

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7064 - L2 Version 2
Chandra X-Ray Center

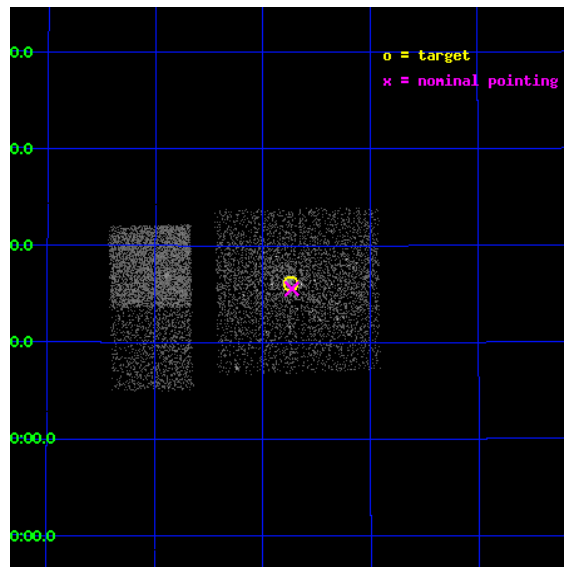
L2 Processing Date : Apr 14 2012

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1 Front

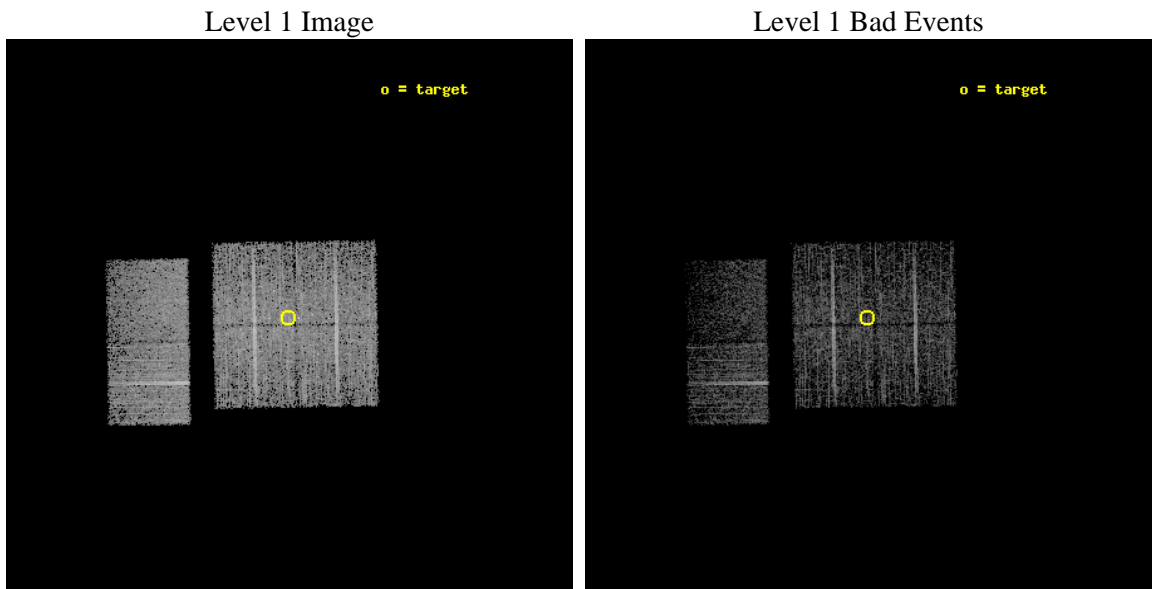
seq_num	600502	Sequence number
obs_id	7064	Observation id
title	Black Hole X-ray Nova in M31	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31-Center	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar]
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.682356077693	Nominal RA [deg]
dec_nom	41.259211404795	Nominal Dec [deg]
roll_nom	269.01998210274	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5533.7419981956	Sum of GTIs [s]
livetime	871.14447307978	Livetime [s]
ontime0	5533.6188980937	Sum of GTIs [s]
ontime1	5533.659918189	Sum of GTIs [s]
ontime2	5533.7009781003	Sum of GTIs [s]
ontime3	5533.7419981956	Sum of GTIs [s]
ontime6	5533.8240782022	Sum of GTIs [s]
ontime7	5533.7830381989	Sum of GTIs [s]
l2events	14168	Number of level 2 events



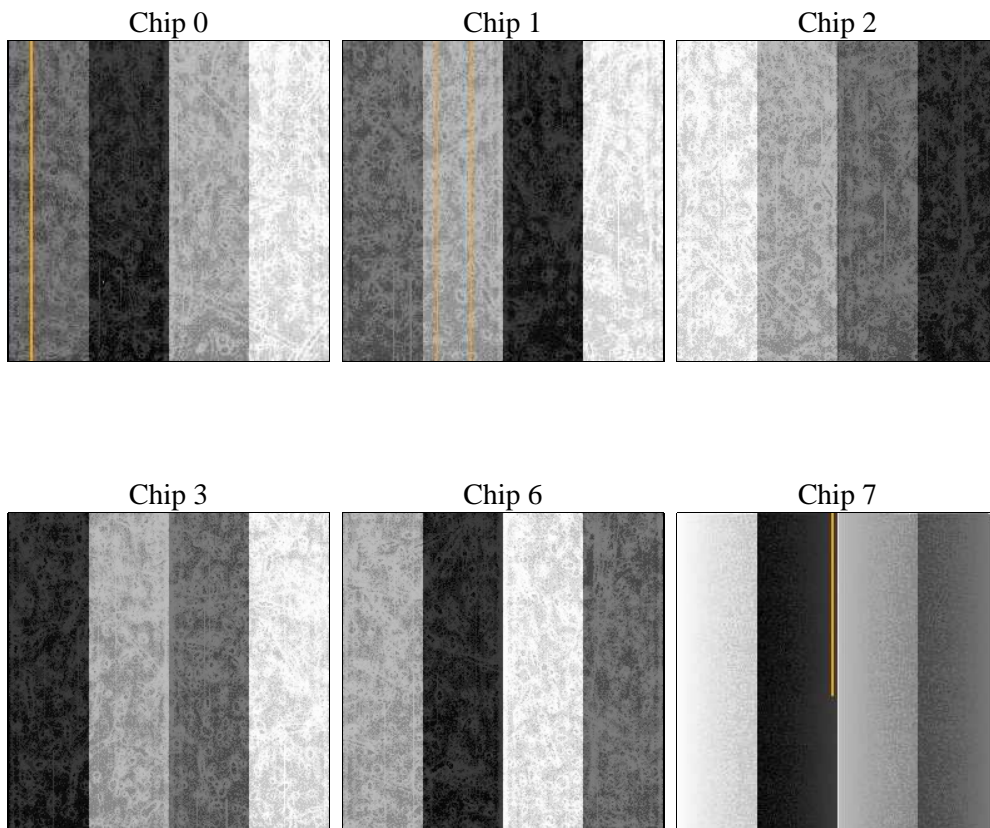
2 OBI Primary

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28951.721000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	5533.7419981956	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	5533.6188980937	Sum of GTIs [s]
date	2012-04-14T17:45:08	Date and time of file creation	ontime1	5533.659918189	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5533.7009781003	Sum of GTIs [s]
			ontime3	5533.7419981956	Sum of GTIs [s]
			ontime6	5533.8240782022	Sum of GTIs [s]
			ontime7	5533.7830381989	Sum of GTIs [s]
			l1events	134145	Number of level 1 events

2.1.4 Events

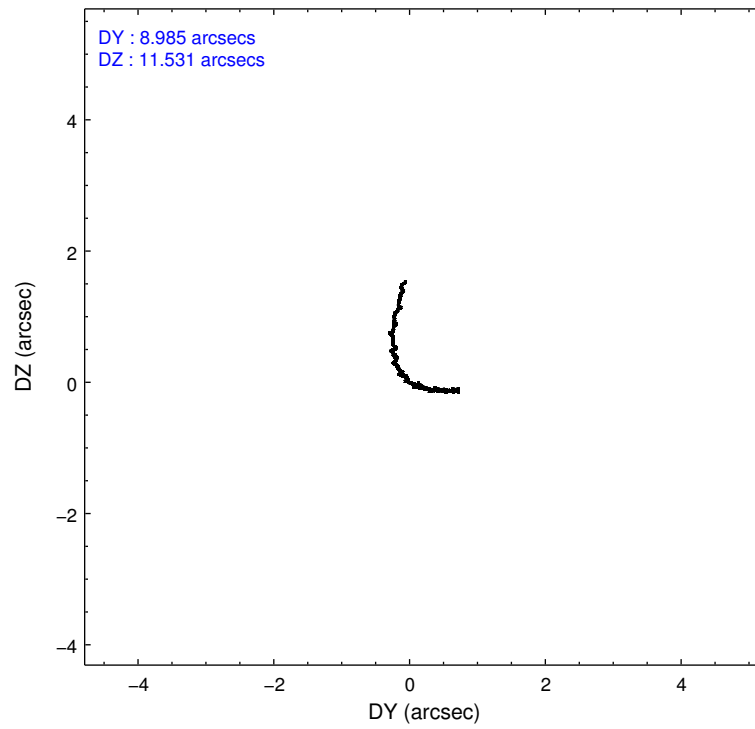
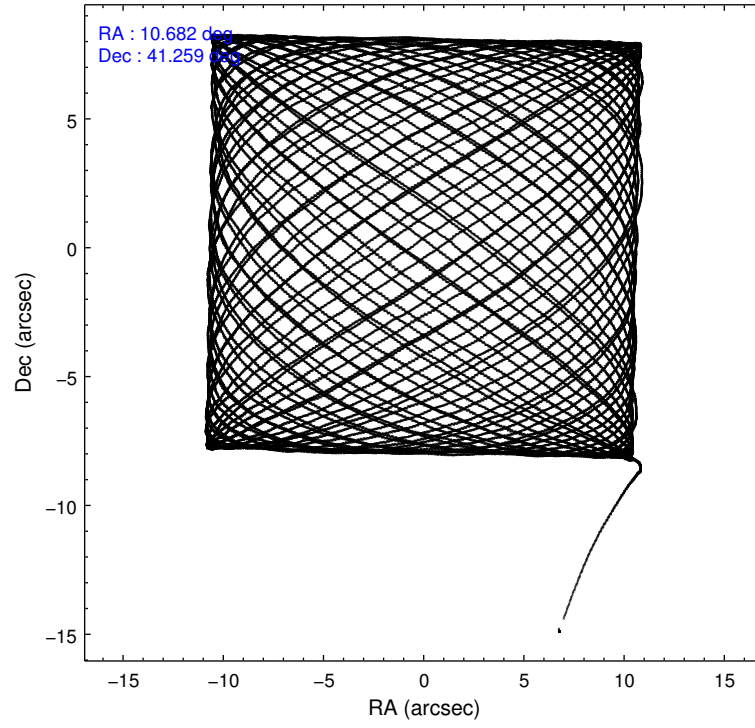
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	22587	21358	23809	23448	24459	18484
rejected events	20600	18658	21895	20853	22748	12908
rejected %	91%	87%	91%	88%	93%	69%

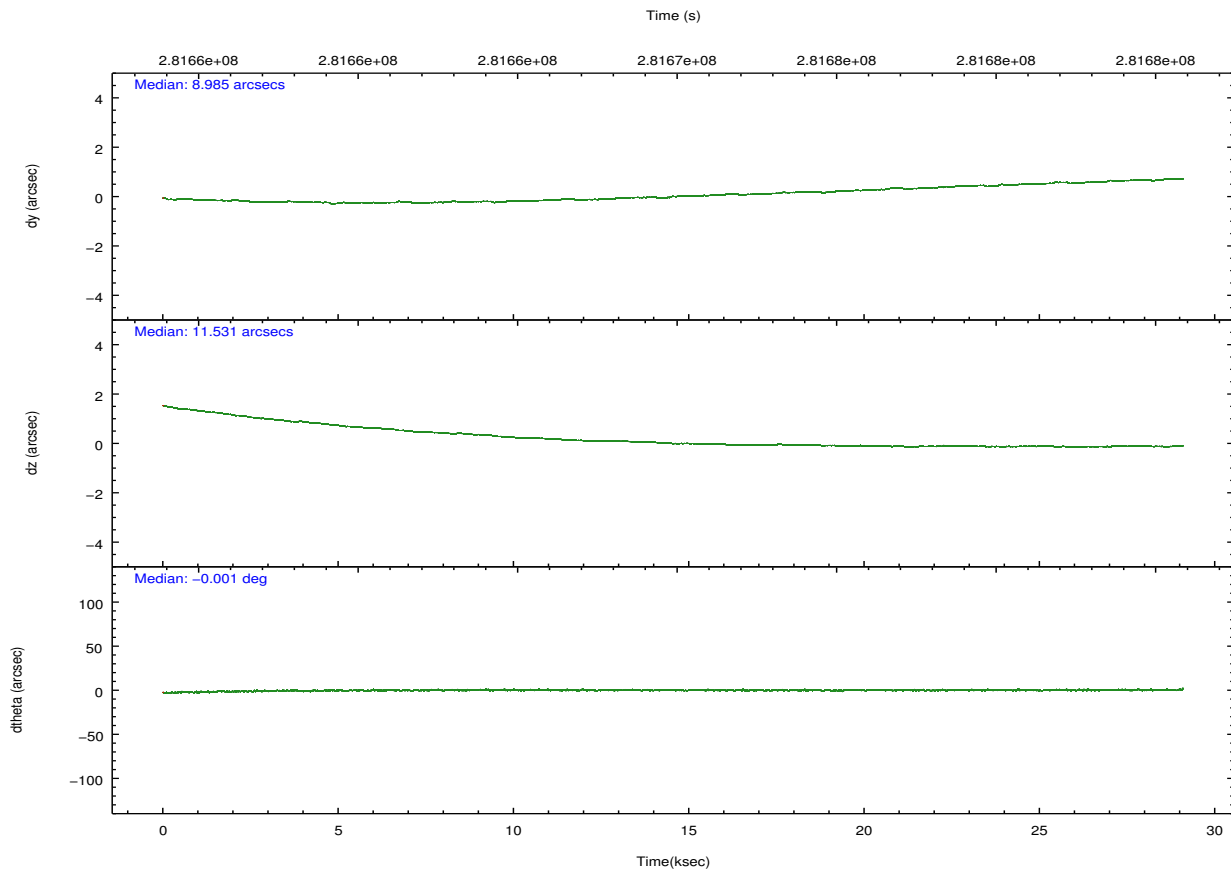
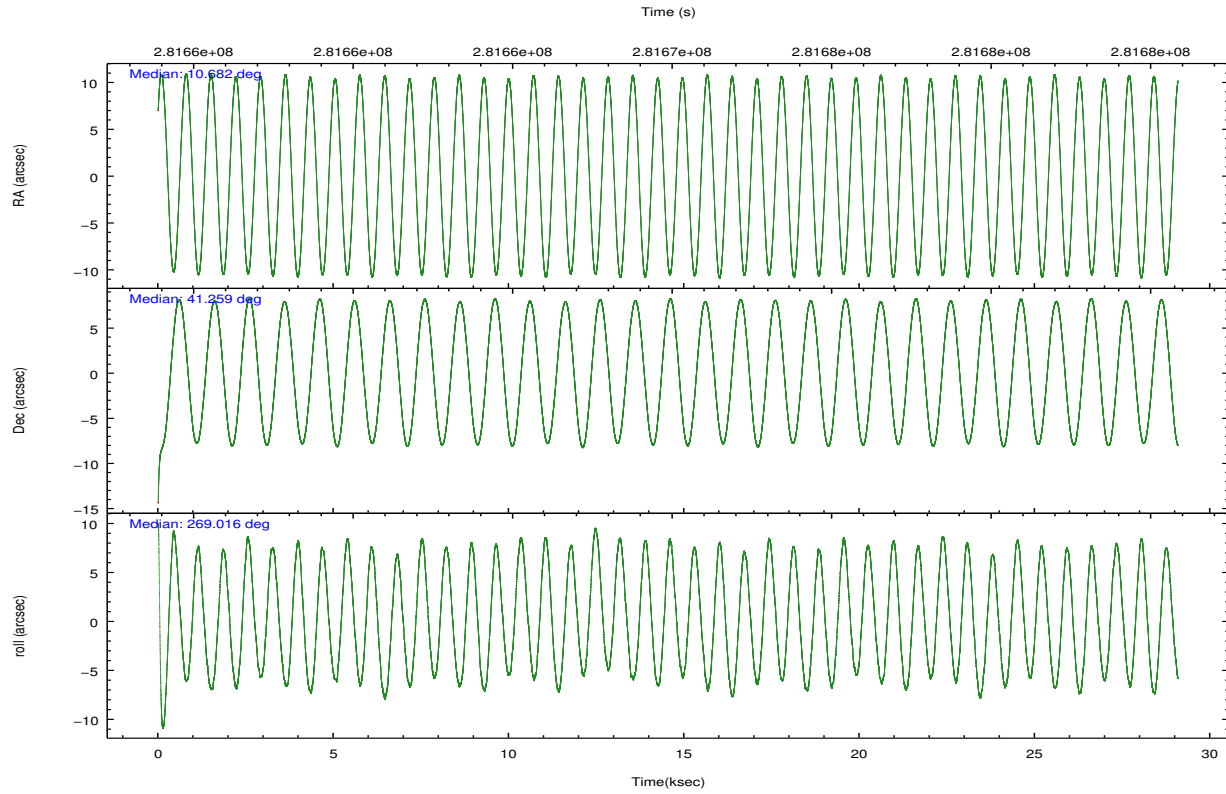
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	724	1221	753	1272	395	567
	3%	5%	3%	5%	1%	3%
grade 1 events	3	17	12	19	5	22
	0%	0%	0%	0%	0%	0%
grade 2 events	445	539	425	526	449	1303
	1%	2%	1%	2%	1%	7%
grade 3 events	284	296	239	241	248	582
	1%	1%	1%	1%	1%	3%
grade 4 events	251	305	269	239	274	503
	1%	1%	1%	1%	1%	2%
grade 5 events	626	680	619	758	788	1696
	2%	3%	2%	3%	3%	9%
grade 6 events	339	400	302	389	408	2830
	1%	1%	1%	1%	1%	15%
grade 7 events	19915	17900	21190	20004	21892	10981
	88%	83%	88%	85%	89%	59%

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	10.664540	10.6823560776929	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.283129	41.25921140479527	Alternating exposures requested	Y	Y
[deg] Pointing Roll	268.823042	269.0199821027438	[s] Primary exposure time	0.600000	0.6
[s] Window start time (MET)	281836865.184000	281836865.184000	[s] Secondary exposure time	0.000000	3.2
[s] Window stop time (MET)	282441665.184000	282441665.184000	Duty cycle	5	5
[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)	281655472.184000	281653862.99421			
Observation start date	2006-12-04T21:36:47	2006-12-04T21:11:02			
[s] Observation end time (MET)	281684424.184000	281684658.60817			
Observation end date	2006-12-05T05:39:19	2006-12-05T05:44:18			
Read mode	TIMED	TIMED			

2.3 Aspect



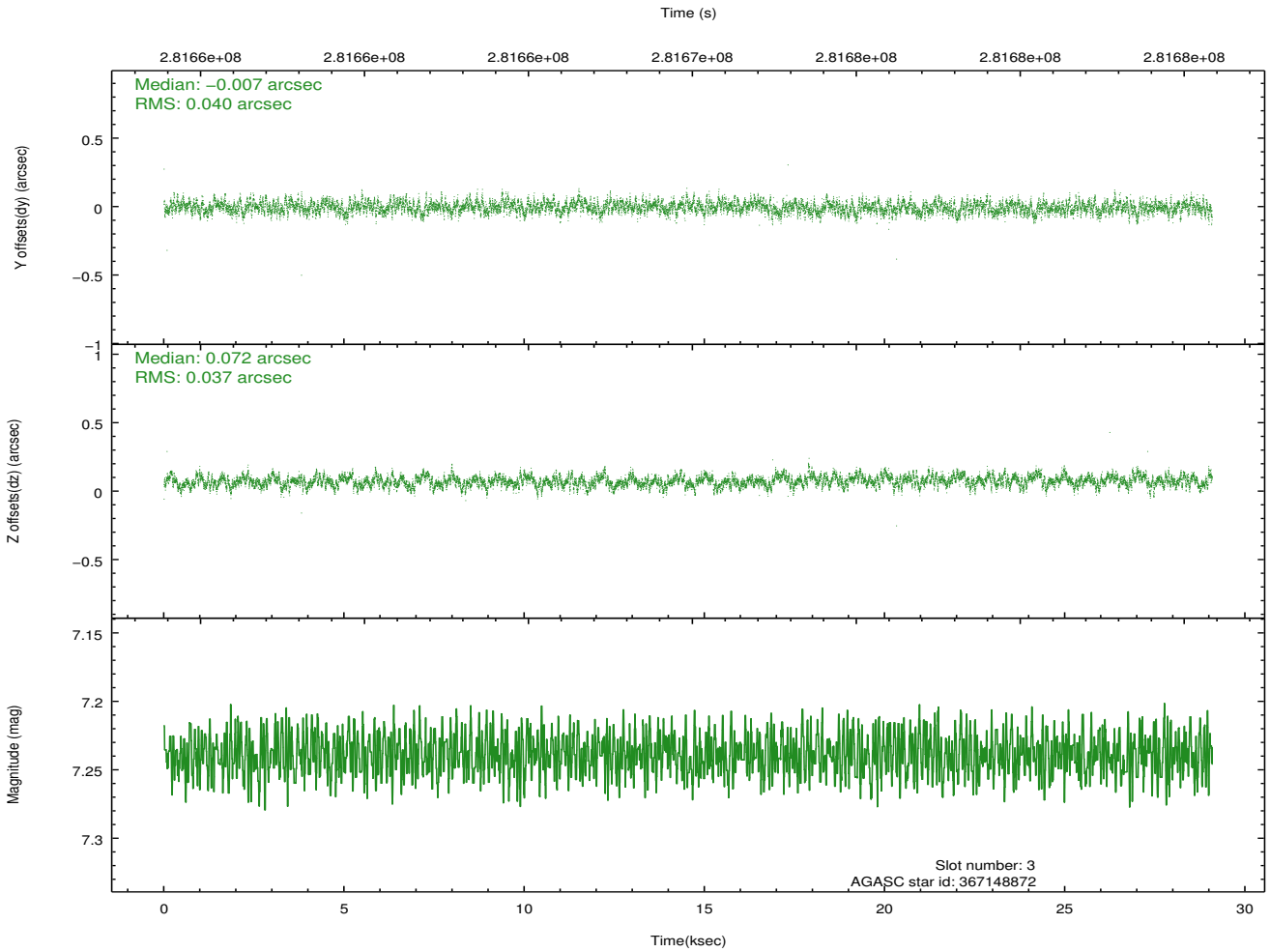
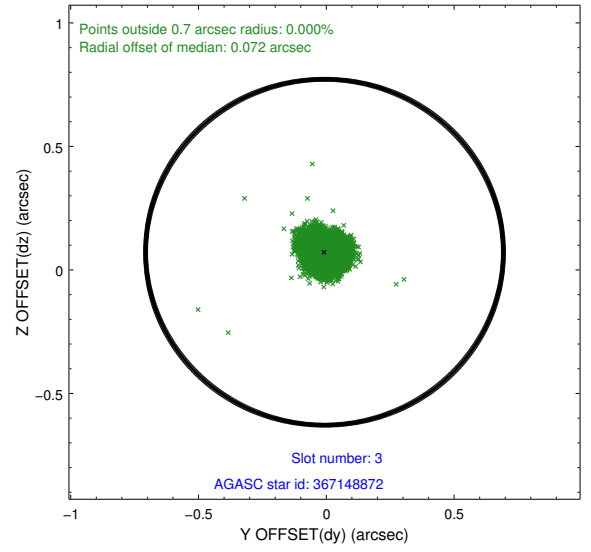
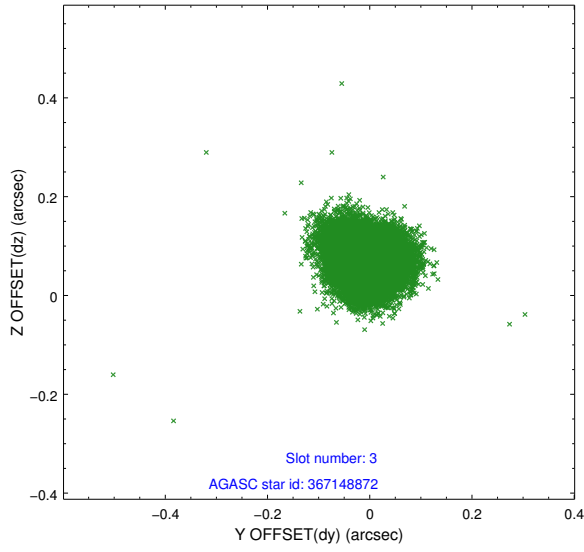


Slot Statistics

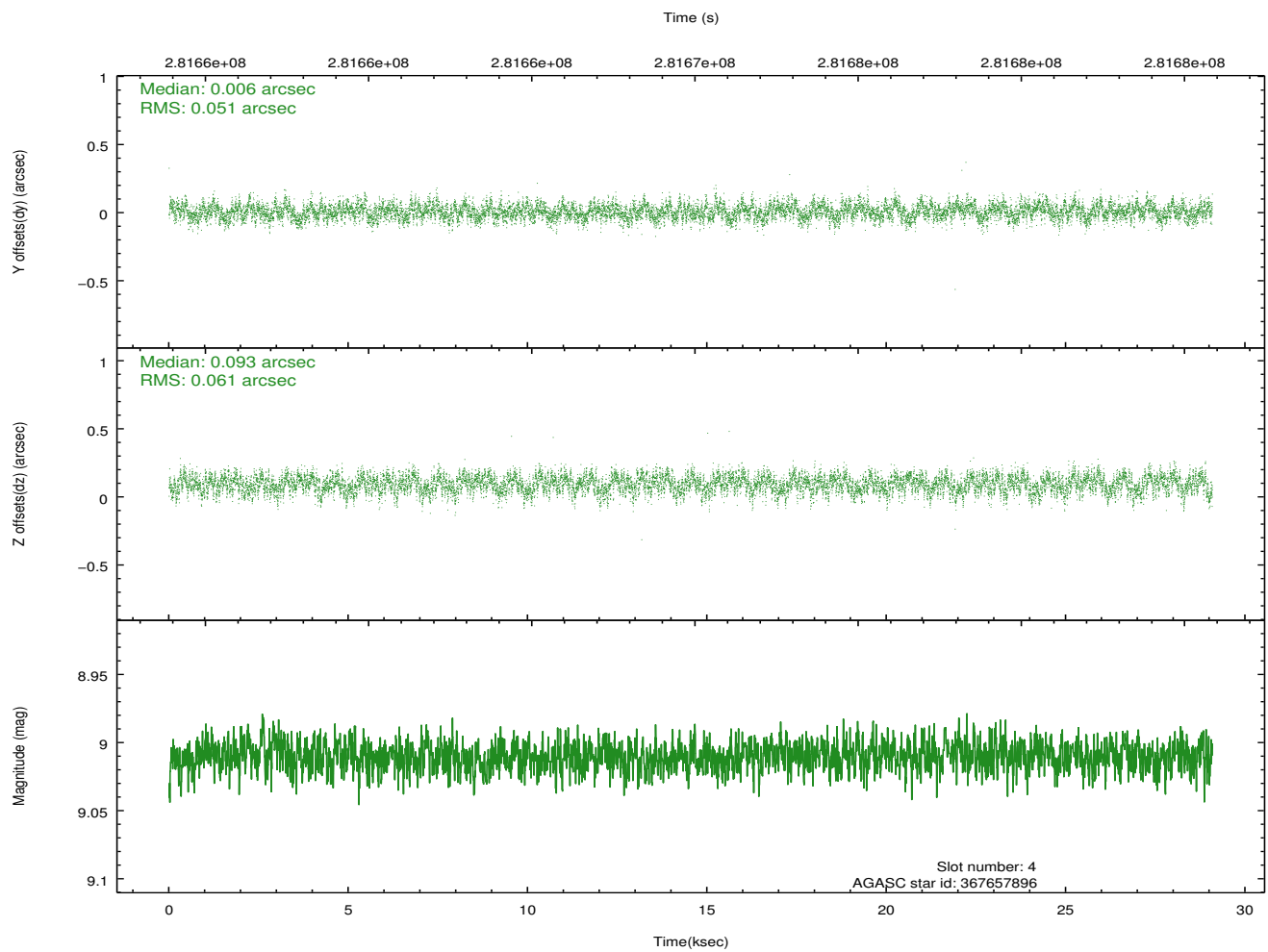
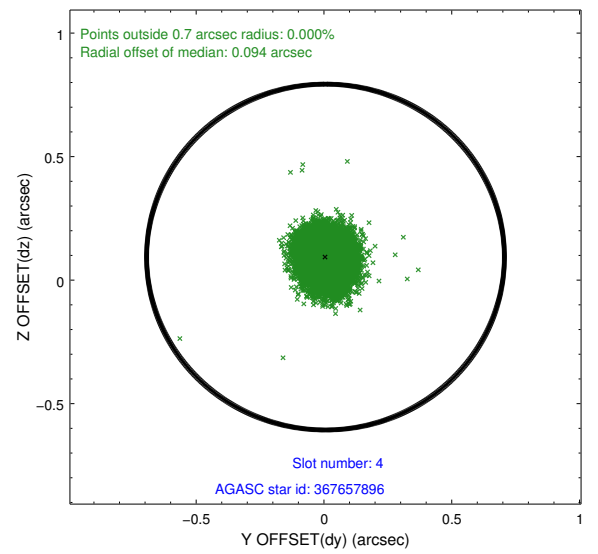
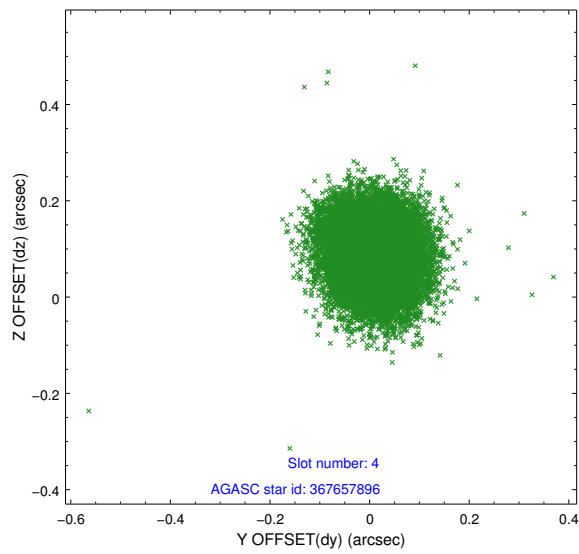
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	7093	0.070	-0.053	0.014	0.031	0.000000	0.000000	930.60	-835.36
1	FID	ACIS-I-5	7.23	7094	-0.221	0.066	0.009	0.015	0.000000	0.000000	-1817.72	1062.26
2	FID	ACIS-I-6	7.25	7093	0.060	0.059	0.012	0.029	0.000000	0.000000	396.10	1706.81
3	GUIDE	367148872	7.24	14188	-0.007	0.072	0.058	0.092	10.505940	40.688258	2150.08	-388.77
4	GUIDE	367657896	9.01	14170	0.006	0.093	0.085	0.135	11.197765	41.313576	-143.52	1439.23
5	GUIDE	367674552	8.85	14180	-0.016	-0.014	0.064	0.103	11.016238	41.570845	-1056.93	925.82
6	GUIDE	367146616	8.86	14182	-0.077	-0.114	0.085	0.136	11.418645	41.190163	283.55	2049.15
7	GUIDE	367138920	7.73	14185	0.096	-0.034	0.064	0.101	11.513485	40.808909	1648.52	2348.44

2.4 Star Slots

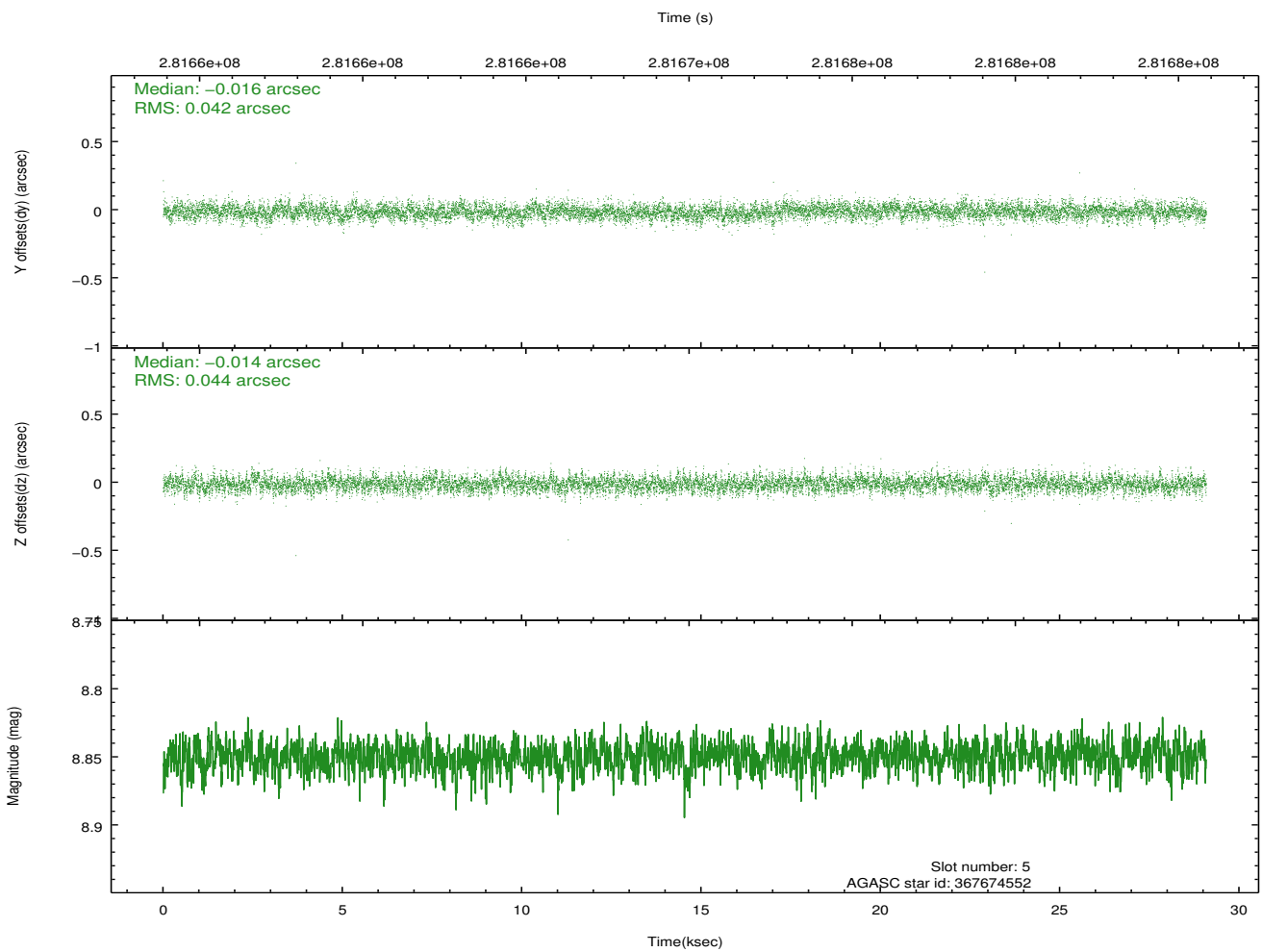
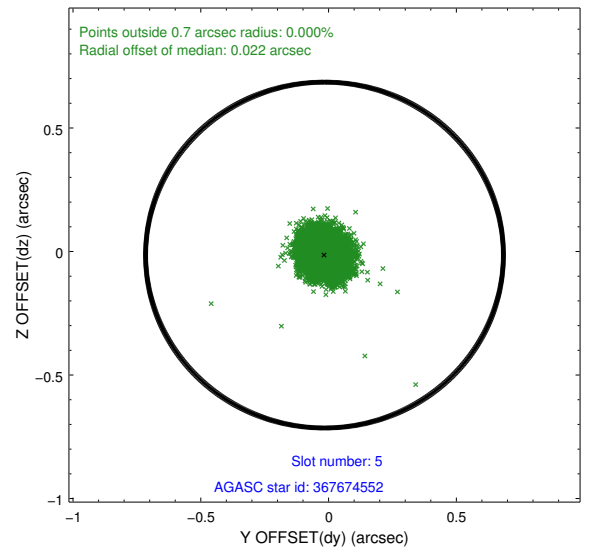
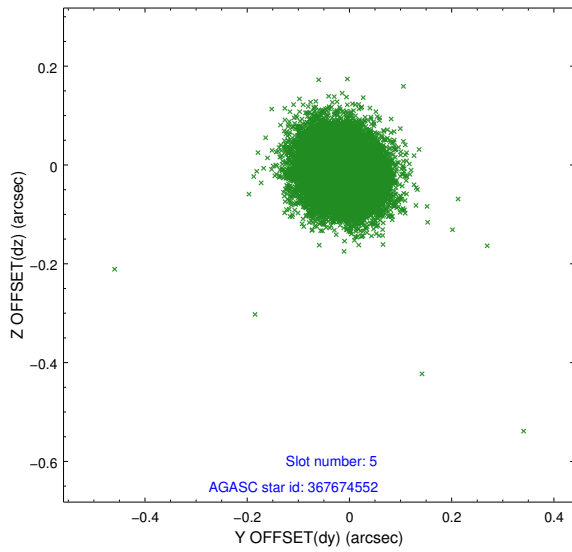
2.4.1 Slot 3



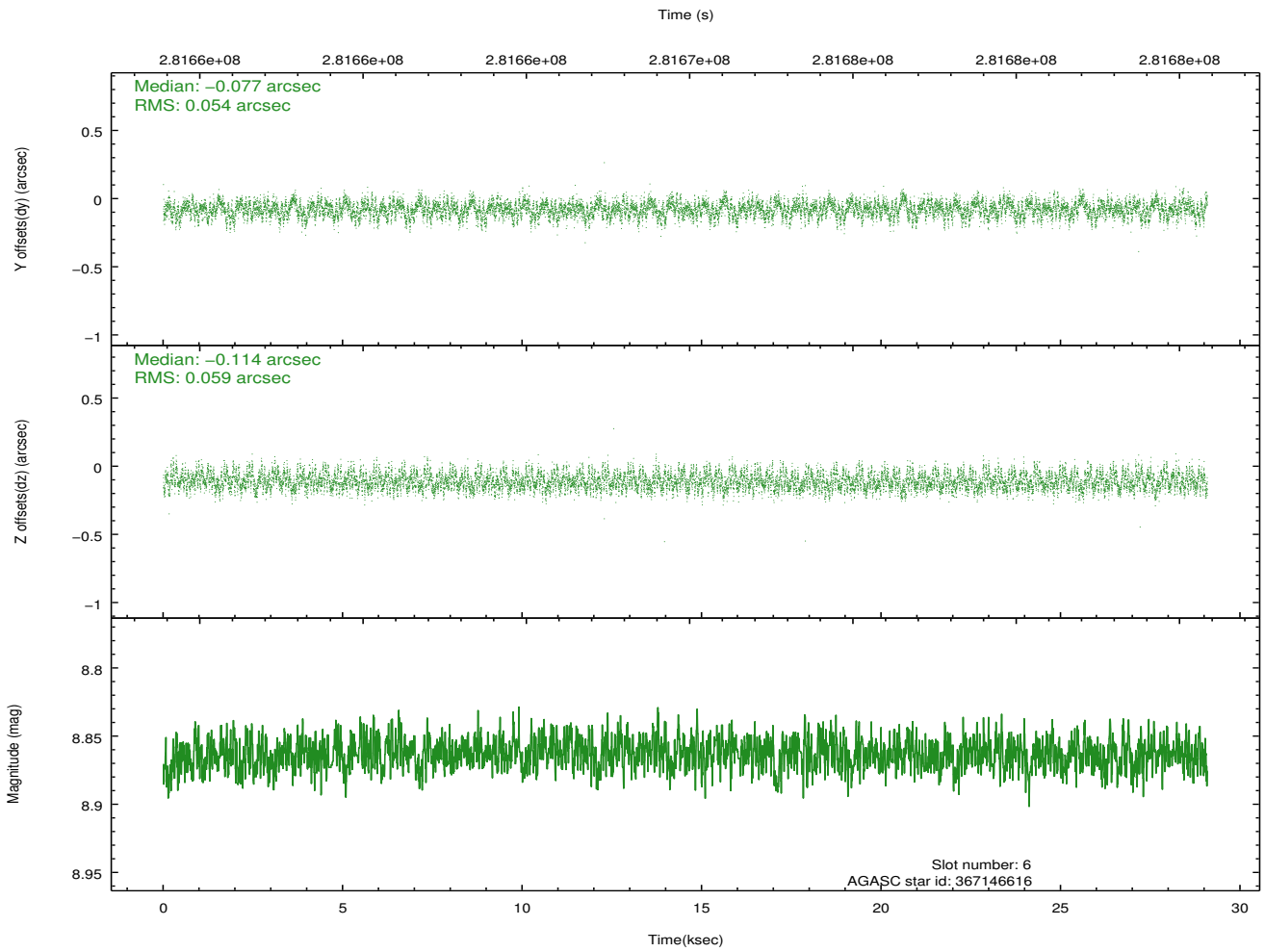
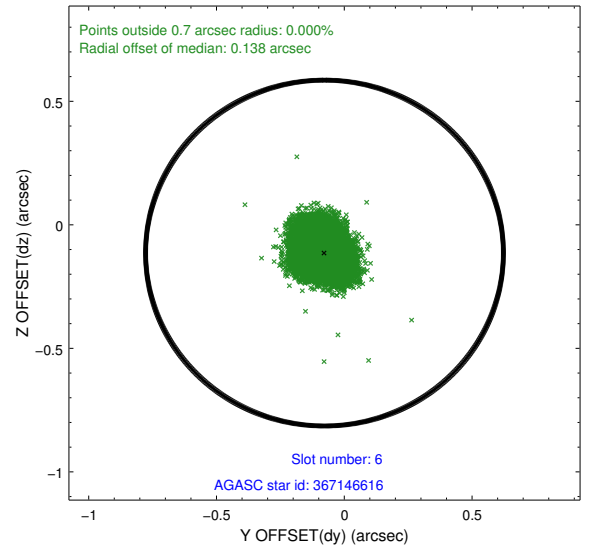
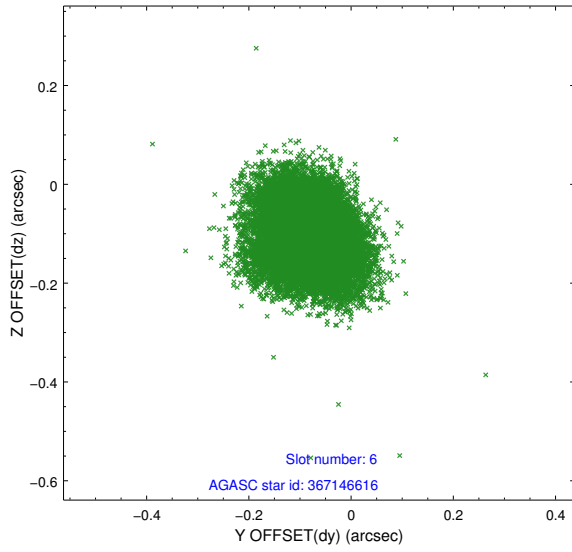
2.4.2 Slot 4



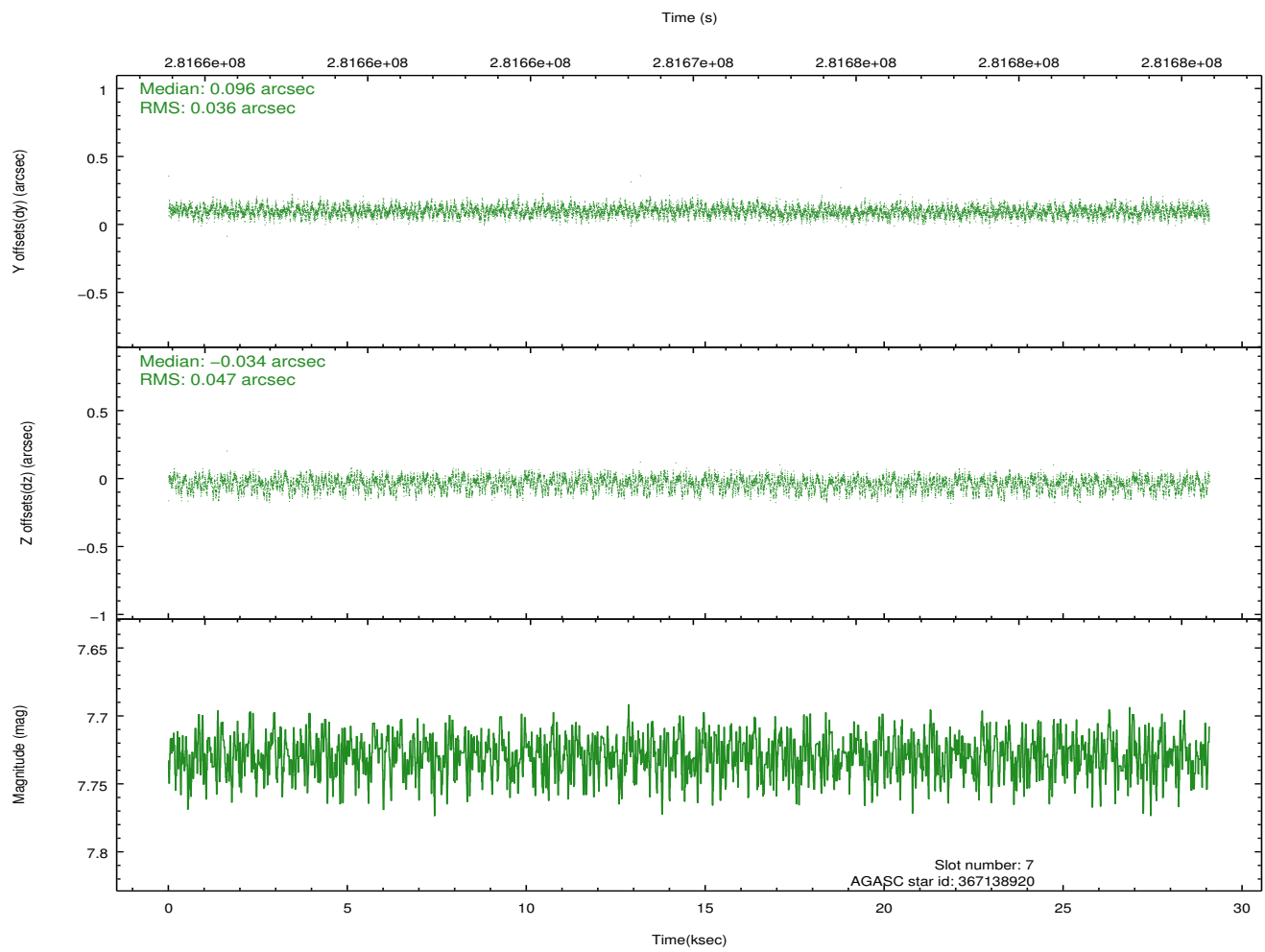
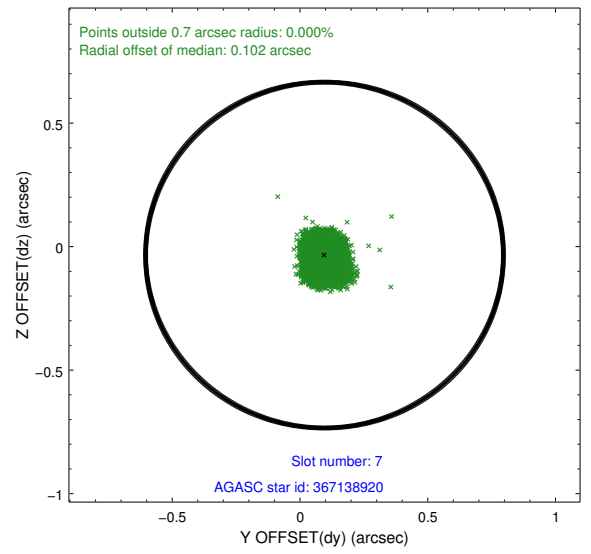
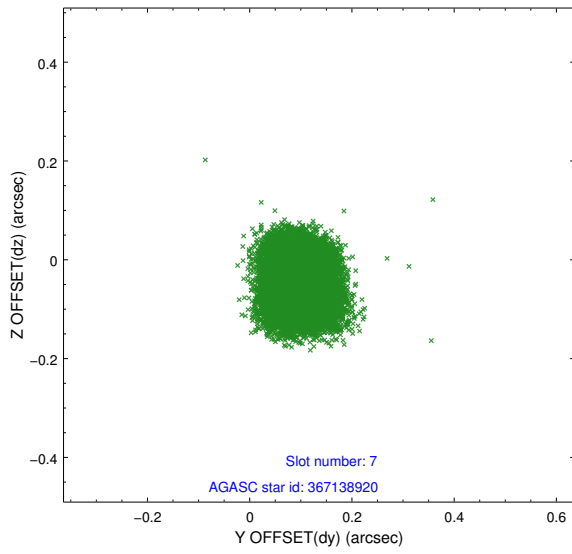
2.4.3 Slot 5



2.4.4 Slot 6

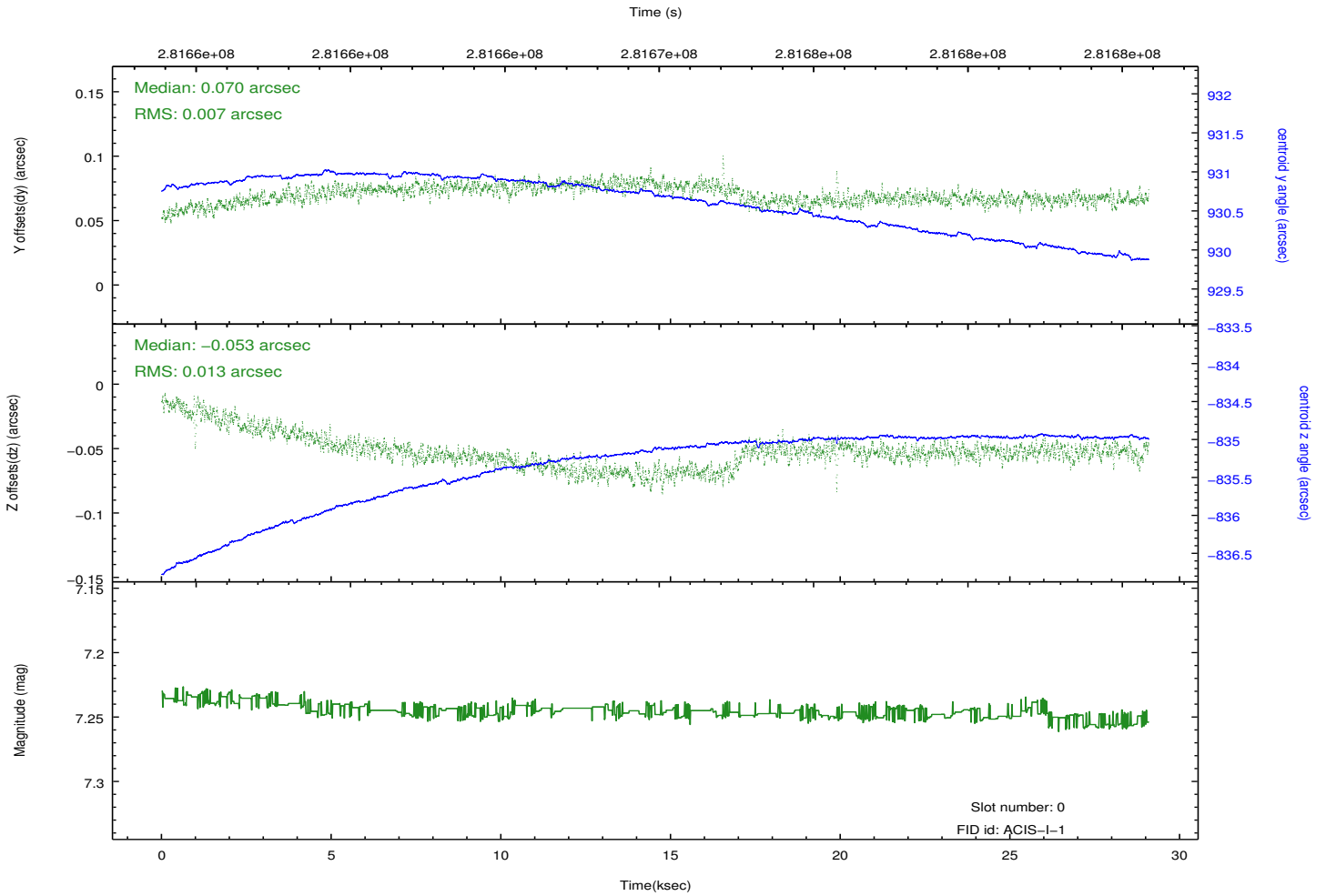
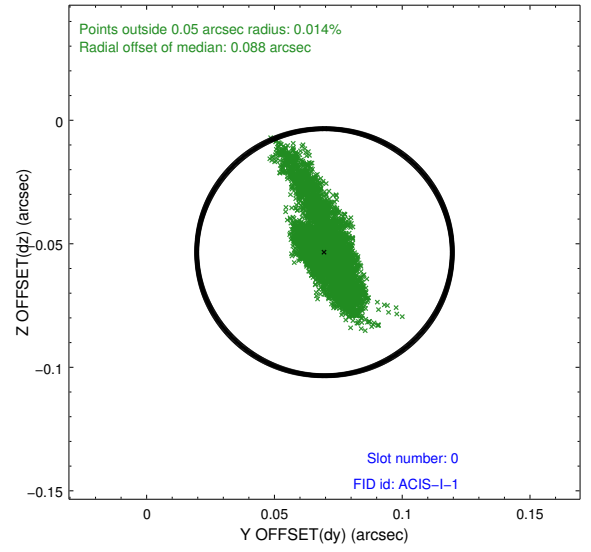
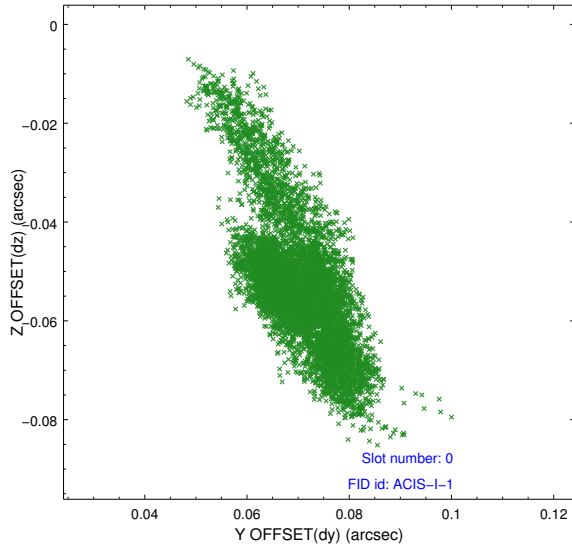


2.4.5 Slot 7

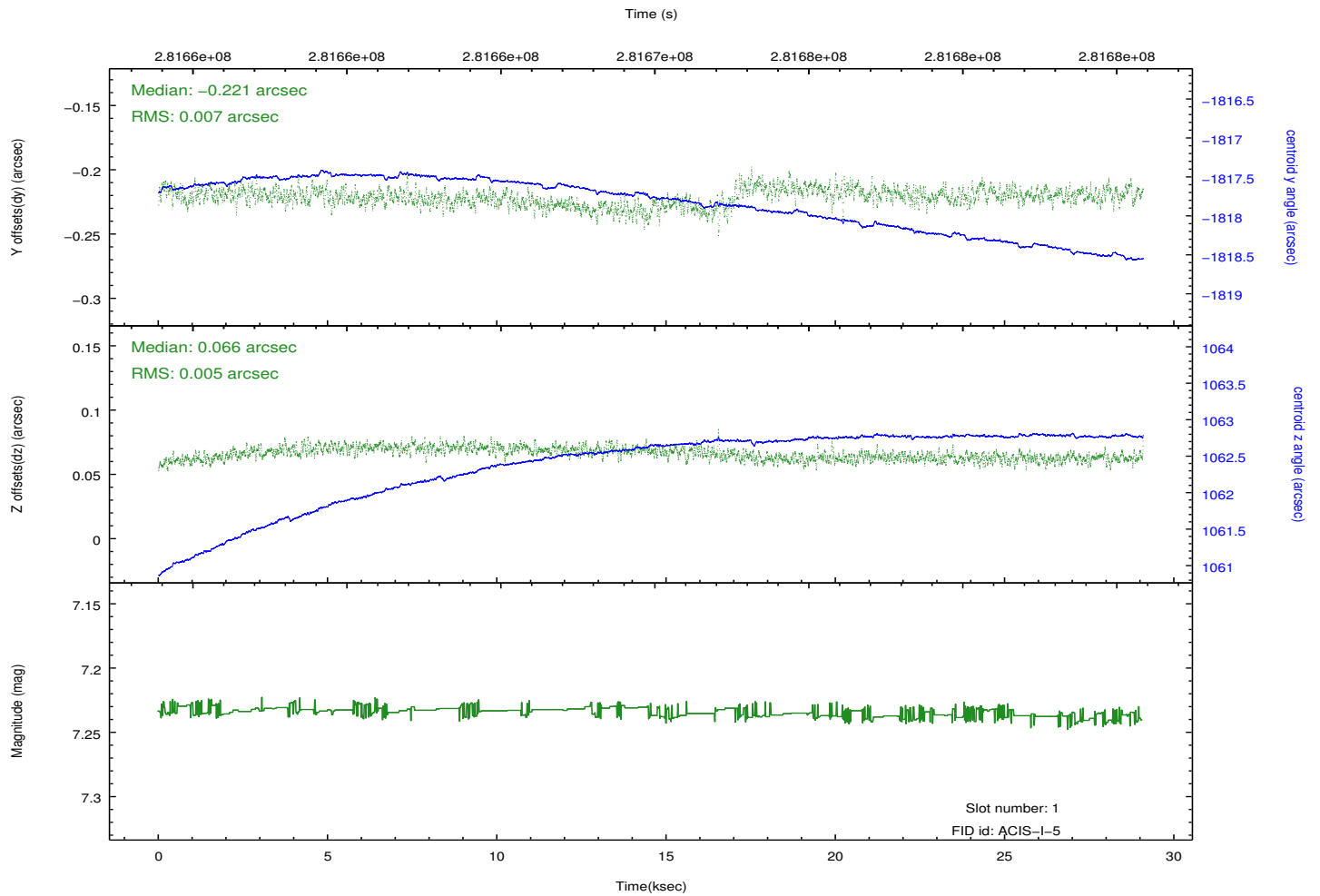
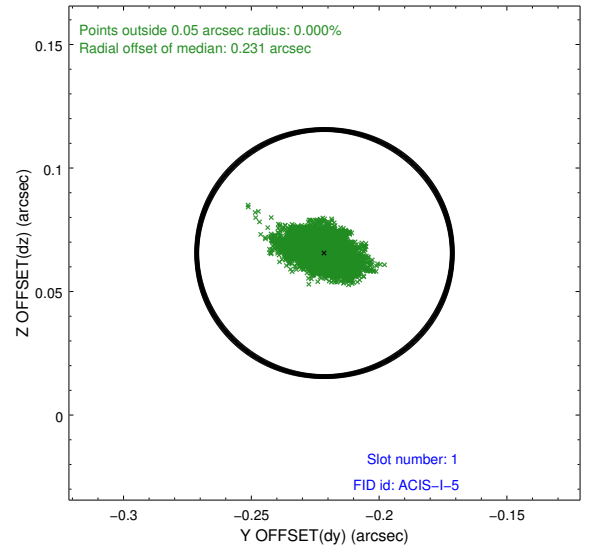
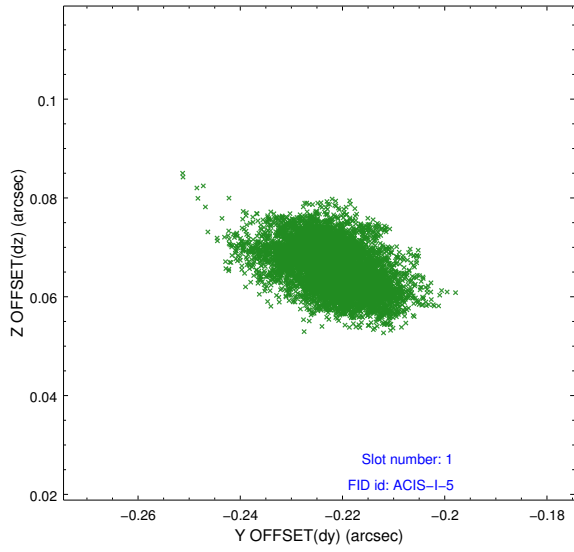


2.5 FID Slots

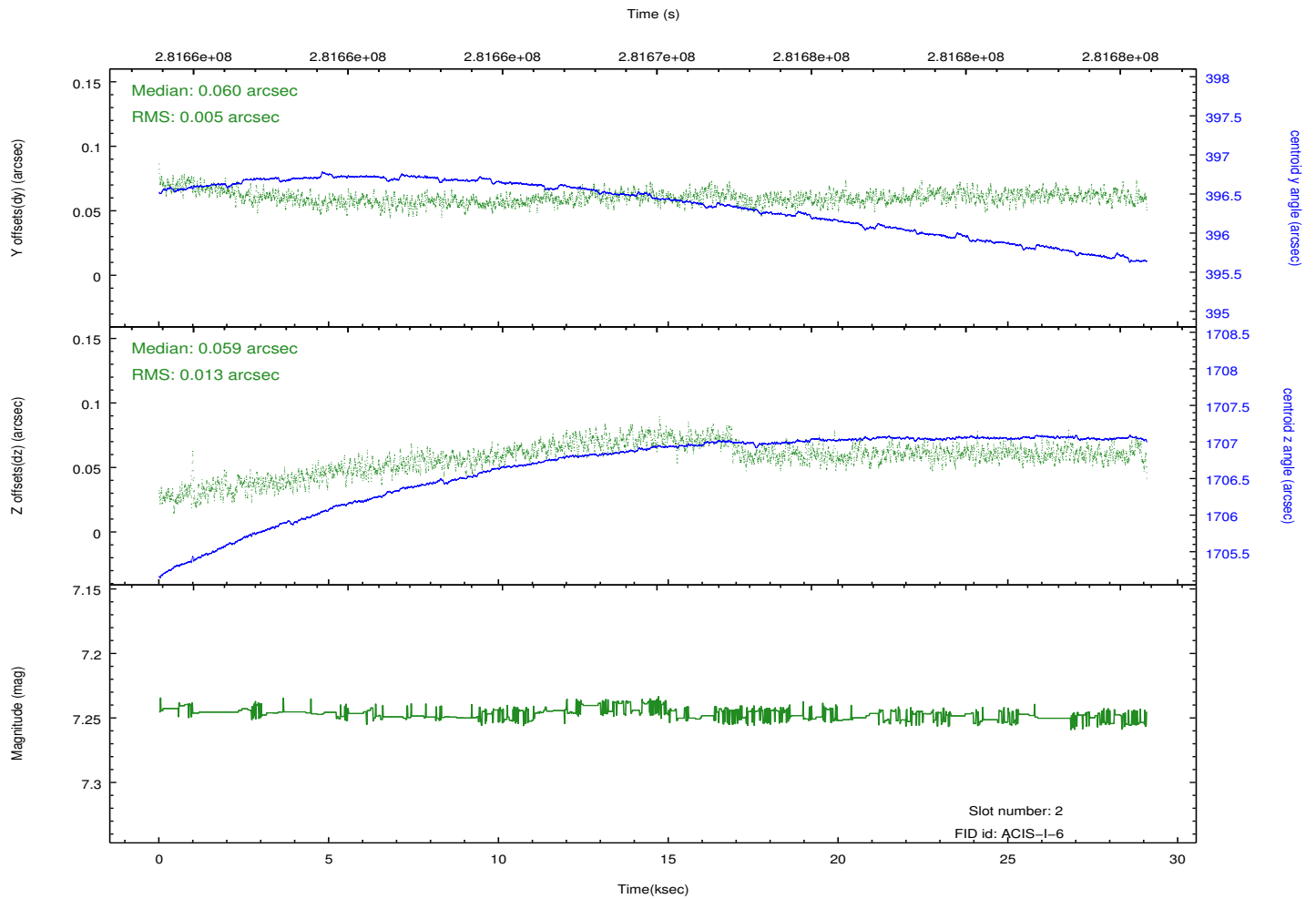
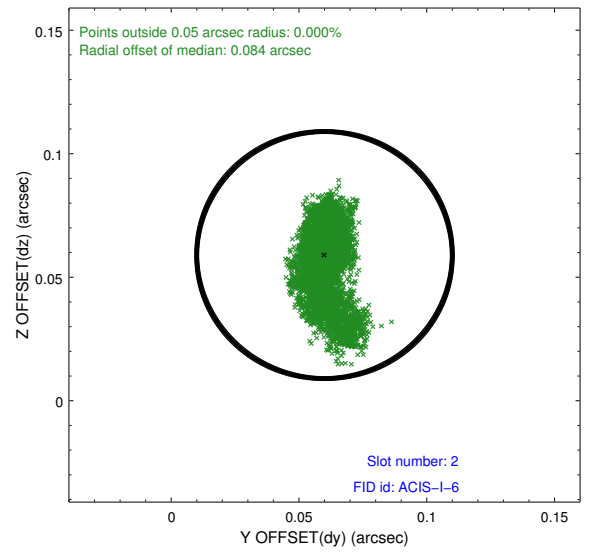
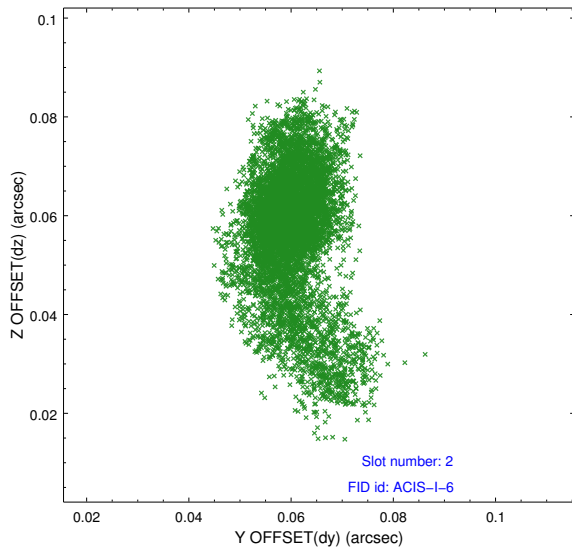
2.5.1 Slot 0



2.5.2 Slot 1



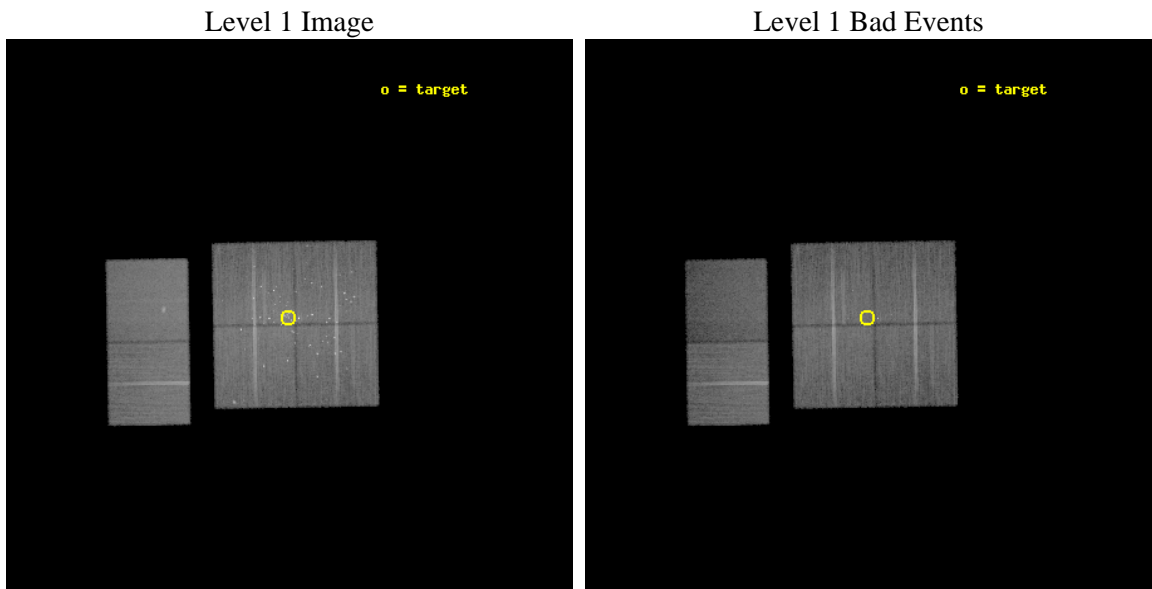
2.5.3 Slot 2



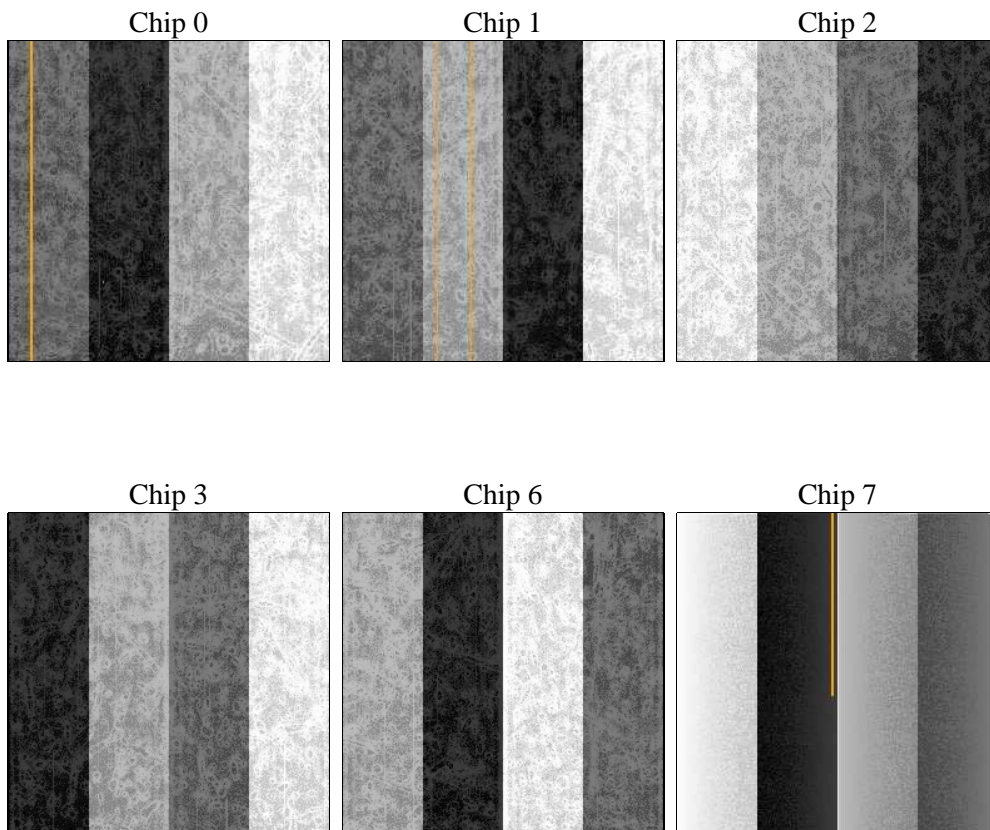
3 OBI Secondary

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28951.721000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	23536.350470126	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	23539.590913236	Sum of GTIs [s]
date	2012-04-14T17:48:00	Date and time of file creation	ontime1	23536.349584281	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	23536.351094723	Sum of GTIs [s]
			ontime3	23536.350470126	Sum of GTIs [s]
			ontime6	23536.350548804	Sum of GTIs [s]
			ontime7	23539.591371715	Sum of GTIs [s]
			l1events	1221964	Number of level 1 events

3.1.4 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	186344	199299	209012	213023	202186	212100	grade 0 events	14273	22159	14768	27363	7094	9696
rejected events	159018	159693	181559	170878	182934	117491		7%	11%	7%	12%	3%	4%
rejected %	85%	80%	86%	80%	90%	55%	grade 1 events	170	756	206	382	97	256
								0%	0%	0%	0%	0%	0%
							grade 2 events	5259	7088	5210	6200	4493	19576
								2%	3%	2%	2%	2%	9%
							grade 3 events	2424	3122	2275	2662	2179	9151
								1%	1%	1%	1%	1%	4%
							grade 4 events	2309	2980	2350	2639	2126	9082
								1%	1%	1%	1%	1%	4%
							grade 5 events	6316	7610	6029	7906	7675	22059
								3%	3%	2%	3%	3%	10%
							grade 6 events	3825	5088	3563	4050	4013	50415
								2%	2%	1%	1%	1%	23%
							grade 7 events	151768	150496	174611	161821	174509	91865
								81%	75%	83%	75%	86%	43%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.04.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.0703924

A.2 Comments

Time constraint not met: Start time requested 2006-12-07T00:00:01 through 2006-12-14T00:00:01 Actual start time 2006-12-04T21:11:02 Due to thermal considerations of the spacecraft operations, it was not possible to schedule this observation during the requested time. The actual observation start time is as close as Mission Planning could schedule the observation to the requested time.