

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 13954 - L2 Version 2
Chandra X-Ray Center

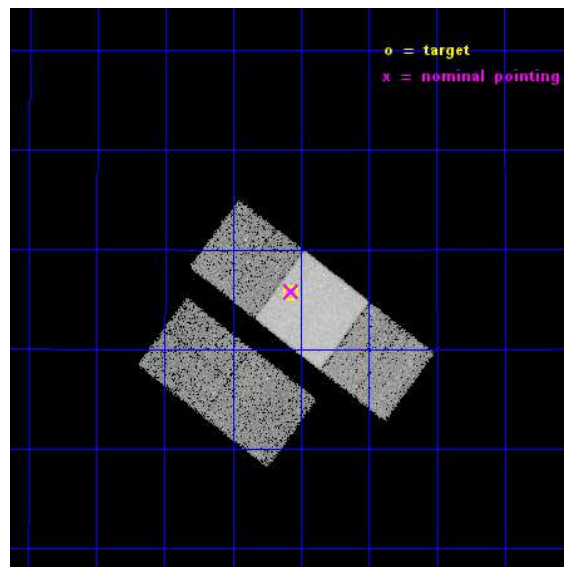
L2 Processing Date : Nov 30 2014

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1 Front

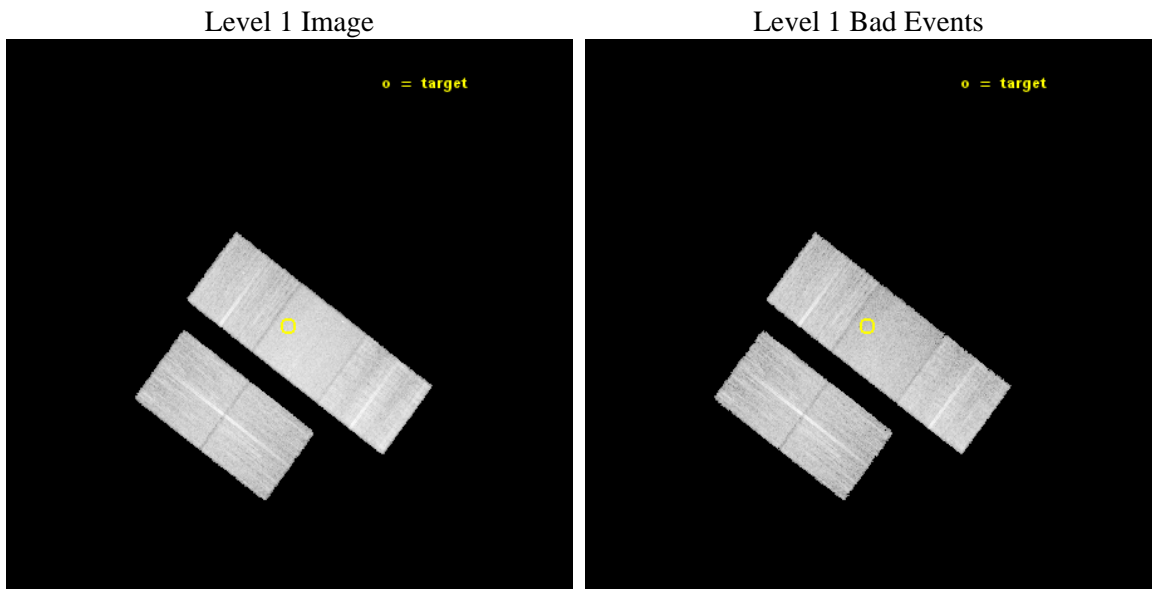
seq_num	702676	Sequence number
obs_id	13954	Observation id
title	Identifying Analogs of NGC 6240: Galaxies with Dual Supermassive Black Holes	Proposal title
observer	Dr. Julia Comerford	Principal investigator
object	SDSS J144804.17+182537.9	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	222.0175	Observer's specified target RA [deg]
dec_targ	18.427194	Observer's specified target Dec [deg]
ra_nom	222.01724430427	Nominal RA [deg]
dec_nom	18.430186045335	Nominal Dec [deg]
roll_nom	37.070131568087	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20069.400154352	Sum of GTIs [s]
livetime	19807.178666458	Livetime [s]
ontime2	20069.400154352	Sum of GTIs [s]
ontime3	20069.400154352	Sum of GTIs [s]
ontime6	20069.400154352	Sum of GTIs [s]
ontime7	20069.400154352	Sum of GTIs [s]
ontime8	20069.400154352	Sum of GTIs [s]
l2events	104411	Number of level 2 events



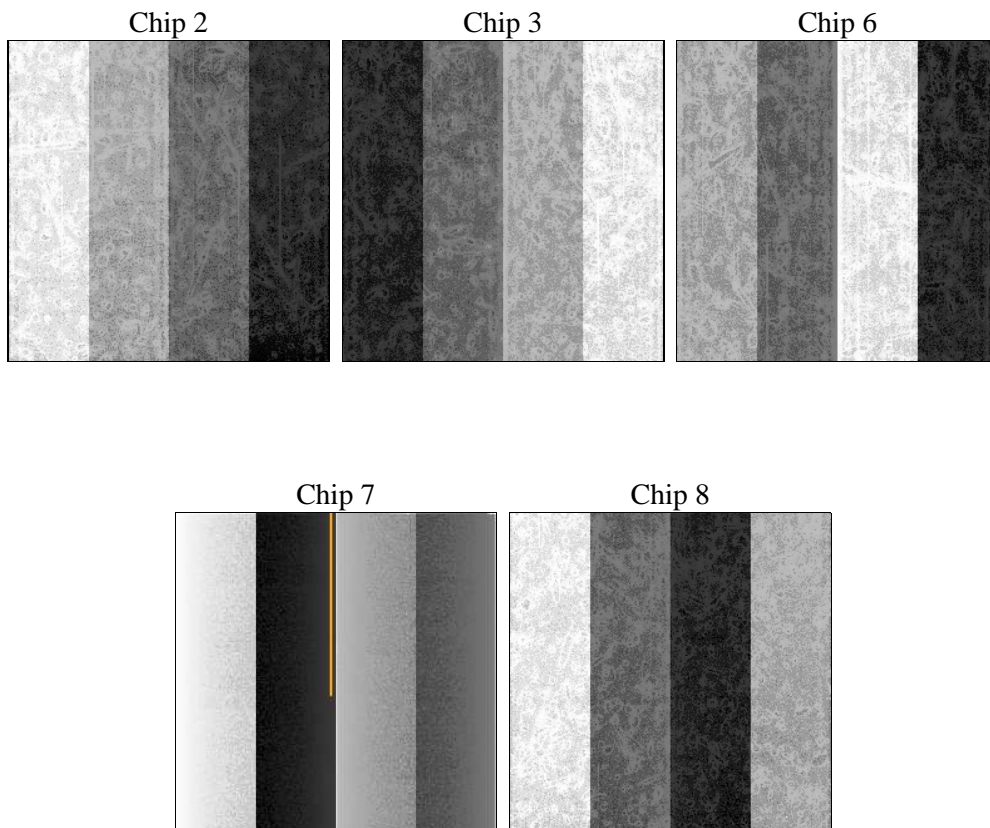
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	20069.400154352	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	20069.400154352	Sum of GTIs [s]
date	2014-11-30T02:35:34	Date and time of file creation	ontime3	20069.400154352	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	20069.400154352	Sum of GTIs [s]
			ontime7	20069.400154352	Sum of GTIs [s]
			ontime8	20069.400154352	Sum of GTIs [s]
			l1events	582184	Number of level 1 events

2.1.4 Events

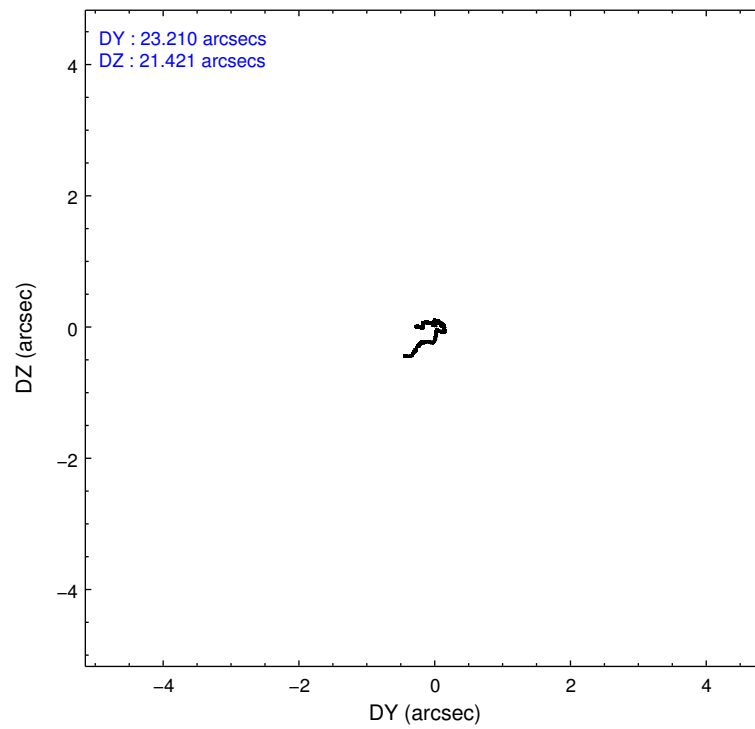
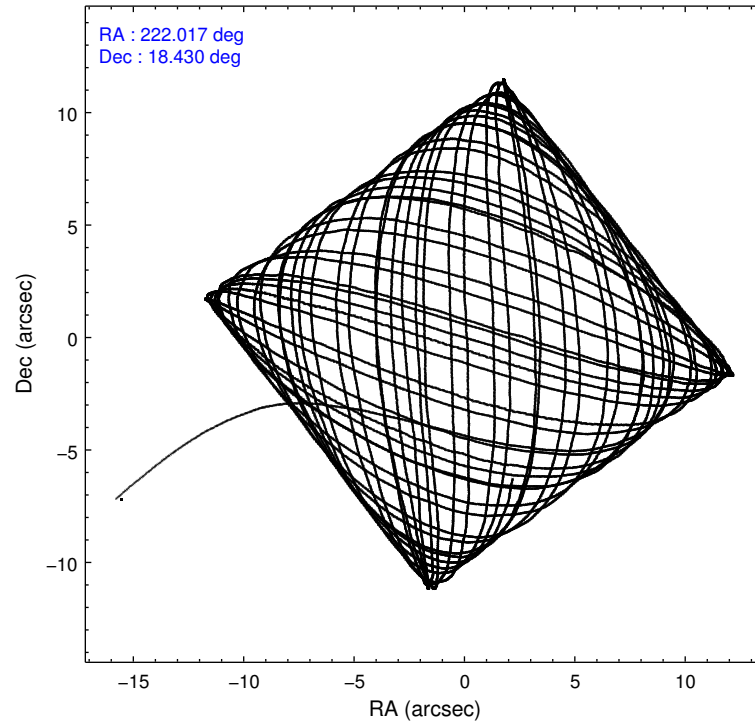
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	98202	97935	106365	139414	140268
rejected events	86404	86451	93466	78707	102343
rejected %	87%	88%	87%	56%	72%

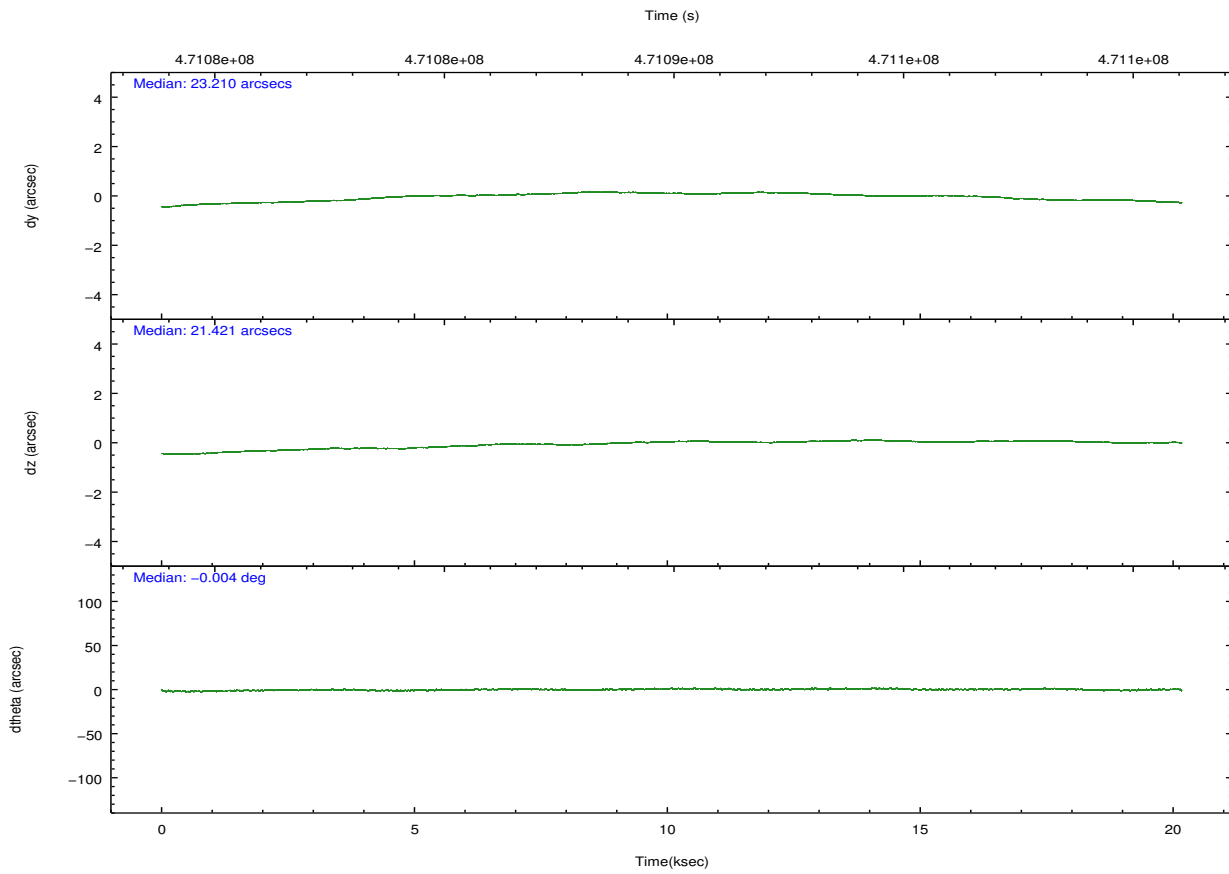
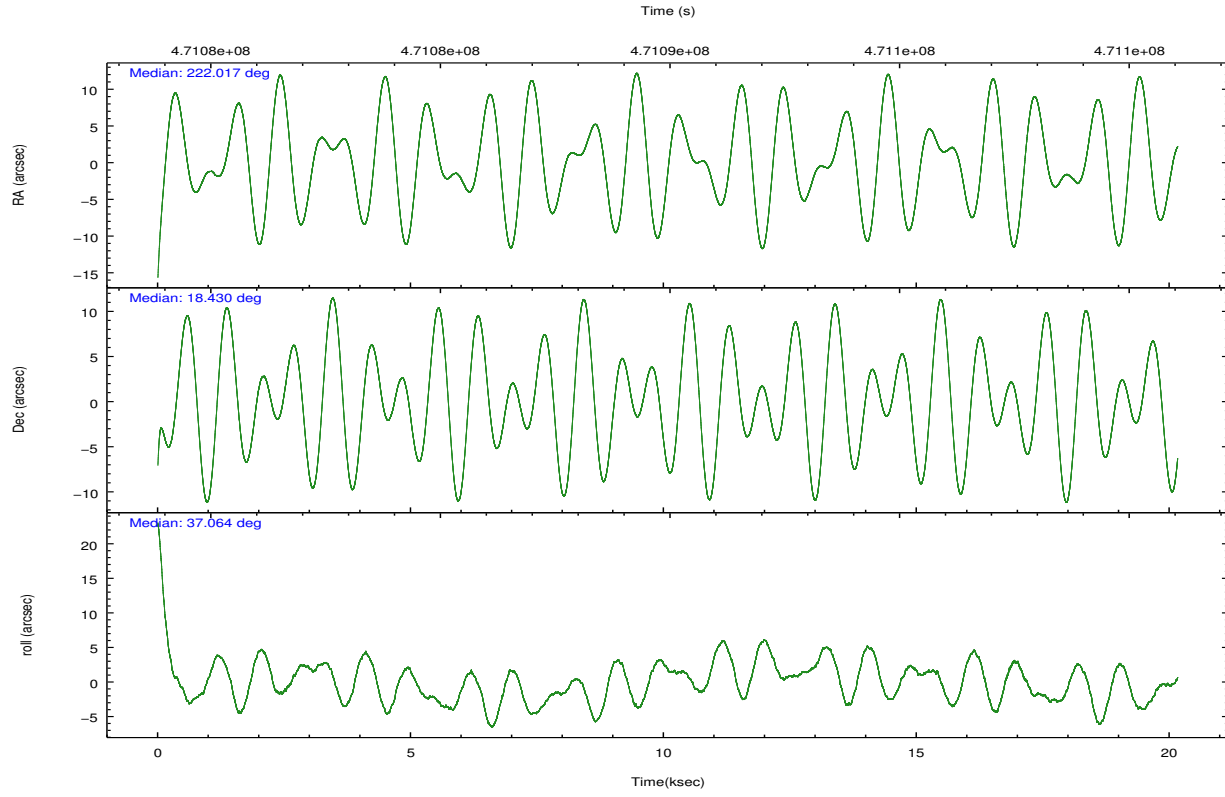
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4377	4043	4525	5706	11319
	4%	4%	4%	4%	8%
grade 1 events	65	59	45	179	94
	0%	0%	0%	0%	0%
grade 2 events	2767	2511	2892	12369	8937
	2%	2%	2%	8%	6%
grade 3 events	1199	1220	1266	5230	3818
	1%	1%	1%	3%	2%
grade 4 events	1239	1262	1256	5136	3721
	1%	1%	1%	3%	2%
grade 5 events	4457	5301	5378	14614	7832
	4%	5%	5%	10%	5%
grade 6 events	2220	2454	2964	32278	10132
	2%	2%	2%	23%	7%
grade 7 events	81878	81085	88039	63902	94415
	83%	82%	82%	45%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	222.006376	222.0172443042738	CCD I2 on	O2	Y
[deg] Pointing Dec	18.404881	18.43018604533526	CCD I3 on	O1	Y
[deg] Pointing Roll	36.916943	37.07013156808746	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O3	Y
[s] Observation start time (MET)	471080042.184000	471079031.07954	CCD S5 on	N	N
Observation start date	2012-12-05T07:32:55	2012-12-05T07:17:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	471100042.184000	471100461.2682	On-chip summing requested	N	N
Observation end date	2012-12-05T13:06:15	2012-12-05T13:14:21	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





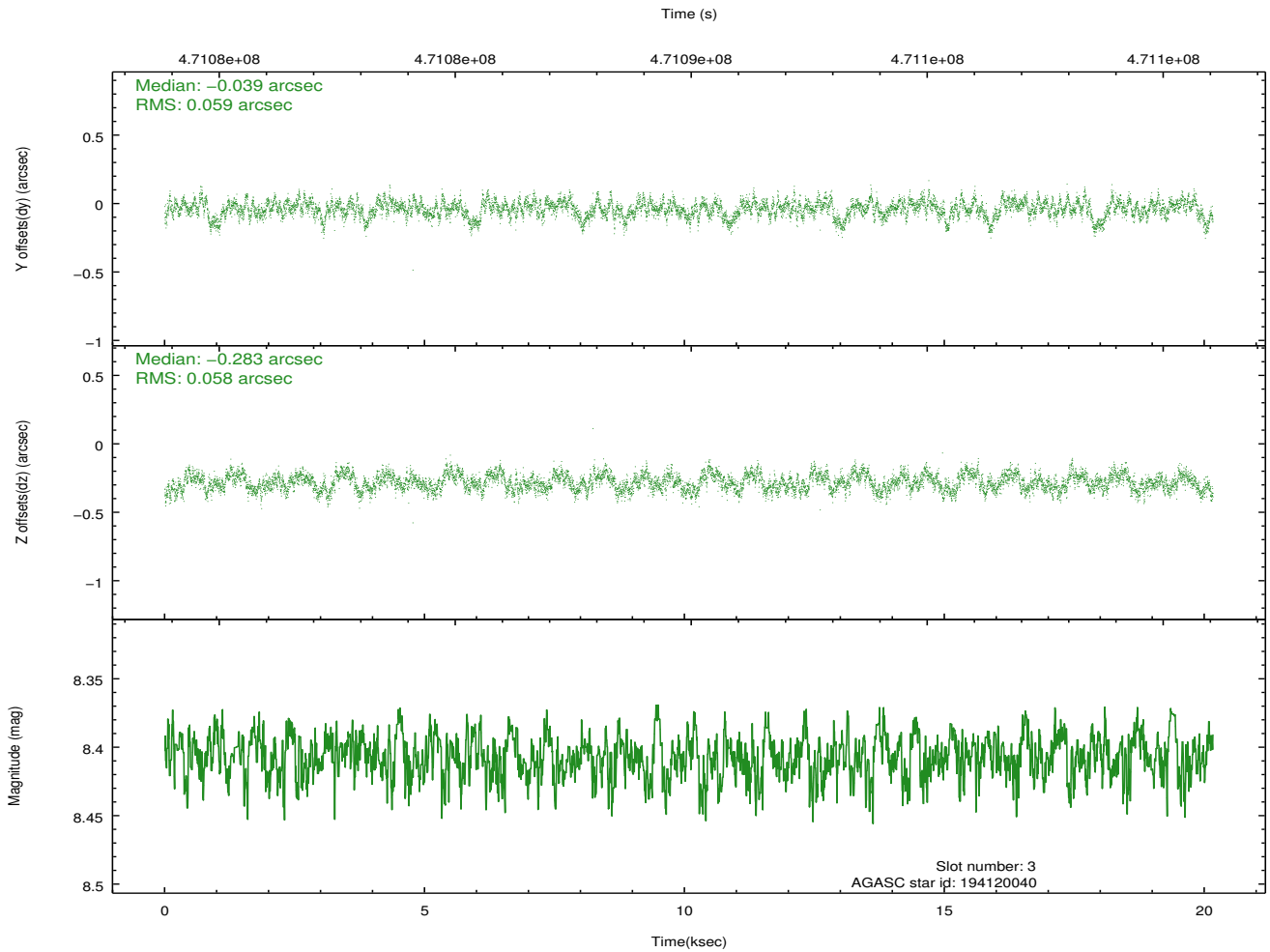
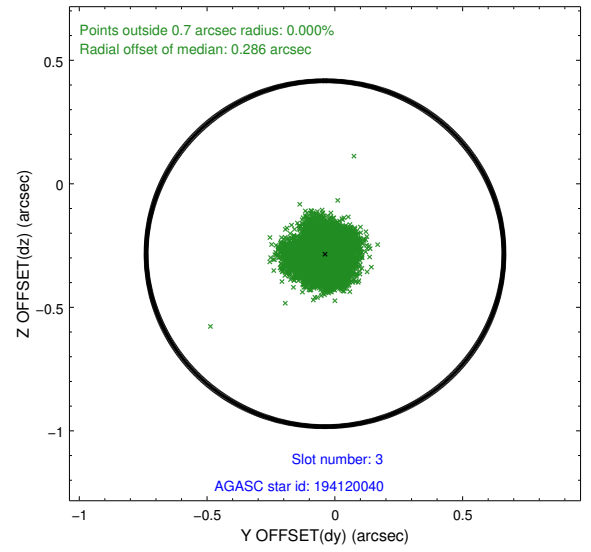
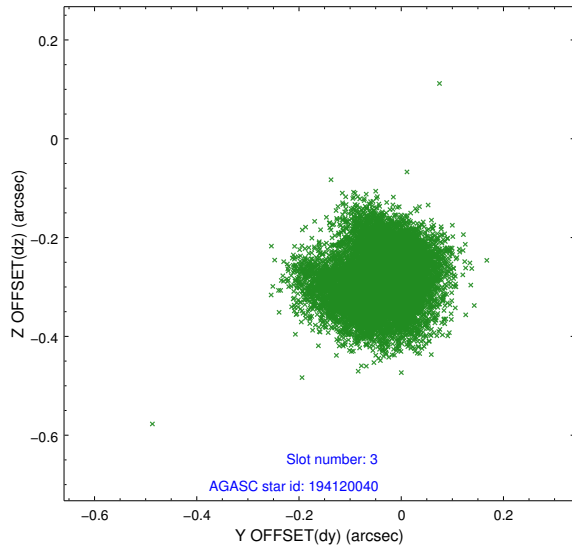
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	4918	-0.106	-0.020	0.008	0.013	0.000000	0.000000	-776.47	-1742.86
1	FID		ACIS-S-4	7.01	4916	0.291	0.057	0.008	0.015	0.000000	0.000000	2137.13	165.48
2	FID		ACIS-S-5	7.04	4918	-0.216	-0.028	0.008	0.014	0.000000	0.000000	-1829.17	159.31
3	GUIDE	used	194120040	8.41	9837	-0.039	-0.283	0.090	0.139	221.387191	18.672305	-1108.04	2040.73
4	GUIDE	used	194120200	8.50	9832	0.054	-0.040	0.105	0.163	221.779793	18.340550	-757.50	280.35
5	GUIDE	used	194120312	8.51	9834	0.236	0.470	0.083	0.126	221.851090	17.757253	-1826.13	-1542.56
6	GUIDE	used	194121888	7.26	9831	-0.042	0.204	0.102	0.150	222.214438	18.199686	125.72	-1017.66
7	GUIDE	used	194122728	7.61	9836	-0.215	-0.352	0.074	0.117	221.882878	19.050029	1059.06	2109.26

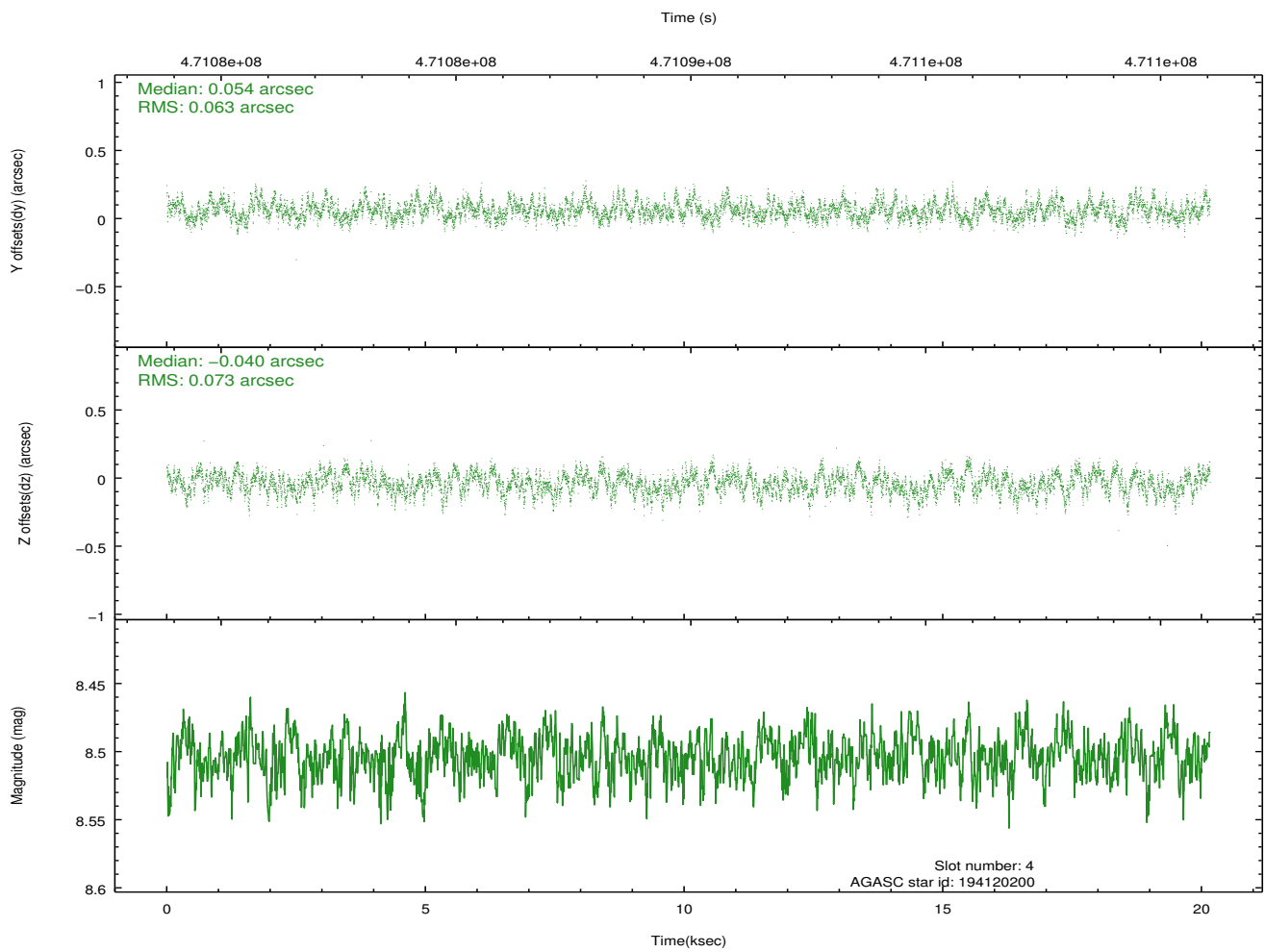
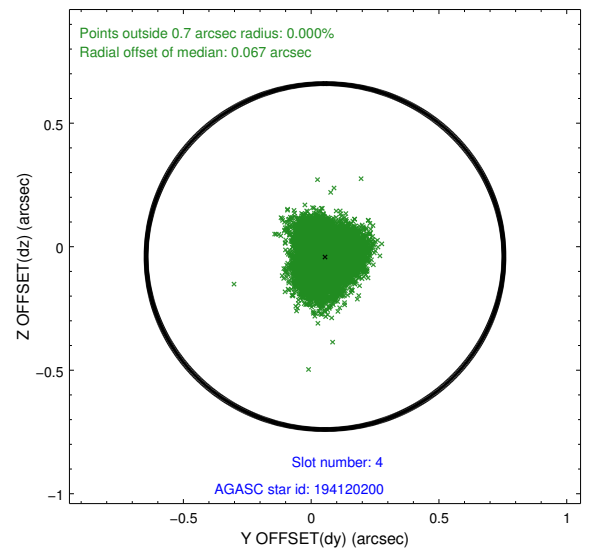
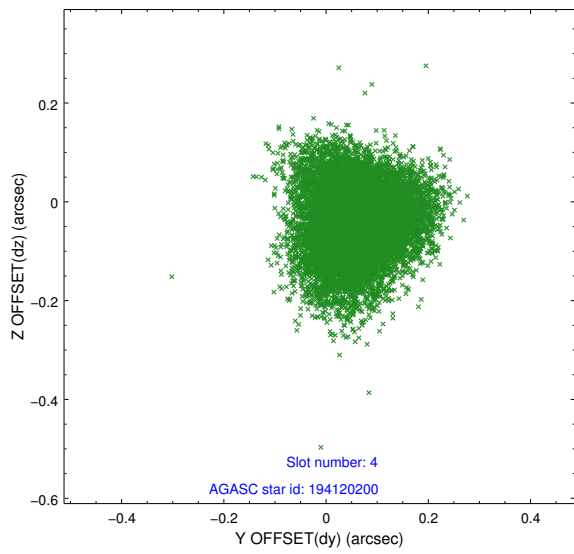
∞

2.4 Star Slots

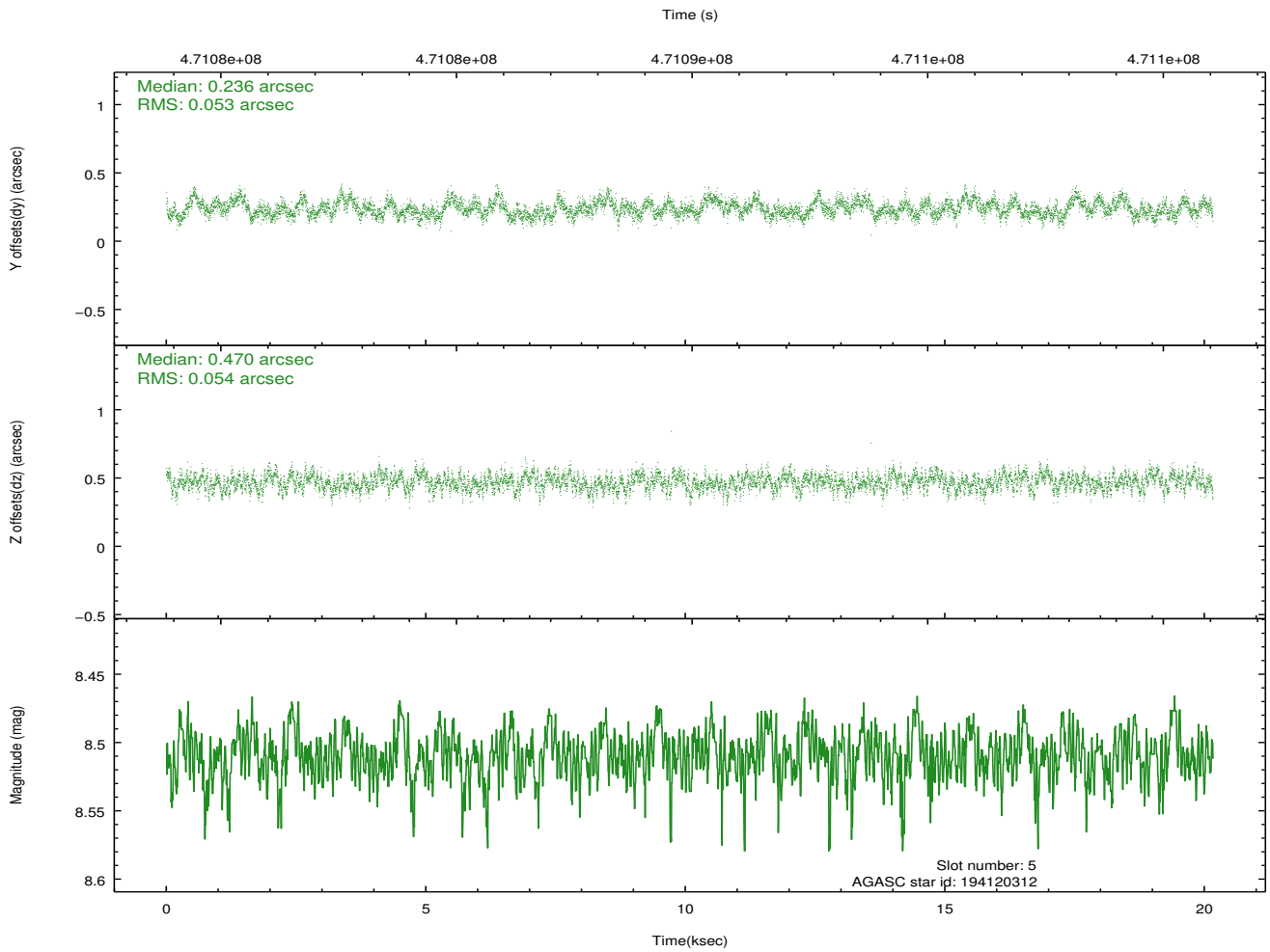
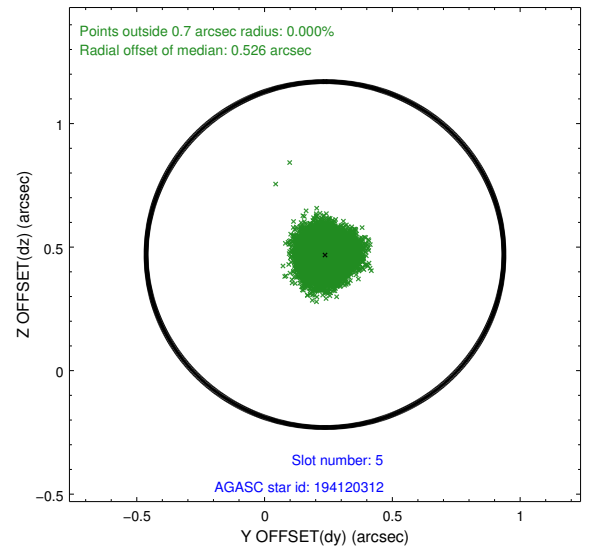
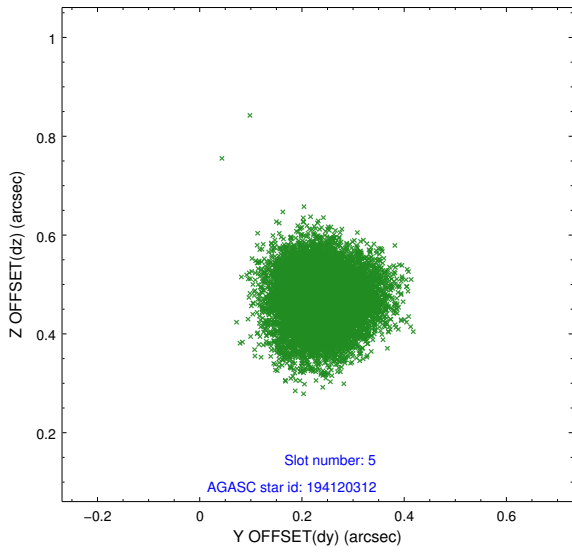
2.4.1 Slot 3



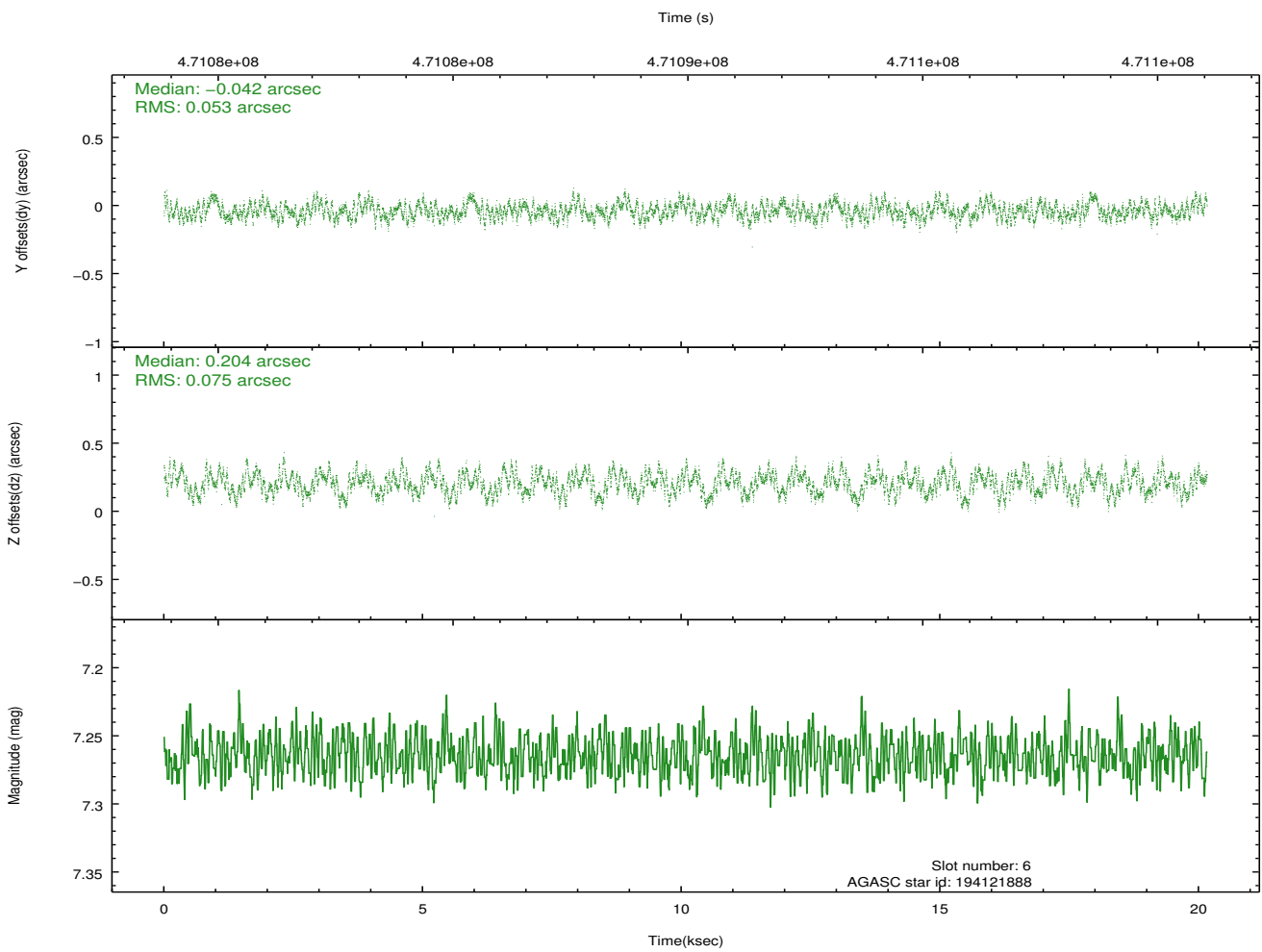
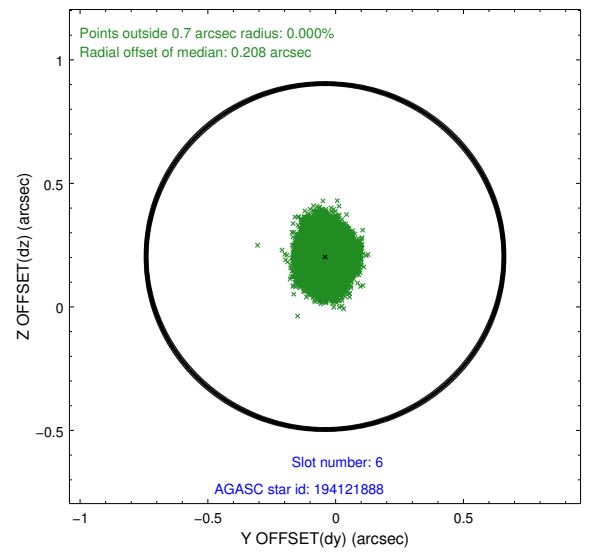
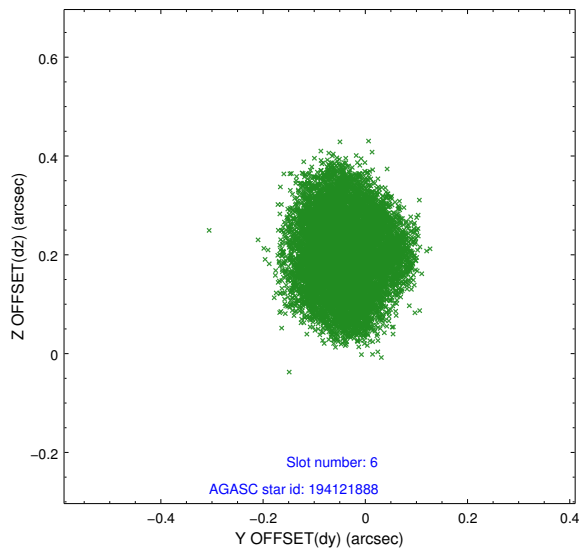
2.4.2 Slot 4



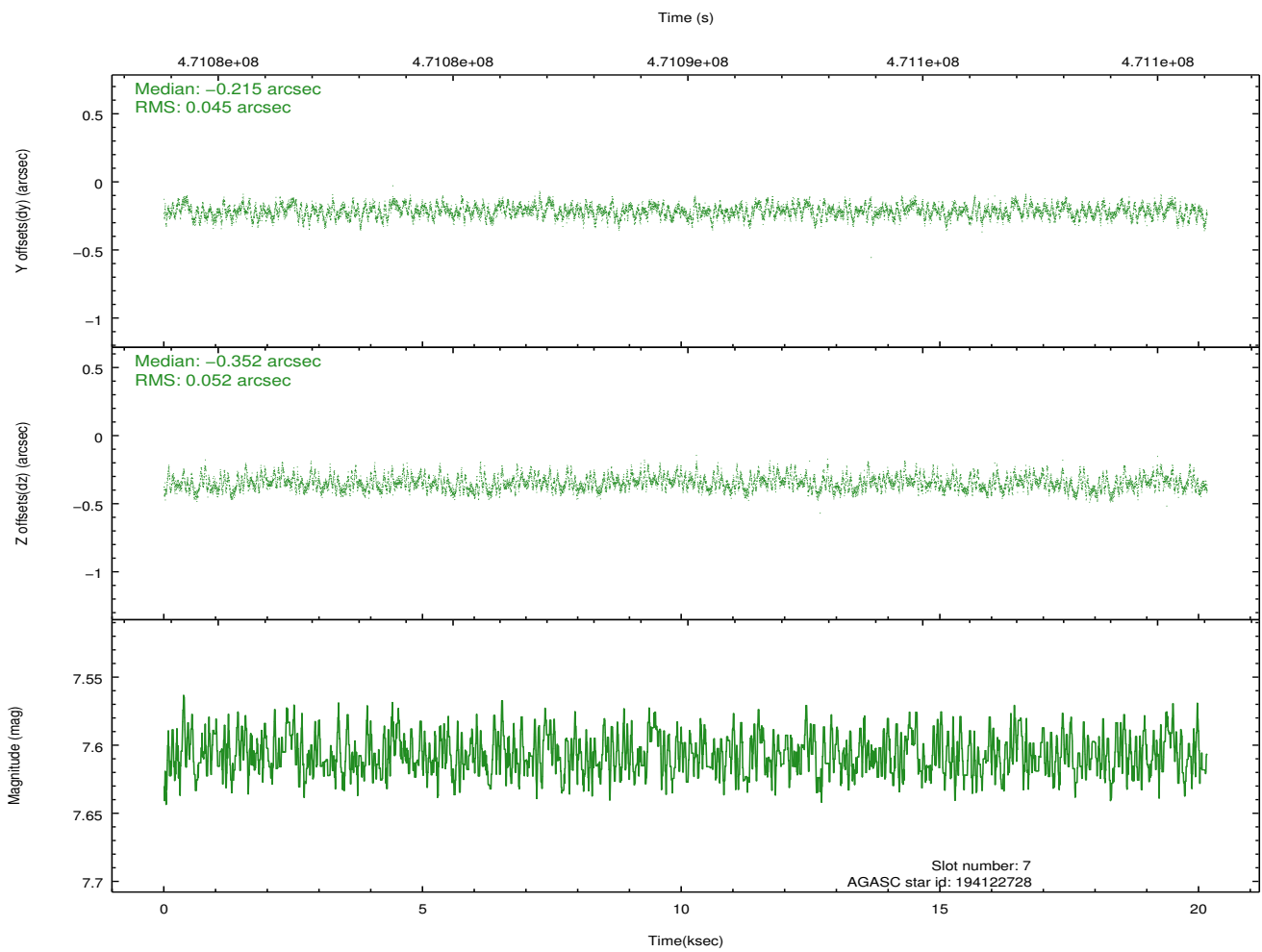
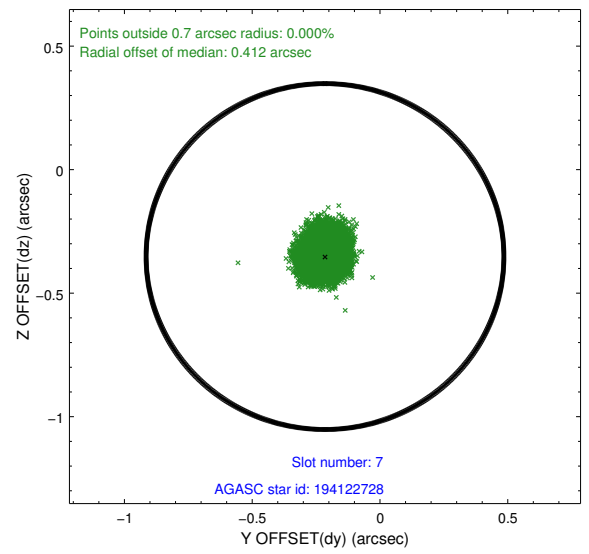
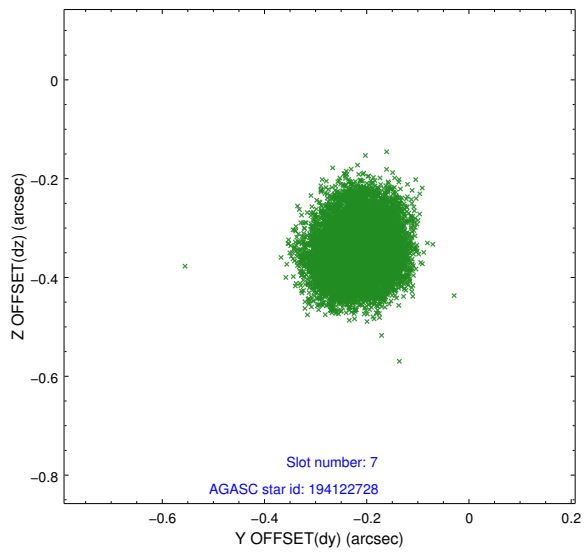
2.4.3 Slot 5



2.4.4 Slot 6

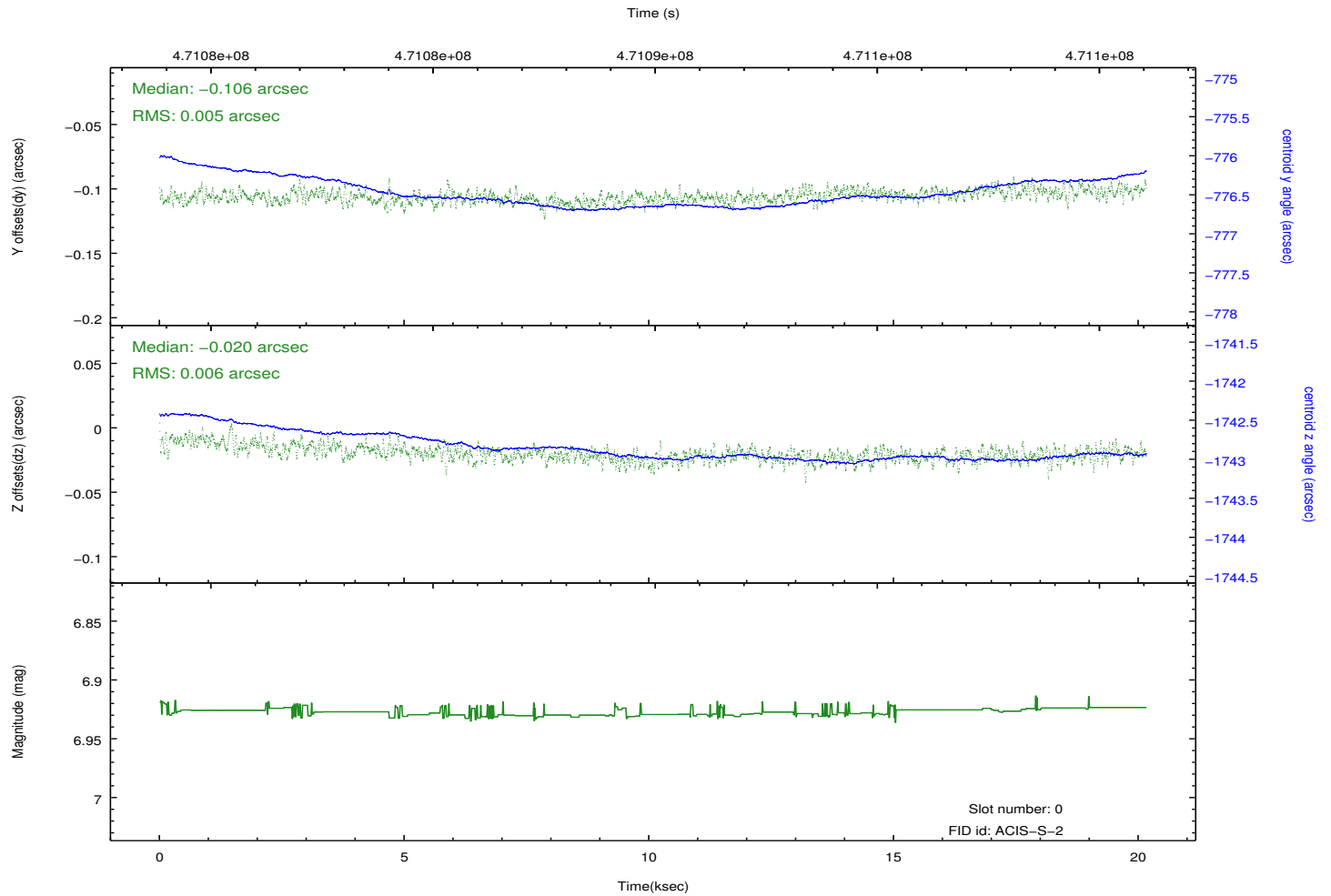
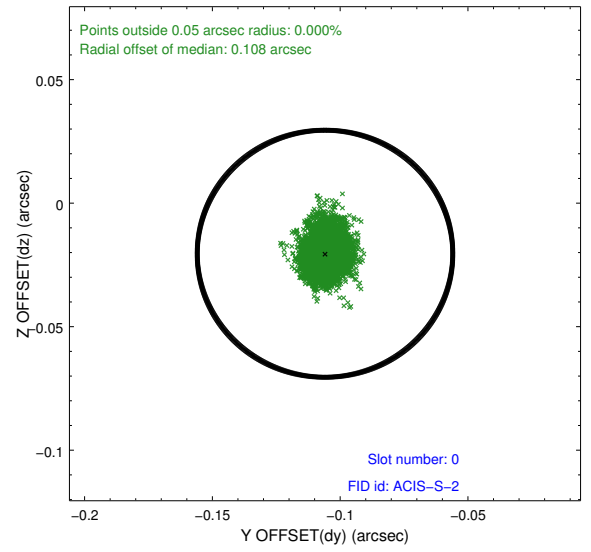
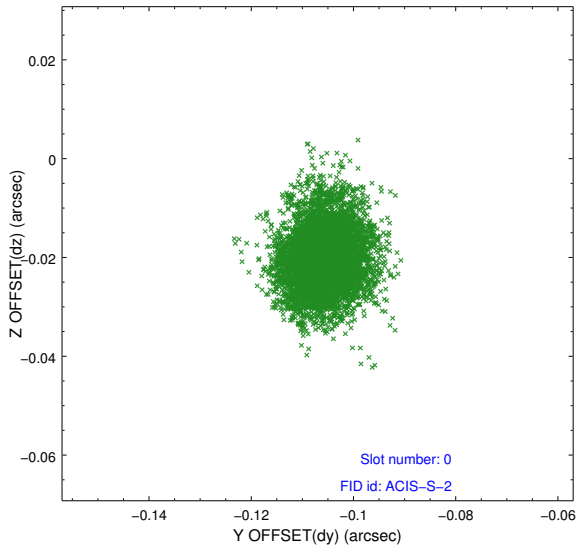


2.4.5 Slot 7

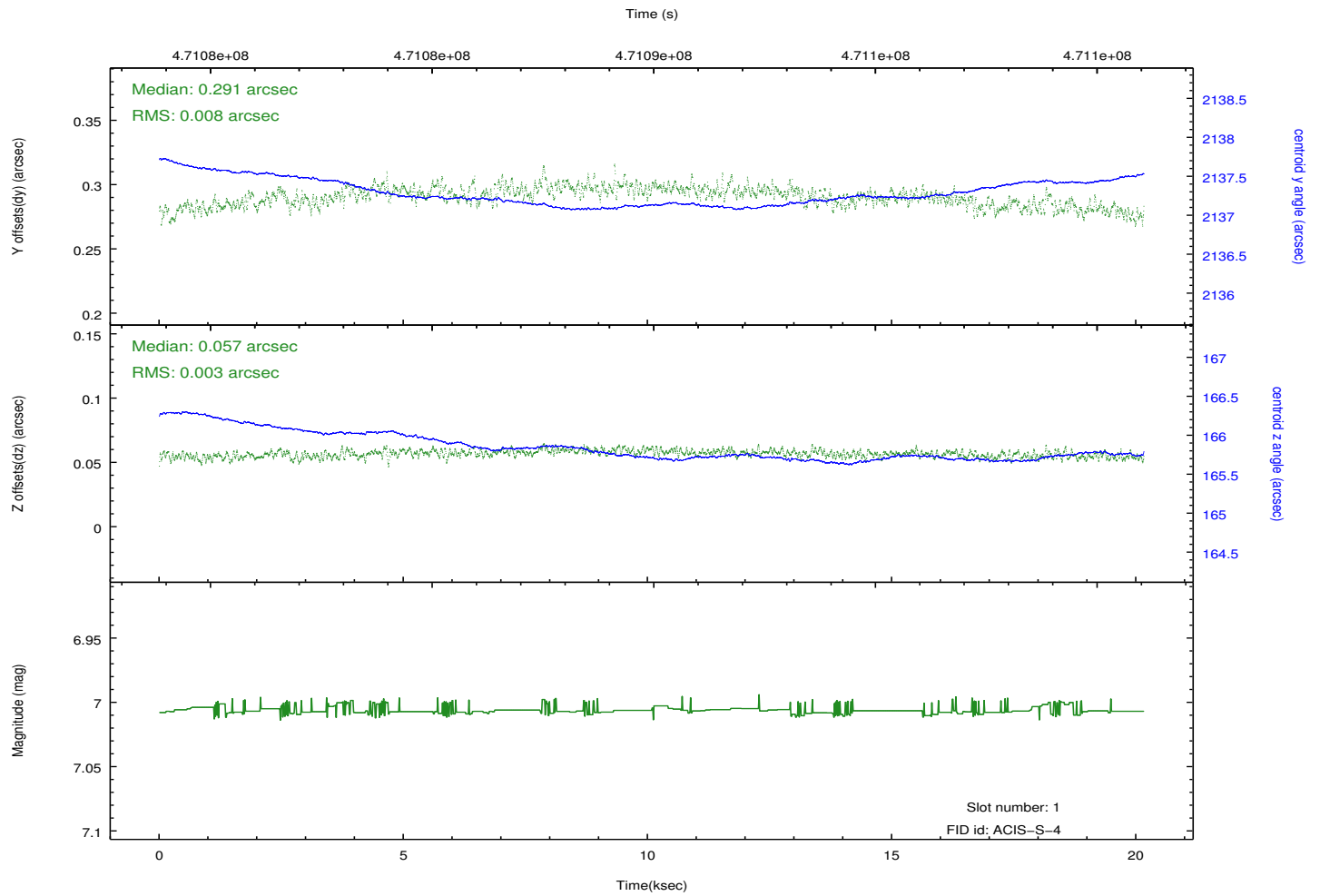
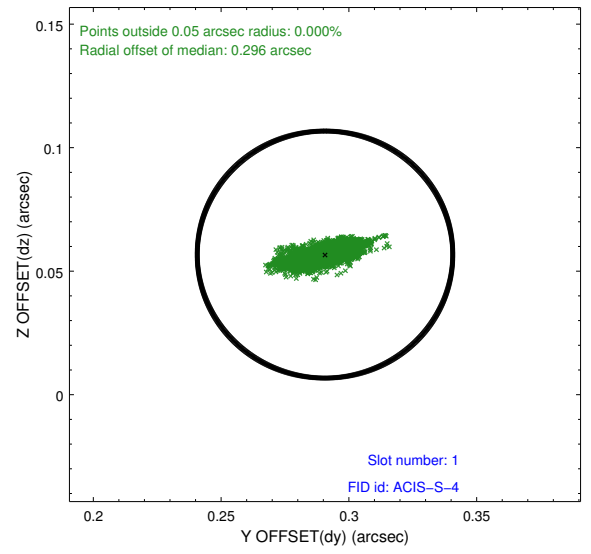
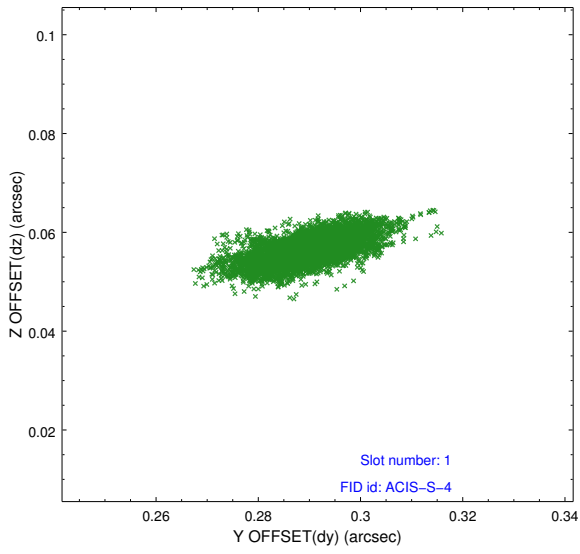


2.5 FID Slots

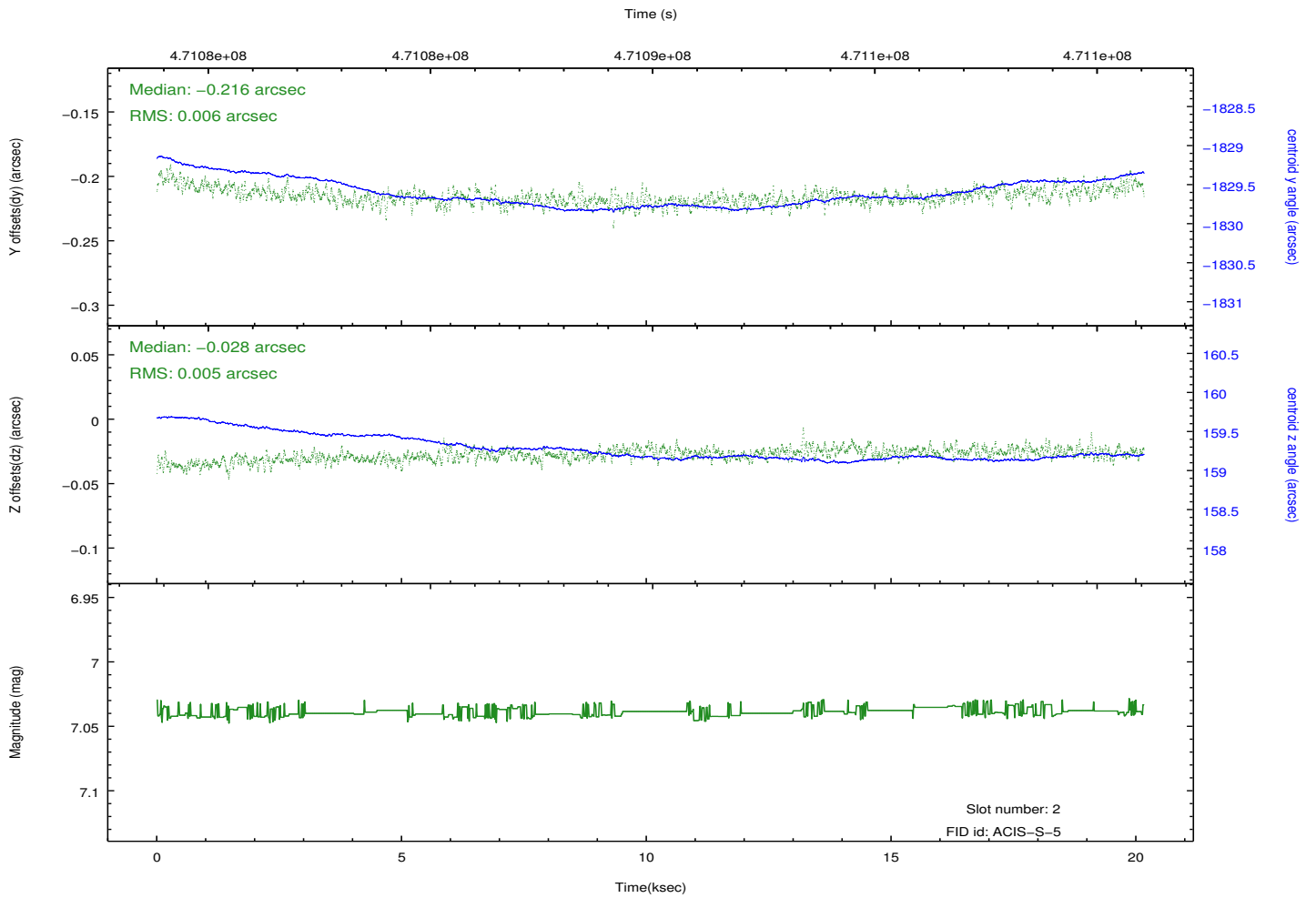
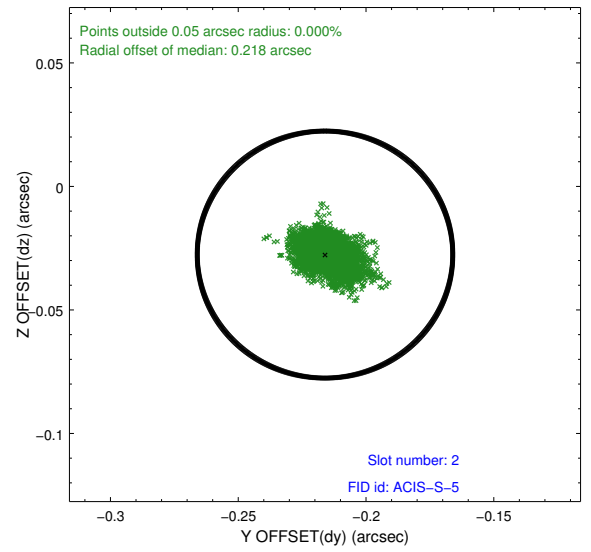
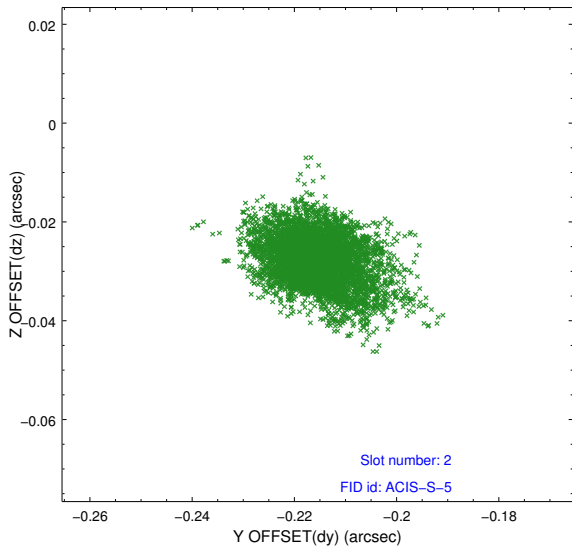
2.5.1 Slot 0



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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.069400154352

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.