

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5348 - L2 Version 4  
Chandra X-Ray Center

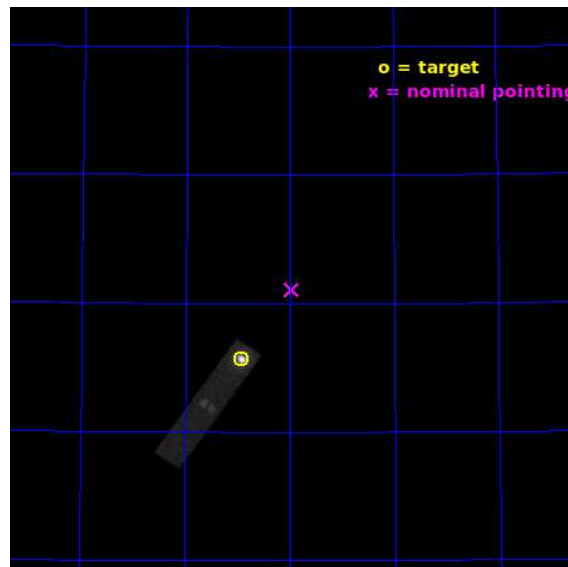
L2 Processing Date : Oct 4 2020

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# 1 Front

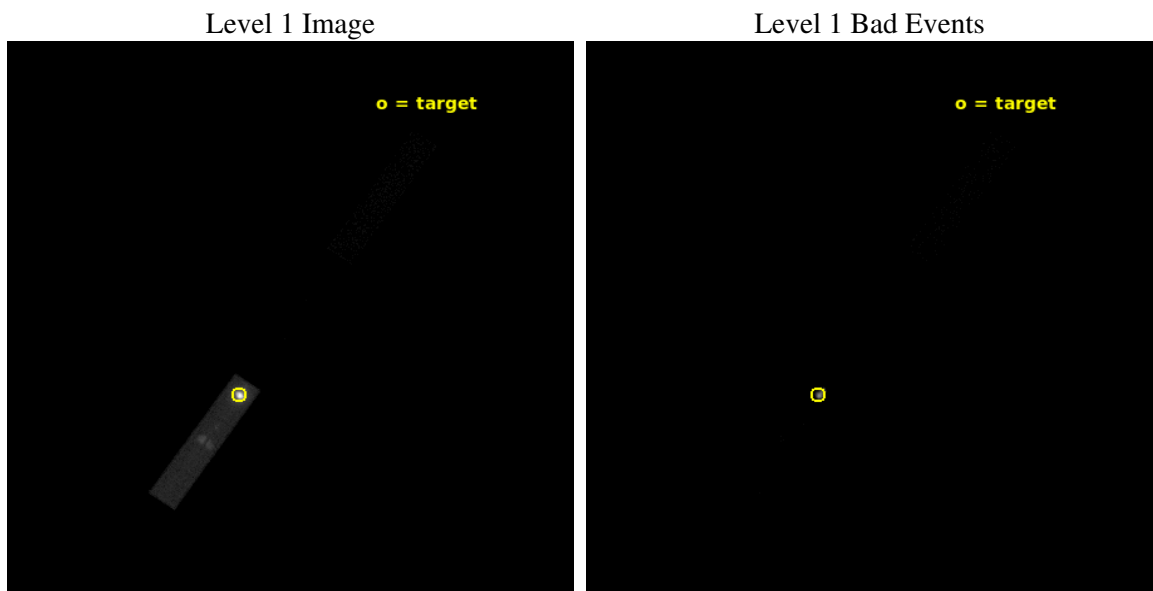
seq_num	290445	Sequence number
obs_id	5348	Observation id
title	Monitoring the health of the HRC UV Ion shield	Proposal title
observer	CXC Calibration	Principal investigator
object	Vega	Source name
ra_targ	279.235	Observer's specified target RA [deg]
dec_targ	38.783778	Observer's specified target Dec [deg]
ra_nom	278.99102715613	Nominal RA [deg]
dec_nom	39.053845091925	Nominal Dec [deg]
roll_nom	304.78700197754	Nominal Roll [deg]
revision	4	Processing version of data
ontime	3178.7813925445	[s]
livetime	1106.9921232891	Ontime multiplied by DTCOR
l2events	568060	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	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	3178.7813925445	[s]
caldsver	4.9.2	&#160	l1events	632753	Number of level 1 events
date	2020-10-05T00:20:34	Date and time of file creation			
revision	4	Processing version of data			

### 2.1.3 Events

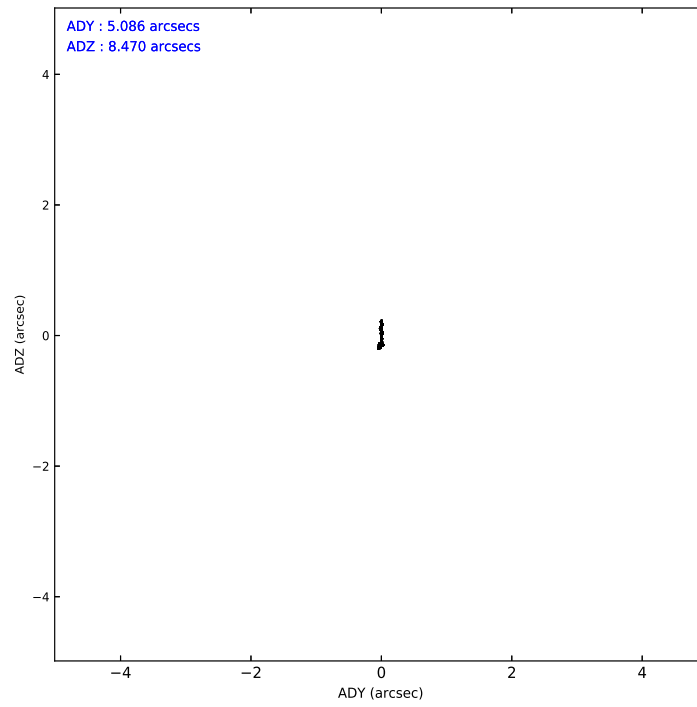
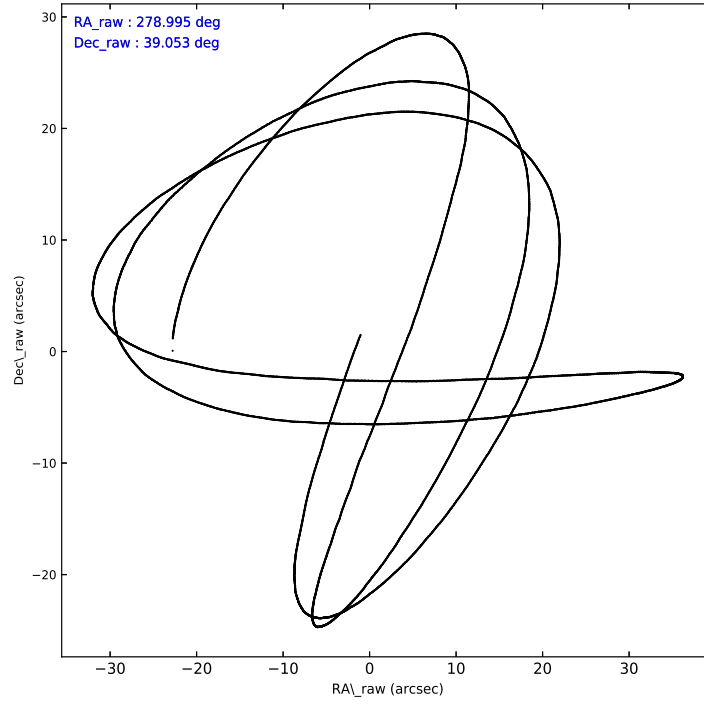
Level 1 Events

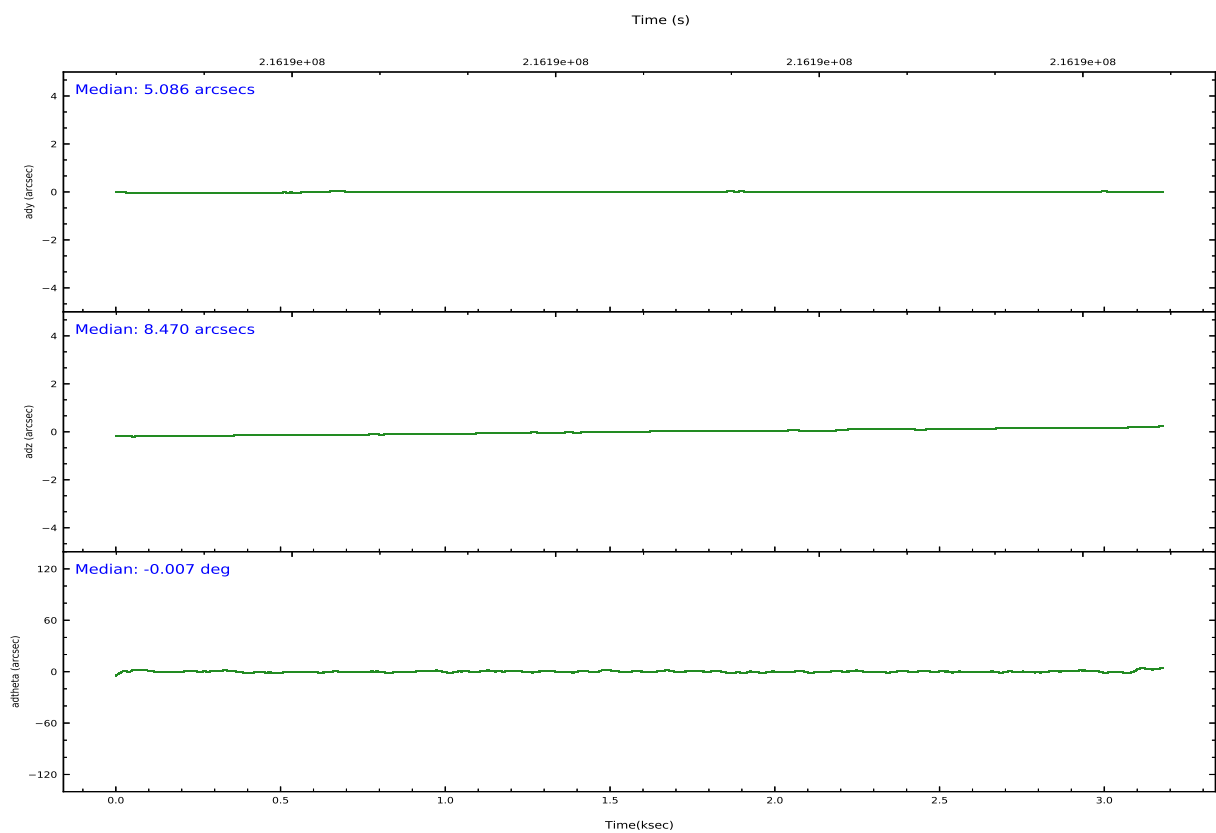
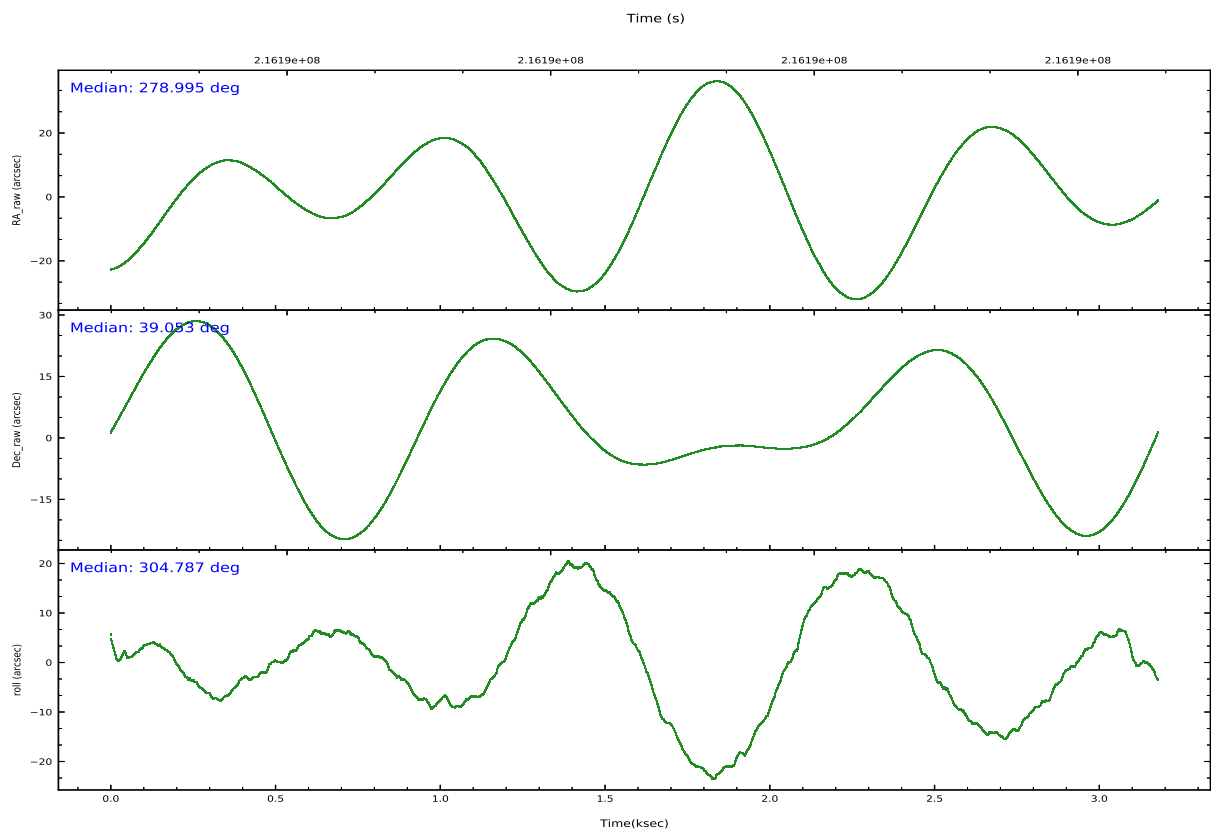
	segment 1	segment 2	segment 3
level 1 events	4180	236	628337
rejected events	4150	236	42203
rejected %	99%	100%	6%

## 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	278.960666	278.99102715613			
[deg] Pointing Dec	39.064970	39.053845091925			
[deg] Pointing Roll	304.741933	304.78700197754			
[s] Window start time (MET)	215654464.184000	215654464.184000			
[s] Window stop time (MET)	218246404.184000	218246404.184000			
[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)	216190044.184000	216189668.37411			
Observation start date	2004-11-07T04:46:20	2004-11-07T04:41:08			
[s] Observation end time (MET)	216193044.184000	216193178.48677			
Observation end date	2004-11-07T05:36:20	2004-11-07T05:39:38			

## 2.3 Aspect





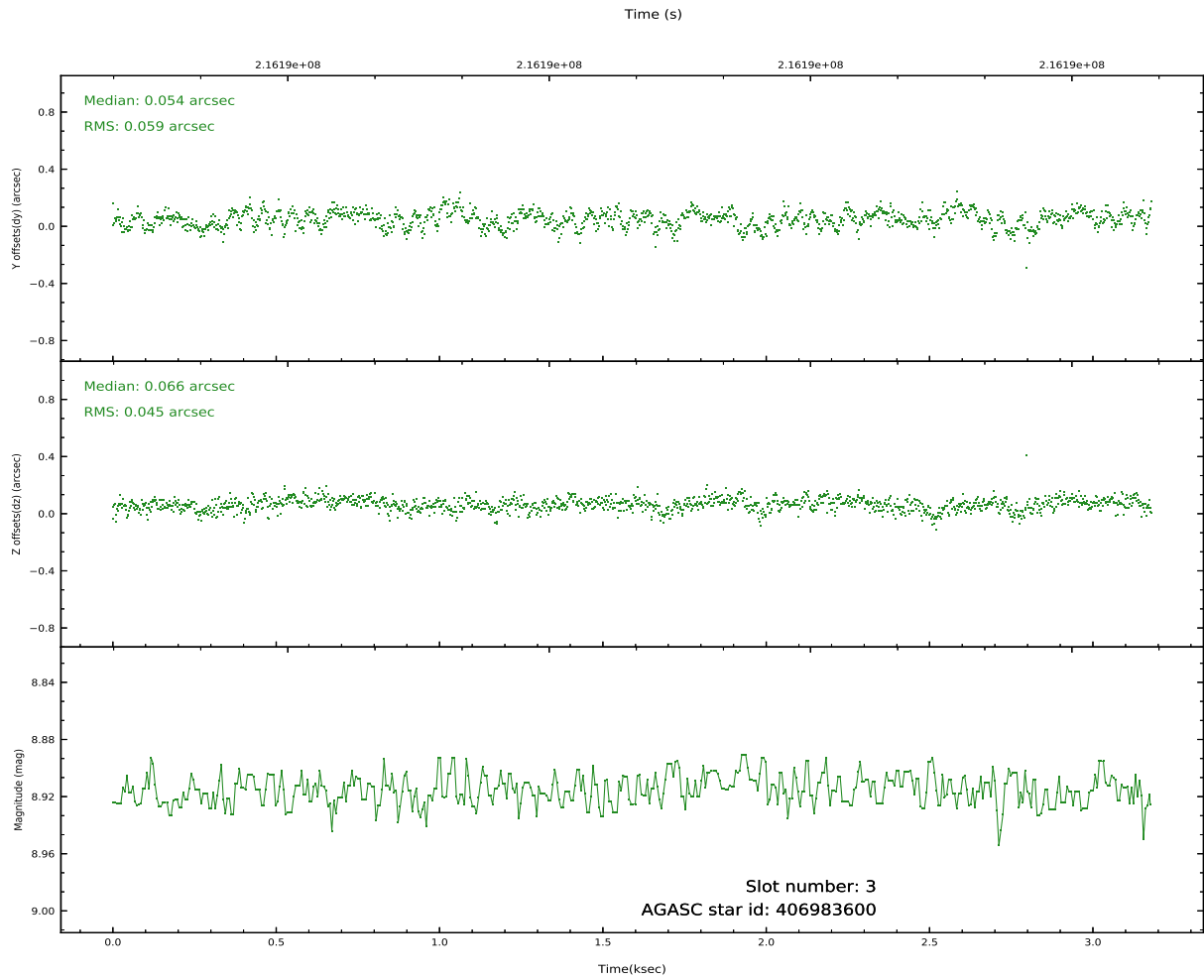
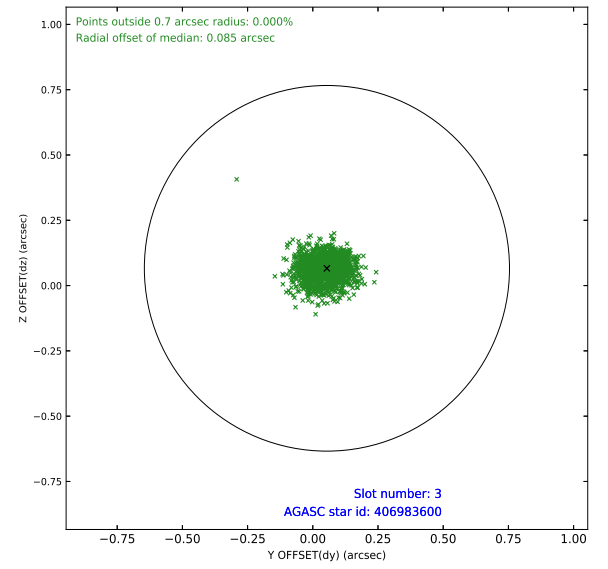
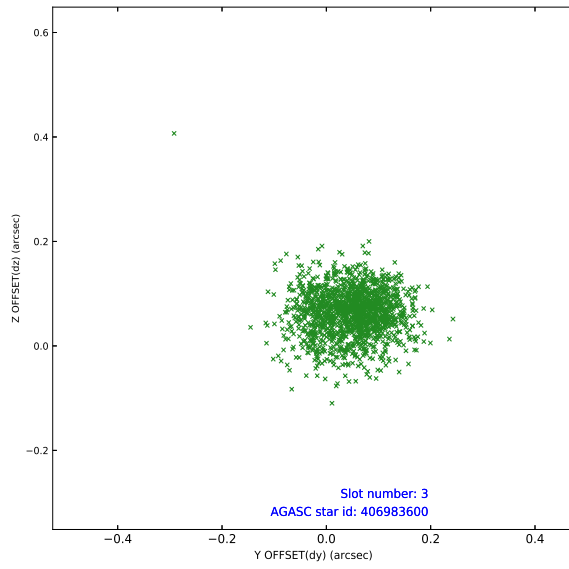
Slot Statistics

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	7.00	776	1.000	0.080	-0.126	0.005	0.010	0.000000	0.000000	-1159.20	-457
1	FID		HRC-S-2	6.99	776	1.000	0.134	-0.155	0.008	0.015	0.000000	0.000000	1239.04	-450
2	FID		HRC-S-4	6.95	776	1.000	0.189	-0.023	0.007	0.014	0.000000	0.000000	1240.71	574
3	GUIDE	used	406983600	8.92	1552	1.000	0.054	0.066	0.078	0.126	279.940957	39.020708	1681.90	2171
4	GUIDE	used	406989616	8.25	1552	1.000	0.101	0.102	0.066	0.107	279.202881	38.520843	1999.16	-553
5	GUIDE	used	406990192	9.00	1548	1.000	-0.078	-0.143	0.090	0.148	278.510952	38.533654	849.23	-2128
6	GUIDE	used	407510432	8.13	1552	1.000	-0.137	-0.061	0.065	0.103	278.762778	39.530640	-1690.61	502
7	GUIDE	used	407521232	8.66	1551	1.000	0.071	0.041	0.085	0.133	279.628883	39.431715	-32.74	2283

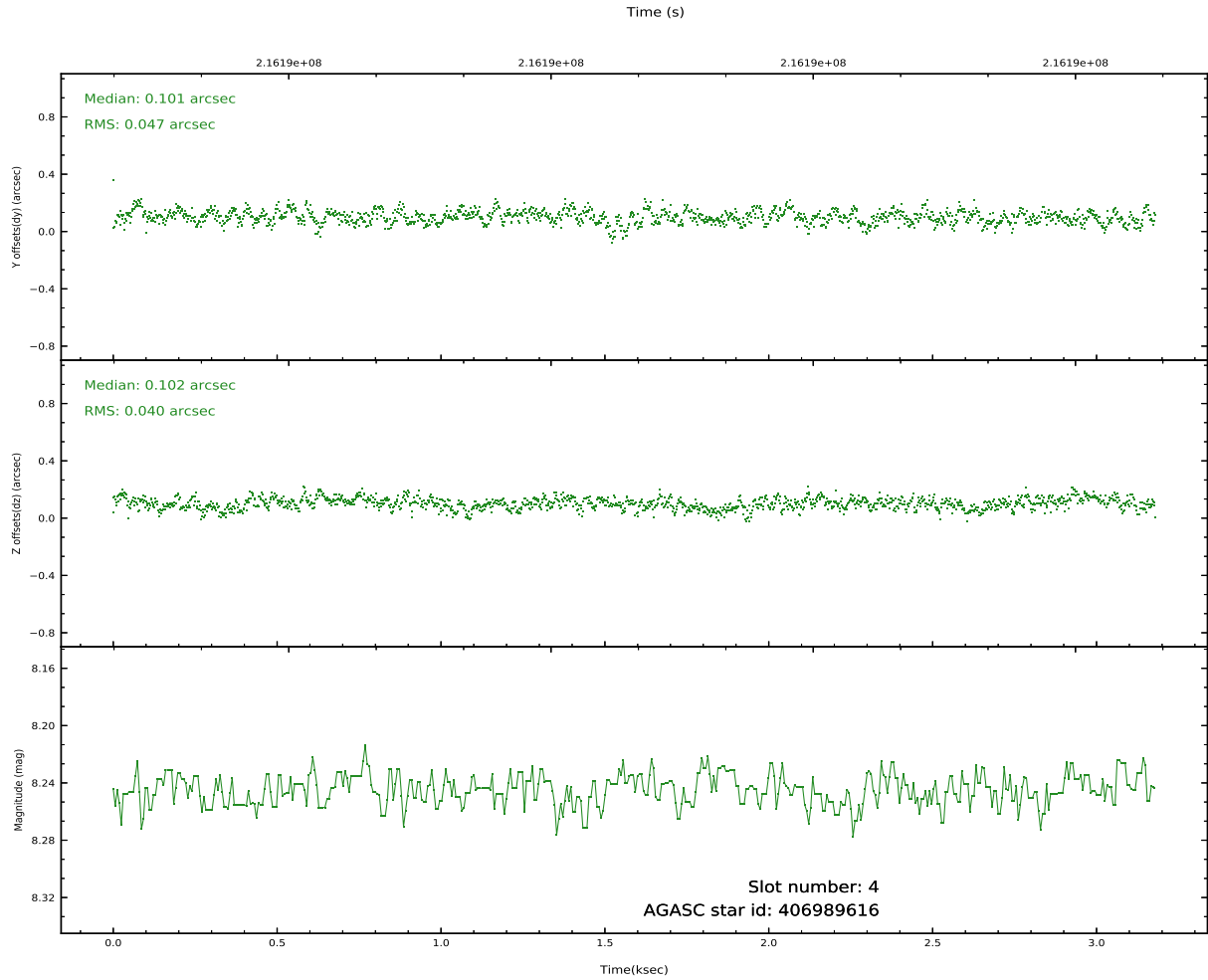
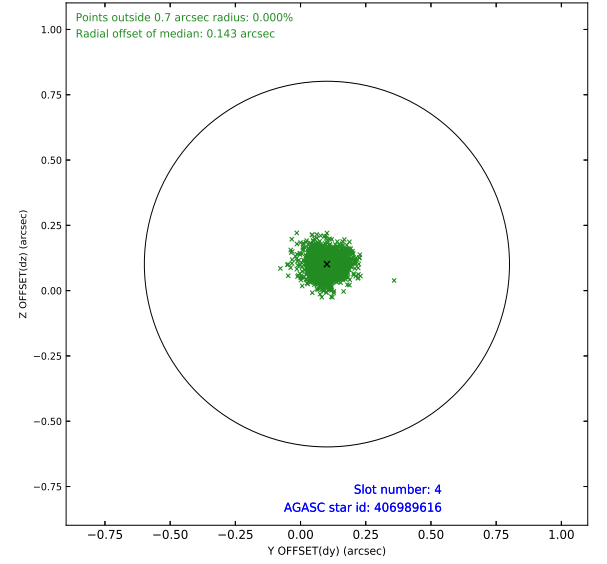
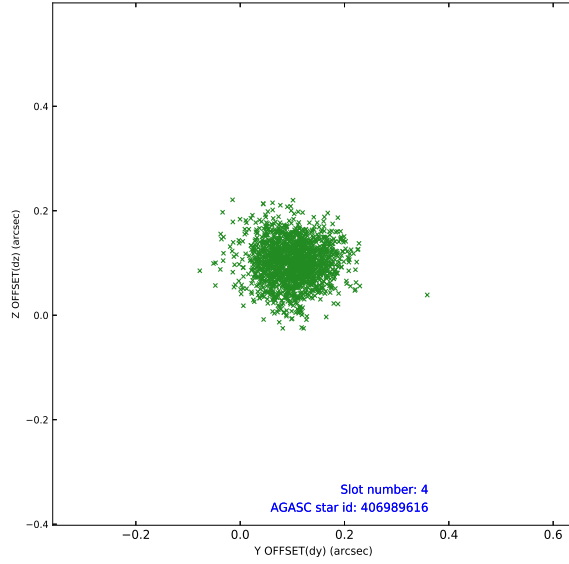


## 2.4 Star Slots

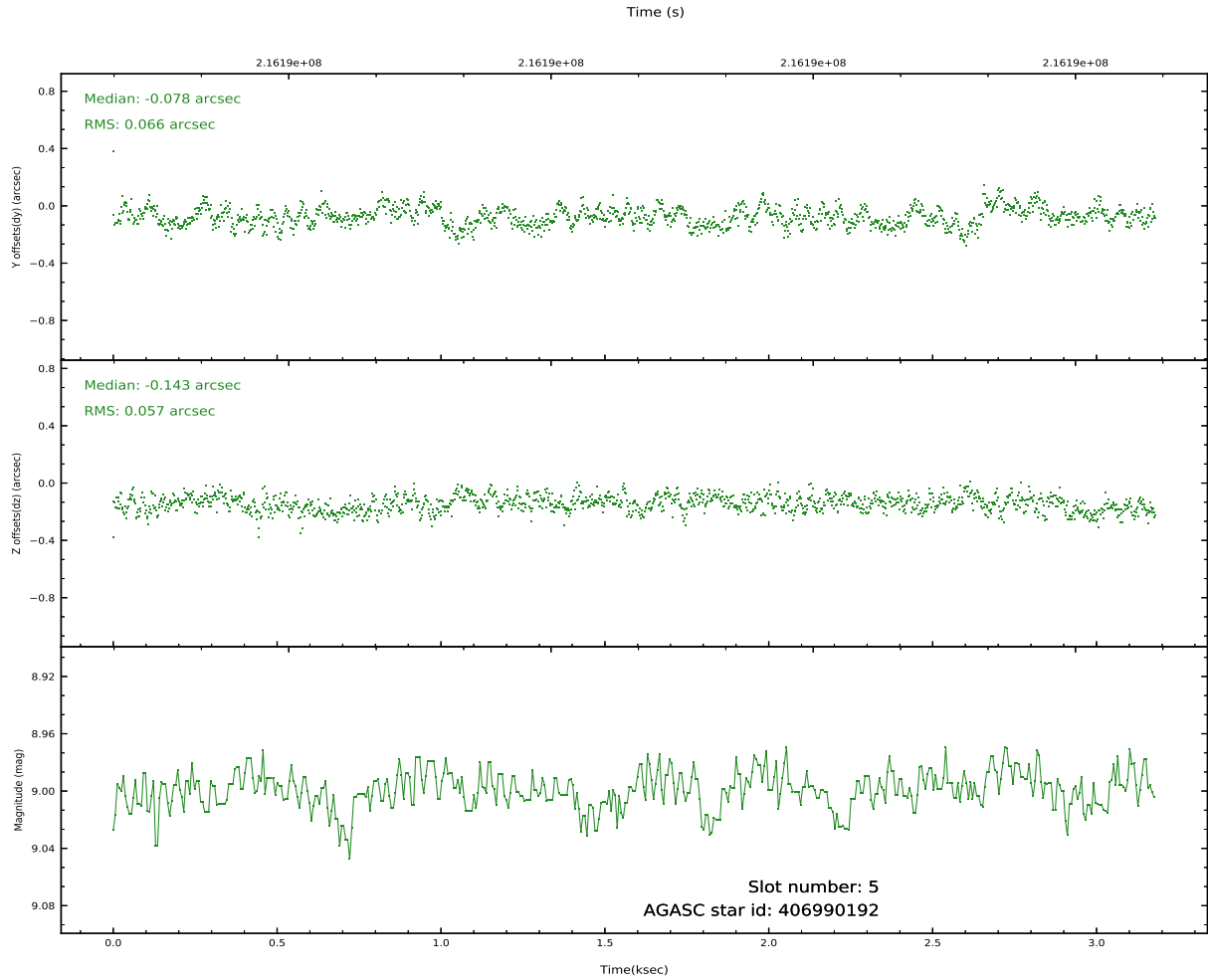
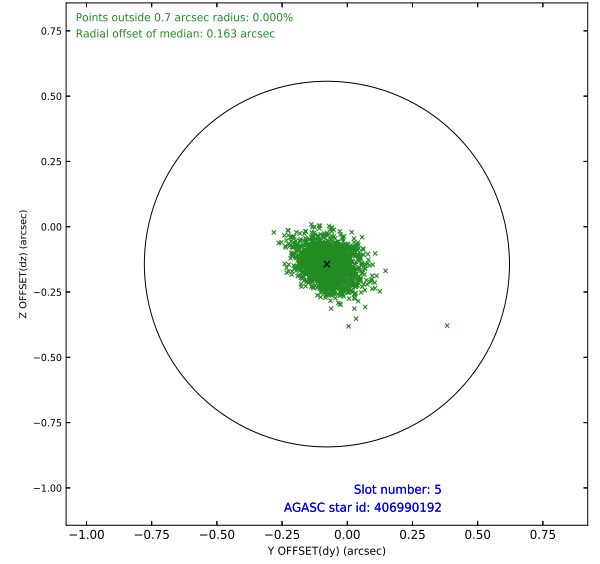
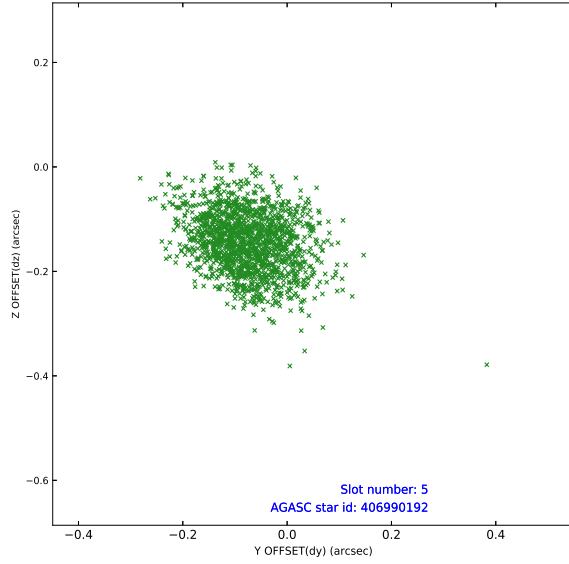
### 2.4.1 Slot 3



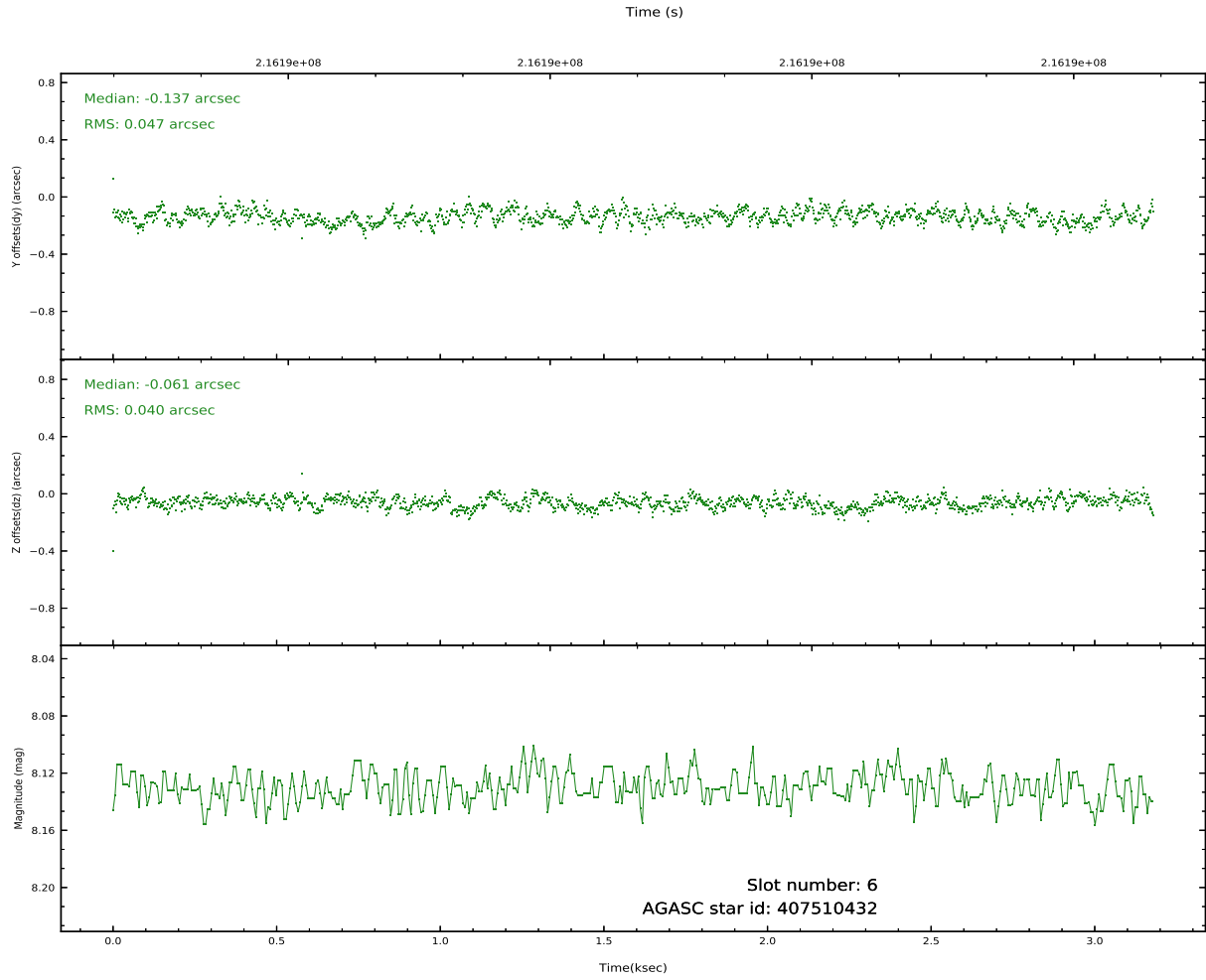
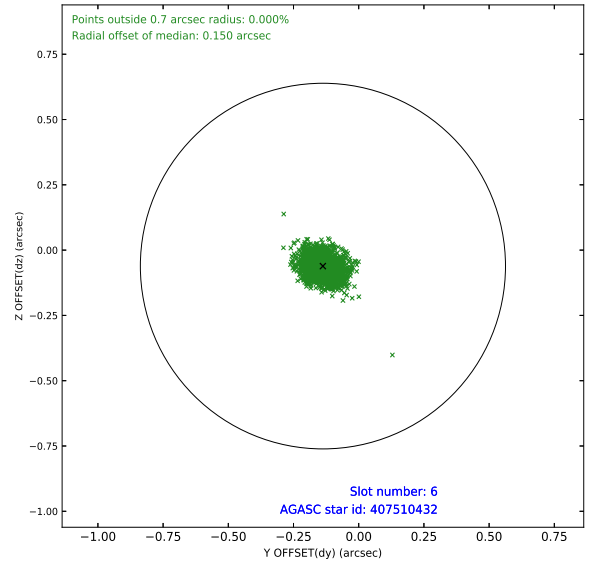
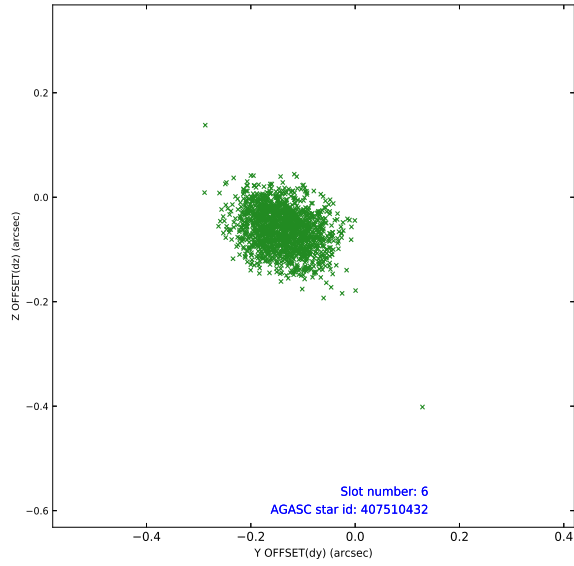
## 2.4.2 Slot 4



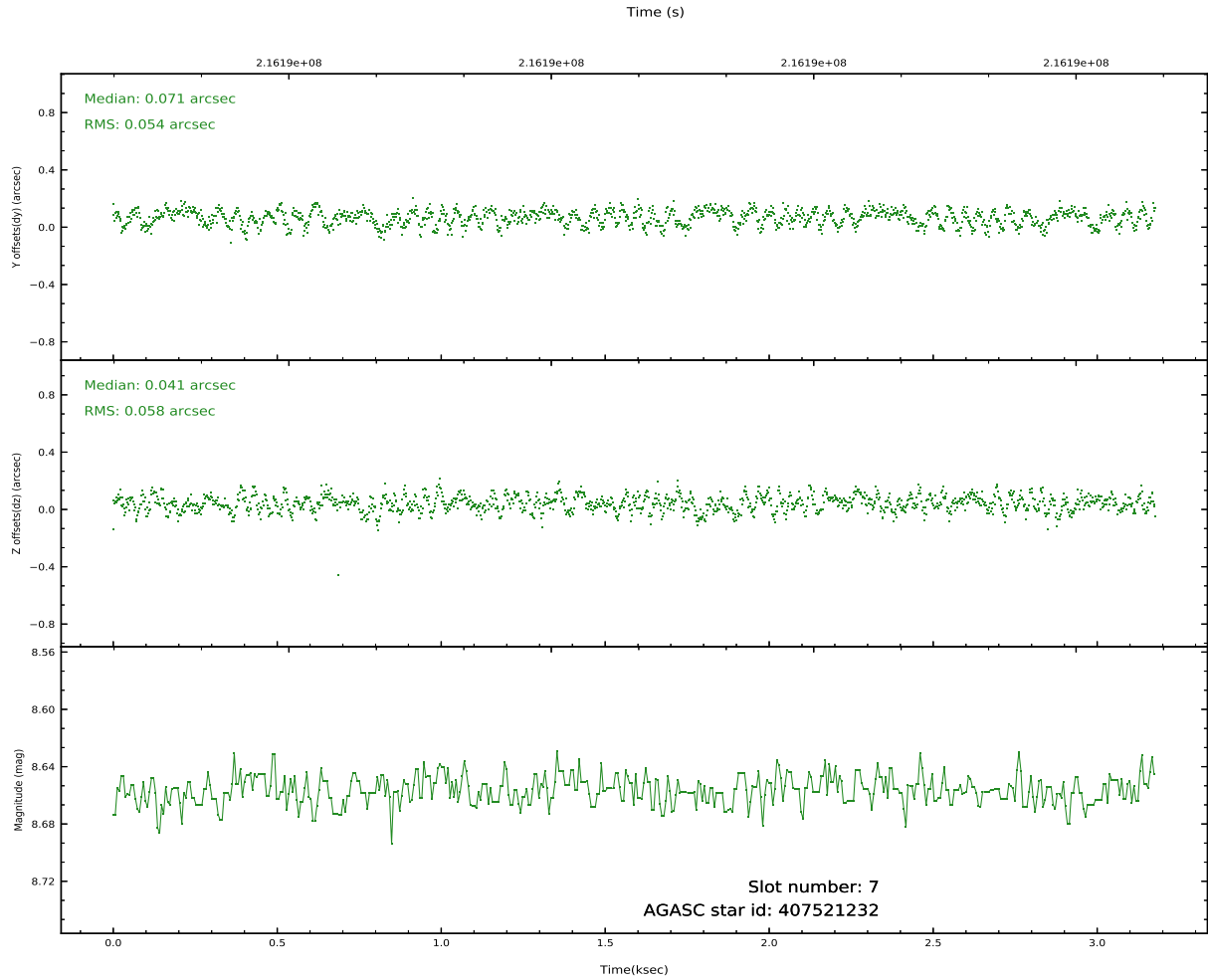
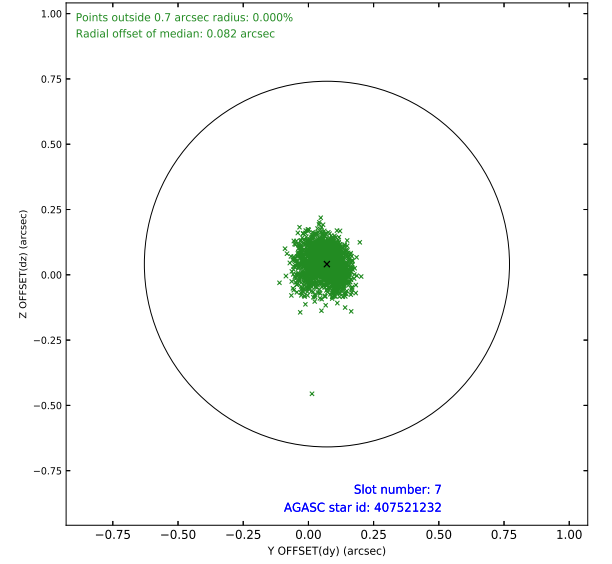
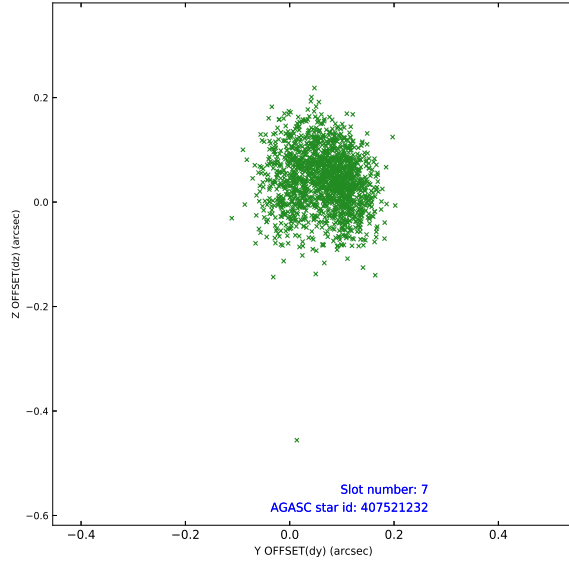
### 2.4.3 Slot 5



## 2.4.4 Slot 6

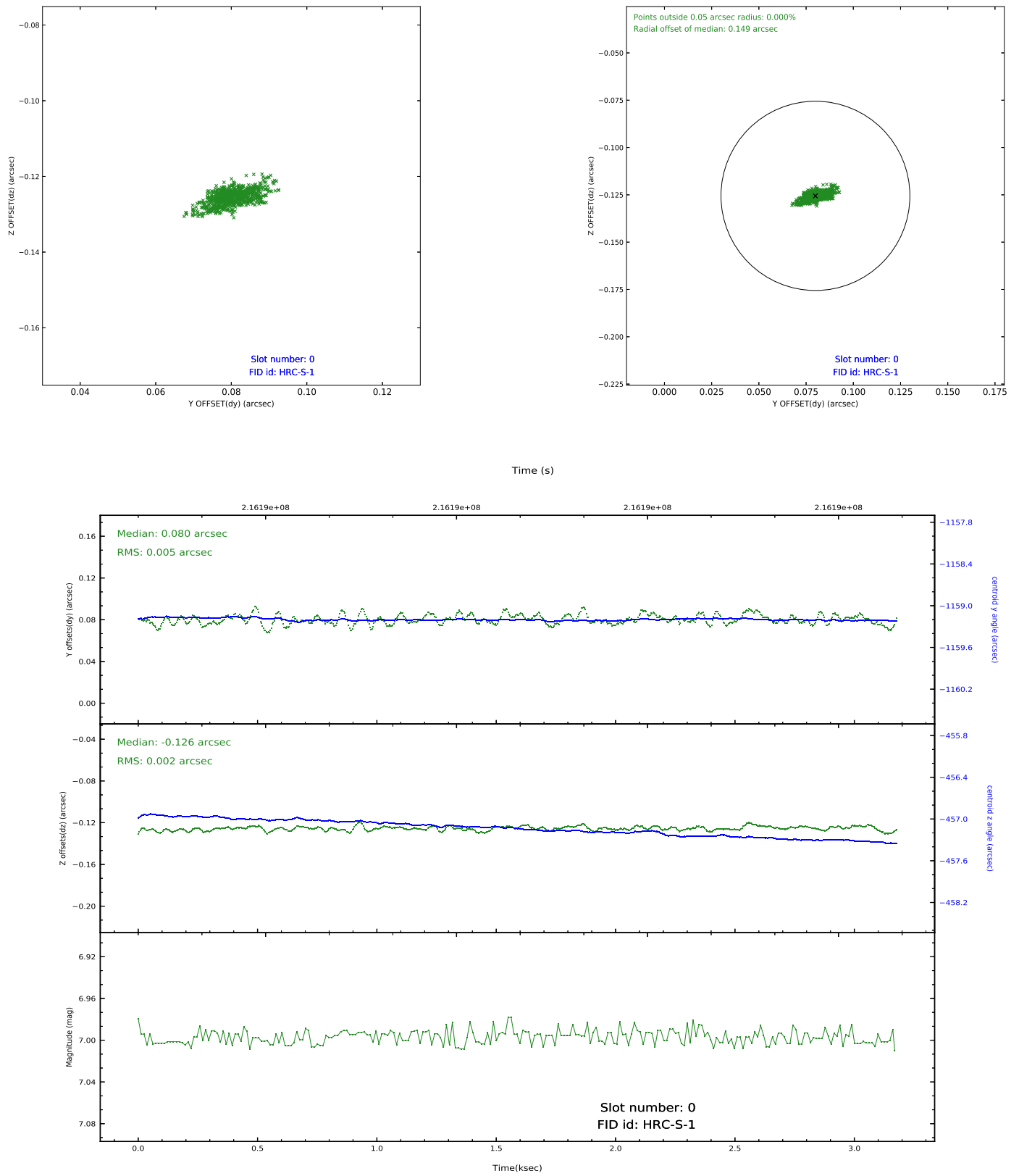


## 2.4.5 Slot 7

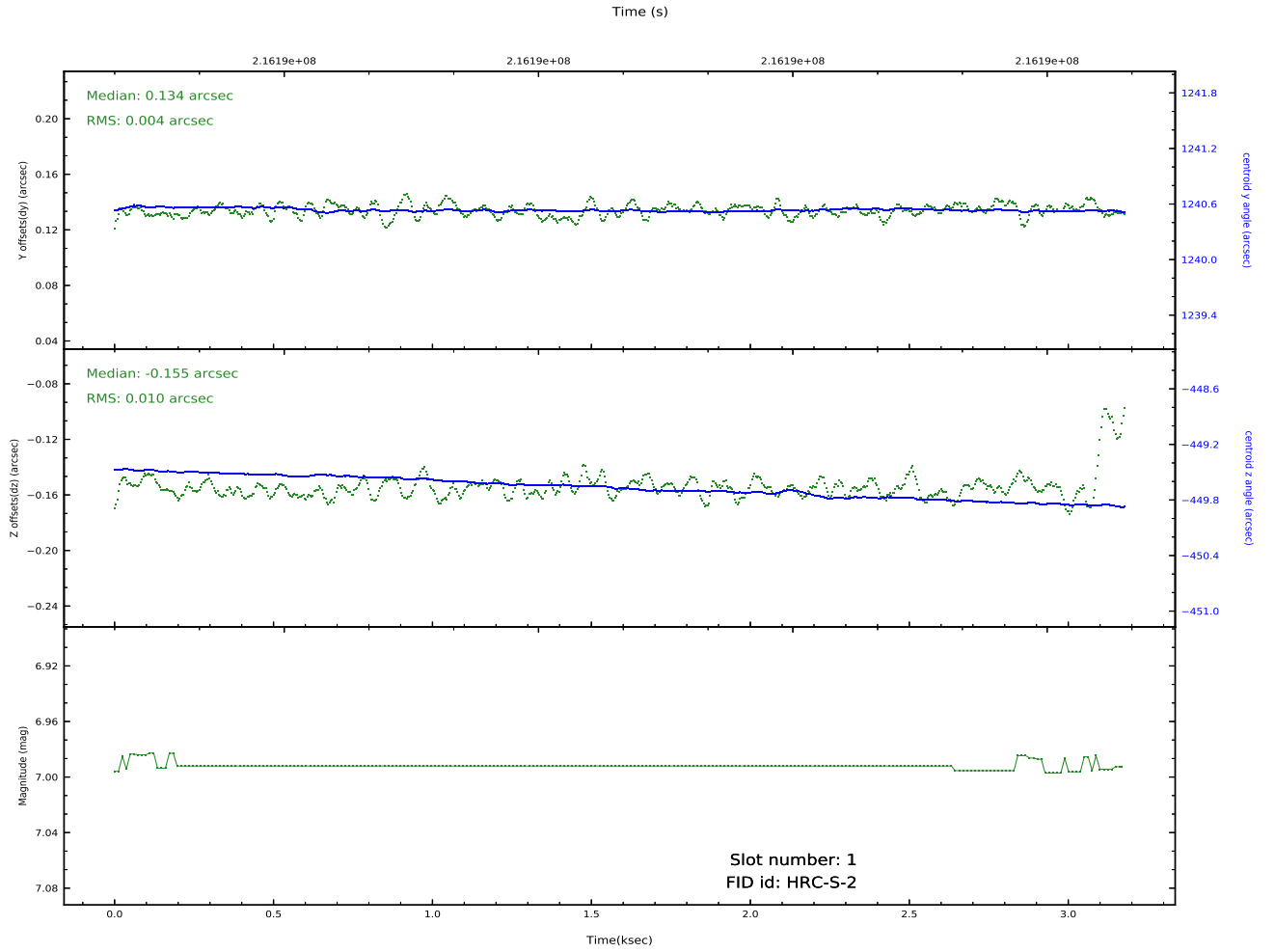
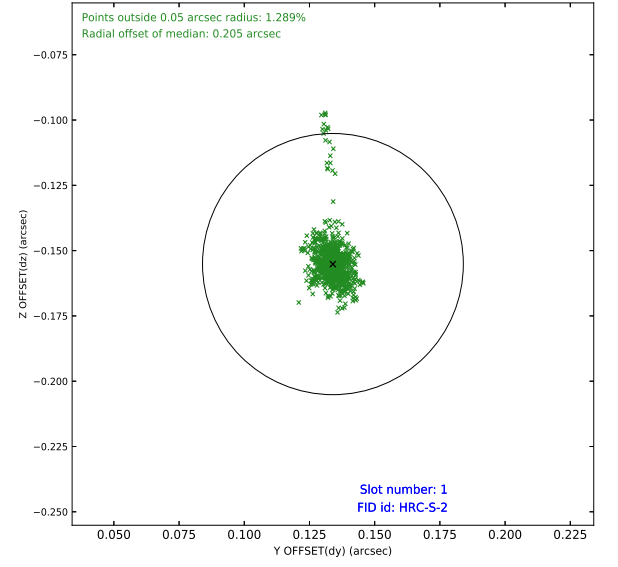
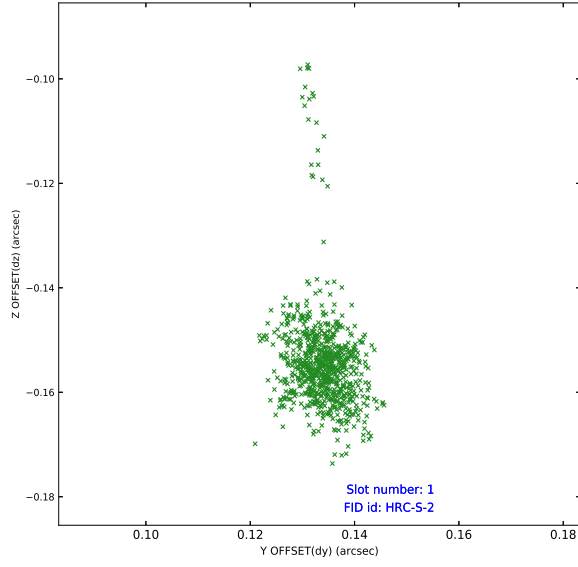


## 2.5 FID Slots

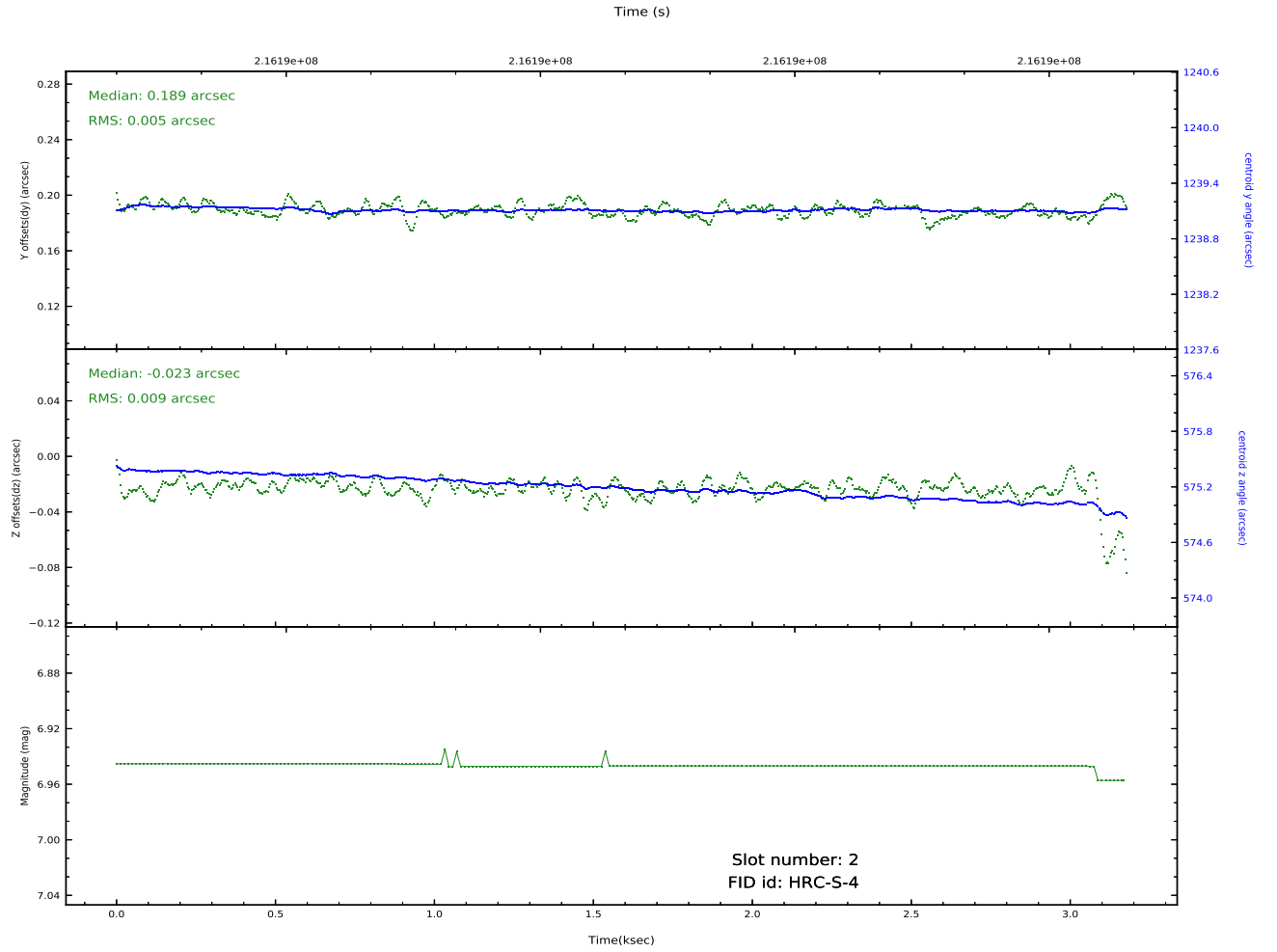
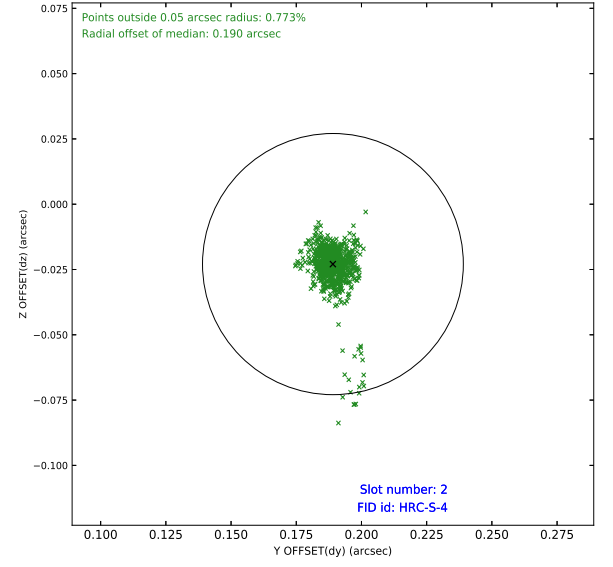
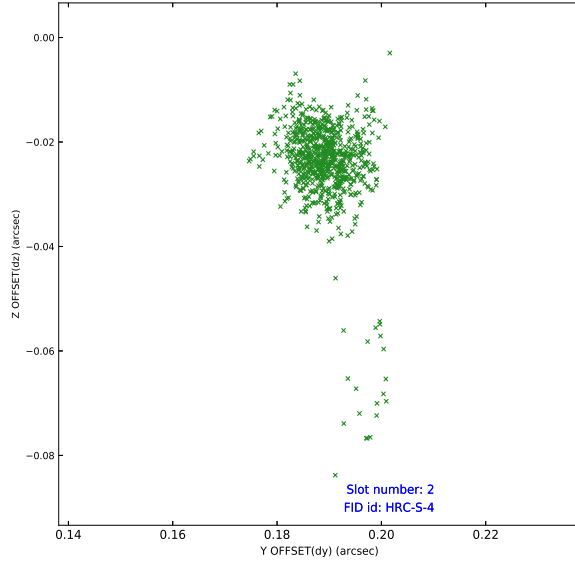
### 2.5.1 Slot 0



## 2.5.2 Slot 1



## 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.178

### A.2 Comments

Window constraint was met.