

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 17756 - L2 Version 2
Chandra X-Ray Center

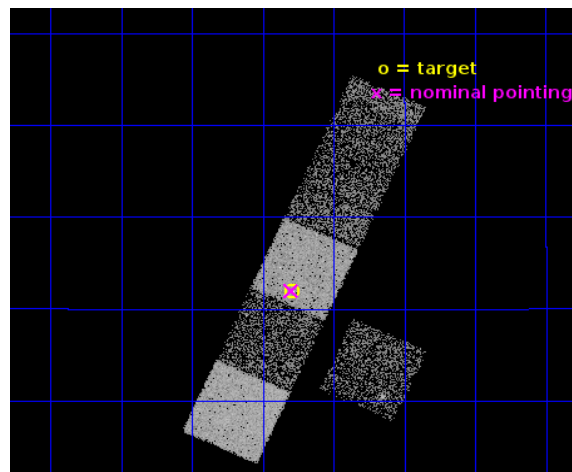
L2 Processing Date : Feb 1 2016

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1 Front

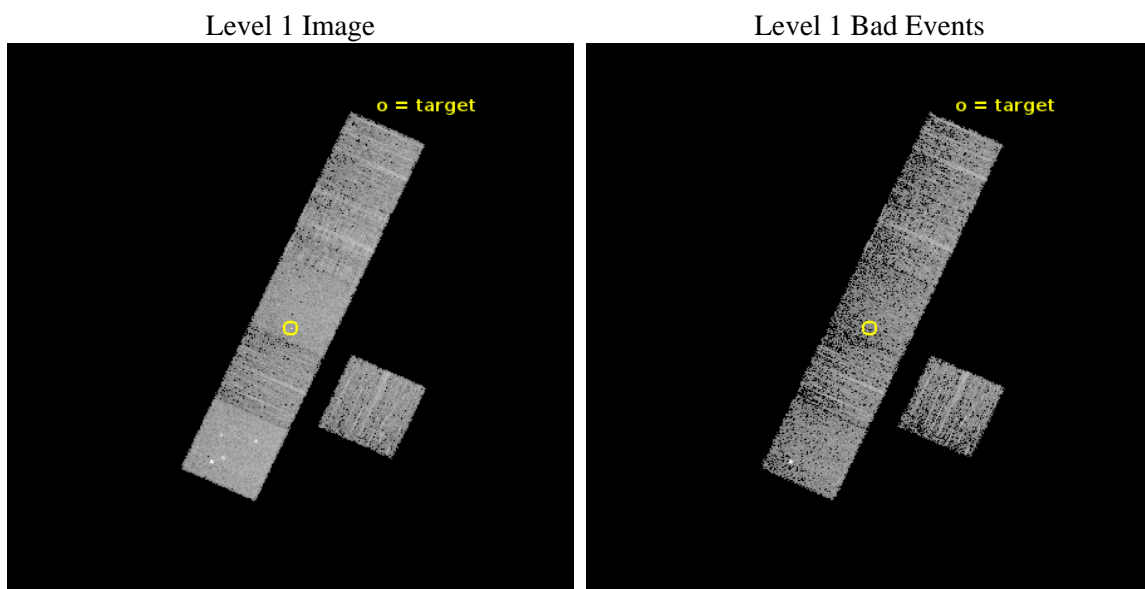
seq_num	201065	Sequence number
obs_id	17756	Observation id
title	Understanding the Rotation/Activity Relation: A New Low-Mass, Extreme-Spin Sample	Proposal title
observer	Dr. Peter Williams	Principal investigator
object	2MASS J07221747+0851566	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	110.572083	Observer's specified target RA [deg]
dec_targ	8.865389	Observer's specified target Dec [deg]
ra_nom	110.5743399759	Nominal RA [deg]
dec_nom	8.8663244990395	Nominal Dec [deg]
roll_nom	294.54472213735	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3948.8000588417	Sum of GTIs [s]
livetime	3898.7979748147	Livetime [s]
ontime2	3948.8000588417	Sum of GTIs [s]
ontime5	3948.8000588417	Sum of GTIs [s]
ontime6	3948.8000588417	Sum of GTIs [s]
ontime7	3948.8000588417	Sum of GTIs [s]
ontime8	3948.8000588417	Sum of GTIs [s]
ontime9	3948.8000588417	Sum of GTIs [s]
l2events	41949	Number of level 2 events



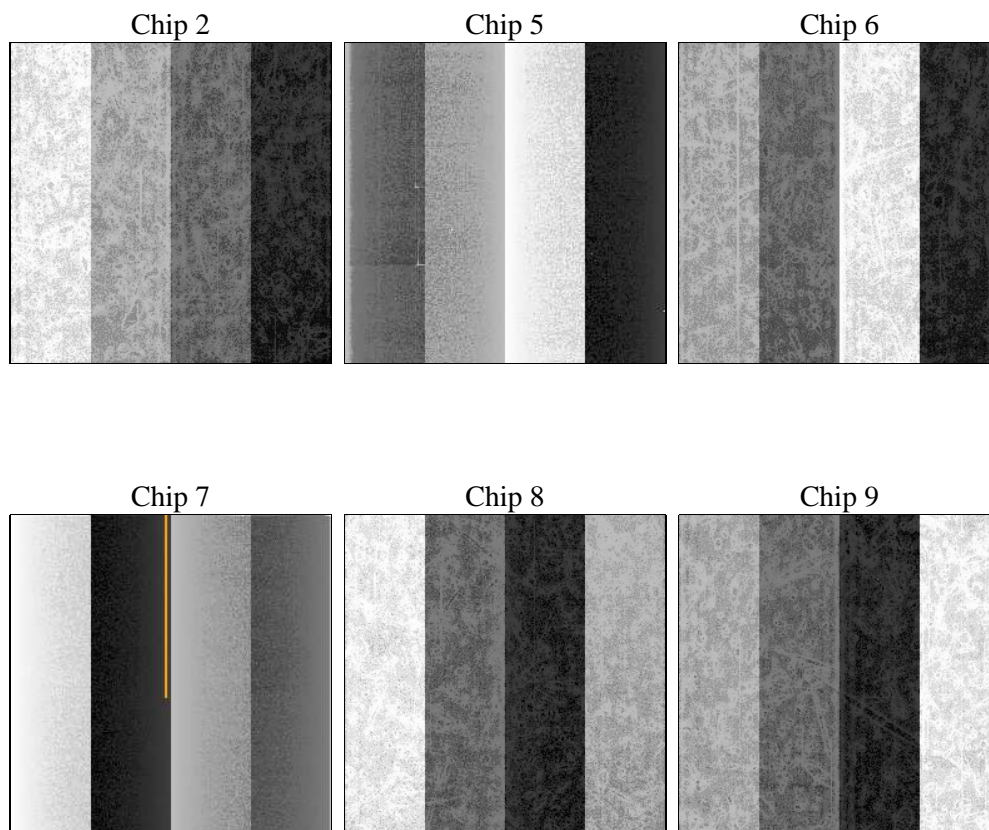
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	3948.8000588417	Sum of GTIs [s]
caldsver	4.7.0	 	ontime2	3948.8000588417	Sum of GTIs [s]
date	2016-02-01T17:29:07	Date and time of file creation	ontime5	3948.8000588417	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	3948.8000588417	Sum of GTIs [s]
			ontime7	3948.8000588417	Sum of GTIs [s]
			ontime8	3948.8000588417	Sum of GTIs [s]
			ontime9	3948.8000588417	Sum of GTIs [s]
			l1events	179600	Number of level 1 events

2.1.4 Events

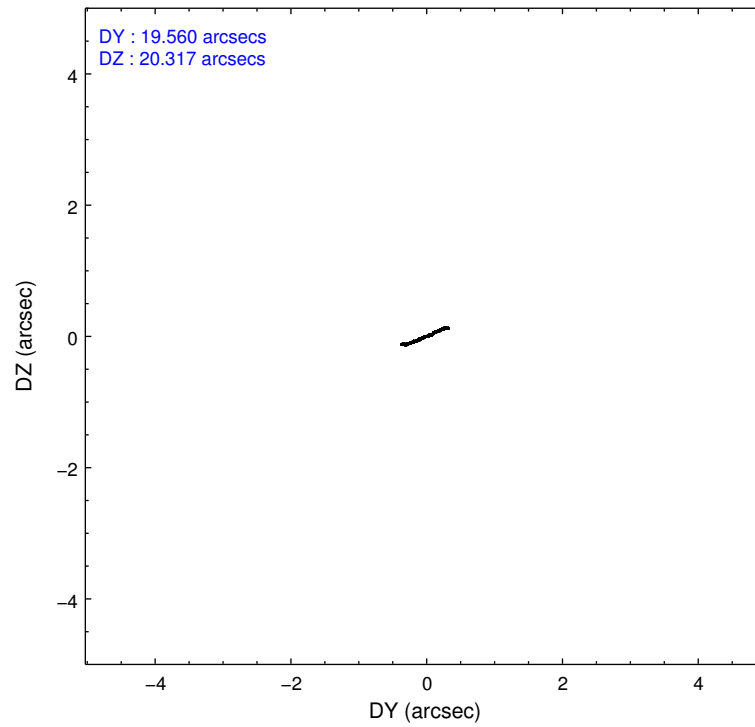
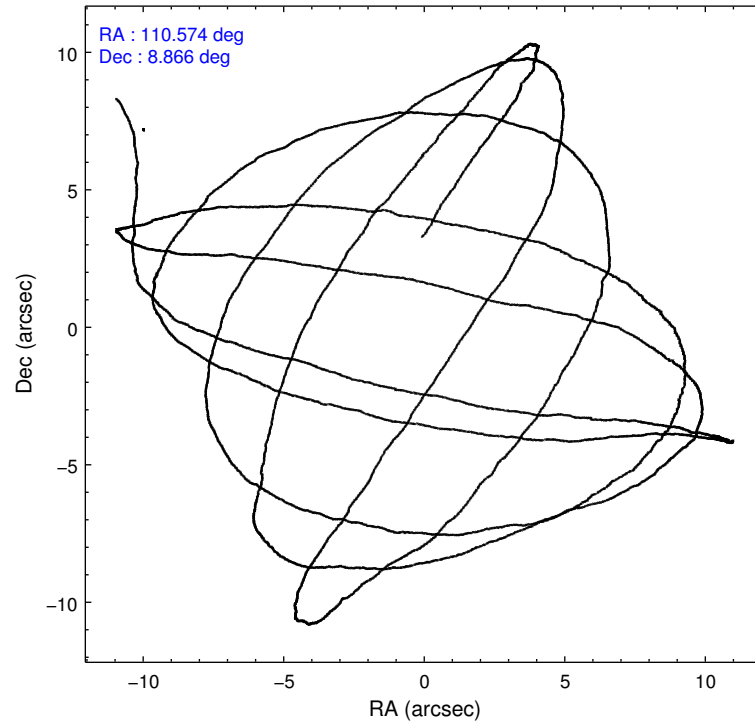
	ccd 2	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 2	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	24492	41060	23702	32427	32330	25589	grade 0 events	996	2094	963	1187	2525	1061
rejected events	21717	21612	20885	18269	23436	22520		4%	5%	4%	3%	7%	4%
rejected %	88%	52%	88%	56%	72%	88%	grade 1 events	14	77	12	52	35	26
								0%	0%	0%	0%	0%	0%
							grade 2 events	700	5931	635	2969	2173	659
								2%	14%	2%	9%	6%	2%
							grade 3 events	252	618	314	1157	933	308
								1%	1%	1%	3%	2%	1%
							grade 4 events	278	541	270	1107	859	326
								1%	1%	1%	3%	2%	1%
							grade 5 events	1053	2873	1168	3244	1807	1384
								4%	6%	4%	10%	5%	5%
							grade 6 events	556	10293	644	7761	2454	718
								2%	25%	2%	23%	7%	2%
							grade 7 events	20643	18633	19696	14950	21544	21107
								84%	45%	83%	46%	66%	82%

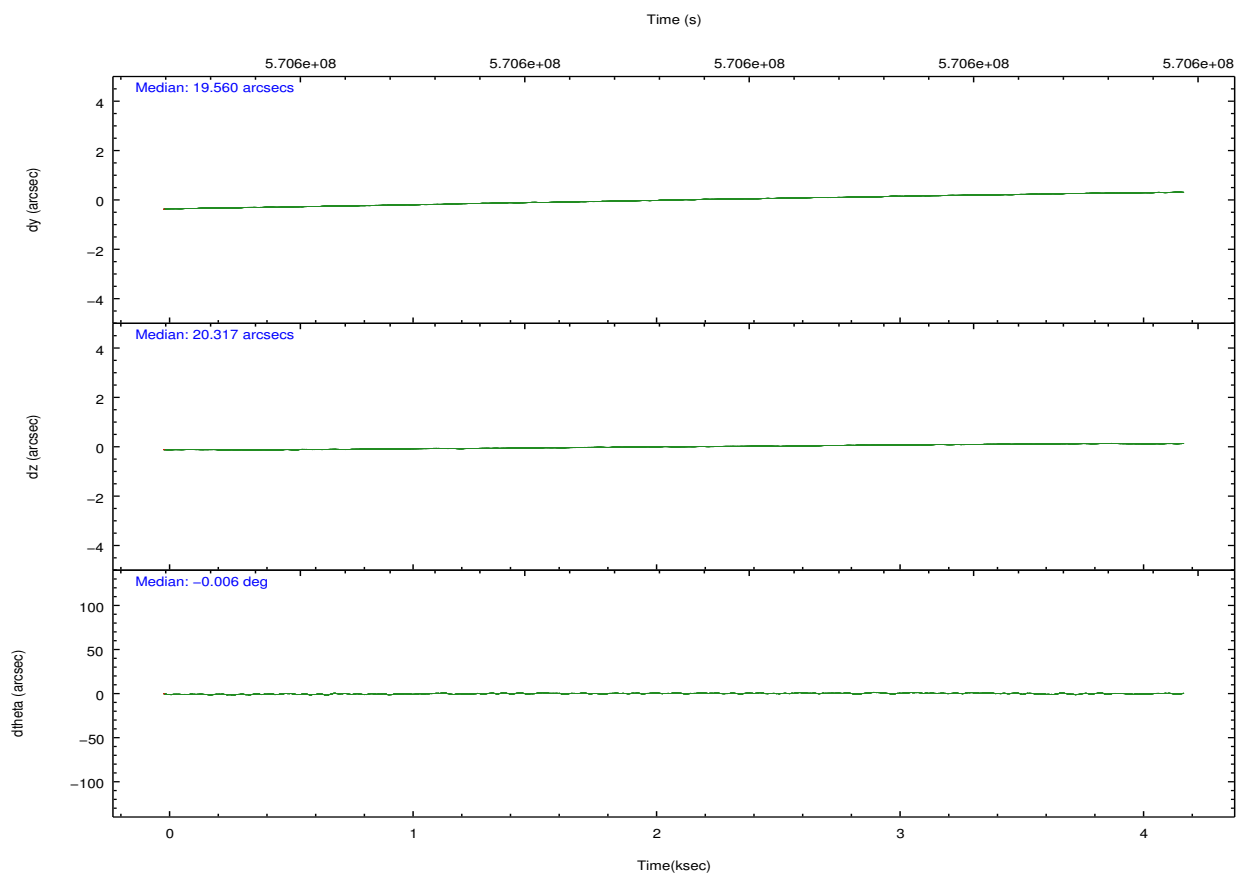
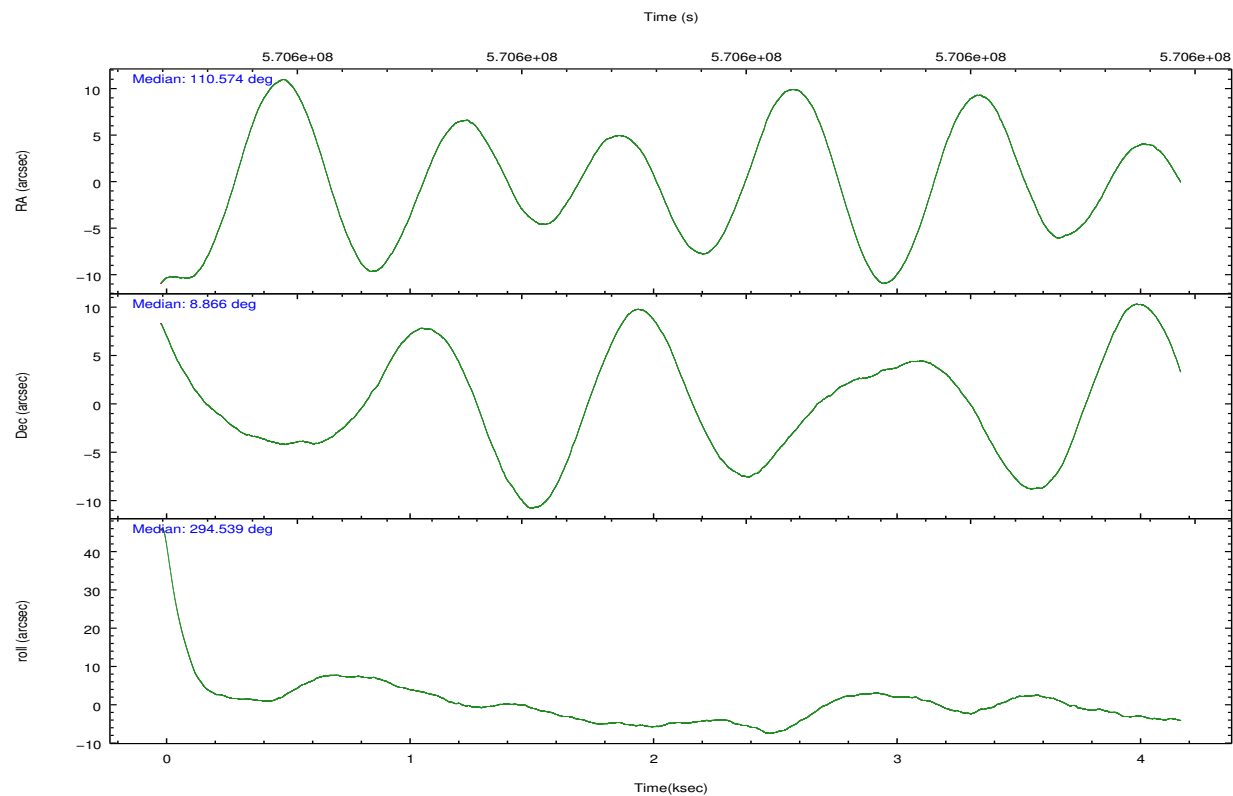
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-256789	ACIS-256789
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	110.551517	110.5743399759047
[deg] Pointing Dec	8.881853	8.866324499039504
[deg] Pointing Roll	294.391492	294.5447221373493
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	570595748.184000	570594740.65005
Observation start date	2016-01-31T02:48:00	2016-01-31T02:32:20
[s] Observation end time (MET)	570599748.184000	570600359.7003599
Observation end date	2016-01-31T03:54:40	2016-01-31T04:05:59
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O1	Y
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	O3	Y
CCD S2 on	O5	Y
CCD S3 on	Y	Y
CCD S4 on	O4	Y
CCD S5 on	O2	Y
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



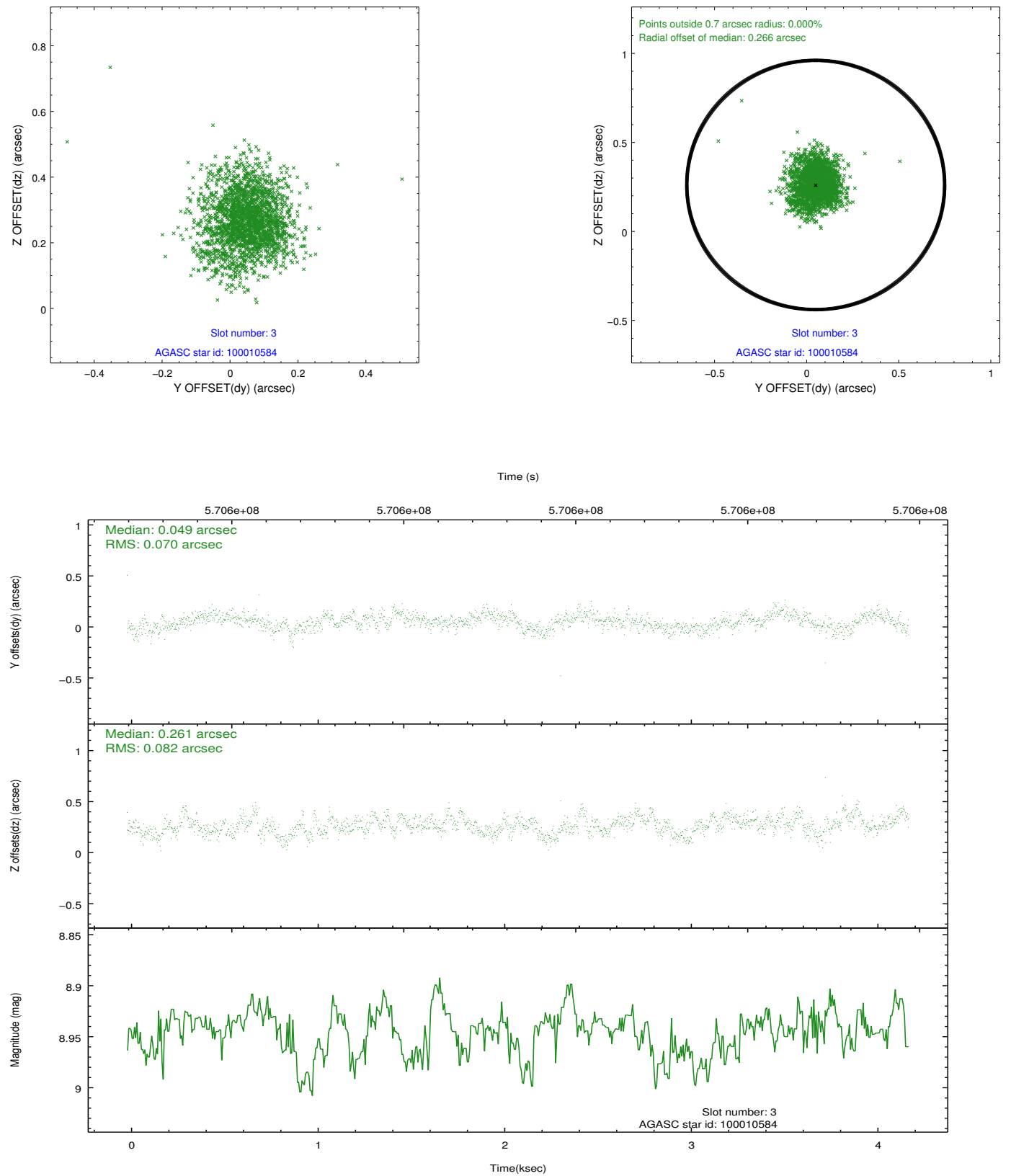


Slot Statistics

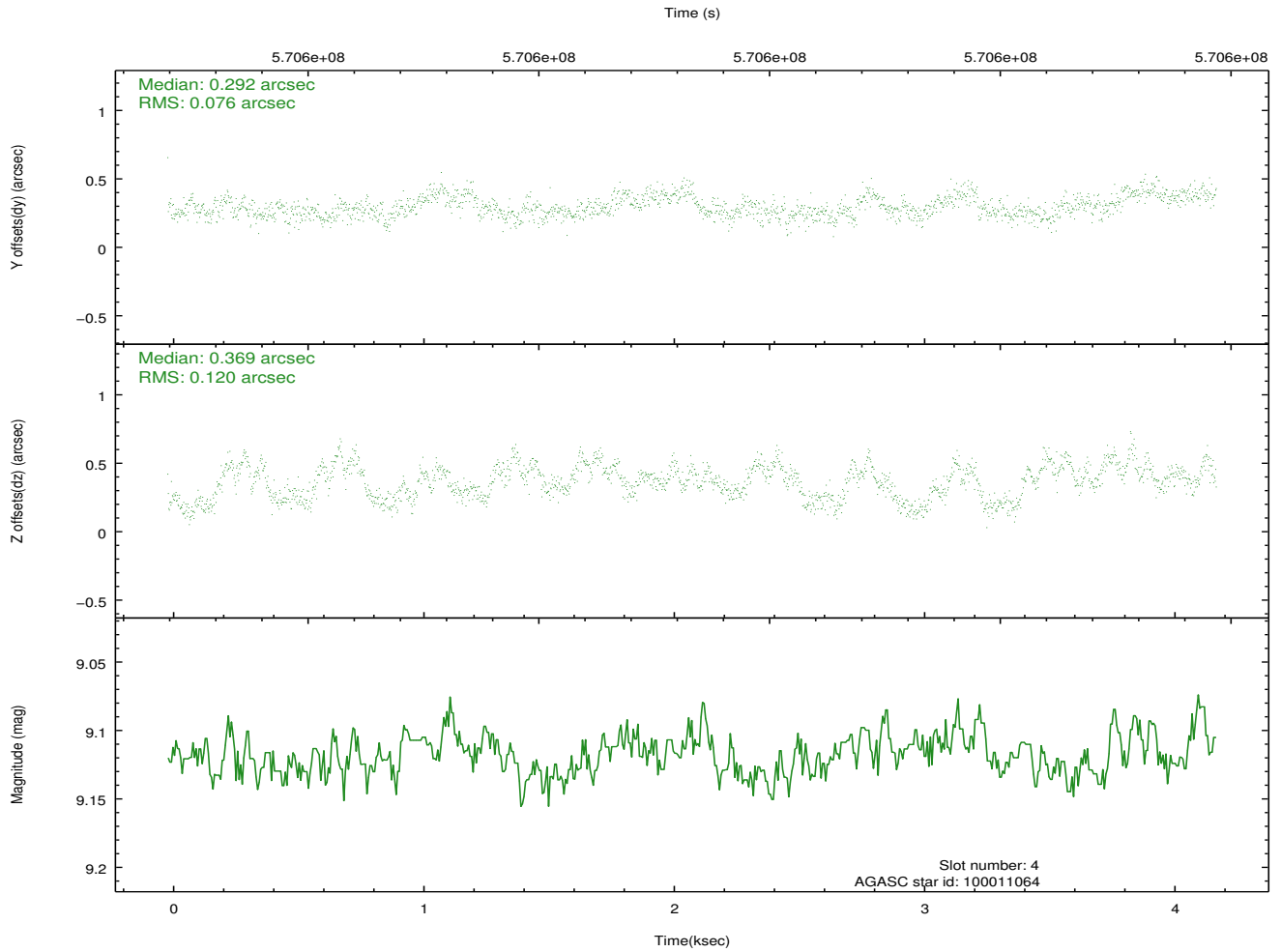
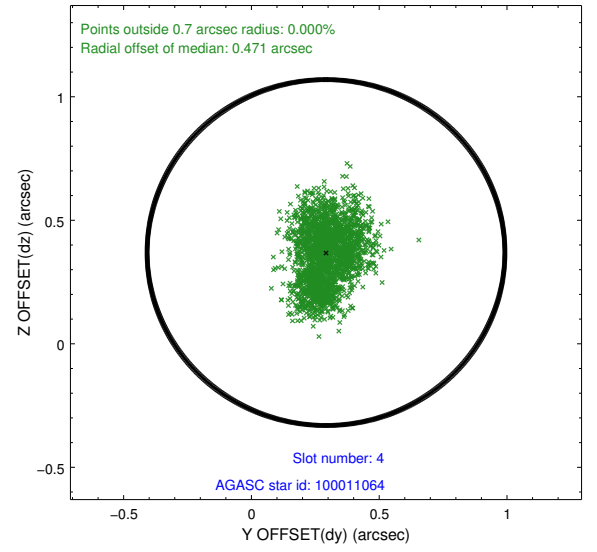
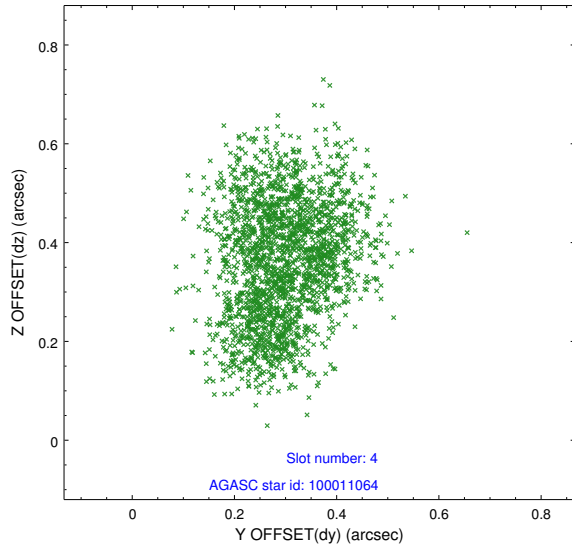
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.20	1022	0.150	-0.121	0.009	0.022	0.000000	0.000000	923.57	-1737.52
1	FID		ACIS-S-5	7.23	1022	-0.324	0.061	0.011	0.022	0.000000	0.000000	-1825.10	158.64
2	FID		ACIS-S-6	7.35	1022	0.153	0.071	0.009	0.014	0.000000	0.000000	387.48	804.32
3	GUIDE	used	100010584	8.94	2044	0.049	0.261	0.114	0.182	110.064273	8.553650	359.73	-2066.86
4	GUIDE	used	100011064	9.12	2044	0.292	0.369	0.154	0.238	109.973832	9.228552	-1977.37	-1356.24
5	GUIDE	used	100023976	9.09	2042	-0.035	0.046	0.130	0.238	110.599707	8.230168	2207.40	-812.83
6	GUIDE	used	100139264	9.44	2044	-0.173	-0.243	0.157	0.252	111.095828	9.179070	-175.14	2203.88
7	GUIDE	used	100145888	9.00	2037	-0.128	-0.436	0.156	0.236	111.308046	8.743019	1564.71	2247.22

2.4 Star Slots

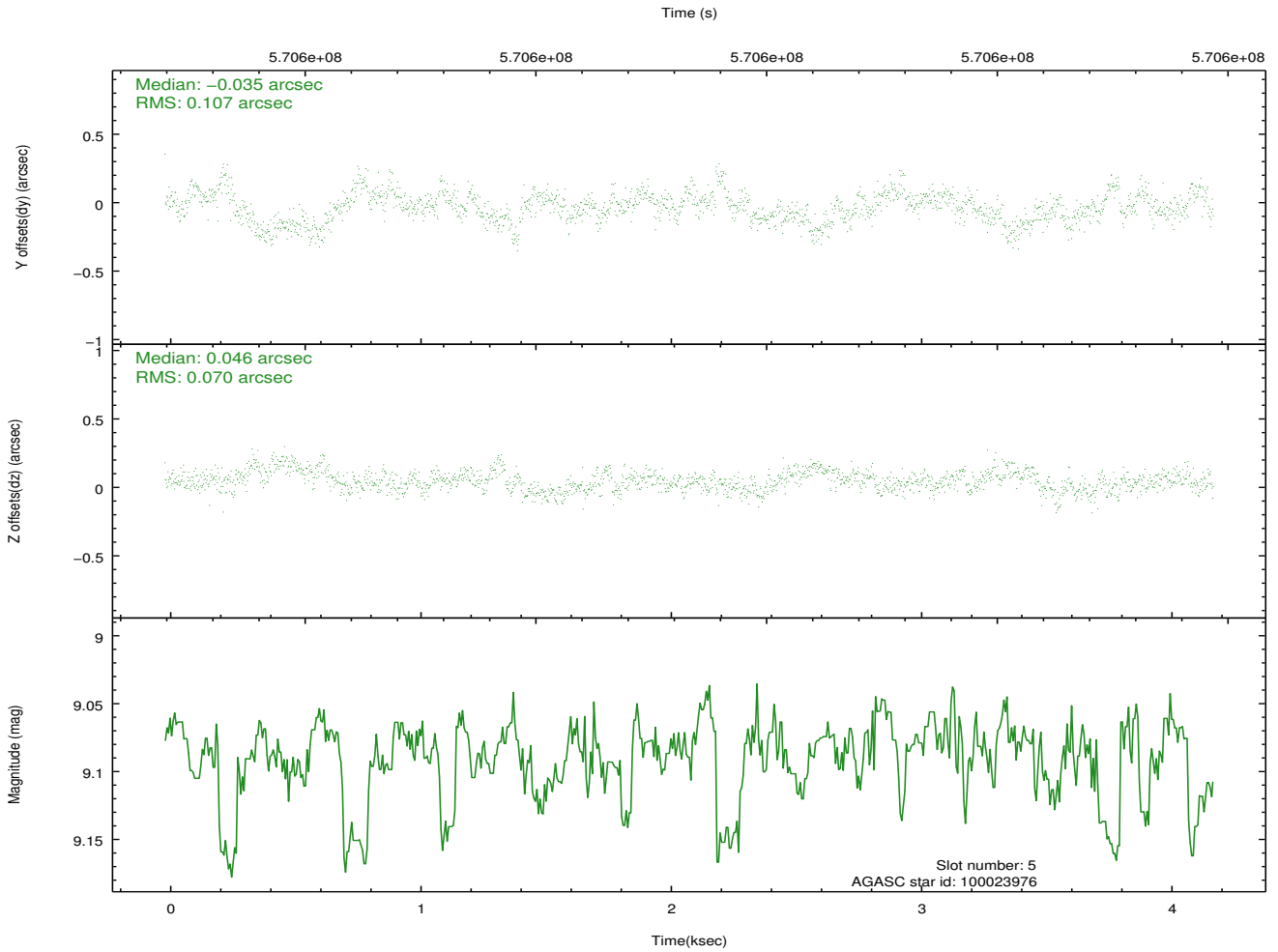
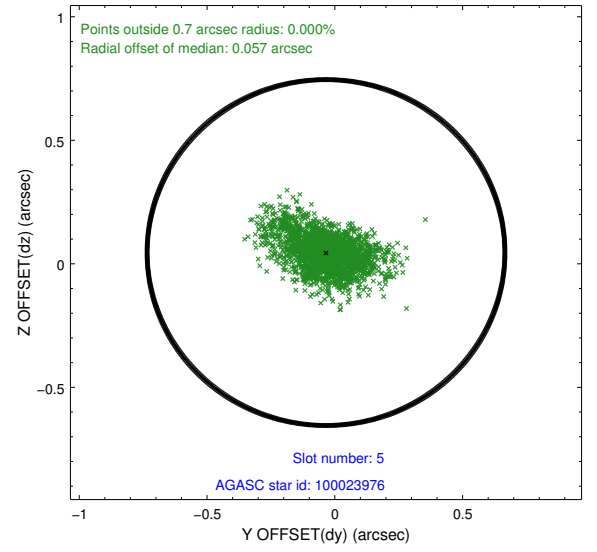
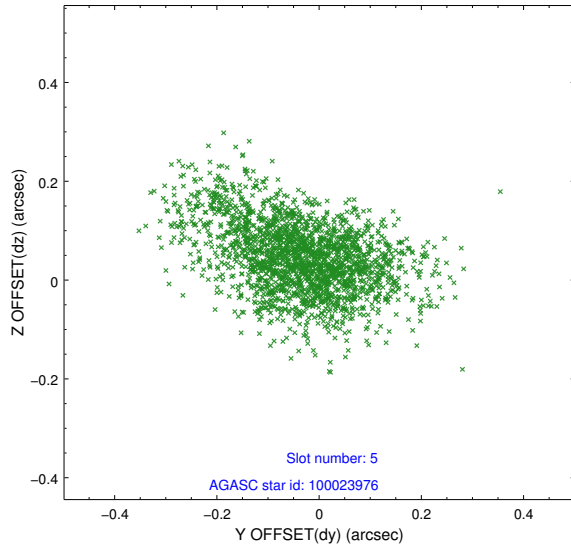
2.4.1 Slot 3



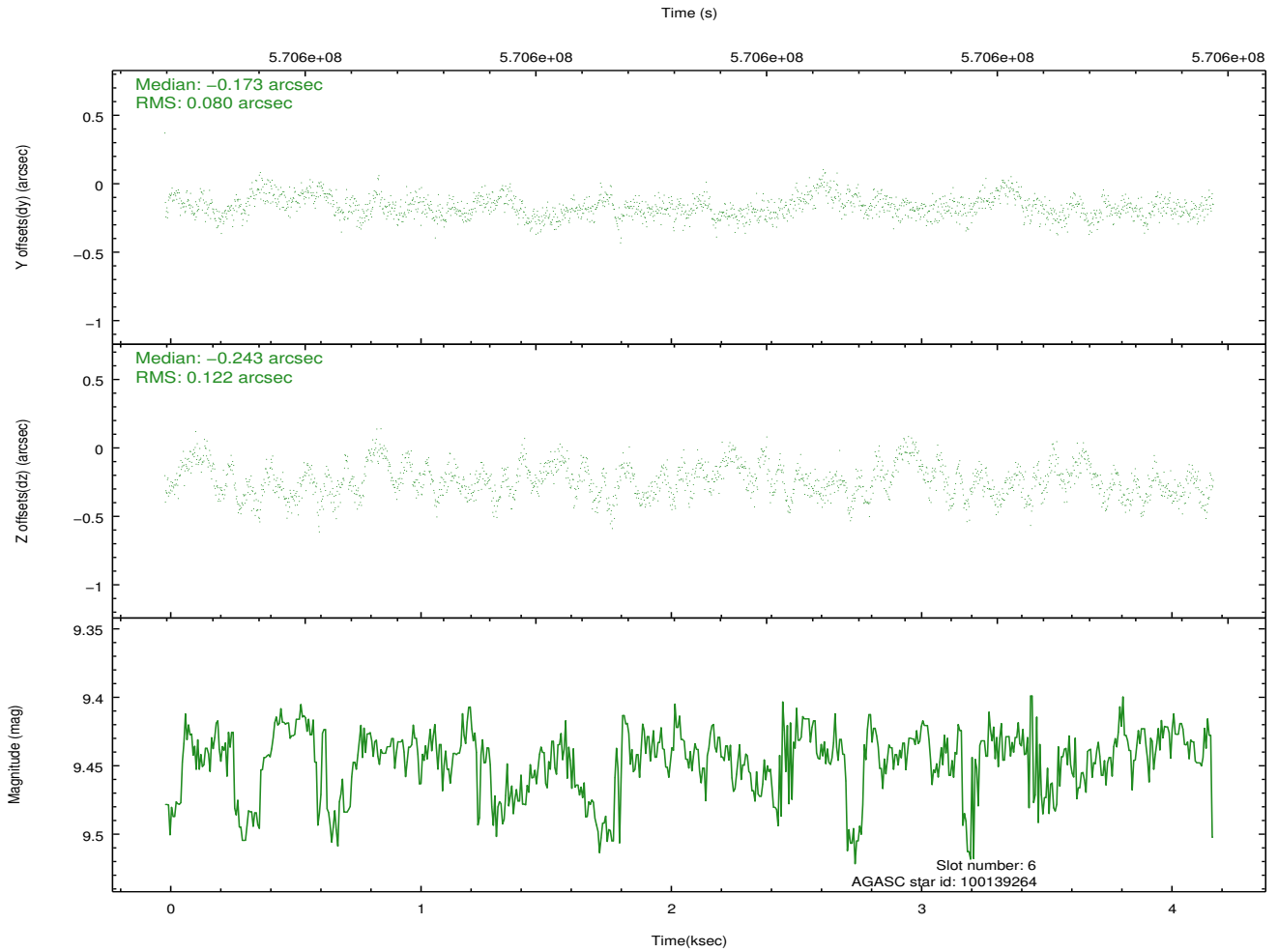
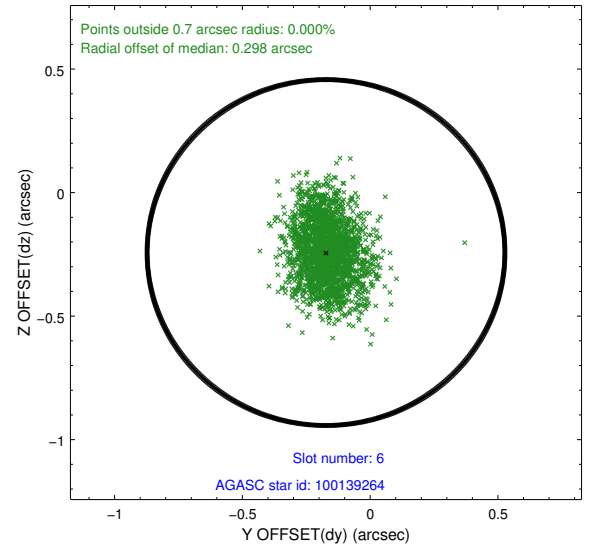
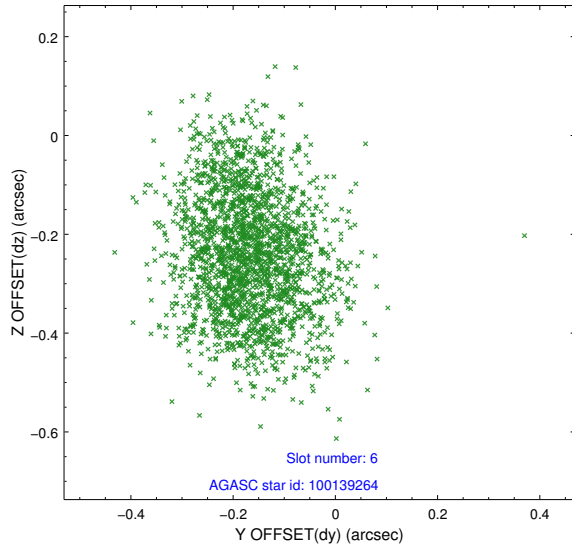
2.4.2 Slot 4



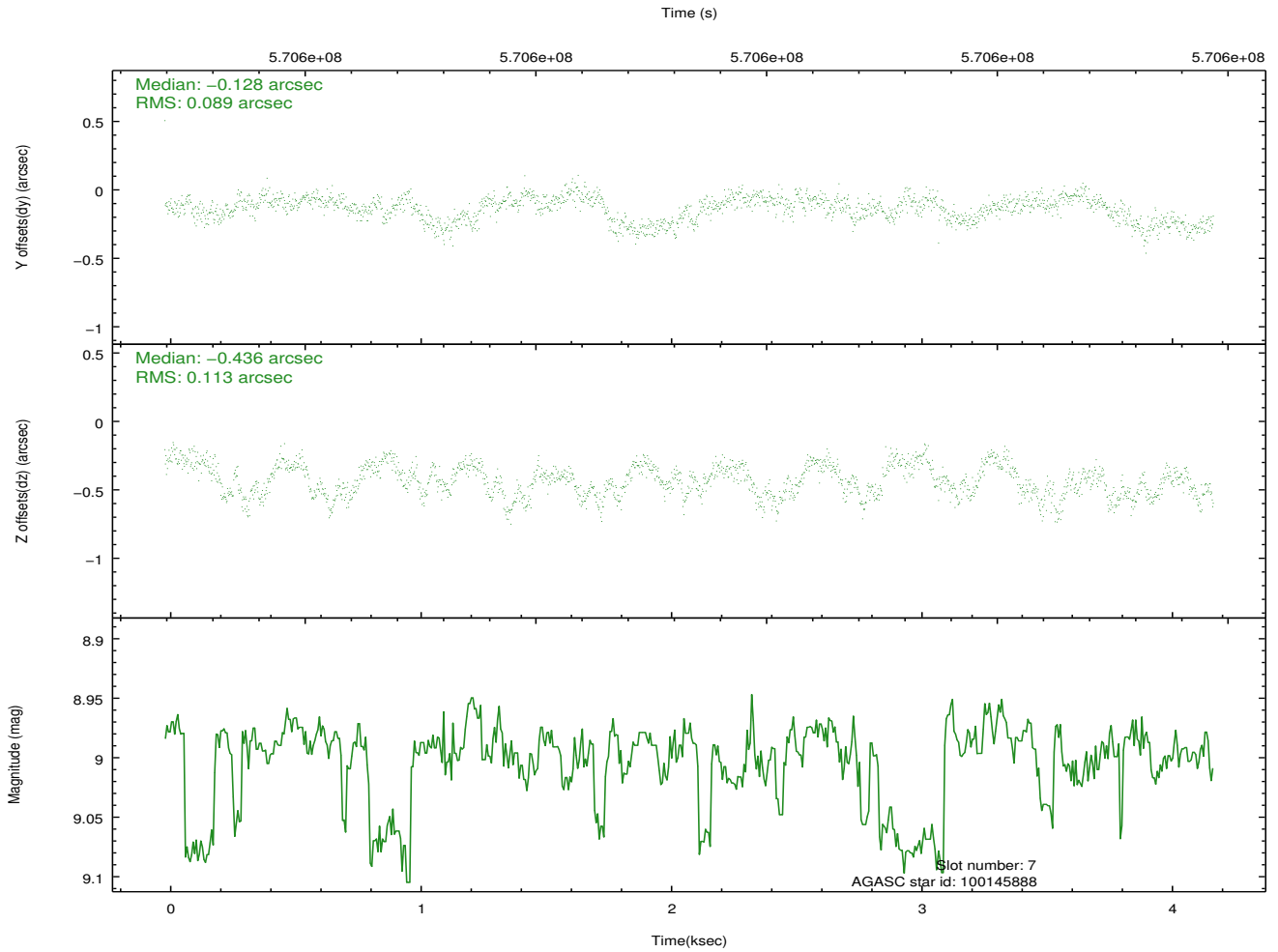
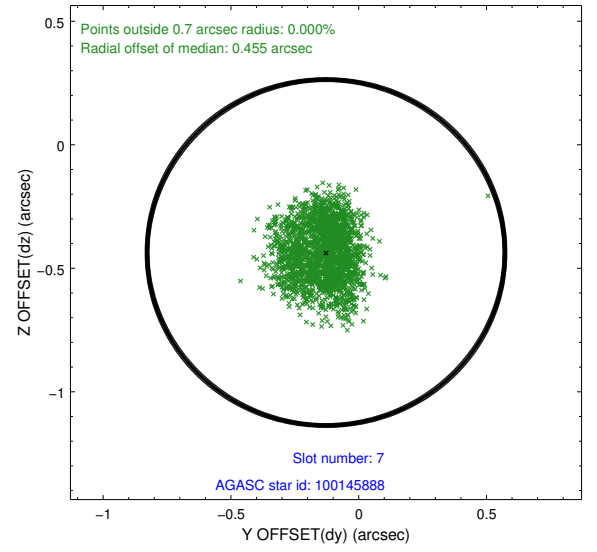
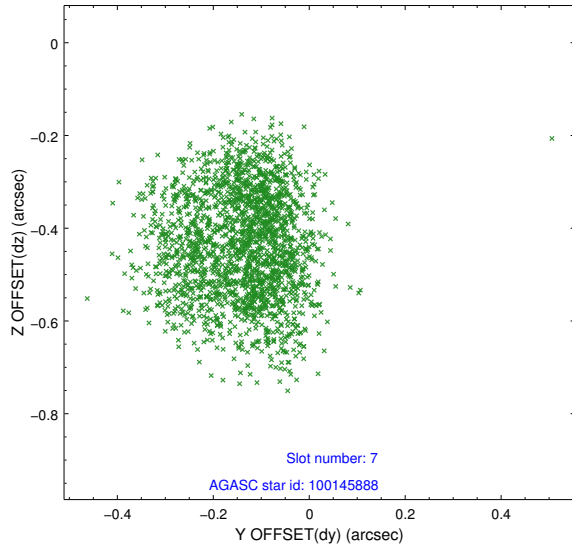
2.4.3 Slot 5



2.4.4 Slot 6

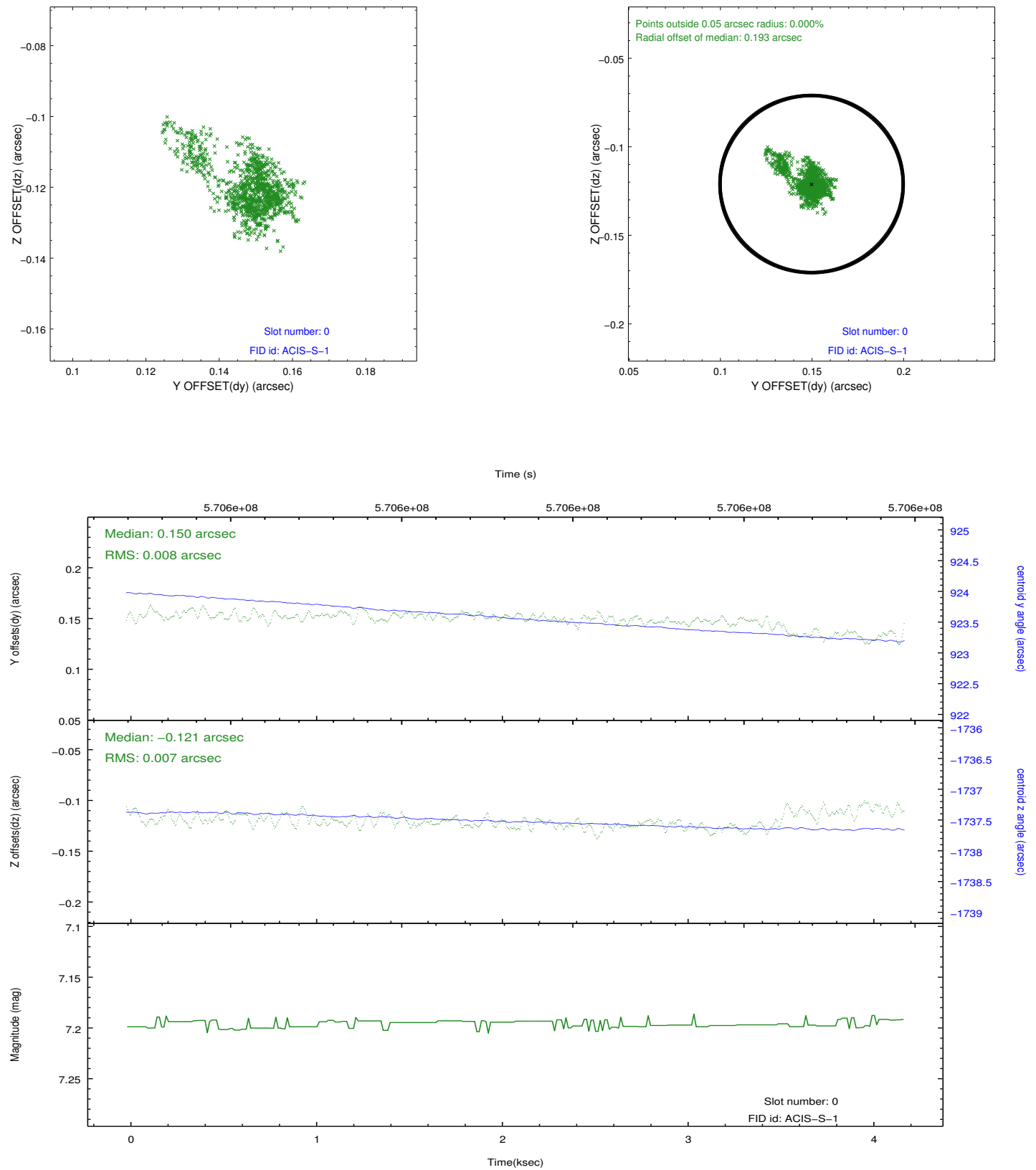


2.4.5 Slot 7

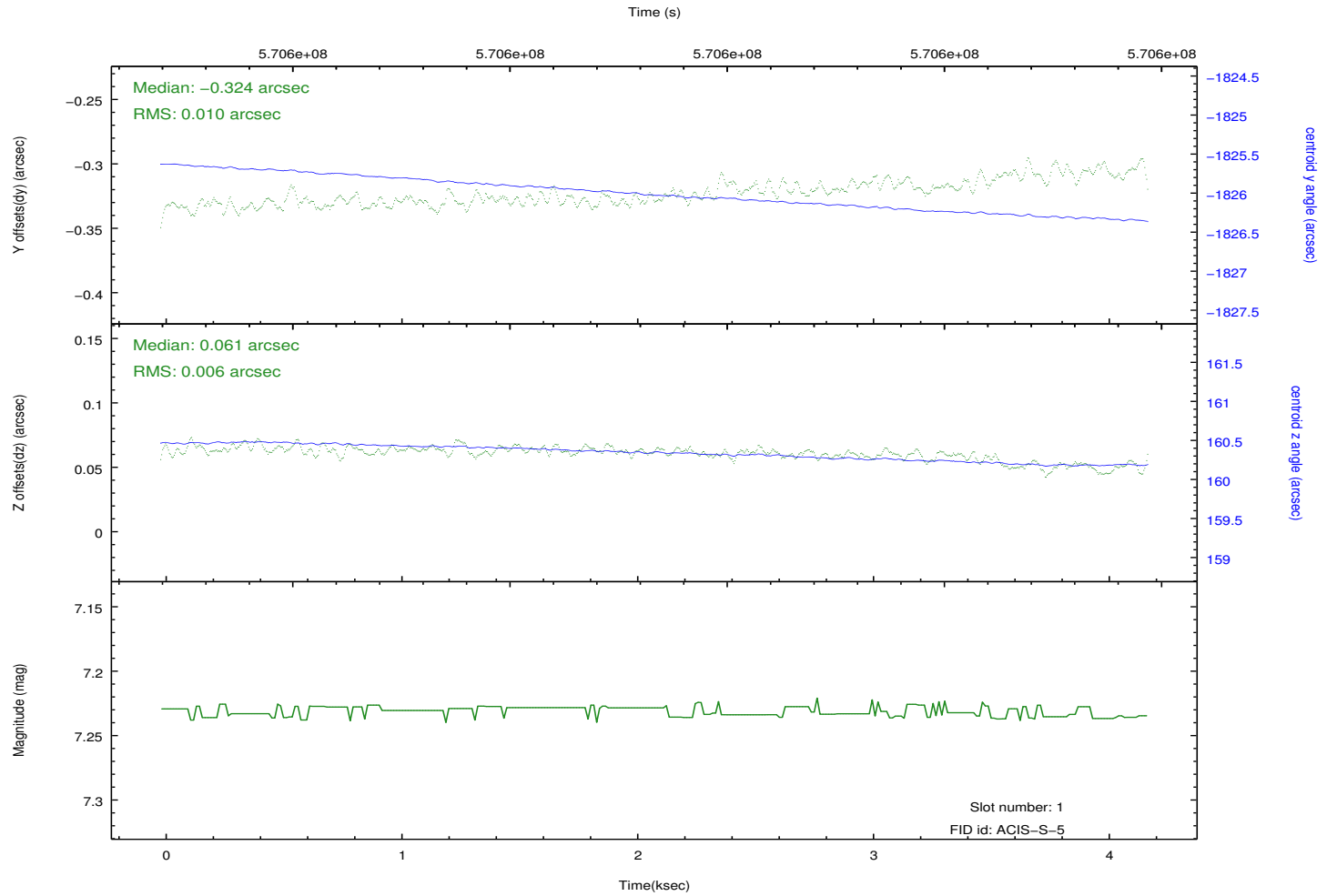
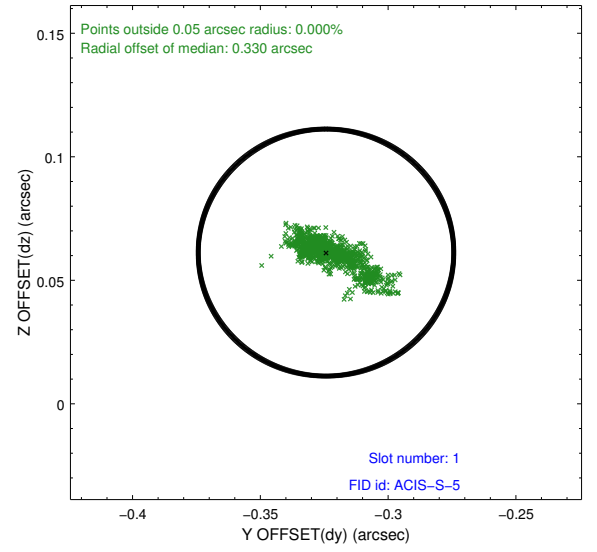
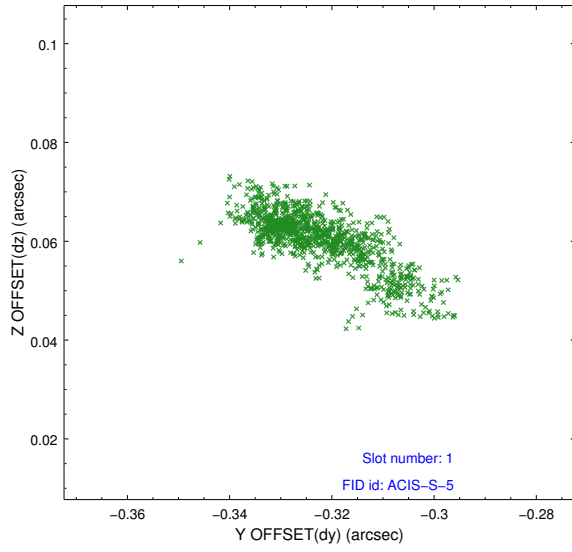


2.5 FID Slots

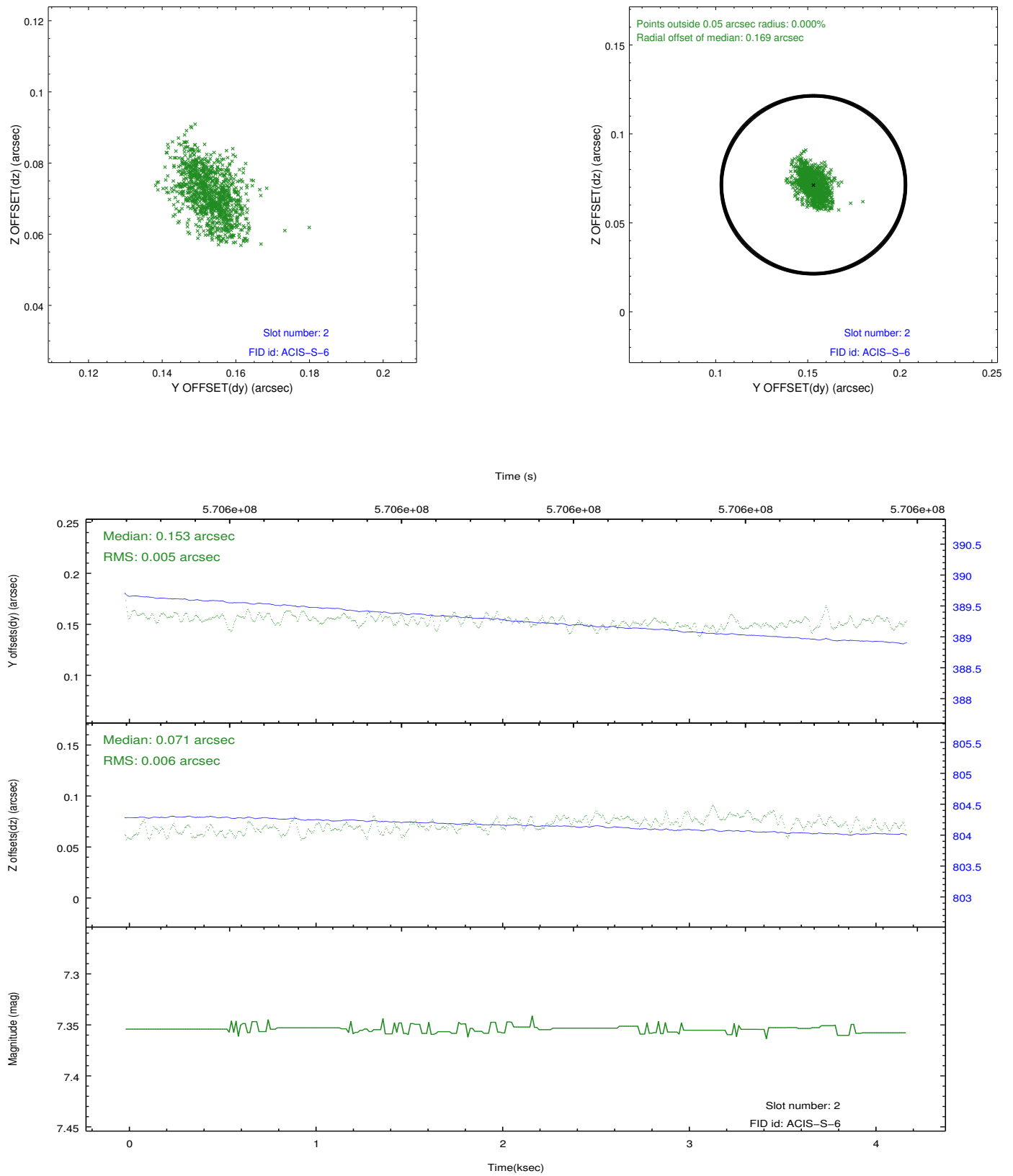
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.02.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.9488000588417

A.2 Comments

Joint proposal with Swift.

A spatial region of the original bias map for CCD = 9 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 = 9 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:

(110.49514, 9.19764), (110.49433, 9.19937), (110.44279, 9.17609),
(110.44359, 9.17435).