

V&V Reference Report

L2 ASCDS Version : 10

Observation 14653 - L2 Version 2
Chandra X-Ray Center

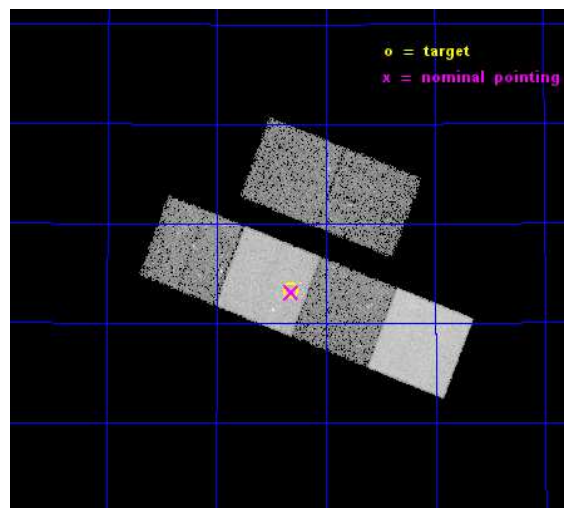
L2 Processing Date : Dec 4 2014

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1 Front

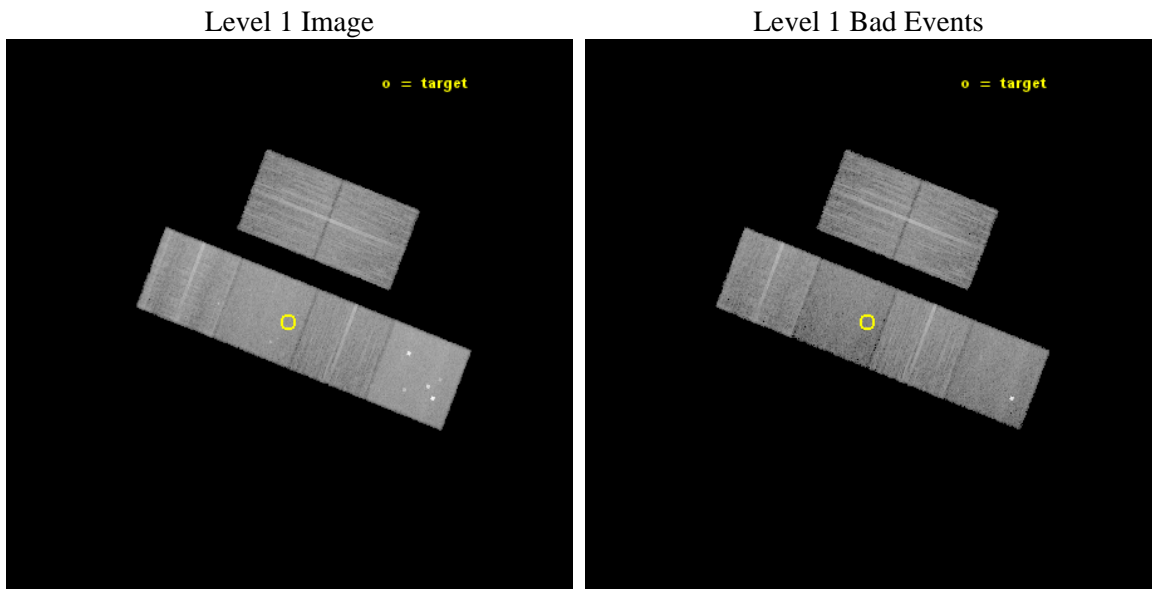
seq_num	401486	Sequence number
obs_id	14653	Observation id
title	A New Insight into Open Cluster Internal Dynamics and Neutron Star Formation	Proposal title
observer	Natalie Gosnell	Principal investigator
object	NGC 6819	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	295.329583	Observer's specified target RA [deg]
dec_targ	40.221444	Observer's specified target Dec [deg]
ra_nom	295.32880313567	Nominal RA [deg]
dec_nom	40.218486142413	Nominal Dec [deg]
roll_nom	201.2226727917	Nominal Roll [deg]
revision	2	Processing version of data
ontime	21964.799918234	Sum of GTIs [s]
livetime	21686.668396055	Livetime [s]
ontime2	21964.799918234	Sum of GTIs [s]
ontime3	21964.799918234	Sum of GTIs [s]
ontime5	21964.799918234	Sum of GTIs [s]
ontime6	21964.799918234	Sum of GTIs [s]
ontime7	21964.799918234	Sum of GTIs [s]
ontime8	21964.799918234	Sum of GTIs [s]
l2events	169395	Number of level 2 events



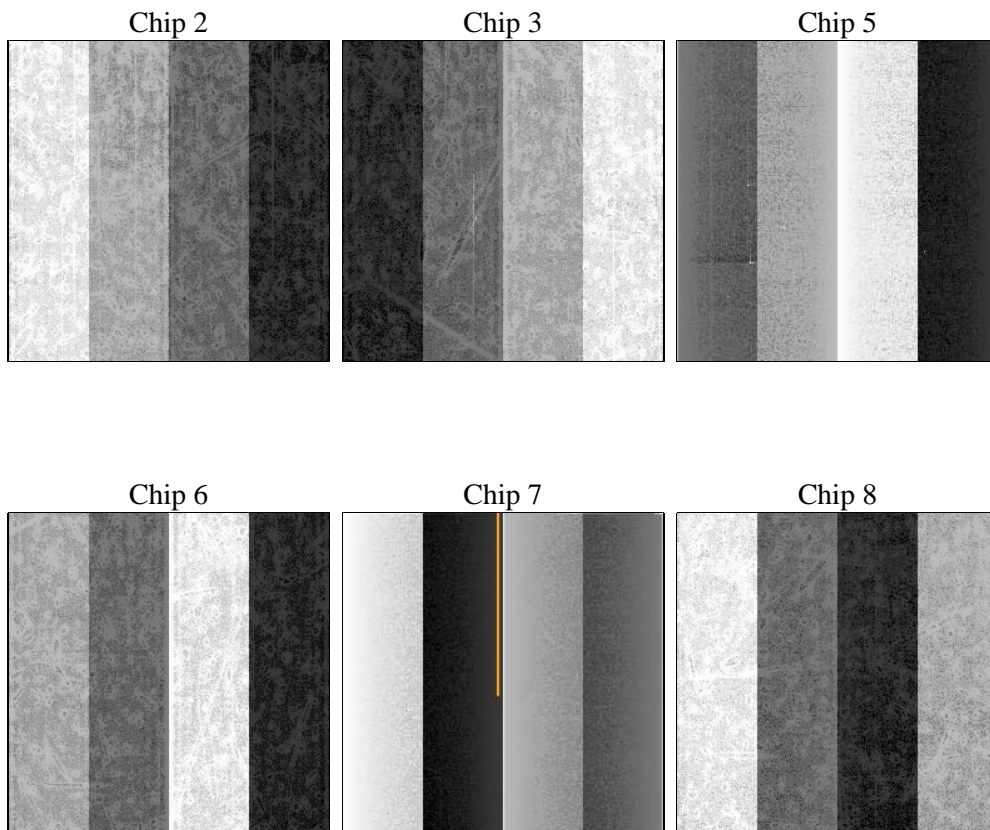
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	21964.799918234	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	21964.799918234	Sum of GTIs [s]
date	2014-12-04T22:15:06	Date and time of file creation	ontime3	21964.799918234	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	21964.799918234	Sum of GTIs [s]
			ontime6	21964.799918234	Sum of GTIs [s]
			ontime7	21964.799918234	Sum of GTIs [s]
			ontime8	21964.799918234	Sum of GTIs [s]
			l1events	697770	Number of level 1 events

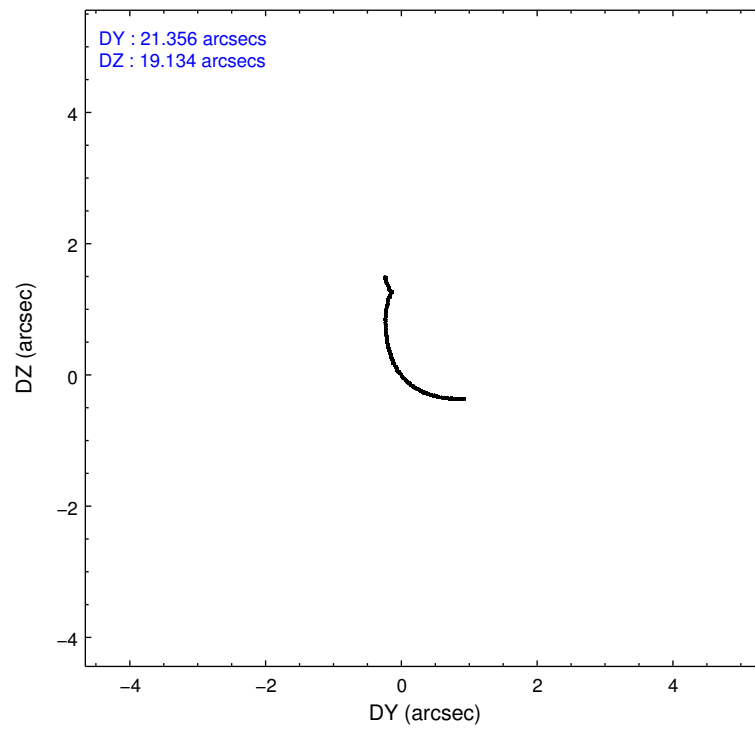
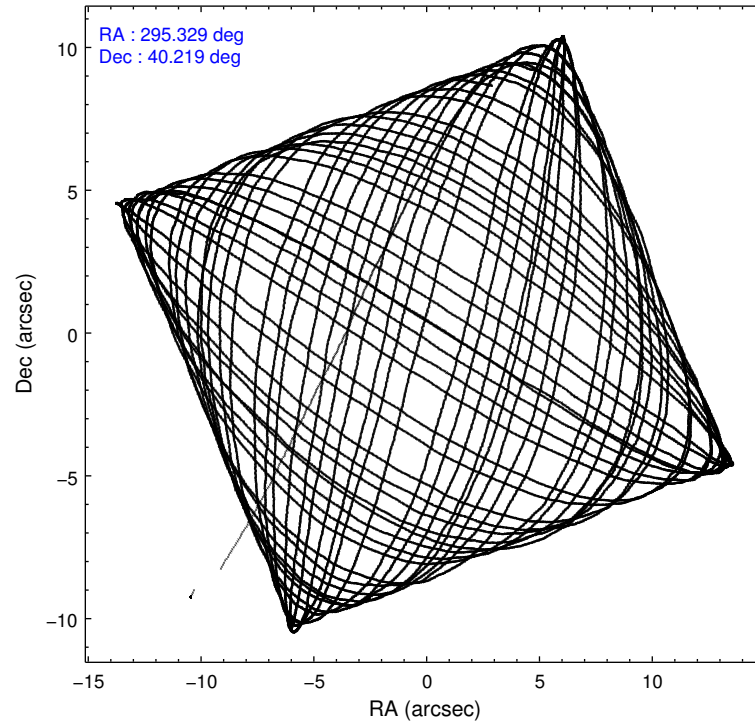
2.1.4 Events

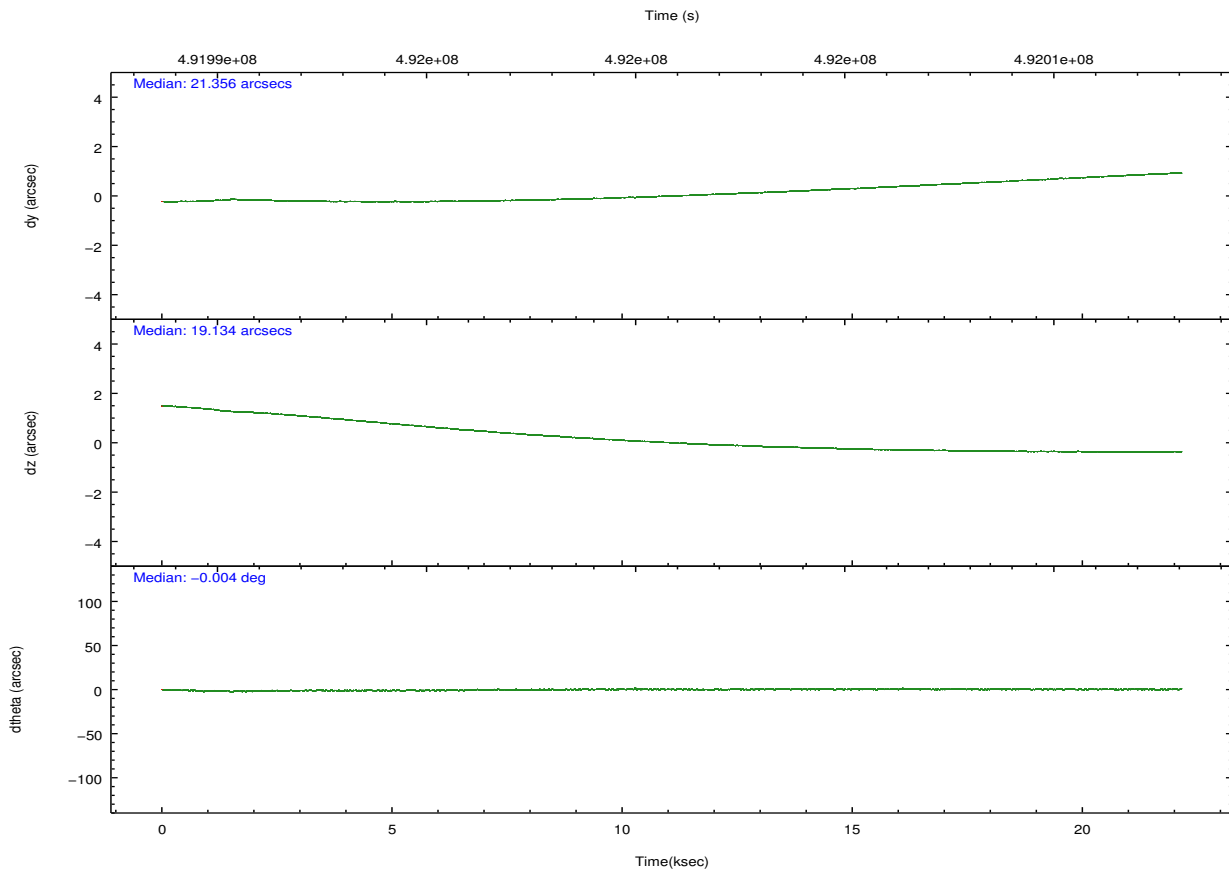
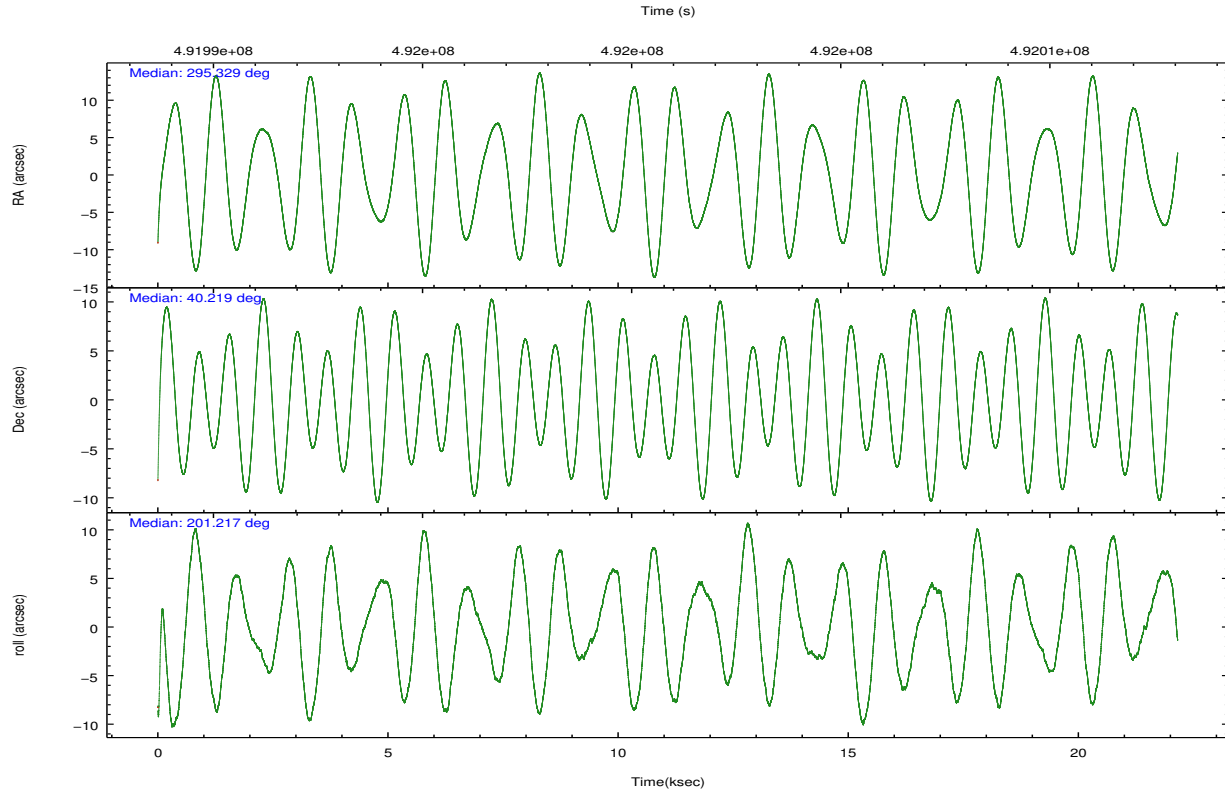
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	99530	95015	162016	99860	115976	125373	grade 0 events	4334	4078	13668	4720	5859	9891
rejected events	88095	84112	76444	87332	60207	90548		4%	4%	8%	4%	5%	7%
rejected %	88%	88%	47%	87%	51%	72%	grade 1 events	55	56	347	53	181	104
								0%	0%	0%	0%	0%	0%
							grade 2 events	2739	2452	25944	2729	11794	8562
								2%	2%	16%	2%	10%	6%
							grade 3 events	1089	1154	3068	1267	5030	3520
								1%	1%	1%	1%	4%	2%
							grade 4 events	1141	1081	2813	1235	4984	3316
								1%	1%	1%	1%	4%	2%
							grade 5 events	3687	4276	12861	4461	12311	6641
								3%	4%	7%	4%	10%	5%
							grade 6 events	2133	2139	40103	2584	28117	9552
								2%	2%	24%	2%	24%	7%
							grade 7 events	84352	79779	63212	82811	47700	83787
								84%	83%	39%	82%	41%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	295.350864	295.3288031356684	CCD I2 on	O4	Y
[deg] Pointing Dec	40.240015	40.21848614241345	CCD I3 on	O3	Y
[deg] Pointing Roll	201.051804	201.2226727916994	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O5	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	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	O2	Y
[s] Observation start time (MET)	491989950.184000	491988823.62399	CCD S5 on	N	N
Observation start date	2013-08-04T07:51:23	2013-08-04T07:33:43	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	492011950.184000	492013023.3628	On-chip summing requested	N	N
Observation end date	2013-08-04T13:58:03	2013-08-04T14:17:03	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





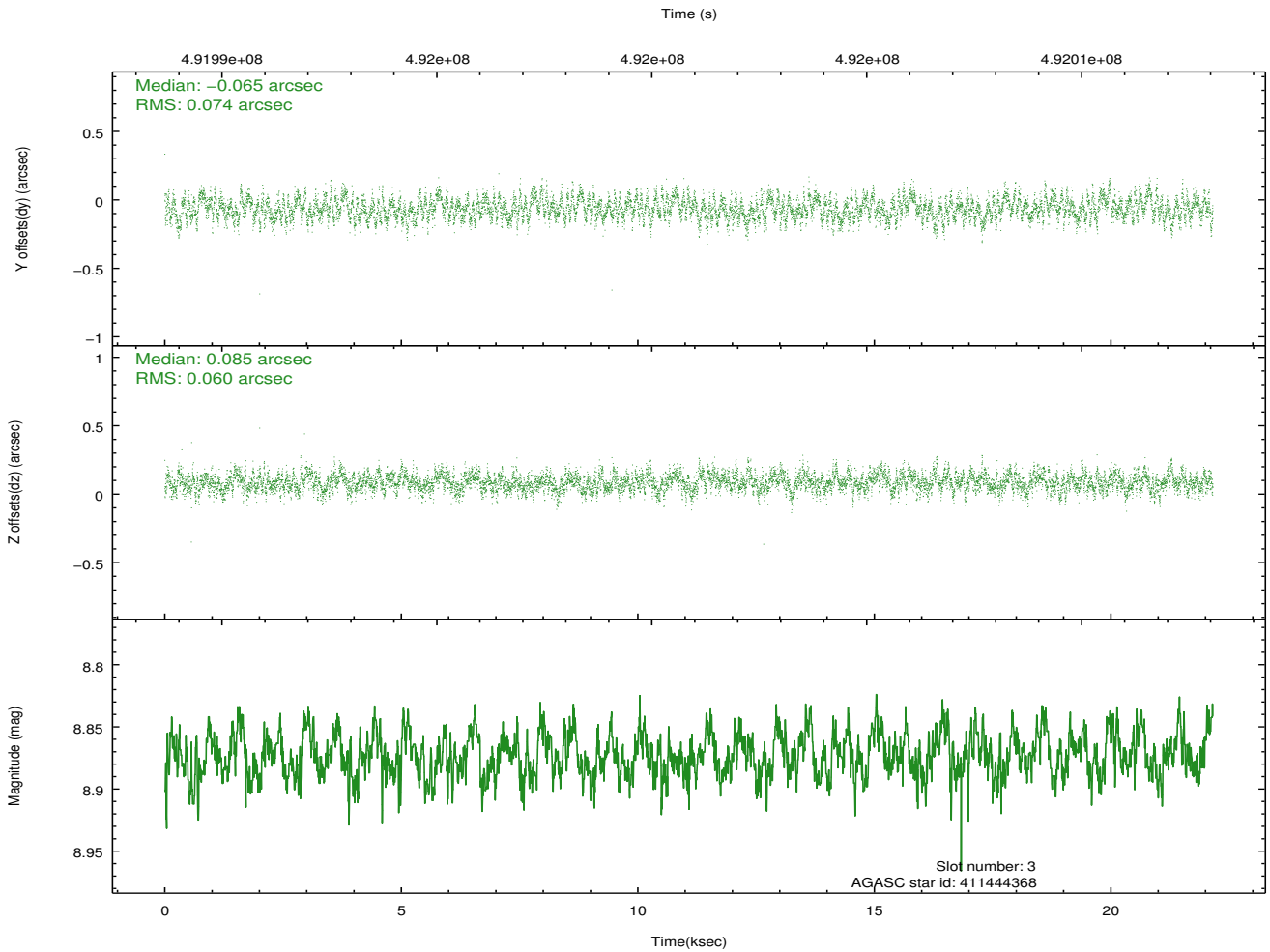
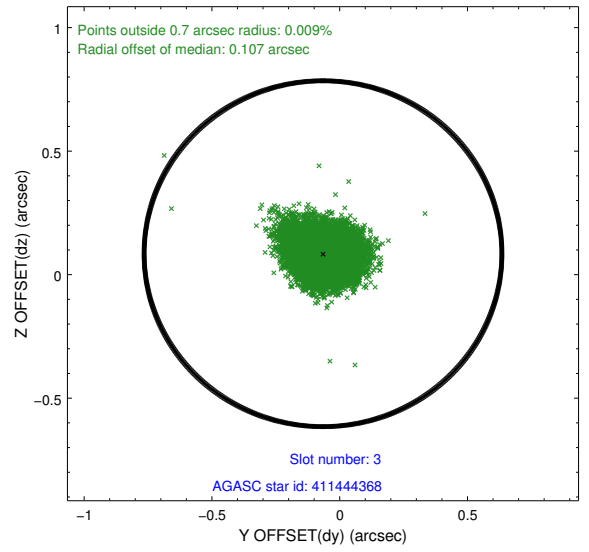
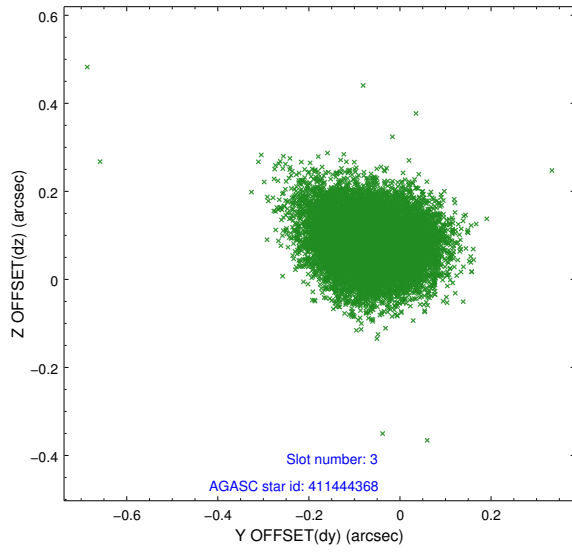
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.94	5405	-0.112	-0.031	0.019	0.027	0.000000	0.000000	-774.76	-1740.87
1	FID		ACIS-S-4	7.02	5405	0.223	0.061	0.008	0.018	0.000000	0.000000	2138.79	167.52
2	FID		ACIS-S-5	7.05	5405	-0.141	-0.023	0.023	0.039	0.000000	0.000000	-1827.43	161.30
3	GUIDE	used	411444368	8.87	10783	-0.065	0.085	0.102	0.161	294.443333	40.513828	1959.86	-1823.34
4	GUIDE	used	411454032	8.85	10696	-0.052	-0.048	0.101	0.162	294.761146	40.359357	1354.06	-986.66
5	GUIDE	used	411574720	7.72	10809	-0.146	-0.441	0.087	0.147	295.934596	39.742335	-866.53	2247.07
6	GUIDE	used	411590984	8.92	10758	0.100	0.302	0.086	0.145	296.287315	39.933898	-2021.37	1945.17
7	GUIDE	used	411579000	8.87	10803	0.165	0.103	0.088	0.139	295.554560	40.798939	-1240.47	-1678.25

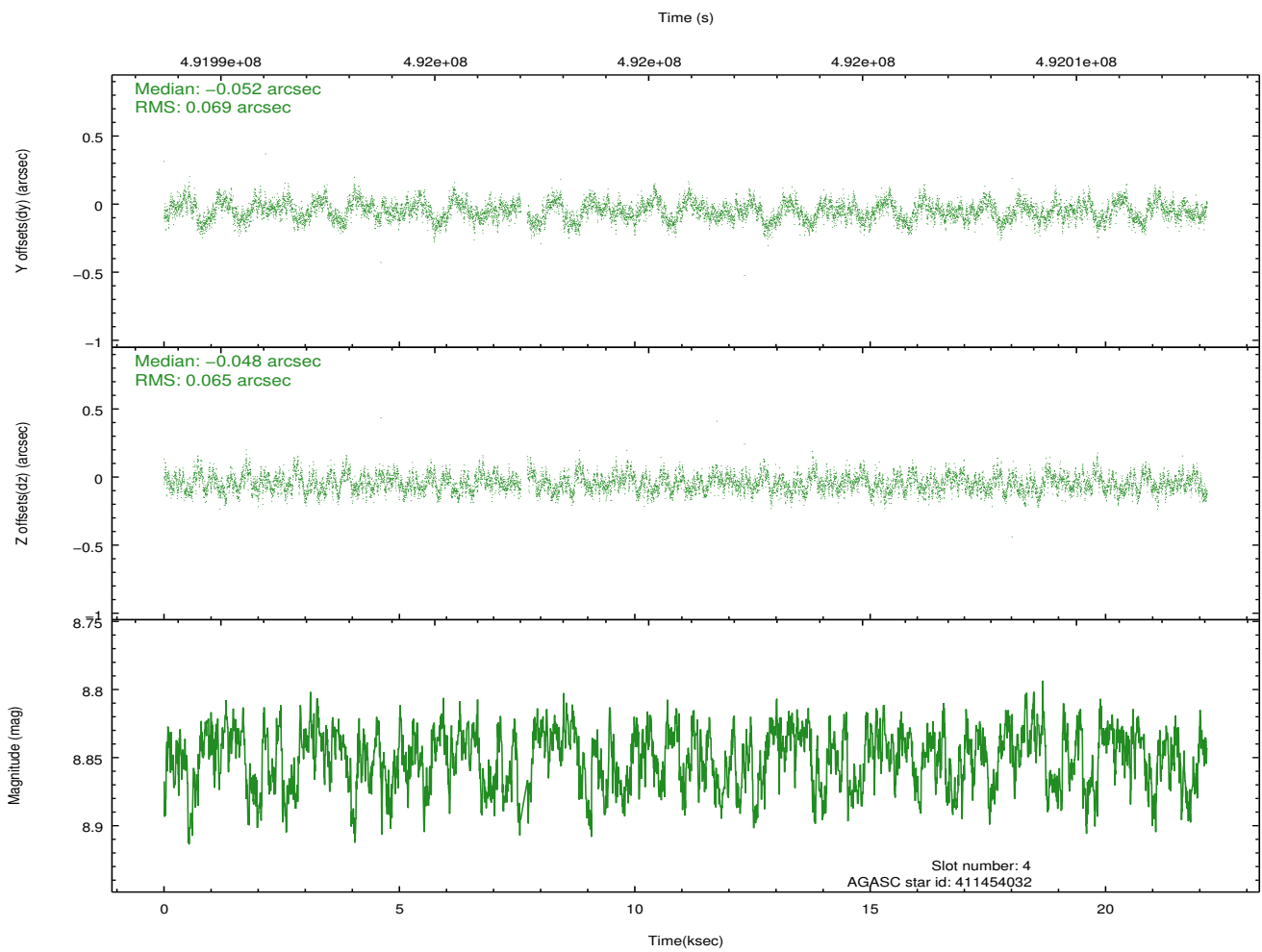
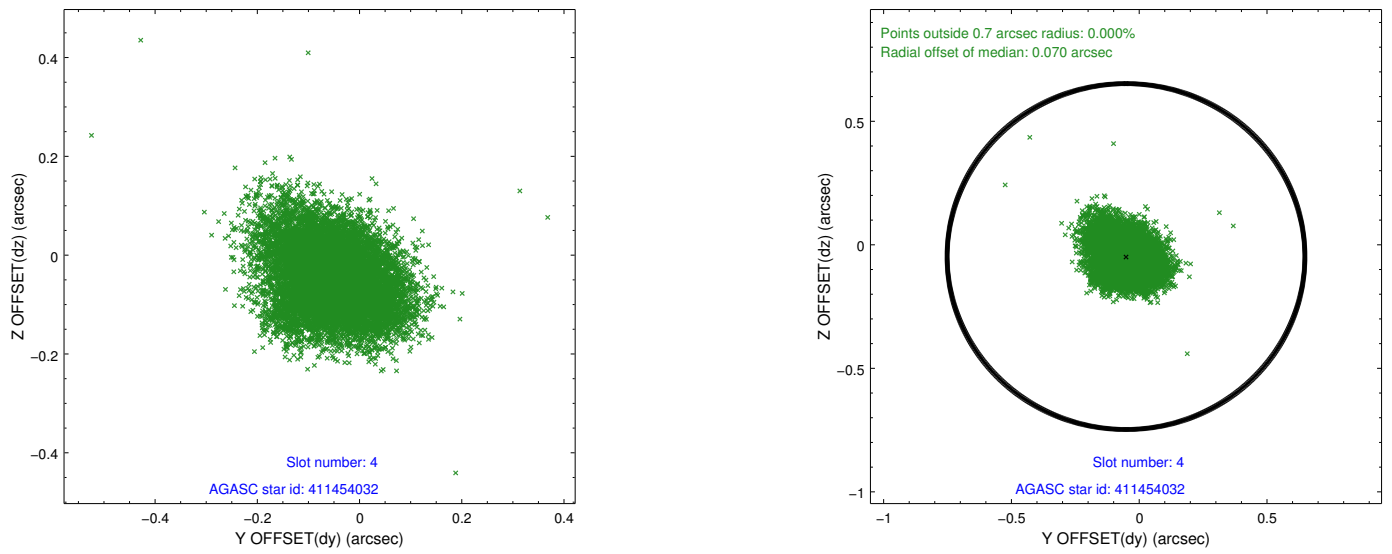
∞

2.4 Star Slots

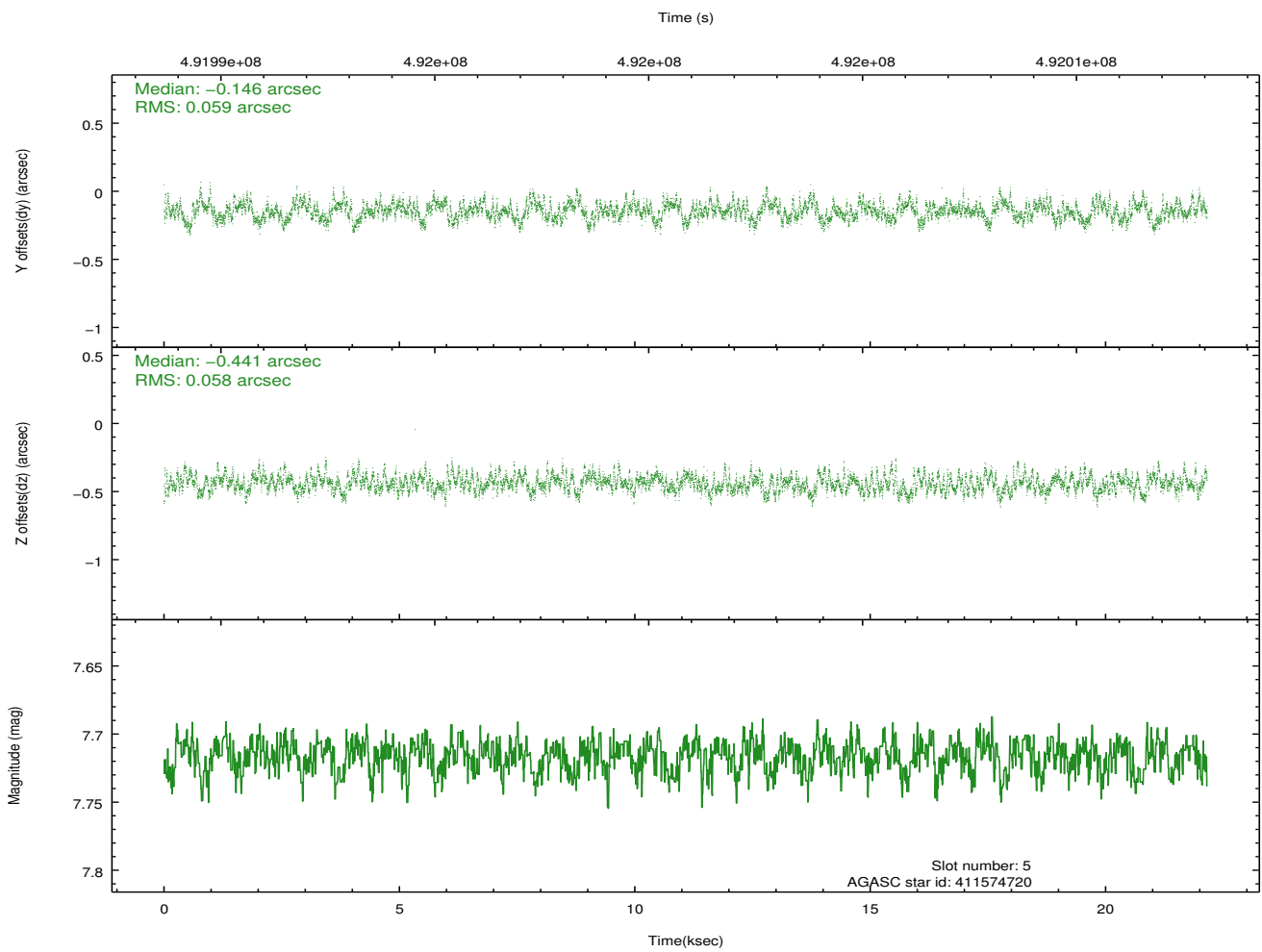
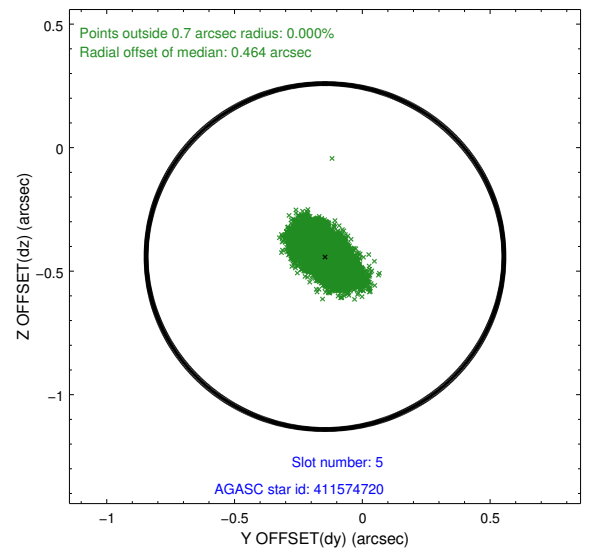
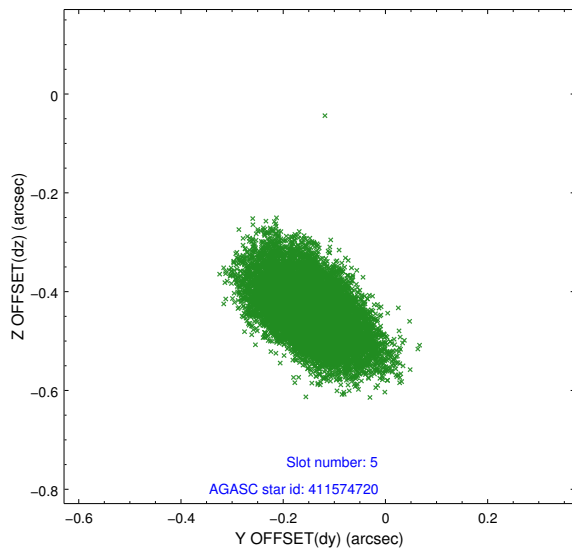
2.4.1 Slot 3



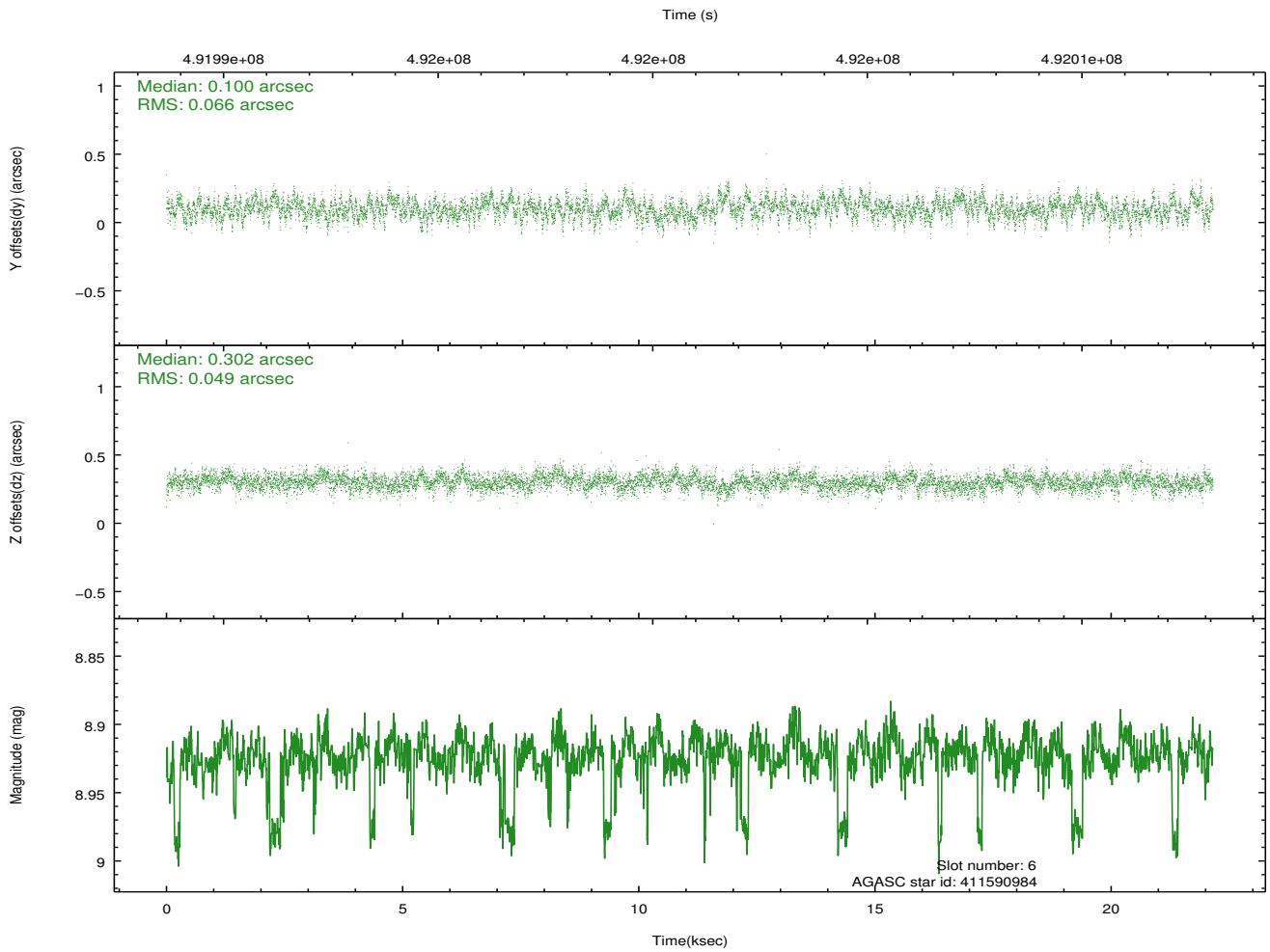
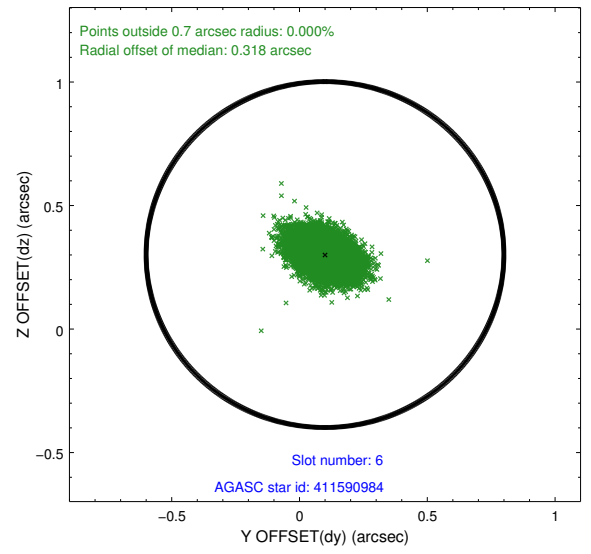
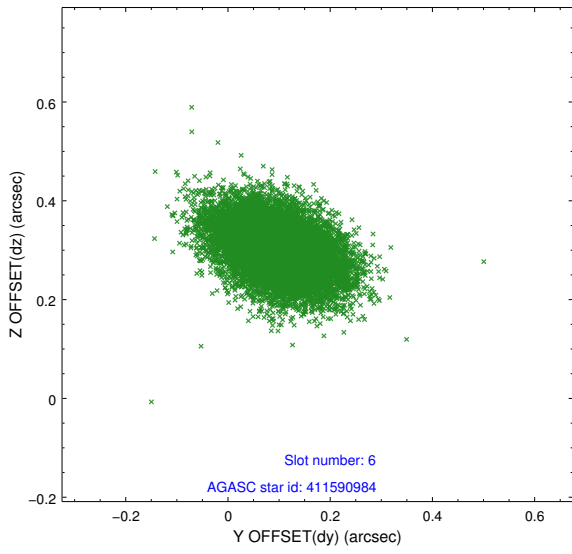
2.4.2 Slot 4



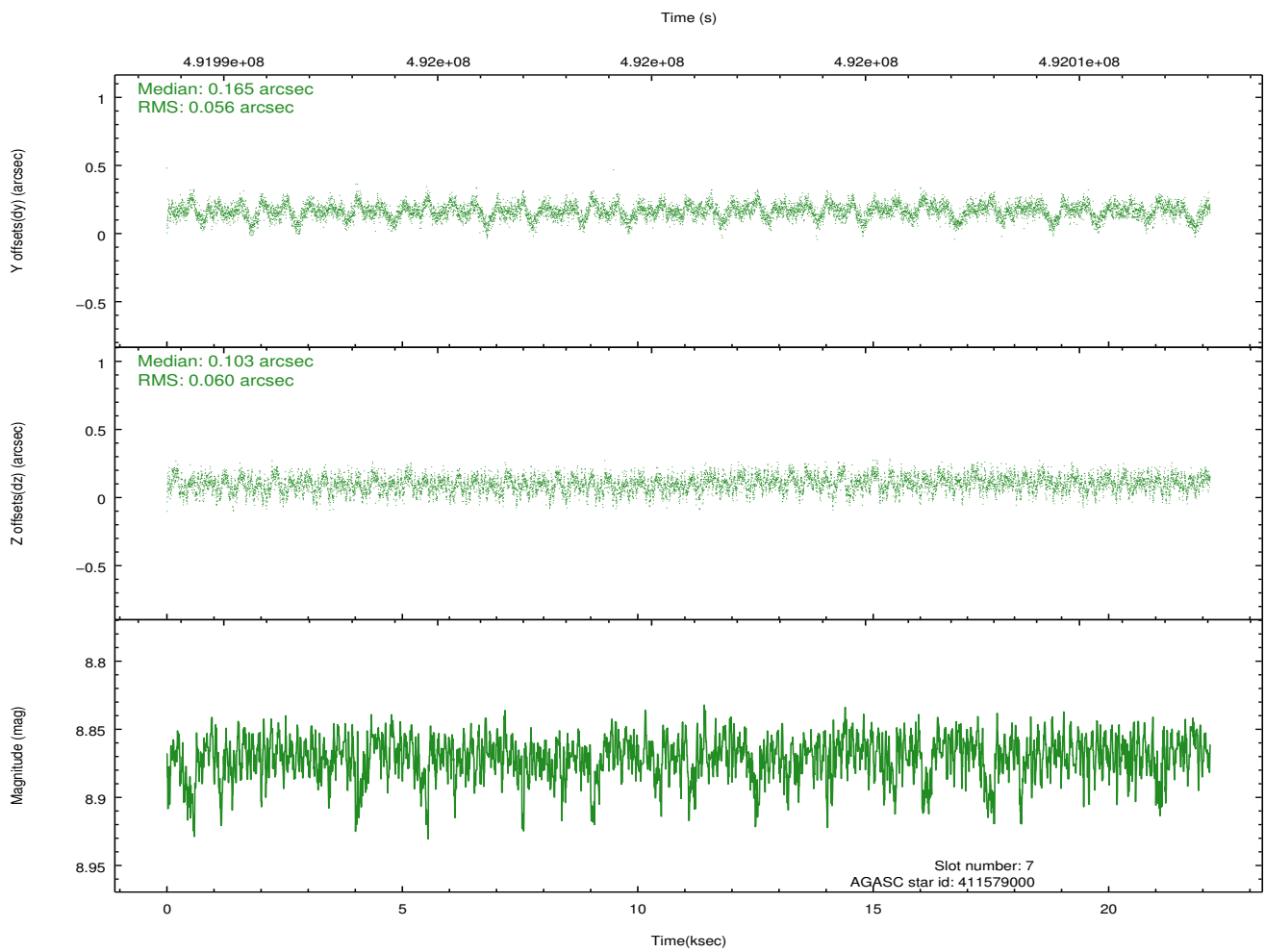
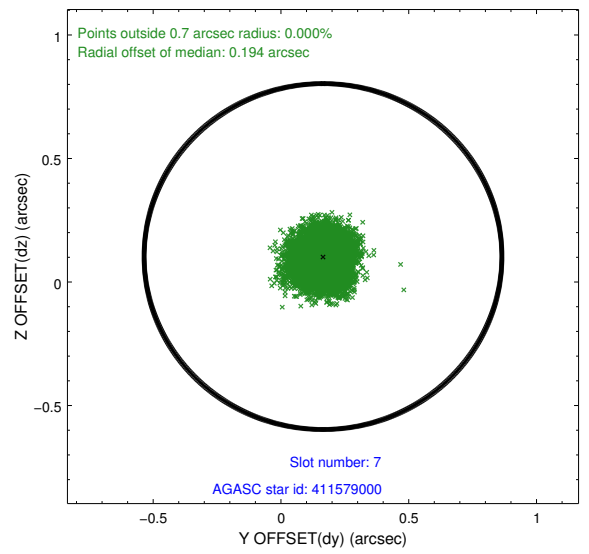
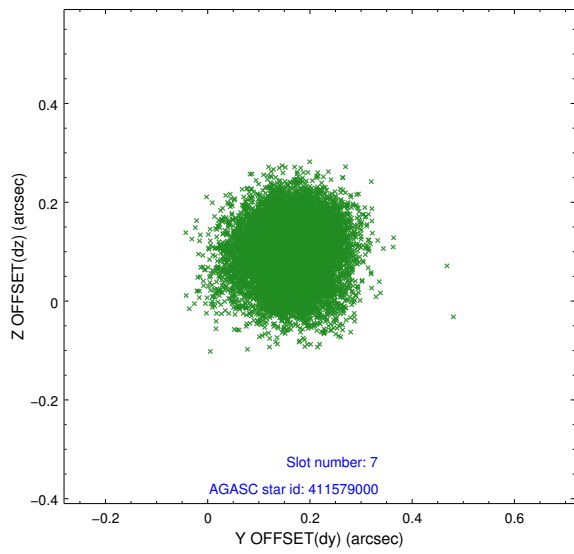
2.4.3 Slot 5



2.4.4 Slot 6

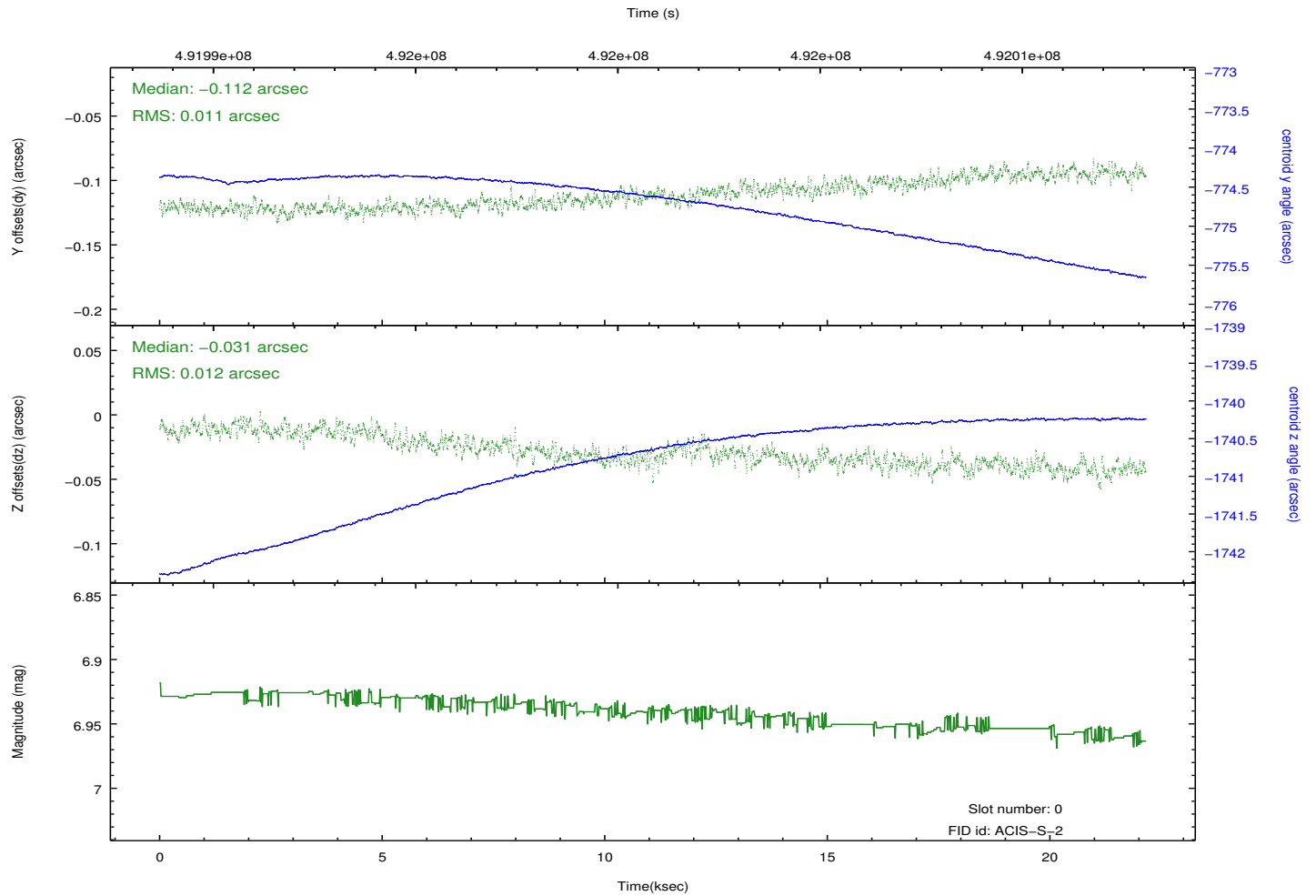
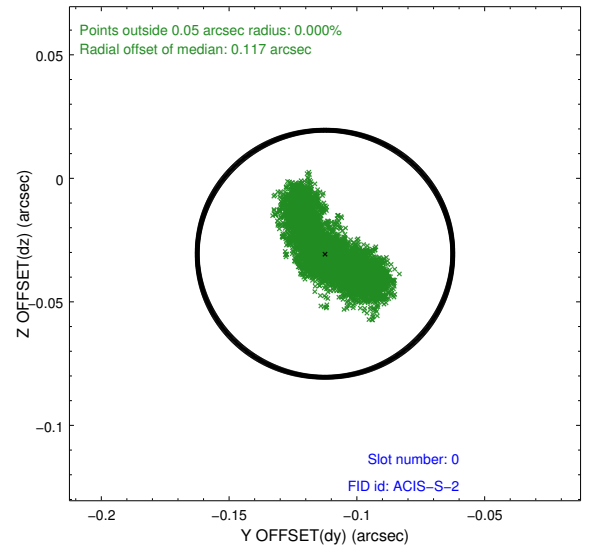
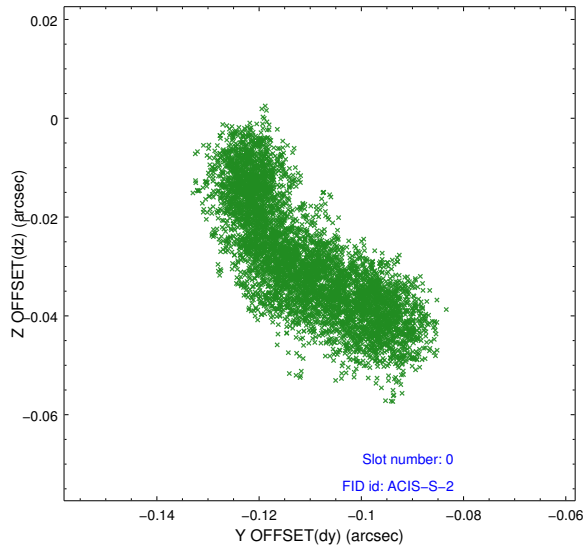


2.4.5 Slot 7

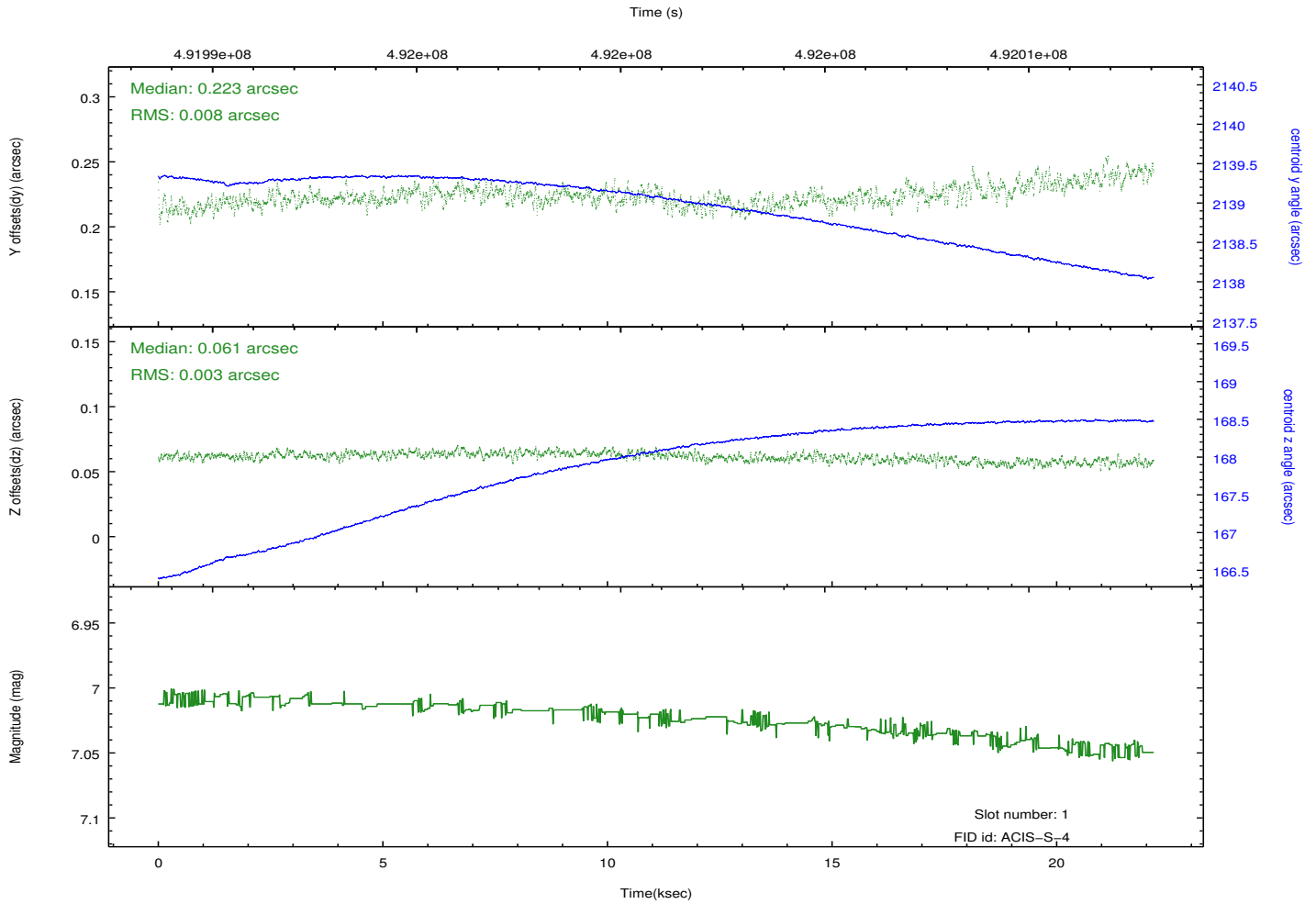
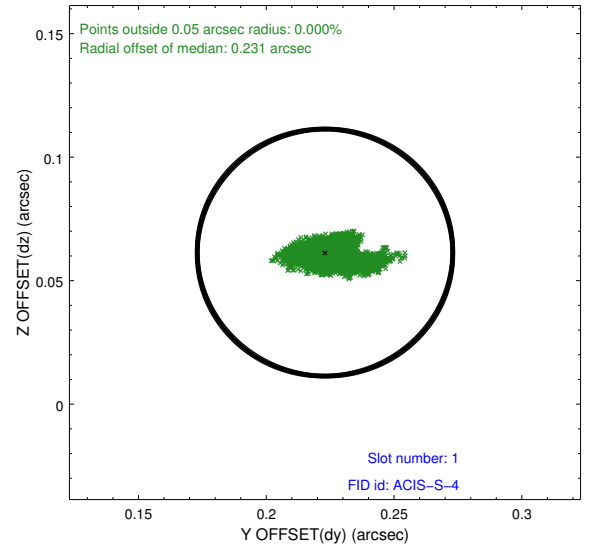
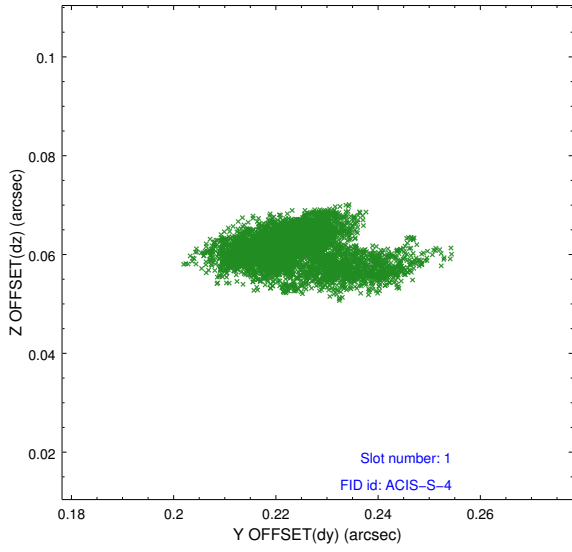


2.5 FID Slots

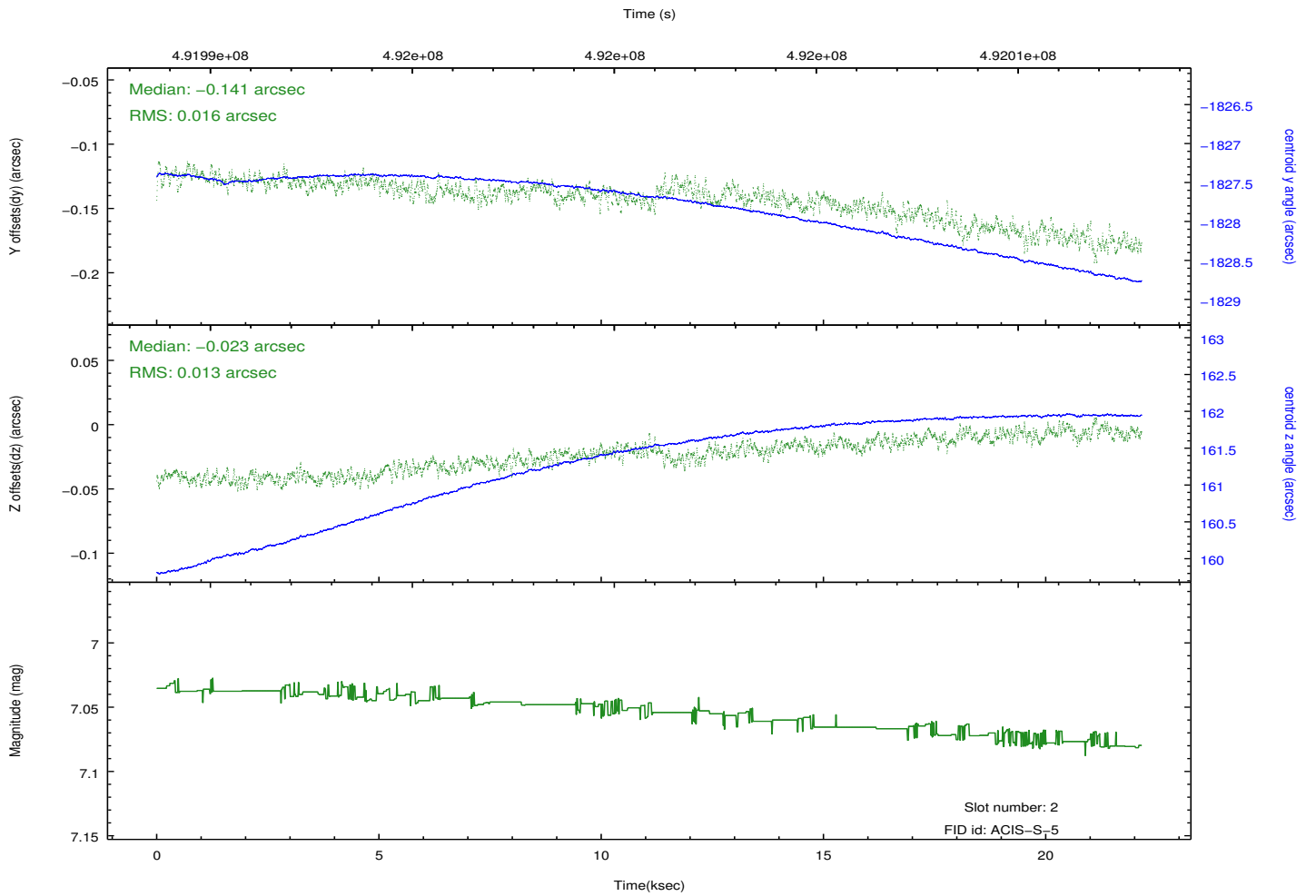
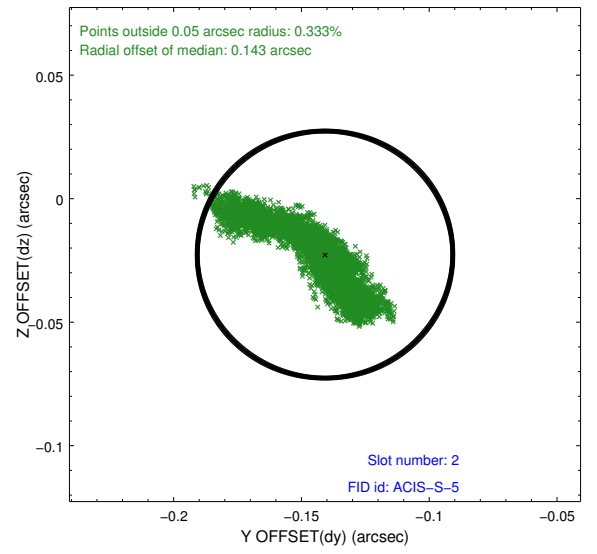
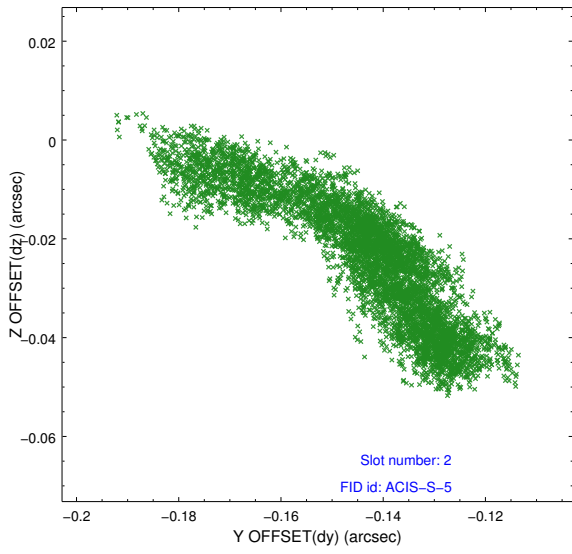
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.964799918234

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.