

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9520 - L2 Version 2
Chandra X-Ray Center

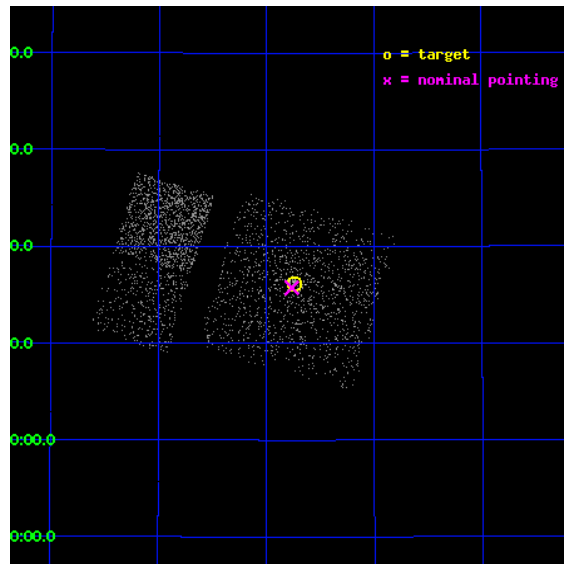
L2 Processing Date : May 6 2012

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1 Front

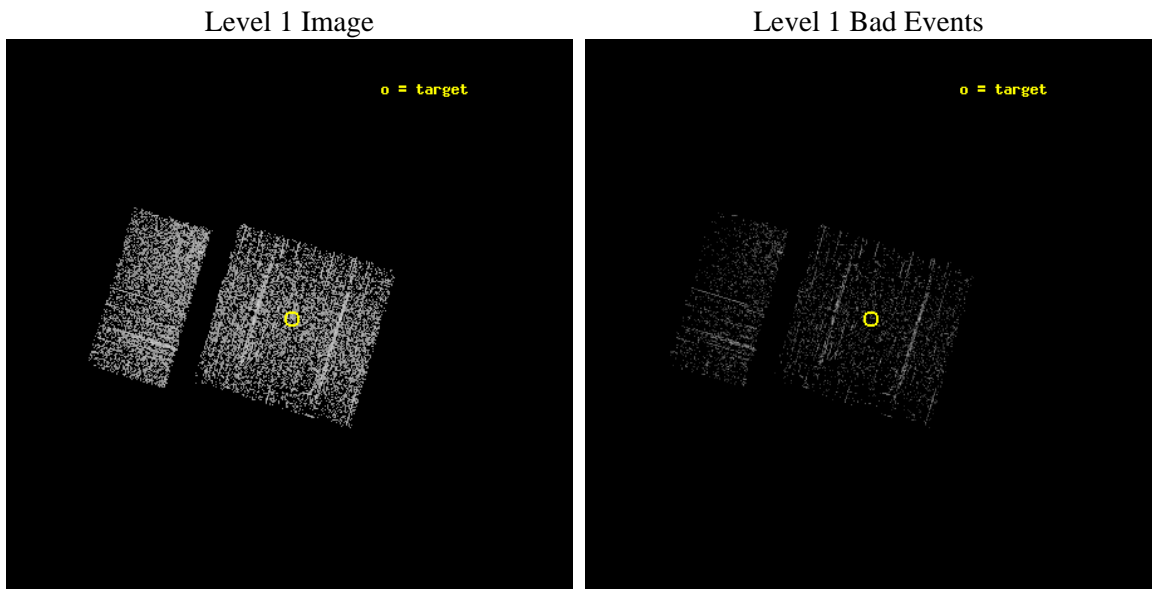
seq_num	600661	Sequence number
obs_id	9520	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[primary] S[econdar]
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.690948382771	Nominal RA [deg]
dec_nom	41.262342737478	Nominal Dec [deg]
roll_nom	286.56851845372	Nominal Roll [deg]
revision	2	Processing version of data
ontime	937.76556760073	Sum of GTIs [s]
livetime	147.62692072133	Livetime [s]
ontime0	937.76558744907	Sum of GTIs [s]
ontime1	937.76558744907	Sum of GTIs [s]
ontime2	937.7654979229	Sum of GTIs [s]
ontime3	937.76556760073	Sum of GTIs [s]
ontime6	937.76558744907	Sum of GTIs [s]
ontime7	937.76547807455	Sum of GTIs [s]
l2events	3345	Number of level 2 events



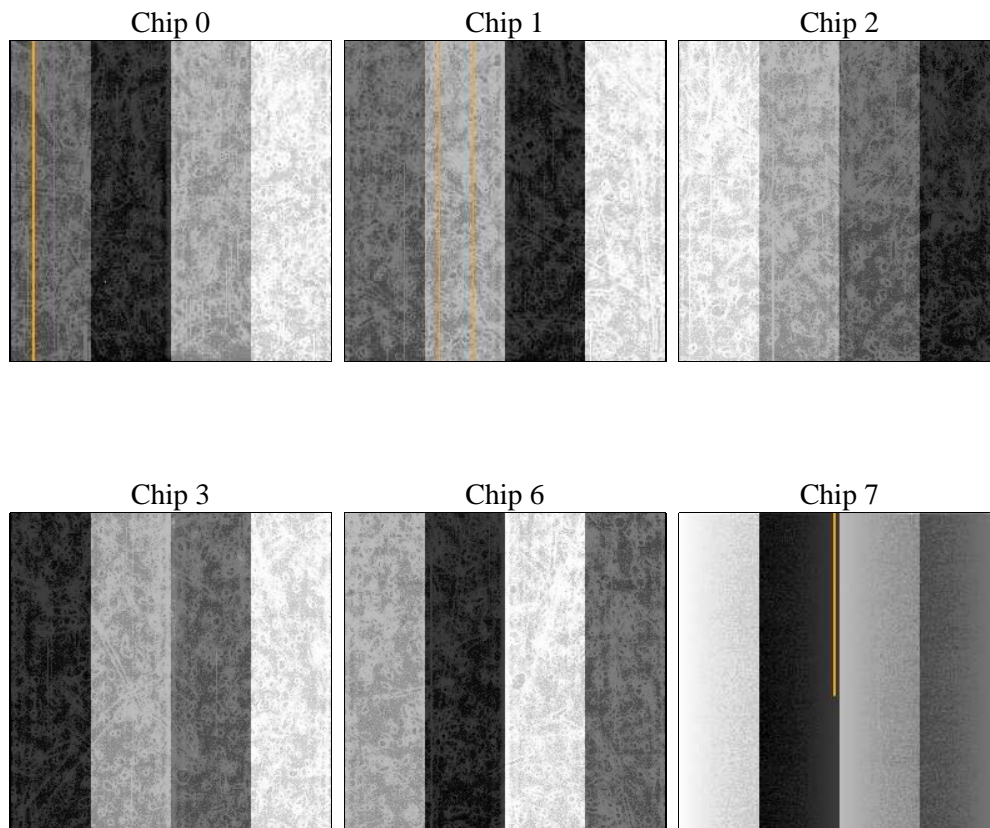
2 OBI Primary

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	8.4.4	Processing system revision	ontime	937.76556760073	Sum of GTIs [s]
caldbver	4.4.9	 	ontime0	937.76558744907	Sum of GTIs [s]
date	2012-05-06T15:31:54	Date and time of file creation	ontime1	937.76558744907	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	937.7654979229	Sum of GTIs [s]
			ontime3	937.76556760073	Sum of GTIs [s]
			ontime6	937.76558744907	Sum of GTIs [s]
			ontime7	937.76547807455	Sum of GTIs [s]
			l1events	27022	Number of level 1 events

2.1.4 Events

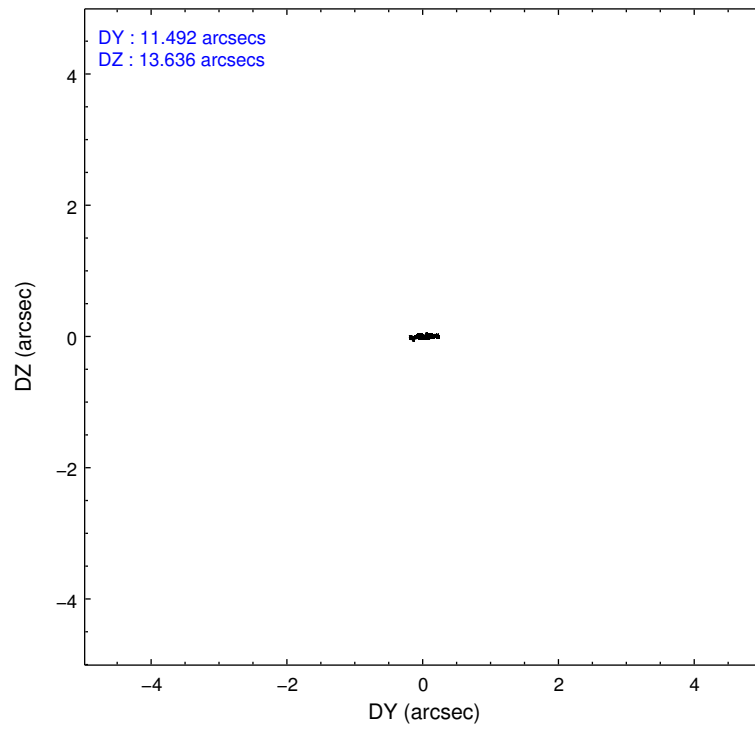
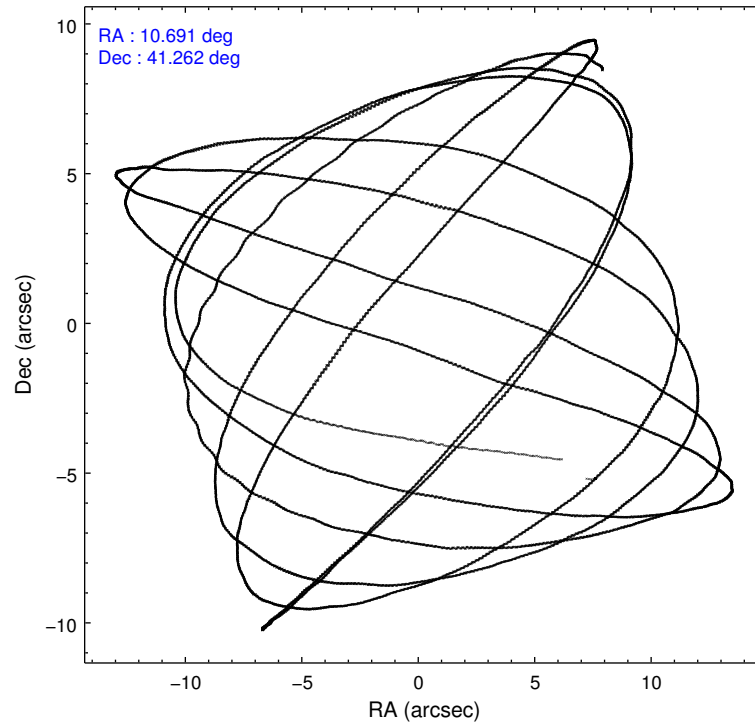
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	4191	4403	4344	4503	4920	4661
rejected events	3707	3835	3852	4014	4483	3310
rejected %	88%	87%	88%	89%	91%	71%

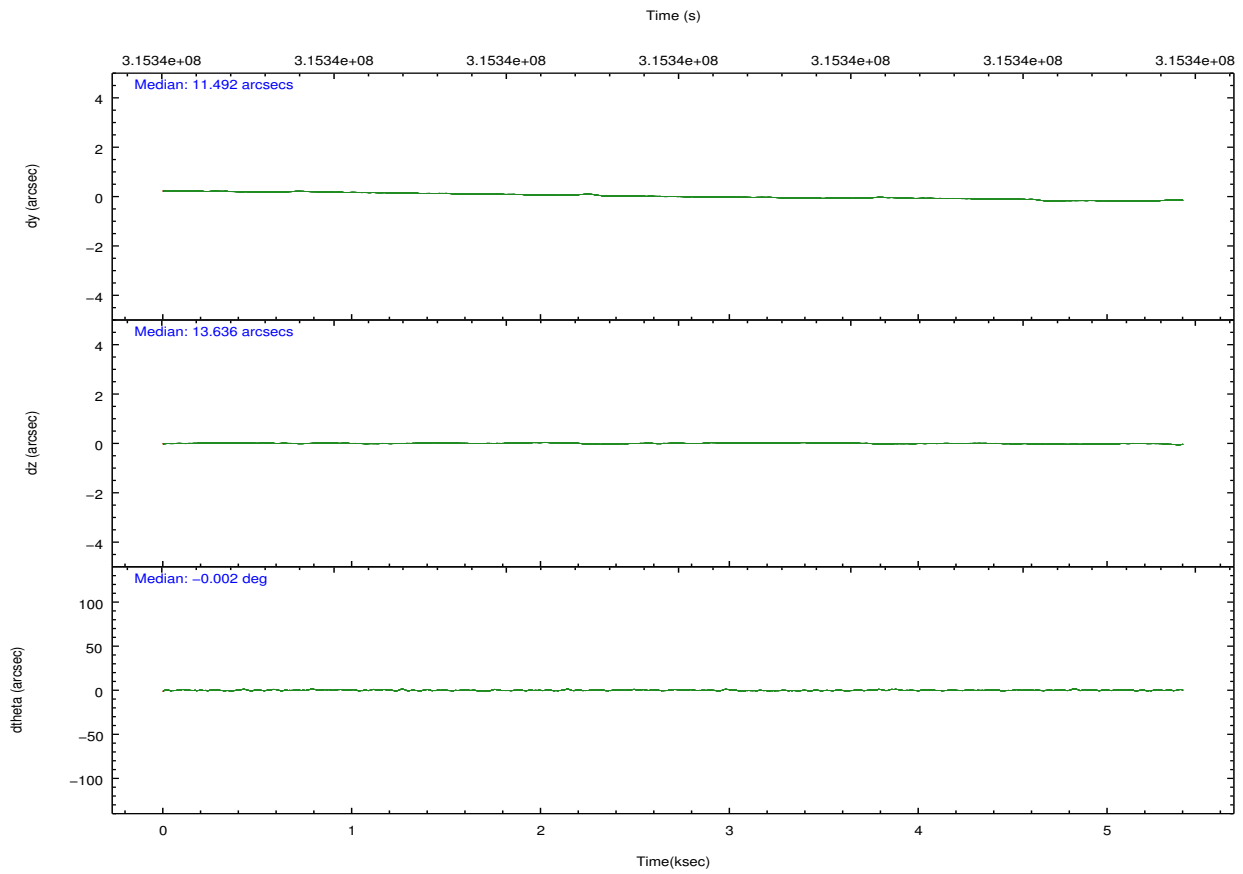
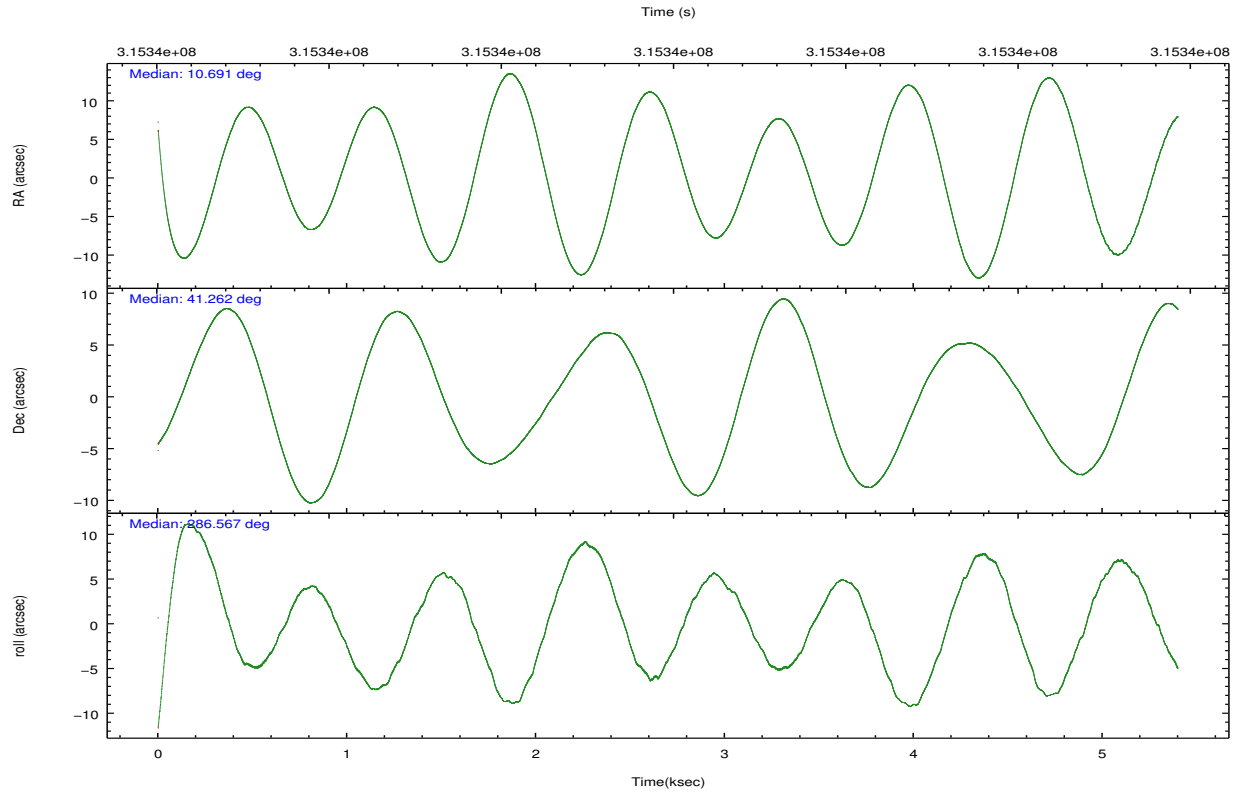
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	168	255	245	235	143	103
	4%	5%	5%	5%	2%	2%
grade 1 events	1	4	1	1	2	6
	0%	0%	0%	0%	0%	0%
grade 2 events	126	115	92	96	101	287
	3%	2%	2%	2%	2%	6%
grade 3 events	42	57	47	36	45	105
	1%	1%	1%	0%	0%	2%
grade 4 events	51	62	47	39	50	113
	1%	1%	1%	0%	1%	2%
grade 5 events	125	144	141	167	166	366
	2%	3%	3%	3%	3%	7%
grade 6 events	98	83	65	84	98	749
	2%	1%	1%	1%	1%	16%
grade 7 events	3580	3683	3706	3845	4315	2932
	85%	83%	85%	85%	87%	62%

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	10.664318	10.69094838277086	CCD I2 on	Y	Y
[deg] Pointing Dec	41.281089	41.26234273747834	CCD I3 on	Y	Y
[deg] Pointing Roll	286.377413	286.5685184537202	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)	315335665.184000	315334553.83078	CCD S5 on	N	N
Observation start date	2007-12-29T17:13:20	2007-12-29T16:55:53	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	315340665.184000	315341858.49364	On-chip summing requested	N	N
Observation end date	2007-12-29T18:36:40	2007-12-29T18:57:38	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



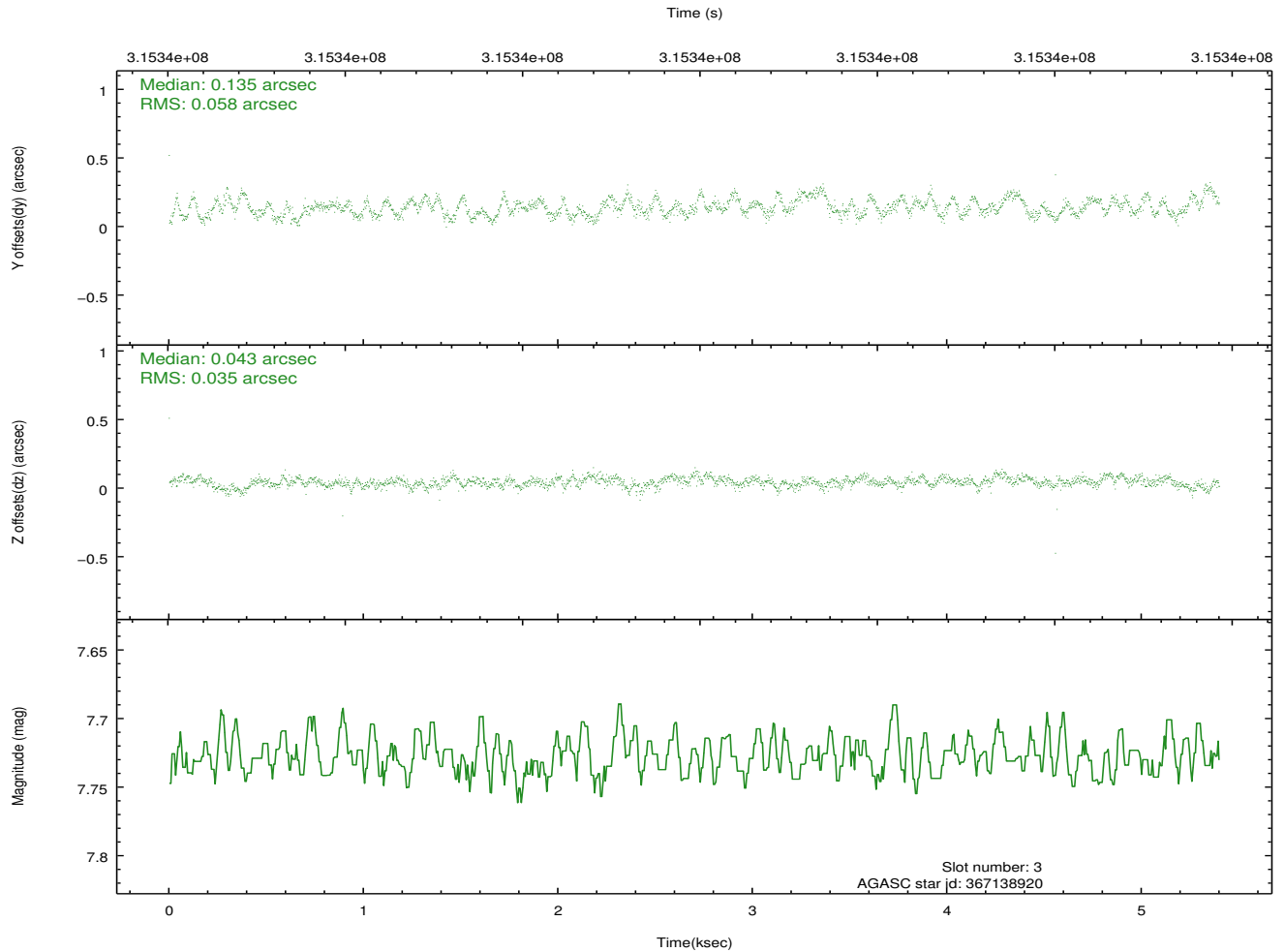
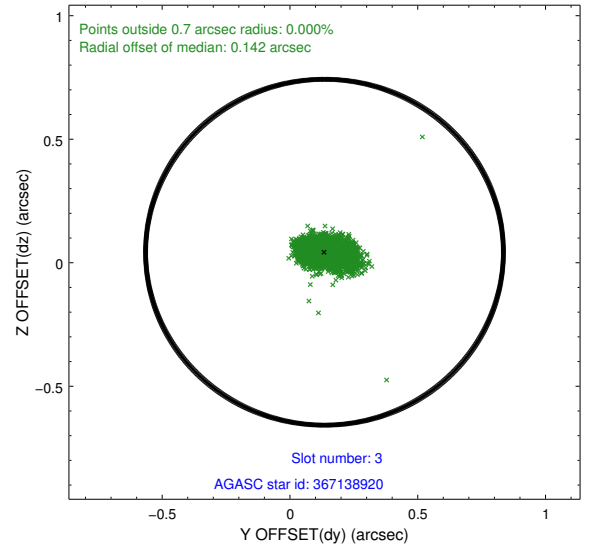
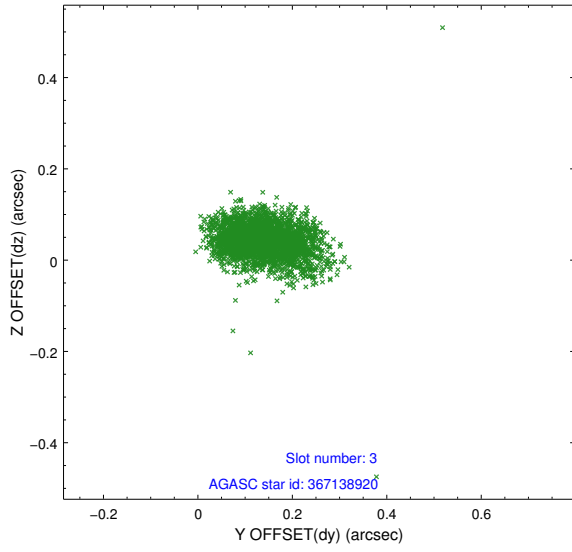


Slot Statistics

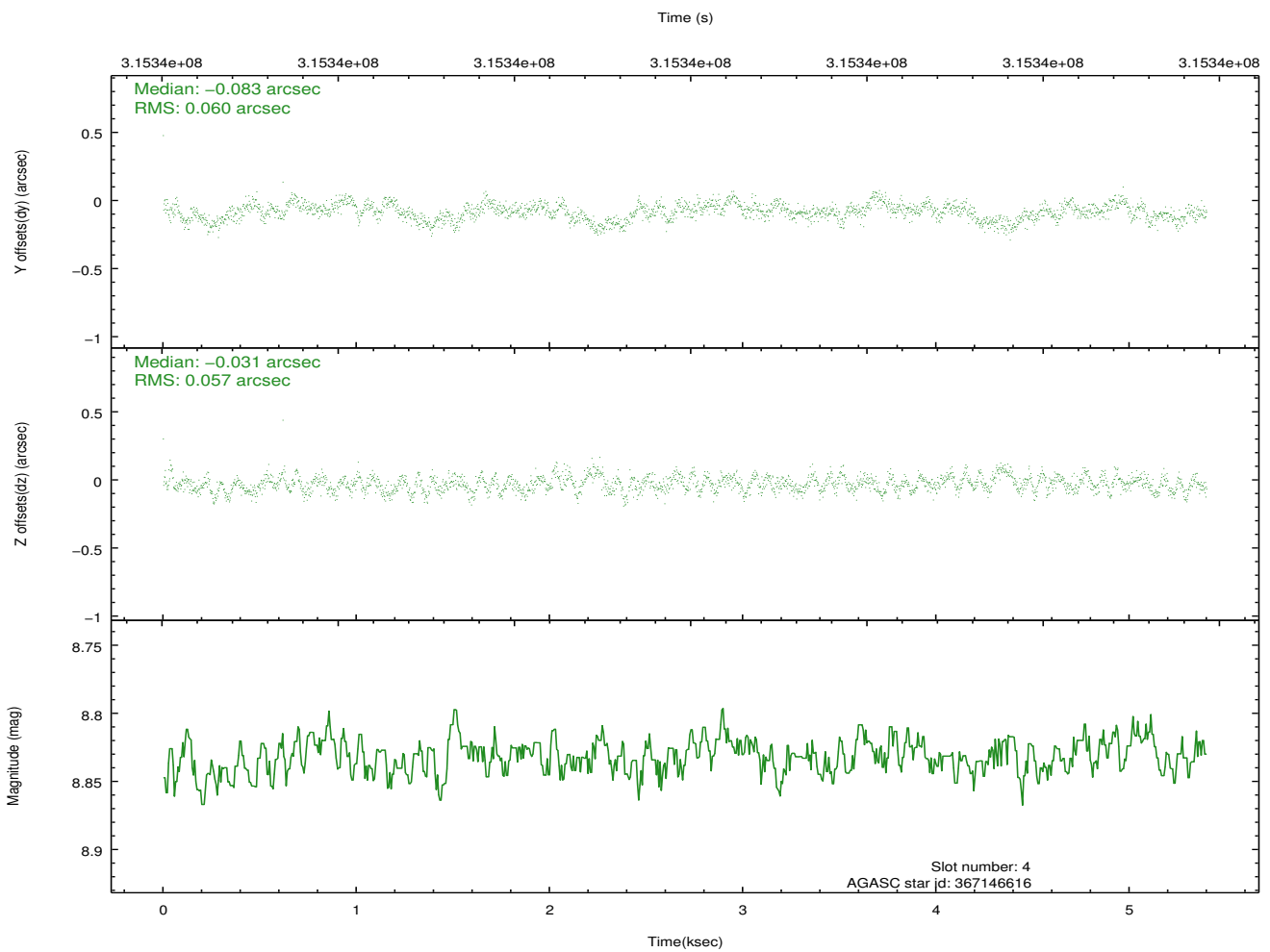
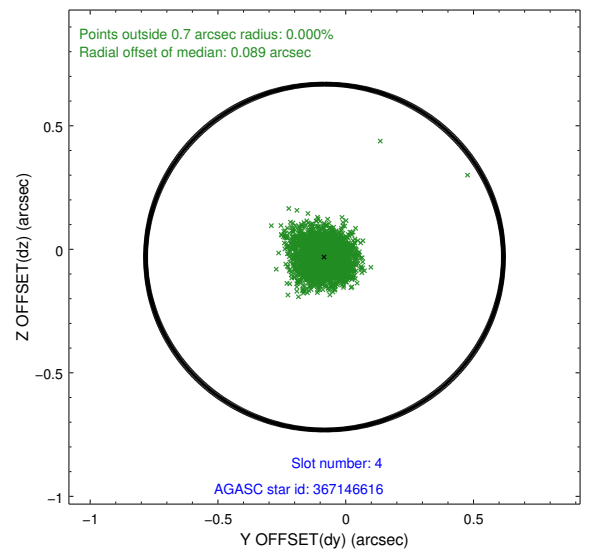
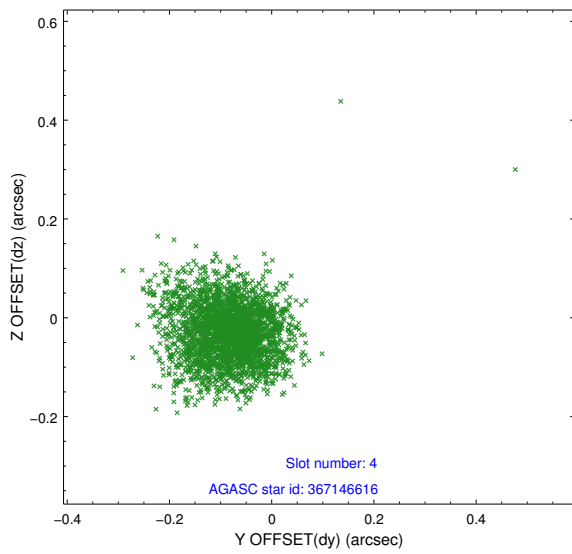
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	1318	0.027	0.019	0.016	0.023	0.000000	0.000000	928.08	-837.17
1	FID	ACIS-I-5	7.23	1318	-0.196	0.040	0.011	0.017	0.000000	0.000000	-1819.65	1059.75
2	FID	ACIS-I-6	7.24	1318	0.078	0.009	0.011	0.017	0.000000	0.000000	392.44	1705.51
3	GUIDE	367138920	7.73	2633	0.135	0.043	0.069	0.116	11.513485	40.808909	2273.68	1744.65
4	GUIDE	367146616	8.83	2629	-0.083	-0.031	0.087	0.141	11.418645	41.190163	882.90	1871.57
5	GUIDE	367148872	7.23	2631	0.054	-0.046	0.070	0.109	10.505940	40.688258	1926.62	-1015.91
6	GUIDE	367674552	8.84	2634	-0.010	0.075	0.076	0.122	11.016238	41.570845	-734.19	1203.86
7	GUIDE	367663272	9.27	2634	-0.100	-0.039	0.096	0.152	10.656279	41.699429	-1450.87	403.68

2.4 Star Slots

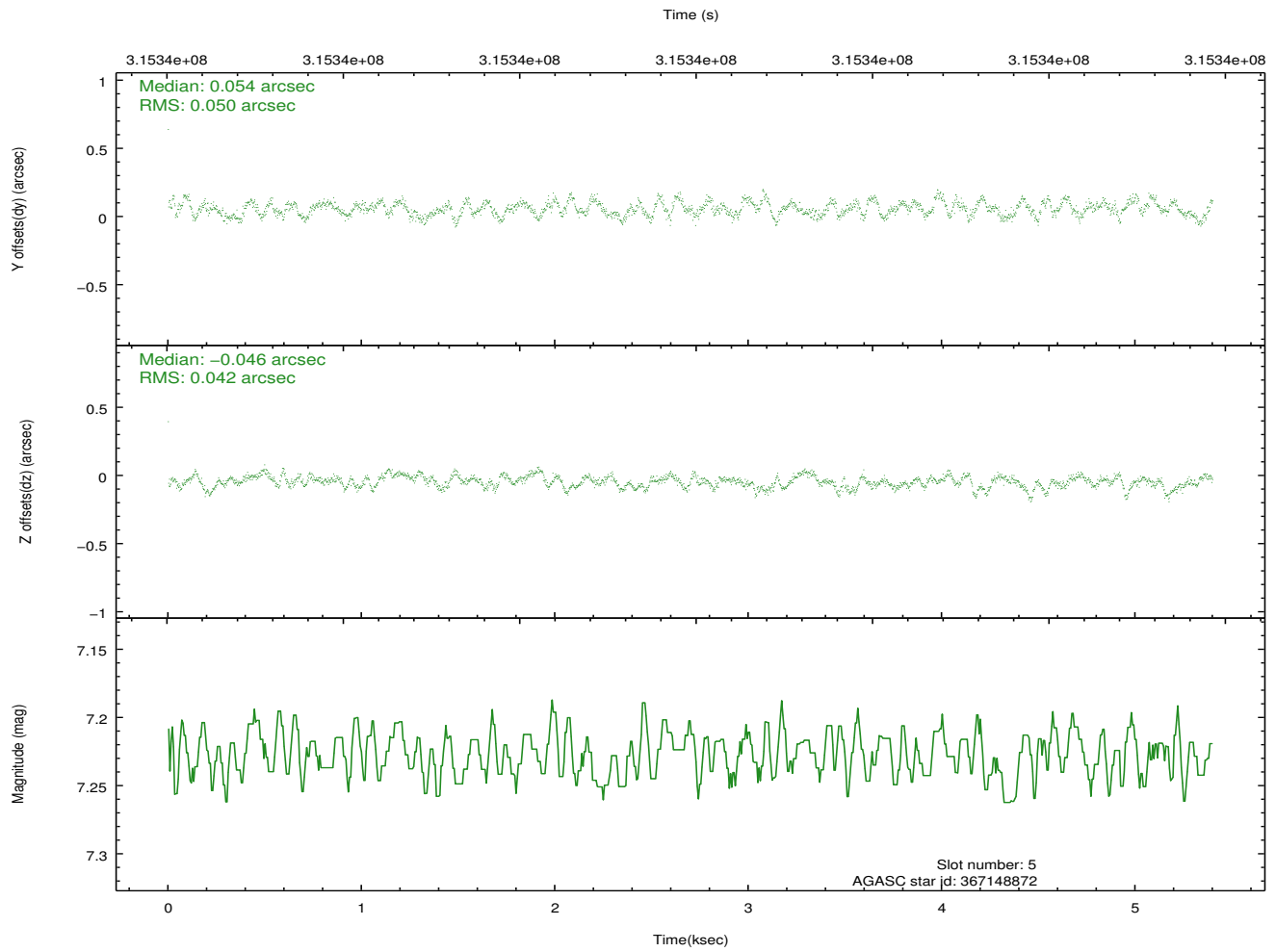
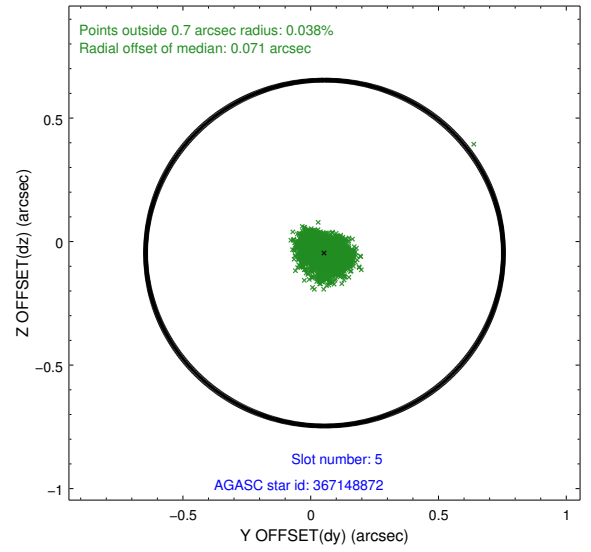
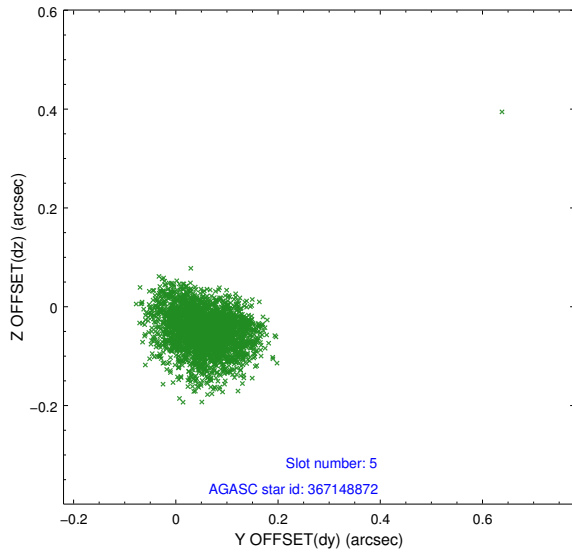
2.4.1 Slot 3



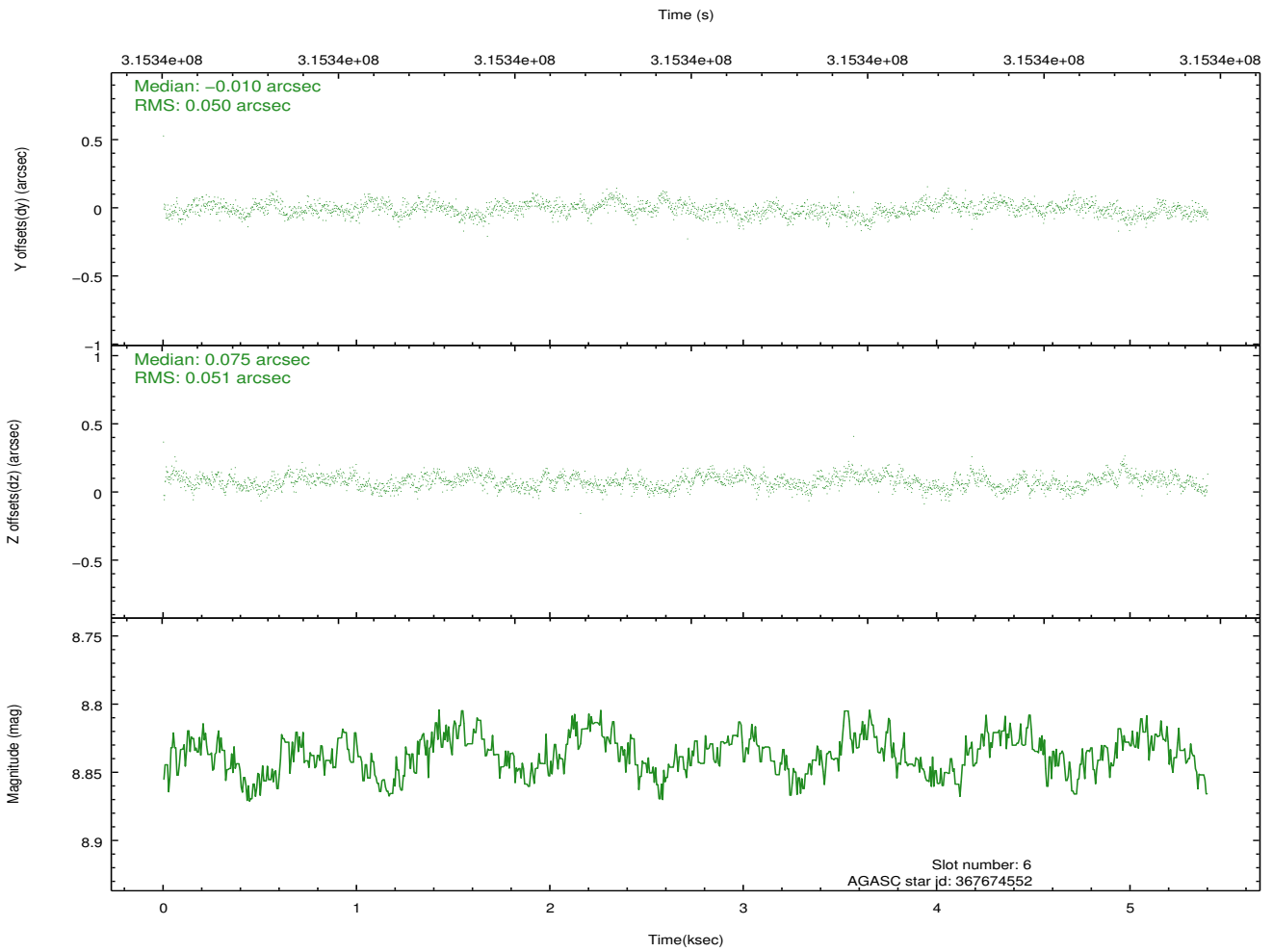
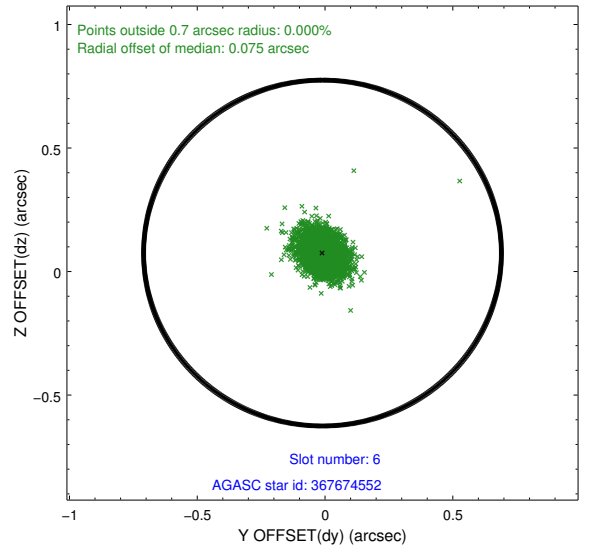
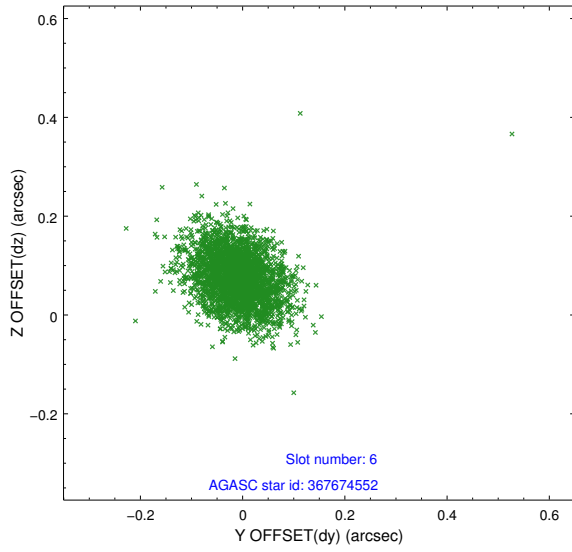
2.4.2 Slot 4



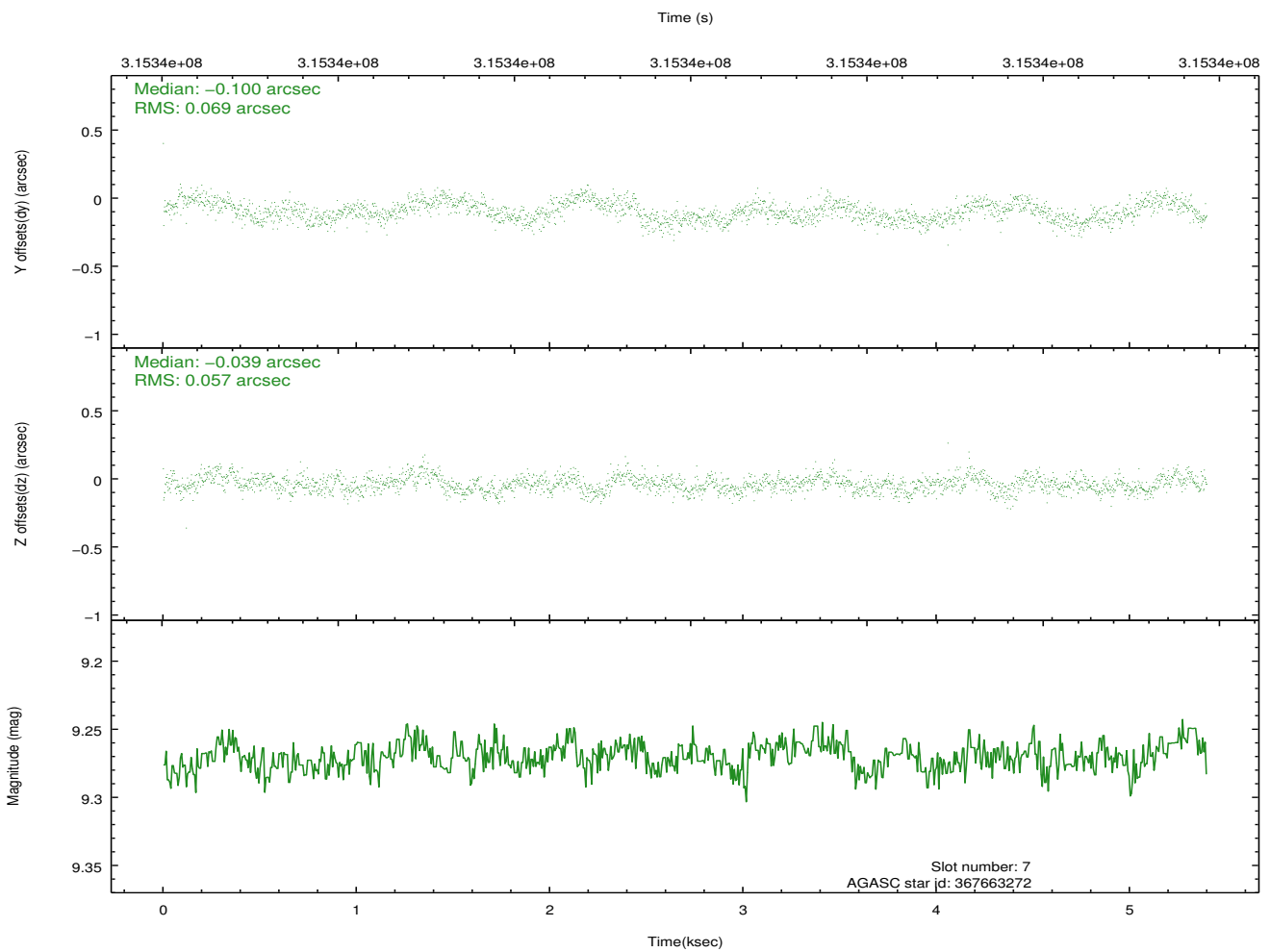
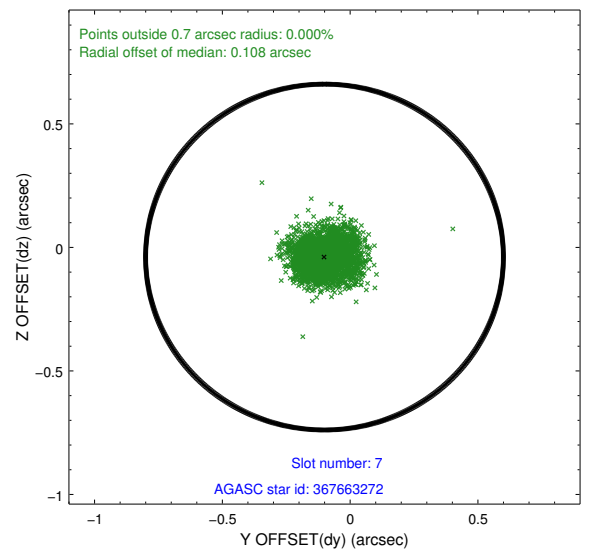
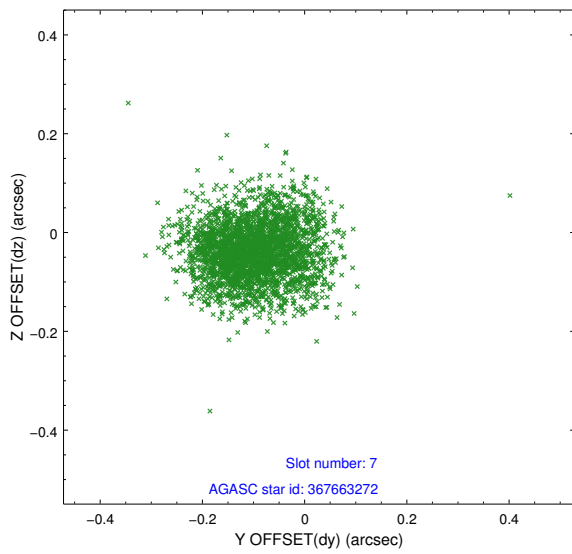
2.4.3 Slot 5



2.4.4 Slot 6

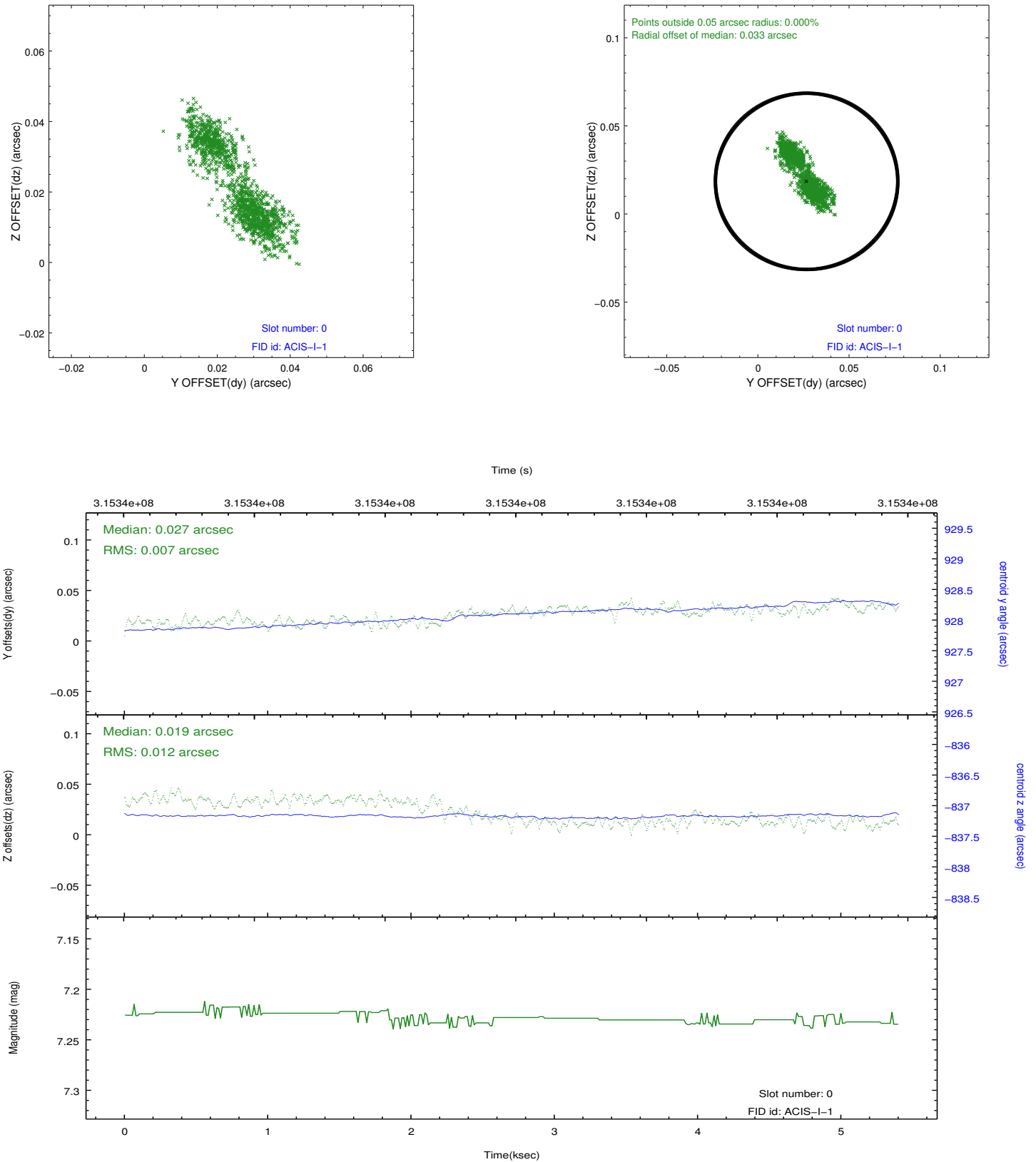


2.4.5 Slot 7

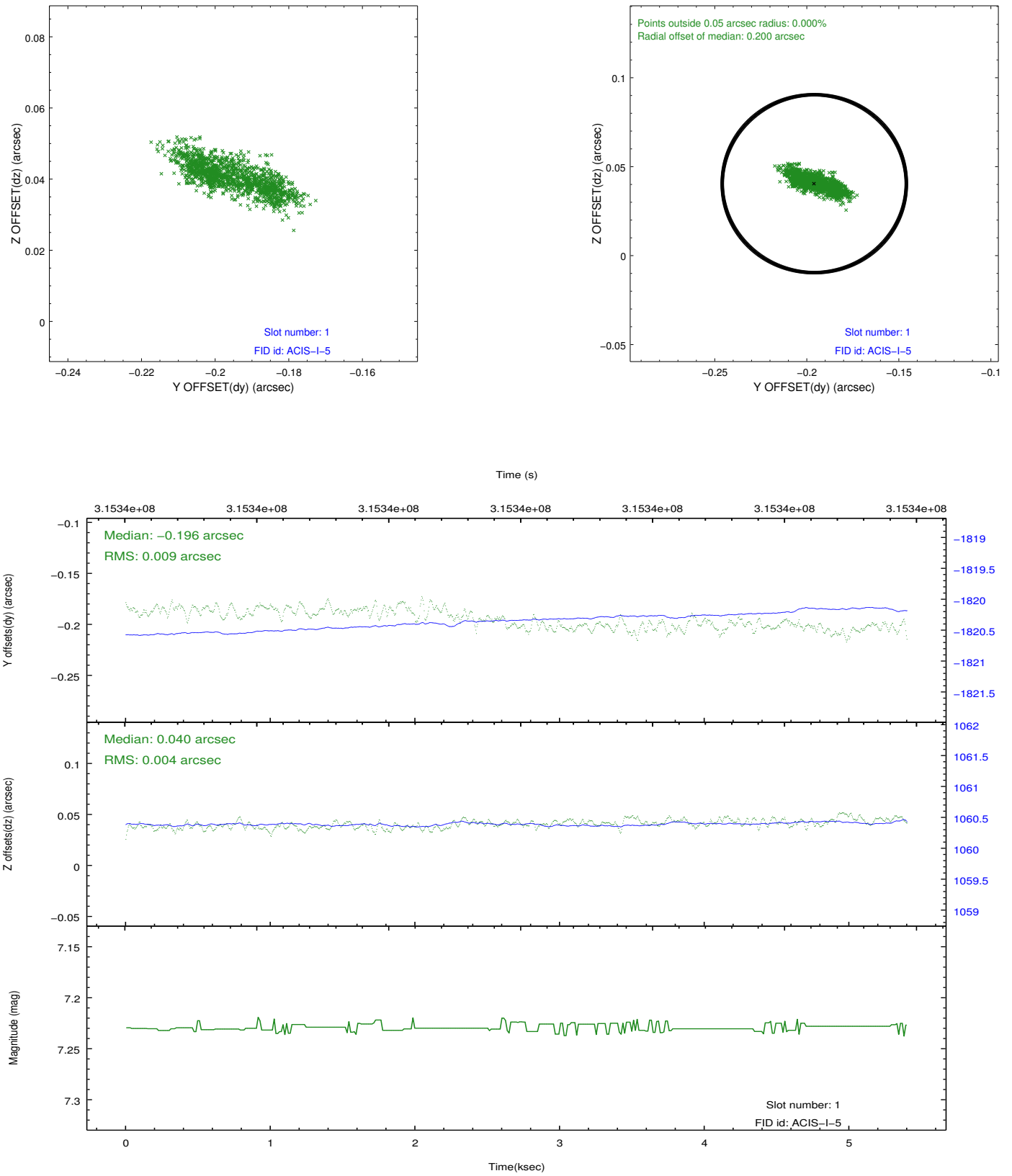


2.5 FID Slots

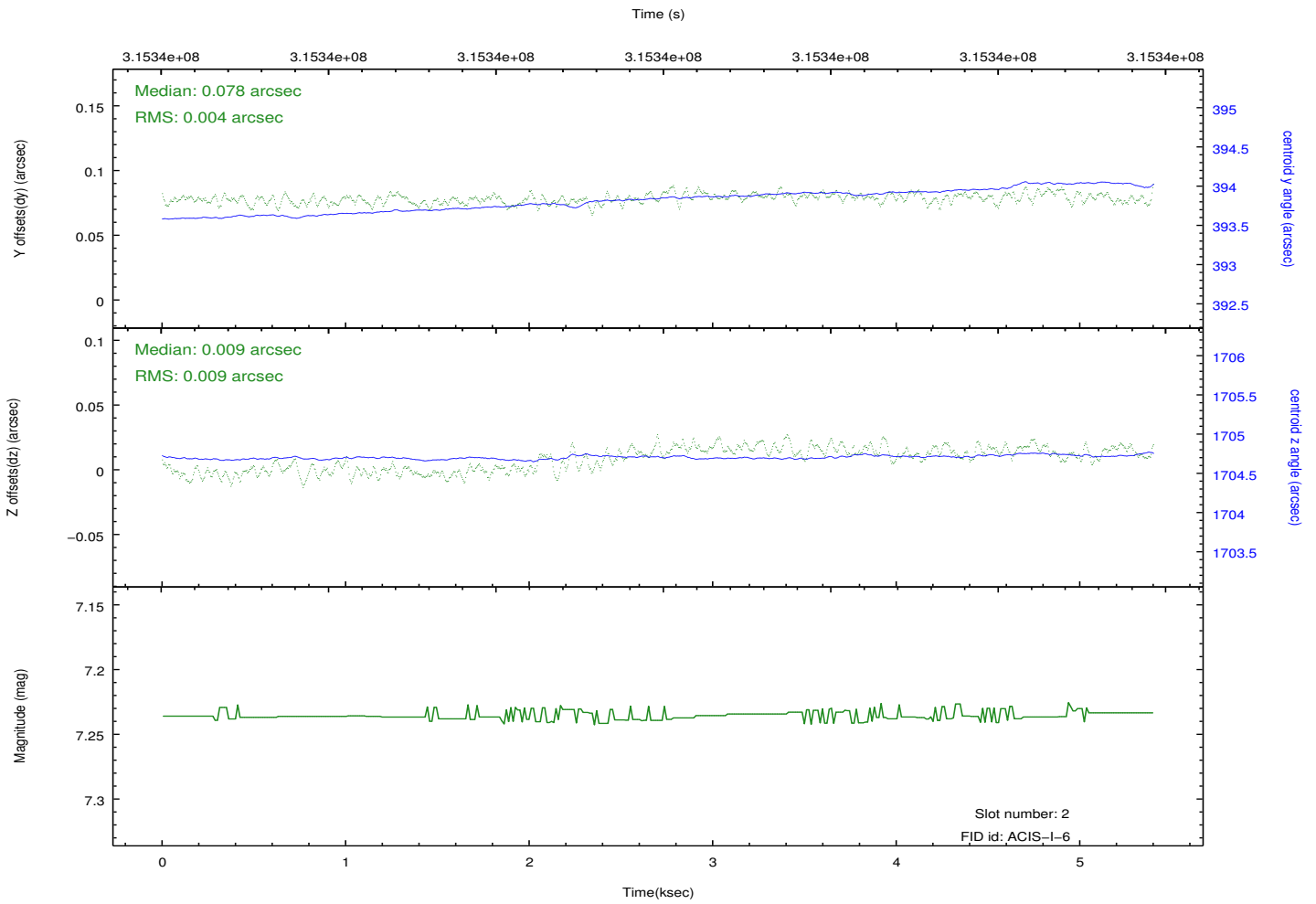
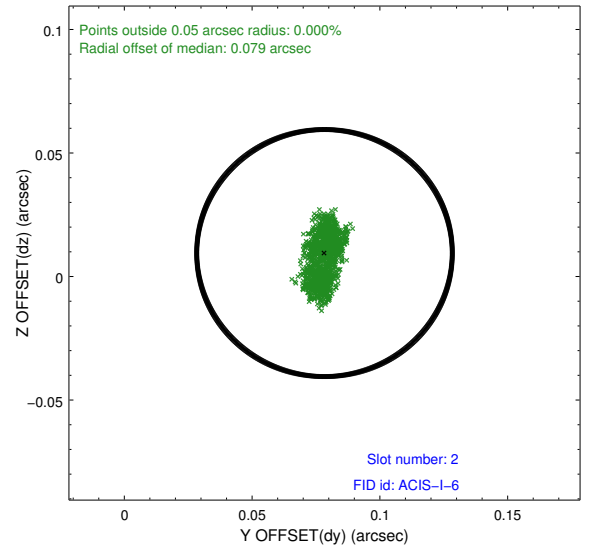
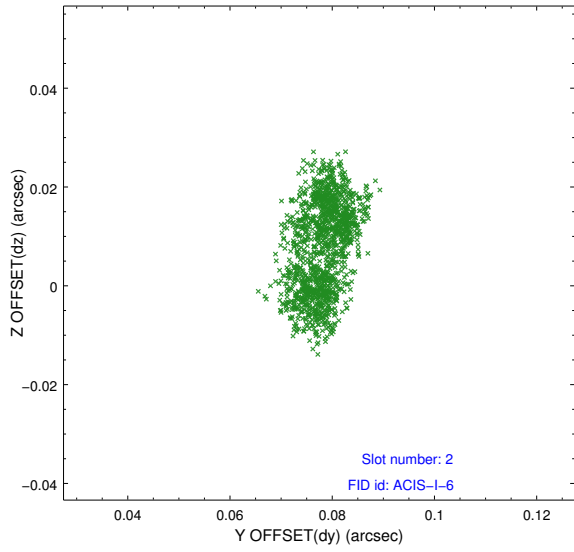
2.5.1 Slot 0



2.5.2 Slot 1



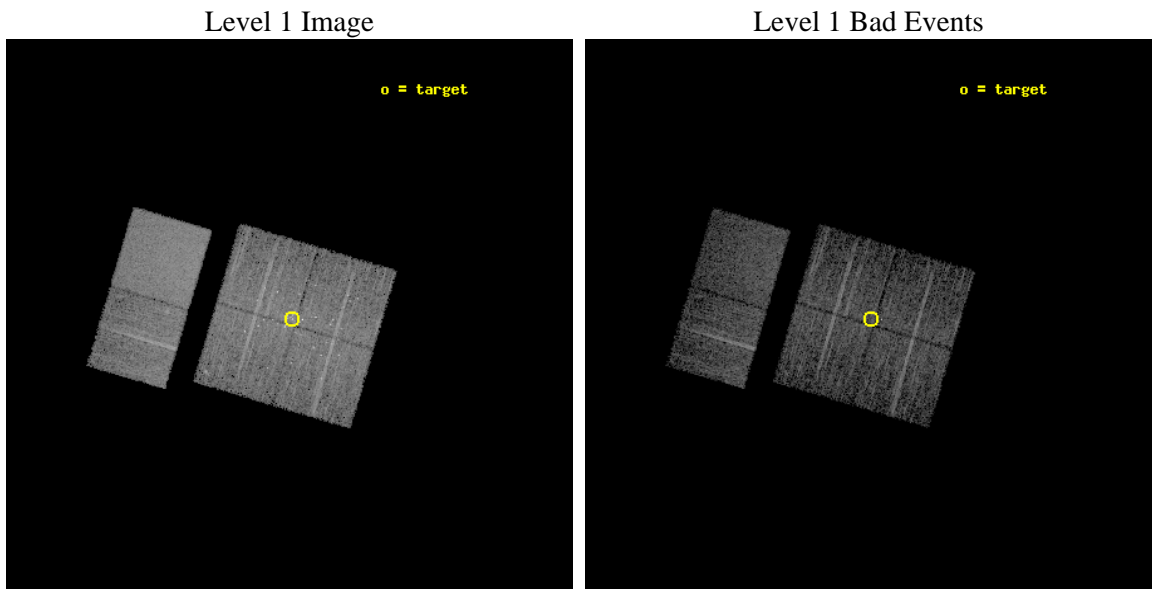
2.5.3 Slot 2



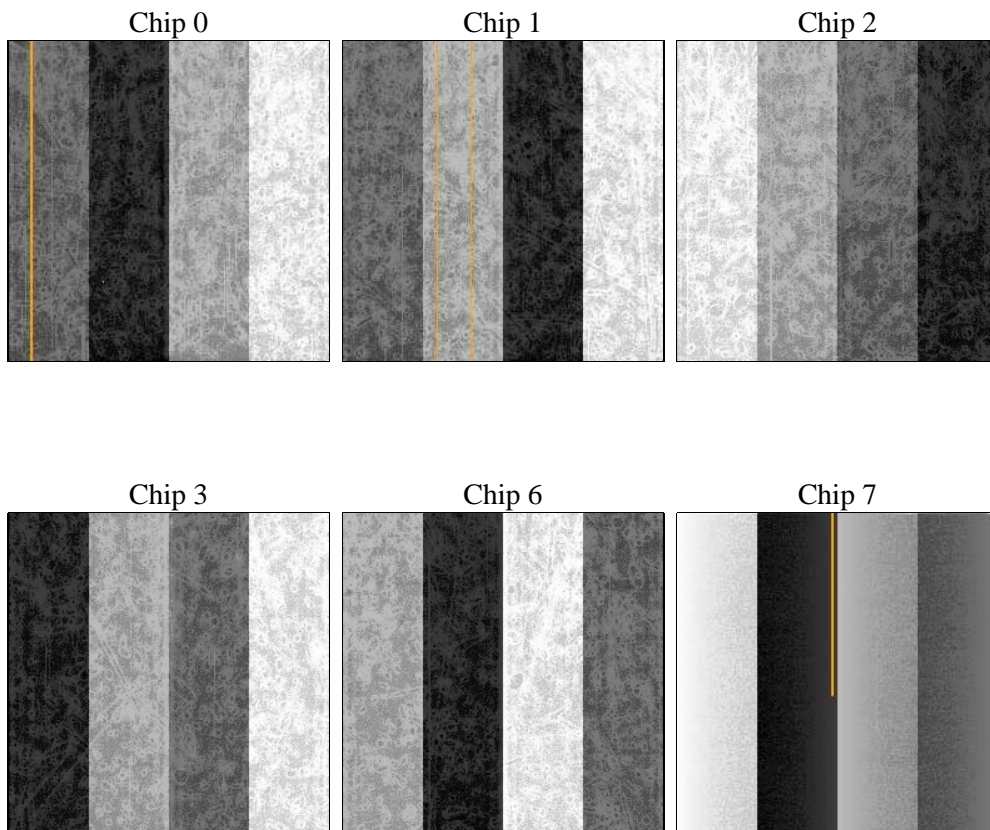
3 OBI Secondary

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	8.4.4	Processing system revision	ontime	4012.598700285	Sum of GTIs [s]
caldbver	4.4.9	 	ontime0	4012.5988696218	Sum of GTIs [s]
date	2012-05-06T15:37:50	Date and time of file creation	ontime1	4009.3578488827	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4012.5986410379	Sum of GTIs [s]
			ontime3	4012.598700285	Sum of GTIs [s]
			ontime6	4012.5985708833	Sum of GTIs [s]
			ontime7	4012.5984519124	Sum of GTIs [s]
			l1events	256942	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	39593	40089	40552	42294	39389	55025	grade 0 events	3545	4440	4091	4625	2059	2097
rejected events	32892	31791	33488	34520	34377	31809		8%	11%	10%	10%	5%	3%
rejected %	83%	79%	82%	81%	87%	57%	grade 1 events	41	132	48	56	16	49
								0%	0%	0%	0%	0%	0%
							grade 2 events	1283	1596	1163	1225	1072	4770
								3%	3%	2%	2%	2%	8%
							grade 3 events	500	564	512	527	474	1958
								1%	1%	1%	1%	1%	3%
							grade 4 events	488	572	475	504	452	1872
								1%	1%	1%	1%	1%	3%
							grade 5 events	1625	1865	1597	1789	1853	5006
								4%	4%	3%	4%	4%	9%
							grade 6 events	905	1138	831	903	964	12551
								2%	2%	2%	2%	2%	22%
							grade 7 events	31206	29782	31835	32665	32499	26722
								78%	74%	78%	77%	82%	48%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.95030314

A.2 Comments

Coordinated with HST.