

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 11840 - L2 Version 2
Chandra X-Ray Center

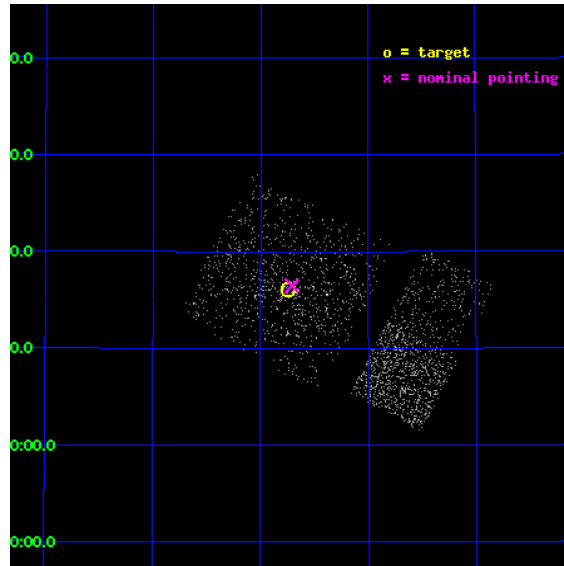
L2 Processing Date : Jun 30 2012

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1 Front

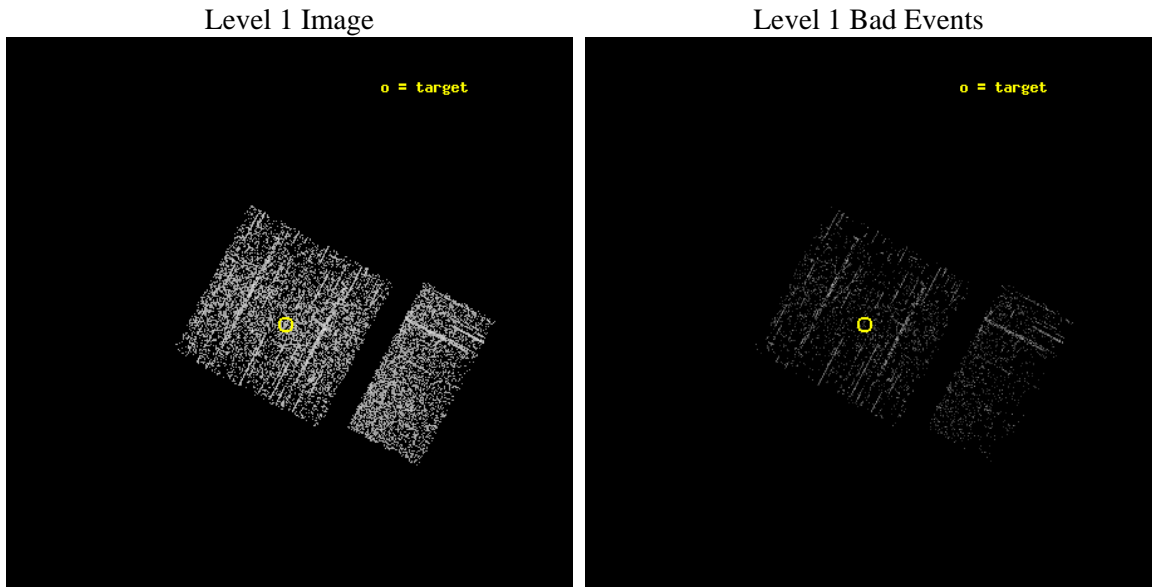
seq_num	600908	Sequence number
obs_id	11840	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.677267430758	Nominal RA [deg]
dec_nom	41.274623953804	Nominal Dec [deg]
roll_nom	118.09042551501	Nominal Roll [deg]
revision	2	Processing version of data
ontime	937.77958446741	Sum of GTIs [s]
livetime	147.62912731425	Livetime [s]
ontime0	937.77958446741	Sum of GTIs [s]
ontime1	937.77960437536	Sum of GTIs [s]
ontime2	937.77960437536	Sum of GTIs [s]
ontime3	937.77958446741	Sum of GTIs [s]
ontime6	937.77958446741	Sum of GTIs [s]
ontime7	933.96822446585	Sum of GTIs [s]
l2events	2487	Number of level 2 events



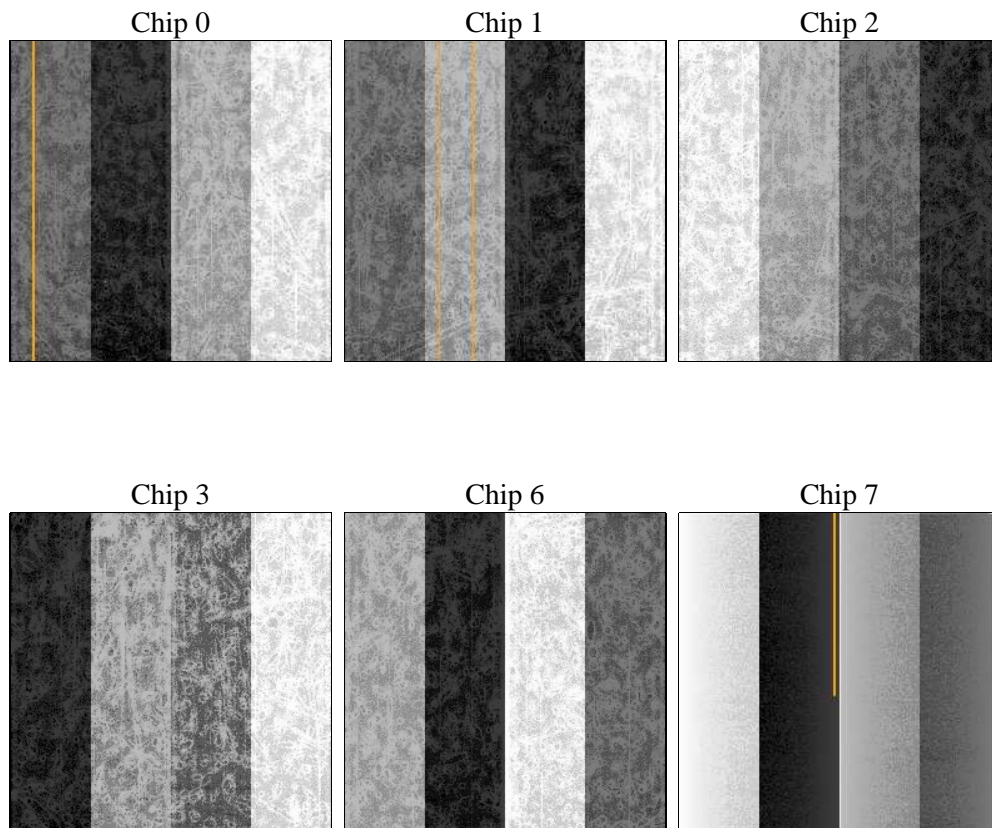
2 OBI Primary

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	937.77958446741	Sum of GTIs [s]
caldsver	4.5.0	 	ontime0	937.77958446741	Sum of GTIs [s]
date	2012-06-30T13:13:35	Date and time of file creation	ontime1	937.77960437536	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	937.77960437536	Sum of GTIs [s]
			ontime3	937.77958446741	Sum of GTIs [s]
			ontime6	937.77958446741	Sum of GTIs [s]
			ontime7	933.96822446585	Sum of GTIs [s]
			l1events	20902	Number of level 1 events

2.1.4 Events

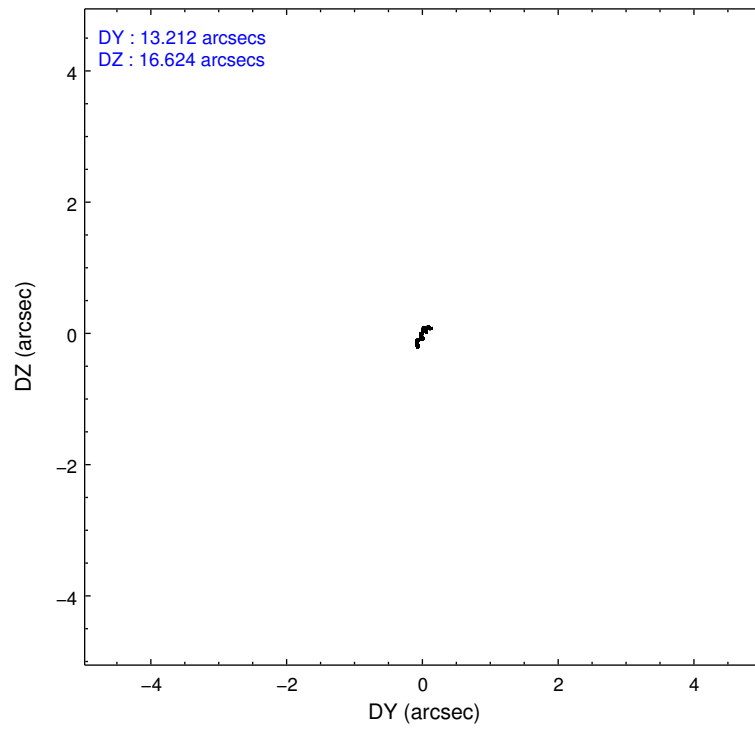
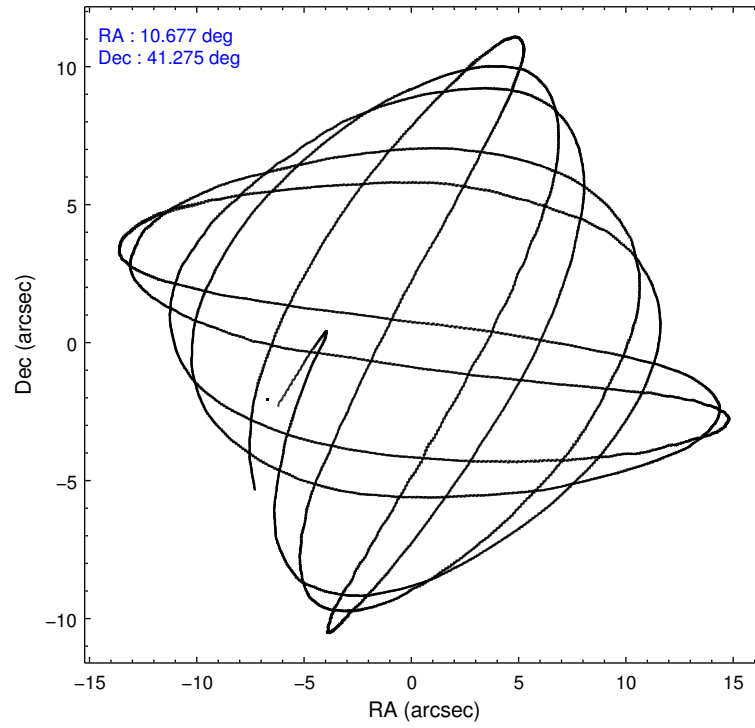
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	3400	3313	3710	3537	3695	3247
rejected events	3083	2892	3316	3085	3389	2292
rejected %	90%	87%	89%	87%	91%	70%

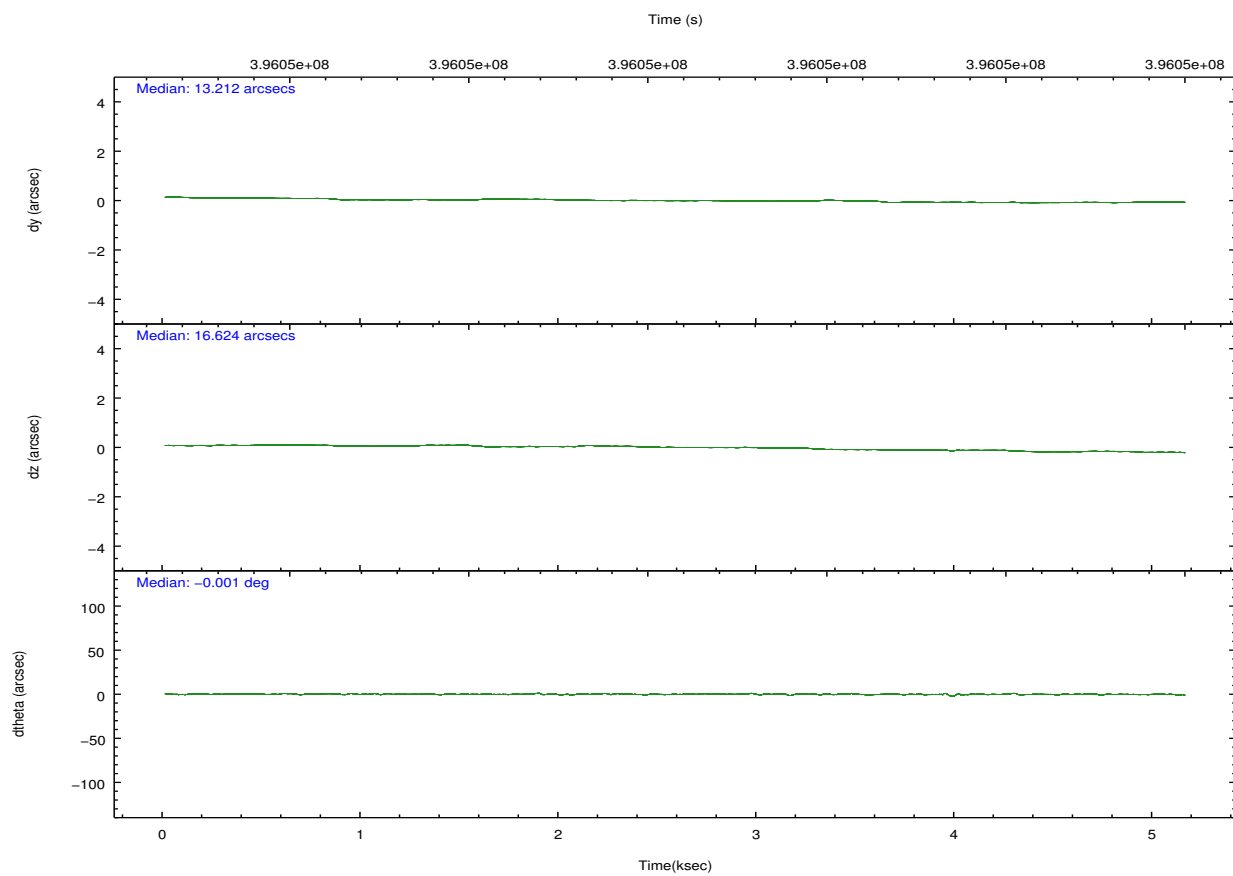
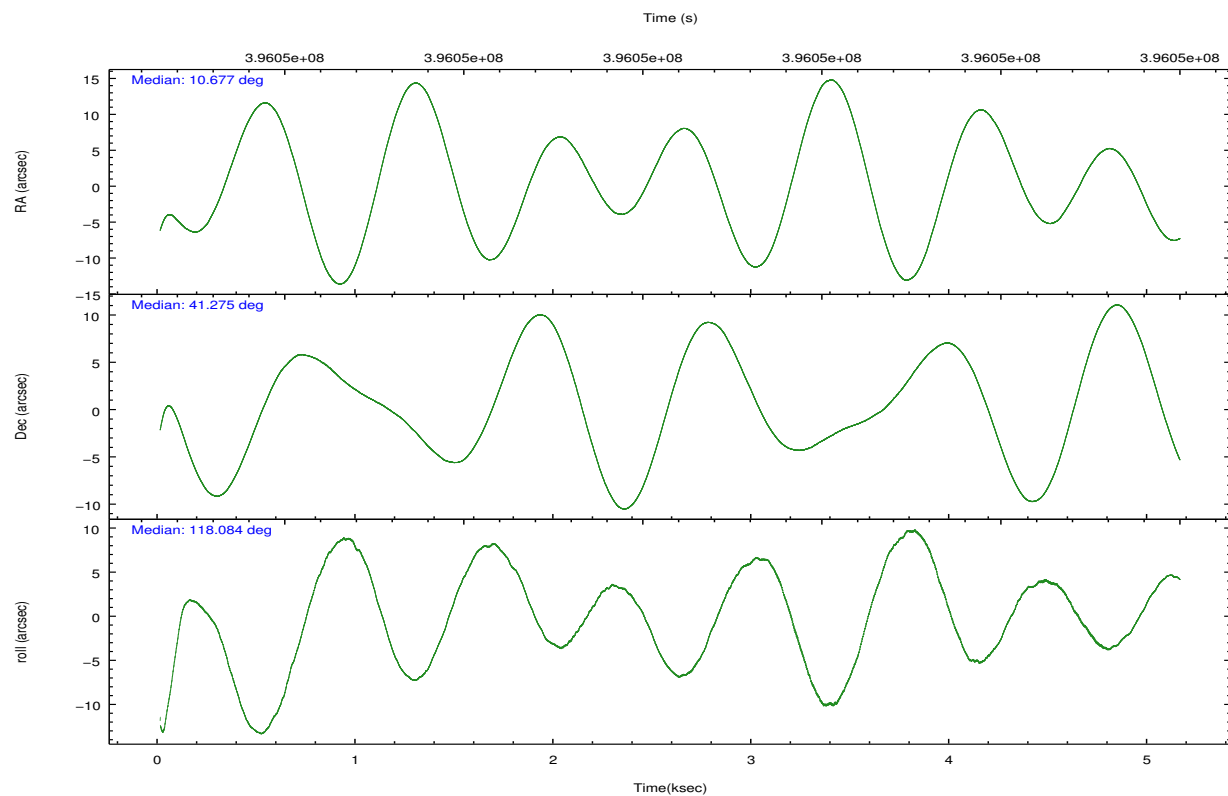
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	132	150	170	225	83	93
	3%	4%	4%	6%	2%	2%
grade 1 events	1	1	1	2	4	4
	0%	0%	0%	0%	0%	0%
grade 2 events	66	92	88	92	83	210
	1%	2%	2%	2%	2%	6%
grade 3 events	35	58	33	49	38	91
	1%	1%	0%	1%	1%	2%
grade 4 events	39	48	43	31	34	75
	1%	1%	1%	0%	0%	2%
grade 5 events	143	131	118	135	174	302
	4%	3%	3%	3%	4%	9%
grade 6 events	46	74	63	58	69	491
	1%	2%	1%	1%	1%	15%
grade 7 events	2938	2759	3194	2945	3210	1981
	86%	83%	86%	83%	86%	61%

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	10.708473	10.67726743075772	CCD I2 on	Y	Y
[deg] Pointing Dec	41.260198	41.27462395380353	CCD I3 on	Y	Y
[deg] Pointing Roll	117.861185	118.0904255150077	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)	396046729.184000	396045689.30625	CCD S5 on	N	N
Observation start date	2010-07-20T20:57:43	2010-07-20T20:41:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	396051729.184000	396052968.34413	On-chip summing requested	N	N
Observation end date	2010-07-20T22:21:03	2010-07-20T22:42:48	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



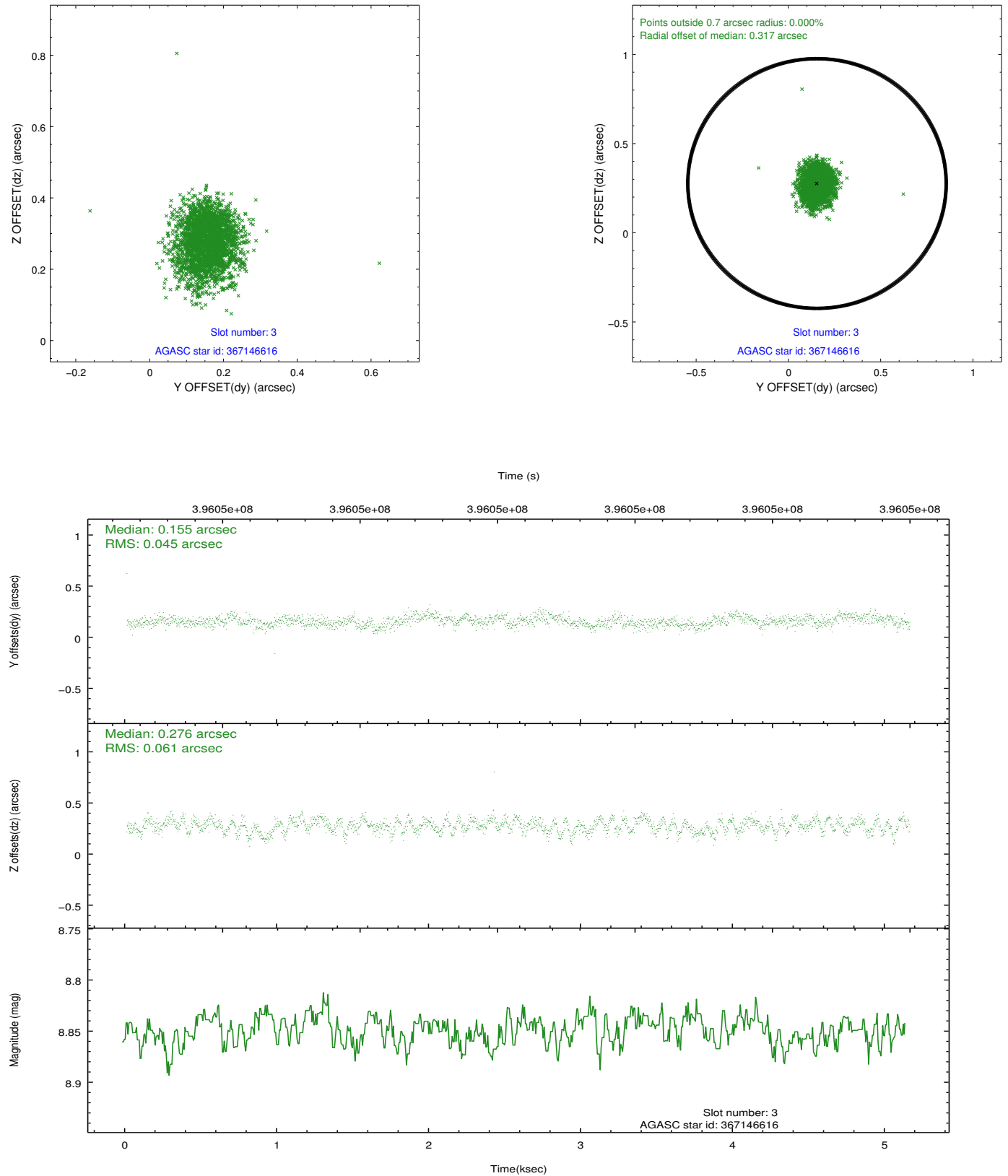


Slot Statistics

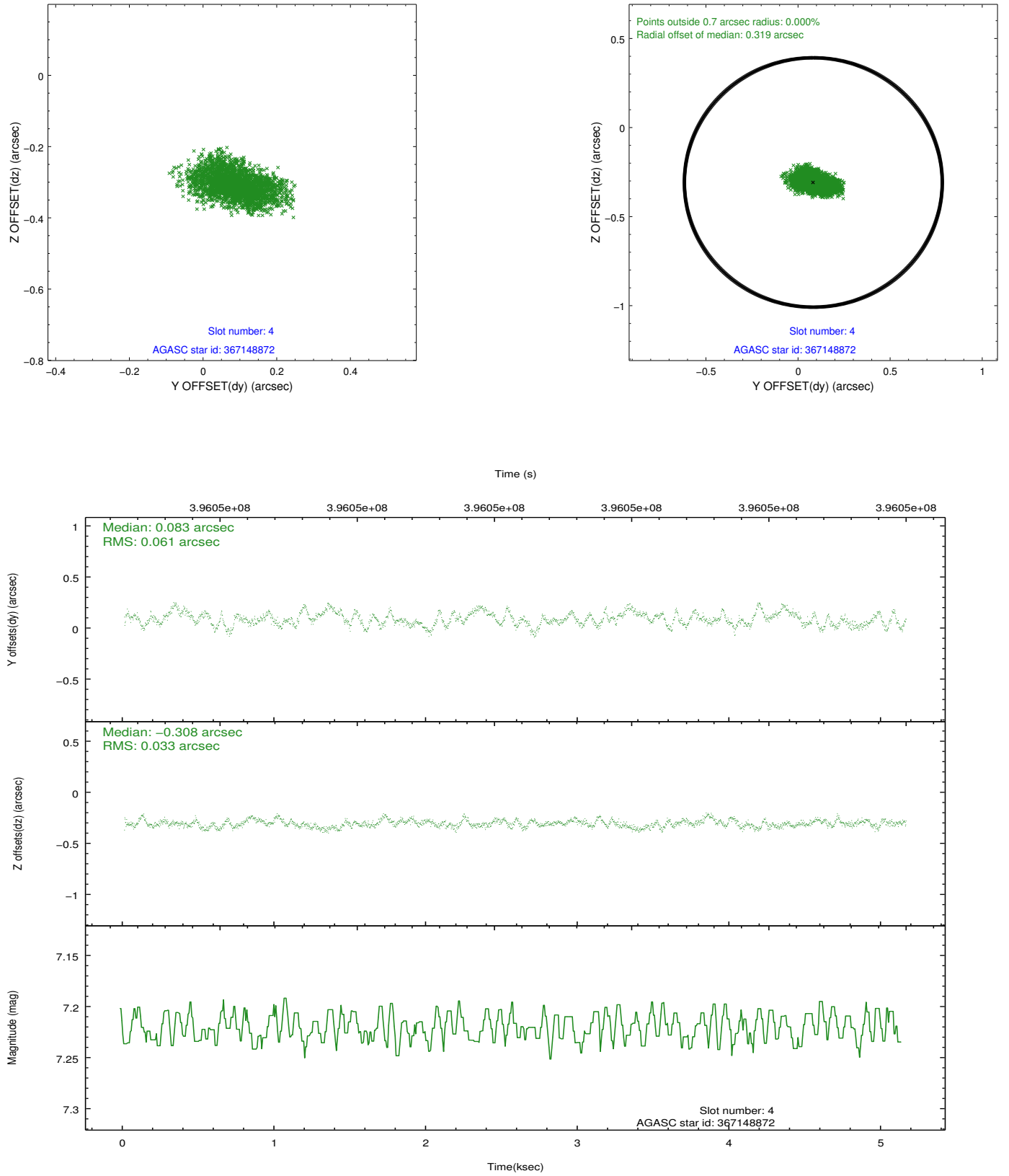
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	6.99	1257	0.053	-0.023	0.007	0.012	0.000000	0.000000	926.33	-840.28
1	FID	ACIS-I-5	6.99	1257	-0.186	0.064	0.007	0.013	0.000000	0.000000	-1821.34	1056.74
2	FID	ACIS-I-6	6.98	1257	0.041	0.029	0.007	0.011	0.000000	0.000000	390.62	1702.51
3	GUIDE	367146616	8.85	2513	0.155	0.276	0.080	0.128	11.418645	41.190163	-1114.42	-1586.56
4	GUIDE	367148872	7.22	2515	0.083	-0.308	0.073	0.123	10.505940	40.688258	-1562.12	1450.11
5	GUIDE	367657896	9.01	2515	0.061	0.039	0.086	0.138	11.197765	41.313576	-445.22	-1260.60
6	GUIDE	367663272	9.27	2512	-0.109	-0.055	0.124	0.203	10.656279	41.699429	1463.67	-614.35
7	GUIDE	367674552	8.85	2512	-0.183	0.051	0.085	0.133	11.016238	41.570845	603.34	-1256.27

2.4 Star Slots

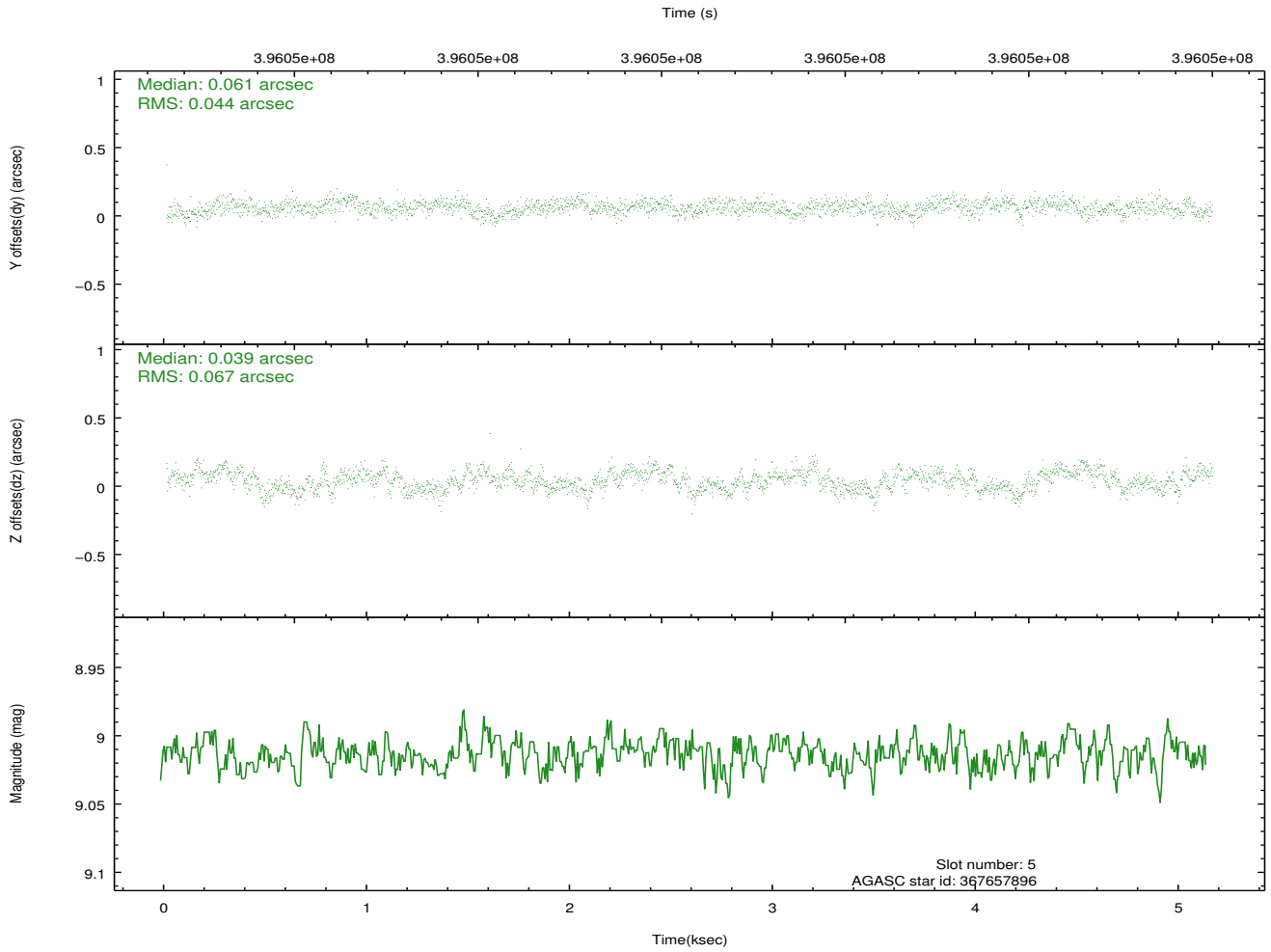
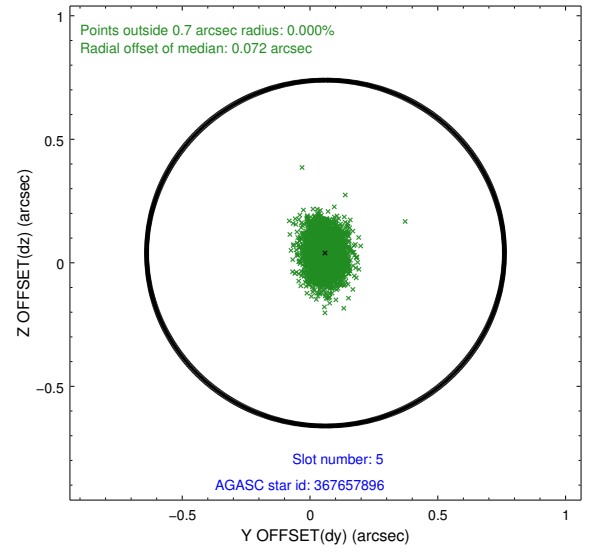
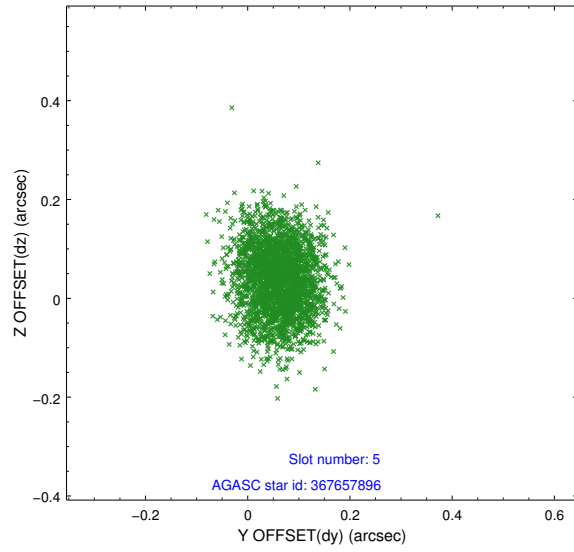
2.4.1 Slot 3



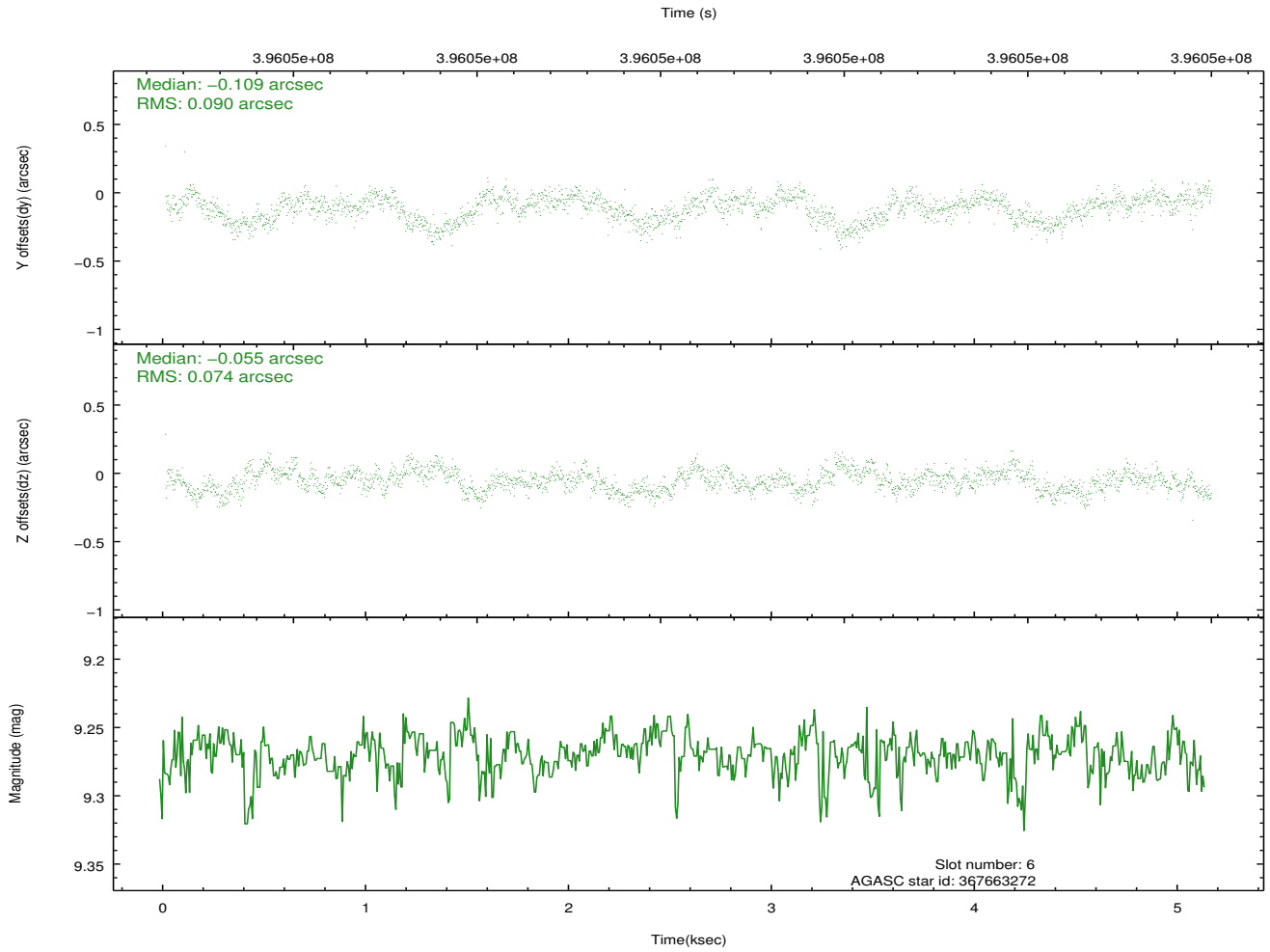
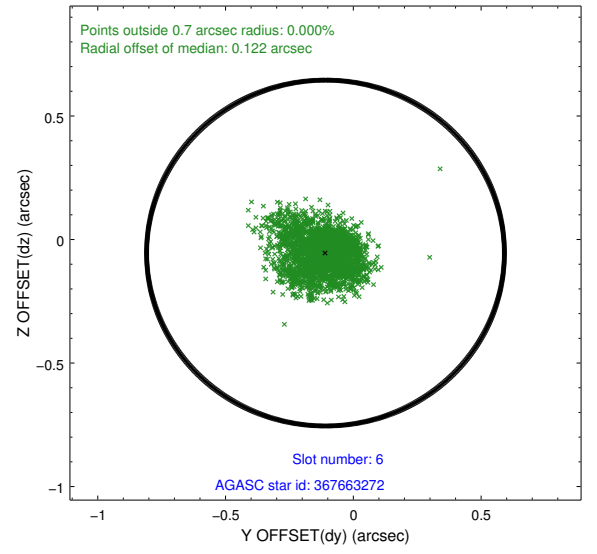
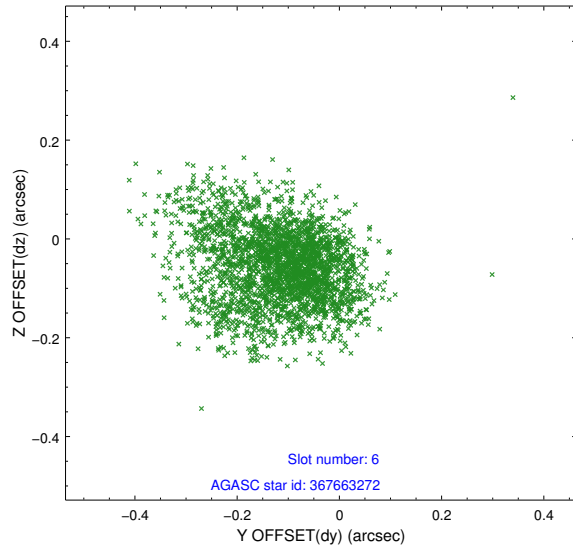
2.4.2 Slot 4



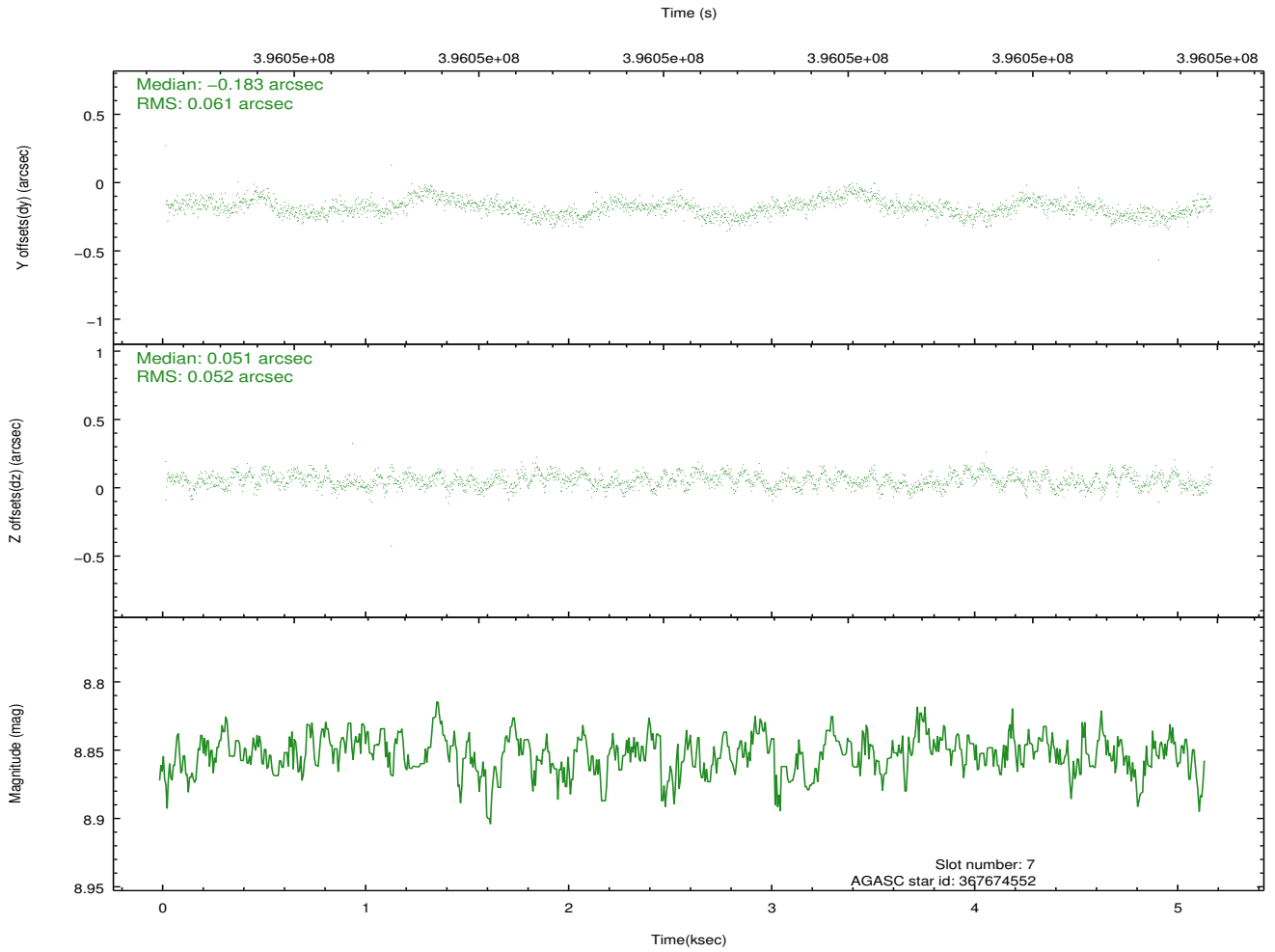
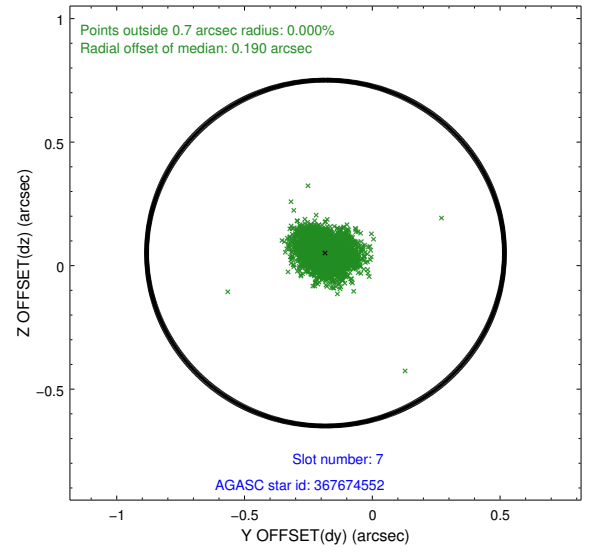
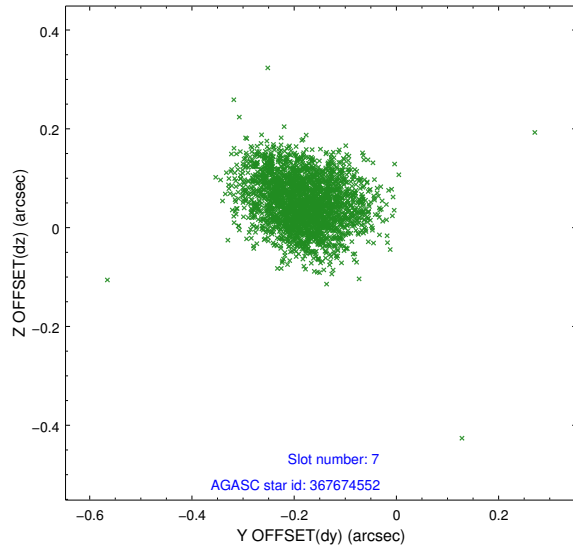
2.4.3 Slot 5



2.4.4 Slot 6

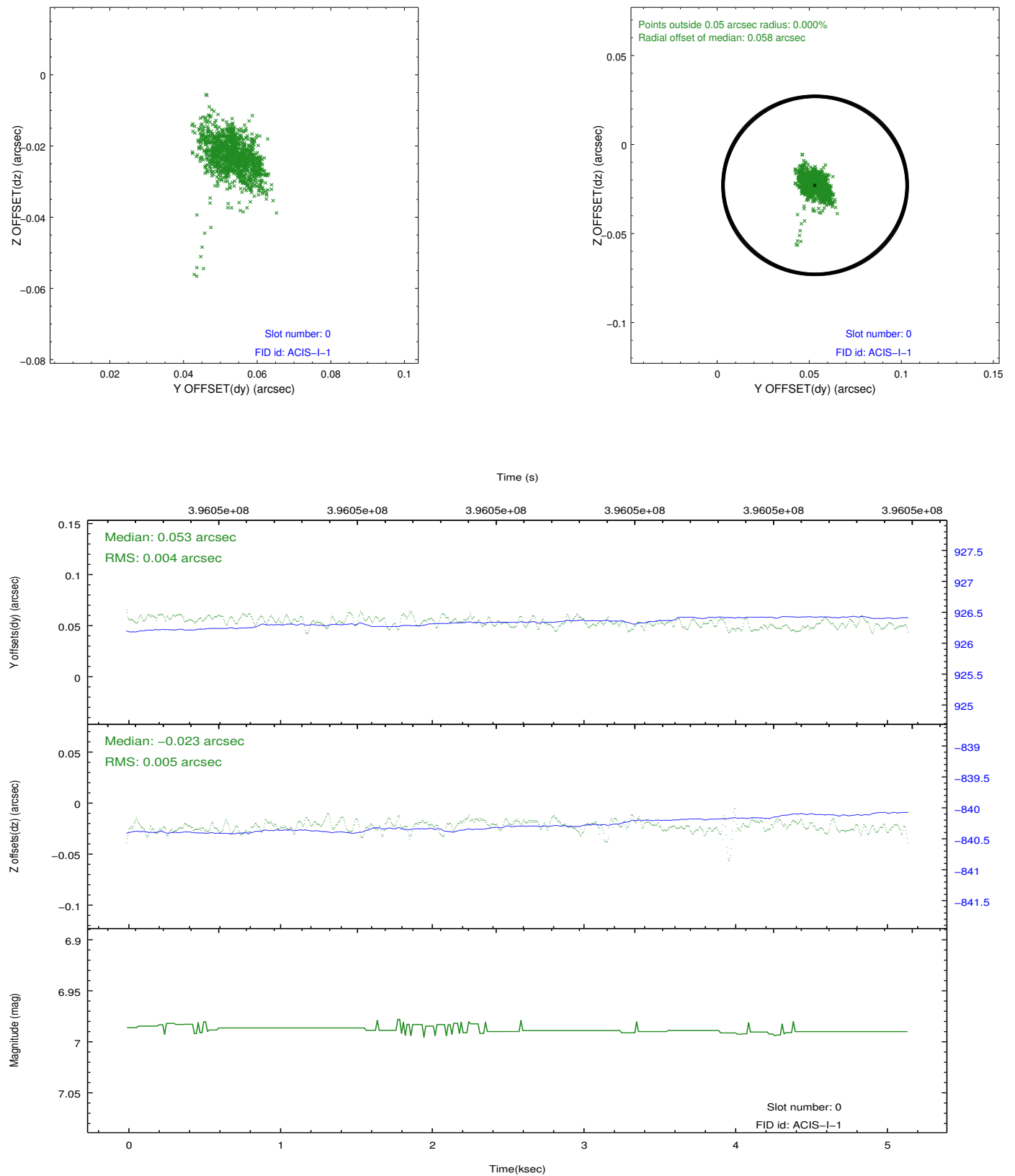


2.4.5 Slot 7

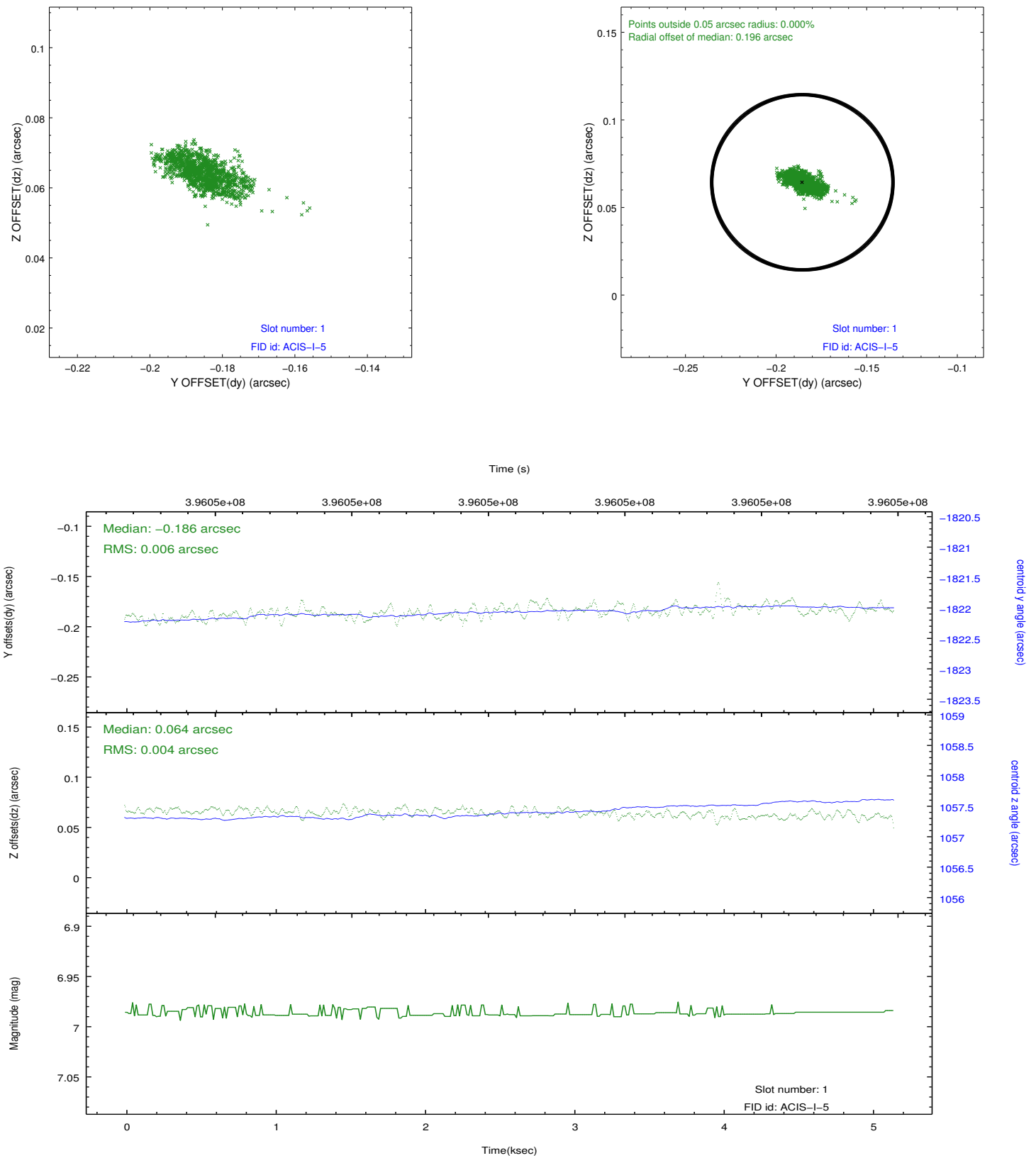


2.5 FID Slots

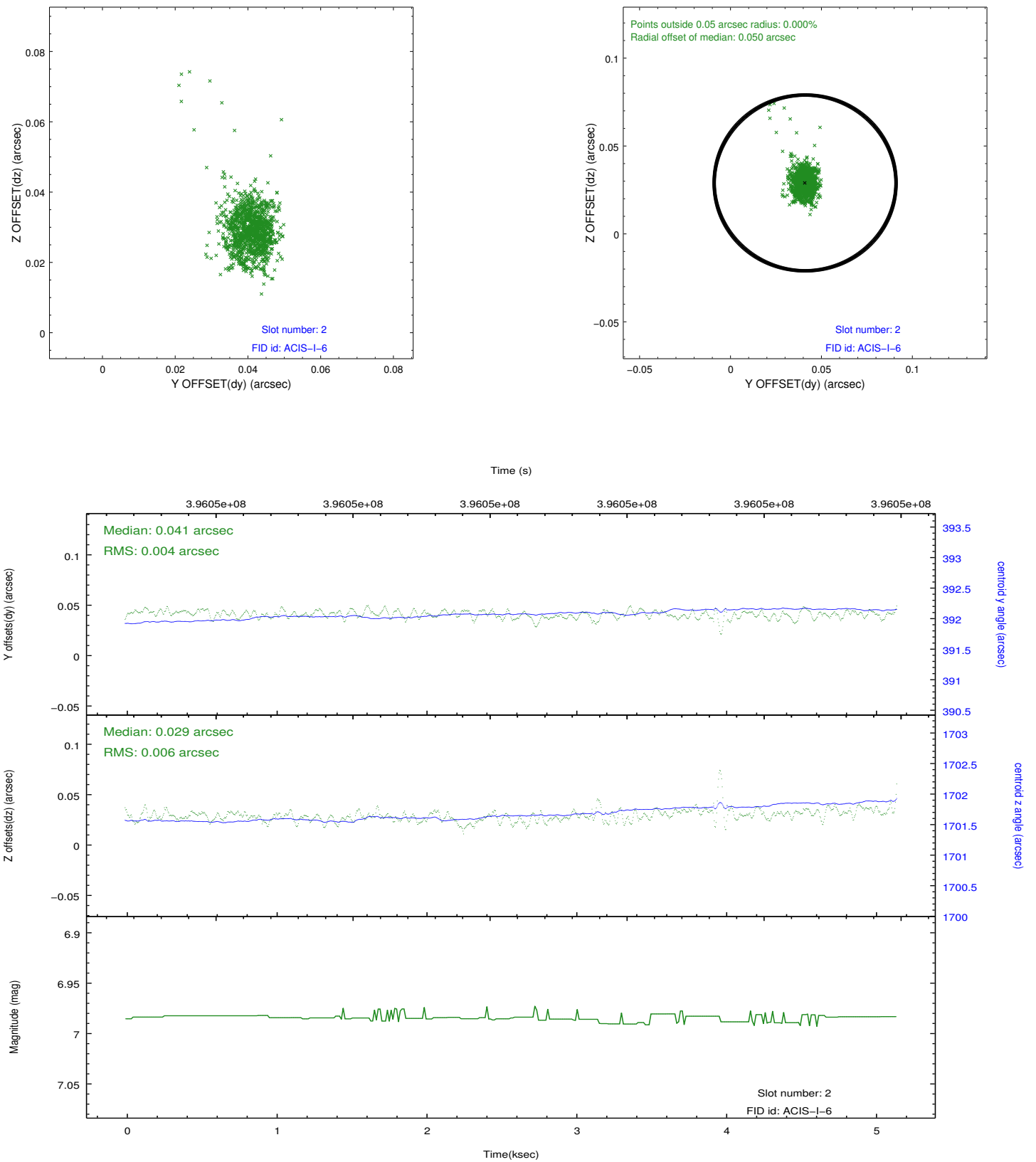
2.5.1 Slot 0



2.5.2 Slot 1



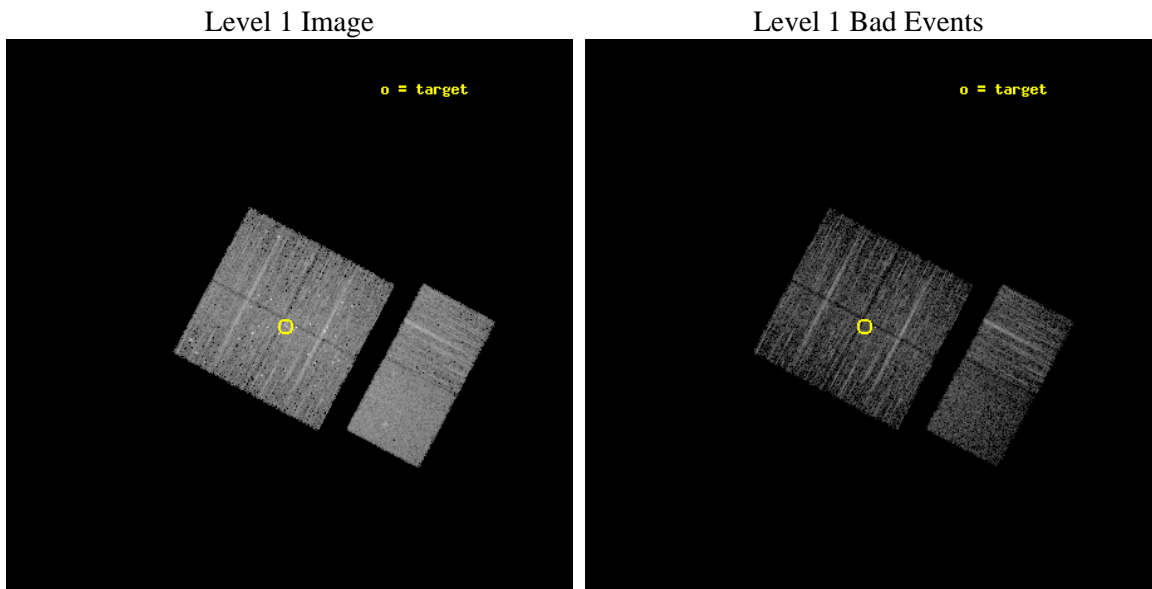
2.5.3 Slot 2



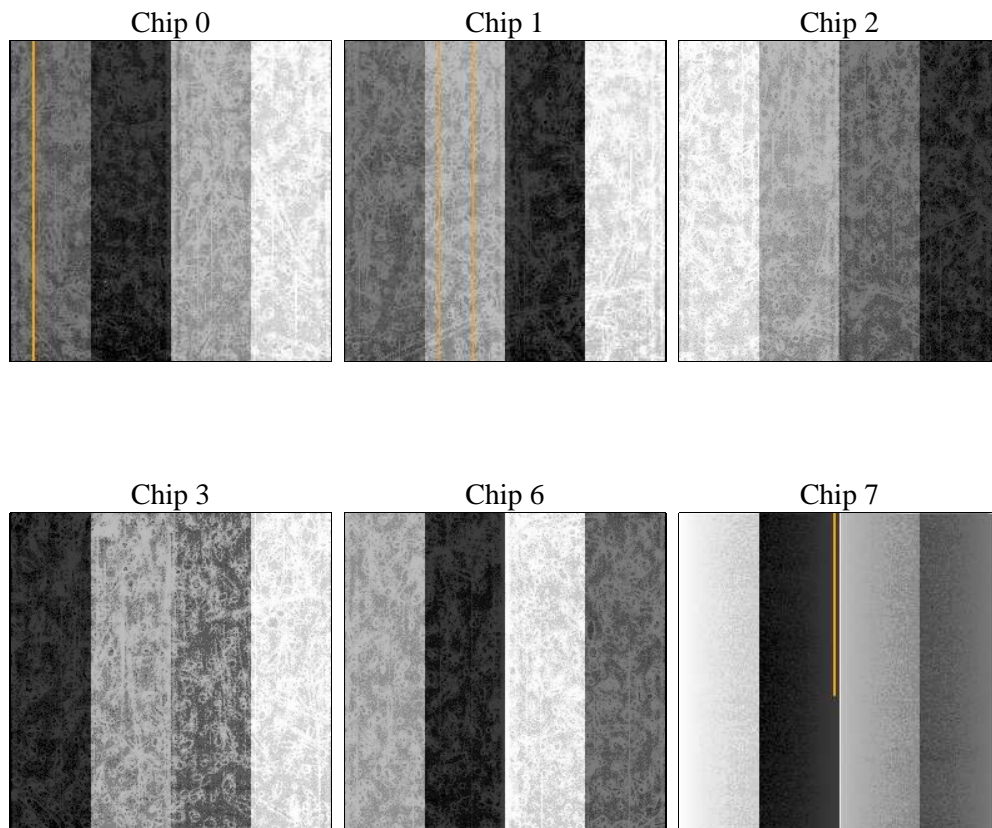
3 OBI Secondary

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	4022.2031980753	Sum of GTIs [s]
caldsver	4.5.0	 	ontime0	4022.2035660744	Sum of GTIs [s]
date	2012-06-30T13:15:07	Date and time of file creation	ontime1	4022.2034869194	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4022.2042141557	Sum of GTIs [s]
			ontime3	4022.2031980753	Sum of GTIs [s]
			ontime6	4022.2035965919	Sum of GTIs [s]
			ontime7	4015.7215861082	Sum of GTIs [s]
			l1events	199879	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	30238	32057	33240	34235	33066	37043	grade 0 events	2335	3625	3520	4583	1333	1637
rejected events	25370	25516	27225	26782	29464	20140		7%	11%	10%	13%	4%	4%
rejected %	83%	79%	81%	78%	89%	54%	grade 1 events	33	46	58	129	17	53
								0%	0%	0%	0%	0%	0%
							grade 2 events	1073	1138	1043	1159	799	3541
								3%	3%	3%	3%	2%	9%
							grade 3 events	367	484	403	526	377	1514
								1%	1%	1%	1%	1%	4%
							grade 4 events	413	462	362	441	368	1522
								1%	1%	1%	1%	1%	4%
							grade 5 events	1248	1352	1199	1502	1401	3869
								4%	4%	3%	4%	4%	10%
							grade 6 events	685	839	696	756	729	8711
								2%	2%	2%	2%	2%	23%
							grade 7 events	24084	24111	25959	25139	28042	16196
								79%	75%	78%	73%	84%	43%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.07.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9599827823639

A.2 Comments