

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 13957 - L2 Version 2
Chandra X-Ray Center

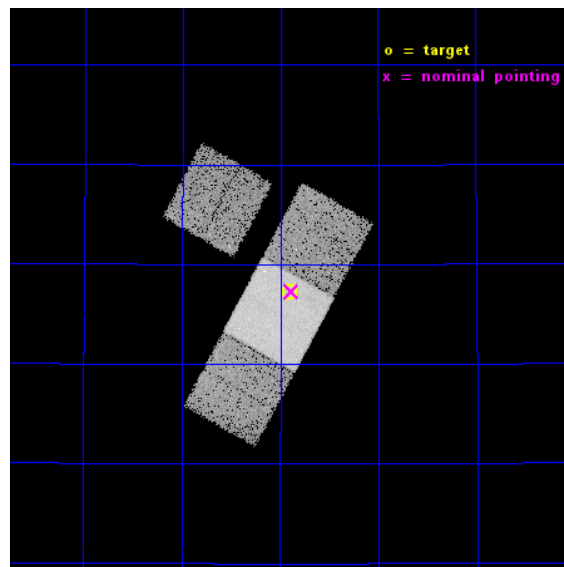
L2 Processing Date : Dec 1 2014

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1 Front

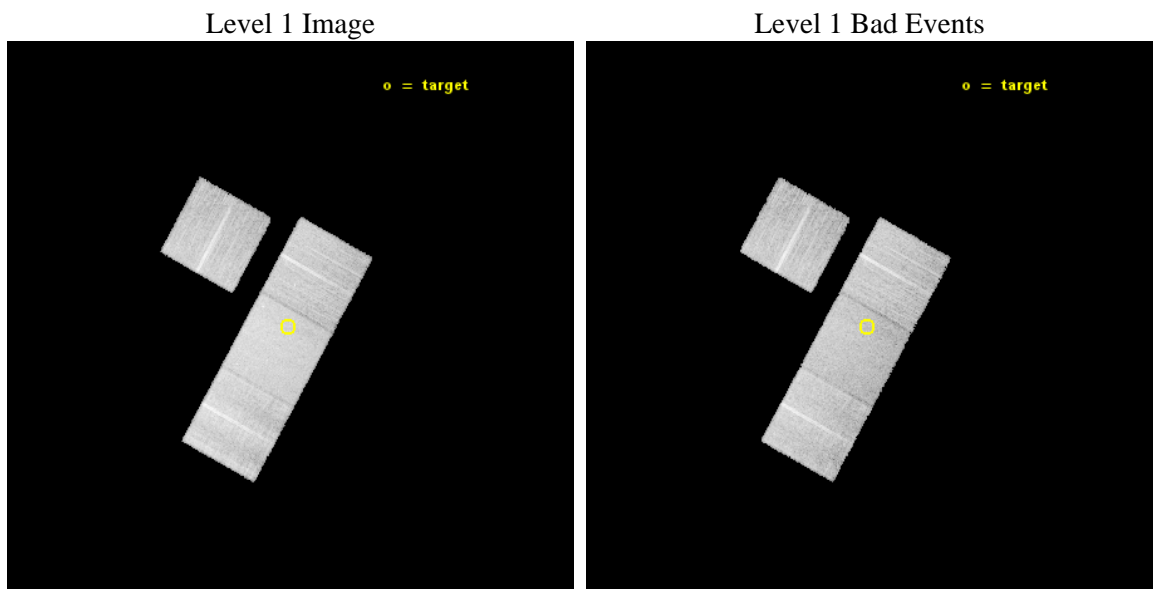
seq_num	702679	Sequence number
obs_id	13957	Observation id
title	Identifying Analogs of NGC 6240: Galaxies with Dual Supermassive Black Holes	Proposal title
observer	Dr. Julia Comerford	Principal investigator
object	SDSS J100654.20+464717.2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	151.725833	Observer's specified target RA [deg]
dec_targ	46.788111	Observer's specified target Dec [deg]
ra_nom	151.72139630704	Nominal RA [deg]
dec_nom	46.788311361318	Nominal Dec [deg]
roll_nom	118.82975542043	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20044.600154161	Sum of GTIs [s]
livetime	19782.702696527	Livetime [s]
ontime2	20041.459113955	Sum of GTIs [s]
ontime6	20041.45909369	Sum of GTIs [s]
ontime7	20044.600154161	Sum of GTIs [s]
ontime8	20044.600154161	Sum of GTIs [s]
l2events	96448	Number of level 2 events



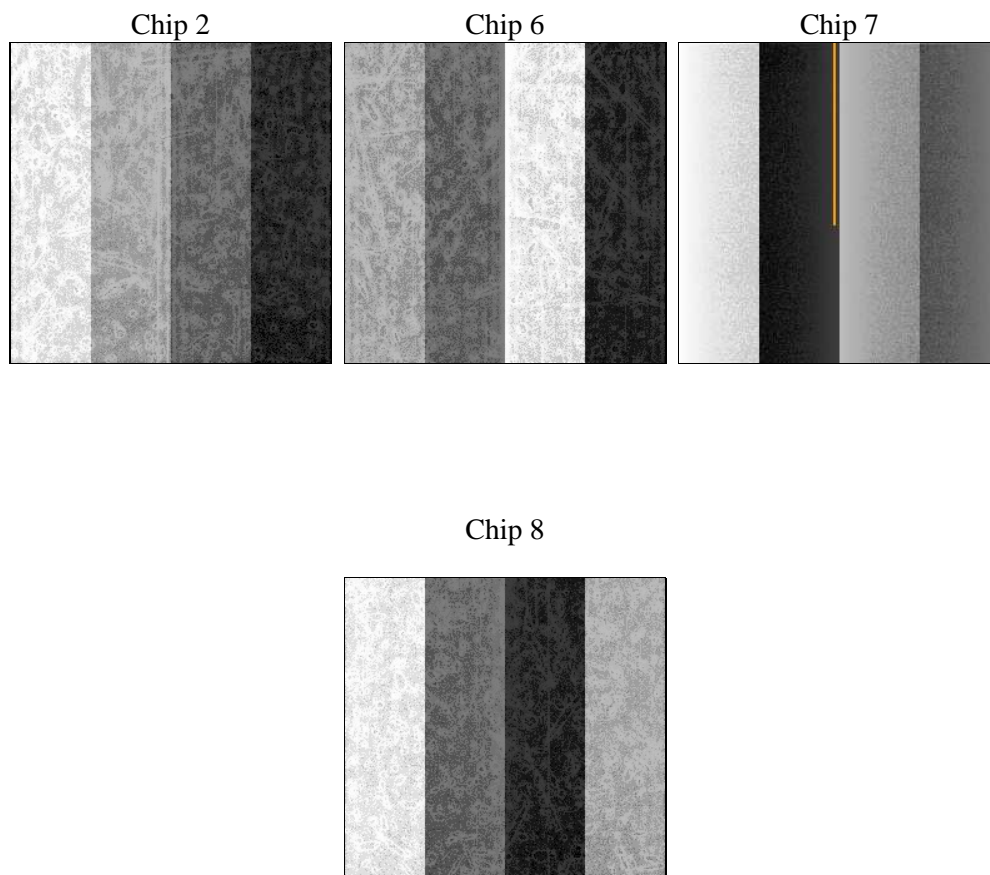
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19923.996000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	20044.600154161	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	20041.459113955	Sum of GTIs [s]
date	2014-12-01T02:02:13	Date and time of file creation	ontime6	20041.45909369	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	20044.600154161	Sum of GTIs [s]
			ontime8	20044.600154161	Sum of GTIs [s]
			l1events	510607	Number of level 1 events

2.1.4 Events

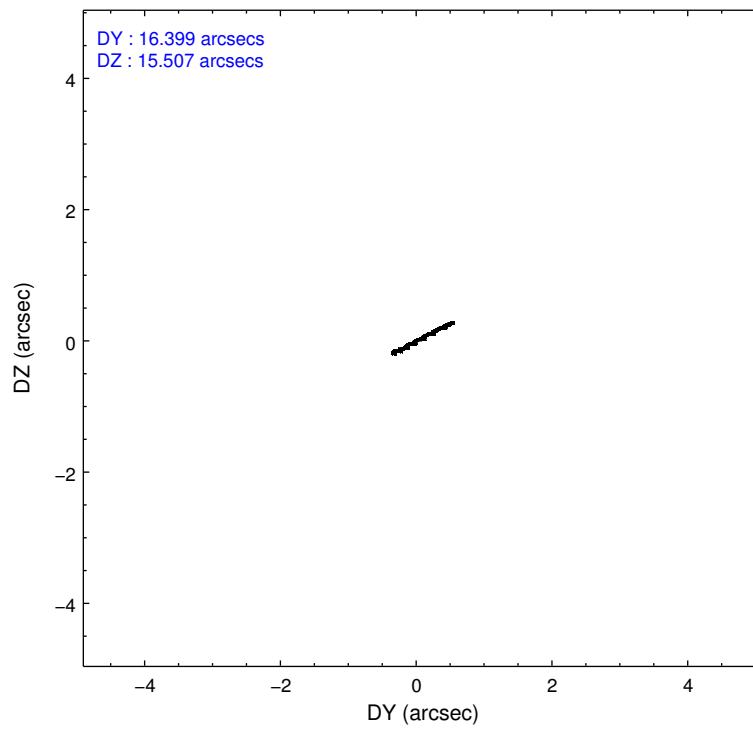
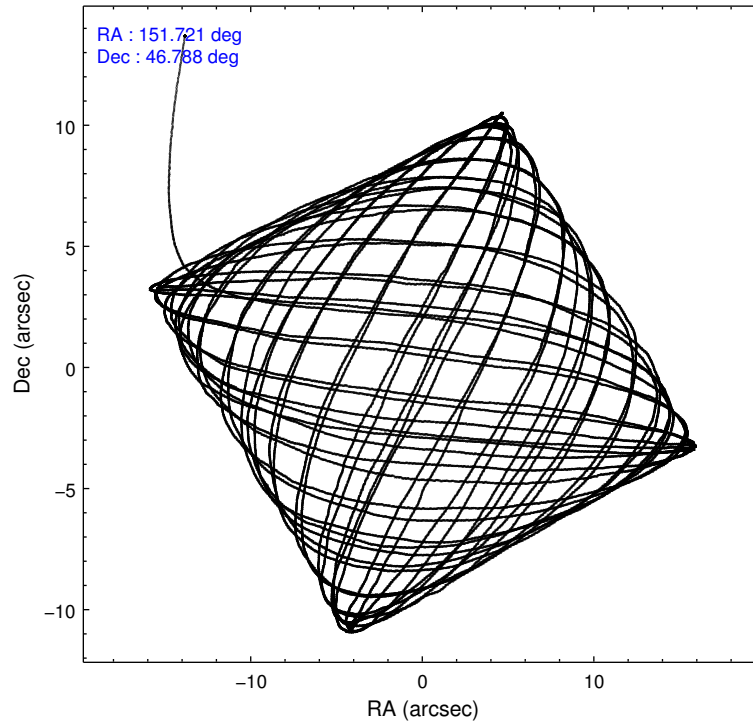
	ccd 2	ccd 6	ccd 7	ccd 8
level 1 events	108676	109999	147291	144641
rejected events	96488	96825	83153	107297
rejected %	88%	88%	56%	74%

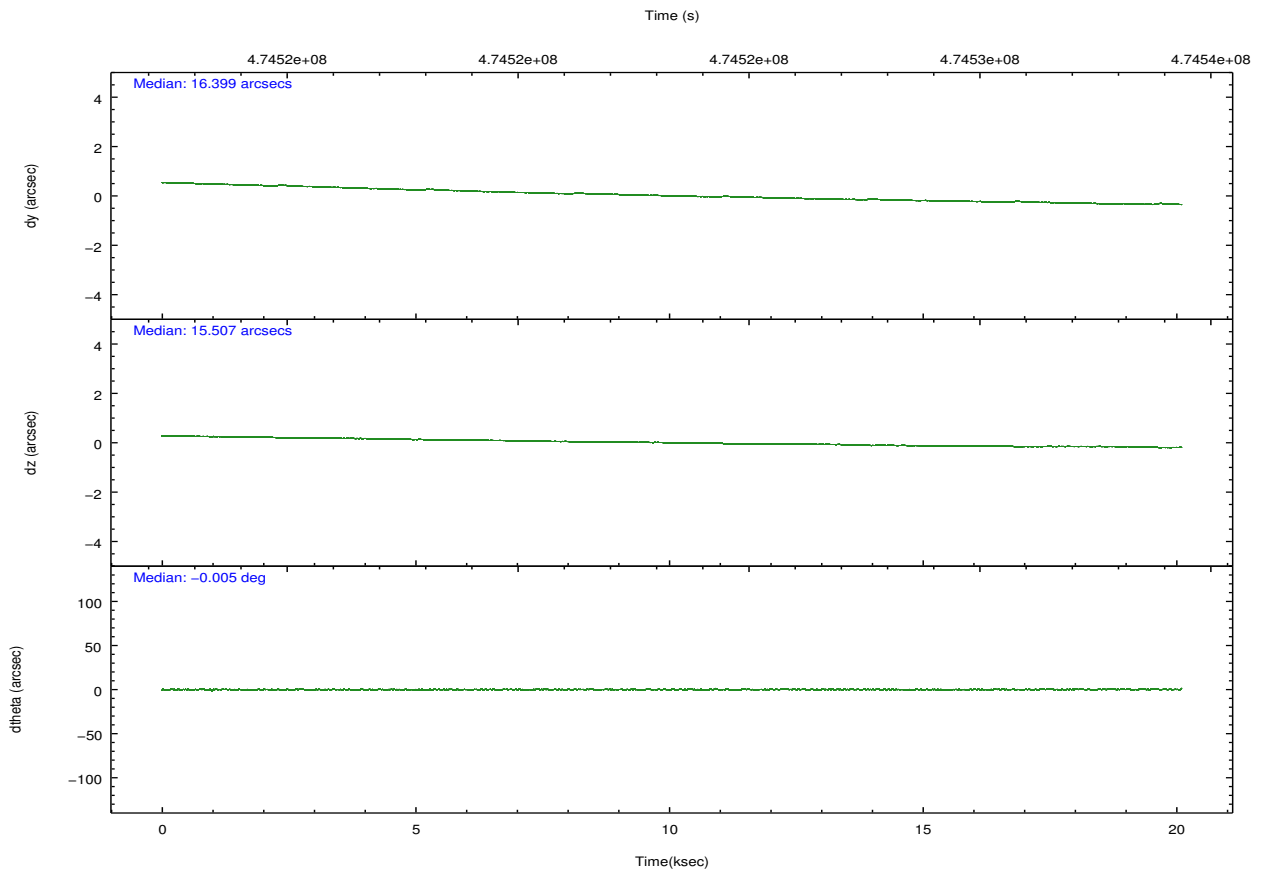
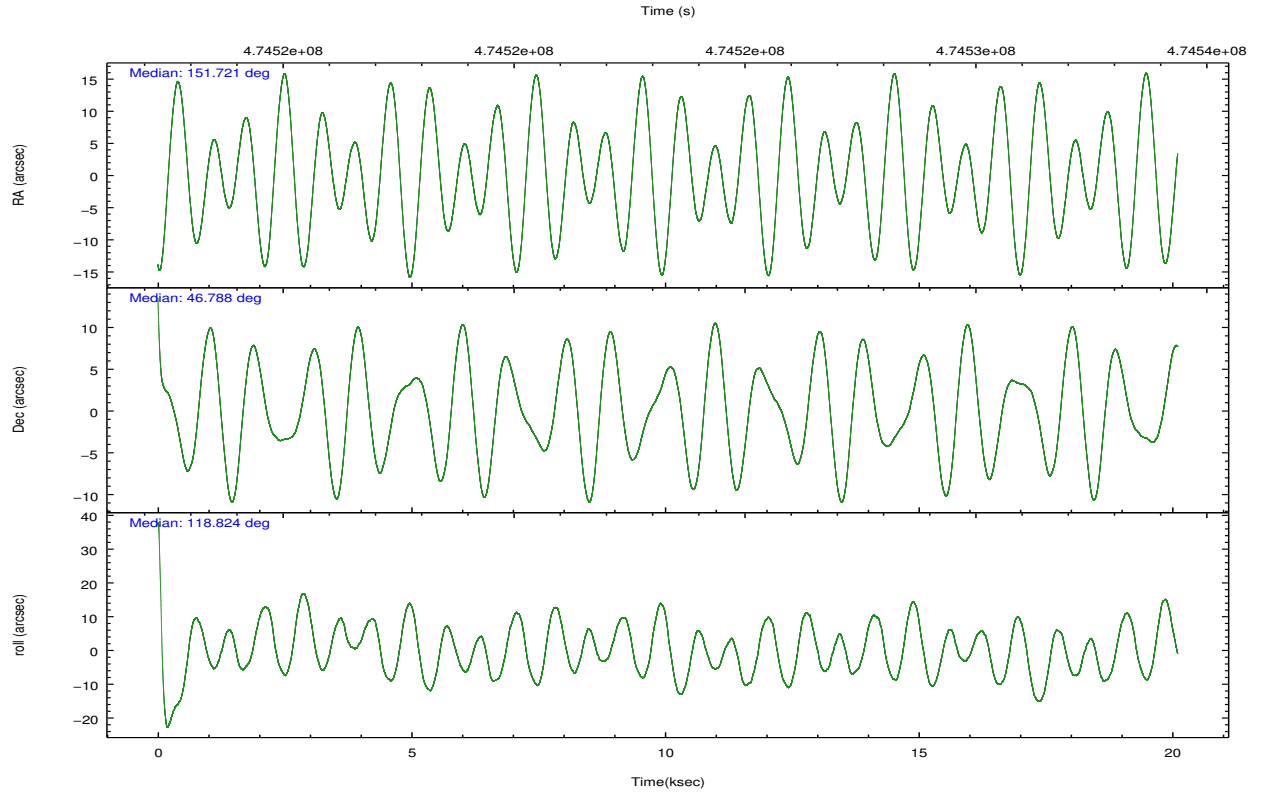
	ccd 2	ccd 6	ccd 7	ccd 8
grade 0 events	4304	4365	5558	10138
	3%	3%	3%	7%
grade 1 events	54	69	165	95
	0%	0%	0%	0%
grade 2 events	2892	3041	13079	9081
	2%	2%	8%	6%
grade 3 events	1243	1416	5511	3959
	1%	1%	3%	2%
grade 4 events	1375	1314	5392	3789
	1%	1%	3%	2%
grade 5 events	4728	5664	15118	8375
	4%	5%	10%	5%
grade 6 events	2374	3038	34610	10380
	2%	2%	23%	7%
grade 7 events	91706	91092	67858	98824
	84%	82%	46%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2678	ACIS-2678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	151.755864	151.7213963070361	CCD I2 on	O2	Y
[deg] Pointing Dec	46.774465	46.78831136131809	CCD I3 on	O1	N
[deg] Pointing Roll	118.647970	118.8297554204304	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O3	Y
[s] Observation start time (MET)	474513453.184000	474512510.15204	CCD S5 on	N	N
Observation start date	2013-01-14T01:16:26	2013-01-14T01:01:50	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	474533377.184000	474533602.60318	On-chip summing requested	N	N
Observation end date	2013-01-14T06:48:30	2013-01-14T06:53:22	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





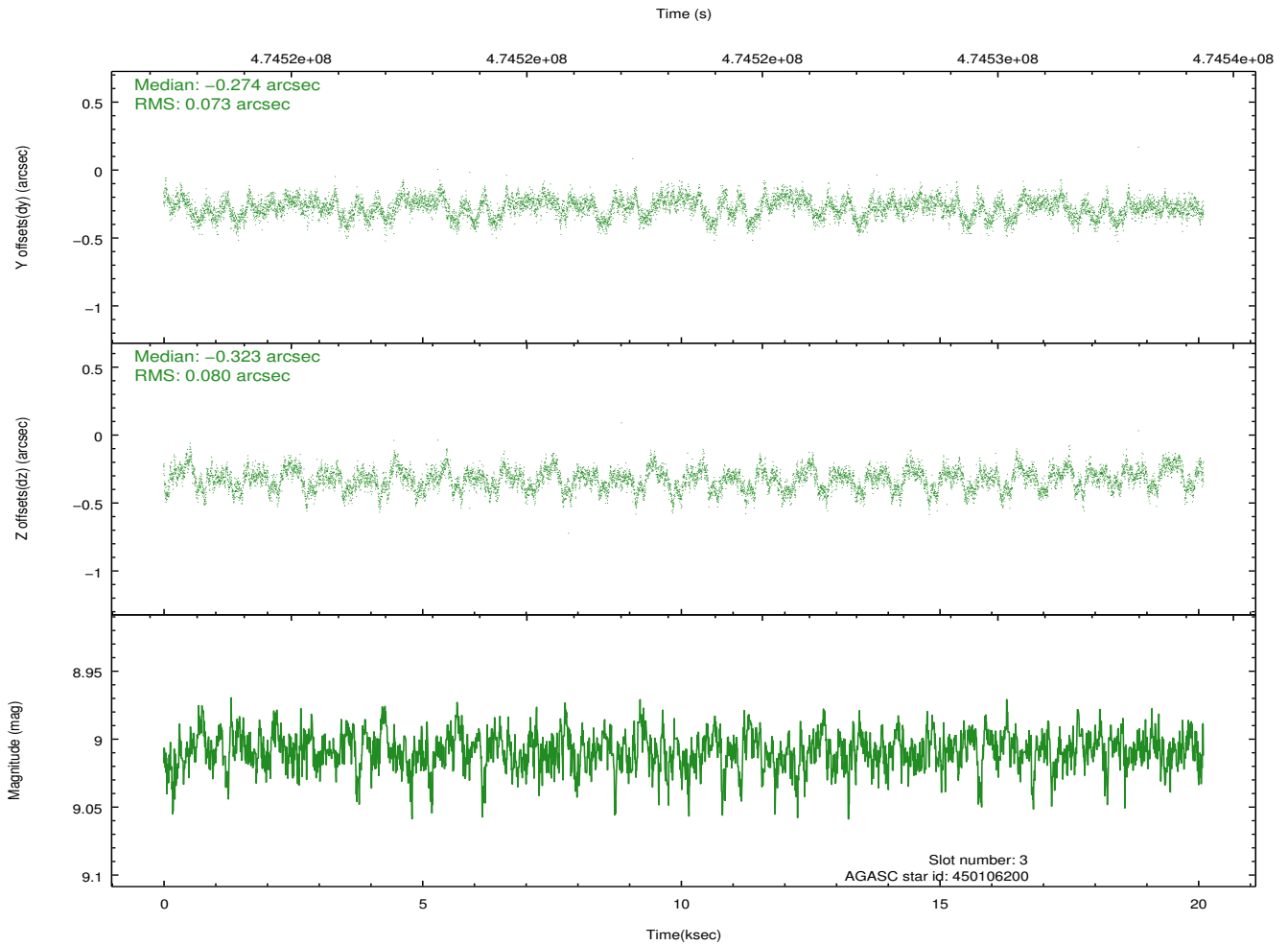
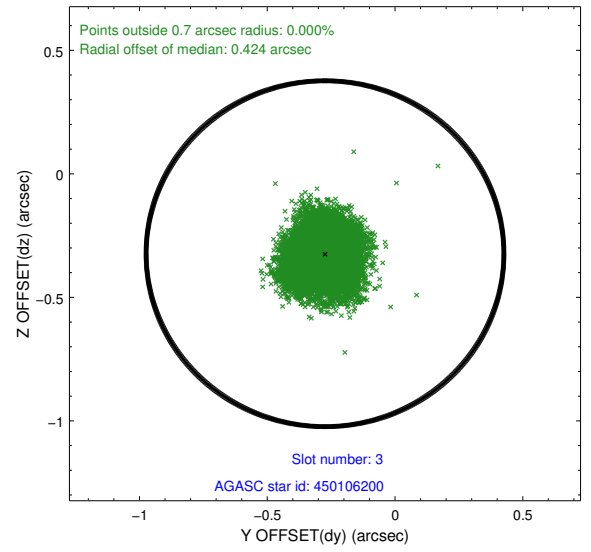
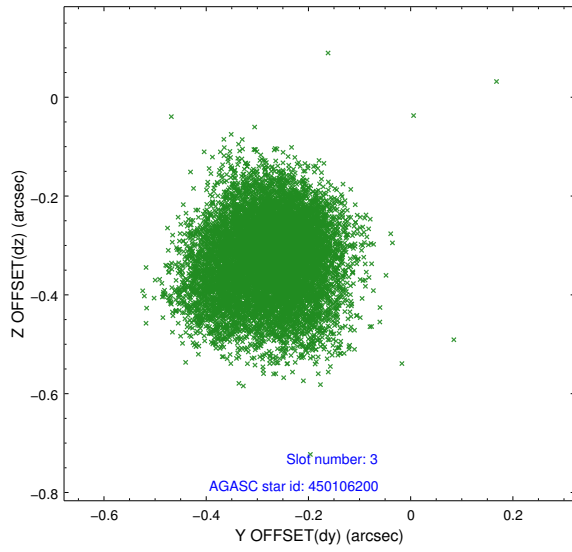
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	4904	-0.130	-0.024	0.007	0.012	0.000000	0.000000	-769.56	-1736.94
1	FID		ACIS-S-4	7.12	4904	0.261	0.069	0.006	0.011	0.000000	0.000000	2144.01	171.46
2	FID		ACIS-S-5	7.15	4902	-0.162	-0.037	0.009	0.016	0.000000	0.000000	-1822.21	165.21
3	GUIDE	used	450106200	9.01	9799	-0.274	-0.323	0.117	0.184	150.850470	47.128271	2191.11	1329.82
4	GUIDE	used	450106360	8.90	9806	0.093	0.121	0.134	0.201	152.309175	46.283982	-2204.09	-360.98
5	GUIDE	used	450108568	10.48	9640	0.094	0.086	0.264	0.424	151.771114	47.363010	1841.56	-1047.95
6	GUIDE	used	450108656	10.45	9798	0.205	0.160	0.298	0.458	152.825445	46.666223	-1593.11	-2140.56
7	GUIDE	used	450111088	9.33	9764	-0.118	-0.015	0.128	0.229	151.807040	46.114977	-2145.18	1026.01

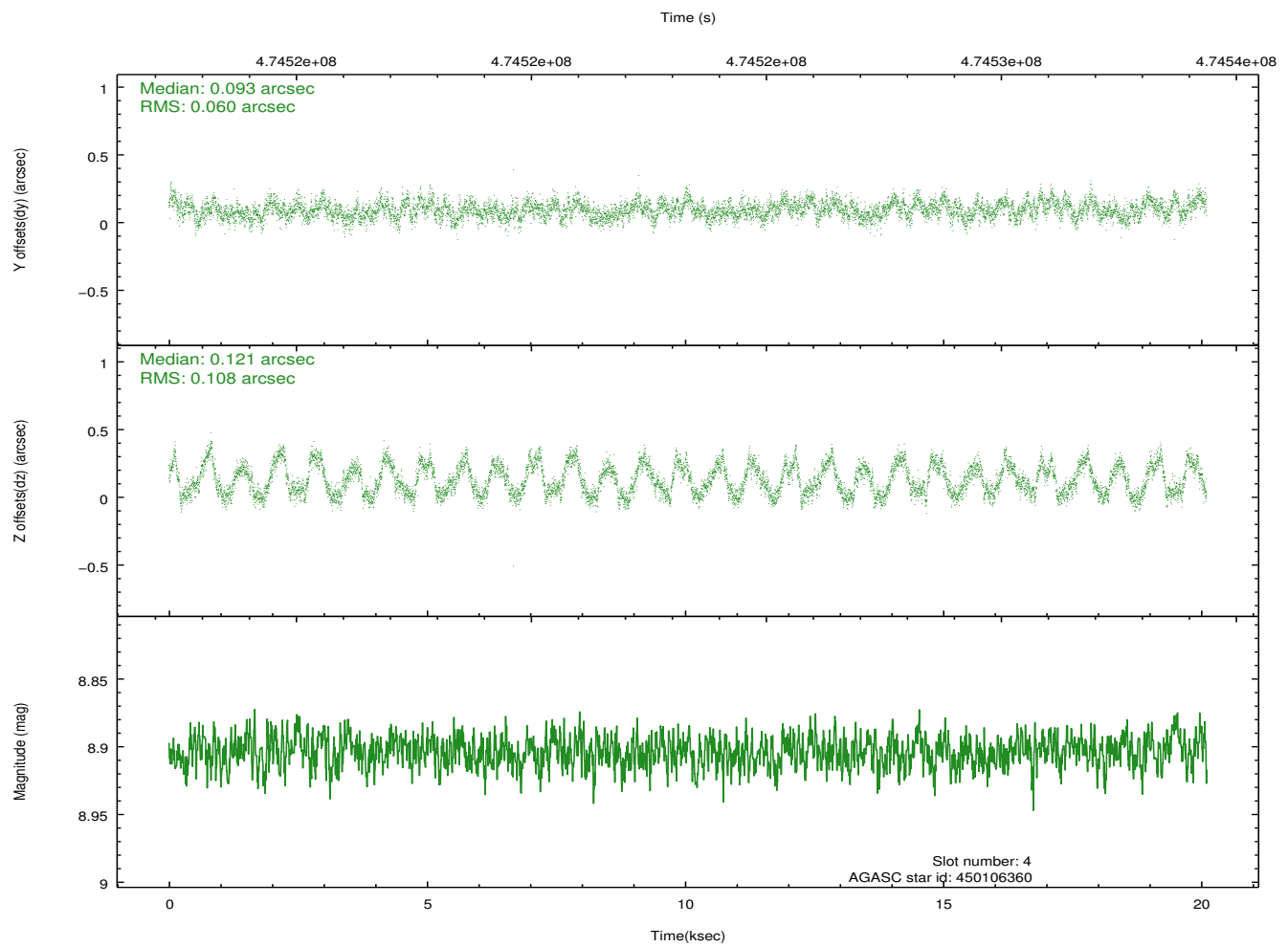
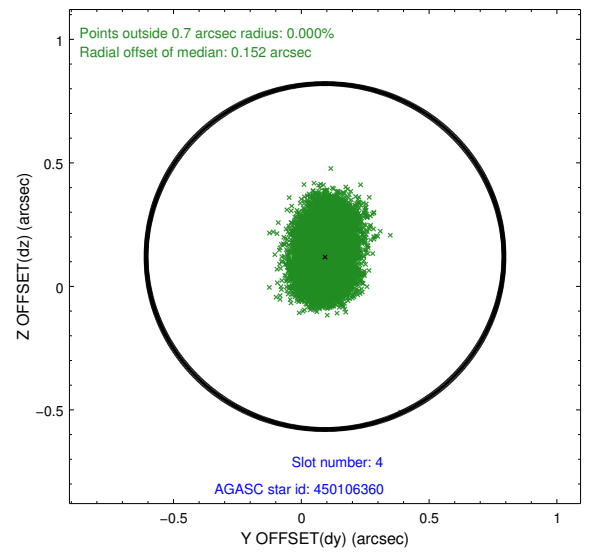
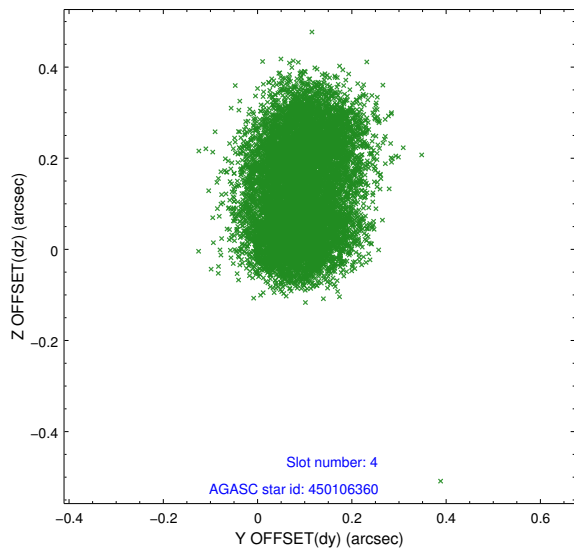
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2.4 Star Slots

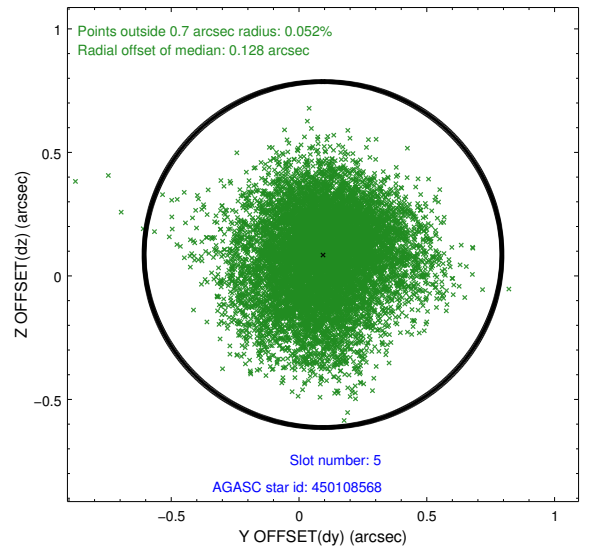
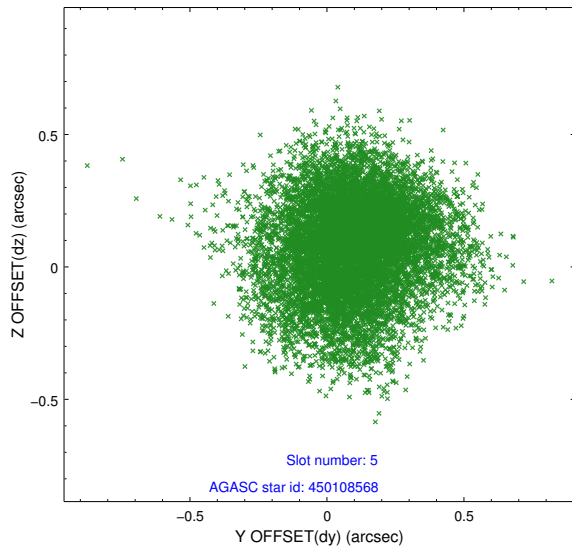
2.4.1 Slot 3



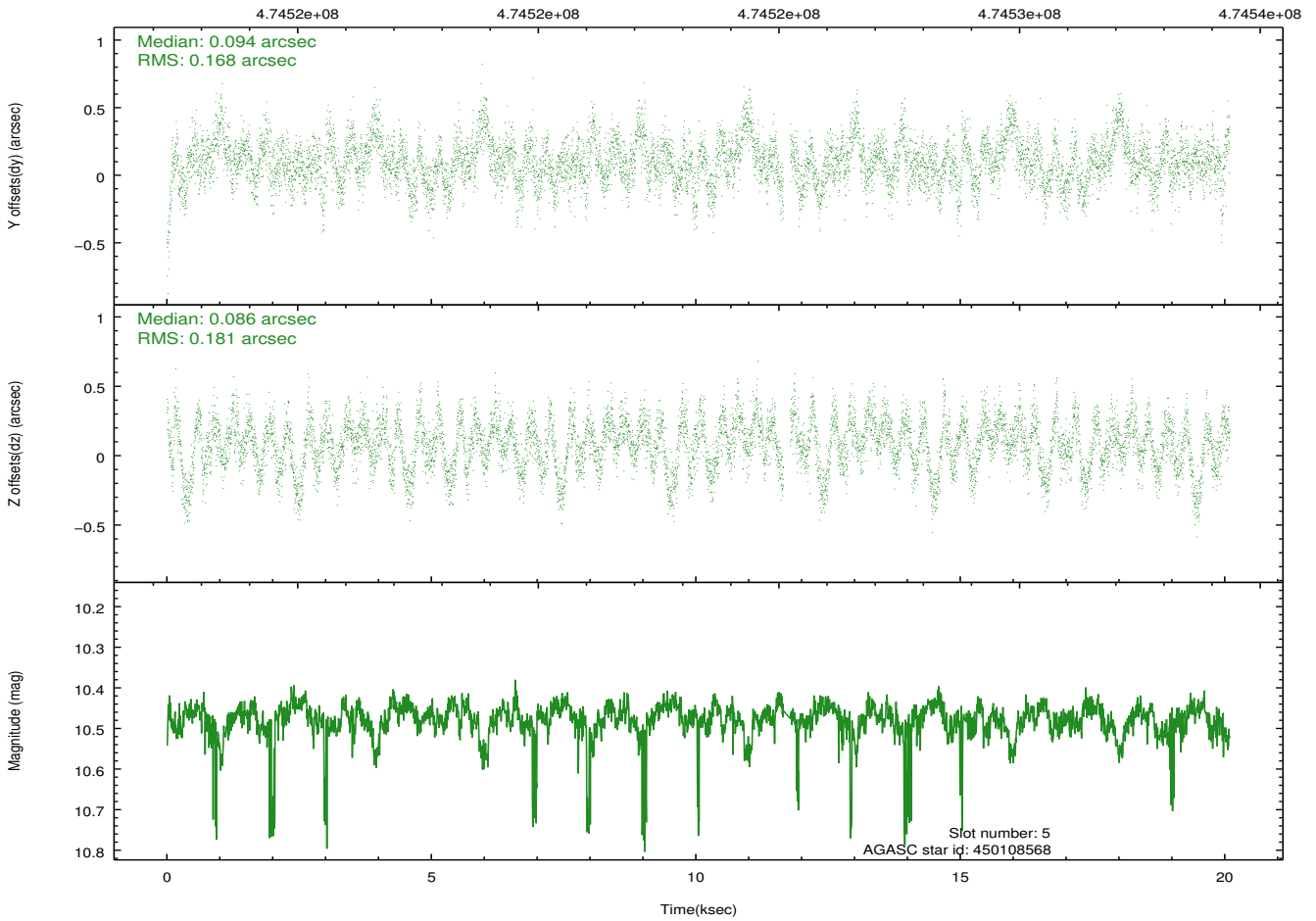
2.4.2 Slot 4



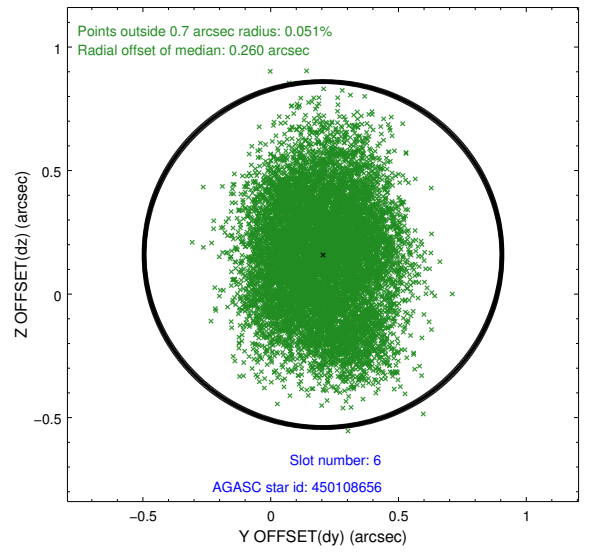
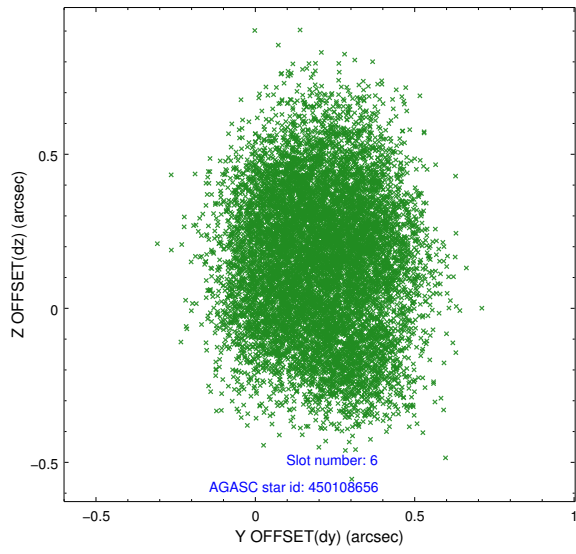
2.4.3 Slot 5



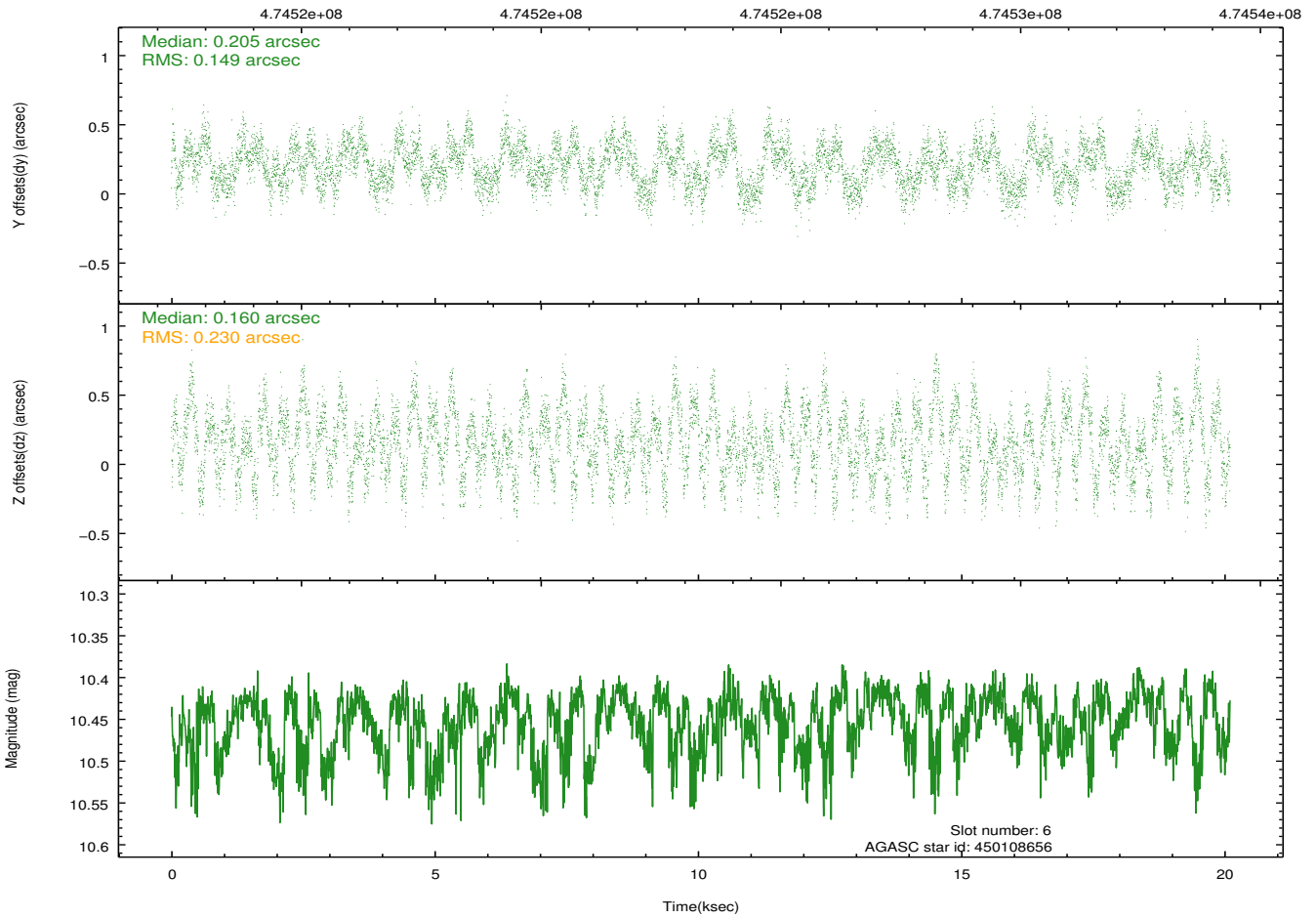
Time (s)



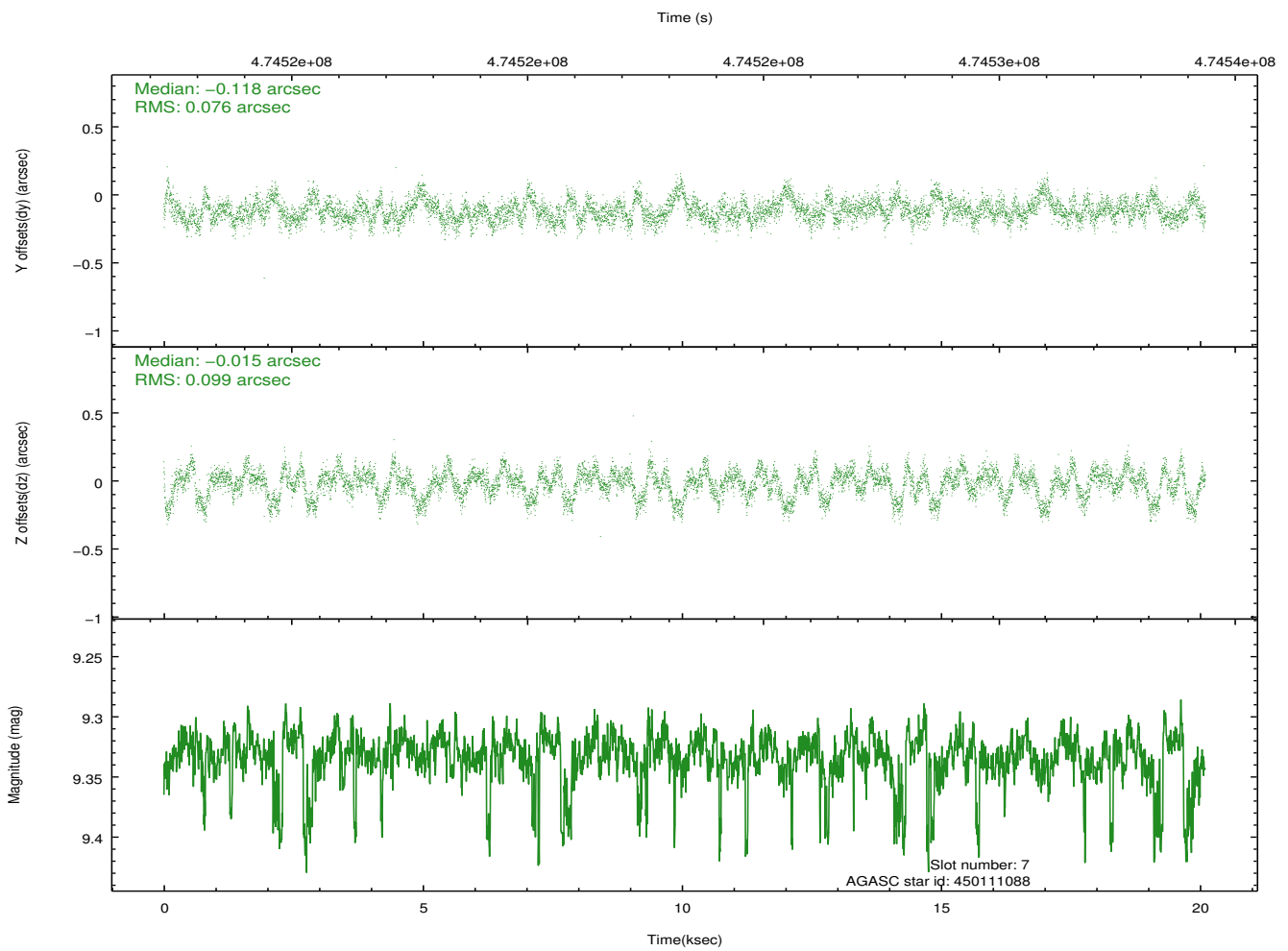
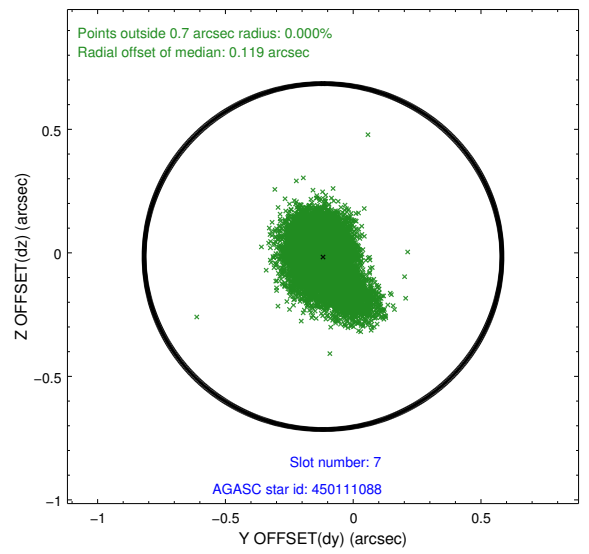
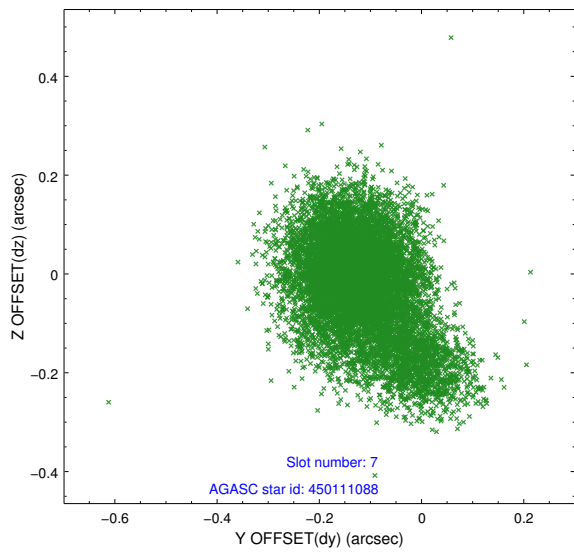
2.4.4 Slot 6



Time (s)

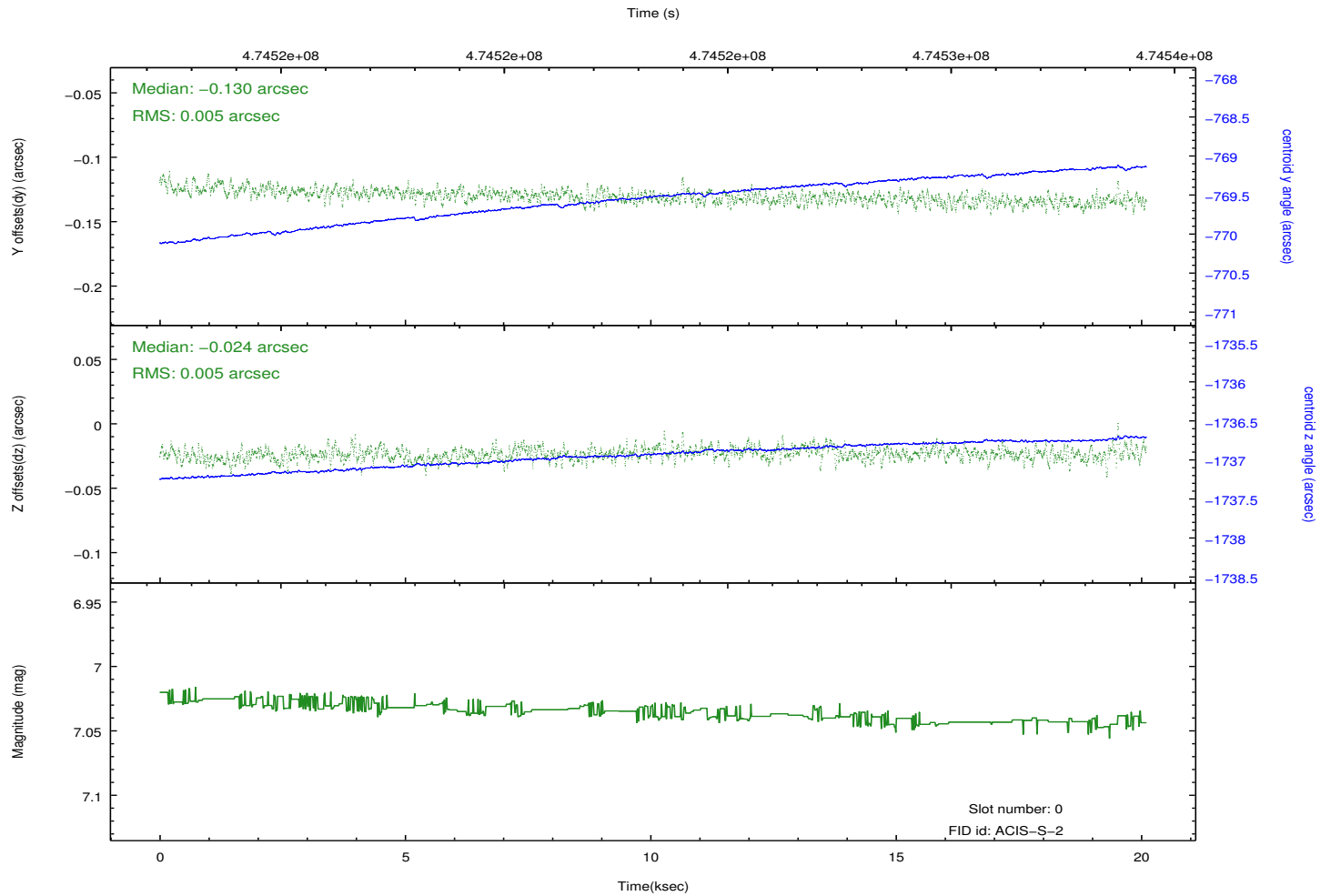
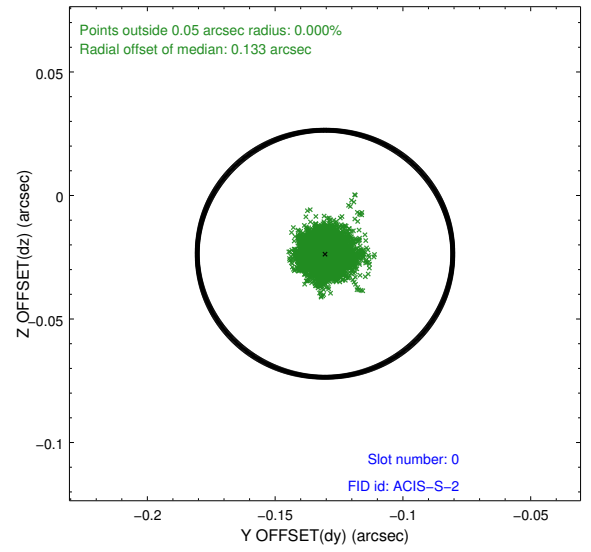
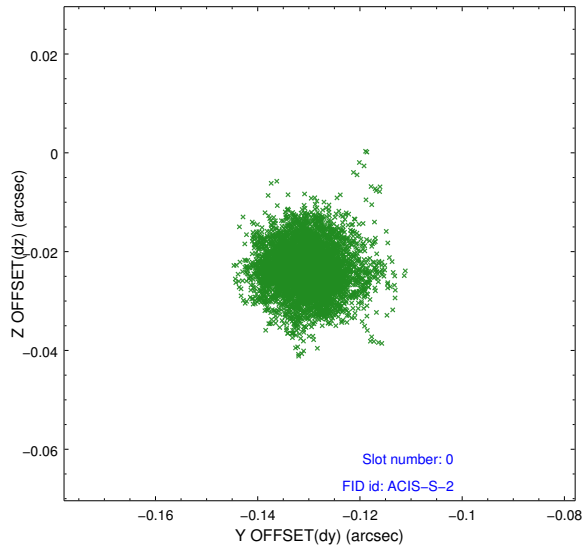


2.4.5 Slot 7

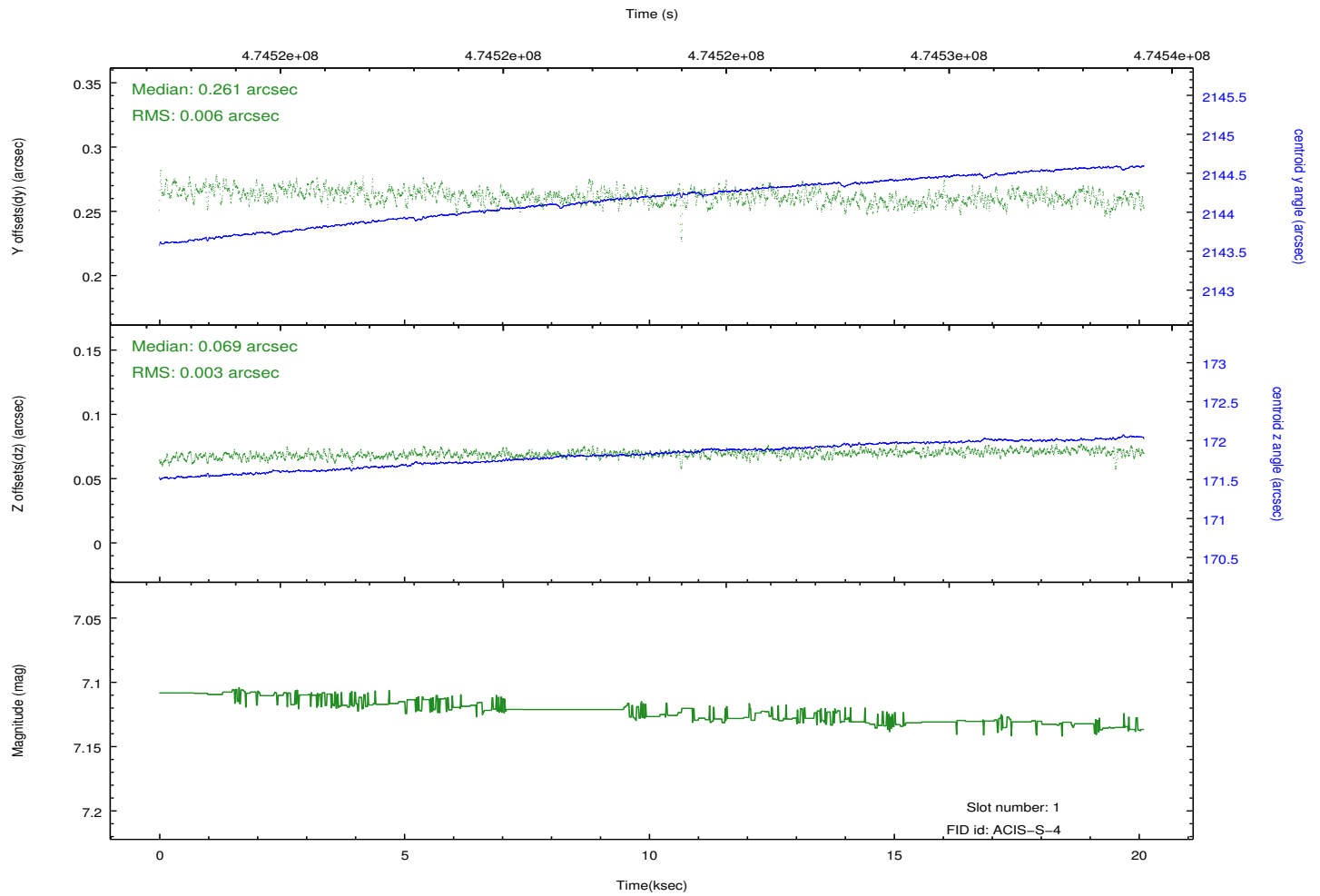
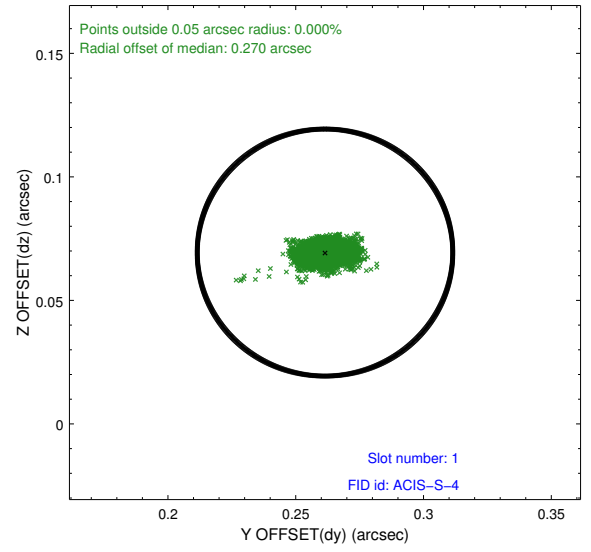
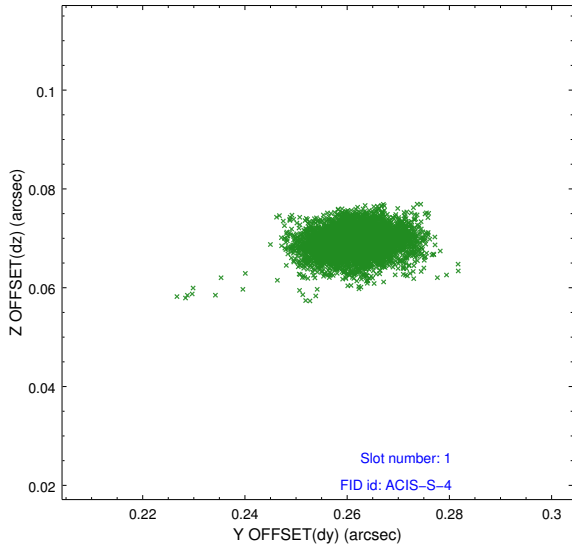


2.5 FID Slots

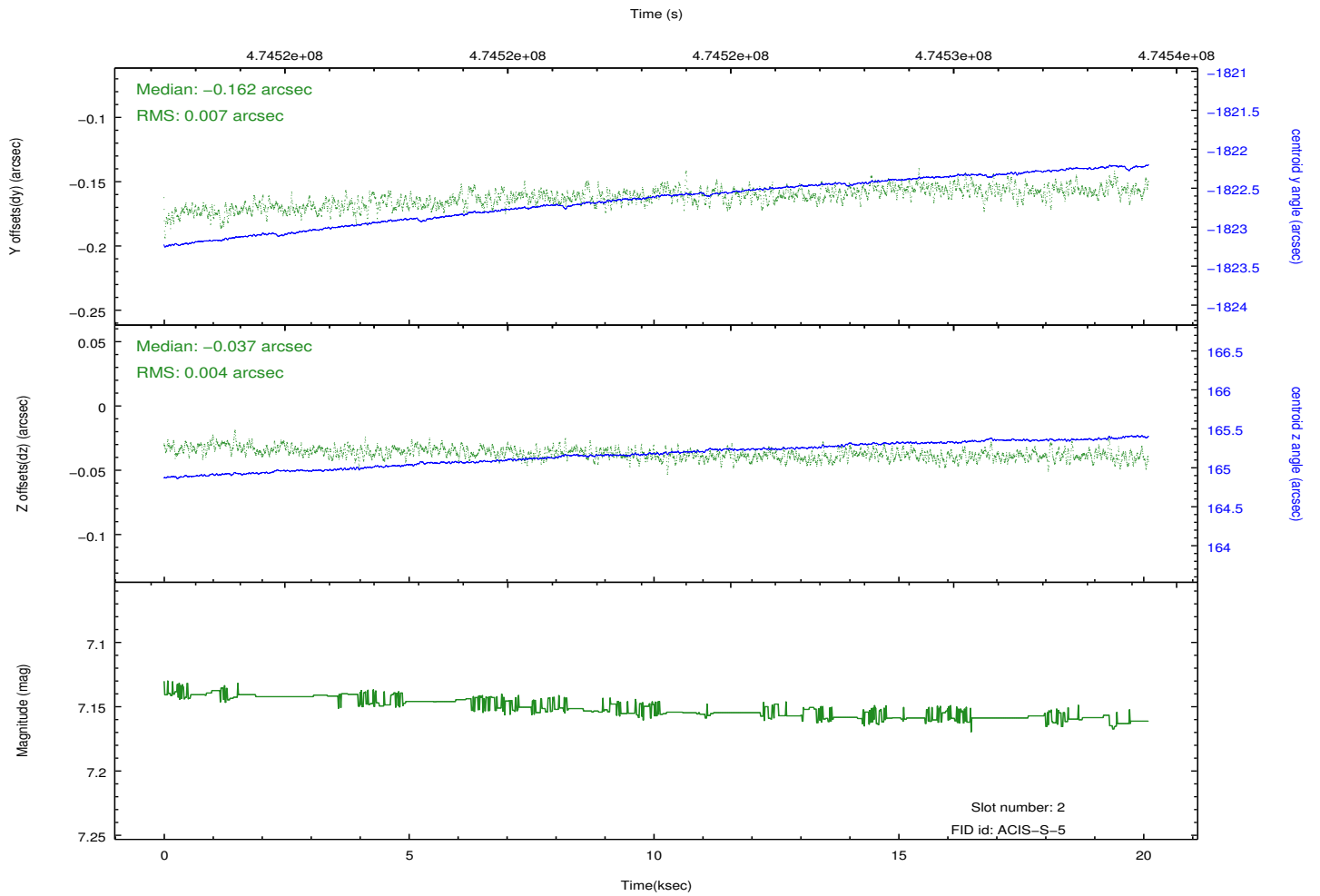
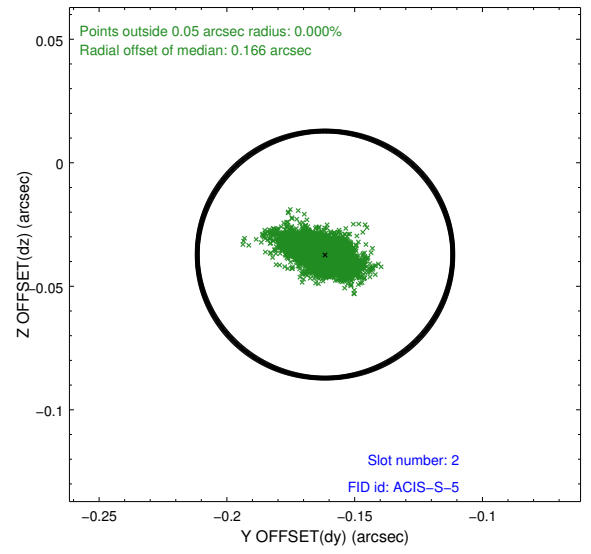
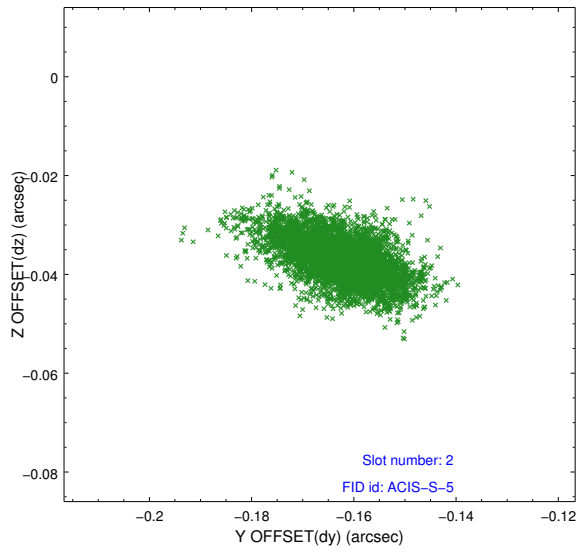
2.5.1 Slot 0



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)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.044600154161

A.2 Comments

Joint proposal with HST.

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.