

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15653 - L2 Version 2
Chandra X-Ray Center

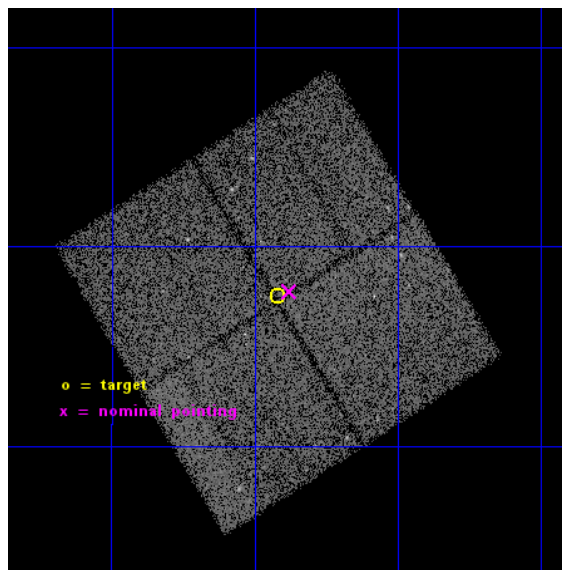
L2 Processing Date : Dec 9 2014

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1 Front

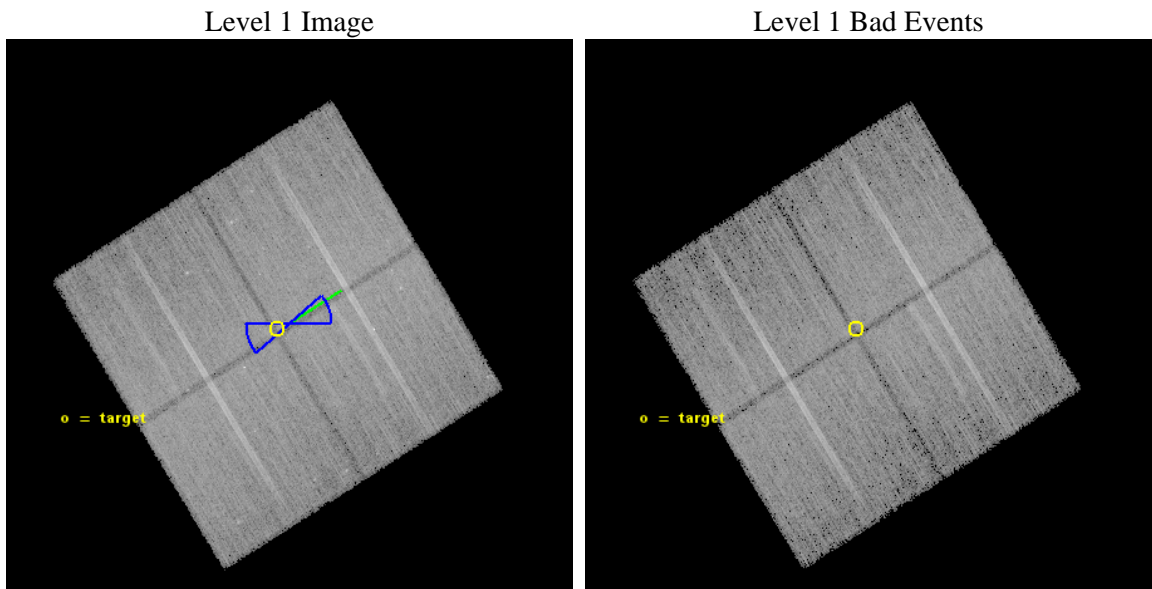
seq_num	901064	Sequence number
obs_id	15653	Observation id
title	The COSMOS Legacy Survey	Proposal title
observer	Dr Francesca Civano	Principal investigator
object	COSMOS Legacy	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.60537	Observer's specified target RA [deg]
dec_targ	2.625135	Observer's specified target Dec [deg]
ra_nom	150.59458935425	Nominal RA [deg]
dec_nom	2.6291509417629	Nominal Dec [deg]
roll_nom	58.209186206984	Nominal Roll [deg]
revision	2	Processing version of data
ontime	45489.359299541	Sum of GTIs [s]
livetime	44895.007331513	Livetime [s]
ontime0	45489.359309494	Sum of GTIs [s]
ontime1	45489.359299541	Sum of GTIs [s]
ontime2	45486.218248725	Sum of GTIs [s]
ontime3	45486.218339086	Sum of GTIs [s]
l2events	88430	Number of level 2 events



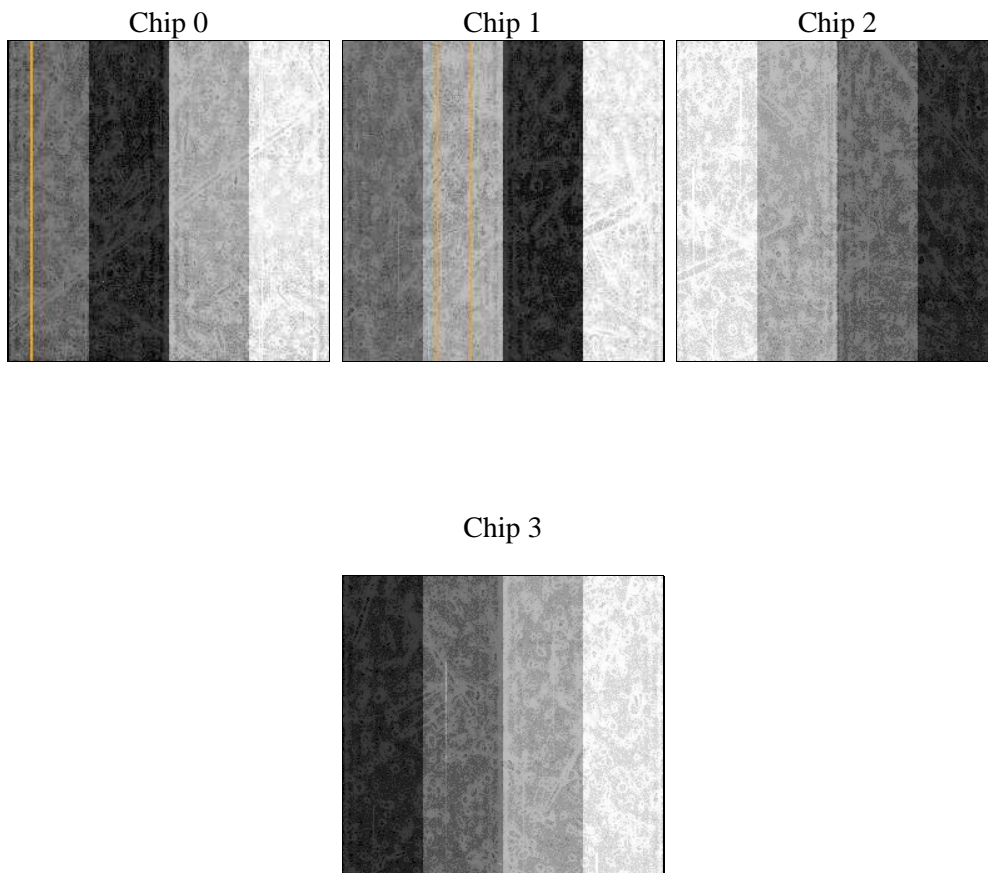
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45400.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	45489.359299541	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	45489.359309494	Sum of GTIs [s]
date	2014-12-09T23:50:14	Date and time of file creation	ontime1	45489.359299541	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	45486.218248725	Sum of GTIs [s]
			ontime3	45486.218339086	Sum of GTIs [s]
			l1events	822940	Number of level 1 events

2.1.4 Events

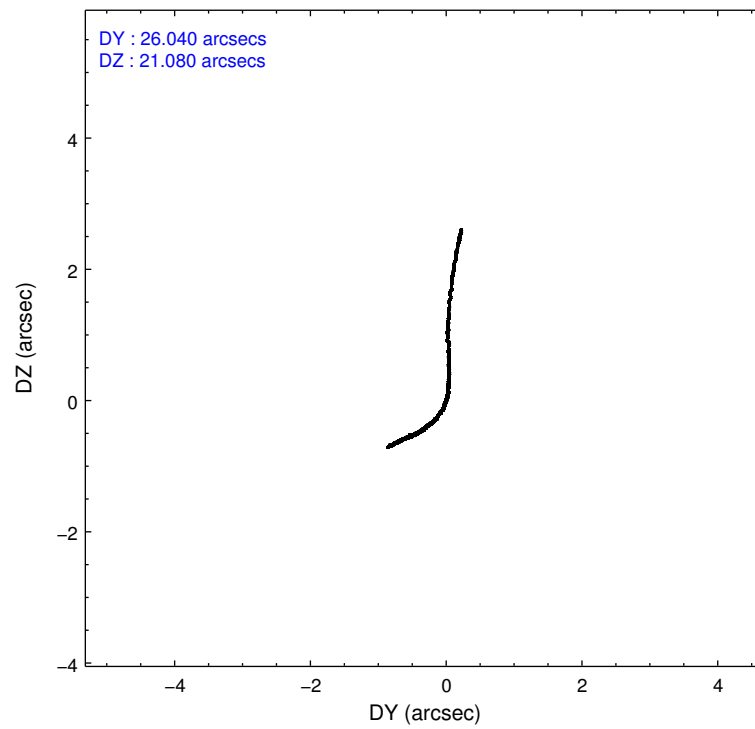
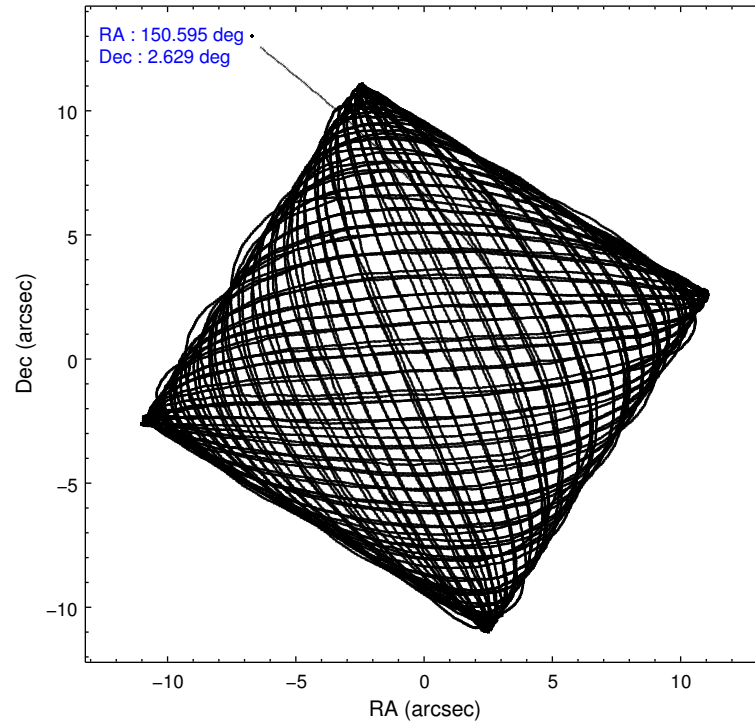
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	192808	202617	214640	212875
rejected events	167427	173661	189457	187145
rejected %	86%	85%	88%	87%

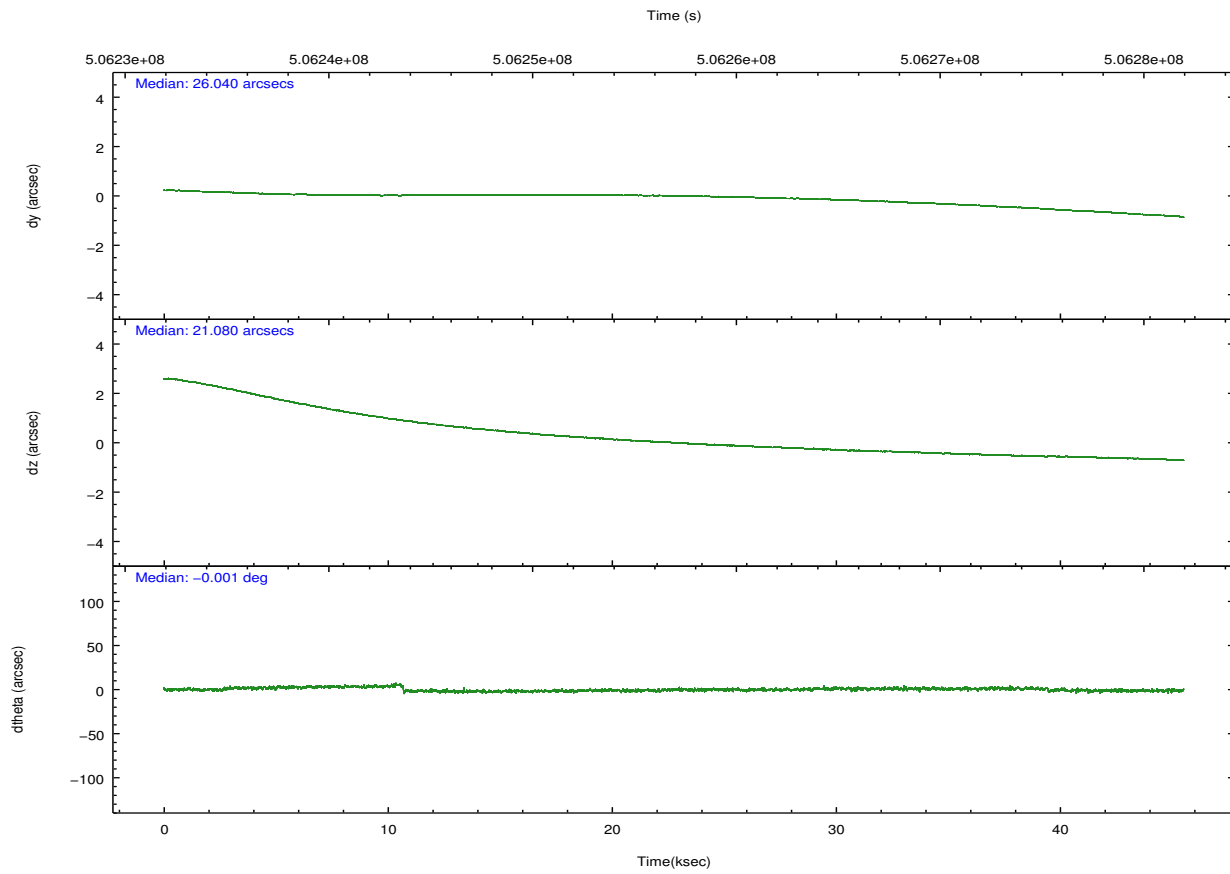
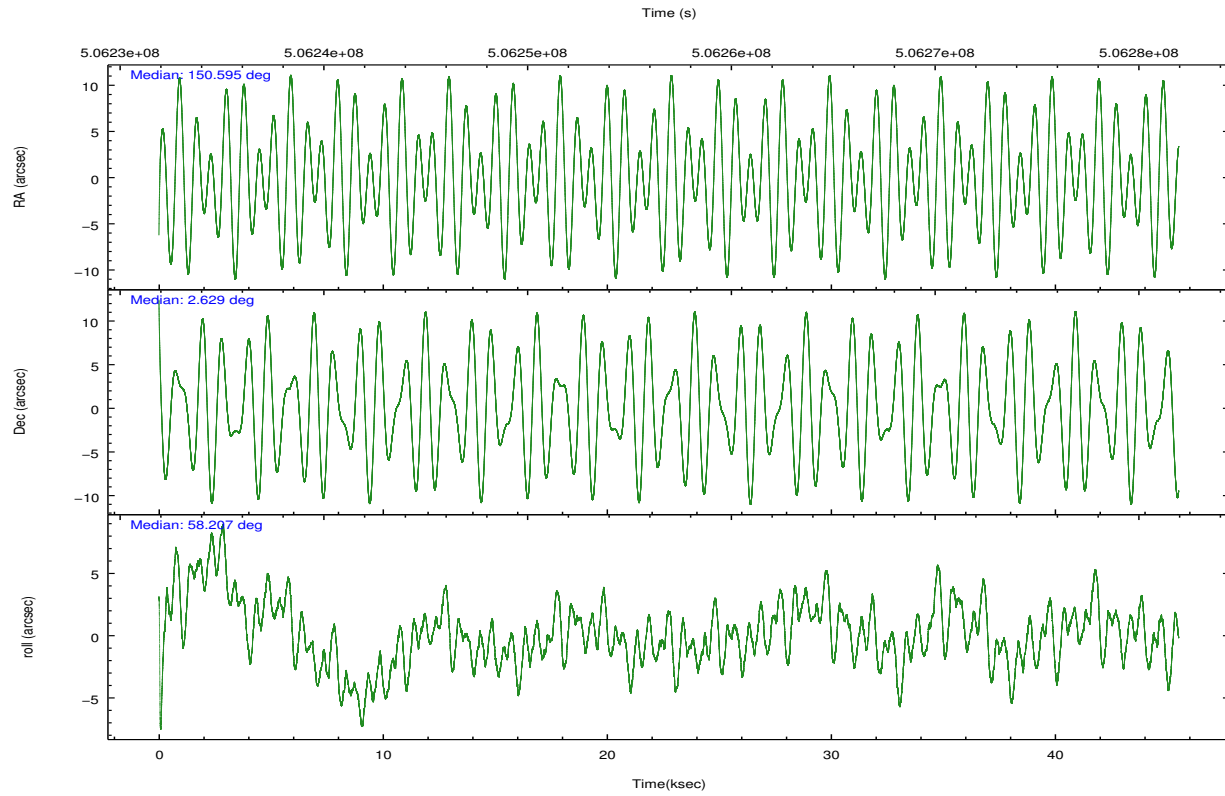
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	8669	10150	8994	9236
	4%	5%	4%	4%
grade 1 events	118	100	123	119
	0%	0%	0%	0%
grade 2 events	6194	6867	6053	5749
	3%	3%	2%	2%
grade 3 events	2656	2760	2586	2659
	1%	1%	1%	1%
grade 4 events	2556	2807	2560	2701
	1%	1%	1%	1%
grade 5 events	10098	10904	9691	12002
	5%	5%	4%	5%
grade 6 events	5308	6375	4991	5390
	2%	3%	2%	2%
grade 7 events	157209	162654	179642	175019
	81%	80%	83%	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	150.593841	150.5945893542461	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.601671	2.629150941762939	Alternating exposures requested	N	N
[deg] Pointing Roll	58.000526	58.20918620698386	[s] Primary exposure time	0.000000	3.1
[deg] Roll angle	250.000000	250.000000			
[deg] Roll tolerance	20.000000	20.000000			
Roll constraint allows 180D rotation	Y	Y			
[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)	506234278.184000	506233082.32855			
Observation start date	2014-01-16T04:36:51	2014-01-16T04:18:02			
[s] Observation end time (MET)	506279678.184000	506280657.70617			
Observation end date	2014-01-16T17:13:31	2014-01-16T17:30:57			
Read mode	TIMED	TIMED			

2.3 Aspect



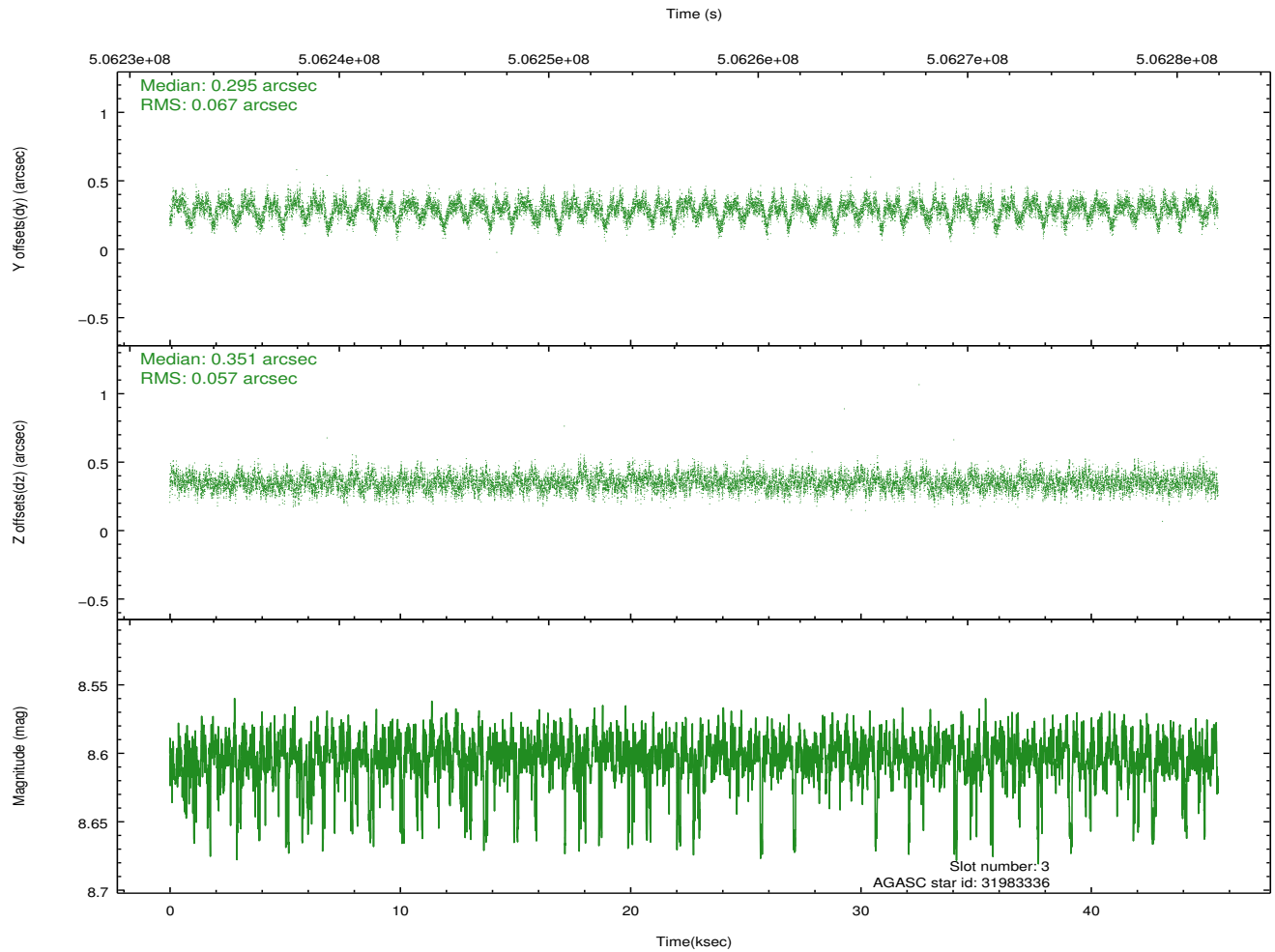
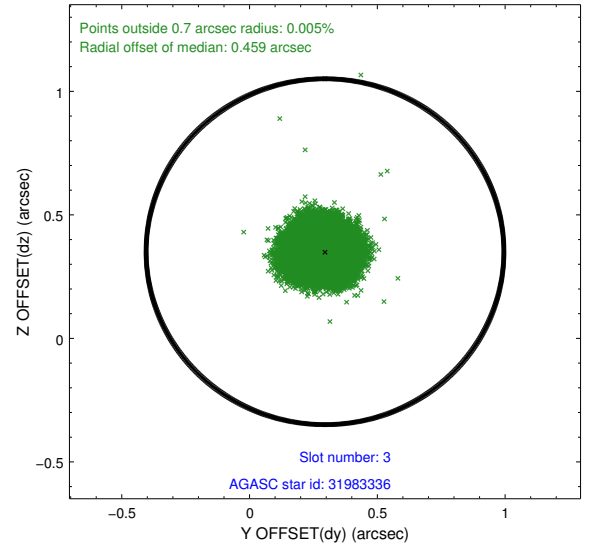
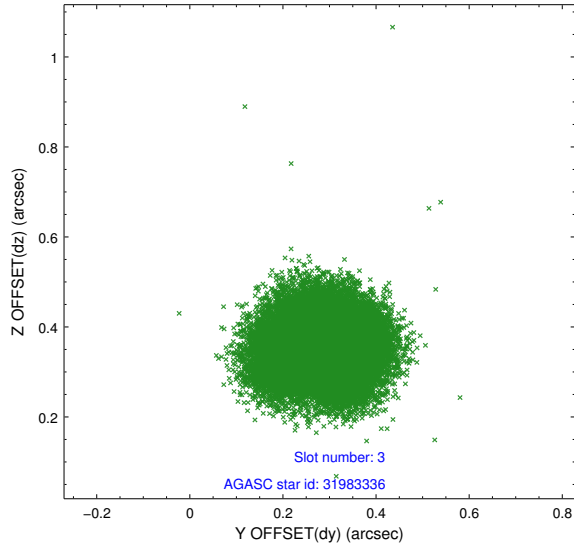


Slot Statistics

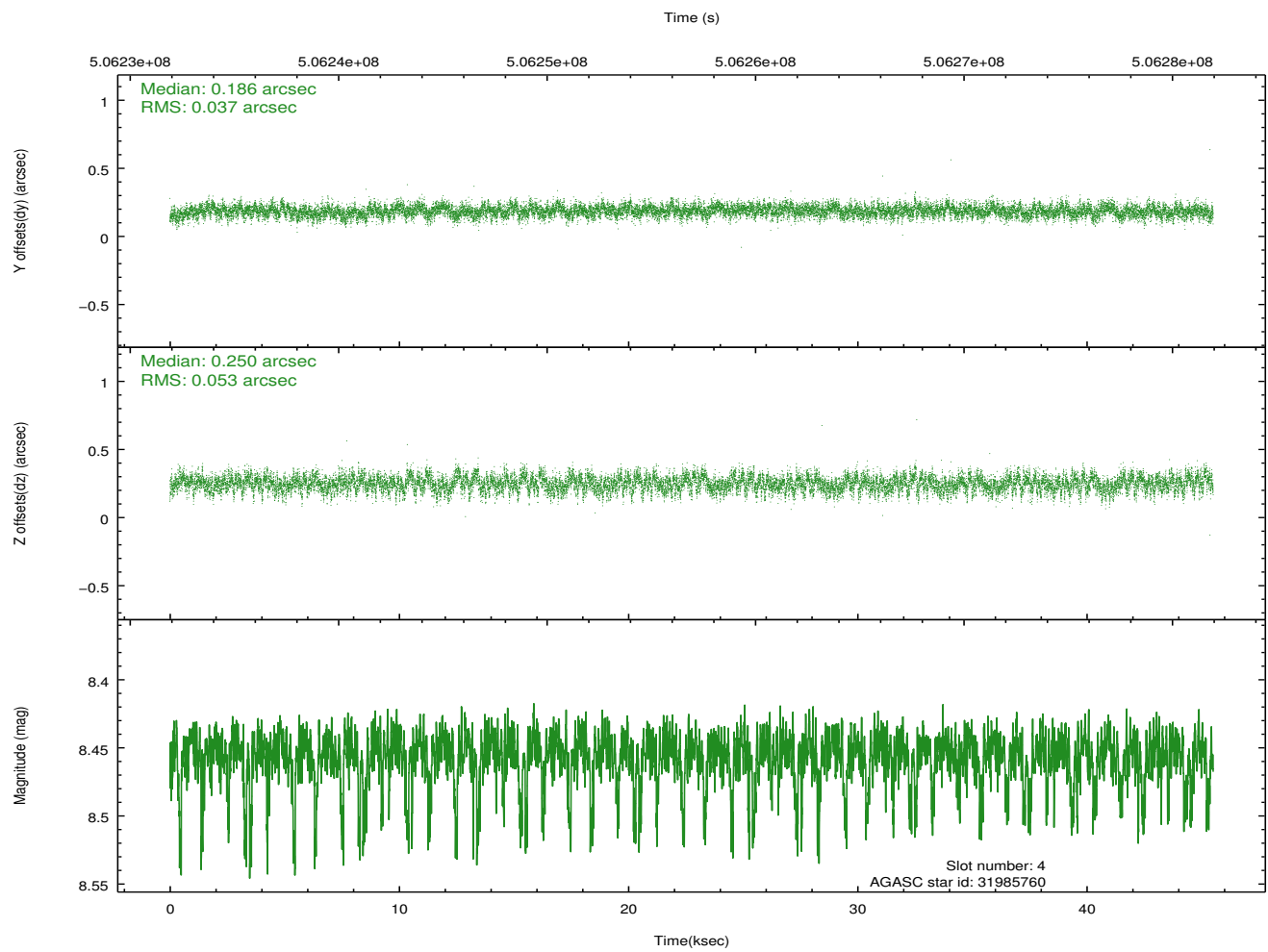
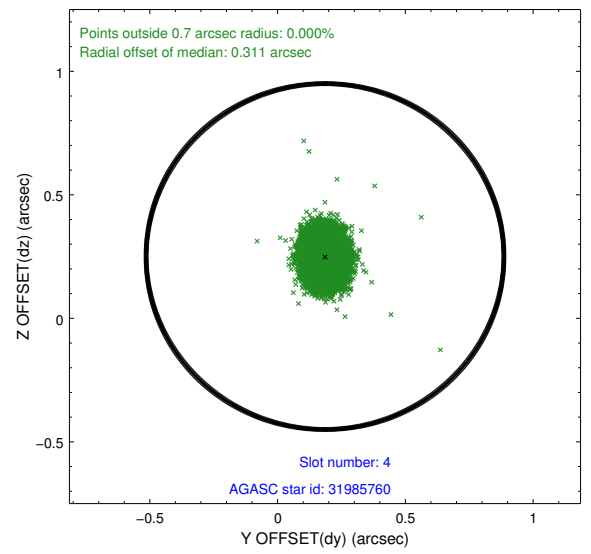
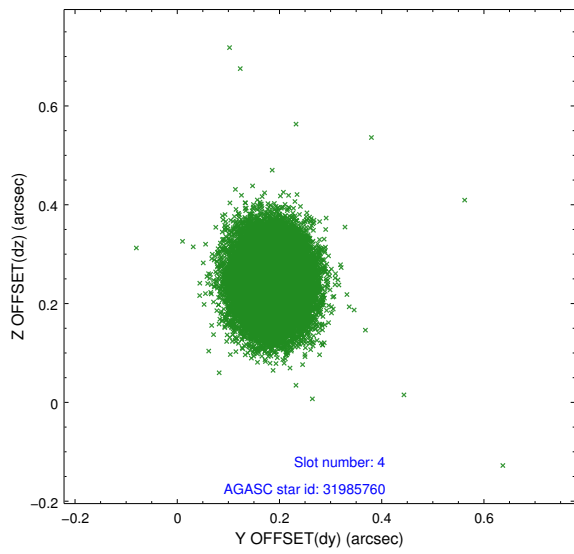
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.14	11101	-0.036	0.014	0.022	0.066	0.000000	0.000000	913.21	-845.15
1	FID		ACIS-I-2	7.03	11101	-0.273	-0.136	0.012	0.032	0.000000	0.000000	-781.12	-851.72
2	FID		ACIS-I-4	7.09	11099	0.207	0.185	0.022	0.037	0.000000	0.000000	2133.37	1054.80
3	GUIDE	used	31983336	8.60	22164	0.295	0.351	0.094	0.150	150.429924	2.291234	-1259.35	-91.56
4	GUIDE	used	31985760	8.46	22195	0.186	0.250	0.069	0.112	150.924581	2.094394	-917.81	-1976.19
5	GUIDE	used	31986152	9.00	22192	0.092	-0.043	0.126	0.193	150.840314	2.057585	-1190.95	-1789.34
6	GUIDE	used	32374896	9.22	22186	-0.026	0.134	0.133	0.206	150.682269	2.512794	-102.55	-439.16
7	GUIDE	used	32386456	9.22	22187	-0.530	-0.690	0.137	0.214	150.309862	3.285518	1547.03	2169.86

2.4 Star Slots

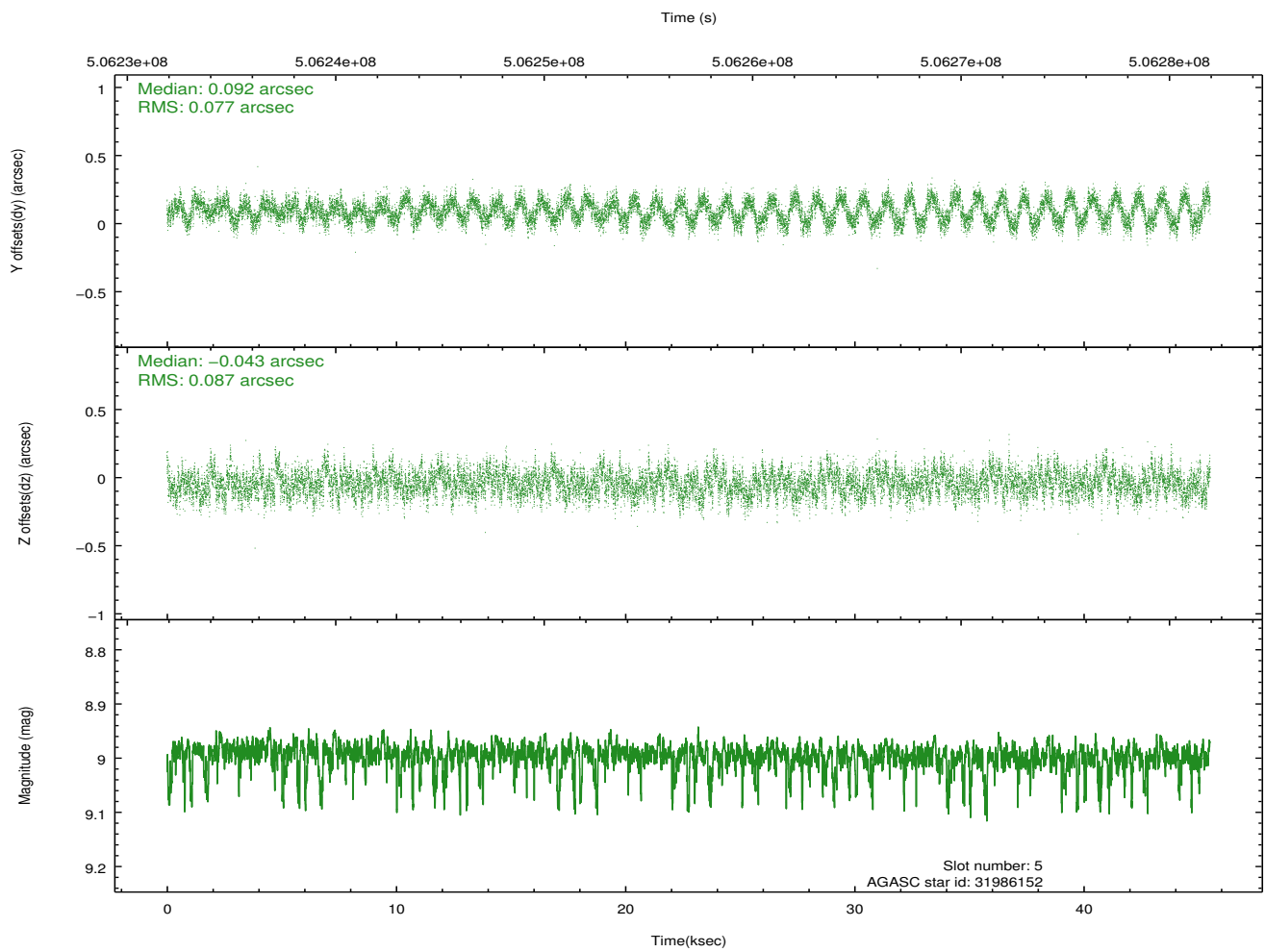
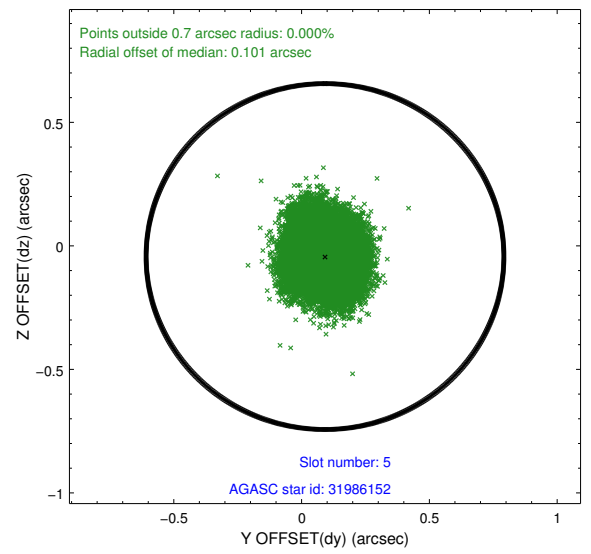
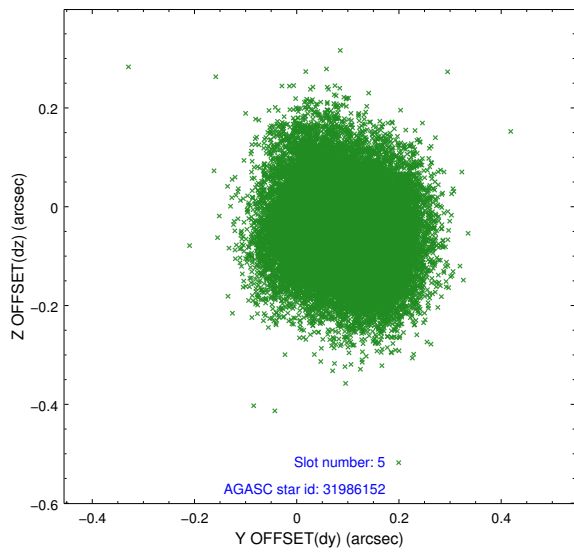
2.4.1 Slot 3



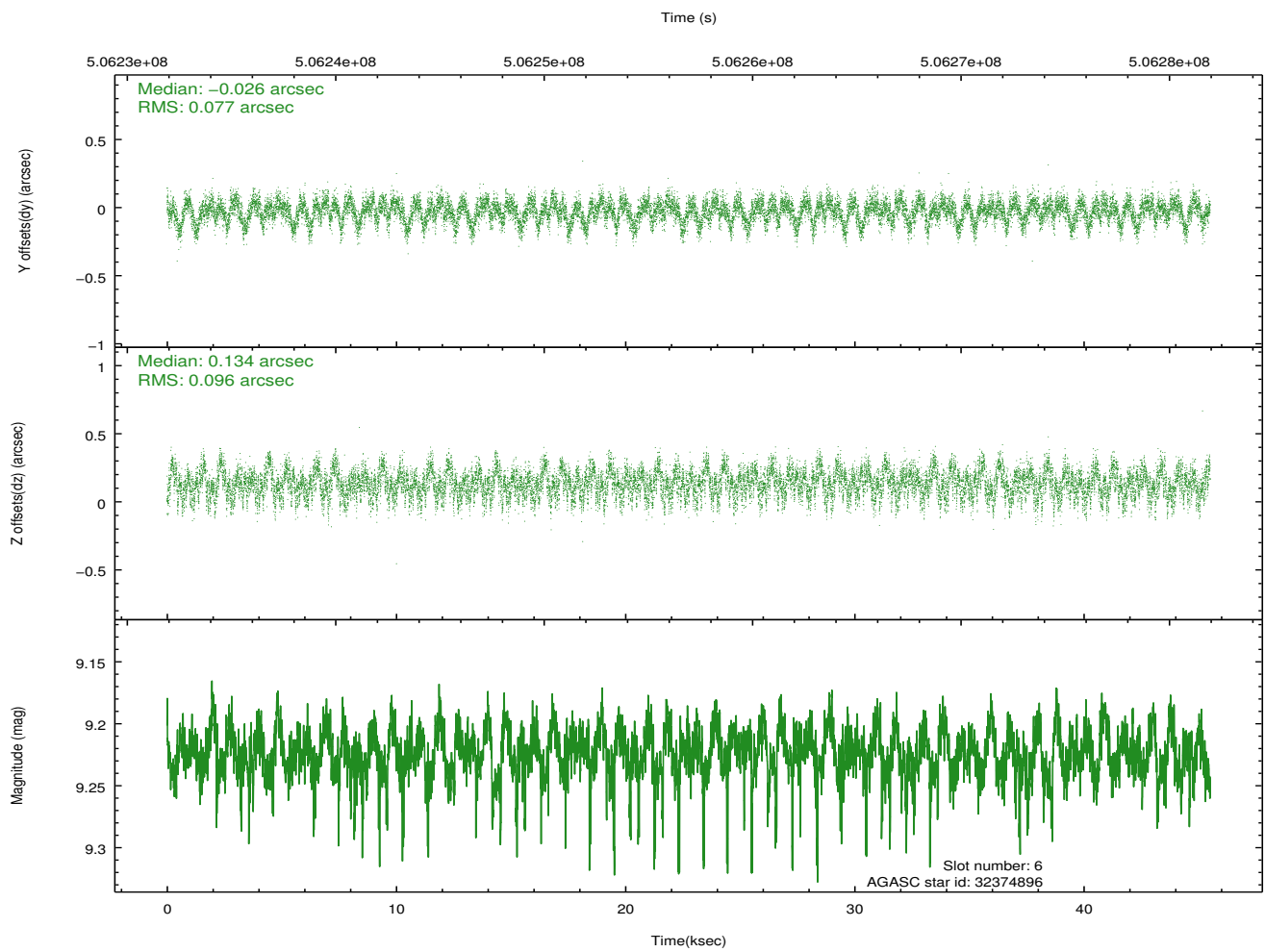
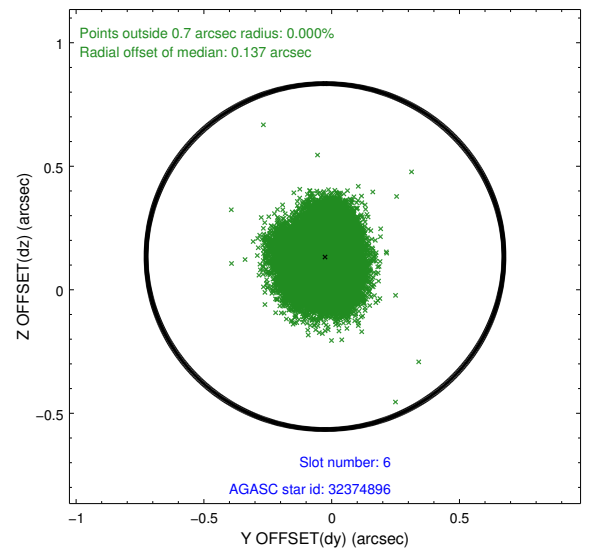
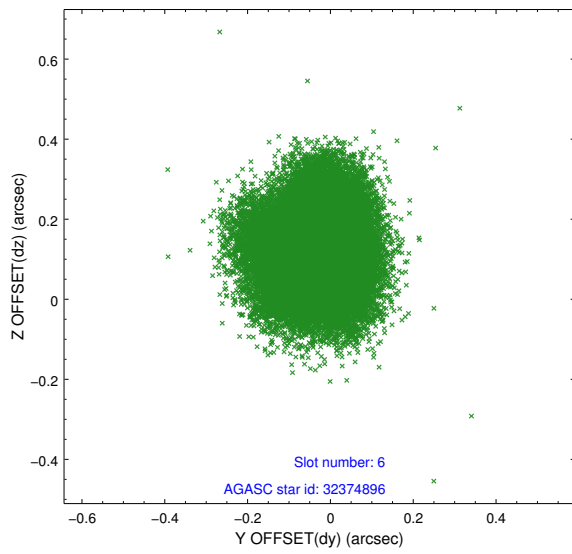
2.4.2 Slot 4



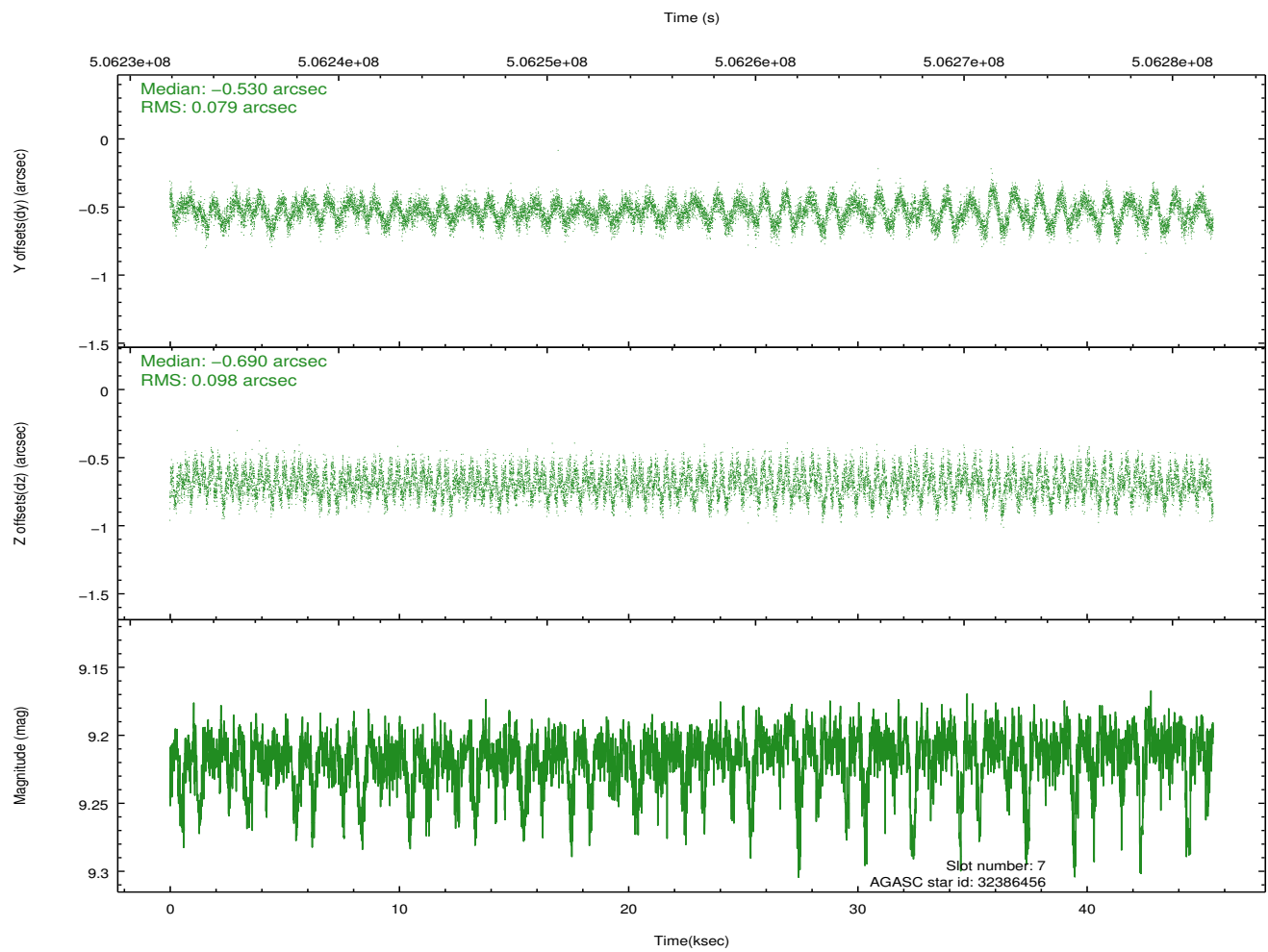
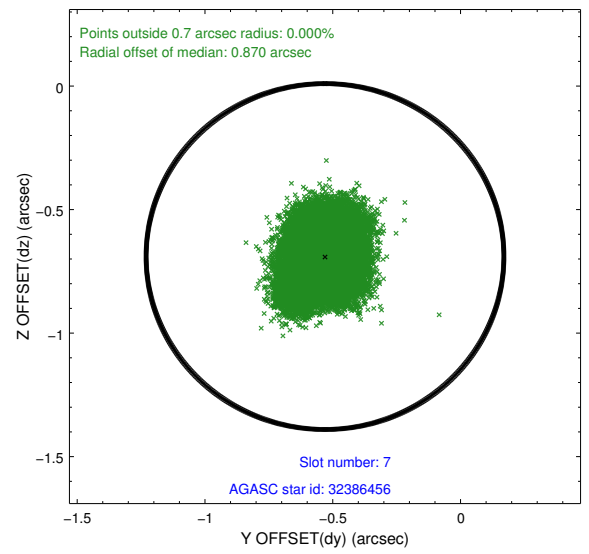
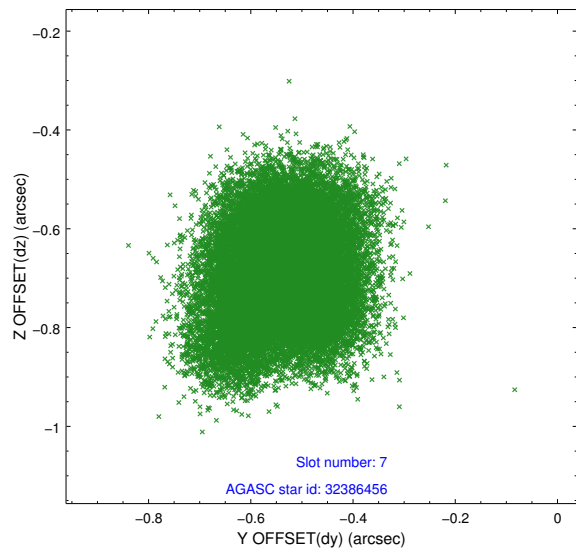
2.4.3 Slot 5



2.4.4 Slot 6

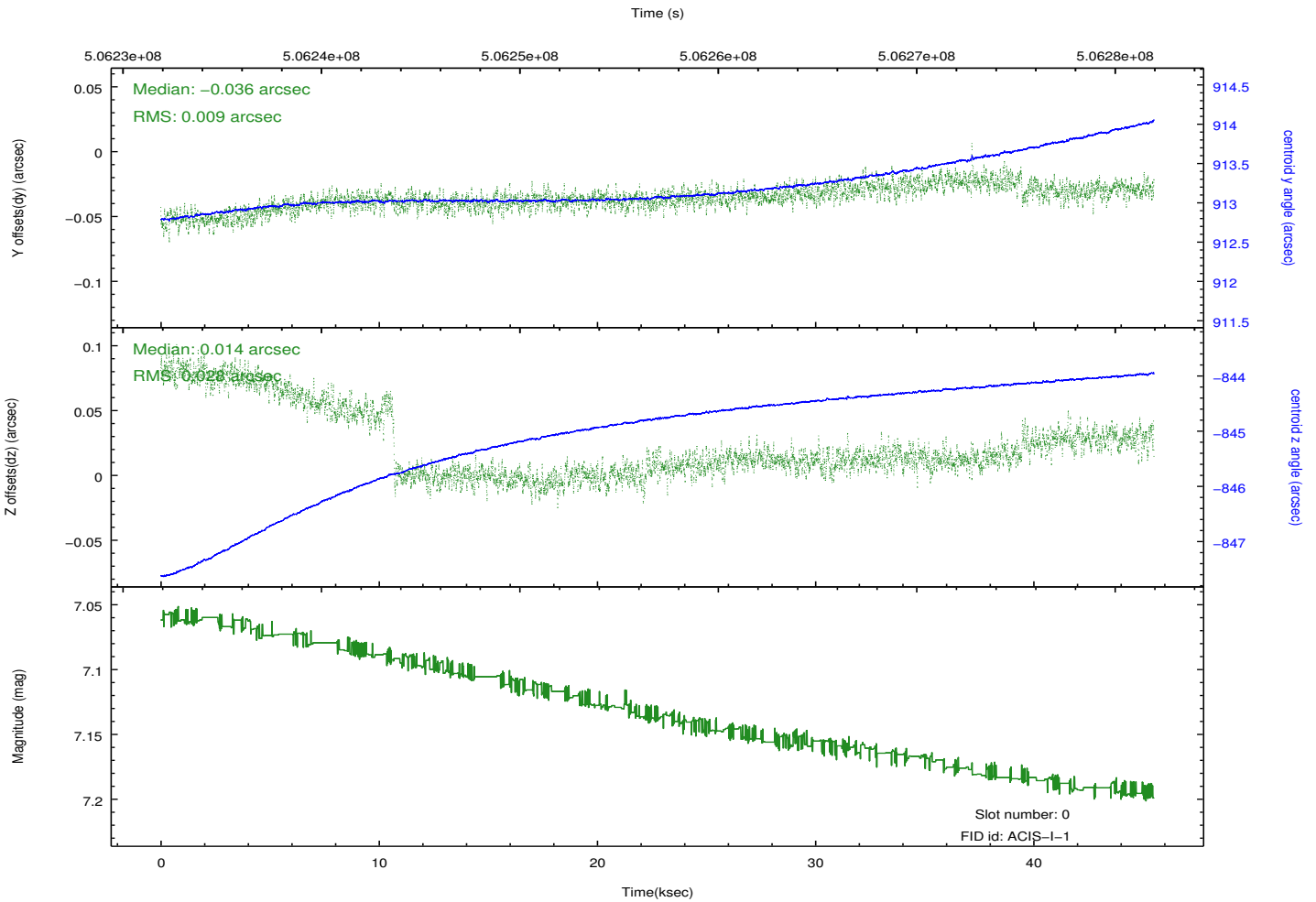
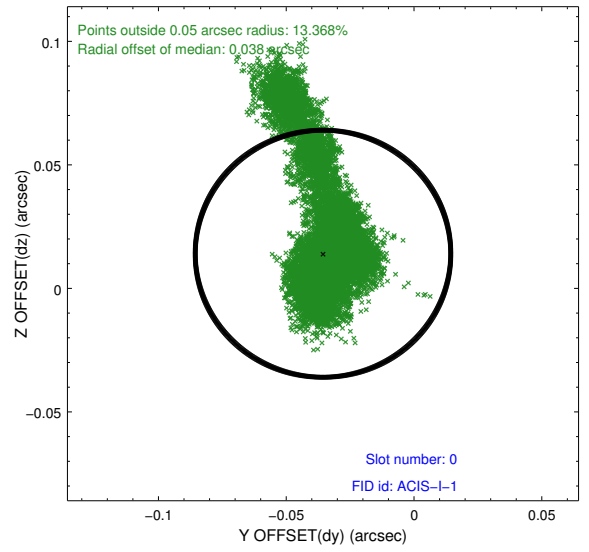
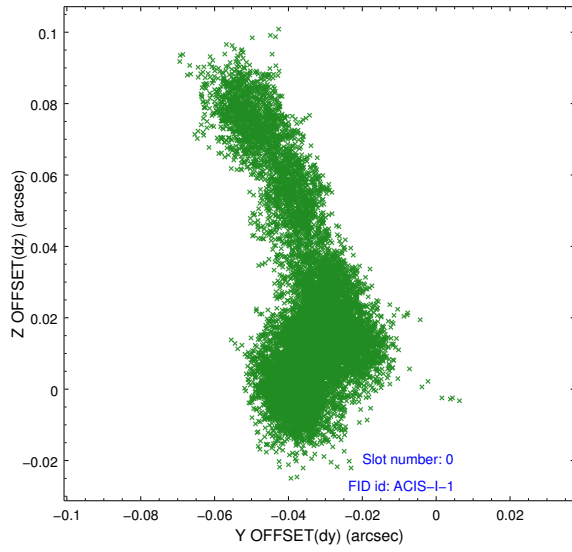


2.4.5 Slot 7

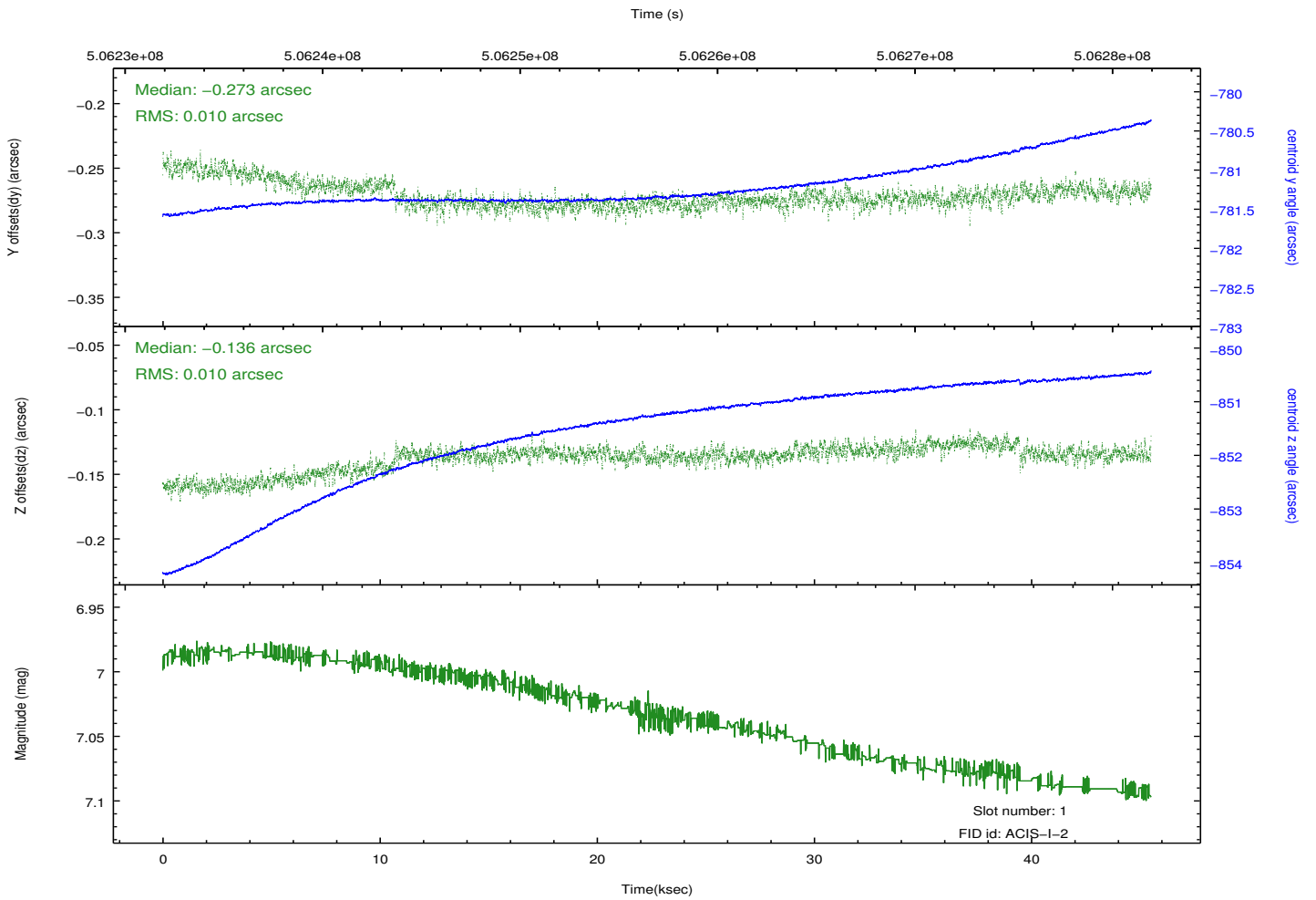
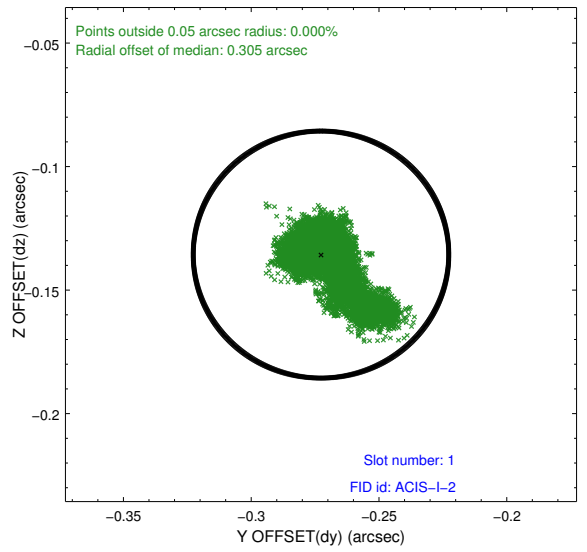
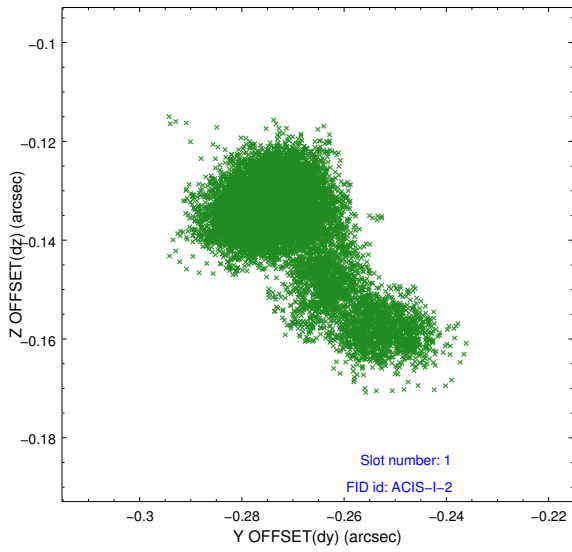


2.5 FID Slots

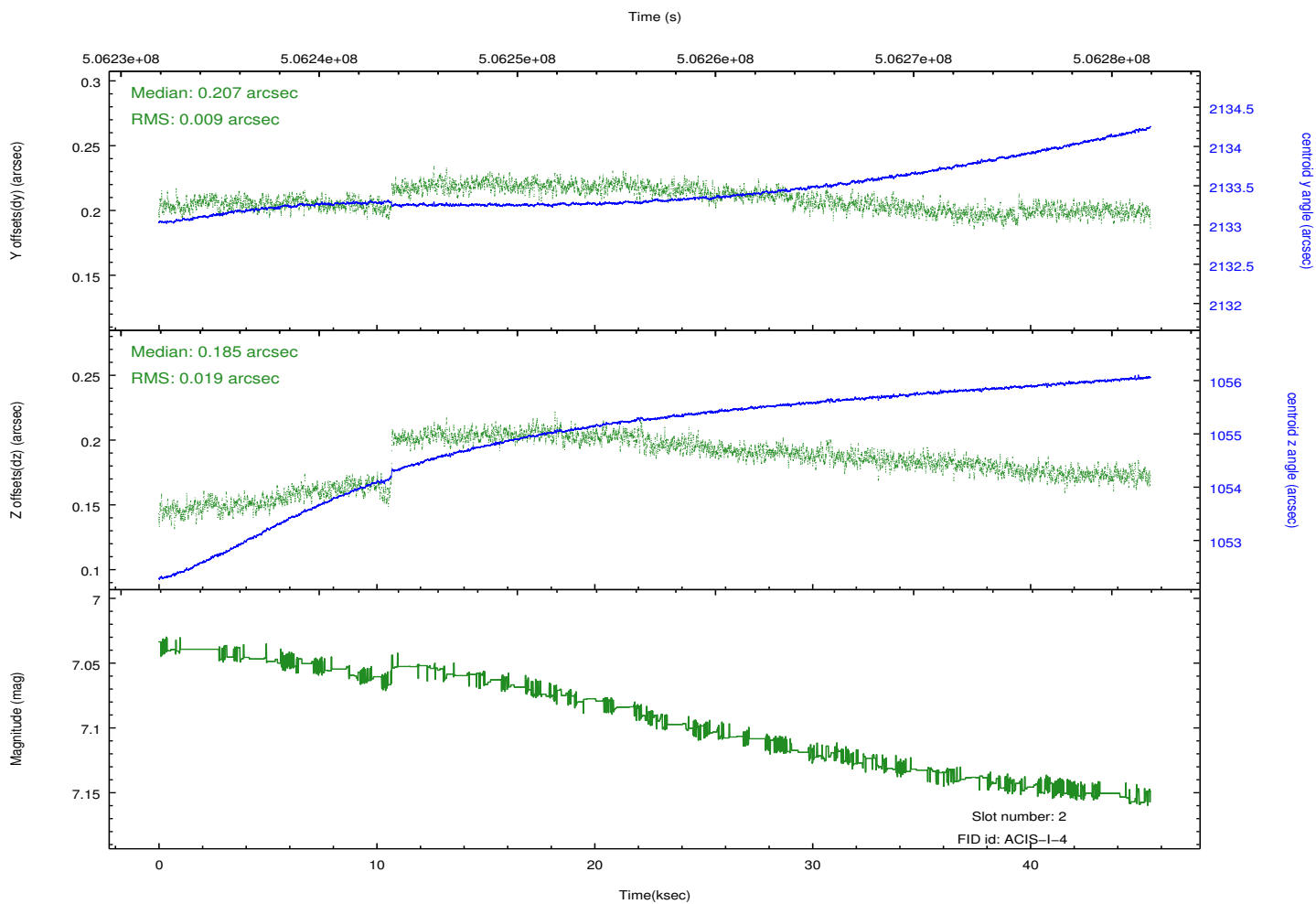
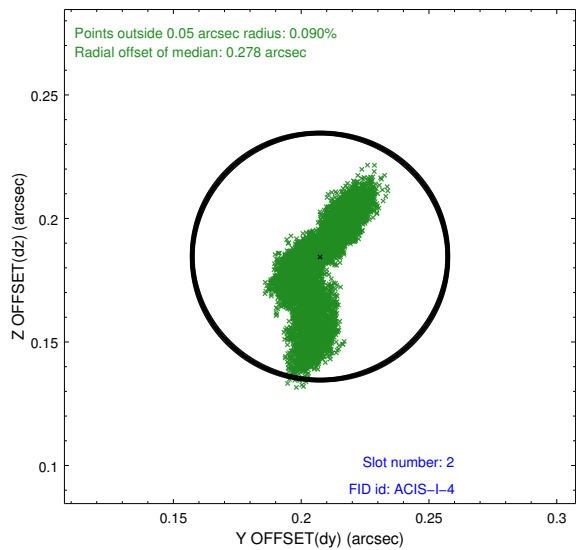
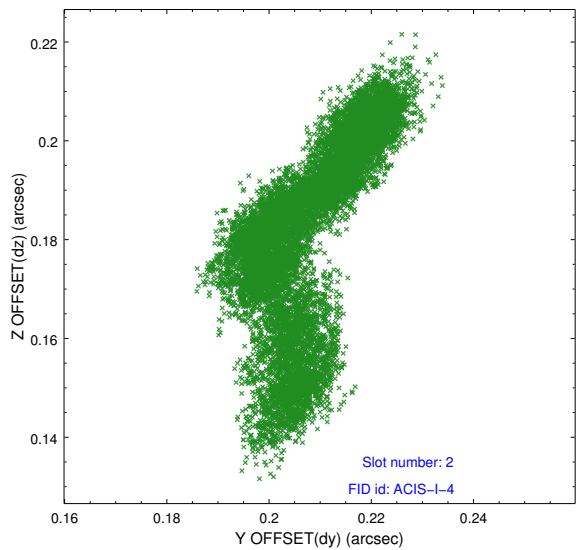
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.489359299541

A.2 Comments

Roll preference met.

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.