

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15608 - L2 Version 2
Chandra X-Ray Center

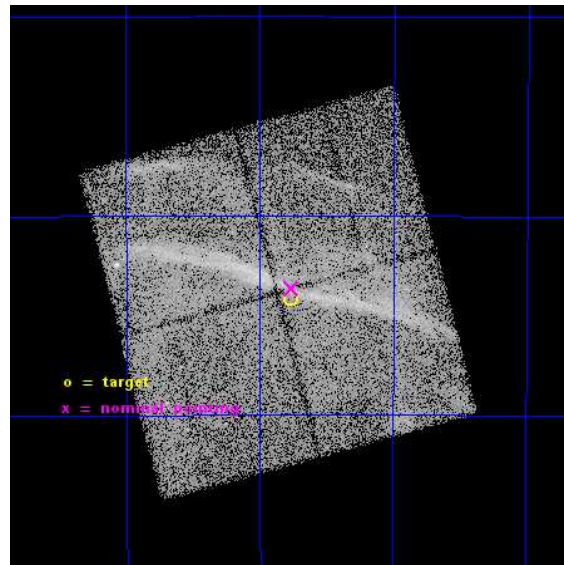
L2 Processing Date : Dec 1 2014

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1 Front

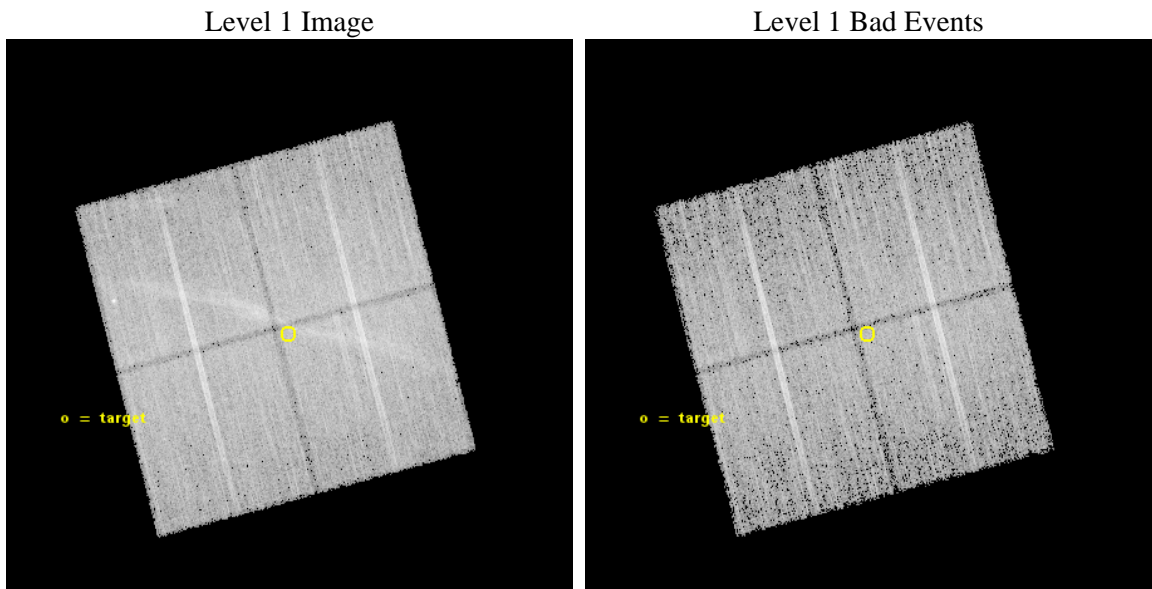
seq_num	502014	Sequence number
obs_id	15608	Observation id
title	Studying Particle Acceleration and Ejecta in Northwest Rim of the Supernova Remnant RCW 86 with Chandra	Proposal title
observer	Dr. Daniel Castro	Principal investigator
object	RCW 86	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	220.441667	Observer's specified target RA [deg]
dec_targ	-62.235556	Observer's specified target Dec [deg]
ra_nom	220.44092643804	Nominal RA [deg]
dec_nom	-62.227466428224	Nominal Dec [deg]
roll_nom	75.208041691478	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29589.275662541	Sum of GTIs [s]
livetime	29202.669992702	Livetime [s]
ontime0	29589.152542531	Sum of GTIs [s]
ontime1	29586.052622199	Sum of GTIs [s]
ontime2	29589.234622538	Sum of GTIs [s]
ontime3	29589.275662541	Sum of GTIs [s]
l2events	122851	Number of level 2 events



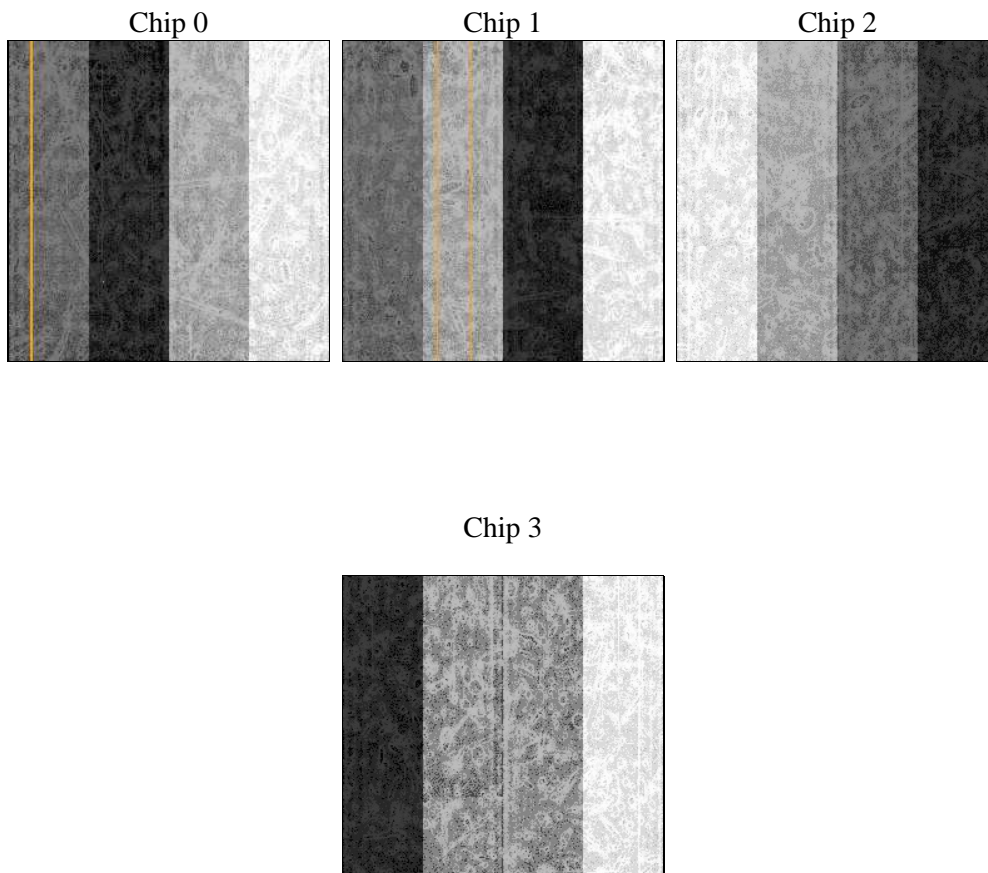
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29500.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	29589.275662541	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	29589.152542531	Sum of GTIs [s]
date	2014-12-01T13:53:49	Date and time of file creation	ontime1	29586.052622199	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	29589.234622538	Sum of GTIs [s]
			ontime3	29589.275662541	Sum of GTIs [s]
			l1events	672901	Number of level 1 events

2.1.4 Events

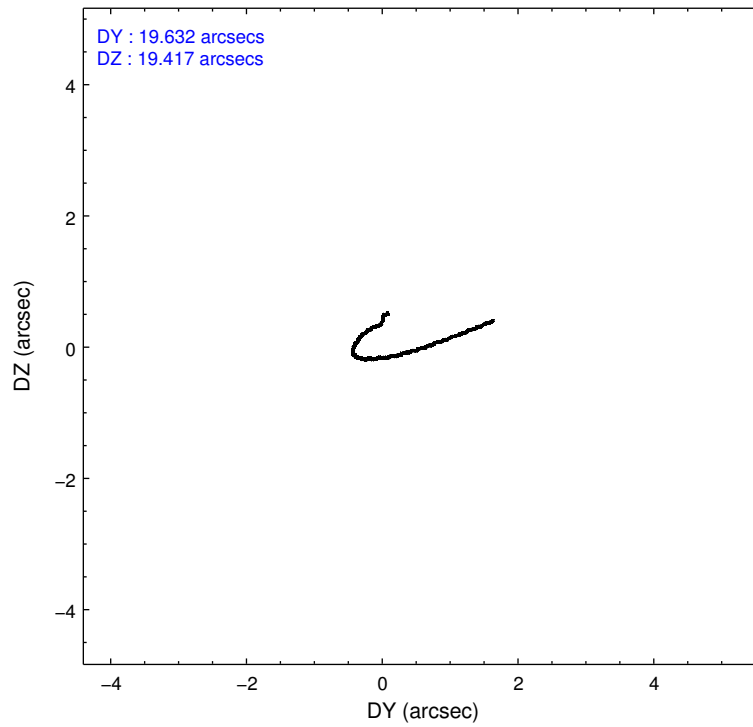
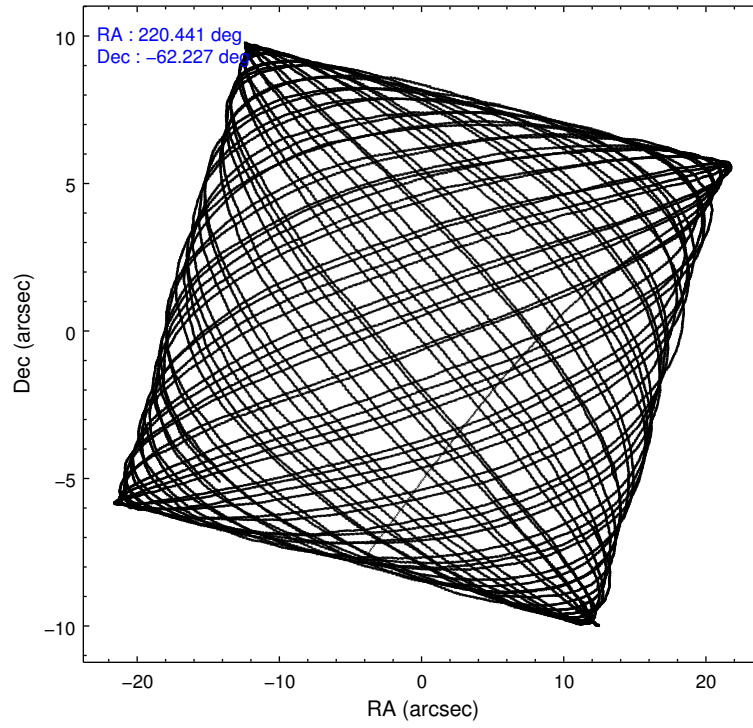
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	175051	157033	168118	172699
rejected events	130530	127732	140398	135088
rejected %	74%	81%	83%	78%

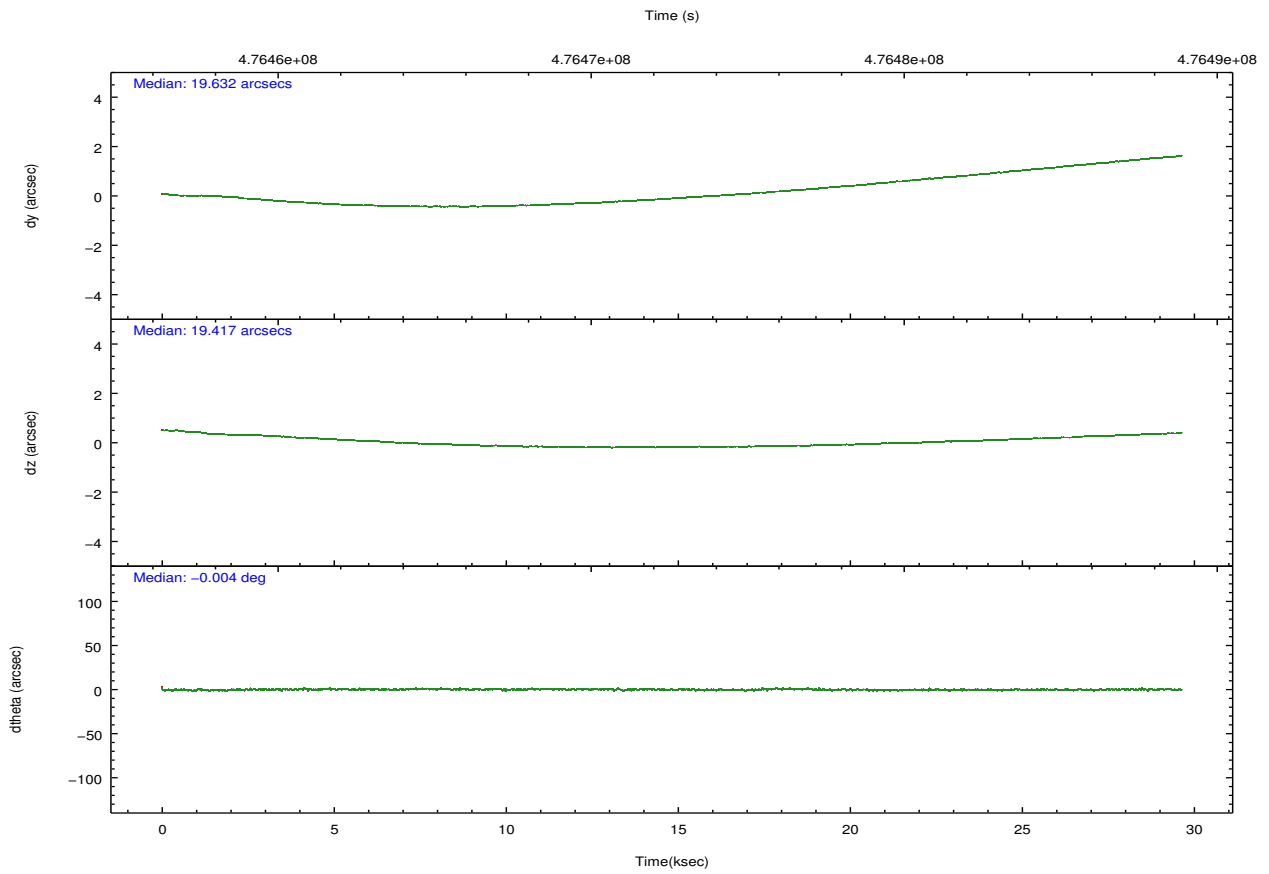
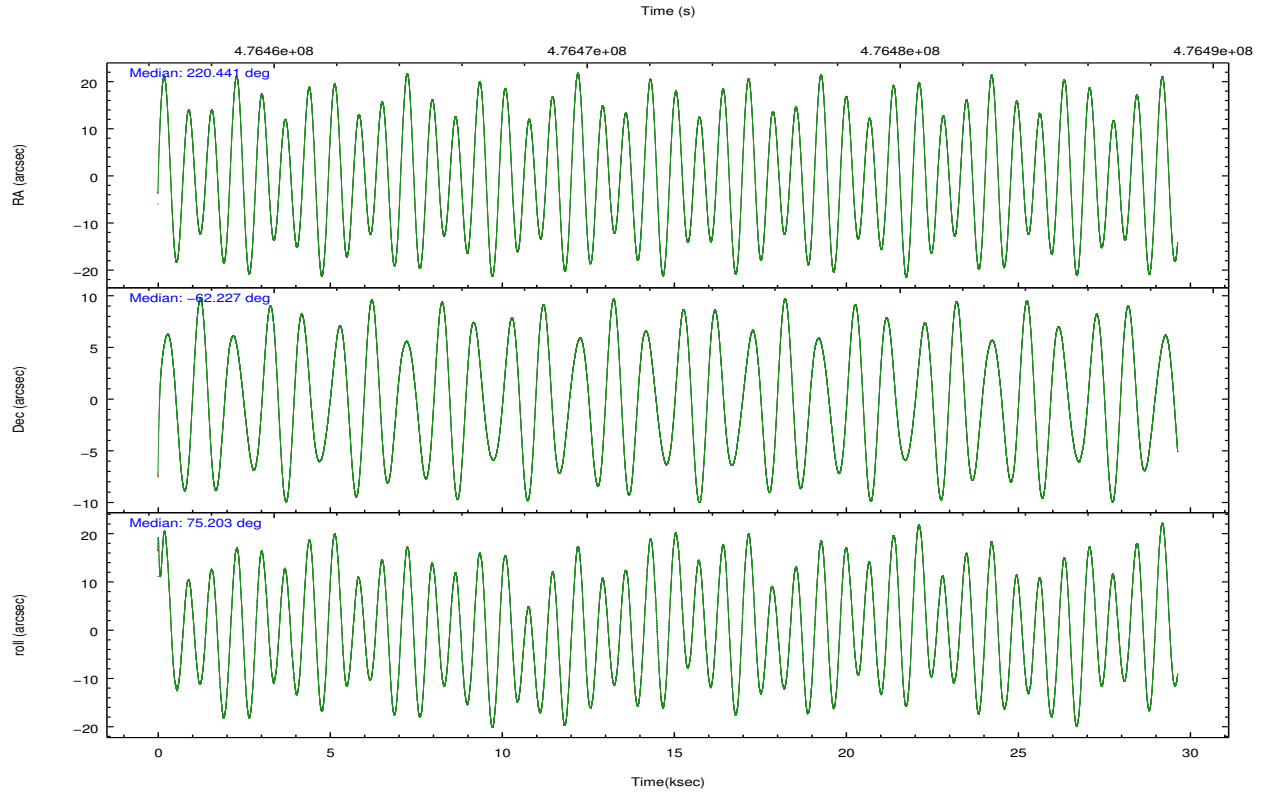
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	28617	14207	14399	23437
	16%	9%	8%	13%
grade 1 events	163	115	118	170
	0%	0%	0%	0%
grade 2 events	6874	5856	5365	5586
	3%	3%	3%	3%
grade 3 events	2558	2310	2189	2359
	1%	1%	1%	1%
grade 4 events	2338	2317	2154	2307
	1%	1%	1%	1%
grade 5 events	7491	7892	7026	8266
	4%	5%	4%	4%
grade 6 events	4140	4615	3618	3927
	2%	2%	2%	2%
grade 7 events	122870	119721	133249	126647
	70%	76%	79%	73%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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
[deg] Pointing RA	220.456633	220.440926438038	Subarray requested	NONE	NONE
[deg] Pointing Dec	-62.253971	-62.22746642822389	Alternating exposures requested	N	N
[deg] Pointing Roll	75.013244	75.208041691478	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	476457889.184000	476456955.2444			
Observation start date	2013-02-05T13:23:42	2013-02-05T13:09:15			
[s] Observation end time (MET)	476487389.184000	476488183.40862			
Observation end date	2013-02-05T21:35:22	2013-02-05T21:49:43			
Read mode	TIMED	TIMED			

2.3 Aspect





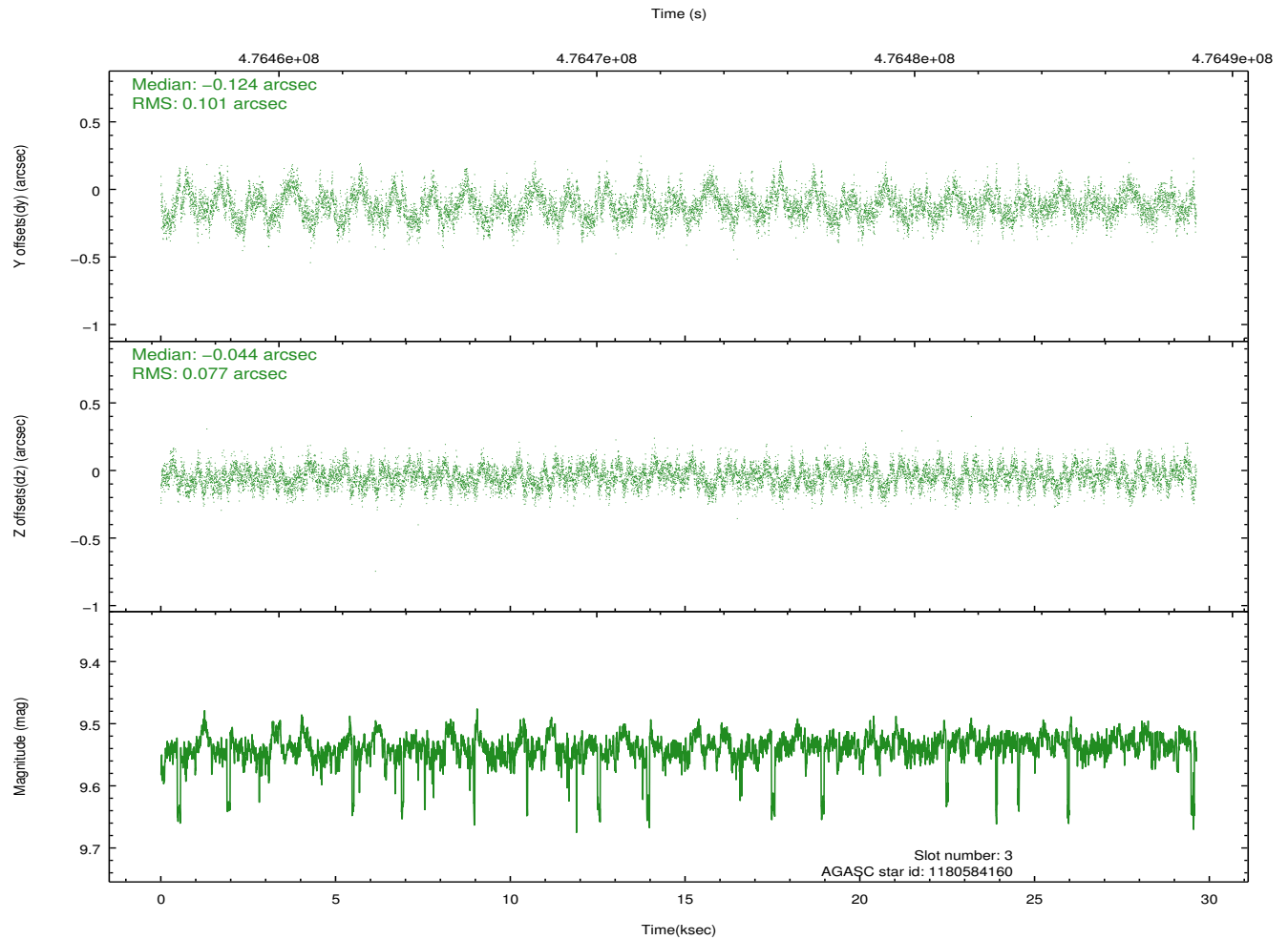
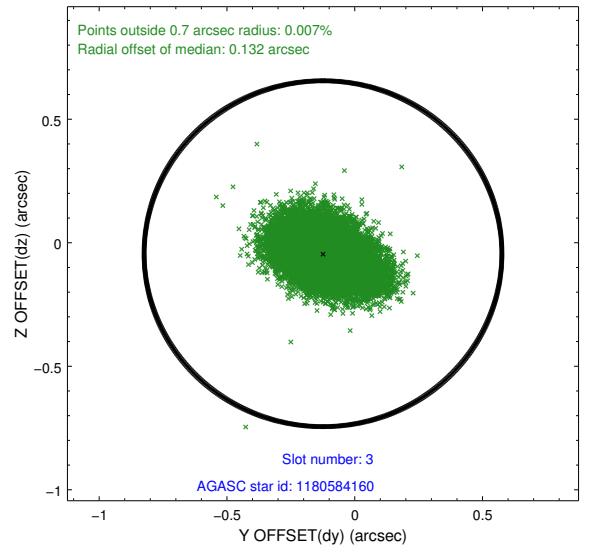
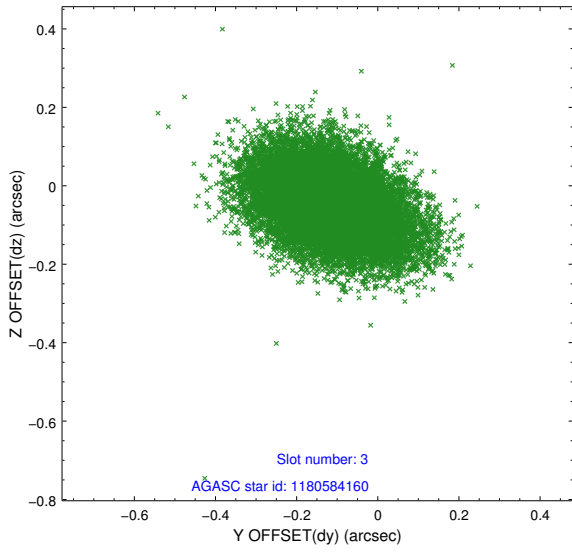
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.05	7230	-0.027	-0.008	0.014	0.027	0.000000	0.000000	919.48	-843.15
1	FID		ACIS-I-4	6.97	7229	0.195	0.042	0.014	0.022	0.000000	0.000000	2139.72	1056.70
2	FID		ACIS-I-5	7.05	7229	-0.267	0.037	0.013	0.023	0.000000	0.000000	-1828.73	1054.50
3	GUIDE	used	1180584160	9.54	14393	-0.124	-0.044	0.133	0.224	221.205741	-61.754749	2058.91	-769.28
4	GUIDE	used	1181104896	6.61	14459	-0.359	-0.646	0.077	0.124	219.299869	-62.010896	323.00	2109.22
5	GUIDE	used	1181107448	9.21	14453	0.188	-0.253	0.095	0.157	219.084809	-62.741785	-2304.15	1724.57
6	GUIDE	used	1181109144	8.37	14457	0.085	0.492	0.076	0.123	221.655127	-62.786083	-1357.55	-2405.21
7	GUIDE	used	1181113992	9.46	14449	0.208	0.466	0.151	0.235	221.650516	-62.822918	-1487.91	-2430.09

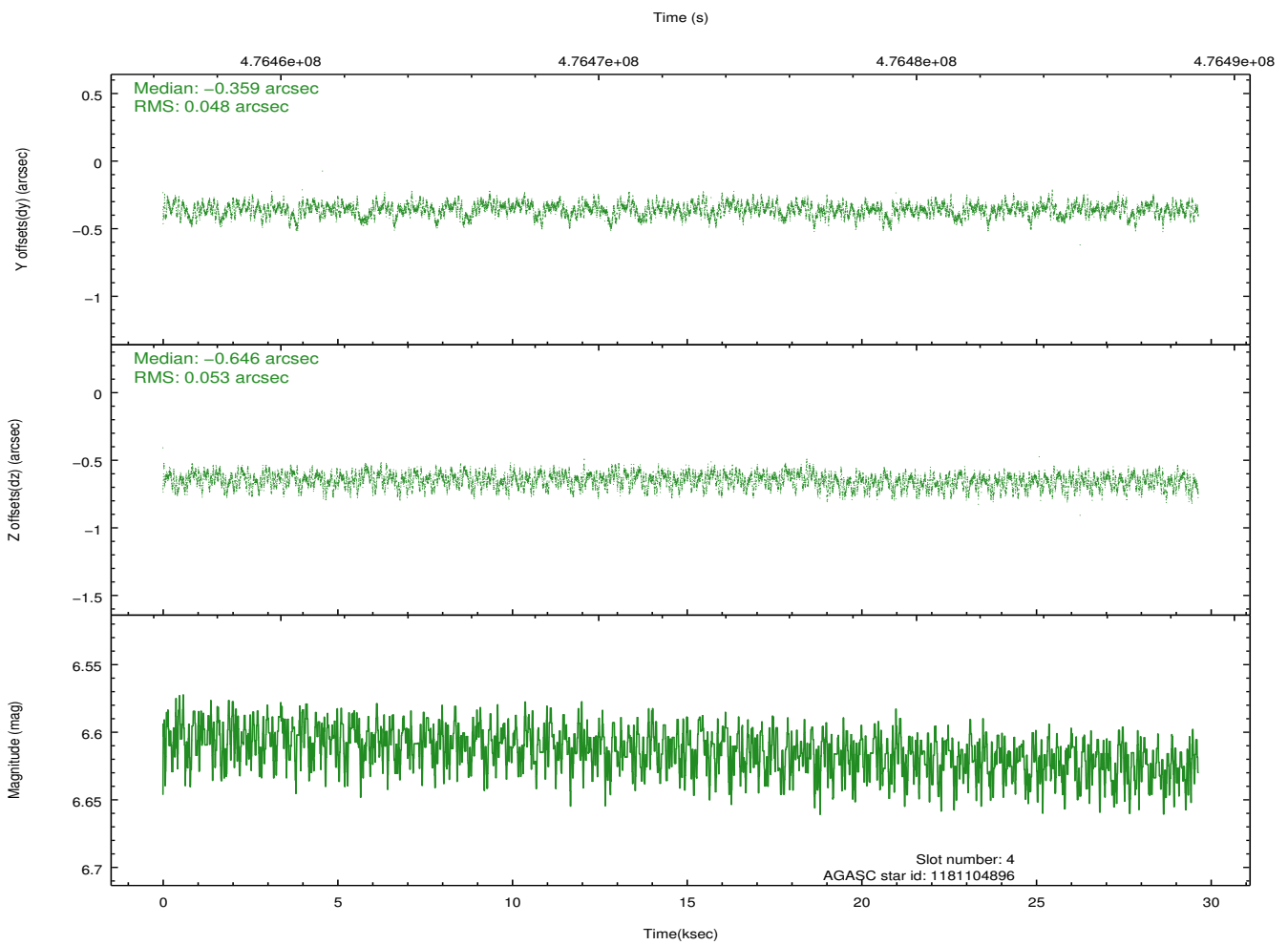
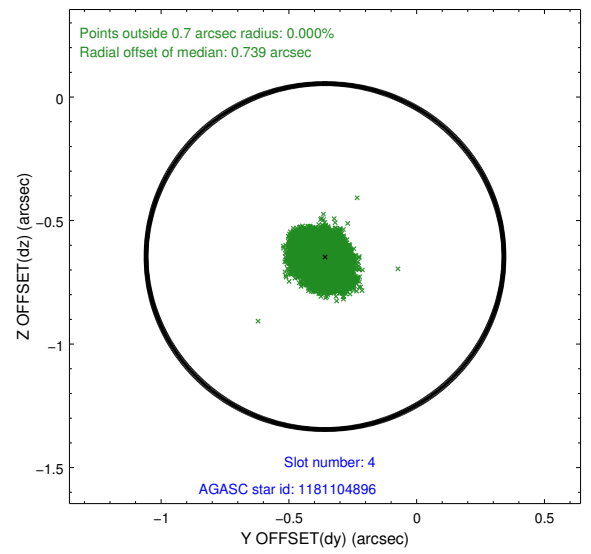
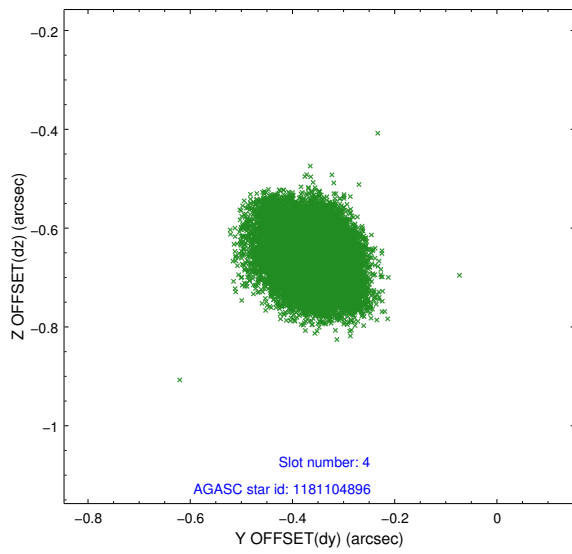
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2.4 Star Slots

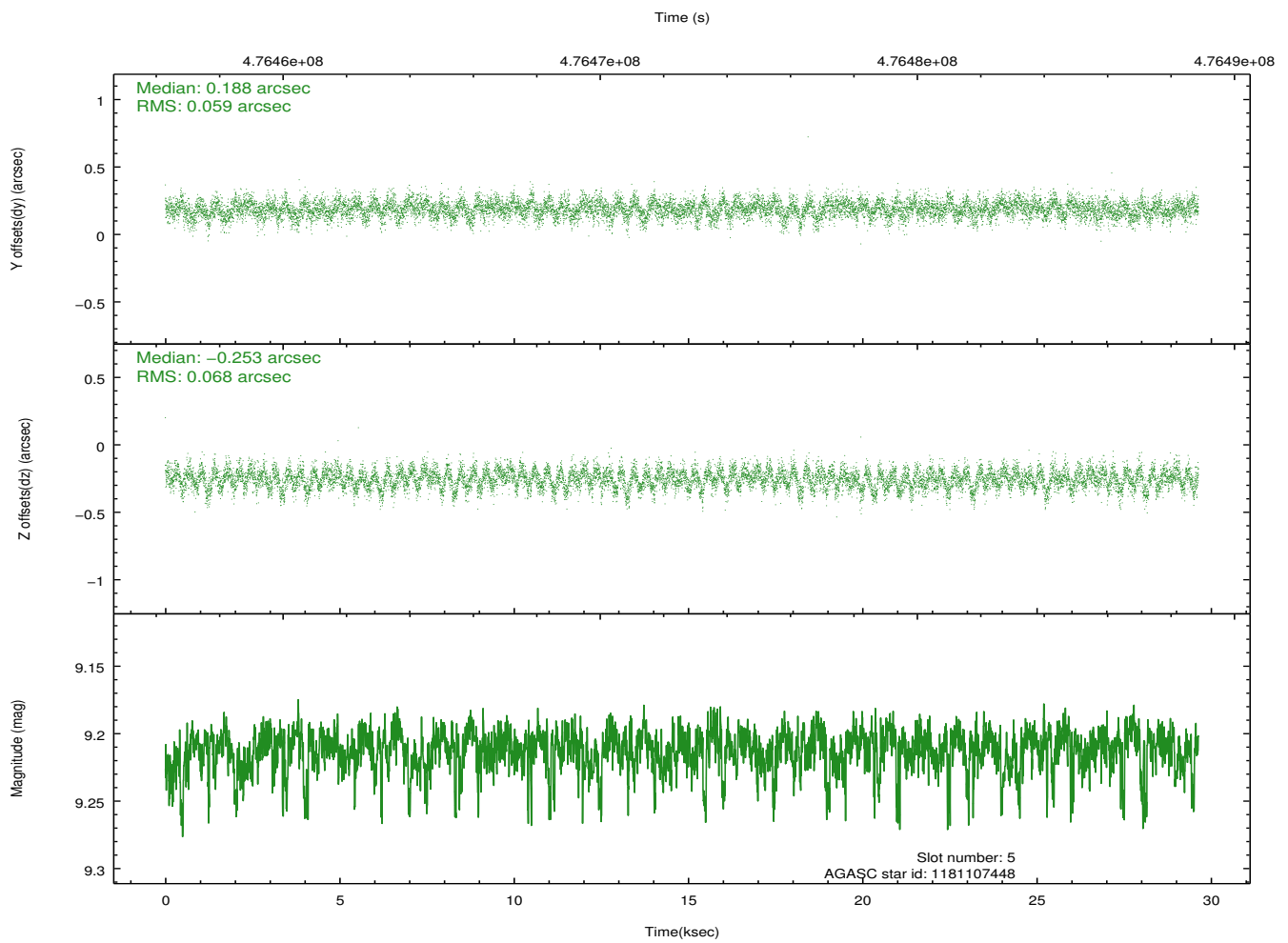
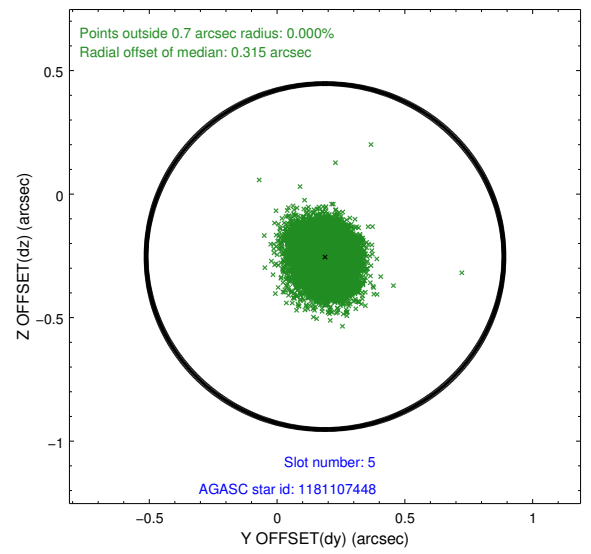
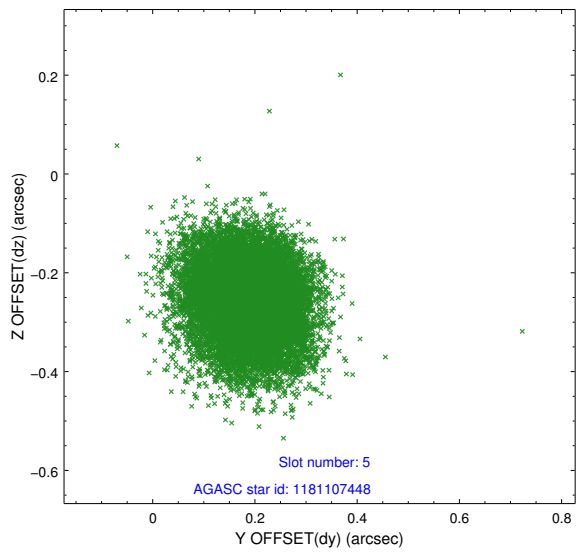
2.4.1 Slot 3



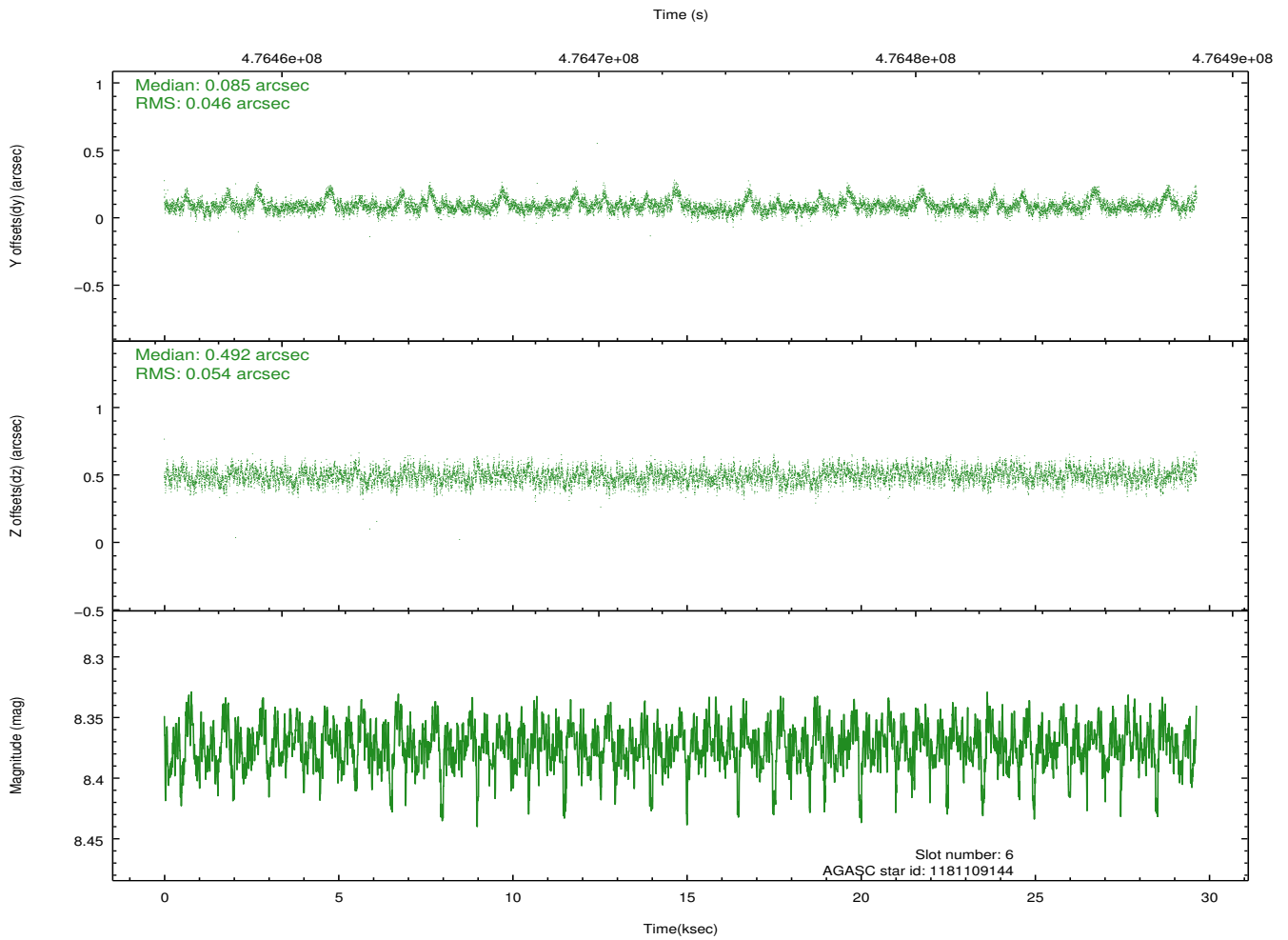
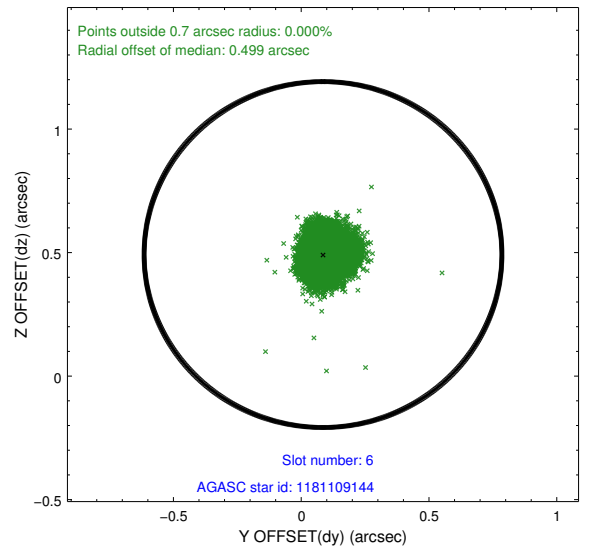
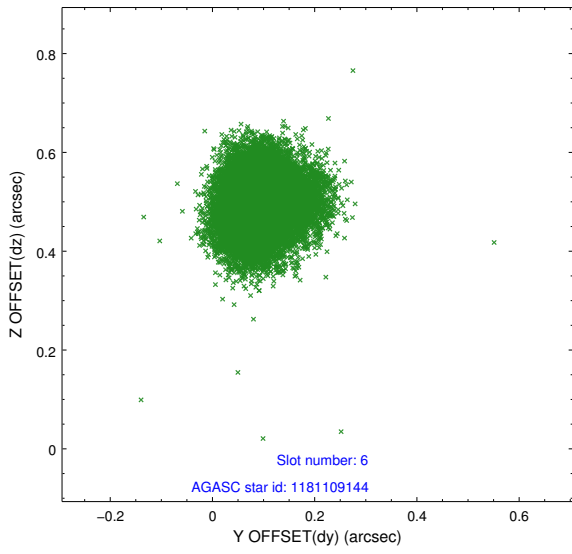
2.4.2 Slot 4



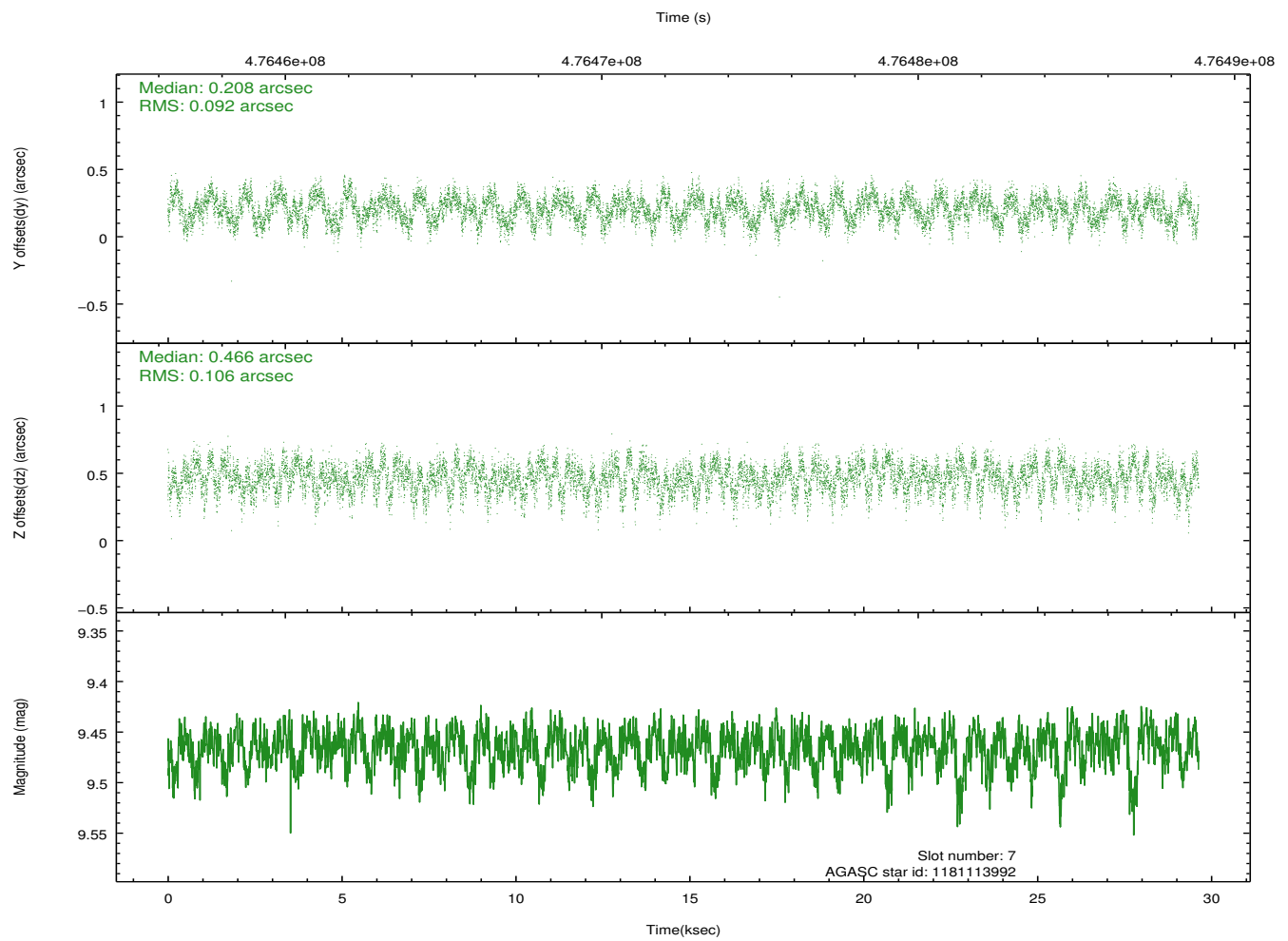
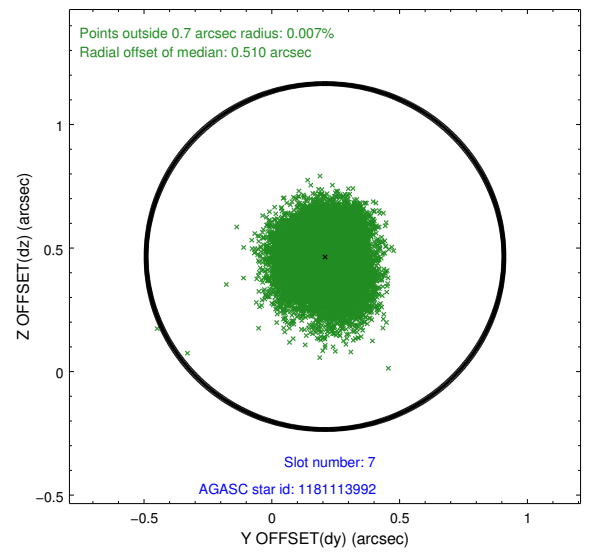
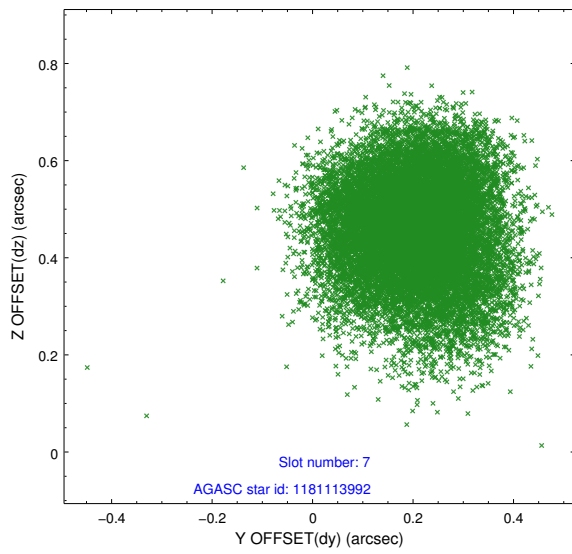
2.4.3 Slot 5



2.4.4 Slot 6

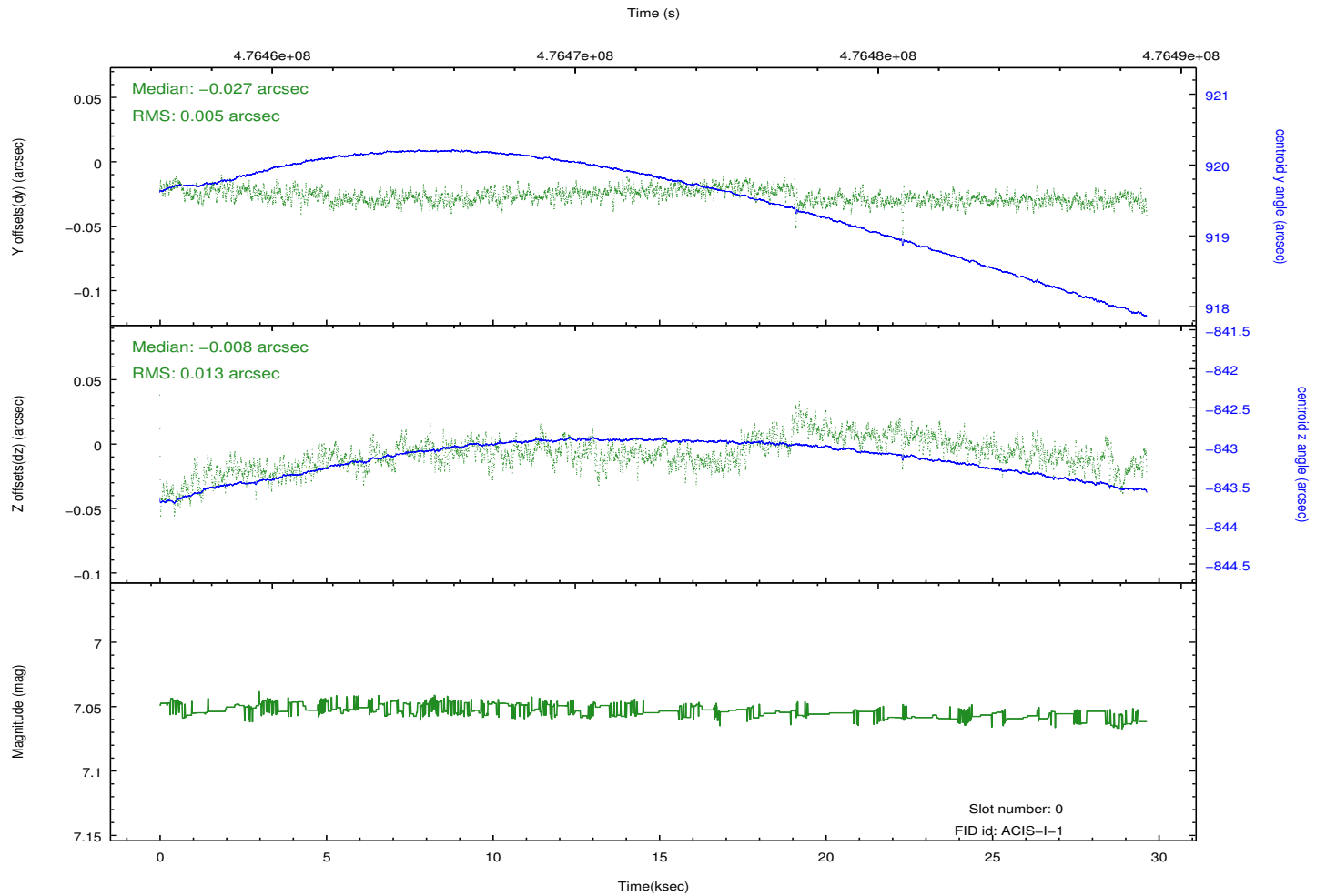
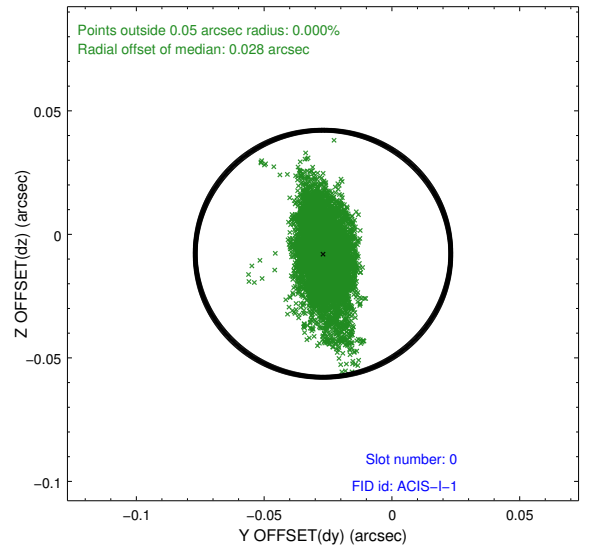
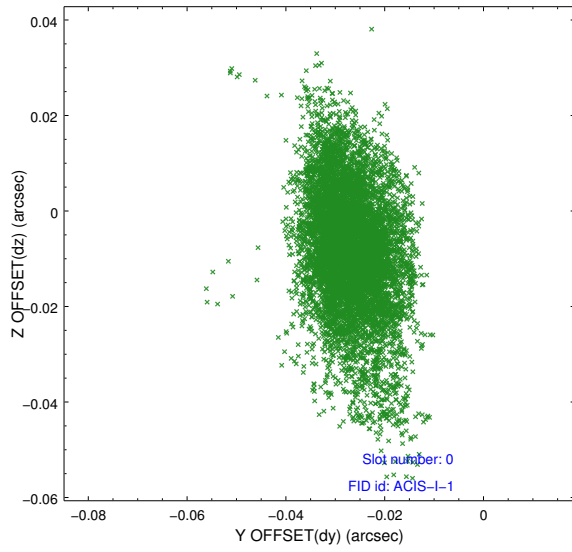


2.4.5 Slot 7

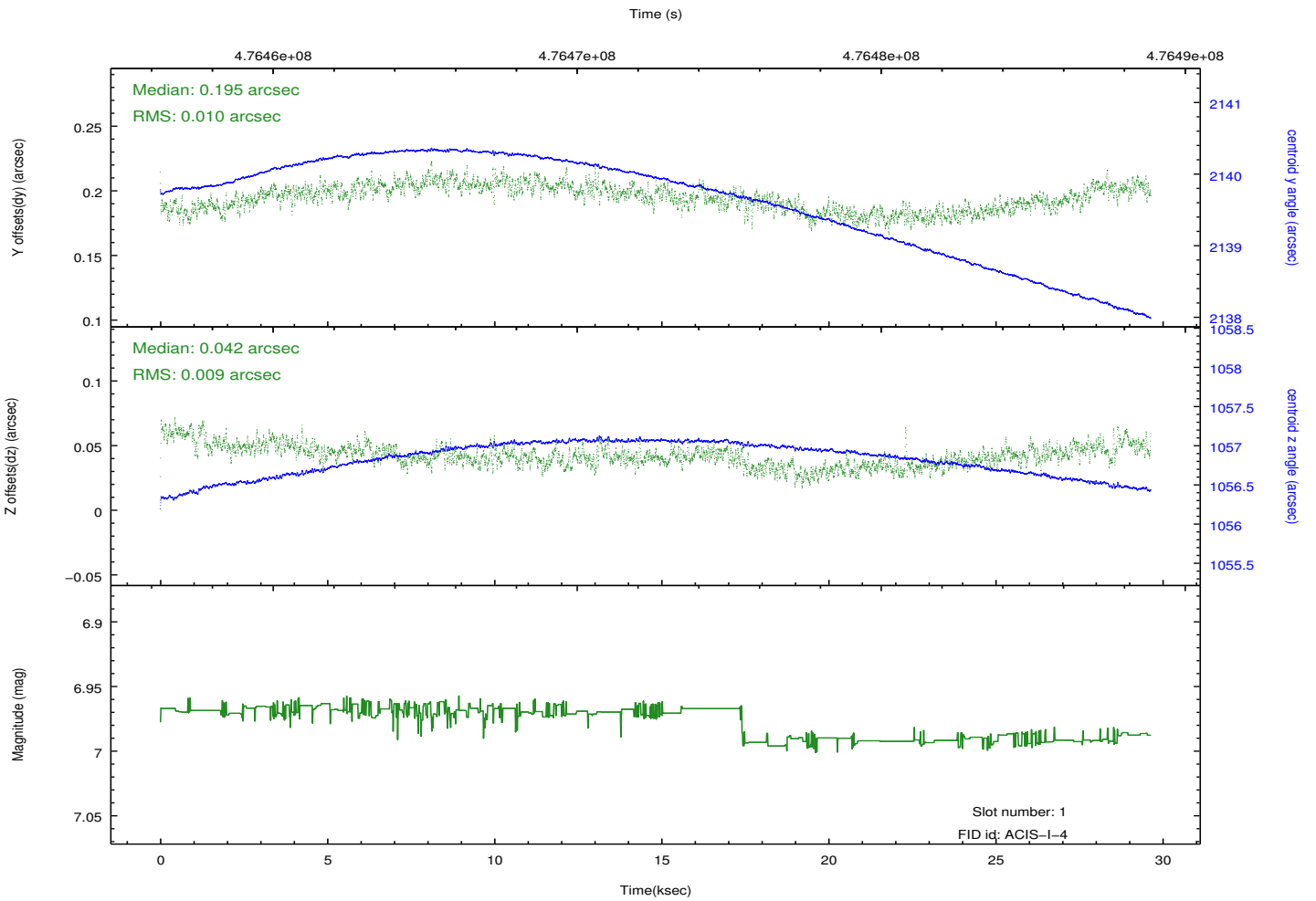
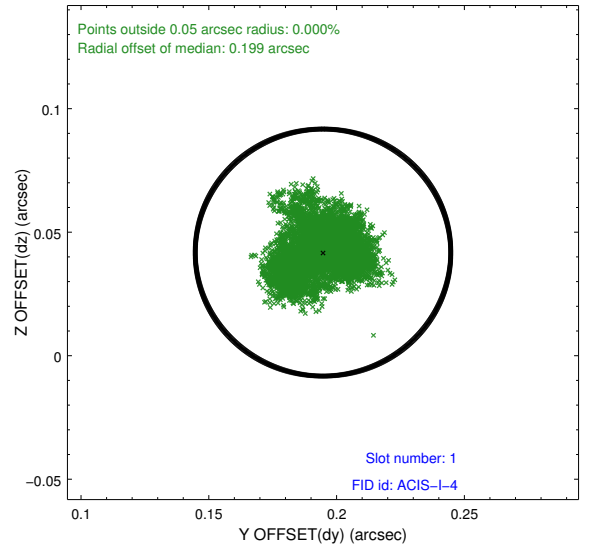
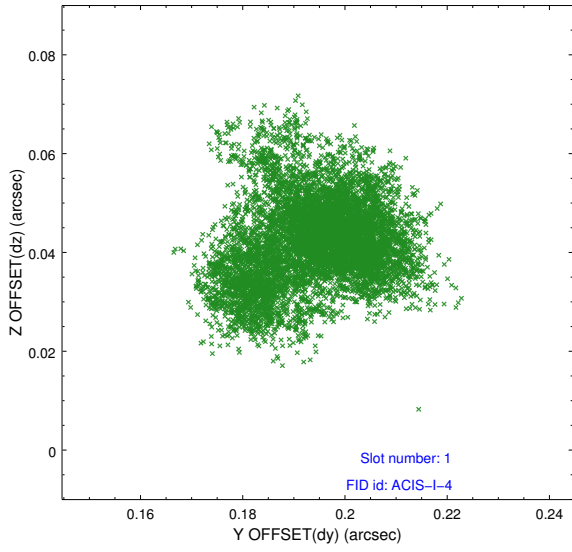


2.5 FID Slots

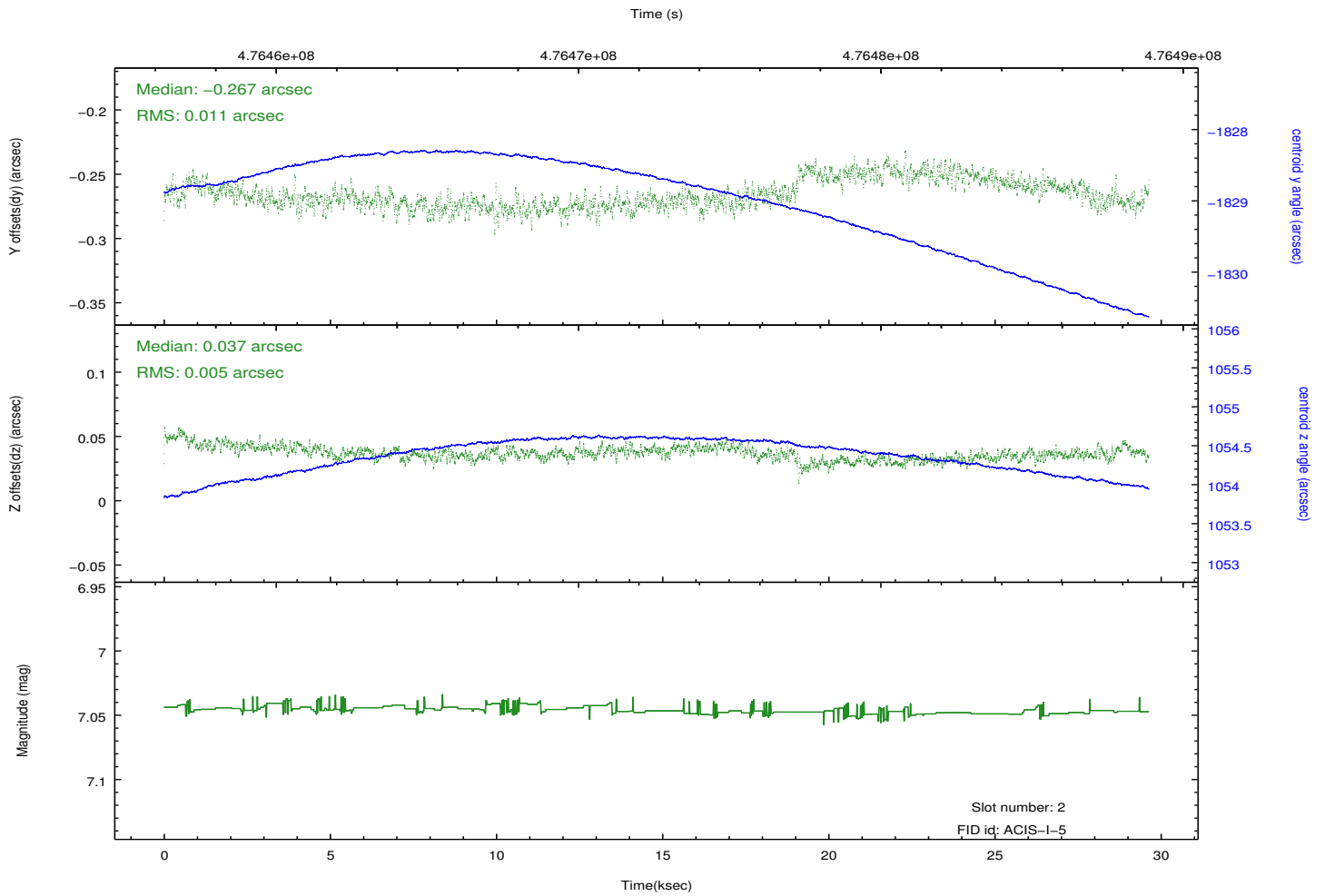
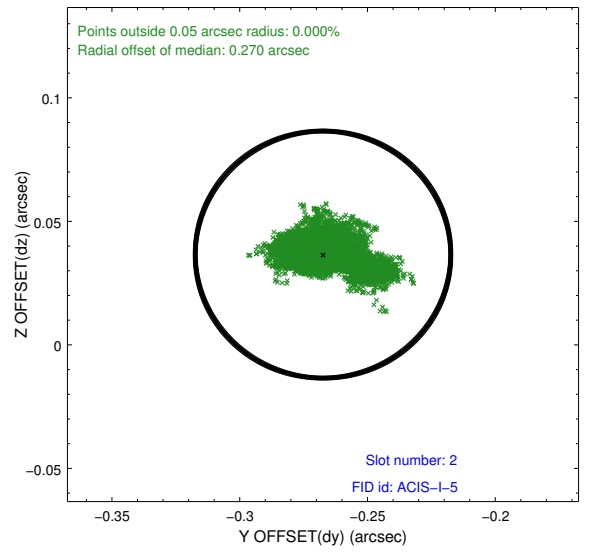
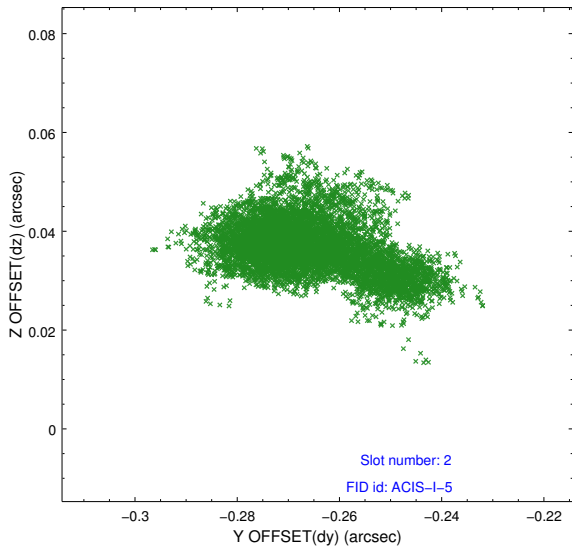
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.589275662541

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.