

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4679 - L2 Version 3
Chandra X-Ray Center

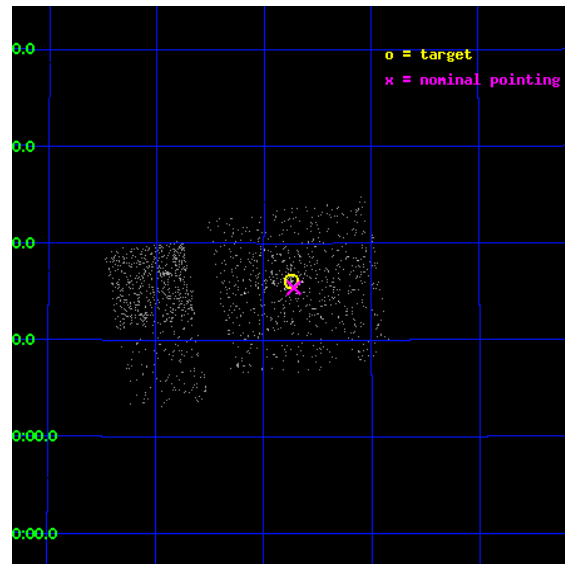
L2 Processing Date : Nov 8 2012

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

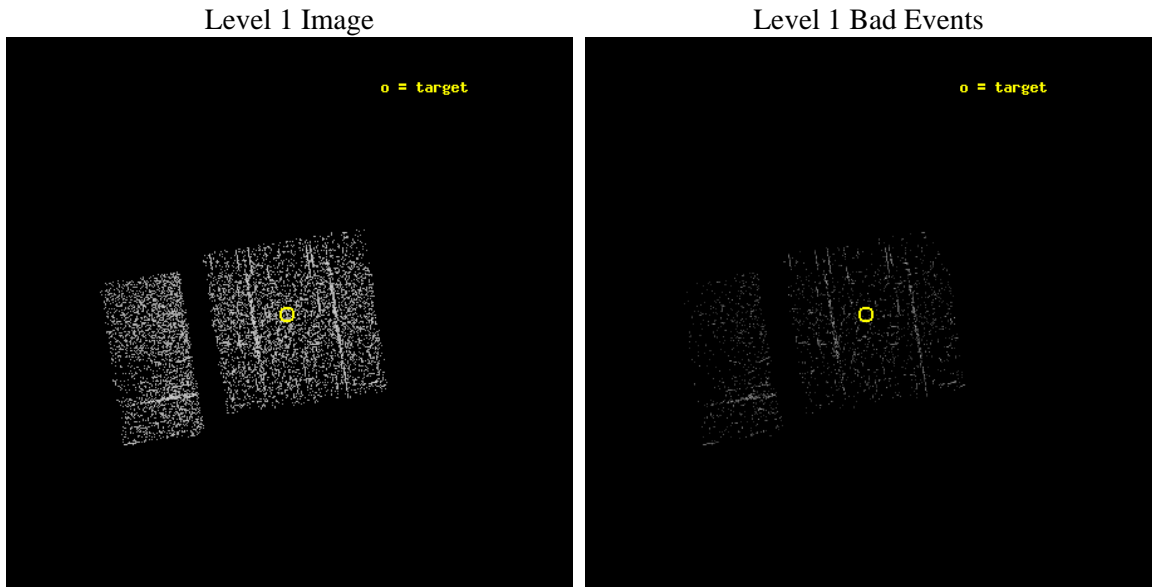
seq_num	600334	Sequence number
obs_id	4679	Observation id
title	Searching for Black Hole X-ray Nova in M31	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31-Center	Source name
dtcycle	0	
cycle	P	events are from which exps? P[primary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.680171034505	Nominal RA [deg]
dec_nom	41.256806936707	Nominal Dec [deg]
roll_nom	261.37877183992	Nominal Roll [deg]
revision	3	Processing version of data
ontime	903.01605764031	Sum of GTIs [s]
livetime	142.1565096407	Livetime [s]
ontime0	903.01605764031	Sum of GTIs [s]
ontime1	903.01605764031	Sum of GTIs [s]
ontime2	903.01605764031	Sum of GTIs [s]
ontime3	903.01605764031	Sum of GTIs [s]
ontime6	903.01605764031	Sum of GTIs [s]
ontime7	903.01605764031	Sum of GTIs [s]
l2events	1803	Number of level 2 events



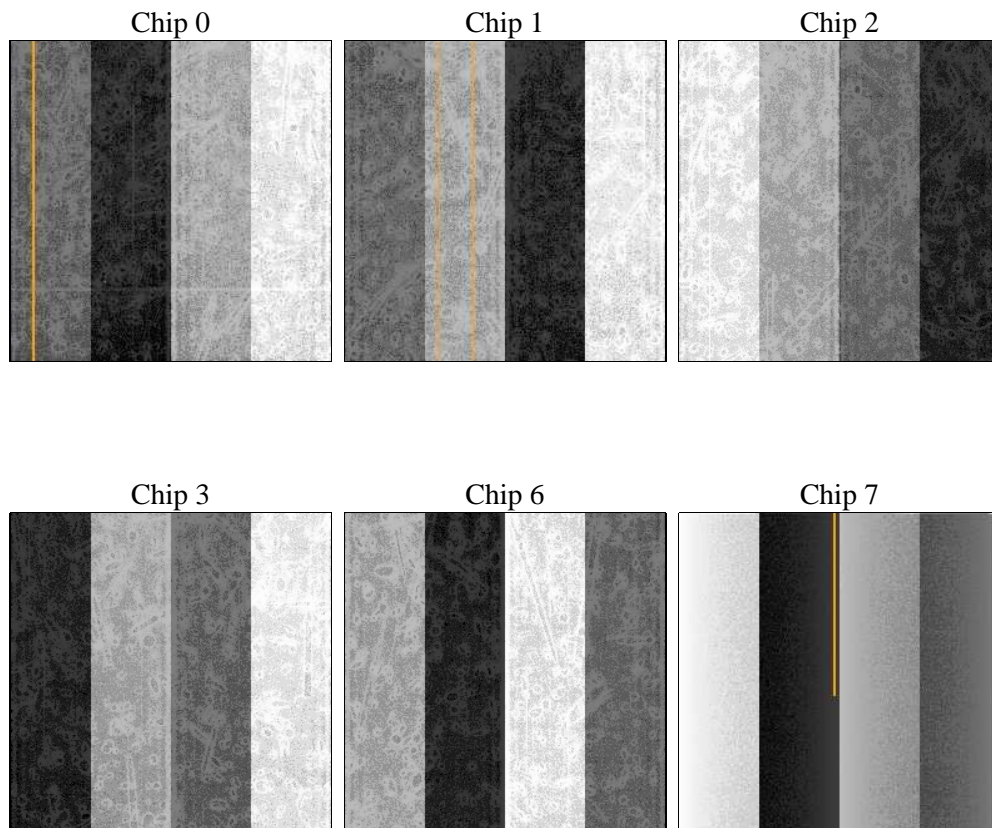
2 OBI Primary

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	4891.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	903.01605764031	Sum of GTIs [s]
caldsver	4.5.2	 	ontime0	903.01605764031	Sum of GTIs [s]
date	2012-11-08T07:38:13	Date and time of file creation	ontime1	903.01605764031	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	903.01605764031	Sum of GTIs [s]
			ontime3	903.01605764031	Sum of GTIs [s]
			ontime6	903.01605764031	Sum of GTIs [s]
			ontime7	903.01605764031	Sum of GTIs [s]
			l1events	13395	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	2180	2187	2197	2459	2140	2232
rejected events	1917	1853	1979	2046	1987	1570
rejected %	87%	84%	90%	83%	92%	70%

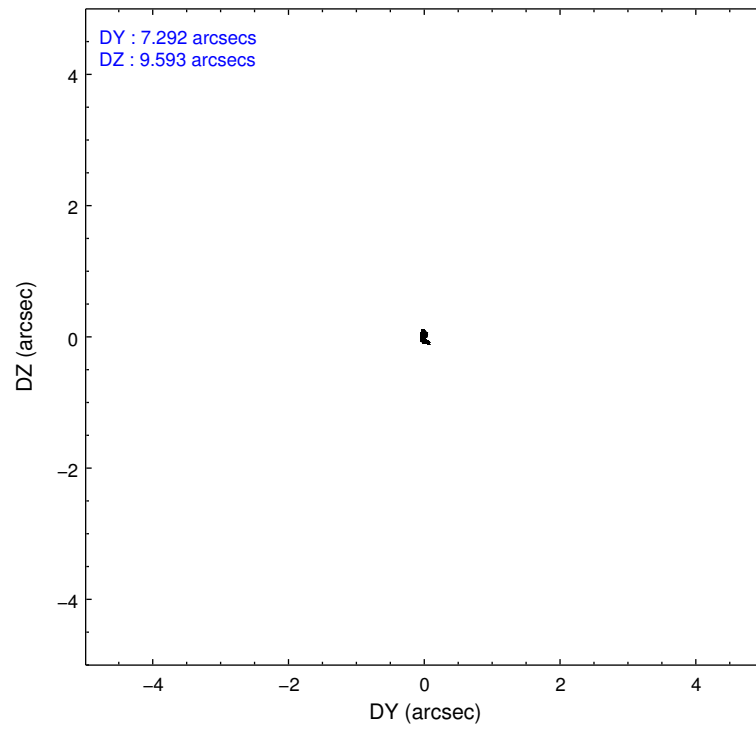
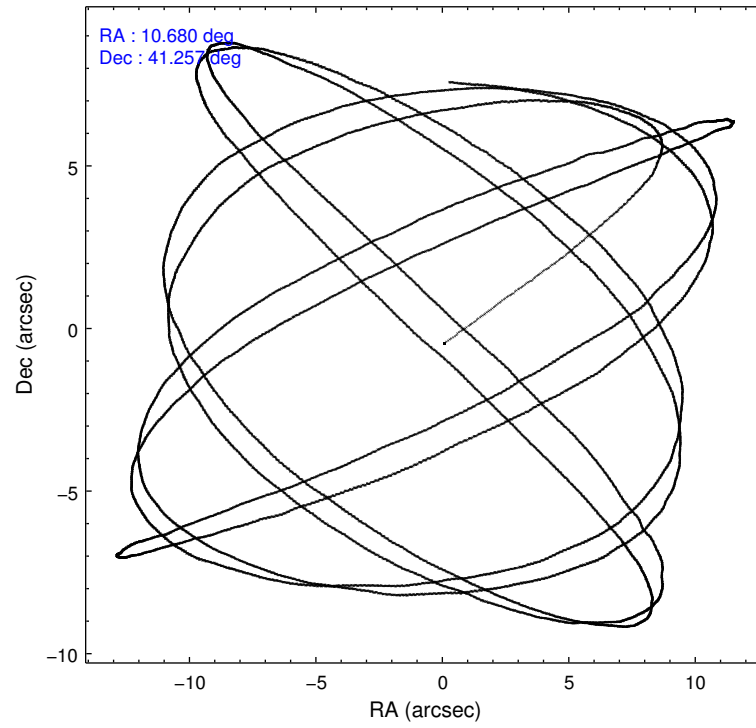
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	115	163	111	244	45	80
	5%	7%	5%	9%	2%	3%
grade 1 events	0	1	3	1	0	1
	0%	0%	0%	0%	0%	0%
grade 2 events	68	67	43	75	44	130
	3%	3%	1%	3%	2%	5%
grade 3 events	30	34	20	35	15	64
	1%	1%	0%	1%	0%	2%
grade 4 events	25	31	17	25	21	65
	1%	1%	0%	1%	0%	2%
grade 5 events	78	65	64	70	73	204
	3%	2%	2%	2%	3%	9%
grade 6 events	28	47	29	37	30	330
	1%	2%	1%	1%	1%	14%
grade 7 events	1836	1779	1910	1972	1912	1358
	84%	81%	86%	80%	89%	60%

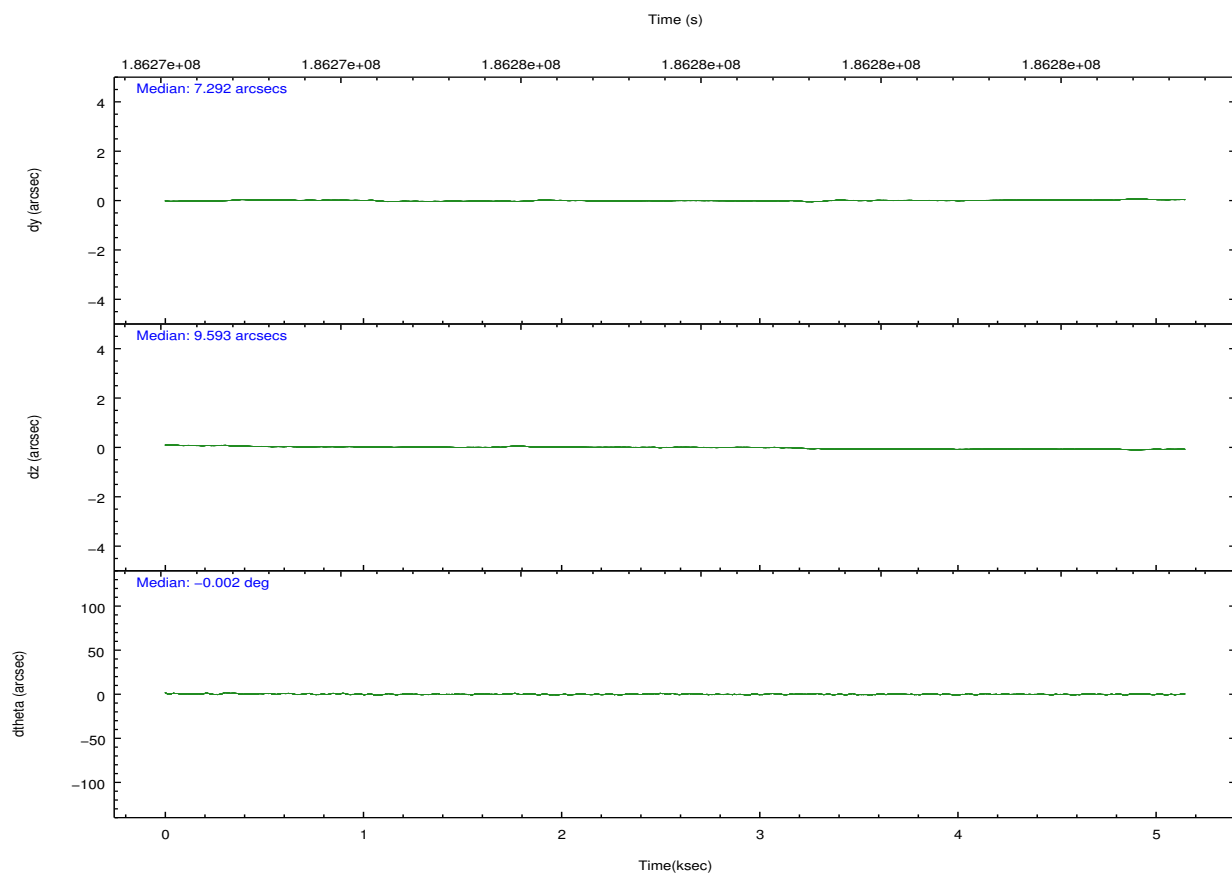
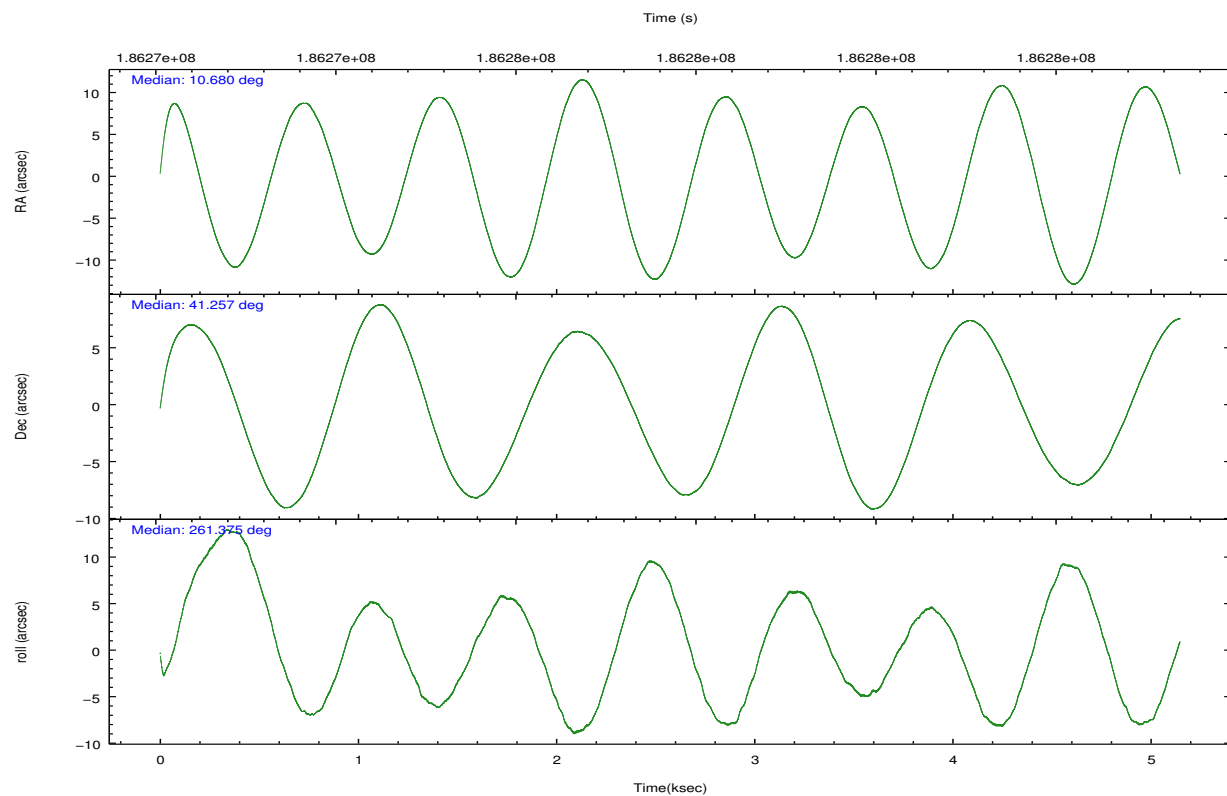
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	10.666649	10.68017103450486
[deg] Pointing Dec	41.282242	41.25680693670683
[deg] Pointing Roll	261.179018	261.3787718399184
[s] Window start time (MET)	186019264.184000	186019264.184000
[s] Window stop time (MET)	186624064.184000	186624064.184000
[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)	186273534.184000	186272530.2914
Observation start date	2003-11-26T22:37:50	2003-11-26T22:22:10
[s] Observation end time (MET)	186278425.184000	186279453.1417
Observation end date	2003-11-26T23:59:21	2003-11-27T00:17:33
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
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



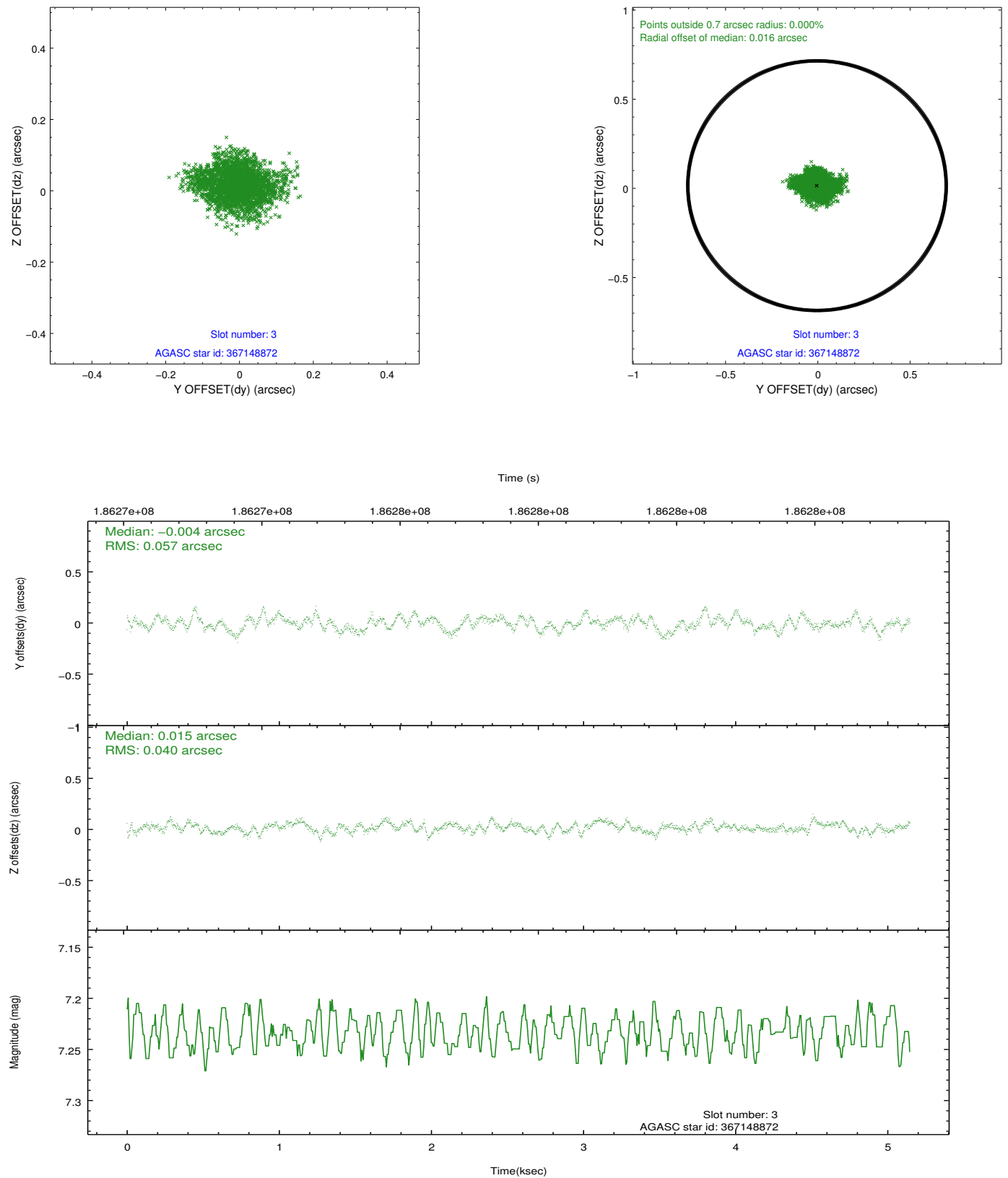


Slot Statistics

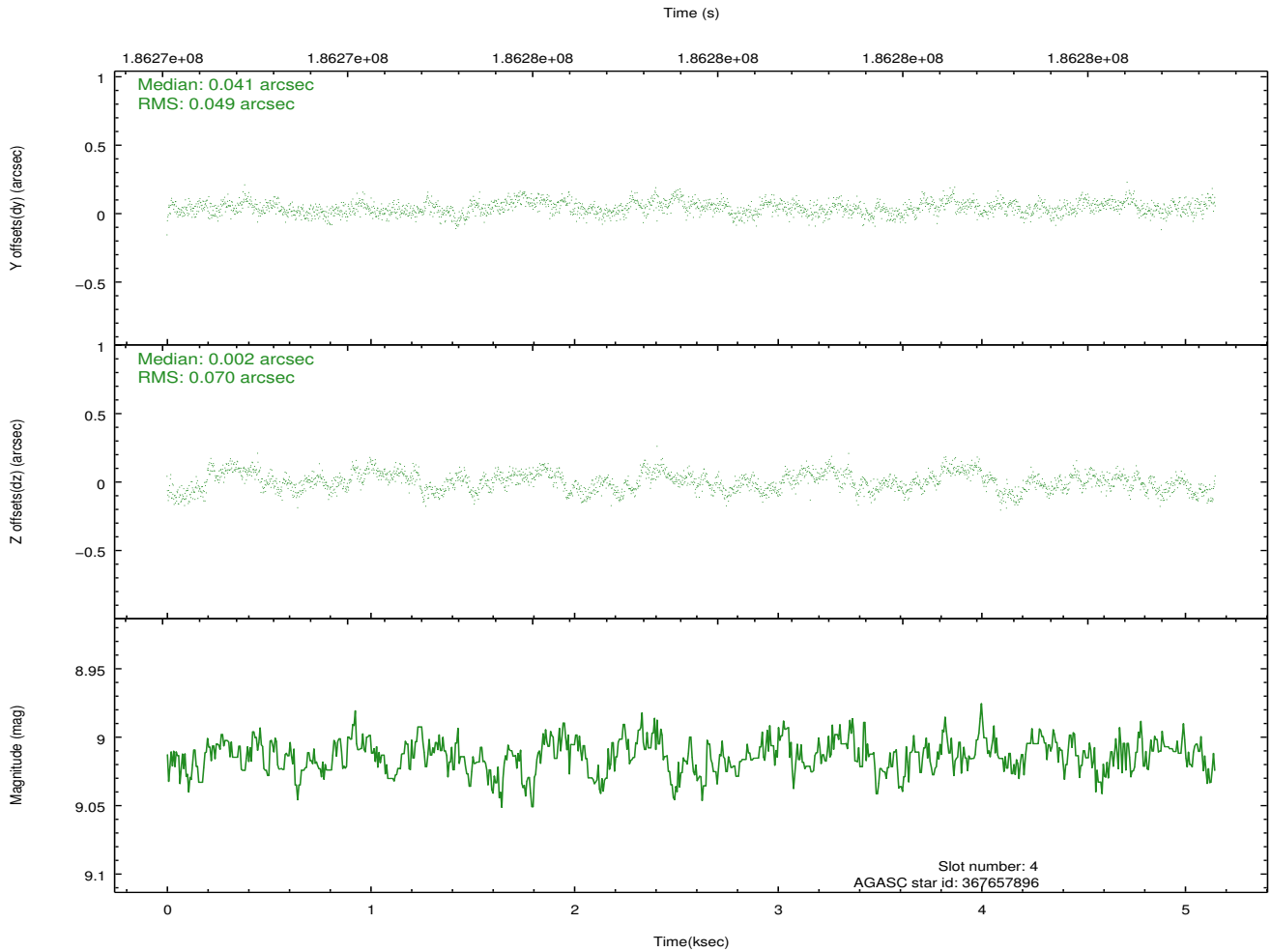
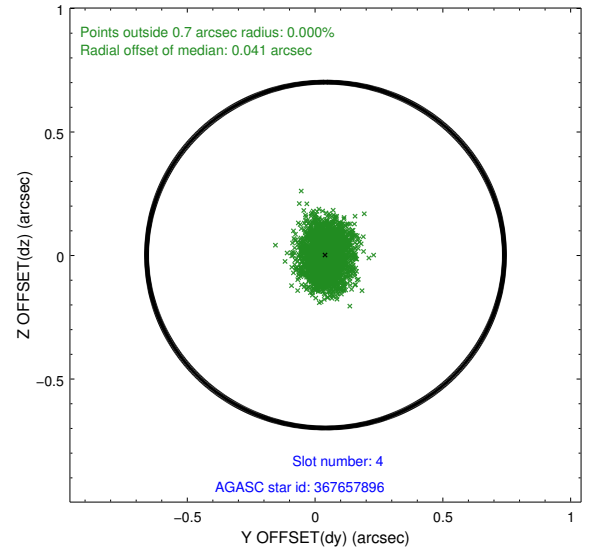
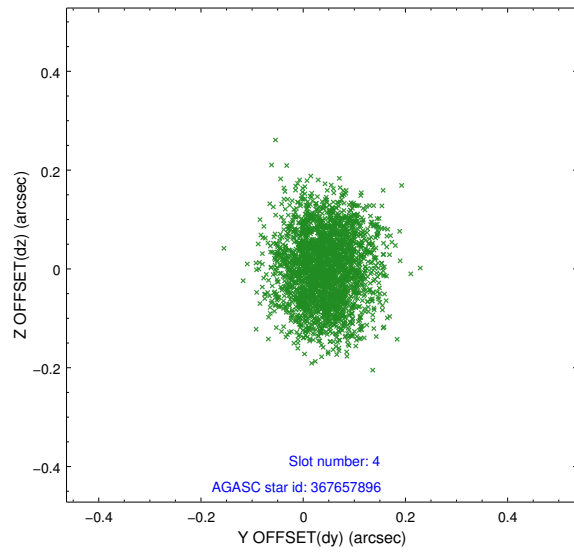
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1256	-0.007	0.040	0.006	0.011	0.000000	0.000000	932.38	-832.99
1	FID	ACIS-I-5	7.23	1256	-0.139	0.023	0.006	0.011	0.000000	0.000000	-1815.21	1063.88
2	FID	ACIS-I-6	7.26	1256	0.055	0.007	0.007	0.011	0.000000	0.000000	396.70	1709.71
3	GUIDE	367148872	7.23	2512	-0.004	0.015	0.075	0.121	10.505940	40.688258	2180.62	-105.60
4	GUIDE	367657896	9.01	2511	0.041	0.002	0.093	0.145	11.197765	41.313576	-334.77	1401.06
5	GUIDE	367658664	9.63	2511	0.086	-0.040	0.188	0.267	10.374070	41.369746	-190.93	-829.15
6	GUIDE	367663272	9.29	2511	-0.123	0.086	0.093	0.148	10.656279	41.699429	-1479.38	-258.53
7	GUIDE	367674552	8.85	2511	-0.014	-0.067	0.075	0.118	11.016238	41.570845	-1173.13	770.57

2.4 Star Slots

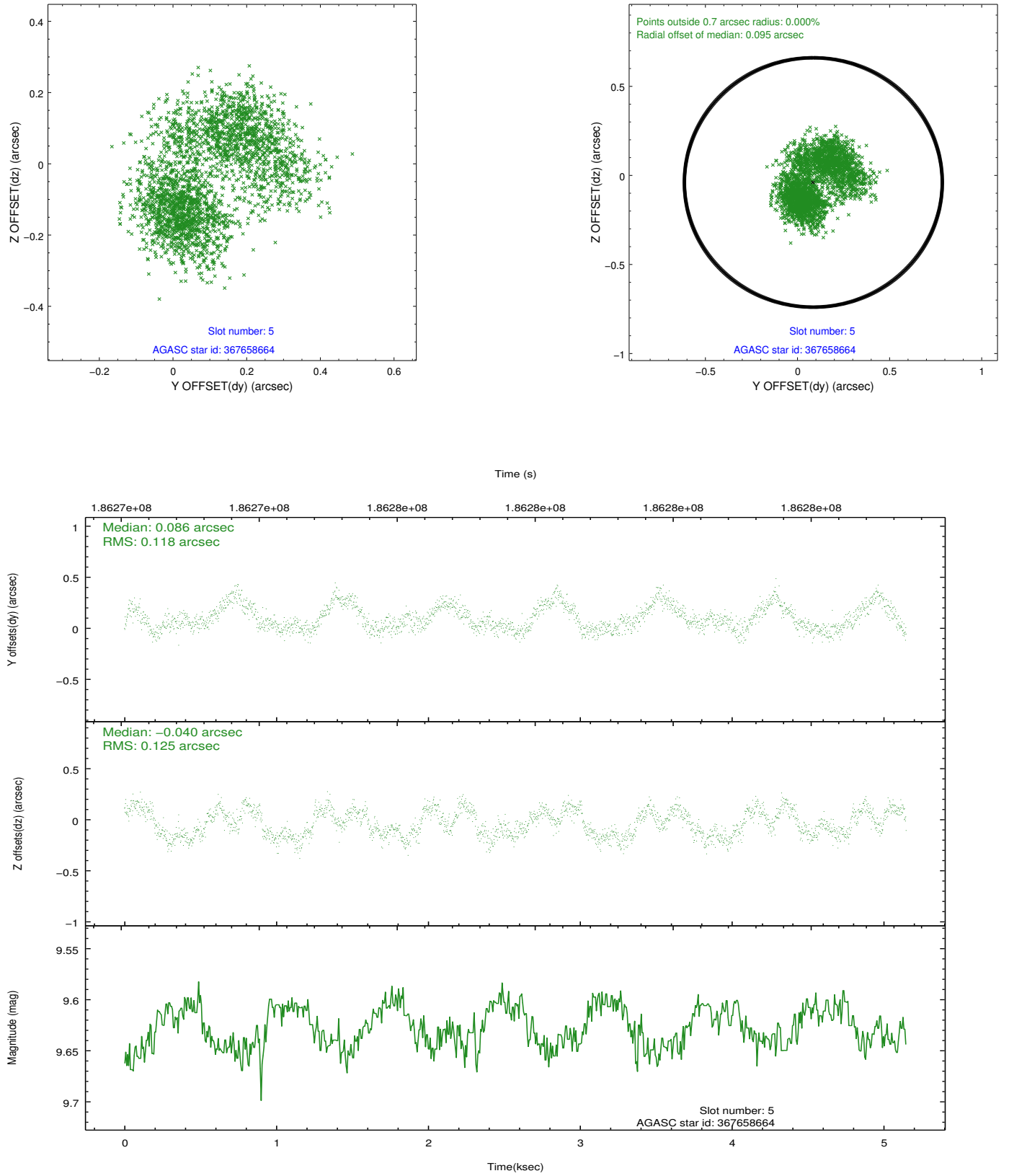
2.4.1 Slot 3



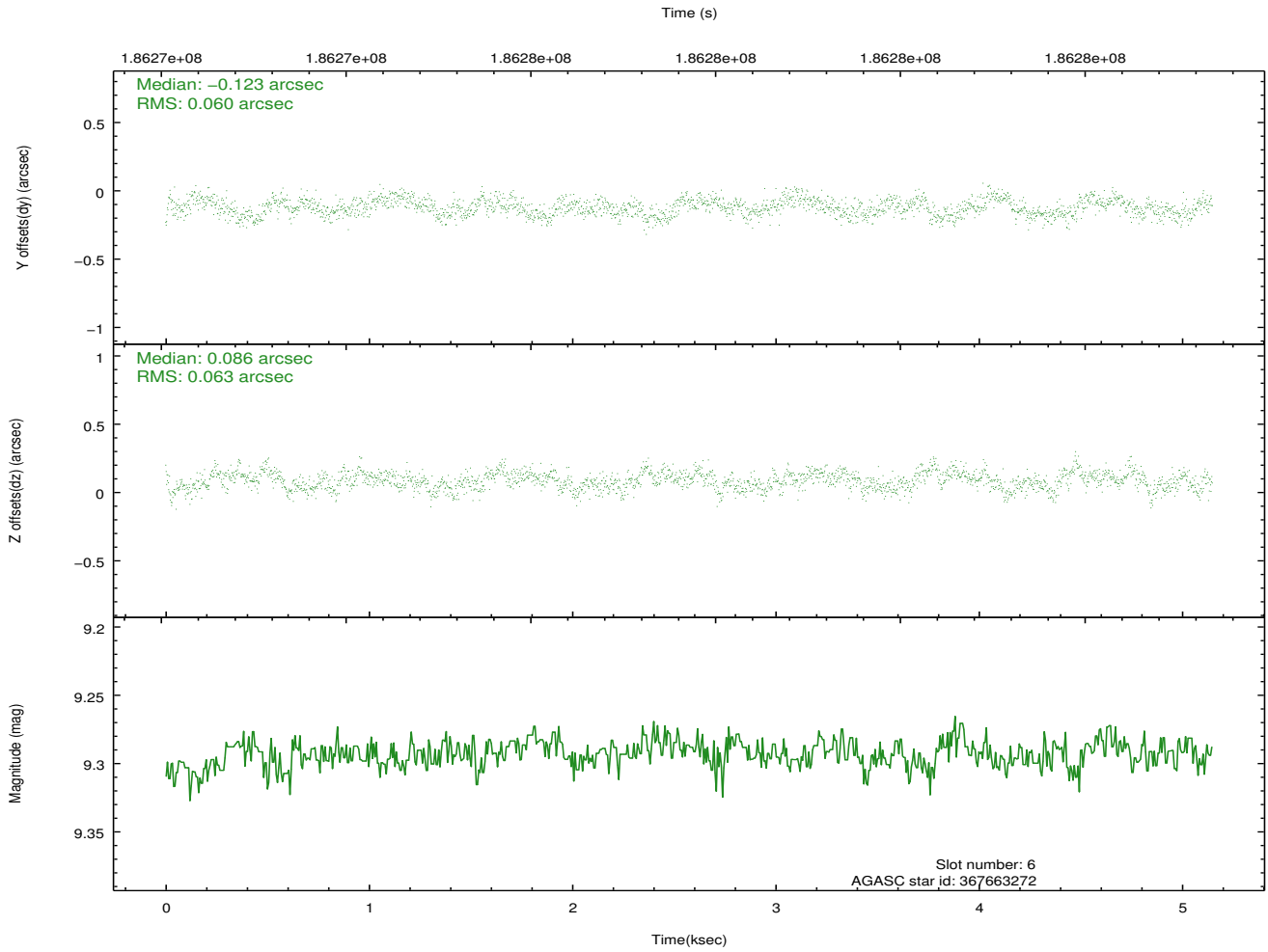
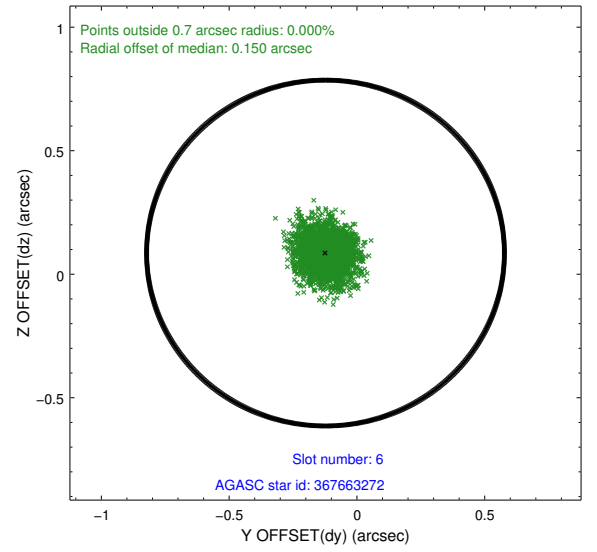
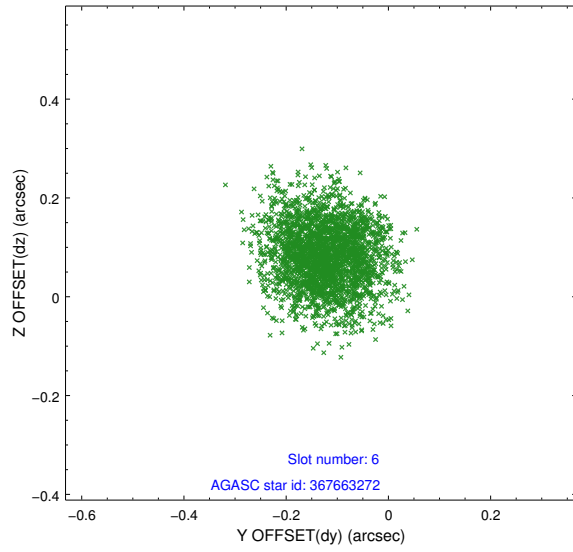
2.4.2 Slot 4



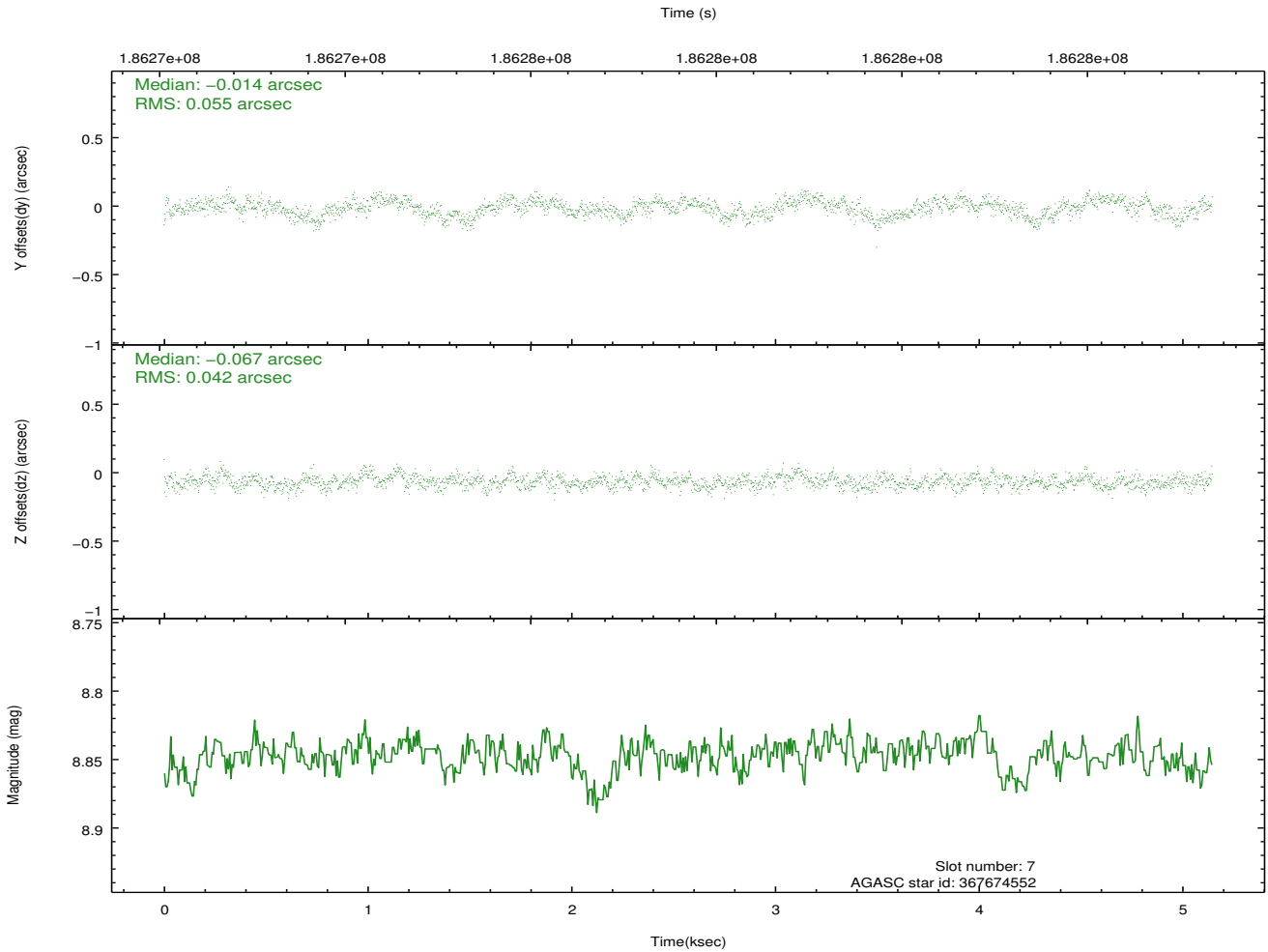
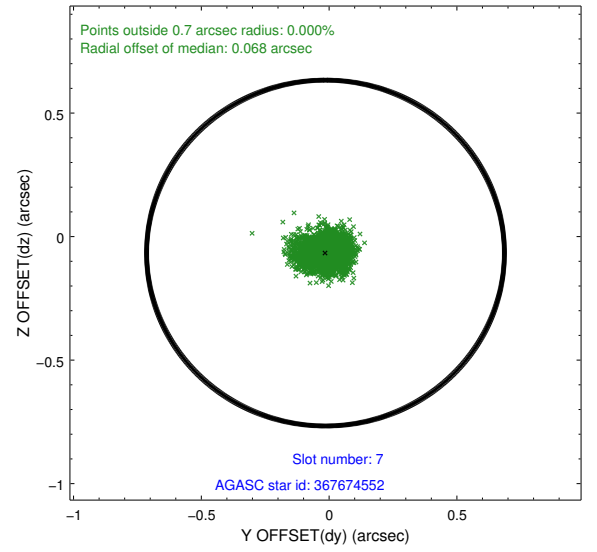
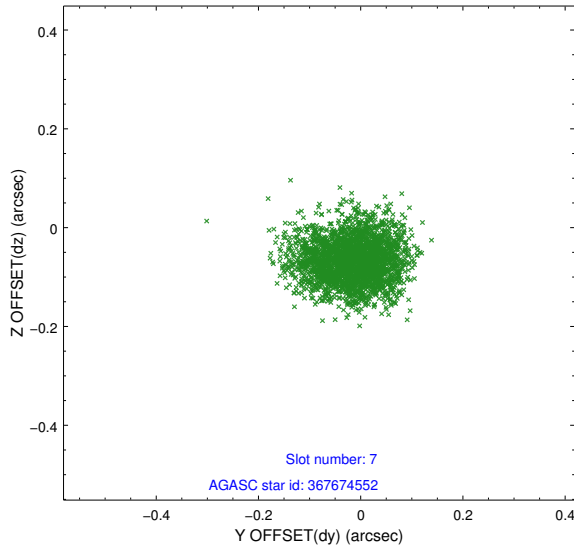
2.4.3 Slot 5



2.4.4 Slot 6

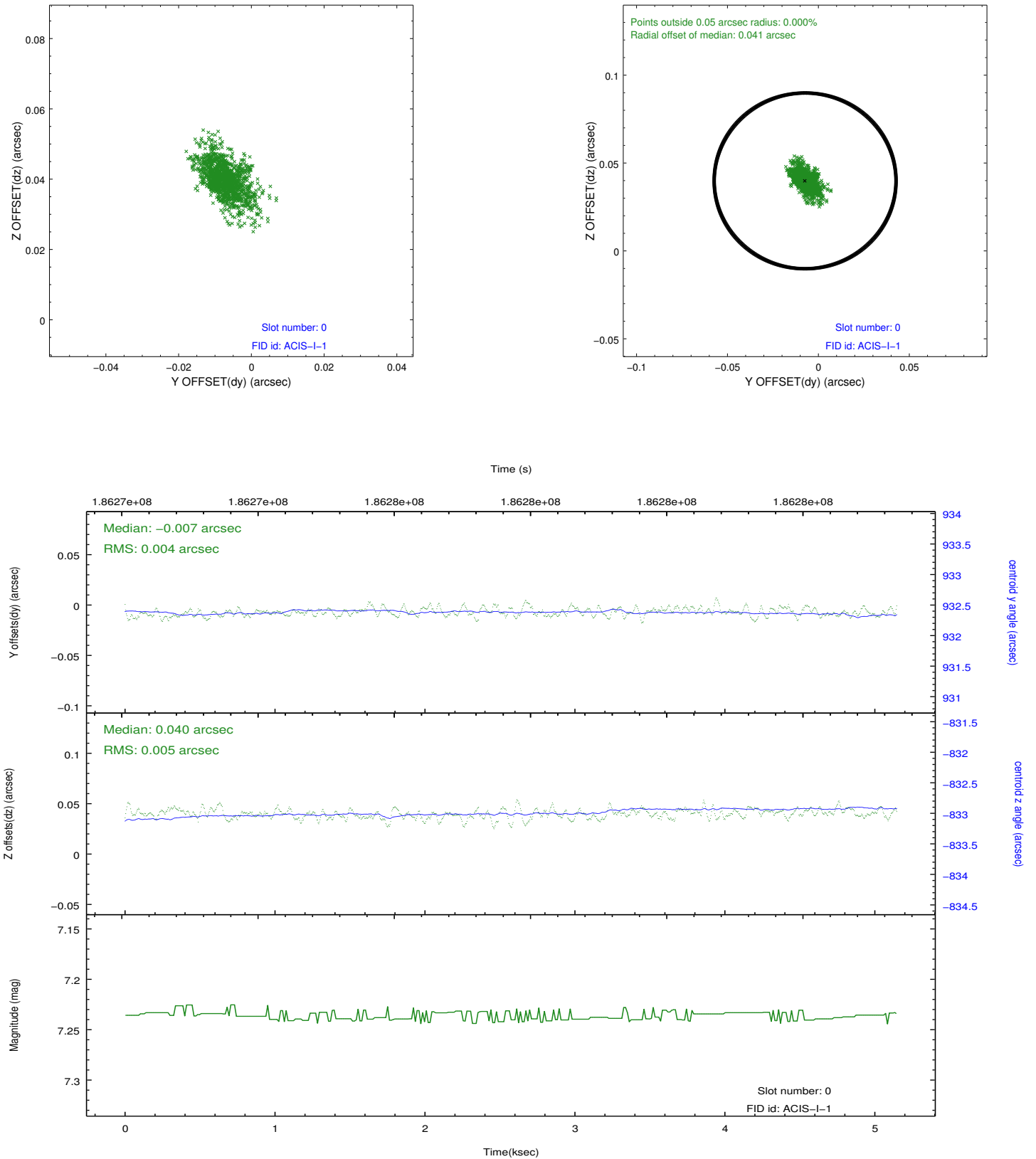


2.4.5 Slot 7

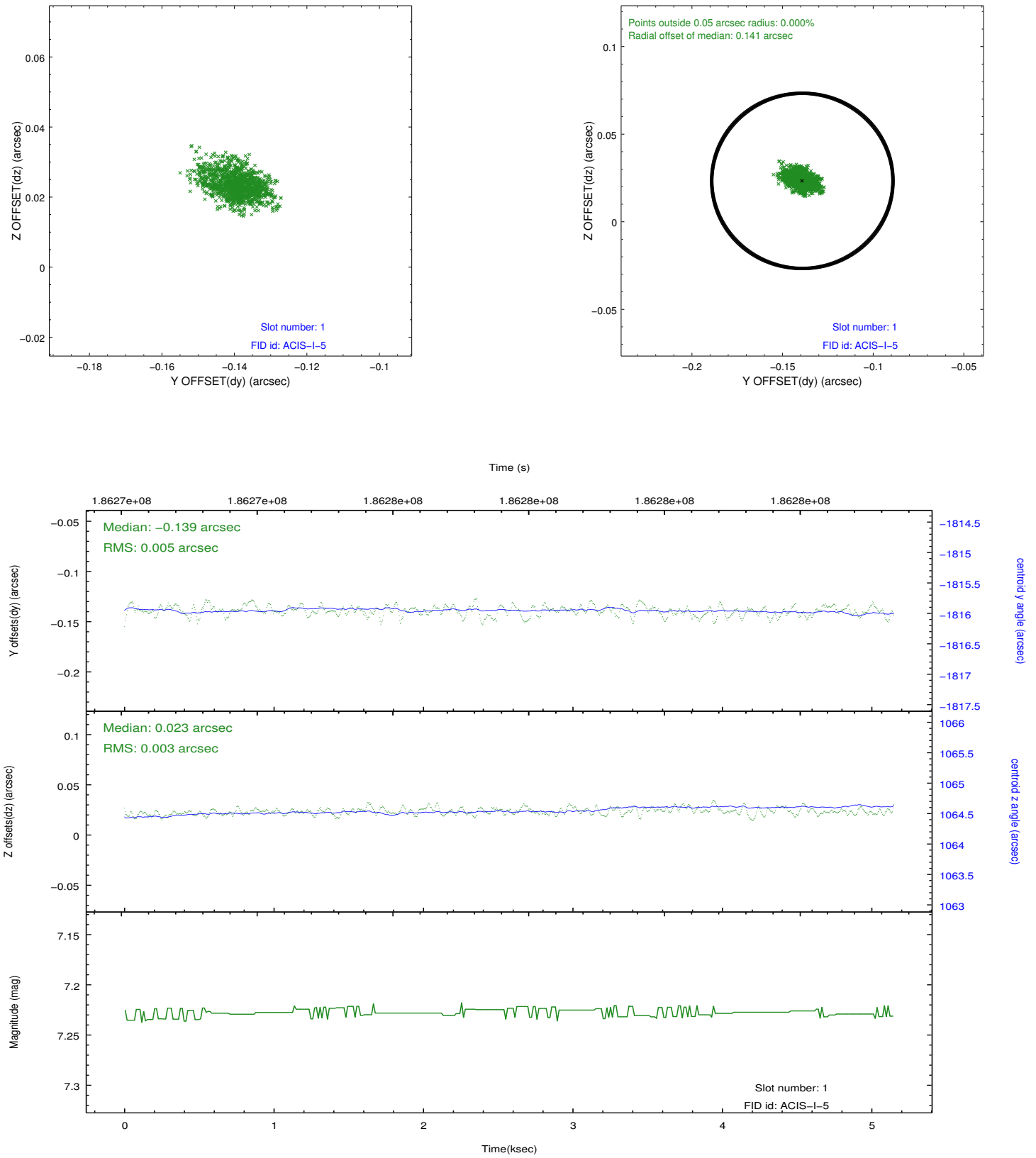


2.5 FID Slots

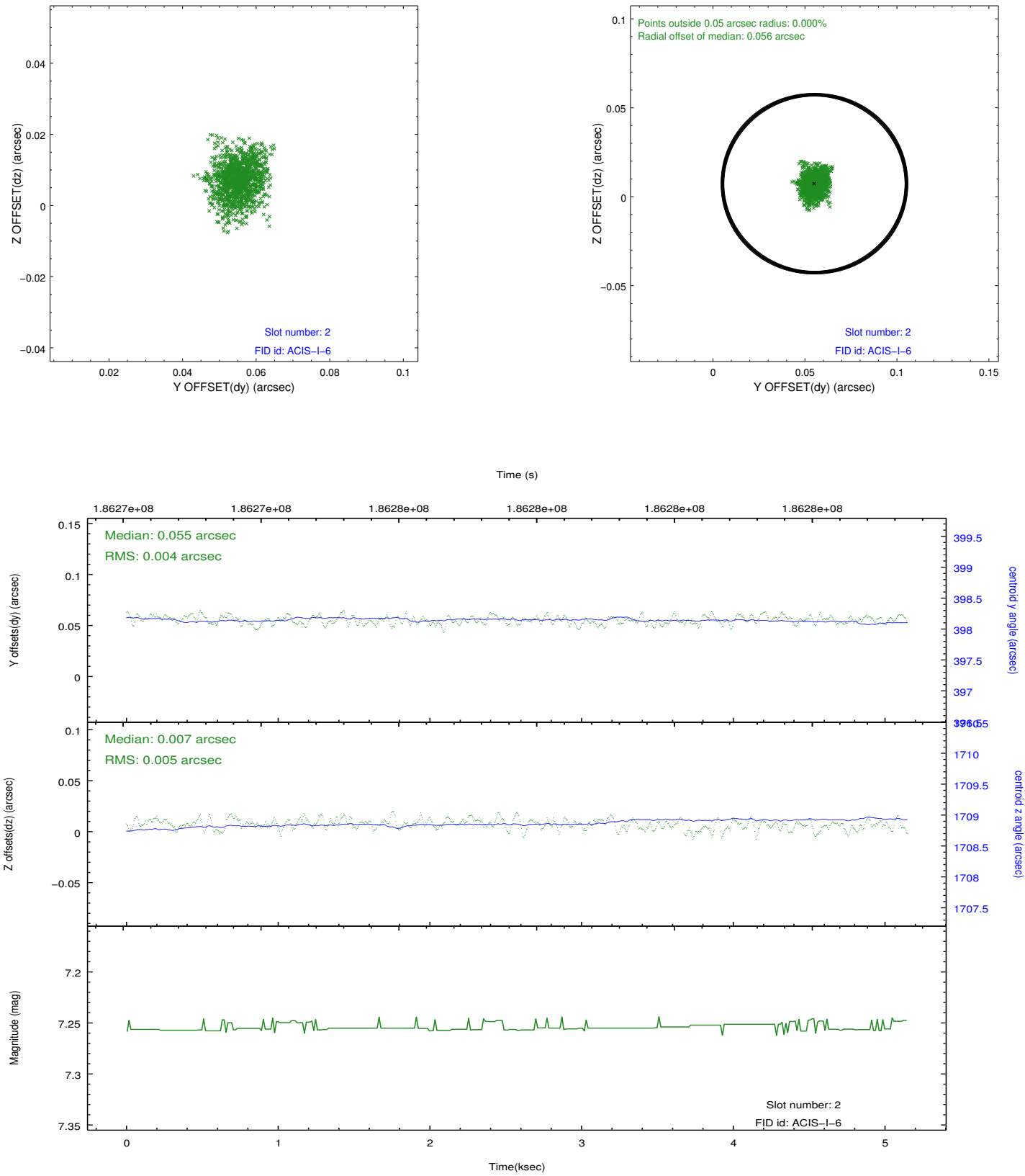
2.5.1 Slot 0



2.5.2 Slot 1



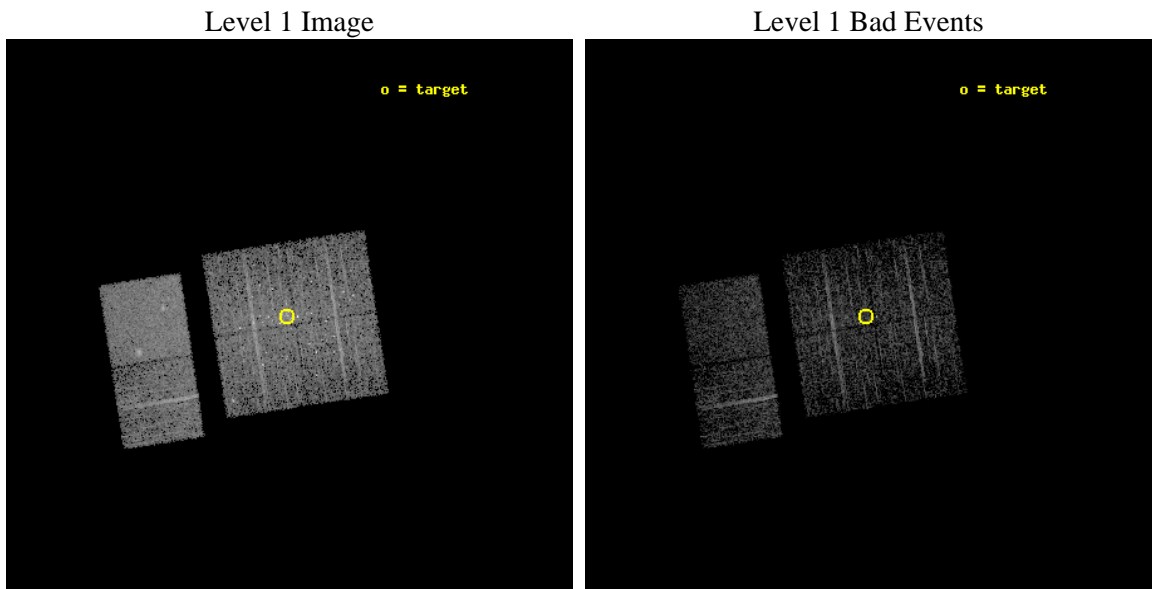
2.5.3 Slot 2



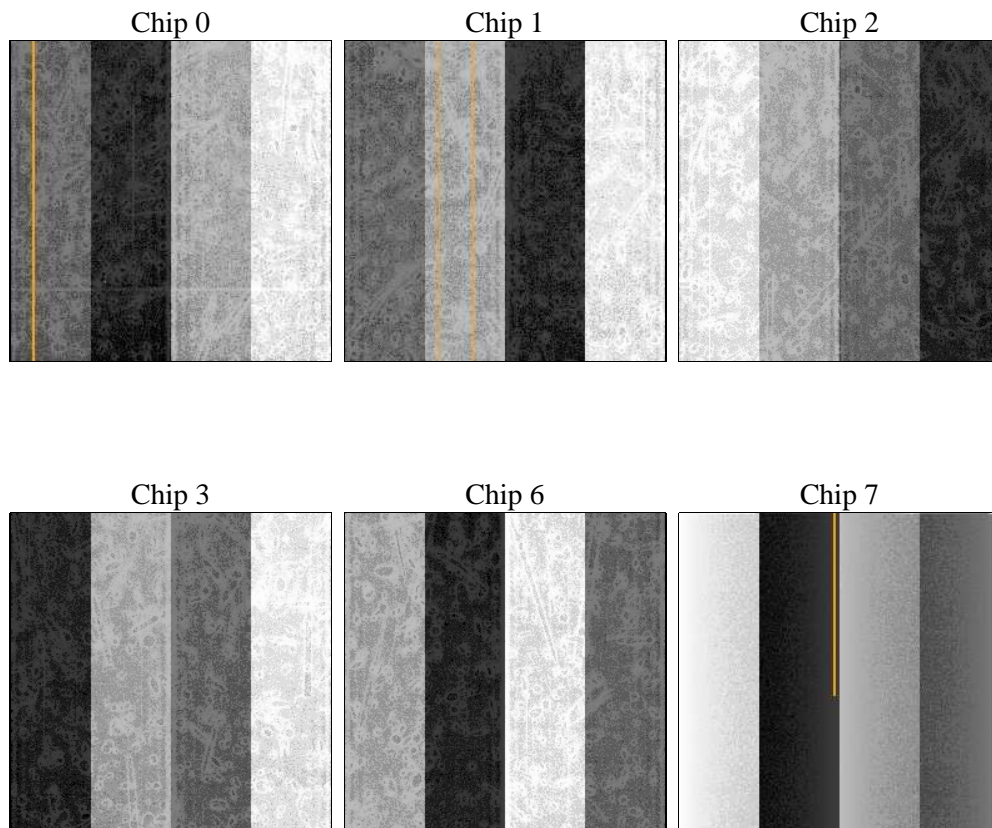
3 OBI Secondary

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	4891.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3866.9022270441	Sum of GTIs [s]
caldsver	4.5.2	 	ontime0	3866.9021570981	Sum of GTIs [s]
date	2012-11-08T07:39:19	Date and time of file creation	ontime1	3866.9023067951	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	3866.9022866786	Sum of GTIs [s]
			ontime3	3866.9022270441	Sum of GTIs [s]
			ontime6	3866.9019976556	Sum of GTIs [s]
			ontime7	3866.9021270275	Sum of GTIs [s]
			l1events	127466	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	19004	19973	19102	23184	19274	26929	grade 0 events	2526	3102	2125	5125	1029	1202
rejected events	14738	14706	15443	16002	16748	15529		13%	15%	11%	22%	5%	4%
rejected %	77%	73%	80%	69%	86%	57%	grade 1 events	21	83	16	52	12	27
								0%	0%	0%	0%	0%	0%
							grade 2 events	718	849	568	908	520	2359
								3%	4%	2%	3%	2%	8%
							grade 3 events	285	334	270	314	228	1015
								1%	1%	1%	1%	1%	3%
							grade 4 events	279	363	256	335	249	1030
								1%	1%	1%	1%	1%	3%
							grade 5 events	840	925	731	915	887	2594
								4%	4%	3%	3%	4%	9%
							grade 6 events	468	630	443	507	505	5817
								2%	3%	2%	2%	2%	21%
							grade 7 events	13867	13687	14693	15028	15844	12885
								72%	68%	76%	64%	82%	47%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.772

A.2 Comments

Window constraint met.