

V&V Reference Report

L2 ASCDS Version : 10.5.1.1

Observation 18046 - L2 Version 1
Chandra X-Ray Center

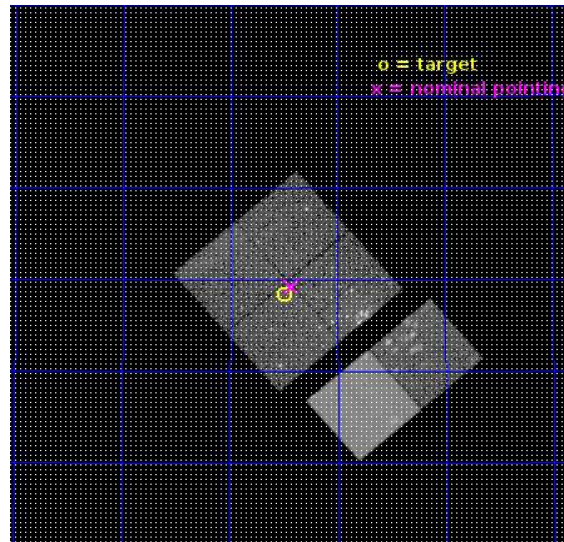
L2 Processing Date : Aug 27 2016

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1 Front

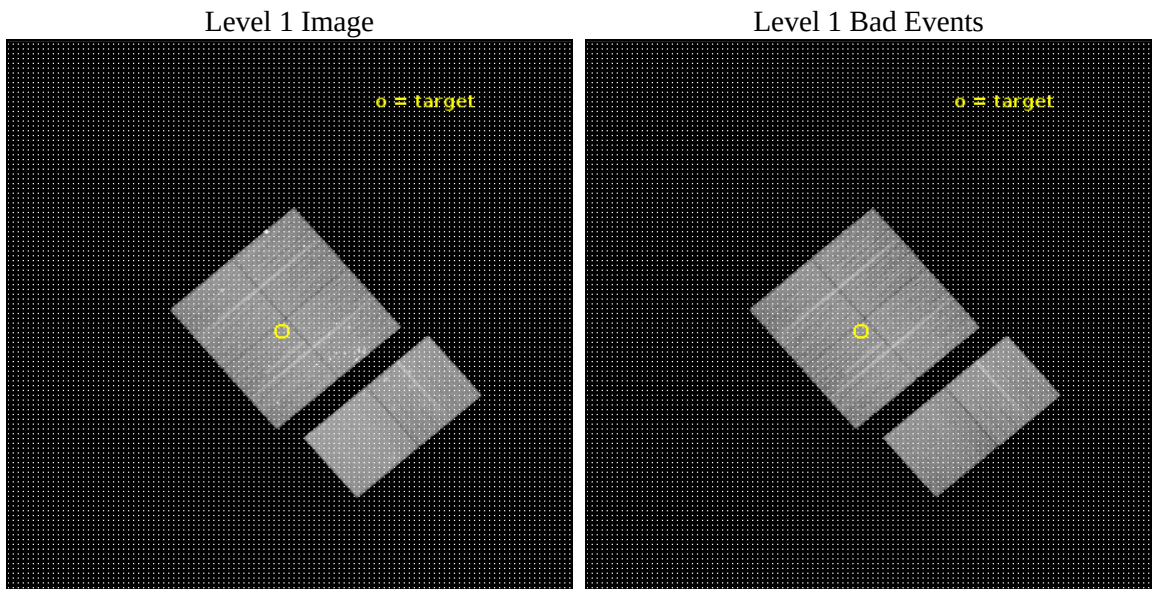
seq_num	601232	Sequence number
obs_id	18046	Observation id
title	0.5-30 KEV MONITORING OF THE M31 DISK WITH CHANDRA AND NUSTAR	Prop
observer	Ann Hornschemeier	Principal investigator
object	M31-NuSTAR-A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.872083	Observer's specified target RA [deg]
dec_targ	41.305889	Observer's specified target Dec [deg]
ra_nom	10.857569098027	Nominal RA [deg]
dec_nom	41.320743619034	Nominal Dec [deg]
roll_nom	139.4054393729	Nominal Roll [deg]
revision	1	Processing version of data
ontime	24934.400371552	Sum of GTIs [s]
livetime	24618.665980354	Livetime [s]
ontime0	24934.400371552	Sum of GTIs [s]
ontime1	24934.400371552	Sum of GTIs [s]
ontime2	24934.400371552	Sum of GTIs [s]
ontime3	24934.400371552	Sum of GTIs [s]
ontime6	24934.400371552	Sum of GTIs [s]
ontime7	24934.400371552	Sum of GTIs [s]
l2events	200391	Number of level 2 events



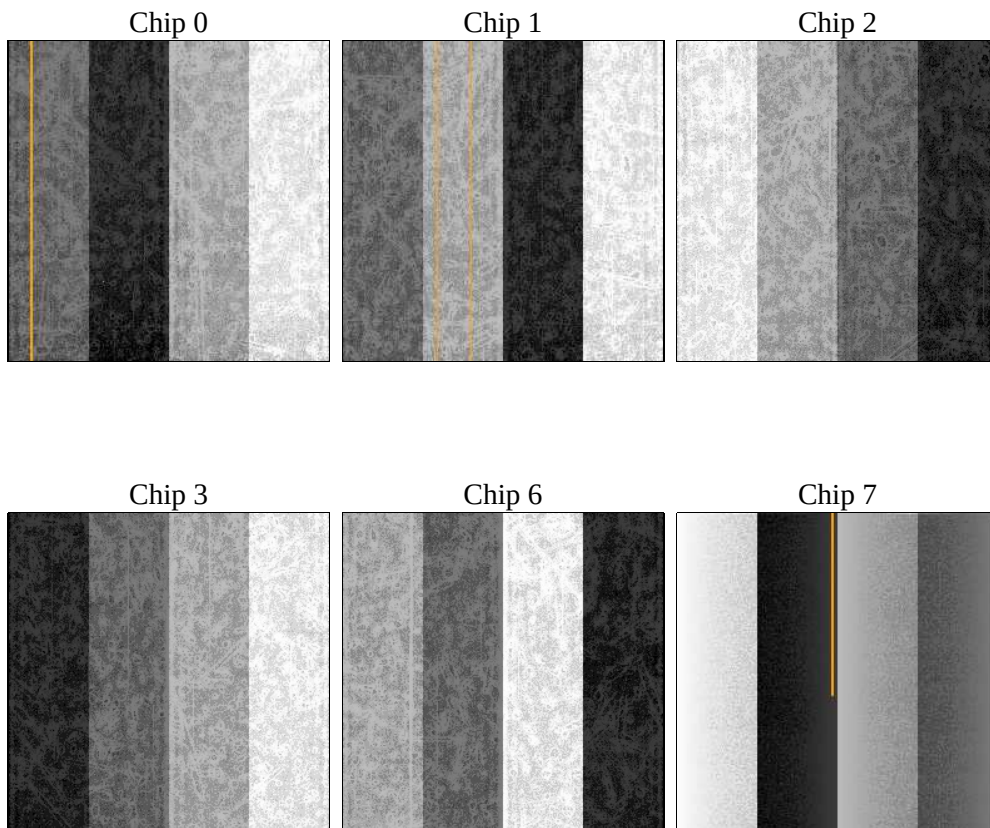
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.1.1	Processing system revision	ontime	24934.400371552	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	24934.400371552	Sum of GTIs [s]
date	2016-08-27T03:58:47	Date and time of file creation	ontime1	24934.400371552	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	24934.400371552	Sum of GTIs [s]
			ontime3	24934.400371552	Sum of GTIs [s]
			ontime6	24934.400371552	Sum of GTIs [s]
			ontime7	24934.400371552	Sum of GTIs [s]
			l1events	1047273	Number of level 1 events

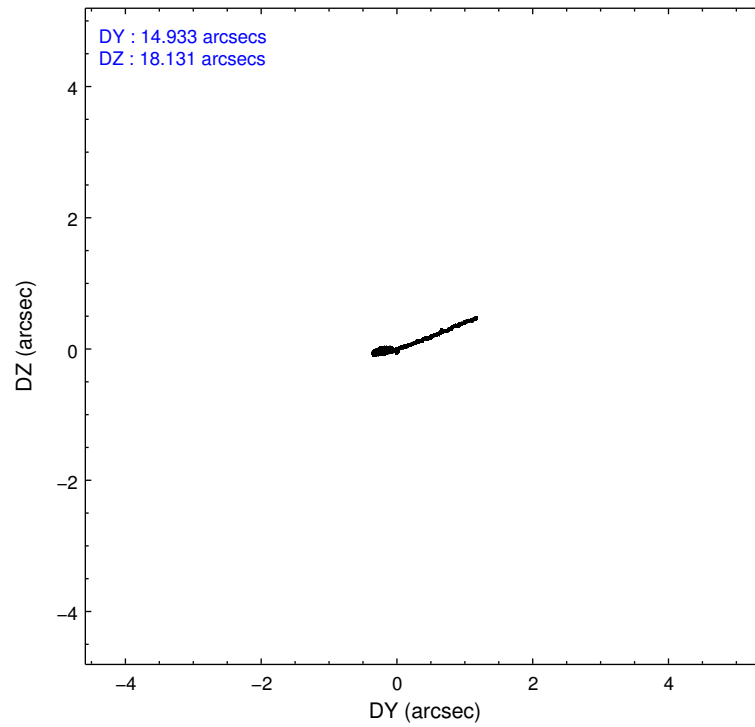
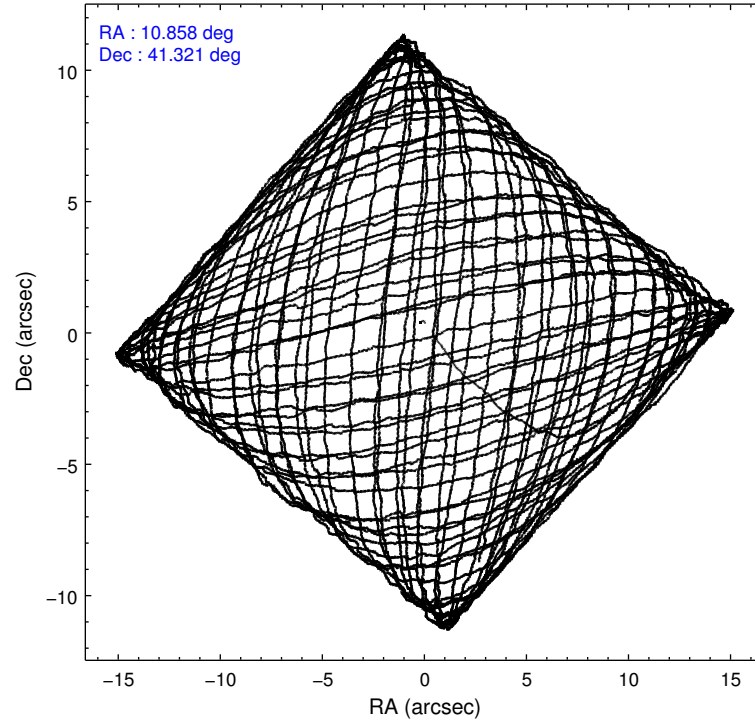
2.1.4 Events

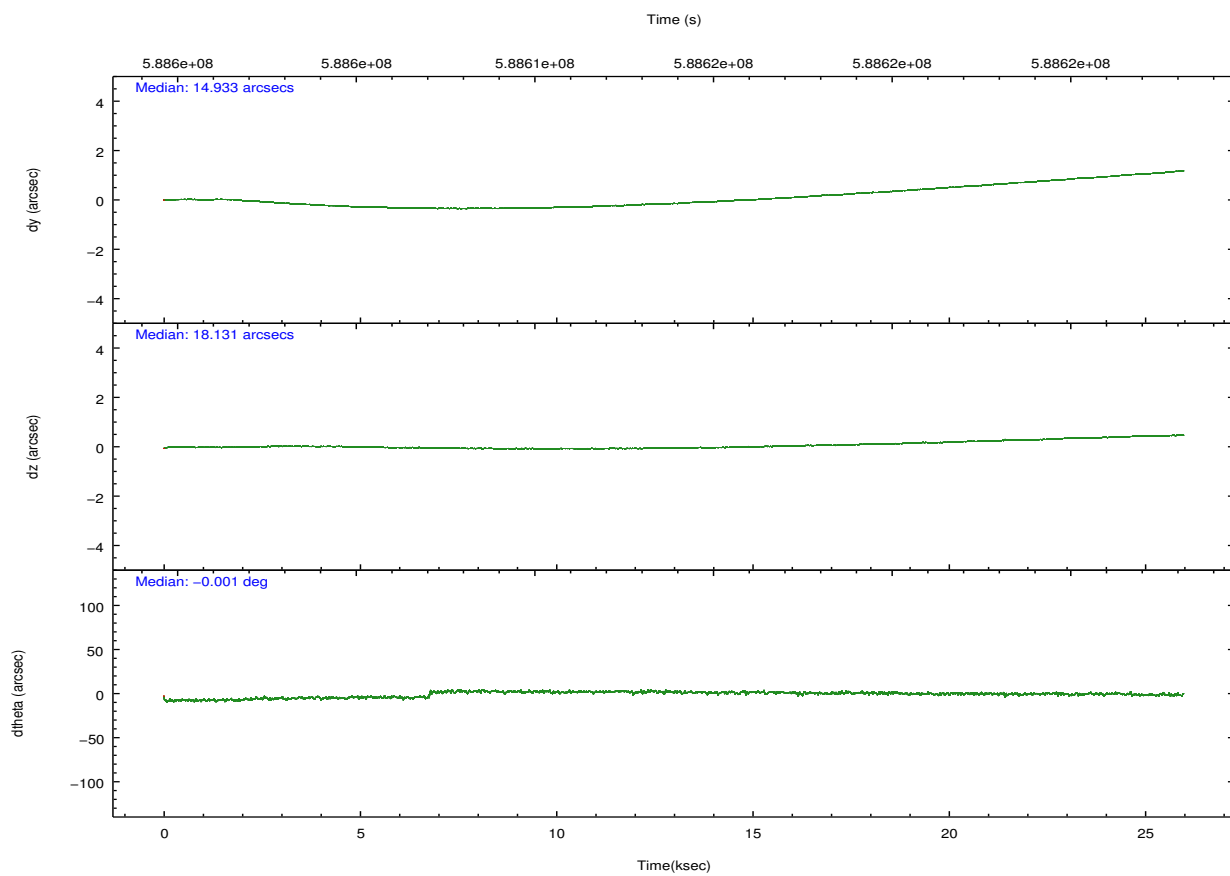
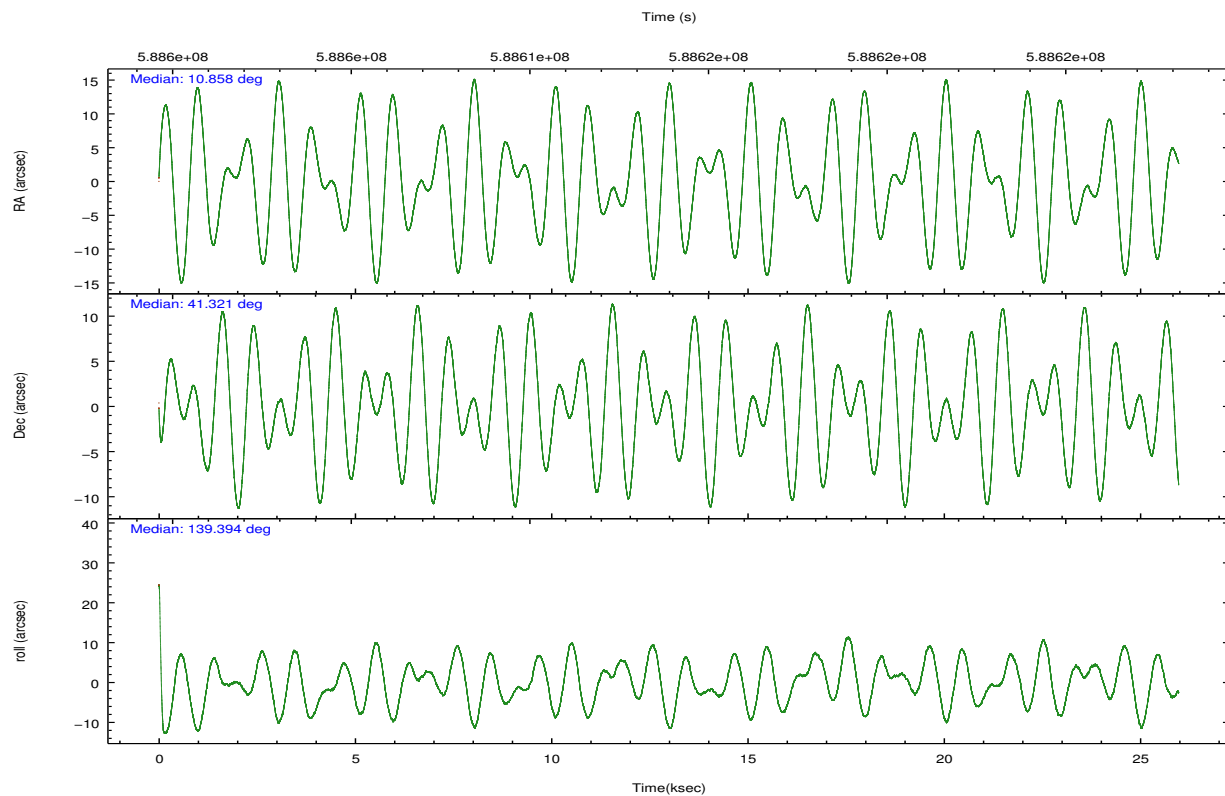
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	152938	156609	179320	166457	179602	212347	grade 0 events	15054	8433	21597	10789	11285	8101
rejected events	125768	134973	142517	143230	154430	119082		9%	5%	12%	6%	6%	3%
rejected %	82%	86%	79%	86%	85%	56%	grade 1 events	136	88	208	163	125	293
								0%	0%	0%	0%	0%	0%
							grade 2 events	4695	4833	6435	4422	5117	19939
								3%	3%	3%	2%	2%	9%
							grade 3 events	1908	1966	2325	2031	2057	7508
								1%	1%	1%	1%	1%	3%
							grade 4 events	1802	1993	2468	2022	2082	7433
								1%	1%	1%	1%	1%	3%
							grade 5 events	6886	7257	6642	7819	8042	21127
								4%	4%	3%	4%	4%	9%
							grade 6 events	3723	4414	3981	3965	4635	50298
								2%	2%	2%	2%	2%	23%
							grade 7 events	118734	127625	135664	135246	146259	97648
								77%	81%	75%	81%	81%	45%

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	10.893707	10.85756909802743	CCD I2 on	Y	Y
[deg] Pointing Dec	41.315755	41.3207436190344	CCD I3 on	Y	Y
[deg] Pointing Roll	139.172877	139.4054393728993	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	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	588601866.184000	588600232.94055	CCD S5 on	N	N
Observation start date	2016-08-26T12:29:58	2016-08-26T12:03:52	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	588626866.184000	588628047.34215	On-chip summing requested	N	N
Observation end date	2016-08-26T19:26:38	2016-08-26T19:47:27	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



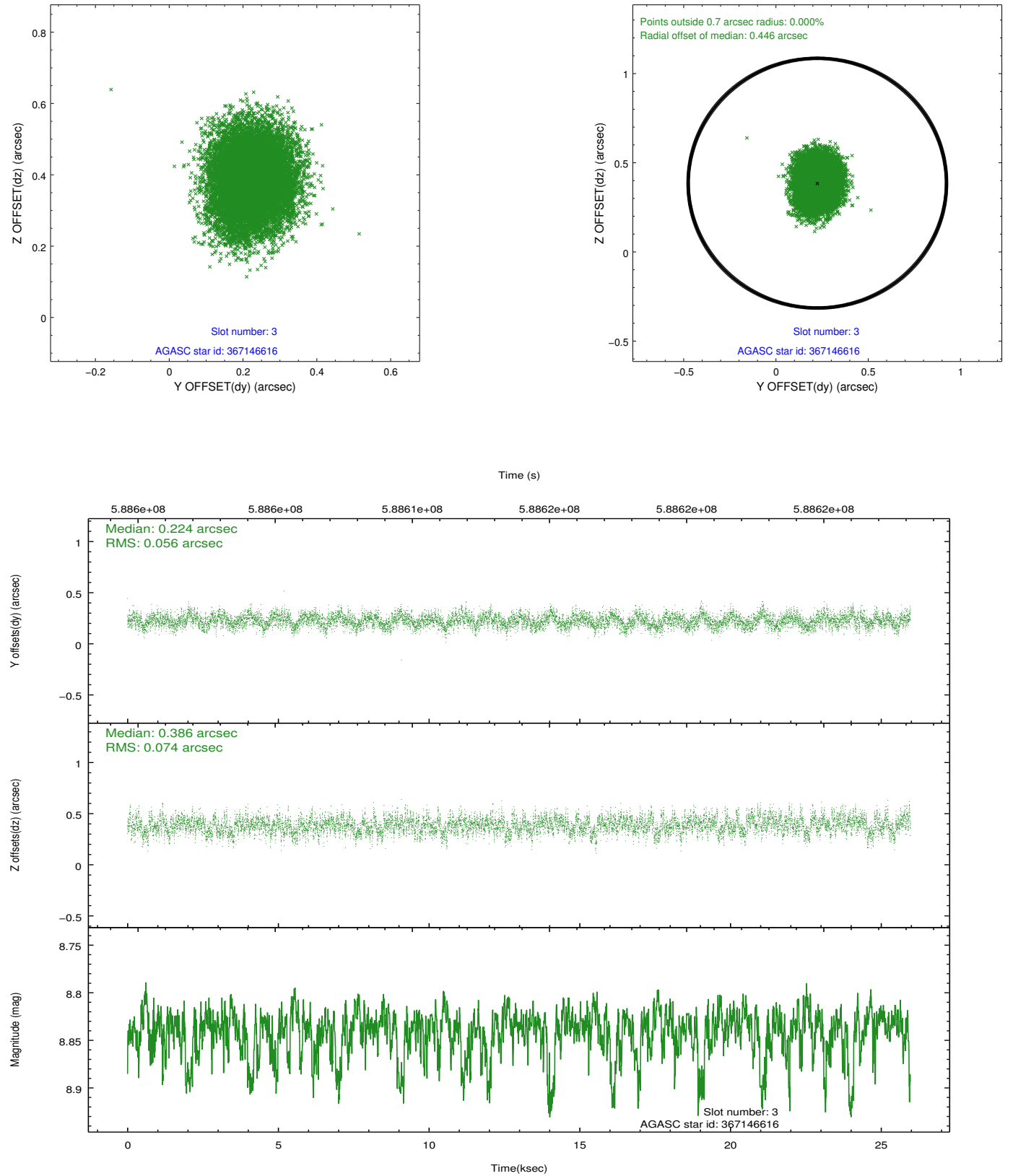


Slot Statistics

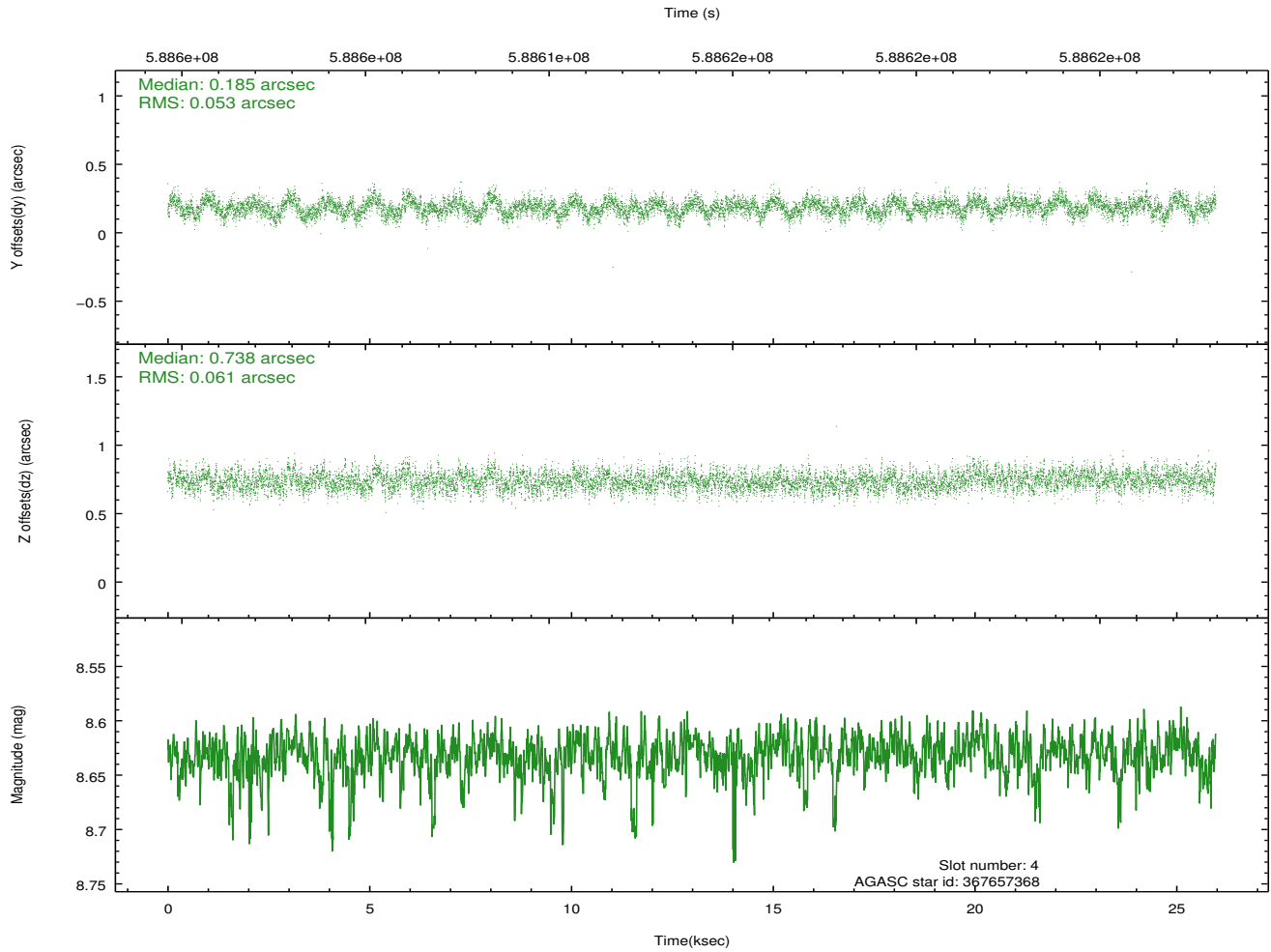
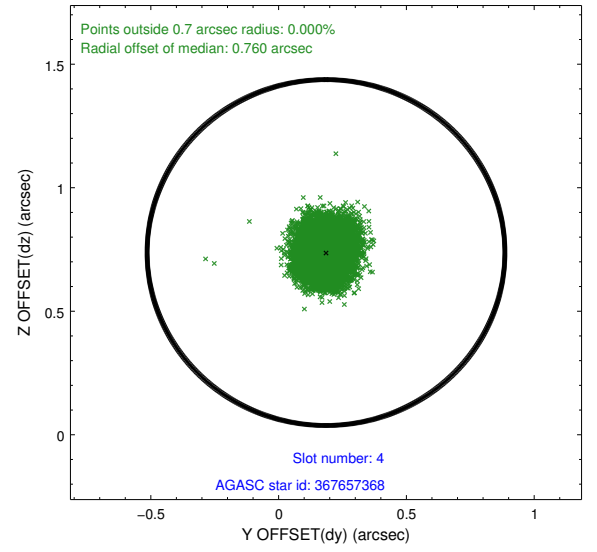
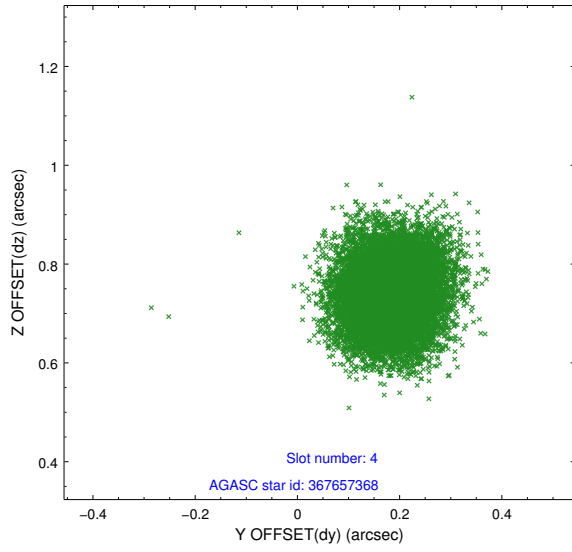
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.14	6336	-0.029	0.020	0.024	0.040	0.000000	0.000000	924.35	-841.88
1	FID		ACIS-I-2	7.04	6335	-0.304	-0.151	0.014	0.027	0.000000	0.000000	-769.95	-848.52
2	FID		ACIS-I-4	7.09	6335	0.233	0.199	0.012	0.036	0.000000	0.000000	2144.48	1058.04
3	GUIDE	used	367146616	8.84	12666	0.224	0.386	0.099	0.163	11.418645	41.190163	-1368.25	-590.26
4	GUIDE	used	367657368	8.63	12667	0.185	0.738	0.086	0.139	11.928227	41.287266	-2173.00	-1763.83
5	GUIDE	used	367674552	8.81	12658	-0.174	0.002	0.111	0.177	11.016238	41.570845	350.67	-910.38
6	GUIDE	used	367148872	7.22	12669	-0.268	-0.819	0.110	0.180	10.505940	40.688258	-675.34	2400.03
7	GUIDE	used	367139648	8.18	12671	0.031	-0.306	0.095	0.172	11.021290	40.433909	-2340.77	2173.41

2.4 Star Slots

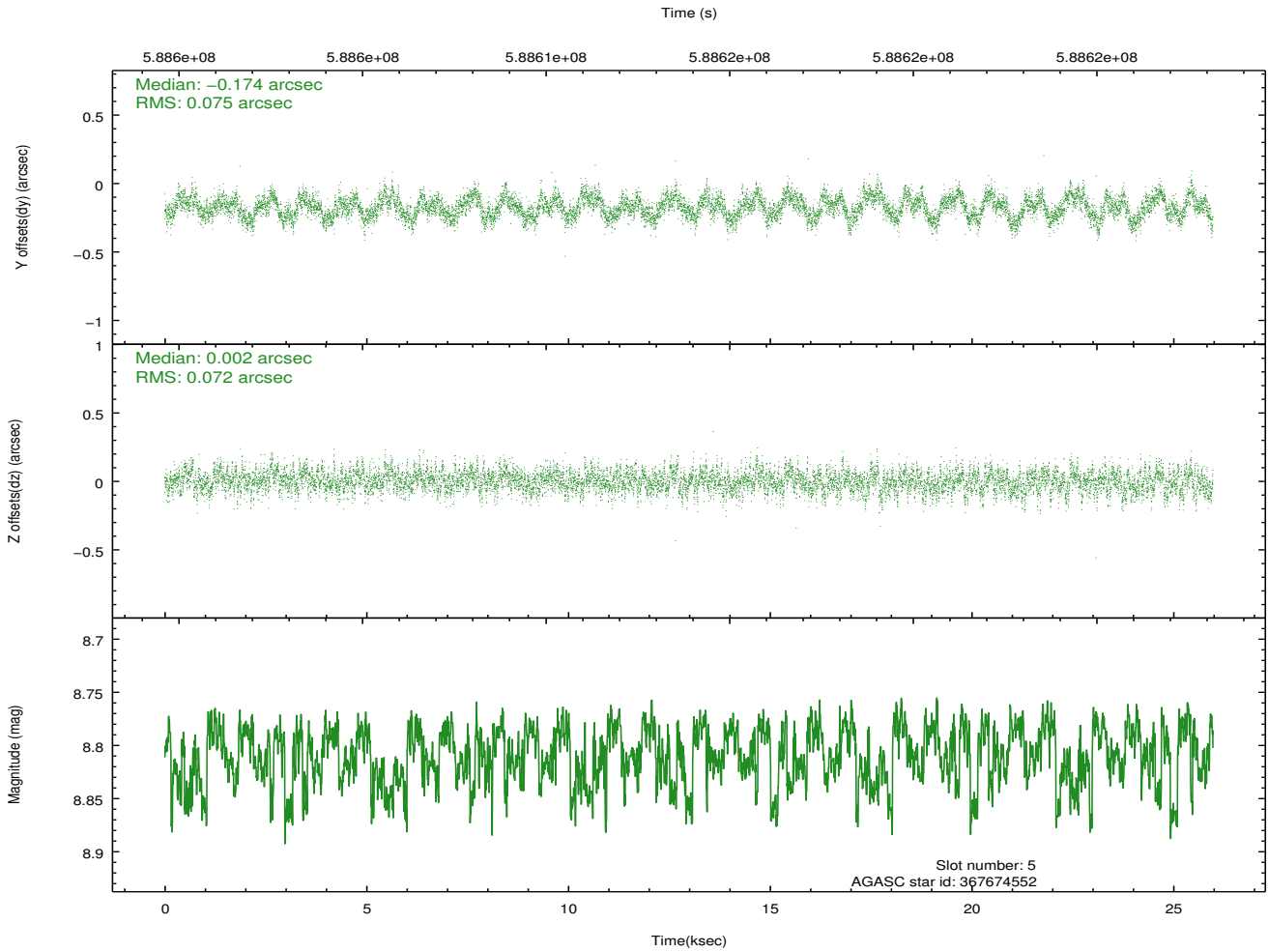
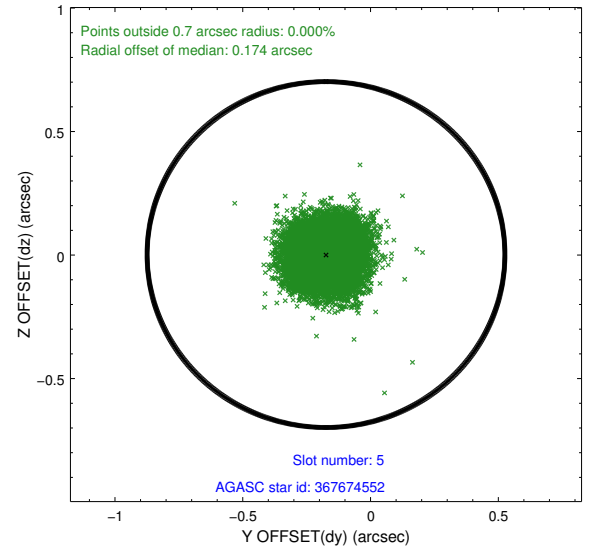
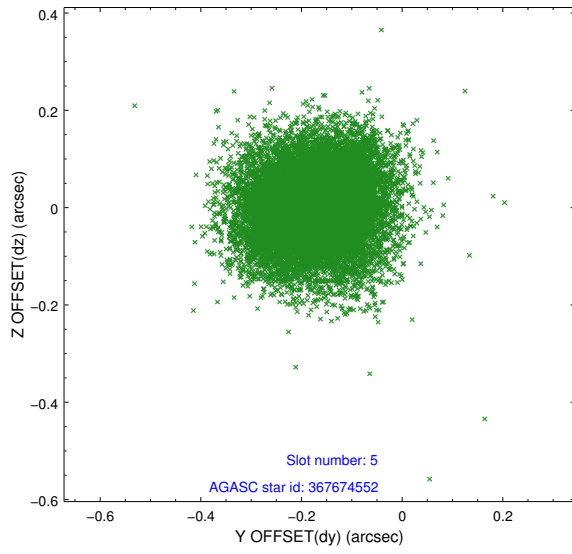
2.4.1 Slot 3



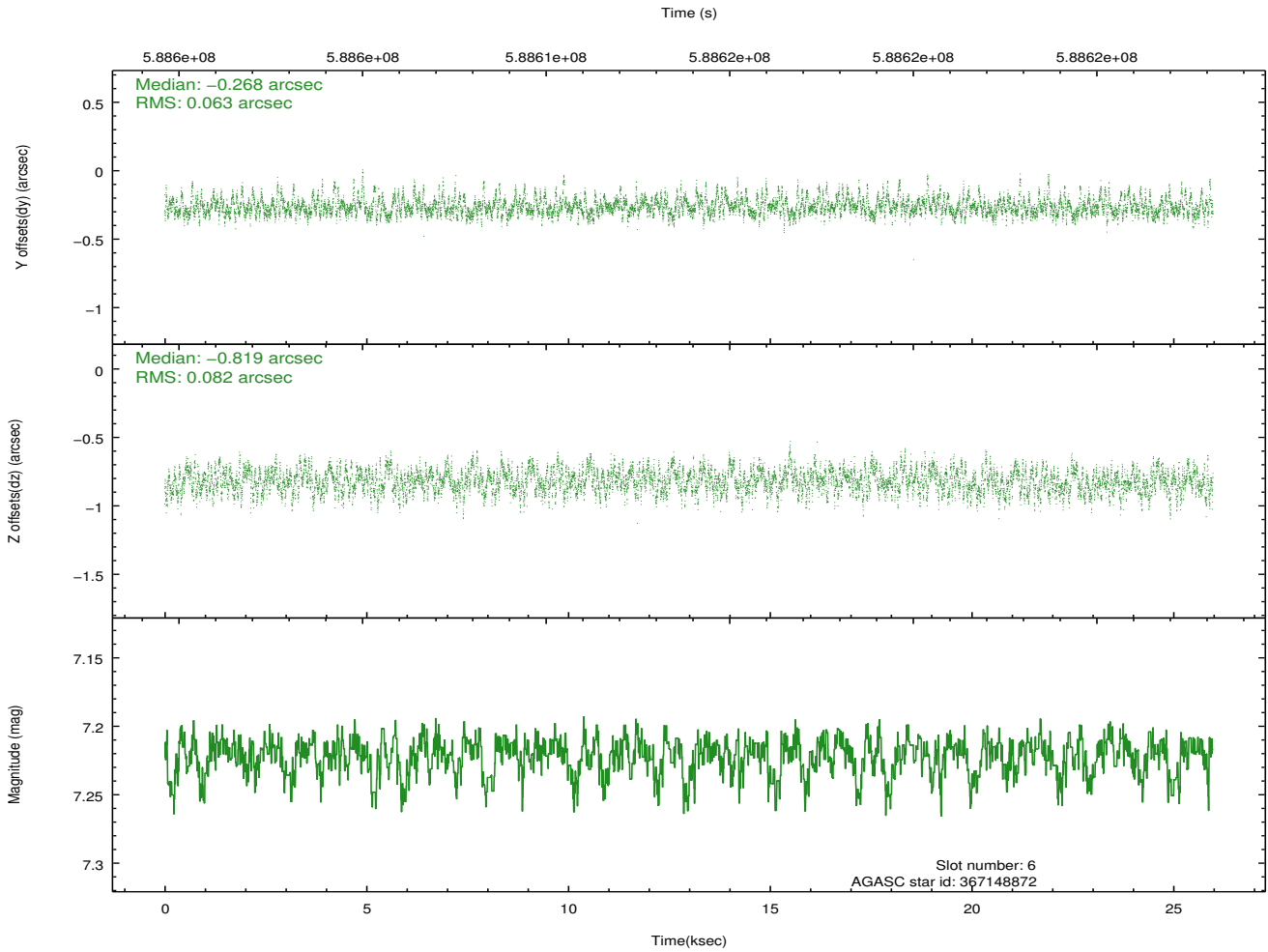
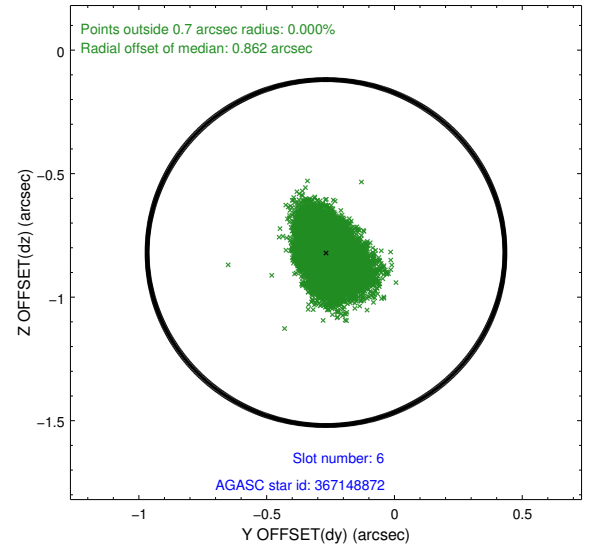
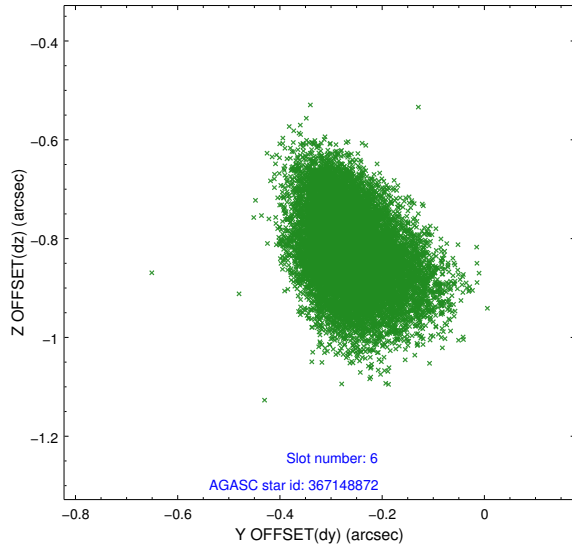
2.4.2 Slot 4



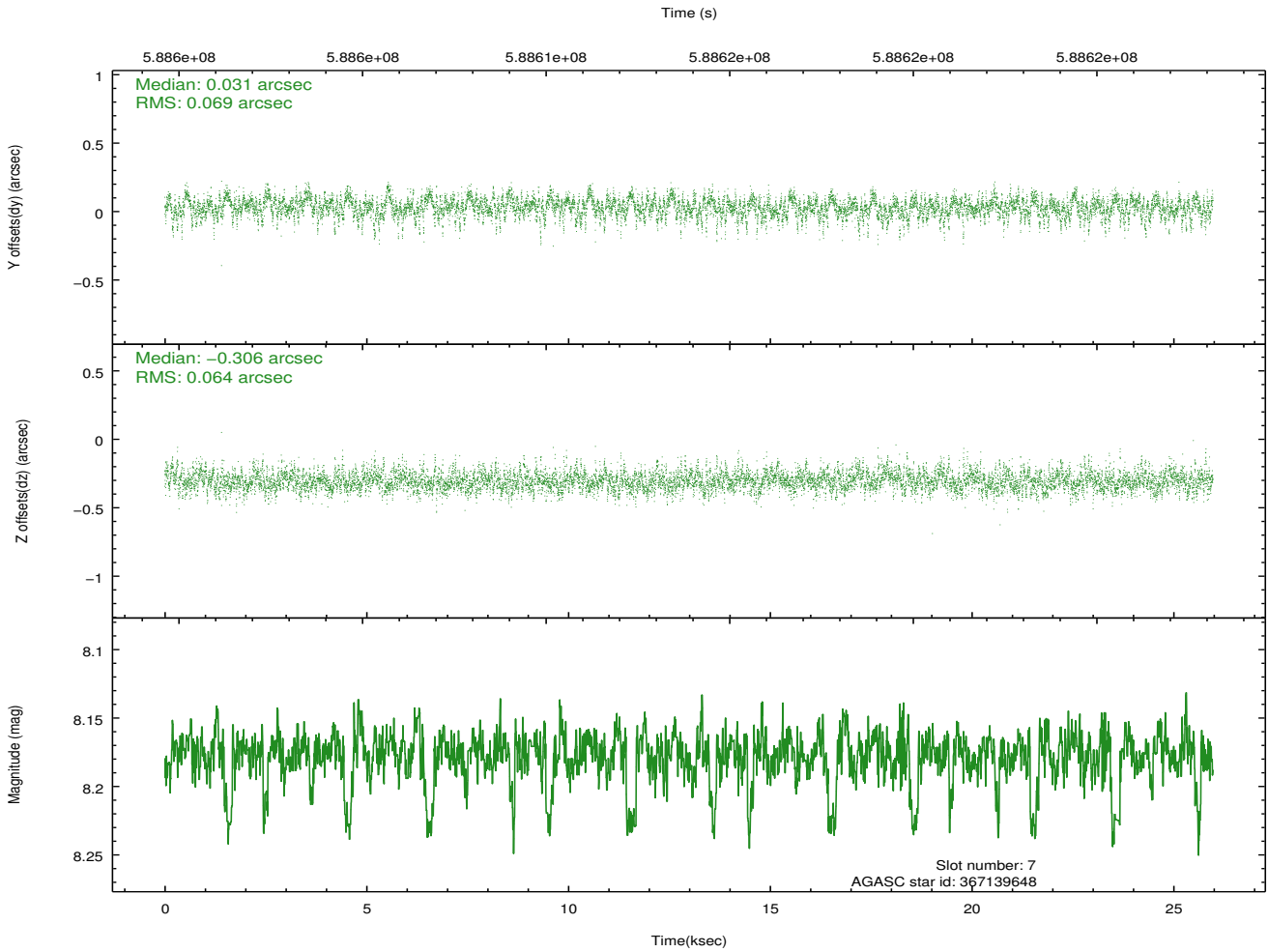
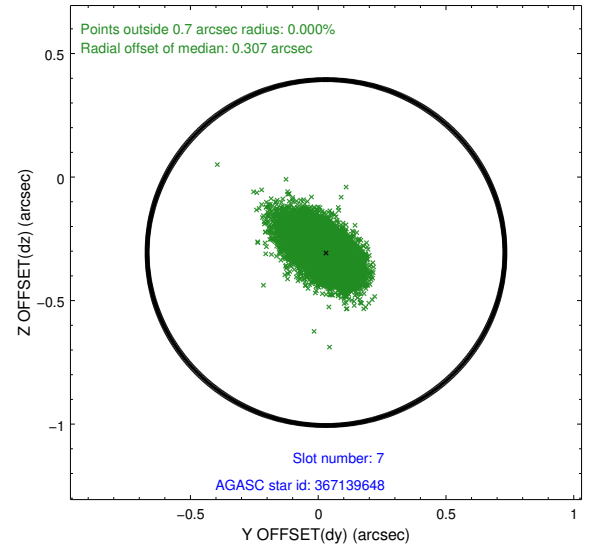
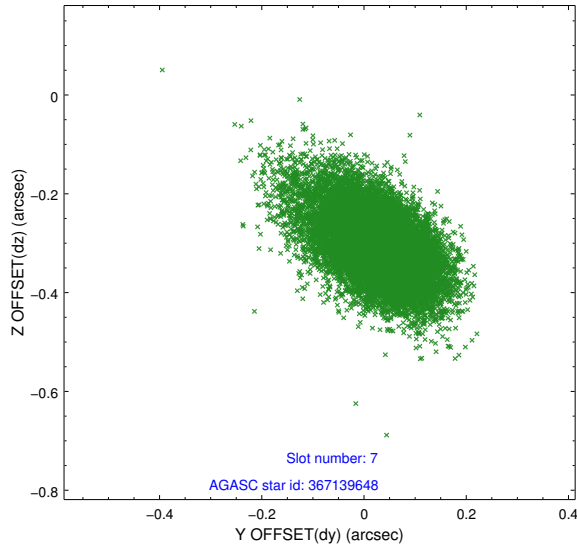
2.4.3 Slot 5



2.4.4 Slot 6

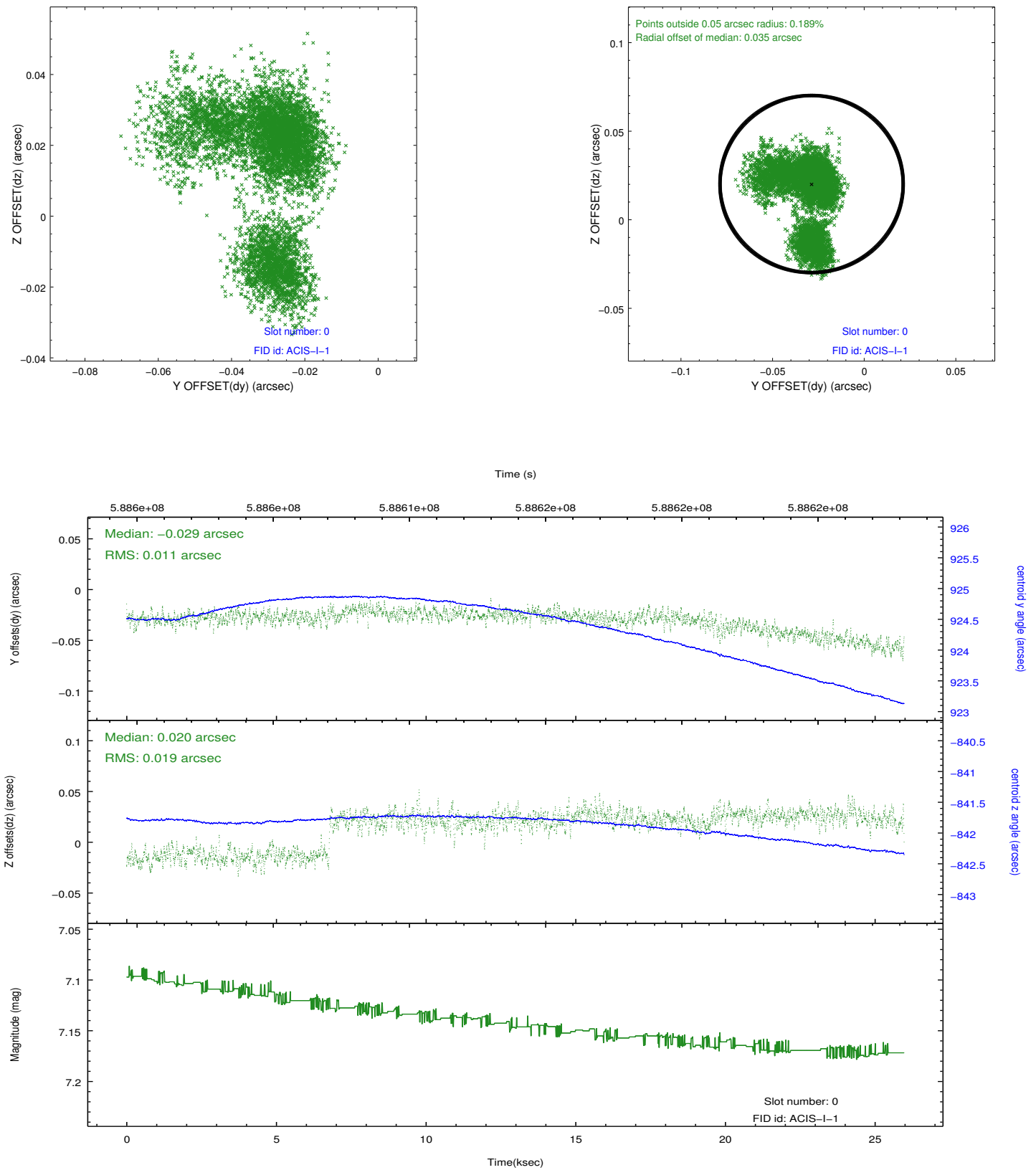


2.4.5 Slot 7

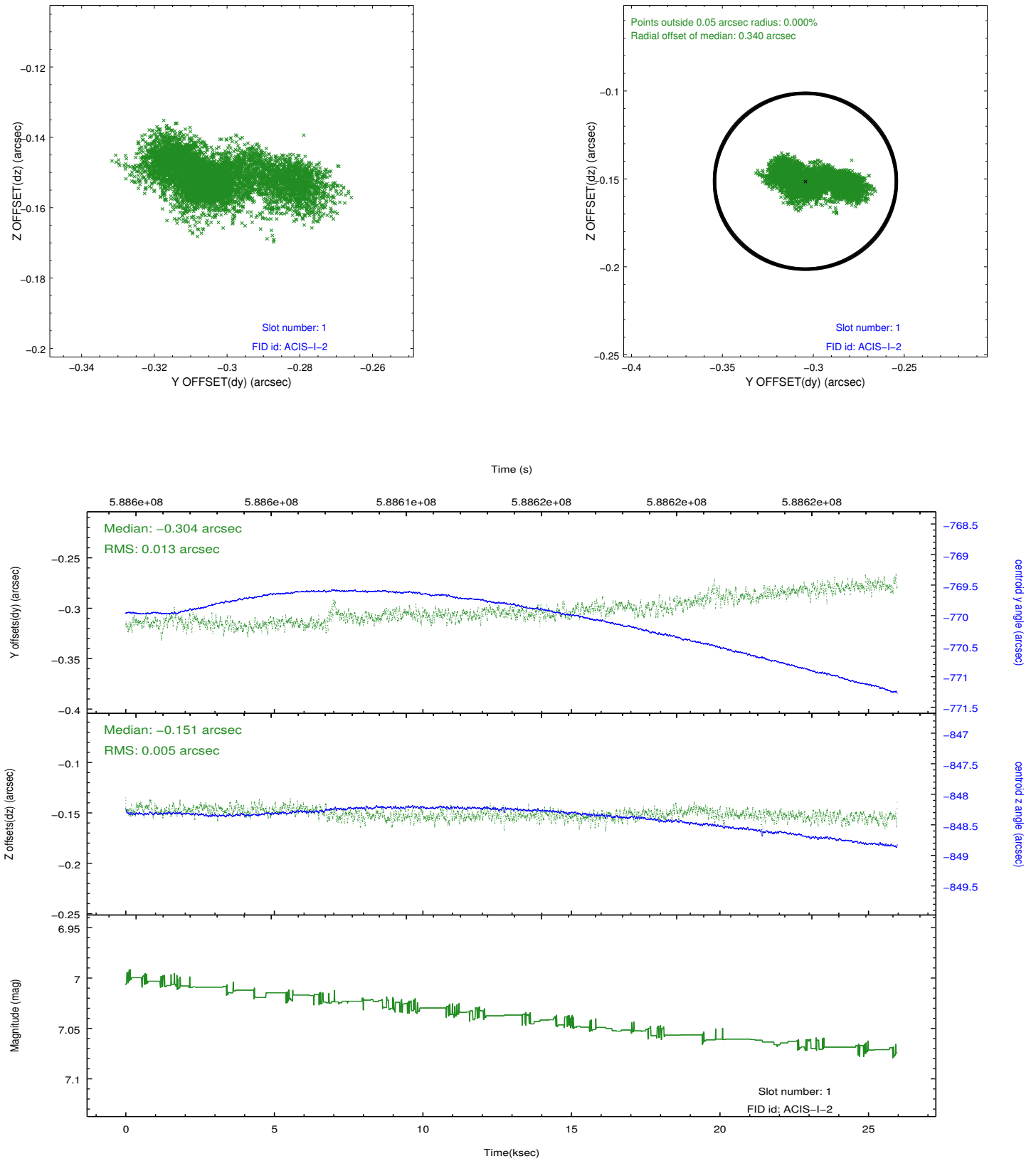


2.5 FID Slots

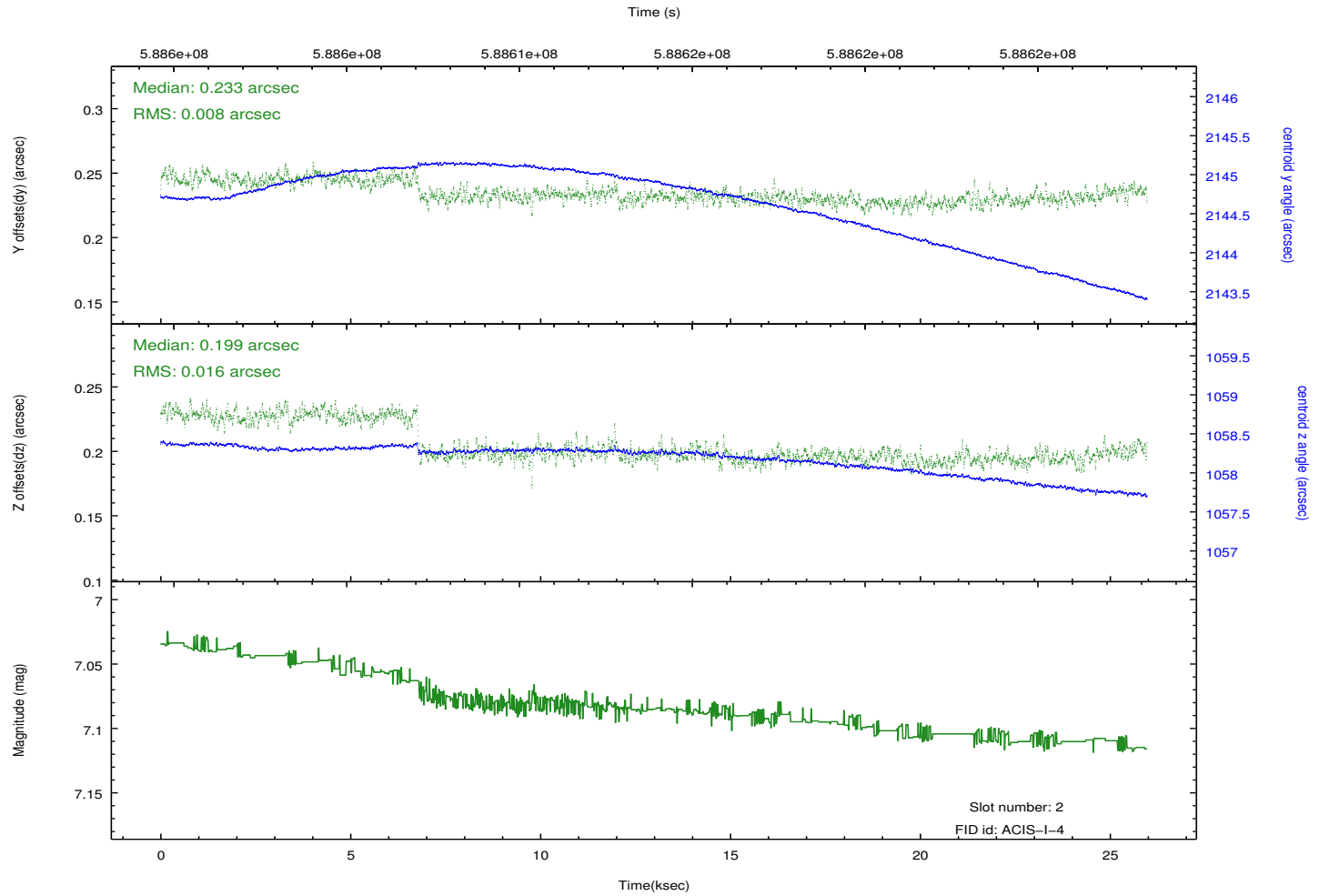
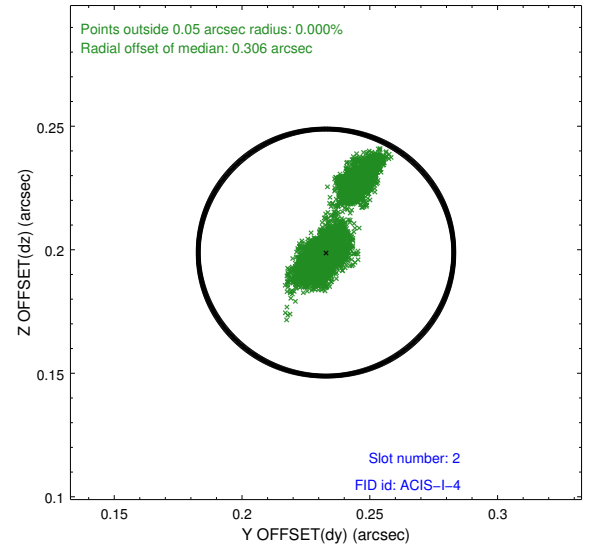
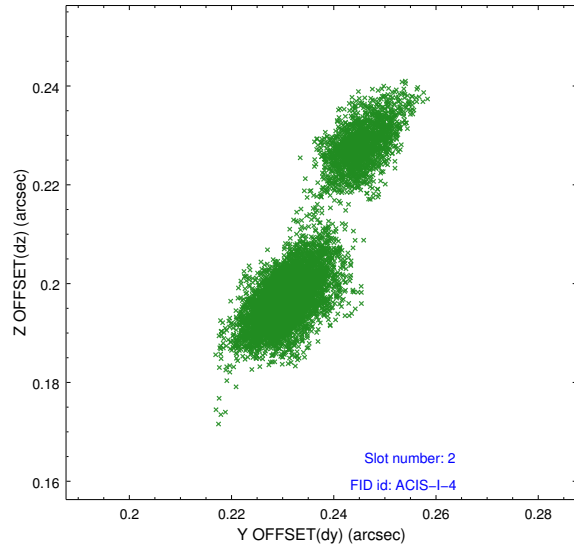
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.08.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.934400371552

A.2 Comments