

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 22270 - L2 Version 1
Chandra X-Ray Center

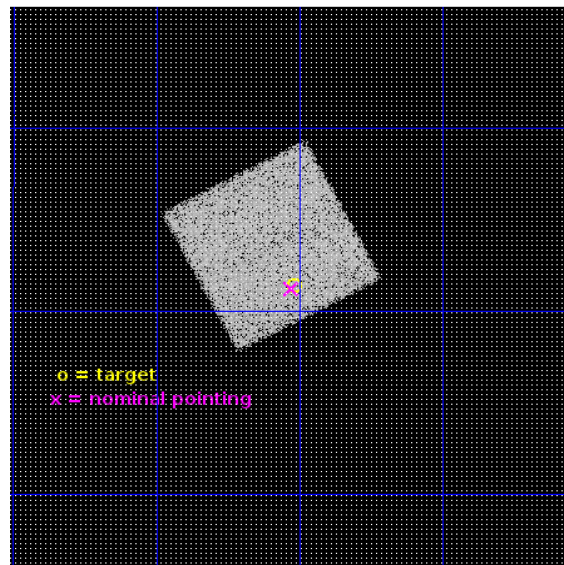
L2 Processing Date : Jun 30 2019

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1 Front

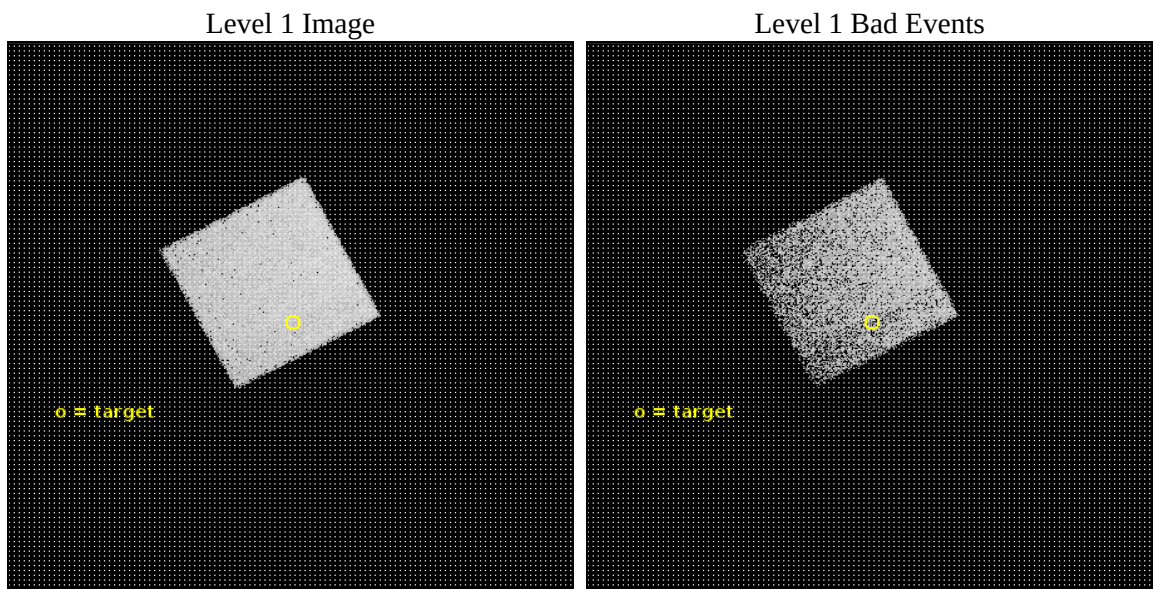
seq_num	703908	Sequence number
obs_id	22270	Observation id
title	Chandra-NuSTAR synergy in the NuSTAR serendipitous survey	Proposal
observer	Dr David Alexander	Principal investigator
object	Mrk1419_s4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	145.129471	Observer's specified target RA [deg]
dec_targ	3.523343	Observer's specified target Dec [deg]
ra_nom	145.13180376502	Nominal RA [deg]
dec_nom	3.5202635161063	Nominal Dec [deg]
roll_nom	242.12110615957	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10091.616227984	Sum of GTIs [s]
livetime	9955.4260003004	Livetime [s]
ontime7	10091.616227984	Sum of GTIs [s]
l2events	40866	Number of level 2 events



2 OBI

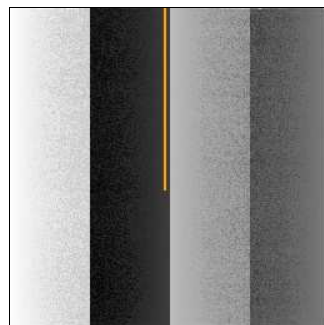
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	10091.616227984	Sum of GTIs [s]
caldsver	4.8.3	 	ontime7	10091.616227984	Sum of GTIs [s]
date	2019-06-30T23:27:30	Date and time of file creation	l1events	96714	Number of level 1 events
revision	1	Processing version of data			

2.1.4 Events

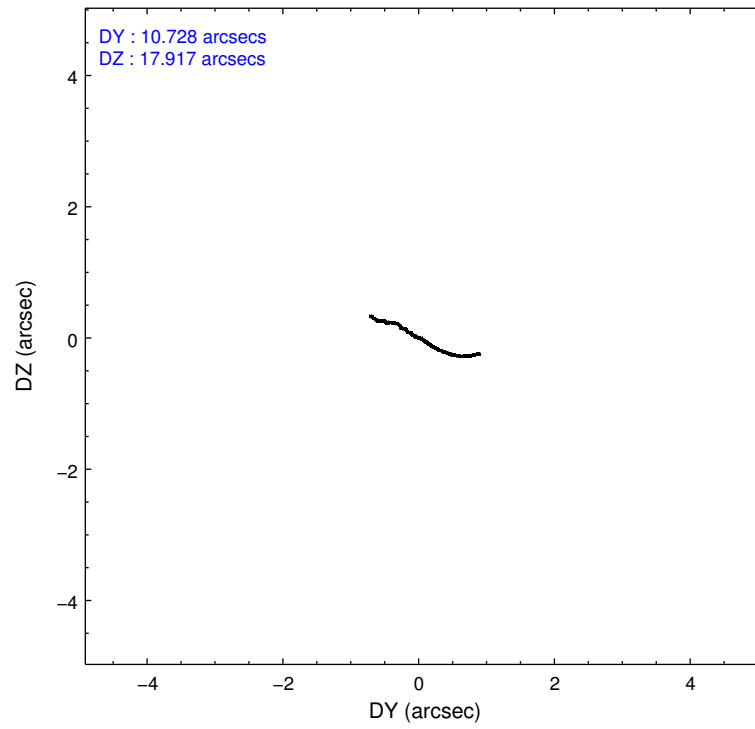
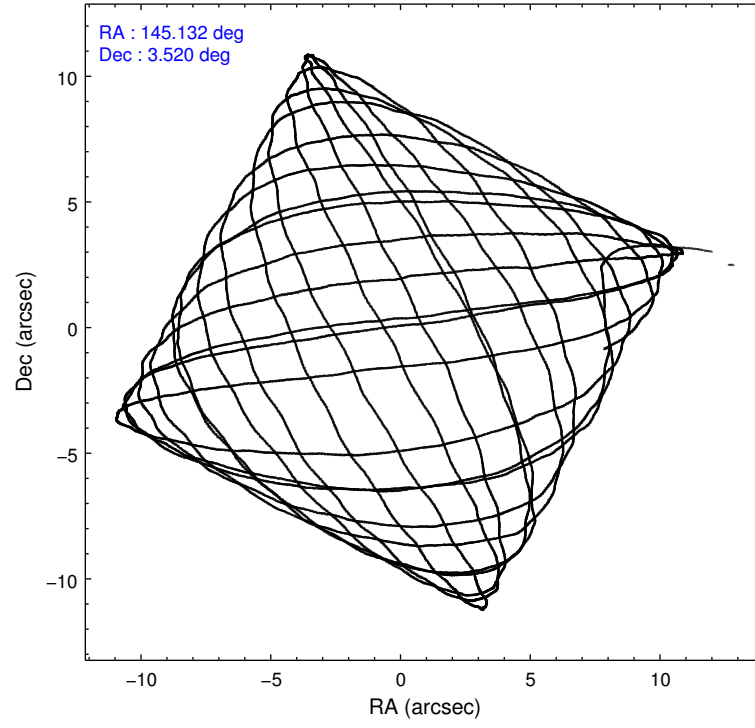
	ccd 7
level 1 events	96714
rejected events	54770
rejected %	56%

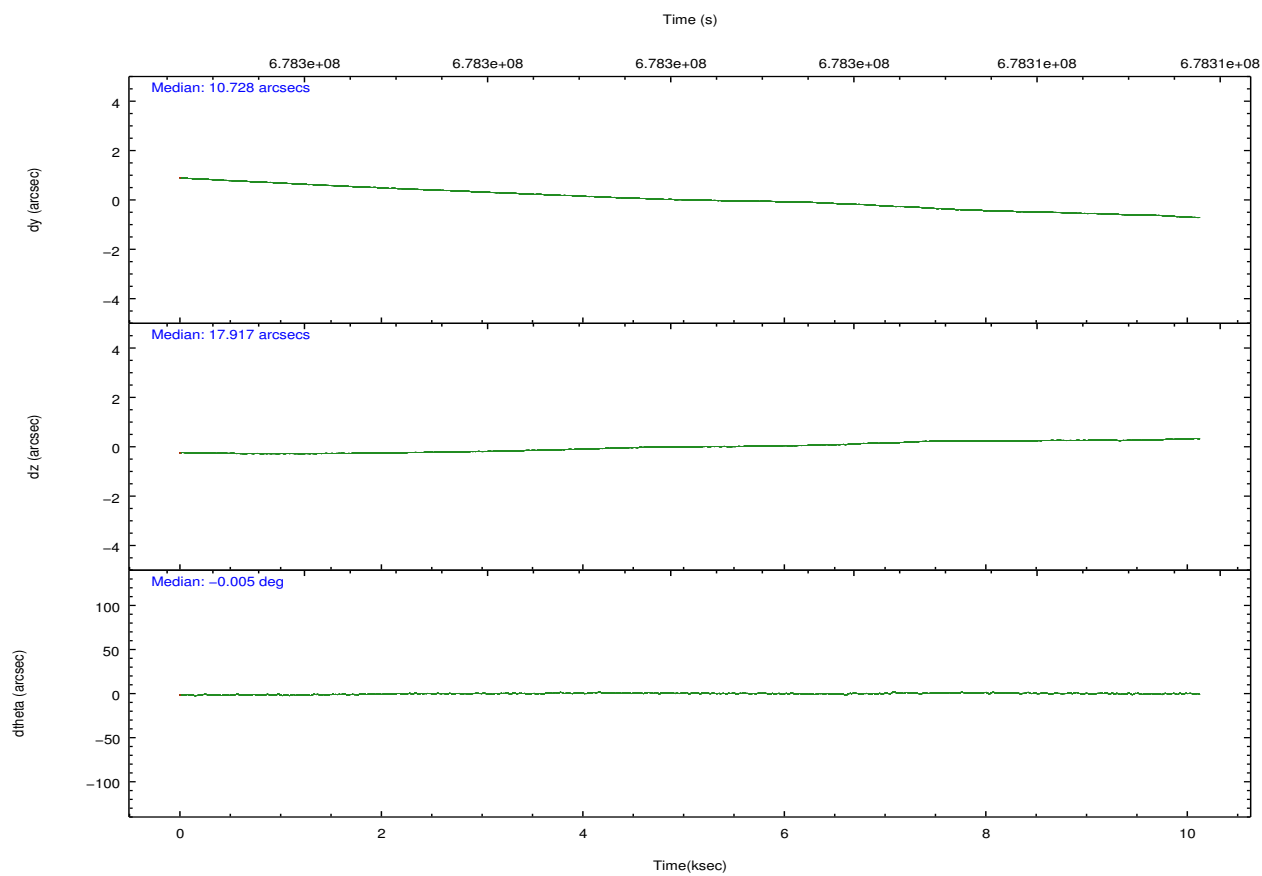
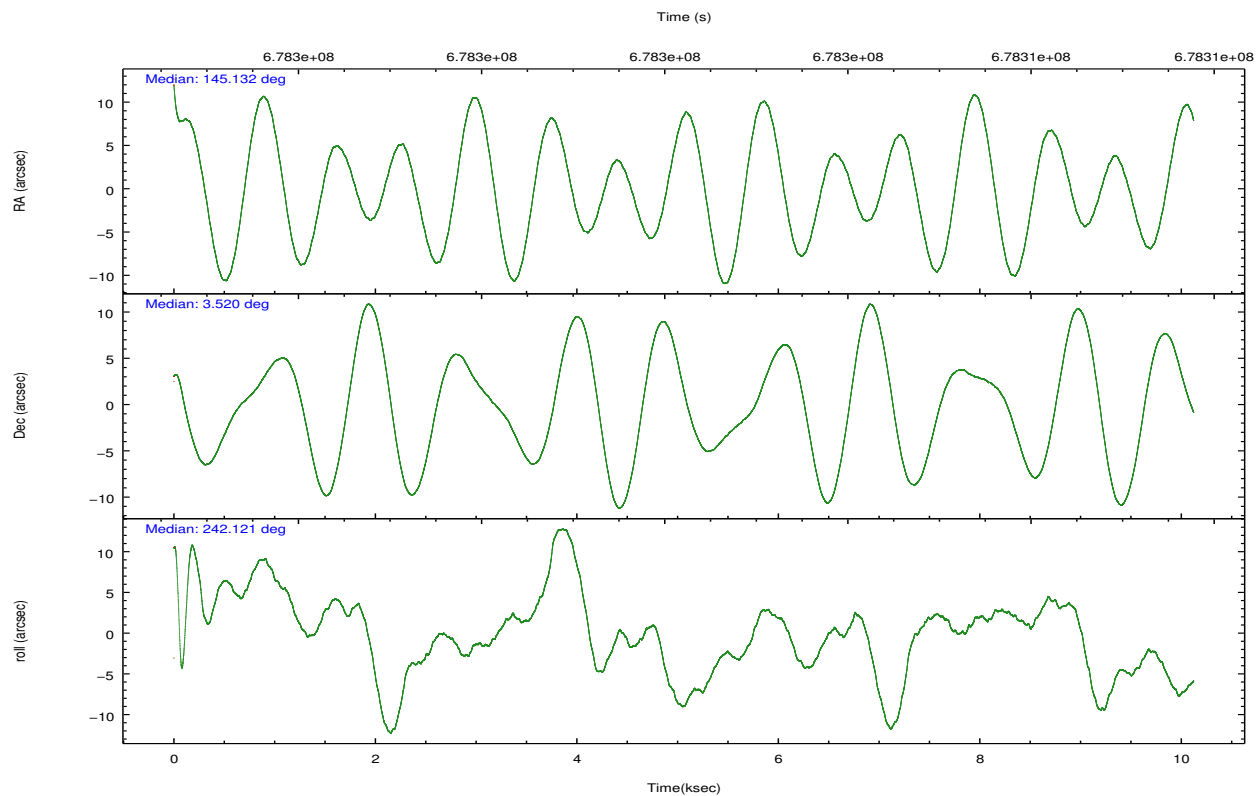
	ccd 7
grade 0 events	3481
	3%
grade 1 events	140
	0%
grade 2 events	8642
	8%
grade 3 events	3164
	3%
grade 4 events	3165
	3%
grade 5 events	9298
	9%
grade 6 events	23508
	24%
grade 7 events	45316
	46%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	145.130378	145.1318037650204	Subarray requested	NONE	NONE
[deg] Pointing Dec	3.547677	3.520263516106322	Alternating exposures requested	N	N
[deg] Pointing Roll	241.964548	242.1211061595741	[s] Primary exposure time	0.000000	3
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	678297261.184000	678295906.00872			
Observation start date	2019-06-30T15:53:12	2019-06-30T15:31:46			
[s] Observation end time (MET)	678307261.184000	678308291.08446			
Observation end date	2019-06-30T18:39:52	2019-06-30T18:58:11			
Read mode	TIMED	TIMED			

2.3 Aspect



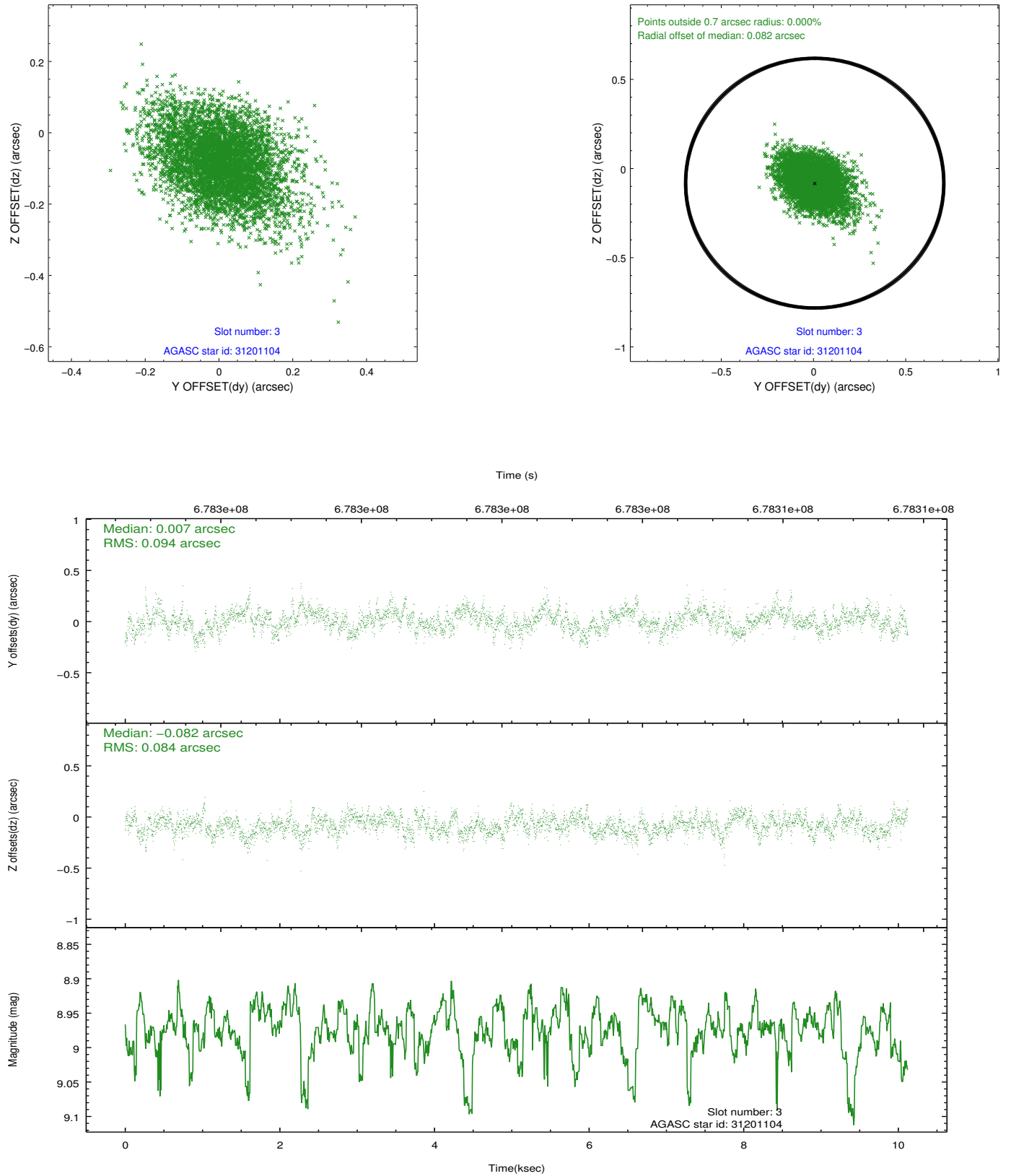


Slot Statistics

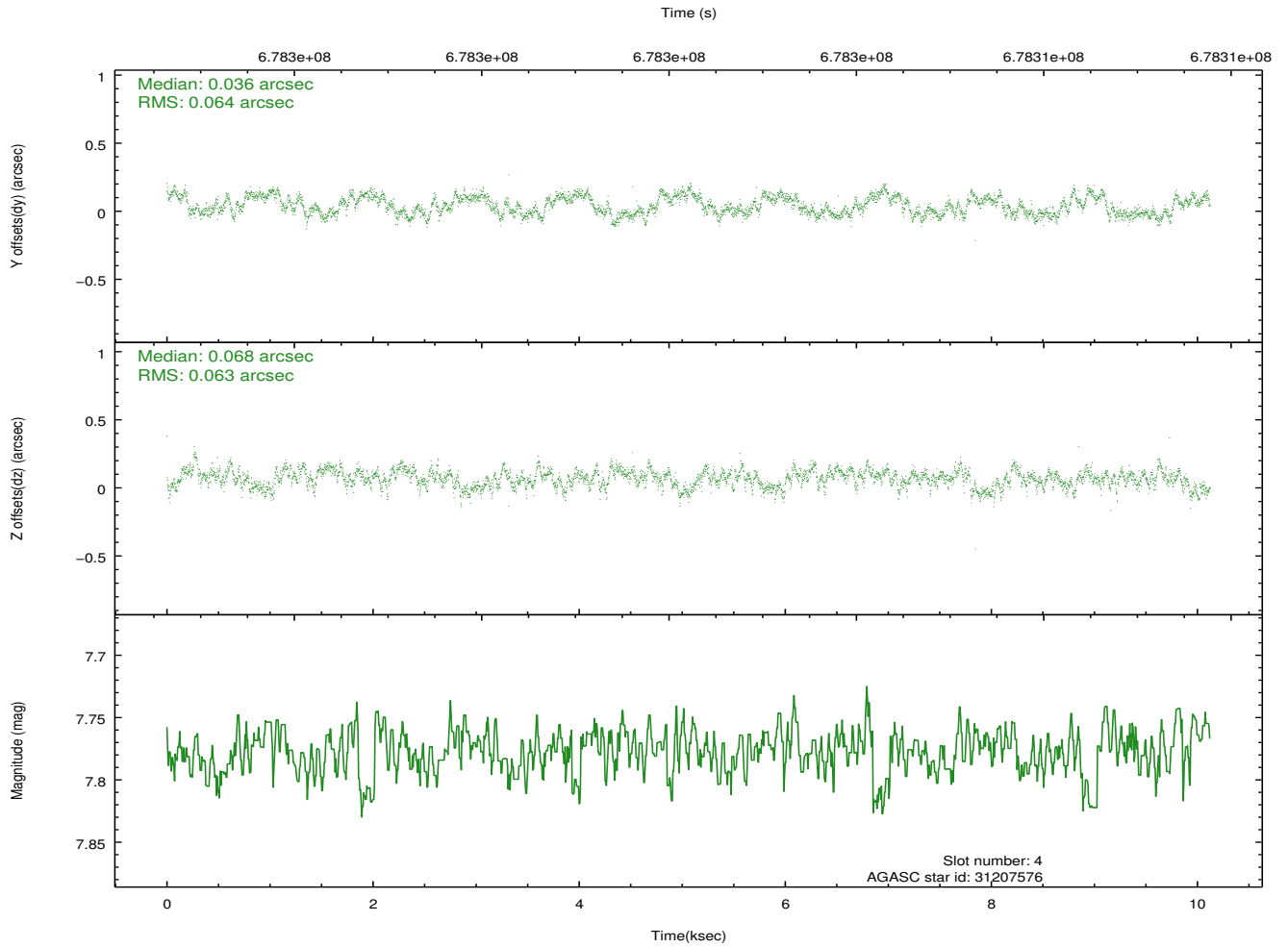
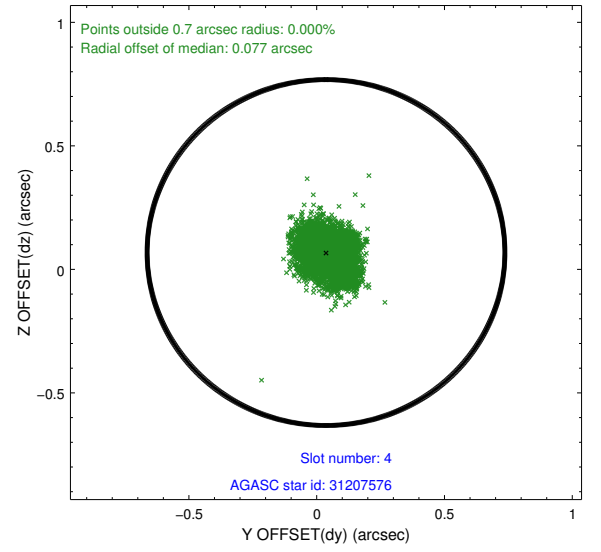
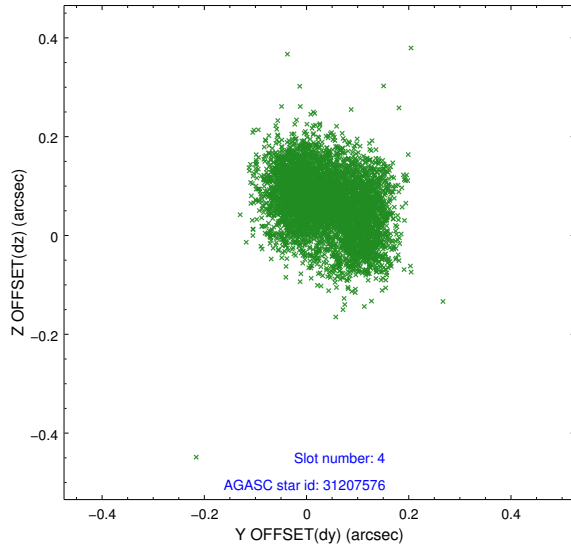
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.15	2469	1.000	-0.258	-0.219	0.009	0.015	0.000000	0.000000	-763.86	-1739
1	FID		ACIS-S-4	7.28	2469	1.000	0.701	0.183	0.013	0.025	0.000000	0.000000	2150.12	168
2	FID		ACIS-S-5	7.26	2470	1.000	-0.471	0.044	0.015	0.037	0.000000	0.000000	-1816.27	162
3	GUIDE	used	31201104	8.97	4935	1.000	0.007	-0.082	0.131	0.225	144.741789	3.223669	1686.17	-684
4	GUIDE	used	31207576	7.78	4938	1.000	0.036	0.068	0.098	0.147	144.924676	4.284621	-1994.20	-1899
5	GUIDE	used	31210976	8.58	4937	1.000	0.145	0.068	0.136	0.215	144.892270	3.933162	-823.02	-1407
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	31341512	8.27	4937	1.000	-0.193	-0.046	0.141	0.213	145.252599	3.794394	-990.36	-30

2.4 Star Slots

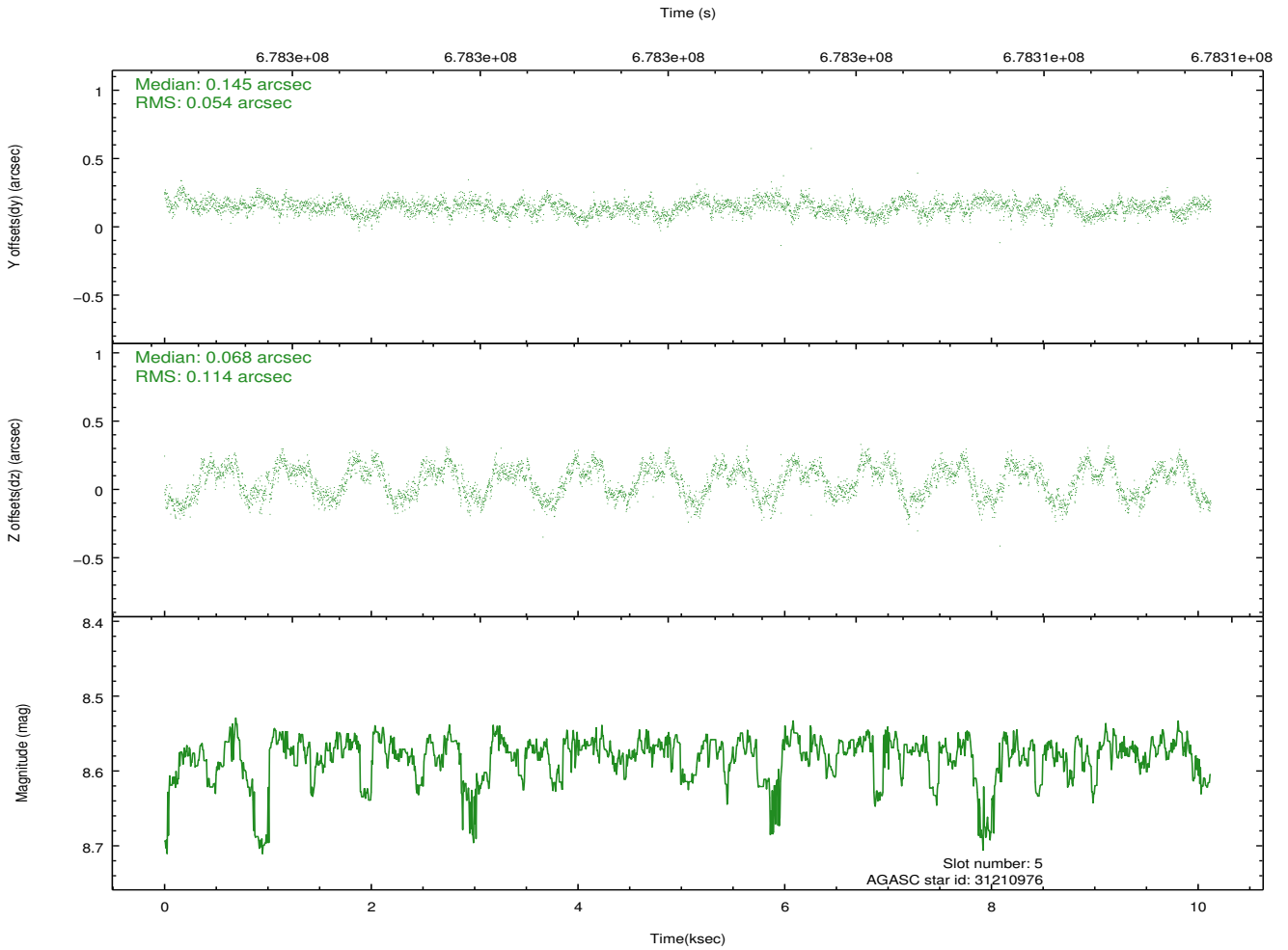
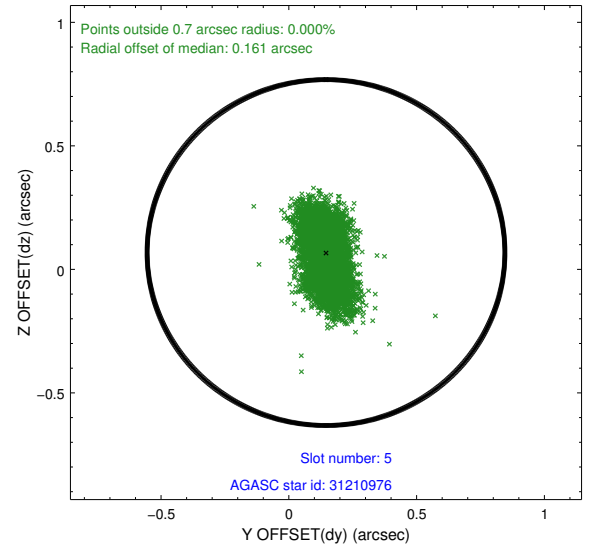
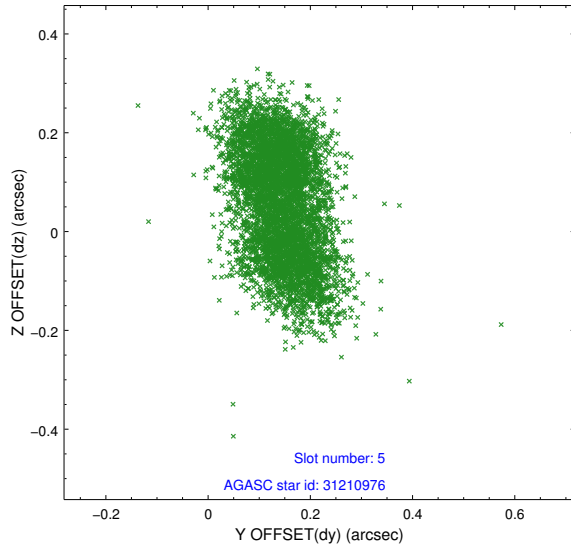
2.4.1 Slot 3



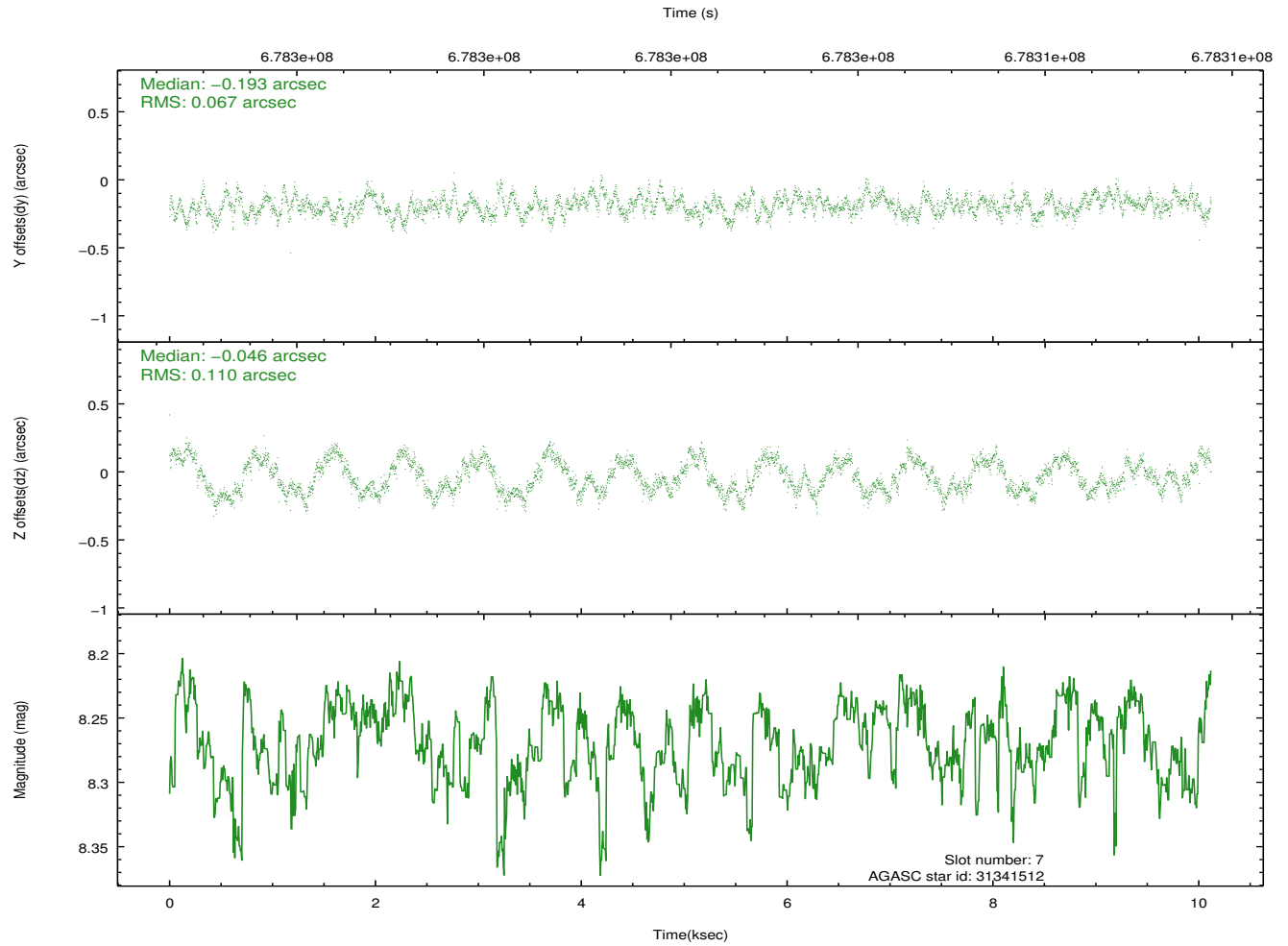
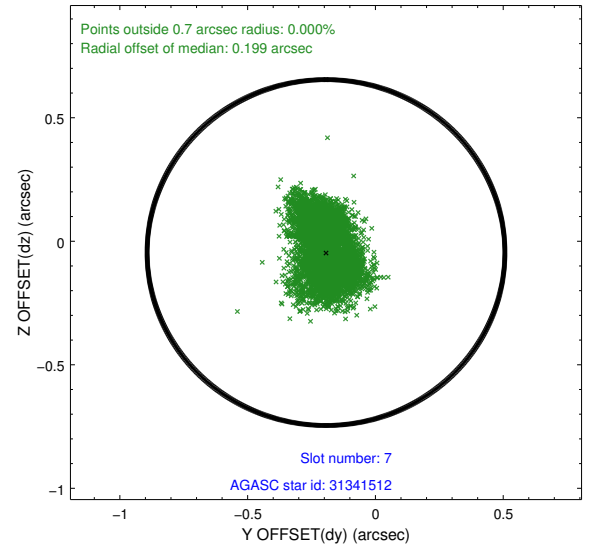
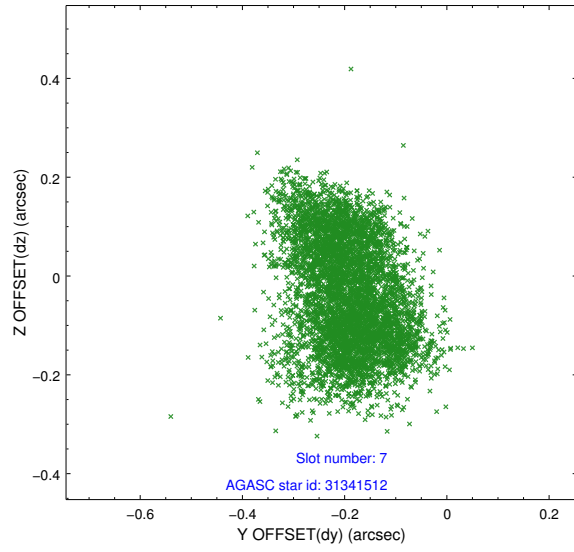
2.4.2 Slot 4



2.4.3 Slot 5

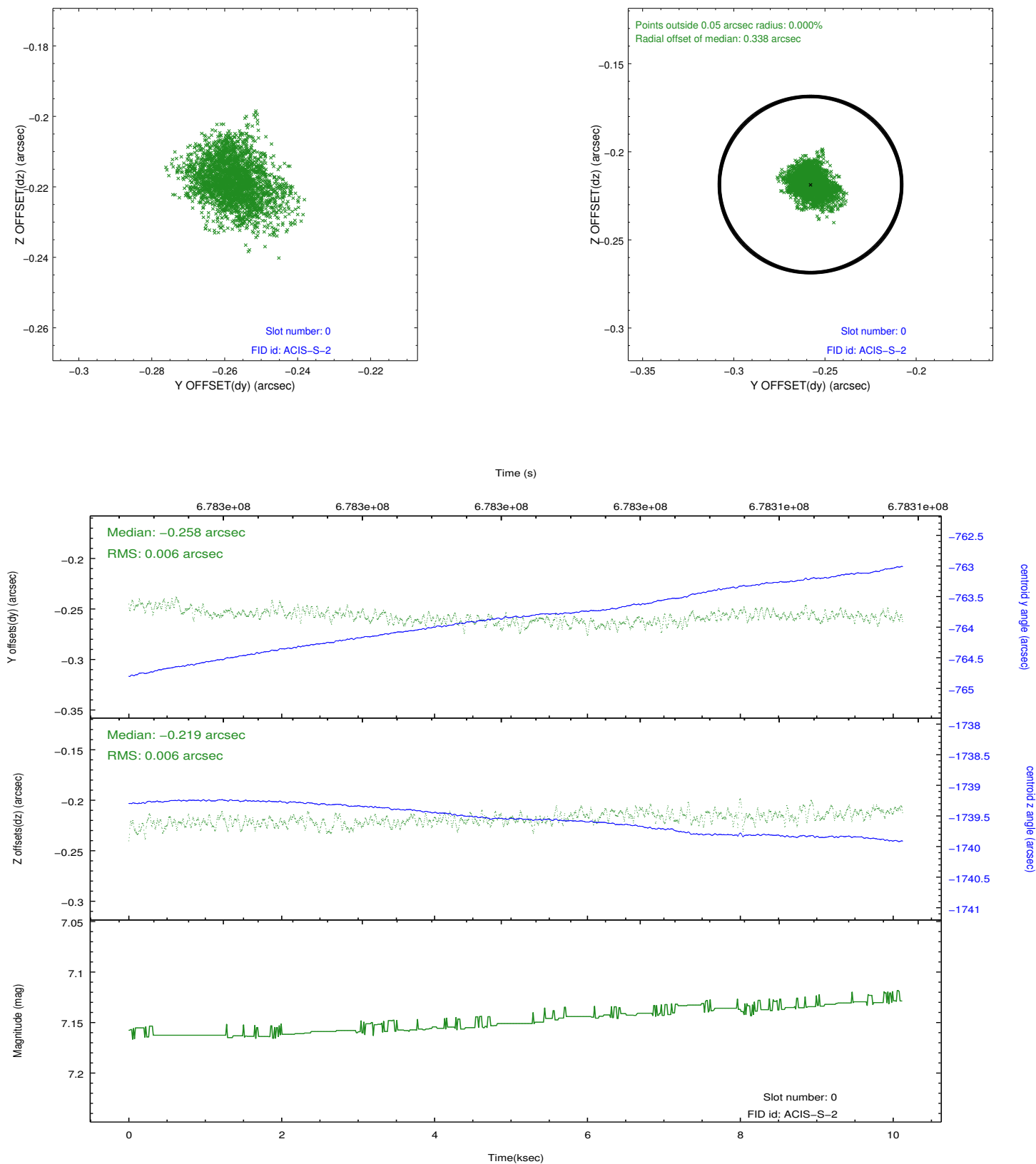


2.4.4 Slot 7

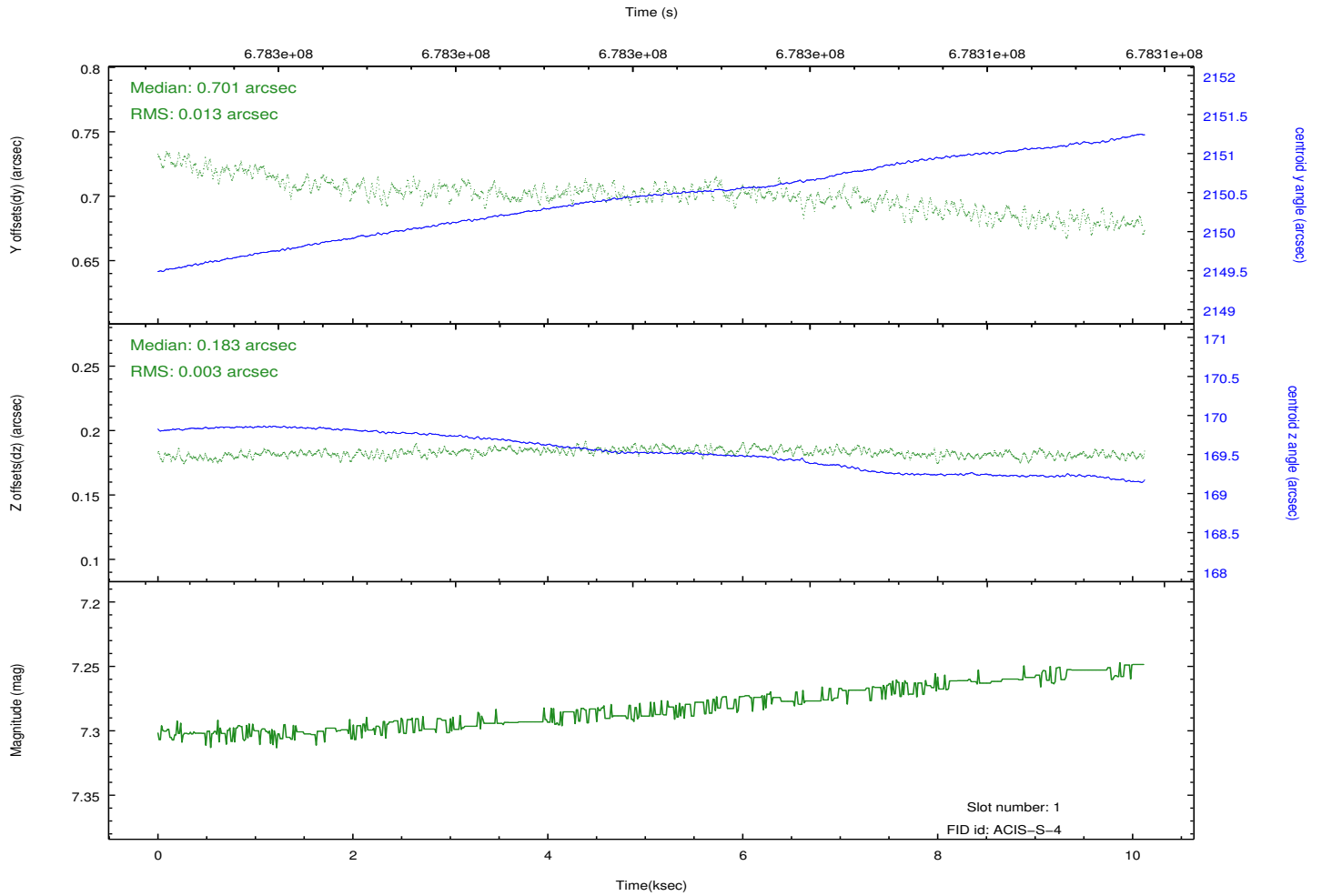
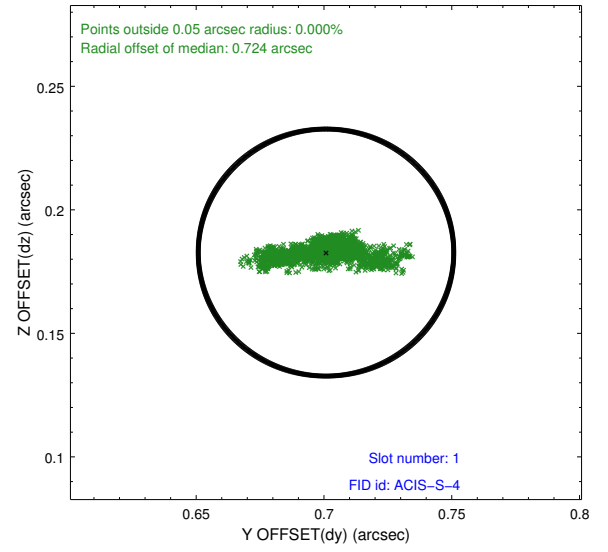
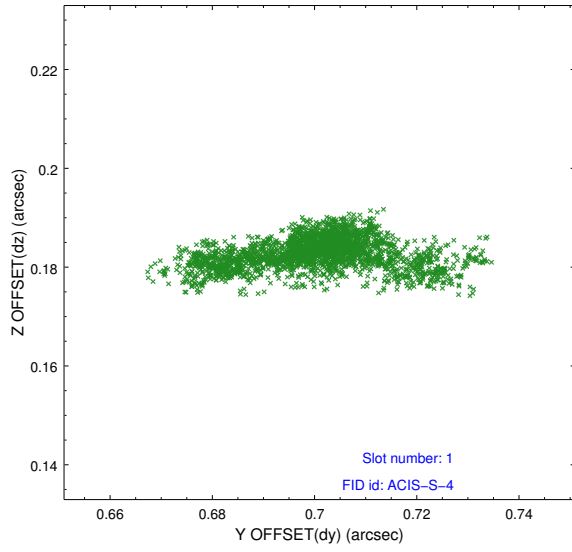


2.5 FID Slots

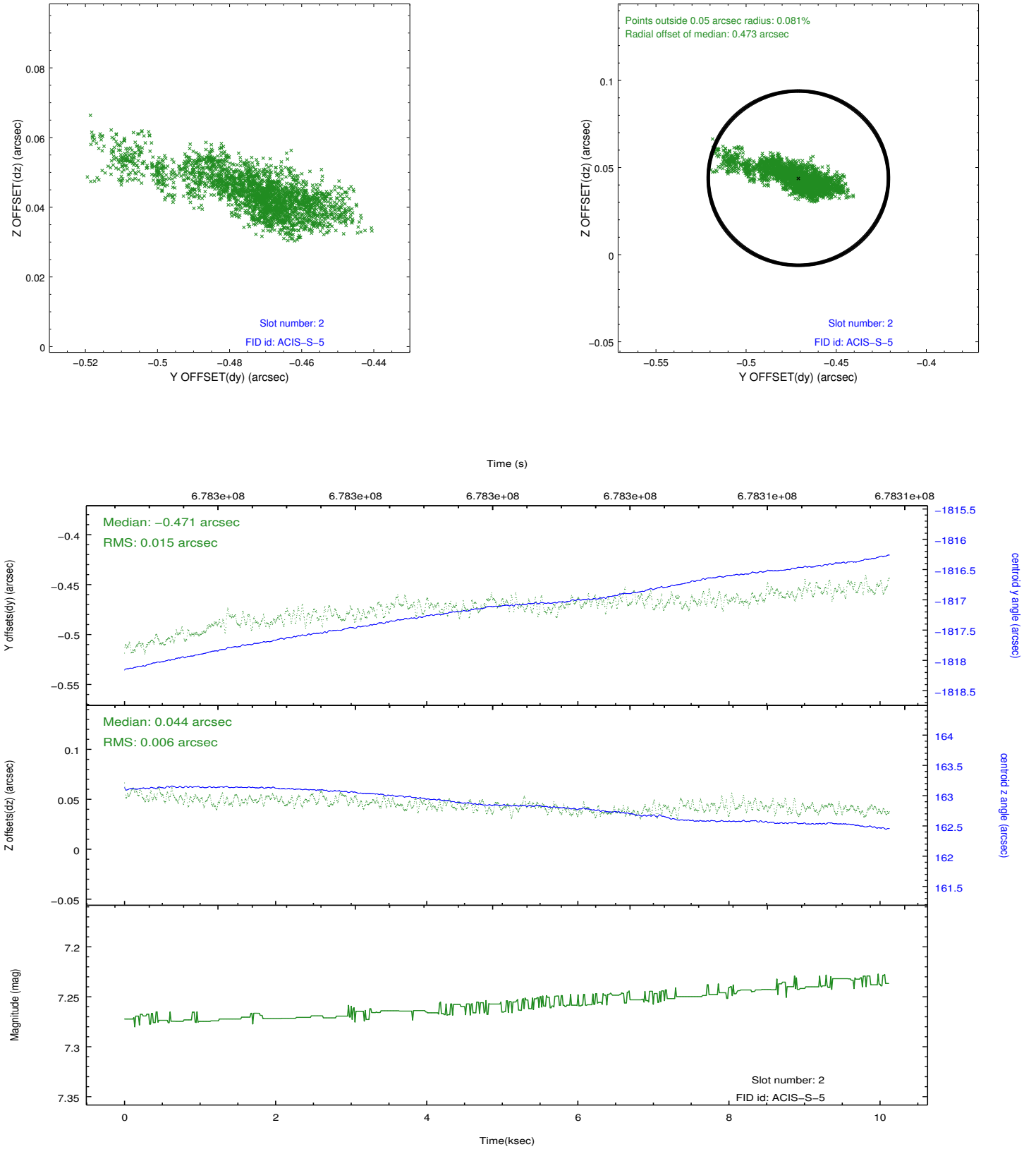
2.5.1 Slot 0



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)	2019.06.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.091616227984

A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.