

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 13896 - L2 Version 2
Chandra X-Ray Center

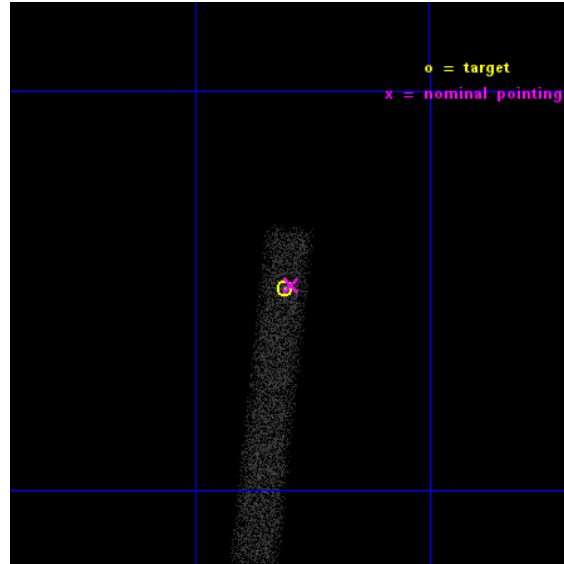
L2 Processing Date : Nov 30 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

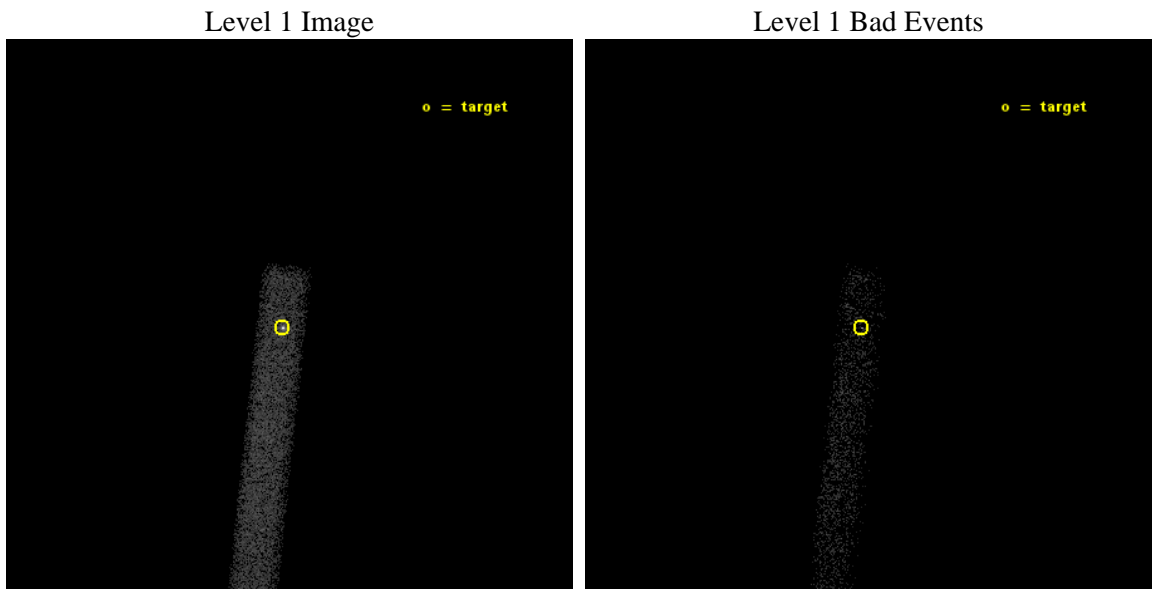
seq_num	702621	Sequence number
obs_id	13896	Observation id
title	CHANDRA SURVEY OF DUAL ACTIVATION IN HARD X-RAY SELECTED MERGING AGN HOSTS	Proposal title
observer	Dr. Richard Mushotzky	Principal investigator
object	Mrk 423	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	171.702083	Observer's specified target RA [deg]
dec_targ	35.250861	Observer's specified target Dec [deg]
ra_nom	171.69876516468	Nominal RA [deg]
dec_nom	35.252180308842	Nominal Dec [deg]
roll_nom	96.370581955791	Nominal Roll [deg]
revision	2	Processing version of data
ontime	17069.457266688	Sum of GTIs [s]
livetime	15481.096741056	Livetime [s]
ontime7	17069.457266688	Sum of GTIs [s]
l2events	13309	Number of level 2 events



2 OBI

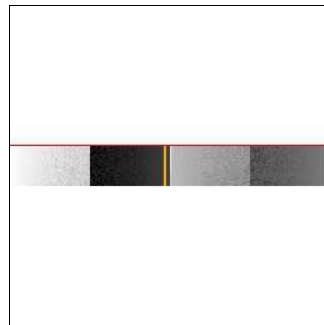
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	17000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	17069.457266688	Sum of GTIs [s]
caldbver	4.6.4	 	ontime7	17069.457266688	Sum of GTIs [s]
date	2014-12-01T03:27:30	Date and time of file creation	l1events	22338	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

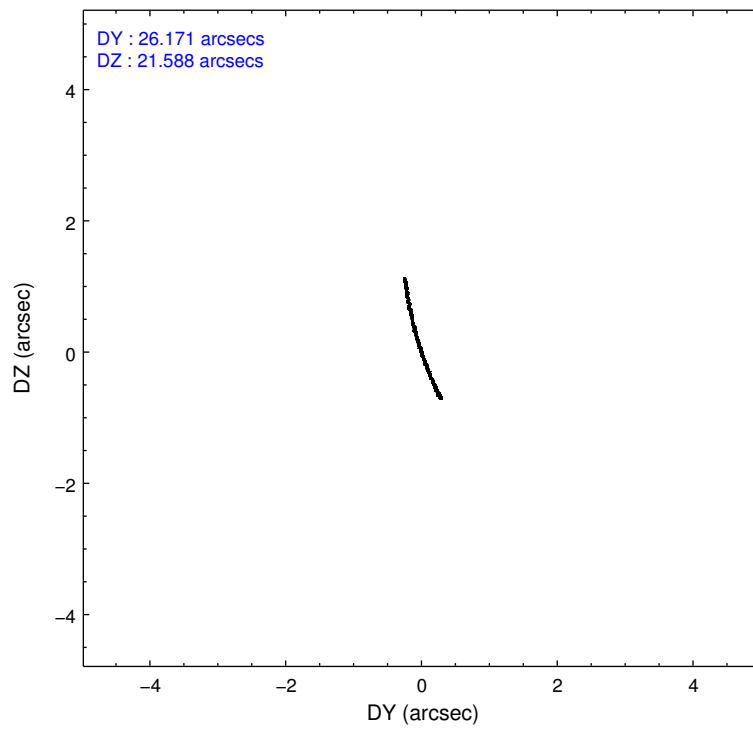
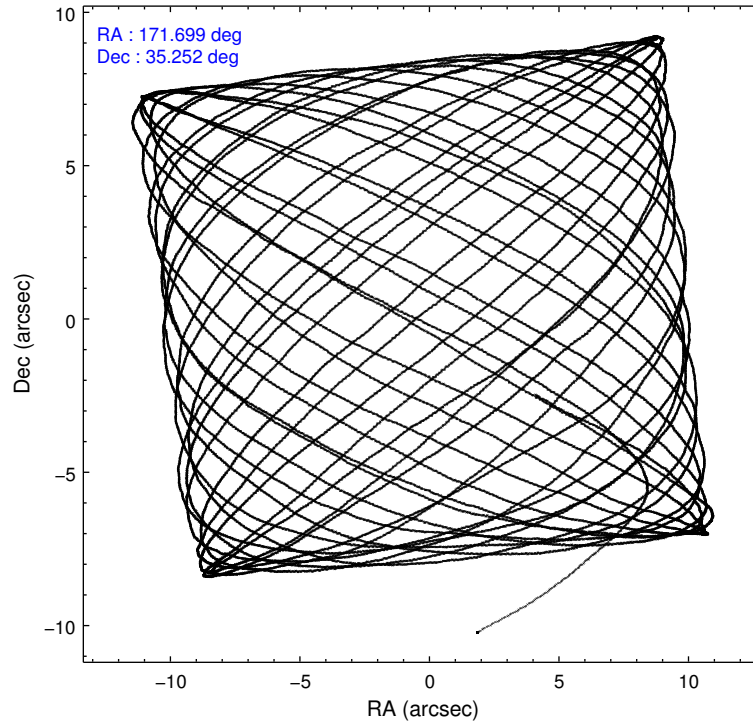
	ccd 7
level 1 events	22338
rejected events	8667
rejected %	38%

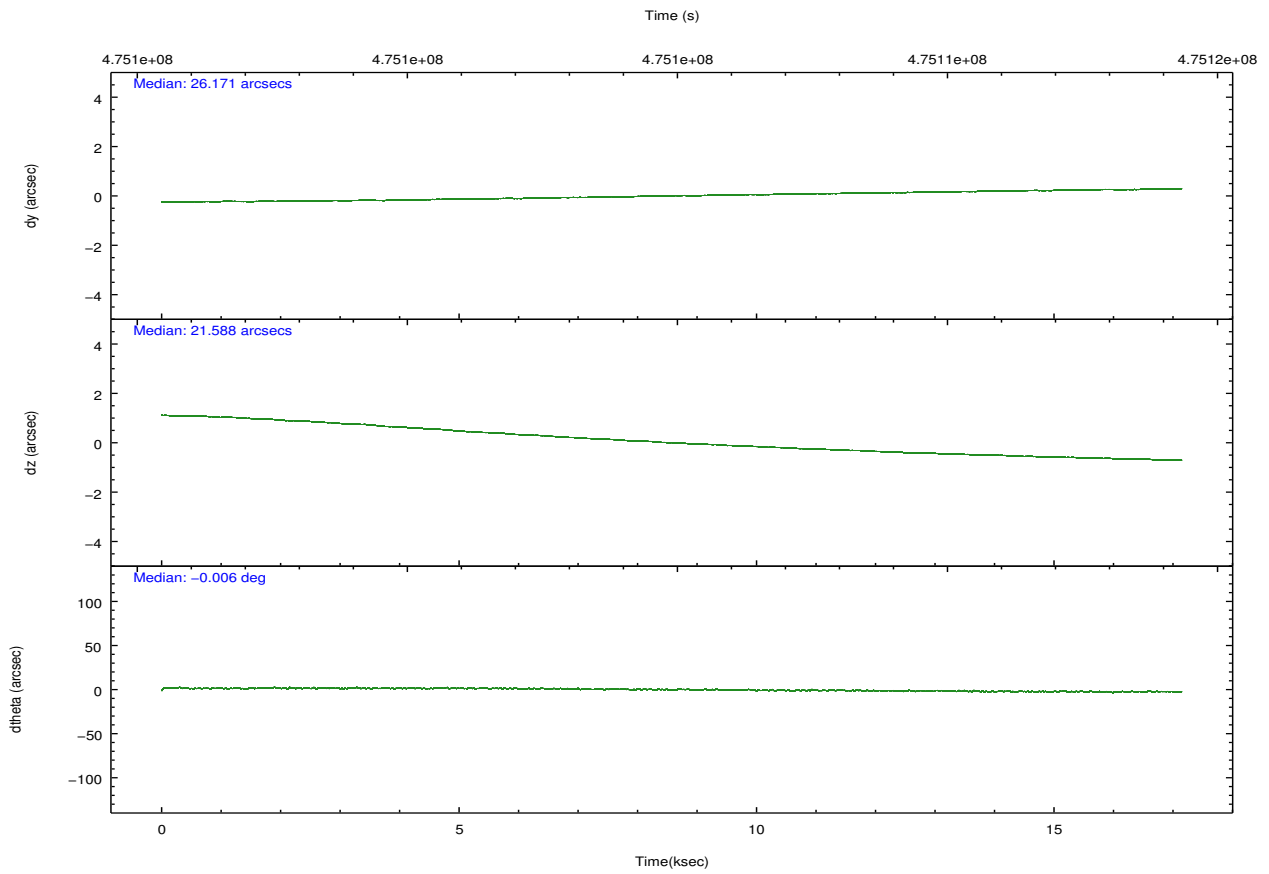
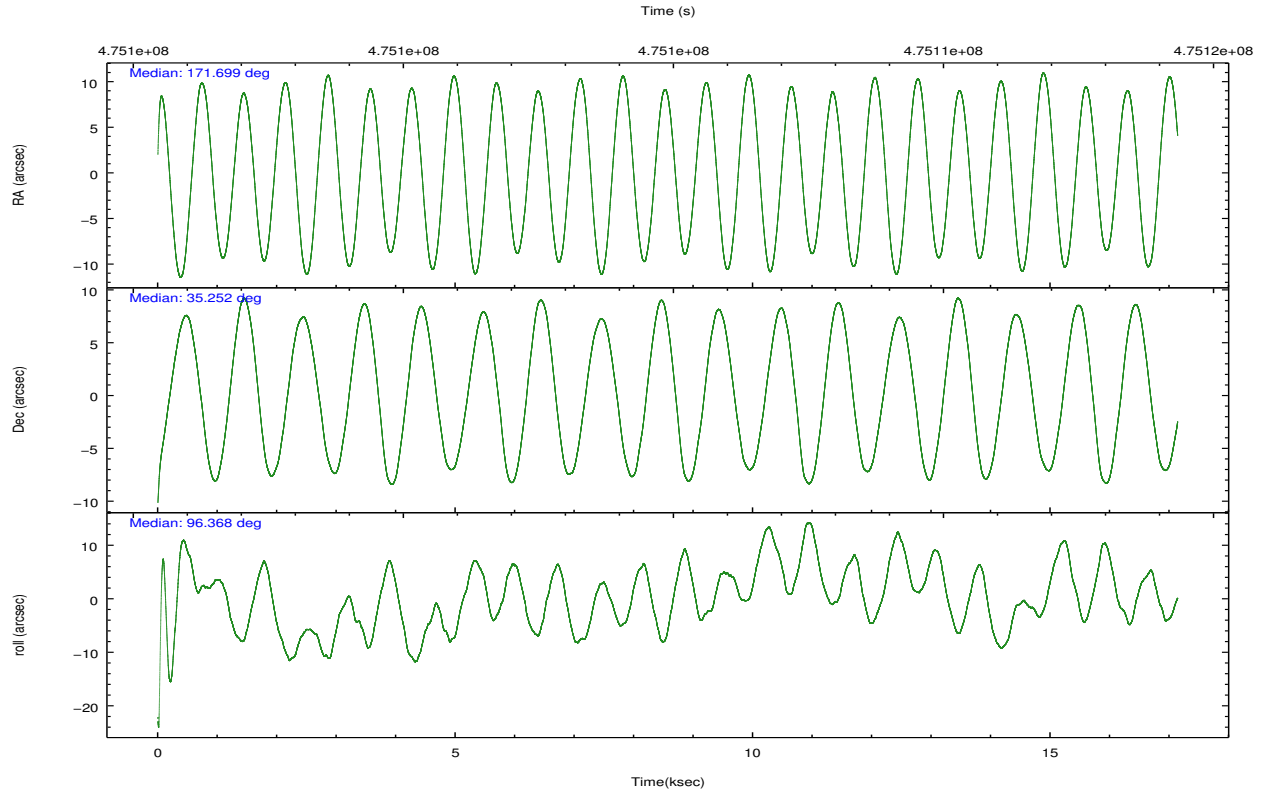
	ccd 7
grade 0 events	2201
	9%
grade 1 events	29
	0%
grade 2 events	2898
	12%
grade 3 events	1740
	7%
grade 4 events	1671
	7%
grade 5 events	1834
	8%
grade 6 events	5162
	23%
grade 7 events	6803
	30%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	171.718974	171.6987651646844	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	35.230396	35.2521803088416	Subarray start row	449	449
[deg] Pointing Roll	96.202322	96.37058195579083	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	475096465.184000	475095353.88341			
Observation start date	2013-01-20T19:13:18	2013-01-20T18:55:53			
[s] Observation end time (MET)	475113465.184000	475113889.47191			
Observation end date	2013-01-20T23:56:38	2013-01-21T00:04:49			
Read mode	TIMED	TIMED			

2.3 Aspect





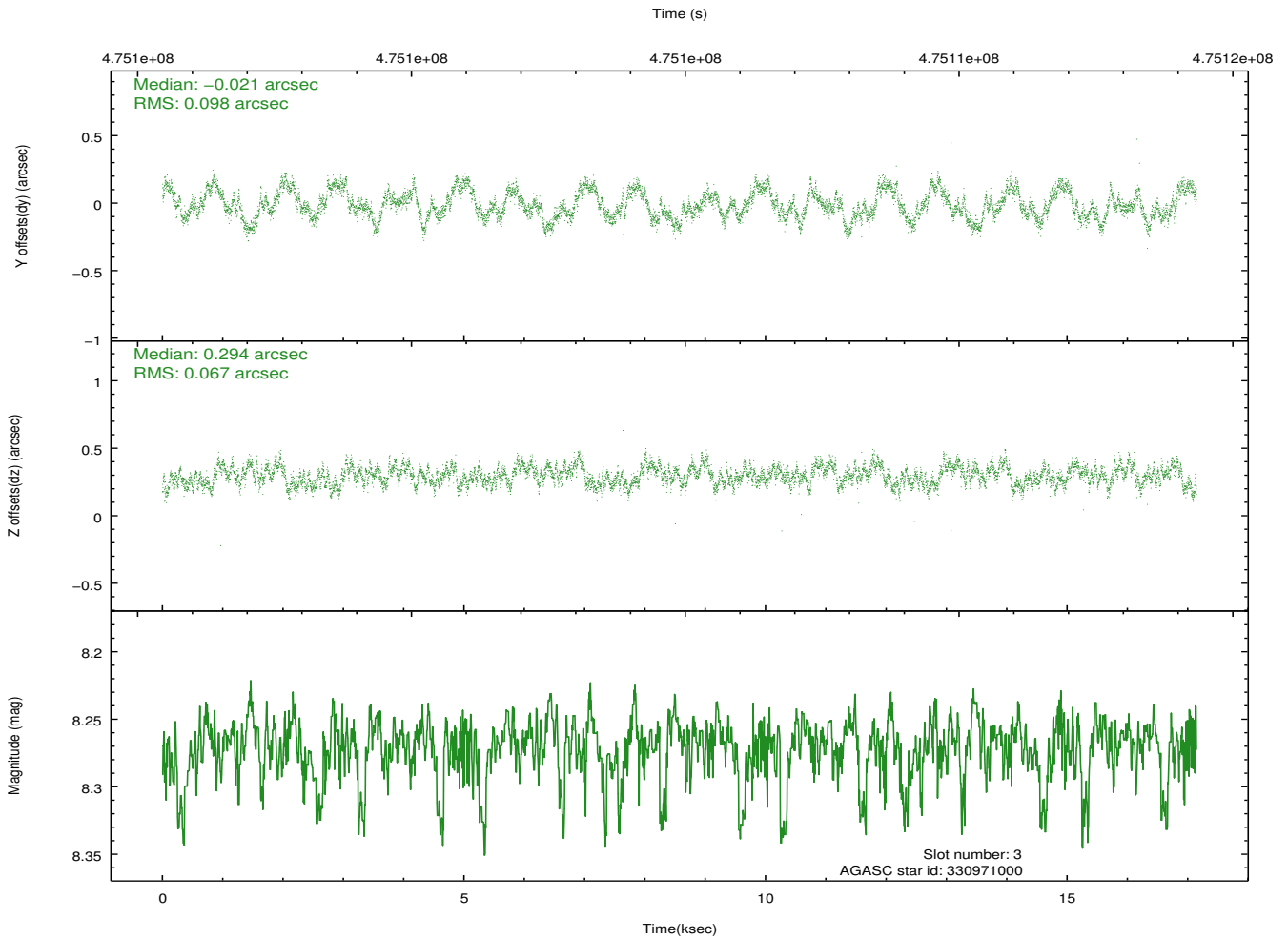
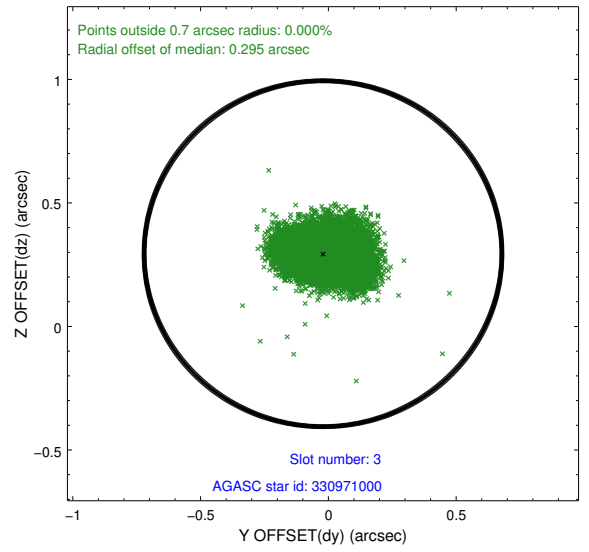
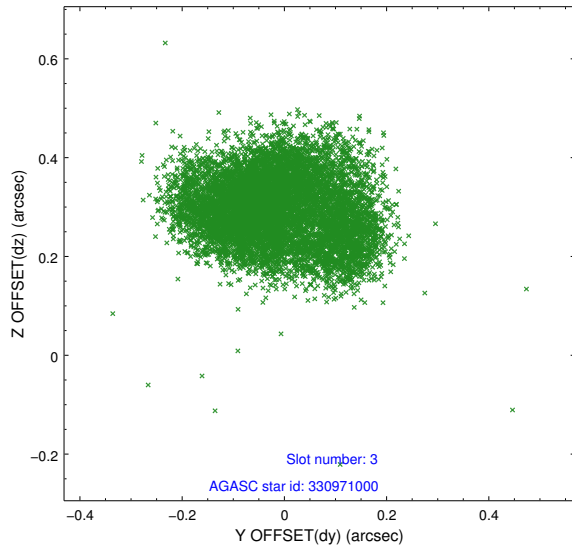
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.02	4181	0.065	-0.069	0.016	0.046	0.000000	0.000000	916.67	-1738.87
1	FID		ACIS-S-5	7.07	4181	-0.170	0.022	0.011	0.016	0.000000	0.000000	-1832.44	158.49
2	FID		ACIS-S-6	7.16	4181	0.083	0.060	0.024	0.061	0.000000	0.000000	381.95	802.77
3	GUIDE	used	330971000	8.27	8361	-0.021	0.294	0.129	0.199	171.971608	35.370564	422.64	-790.99
4	GUIDE	used	330972304	10.25	8194	0.163	0.032	0.257	0.411	171.285706	34.868874	-1152.46	1412.73
5	GUIDE	used	330973080	8.90	8357	0.070	-0.060	0.108	0.168	171.365950	35.166409	-114.90	1058.02
6	GUIDE	used	330974656	9.97	8298	-0.289	-0.085	0.276	0.475	171.511450	35.743657	1902.89	404.51
7	GUIDE	used	330971680	10.26	8234	0.098	-0.167	0.279	0.475	171.326459	34.554369	-2291.07	1420.63

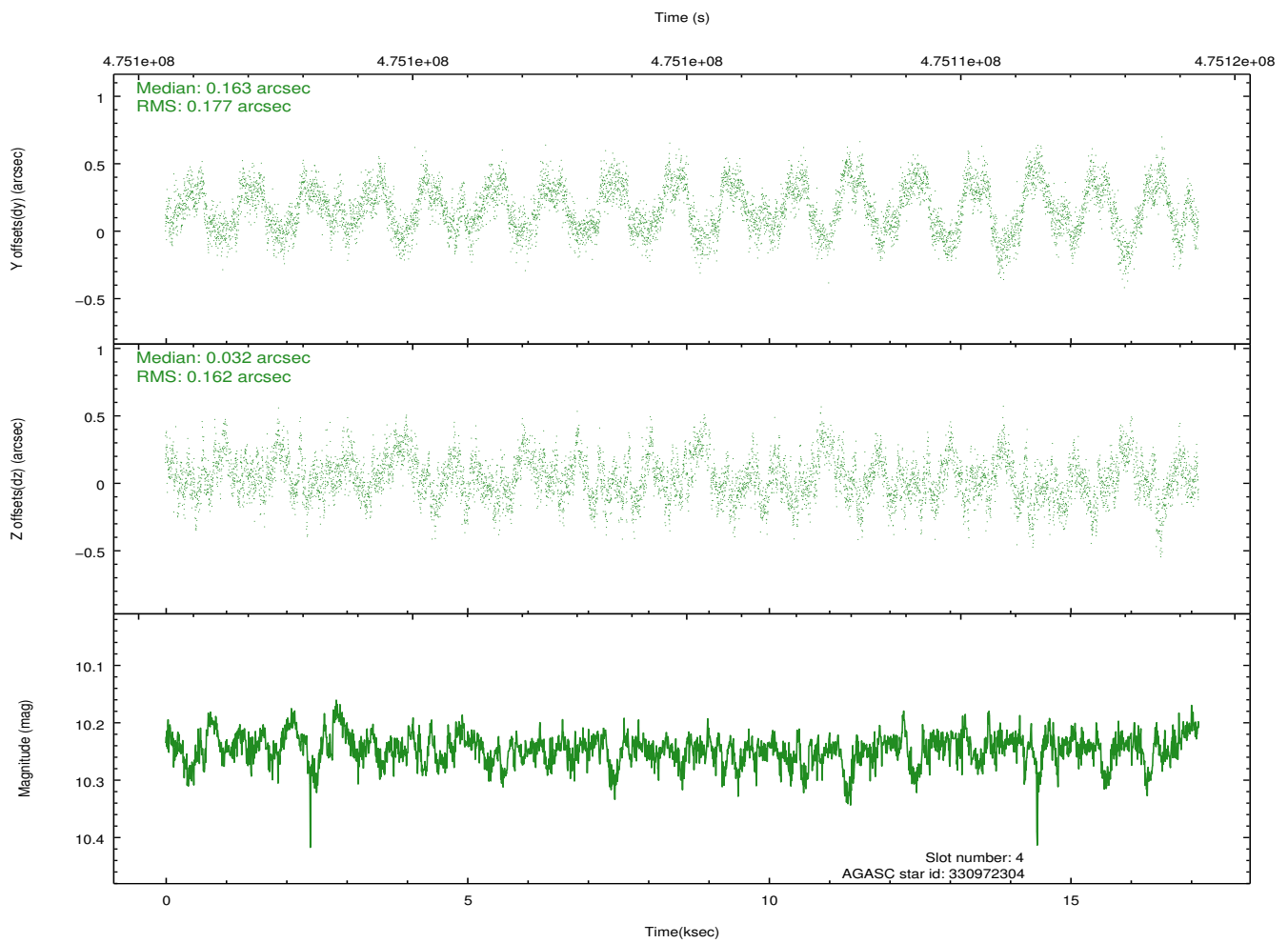
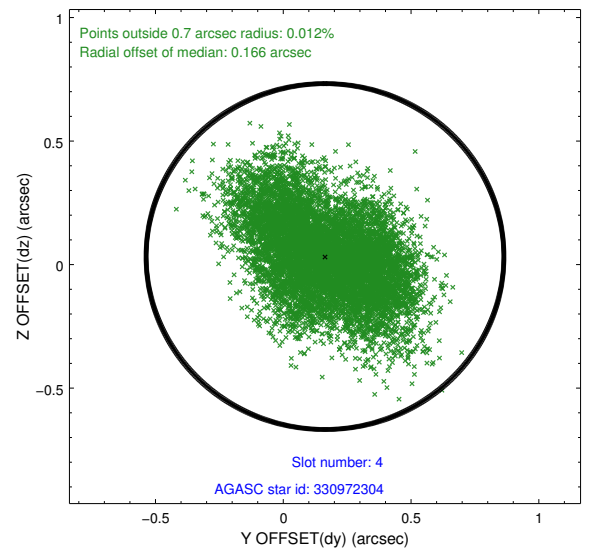
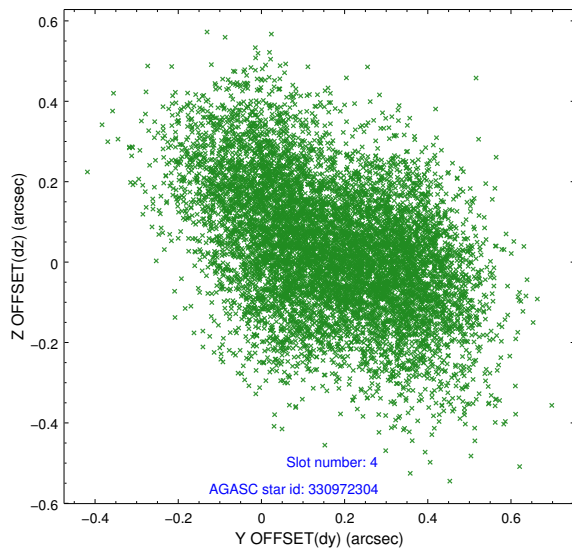
∞

2.4 Star Slots

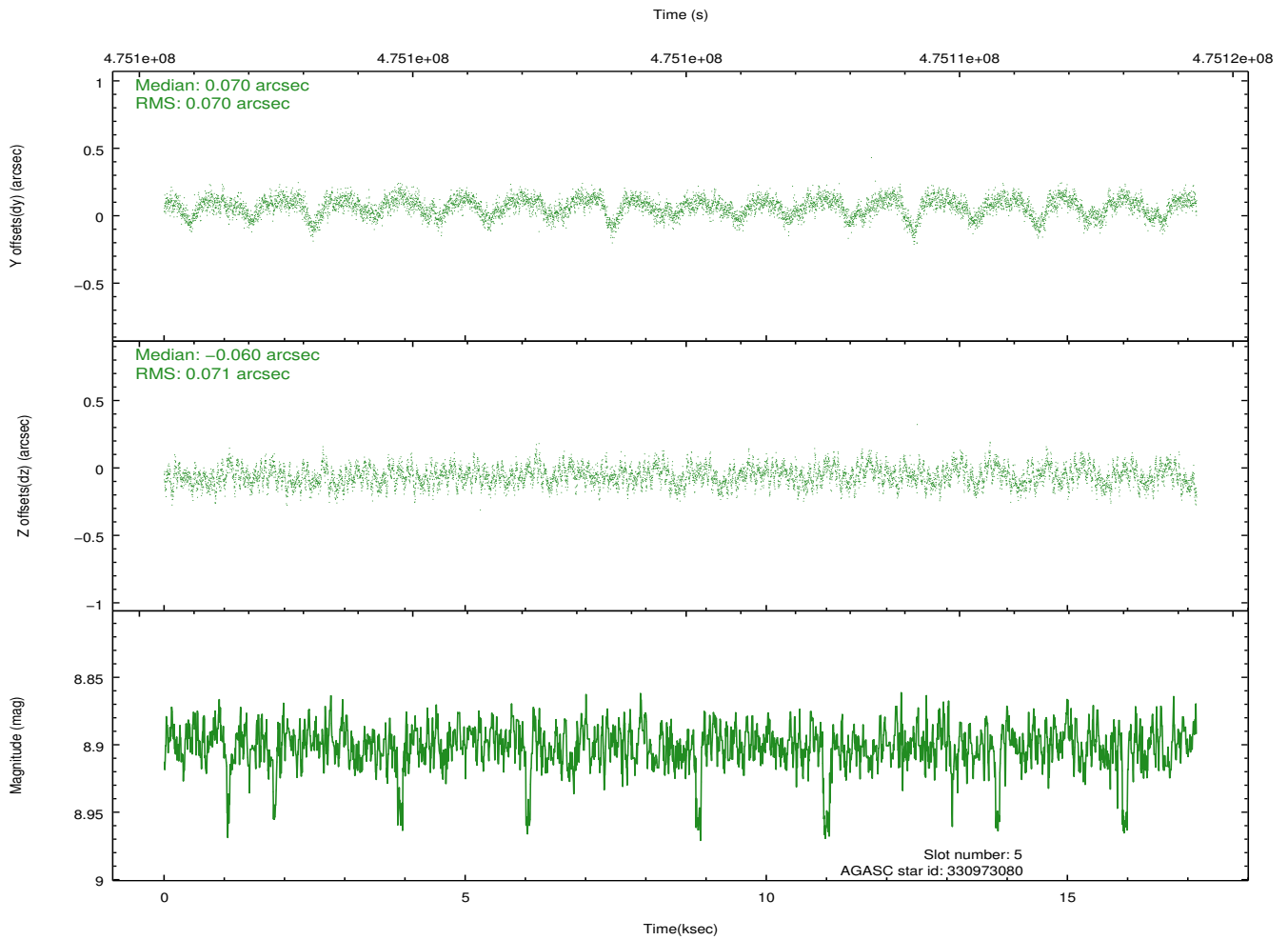
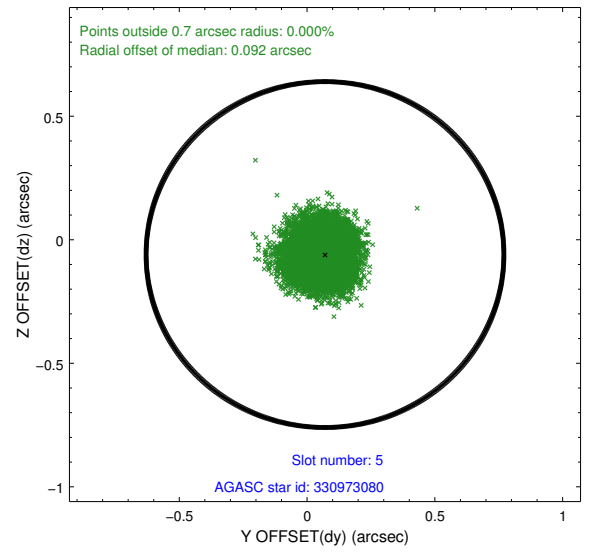
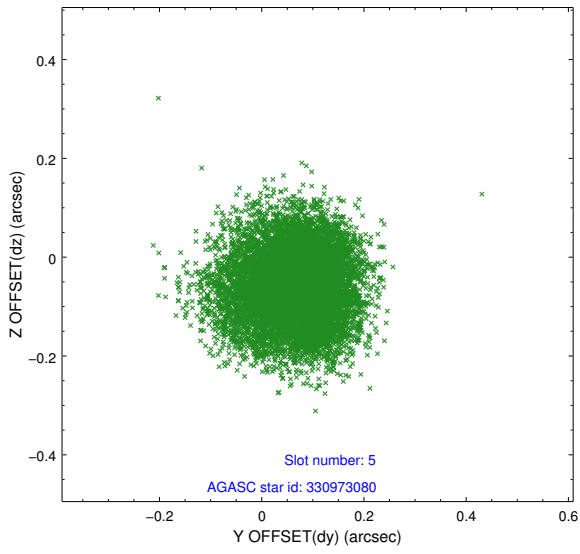
2.4.1 Slot 3



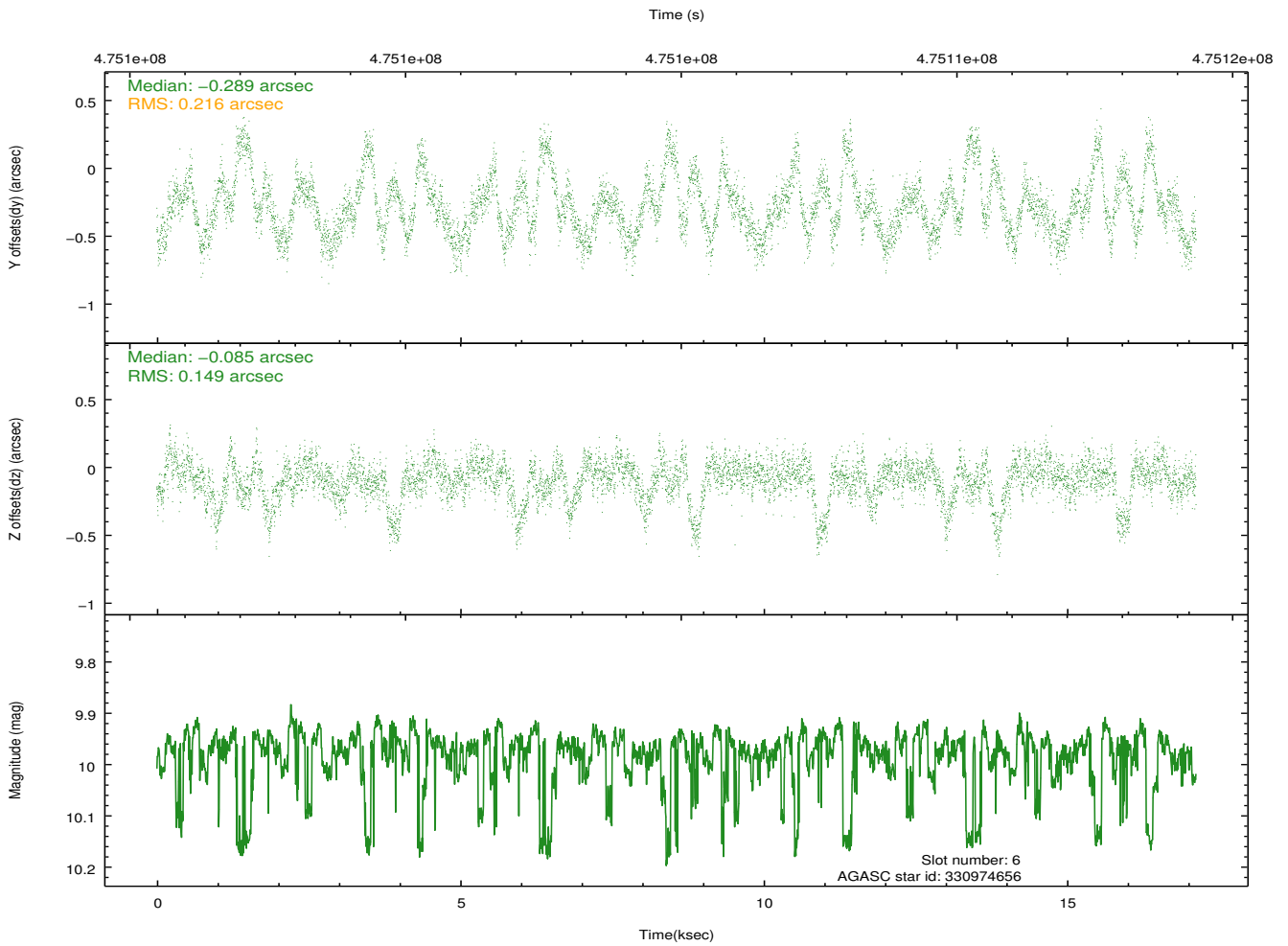
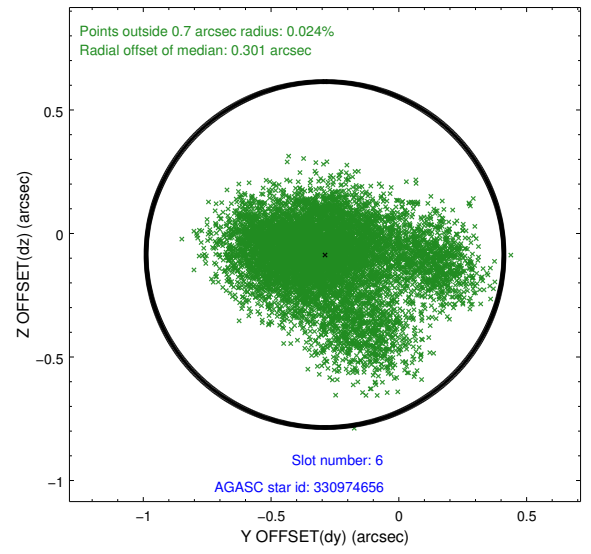
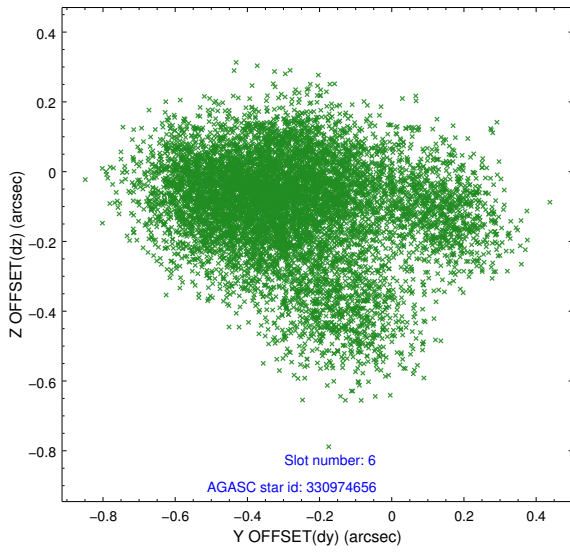
2.4.2 Slot 4



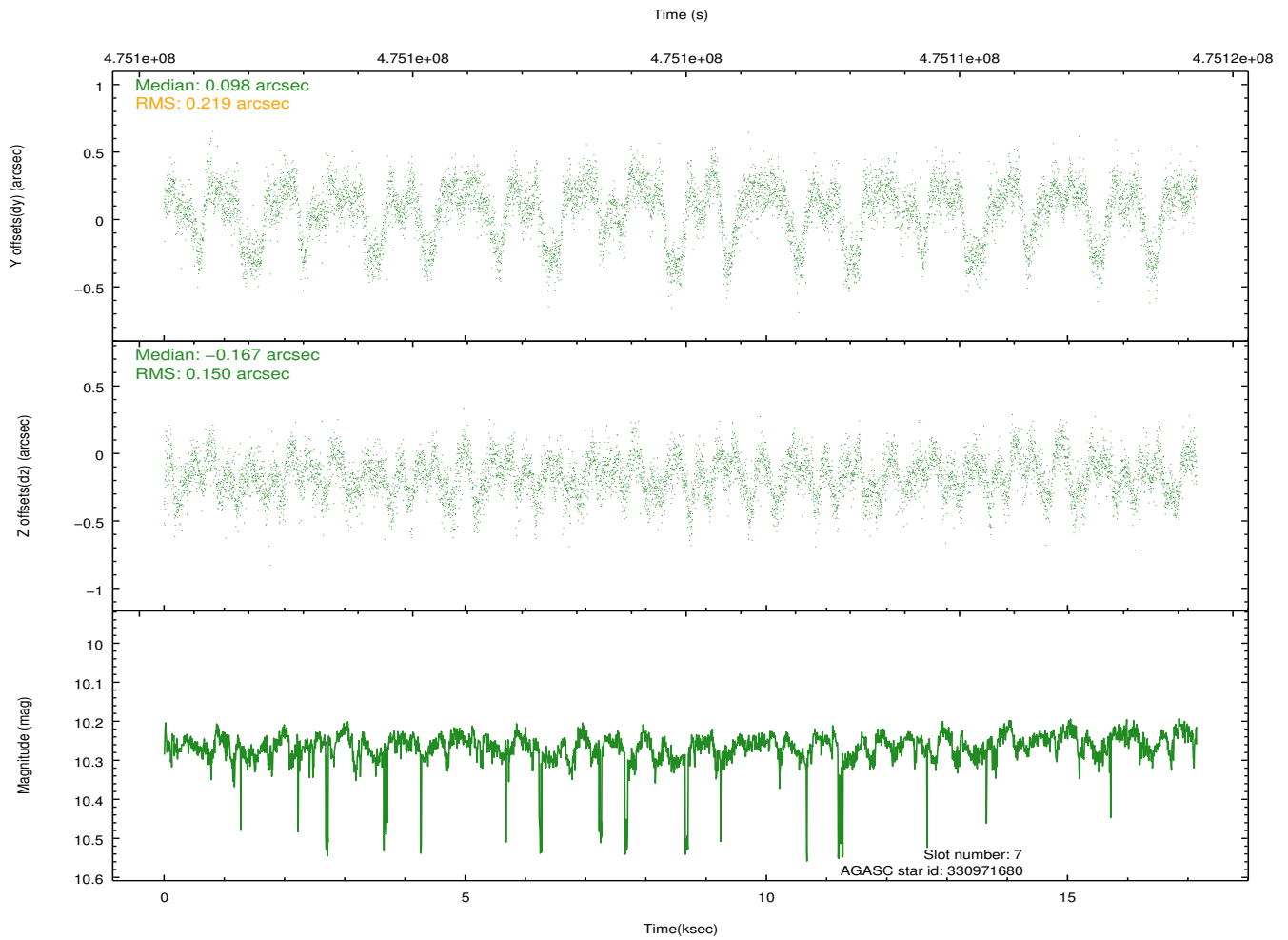
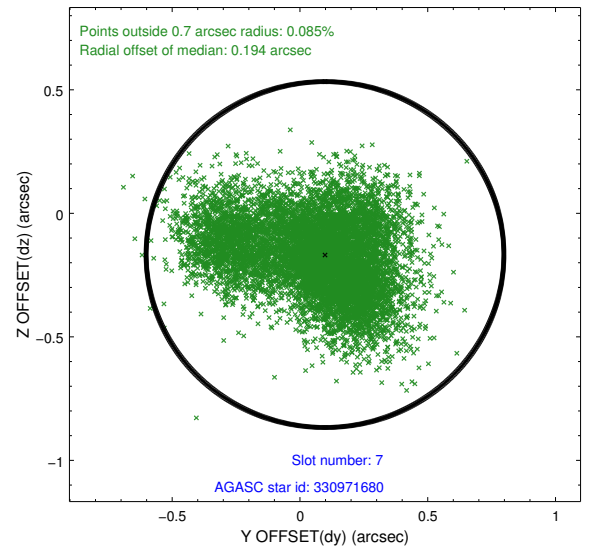
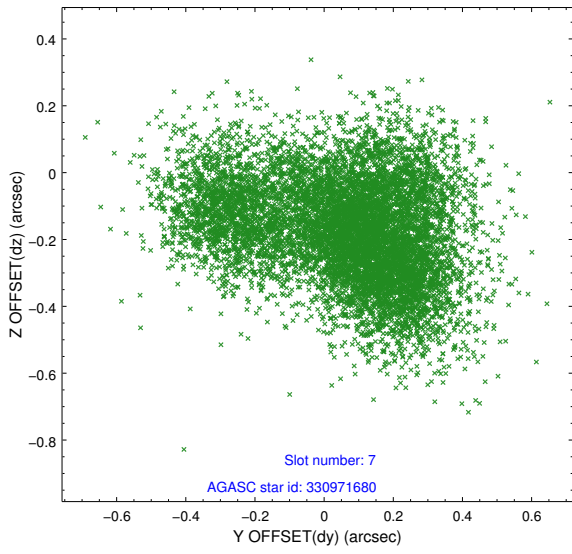
2.4.3 Slot 5



2.4.4 Slot 6

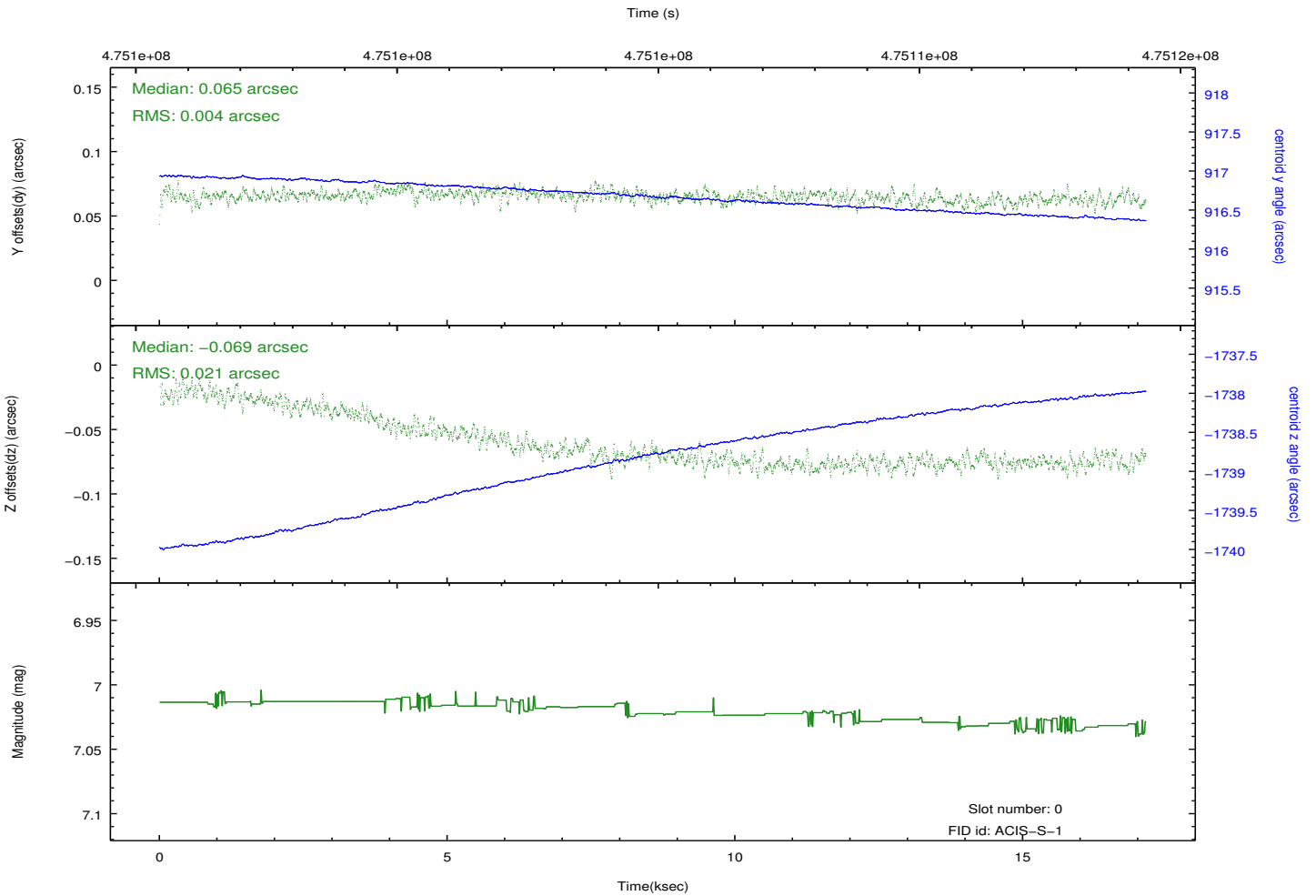
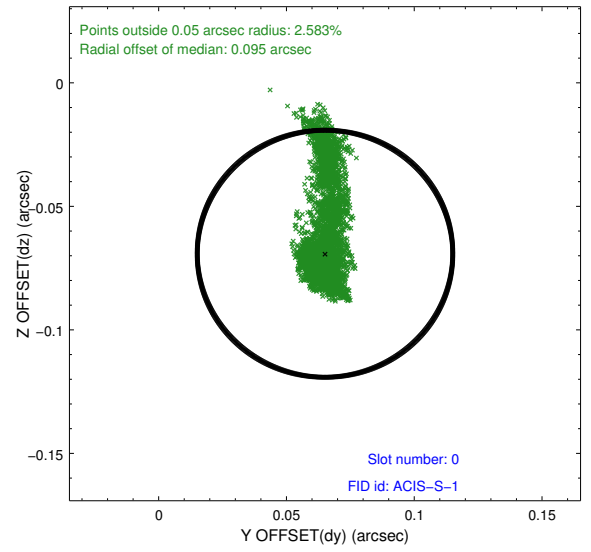
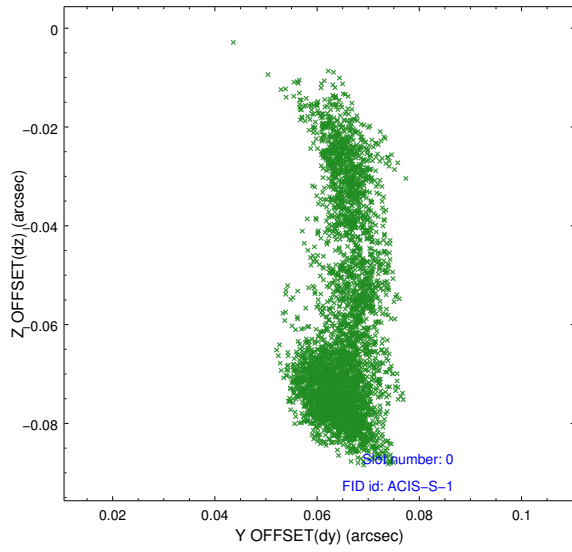


2.4.5 Slot 7

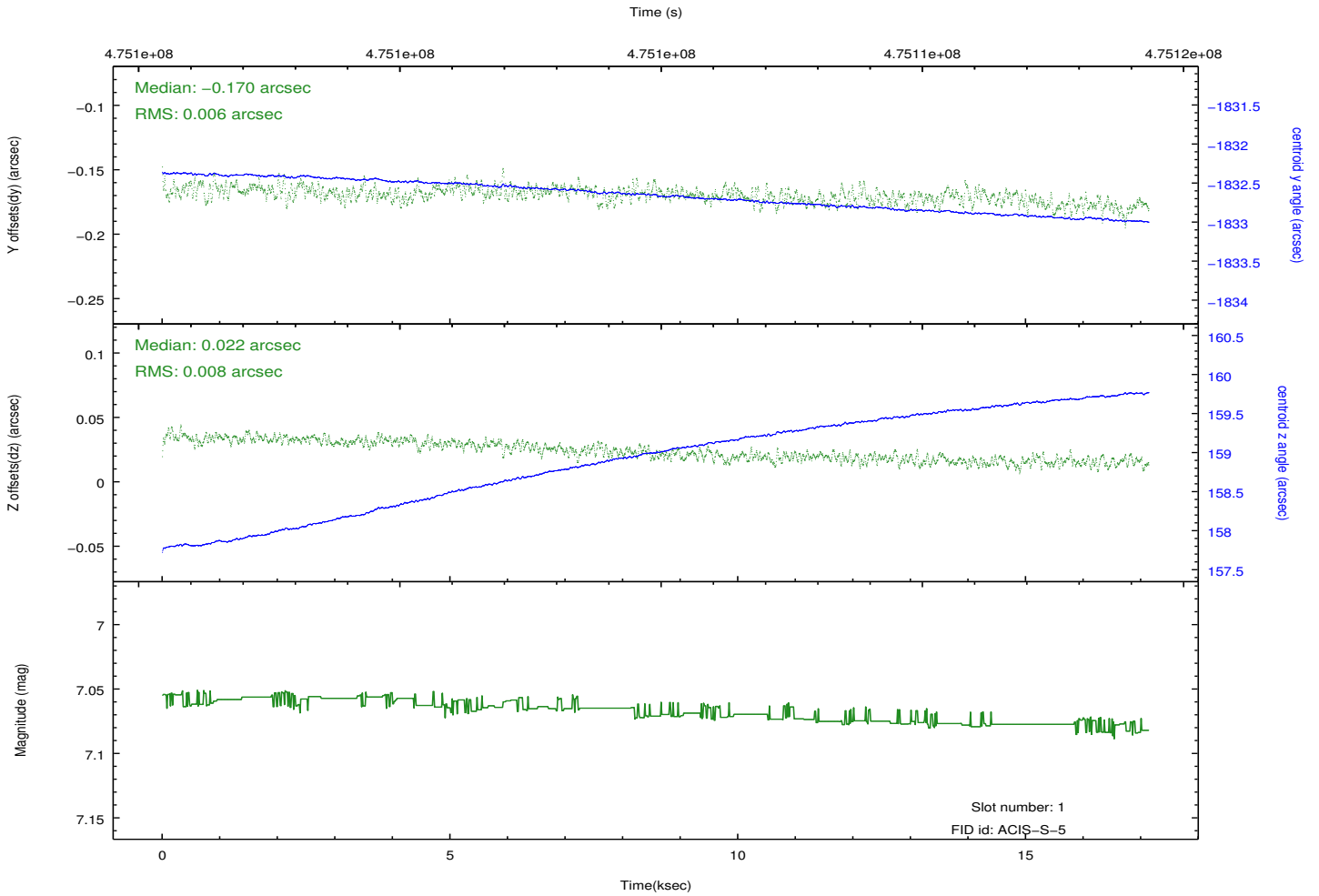
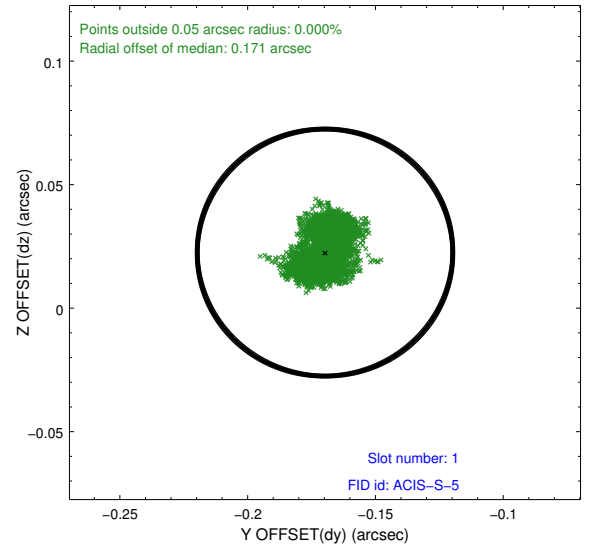
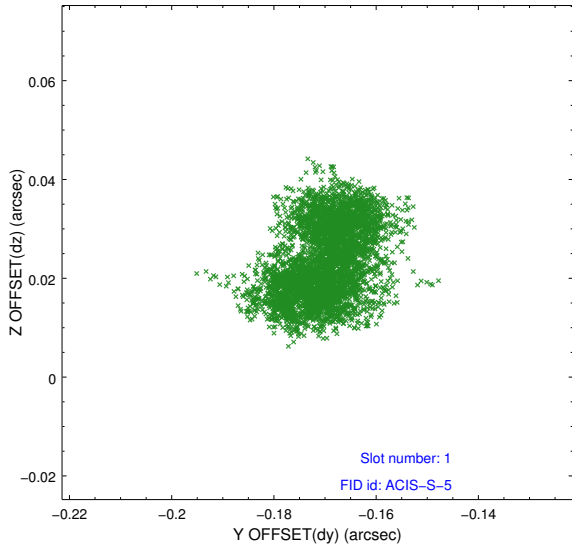


2.5 FID Slots

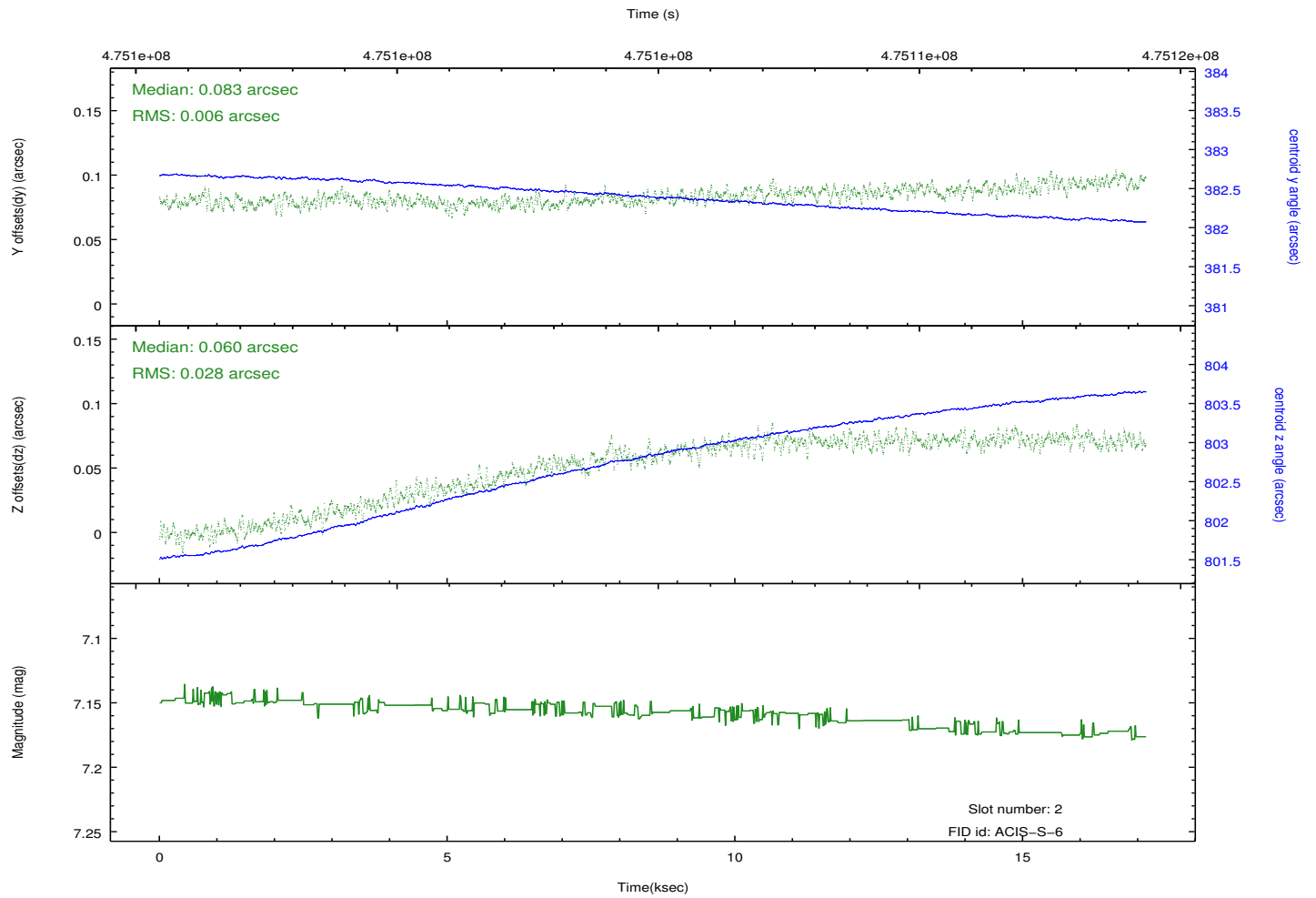
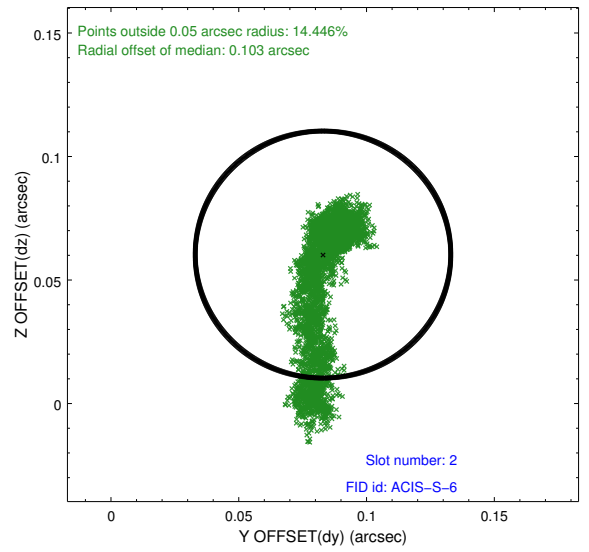
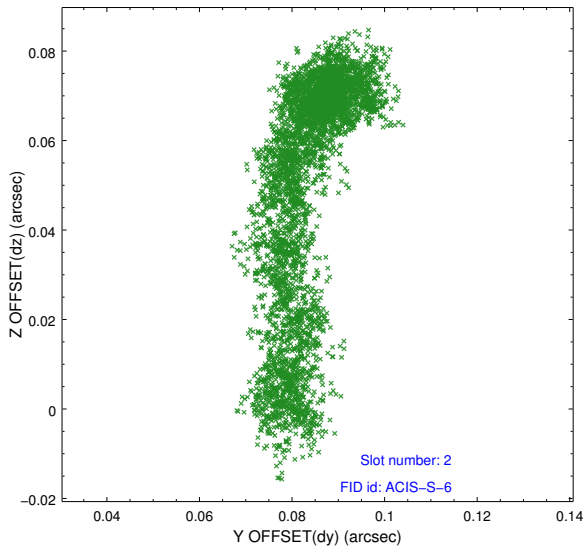
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.069457266688

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.