

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9529 - L2 Version 2
Chandra X-Ray Center

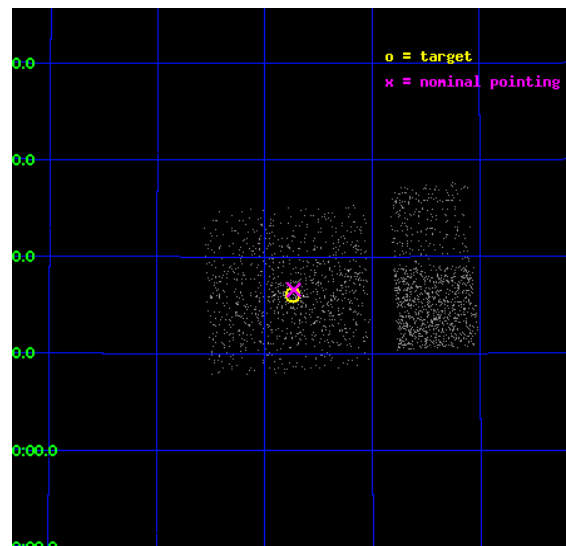
L2 Processing Date : May 15 2012

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

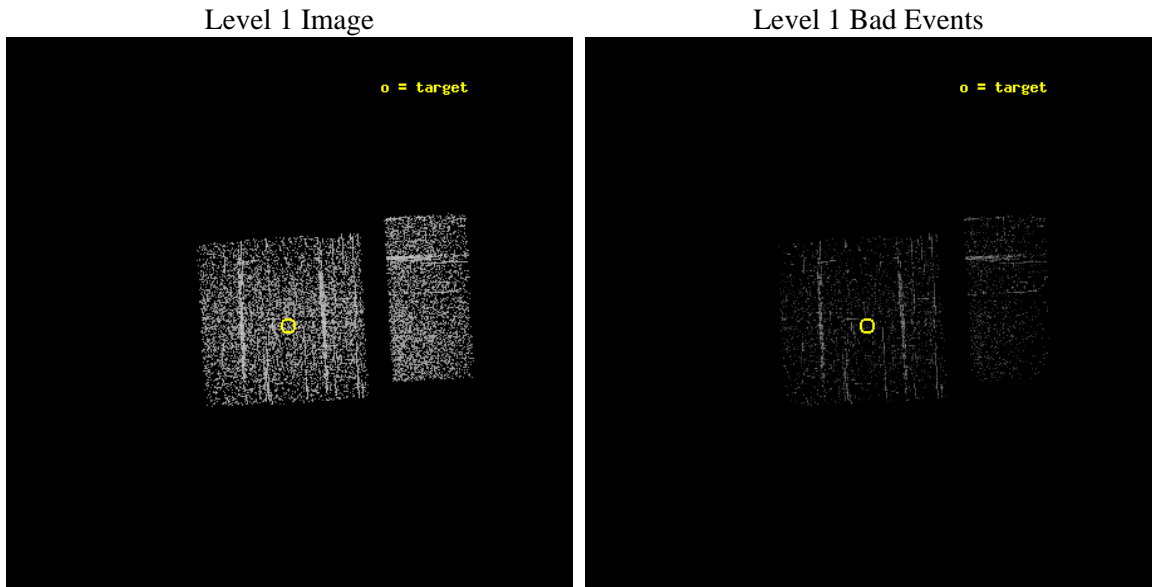
seq_num	600670	Sequence number
obs_id	9529	Observation id
title	Continued M31 Monitoring for Black Hole X-ray Nova	Proposal title
observer	Dr. Michael Garcia	Principal investigator
object	M31	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.682431428636	Nominal RA [deg]
dec_nom	41.276797141887	Nominal Dec [deg]
roll_nom	87.020378177474	Nominal Roll [deg]
revision	2	Processing version of data
ontime	975.47782170773	Sum of GTIs [s]
livetime	153.56373919667	Livetime [s]
ontime0	975.35470169783	Sum of GTIs [s]
ontime1	975.39574170113	Sum of GTIs [s]
ontime2	975.43678170443	Sum of GTIs [s]
ontime3	975.47782170773	Sum of GTIs [s]
ontime6	975.55990171432	Sum of GTIs [s]
ontime7	975.51886171103	Sum of GTIs [s]
l2events	2529	Number of level 2 events



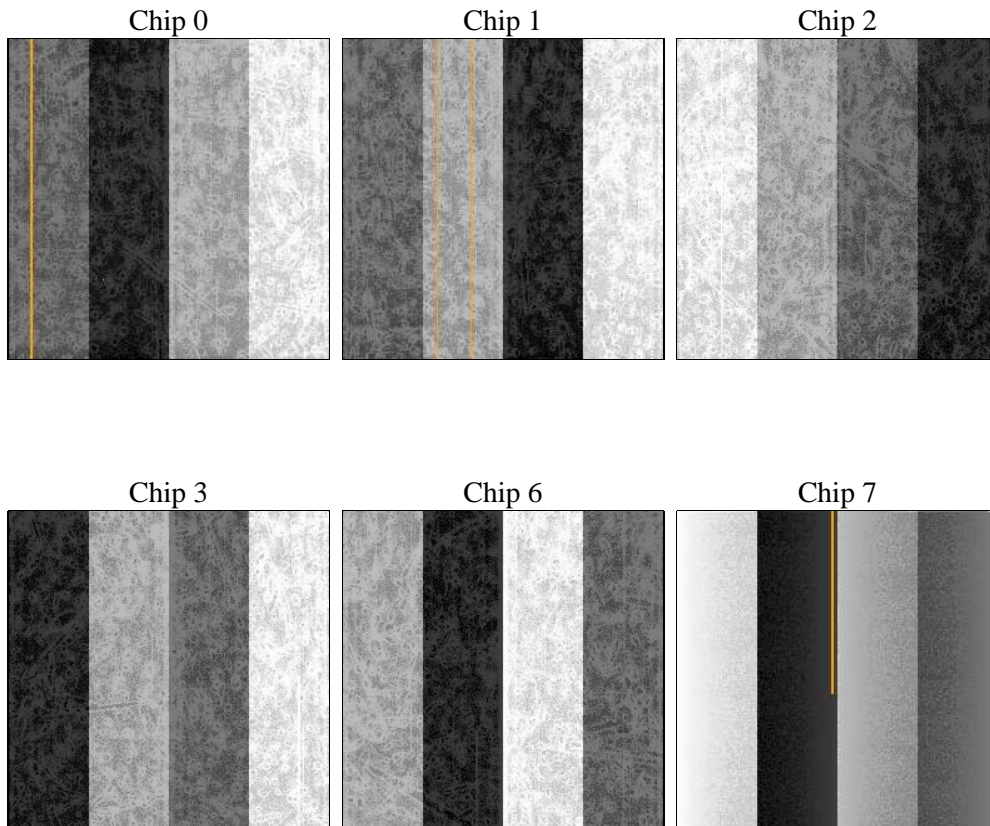
2 OBI Primary

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	975.47782170773	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	975.35470169783	Sum of GTIs [s]
date	2012-05-15T15:55:53	Date and time of file creation	ontime1	975.39574170113	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	975.43678170443	Sum of GTIs [s]
			ontime3	975.47782170773	Sum of GTIs [s]
			ontime6	975.55990171432	Sum of GTIs [s]
			ontime7	975.51886171103	Sum of GTIs [s]
			l1events	24533	Number of level 1 events

2.1.4 Events

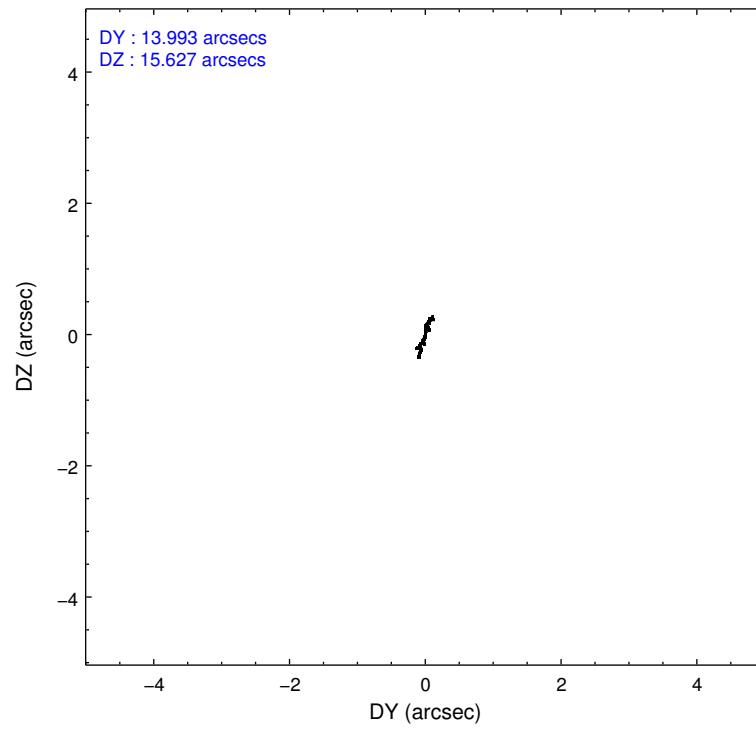
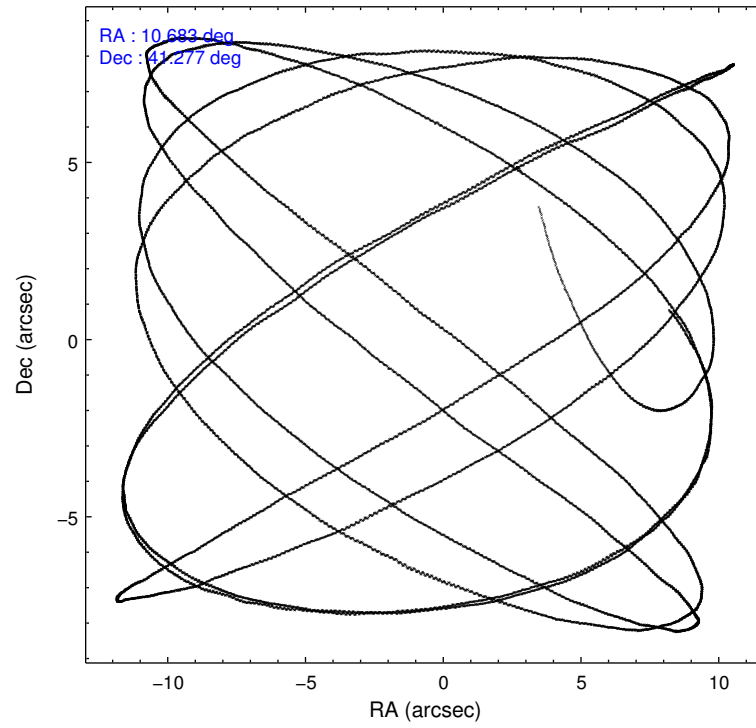
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	3870	4034	4518	4369	4102	3640
rejected events	3549	3615	4154	3855	3836	2657
rejected %	91%	89%	91%	88%	93%	72%

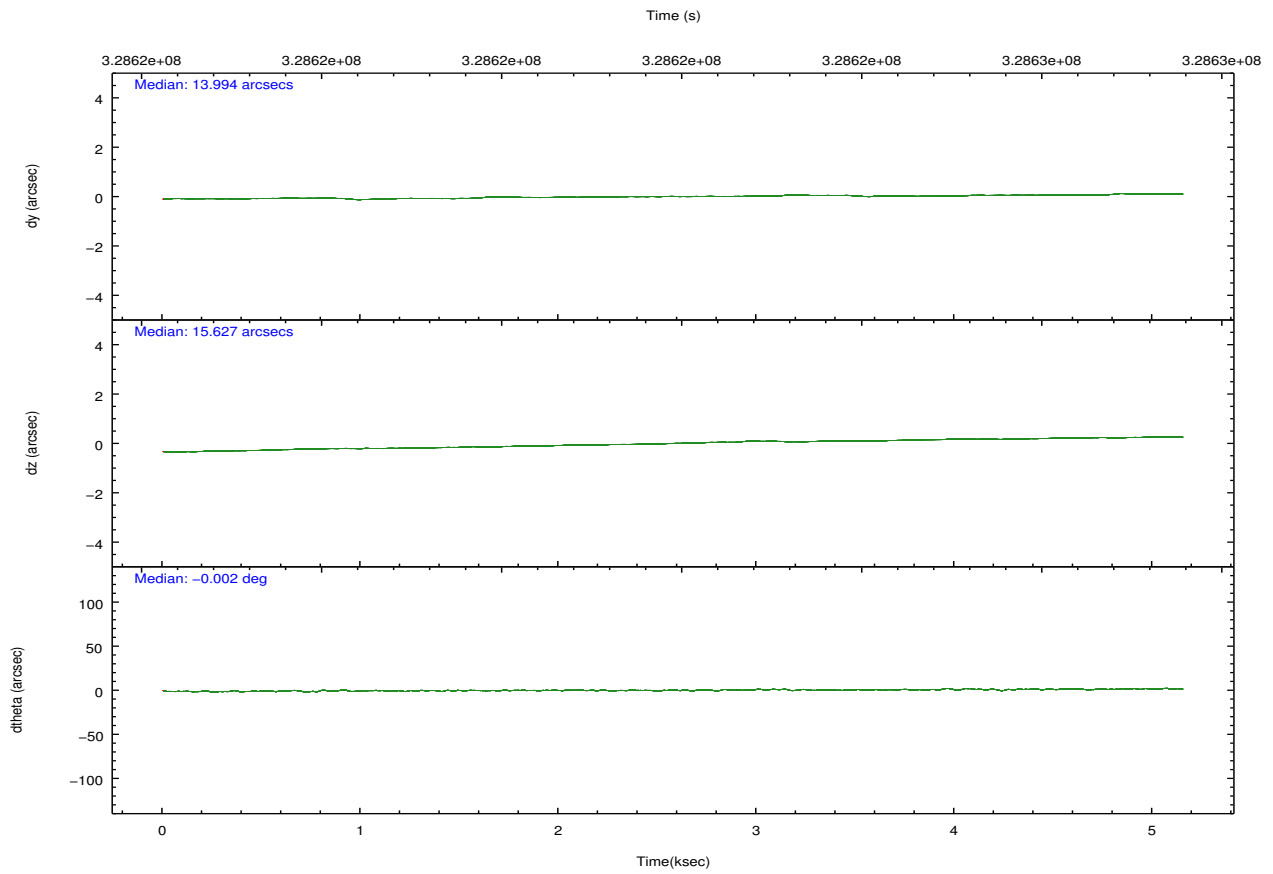
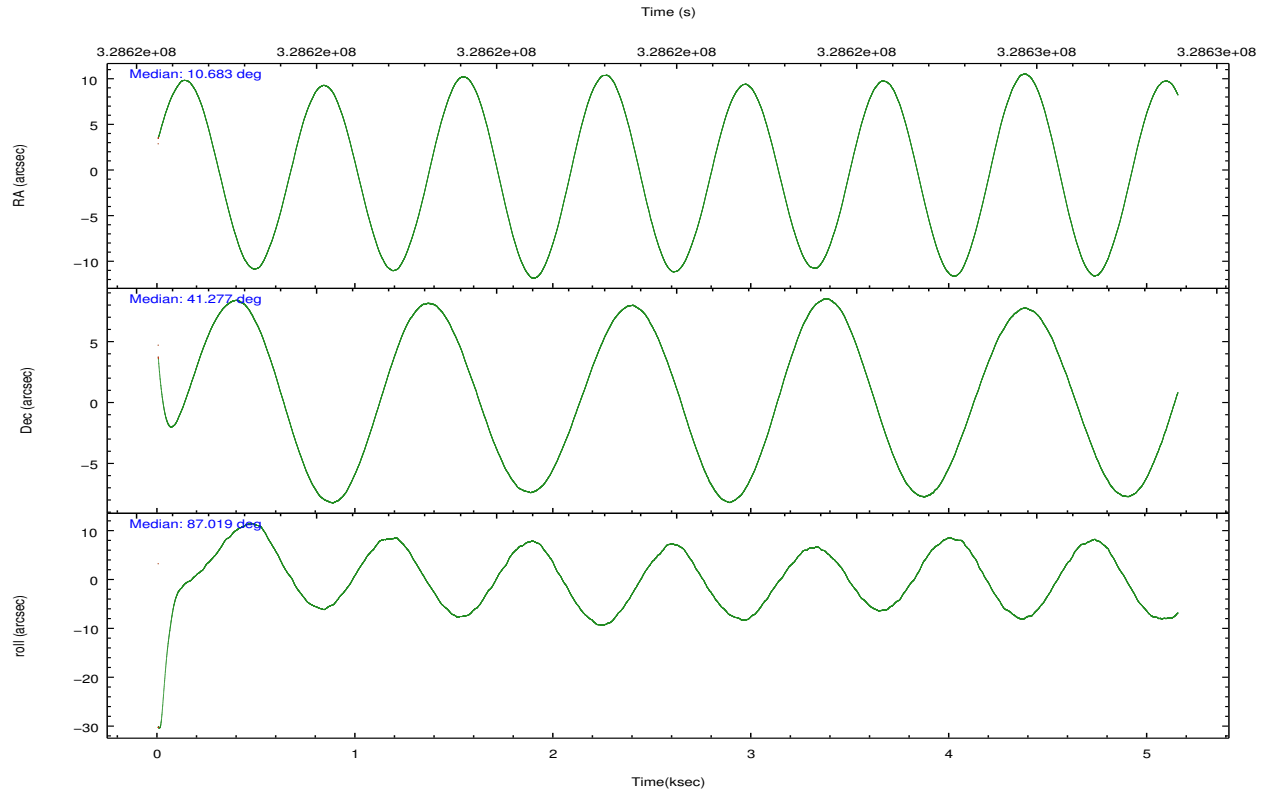
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	119	166	137	296	74	95
	3%	4%	3%	6%	1%	2%
grade 1 events	2	3	1	2	2	6
	0%	0%	0%	0%	0%	0%
grade 2 events	79	101	94	95	82	259
	2%	2%	2%	2%	1%	7%
grade 3 events	38	41	46	51	43	107
	0%	1%	1%	1%	1%	2%
grade 4 events	56	61	66	41	33	101
	1%	1%	1%	0%	0%	2%
grade 5 events	136	142	113	147	150	314
	3%	3%	2%	3%	3%	8%
grade 6 events	73	95	67	71	79	557
	1%	2%	1%	1%	1%	15%
grade 7 events	3367	3425	3994	3666	3639	2201
	87%	84%	88%	83%	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	10.699094	10.68243142863589	CCD I2 on	Y	Y
[deg] Pointing Dec	41.252357	41.27679714188704	CCD I3 on	Y	Y
[deg] Pointing Roll	86.800793	87.02037817747382	CCD S0 on	N	N
[s] Window start time (MET)	328147265.184000	328147265.184000	CCD S1 on	N	N
[s] Window stop time (MET)	328665605.184000	328665605.184000	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)	328621534.184000	328620087.36417	On-chip summing requested	N	N
Observation start date	2008-05-31T11:44:29	2008-05-31T11:21:27	Subarray requested	NONE	NONE
[s] Observation end time (MET)	328626534.184000	328627573.96454	Alternating exposures requested	Y	Y
Observation end date	2008-05-31T13:07:49	2008-05-31T13:26:13	[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



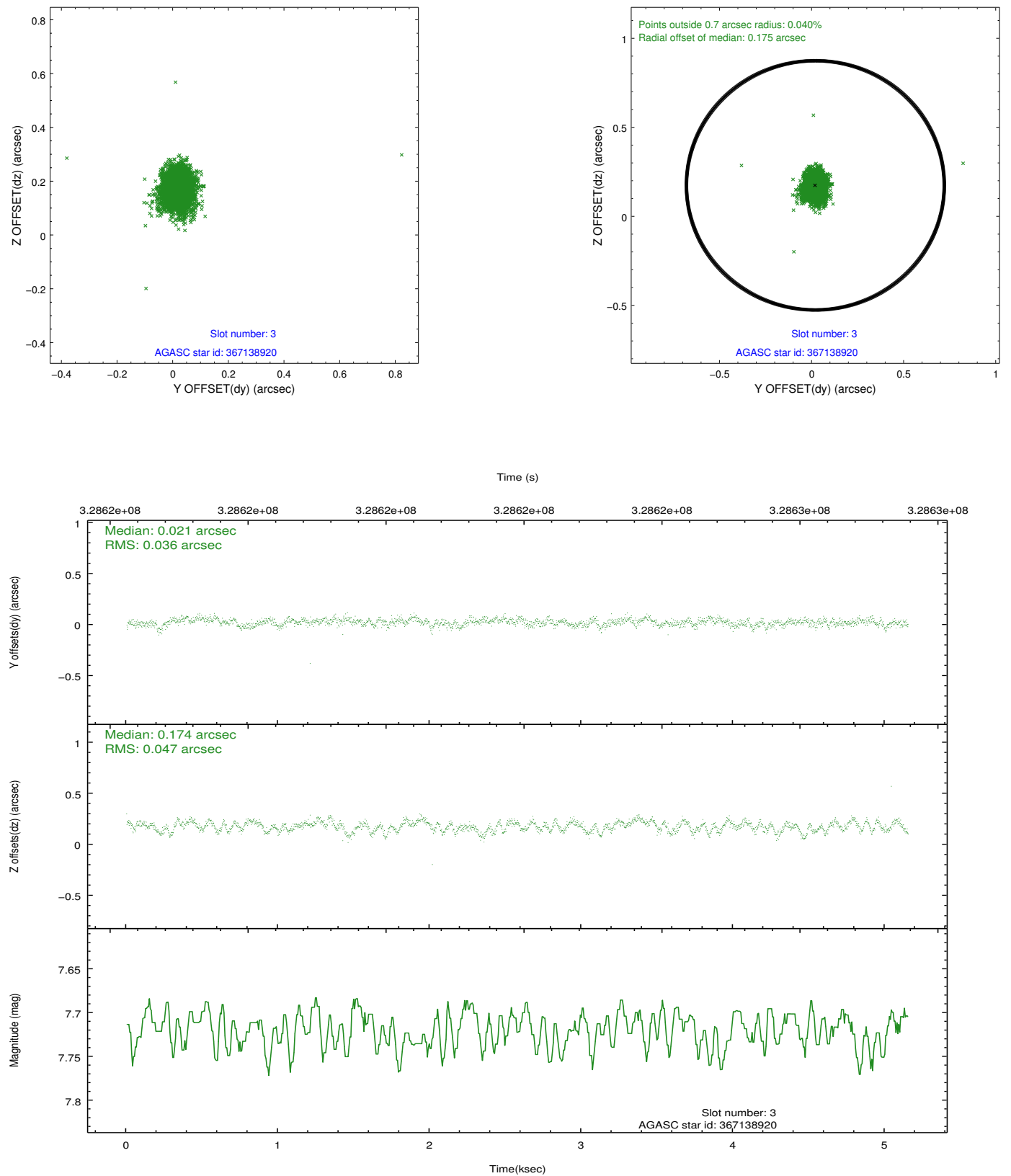


Slot Statistics

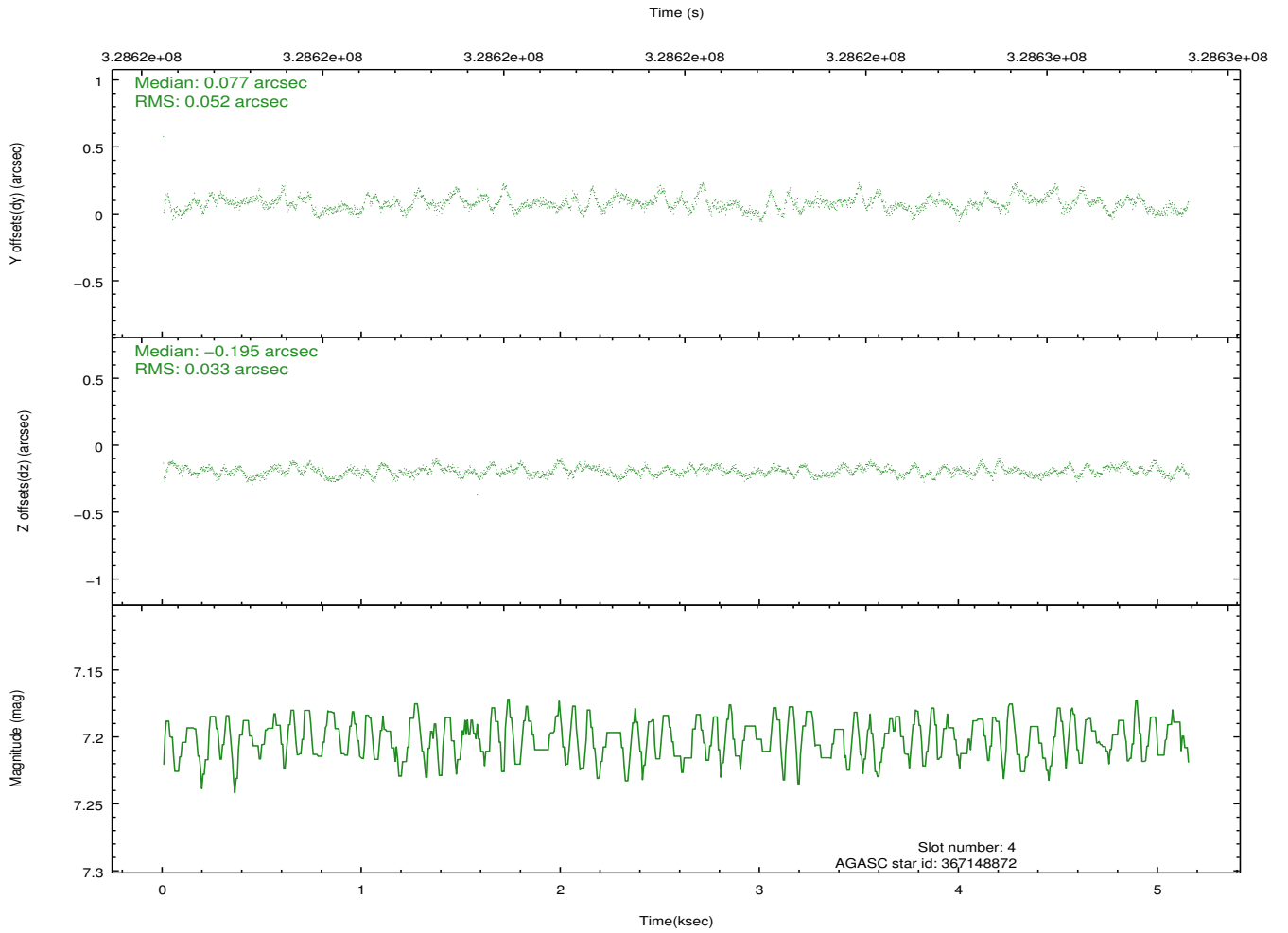
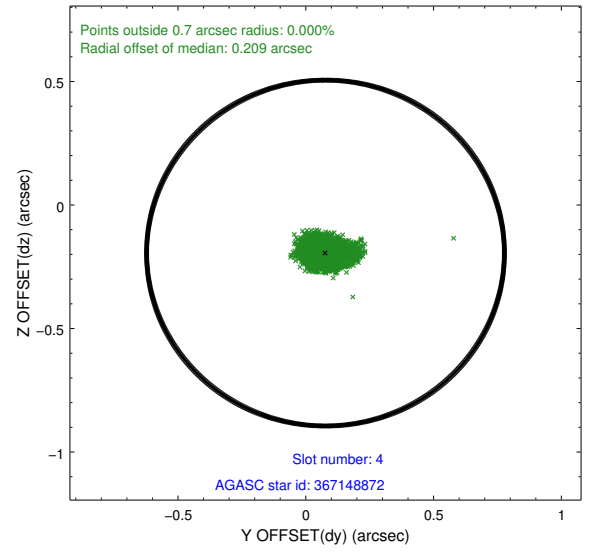
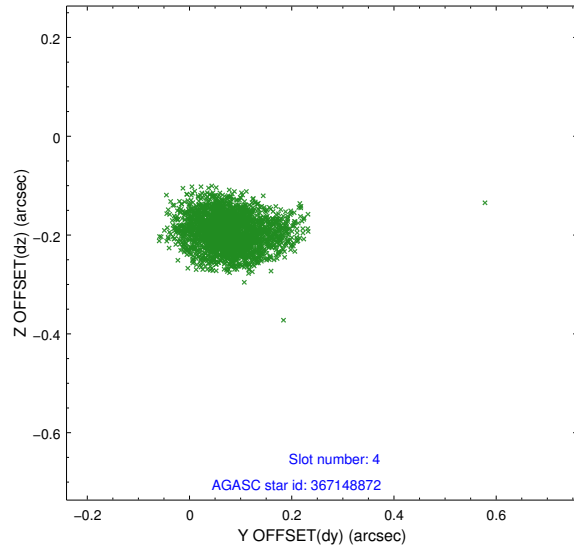
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.00	1257	0.035	-0.015	0.011	0.020	0.000000	0.000000	925.53	-839.24
1	FID	ACIS-I-5	6.99	1257	-0.209	0.039	0.008	0.014	0.000000	0.000000	-1822.16	1057.72
2	FID	ACIS-I-6	7.01	1257	0.081	0.046	0.007	0.012	0.000000	0.000000	389.85	1703.55
3	GUIDE	367138920	7.72	2513	0.021	0.174	0.060	0.096	11.513485	40.808909	-1459.76	-2304.31
4	GUIDE	367148872	7.20	2514	0.077	-0.195	0.066	0.107	10.505940	40.688258	-2057.09	412.56
5	GUIDE	367657896	9.01	2510	-0.015	0.057	0.077	0.126	11.197765	41.313576	298.77	-1333.06
6	GUIDE	367663272	9.28	2510	-0.023	-0.186	0.094	0.158	10.656279	41.699429	1600.67	205.21
7	GUIDE	367674552	8.84	2511	-0.059	0.152	0.078	0.126	11.016238	41.570845	1194.93	-788.11

2.4 Star Slots

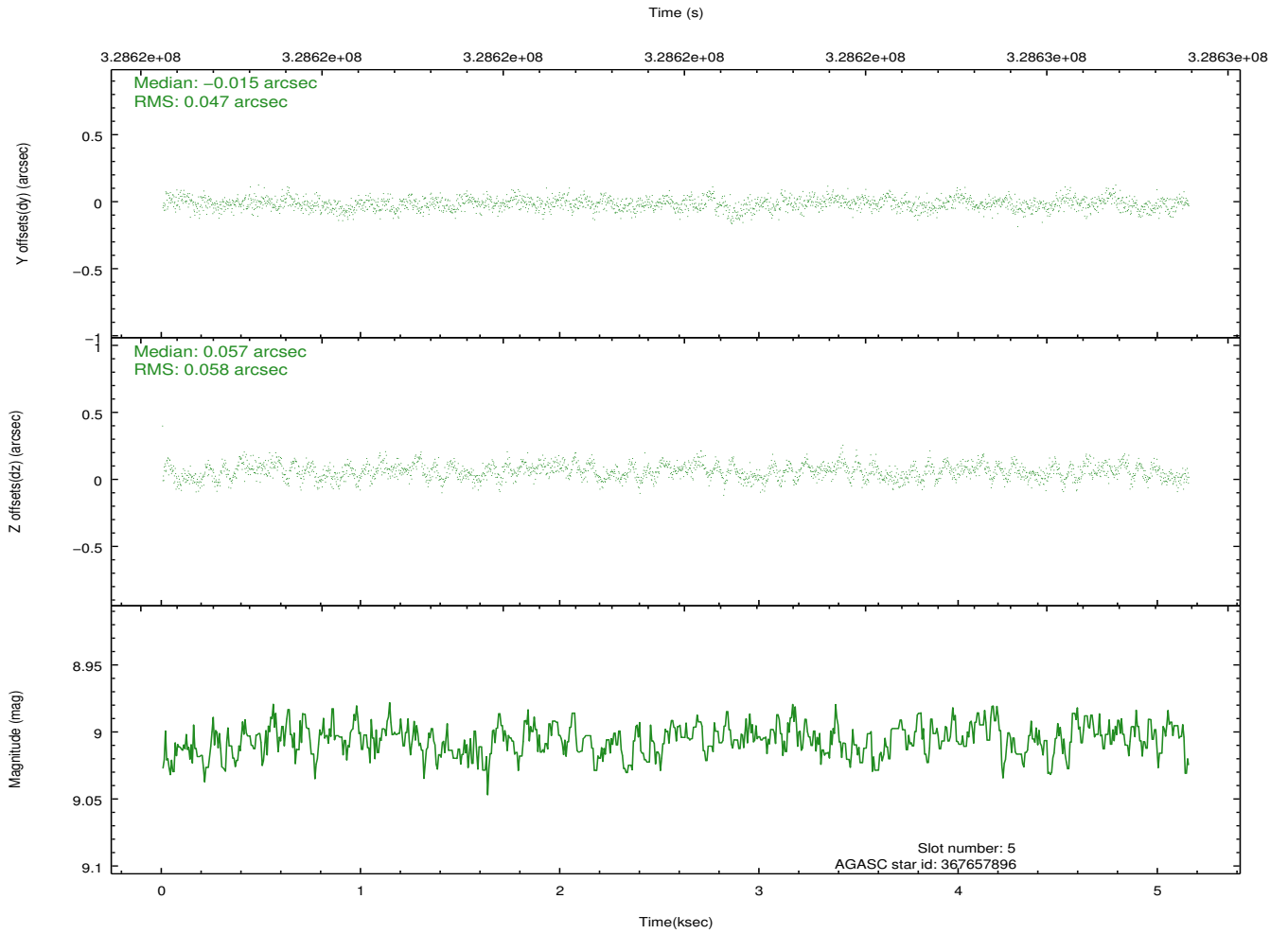
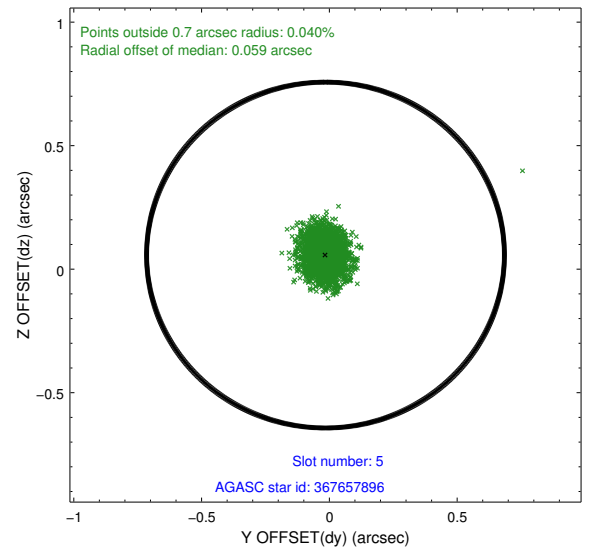
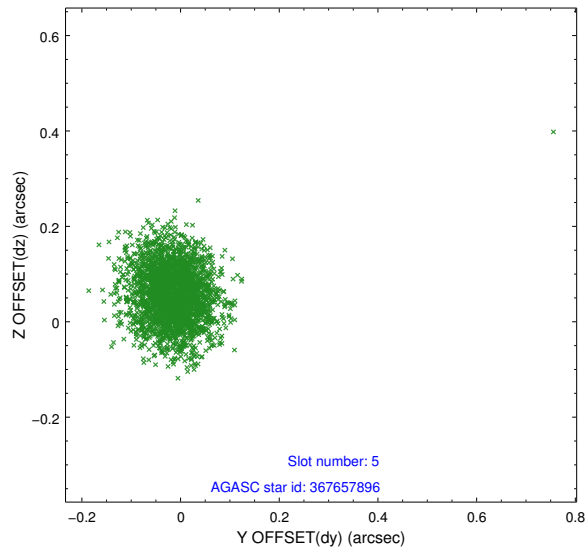
2.4.1 Slot 3



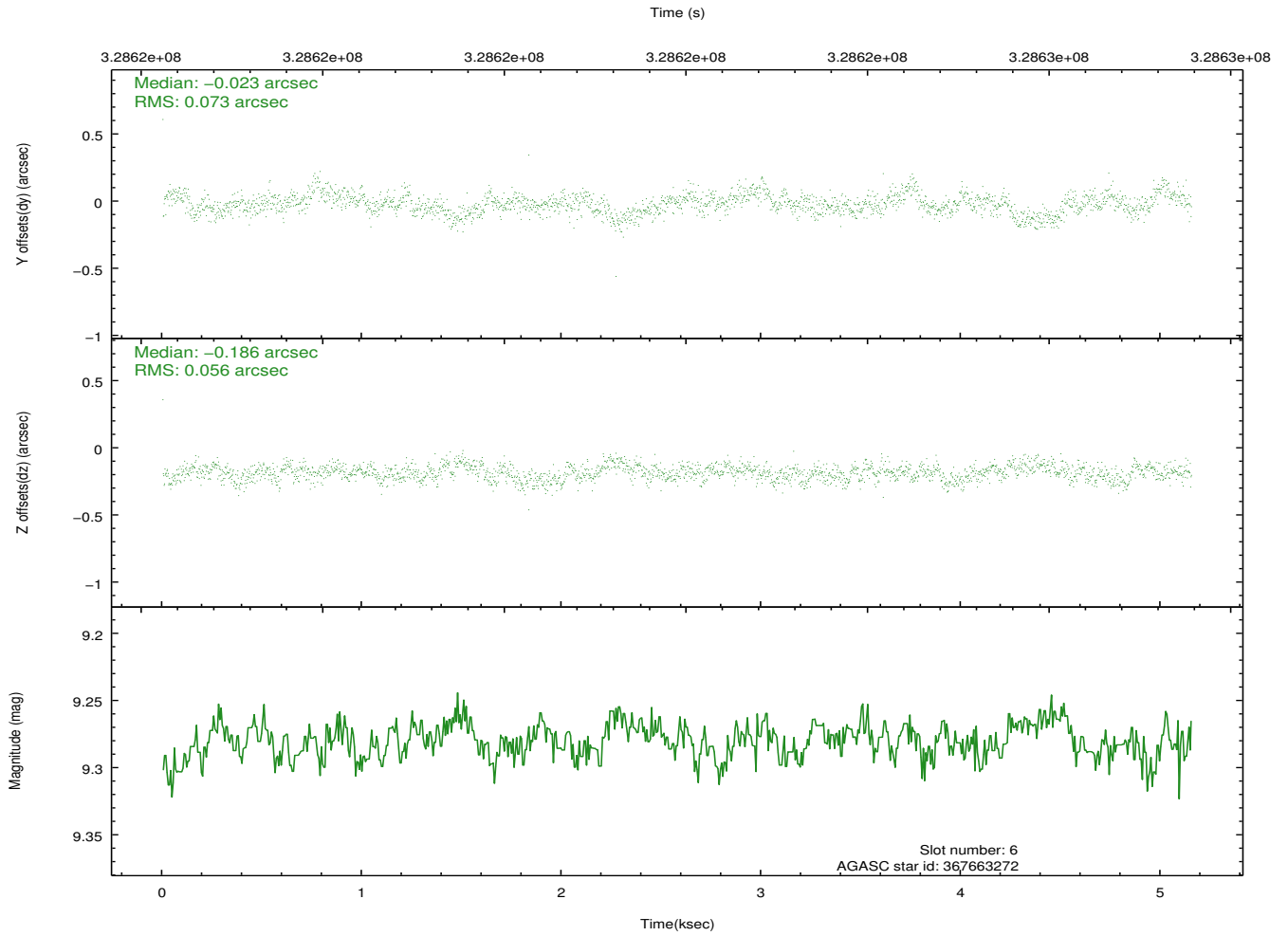
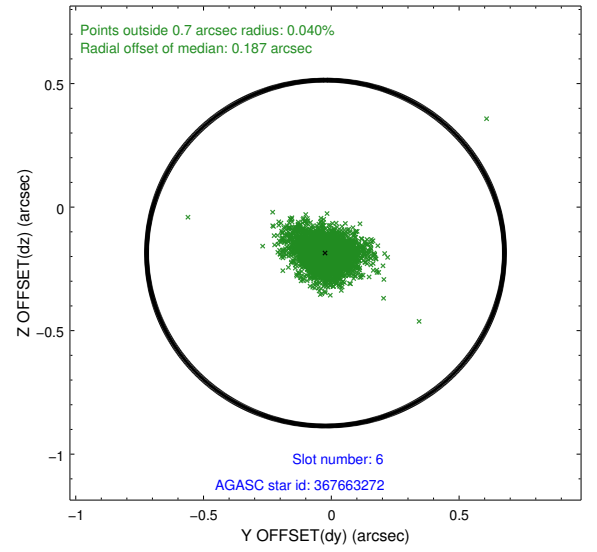
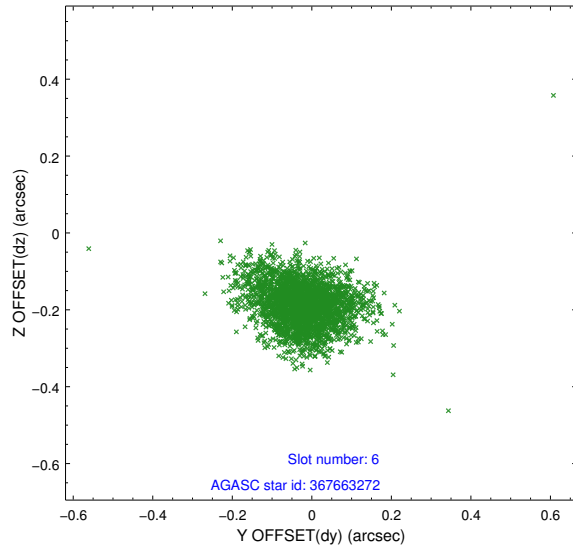
2.4.2 Slot 4



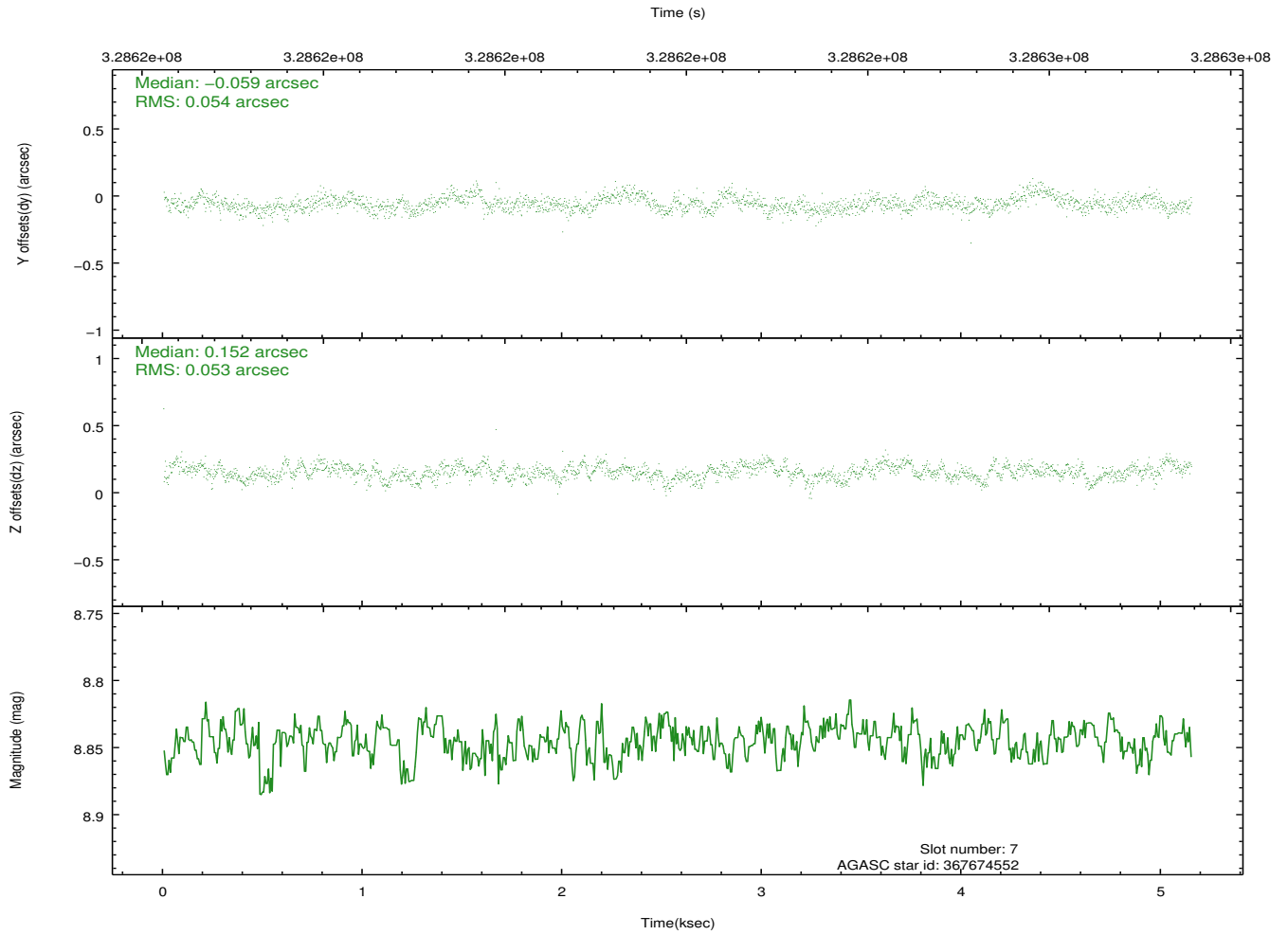
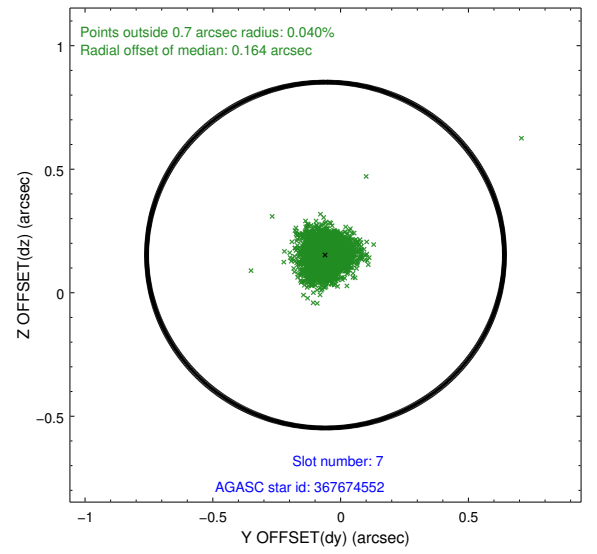
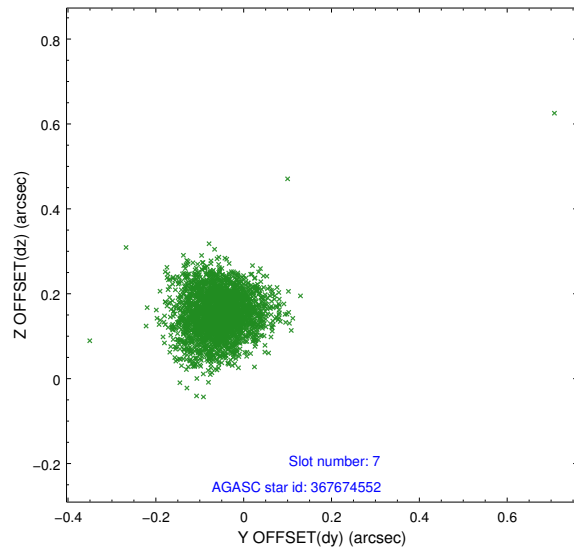
2.4.3 Slot 5



2.4.4 Slot 6

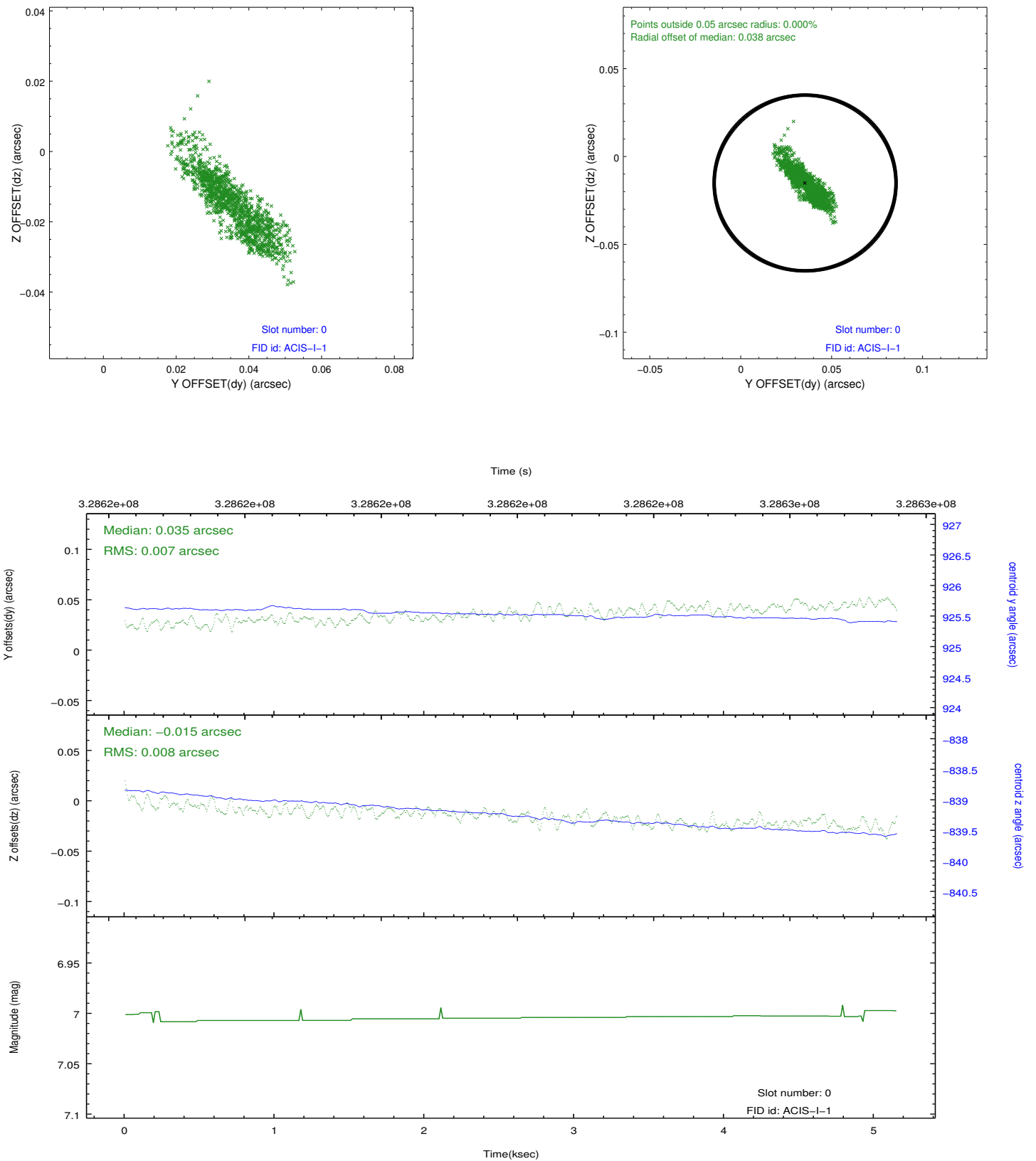


2.4.5 Slot 7

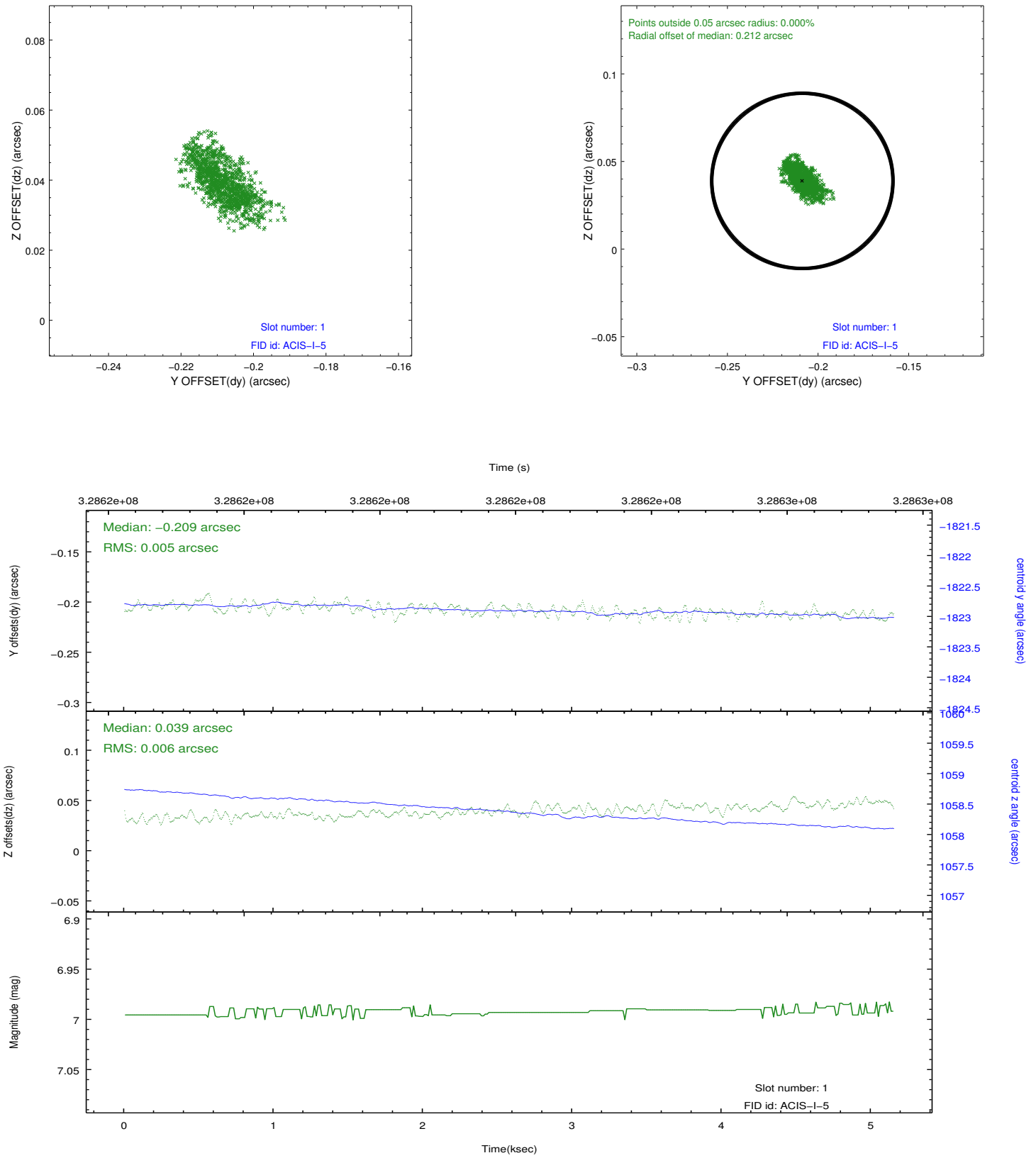


2.5 FID Slots

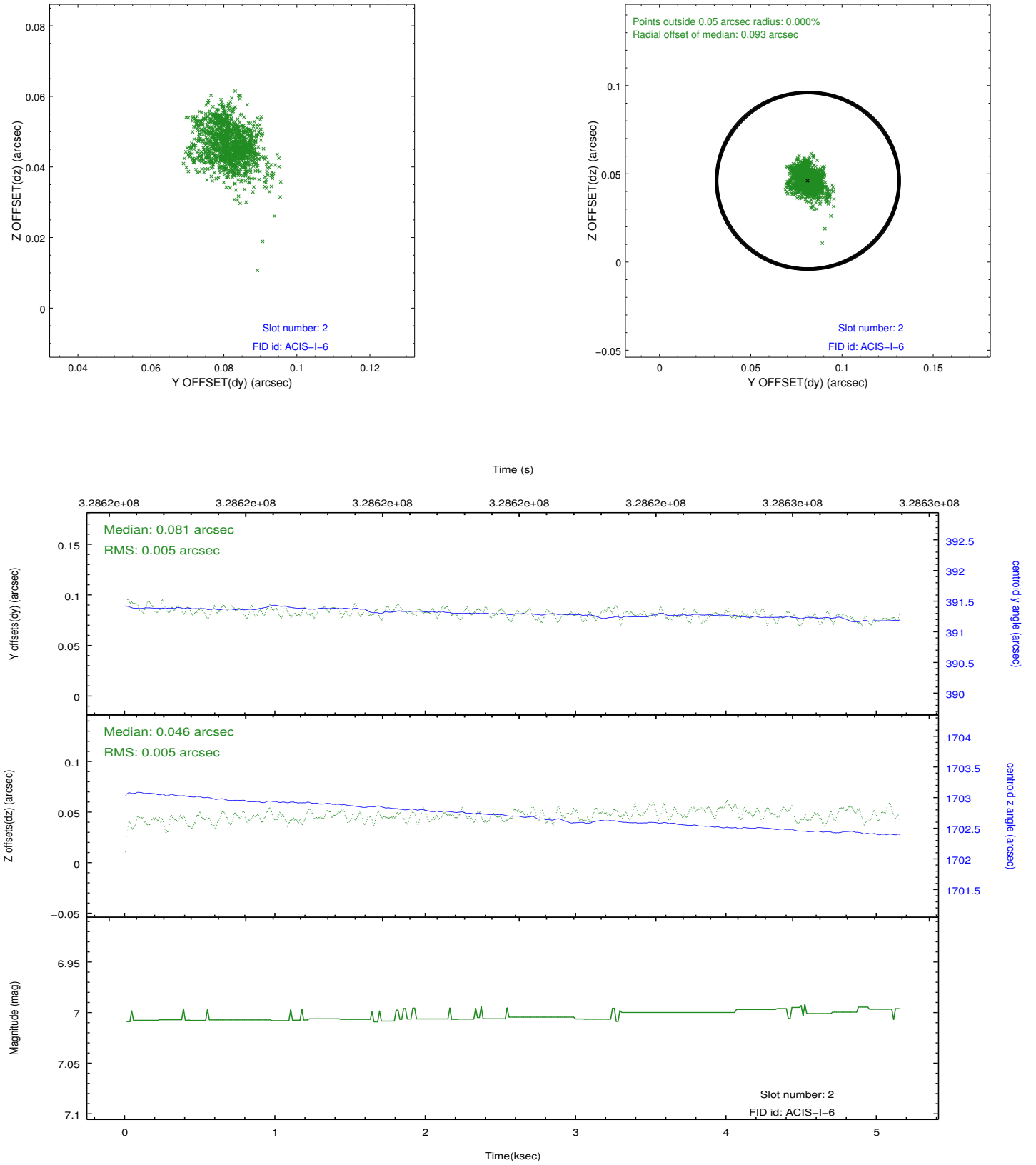
2.5.1 Slot 0



2.5.2 Slot 1



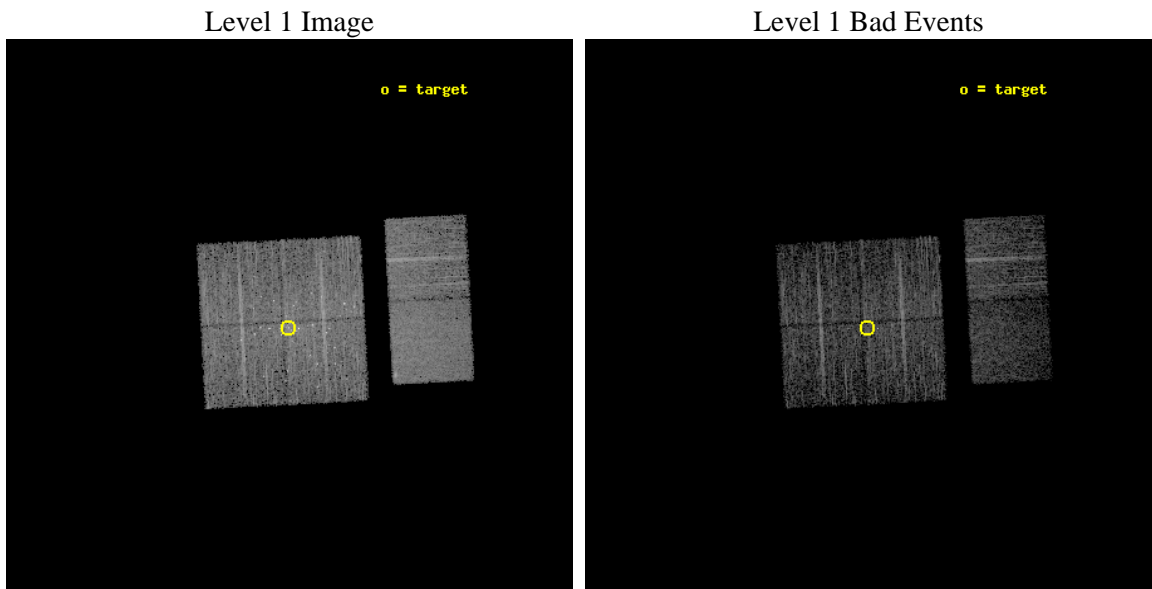
2.5.3 Slot 2



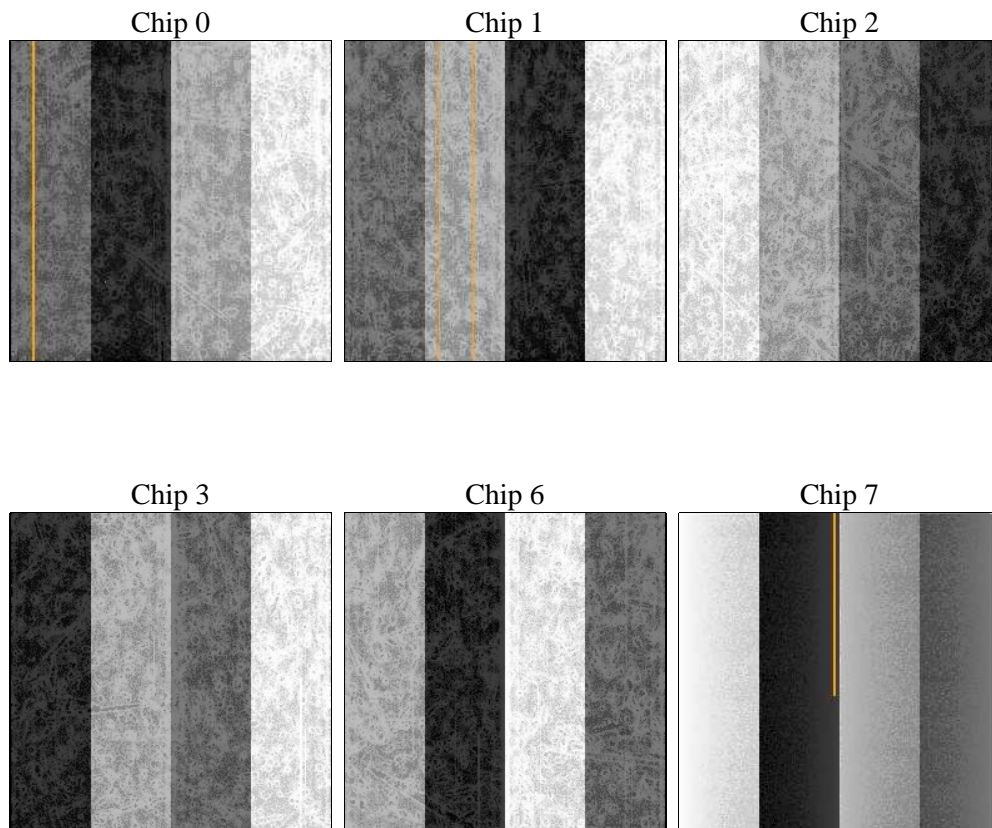
3 OBI Secondary

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	4166.1015642881	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	4162.860683322	Sum of GTIs [s]
date	2012-05-15T15:57:47	Date and time of file creation	ontime1	4166.1016530395	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4166.101744175	Sum of GTIs [s]
			ontime3	4166.1015642881	Sum of GTIs [s]
			ontime6	4166.1016936302	Sum of GTIs [s]
			ontime7	4166.1018137932	Sum of GTIs [s]
			l1events	236624	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	35397	36199	42218	43100	37606	42104	grade 0 events	2519	3823	3133	5601	1395	1853
rejected events	30685	29780	36910	34696	34111	24893		7%	10%	7%	12%	3%	4%
rejected %	86%	82%	87%	80%	90%	59%	grade 1 events	33	60	40	178	21	55
								0%	0%	0%	0%	0%	0%
							grade 2 events	1073	1195	1091	1320	908	4005
								3%	3%	2%	3%	2%	9%
							grade 3 events	469	537	460	562	416	1864
								1%	1%	1%	1%	1%	4%
							grade 4 events	447	509	452	626	394	1768
								1%	1%	1%	1%	1%	4%
							grade 5 events	1298	1481	1193	1583	1610	4472
								3%	4%	2%	3%	4%	10%
							grade 6 events	767	941	742	914	847	10007
								2%	2%	1%	2%	2%	23%
							grade 7 events	28791	27653	35107	32316	32015	18080
								81%	76%	83%	74%	85%	42%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.14180972

A.2 Comments

Joint Proposal: HST. Window constraint met.