

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 2669 - L2 Version 4
Chandra X-Ray Center

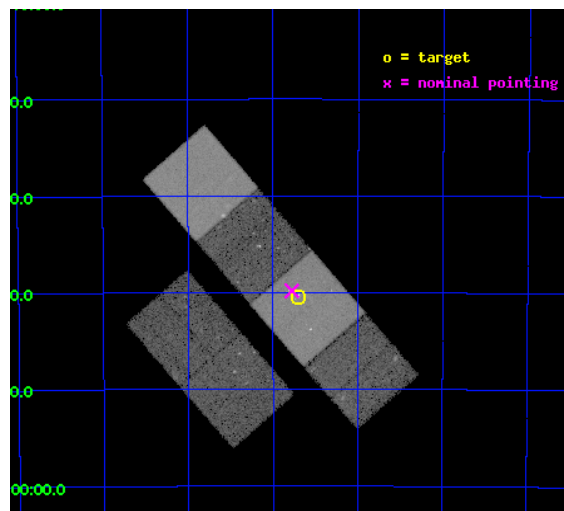
L2 Processing Date : Nov 21 2012

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1 Front

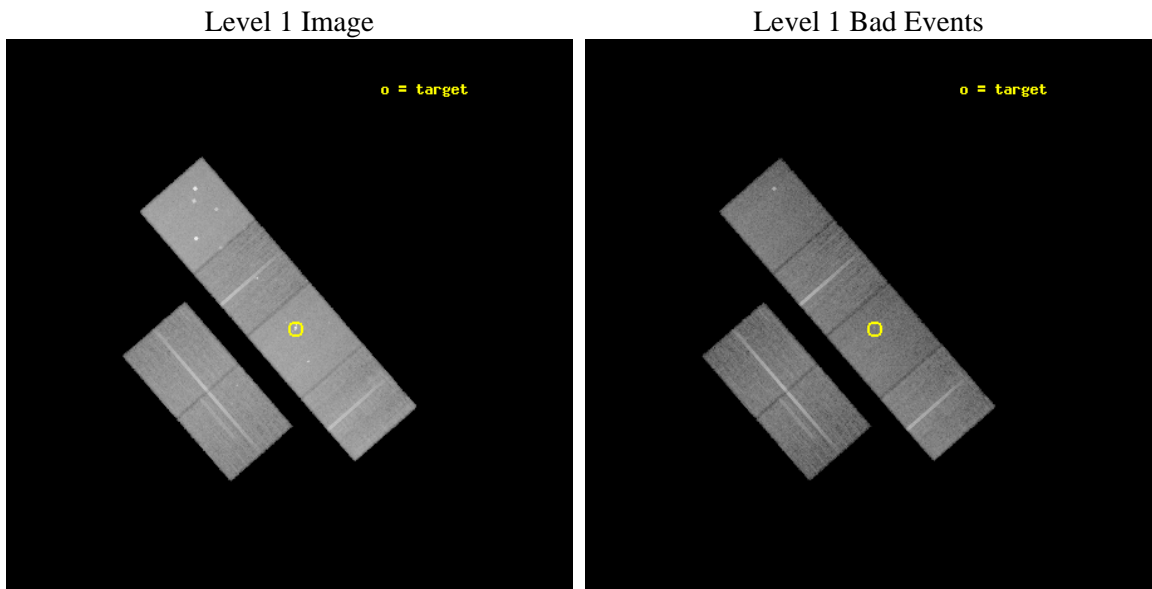
seq_num	300070	Sequence number
obs_id	2669	Observation id
title	RESOLVING THE COMPACT BINARIES IN NGC 6397	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	NGC6397	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.175	Observer's specified target RA [deg]
dec_targ	-53.674417	Observer's specified target Dec [deg]
ra_nom	265.19462291411	Nominal RA [deg]
dec_nom	-53.663694464113	Nominal Dec [deg]
roll_nom	48.943002386006	Nominal Roll [deg]
revision	4	Processing version of data
ontime	27001.599899411	Sum of GTIs [s]
livetime	26659.689383073	Livetime [s]
ontime2	27001.599899411	Sum of GTIs [s]
ontime3	27001.599899411	Sum of GTIs [s]
ontime5	27001.599899411	Sum of GTIs [s]
ontime6	27001.599899411	Sum of GTIs [s]
ontime7	27001.599899411	Sum of GTIs [s]
ontime8	27001.599899411	Sum of GTIs [s]
l2events	279645	Number of level 2 events



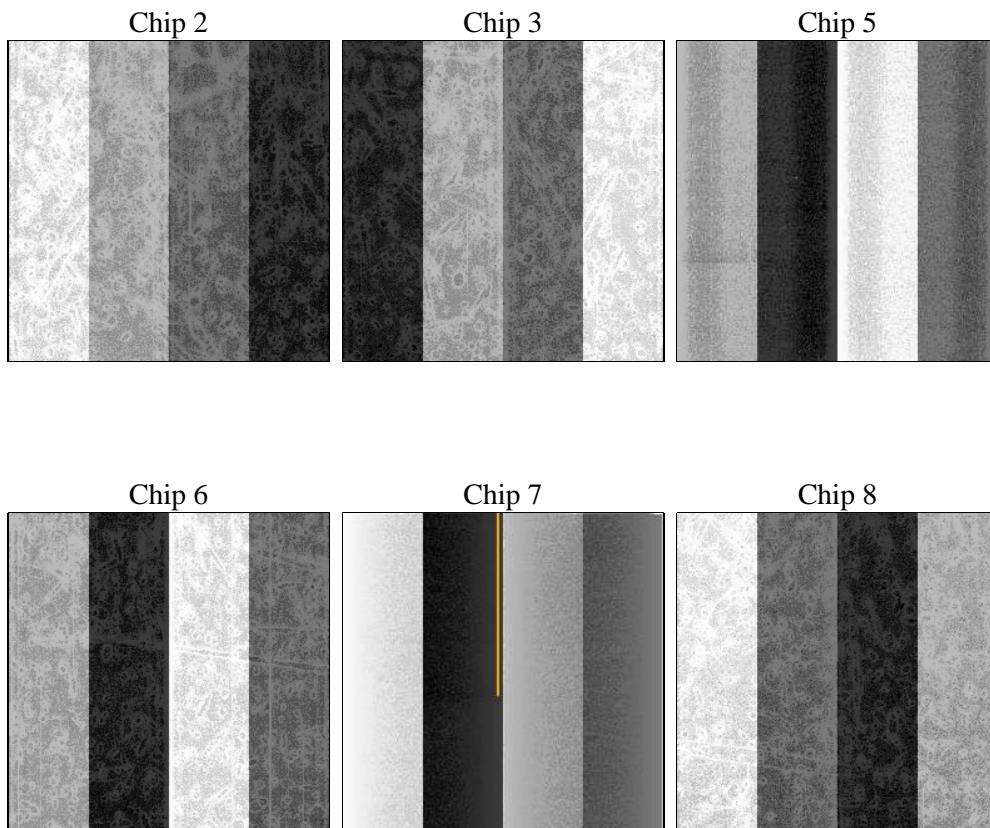
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	27001.599899411	Sum of GTIs [s]
caldbver	4.5.2	 	ontime2	27001.599899411	Sum of GTIs [s]
date	2012-11-21T03:36:38	Date and time of file creation	ontime3	27001.599899411	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	27001.599899411	Sum of GTIs [s]
			ontime6	27001.599899411	Sum of GTIs [s]
			ontime7	27001.599899411	Sum of GTIs [s]
			ontime8	27001.599899411	Sum of GTIs [s]
			l1events	1206654	Number of level 1 events

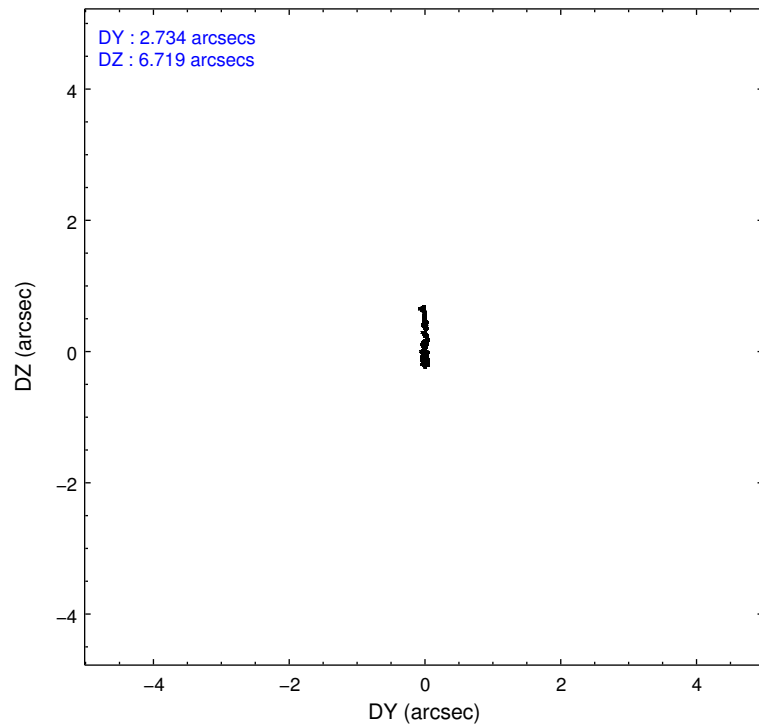
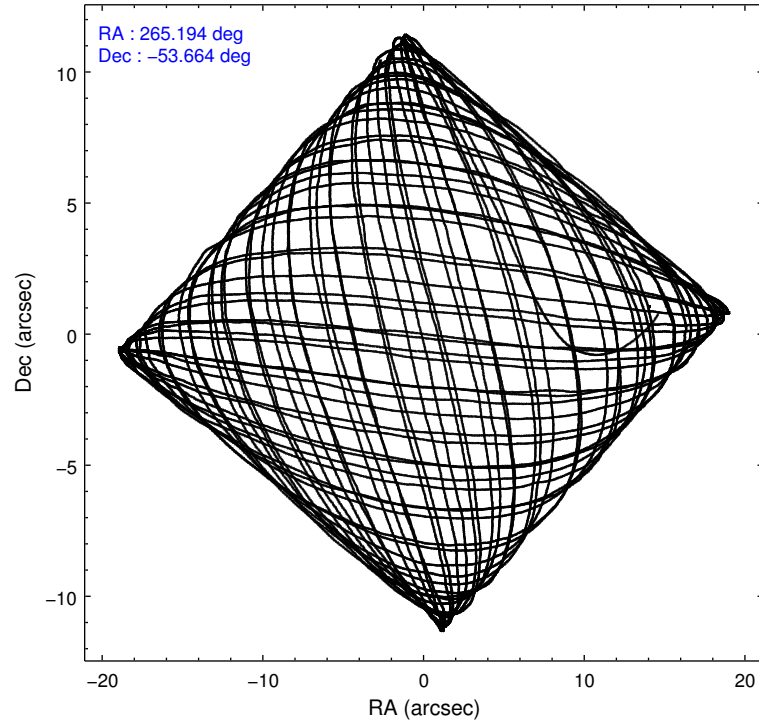
2.1.4 Events

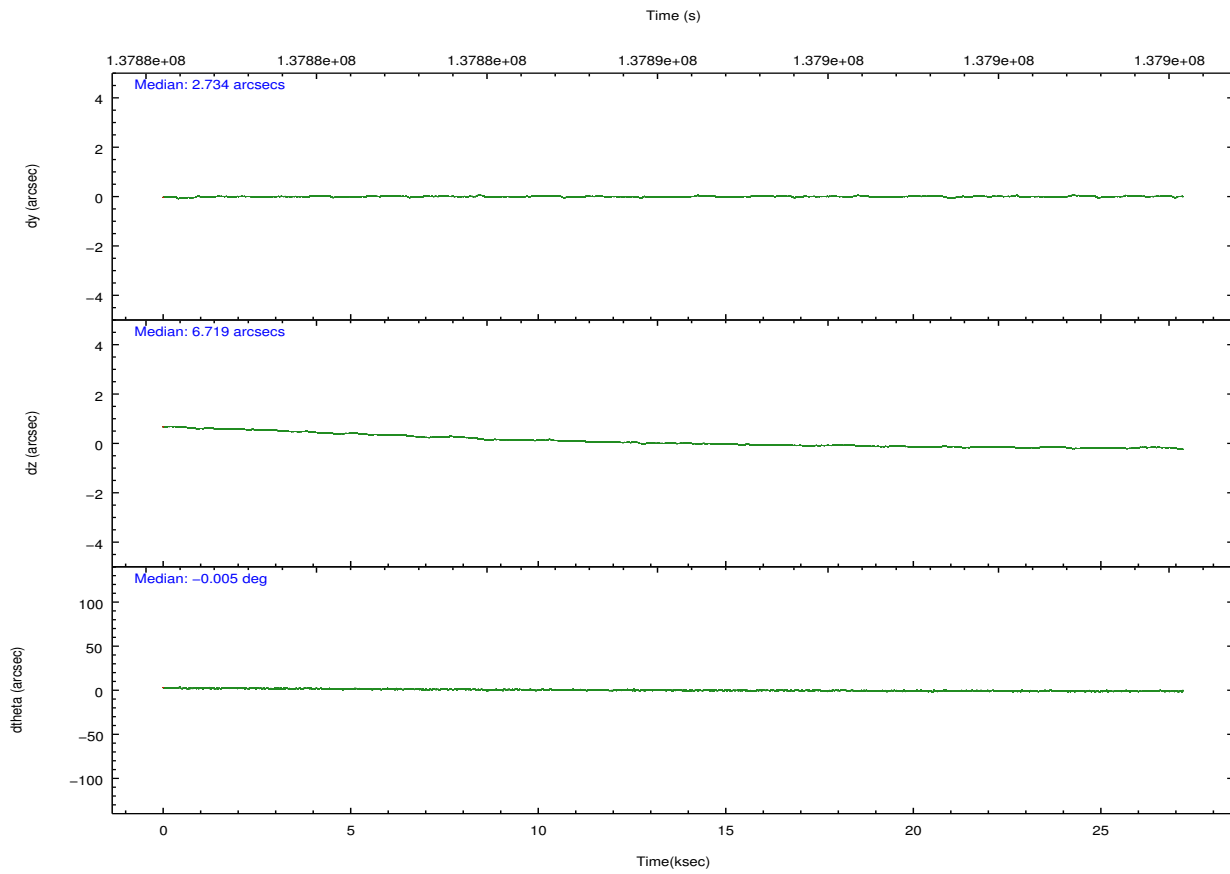
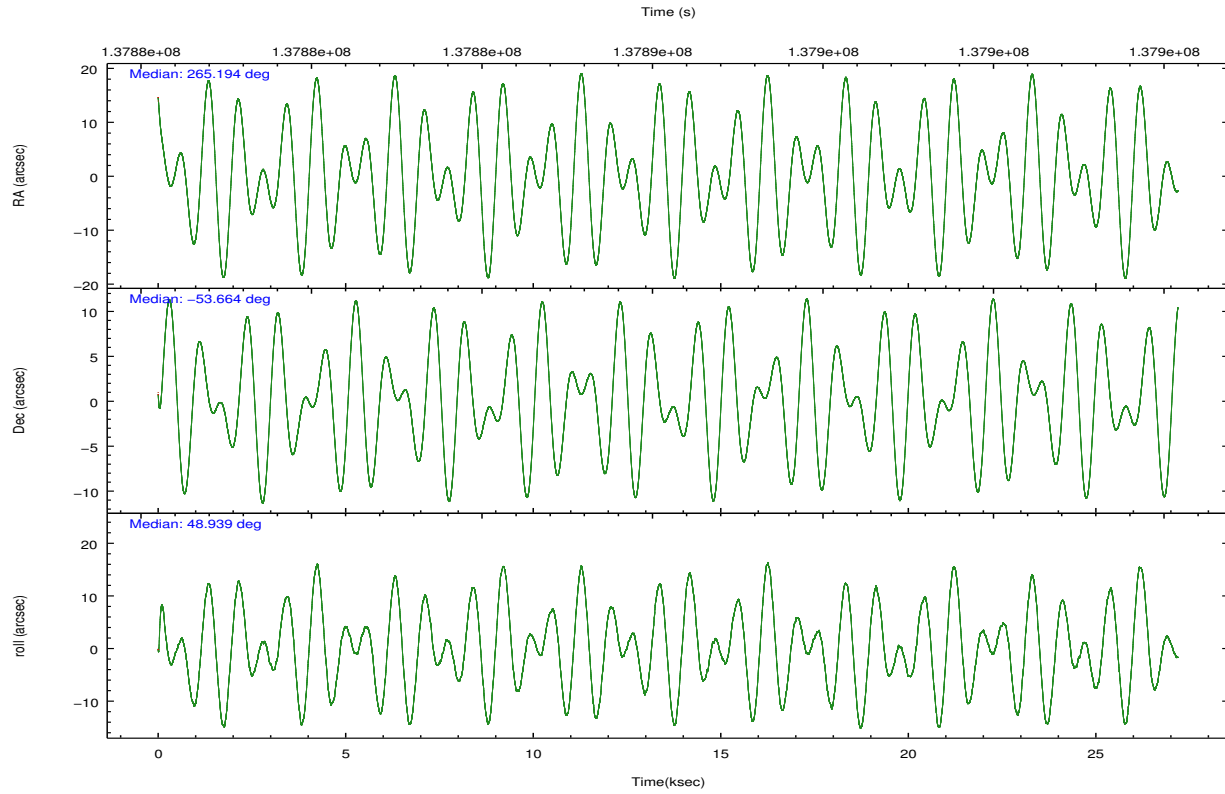
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	172323	162963	254915	171908	231548	212997	grade 0 events	8980	9261	18898	9838	11207	14882
rejected events	151961	142458	132562	149888	131478	167849		5%	5%	7%	5%	4%	6%
rejected %	88%	87%	52%	87%	56%	78%	grade 1 events	92	79	310	82	252	143
								0%	0%	0%	0%	0%	0%
							grade 2 events	4348	3944	36028	4218	20212	9511
								2%	2%	14%	2%	8%	4%
							grade 3 events	1788	1918	4914	2042	9078	4806
								1%	1%	1%	1%	3%	2%
							grade 4 events	1788	1853	4799	1964	9307	4419
								1%	1%	1%	1%	4%	2%
							grade 5 events	6129	6816	19061	7651	21457	9455
								3%	4%	7%	4%	9%	4%
							grade 6 events	3462	3531	57732	3963	50278	11538
								2%	2%	22%	2%	21%	5%
							grade 7 events	145736	135561	113173	142150	109757	158243
								84%	83%	44%	82%	47%	74%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	265.186366	265.1946229141117	Subarray requested	NONE	NONE
[deg] Pointing Dec	-53.690505	-53.66369446411341	Alternating exposures requested	N	N
[deg] Pointing Roll	48.779726	48.94300238600563	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	137877053.184000	137876071.37074			
Observation start date	2002-05-15T19:09:49	2002-05-15T18:54:31			
[s] Observation end time (MET)	137904053.184000	137904836.97191			
Observation end date	2002-05-16T02:39:49	2002-05-16T02:53:56			
Read mode	TIMED	TIMED			

2.3 Aspect



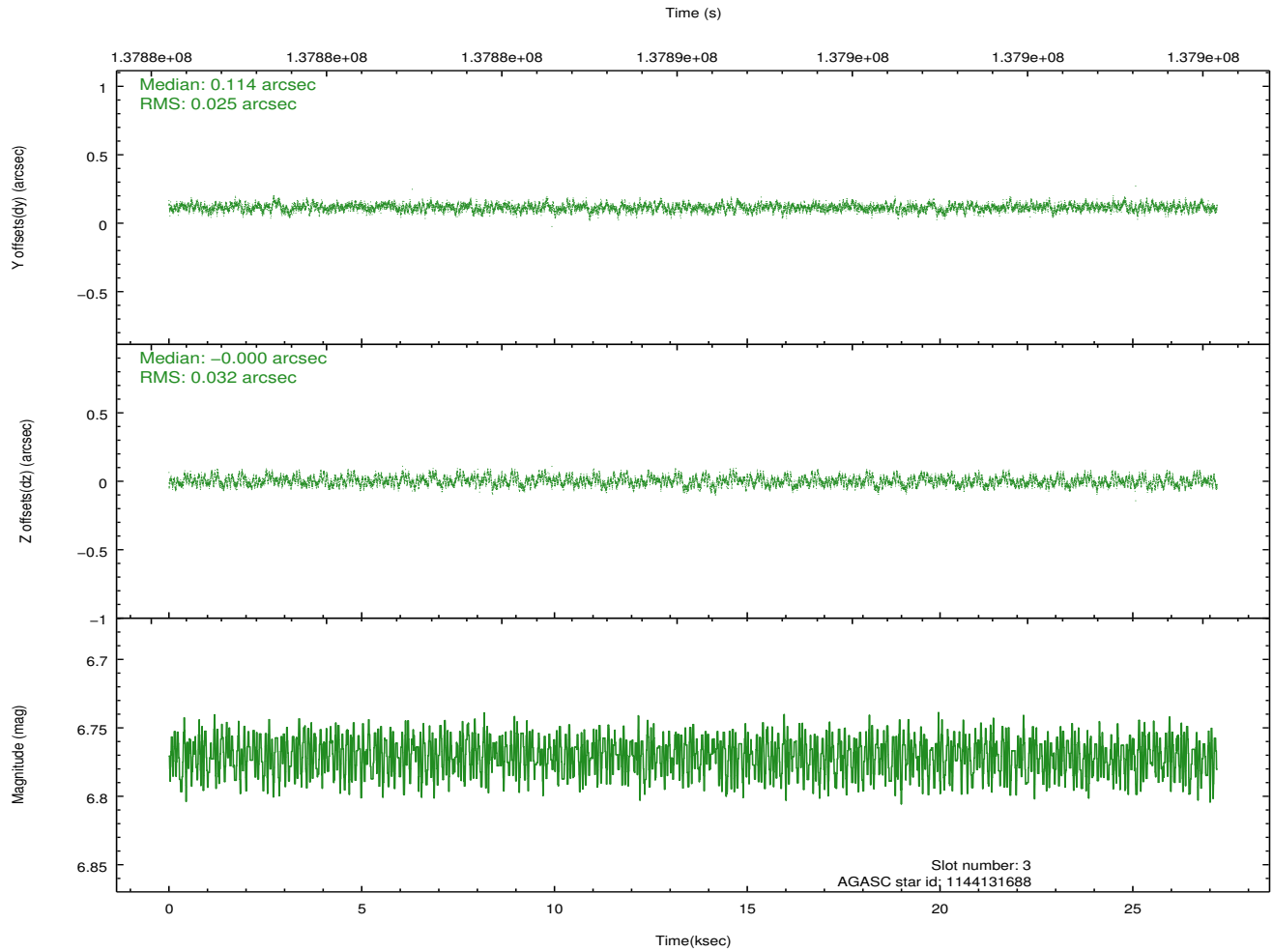
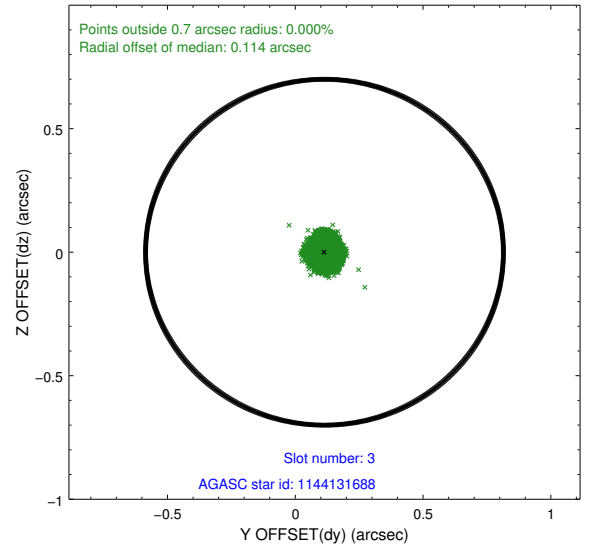
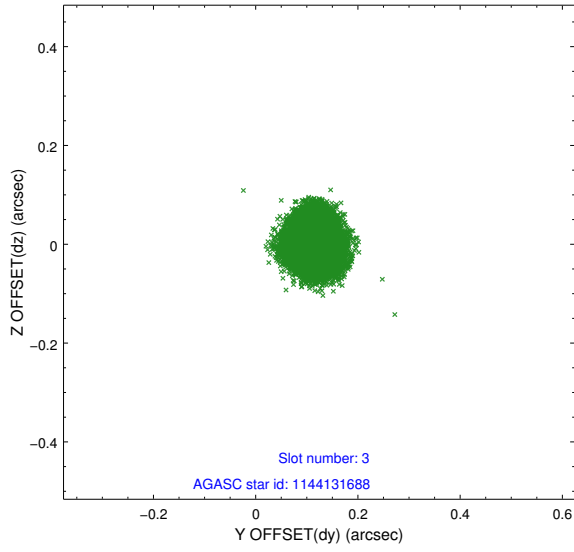


Slot Statistics

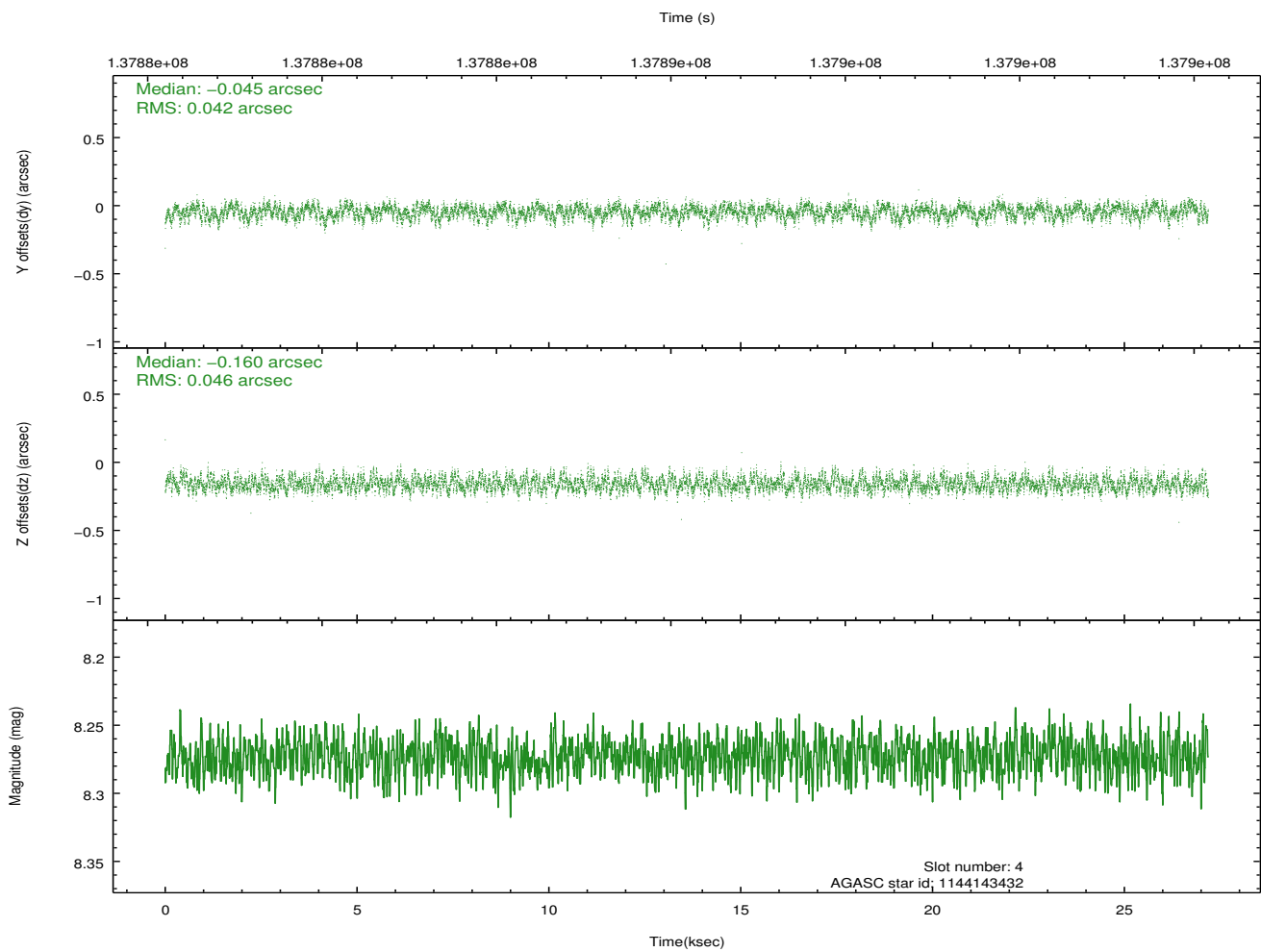
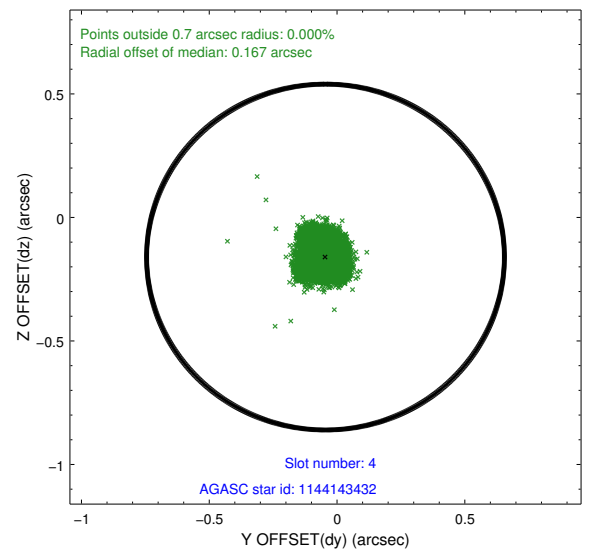
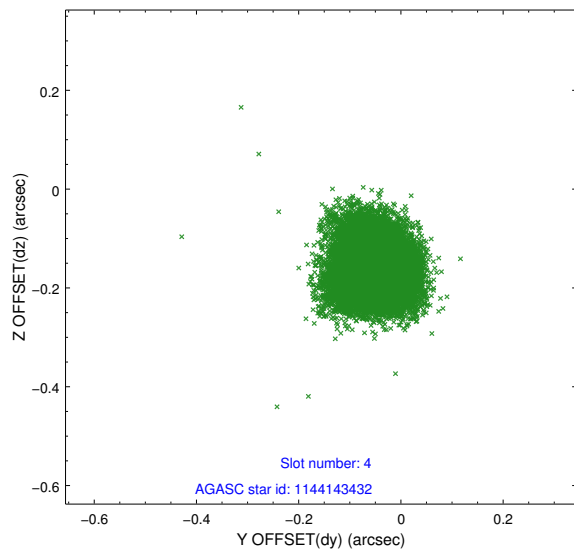
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	6632	-0.023	0.010	0.009	0.017	0.000000	0.000000	-755.38	-1727.97
1	FID	ACIS-S-4	7.20	6631	-0.032	0.008	0.007	0.013	0.000000	0.000000	2157.83	180.44
2	FID	ACIS-S-5	7.24	6631	0.024	-0.010	0.008	0.014	0.000000	0.000000	-1808.06	174.17
3	GUIDE	1144131688	6.77	13261	0.114	-0.000	0.044	0.069	264.942474	-54.356438	-2140.22	-1196.00
4	GUIDE	1144143432	8.27	13259	-0.045	-0.160	0.067	0.107	264.820407	-53.209617	781.02	1732.33
5	GUIDE	1144138384	8.28	13259	-0.196	0.216	0.071	0.112	266.438271	-53.588969	2020.63	-1786.69
6	GUIDE	1144660608	8.32	13260	0.119	0.058	0.059	0.093	265.130202	-54.477870	-2208.49	-1780.12
7	GUIDE	1144130096	8.94	13256	0.008	-0.114	0.071	0.114	265.098929	-52.802658	2279.14	2248.90

2.4 Star Slots

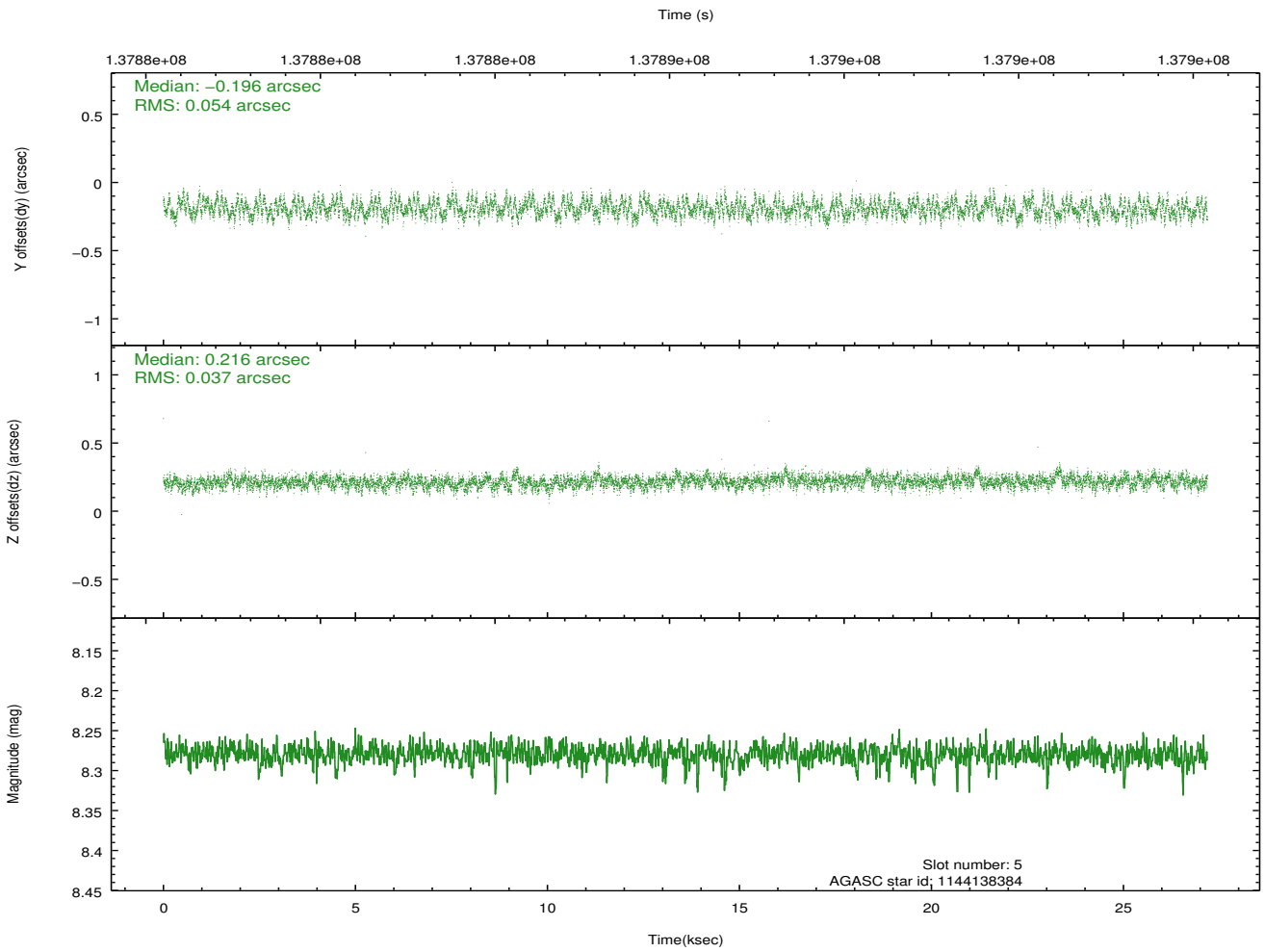
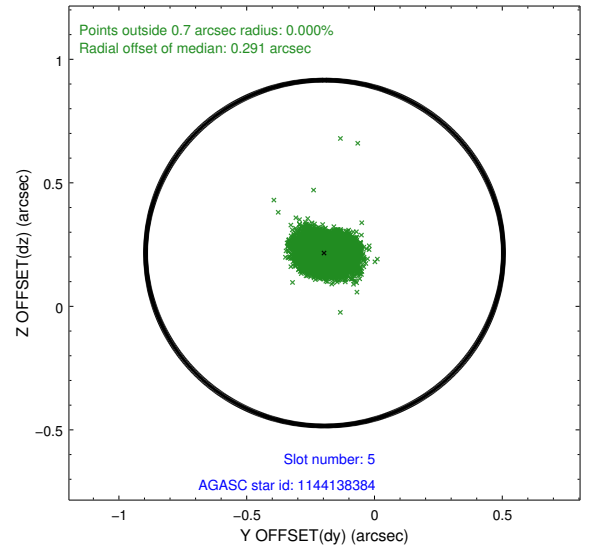
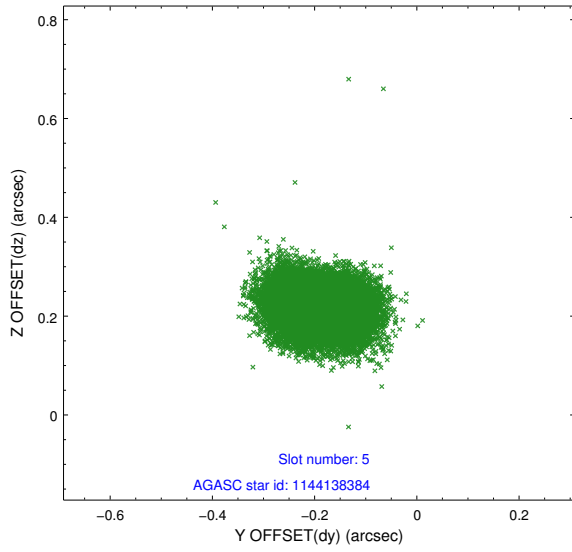
2.4.1 Slot 3



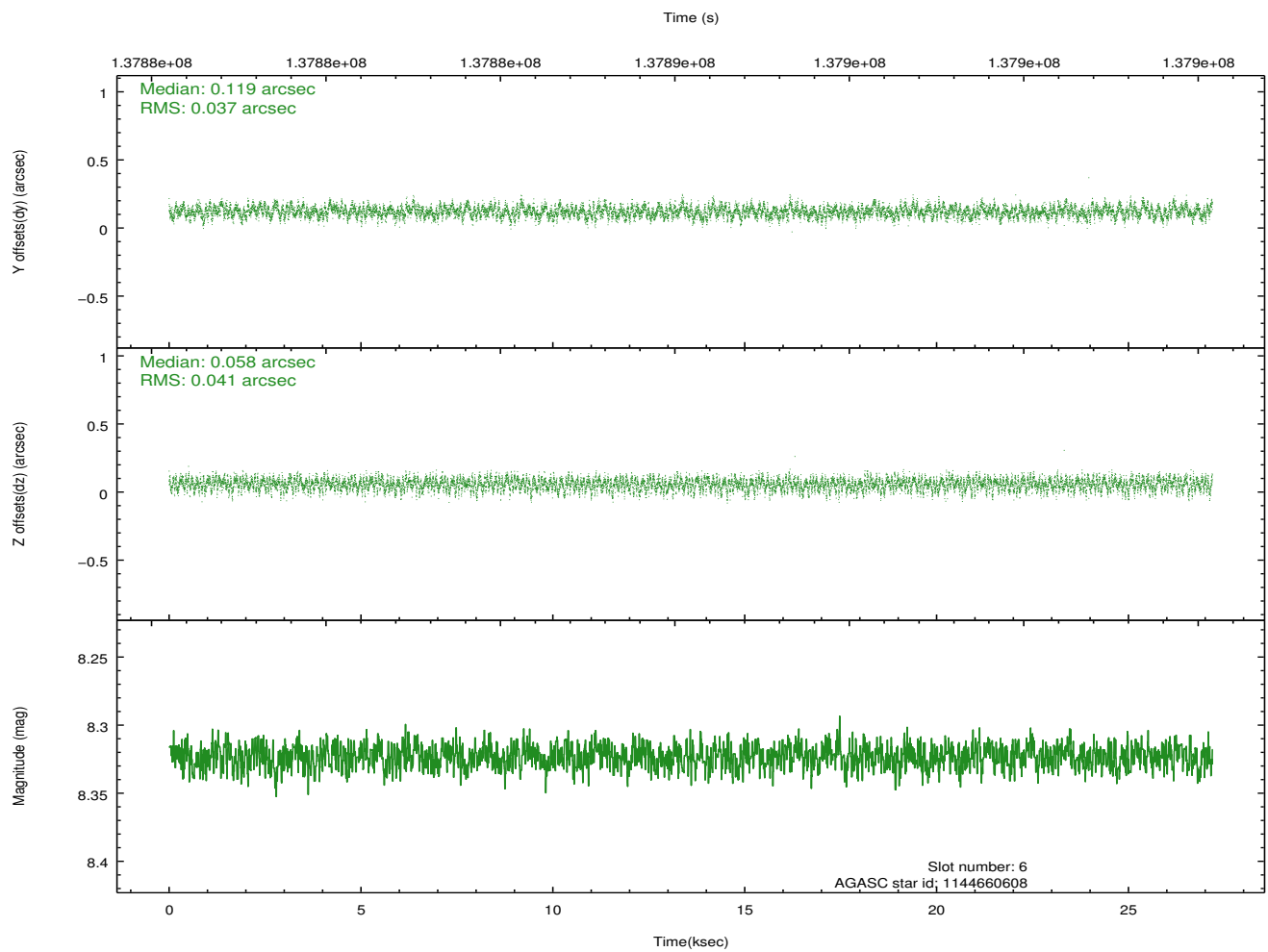
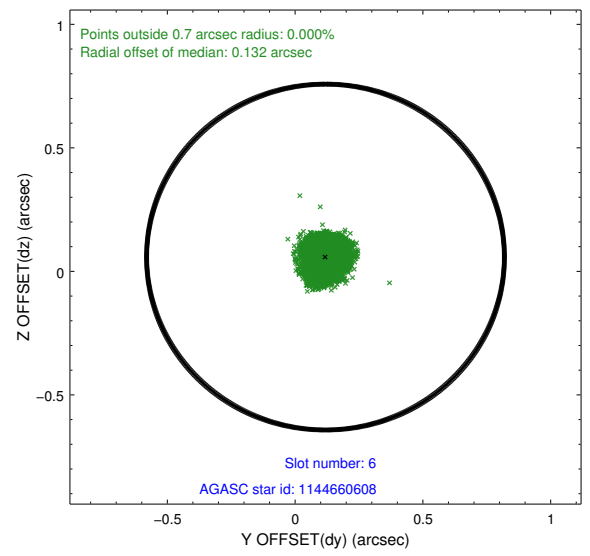
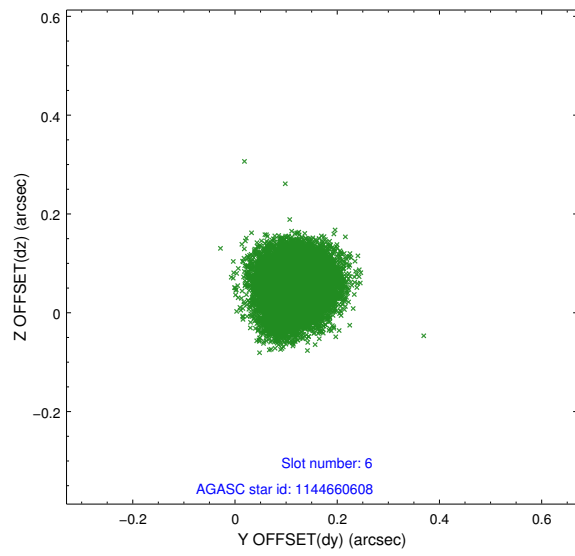
2.4.2 Slot 4



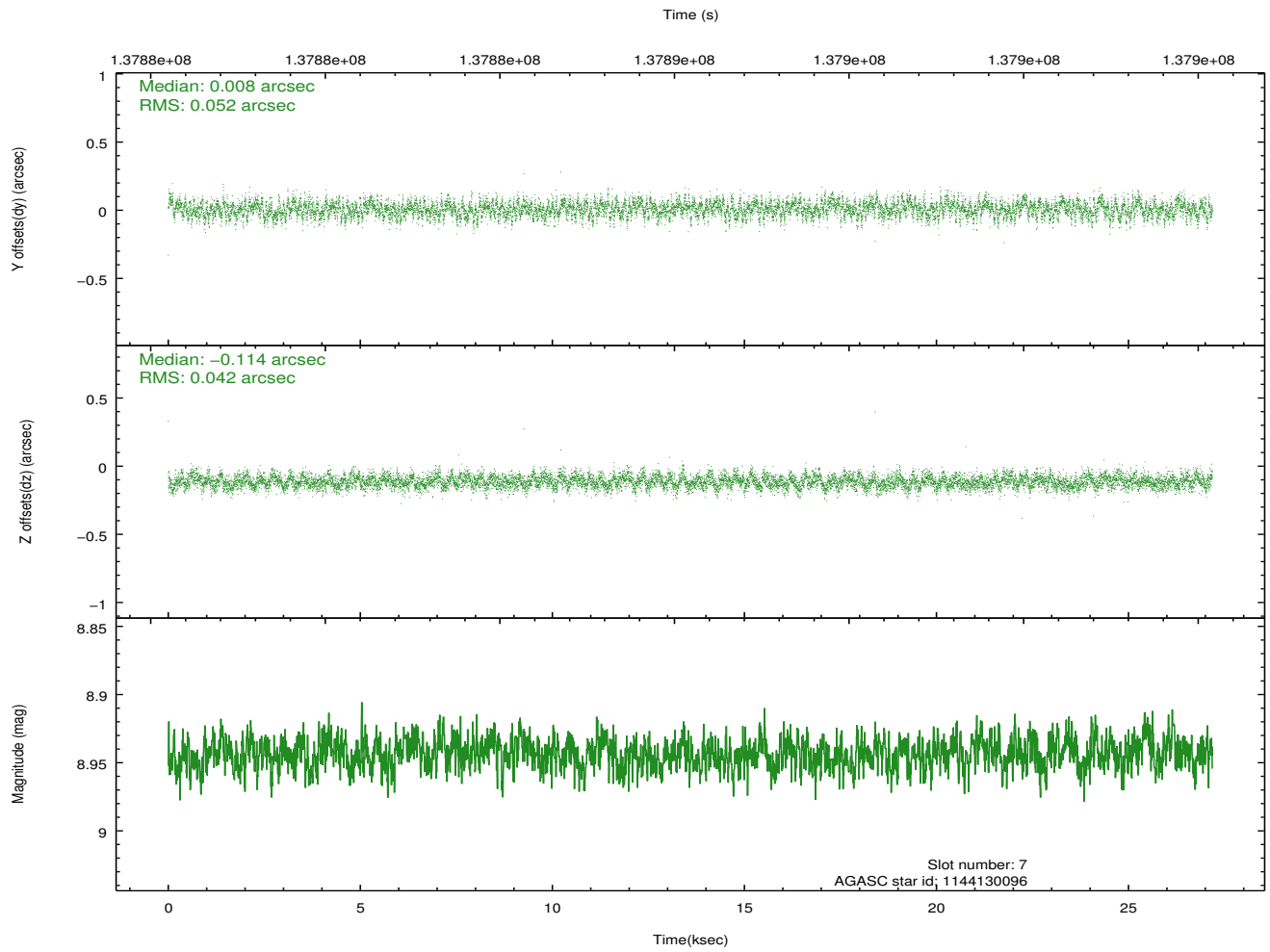
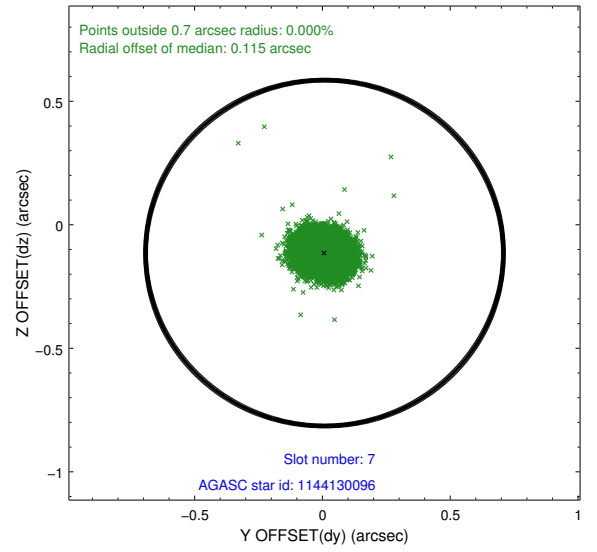
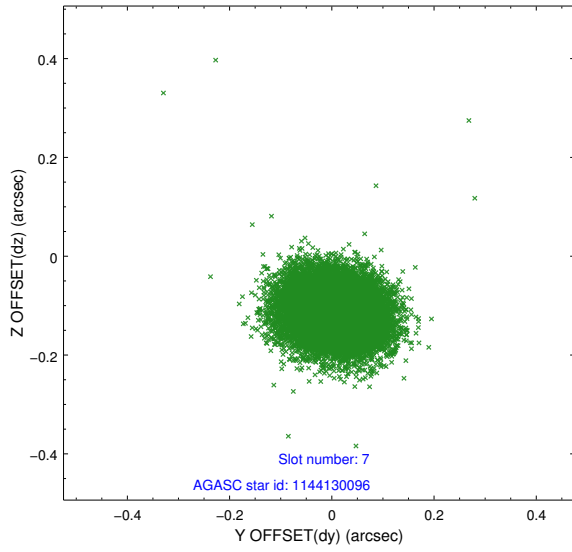
2.4.3 Slot 5



2.4.4 Slot 6

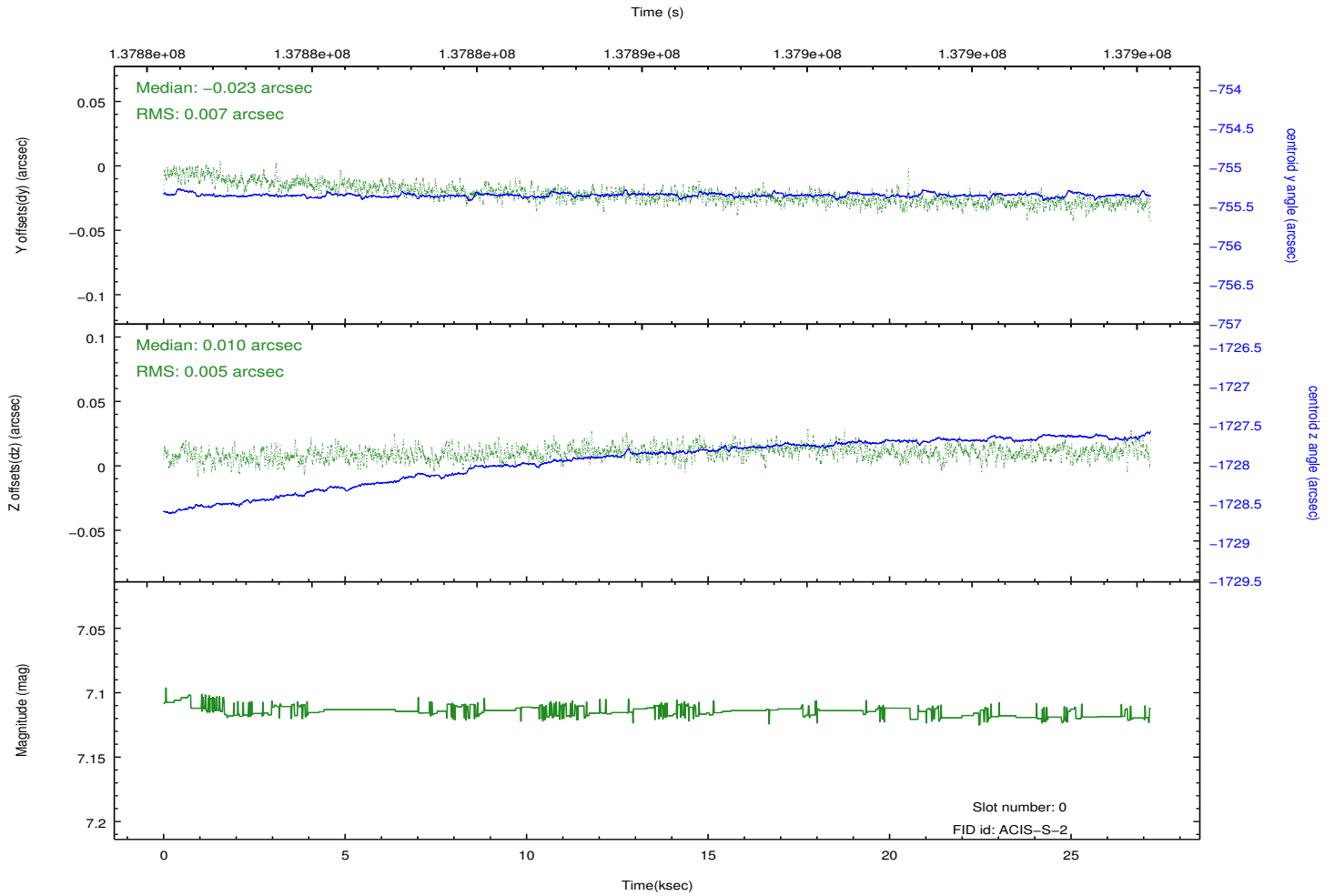
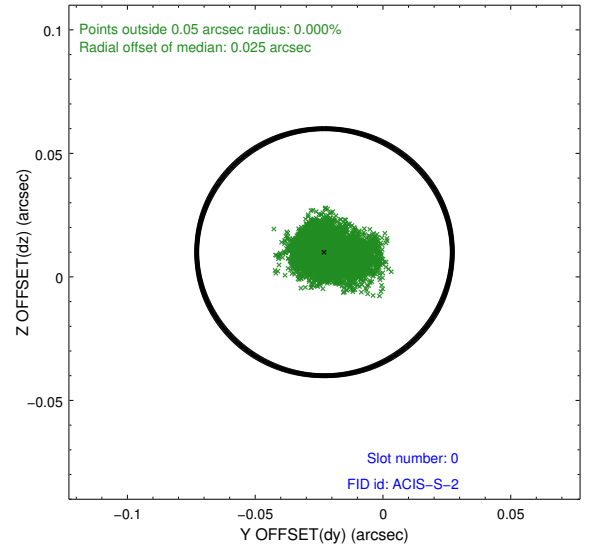
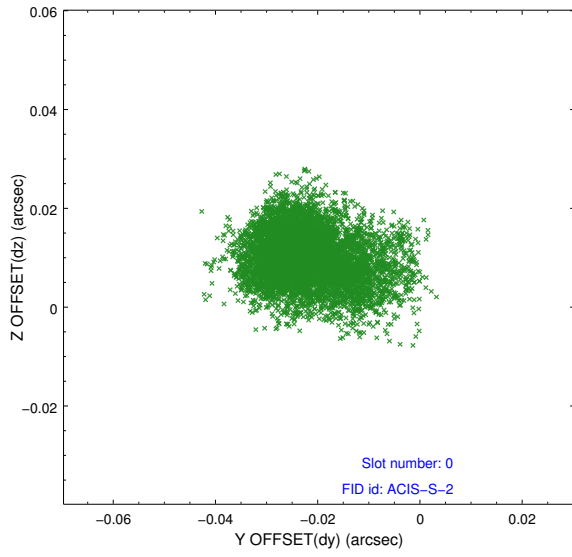


2.4.5 Slot 7

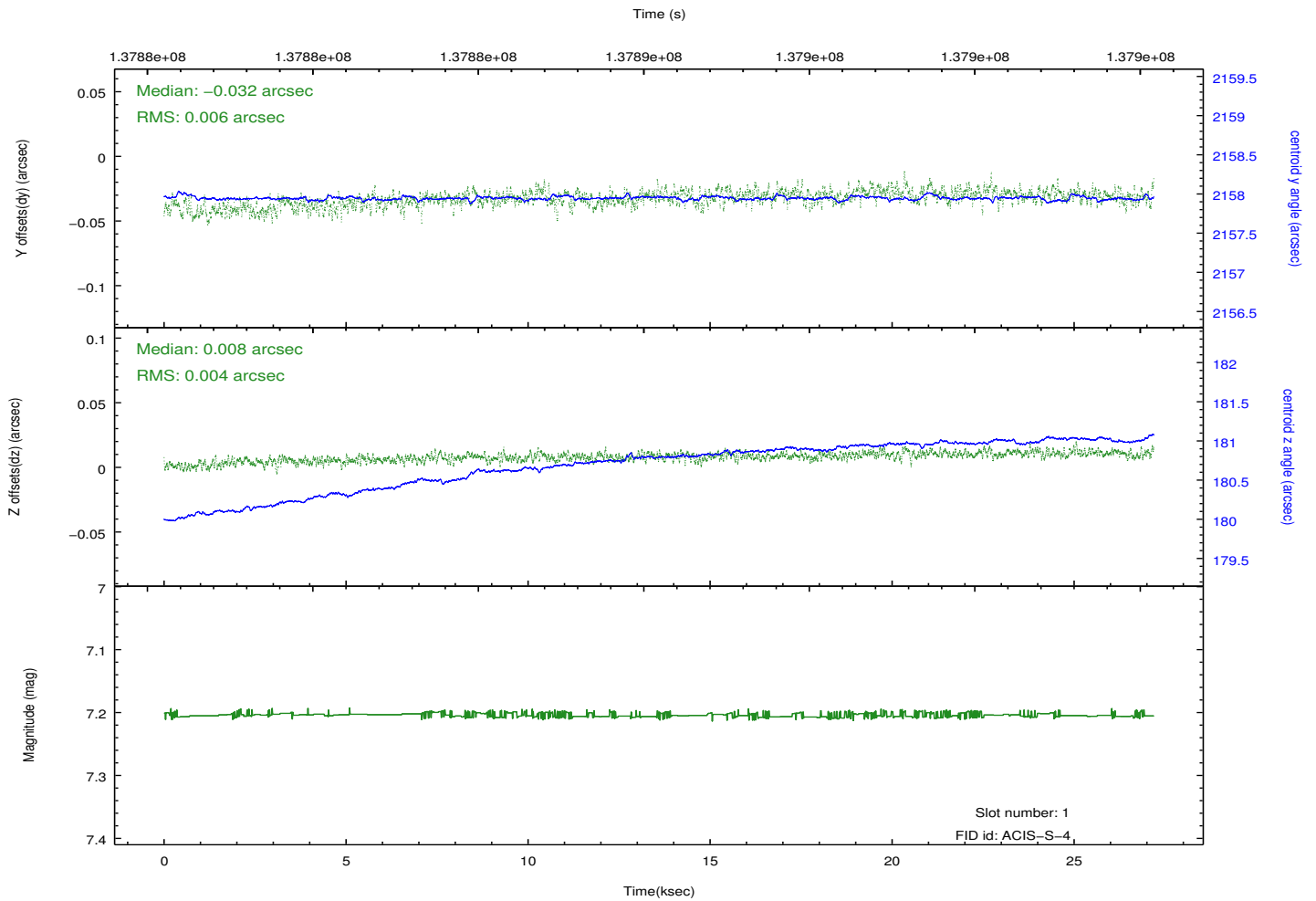
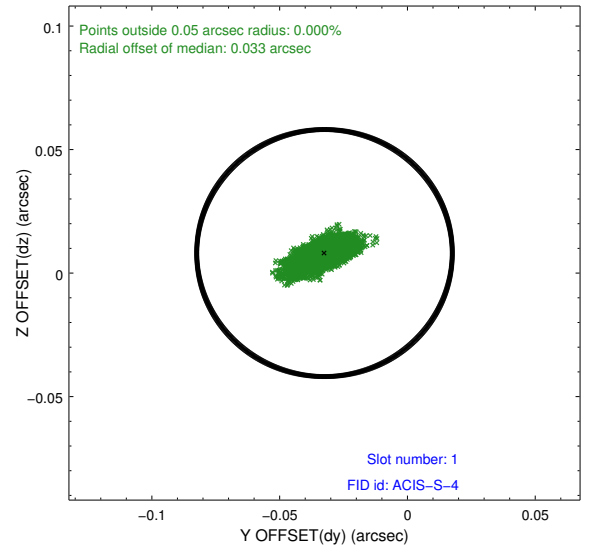
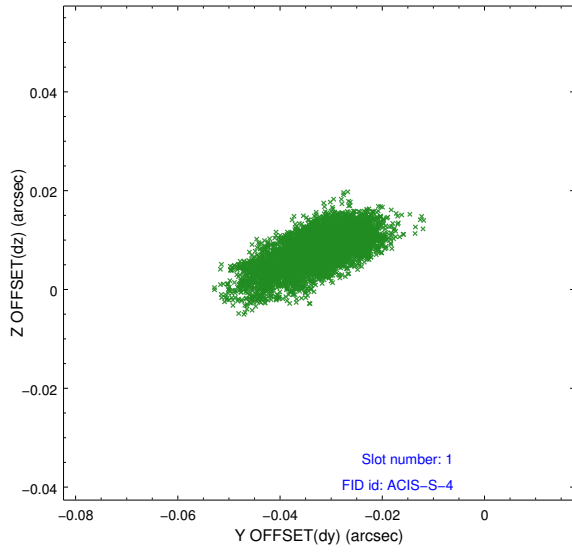


2.5 FID Slots

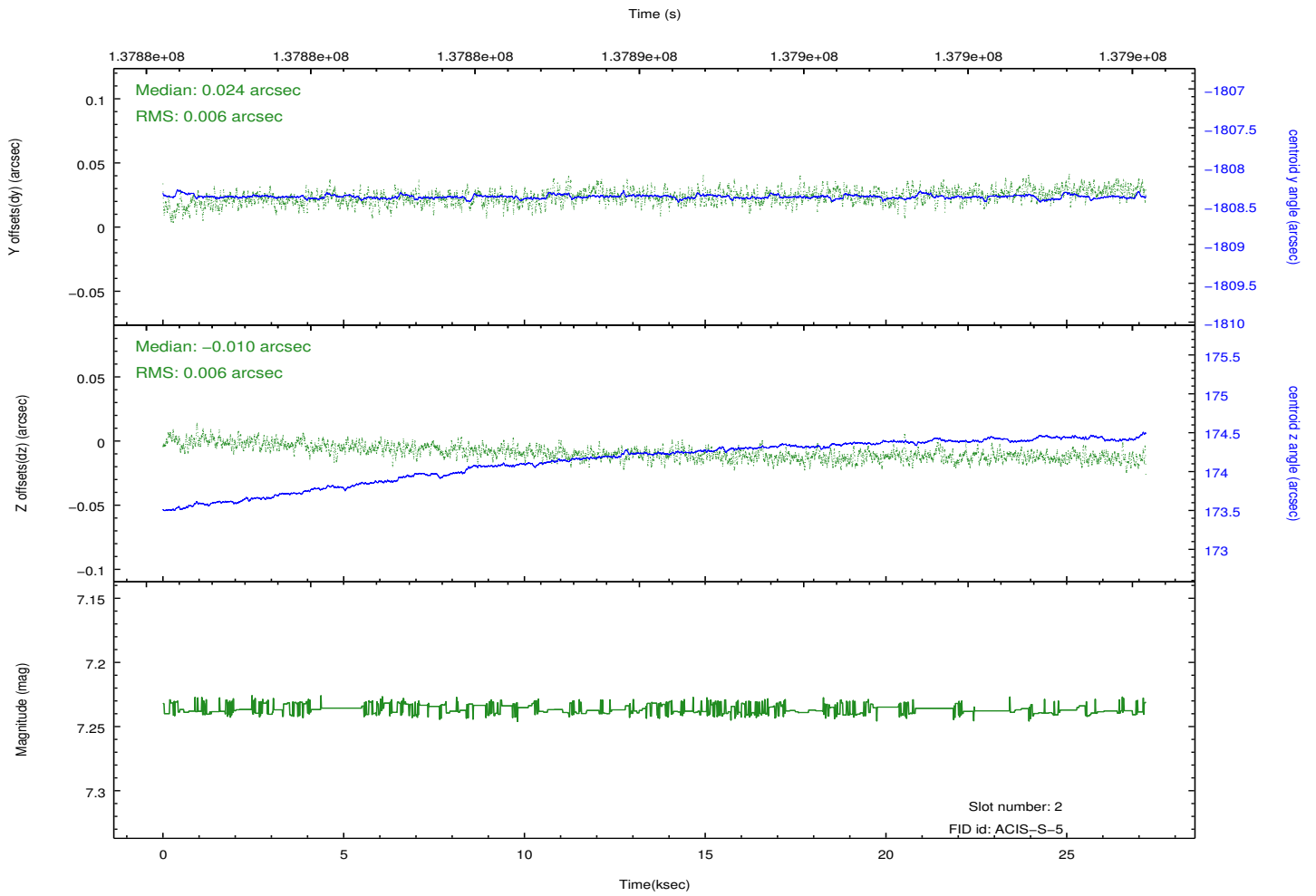
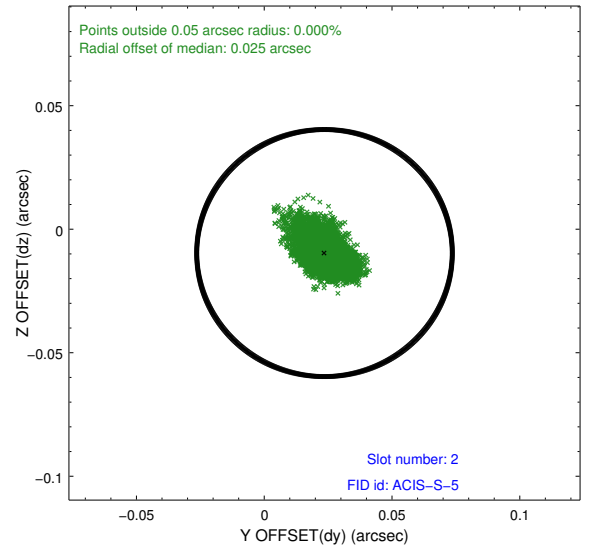
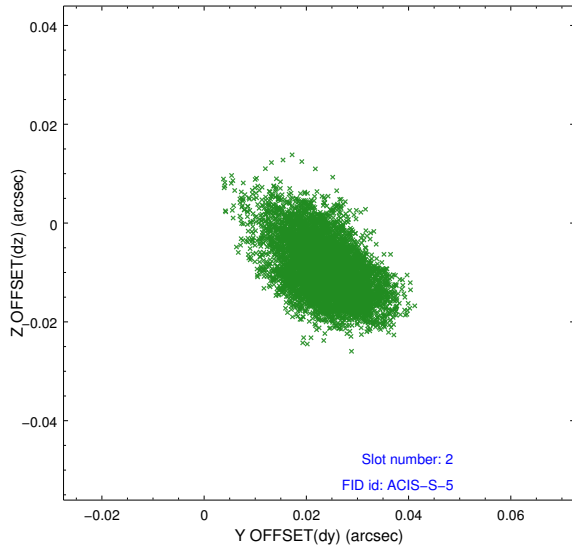
2.5.1 Slot 0



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)	2012.11.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.004

A.2 Comments

A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 6 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(265.26603, -53.50735), (265.26076, -53.51096), (265.43847, -53.60234), (265.44373, -53.59872)