

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 16297 - L2 Version 1
Chandra X-Ray Center

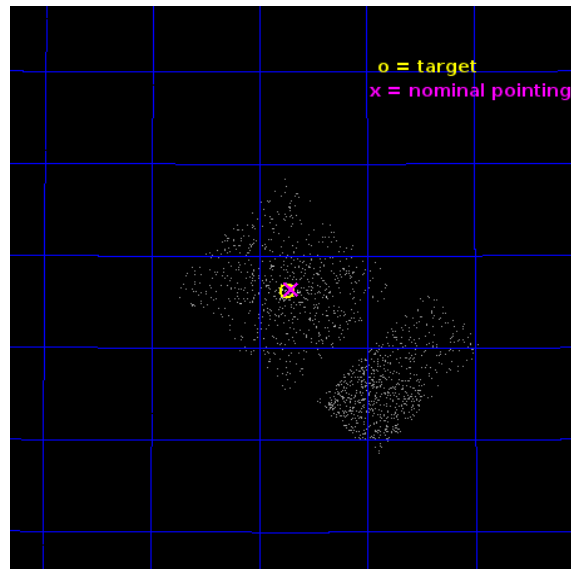
L2 Processing Date : Aug 18 2014

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1 Front

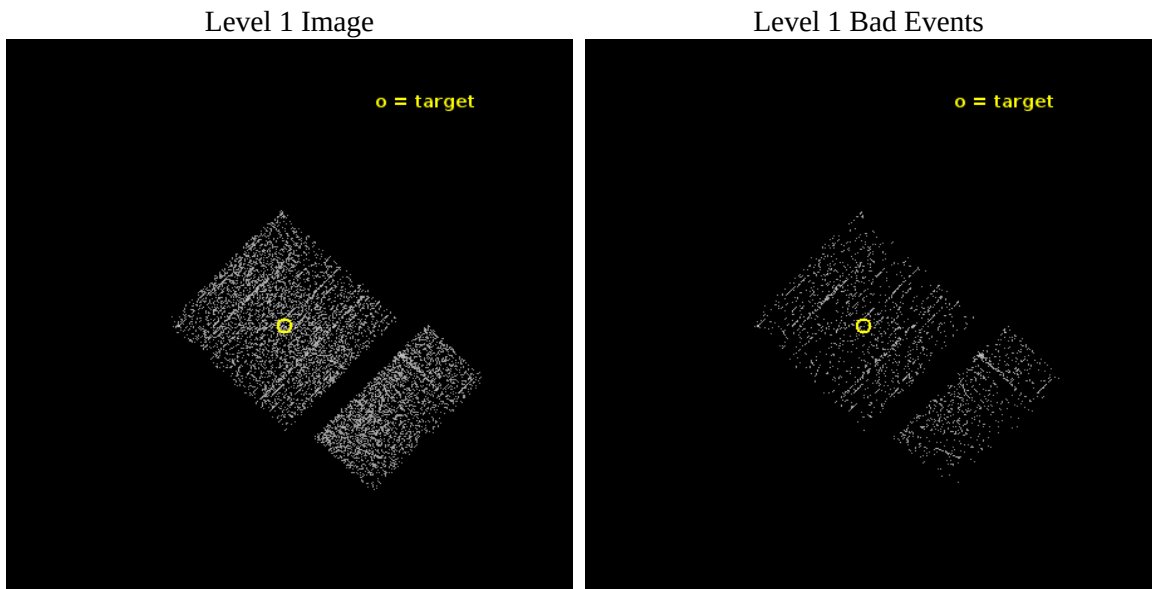
seq_num	601141	Sequence number
obs_id	16297	Observation id
title	M31 BHXNe	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31 BHXNe	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.675476661024	Nominal RA [deg]
dec_nom	41.272873078409	Nominal Dec [deg]
roll_nom	133.75173745667	Nominal Roll [deg]
revision	1	Processing version of data
ontime	922.19157421589	Sum of GTIs [s]
livetime	145.17519849333	Livetime [s]
ontime0	922.19157421589	Sum of GTIs [s]
ontime1	922.19157421589	Sum of GTIs [s]
ontime2	922.19157421589	Sum of GTIs [s]
ontime3	922.19157421589	Sum of GTIs [s]
ontime6	922.19157421589	Sum of GTIs [s]
ontime7	922.19157421589	Sum of GTIs [s]
l2events	1762	Number of level 2 events



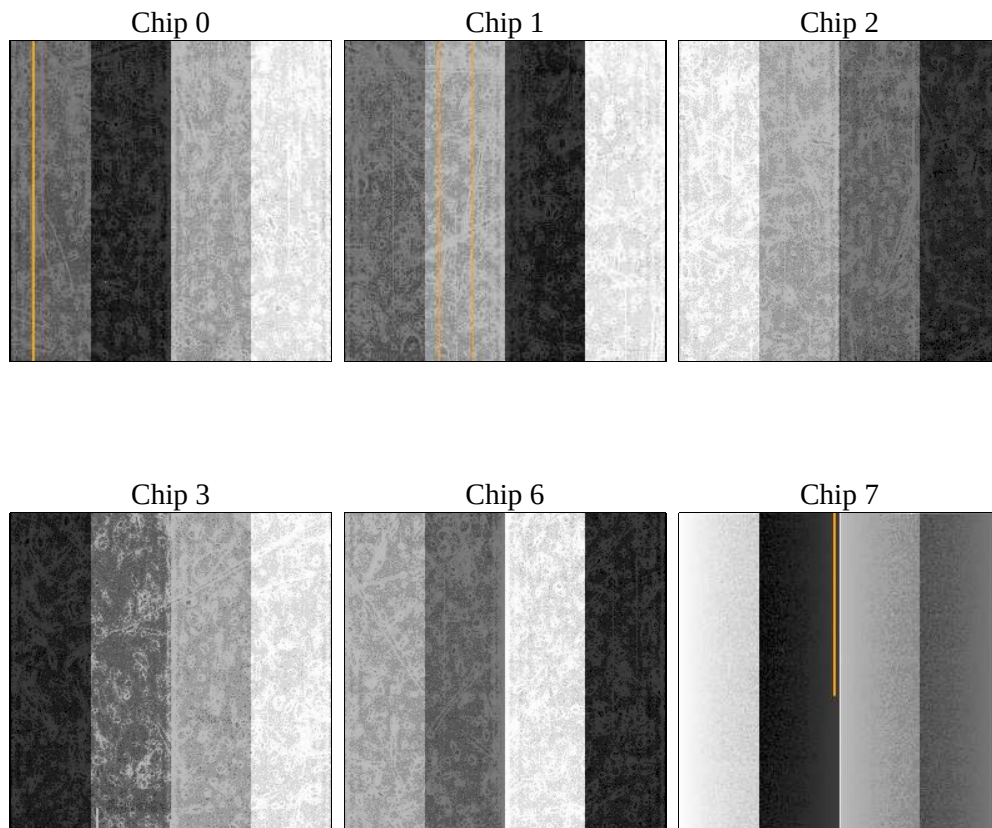
2 OBI Primary

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	10.2.4	Processing system revision	ontime	922.19157421589	Sum of GTIs [s]
caldsver	4.6.2	 	ontime0	922.19157421589	Sum of GTIs [s]
date	2014-08-18T16:00:14	Date and time of file creation	ontime1	922.19157421589	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	922.19157421589	Sum of GTIs [s]
			ontime3	922.19157421589	Sum of GTIs [s]
			ontime6	922.19157421589	Sum of GTIs [s]
			ontime7	922.19157421589	Sum of GTIs [s]
			l1events	12544	Number of level 1 events

2.1.4 Events

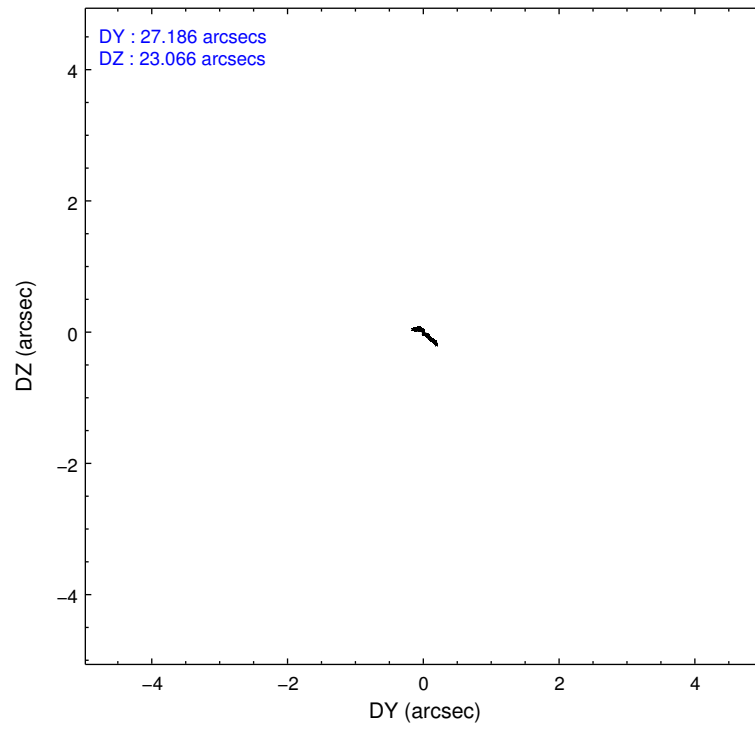
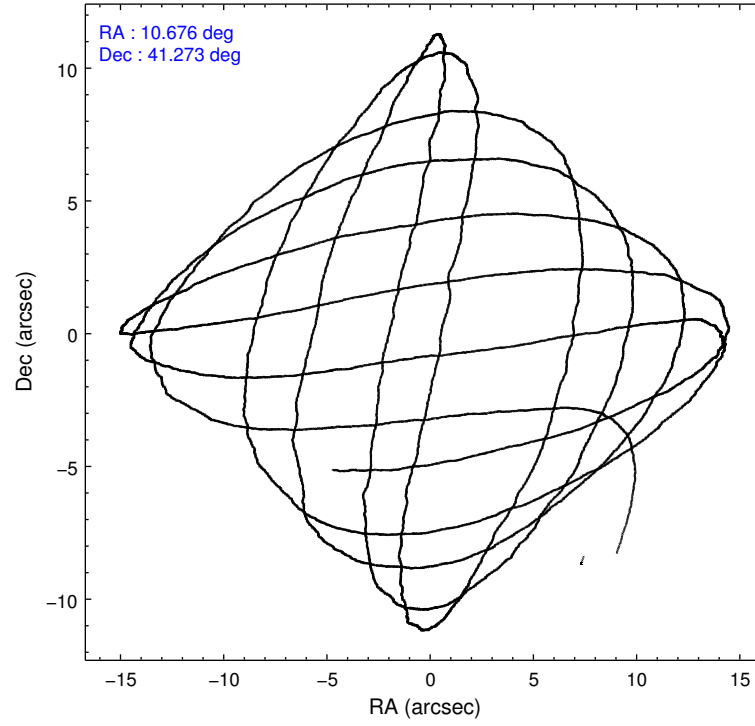
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	1947	1896	2133	2060	2143	2365
rejected events	1733	1647	1772	1765	1930	1720
rejected %	89%	86%	83%	85%	90%	72%

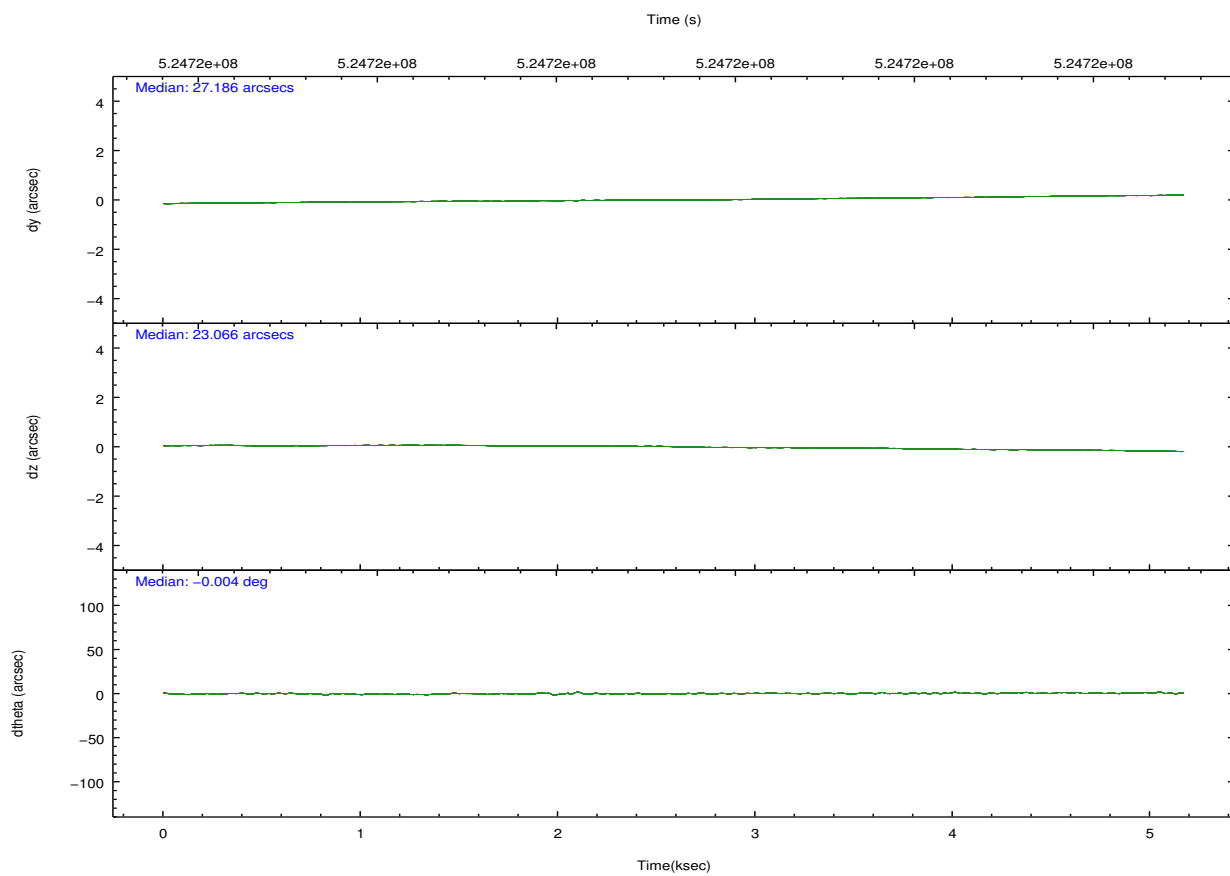
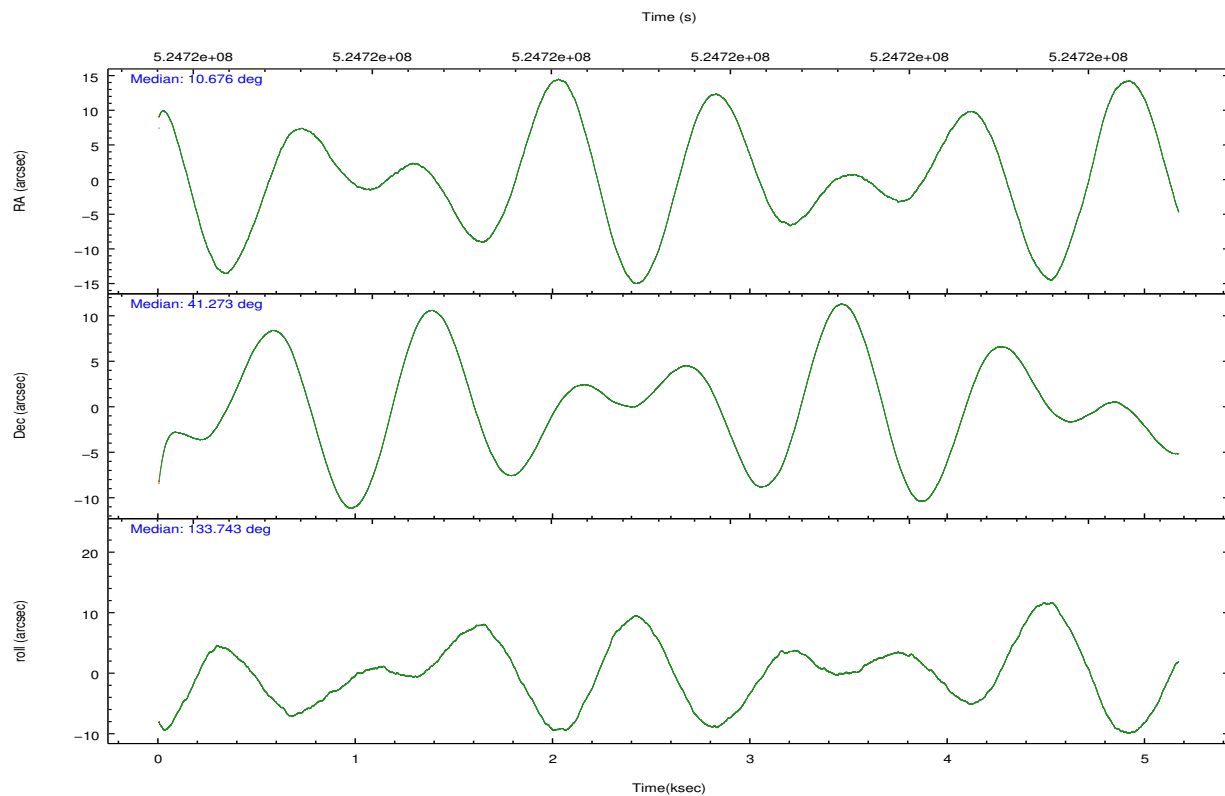
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	80	92	177	151	54	65
	4%	4%	8%	7%	2%	2%
grade 1 events	0	0	4	2	0	0
	0%	0%	0%	0%	0%	0%
grade 2 events	57	50	73	46	61	138
	2%	2%	3%	2%	2%	5%
grade 3 events	22	30	33	29	25	72
	1%	1%	1%	1%	1%	3%
grade 4 events	21	27	33	22	20	59
	1%	1%	1%	1%	0%	2%
grade 5 events	104	89	108	106	122	208
	5%	4%	5%	5%	5%	8%
grade 6 events	36	50	48	48	54	319
	1%	2%	2%	2%	2%	13%
grade 7 events	1627	1558	1657	1656	1807	1504
	83%	82%	77%	80%	84%	63%

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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	10.710745	10.67547666102437	CCD I2 on	Y	Y
[deg] Pointing Dec	41.265297	41.27287307840872	CCD I3 on	Y	Y
[deg] Pointing Roll	133.519784	133.7517374566705	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	524716237.184000	524715263.73647	CCD S5 on	N	N
Observation start date	2014-08-18T02:29:30	2014-08-18T02:14:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	524721237.184000	524722339.31186	On-chip summing requested	N	N
Observation end date	2014-08-18T03:52:50	2014-08-18T04:12:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	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



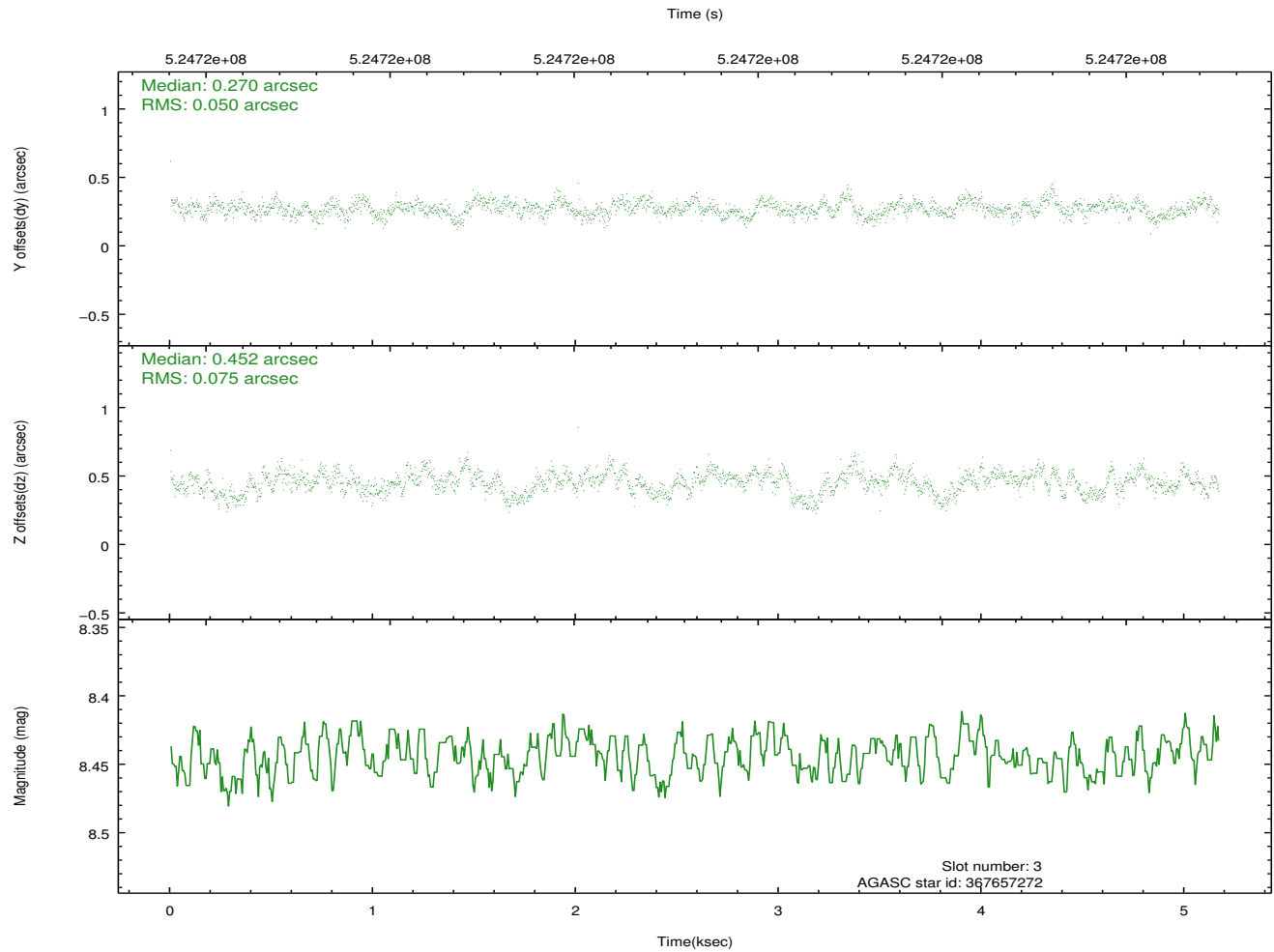
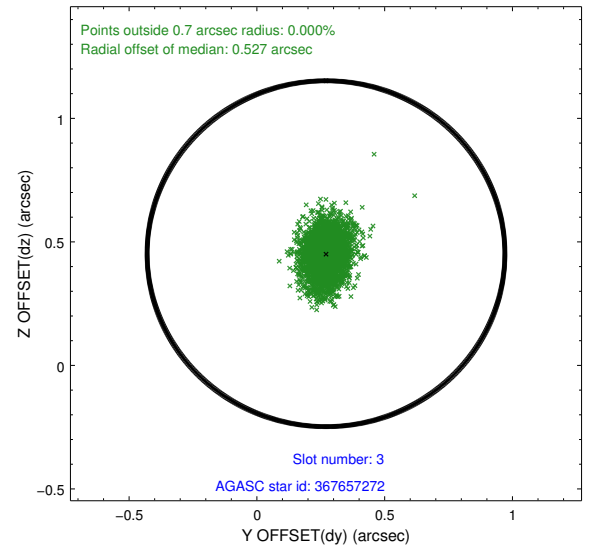
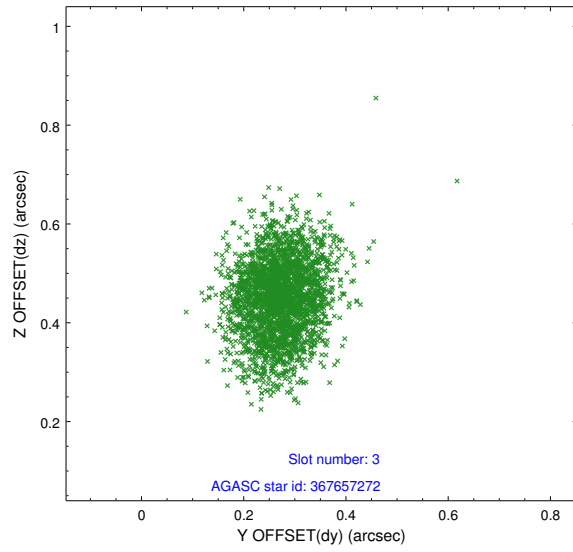


Slot Statistics

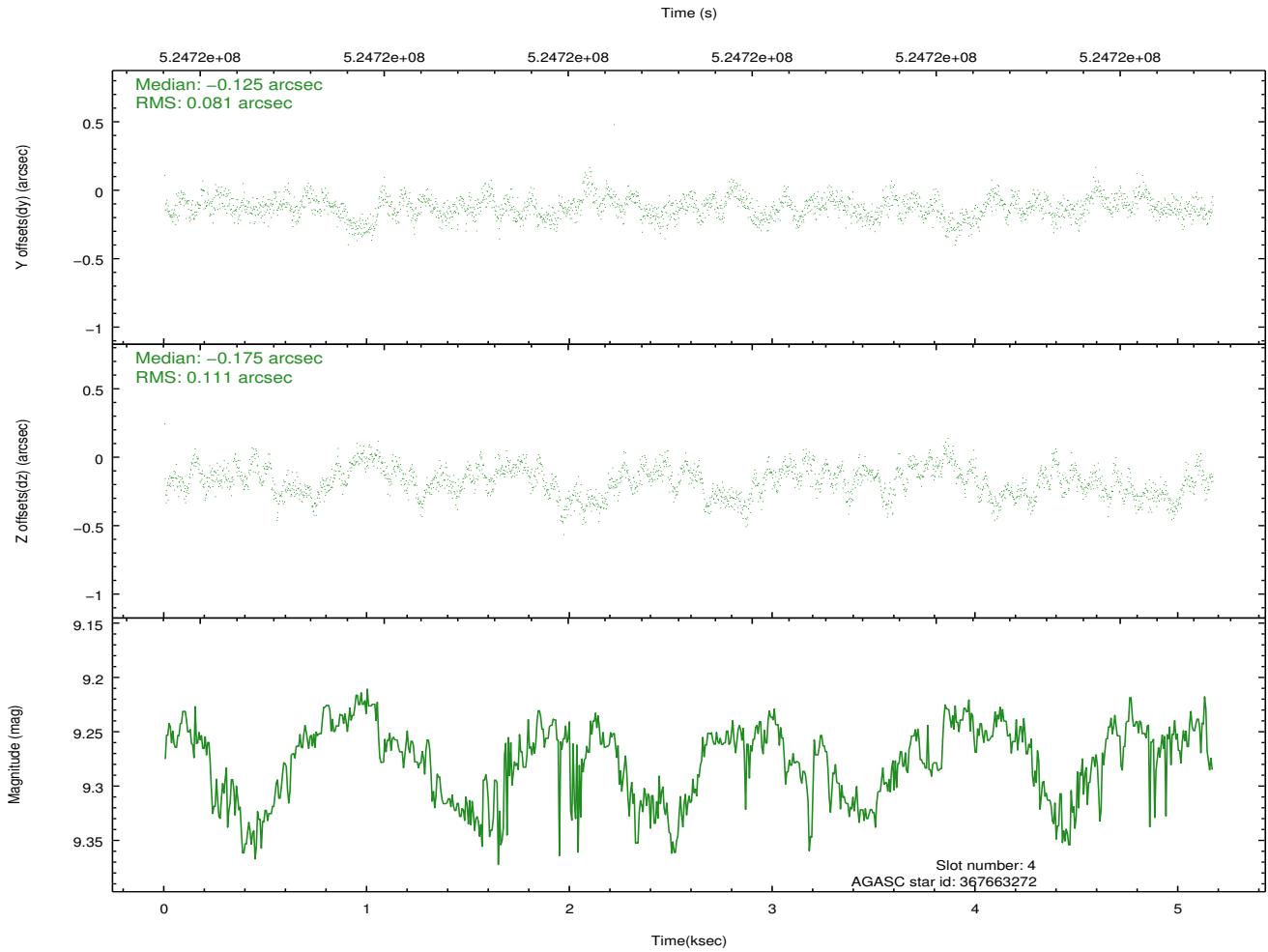
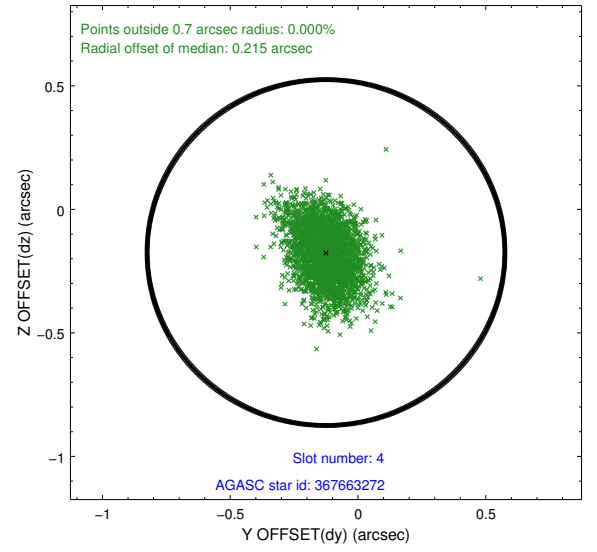
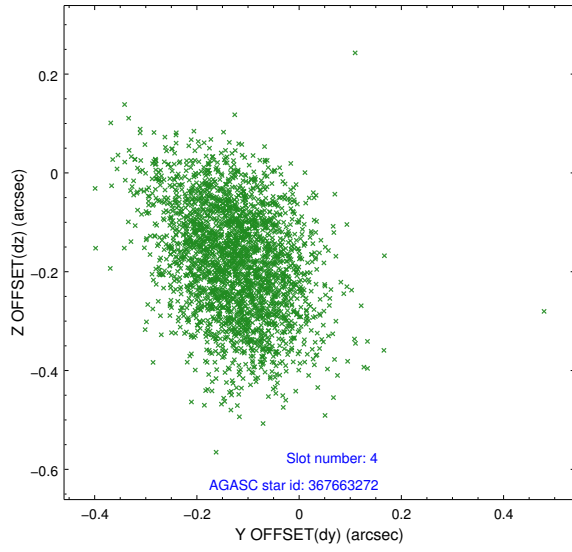
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.07	1261	0.018	0.067	0.009	0.014	0.000000	0.000000	911.98	-846.75
1	FID	ACIS-I-5	7.05	1261	-0.246	0.028	0.006	0.011	0.000000	0.000000	-1835.83	1050.00
2	FID	ACIS-I-6	7.06	1261	0.137	-0.023	0.007	0.013	0.000000	0.000000	376.25	1695.87
3	GUIDE	367657272	8.44	2522	0.270	0.452	0.095	0.159	11.834471	41.298907	-1989.79	-2300.32
4	GUIDE	367663272	9.27	2521	-0.125	-0.175	0.145	0.240	10.656279	41.699429	1234.24	-969.51
5	GUIDE	367674552	8.85	2521	-0.130	0.006	0.096	0.158	11.016238	41.570845	232.91	-1355.21
6	GUIDE	367148872	7.22	2522	-0.266	-0.862	0.098	0.161	10.505940	40.688258	-1121.45	1834.89
7	GUIDE	367657368	8.64	2519	0.253	0.576	0.105	0.179	11.928227	41.287266	-2193.17	-2457.29

2.4 Star Slots

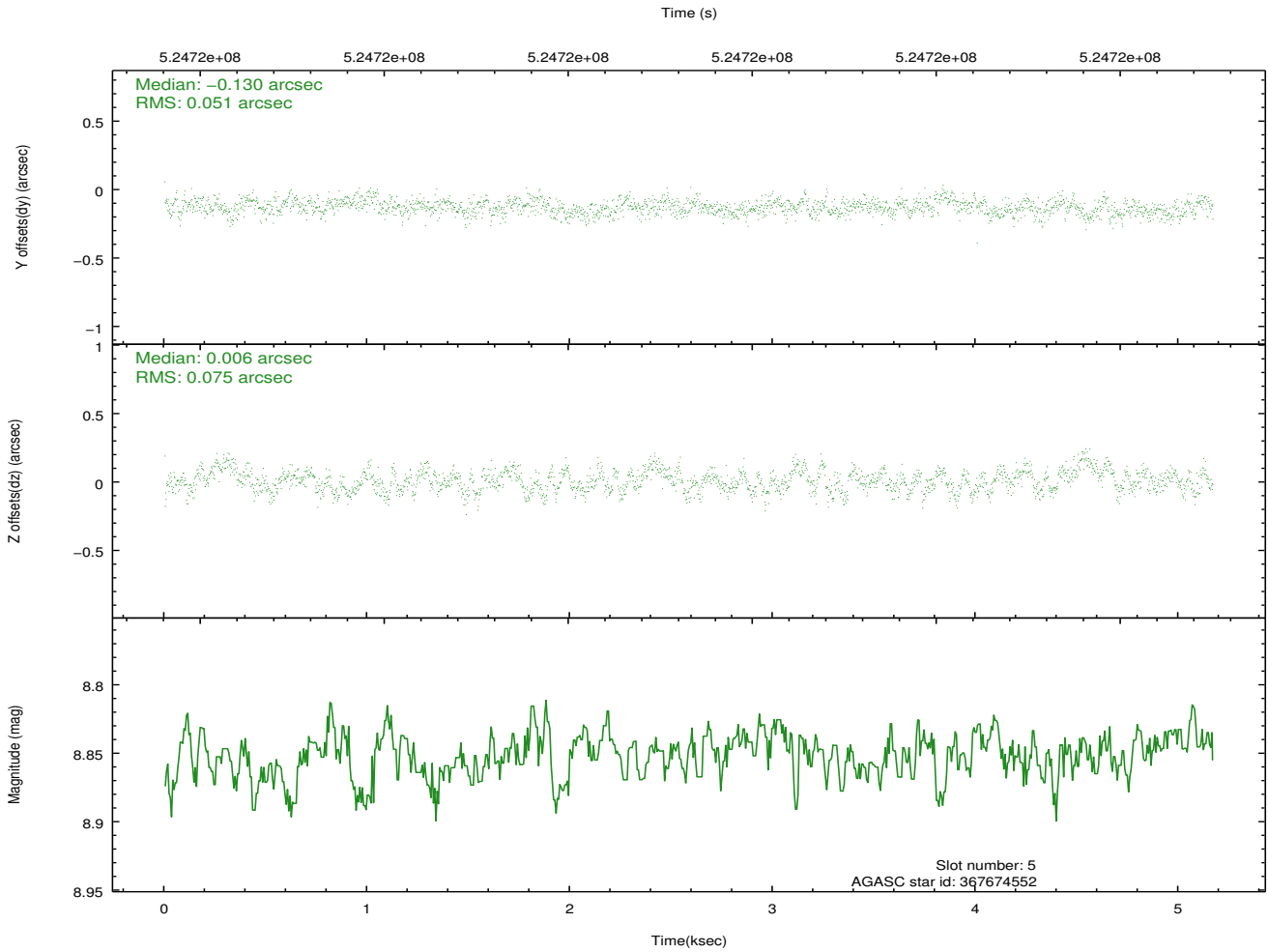
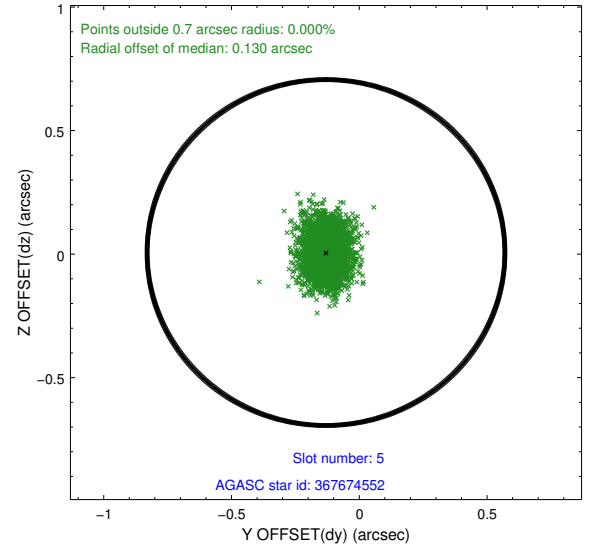
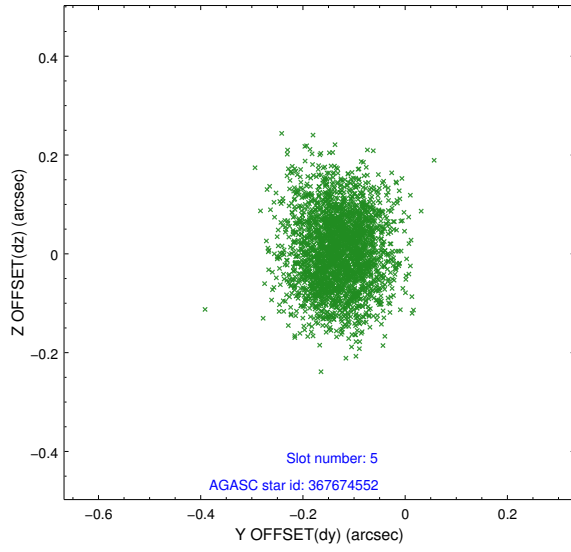
2.4.1 Slot 3



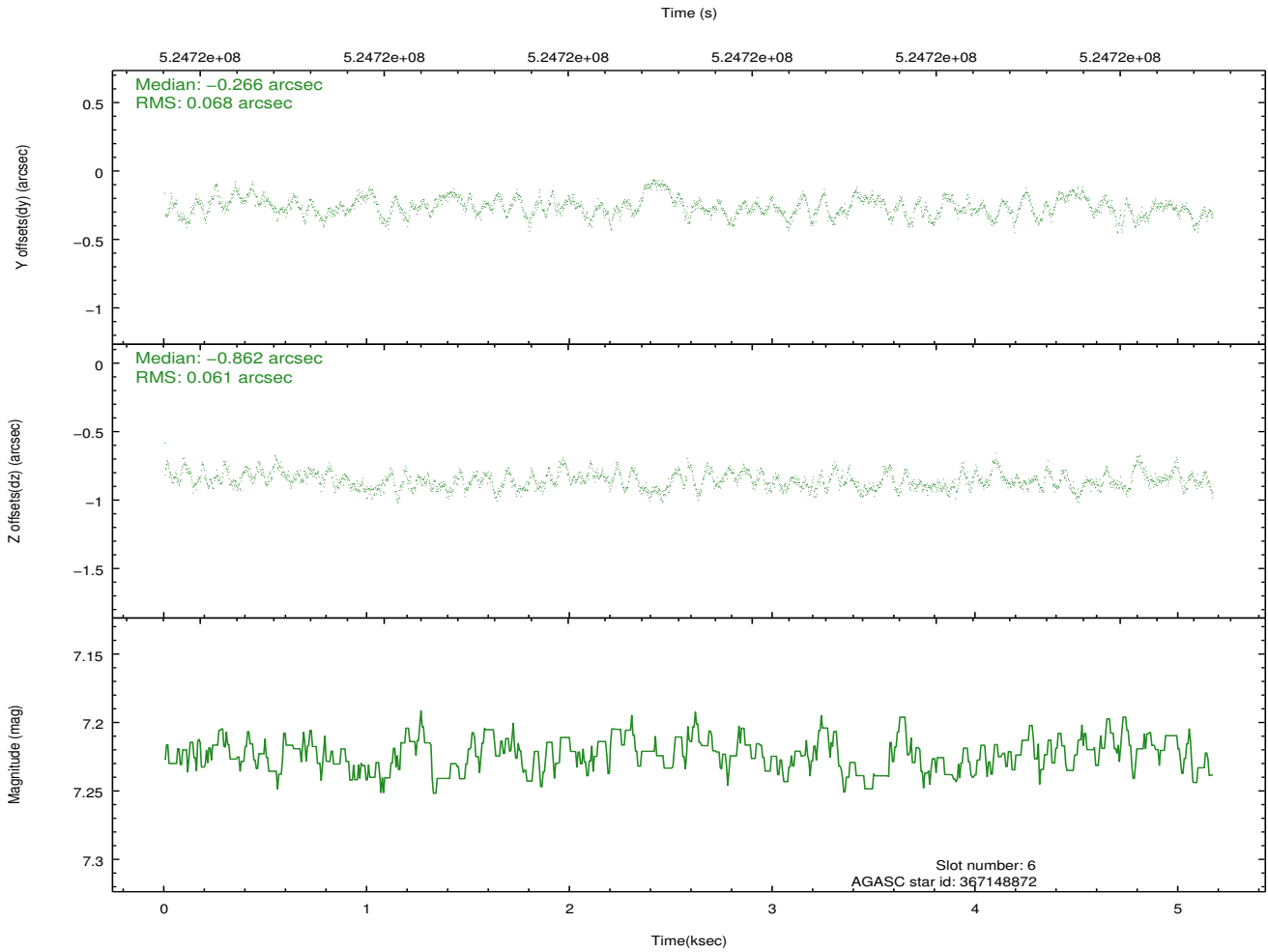
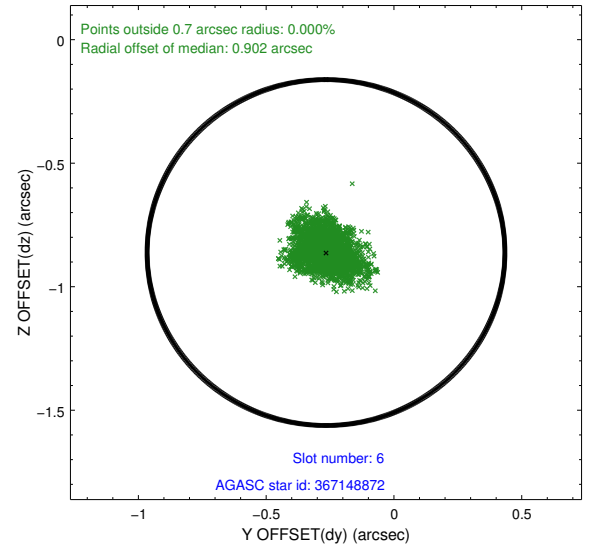
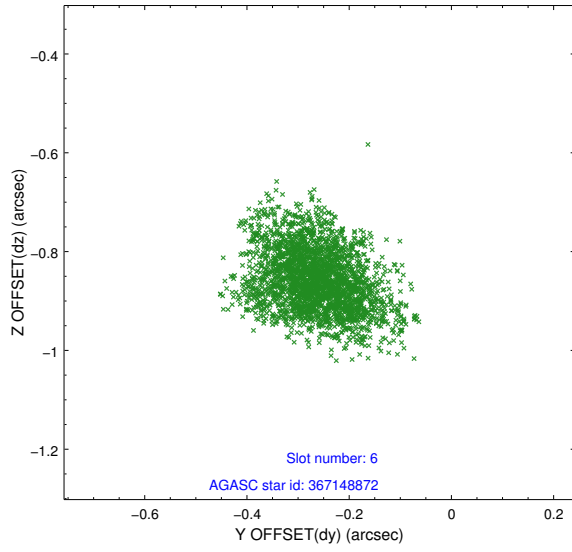
2.4.2 Slot 4



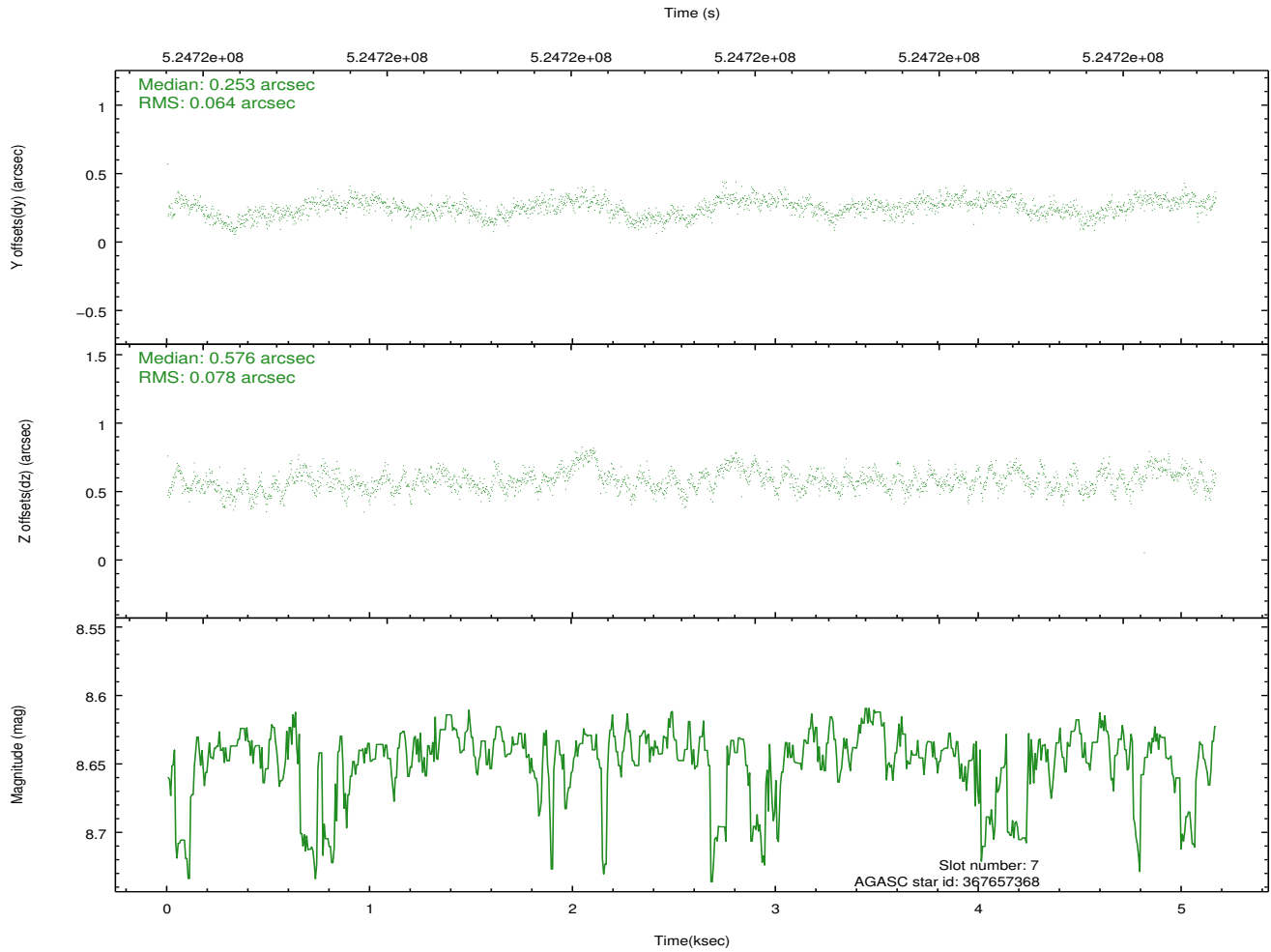
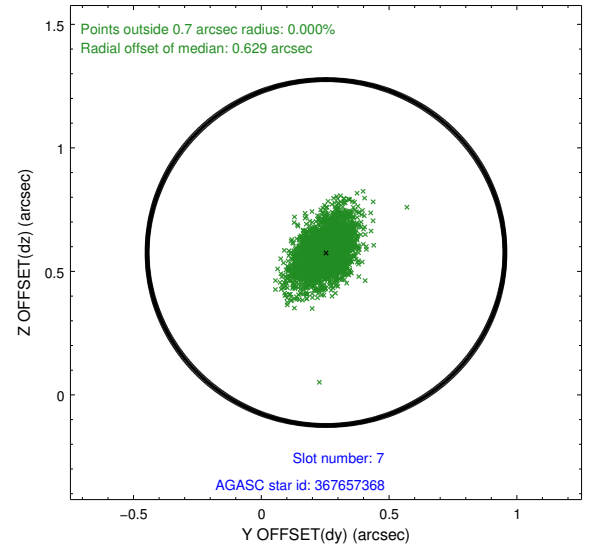
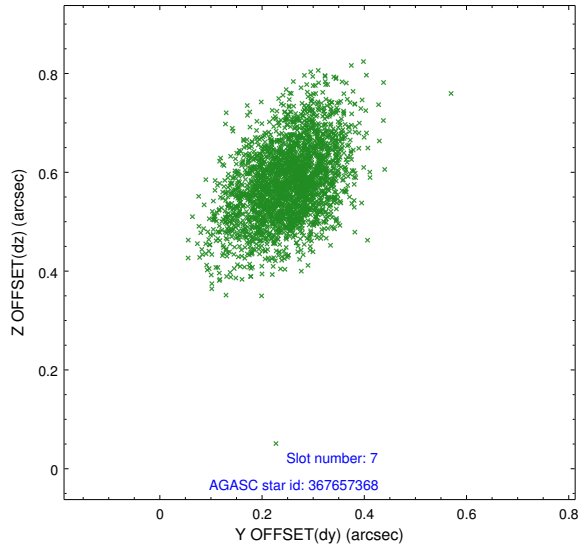
2.4.3 Slot 5



2.4.4 Slot 6

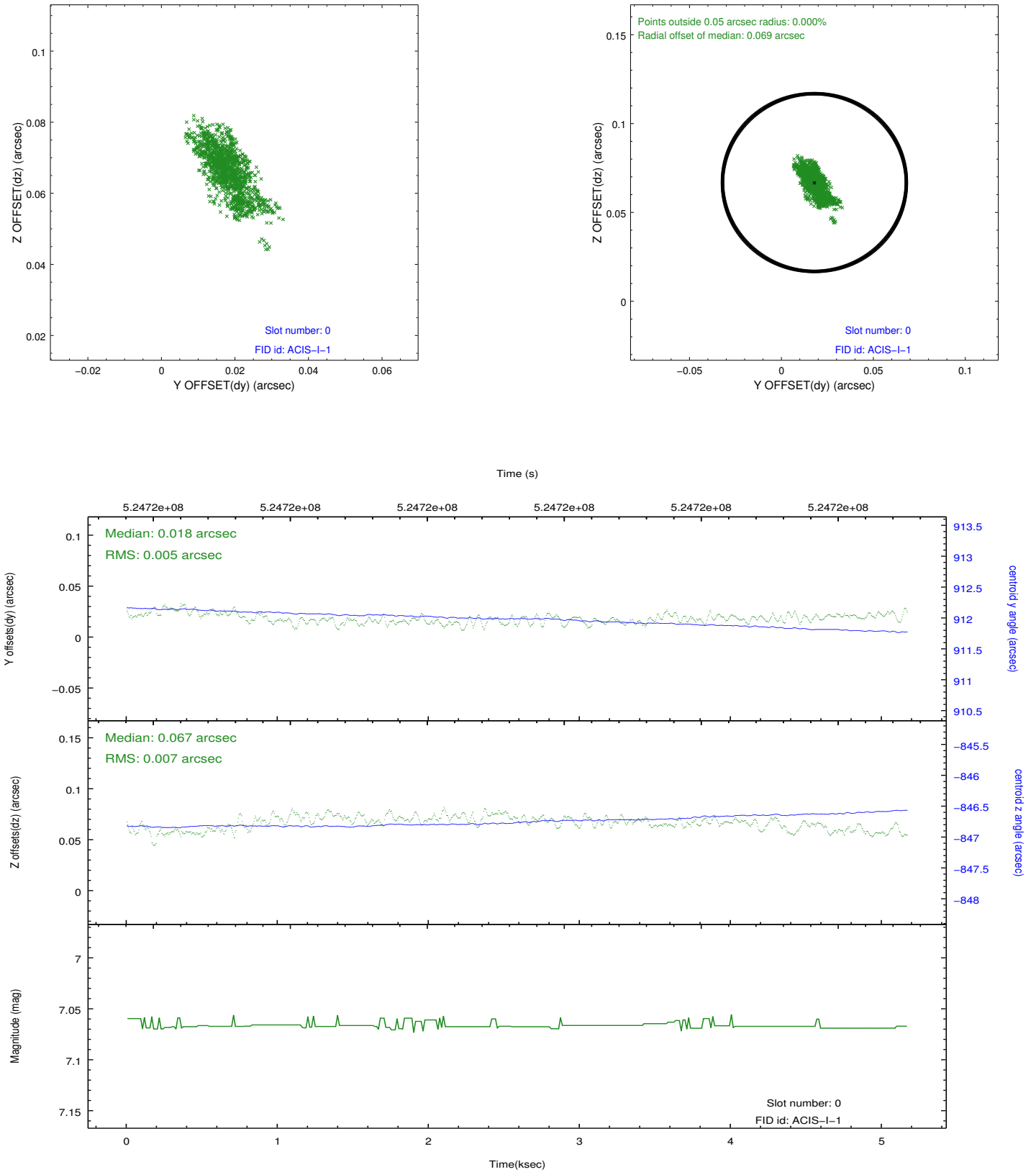


2.4.5 Slot 7

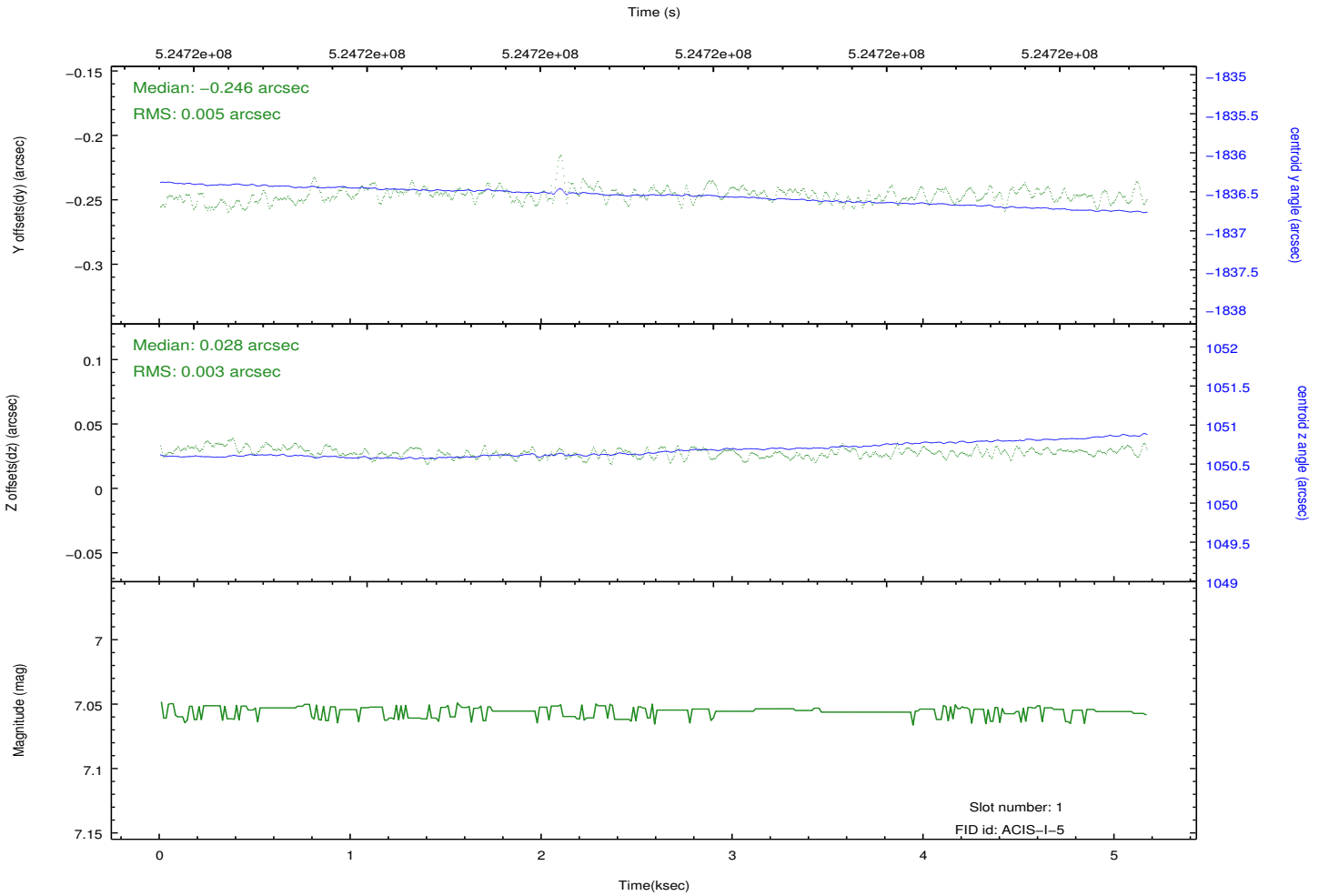
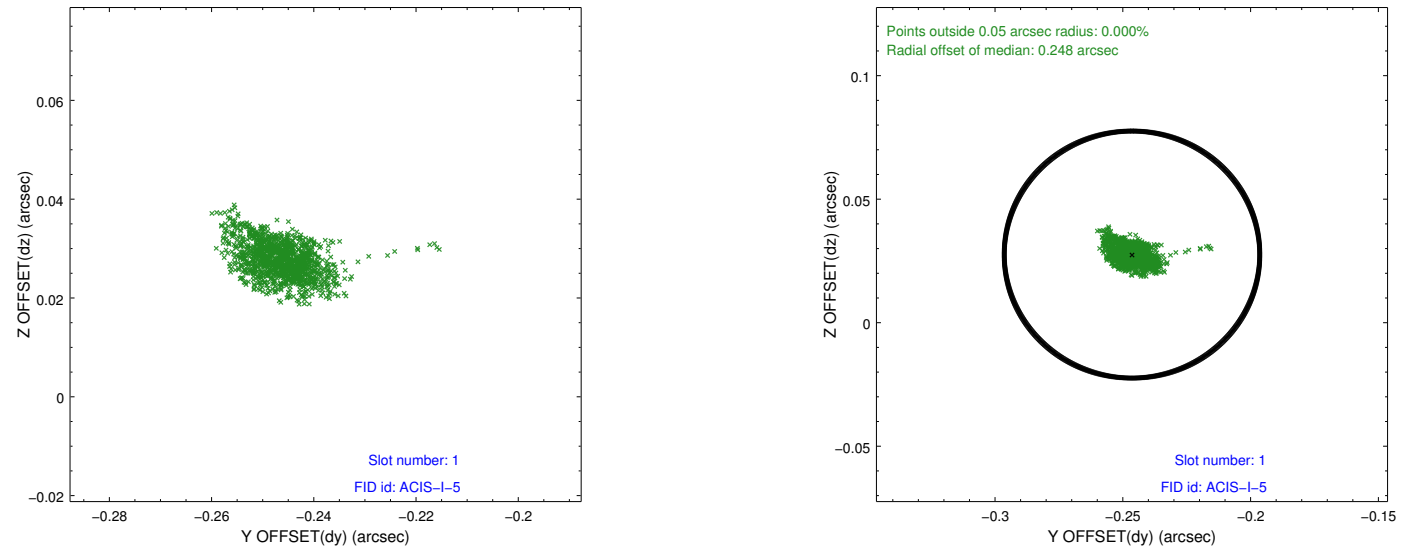


2.5 FID Slots

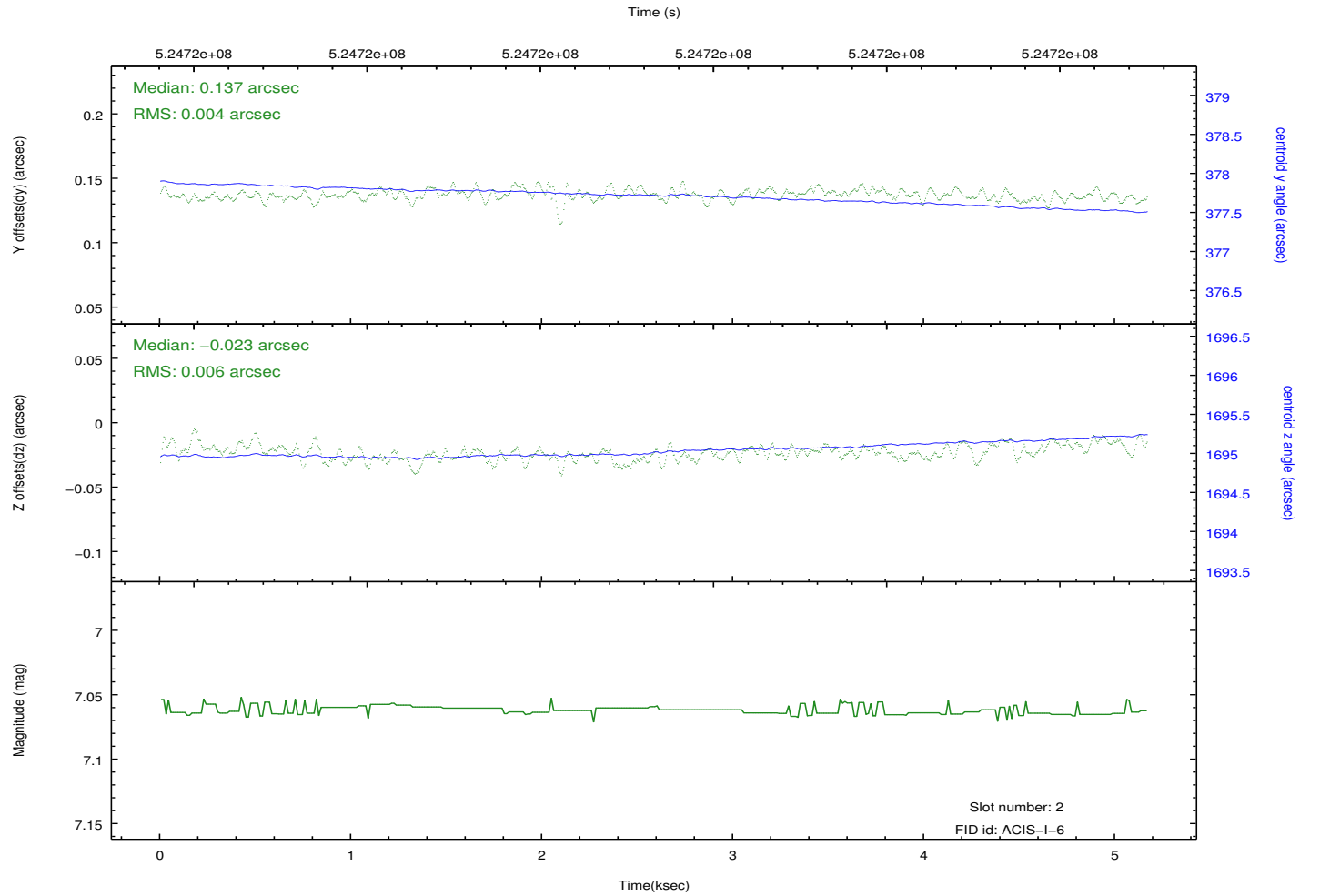
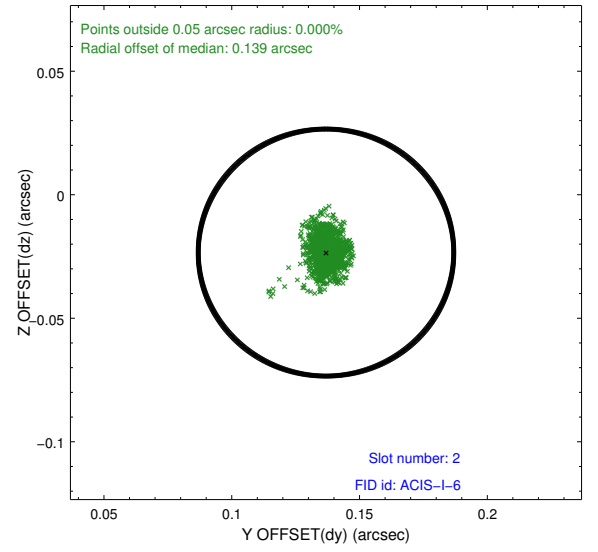
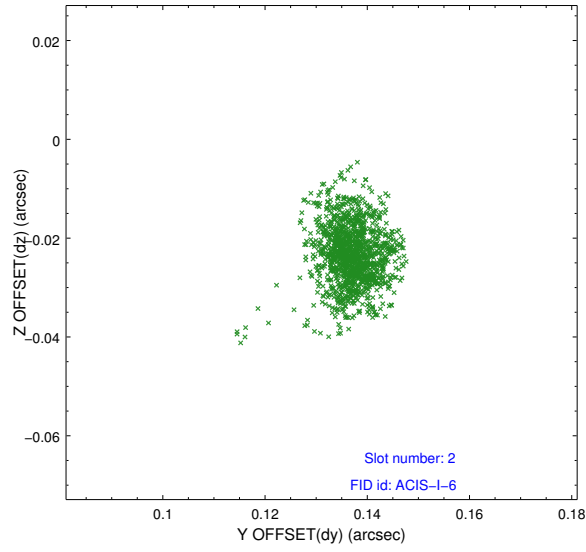
2.5.1 Slot 0



2.5.2 Slot 1



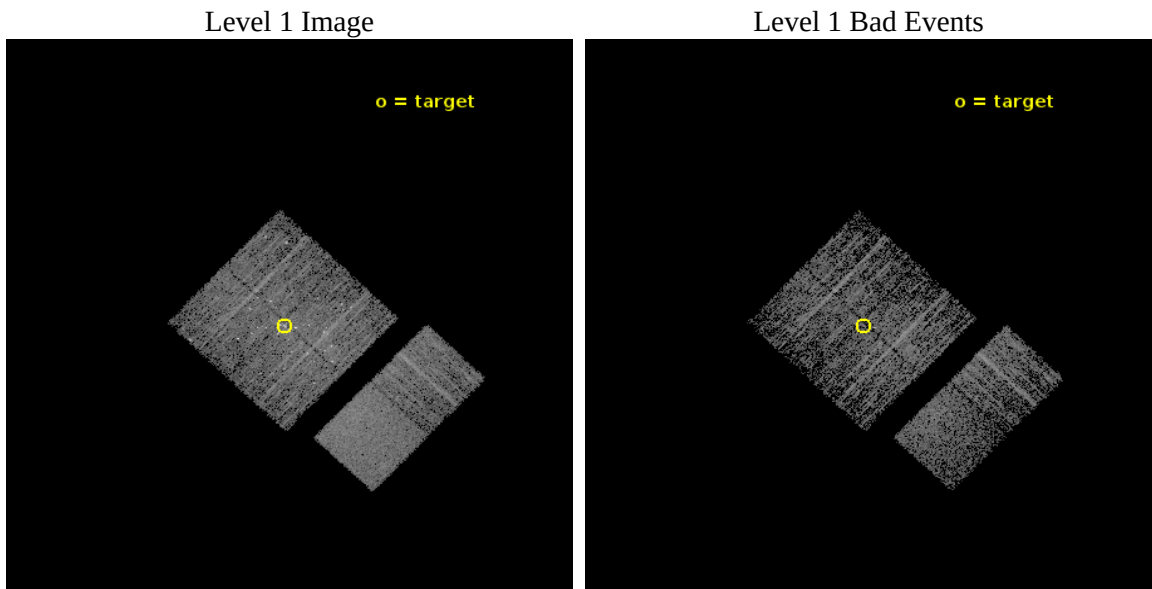
2.5.3 Slot 2



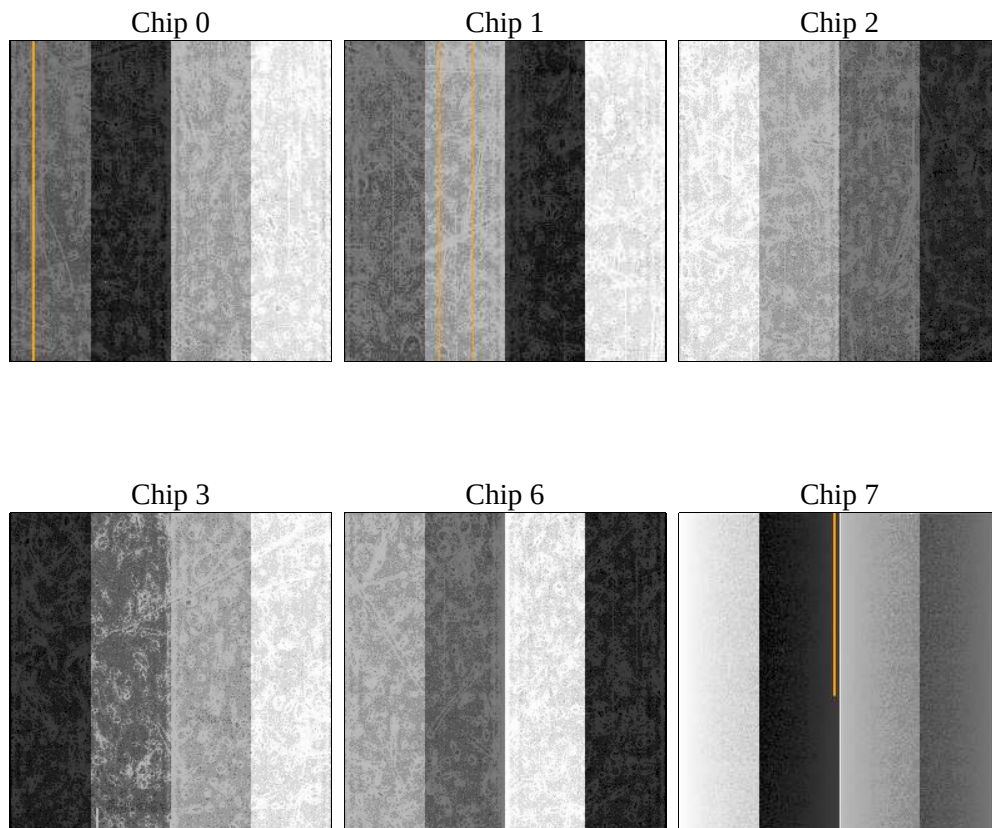
3 OBI Secondary

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	10.2.4	Processing system revision	ontime	3957.6458660364	Sum of GTIs [s]
caldsver	4.6.2	 	ontime0	3957.6461847425	Sum of GTIs [s]
date	2014-08-18T16:00:18	Date and time of file creation	ontime1	3957.6461349726	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	3957.6460154653	Sum of GTIs [s]
			ontime3	3957.6458660364	Sum of GTIs [s]
			ontime6	3957.6458665133	Sum of GTIs [s]
			ontime7	3957.6458266973	Sum of GTIs [s]
			l1events	130534	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	18624	19611	23731	21052	20299	27217	grade 0 events	1738	2513	3358	3089	881	1130
rejected events	15232	15095	18041	15914	17853	15141		9%	12%	14%	14%	4%	4%
rejected %	81%	76%	76%	75%	87%	55%	grade 1 events	17	41	128	47	11	39
								0%	0%	0%	0%	0%	0%
							grade 2 events	653	836	1004	831	563	2471
								3%	4%	4%	3%	2%	9%
							grade 3 events	286	261	397	334	236	1010
								1%	1%	1%	1%	1%	3%
							grade 4 events	250	297	356	321	219	1025
								1%	1%	1%	1%	1%	3%
							grade 5 events	956	1026	939	1071	1090	2850
								5%	5%	3%	5%	5%	10%
							grade 6 events	474	619	578	567	550	6461
								2%	3%	2%	2%	2%	23%
							grade 7 events	14250	14018	16971	14792	16749	12231
								76%	71%	71%	70%	82%	44%

A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.08.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.87983744025229

A.2 Comments