

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13959 - L2 Version 2
Chandra X-Ray Center

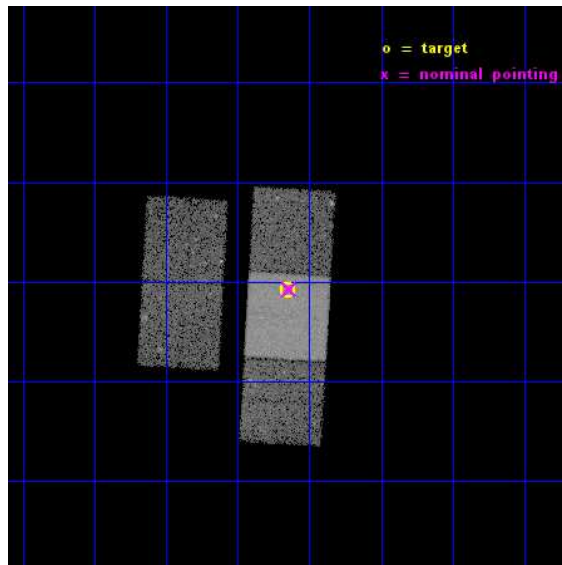
L2 Processing Date : Nov 26 2014

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1 Front

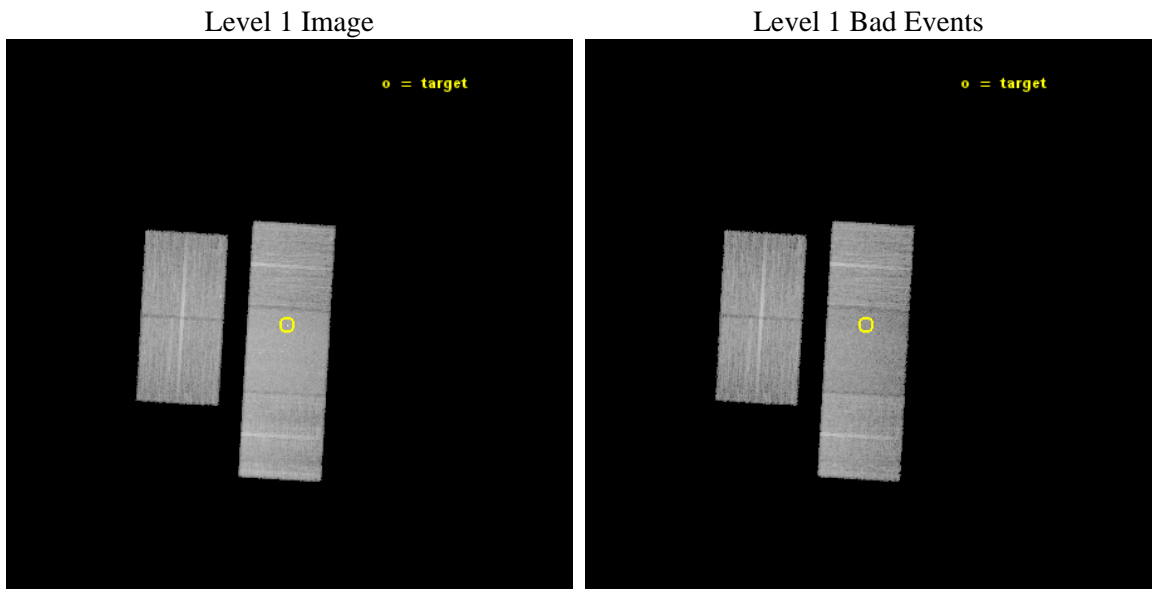
seq_num	702681	Sequence number
obs_id	13959	Observation id
title	Identifying Analogs of NGC 6240: Galaxies with Dual Supermassive Black Holes	Proposal title
observer	Dr. Julia Comerford	Principal investigator
object	SDSS J014209.01-005050.0	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	25.5375	Observer's specified target RA [deg]
dec_targ	-0.847222	Observer's specified target Dec [deg]
ra_nom	25.534857975918	Nominal RA [deg]
dec_nom	-0.8457516015065	Nominal Dec [deg]
roll_nom	93.364719807283	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20066.040466845	Sum of GTIs [s]
livetime	19803.862875742	Livetime [s]
ontime2	20065.876306832	Sum of GTIs [s]
ontime3	20065.958386838	Sum of GTIs [s]
ontime6	20065.999426842	Sum of GTIs [s]
ontime7	20066.040466845	Sum of GTIs [s]
ontime8	20065.917346835	Sum of GTIs [s]
l2events	106592	Number of level 2 events



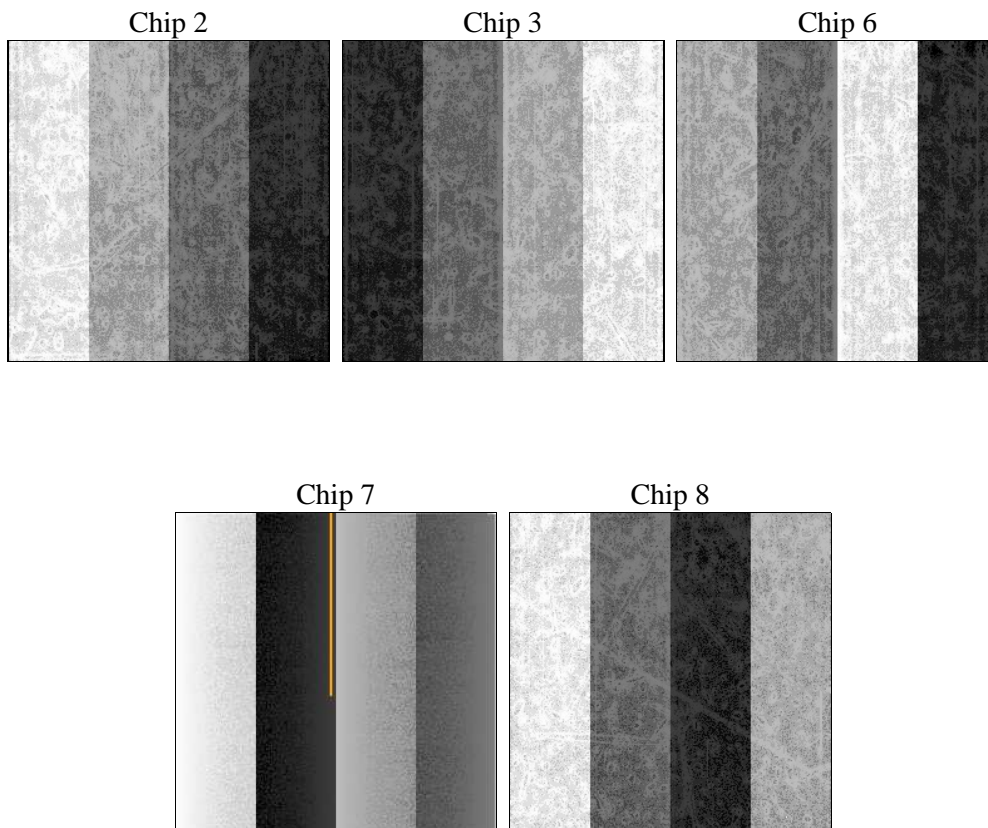
2 OBI

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	20066.040466845	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	20065.876306832	Sum of GTIs [s]
date	2014-11-27T03:51:55	Date and time of file creation	ontime3	20065.958386838	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	20065.999426842	Sum of GTIs [s]
			ontime7	20066.040466845	Sum of GTIs [s]
			ontime8	20065.917346835	Sum of GTIs [s]
			l1events	607349	Number of level 1 events

2.1.4 Events

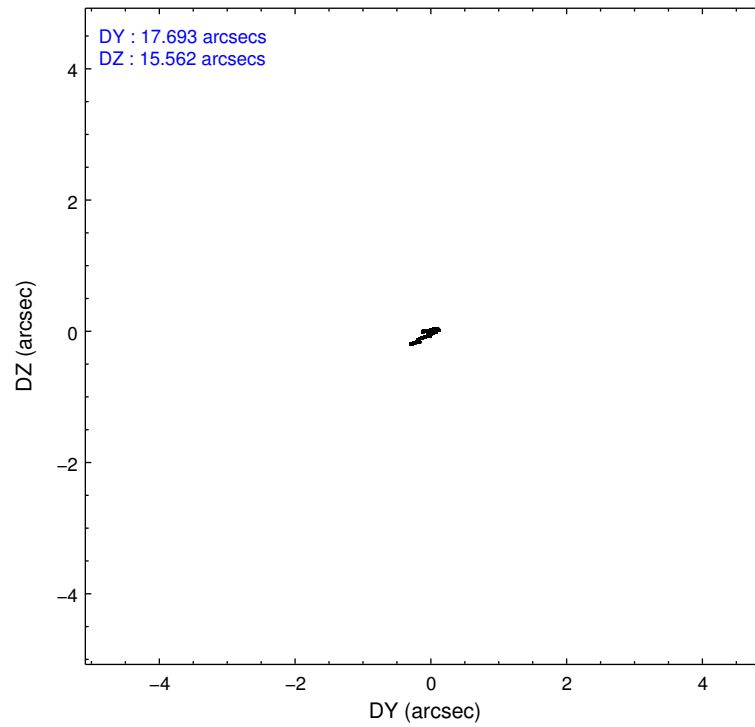
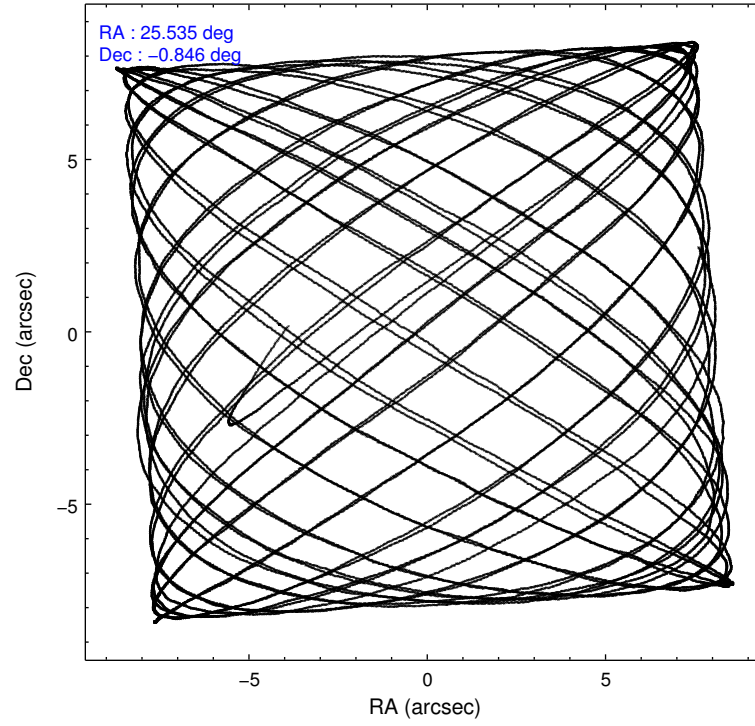
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	104722	104596	111885	145083	141063
rejected events	92512	92809	98789	81706	104557
rejected %	88%	88%	88%	56%	74%

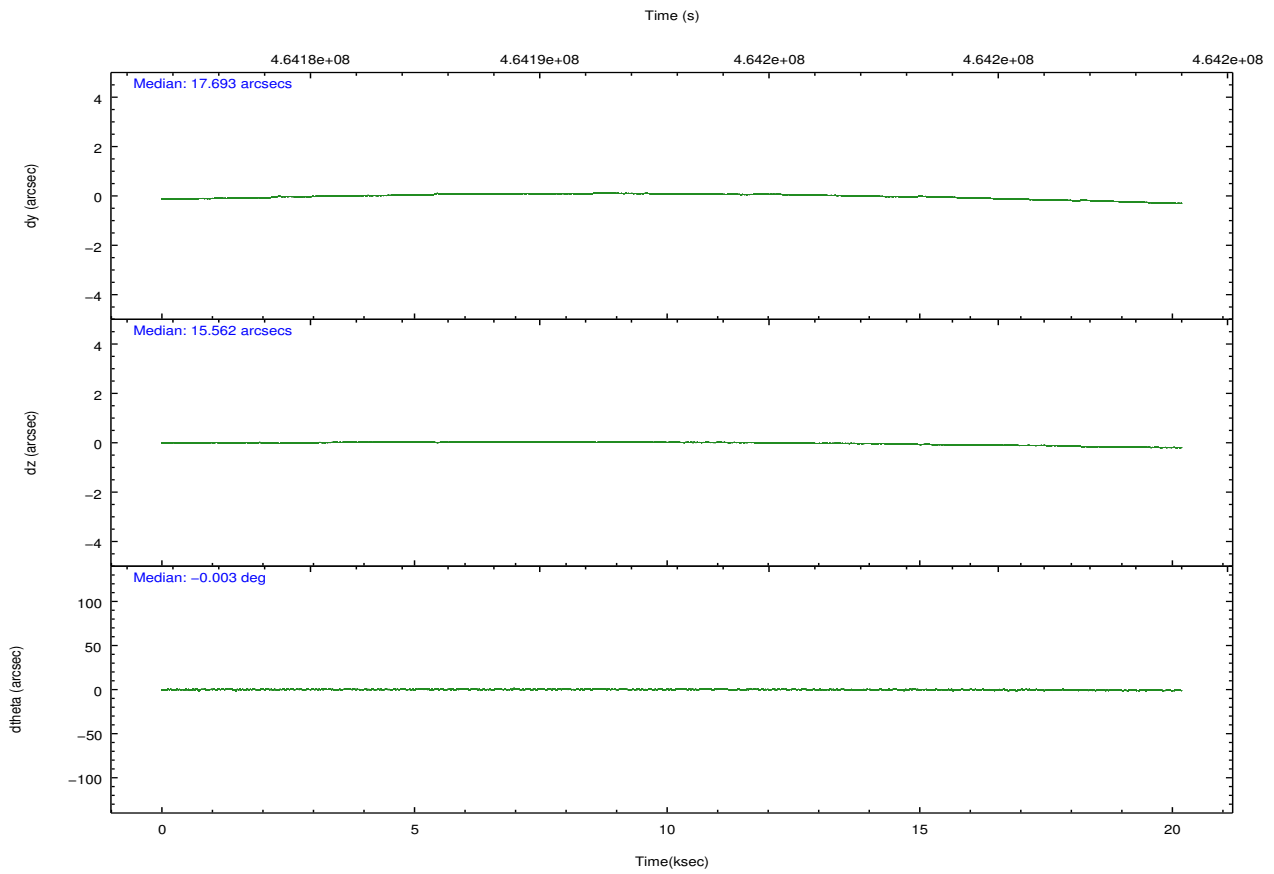
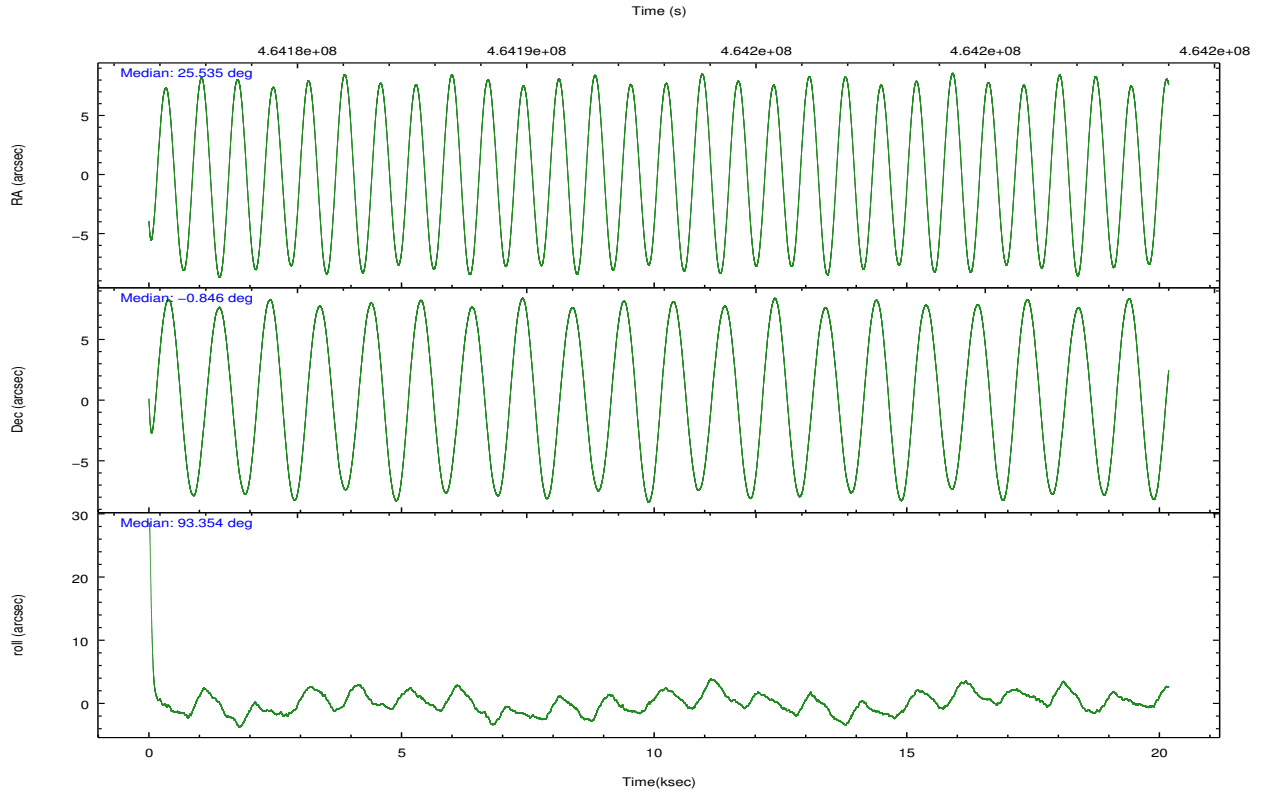
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4424	3986	4577	5739	10039
	4%	3%	4%	3%	7%
grade 1 events	57	61	61	176	116
	0%	0%	0%	0%	0%
grade 2 events	2882	2621	2888	12922	8983
	2%	2%	2%	8%	6%
grade 3 events	1217	1348	1346	5407	3824
	1%	1%	1%	3%	2%
grade 4 events	1266	1348	1315	5292	3574
	1%	1%	1%	3%	2%
grade 5 events	4664	5556	5648	15016	8102
	4%	5%	5%	10%	5%
grade 6 events	2424	2488	2973	34032	10088
	2%	2%	2%	23%	7%
grade 7 events	87788	87188	93077	66499	96337
	83%	83%	83%	45%	68%

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	25.550206	25.53485797591826	CCD I2 on	O2	Y
[deg] Pointing Dec	-0.868381	-0.8457516015065021	CCD I3 on	O1	Y
[deg] Pointing Roll	93.208309	93.36471980728251	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	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	O3	Y
[s] Observation start time (MET)	464182967.184000	464181874.38402	CCD S5 on	N	N
Observation start date	2012-09-16T11:41:40	2012-09-16T11:24:34	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	464202967.184000	464203900.6102	On-chip summing requested	N	N
Observation end date	2012-09-16T17:15:00	2012-09-16T17:31:40	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



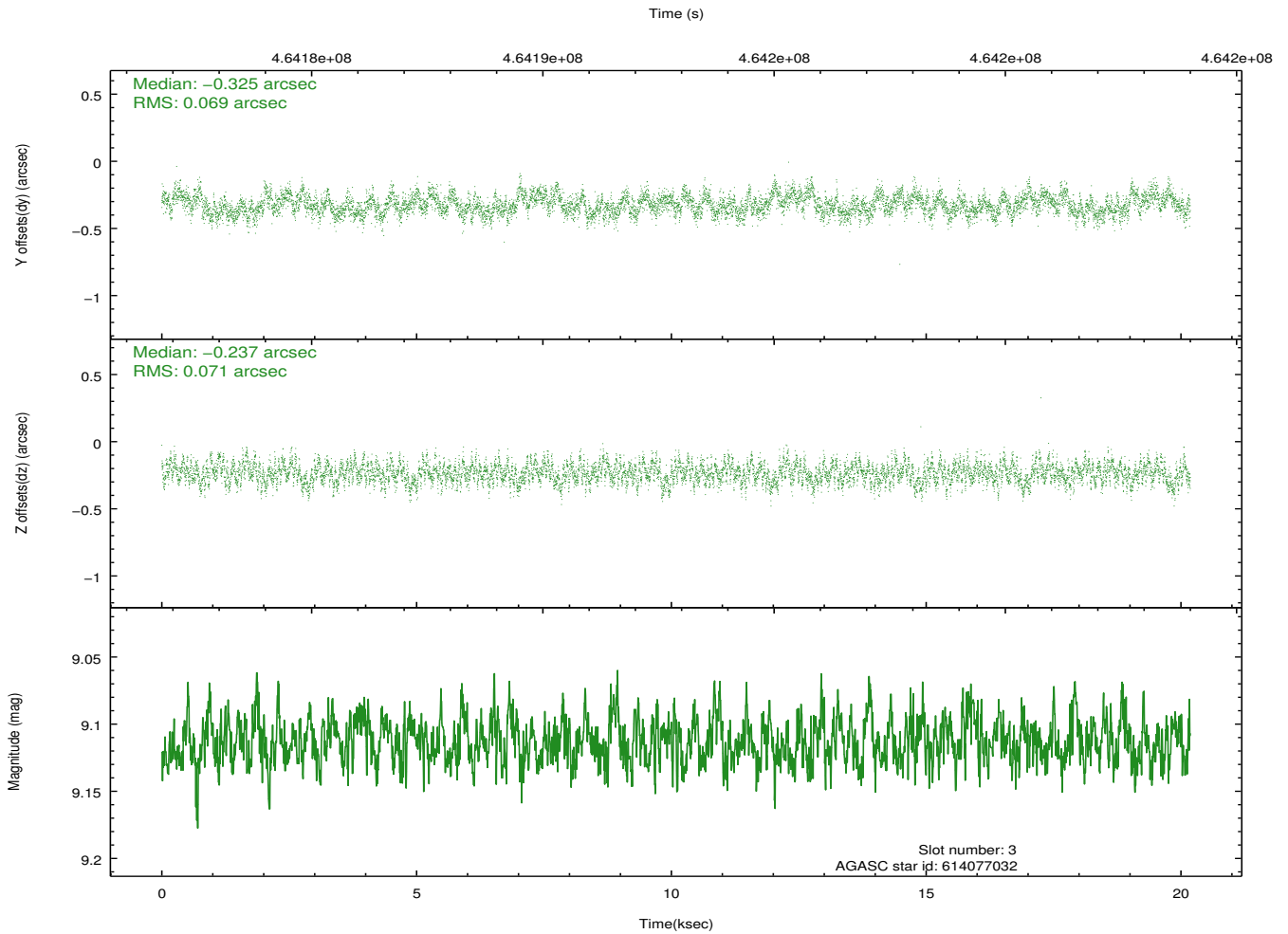
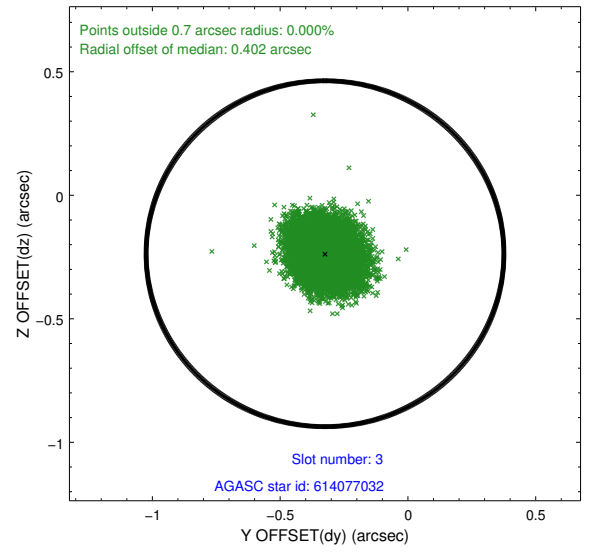
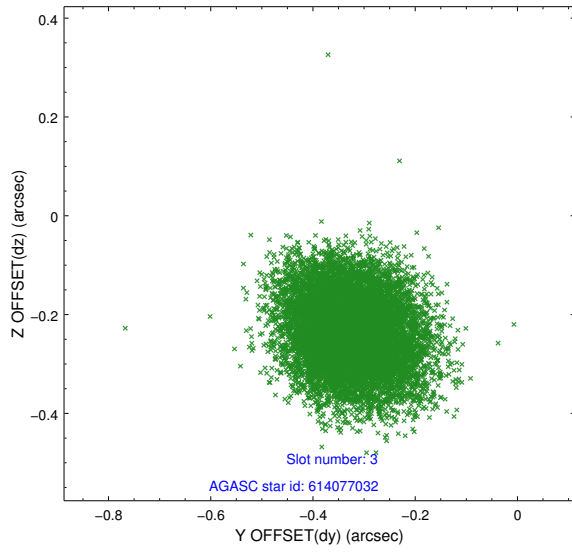


Slot Statistics

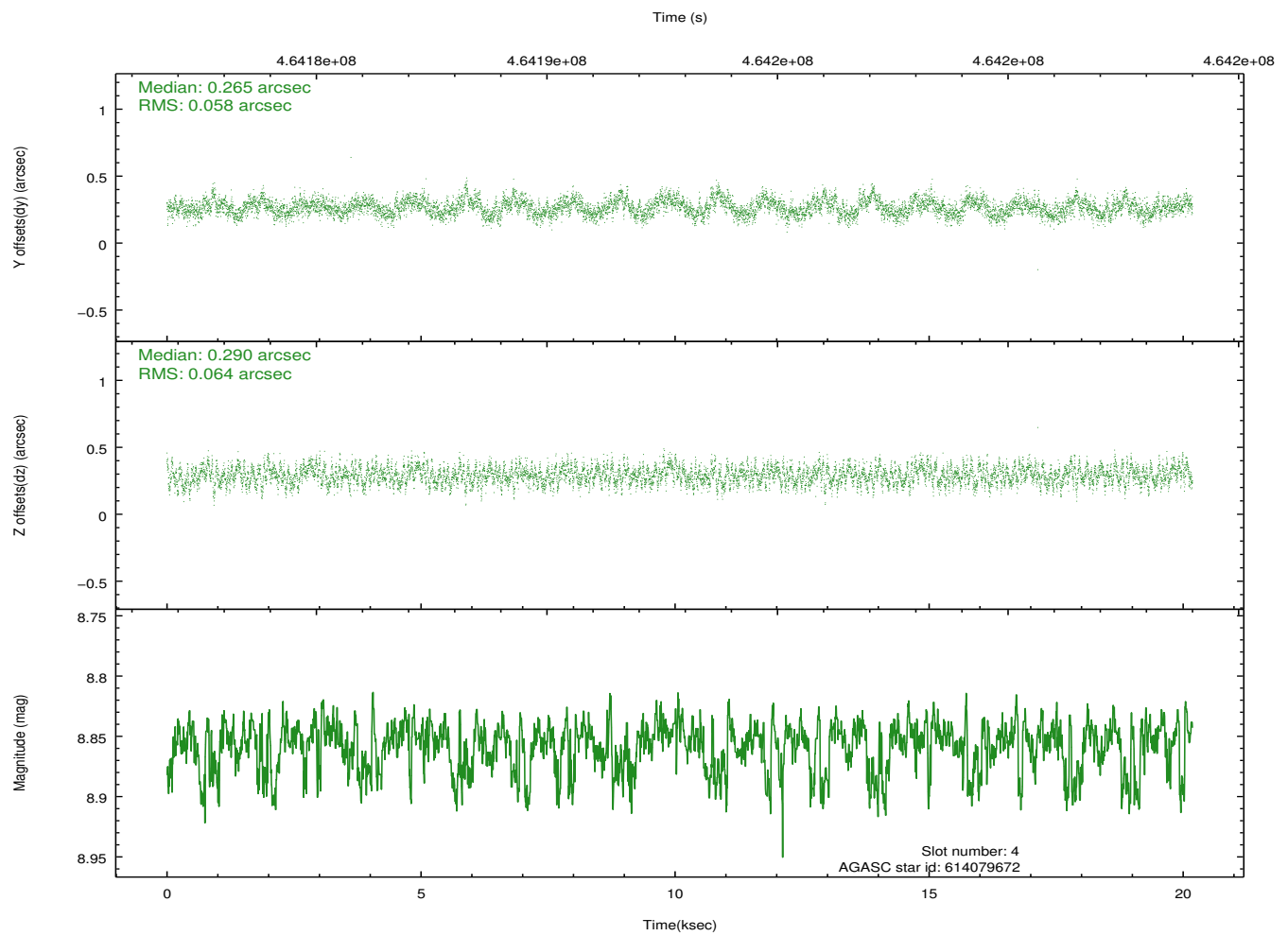
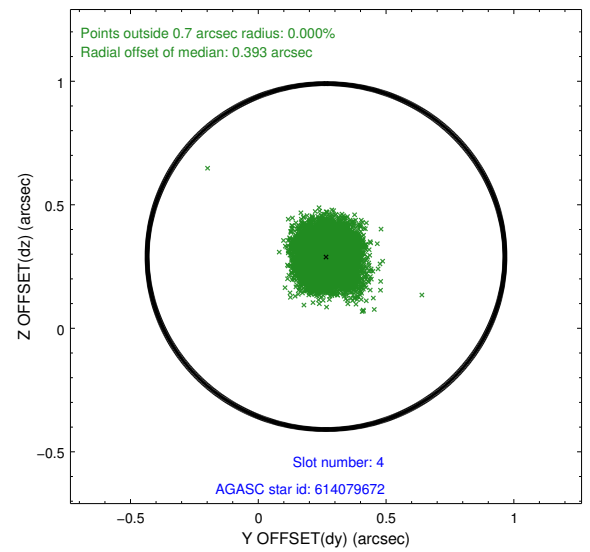
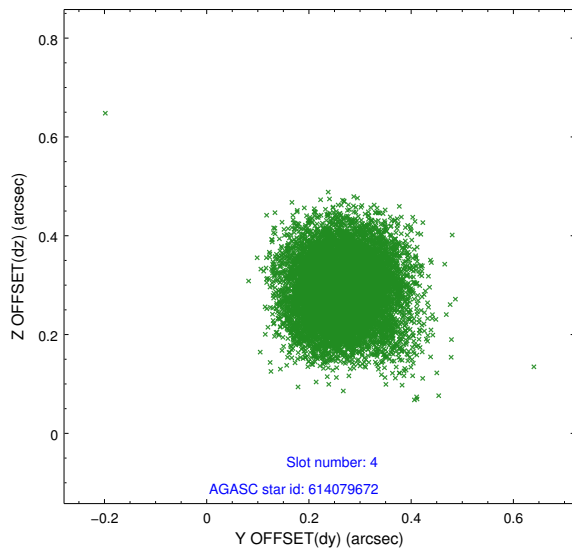
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.02	4924	-0.146	-0.096	0.006	0.011	0.000000	0.000000	-770.89	-1736.90
1	FID		ACIS-S-4	7.10	4921	0.184	0.070	0.006	0.010	0.000000	0.000000	2142.67	171.49
2	FID		ACIS-S-6	7.23	4923	-0.066	0.033	0.007	0.012	0.000000	0.000000	391.46	809.10
3	GUIDE	used	614077032	9.11	9838	-0.325	-0.237	0.107	0.168	25.503982	-0.482234	1397.15	88.38
4	GUIDE	used	614079672	8.86	9846	0.265	0.290	0.092	0.144	25.604917	-1.036998	-616.43	-162.44
5	GUIDE	used	614079768	8.14	9841	0.037	0.202	0.066	0.108	25.844272	-0.572569	1003.83	-1116.04
6	GUIDE	used	614082104	9.26	9824	-0.070	-0.283	0.118	0.186	24.894915	-0.720958	661.76	2325.10
7	GUIDE	used	614080176	8.73	9840	0.091	0.027	0.094	0.158	25.999699	-0.168882	2424.37	-1755.97

2.4 Star Slots

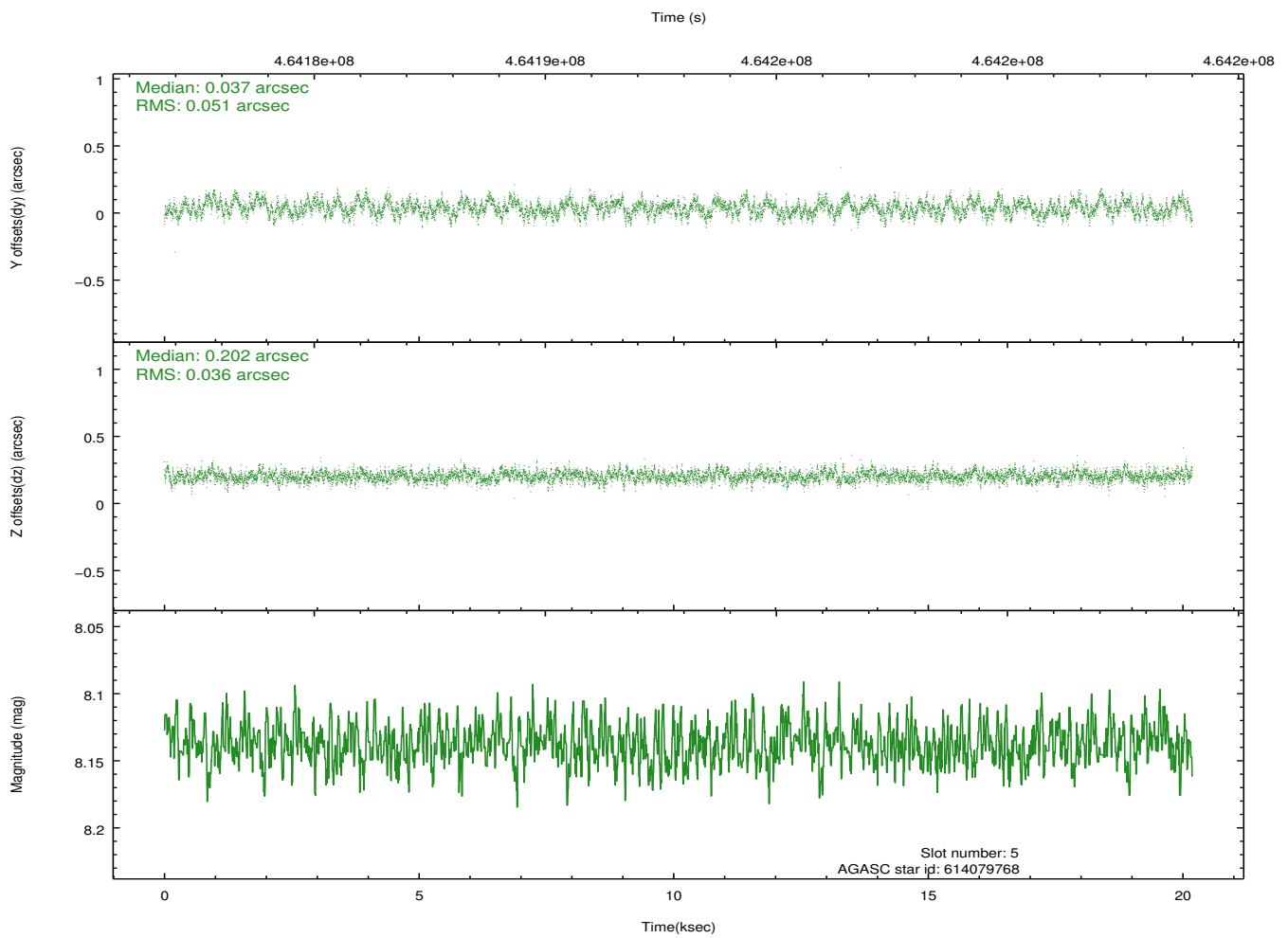
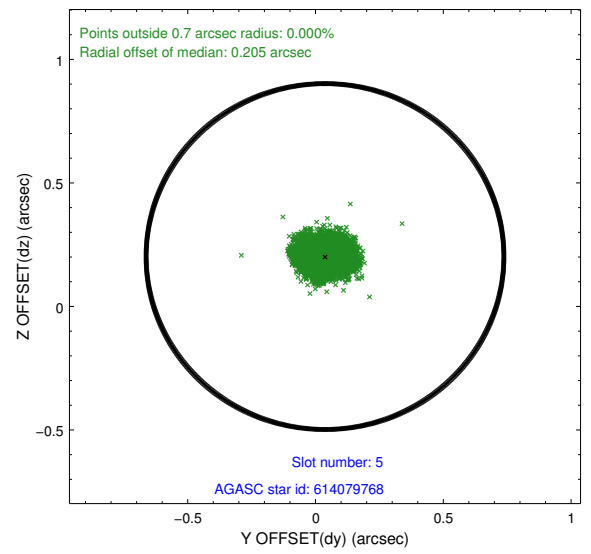
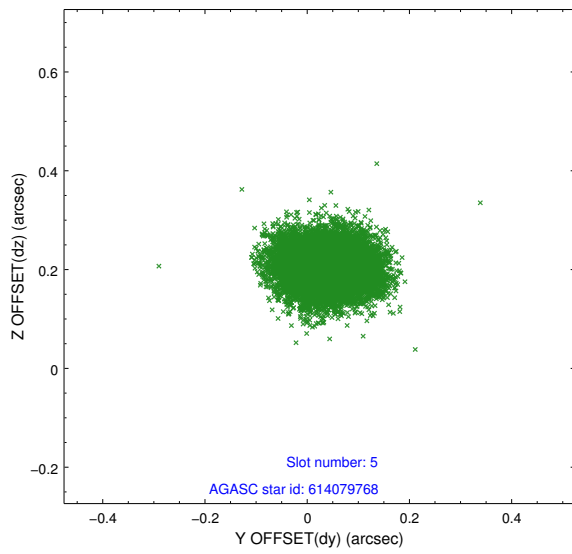
2.4.1 Slot 3



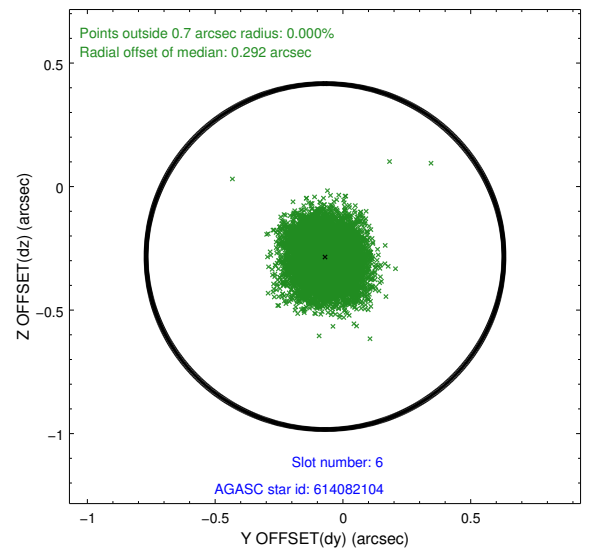
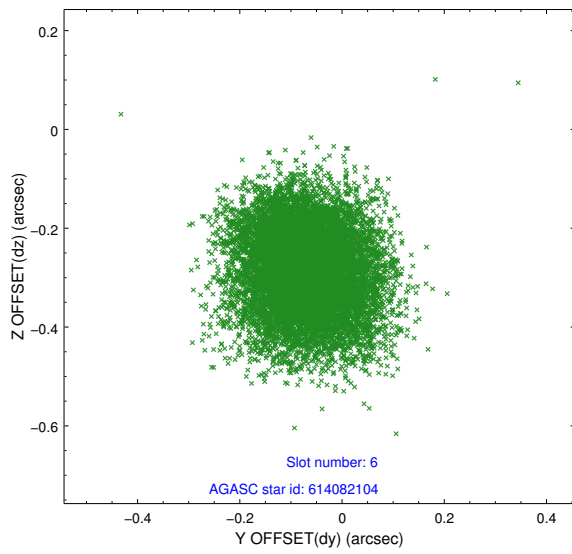
2.4.2 Slot 4



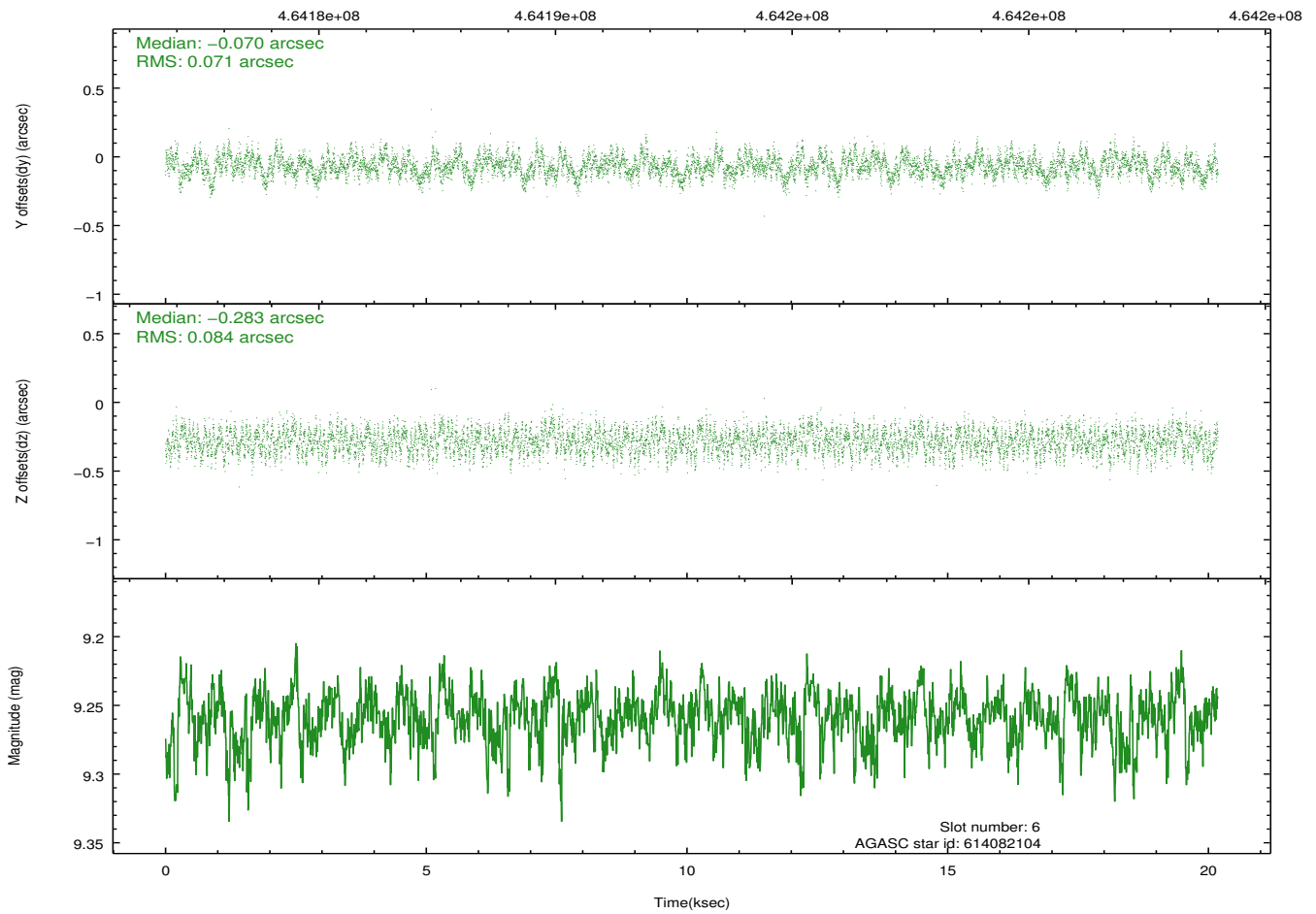
2.4.3 Slot 5



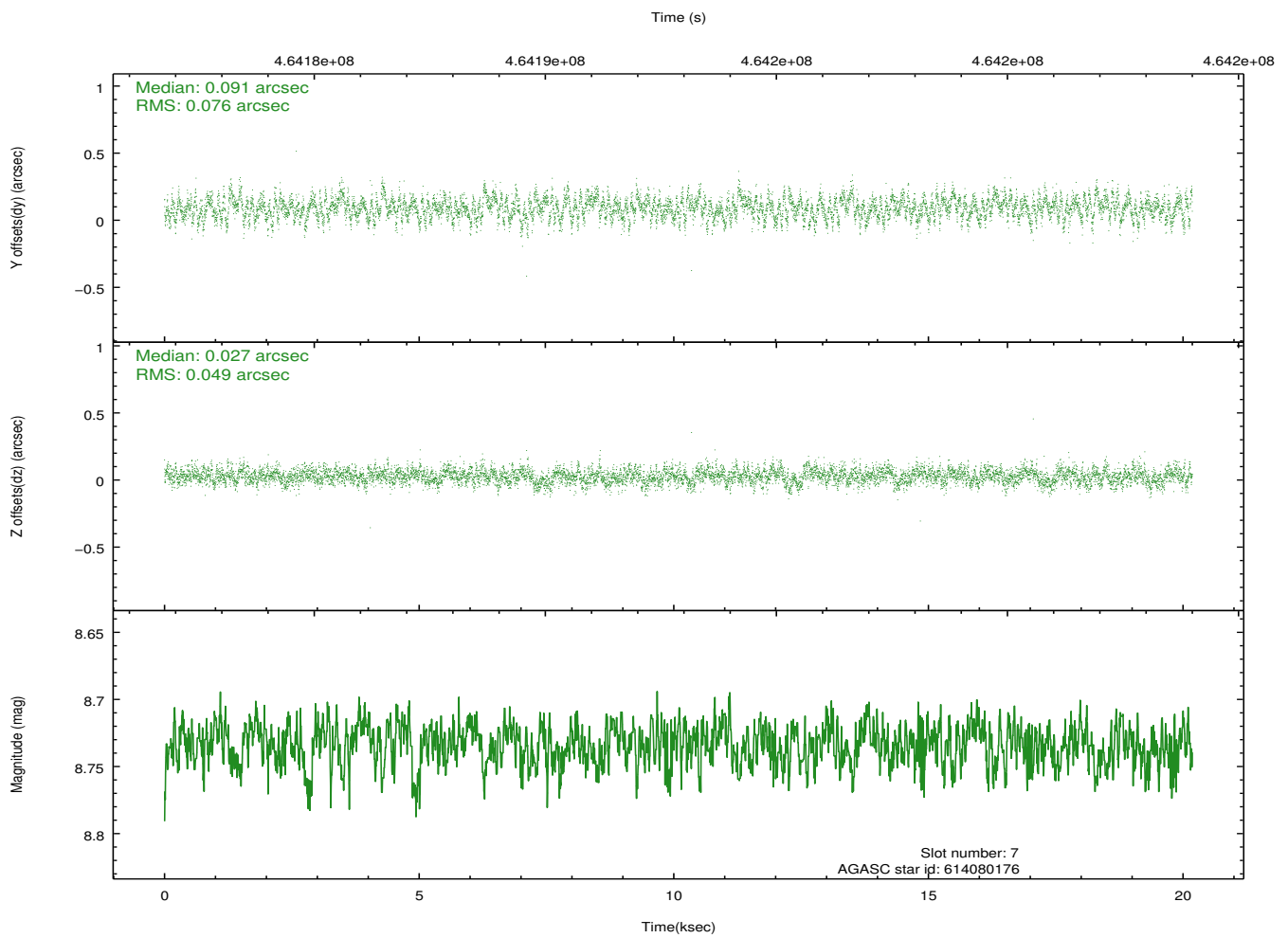
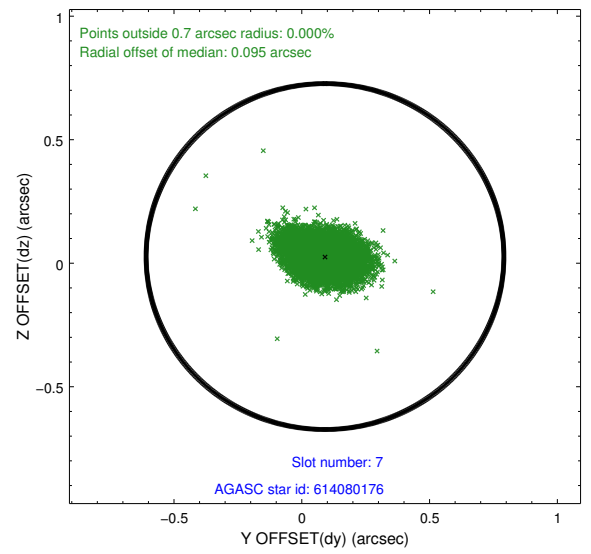
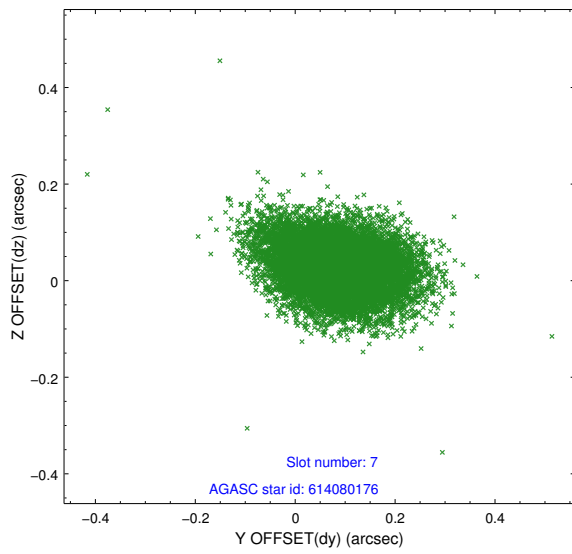
2.4.4 Slot 6



Time (s)

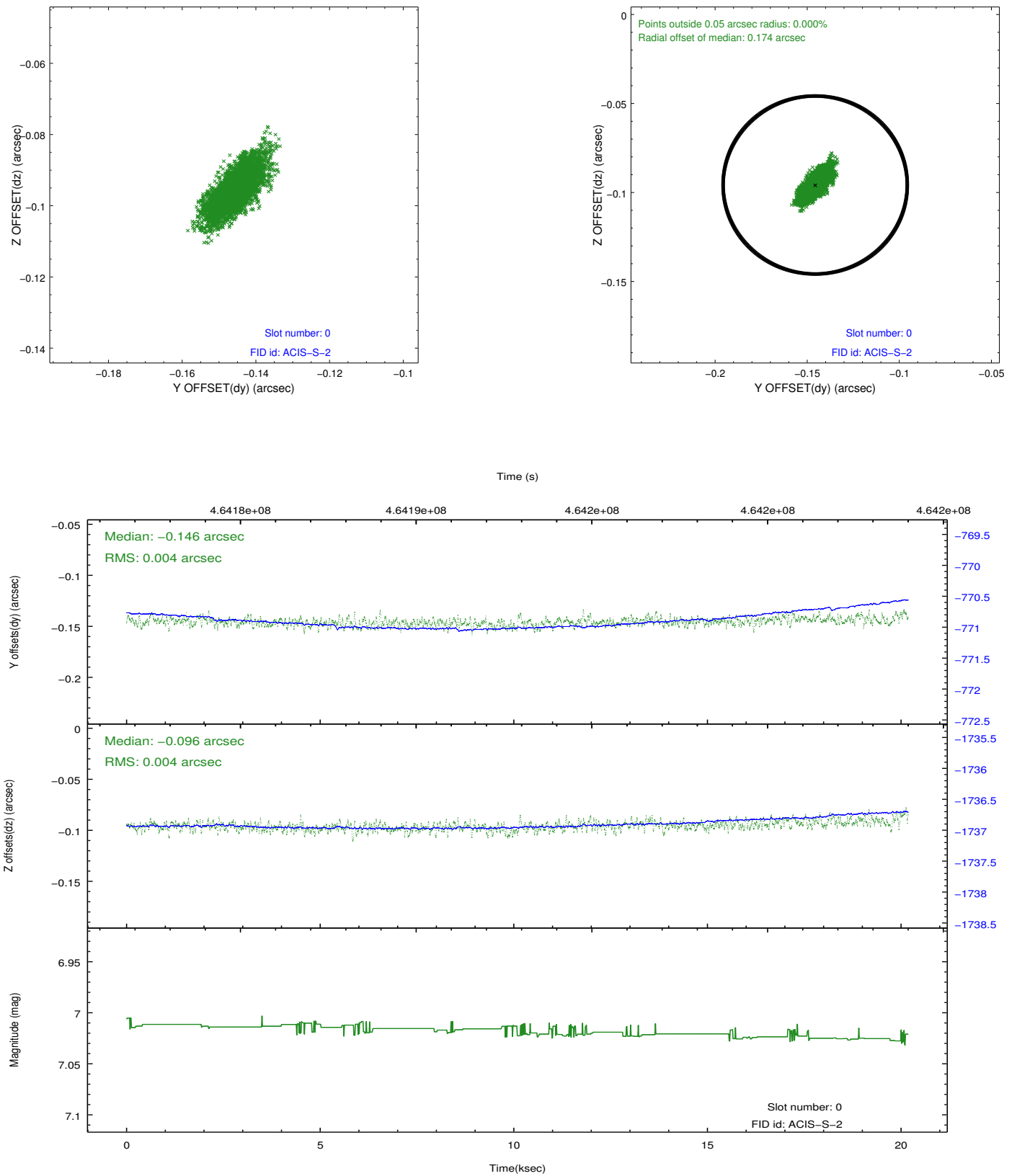


2.4.5 Slot 7

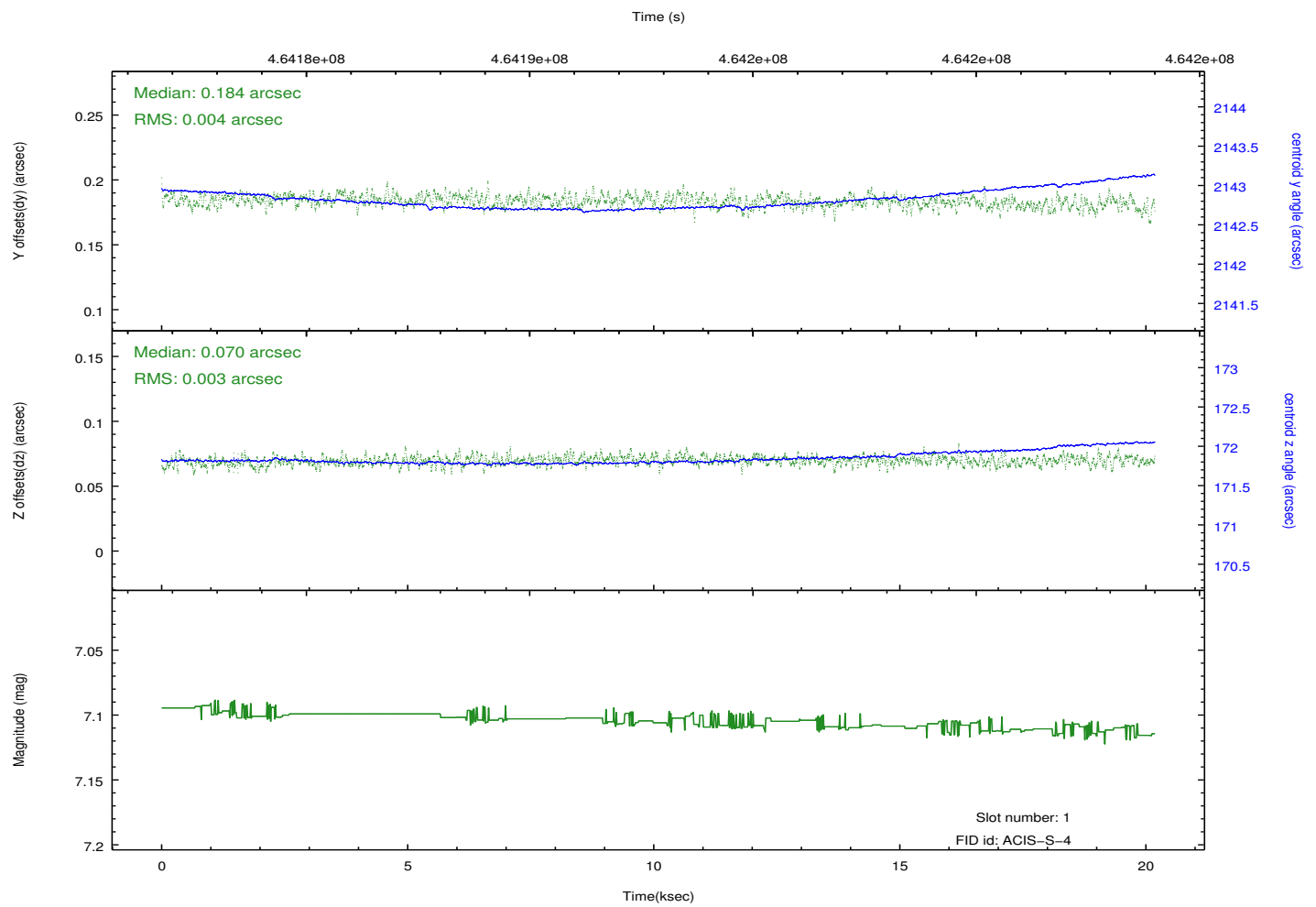
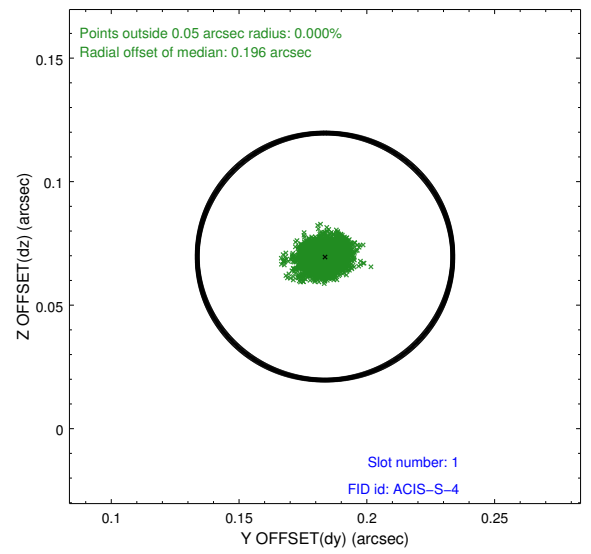
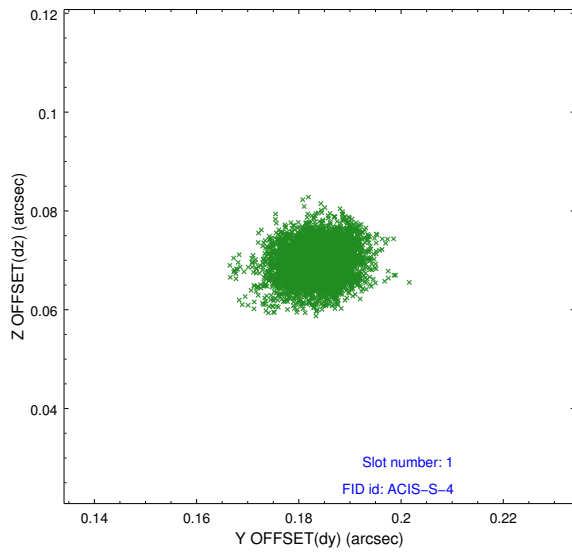


2.5 FID Slots

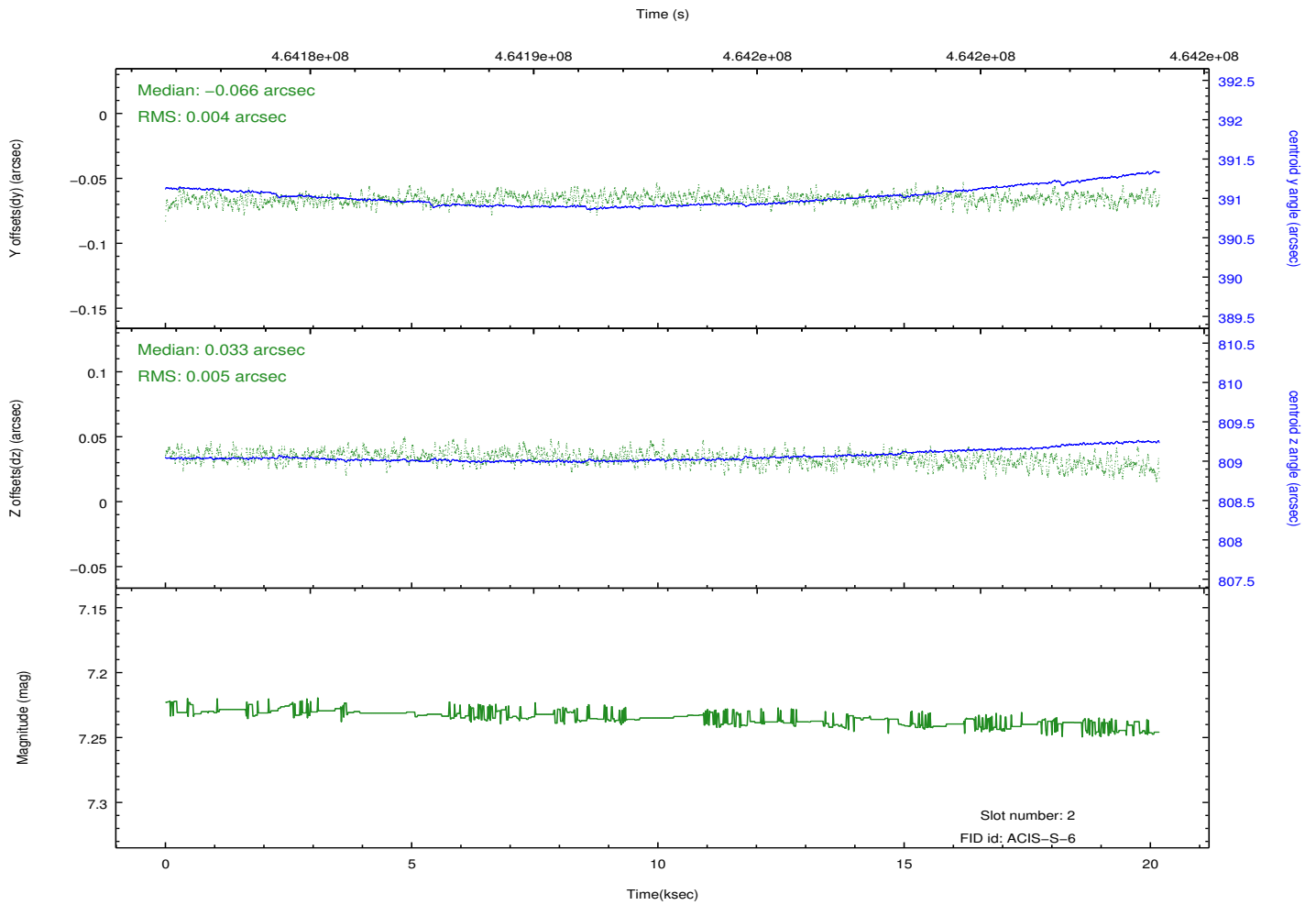
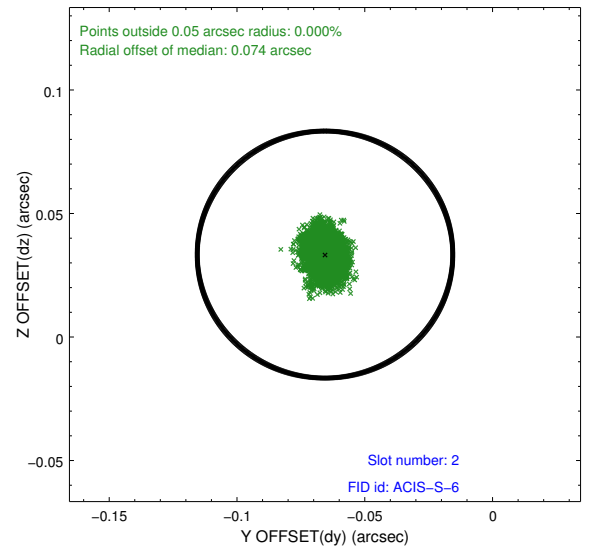
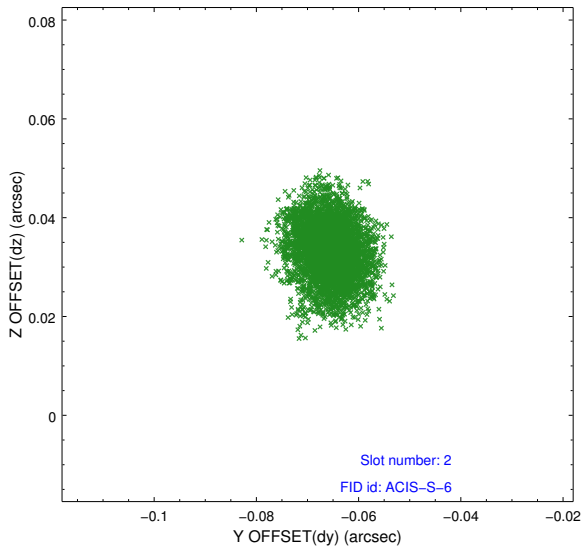
2.5.1 Slot 0



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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.066040466845

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.