

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11841 - L2 Version 2
Chandra X-Ray Center

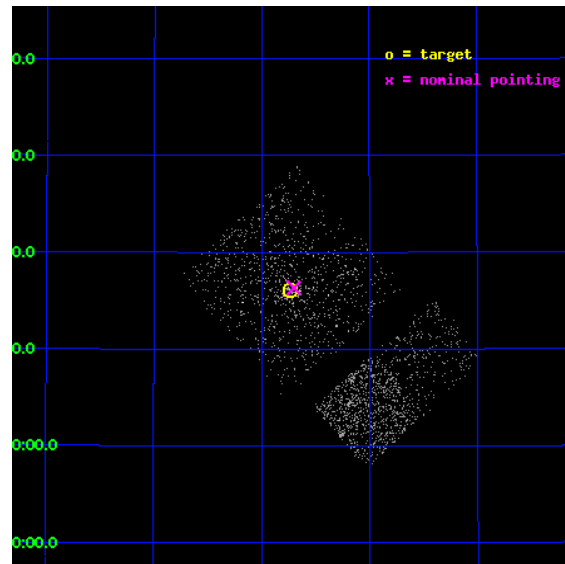
L2 Processing Date : Jul 2 2012

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1 Front

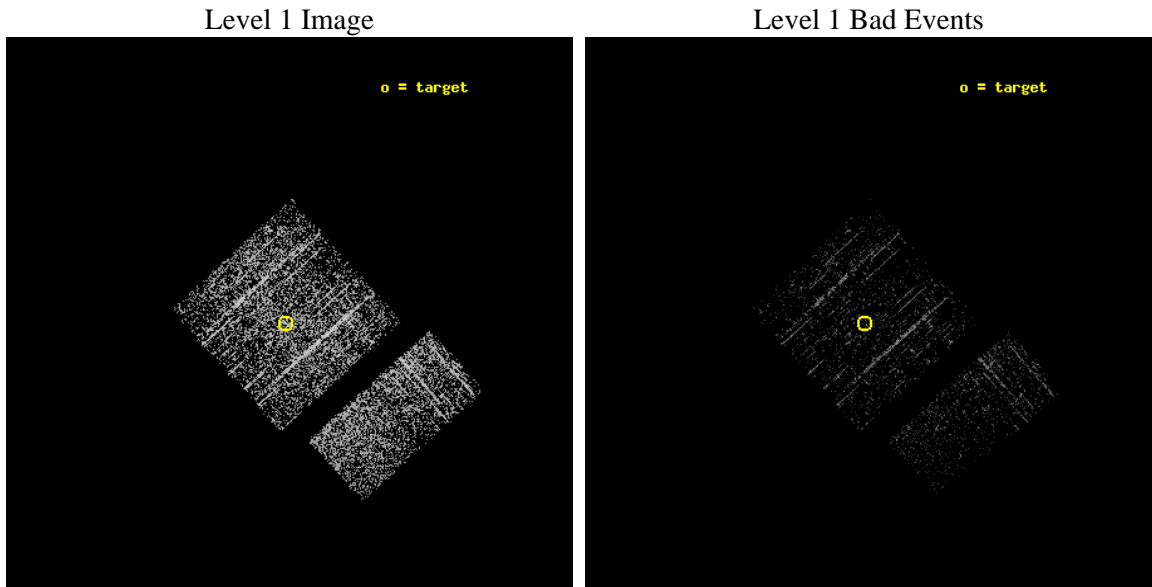
seq_num	600909	Sequence number
obs_id	11841	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[primary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.675285116754	Nominal RA [deg]
dec_nom	41.272310082559	Nominal Dec [deg]
roll_nom	137.84462789832	Nominal Roll [deg]
revision	2	Processing version of data
ontime	937.73787379265	Sum of GTIs [s]
livetime	147.62256104792	Livetime [s]
ontime0	937.73786383867	Sum of GTIs [s]
ontime1	937.73786383867	Sum of GTIs [s]
ontime2	937.73786383867	Sum of GTIs [s]
ontime3	937.73787379265	Sum of GTIs [s]
ontime6	937.73787379265	Sum of GTIs [s]
ontime7	937.73786383867	Sum of GTIs [s]
l2events	2461	Number of level 2 events



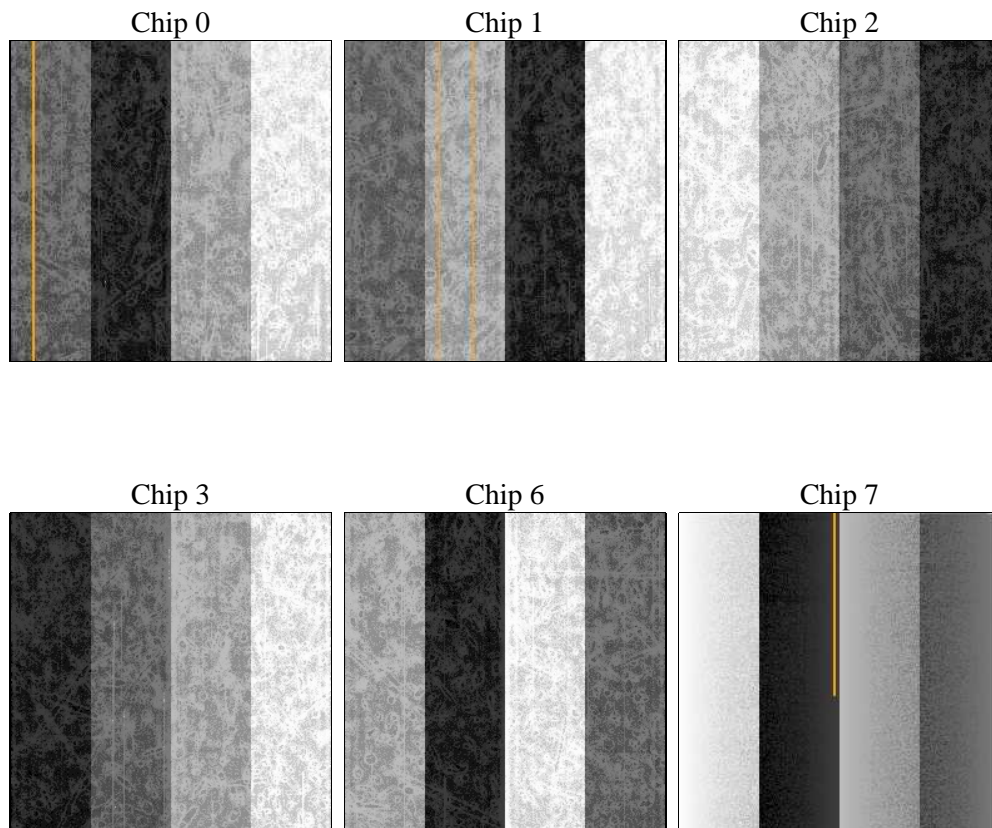
2 OBI Primary

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	937.73787379265	Sum of GTIs [s]
caldsver	4.5.0	 	ontime0	937.73786383867	Sum of GTIs [s]
date	2012-07-02T05:36:55	Date and time of file creation	ontime1	937.73786383867	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	937.73786383867	Sum of GTIs [s]
			ontime3	937.73787379265	Sum of GTIs [s]
			ontime6	937.73787379265	Sum of GTIs [s]
			ontime7	937.73786383867	Sum of GTIs [s]
			l1events	19723	Number of level 1 events

2.1.4 Events

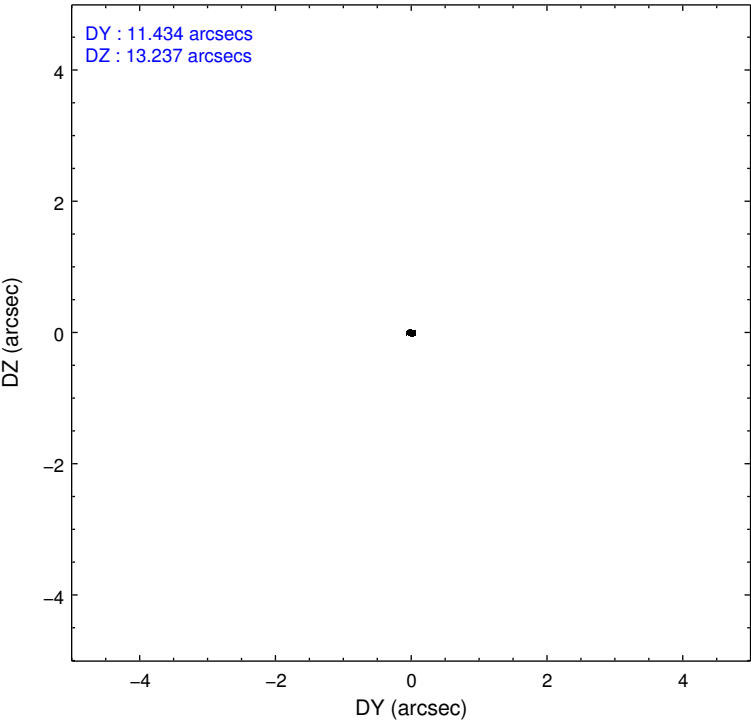
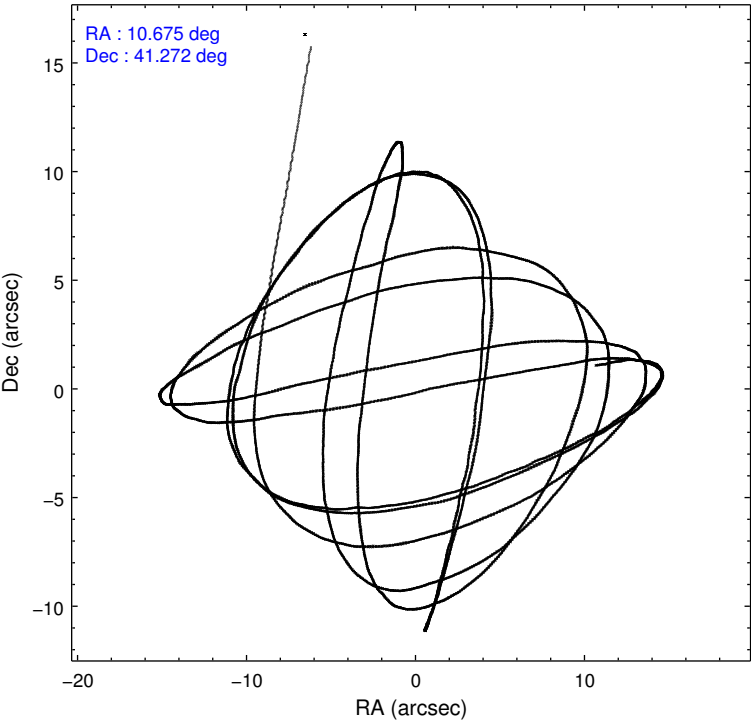
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	3022	3127	3646	3264	3578	3086
rejected events	2719	2721	3168	2881	3292	2097
rejected %	89%	87%	86%	88%	92%	67%

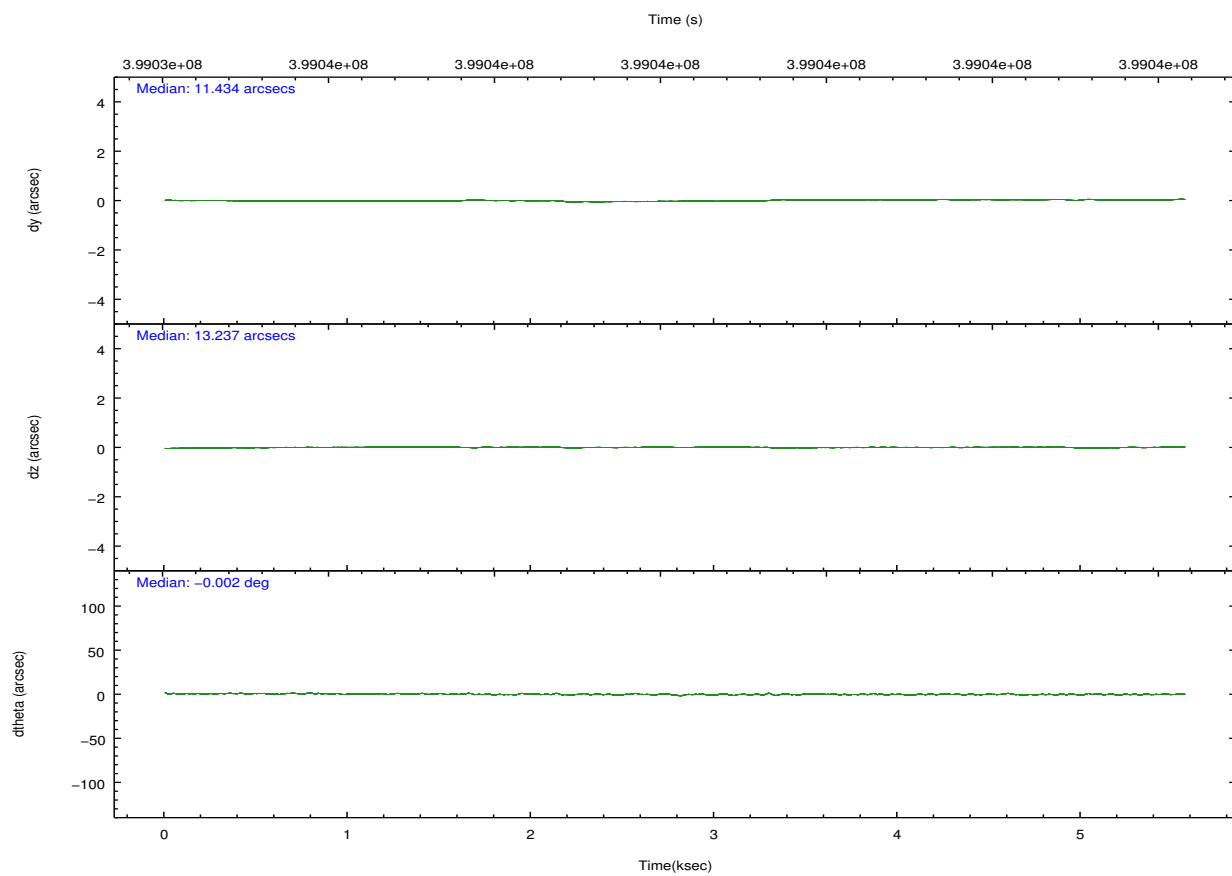
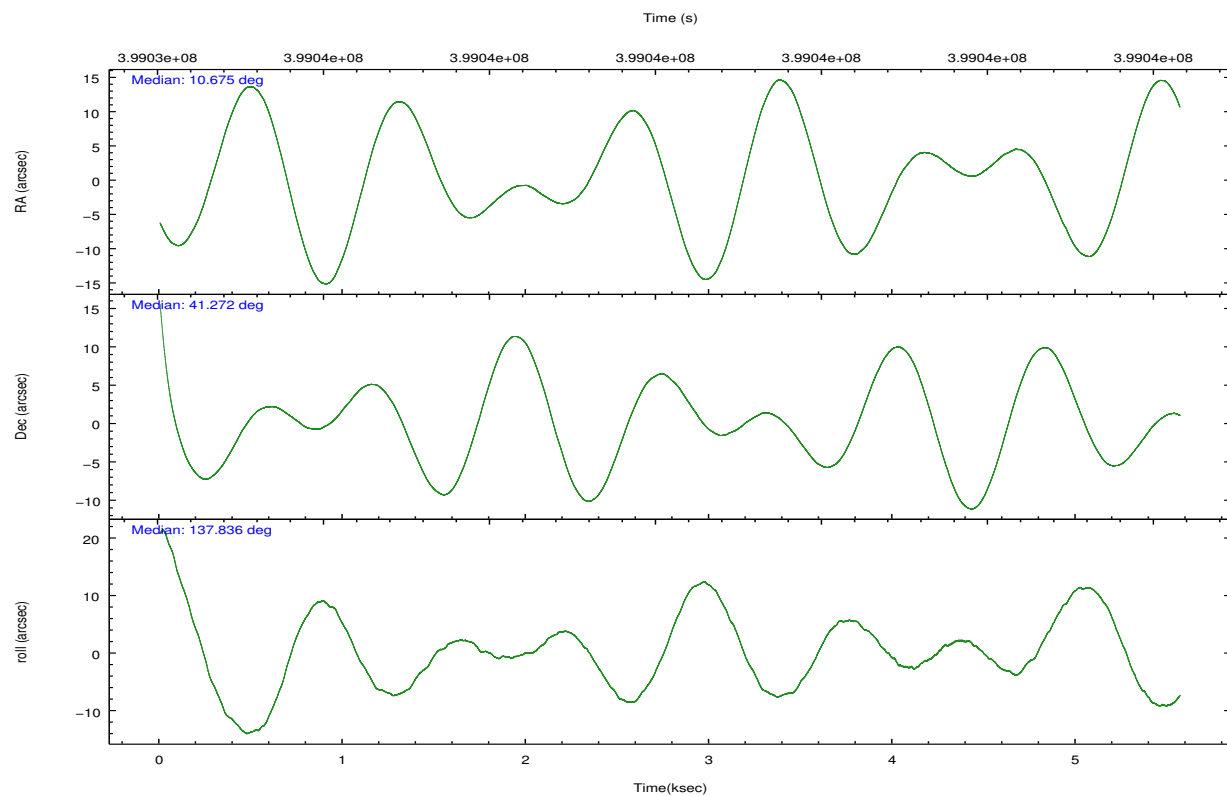
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	115	145	255	155	80	112
	3%	4%	6%	4%	2%	3%
grade 1 events	0	0	4	0	3	4
	0%	0%	0%	0%	0%	0%
grade 2 events	74	100	94	80	63	215
	2%	3%	2%	2%	1%	6%
grade 3 events	35	43	34	46	43	70
	1%	1%	0%	1%	1%	2%
grade 4 events	27	54	40	44	42	98
	0%	1%	1%	1%	1%	3%
grade 5 events	120	124	118	129	134	297
	3%	3%	3%	3%	3%	9%
grade 6 events	52	65	57	61	60	498
	1%	2%	1%	1%	1%	16%
grade 7 events	2599	2596	3044	2749	3153	1792
	86%	83%	83%	84%	88%	58%

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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	10.711041	10.67528511675407	CCD I2 on	Y	Y
[deg] Pointing Dec	41.266686	41.27231008255875	CCD I3 on	Y	Y
[deg] Pointing Roll	137.612330	137.8446278983164	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	399034877.184000	399033678.23415	CCD S5 on	N	N
Observation start date	2010-08-24T11:00:11	2010-08-24T10:41:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	399039877.184000	399040776.35952	On-chip summing requested	N	N
Observation end date	2010-08-24T12:23:31	2010-08-24T12:39:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	Y	Y
			[s] Primary exposure time	0.600000	0.6
			[s] Secondary exposure time	0.000000	3.2
			Duty cycle	5	5

2.3 Aspect



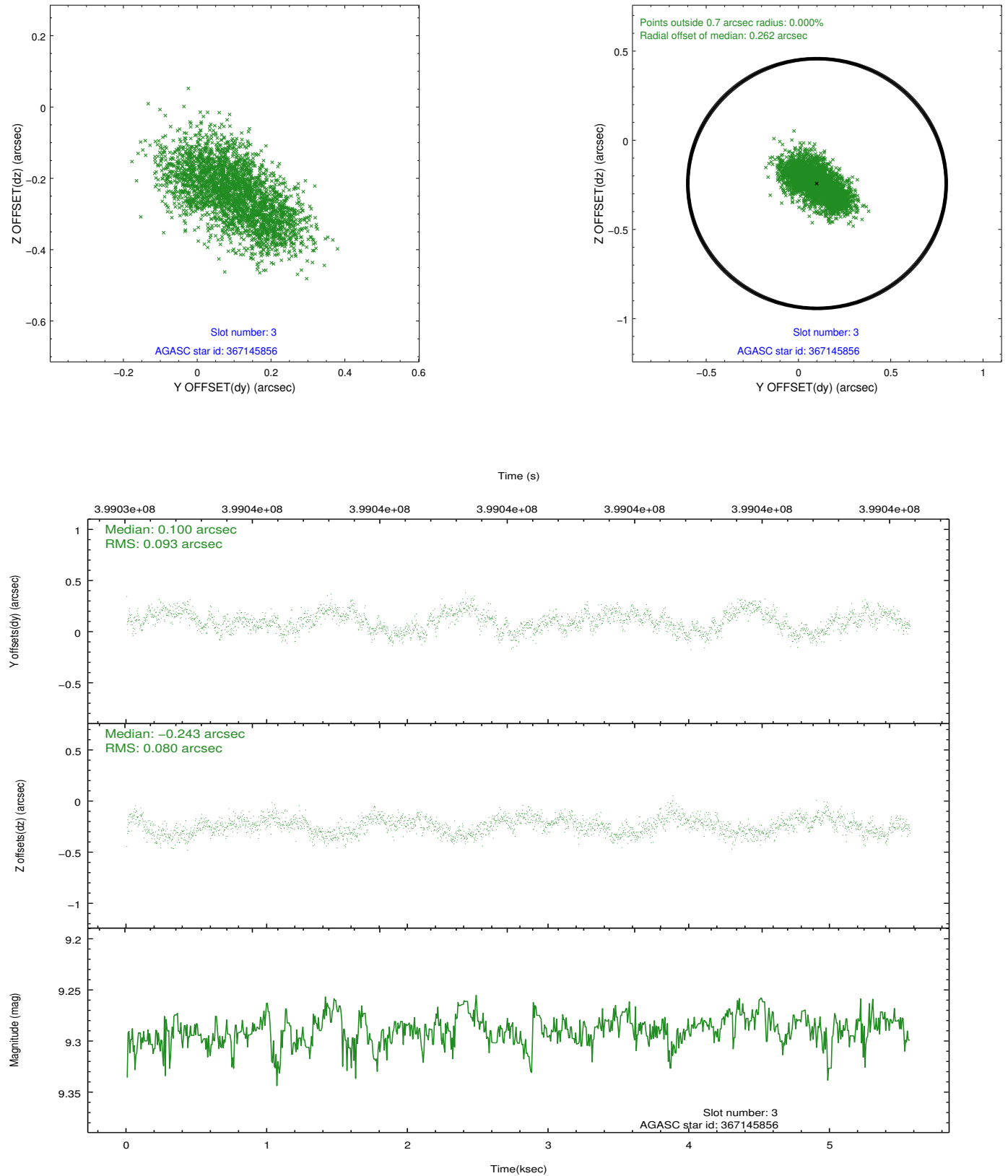


Slot Statistics

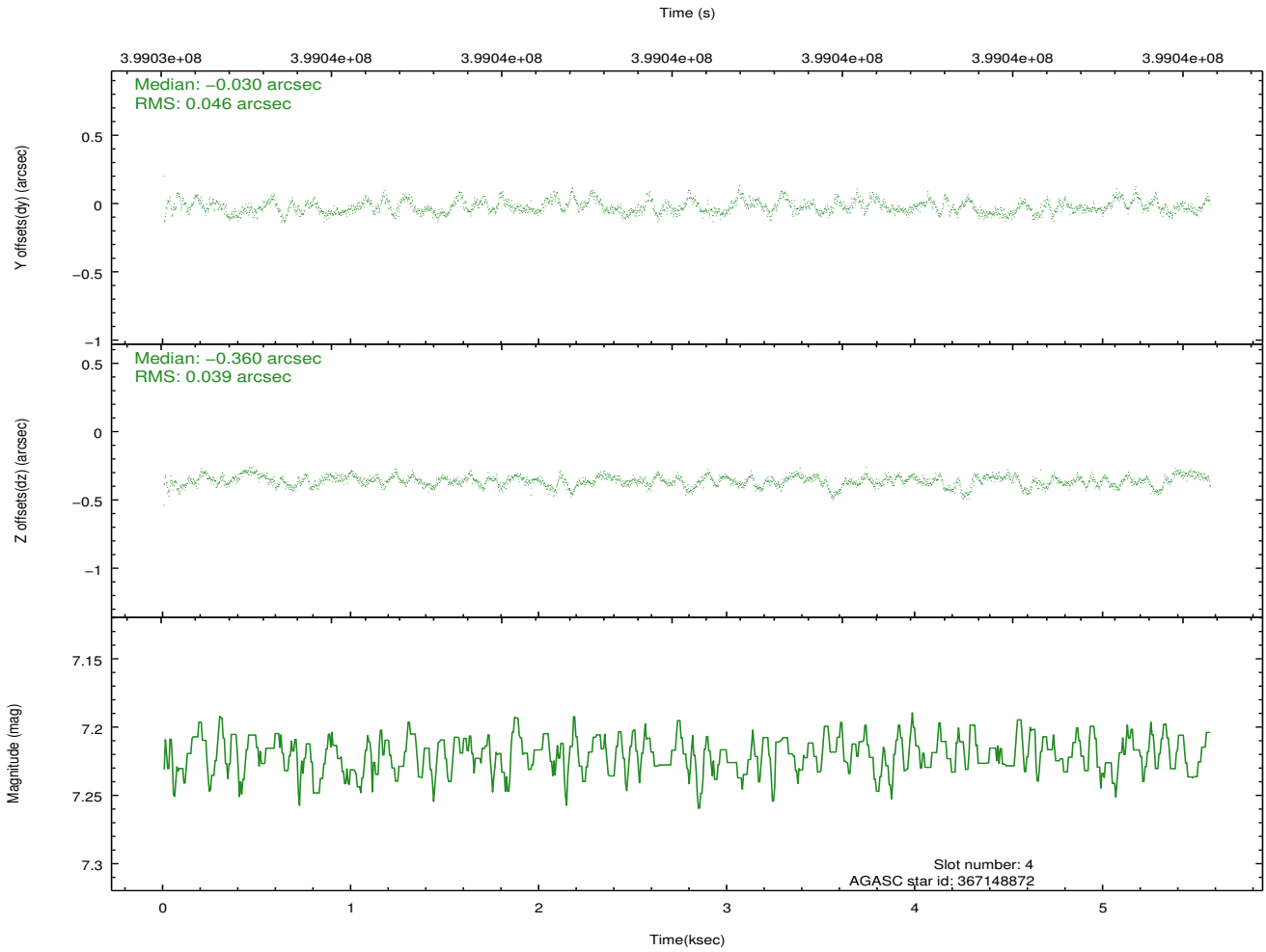
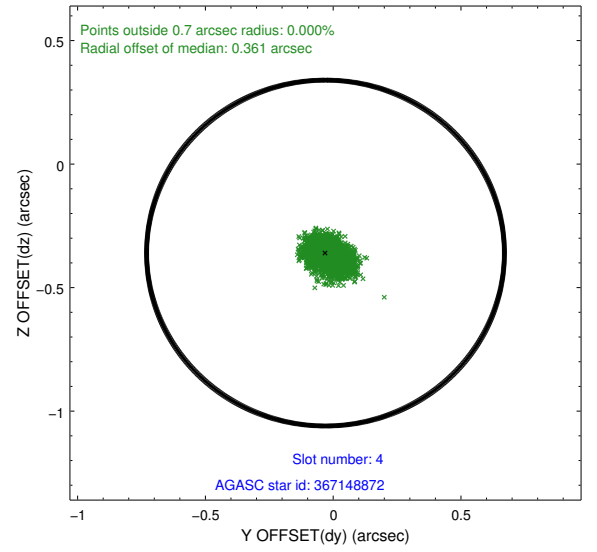
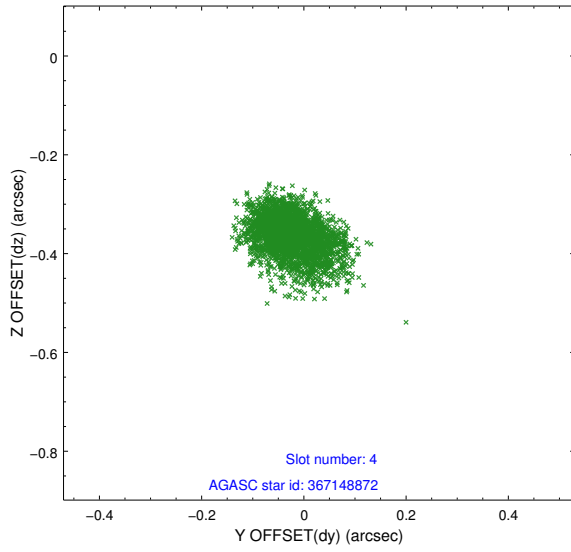
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.08	1358	-0.001	0.021	0.008	0.014	0.000000	0.000000	928.12	-836.77
1	FID	ACIS-I-4	7.01	1358	0.143	0.010	0.007	0.012	0.000000	0.000000	2148.91	1062.49
2	FID	ACIS-I-5	7.07	1358	-0.239	0.040	0.007	0.011	0.000000	0.000000	-1818.73	1061.60
3	GUIDE	367145856	9.29	2714	0.100	-0.243	0.135	0.208	10.744946	40.402085	-2166.75	2236.21
4	GUIDE	367148872	7.22	2715	-0.030	-0.360	0.063	0.107	10.505940	40.688258	-990.88	1916.06
5	GUIDE	367657272	8.40	2716	0.033	0.370	0.066	0.109	11.834471	41.298907	-2152.35	-2147.62
6	GUIDE	367663272	9.29	2713	-0.070	0.095	0.085	0.140	10.656279	41.699429	1159.06	-1050.94
7	GUIDE	367674552	8.84	2707	-0.037	0.146	0.081	0.132	11.016238	41.570845	132.86	-1364.03

2.4 Star Slots

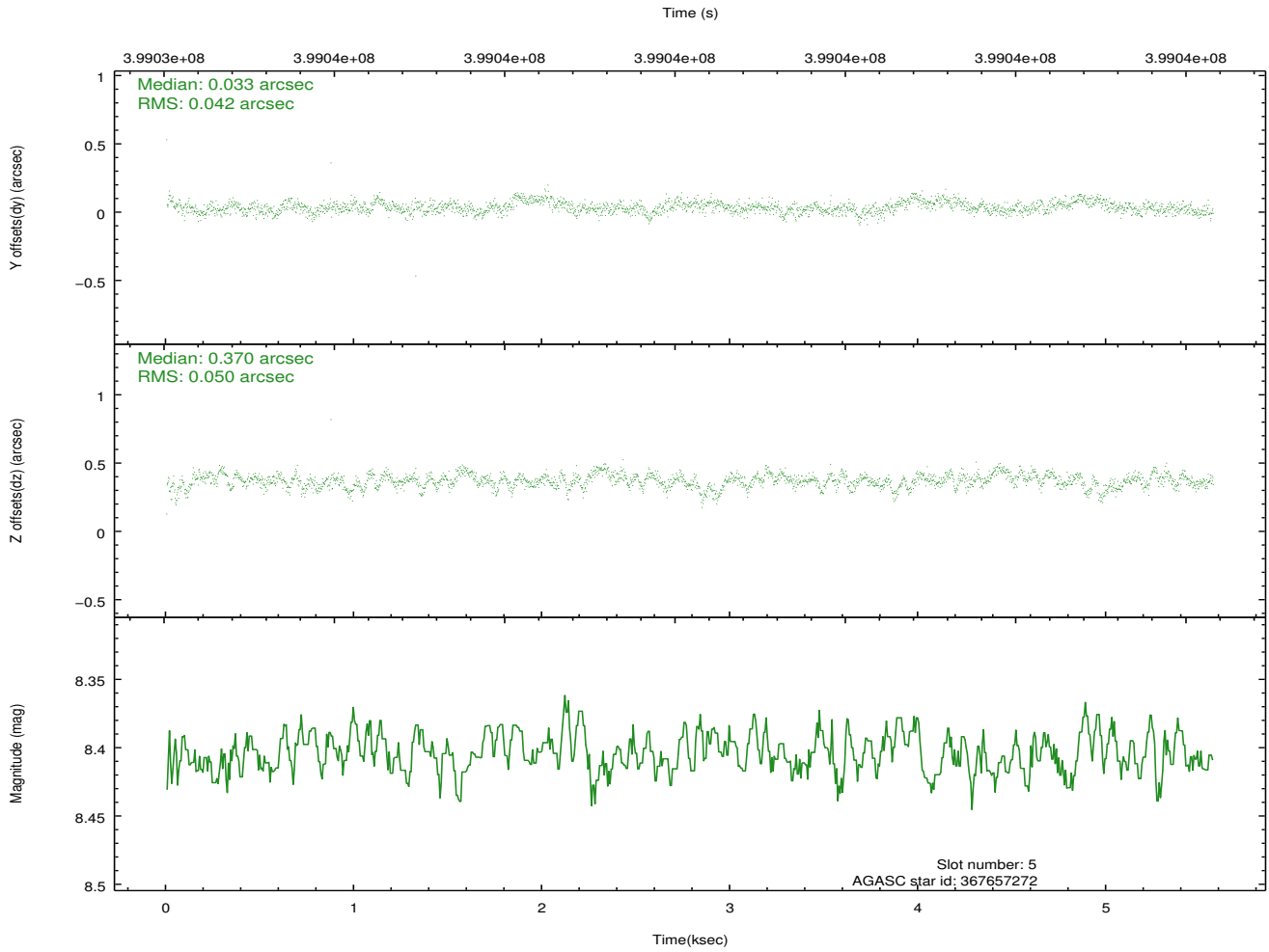
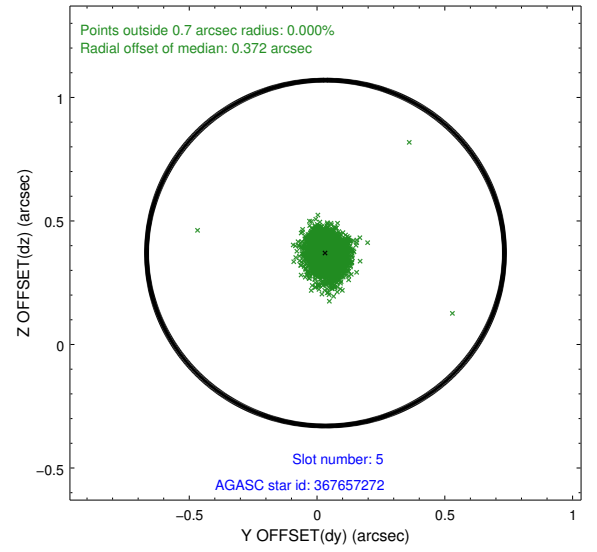
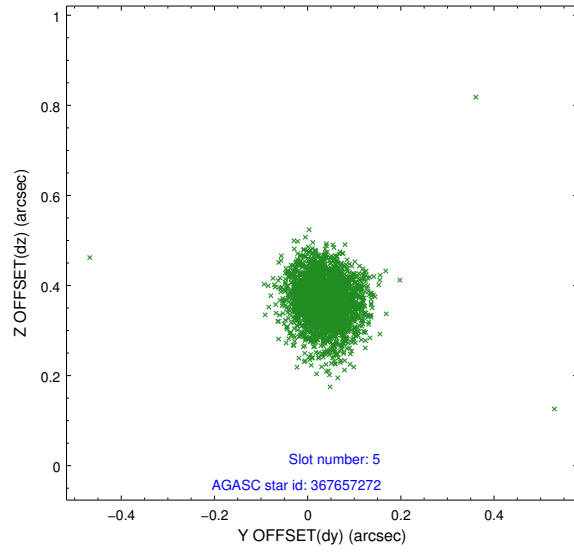
2.4.1 Slot 3



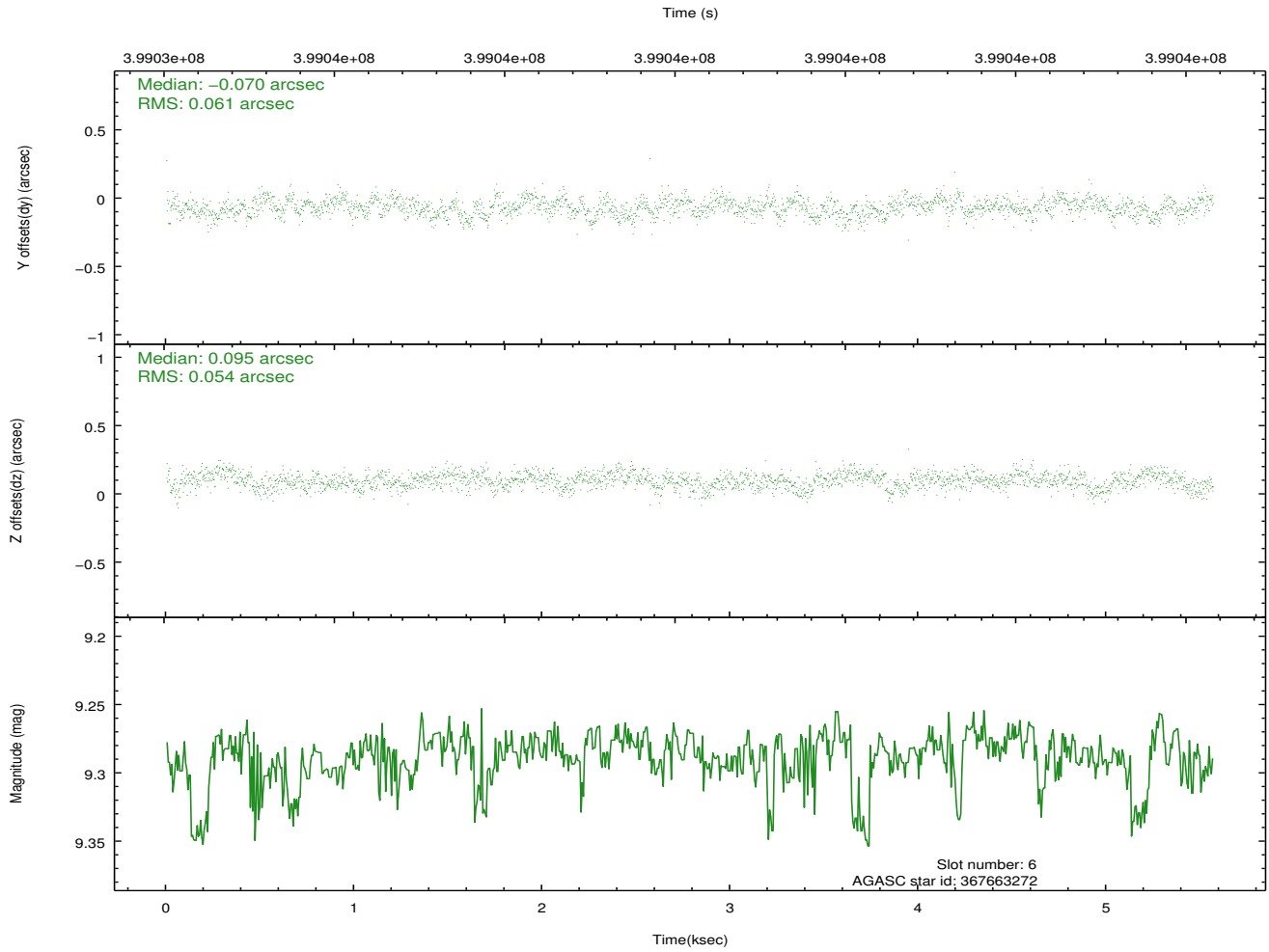
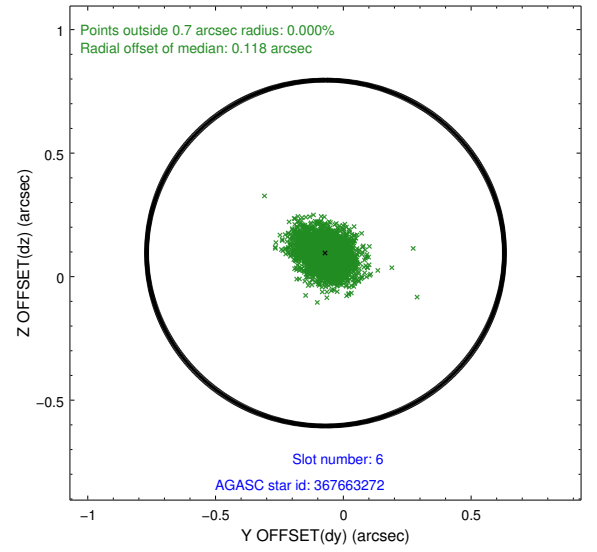
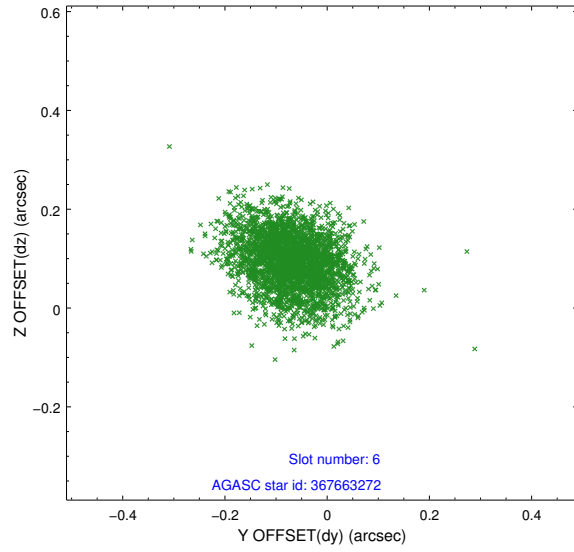
2.4.2 Slot 4



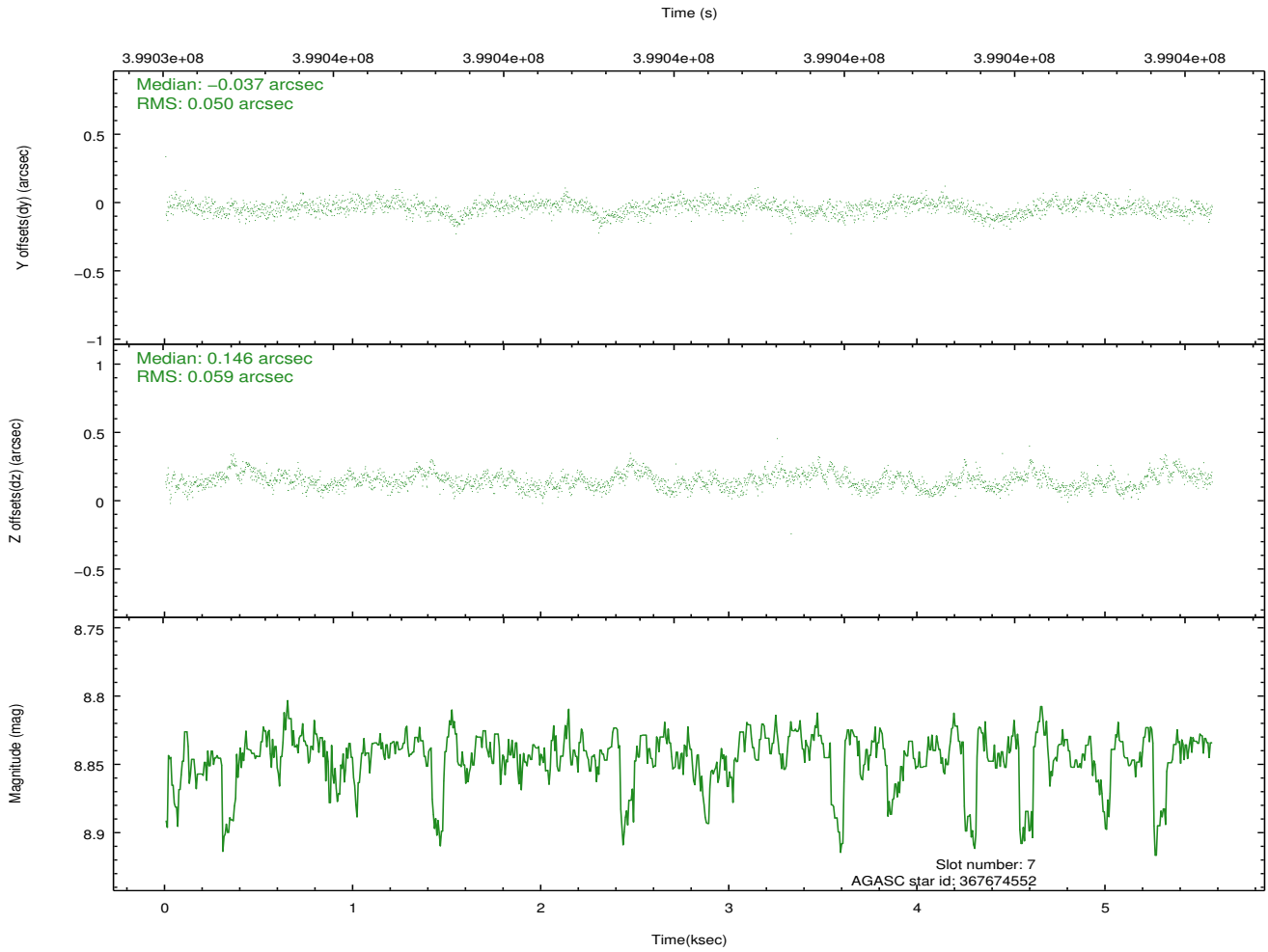
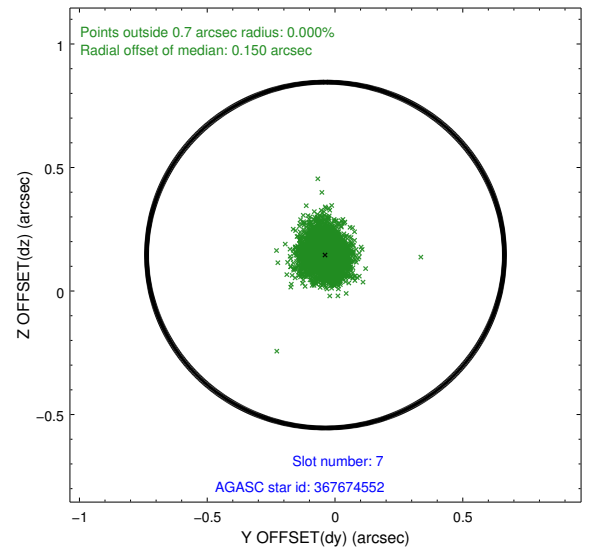
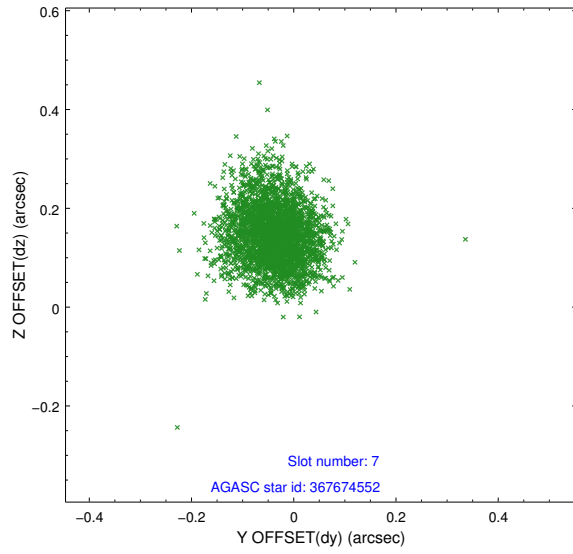
2.4.3 Slot 5



2.4.4 Slot 6

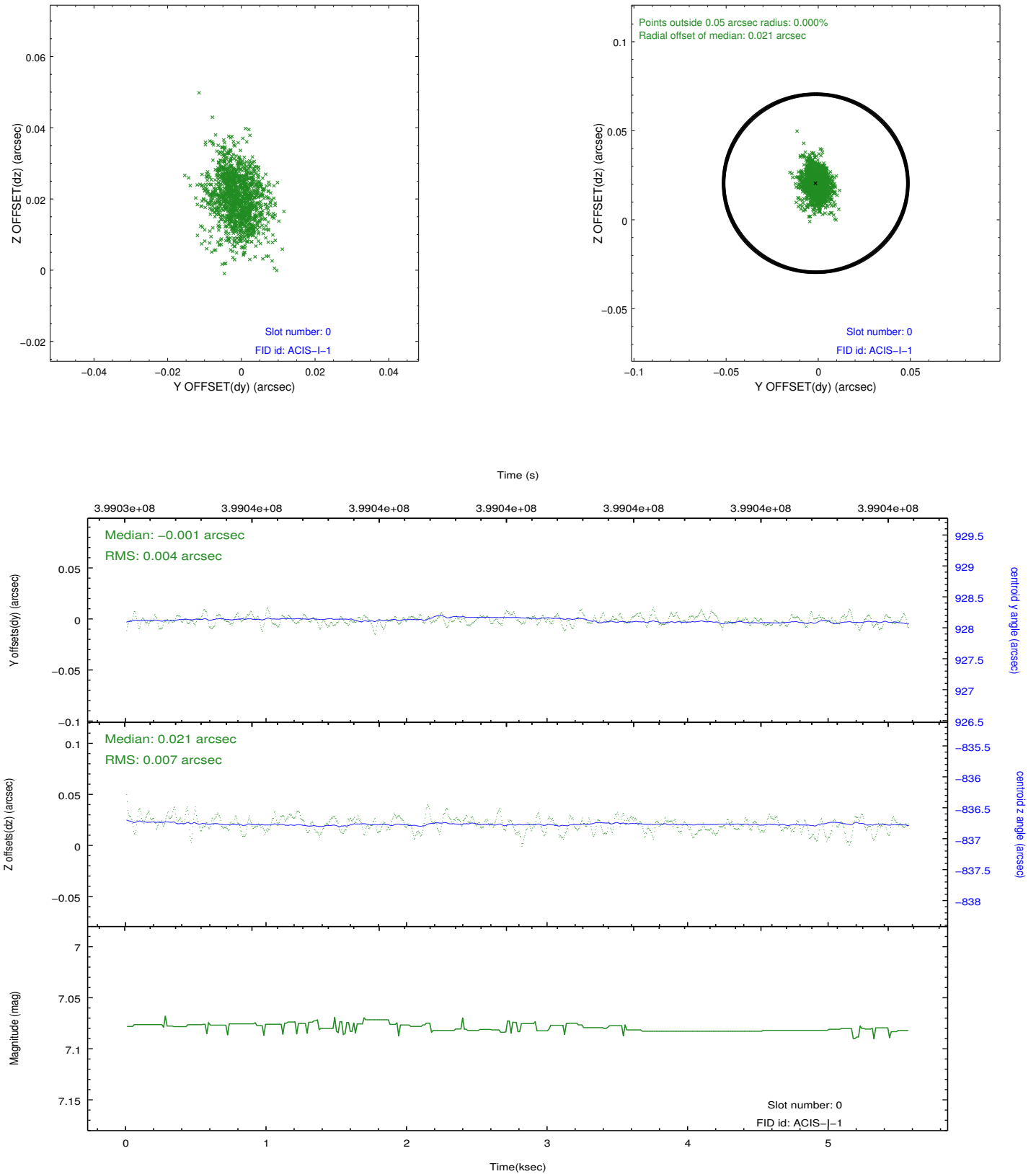


2.4.5 Slot 7

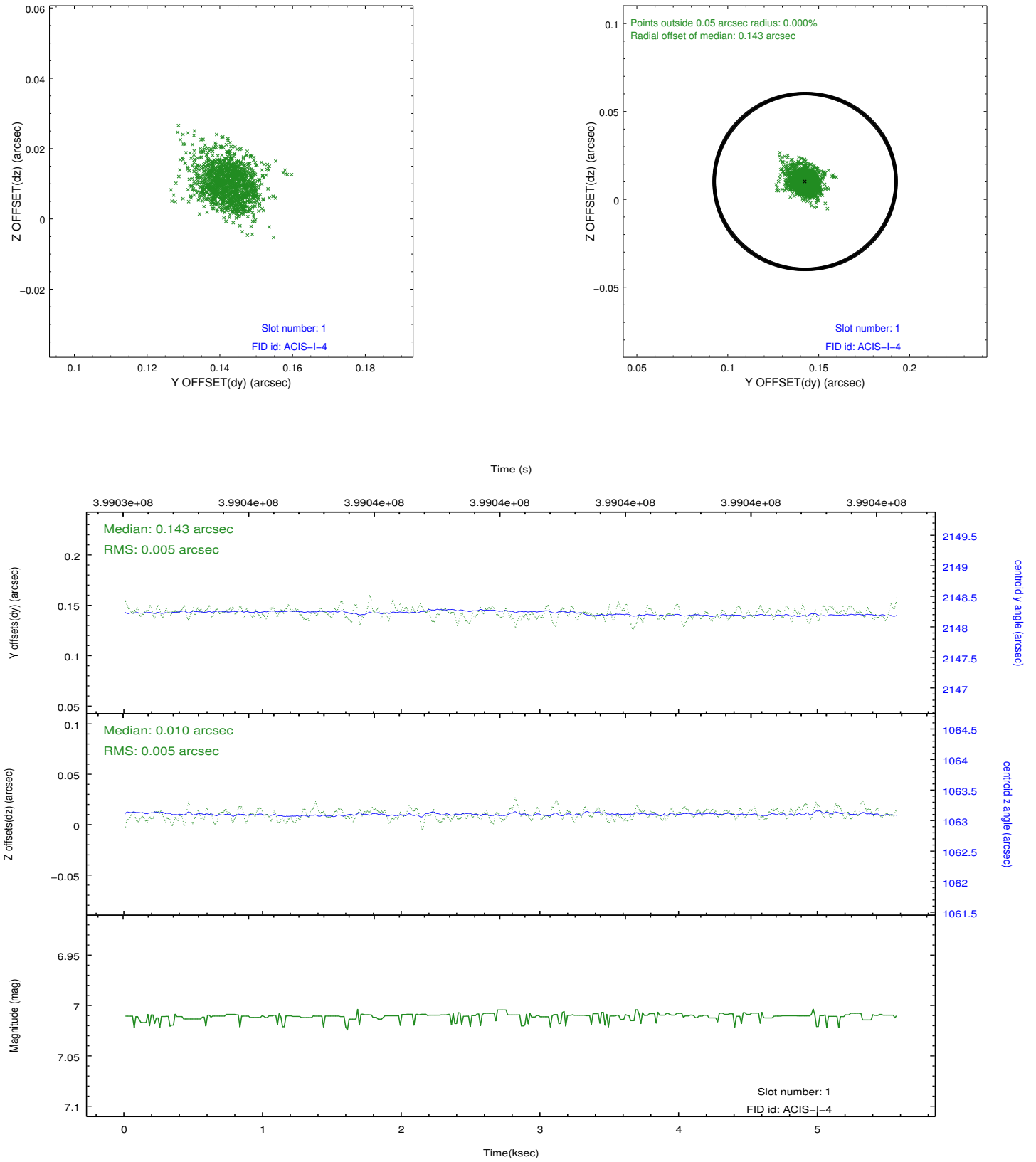


2.5 FID Slots

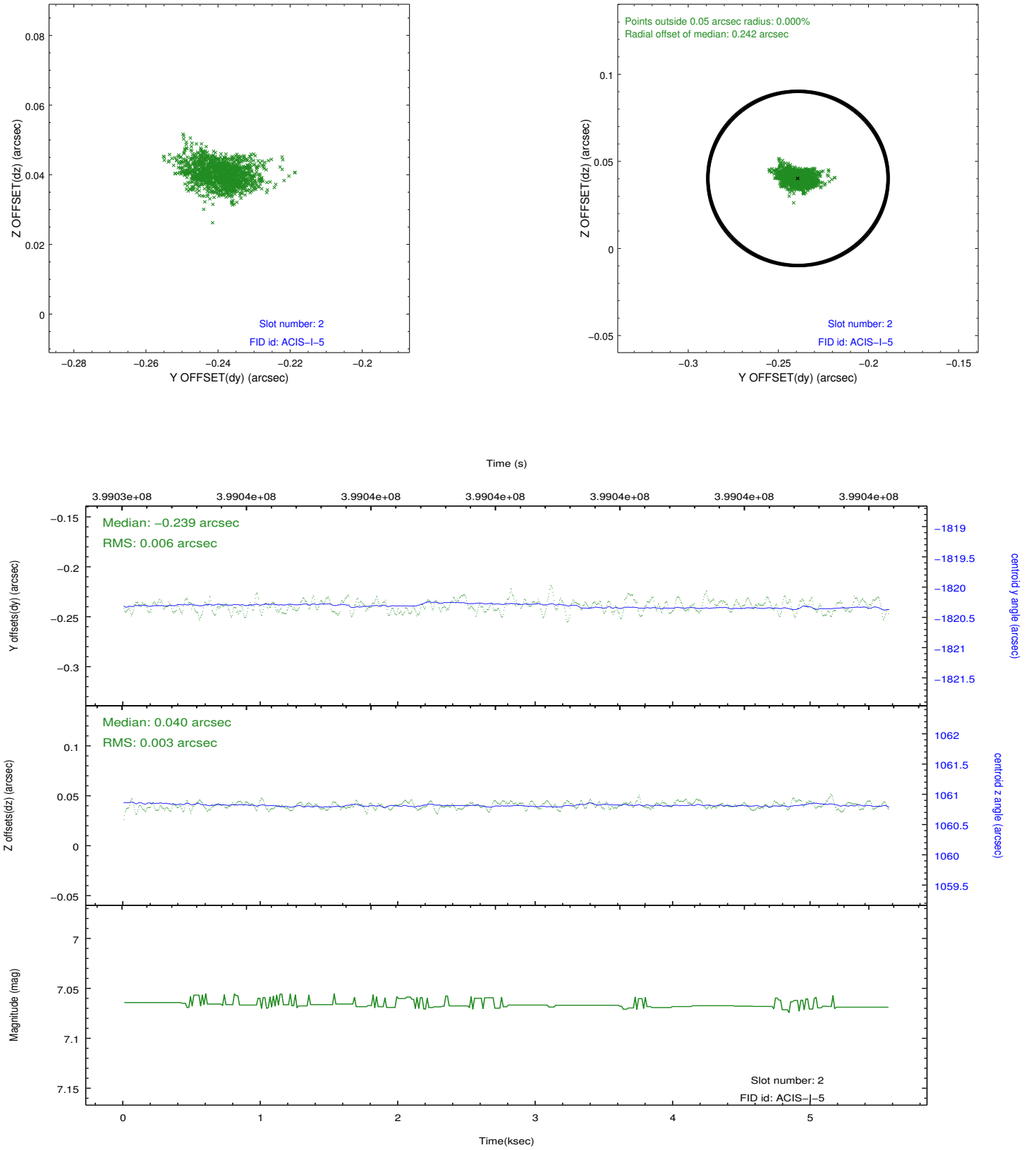
2.5.1 Slot 0



2.5.2 Slot 1



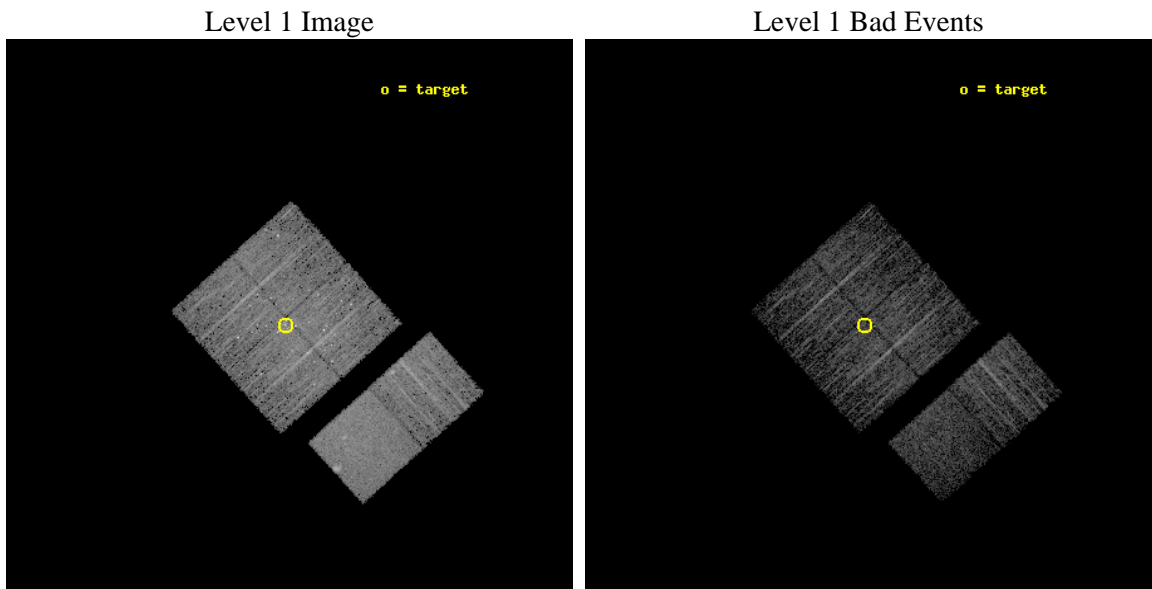
2.5.3 Slot 2



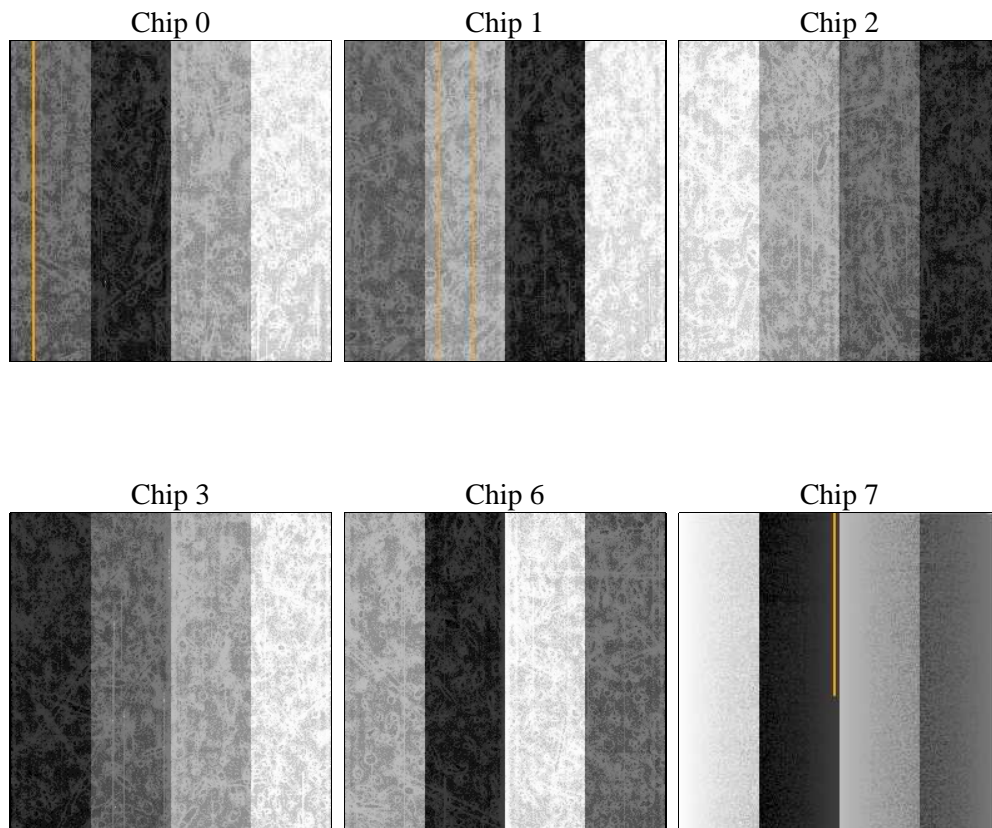
3 OBI Secondary

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4022.1888571382	Sum of GTIs [s]
caldsver	4.5.0	 	ontime0	4022.188785851	Sum of GTIs [s]
date	2012-07-02T05:38:06	Date and time of file creation	ontime1	4022.1890047193	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4022.1890051365	Sum of GTIs [s]
			ontime3	4022.1888571382	Sum of GTIs [s]
			ontime6	4022.1889052391	Sum of GTIs [s]
			ontime7	4022.1888567805	Sum of GTIs [s]
			l1events	193019	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	28060	29319	34866	32264	30985	37525	grade 0 events	2160	3119	4388	3662	1503	1811
rejected events	23534	23502	27632	26105	27218	20077		7%	10%	12%	11%	4%	4%
rejected %	83%	80%	79%	80%	87%	53%	grade 1 events	29	44	144	53	16	42
								0%	0%	0%	0%	0%	0%
							grade 2 events	922	1058	1210	991	810	3612
								3%	3%	3%	3%	2%	9%
							grade 3 events	416	440	445	426	351	1494
								1%	1%	1%	1%	1%	3%
							grade 4 events	379	447	479	401	365	1514
								1%	1%	1%	1%	1%	4%
							grade 5 events	1178	1301	1257	1386	1379	3808
								4%	4%	3%	4%	4%	10%
							grade 6 events	657	763	726	693	741	9041
								2%	2%	2%	2%	2%	24%
							grade 7 events	22319	22147	26217	24652	25820	16203
								79%	75%	75%	76%	83%	43%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.07.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.95992673015593

A.2 Comments