

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 21228 - L2 Version 1
Chandra X-Ray Center

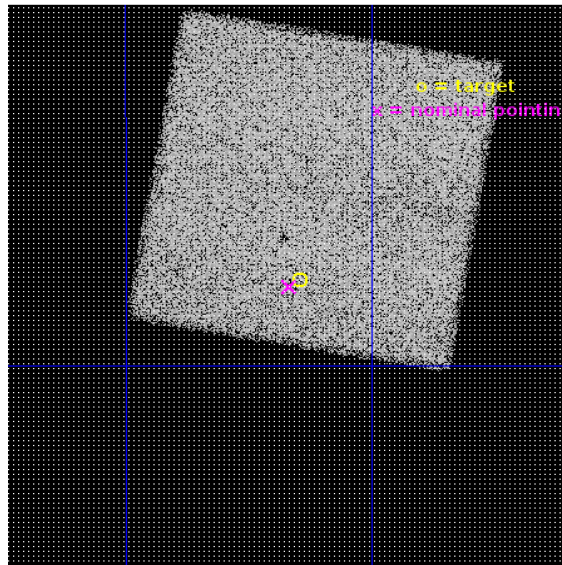
L2 Processing Date : Jul 27 2019

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

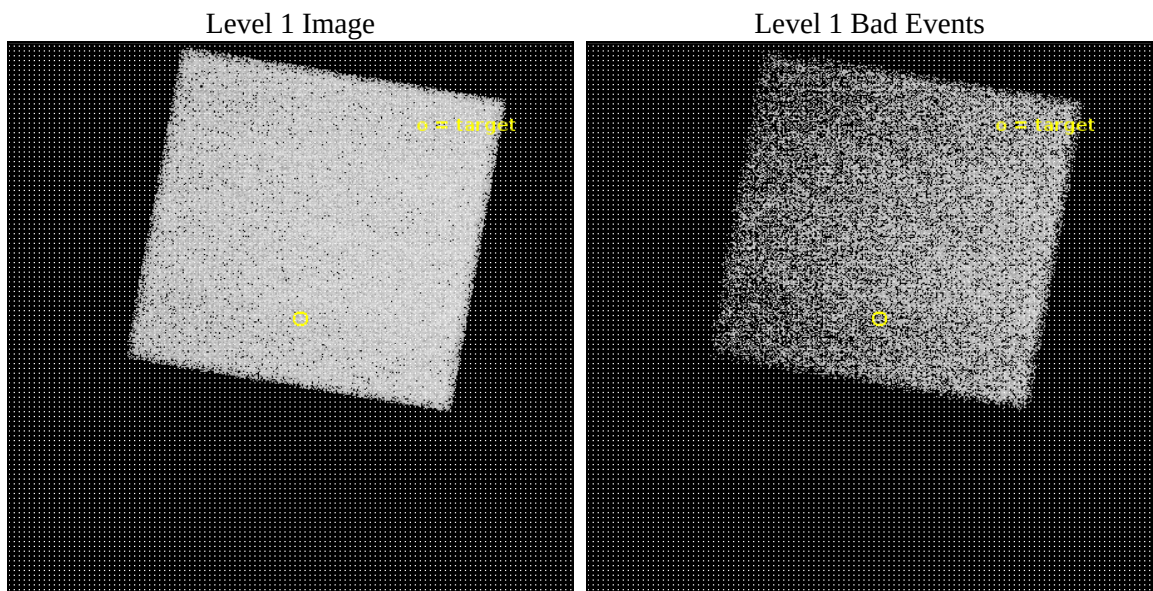
seq_num	402061	Sequence number
obs_id	21228	Observation id
title	An unexplored regime of neutron star heating and cooling	Proposal
observer	Nathalie Degenaar	Principal investigator
object	IGR J17511-3057	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.785833	Observer's specified target RA [deg]
dec_targ	-30.961583	Observer's specified target Dec [deg]
ra_nom	267.79159734979	Nominal RA [deg]
dec_nom	-30.964420665968	Nominal Dec [deg]
roll_nom	279.69940148733	Nominal Roll [deg]
revision	1	Processing version of data
ontime	28091.405730009	Sum of GTIs [s]
livetime	27712.301446225	Livetime [s]
ontime7	28091.405730009	Sum of GTIs [s]
l2events	120344	Number of level 2 events



2 OBI

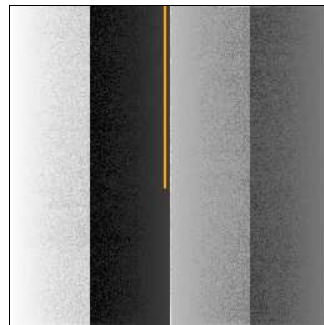
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	28091.405730009	Sum of GTIs [s]
caldsver	4.8.3.1	 	ontime7	28091.405730009	Sum of GTIs [s]
date	2019-07-27T23:30:37	Date and time of file creation	l1events	278315	Number of level 1 events
revision	1	Processing version of data			

2.1.4 Events

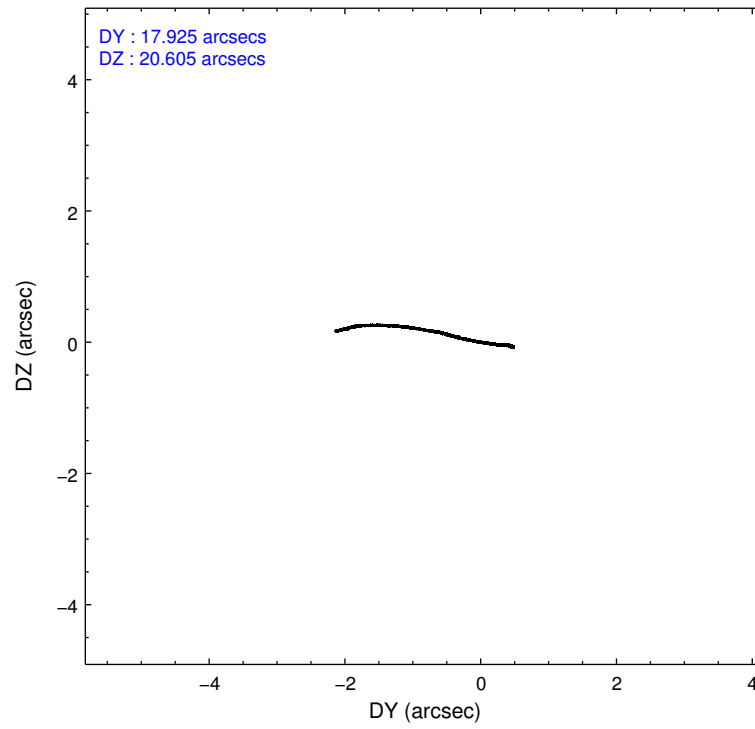
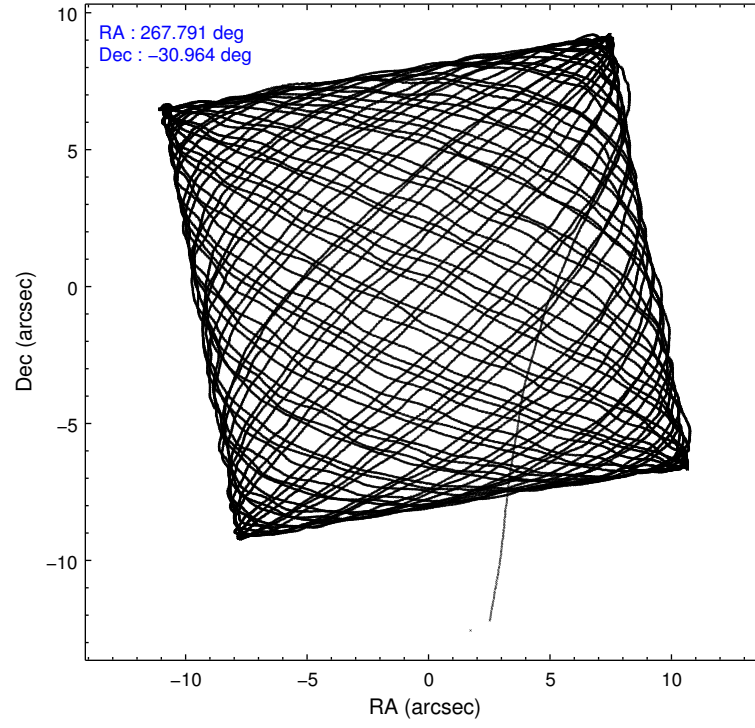
	ccd 7
level 1 events	278315
rejected events	154860
rejected %	55%

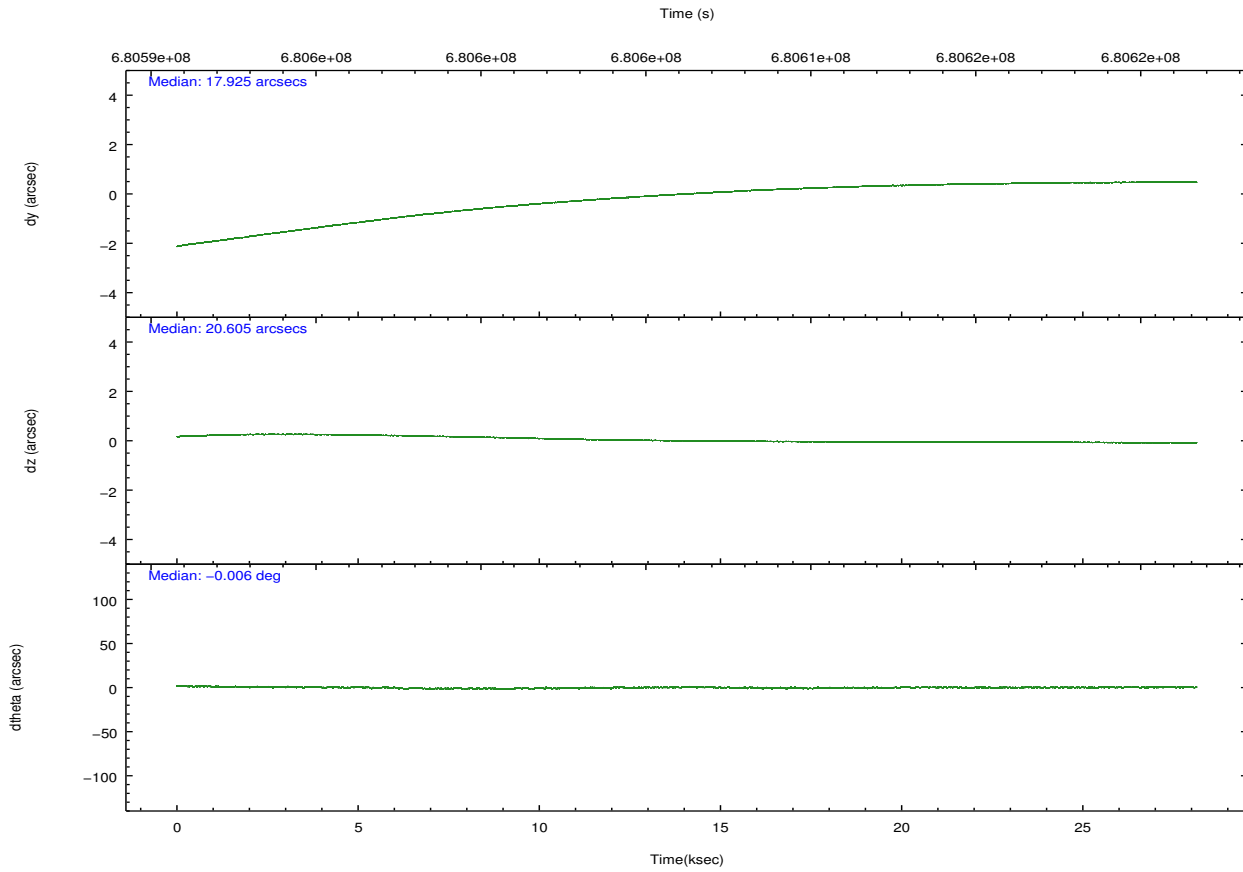
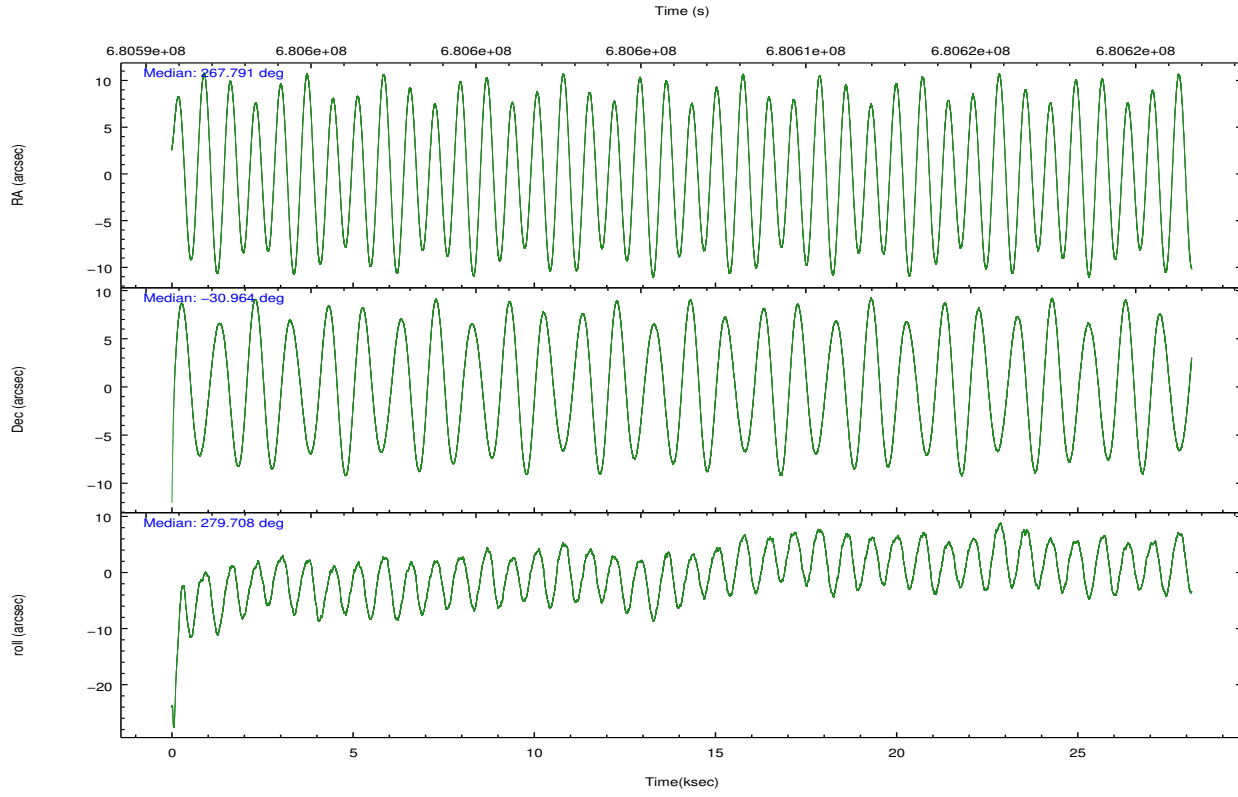
	ccd 7
grade 0 events	10542
	3%
grade 1 events	426
	0%
grade 2 events	26491
	9%
grade 3 events	9816
	3%
grade 4 events	9583
	3%
grade 5 events	27165
	9%
grade 6 events	67027
	24%
grade 7 events	127265
	45%

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	267.770815	267.7915973497899	Subarray requested	NONE	NONE
[deg] Pointing Dec	-30.943538	-30.96442066596822	Alternating exposures requested	N	N
[deg] Pointing Roll	279.532081	279.6994014873336	[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)	680592304.184000	680591076.40903			
Observation start date	2019-07-27T05:23:55	2019-07-27T05:04:36			
[s] Observation end time (MET)	680620304.184000	680620633.31081			
Observation end date	2019-07-27T13:10:35	2019-07-27T13:17:13			
Read mode	TIMED	TIMED			

2.3 Aspect



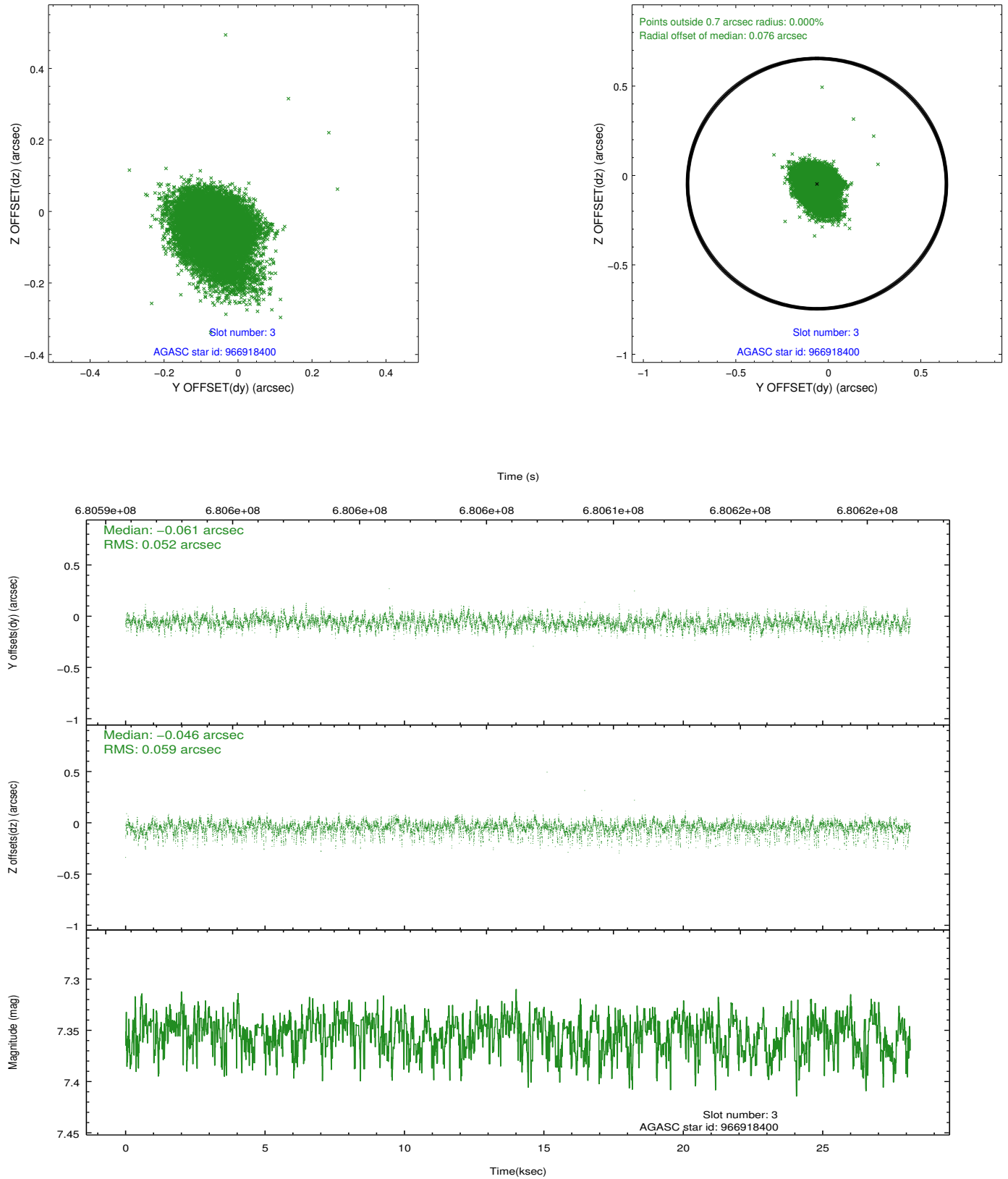


Slot Statistics

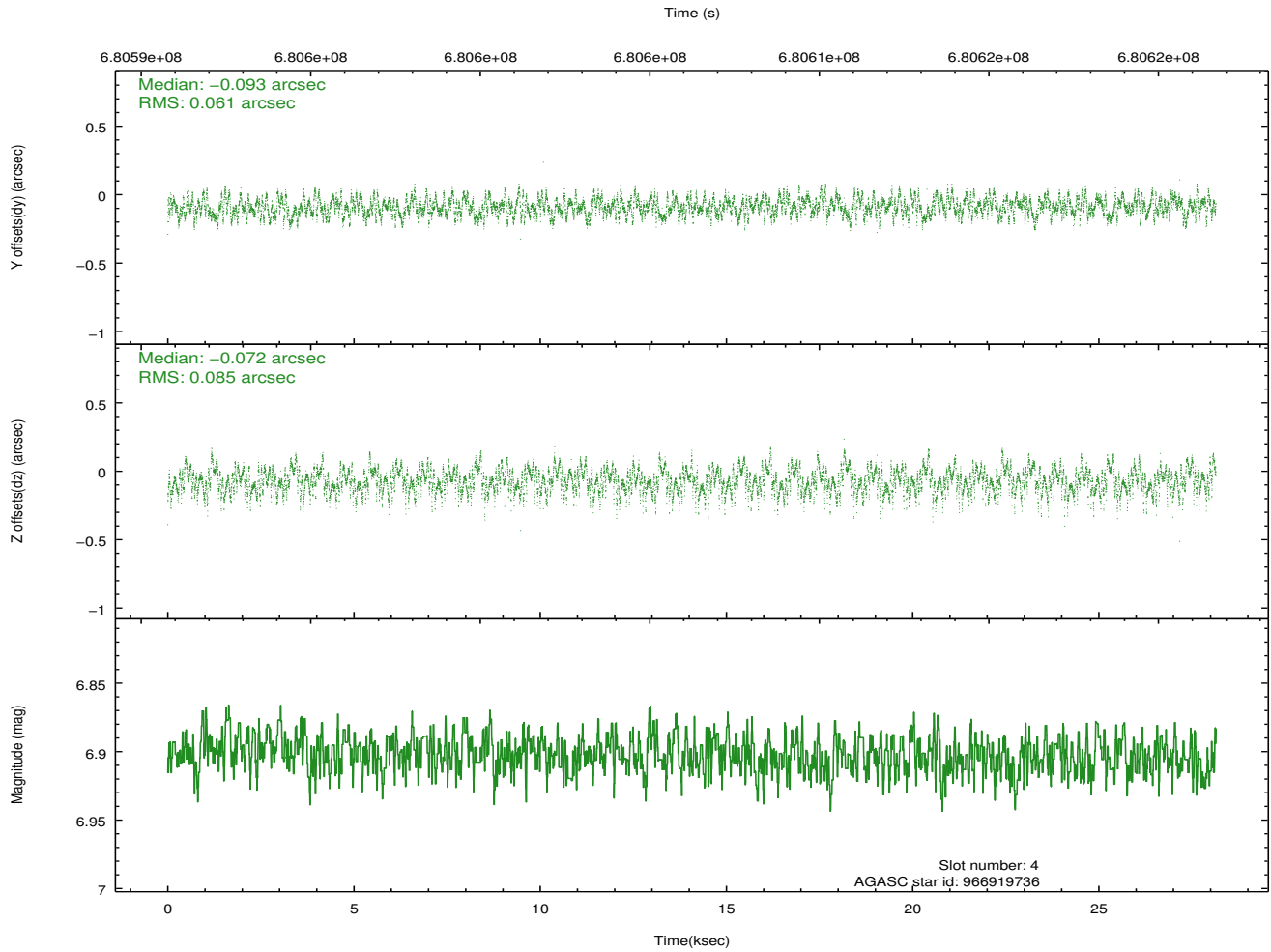
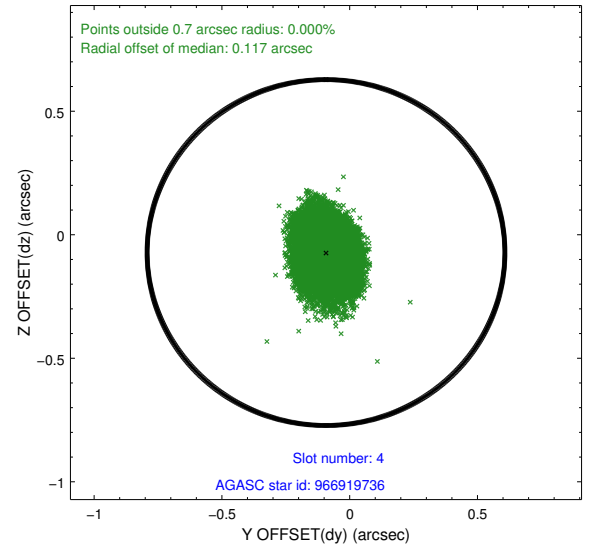
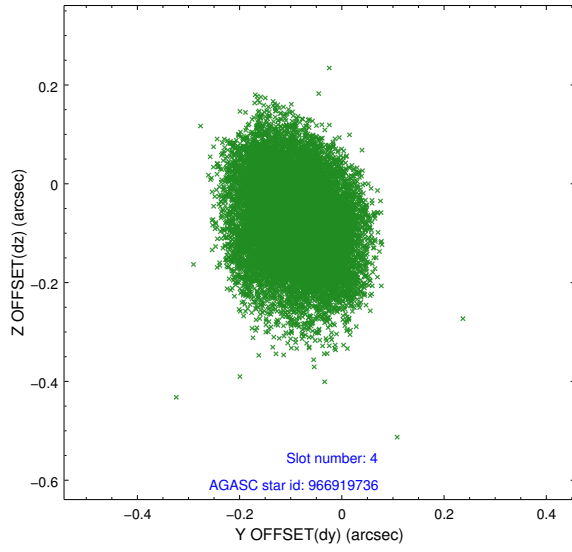
id	status	used	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		7.02	6863	1.000	-0.307	-0.231	0.022	0.033	0.000000	0.000000	-770.93	-1742
1	FID		7.13	6864	1.000	0.779	0.207	0.022	0.033	0.000000	0.000000	2143.33	166
2	FID		7.09	6864	1.000	-0.503	0.028	0.014	0.027	0.000000	0.000000	-1823.92	159
3	GUIDE	used	7.35	13726	1.000	-0.061	-0.046	0.081	0.141	267.537101	-30.960086	-58.84	-720
4	GUIDE	used	6.90	13728	1.000	-0.093	-0.072	0.113	0.178	267.322278	-30.597445	-1454.13	-1162
5	GUIDE	used	8.13	13714	1.000	0.117	0.012	0.170	0.253	267.318997	-31.255021	879.47	-1556
6	GUIDE	used	8.32	13716	1.000	0.055	0.108	0.120	0.187	267.231170	-30.494681	-1865.62	-1382
7	GUIDE	used	8.12	13721	1.000	-0.029	0.026	0.091	0.145	267.457106	-30.882477	-374.94	-918

2.4 Star Slots

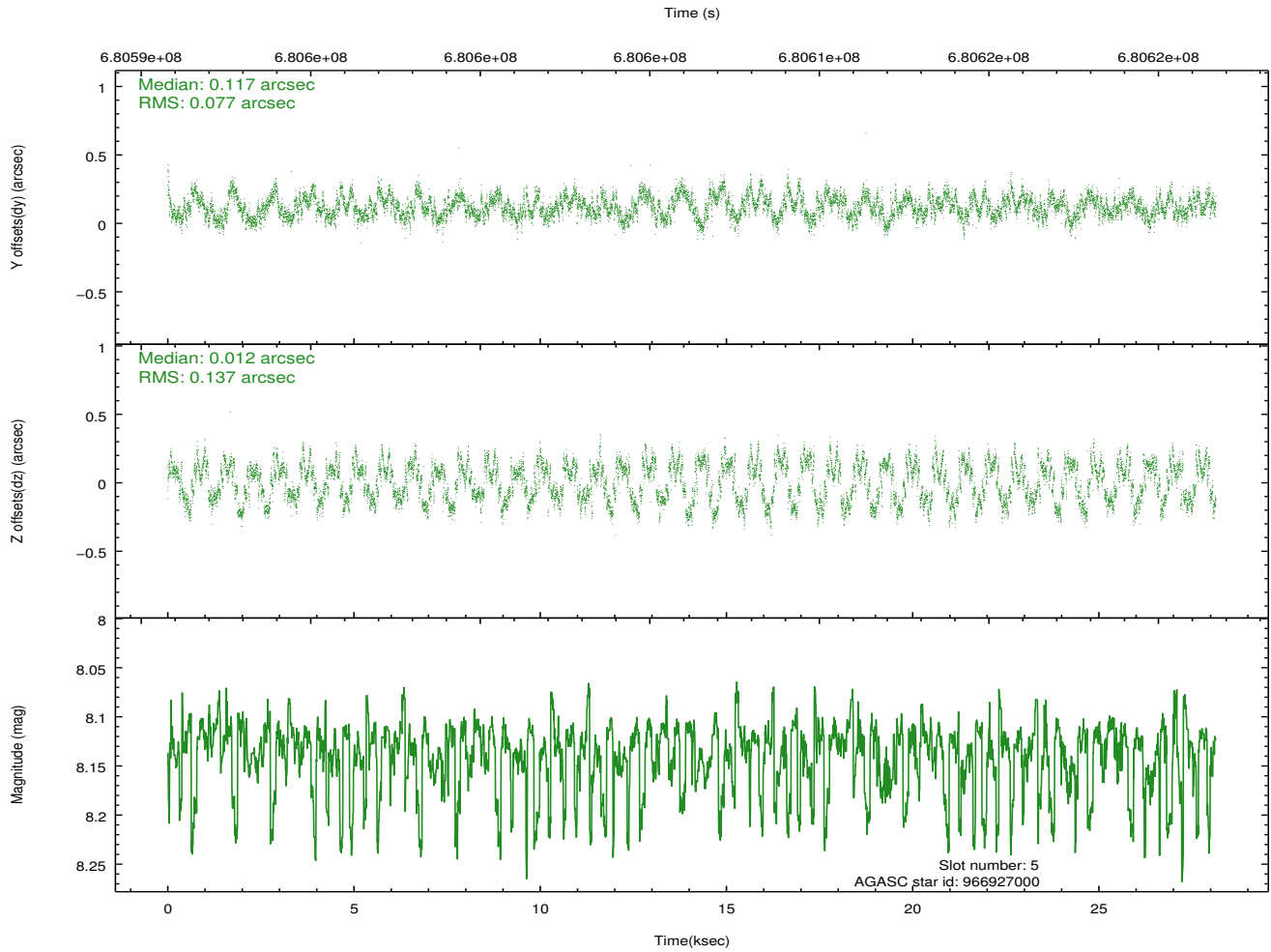
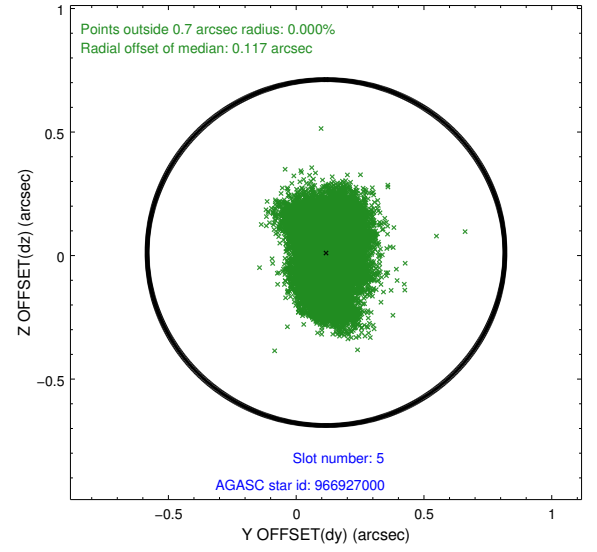
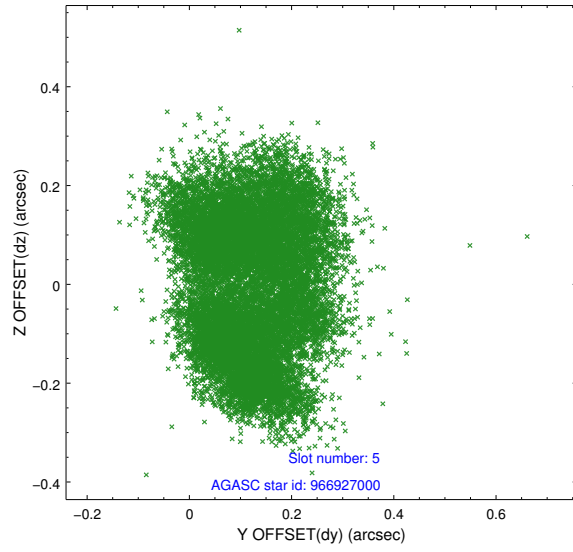
2.4.1 Slot 3



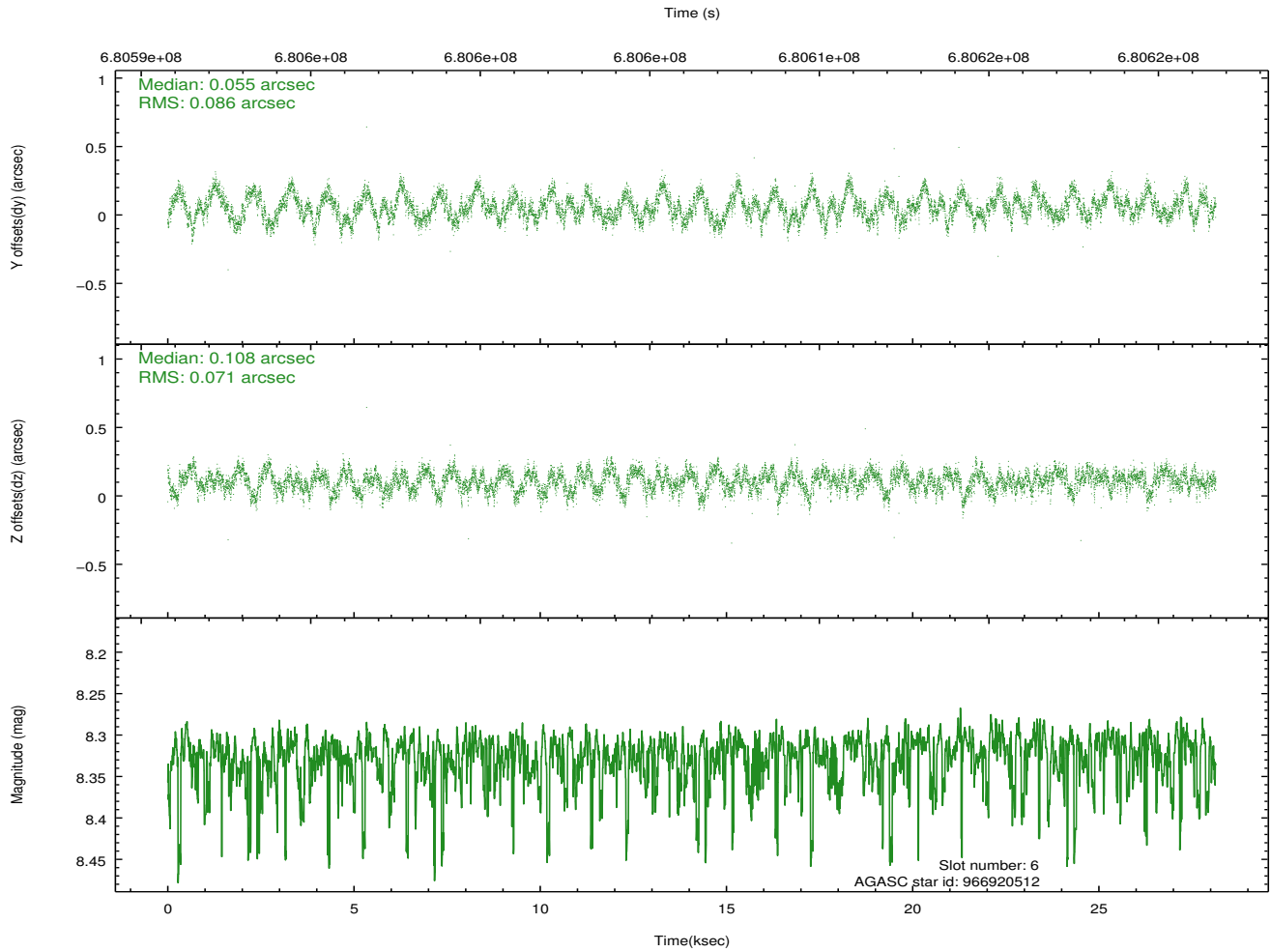
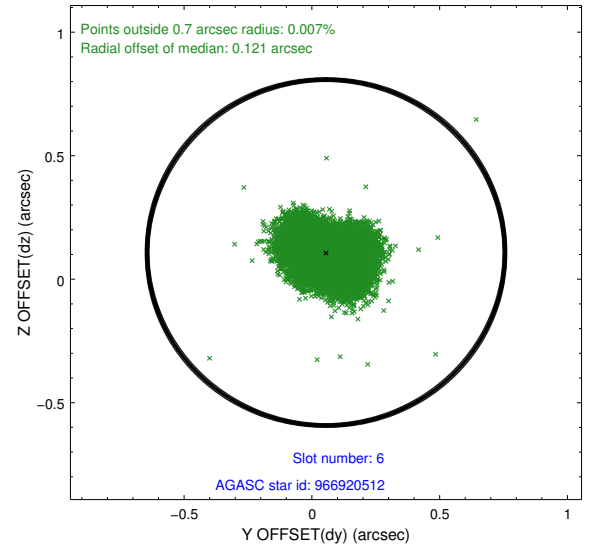
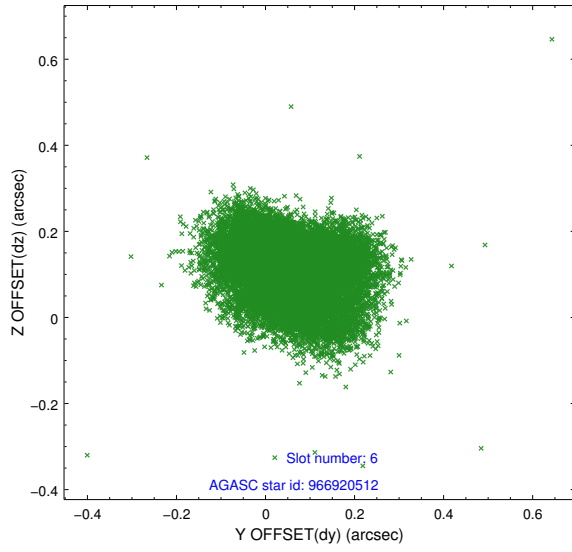
2.4.2 Slot 4



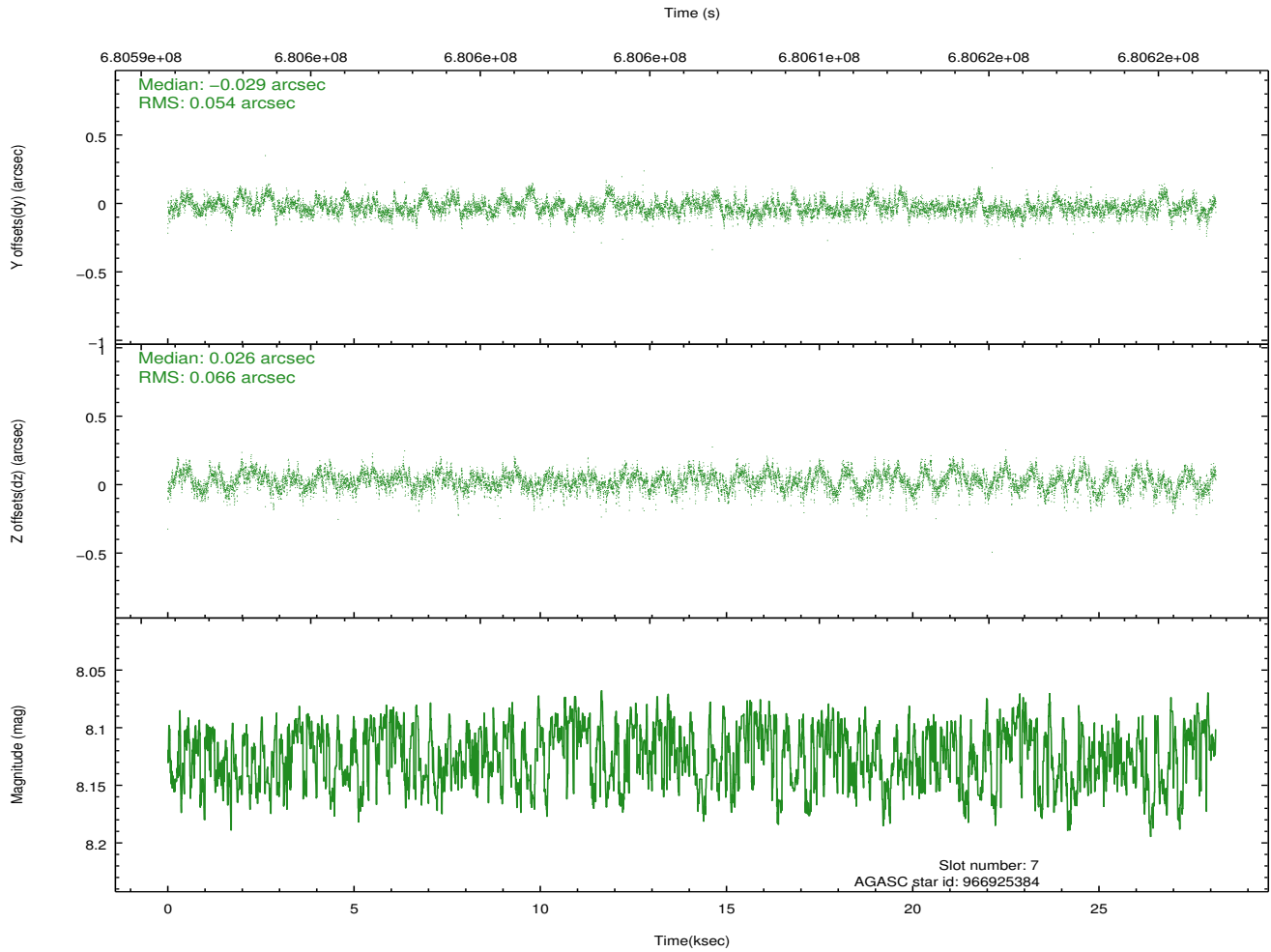
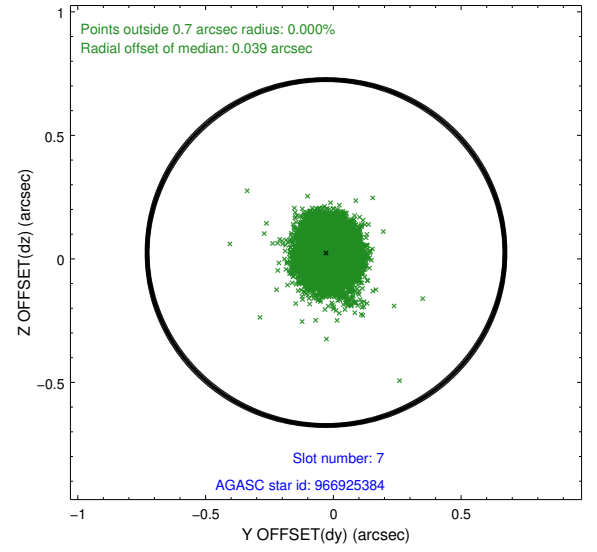
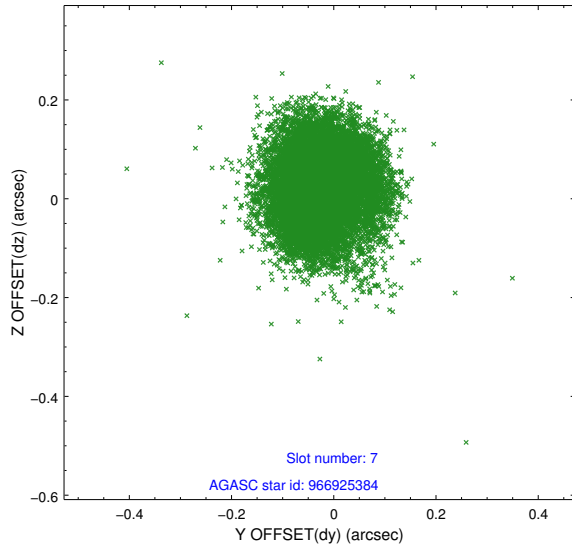
2.4.3 Slot 5



2.4.4 Slot 6

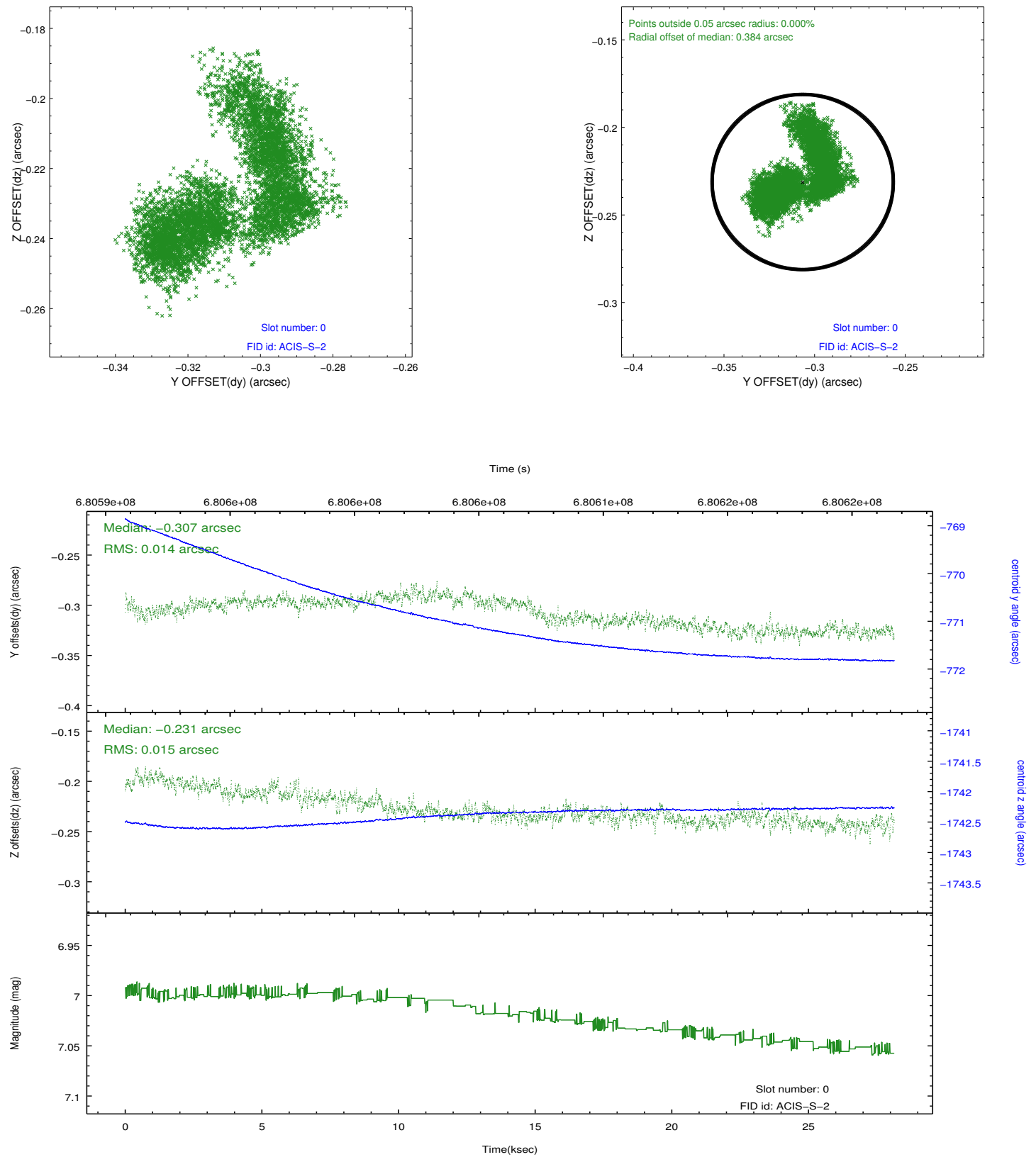


2.4.5 Slot 7

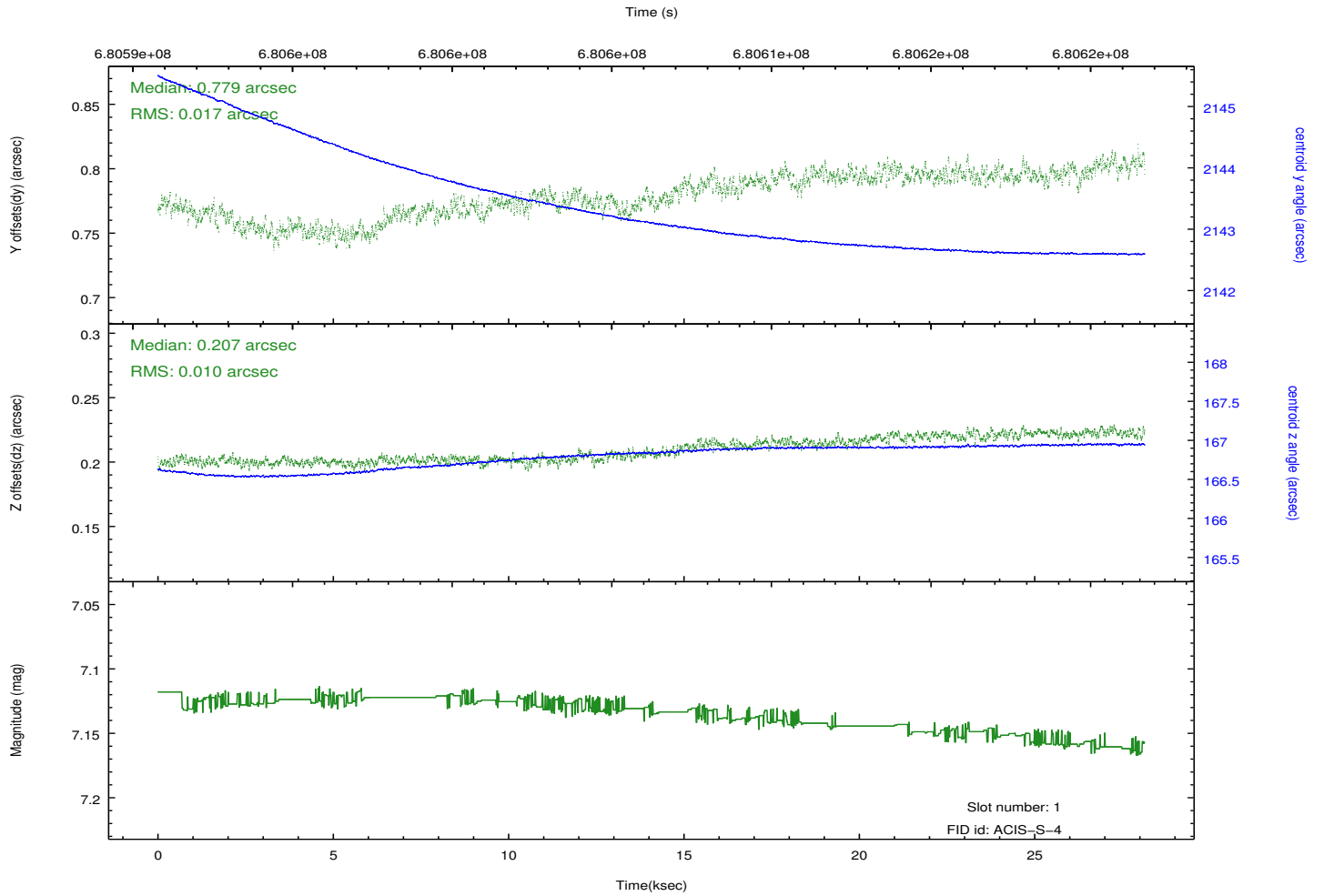
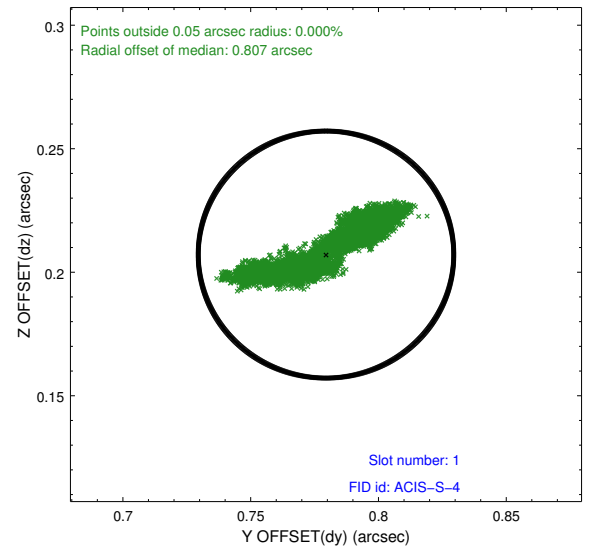
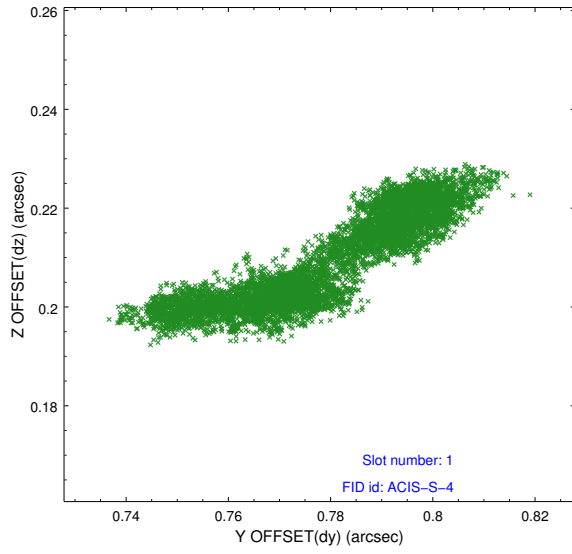


2.5 FID Slots

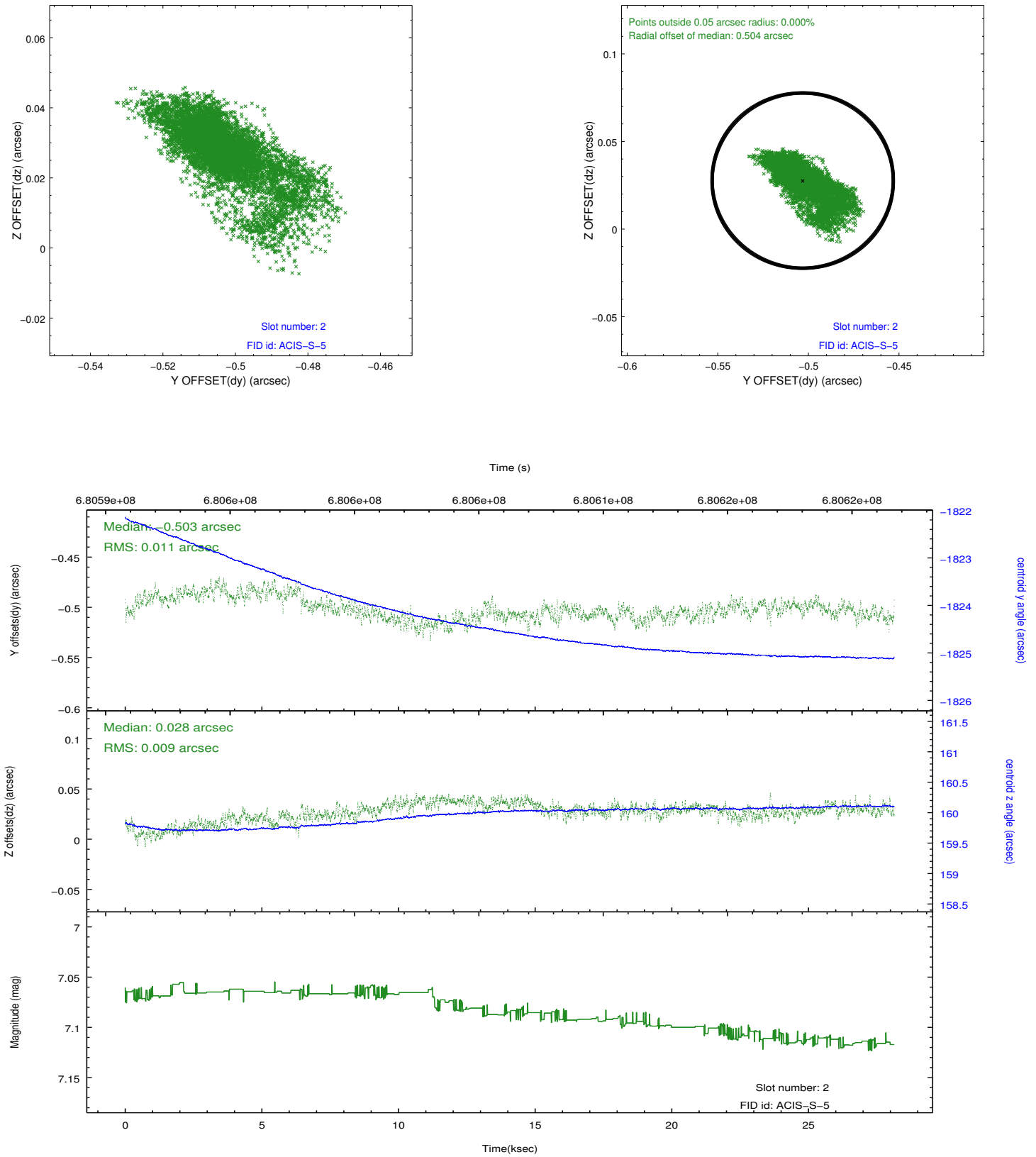
2.5.1 Slot 0



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)	2019.07.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.091405730009

A.2 Comments