

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 21420 - L2 Version 1
Chandra X-Ray Center

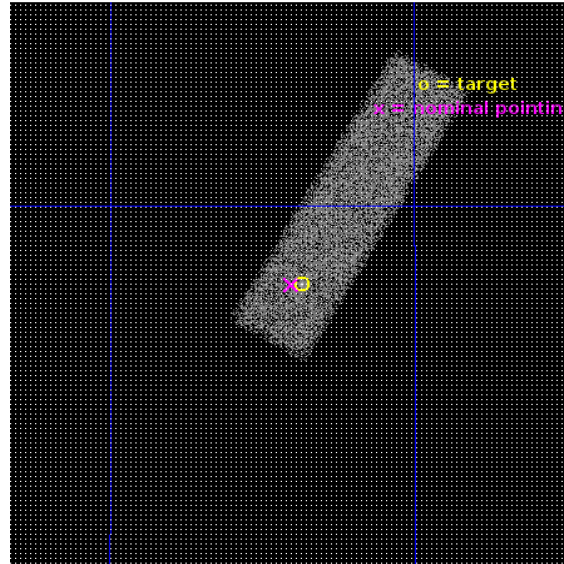
L2 Processing Date : Aug 12 2019

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

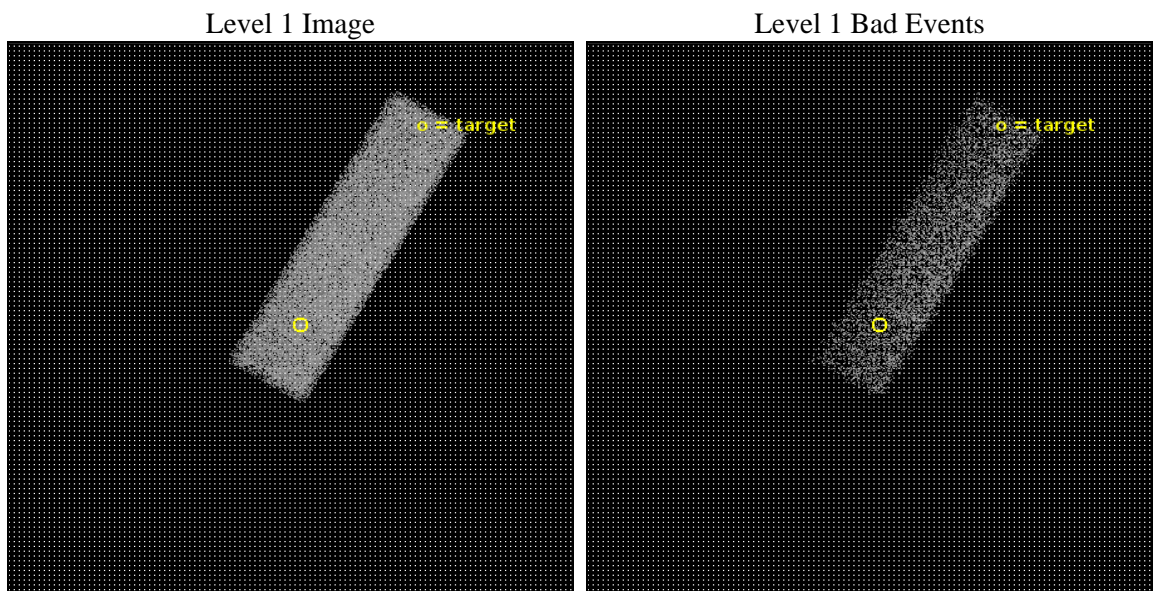
seq_num	703717	Sequence number
obs_id	21420	Observation id
title	THE TORUS AND THE HOST: Extended Hard Emission in Compton Thick AGN with NuSTAR Spectra	Proposal title
observer	Martin Elvis	Principal investigator
object	NGC4500	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.842083	Observer's specified target RA [deg]
dec_targ	57.964722	Observer's specified target Dec [deg]
ra_nom	187.85099204835	Nominal RA [deg]
dec_nom	57.964436181955	Nominal Dec [deg]
roll_nom	300.40338252308	Nominal Roll [deg]
revision	1	Processing version of data
ontime	19059.998863935	Sum of GTIs [s]
livetime	18129.933286346	Livetime [s]
ontime7	19059.998863935	Sum of GTIs [s]
l2events	22930	Number of level 2 events



2 OBI

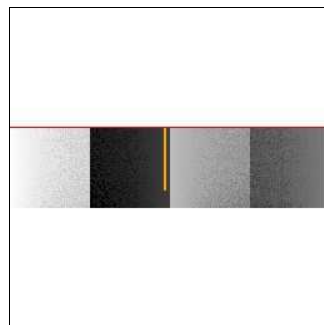
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	19059.998863935	Sum of GTIs [s]
caldsver	4.8.3.1	 	ontime7	19059.998863935	Sum of GTIs [s]
date	2019-08-12T06:02:43	Date and time of file creation	l1events	48706	Number of level 1 events
revision	1	Processing version of data			

2.1.4 Events

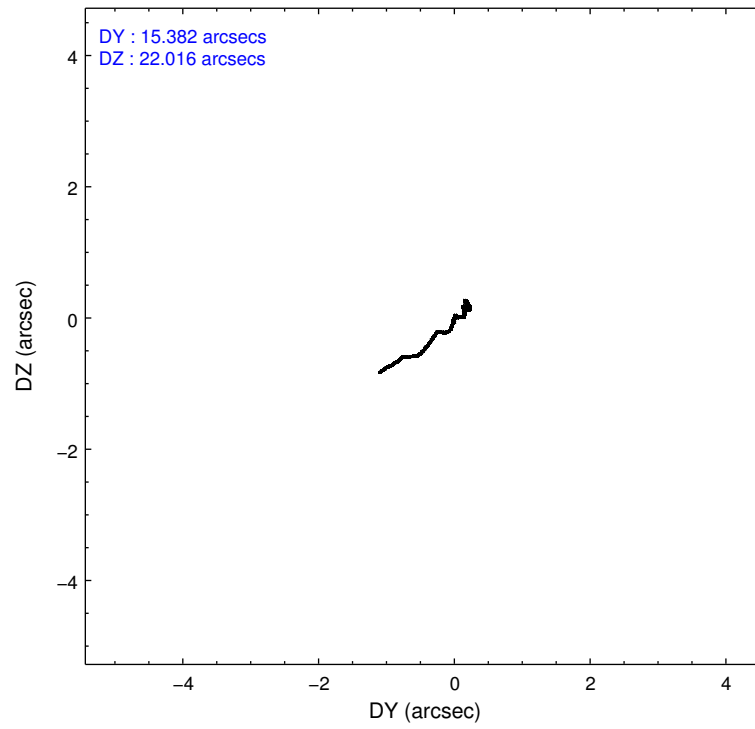
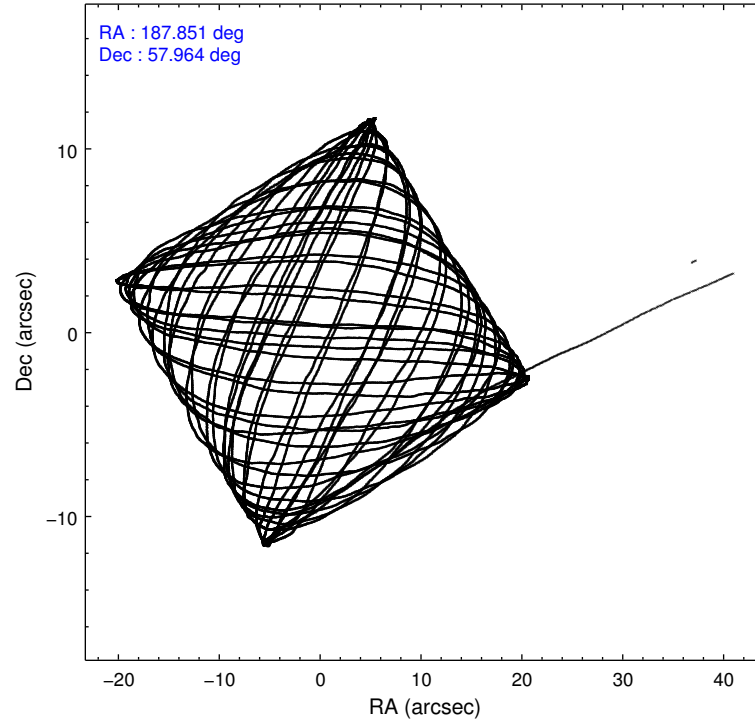
	ccd 7
level 1 events	48706
rejected events	25034
rejected %	51%

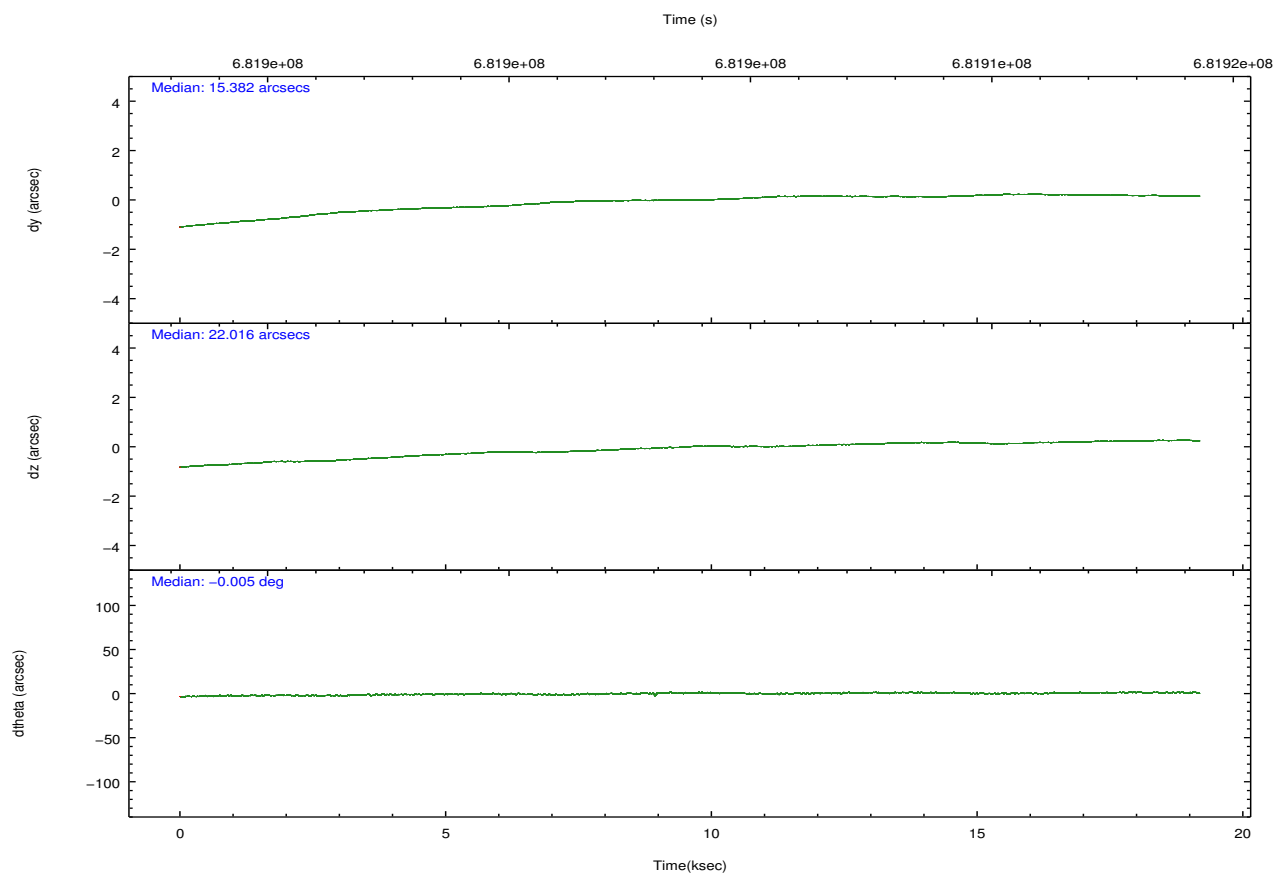
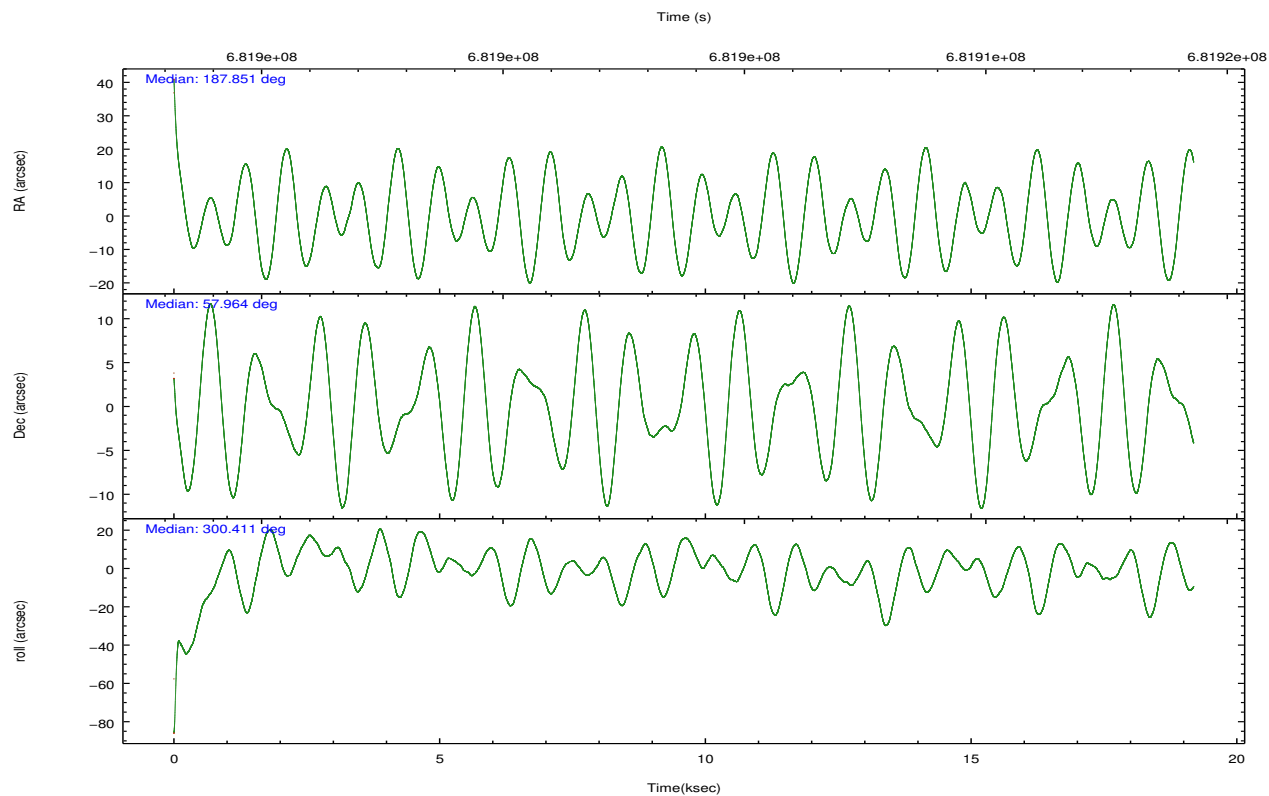
	ccd 7
grade 0 events	2411
	4%
grade 1 events	95
	0%
grade 2 events	4962
	10%
grade 3 events	2614
	5%
grade 4 events	2556
	5%
grade 5 events	5137
	10%
grade 6 events	11129
	22%
grade 7 events	19802
	40%

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	187.805616	187.8509920483513	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	57.977679	57.96443618195499	Subarray start row	385	385
[deg] Pointing Roll	300.285259	300.403382523082	Subarray row count	256	256
[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	0.8
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	681894337.184000	681893466.08734			
Observation start date	2019-08-11T07:04:28	2019-08-11T06:51:06			
[s] Observation end time (MET)	681913337.184000	681913825.66356			
Observation end date	2019-08-11T12:21:08	2019-08-11T12:30:25			
Read mode	TIMED	TIMED			

2.3 Aspect



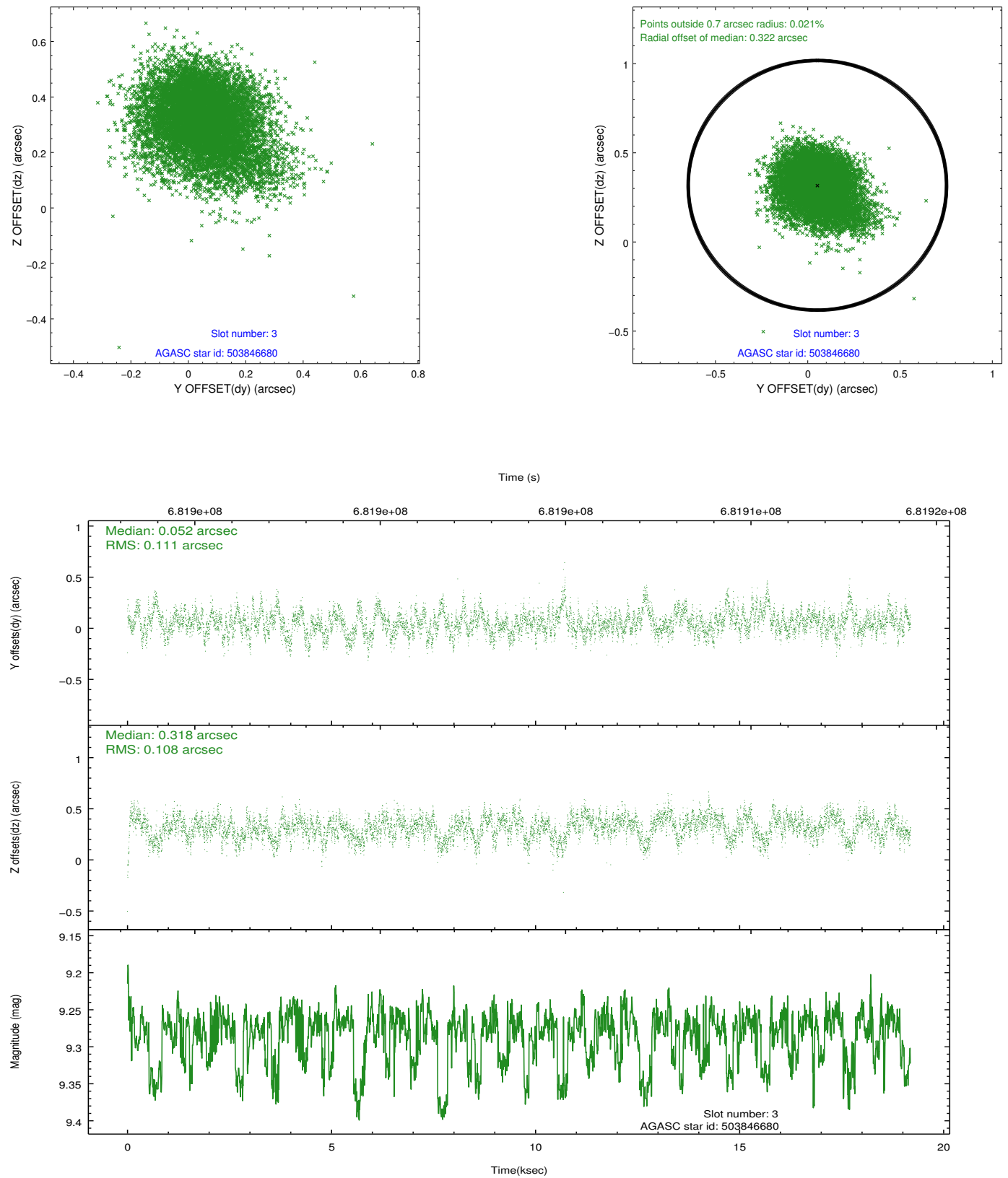


Slot Statistics

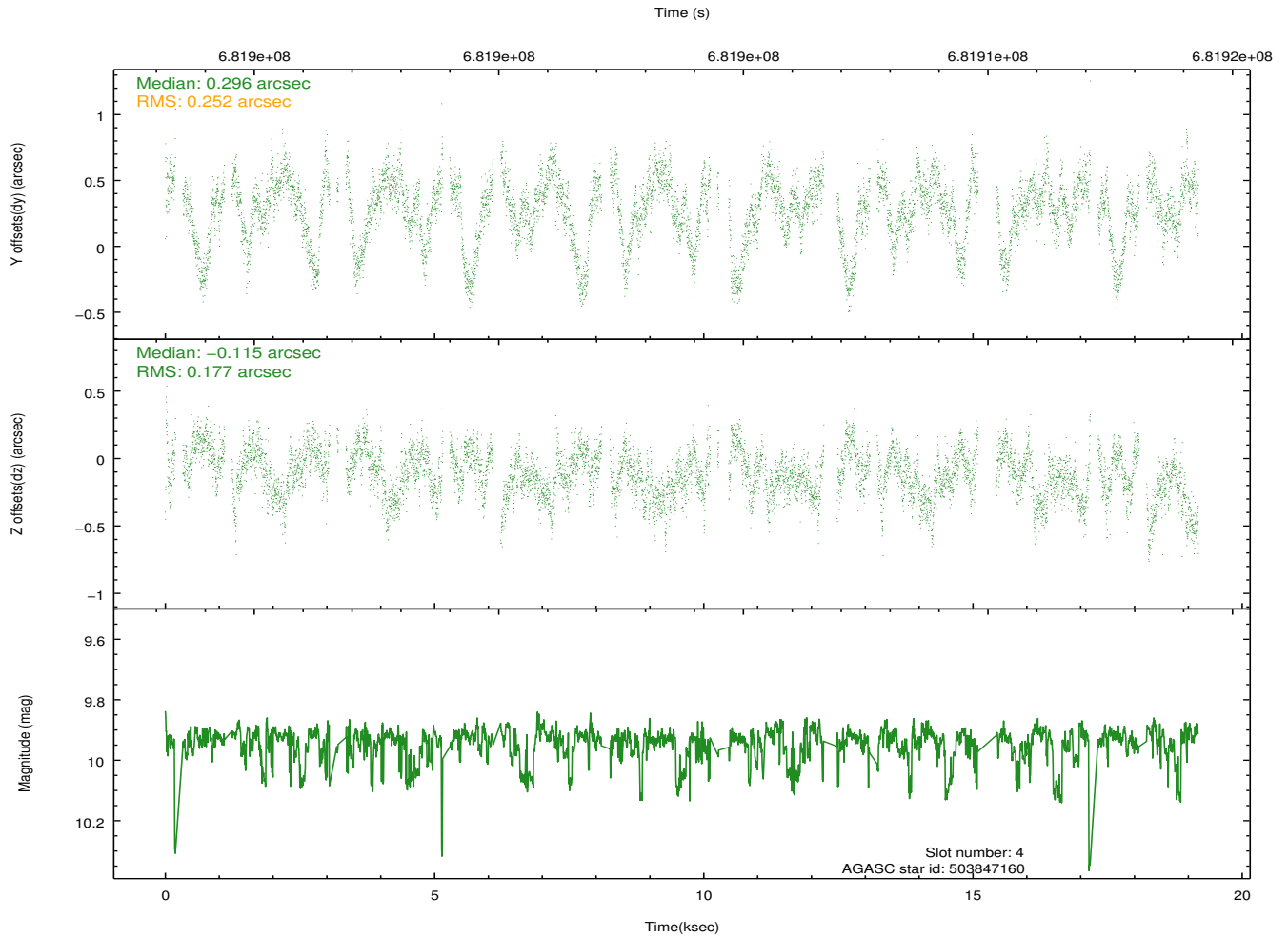
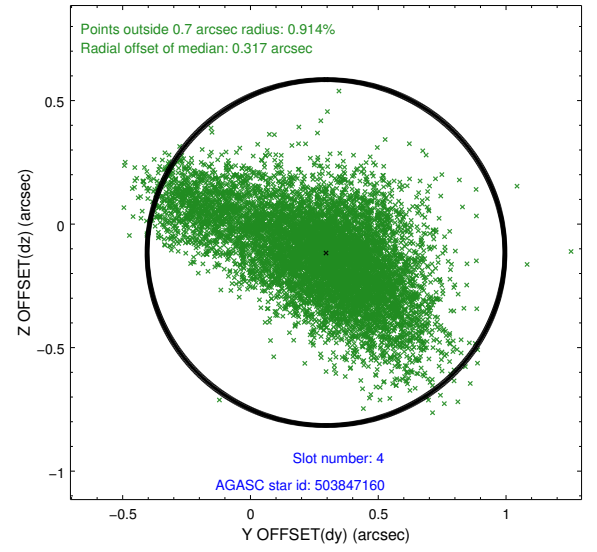
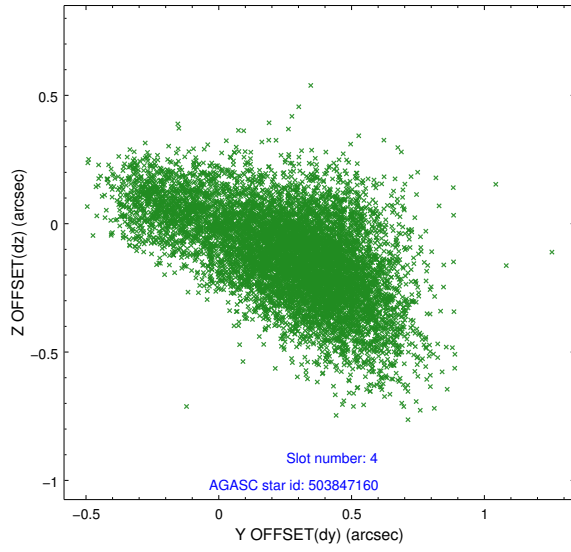
	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	m
	FID		ACIS-S-2	7.02	4681	1.000	-0.290	-0.226	0.010	0.027	0.000000	0.000000	-768.50	-17
	FID		ACIS-S-4	7.14	4681	1.000	0.732	0.200	0.012	0.024	0.000000	0.000000	2145.68	1
	FID		ACIS-S-5	7.11	4680	1.000	-0.473	0.034	0.012	0.030	0.000000	0.000000	-1821.30	1
	GUIDE	used	503846680	9.28	9349	1.000	0.052	0.318	0.161	0.271	188.032815	57.457908	1837.04	-5
	BAD	used	503847160	9.94	8203	1.000	0.296	-0.115	0.312	0.588	187.813738	57.295659	2126.72	-12
	GUIDE	used	504234440	9.19	9347	1.000	0.153	0.289	0.177	0.266	187.285147	58.522847	-2191.52	1
	GUIDE	used	504239672	9.69	9342	1.000	-0.254	-0.368	0.272	0.447	189.223345	57.968852	1367.33	23
	GUIDE	used	504240088	10.03	9265	1.000	-0.215	-0.123	0.386	0.599	188.947210	57.565103	2376.95	11

2.4 Star Slots

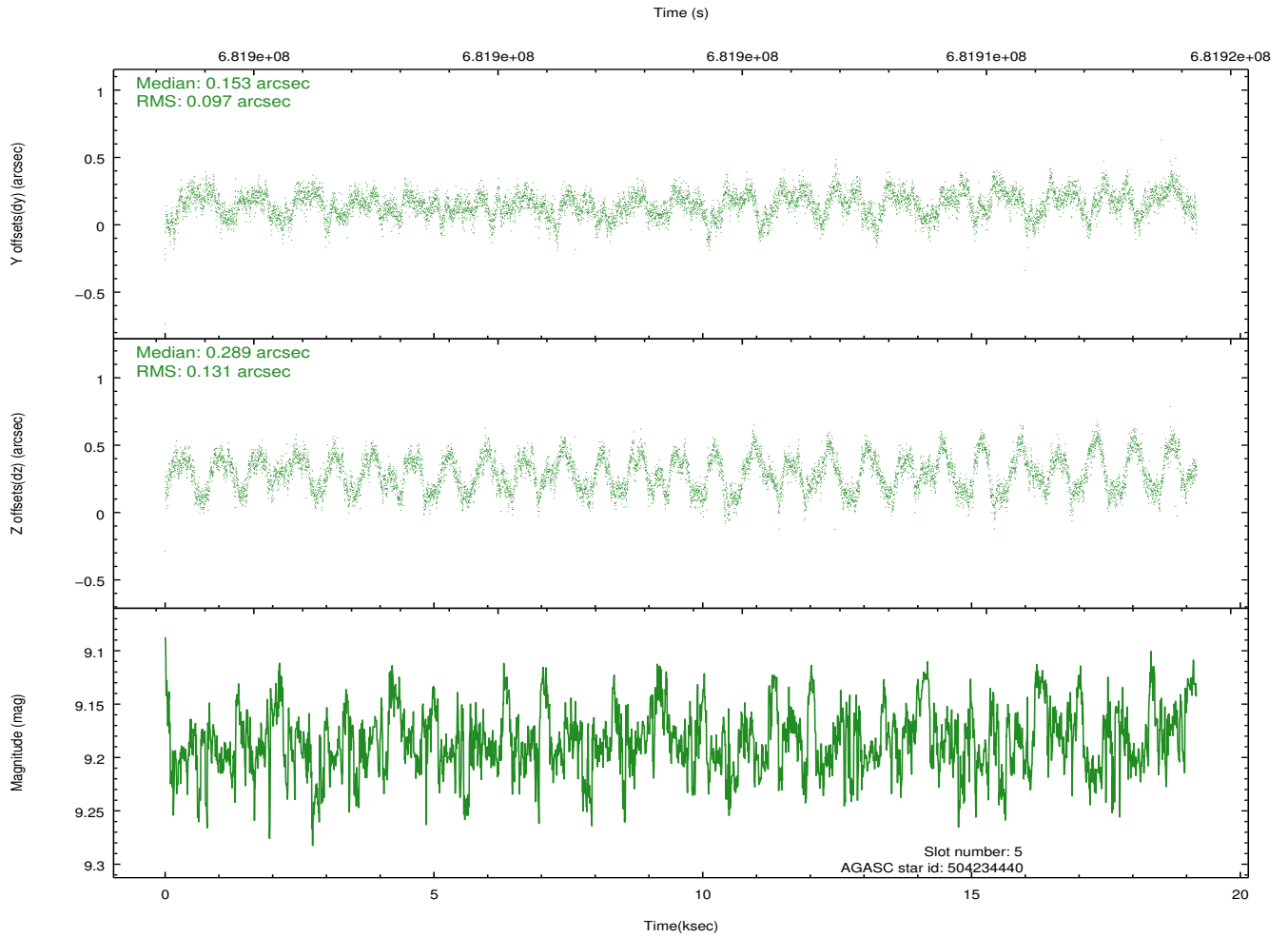
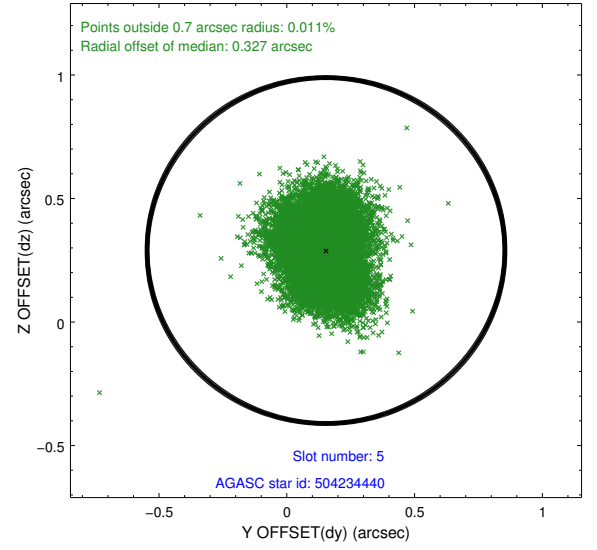
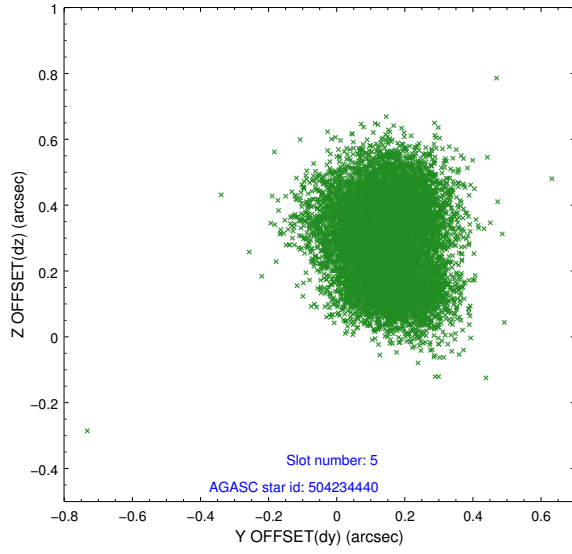
2.4.1 Slot 3



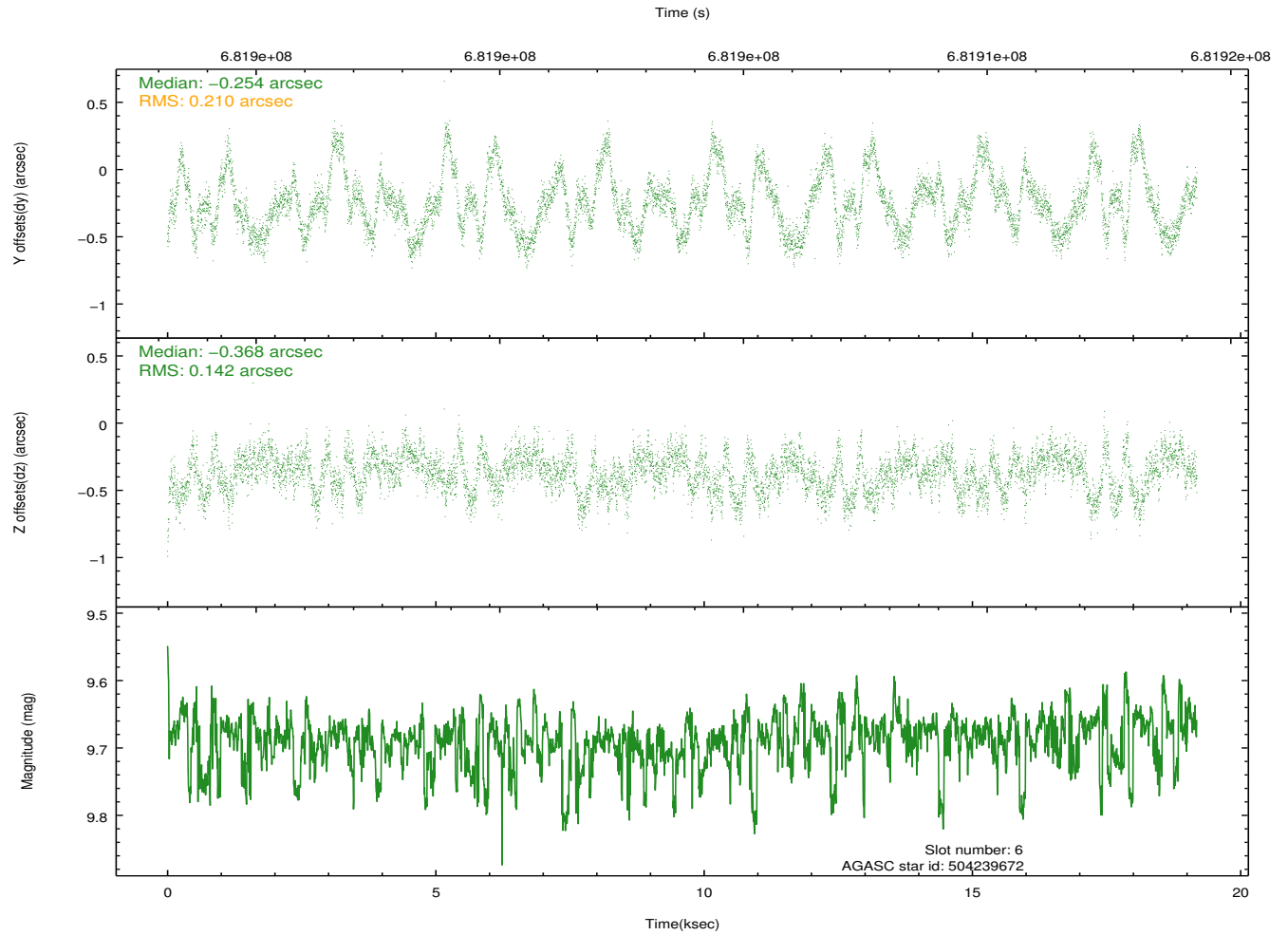
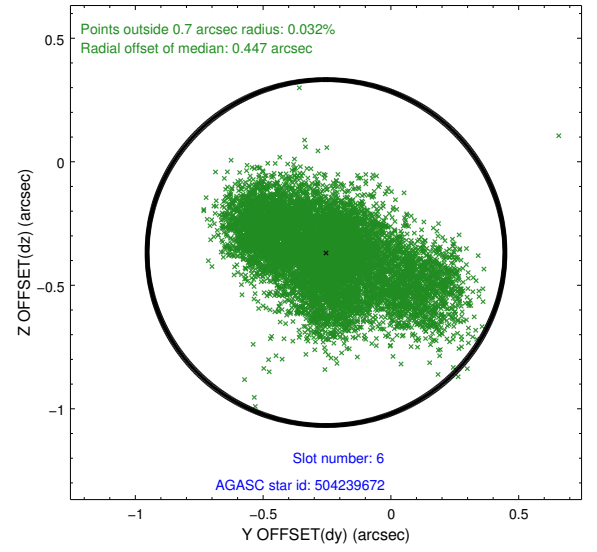
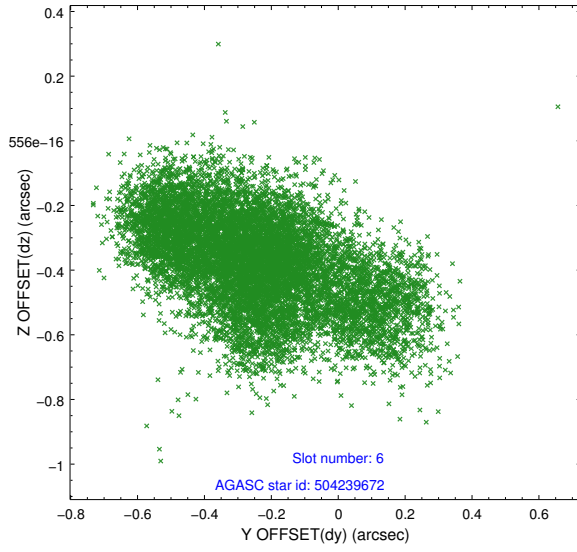
2.4.2 Slot 4



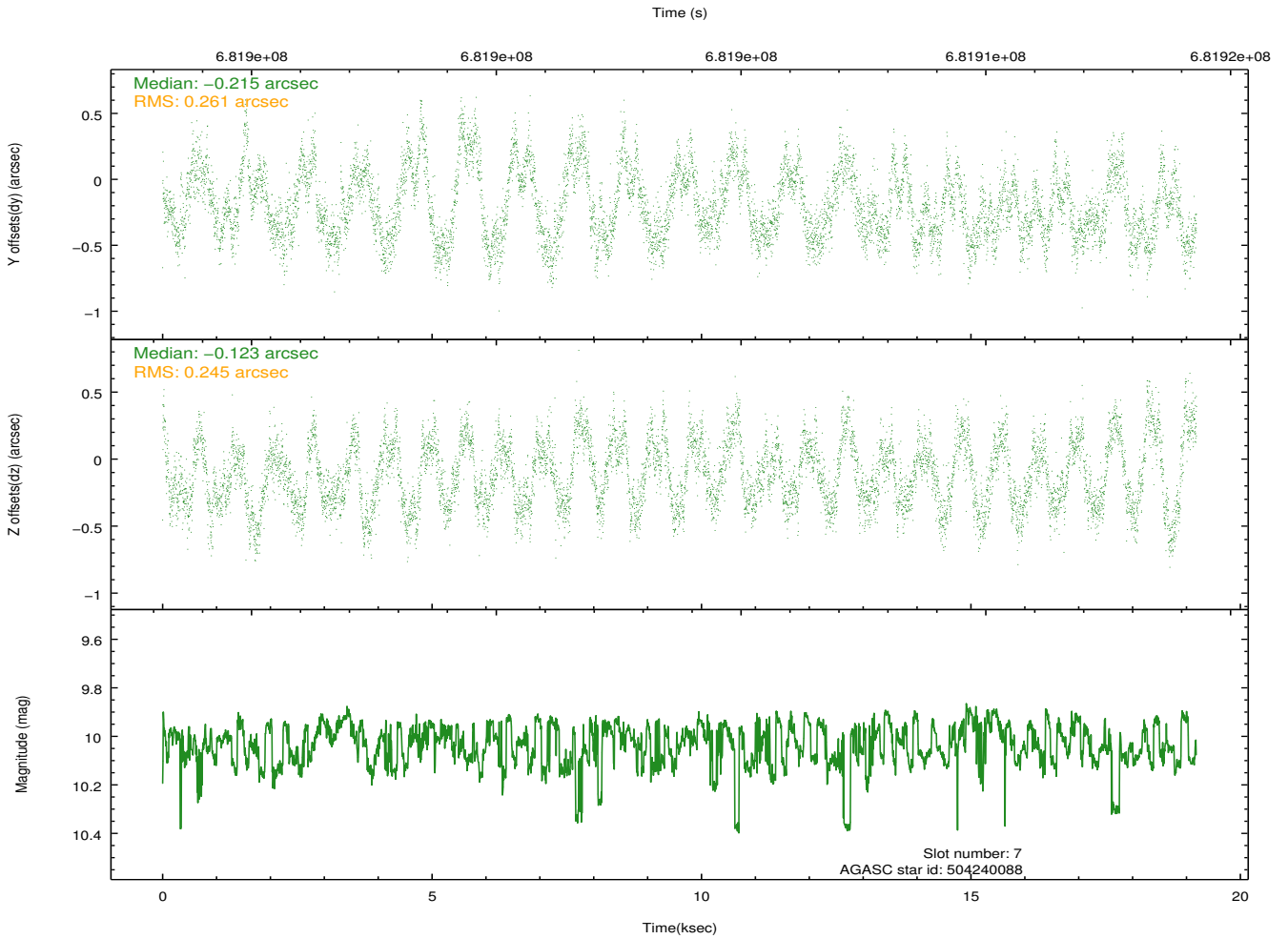
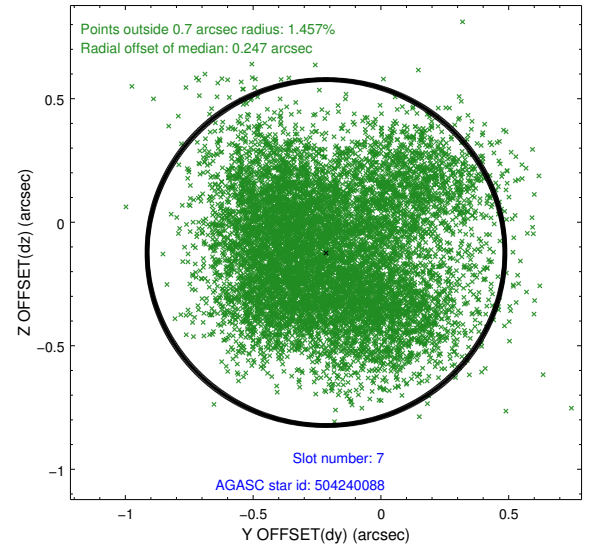
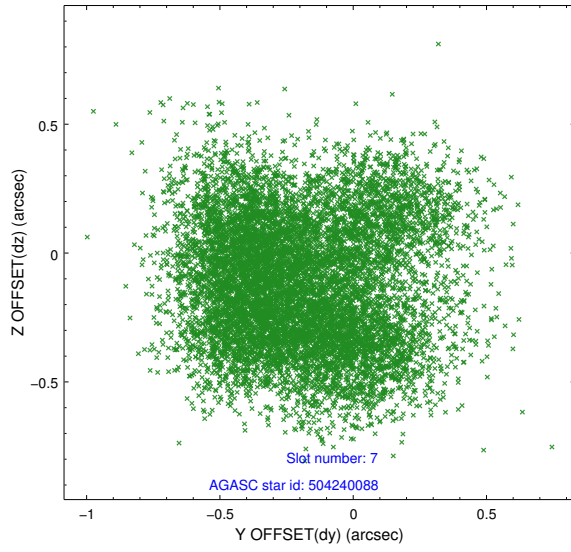
2.4.3 Slot 5



2.4.4 Slot 6

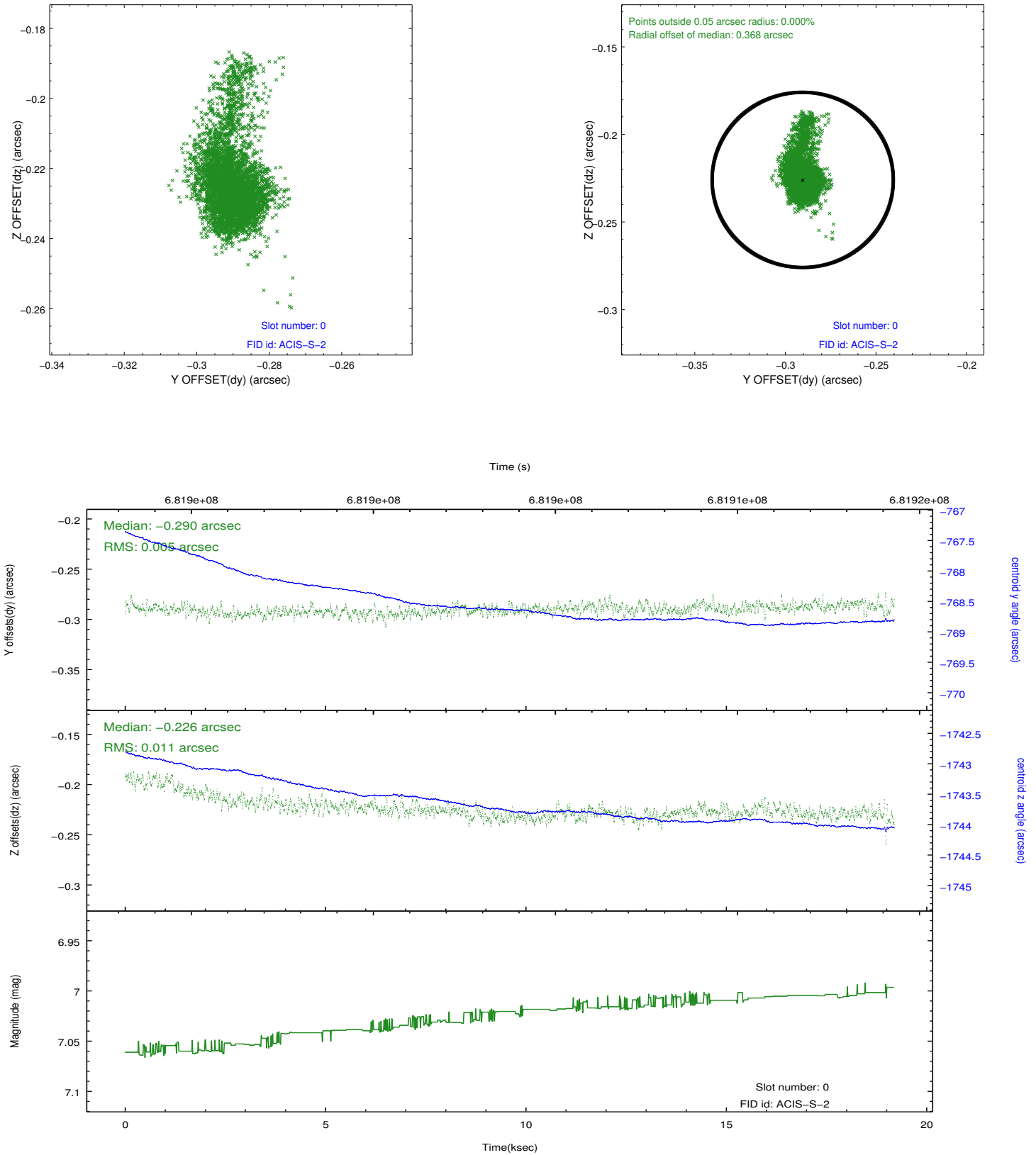


2.4.5 Slot 7

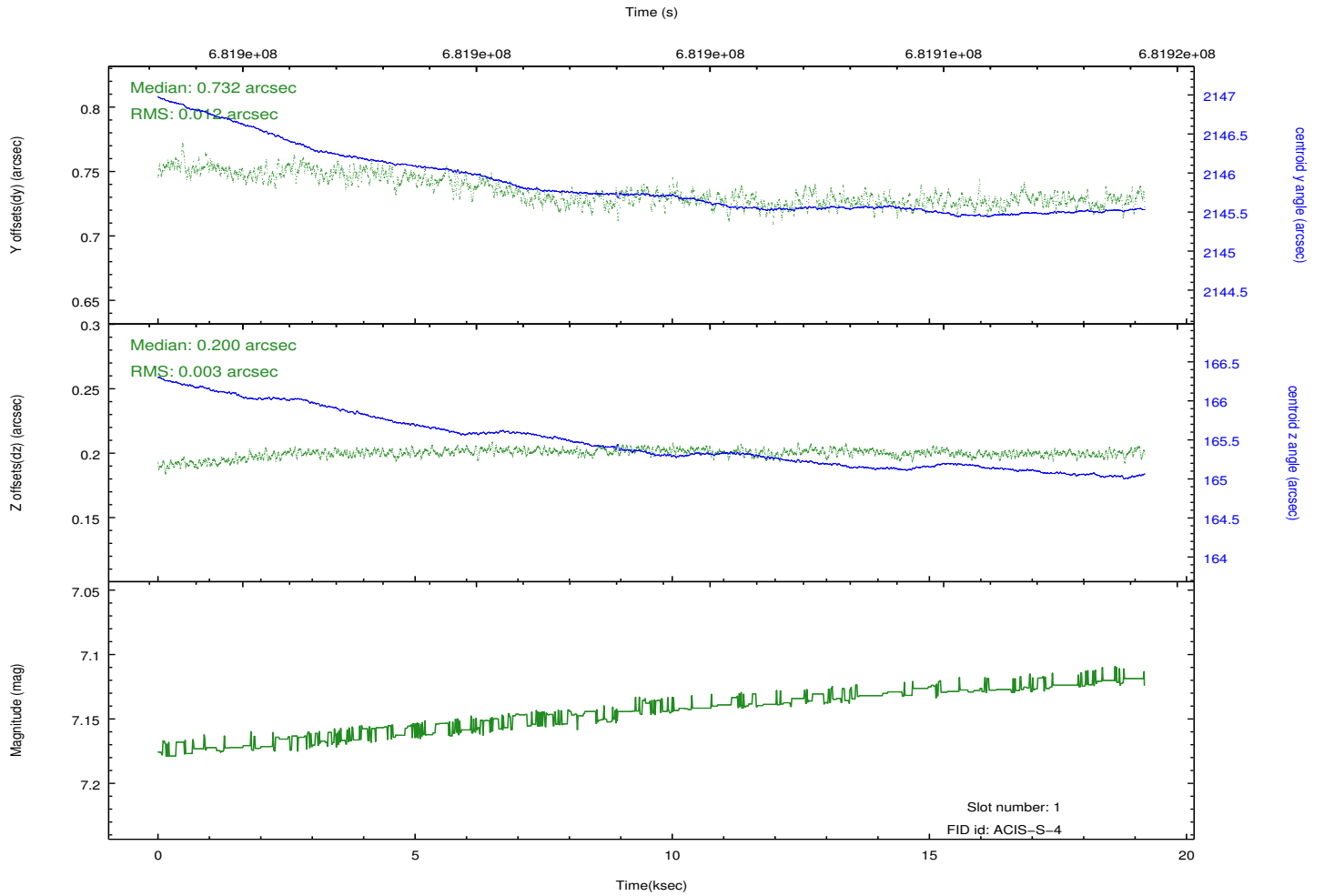
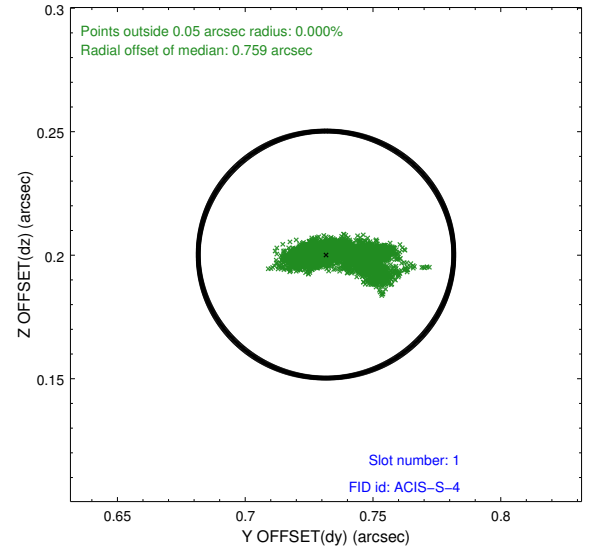
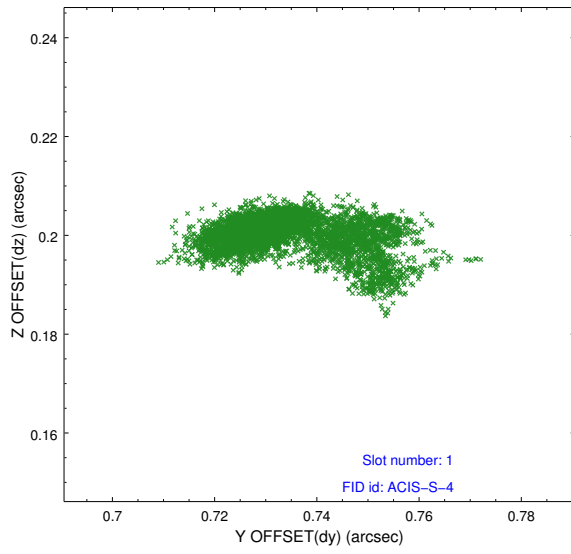


2.5 FID Slots

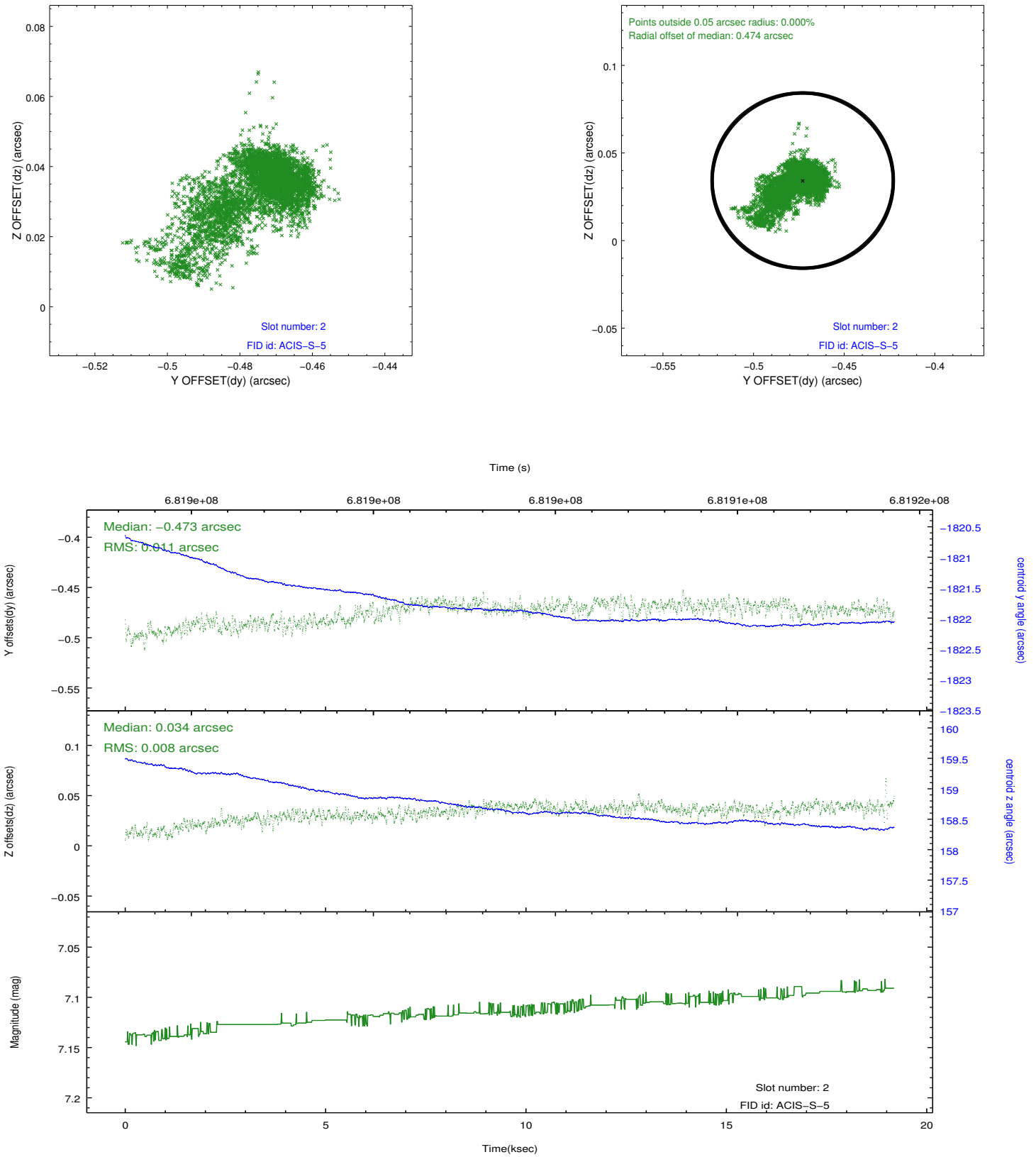
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2019.08.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.059998863935

A.2 Comments