

V&V Reference Report

L2 ASCDS Version : 10

Observation 15302 - L2 Version 2
Chandra X-Ray Center

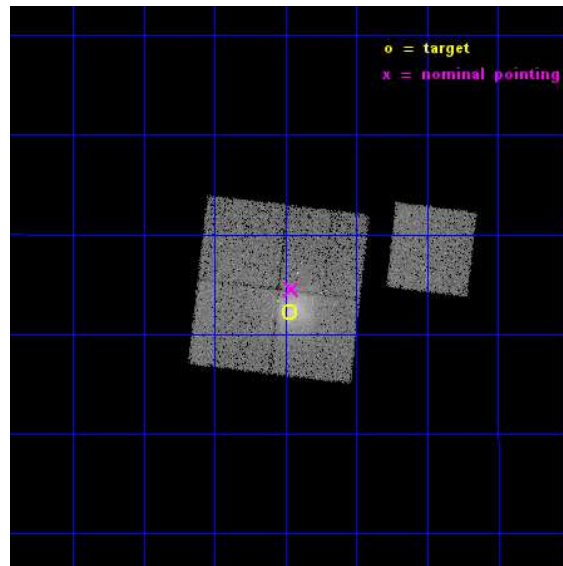
L2 Processing Date : Dec 6 2014

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1 Front

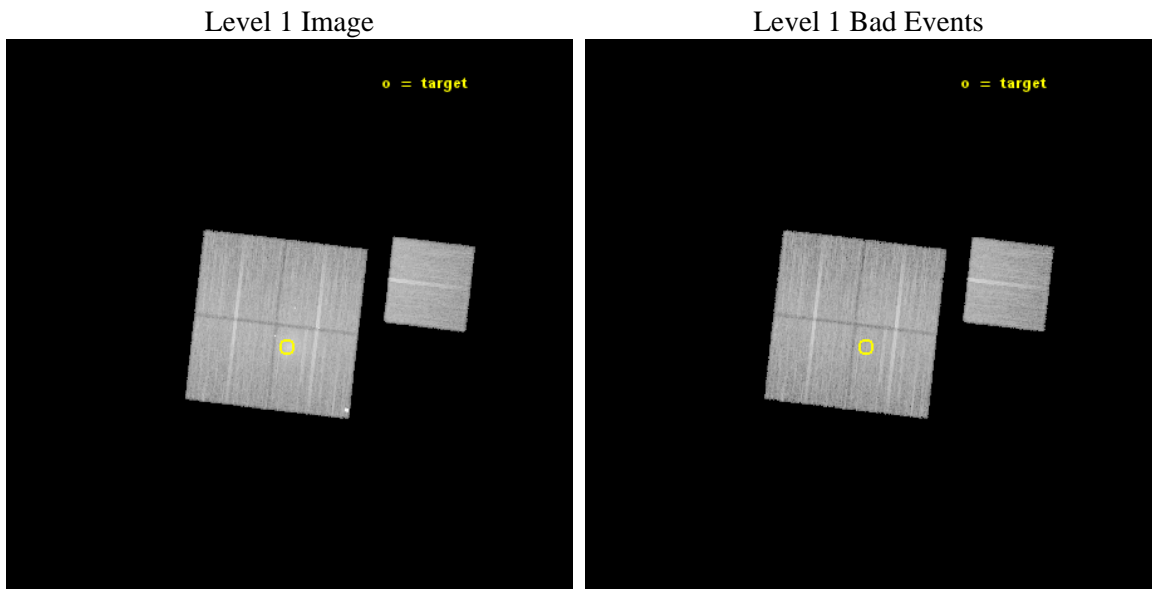
seq_num	801335	Sequence number
obs_id	15302	Observation id
title	Characterizing the Most Massive Clusters in the z	Proposal title
observer	Dr Stephen Murray	Principal investigator
object	G171.94-40.65	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	48.24206	Observer's specified target RA [deg]
dec_targ	8.370826	Observer's specified target Dec [deg]
ra_nom	48.239507731783	Nominal RA [deg]
dec_nom	8.4085016787985	Nominal Dec [deg]
roll_nom	96.657549640684	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27084.700208306	Sum of GTIs [s]
livetime	26730.818660619	Livetime [s]
ontime0	27084.700208306	Sum of GTIs [s]
ontime1	27084.700208306	Sum of GTIs [s]
ontime2	27084.700208306	Sum of GTIs [s]
ontime3	27084.700208306	Sum of GTIs [s]
ontime6	27084.700208306	Sum of GTIs [s]
l2events	83888	Number of level 2 events



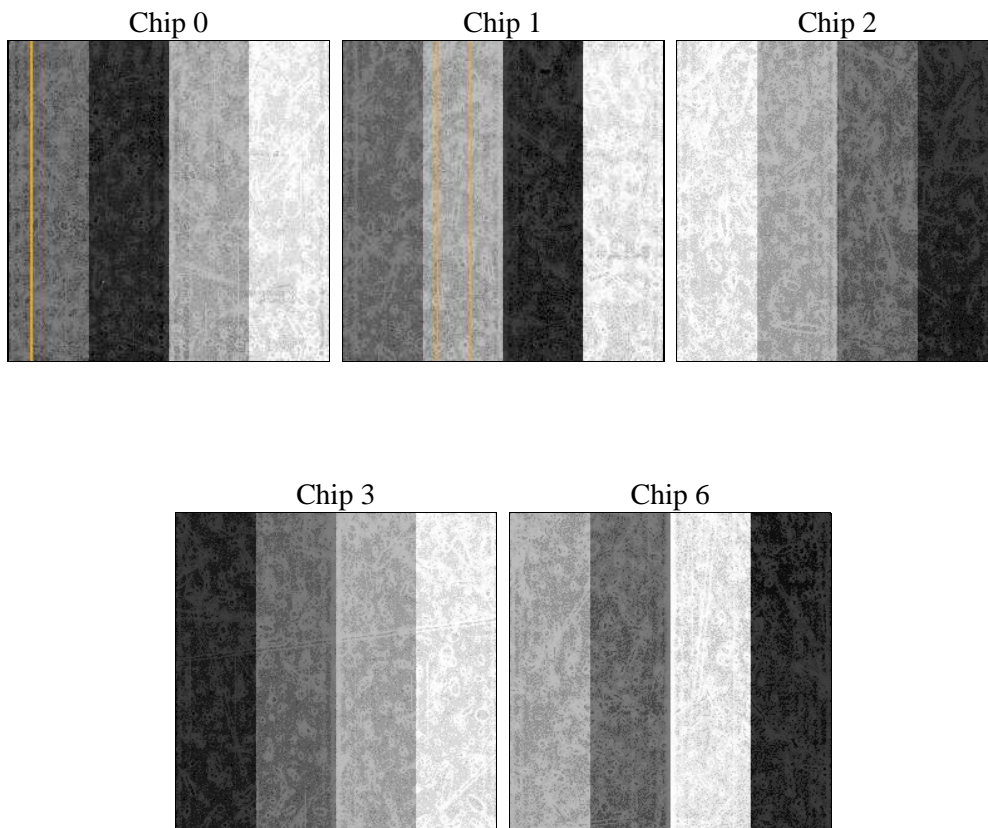
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	27084.700208306	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	27084.700208306	Sum of GTIs [s]
date	2014-12-06T22:10:47	Date and time of file creation	ontime1	27084.700208306	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	27084.700208306	Sum of GTIs [s]
			ontime3	27084.700208306	Sum of GTIs [s]
			ontime6	27084.700208306	Sum of GTIs [s]
			l1events	651752	Number of level 1 events

2.1.4 Events

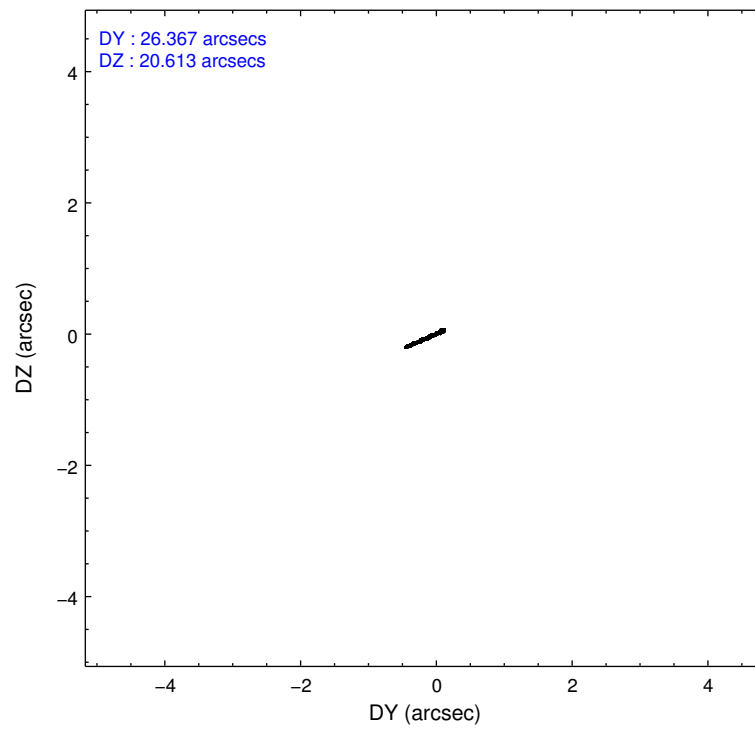
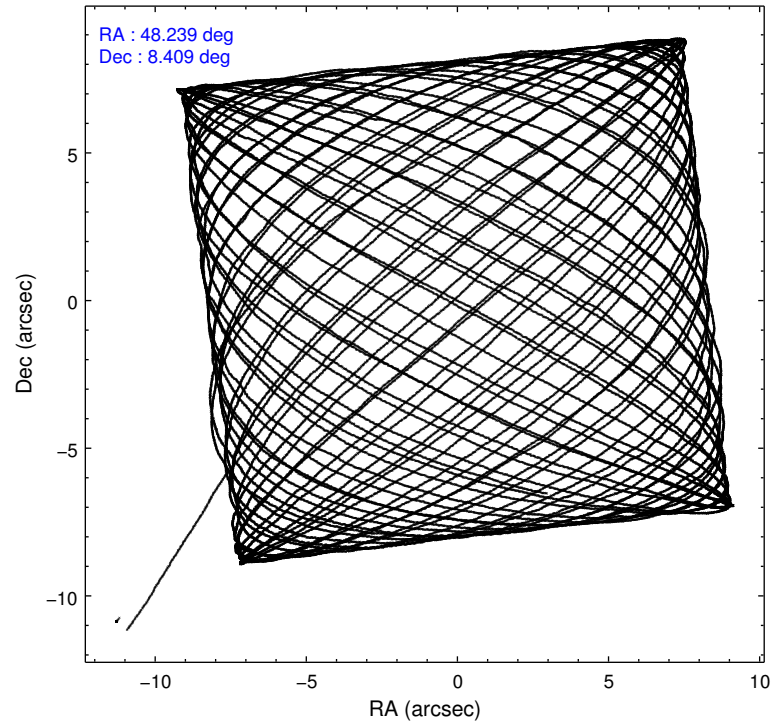
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	120401	124303	130962	146405	129681
rejected events	104769	106082	114791	112483	114193
rejected %	87%	85%	87%	76%	88%

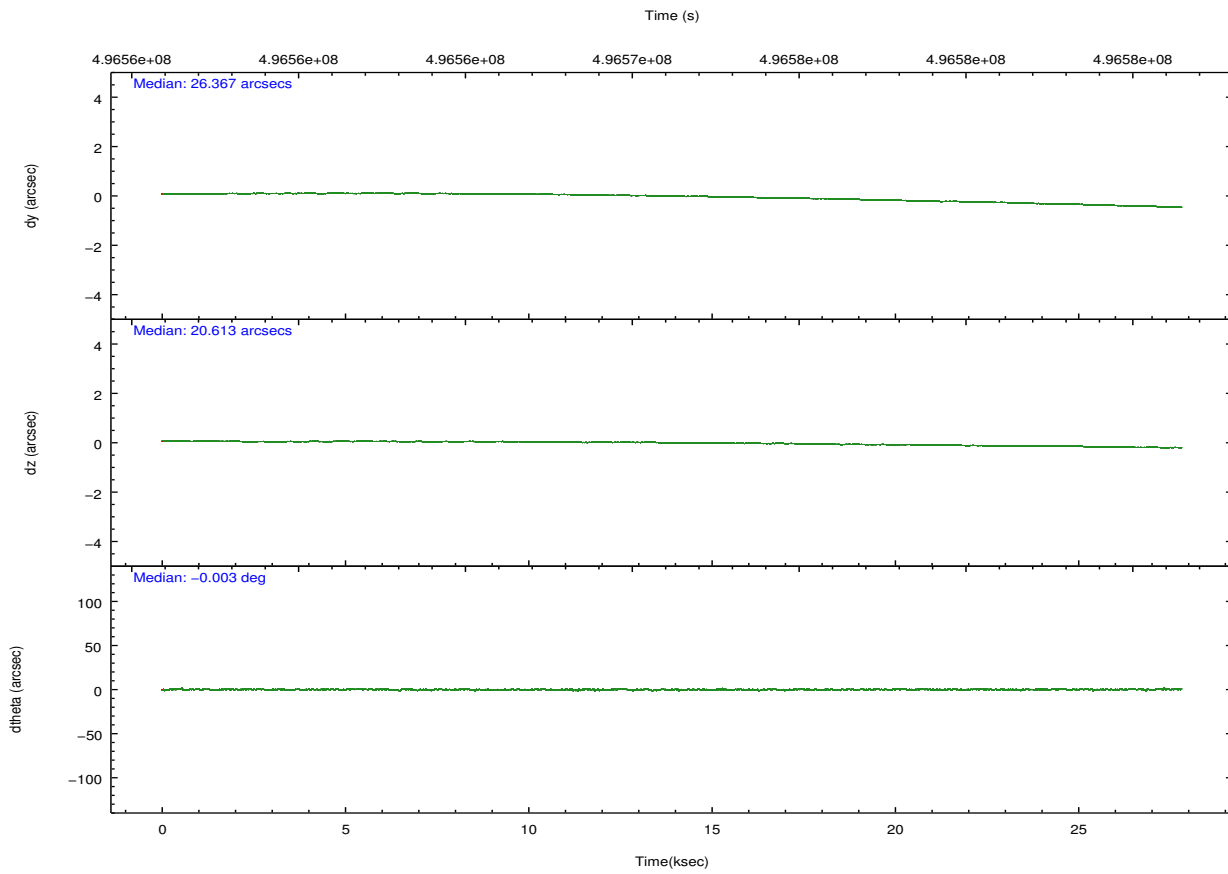
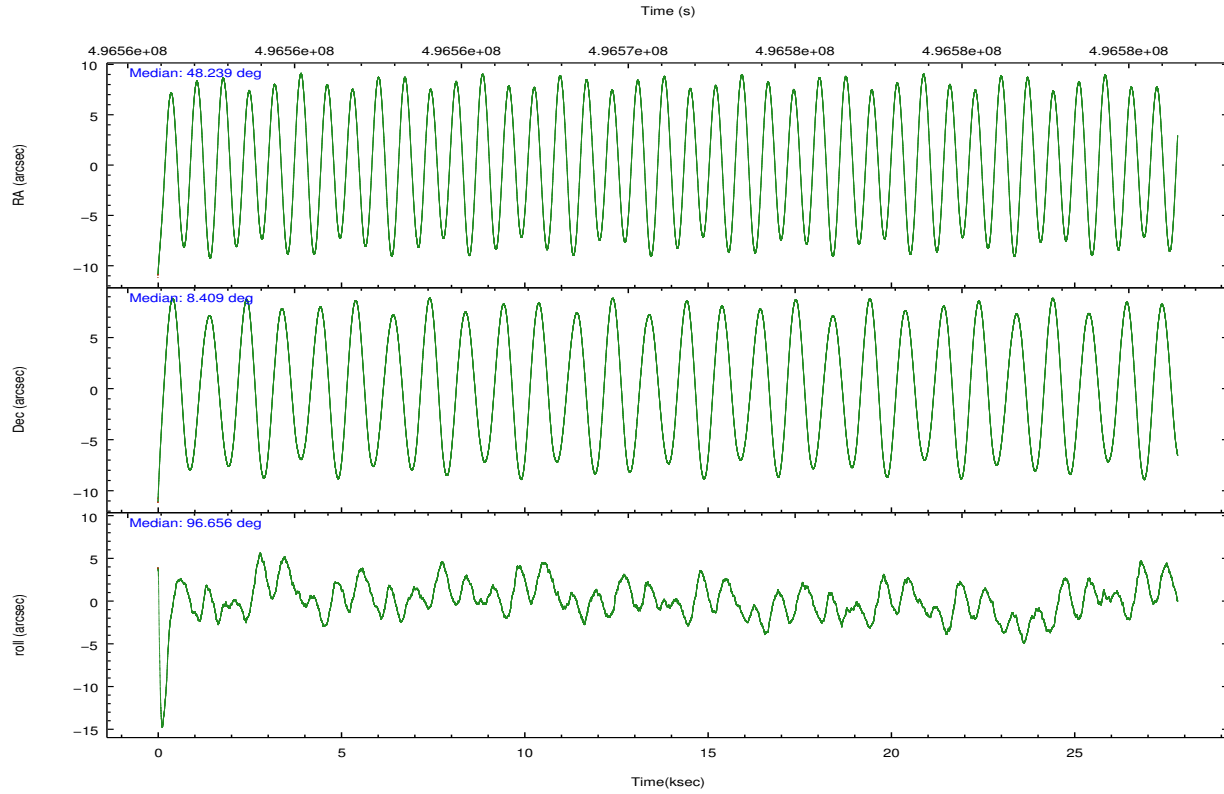
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5311	6496	6296	20979	5070
	4%	5%	4%	14%	3%
grade 1 events	77	76	84	141	61
	0%	0%	0%	0%	0%
grade 2 events	3783	4416	3770	5116	3588
	3%	3%	2%	3%	2%
grade 3 events	1621	1686	1516	2133	1648
	1%	1%	1%	1%	1%
grade 4 events	1572	1748	1604	2014	1584
	1%	1%	1%	1%	1%
grade 5 events	6272	6674	5804	7252	6923
	5%	5%	4%	4%	5%
grade 6 events	3347	3881	2990	3685	3599
	2%	3%	2%	2%	2%
grade 7 events	98418	99326	108898	105085	107208
	81%	79%	83%	71%	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	48.256197	48.23950773178331	CCD I2 on	Y	Y
[deg] Pointing Dec	8.386497	8.408501678798485	CCD I3 on	Y	Y
[deg] Pointing Roll	96.446416	96.65754964068371	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	-231.842463	-231.8374710109429	CCD S3 on	N	N
[mm] SIM translation stage offset	-1.75	-1.754981991986767	CCD S4 on	N	N
[s] Observation start time (MET)	496558089.184000	496556834.26072	CCD S5 on	N	N
Observation start date	2013-09-26T04:47:02	2013-09-26T04:27:14	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	496585089.184000	496585599.86229	On-chip summing requested	N	N
Observation end date	2013-09-26T12:17:02	2013-09-26T12:26:39	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





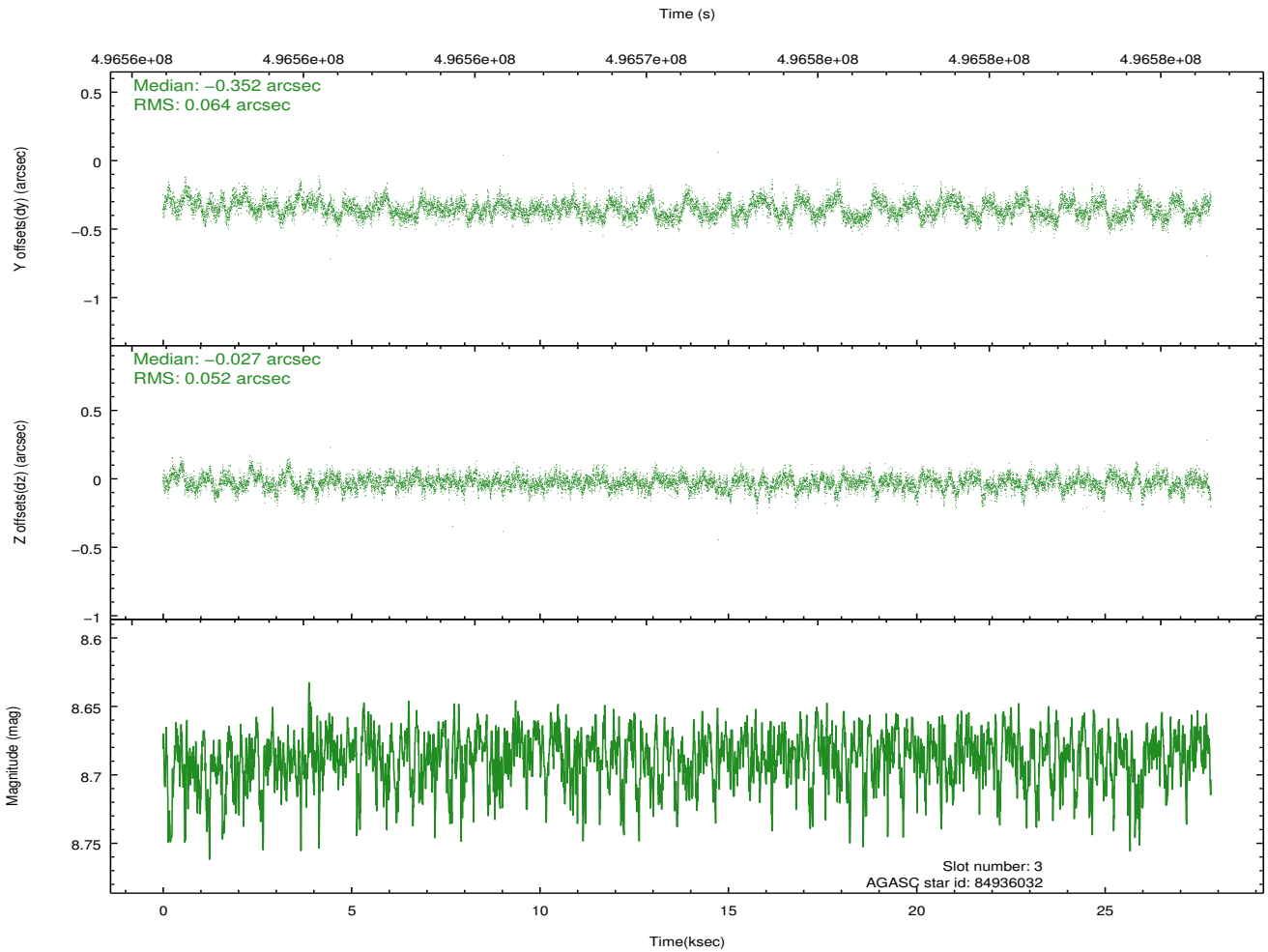
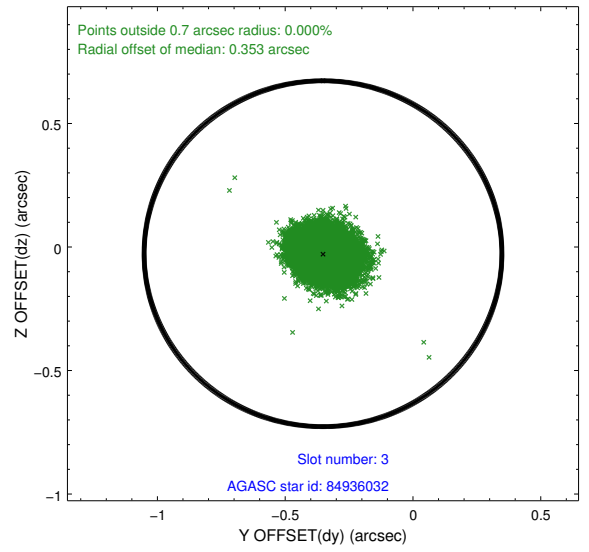
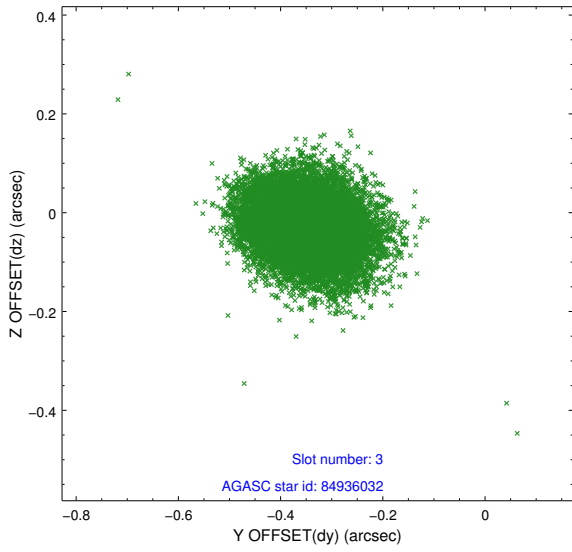
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.14	6785	0.087	-0.042	0.007	0.011	0.000000	0.000000	912.92	-880.29
1	FID		ACIS-I-5	7.13	6784	-0.308	0.063	0.007	0.012	0.000000	0.000000	-1835.57	1017.18
2	FID		ACIS-I-6	7.14	6785	0.130	0.050	0.007	0.011	0.000000	0.000000	378.35	1661.83
3	GUIDE	used	84936032	8.69	13565	-0.352	-0.027	0.088	0.142	47.918337	8.936956	2103.58	971.84
4	GUIDE	used	84936568	8.68	13546	-0.155	-0.090	0.102	0.166	47.776859	8.722049	1392.35	1558.30
5	GUIDE	used	84937320	8.91	13562	0.104	0.089	0.103	0.172	47.925196	8.118783	-824.18	1280.19
6	GUIDE	used	84938448	9.34	13554	0.477	0.117	0.126	0.199	48.389993	7.798743	-2155.39	-236.52
7	GUIDE	used	84938632	7.29	13569	-0.077	-0.087	0.070	0.116	48.146377	8.593725	785.11	304.90

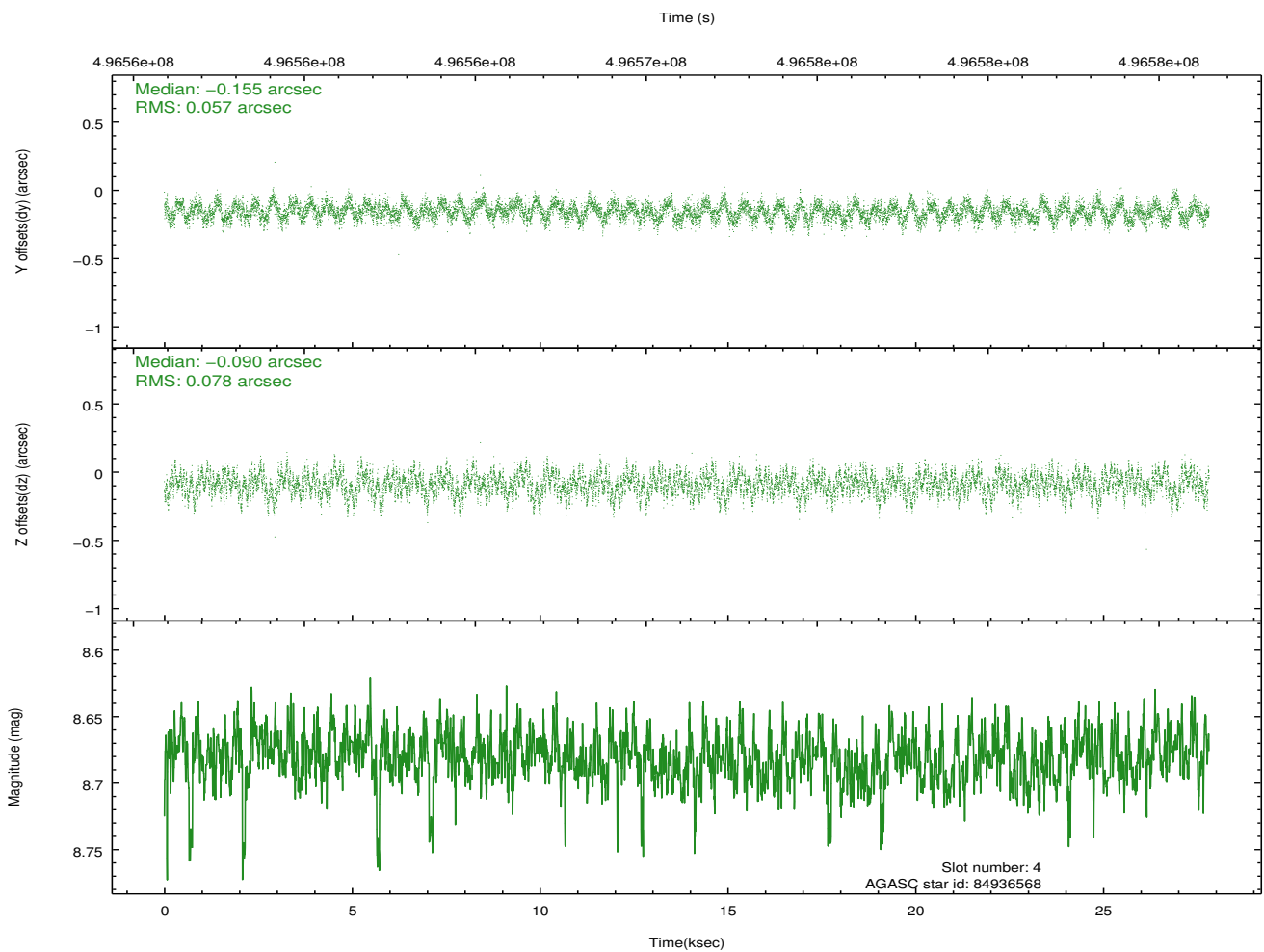
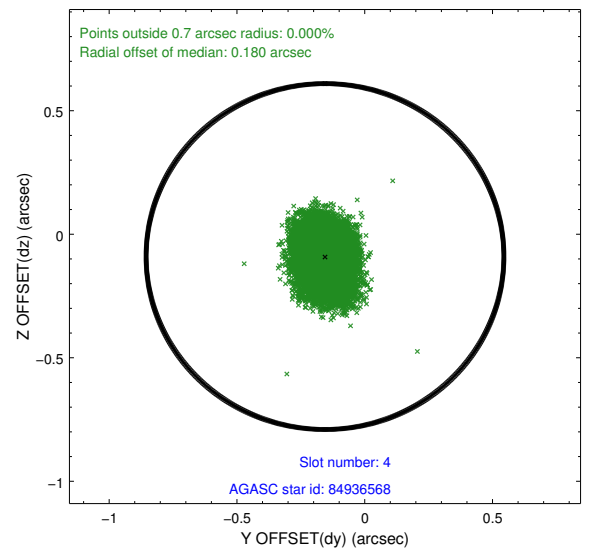
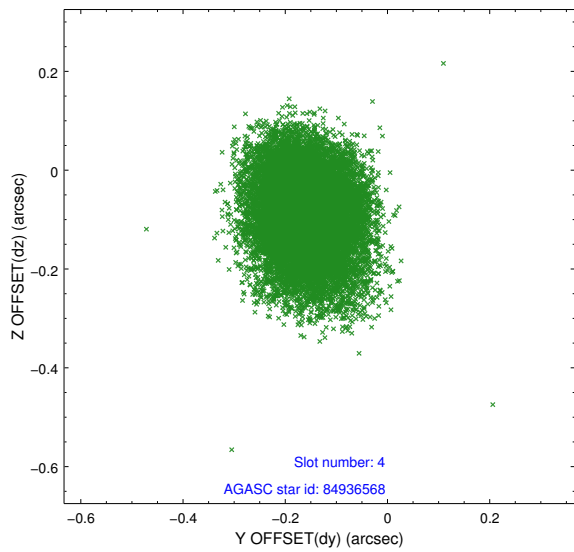
∞

2.4 Star Slots

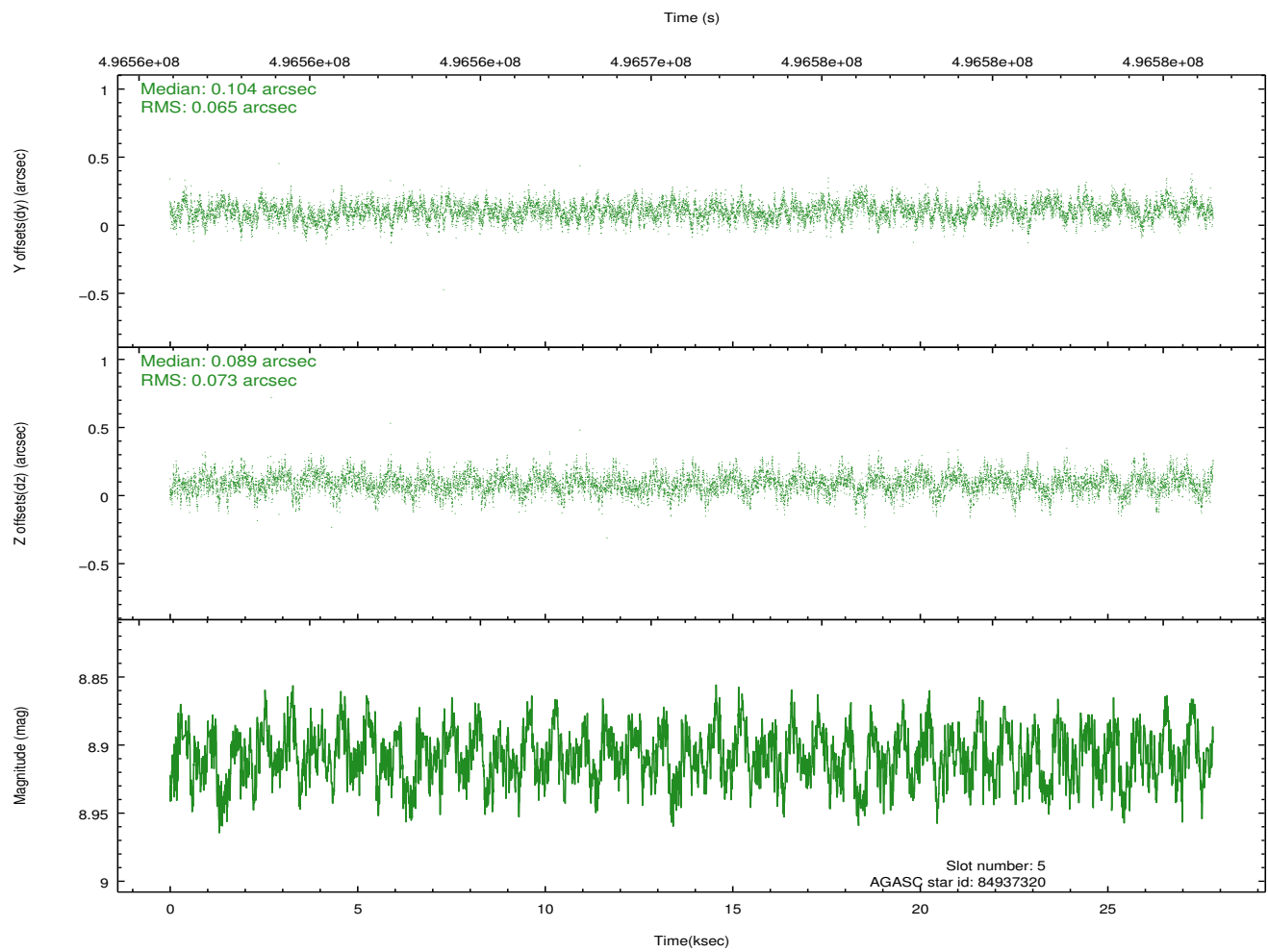
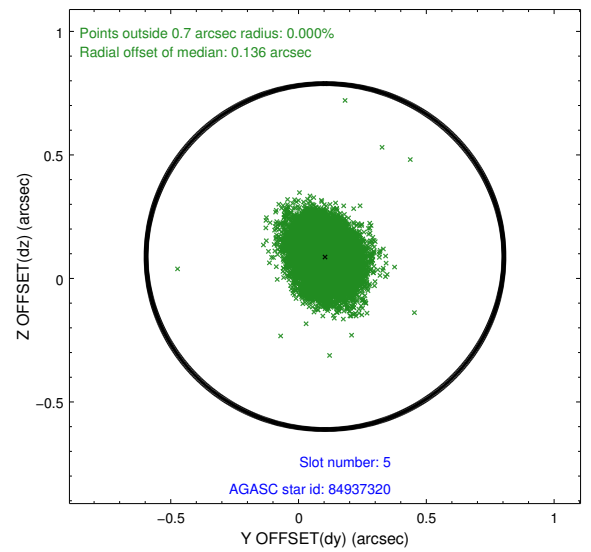
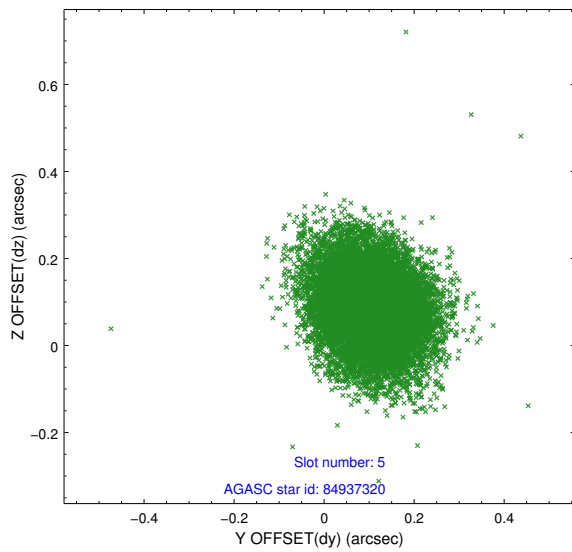
2.4.1 Slot 3



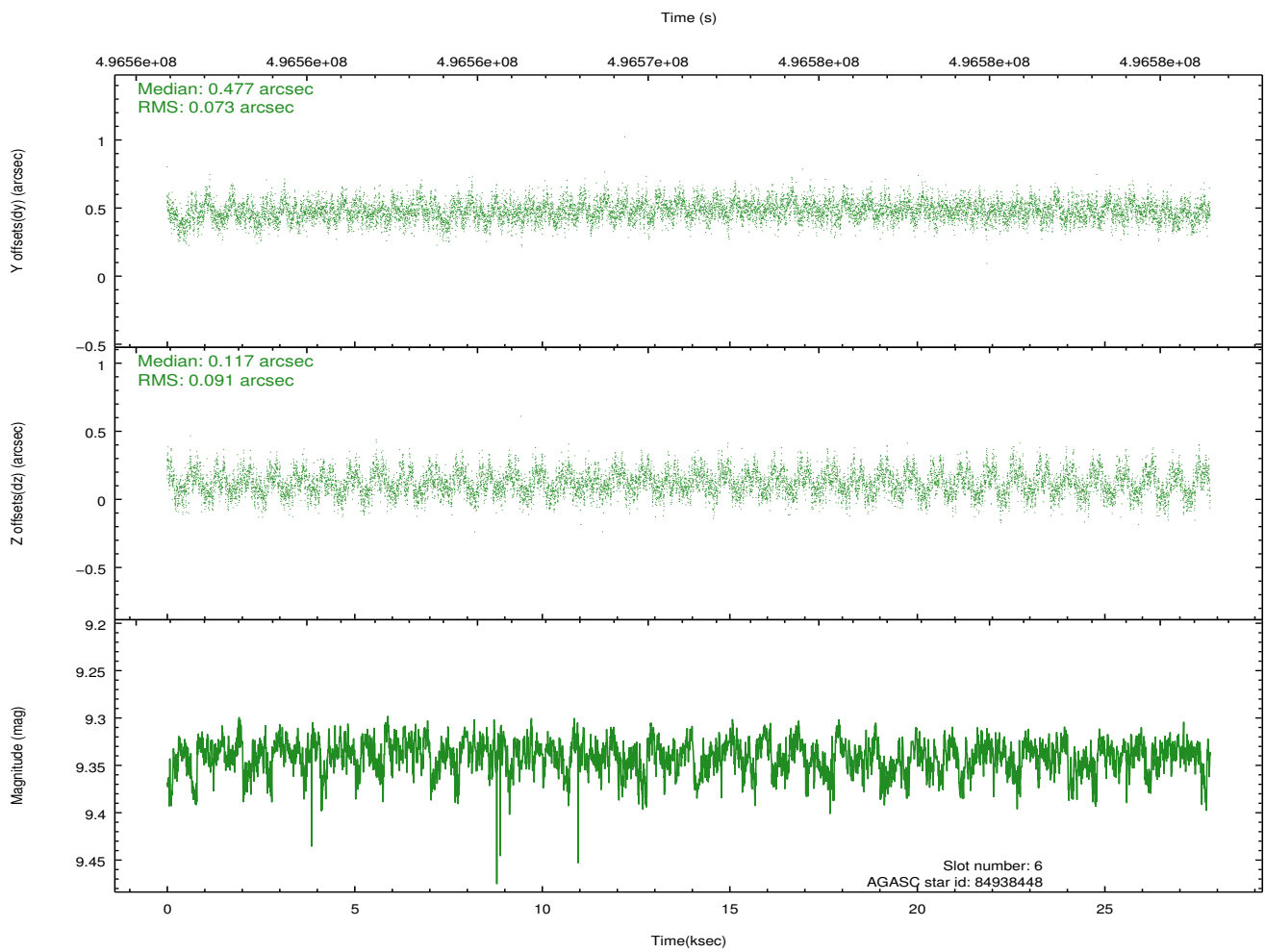
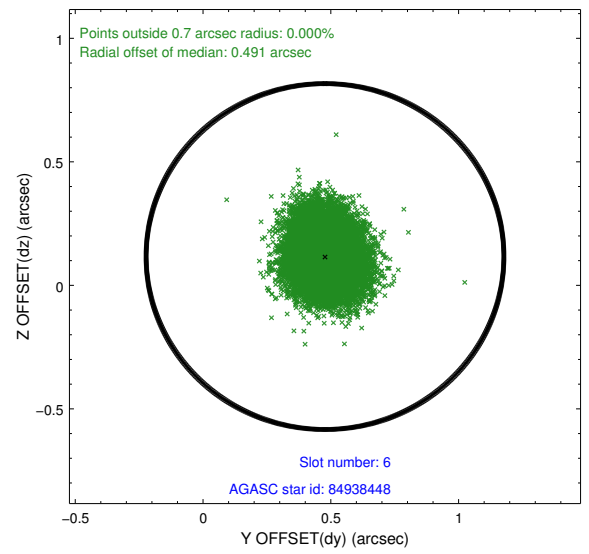
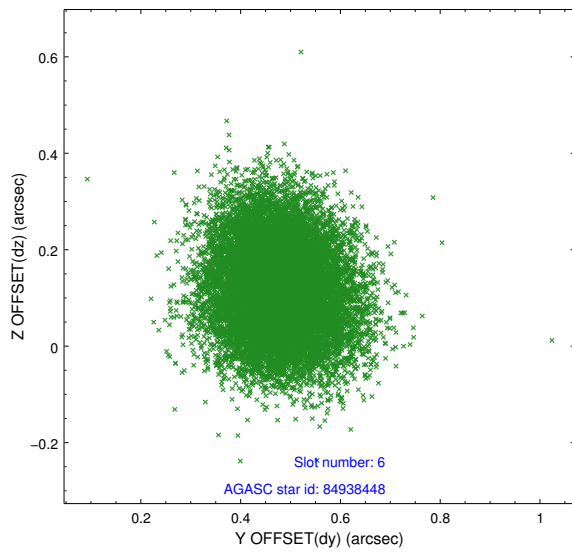
2.4.2 Slot 4



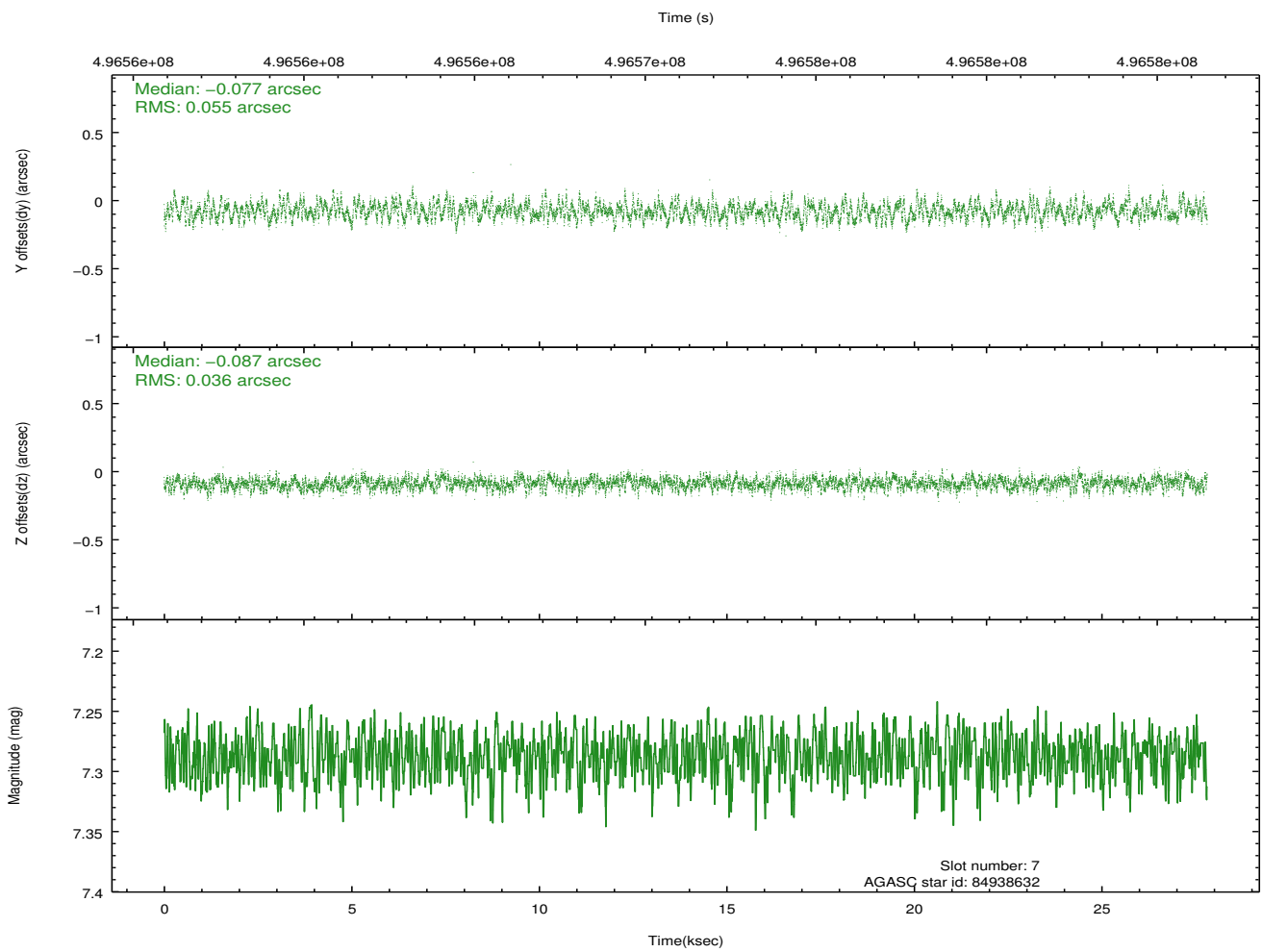
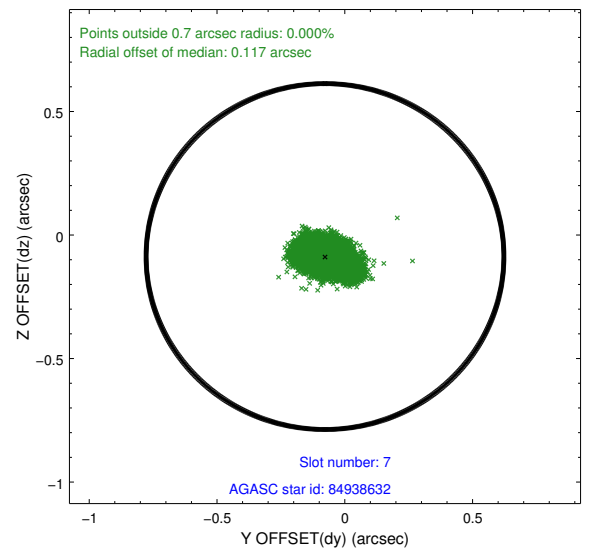
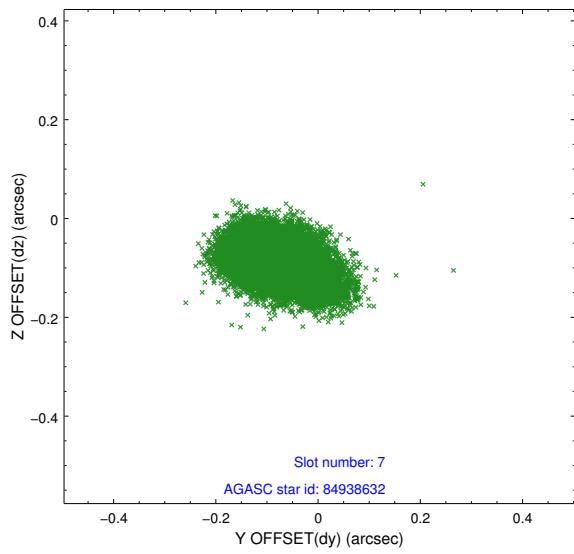
2.4.3 Slot 5



2.4.4 Slot 6

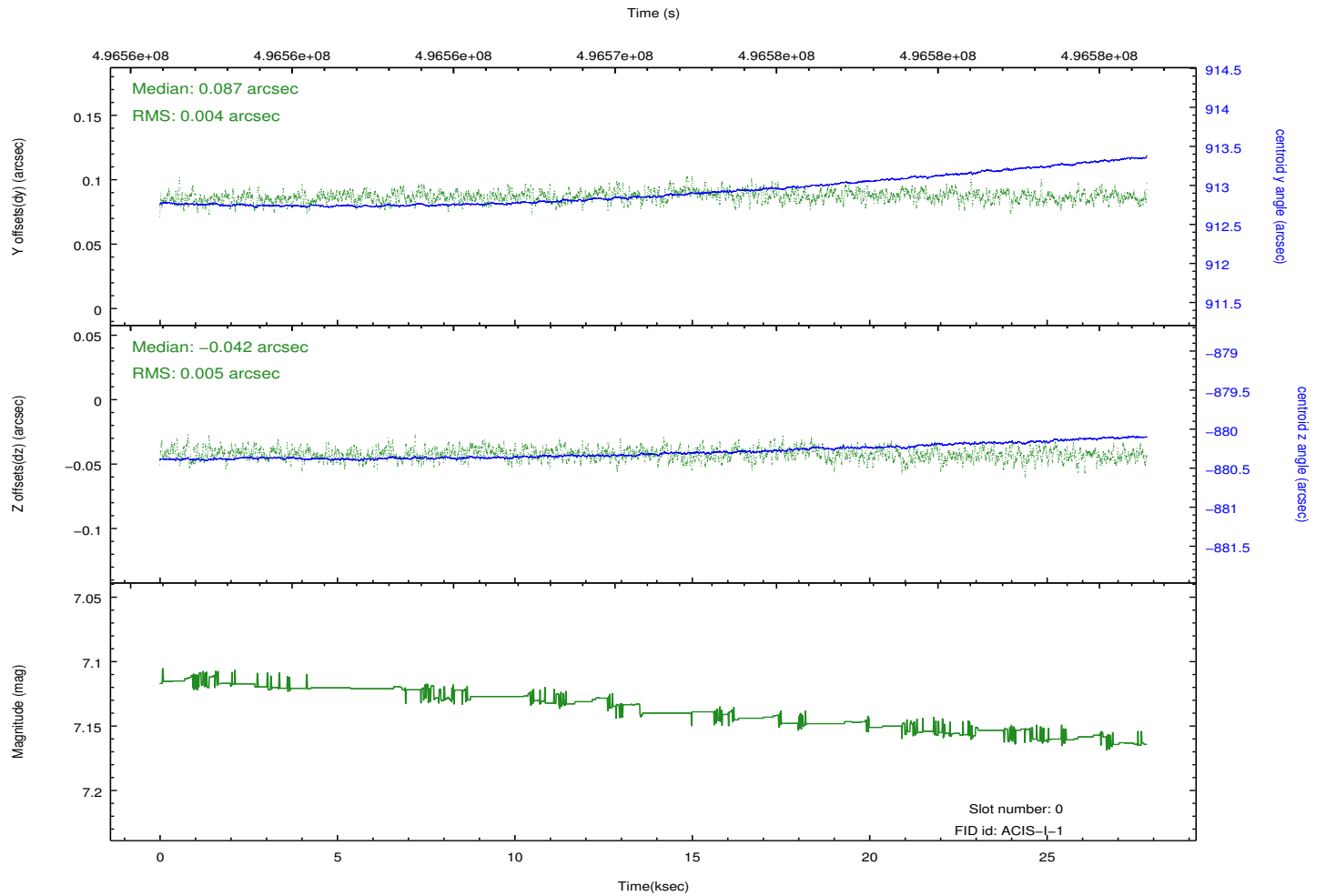
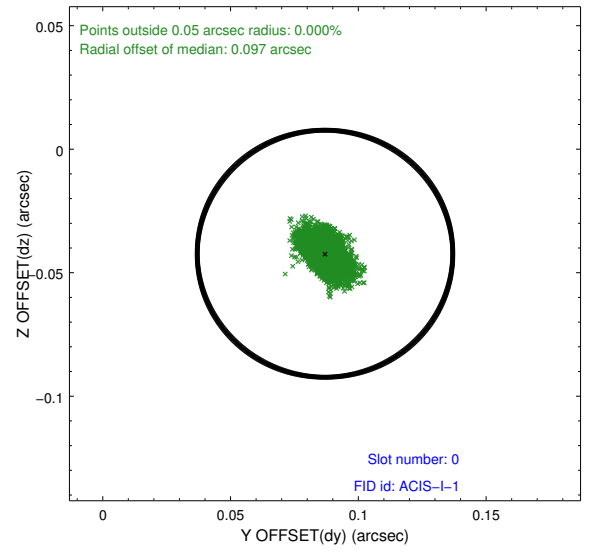
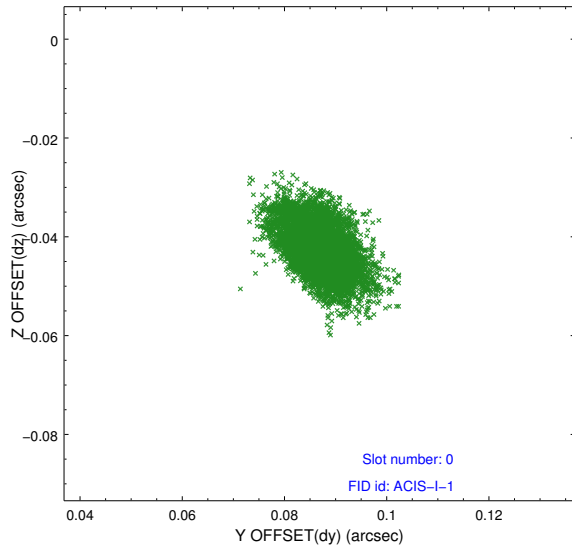


2.4.5 Slot 7

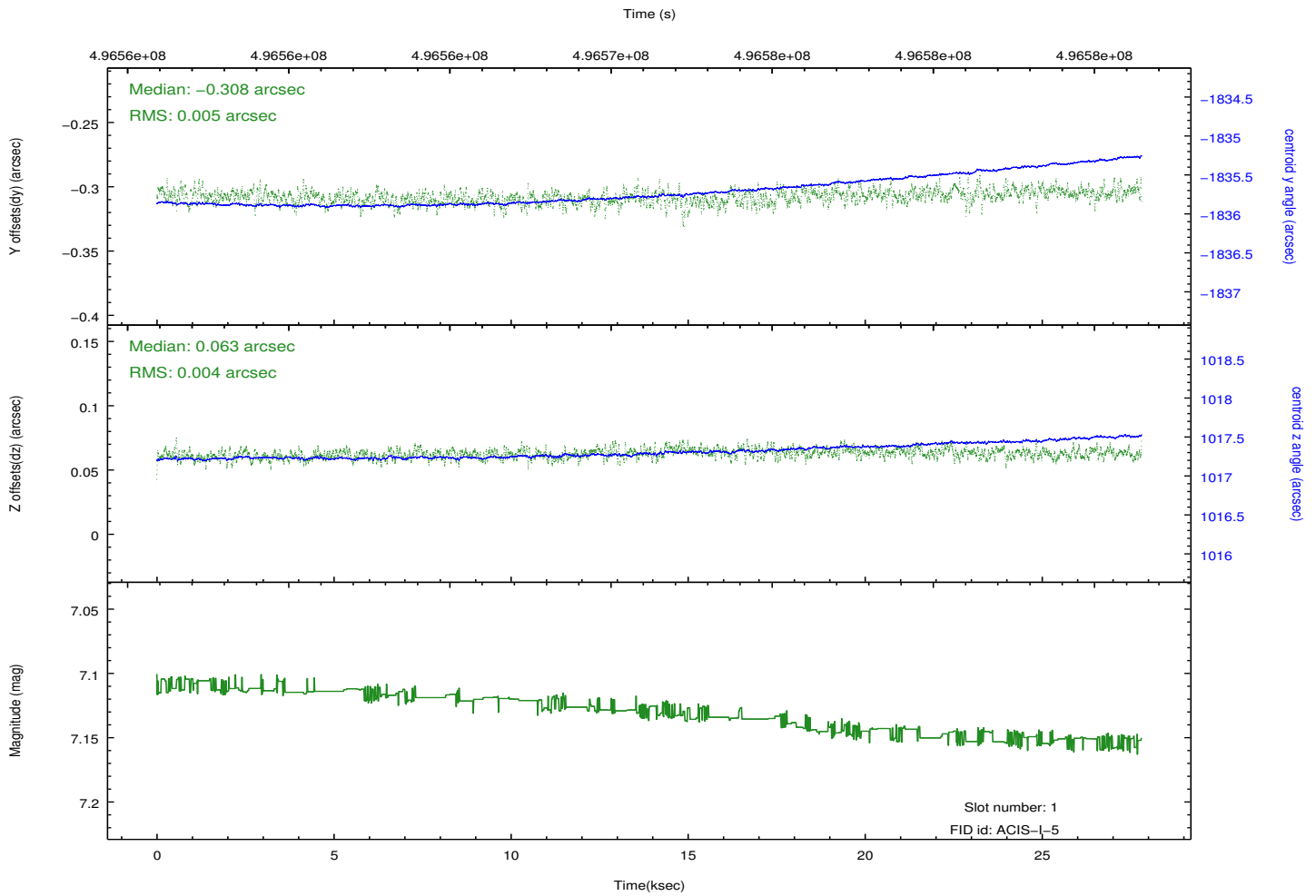
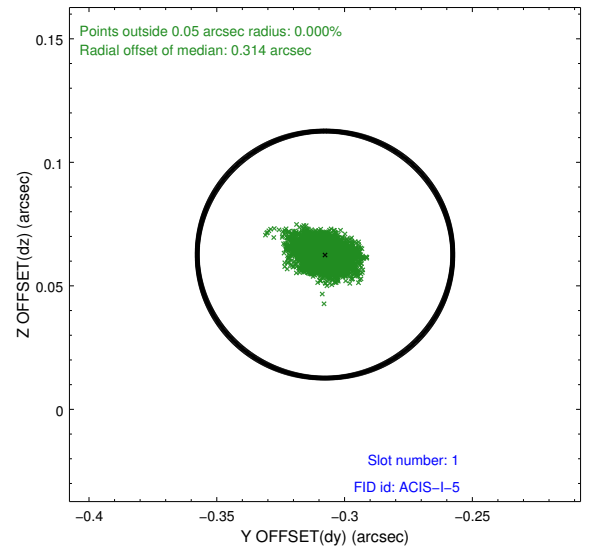
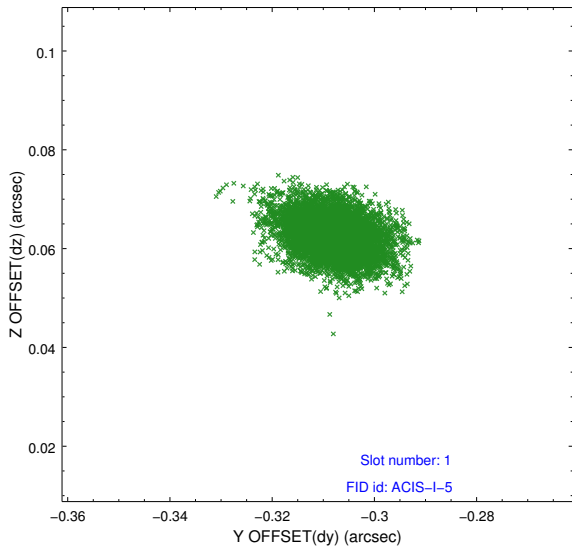


2.5 FID Slots

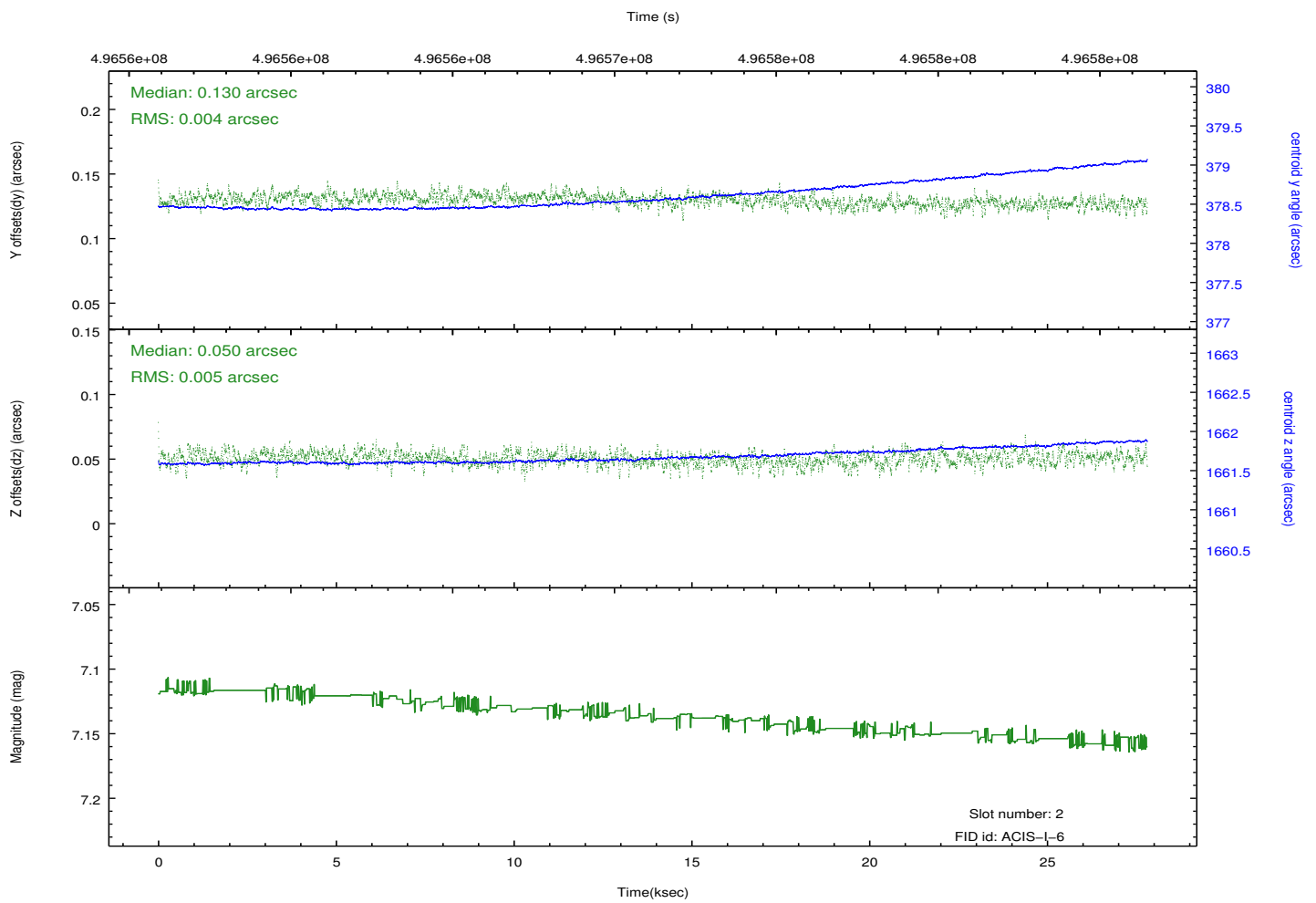
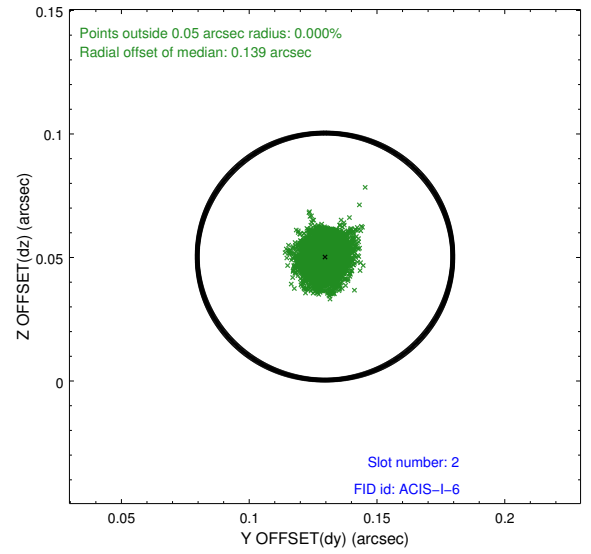
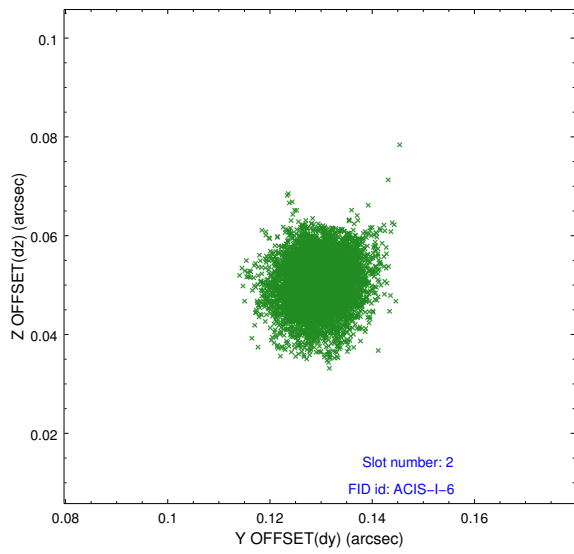
2.5.1 Slot 0



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	27.084700208306

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.