

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17446 - L2 Version 1
Chandra X-Ray Center

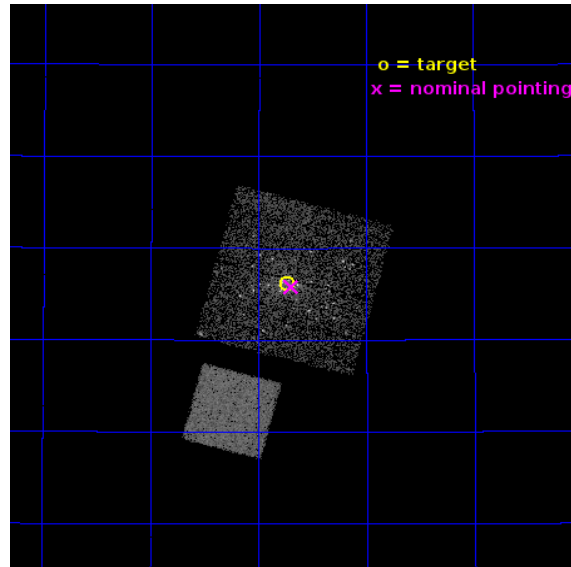
L2 Processing Date : Oct 14 2015

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1 Front

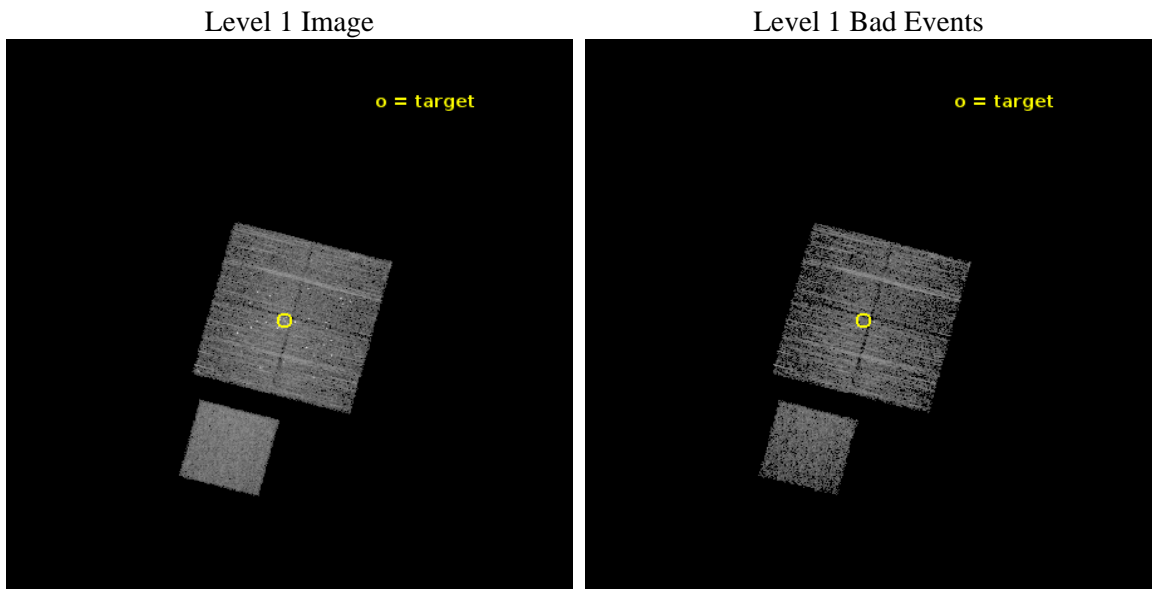
seq_num	401679	Sequence number
obs_id	17446	Observation id
title	Monitoring the central region of M31 for X-ray transients	Proposal
observer	Dr. Stephen Murray	Principal investigator
object	M31 bulge	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.269028	Observer's specified target Dec [deg]
ra_nom	10.674022236756	Nominal RA [deg]
dec_nom	41.263385510834	Nominal Dec [deg]
roll_nom	194.89779796576	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5062.300039053	Sum of GTIs [s]
livetime	4996.1573622317	Livetime [s]
ontime0	5062.300039053	Sum of GTIs [s]
ontime1	5062.300039053	Sum of GTIs [s]
ontime2	5062.300039053	Sum of GTIs [s]
ontime3	5062.300039053	Sum of GTIs [s]
ontime7	5062.300039053	Sum of GTIs [s]
l2events	35903	Number of level 2 events



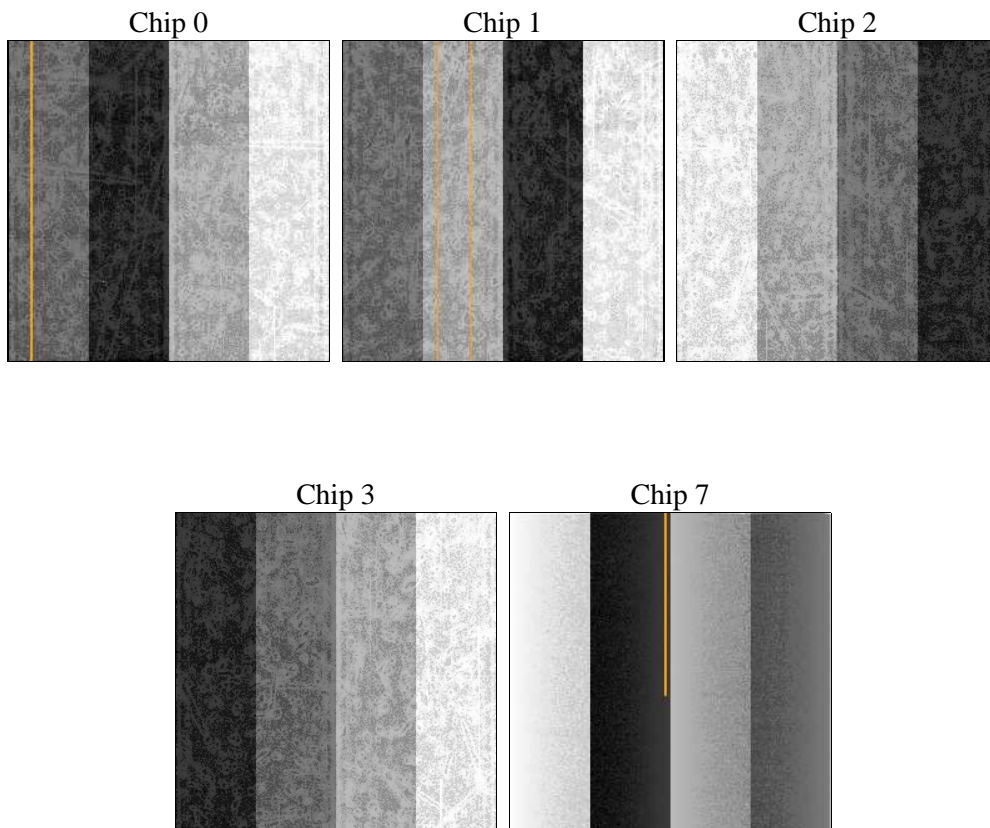
2 OBI

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	10.4.2.1	Processing system revision	ontime	5062.300039053	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	5062.300039053	Sum of GTIs [s]
date	2015-10-15T01:33:55	Date and time of file creation	ontime1	5062.300039053	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5062.300039053	Sum of GTIs [s]
			ontime3	5062.300039053	Sum of GTIs [s]
			ontime7	5062.300039053	Sum of GTIs [s]
			l1events	150968	Number of level 1 events

2.1.4 Events

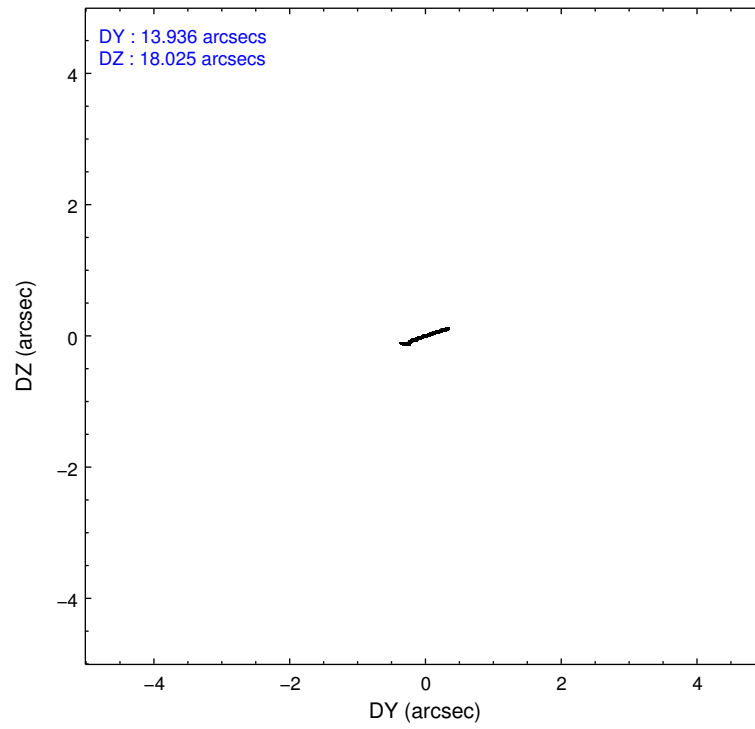
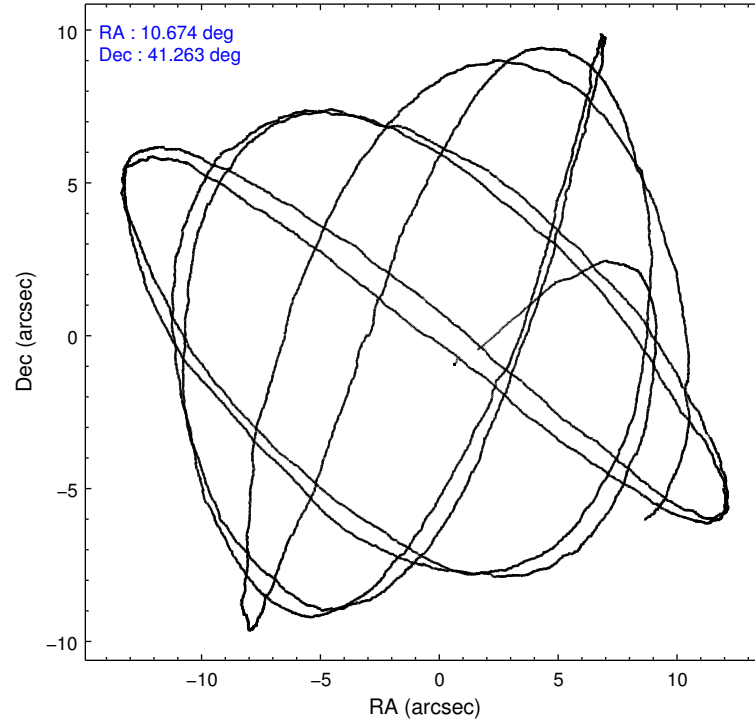
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	25825	26879	30760	31390	36114
rejected events	21244	21700	24393	23942	20745
rejected %	82%	80%	79%	76%	57%

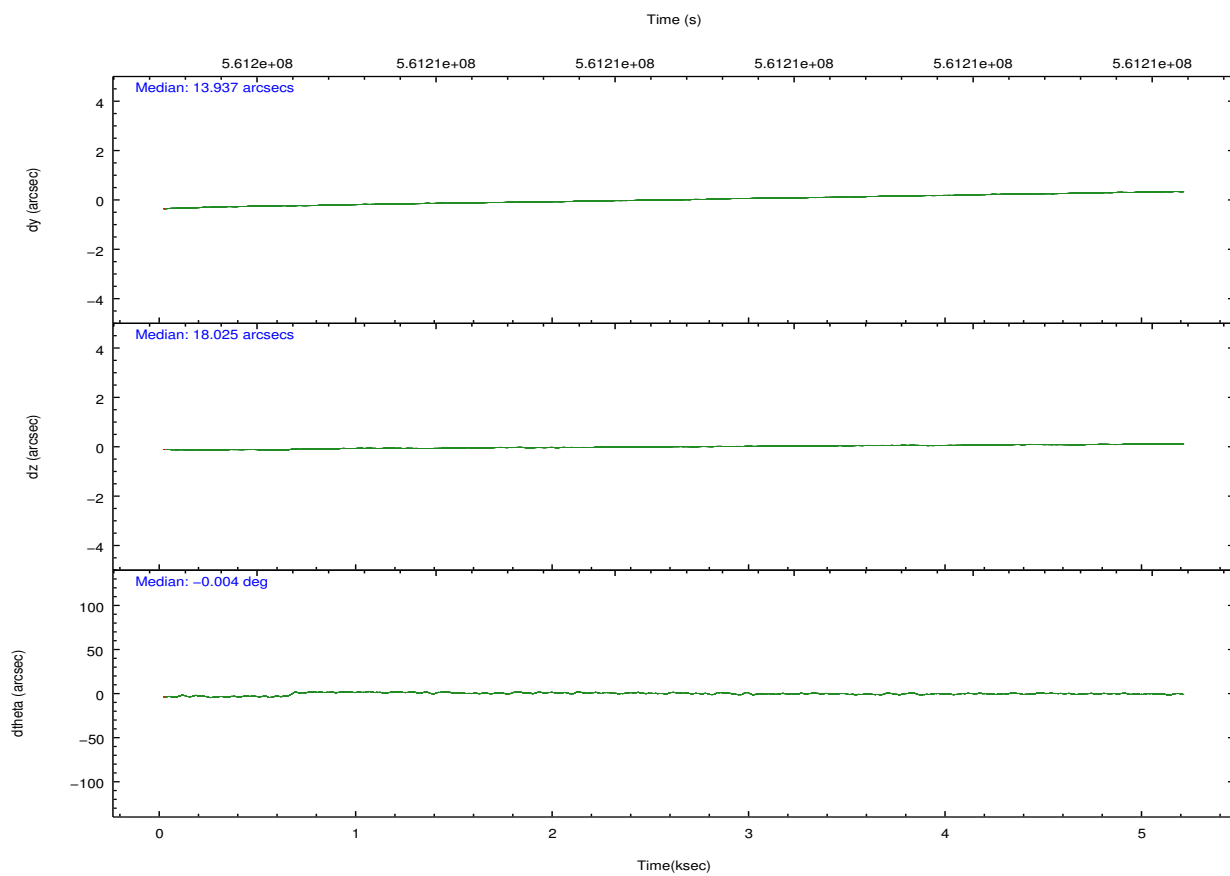
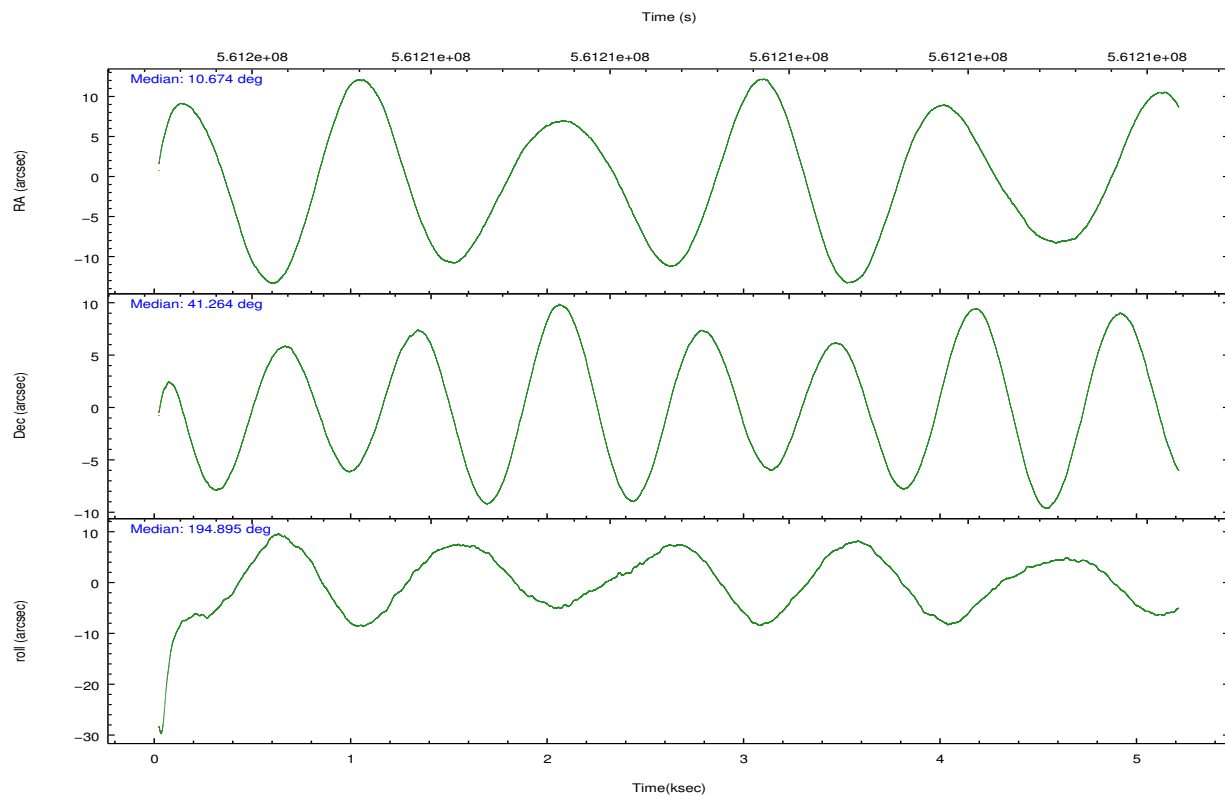
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	2257	2545	3604	4586	1281
	8%	9%	11%	14%	3%
grade 1 events	27	28	147	76	41
	0%	0%	0%	0%	0%
grade 2 events	991	1135	1183	1124	3182
	3%	4%	3%	3%	8%
grade 3 events	355	385	433	480	1242
	1%	1%	1%	1%	3%
grade 4 events	346	341	437	479	1270
	1%	1%	1%	1%	3%
grade 5 events	1185	1304	1213	1439	3593
	4%	4%	3%	4%	9%
grade 6 events	637	783	717	786	8420
	2%	2%	2%	2%	23%
grade 7 events	20027	20358	23026	22420	17085
	77%	75%	74%	71%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	10.699853	10.6740222367564	CCD I2 on	Y	Y
[deg] Pointing Dec	41.282986	41.26338551083386	CCD I3 on	Y	Y
[deg] Pointing Roll	194.672144	194.8977979657589	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	N	N
[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)	561204950.184000	561203992.49278	CCD S5 on	N	N
Observation start date	2015-10-14T10:14:42	2015-10-14T09:59:52	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	561209950.184000	561211267.94319	On-chip summing requested	N	N
Observation end date	2015-10-14T11:38:02	2015-10-14T12:01:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



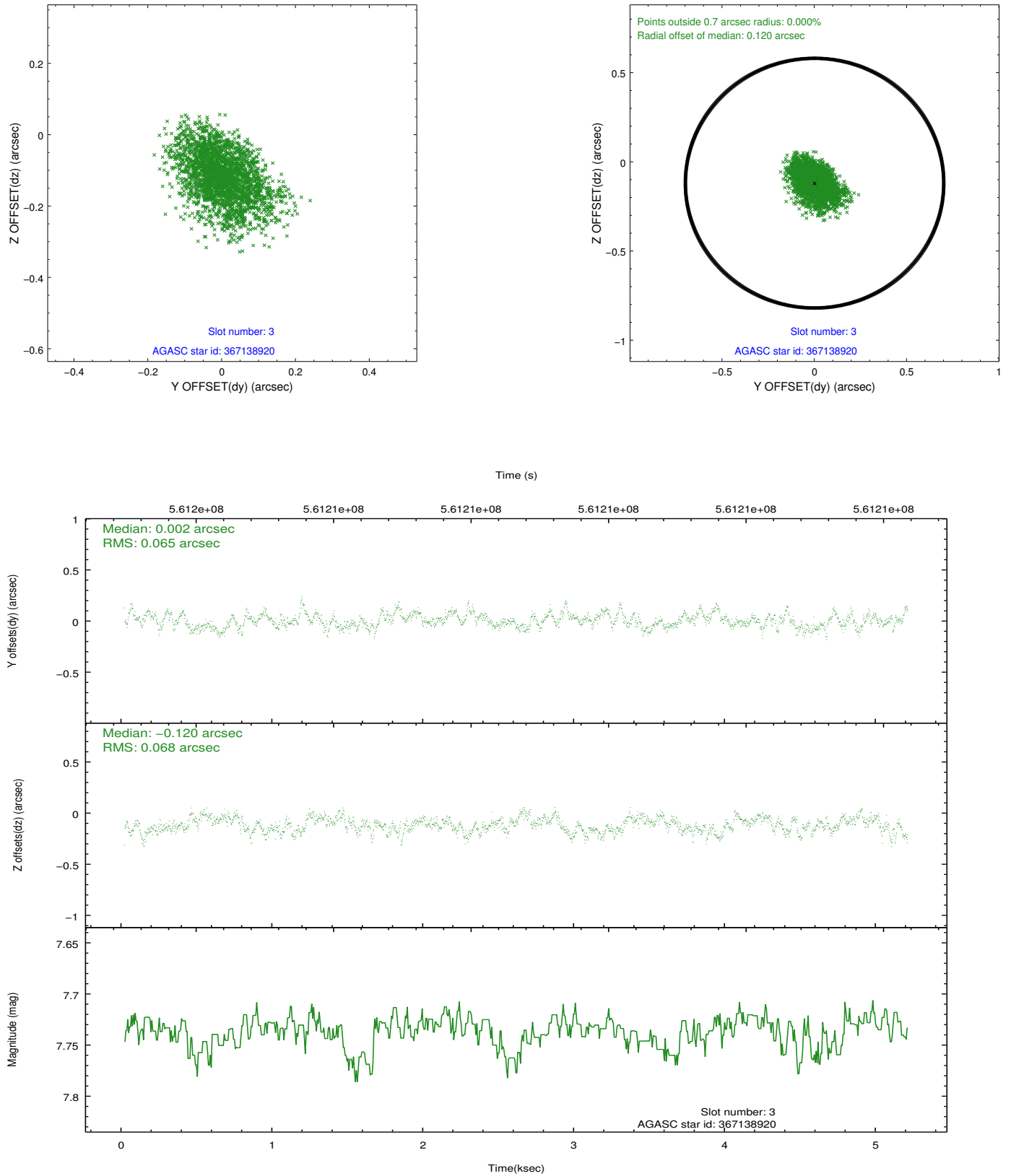


Slot Statistics

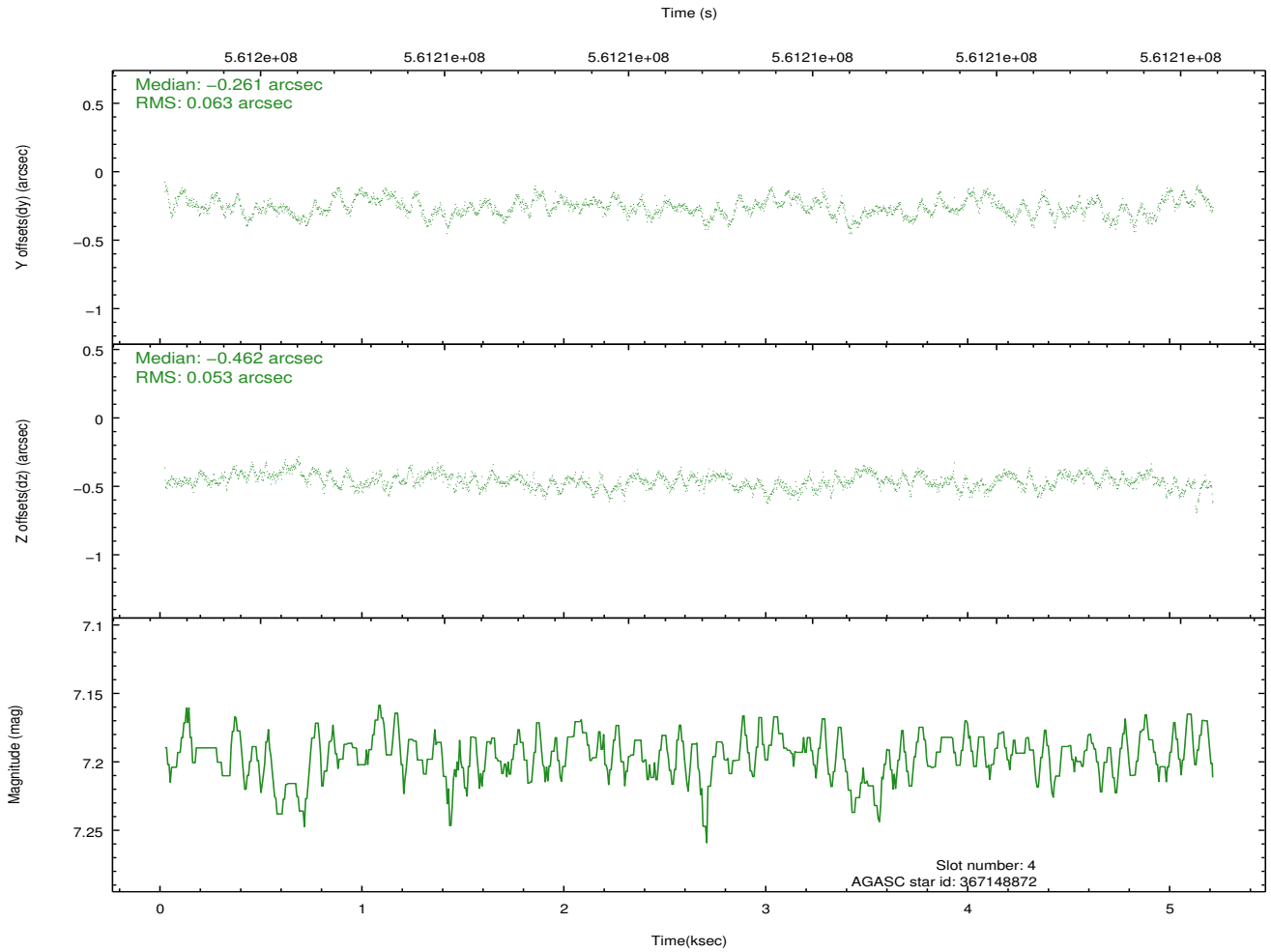
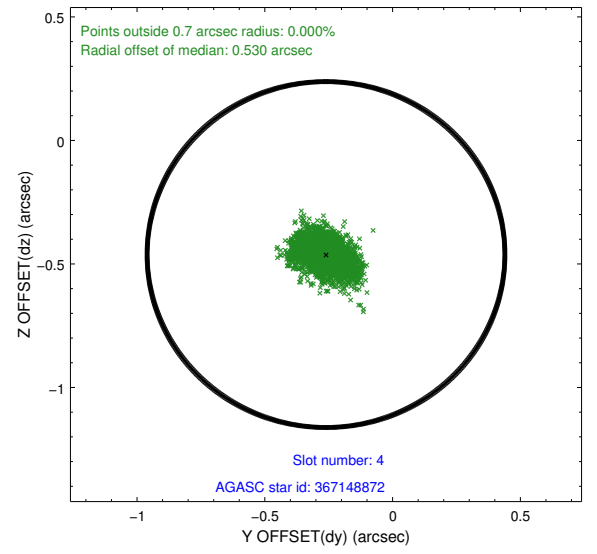
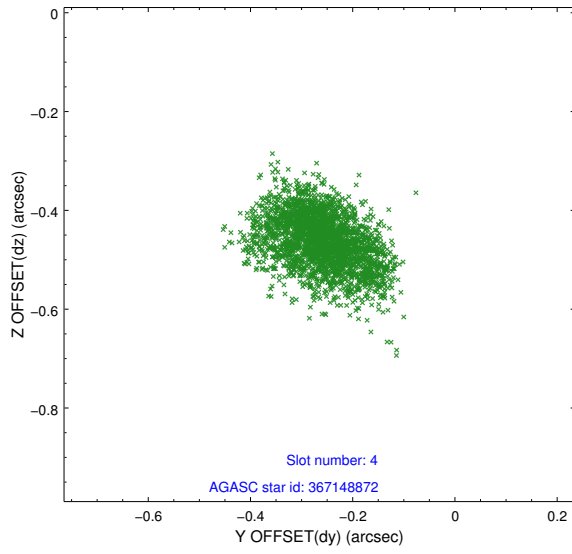
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	1267	-0.027	-0.042	0.013	0.071	0.000000	0.000000	925.54	-841.73
1	FID		ACIS-I-4	7.20	1267	0.375	0.066	0.010	0.051	0.000000	0.000000	2146.58	1057.65
2	FID		ACIS-I-5	7.25	1267	-0.446	0.047	0.010	0.022	0.000000	0.000000	-1821.44	1056.69
3	GUIDE	used	367138920	7.74	2530	0.002	-0.120	0.101	0.165	11.513485	40.808909	-1716.00	2203.73
4	GUIDE	used	367148872	7.19	2533	-0.261	-0.462	0.088	0.142	10.505940	40.688258	1054.00	1938.05
5	GUIDE	used	367657896	8.99	2532	-0.020	0.099	0.110	0.193	11.197765	41.313576	-1330.57	231.64
6	GUIDE	used	367663272	9.27	2532	0.149	0.156	0.111	0.183	10.656279	41.699429	-264.99	-1479.41
7	GUIDE	used	367674552	8.83	2530	0.123	0.323	0.119	0.185	11.016238	41.570845	-1086.95	-788.21

2.4 Star Slots

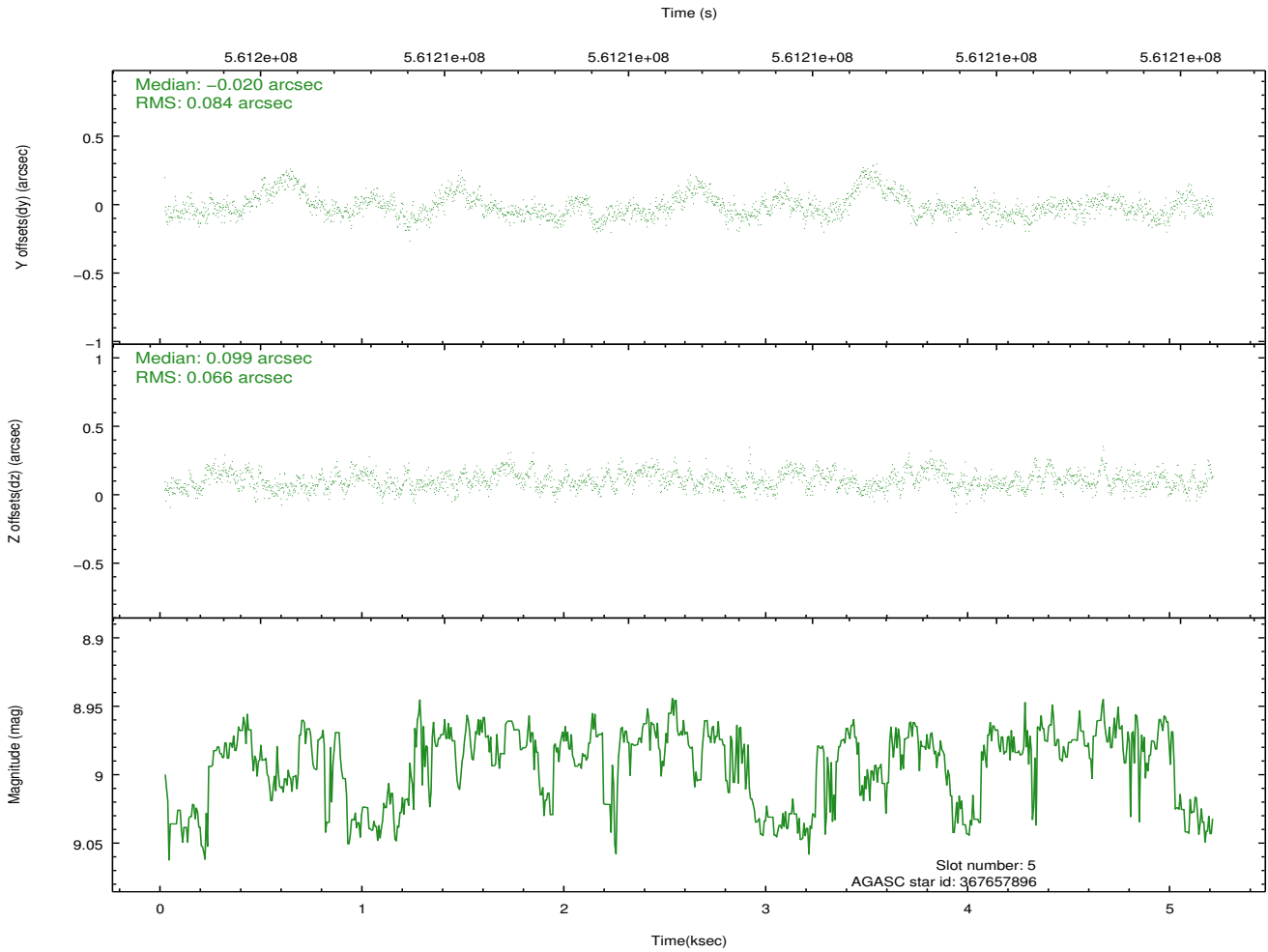
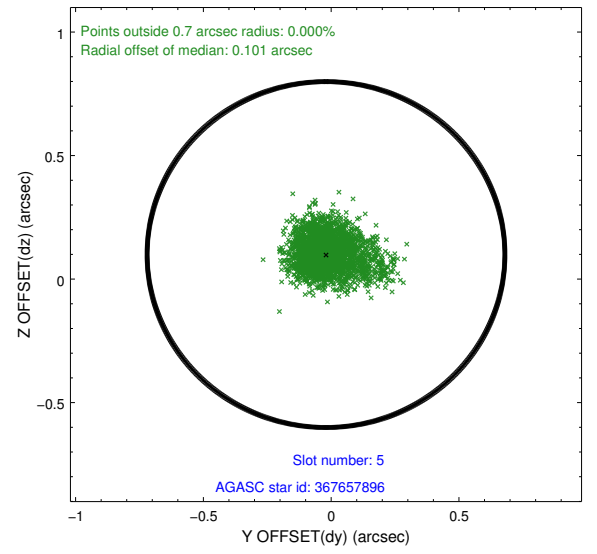
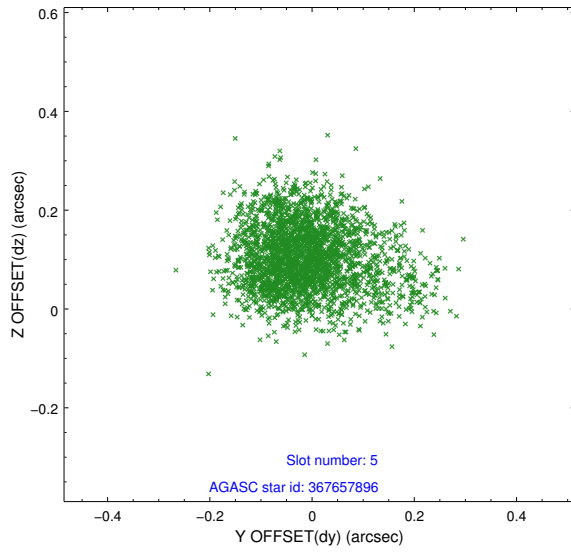
2.4.1 Slot 3



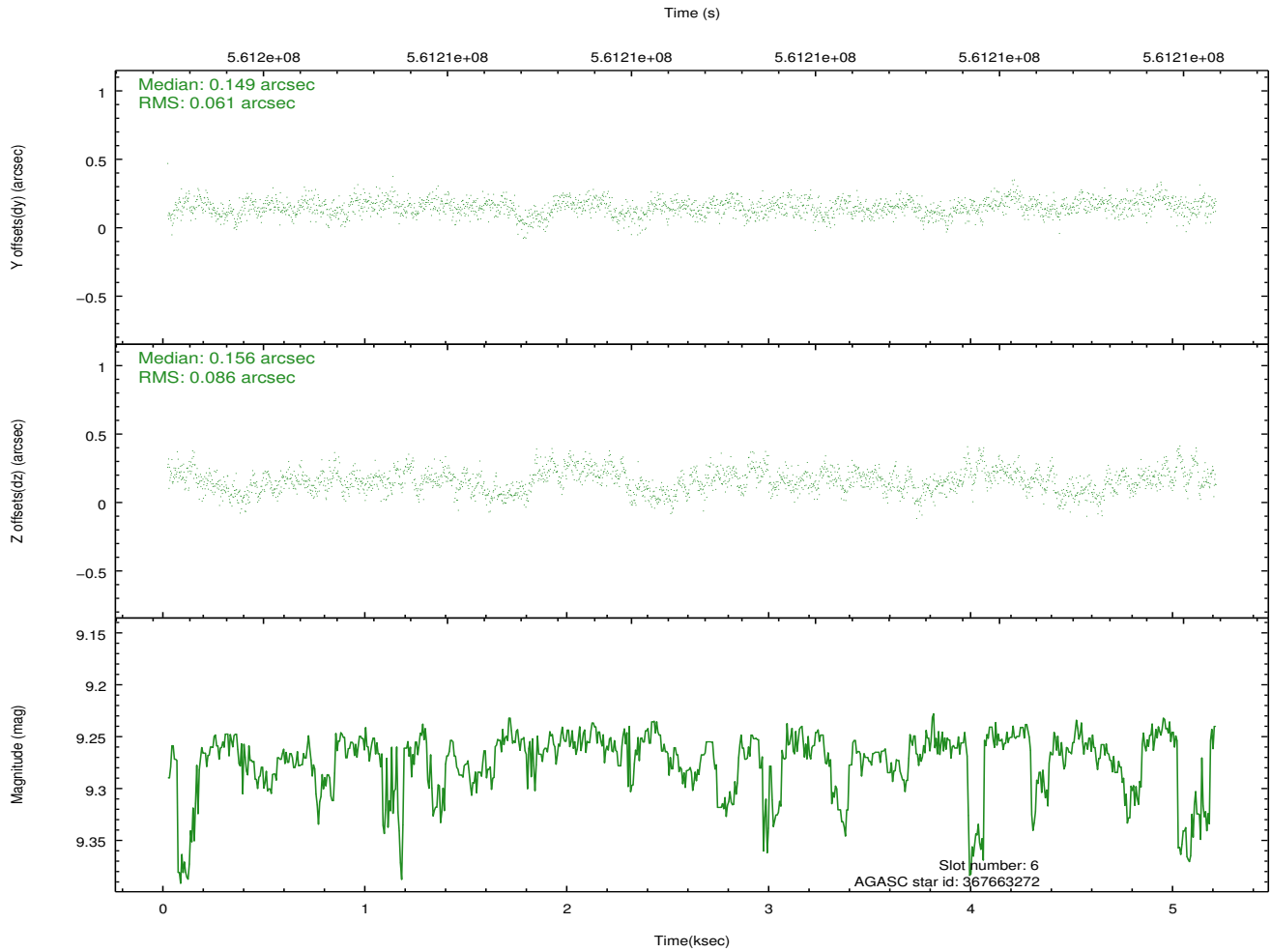
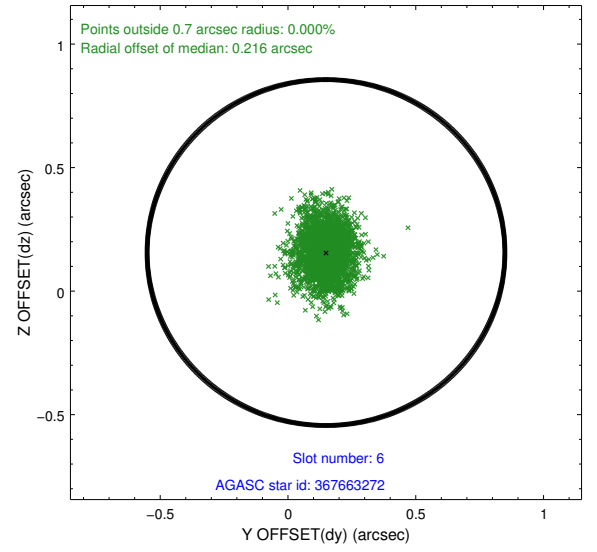
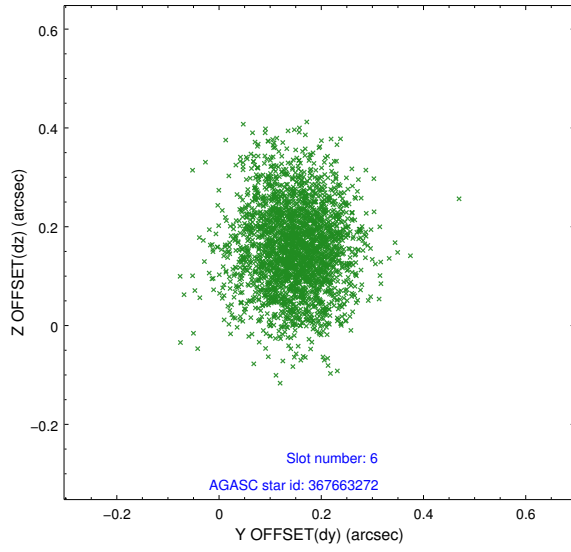
2.4.2 Slot 4



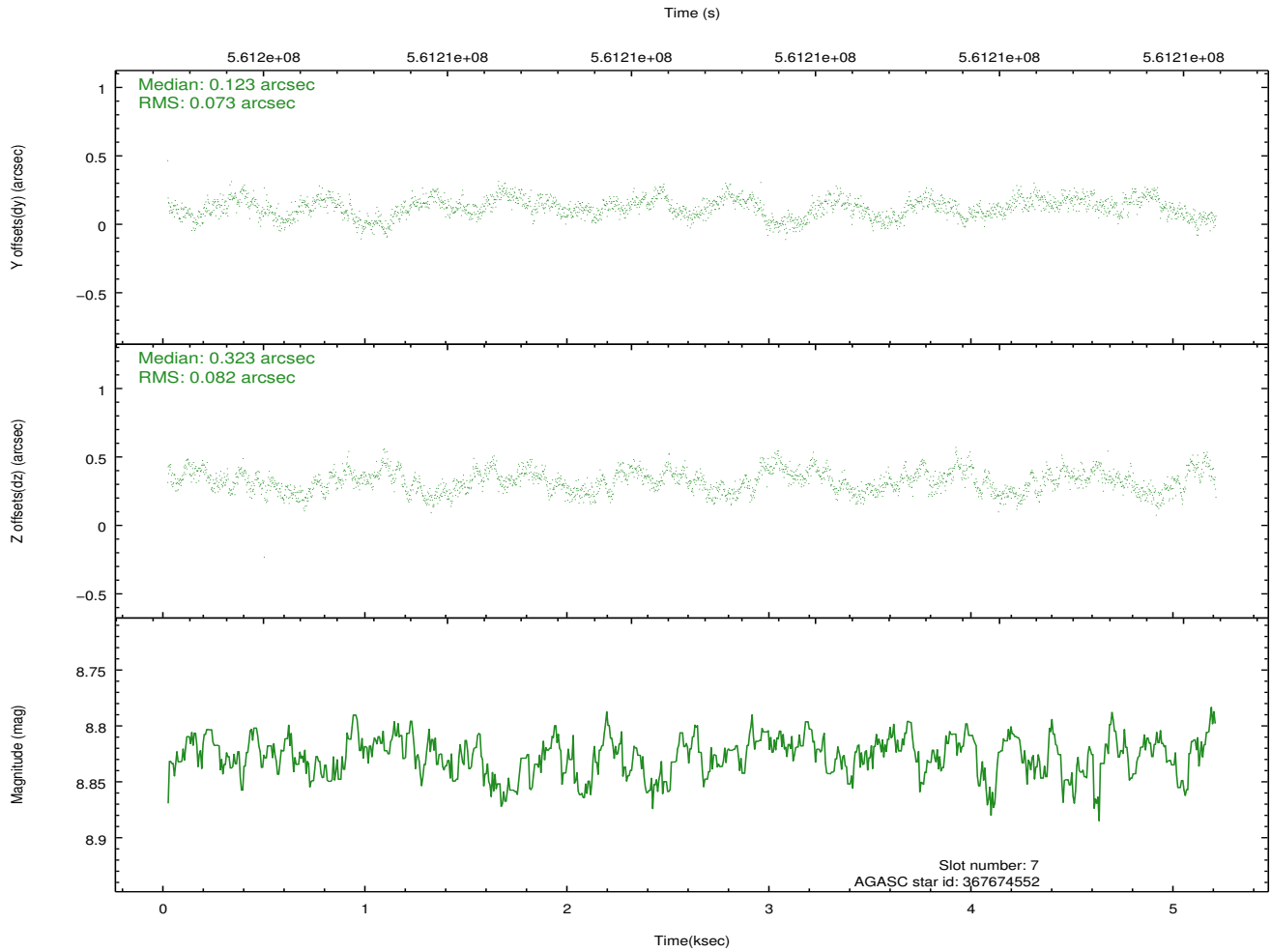
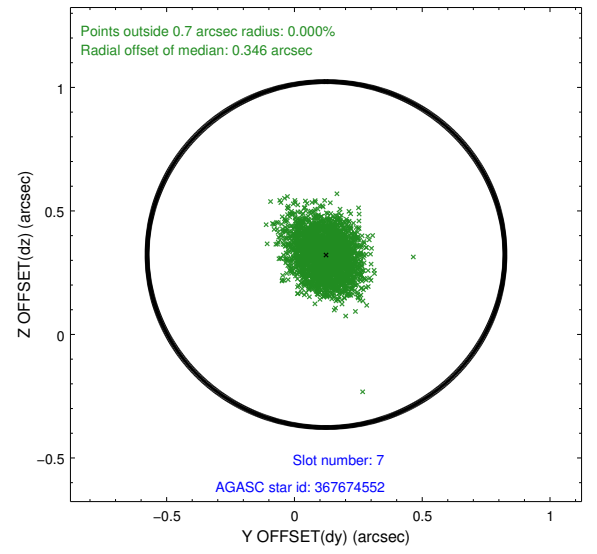
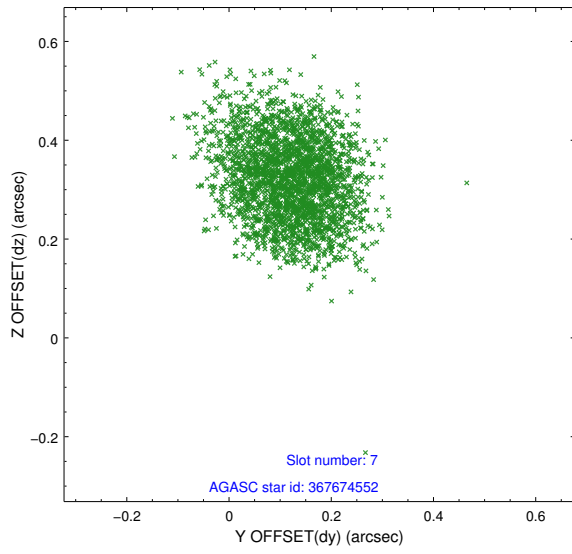
2.4.3 Slot 5



2.4.4 Slot 6

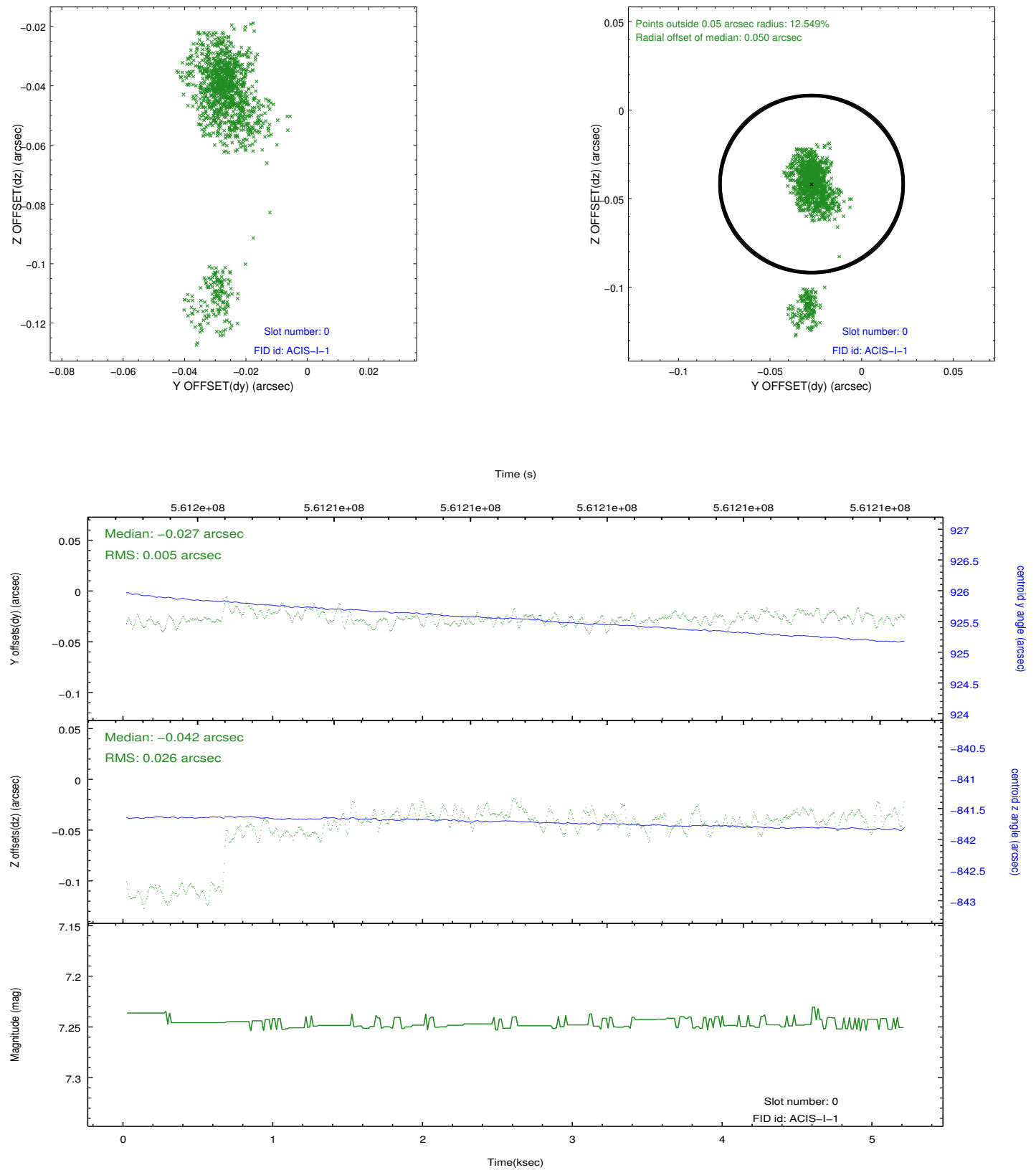


2.4.5 Slot 7

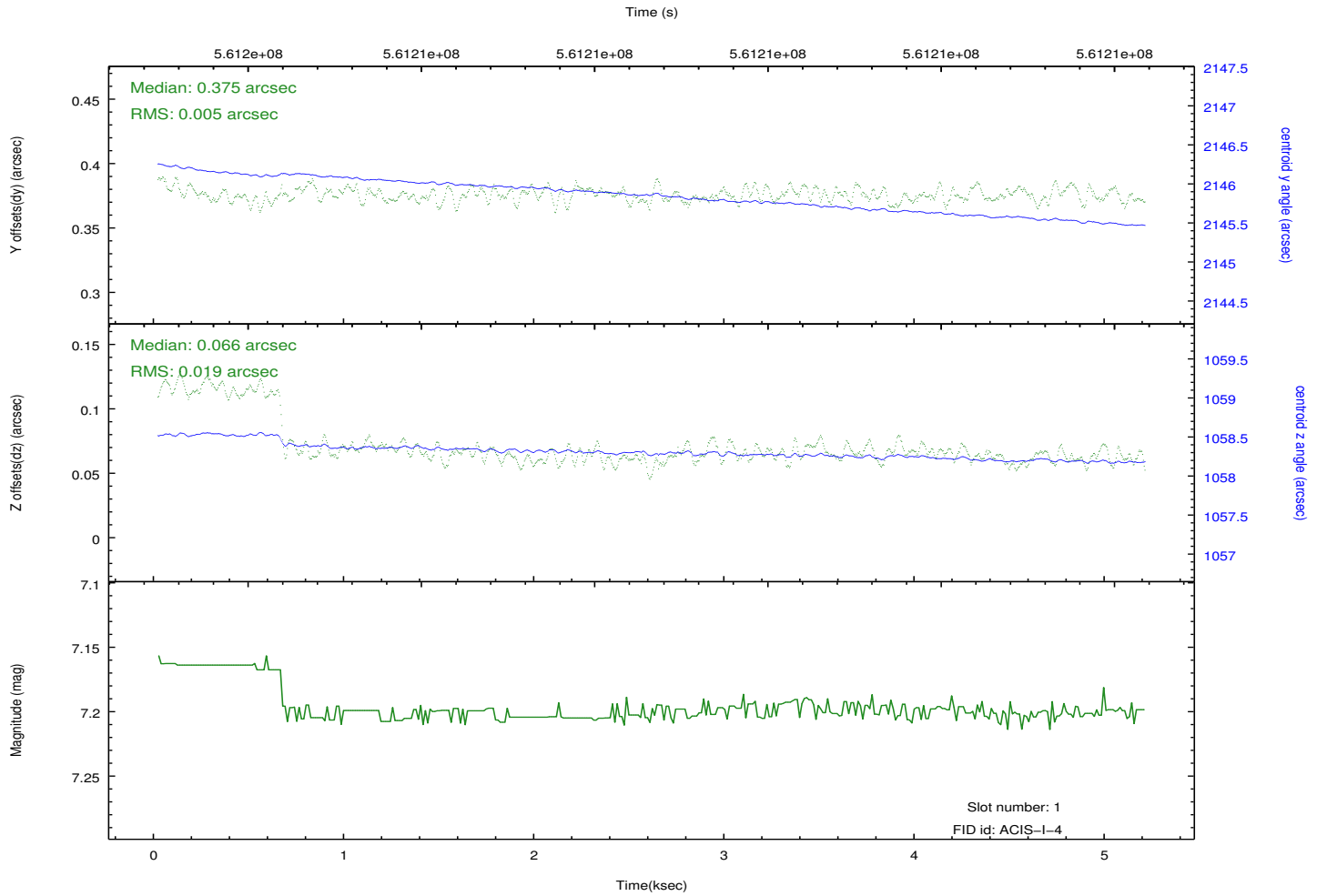
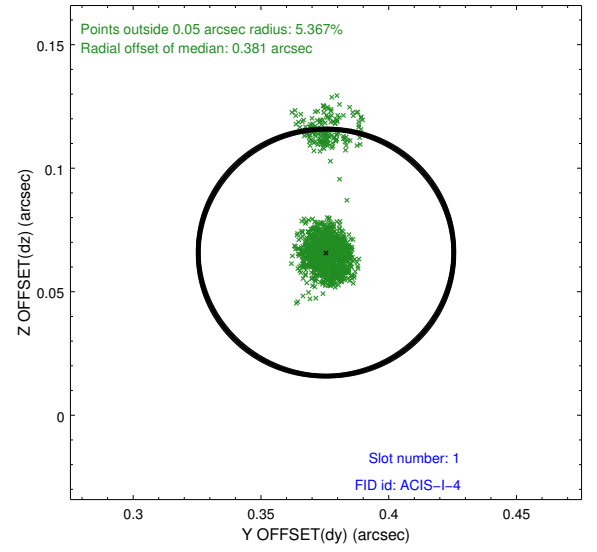
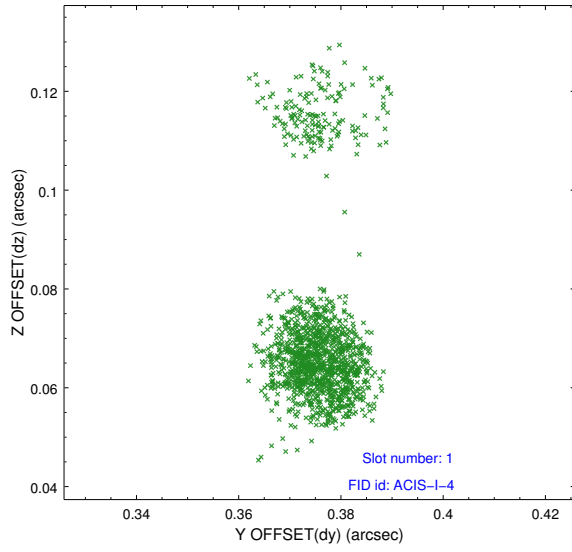


2.5 FID Slots

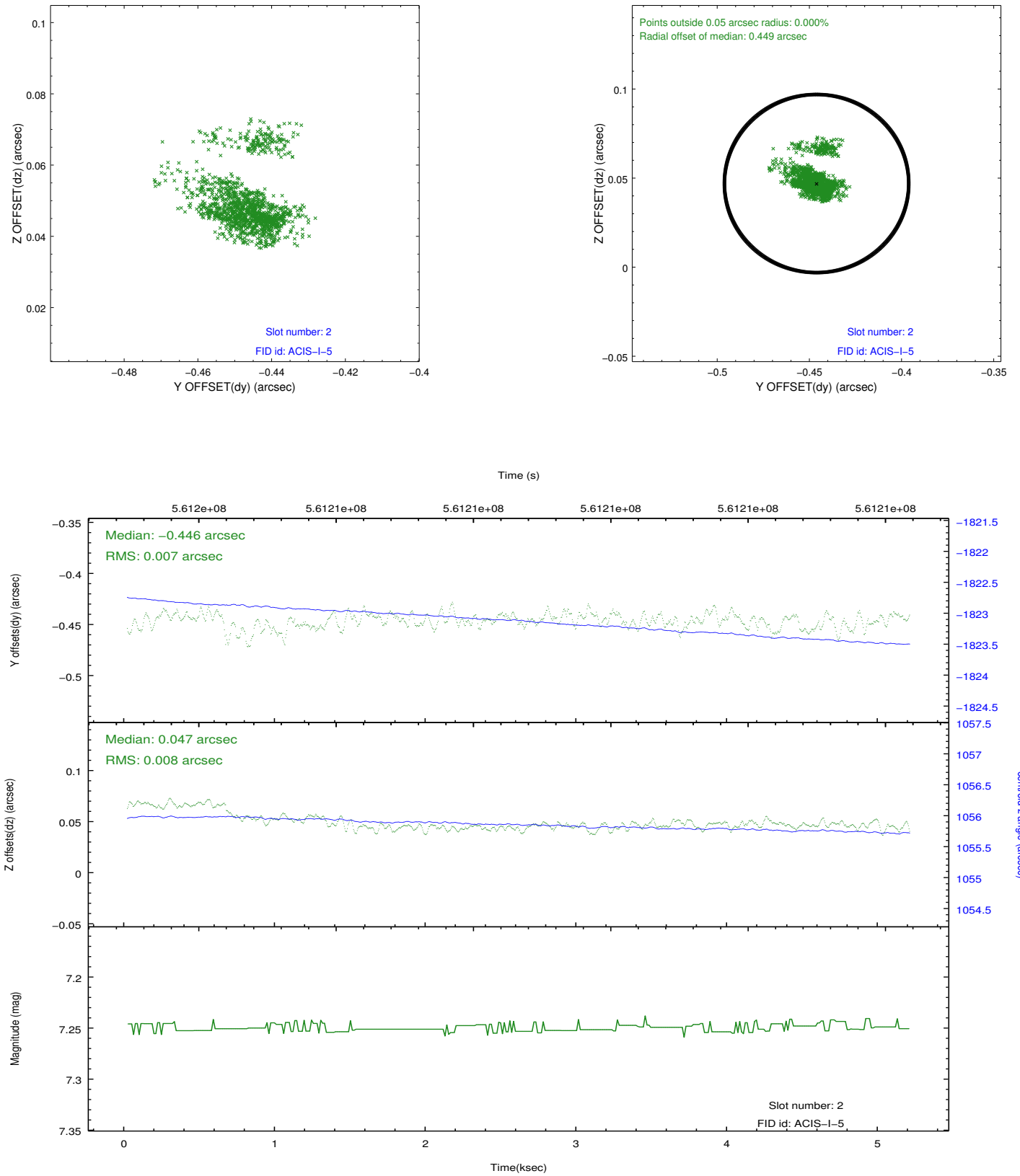
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.10.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.062300039053

A.2 Comments

The slot 2 radial offset of 0.400 arcsec is acceptable. The slot 1 discontinuity of ~0.05 arcsec is also passable