

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 6157 - L2 Version 5
Chandra X-Ray Center

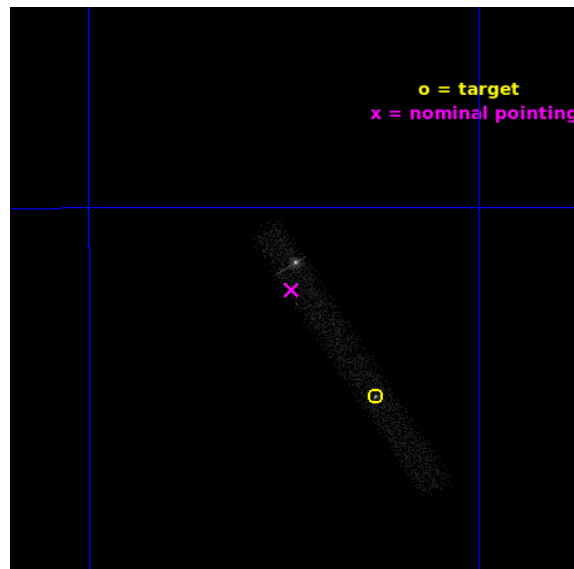
L2 Processing Date : Oct 10 2020

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

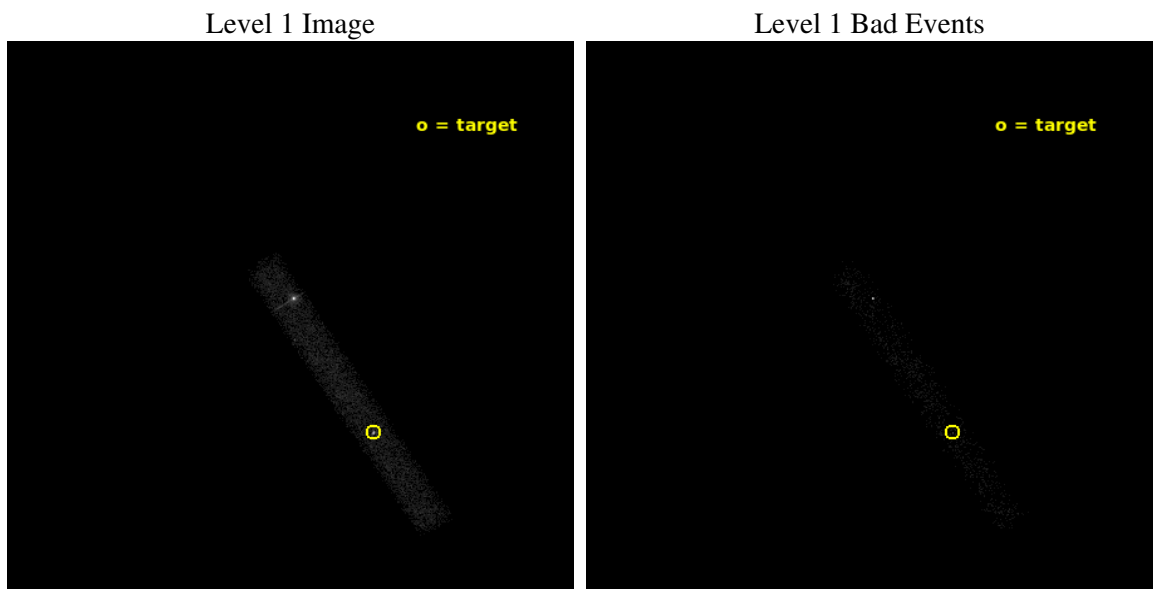
seq_num	590418	Sequence number
obs_id	6157	Observation id
title	Calibrating Pile-up in ACIS Imaging Data with PSRJ0437-4715	Propos
observer	CXC Calibration	Principal investigator
object	PSR J0437-4715	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	69.315833	Observer's specified target RA [deg]
dec_targ	-47.252333	Observer's specified target Dec [deg]
ra_nom	69.369616782627	Nominal RA [deg]
dec_nom	-47.204056313939	Nominal Dec [deg]
roll_nom	57.288087017922	Nominal Roll [deg]
revision	5	Processing version of data
ontime	9449.6001407802	Sum of GTIs [s]
livetime	8570.2885368948	Livetime [s]
ontime7	9449.6001407802	Sum of GTIs [s]
l2events	19454	Number of level 2 events



2 OBI

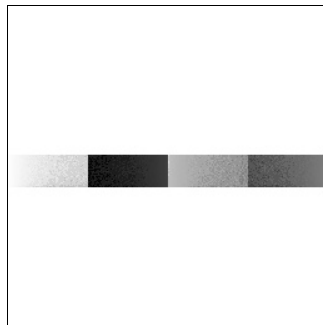
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9265.809000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	9449.6001407802	Sum of GTIs [s]
caldsver	4.9.2	 	ontime7	9449.6001407802	Sum of GTIs [s]
date	2020-10-11T01:01:21	Date and time of file creation	l1events	26955	Number of level 1 events
revision	5	Processing version of data			

2.1.4 Events

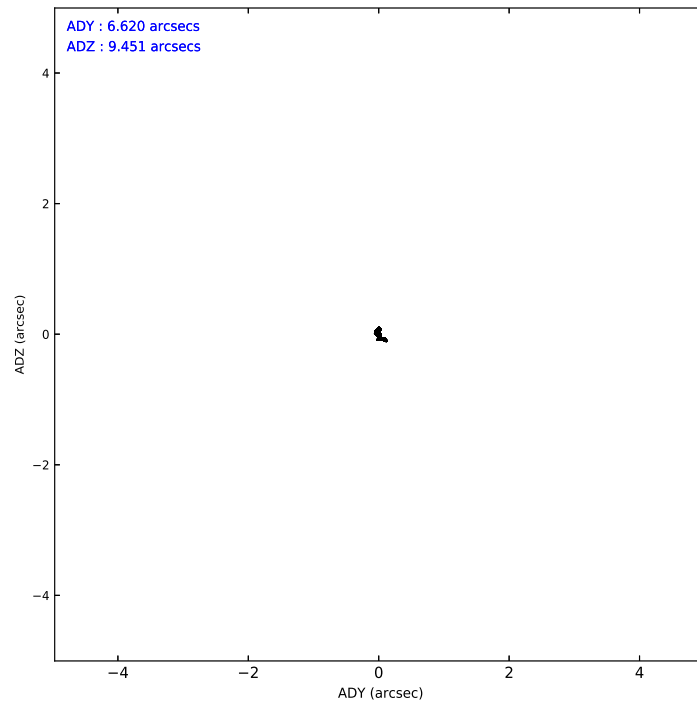
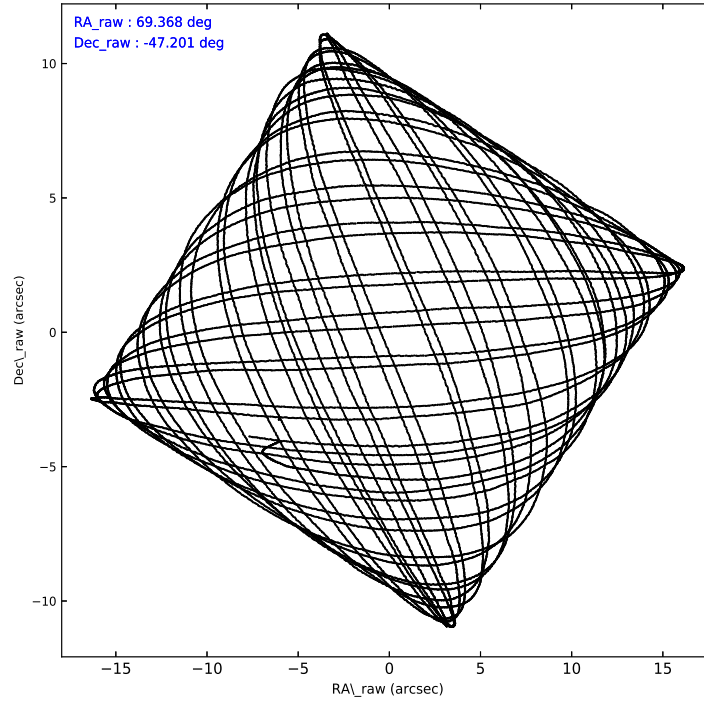
	ccd 7
level 1 events	26955
rejected events	7327
rejected %	27%

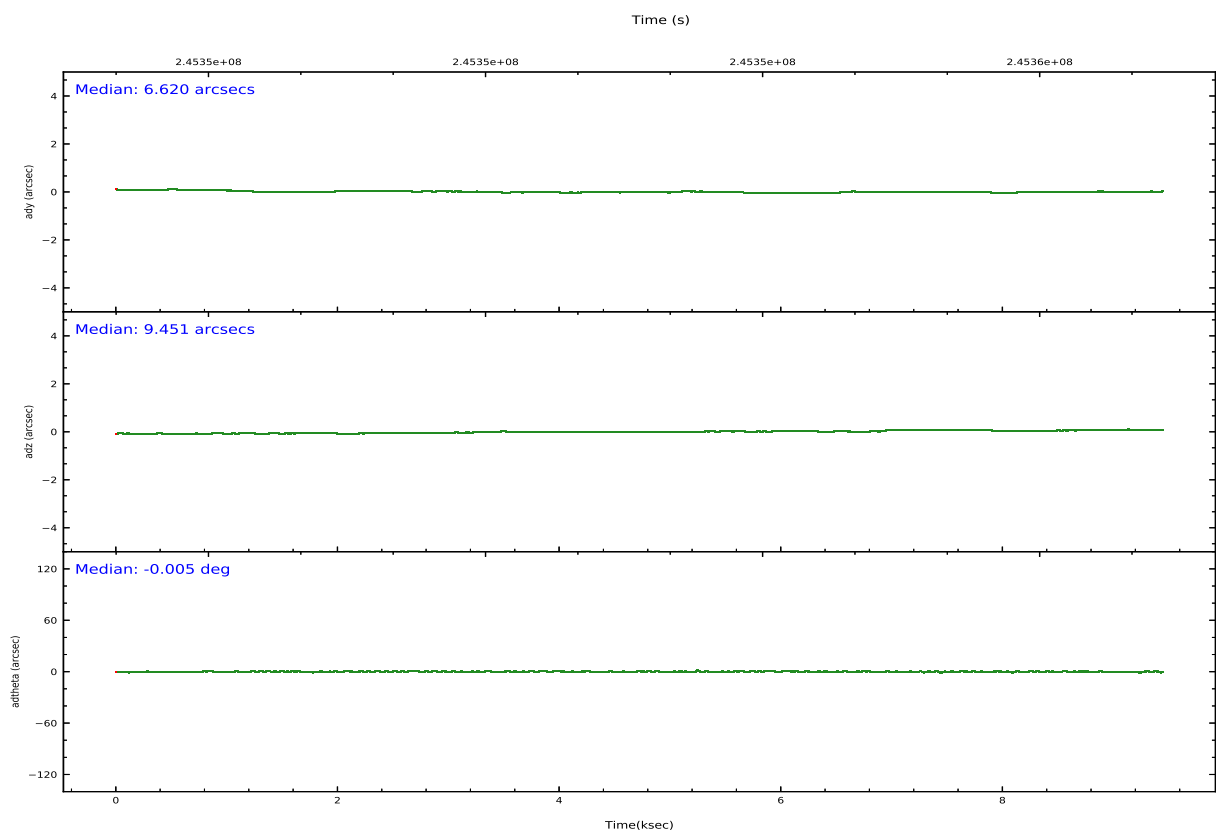
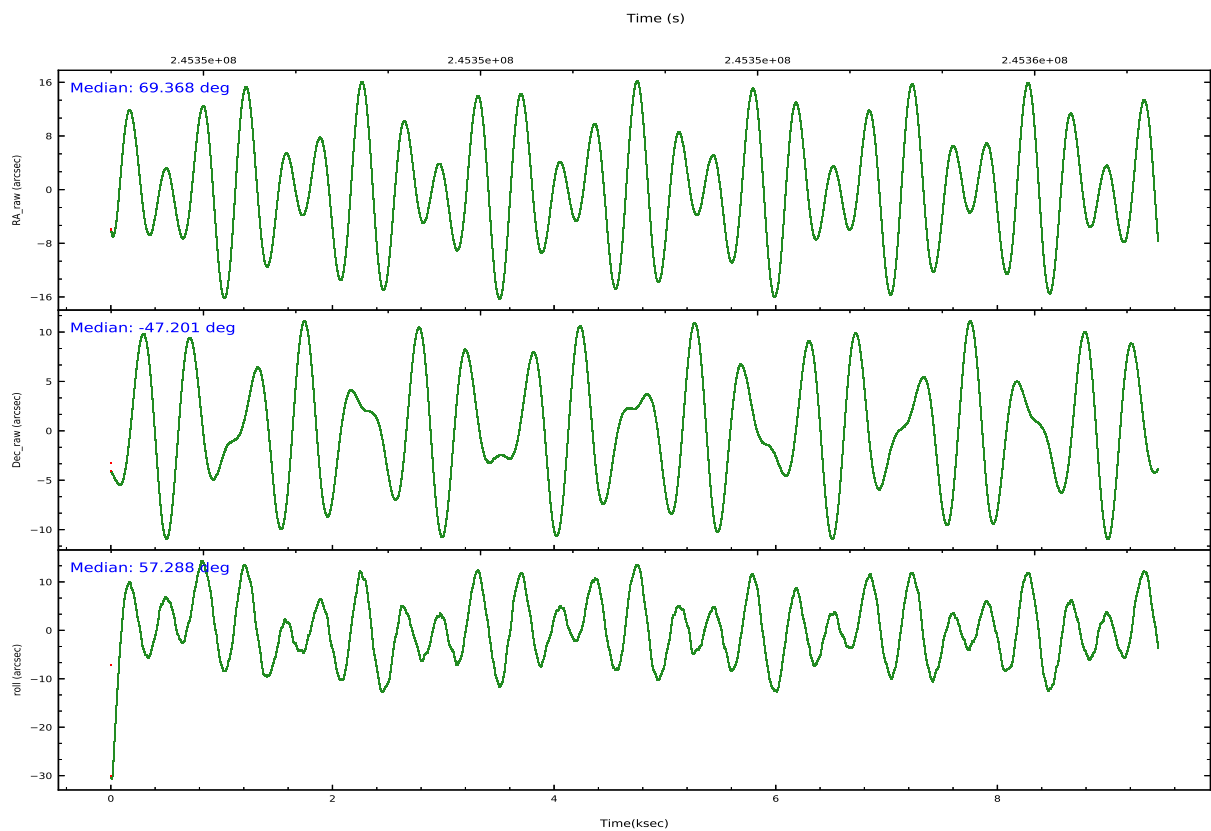
	ccd 7
grade 0 events	5722
	21%
grade 1 events	251
	0%
grade 2 events	4464
	16%
grade 3 events	2230
	8%
grade 4 events	2220
	8%
grade 5 events	1705
	6%
grade 6 events	5358
	19%
grade 7 events	5005
	18%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
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	69.366410	69.36961678262701	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-47.228083	-47.204056313939	Subarray start row	448	448
[deg] Pointing Roll	57.124182	57.288087017922	Subarray row count	101	101
[s] Window start time (MET)	244512064.184000	244512064.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	247190404.184000	247190404.184000	[s] Primary exposure time	0.000000	0.4
[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)	245346849.184000	245345974.58737			
Observation start date	2005-10-10T15:53:05	2005-10-10T15:39:34			
[s] Observation end time (MET)	245356114.184000	245356336.31285			
Observation end date	2005-10-10T18:27:30	2005-10-10T18:32:16			
Read mode	TIMED	TIMED			

2.3 Aspect



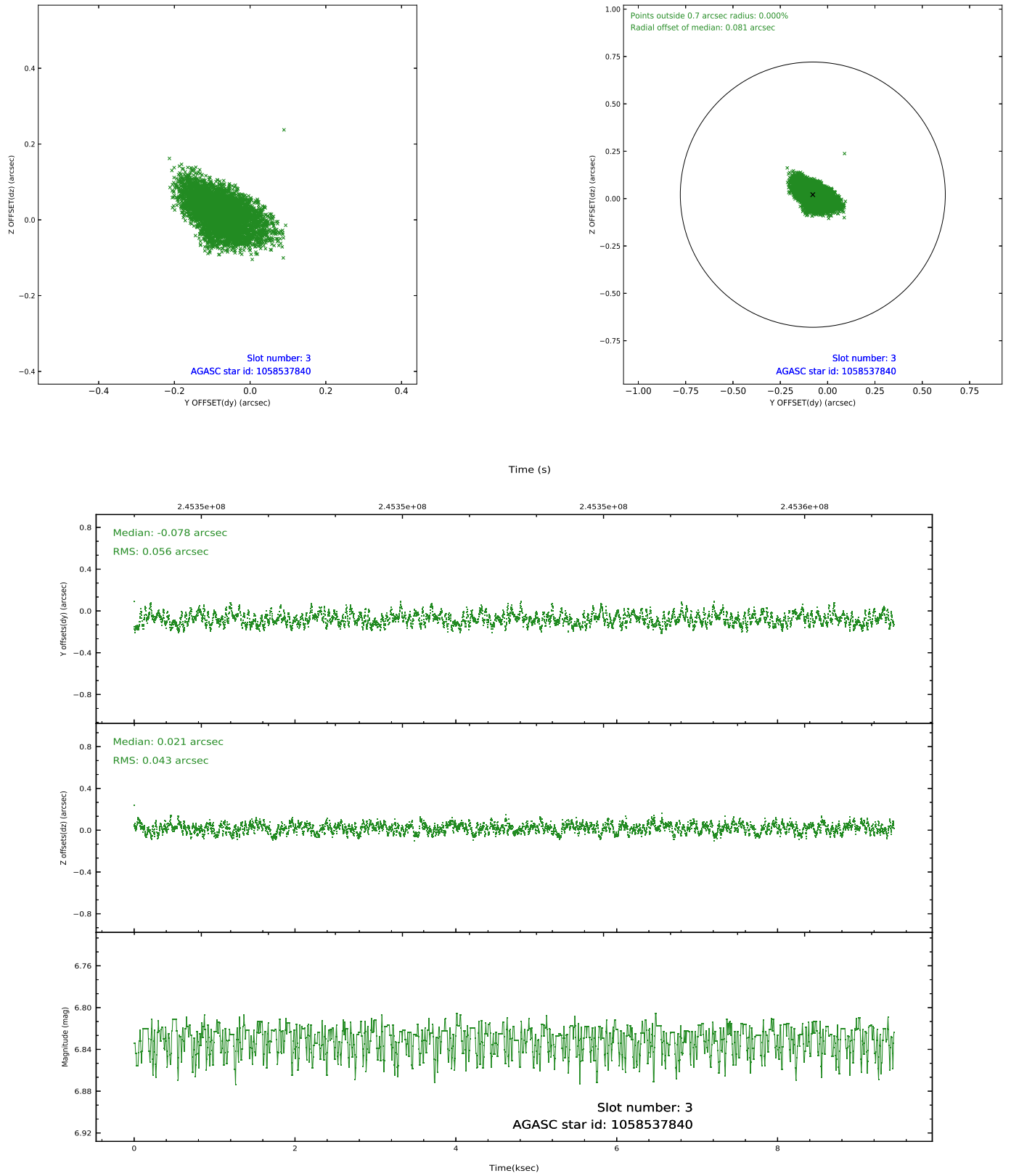


Slot Statistics

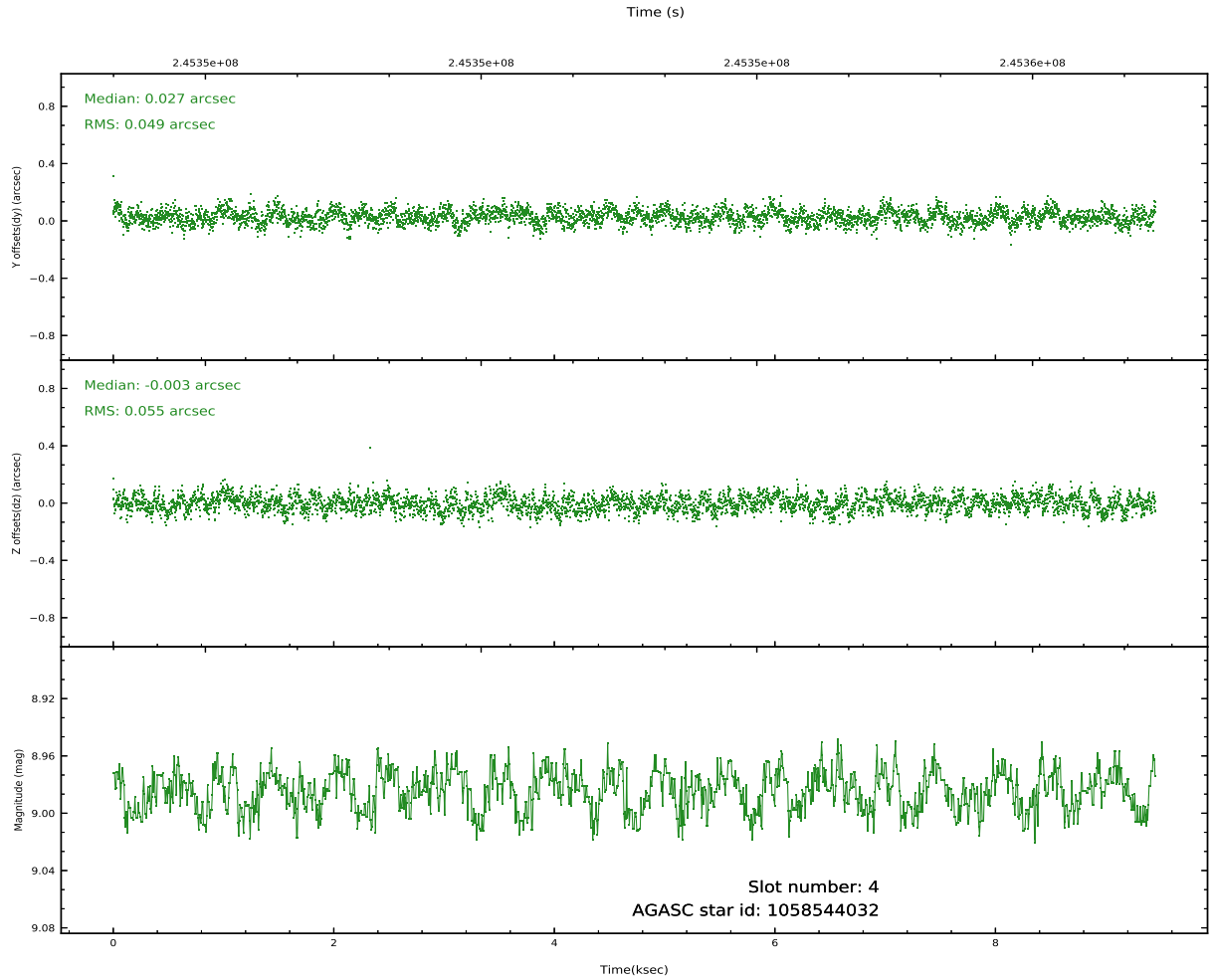
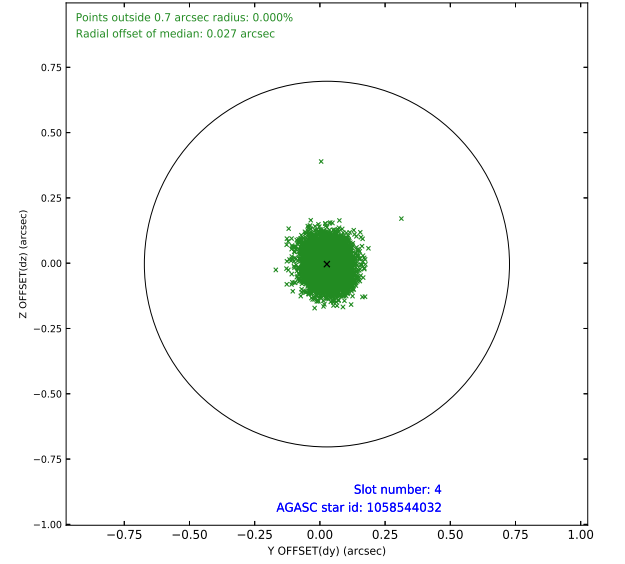
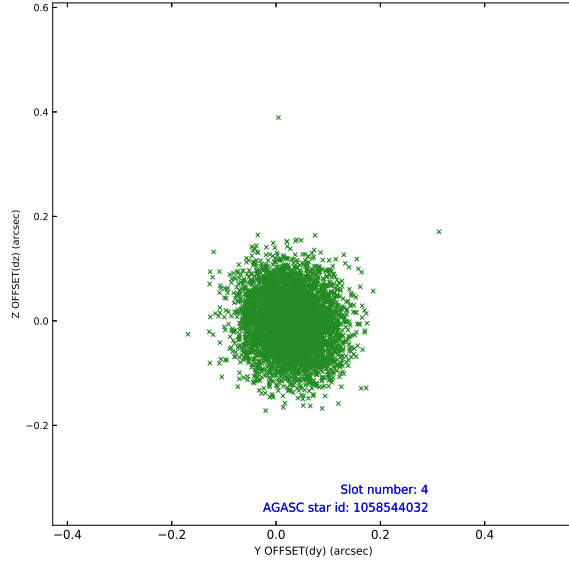
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2305	1.000	-0.089	-0.085	0.008	0.012	0.000000	0.000000	-759.41	-1730
1	FID		ACIS-S-4	7.21	2305	1.000	0.173	0.065	0.006	0.010	0.000000	0.000000	2153.82	177
2	FID		ACIS-S-5	7.23	2305	1.000	-0.116	0.028	0.007	0.012	0.000000	0.000000	-1811.59	171
3	GUIDE	used	1058537840	6.83	4611	1.000	-0.078	0.021	0.075	0.123	70.442463	-47.259783	1317.05	-2279
4	GUIDE	used	1058544032	8.98	4607	1.000	0.027	-0.003	0.080	0.125	69.576631	-47.141596	541.03	-263
5	GUIDE	used	1058931064	9.48	4605	1.000	0.102	-0.033	0.111	0.185	69.760694	-47.722390	-977.61	-1768
6	GUIDE	used	1058932104	9.96	4605	1.000	0.009	0.043	0.144	0.230	69.775154	-47.961562	-1684.85	-2262
7	GUIDE	used	1058542336	9.64	4609	1.000	-0.060	-0.024	0.116	0.191	69.740954	-46.597293	2408.30	453

2.4 Star Slots

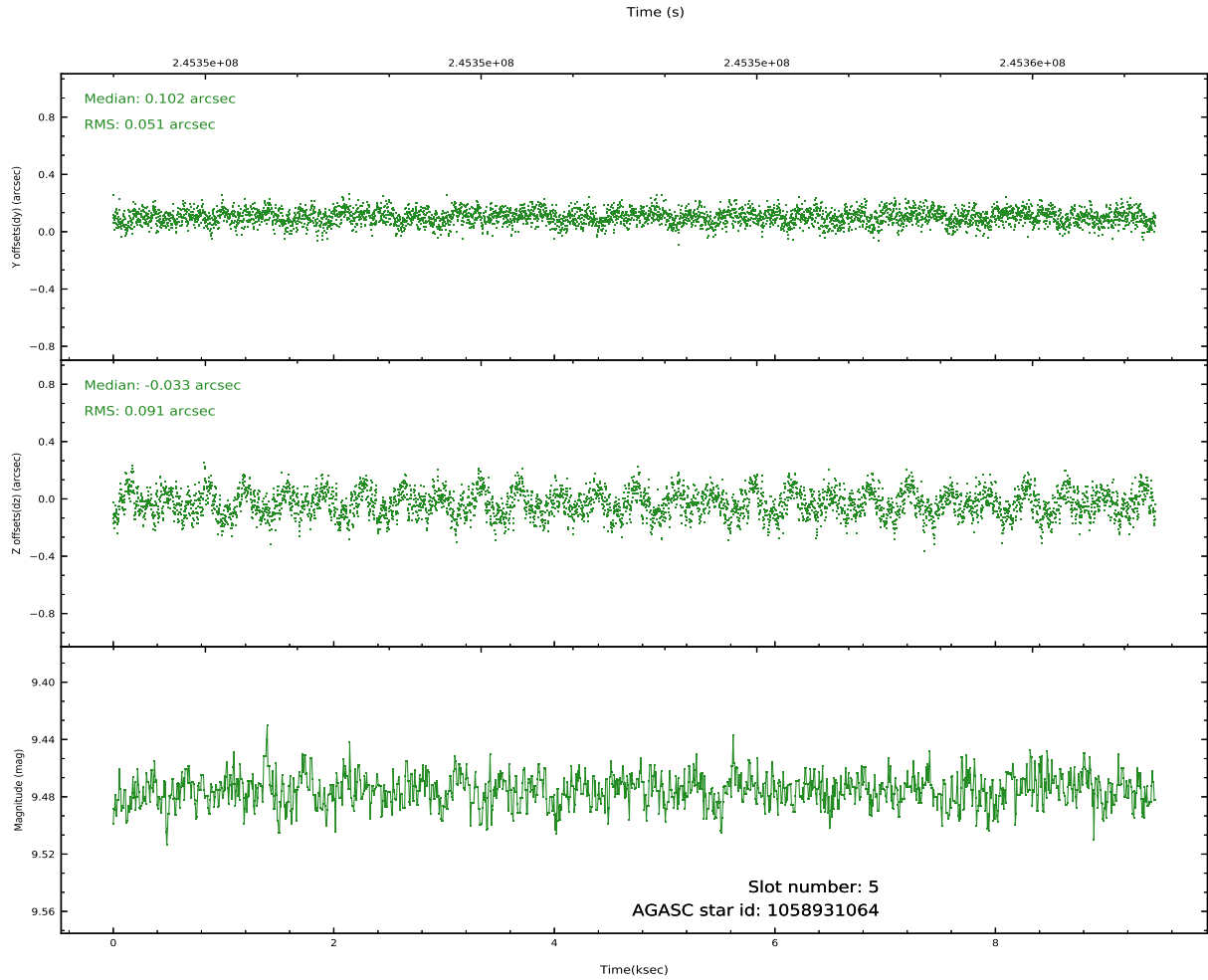
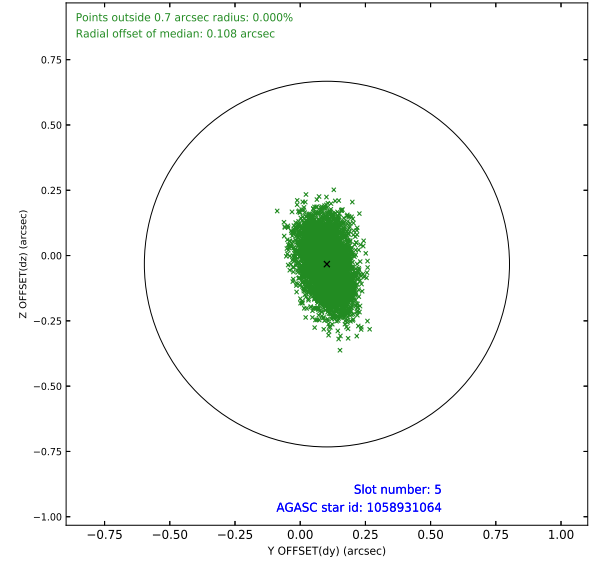
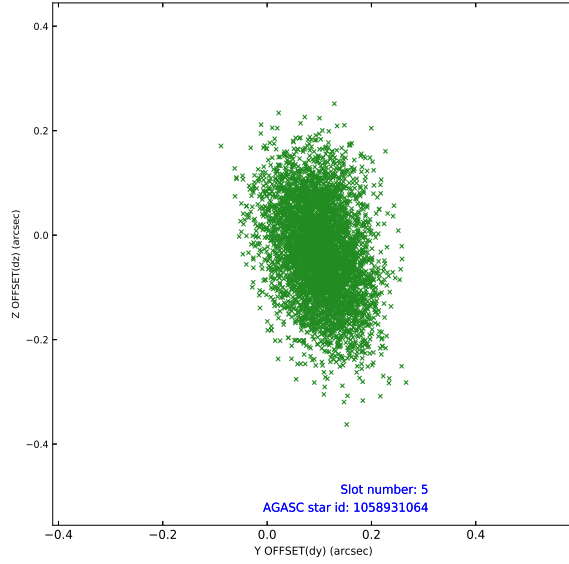
2.4.1 Slot 3



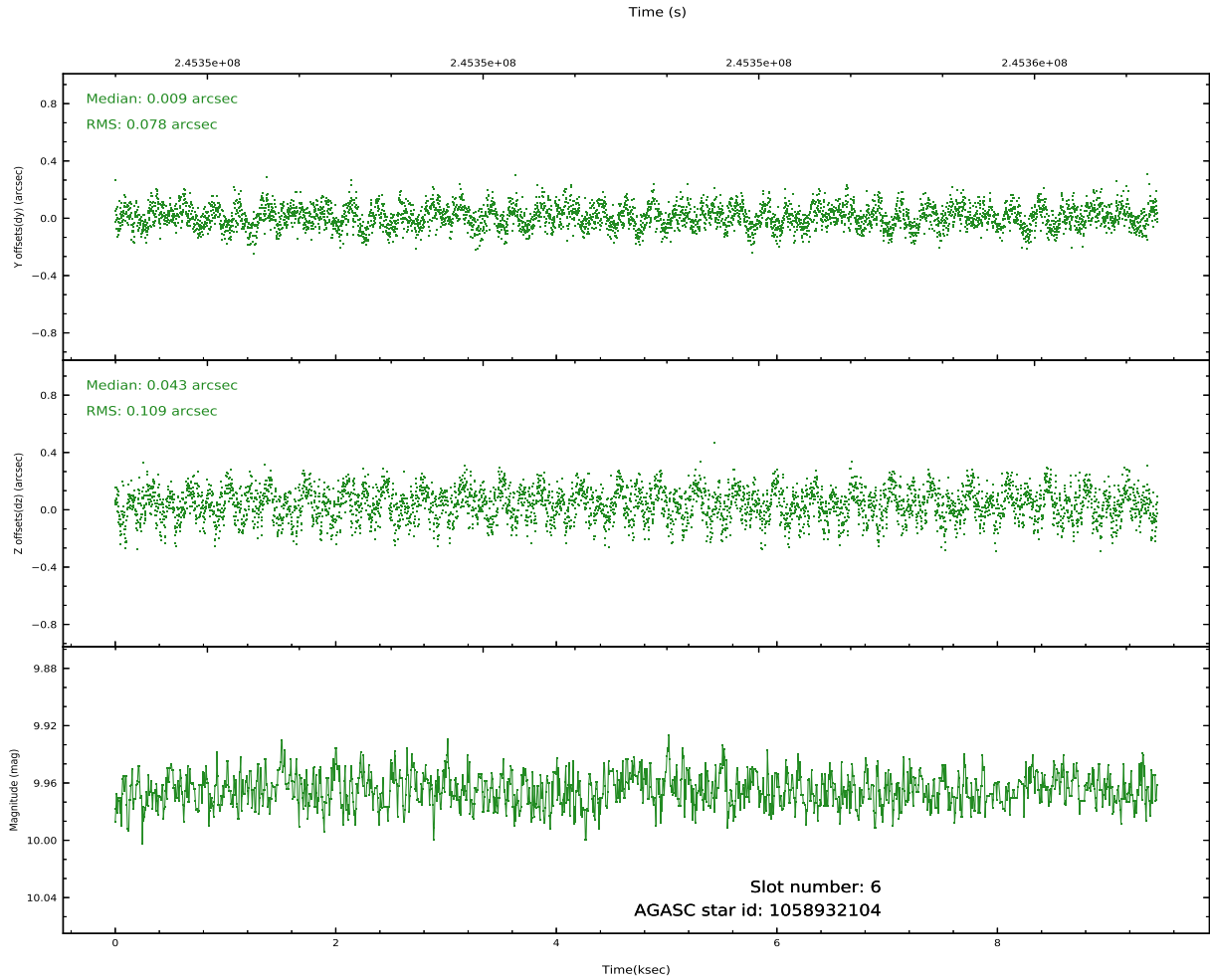
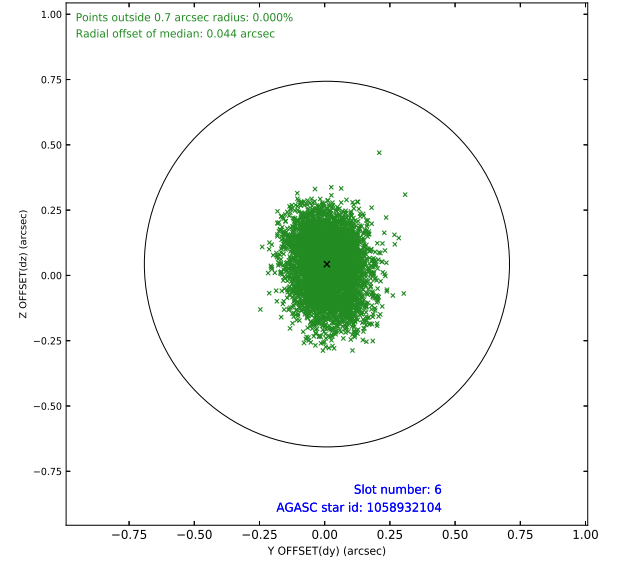
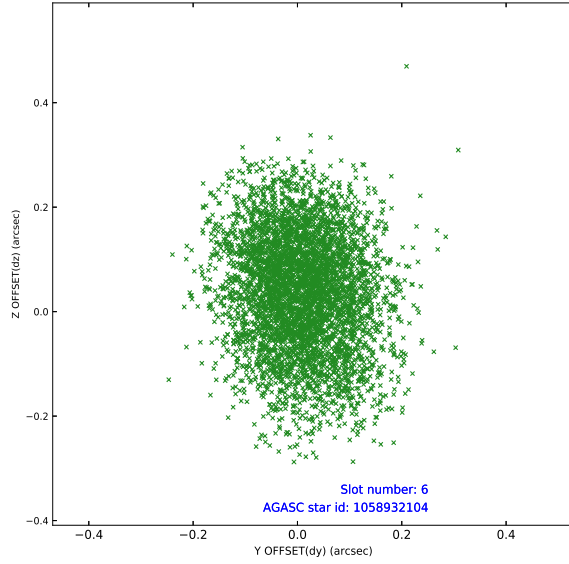
2.4.2 Slot 4



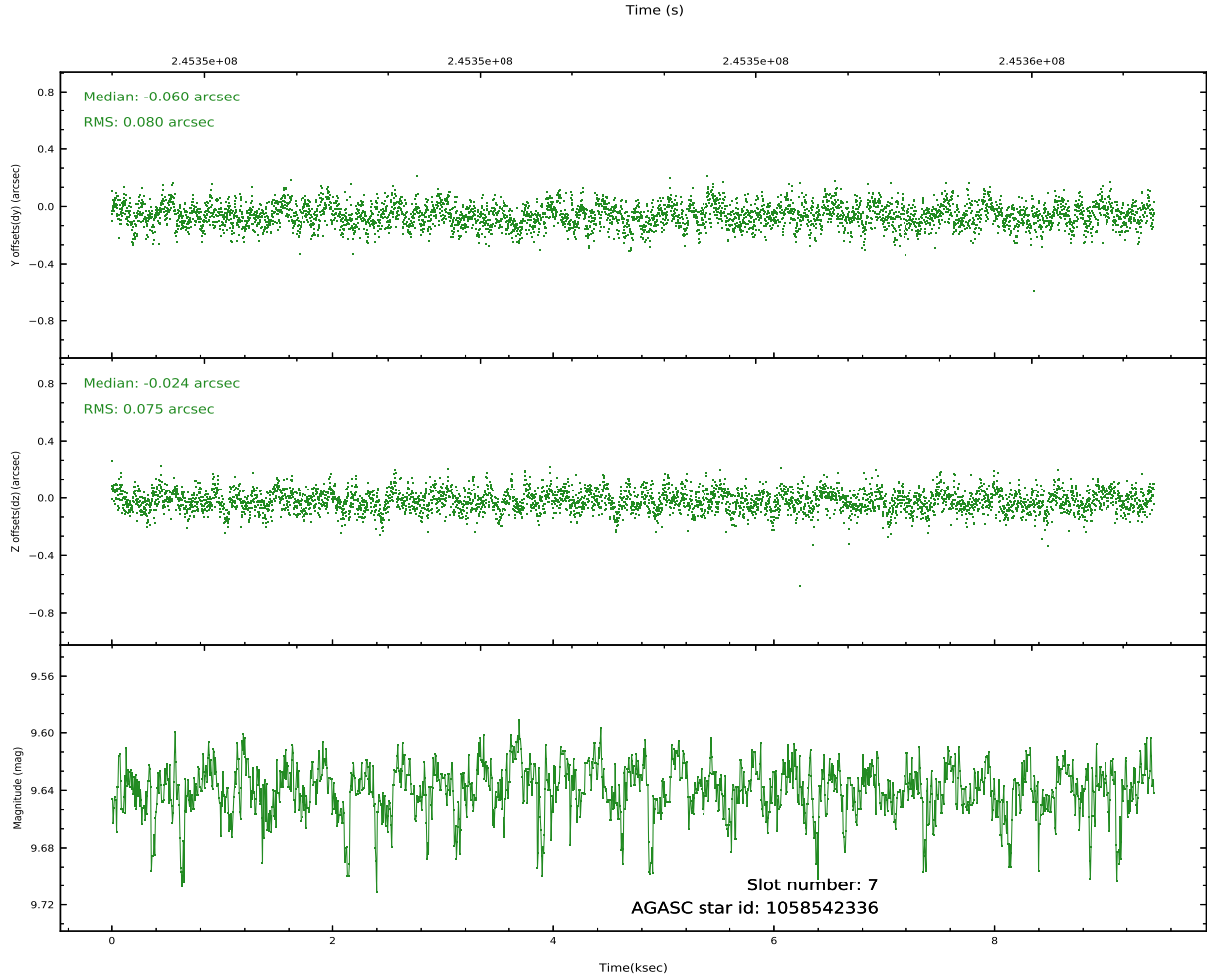
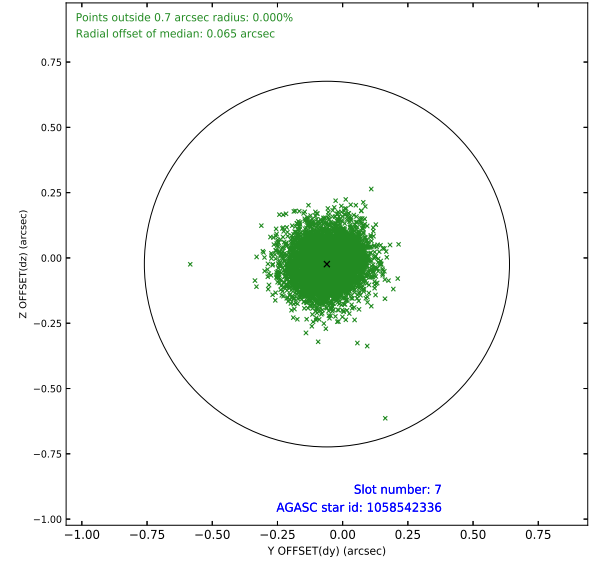
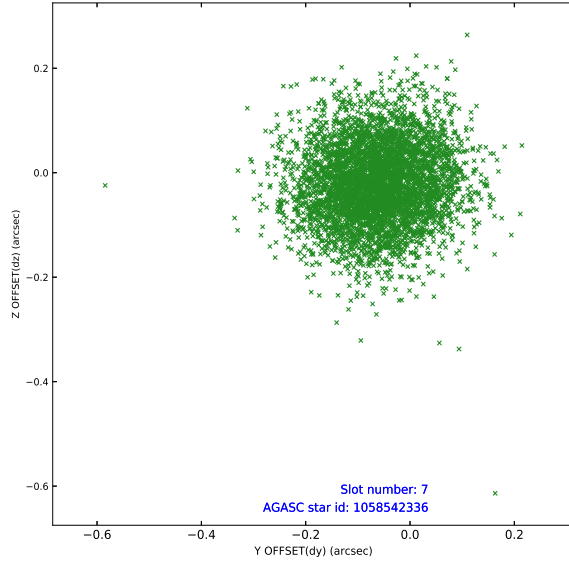
2.4.3 Slot 5



2.4.4 Slot 6

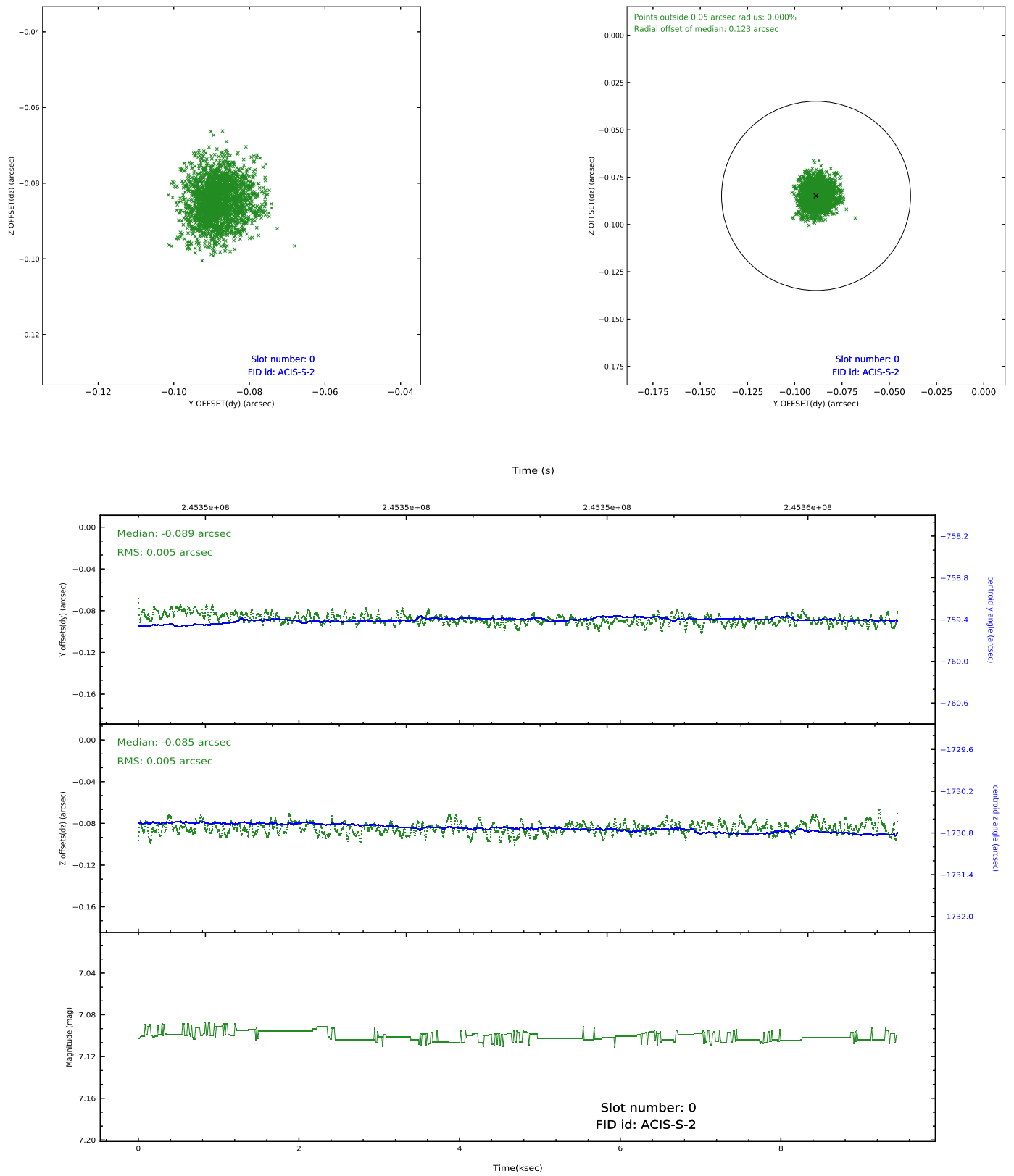


2.4.5 Slot 7

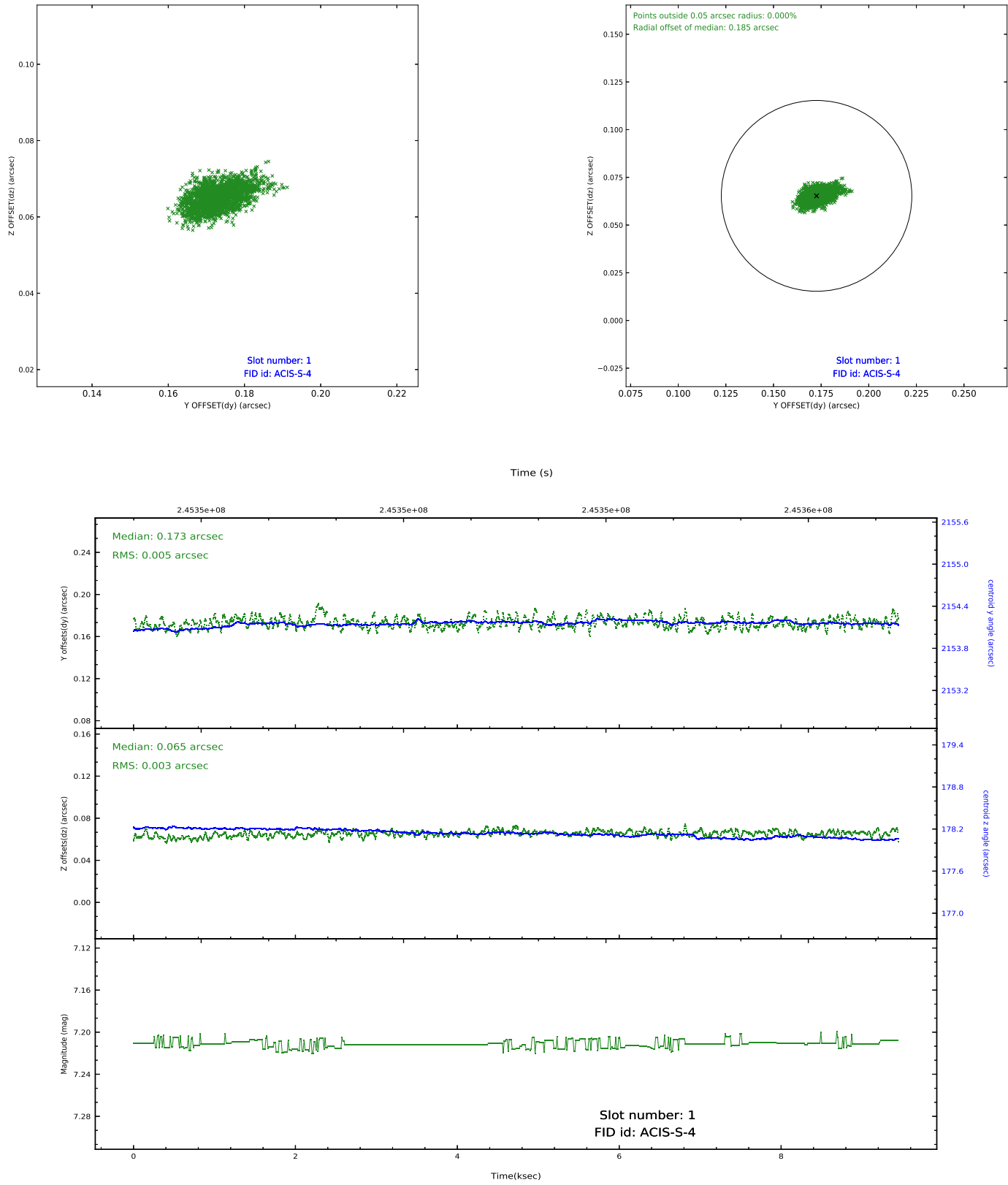


2.5 FID Slots

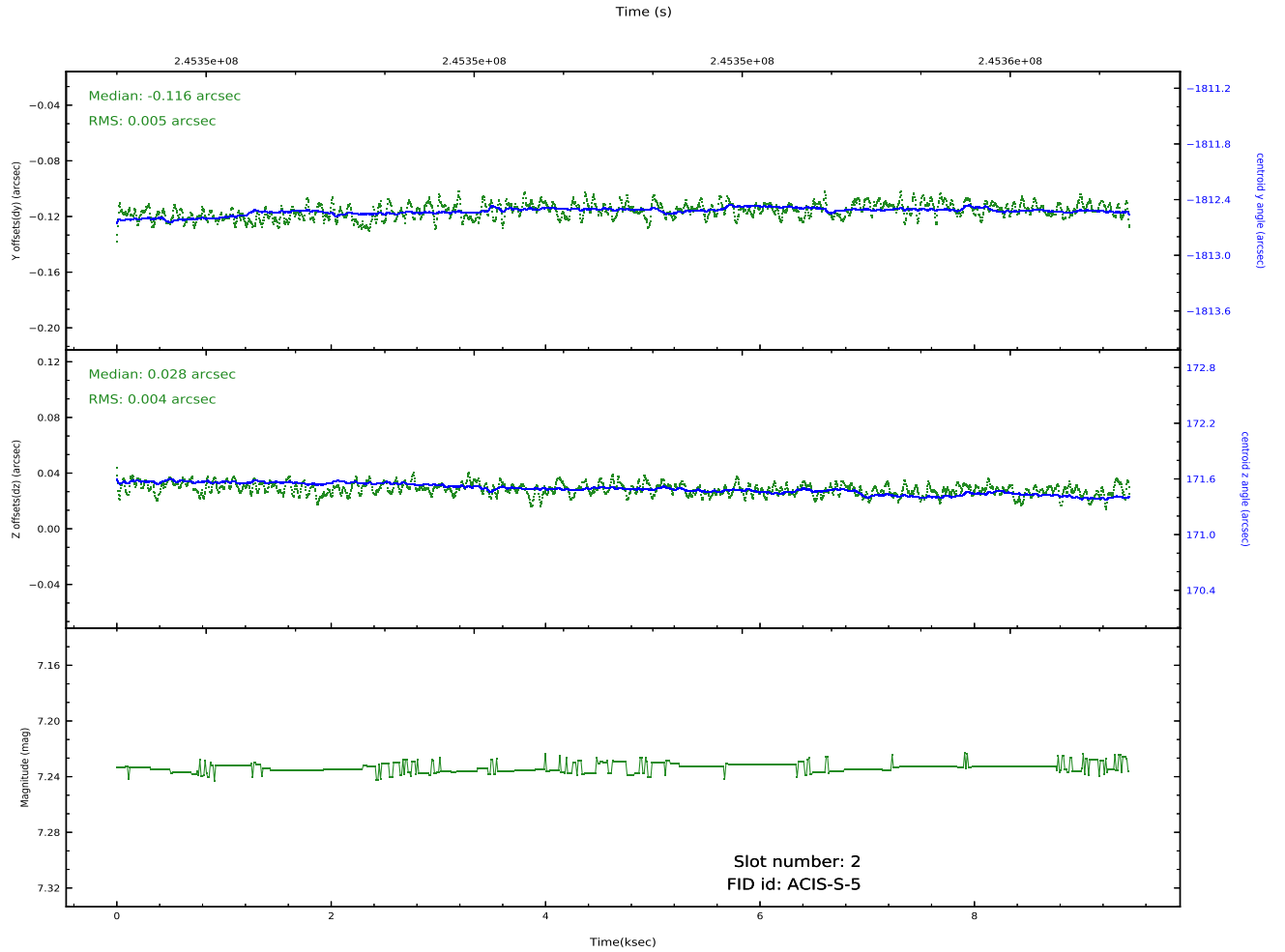
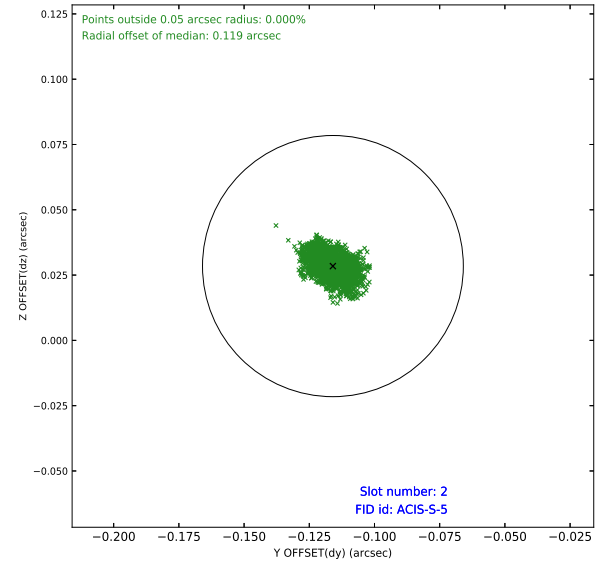
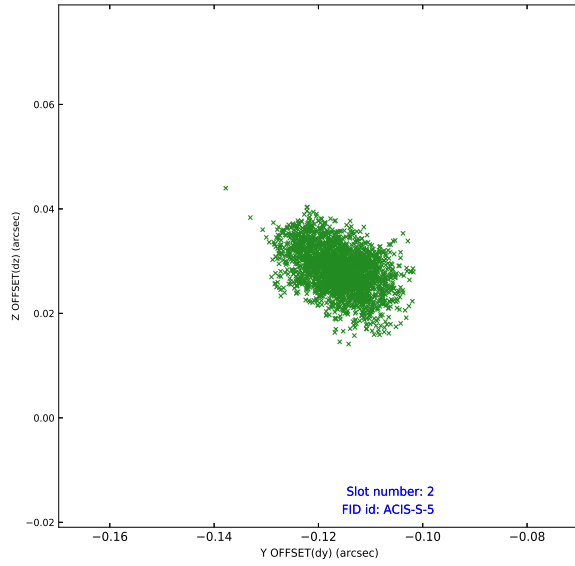
2.5.1 Slot 0



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)	2020.10.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.4496

A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files ARE INCORRECT by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct.

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Window constraint met.