

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 18688 - L2 Version 1
Chandra X-Ray Center

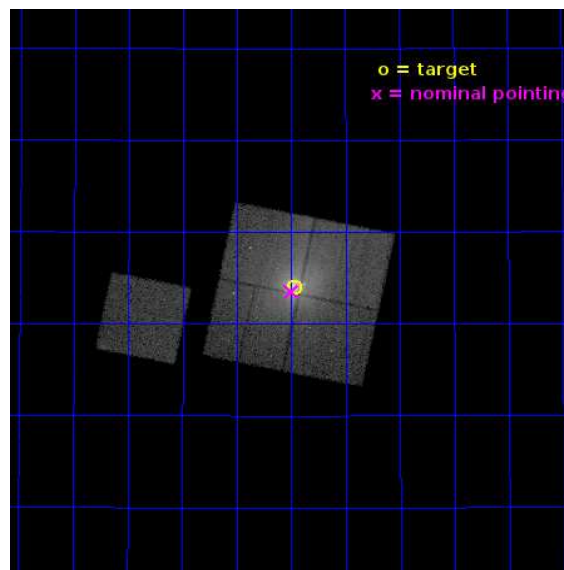
L2 Processing Date : Nov 2 2015

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1 Front

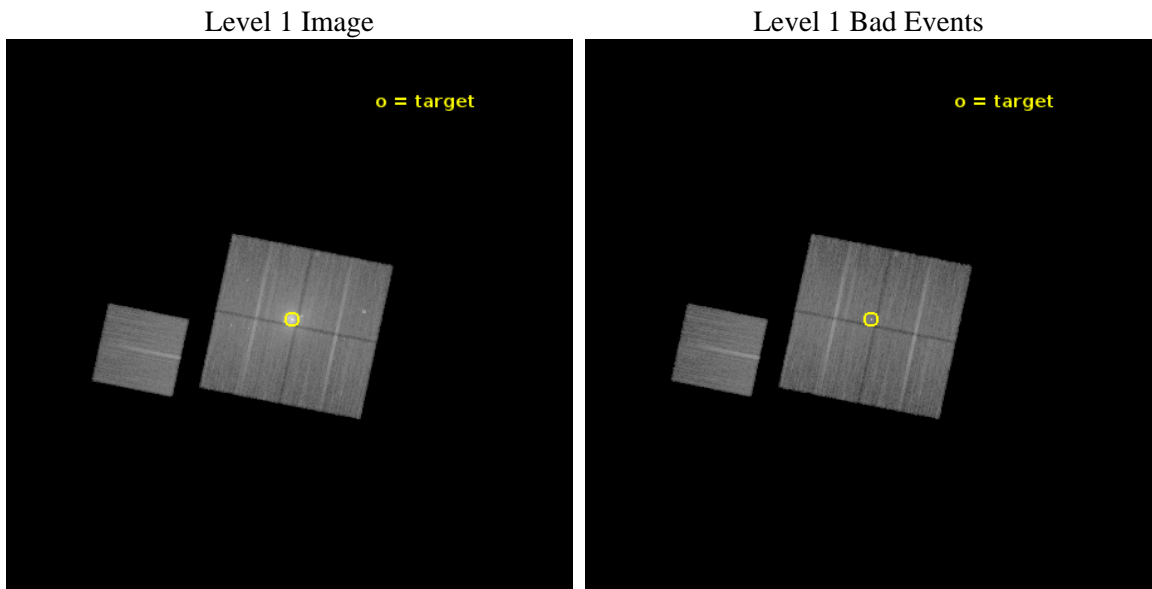
seq_num	703131	Sequence number
obs_id	18688	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - Nucleus	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.867917	Observer's specified target RA [deg]
dec_targ	40.733889	Observer's specified target Dec [deg]
ra_nom	299.87470024017	Nominal RA [deg]
dec_nom	40.725273643464	Nominal Dec [deg]
roll_nom	281.70426497584	Nominal Roll [deg]
revision	1	Processing version of data
ontime	35054.759299517	Sum of GTIs [s]
livetime	34596.74306233	Livetime [s]
ontime0	35051.618299484	Sum of GTIs [s]
ontime1	35057.900269747	Sum of GTIs [s]
ontime2	35057.900269747	Sum of GTIs [s]
ontime3	35054.759299517	Sum of GTIs [s]
ontime6	35054.759289503	Sum of GTIs [s]
l2events	276561	Number of level 2 events



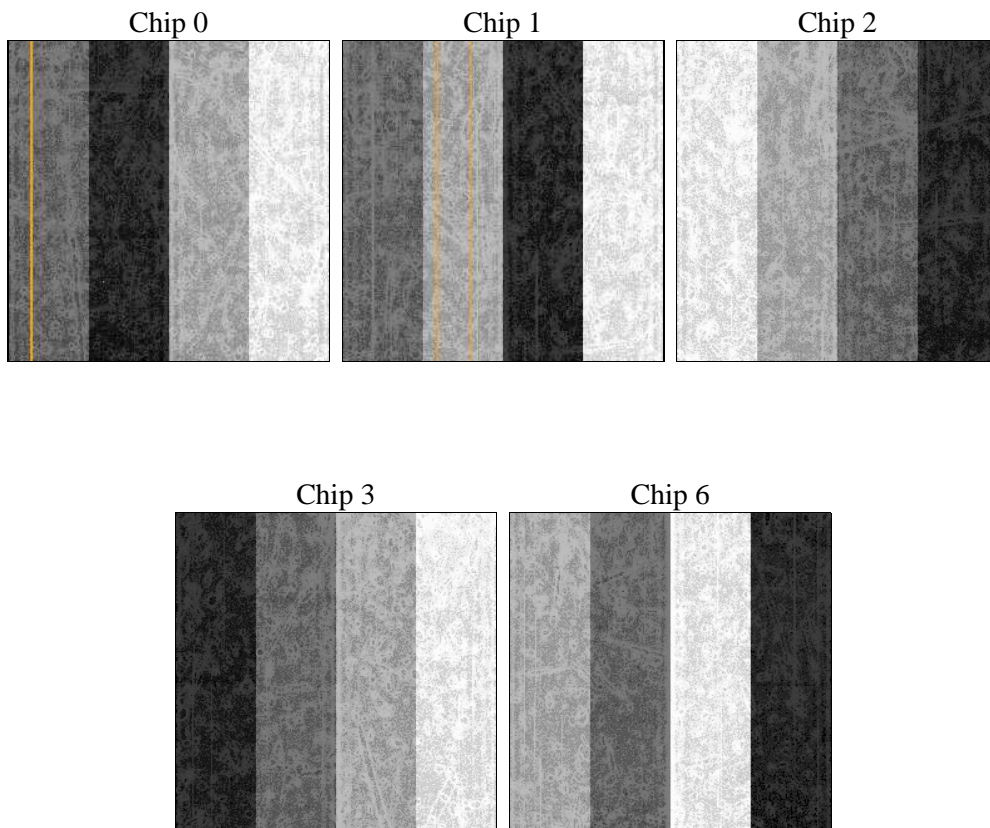
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	35054.759299517	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	35051.618299484	Sum of GTIs [s]
date	2015-11-02T19:08:03	Date and time of file creation	ontime1	35057.900269747	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	35057.900269747	Sum of GTIs [s]
			ontime3	35054.759299517	Sum of GTIs [s]
			ontime6	35054.759289503	Sum of GTIs [s]
			l1events	1133304	Number of level 1 events

2.1.4 Events

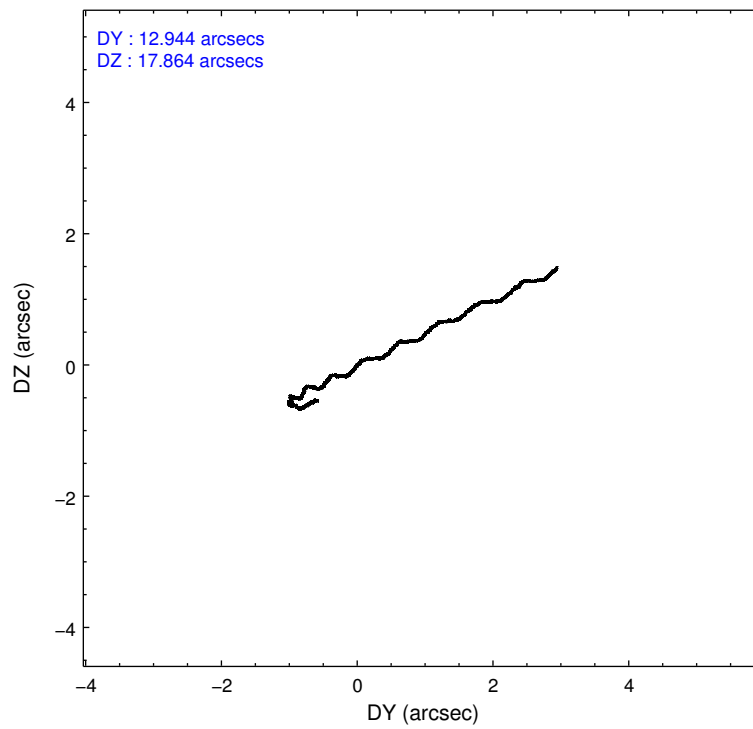
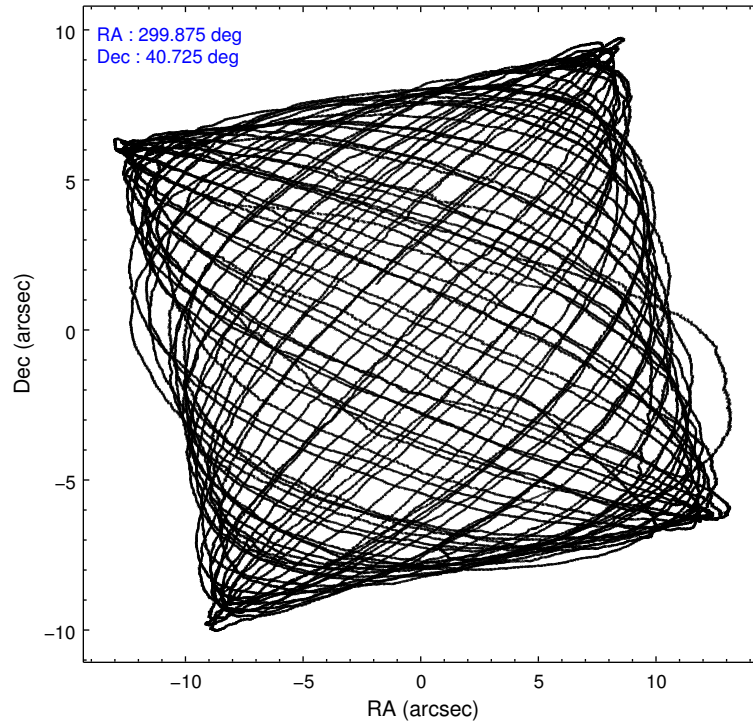
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	191207	228593	217998	298385	197121
rejected events	155315	158693	172666	170945	173326
rejected %	81%	69%	79%	57%	87%

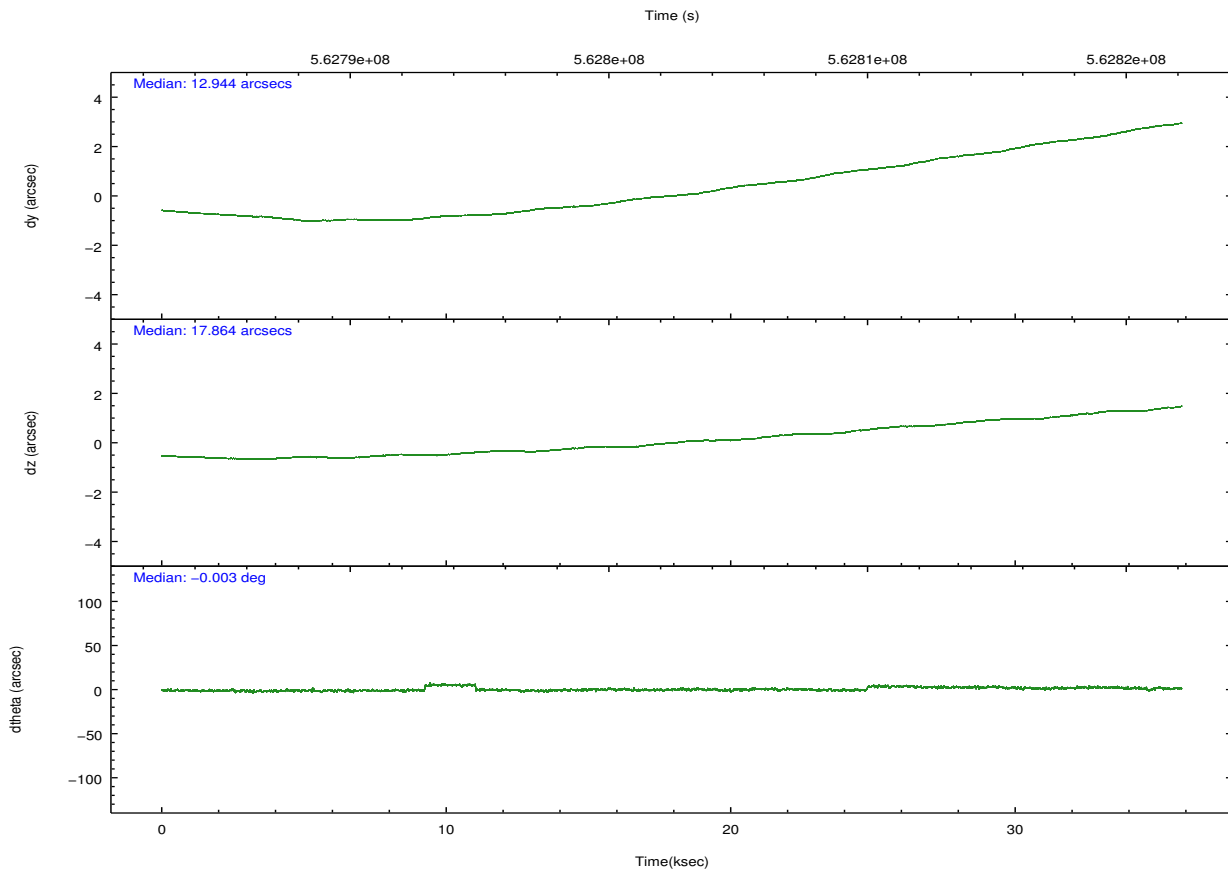
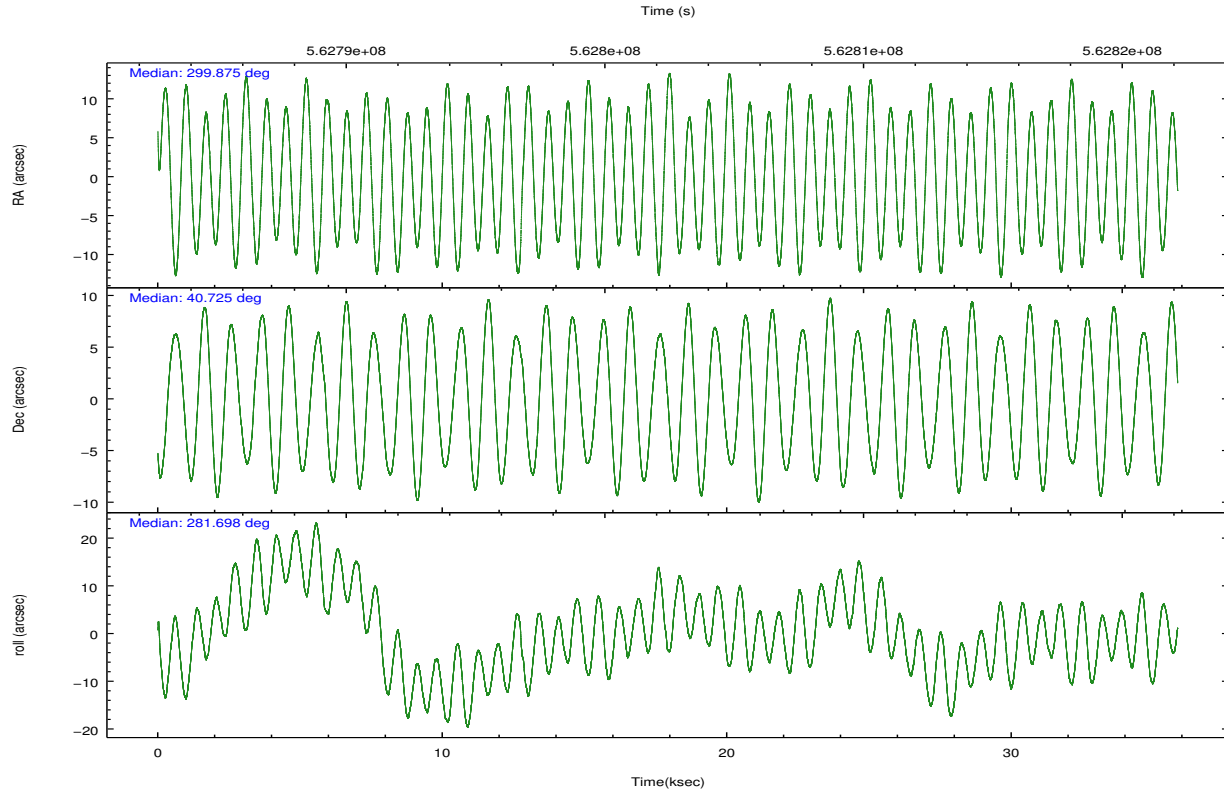
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	18242	43187	26163	89229	8576
	9%	18%	12%	29%	4%
grade 1 events	151	254	219	963	108
	0%	0%	0%	0%	0%
grade 2 events	7208	11736	8056	16582	5199
	3%	5%	3%	5%	2%
grade 3 events	2814	3919	3017	6252	2378
	1%	1%	1%	2%	1%
grade 4 events	2610	3975	2941	6133	2287
	1%	1%	1%	2%	1%
grade 5 events	8835	9554	8420	10809	9497
	4%	4%	3%	3%	4%
grade 6 events	5022	7093	5158	9253	5357
	2%	3%	2%	3%	2%
grade 7 events	146325	148875	164024	159164	163719
	76%	65%	75%	53%	83%

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	299.850355	299.8747002401749	CCD I2 on	Y	Y
[deg] Pointing Dec	40.745804	40.7252736434643	CCD I3 on	Y	Y
[deg] Pointing Roll	281.511467	281.7042649758432	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	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	562785365.184000	562783699.00712	CCD S5 on	N	N
Observation start date	2015-11-01T17:14:57	2015-11-01T16:48:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	562820365.184000	562821153.53424	On-chip summing requested	N	N
Observation end date	2015-11-02T02:58:17	2015-11-02T03:12:33	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





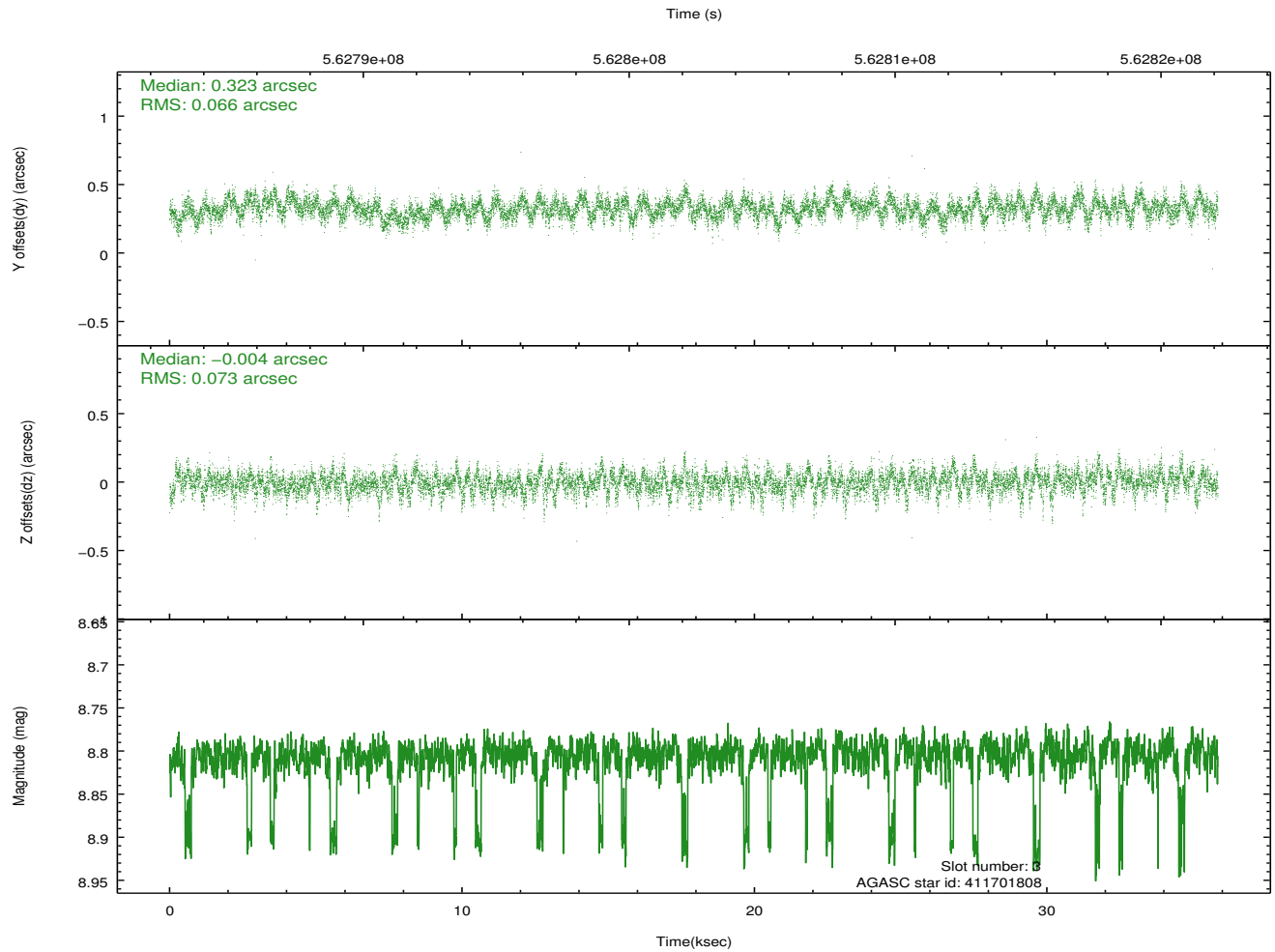
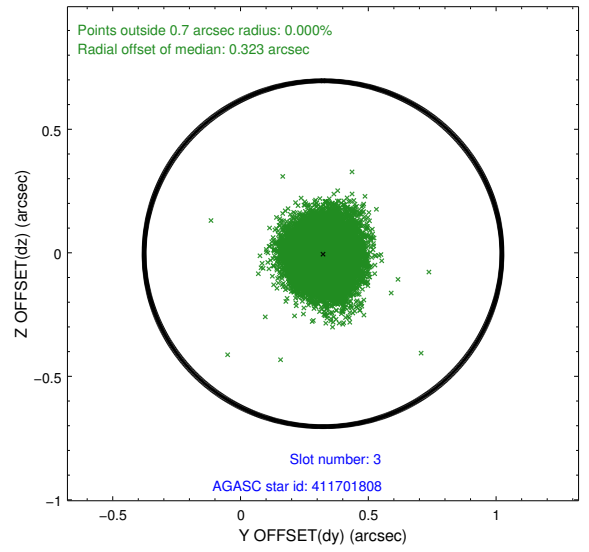
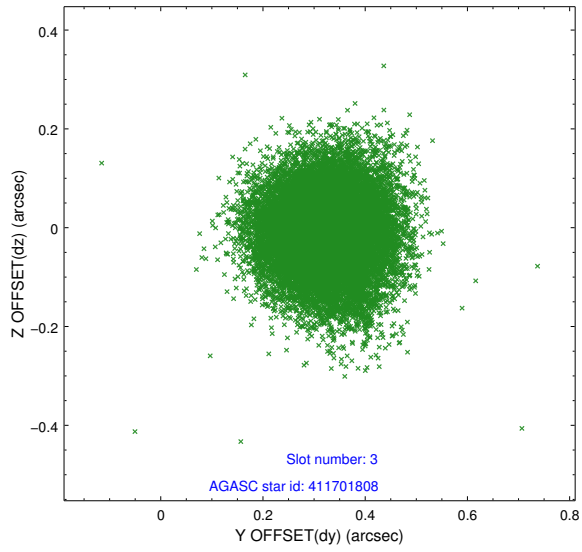
Slot Statistics

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	8743	-0.134	-0.070	0.038	0.052	0.000000	0.000000	926.06	-841.74
1	FID		ACIS-I-4	7.17	8739	0.163	0.136	0.024	0.048	0.000000	0.000000	2146.42	1058.25
2	FID		ACIS-I-6	7.25	8743	-0.124	0.001	0.026	0.041	0.000000	0.000000	392.01	1700.35
3	GUIDE	used	411701808	8.81	17477	0.323	-0.004	0.104	0.171	299.419536	40.880184	-709.97	-1051.83
4	GUIDE	used	411707968	7.25	17484	-0.058	0.119	0.102	0.155	299.509933	40.926839	-824.93	-776.55
5	GUIDE	used	412240768	8.26	17483	-0.021	0.213	0.091	0.150	299.999696	41.280279	-1804.80	780.13
6	GUIDE	used	413421624	8.68	17474	-0.072	-0.105	0.093	0.156	300.399768	40.893051	-225.62	1572.08
7	GUIDE	used	413421016	8.68	17481	-0.166	-0.207	0.109	0.180	300.612426	40.446254	1464.76	1832.49

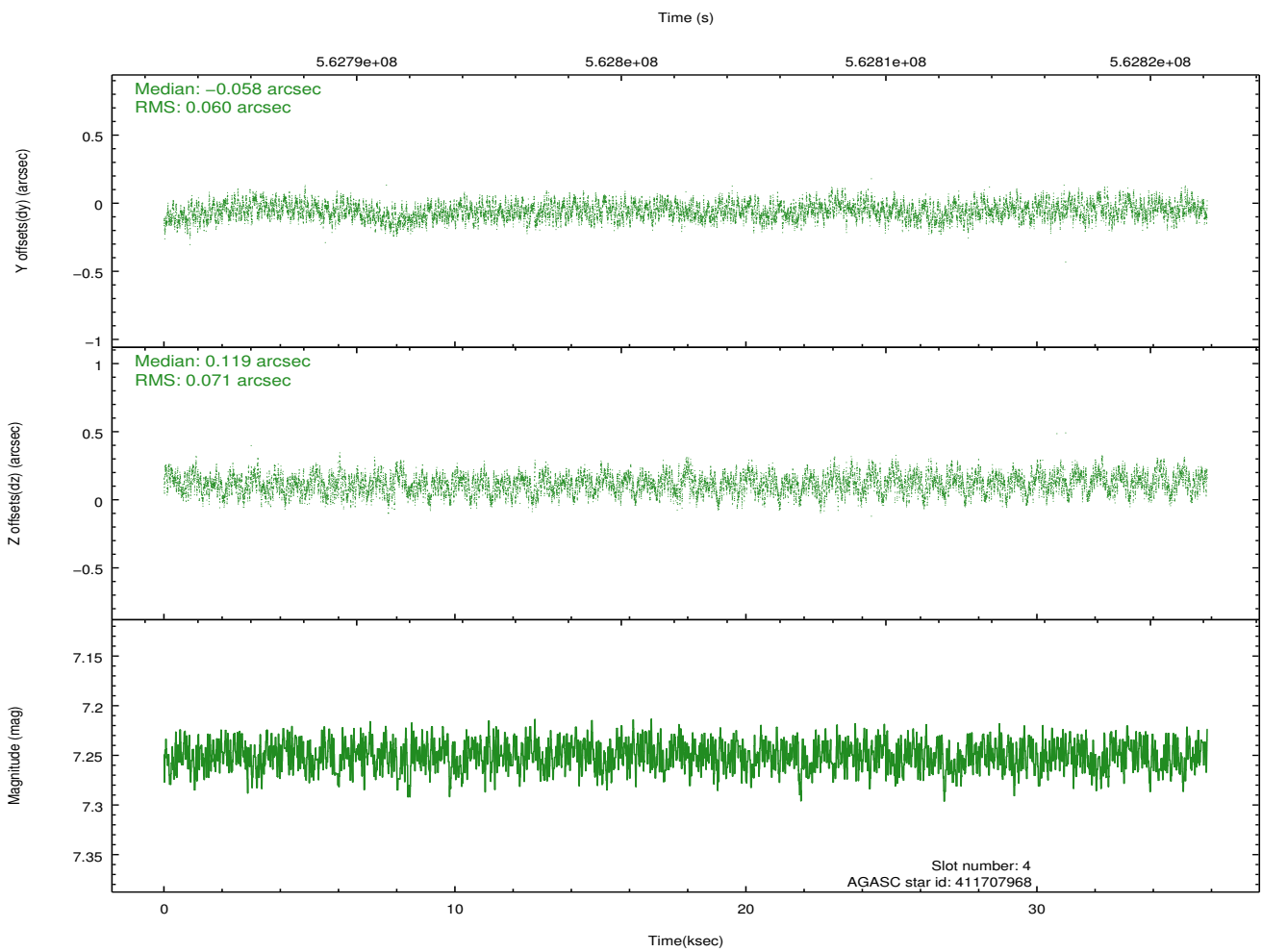
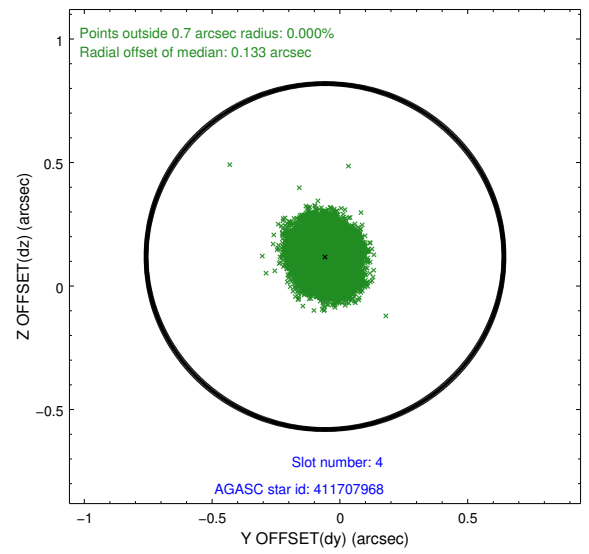
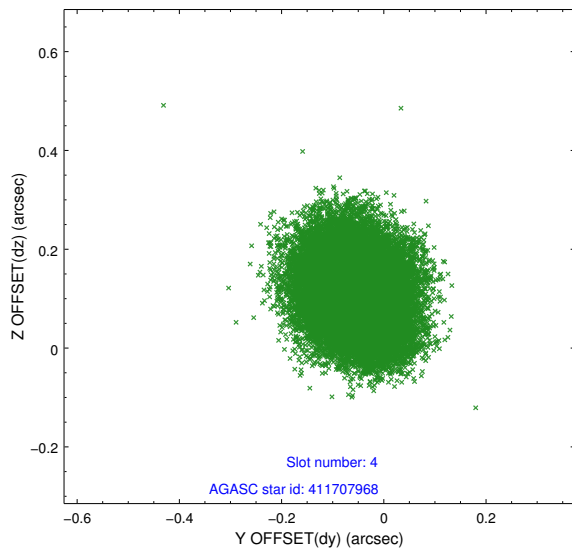
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2.4 Star Slots

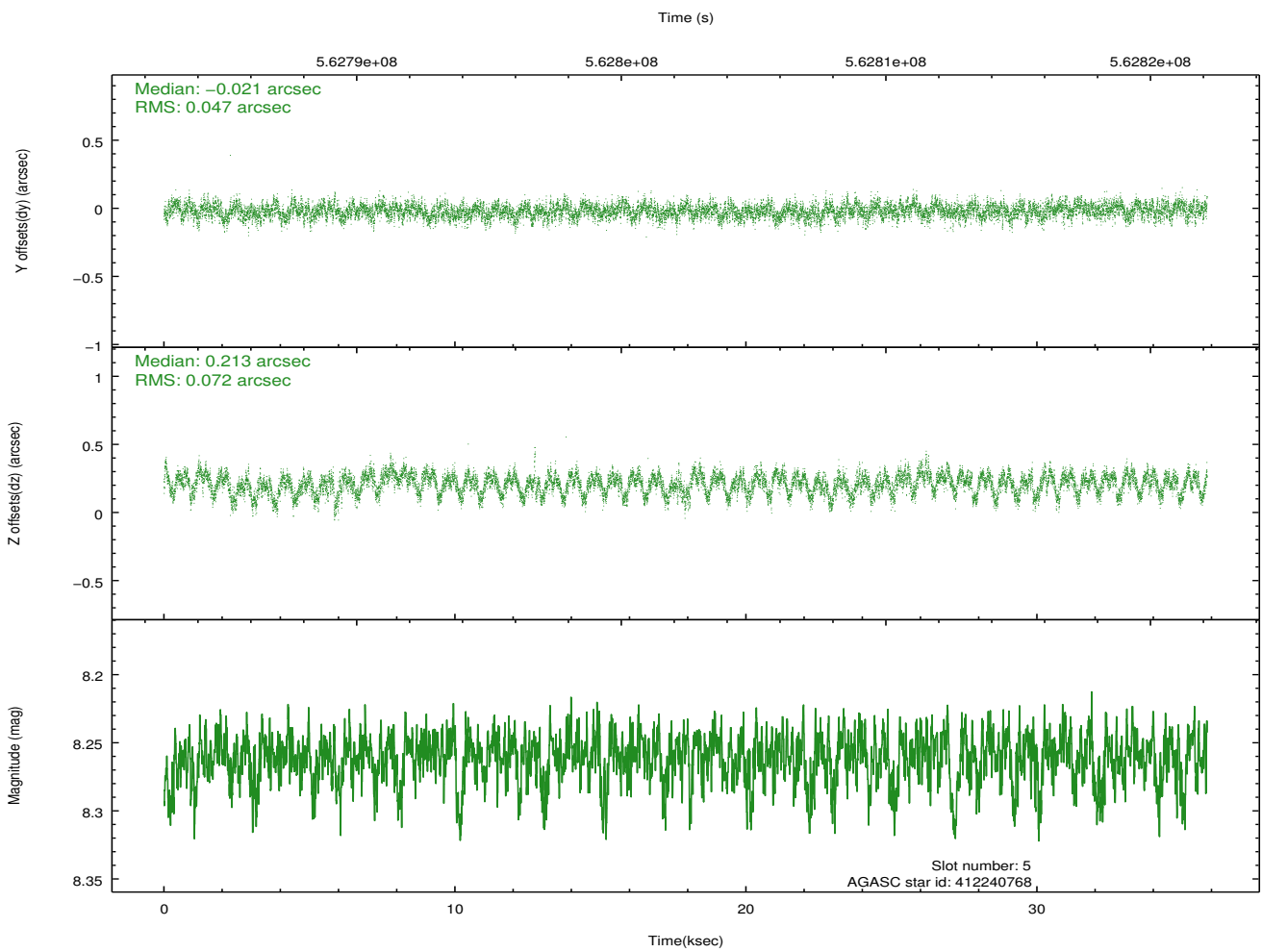
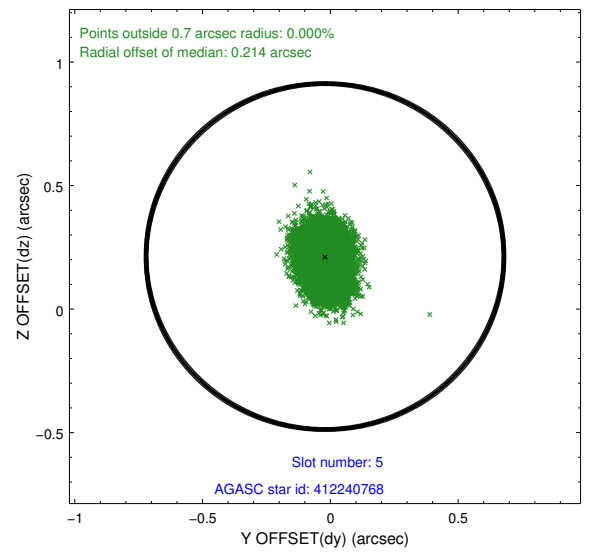
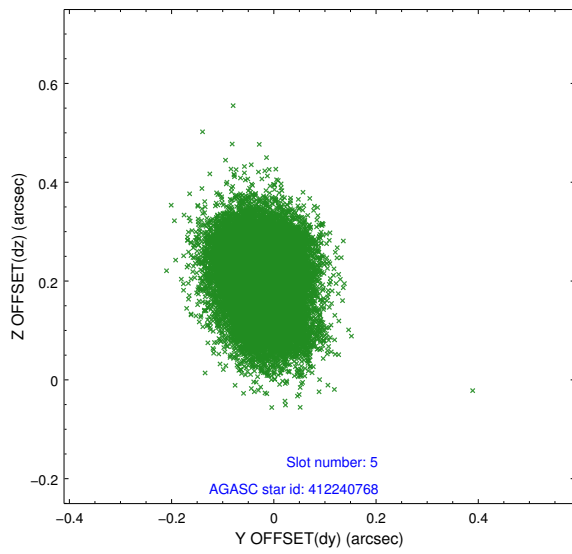
2.4.1 Slot 3



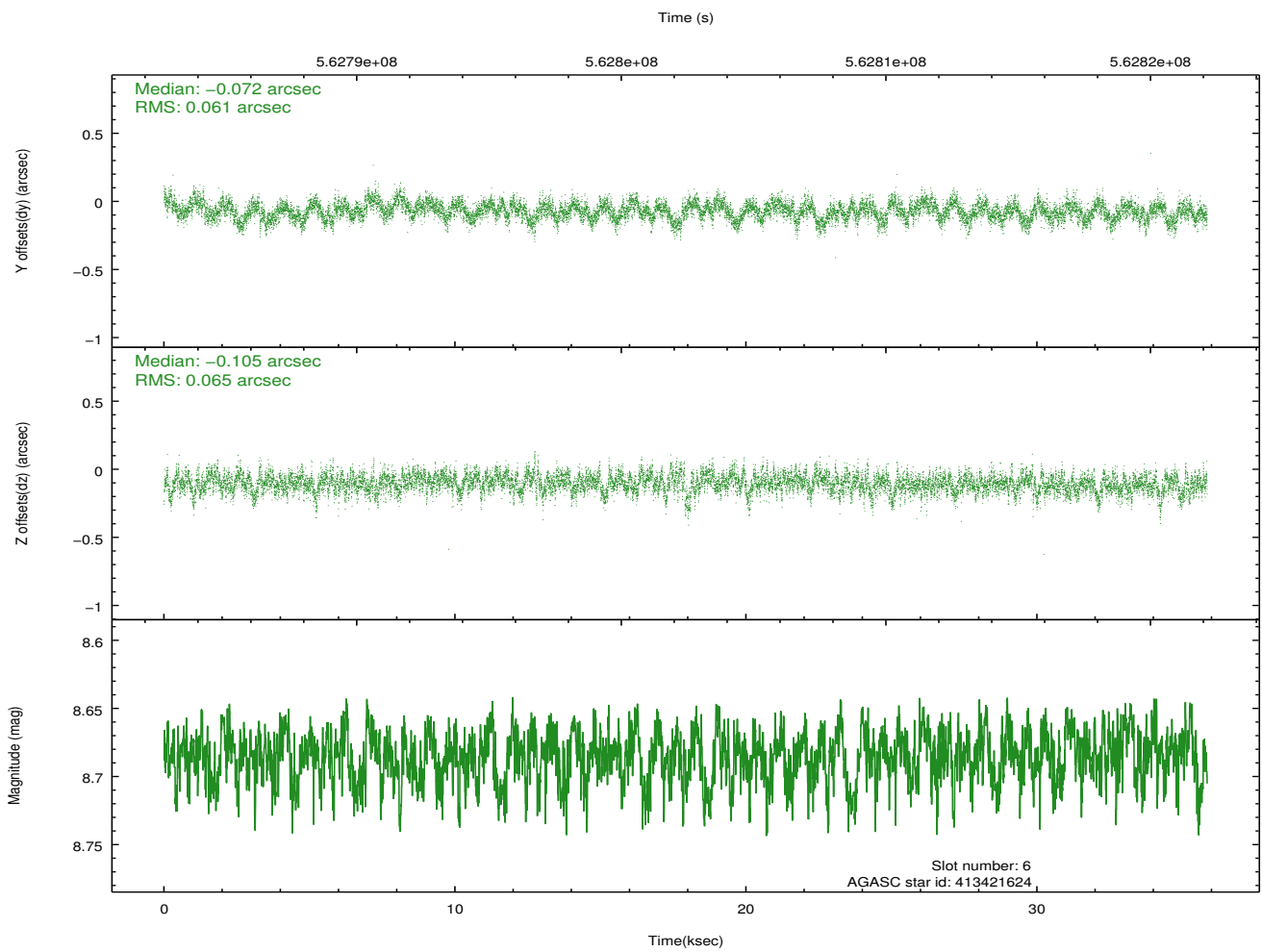
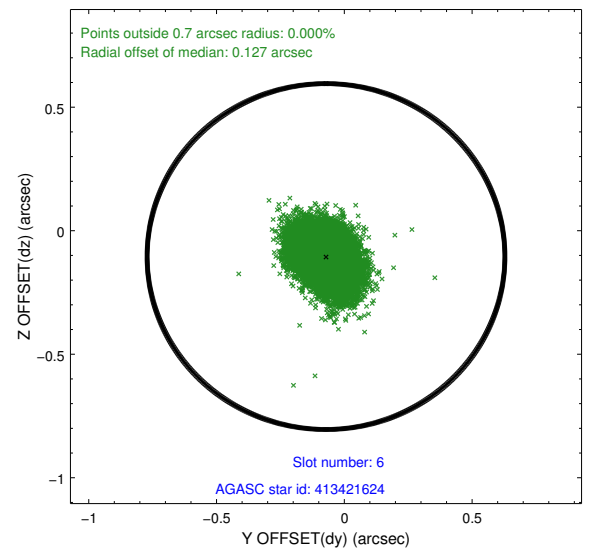
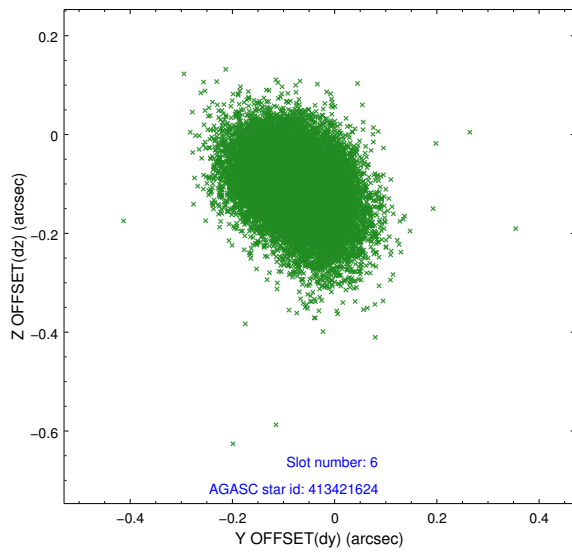
2.4.2 Slot 4



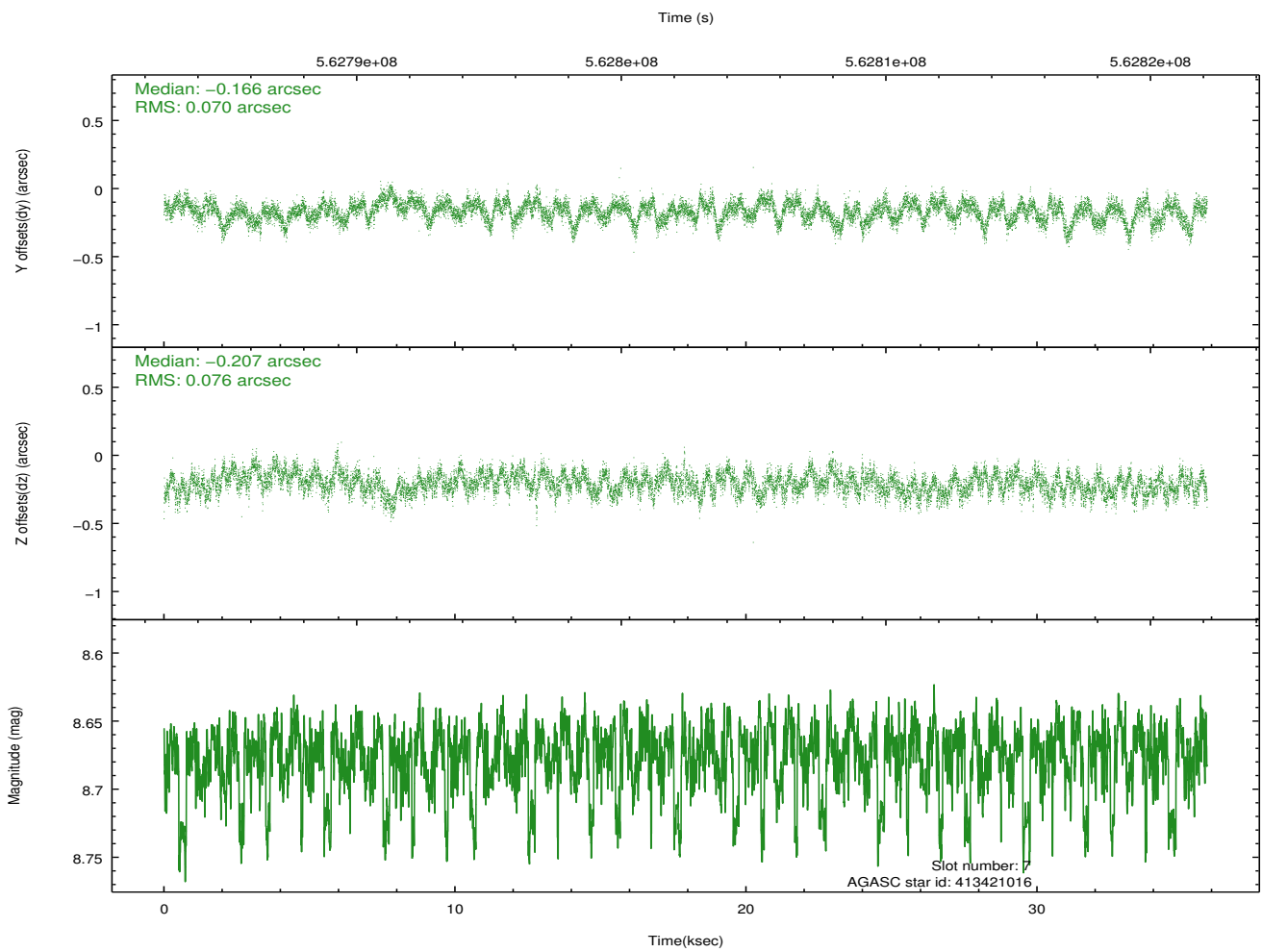
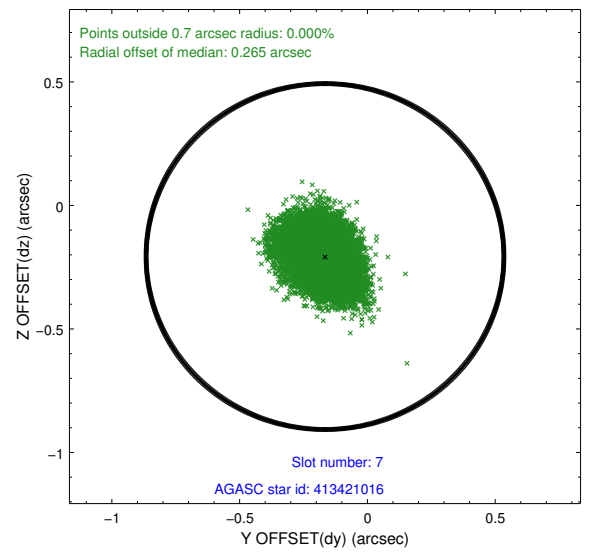
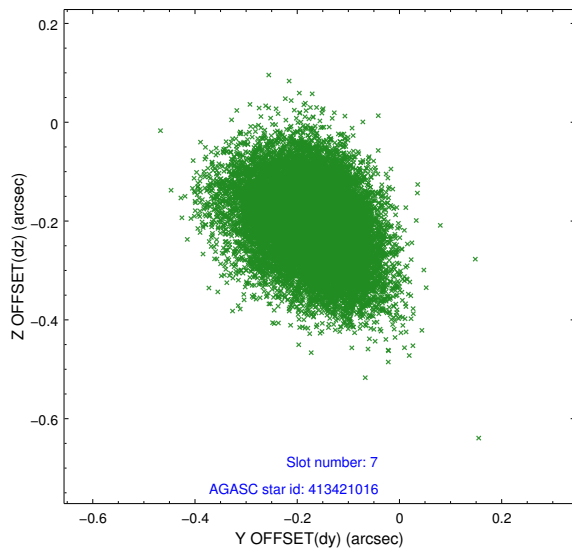
2.4.3 Slot 5



2.4.4 Slot 6

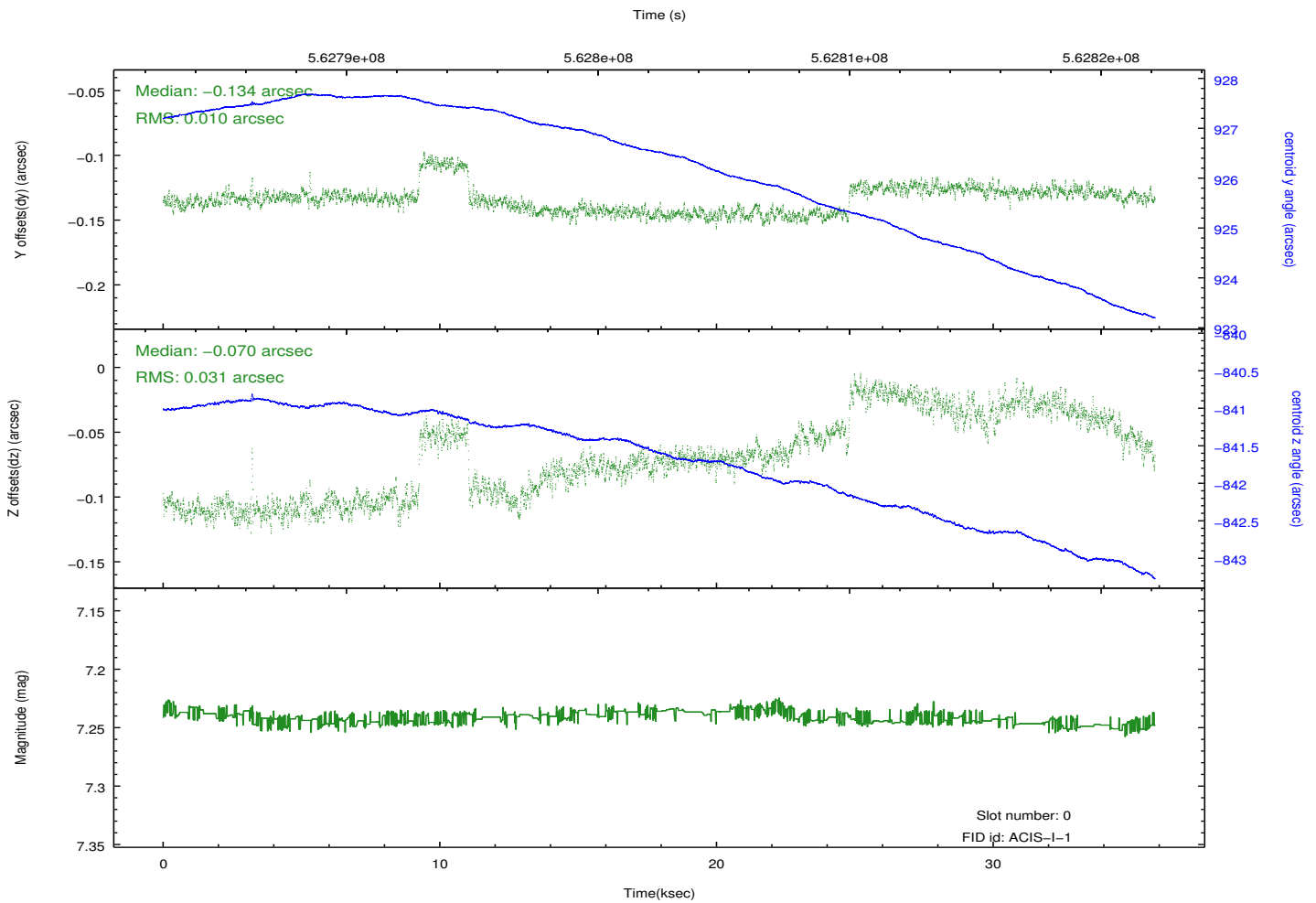
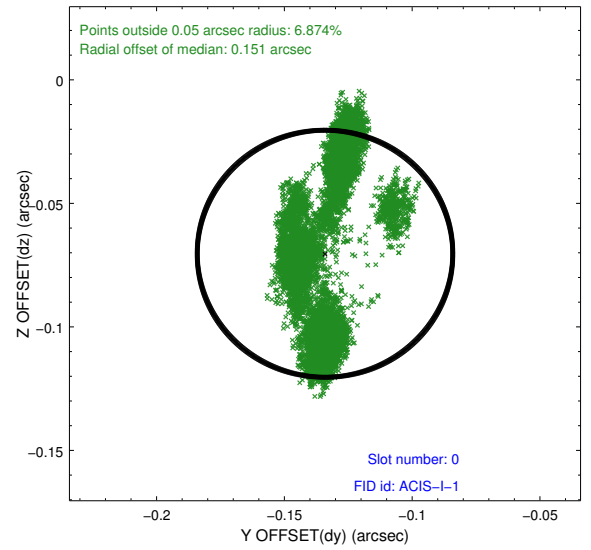
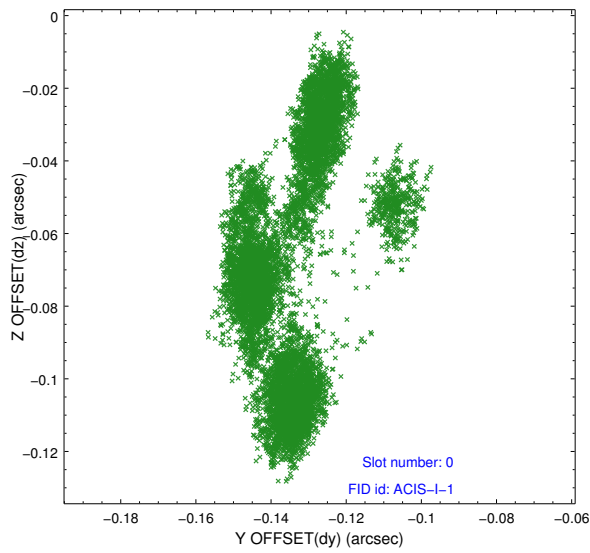


2.4.5 Slot 7

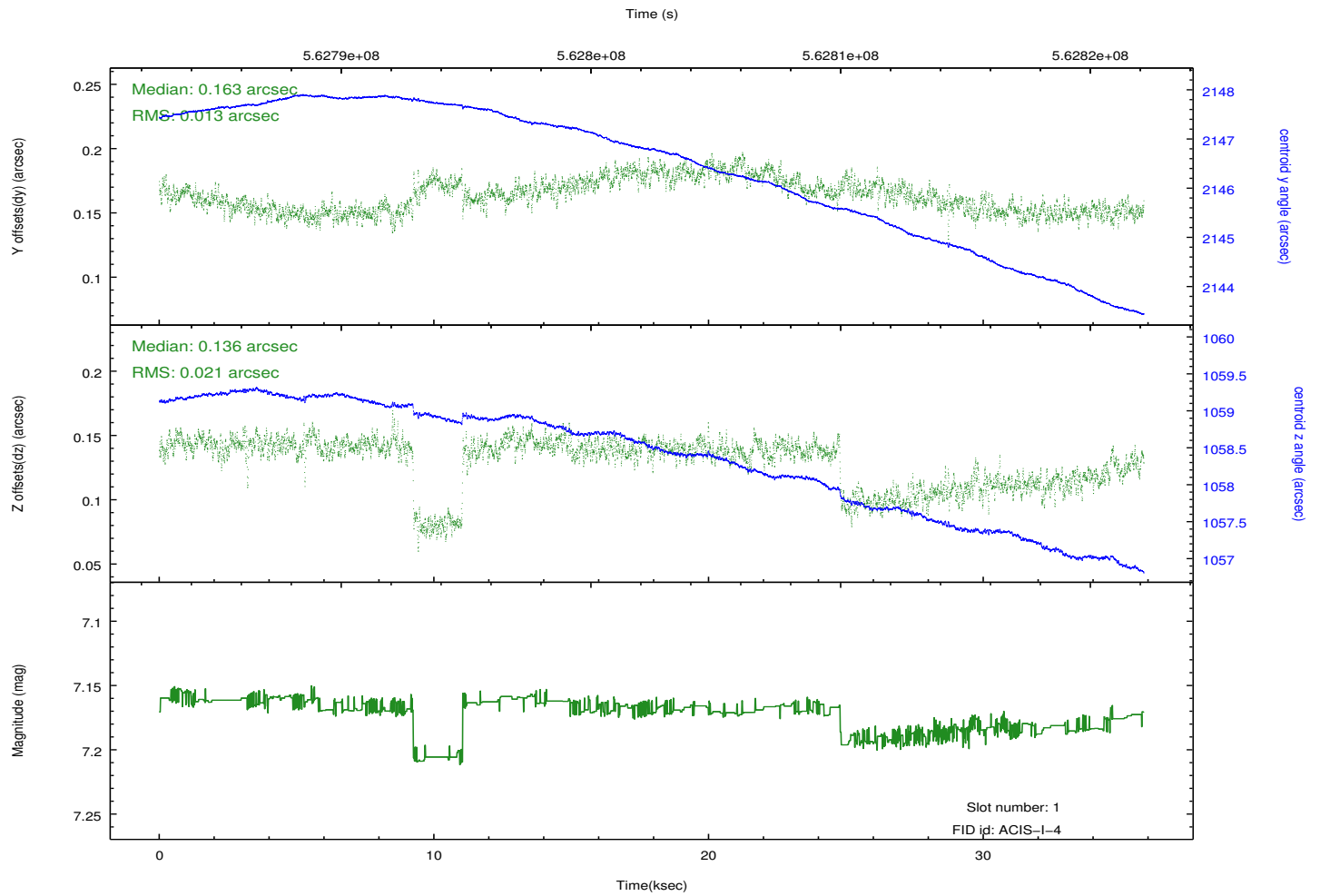
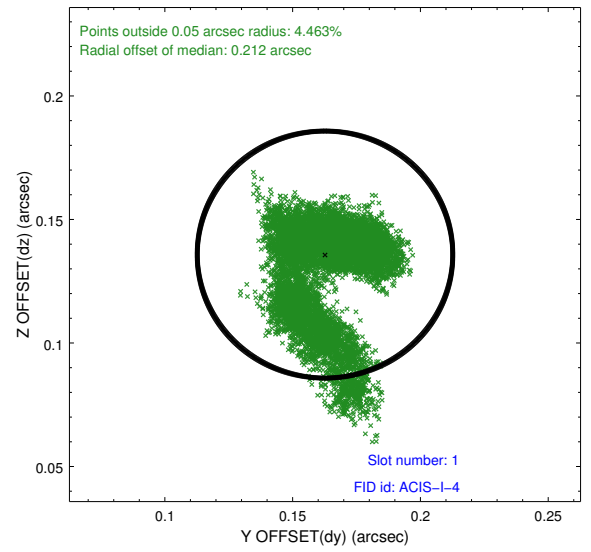
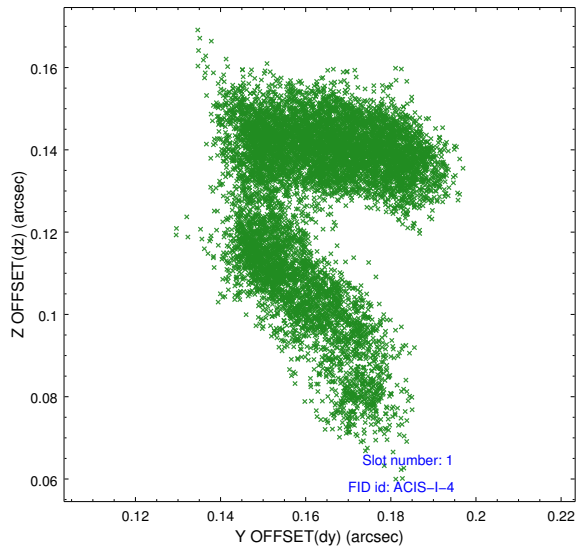


2.5 FID Slots

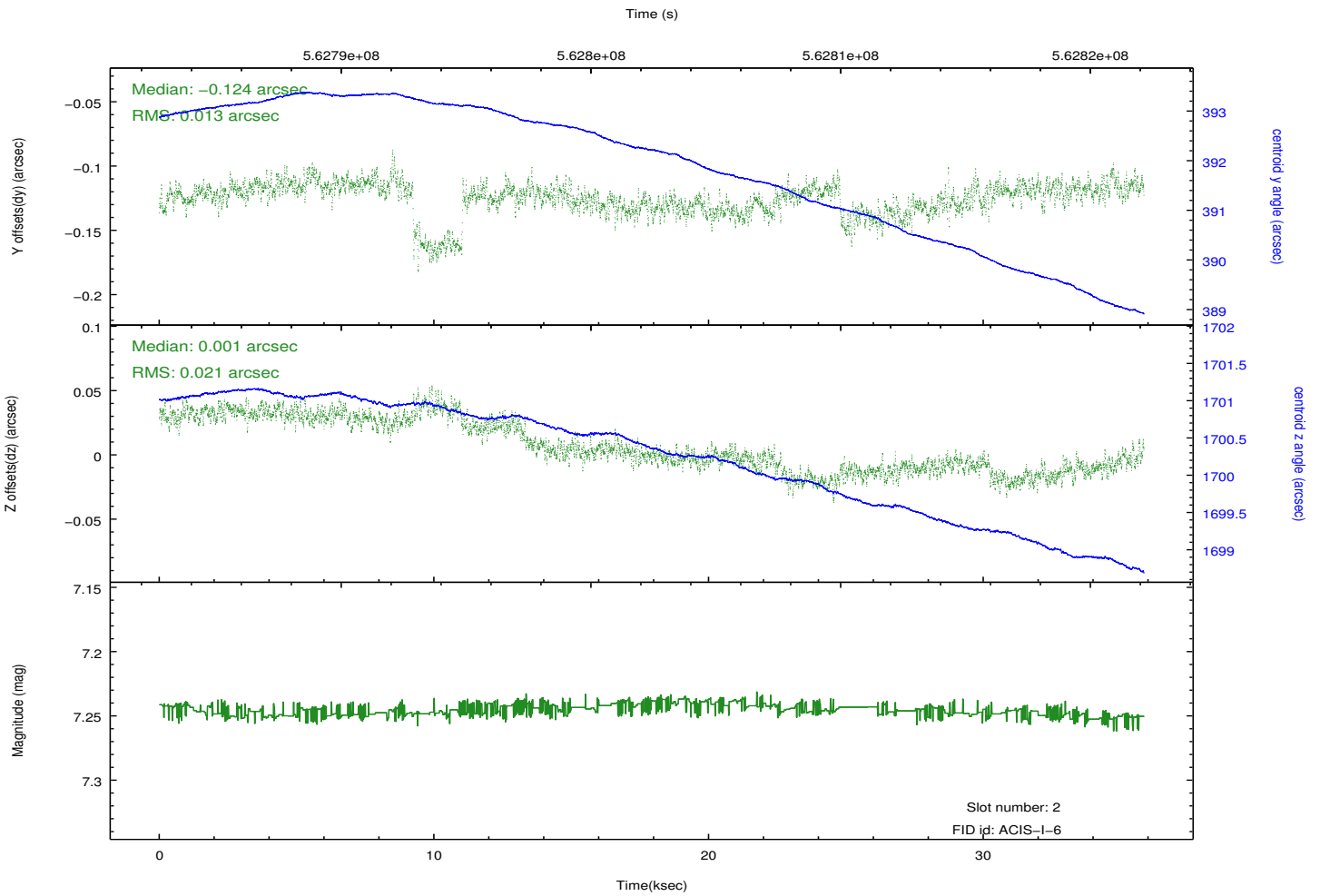
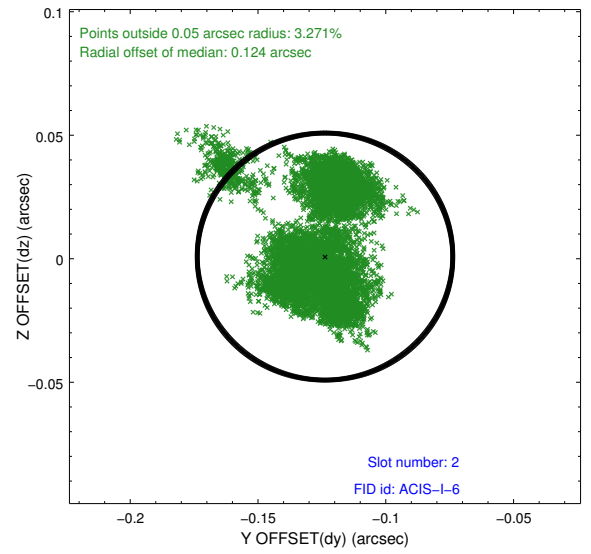
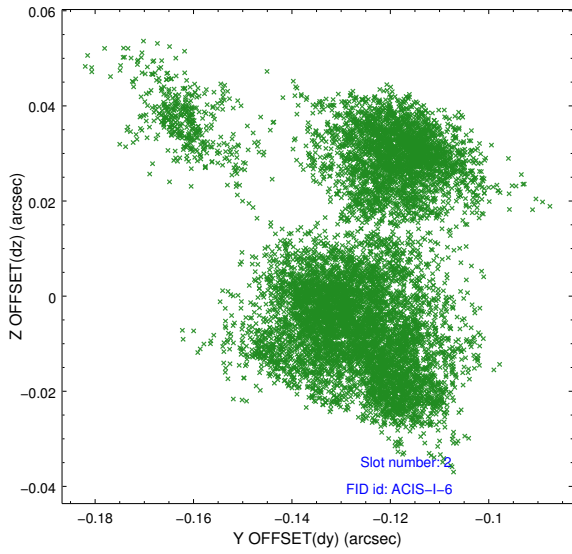
2.5.1 Slot 0



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)	2015.11.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.054759299517

A.2 Comments