

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 6421 - L2 Version 3
Chandra X-Ray Center

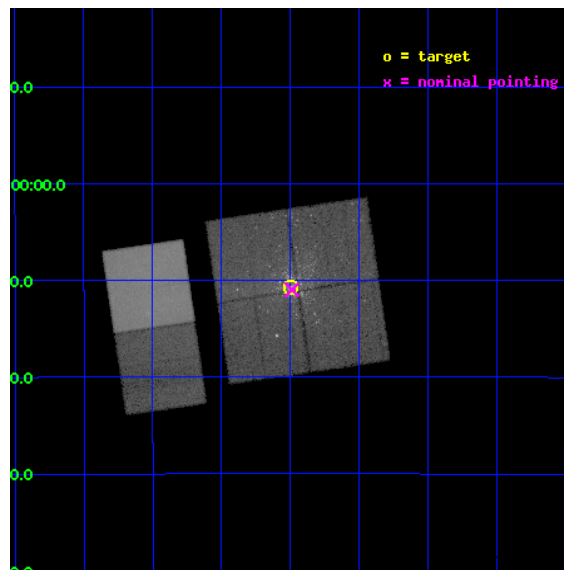
L2 Processing Date : May 3 2012

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1 Front

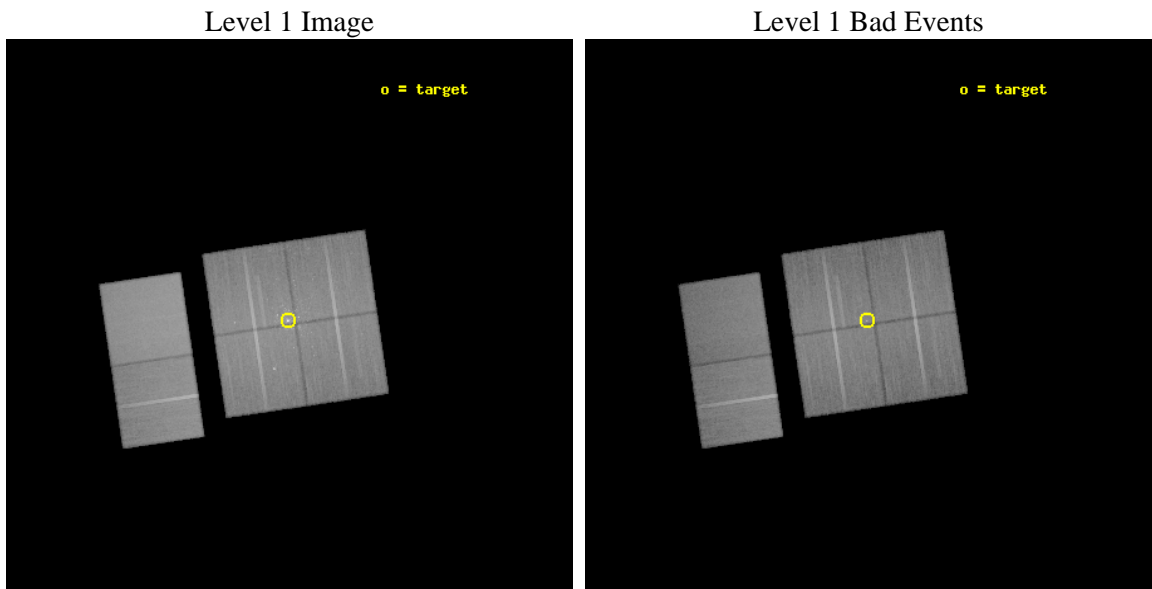
seq_num	200395	Sequence number
obs_id	6421	Observation id
title	Winds, OB Populations, and Young Stars: New Science from M17	Propo
observer	Dr. Leisa Townsley	Principal investigator
object	M17 Pointing I	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	275.124583	Observer's specified target RA [deg]
dec_targ	-16.179139	Observer's specified target Dec [deg]
ra_nom	275.12206780537	Nominal RA [deg]
dec_nom	-16.18313062045	Nominal Dec [deg]
roll_nom	261.60797946953	Nominal Roll [deg]
revision	3	Processing version of data
ontime	39941.553810835	Sum of GTIs [s]
livetime	39435.789806566	Livetime [s]
ontime0	39951.153631985	Sum of GTIs [s]
ontime1	39951.194741488	Sum of GTIs [s]
ontime2	39951.235692024	Sum of GTIs [s]
ontime3	39941.553810835	Sum of GTIs [s]
ontime6	39954.599812269	Sum of GTIs [s]
ontime7	39954.558772266	Sum of GTIs [s]
l2events	455837	Number of level 2 events



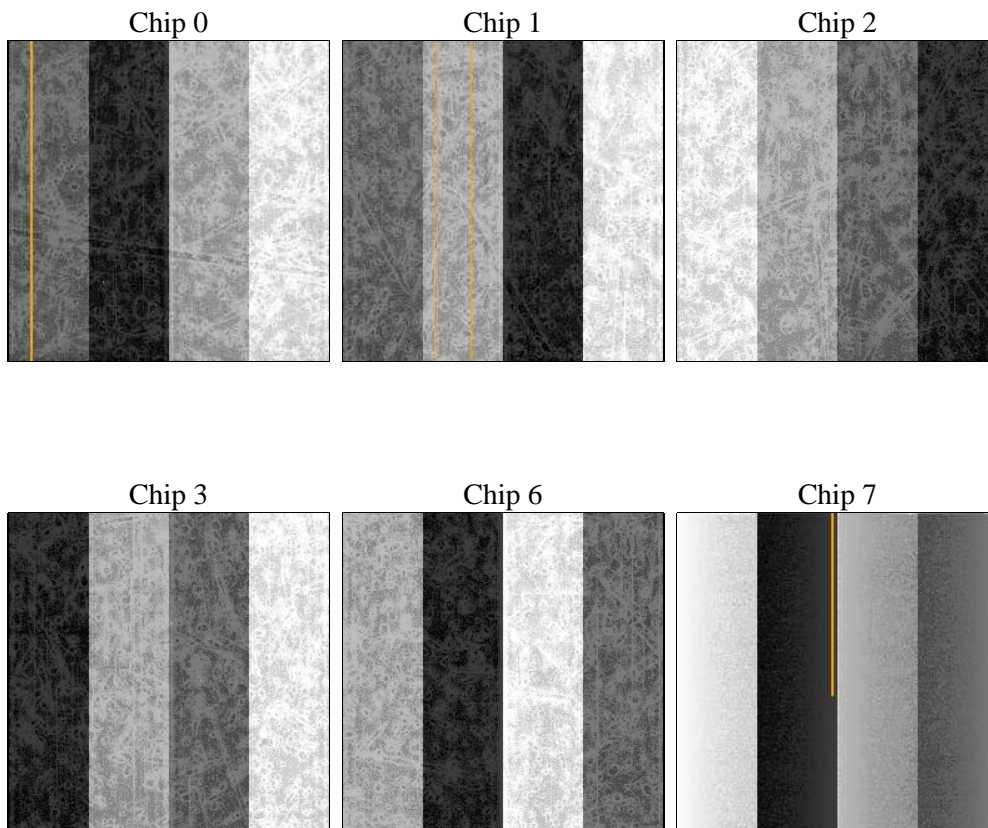
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	39941.553810835	Sum of GTIs [s]
caldbver	4.4.9	 	ontime0	39951.153631985	Sum of GTIs [s]
date	2012-05-03T05:00:36	Date and time of file creation	ontime1	39951.194741488	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	39951.235692024	Sum of GTIs [s]
			ontime3	39941.553810835	Sum of GTIs [s]
			ontime6	39954.599812269	Sum of GTIs [s]
			ontime7	39954.558772266	Sum of GTIs [s]
			l1events	2338739	Number of level 1 events

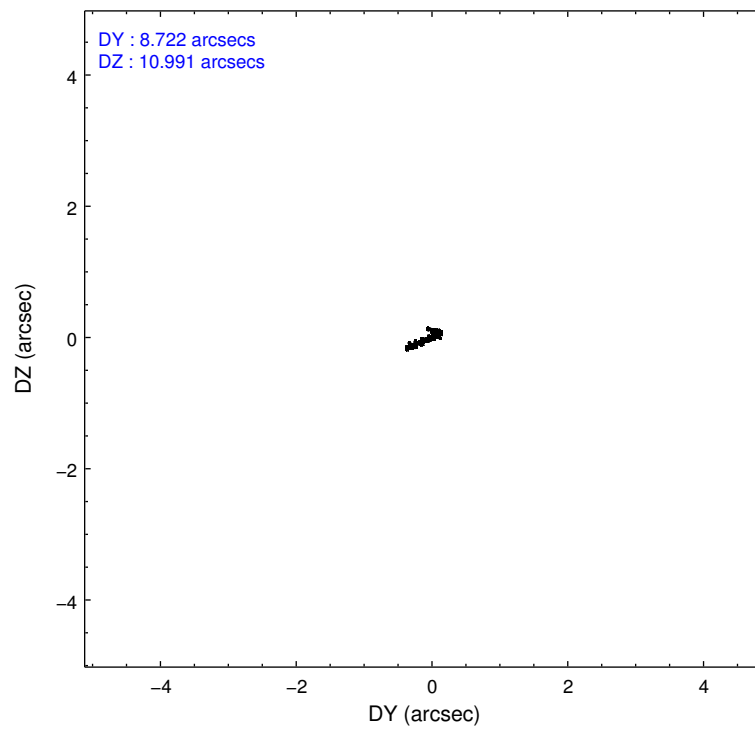
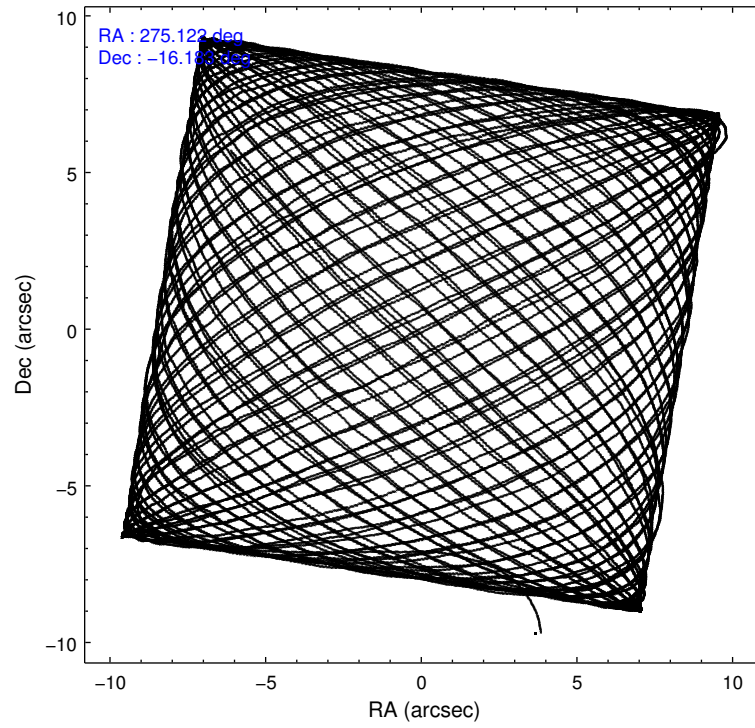
2.1.4 Events

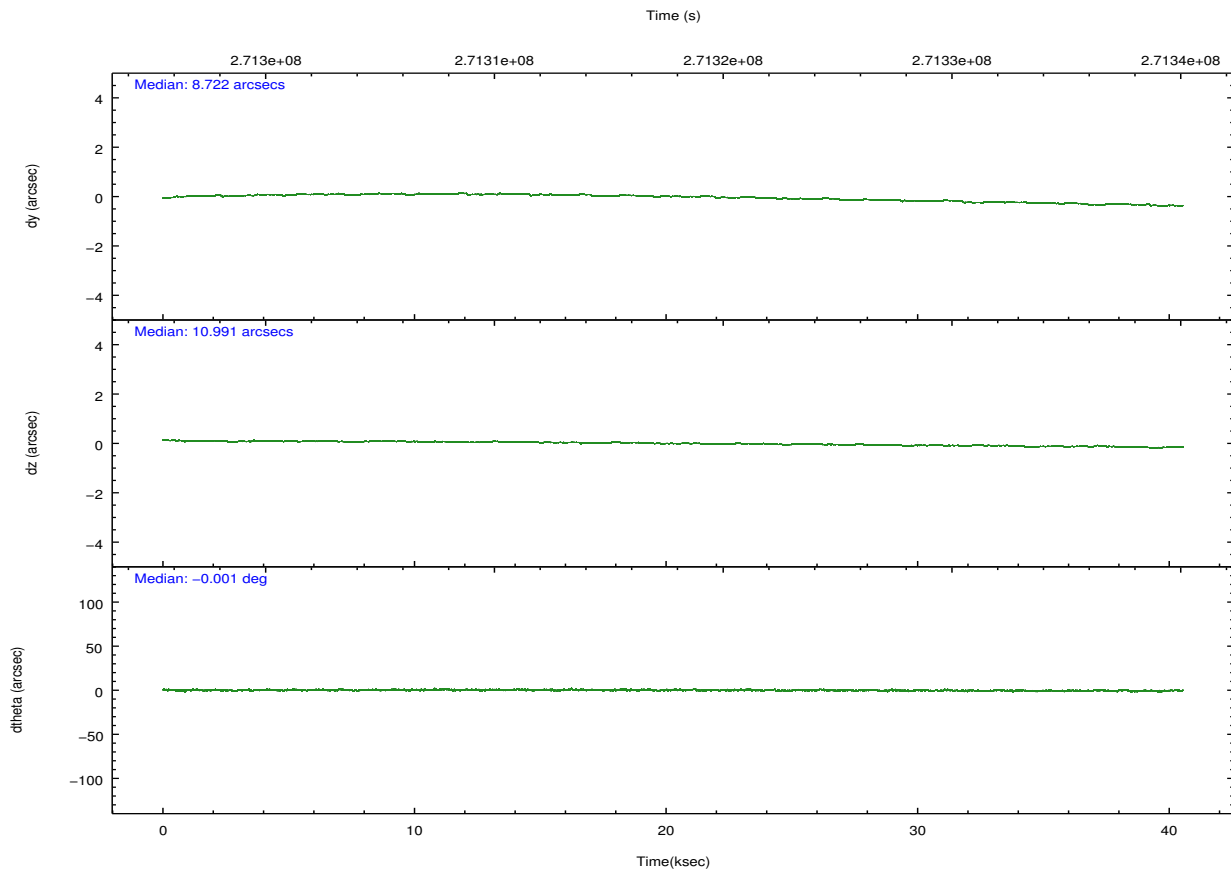
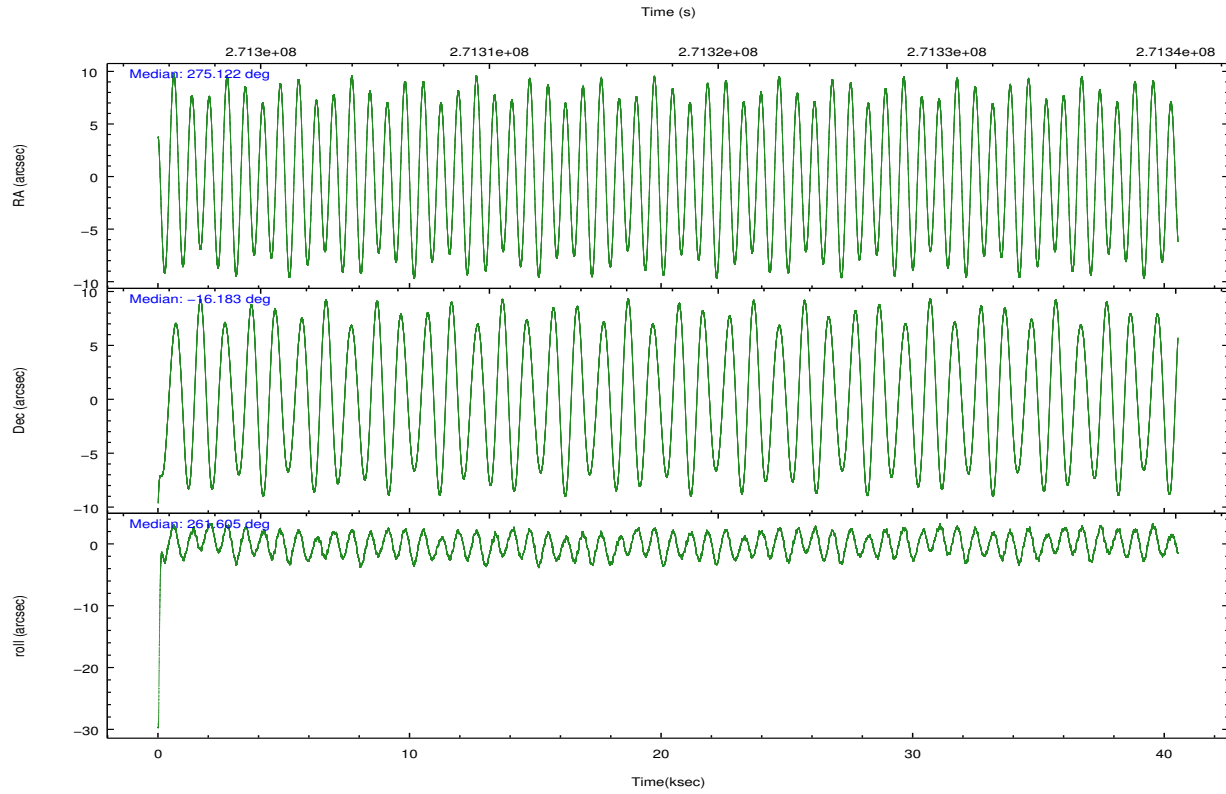
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	340427	345802	378643	381428	388529	503910	grade 0 events	22695	26476	26331	40151	20964	22877
rejected events	291473	288730	327306	312205	340274	285573		6%	7%	6%	10%	5%	4%
rejected %	85%	83%	86%	81%	87%	56%	grade 1 events	271	240	275	609	216	471
								0%	0%	0%	0%	0%	0%
							grade 2 events	10103	11699	9558	11128	9980	44969
								2%	3%	2%	2%	2%	8%
							grade 3 events	4339	4841	4146	4913	4300	19320
								1%	1%	1%	1%	1%	3%
							grade 4 events	4145	4663	4229	4893	4043	19108
								1%	1%	1%	1%	1%	3%
							grade 5 events	14106	15355	13791	16527	17113	46185
								4%	4%	3%	4%	4%	9%
							grade 6 events	7674	9397	7076	8145	8968	112077
								2%	2%	1%	2%	2%	22%
							grade 7 events	277094	273131	313237	295062	322945	238903
								81%	78%	82%	77%	83%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	275.111472	275.1220678053691	Subarray requested	NONE	NONE
[deg] Pointing Dec	-16.157679	-16.18313062044995	Alternating exposures requested	N	N
[deg] Pointing Roll	261.396354	261.6079794695301	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	271298081.184000	271296943.73139			
Observation start date	2006-08-07T00:33:36	2006-08-07T00:15:43			
[s] Observation end time (MET)	271338081.184000	271339000.50836			
Observation end date	2006-08-07T11:40:16	2006-08-07T11:56:40			
Read mode	TIMED	TIMED			

2.3 Aspect



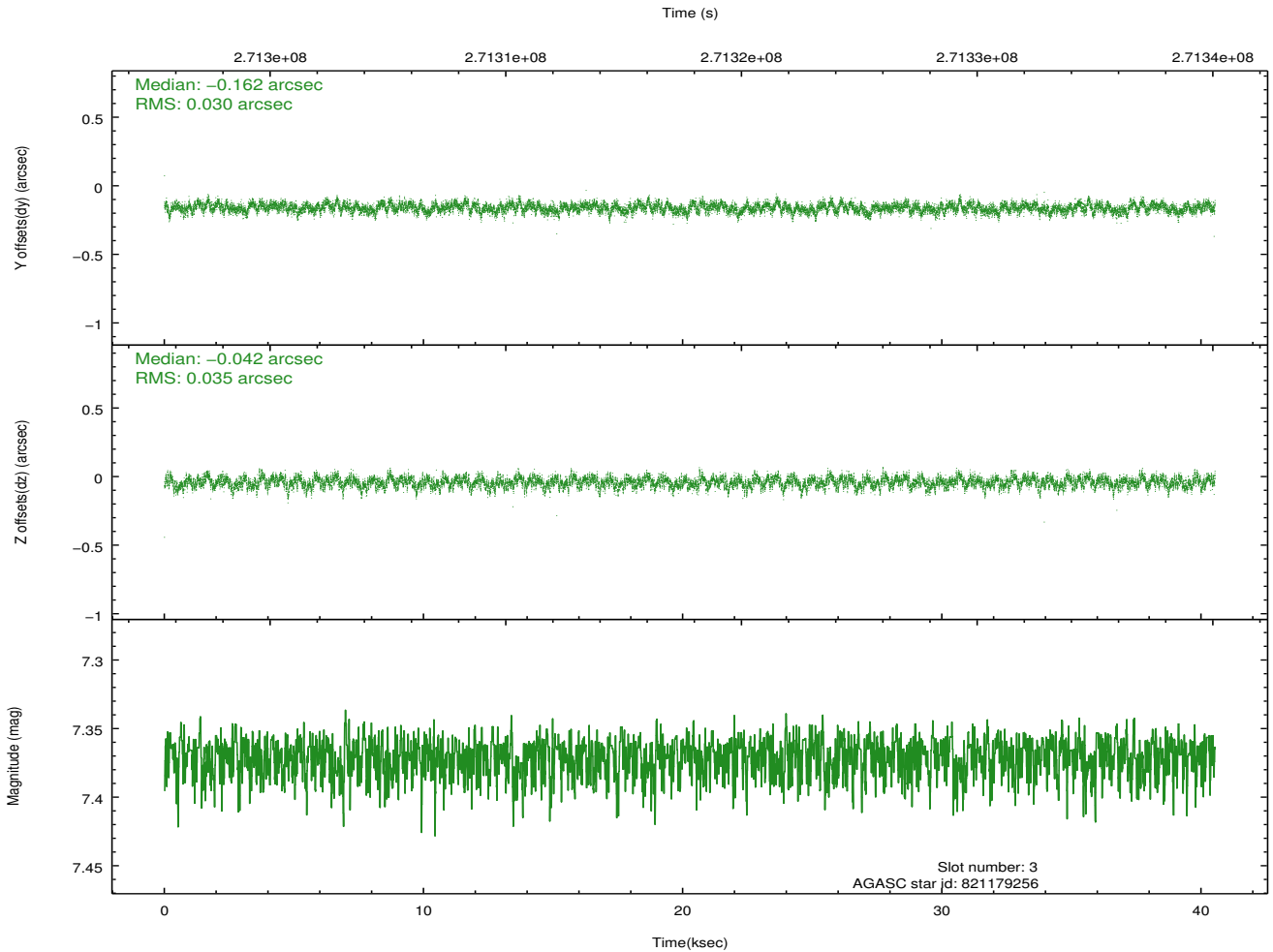
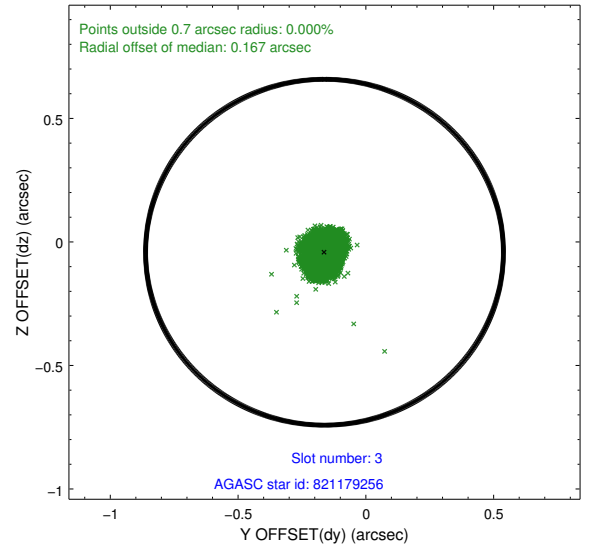
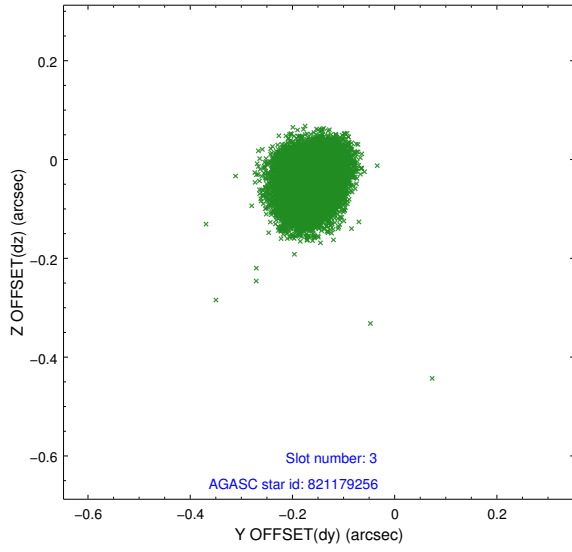


Slot Statistics

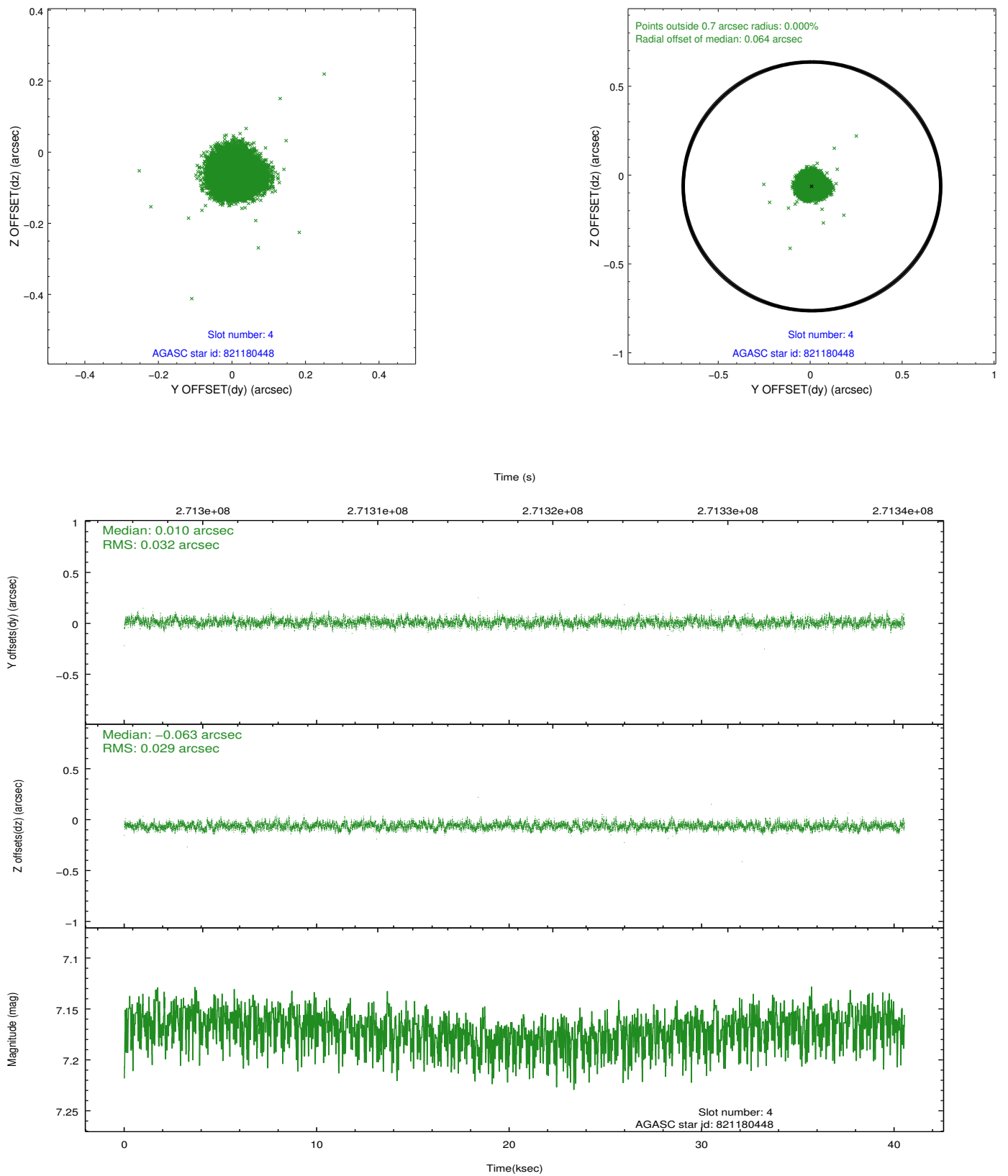
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	9887	0.057	-0.059	0.008	0.014	0.000000	0.000000	931.02	-834.55
1	FID	ACIS-I-5	7.23	9886	-0.215	0.052	0.008	0.016	0.000000	0.000000	-1817.34	1063.07
2	FID	ACIS-I-6	7.24	9886	0.066	0.078	0.007	0.012	0.000000	0.000000	396.58	1707.60
3	GUIDE	821179256	7.37	19773	-0.162	-0.042	0.049	0.080	274.840900	-15.612800	-1798.48	-1220.89
4	GUIDE	821180448	7.17	19774	0.010	-0.063	0.046	0.073	275.453560	-16.324585	418.33	1258.70
5	GUIDE	821181816	8.42	19709	0.101	-0.026	0.064	0.107	274.847938	-16.750455	2246.84	-578.59
6	GUIDE	821186736	7.96	19771	0.131	0.043	0.061	0.101	274.765126	-16.656680	1956.38	-911.93
7	GUIDE	821171832	8.87	19758	-0.084	0.090	0.080	0.132	275.792275	-15.610164	-2298.15	2039.89

2.4 Star Slots

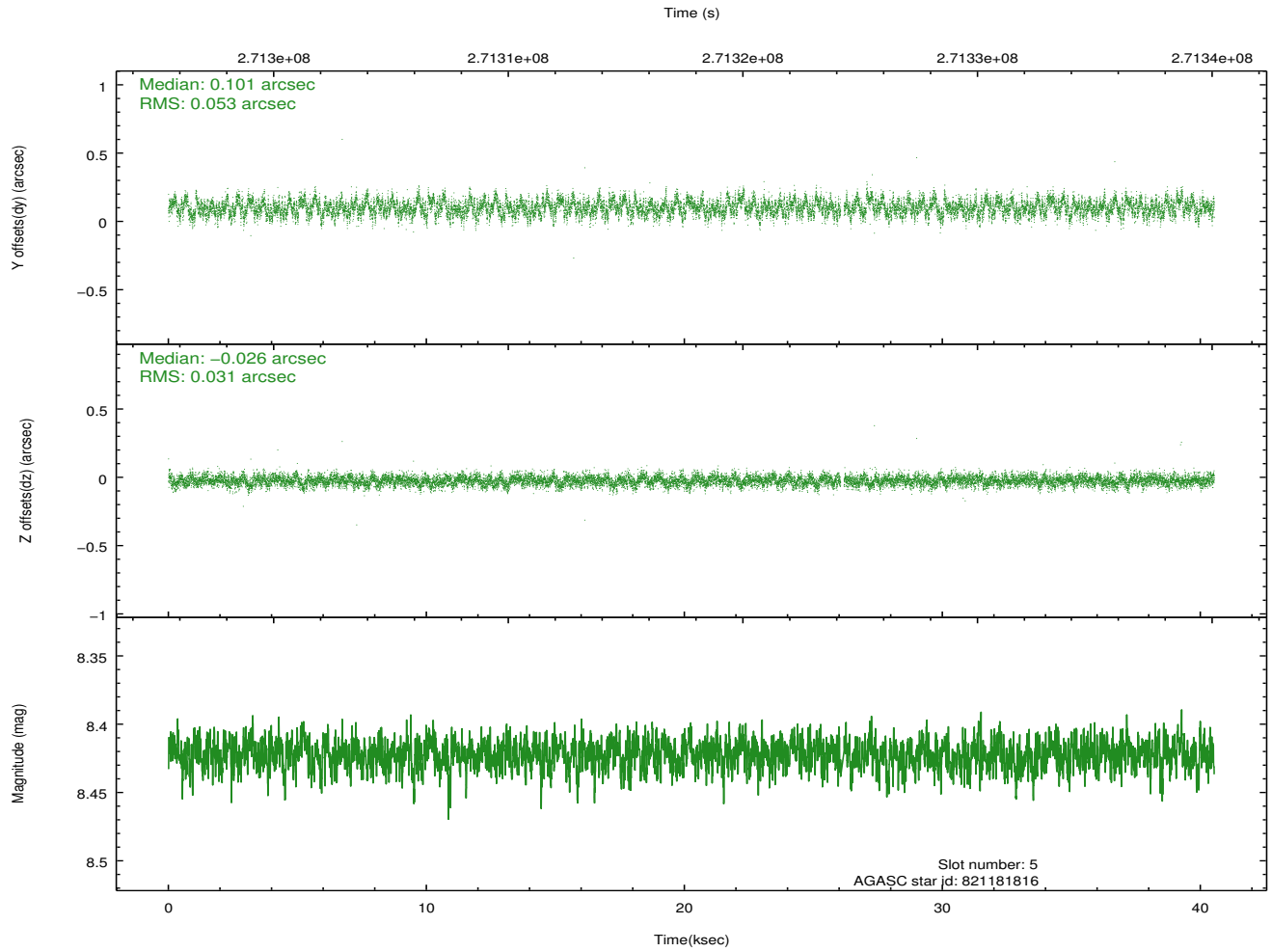
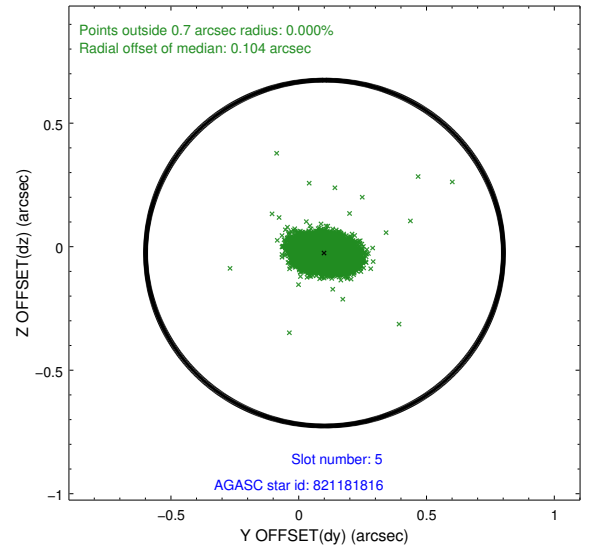
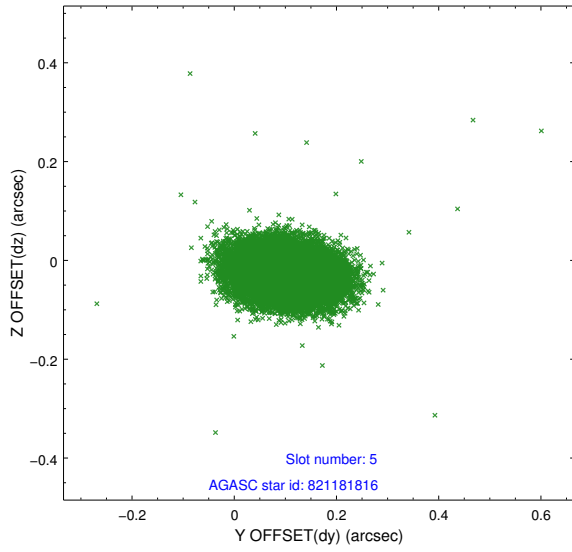
2.4.1 Slot 3



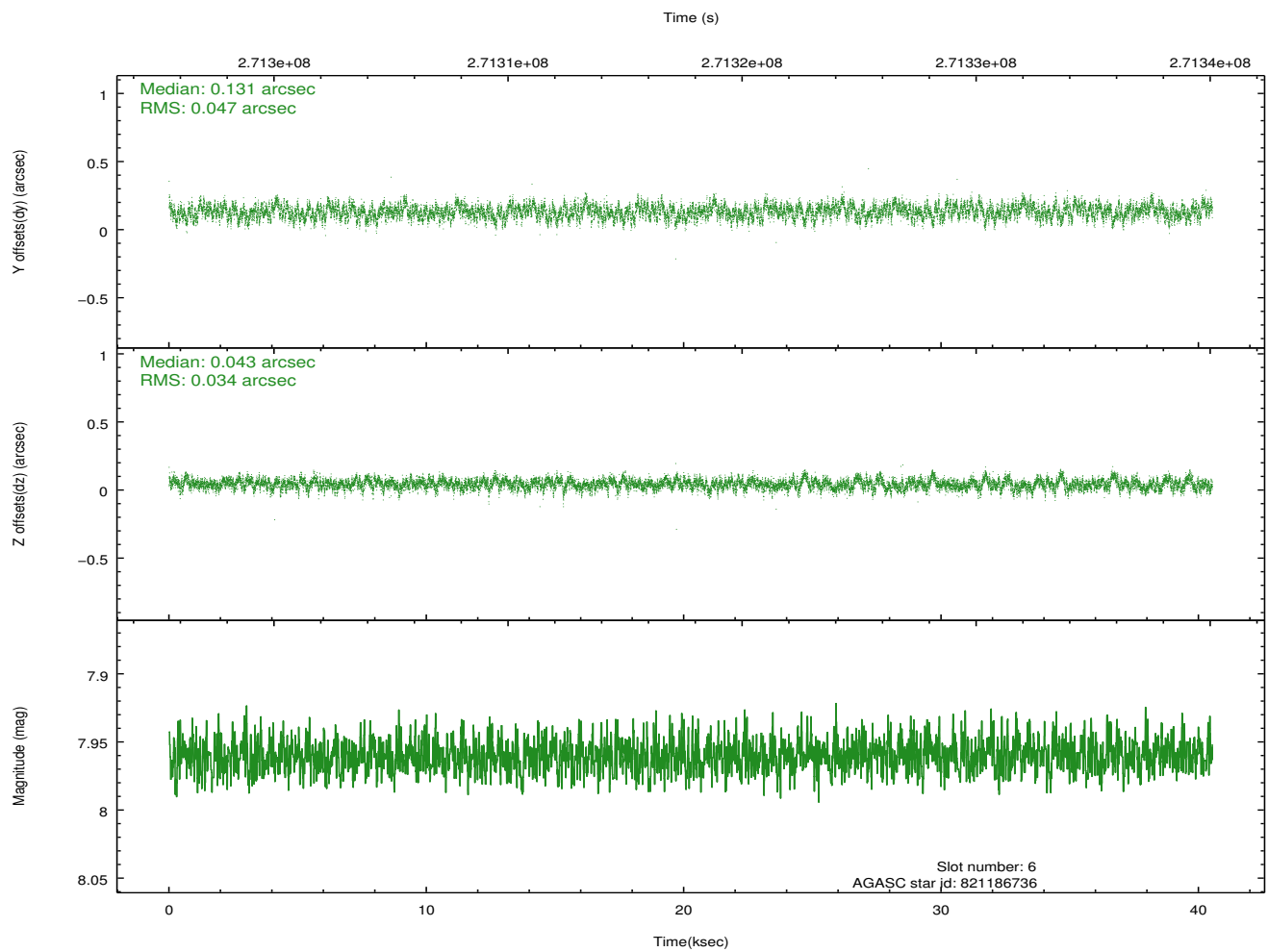
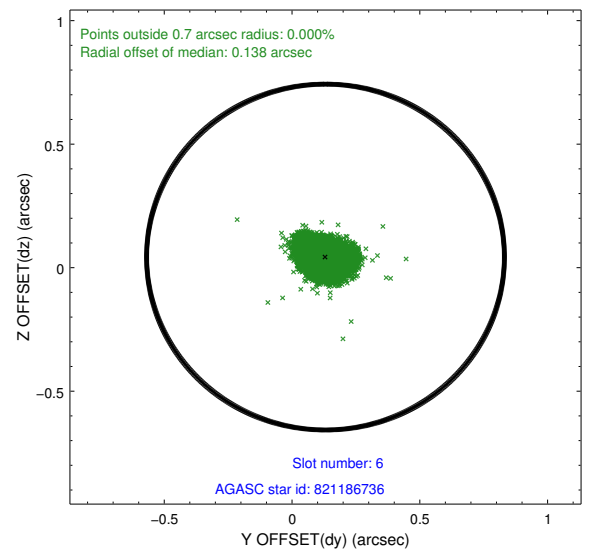
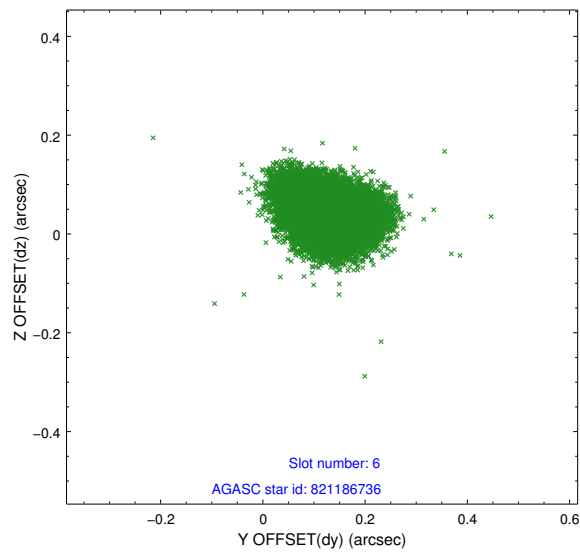
2.4.2 Slot 4



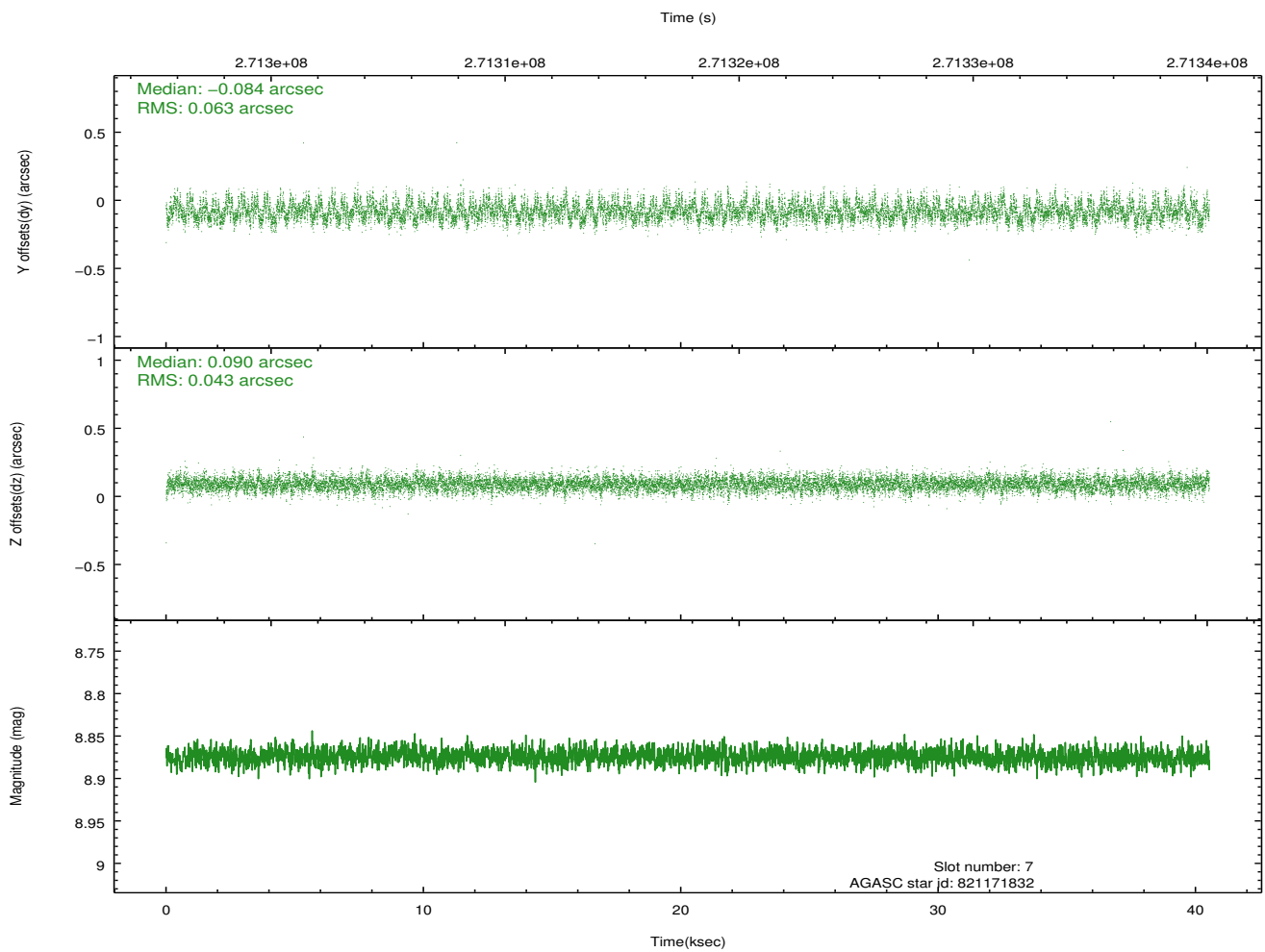
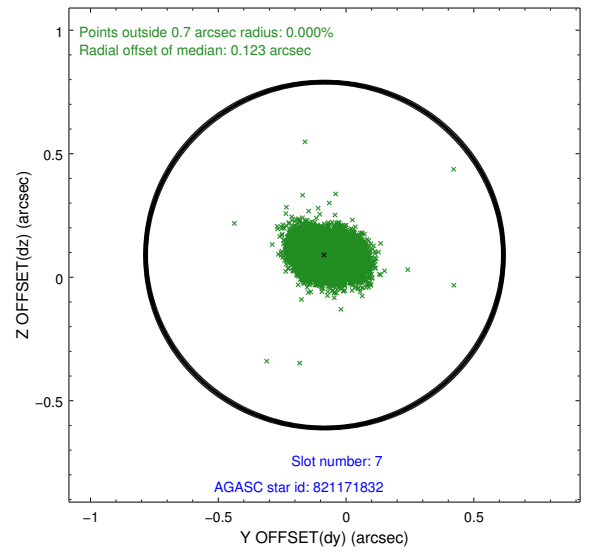
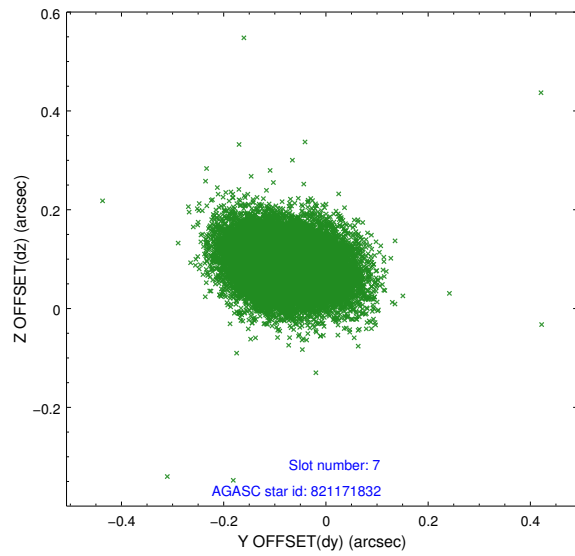
2.4.3 Slot 5



2.4.4 Slot 6

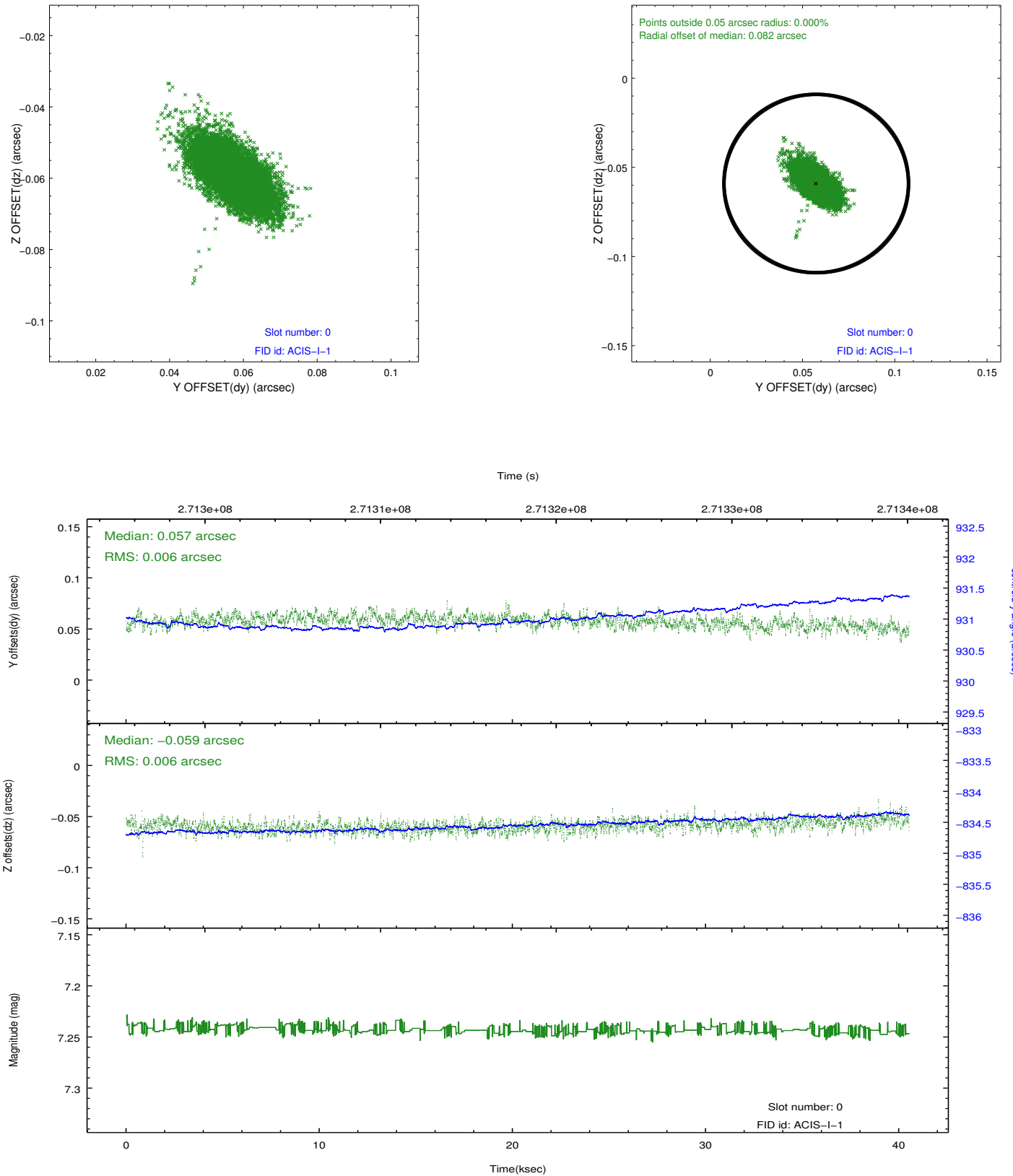


2.4.5 Slot 7

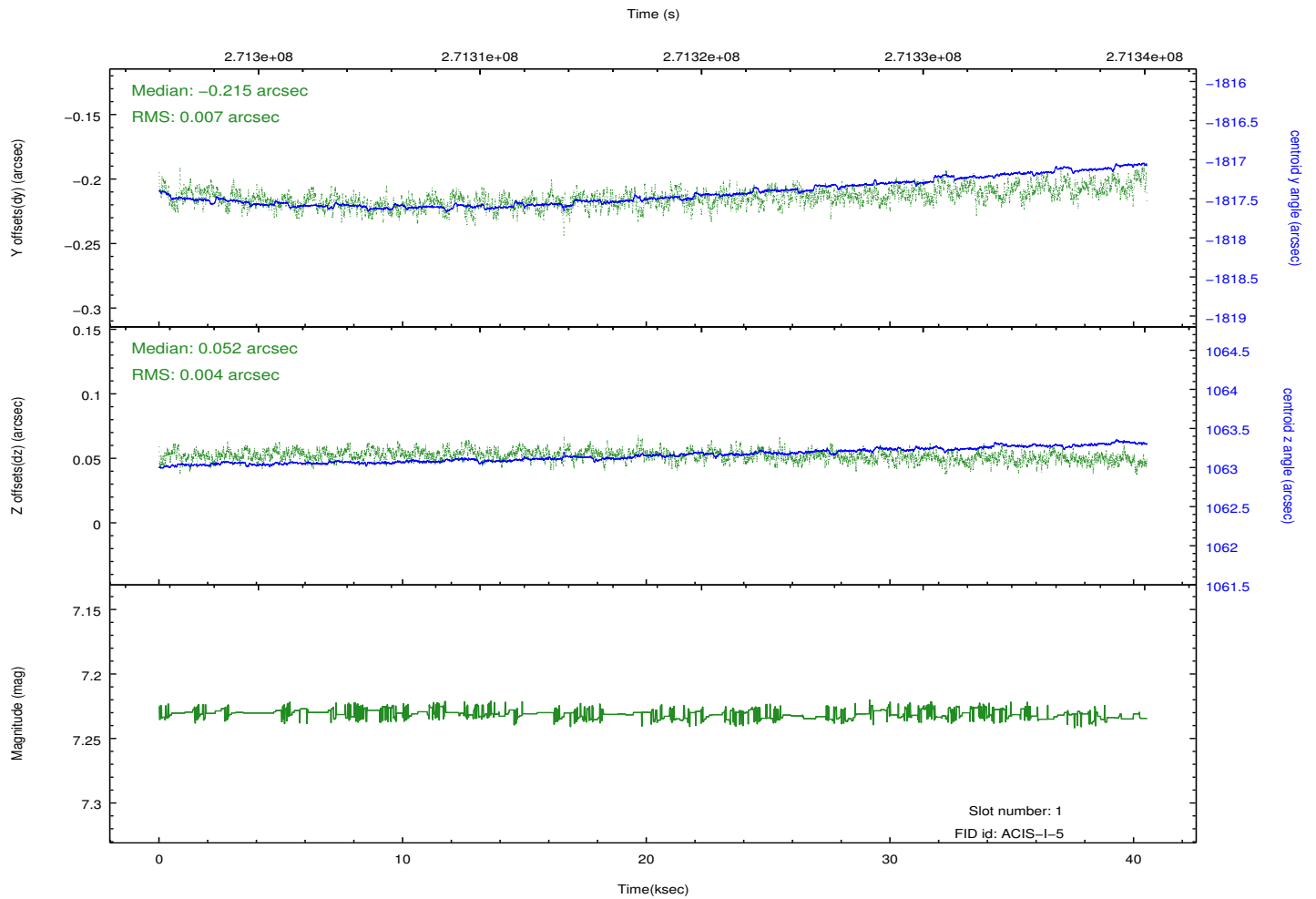
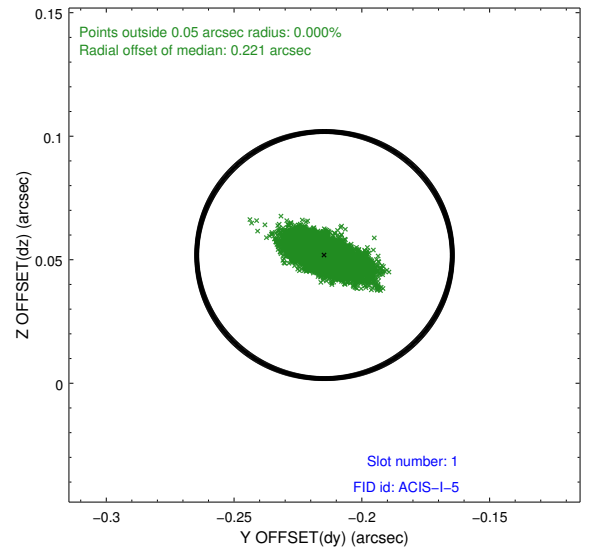
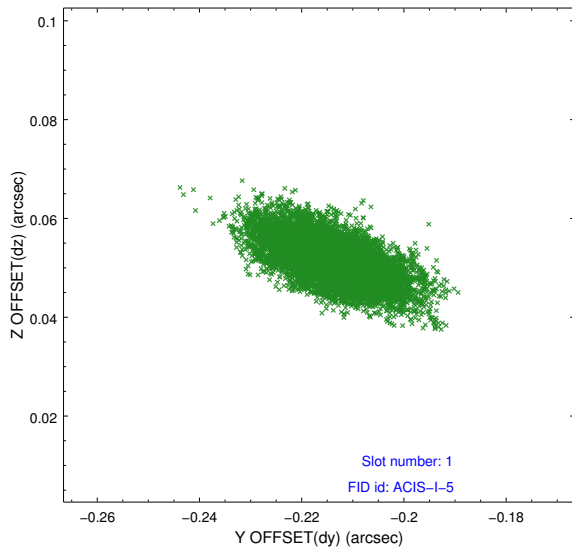


2.5 FID Slots

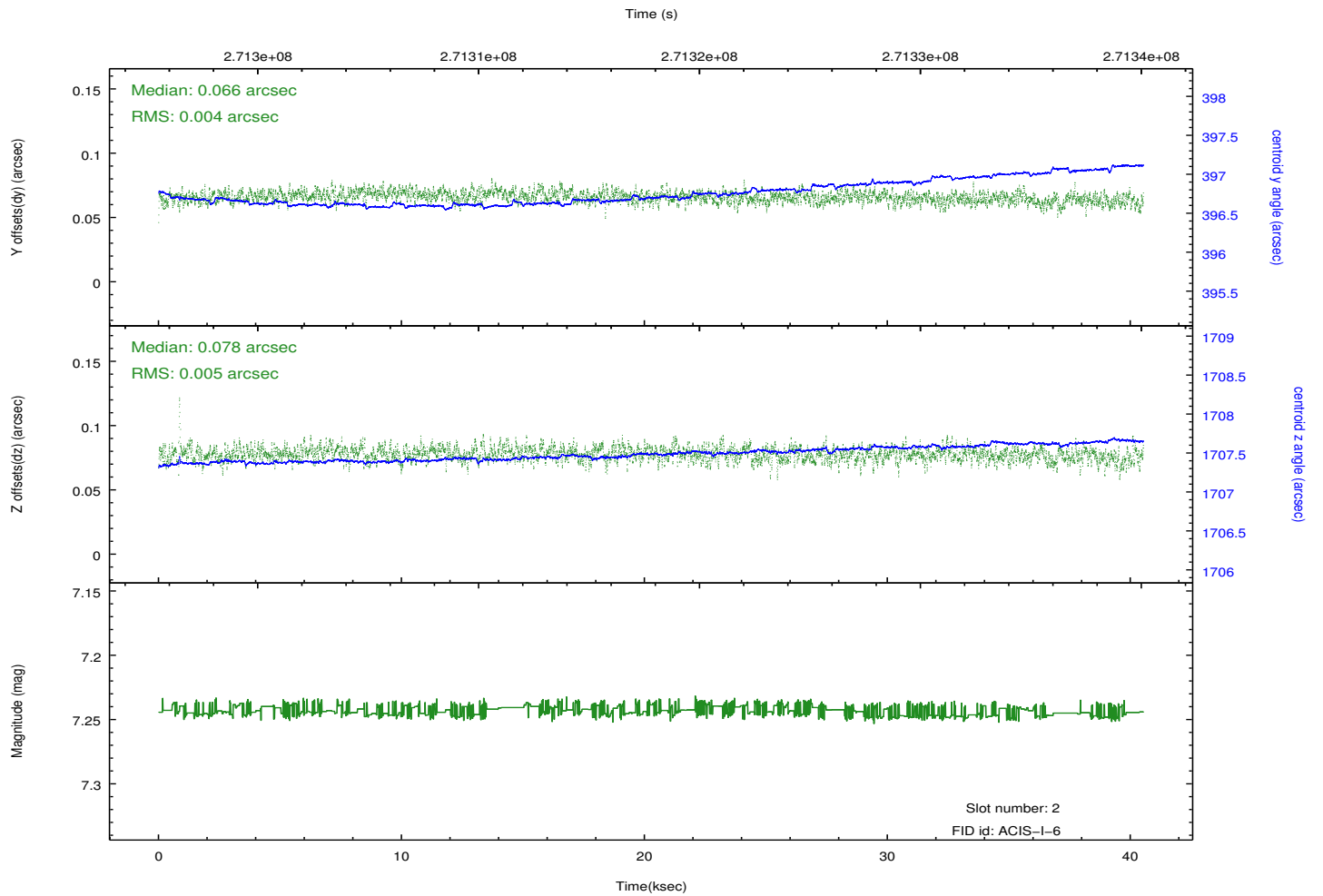
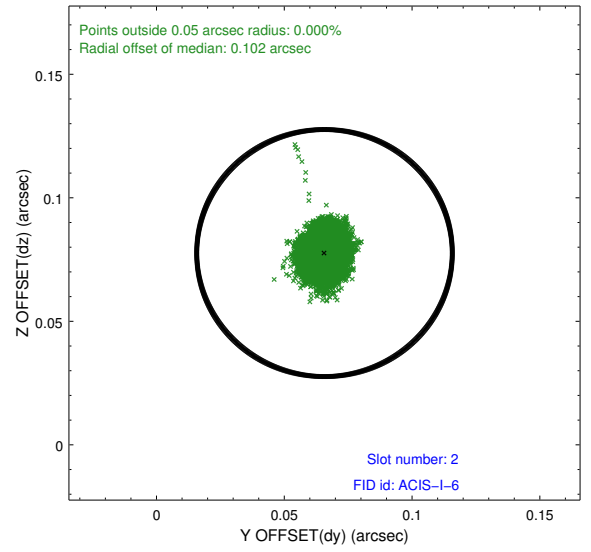
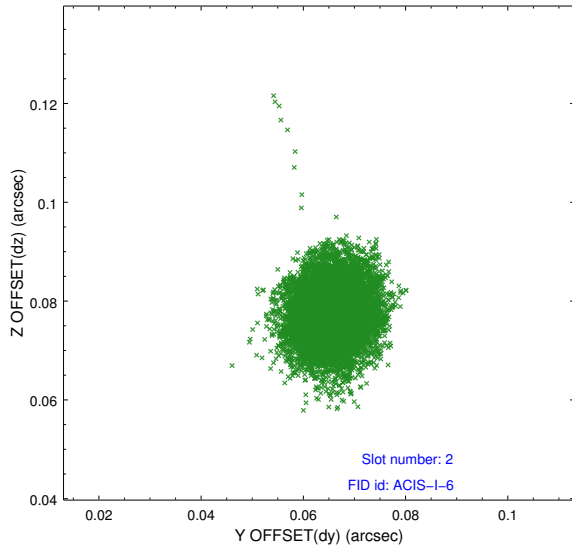
2.5.1 Slot 0



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)	2012.05.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.9422359

A.2 Comments

A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 6 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:
(275.43491, -16.31709), (275.43756, -16.29953), (275.36847, -16.28990), (275.34752, -16.30491)