

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16579 - L2 Version 2
Chandra X-Ray Center

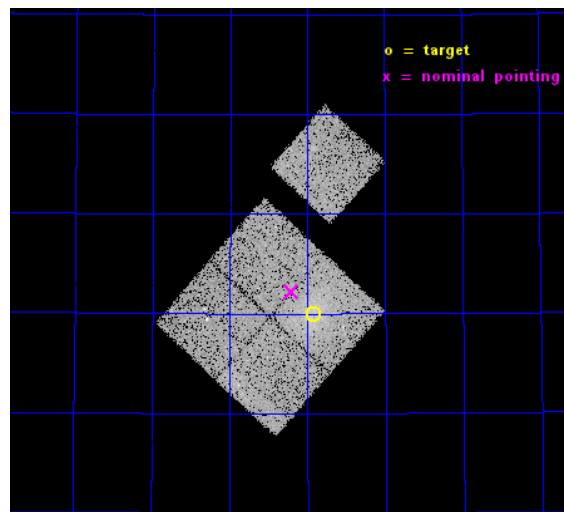
L2 Processing Date : Dec 10 2014

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1 Front

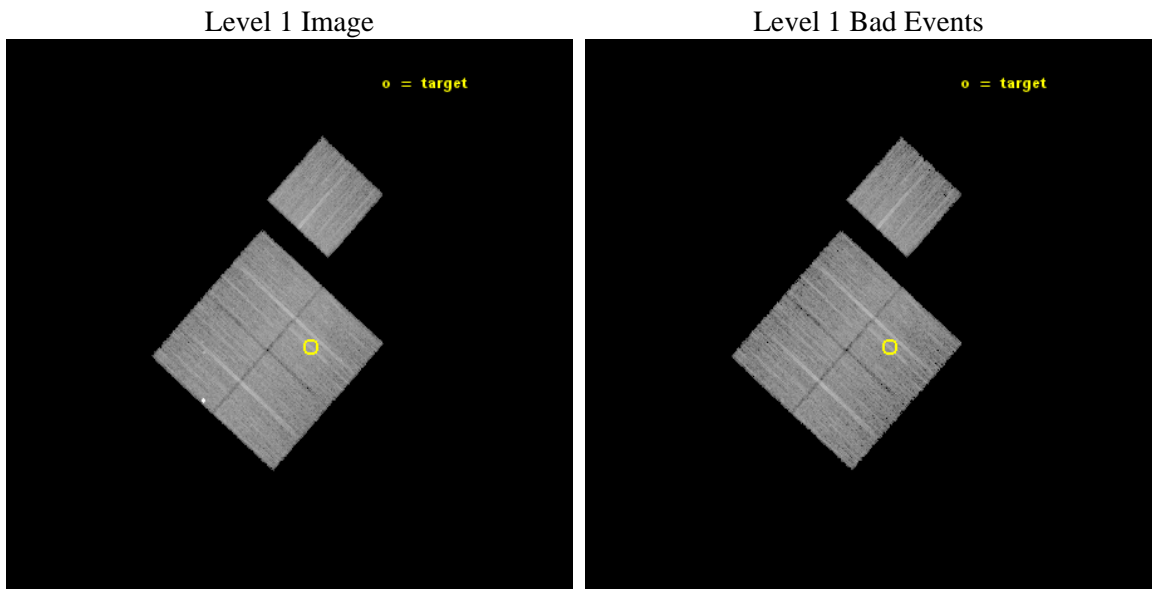
seq_num	801260	Sequence number
obs_id	16579	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G085.99+26.71	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	274.980417	Observer's specified target RA [deg]
dec_targ	57.165917	Observer's specified target Dec [deg]
ra_nom	275.05197372291	Nominal RA [deg]
dec_nom	57.204120268738	Nominal Dec [deg]
roll_nom	42.183911099032	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19573.400150537	Sum of GTIs [s]
livetime	19317.659267843	Livetime [s]
ontime0	19573.400150537	Sum of GTIs [s]
ontime1	19567.118160009	Sum of GTIs [s]
ontime2	19570.259180188	Sum of GTIs [s]
ontime3	19573.400150537	Sum of GTIs [s]
ontime6	19573.400150537	Sum of GTIs [s]
l2events	52995	Number of level 2 events



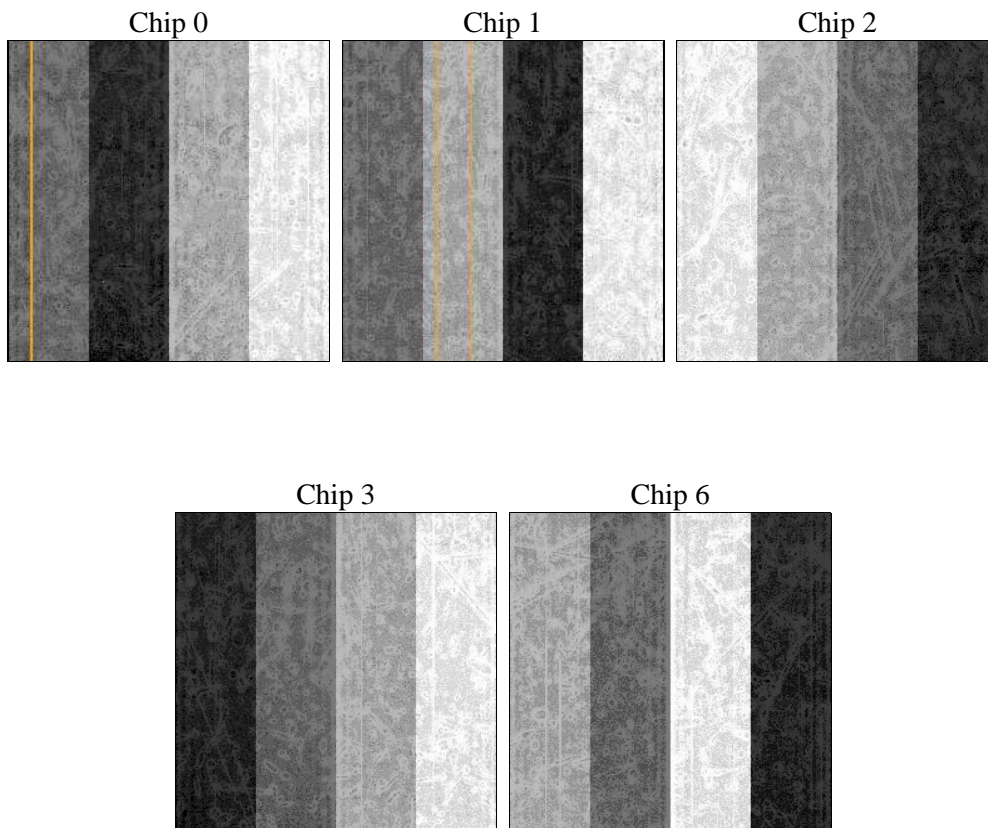
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19800.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	19573.400150537	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	19573.400150537	Sum of GTIs [s]
date	2014-12-10T06:45:07	Date and time of file creation	ontime1	19567.118160009	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	19570.259180188	Sum of GTIs [s]
			ontime3	19573.400150537	Sum of GTIs [s]
			ontime6	19573.400150537	Sum of GTIs [s]
			l1events	454608	Number of level 1 events

2.1.4 Events

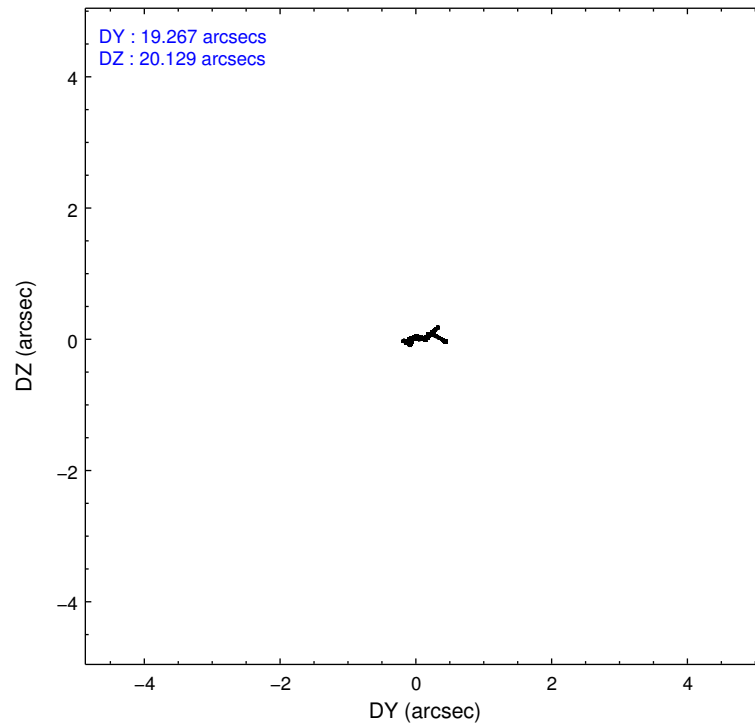
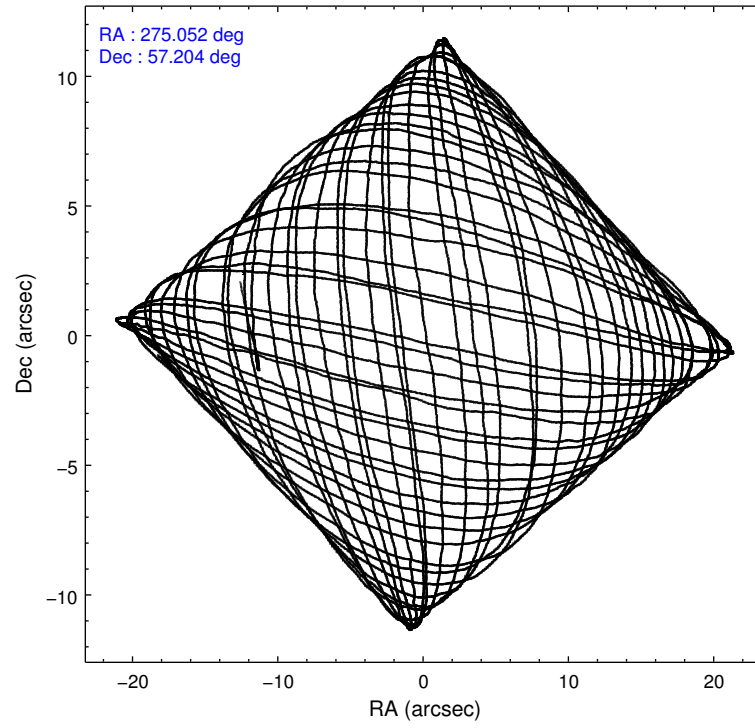
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	92013	86520	92470	92703	90902
rejected events	74668	74039	80347	77819	79760
rejected %	81%	85%	86%	83%	87%

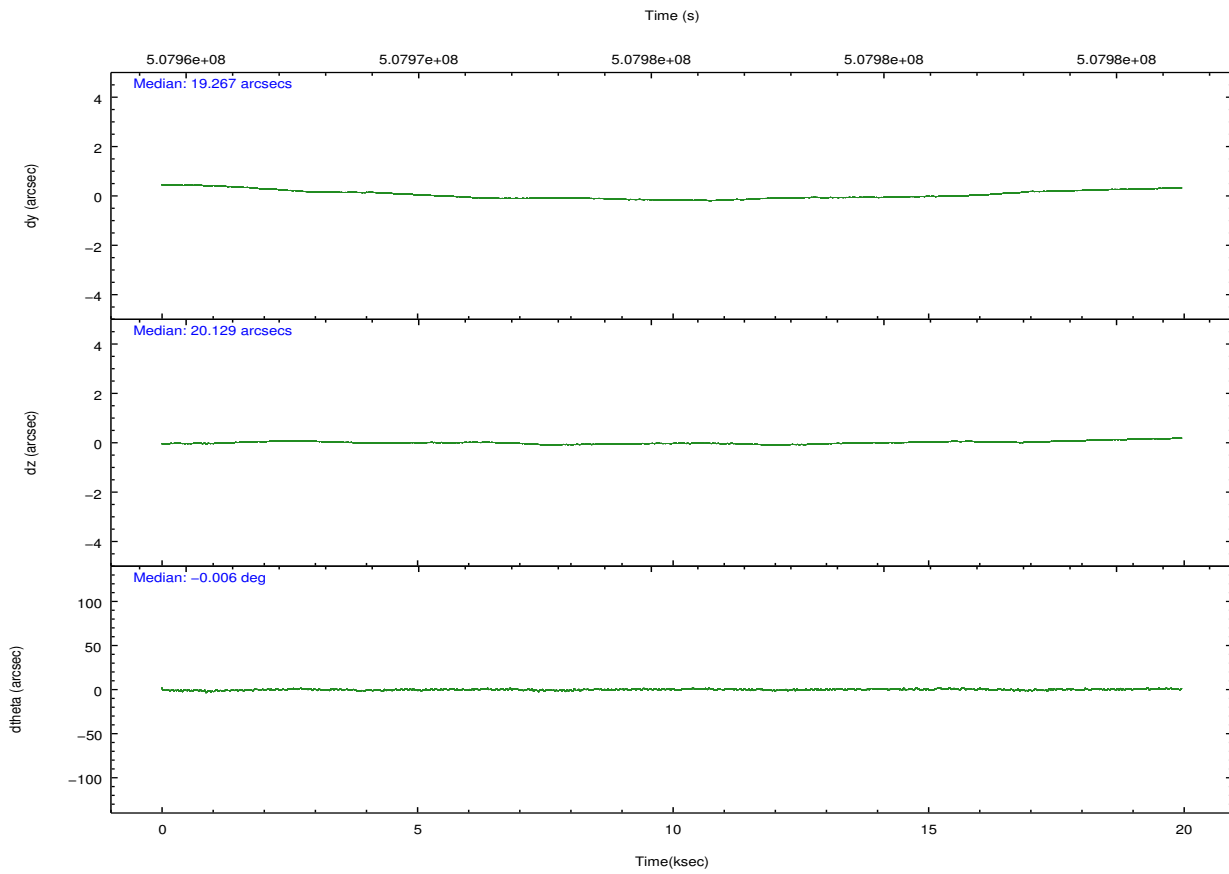
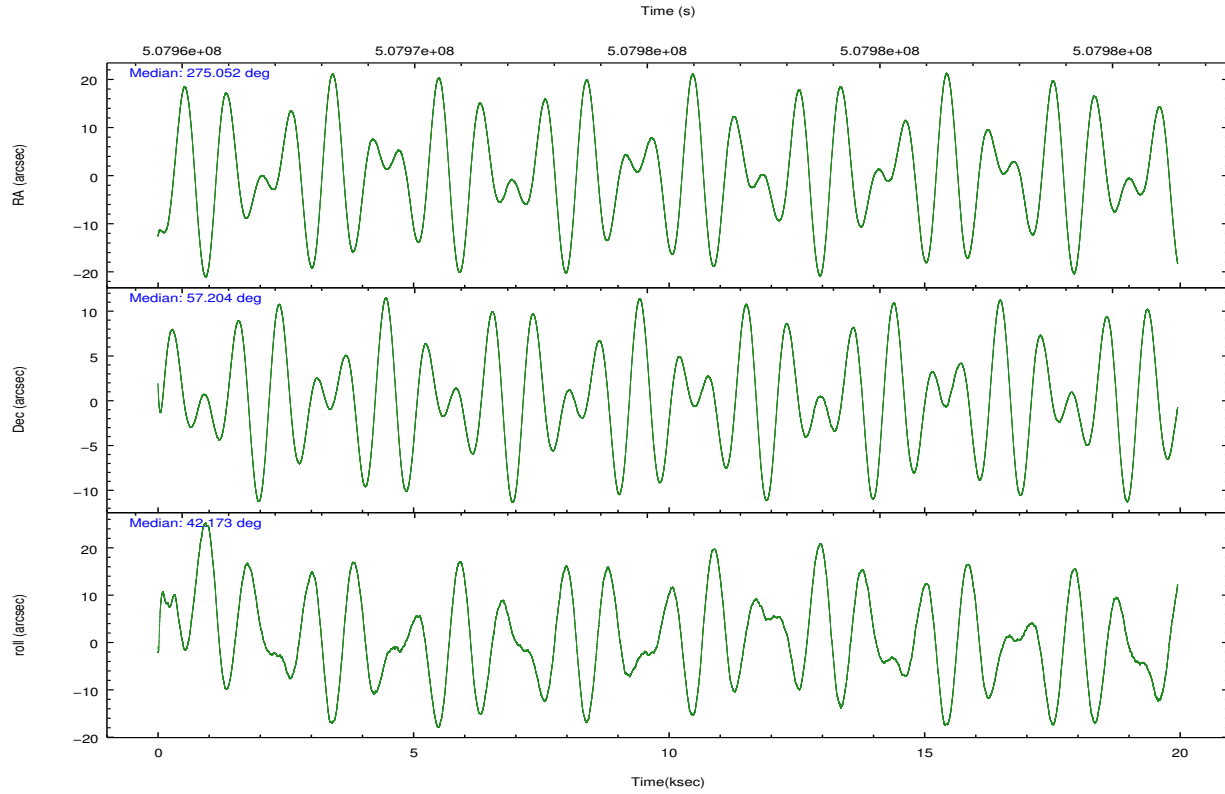
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9997	4578	4789	7246	3690
	10%	5%	5%	7%	4%
grade 1 events	66	46	78	65	36
	0%	0%	0%	0%	0%
grade 2 events	2840	2957	2926	2851	2502
	3%	3%	3%	3%	2%
grade 3 events	1111	1235	1105	1240	1175
	1%	1%	1%	1%	1%
grade 4 events	1085	1200	1173	1212	1139
	1%	1%	1%	1%	1%
grade 5 events	4418	4731	4067	4973	4857
	4%	5%	4%	5%	5%
grade 6 events	2317	2516	2134	2340	2642
	2%	2%	2%	2%	2%
grade 7 events	70179	69257	76198	72776	74861
	76%	80%	82%	78%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	275.036645	275.0519737229068	CCD I2 on	Y	Y
[deg] Pointing Dec	57.177893	57.20412026873797	CCD I3 on	Y	Y
[deg] Pointing Roll	41.988116	42.18391109903156	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	507965624.184000	507964704.61127	CCD S5 on	N	N
Observation start date	2014-02-05T05:32:37	2014-02-05T05:18:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	507985424.184000	507986289.06246	On-chip summing requested	N	N
Observation end date	2014-02-05T11:02:37	2014-02-05T11:18:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





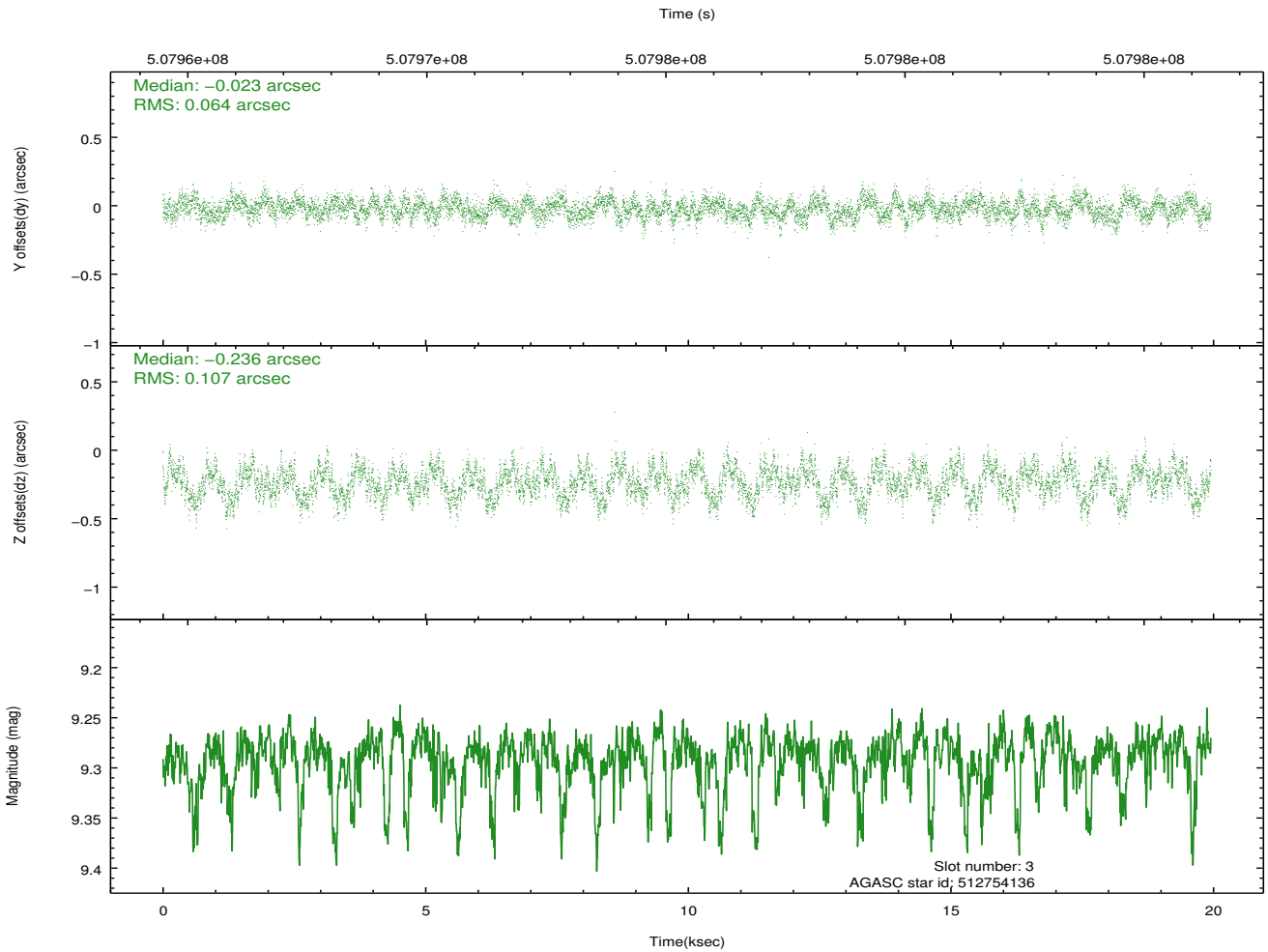
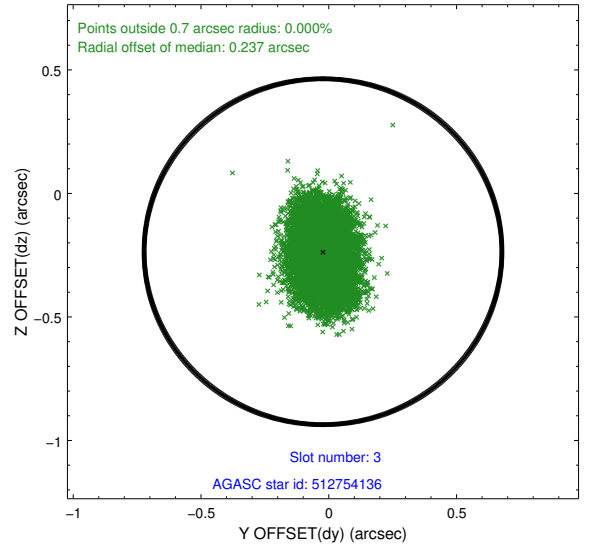
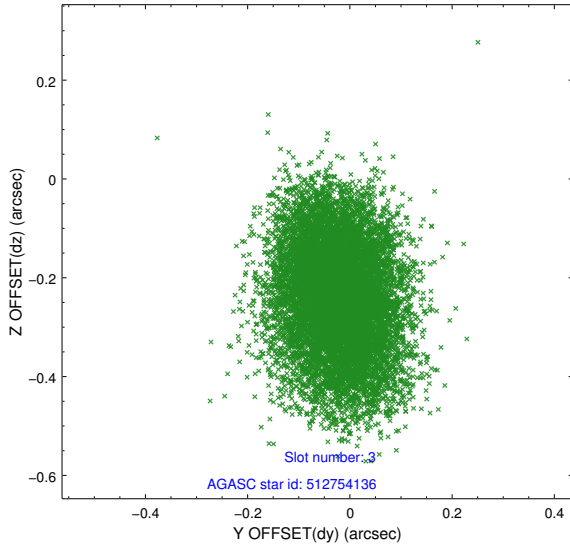
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.10	4867	0.093	-0.165	0.010	0.018	0.000000	0.000000	920.03	-1003.06
1	FID		ACIS-I-4	7.01	4867	0.118	0.094	0.007	0.012	0.000000	0.000000	2139.64	897.93
2	FID		ACIS-I-5	7.09	4867	-0.309	0.142	0.008	0.014	0.000000	0.000000	-1828.25	894.83
3	GUIDE	used	512754136	9.29	9722	-0.023	-0.236	0.132	0.217	274.638226	57.527216	270.43	1451.33
4	GUIDE	used	512755536	8.56	9730	-0.188	-0.190	0.085	0.132	274.324346	56.855002	-1814.74	79.07
5	GUIDE	used	512760416	9.18	9722	0.142	-0.080	0.141	0.225	275.133434	57.251662	318.05	71.48
6	GUIDE	used	512763696	7.94	9735	-0.082	-0.002	0.108	0.155	275.893875	57.284361	1503.51	-822.70
7	GUIDE	used	512765600	8.88	9729	0.154	0.502	0.101	0.158	275.182953	56.711103	-908.26	-1441.89

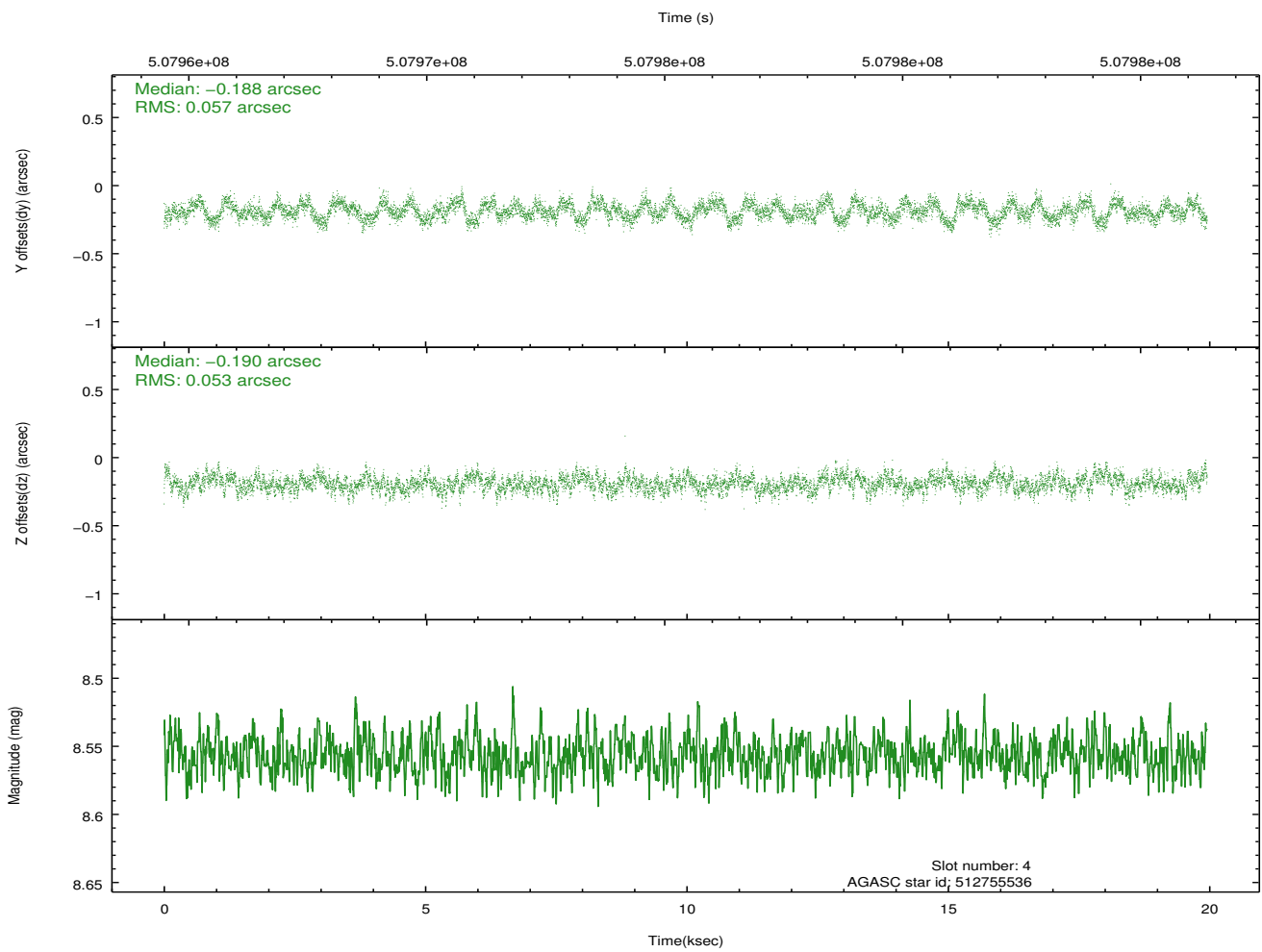
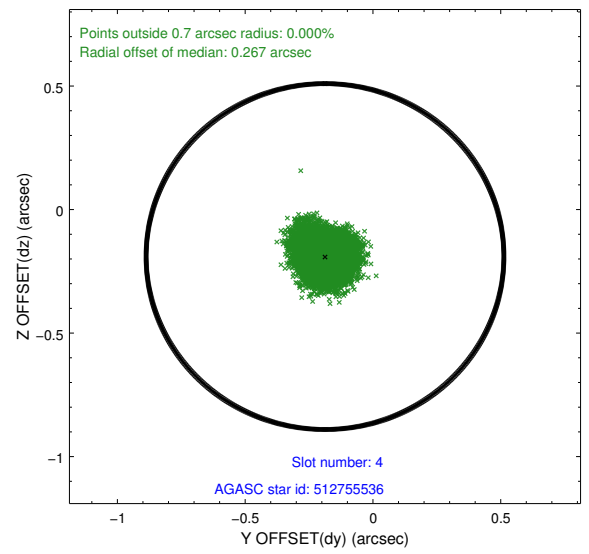
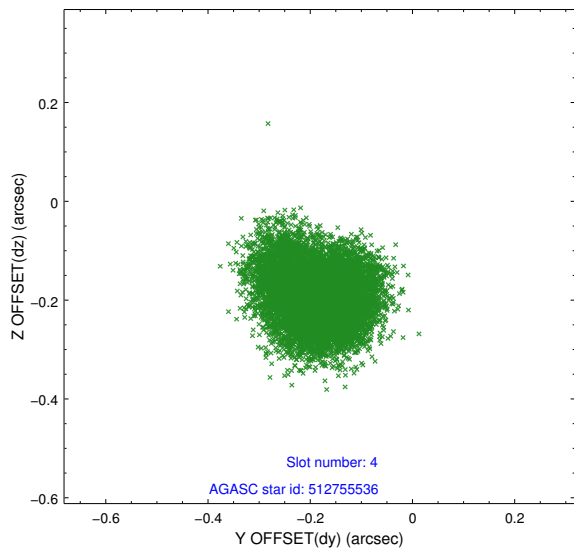
∞

2.4 Star Slots

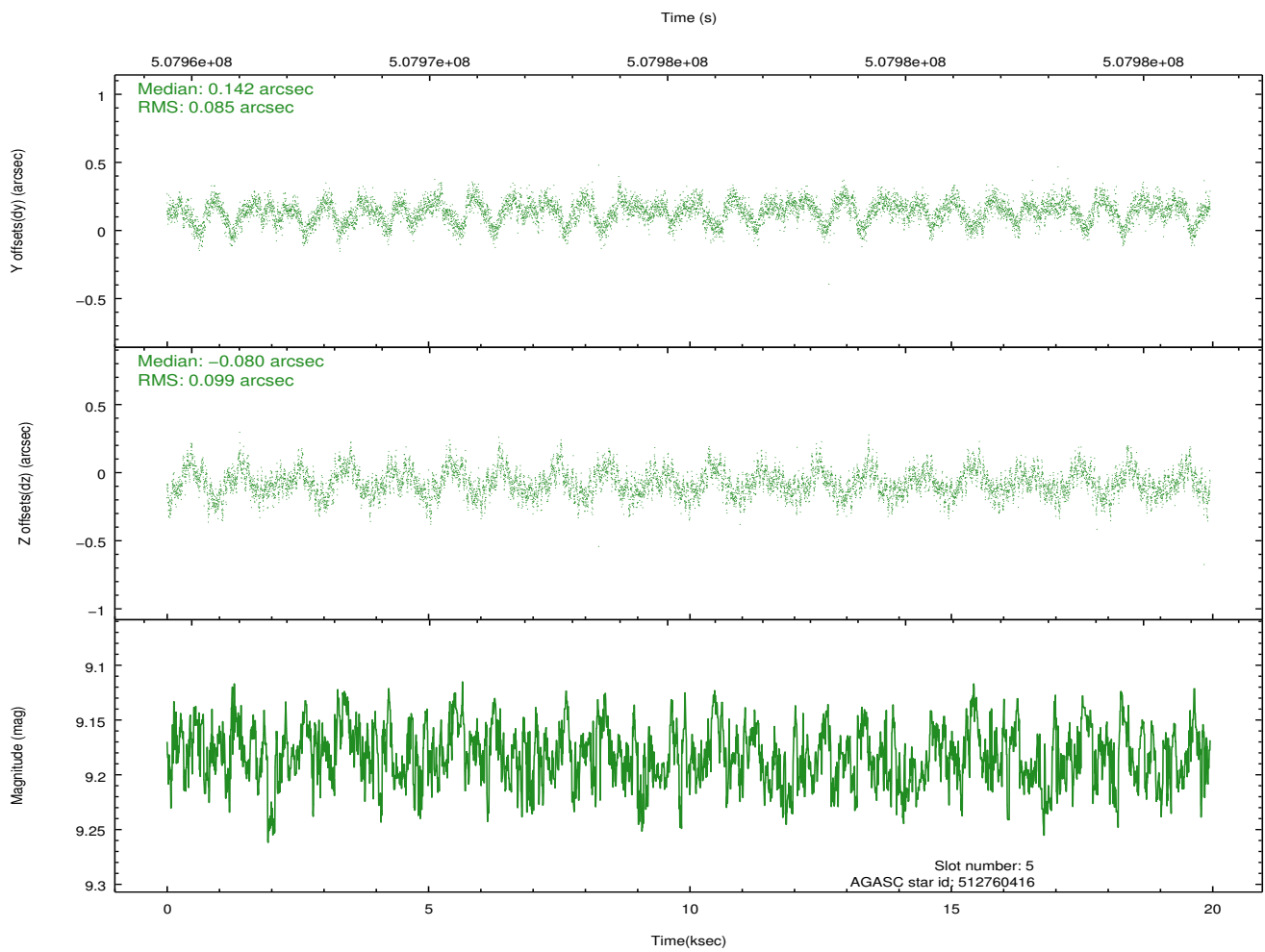
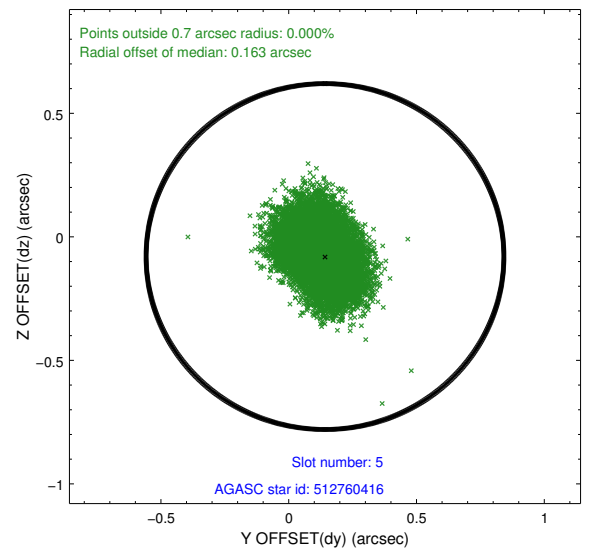
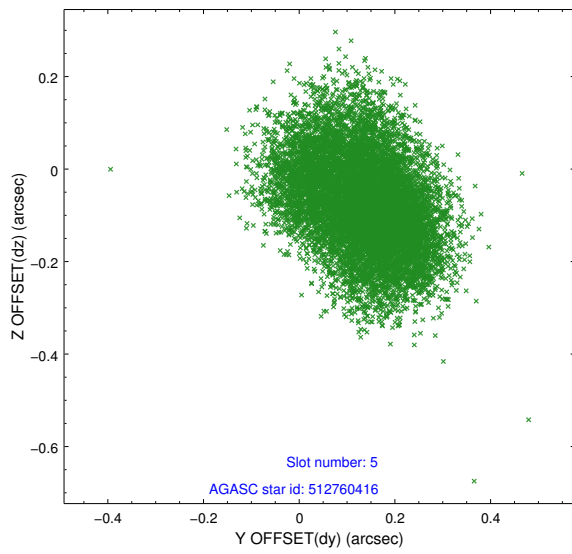
2.4.1 Slot 3



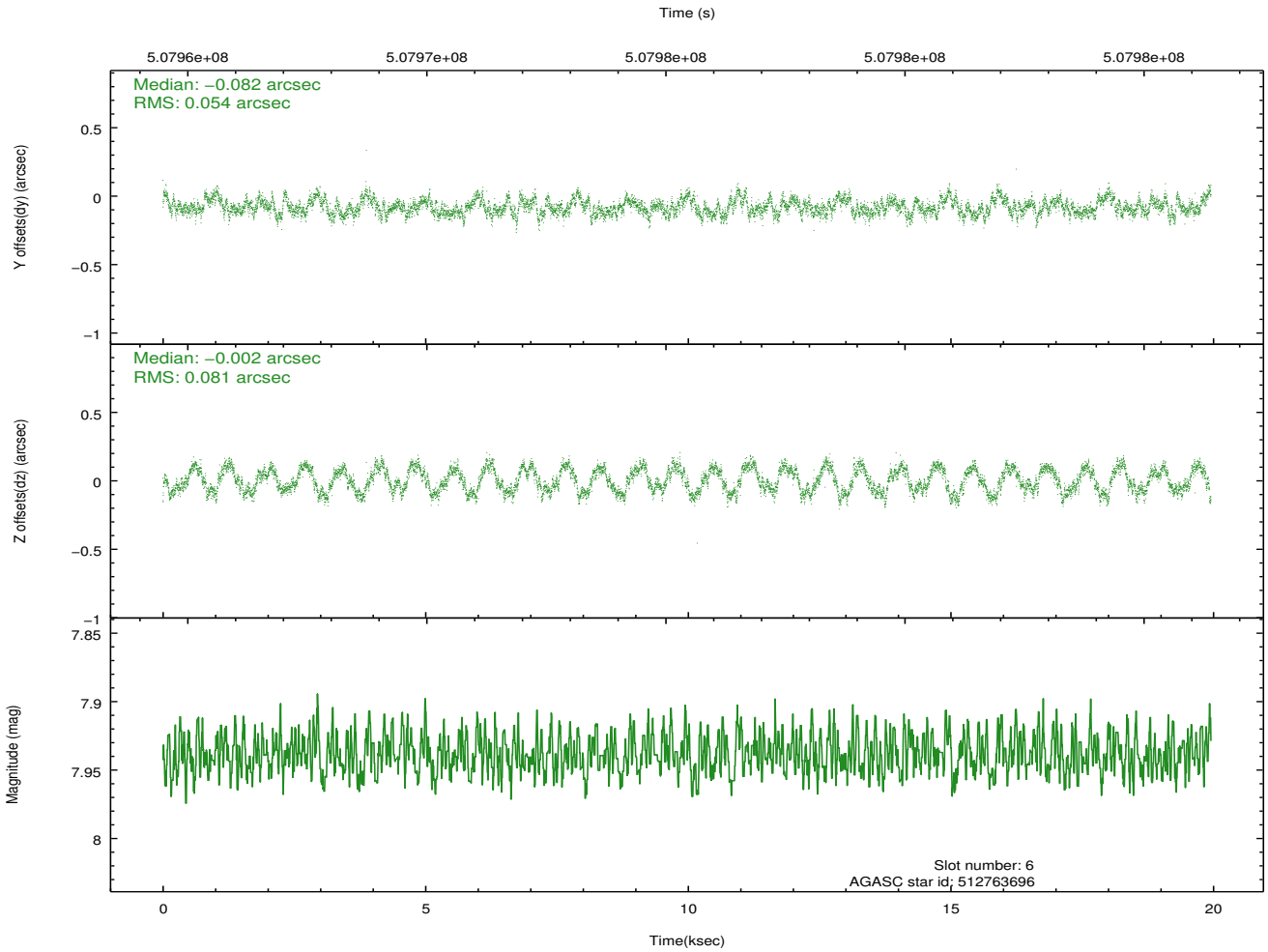
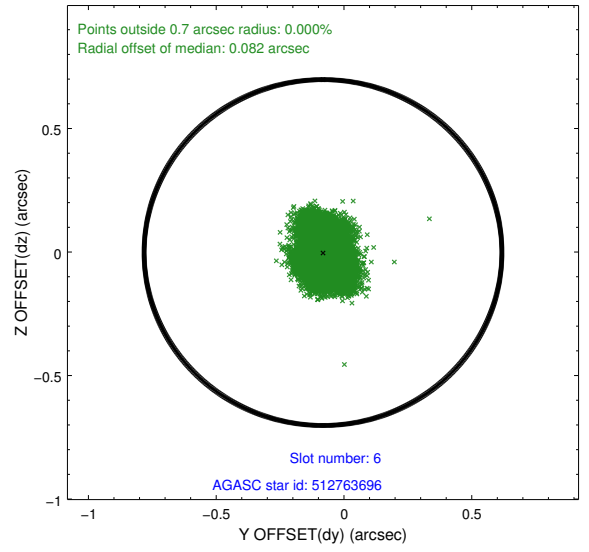
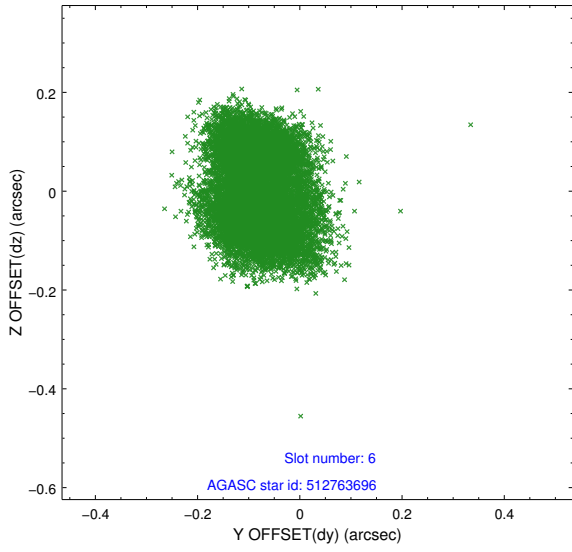
2.4.2 Slot 4



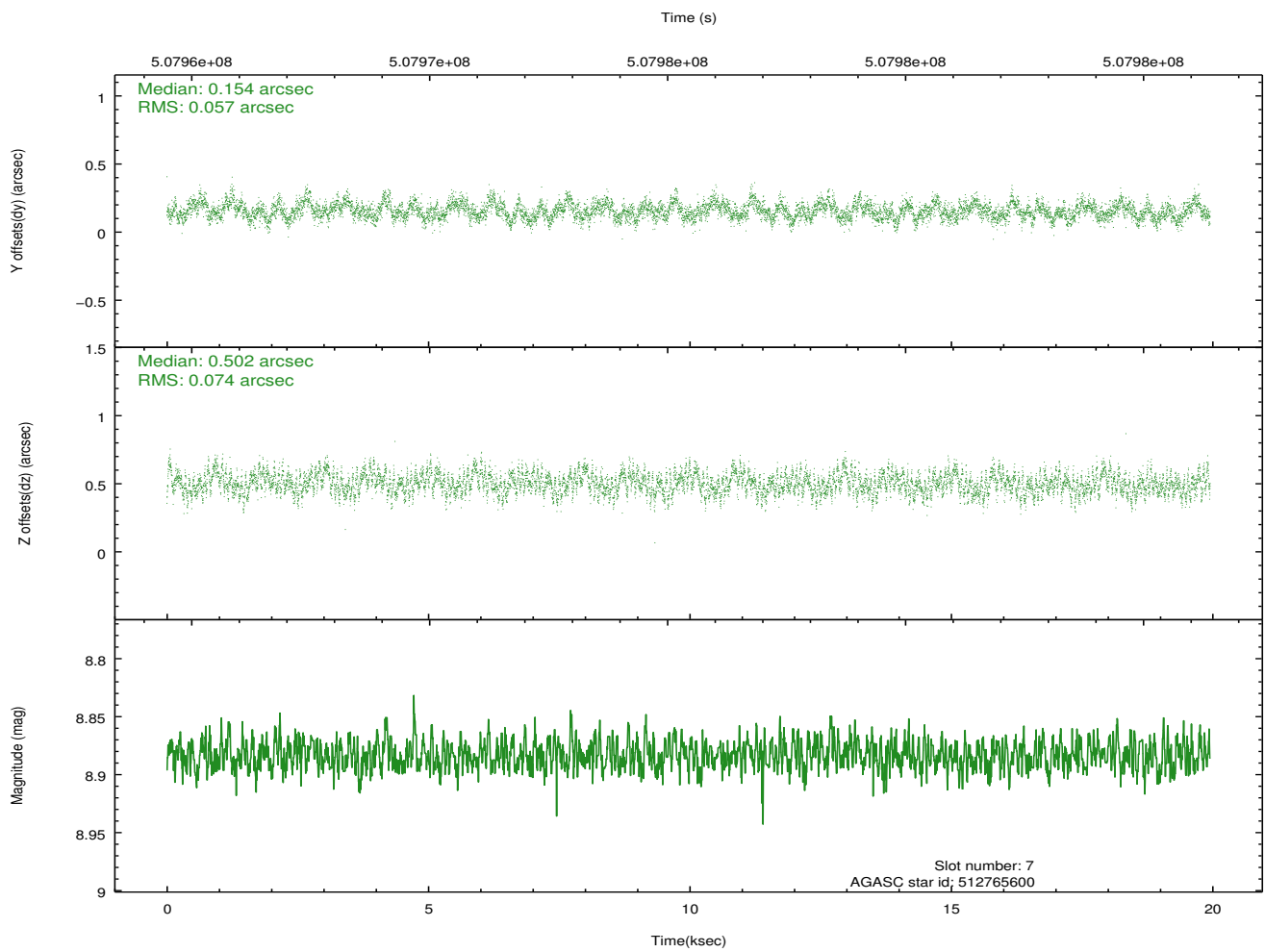
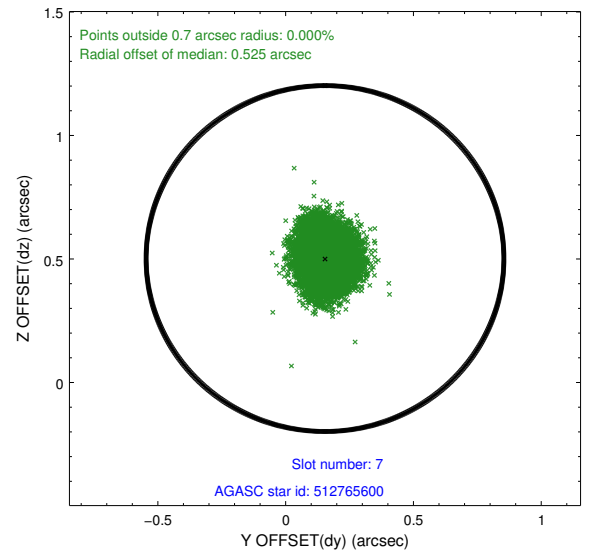
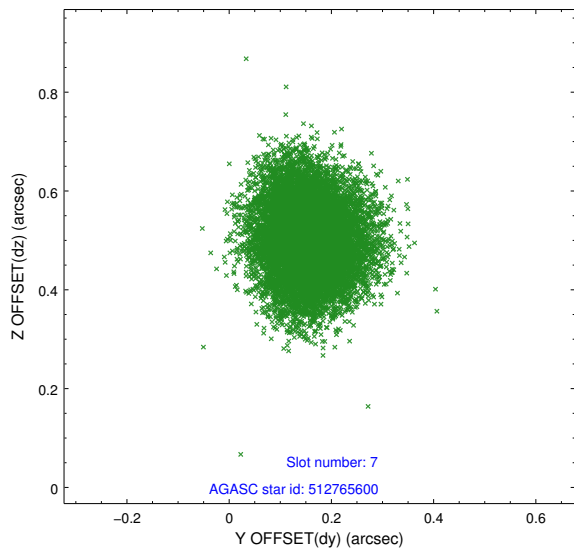
2.4.3 Slot 5



2.4.4 Slot 6

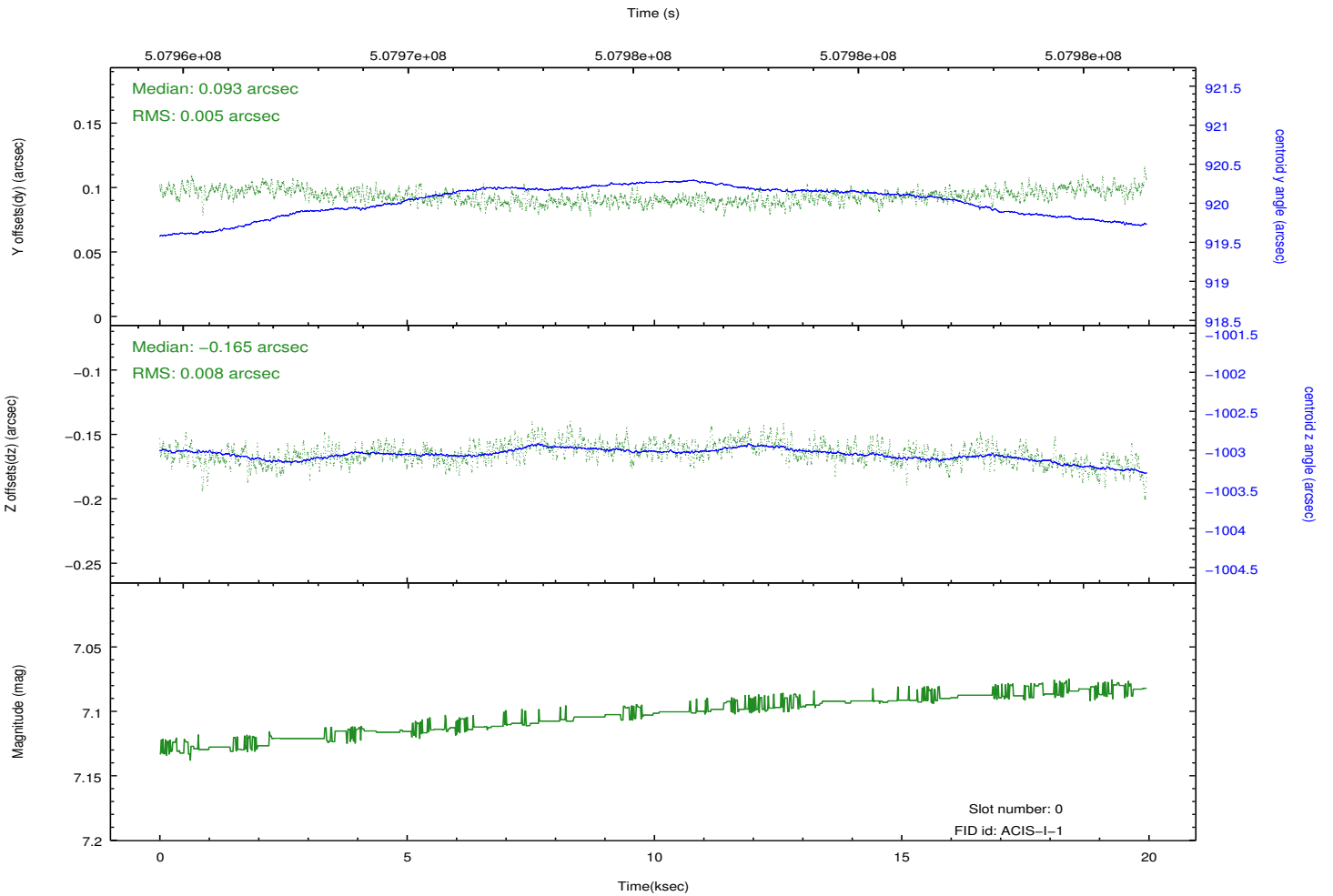
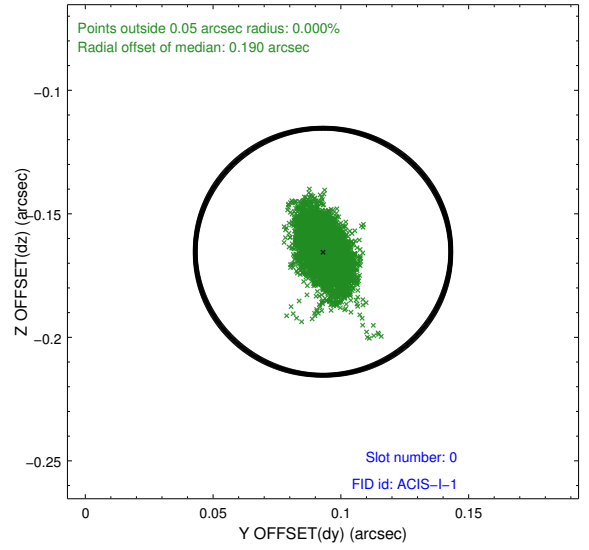
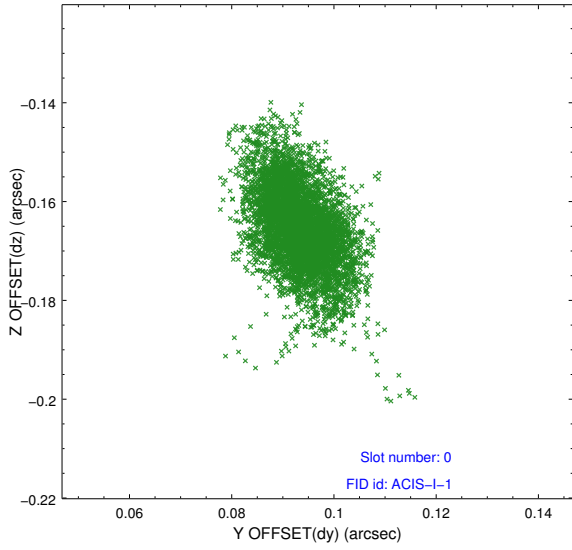


2.4.5 Slot 7

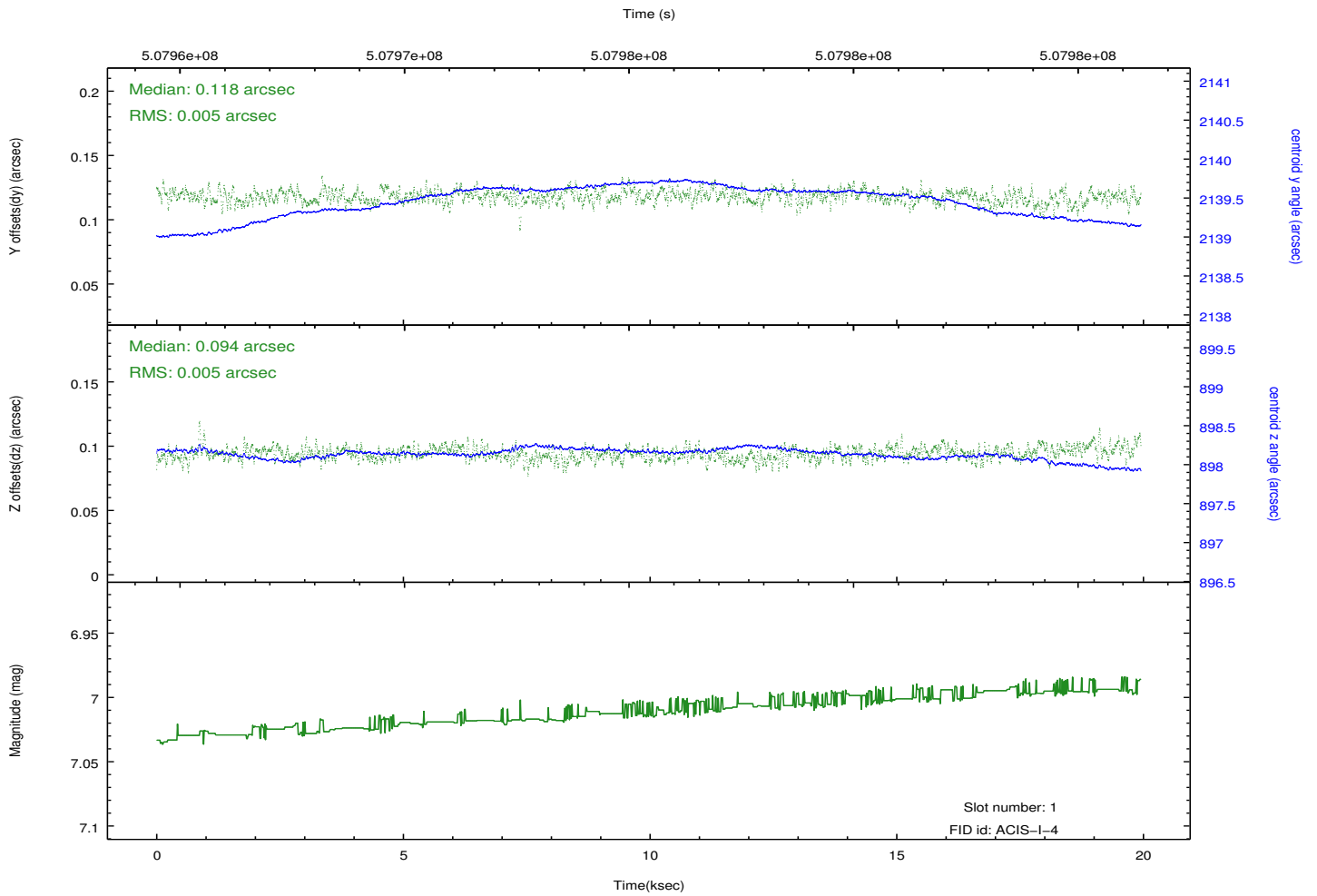
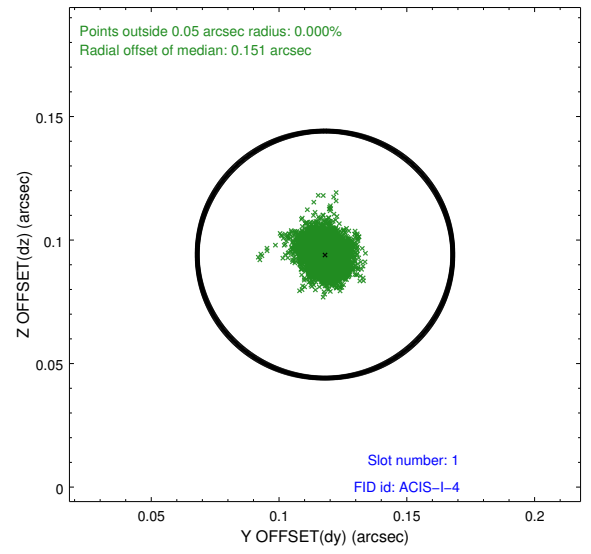
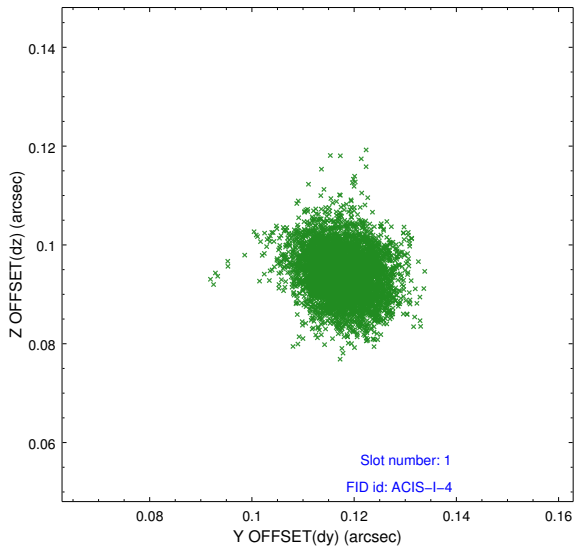


2.5 FID Slots

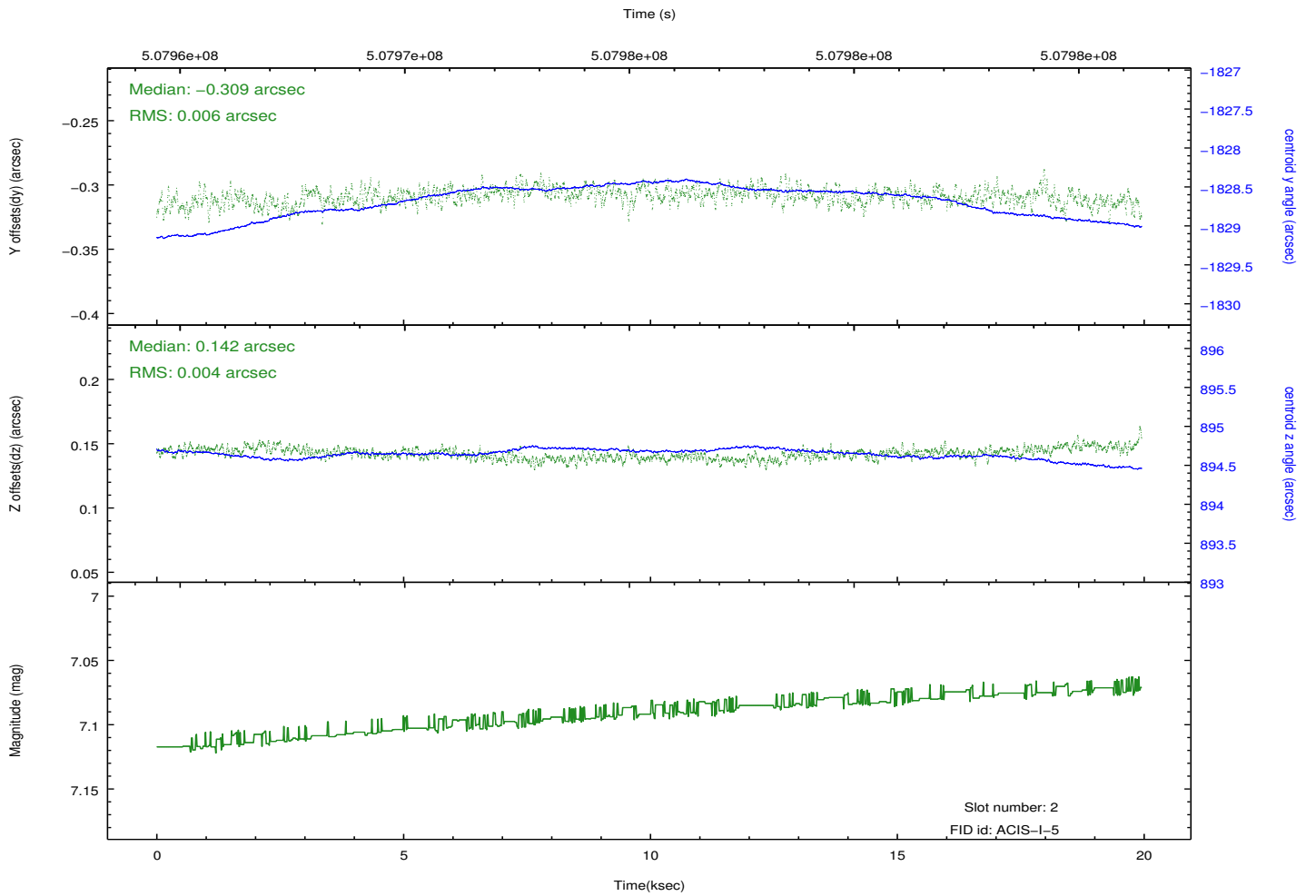
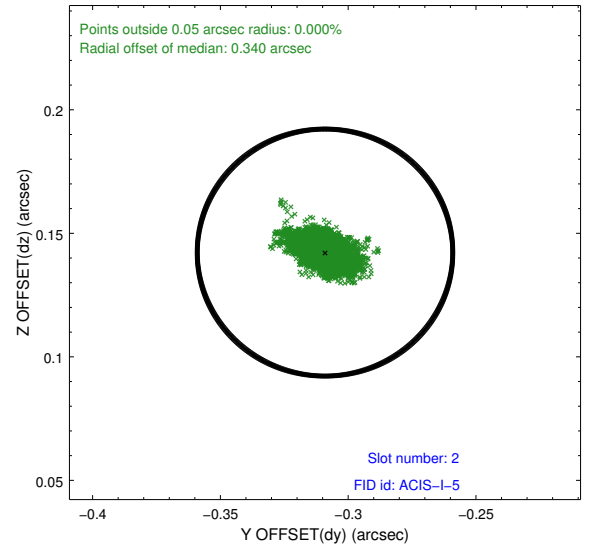
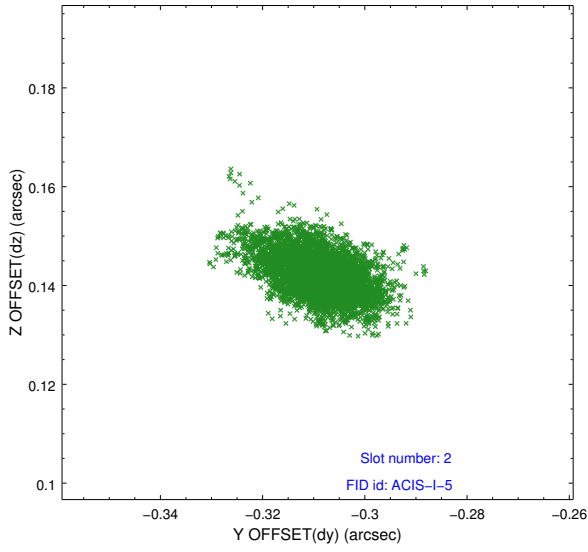
2.5.1 Slot 0



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)	2014.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.573400150537

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.