

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 19616 - L2 Version 1
Chandra X-Ray Center

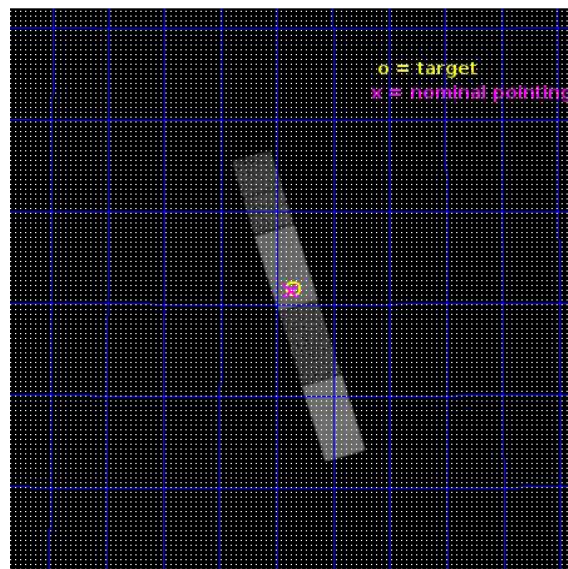
L2 Processing Date : Jan 3 2019

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1 Front

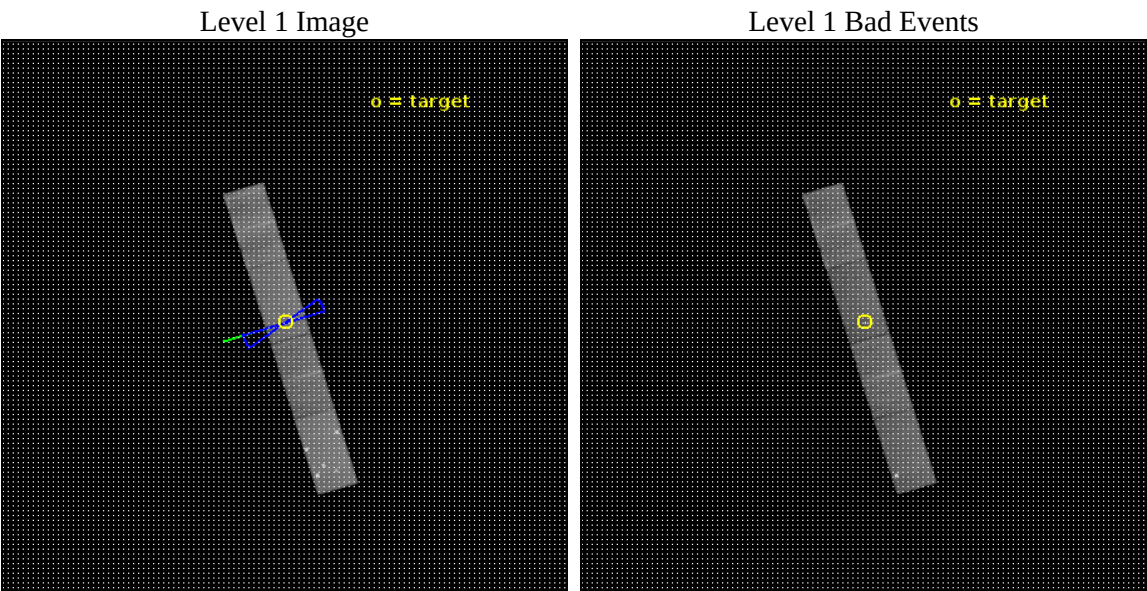
seq_num	703413	Sequence number
obs_id	19616	Observation id
title	The 3C111 Jet: X-ray Variability, Spectrum & Broadband SED	Proposa
observer	Eric Perlman	Principal investigator
object	3C 111	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	64.58875	Observer's specified target RA [deg]
dec_targ	38.026667	Observer's specified target Dec [deg]
ra_nom	64.592227649187	Nominal RA [deg]
dec_nom	38.024322729289	Nominal Dec [deg]
roll_nom	253.15448384088	Nominal Roll [deg]
revision	1	Processing version of data
ontime	24068.160959959	Sum of GTIs [s]
livetime	23500.823434229	Livetime [s]
ontime5	24068.119920015	Sum of GTIs [s]
ontime6	24068.078879952	Sum of GTIs [s]
ontime7	24068.160959959	Sum of GTIs [s]
ontime8	24068.037840009	Sum of GTIs [s]
l2events	159244	Number of level 2 events



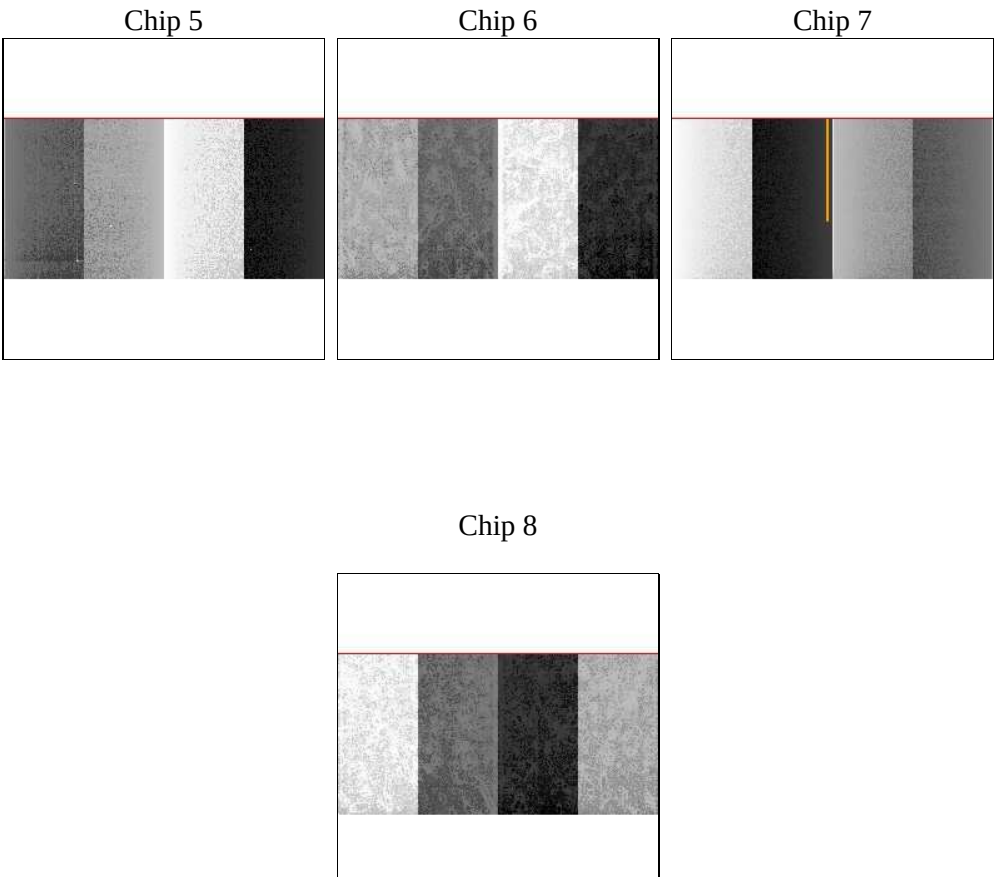
2 OBI

2.1 OBI

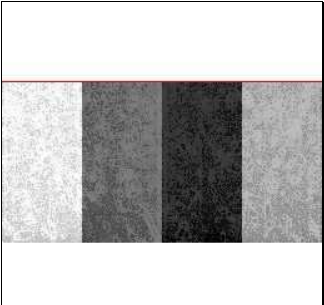
2.1.1 Images



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	10.7.1	Processing system revision	ontime	24068.160959959	Sum of GTIs [s]
caldsver	4.8.2	 	ontime5	24068.119920015	Sum of GTIs [s]
date	2019-01-03T22:45:04	Date and time of file creation	ontime6	24068.078879952	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	24068.160959959	Sum of GTIs [s]
			ontime8	24068.037840009	Sum of GTIs [s]
			l1events	565895	Number of level 1 events

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	195751	99445	143935	126764
rejected events	86949	87872	74174	93335
rejected %	44%	88%	51%	73%

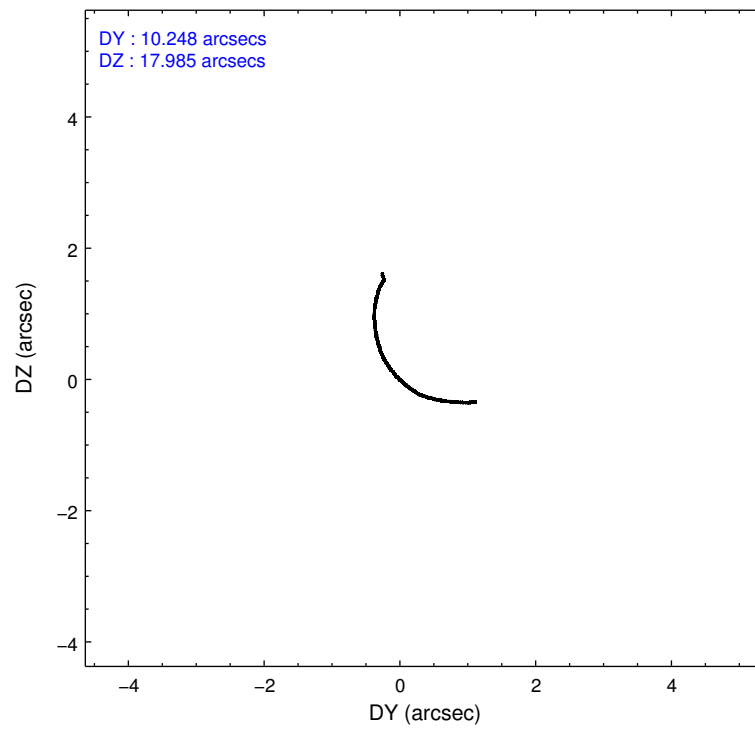
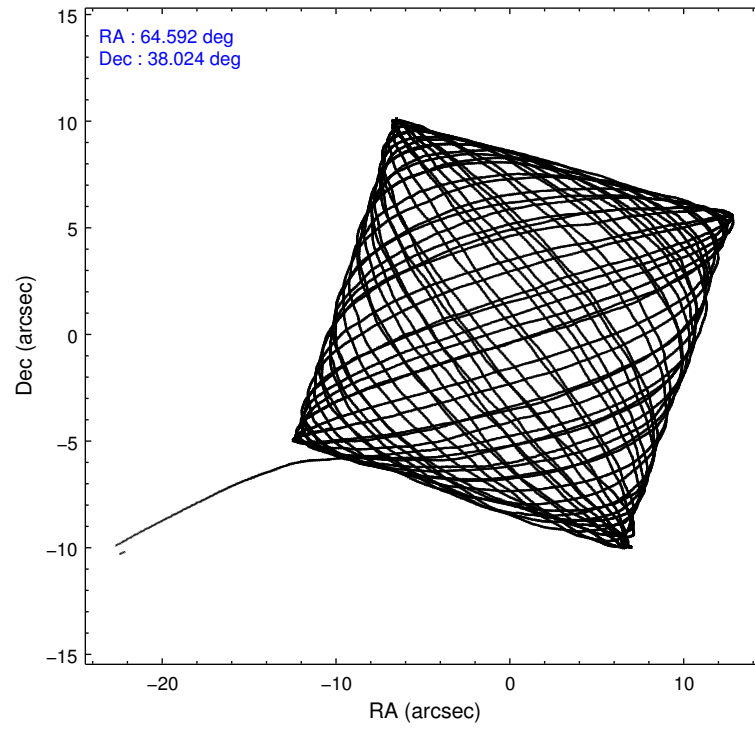
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	35010	3788	7282	9325
	17%	3%	5%	7%
grade 1 events	466	43	495	60
	0%	0%	0%	0%
grade 2 events	27805	2451	14740	8000
	14%	2%	10%	6%
grade 3 events	4135	1360	6444	3558
	2%	1%	4%	2%
grade 4 events	3016	1352	6379	3347
	1%	1%	4%	2%
grade 5 events	13012	4525	14525	6477
	6%	4%	10%	5%
grade 6 events	38853	2623	34926	9221
	19%	2%	24%	7%
grade 7 events	73454	83303	59144	86776
	37%	83%	41%	68%

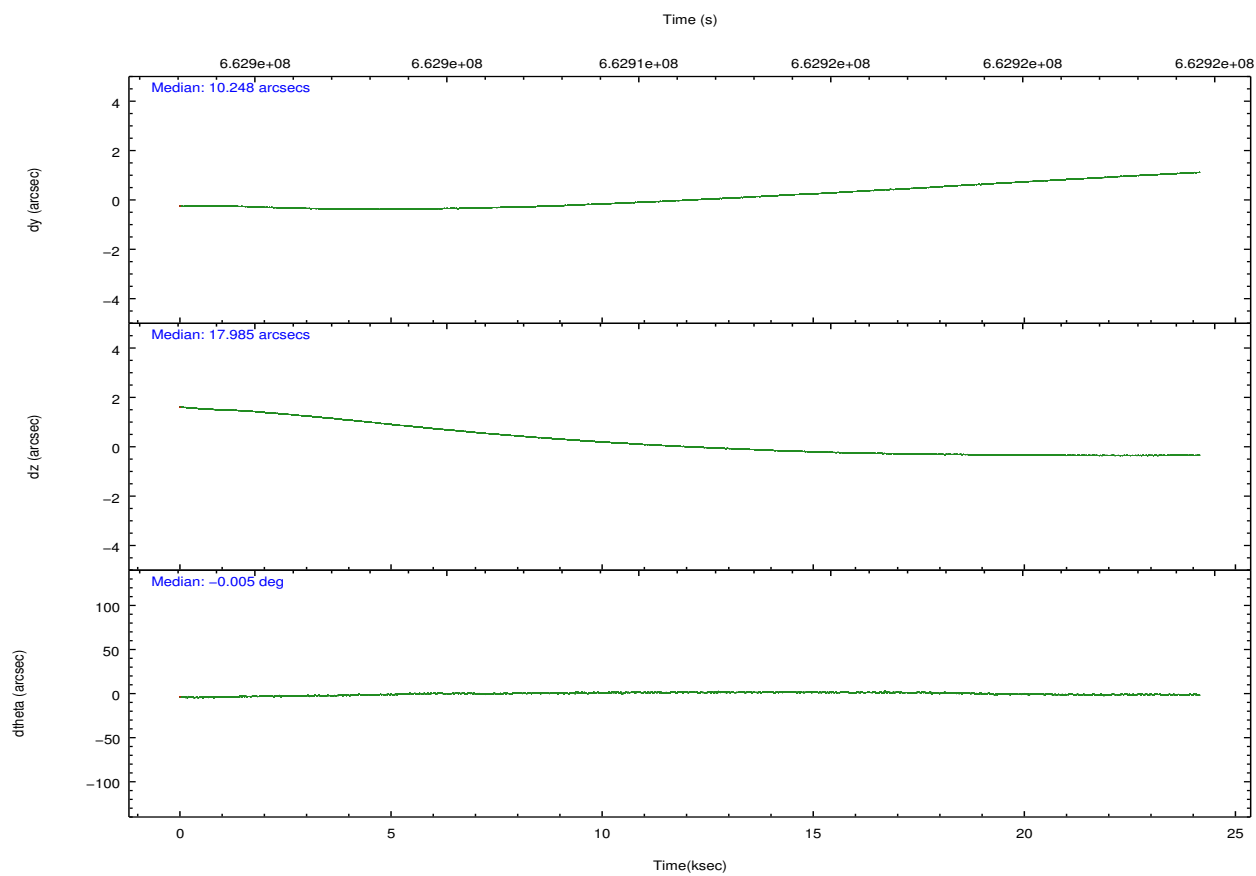
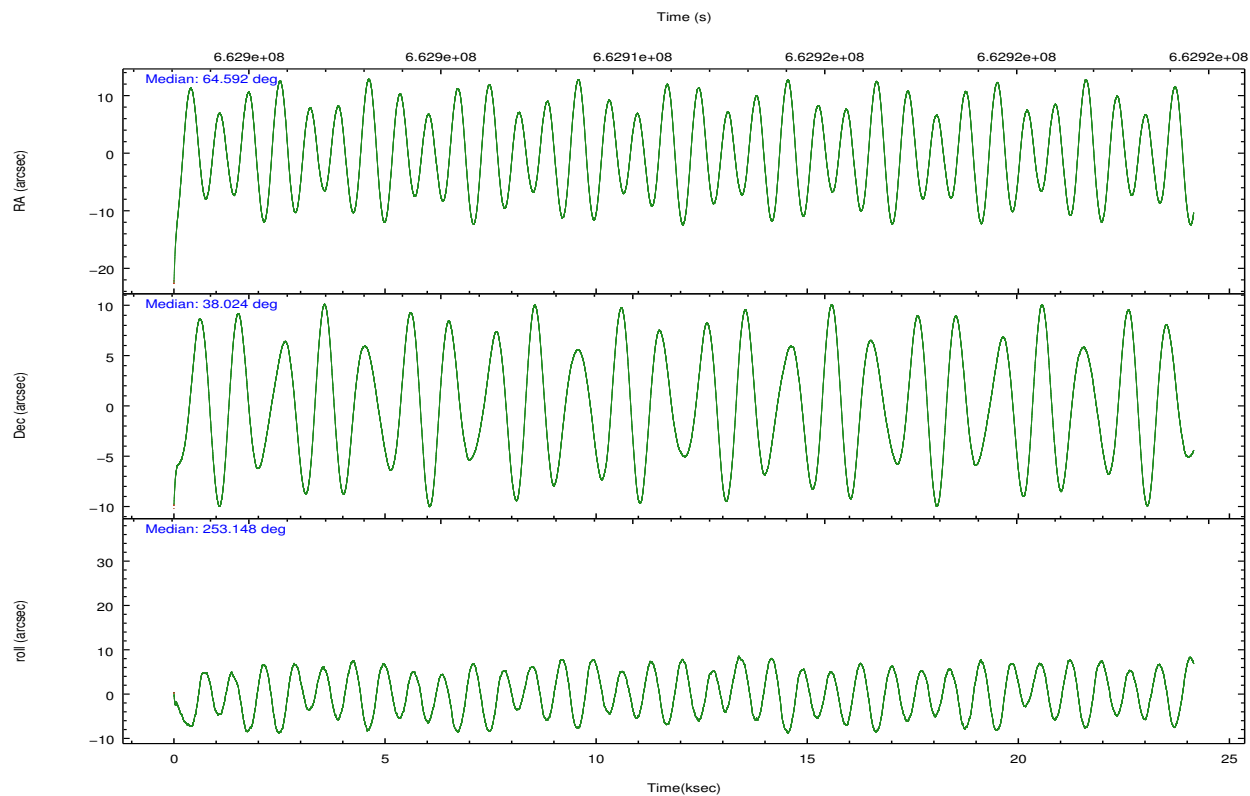
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	64.583860	64.59222764918678
[deg] Pointing Dec	38.050968	38.0243227292891
[deg] Pointing Roll	253.003016	253.1544838408791
[deg] Roll angle	63.500000	63.500000
[deg] Roll tolerance	10.000000	10.000000
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)	662899386.184000	662898206.9747
Observation start date	2019-01-03T10:41:57	2019-01-03T10:23:26
[s] Observation end time (MET)	662923386.184000	662924393.1637599
Observation end date	2019-01-03T17:21:57	2019-01-03T17:39:53
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/2
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



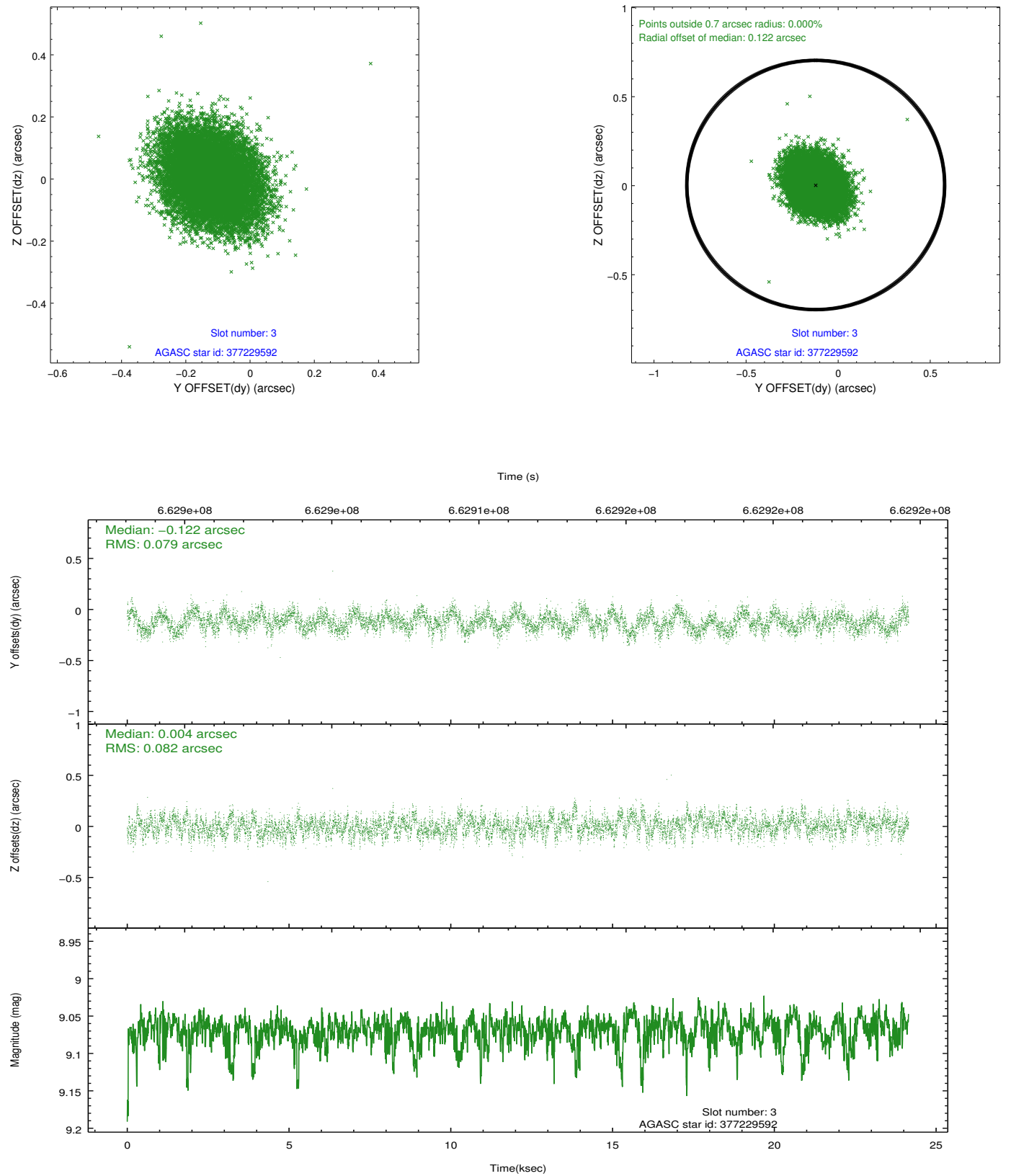


Slot Statistics

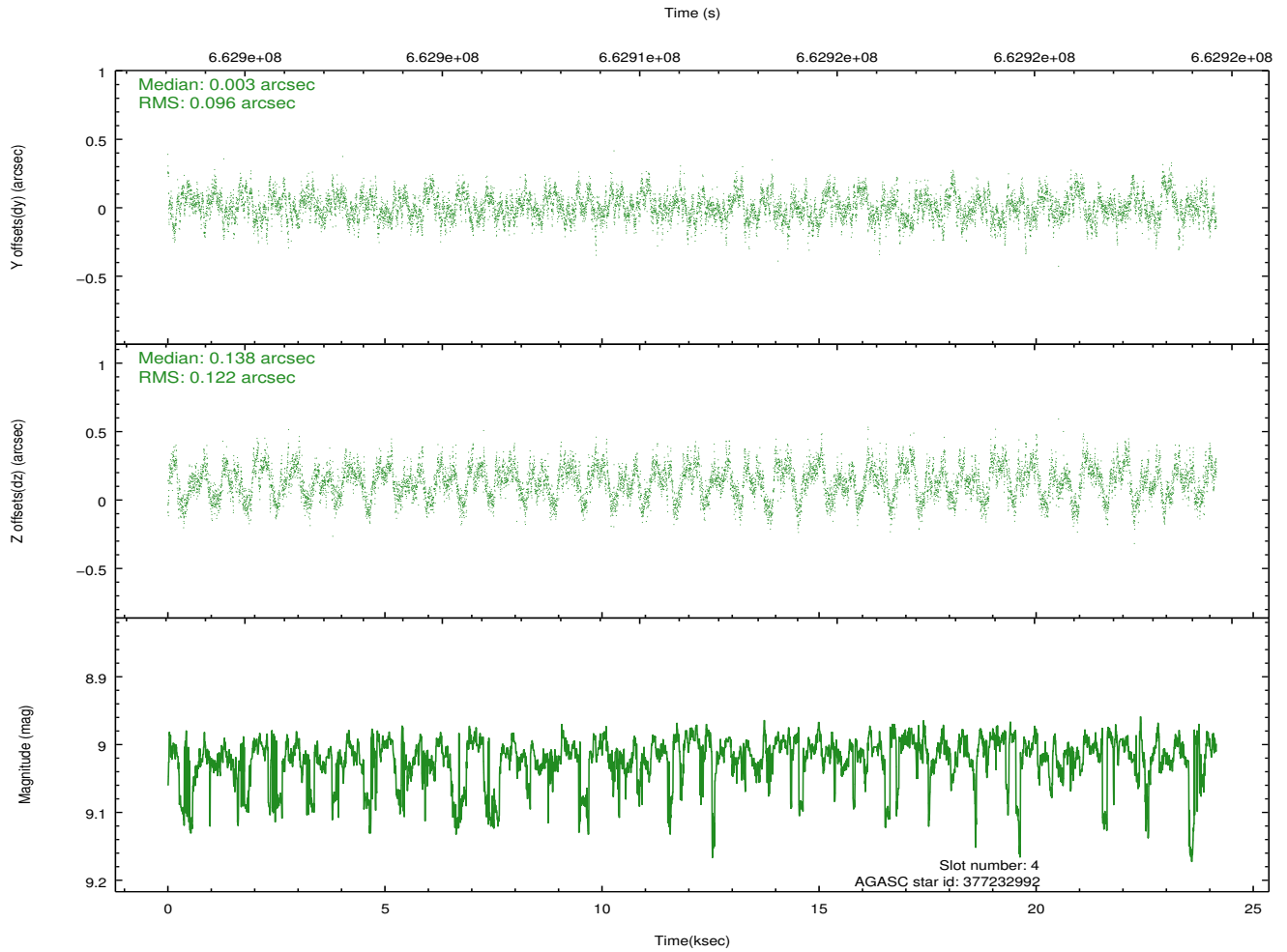
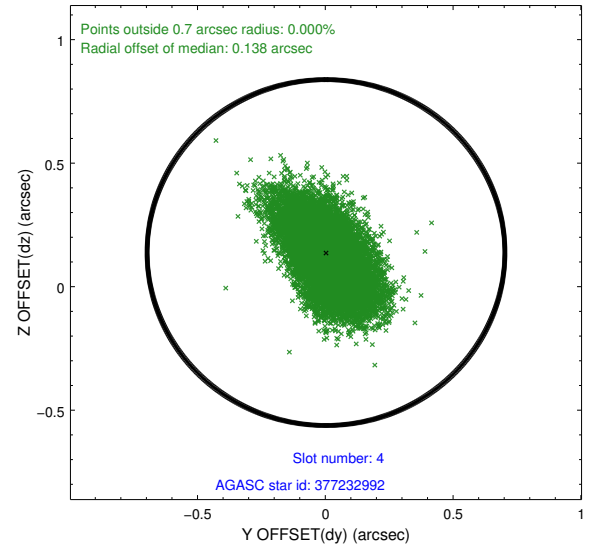
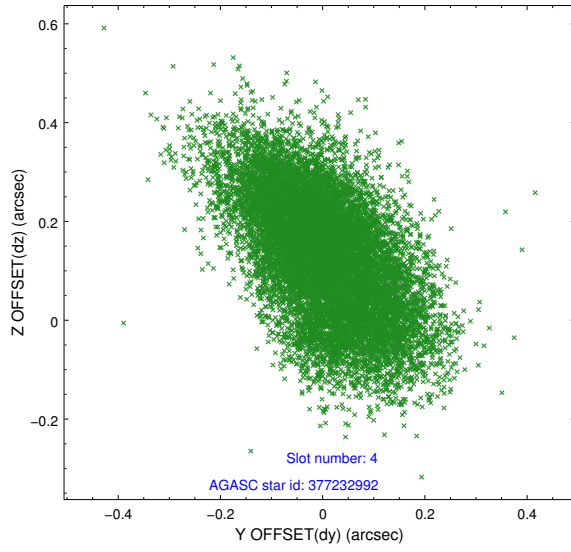
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.01	5891	1.000	-0.266	-0.163	0.014	0.052	0.000000	0.000000	-763.48	-1739
1	FID		ACIS-S-4	7.14	5892	1.000	0.651	0.172	0.010	0.017	0.000000	0.000000	2150.63	168
2	FID		ACIS-S-5	7.12	5890	1.000	-0.418	0.001	0.018	0.060	0.000000	0.000000	-1816.33	162
3	GUIDE	used	377229592	9.07	11764	1.000	-0.122	0.004	0.123	0.193	64.771333	38.350817	-1187.01	190
4	GUIDE	used	377232992	9.02	11775	1.000	0.003	0.138	0.165	0.273	63.776678	37.815935	1471.15	-1950
5	GUIDE	used	377363032	9.34	11732	1.000	0.110	-0.018	0.191	0.343	65.027918	38.365214	-1450.80	867
6	GUIDE	used	377233080	6.28	11780	1.000	0.273	-0.266	0.123	0.221	63.716955	37.542672	2463.00	-1834
7	GUIDE	used	377365280	7.10	11782	1.000	-0.268	0.135	0.079	0.131	65.229745	38.577157	-2348.98	1183

2.4 Star Slots

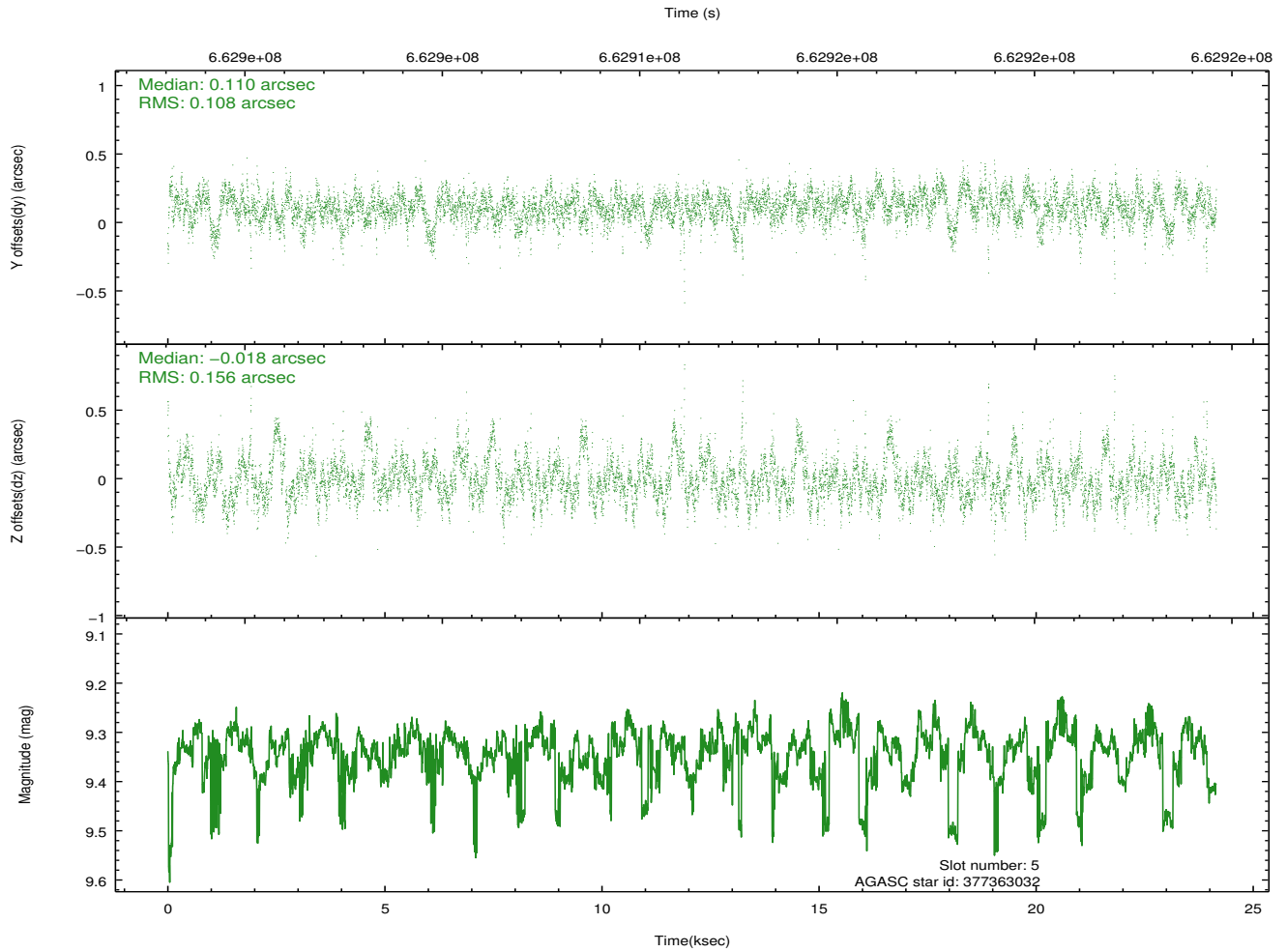
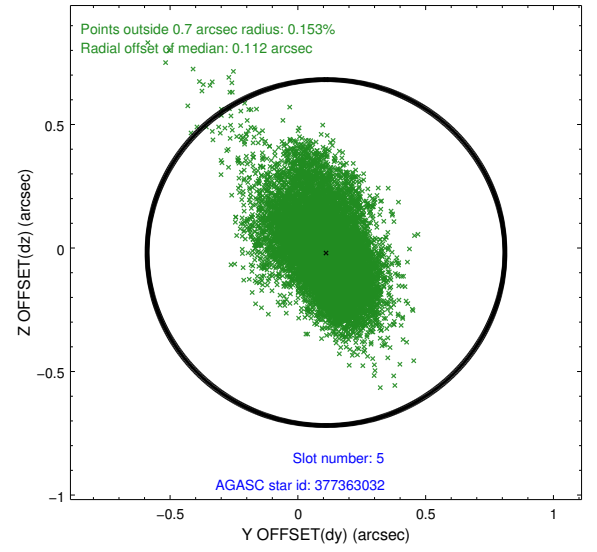
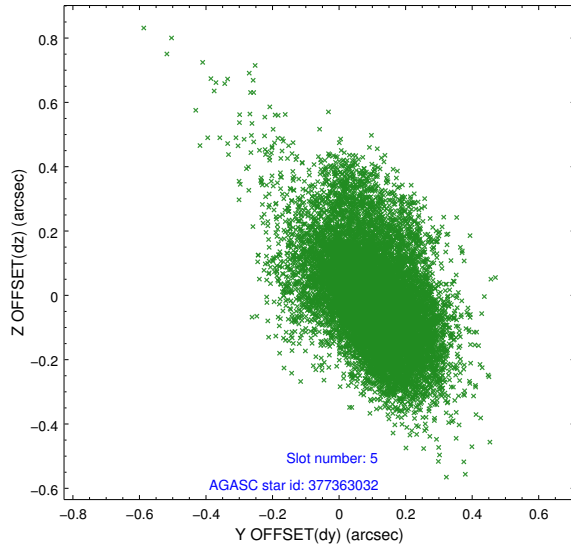
2.4.1 Slot 3



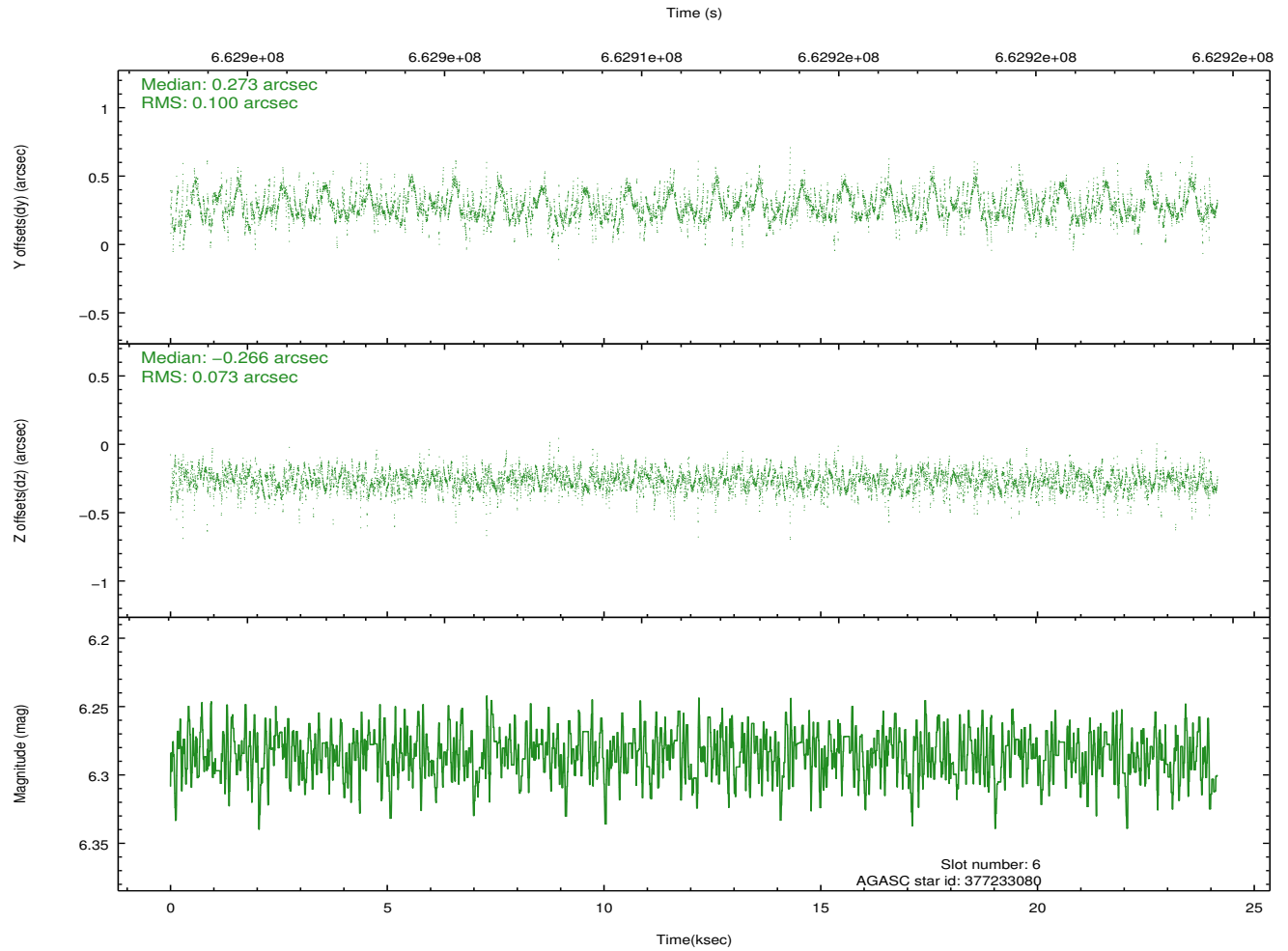
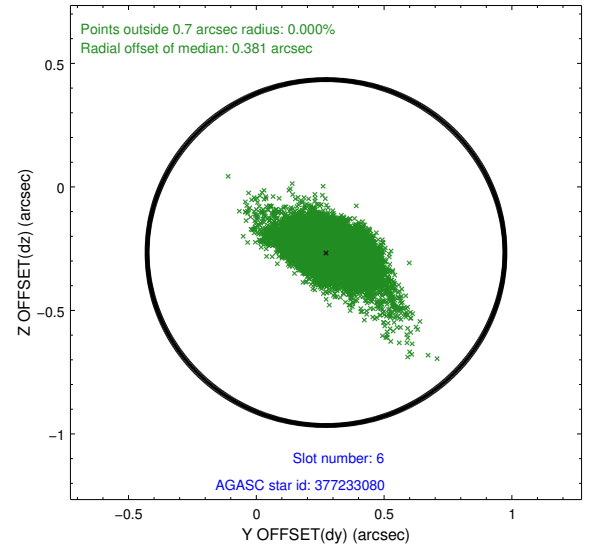
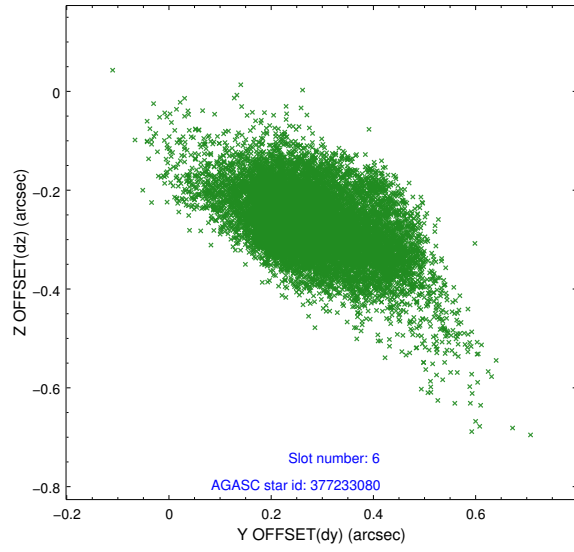
2.4.2 Slot 4



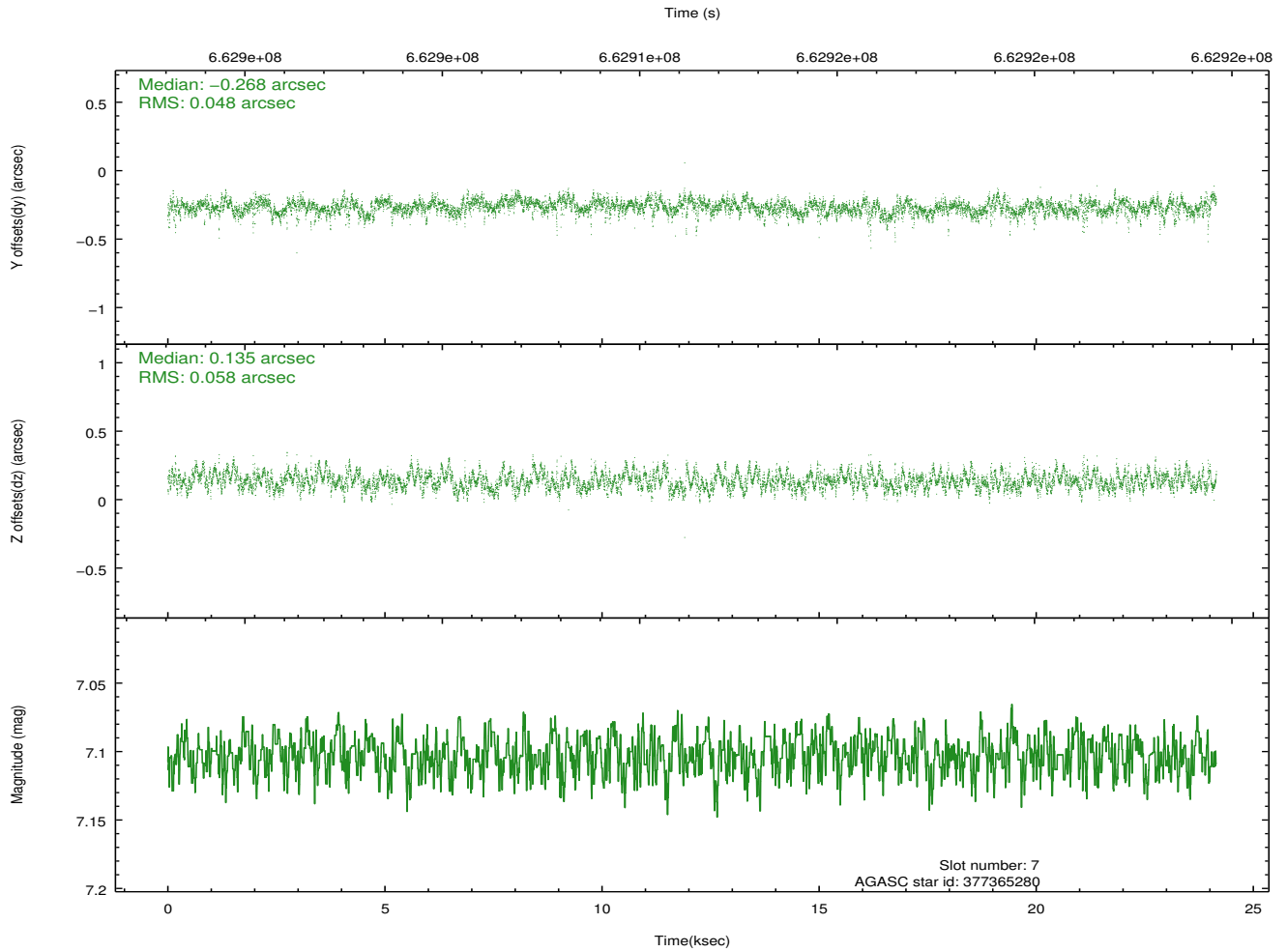
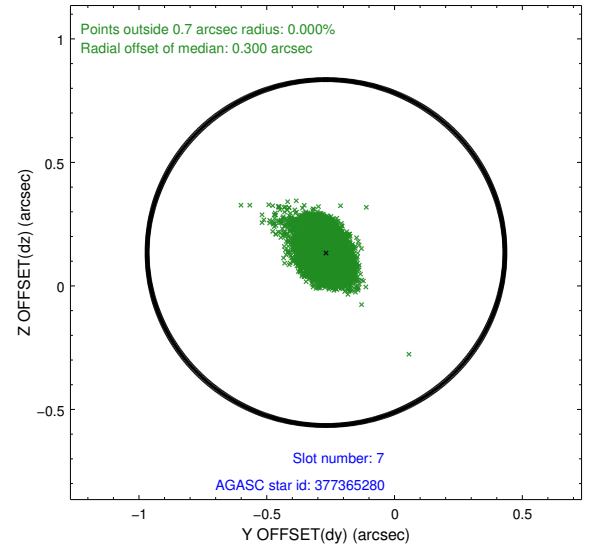
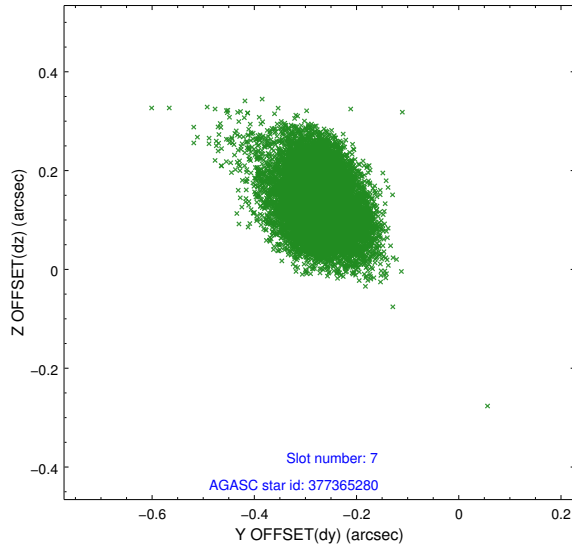
2.4.3 Slot 5



2.4.4 Slot 6

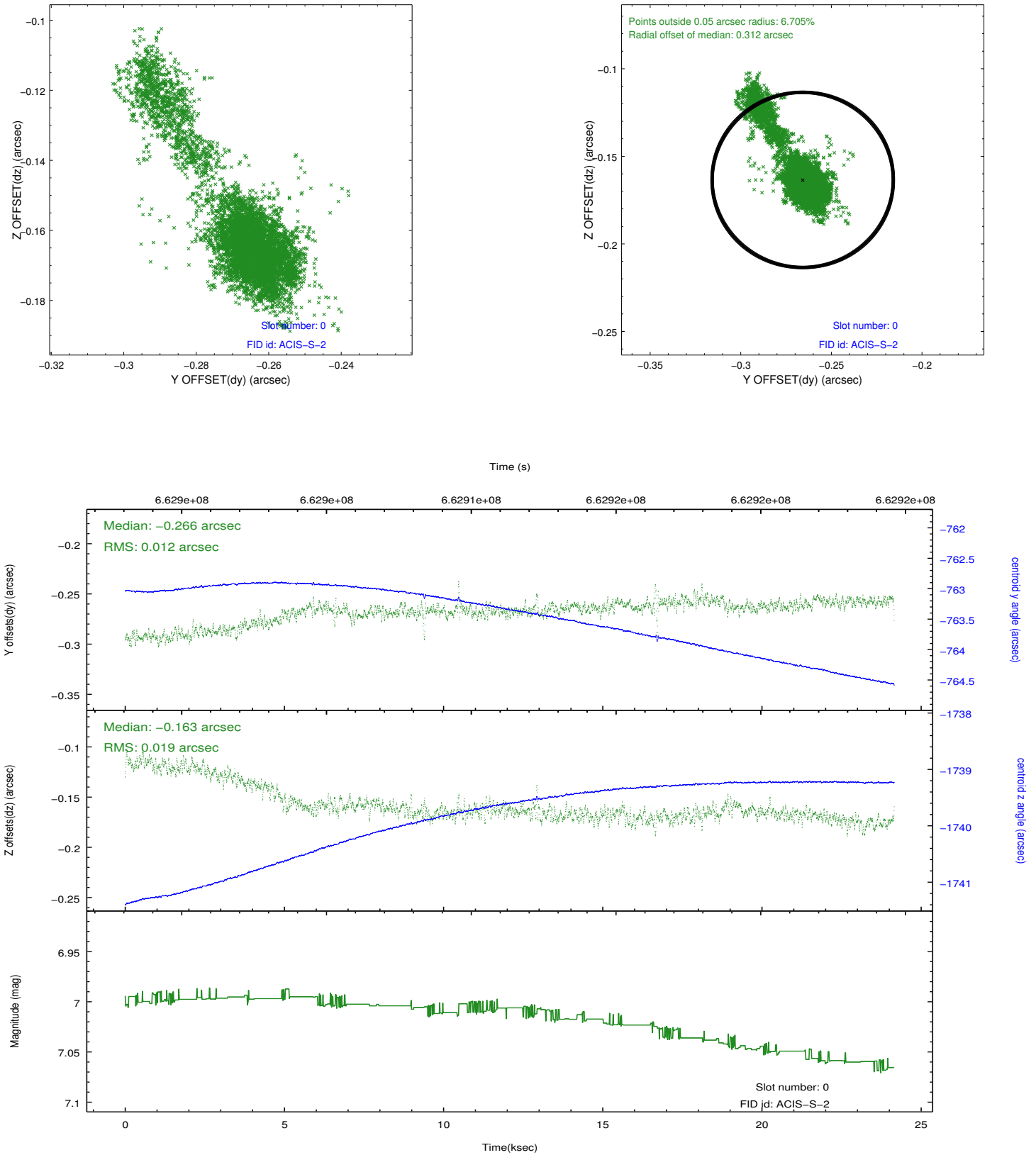


2.4.5 Slot 7

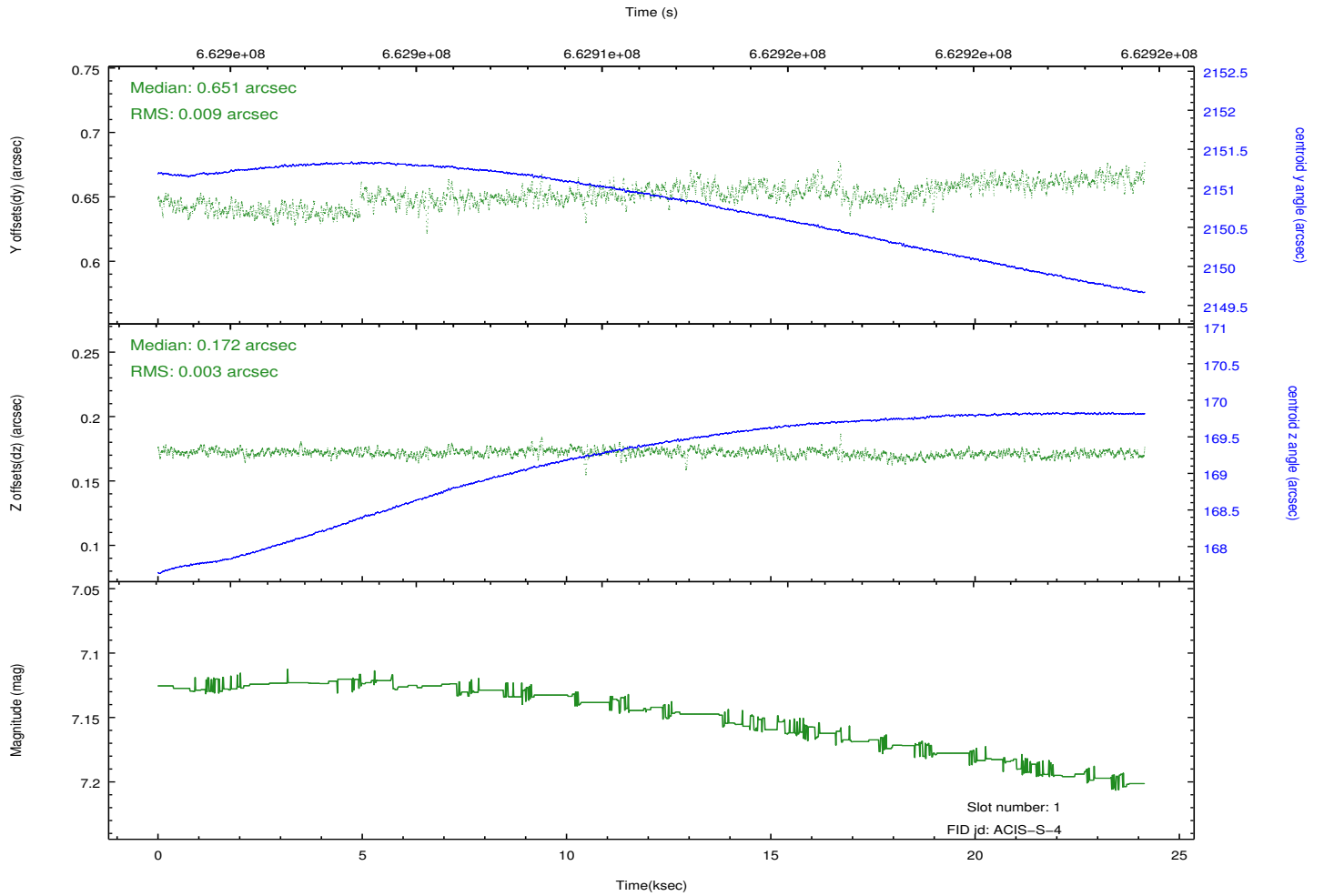
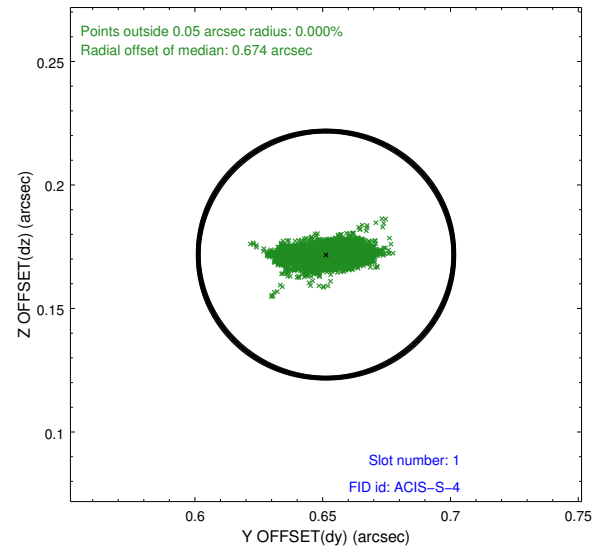
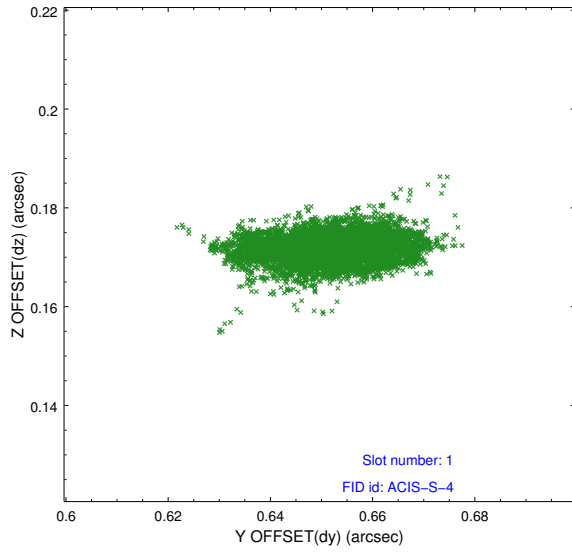


2.5 FID Slots

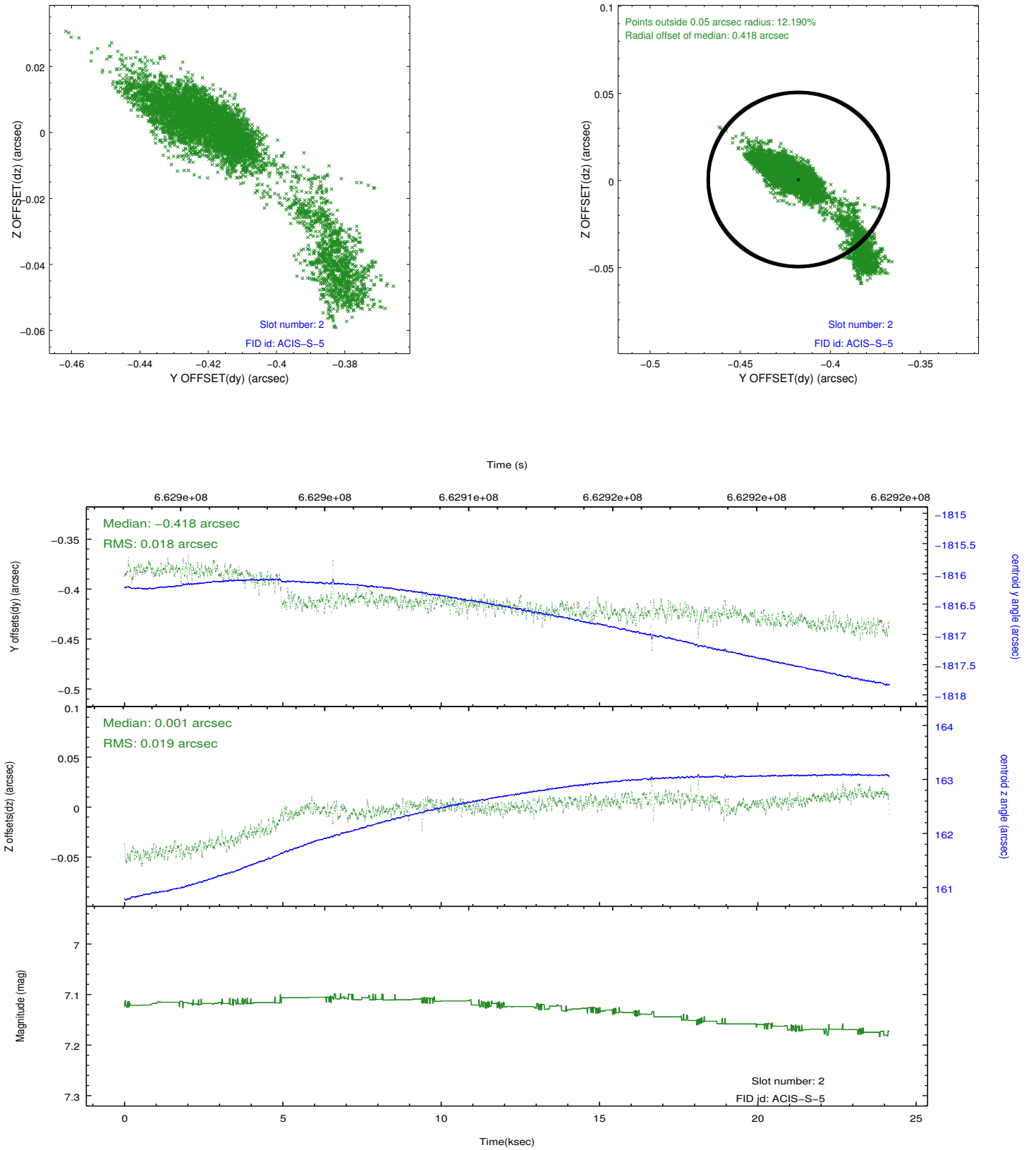
2.5.1 Slot 0



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)	2019.01.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.068160959959

A.2 Comments

Joint proposal with HST and NuSTAR.

Observation coordinated with HST and NuSTAR.

Roll preference met.