

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5053 - L2 Version 4  
Chandra X-Ray Center

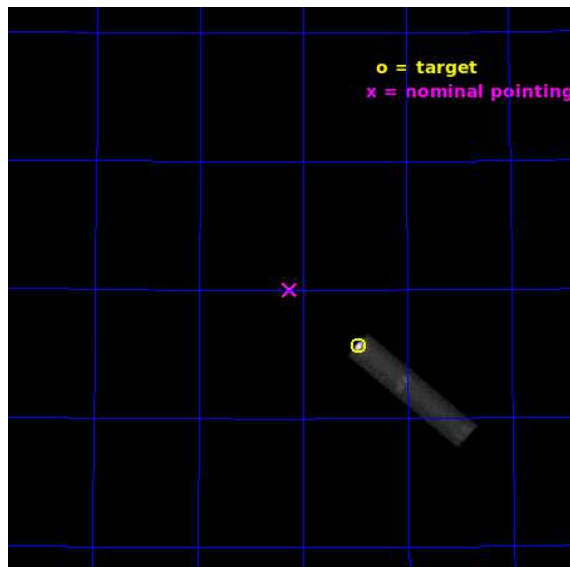
L2 Processing Date : Sep 22 2020

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# 1 Front

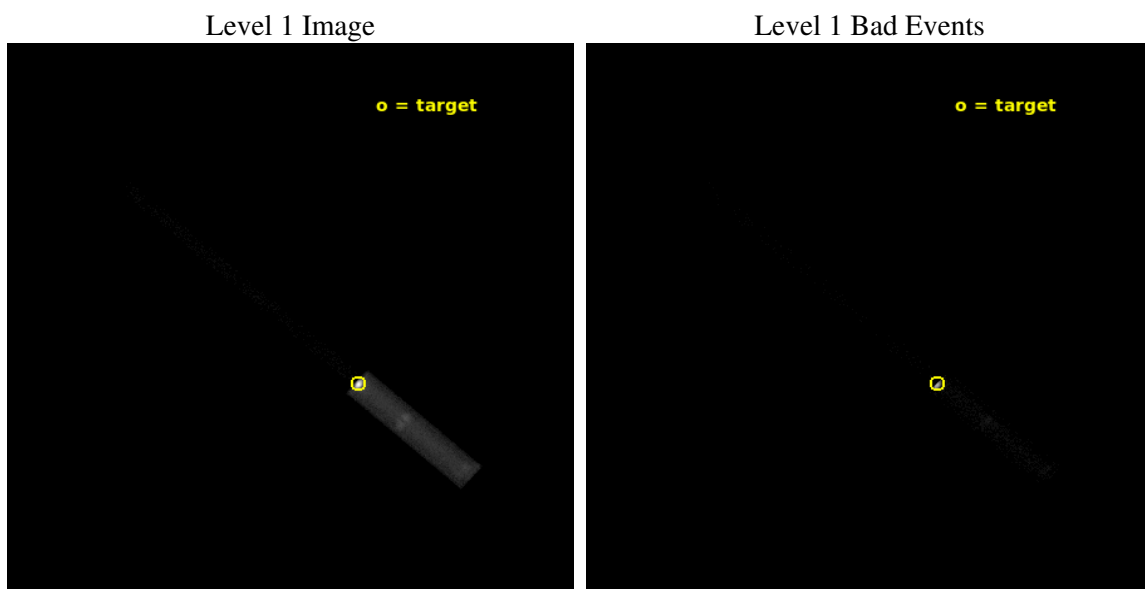
seq_num	290326	Sequence number
obs_id	5053	Observation id
title	AO5 Measurements of the optical/UV Transmission of the HRC and ACIS Filters.	Proposal title
observer	CXC Calibration	Principal investigator
object	Vega	Source name
ra_targ	279.235	Observer's specified target RA [deg]
dec_targ	38.783778	Observer's specified target Dec [deg]
ra_nom	279.56341841593	Nominal RA [deg]
dec_nom	39.001722101911	Nominal Dec [deg]
roll_nom	41.045994870959	Nominal Roll [deg]
revision	4	Processing version of data
ontime	2143.5313437283	[s]
livetime	764.39322987463	Ontime multiplied by DTCOR
l2events	327629	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	10.9.1	Processing system revision	ontime	2143.5313437283	[s]
caldbver	4.9.2	&#160	l1events	445684	Number of level 1 events
date	2020-09-23T02:29:03	Date and time of file creation			
revision	4	Processing version of data			

### 2.1.3 Events

Level 1 Events

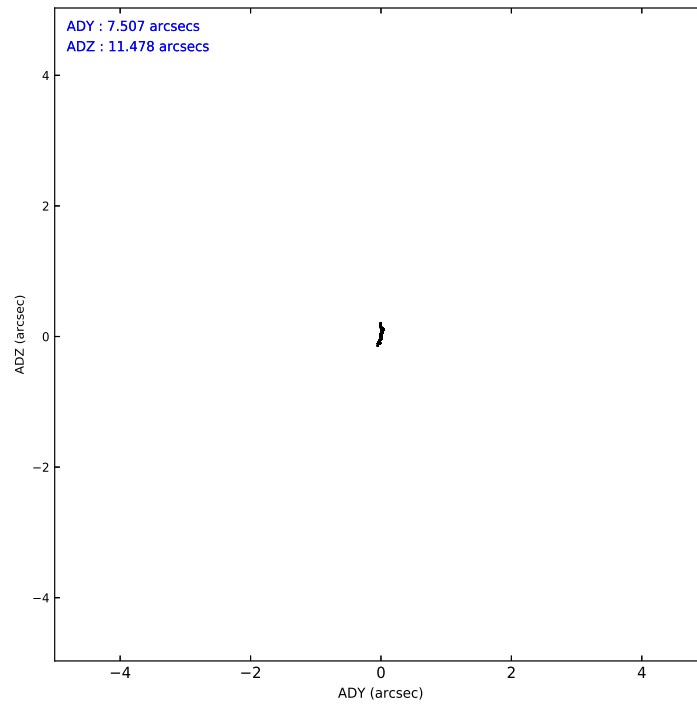
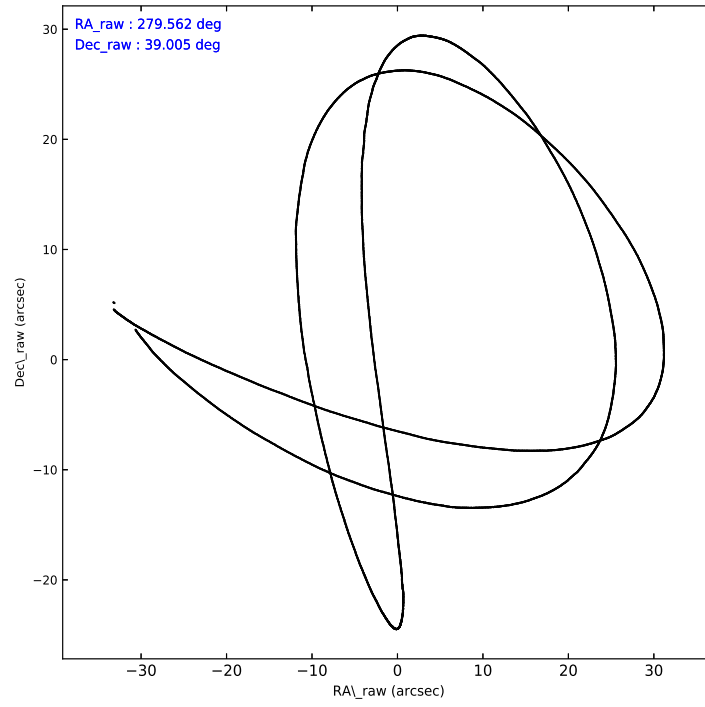
	segment 1	segment 2	segment 3
level 1 events	424411	19988	1285
rejected events	29167	19988	1285
rejected %	6%	100%	100%

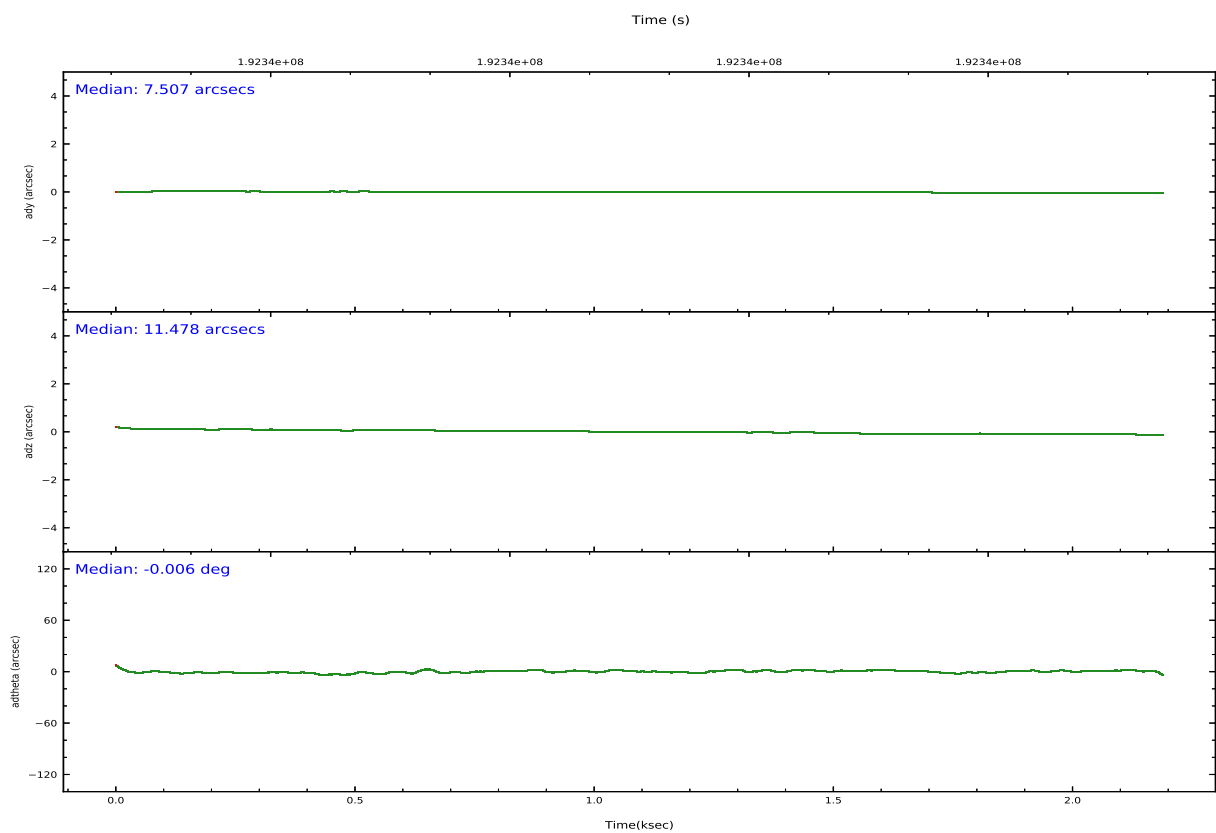
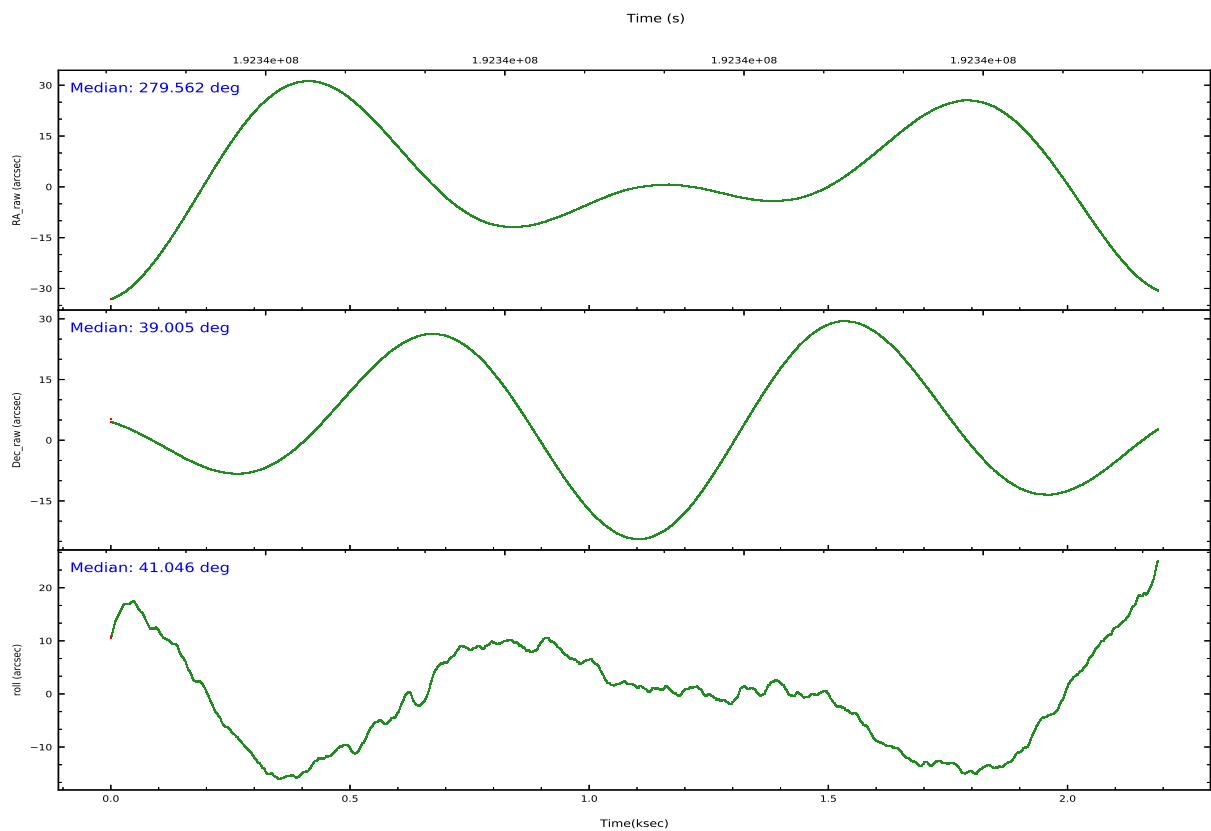
## 2.2 Compared Parameters

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	279.552278	279.56341841593
[deg] Pointing Dec	38.978308	39.001722101911
[deg] Pointing Roll	40.981572	41.045994870959
[s] Window start time (MET)	191980864.184000	191980864.184000
[s] Window stop time (MET)	197078464.184000	197078464.184000
[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)	192340366.184000	192339990.38041
Observation start date	2004-02-05T03:51:42	2004-02-05T03:46:30
[s] Observation end time (MET)	192342366.184000	192342500.60552
Observation end date	2004-02-05T04:25:02	2004-02-05T04:28:20

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

## 2.3 Aspect





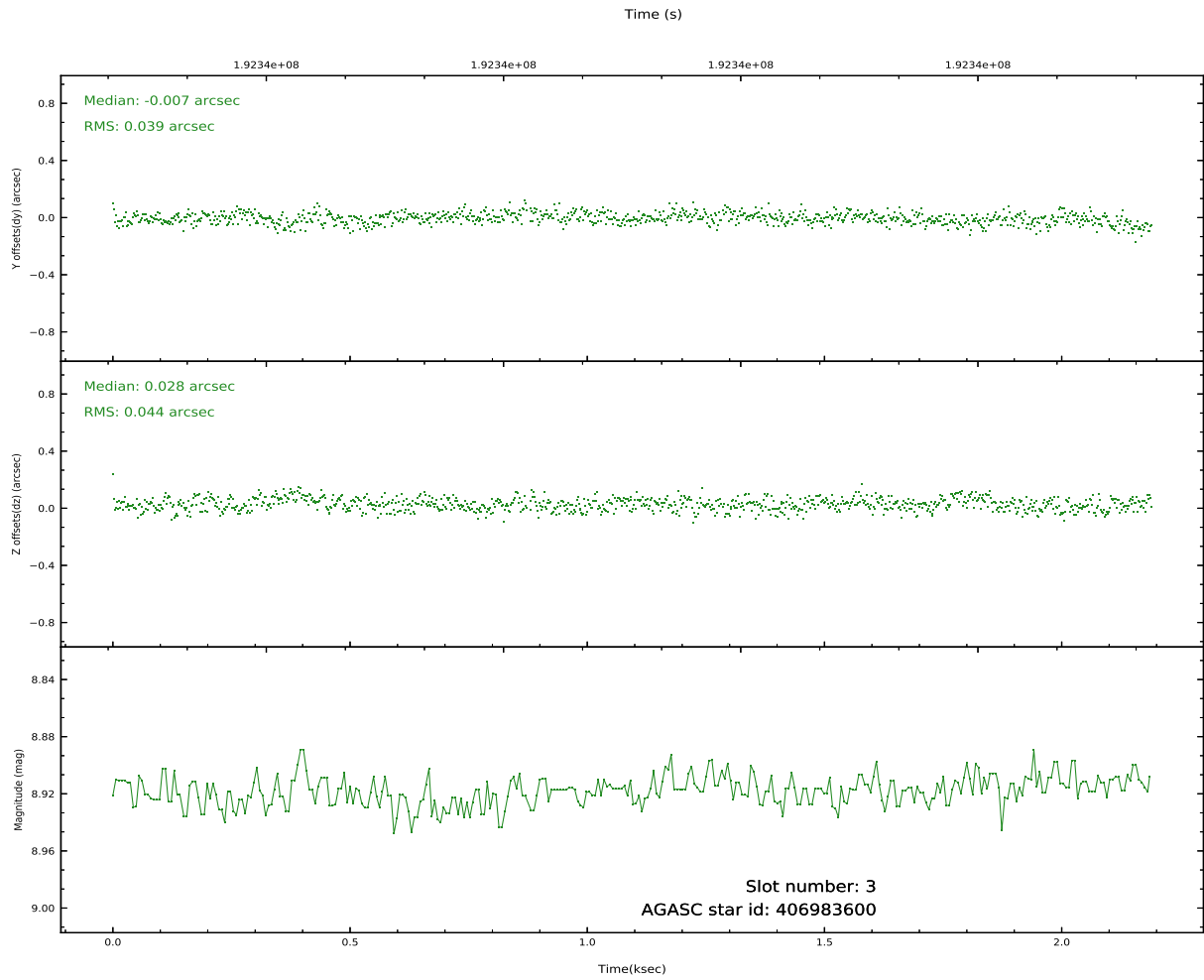
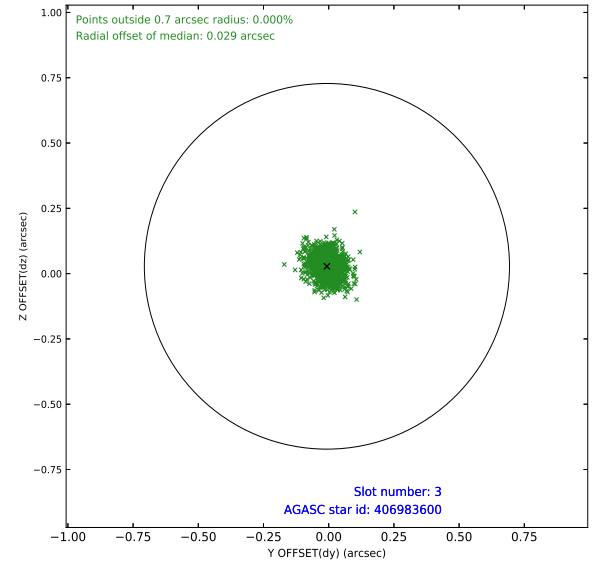
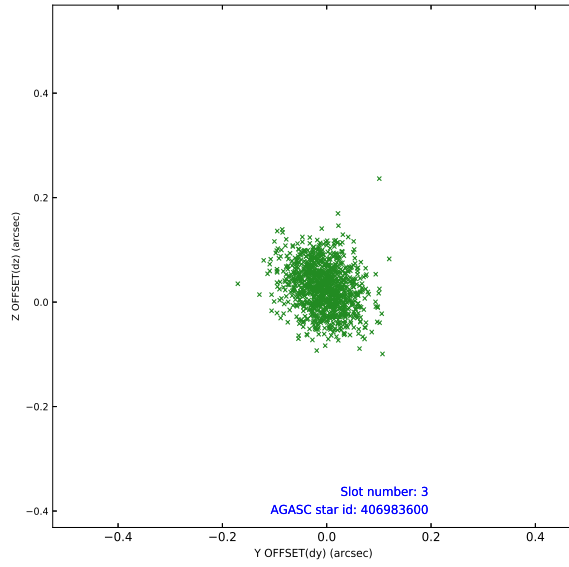
Slot Statistics

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	7.02	535	1.000	0.049	-0.164	0.007	0.012	0.000000	0.000000	-1161.71	-460
1	FID		HRC-S-3	7.04	535	1.000	0.090	-0.067	0.008	0.014	0.000000	0.000000	-1166.61	568
2	FID		HRC-S-4	6.99	535	1.000	0.250	-0.065	0.005	0.010	0.000000	0.000000	1234.52	573
3	GUIDE	used	406983600	8.92	1064	1.000	-0.007	0.028	0.062	0.102	279.940957	39.020708	922.54	-595
4	GUIDE	used	406985120	7.42	1069	1.000	-0.053	-0.046	0.071	0.112	278.839732	38.894839	-1698.17	1088
5	GUIDE	used	406989616	8.23	1068	1.000	-0.006	0.037	0.058	0.093	279.202881	38.520843	-1823.15	-594
6	GUIDE	used	407521232	8.64	1068	1.000	0.072	-0.017	0.063	0.100	279.628883	39.431715	1229.83	1093
7	GUIDE	used	407521584	8.94	1068	1.000	-0.008	-0.002	0.074	0.117	279.676096	39.795417	2189.10	1998

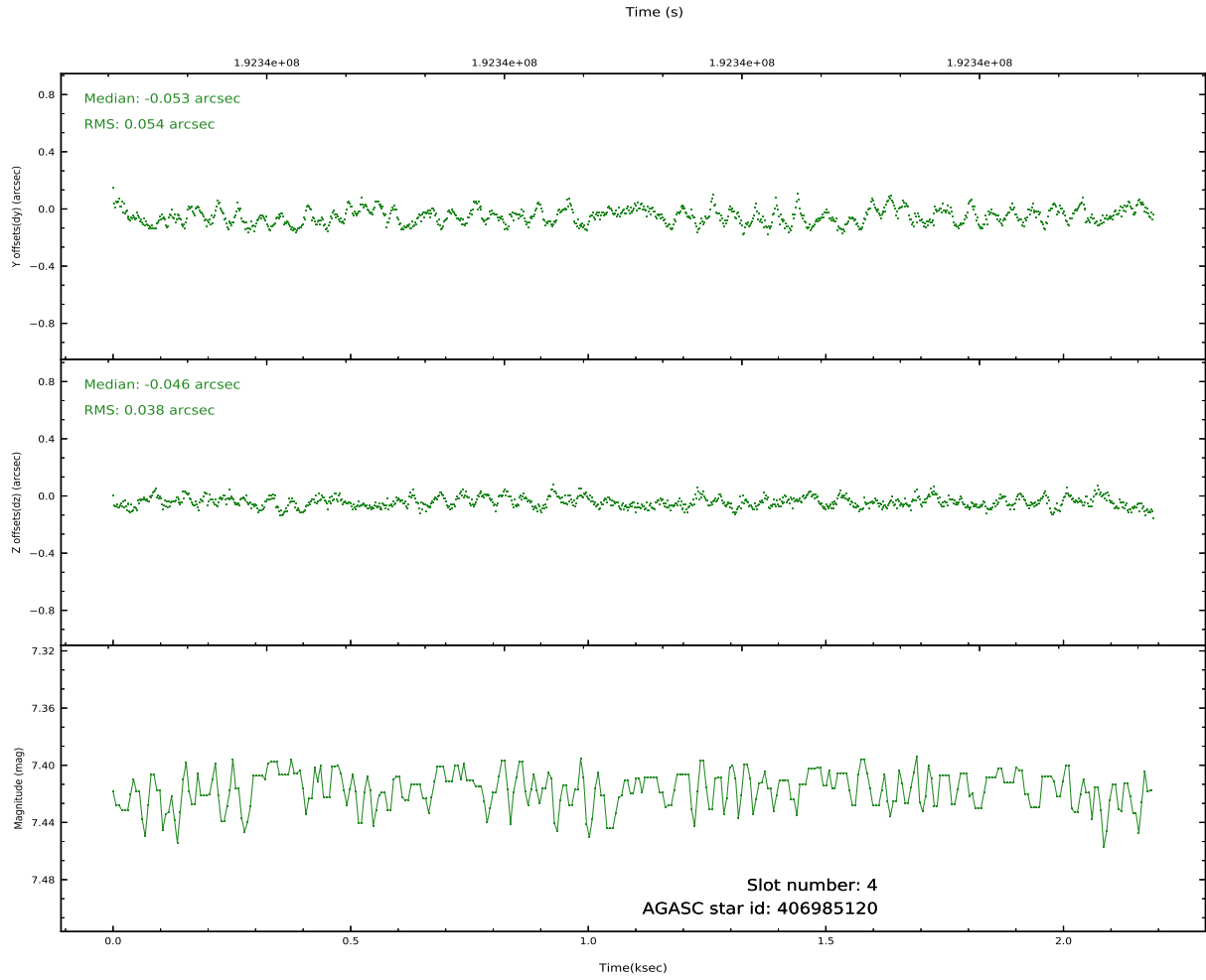
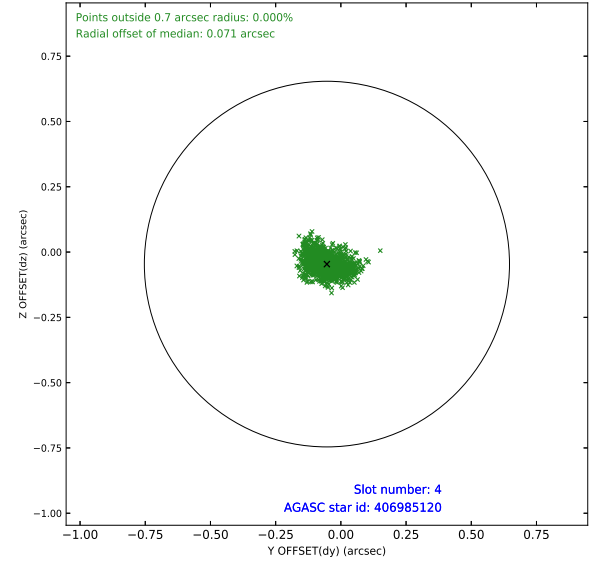
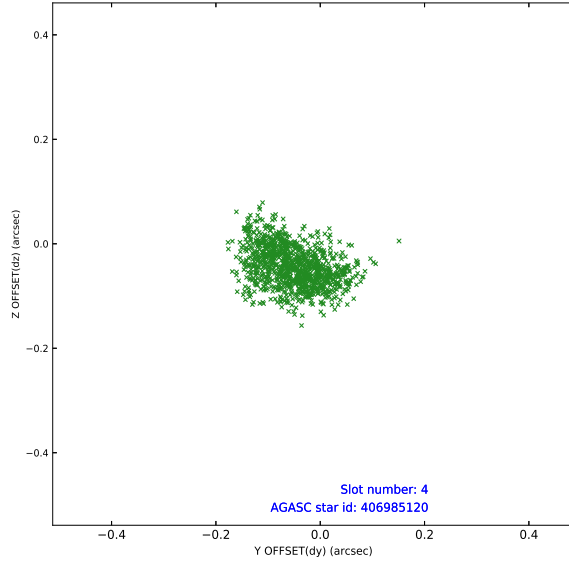


## 2.4 Star Slots

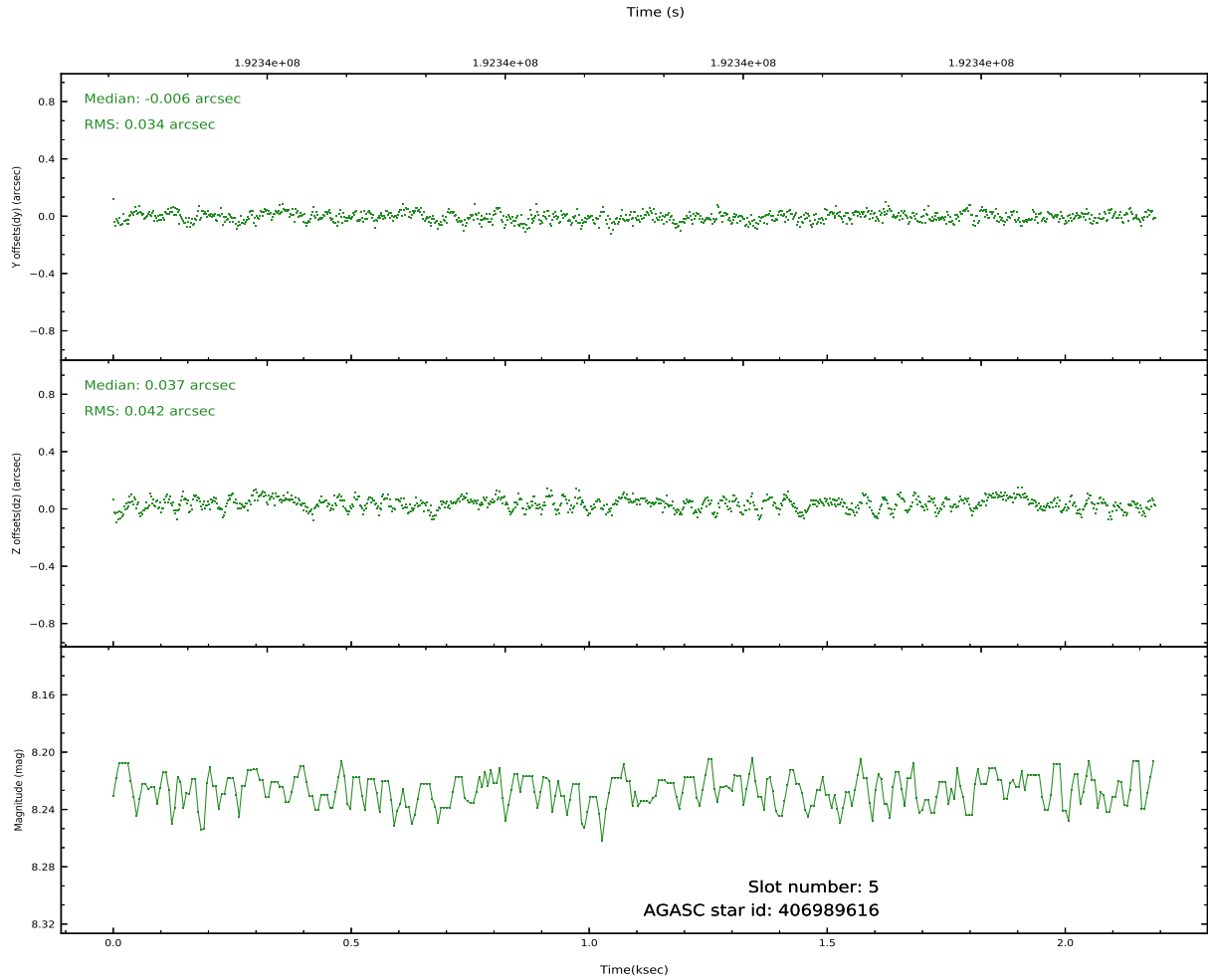
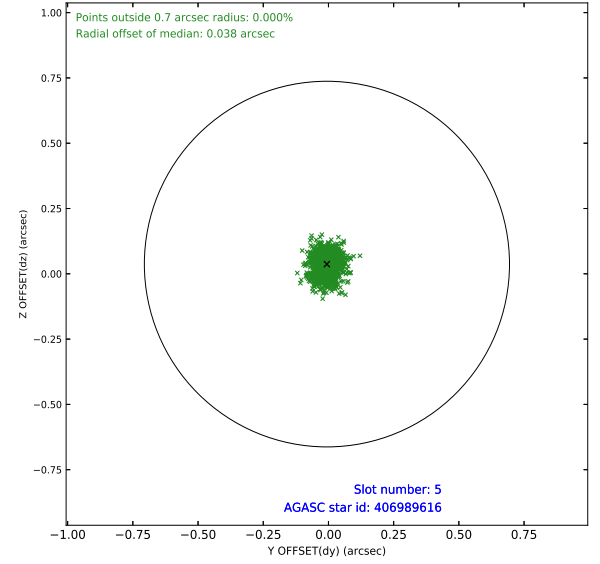
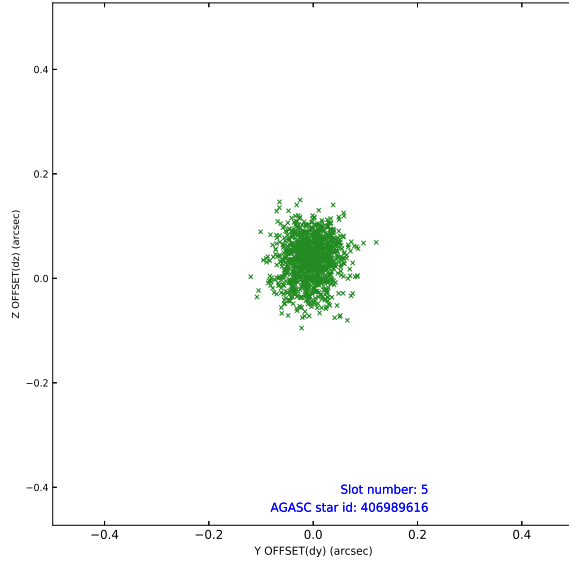
### 2.4.1 Slot 3



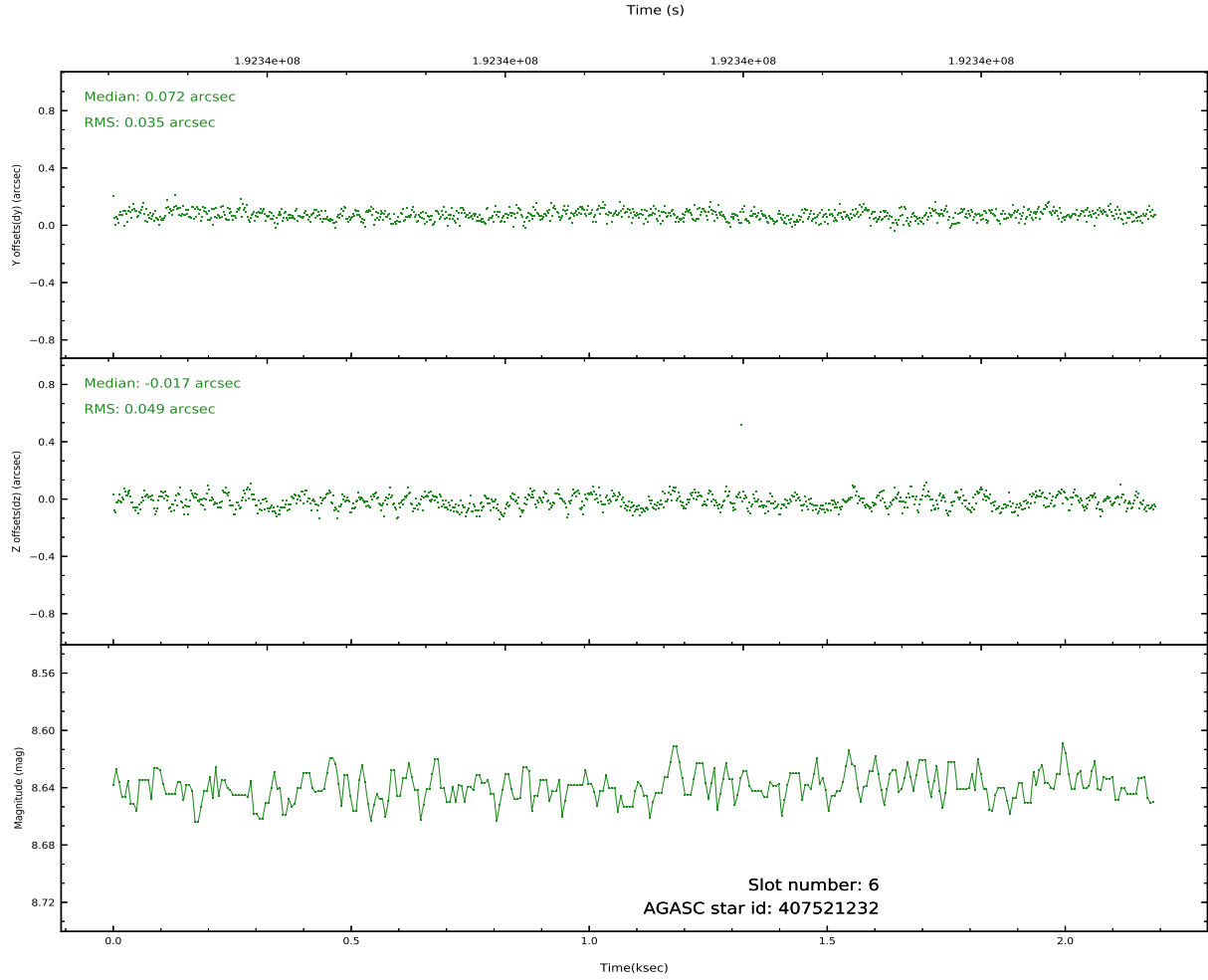
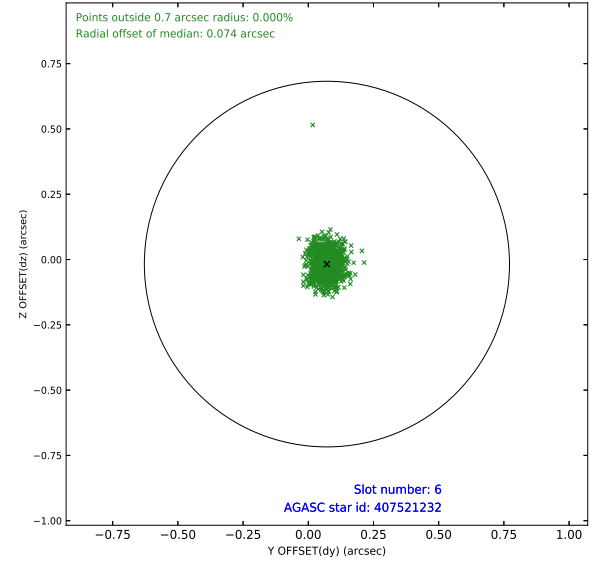
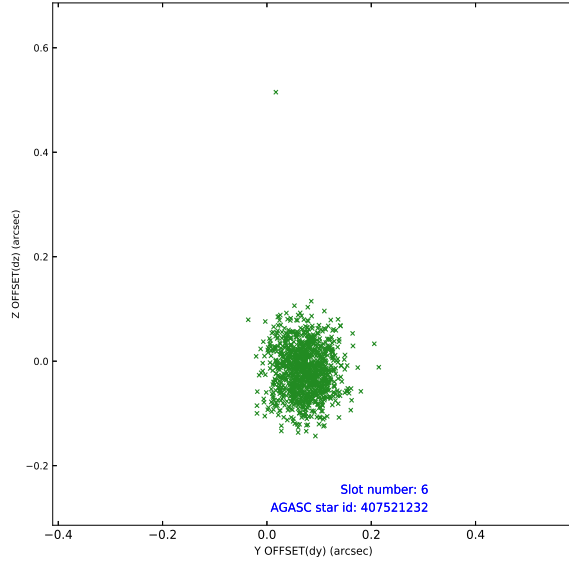
## 2.4.2 Slot 4



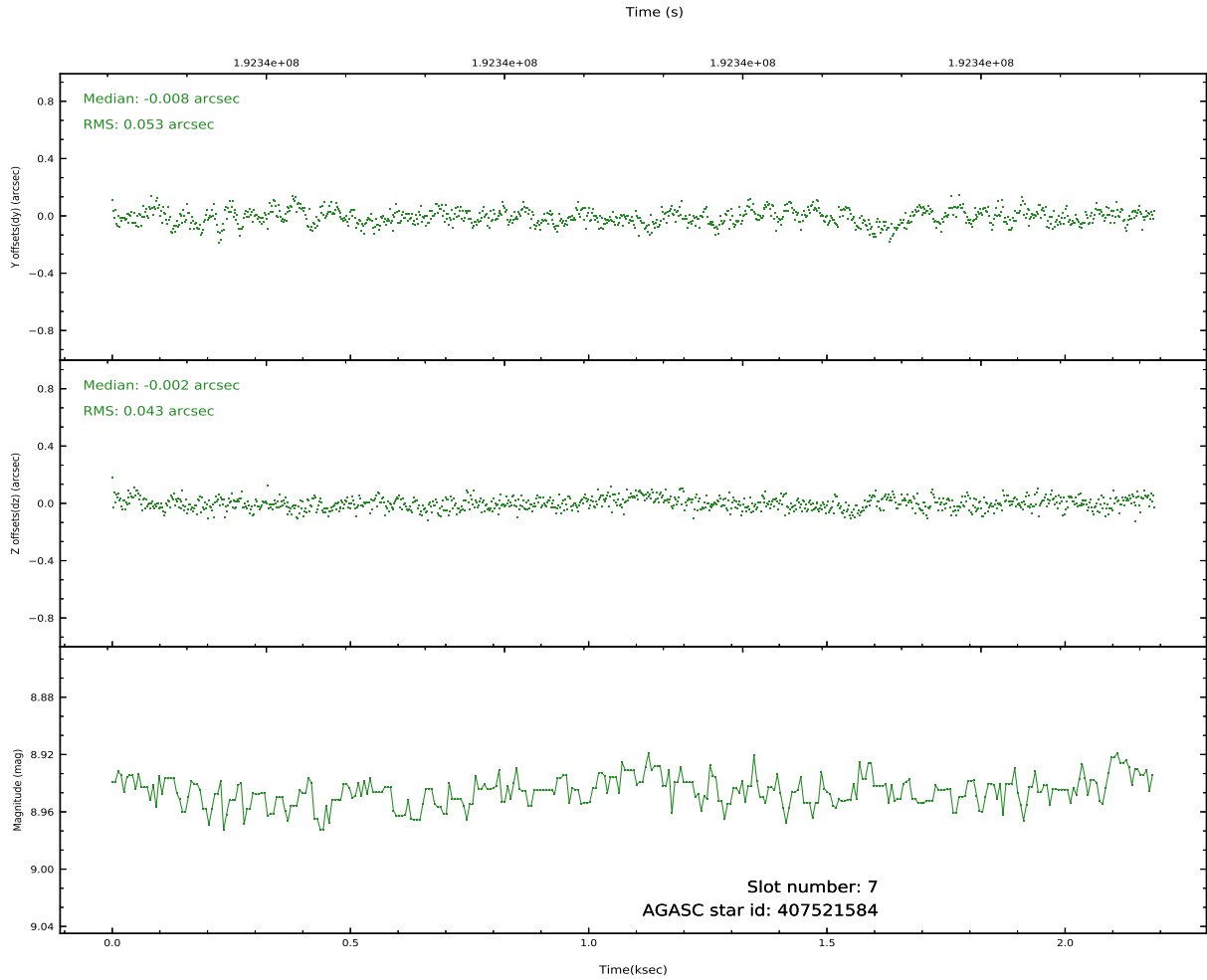
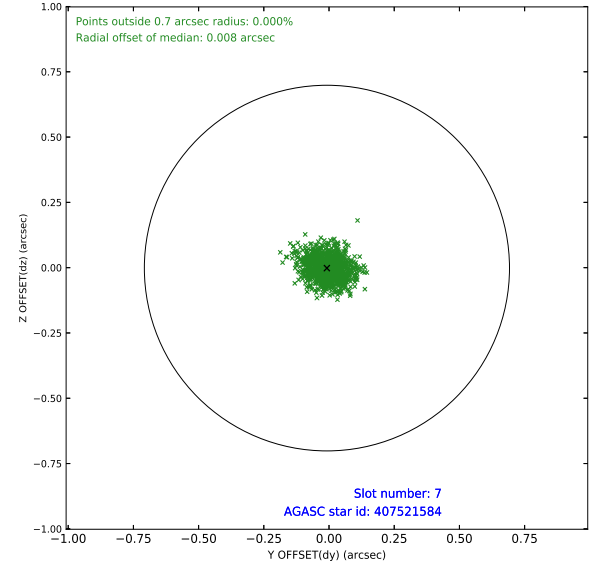
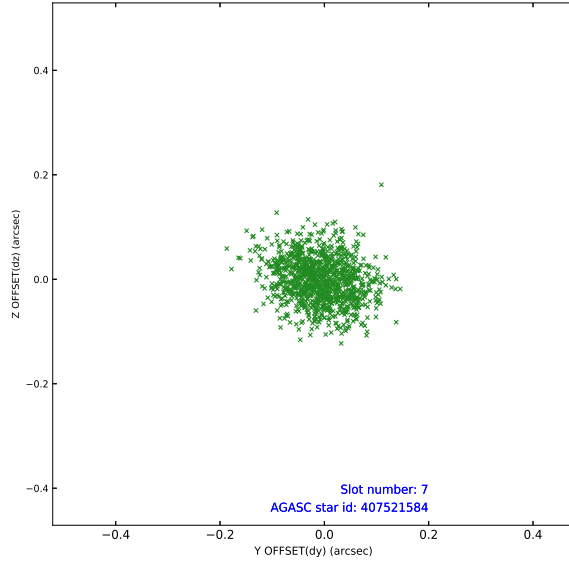
### 2.4.3 Slot 5



## 2.4.4 Slot 6

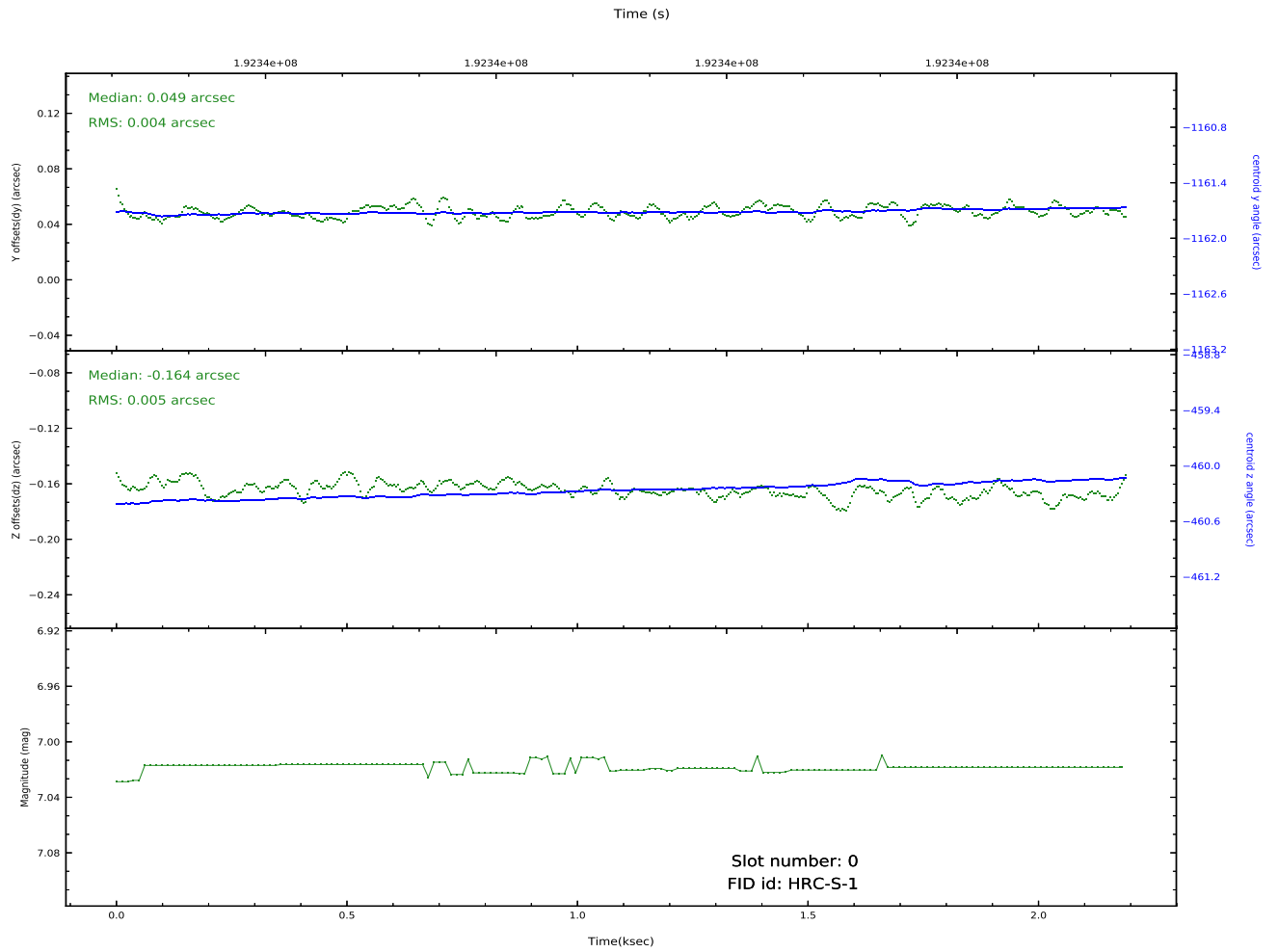
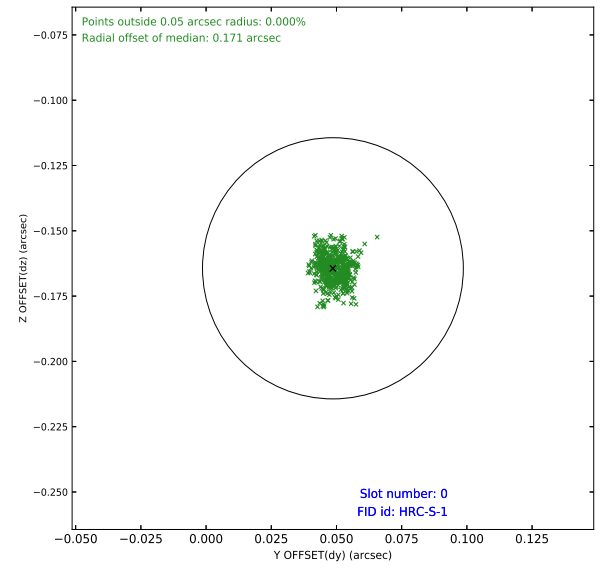
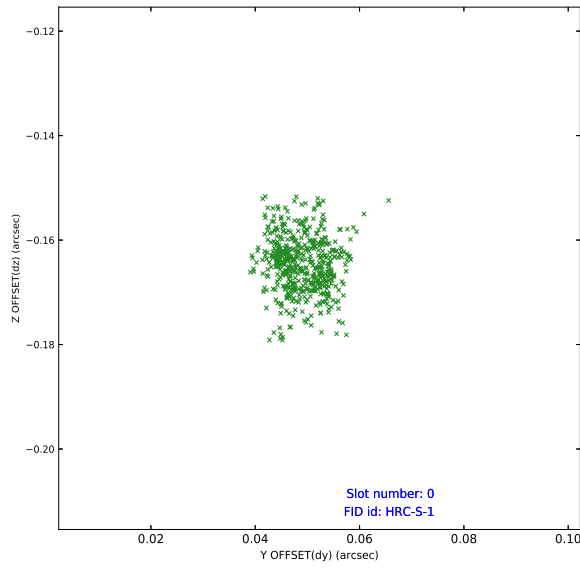


## 2.4.5 Slot 7

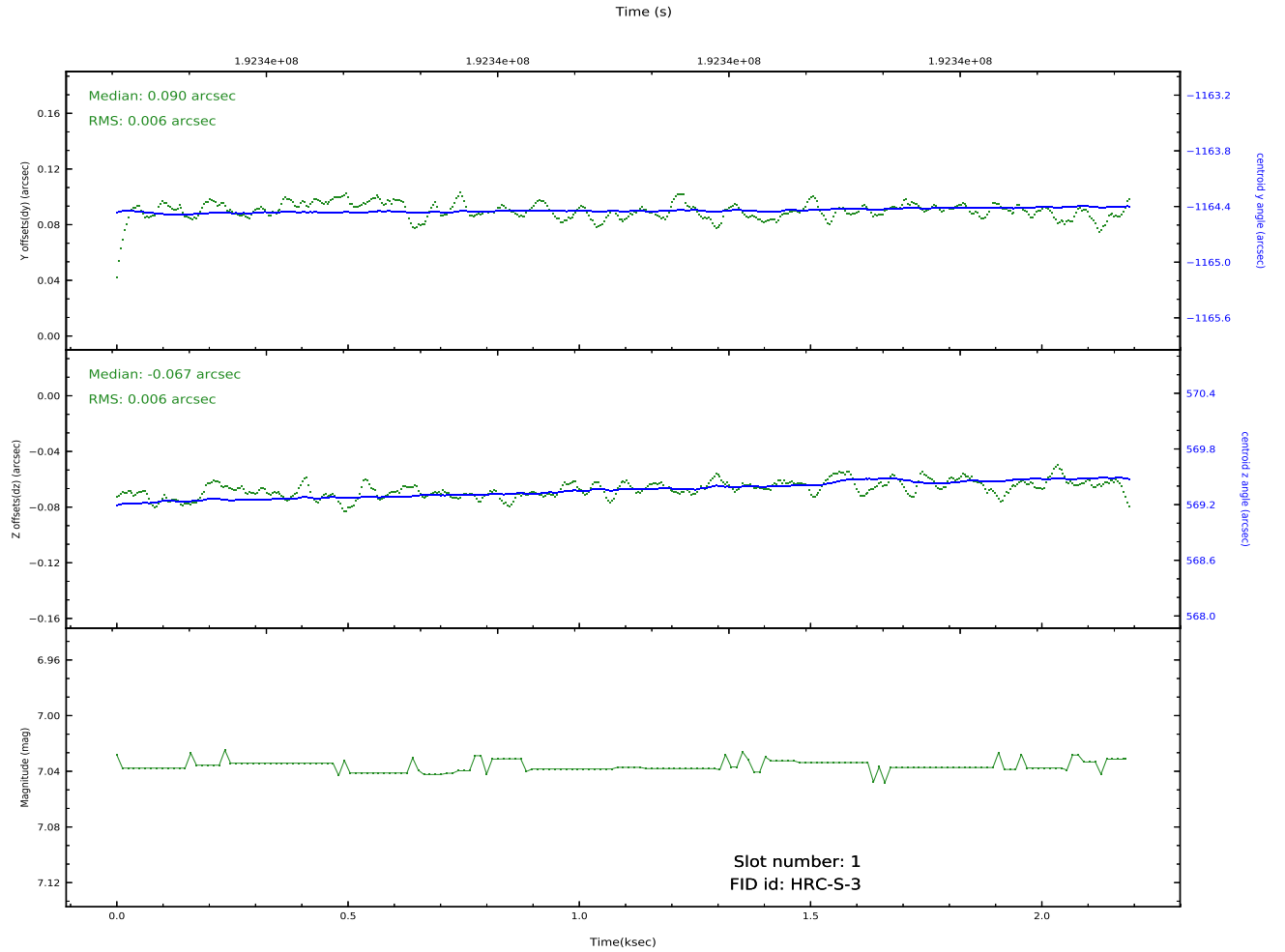
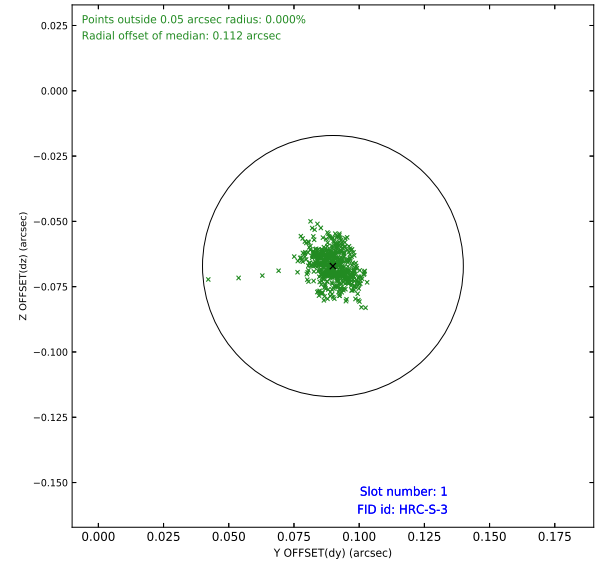
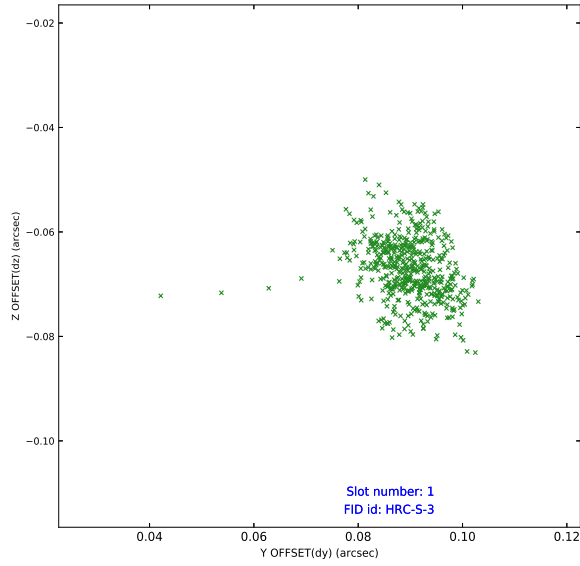


## 2.5 FID Slots

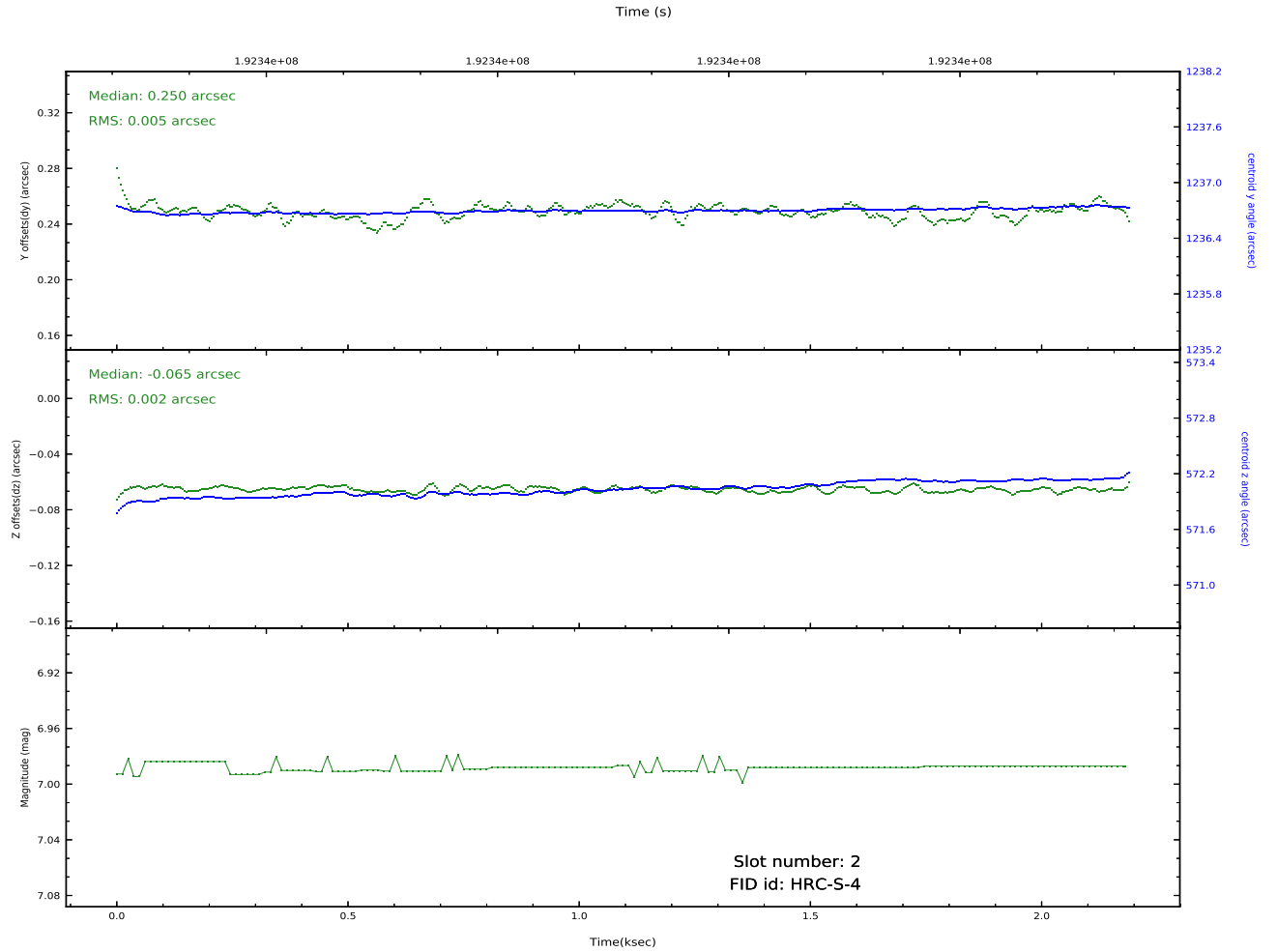
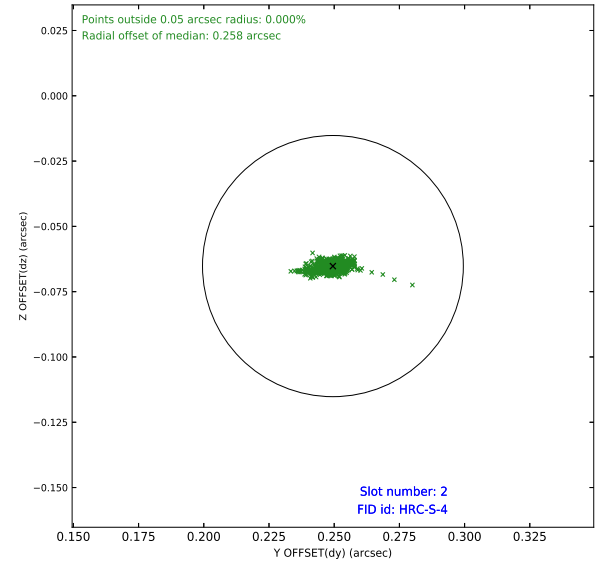
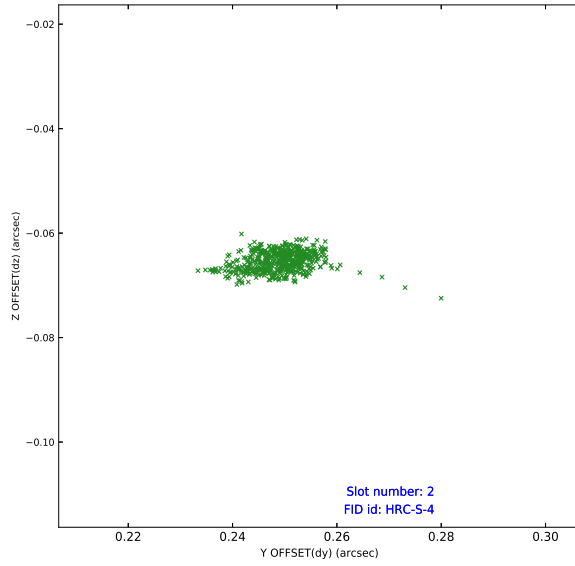
### 2.5.1 Slot 0



## 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	2.143

### A.2 Comments

Window constraint met.