

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13605 - L2 Version 2
Chandra X-Ray Center

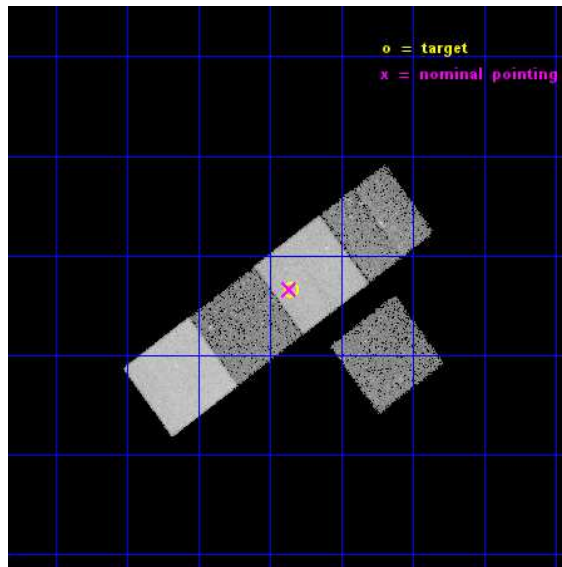
L2 Processing Date : Nov 28 2014

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1 Front

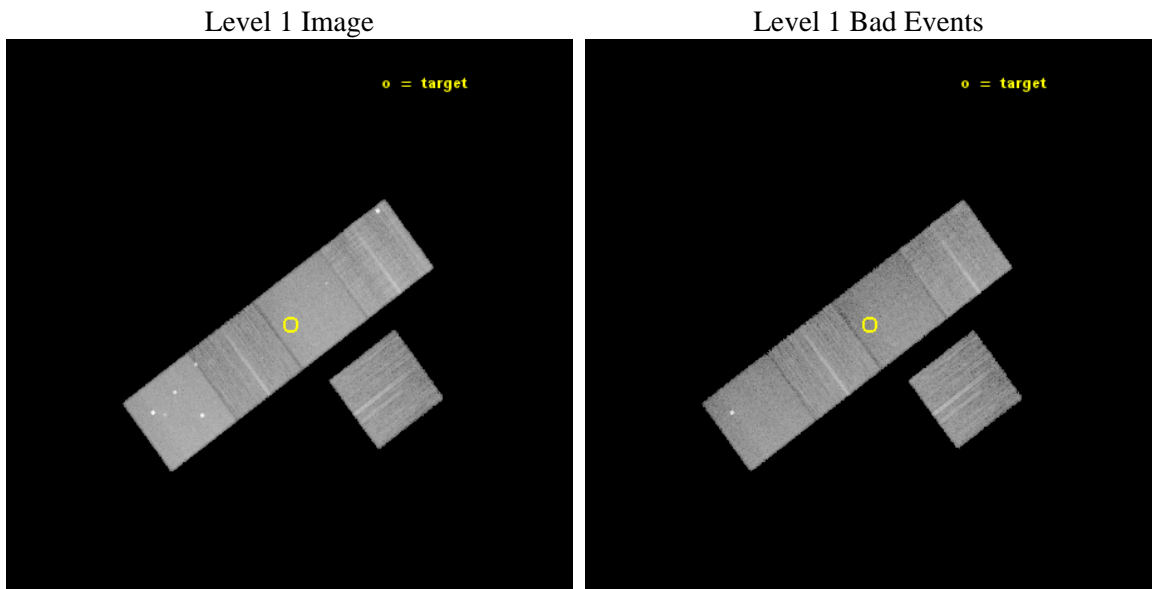
seq_num	200760	Sequence number
obs_id	13605	Observation id
title	Are Convective Dynamos Super-Saturated at High Rotation Velocities?	
observer	Prof. Edo Berger	Principal investigator
object	LP647-13	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	17.463333	Observer's specified target RA [deg]
dec_targ	-3.724	Observer's specified target Dec [deg]
ra_nom	17.46617797142	Nominal RA [deg]
dec_nom	-3.722940871172	Nominal Dec [deg]
roll_nom	323.15681682669	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20060.100154281	Sum of GTIs [s]
livetime	19798.000177734	Livetime [s]
ontime3	20060.100154281	Sum of GTIs [s]
ontime5	20060.100154281	Sum of GTIs [s]
ontime6	20060.100154281	Sum of GTIs [s]
ontime7	20060.100154281	Sum of GTIs [s]
ontime8	20060.100154281	Sum of GTIs [s]
l2events	177935	Number of level 2 events



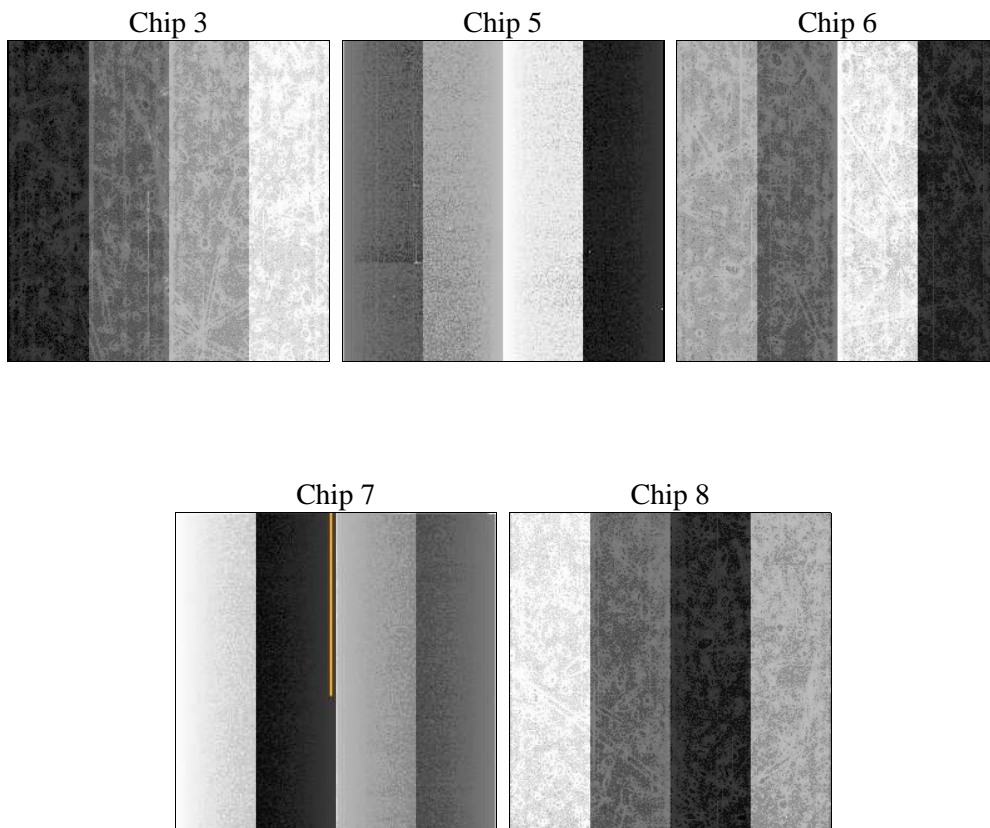
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.588000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	20060.100154281	Sum of GTIs [s]
caldsver	4.6.4	 	ontime3	20060.100154281	Sum of GTIs [s]
date	2014-11-28T23:53:15	Date and time of file creation	ontime5	20060.100154281	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	20060.100154281	Sum of GTIs [s]
			ontime7	20060.100154281	Sum of GTIs [s]
			ontime8	20060.100154281	Sum of GTIs [s]
			l1events	688356	Number of level 1 events

2.1.4 Events

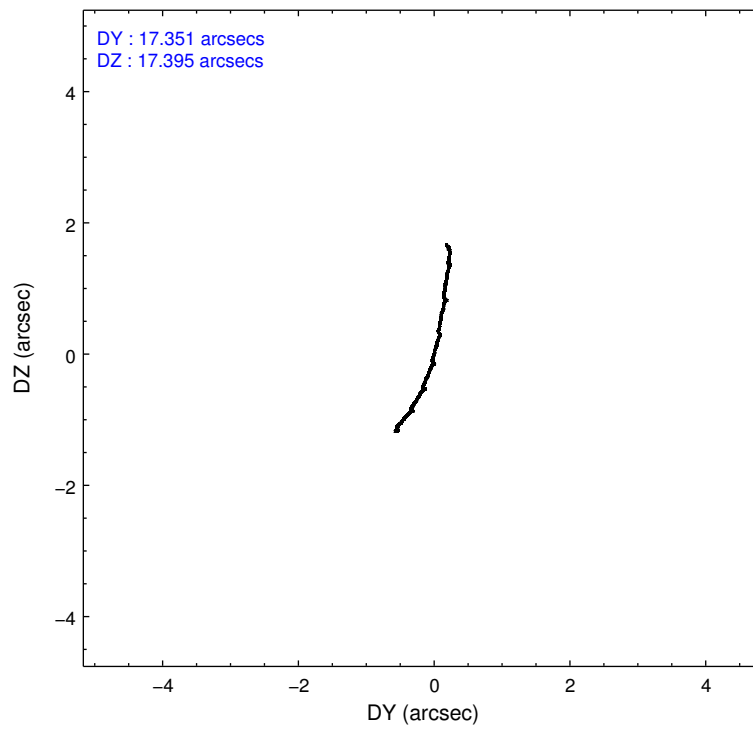
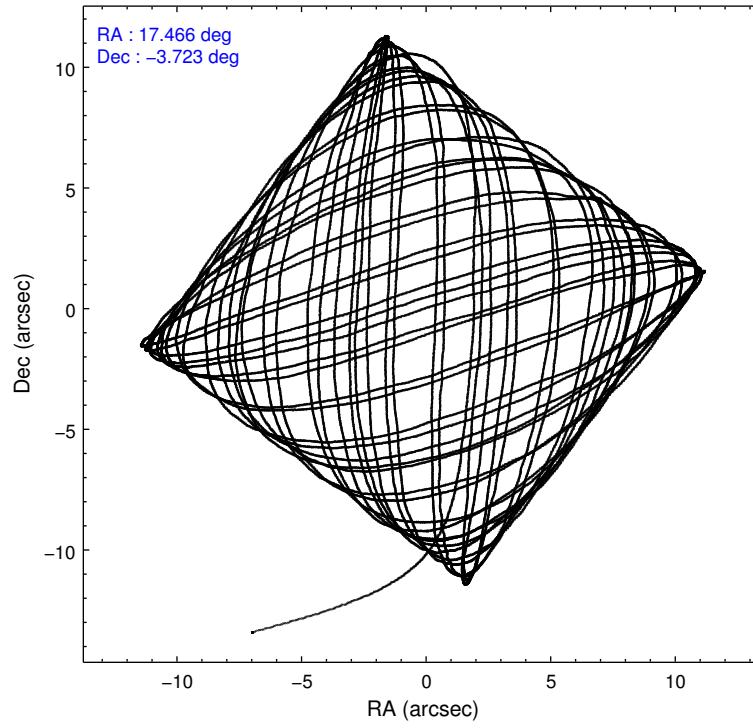
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	100962	184837	109273	143793	149491
rejected events	89125	92635	96115	80567	106339
rejected %	88%	50%	87%	56%	71%

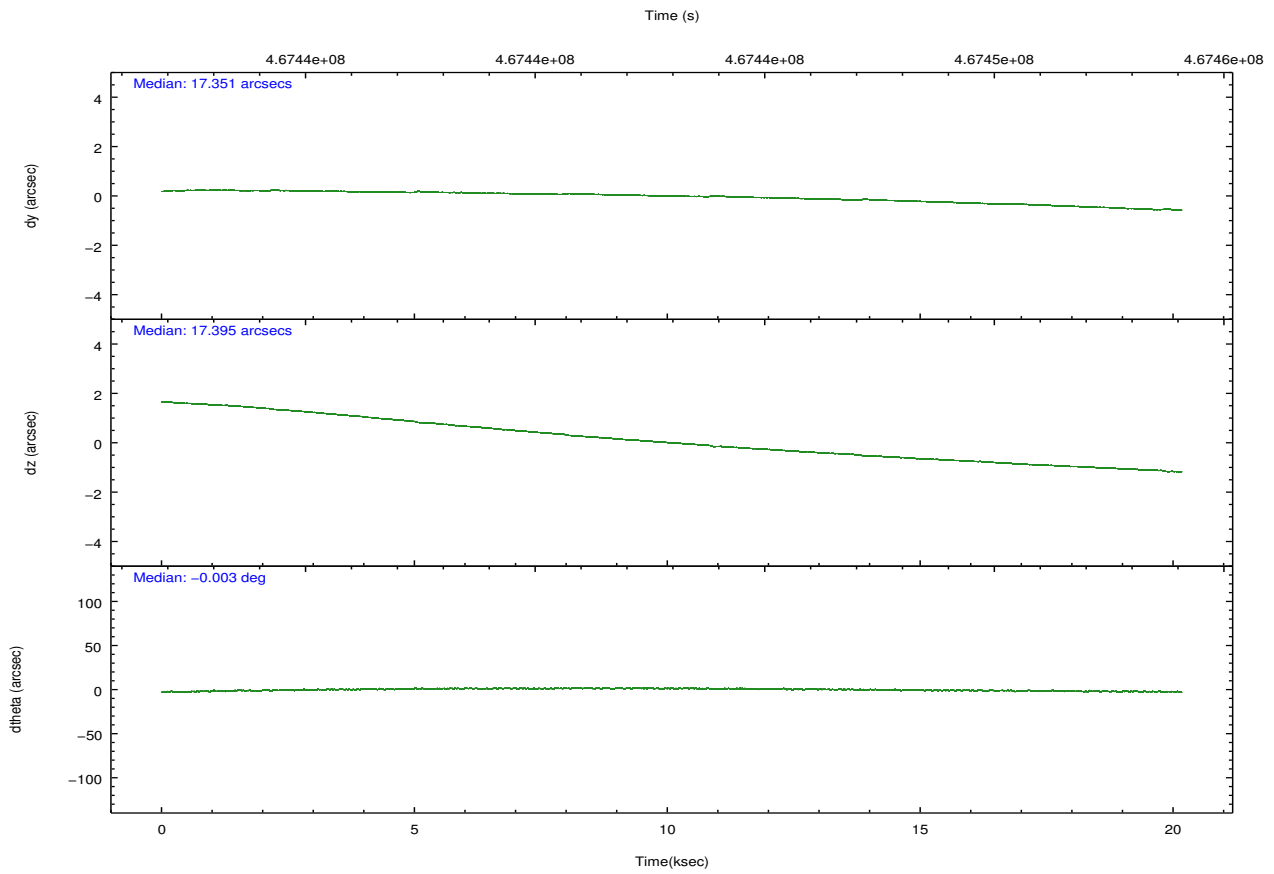
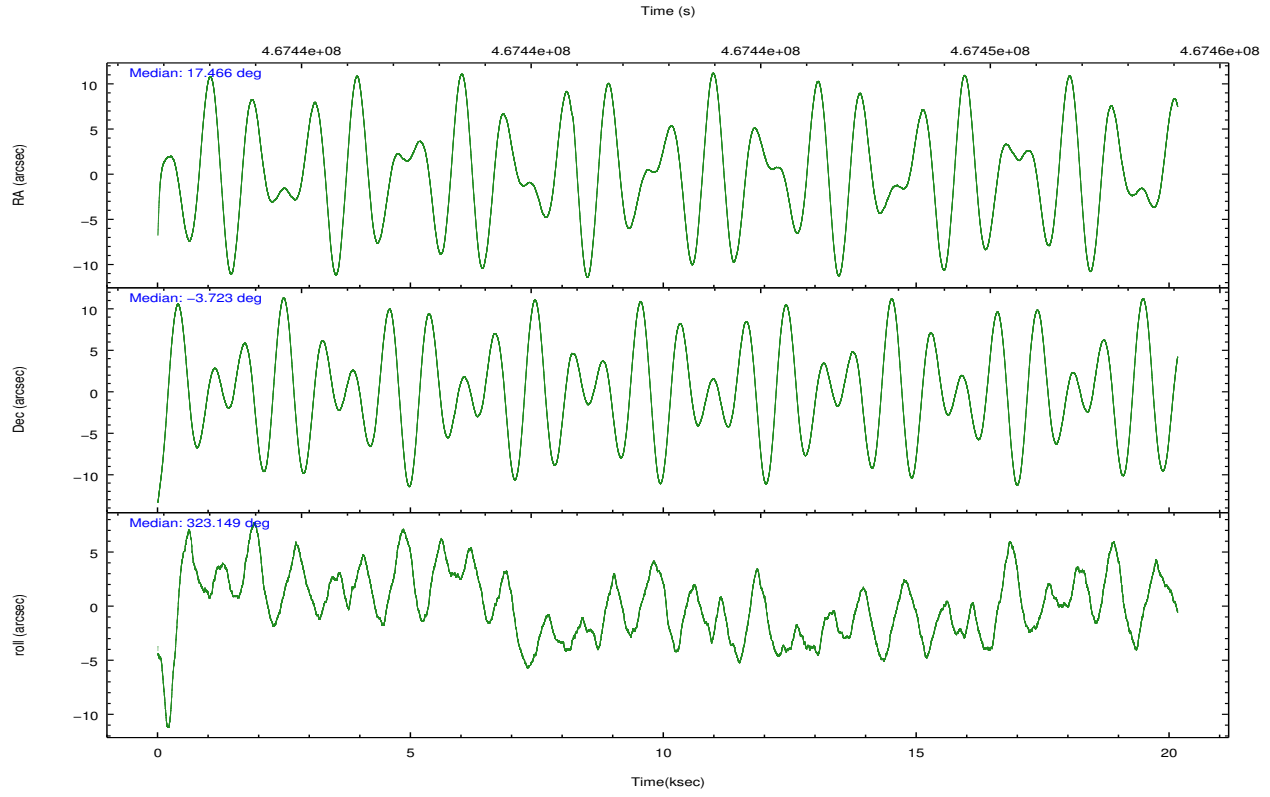
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	4141	13204	4489	5705	15673
	4%	7%	4%	3%	10%
grade 1 events	40	362	57	157	114
	0%	0%	0%	0%	0%
grade 2 events	2697	26984	3022	12923	9236
	2%	14%	2%	8%	6%
grade 3 events	1203	3246	1365	5540	4010
	1%	1%	1%	3%	2%
grade 4 events	1222	2965	1344	5516	3799
	1%	1%	1%	3%	2%
grade 5 events	5390	14251	5566	15037	8085
	5%	7%	5%	10%	5%
grade 6 events	2577	45856	2945	33579	10468
	2%	24%	2%	23%	7%
grade 7 events	83692	77969	90485	65336	98106
	82%	42%	82%	45%	65%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	17.438921	17.46617797142	CCD I2 on	N	N
[deg] Pointing Dec	-3.720046	-3.722940871171987	CCD I3 on	O1	Y
[deg] Pointing Roll	322.998416	323.1568168266899	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	467433066.184000	467431769.28348	CCD S5 on	N	N
Observation start date	2012-10-24T02:29:59	2012-10-24T02:09:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	467453066.184000	467453294.28464	On-chip summing requested	N	N
Observation end date	2012-10-24T08:03:19	2012-10-24T08:08:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





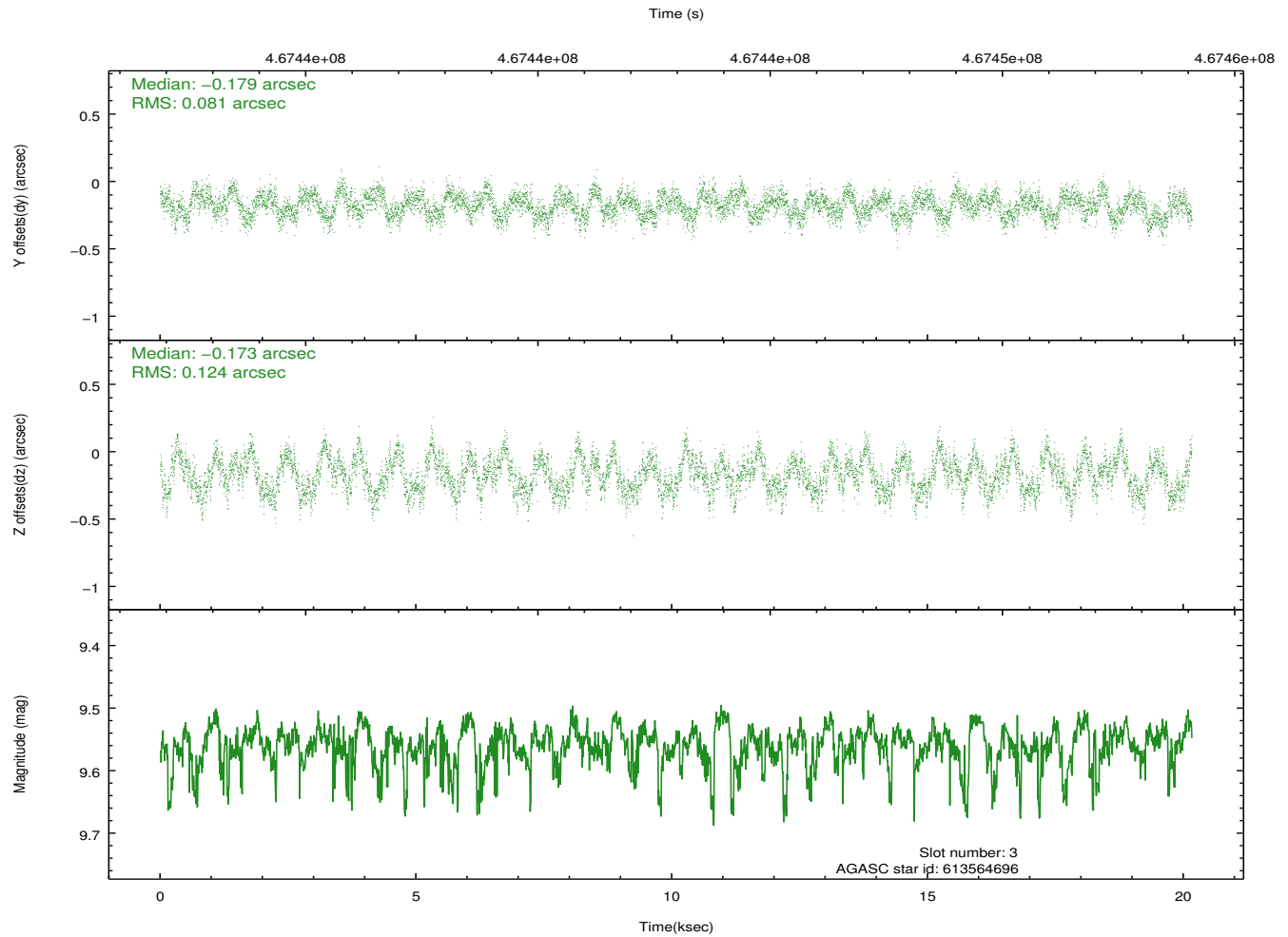
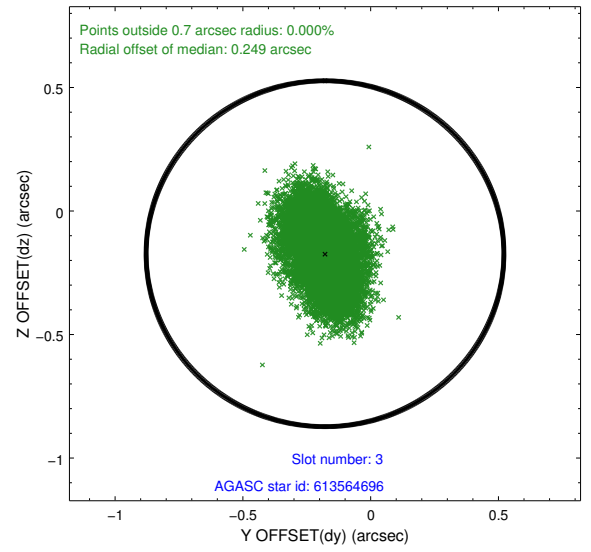
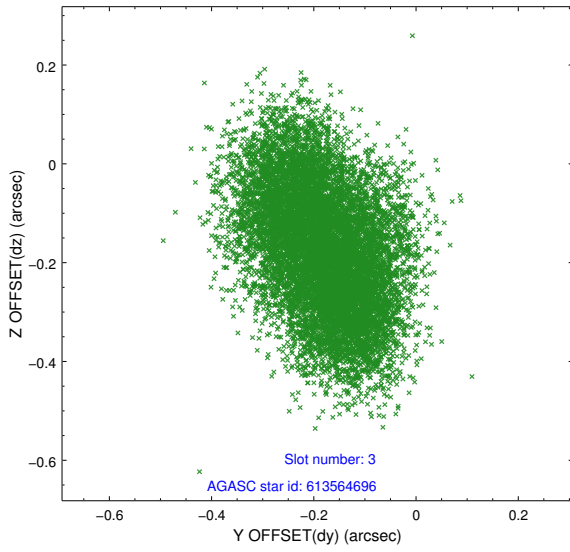
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.94	4918	-0.083	-0.026	0.020	0.034	0.000000	0.000000	-770.43	-1738.96
1	FID		ACIS-S-4	7.03	4918	0.202	0.047	0.007	0.013	0.000000	0.000000	2143.07	169.36
2	FID		ACIS-S-5	7.06	4918	-0.151	-0.011	0.018	0.036	0.000000	0.000000	-1823.08	163.23
3	GUIDE	used	613564696	9.56	9783	-0.179	-0.173	0.160	0.251	17.949580	-3.428917	835.72	1941.67
4	GUIDE	used	613565480	10.38	9817	0.087	-0.030	0.286	0.432	17.516597	-3.061525	-1203.75	2061.12
5	GUIDE	used	613566008	9.97	9819	0.012	0.142	0.198	0.303	17.033880	-3.648608	-1316.25	-670.04
6	GUIDE	used	613815656	9.84	9788	0.116	-0.076	0.167	0.266	17.660133	-4.342752	1984.17	-1312.12
7	GUIDE	used	613817792	9.56	9818	-0.008	0.162	0.147	0.283	17.445505	-3.793069	177.54	-195.52

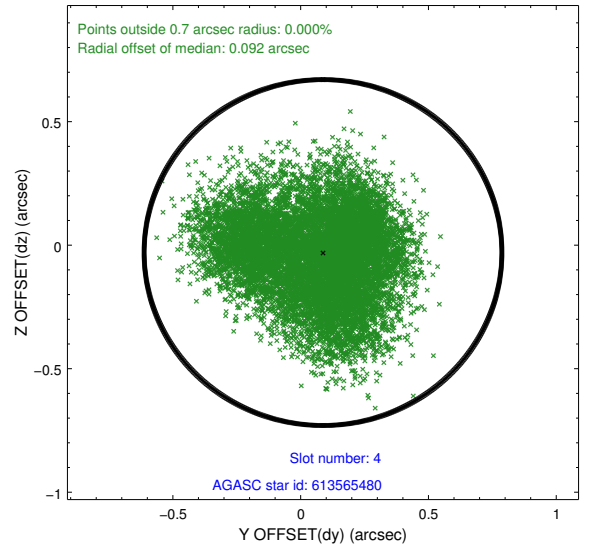
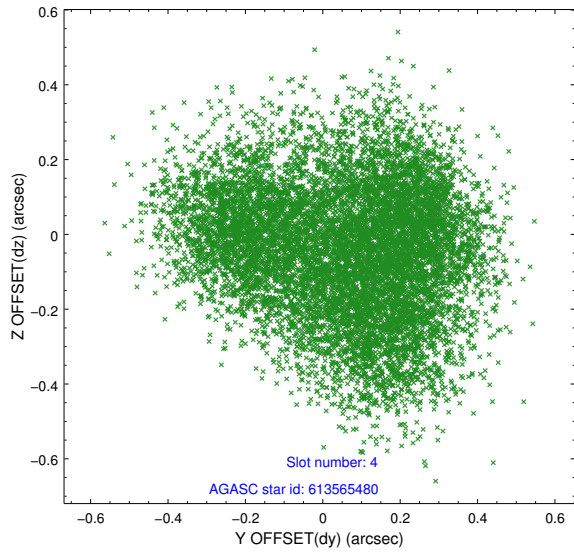
∞

2.4 Star Slots

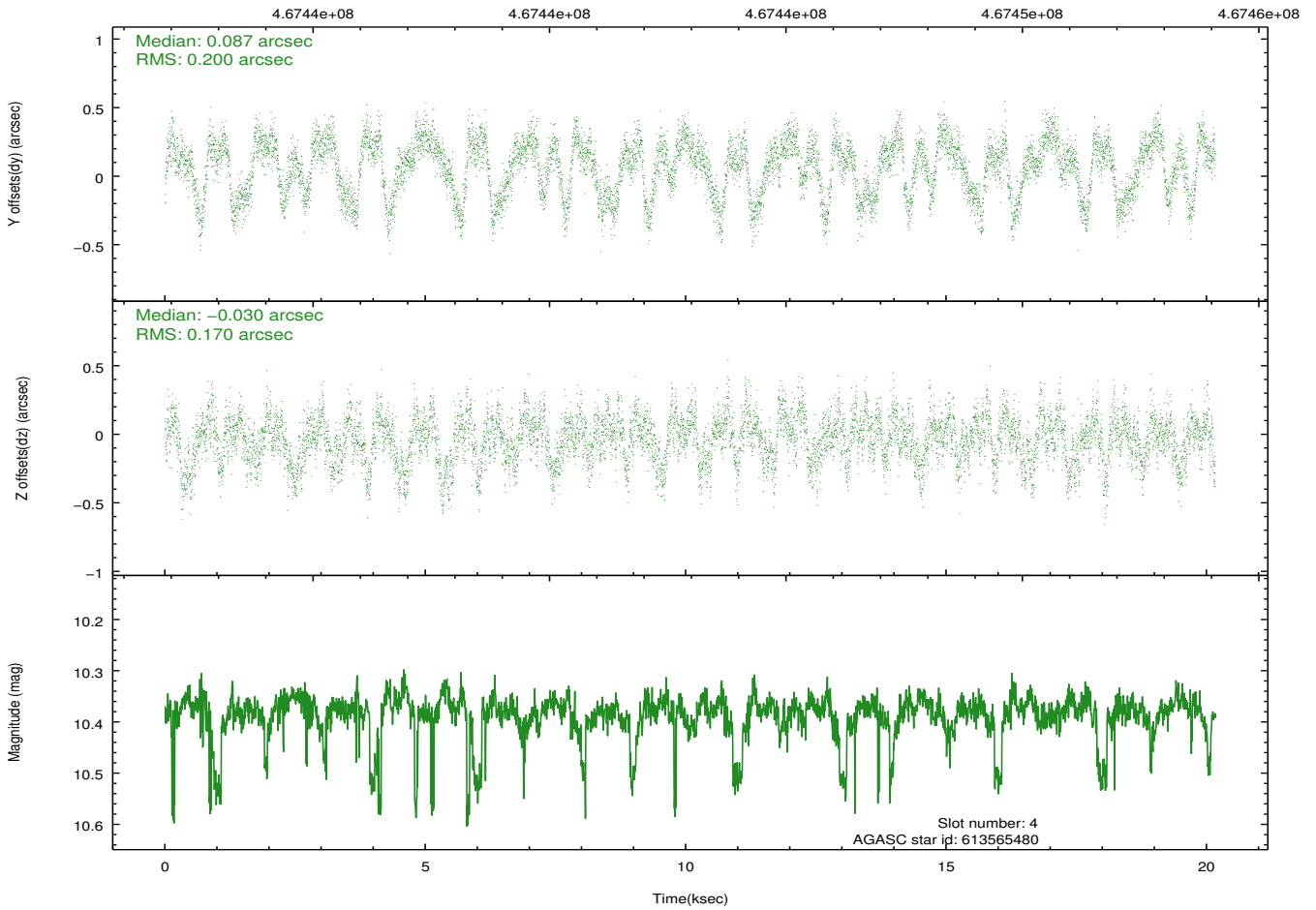
2.4.1 Slot 3



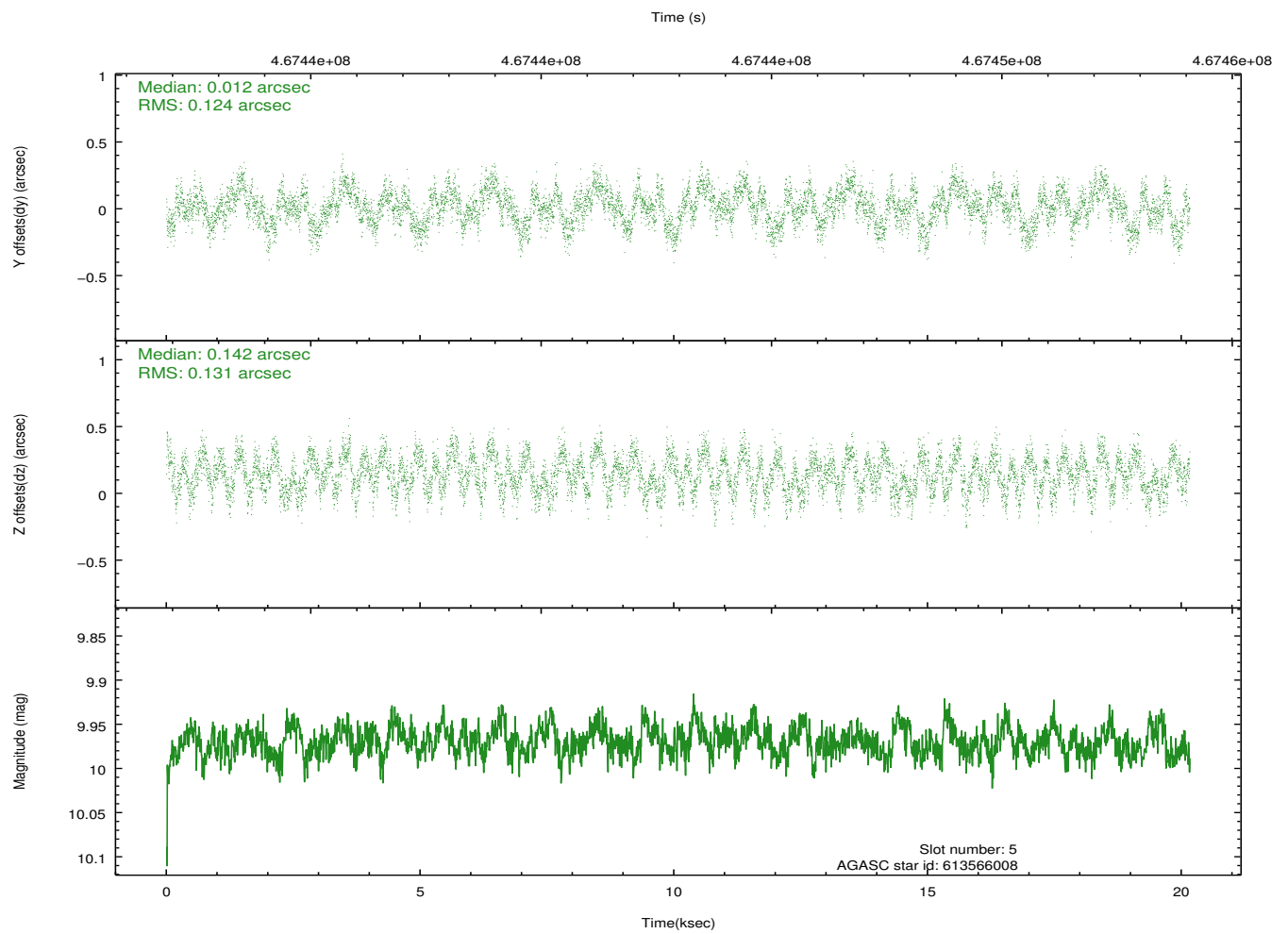
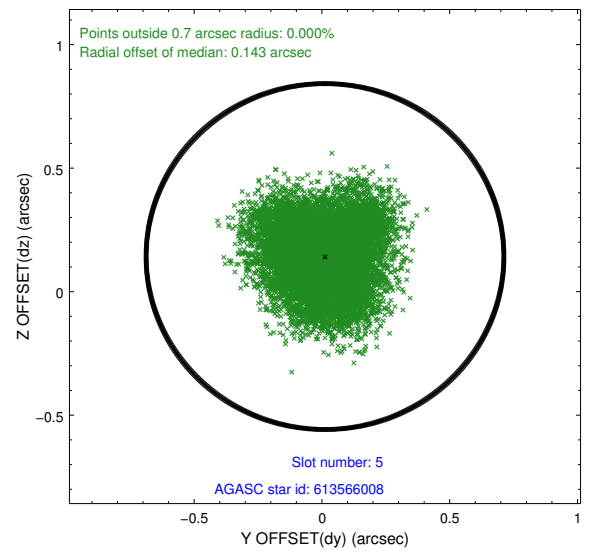
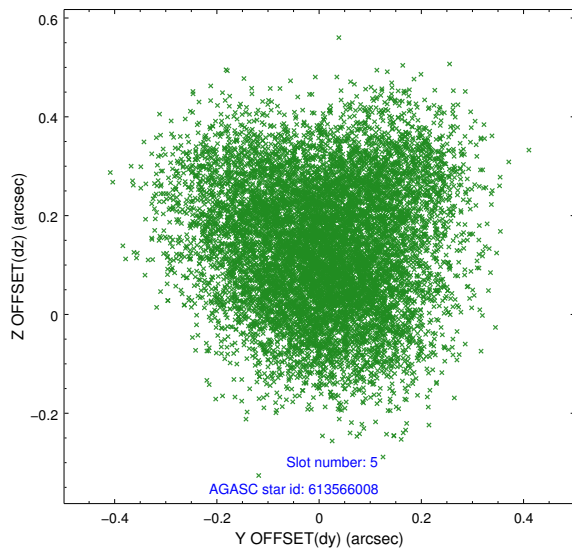
2.4.2 Slot 4



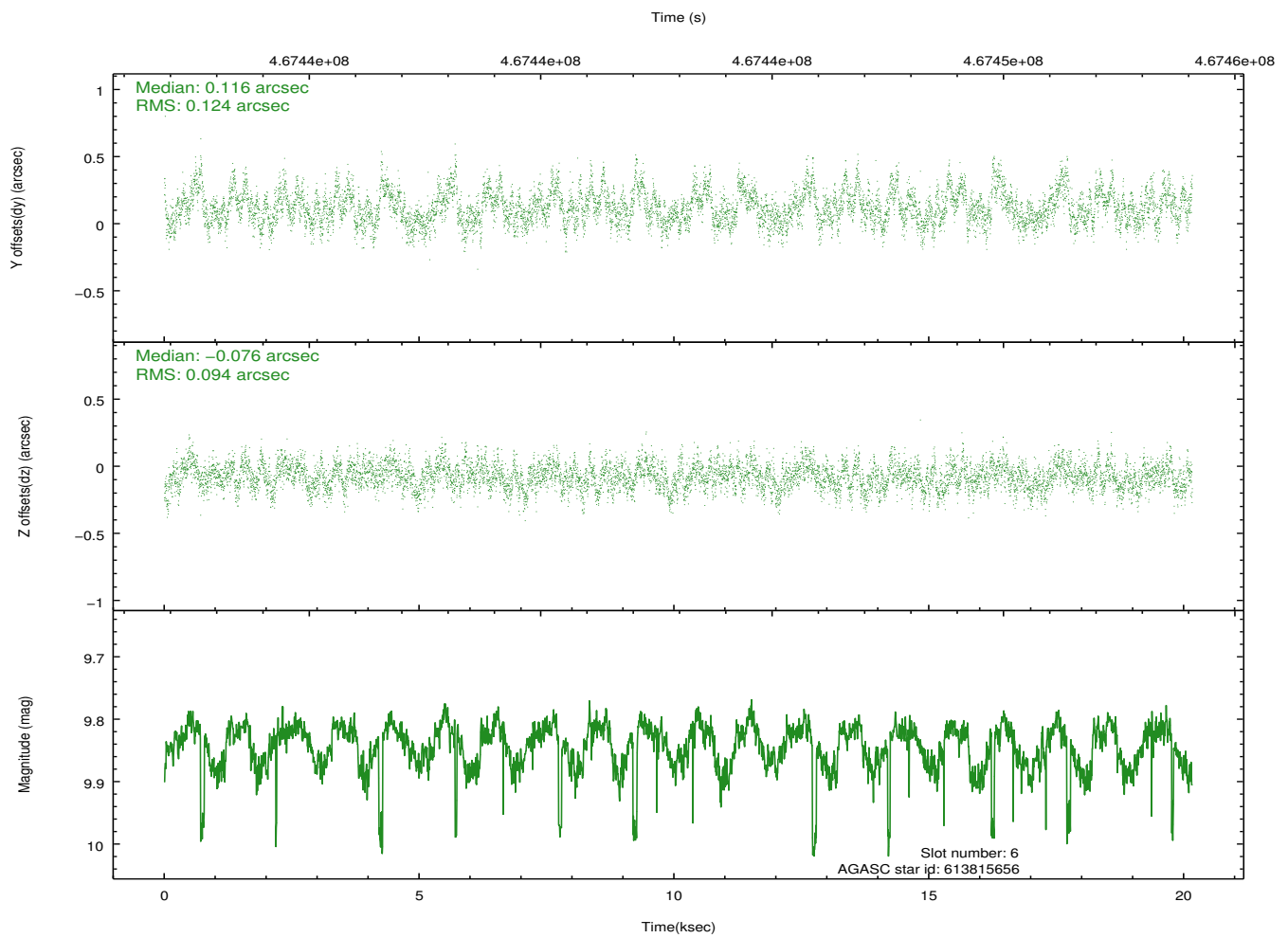
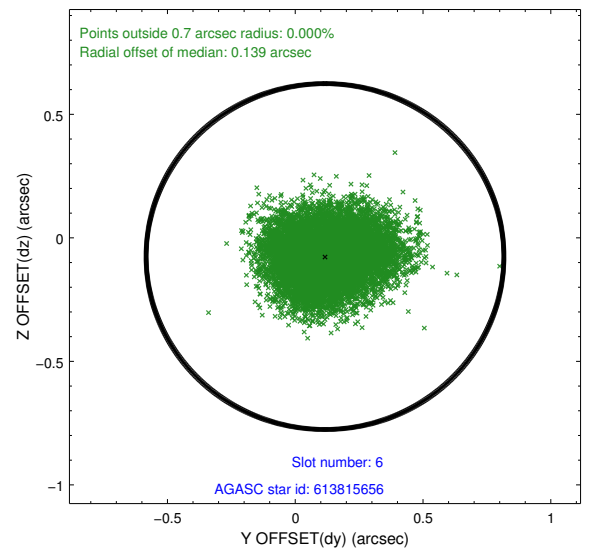
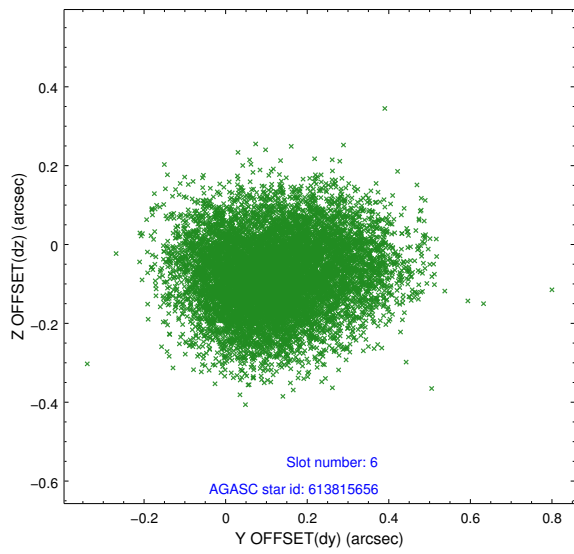
Time (s)



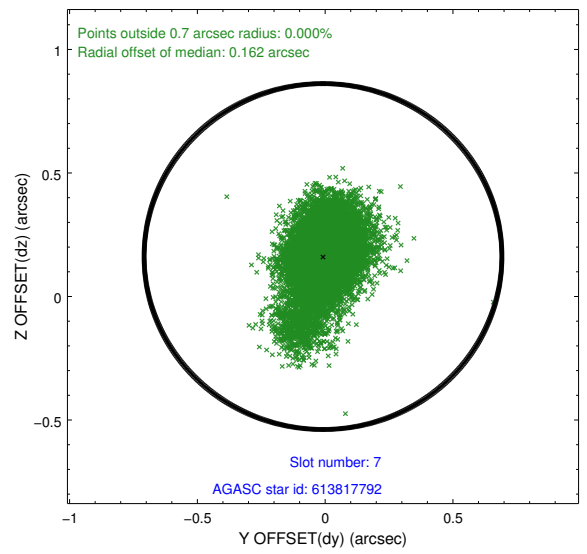
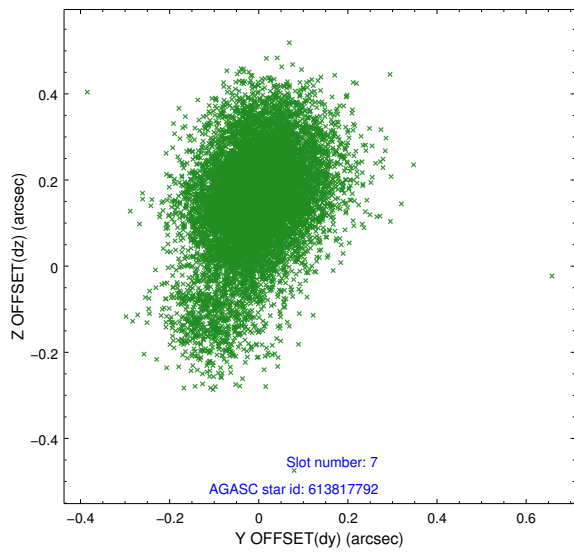
2.4.3 Slot 5



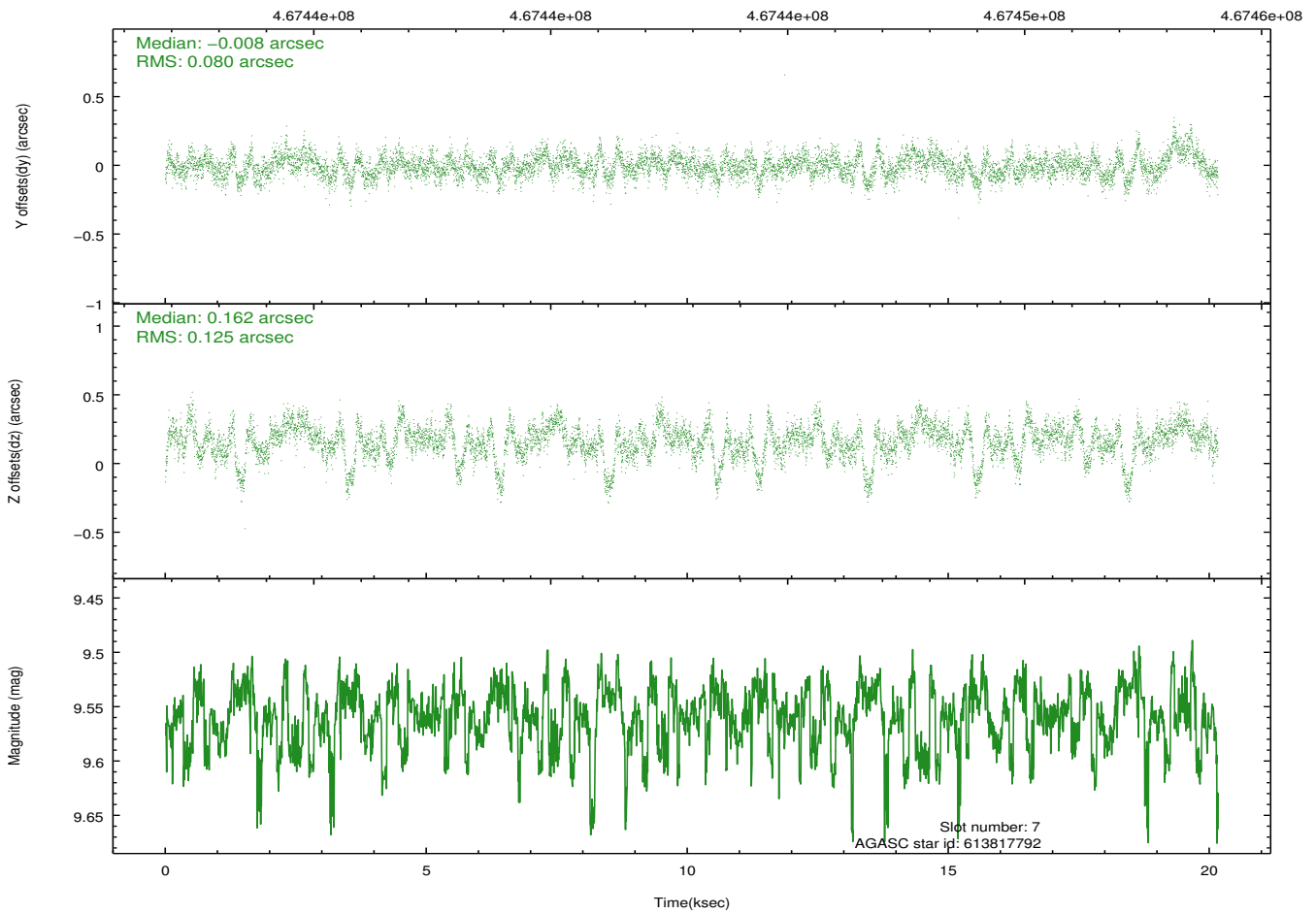
2.4.4 Slot 6



2.4.5 Slot 7

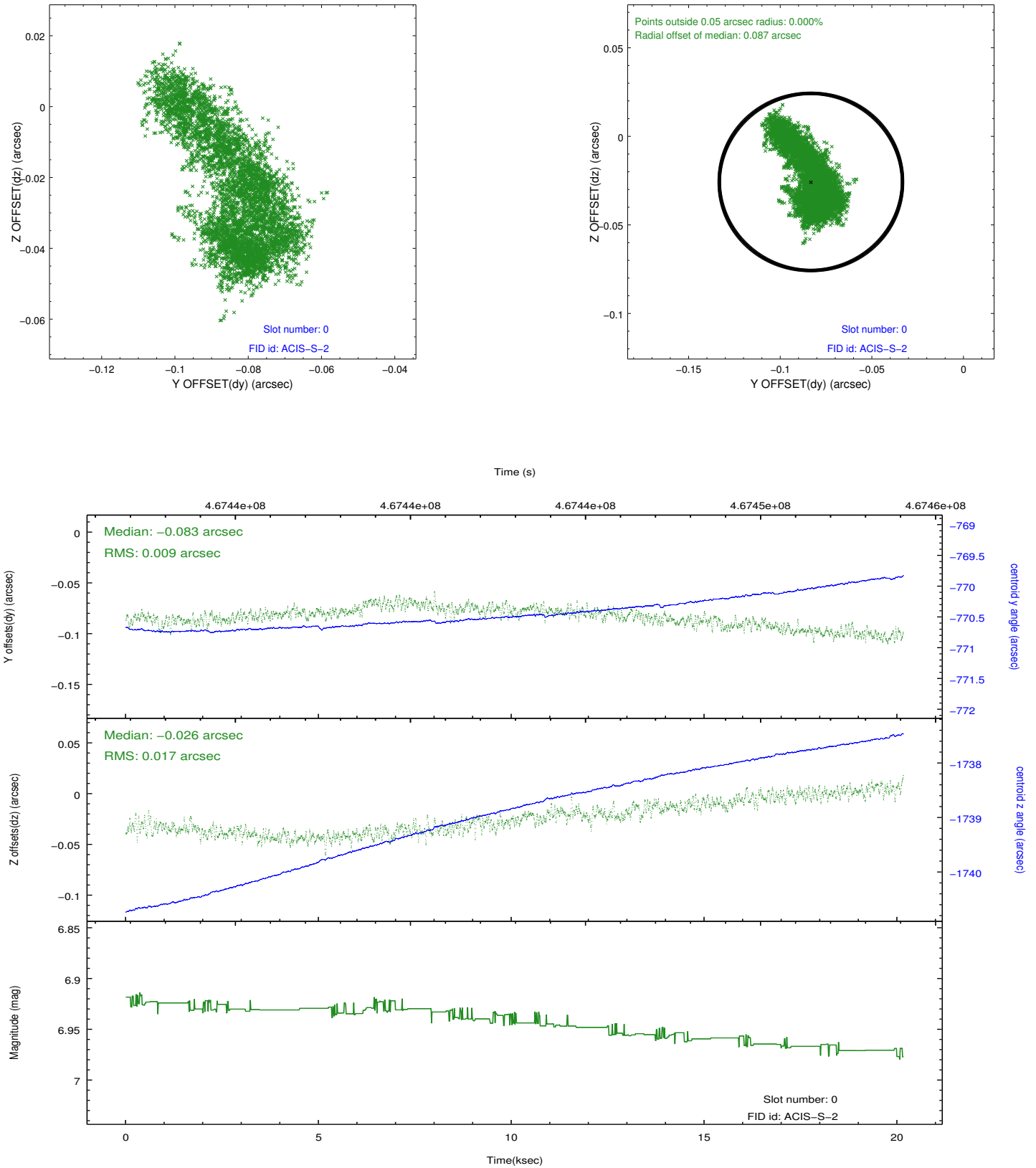


Time (s)

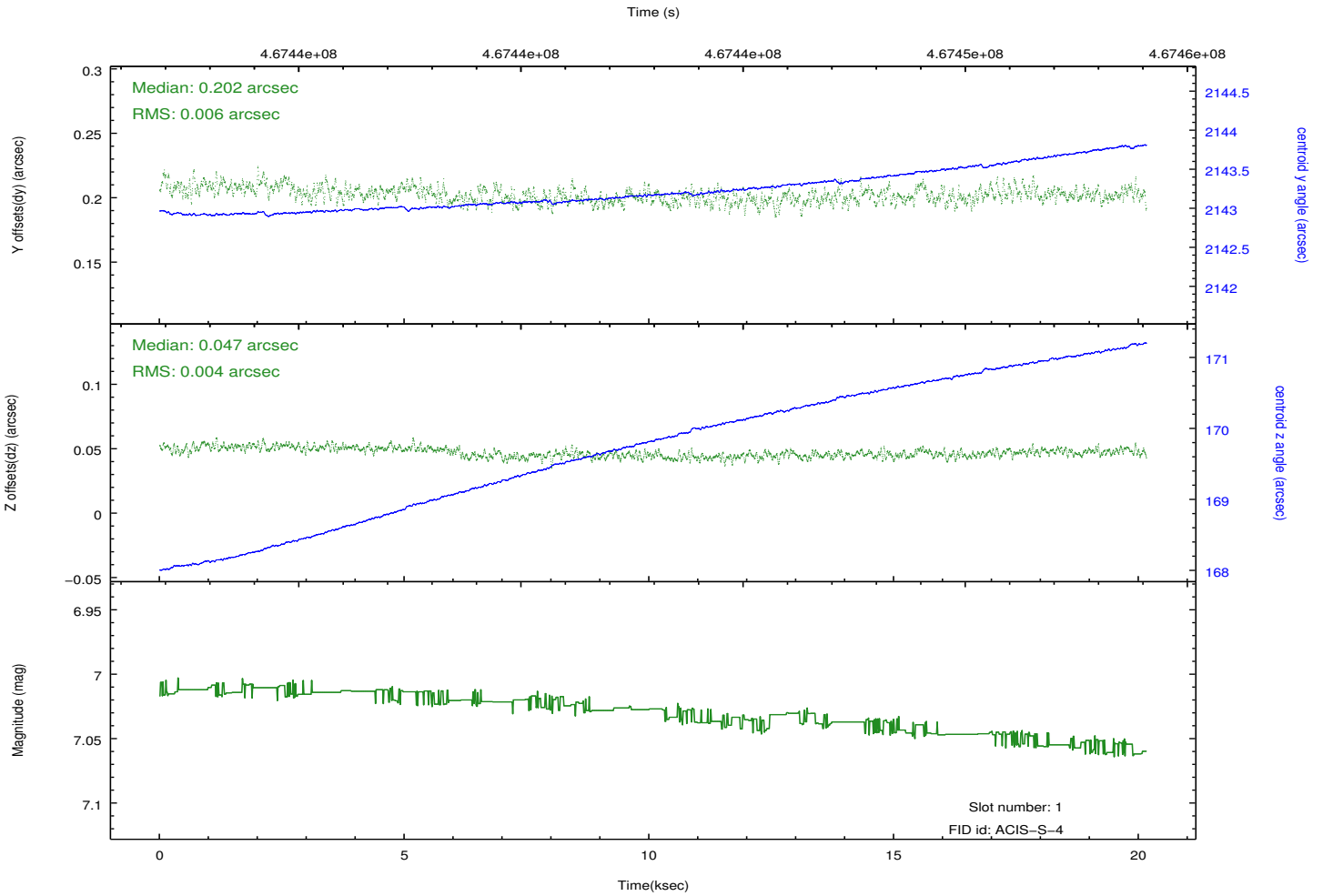
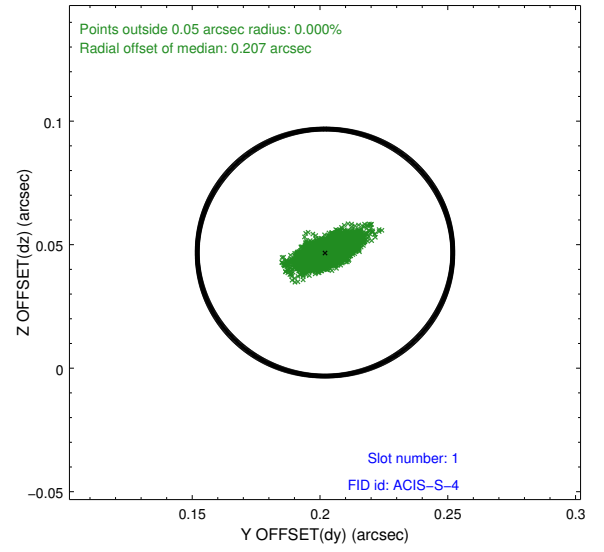
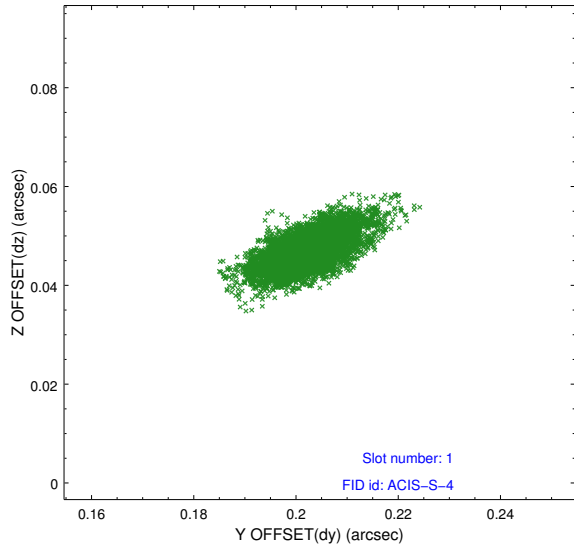


2.5 FID Slots

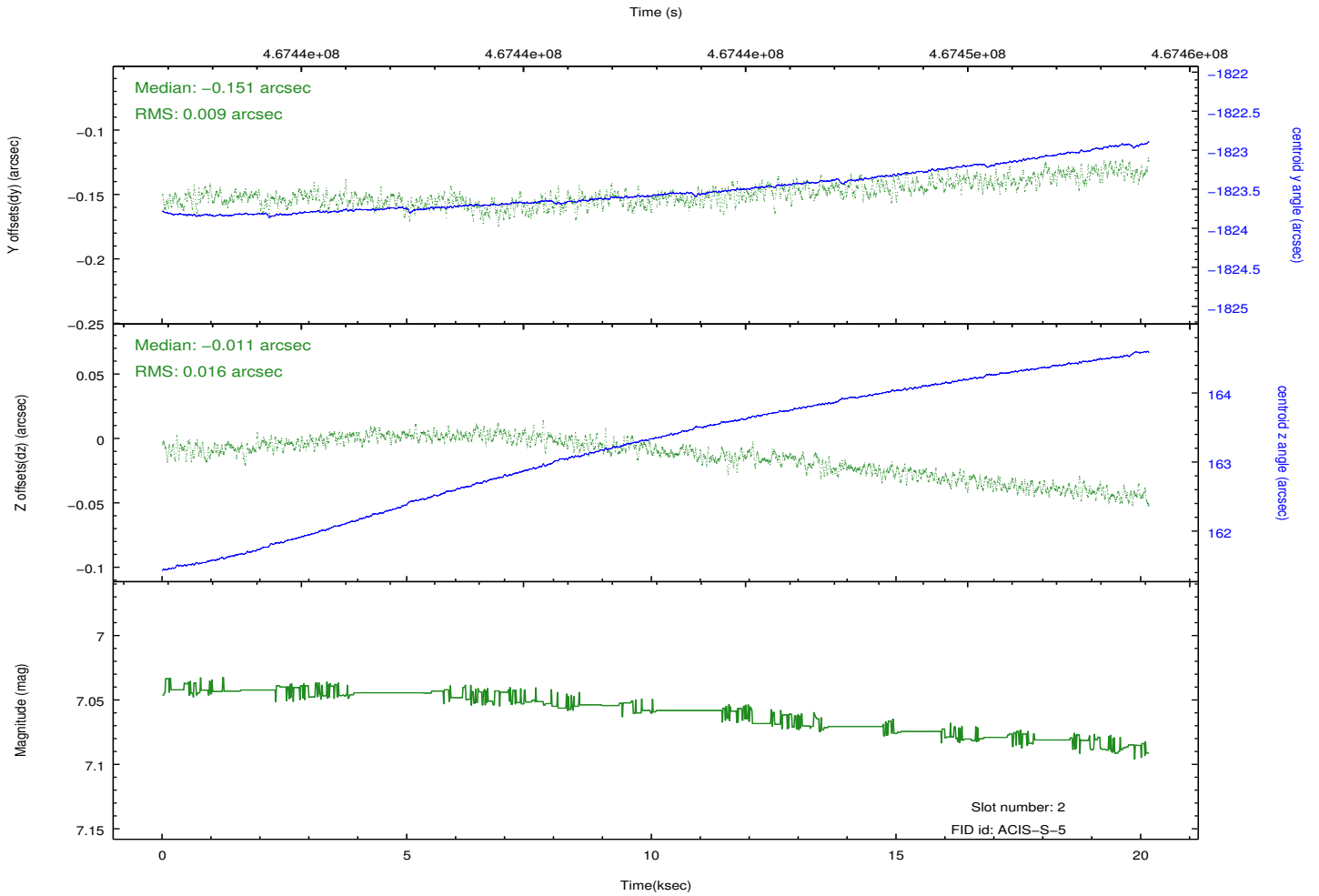
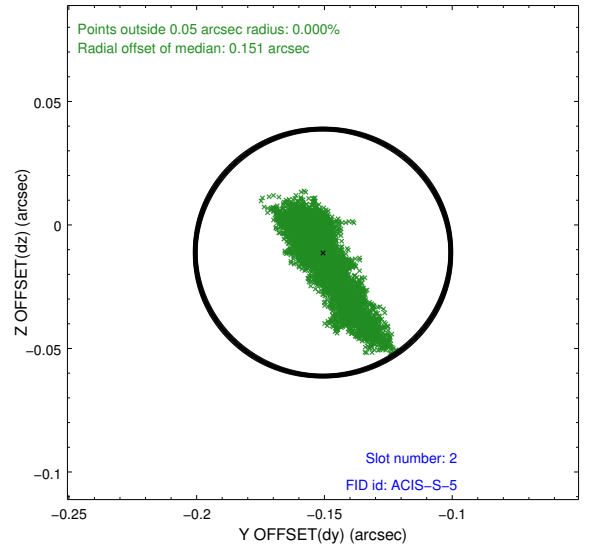
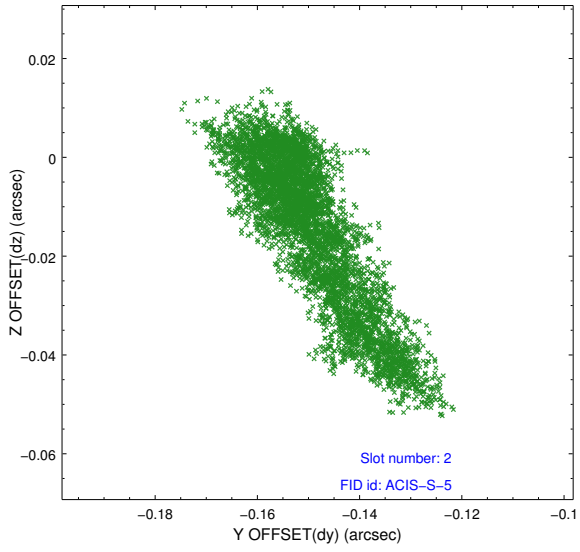
2.5.1 Slot 0



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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.060100154281

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.