

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 13276 - L2 Version 2
Chandra X-Ray Center

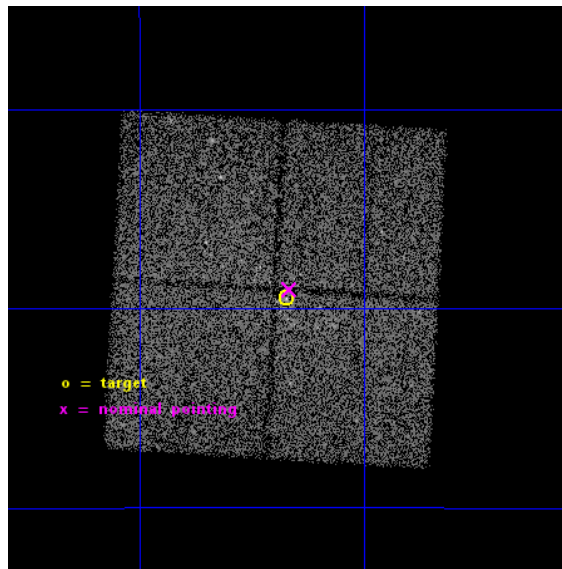
L2 Processing Date : Dec 1 2014

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1 Front

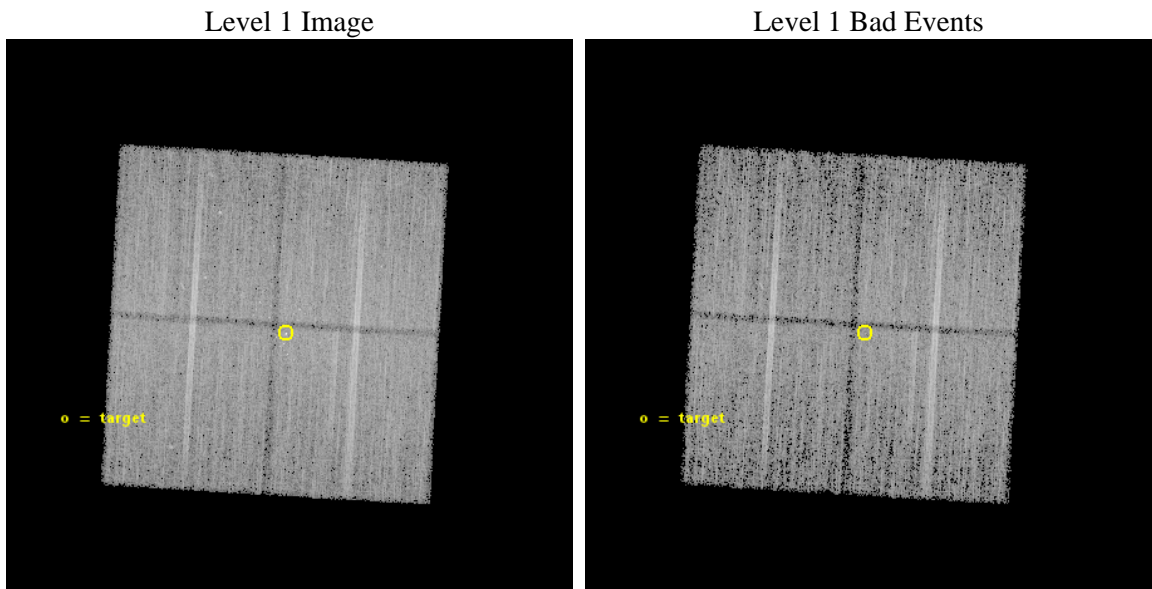
seq_num	200746	Sequence number
obs_id	13276	Observation id
title	A Chandra View of the RCW120 Bubble (GTO part)	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	RCW120	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	258.086667	Observer's specified target RA [deg]
dec_targ	-38.491806	Observer's specified target Dec [deg]
ra_nom	258.08303142862	Nominal RA [deg]
dec_nom	-38.48424131095	Nominal Dec [deg]
roll_nom	93.284176541585	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30081.819117844	Sum of GTIs [s]
livetime	29688.778005156	Livetime [s]
ontime0	30087.977978408	Sum of GTIs [s]
ontime1	30084.878008246	Sum of GTIs [s]
ontime2	30088.060058415	Sum of GTIs [s]
ontime3	30081.819117844	Sum of GTIs [s]
l2events	64307	Number of level 2 events



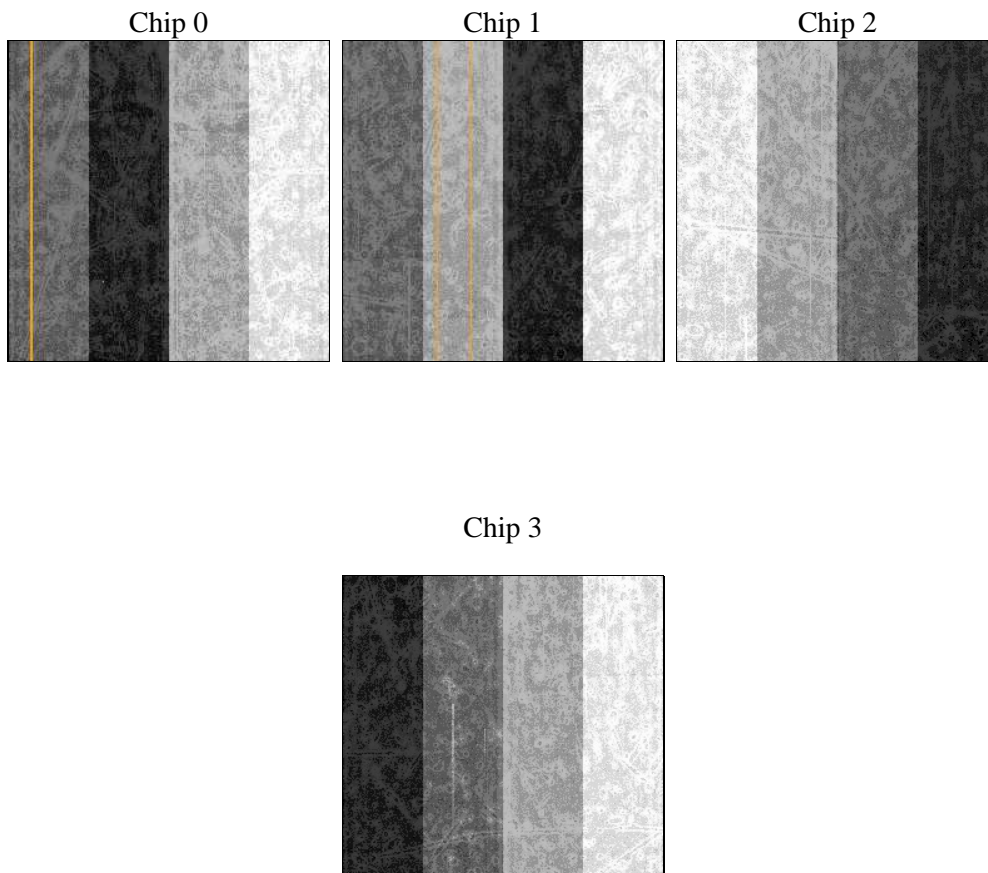
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	30081.819117844	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	30087.977978408	Sum of GTIs [s]
date	2014-12-01T11:32:56	Date and time of file creation	ontime1	30084.878008246	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30088.060058415	Sum of GTIs [s]
			ontime3	30081.819117844	Sum of GTIs [s]
			l1events	593121	Number of level 1 events

2.1.4 Events

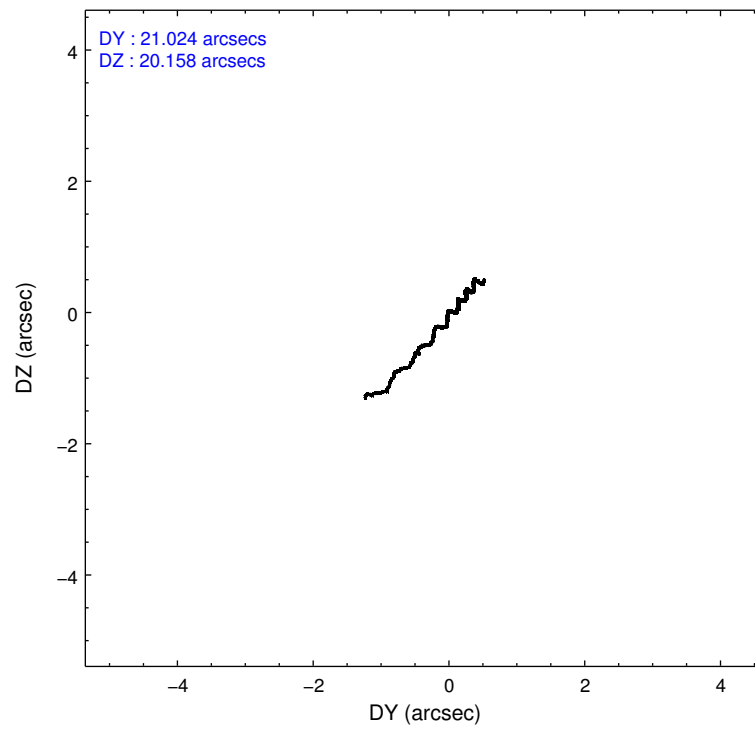
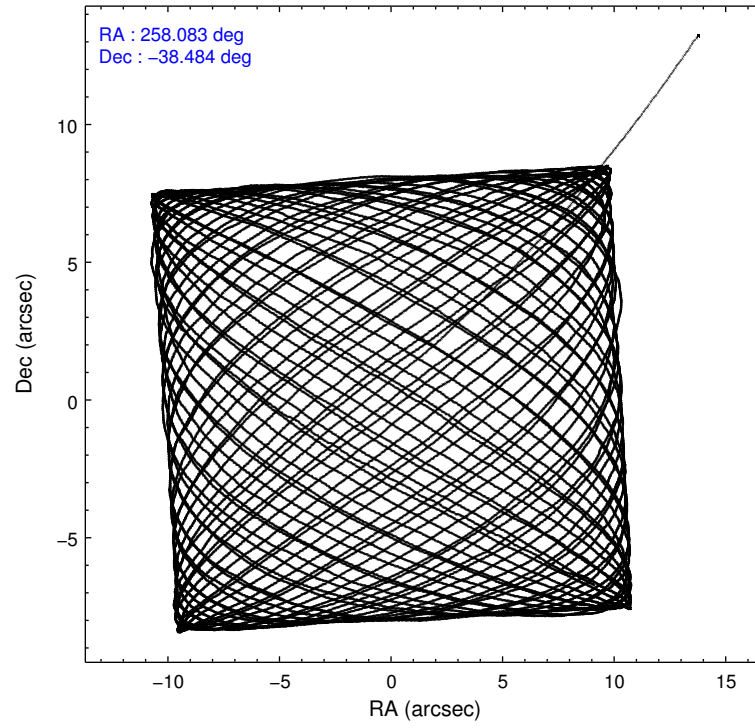
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	143666	139705	159933	149817
rejected events	123458	120193	141240	131017
rejected %	85%	86%	88%	87%

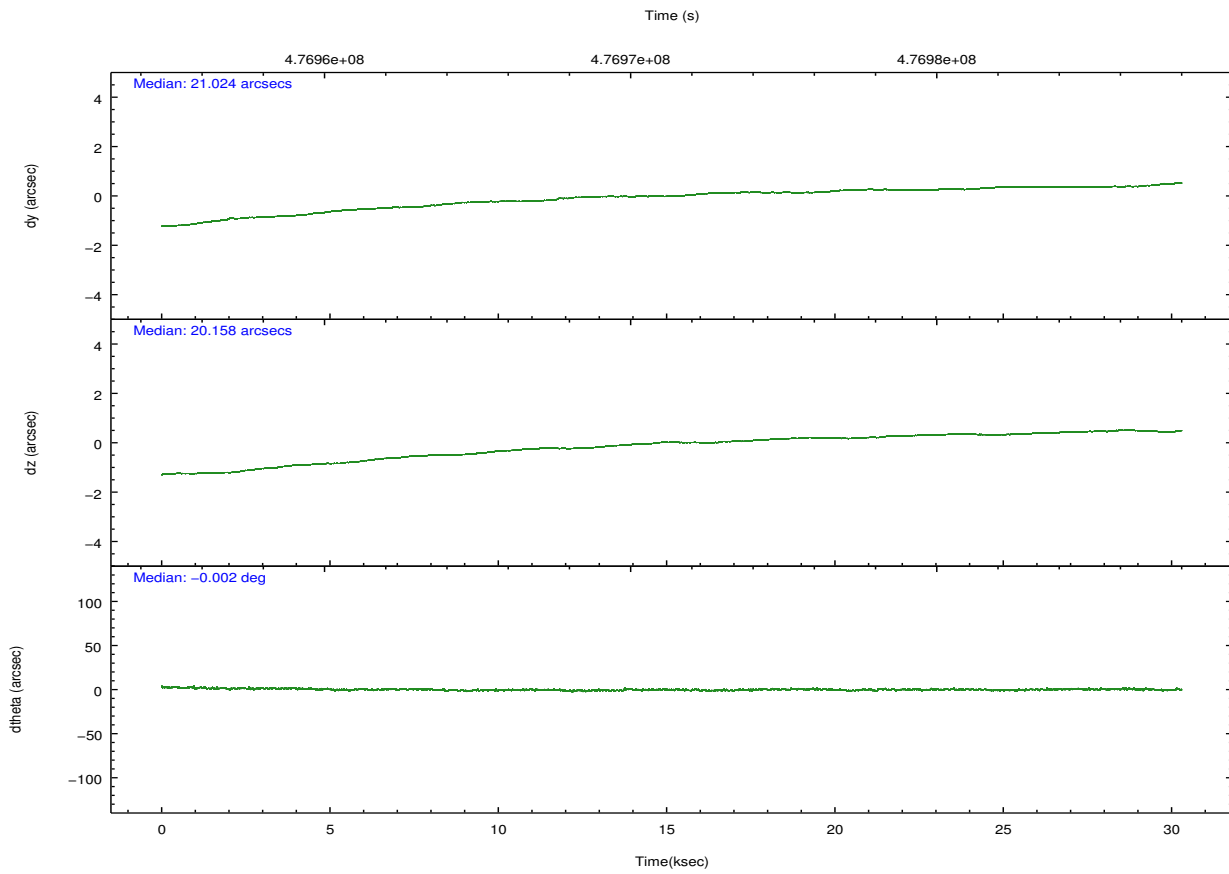
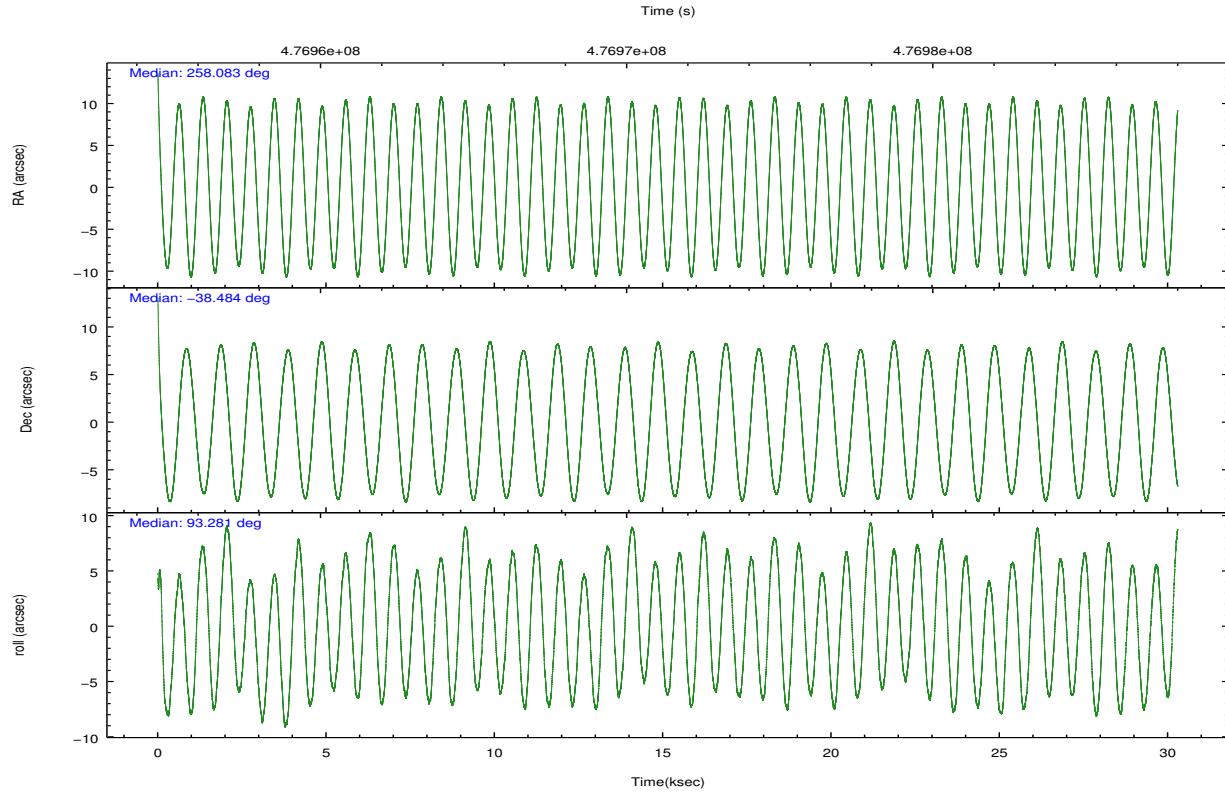
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	8016	7157	7264	7809
	5%	5%	4%	5%
grade 1 events	100	71	88	103
	0%	0%	0%	0%
grade 2 events	4835	4492	4531	3978
	3%	3%	2%	2%
grade 3 events	2009	1973	1831	1838
	1%	1%	1%	1%
grade 4 events	1807	1968	1837	1886
	1%	1%	1%	1%
grade 5 events	6119	6580	5633	7054
	4%	4%	3%	4%
grade 6 events	3546	3925	3242	3292
	2%	2%	2%	2%
grade 7 events	117234	113539	135507	123857
	81%	81%	84%	82%

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	258.102436	258.0830314286175	Subarray requested	NONE	NONE
[deg] Pointing Dec	-38.507161	-38.48424131094962	Alternating exposures requested	N	N
[deg] Pointing Roll	93.087581	93.28417654158459	[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)	476956492.184000	476955549.60888			
Observation start date	2013-02-11T07:53:45	2013-02-11T07:39:09			
[s] Observation end time (MET)	476986492.184000	476987416.86061			
Observation end date	2013-02-11T16:13:45	2013-02-11T16:30:16			
Read mode	TIMED	TIMED			

2.3 Aspect





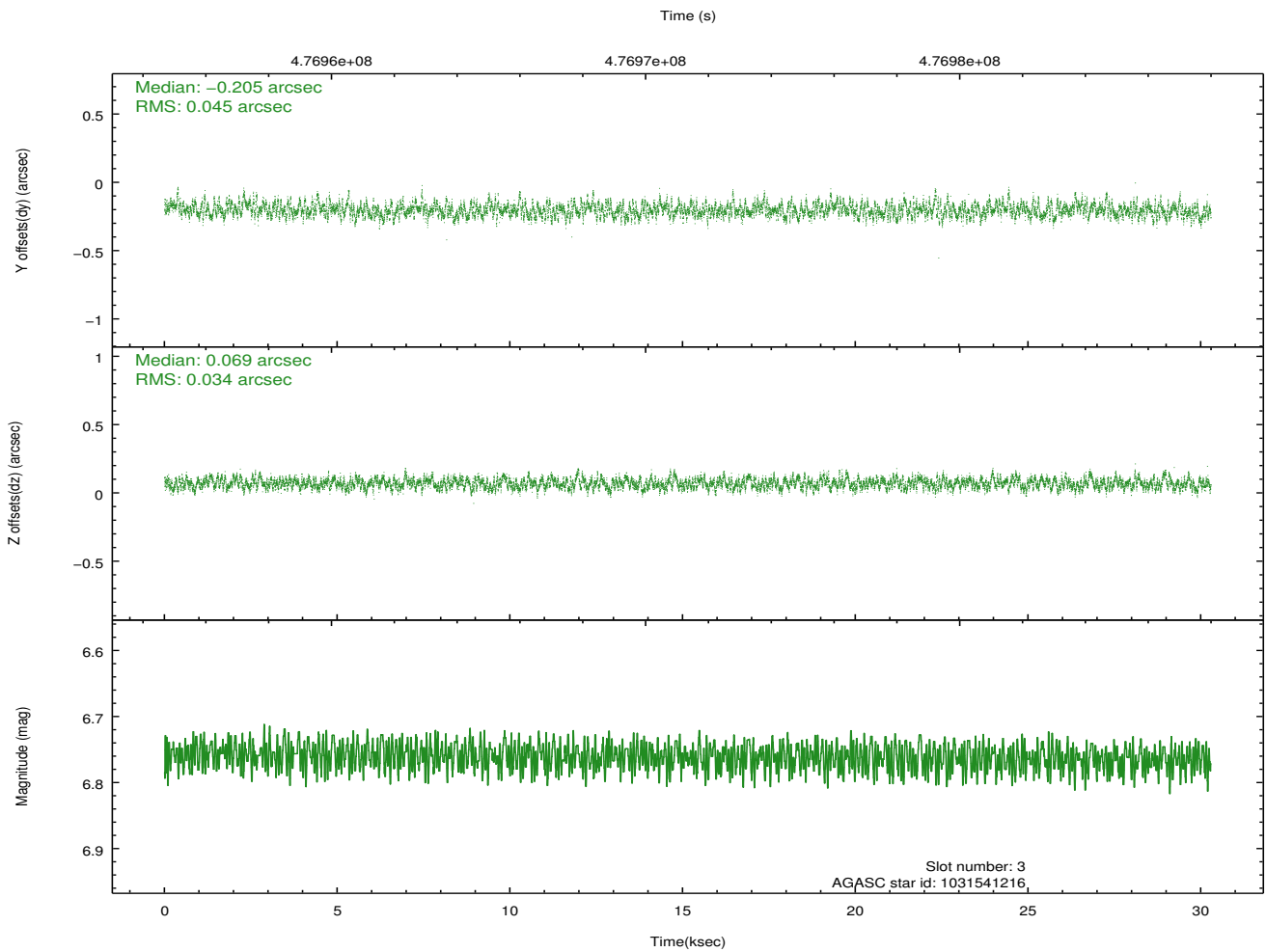
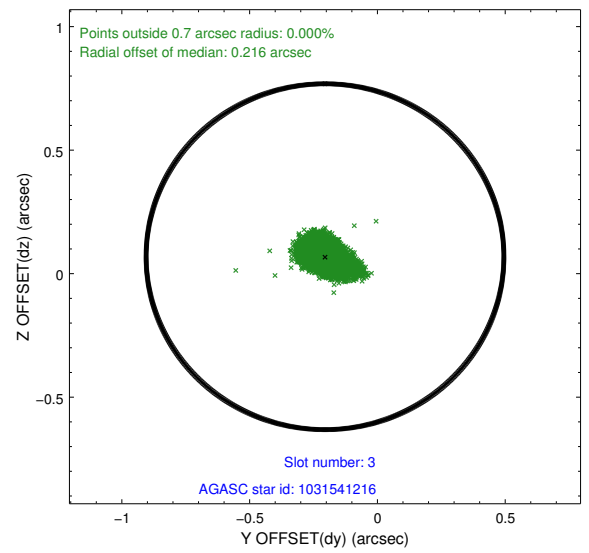
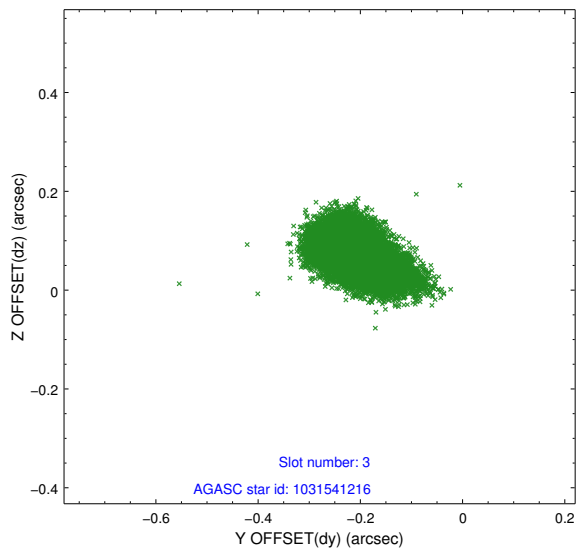
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	6.96	7388	-0.001	-0.064	0.015	0.028	0.000000	0.000000	-775.79	-850.14
1	FID		ACIS-I-5	7.05	7387	-0.217	0.052	0.012	0.019	0.000000	0.000000	-1830.14	1053.78
2	FID		ACIS-I-6	7.06	7389	0.125	0.081	0.010	0.018	0.000000	0.000000	383.96	1698.40
3	GUIDE	used	1031541216	6.76	14776	-0.205	0.069	0.060	0.099	258.289266	-37.952377	1965.48	-636.85
4	GUIDE	used	1031549032	7.98	14775	0.218	-0.014	0.075	0.120	258.584727	-38.516573	-109.71	-1354.45
5	GUIDE	used	1031549480	7.86	14777	0.068	0.226	0.059	0.095	258.859583	-38.394348	282.33	-2154.32
6	GUIDE	used	1031538744	7.09	14775	-0.460	-0.335	0.049	0.081	257.905000	-37.853256	2380.04	433.55
7	GUIDE	used	1031546704	9.14	14637	0.381	0.053	0.095	0.150	258.328569	-39.071177	-2061.66	-521.54

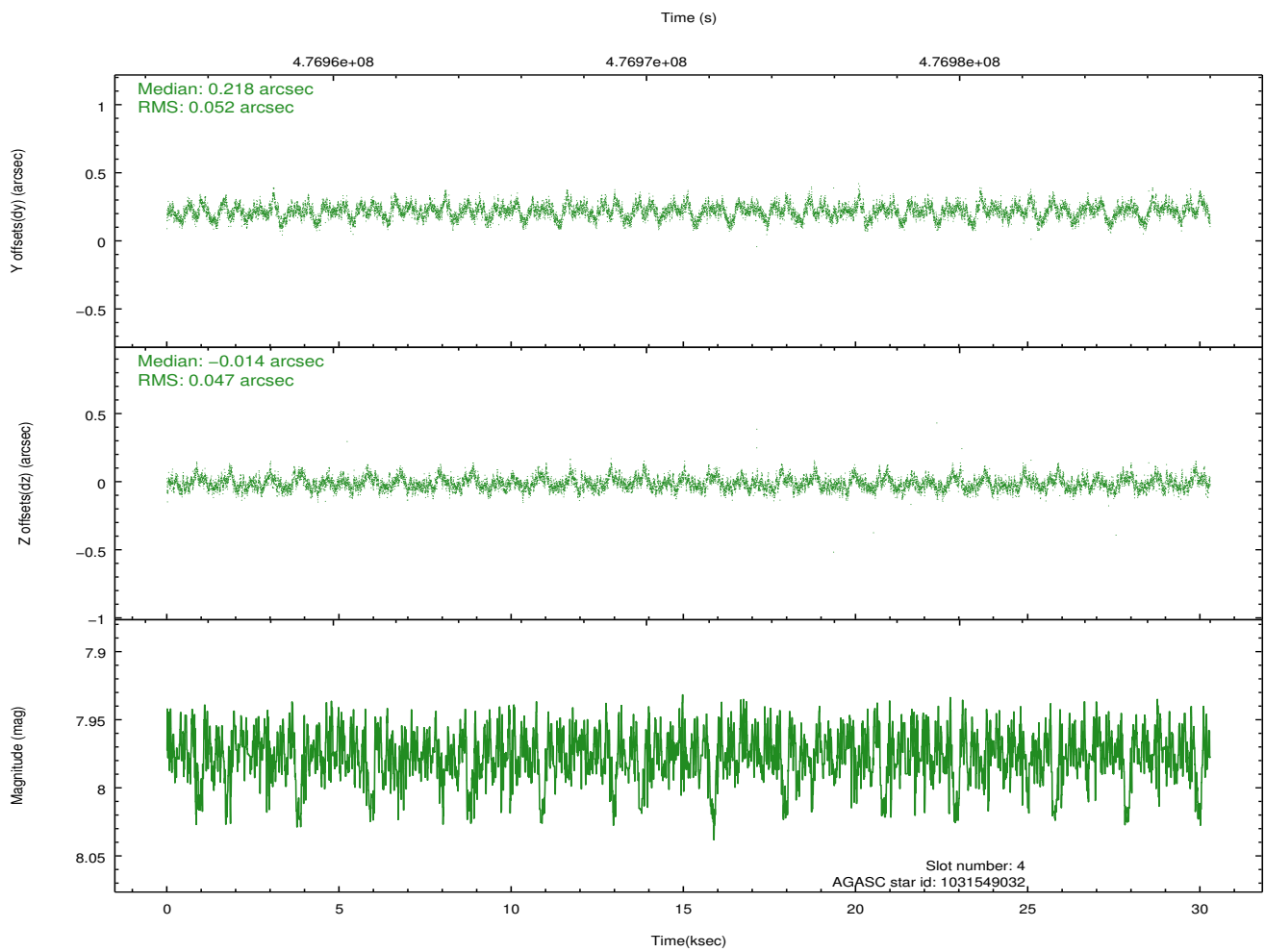
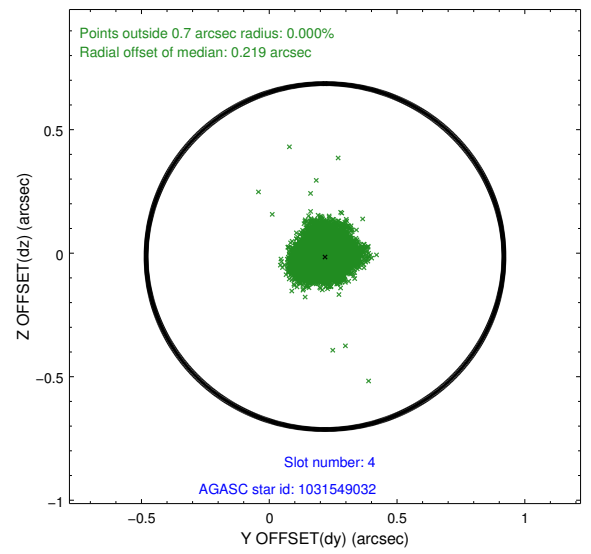
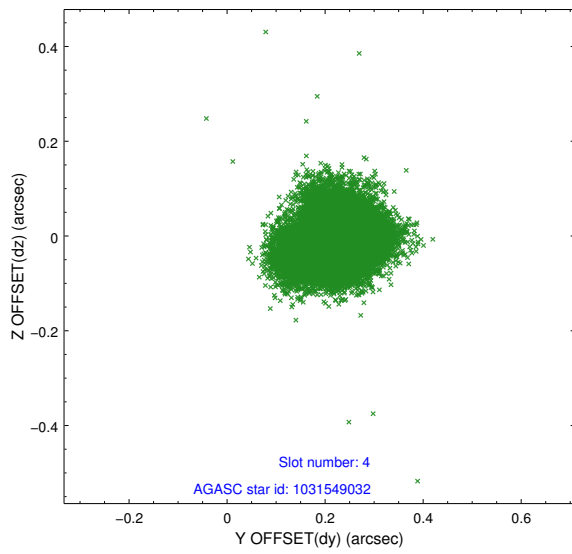
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2.4 Star Slots

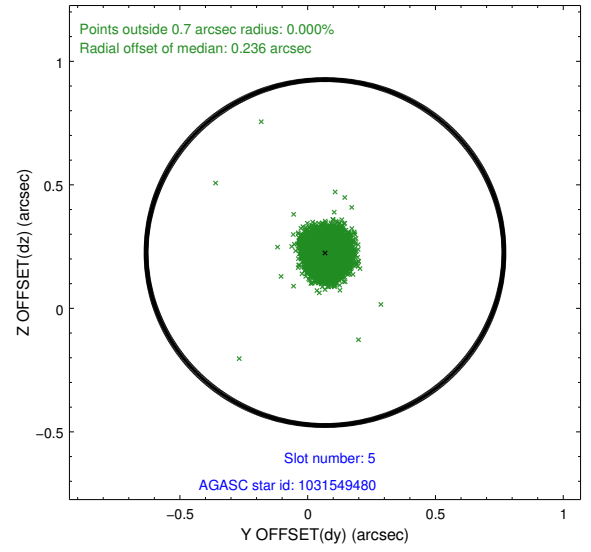
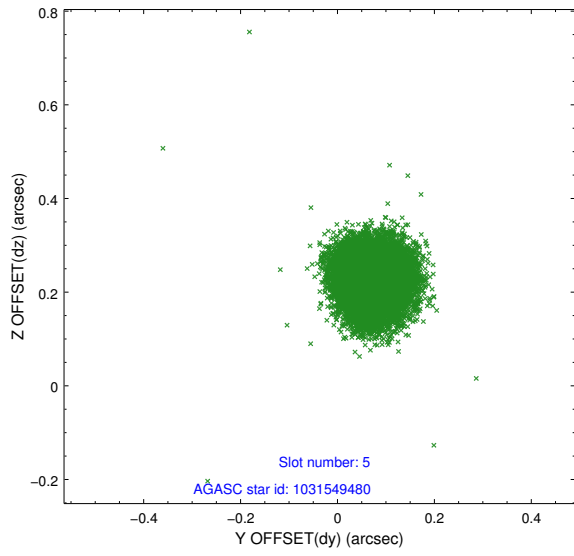
2.4.1 Slot 3



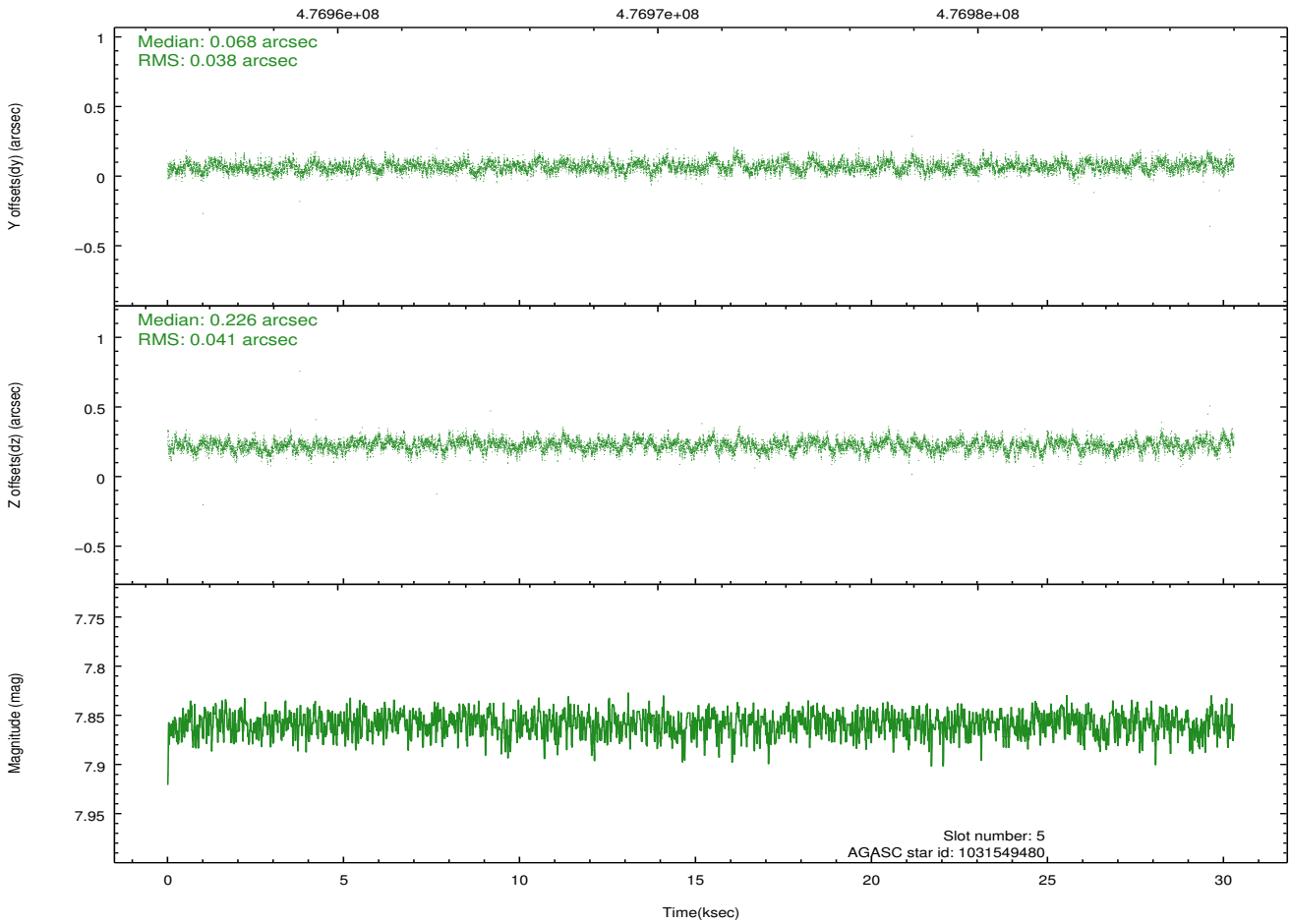
2.4.2 Slot 4



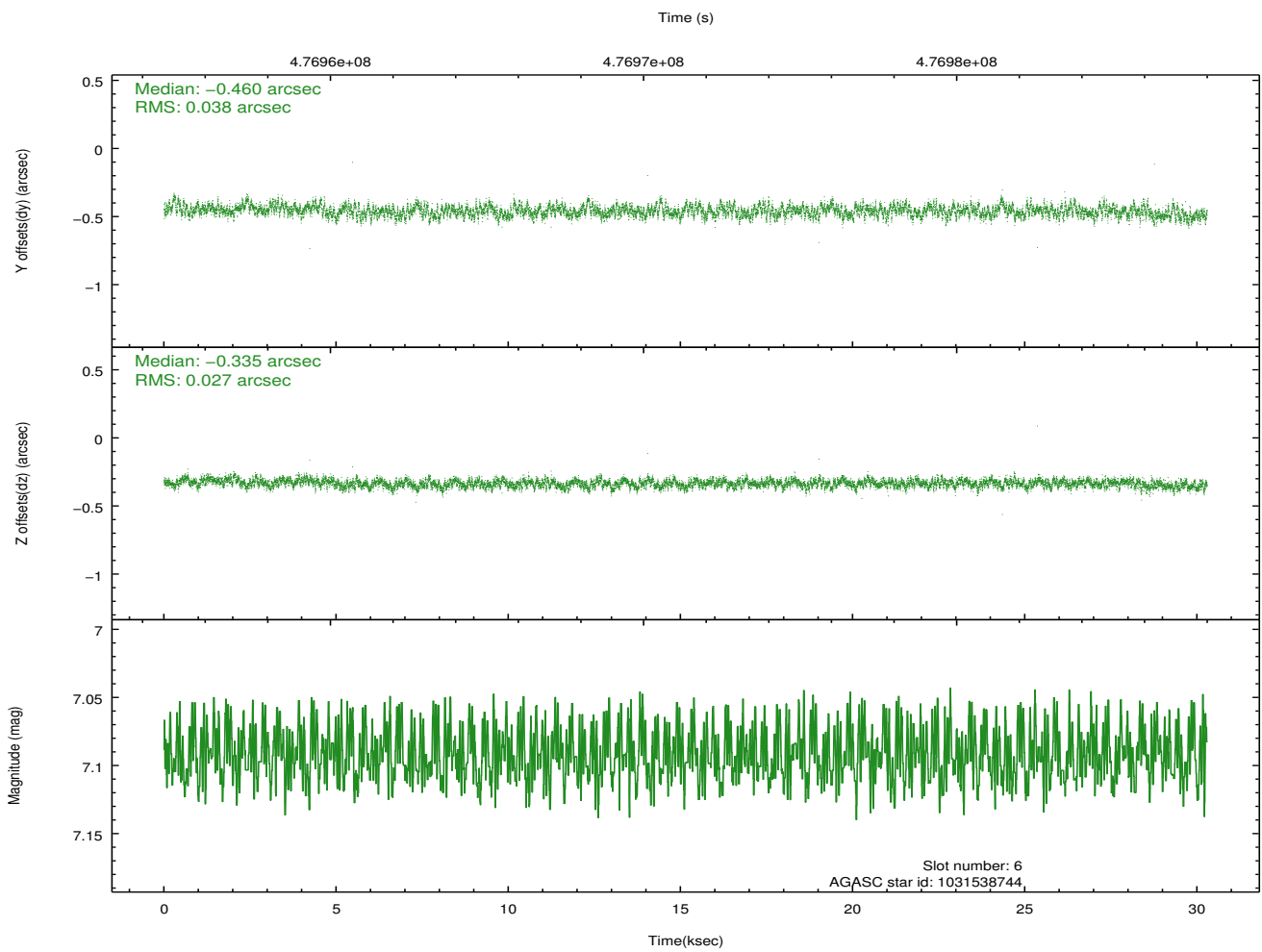
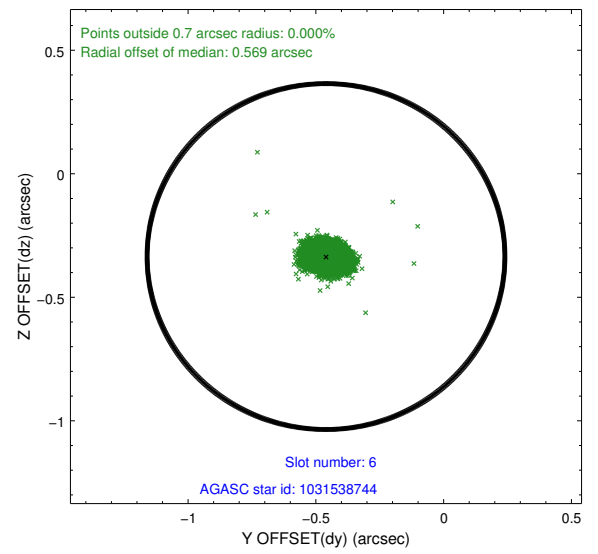
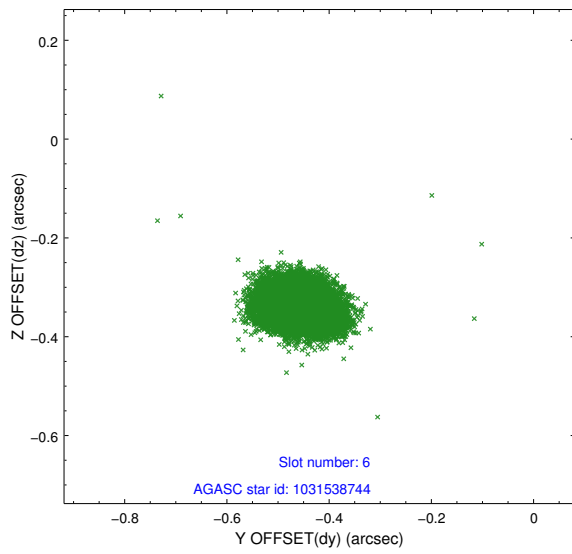
2.4.3 Slot 5



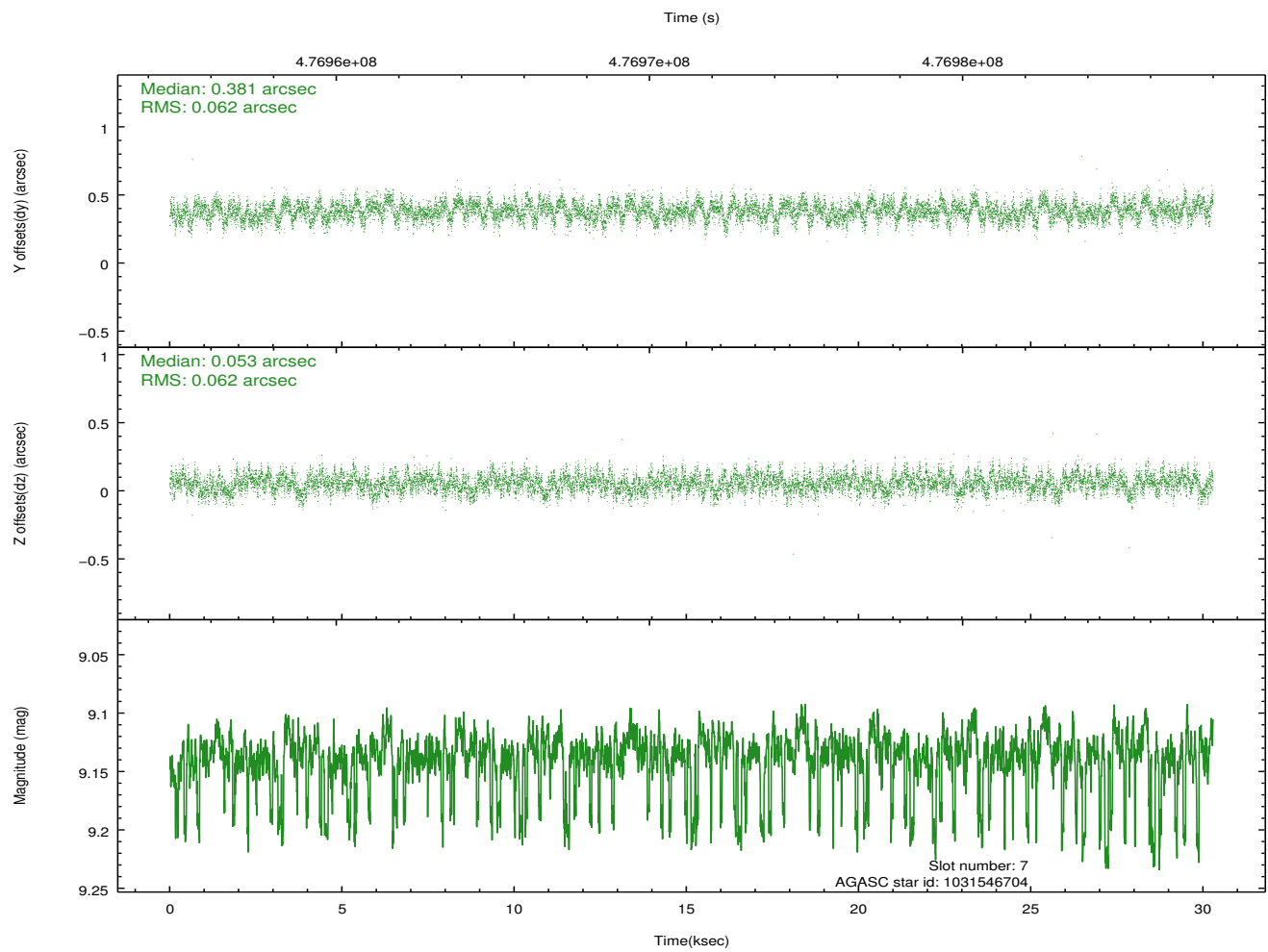
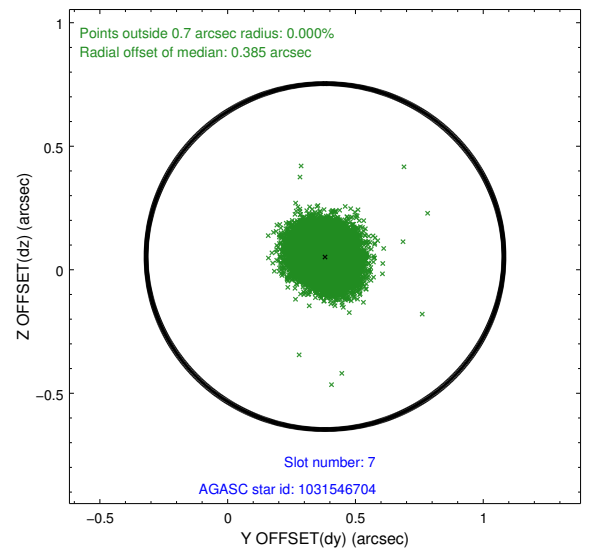
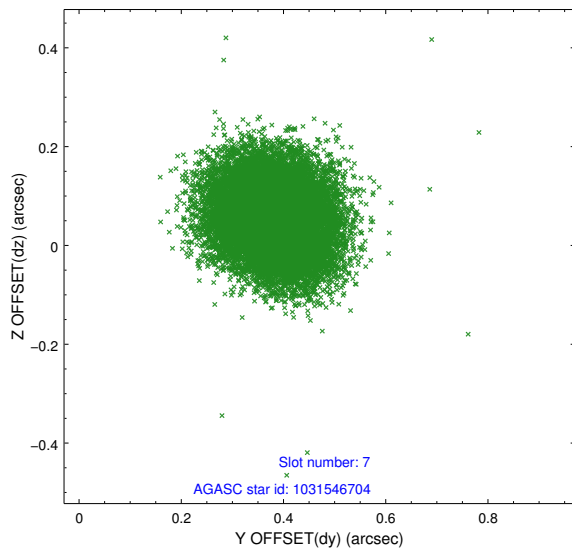
Time (s)



2.4.4 Slot 6

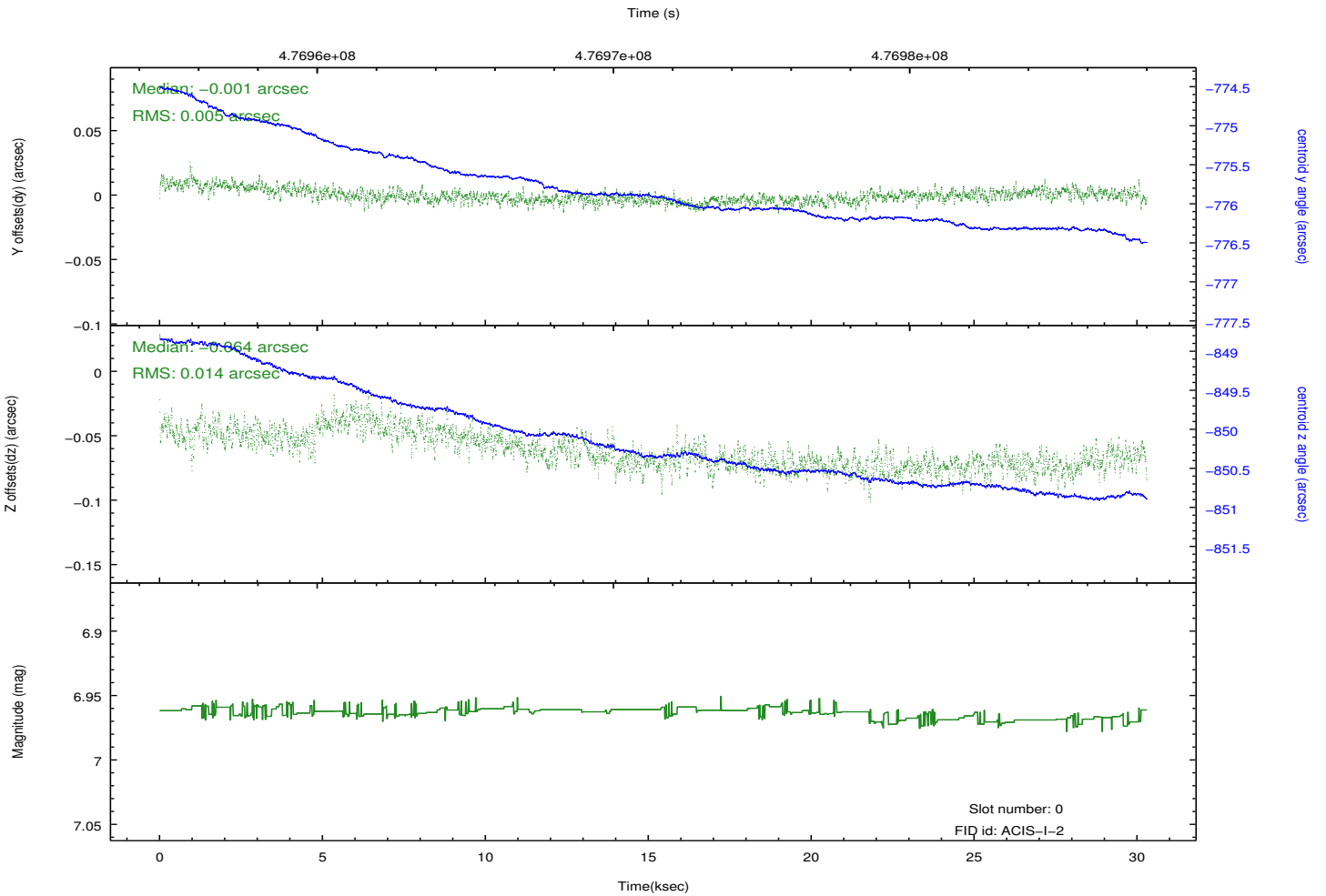
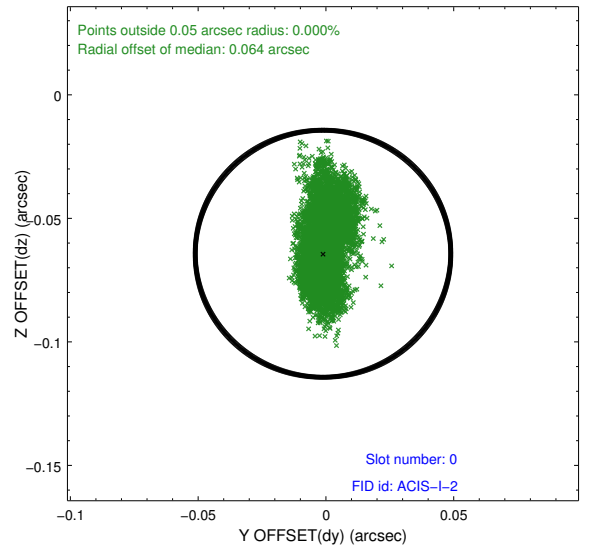
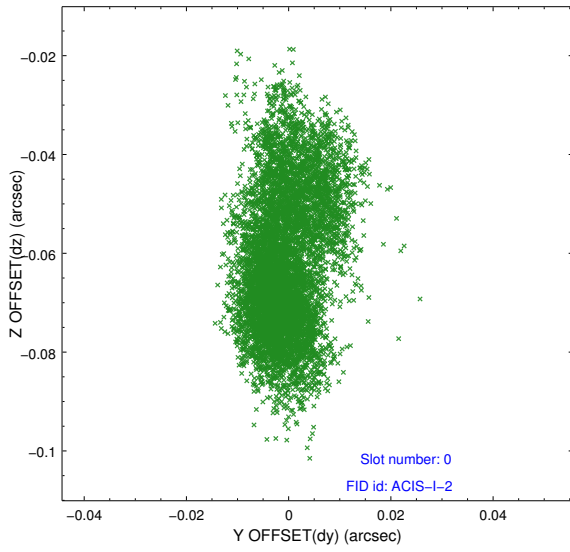


2.4.5 Slot 7

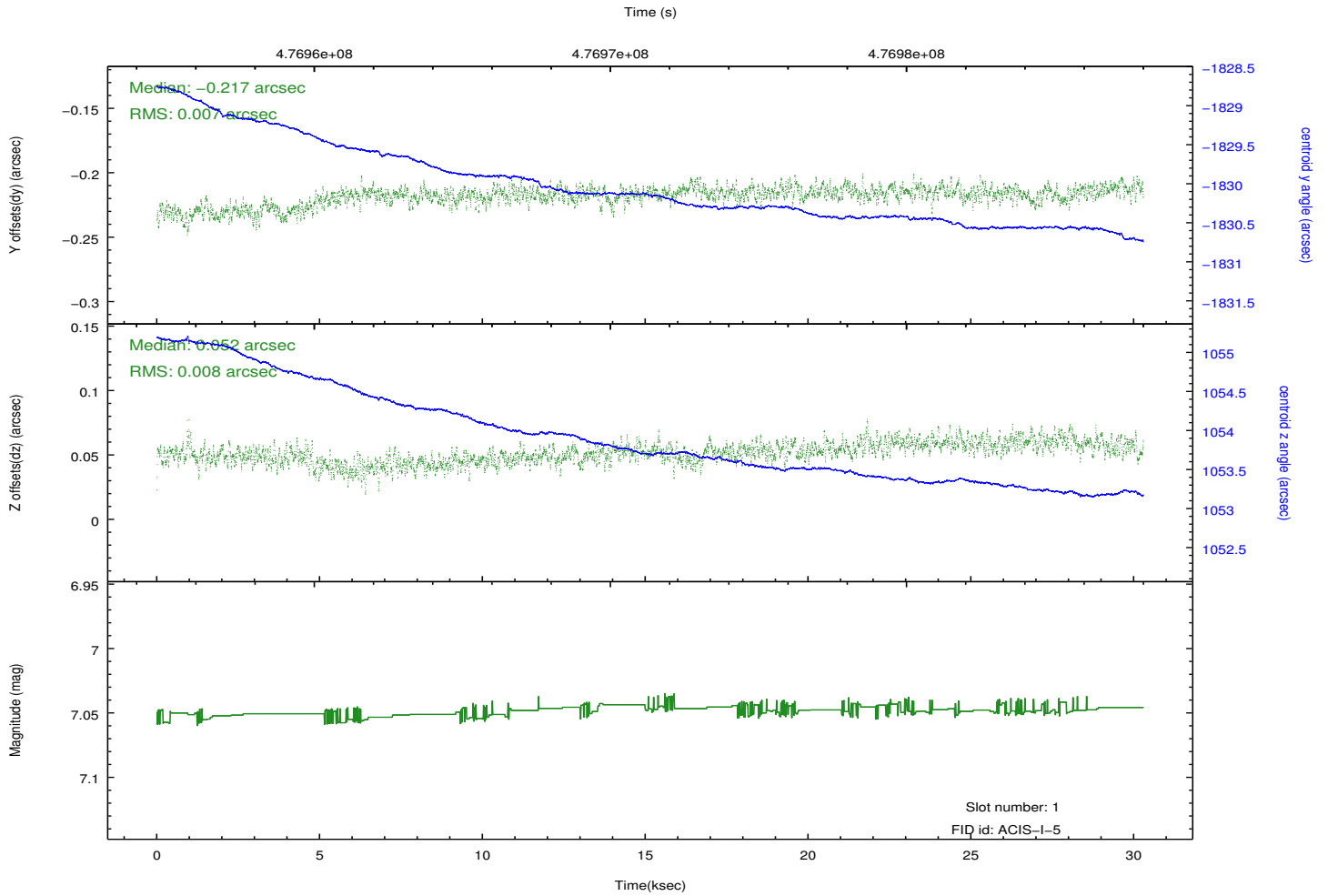
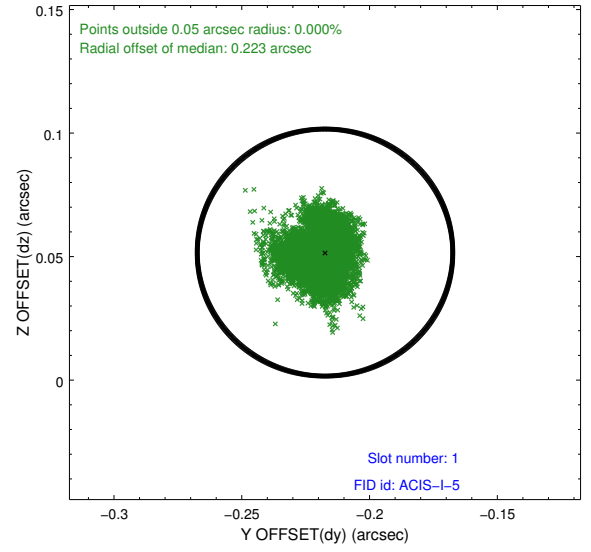
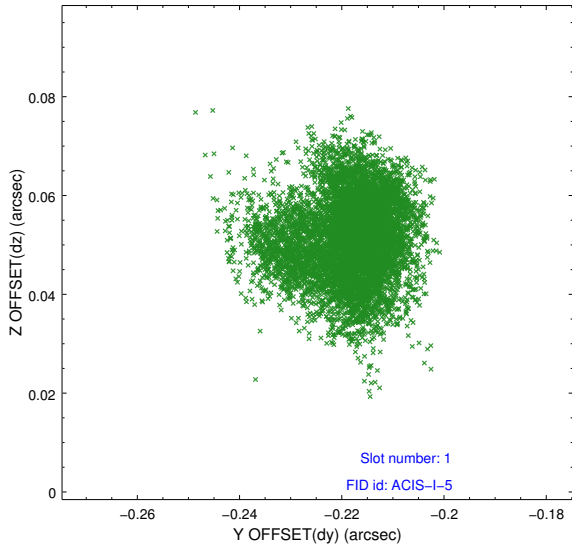


2.5 FID Slots

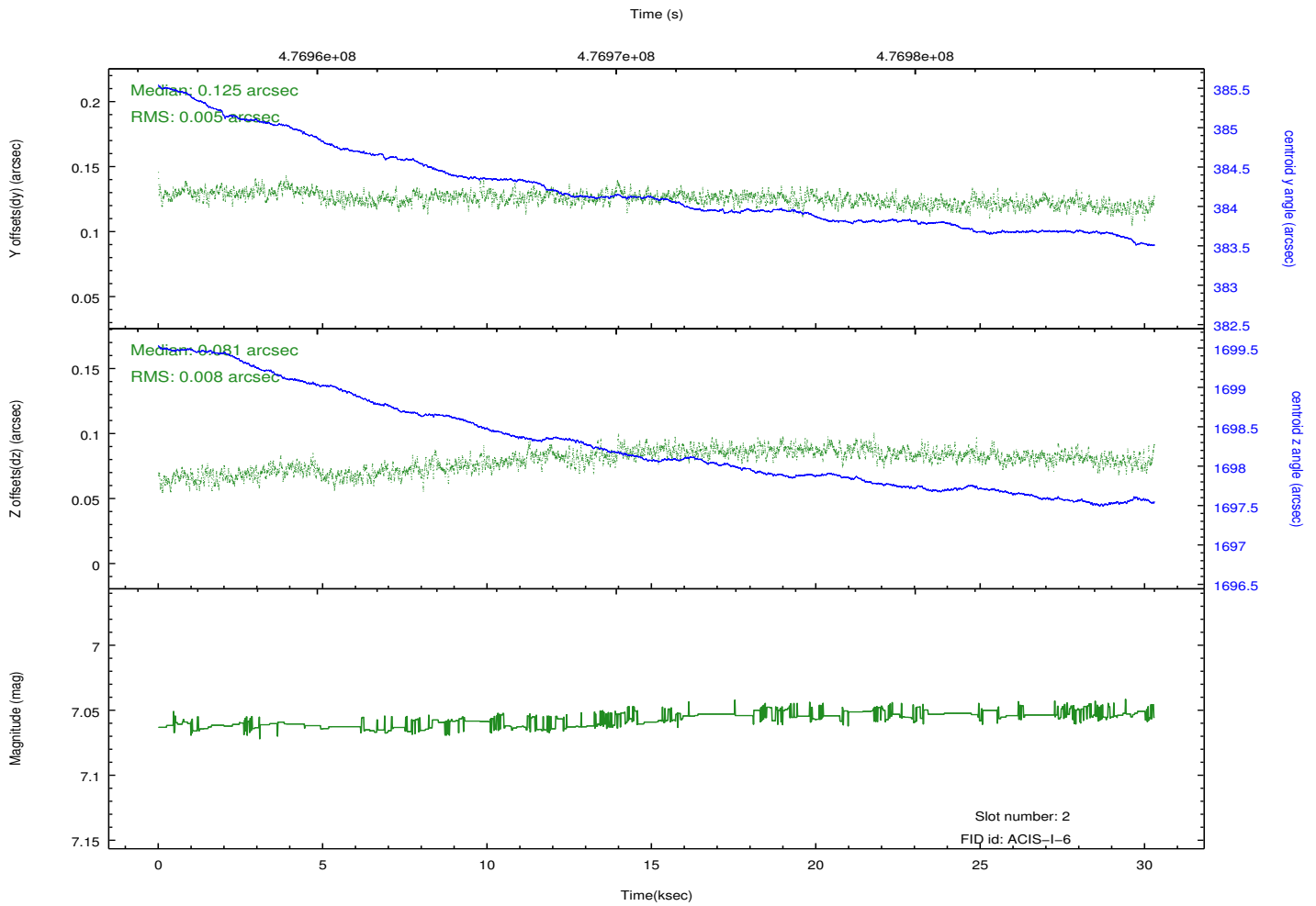
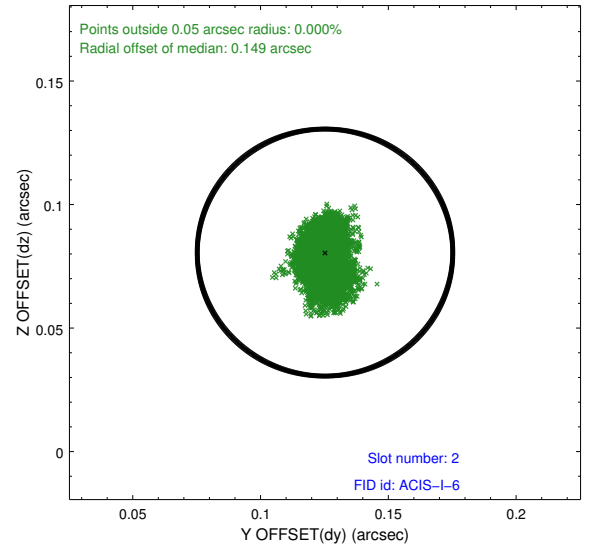
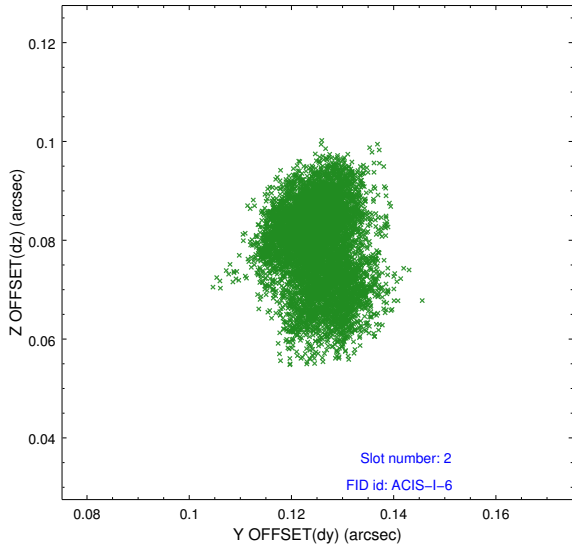
2.5.1 Slot 0



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)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.081819117844

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.