

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16324 - L2 Version 2
Chandra X-Ray Center

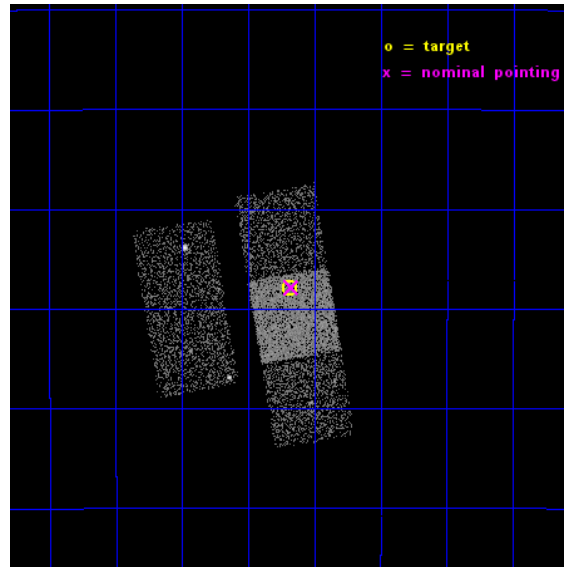
L2 Processing Date : Dec 9 2014

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1 Front

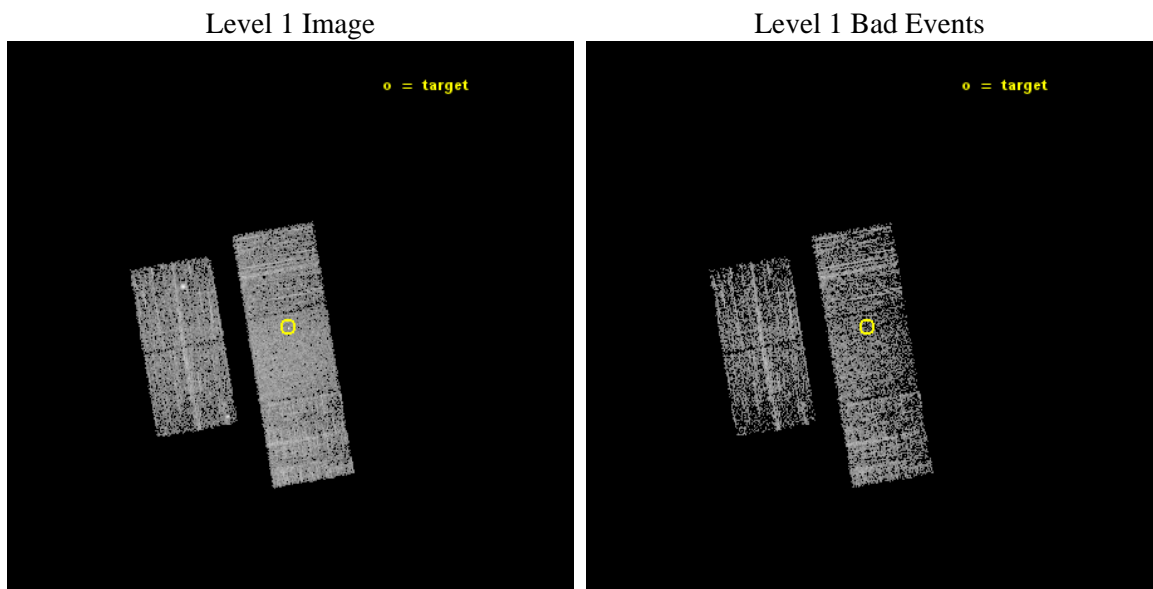
seq_num	200950	Sequence number
obs_id	16324	Observation id
title	X-rays and Disks around Upper Sco Stars	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	US 16094098-2217594	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	242.420833	Observer's specified target RA [deg]
dec_targ	-22.299833	Observer's specified target Dec [deg]
ra_nom	242.41830679013	Nominal RA [deg]
dec_nom	-22.29771909976	Nominal Dec [deg]
roll_nom	80.340956282456	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3071.3600175381	Sum of GTIs [s]
livetime	3031.2304378066	Livetime [s]
ontime2	3071.1958575249	Sum of GTIs [s]
ontime3	3068.1369271874	Sum of GTIs [s]
ontime6	3071.3189775348	Sum of GTIs [s]
ontime7	3071.3600175381	Sum of GTIs [s]
ontime8	3071.2368975282	Sum of GTIs [s]
l2events	16447	Number of level 2 events



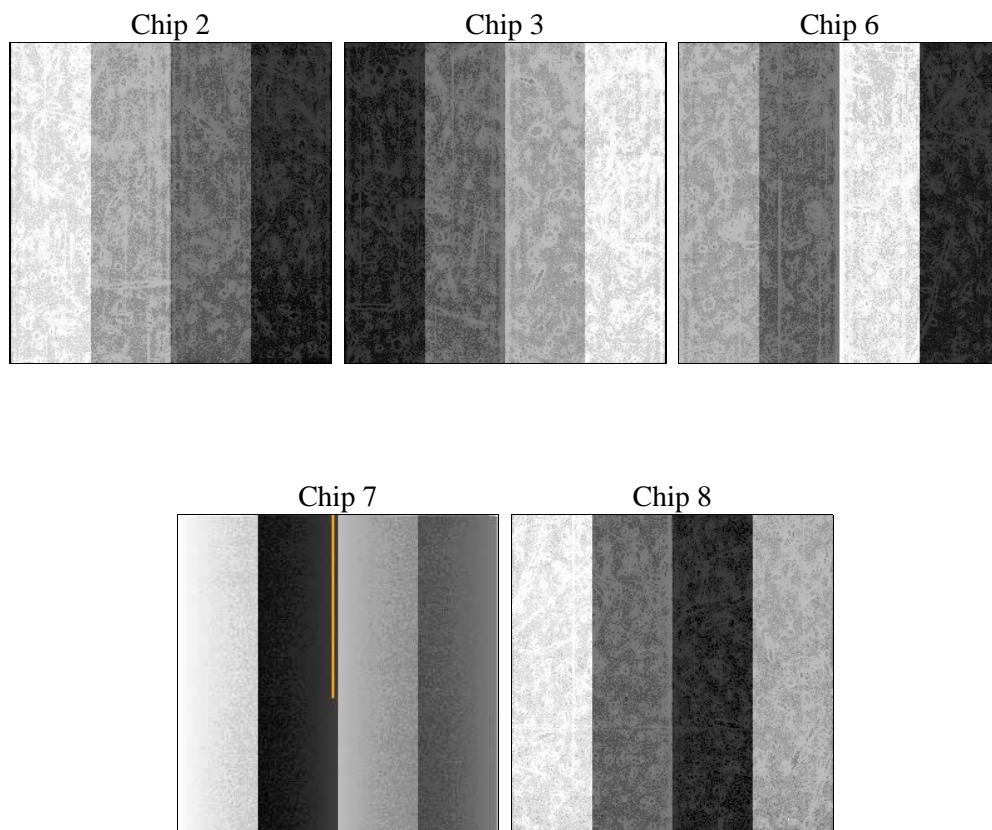
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	3071.3600175381	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	3071.1958575249	Sum of GTIs [s]
date	2014-12-09T23:50:26	Date and time of file creation	ontime3	3068.1369271874	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	3071.3189775348	Sum of GTIs [s]
			ontime7	3071.3600175381	Sum of GTIs [s]
			ontime8	3071.2368975282	Sum of GTIs [s]
			l1events	87041	Number of level 1 events

2.1.4 Events

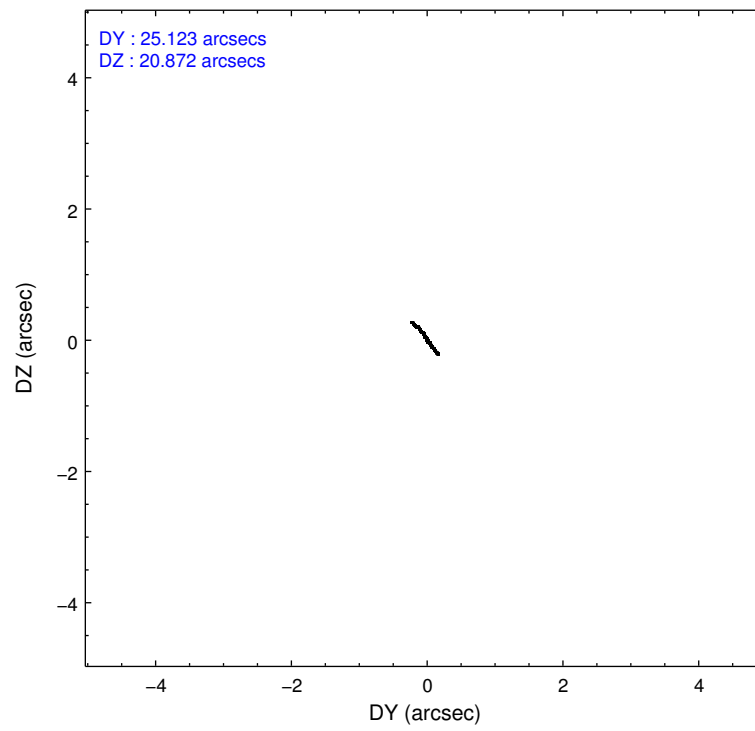
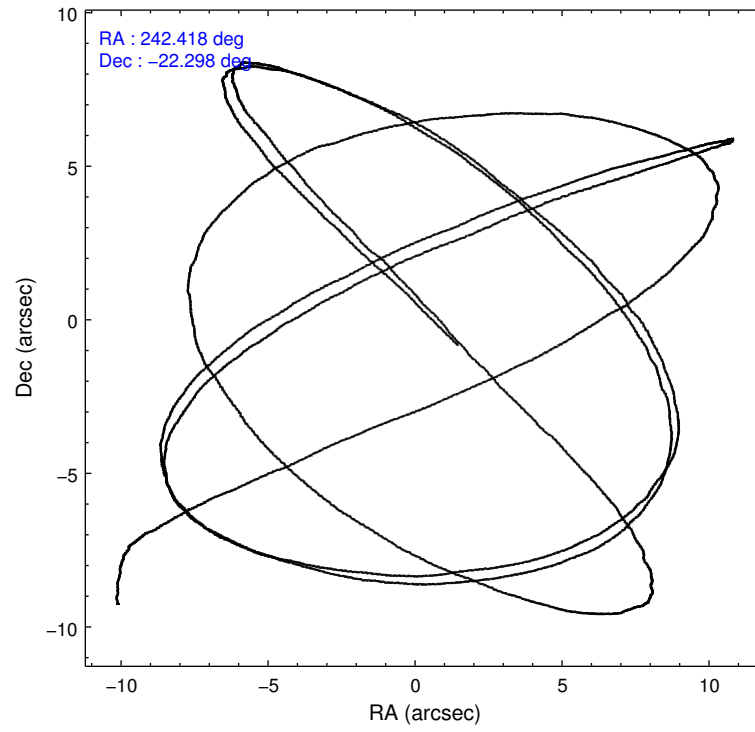
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	15611	14161	15887	20698	20684
rejected events	13145	12167	13966	11581	15493
rejected %	84%	85%	87%	55%	74%

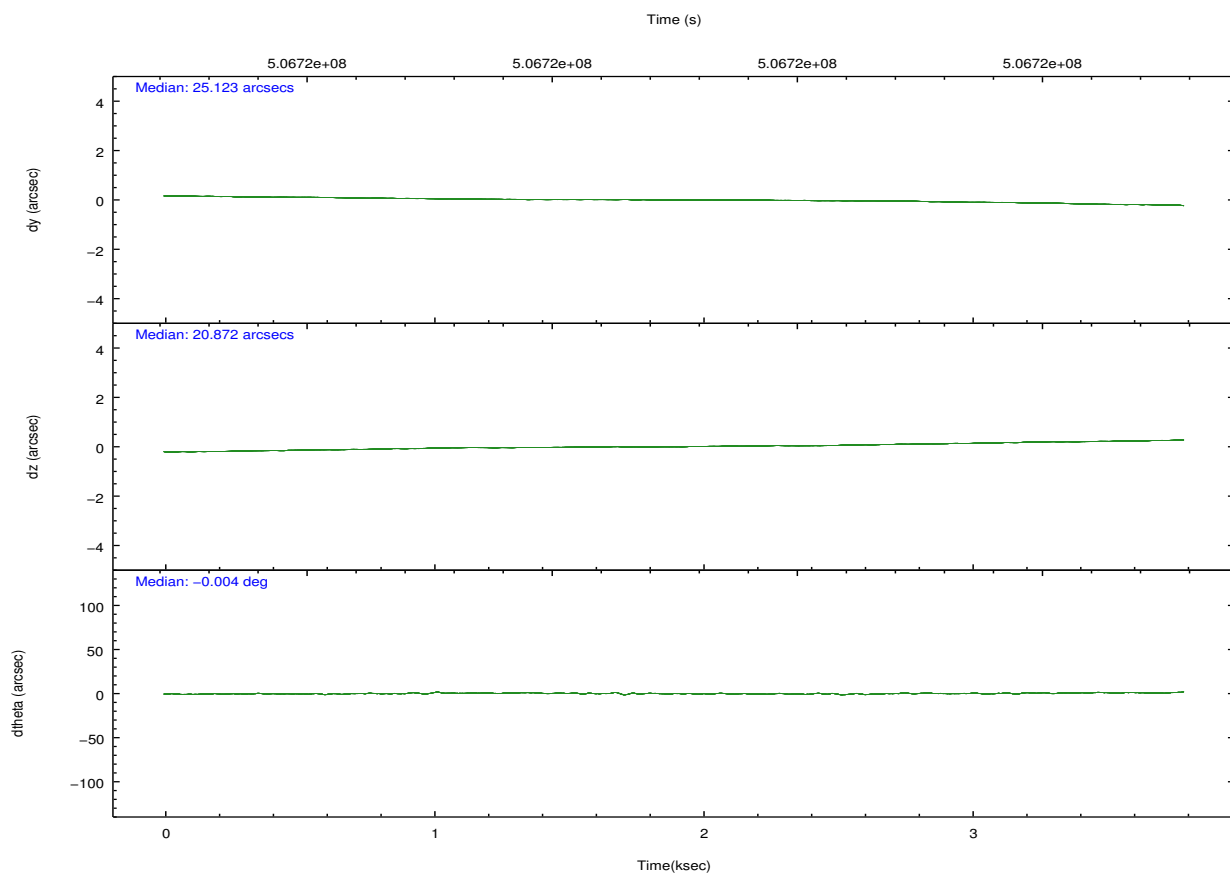
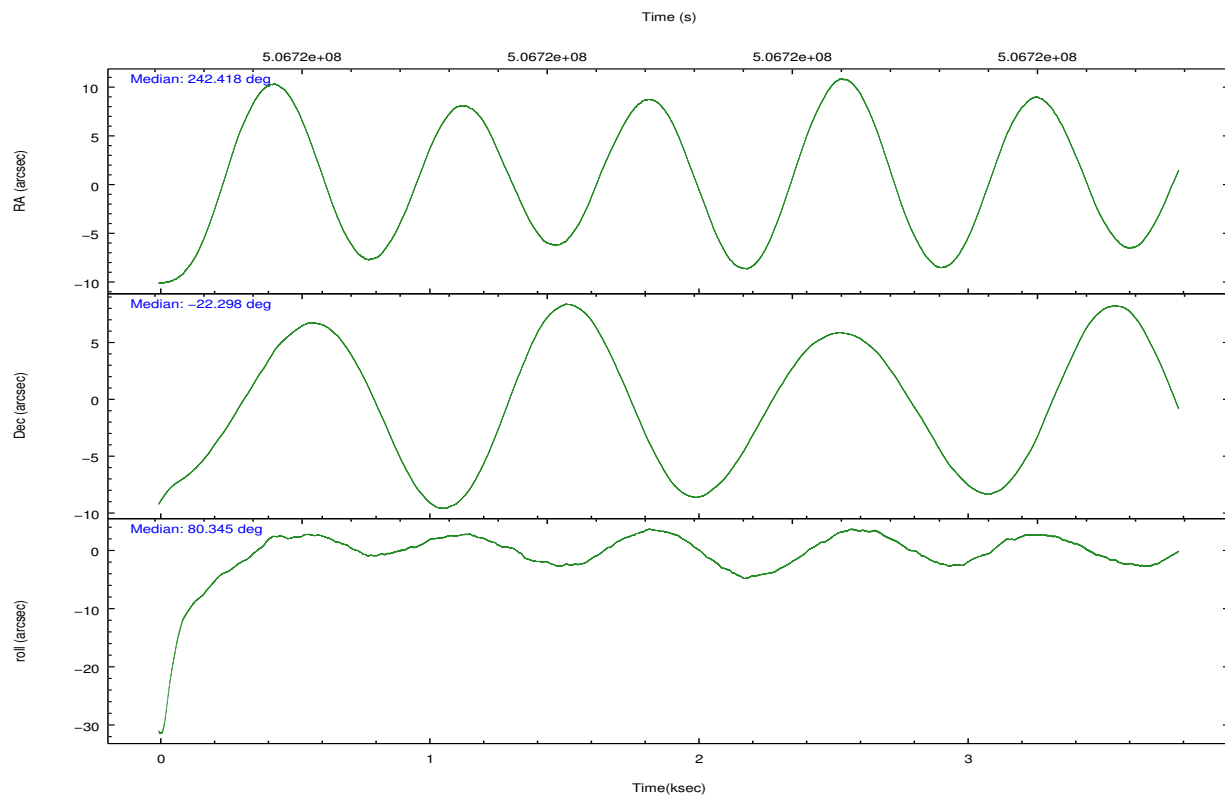
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1277	844	690	818	1457
	8%	5%	4%	3%	7%
grade 1 events	17	8	9	21	10
	0%	0%	0%	0%	0%
grade 2 events	515	411	461	1889	1340
	3%	2%	2%	9%	6%
grade 3 events	166	190	178	836	444
	1%	1%	1%	4%	2%
grade 4 events	184	189	183	748	394
	1%	1%	1%	3%	1%
grade 5 events	663	775	746	2054	1088
	4%	5%	4%	9%	5%
grade 6 events	326	363	414	4836	1560
	2%	2%	2%	23%	7%
grade 7 events	12463	11381	13206	9496	14391
	79%	80%	83%	45%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	242.429054	242.4183067901293	Subarray requested	NONE	NONE
[deg] Pointing Dec	-22.323303	-22.29771909976	Alternating exposures requested	N	N
[deg] Pointing Roll	80.188491	80.34095628245588	[s] Primary exposure time	0.000000	3.1
[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)	506717390.184000	506716147.94263			
Observation start date	2014-01-21T18:48:43	2014-01-21T18:29:07			
[s] Observation end time (MET)	506720390.184000	506721166.85541			
Observation end date	2014-01-21T19:38:43	2014-01-21T19:52:46			
Read mode	TIMED	TIMED			

2.3 Aspect



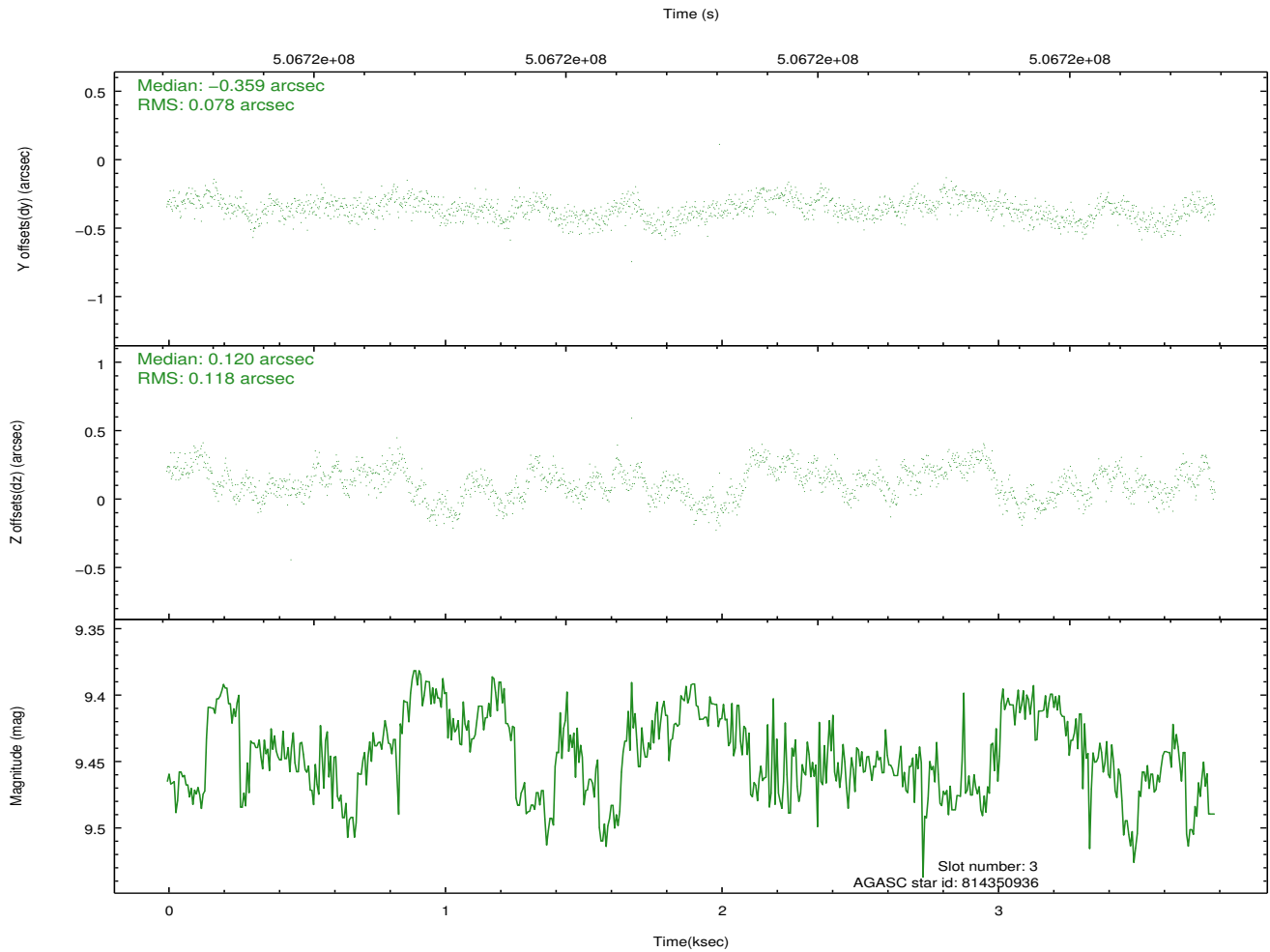
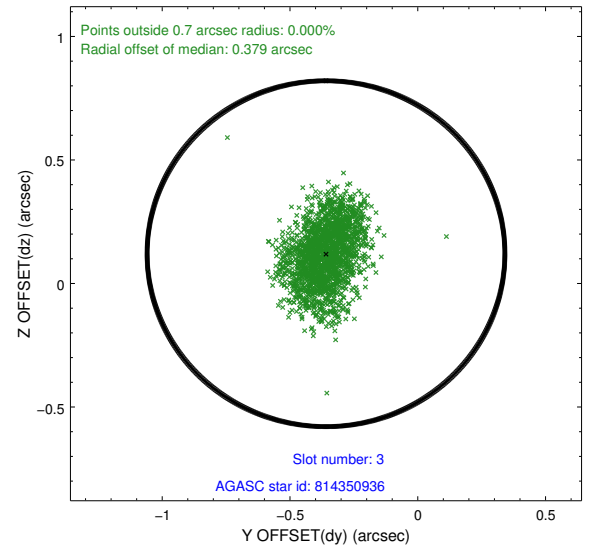
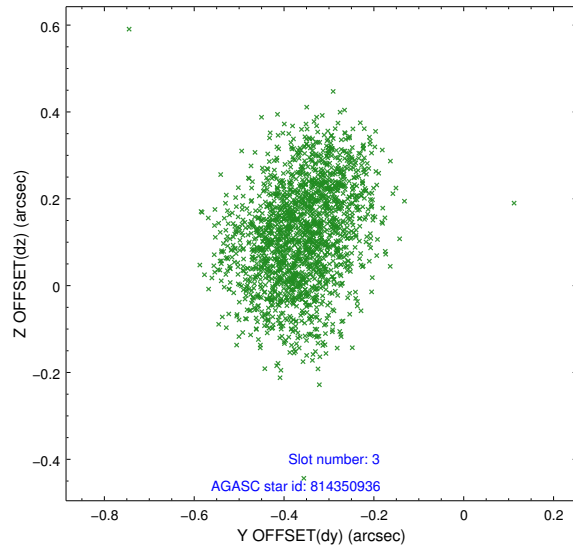


Slot Statistics

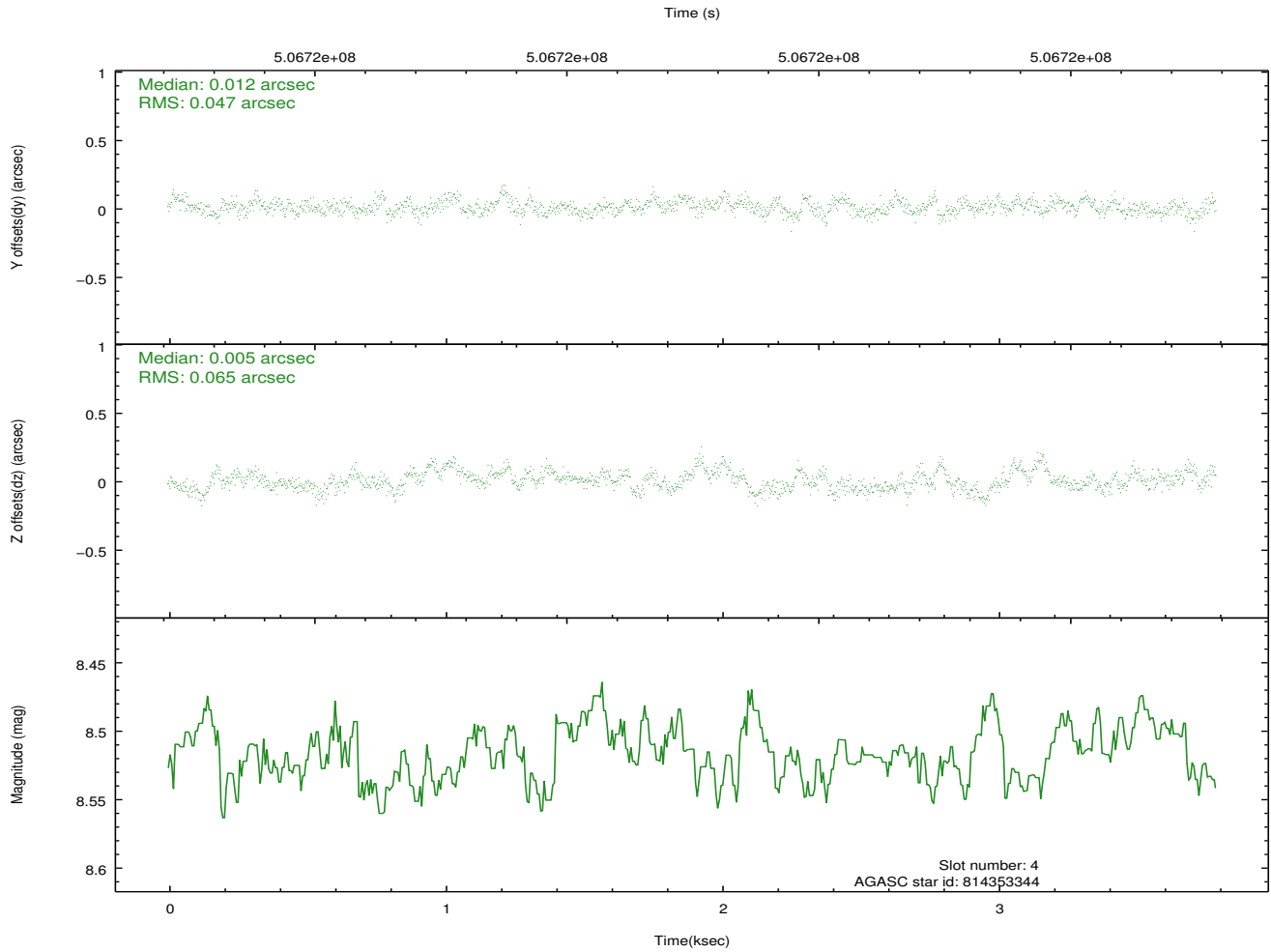
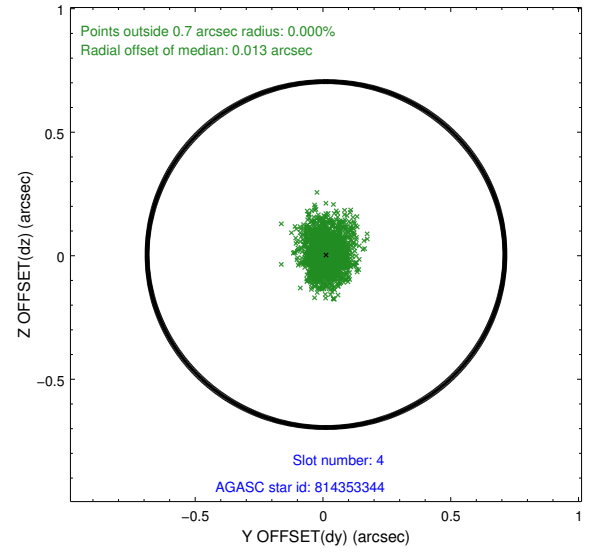
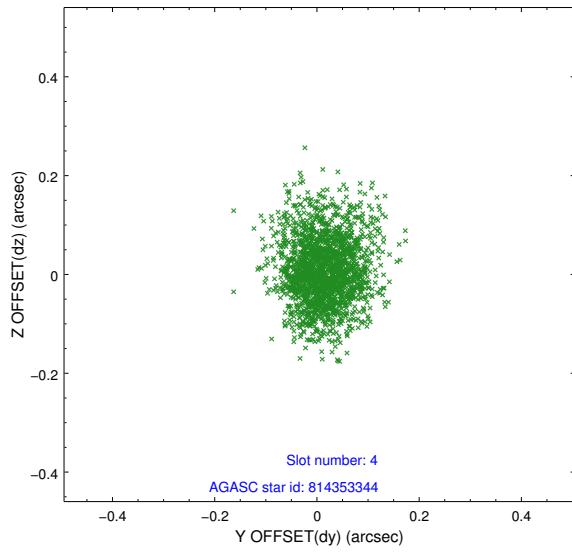
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.06	925	-0.201	-0.027	0.008	0.016	0.000000	0.000000	-778.56	-1742.40
1	FID		ACIS-S-4	7.16	925	0.380	0.104	0.006	0.011	0.000000	0.000000	2134.53	164.49
2	FID		ACIS-S-5	7.18	925	-0.211	-0.068	0.008	0.016	0.000000	0.000000	-1829.30	159.87
3	GUIDE	used	814350936	9.45	1846	-0.359	0.120	0.152	0.241	242.620326	-22.229946	439.13	-570.98
4	GUIDE	used	814353344	8.52	1850	0.012	0.005	0.083	0.142	242.705267	-22.194192	615.14	-827.65
5	GUIDE	used	814365896	7.42	1850	-0.036	0.005	0.091	0.156	242.582895	-22.157013	677.08	-404.09
6	GUIDE	used	888670448	8.62	1850	0.297	-0.168	0.110	0.167	242.177512	-22.849095	-2007.69	499.44
7	GUIDE	used	888671992	9.09	1848	0.077	0.038	0.101	0.160	242.360980	-22.609599	-1055.08	47.48

2.4 Star Slots

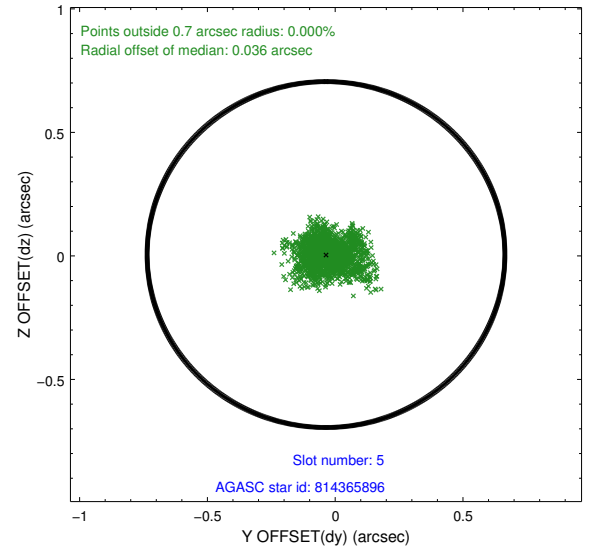
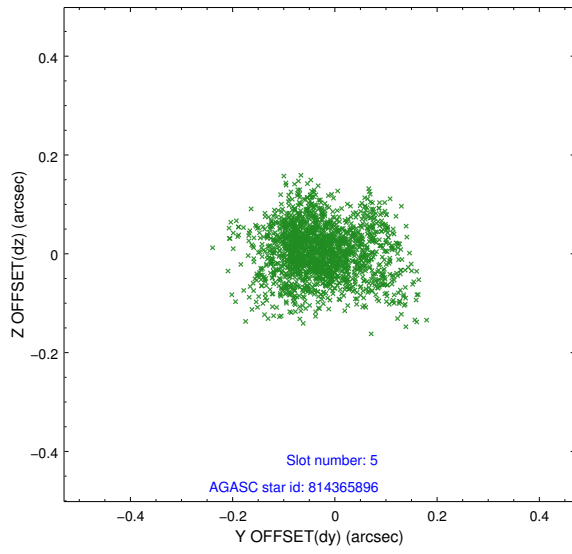
2.4.1 Slot 3



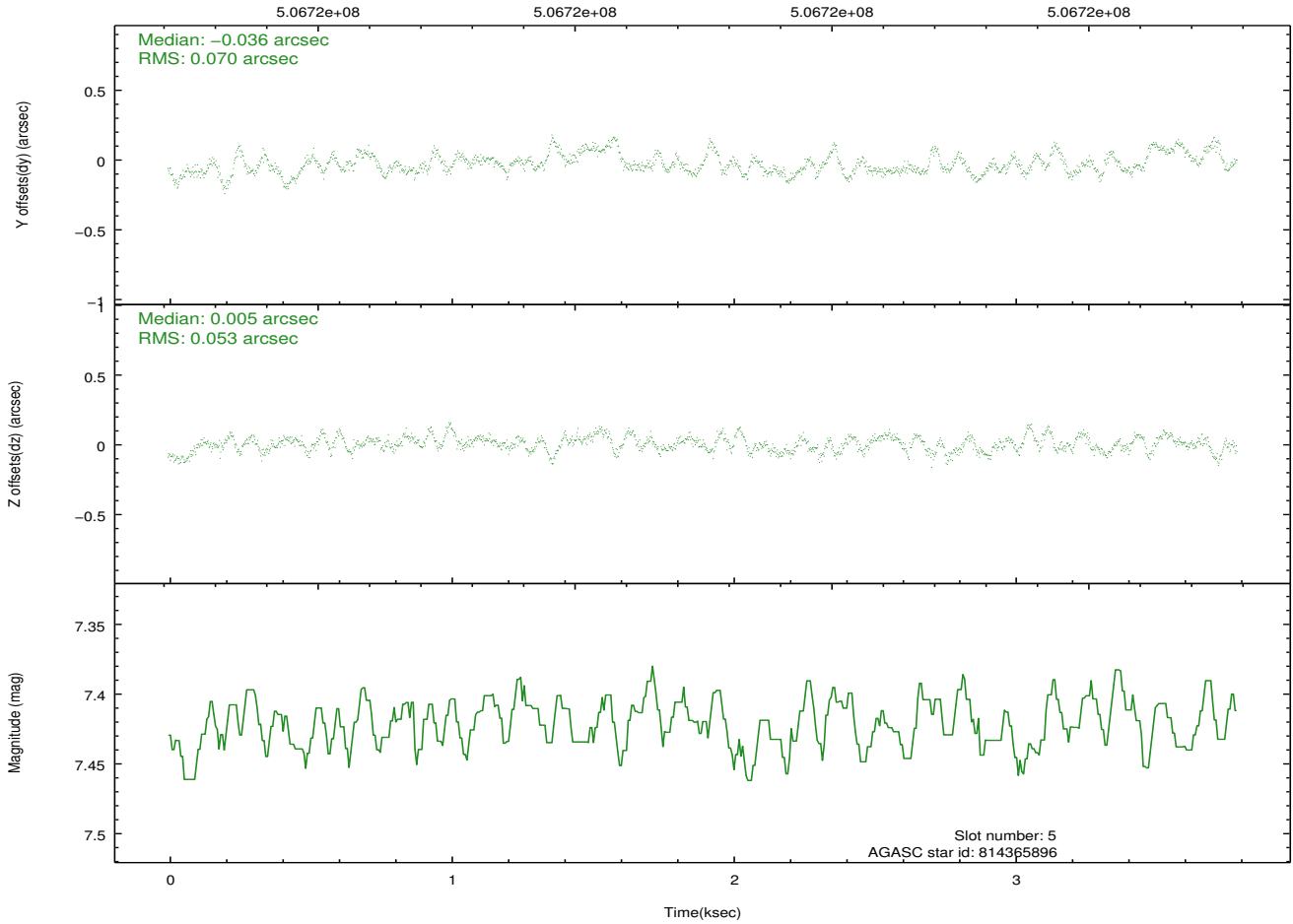
2.4.2 Slot 4



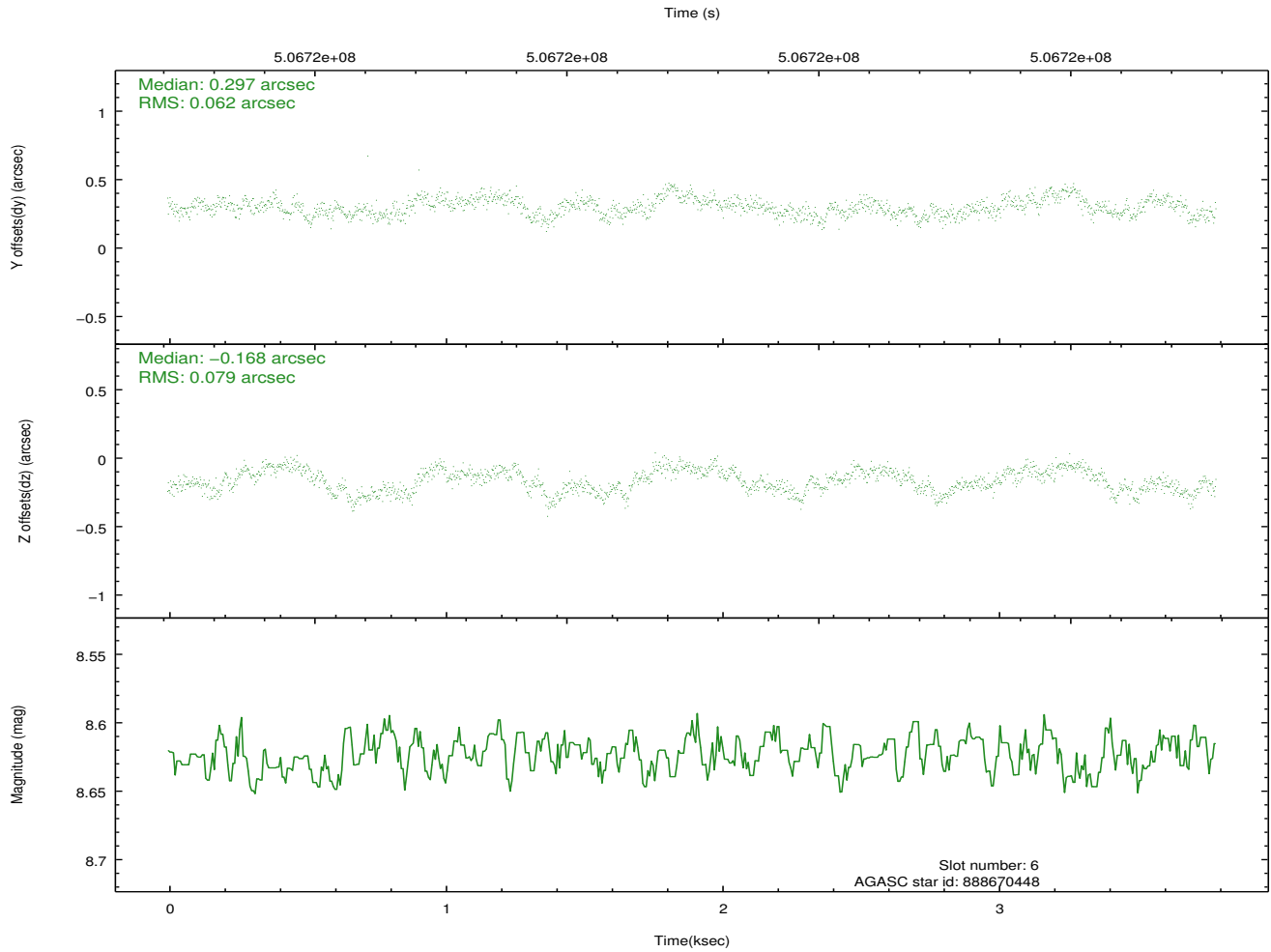
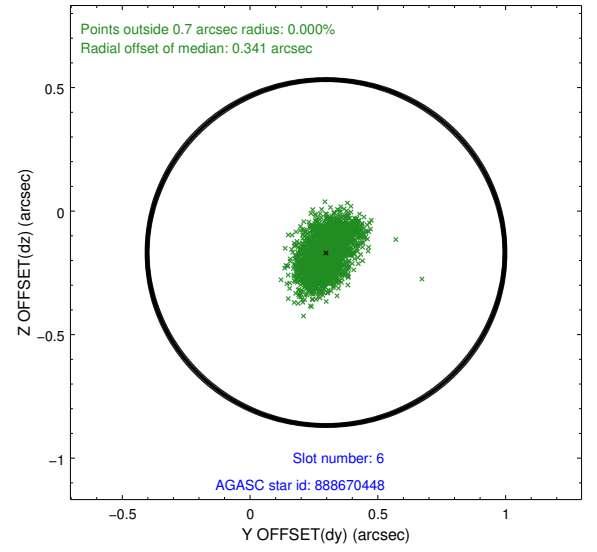
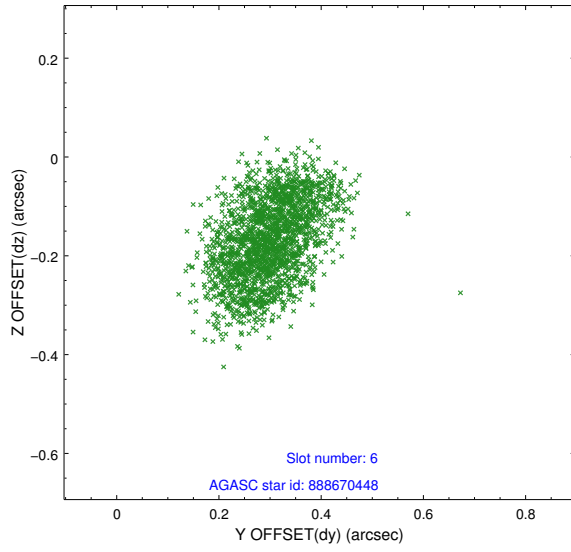
2.4.3 Slot 5



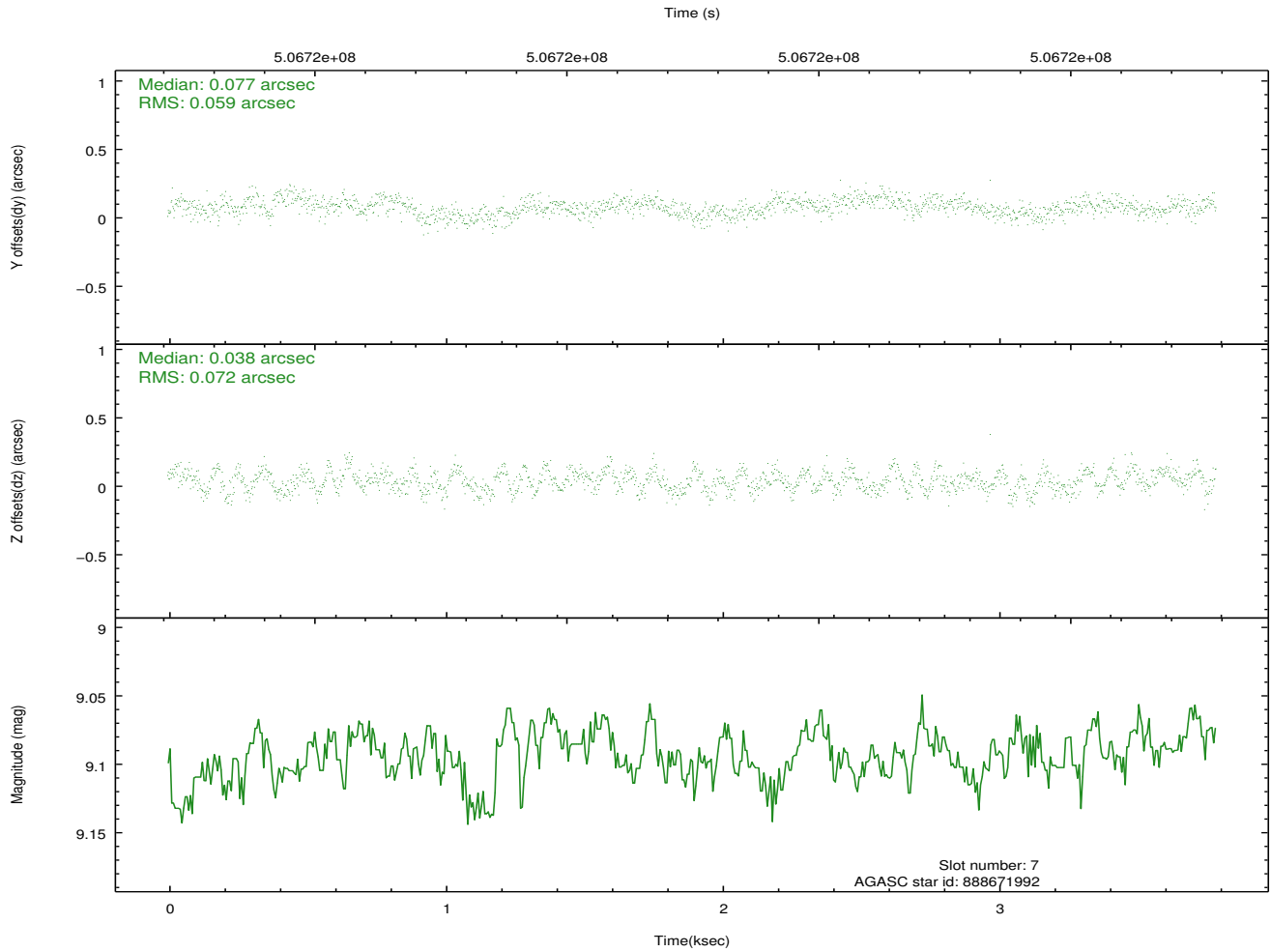
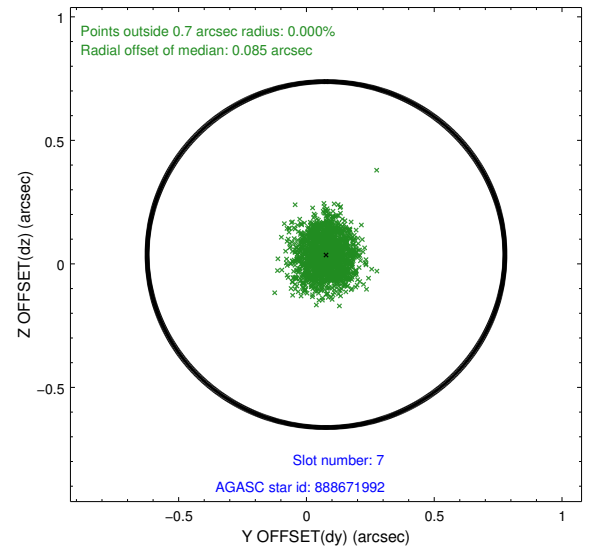
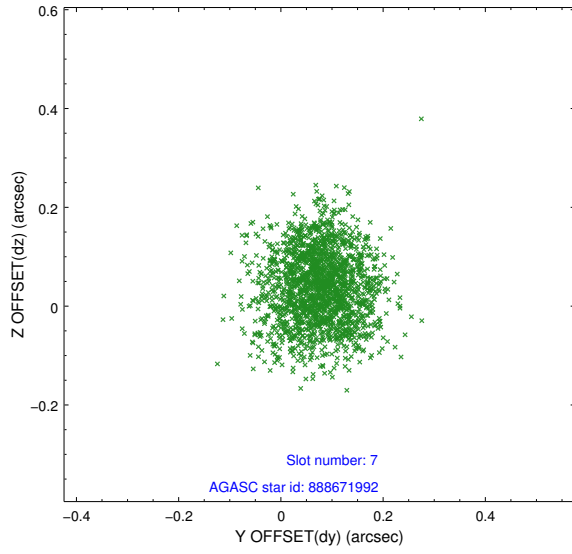
Time (s)



2.4.4 Slot 6

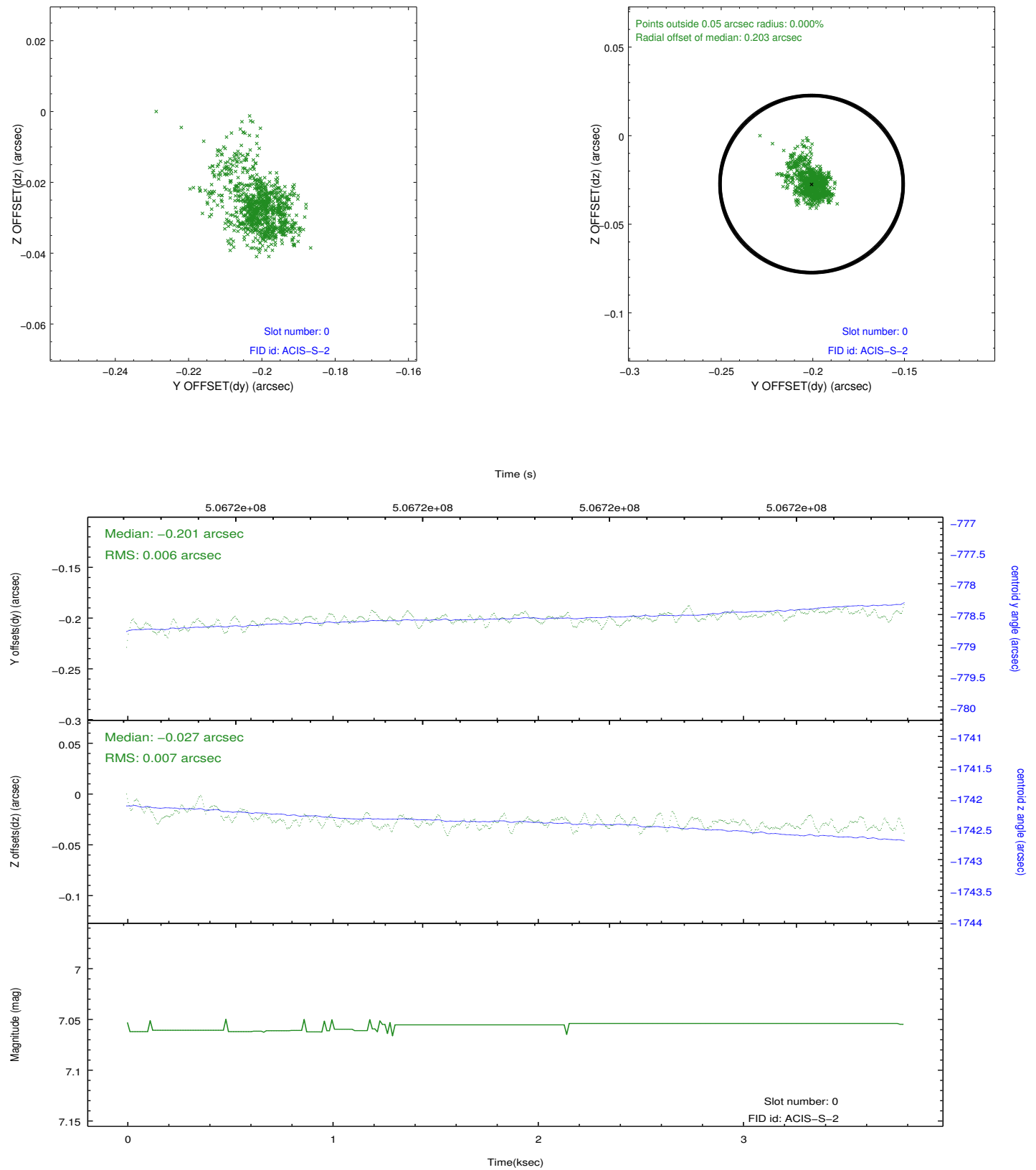


2.4.5 Slot 7

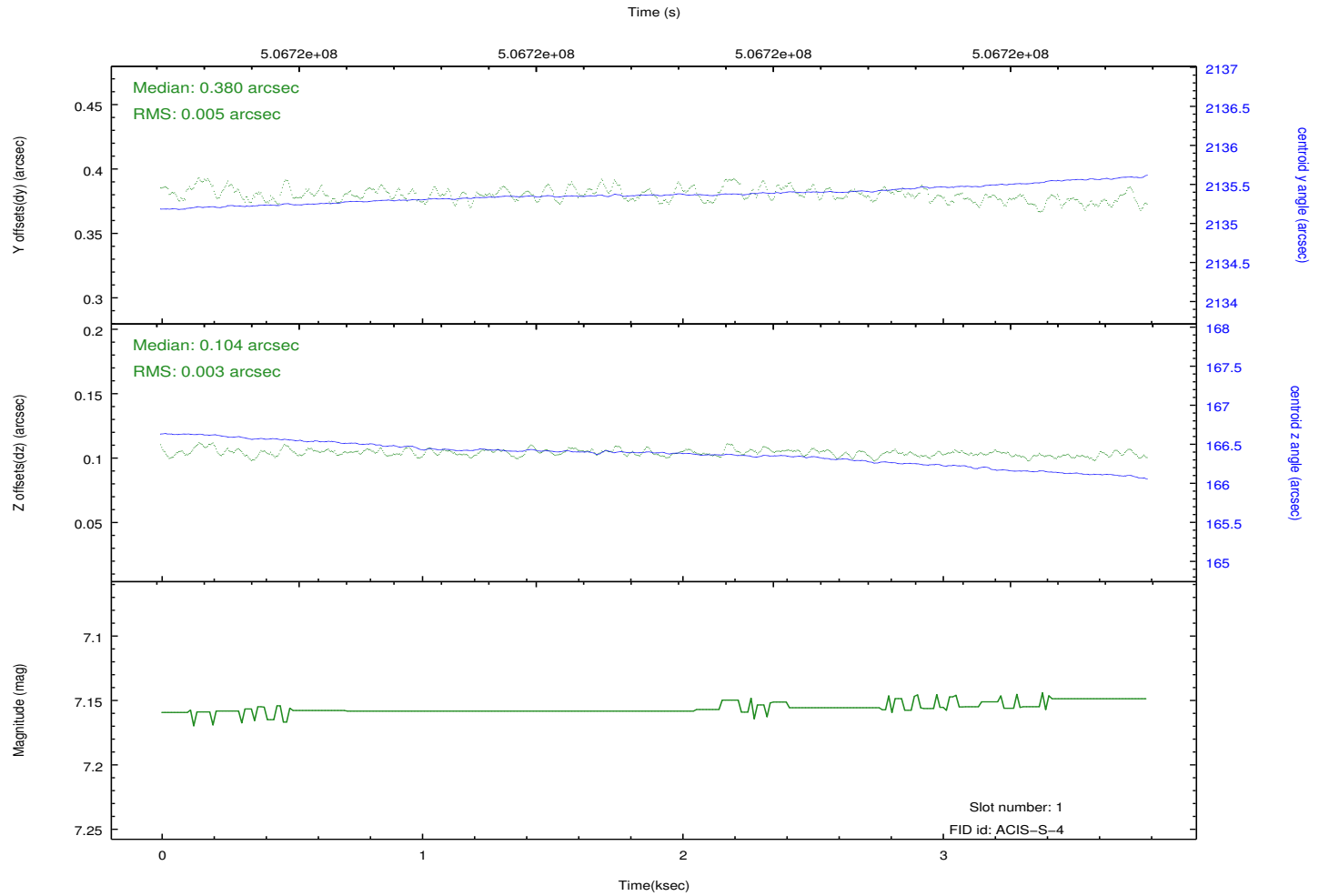
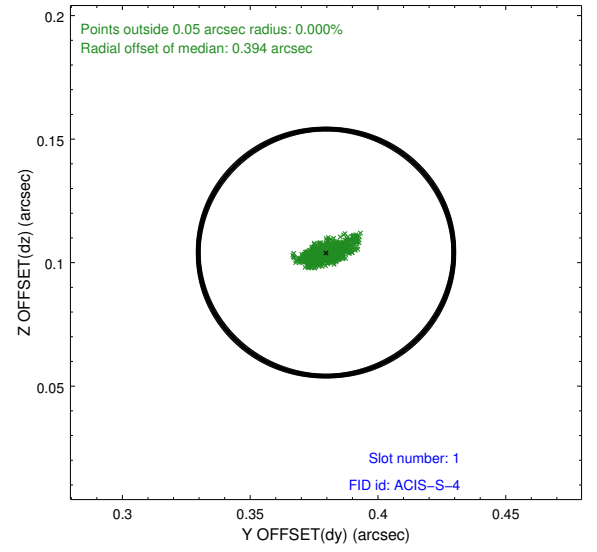
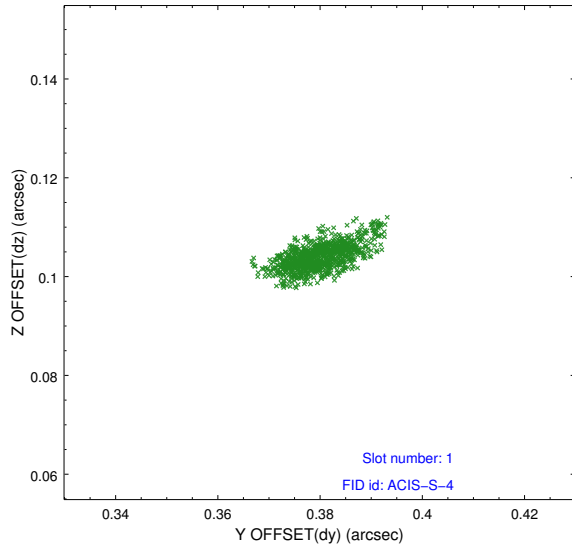


2.5 FID Slots

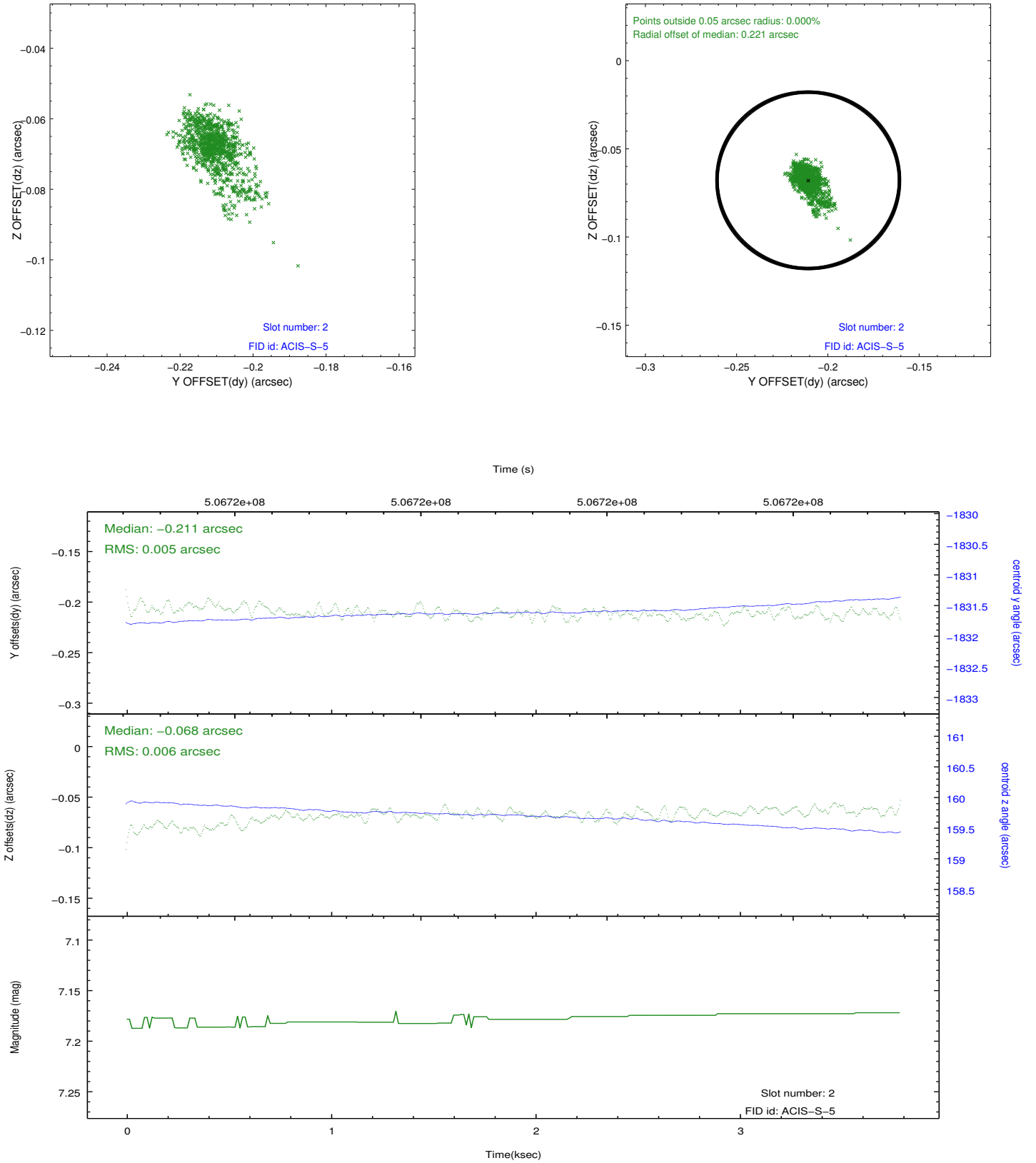
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.0713600175381

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.