

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20658 - L2 Version 2  
Chandra X-Ray Center

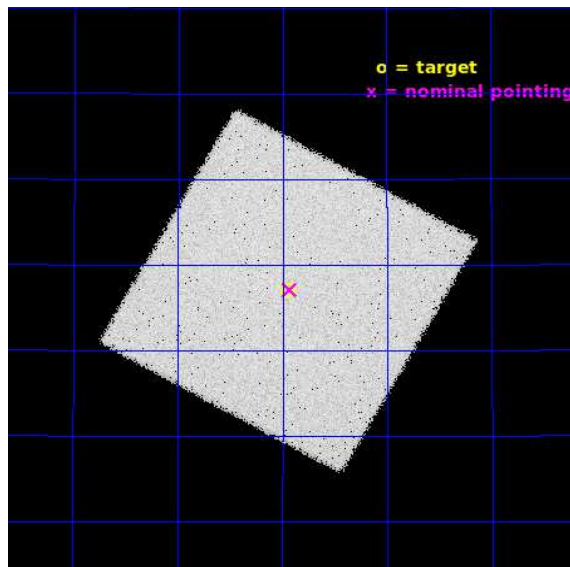
L2 Processing Date : Oct 26 2020

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
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
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

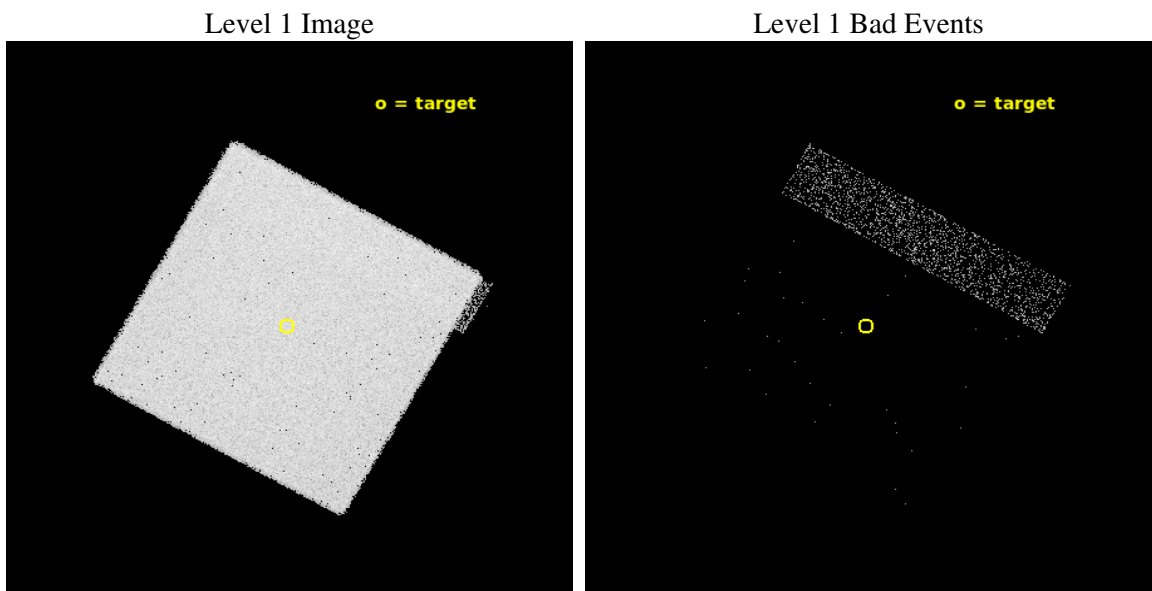
seq_num	291369	Sequence number
obs_id	20658	Observation id
title	AO-19 Measurements of the optical/UV Transmission of the HRC Filters.	Proposal title
observer	CXC Calibration	Principal investigator
object	Vega	Source name
ra_targ	279.235833	Observer's specified target RA [deg]
dec_targ	38.78475	Observer's specified target Dec [deg]
ra_nom	279.23205589637	Nominal RA [deg]
dec_nom	38.785455471532	Nominal Dec [deg]
roll_nom	164.39322310846	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2170.9501285553	[s]
livetime	2141.3446606647	Ontime multiplied by DTCOR
l2events	254595	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	2000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	2170.9501285553	[s]
caldsver	4.9.3	&#160	l1events	556773	Number of level 1 events
date	2020-10-26T16:18:12	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

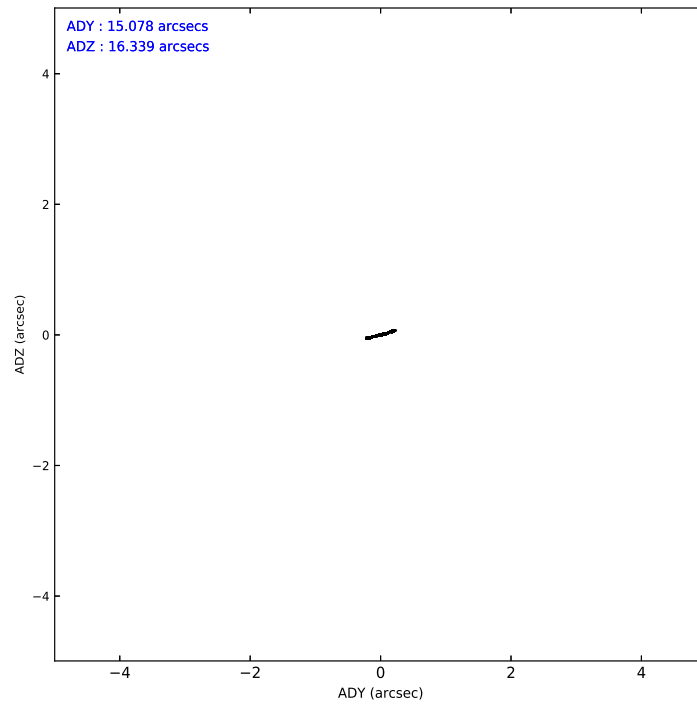
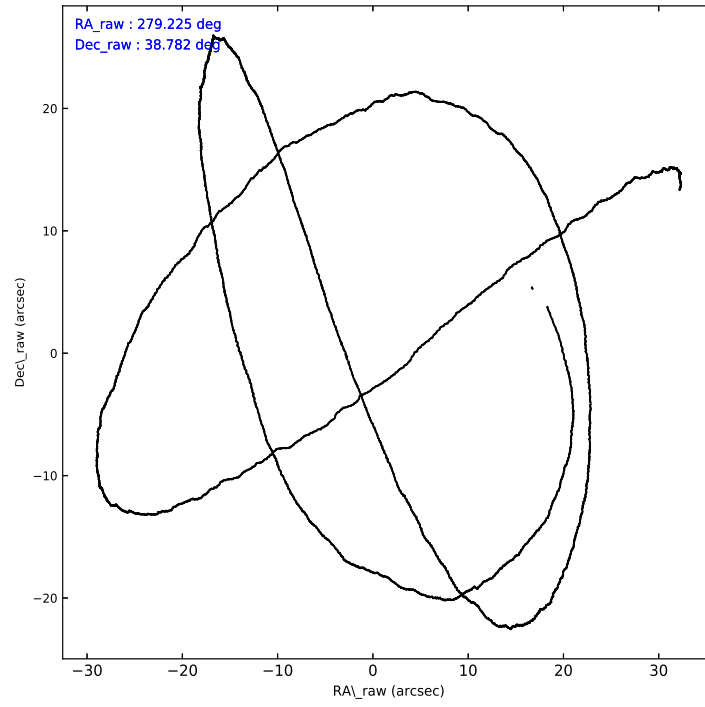
	<b>segment 0</b>
level 1 events	556773
rejected events	220263
rejected %	39%

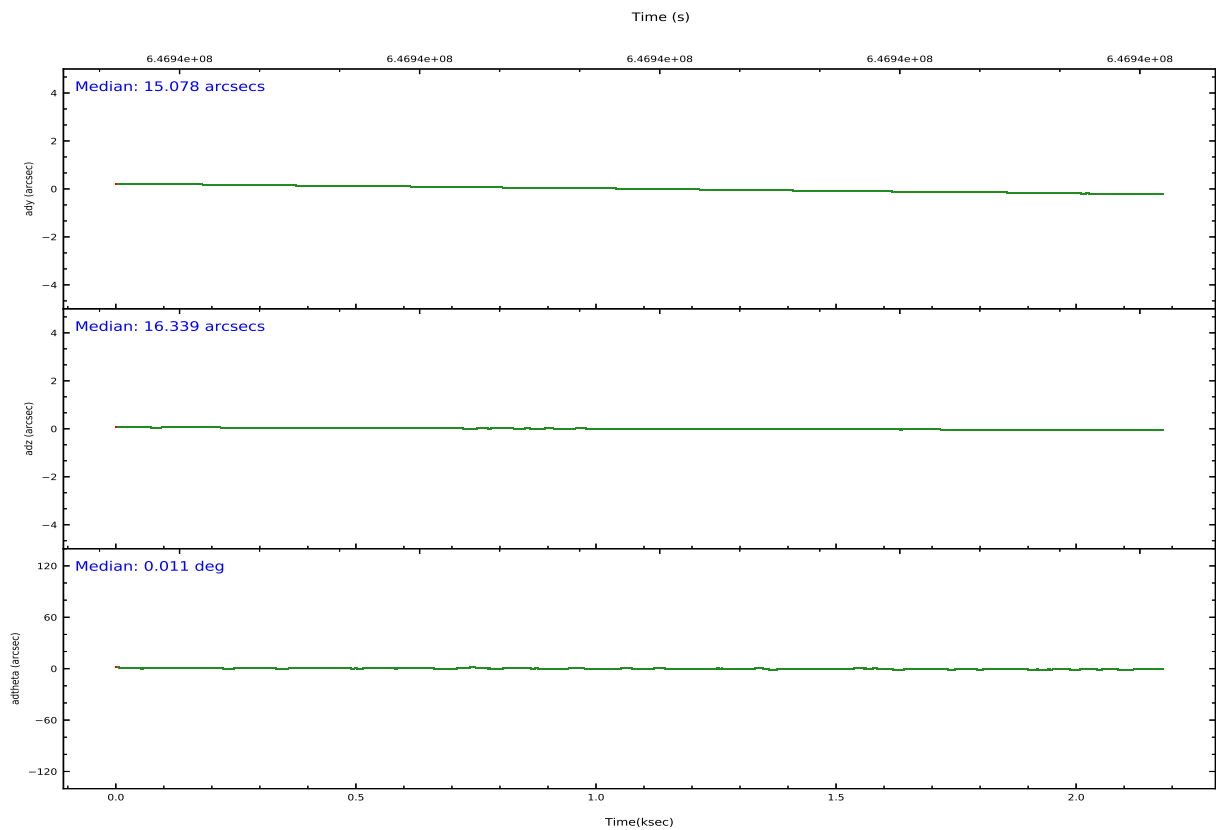
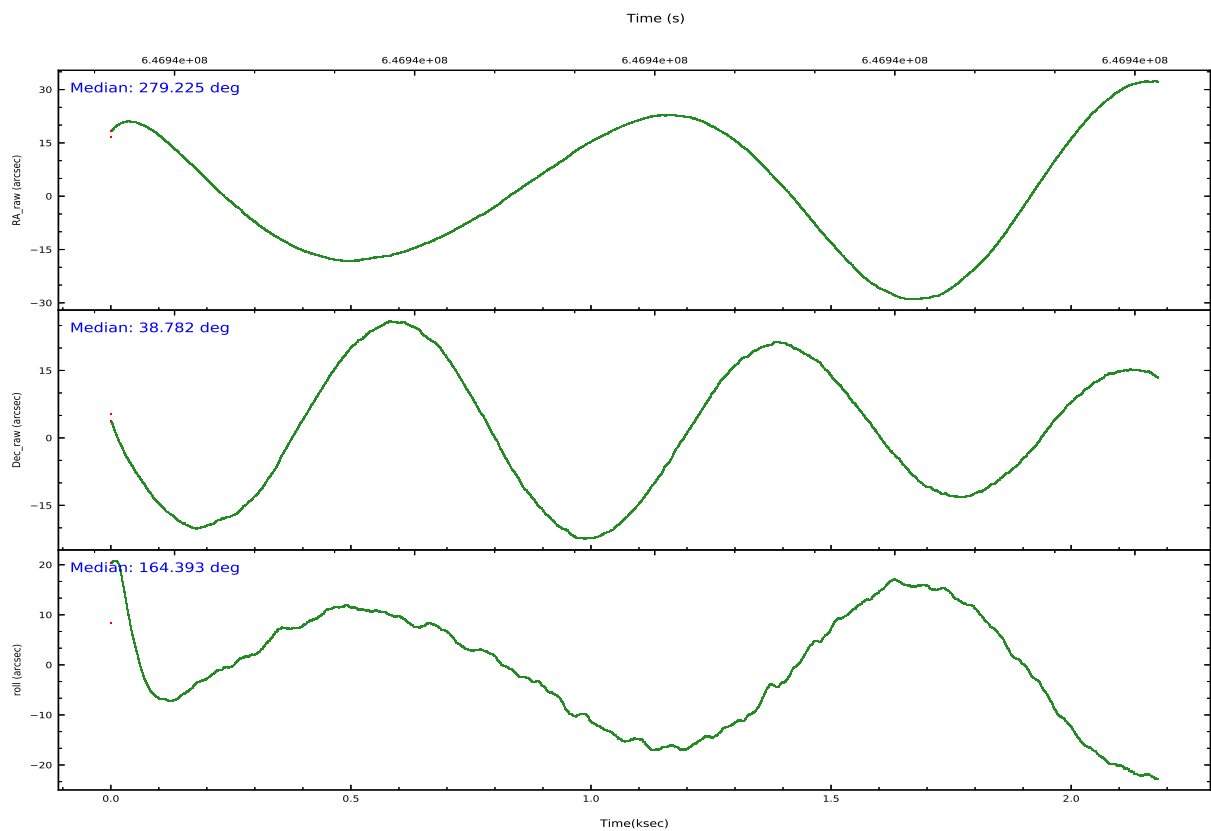
## 2.2 Compared Parameters

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	279.258862	279.23205589637
[deg] Pointing Dec	38.789660	38.785455471532
[deg] Pointing Roll	164.485574	164.39322310846
[s] Window start time (MET)	644198469.184000	644198469.184000
[s] Window stop time (MET)	649382469.184000	649382469.184000
[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)	646940548.184000	646939011.8085999
Observation start date	2018-07-02T17:41:19	2018-07-02T17:16:51
[s] Observation end time (MET)	646942548.184000	646942971.89634
Observation end date	2018-07-02T18:14:39	2018-07-02T18:22:51

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

## 2.3 Aspect





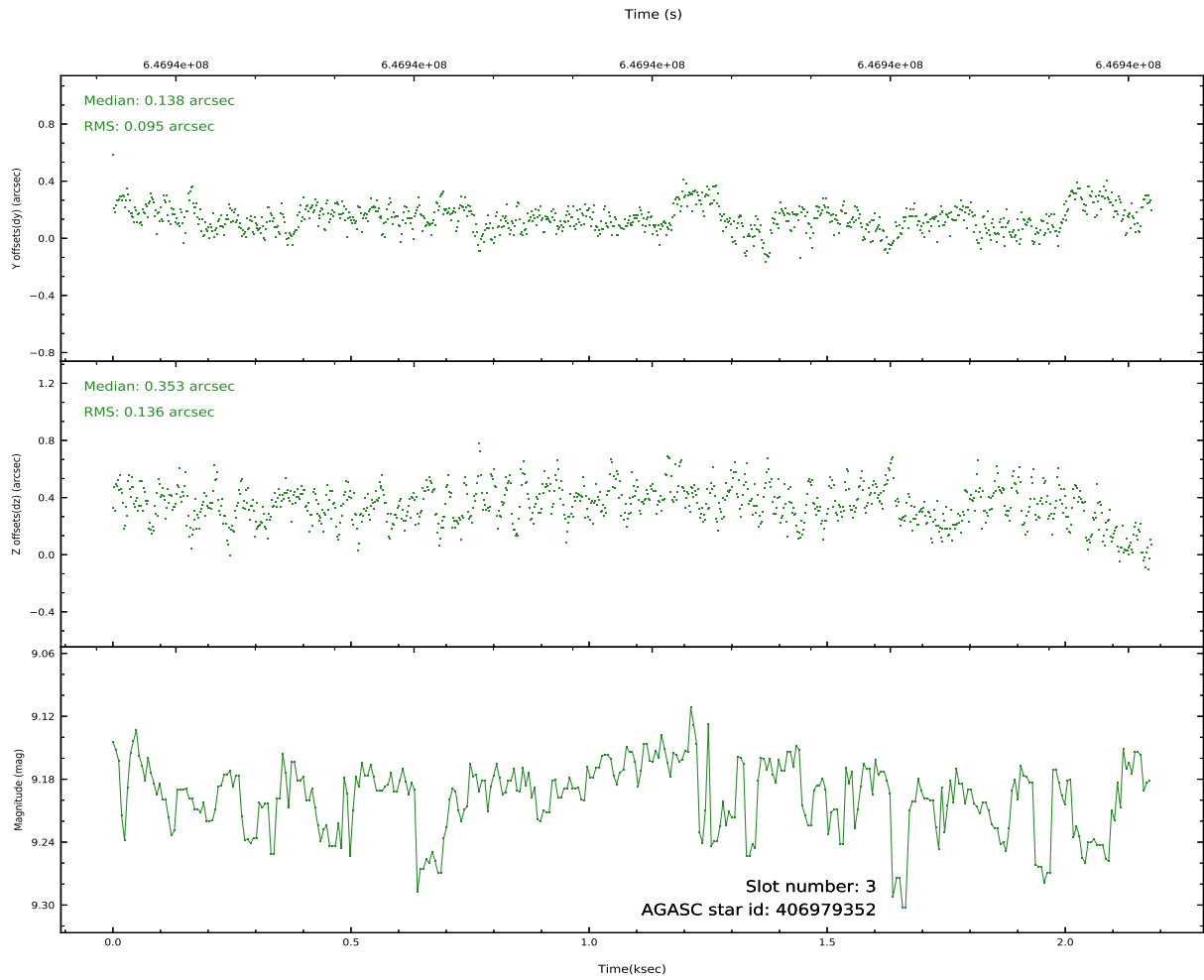
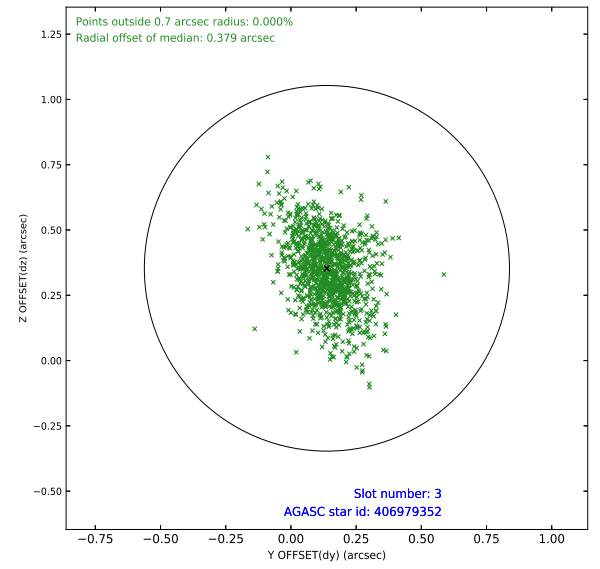
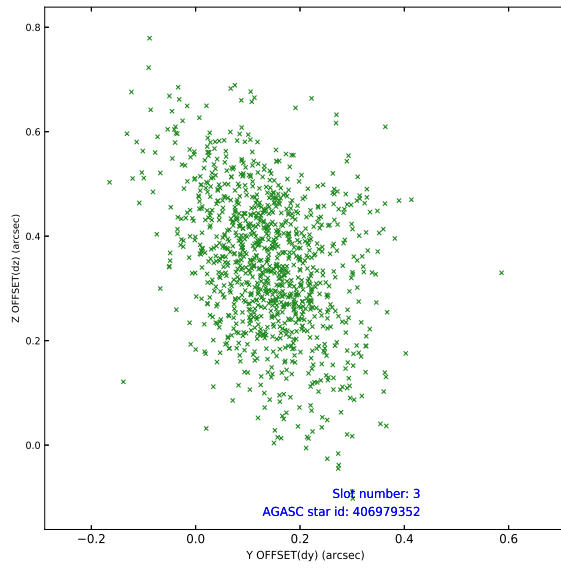
Slot Statistics

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	7.02	533	1.000	-0.077	0.040	0.007	0.012	0.000000	0.000000	-771.02	-1304
1	FID		HRC-I-2	7.05	533	1.000	0.332	-0.245	0.006	0.011	0.000000	0.000000	840.57	-1308
2	FID		HRC-I-3	7.11	533	1.000	-0.137	0.116	0.006	0.012	0.000000	0.000000	-1197.88	997
3	GUIDE	used	406979352	9.19	1062	1.000	0.138	0.353	0.170	0.313	279.968297	39.230258	-1480.62	-2062
4	GUIDE	used	406983600	8.87	1064	1.000	0.034	0.193	0.144	0.253	279.940957	39.020708	-1616.90	-1320
5	GUIDE	used	406989616	8.22	1064	1.000	-0.050	-0.112	0.134	0.241	279.202881	38.520843	-108.27	972
6	GUIDE	used	407510432	8.12	1064	1.000	0.233	-0.095	0.174	0.303	278.762778	39.530640	2042.46	-2205
7	GUIDE	used	406987272	6.90	1064	1.000	-0.367	-0.334	0.142	0.251	278.536588	38.437504	1627.86	1755

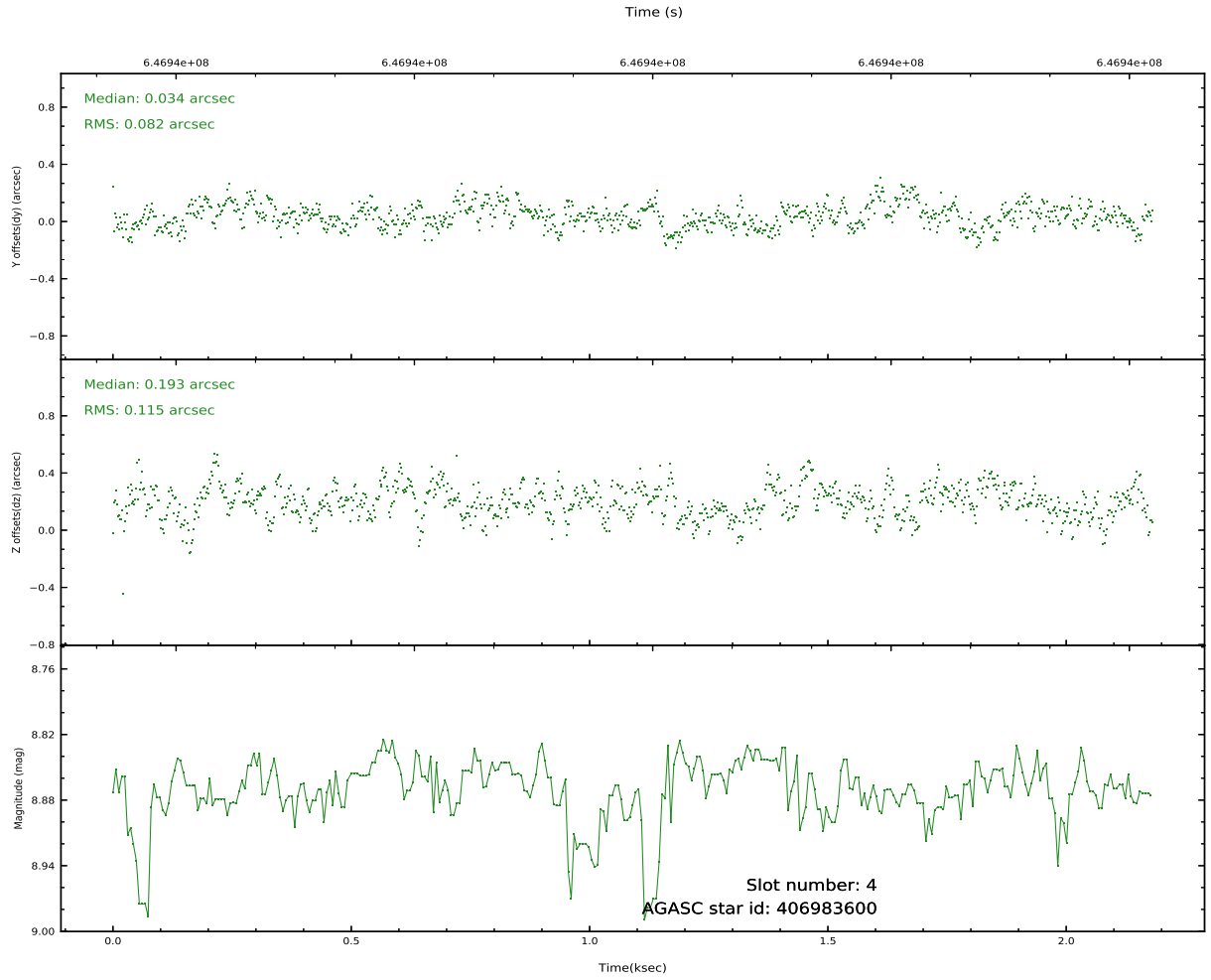
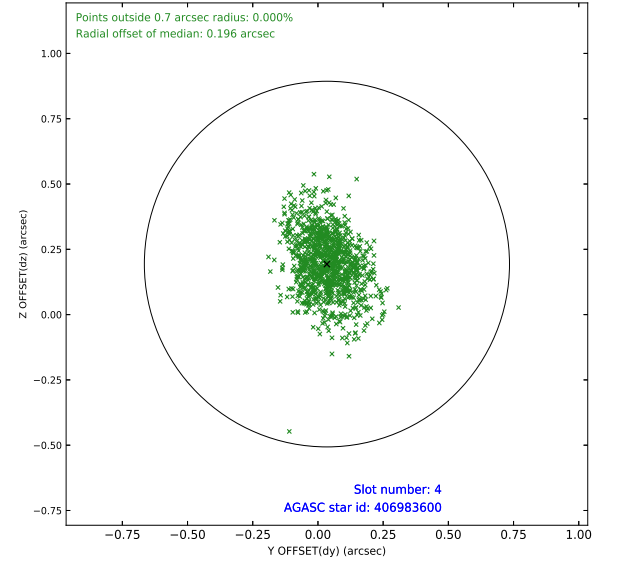
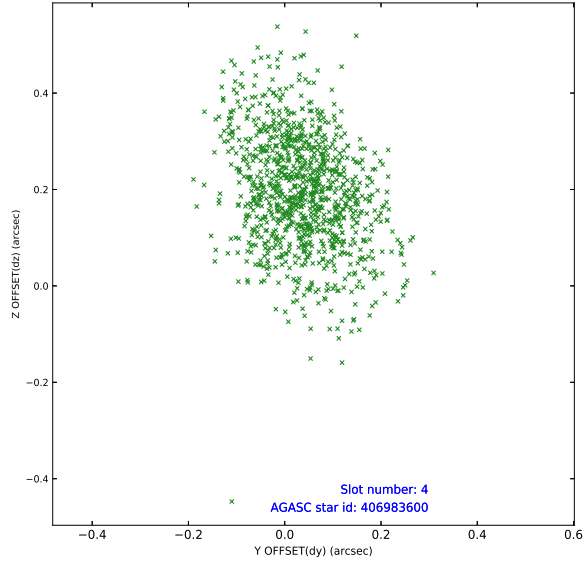


## 2.4 Star Slots

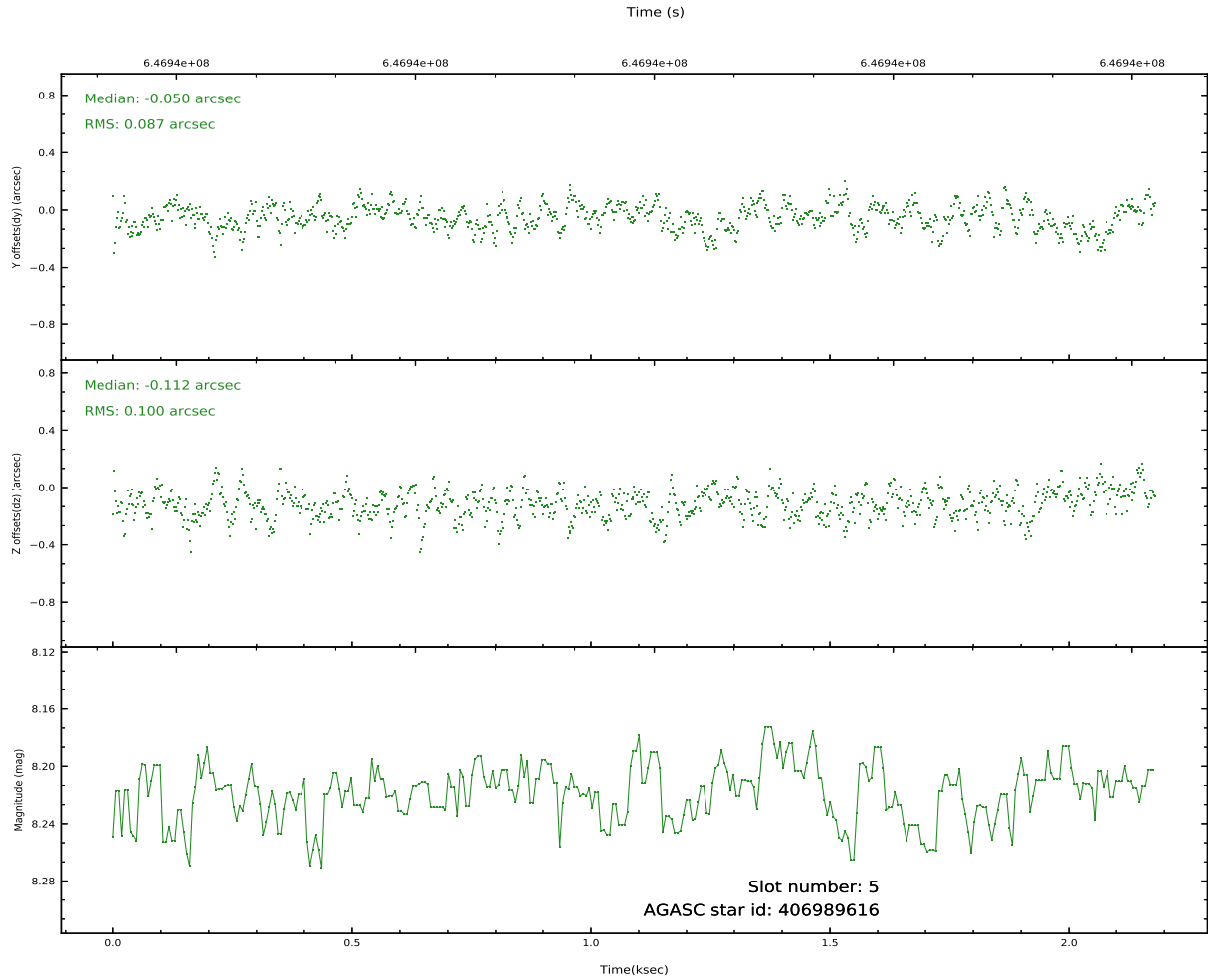
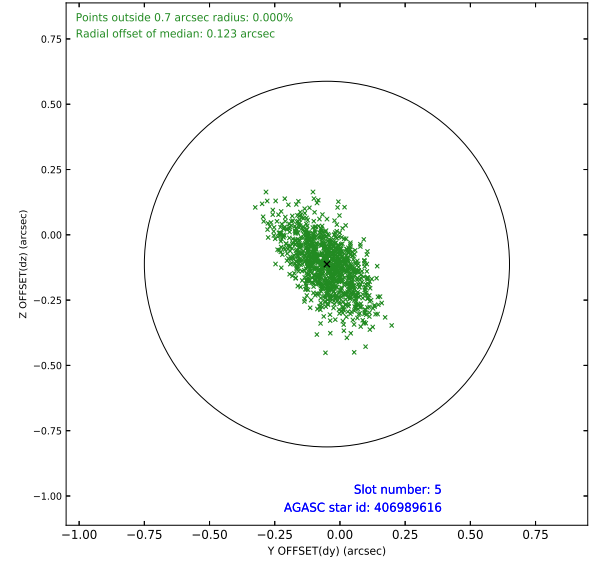
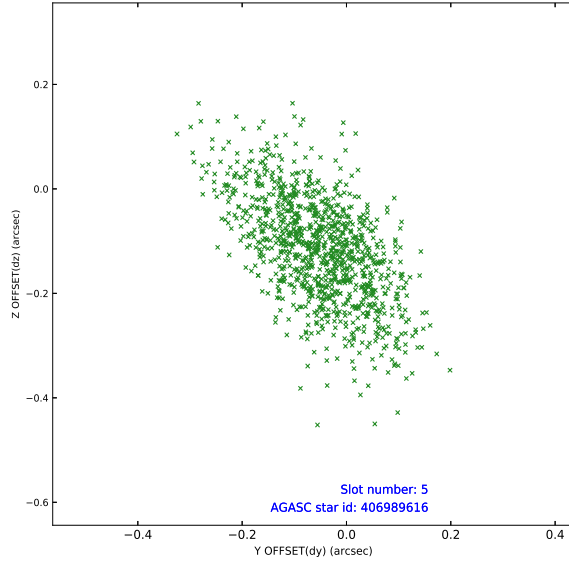
### 2.4.1 Slot 3



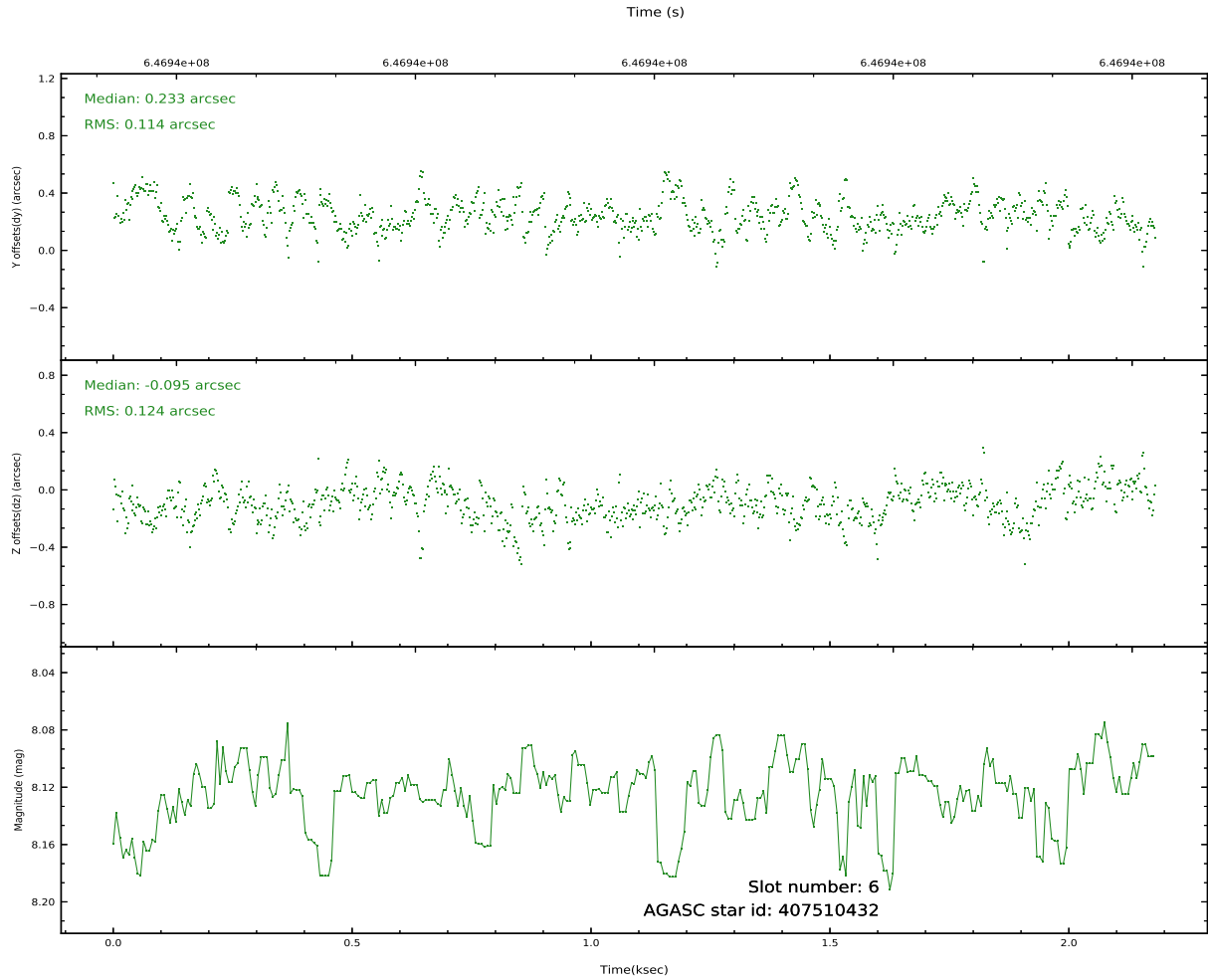
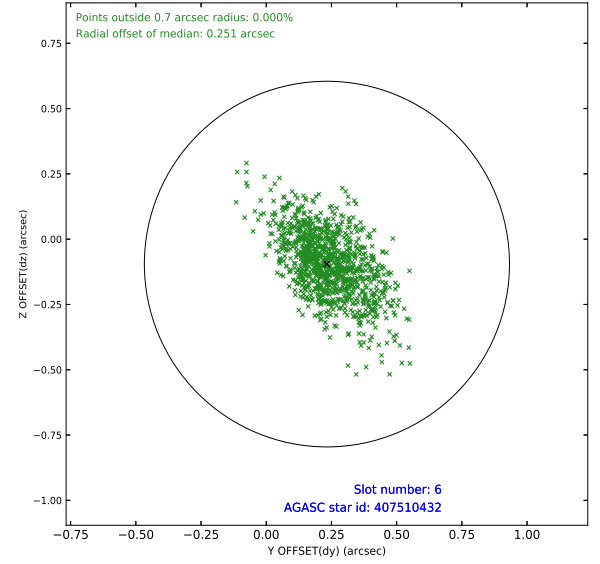
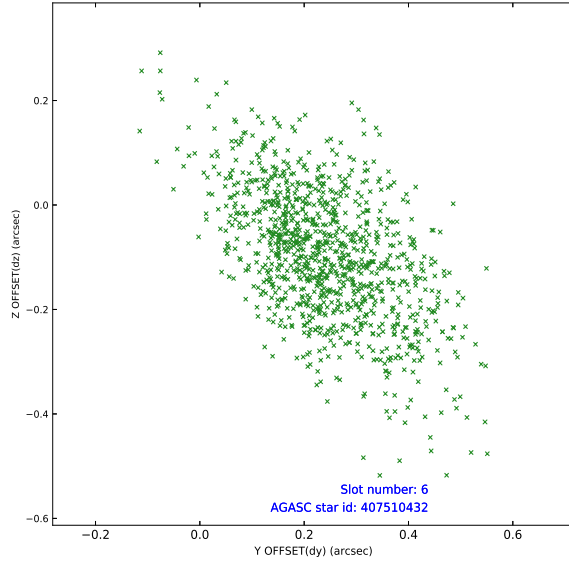
## 2.4.2 Slot 4



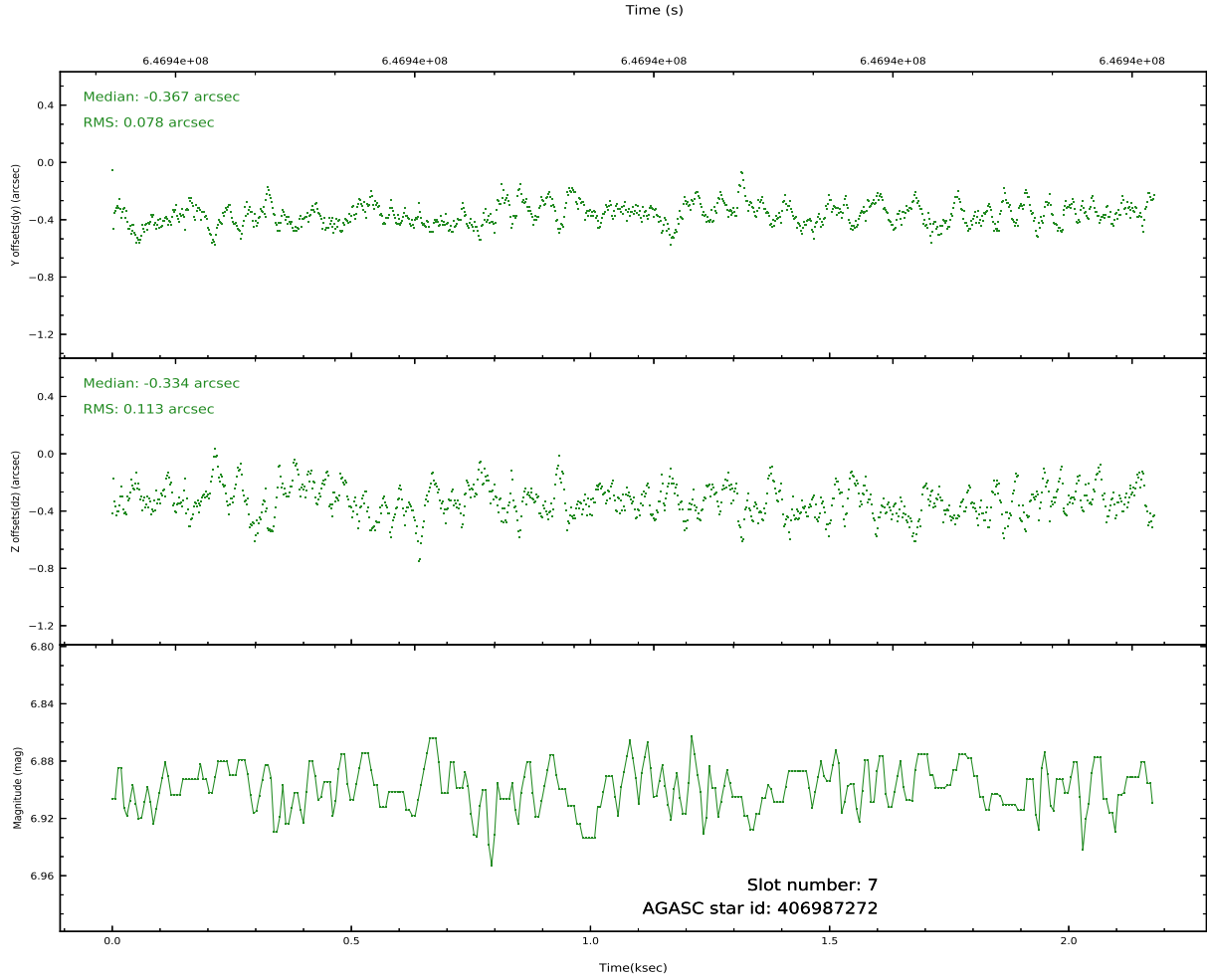
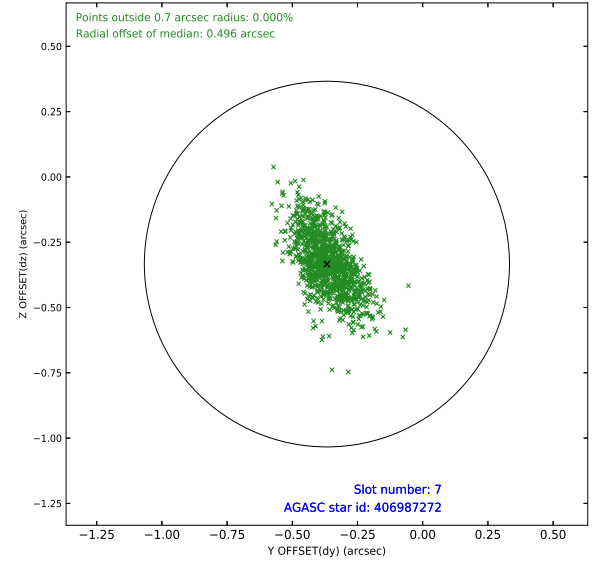
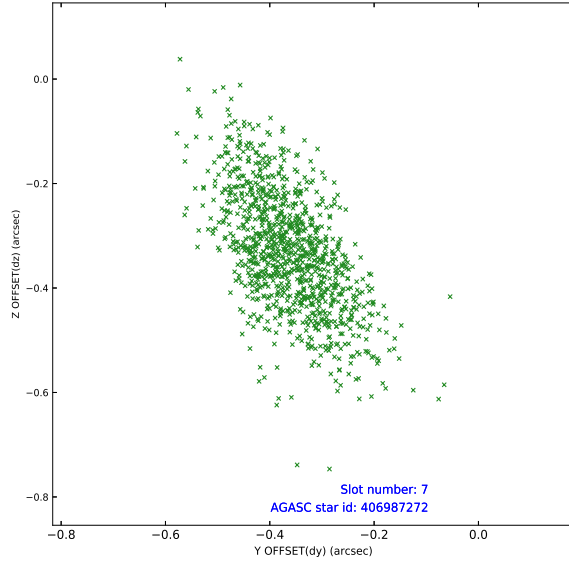
### 2.4.3 Slot 5



## 2.4.4 Slot 6

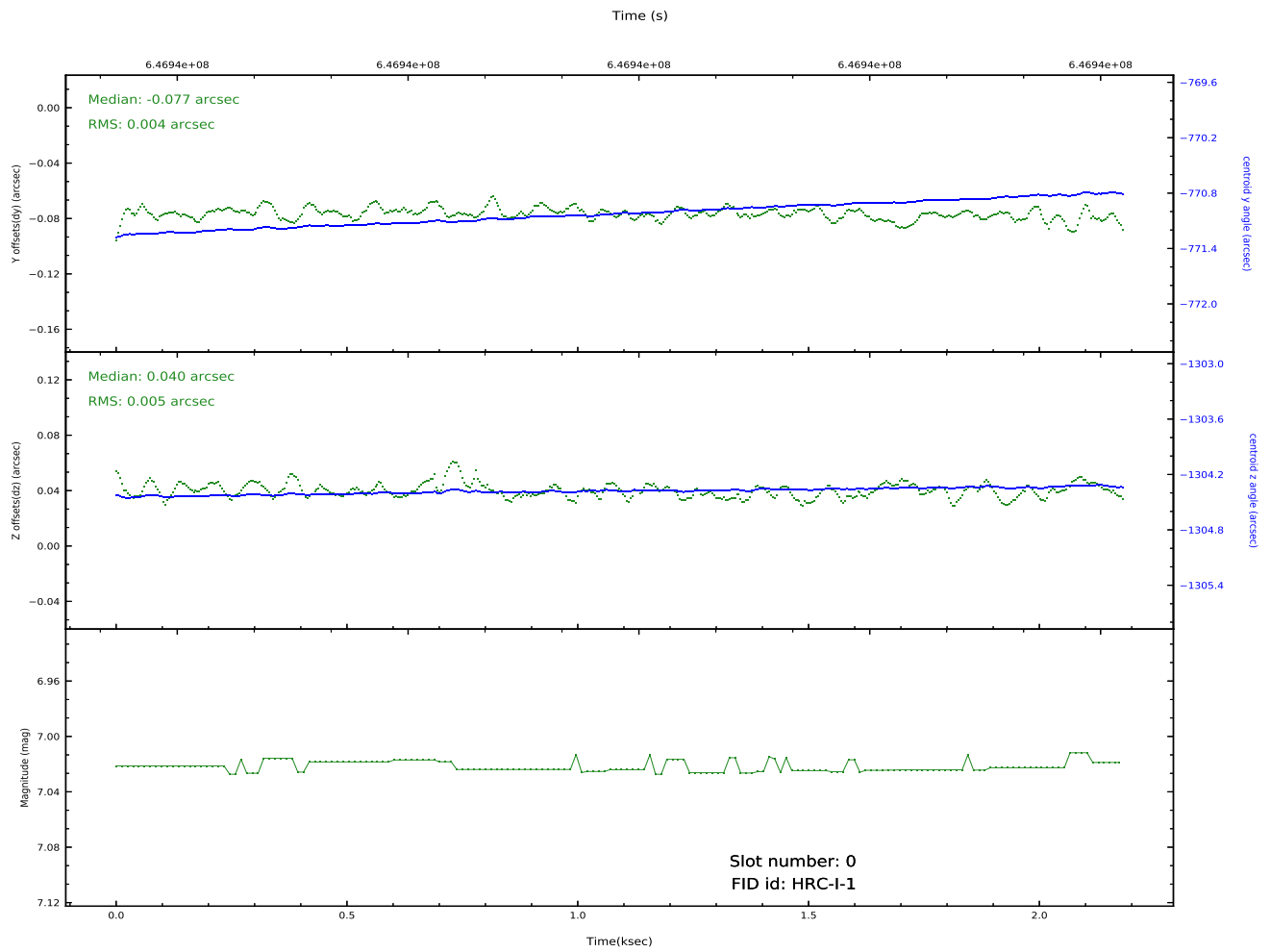
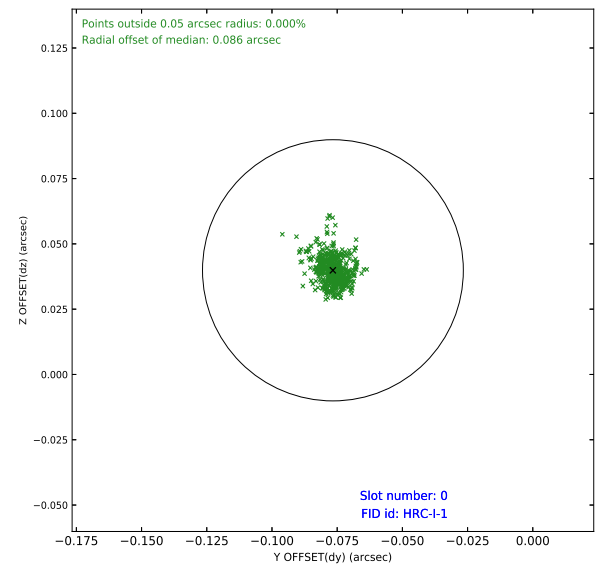
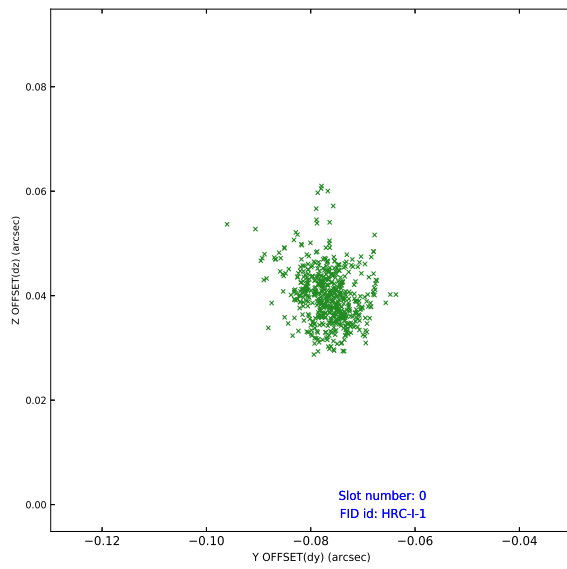


## 2.4.5 Slot 7

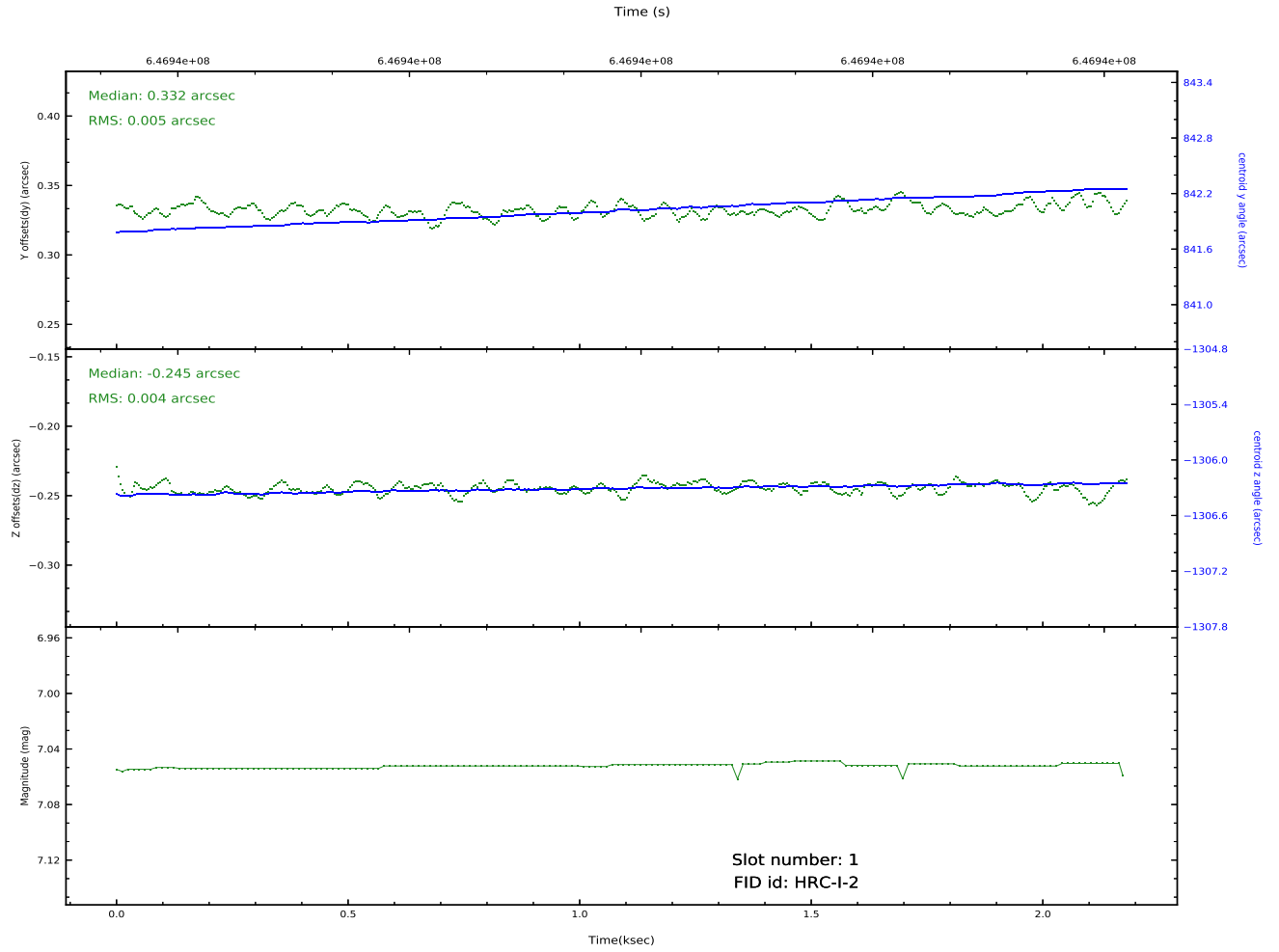
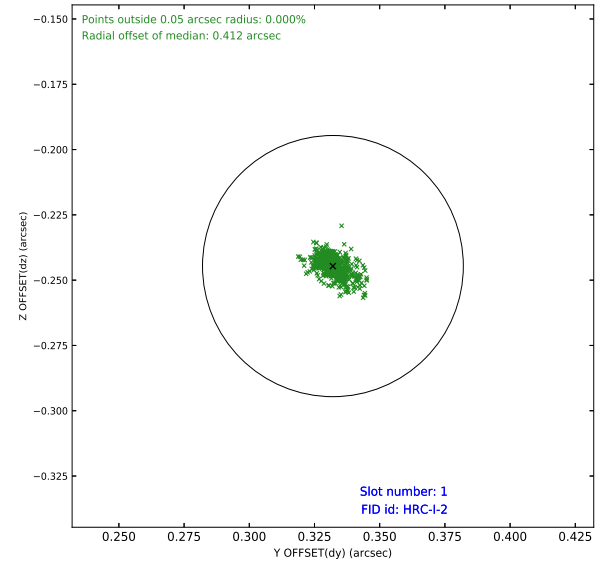
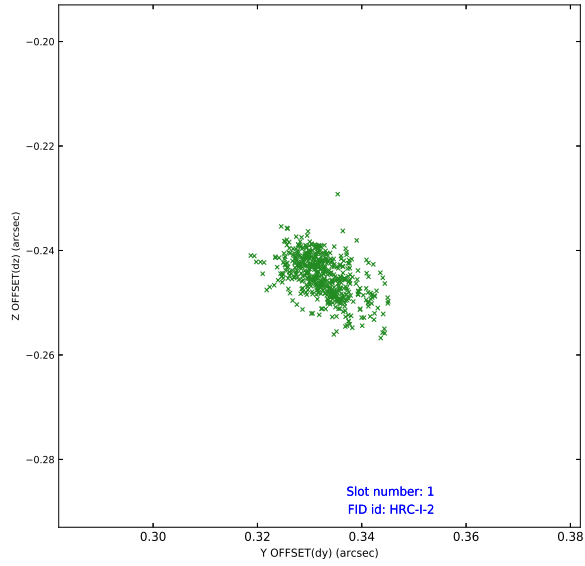


## 2.5 FID Slots

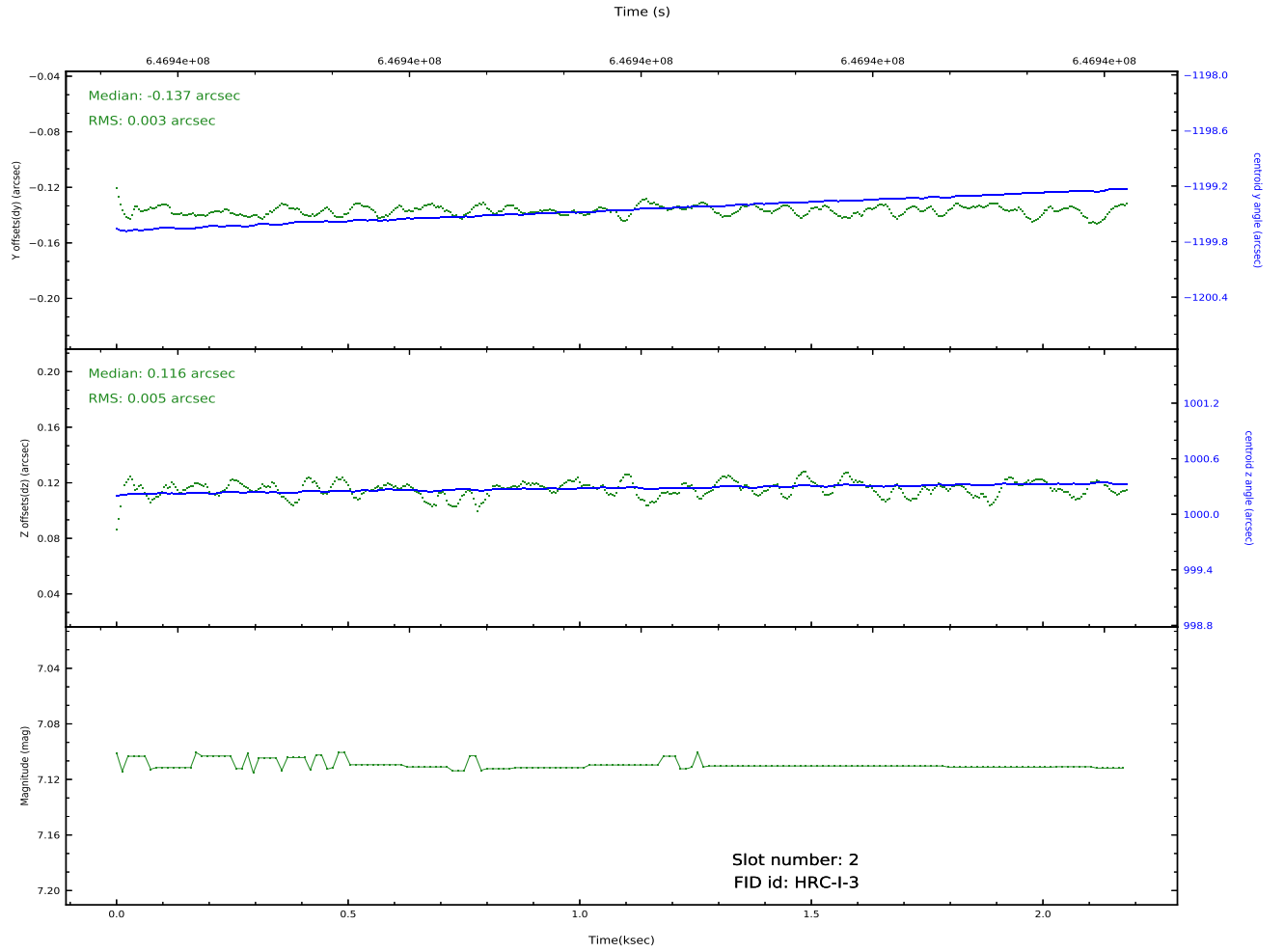
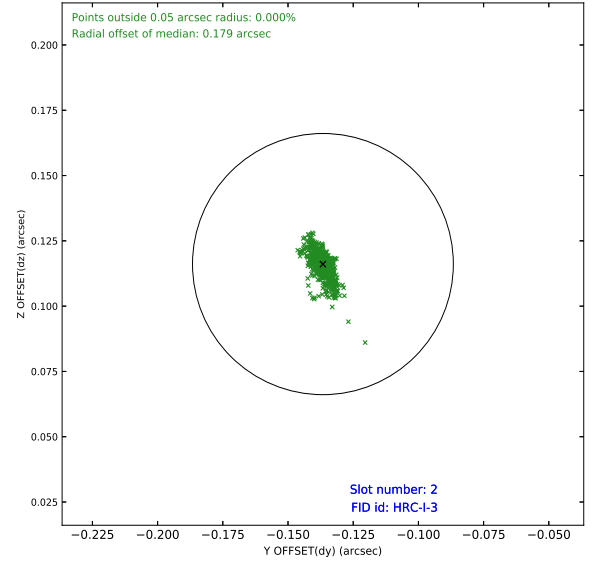
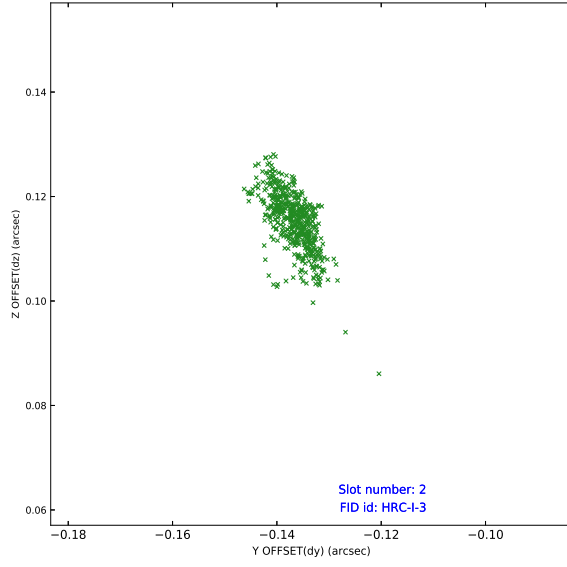
### 2.5.1 Slot 0



## 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)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.1709501285553

### A.2 Comments

Window preference met.