

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 7139 - L2 Version 2
Chandra X-Ray Center

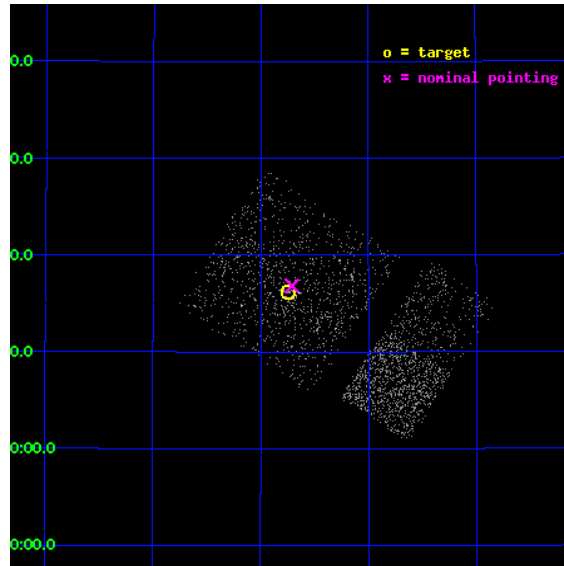
L2 Processing Date : Apr 6 2012

Contents

1	Front	2
2	OBI Primary	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	OBI Secondary	17
3.1	OBI	17
3.1.1	Images	17
3.1.2	Bias	17
3.1.3	Parameters	18
3.1.4	Events	18
A	Summary	19
A.1	Status	19
A.2	Comments	19

1 Front

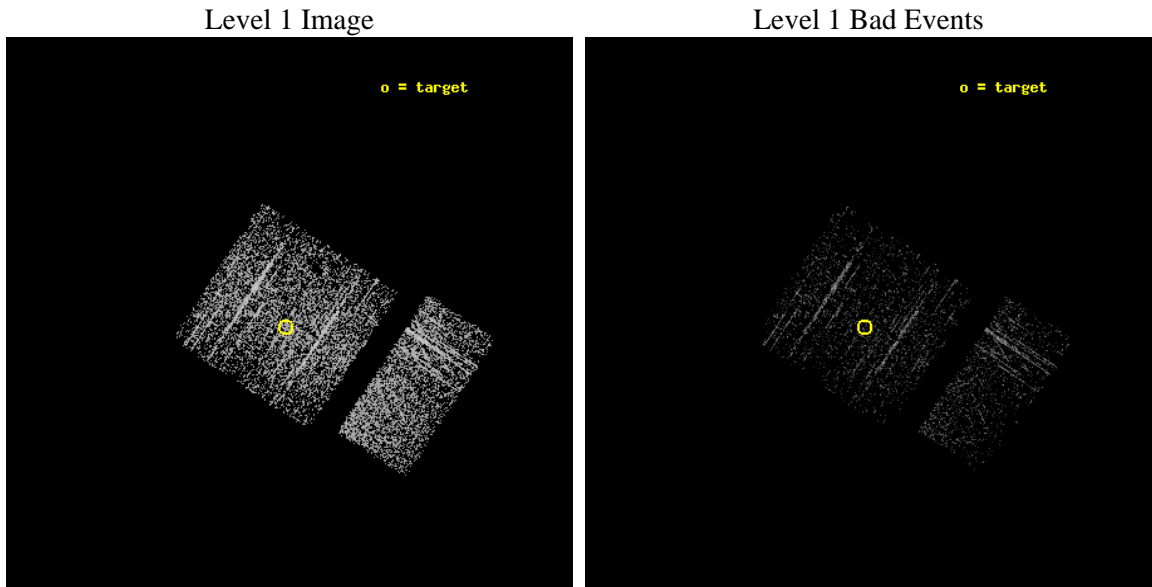
seq_num	600577	Sequence number
obs_id	7139	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Michael Garcia	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.677758788043	Nominal RA [deg]
dec_nom	41.280585062469	Nominal Dec [deg]
roll_nom	123.46510348273	Nominal Roll [deg]
revision	2	Processing version of data
ontime	920.66785299778	Sum of GTIs [s]
livetime	124.03375757105	Livetime [s]
ontime0	920.66785299778	Sum of GTIs [s]
ontime1	920.66785299778	Sum of GTIs [s]
ontime2	920.66785299778	Sum of GTIs [s]
ontime3	920.66785299778	Sum of GTIs [s]
ontime6	920.63956409693	Sum of GTIs [s]
ontime7	920.66785299778	Sum of GTIs [s]
l2events	2762	Number of level 2 events



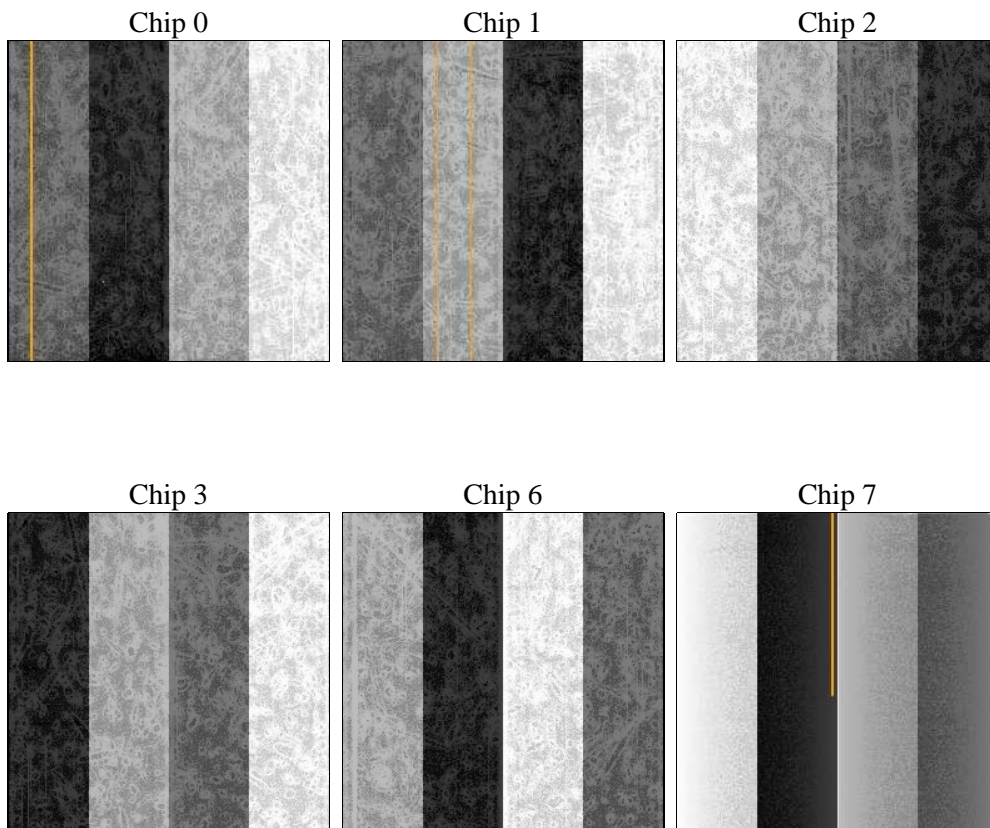
2 OBI Primary

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	8.4.3.1	Processing system revision	ontime	920.66785299778	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	920.66785299778	Sum of GTIs [s]
date	2012-04-06T03:18:35	Date and time of file creation	ontime1	920.66785299778	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	920.66785299778	Sum of GTIs [s]
			ontime3	920.66785299778	Sum of GTIs [s]
			ontime6	920.63956409693	Sum of GTIs [s]
			ontime7	920.66785299778	Sum of GTIs [s]
			l1events	24512	Number of level 1 events

2.1.4 Events

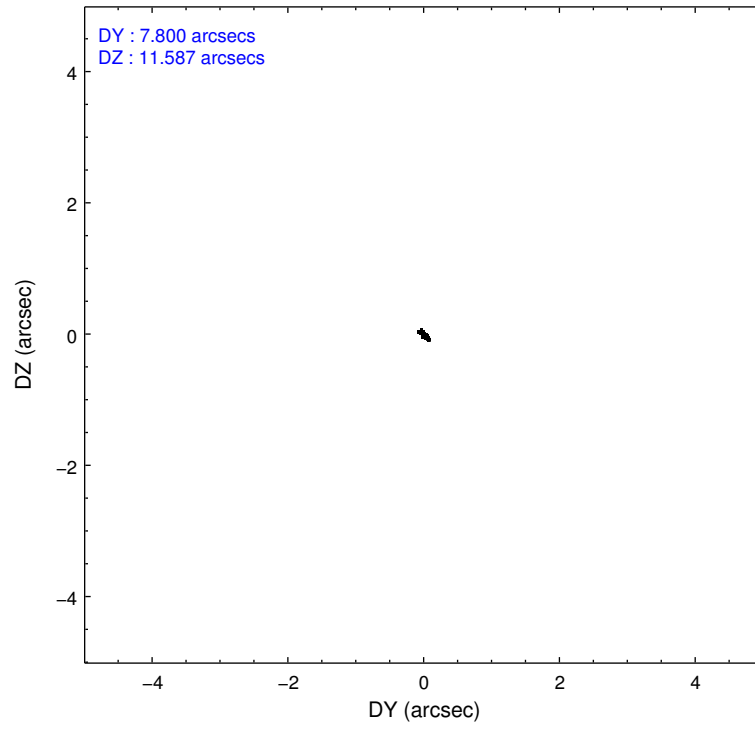
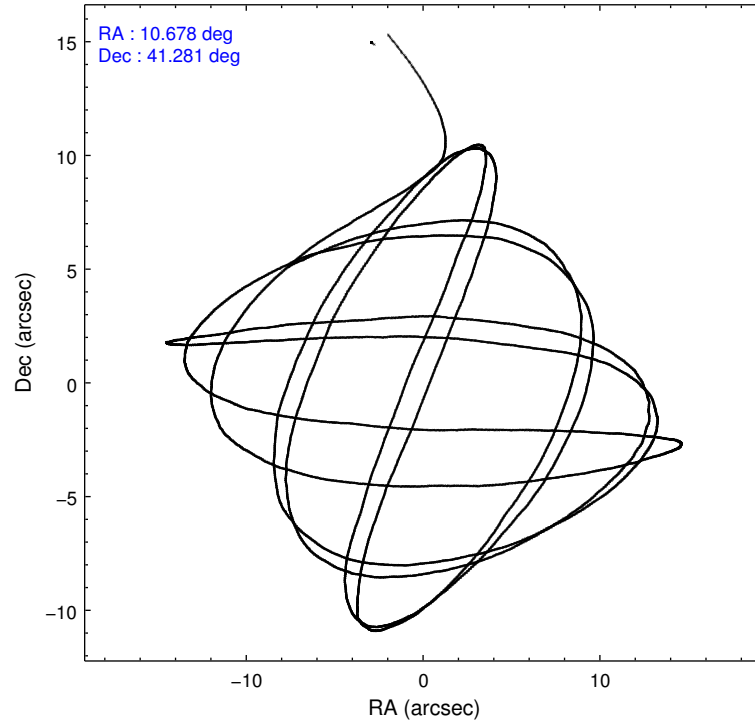
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	3566	3968	3933	4015	4842	4188
rejected events	3206	3540	3548	3491	4488	3091
rejected %	89%	89%	90%	86%	92%	73%

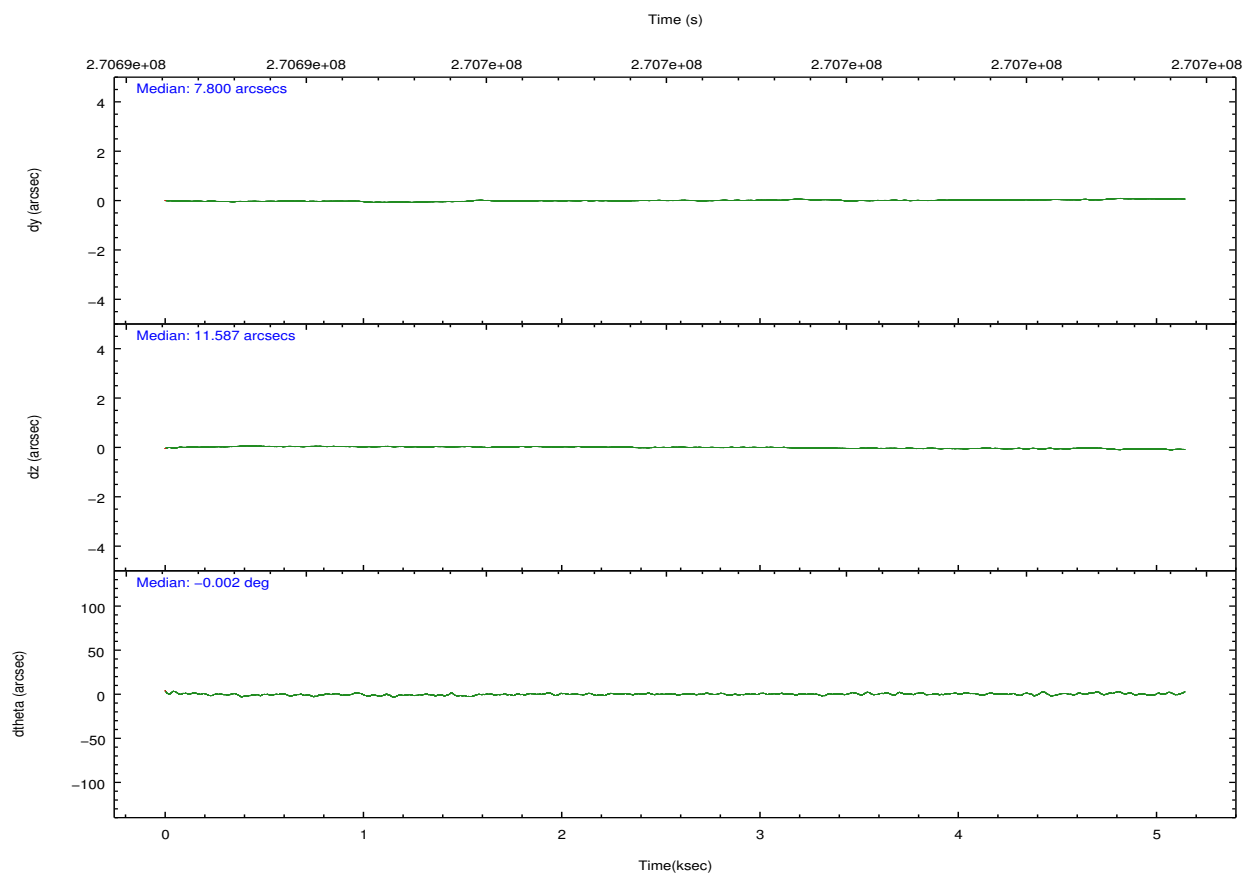
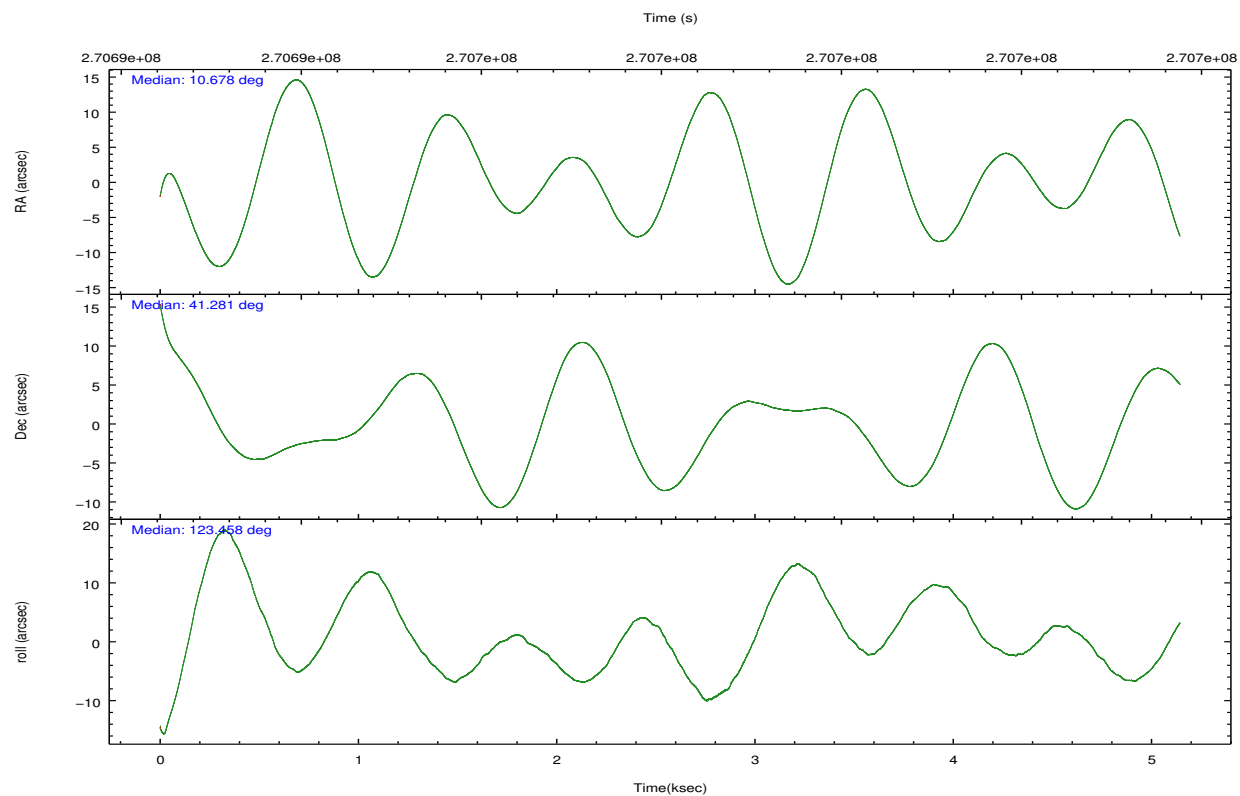
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	129	162	180	289	99	87
	3%	4%	4%	7%	2%	2%
grade 1 events	1	1	5	3	1	2
	0%	0%	0%	0%	0%	0%
grade 2 events	81	79	69	71	95	249
	2%	1%	1%	1%	1%	5%
grade 3 events	53	52	31	46	43	110
	1%	1%	0%	1%	0%	2%
grade 4 events	32	50	41	52	49	77
	0%	1%	1%	1%	1%	1%
grade 5 events	141	146	131	139	143	340
	3%	3%	3%	3%	2%	8%
grade 6 events	66	87	66	68	69	581
	1%	2%	1%	1%	1%	13%
grade 7 events	3063	3391	3410	3347	4343	2742
	85%	85%	86%	83%	89%	65%

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	10.710450	10.67775878804303	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.268363	41.28058506246928	Alternating exposures requested	Y	Y
[deg] Pointing Roll	123.234868	123.465103482732	[s] Primary exposure time	0.500000	0.5
[s] Window start time (MET)	270345665.184000	270345665.184000	[s] Secondary exposure time	0.000000	3.2
[s] Window stop time (MET)	270950465.184000	270950465.184000	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)	270693615.184000	270692607.29055			
Observation start date	2006-07-31T00:39:10	2006-07-31T00:23:27			
[s] Observation end time (MET)	270698615.184000	270699493.75337			
Observation end date	2006-07-31T02:02:30	2006-07-31T02:18:13			
Read mode	TIMED	TIMED			

2.3 Aspect



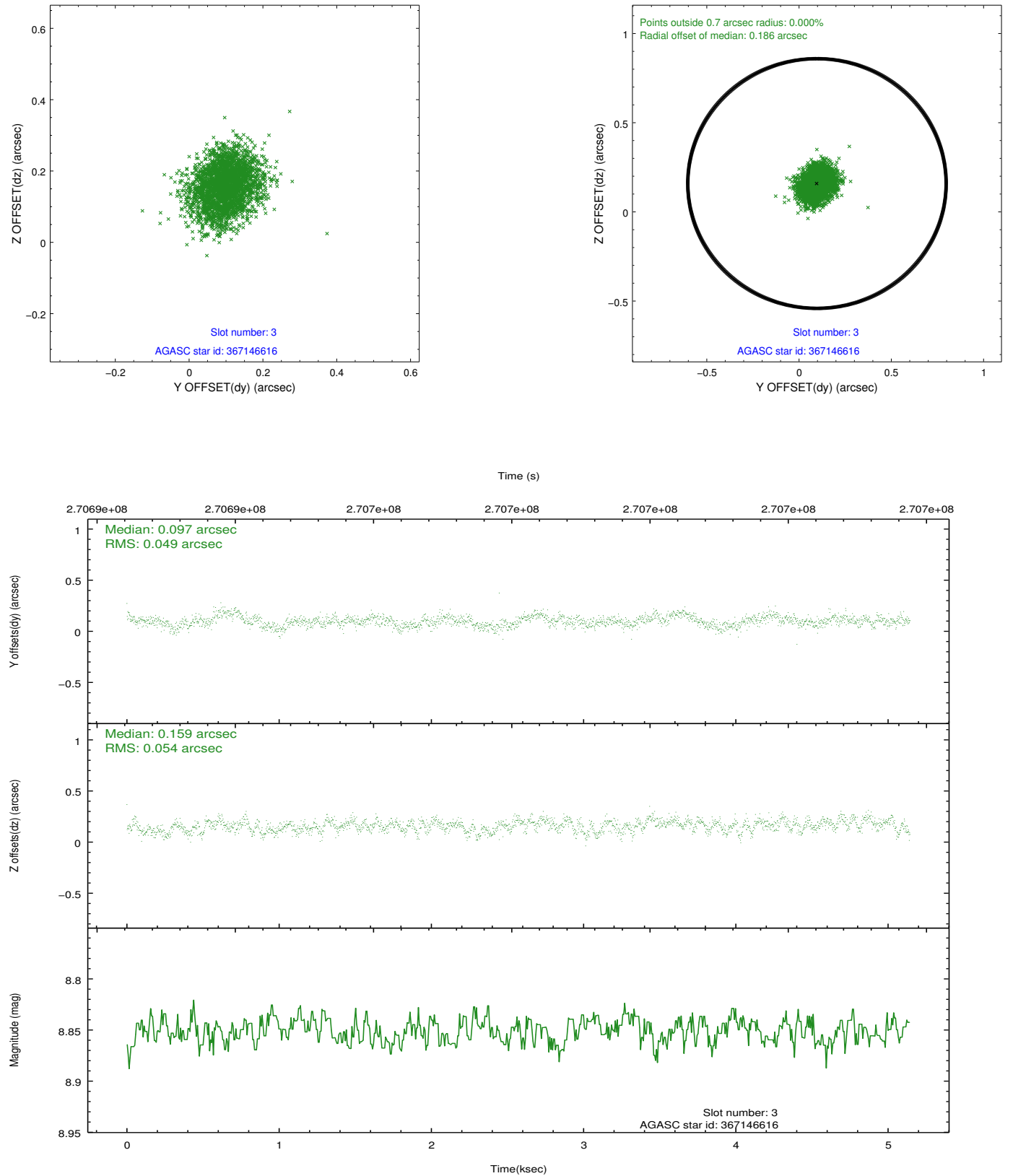


Slot Statistics

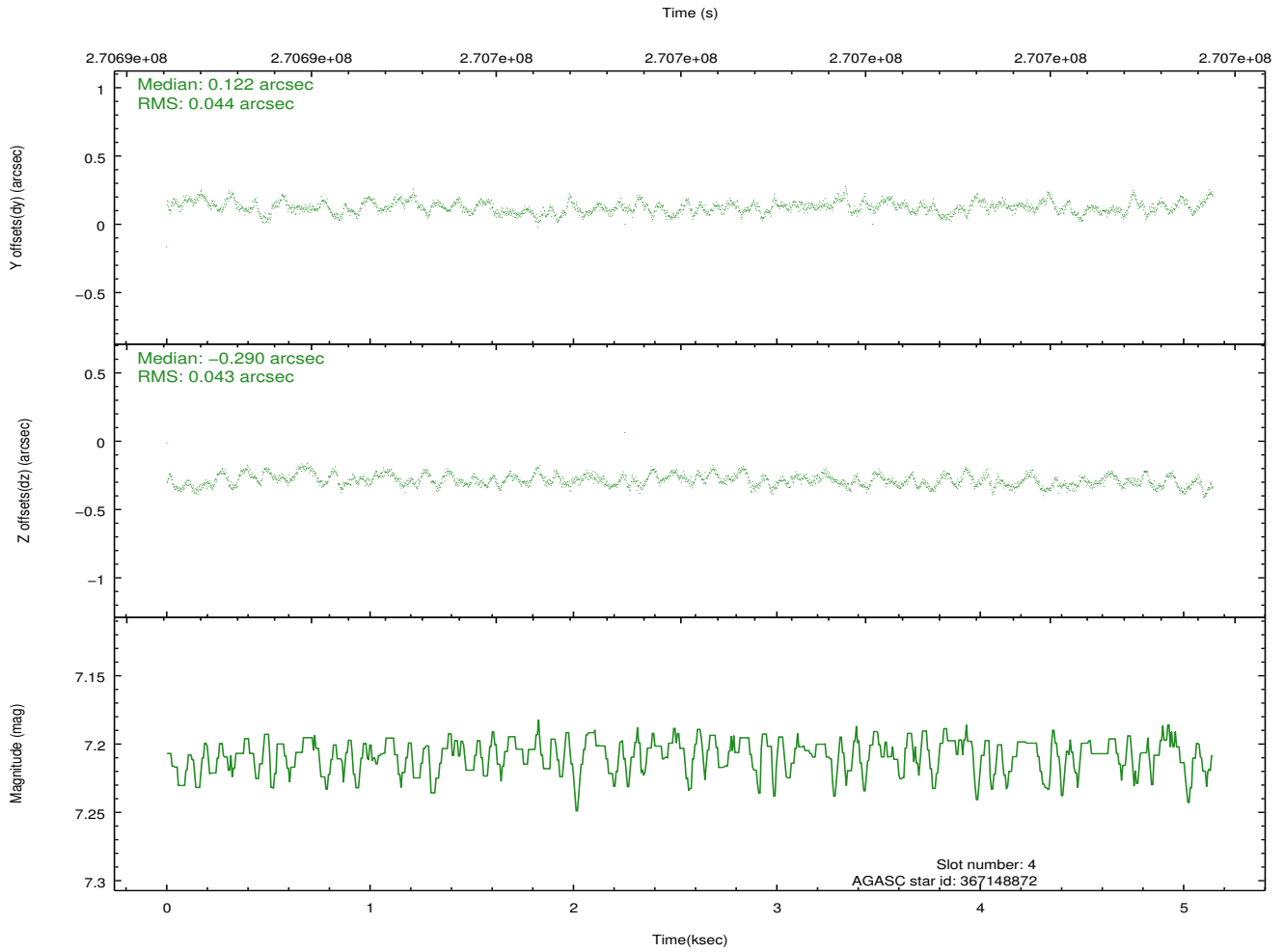
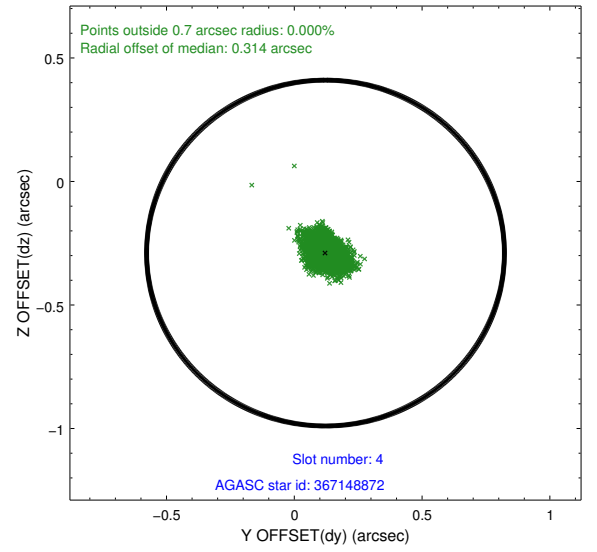
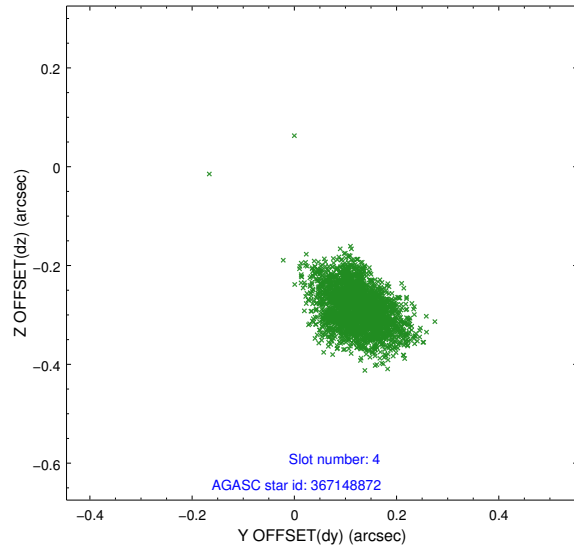
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1253	-0.053	-0.001	0.010	0.018	0.000000	0.000000	931.80	-835.09
1	FID	ACIS-I-2	7.14	1255	-0.164	-0.069	0.011	0.017	0.000000	0.000000	-761.74	-842.19
2	FID	ACIS-I-4	7.17	1255	0.121	0.138	0.013	0.021	0.000000	0.000000	2151.33	1064.25
3	GUIDE	367146616	8.85	2508	0.097	0.159	0.078	0.123	11.418645	41.190163	-1280.03	-1454.50
4	GUIDE	367148872	7.21	2510	0.122	-0.290	0.065	0.106	10.505940	40.688258	-1440.99	1610.70
5	GUIDE	367657896	9.02	2507	0.057	0.030	0.089	0.143	11.197765	41.313576	-583.17	-1192.56
6	GUIDE	367663272	9.29	2500	-0.167	0.009	0.086	0.144	10.656279	41.699429	1377.81	-728.27
7	GUIDE	367674552	8.85	2508	-0.108	0.093	0.077	0.126	11.016238	41.570845	461.32	-1286.43

2.4 Star Slots

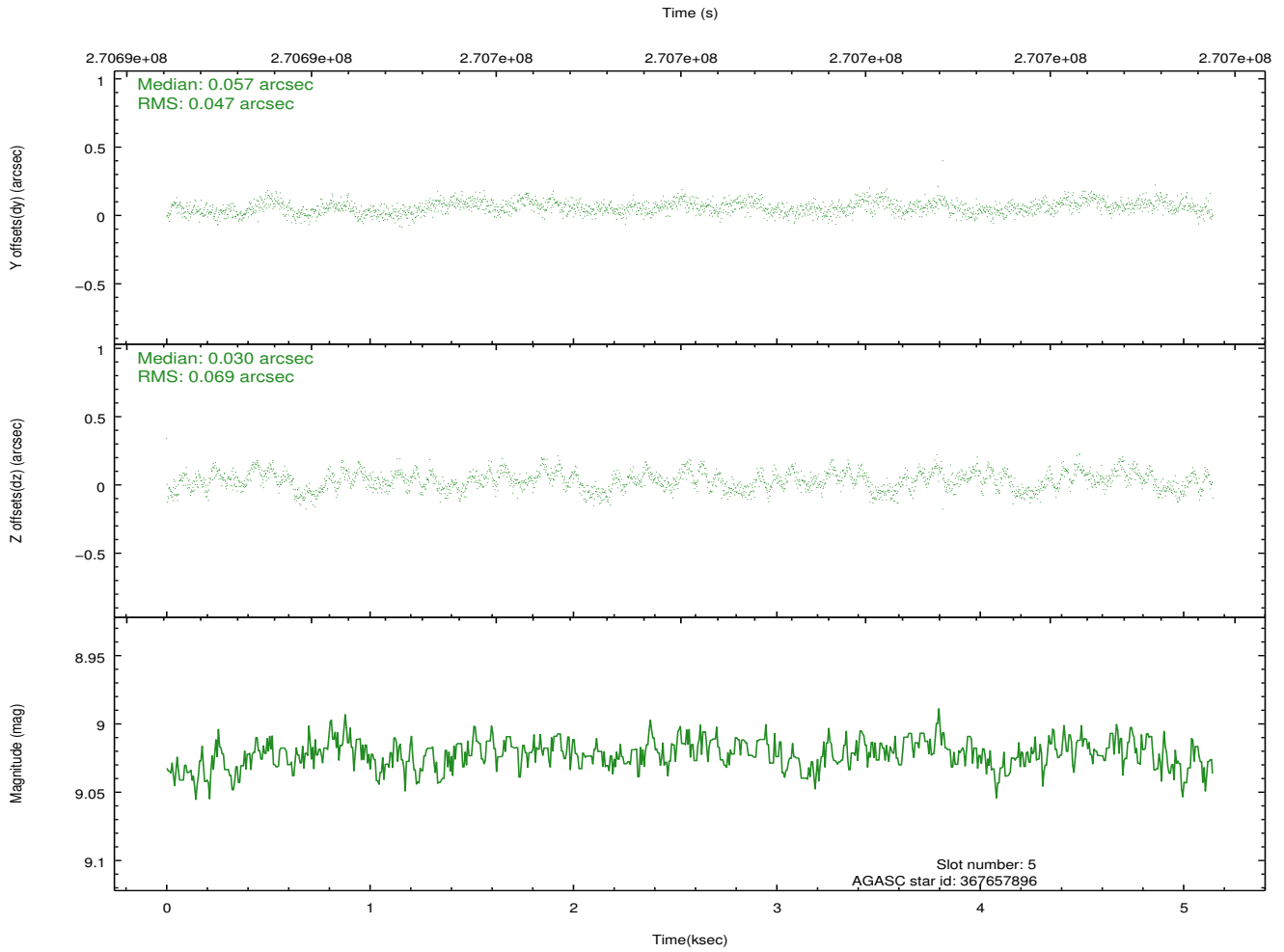
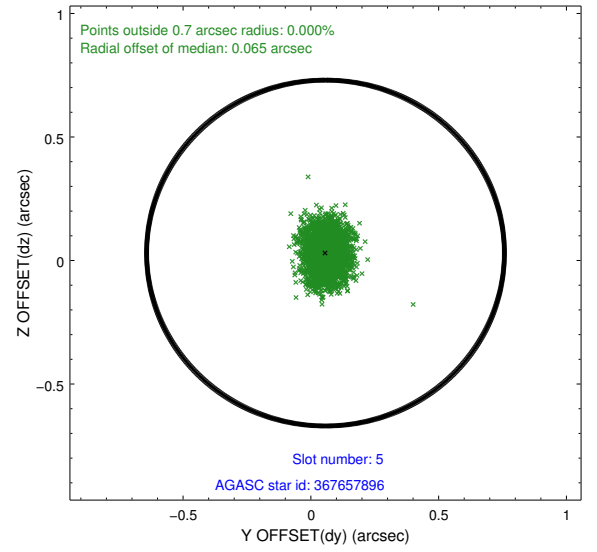
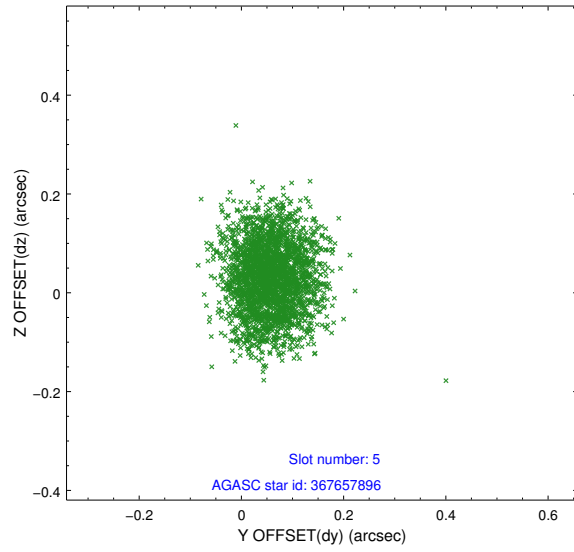
2.4.1 Slot 3



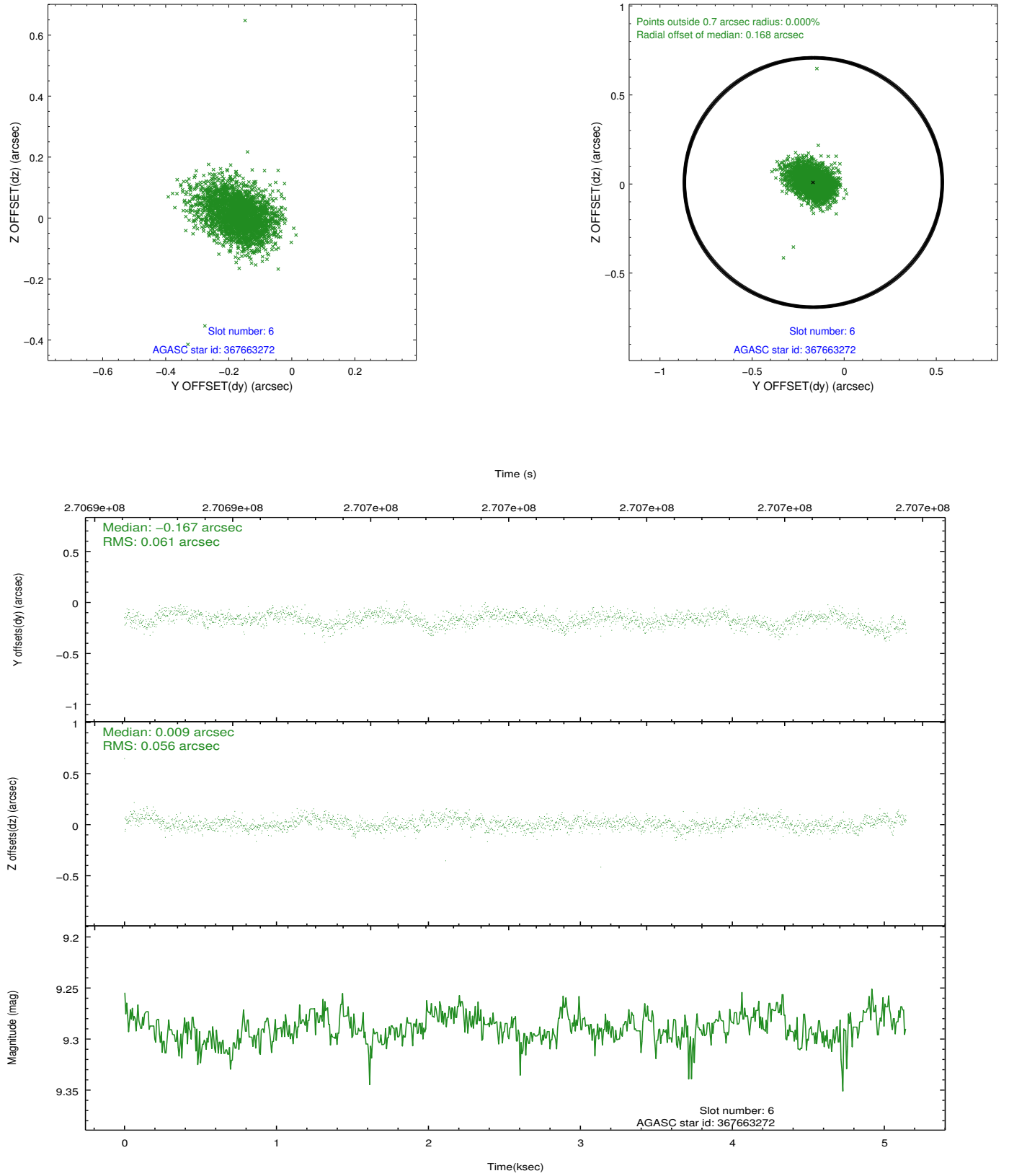
2.4.2 Slot 4



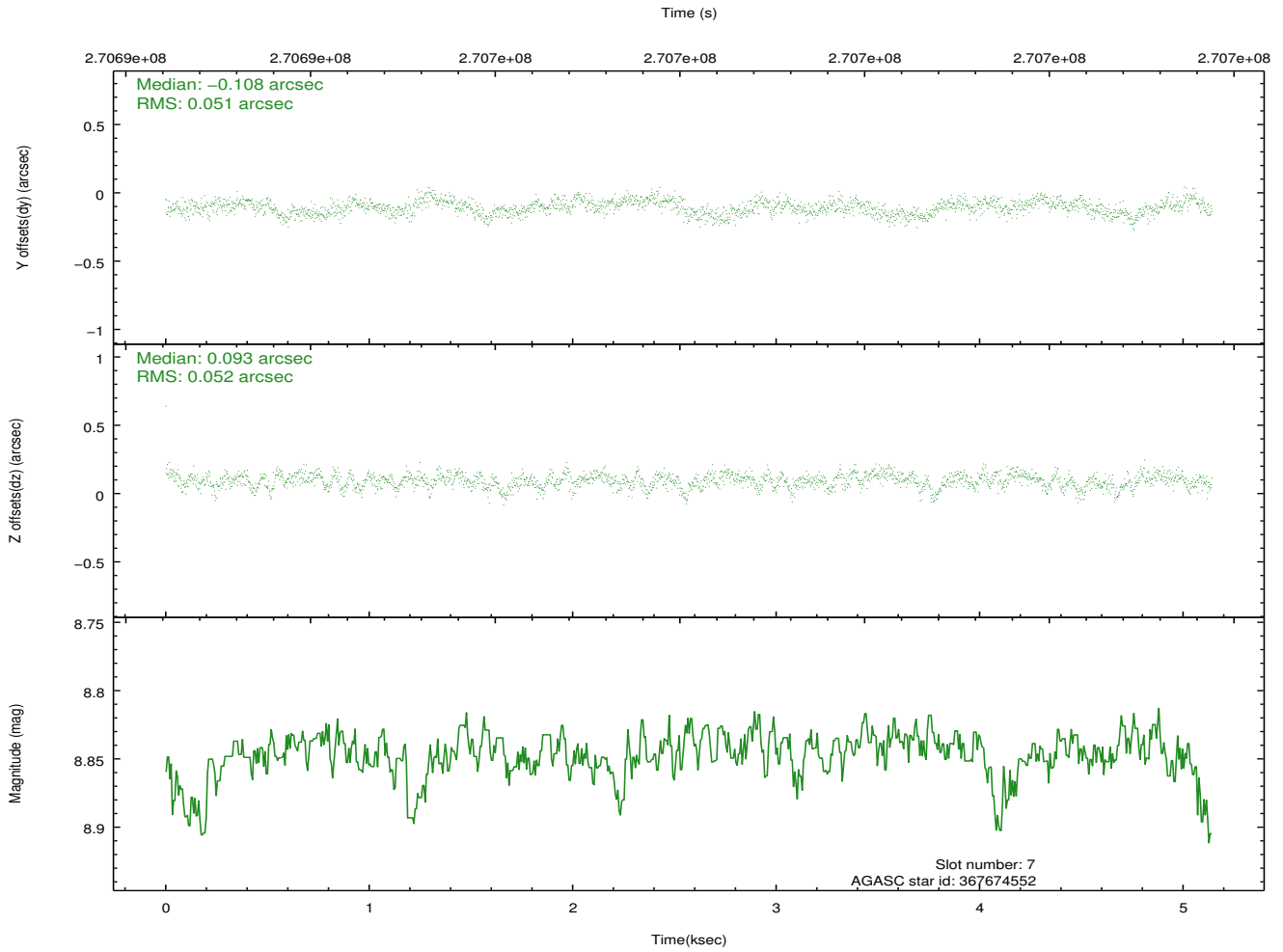
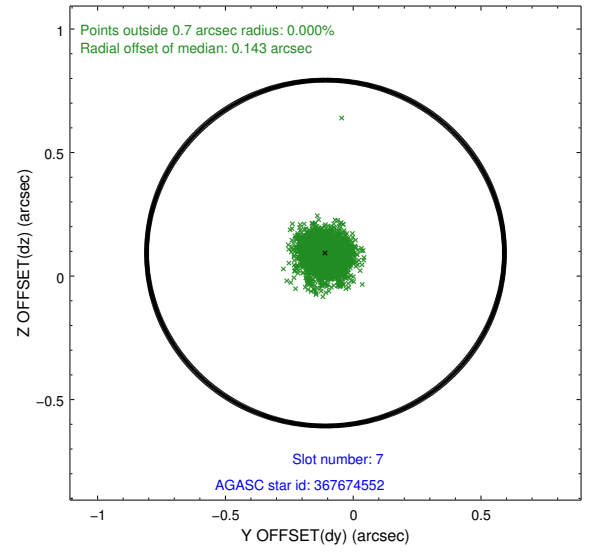
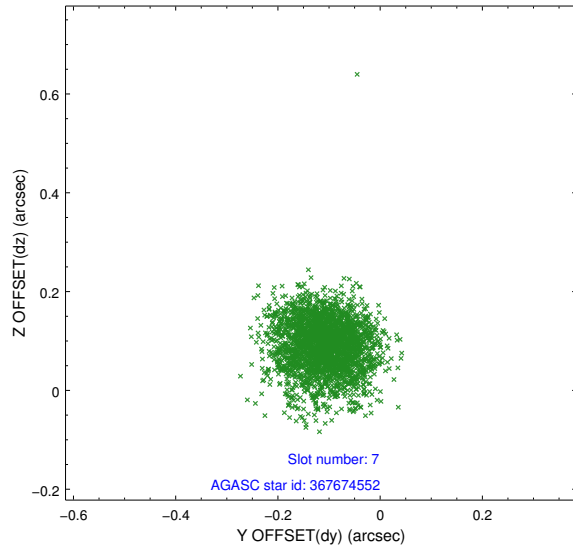
2.4.3 Slot 5



2.4.4 Slot 6

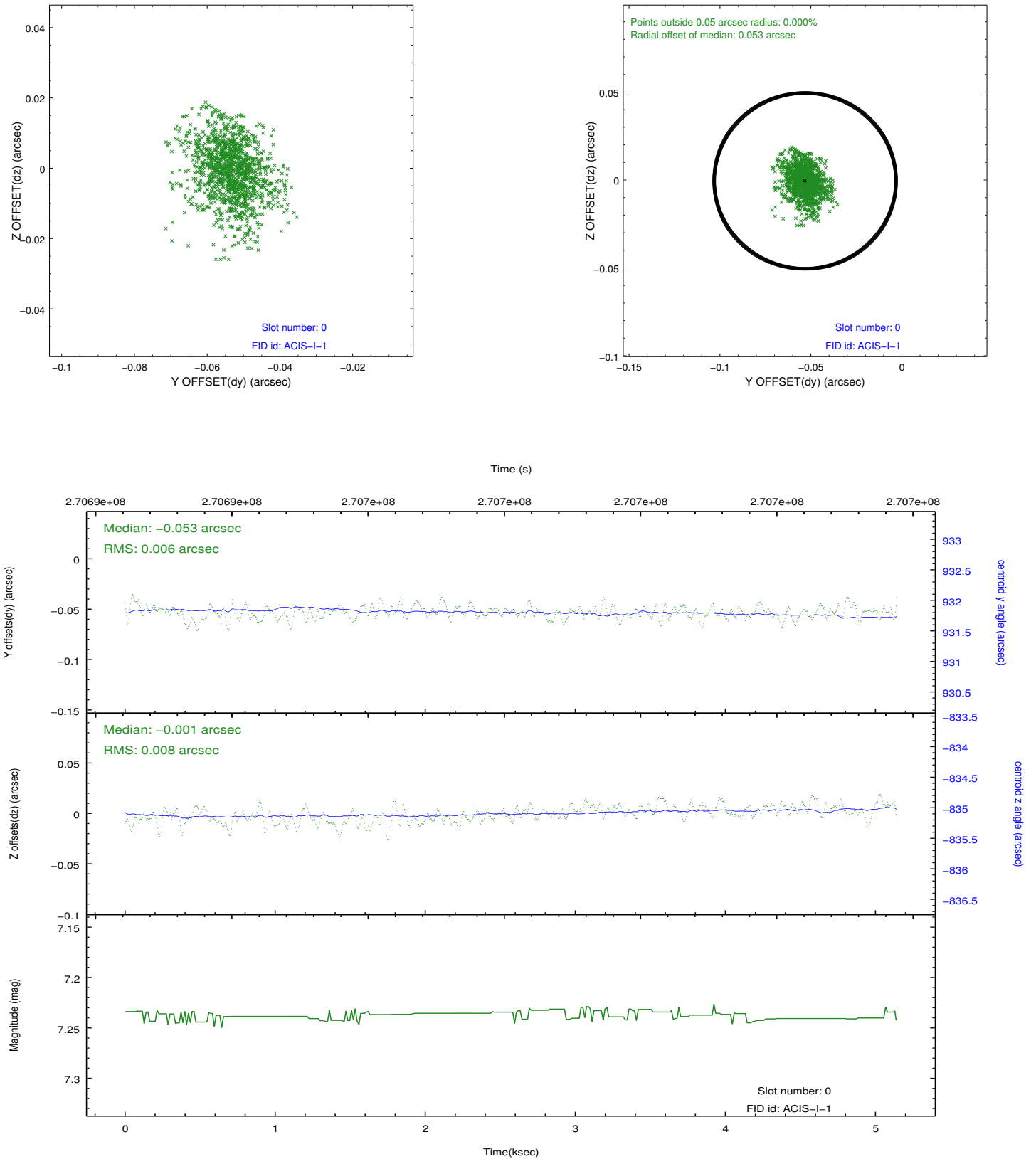


2.4.5 Slot 7

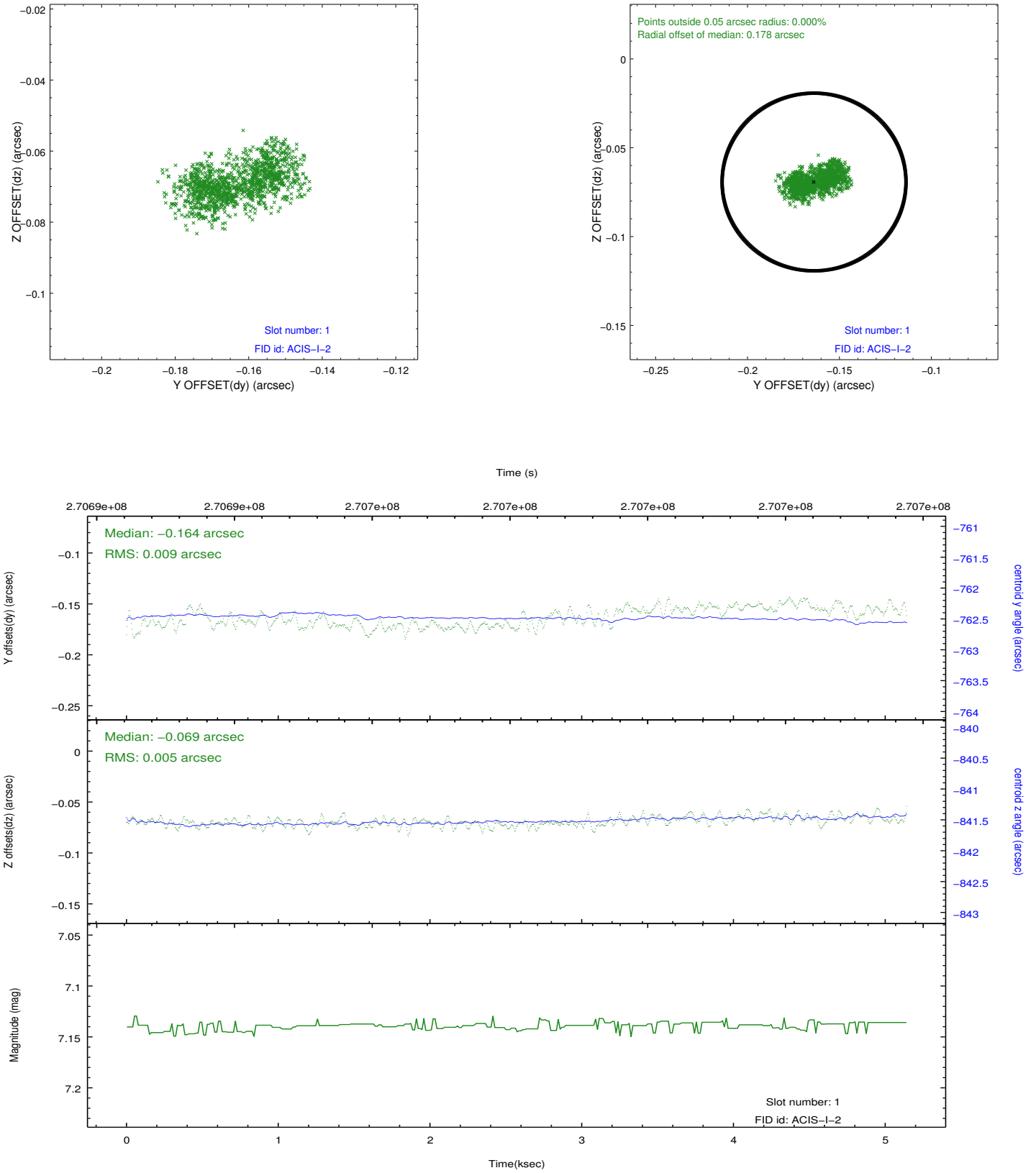


2.5 FID Slots

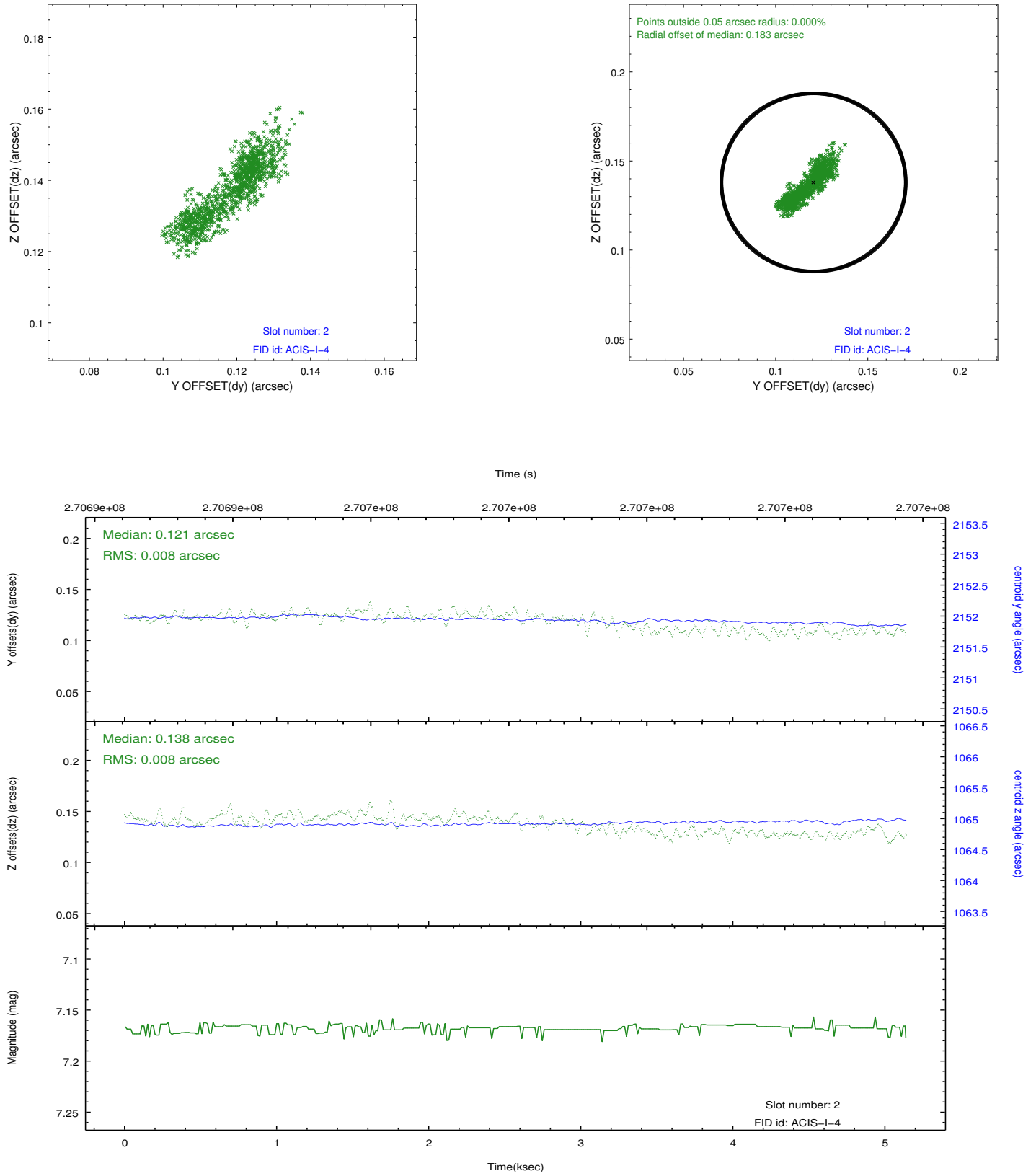
2.5.1 Slot 0



2.5.2 Slot 1



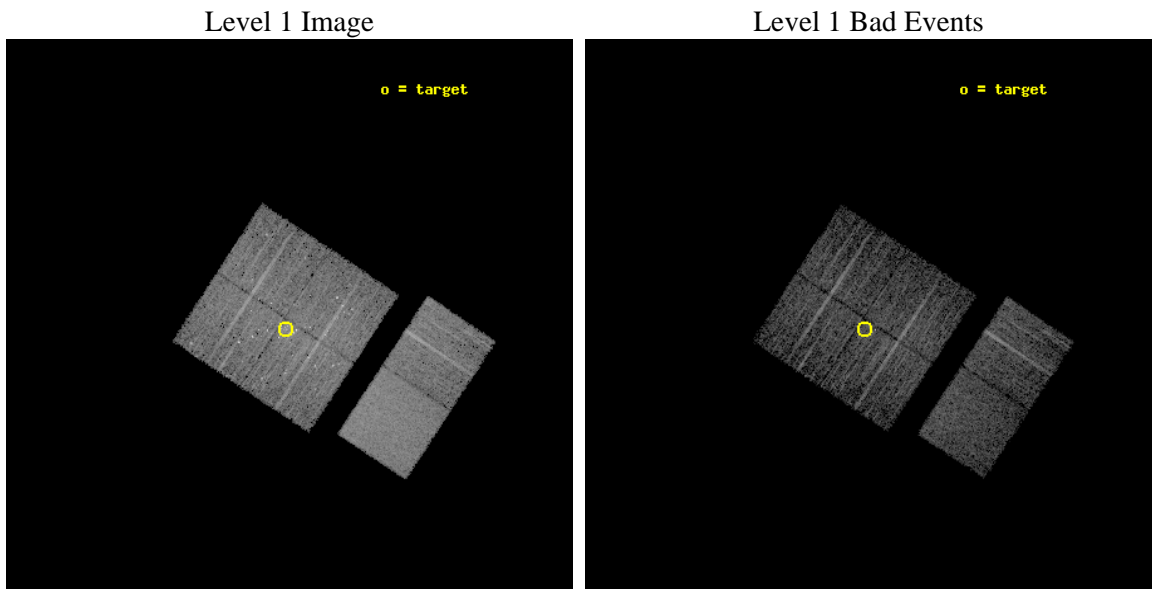
2.5.3 Slot 2



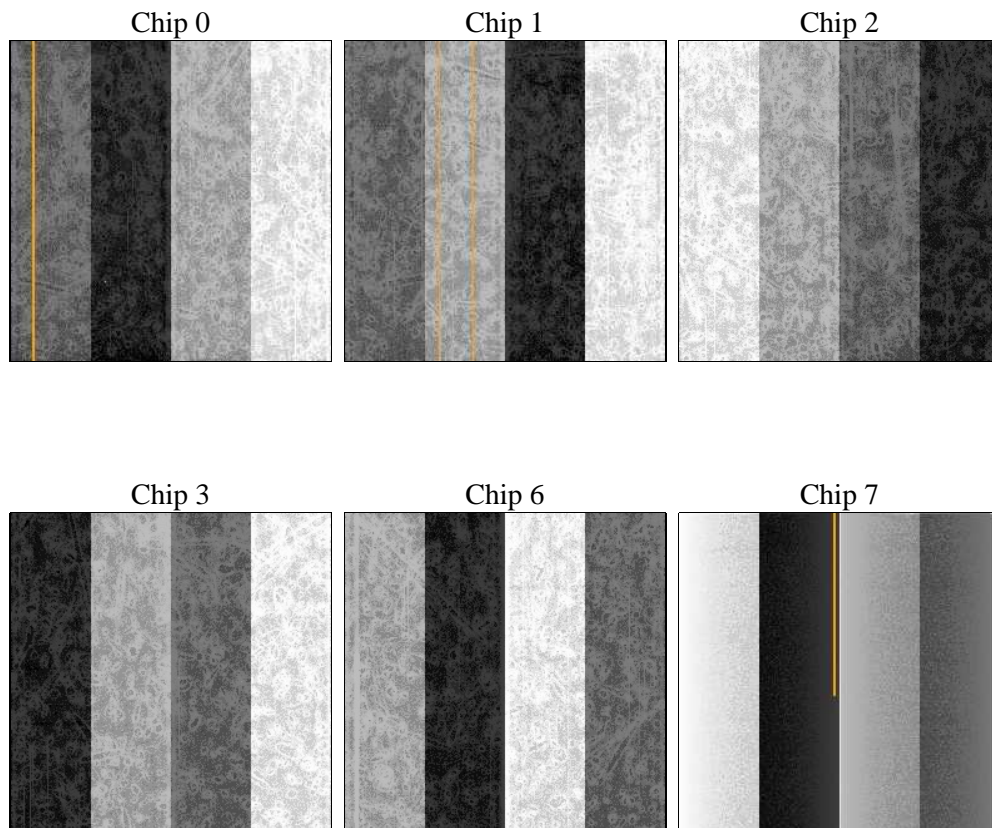
3 OBI Secondary

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	8.4.3.1	Processing system revision	ontime	4038.3915773034	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	4035.1501780152	Sum of GTIs [s]
date	2012-04-06T03:20:53	Date and time of file creation	ontime1	4038.3916877508	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4035.1507662535	Sum of GTIs [s]
			ontime3	4038.3915773034	Sum of GTIs [s]
			ontime6	4038.3912090063	Sum of GTIs [s]
			ontime7	4038.3918963075	Sum of GTIs [s]
			l1events	239951	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	34674	37281	38333	41929	37841	49893	grade 0 events	2934	4048	4013	6114	1758	1839
rejected events	29054	29891	31511	32238	33509	28926		8%	10%	10%	14%	4%	3%
rejected %	83%	80%	82%	76%	88%	57%	grade 1 events	50	46	48	173	20	49
								0%	0%	0%	0%	0%	0%
							grade 2 events	1069	1300	1127	1483	964	4213
								3%	3%	2%	3%	2%	8%
							grade 3 events	464	546	473	614	398	1859
								1%	1%	1%	1%	1%	3%
							grade 4 events	396	526	475	585	367	1858
								1%	1%	1%	1%	0%	3%
							grade 5 events	1447	1563	1381	1743	1779	4734
								4%	4%	3%	4%	4%	9%
							grade 6 events	778	973	738	914	849	11229
								2%	2%	1%	2%	2%	22%
							grade 7 events	27536	28279	30078	30303	31706	24112
								79%	75%	78%	72%	83%	48%

A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.04.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.95886322

A.2 Comments

Joint proposal with HST.

Window preference met.