

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 15391 - L2 Version 2
Chandra X-Ray Center

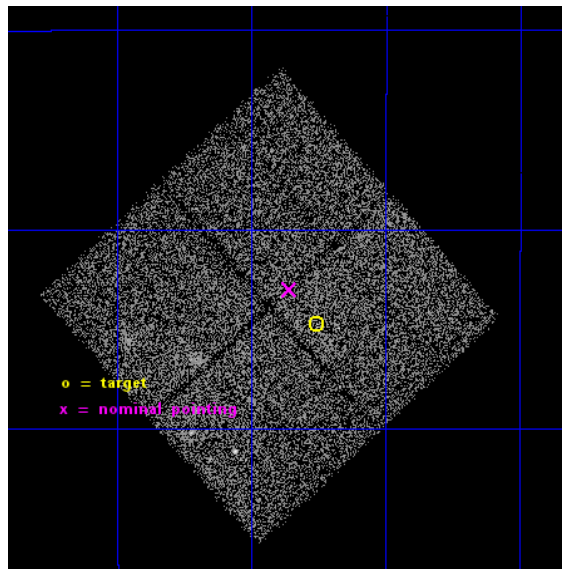
L2 Processing Date : Dec 6 2014

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1 Front

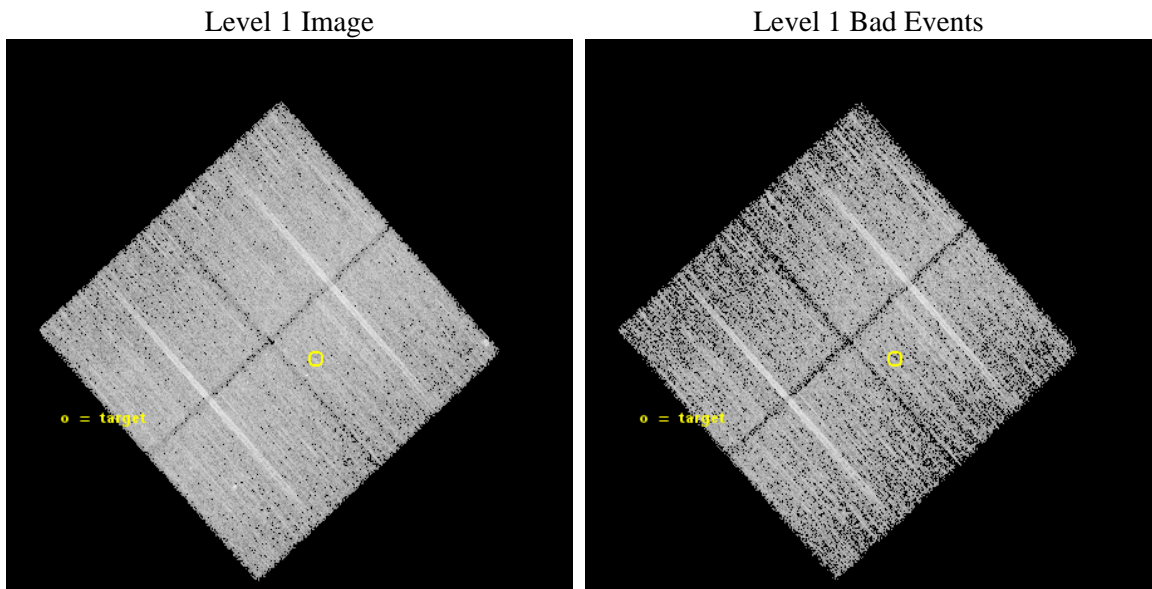
seq_num	601097	Sequence number
obs_id	15391	Observation id
title	Search for evidence of dwarf galaxy collisions in X-rays	Proposal
observer	Professor Gordon Garmire	Principal investigator
object	ngc1232	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	47.439583	Observer's specified target RA [deg]
dec_targ	-20.579444	Observer's specified target Dec [deg]
ra_nom	47.464849099882	Nominal RA [deg]
dec_nom	-20.550015338246	Nominal Dec [deg]
roll_nom	47.717549269439	Nominal Roll [deg]
revision	2	Processing version of data
ontime	21557.400165796	Sum of GTIs [s]
livetime	21275.736862303	Livetime [s]
ontime0	21557.400165796	Sum of GTIs [s]
ontime1	21554.259105384	Sum of GTIs [s]
ontime2	21557.400165796	Sum of GTIs [s]
ontime3	21557.400165796	Sum of GTIs [s]
l2events	38572	Number of level 2 events



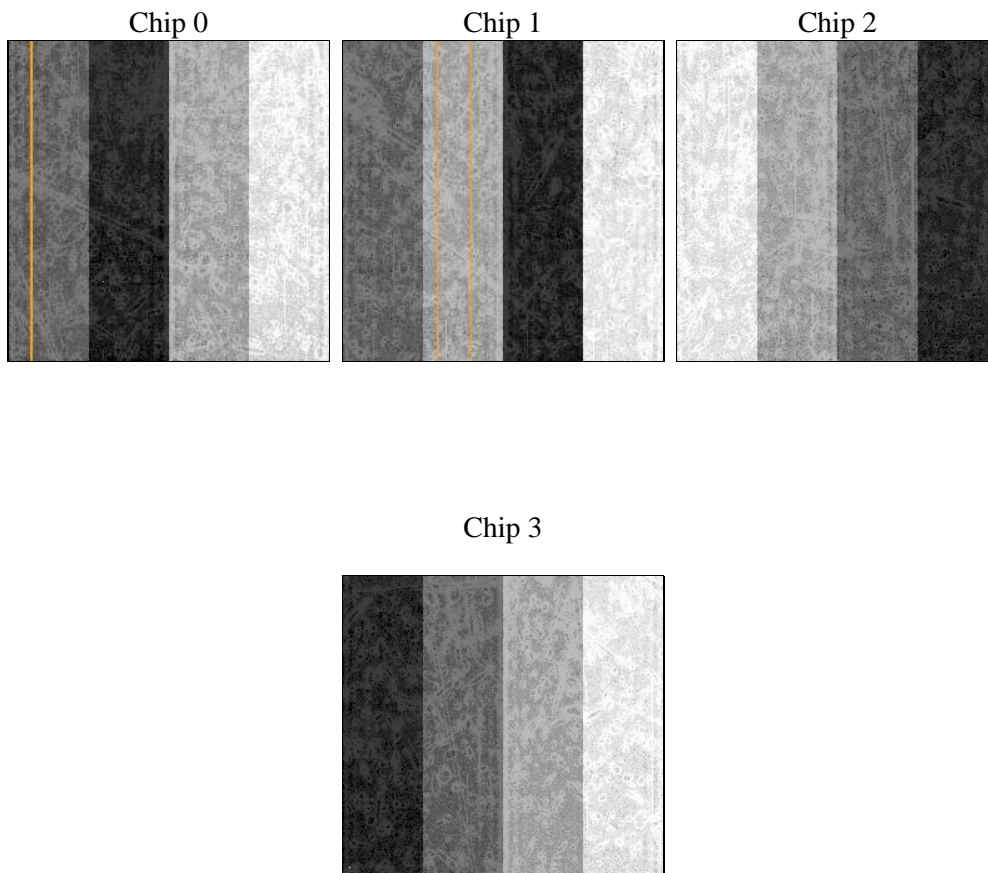
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	21468.632000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	21557.400165796	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	21557.400165796	Sum of GTIs [s]
date	2014-12-07T02:06:24	Date and time of file creation	ontime1	21554.259105384	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	21557.400165796	Sum of GTIs [s]
			ontime3	21557.400165796	Sum of GTIs [s]
			l1events	383600	Number of level 1 events

2.1.4 Events

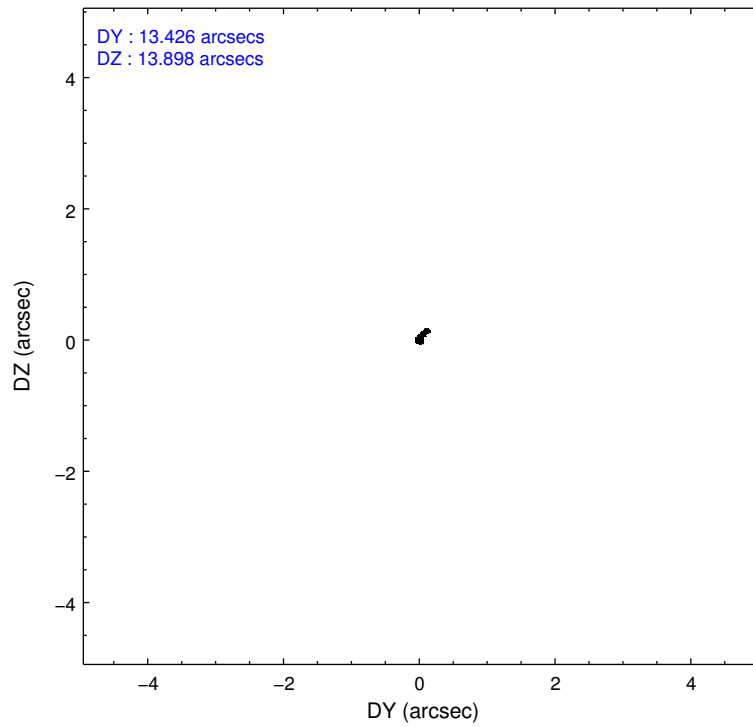
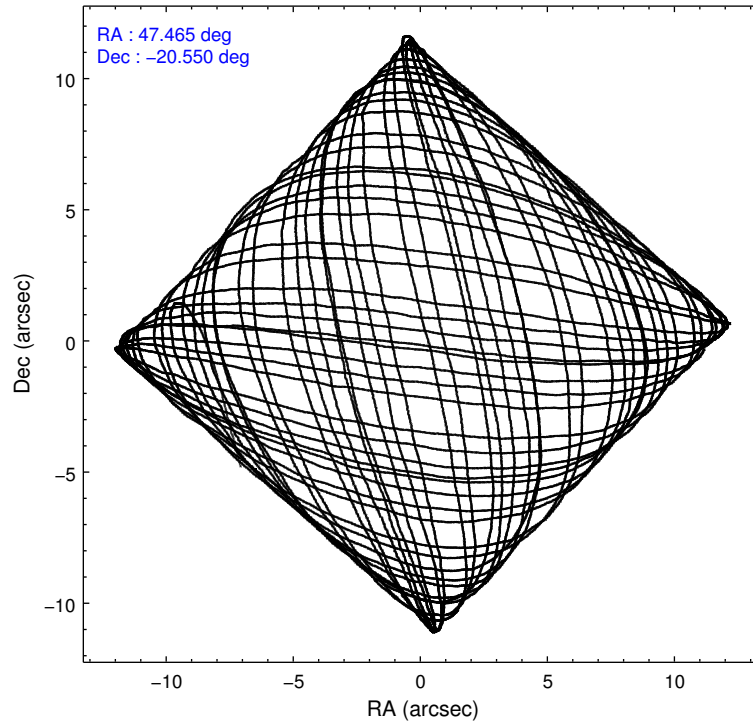
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	90091	95134	99817	98558
rejected events	78603	82641	88894	87087
rejected %	87%	86%	89%	88%

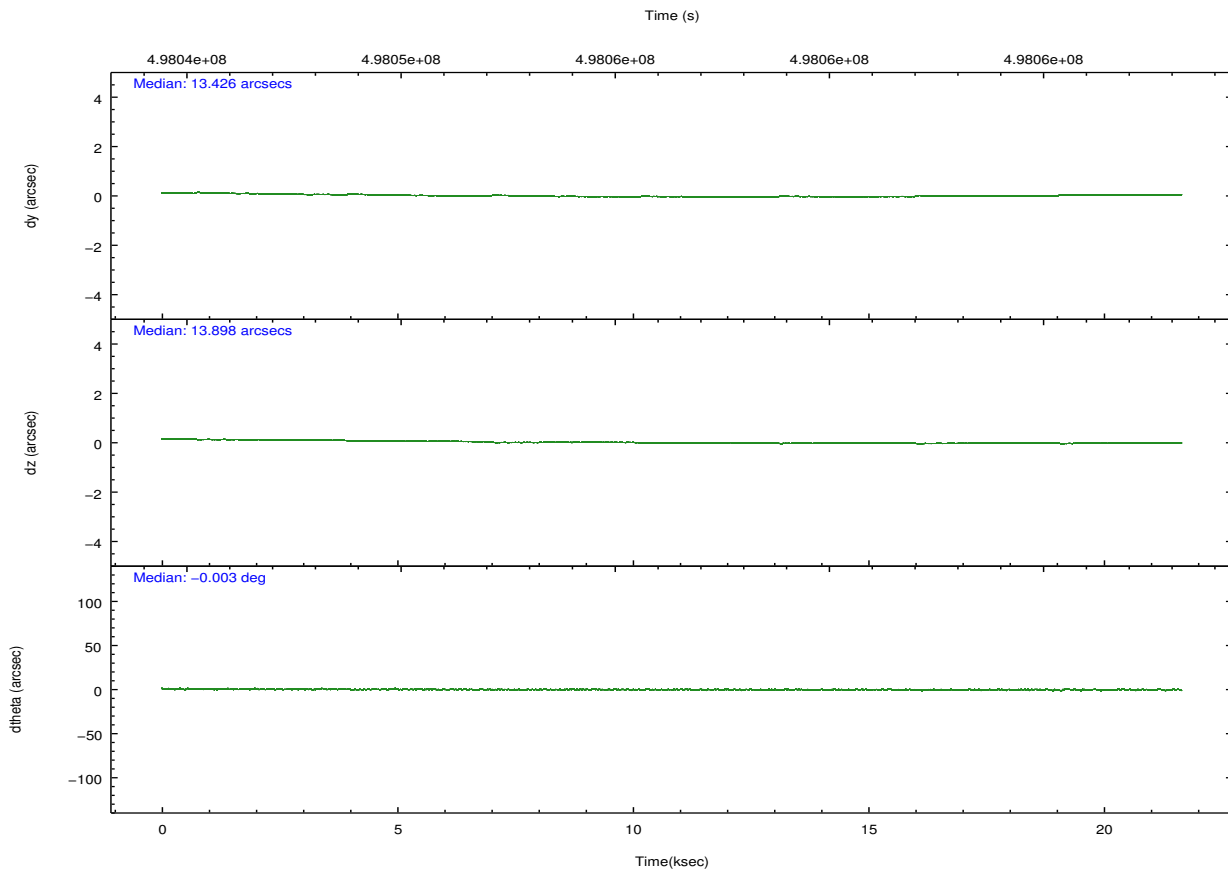
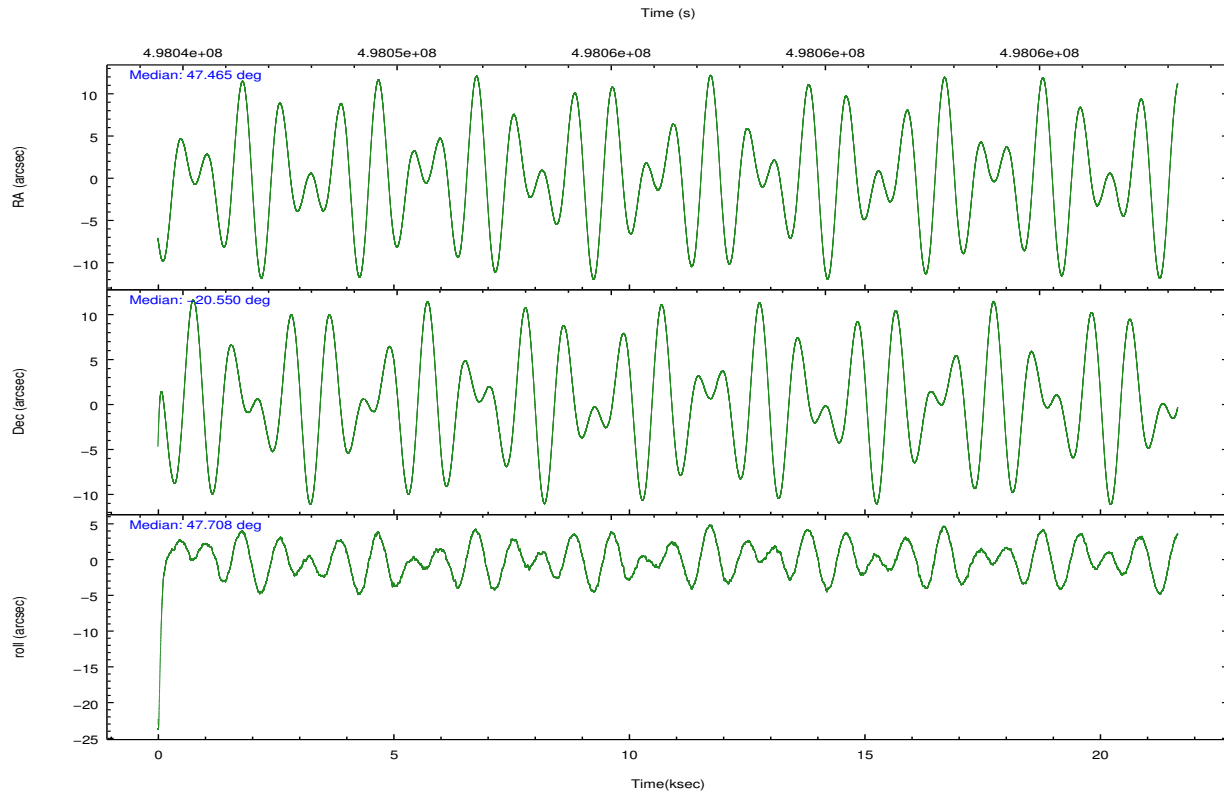
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	4234	4410	4050	4573
	4%	4%	4%	4%
grade 1 events	53	48	59	50
	0%	0%	0%	0%
grade 2 events	2733	2868	2548	2388
	3%	3%	2%	2%
grade 3 events	1123	1250	1112	1162
	1%	1%	1%	1%
grade 4 events	1107	1237	1134	1163
	1%	1%	1%	1%
grade 5 events	4054	4070	3701	4398
	4%	4%	3%	4%
grade 6 events	2293	2733	2092	2186
	2%	2%	2%	2%
grade 7 events	74494	78518	85121	82638
	82%	82%	85%	83%

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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	47.458740	47.46484909988193	CCD I2 on	Y	Y
[deg] Pointing Dec	-20.576892	-20.55001533824558	CCD I3 on	Y	Y
[deg] Pointing Roll	47.506725	47.71754926943932	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	N
[mm] SIM translation stage pos	-231.592463	-231.5960967419932	CCD S3 on	O2	N
[mm] SIM translation stage offset	-2	-1.996356260936523	CCD S4 on	N	N
[s] Observation start time (MET)	498045674.184000	498044120.61703	CCD S5 on	N	N
Observation start date	2013-10-13T10:00:07	2013-10-13T09:35:20	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	498067142.184000	498067382.4808	On-chip summing requested	N	N
Observation end date	2013-10-13T15:57:55	2013-10-13T16:03:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





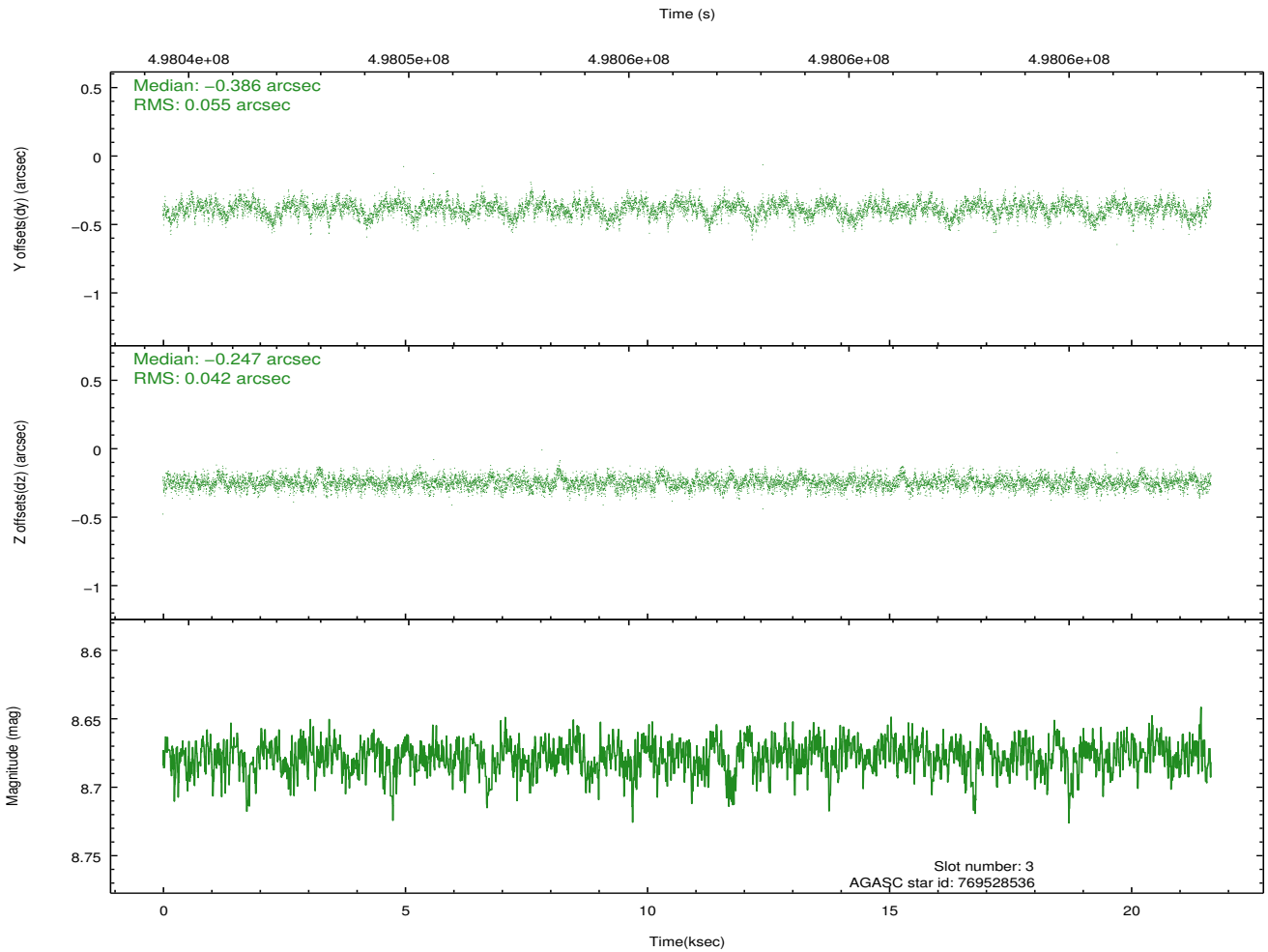
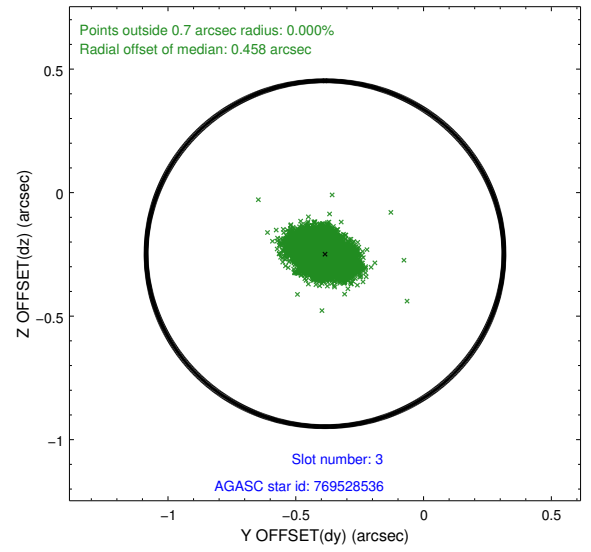
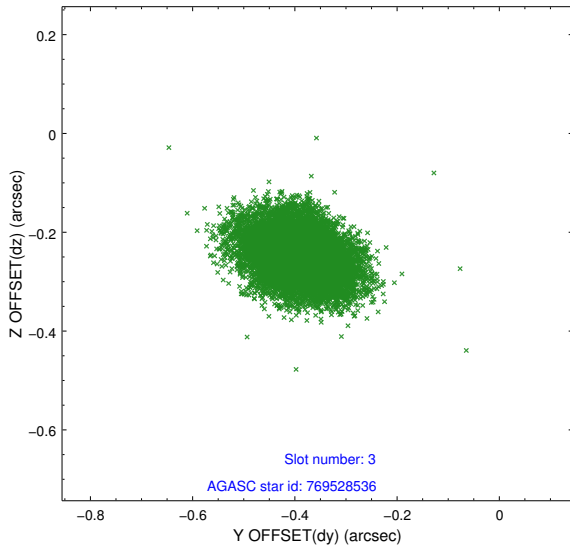
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.24	5281	0.096	-0.071	0.007	0.013	0.000000	0.000000	926.14	-878.45
1	FID		ACIS-I-5	7.24	5281	-0.285	0.073	0.006	0.010	0.000000	0.000000	-1822.30	1019.03
2	FID		ACIS-I-6	7.23	5281	0.098	0.070	0.007	0.012	0.000000	0.000000	391.46	1663.77
3	GUIDE	used	769528536	8.68	10560	-0.386	-0.247	0.073	0.121	46.820282	-20.648792	-1647.11	1407.61
4	GUIDE	used	769528560	8.51	10560	0.047	0.132	0.070	0.115	47.066460	-20.416749	-469.89	1364.37
5	GUIDE	used	769529248	7.53	10561	0.423	-0.637	0.066	0.111	47.673143	-20.111513	1725.25	596.66
6	GUIDE	used	770451224	7.78	10560	-0.128	0.443	0.057	0.092	48.005011	-20.791582	670.50	-1879.30
7	GUIDE	used	770451544	7.55	10560	0.046	0.306	0.069	0.108	48.064077	-20.619593	1262.40	-1610.09

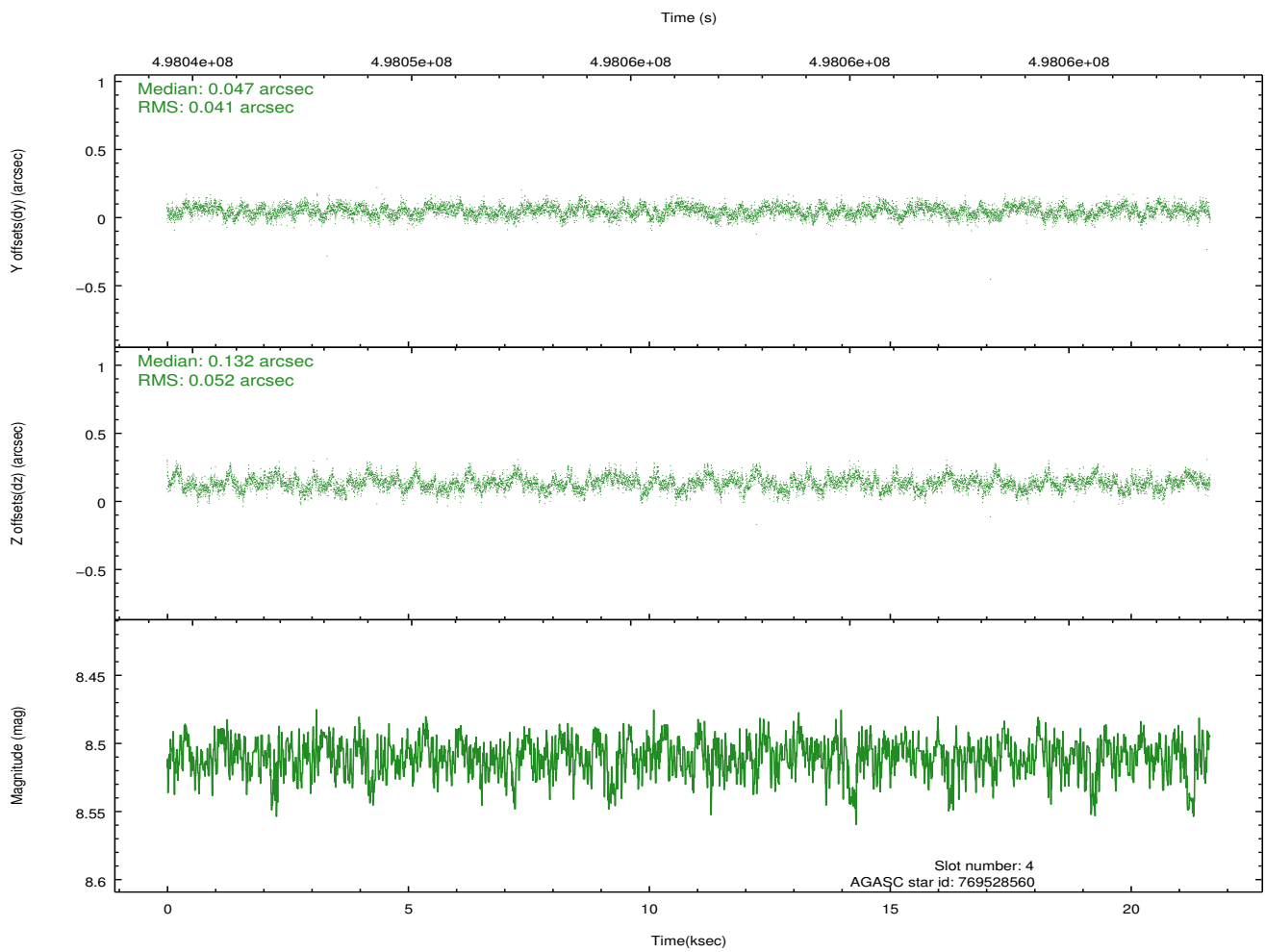
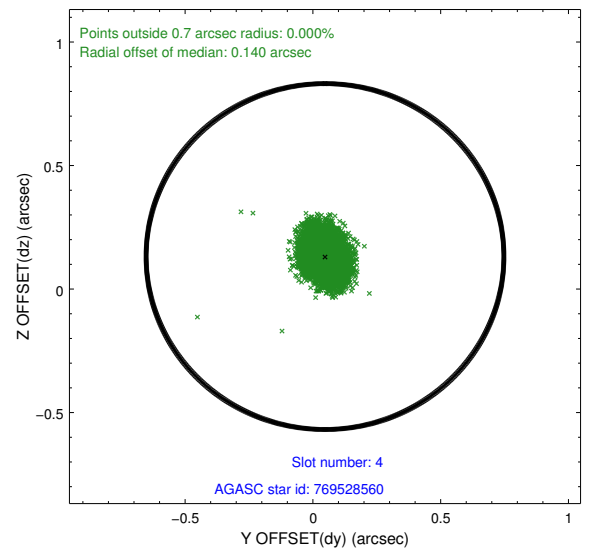
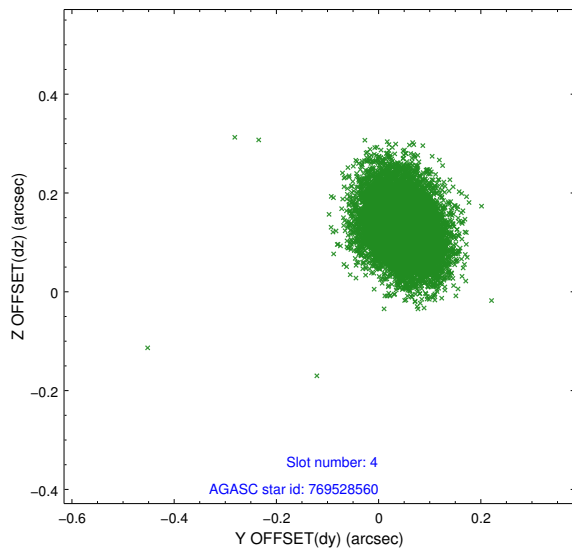
∞

2.4 Star Slots

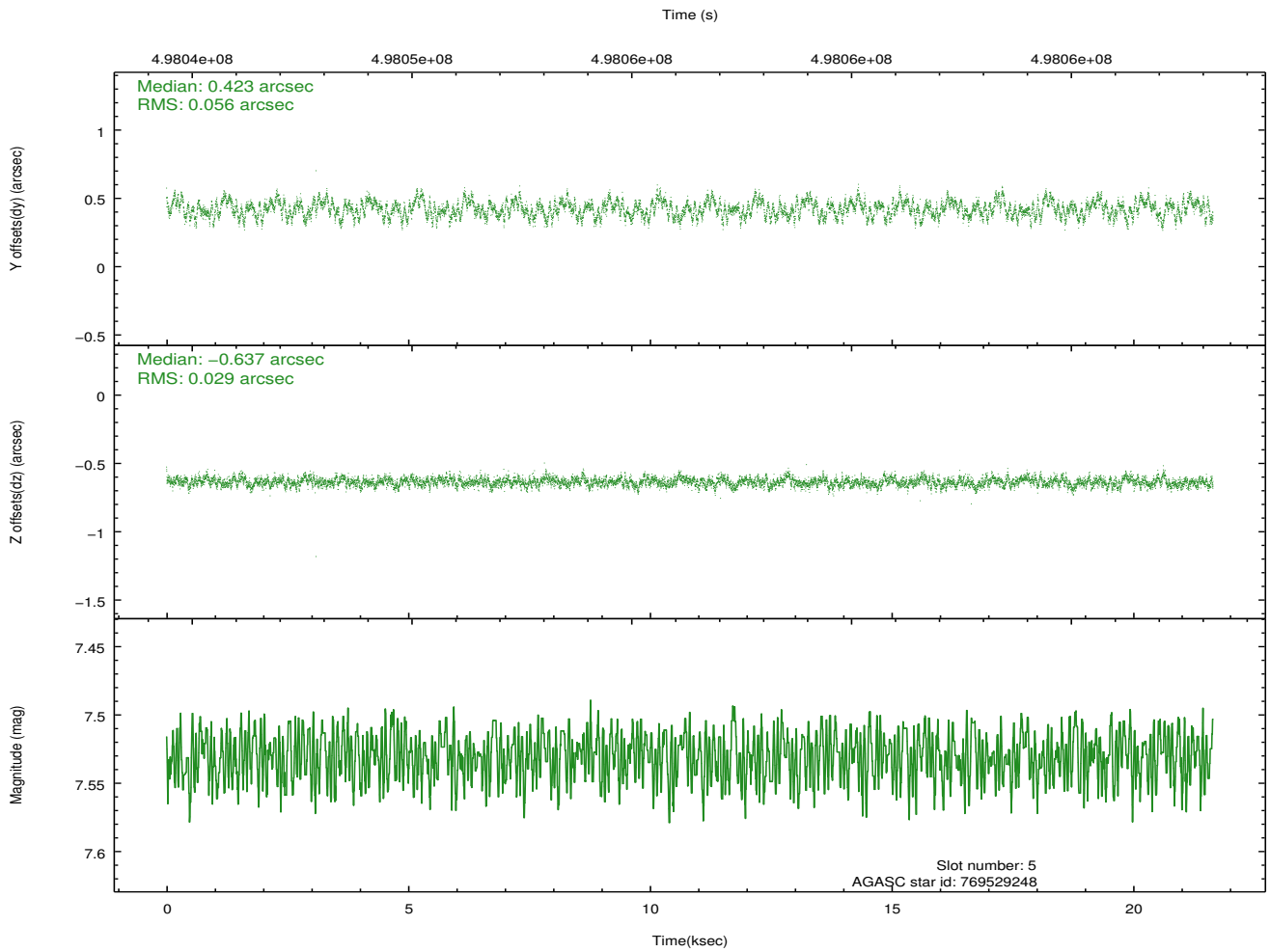
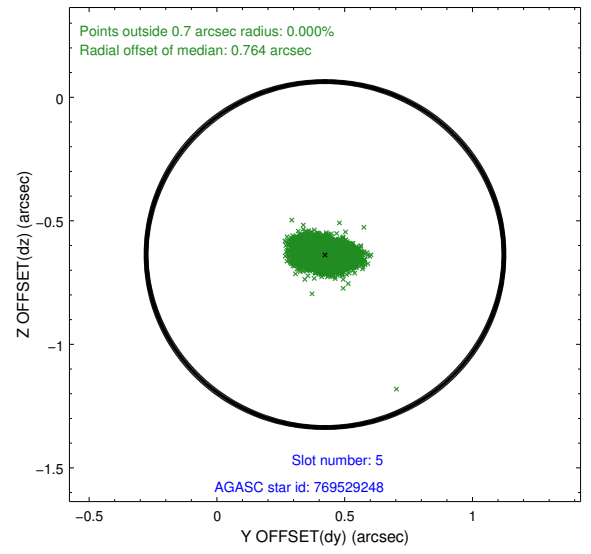
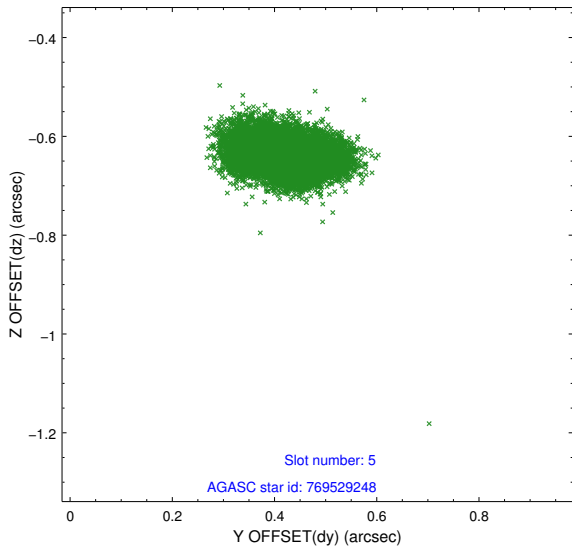
2.4.1 Slot 3



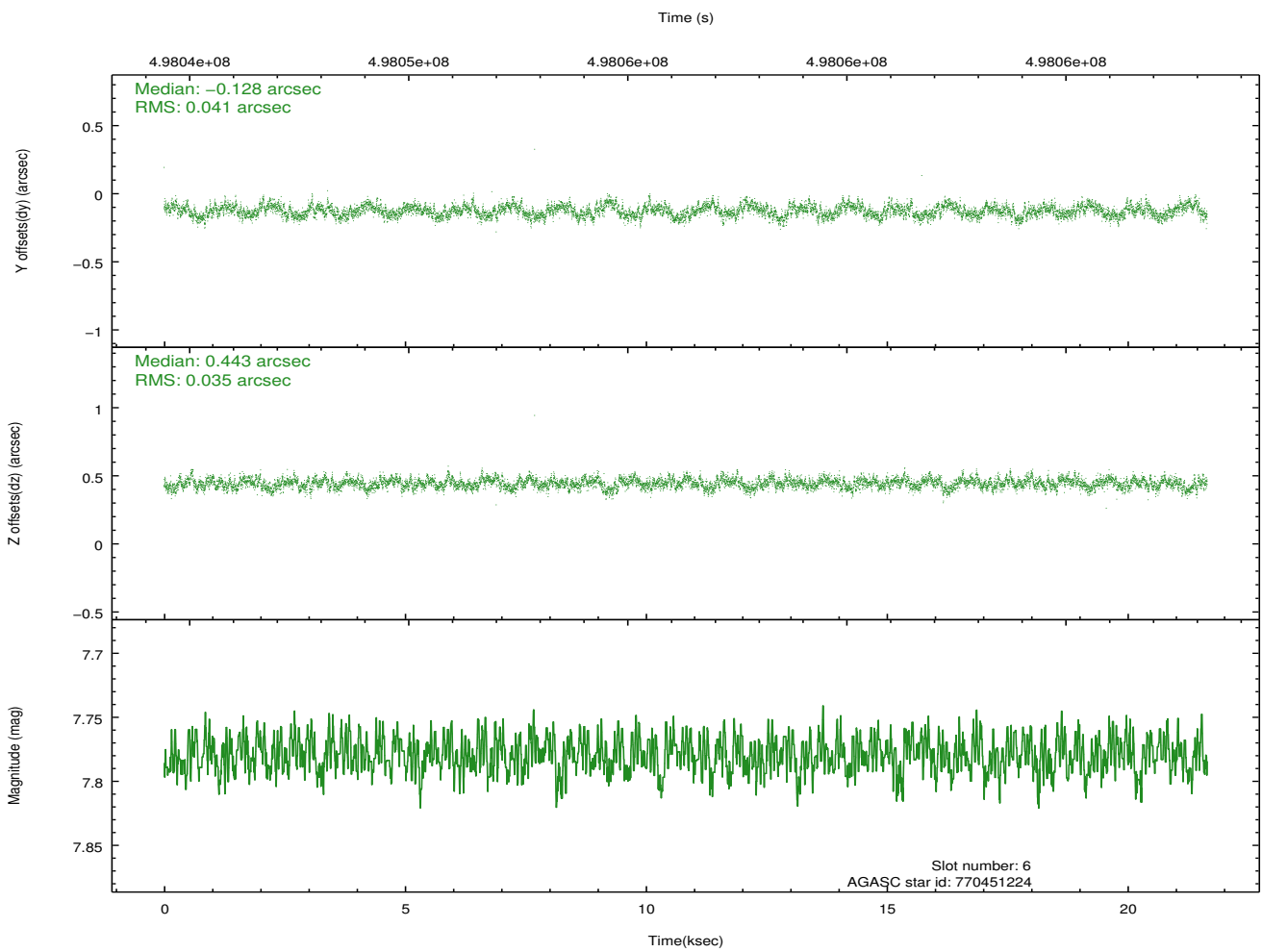
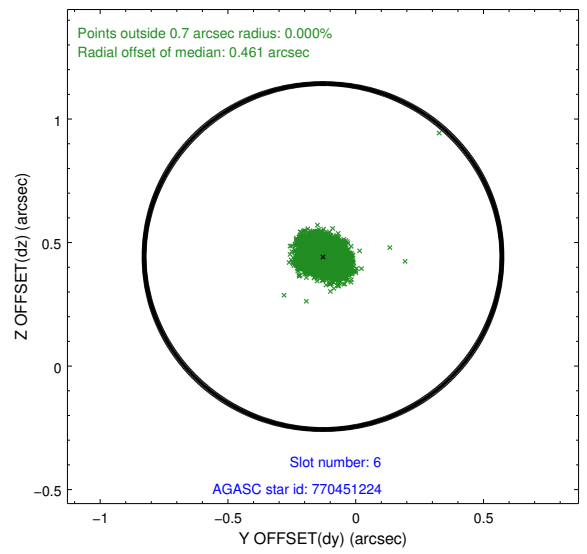
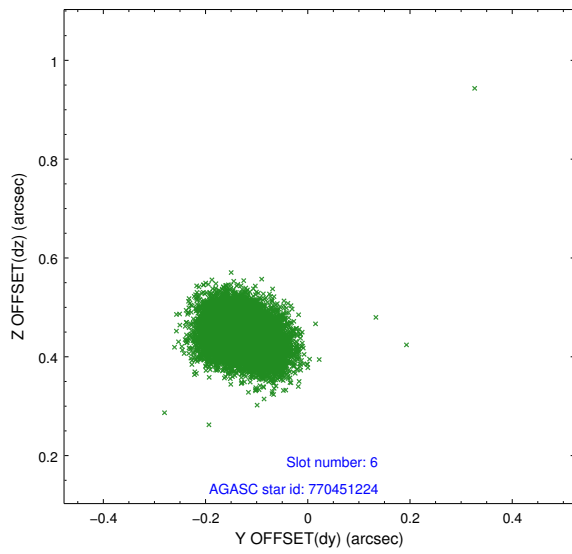
2.4.2 Slot 4



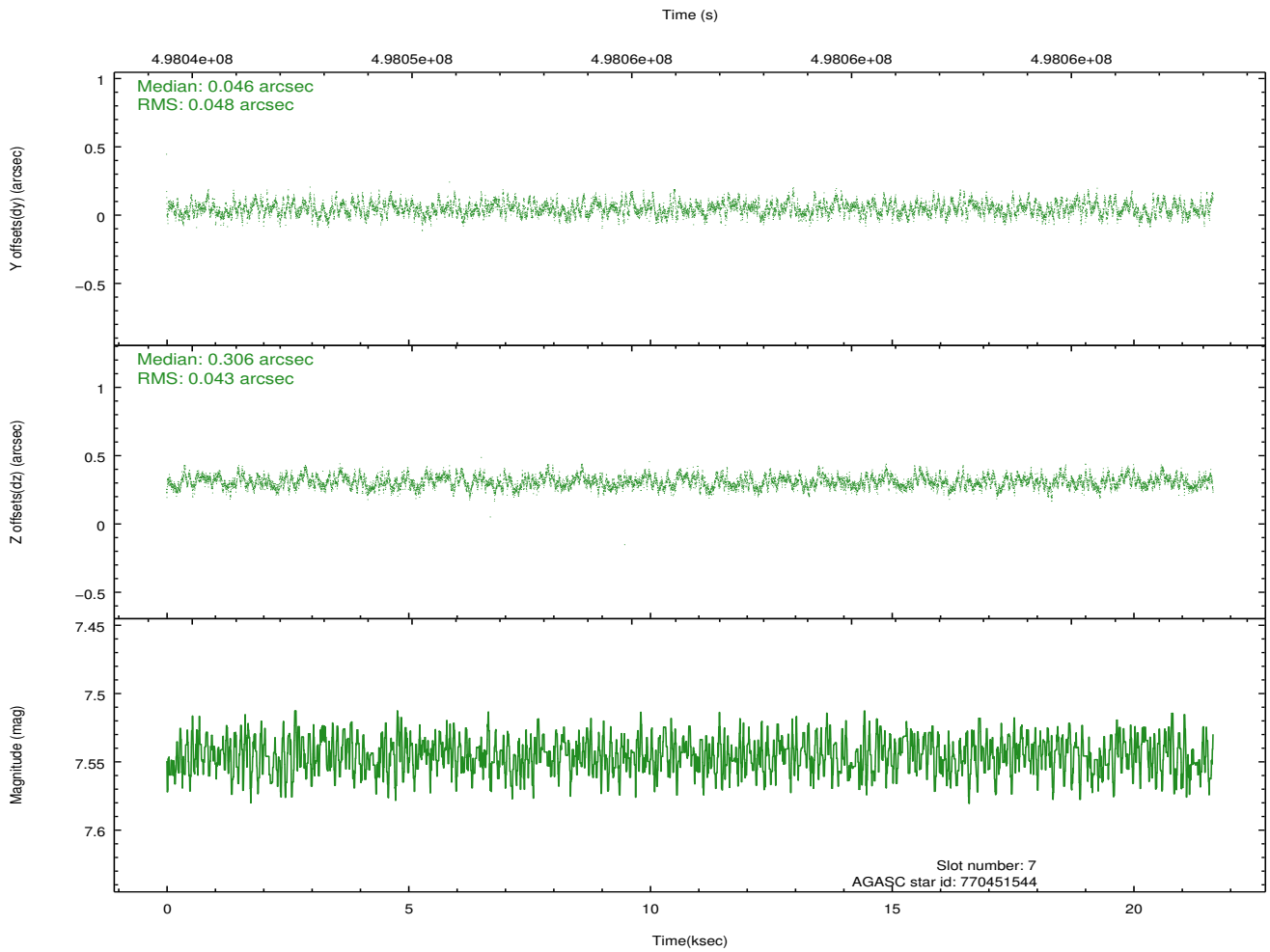
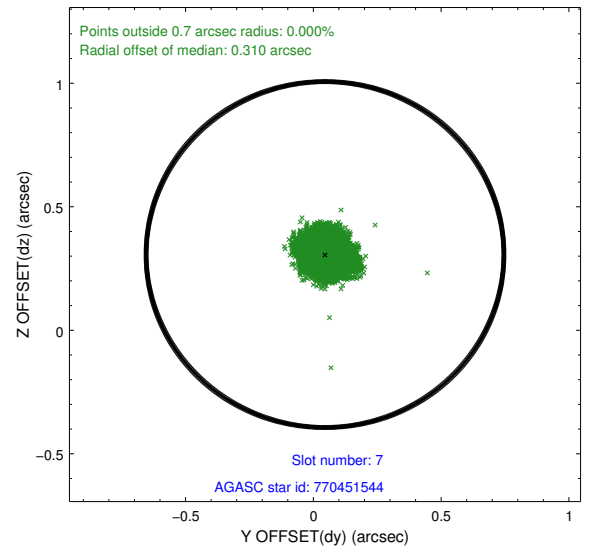
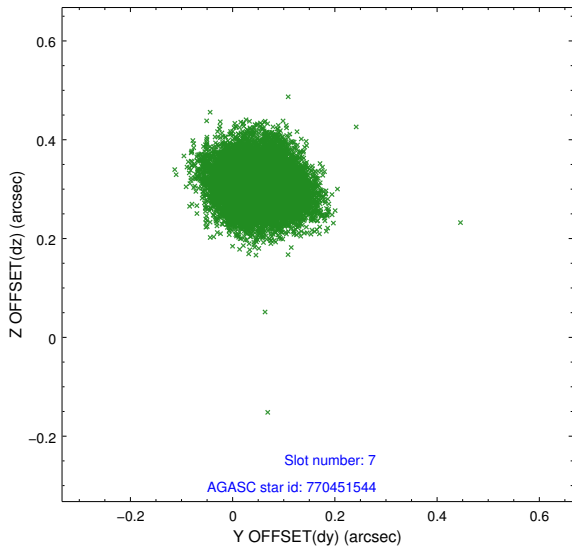
2.4.3 Slot 5



2.4.4 Slot 6

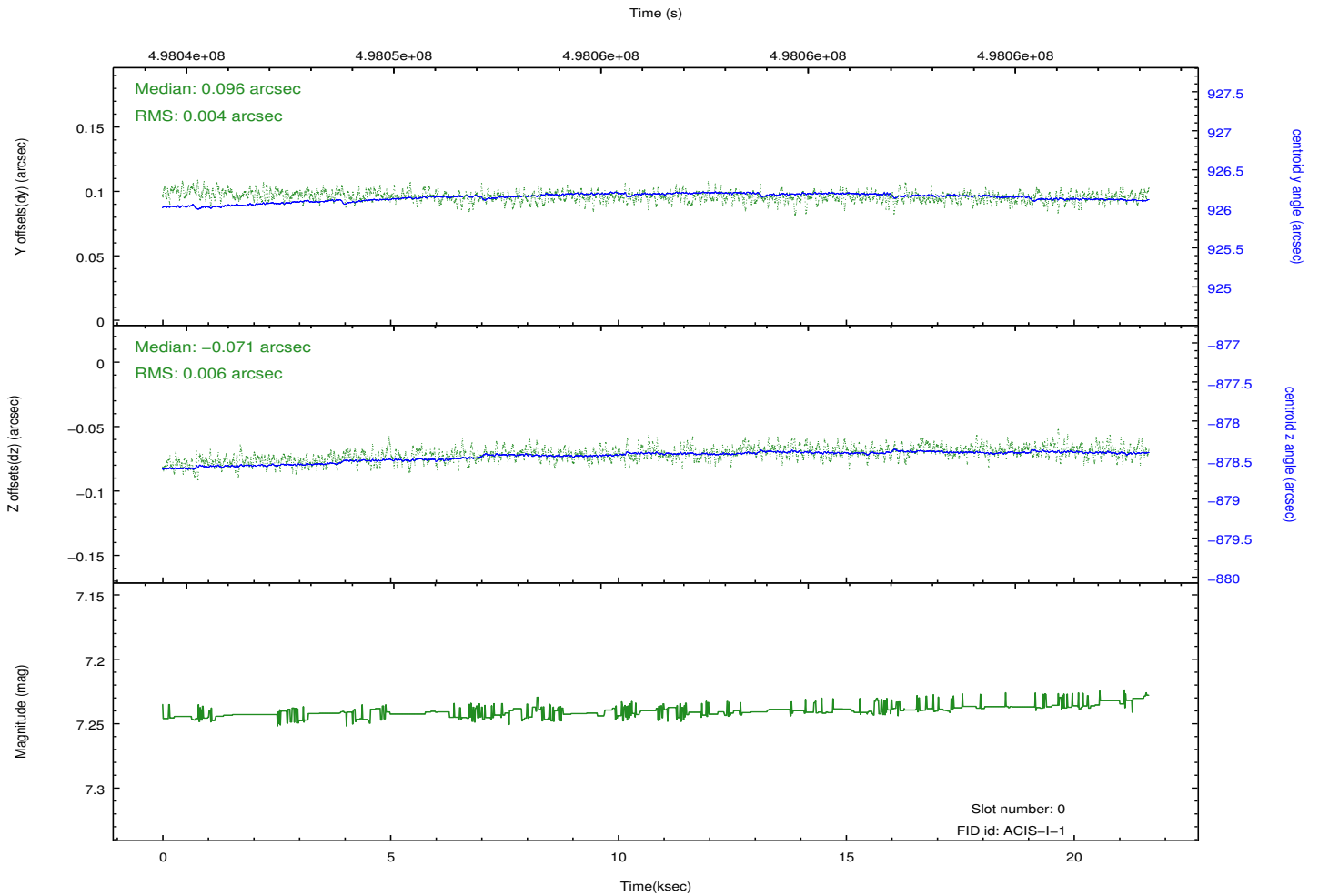
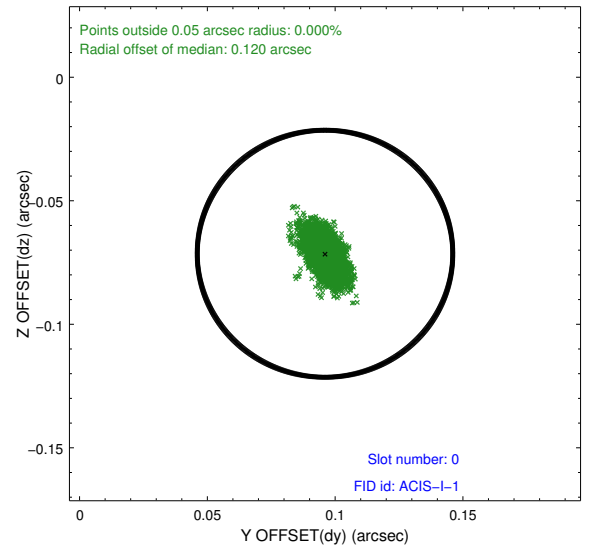
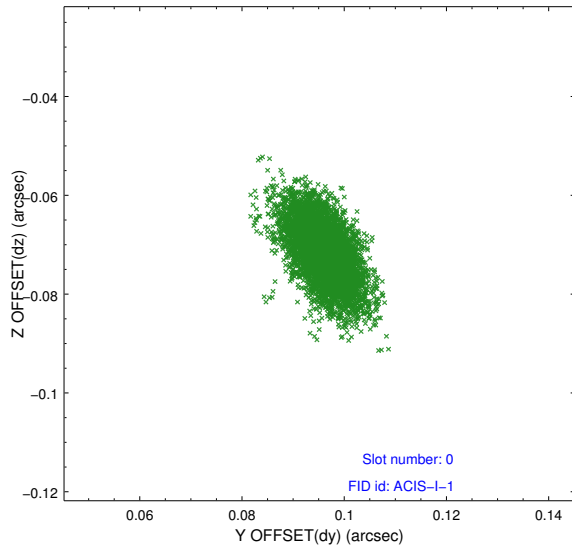


2.4.5 Slot 7

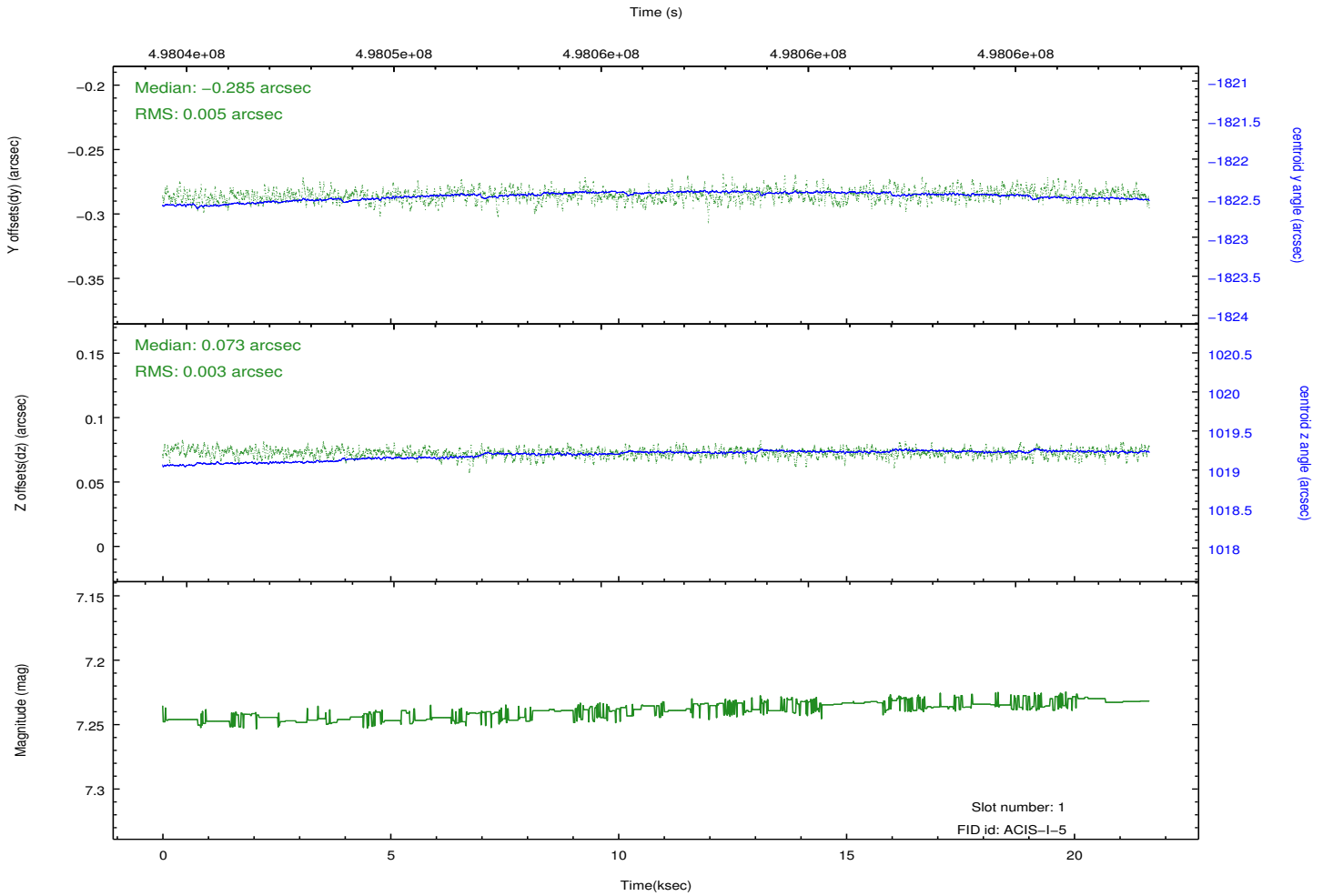
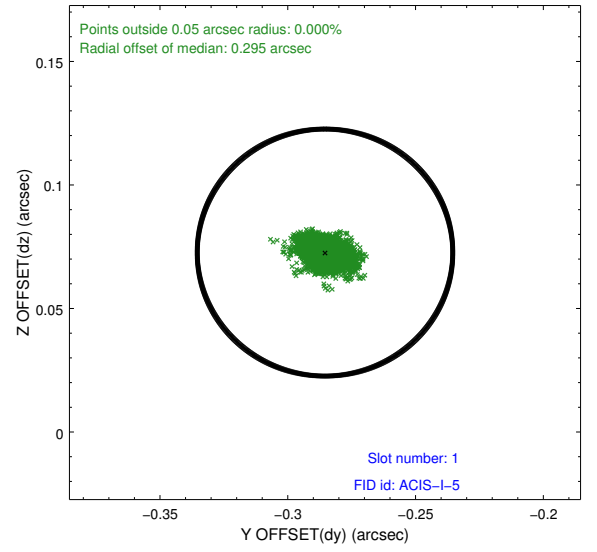
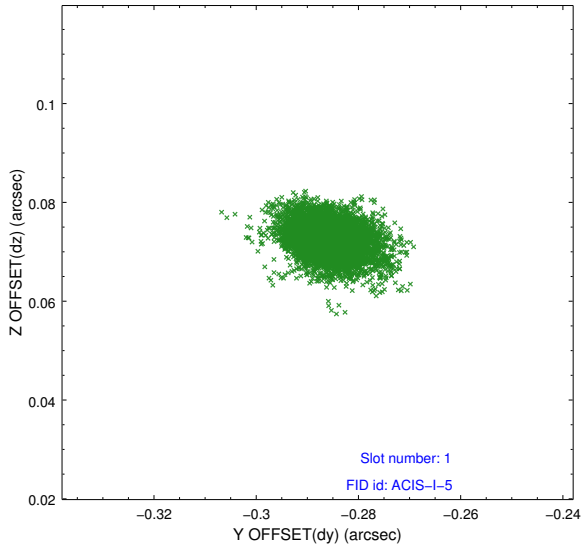


2.5 FID Slots

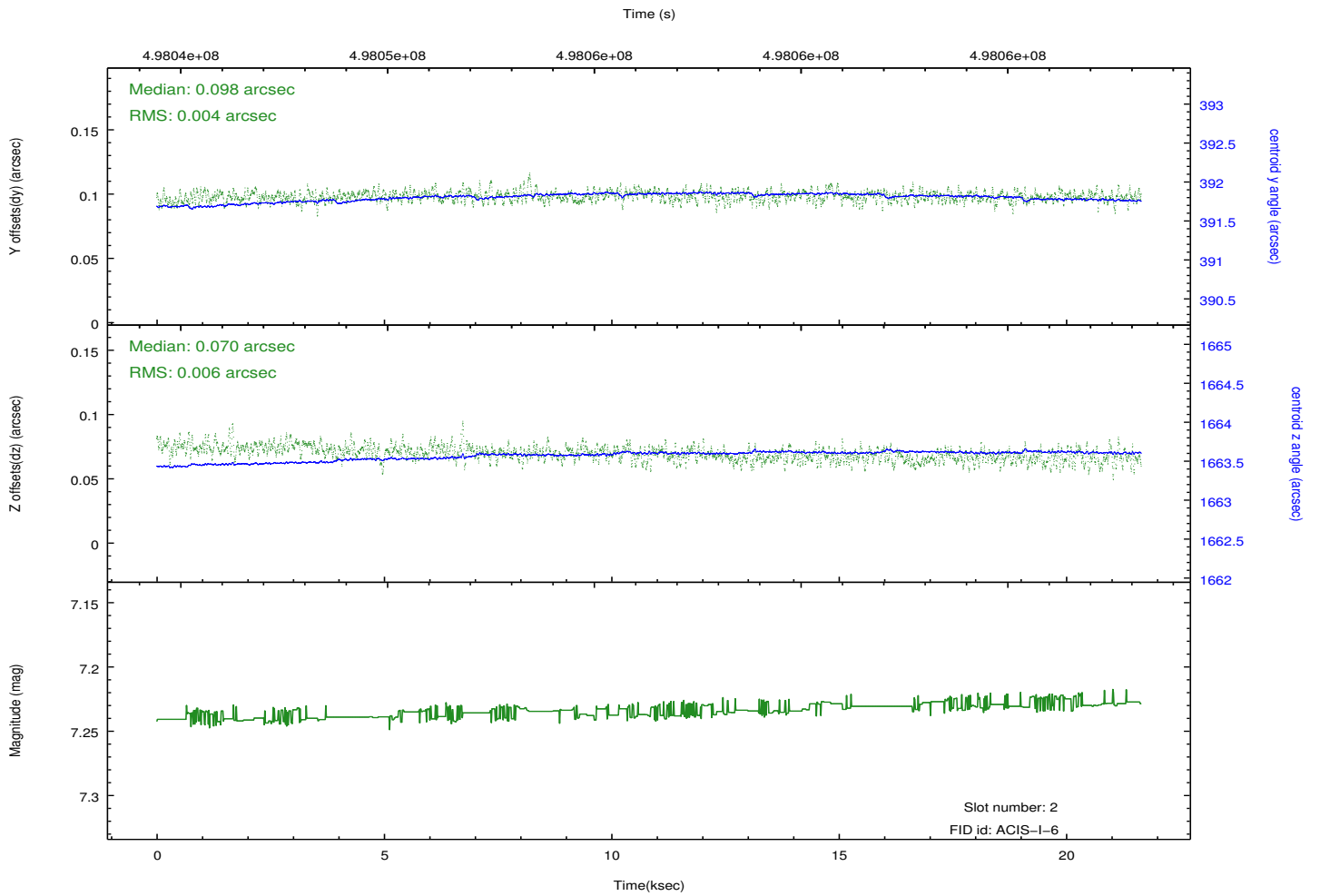
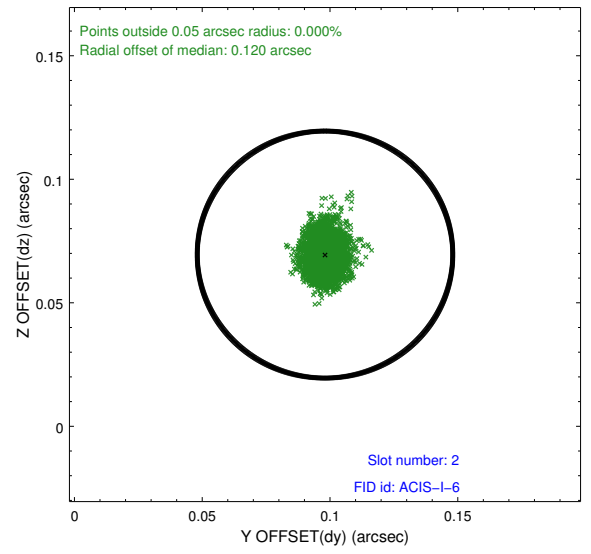
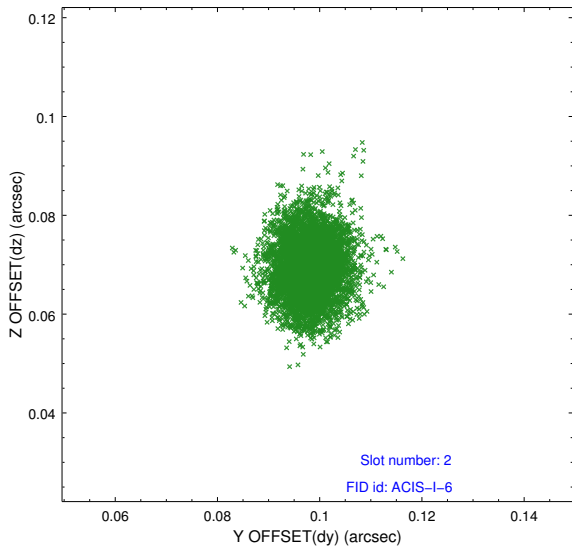
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.557400165796

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.