

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11051 - L2 Version 3
Chandra X-Ray Center

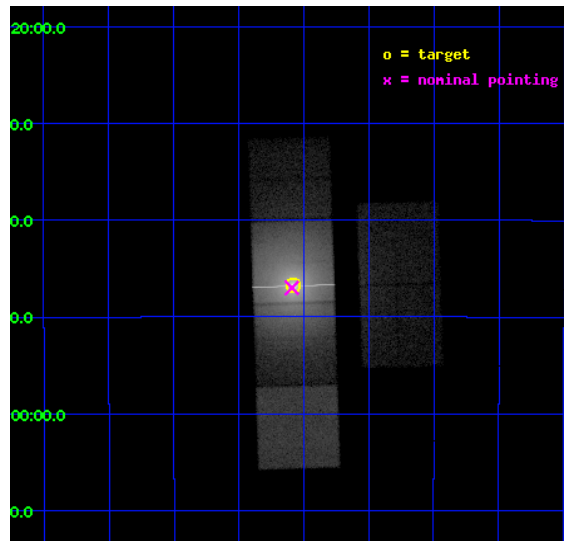
L2 Processing Date : Jul 5 2012

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1 Front

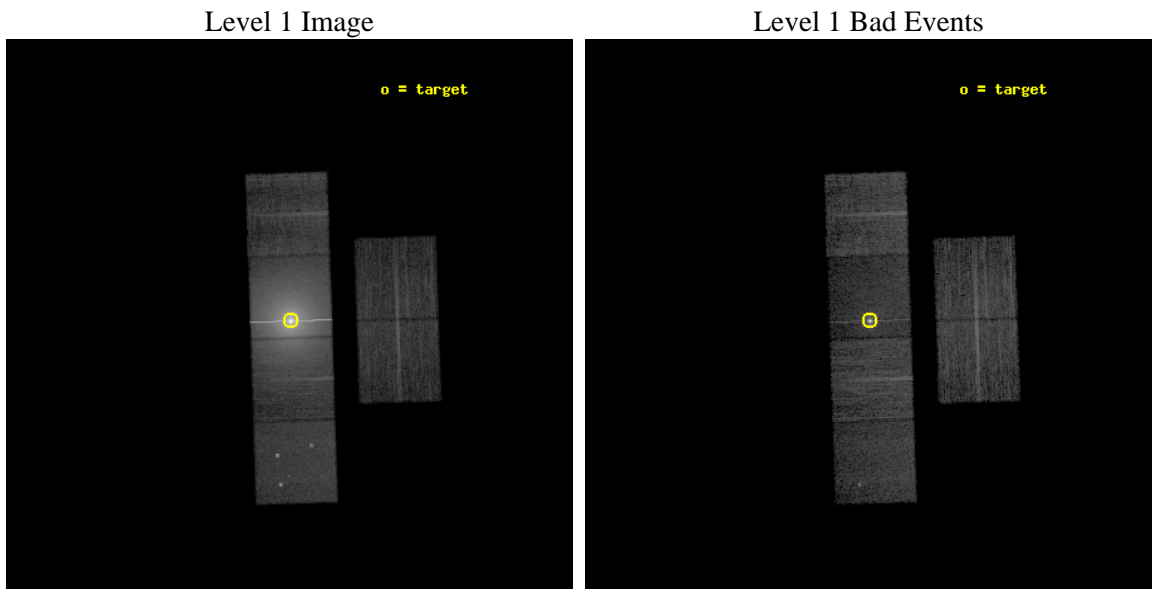
seq_num	401086	Sequence number
obs_id	11051	Observation id
title	Transient LMXBs in Globular Clusters: More Numerous than We Thought?	
observer	Prof. David Pooley	Principal investigator
object	Terzan 5	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.020417	Observer's specified target RA [deg]
dec_targ	-24.779167	Observer's specified target Dec [deg]
ra_nom	267.02302818409	Nominal RA [deg]
dec_nom	-24.783429848446	Nominal Dec [deg]
roll_nom	268.11633043309	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10053.376205087	Sum of GTIs [s]
livetime	9926.0743021615	Livetime [s]
ontime2	10053.41724509	Sum of GTIs [s]
ontime3	10053.253085077	Sum of GTIs [s]
ontime5	10053.335165083	Sum of GTIs [s]
ontime6	10053.29412508	Sum of GTIs [s]
ontime7	10053.376205087	Sum of GTIs [s]
ontime8	10053.212045074	Sum of GTIs [s]
l2events	795570	Number of level 2 events



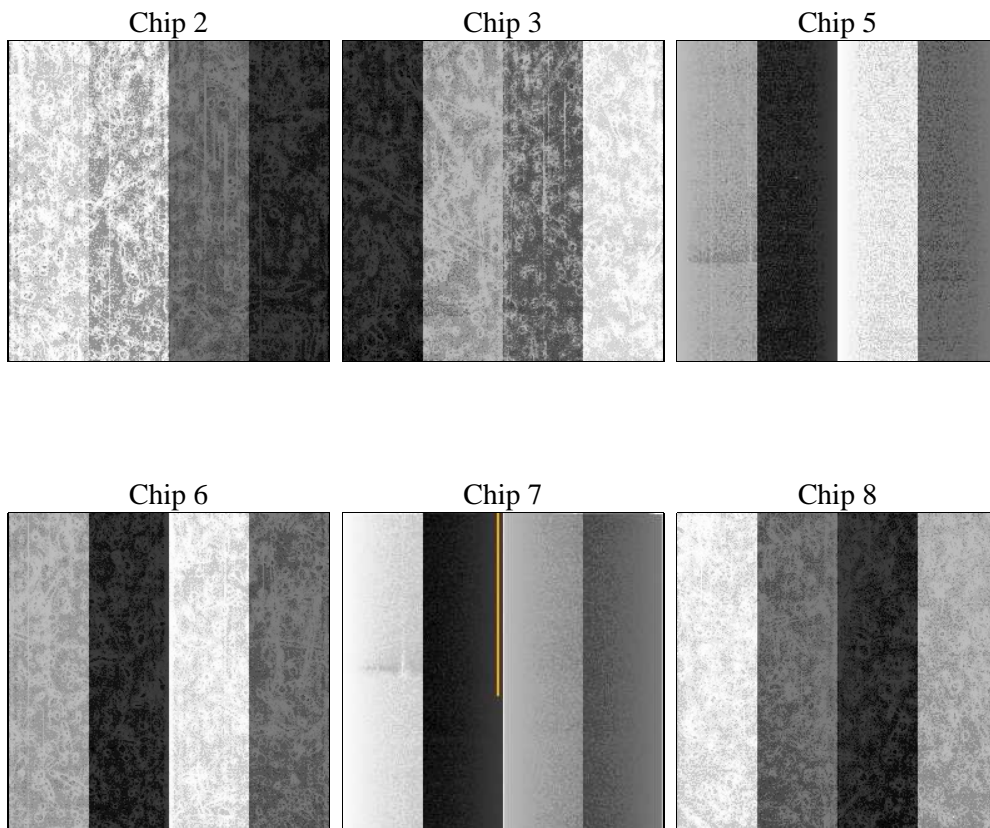
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10053.376205087	Sum of GTIs [s]
caldsver	4.5.0	 	ontime2	10053.41724509	Sum of GTIs [s]
date	2012-07-05T21:00:26	Date and time of file creation	ontime3	10053.253085077	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	10053.335165083	Sum of GTIs [s]
			ontime6	10053.29412508	Sum of GTIs [s]
			ontime7	10053.376205087	Sum of GTIs [s]
			ontime8	10053.212045074	Sum of GTIs [s]
			l1events	1184399	Number of level 1 events

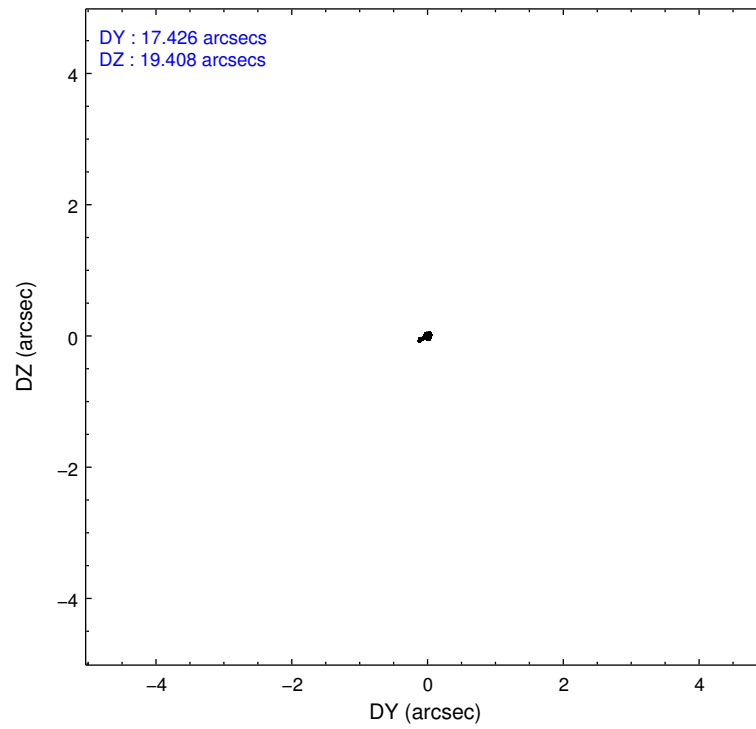
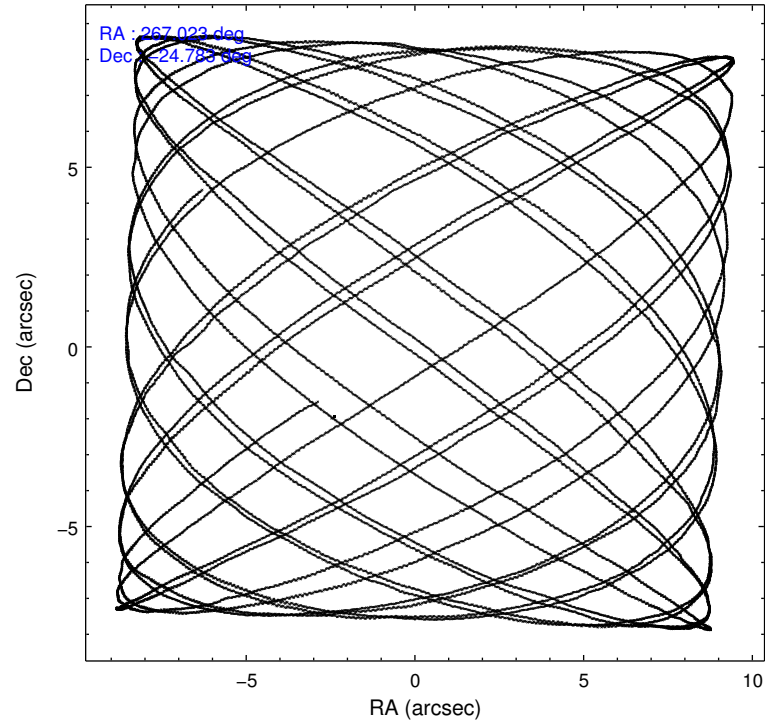
2.1.4 Events

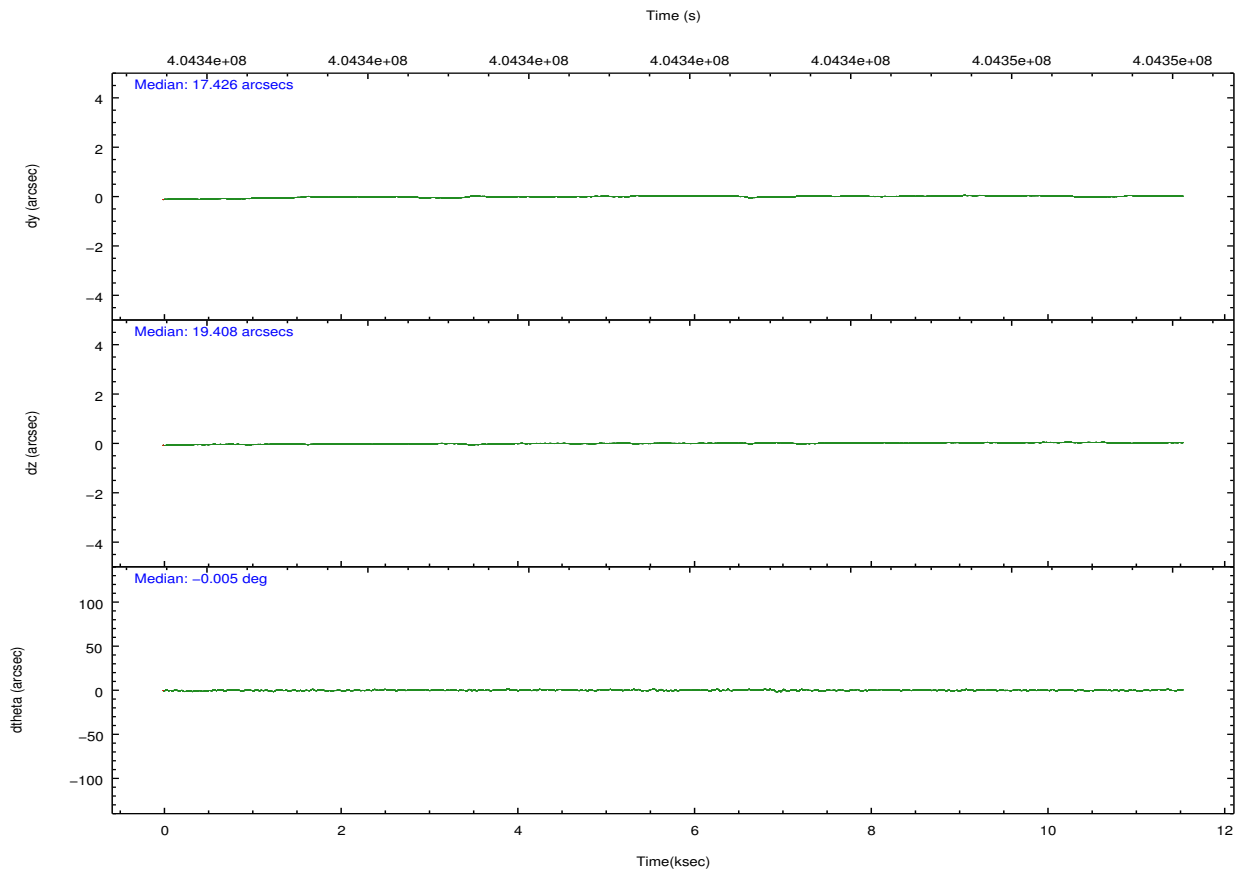
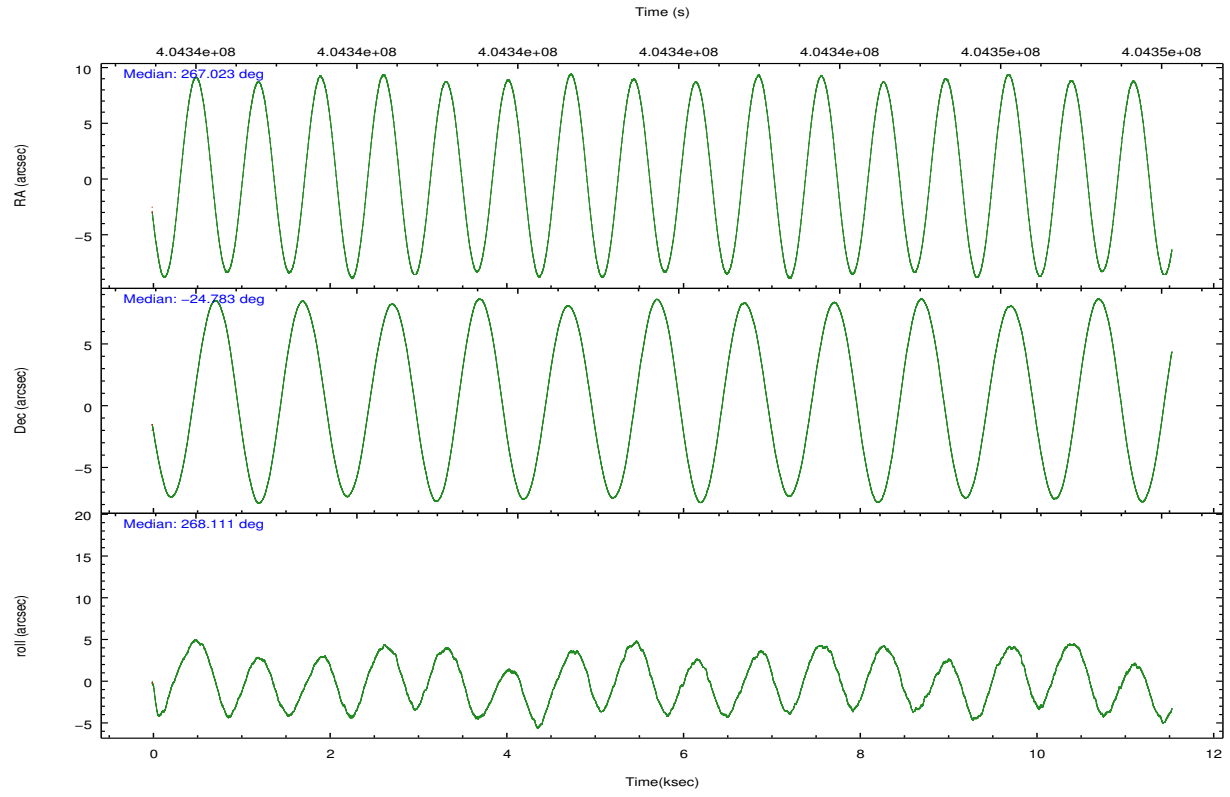
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	72840	70343	98055	154824	695561	92776	grade 0 events	7219	7071	8952	68509	125457	12441
rejected events	59556	57442	43168	61189	71036	62823		9%	10%	9%	44%	18%	13%
rejected %	81%	81%	44%	39%	10%	67%	grade 1 events	61	69	477	352	2482	114
								0%	0%	0%	0%	0%	0%
							grade 2 events	2569	2202	16296	11939	153878	6265
								3%	3%	16%	7%	22%	6%
							grade 3 events	988	966	2241	4000	66981	2593
								1%	1%	2%	2%	9%	2%
							grade 4 events	961	1051	2252	4030	66104	2491
								1%	1%	2%	2%	9%	2%
							grade 5 events	2266	2555	7142	2920	17593	3818
								3%	3%	7%	1%	2%	4%
							grade 6 events	1551	1615	25163	5188	212290	6174
								2%	2%	25%	3%	30%	6%
							grade 7 events	57225	54814	35532	57886	50776	58880
								78%	77%	36%	37%	7%	63%

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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	267.008517	267.0230281840863	CCD I2 on	O1	Y
[deg] Pointing Dec	-24.759445	-24.78342984844603	CCD I3 on	O2	Y
[deg] Pointing Roll	267.953630	268.1163304330871	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[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	Y	Y
[s] Observation start time (MET)	404337559.184000	404335829.76889	CCD S5 on	N	N
Observation start date	2010-10-24T19:58:13	2010-10-24T19:30:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	404347559.184000	404348651.49454	On-chip summing requested	N	N
Observation end date	2010-10-24T22:44:53	2010-10-24T23:04:11	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



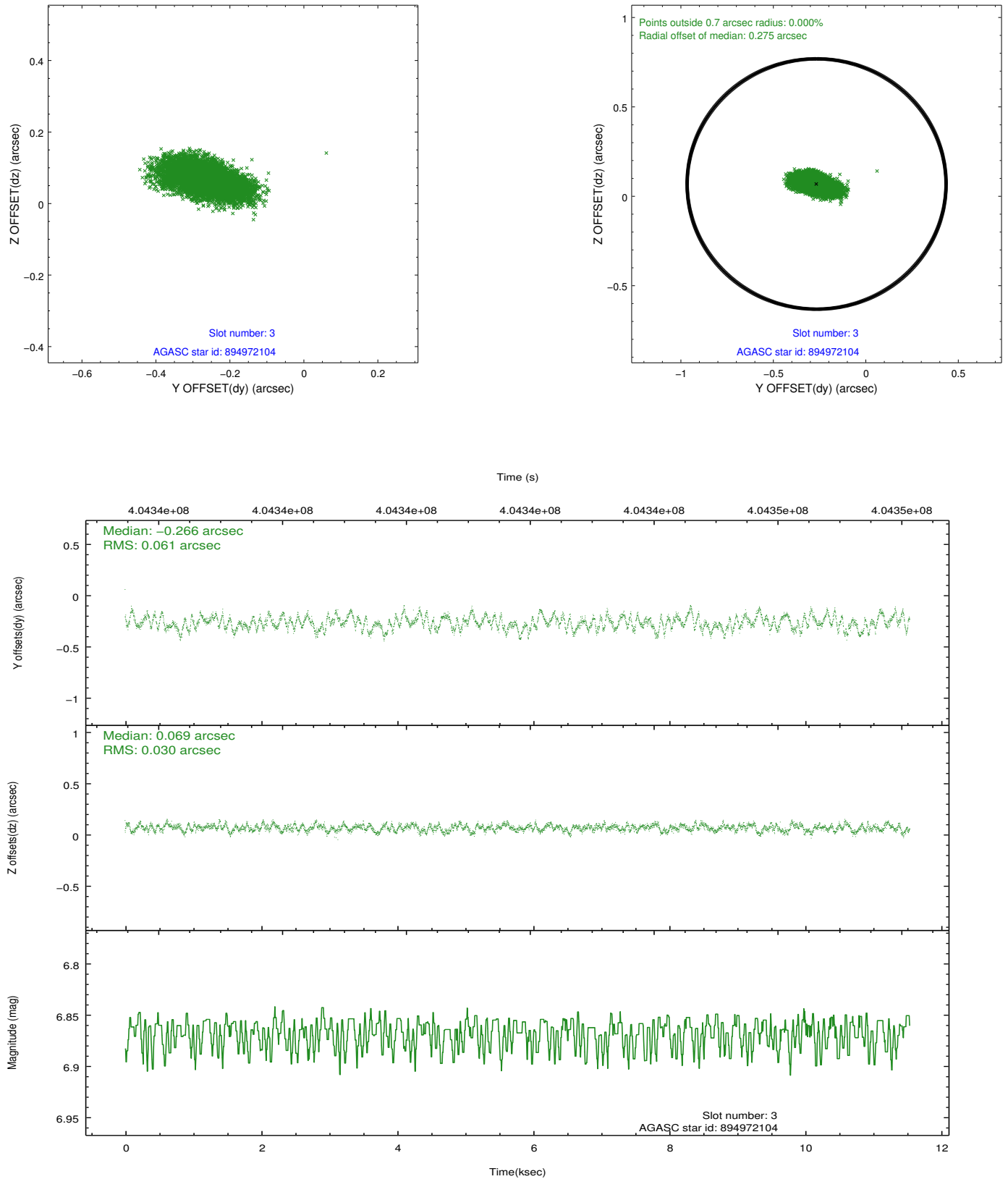


Slot Statistics

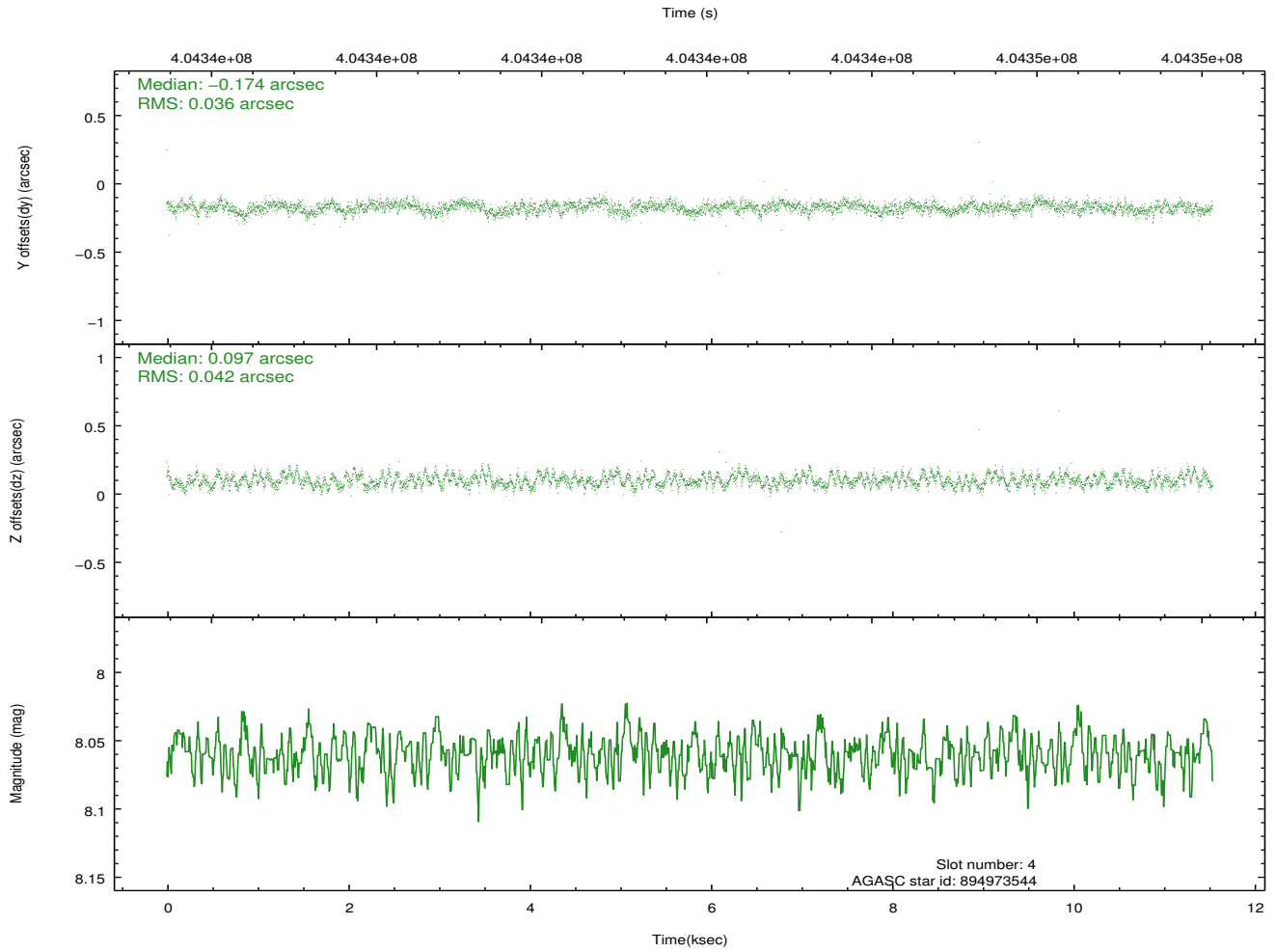
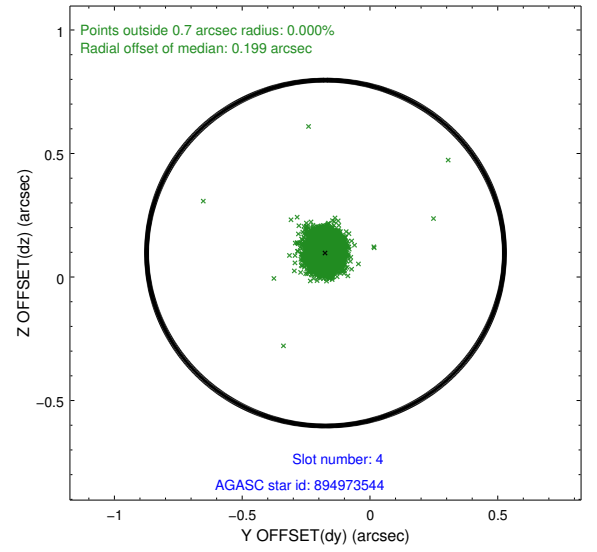
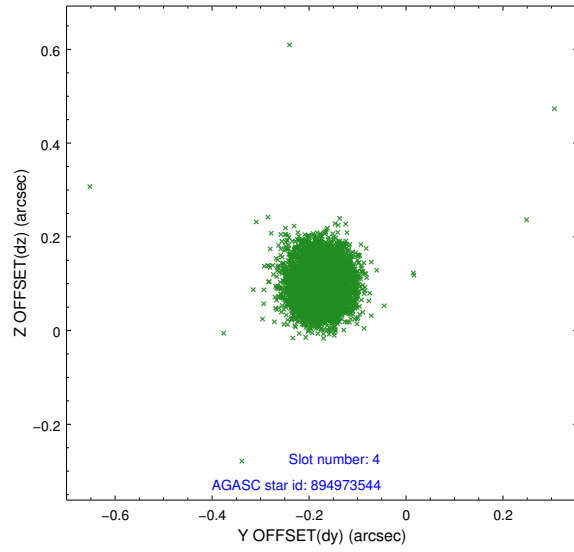
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.97	2816	0.129	-0.006	0.006	0.011	0.000000	0.000000	925.71	-1736.54
1	FID	ACIS-S-2	6.89	2816	-0.147	-0.014	0.006	0.011	0.000000	0.000000	-770.23	-1741.55
2	FID	ACIS-S-6	7.11	2816	-0.003	0.025	0.005	0.010	0.000000	0.000000	391.03	804.37
3	GUIDE	894972104	6.87	5631	-0.266	0.069	0.070	0.122	267.489380	-24.207054	-2040.93	1506.63
4	GUIDE	894973544	8.06	5629	-0.174	0.097	0.057	0.090	266.605572	-24.141151	-2175.35	-1402.10
5	GUIDE	895485920	8.67	5628	0.227	0.108	0.071	0.119	266.932426	-25.188840	1553.71	-192.22
6	GUIDE	895486672	9.02	5624	-0.041	-0.005	0.101	0.159	267.522168	-25.216127	1587.05	1730.93
7	GUIDE	895489704	8.80	5625	0.255	-0.266	0.100	0.161	266.328076	-25.361339	2251.72	-2133.87

2.4 Star Slots

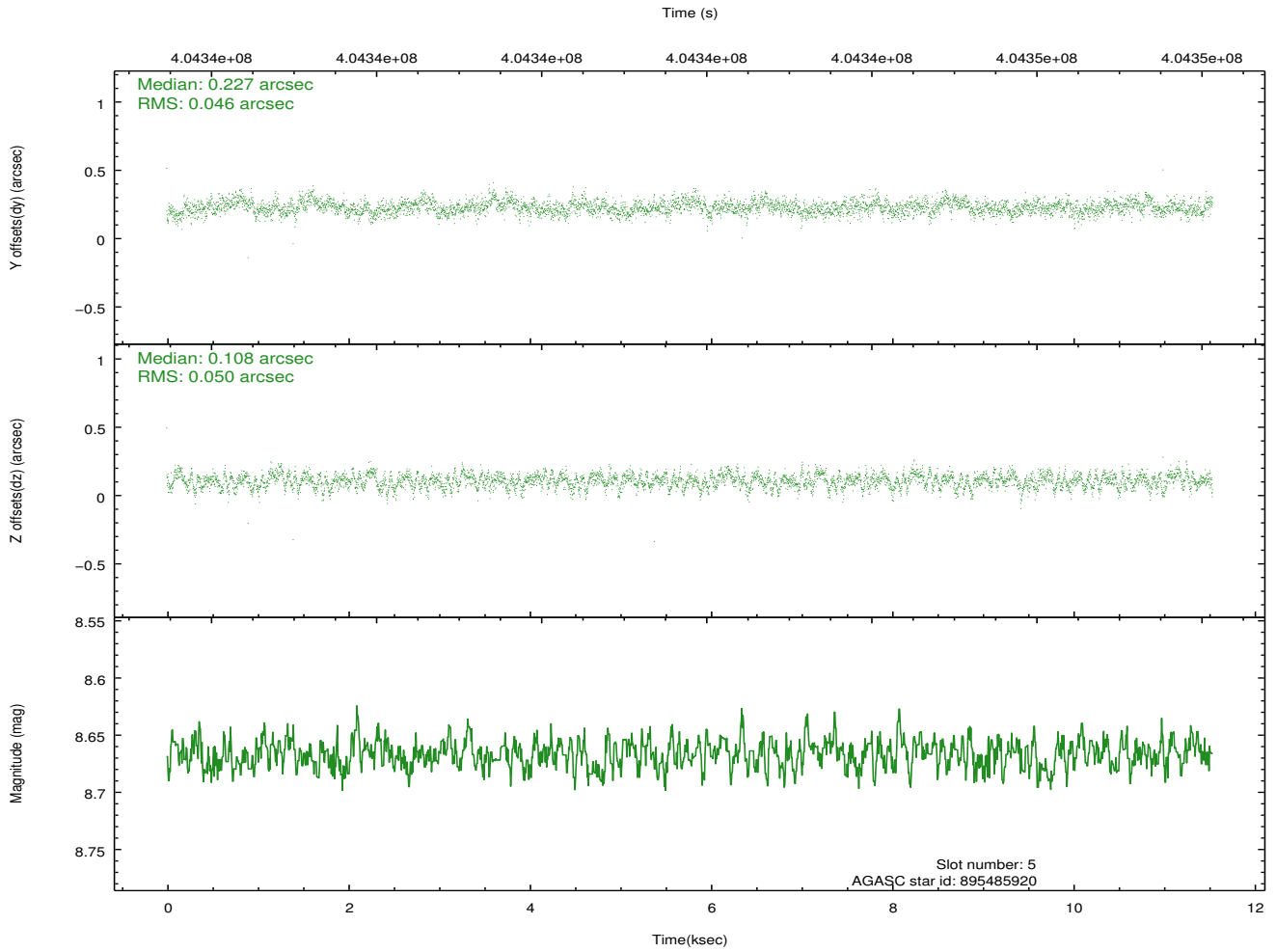
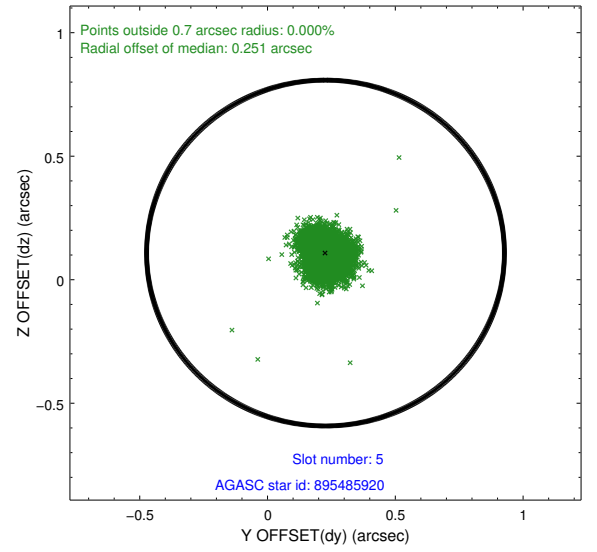
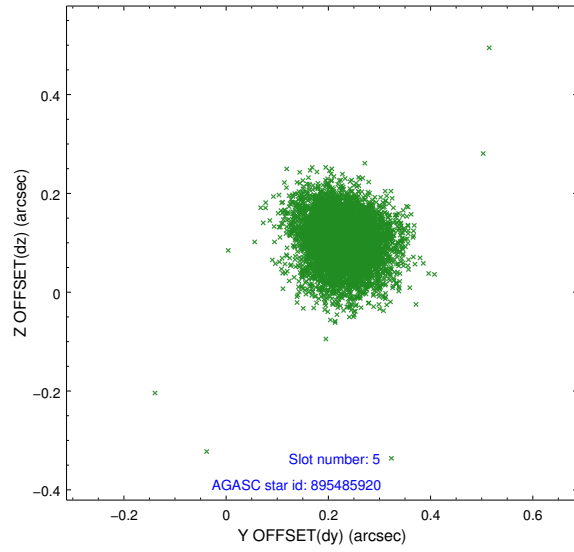
2.4.1 Slot 3



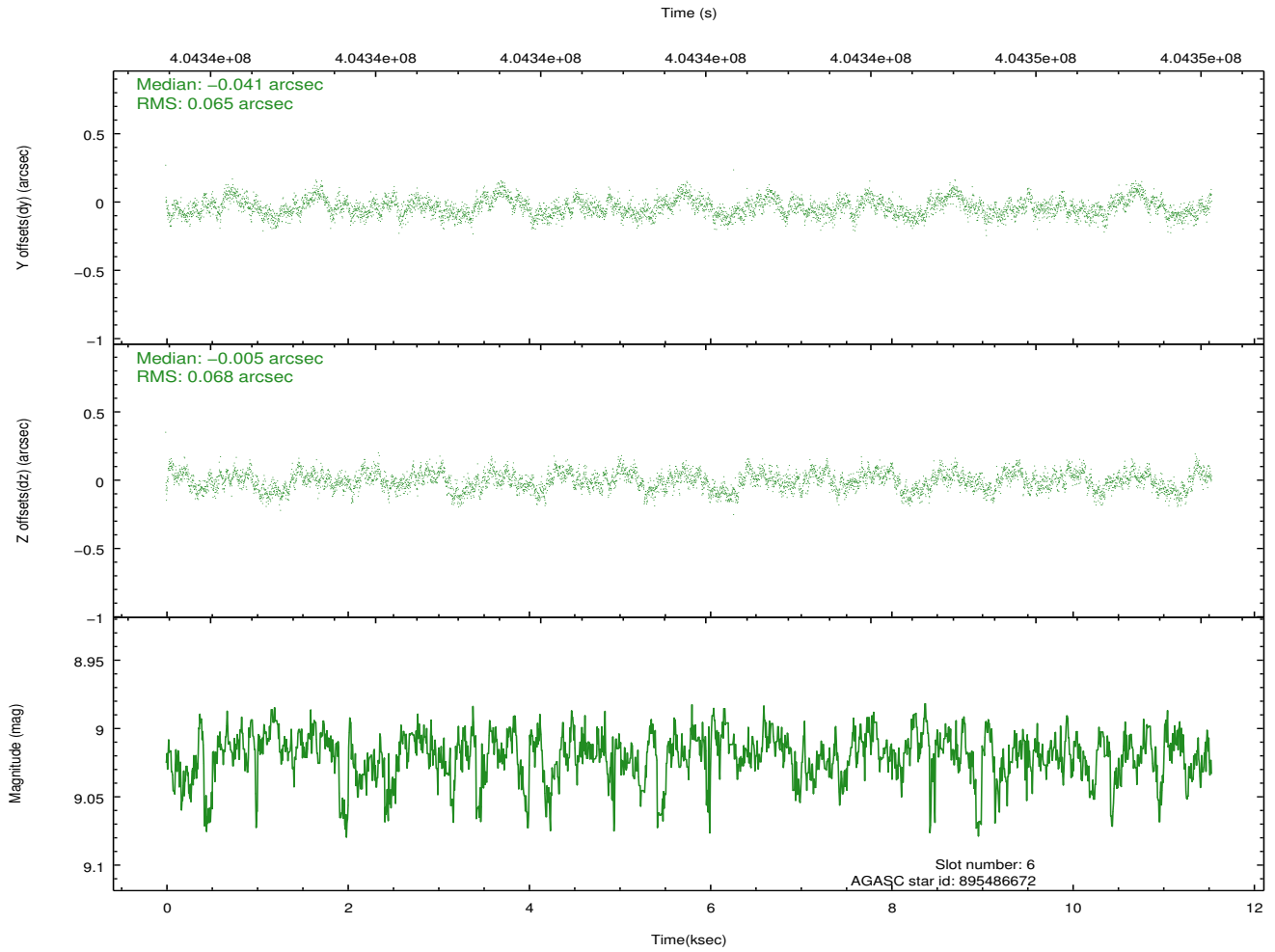
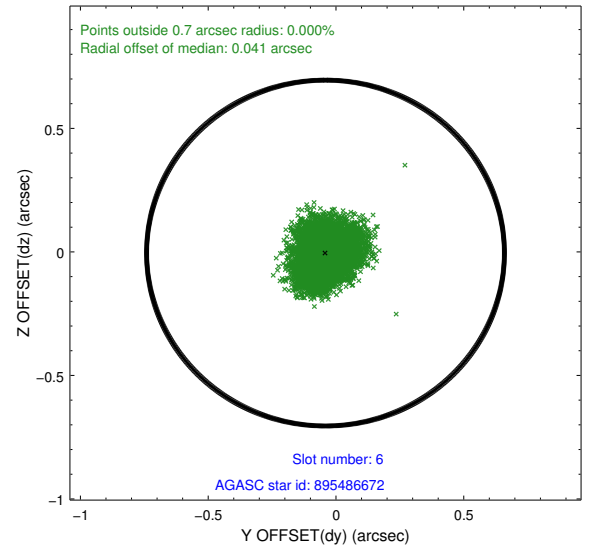
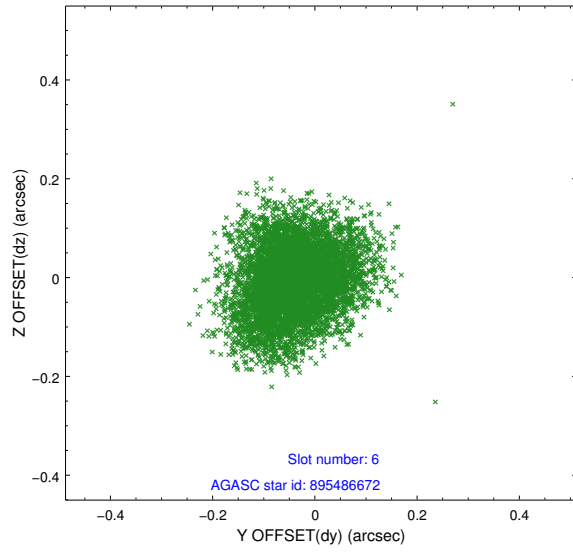
2.4.2 Slot 4



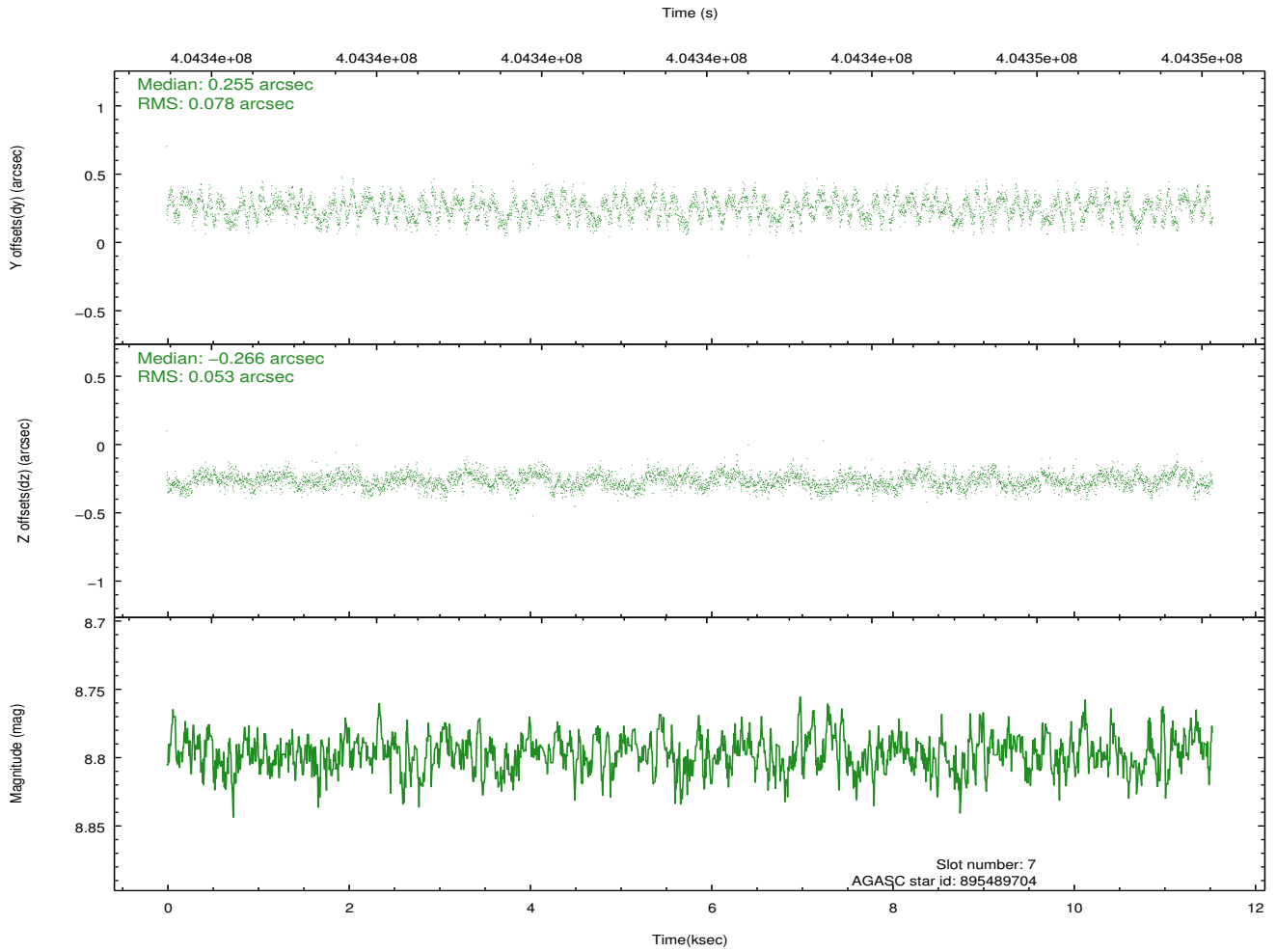
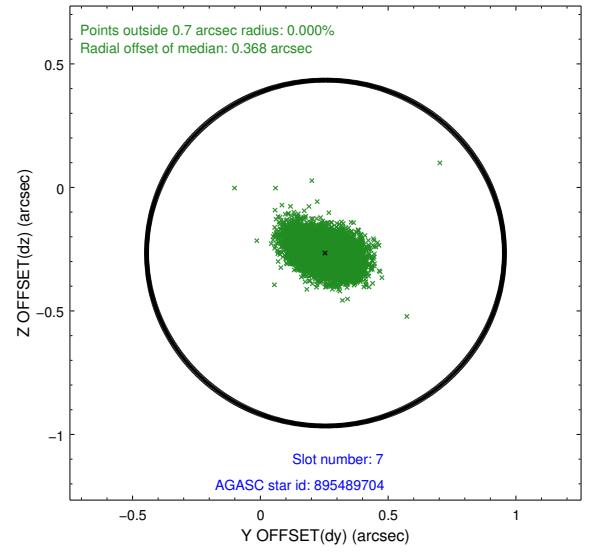
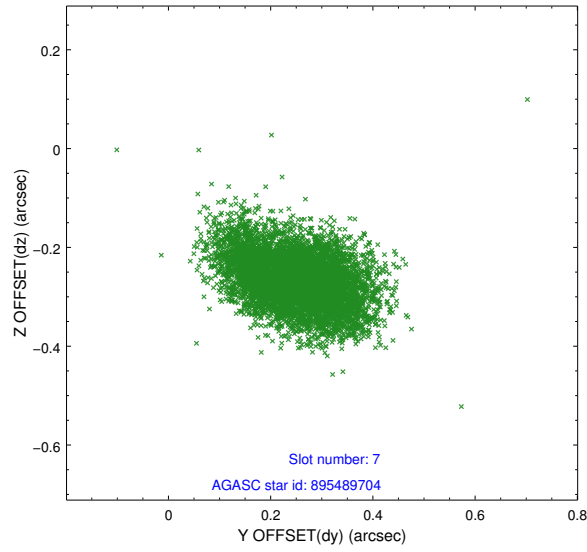
2.4.3 Slot 5



2.4.4 Slot 6

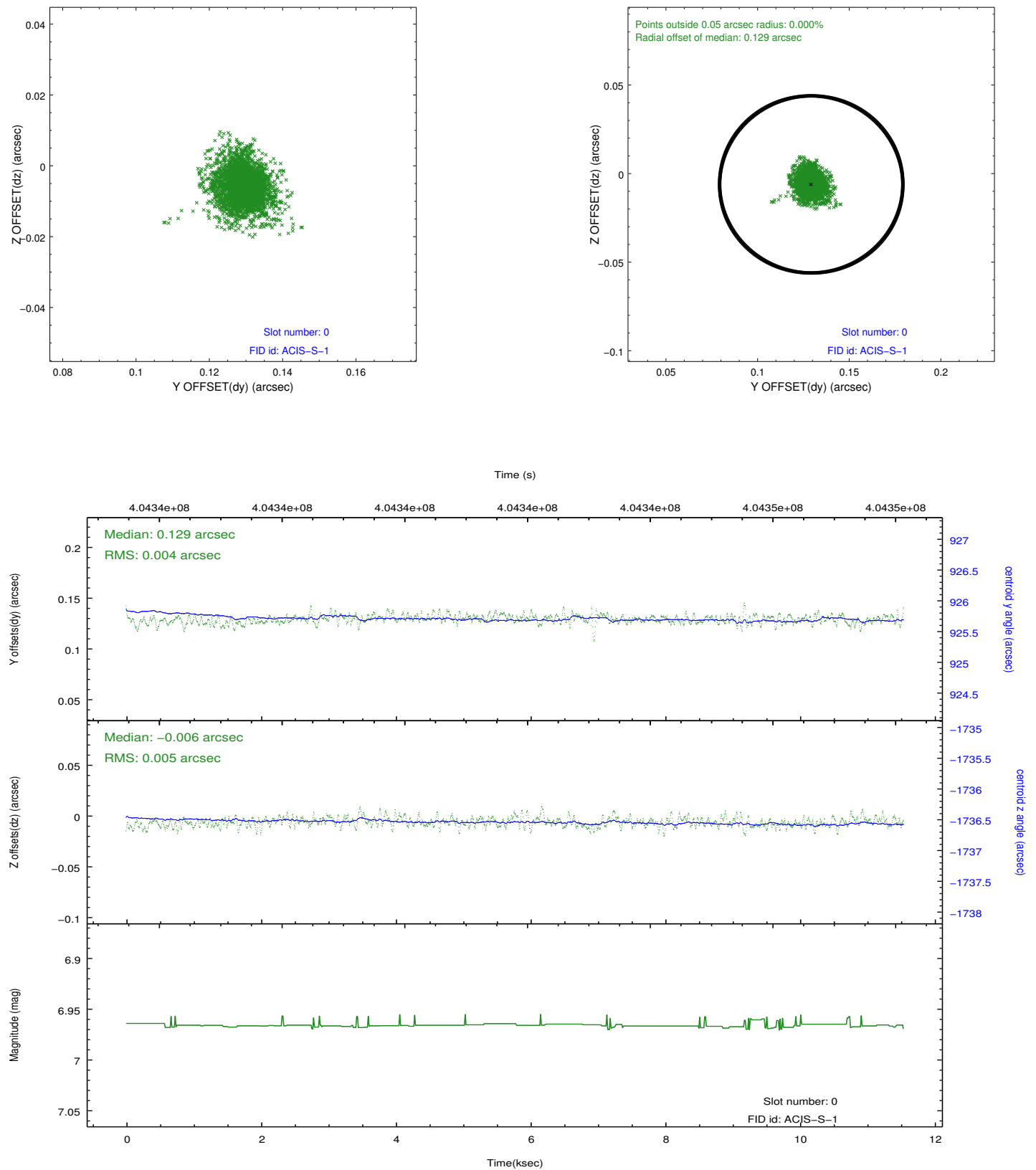


2.4.5 Slot 7

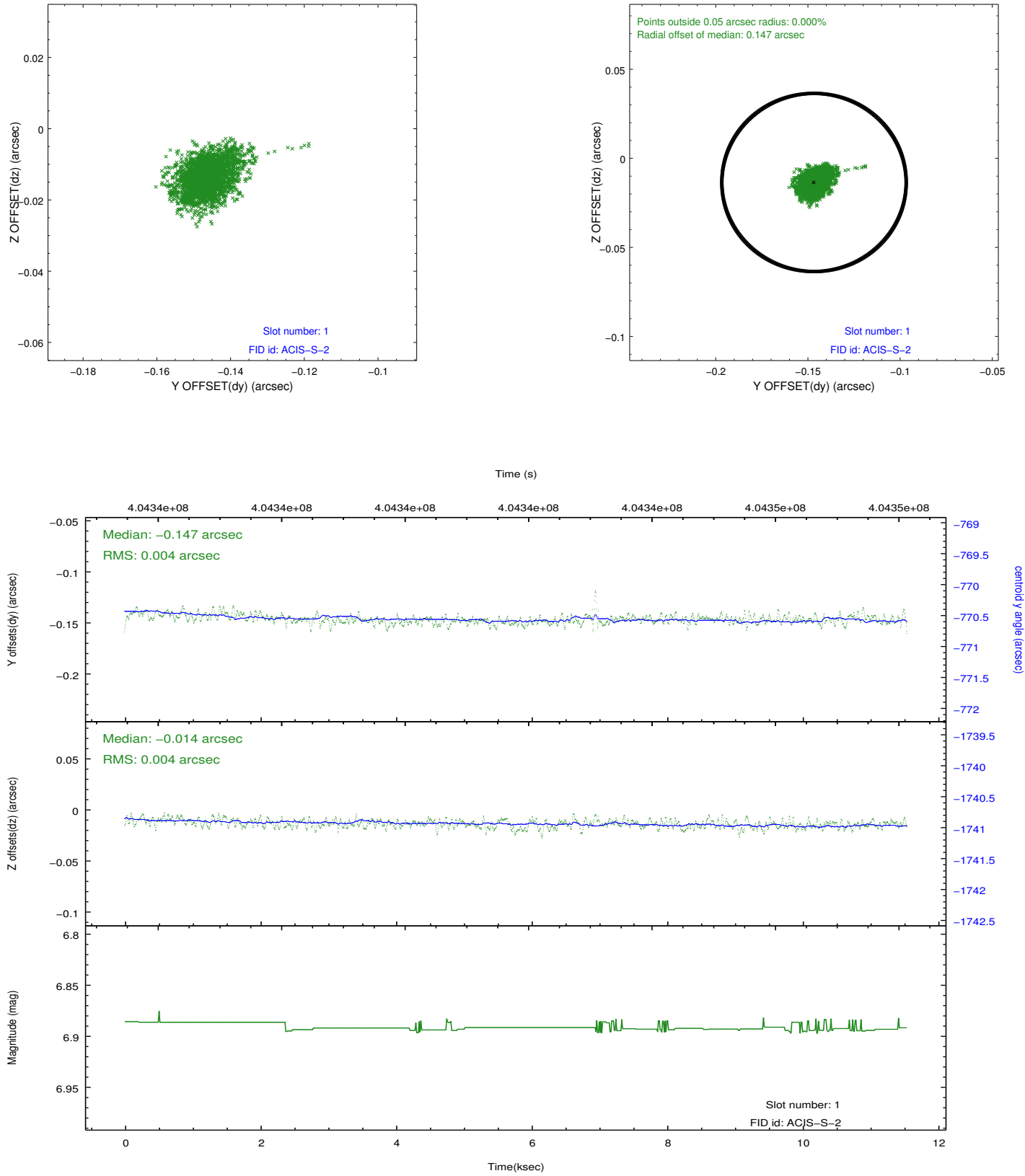


2.5 FID Slots

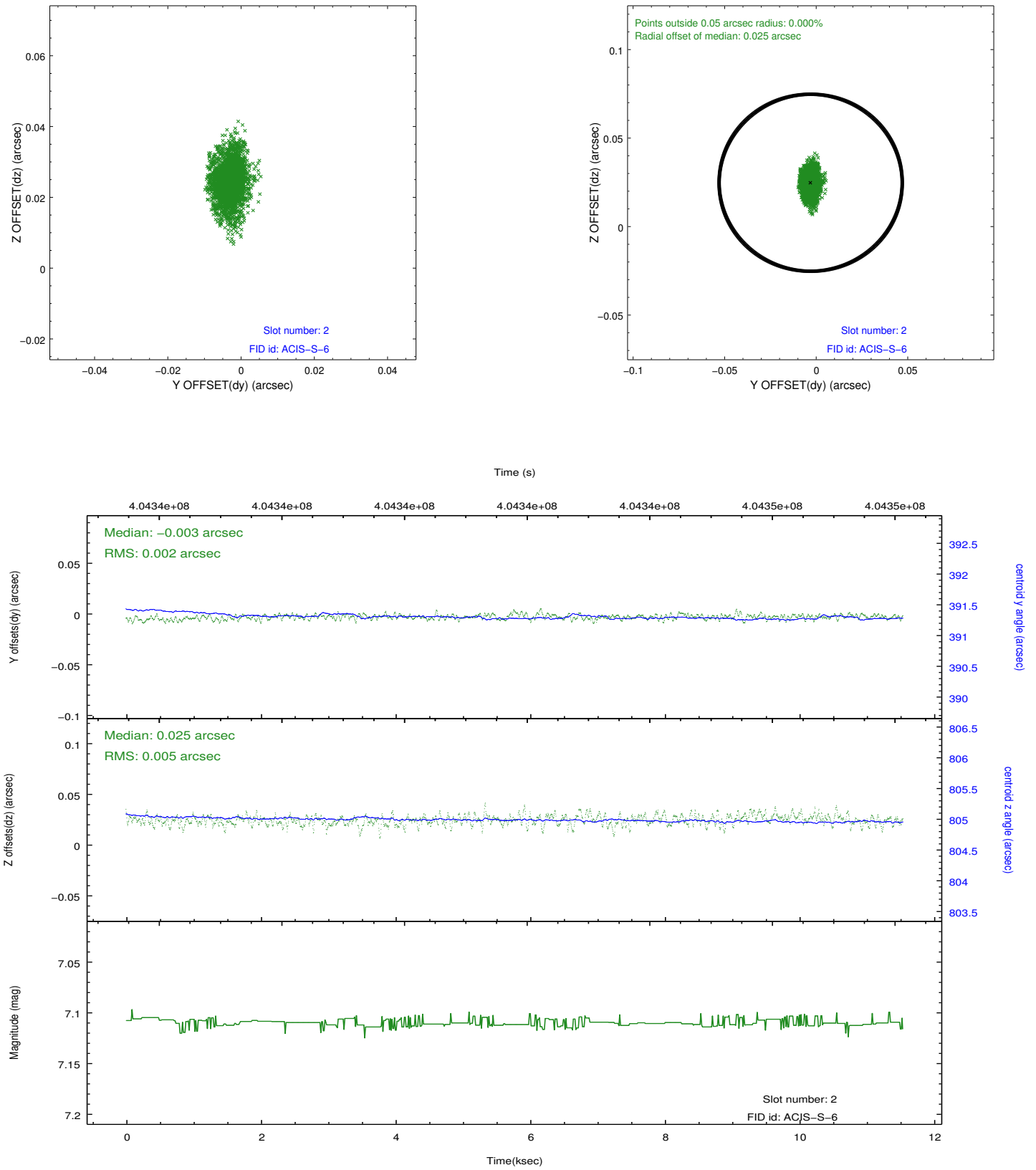
2.5.1 Slot 0



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)	2012.07.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.053376198173

A.2 Comments

A spatial region of the original bias map for CCD = 7 suffered from anomalously high data values at the position of the target. In the original processing, a region with approximately 40 pixels near the center of the target in the Level 2 event data had zero or near zero counts because of the elevated bias values. The bias map for CCD = 7 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(267.01882,-24.78200),(267.01889,-24.77981),(267.01649,-24.77974),(267.01641,-24.78193)