

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4276 - L2 Version 5
Chandra X-Ray Center

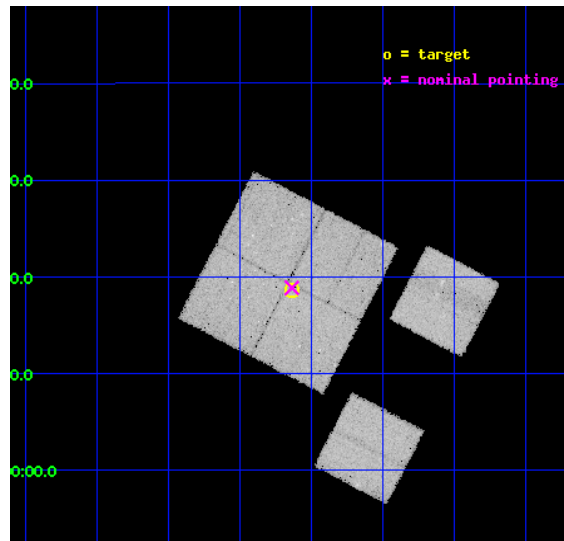
L2 Processing Date : Oct 29 2012

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1 Front

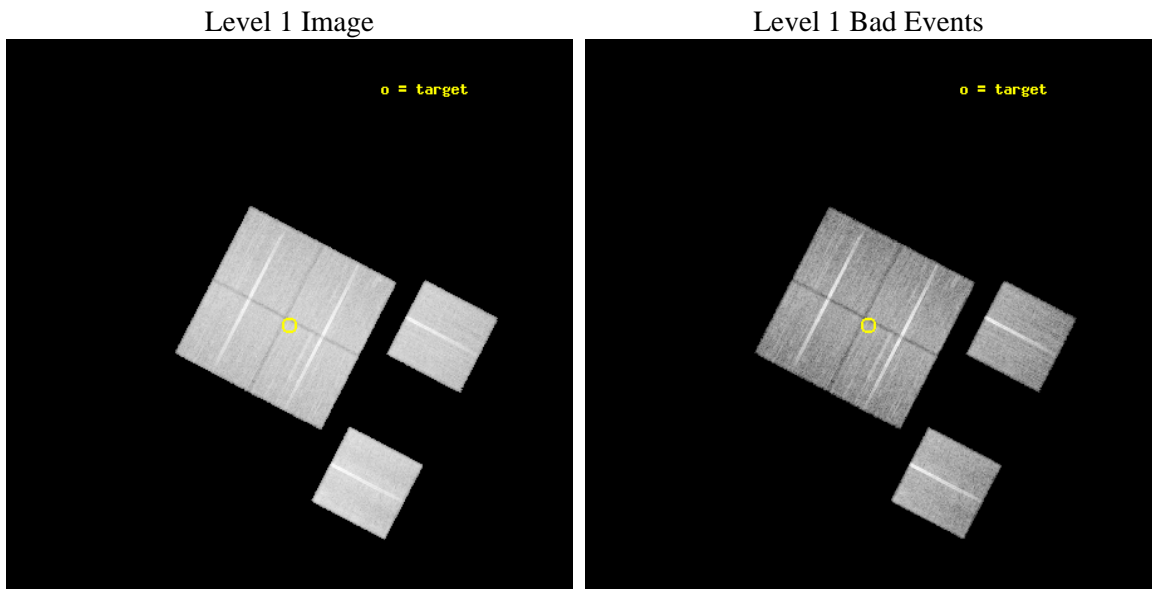
seq_num	900319	Sequence number
obs_id	4276	Observation id
title	A CHANDRA/XMM ATTACK ON THE ASTROPHYSICS OF THE HARD X-RAY BACKGROUND.	Proposal title
observer	Prof. Ian McHardy	Principal investigator
object	XMM 1HR - FIELD 3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	26.409075	Observer's specified target RA [deg]
dec_targ	-4.690134	Observer's specified target Dec [deg]
ra_nom	26.408718517643	Nominal RA [deg]
dec_nom	-4.6855182786776	Nominal Dec [deg]
roll_nom	117.40864902448	Nominal Roll [deg]
revision	5	Processing version of data
ontime	28921.599892259	Sum of GTIs [s]
livetime	28555.377179926	Livetime [s]
ontime0	28827.611097723	Sum of GTIs [s]
ontime1	28918.358951896	Sum of GTIs [s]
ontime2	28915.117971718	Sum of GTIs [s]
ontime3	28921.599892259	Sum of GTIs [s]
ontime6	28915.117941827	Sum of GTIs [s]
ontime8	28918.358932018	Sum of GTIs [s]
l2events	176013	Number of level 2 events



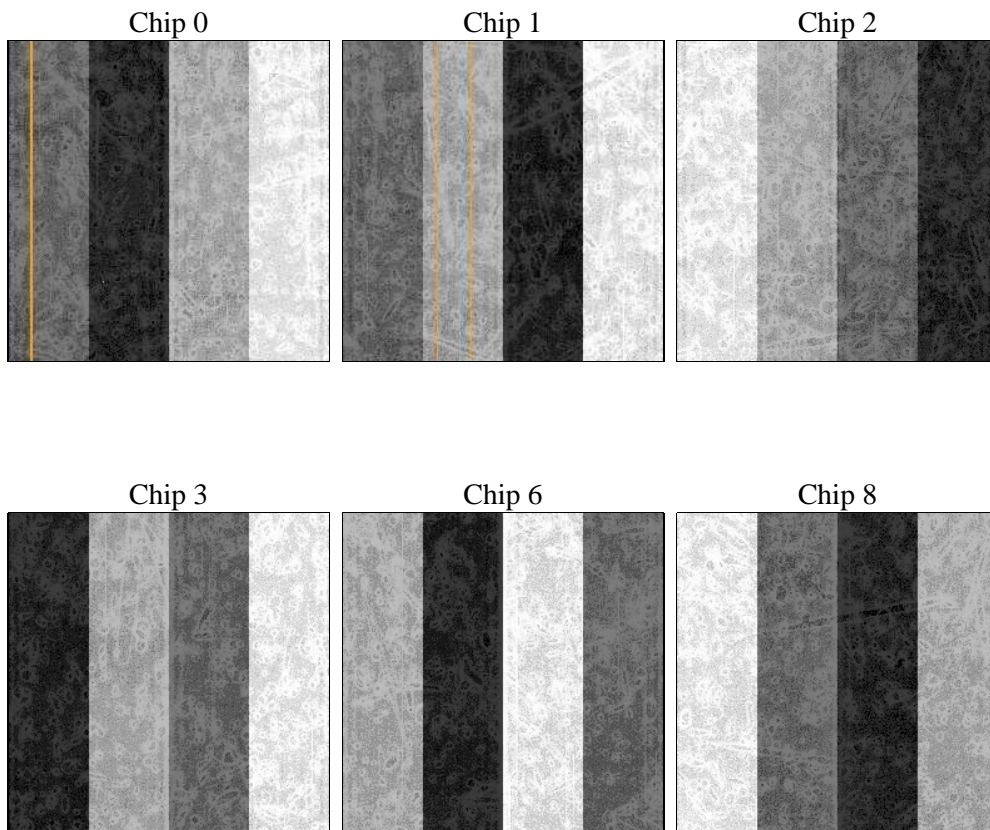
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	28835.221000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	28921.599892259	Sum of GTIs [s]
caldbver	4.5.2	 	ontime0	28827.611097723	Sum of GTIs [s]
date	2012-10-29T05:18:00	Date and time of file creation	ontime1	28918.358951896	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	28915.117971718	Sum of GTIs [s]
			ontime3	28921.599892259	Sum of GTIs [s]
			ontime6	28915.117941827	Sum of GTIs [s]
			ontime8	28918.358932018	Sum of GTIs [s]
			l1events	1142011	Number of level 1 events

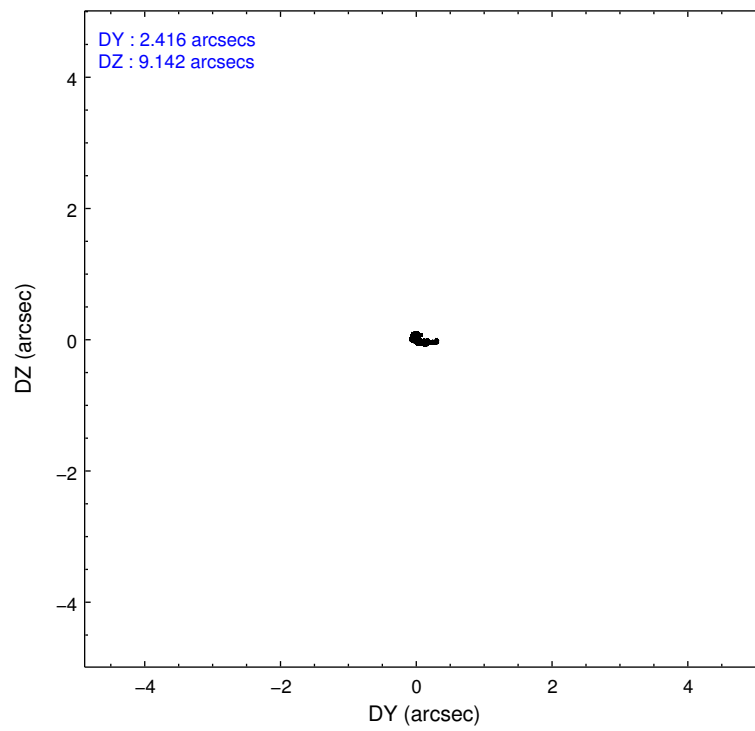
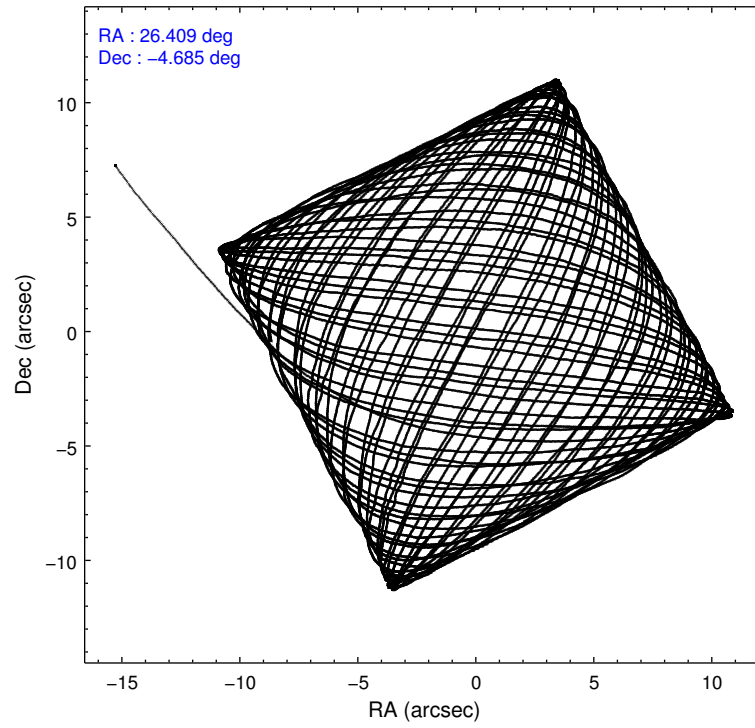
2.1.4 Events

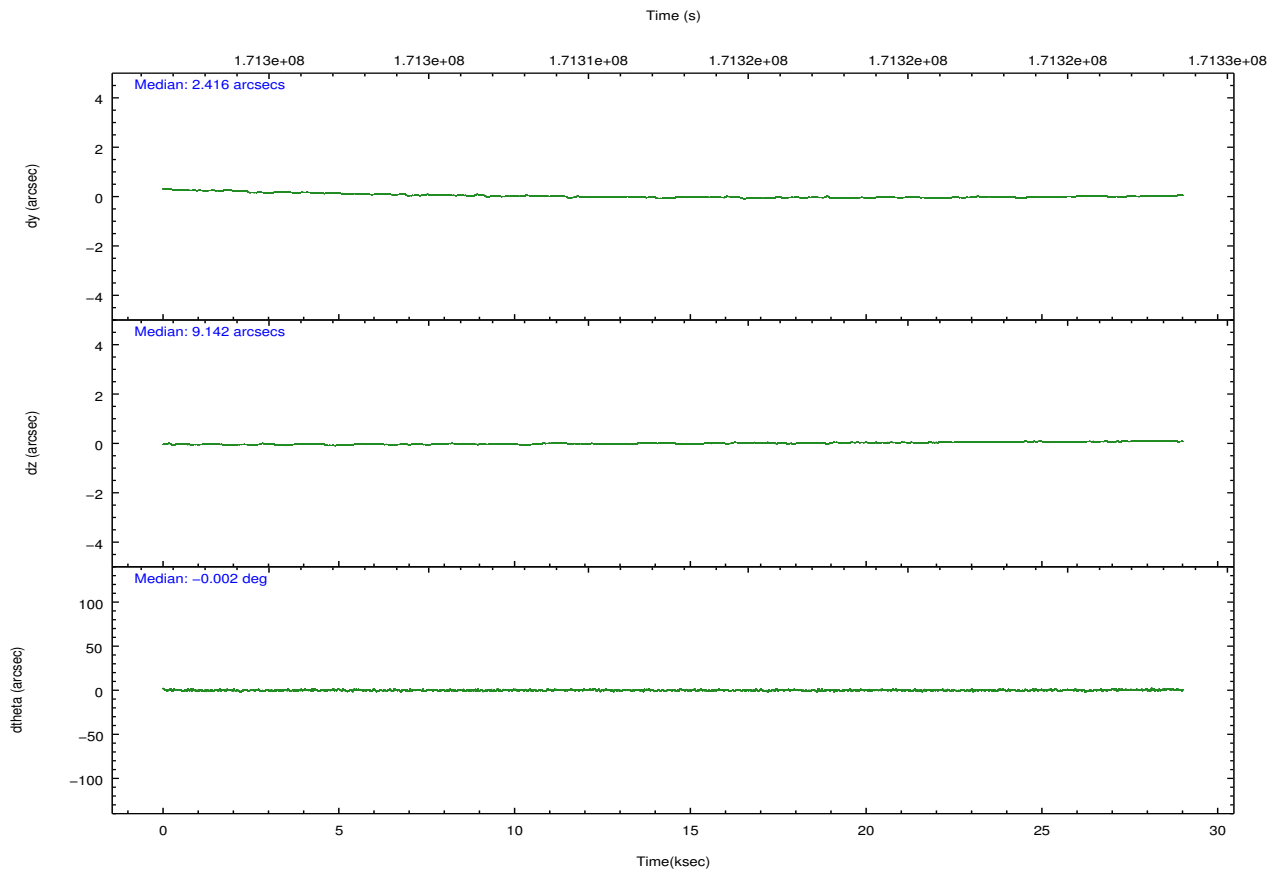
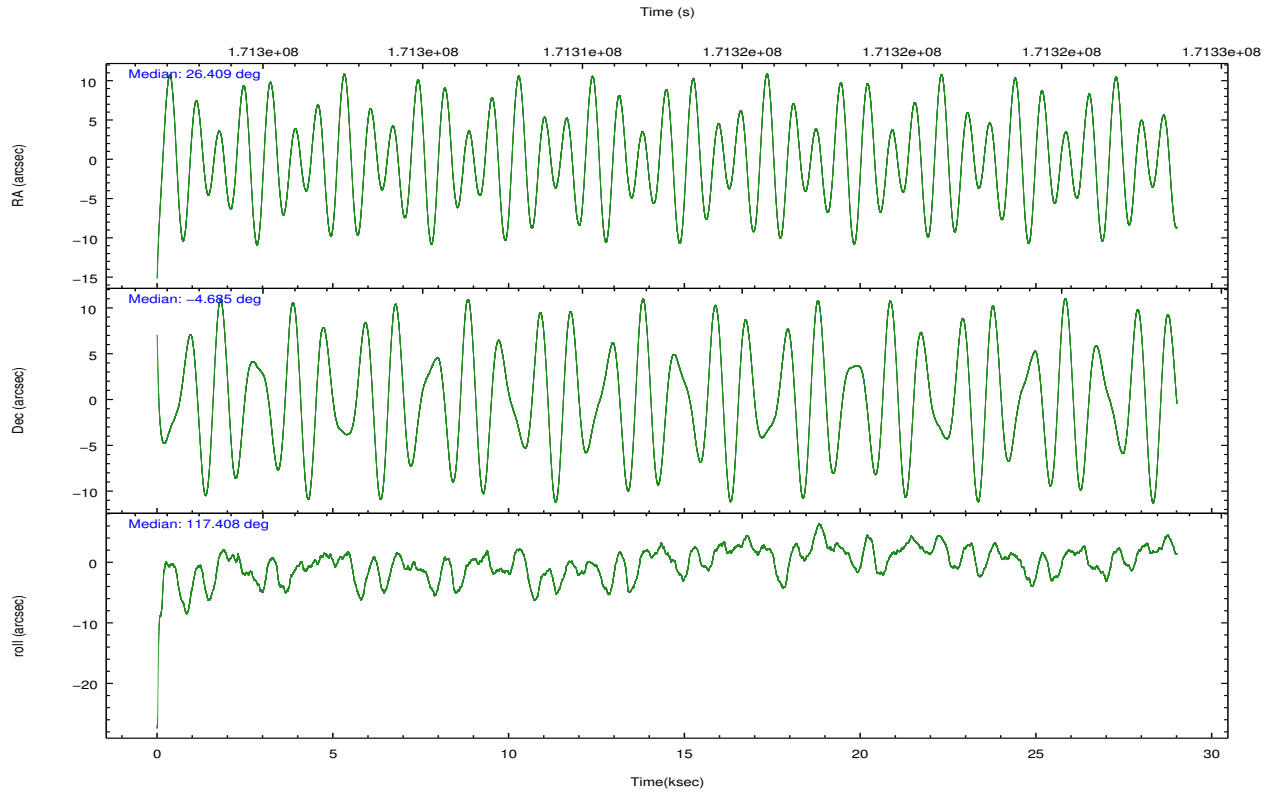
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 8
level 1 events	169743	172837	185834	183427	186963	243207	grade 0 events	17718	17083	18485	17789	17917	25208
rejected events	137731	139471	153862	151639	153615	183689		10%	9%	9%	9%	9%	10%
rejected %	81%	80%	82%	82%	82%	75%	grade 1 events	133	129	152	116	109	205
								0%	0%	0%	0%	0%	0%
							grade 2 events	5516	6168	5225	5100	5766	11193
								3%	3%	2%	2%	3%	4%
							grade 3 events	2462	2592	2248	2442	2423	5358
								1%	1%	1%	1%	1%	2%
							grade 4 events	2291	2643	2213	2387	2317	5088
								1%	1%	1%	1%	1%	2%
							grade 5 events	6822	7336	6797	7666	7895	10640
								4%	4%	3%	4%	4%	4%
							grade 6 events	4087	4880	3805	4075	4927	12683
								2%	2%	2%	2%	2%	5%
							grade 7 events	130714	132006	146909	143852	145609	172832
								77%	76%	79%	78%	77%	71%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012368	ACIS-012368	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	26.431921	26.40871851764277	Subarray requested	NONE	NONE
[deg] Pointing Dec	-4.700172	-4.685518278677592	Alternating exposures requested	N	N
[deg] Pointing Roll	117.201872	117.4086490244804	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	171298321.184000	171297305.78731			
Observation start date	2003-06-06T14:50:57	2003-06-06T14:35:05			
[s] Observation end time (MET)	171327156.184000	171327471.0261			
Observation end date	2003-06-06T22:51:32	2003-06-06T22:57:51			
Read mode	TIMED	TIMED			

2.3 Aspect



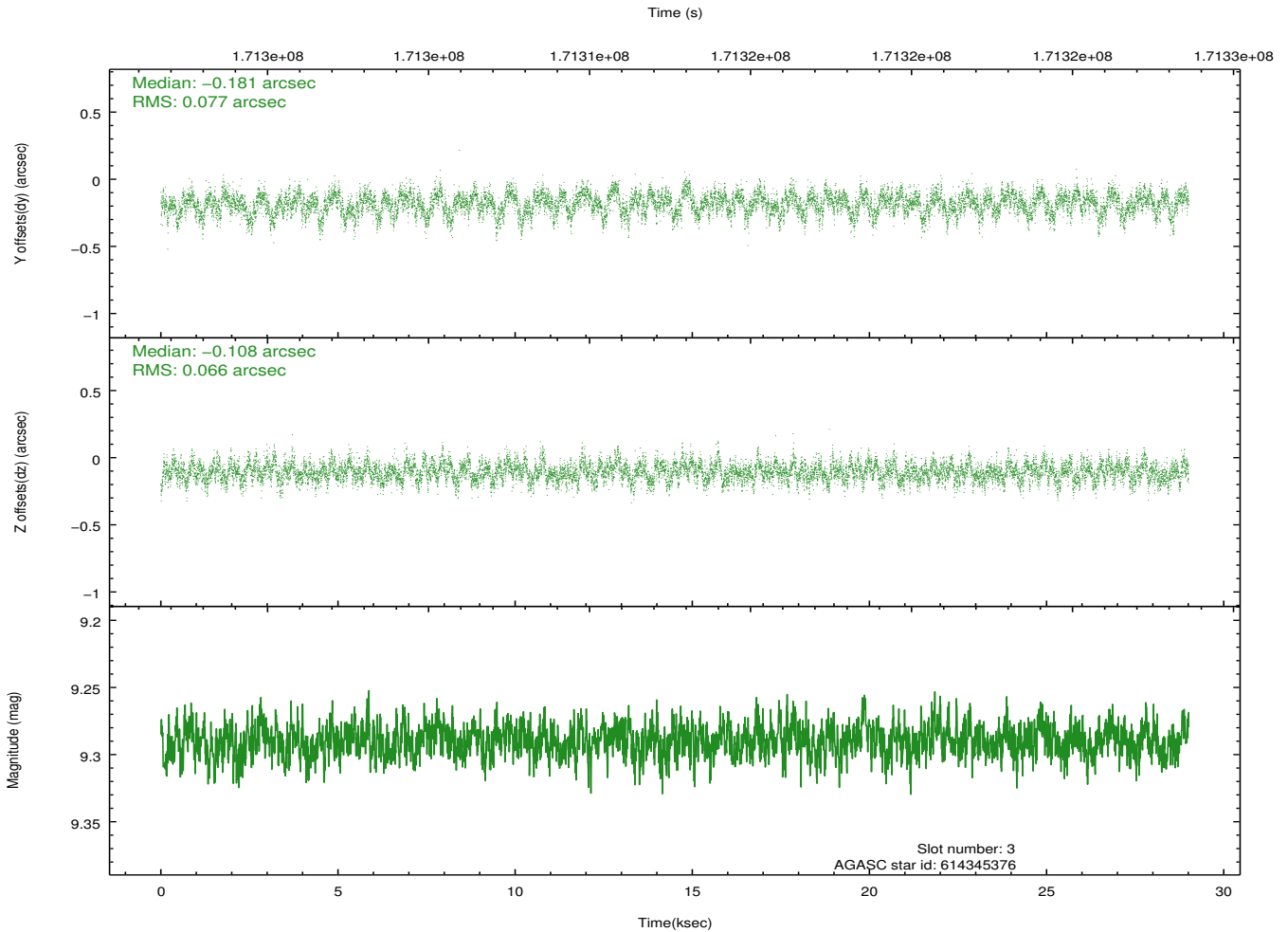
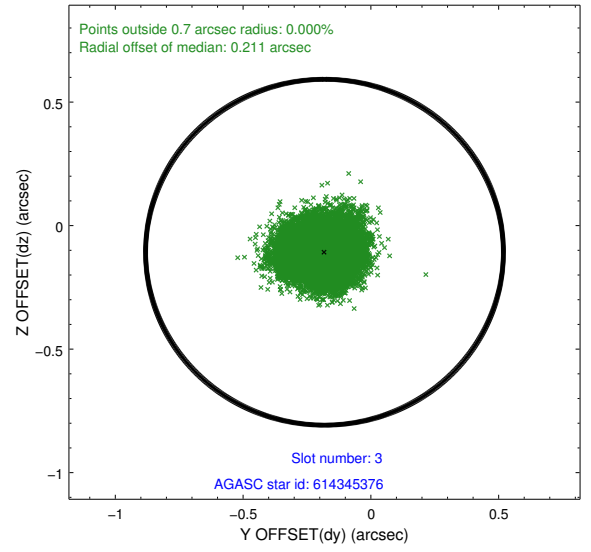
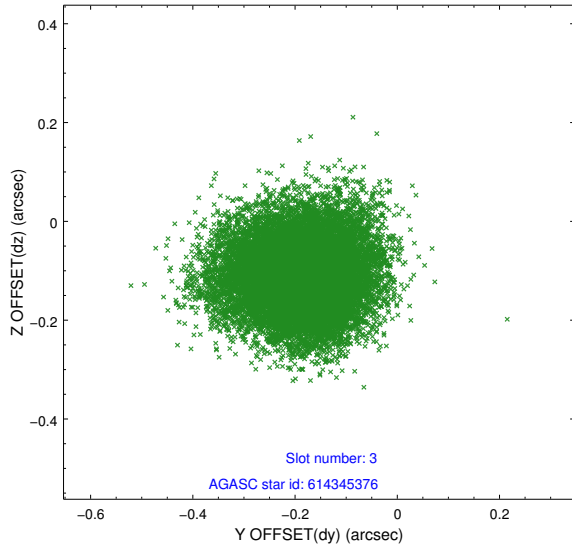


Slot Statistics

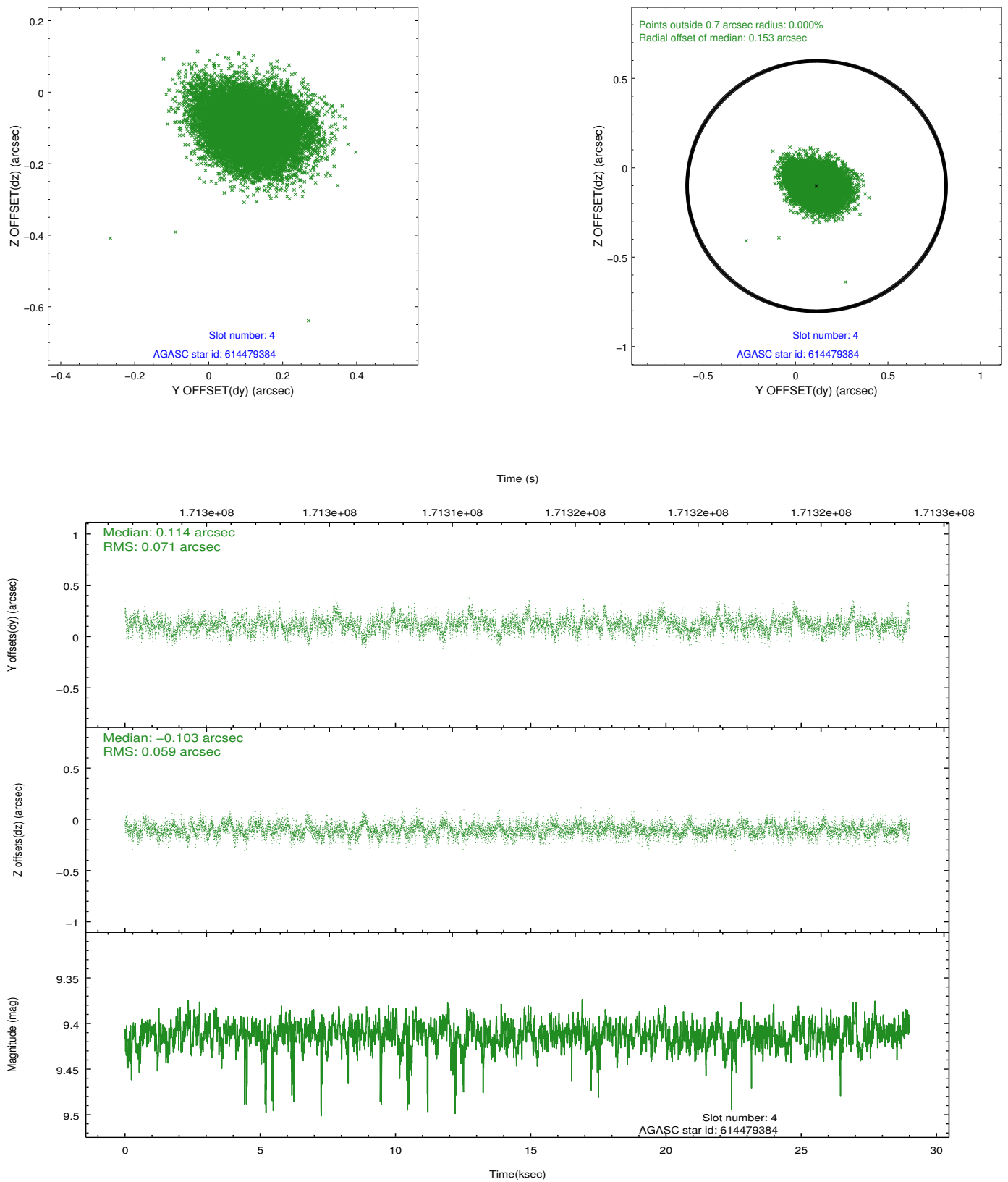
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	7076	-0.061	0.038	0.006	0.011	0.000000	0.000000	937.29	-832.56
1	FID	ACIS-I-4	7.18	7076	0.015	0.043	0.008	0.014	0.000000	0.000000	2157.47	1067.20
2	FID	ACIS-I-6	7.25	7076	-0.052	-0.016	0.008	0.013	0.000000	0.000000	403.33	1709.43
3	GUIDE	614345376	9.29	14147	-0.181	-0.108	0.108	0.175	25.702118	-4.344424	2335.35	1745.54
4	GUIDE	614479384	9.41	14084	0.114	-0.103	0.097	0.162	26.458684	-5.277867	-1893.21	865.79
5	GUIDE	614480816	10.51	14117	0.140	-0.033	0.185	0.317	26.301496	-5.028963	-838.90	957.51
6	GUIDE	614482496	8.04	14149	-0.138	0.125	0.075	0.123	26.490453	-4.228669	1413.42	-962.16
7	GUIDE	614483944	10.04	14138	0.077	0.114	0.114	0.188	26.708180	-4.967254	-1308.00	-441.20

2.4 Star Slots

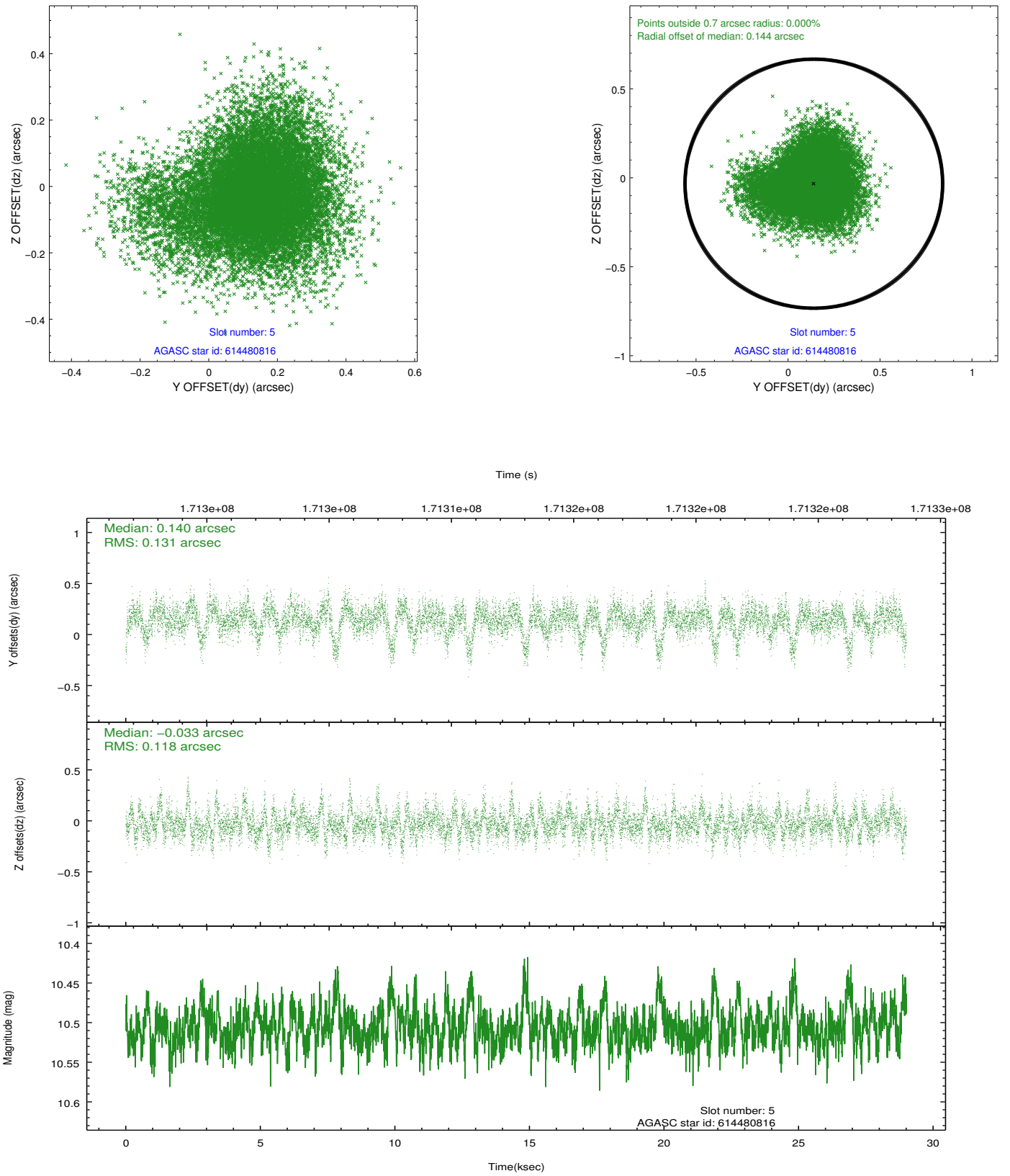
2.4.1 Slot 3



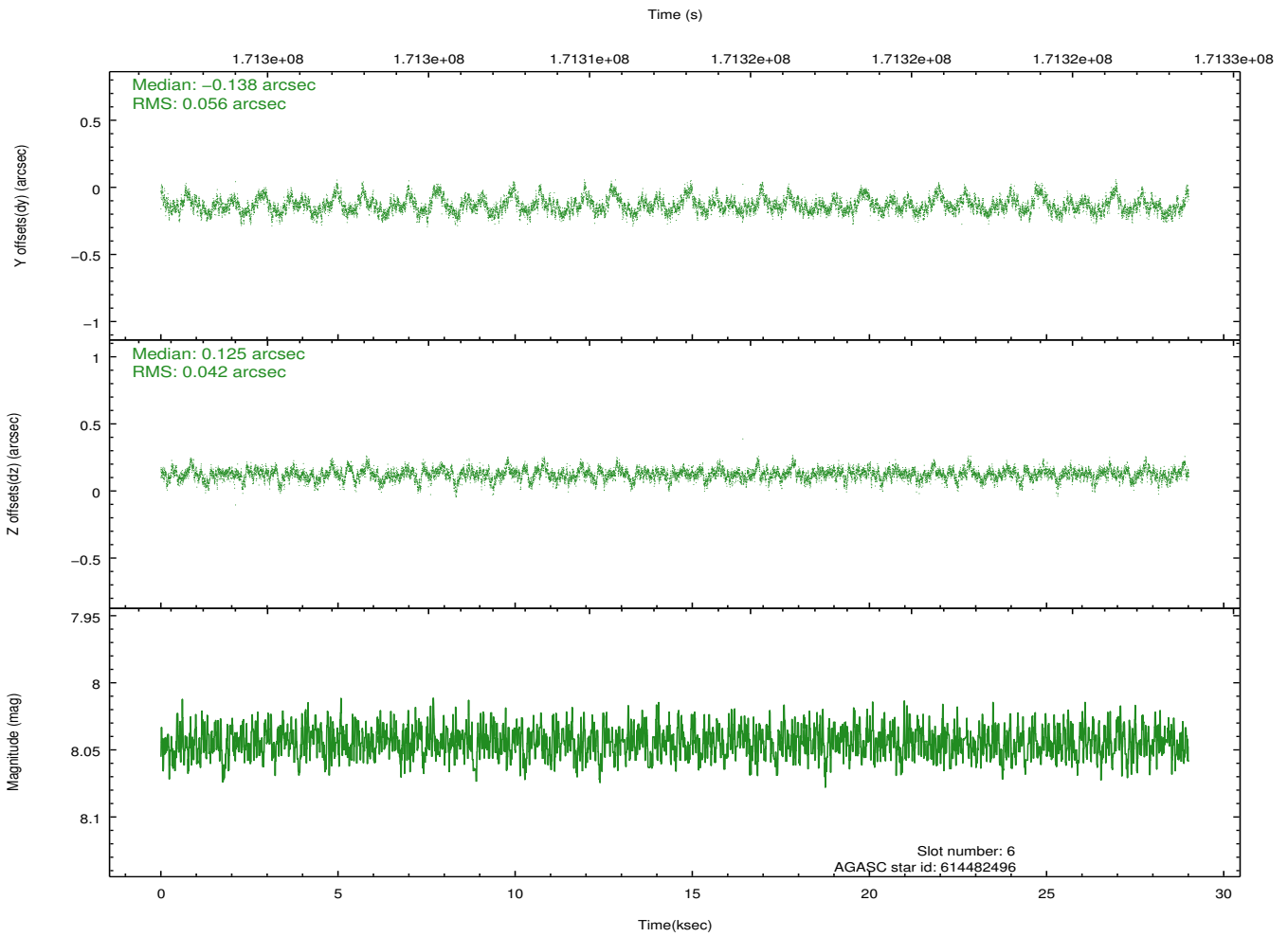
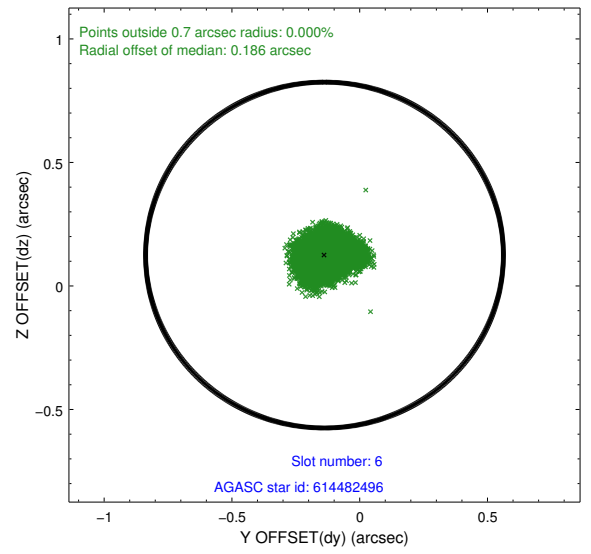
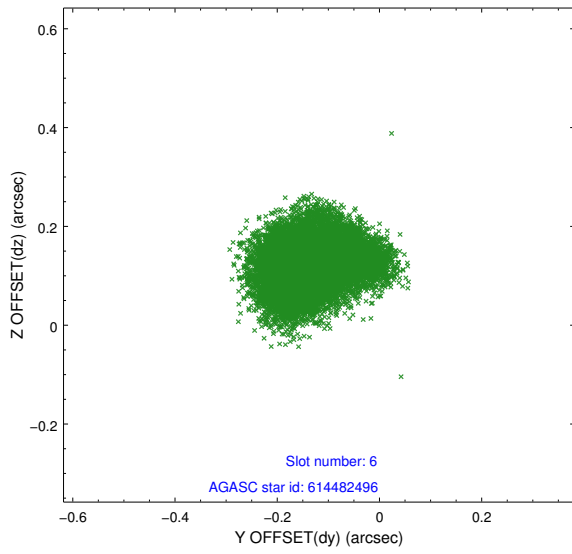
2.4.2 Slot 4



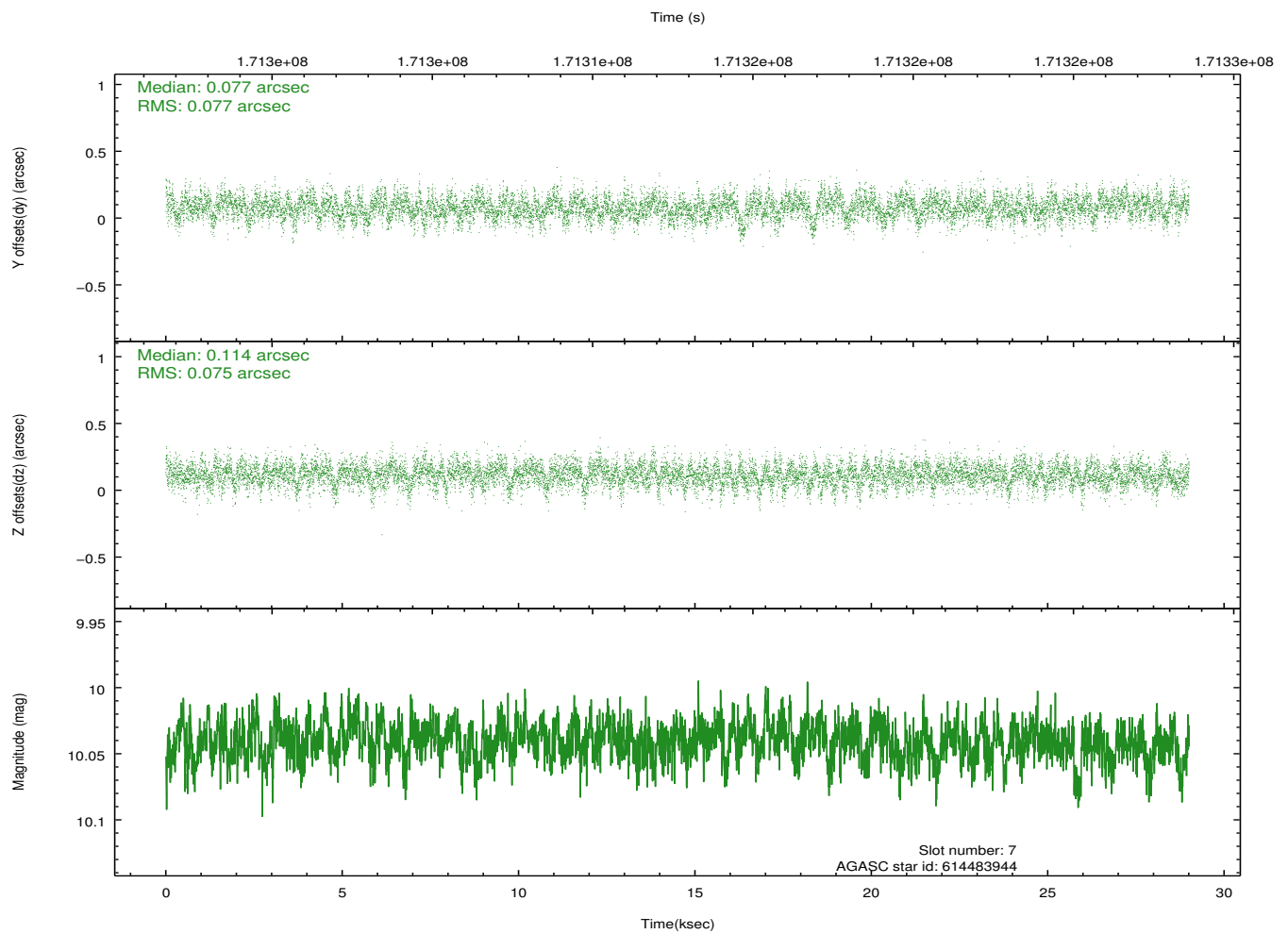
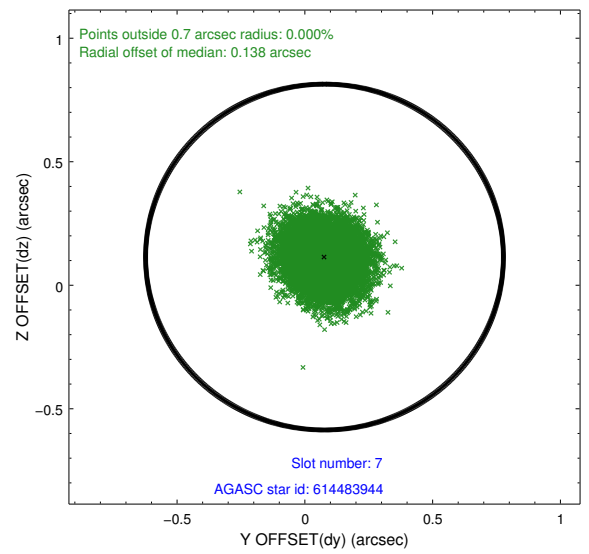
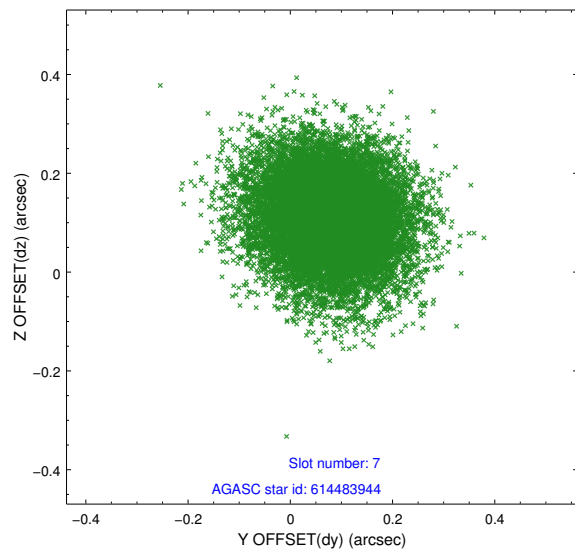
2.4.3 Slot 5



2.4.4 Slot 6

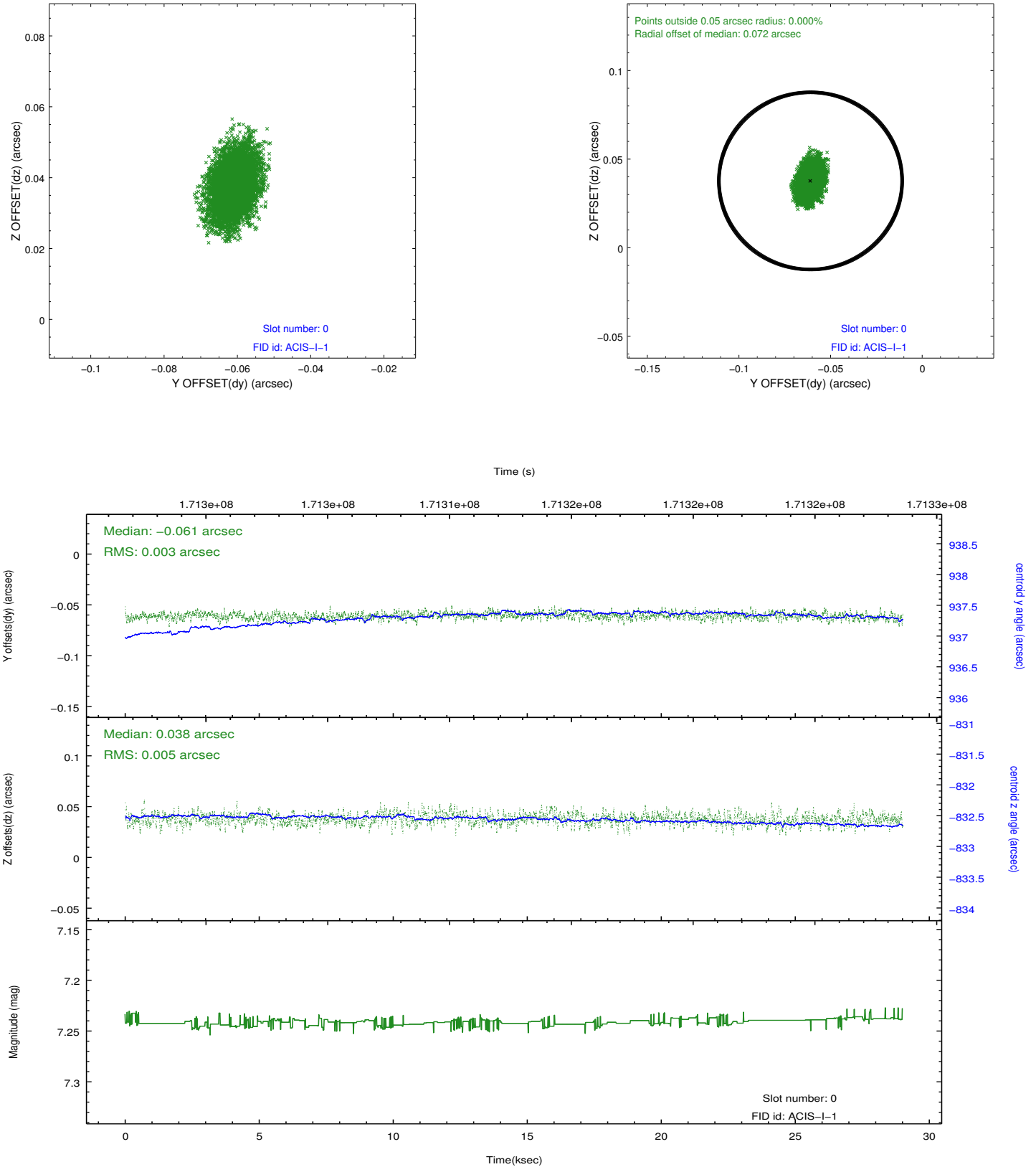


2.4.5 Slot 7

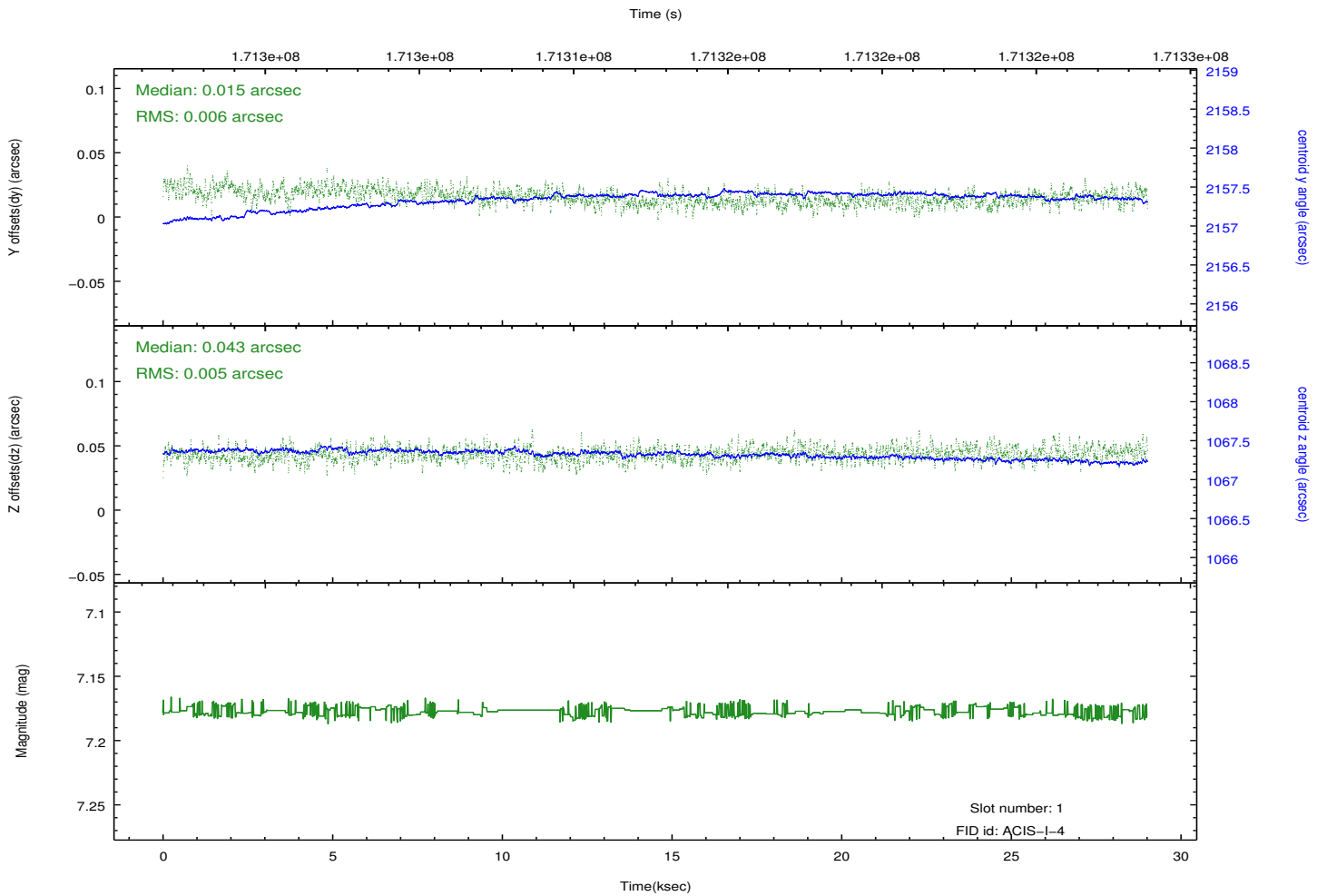
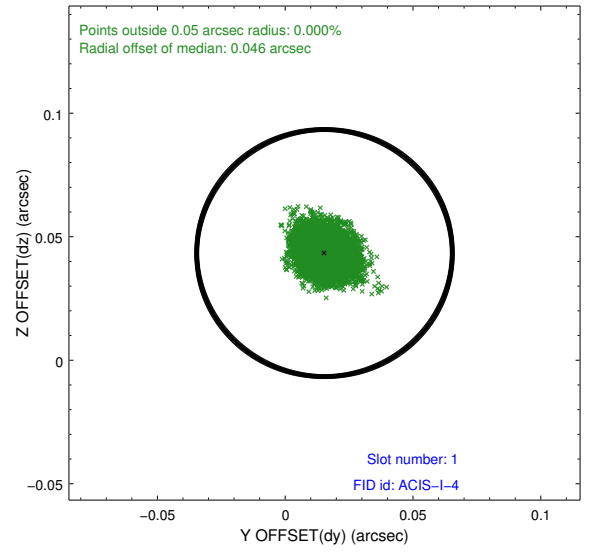
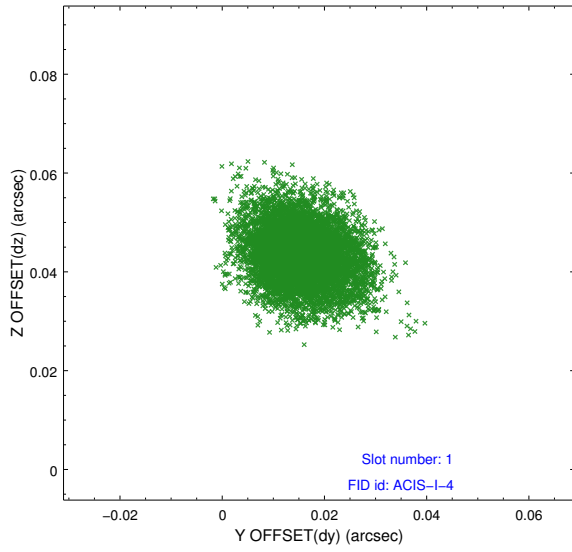


2.5 FID Slots

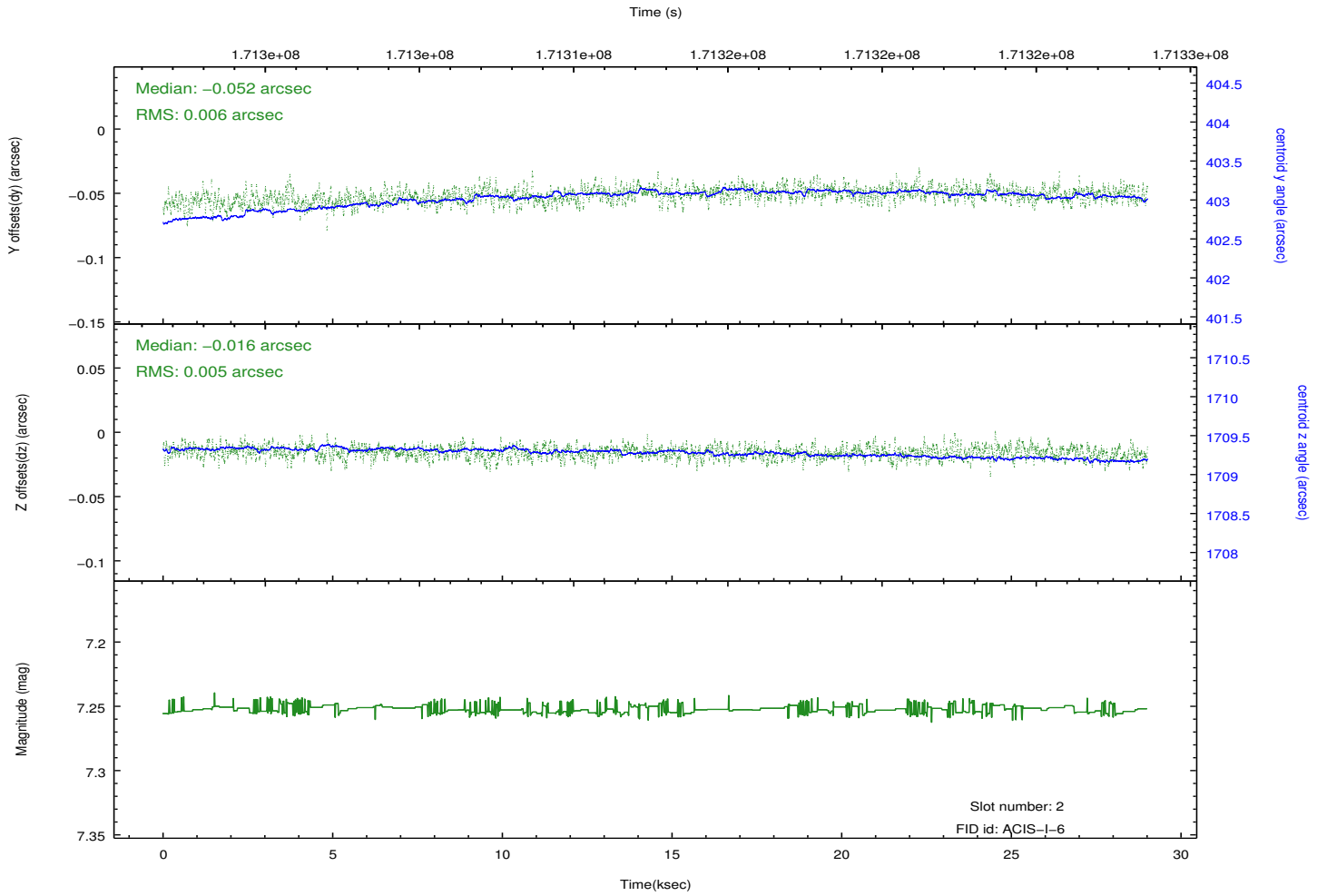
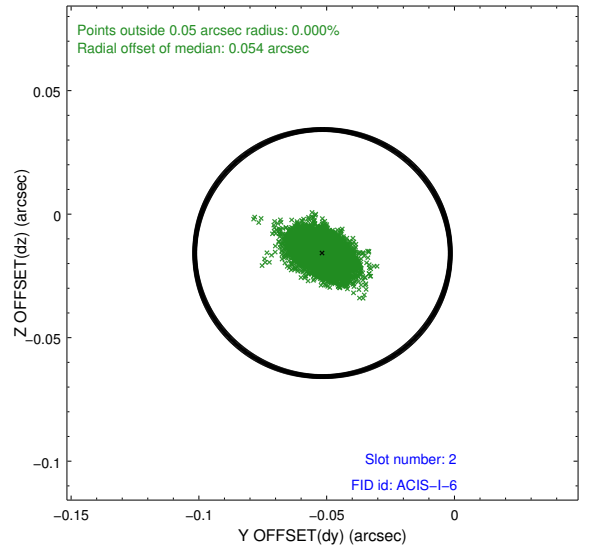
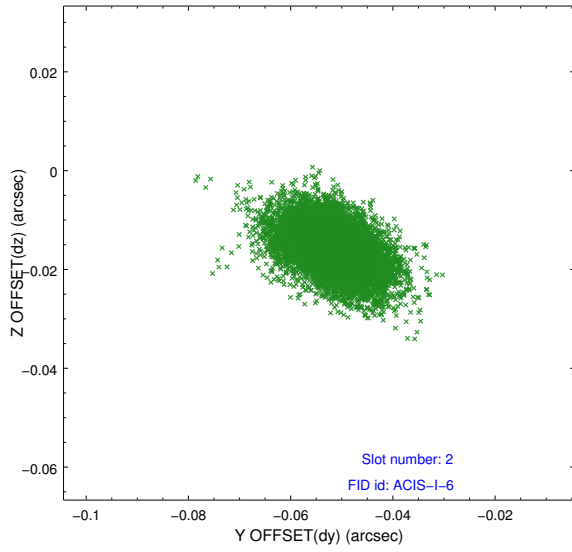
2.5.1 Slot 0



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)	2013.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.921

A.2 Comments

Roll preference met. ===

A warning from the software indicates out-of-sequence exposure records. This appears to be due to a duplication of ACIS packets in the raw telemetry. The duplicate data is filtered out in Level 2 data. There is no problem with Level 2 data. The duplicate data could be removed by special processing, removing major/minor frames 27315:50 - 27315:55 from raw telemetry.