

V&V Reference Report

L2 ASCDS Version : 10

Observation 15664 - L2 Version 2
Chandra X-Ray Center

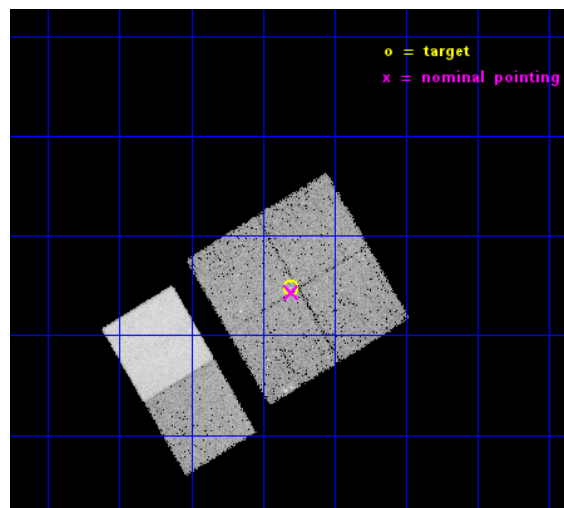
L2 Processing Date : Dec 5 2014

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1 Front

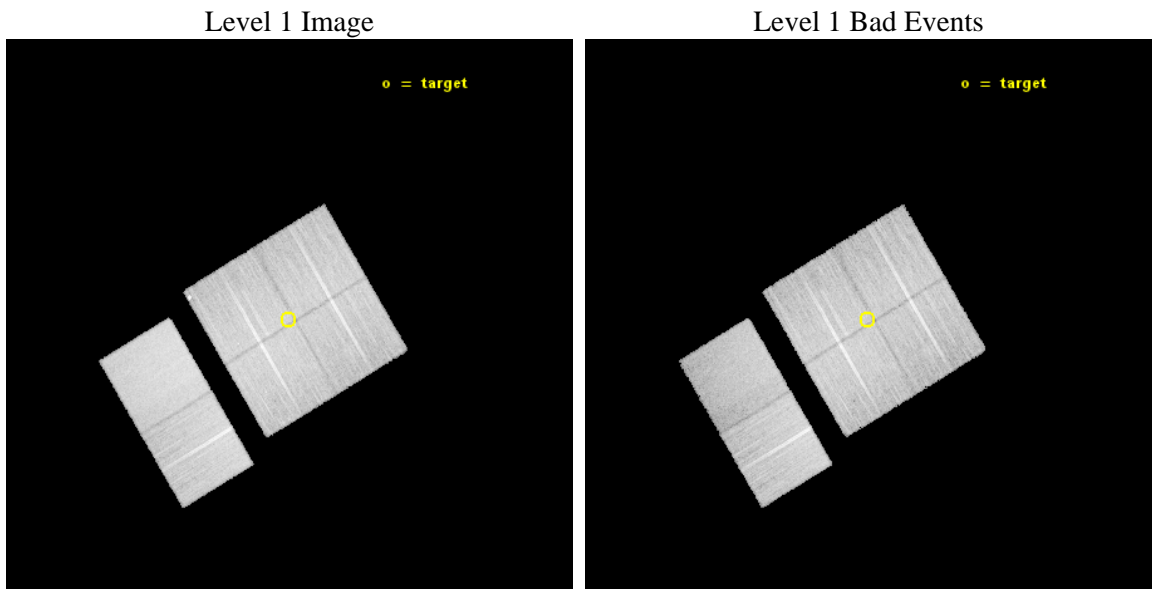
seq_num	200842	Sequence number
obs_id	15664	Observation id
title	An X-ray Census of the Young Stellar Population in Infrared Dark Clouds	Proposal title
observer	Assoc. Prof. Jonathan Tan	Principal investigator
object	IRDC G34.4+0.23 (IRDC F)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	283.327083	Observer's specified target RA [deg]
dec_targ	1.413333	Observer's specified target Dec [deg]
ra_nom	283.32519246196	Nominal RA [deg]
dec_nom	1.4054619660129	Nominal Dec [deg]
roll_nom	239.20872533923	Nominal Roll [deg]
revision	2	Processing version of data
ontime	34969.599869788	Sum of GTIs [s]
livetime	34526.793740071	Livetime [s]
ontime0	34969.599869788	Sum of GTIs [s]
ontime1	34966.358889461	Sum of GTIs [s]
ontime2	34969.599869788	Sum of GTIs [s]
ontime3	34969.599869788	Sum of GTIs [s]
ontime6	34963.117769182	Sum of GTIs [s]
ontime7	34969.599869788	Sum of GTIs [s]
l2events	164493	Number of level 2 events



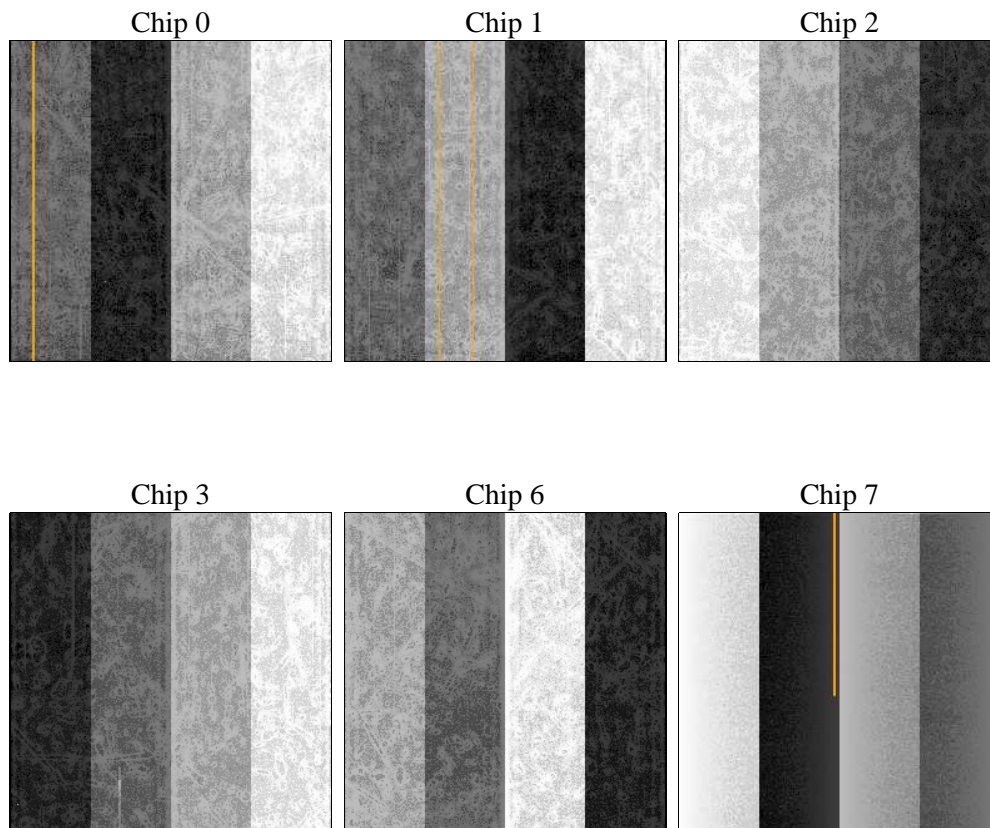
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	34969.599869788	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	34969.599869788	Sum of GTIs [s]
date	2014-12-06T03:18:14	Date and time of file creation	ontime1	34966.358889461	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	34969.599869788	Sum of GTIs [s]
			ontime3	34969.599869788	Sum of GTIs [s]
			ontime6	34963.117769182	Sum of GTIs [s]
			ontime7	34969.599869788	Sum of GTIs [s]
			l1events	921376	Number of level 1 events

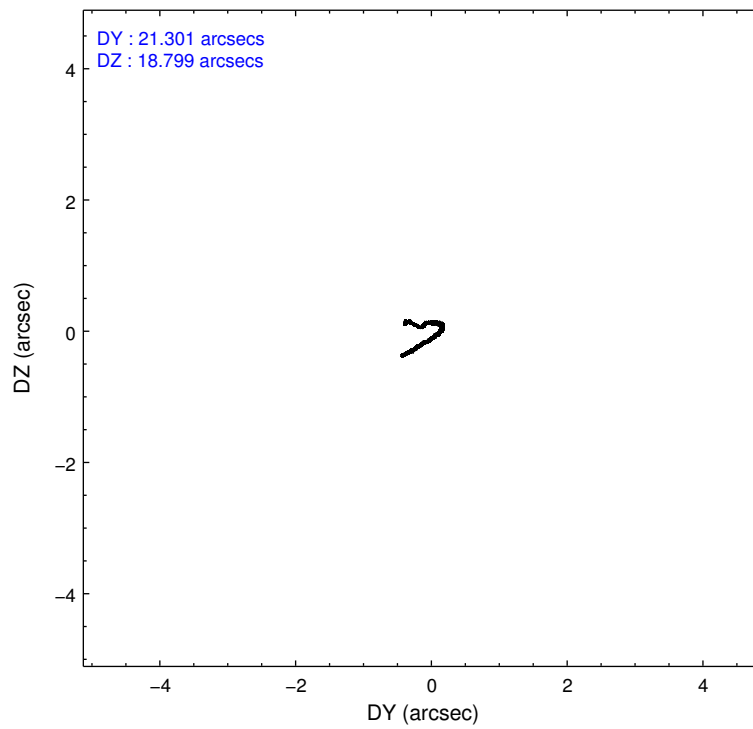
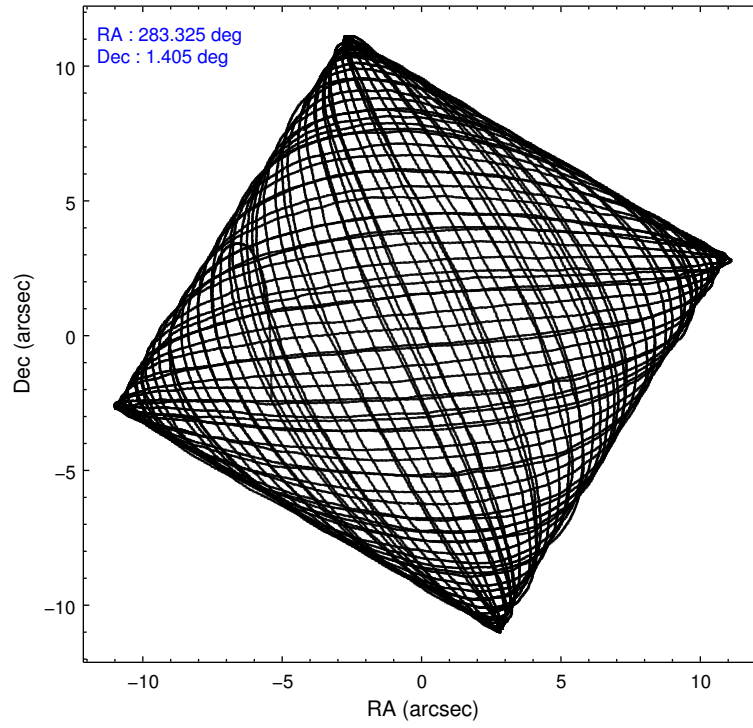
2.1.4 Events

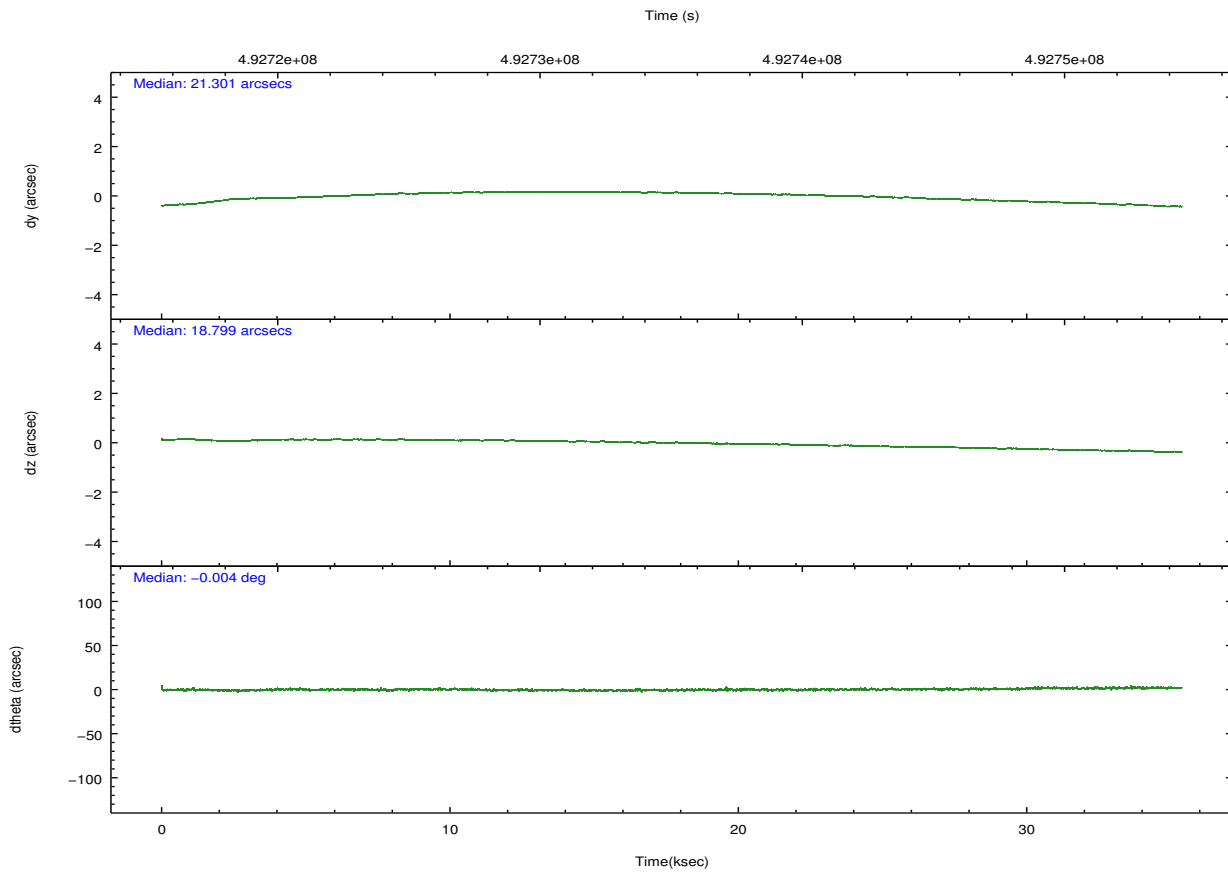
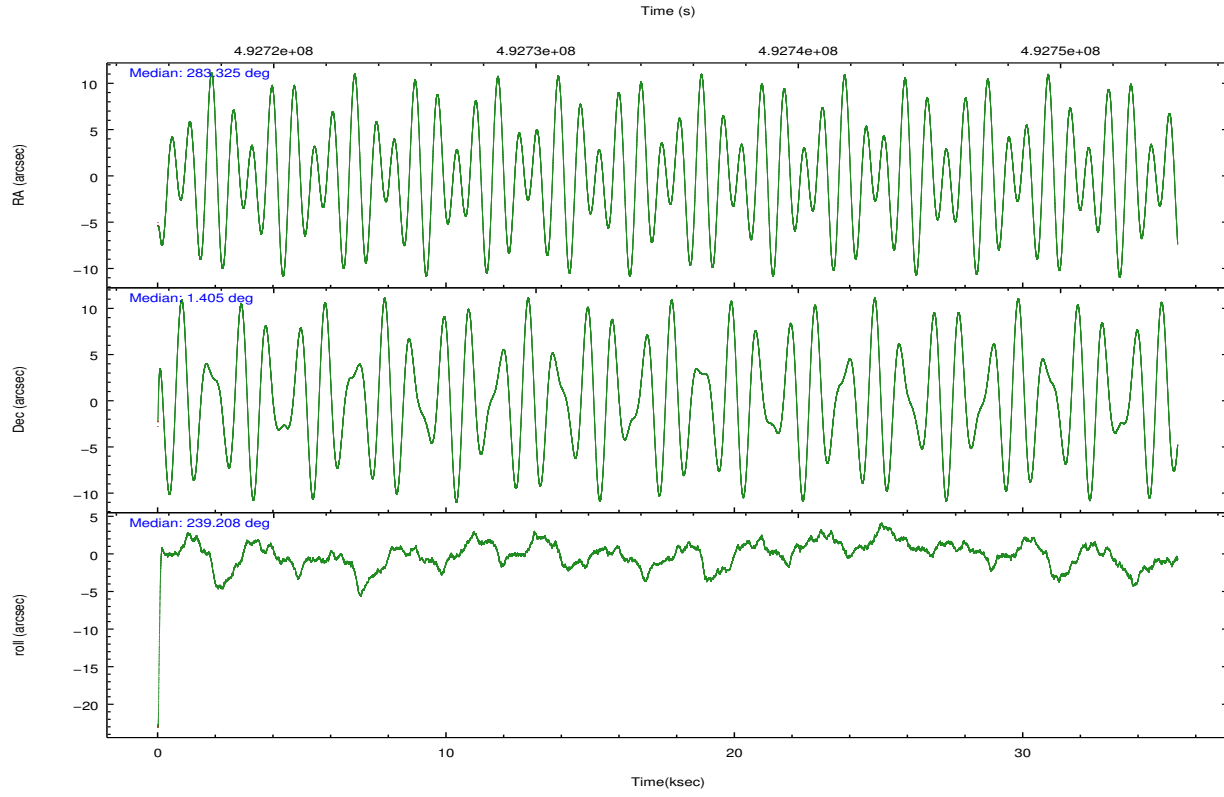
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	134296	139436	155787	148170	158567	185120	grade 0 events	6757	6834	7404	7521	6886	8239
rejected events	115844	120081	136917	129262	139106	97877		5%	4%	4%	5%	4%	4%
rejected %	86%	86%	87%	87%	87%	52%	grade 1 events	89	84	88	117	104	257
								0%	0%	0%	0%	0%	0%
							grade 2 events	4410	4415	4500	4024	4545	18626
								3%	3%	2%	2%	2%	10%
							grade 3 events	1950	1980	1794	1883	1903	7664
								1%	1%	1%	1%	1%	4%
							grade 4 events	1762	1997	1817	1946	1889	7423
								1%	1%	1%	1%	1%	4%
							grade 5 events	6280	6826	5921	7221	7503	19673
								4%	4%	3%	4%	4%	10%
							grade 6 events	3573	4132	3358	3537	4244	45312
								2%	2%	2%	2%	2%	24%
							grade 7 events	109475	113168	130905	121921	131493	77926
								81%	81%	84%	82%	82%	42%

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	283.325465	283.3251924619618	CCD I2 on	Y	Y
[deg] Pointing Dec	1.432974	1.405461966012941	CCD I3 on	Y	Y
[deg] Pointing Roll	239.000043	239.208725339233	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)	492717719.184000	492716668.98865	CCD S5 on	N	N
Observation start date	2013-08-12T18:00:52	2013-08-12T17:44:28	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	492752719.184000	492753613.57816	On-chip summing requested	N	N
Observation end date	2013-08-13T03:44:12	2013-08-13T04:00:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





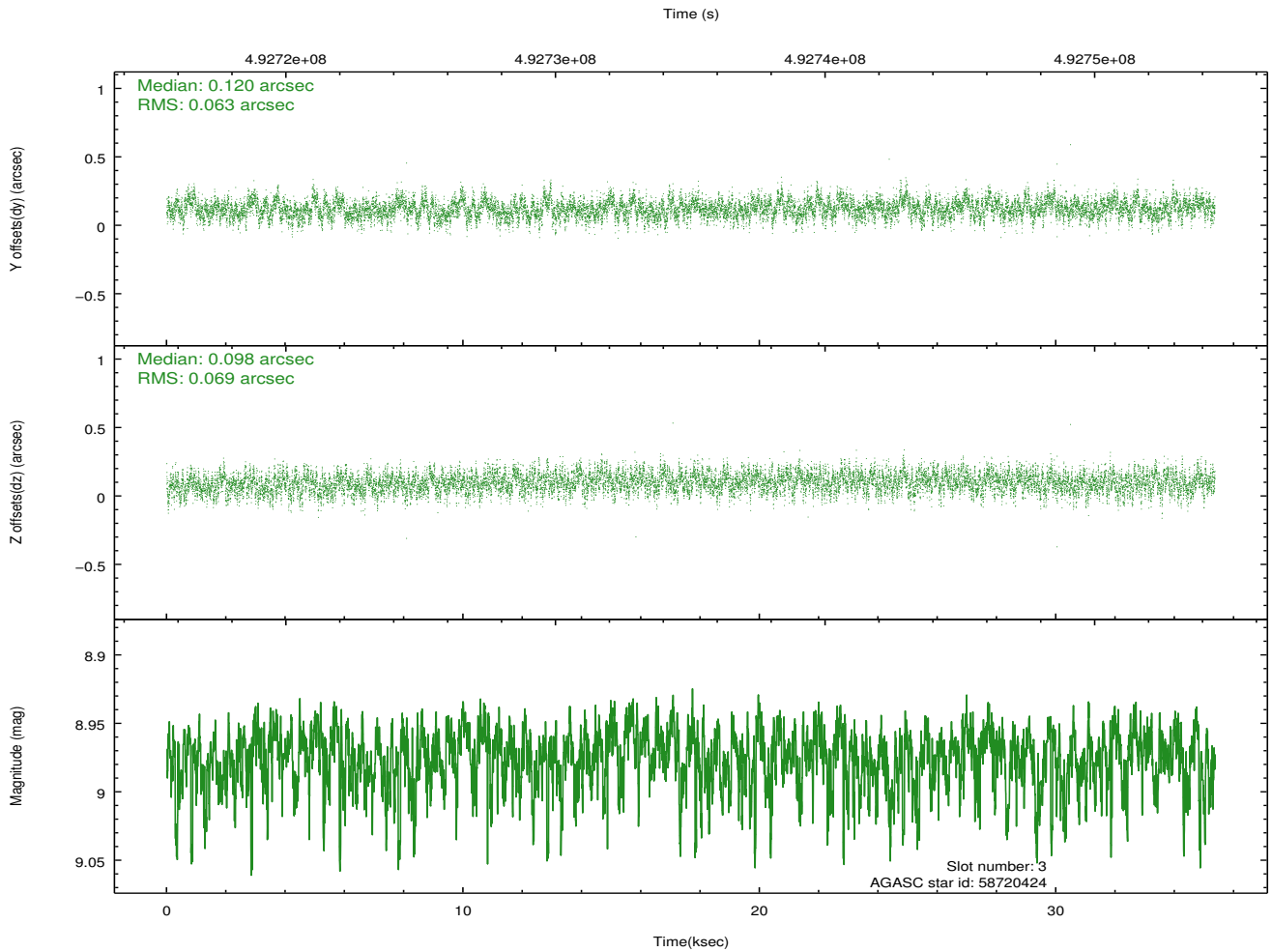
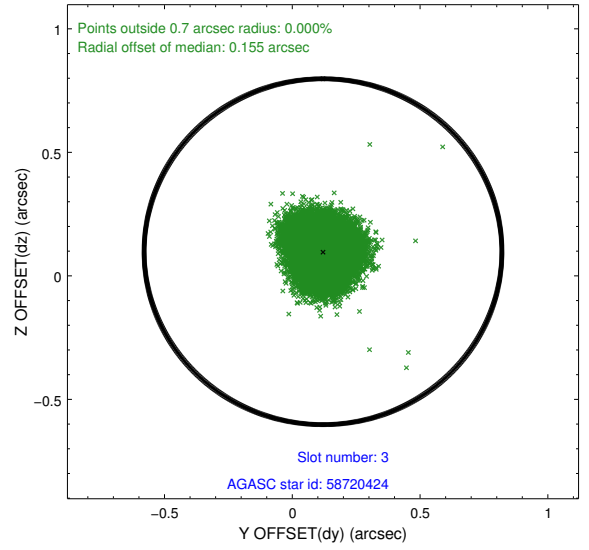
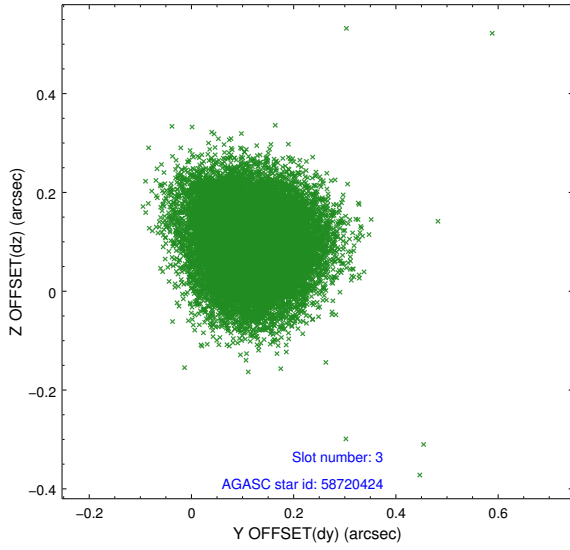
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-4	7.05	8624	0.228	0.055	0.010	0.022	0.000000	0.000000	2138.18	1057.57
1	FID		ACIS-I-5	7.11	8625	-0.374	0.030	0.007	0.016	0.000000	0.000000	-1830.33	1055.20
2	FID		ACIS-I-6	7.11	8626	0.047	-0.018	0.010	0.016	0.000000	0.000000	383.51	1699.56
3	GUIDE	used	58720424	8.97	17213	0.120	0.098	0.100	0.159	282.873634	1.408205	914.28	-1347.37
4	GUIDE	used	58721456	9.09	17153	0.010	-0.012	0.102	0.164	283.027077	0.876858	2269.59	110.59
5	GUIDE	used	58852048	8.35	17243	-0.007	-0.107	0.076	0.122	283.366398	0.870285	1660.89	1169.79
6	GUIDE	used	59377960	7.64	17245	-0.116	-0.019	0.072	0.120	283.627467	1.897490	-1992.16	70.82
7	GUIDE	used	59376240	7.28	17248	-0.016	0.050	0.101	0.153	283.651753	1.887471	-2007.05	163.82

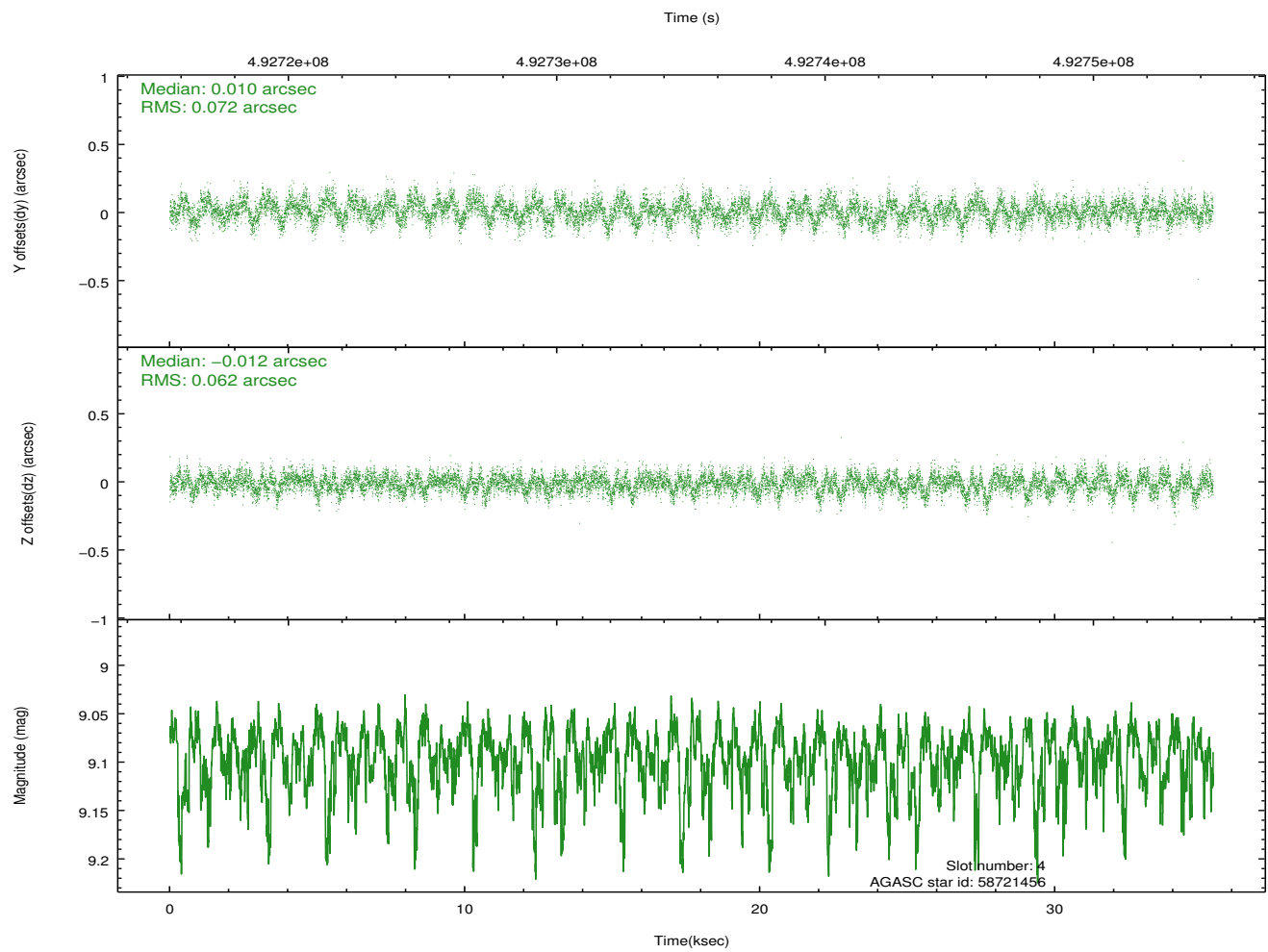
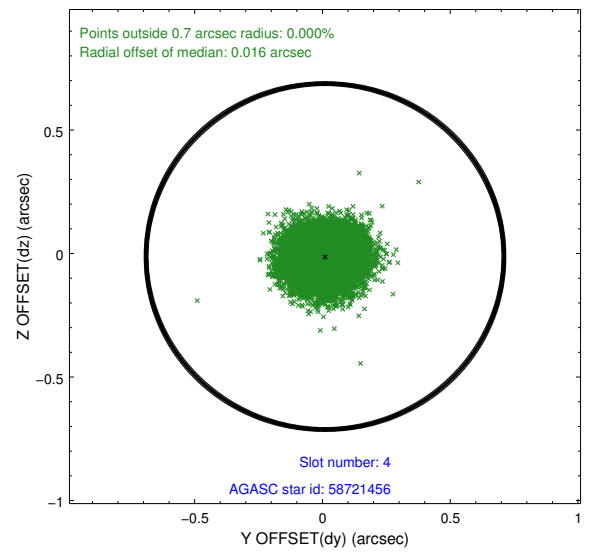
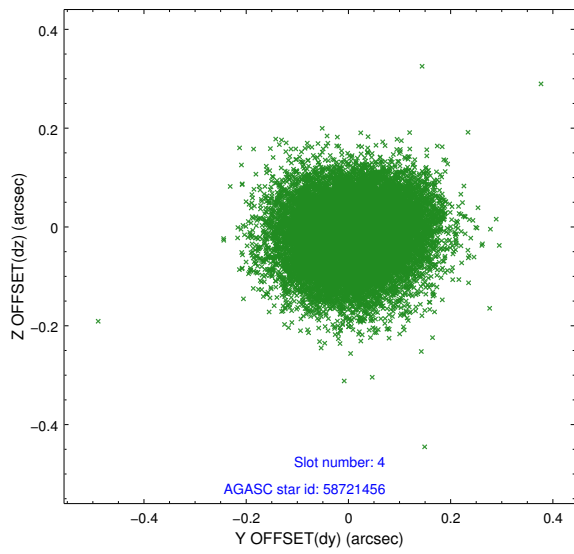
∞

2.4 Star Slots

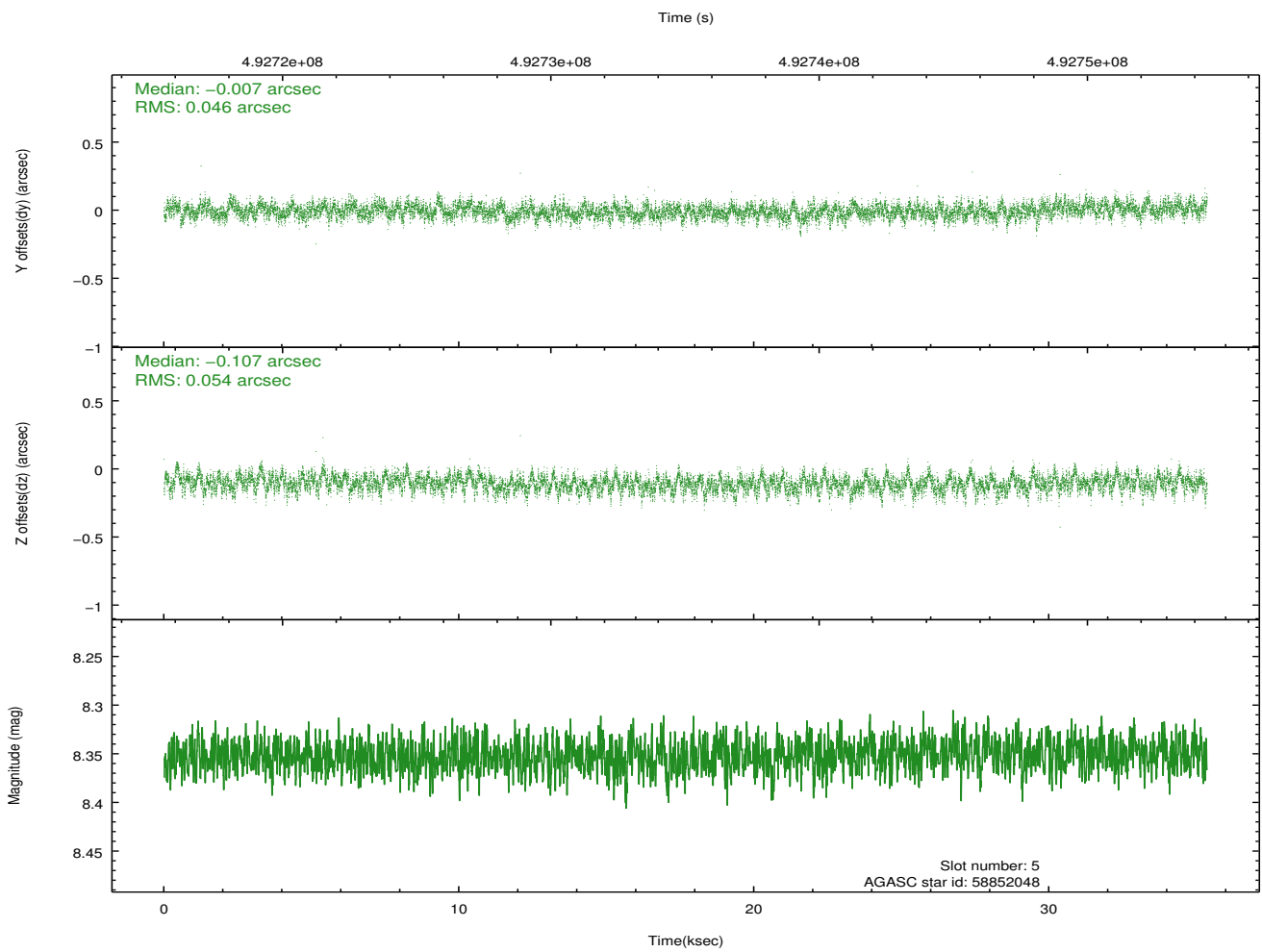
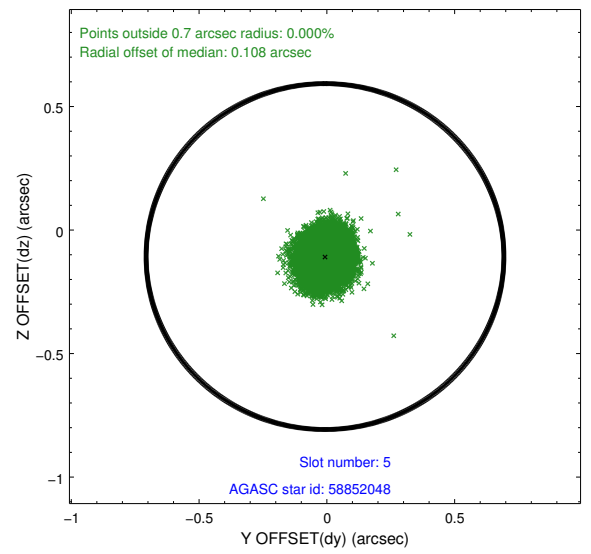
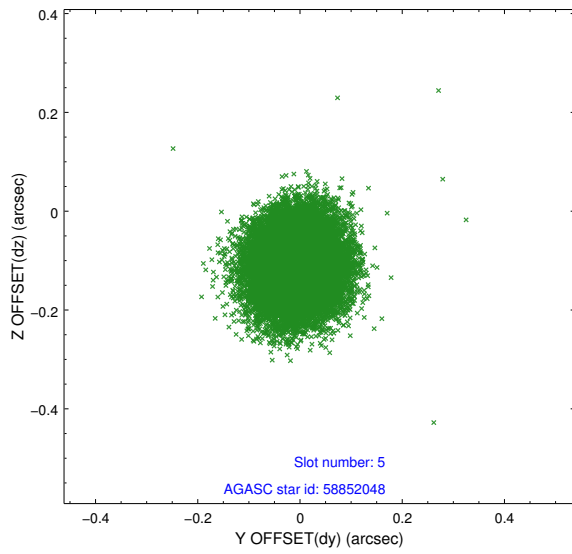
2.4.1 Slot 3



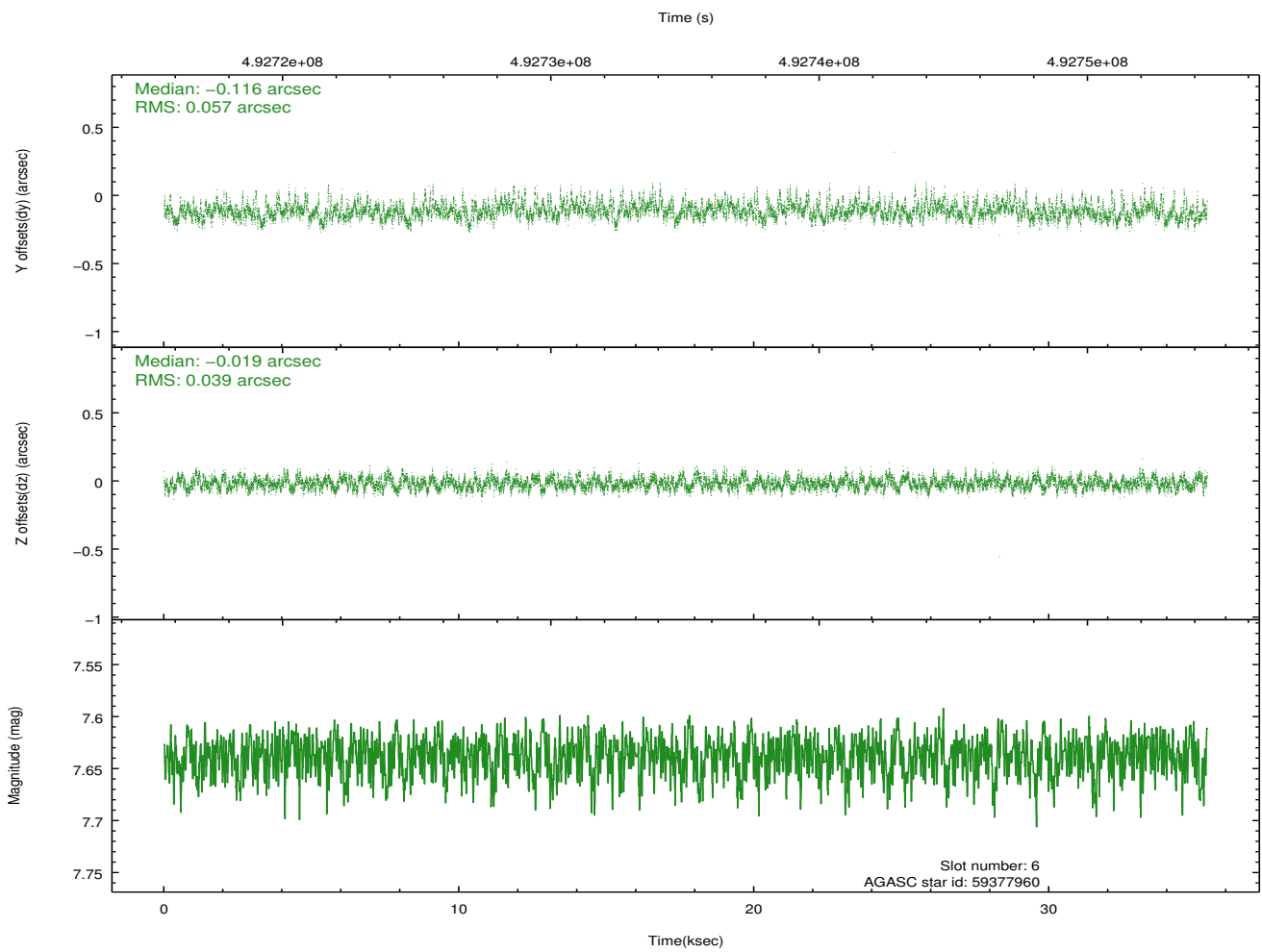
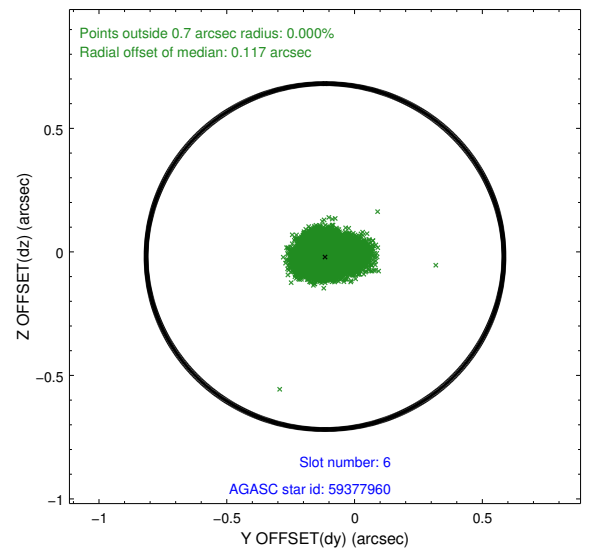
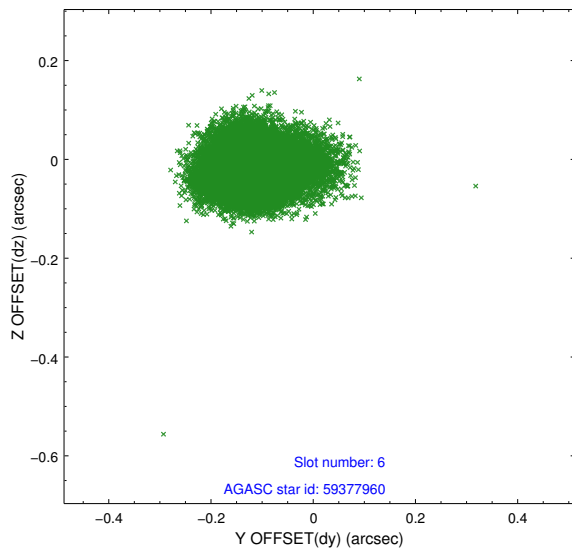
2.4.2 Slot 4



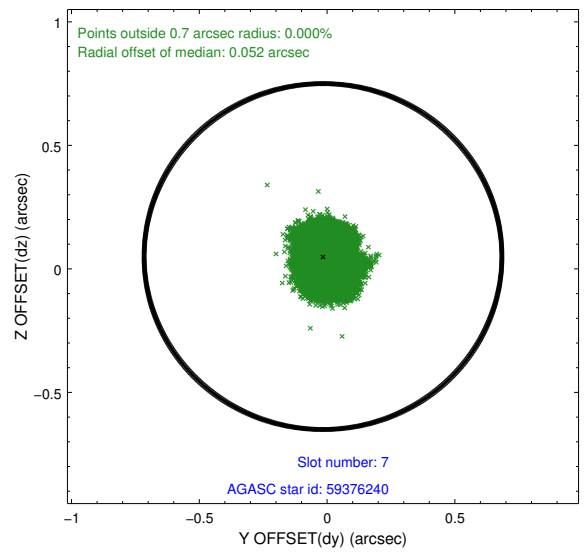
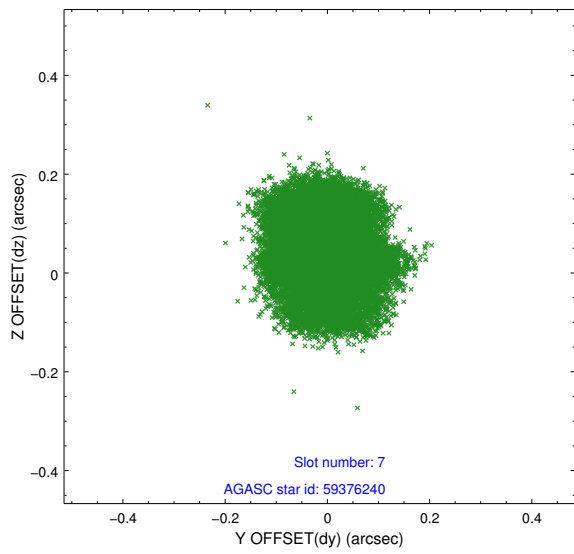
2.4.3 Slot 5



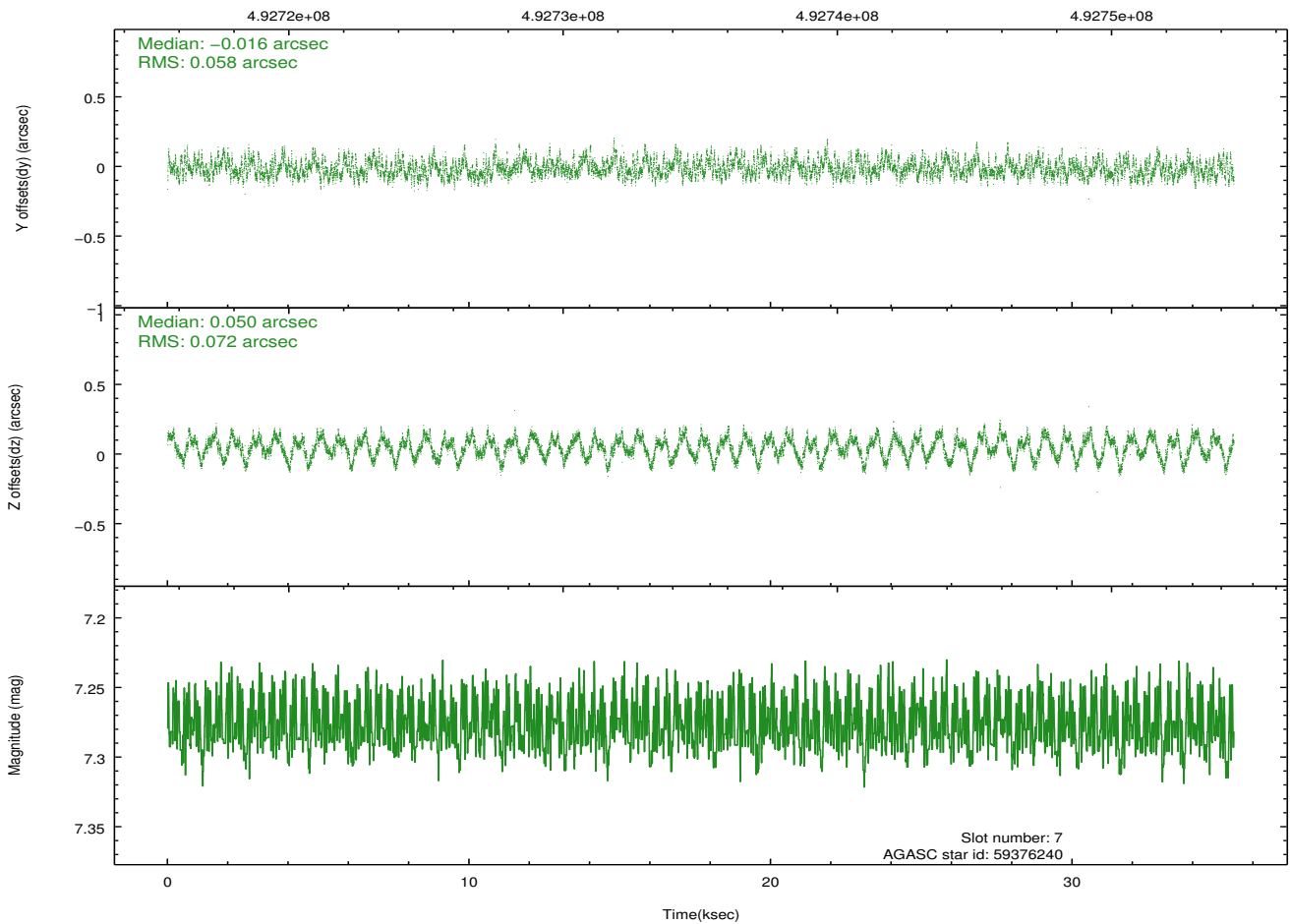
2.4.4 Slot 6



2.4.5 Slot 7

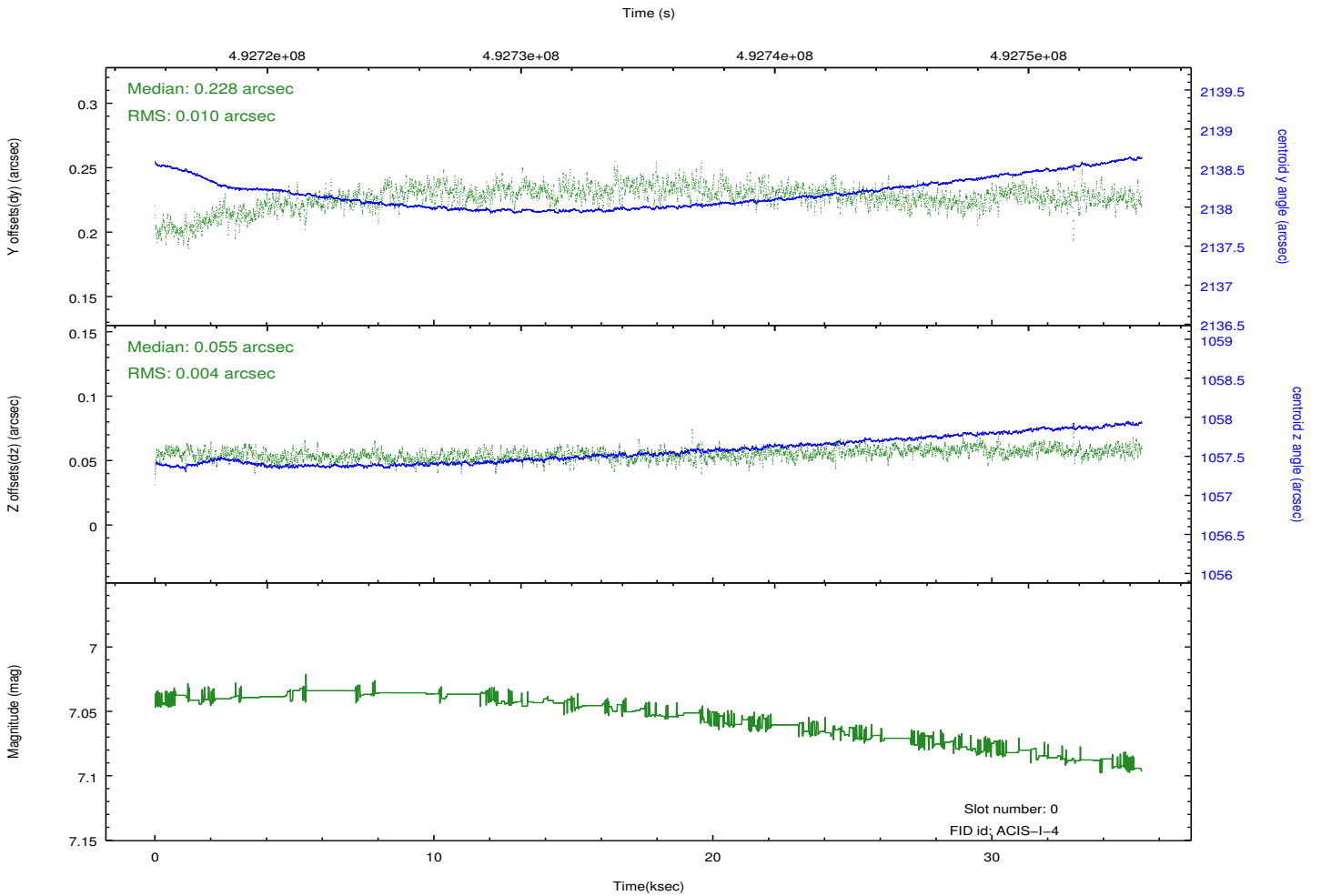
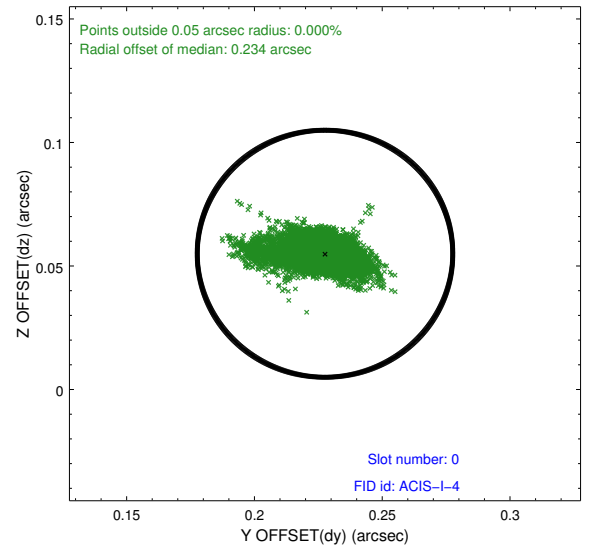
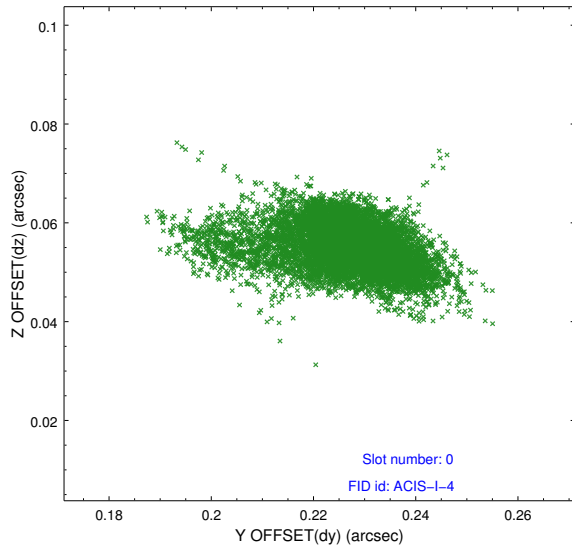


Time (s)

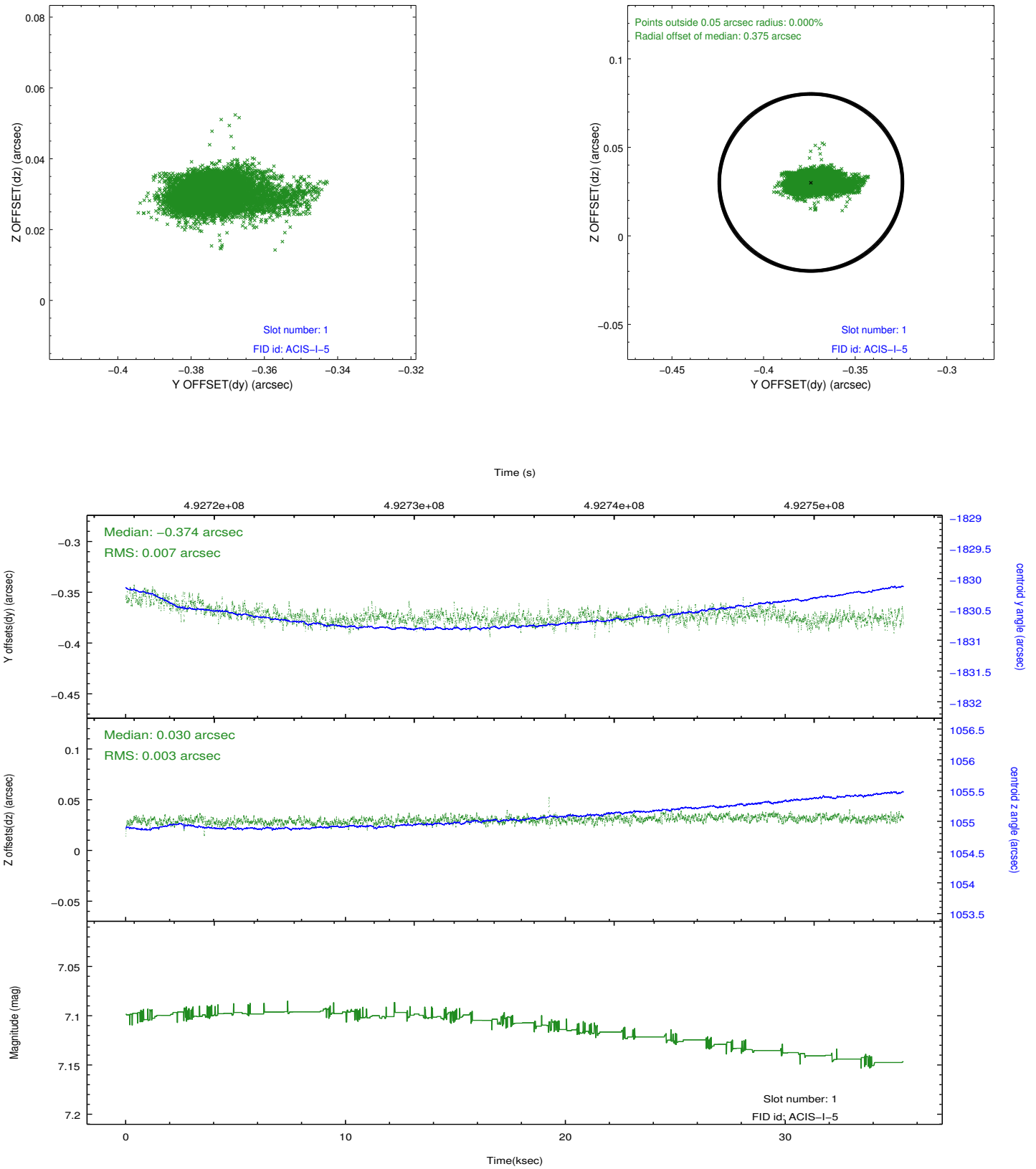


2.5 FID Slots

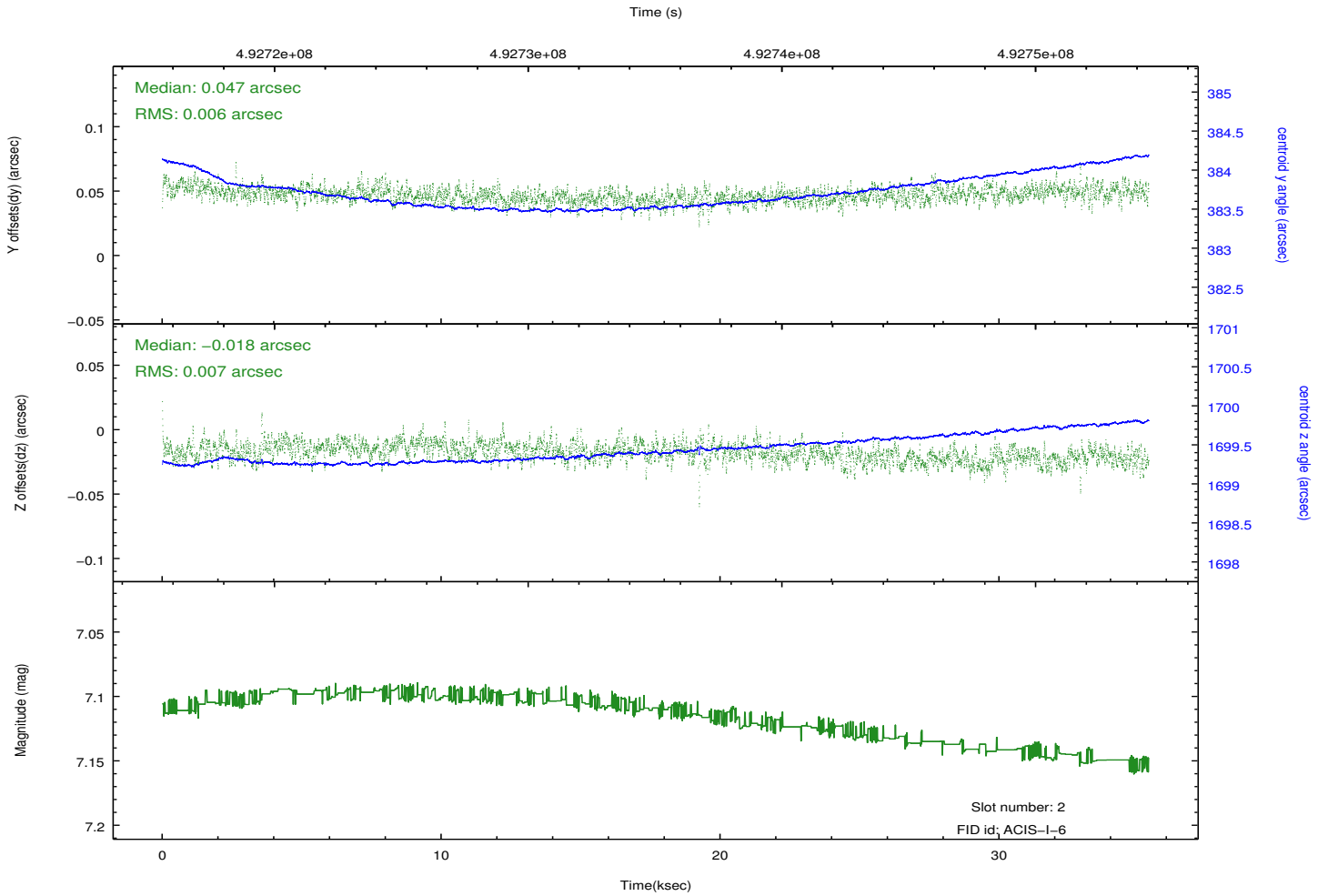
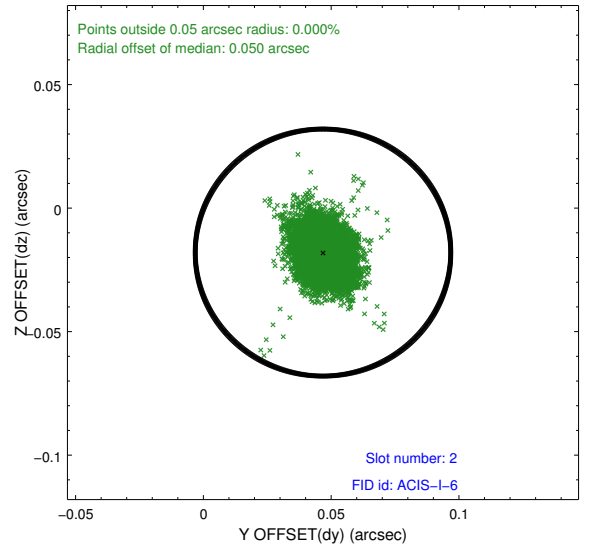
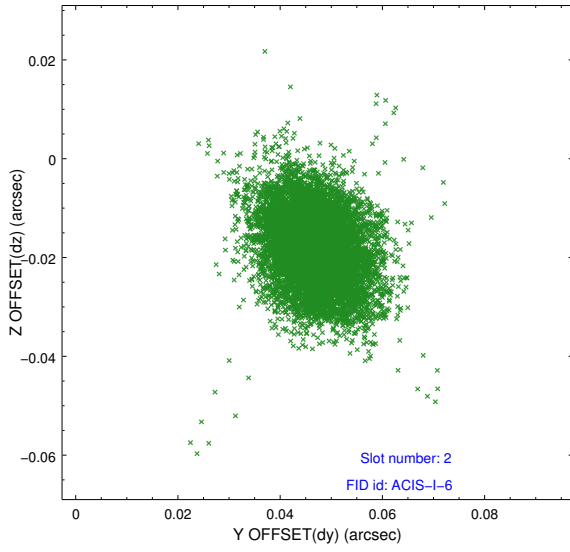
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.969599869788

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.