

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9380 - L2 Version 2
Chandra X-Ray Center

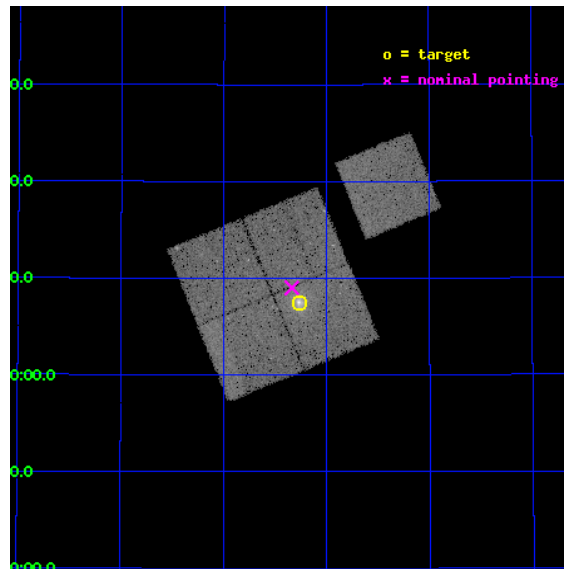
L2 Processing Date : May 8 2012

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1 Front

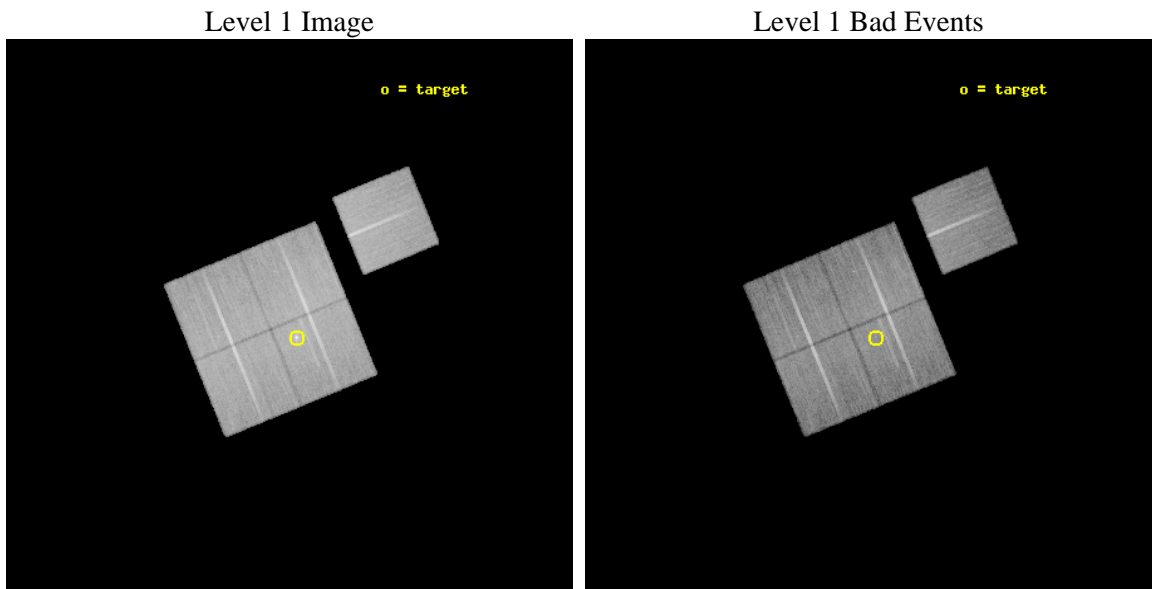
seq_num	800717	Sequence number
obs_id	9380	Observation id
title	Probing Dark Energy with Relaxed Galaxy Clusters	Proposal title
observer	Prof. Steven Allen	Principal investigator
object	MACS1427+44	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	216.8175	Observer's specified target RA [deg]
dec_targ	44.125278	Observer's specified target Dec [deg]
ra_nom	216.83452355768	Nominal RA [deg]
dec_nom	44.150224403344	Nominal Dec [deg]
roll_nom	67.696845783863	Nominal Roll [deg]
revision	2	Processing version of data
ontime	26160.859230816	Sum of GTIs [s]
livetime	25819.048345621	Livetime [s]
ontime0	26157.718240678	Sum of GTIs [s]
ontime1	26157.718240619	Sum of GTIs [s]
ontime2	26157.718240559	Sum of GTIs [s]
ontime3	26160.859230816	Sum of GTIs [s]
ontime6	26164.000201225	Sum of GTIs [s]
l2events	93512	Number of level 2 events



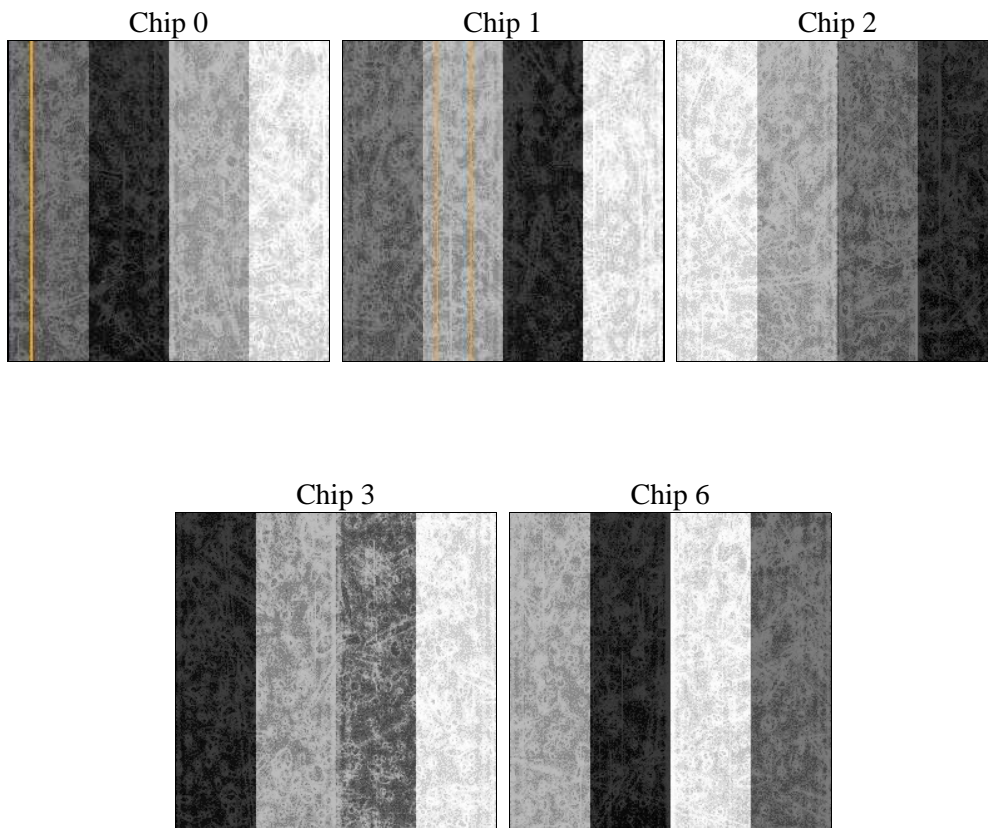
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	26160.859230816	Sum of GTIs [s]
caldbver	4.4.9	 	ontime0	26157.718240678	Sum of GTIs [s]
date	2012-05-08T02:17:49	Date and time of file creation	ontime1	26157.718240619	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	26157.718240559	Sum of GTIs [s]
			ontime3	26160.859230816	Sum of GTIs [s]
			ontime6	26164.000201225	Sum of GTIs [s]
			l1events	1020950	Number of level 1 events

2.1.4 Events

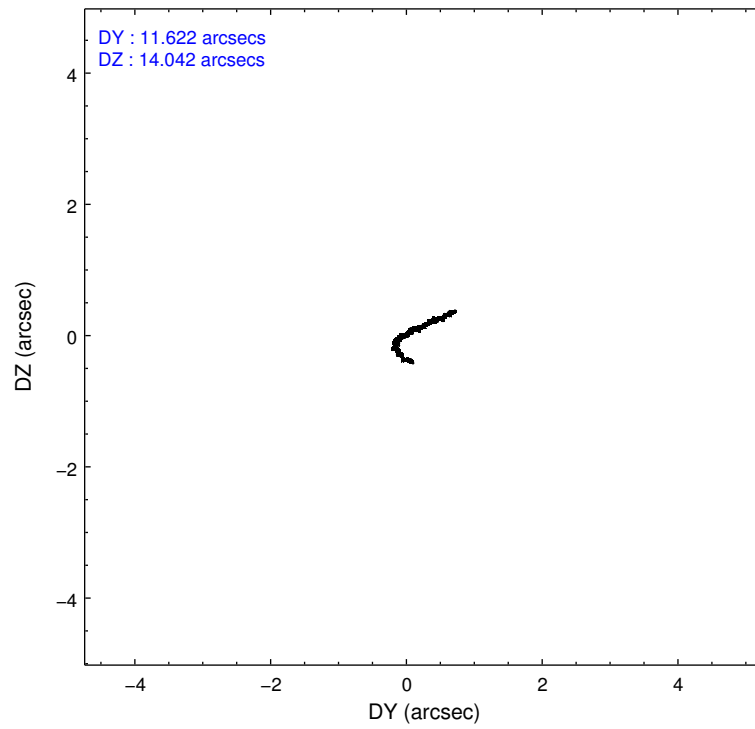
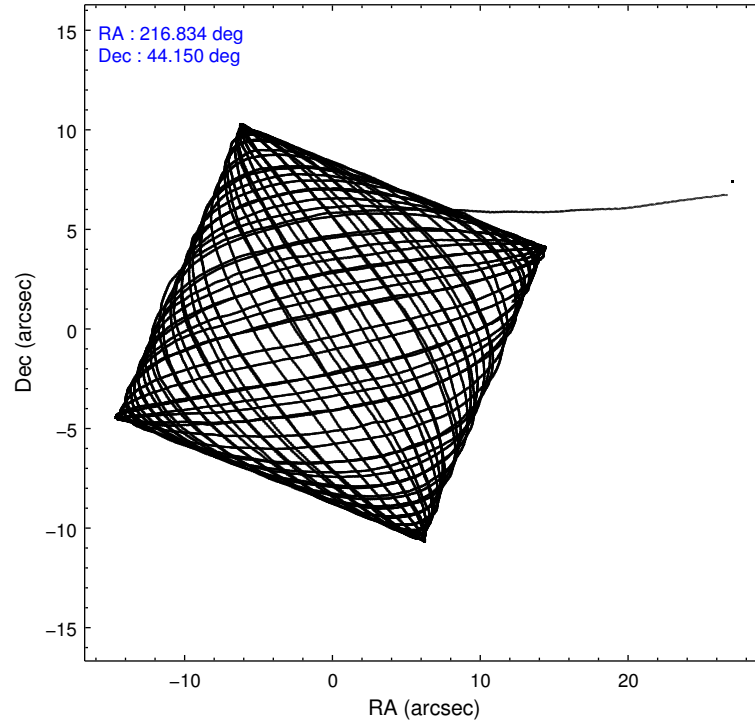
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	194991	194883	217374	205222	208480
rejected events	174326	171676	196433	179838	187297
rejected %	89%	88%	90%	87%	89%

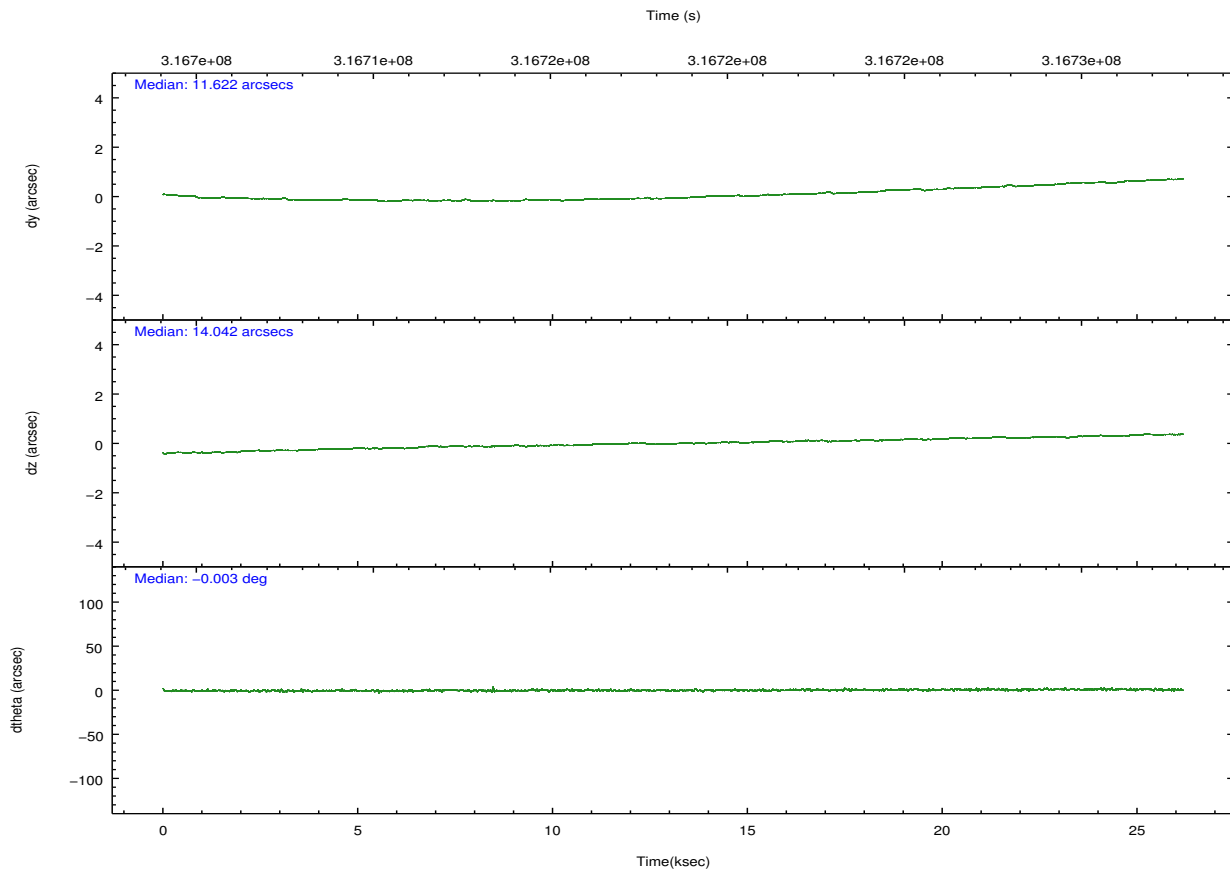
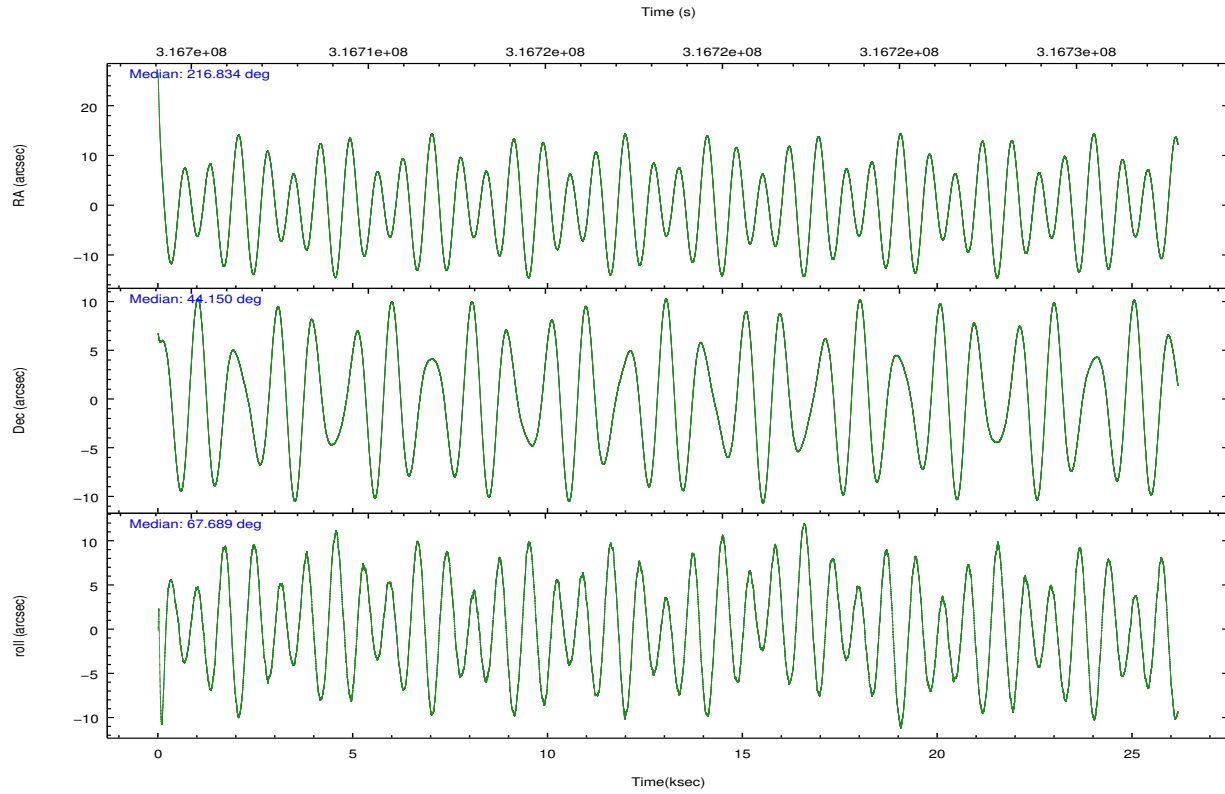
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	7424	8512	7632	11774	7233
	3%	4%	3%	5%	3%
grade 1 events	100	102	103	155	102
	0%	0%	0%	0%	0%
grade 2 events	4988	5221	4971	4848	4636
	2%	2%	2%	2%	2%
grade 3 events	2357	2456	2221	2343	2404
	1%	1%	1%	1%	1%
grade 4 events	2034	2469	2308	2324	2355
	1%	1%	1%	1%	1%
grade 5 events	7297	8048	6820	8338	8046
	3%	4%	3%	4%	3%
grade 6 events	3903	4598	3842	4131	4589
	2%	2%	1%	2%	2%
grade 7 events	166888	163477	189477	171309	179115
	85%	83%	87%	83%	85%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	216.839792	216.8345235576792	CCD I2 on	Y	Y
[deg] Pointing Dec	44.122974	44.15022440334425	CCD I3 on	Y	Y
[deg] Pointing Roll	67.484472	67.69684578386311	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	-229.442463	-229.4438428438578	CCD S3 on	N	N
[mm] SIM translation stage offset	-4.15	-4.148610159071865	CCD S4 on	N	N
[s] Observation start time (MET)	316705555.184000	316704546.85964	CCD S5 on	N	N
Observation start date	2008-01-14T13:44:50	2008-01-14T13:29:06	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	316731555.184000	316732289.51098	On-chip summing requested	N	N
Observation end date	2008-01-14T20:58:10	2008-01-14T21:11:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



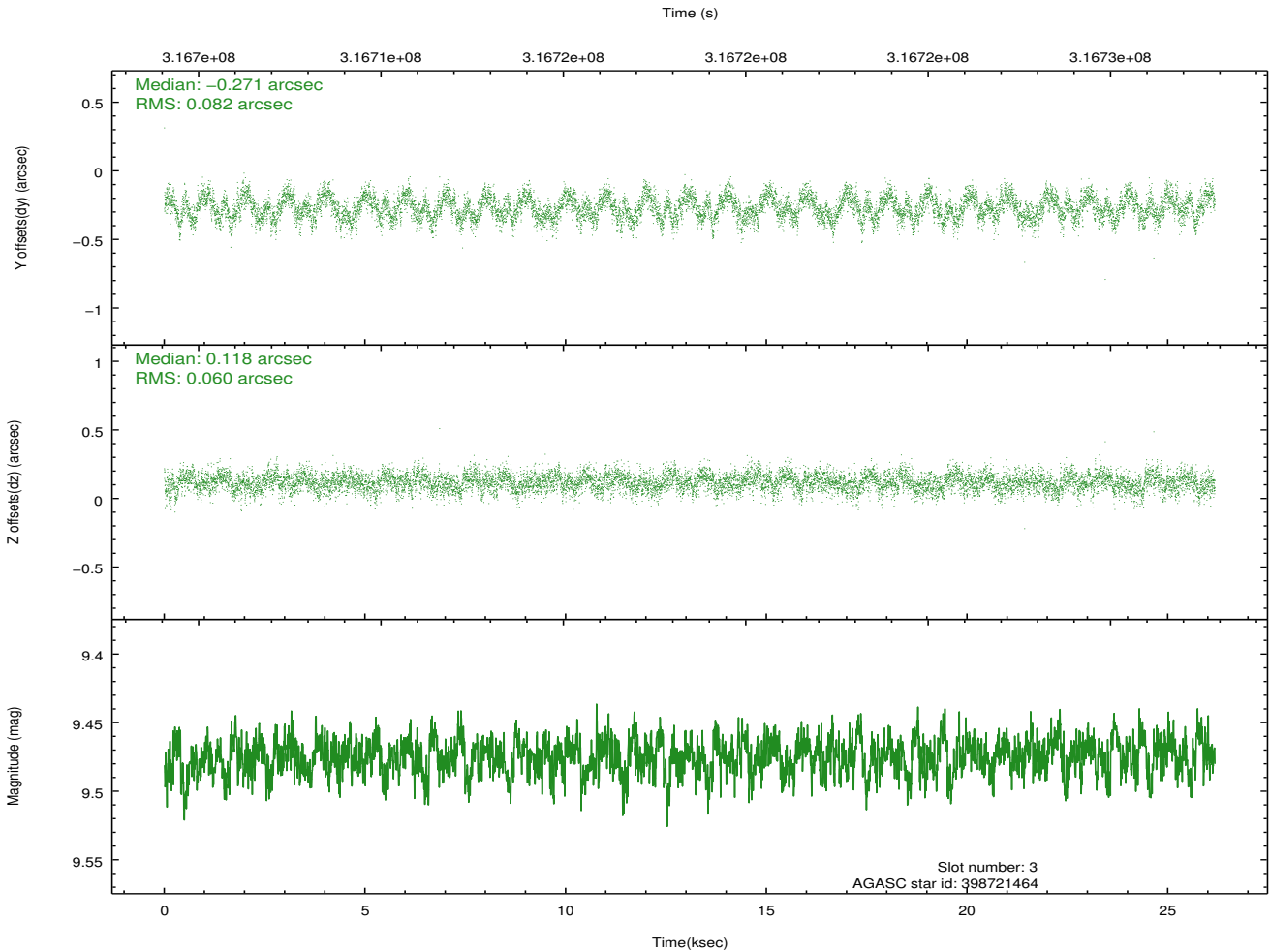
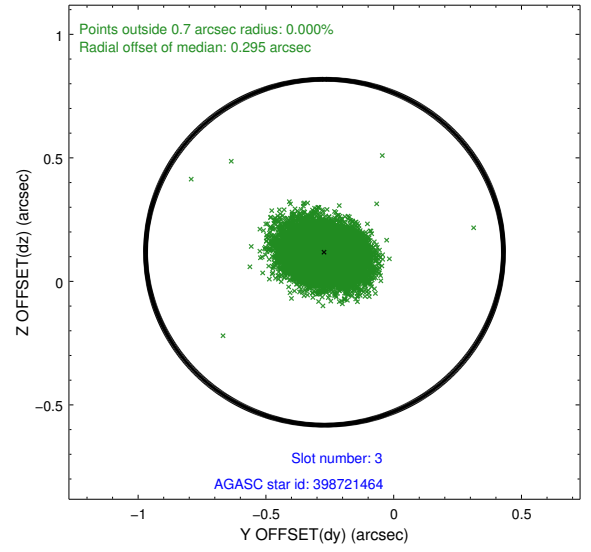
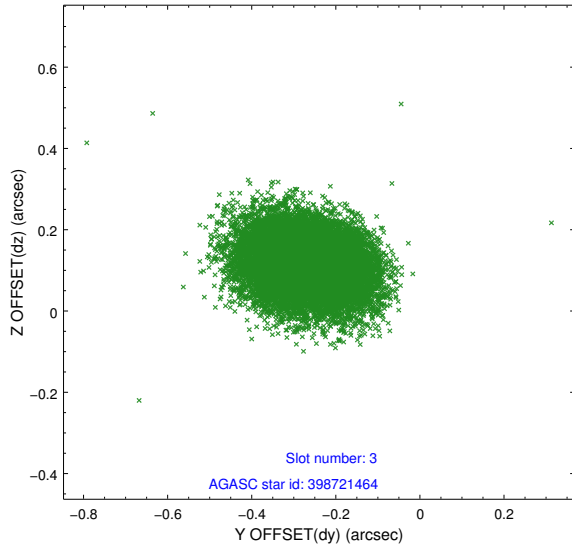


Slot Statistics

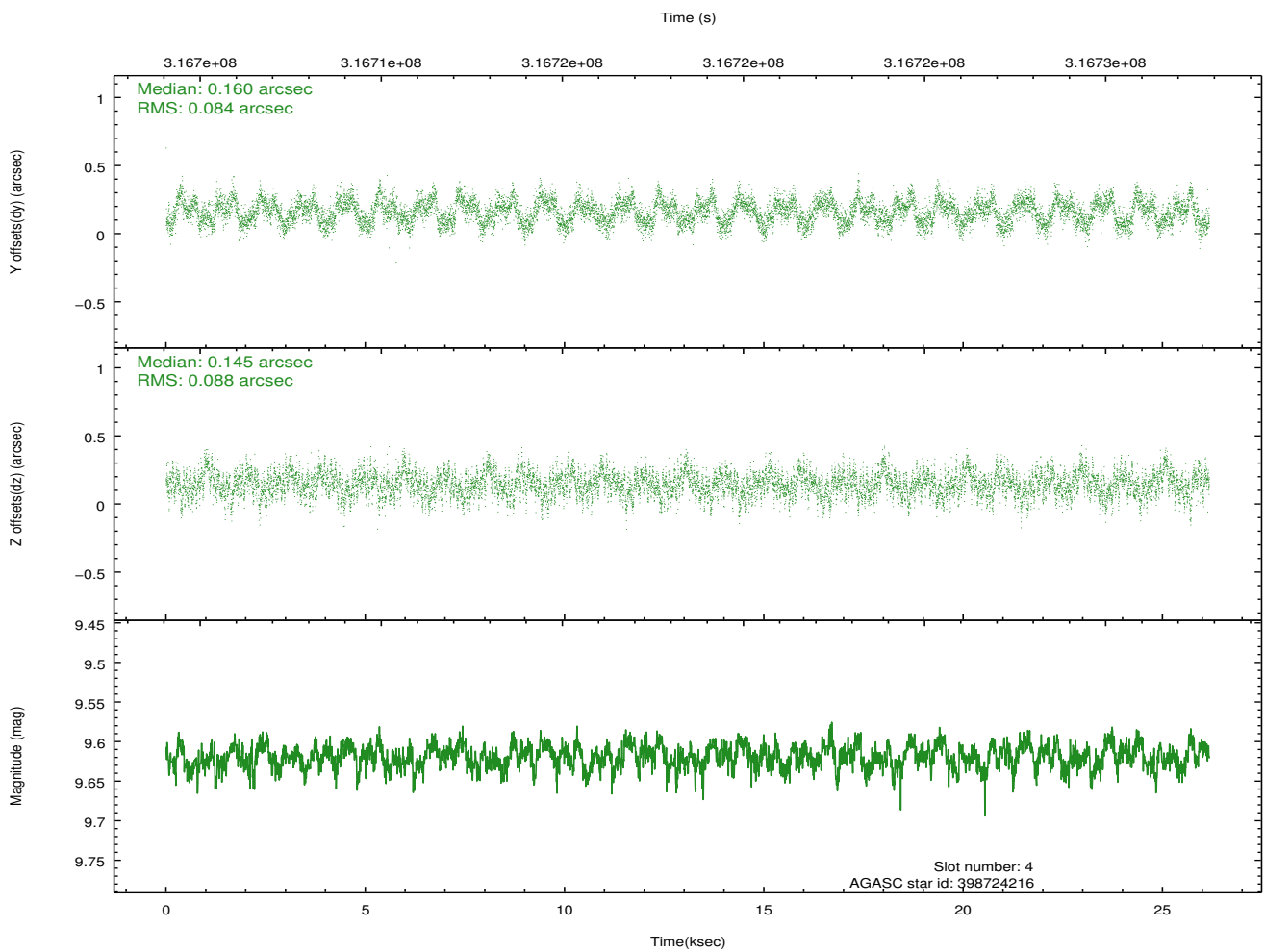
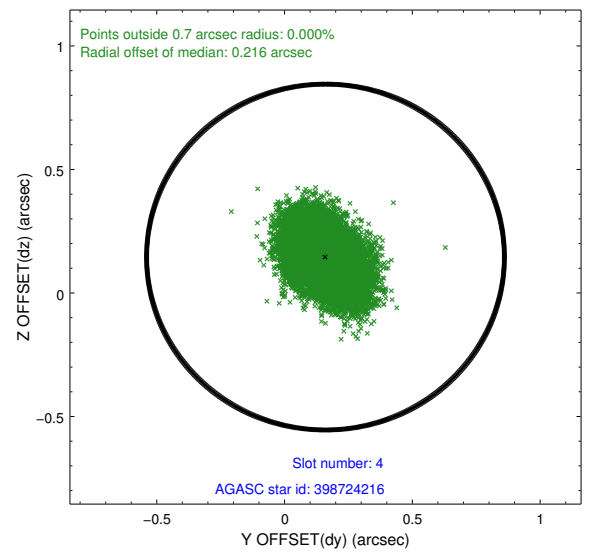
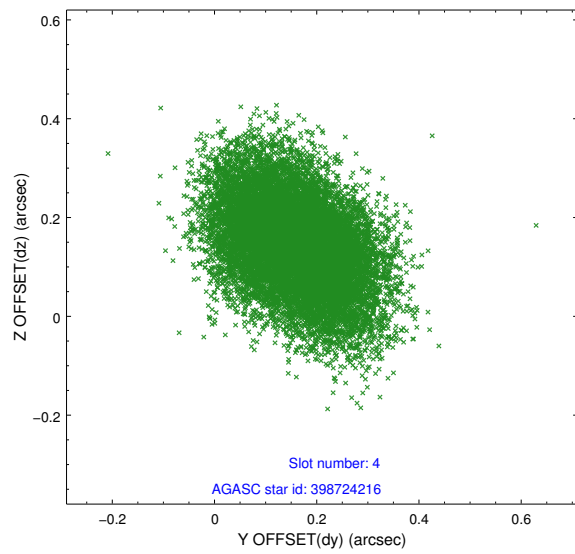
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	6379	-0.094	-0.086	0.009	0.016	0.000000	0.000000	-766.71	-928.64
1	FID	ACIS-I-4	7.14	6382	0.139	0.080	0.010	0.021	0.000000	0.000000	2147.48	977.64
2	FID	ACIS-I-5	7.22	6384	-0.147	0.075	0.010	0.018	0.000000	0.000000	-1820.27	975.02
3	GUIDE	398721464	9.47	12756	-0.271	0.118	0.108	0.172	217.791139	44.290387	1508.93	-2028.11
4	GUIDE	398724216	9.62	12741	0.160	0.145	0.130	0.209	216.907325	43.952017	-501.52	-397.95
5	GUIDE	398724320	9.59	12756	0.129	0.069	0.138	0.213	217.327713	43.656759	-1059.76	-1815.32
6	GUIDE	398727024	9.60	12747	0.090	0.027	0.113	0.180	217.158424	44.398345	1232.60	-375.06
7	GUIDE	398593544	8.62	12761	-0.106	-0.357	0.073	0.116	216.095119	44.392456	170.39	2144.05

2.4 Star Slots

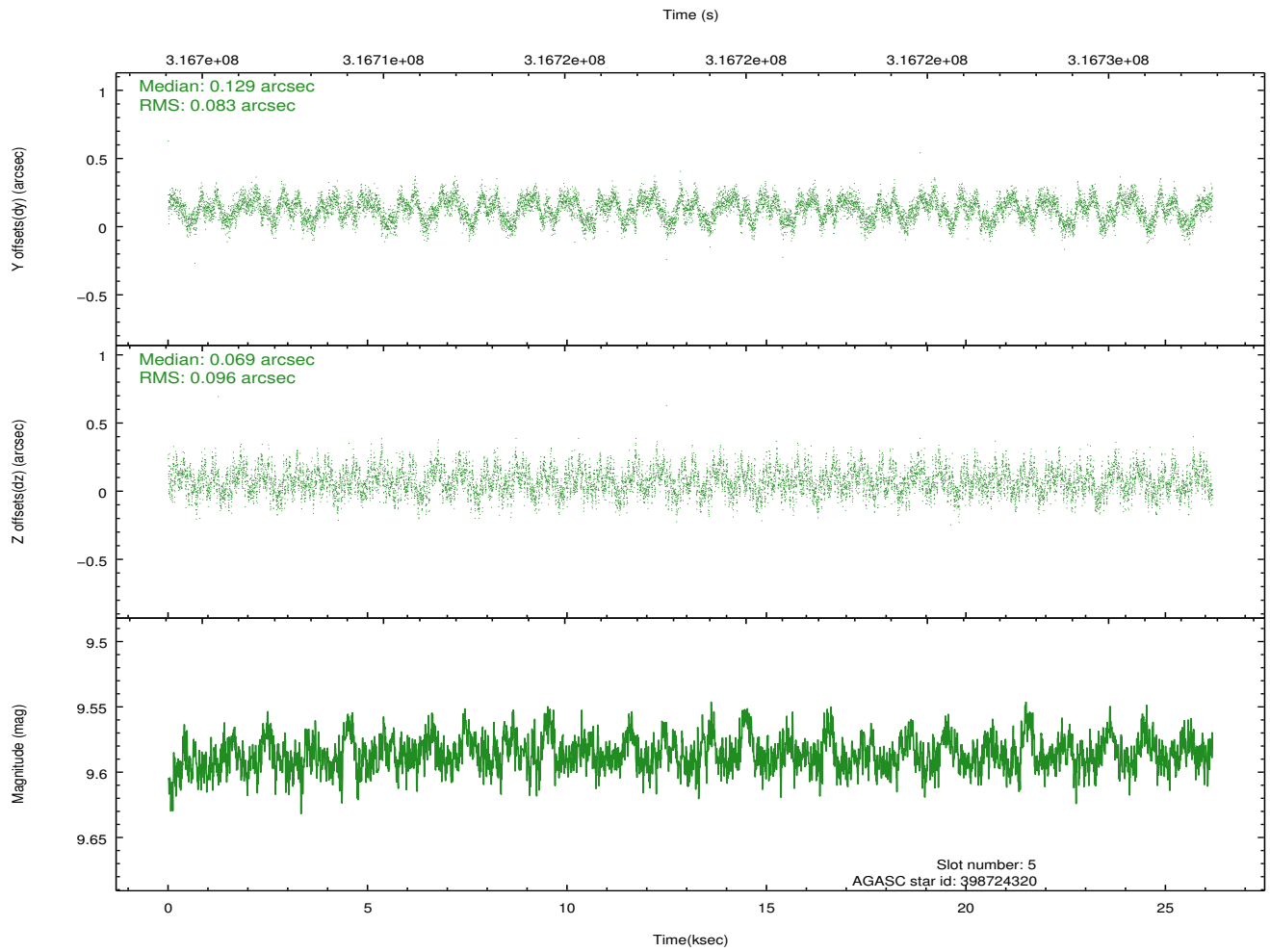
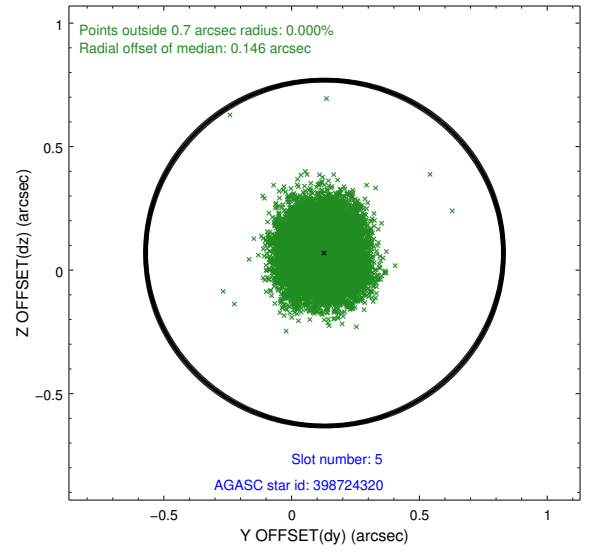
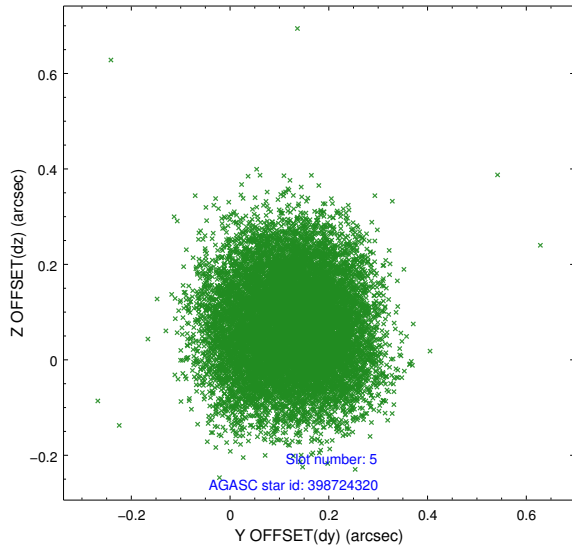
2.4.1 Slot 3



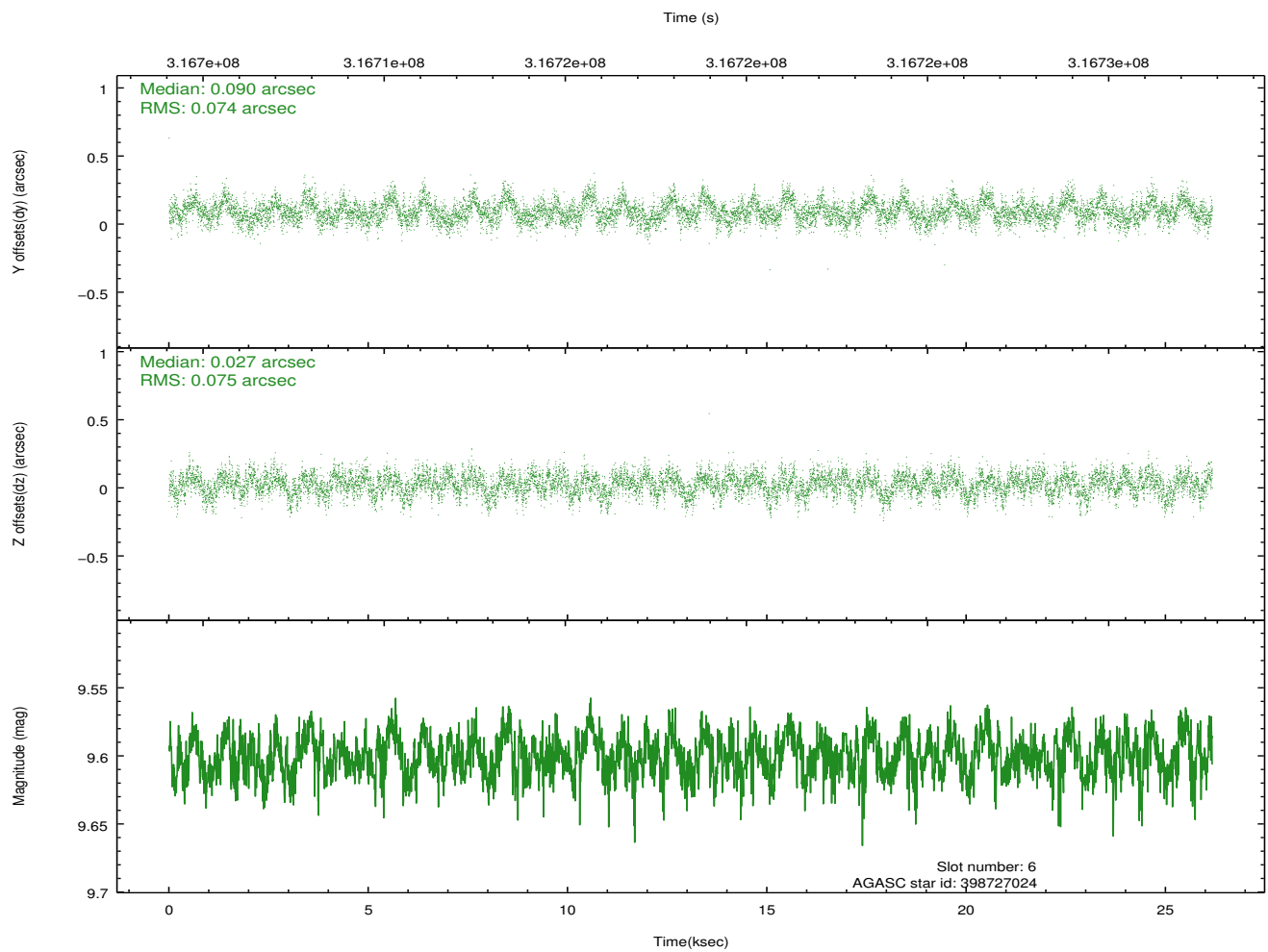
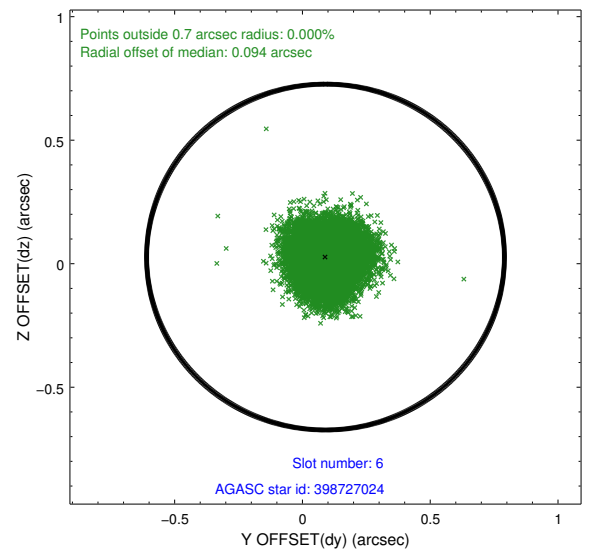
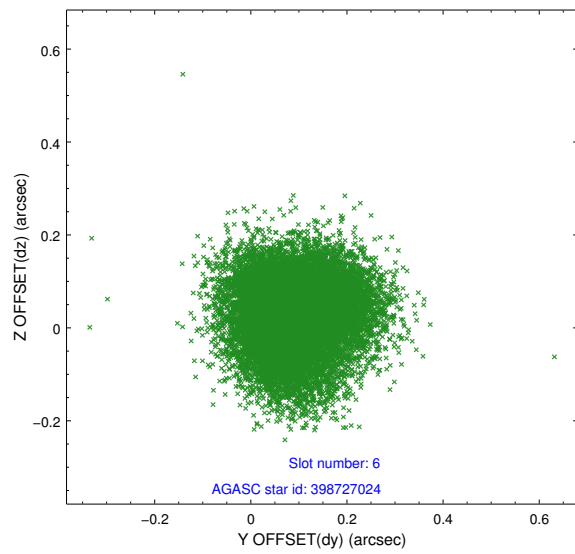
2.4.2 Slot 4



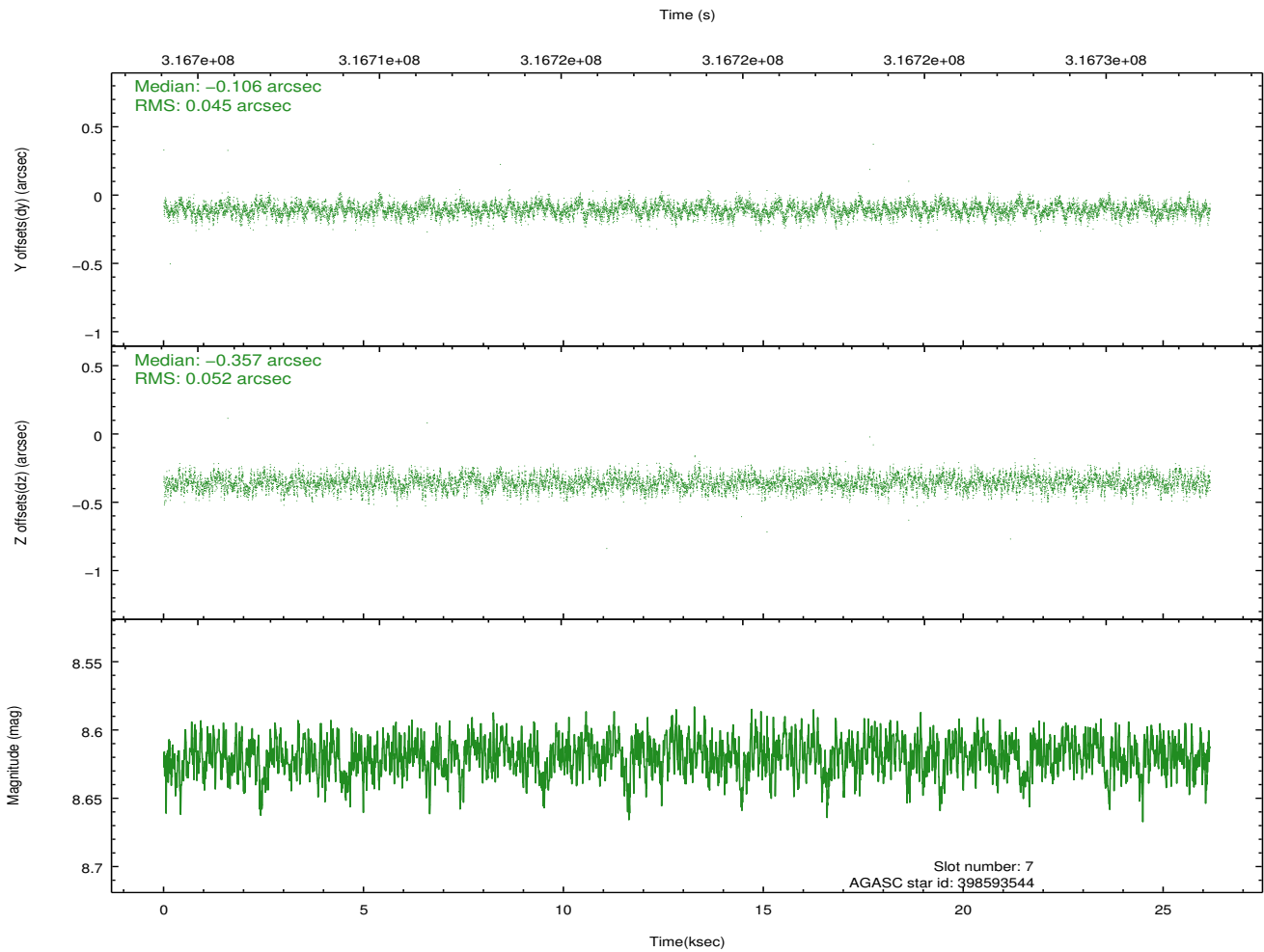
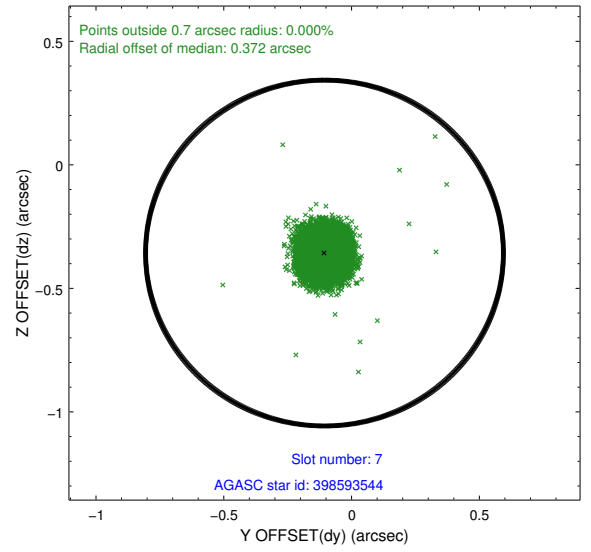
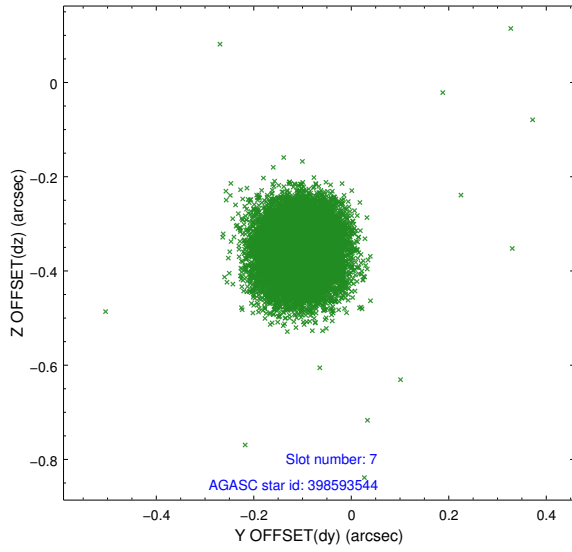
2.4.3 Slot 5



2.4.4 Slot 6

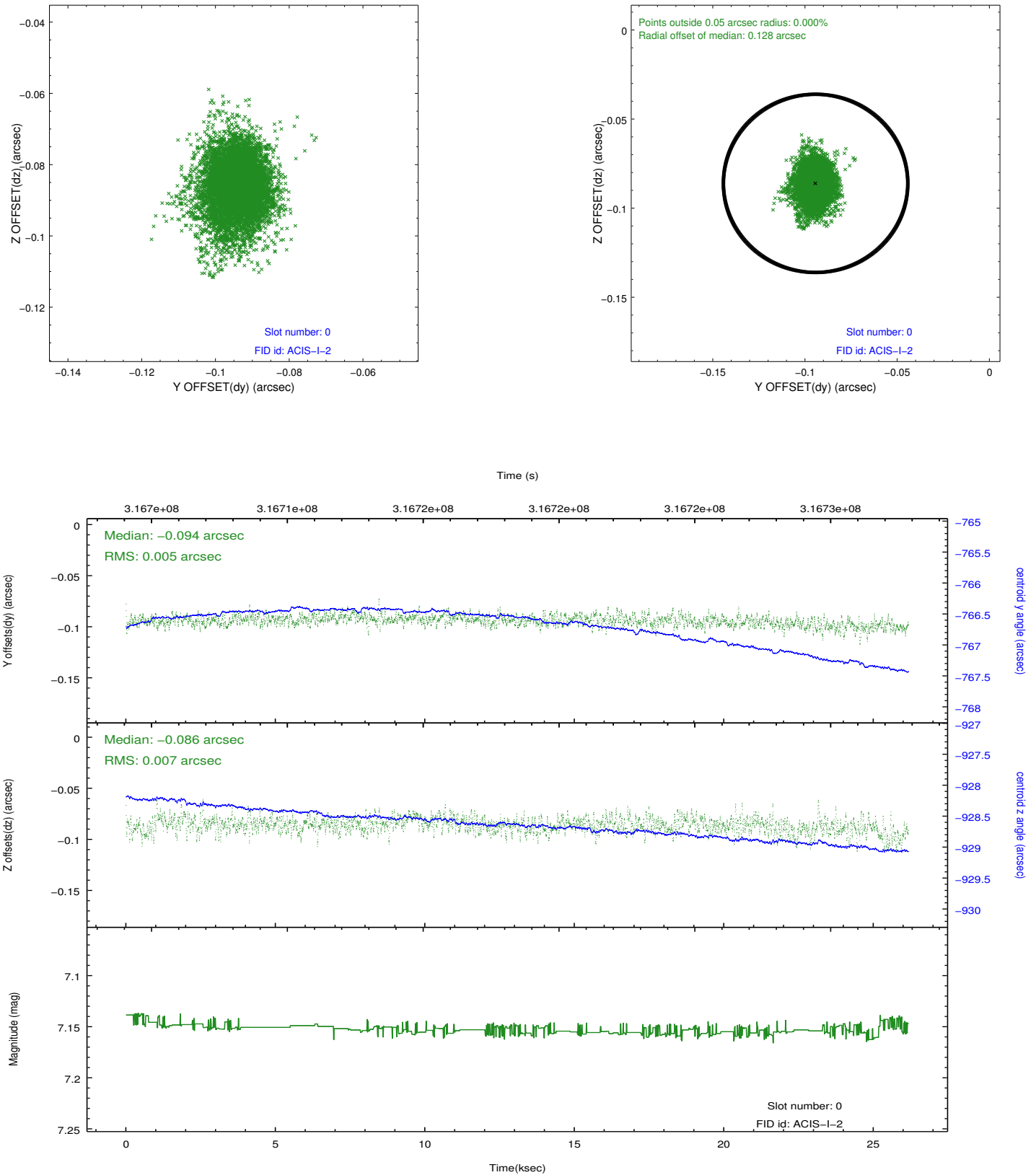


2.4.5 Slot 7

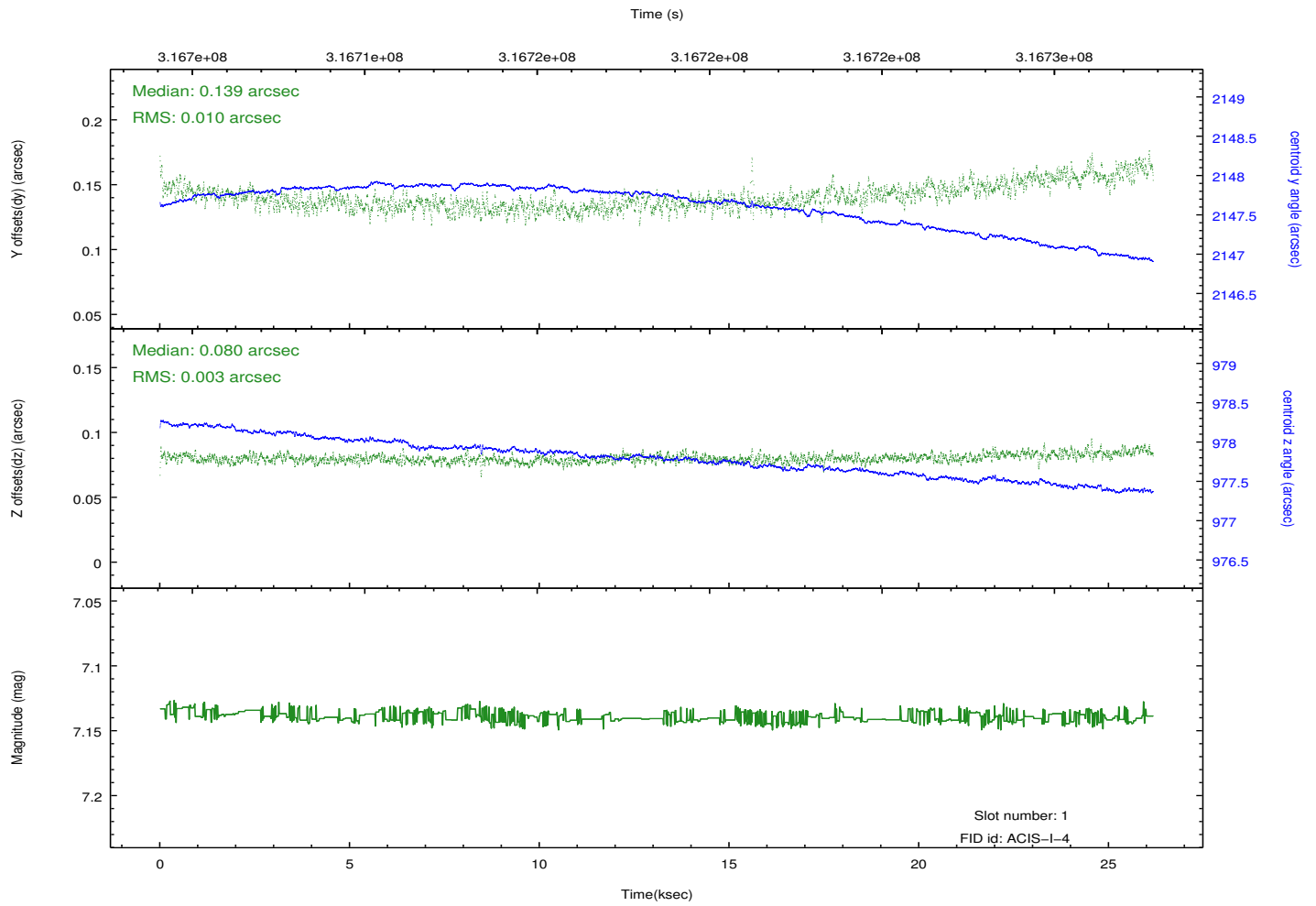
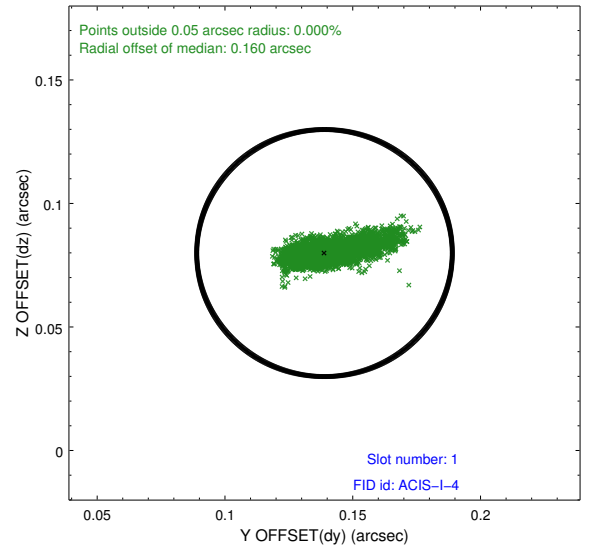
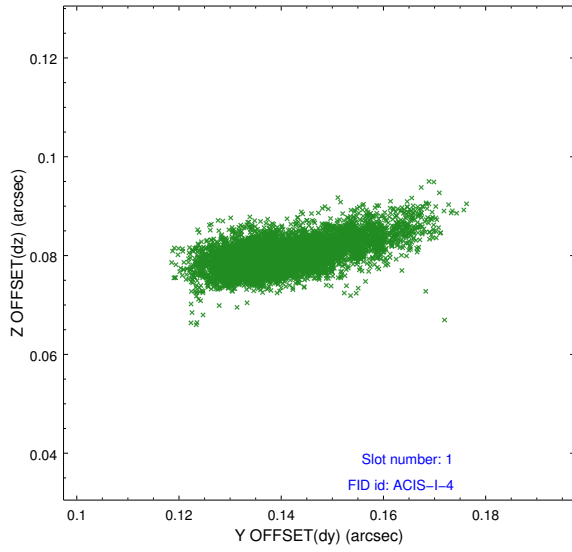


2.5 FID Slots

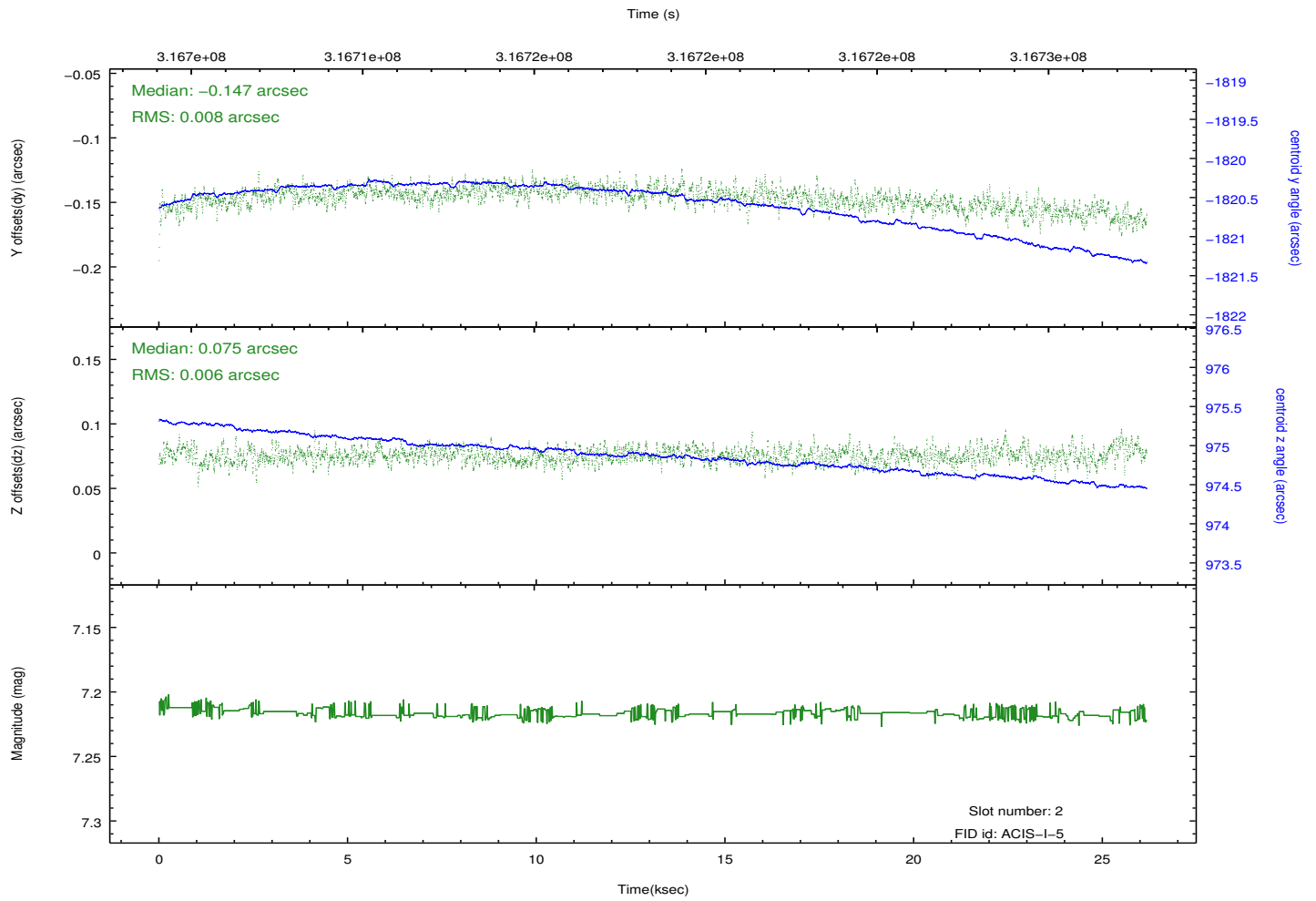
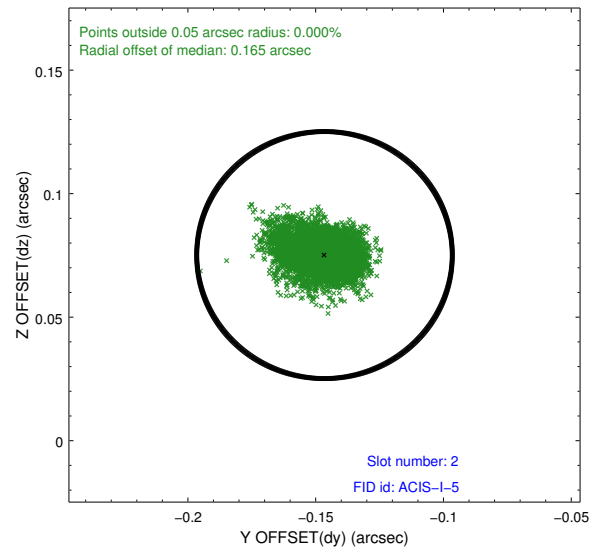
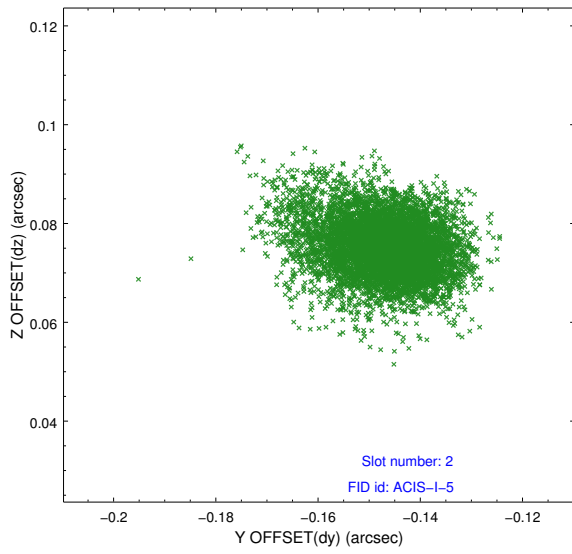
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.1608592

A.2 Comments

Source falls on the gap between the nodes of the CCD chip and has been dithered over this gap. Dithering over the node boundary, which has lower sensitivity, can give a false indication of variability.