

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5055 - L2 Version 5  
Chandra X-Ray Center

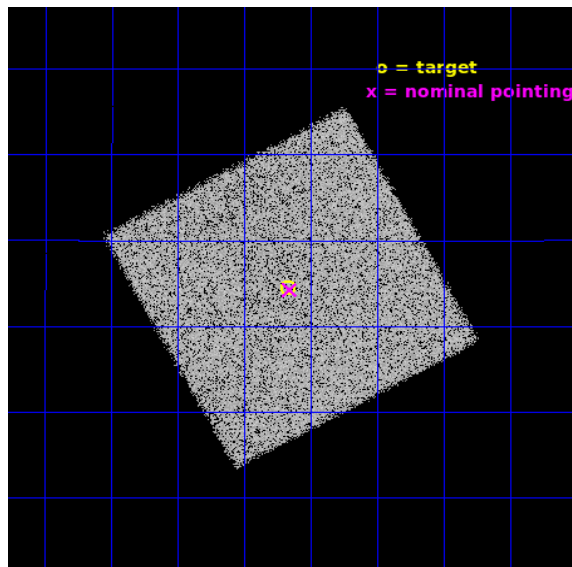
L2 Processing Date : Sep 22 2020

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# 1 Front

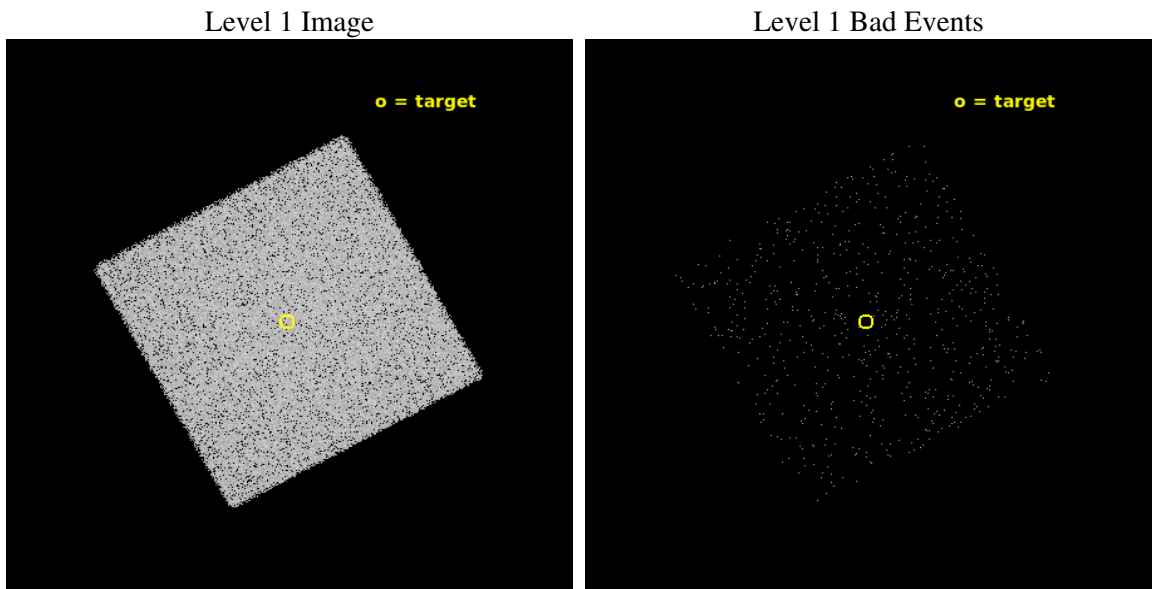
seq_num	290328	Sequence number
obs_id	5055	Observation id
title	AO5 Measurements of the optical/UV Transmission of the HRC and ACIS Filters.	Proposal title
observer	CXC Calibration	Principal investigator
object	Betelgeuse	Source name
ra_targ	88.792917	Observer's specified target RA [deg]
dec_targ	7.407056	Observer's specified target Dec [deg]
ra_nom	88.789304885663	Nominal RA [deg]
dec_nom	7.4041706888972	Nominal Dec [deg]
roll_nom	286.31058405967	Nominal Roll [deg]
revision	5	Processing version of data
ontime	2086.1313411891	[s]
livetime	2043.6794673078	Ontime multiplied by DTCOR
l2events	89310	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	2102.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	2086.1313411891	[s]
caldbver	4.9.2	&#160	l1events	136517	Number of level 1 events
date	2020-09-23T01:28:16	Date and time of file creation			
revision	5	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

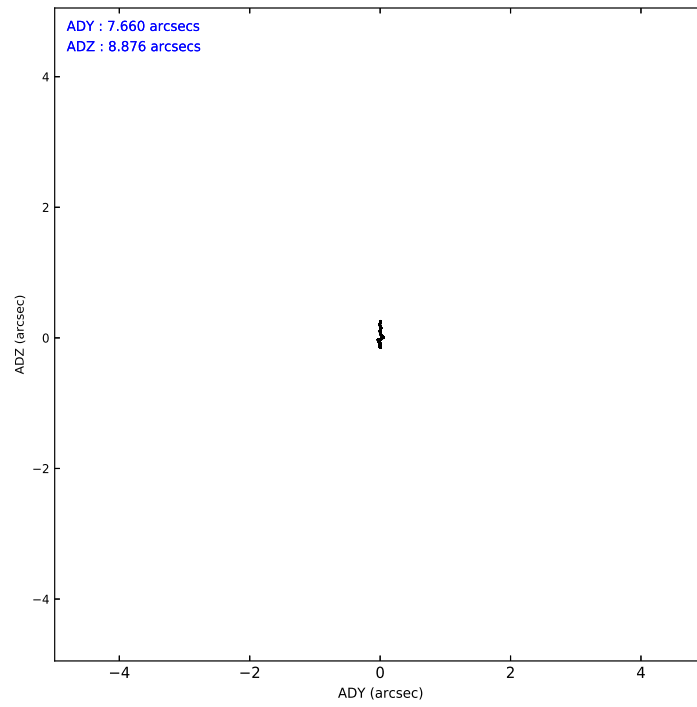
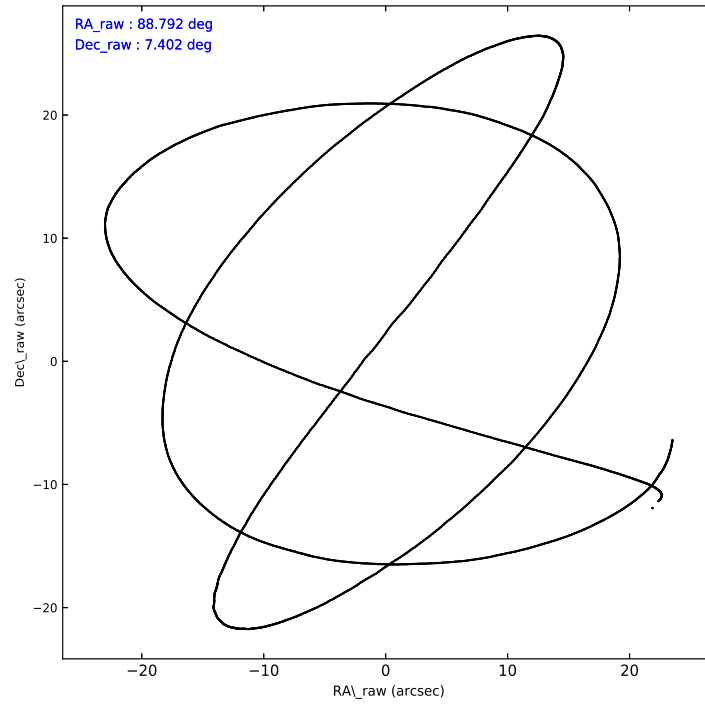
	<b>segment 0</b>
level 1 events	136517
rejected events	8604
rejected %	6%

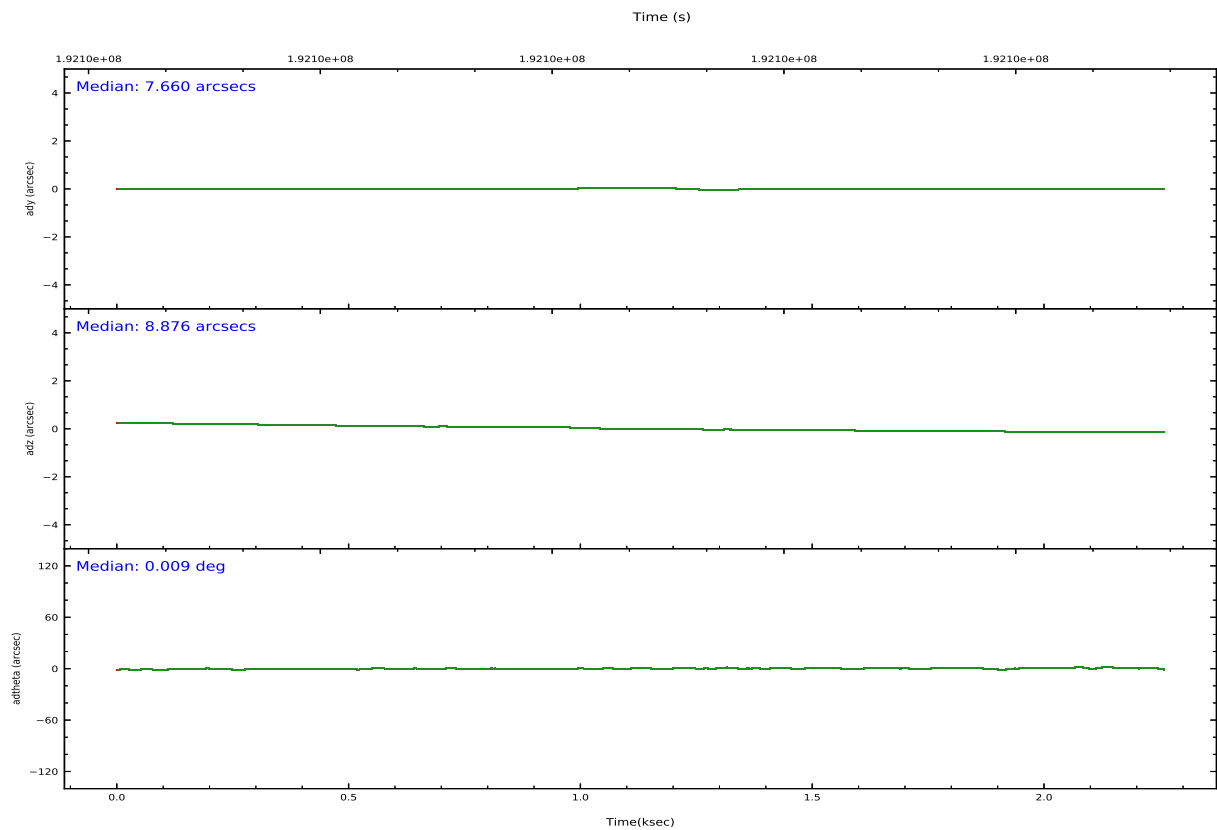
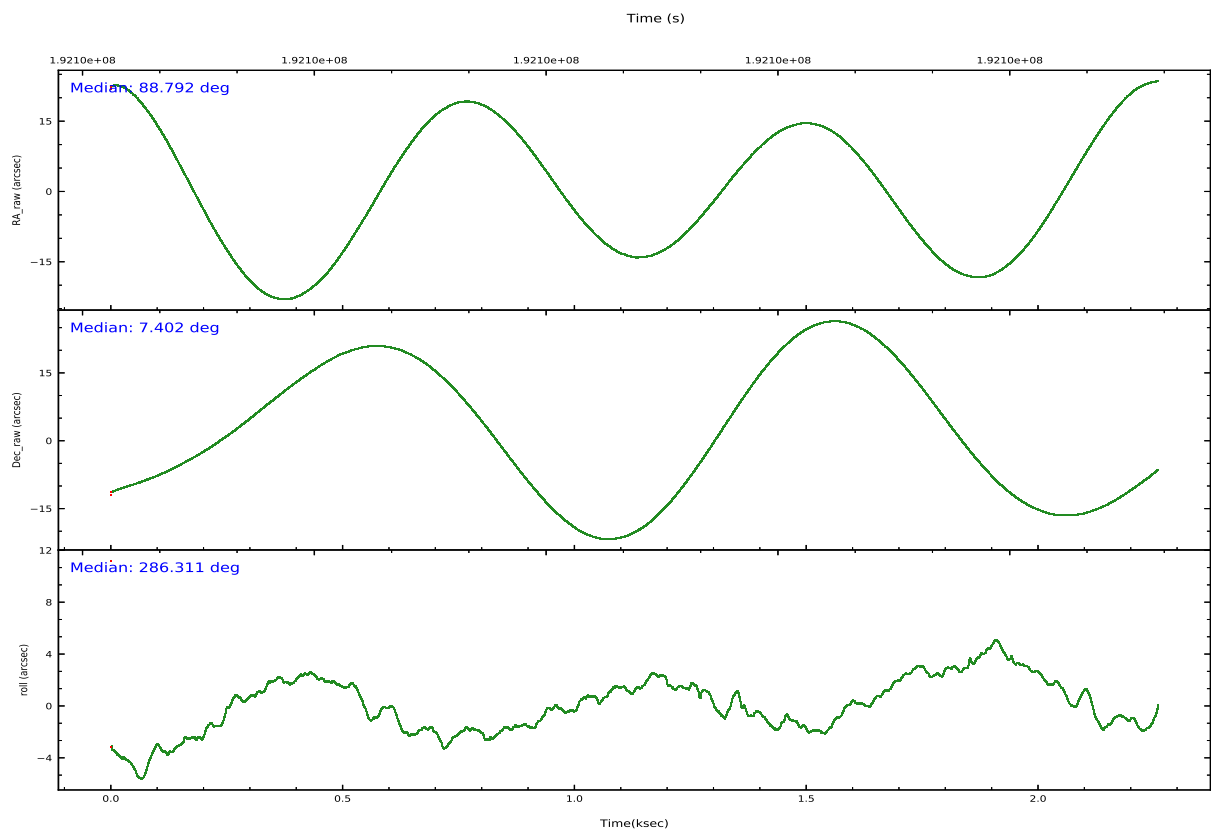
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	88.772252	88.789304885663
[deg] Pointing Dec	7.421169	7.4041706888972
[deg] Pointing Roll	286.421337	286.31058405967
[s] Window start time (MET)	191980864.184000	191980864.184000
[s] Window stop time (MET)	197078464.184000	197078464.184000
[mm] SIM focus pos	-1.040293	-1.038866356238299
[mm] SIM defocus	0	0.001426264420575141
[mm] SIM translation stage pos	126.985494	126.9829799899862
[mm] SIM translation stage offset	0	0.002508901615314585
[s] Observation start time (MET)	192103219.184000	192102807.93254
Observation start date	2004-02-02T09:59:15	2004-02-02T09:53:27
[s] Observation end time (MET)	192105321.184000	192105457.04516
Observation end date	2004-02-02T10:34:17	2004-02-02T10:37:37

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

## 2.3 Aspect





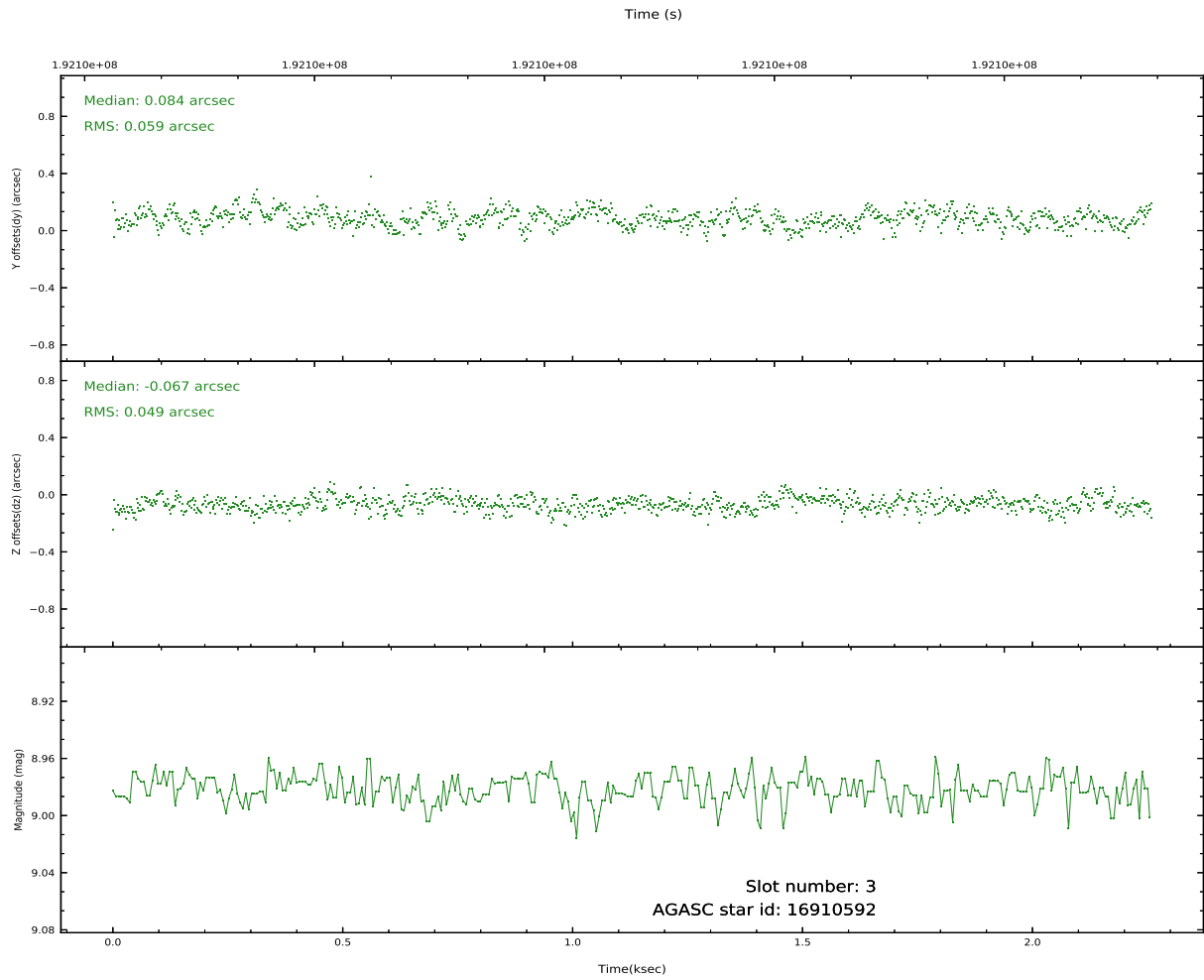
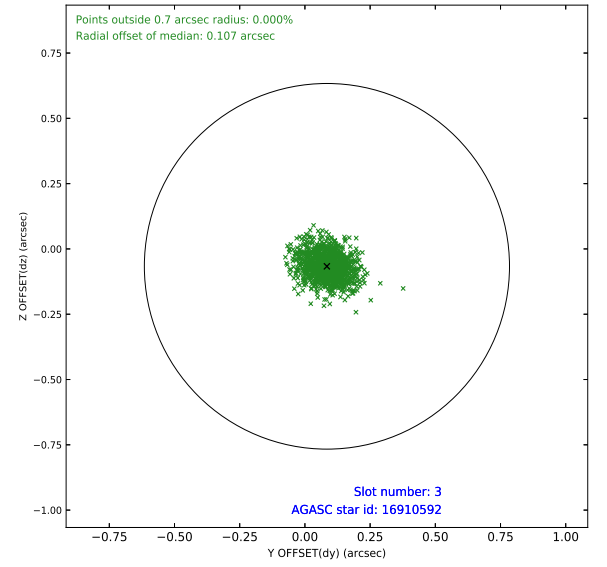
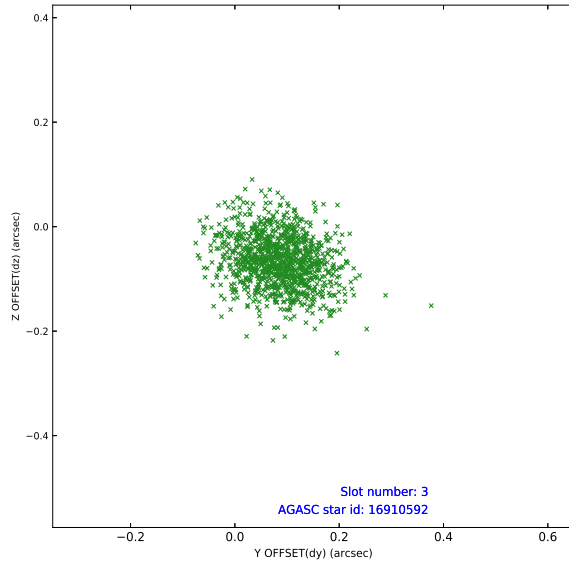
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-I-1	7.06	552	1.000	-0.027	0.017	0.007	0.013	0.000000	0.000000	-763.31	-1296
1	FID		HRC-I-2	7.10	552	1.000	0.182	-0.126	0.008	0.013	0.000000	0.000000	848.15	-1300
2	FID		HRC-I-3	7.15	552	1.000	-0.036	0.019	0.010	0.017	0.000000	0.000000	-1190.24	1005
3	GUIDE	used	16910592	8.98	1103	1.000	0.084	-0.067	0.079	0.134	88.532936	6.726769	2155.71	-1527
4	GUIDE	used	16913360	8.33	1103	1.000	-0.002	0.054	0.059	0.092	89.178373	7.247125	1012.04	1213
5	GUIDE	used	16918912	8.67	1103	1.000	0.162	0.107	0.063	0.102	89.257075	6.922287	2212.37	1156
6	GUIDE	used	93854800	7.58	1103	1.000	-0.125	-0.139	0.055	0.085	88.376308	7.655454	-1207.18	-1115
7	GUIDE	used	93855160	8.50	1102	1.000	-0.120	0.043	0.066	0.104	88.514904	7.713359	-1270.20	-583

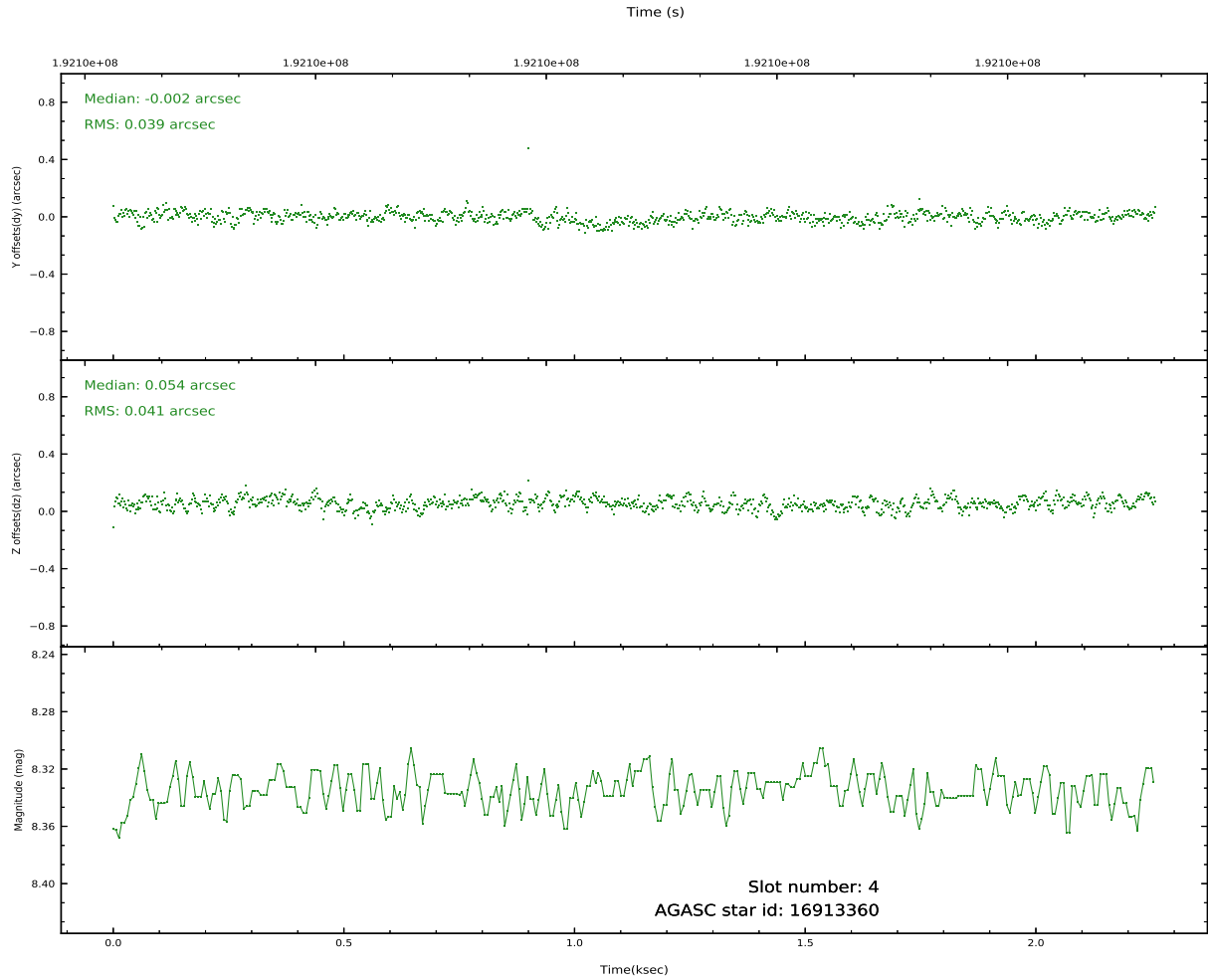
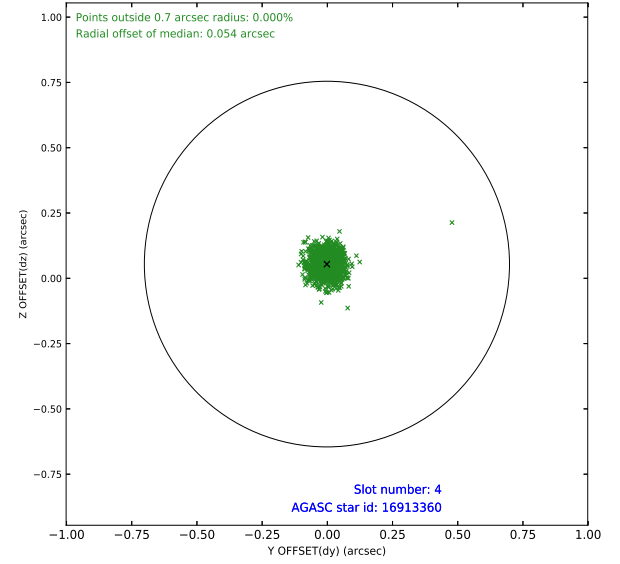
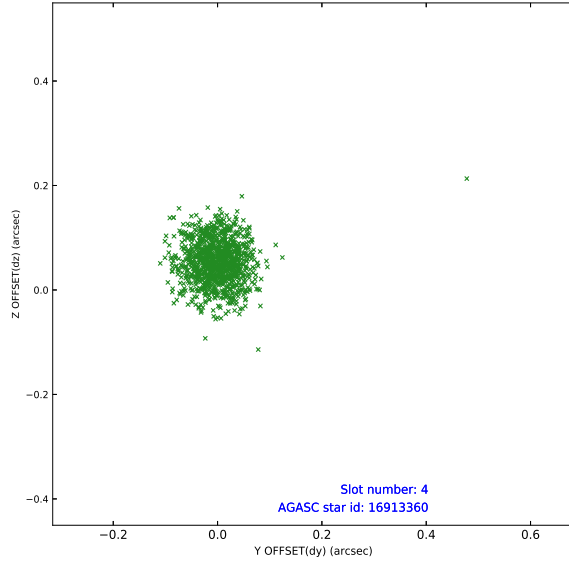


## 2.4 Star Slots

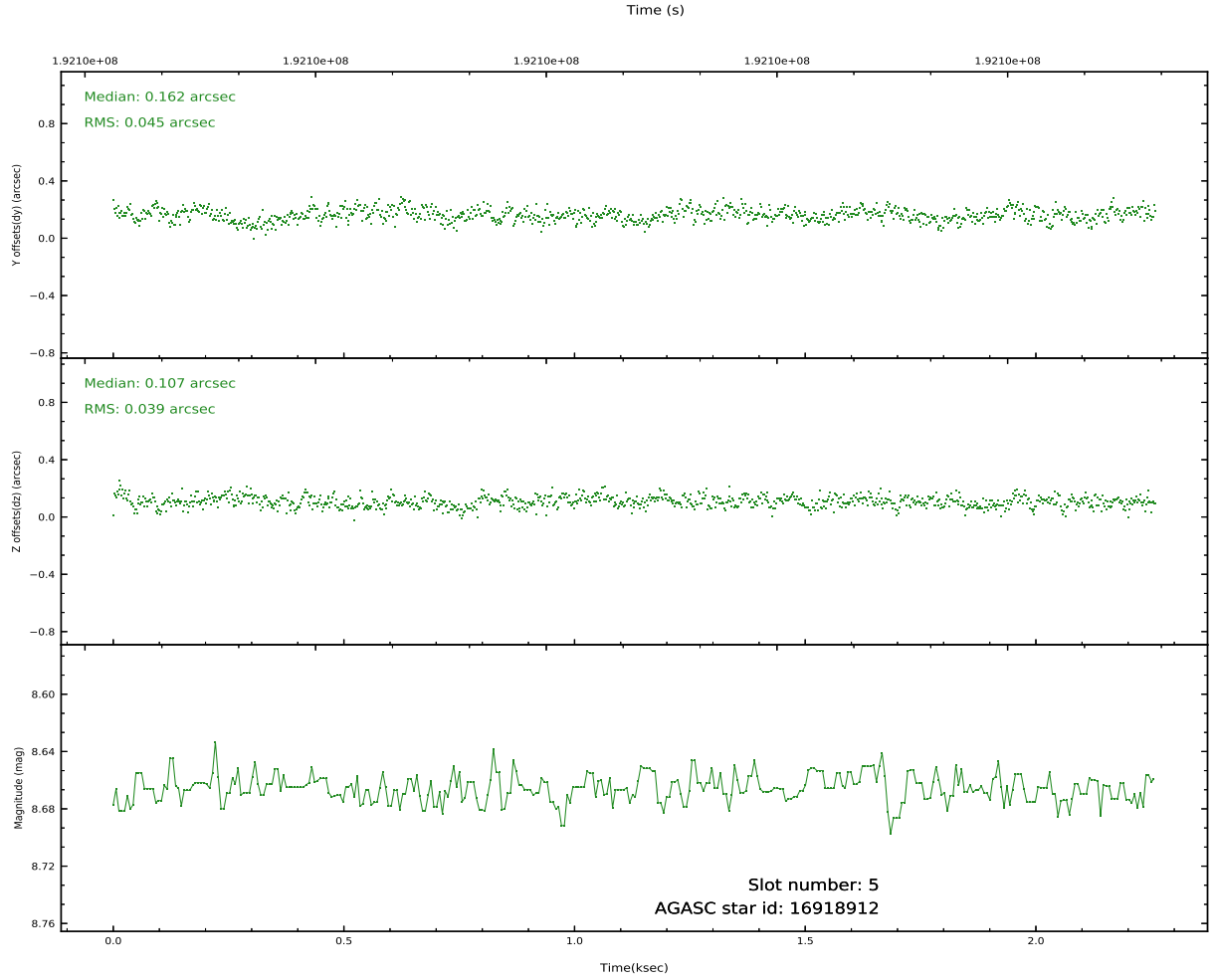
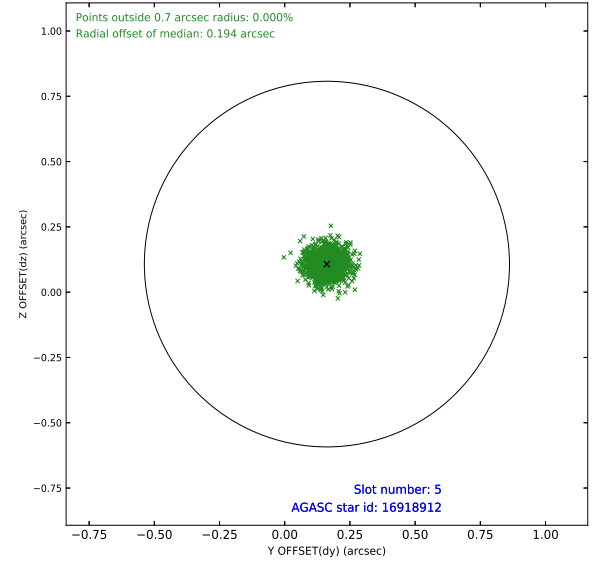
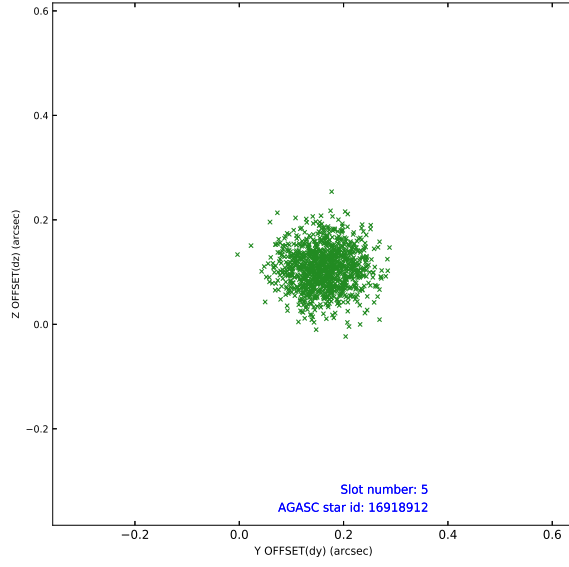
### 2.4.1 Slot 3



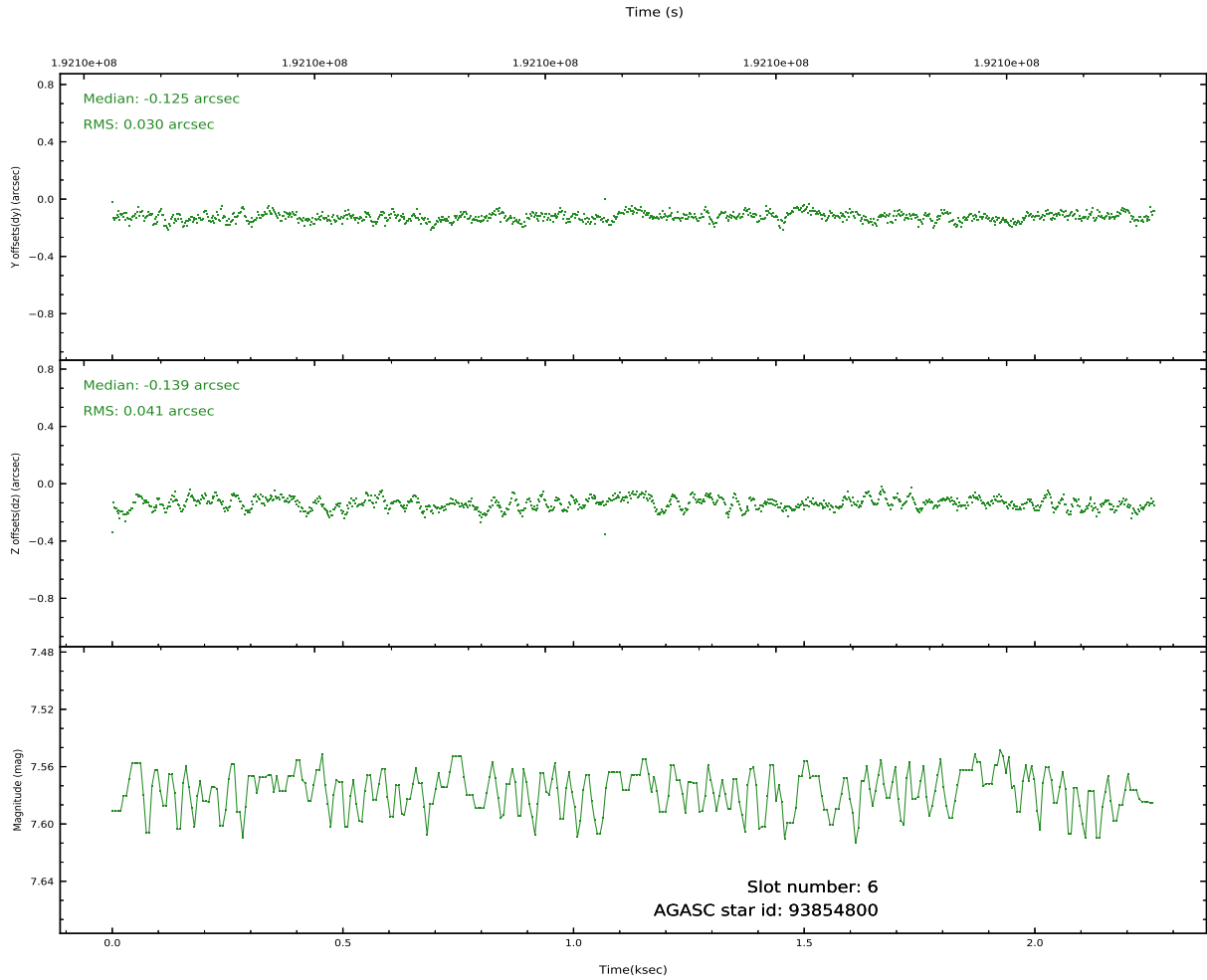
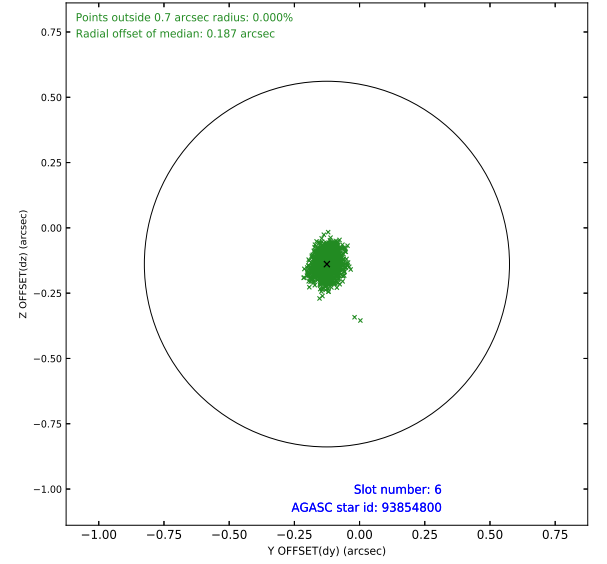
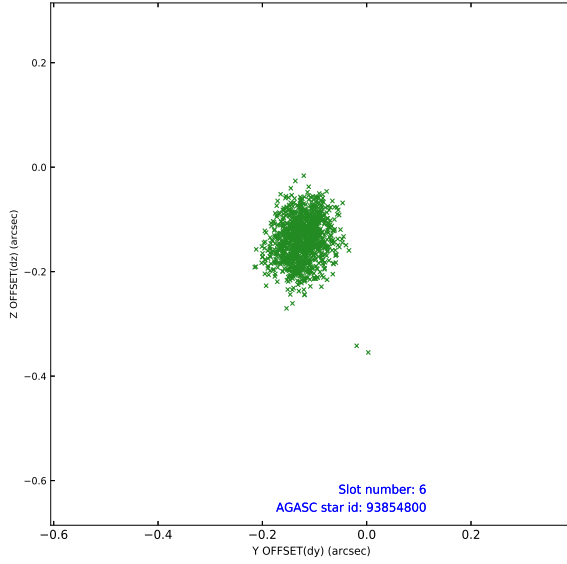
## 2.4.2 Slot 4



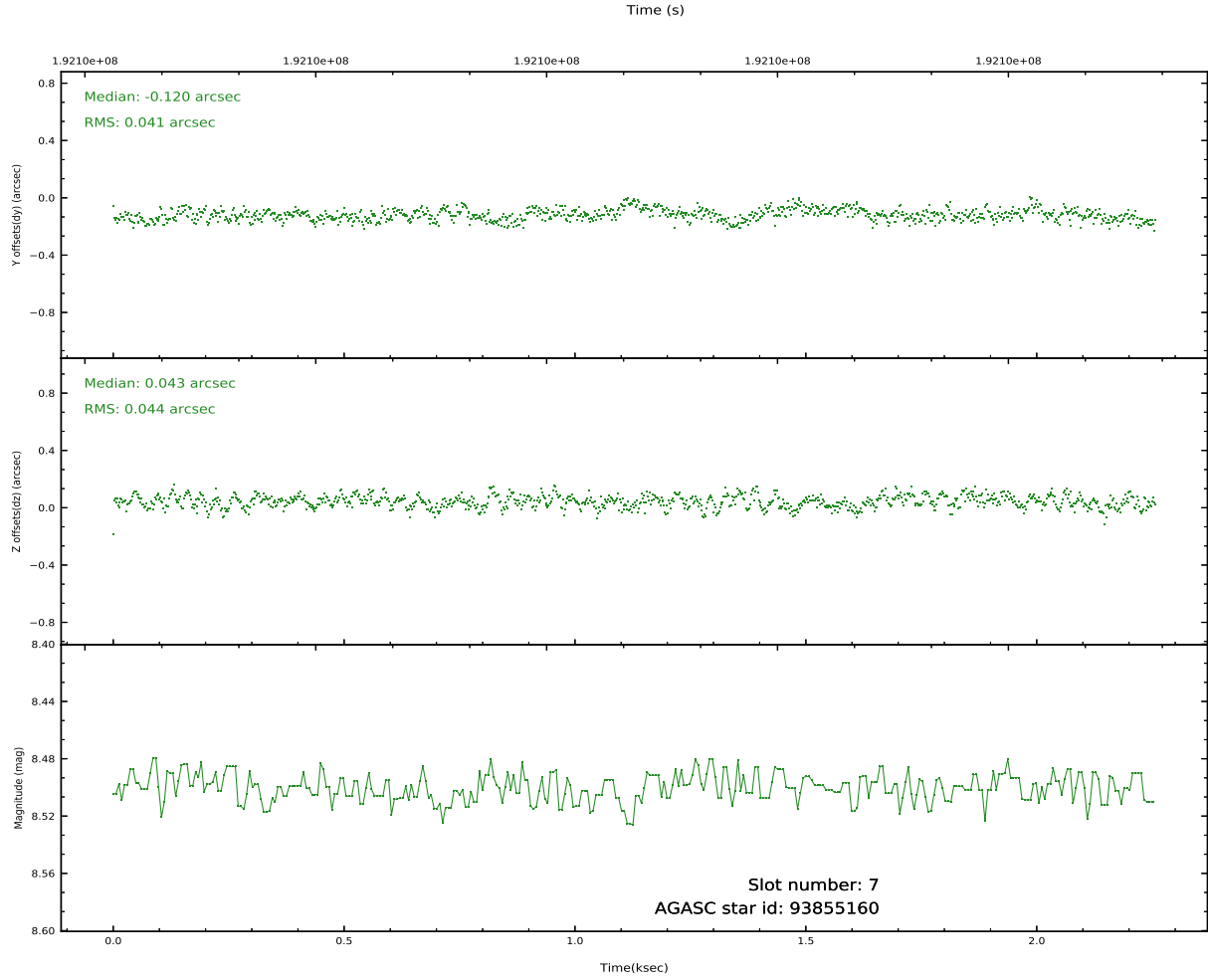
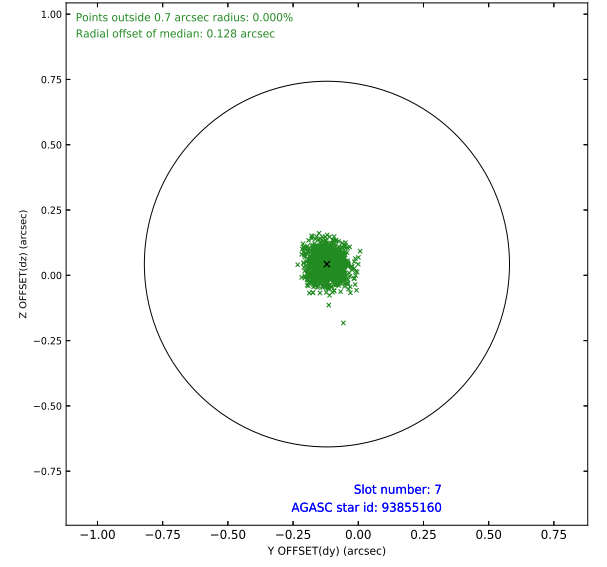
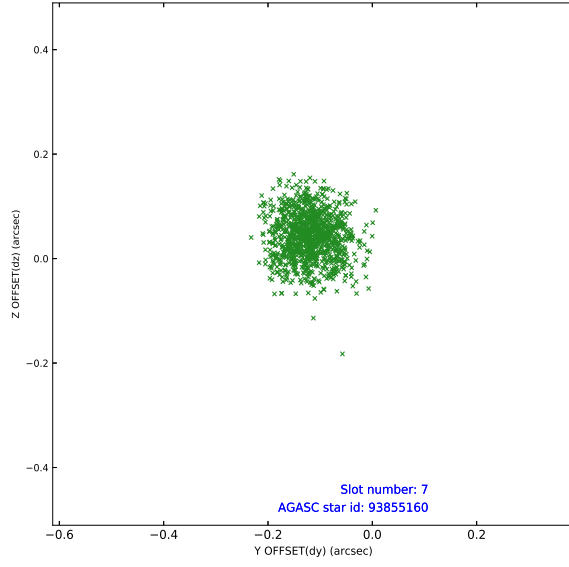
### 2.4.3 Slot 5



## 2.4.4 Slot 6

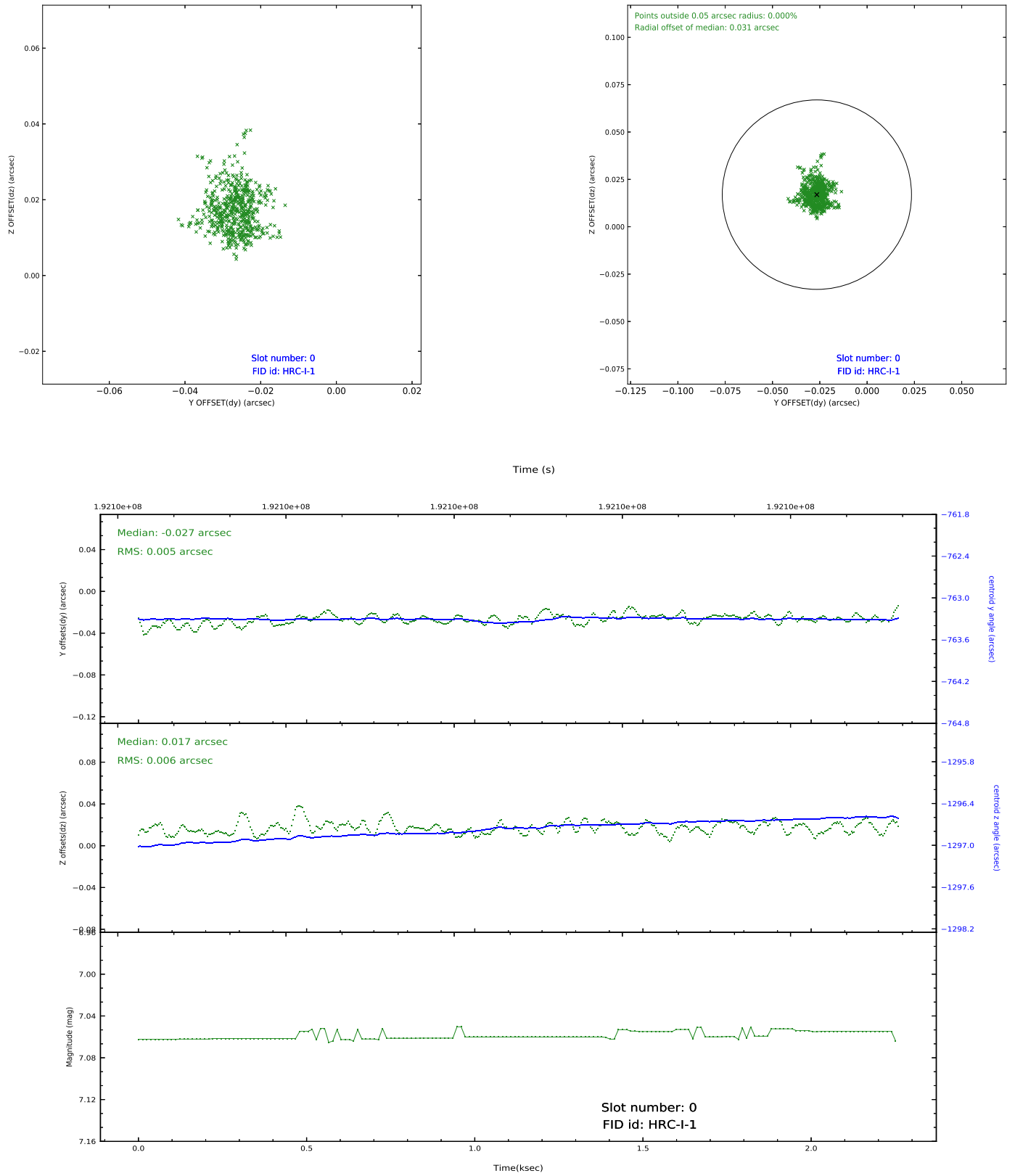


## 2.4.5 Slot 7

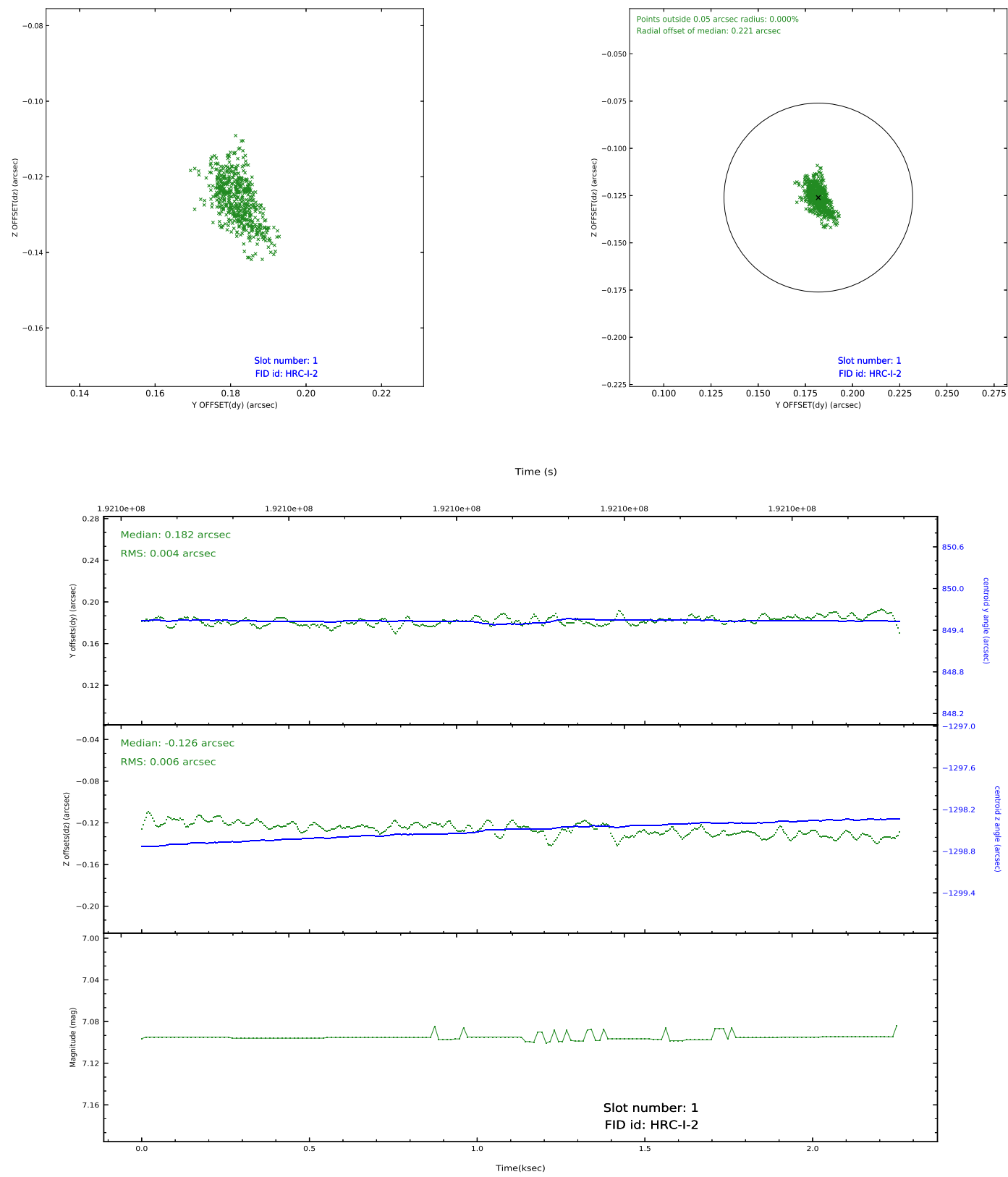


## 2.5 FID Slots

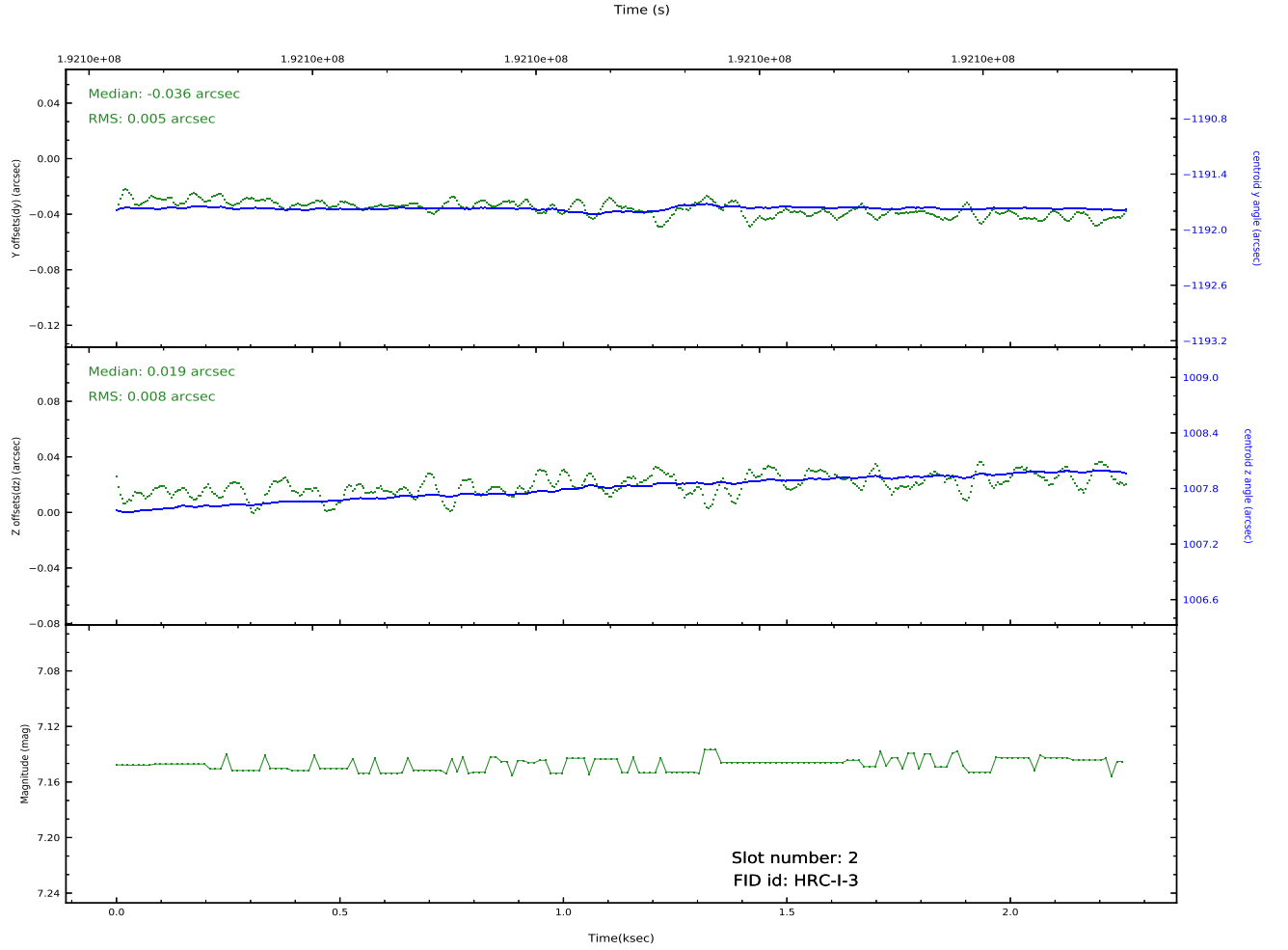
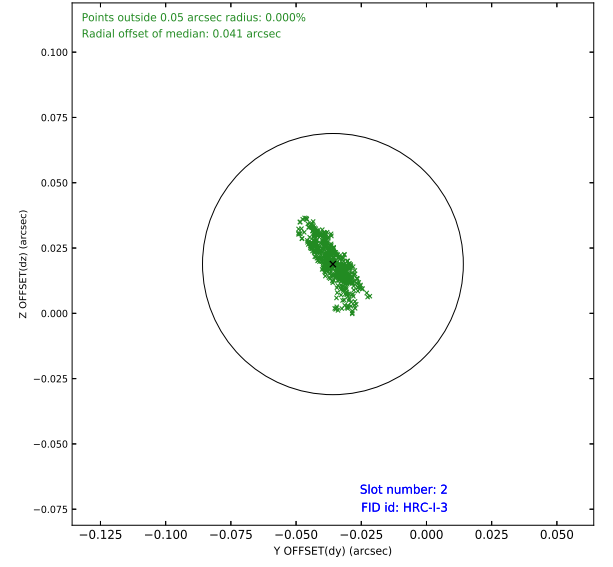
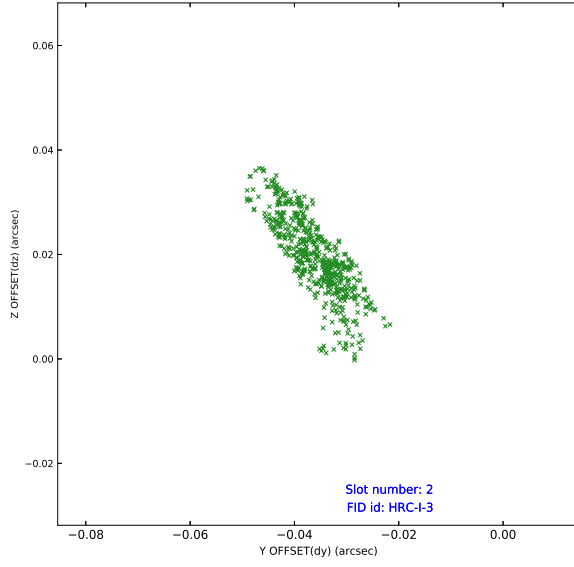
### 2.5.1 Slot 0



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	2.086

## A.2 Comments

Window constraint met.

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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.