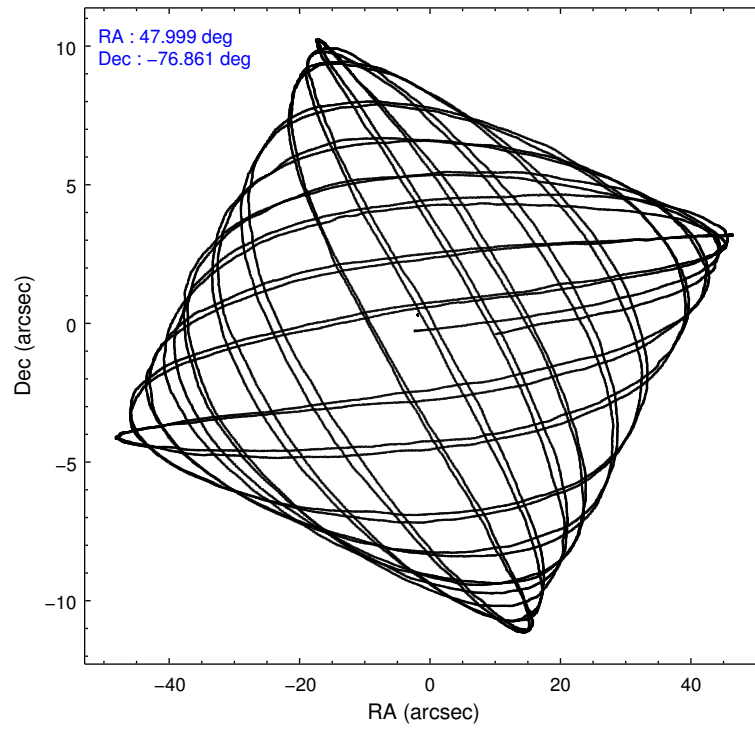
2.1.4 Events

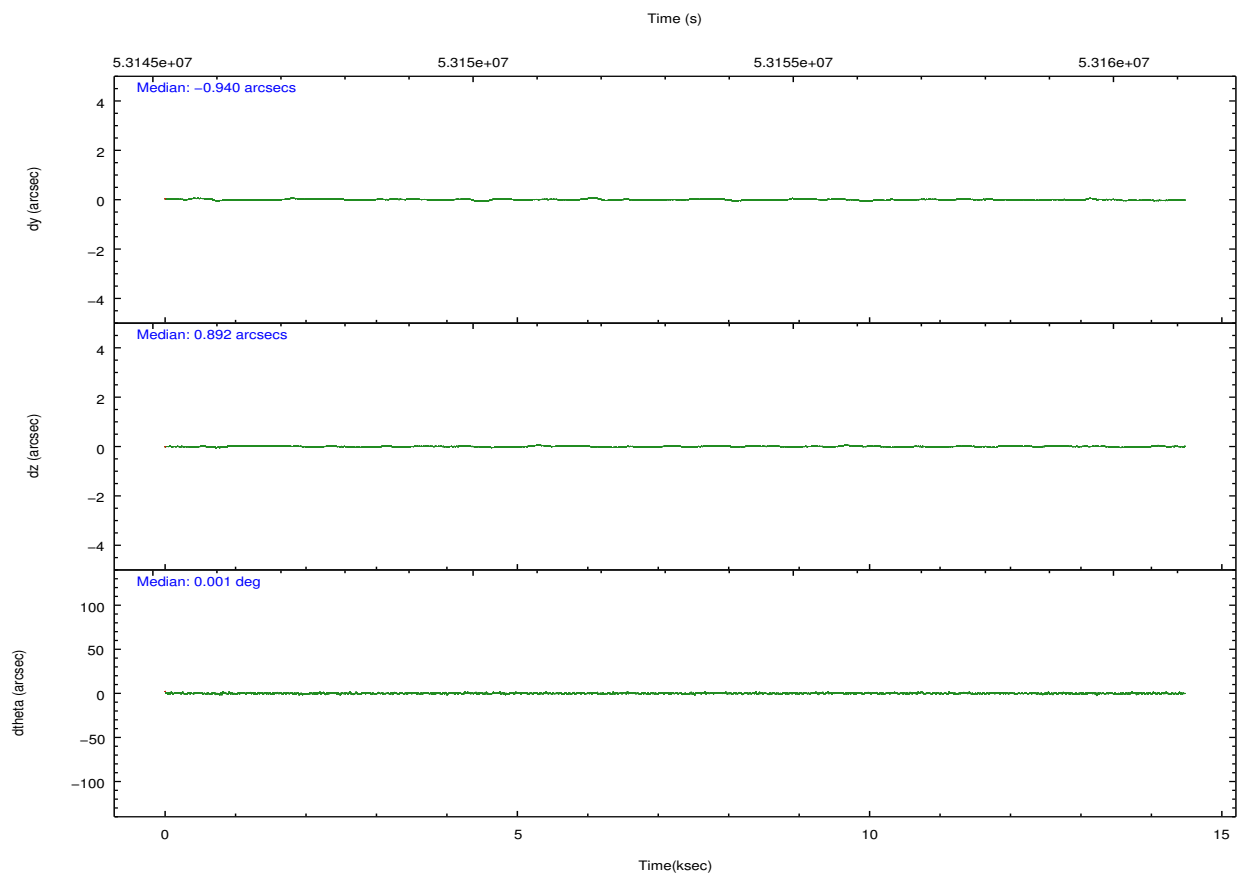
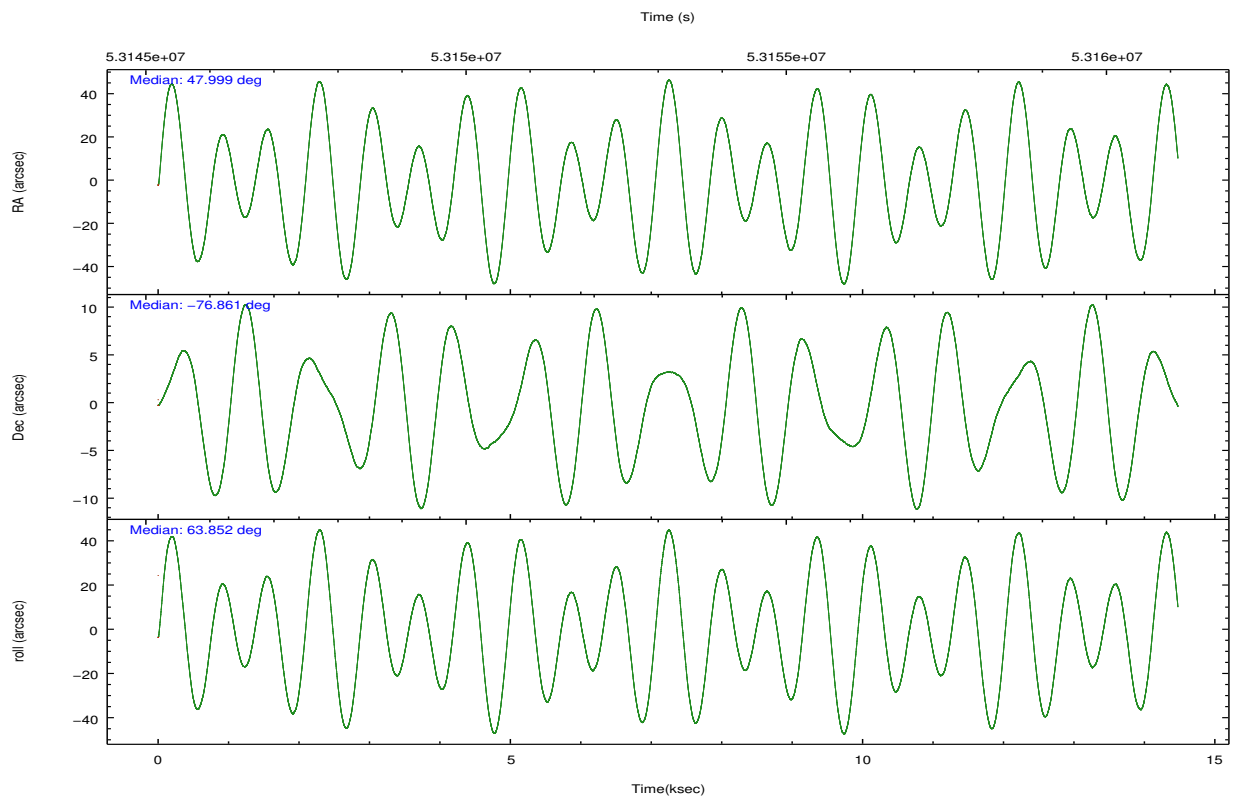
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	123845	122906	129732	133668	126637	154827	grade 0 events	4409	4869	3907	6555	3766	7818
rejected events	111364	109173	118283	117516	114393	81276		3%	3%	3%	4%	2%	5%
rejected %	89%	88%	91%	87%	90%	52%	grade 1 events	40	37	44	314	20	82
								0%	0%	0%	0%	0%	0%
							grade 2 events	3433	3632	3302	4301	3810	11621
								2%	2%	2%	3%	3%	7%
							grade 3 events	1120	1230	945	1262	913	7008
								0%	1%	0%	0%	0%	4%
							grade 4 events	1040	1264	975	1232	896	5921
								0%	1%	0%	0%	0%	3%
							grade 5 events	2954	2957	2494	3379	2871	8912
								2%	2%	1%	2%	2%	5%
							grade 6 events	2486	2748	2328	2812	2860	41214
								2%	2%	1%	2%	2%	26%
							grade 7 events	108363	106169	115737	113813	111501	72251
								87%	86%	89%	85%	88%	46%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	48.004039	47.99887880309505	Subarray requested	NONE	NONE
Pointing Dec	-76.888456	-76.86061107267258	Alternating exposures requested	N	N
Pointing Roll	63.655179	63.858838574423	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	53146393.184000	53145727.909392			
Observation start date	1999-09-08T02:52:09	1999-09-08T02:42:07			
Observation end time	53160393.184000	53160527.372423			
Observation end date	1999-09-08T06:45:29	1999-09-08T06:48:47			
Read mode	TIMED	TIMED			

2.3 Aspect



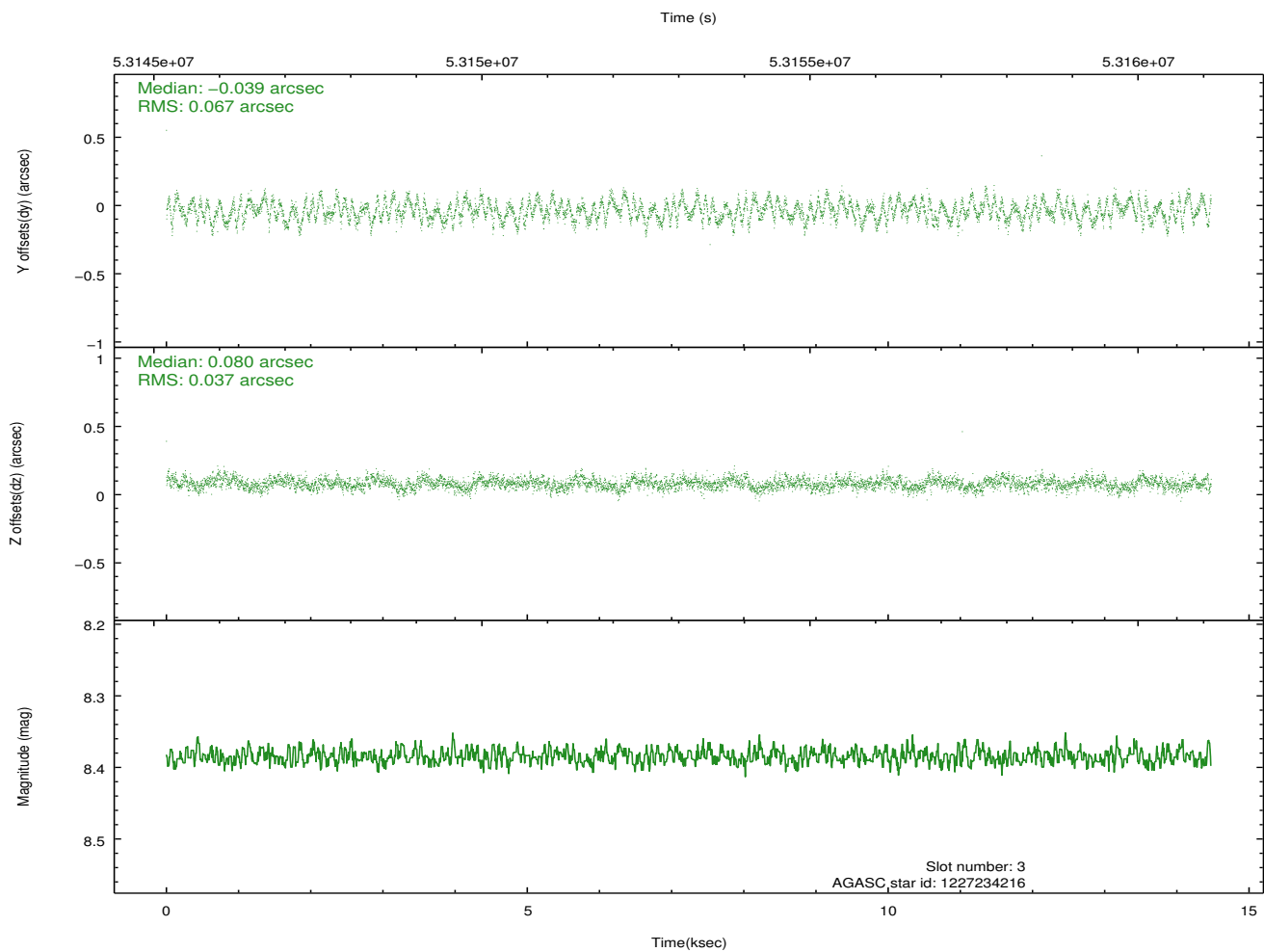
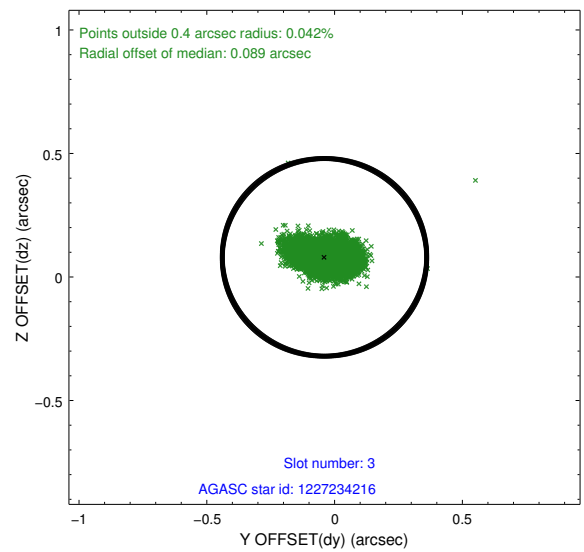
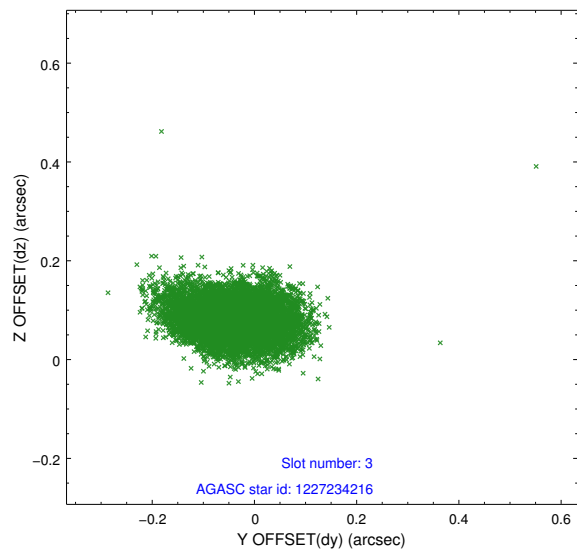


Slot Statistics

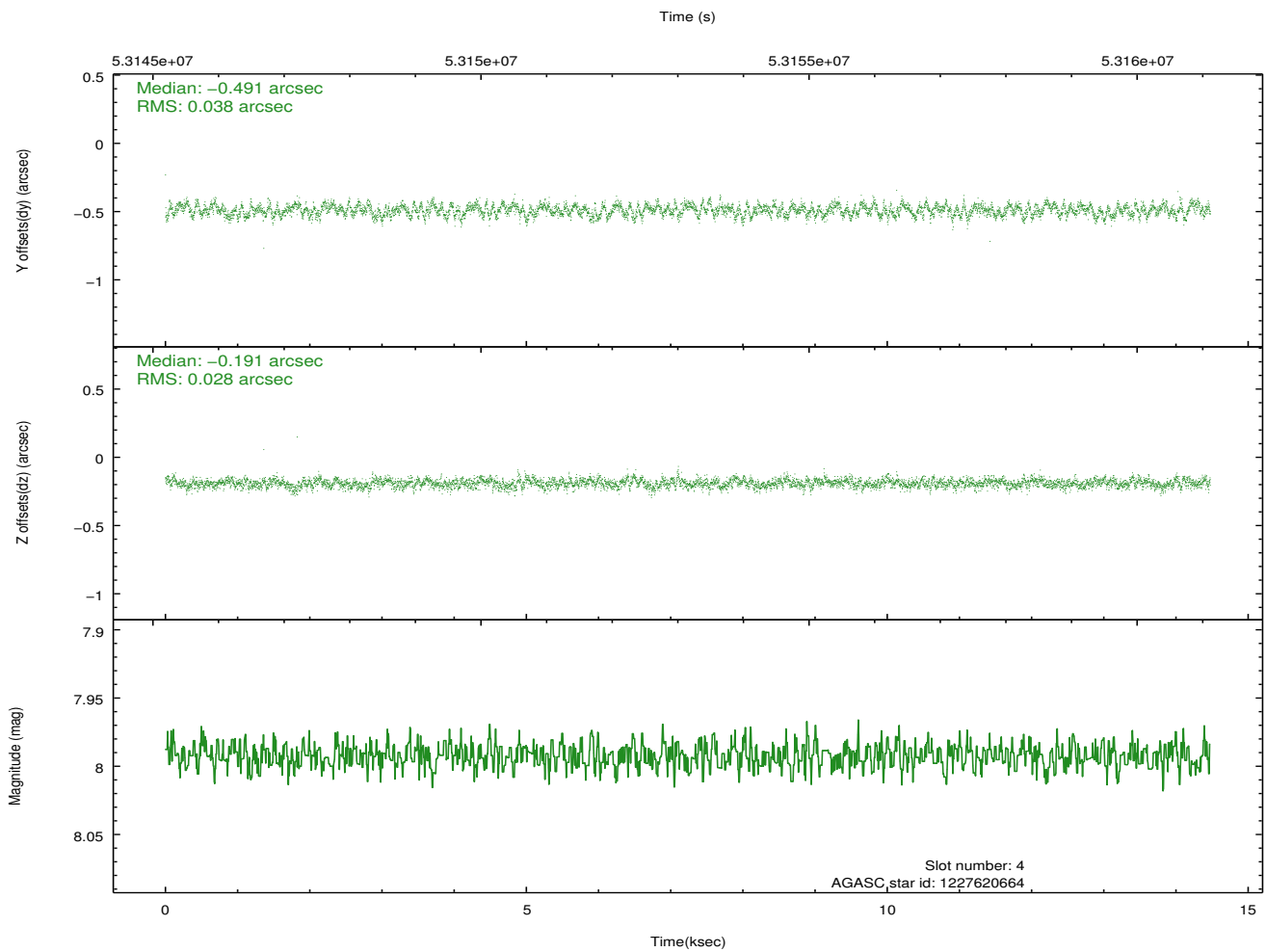
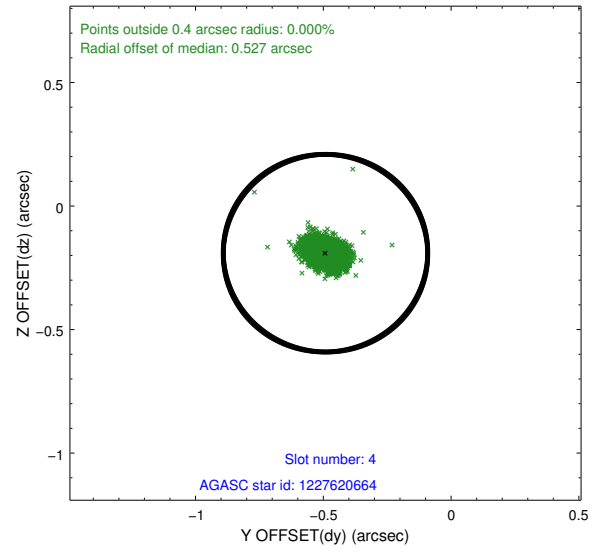
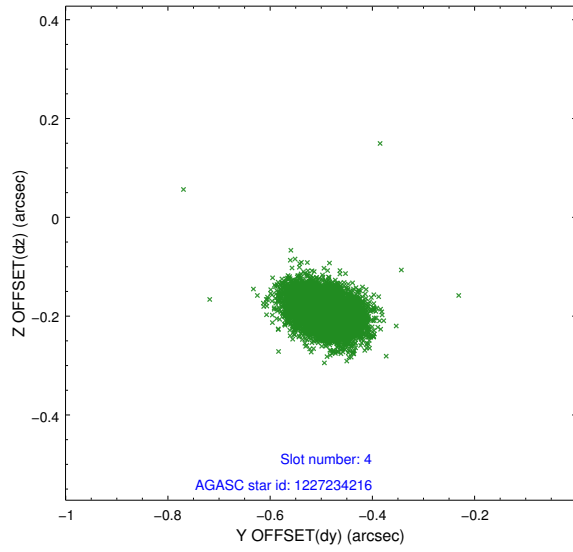
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.21	7062	-0.044	0.035	0.008	0.015	0.000000	0.000000	-753.43	-830.40
1	FID	ACIS-I-4	7.23	7060	0.126	0.023	0.006	0.011	0.000000	0.000000	2160.88	1075.54
2	FID	ACIS-I-5	7.23	7061	-0.183	0.010	0.008	0.014	0.000000	0.000000	-1807.17	1073.71
3	GUIDE	1227234216	8.39	7061	-0.039	0.080	0.080	0.132	51.506981	-76.616205	2095.78	-2217.32
4	GUIDE	1227620664	7.99	7061	-0.491	-0.191	0.049	0.081	46.150563	-77.166043	-1574.04	873.81
5	GUIDE	1227629440	9.11	7059	-0.179	-0.037	0.063	0.103	48.268116	-77.028500	-357.54	-414.82
6	GUIDE	1227104240	9.79	7054	-0.145	0.183	0.093	0.153	48.955462	-76.524572	1522.48	-136.12
7	GUIDE	1227097864	9.92	7058	0.856	-0.034	0.090	0.147	46.669937	-76.763312	-94.14	1180.05

2.4 Star Slots

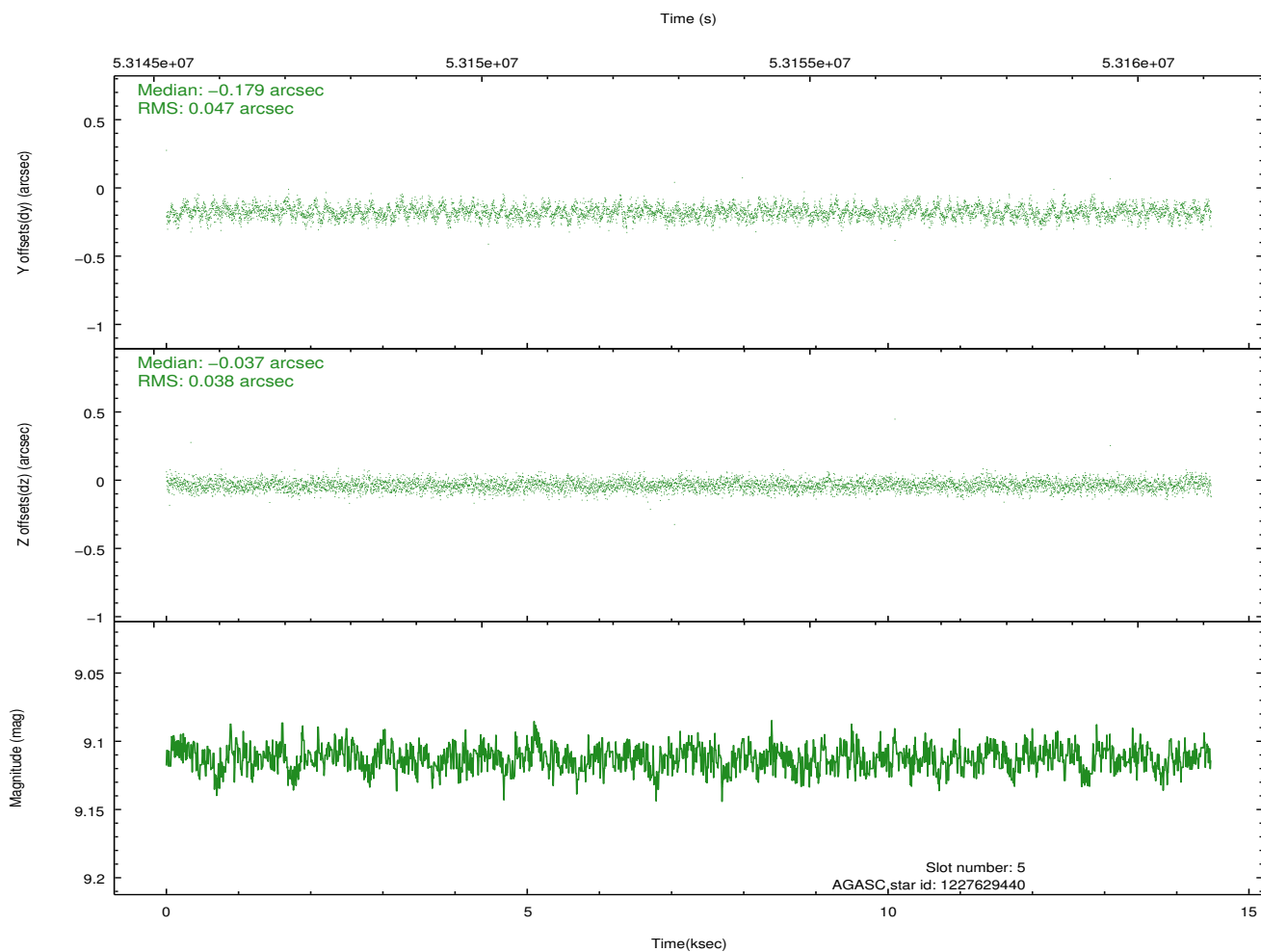
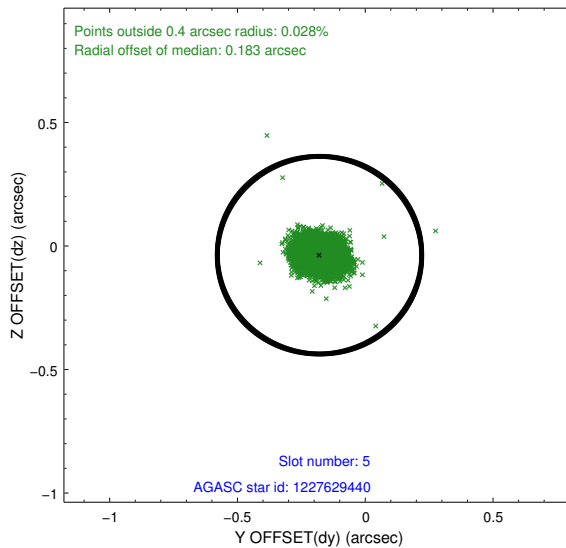
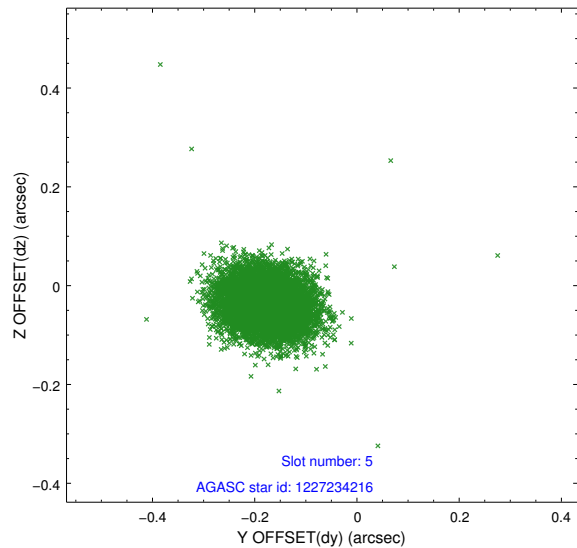
2.4.1 Slot 3



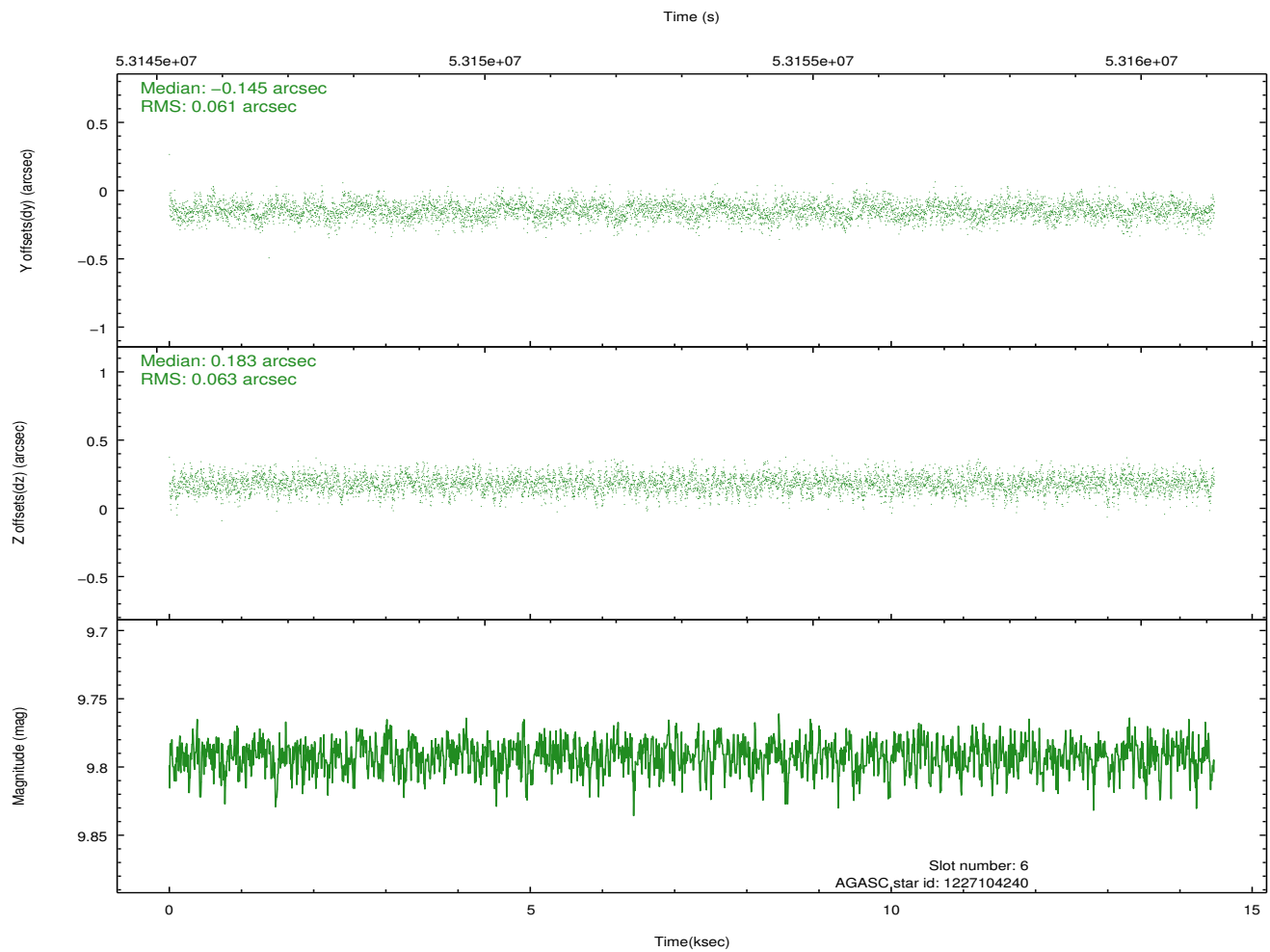
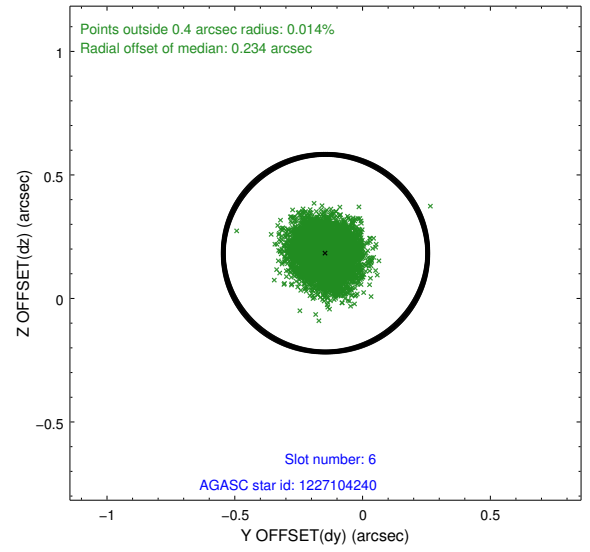
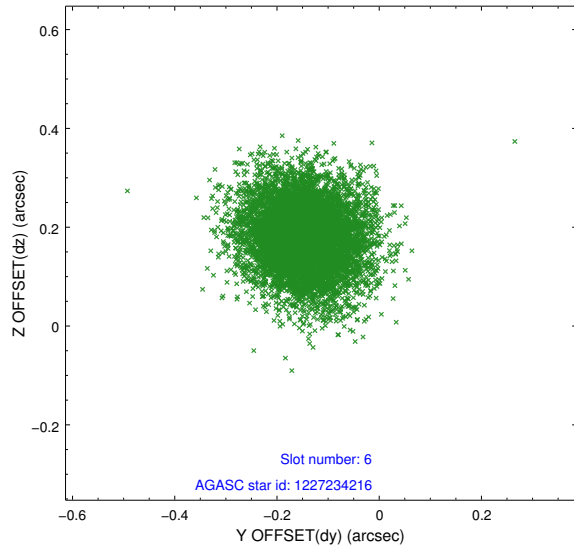
2.4.2 Slot 4



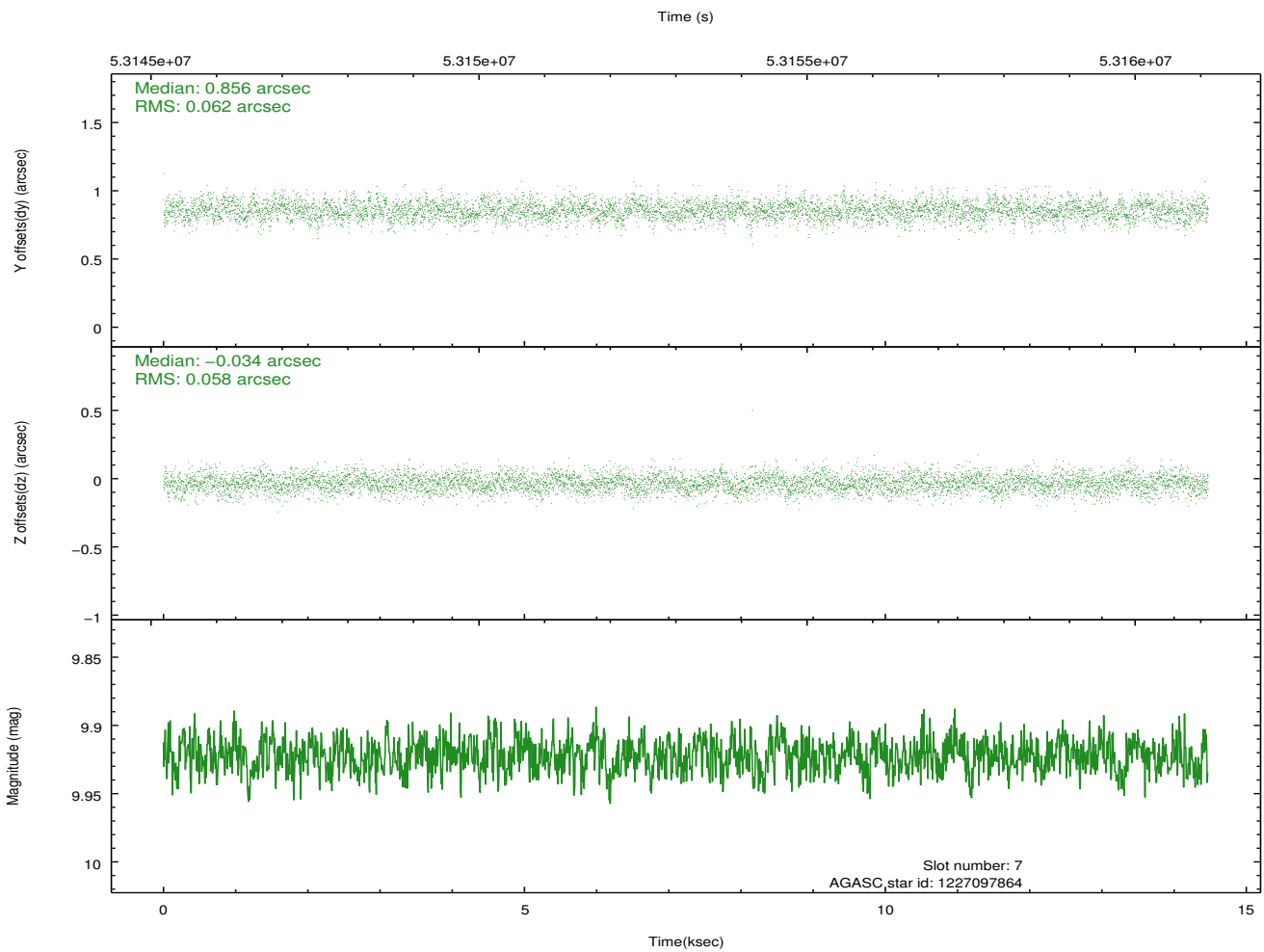
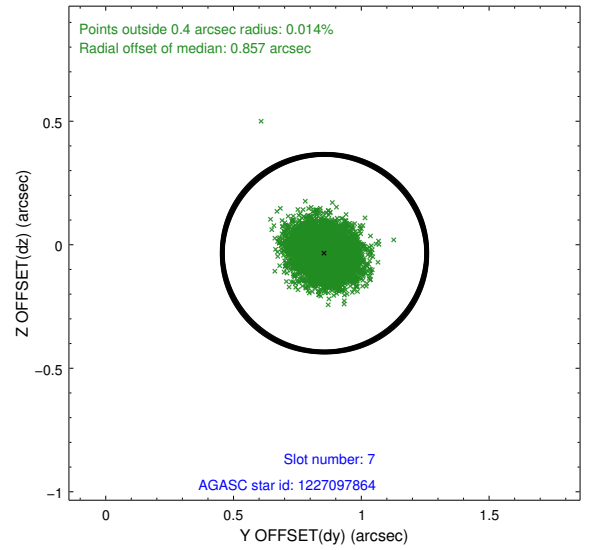
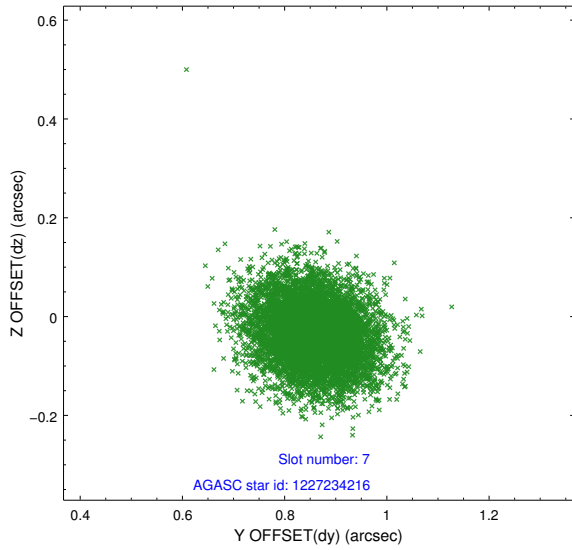
2.4.3 Slot 5



2.4.4 Slot 6

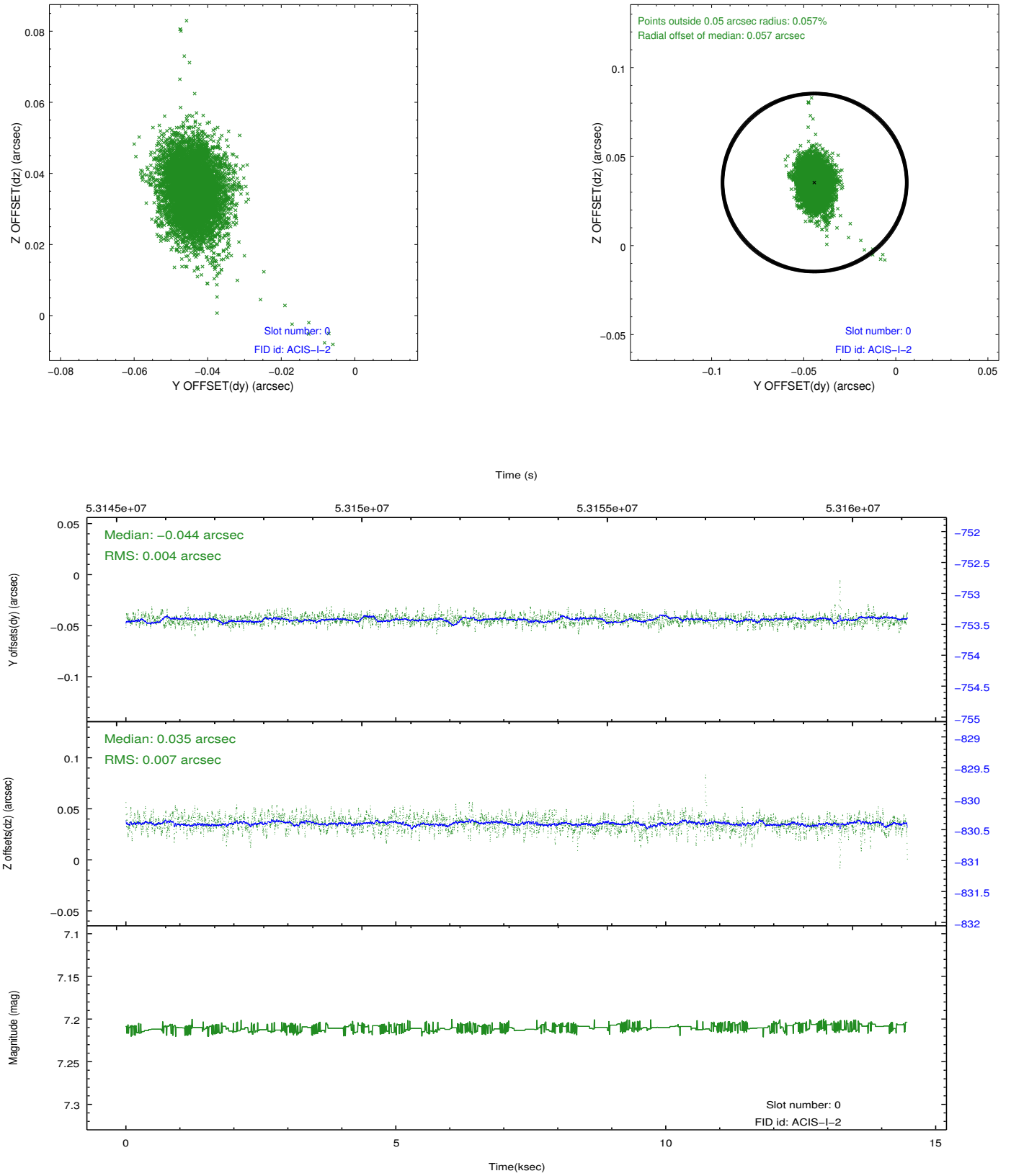


2.4.5 Slot 7

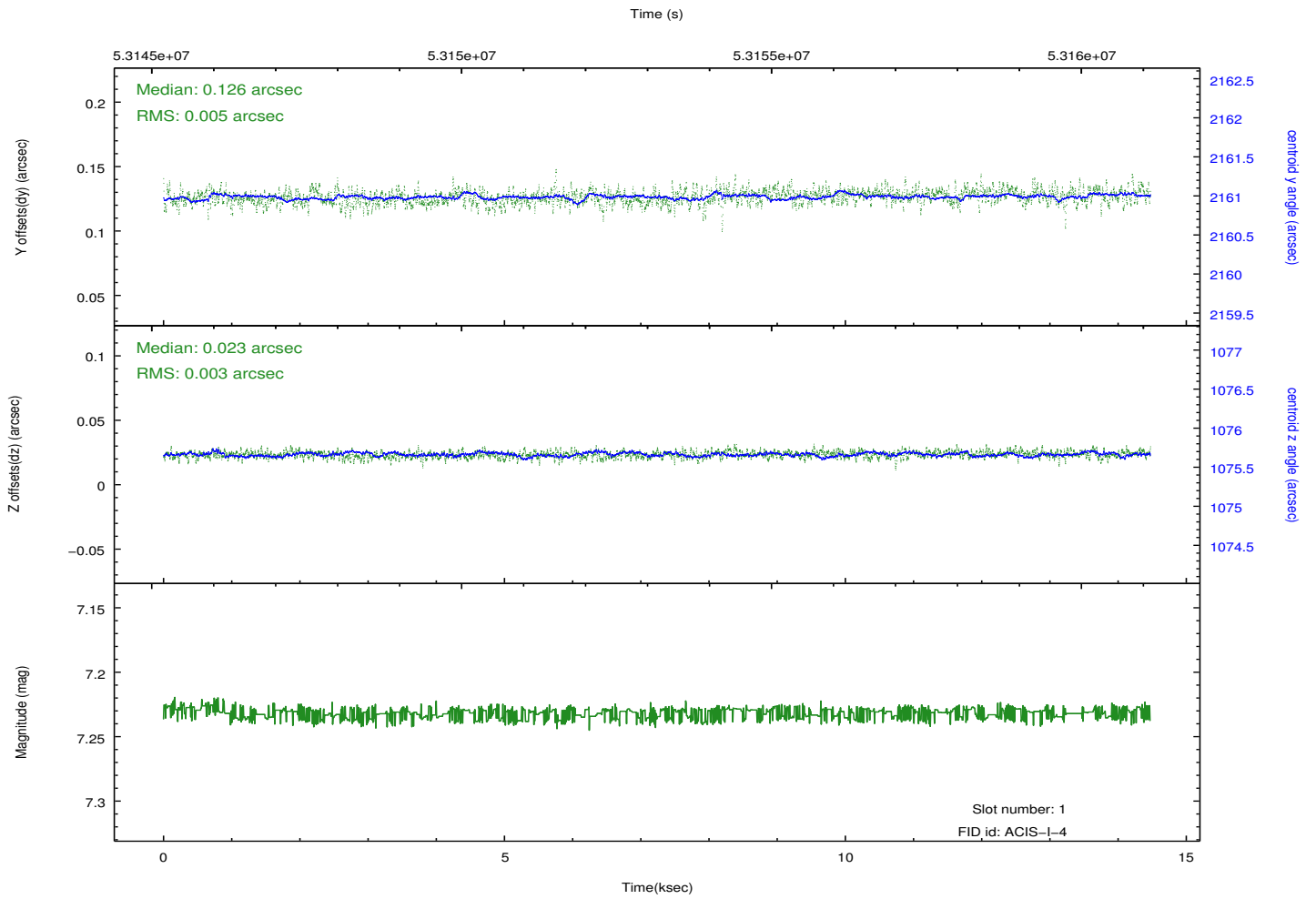
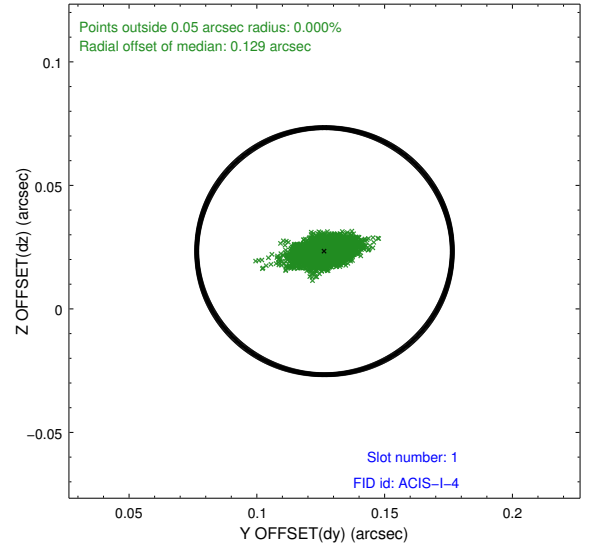
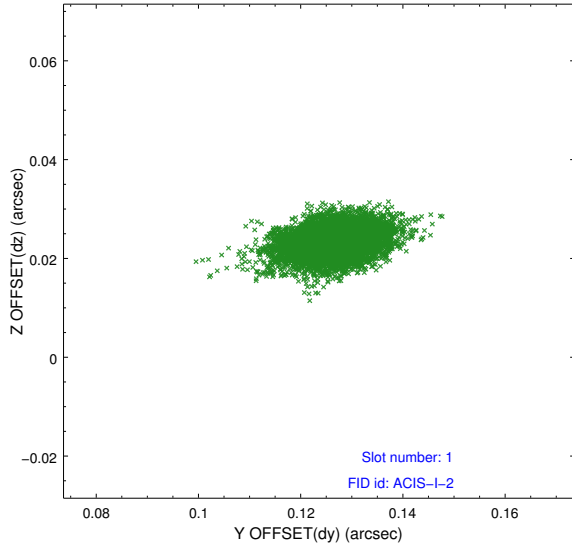


2.5 FID Slots

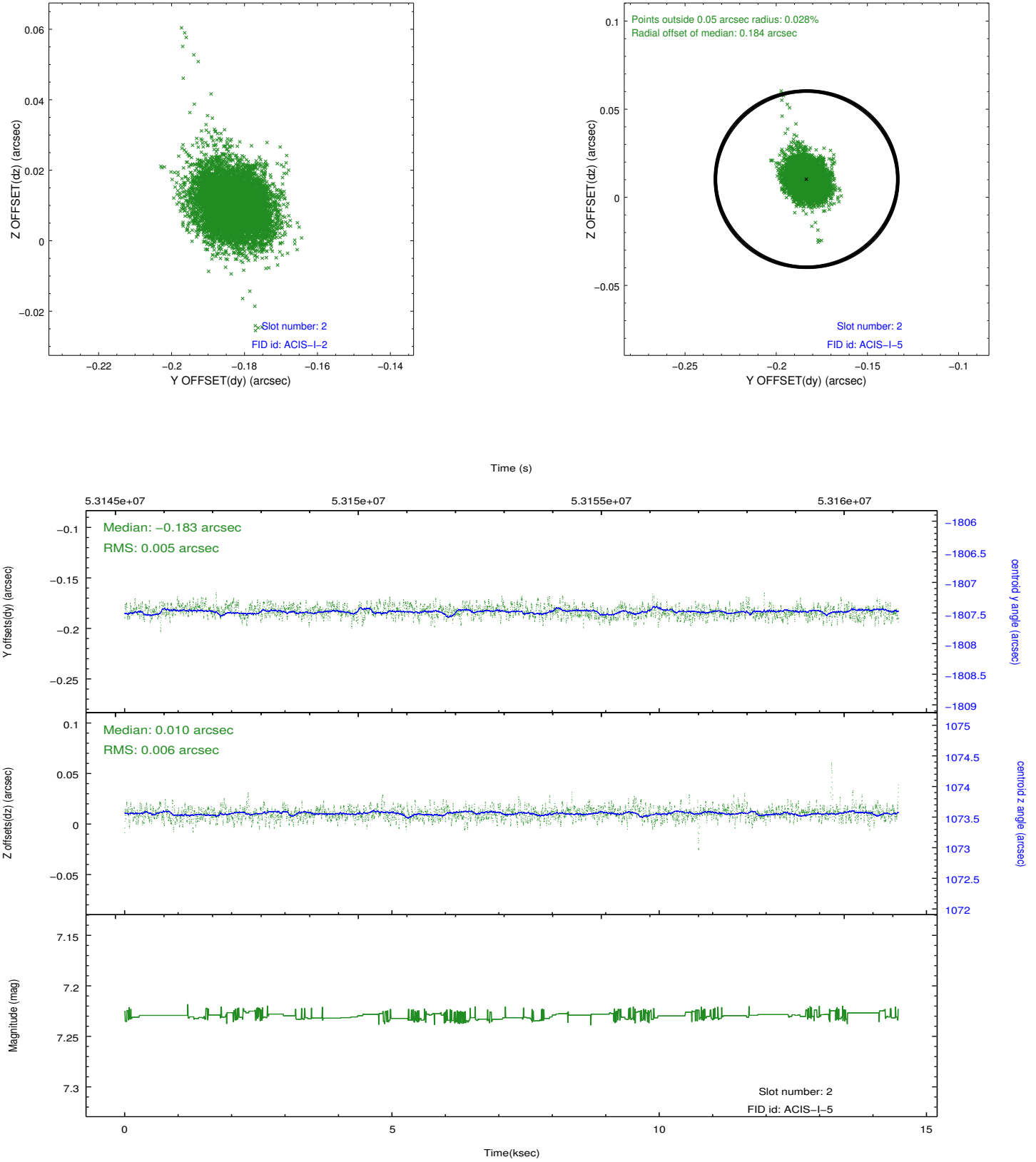
2.5.1 Slot 0



2.5.2 Slot 1

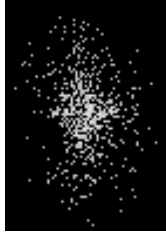


2.5.3 Slot 2

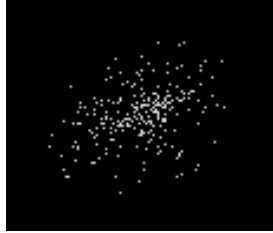


3 Point Sources

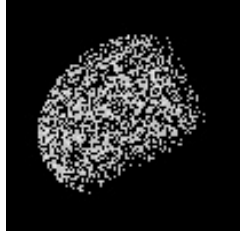
5.91 arcmin



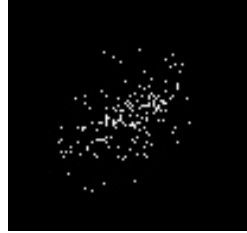
6.02 arcmin



19.32 arcmin



4.99 arcmin



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	13.001

A.2 Comments

ACIS PSF measurement on I3.

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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.