

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 5091 - L2 Version 4
Chandra X-Ray Center

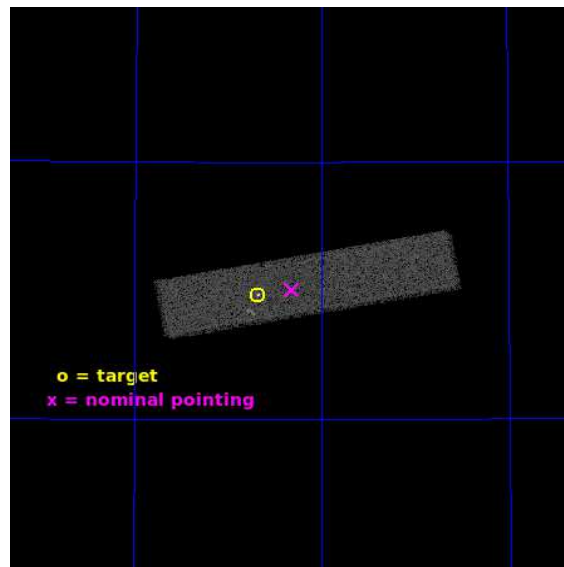
L2 Processing Date : Sep 23 2020

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Parameters	4
2.1.3	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

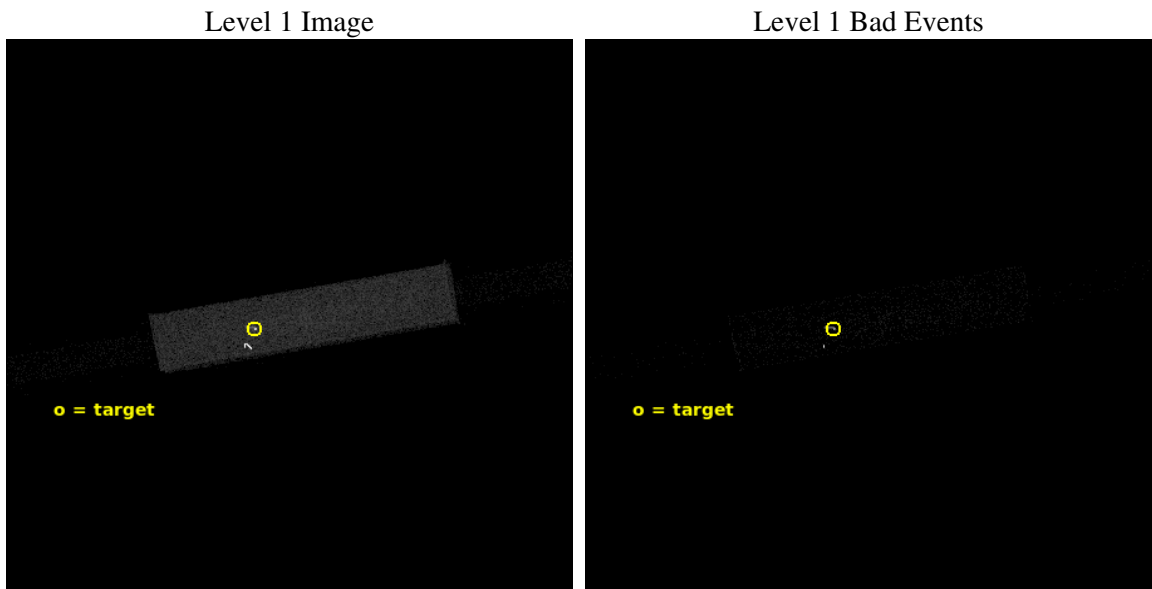
seq_num	290364	Sequence number
obs_id	5091	Observation id
title	AO5A Calibration Observations to Monitor the Spatial Variations in the HRC-S Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.07917165104	Nominal RA [deg]
dec_nom	45.751744118393	Nominal Dec [deg]
roll_nom	349.6810826059	Nominal Roll [deg]
revision	4	Processing version of data
ontime	1087.7812975645	[s]
livetime	1038.7220513258	Ontime multiplied by DTCOR
l2events	41179	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	946.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	1087.7812975645	[s]
caldbver	4.9.2	 	l1events	141796	Number of level 1 events
date	2020-09-23T05:08:34	Date and time of file creation			
revision	4	Processing version of data			

2.1.3 Events

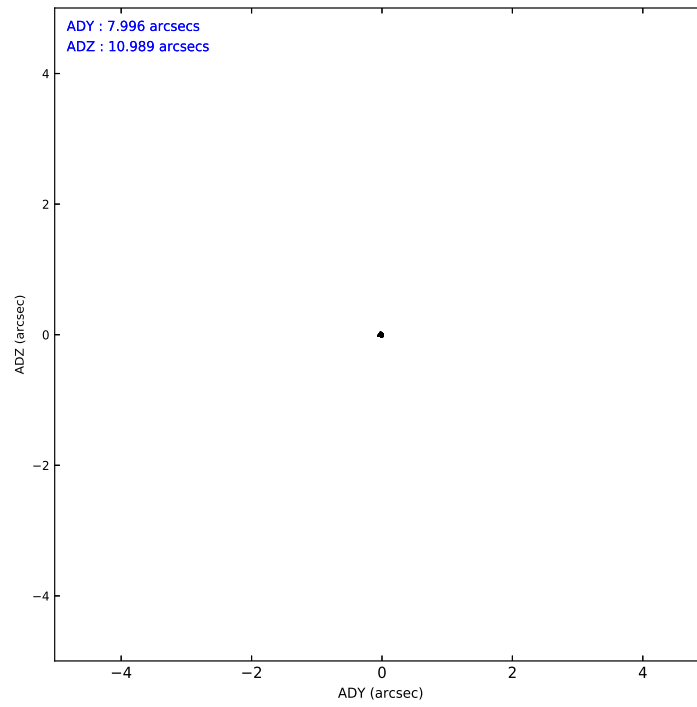
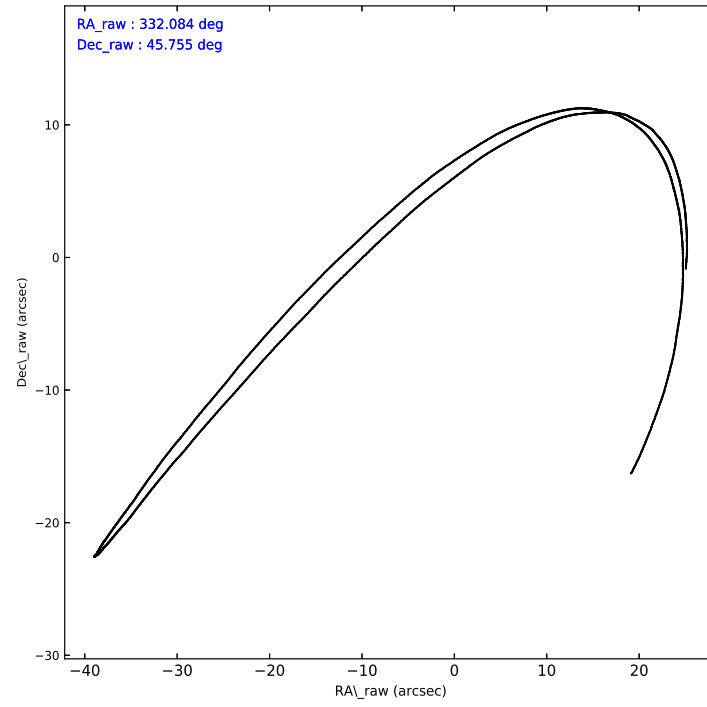
Level 1 Events

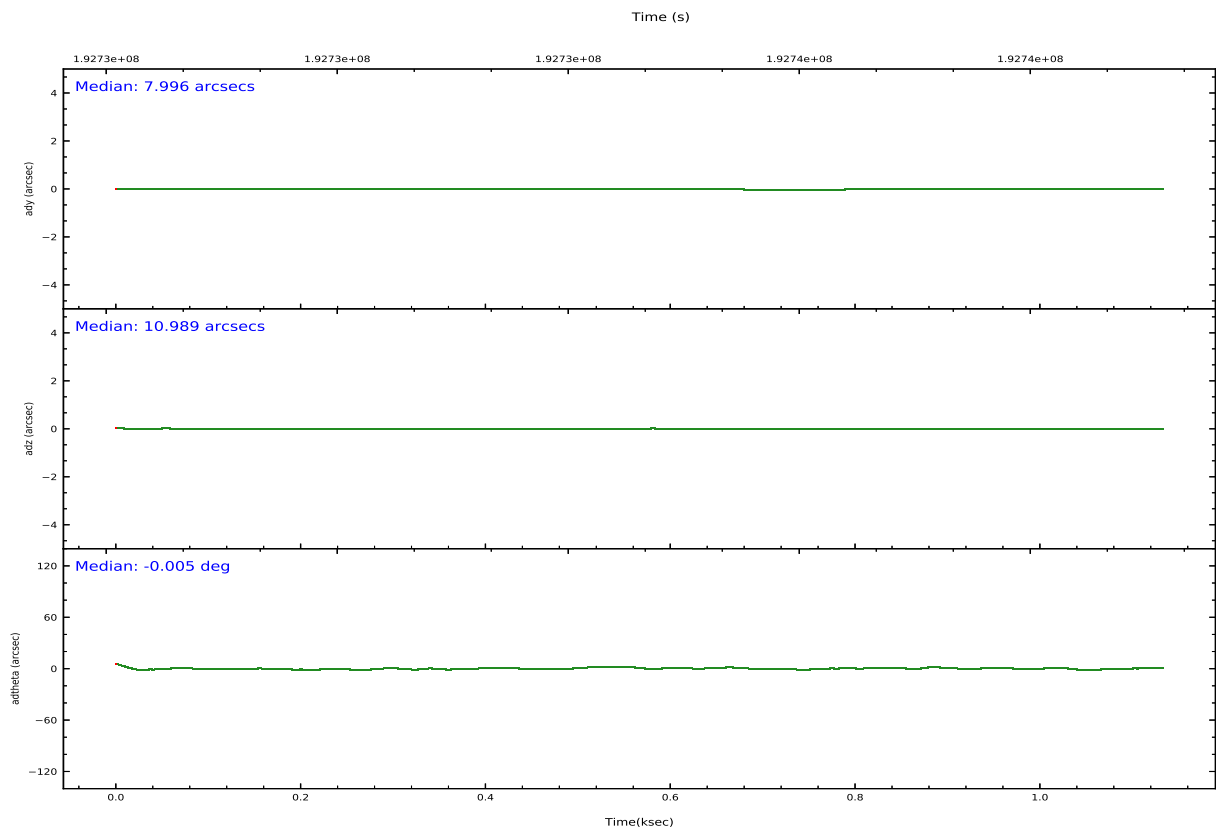
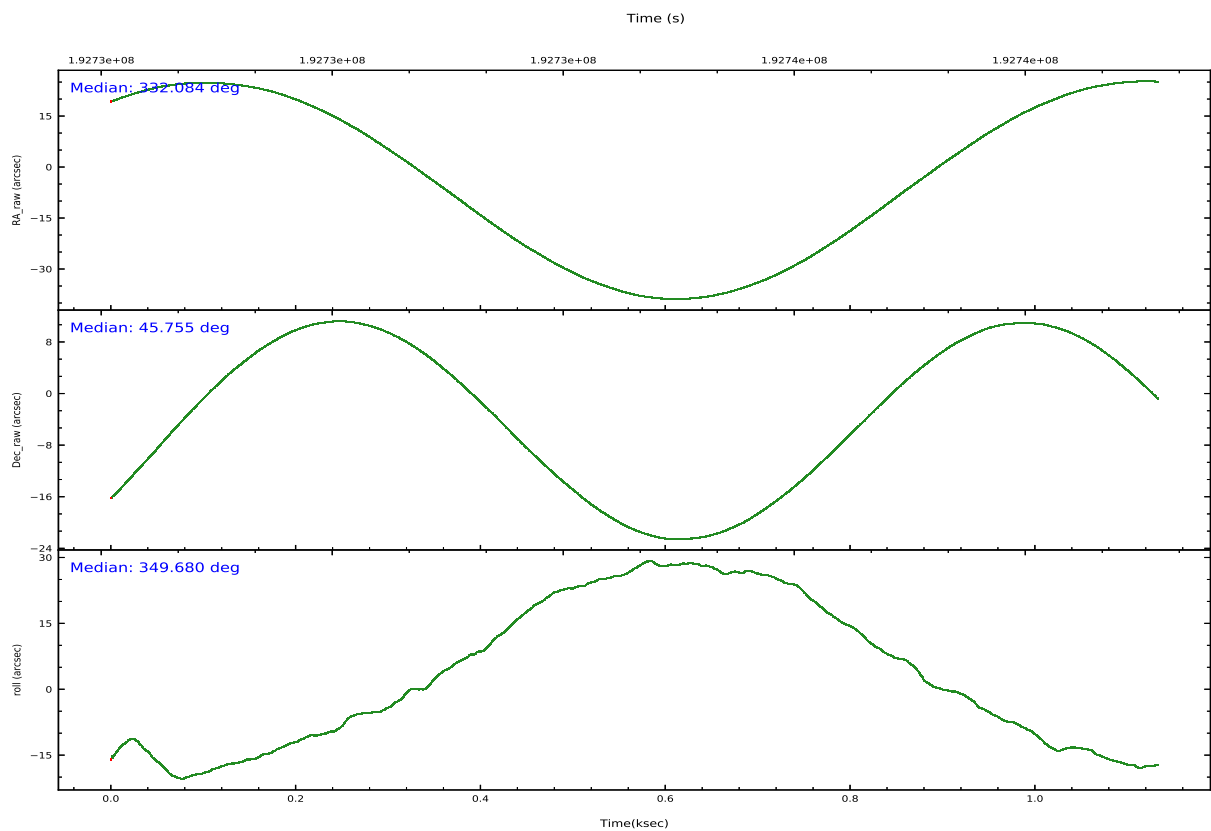
	segment 1	segment 2	segment 3
level 1 events	1102	139552	1142
rejected events	1102	27720	1142
rejected %	100%	19%	100%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar version number	8	8
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	332.044744	332.07917165104			
[deg] Pointing Dec	45.742425	45.751744118393			
[deg] Pointing Roll	349.646032	349.6810826059			
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	192734449.184000	192734073.17264			
Observation start date	2004-02-09T17:19:45	2004-02-09T17:14:33			
[s] Observation end time (MET)	192735395.184000	192735528.6727			
Observation end date	2004-02-09T17:35:31	2004-02-09T17:38:48			

2.3 Aspect



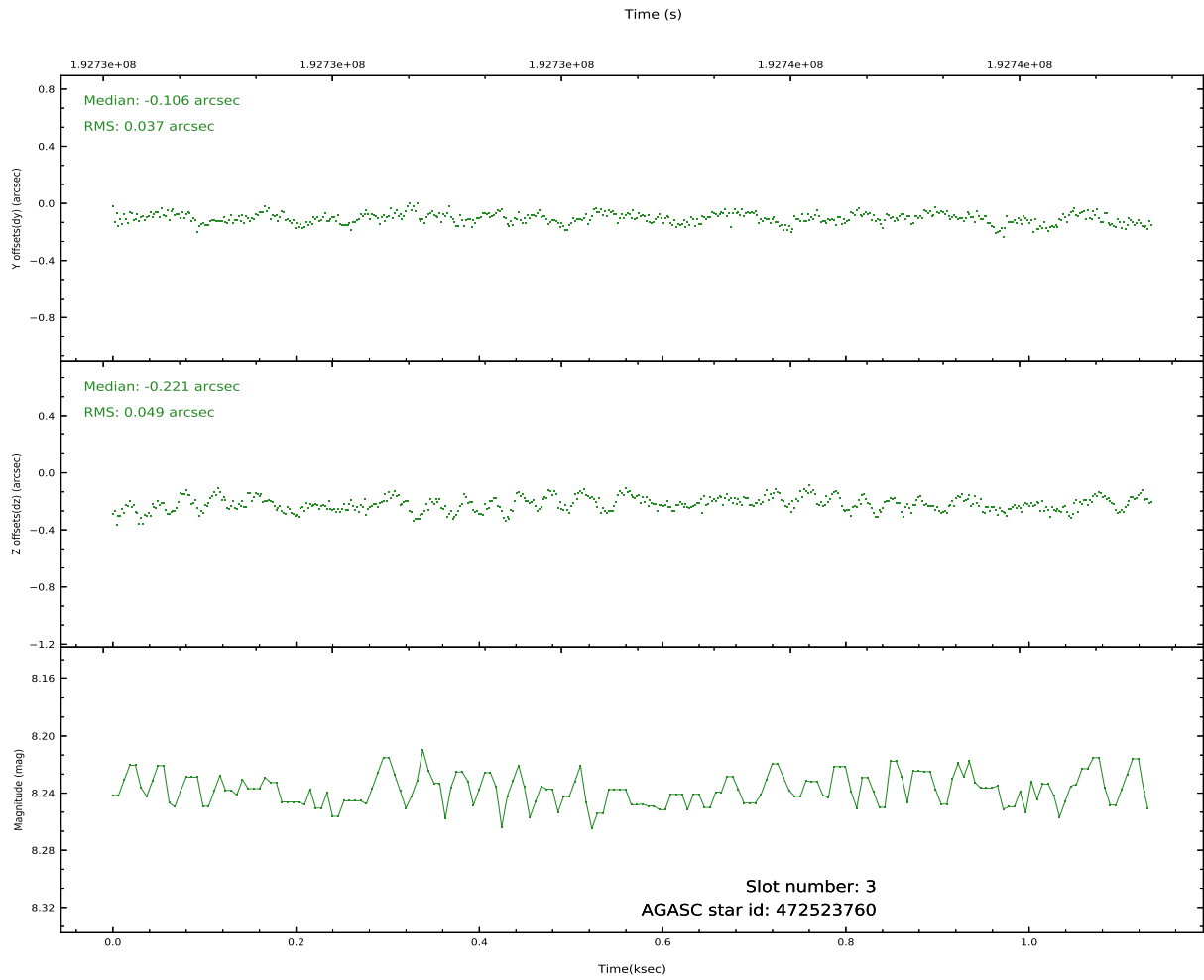
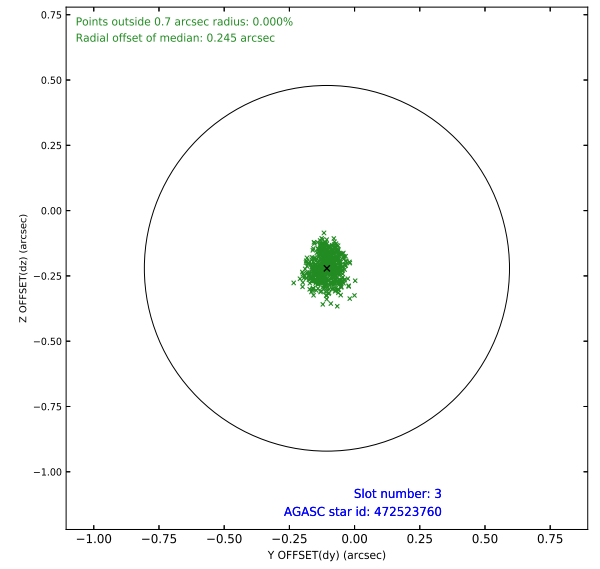
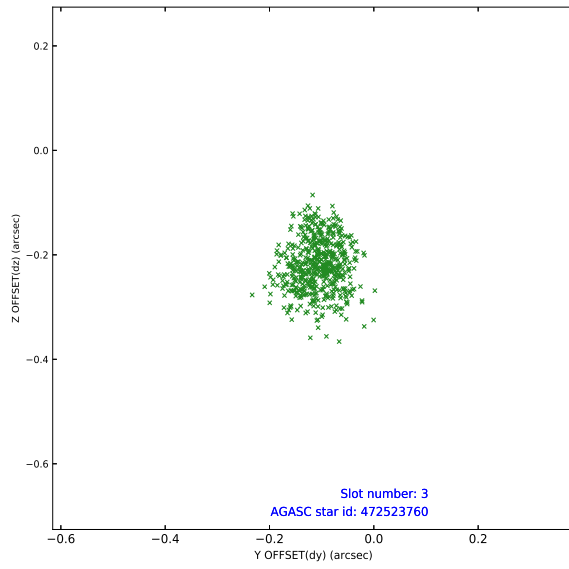


Slot Statistics

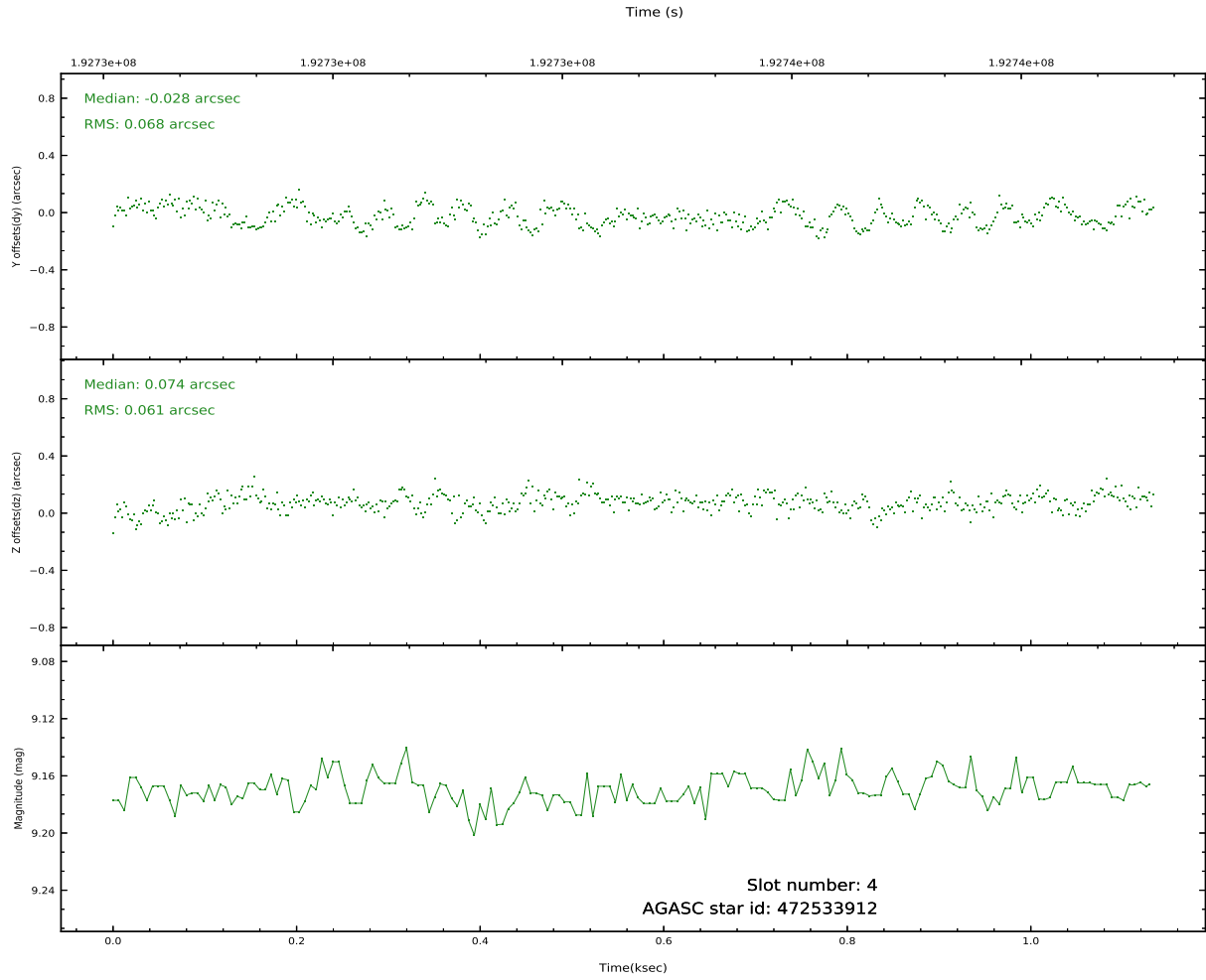
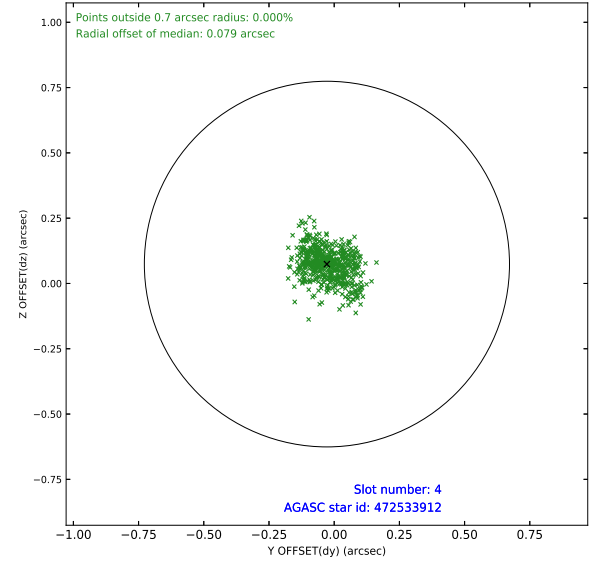
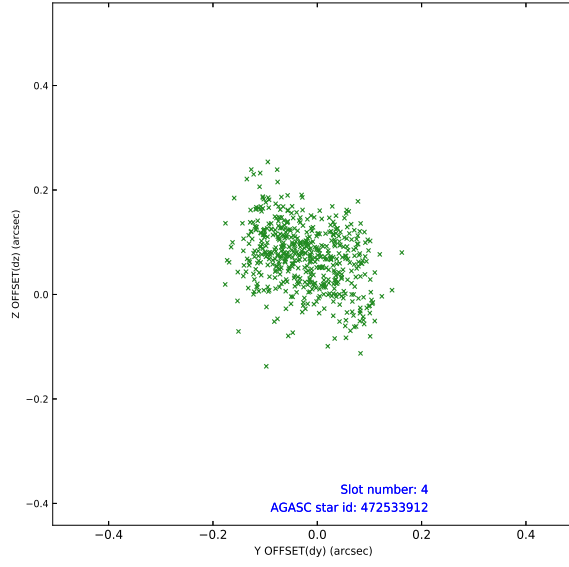
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.03	277	1.000	0.065	-0.144	0.004	0.007	0.000000	0.000000	-1162.21	-459
1	FID		HRC-S-2	7.02	277	1.000	0.106	-0.154	0.008	0.015	0.000000	0.000000	1233.32	-453
2	FID		HRC-S-4	7.00	277	1.000	0.232	-0.006	0.007	0.015	0.000000	0.000000	1240.63	570
3	GUIDE	used	472523760	8.24	554	1.000	-0.106	-0.221	0.068	0.104	331.645363	45.403260	-774.49	-1384
4	GUIDE	used	472533912	9.17	554	1.000	-0.028	0.074	0.098	0.161	331.791136	46.368695	-1027.48	2099
5	GUIDE	used	472654568	9.42	554	1.000	-0.042	-0.022	0.106	0.192	332.194449	45.063576	811.67	-2335
6	GUIDE	used	472659832	9.46	554	1.000	0.017	0.127	0.092	0.152	332.780399	46.098139	1575.58	1590
7	GUIDE	used	472655152	9.43	551	1.000	0.161	0.037	0.088	0.148	332.504239	45.862991	1057.02	636

2.4 Star Slots

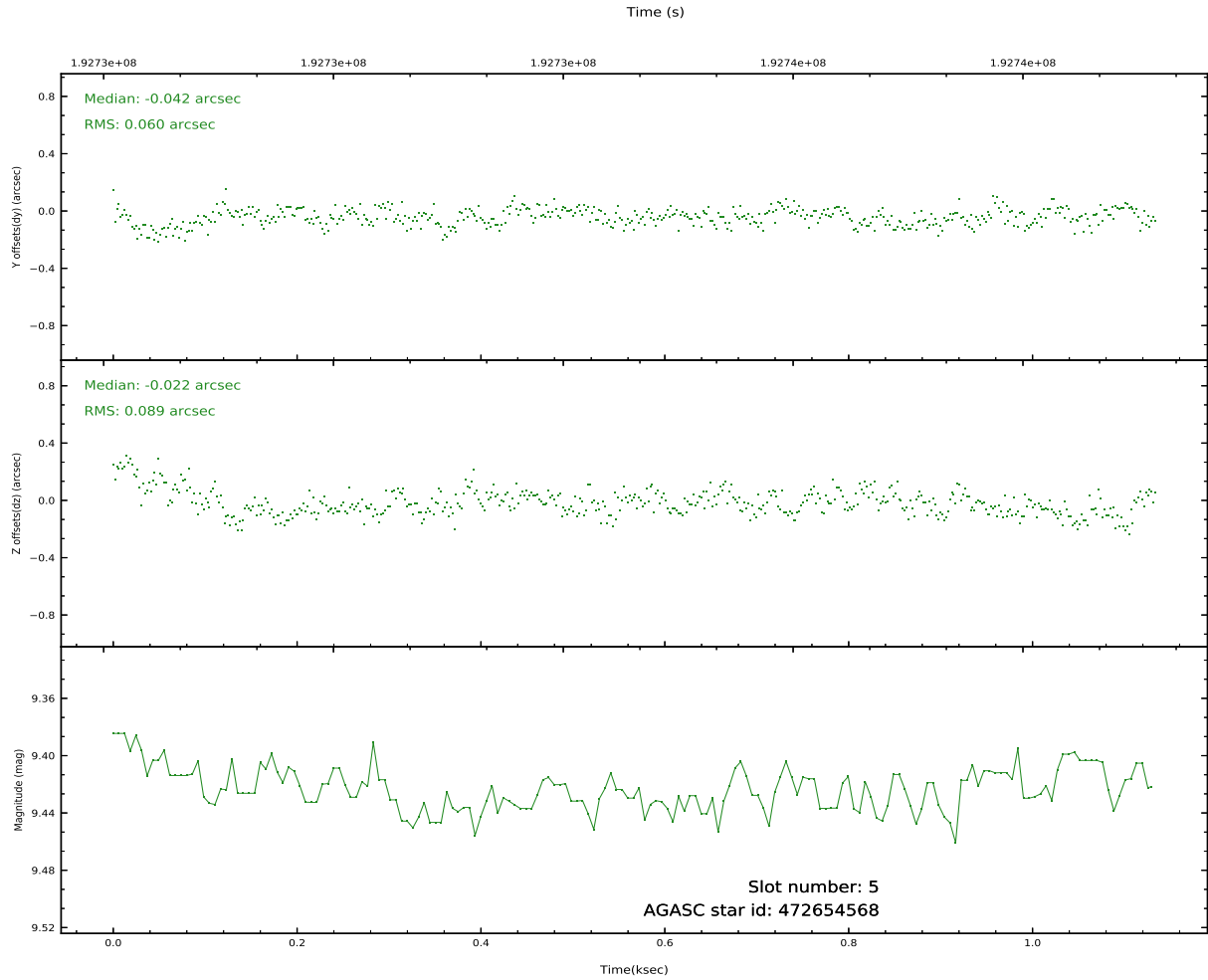
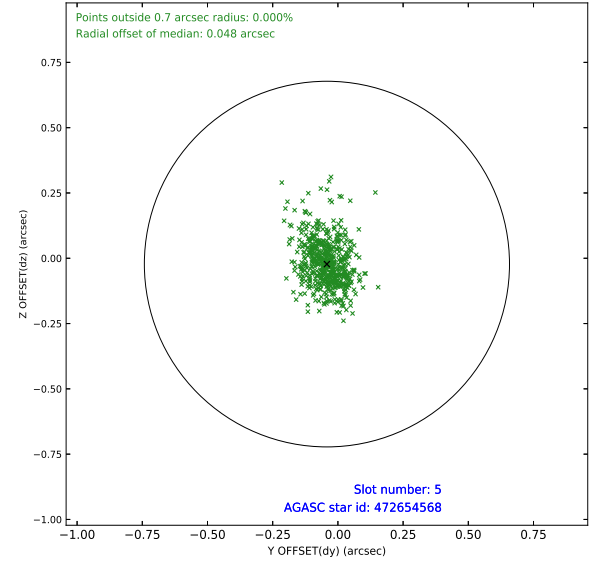
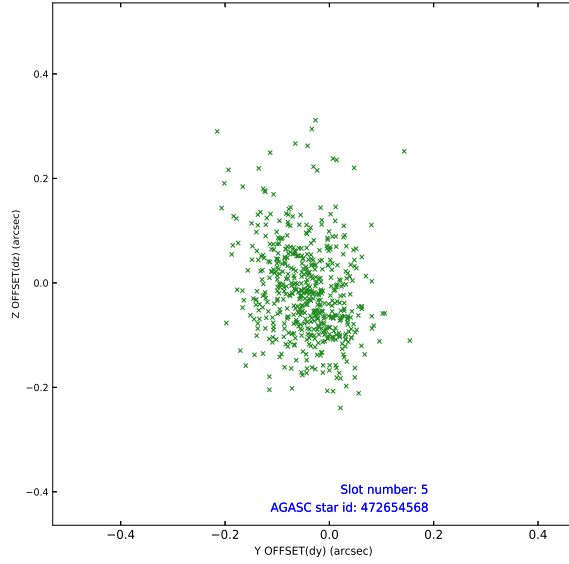
2.4.1 Slot 3



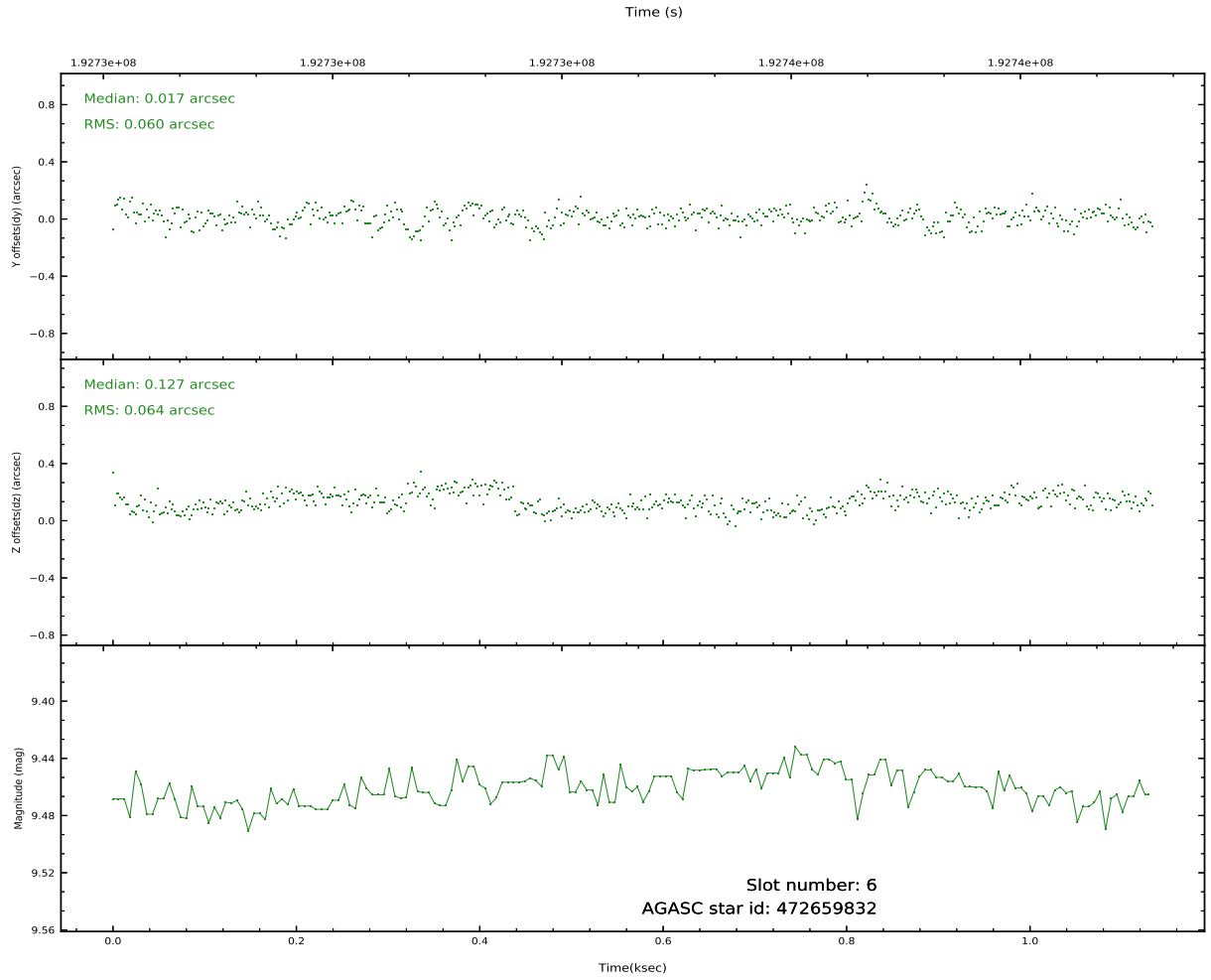
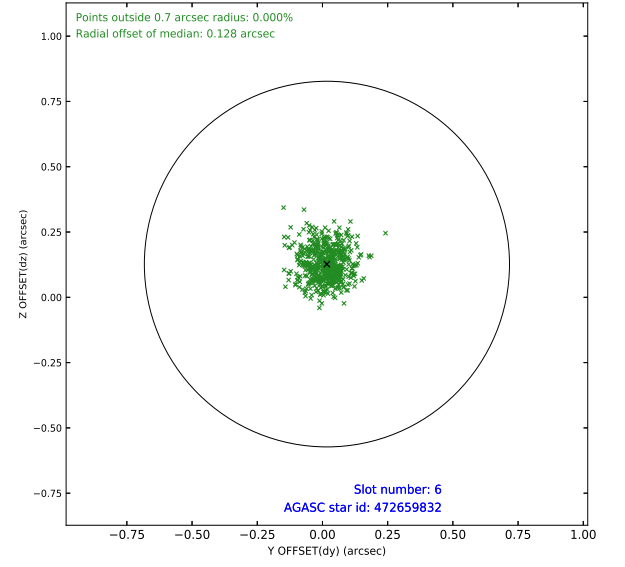
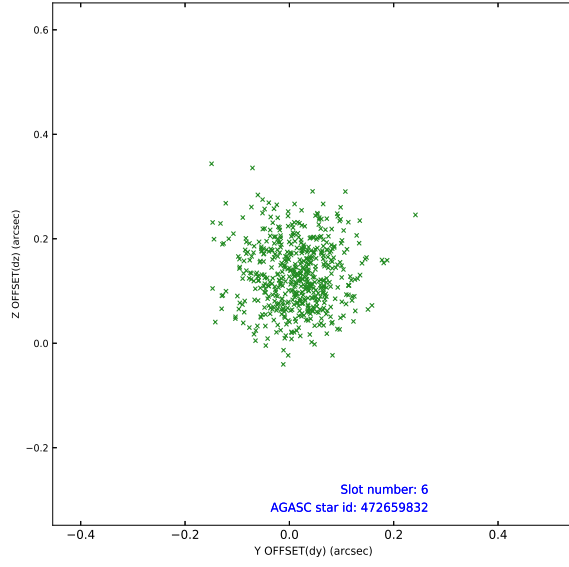
2.4.2 Slot 4



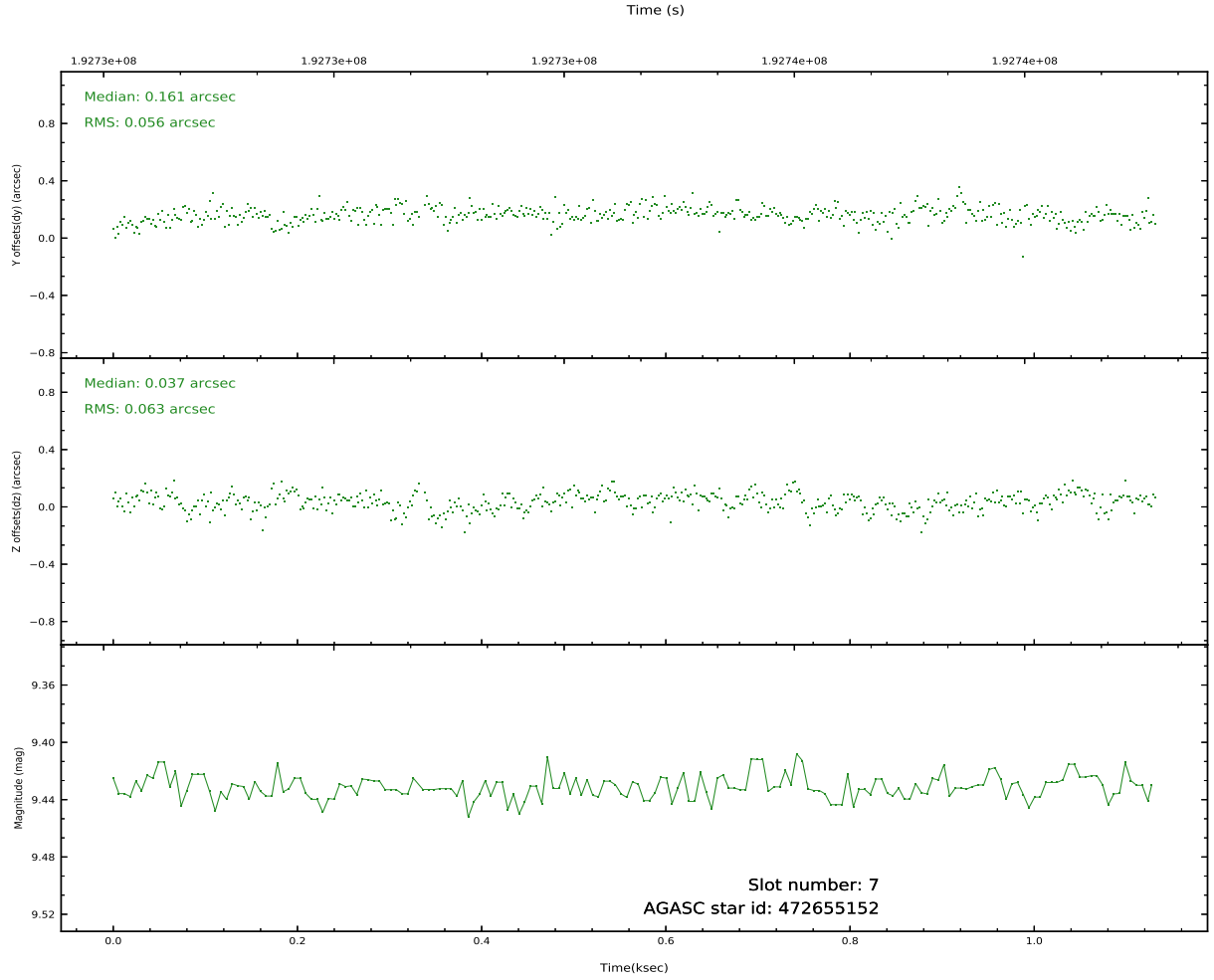
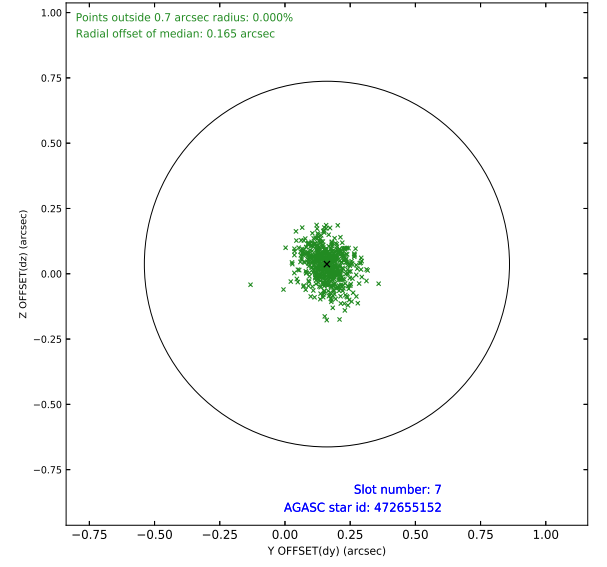
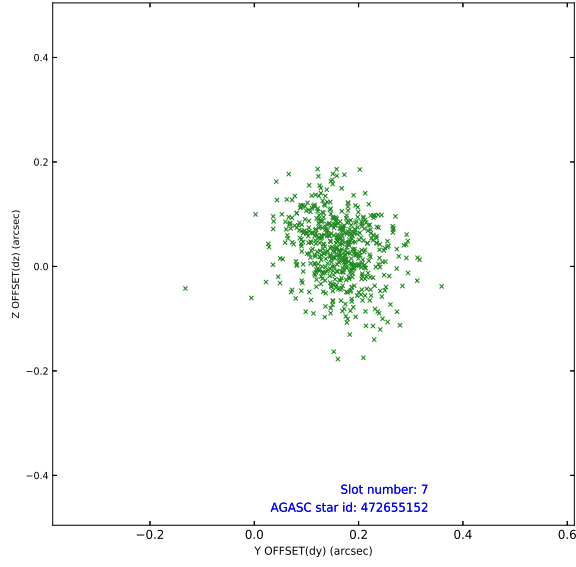
2.4.3 Slot 5



2.4.4 Slot 6

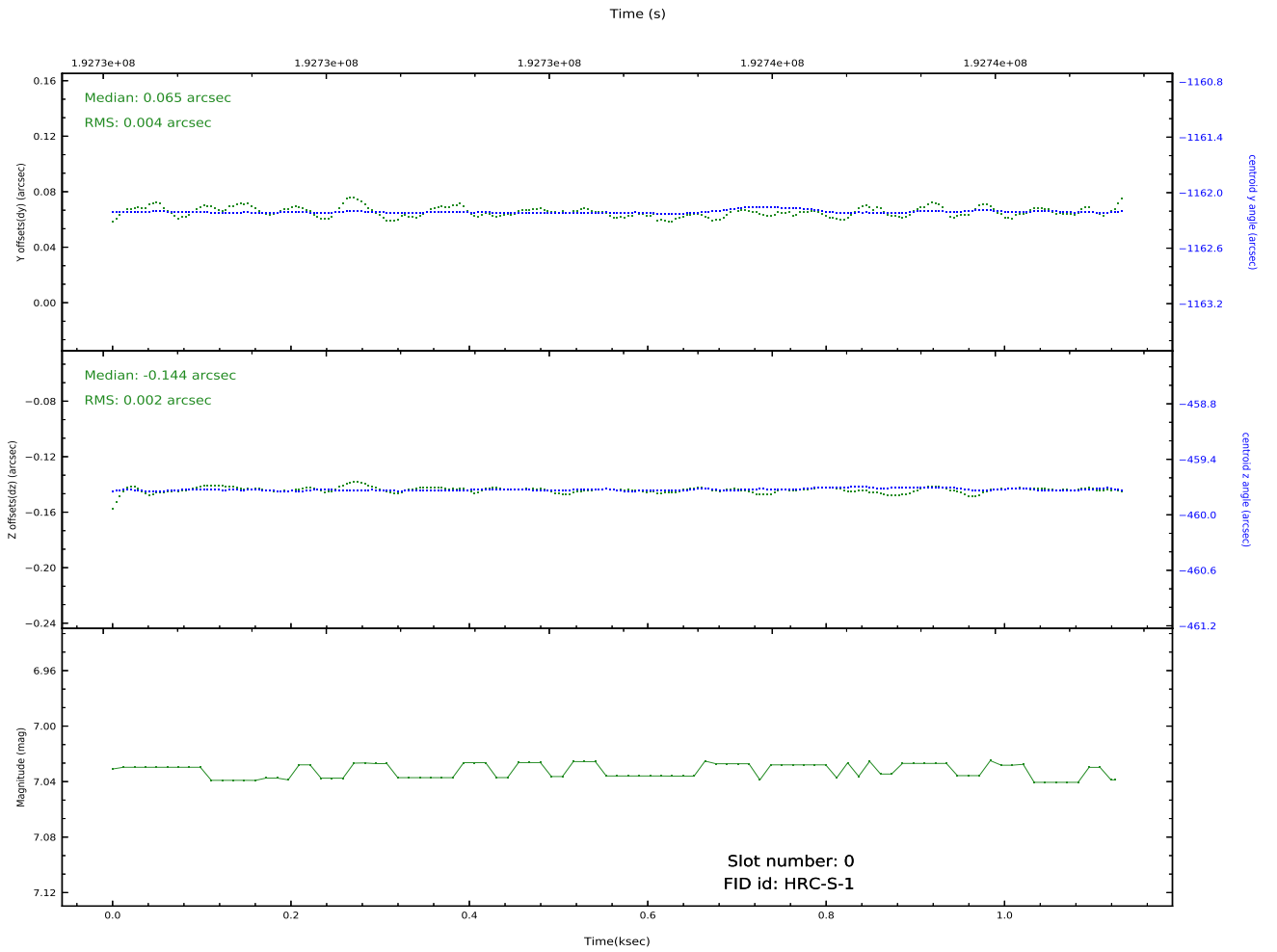
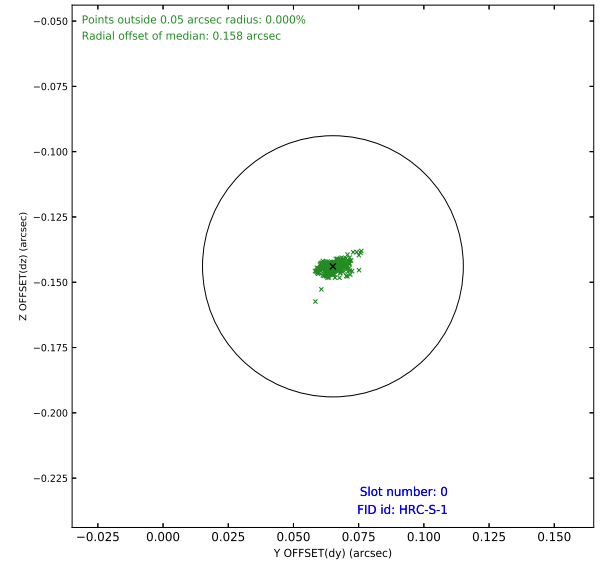
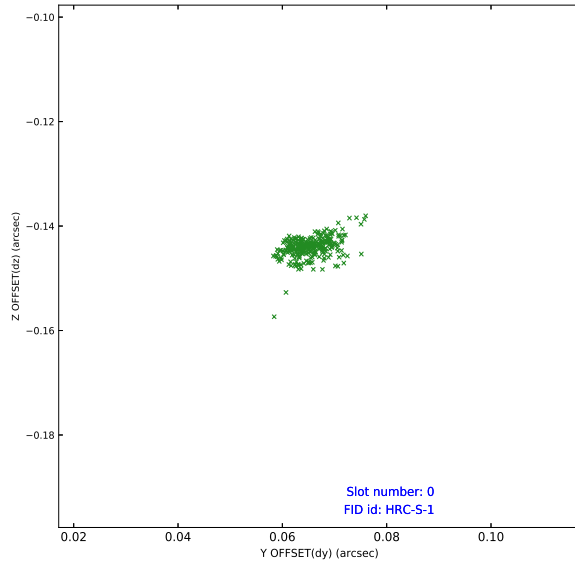


2.4.5 Slot 7

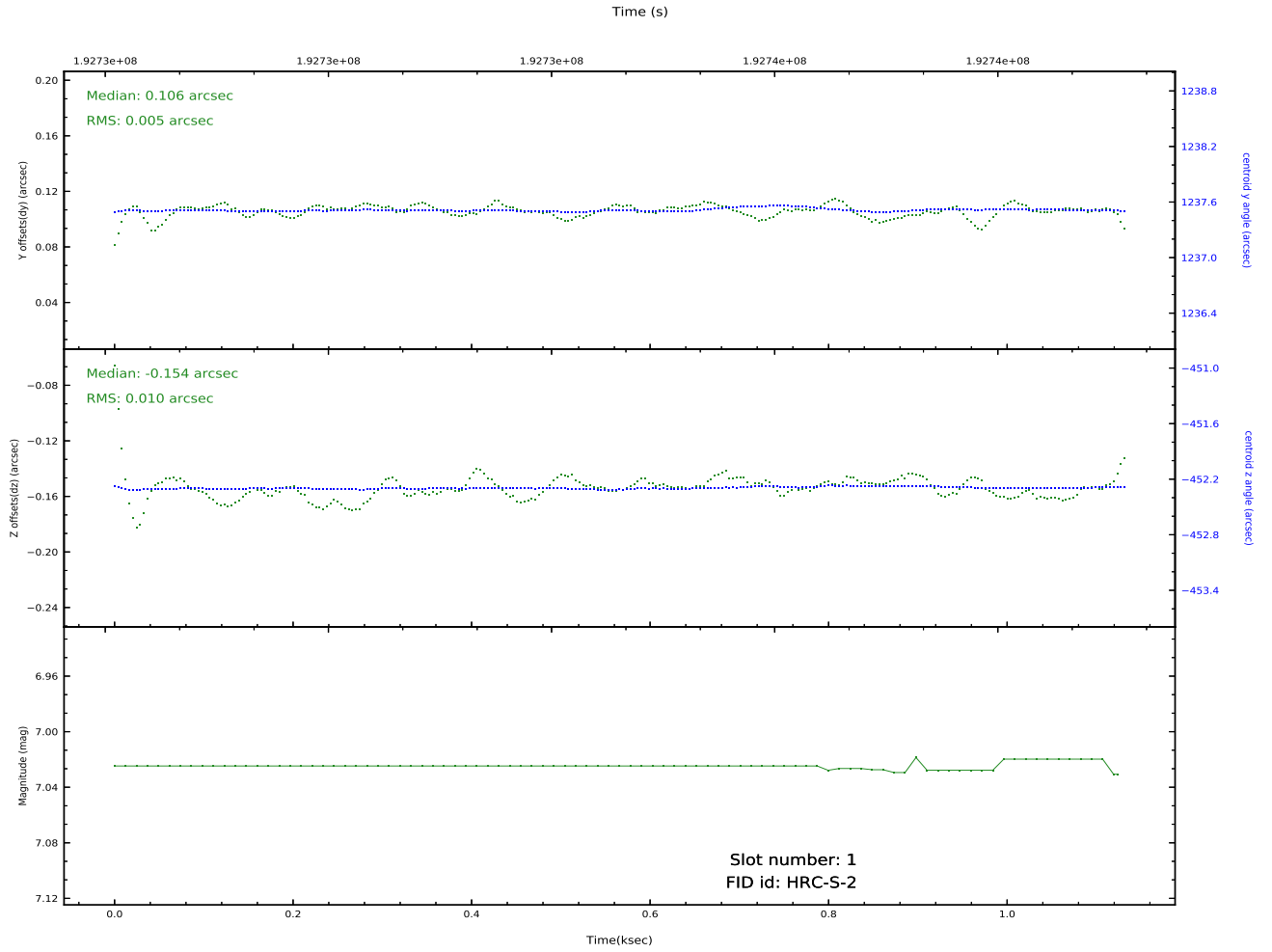
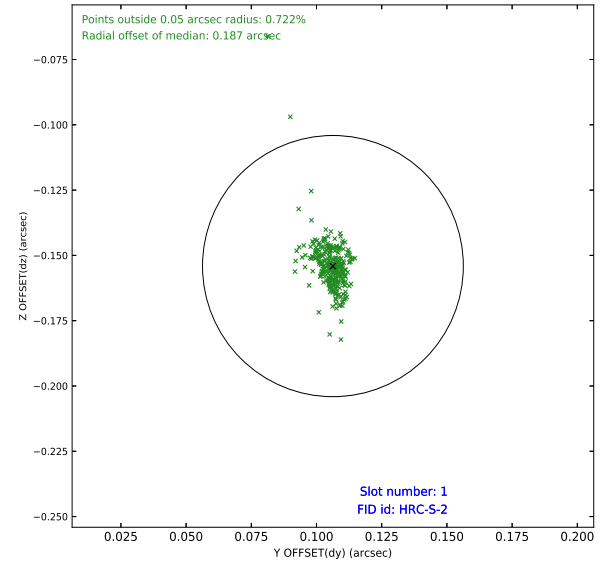
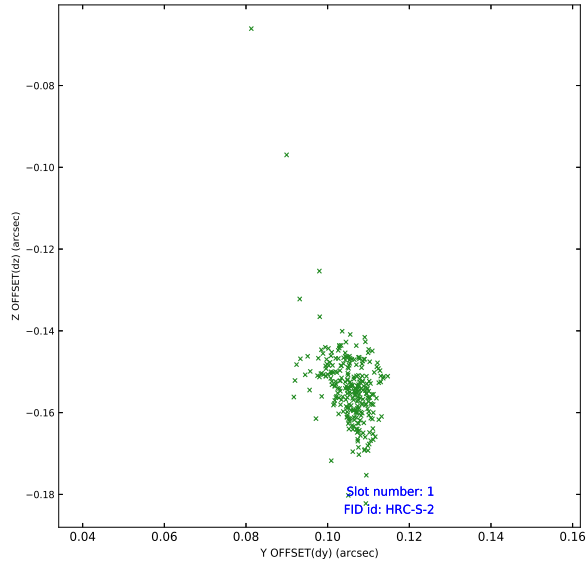


2.5 FID Slots

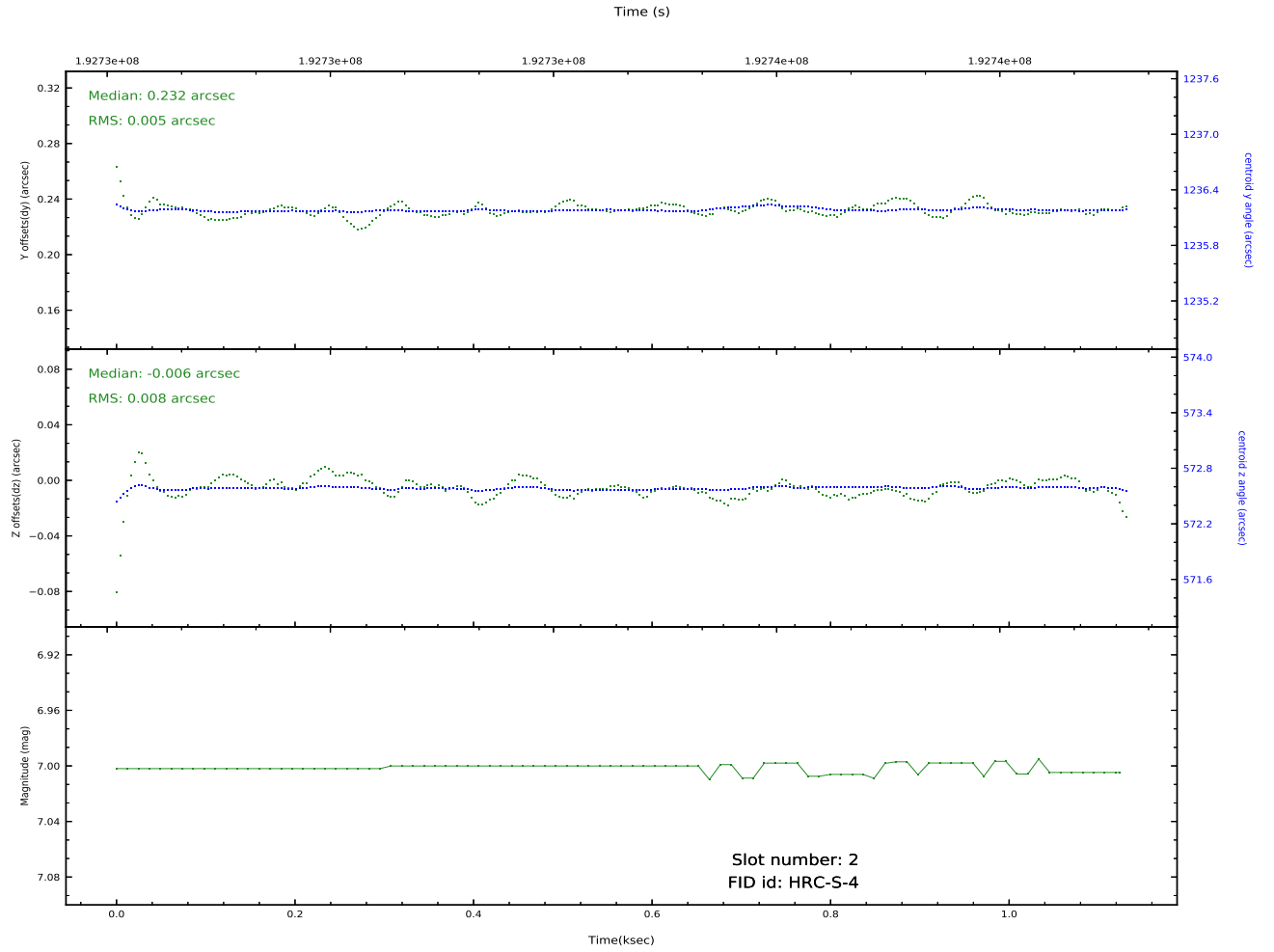
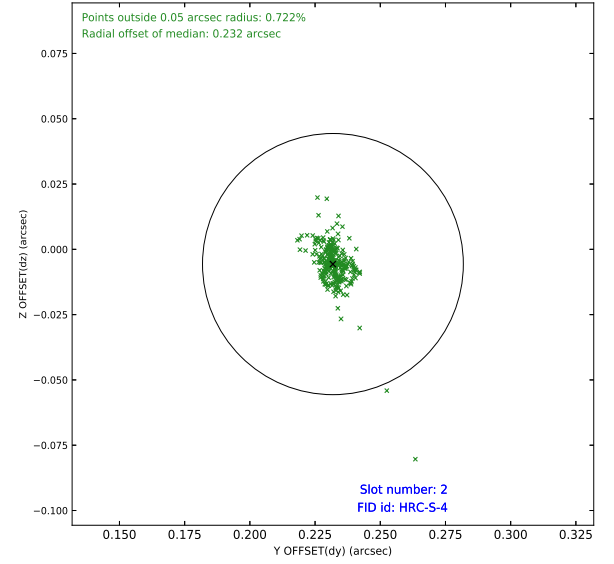
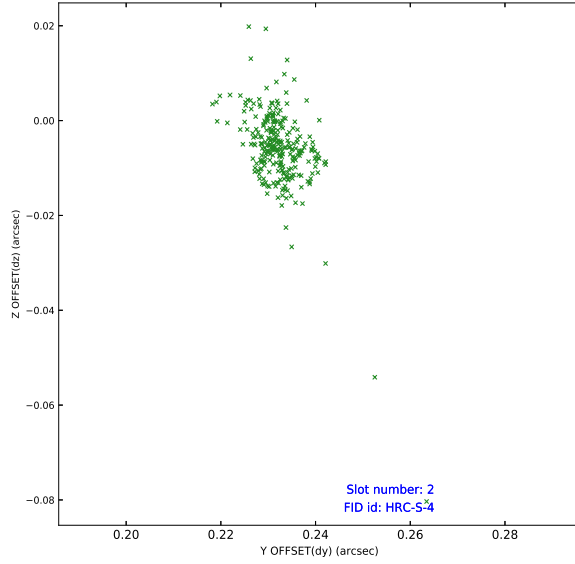
2.5.1 Slot 0



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)	2020.09.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.087

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.