

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 16486 - L2 Version 2
Chandra X-Ray Center

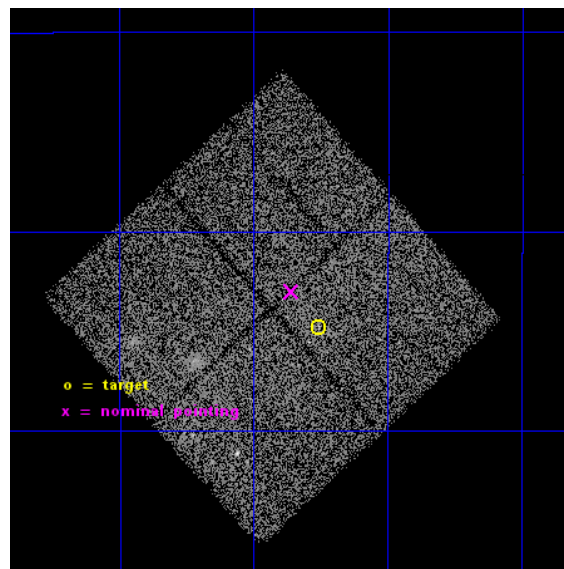
L2 Processing Date : Dec 6 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

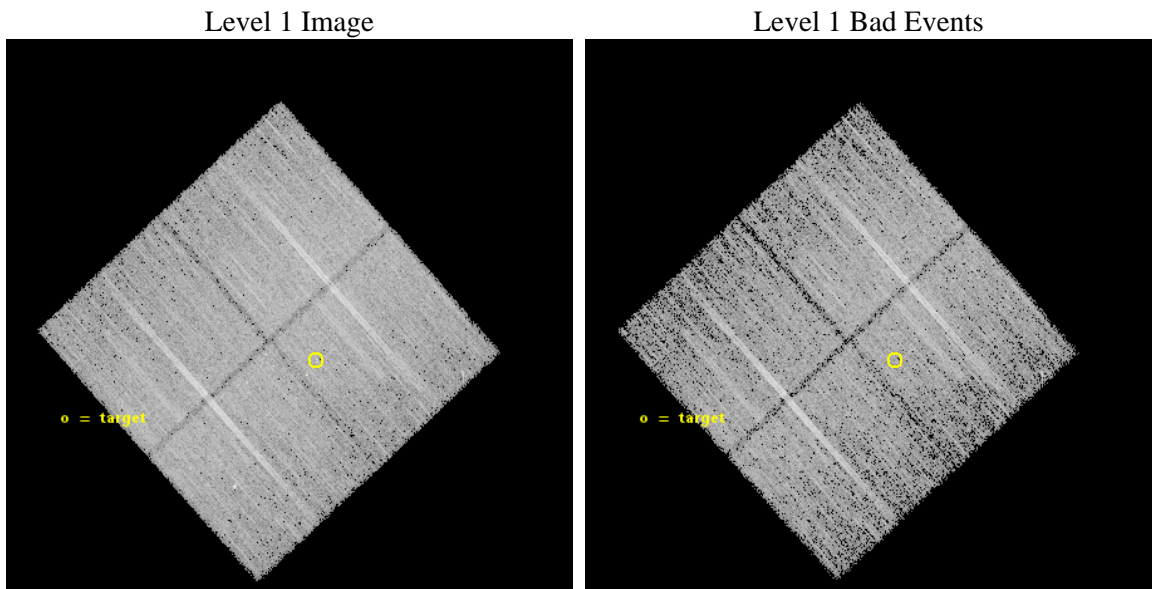
seq_num	601097	Sequence number
obs_id	16486	Observation id
title	Search for evidence of dwarf galaxy collisions in X-rays	Proposal
observer	Professor Gordon Garmire	Principal investigator
object	ngc1232	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	47.439583	Observer's specified target RA [deg]
dec_targ	-20.579444	Observer's specified target Dec [deg]
ra_nom	47.464884888345	Nominal RA [deg]
dec_nom	-20.549984641613	Nominal Dec [deg]
roll_nom	47.717570037091	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28619.095504105	Sum of GTIs [s]
livetime	28245.165952272	Livetime [s]
ontime0	28618.972374141	Sum of GTIs [s]
ontime1	28622.154444516	Sum of GTIs [s]
ontime2	28612.7724033	Sum of GTIs [s]
ontime3	28619.095504105	Sum of GTIs [s]
l2events	51916	Number of level 2 events



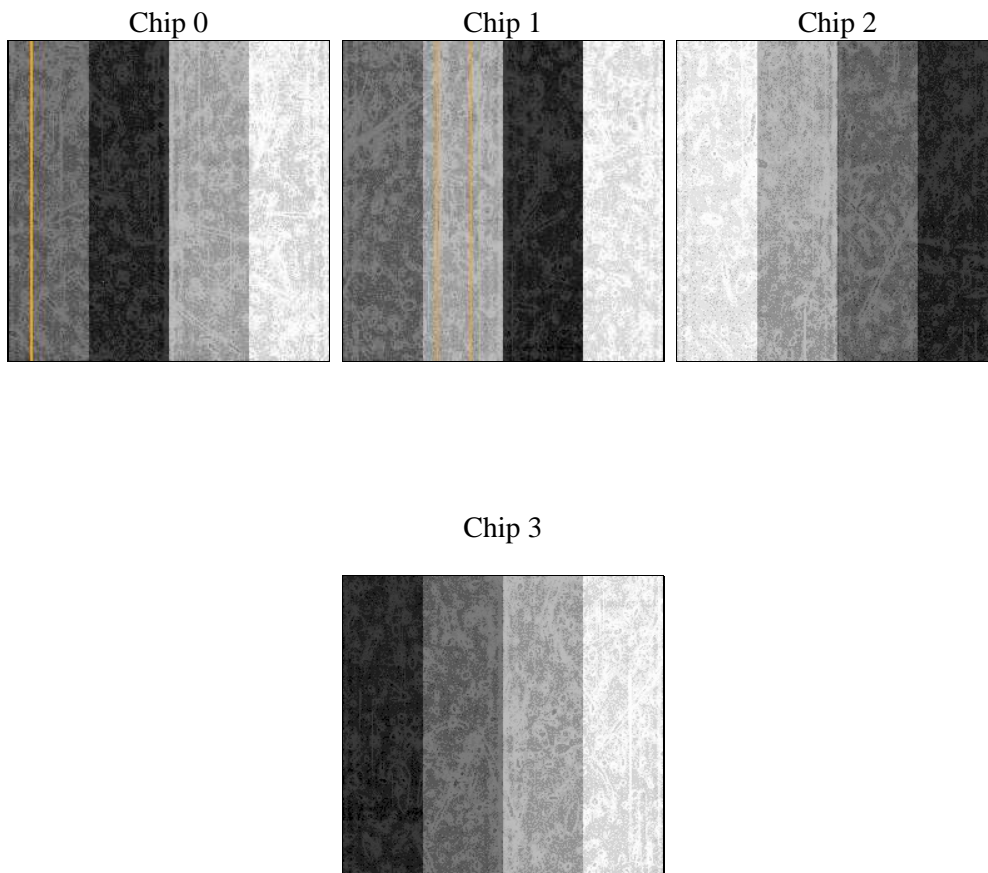
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28532.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	28619.095504105	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	28618.972374141	Sum of GTIs [s]
date	2014-12-07T02:11:35	Date and time of file creation	ontime1	28622.154444516	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	28612.7724033	Sum of GTIs [s]
			ontime3	28619.095504105	Sum of GTIs [s]
			l1events	491638	Number of level 1 events

2.1.4 Events

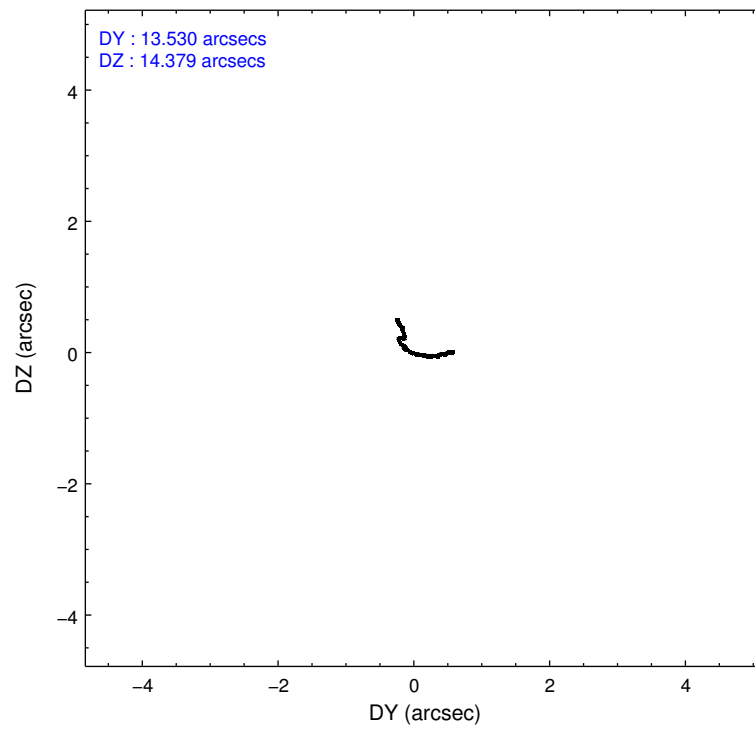
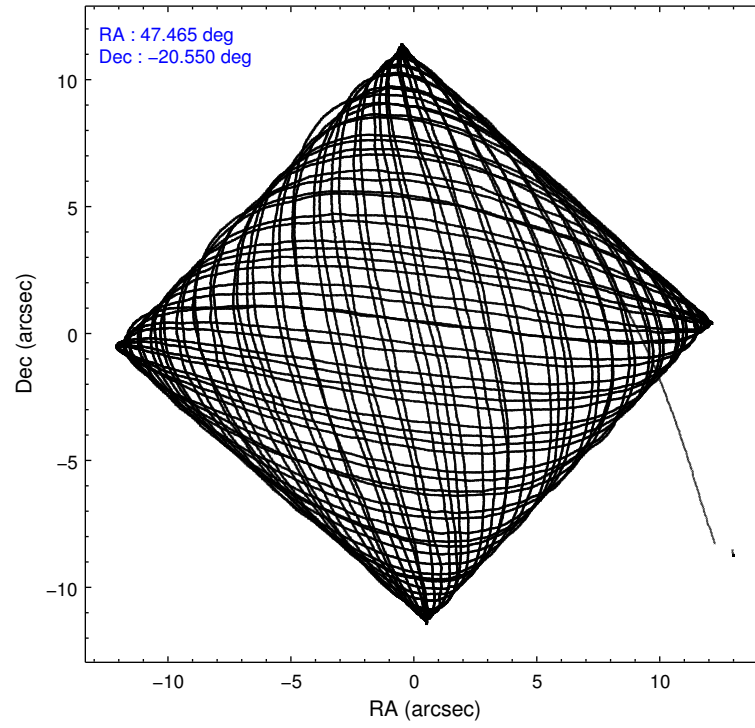
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	116423	119871	131348	123996
rejected events	100668	102943	116697	109217
rejected %	86%	85%	88%	88%

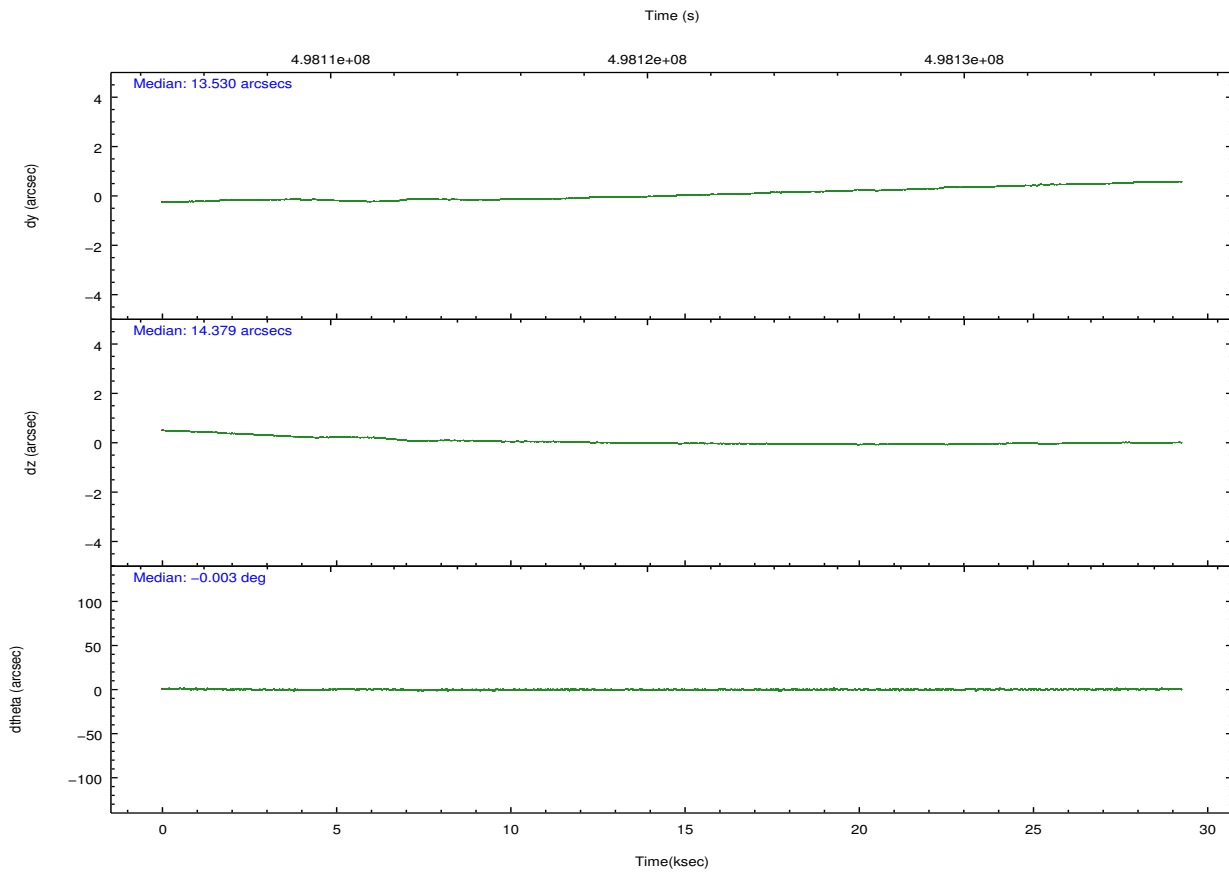
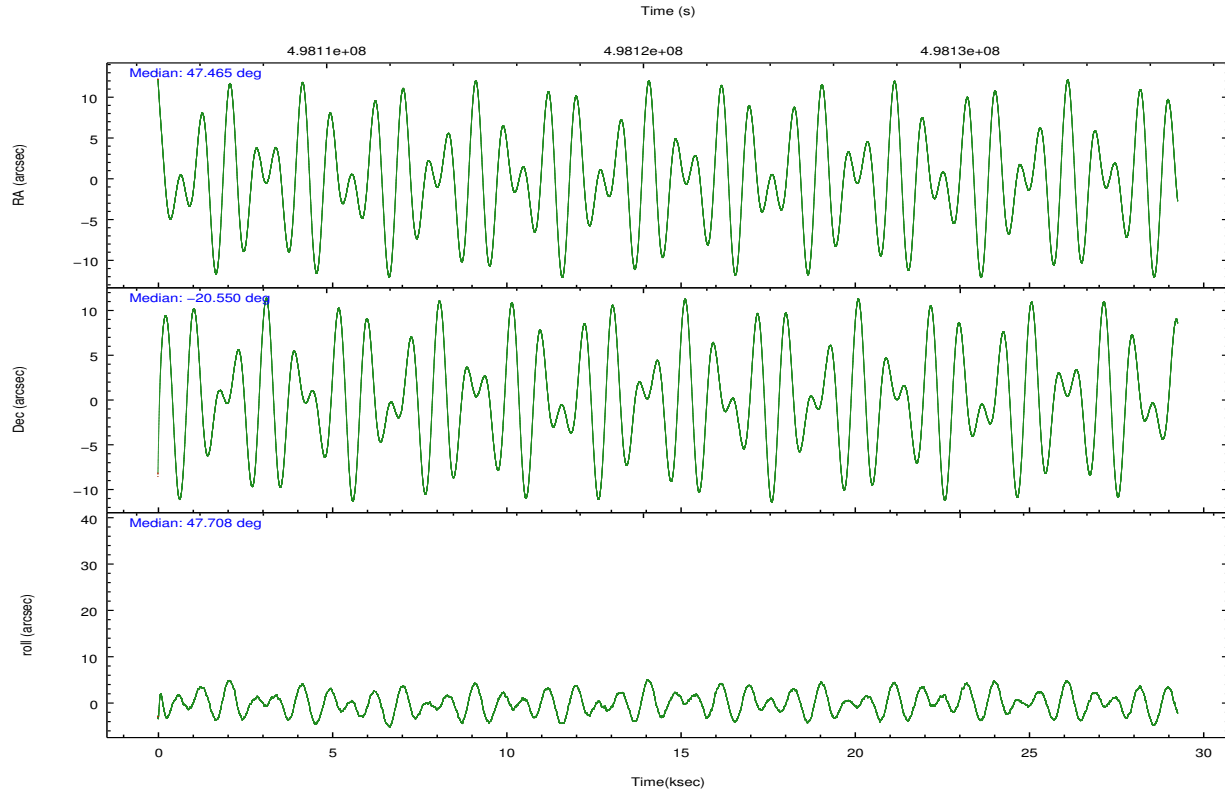
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	5759	6127	5487	5639
	4%	5%	4%	4%
grade 1 events	79	66	83	102
	0%	0%	0%	0%
grade 2 events	3839	3835	3550	3267
	3%	3%	2%	2%
grade 3 events	1612	1688	1443	1590
	1%	1%	1%	1%
grade 4 events	1532	1743	1507	1484
	1%	1%	1%	1%
grade 5 events	5308	5656	4872	6127
	4%	4%	3%	4%
grade 6 events	3017	3538	2667	2800
	2%	2%	2%	2%
grade 7 events	95277	97218	111739	102987
	81%	81%	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	47.46488488834517	CCD I2 on	Y	Y
[deg] Pointing Dec	-20.576892	-20.54998464161281	CCD I3 on	Y	Y
[deg] Pointing Roll	47.506725	47.71757003709097	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)	498106865.184000	498105098.38287	CCD S5 on	N	N
Observation start date	2013-10-14T02:59:58	2013-10-14T02:31:38	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	498135397.184000	498135594.69704	On-chip summing requested	N	N
Observation end date	2013-10-14T10:55:30	2013-10-14T10:59:54	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





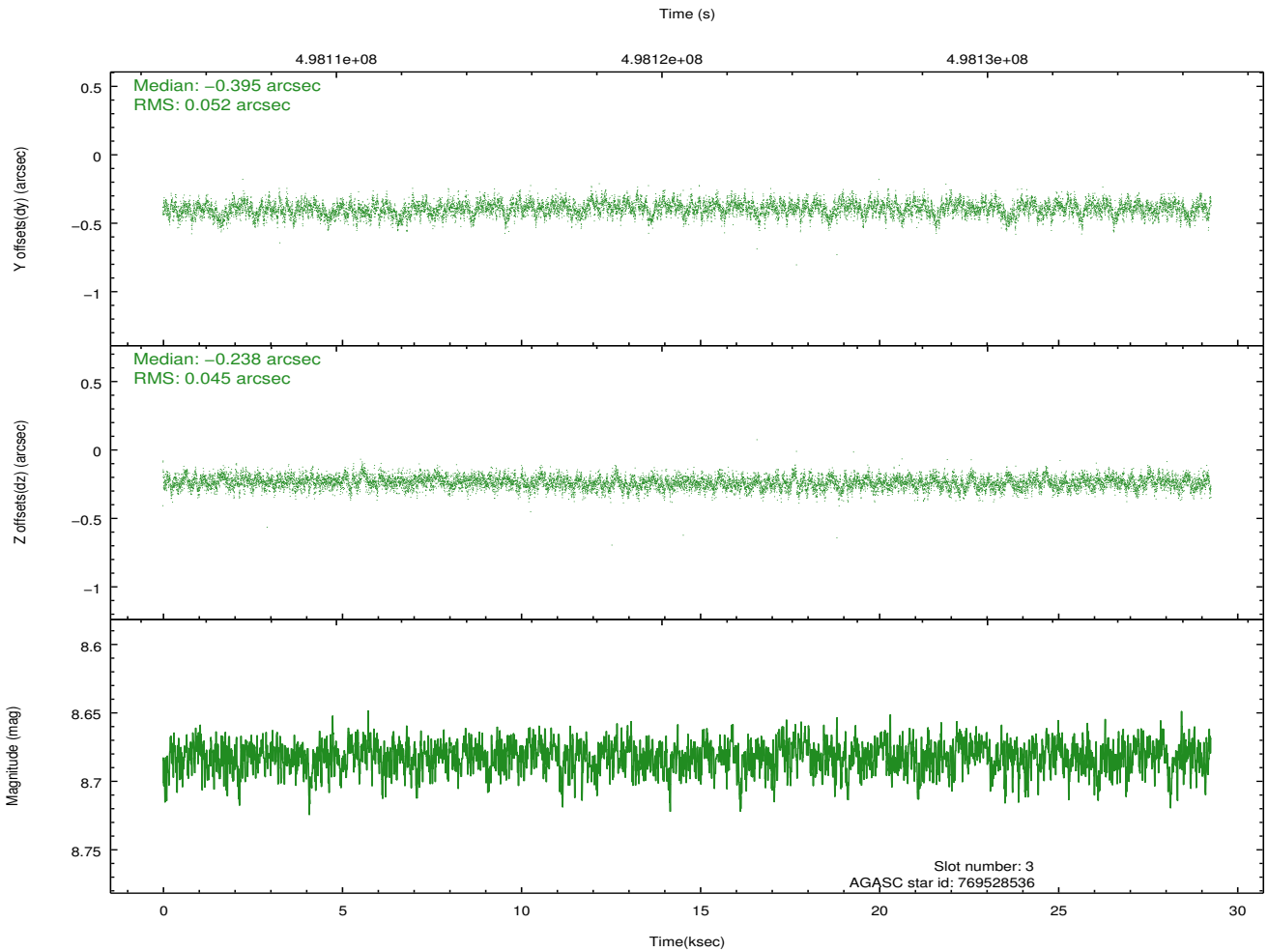
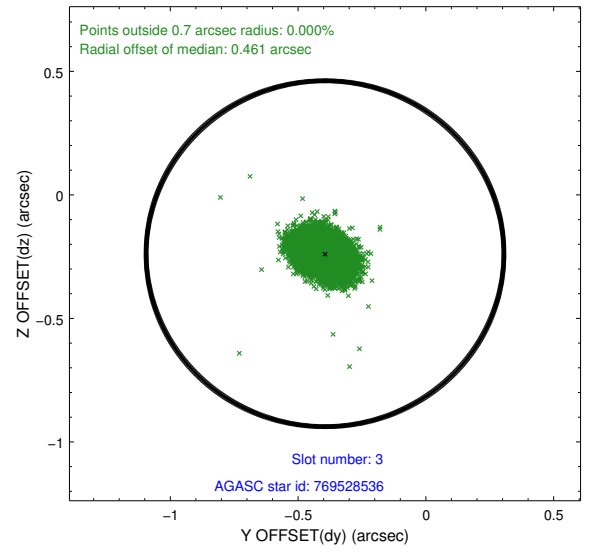
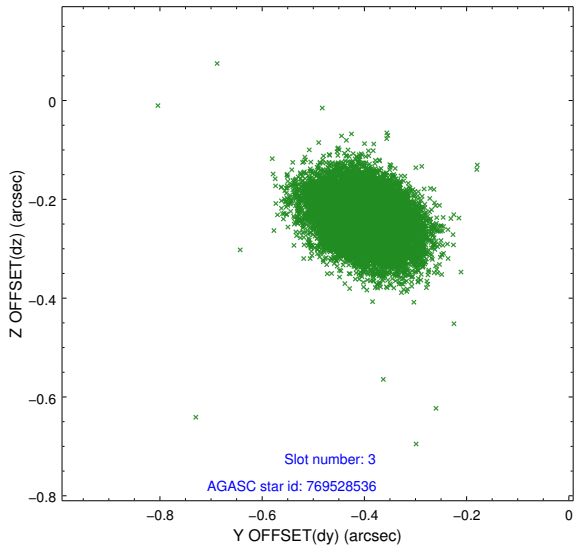
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	7139	0.080	-0.049	0.012	0.027	0.000000	0.000000	925.95	-878.97
1	FID		ACIS-I-5	7.08	7139	-0.253	0.068	0.010	0.016	0.000000	0.000000	-1822.48	1018.54
2	FID		ACIS-I-6	7.07	7139	0.082	0.052	0.011	0.020	0.000000	0.000000	391.36	1663.16
3	GUIDE	used	769528536	8.68	14272	-0.395	-0.238	0.071	0.119	46.820282	-20.648792	-1647.28	1407.65
4	GUIDE	used	769528560	8.51	14277	0.037	0.145	0.065	0.106	47.066460	-20.416749	-470.01	1364.37
5	GUIDE	used	769529248	7.53	14277	0.429	-0.636	0.067	0.108	47.673143	-20.111513	1725.11	596.65
6	GUIDE	used	770451224	7.78	14276	-0.123	0.429	0.058	0.092	48.005011	-20.791582	670.29	-1879.31
7	GUIDE	used	770451544	7.54	14277	0.051	0.297	0.069	0.111	48.064077	-20.619593	1262.22	-1610.04

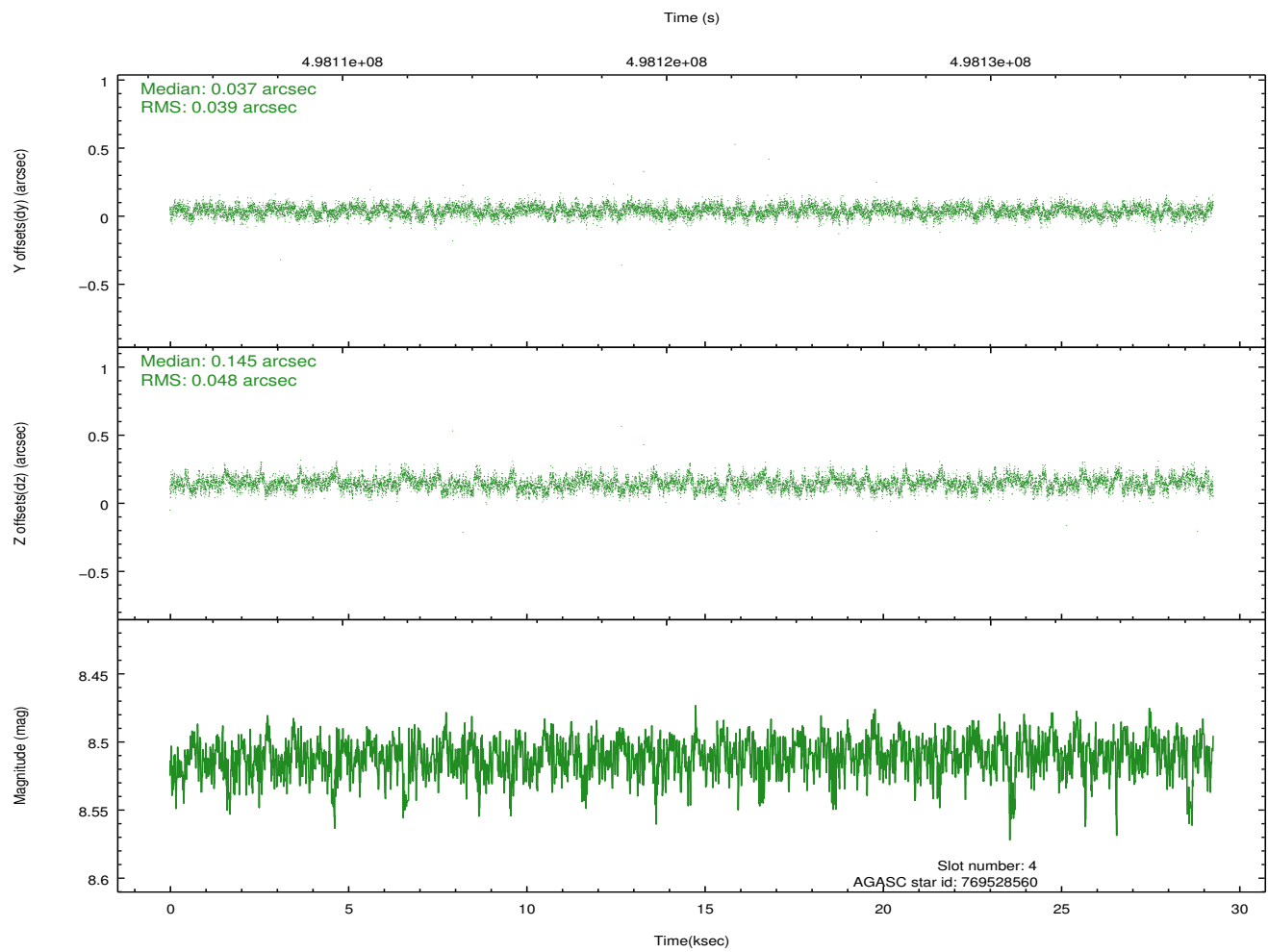
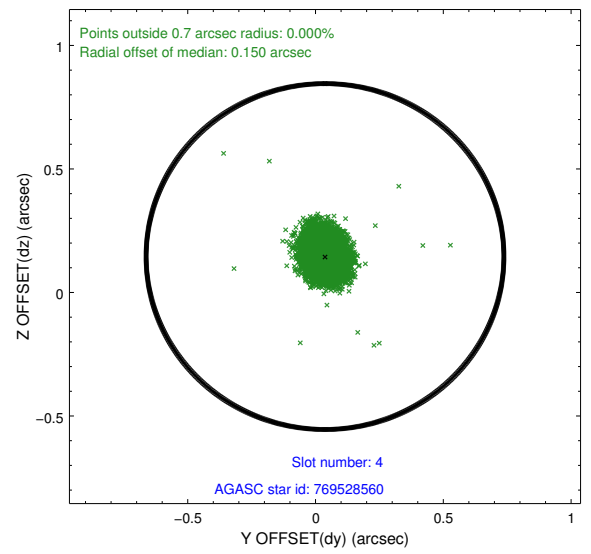
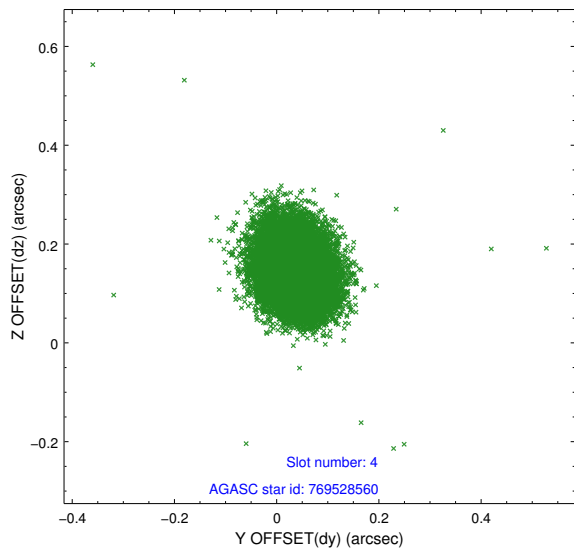
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2.4 Star Slots

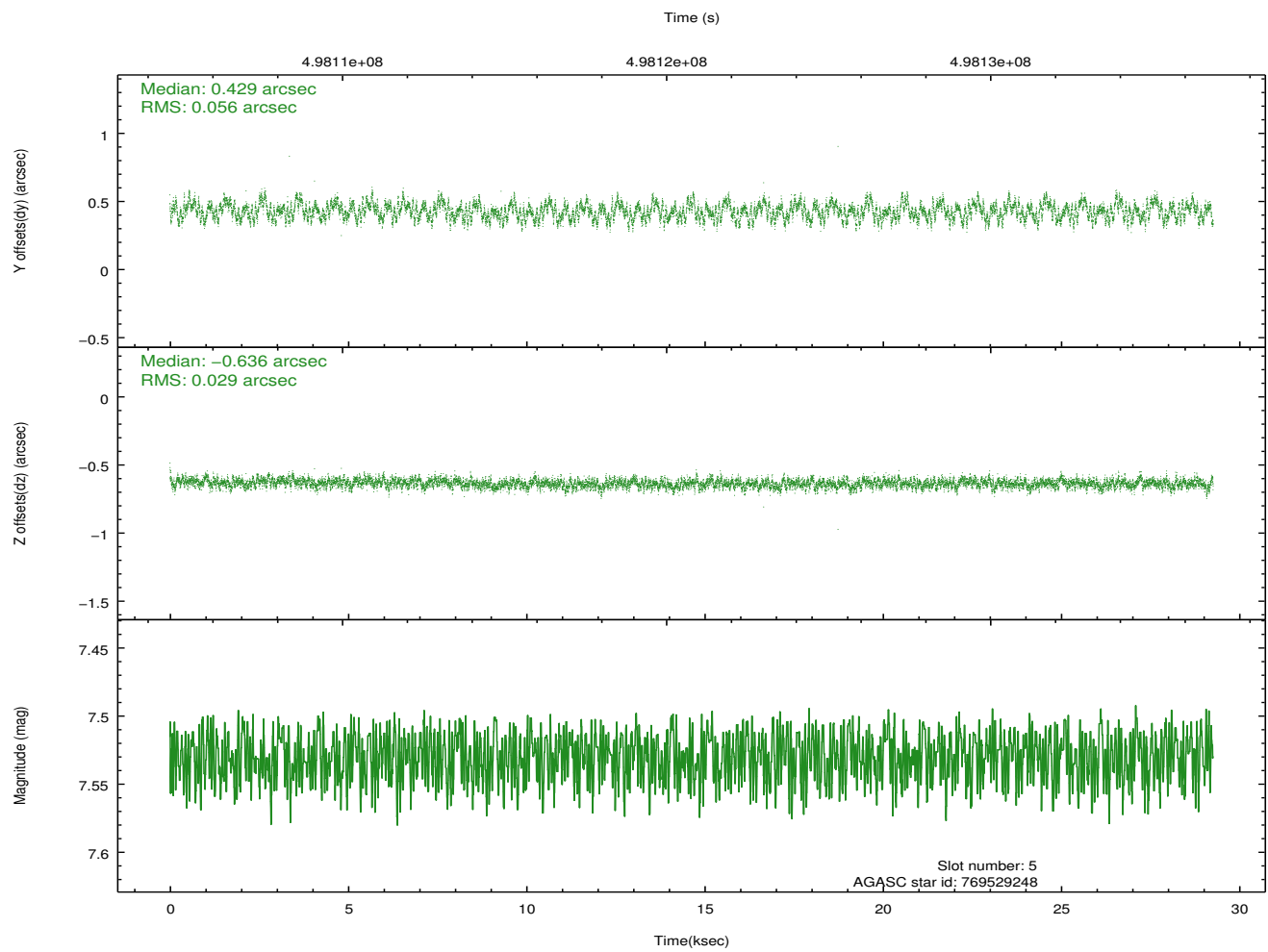
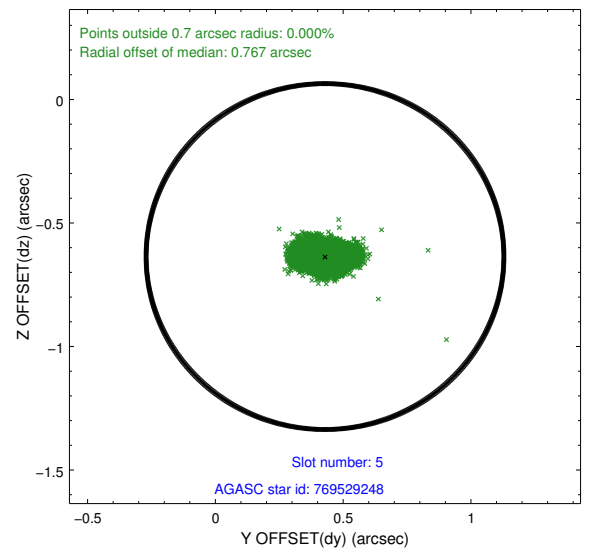
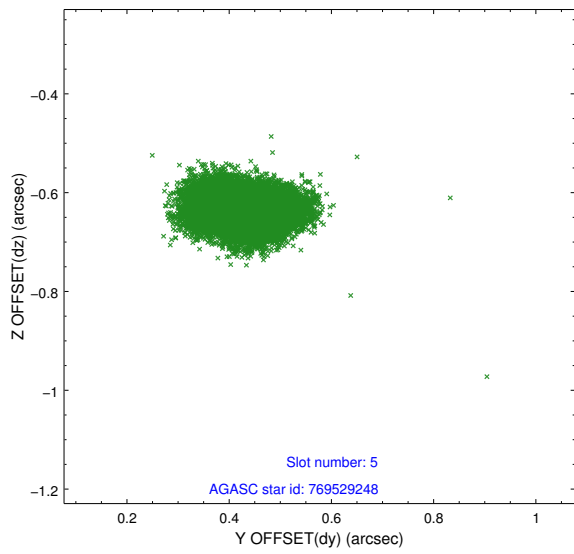
2.4.1 Slot 3



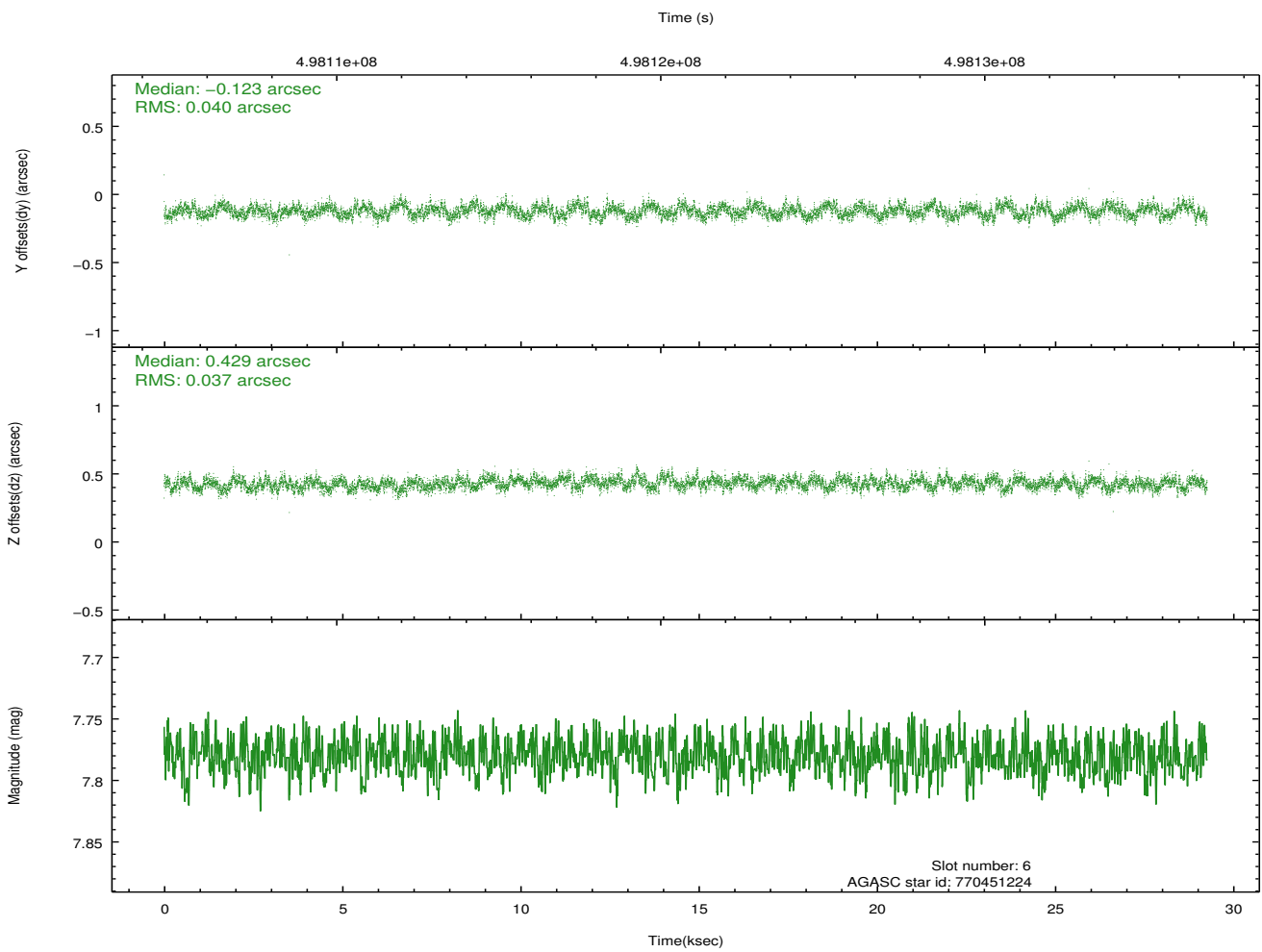
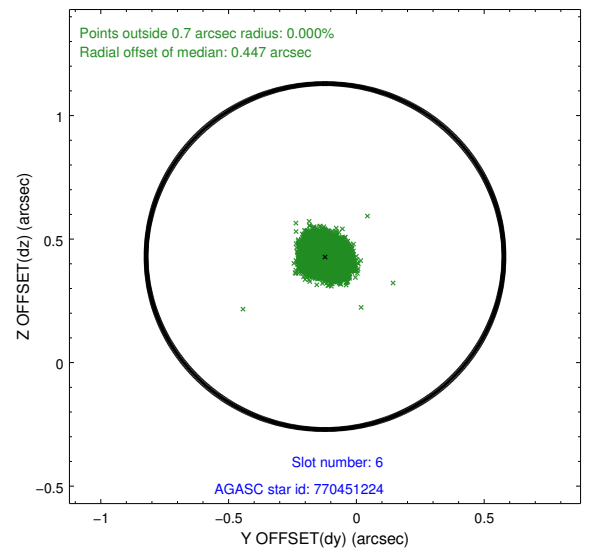
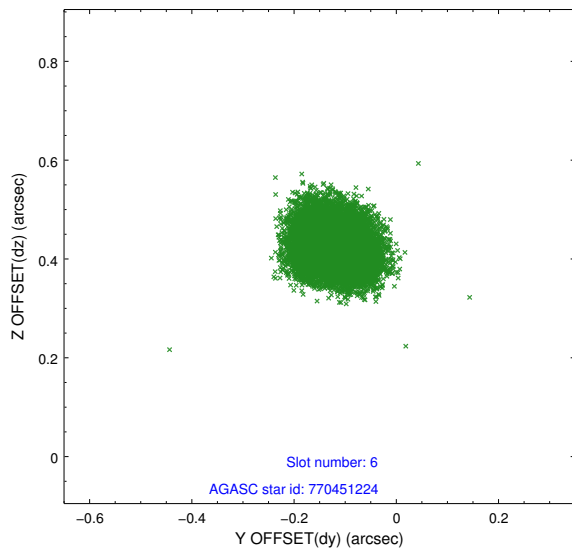
2.4.2 Slot 4



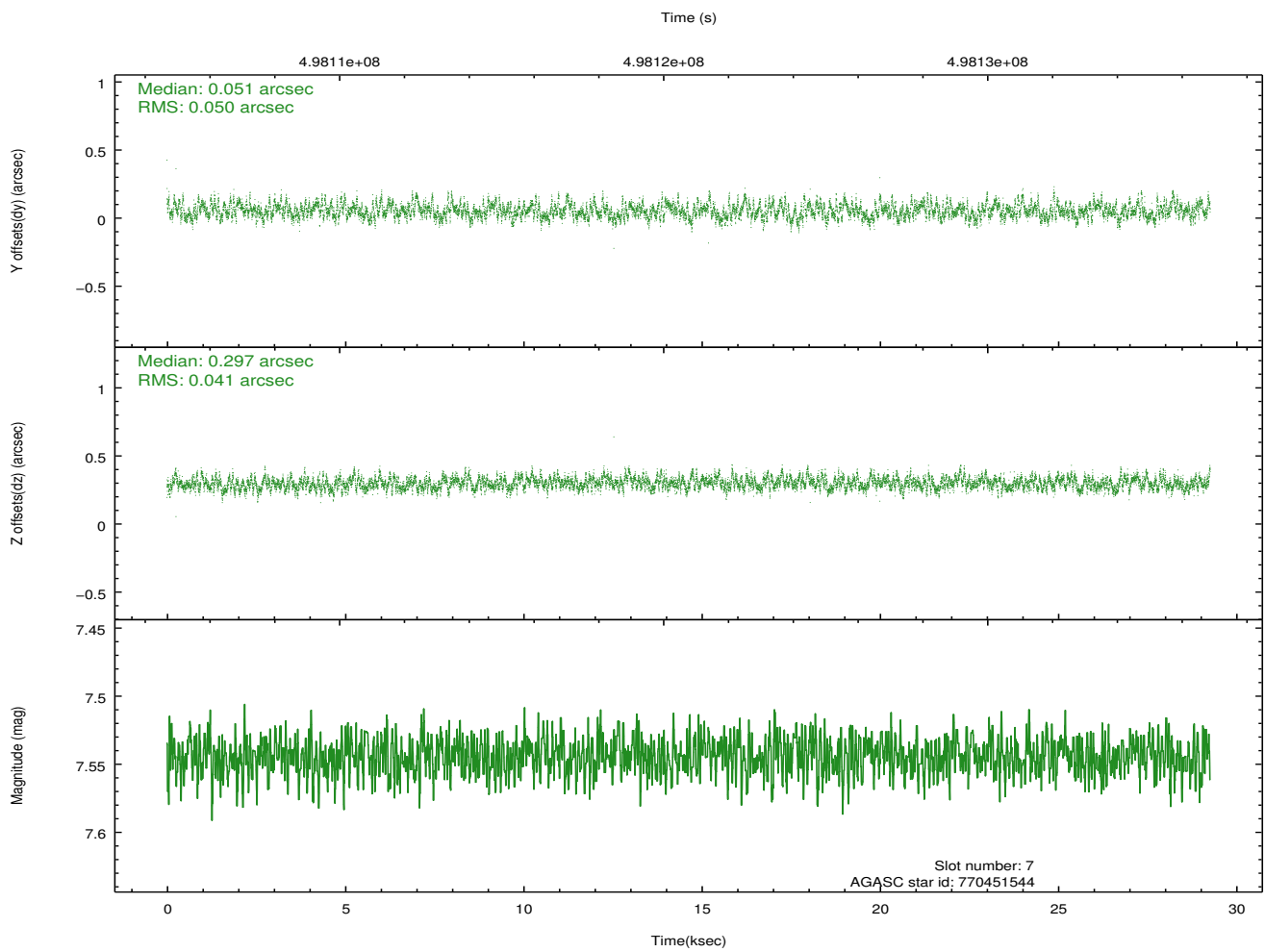
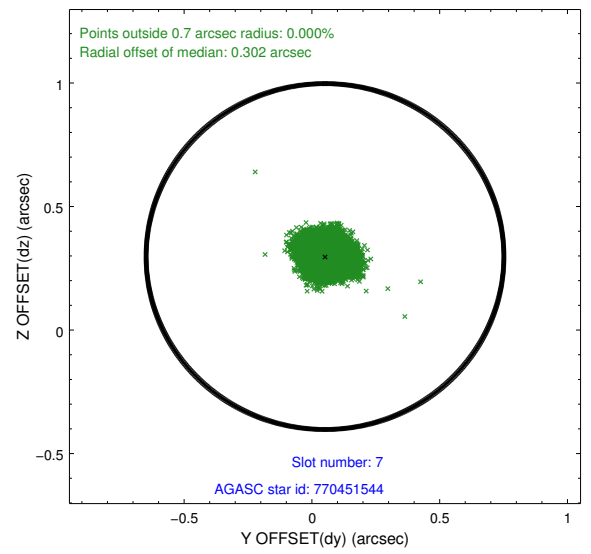
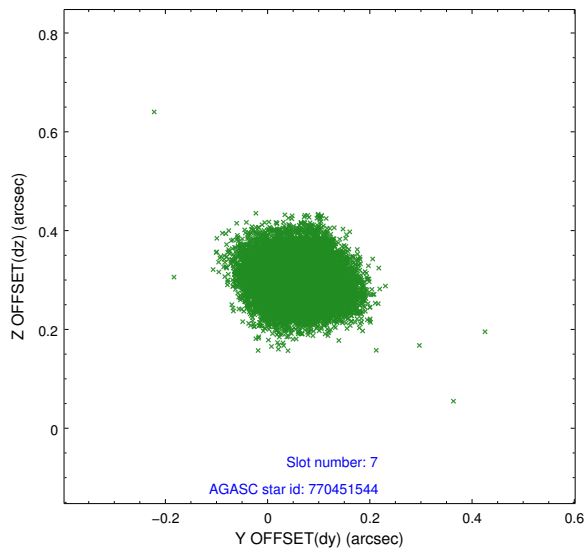
2.4.3 Slot 5



2.4.4 Slot 6

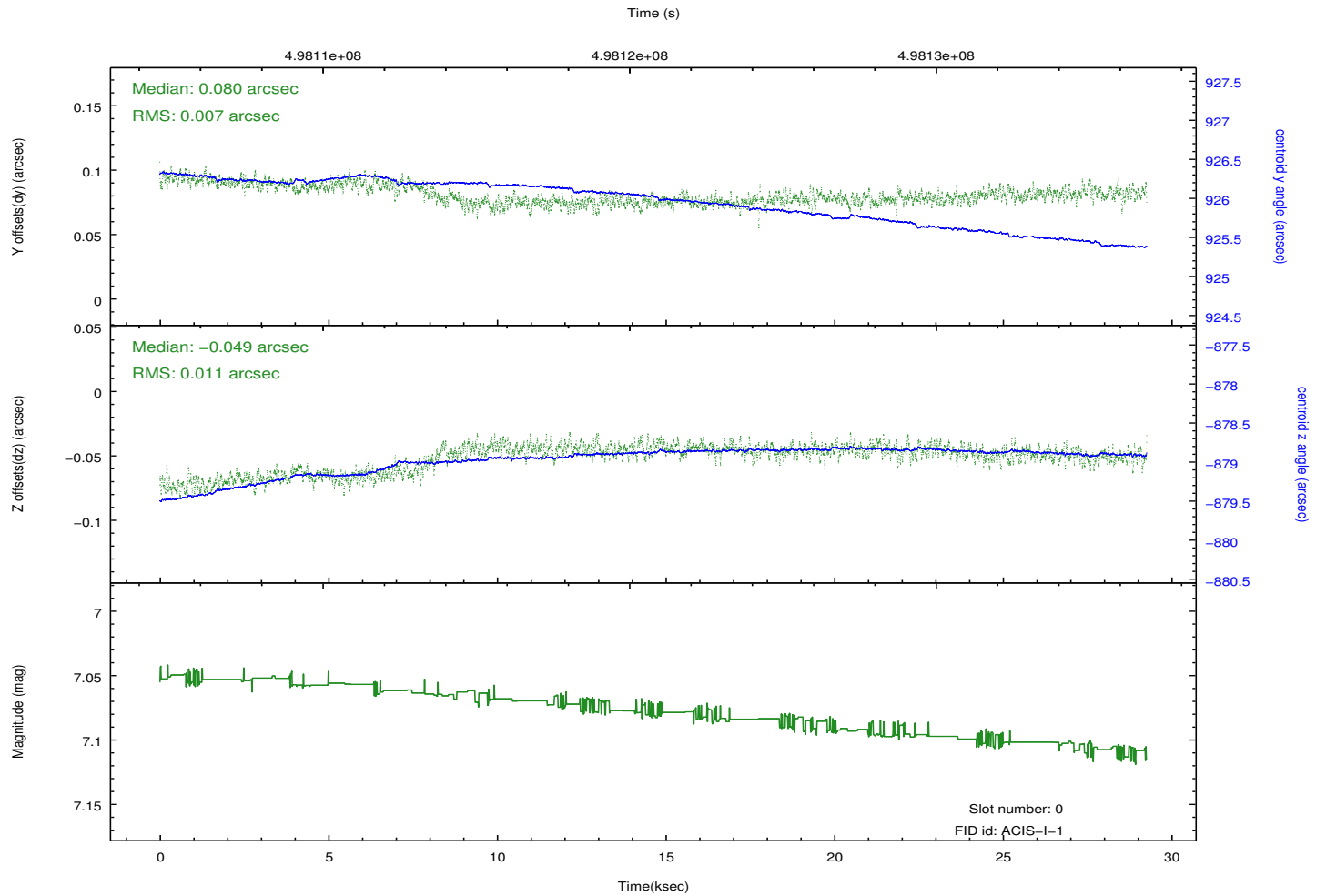
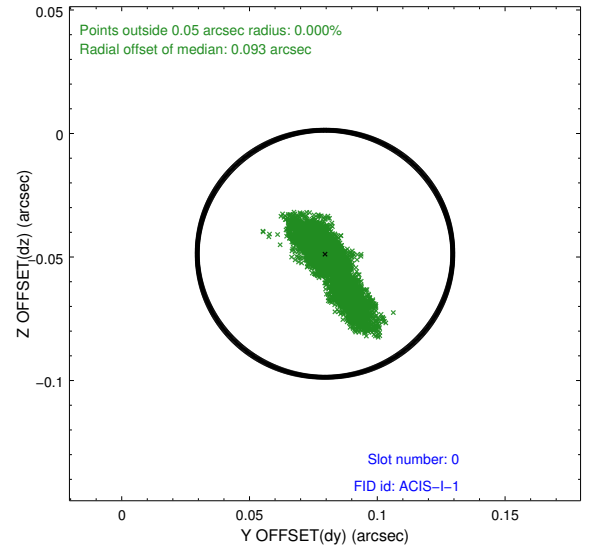
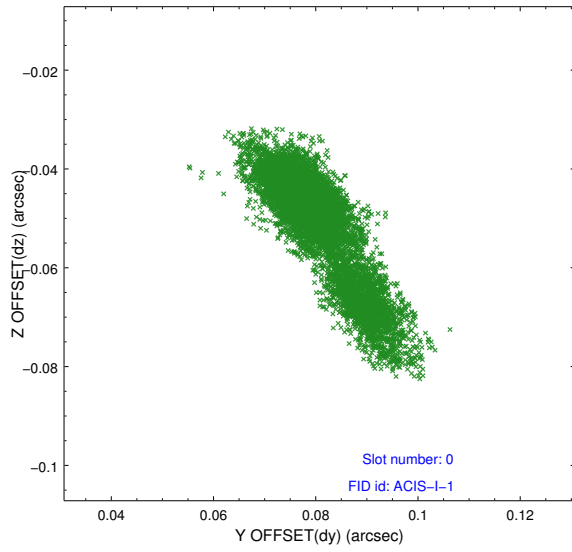


2.4.5 Slot 7

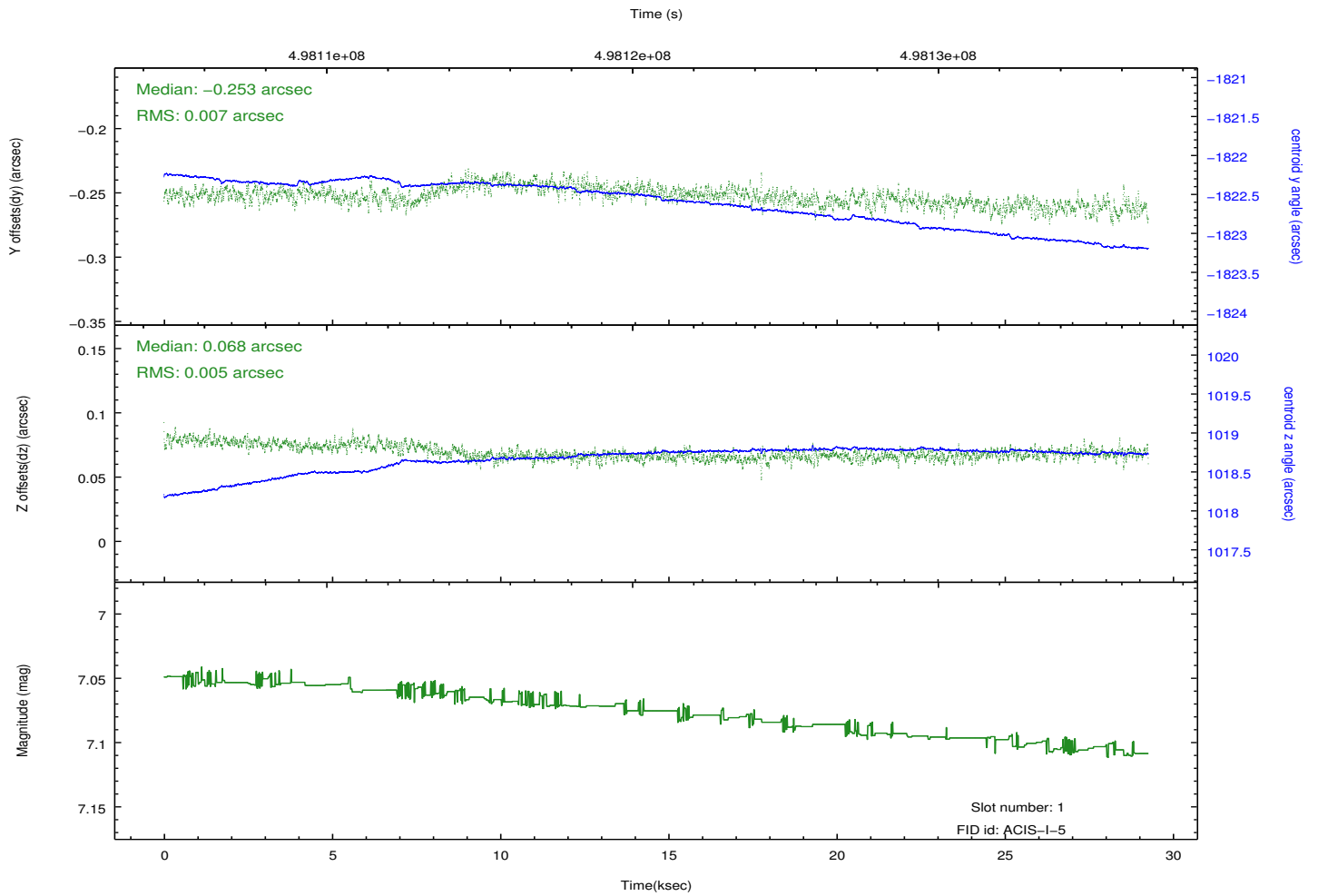
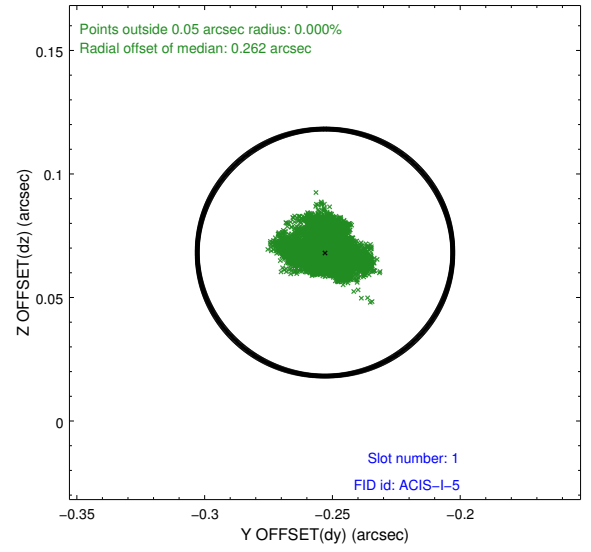
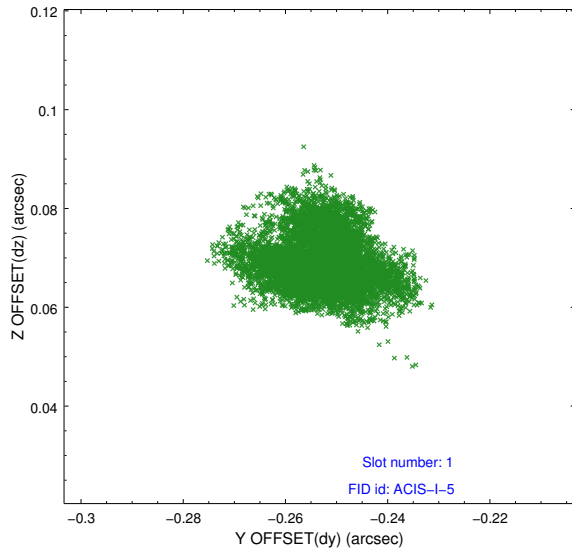


2.5 FID Slots

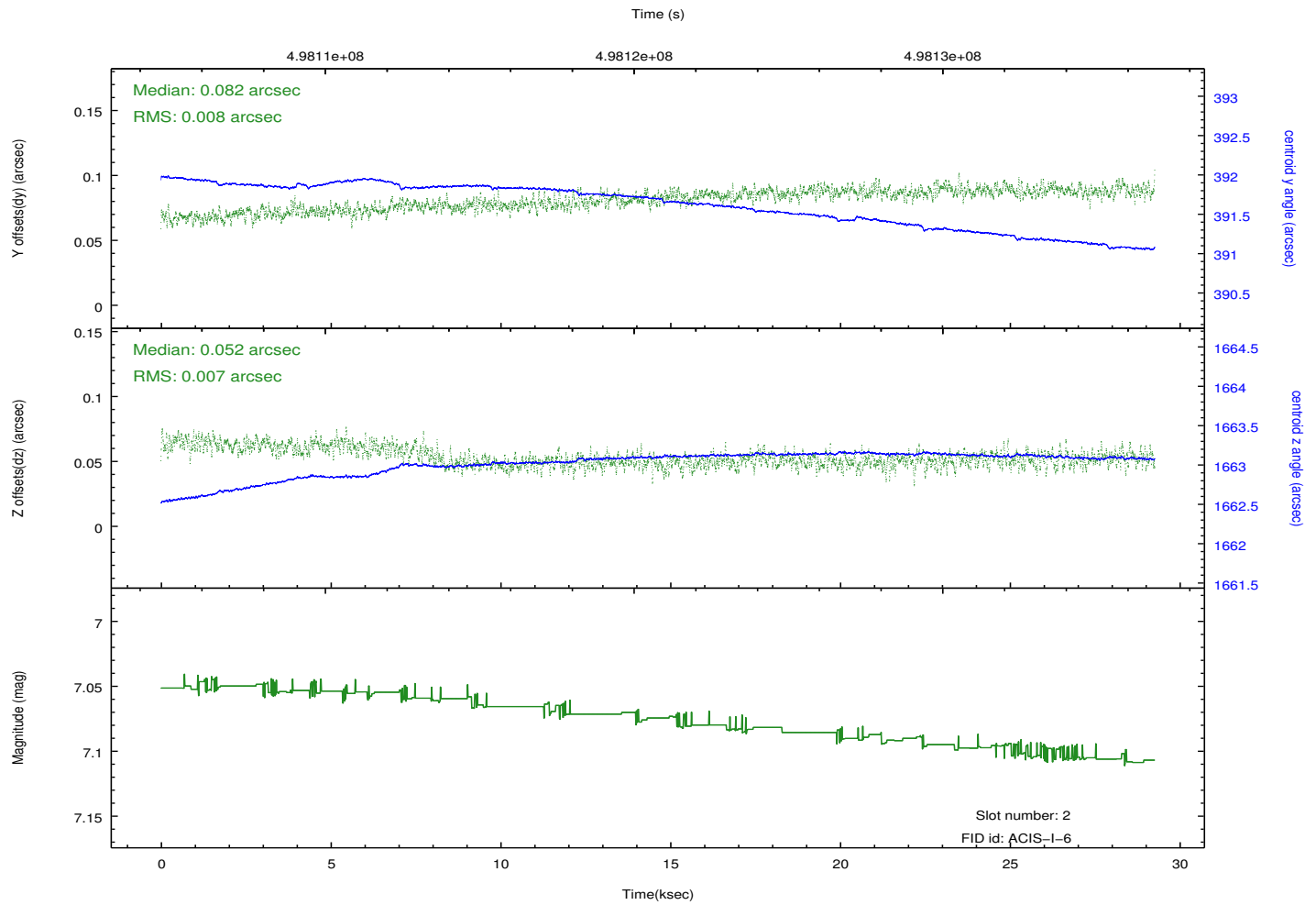
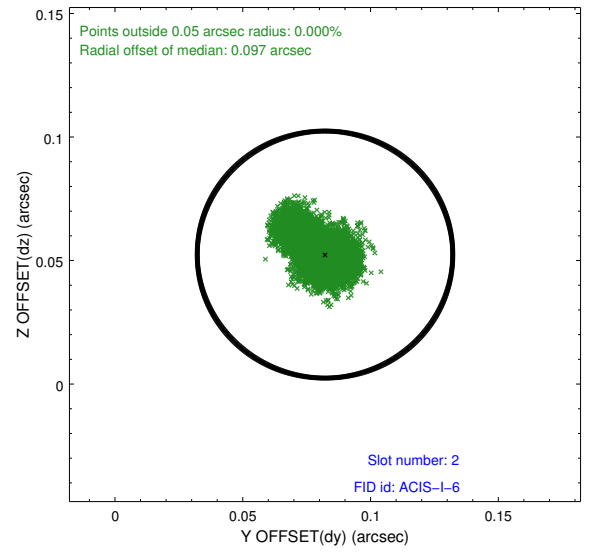
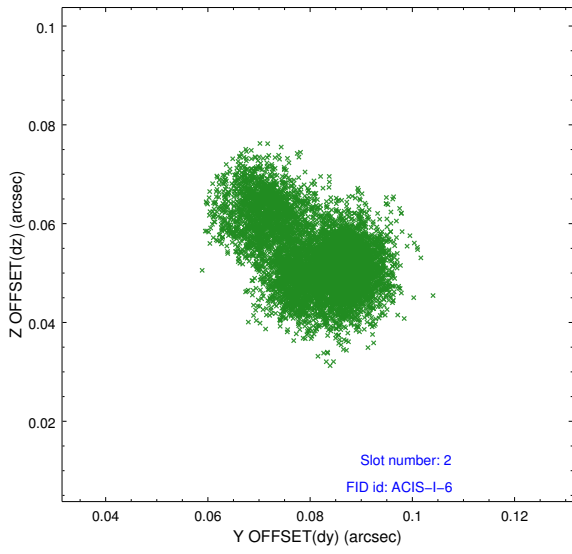
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.619095504105

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.