

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14484 - L2 Version 2
Chandra X-Ray Center

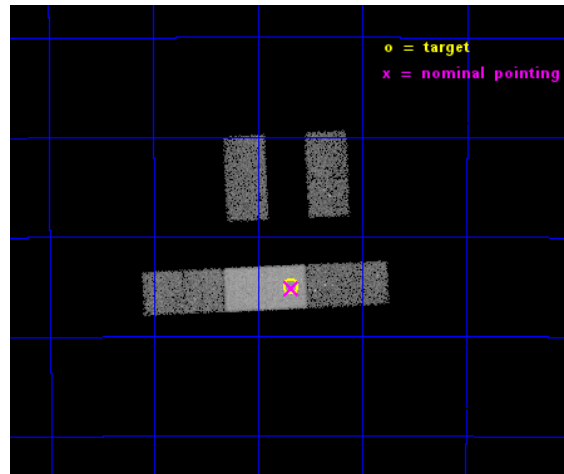
L2 Processing Date : Dec 2 2014

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1 Front

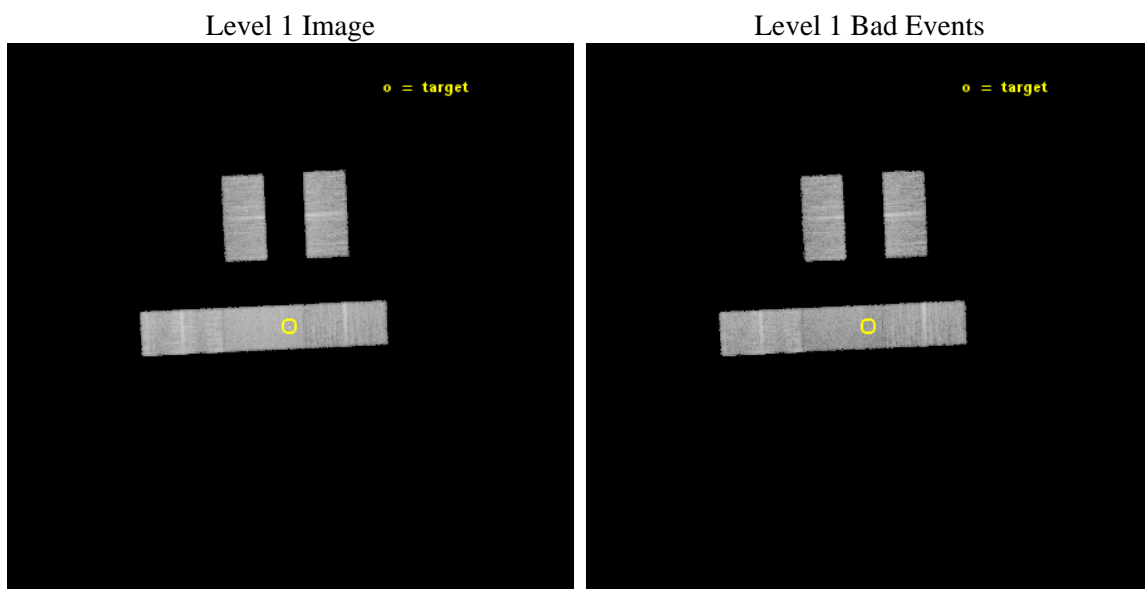
seq_num	702721	Sequence number
obs_id	14484	Observation id
title	ENERGY DEPENDENT X-RAY MICROLENSING AND THE STRUCTURE OF QUASARS	P
observer	Prof. Christopher Kochanek	Principal investigator
object	QJ0158-4325	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	29.6725	Observer's specified target RA [deg]
dec_targ	-43.417833	Observer's specified target Dec [deg]
ra_nom	29.670090492762	Nominal RA [deg]
dec_nom	-43.420306023154	Nominal Dec [deg]
roll_nom	177.40612406266	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19065.403045356	Sum of GTIs [s]
livetime	18615.991118588	Livetime [s]
ontime2	19065.238885343	Sum of GTIs [s]
ontime3	19063.579975128	Sum of GTIs [s]
ontime6	19061.87997514	Sum of GTIs [s]
ontime7	19065.403045356	Sum of GTIs [s]
ontime8	19063.538885355	Sum of GTIs [s]
l2events	53685	Number of level 2 events



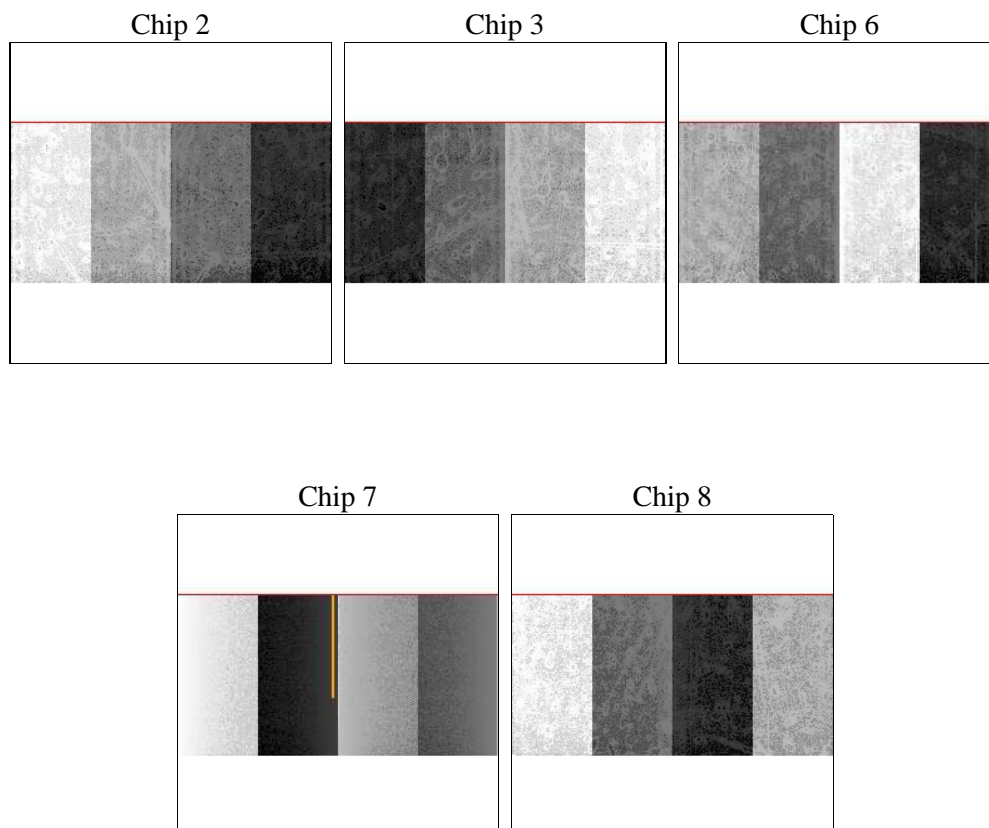
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.647000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	19065.403045356	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	19065.238885343	Sum of GTIs [s]
date	2014-12-02T22:18:47	Date and time of file creation	ontime3	19063.579975128	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	19061.87997514	Sum of GTIs [s]
			ontime7	19065.403045356	Sum of GTIs [s]
			ontime8	19063.538885355	Sum of GTIs [s]
			l1events	304154	Number of level 1 events

2.1.4 Events

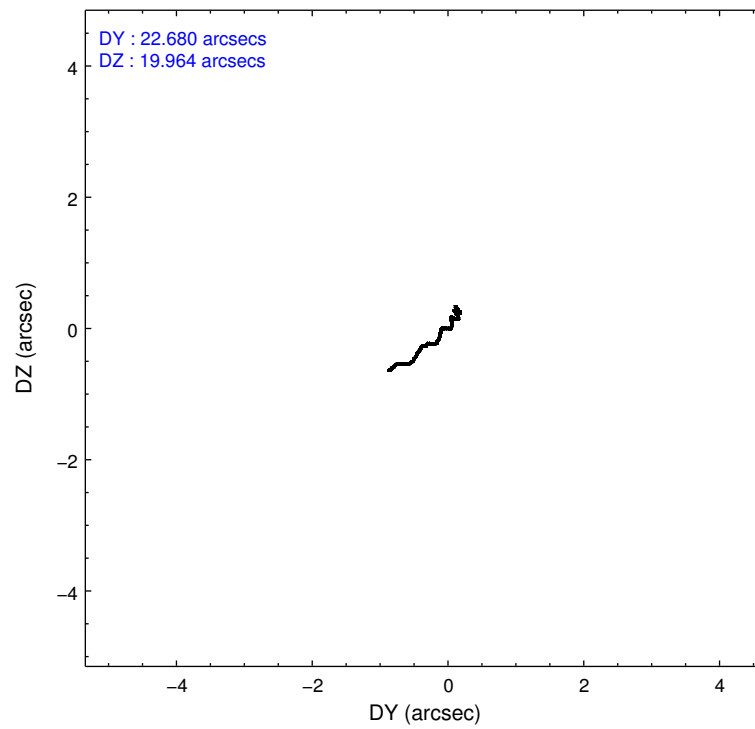
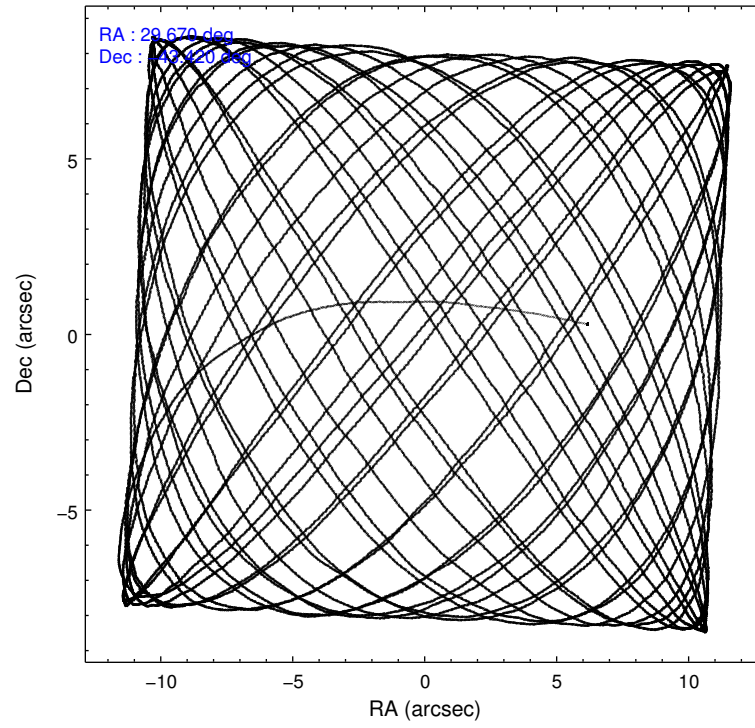
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	53077	50717	55236	70420	74704
rejected events	46872	44807	48551	38463	55143
rejected %	88%	88%	87%	54%	73%

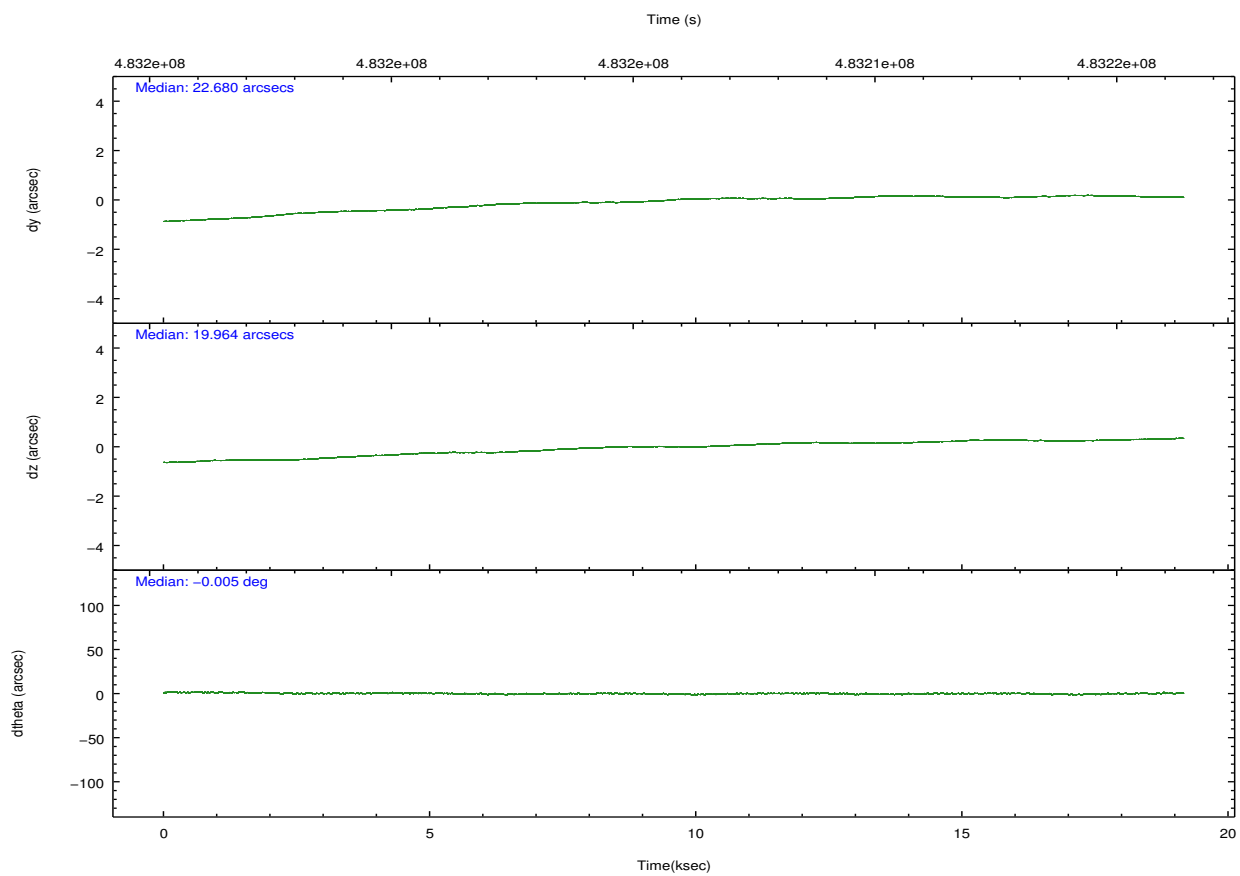
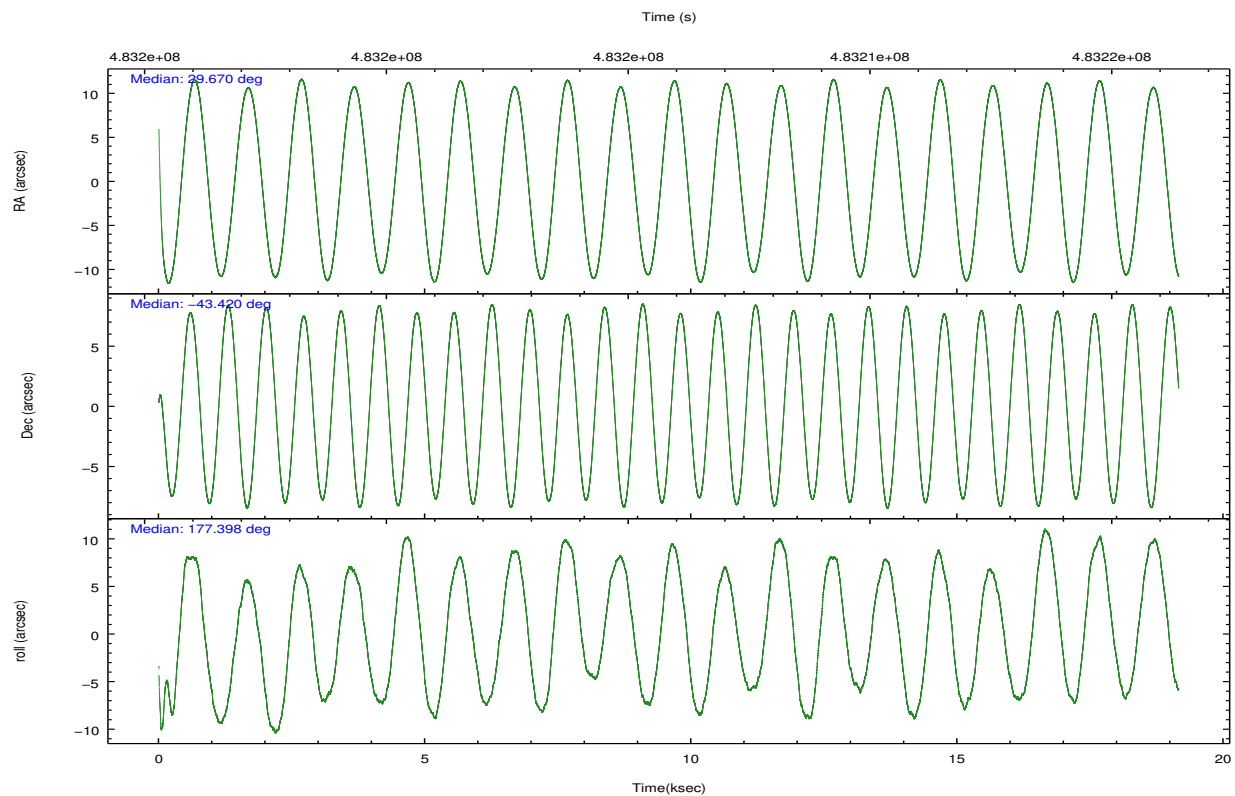
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2072	1839	2274	3206	5657
	3%	3%	4%	4%	7%
grade 1 events	21	28	22	101	36
	0%	0%	0%	0%	0%
grade 2 events	1495	1317	1369	6749	4574
	2%	2%	2%	9%	6%
grade 3 events	686	785	807	3052	1953
	1%	1%	1%	4%	2%
grade 4 events	736	744	812	3059	1911
	1%	1%	1%	4%	2%
grade 5 events	2132	2540	2615	7494	3779
	4%	5%	4%	10%	5%
grade 6 events	1216	1225	1424	15893	5466
	2%	2%	2%	22%	7%
grade 7 events	44719	42239	45913	30866	51328
	84%	83%	83%	43%	68%

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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	29.703286	29.67009049276209	CCD I2 on	O4	Y
[deg] Pointing Dec	-43.407390	-43.42030602315408	CCD I3 on	O3	Y
[deg] Pointing Roll	177.272320	177.4061240626592	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	483196422.184000	483195479.85894	CCD S5 on	N	N
Observation start date	2013-04-24T13:12:35	2013-04-24T12:57:59	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	483215423.184000	483215648.78503	On-chip summing requested	N	N
Observation end date	2013-04-24T18:29:16	2013-04-24T18:34:08	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	257	257
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

2.3 Aspect



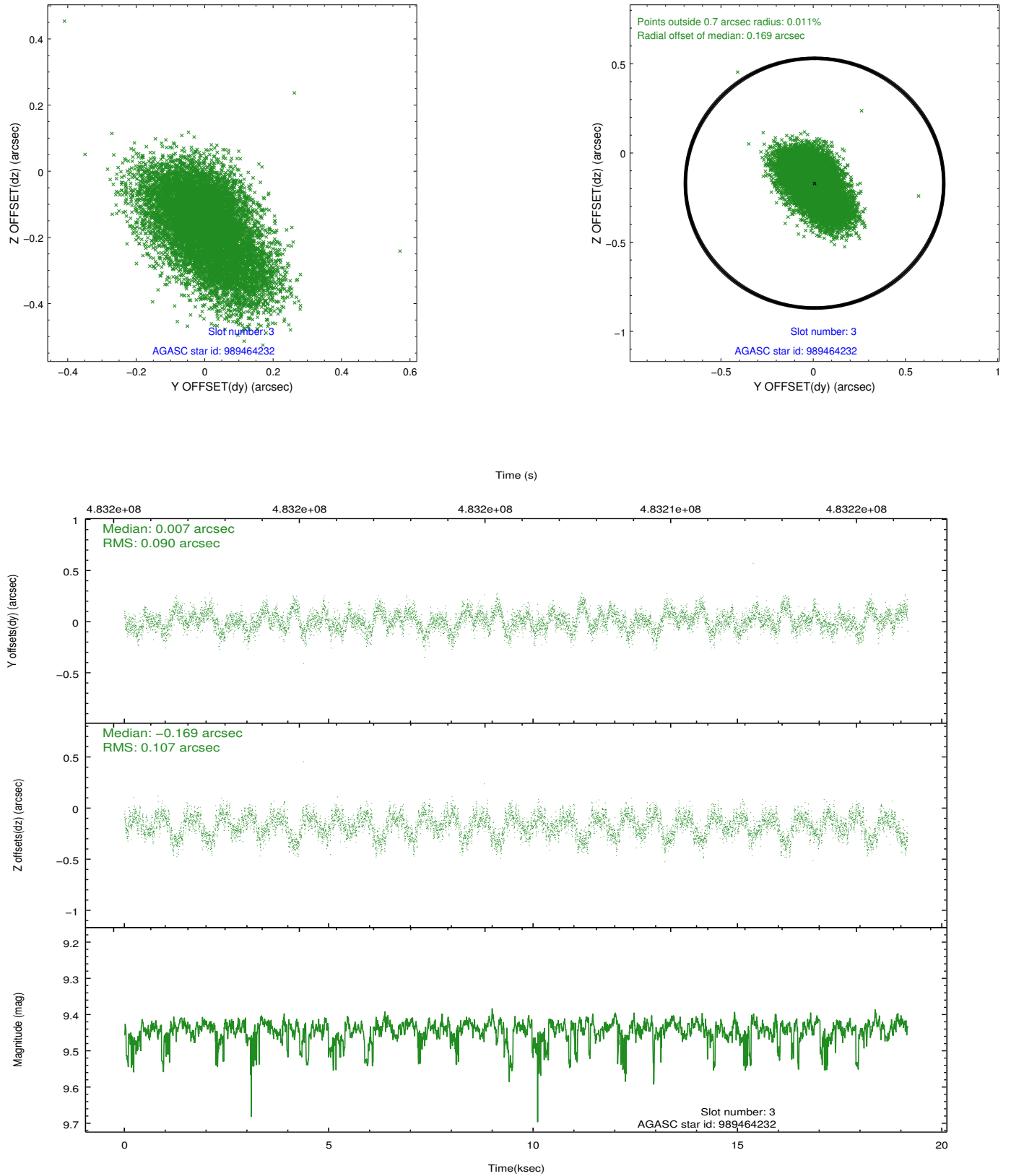


Slot Statistics

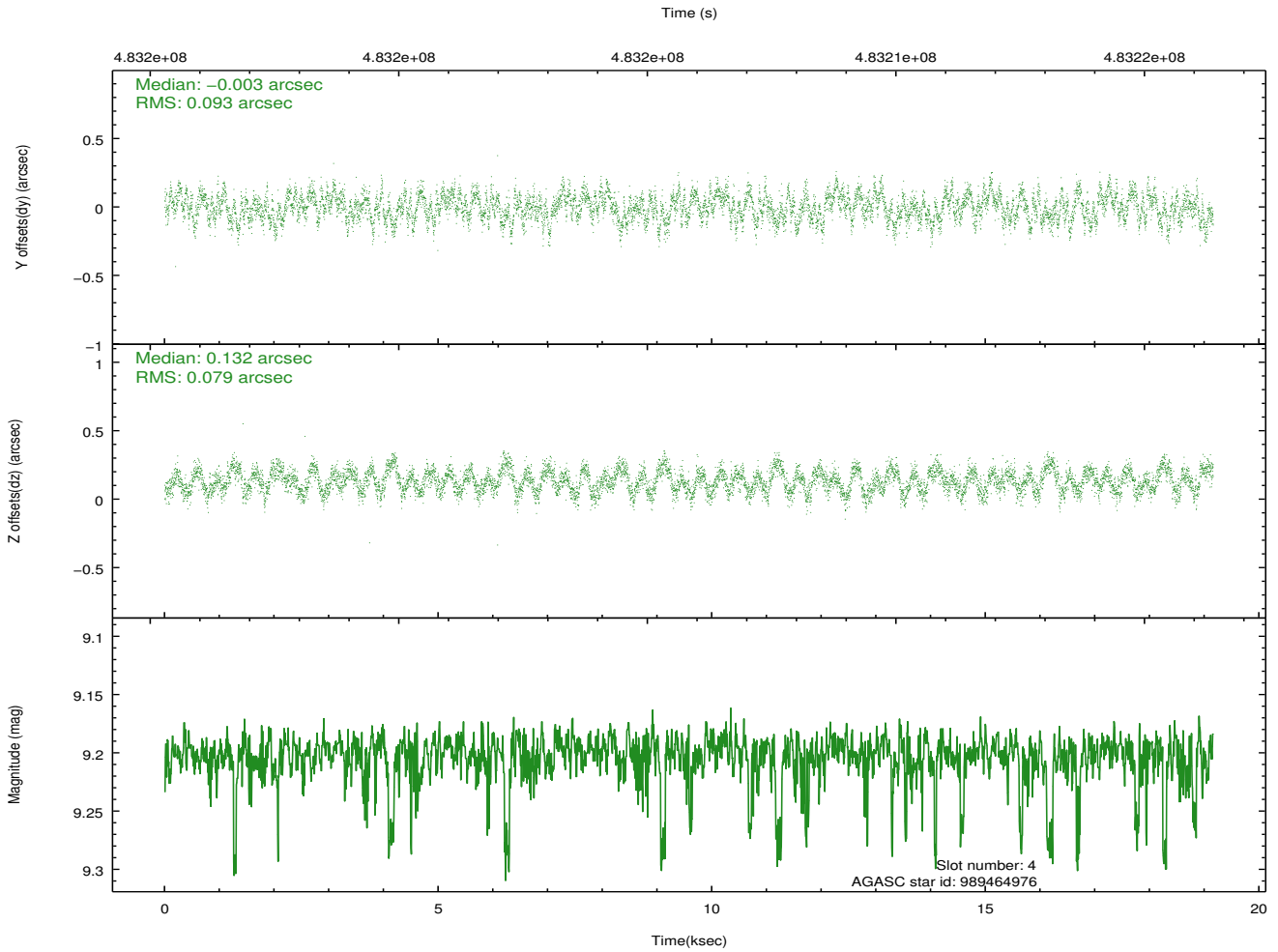
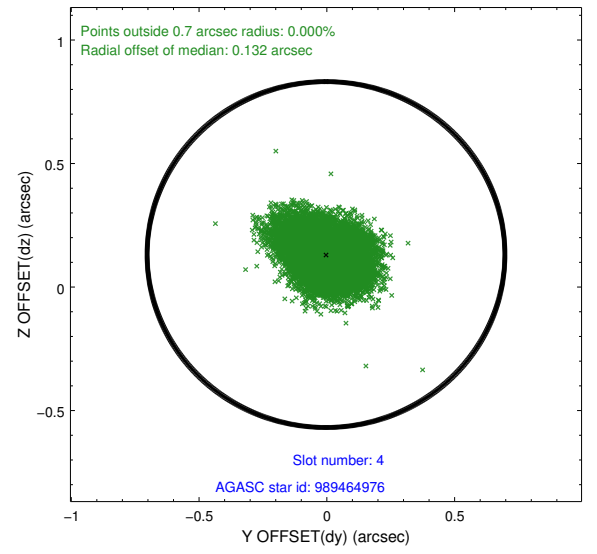
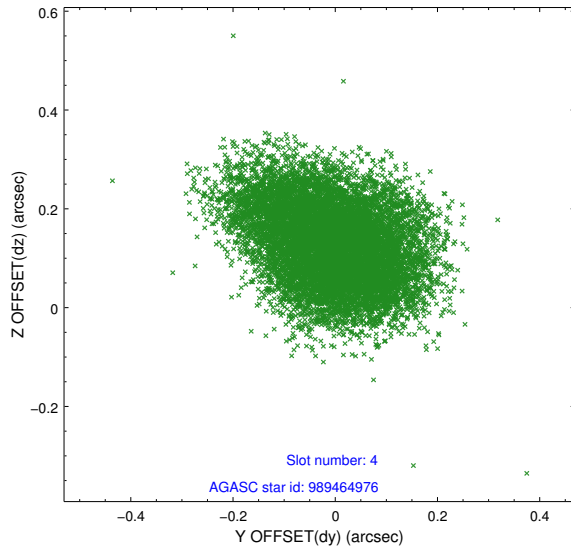
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	4673	-0.110	-0.008	0.008	0.013	0.000000	0.000000	-775.81	-1741.43
1	FID		ACIS-S-4	7.01	4673	0.257	0.055	0.015	0.037	0.000000	0.000000	2137.72	166.93
2	FID		ACIS-S-5	7.04	4672	-0.177	-0.039	0.015	0.033	0.000000	0.000000	-1828.48	160.70
3	GUIDE	used	989464232	9.44	9296	0.007	-0.169	0.149	0.244	29.286358	-43.452579	1081.78	217.59
4	GUIDE	used	989464976	9.20	9328	-0.003	0.132	0.131	0.205	28.960994	-43.047006	2012.70	-1193.90
5	GUIDE	used	989467528	8.20	9345	-0.107	0.145	0.093	0.146	29.209436	-43.178151	1334.09	-758.29
6	GUIDE	used	989470432	9.26	9312	-0.018	0.035	0.117	0.195	29.550844	-43.446971	391.60	161.85
7	GUIDE	used	989470600	9.41	9339	0.122	-0.133	0.127	0.199	29.755442	-43.921156	-223.78	1841.32

2.4 Star Slots

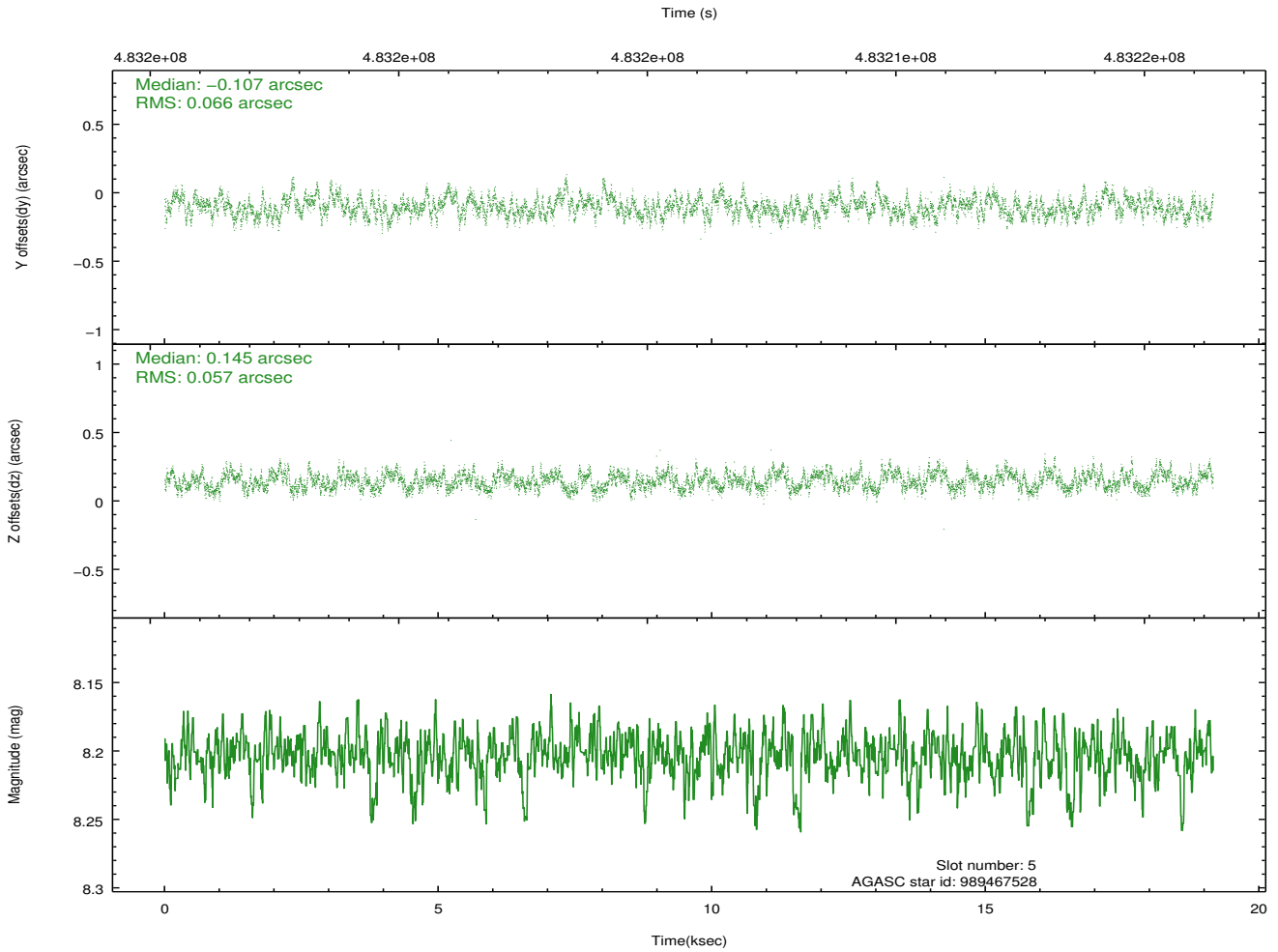
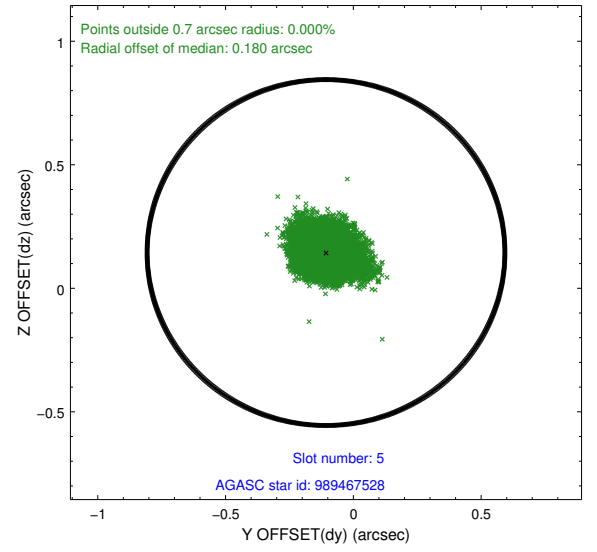
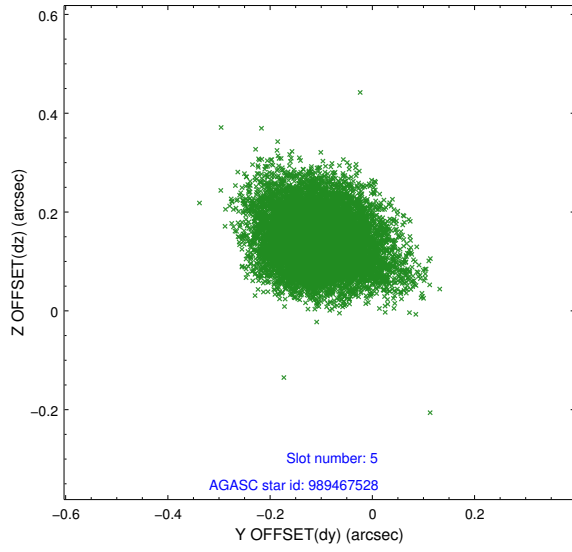
2.4.1 Slot 3



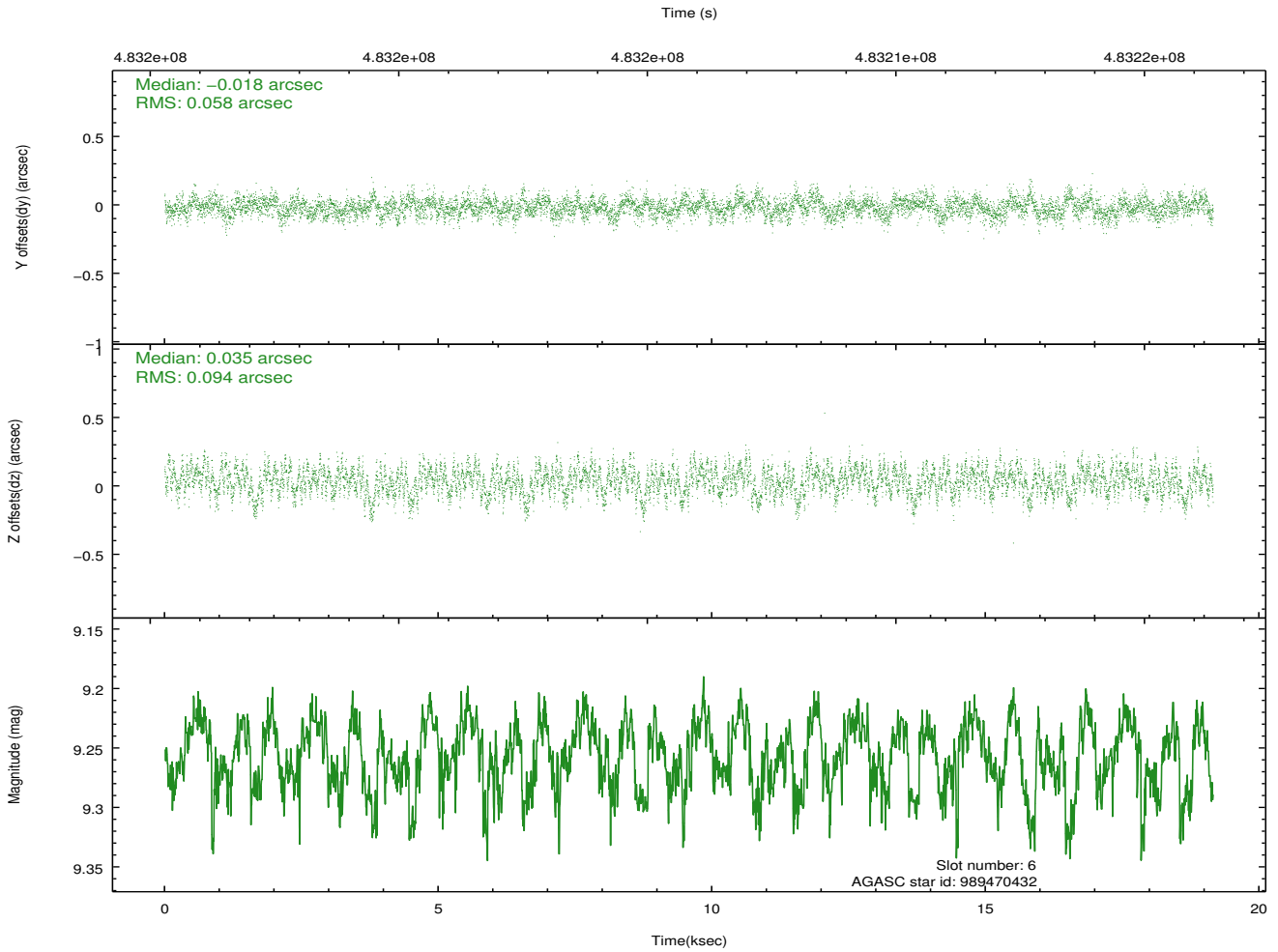
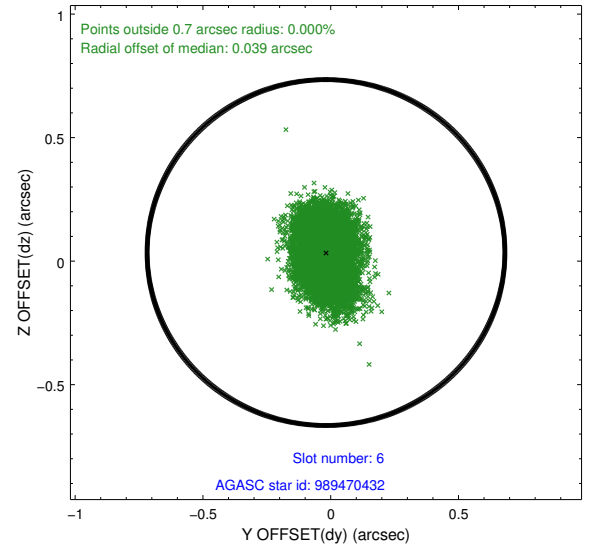
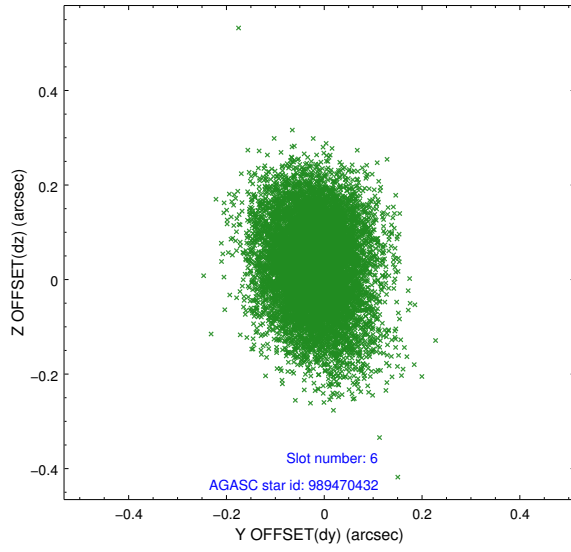
2.4.2 Slot 4



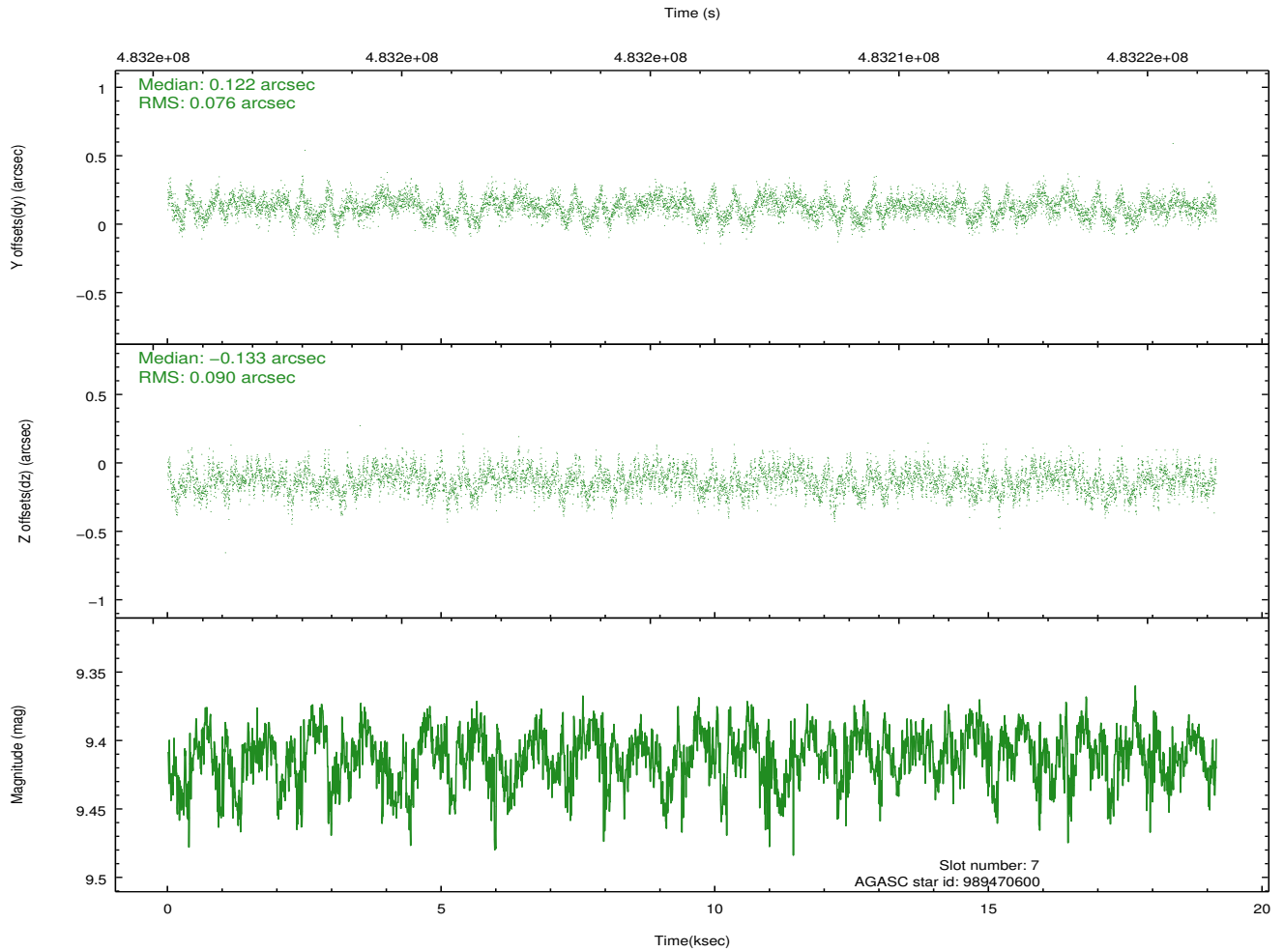
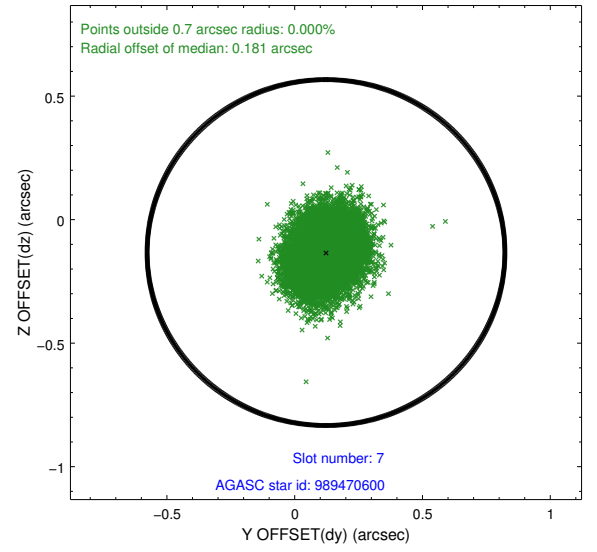
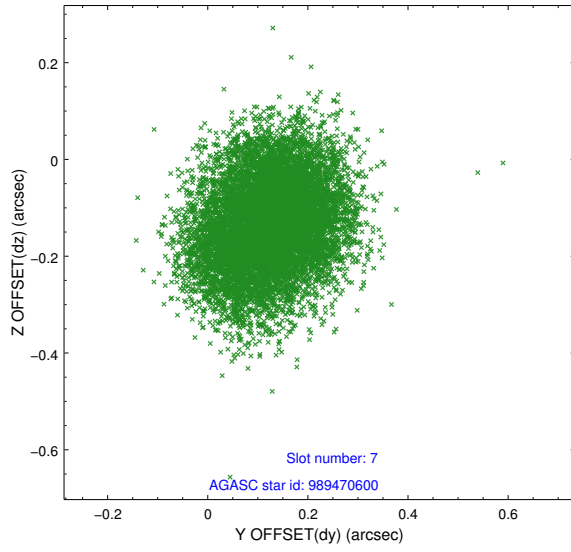
2.4.3 Slot 5



2.4.4 Slot 6

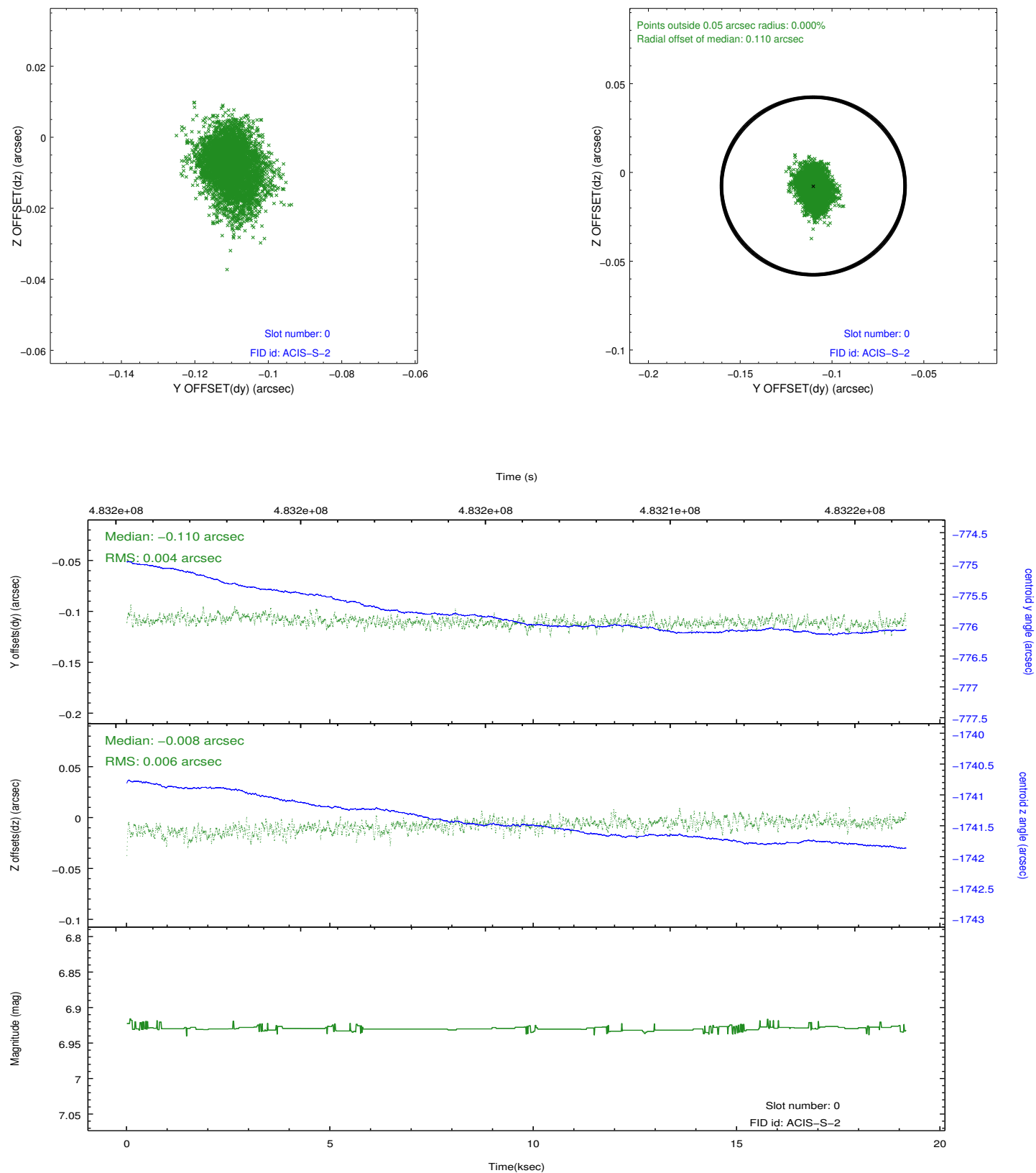


2.4.5 Slot 7

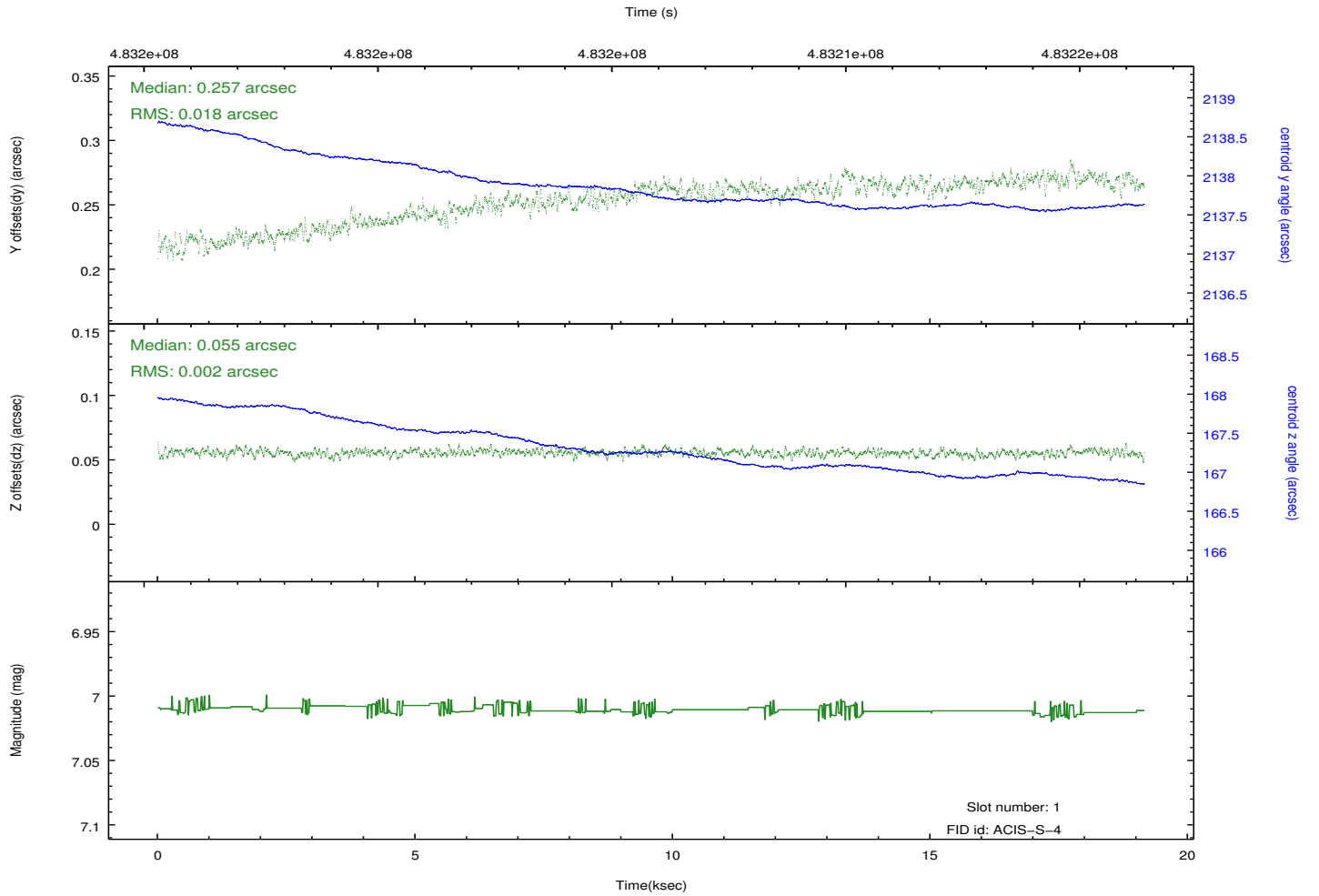
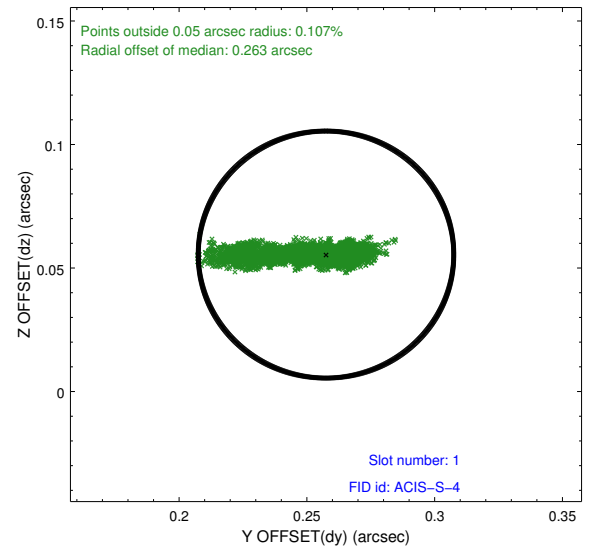
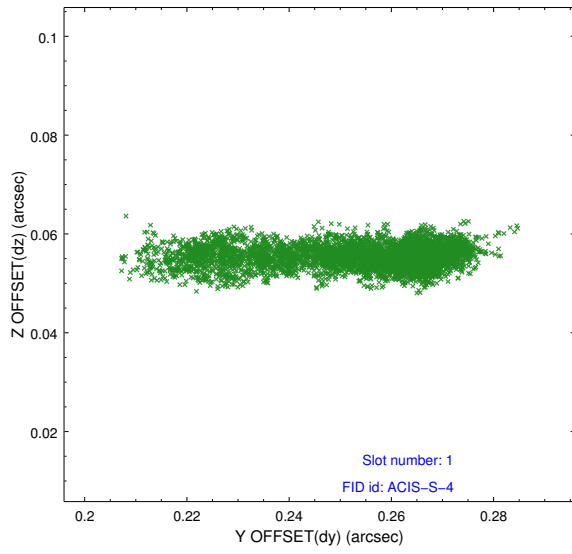


2.5 FID Slots

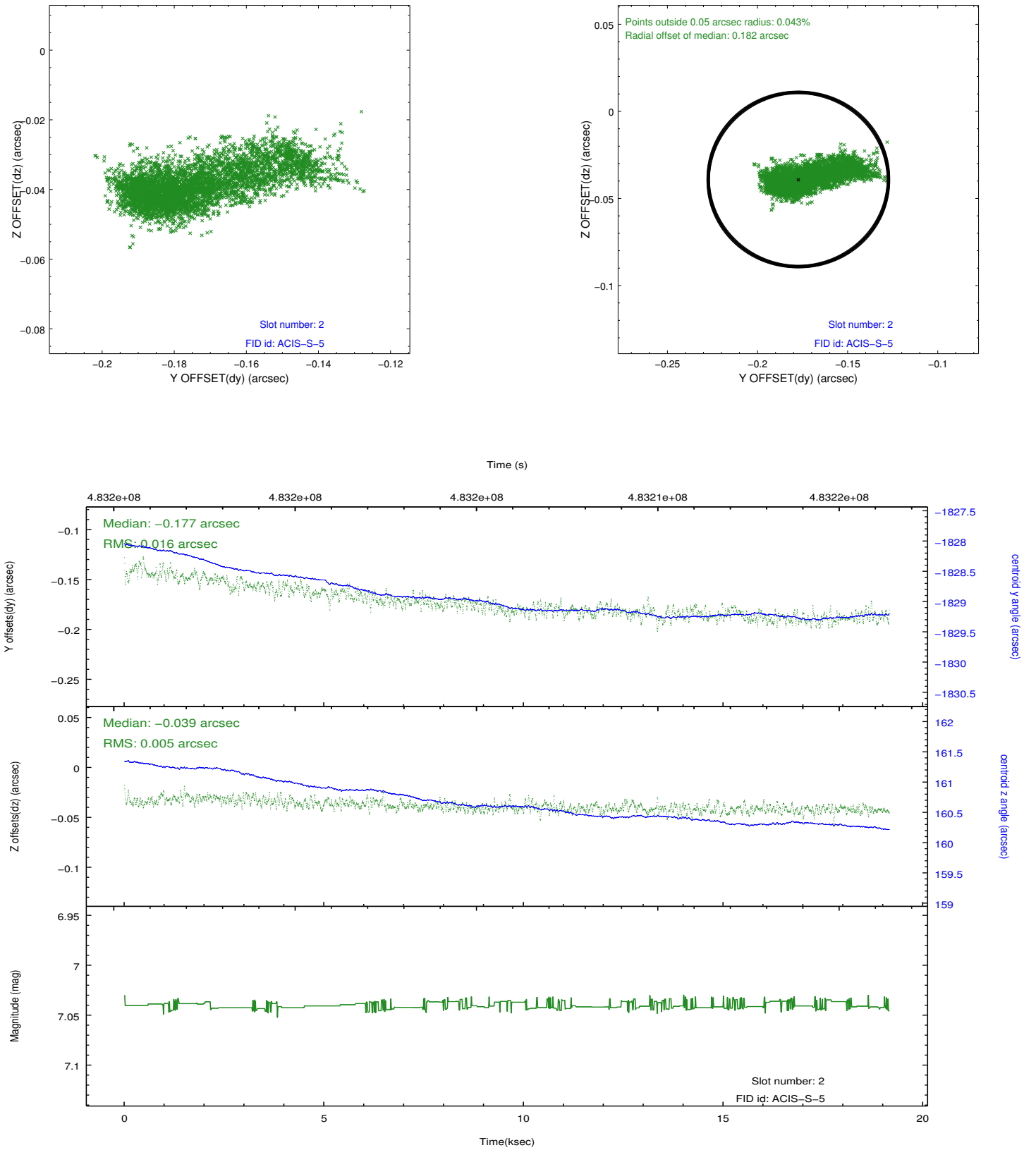
2.5.1 Slot 0



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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.065403045356

A.2 Comments

Joint proposal with HST.

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.