

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 16487 - L2 Version 3
Chandra X-Ray Center

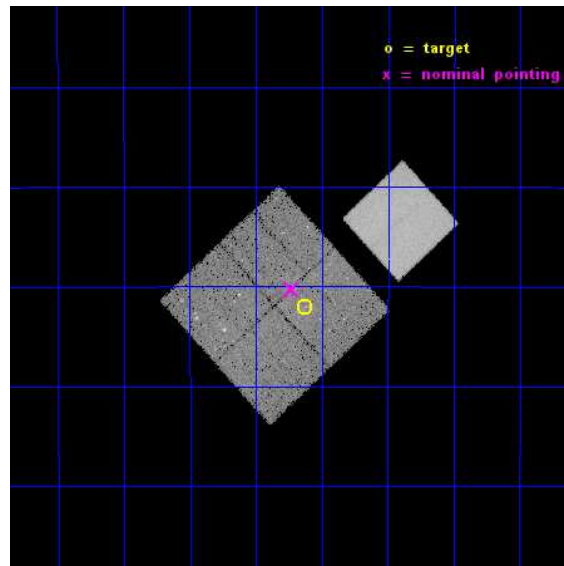
L2 Processing Date : Dec 6 2014

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1 Front

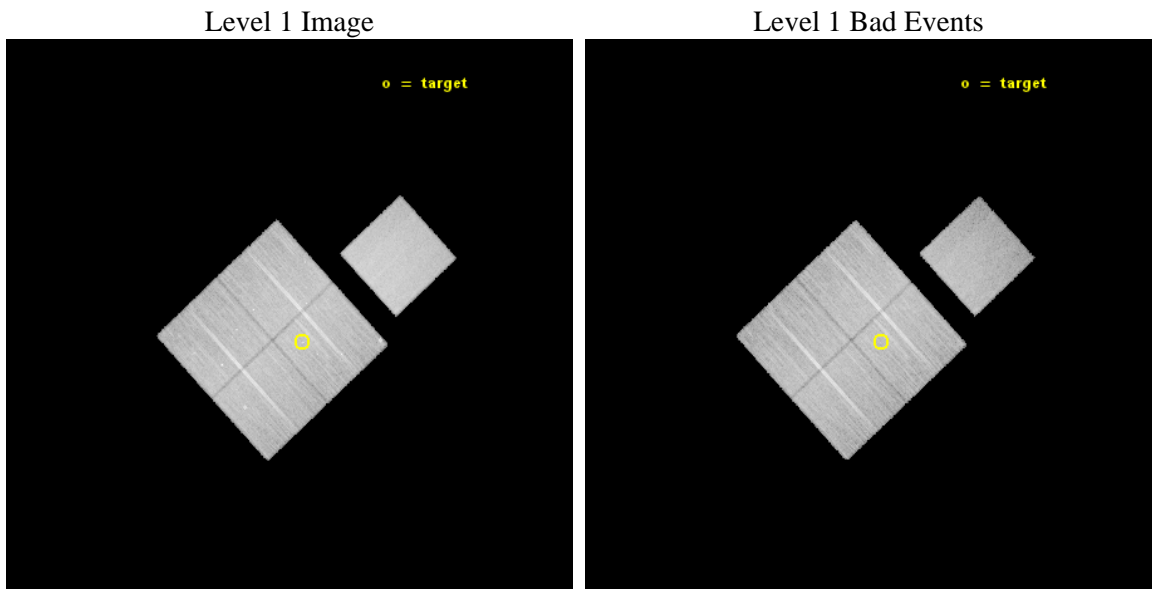
seq_num	601098	Sequence number
obs_id	16487	Observation id
title	Search for evidence of dwarf galaxy collisions in X-rays(2)	Propos
observer	Professor Gordon Garmire	Principal investigator
object	ngc1187	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	45.656667	Observer's specified target RA [deg]
dec_targ	-22.867222	Observer's specified target Dec [deg]
ra_nom	45.682632371161	Nominal RA [deg]
dec_nom	-22.837980233193	Nominal Dec [deg]
roll_nom	47.218770974295	Nominal Roll [deg]
revision	3	Processing version of data
ontime	41043.013674736	Sum of GTIs [s]
livetime	40506.756485649	Livetime [s]
ontime0	41042.890584886	Sum of GTIs [s]
ontime1	41039.790534616	Sum of GTIs [s]
ontime2	41049.254765511	Sum of GTIs [s]
ontime3	41043.013674736	Sum of GTIs [s]
ontime7	41049.336845517	Sum of GTIs [s]
l2events	176258	Number of level 2 events



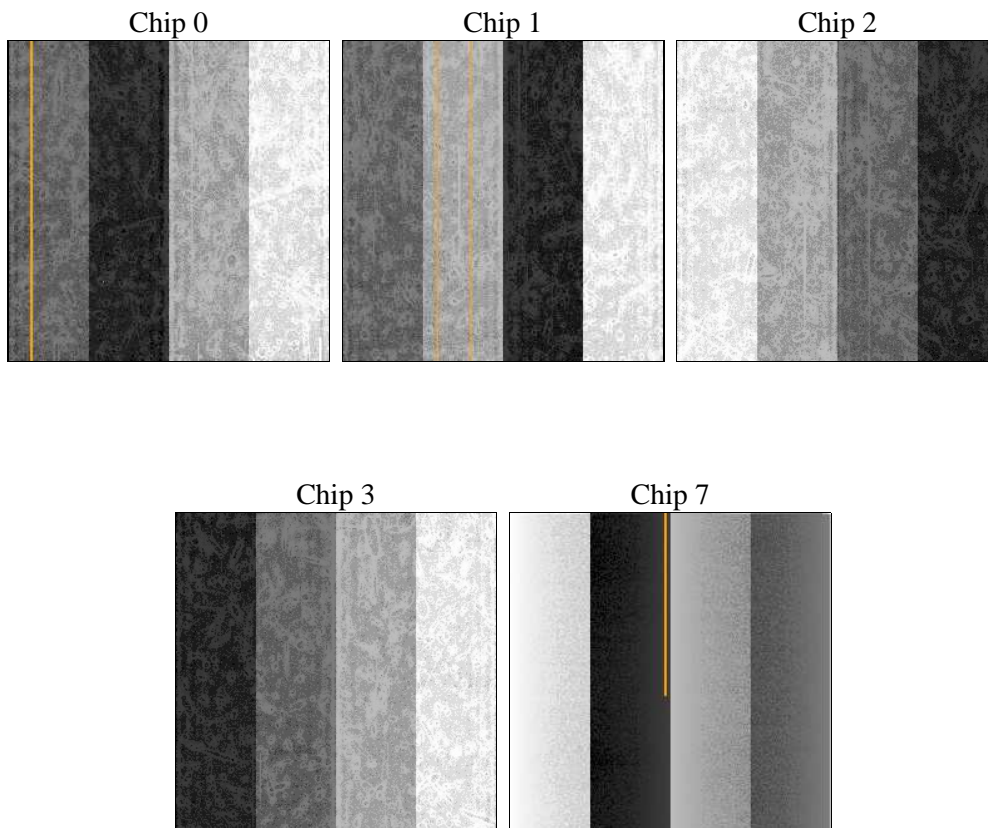
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40978.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	41043.013674736	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	41042.890584886	Sum of GTIs [s]
date	2014-12-07T02:47:56	Date and time of file creation	ontime1	41039.790534616	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	41049.254765511	Sum of GTIs [s]
			ontime3	41043.013674736	Sum of GTIs [s]
			ontime7	41049.336845517	Sum of GTIs [s]
			l1events	944455	Number of level 1 events

2.1.4 Events

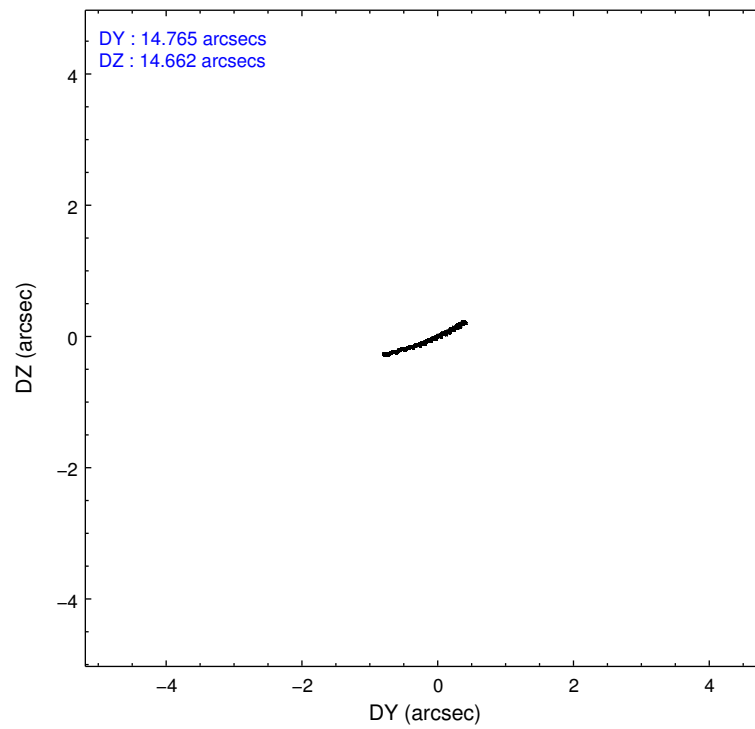
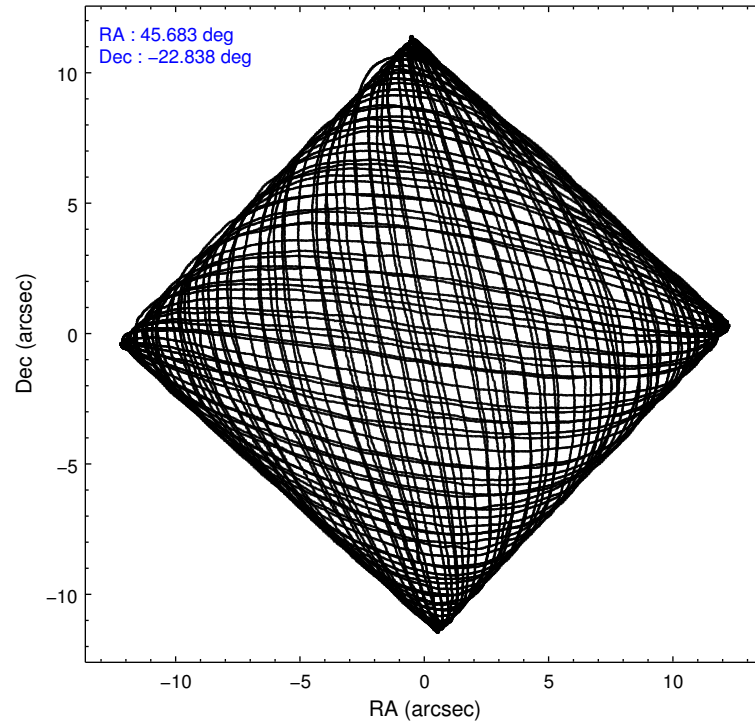
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	172438	173334	188805	185367	224511
rejected events	148927	150225	166965	162885	120343
rejected %	86%	86%	88%	87%	53%

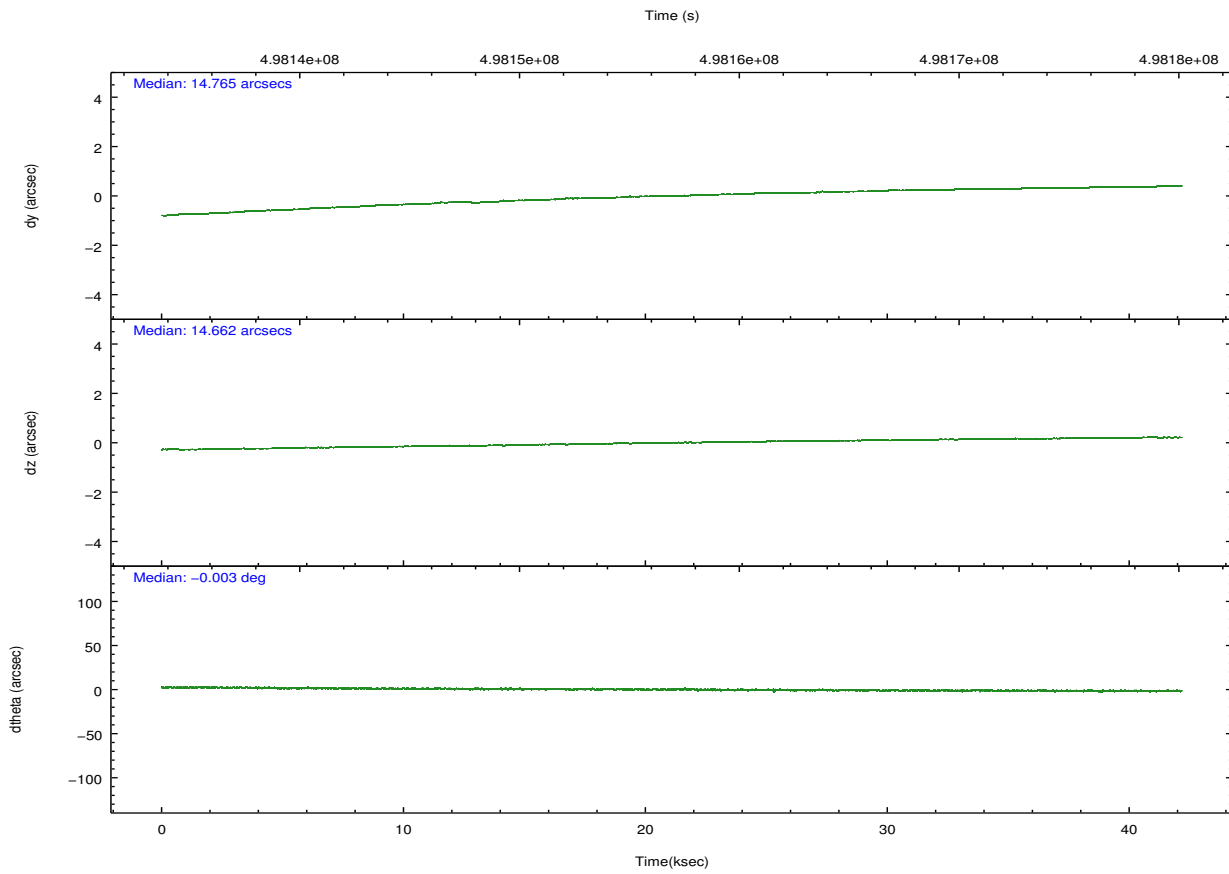
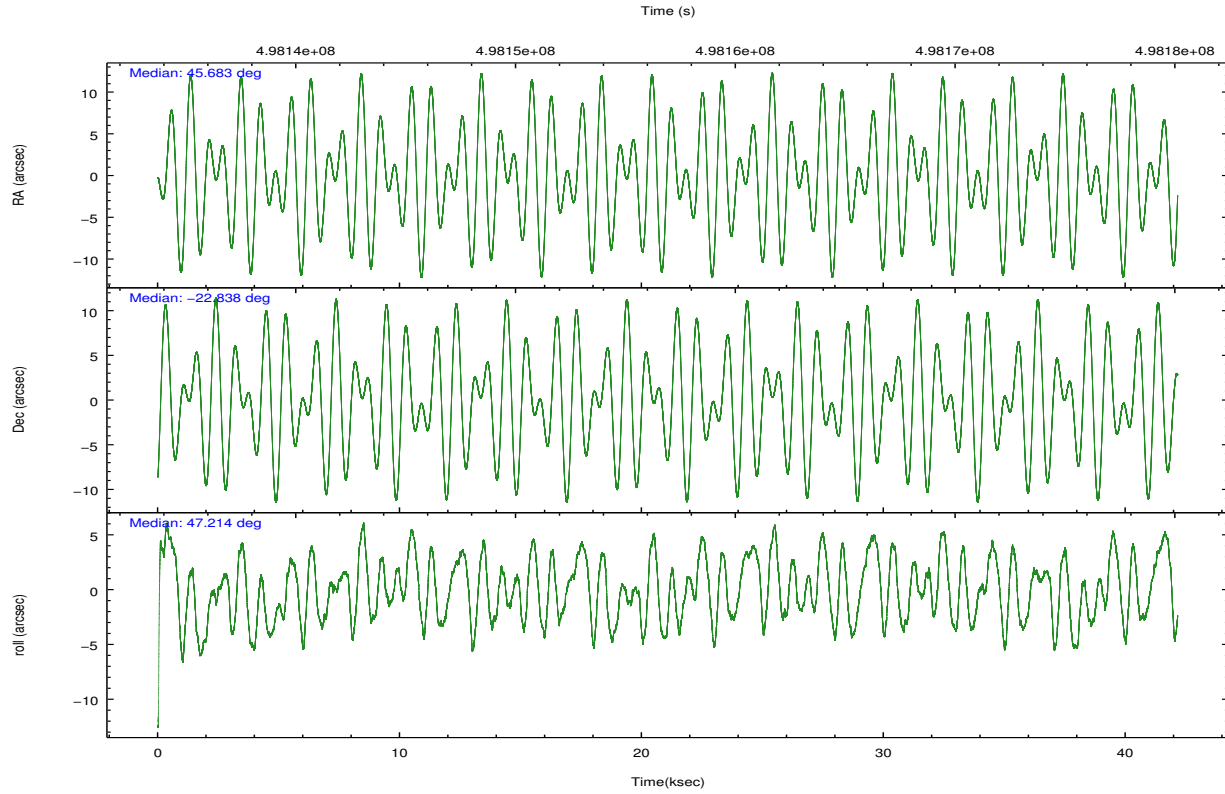
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	9100	8167	8409	9095	9796
	5%	4%	4%	4%	4%
grade 1 events	131	127	95	111	285
	0%	0%	0%	0%	0%
grade 2 events	5427	5307	5182	4645	22290
	3%	3%	2%	2%	9%
grade 3 events	2403	2331	2165	2196	8890
	1%	1%	1%	1%	3%
grade 4 events	2209	2377	2207	2244	8930
	1%	1%	1%	1%	3%
grade 5 events	7636	8185	7084	8612	23461
	4%	4%	3%	4%	10%
grade 6 events	4373	4928	3879	4303	54273
	2%	2%	2%	2%	24%
grade 7 events	141159	141912	159784	154161	96586
	81%	81%	84%	83%	43%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	45.676160	45.68263237116076	CCD I2 on	Y	Y
[deg] Pointing Dec	-22.864820	-22.83798023319282	CCD I3 on	Y	Y
[deg] Pointing Roll	47.007572	47.21877097429506	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	N
[mm] SIM translation stage pos	-228.592463	-228.6015472178352	CCD S3 on	O2	Y
[mm] SIM translation stage offset	-5	-4.990905785094469	CCD S4 on	N	N
[s] Observation start time (MET)	498137034.184000	498135594.69704	CCD S5 on	N	N
Observation start date	2013-10-14T11:22:47	2013-10-14T10:59:54	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	498178012.184000	498178744.6369	On-chip summing requested	N	N
Observation end date	2013-10-14T22:45:45	2013-10-14T22:59:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





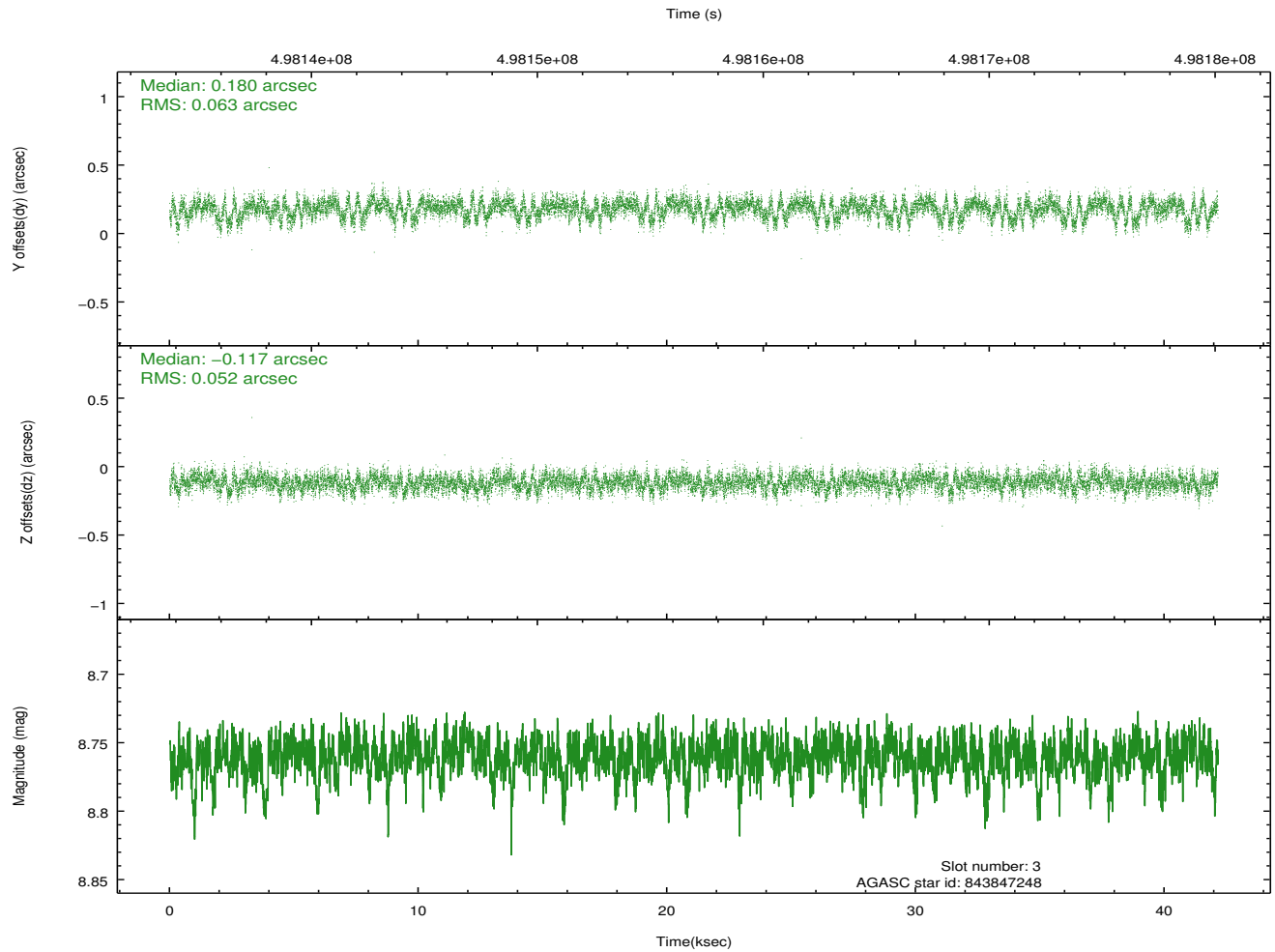
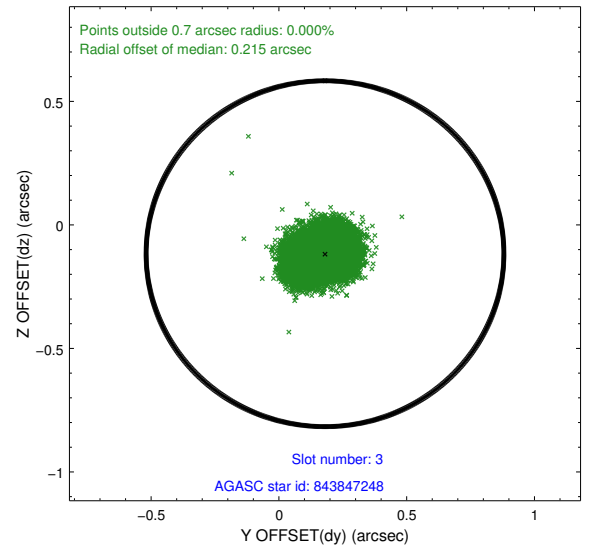
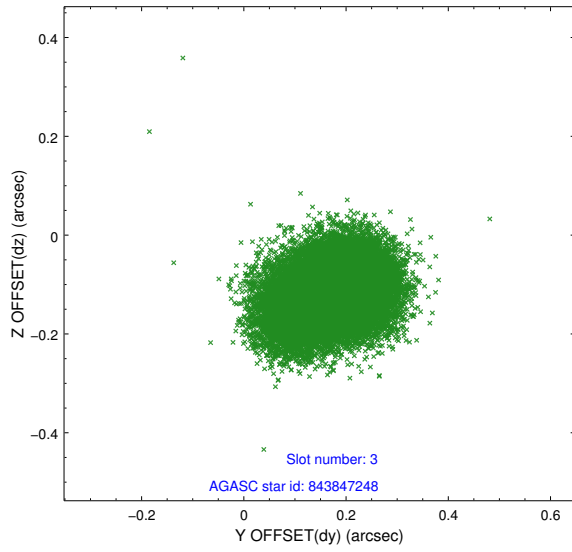
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.16	10283	0.123	-0.084	0.010	0.030	0.000000	0.000000	924.82	-940.73
1	FID		ACIS-I-5	7.13	10282	-0.276	0.103	0.008	0.018	0.000000	0.000000	-1823.72	956.88
2	FID		ACIS-I-6	7.14	10282	0.062	0.051	0.009	0.021	0.000000	0.000000	390.24	1601.39
3	GUIDE	used	843847248	8.76	20561	0.180	-0.117	0.087	0.141	45.247726	-22.941116	-1170.47	850.12
4	GUIDE	used	843847640	8.34	20562	-0.166	-0.128	0.073	0.140	45.691776	-22.534731	904.71	772.43
5	GUIDE	used	843847680	10.06	20477	0.247	0.346	0.219	0.335	45.778102	-23.658054	-1857.66	-2192.91
6	GUIDE	used	843848072	8.99	20522	-0.031	0.214	0.108	0.178	46.055215	-23.143632	120.66	-1603.26
7	GUIDE	used	769526576	9.43	20544	-0.230	-0.310	0.124	0.197	45.442990	-22.112118	1451.29	2416.07

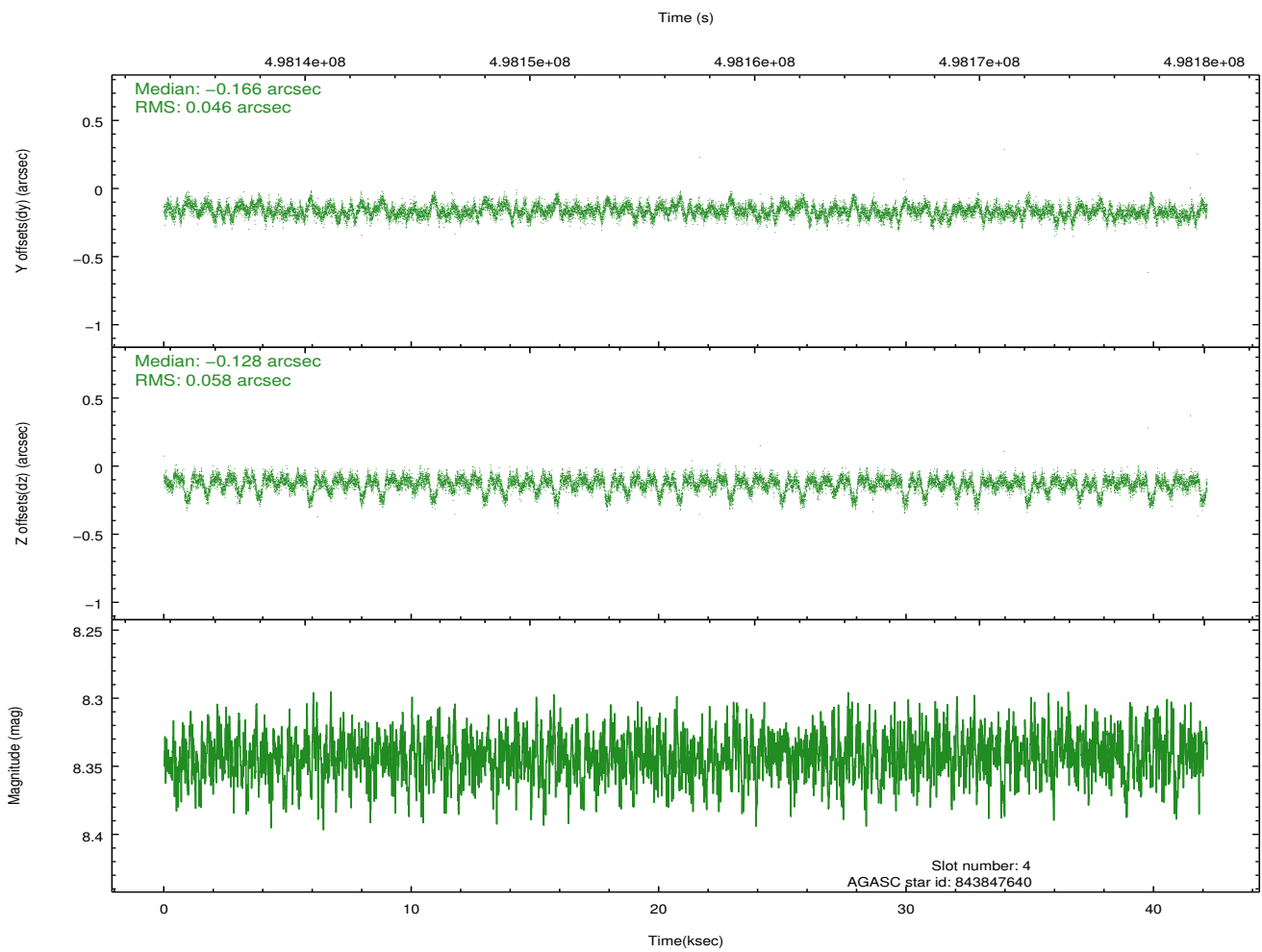
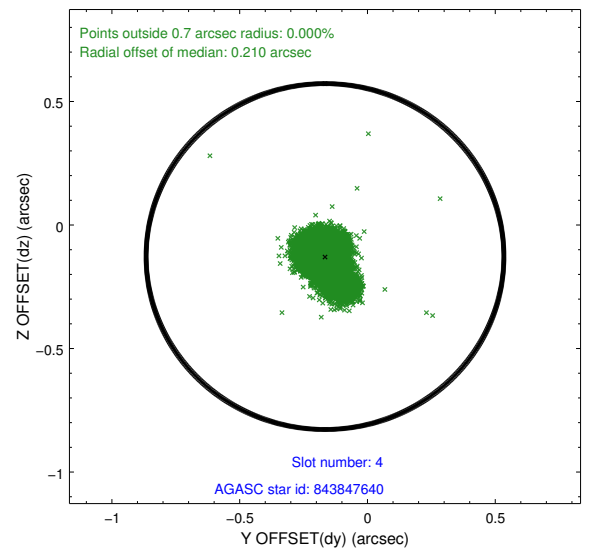
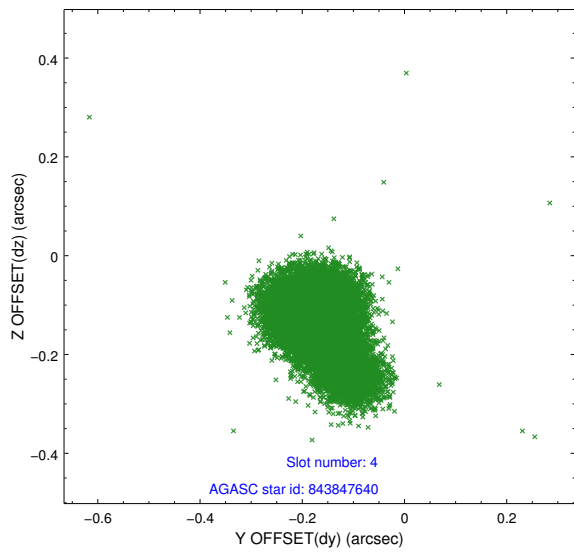
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2.4 Star Slots

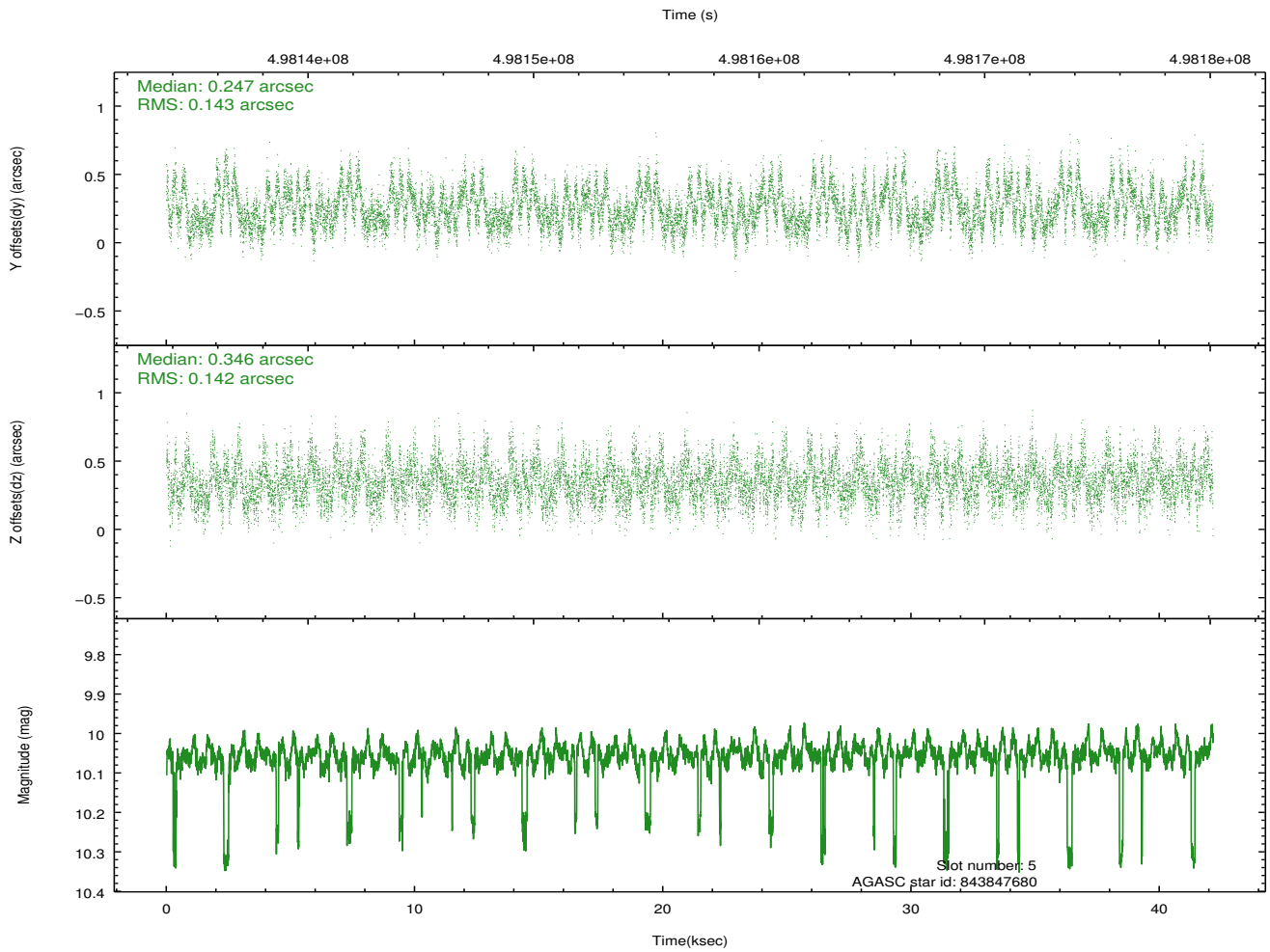
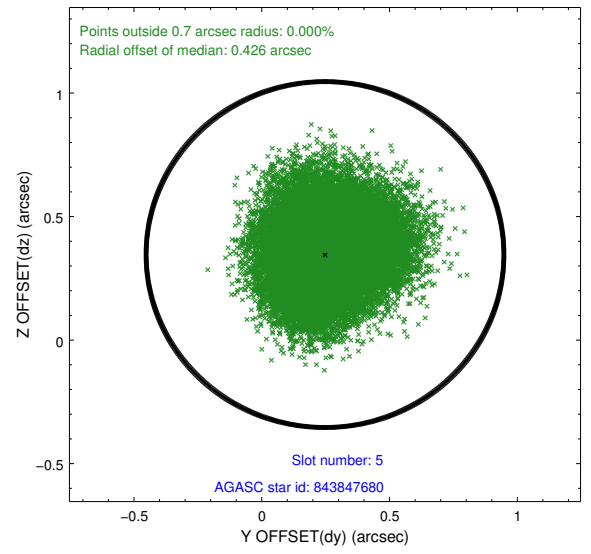
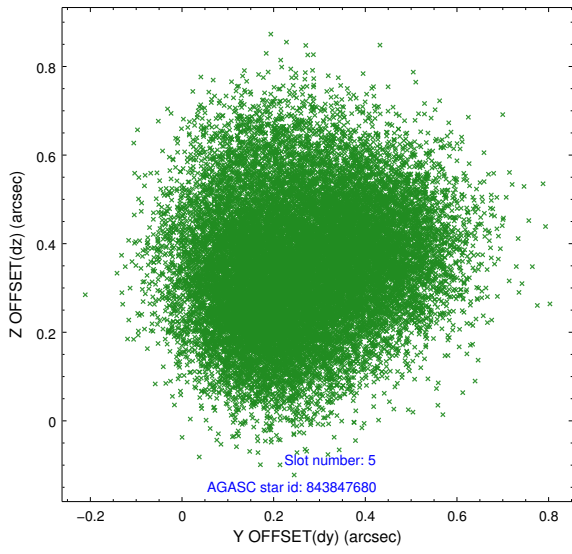
2.4.1 Slot 3



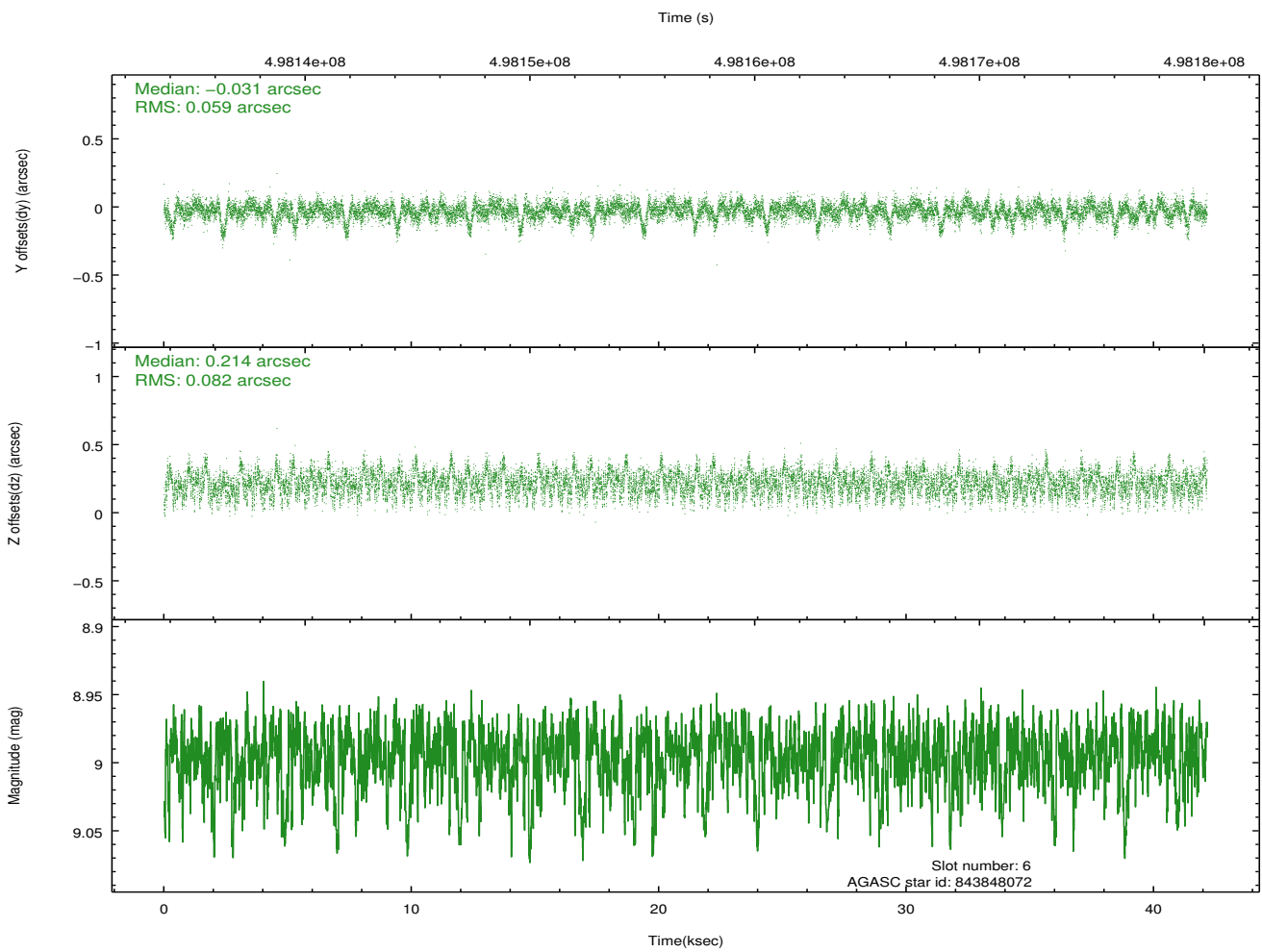
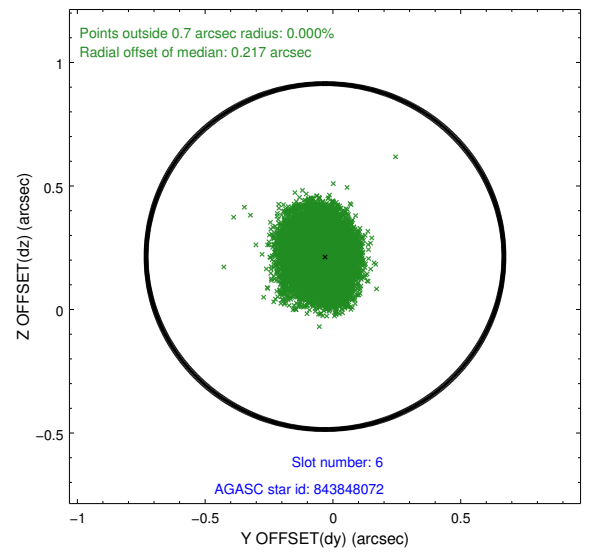
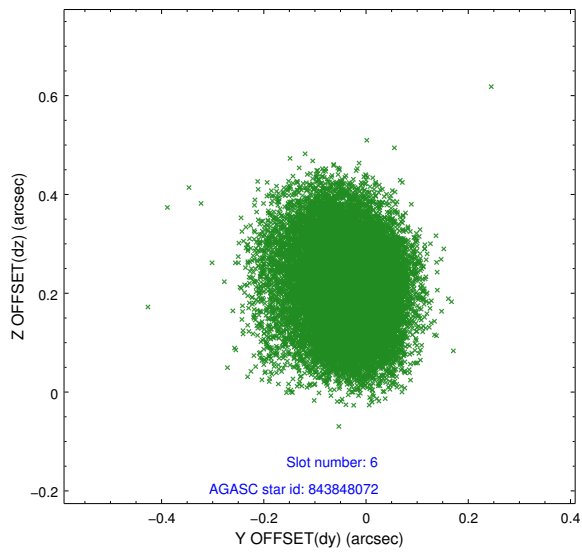
2.4.2 Slot 4



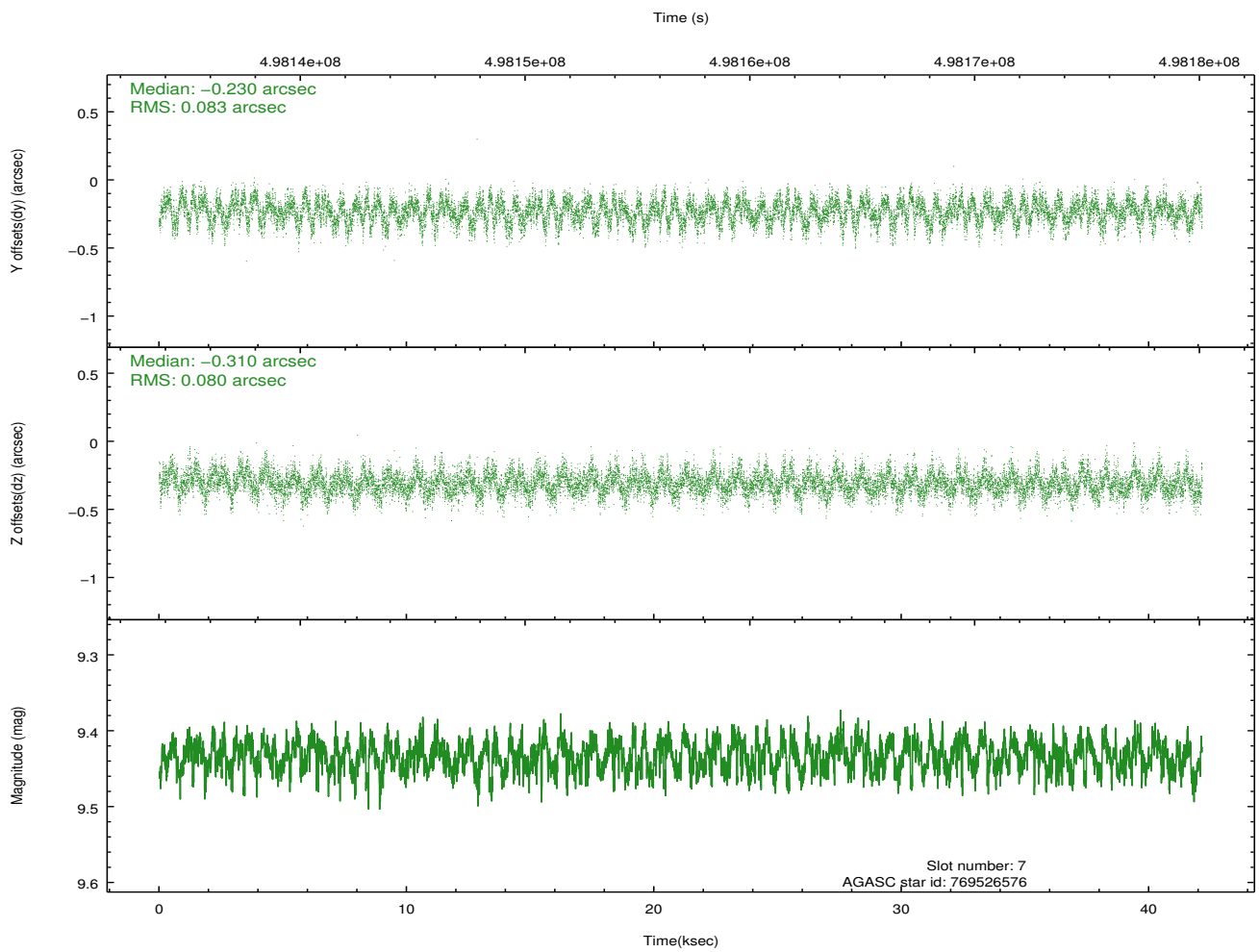
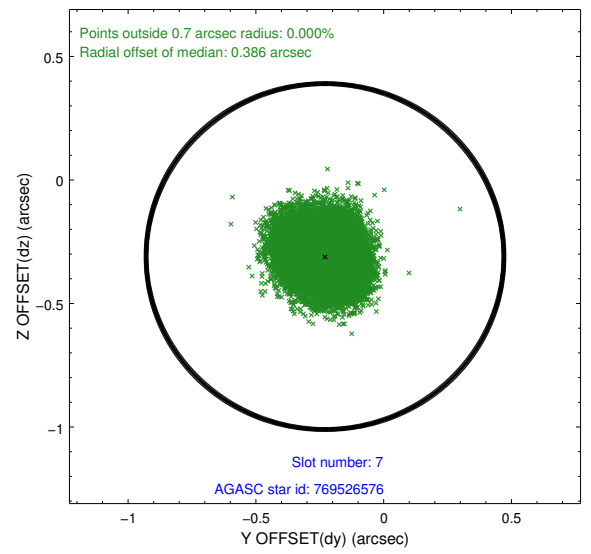
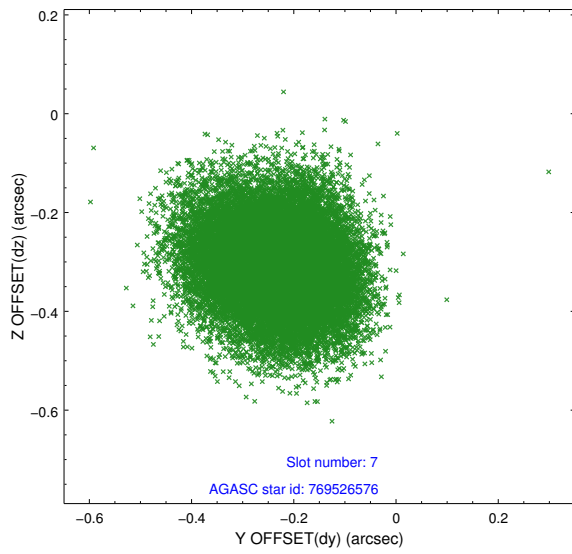
2.4.3 Slot 5



2.4.4 Slot 6

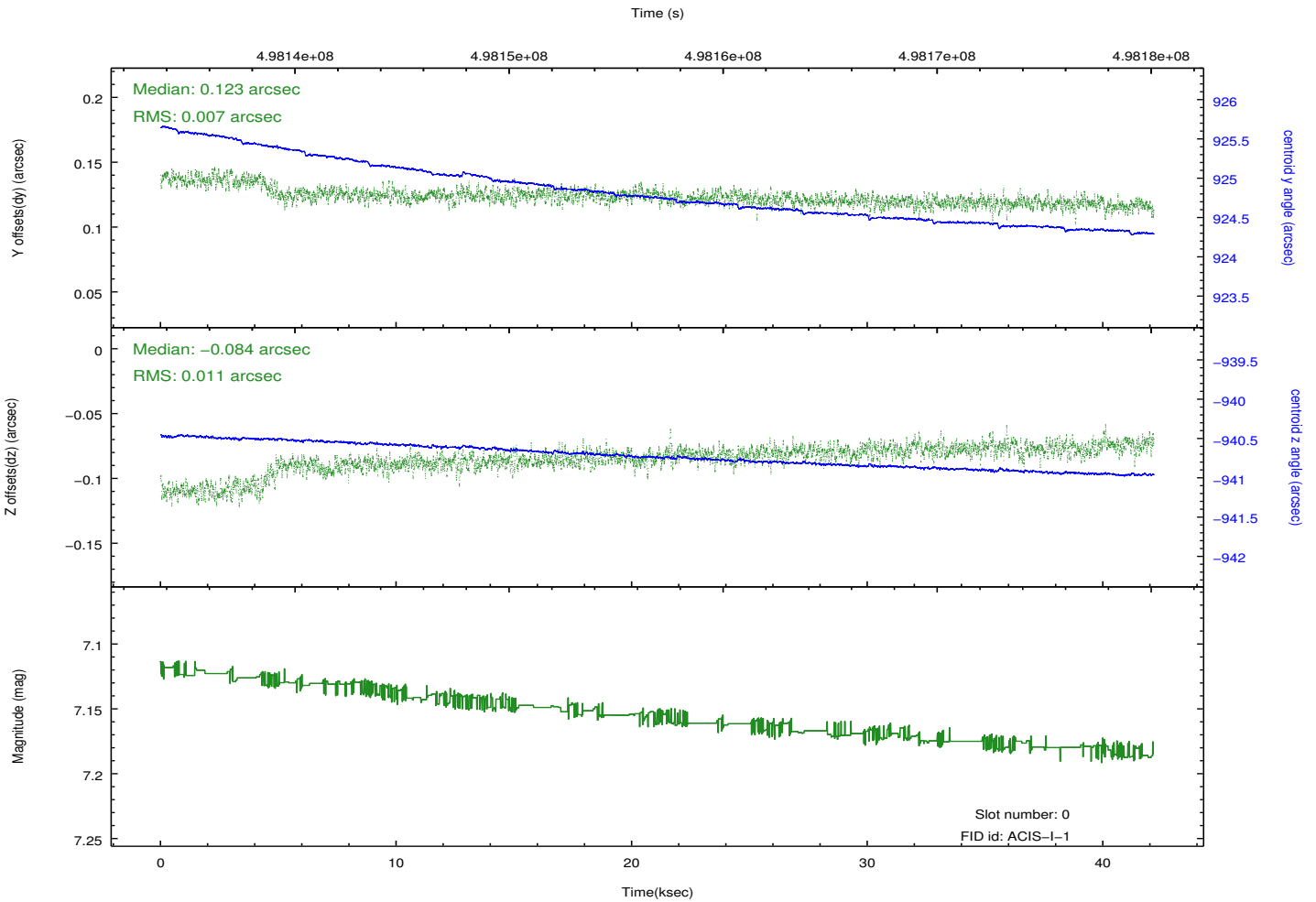
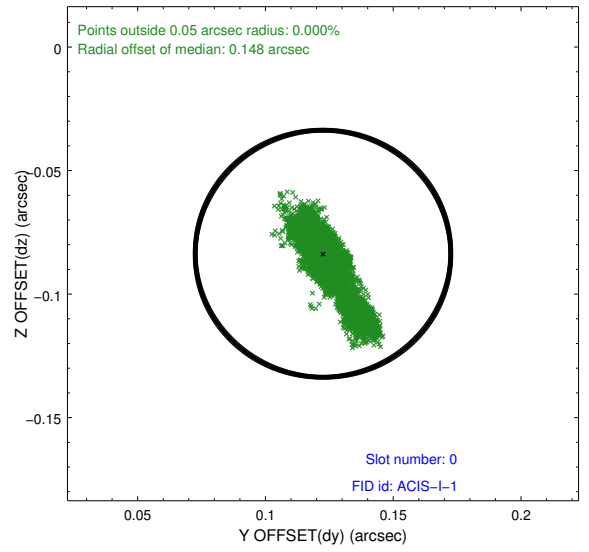
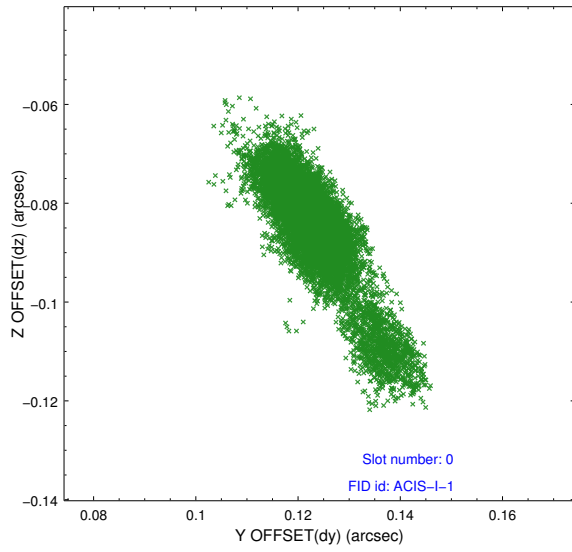


2.4.5 Slot 7

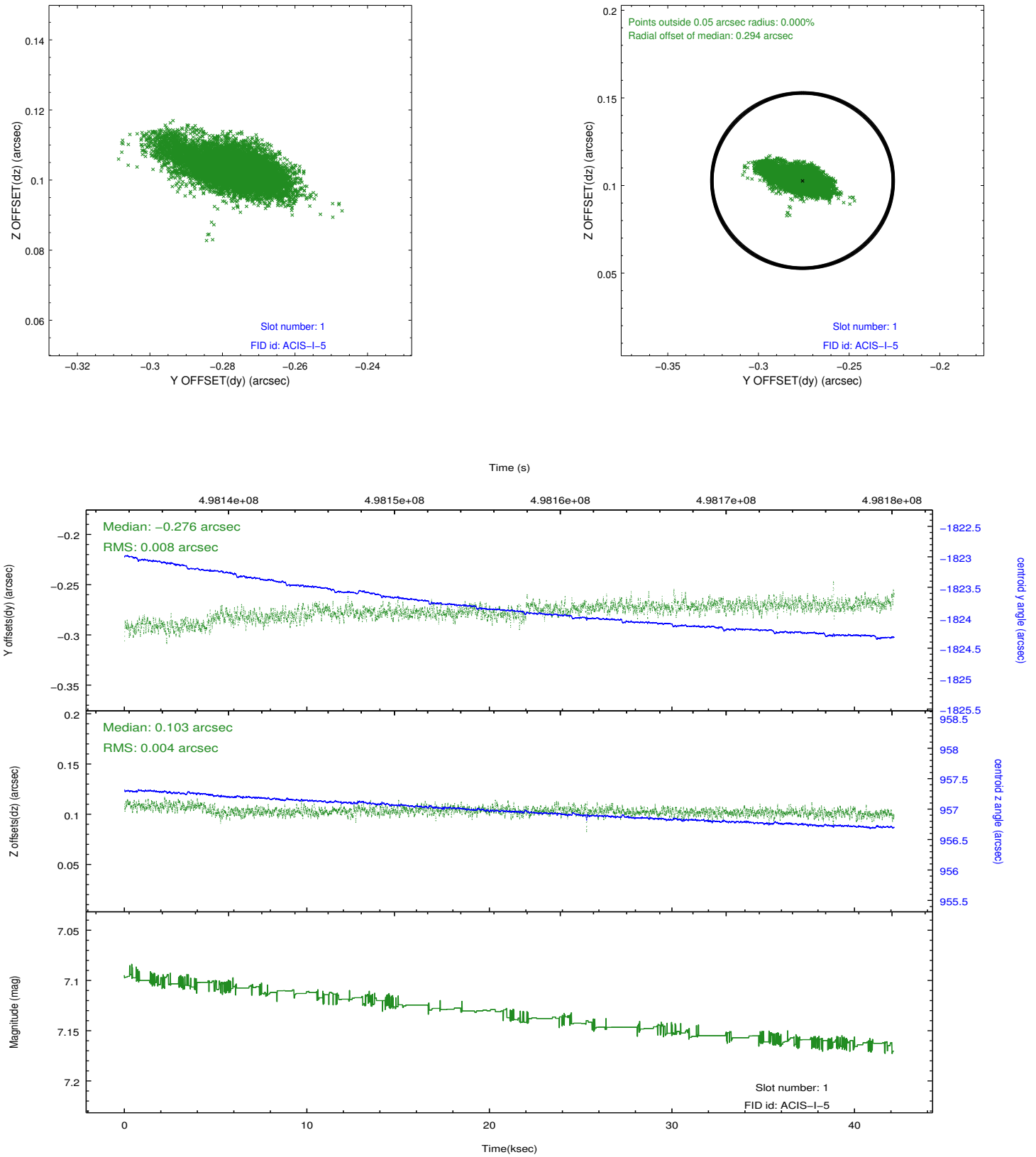


2.5 FID Slots

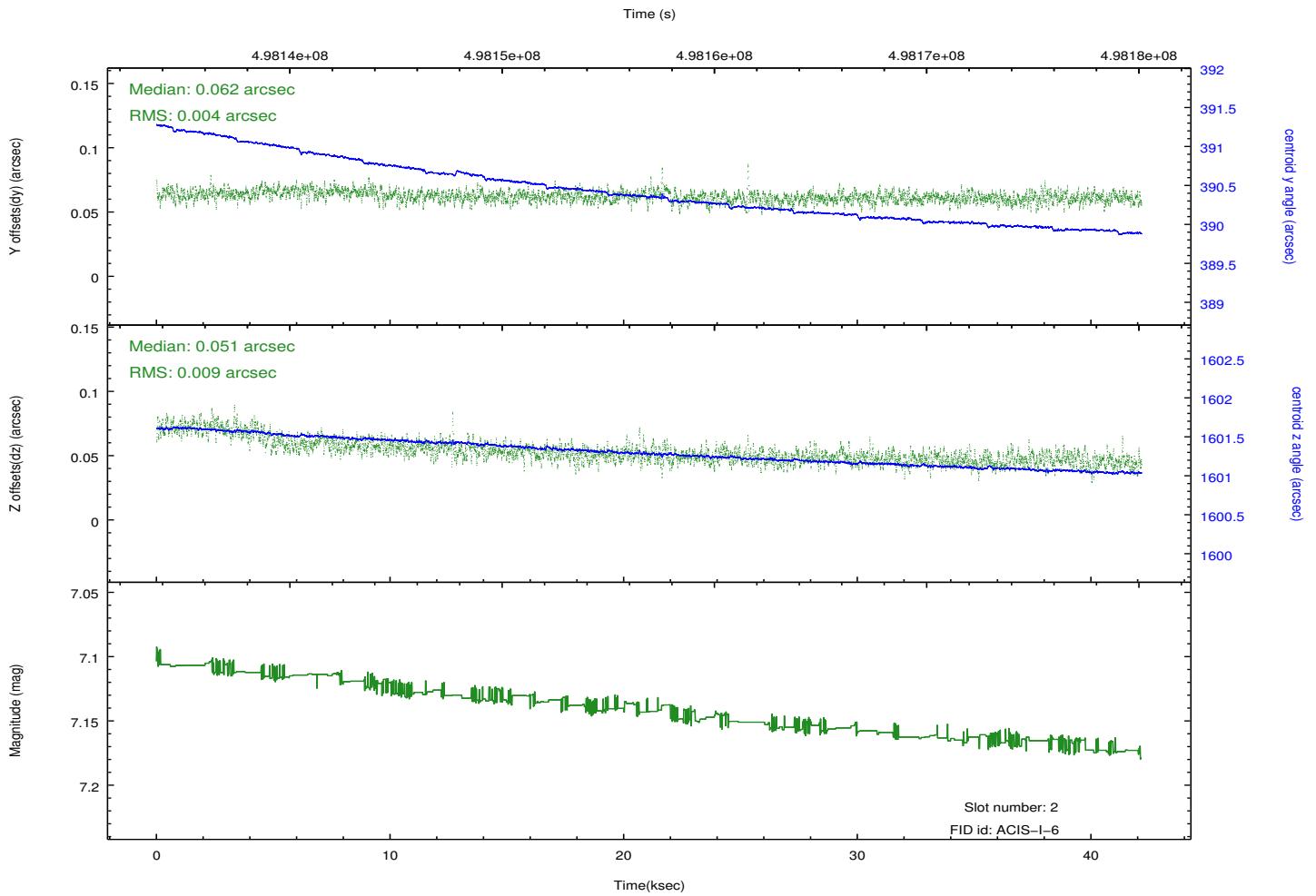
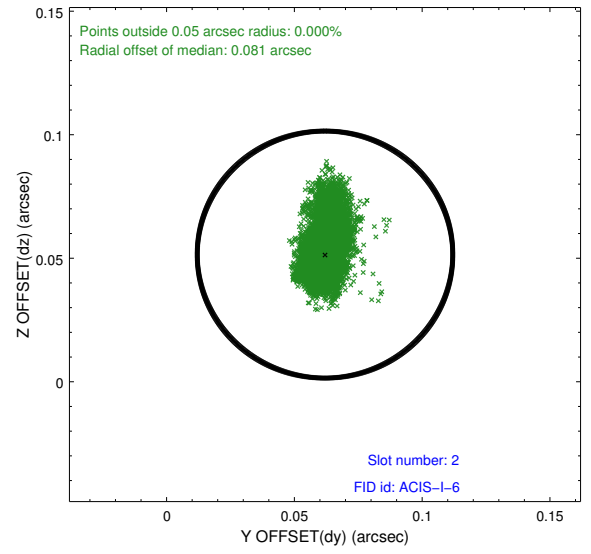
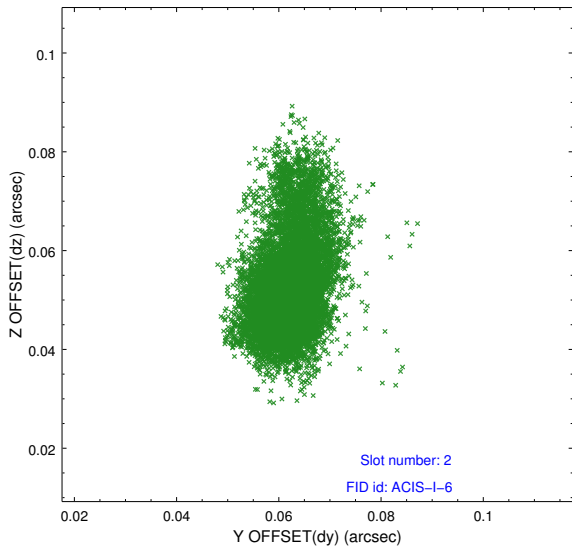
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	41.043013674736

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.