

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 4719 - L2 Version 3
Chandra X-Ray Center

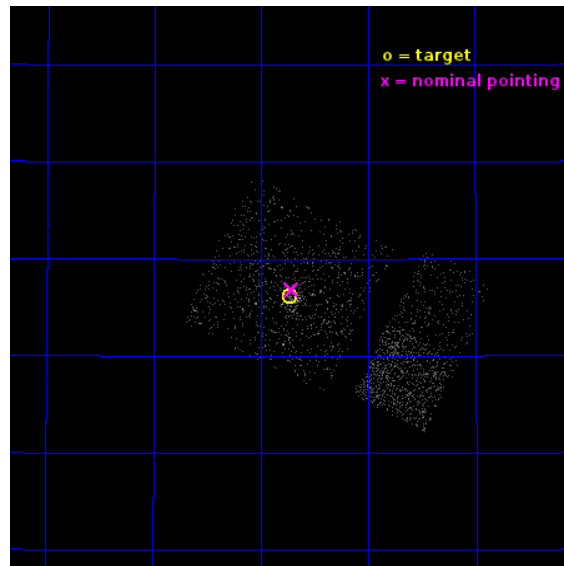
L2 Processing Date : Dec 6 2012

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

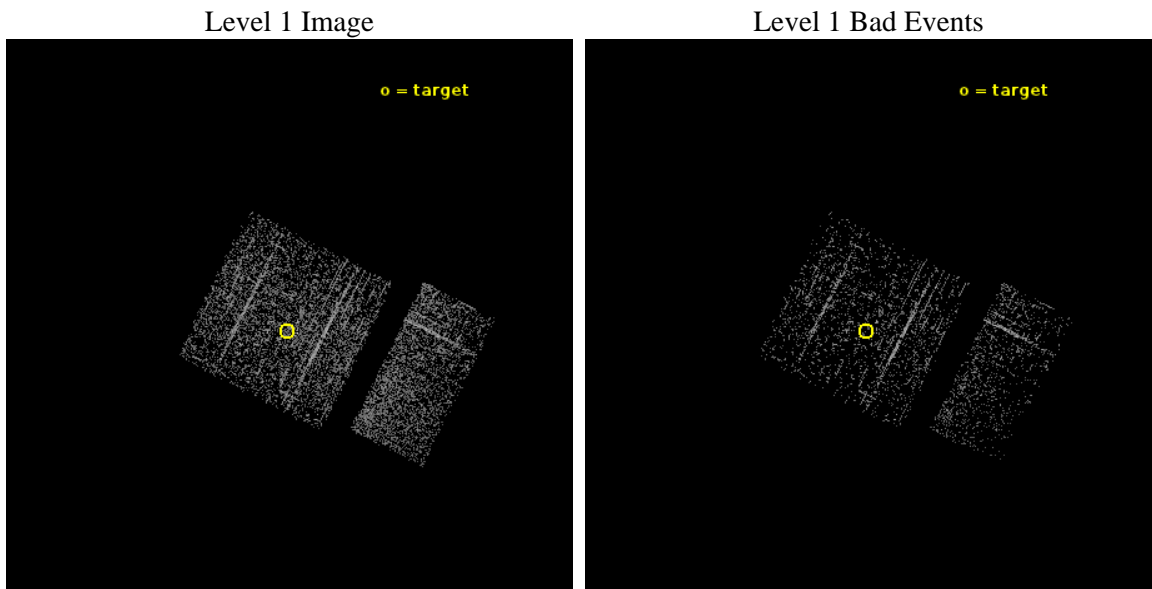
seq_num	600374	Sequence number
obs_id	4719	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Michael Garcia	Principal investigator
object	M31-bulge	Source name
dtcycle	0	
cycle	P	events are from which exps? P[primary] S[econdar]
ra_targ	10.684583	Observer's specified target RA [deg]
dec_targ	41.269	Observer's specified target Dec [deg]
ra_nom	10.679080885157	Nominal RA [deg]
dec_nom	41.281081703899	Nominal Dec [deg]
roll_nom	116.82958302177	Nominal Roll [deg]
revision	3	Processing version of data
ontime	981.51694083214	Sum of GTIs [s]
livetime	154.51444221991	Livetime [s]
ontime0	981.51694083214	Sum of GTIs [s]
ontime1	981.51694083214	Sum of GTIs [s]
ontime2	981.51694083214	Sum of GTIs [s]
ontime3	981.51694083214	Sum of GTIs [s]
ontime6	981.51694083214	Sum of GTIs [s]
ontime7	981.51694083214	Sum of GTIs [s]
l2events	2540	Number of level 2 events



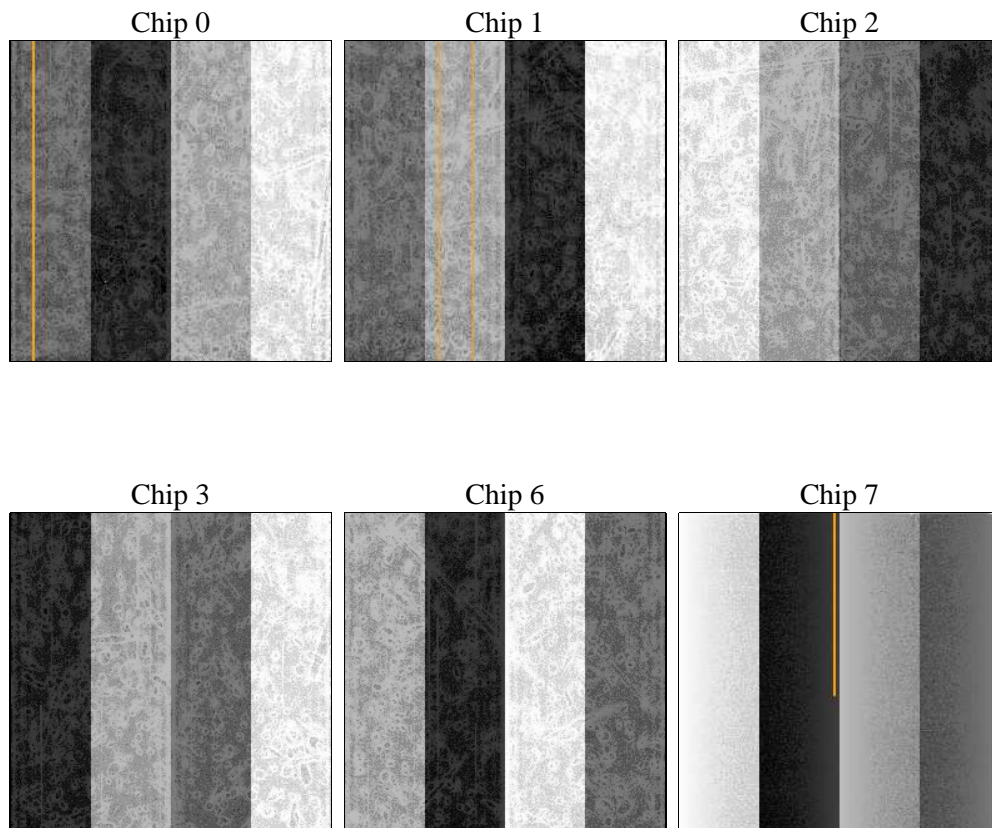
2 OBI Primary

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	8.5	Processing system revision	ontime	981.51694083214	Sum of GTIs [s]
caldbver	4.5.4	 	ontime0	981.51694083214	Sum of GTIs [s]
date	2012-12-06T09:13:32	Date and time of file creation	ontime1	981.51694083214	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	981.51694083214	Sum of GTIs [s]
			ontime3	981.51694083214	Sum of GTIs [s]
			ontime6	981.51694083214	Sum of GTIs [s]
			ontime7	981.51694083214	Sum of GTIs [s]
			l1events	27060	Number of level 1 events

2.1.4 Events

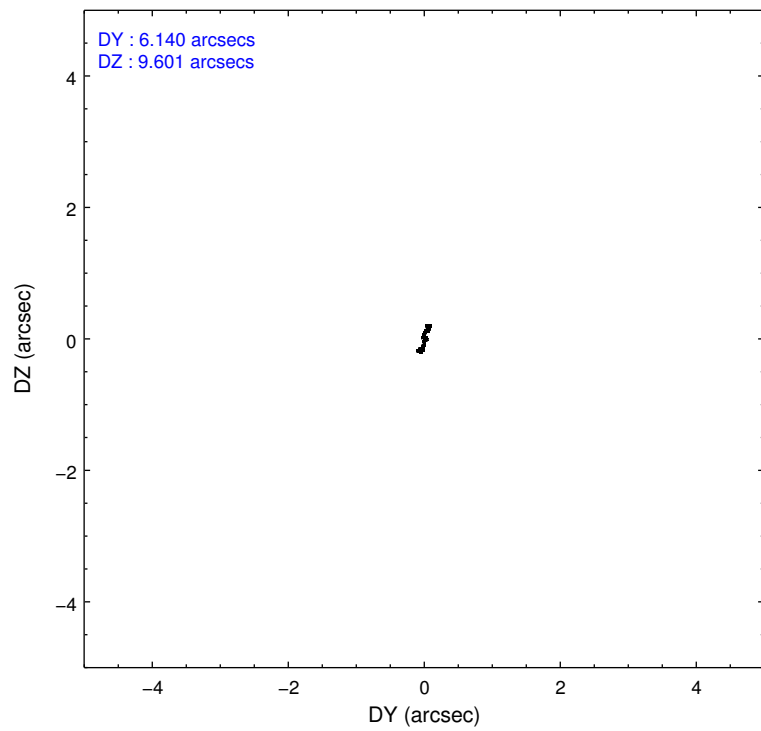
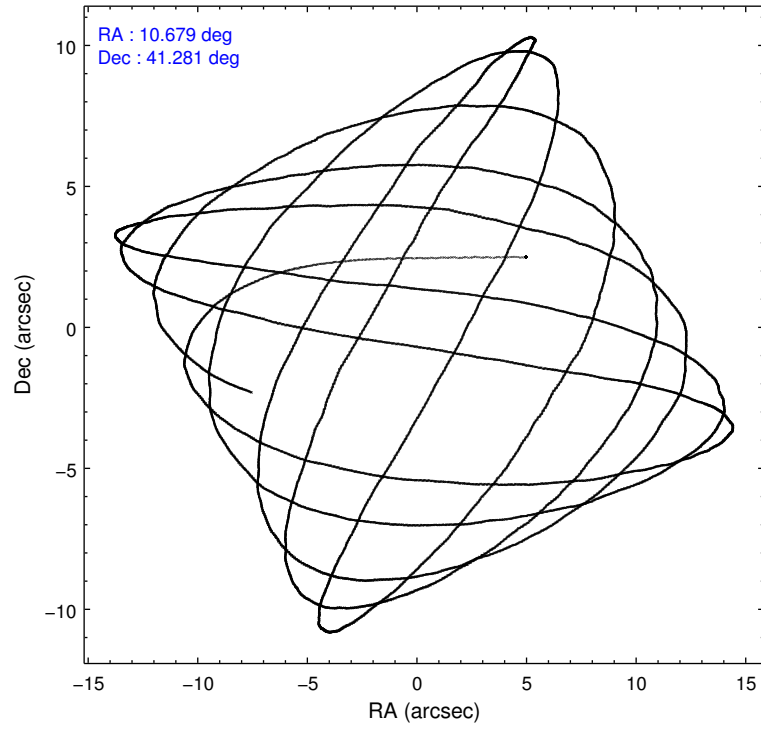
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	3926	4154	5017	4764	4781	4418
rejected events	3595	3763	4678	4174	4510	3473
rejected %	91%	90%	93%	87%	94%	78%

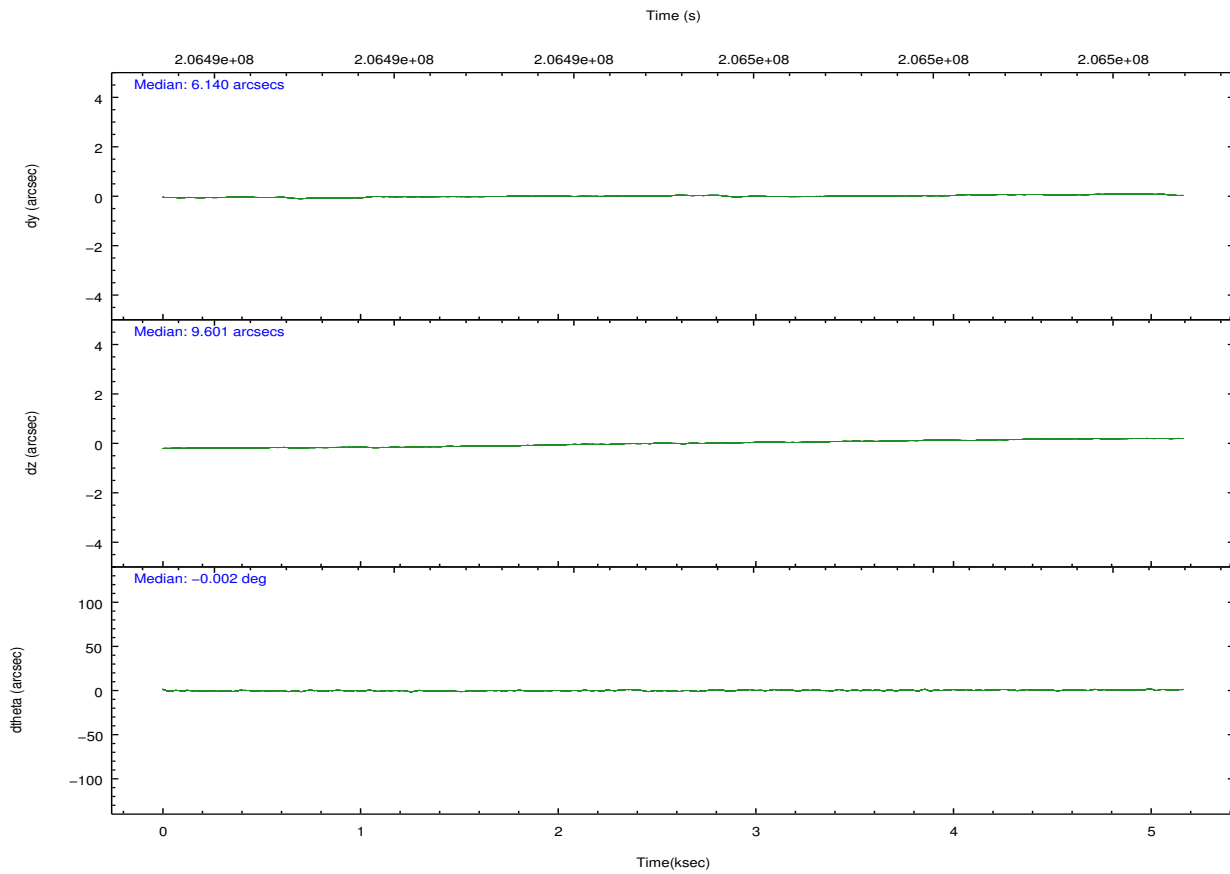
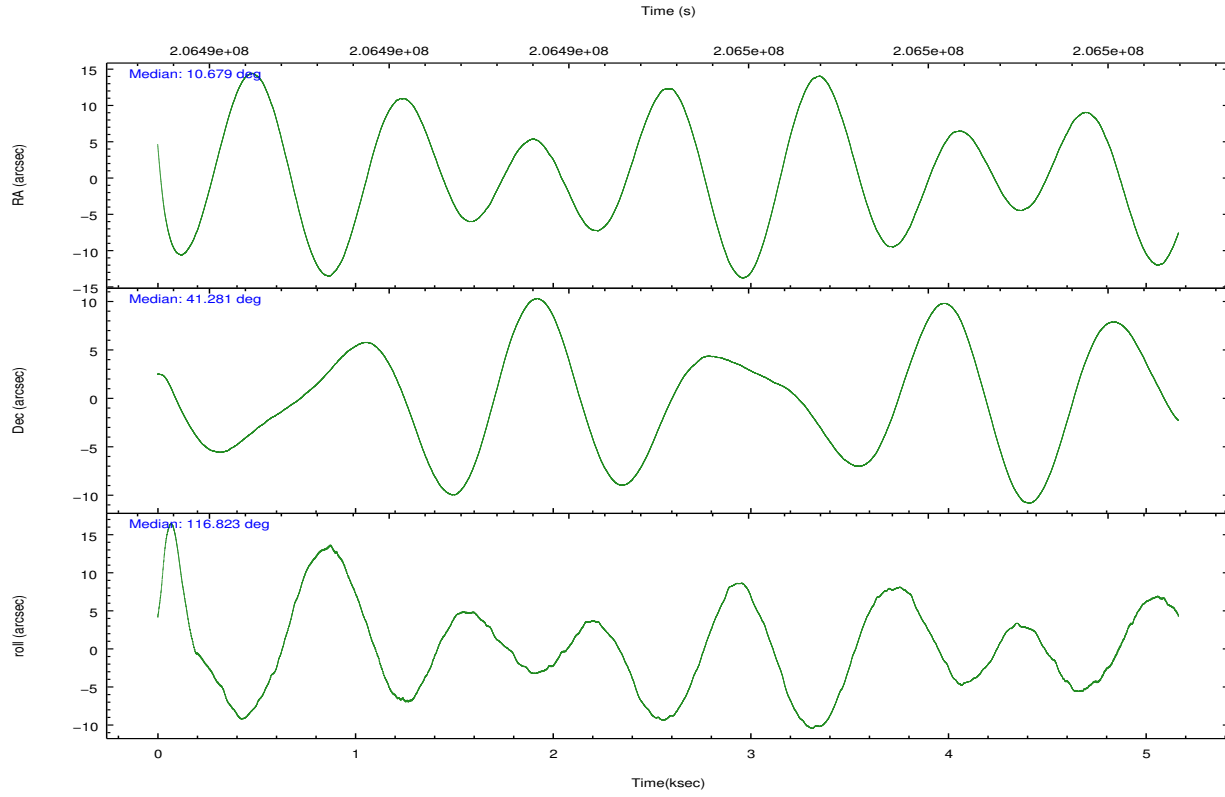
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	147	193	200	381	95	126
	3%	4%	3%	7%	1%	2%
grade 1 events	2	1	2	9	2	4
	0%	0%	0%	0%	0%	0%
grade 2 events	81	97	89	125	78	264
	2%	2%	1%	2%	1%	5%
grade 3 events	64	63	34	62	42	124
	1%	1%	0%	1%	0%	2%
grade 4 events	48	54	42	44	44	124
	1%	1%	0%	0%	0%	2%
grade 5 events	127	135	129	164	147	403
	3%	3%	2%	3%	3%	9%
grade 6 events	67	82	57	63	91	616
	1%	1%	1%	1%	1%	13%
grade 7 events	3390	3529	4464	3916	4282	2757
	86%	84%	88%	82%	89%	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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	10.709779	10.67908088515713	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.266185	41.28108170389885	Alternating exposures requested	Y	Y
[deg] Pointing Roll	116.600666	116.8295830217675	[s] Primary exposure time	0.600000	0.6
[s] Window start time (MET)	205977664.184000	205977664.184000	[s] Secondary exposure time	0.000000	3.2
[s] Window stop time (MET)	206582464.184000	206582464.184000	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)	206492132.184000	206490236.44135			
Observation start date	2004-07-17T22:54:28	2004-07-17T22:23:56			
[s] Observation end time (MET)	206497132.184000	206497910.10419			
Observation end date	2004-07-18T00:17:48	2004-07-18T00:31:50			
Read mode	TIMED	TIMED			

2.3 Aspect



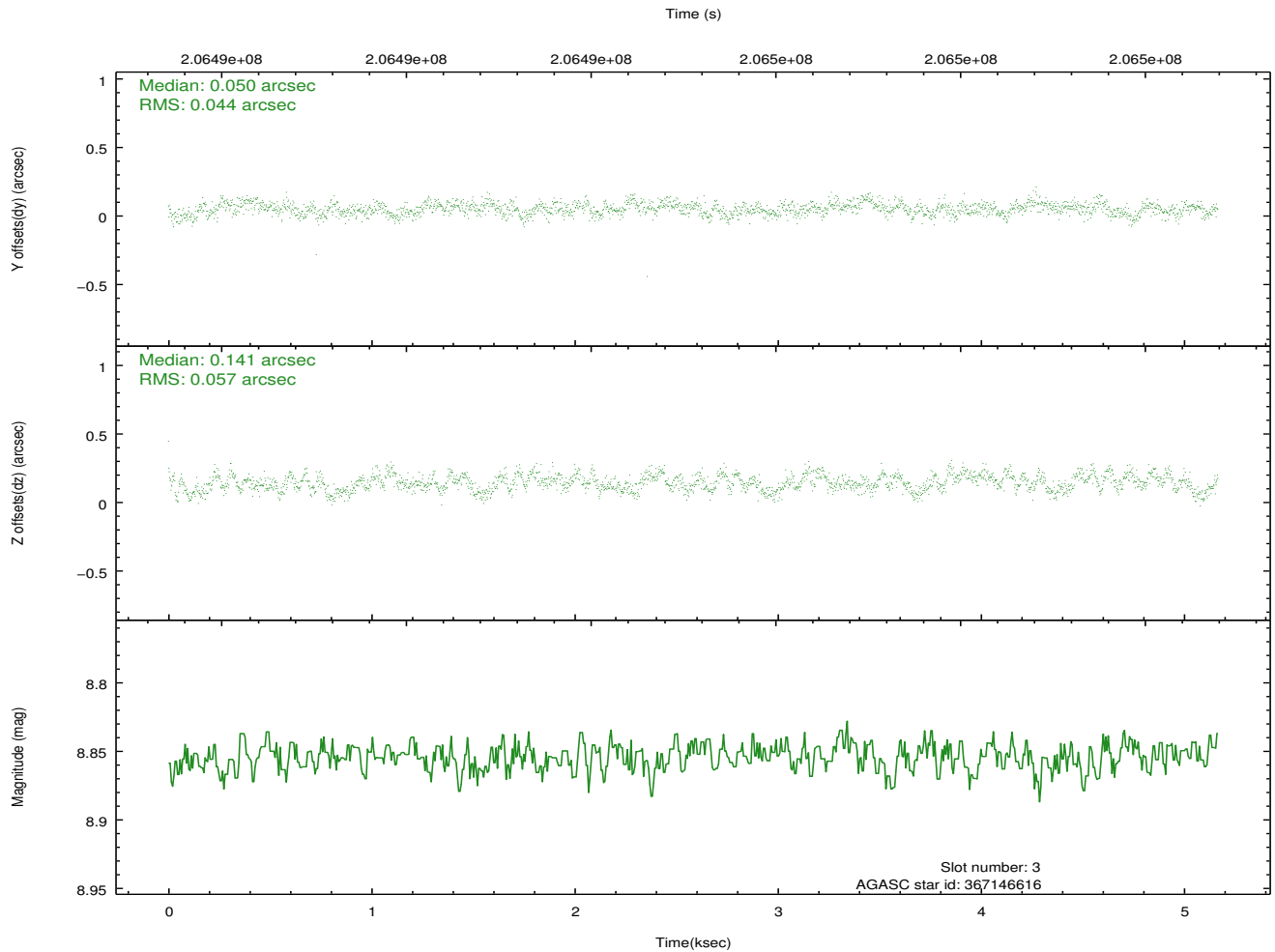
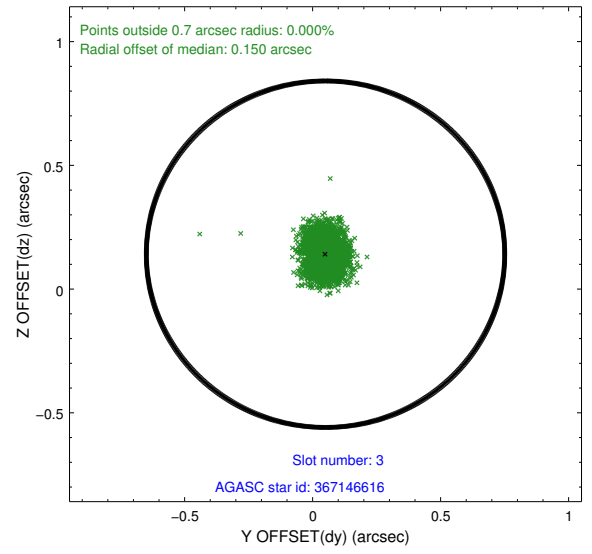
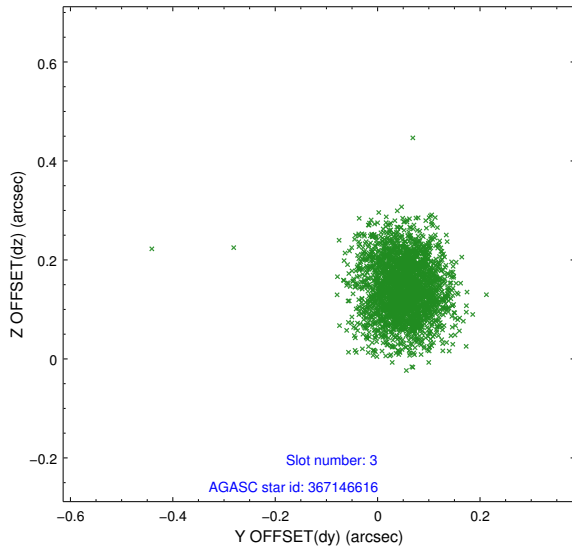


Slot Statistics

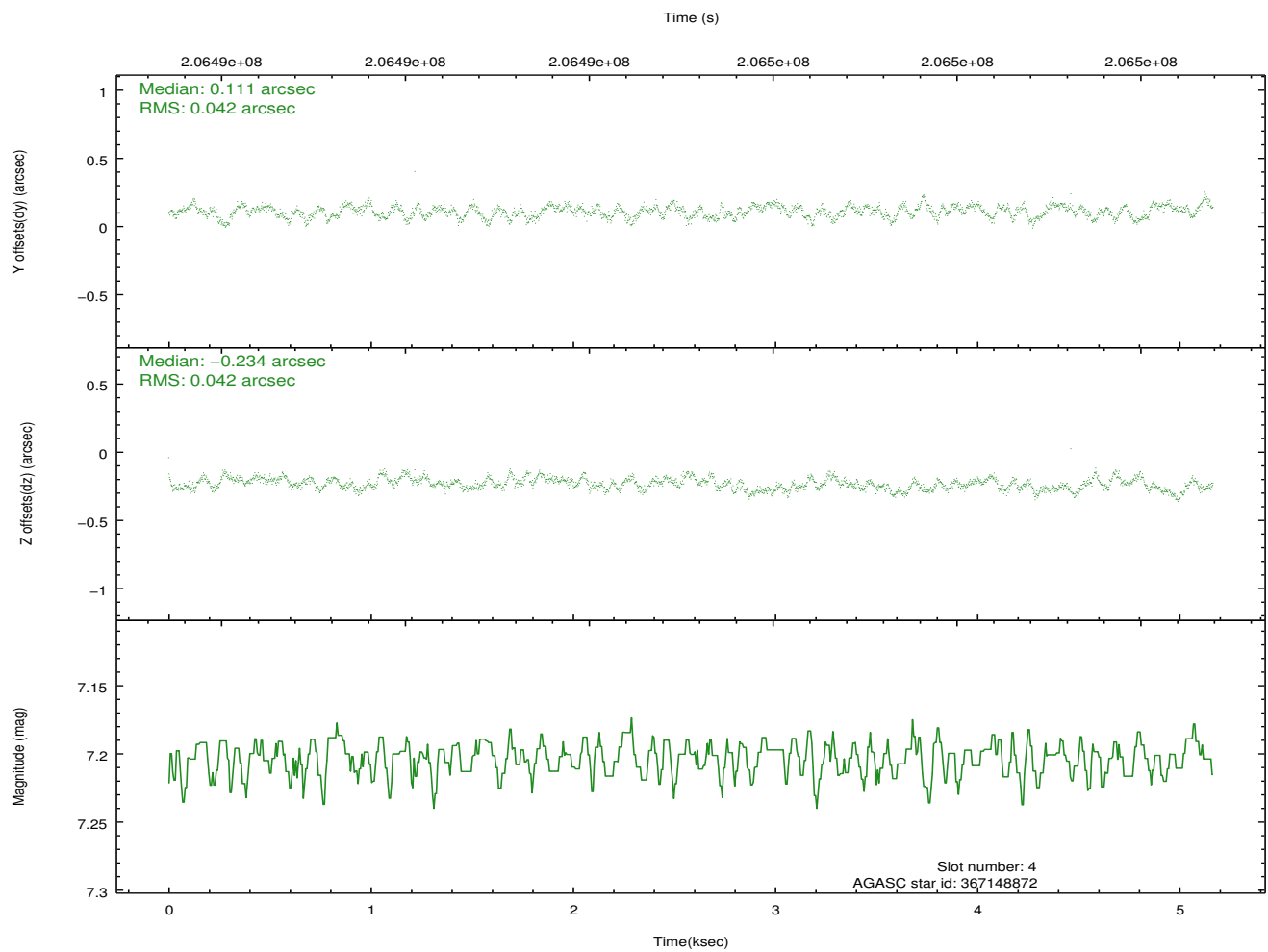
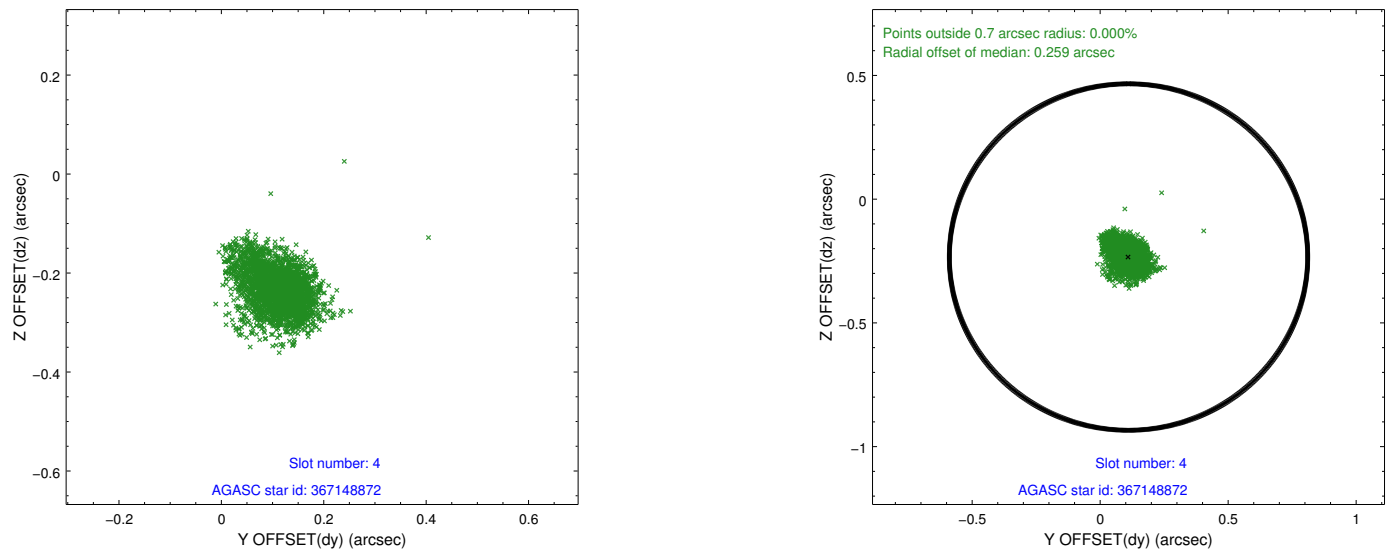
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1260	-0.002	0.038	0.009	0.014	0.000000	0.000000	933.56	-833.01
1	FID	ACIS-I-5	7.23	1260	-0.153	0.024	0.013	0.019	0.000000	0.000000	-1814.05	1063.86
2	FID	ACIS-I-6	7.26	1260	0.065	0.009	0.009	0.014	0.000000	0.000000	397.89	1709.69
3	GUIDE	367146616	8.85	2518	0.050	0.141	0.077	0.125	11.418645	41.190163	-1097.24	-1598.05
4	GUIDE	367148872	7.20	2521	0.111	-0.234	0.062	0.105	10.505940	40.688258	-1611.16	1428.02
5	GUIDE	367657896	9.02	2521	0.026	0.039	0.087	0.133	11.197765	41.313576	-435.31	-1257.33
6	GUIDE	367663272	9.28	2507	-0.083	-0.022	0.088	0.145	10.656279	41.699429	1458.99	-569.76
7	GUIDE	367674552	8.84	2519	-0.101	0.074	0.063	0.102	11.016238	41.570845	613.11	-1229.89

2.4 Star Slots

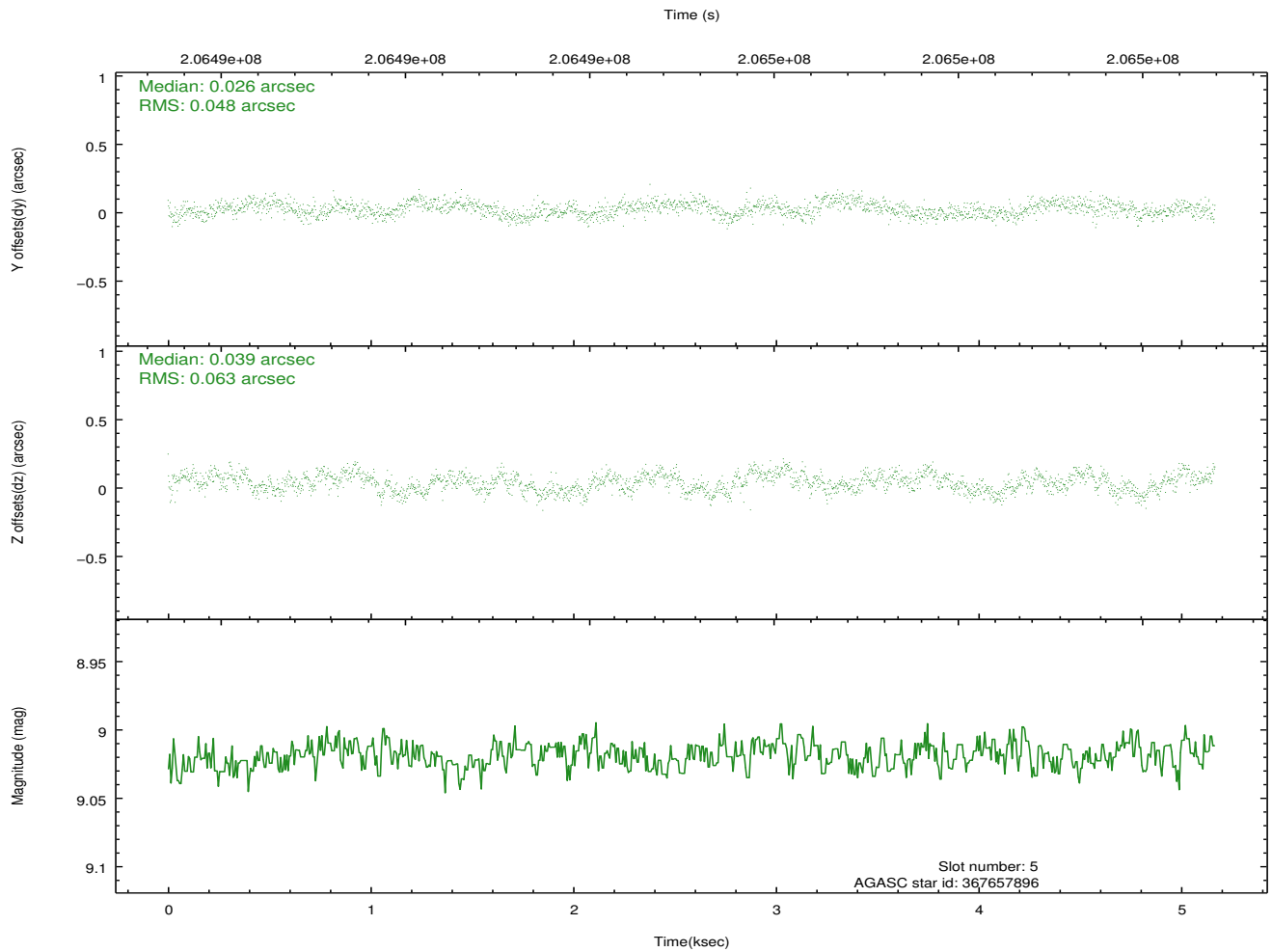
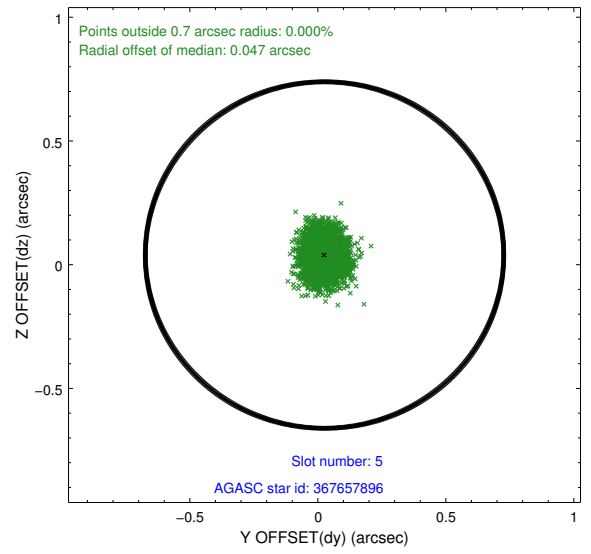
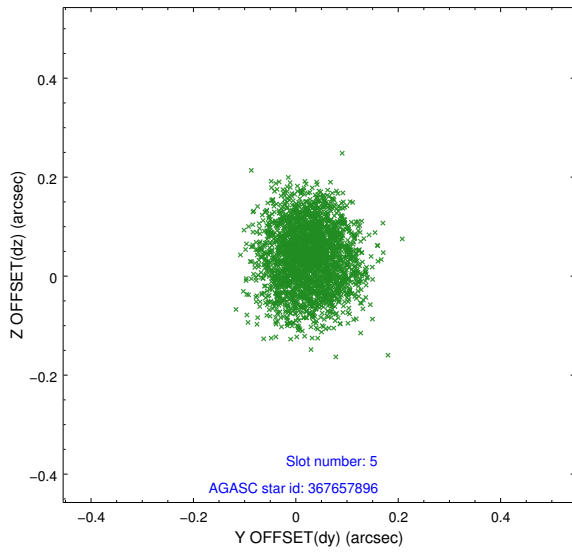
2.4.1 Slot 3



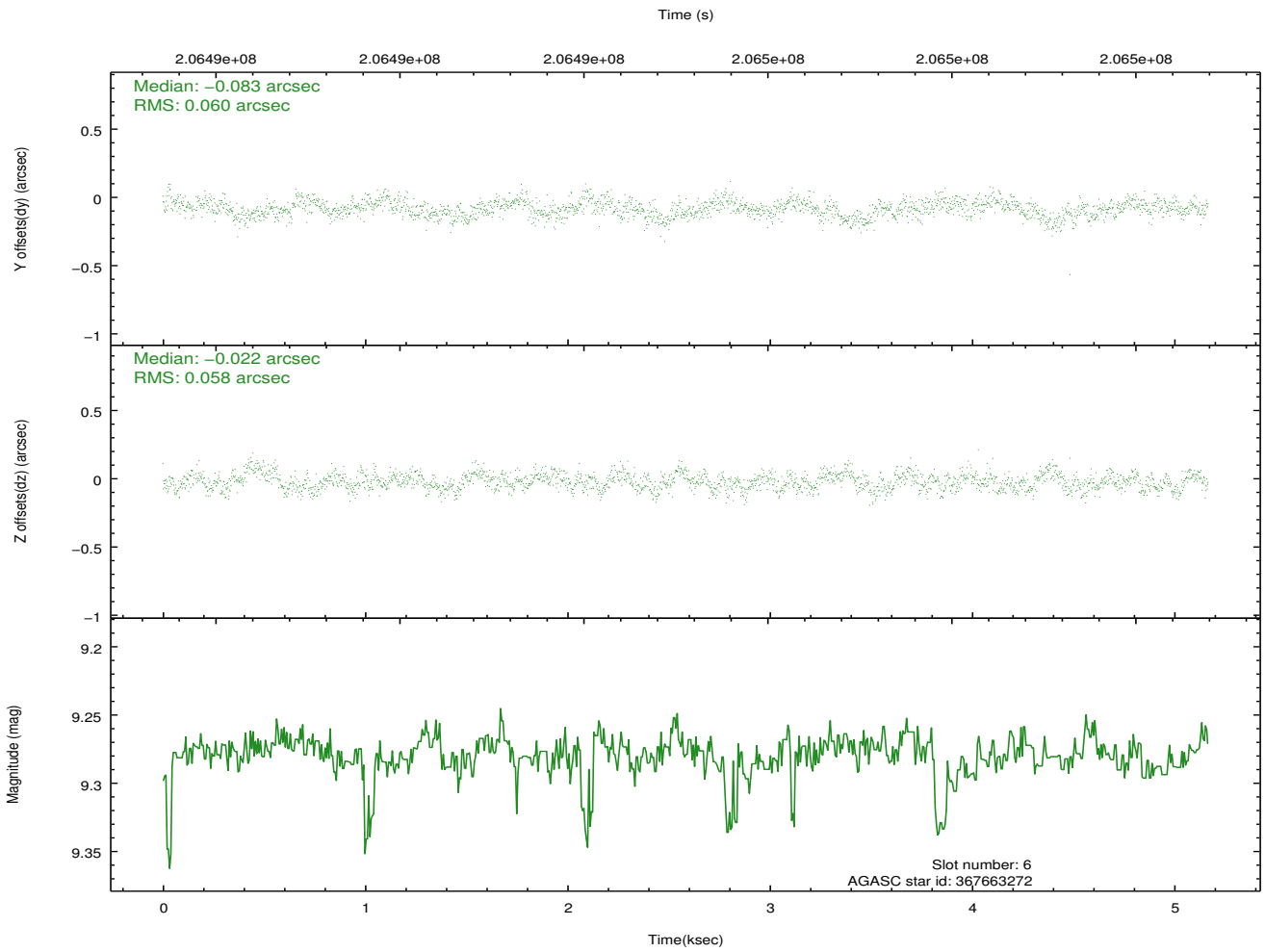
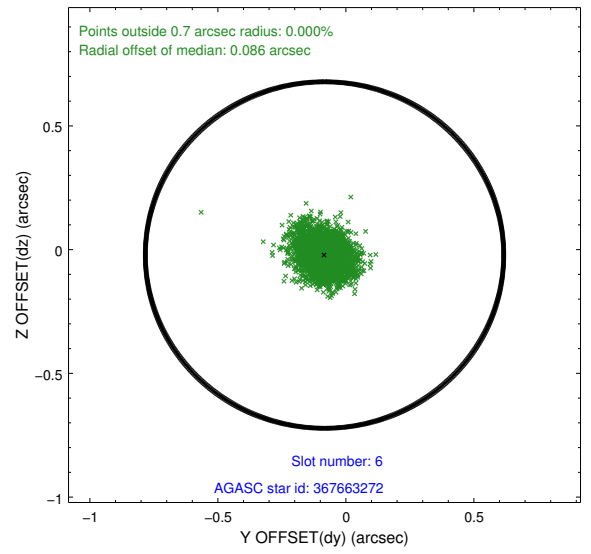
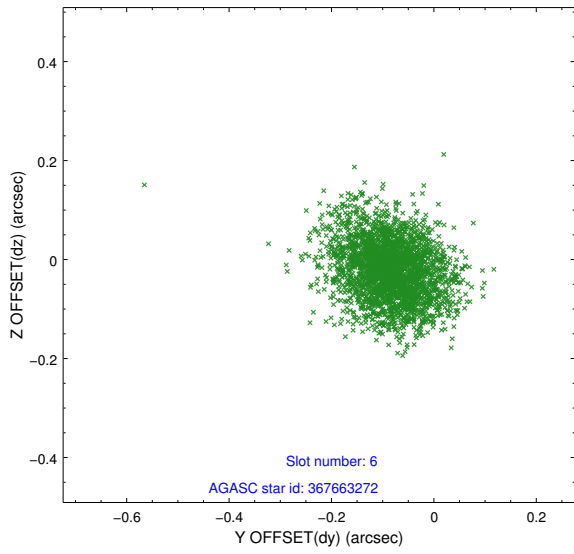
2.4.2 Slot 4



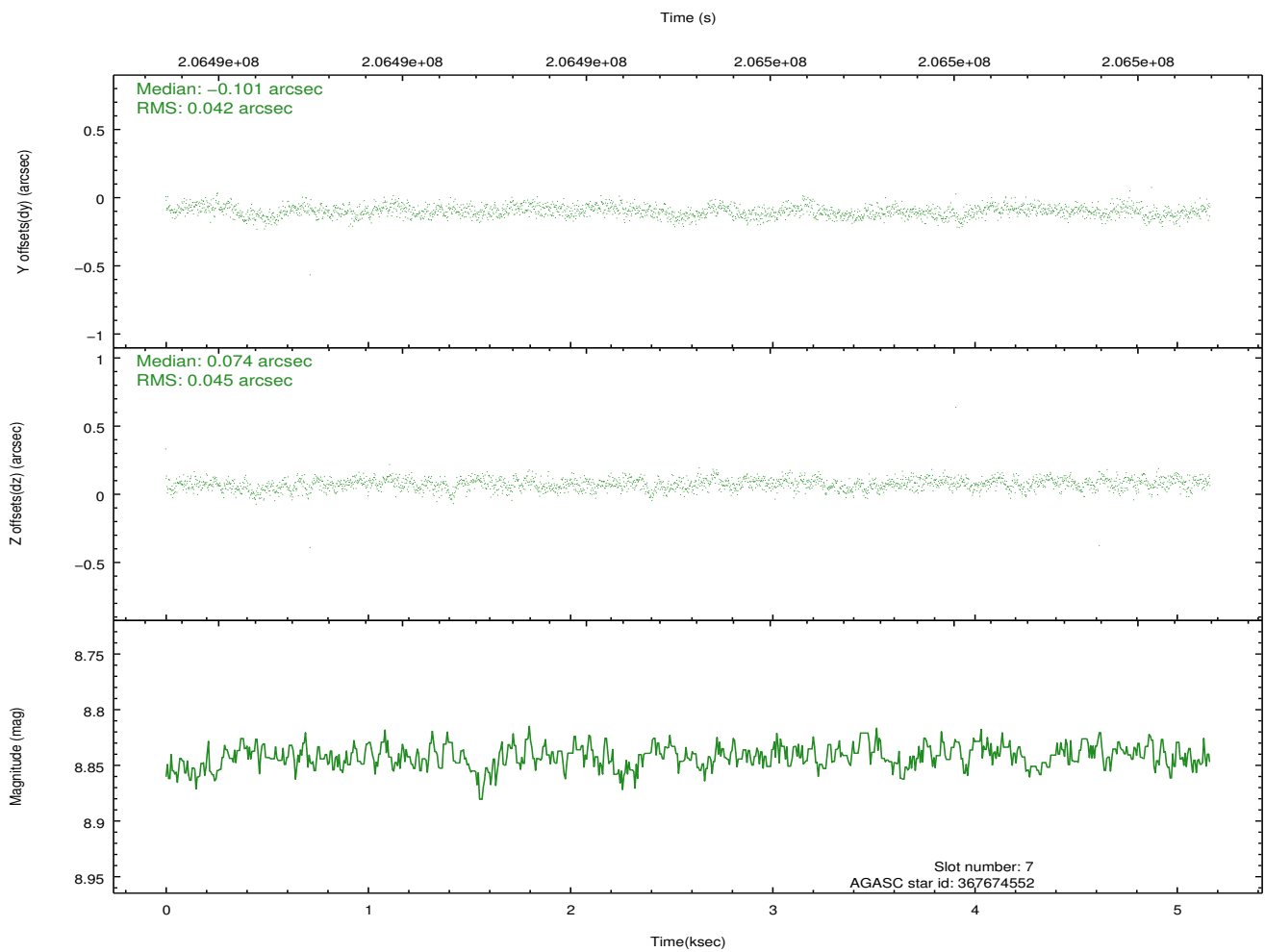
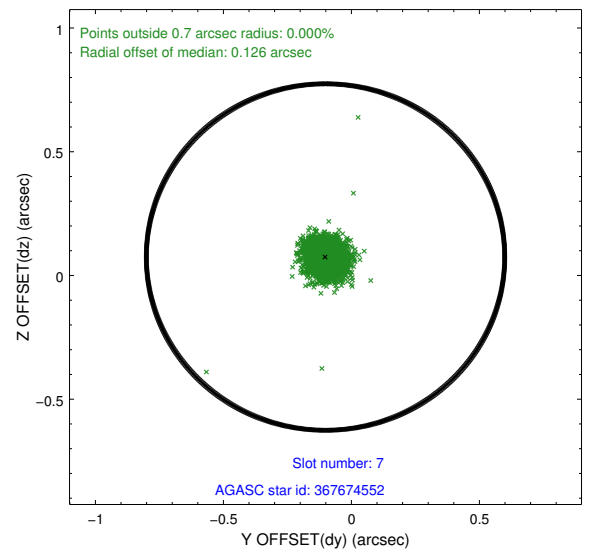
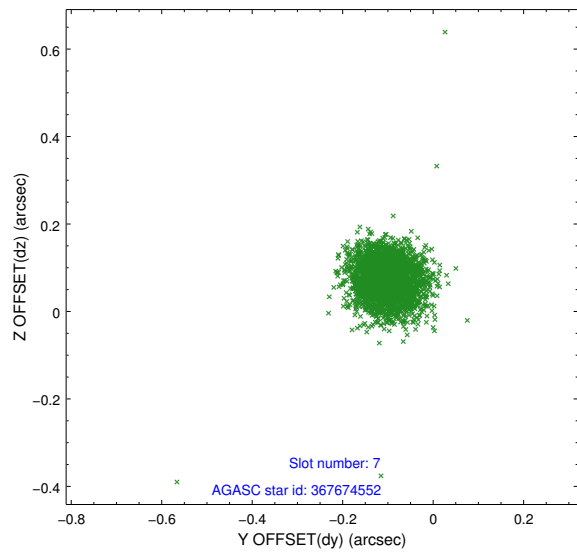
2.4.3 Slot 5



2.4.4 Slot 6

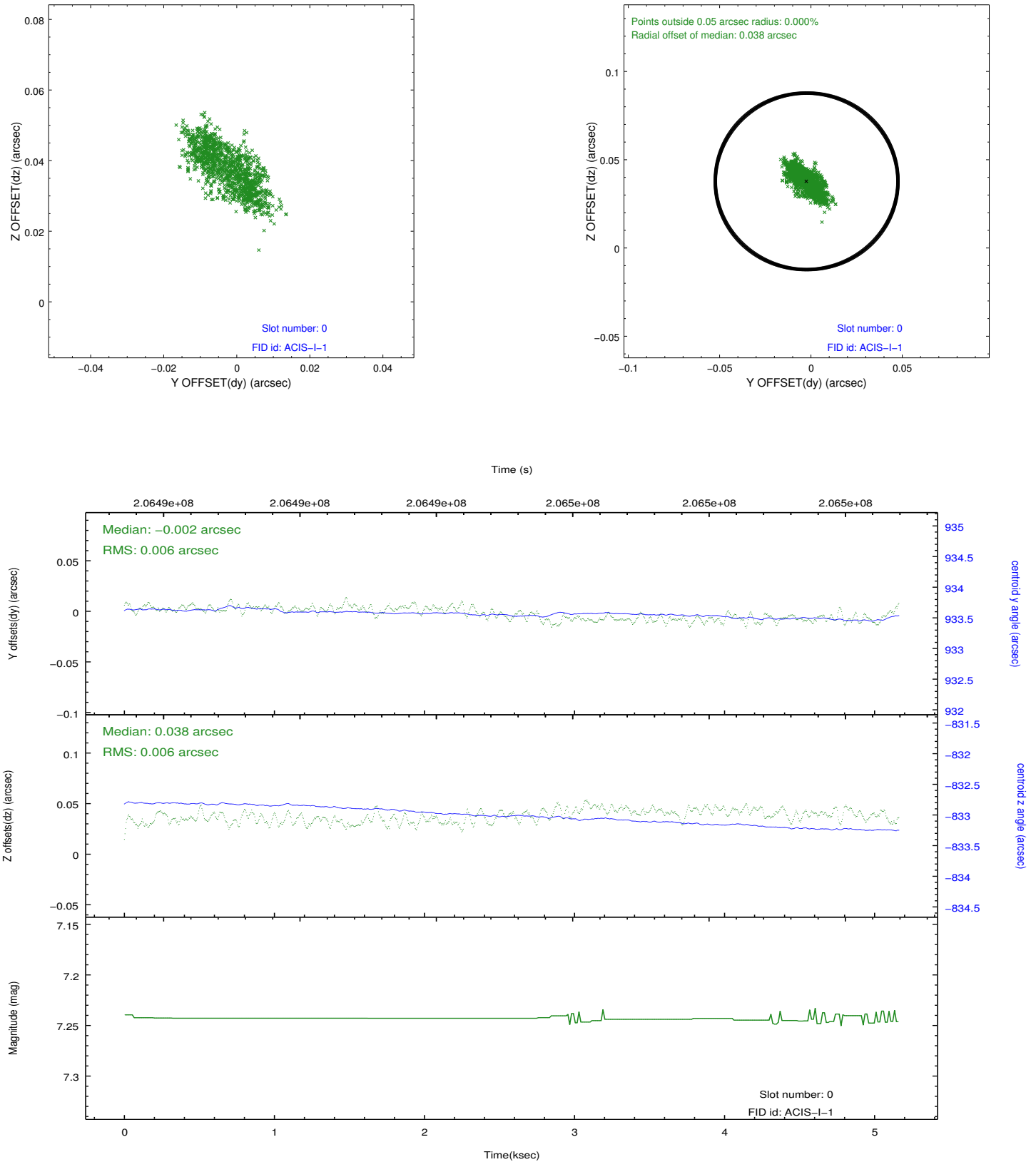


2.4.5 Slot 7

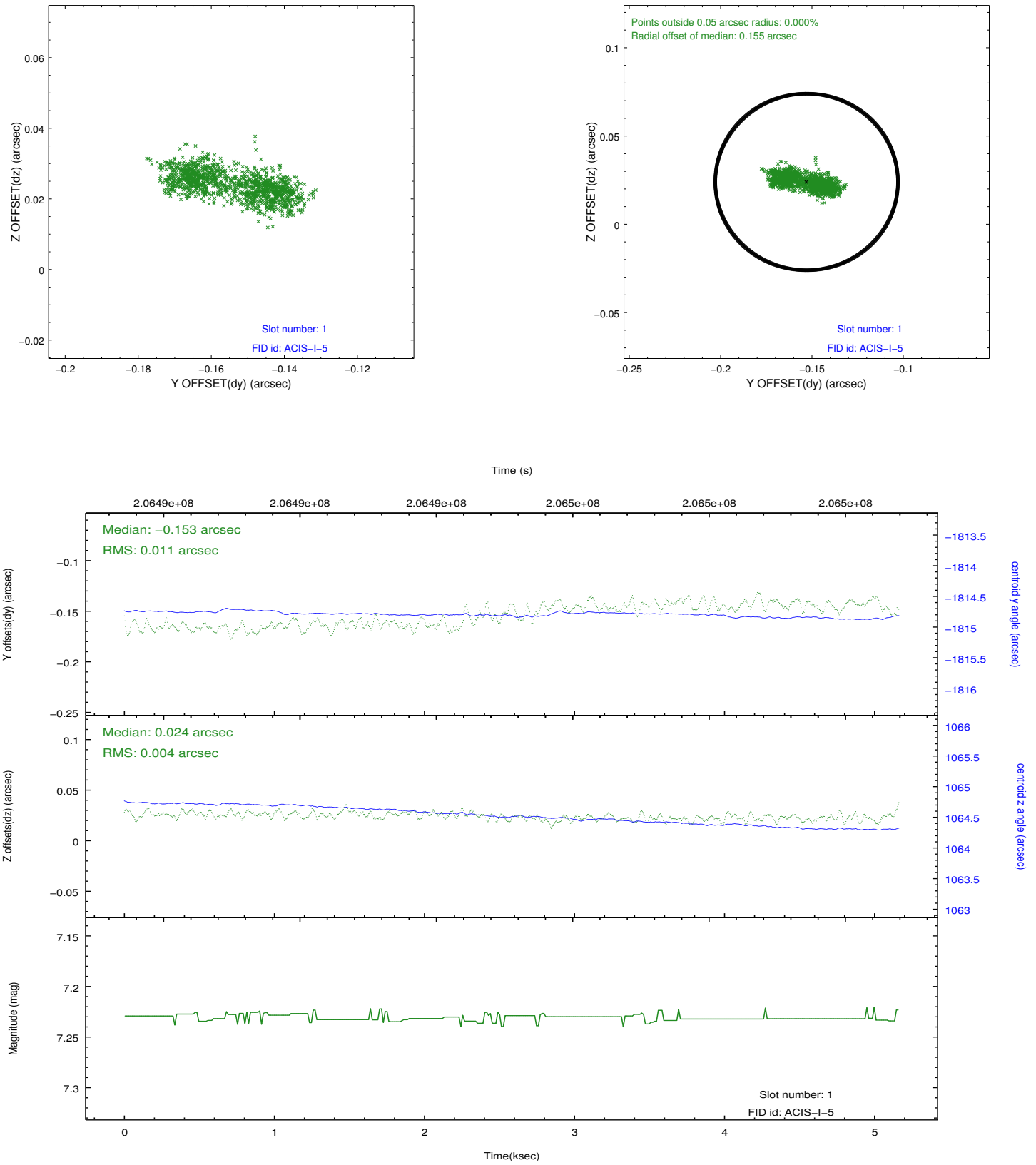


2.5 FID Slots

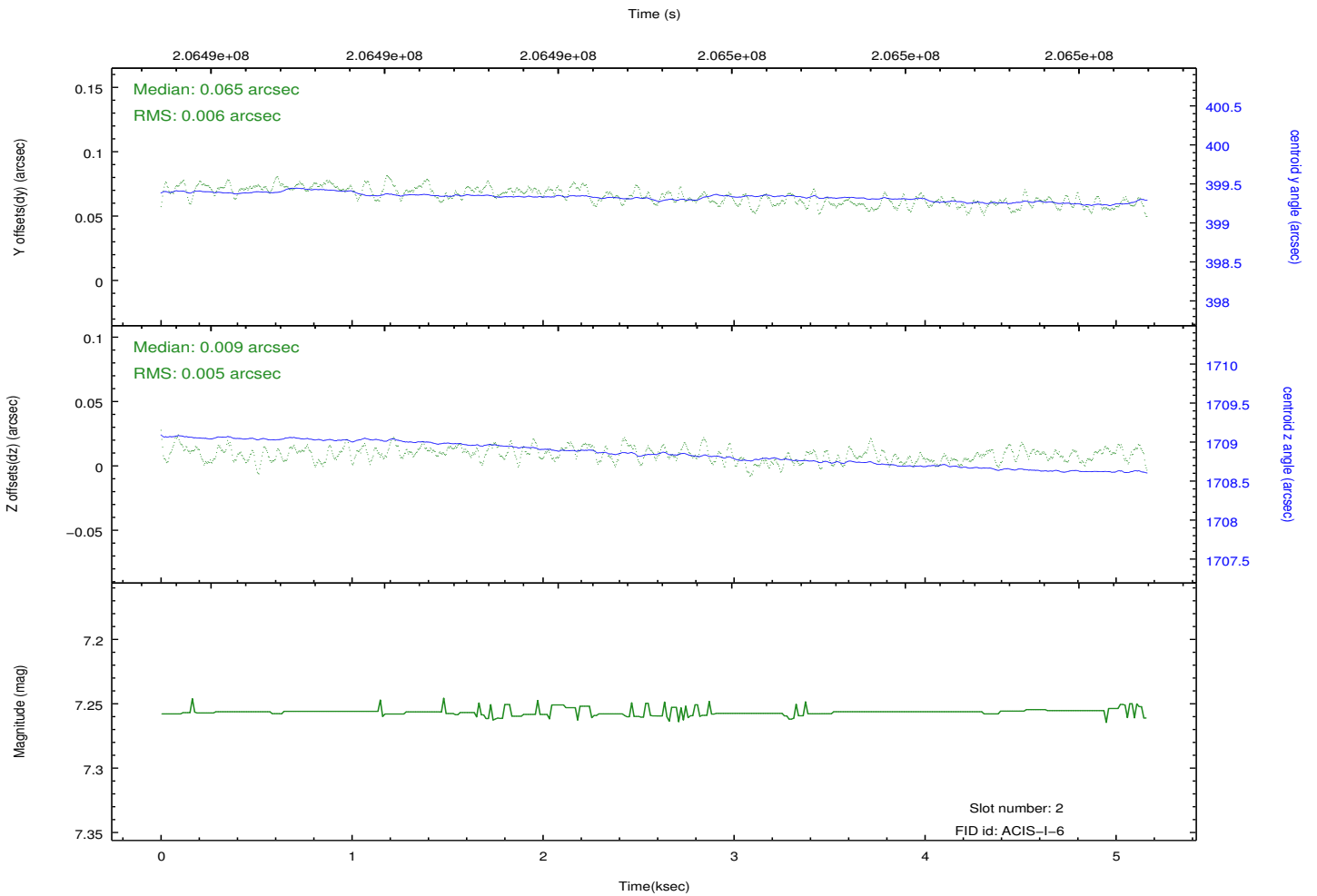
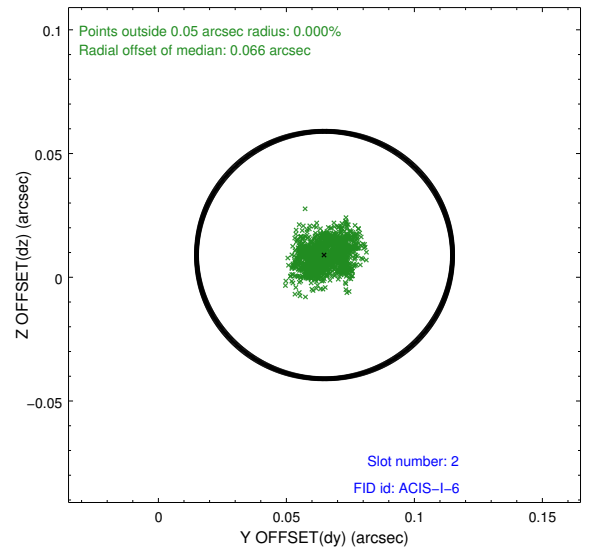
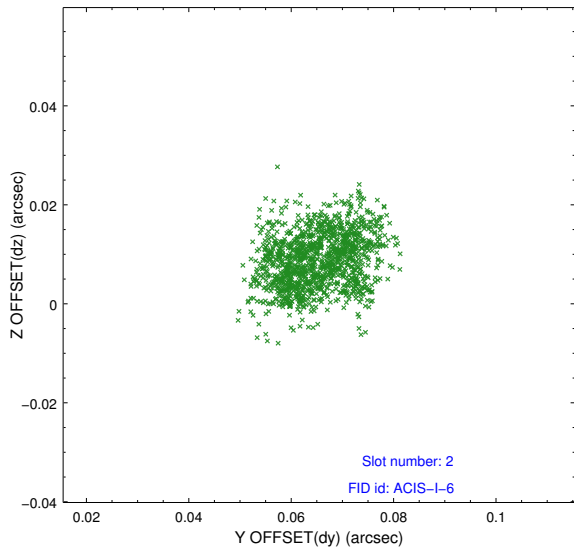
2.5.1 Slot 0



2.5.2 Slot 1



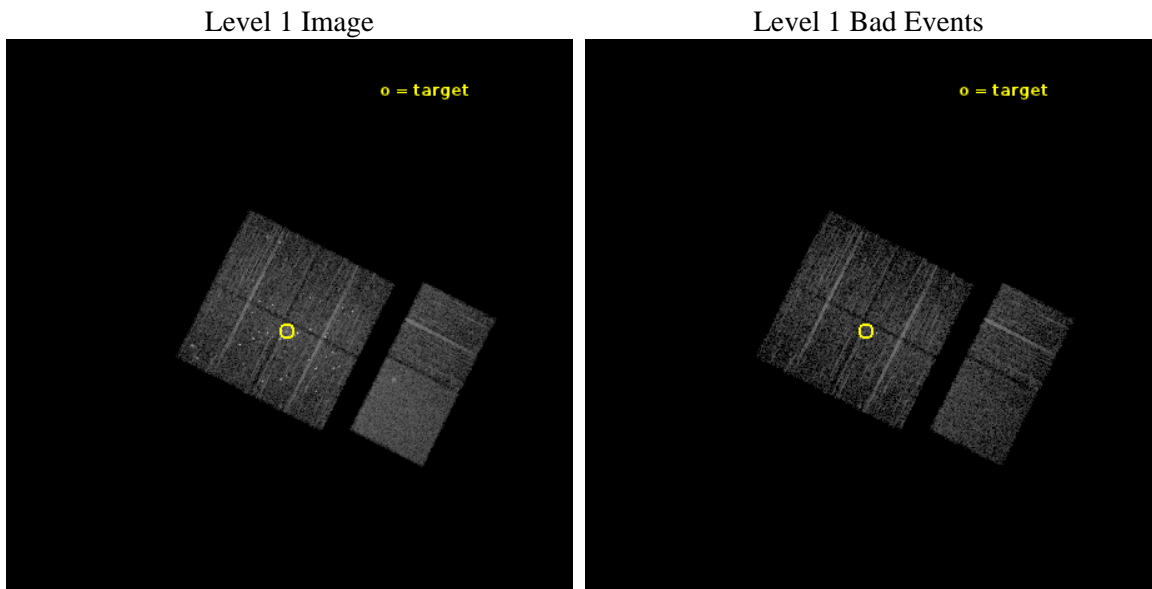
2.5.3 Slot 2



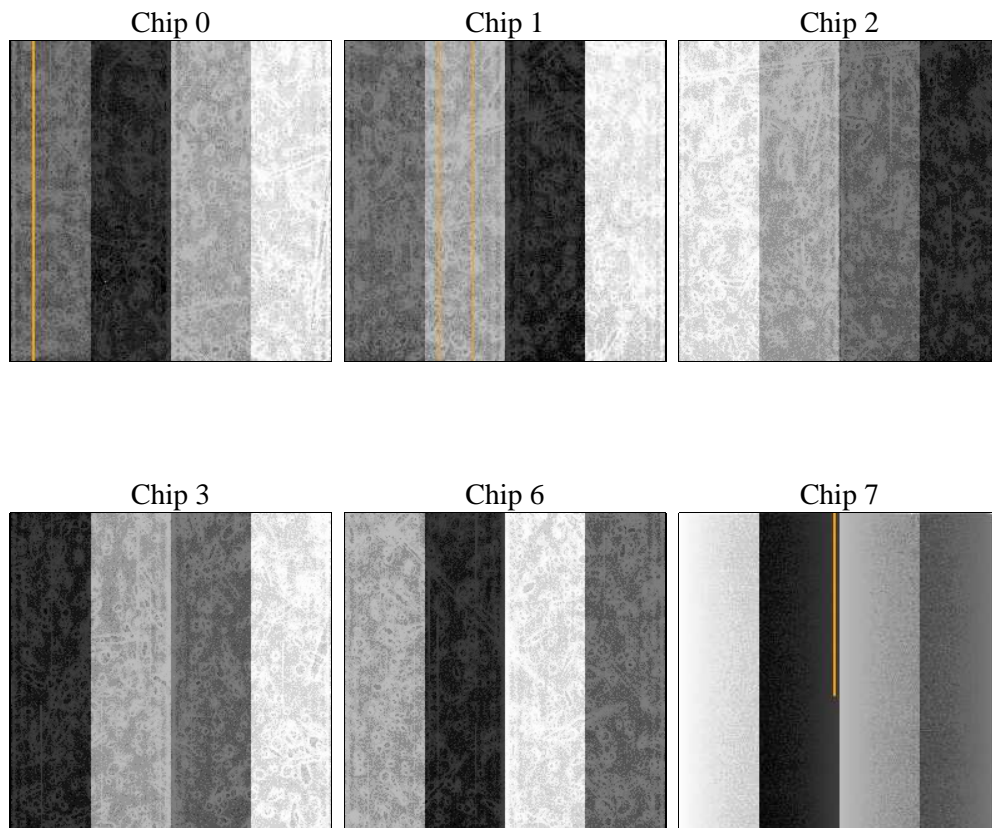
3 OBI Secondary

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	8.5	Processing system revision	ontime	4176.3133982718	Sum of GTIs [s]
caldbver	4.5.4	 	ontime0	4176.1901982725	Sum of GTIs [s]
date	2012-12-06T09:14:23	Date and time of file creation	ontime1	4176.231079191	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4176.2723581791	Sum of GTIs [s]
			ontime3	4176.3133982718	Sum of GTIs [s]
			ontime6	4176.3951096237	Sum of GTIs [s]
			ontime7	4176.3542290926	Sum of GTIs [s]
			l1events	257828	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	38990	37627	40963	45905	40906	53437	grade 0 events	3210	4208	4207	7240	1909	2019
rejected events	34008	31336	35160	36247	37140	36463		8%	11%	10%	15%	4%	3%
rejected %	87%	83%	85%	78%	90%	68%	grade 1 events	26	35	45	196	20	61
								0%	0%	0%	0%	0%	0%
							grade 2 events	1126	1327	1297	1710	1001	4363
								2%	3%	3%	3%	2%	8%
							grade 3 events	507	520	528	707	457	1999
								1%	1%	1%	1%	1%	3%
							grade 4 events	454	593	487	688	479	1940
								1%	1%	1%	1%	1%	3%
							grade 5 events	1564	1645	1557	1941	1917	5156
								4%	4%	3%	4%	4%	9%
							grade 6 events	866	982	785	1004	975	11713
								2%	2%	1%	2%	2%	21%
							grade 7 events	31237	28317	32057	32419	34148	26186
								80%	75%	78%	70%	83%	49%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.12.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.1

A.2 Comments

Window constraint met. Joint Proposal: HST