

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19615 - L2 Version 1
Chandra X-Ray Center

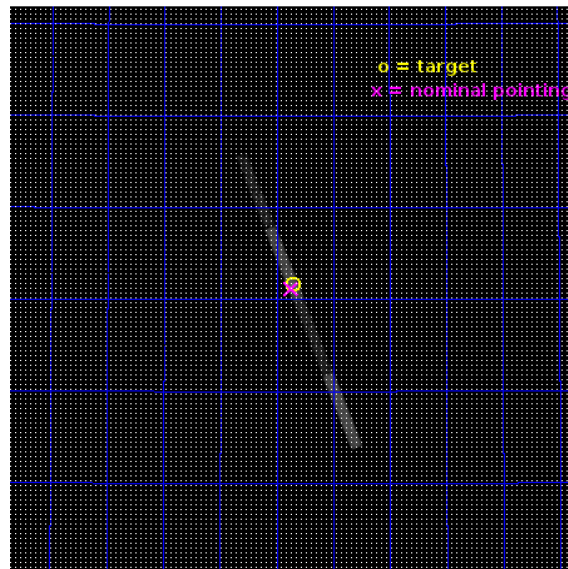
L2 Processing Date : Dec 27 2017

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1 Front

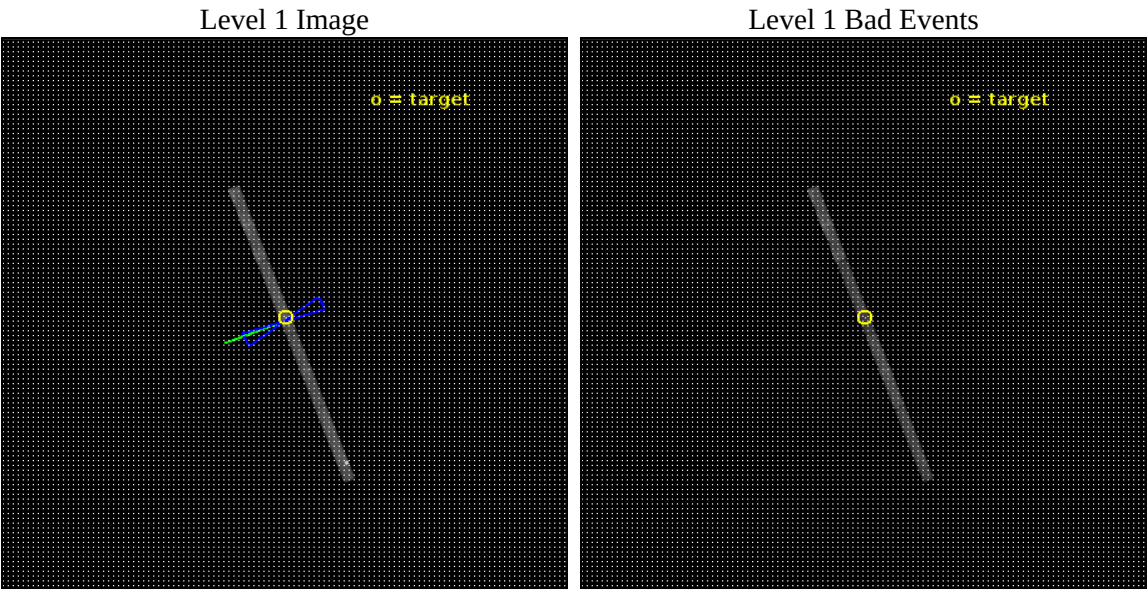
seq_num	703412	Sequence number
obs_id	19615	Observation id
title	The 3C111 Jet: X-ray Variability, Spectrum & Broadband SED	Proposa
observer	Eric Perlman	Principal investigator
object	3C 111	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	64.58875	Observer's specified target RA [deg]
dec_targ	38.026667	Observer's specified target Dec [deg]
ra_nom	64.592385892488	Nominal RA [deg]
dec_nom	38.019545509719	Nominal Dec [deg]
roll_nom	249.15438286594	Nominal Roll [deg]
revision	1	Processing version of data
ontime	24087.000957251	Sum of GTIs [s]
livetime	22544.927889602	Livetime [s]
ontime5	24086.982245564	Sum of GTIs [s]
ontime6	24086.941205502	Sum of GTIs [s]
ontime7	24087.000957251	Sum of GTIs [s]
ontime8	24086.900165558	Sum of GTIs [s]
l2events	69154	Number of level 2 events



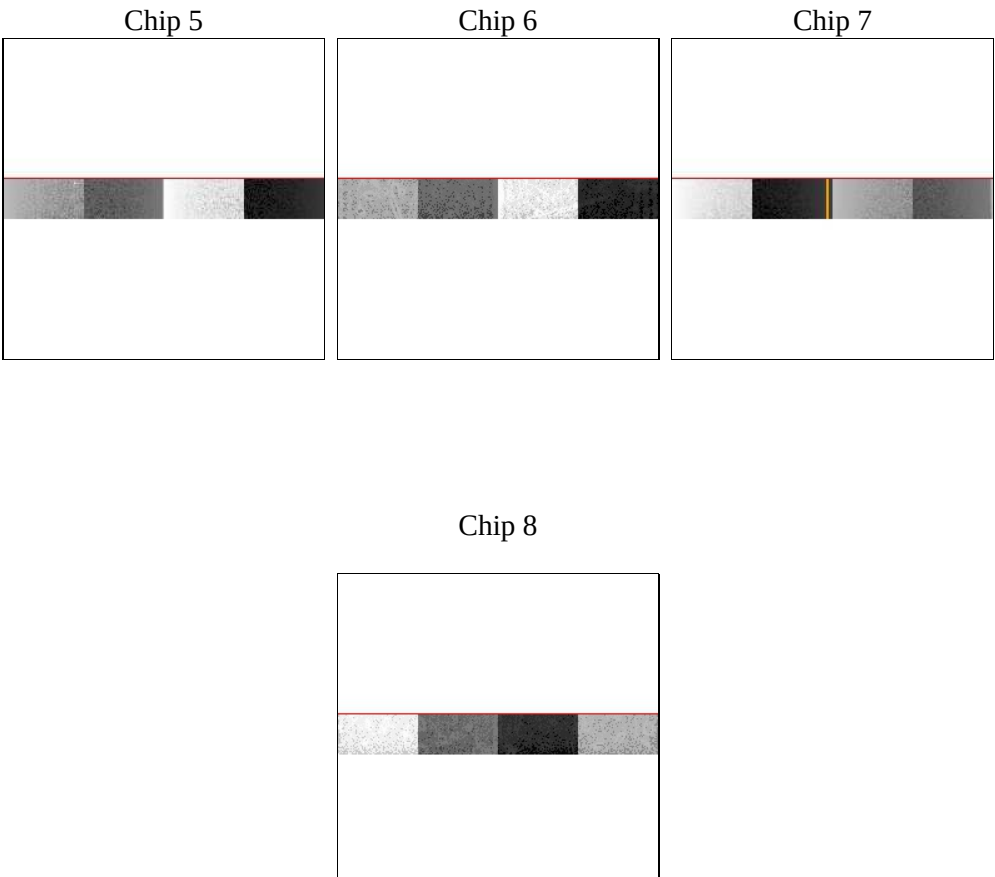
2 OBI

2.1 OBI

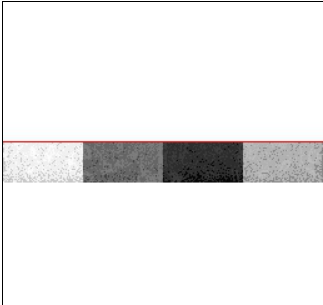
2.1.1 Images



2.1.2 Bias



Chip 8



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	24087.000957251	Sum of GTIs [s]
caldsver	4.7.7	 	ontime5	24086.982245564	Sum of GTIs [s]
date	2017-12-27T04:25:50	Date and time of file creation	ontime6	24086.941205502	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	24087.000957251	Sum of GTIs [s]
			ontime8	24086.900165558	Sum of GTIs [s]
			l1events	220227	Number of level 1 events

2.1.4 Events

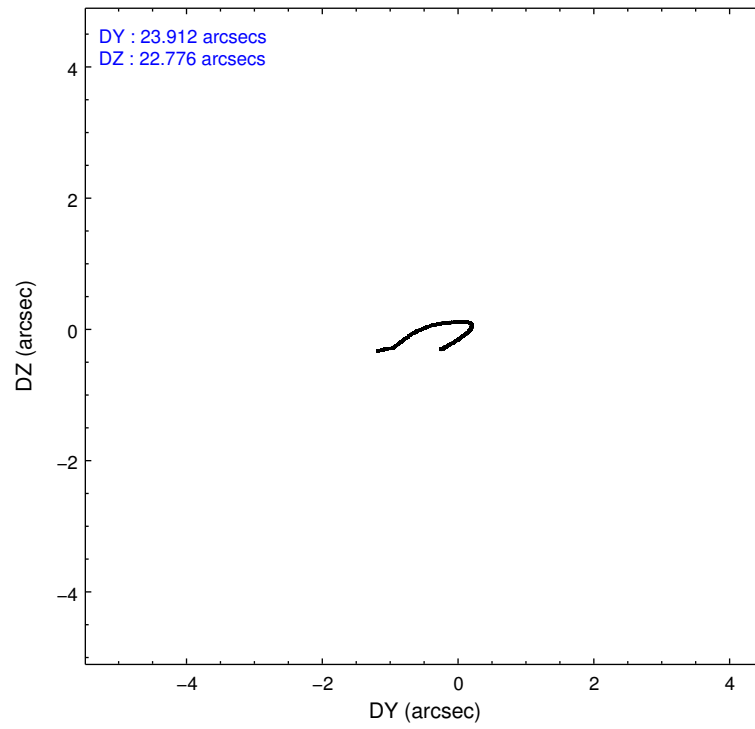
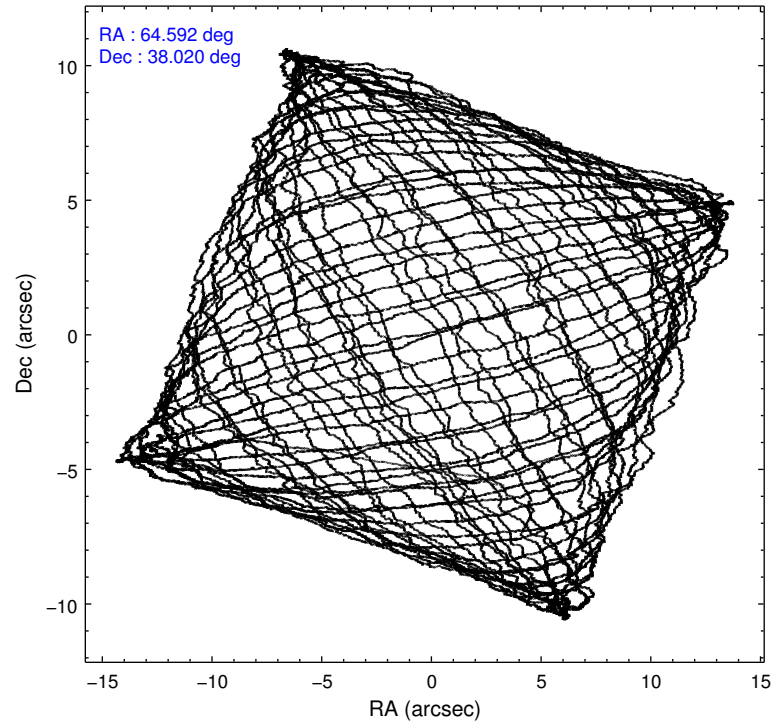
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	74393	29473	75466	40895
rejected events	19416	25920	28807	31495
rejected %	26%	87%	38%	77%

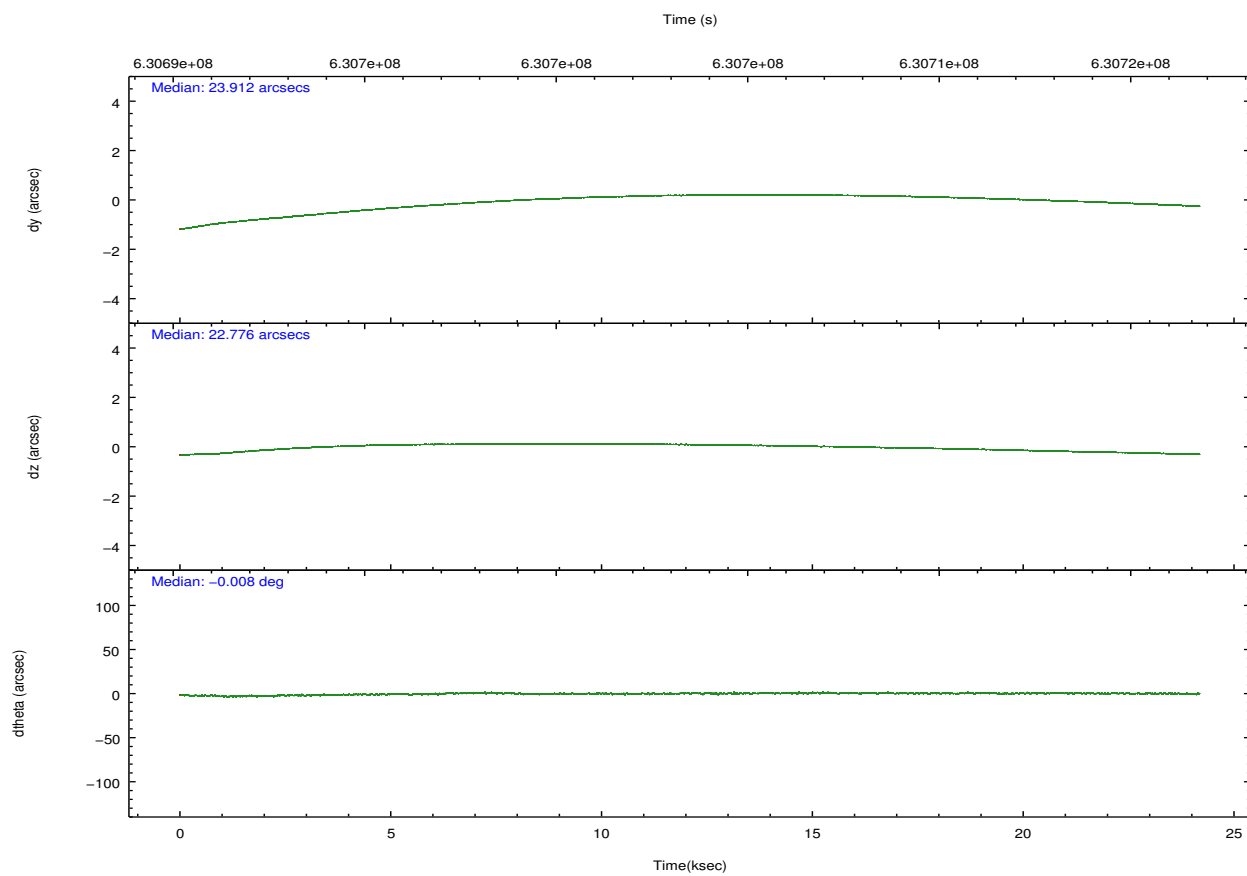
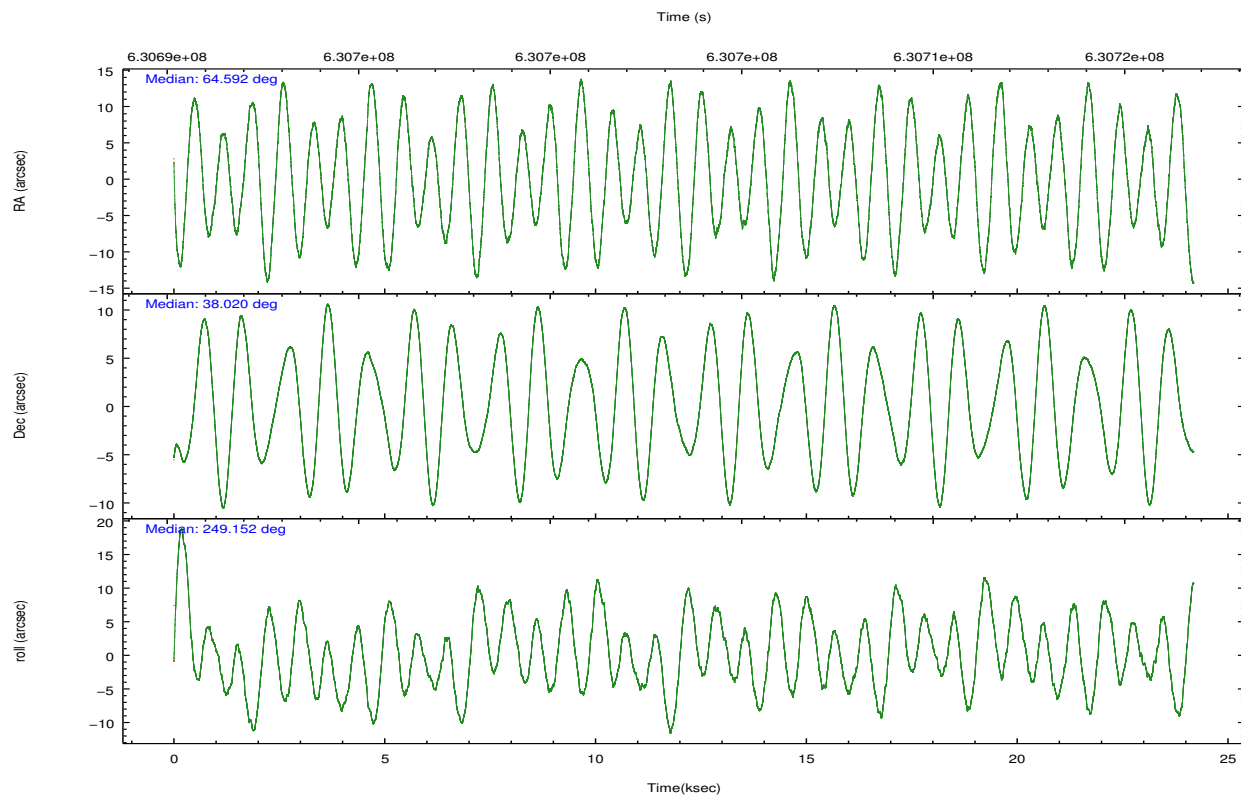
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	21473	1040	6615	2196
	28%	3%	8%	5%
grade 1 events	164	3	714	23
	0%	0%	0%	0%
grade 2 events	21105	633	9990	1994
	28%	2%	13%	4%
grade 3 events	1039	625	4766	1079
	1%	2%	6%	2%
grade 4 events	1545	586	4710	1077
	2%	1%	6%	2%
grade 5 events	3072	1085	6766	1506
	4%	3%	8%	3%
grade 6 events	9819	669	20582	3054
	13%	2%	27%	7%
grade 7 events	16176	24832	21323	29966
	21%	84%	28%	73%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	64.586399	64.59238589248751	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	38.046589	38.01954550971883	Subarray start row	449	449
[deg] Pointing Roll	249.001450	249.154382865937	Subarray row count	128	128
[deg] Roll angle	63.500000	63.500000	Alternating exposures requested	N	N
[deg] Roll tolerance	10.000000	10.000000	[s] Primary exposure time	0.000000	0.6
Roll constraint allows 180D rotation	Y	Y			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	630691577.184000	630690469.97489			
Observation start date	2017-12-26T16:05:08	2017-12-26T15:47:49			
[s] Observation end time (MET)	630715577.184000	630717021.57646			
Observation end date	2017-12-26T22:45:08	2017-12-26T23:10:21			
Read mode	TIMED	TIMED			

2.3 Aspect



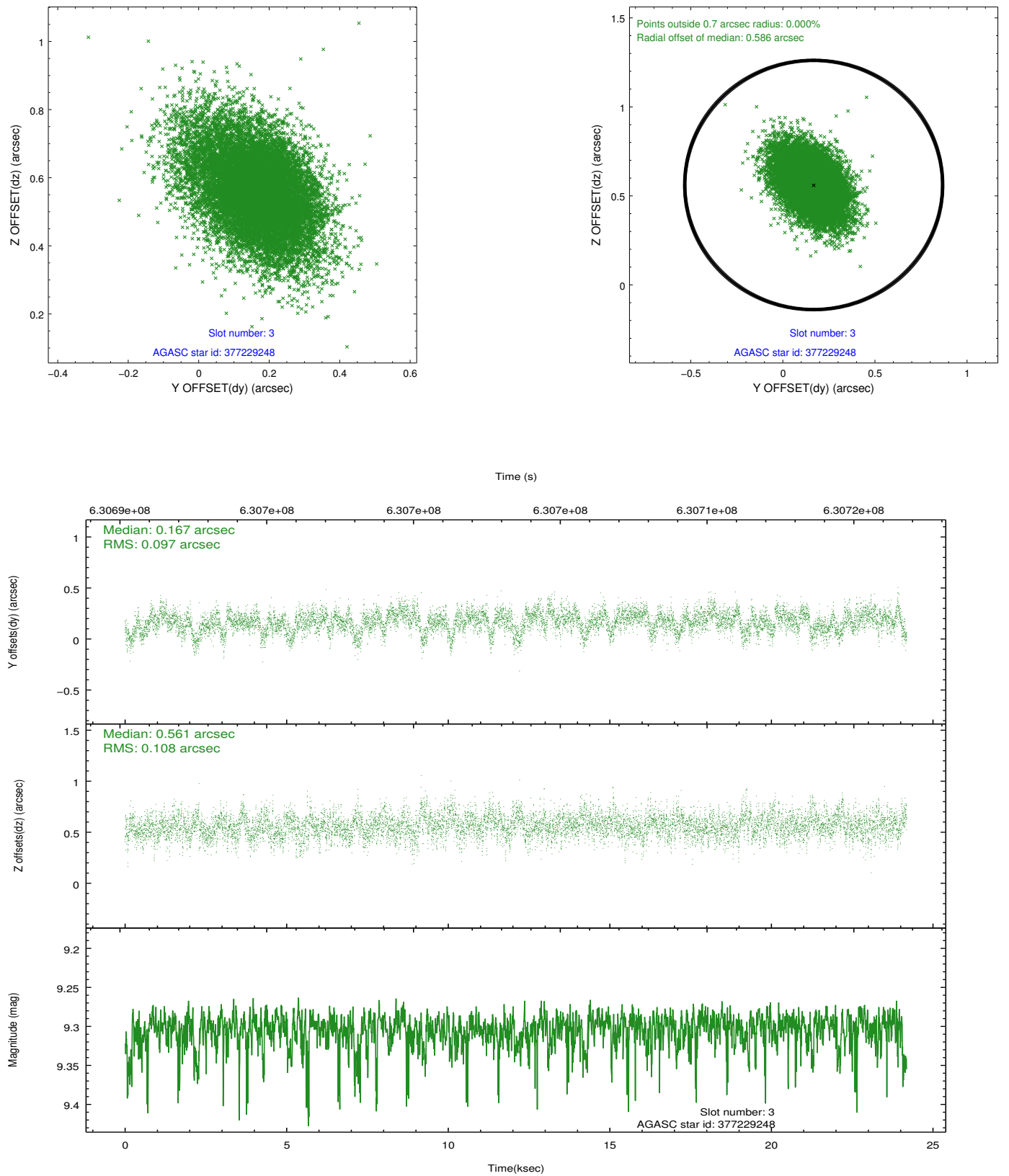


Slot Statistics

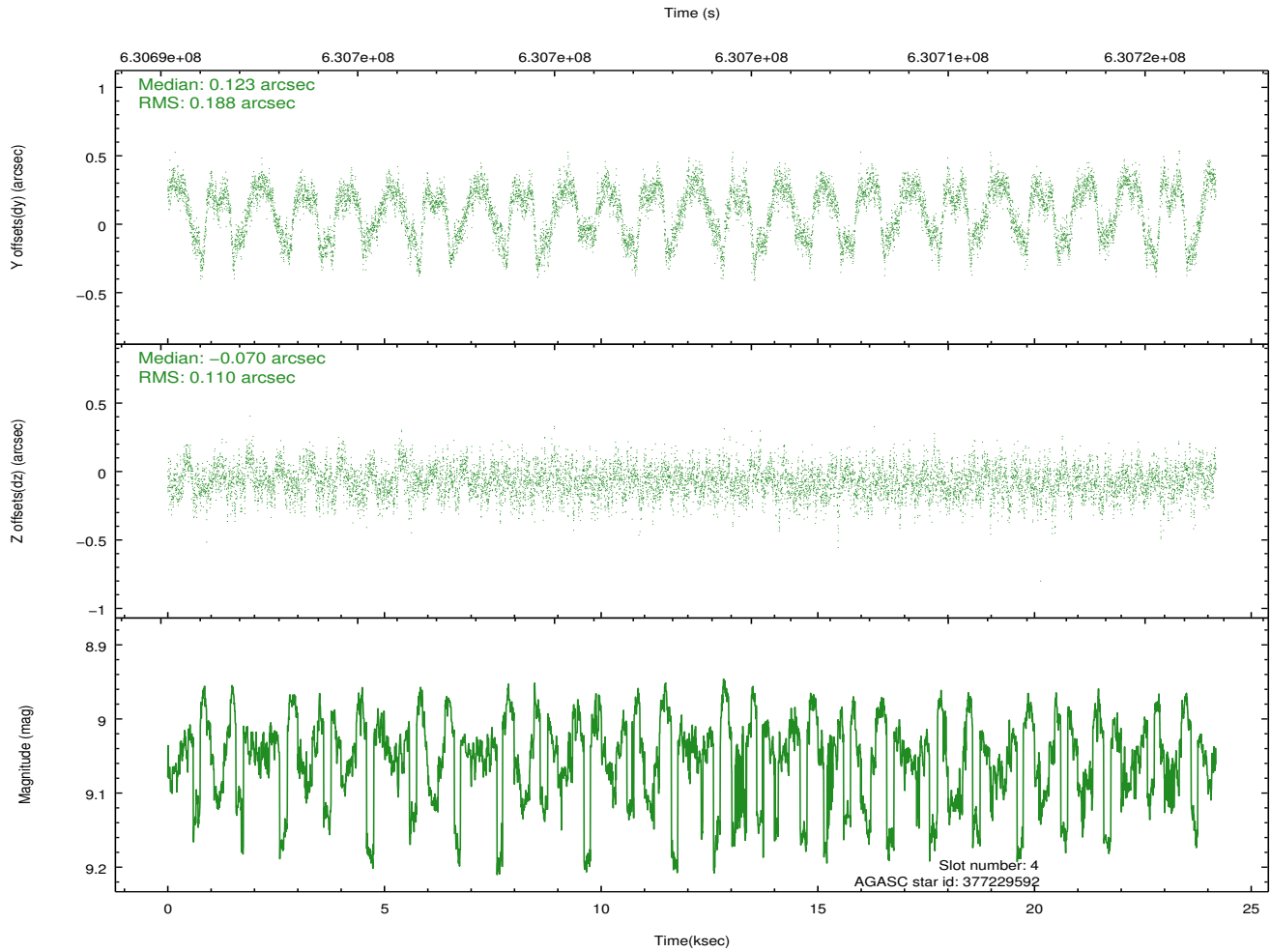
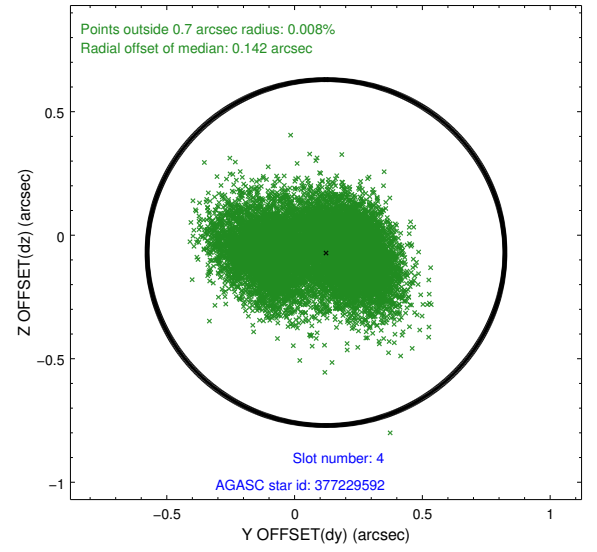
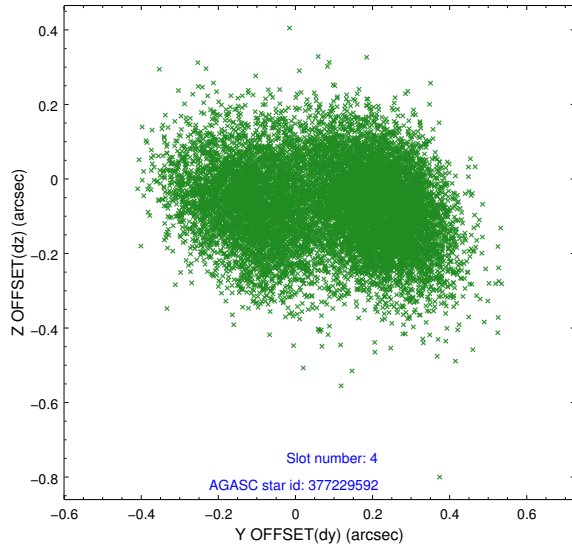
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.12	5900	0.124	-0.029	0.020	0.032	0.000000	0.000000	919.24	-1739.94
1	FID		ACIS-S-5	7.14	5900	-0.369	0.039	0.016	0.025	0.000000	0.000000	-1830.26	157.42
2	FID		ACIS-S-6	7.30	5899	0.228	0.001	0.010	0.027	0.000000	0.000000	384.64	801.59
3	GUIDE	used	377229248	9.30	11784	0.167	0.561	0.150	0.260	64.421964	38.589680	-1659.22	-1132.05
4	GUIDE	used	377229592	9.05	11790	0.123	-0.070	0.233	0.375	64.771333	38.350817	-1209.24	94.53
5	GUIDE	used	377232992	9.01	11787	0.240	0.108	0.147	0.245	63.776678	37.815935	1591.76	-1855.51
6	GUIDE	used	377363032	9.34	11780	0.151	-0.017	0.210	0.336	65.027918	38.365214	-1519.54	751.39
7	GUIDE	used	312349048	6.36	11795	-0.647	-0.579	0.124	0.215	65.050136	37.200711	2363.06	2331.76

2.4 Star Slots

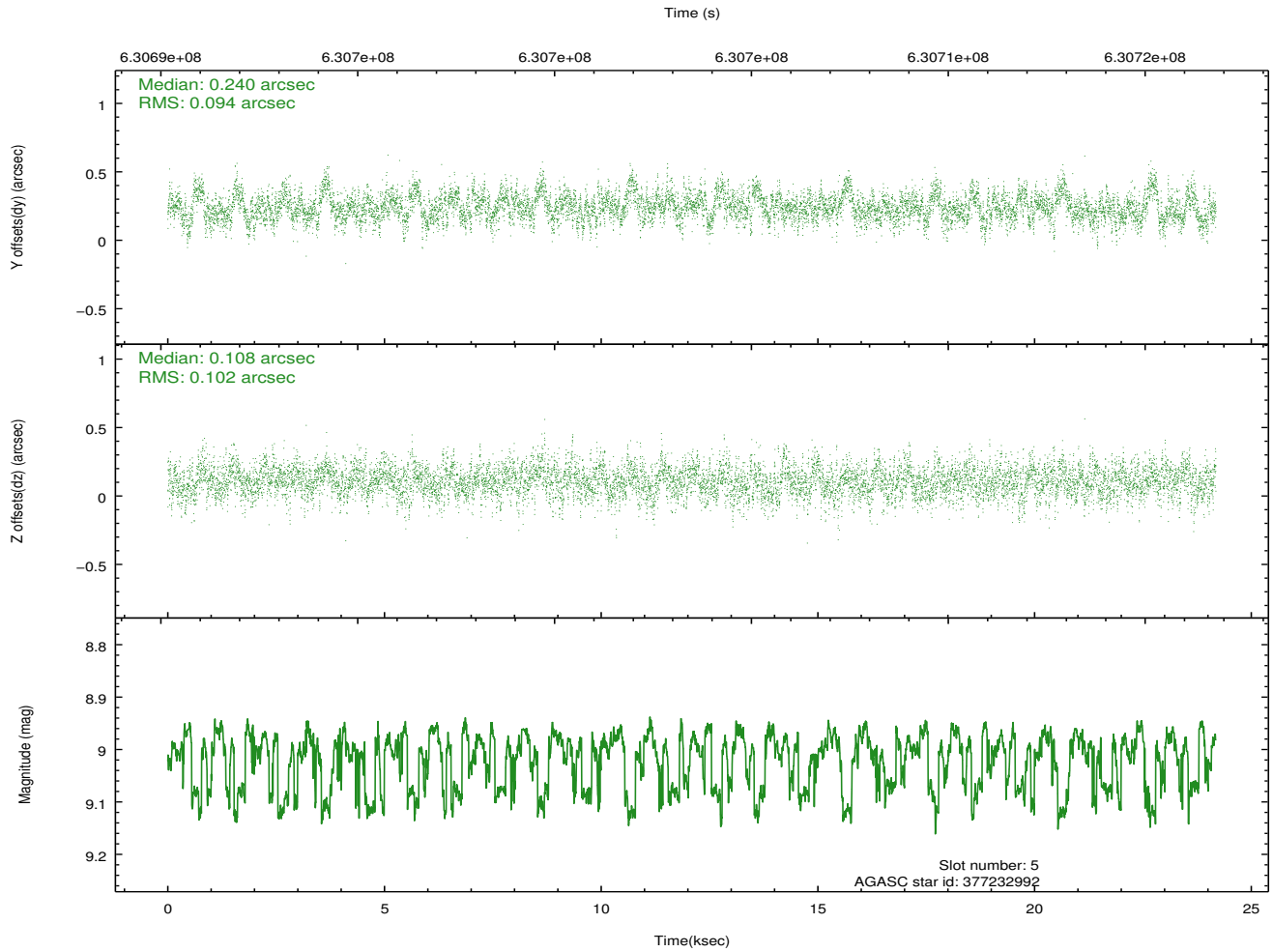
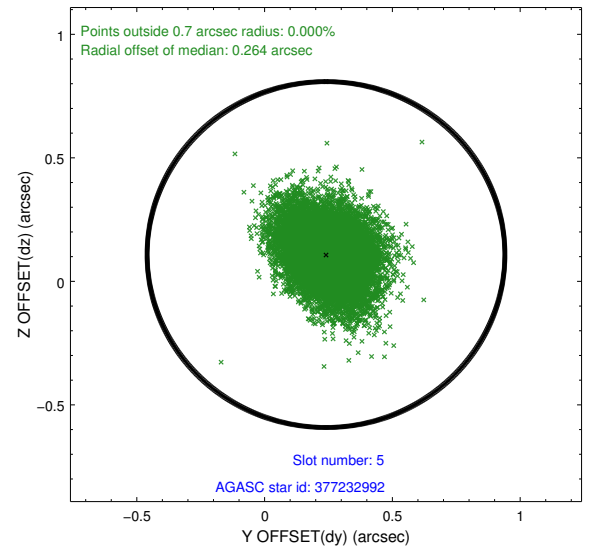
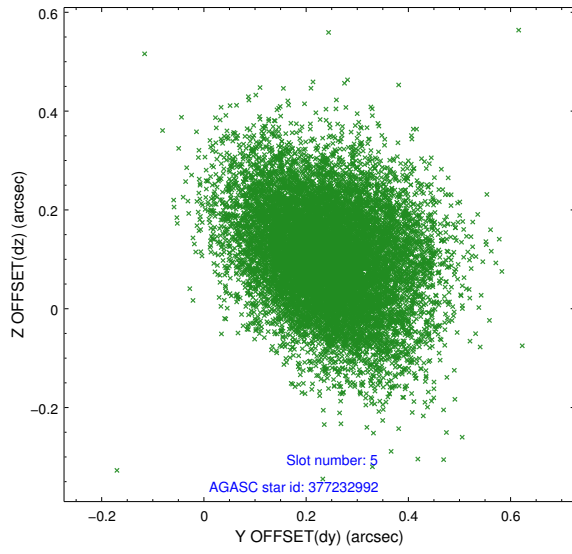
2.4.1 Slot 3



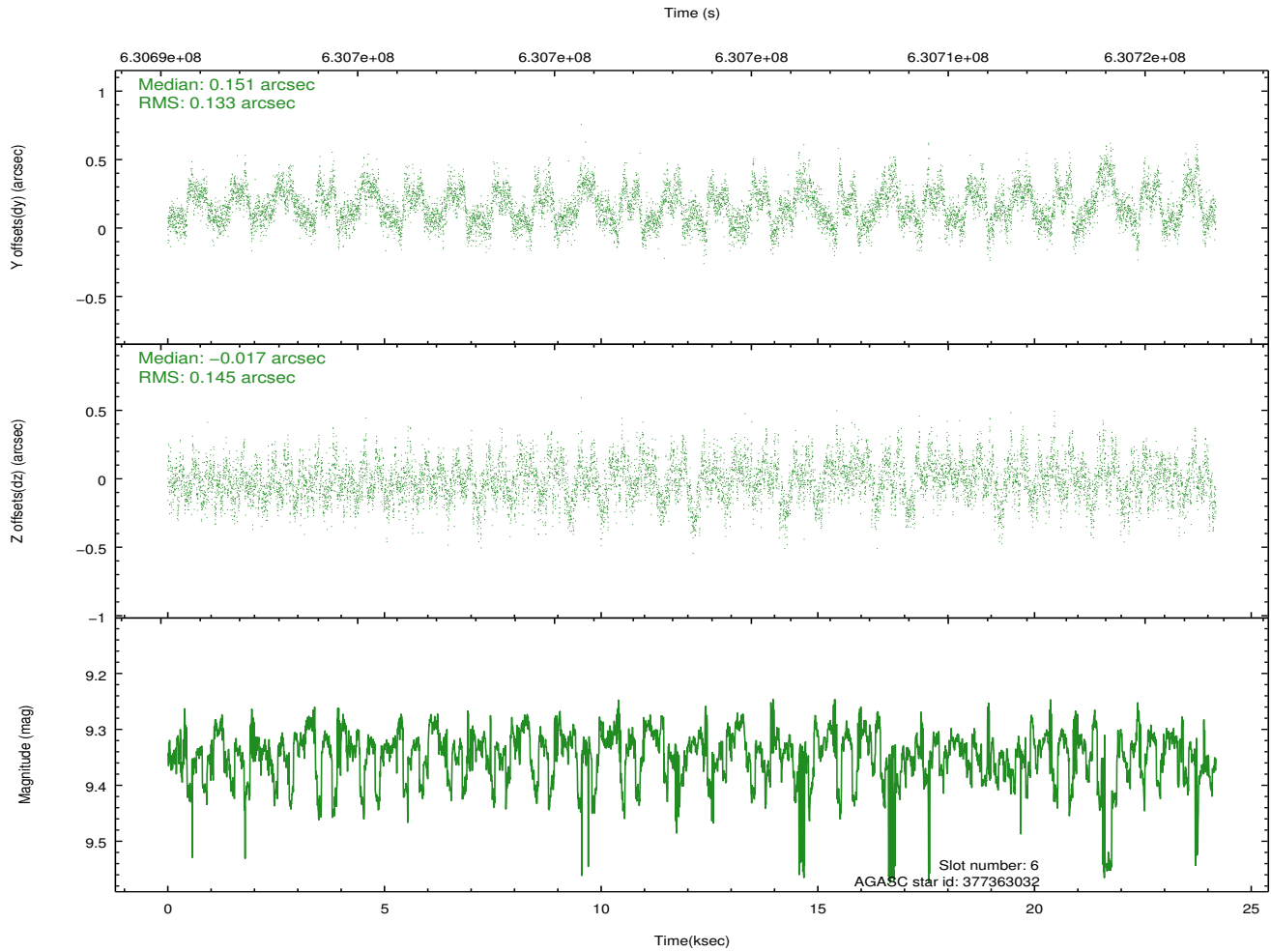
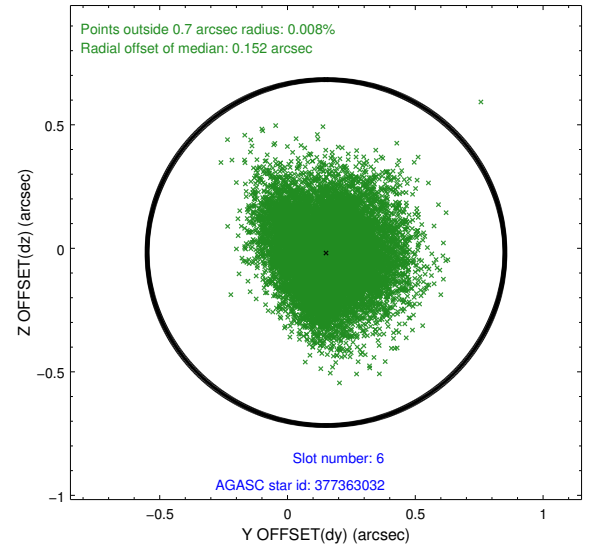
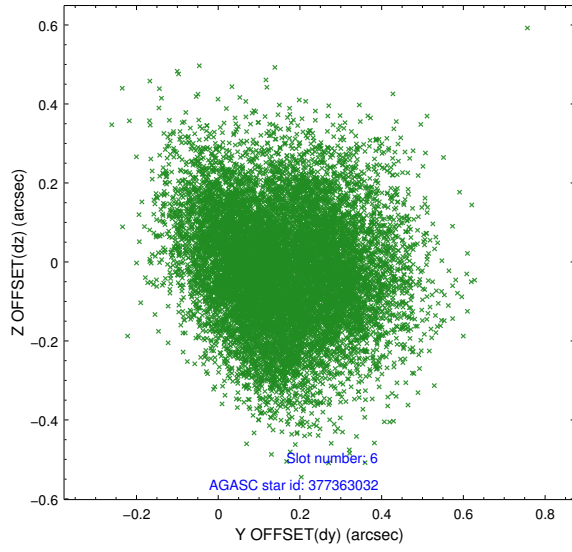
2.4.2 Slot 4



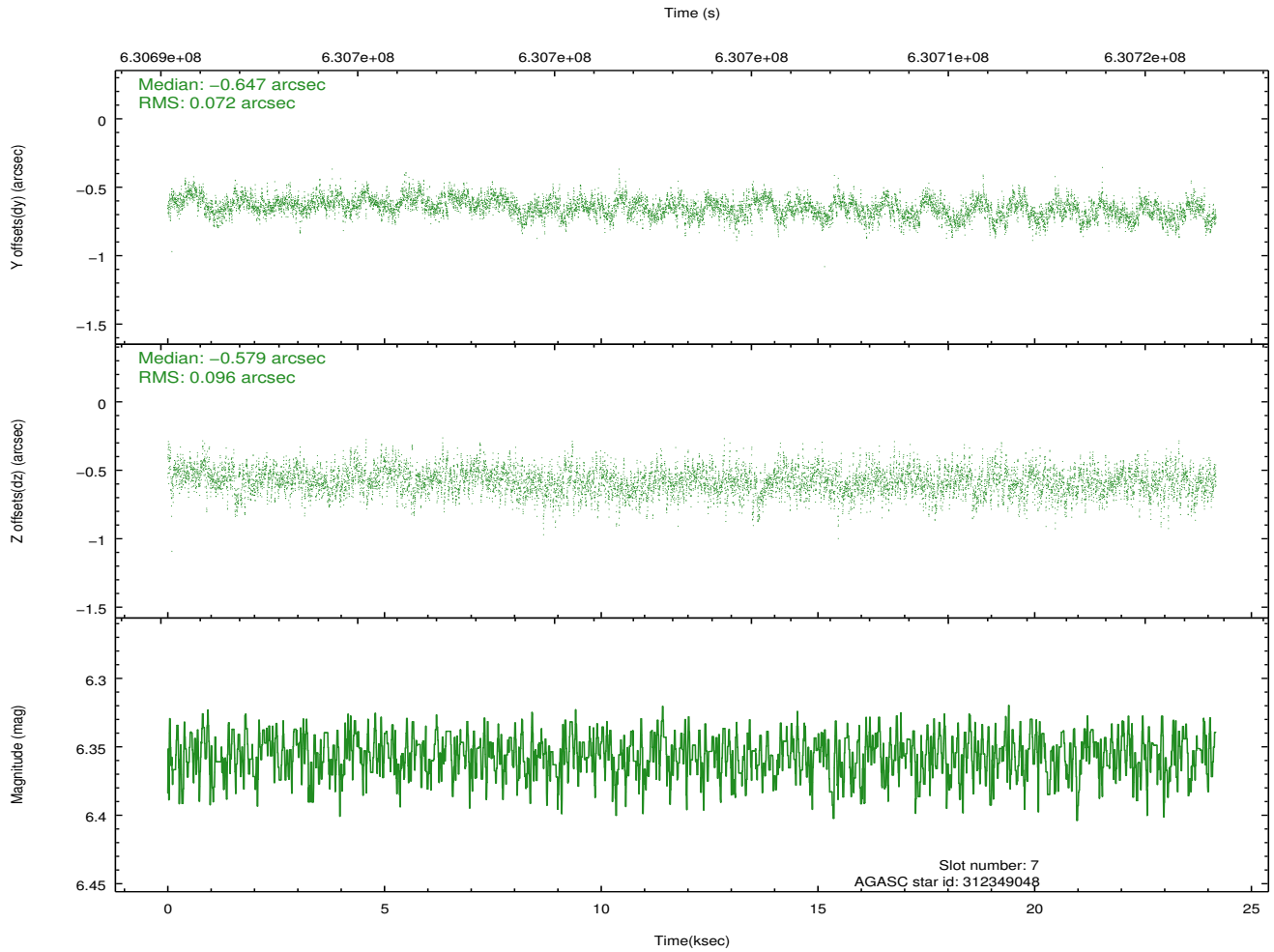
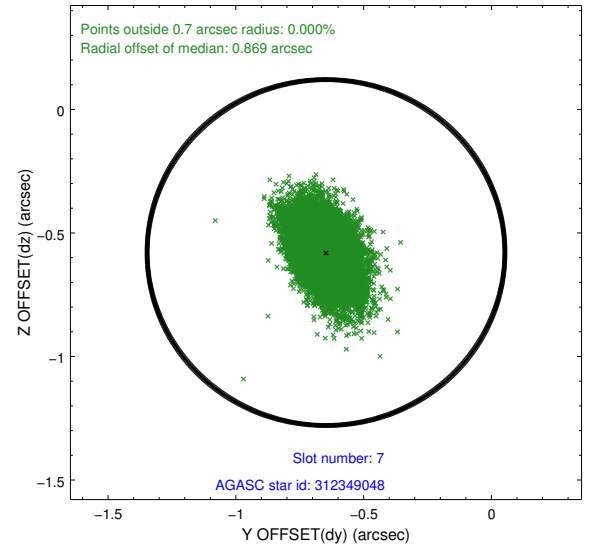
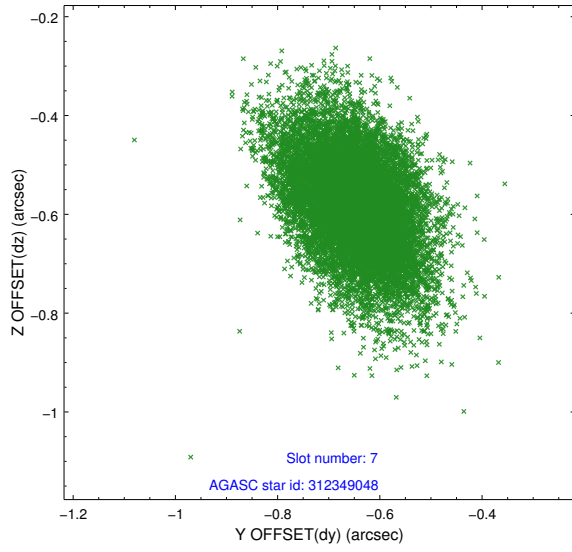
2.4.3 Slot 5



2.4.4 Slot 6

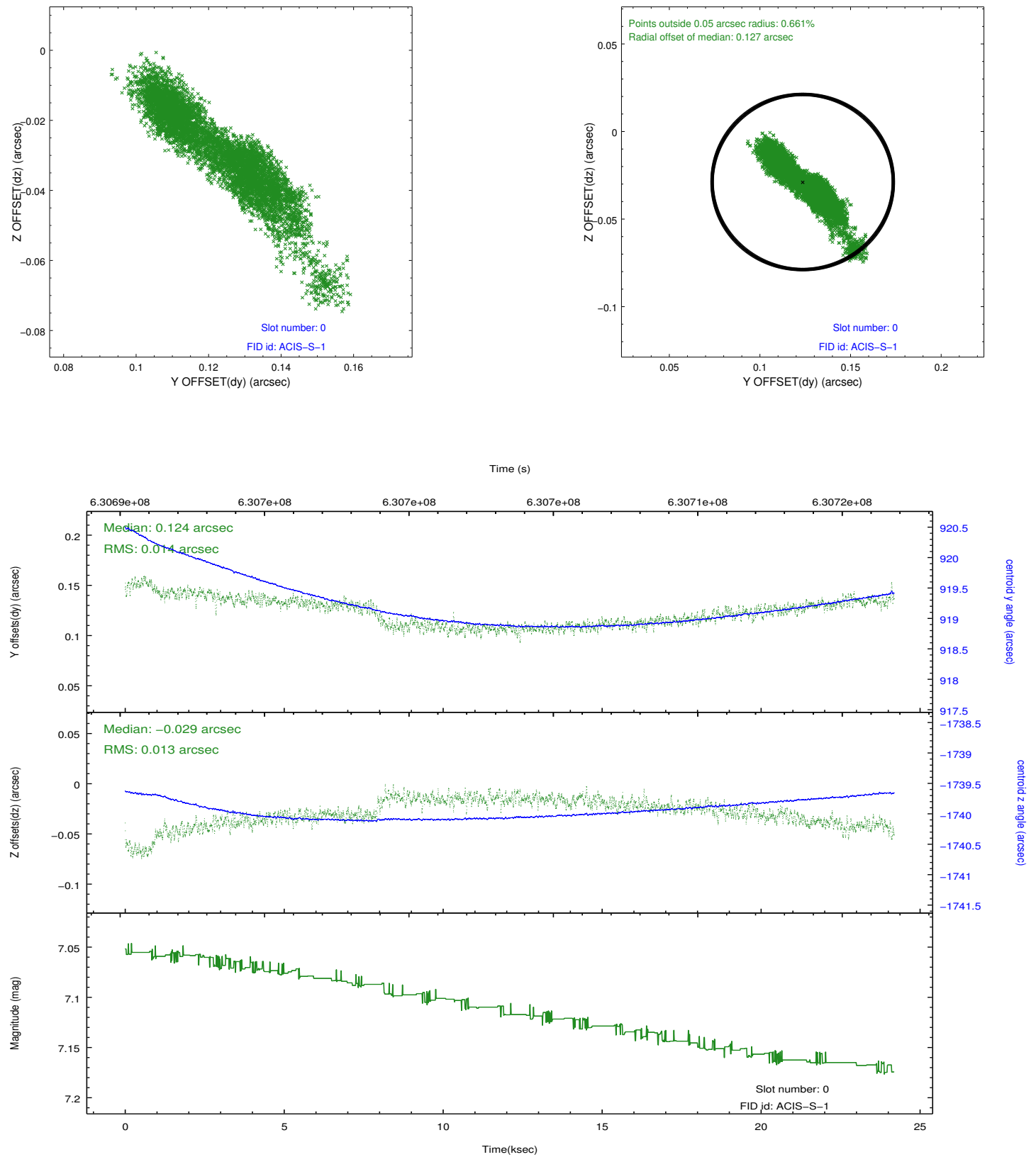


2.4.5 Slot 7

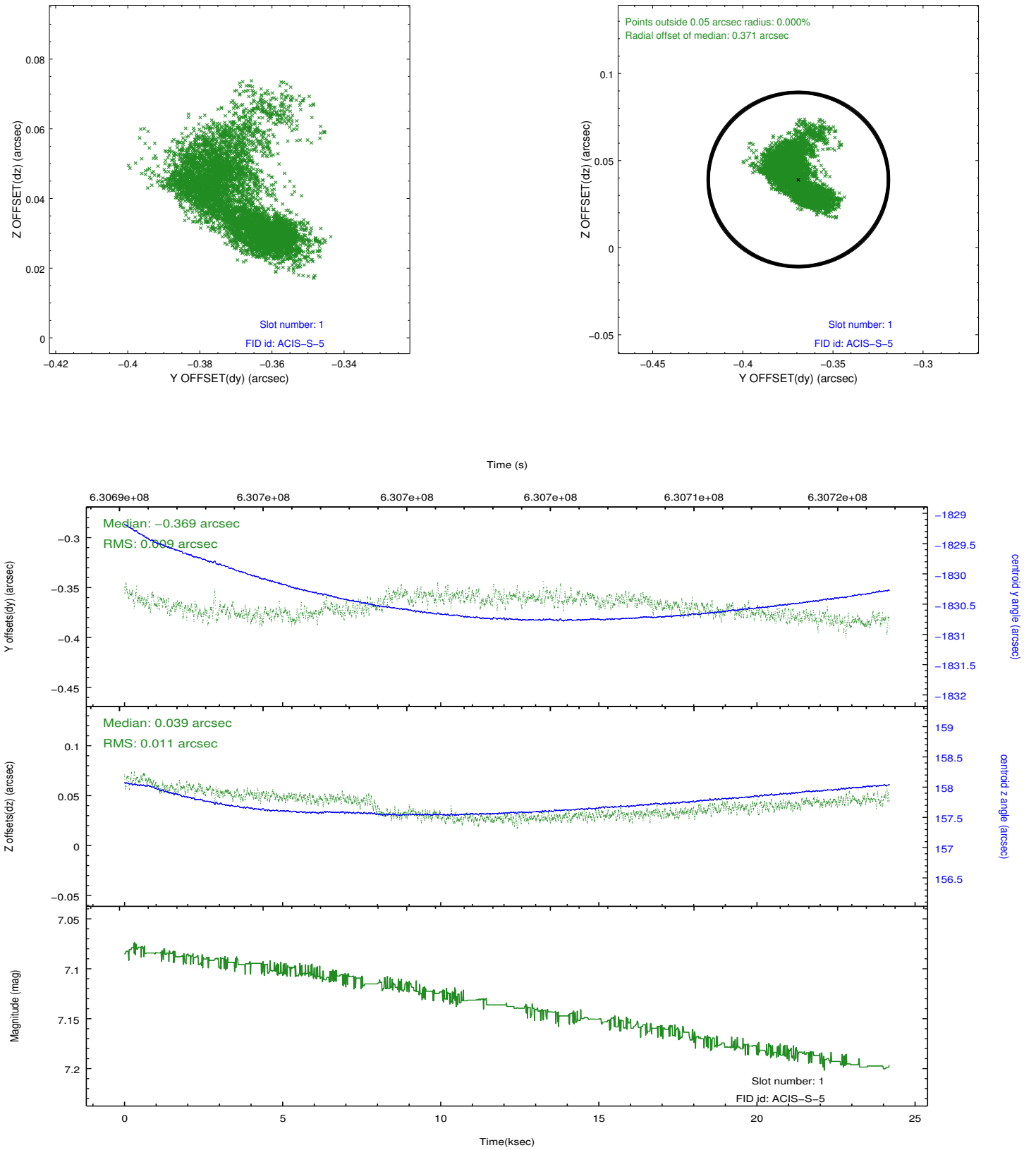


2.5 FID Slots

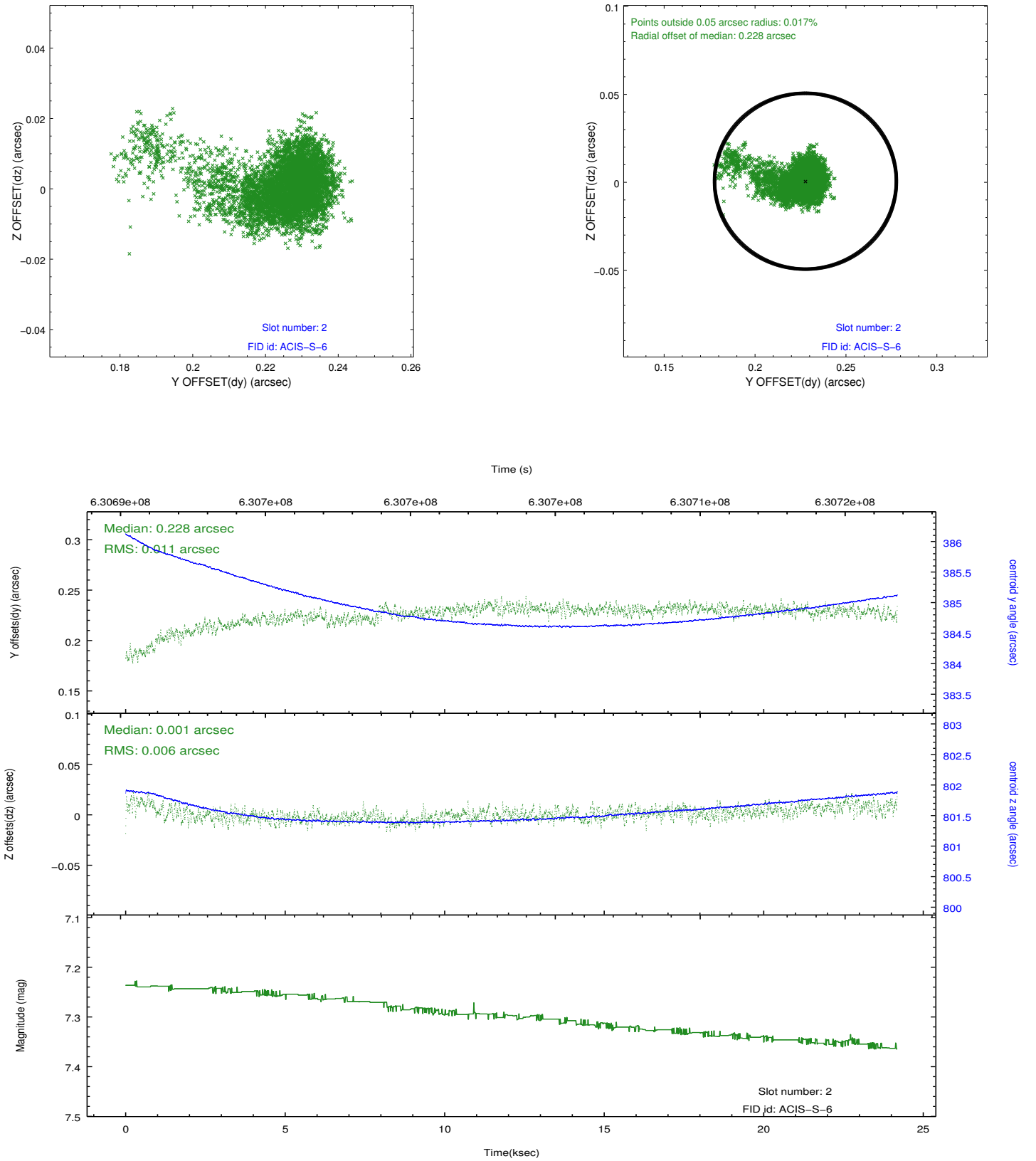
2.5.1 Slot 0



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)	2017.12.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.087000957251

A.2 Comments

Joint Proposal: HST+NuSTAR. Roll constraint met.