

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20872 - L2 Version 2
Chandra X-Ray Center

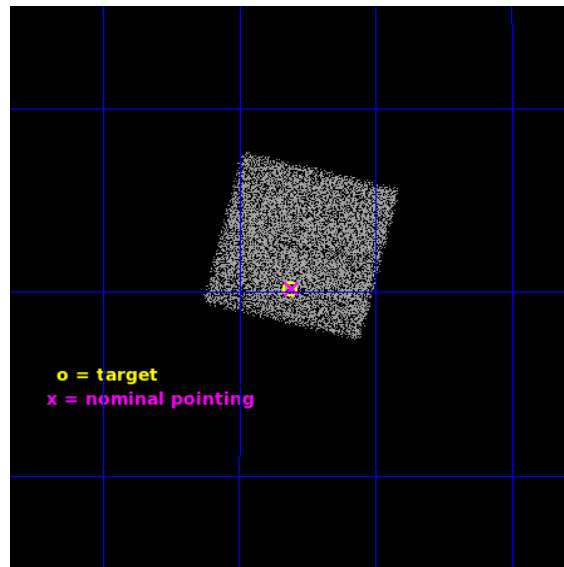
L2 Processing Date : Oct 24 2020

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1 Front

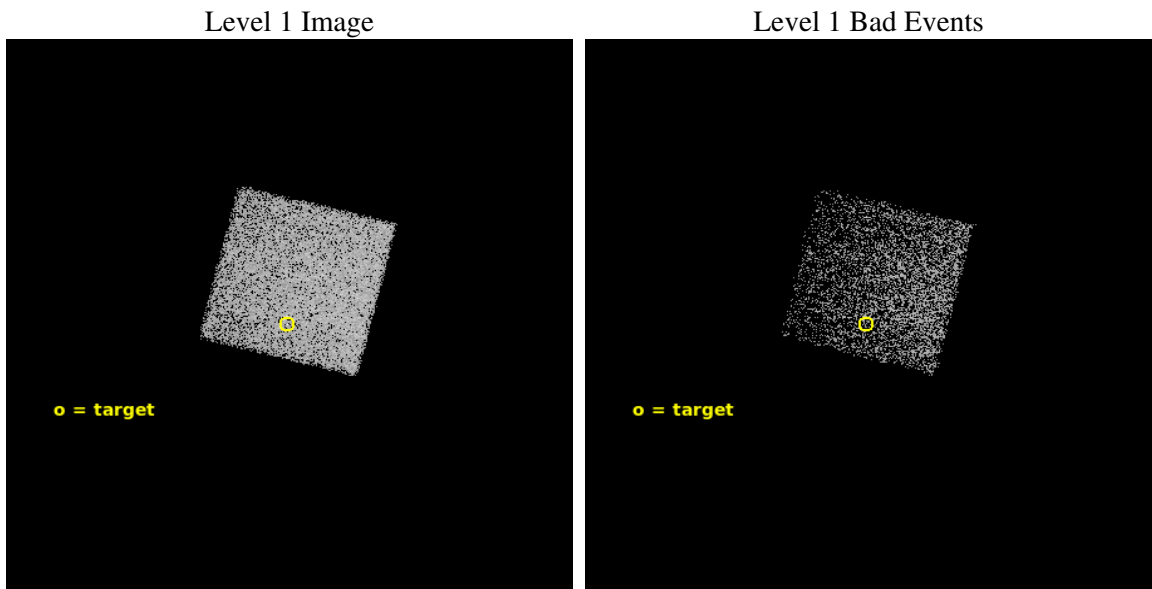
seq_num	201201	Sequence number
obs_id	20872	Observation id
title	Characterizing X-ray driven molecular chemistry in a young protoplanetary disk	Proposal title
observer	Lauren Cleeves	Principal investigator
object	DM Tau	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	68.452917	Observer's specified target RA [deg]
dec_targ	18.169417	Observer's specified target Dec [deg]
ra_nom	68.451698344458	Nominal RA [deg]
dec_nom	18.169818618812	Nominal Dec [deg]
roll_nom	284.08959325201	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4092.0	Sum of GTIs [s]
livetime	4036.7768921159	Livetime [s]
ontime7	4092.0	Sum of GTIs [s]
l2events	15701	Number of level 2 events



2 OBI

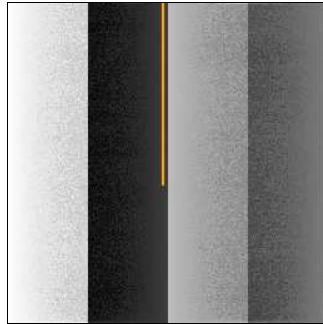
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	4092.0	Sum of GTIs [s]
caldsver	4.9.3	 	ontime7	4092.0	Sum of GTIs [s]
date	2020-10-24T05:02:30	Date and time of file creation	l1events	37343	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

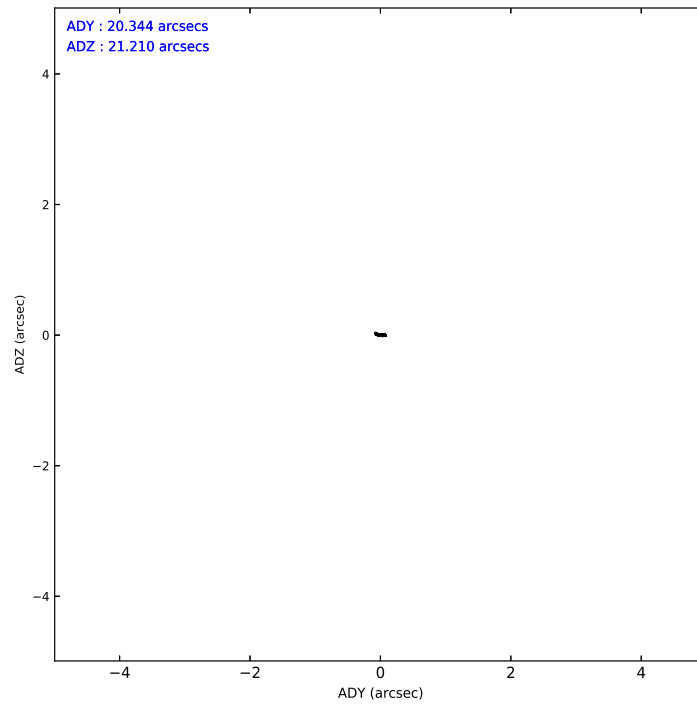
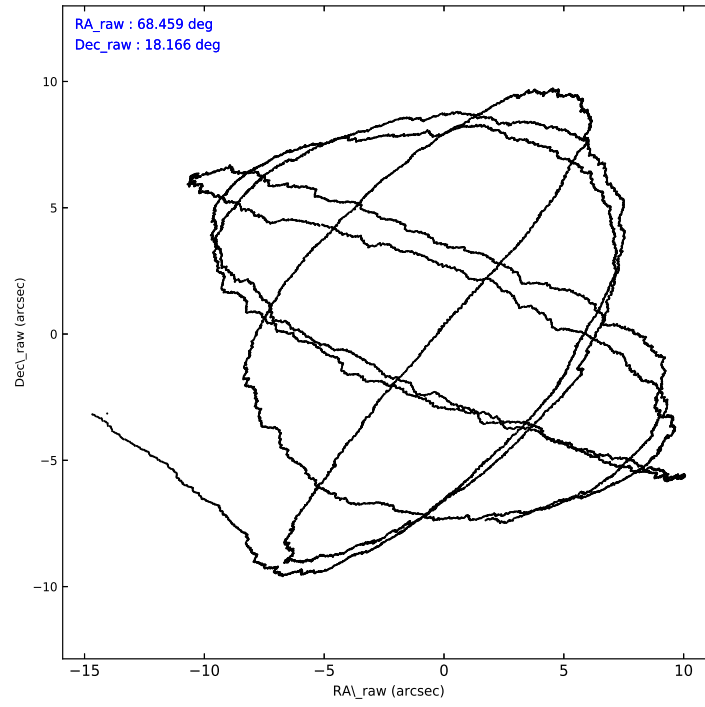
	ccd 7
level 1 events	37343
rejected events	21097
rejected %	56%

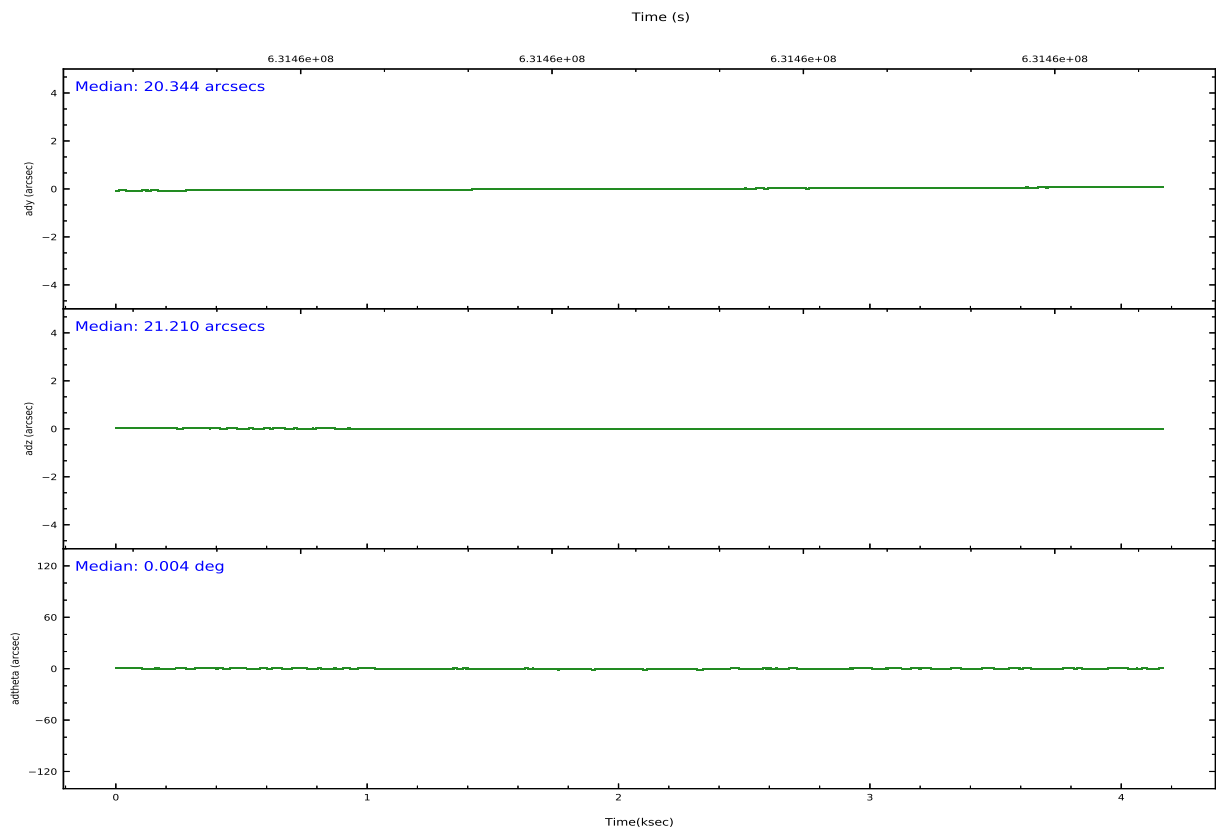
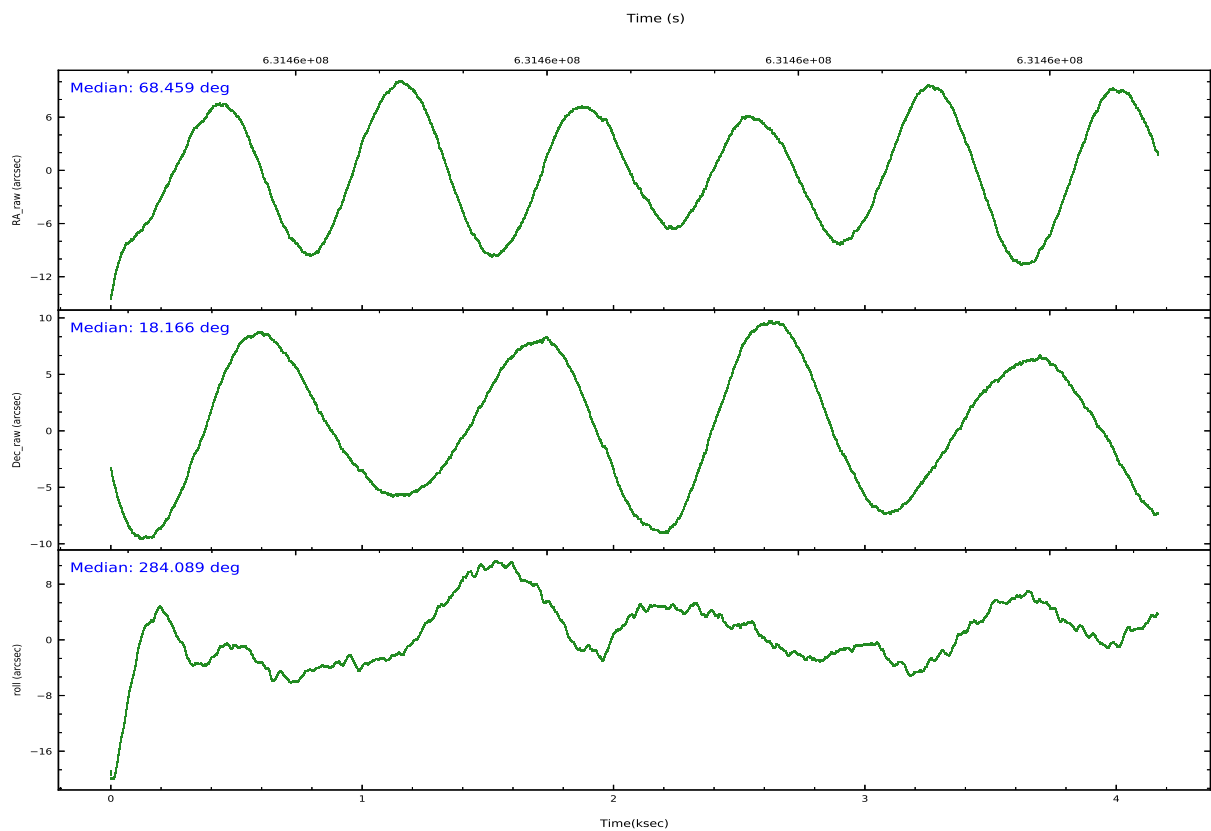
	ccd 7
grade 0 events	1404
	3%
grade 1 events	56
	0%
grade 2 events	3537
	9%
grade 3 events	1296
	3%
grade 4 events	1274
	3%
grade 5 events	3822
	10%
grade 6 events	8743
	23%
grade 7 events	17211
	46%

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	68.438978	68.45169834445799	Subarray requested	NONE	NONE
[deg] Pointing Dec	18.185070	18.169818618812	Alternating exposures requested	N	N
[deg] Pointing Roll	283.949588	284.08959325201	[s] Primary exposure time	0.000000	3
[s] Window start time (MET)	631317669.184000	631317669.184000			
[s] Window stop time (MET)	631490469.184000	631490469.184000			
[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)	631454432.184000	631452800.95723			
Observation start date	2018-01-04T11:59:23	2018-01-04T11:33:20			
[s] Observation end time (MET)	631458432.184000	631459869.35765			
Observation end date	2018-01-04T13:06:03	2018-01-04T13:31:09			
Read mode	TIMED	TIMED			

2.3 Aspect



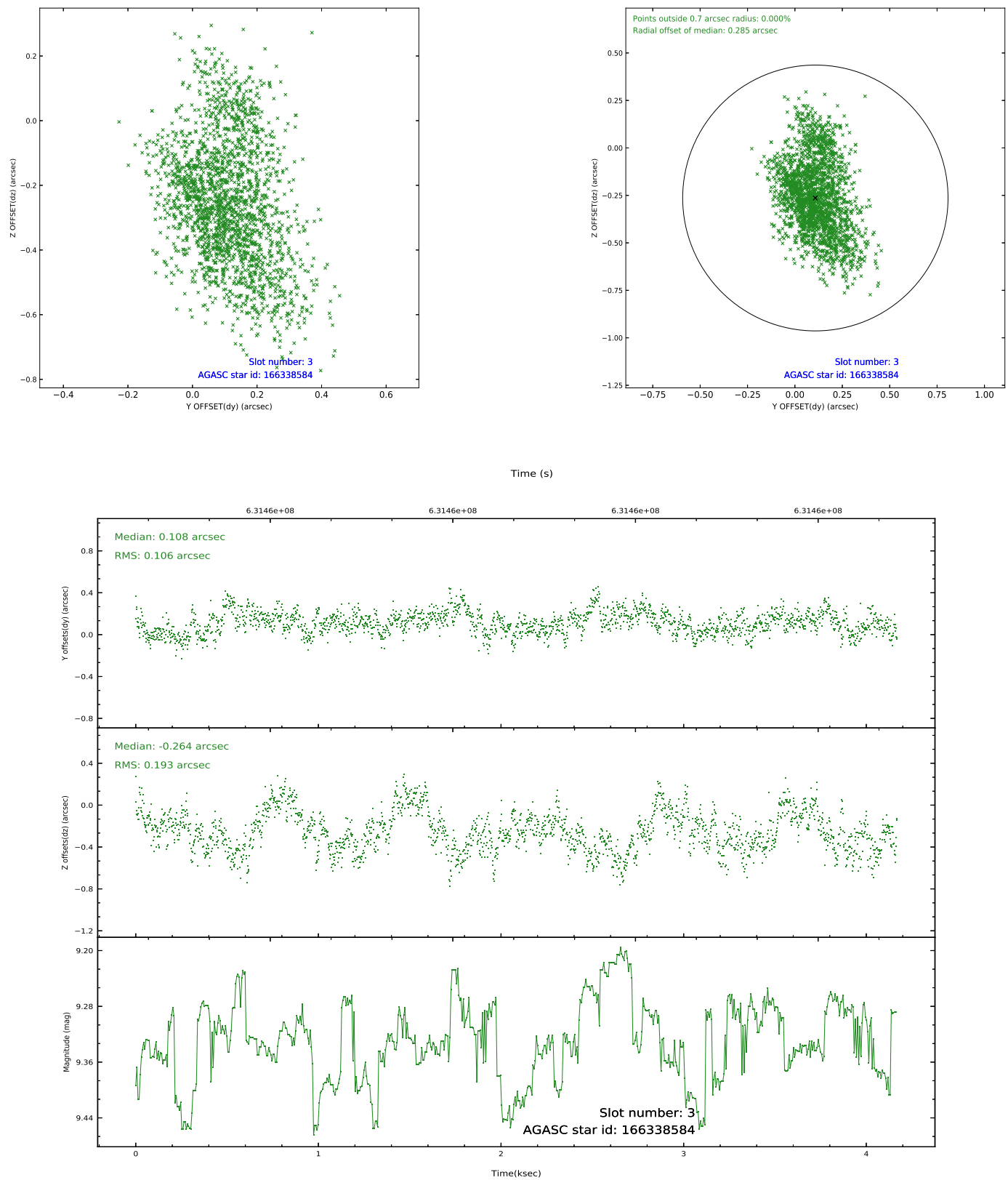


Slot Statistics

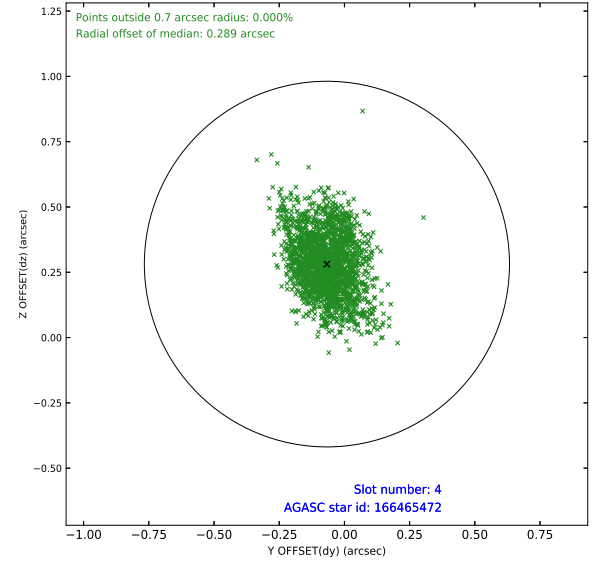
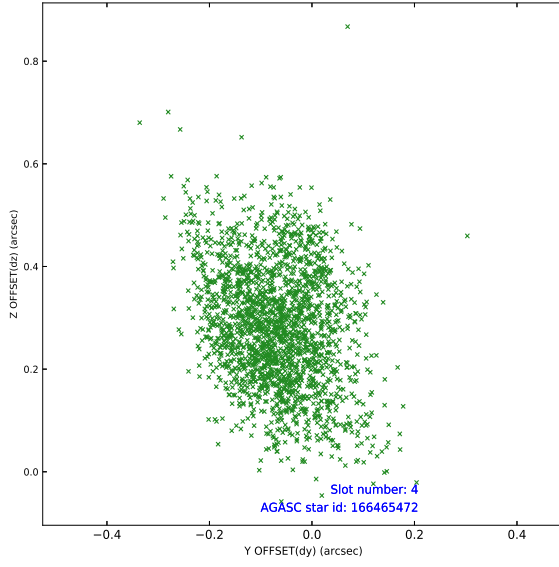
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.04	1017	1.000	0.112	-0.099	0.007	0.013	0.000000	0.000000	-773.60	-1742
1	FID		ACIS-S-4	7.16	1017	1.000	0.096	-0.027	0.007	0.012	0.000000	0.000000	2139.24	163
2	FID		ACIS-S-5	7.14	1017	1.000	-0.239	0.135	0.007	0.012	0.000000	0.000000	-1824.62	159
3	GUIDE	used	166338584	9.33	2032	1.000	0.108	-0.264	0.235	0.394	67.904616	17.709782	1217.86	-2188
4	GUIDE	used	166465472	8.32	2034	1.000	-0.067	0.281	0.148	0.252	68.719684	18.413404	-566.60	1128
5	GUIDE	used	166467888	8.09	2033	1.000	0.058	-0.191	0.124	0.224	68.675864	17.748180	1722.59	410
6	GUIDE	used	166468240	9.00	2030	1.000	0.023	-0.038	0.190	0.308	68.167699	17.861525	907.16	-1182
7	GUIDE	used	166472048	8.57	2033	1.000	-0.115	0.202	0.136	0.214	69.128417	17.932418	1448.36	2073

2.4 Star Slots

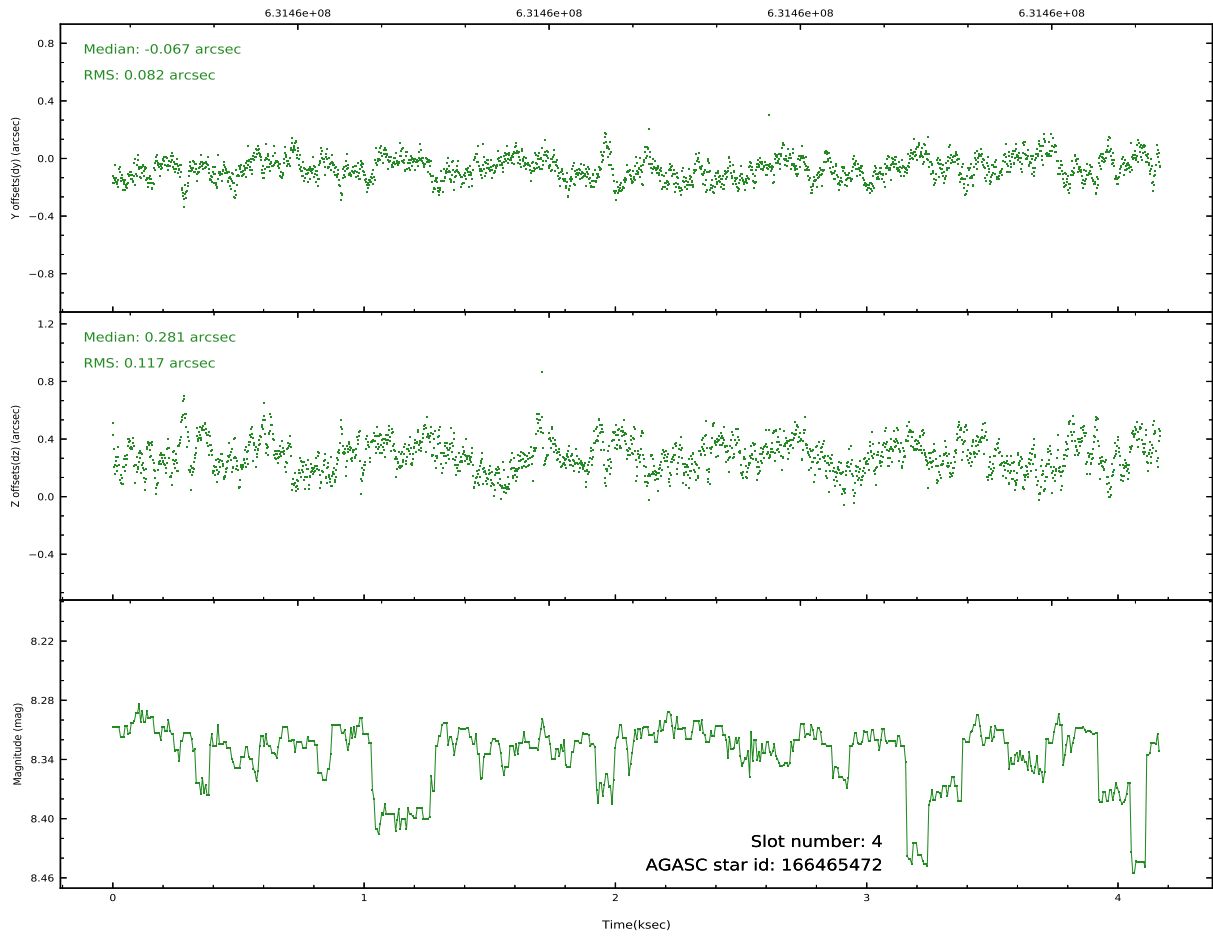
2.4.1 Slot 3



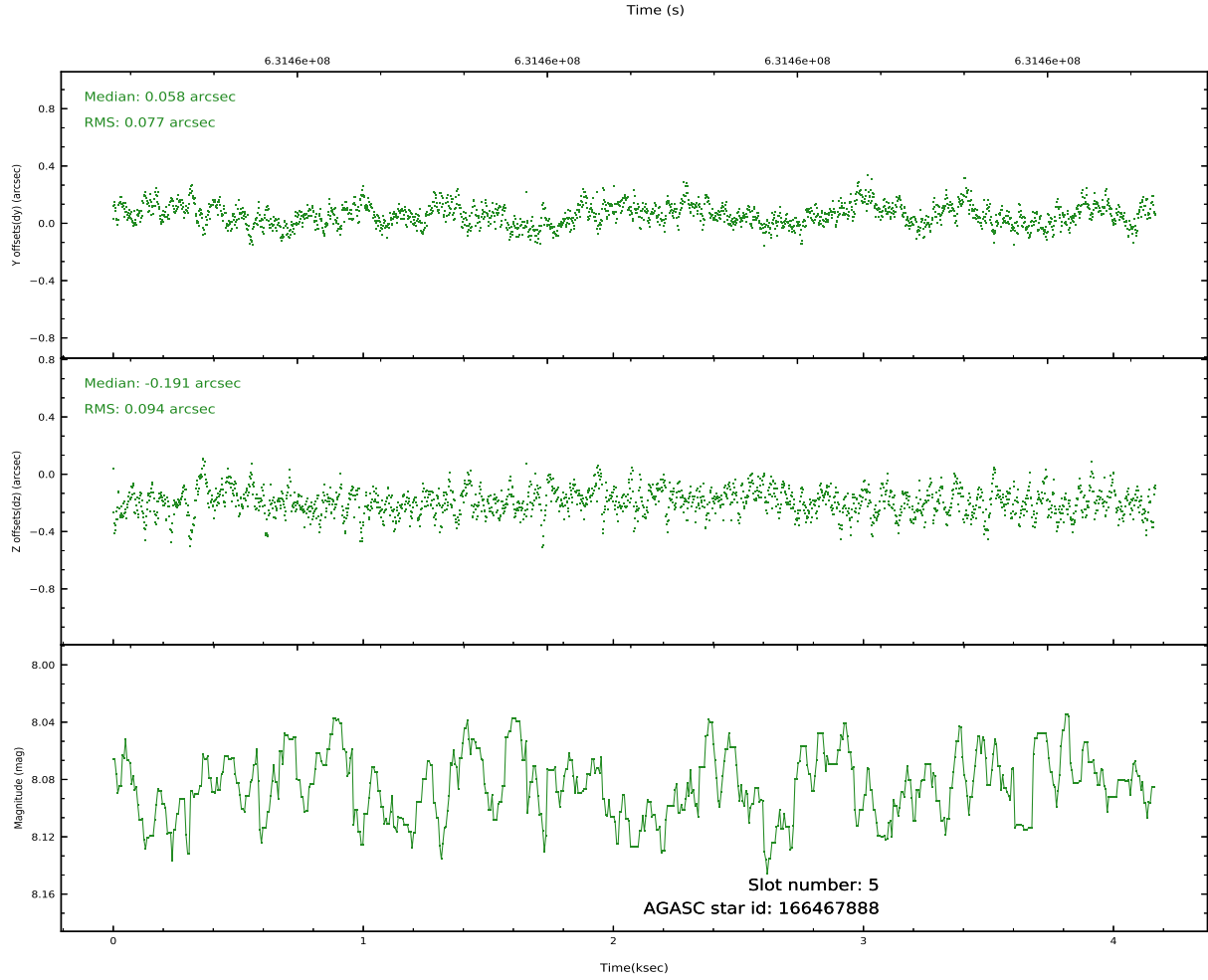
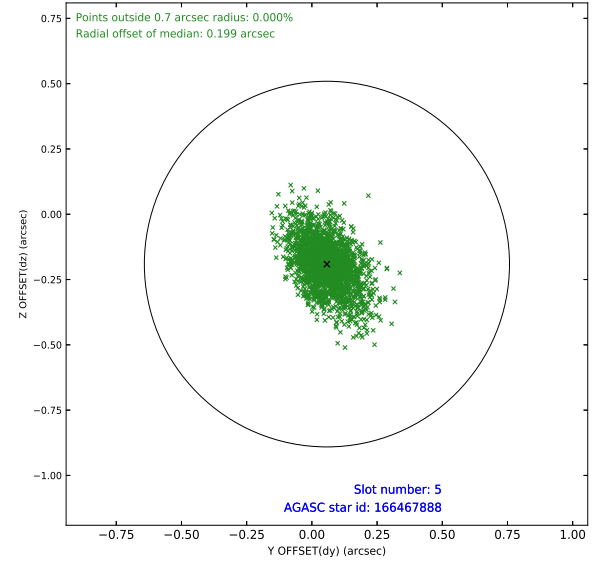
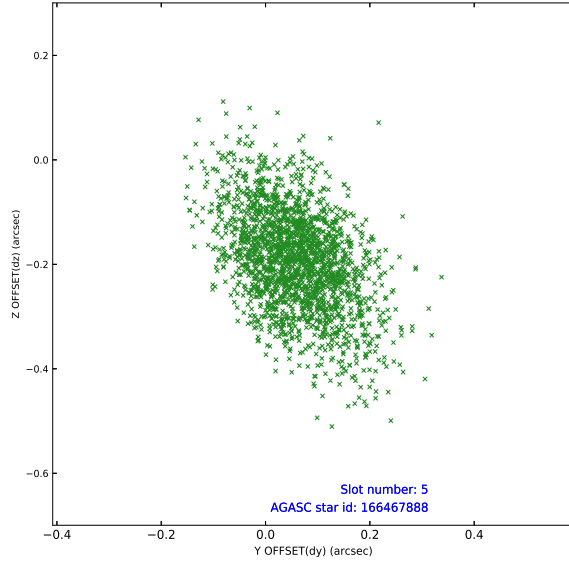
2.4.2 Slot 4



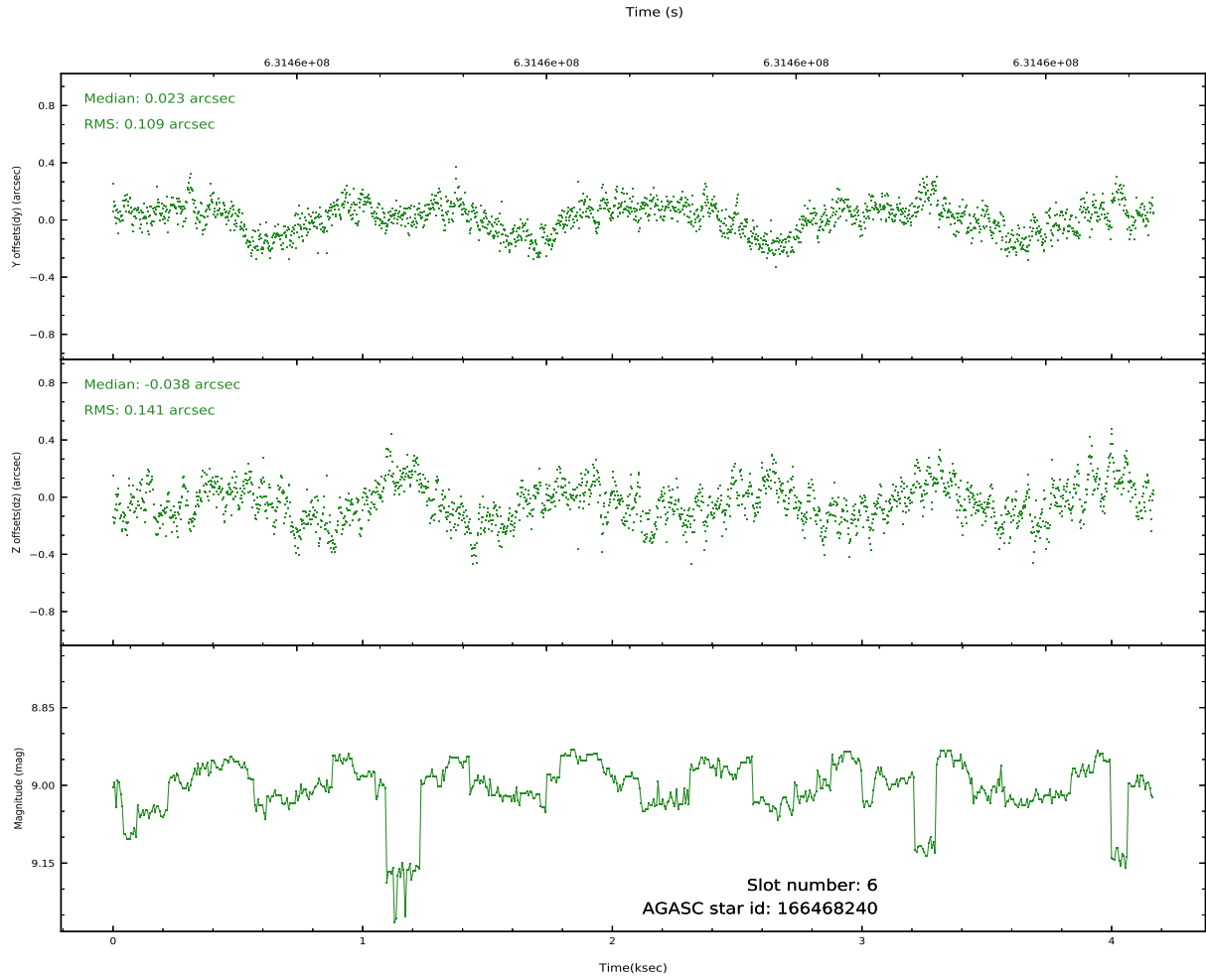
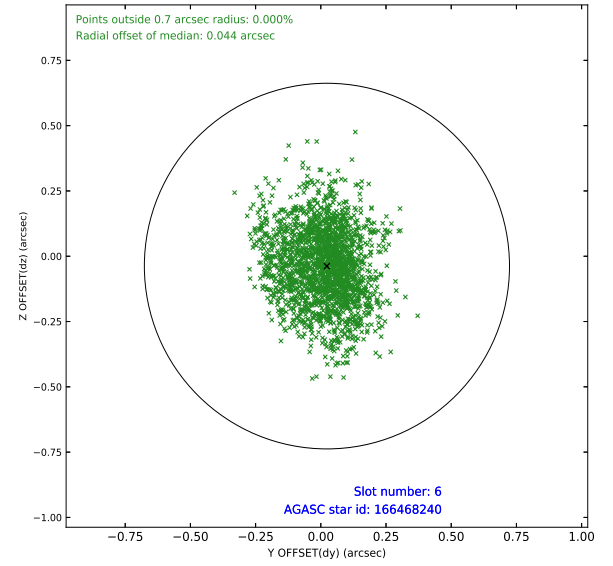
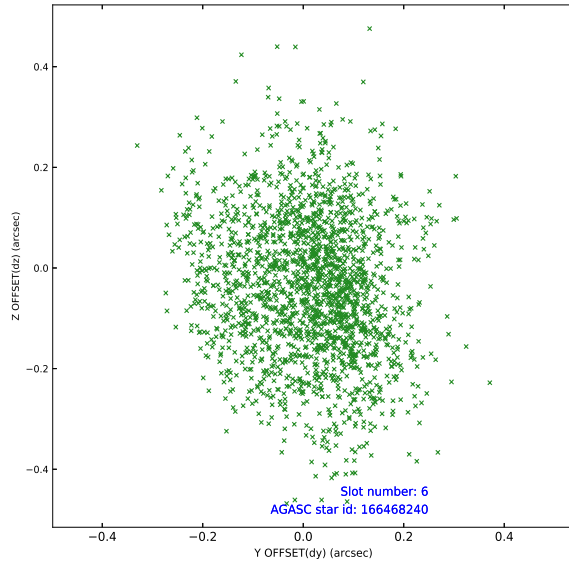
Time (s)



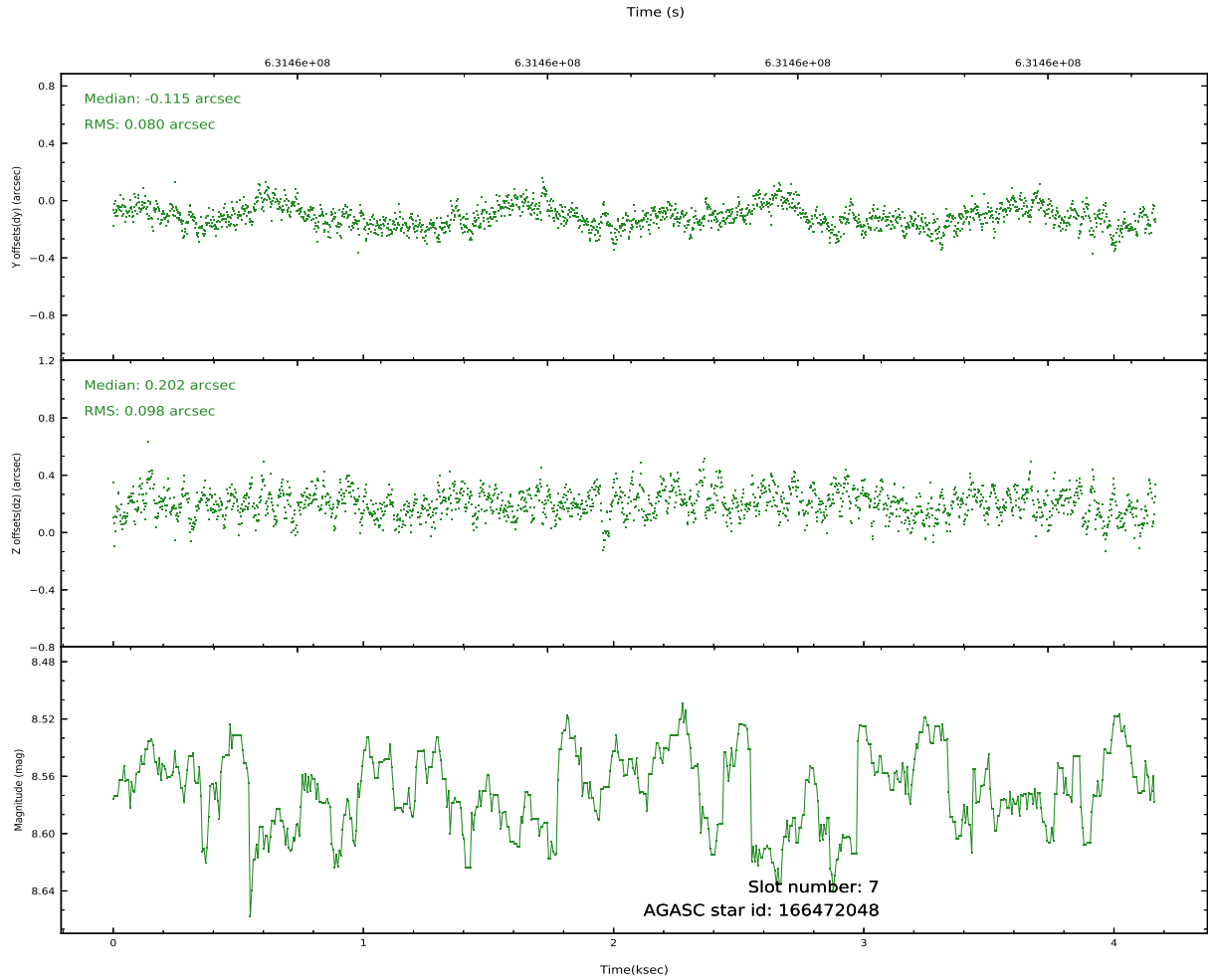
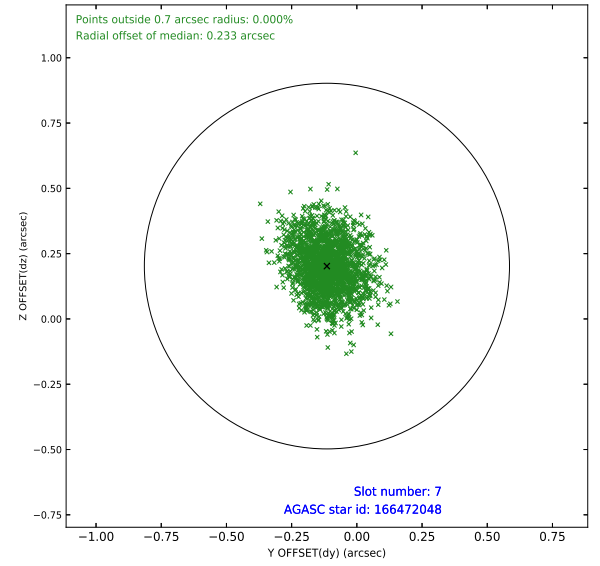
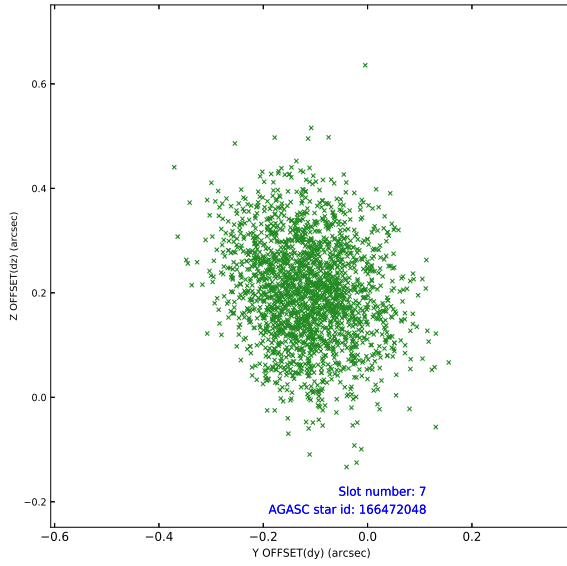
2.4.3 Slot 5



2.4.4 Slot 6

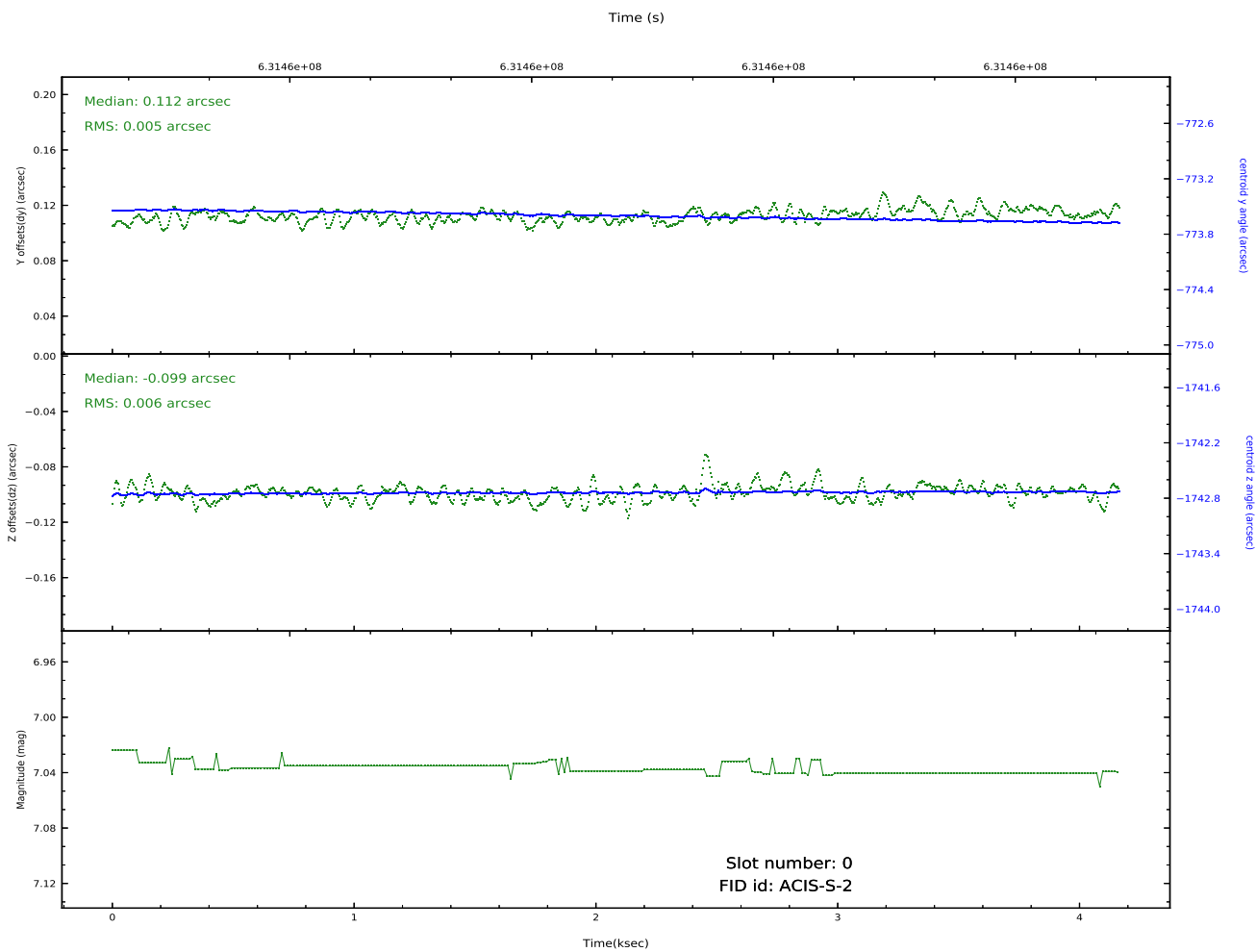
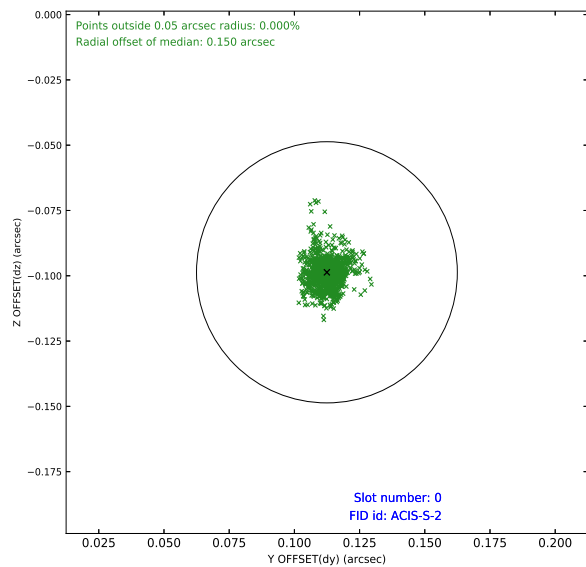
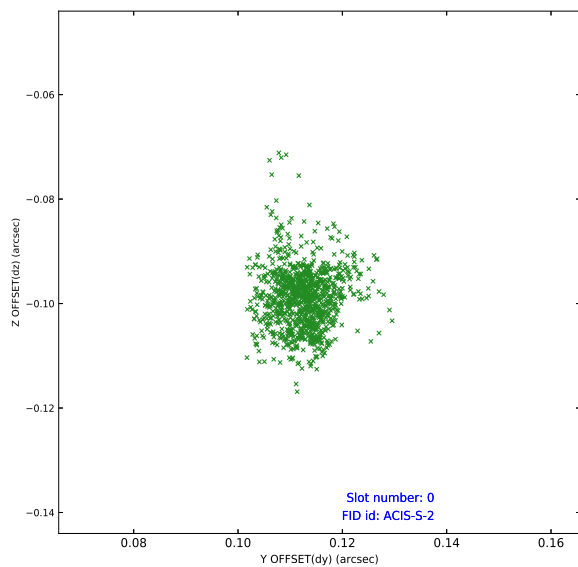


2.4.5 Slot 7

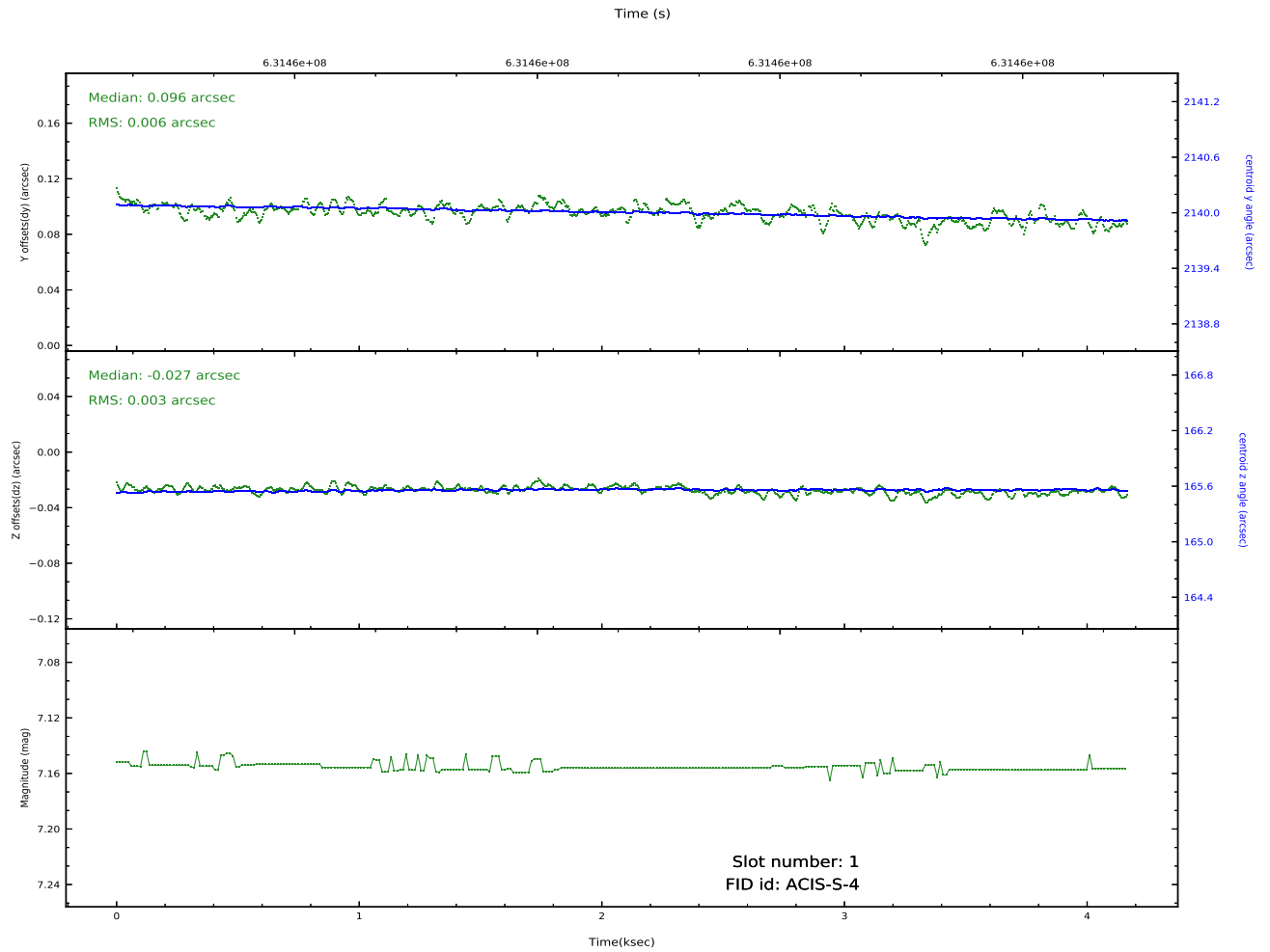
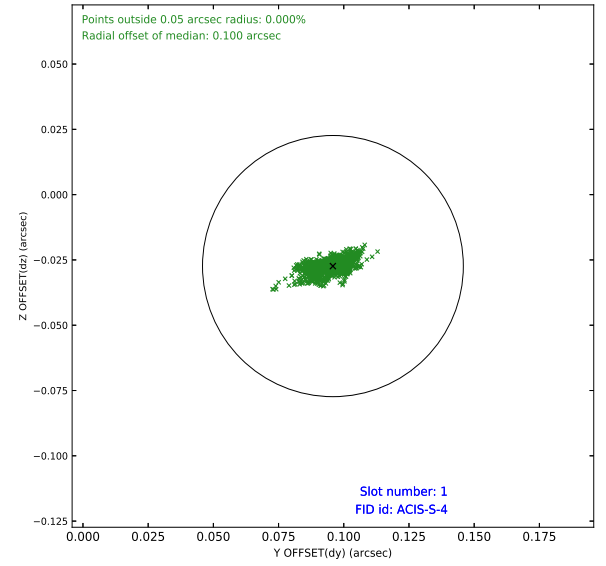
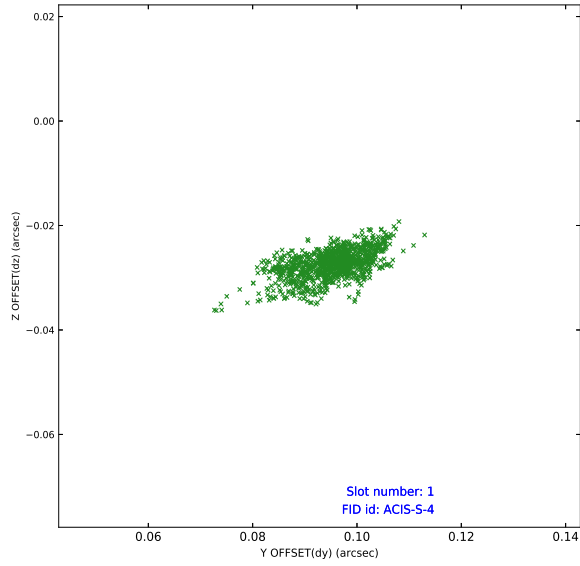


2.5 FID Slots

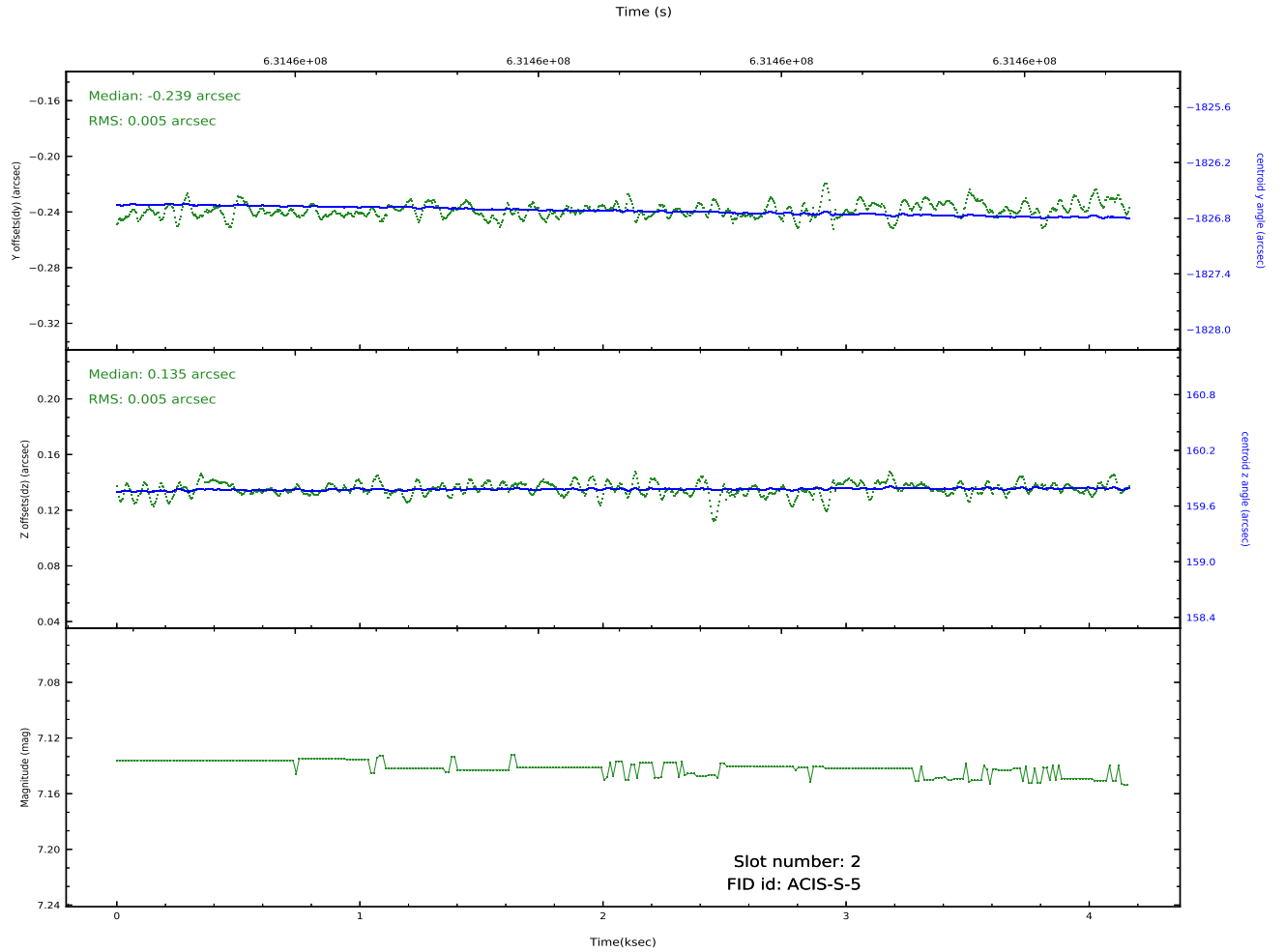
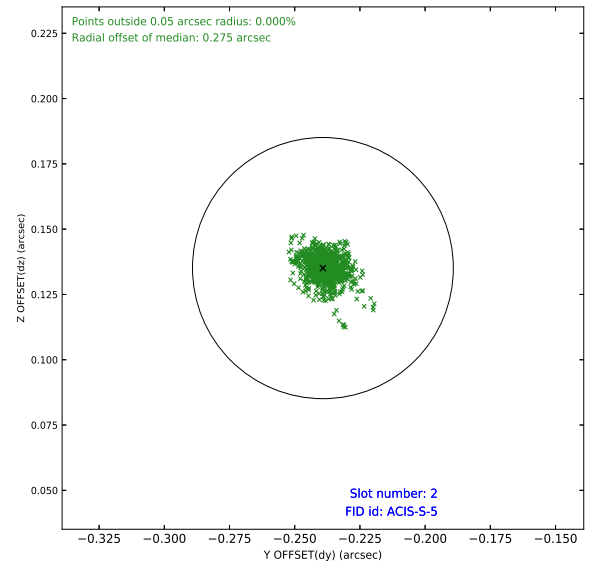
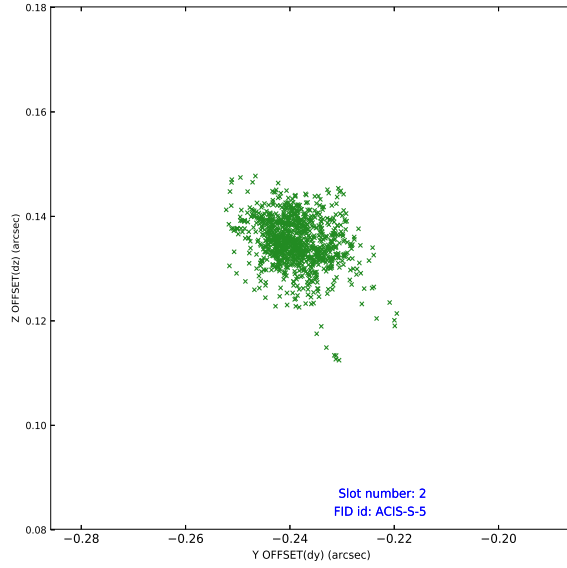
2.5.1 Slot 0



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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.092

A.2 Comments

Window constraint was met.