

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9523 - L2 Version 2
Chandra X-Ray Center

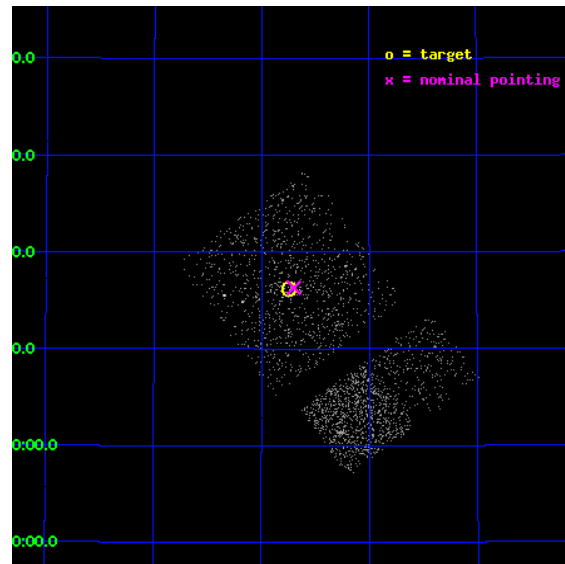
L2 Processing Date : May 20 2012

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

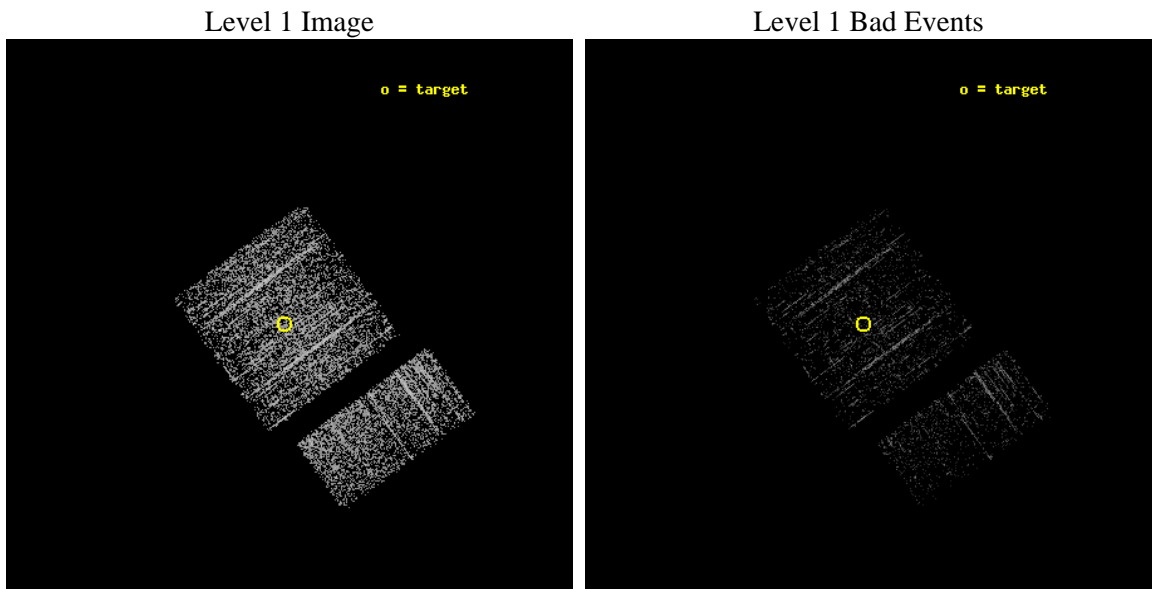
seq_num	600664	Sequence number
obs_id	9523	Observation id
title	Black Hole X-ray Novae in M31	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.6748130166	Nominal RA [deg]
dec_nom	41.271675471719	Nominal Dec [deg]
roll_nom	143.83236689301	Nominal Roll [deg]
revision	2	Processing version of data
ontime	983.14638876915	Sum of GTIs [s]
livetime	154.77095663004	Livetime [s]
ontime0	983.02326875925	Sum of GTIs [s]
ontime1	983.06430876255	Sum of GTIs [s]
ontime2	983.10534876585	Sum of GTIs [s]
ontime3	983.14638876915	Sum of GTIs [s]
ontime6	983.22846877575	Sum of GTIs [s]
ontime7	983.18742877245	Sum of GTIs [s]
l2events	2797	Number of level 2 events



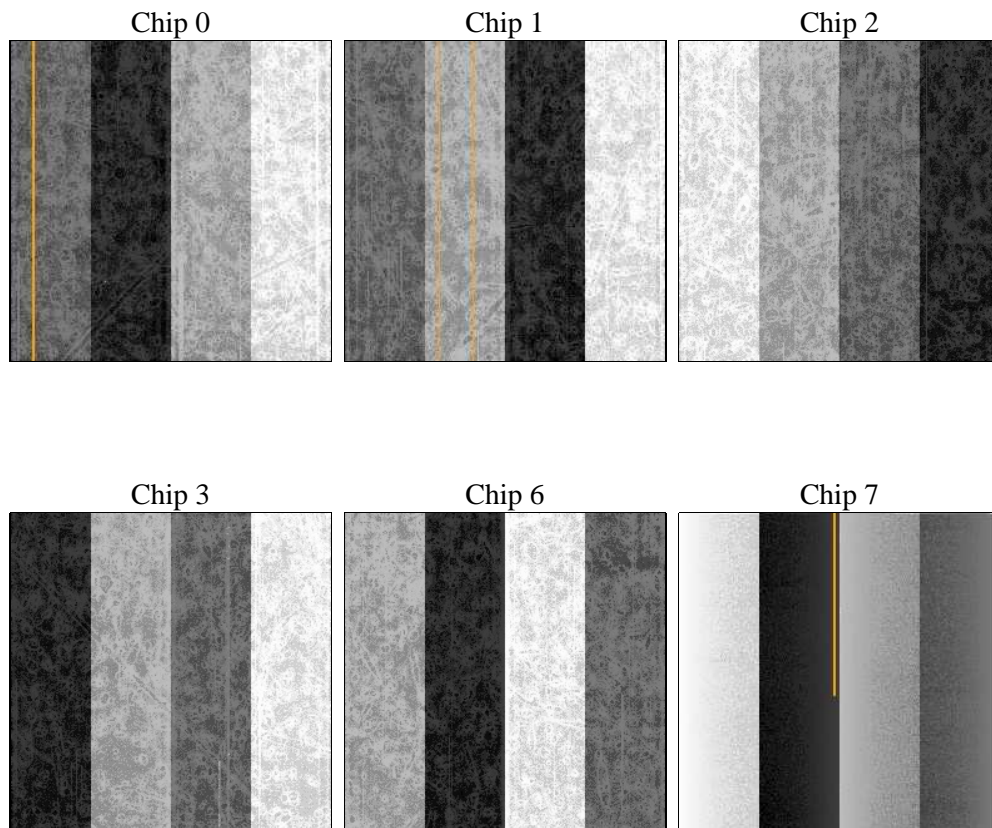
2 OBI Primary

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	983.14638876915	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	983.02326875925	Sum of GTIs [s]
date	2012-05-20T20:38:55	Date and time of file creation	ontime1	983.06430876255	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	983.10534876585	Sum of GTIs [s]
			ontime3	983.14638876915	Sum of GTIs [s]
			ontime6	983.22846877575	Sum of GTIs [s]
			ontime7	983.18742877245	Sum of GTIs [s]
			l1events	23807	Number of level 1 events

2.1.4 Events

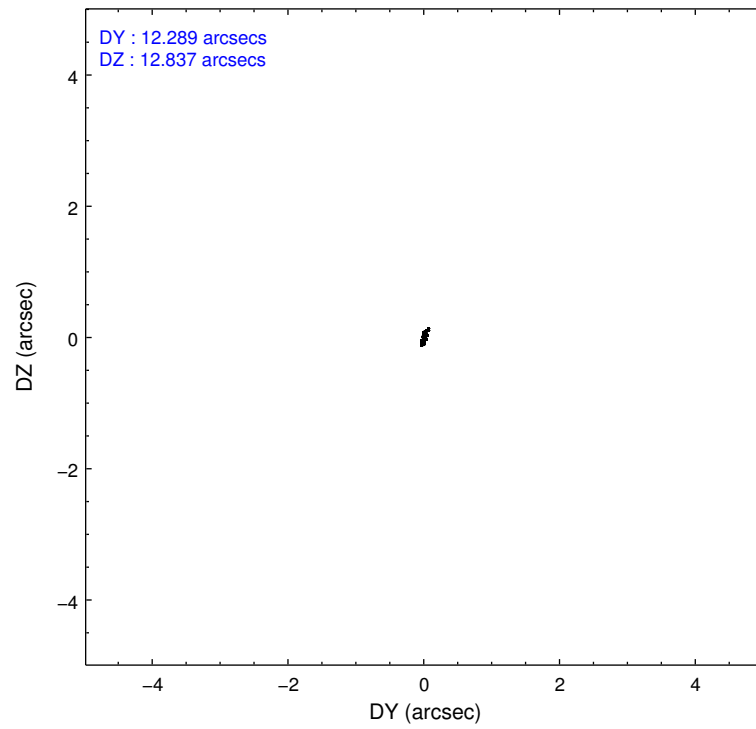
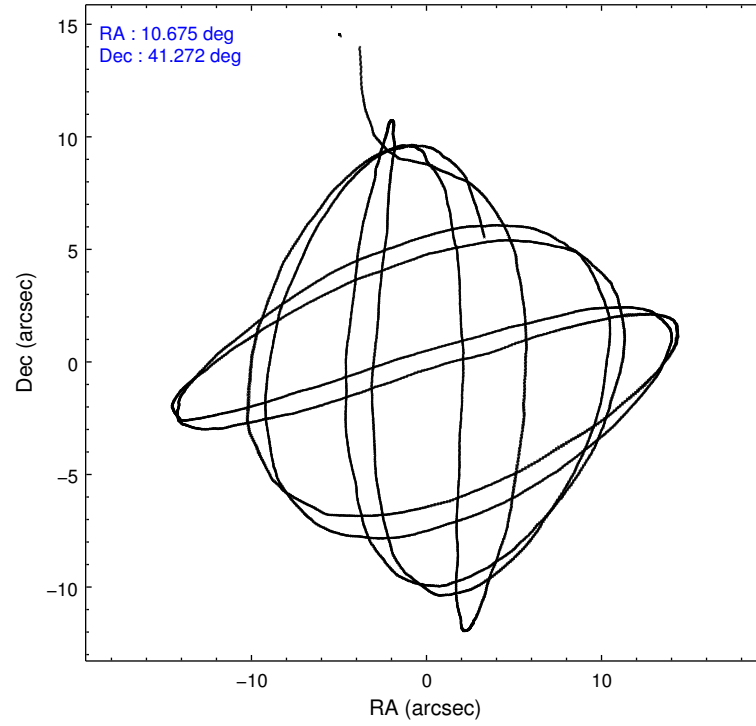
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	3587	3901	4180	4129	4318	3692
rejected events	3226	3394	3696	3680	3988	2556
rejected %	89%	87%	88%	89%	92%	69%

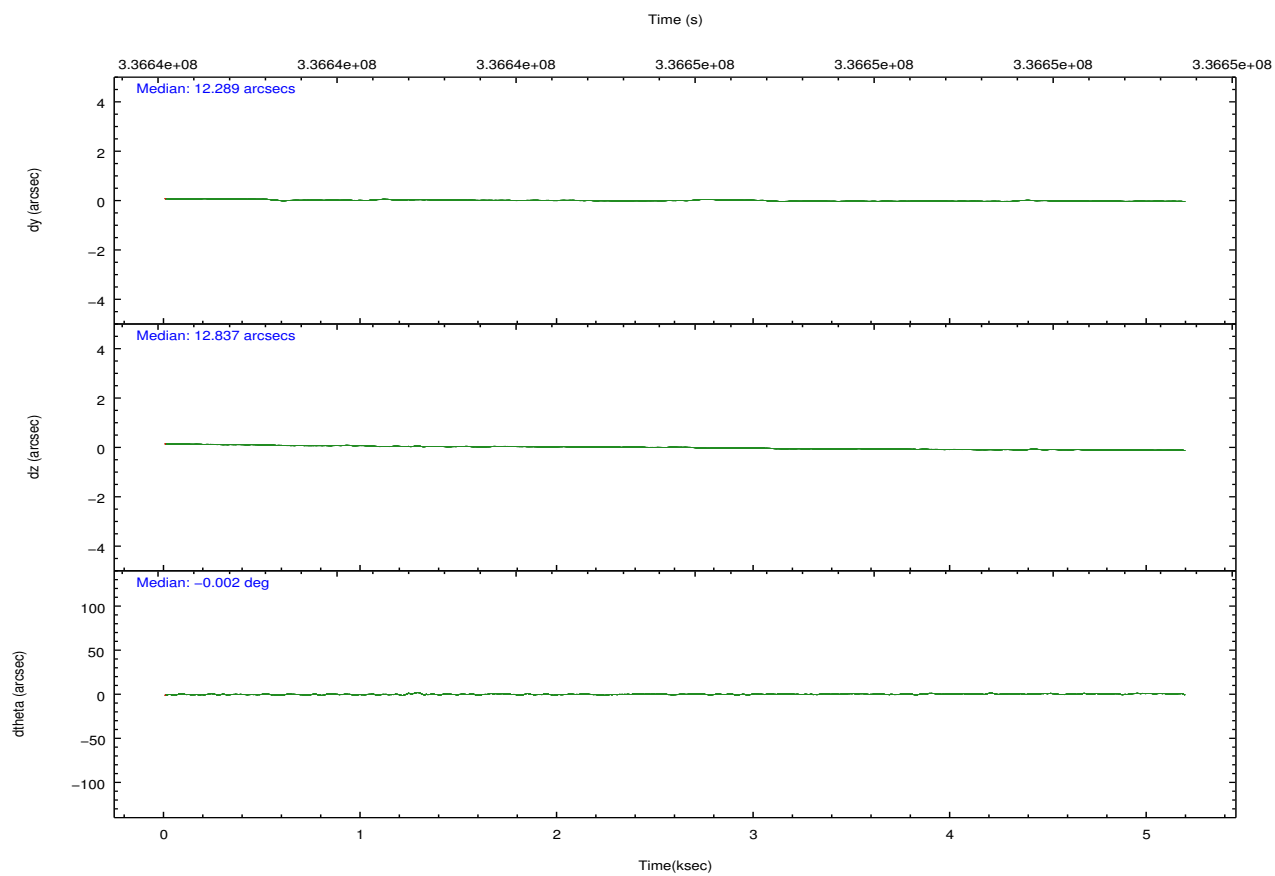
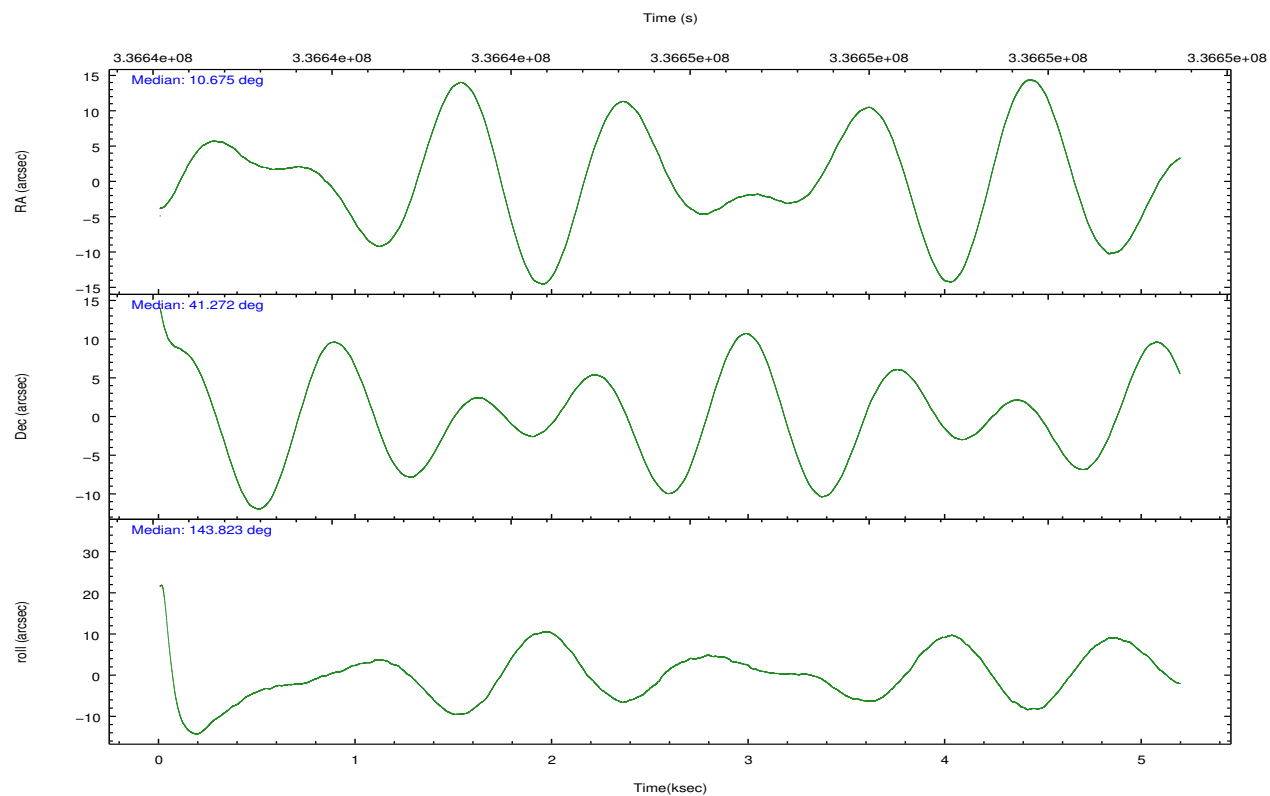
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	104	237	239	194	65	110
	2%	6%	5%	4%	1%	2%
grade 1 events	2	1	5	3	0	2
	0%	0%	0%	0%	0%	0%
grade 2 events	87	88	108	102	84	260
	2%	2%	2%	2%	1%	7%
grade 3 events	55	67	45	43	54	125
	1%	1%	1%	1%	1%	3%
grade 4 events	47	52	48	38	47	123
	1%	1%	1%	0%	1%	3%
grade 5 events	128	119	114	158	176	326
	3%	3%	2%	3%	4%	8%
grade 6 events	69	68	51	76	84	524
	1%	1%	1%	1%	1%	14%
grade 7 events	3095	3269	3570	3515	3808	2222
	86%	83%	85%	85%	88%	60%

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	10.711214	10.67481301659958	CCD I2 on	Y	Y
[deg] Pointing Dec	41.268729	41.27167547171909	CCD I3 on	Y	Y
[deg] Pointing Roll	143.599581	143.8323668930052	CCD S0 on	N	N
[s] Window start time (MET)	336441665.184000	336441665.184000	CCD S1 on	N	N
[s] Window stop time (MET)	337046405.184000	337046405.184000	CCD S2 on	O2	Y
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S3 on	O1	Y
[mm] SIM defocus	0	0.001439871863259334	CCD S4 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S5 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	Number of optional ACIS chips dropped	0	0
[s] Observation start time (MET)	336643493.184000	336642367.90429	On-chip summing requested	N	N
Observation start date	2008-09-01T08:03:48	2008-09-01T07:46:07	Subarray requested	NONE	NONE
[s] Observation end time (MET)	336648493.184000	336648979.66712	Alternating exposures requested	Y	Y
Observation end date	2008-09-01T09:27:08	2008-09-01T09:36:19	[s] Primary exposure time	0.600000	0.6
Read mode	TIMED	TIMED	[s] Secondary exposure time	0.000000	3.2
			Duty cycle	5	5

2.3 Aspect



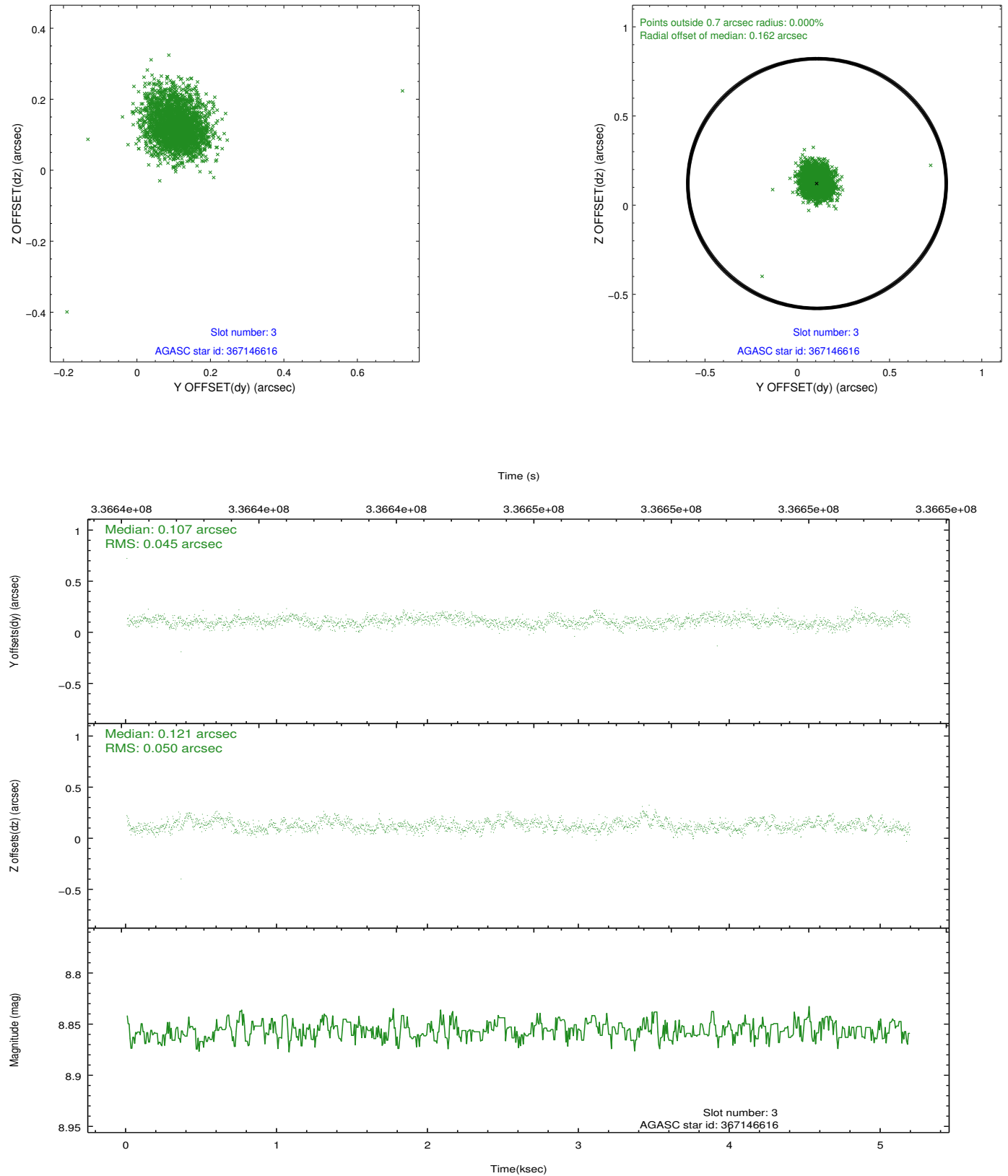


Slot Statistics

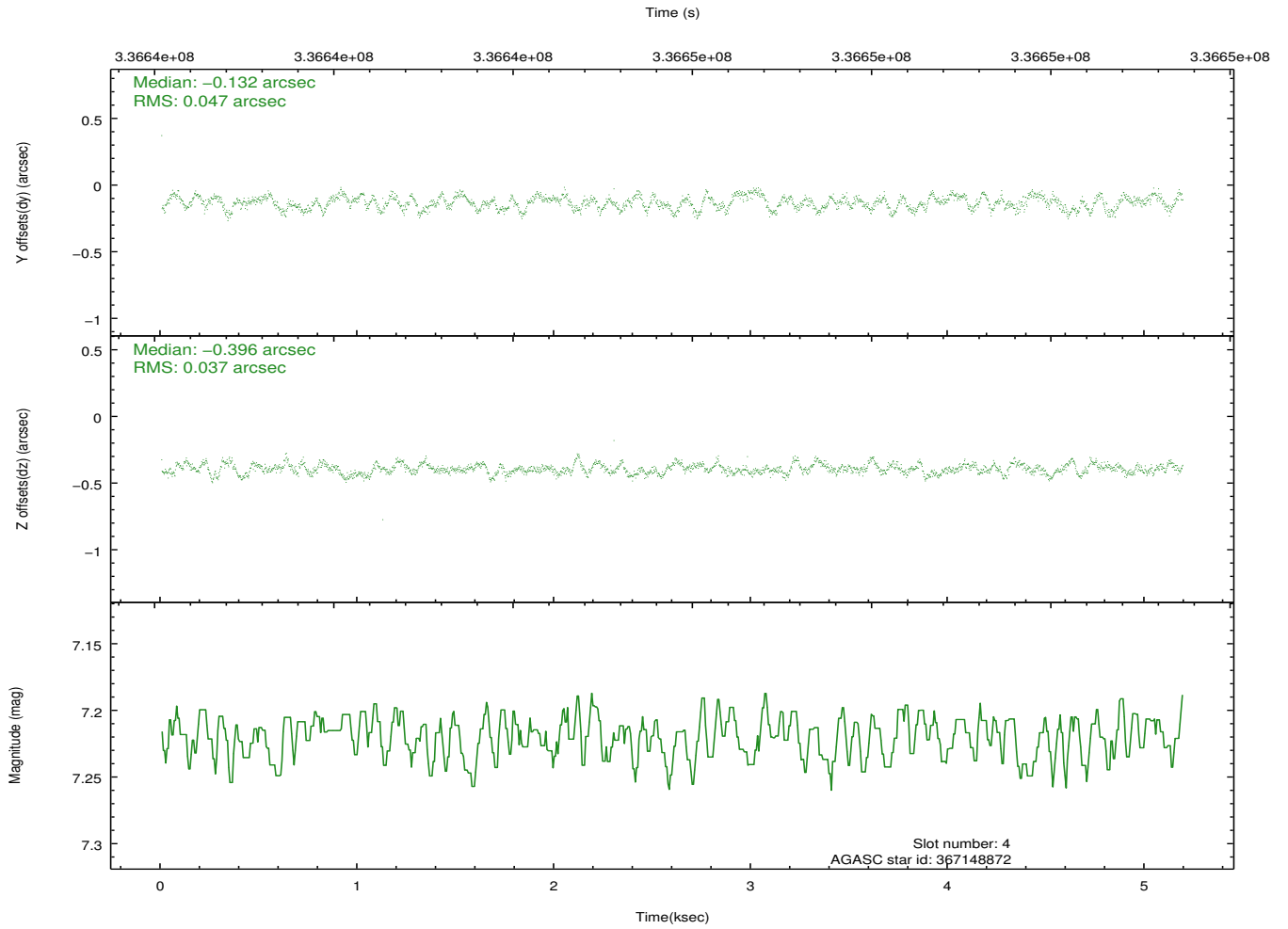
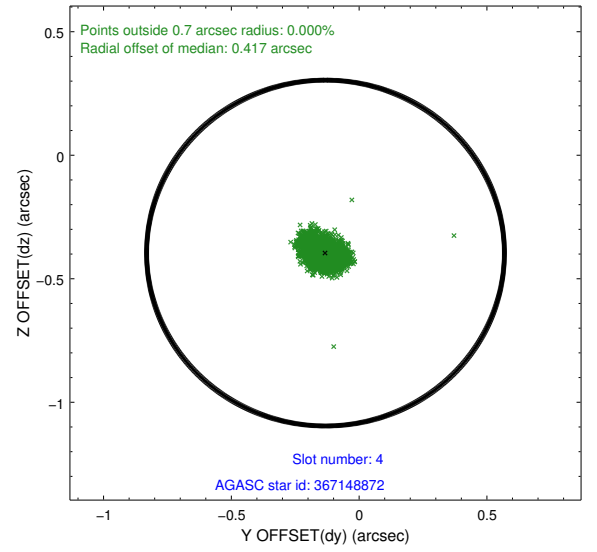
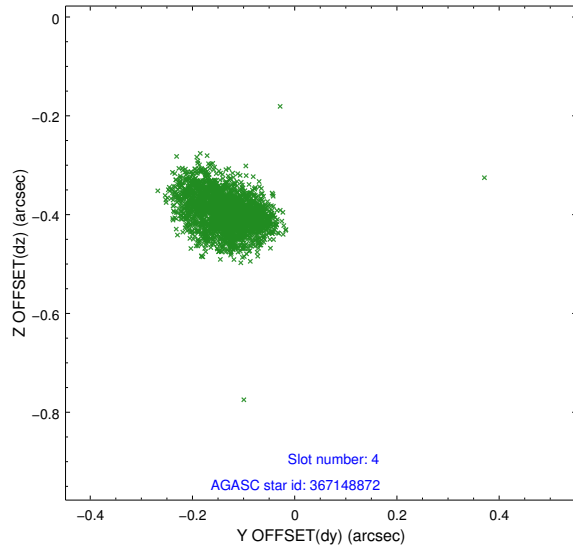
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.03	1266	0.043	0.000	0.007	0.012	0.000000	0.000000	927.28	-836.37
1	FID	ACIS-I-5	7.02	1265	-0.174	0.061	0.006	0.011	0.000000	0.000000	-1820.39	1060.61
2	FID	ACIS-I-6	7.03	1266	0.041	0.009	0.007	0.011	0.000000	0.000000	391.57	1706.37
3	GUIDE	367146616	8.86	2530	0.107	0.121	0.069	0.112	11.418645	41.190163	-1705.53	-915.45
4	GUIDE	367148872	7.22	2532	-0.132	-0.396	0.064	0.099	10.505940	40.688258	-790.07	2014.24
5	GUIDE	367657896	9.02	2532	-0.003	0.035	0.077	0.125	11.197765	41.313576	-961.12	-912.33
6	GUIDE	367674552	8.86	2521	0.052	0.041	0.070	0.110	11.016238	41.570845	-15.18	-1363.76
7	GUIDE	367657272	8.41	2525	-0.017	0.195	0.091	0.139	11.834471	41.298907	-2368.82	-1906.16

2.4 Star Slots

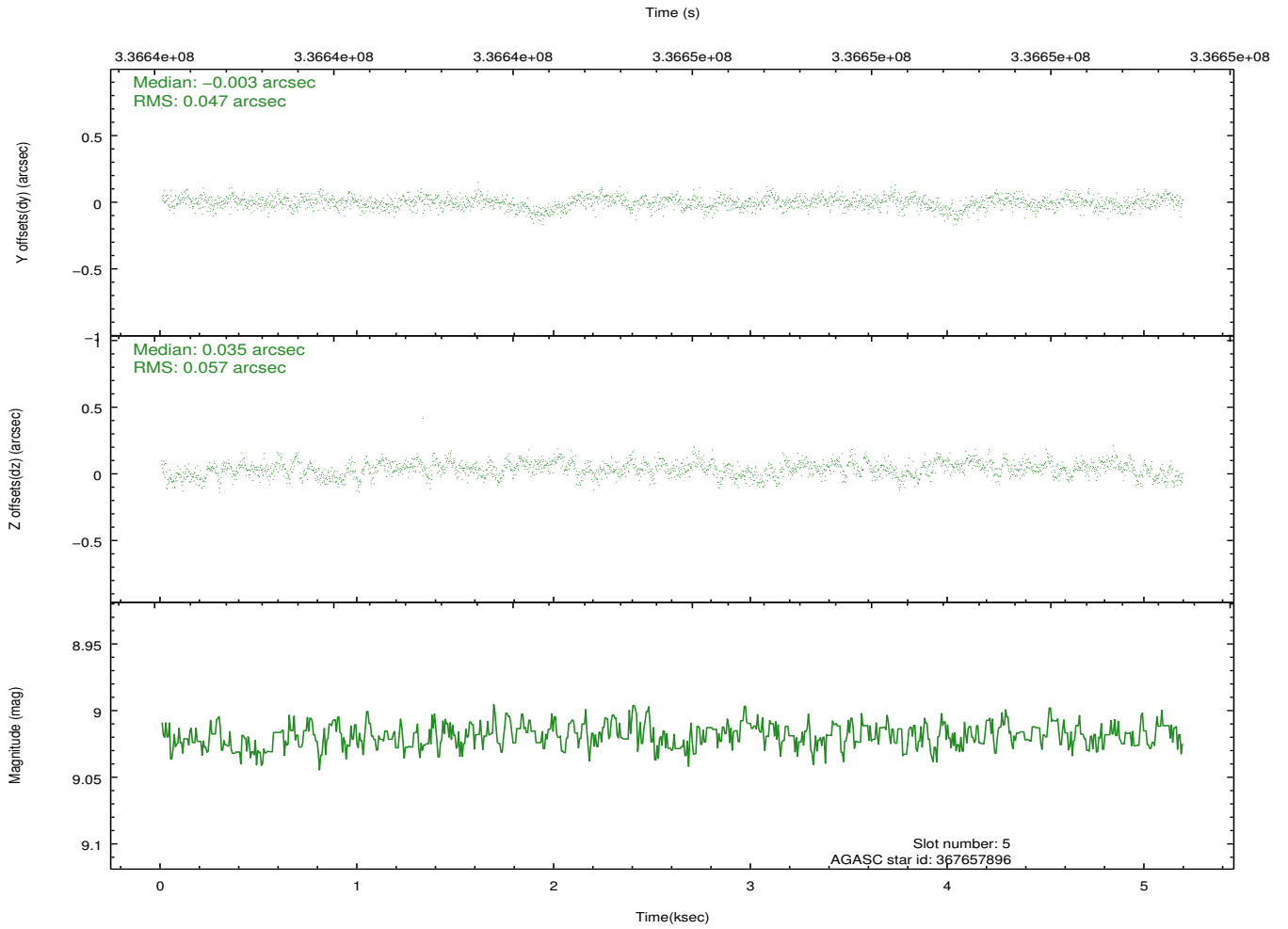
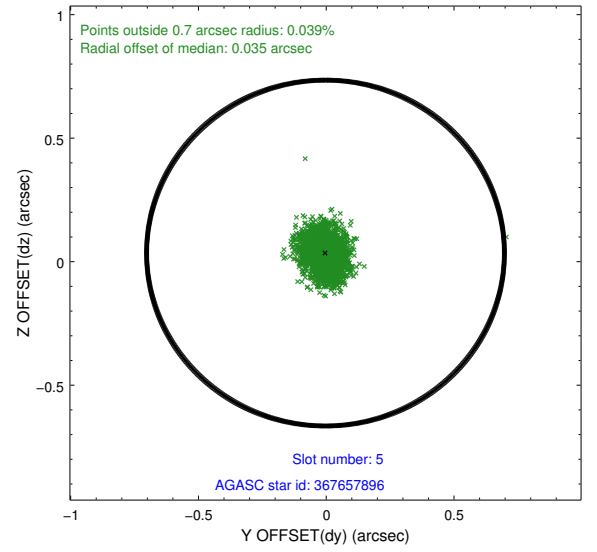
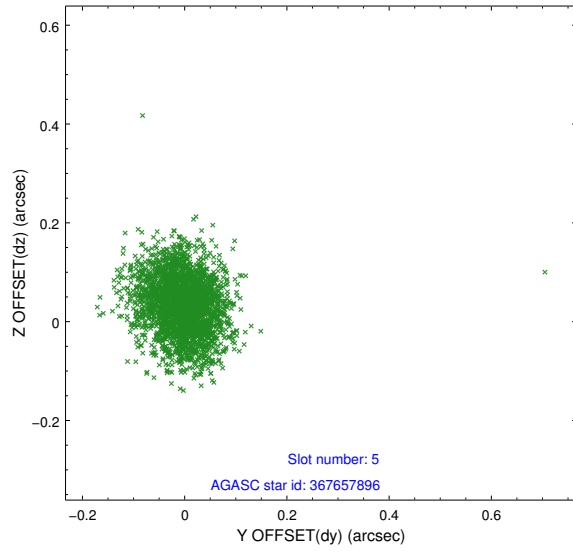
2.4.1 Slot 3



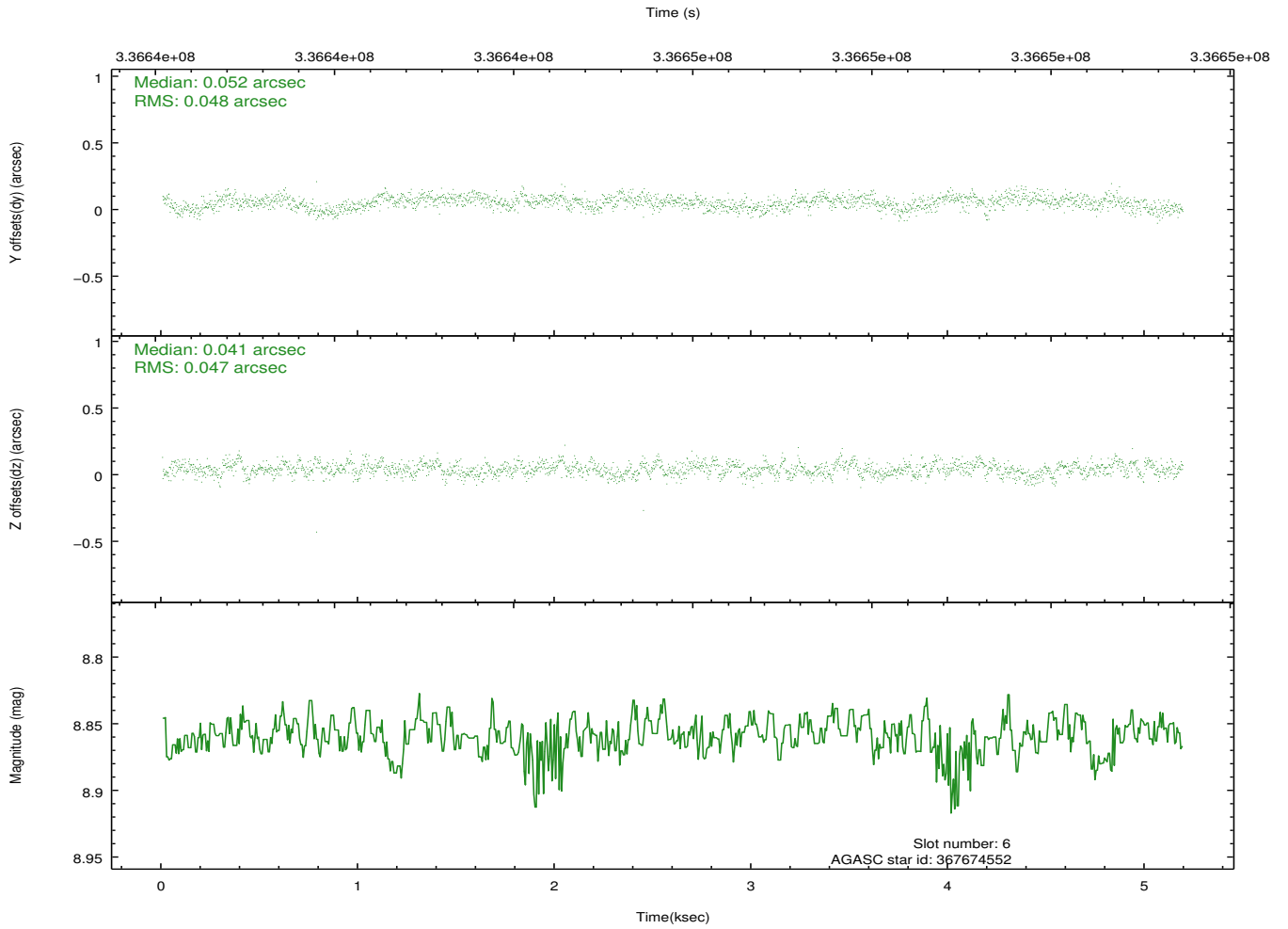
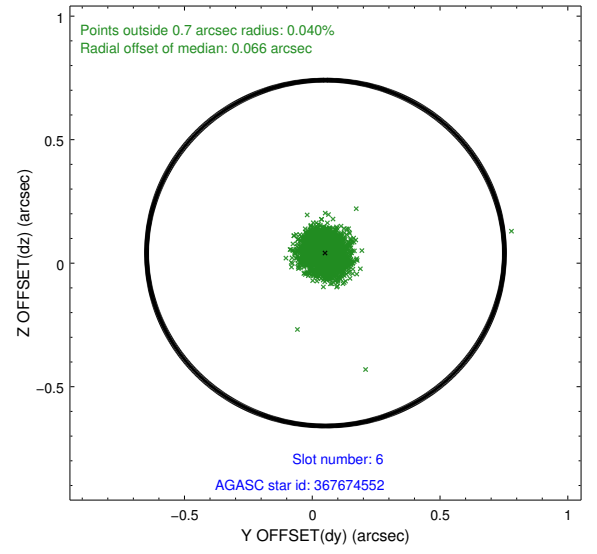
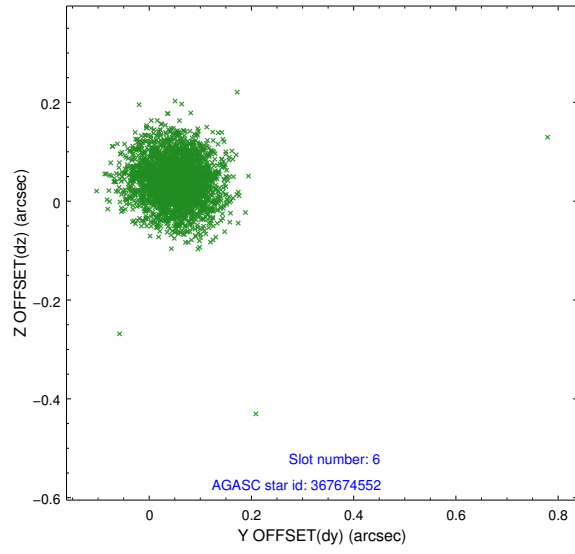
2.4.2 Slot 4



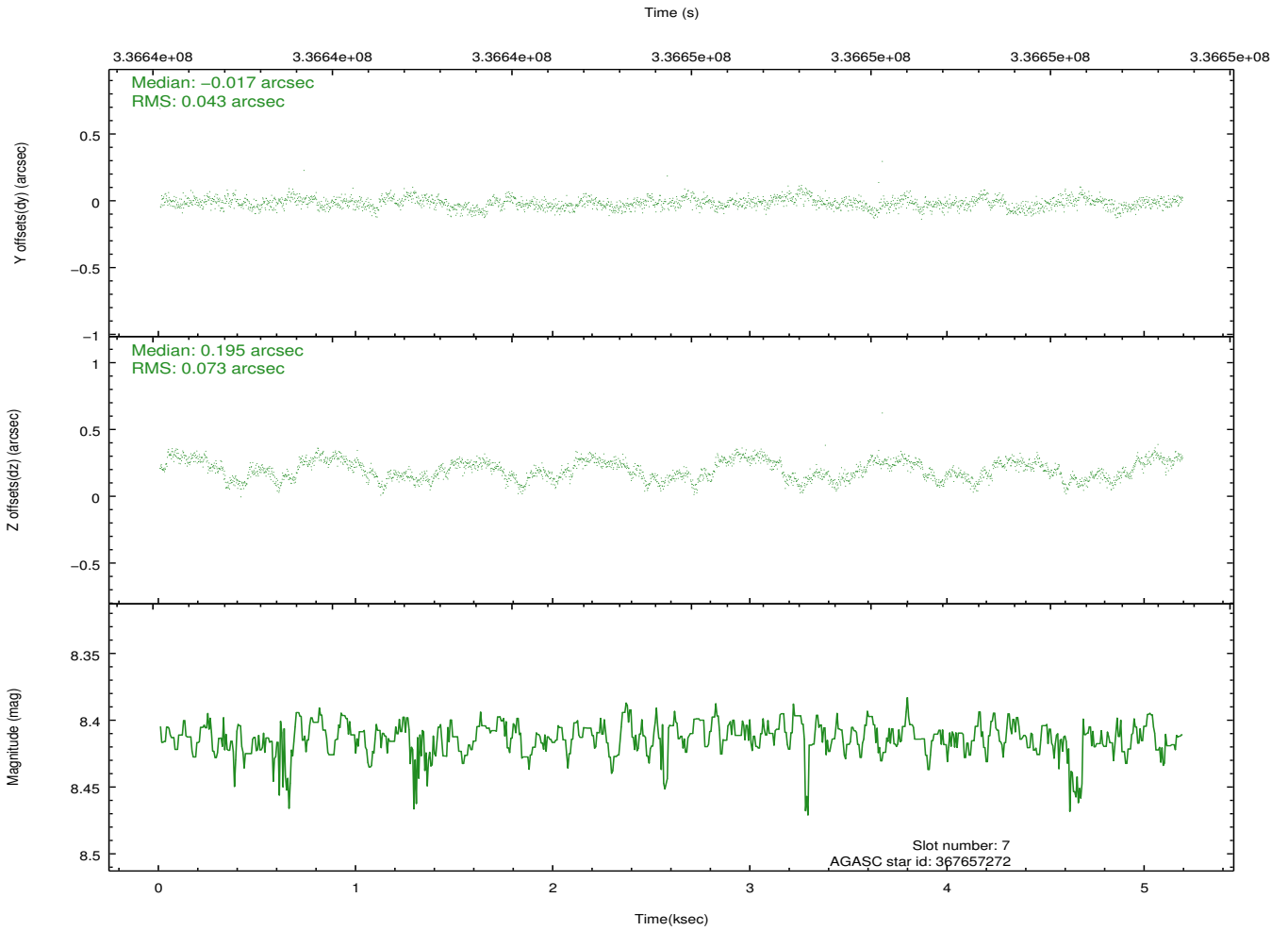
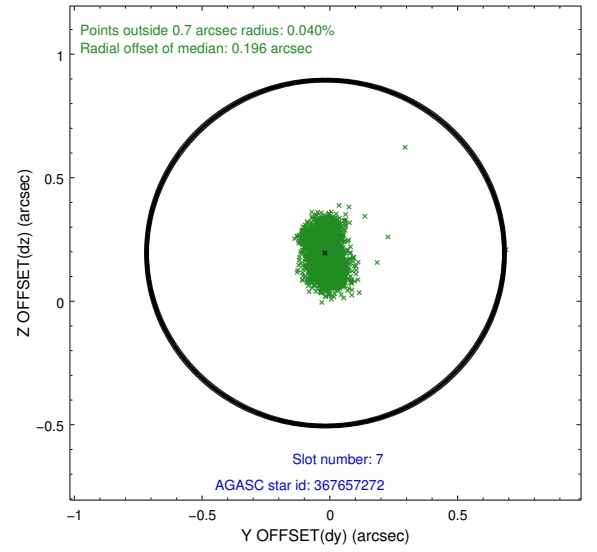
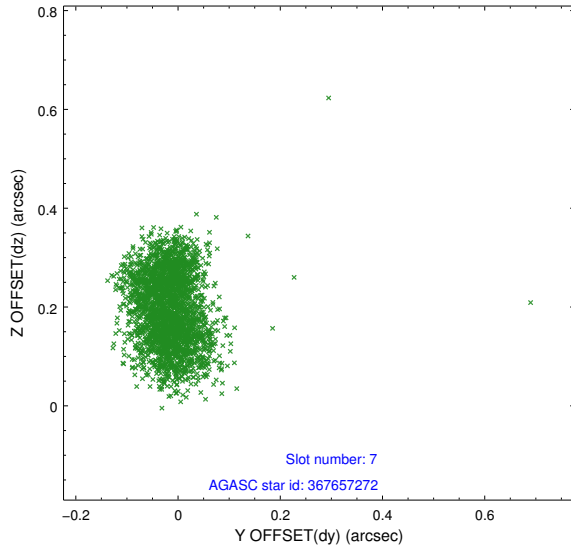
2.4.3 Slot 5



2.4.4 Slot 6

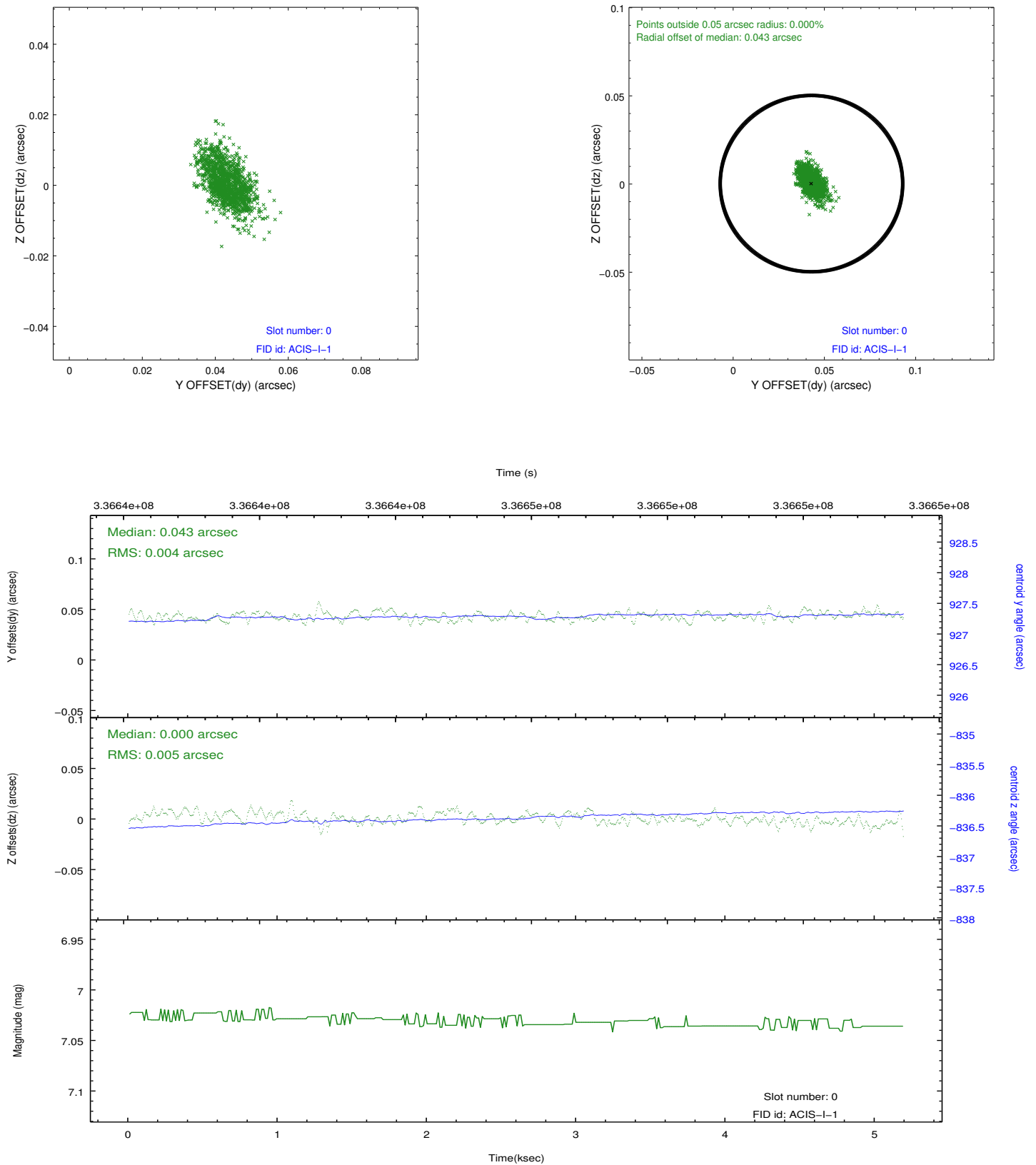


2.4.5 Slot 7

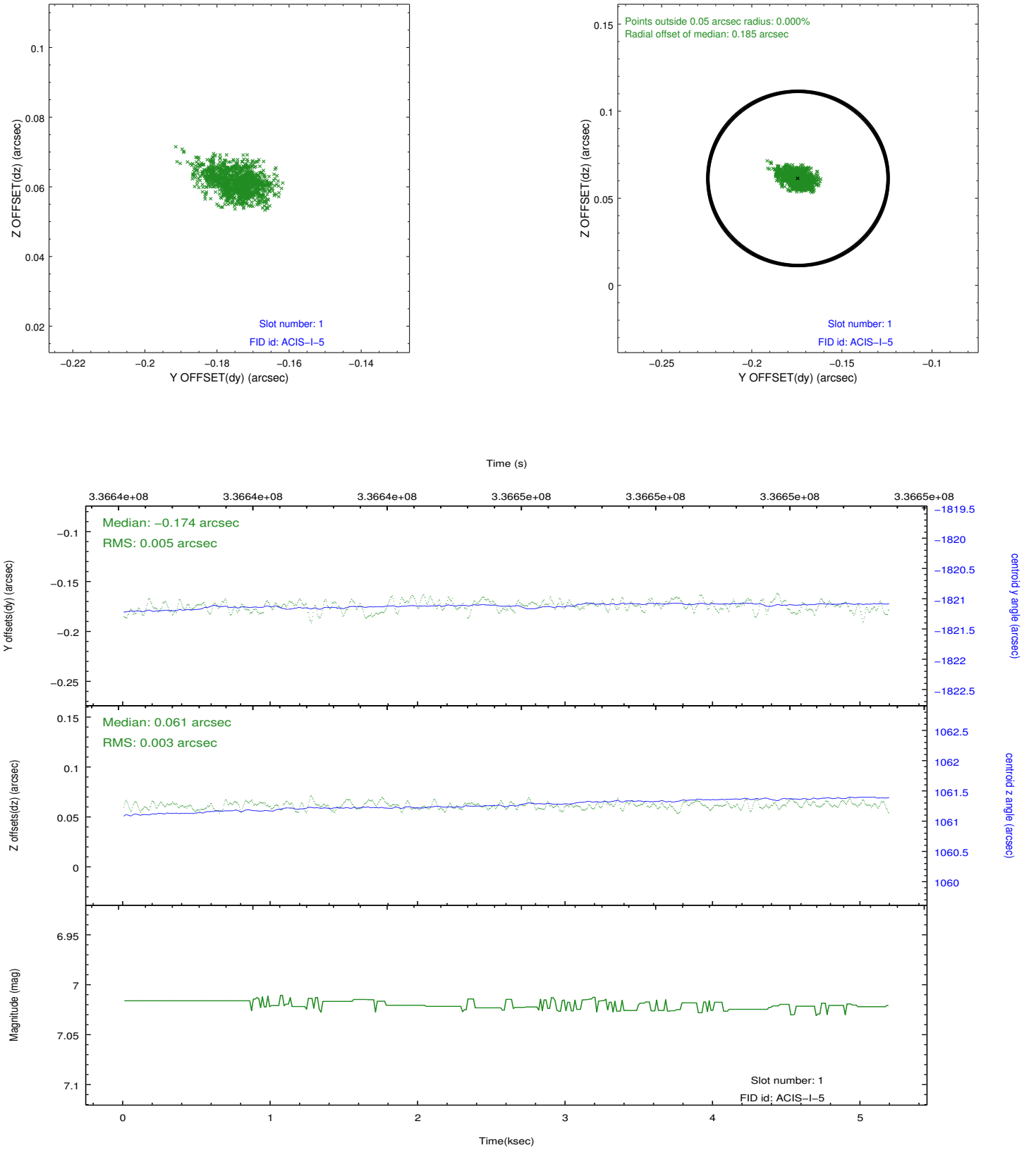


2.5 FID Slots

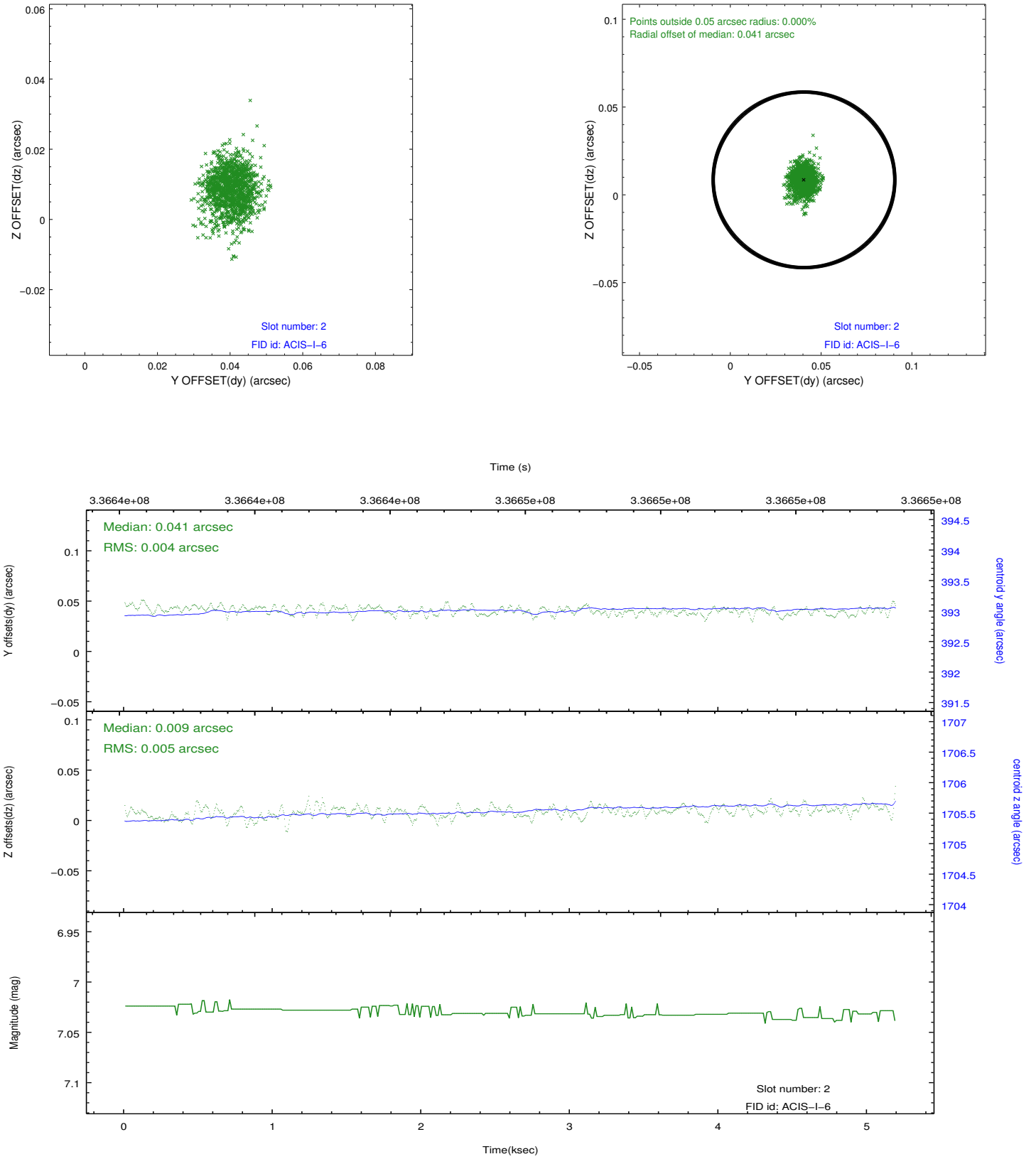
2.5.1 Slot 0



2.5.2 Slot 1



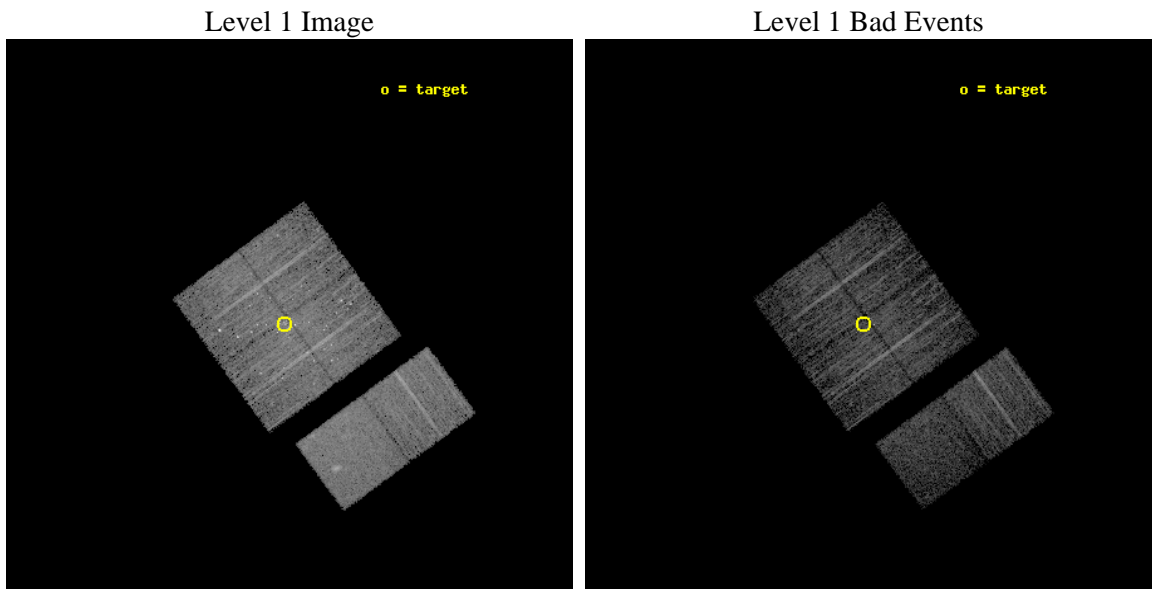
2.5.3 Slot 2



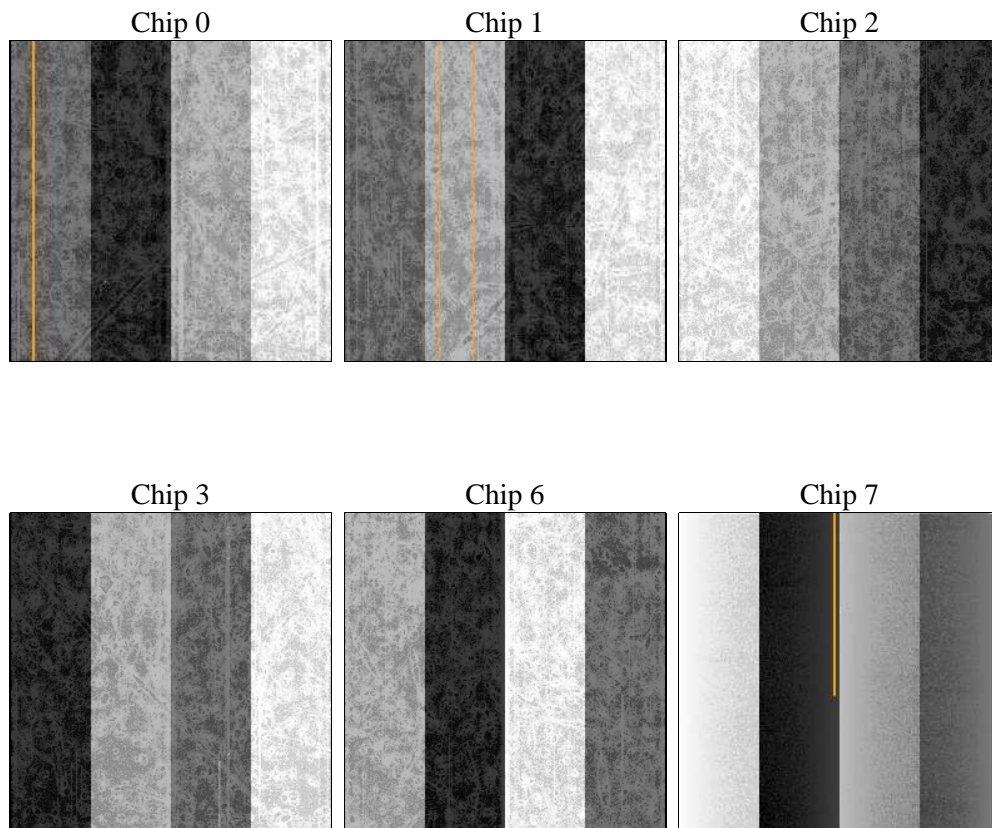
3 OBI Secondary

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	4193.2717649341	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	4193.2716560364	Sum of GTIs [s]
date	2012-05-20T20:38:15	Date and time of file creation	ontime1	4193.2717852592	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4193.2715665102	Sum of GTIs [s]
			ontime3	4193.2717649341	Sum of GTIs [s]
			ontime6	4193.2716267705	Sum of GTIs [s]
			ontime7	4193.2718548775	Sum of GTIs [s]
			l1events	224950	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	32946	37610	39037	38036	36738	40583	grade 0 events	1928	5045	4526	4196	1325	1988
rejected events	28553	29330	31334	31178	32963	21638		5%	13%	11%	11%	3%	4%
rejected %	86%	77%	80%	81%	89%	53%	grade 1 events	18	86	154	64	13	55
								0%	0%	0%	0%	0%	0%
							grade 2 events	927	1336	1282	1051	847	3987
								2%	3%	3%	2%	2%	9%
							grade 3 events	452	526	568	465	435	1808
								1%	1%	1%	1%	1%	4%
							grade 4 events	393	564	541	464	414	1783
								1%	1%	1%	1%	1%	4%
							grade 5 events	1165	1443	1217	1435	1527	4218
								3%	3%	3%	3%	4%	10%
							grade 6 events	713	864	820	721	780	9470
								2%	2%	2%	1%	2%	23%
							grade 7 events	27350	27746	29929	29640	31397	17274
								83%	73%	76%	77%	85%	42%

A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.05.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.17660264

A.2 Comments

Window preference met.