

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4667 - L2 Version 5
Chandra X-Ray Center

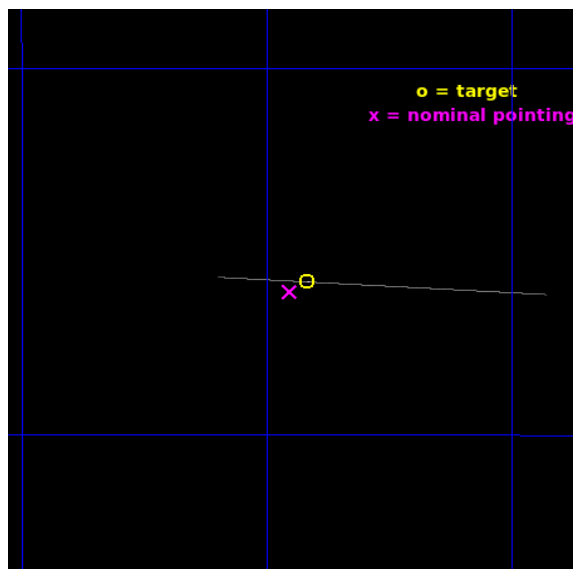
L2 Processing Date : Sep 21 2020

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1 Front

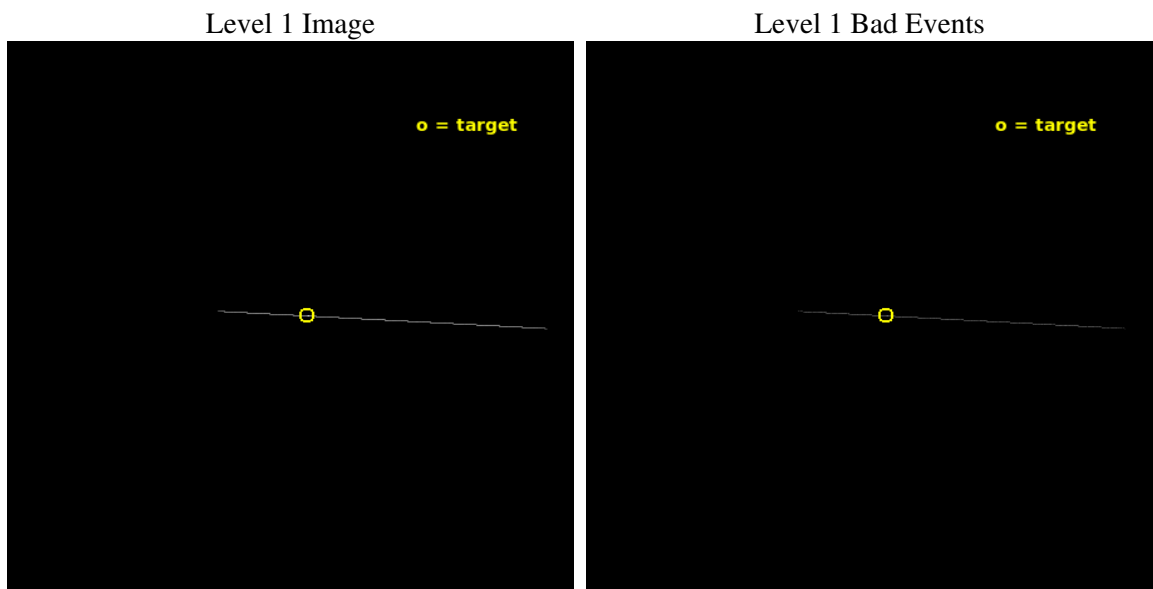
seq_num	500486	Sequence number
obs_id	4667	Observation id
title	Timing the Enigmatic Nearby Neutron Star RX J0720.4-3125	Proposal
observer	Prof. David Kaplan	Principal investigator
object	RX J0720.4-3125	Source name
ra_targ	110.104167	Observer's specified target RA [deg]
dec_targ	-31.430444	Observer's specified target Dec [deg]
ra_nom	110.1131085113	Nominal RA [deg]
dec_nom	-31.435009274918	Nominal Dec [deg]
roll_nom	3.1052758929214	Nominal Roll [deg]
revision	5	Processing version of data
ontime	4791.25	Sum of GTIs [s]
livetime	4772.5341796875	Livetime [s]
ontime7	4791.25	Sum of GTIs [s]
l2events	26048	Number of level 2 events



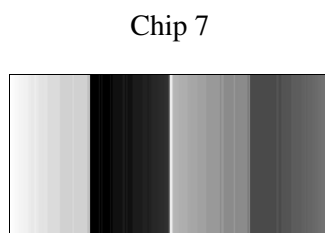
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4657.602000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	4791.25	Sum of GTIs [s]
caldsver	4.9.2	 	ontime7	4791.25	Sum of GTIs [s]
date	2020-09-22T01:11:05	Date and time of file creation	l1events	37592	Number of level 1 events
revision	5	Processing version of data			

2.1.4 Events

	ccd 7
level 1 events	37592
rejected events	10887
rejected %	28%

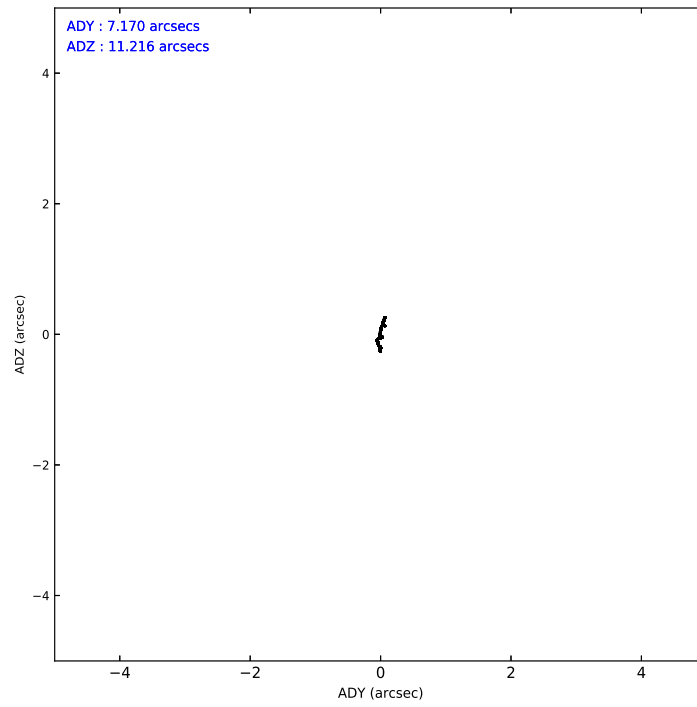
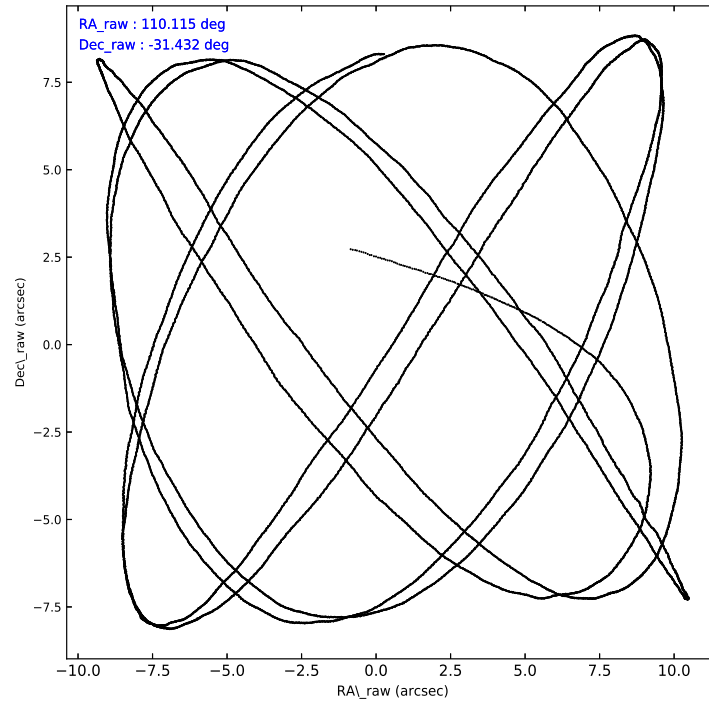
	ccd 7
grade 0 events	7990
	21%
grade 1 events	86
	0%
grade 2 events	7301
	19%
grade 3 events	2641
	7%
grade 4 events	2590
	6%
grade 5 events	4408
	11%
grade 6 events	12576
	33%
grade 7 events	0
	0%

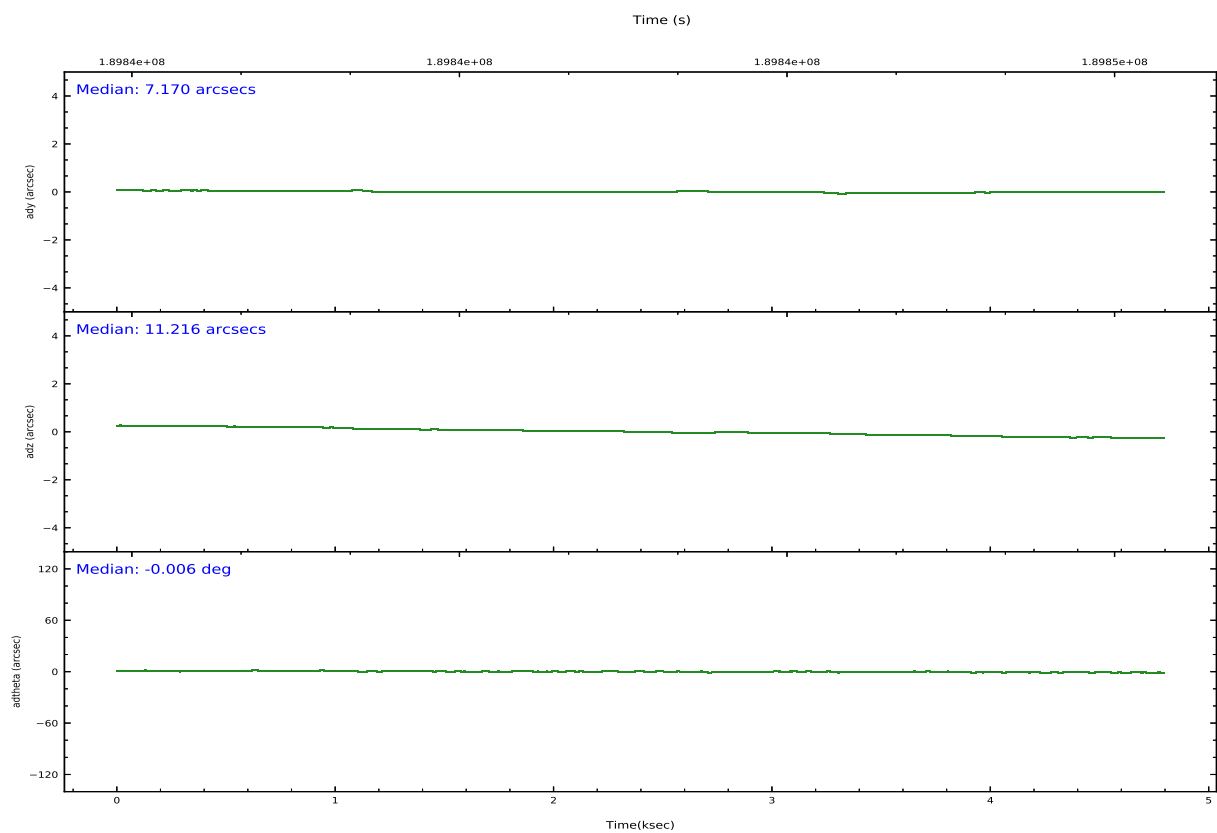
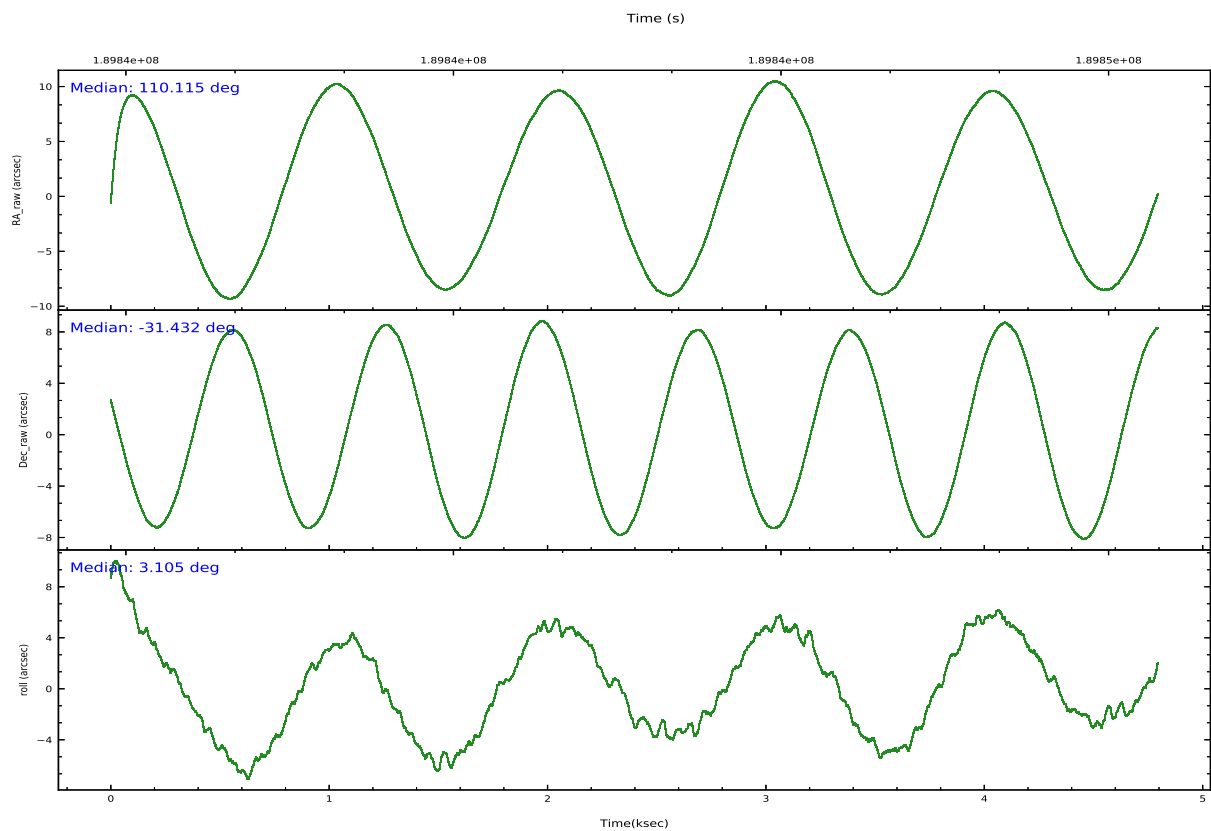
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	CC33_FAINT	CC33_FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	110.088914	110.1131085113
[deg] Pointing Dec	-31.446801	-31.435009274918
[deg] Pointing Roll	2.936326	3.1052758929214
[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)	189841069.184000	189839158.8838
Observation start date	2004-01-07T05:36:45	2004-01-07T05:05:58
[s] Observation end time (MET)	189845727.184000	189846041.2466
Observation end date	2004-01-07T06:54:23	2004-01-07T07:00:41
Read mode	CONTINUOUS	CONTINUOUS

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0

2.3 Aspect



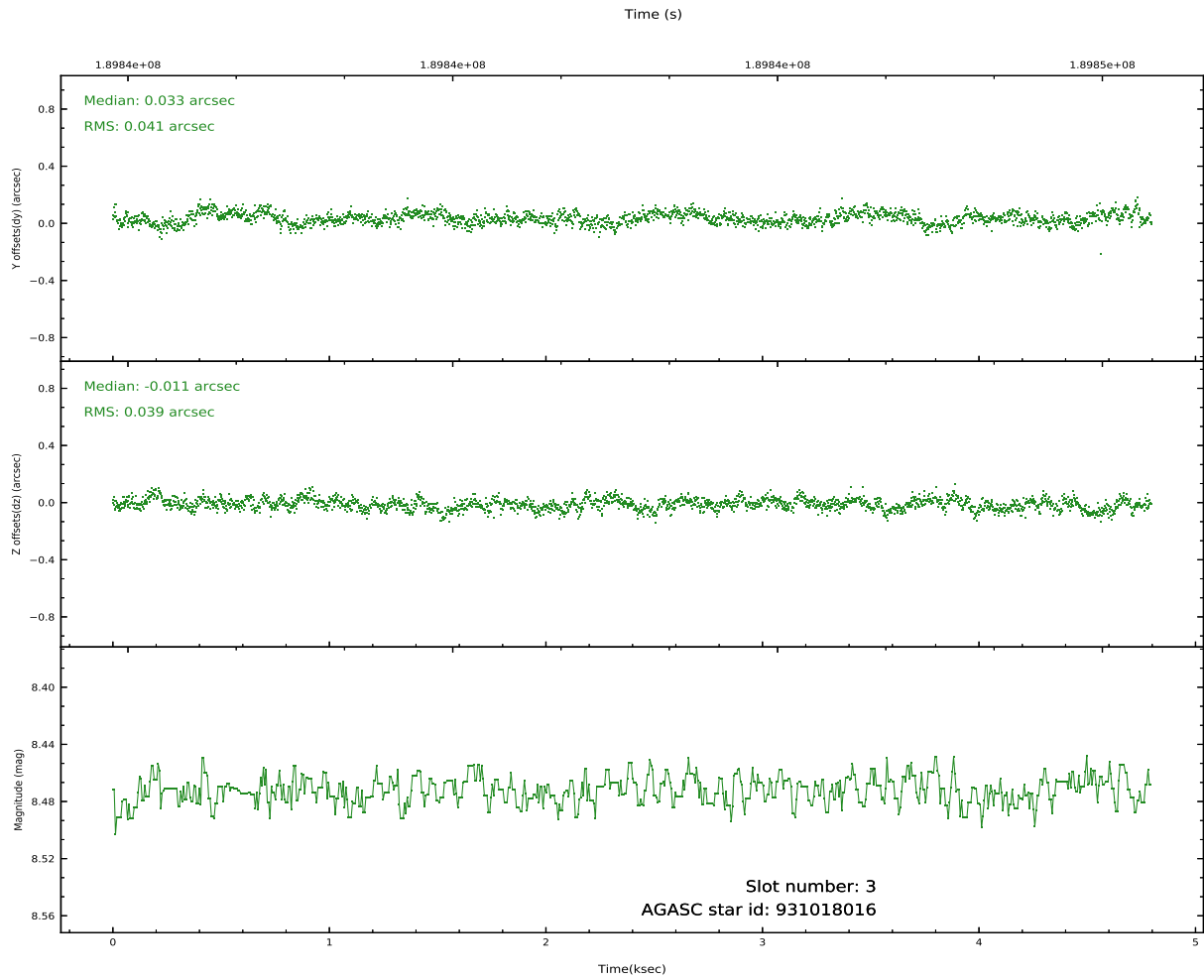
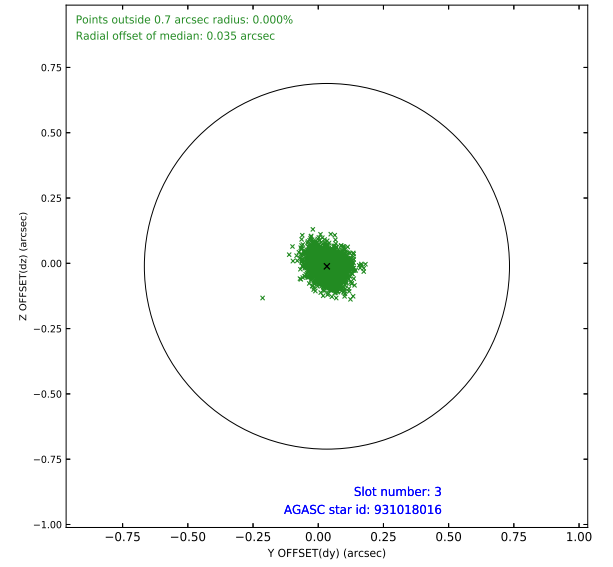
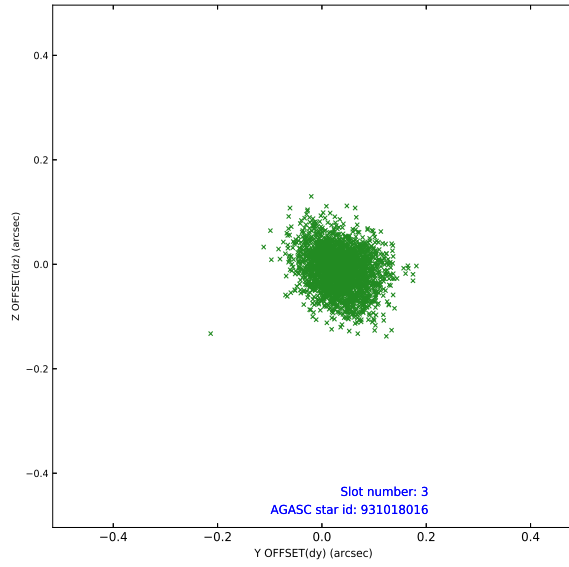


Slot Statistics

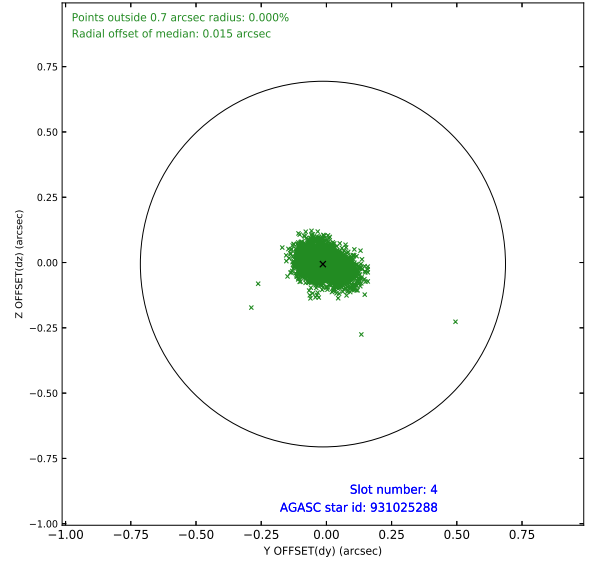
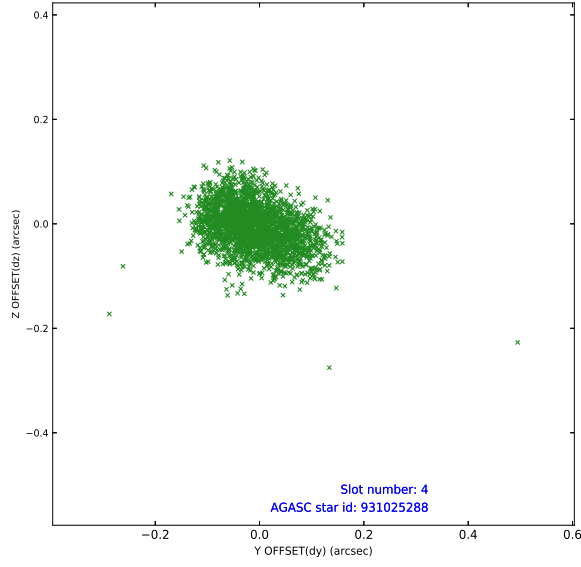
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1170	1.000	-0.063	-0.041	0.008	0.013	0.000000	0.000000	-759.95	-1732
1	FID		ACIS-S-4	7.20	1170	1.000	0.110	0.041	0.006	0.010	0.000000	0.000000	2152.87	174
2	FID		ACIS-S-5	7.23	1171	1.000	-0.078	0.009	0.008	0.014	0.000000	0.000000	-1811.22	169
3	GUIDE	used	931018016	8.47	2340	1.000	0.033	-0.011	0.060	0.099	109.684535	-31.226562	-1202.41	853
4	GUIDE	used	931025288	8.44	2340	1.000	-0.013	-0.006	0.079	0.126	109.511084	-30.937793	-1688.67	1917
5	GUIDE	used	931695048	7.38	2341	1.000	-0.015	0.049	0.081	0.125	110.648539	-32.046020	1594.69	-2244
6	GUIDE	used	931019296	8.66	2341	1.000	0.038	0.052	0.070	0.115	109.471771	-31.694370	-1932.73	-799
7	GUIDE	used	931160352	8.63	2340	1.000	-0.036	-0.086	0.079	0.125	110.268138	-30.864891	659.67	2063

2.4 Star Slots

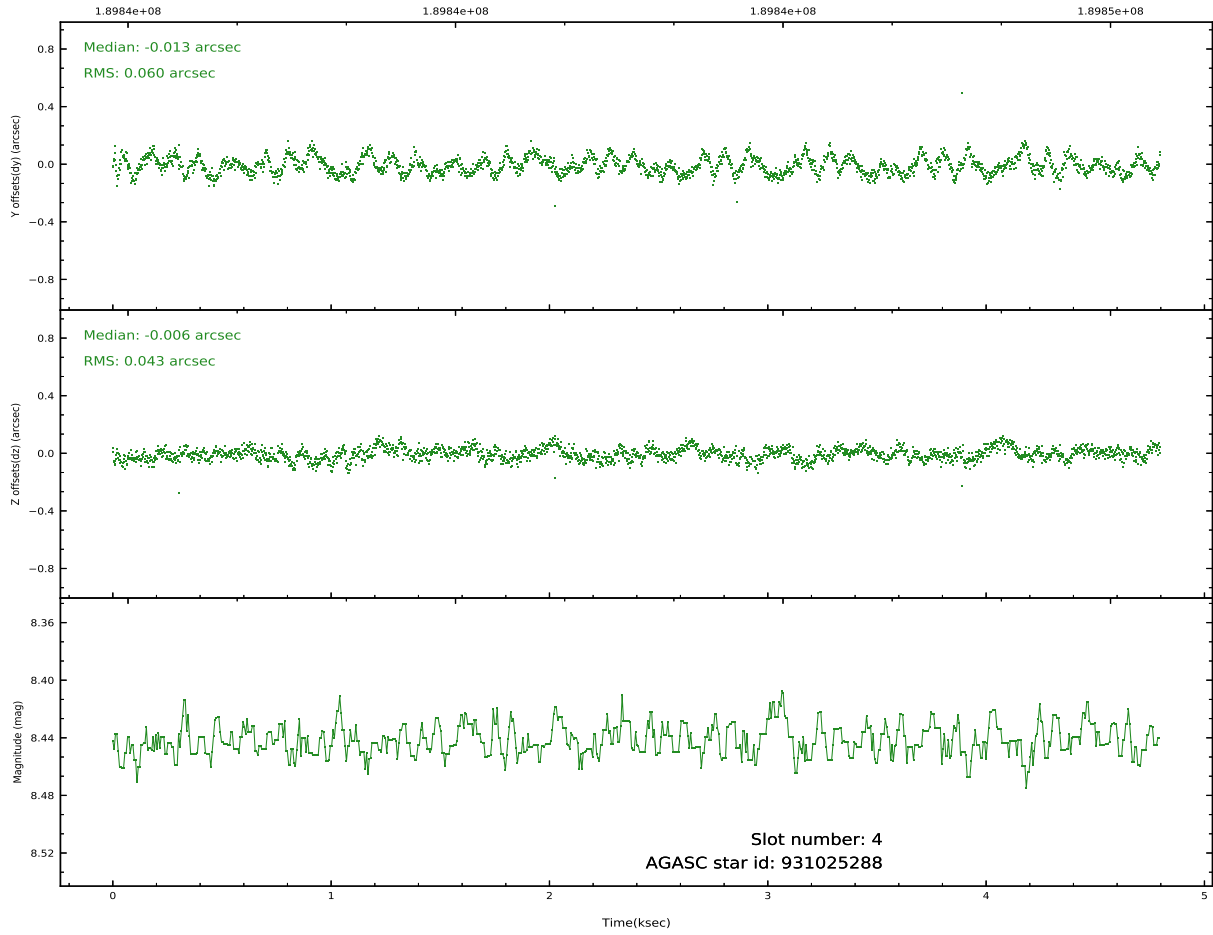
2.4.1 Slot 3



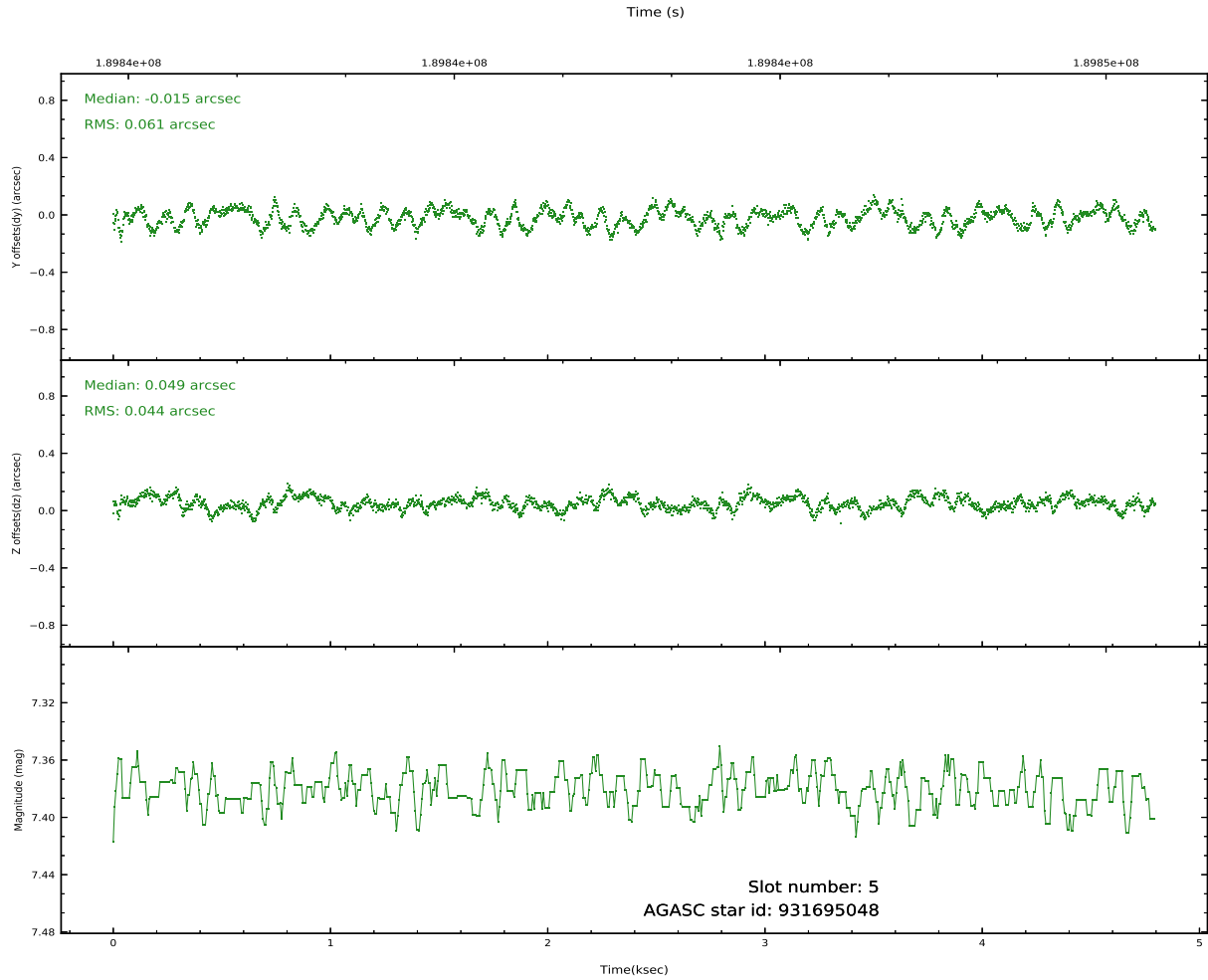
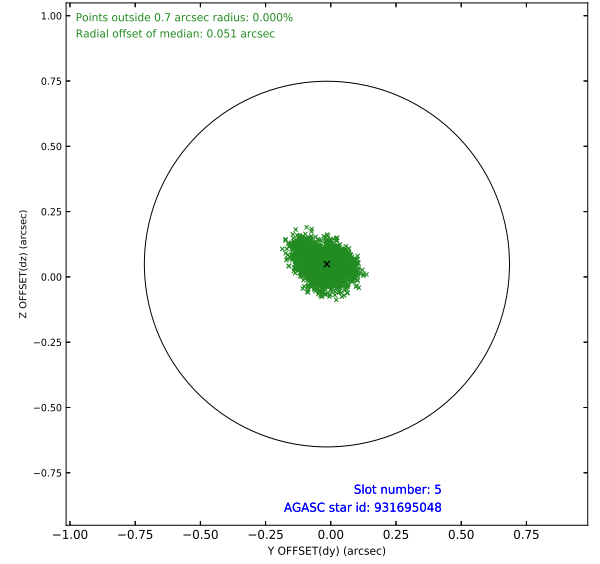
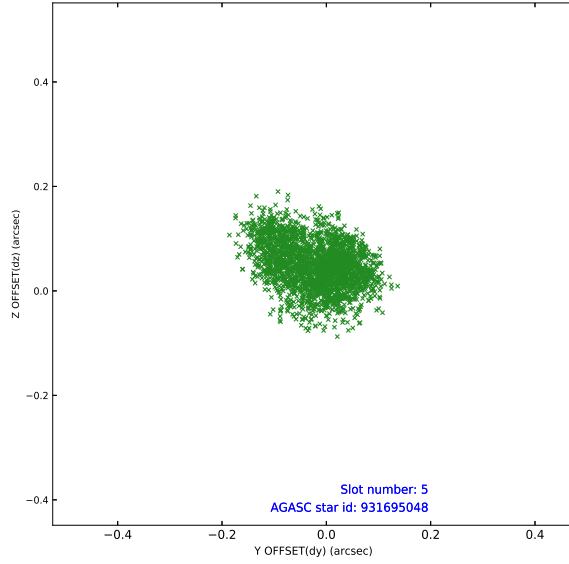
2.4.2 Slot 4



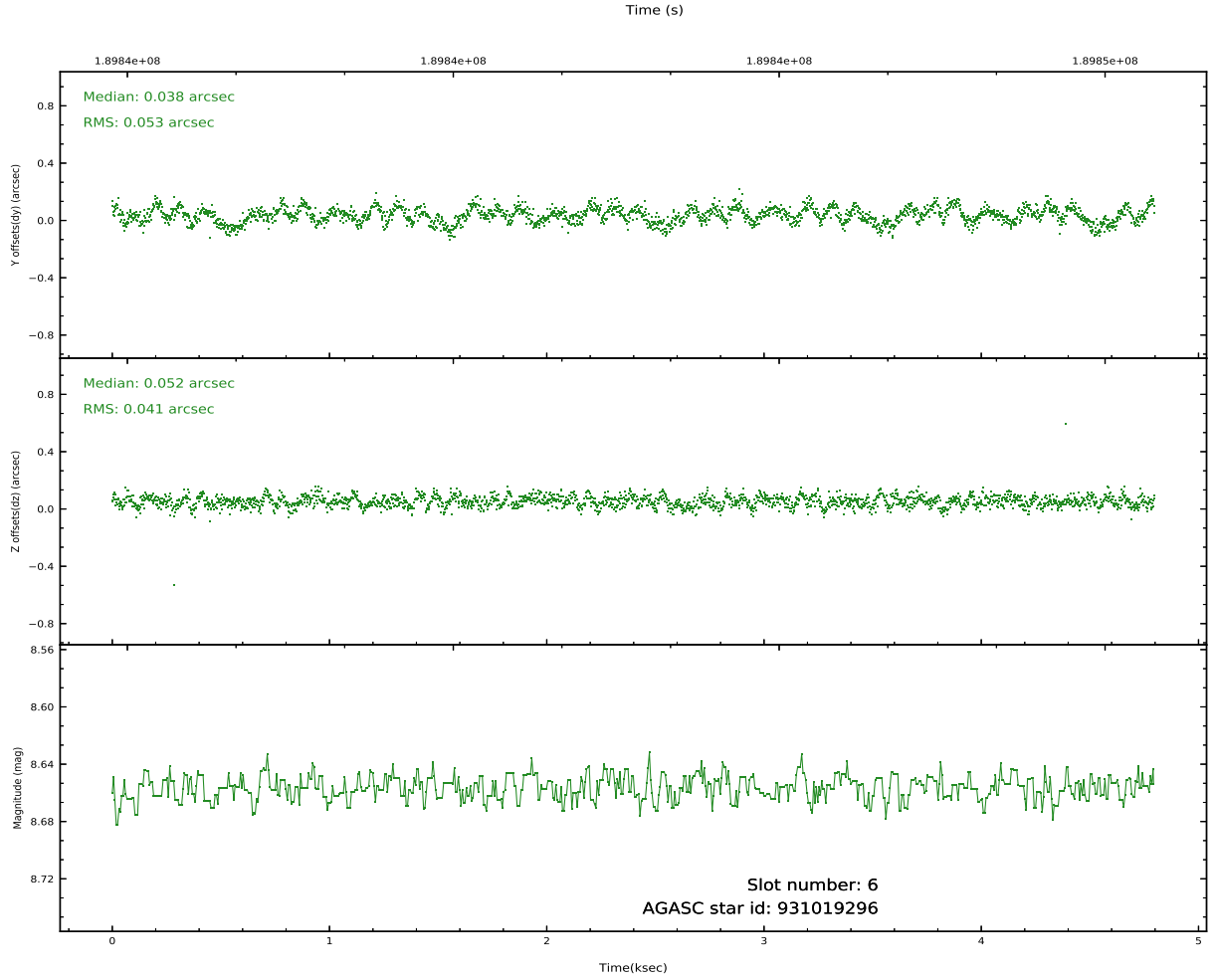
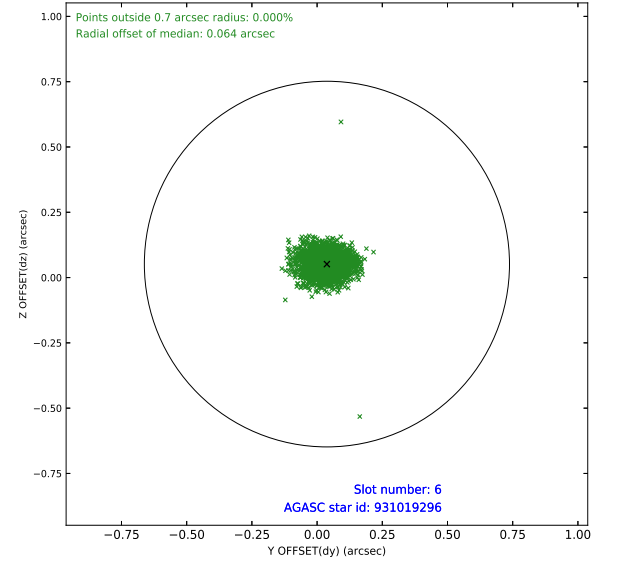
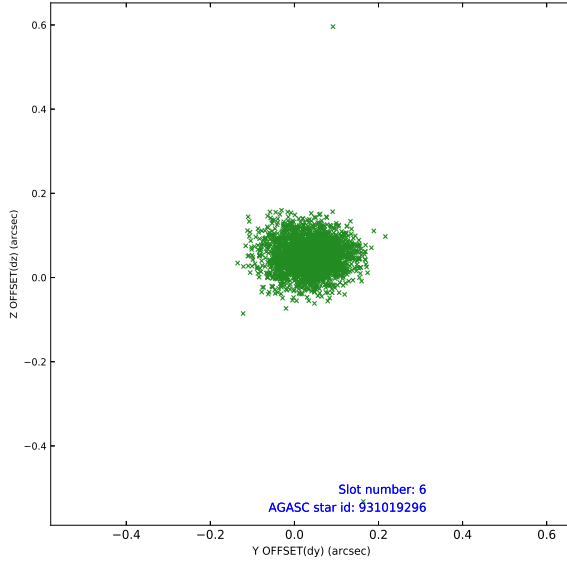
Time (s)



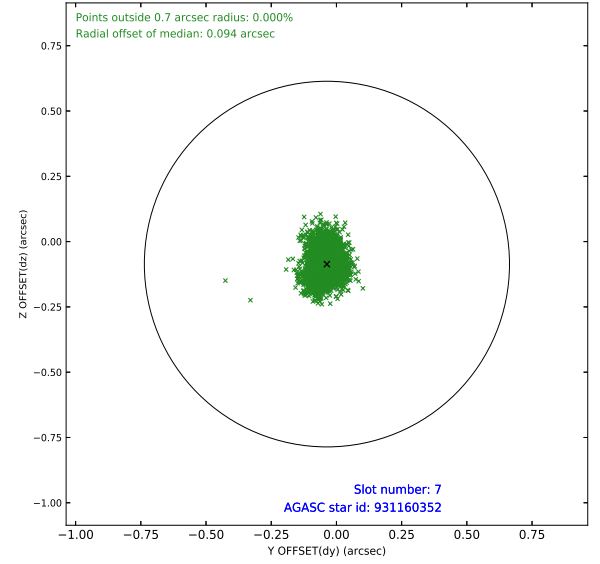
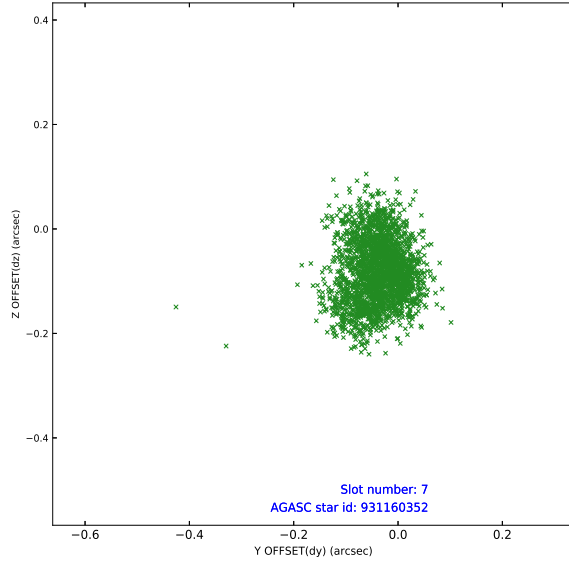
2.4.3 Slot 5



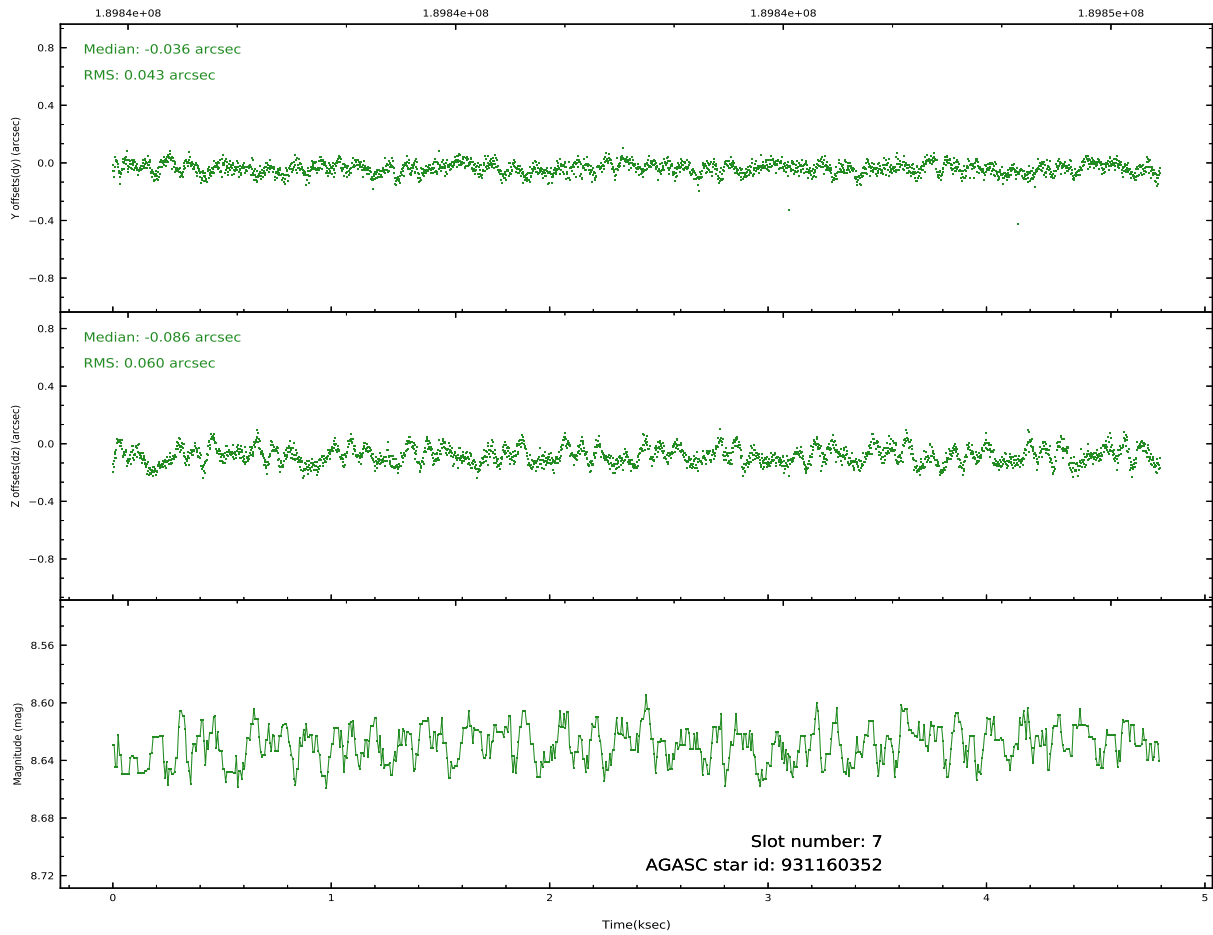
2.4.4 Slot 6



2.4.5 Slot 7

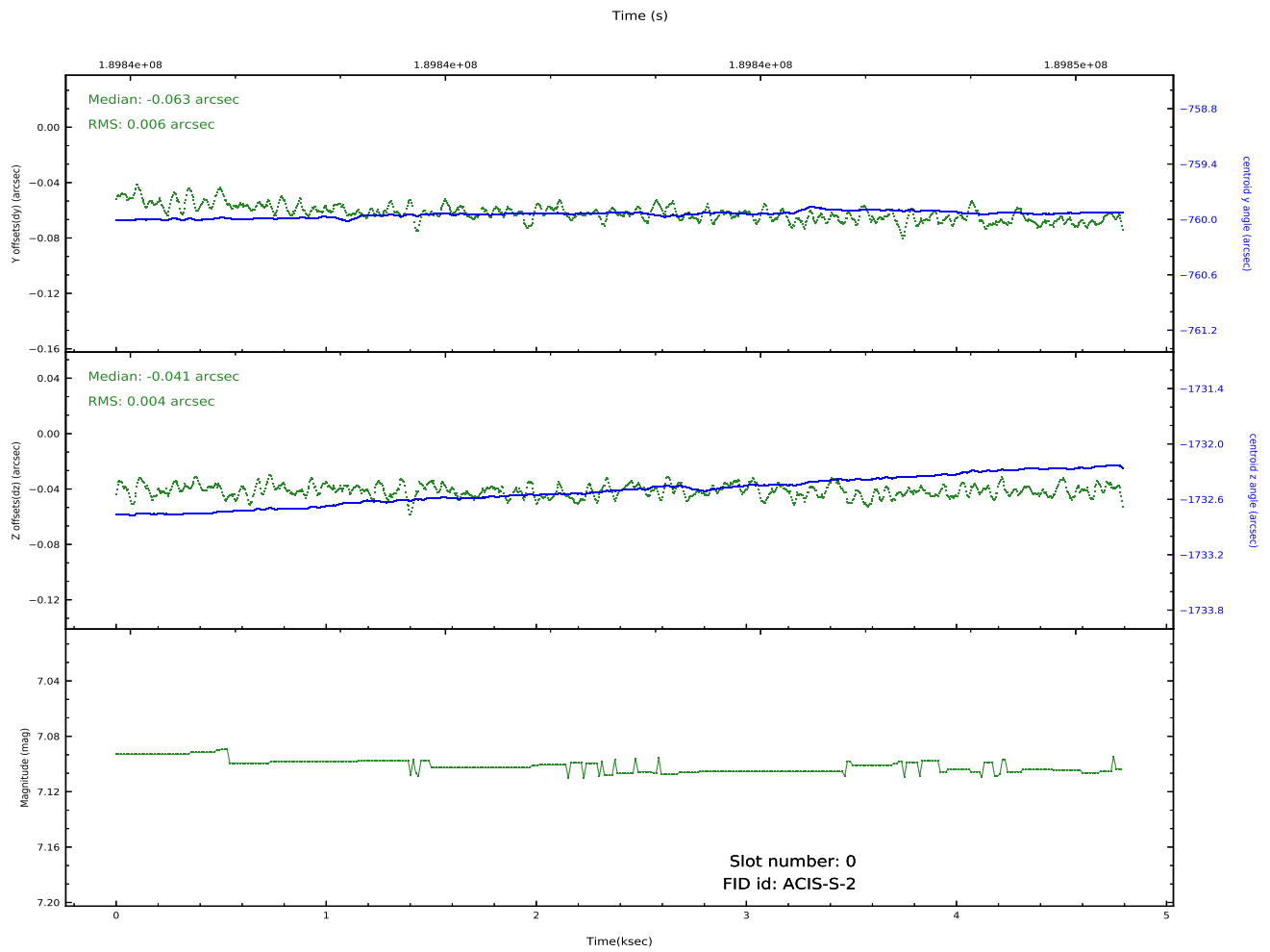
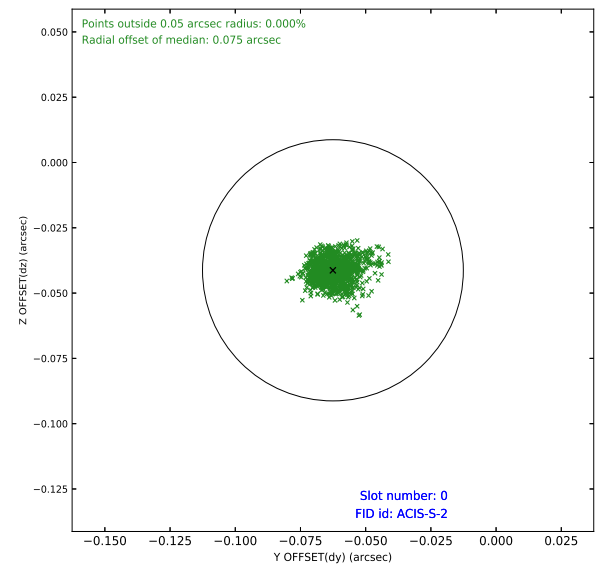
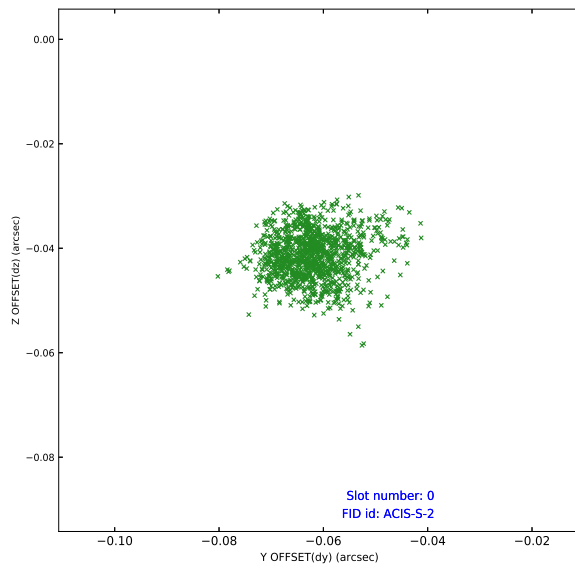


Time (s)

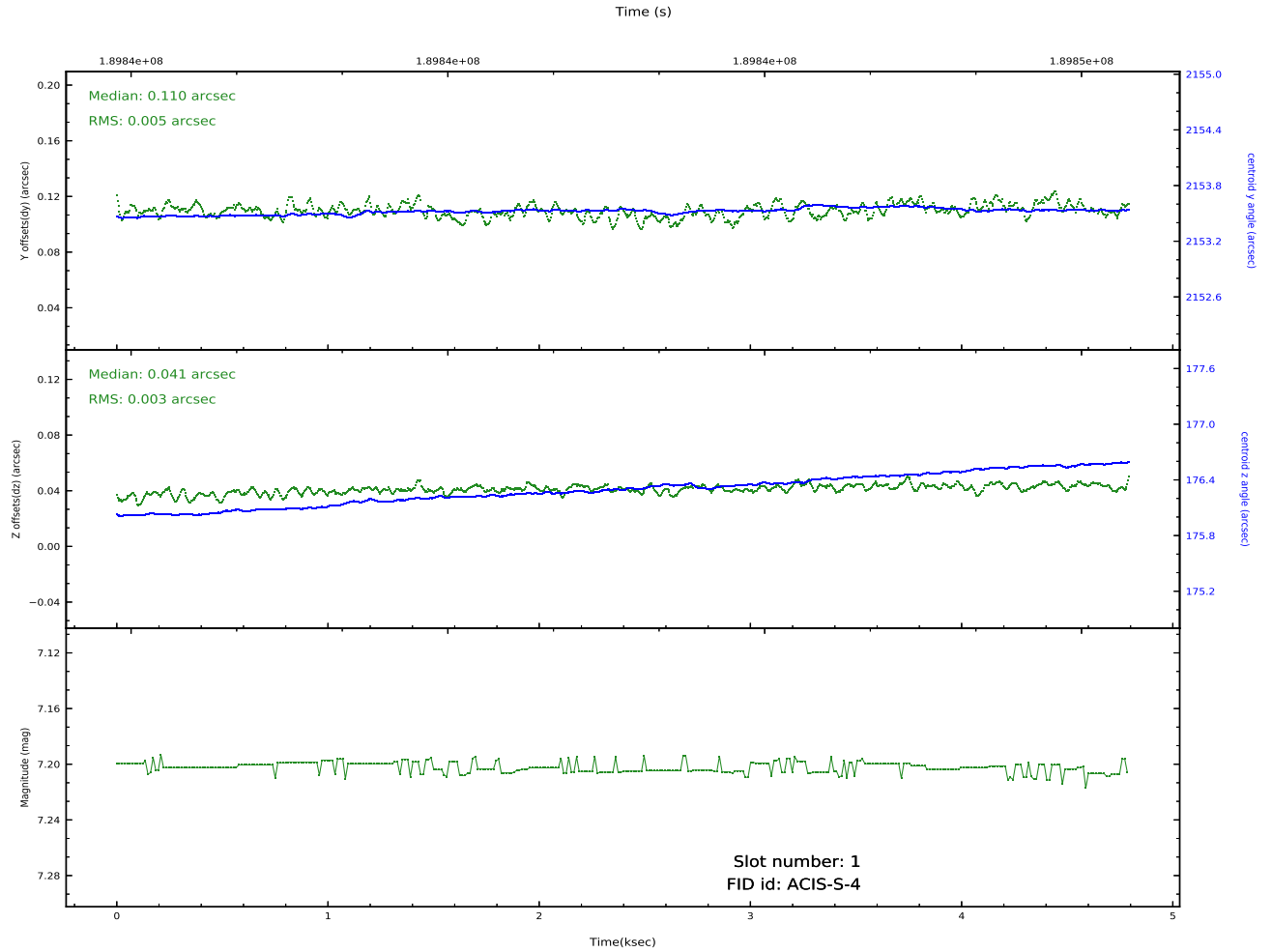
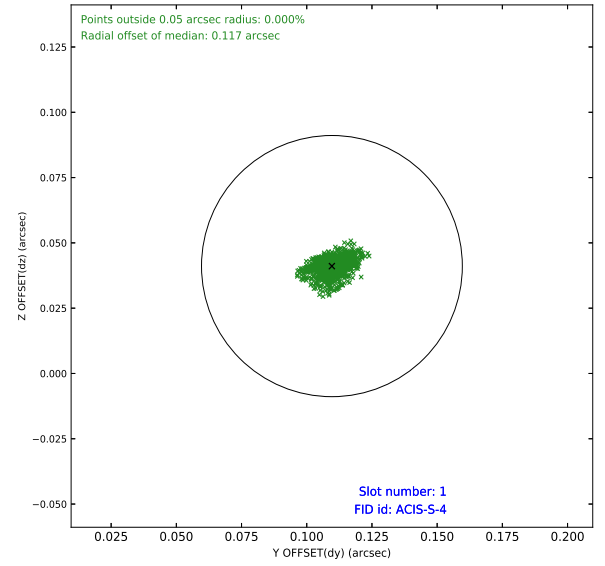
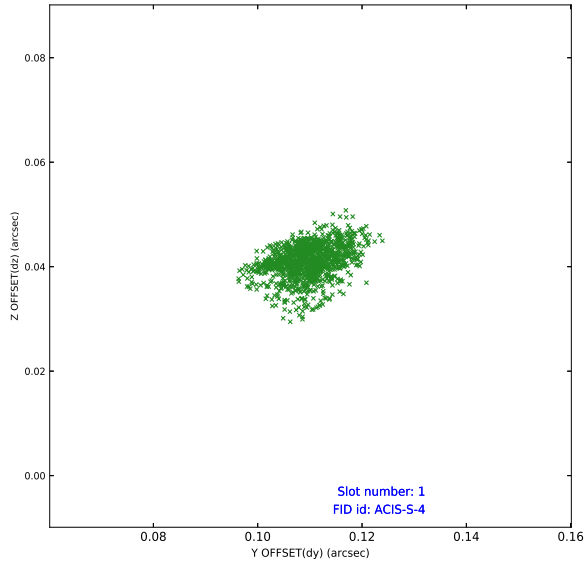


2.5 FID Slots

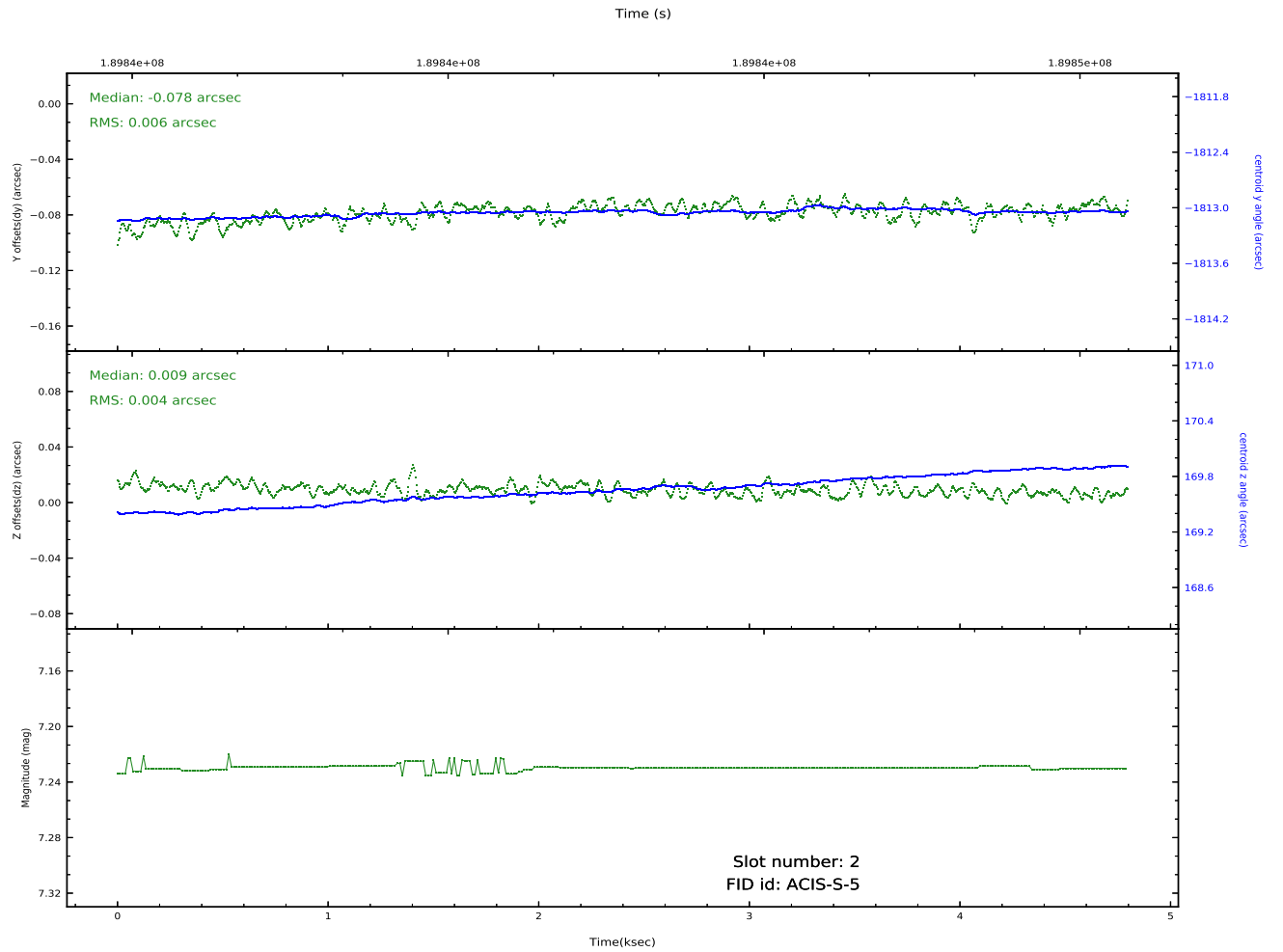
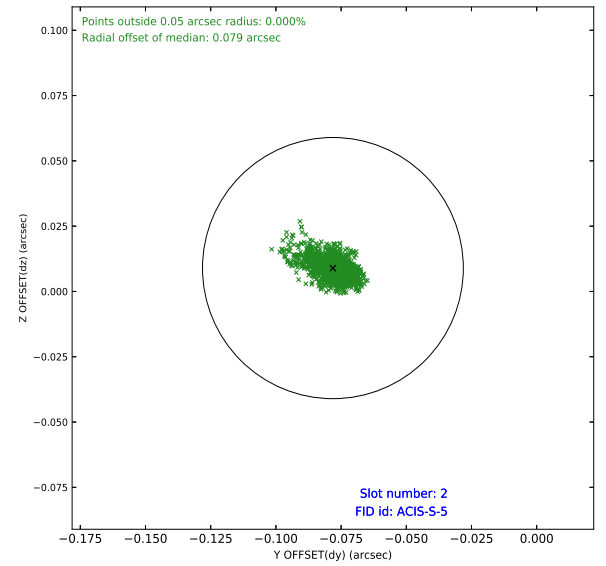
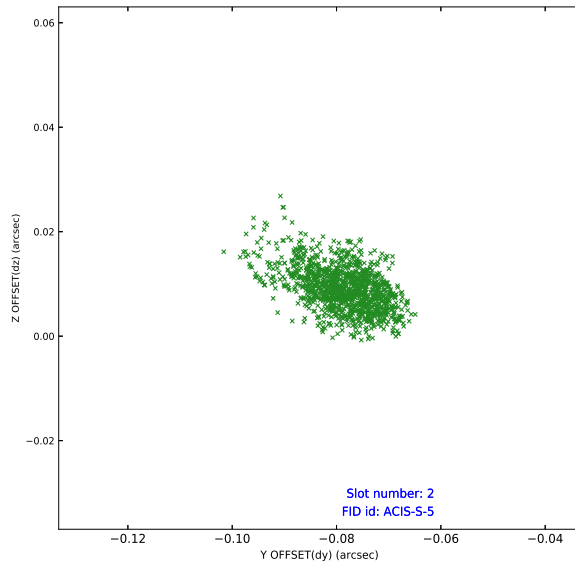
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Melania Nynka
V&V Date (YYYY-MM-DD)	2020.10.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.794

A.2 Comments