

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20705 - L2 Version 2
Chandra X-Ray Center

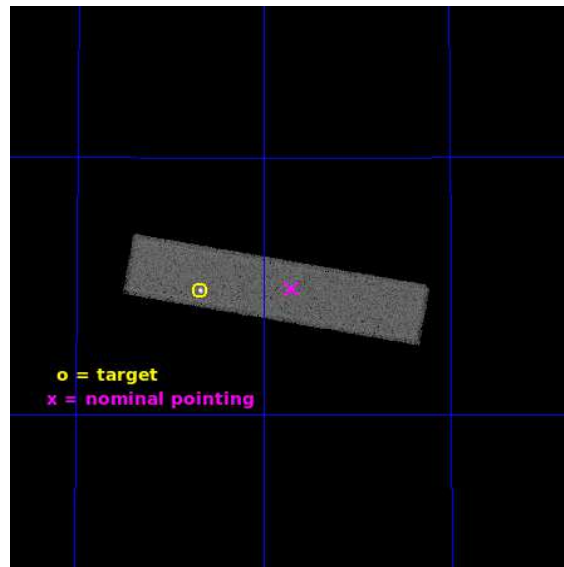
L2 Processing Date : Oct 27 2020

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1 Front

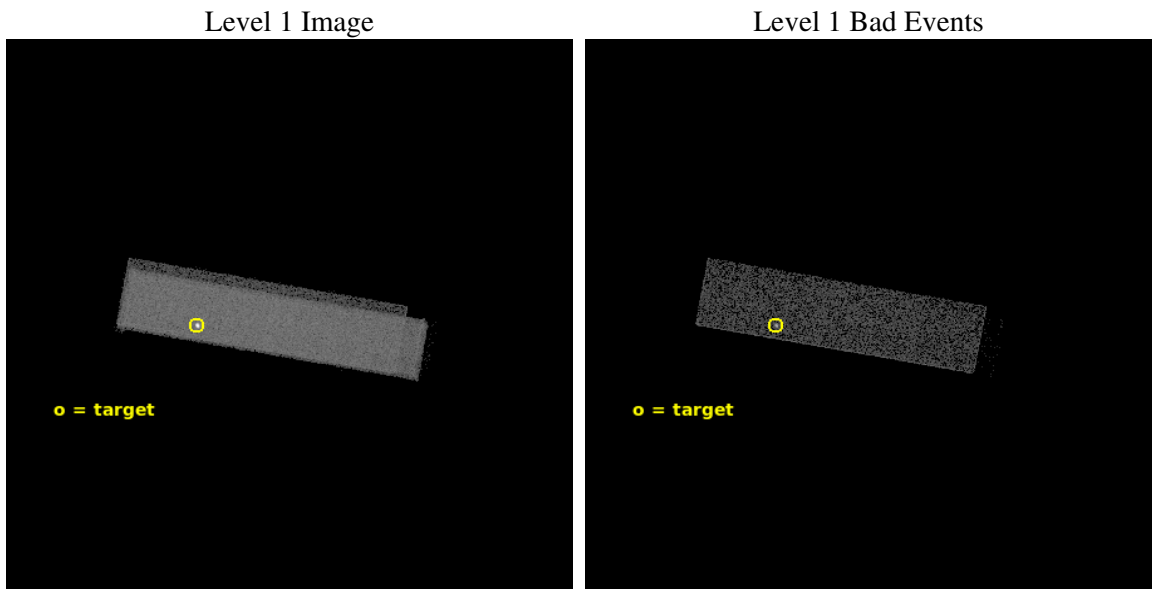
seq_num	291416	Sequence number
obs_id	20705	Observation id
title	AO-19 Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	331.92422740084	Nominal RA [deg]
dec_nom	45.745760196858	Nominal Dec [deg]
roll_nom	190.23838760156	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1120.3250670433	[s]
livetime	1081.7391532706	Ontime multiplied by DTCOR
l2events	79031	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	1120.3250670433	[s]
caldsver	4.9.3	 	l1events	160660	Number of level 1 events
date	2020-10-27T17:41:53	Date and time of file creation			
revision	2	Processing version of data			

2.1.3 Events

Level 1 Events

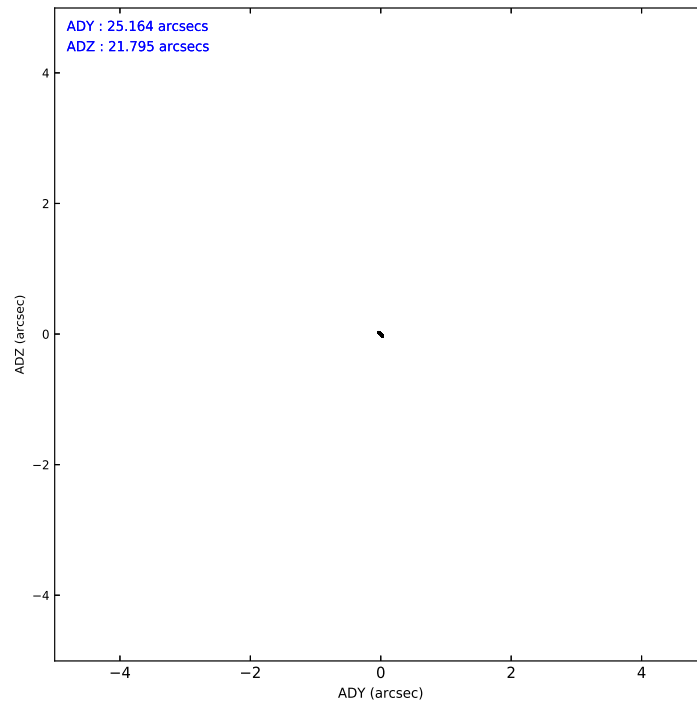
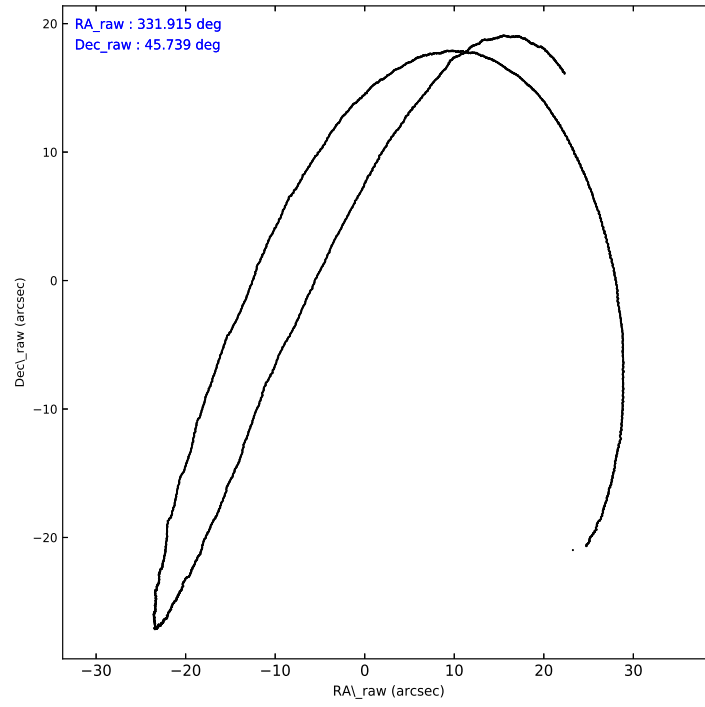
	segment 1	segment 2	segment 3
level 1 events	0	160660	0
rejected events	0	69652	0
rejected %	0%	43%	0%

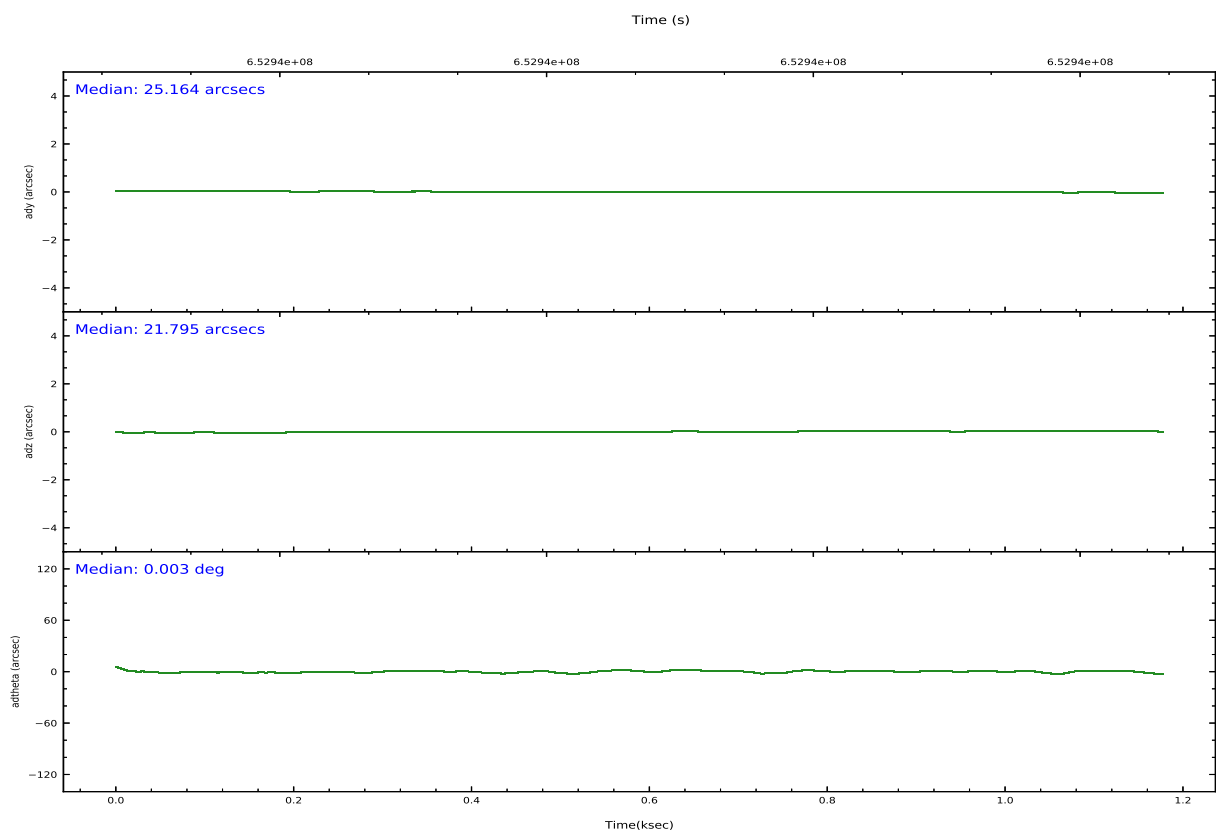
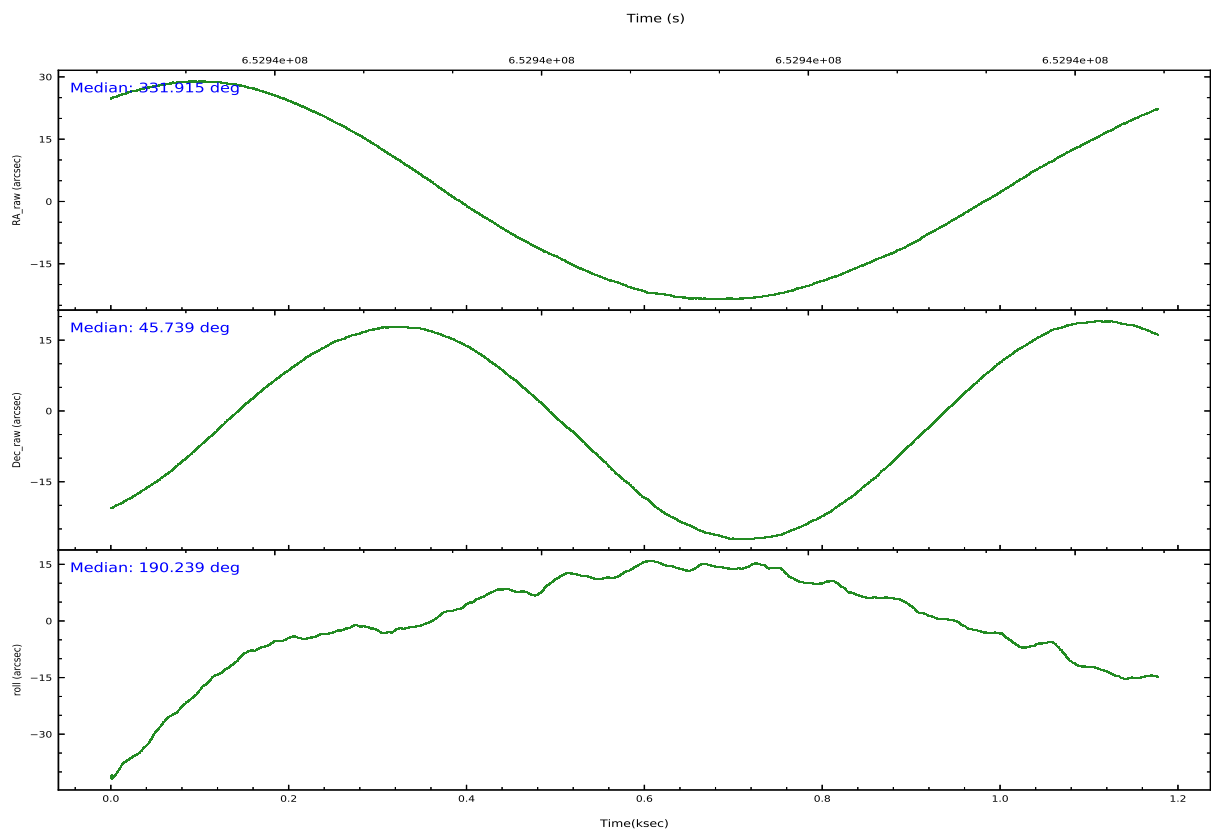
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	331.945478	331.92422740084
[deg] Pointing Dec	45.757479	45.745760196858
[deg] Pointing Roll	190.160840	190.23838760156
[mm] SIM focus pos	-1.533336	-1.526339935833849
[mm] SIM defocus	7.710433287538843e-07	0.006996703570447904
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	652944094.184000	652943521.10224
Observation start date	2018-09-10T05:20:25	2018-09-10T05:12:01
[s] Observation end time (MET)	652945094.184000	652946234.7898999
Observation end date	2018-09-10T05:37:05	2018-09-10T05:57:14

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect



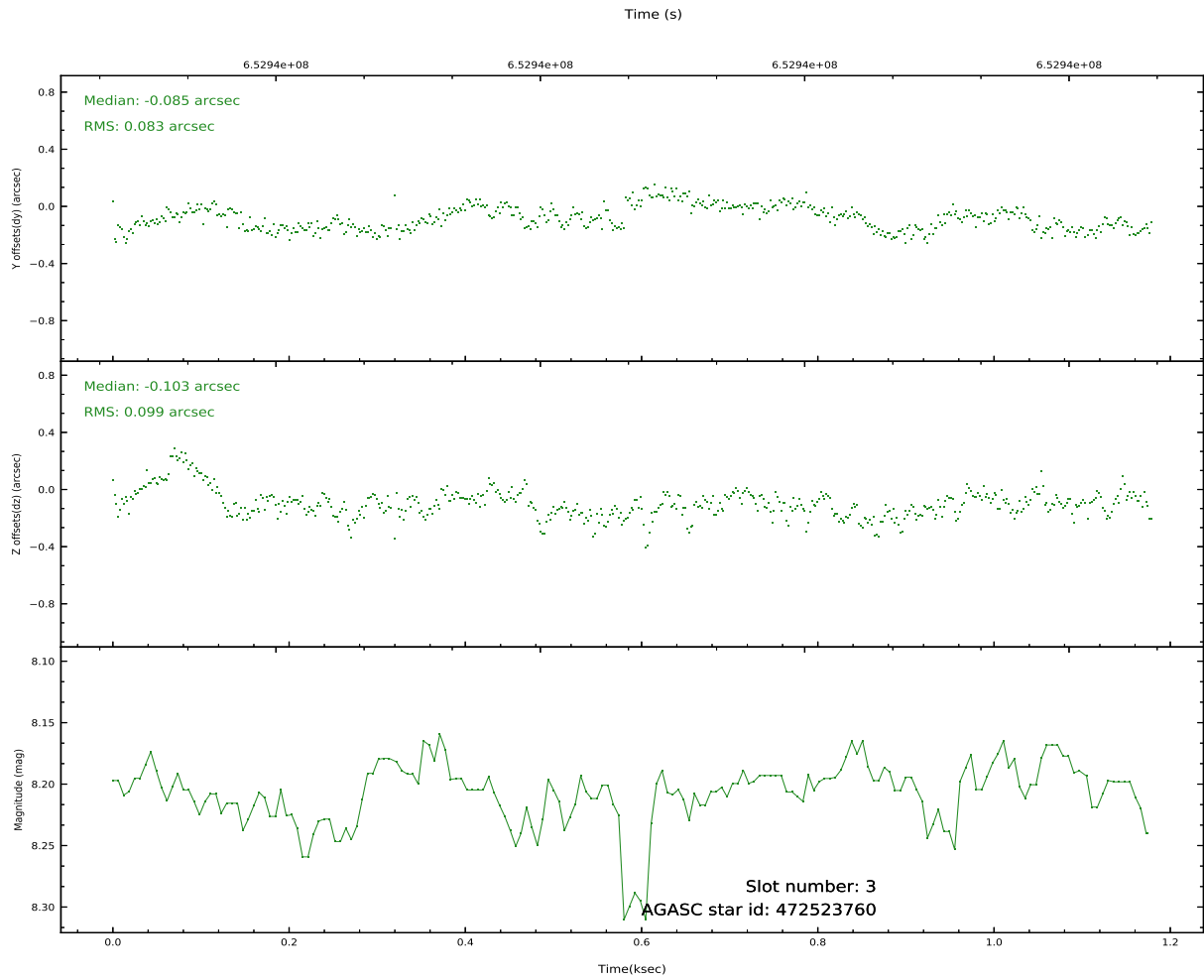
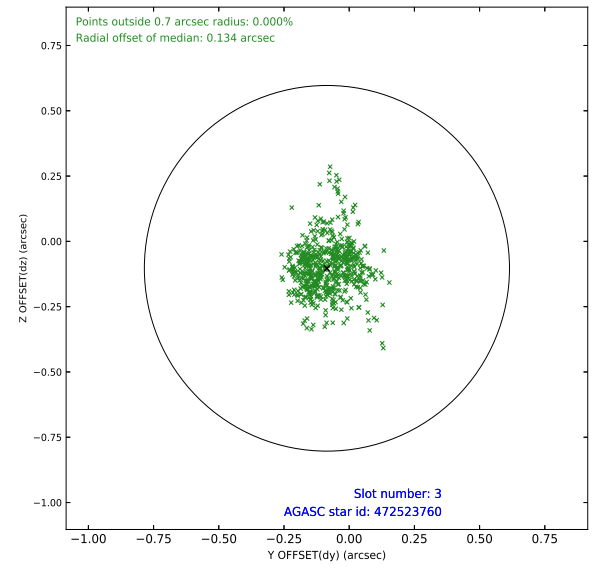
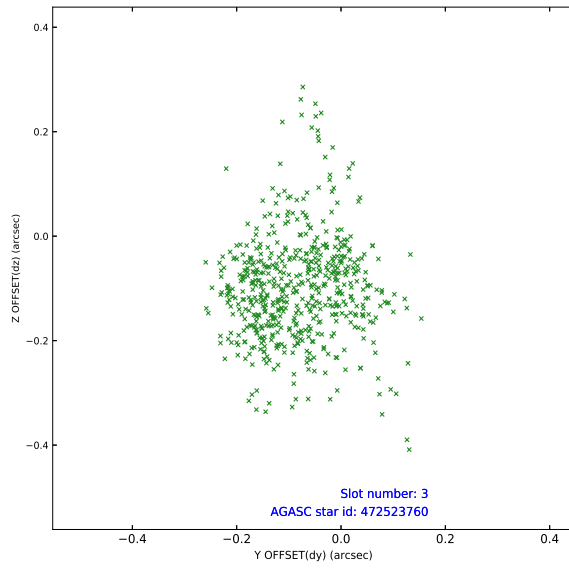


Slot Statistics

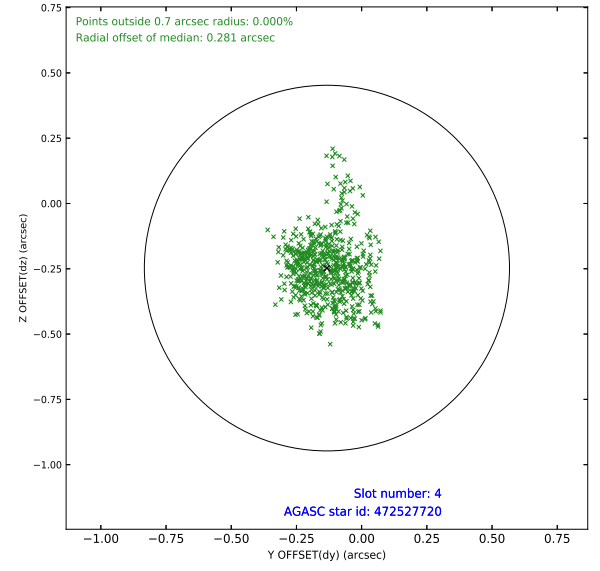
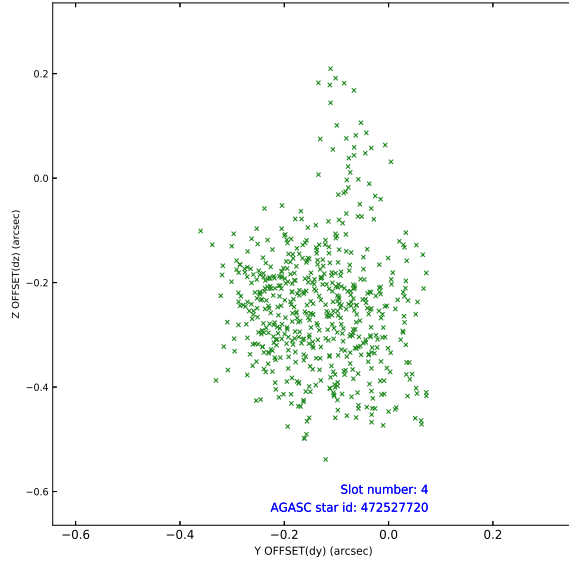
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.06	288	1.000	0.103	-0.169	0.007	0.010	0.000000	0.000000	-1179.86	-470
1	FID		HRC-S-3	7.05	288	1.000	0.015	-0.040	0.008	0.012	0.000000	0.000000	-1186.64	557
2	FID		HRC-S-4	7.01	288	1.000	0.269	-0.089	0.004	0.008	0.000000	0.000000	1214.54	563
3	GUIDE	used	472523760	8.20	574	1.000	-0.085	-0.103	0.130	0.231	331.645363	45.403260	972.94	1121
4	GUIDE	used	472527720	6.99	576	1.000	-0.133	-0.247	0.153	0.265	331.460205	45.112509	1625.20	2068
5	GUIDE	used	472535576	7.85	576	1.000	-0.125	0.099	0.132	0.253	331.438373	46.291802	906.24	-2114
6	GUIDE	used	472655152	9.36	576	1.000	0.042	0.249	0.253	0.503	332.504239	45.862991	-1443.52	-133
7	GUIDE	used	472533912	9.12	568	1.000	0.284	0.042	0.235	0.490	331.791136	46.368695	-11.22	-2232

2.4 Star Slots

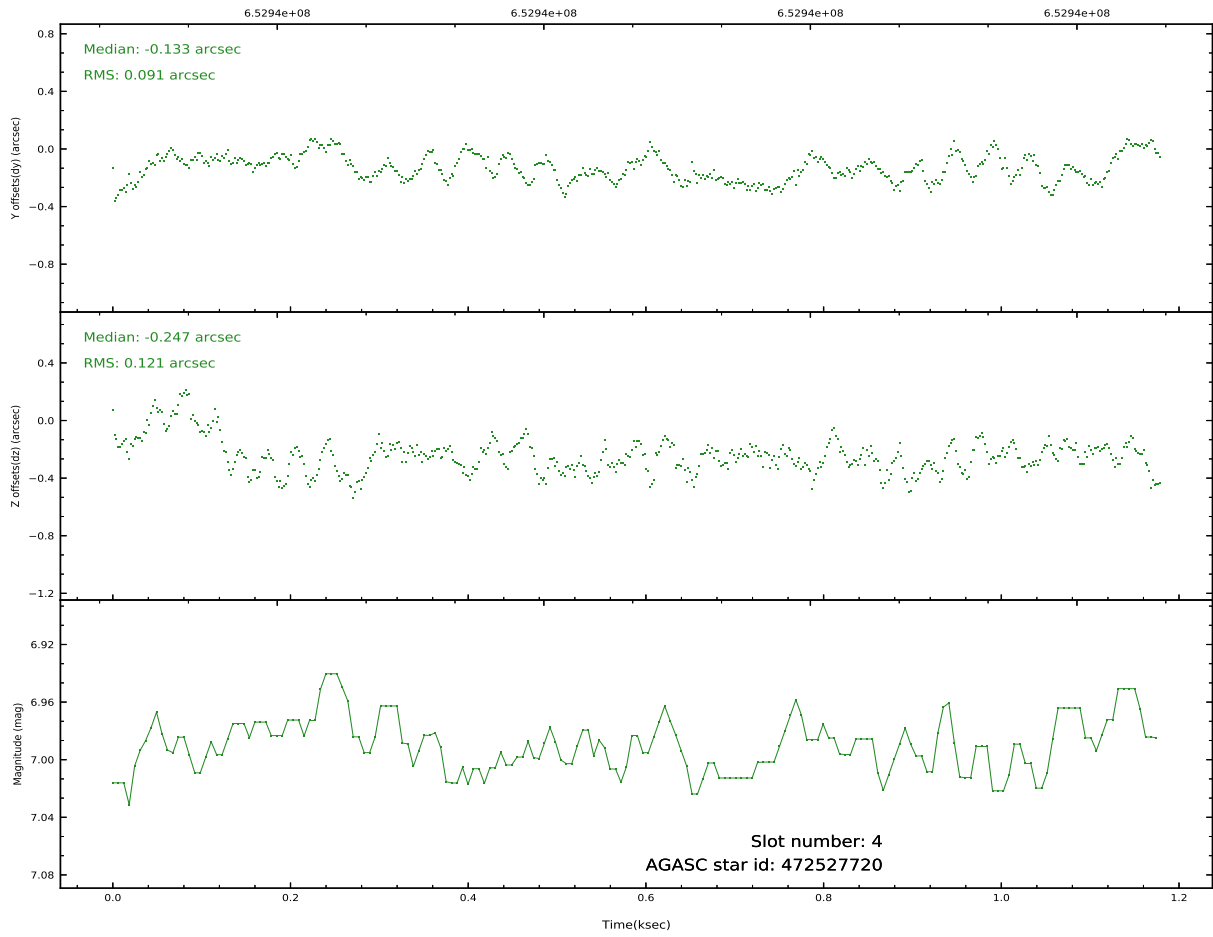
2.4.1 Slot 3



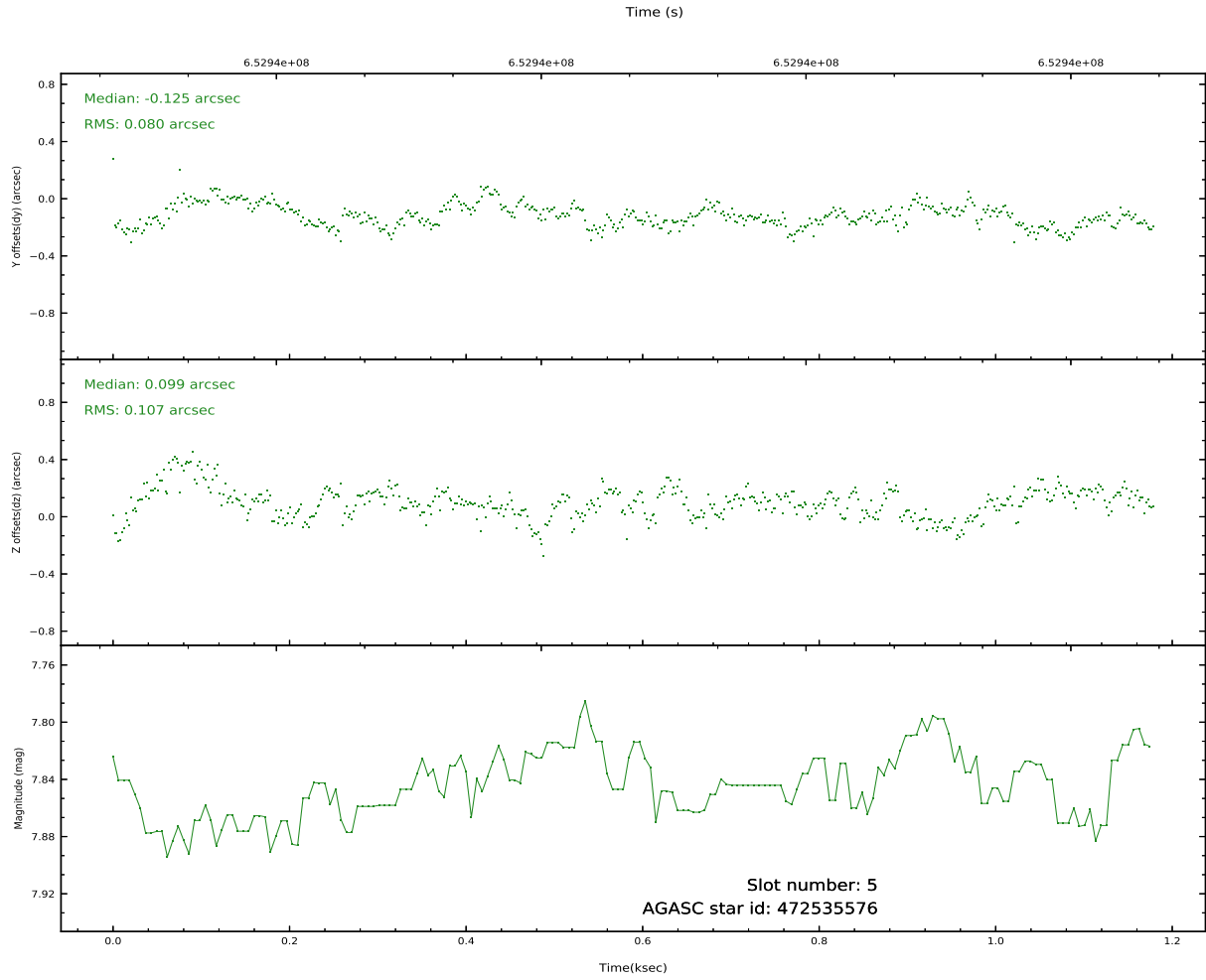
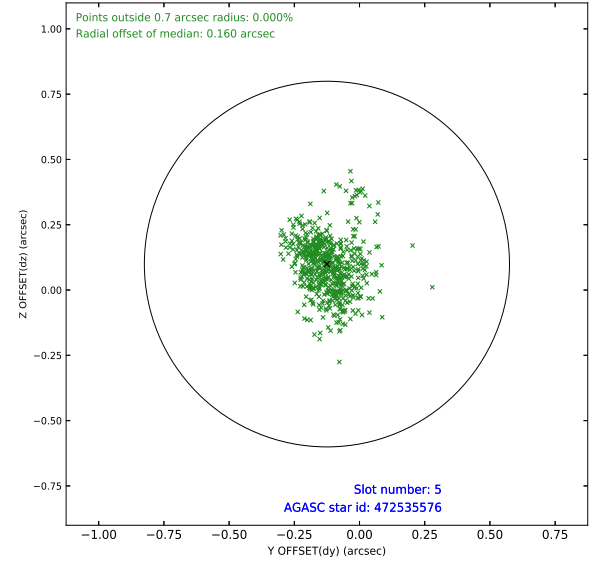
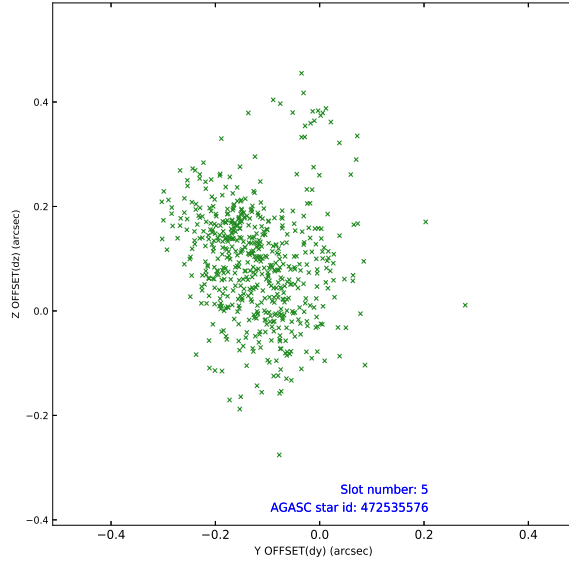
2.4.2 Slot 4



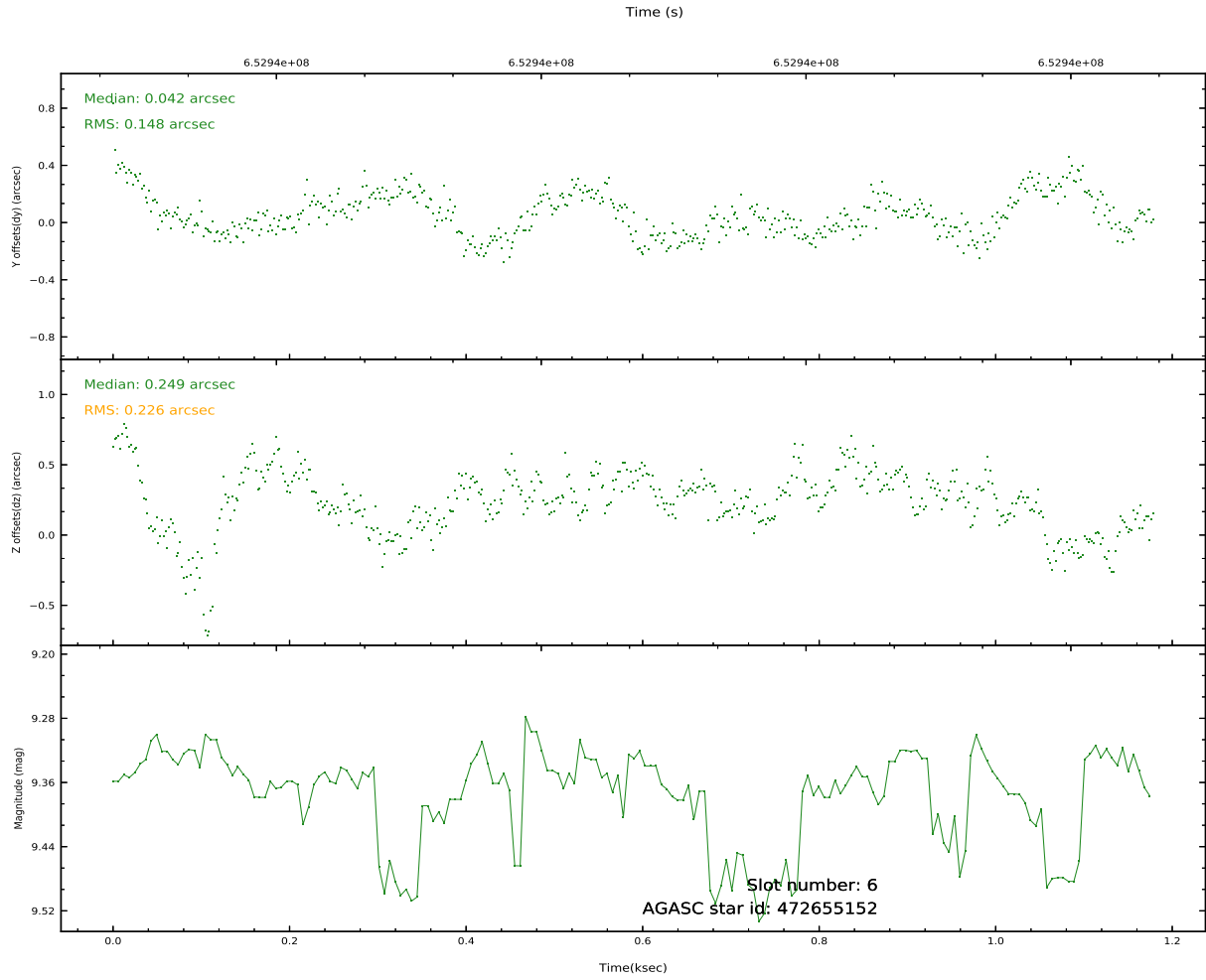
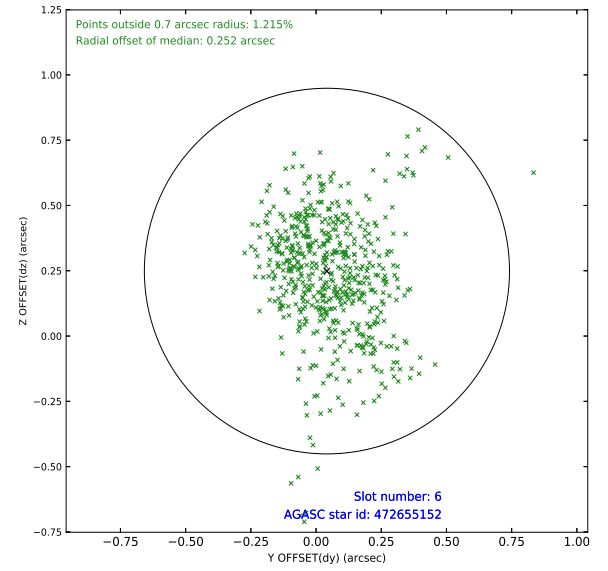
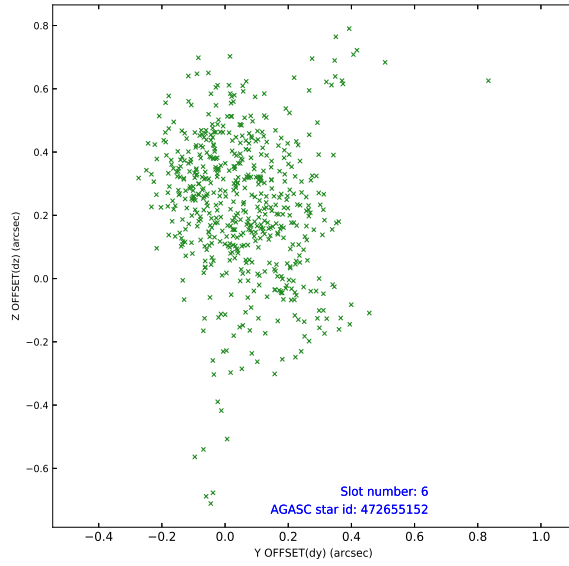
Time (s)



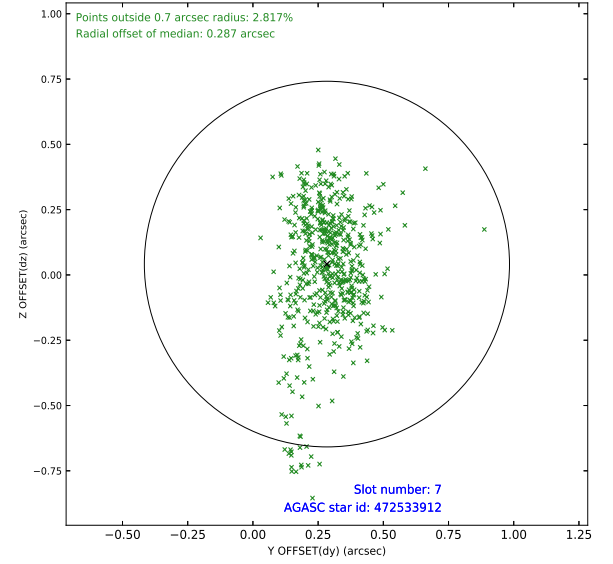
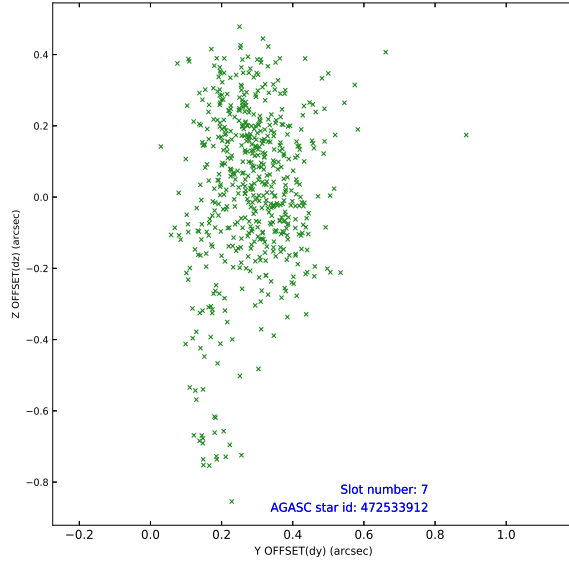
2.4.3 Slot 5



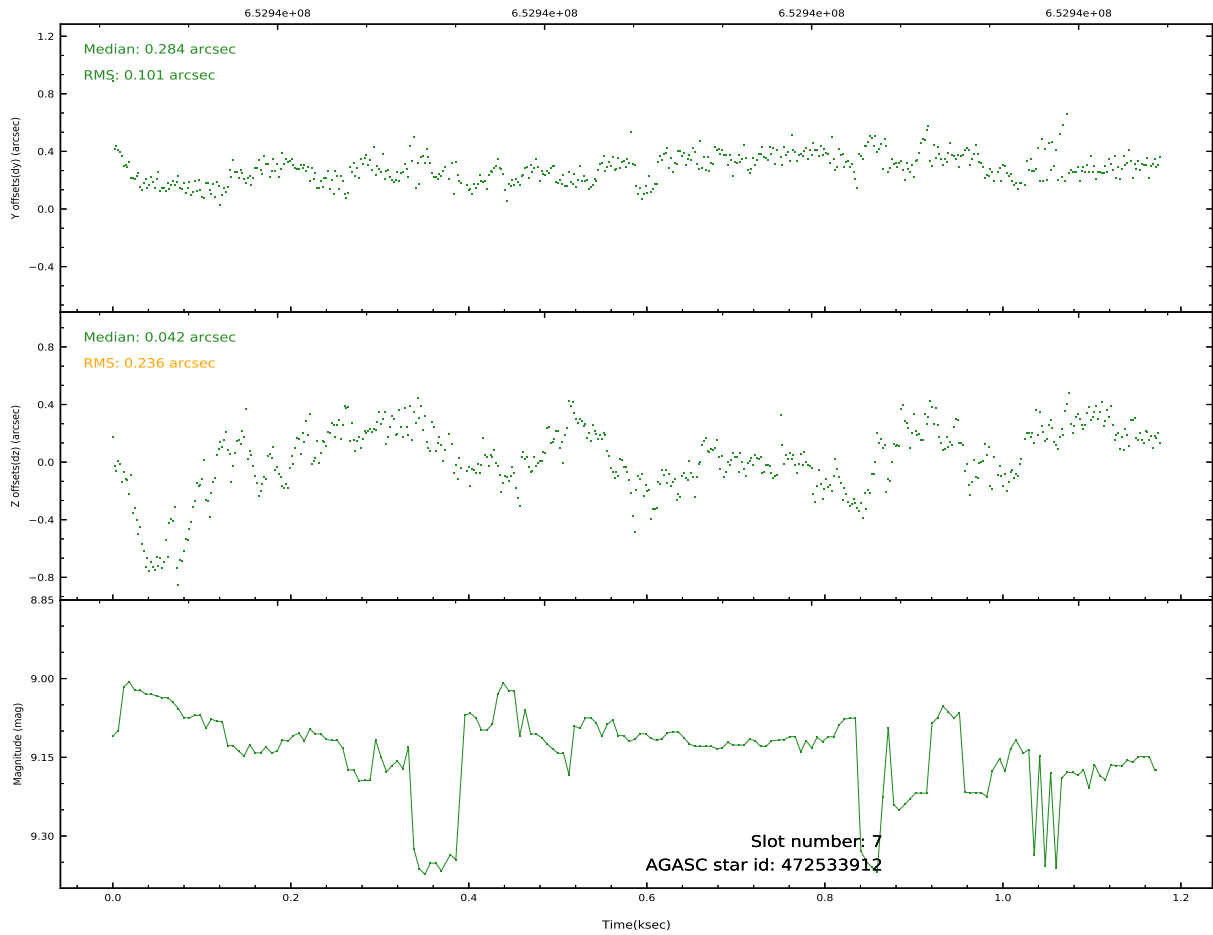
2.4.4 Slot 6



2.4.5 Slot 7

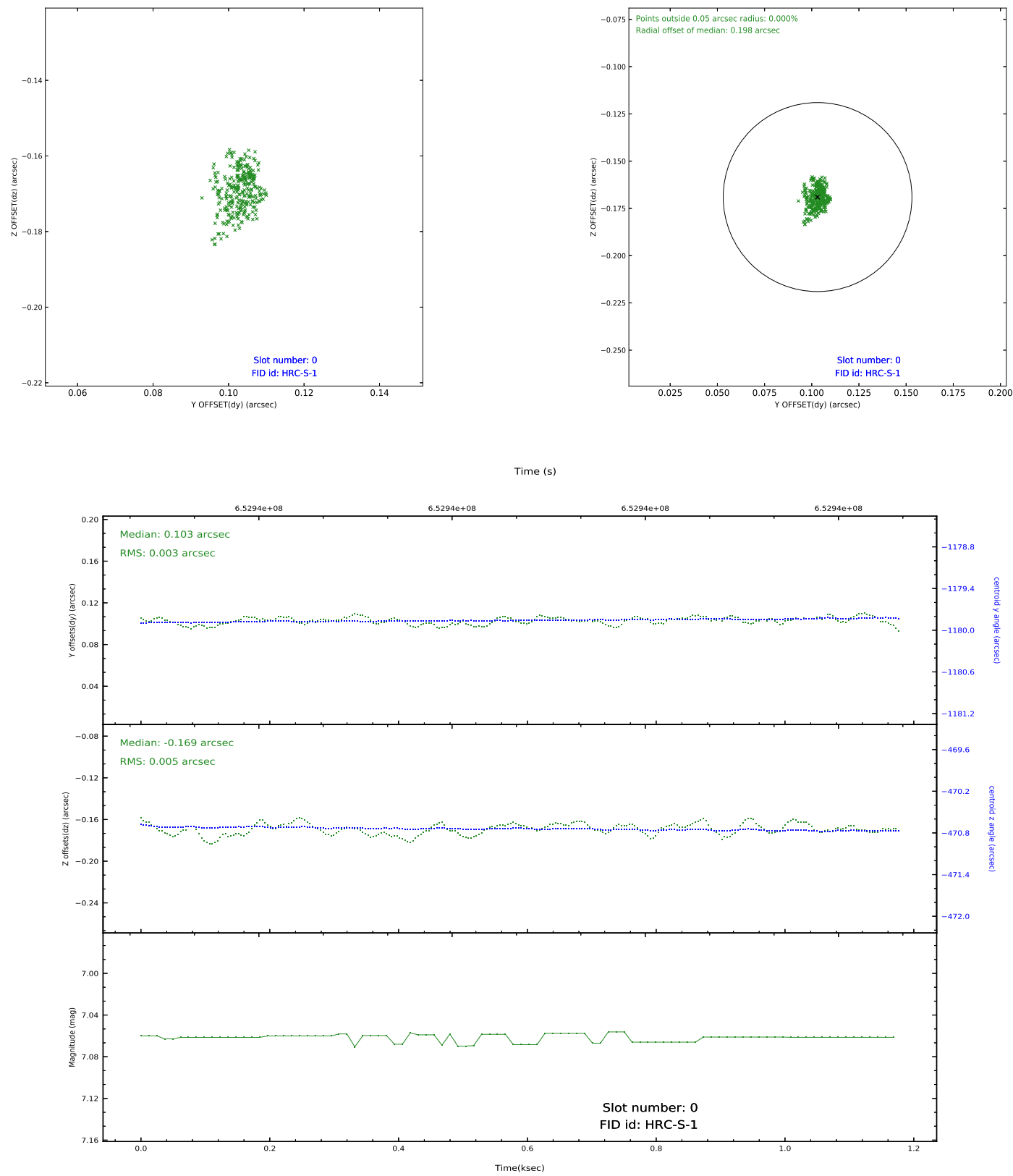


Time (s)

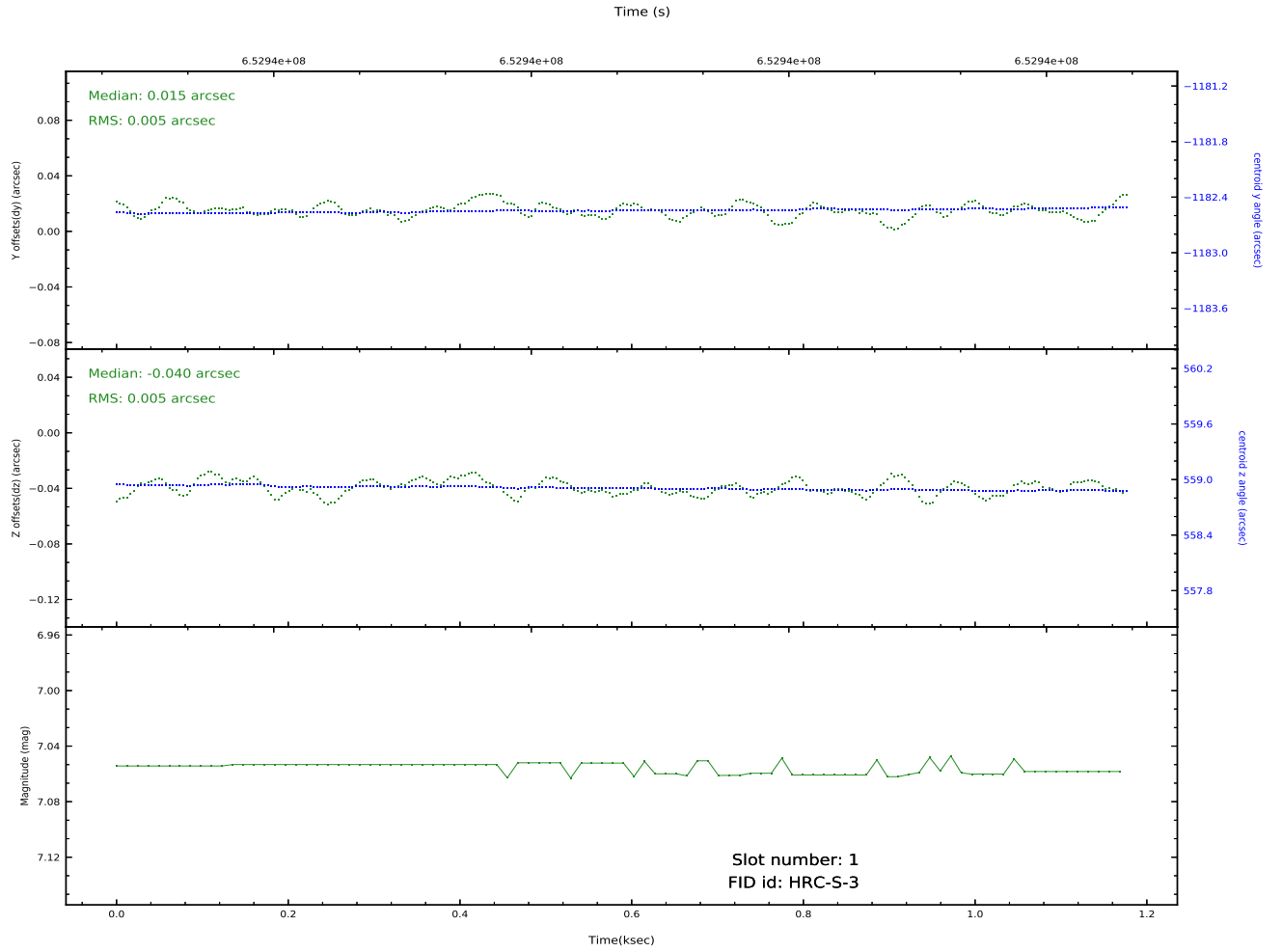
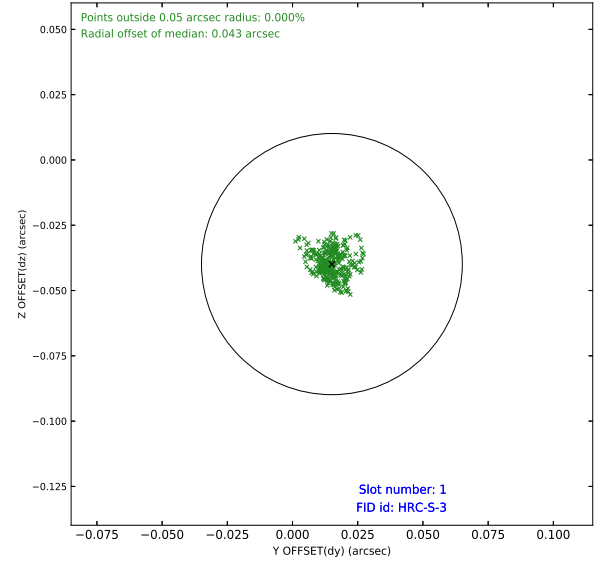
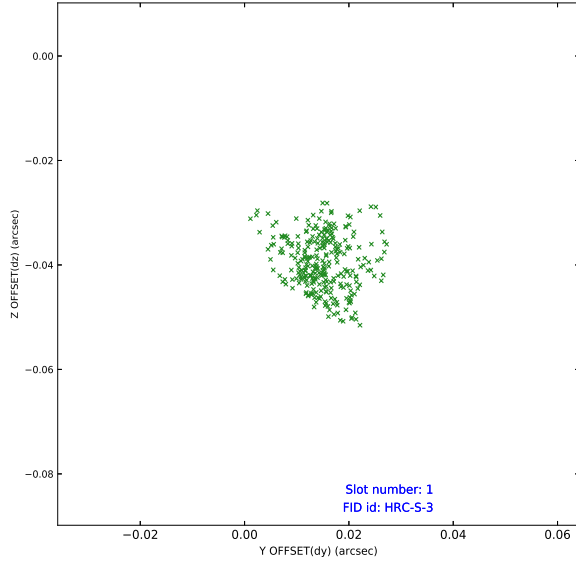


2.5 FID Slots

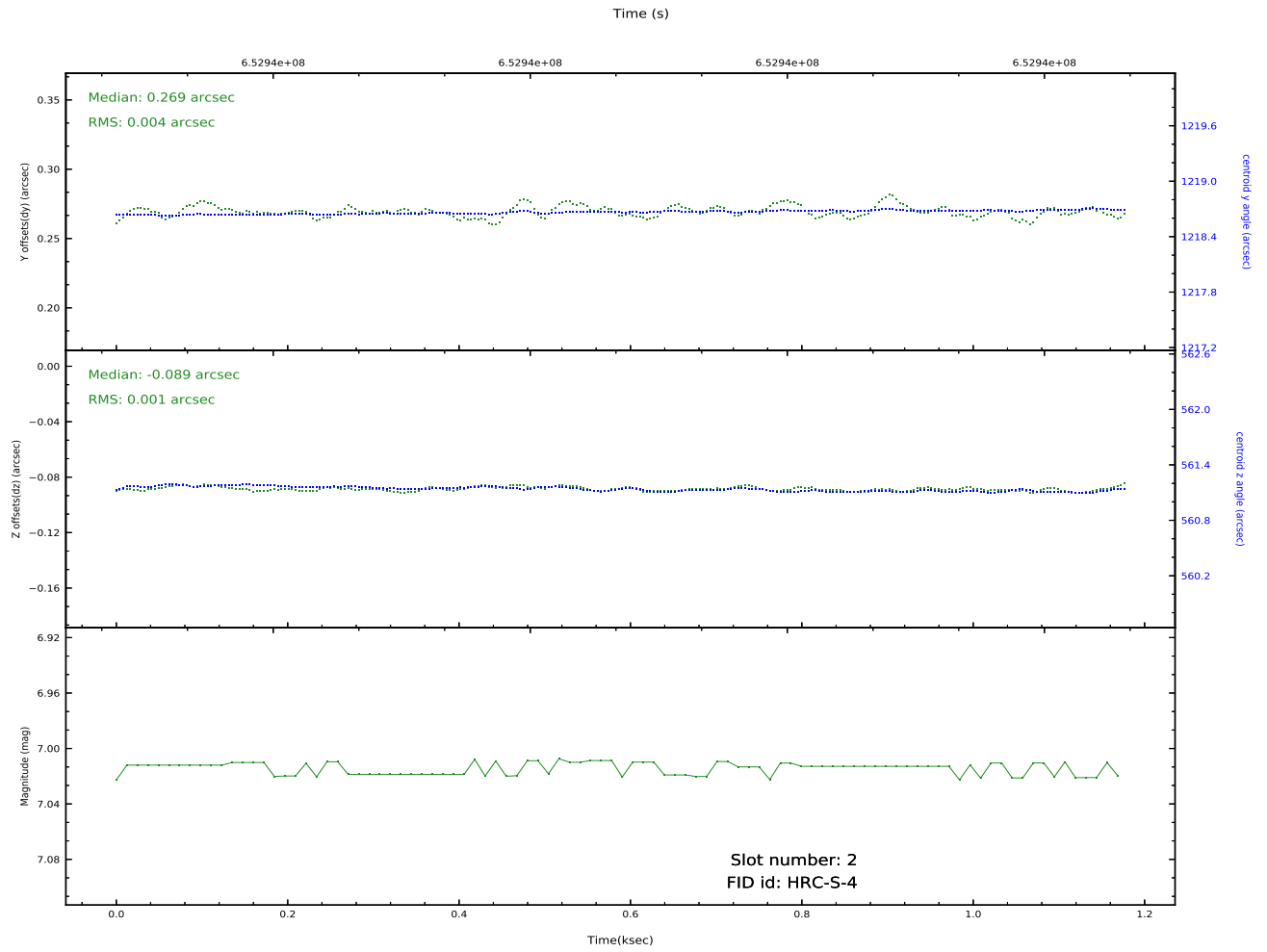
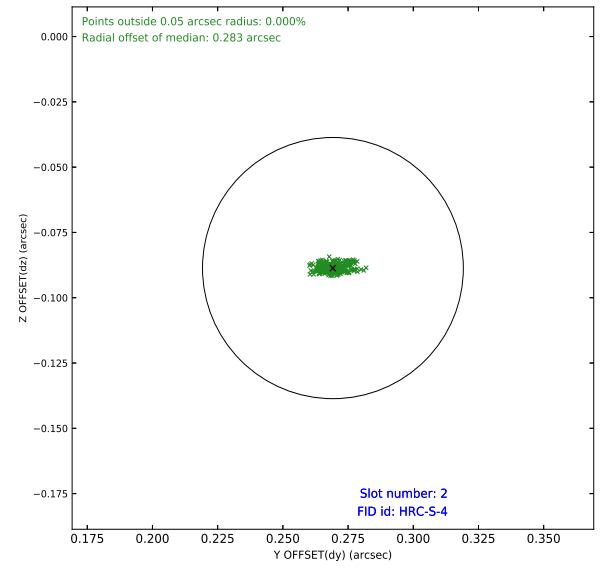
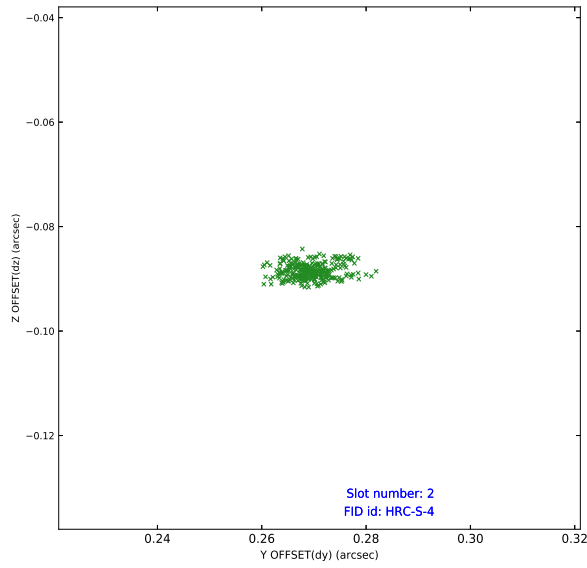
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1203250665665

A.2 Comments

Due to corruption of the secondary science data during this observation, some instrument parameters have bogus values. The data in this observation have been inspected by the HRC team. PLEASE NOTE: All the event data in this observation are good. The short gaps in the GTI intervals can be eliminated (i.e., use the first START and last STOP). THE DTF values during this observation can be estimated by dropping all the low values and averaging the remaining values near 1.0.

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Indication that degap correction is not available for this off-axis source.