

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15609 - L2 Version 2
Chandra X-Ray Center

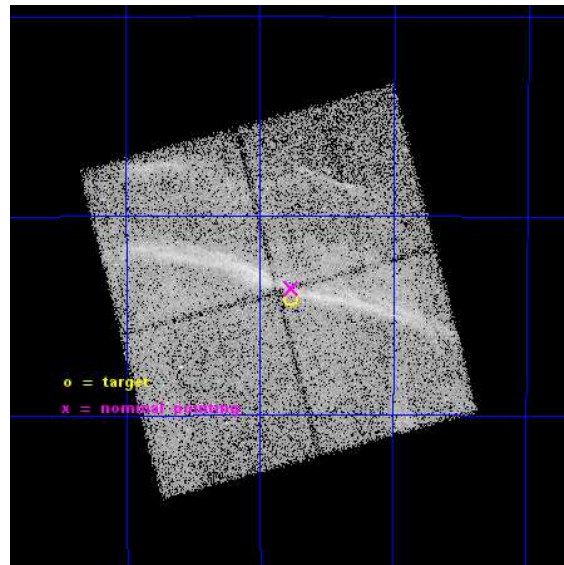
L2 Processing Date : Dec 1 2014

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1 Front

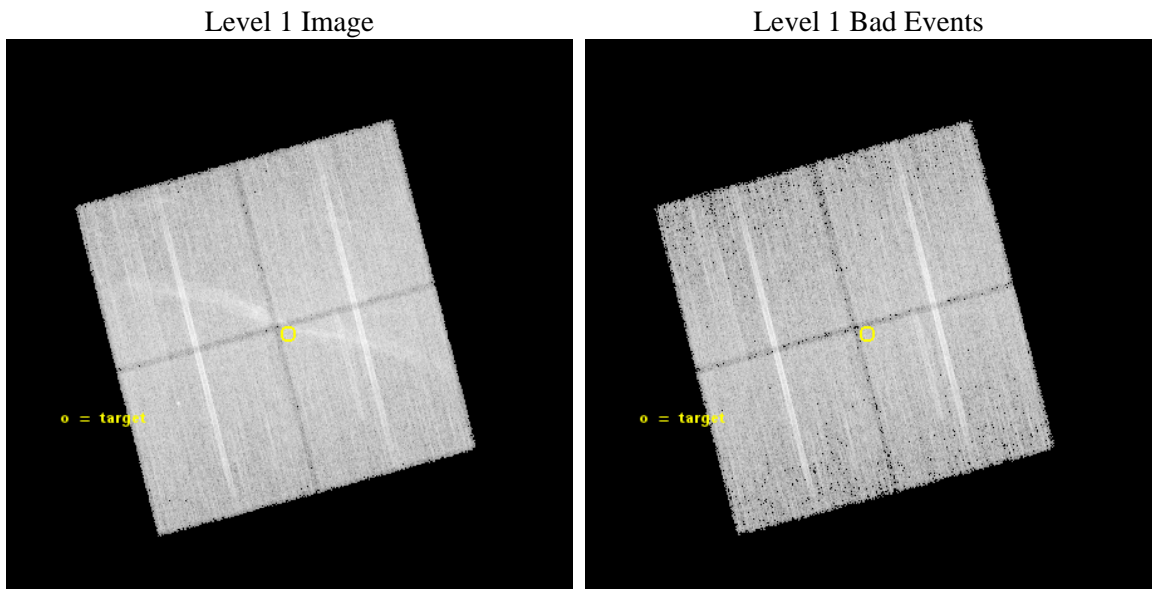
seq_num	502014	Sequence number
obs_id	15609	Observation id
title	Studying Particle Acceleration and Ejecta in Northwest Rim of the Supernova Remnant RCW 86 with Chandra	Proposal title
observer	Dr. Daniel Castro	Principal investigator
object	RCW 86	Source name
dtcycle	0	
cycle	P	events from which exps? 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	220.44092347531	Nominal RA [deg]
dec_nom	-62.227480598423	Nominal Dec [deg]
roll_nom	75.208033645189	Nominal Roll [deg]
revision	2	Processing version of data
ontime	38086.600292921	Sum of GTIs [s]
livetime	37588.970821147	Livetime [s]
ontime0	38083.459302664	Sum of GTIs [s]
ontime1	38086.600292921	Sum of GTIs [s]
ontime2	38086.600292921	Sum of GTIs [s]
ontime3	38086.600292921	Sum of GTIs [s]
l2events	159012	Number of level 2 events



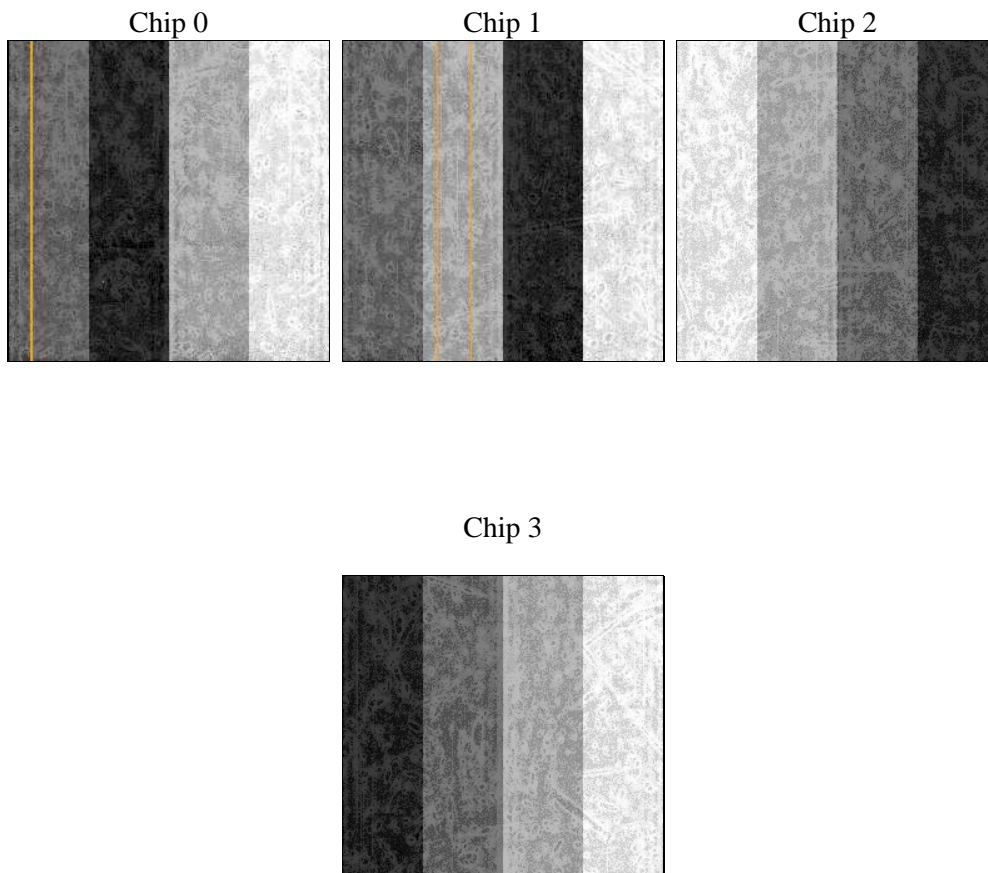
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	38086.600292921	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	38083.459302664	Sum of GTIs [s]
date	2014-12-01T11:33:05	Date and time of file creation	ontime1	38086.600292921	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	38086.600292921	Sum of GTIs [s]
			ontime3	38086.600292921	Sum of GTIs [s]
			l1events	880436	Number of level 1 events

2.1.4 Events

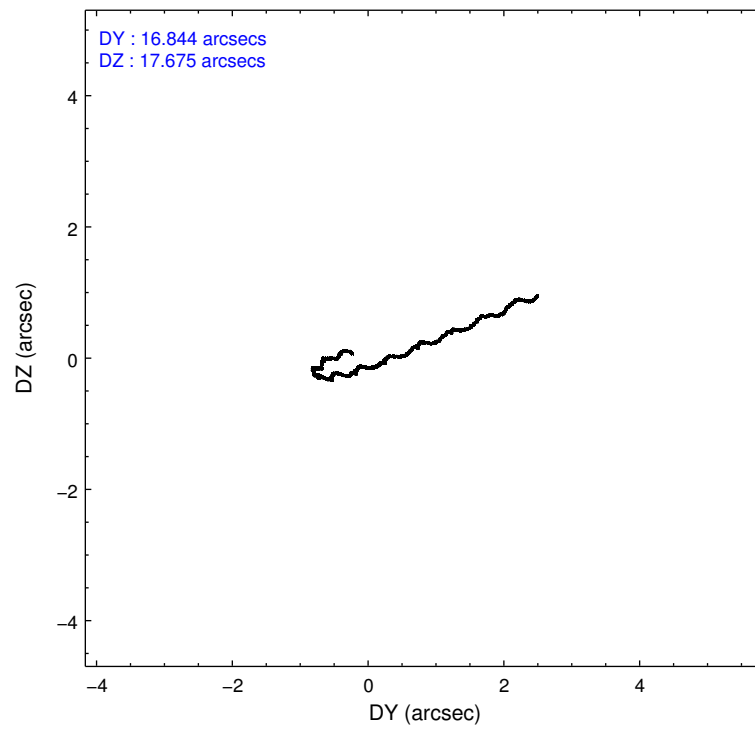
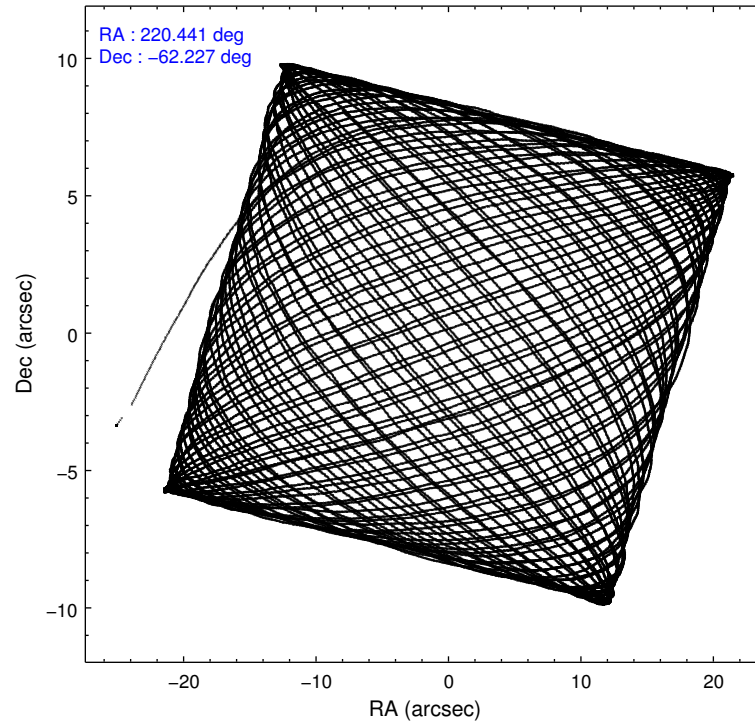
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	221347	205890	220957	232242
rejected events	164195	167923	185419	182973
rejected %	74%	81%	83%	78%

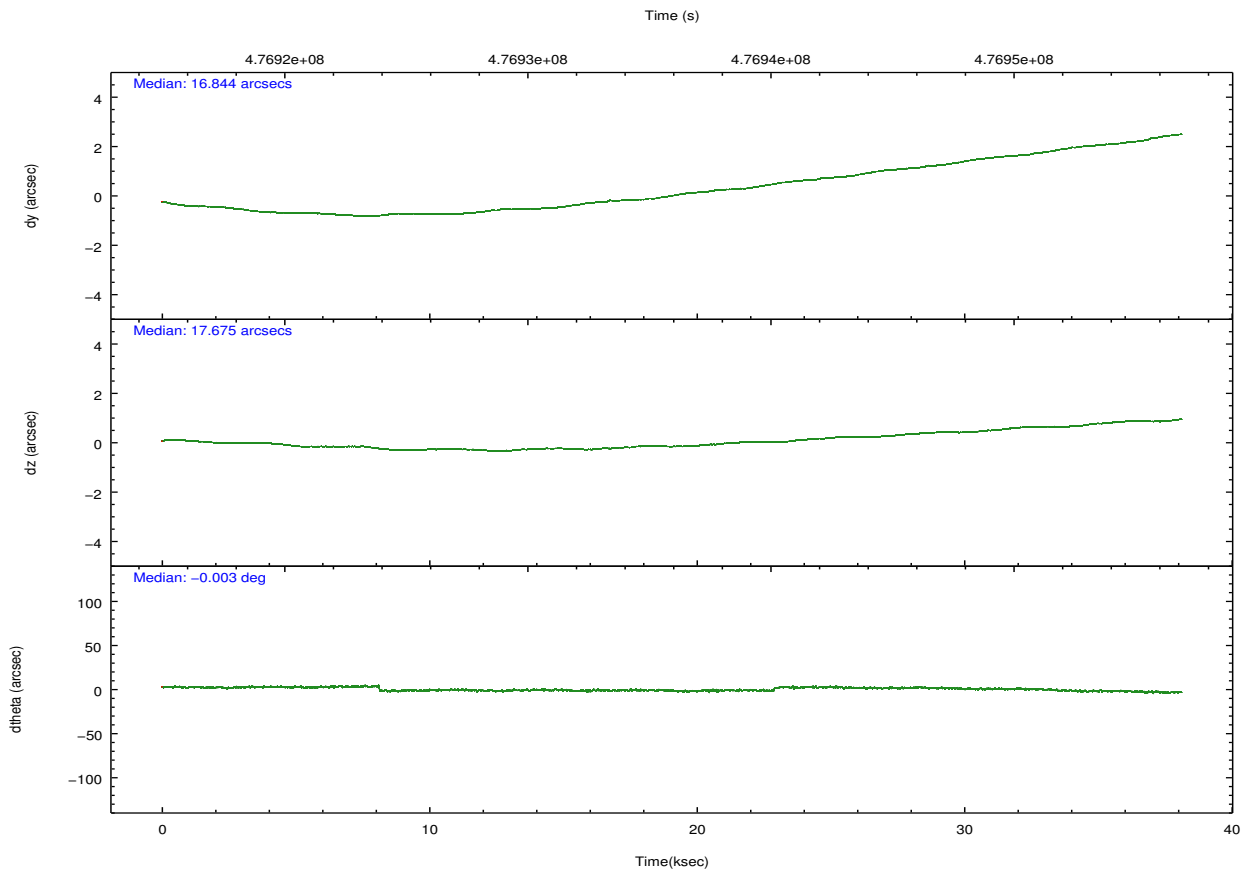
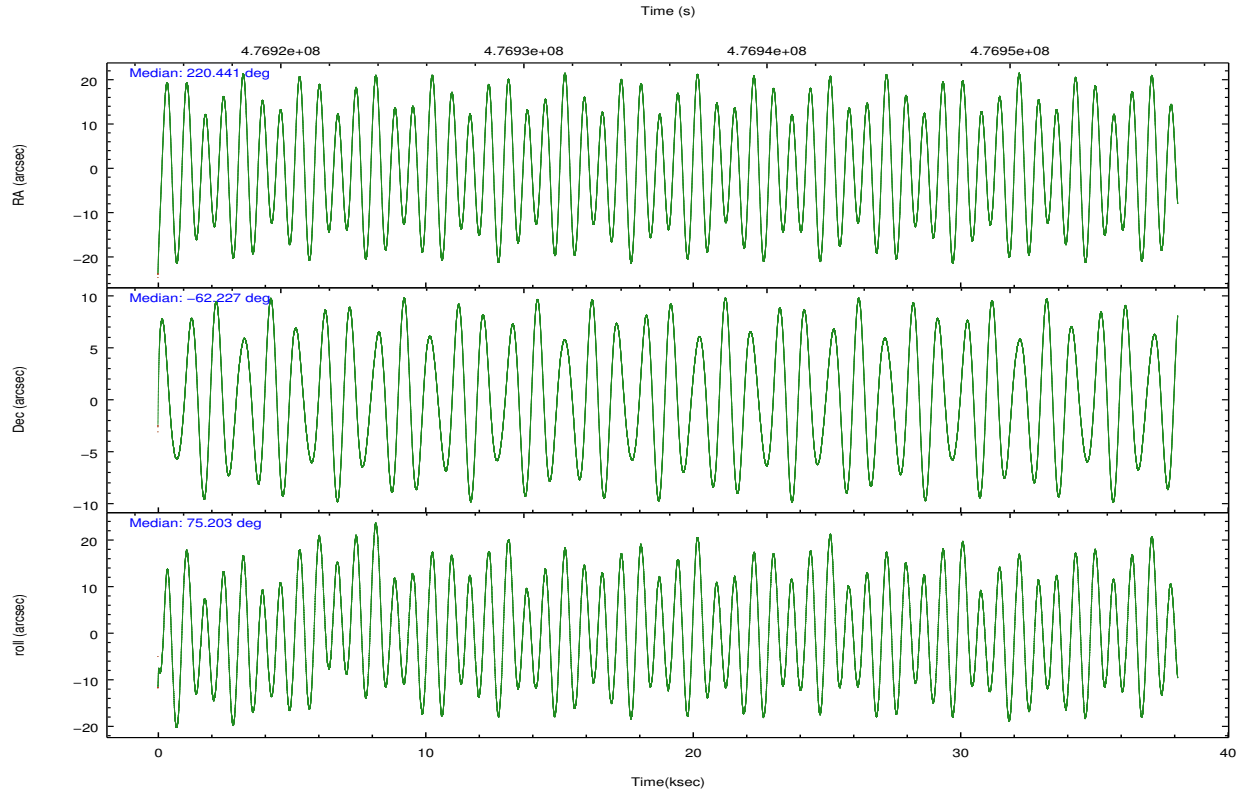
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	36363	18419	18462	30808
	16%	8%	8%	13%
grade 1 events	208	122	172	186
	0%	0%	0%	0%
grade 2 events	8953	7610	6928	7268
	4%	3%	3%	3%
grade 3 events	3425	2983	2629	2975
	1%	1%	1%	1%
grade 4 events	3097	2965	2741	2995
	1%	1%	1%	1%
grade 5 events	9607	10236	9034	10981
	4%	4%	4%	4%
grade 6 events	5327	5995	4787	5234
	2%	2%	2%	2%
grade 7 events	154367	157560	176204	171795
	69%	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	220.4409234753052	Subarray requested	NONE	NONE
[deg] Pointing Dec	-62.253971	-62.2274805984234	Alternating exposures requested	N	N
[deg] Pointing Roll	75.013244	75.20803364518949	[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)	476916975.184000	476915841.10674			
Observation start date	2013-02-10T20:55:08	2013-02-10T20:37:21			
[s] Observation end time (MET)	476954975.184000	476955549.60888			
Observation end date	2013-02-11T07:28:28	2013-02-11T07:39:09			
Read mode	TIMED	TIMED			

2.3 Aspect





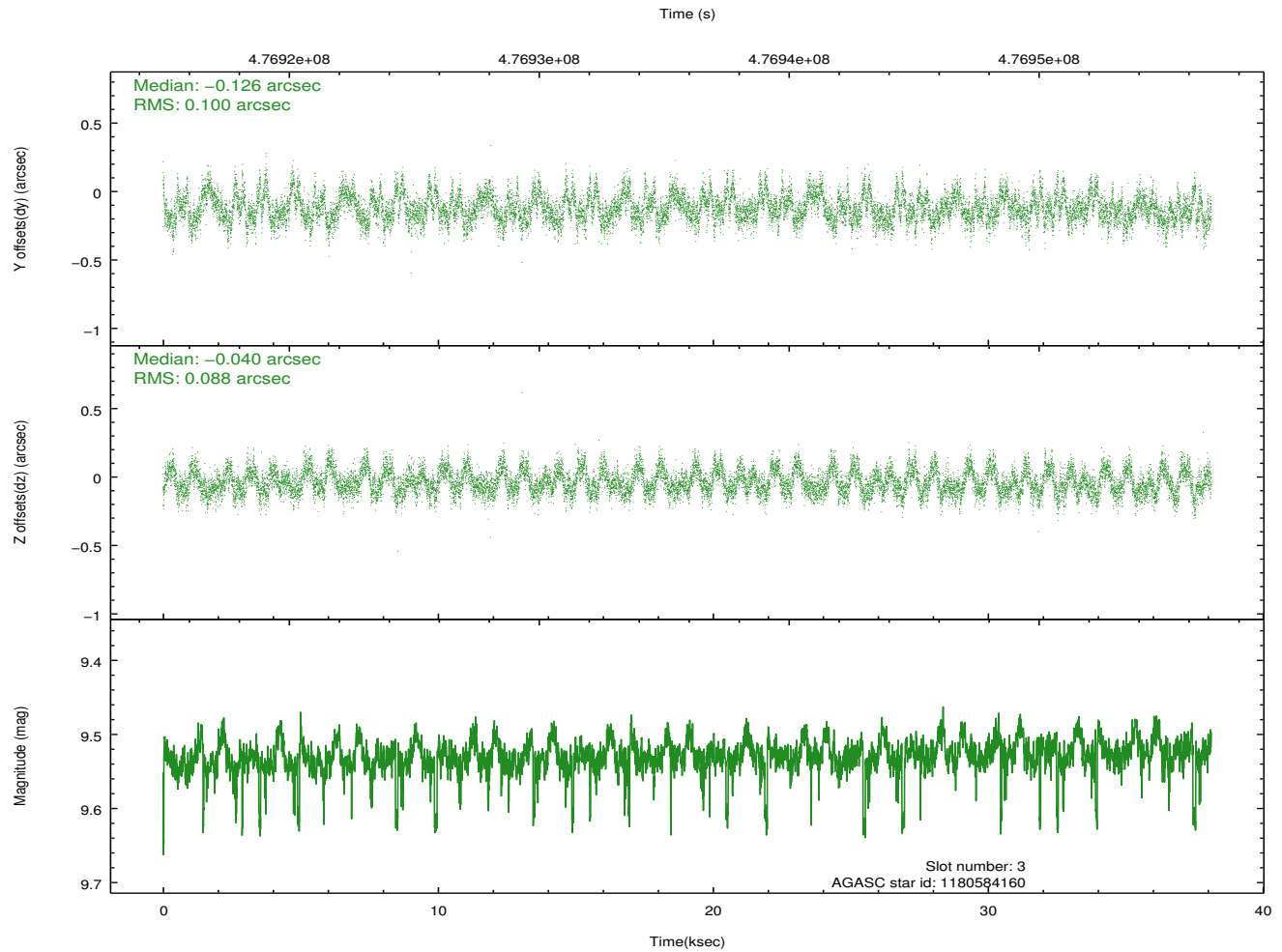
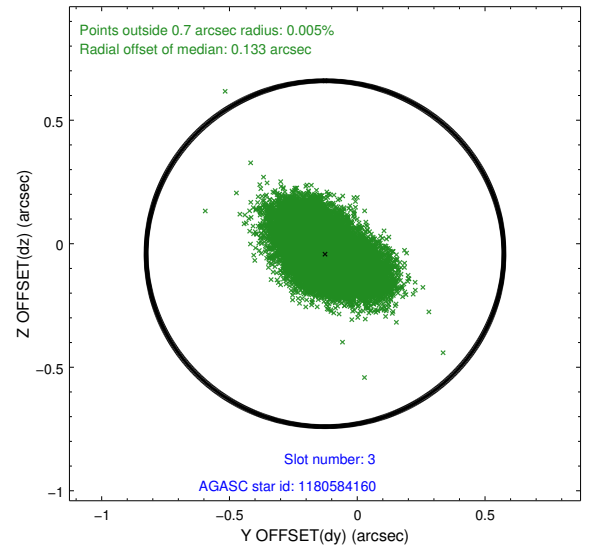
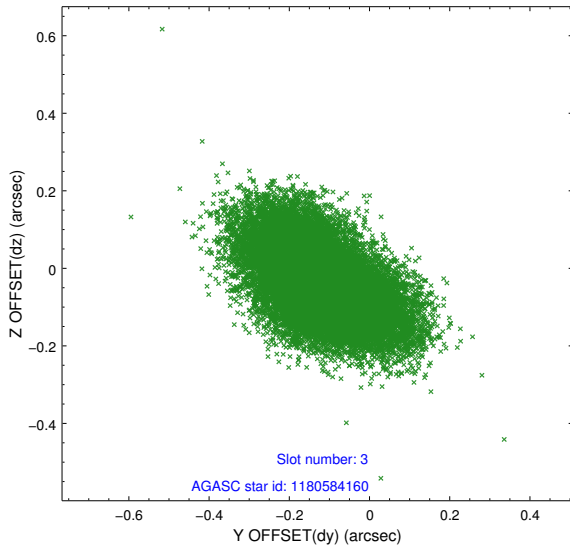
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	9300	-0.025	-0.018	0.050	0.065	0.000000	0.000000	922.20	-841.47
1	FID		ACIS-I-4	7.02	9298	0.201	0.047	0.051	0.062	0.000000	0.000000	2142.45	1058.44
2	FID		ACIS-I-5	7.08	9299	-0.273	0.043	0.041	0.053	0.000000	0.000000	-1826.05	1056.23
3	GUIDE	used	1180584160	9.53	18530	-0.126	-0.040	0.141	0.235	221.205741	-61.754749	2058.95	-769.26
4	GUIDE	used	1181104896	6.51	18599	-0.344	-0.616	0.070	0.110	219.299869	-62.010896	323.01	2109.27
5	GUIDE	used	1181107448	9.21	18584	0.189	-0.252	0.092	0.150	219.084809	-62.741785	-2304.13	1724.56
6	GUIDE	used	1181109144	8.36	18598	0.069	0.465	0.076	0.123	221.655127	-62.786083	-1357.50	-2405.25
7	GUIDE	used	1181113992	9.47	18575	0.206	0.450	0.144	0.226	221.650516	-62.822918	-1487.86	-2430.06

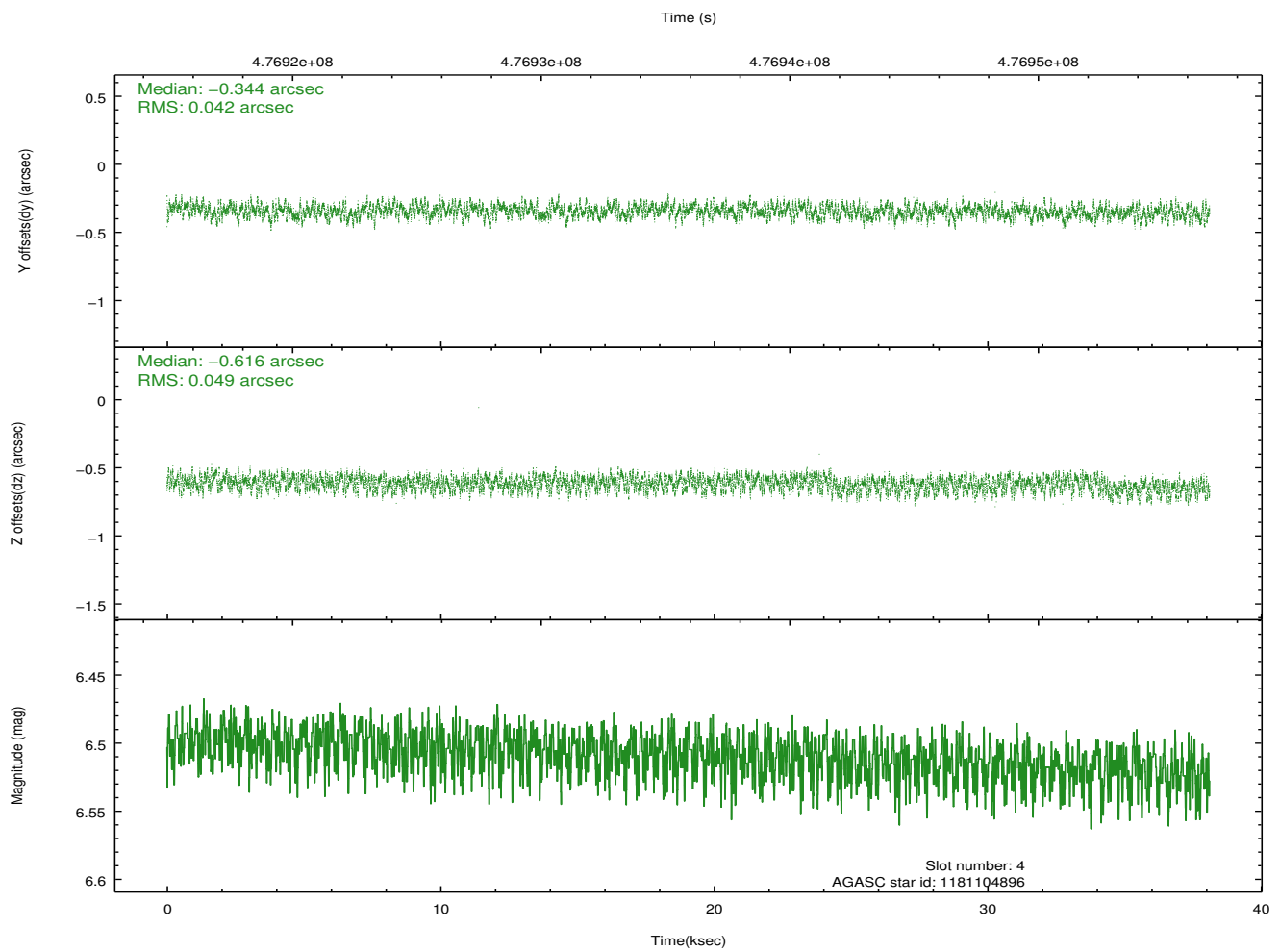
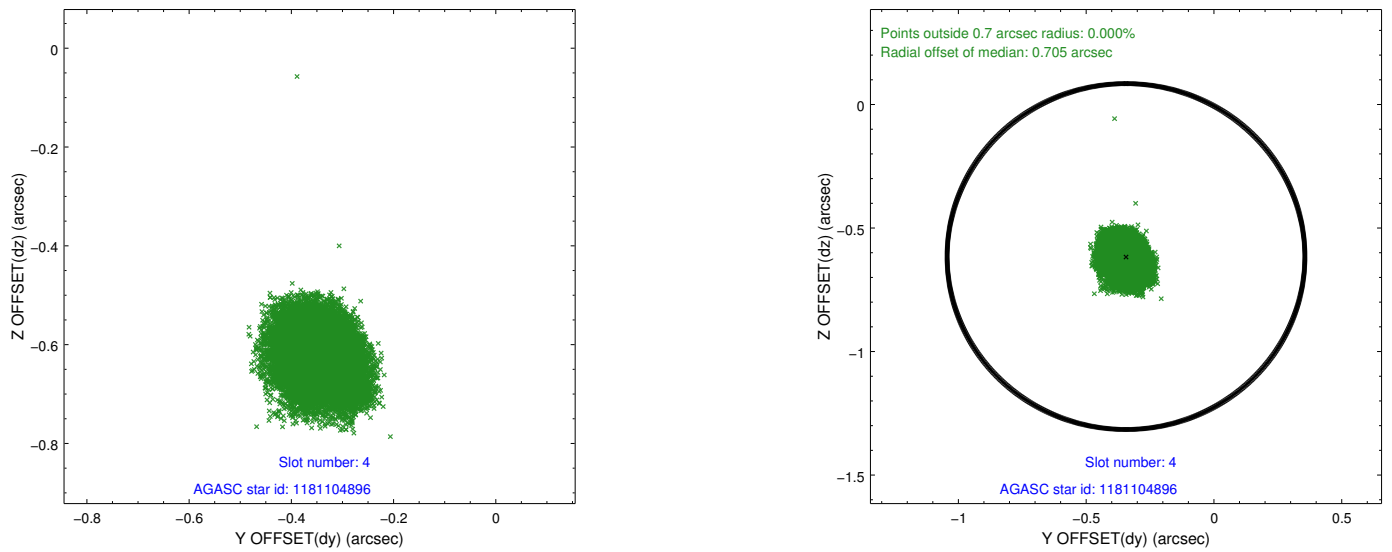
∞

2.4 Star Slots

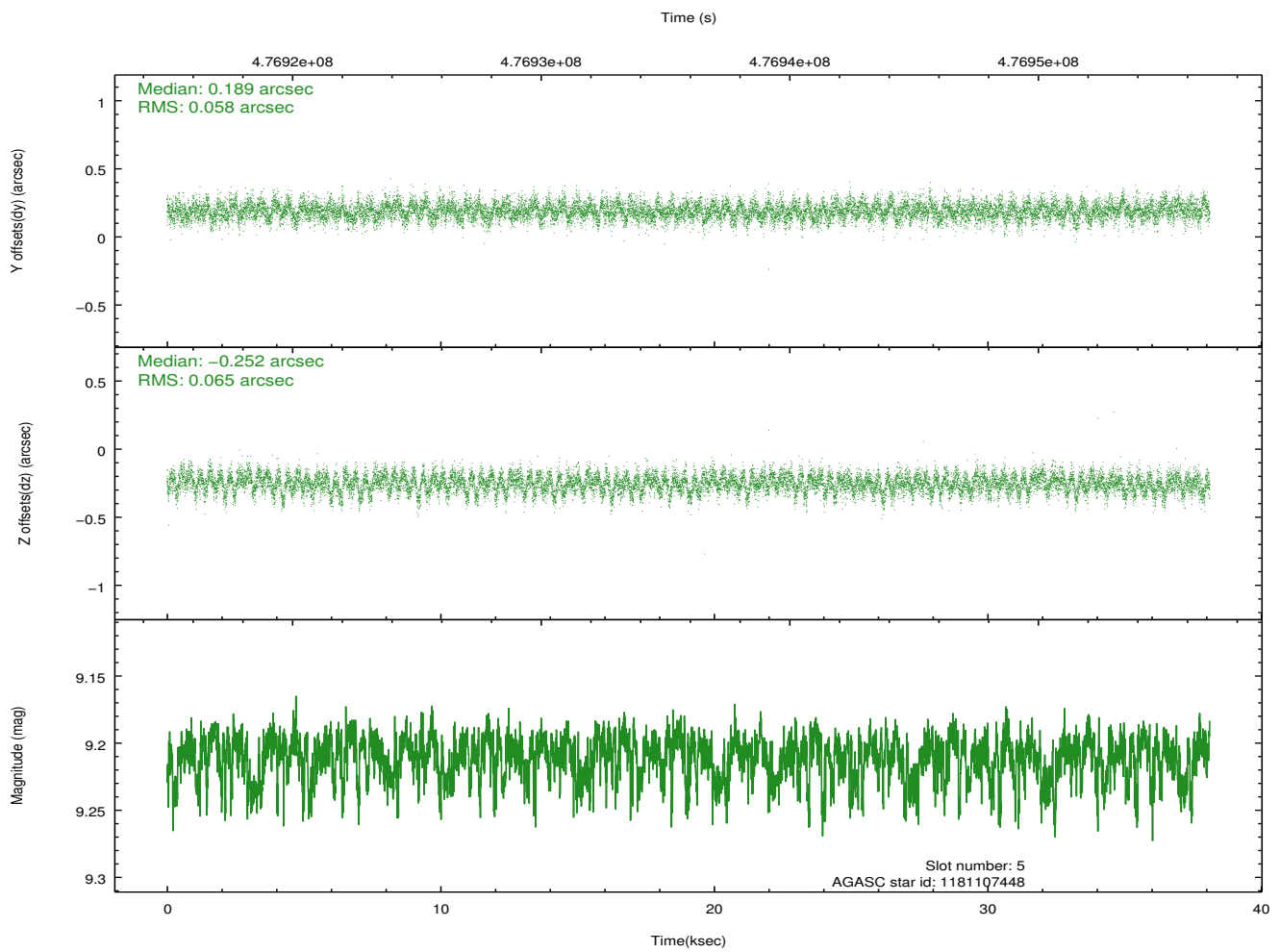
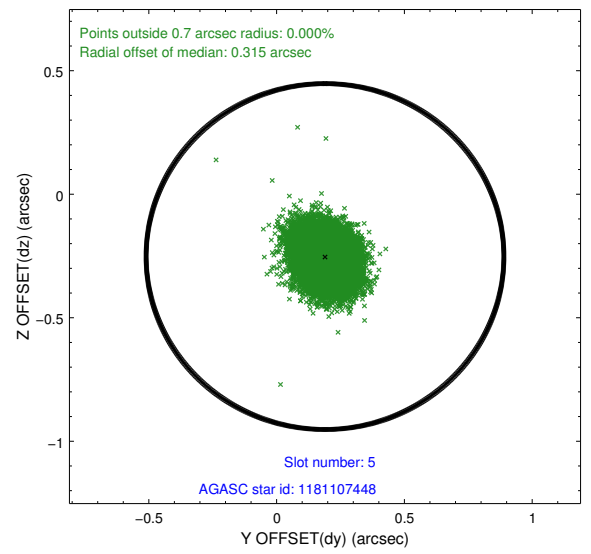
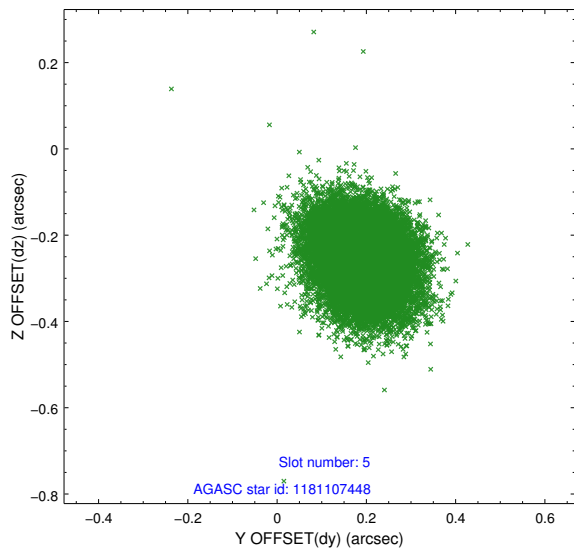
2.4.1 Slot 3



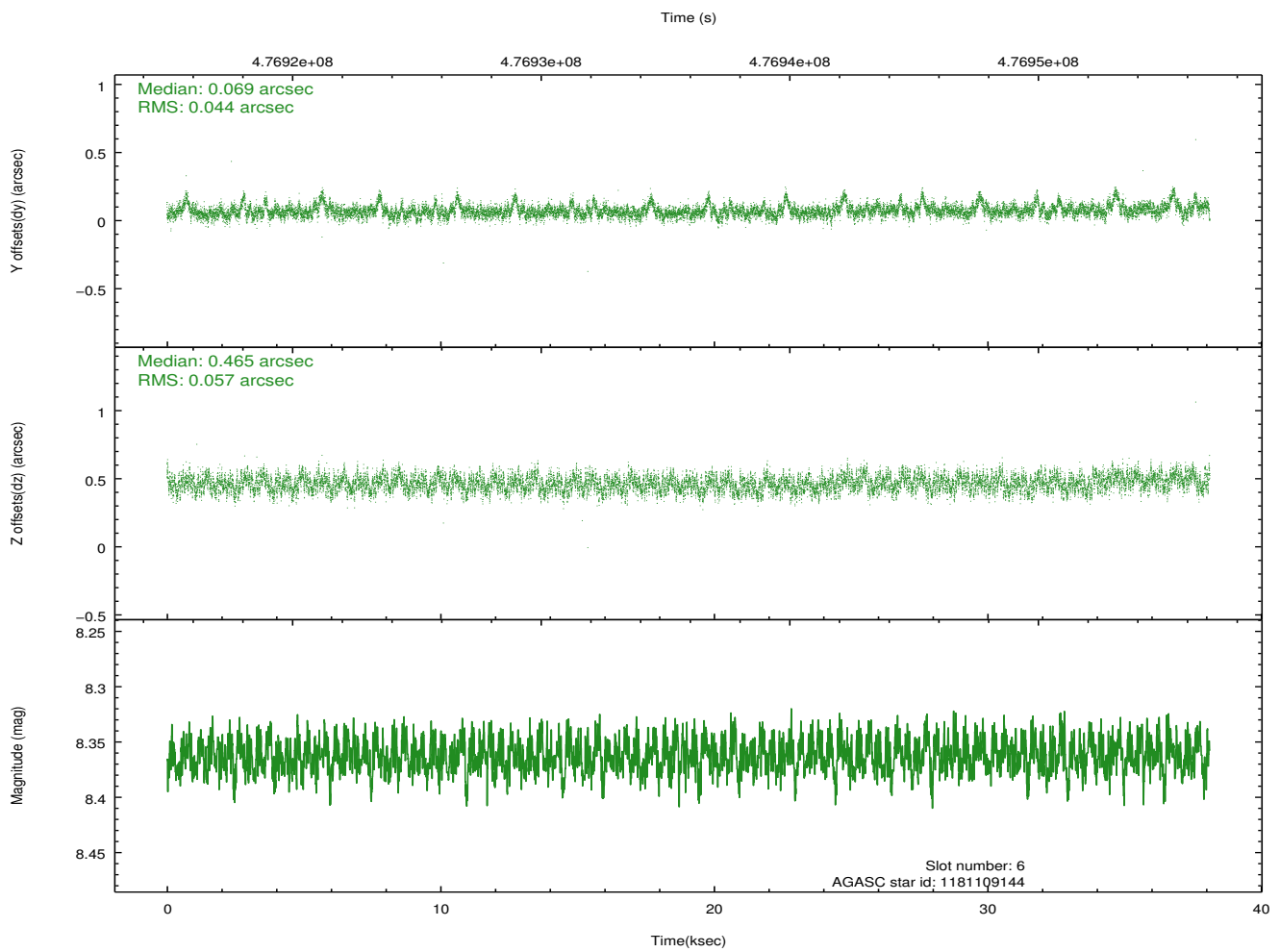
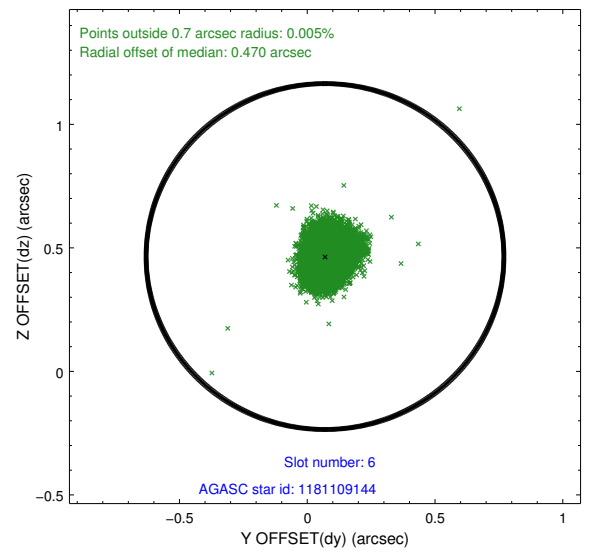
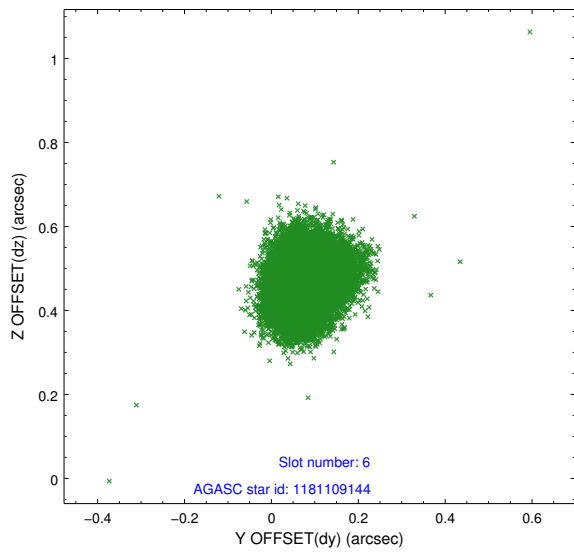
2.4.2 Slot 4



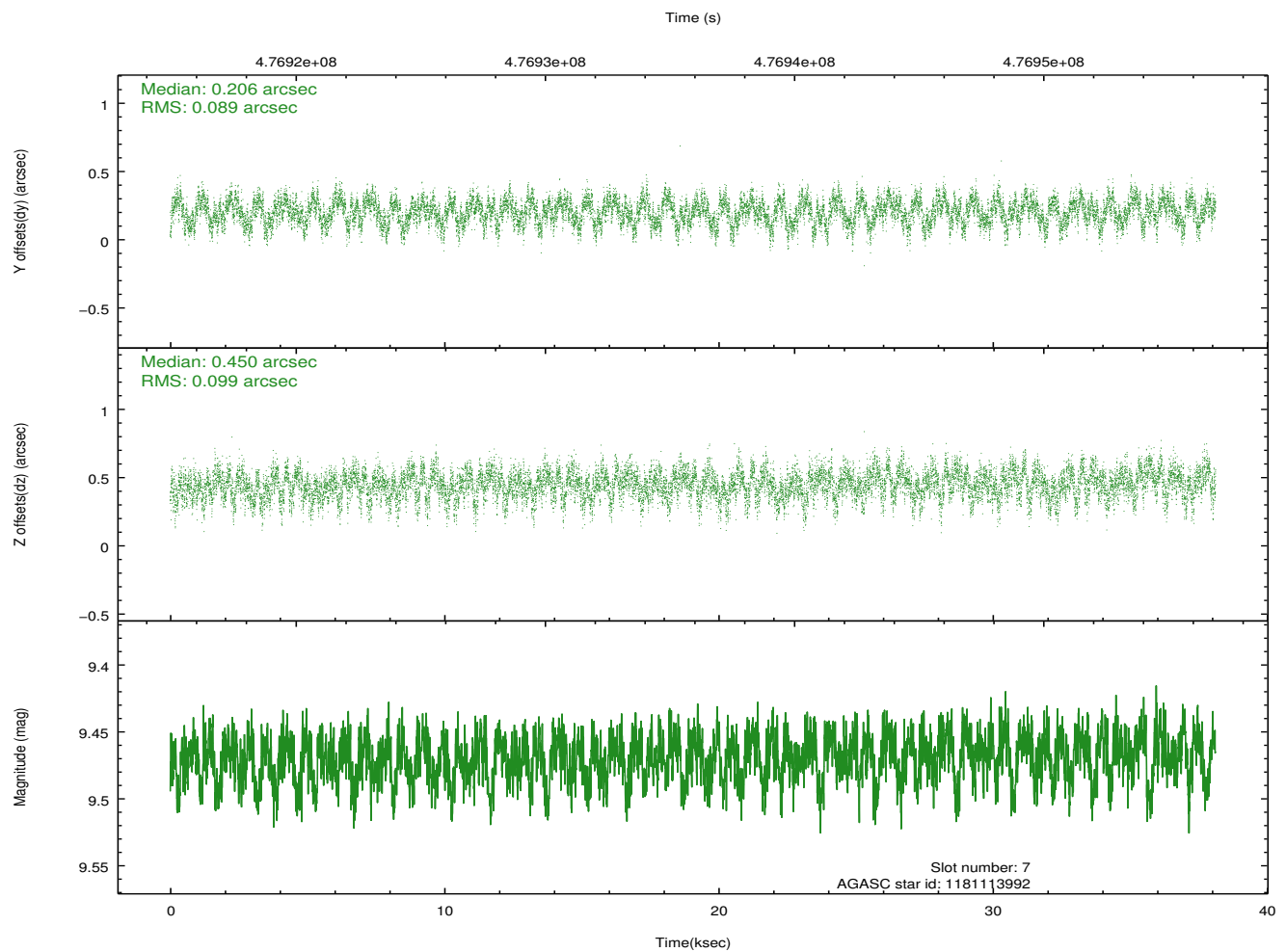
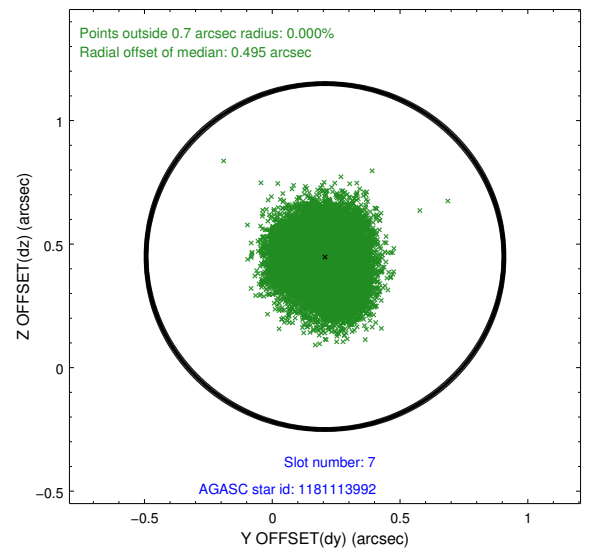
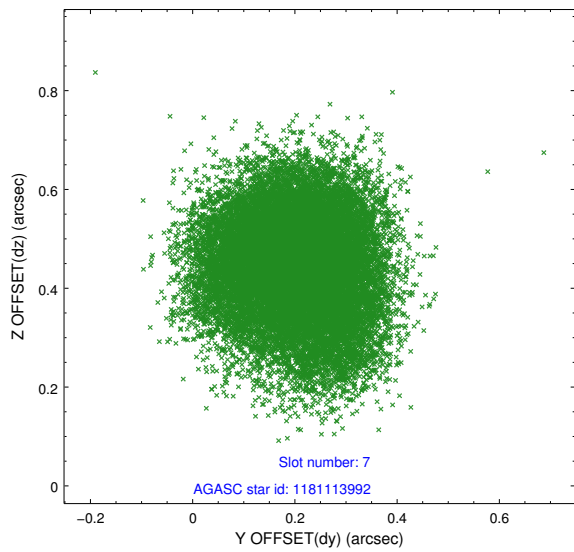
2.4.3 Slot 5



2.4.4 Slot 6

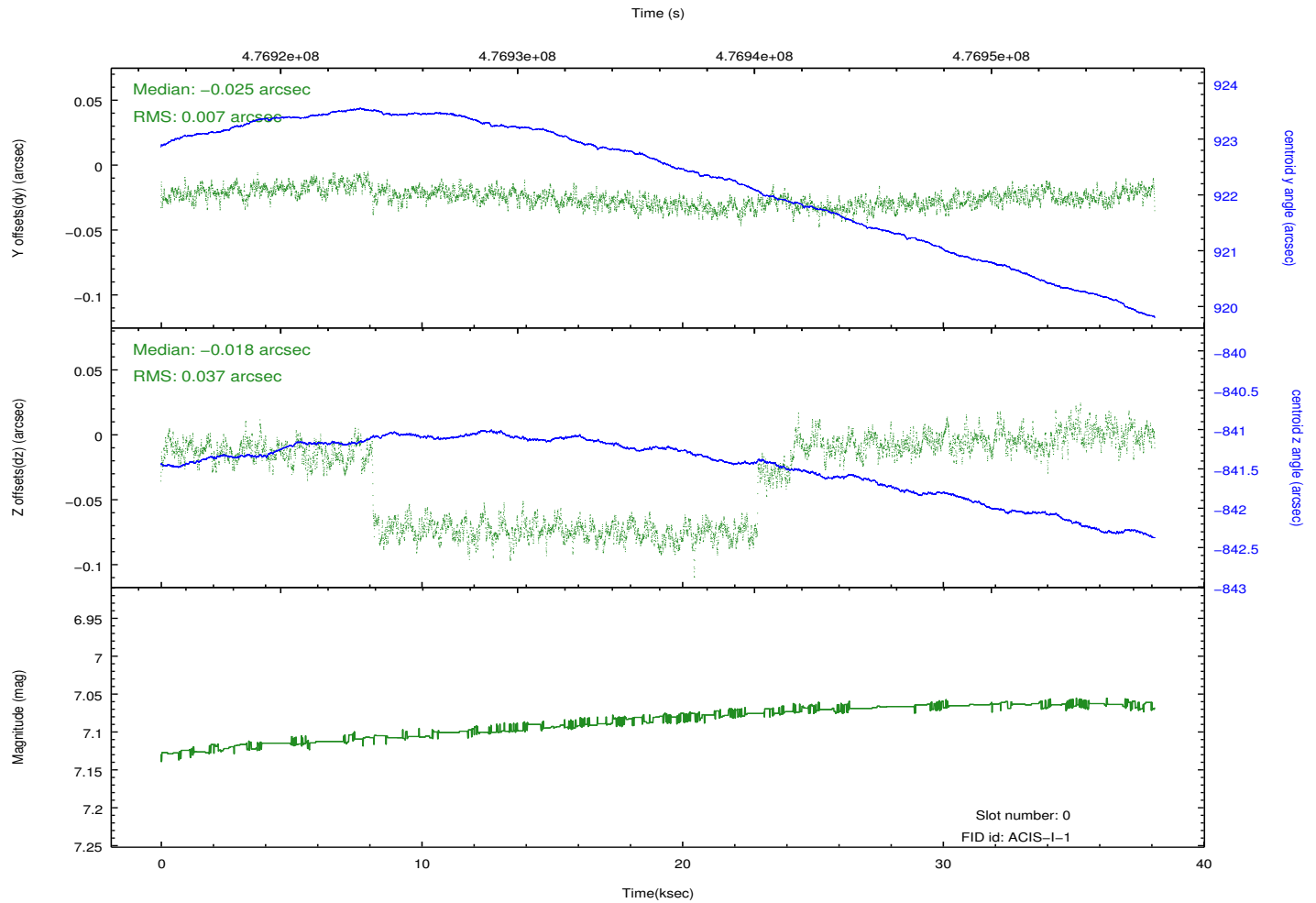
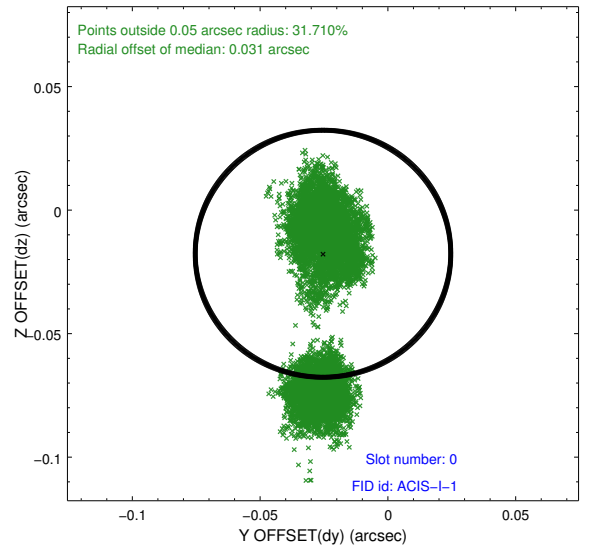
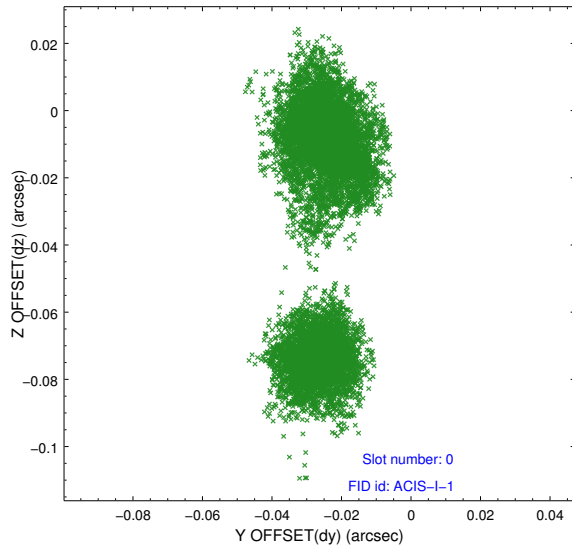


2.4.5 Slot 7

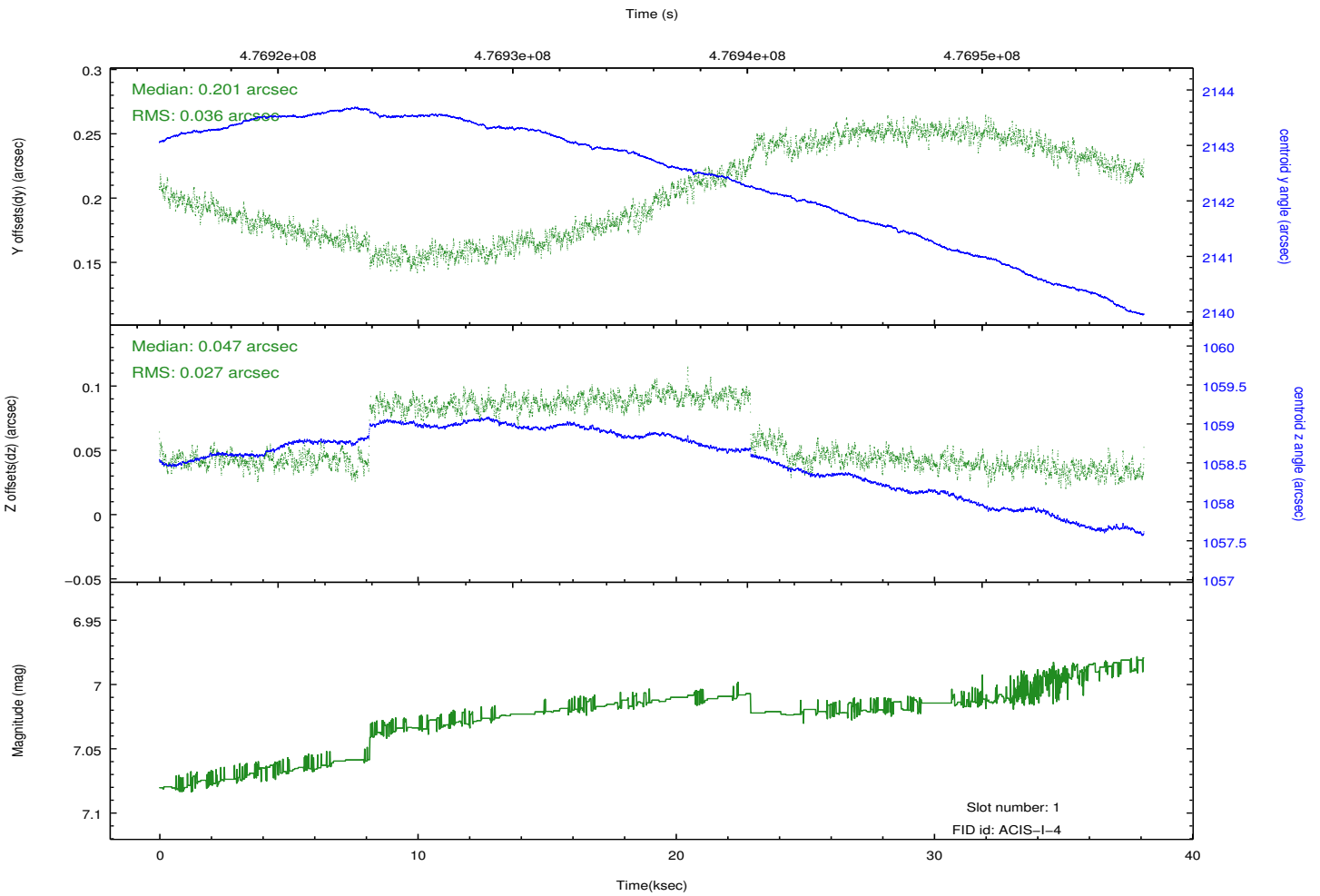
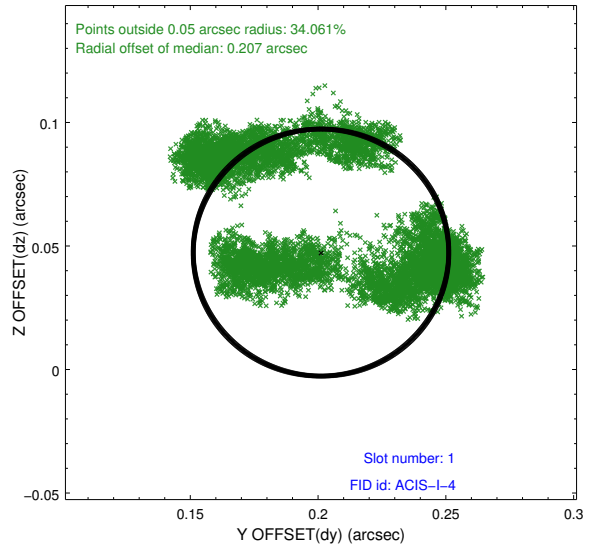
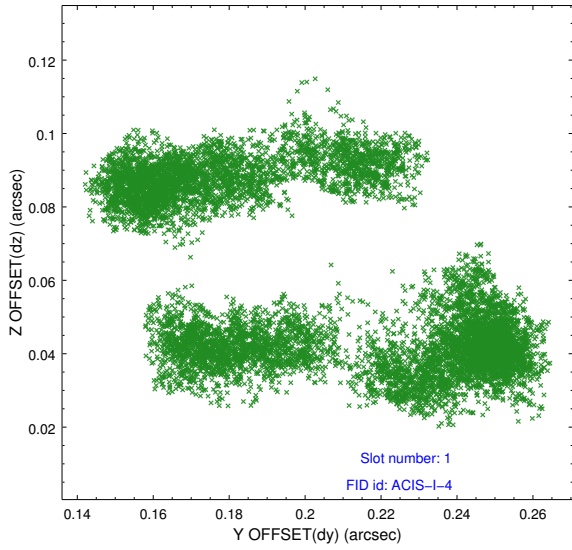


2.5 FID Slots

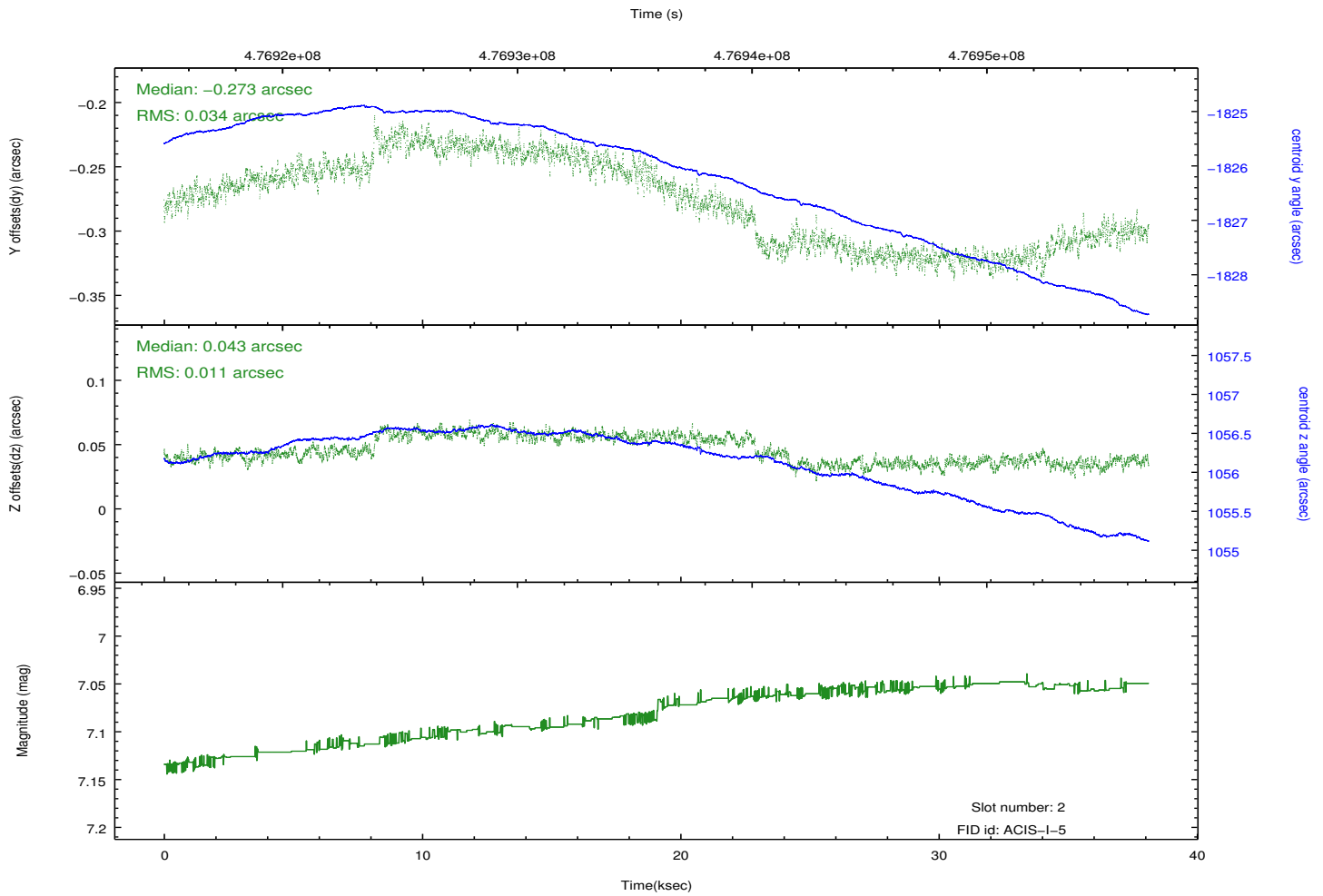
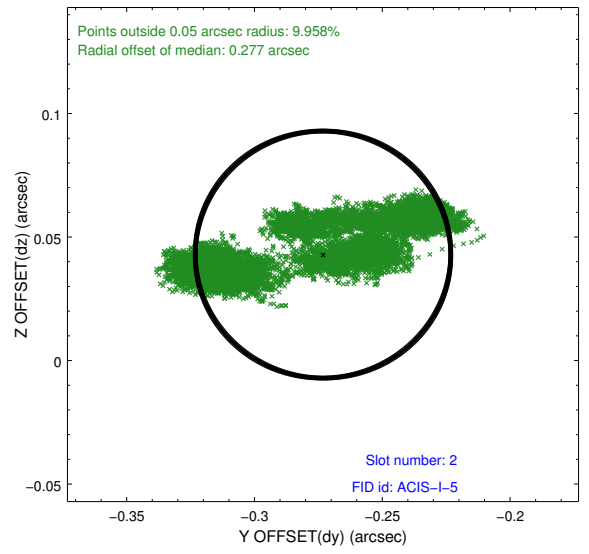
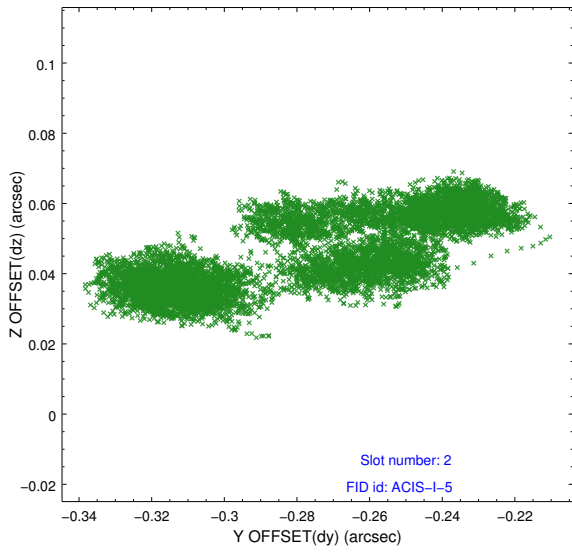
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.086600292921

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.