

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5051 - L2 Version 4  
Chandra X-Ray Center

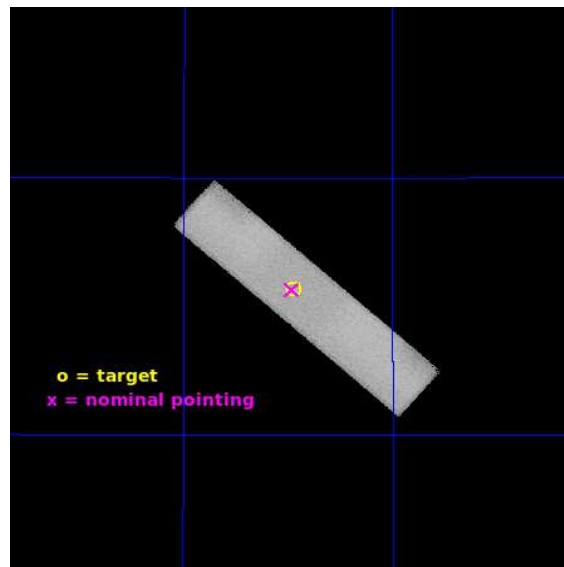
L2 Processing Date : Sep 22 2020

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# 1 Front

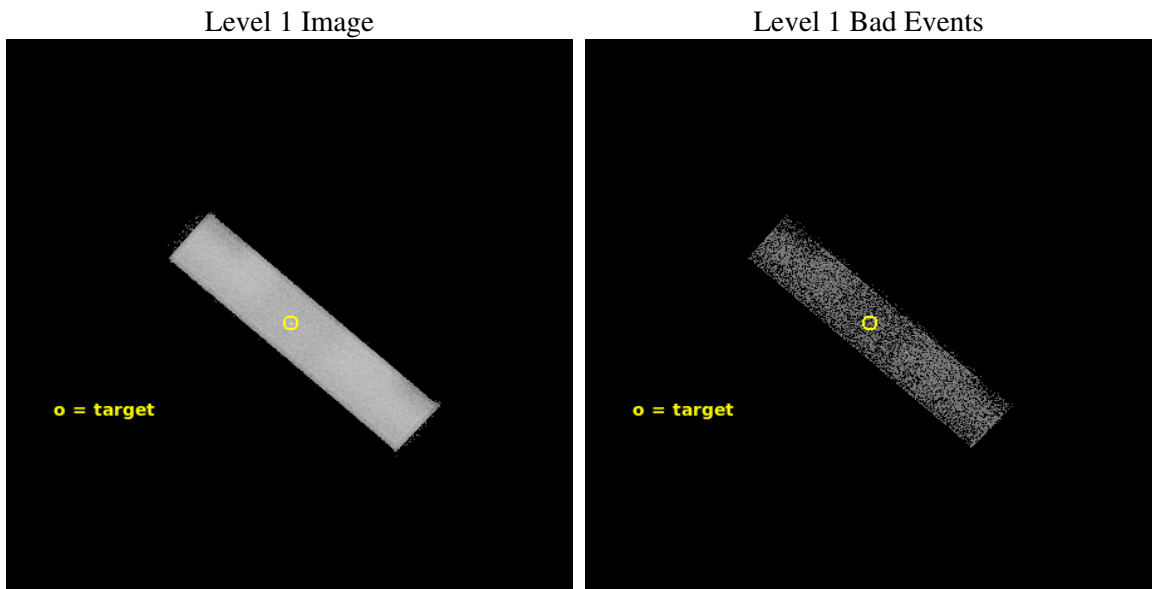
seq_num	290324	Sequence number
obs_id	5051	Observation id
title	AO5 Measurements of the optical/UV Transmission of the HRC and ACIS Filters.	Proposal title
observer	CXC Calibration	Principal investigator
object	Vega	Source name
ra_targ	279.235	Observer's specified target RA [deg]
dec_targ	38.783778	Observer's specified target Dec [deg]
ra_nom	279.2402776476	Nominal RA [deg]
dec_nom	38.782928414637	Nominal Dec [deg]
roll_nom	41.335205867891	Nominal Roll [deg]
revision	4	Processing version of data
ontime	1842.1813305616	[s]
livetime	1769.1445116487	Ontime multiplied by DTCOR
l2events	220474	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	1842.1813305616	[s]
caldbver	4.9.2	&#160	l1events	268295	Number of level 1 events
date	2020-09-23T02:27:23	Date and time of file creation			
revision	4	Processing version of data			

### 2.1.3 Events

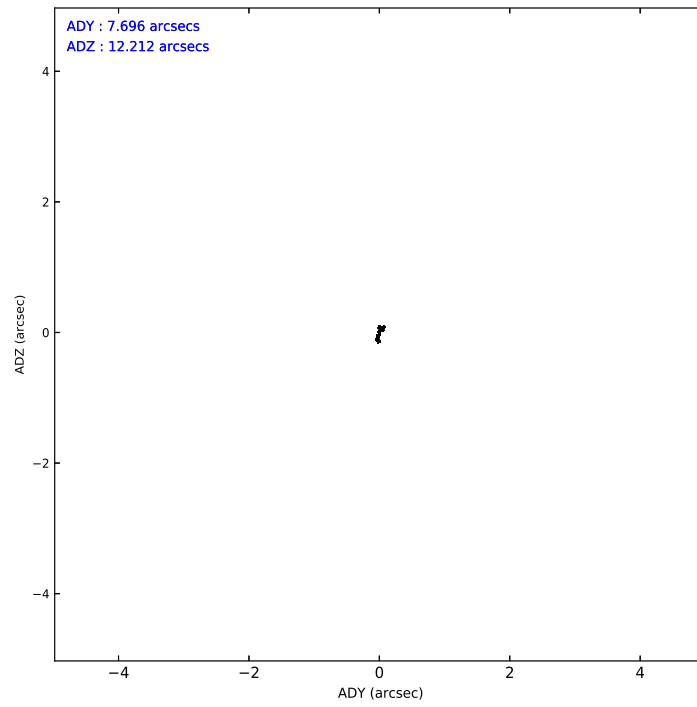
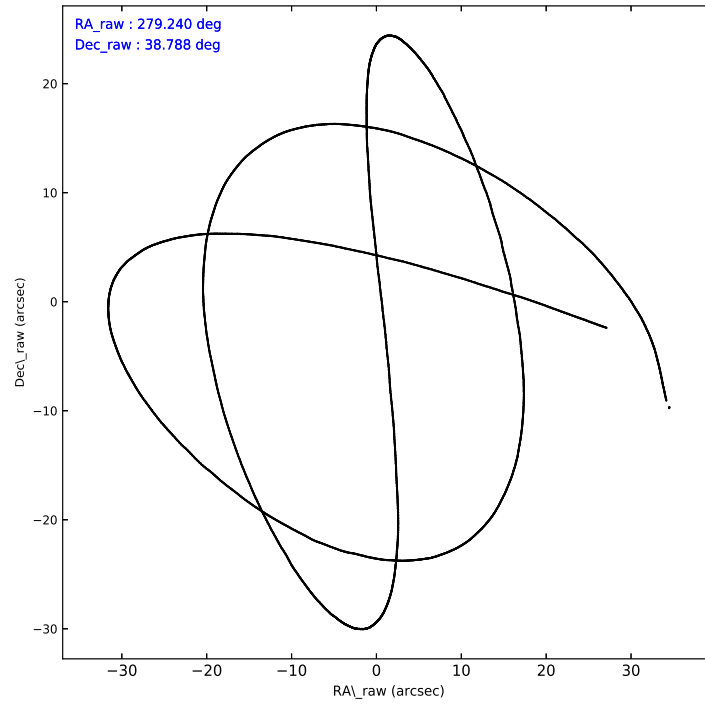
Level 1 Events

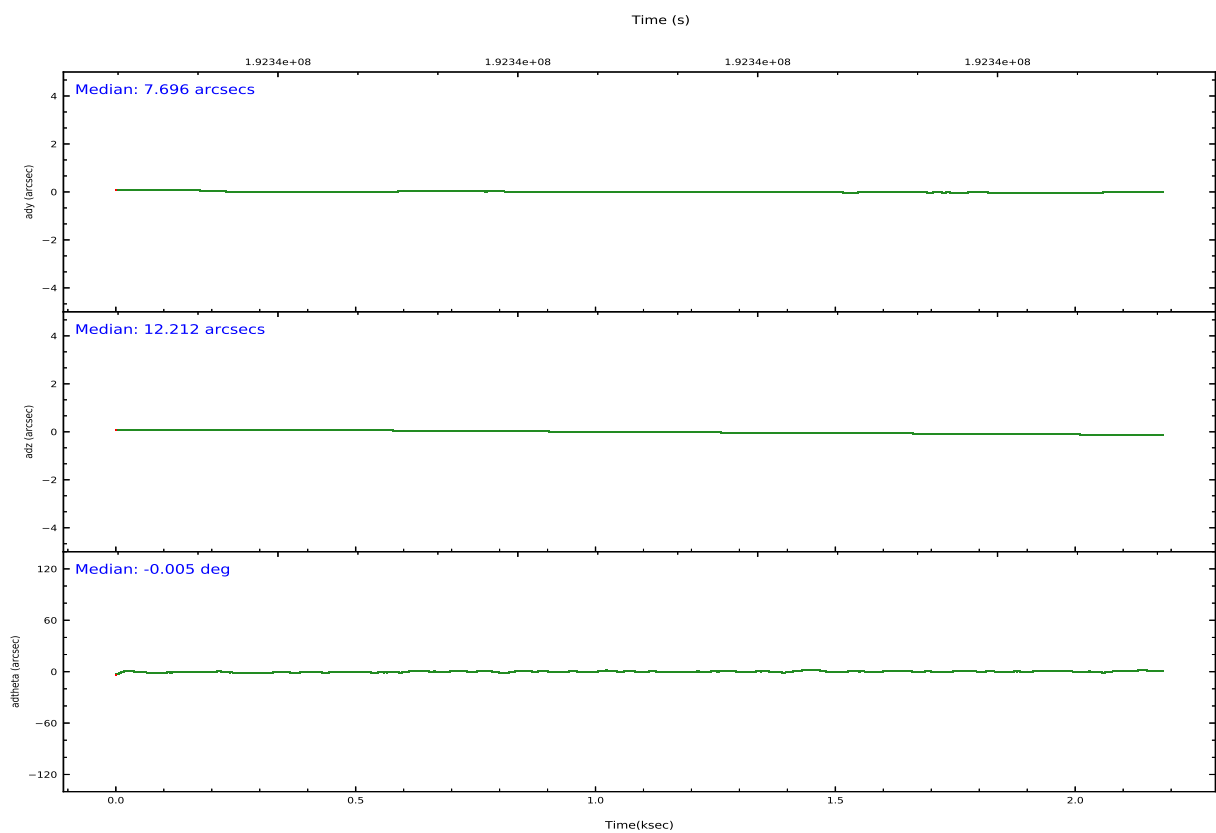
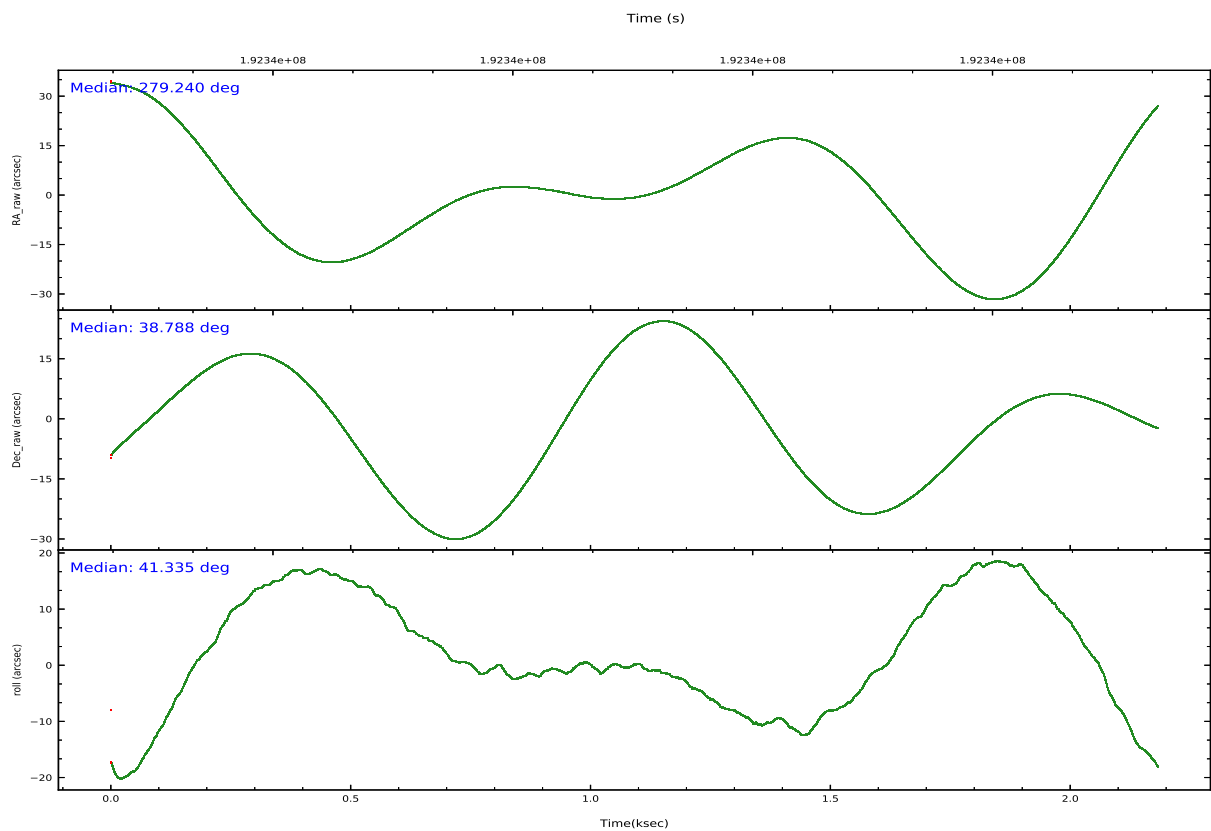
	segment 1	segment 2	segment 3
level 1 events	0	268295	0
rejected events	0	27880	0
rejected %	0%	10%	0%

## 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	279.229618	279.2402776476			
[deg] Pointing Dec	38.759252	38.782928414637			
[deg] Pointing Roll	41.271619	41.335205867891			
[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)	192335346.184000	192334971.98019			
Observation start date	2004-02-05T02:28:02	2004-02-05T02:22:51			
[s] Observation end time (MET)	192337346.184000	192337480.1553			
Observation end date	2004-02-05T03:01:22	2004-02-05T03:04:40			

## 2.3 Aspect





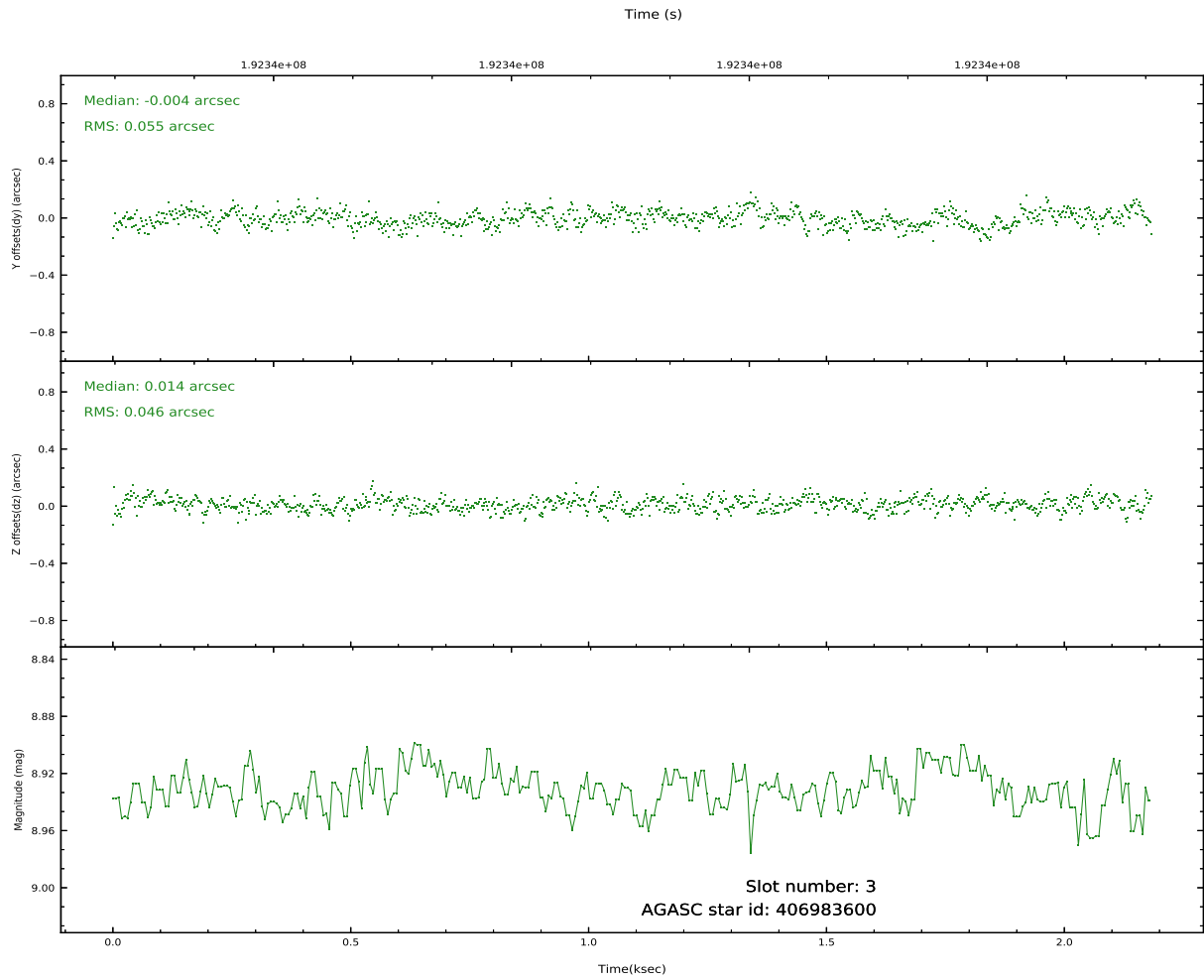
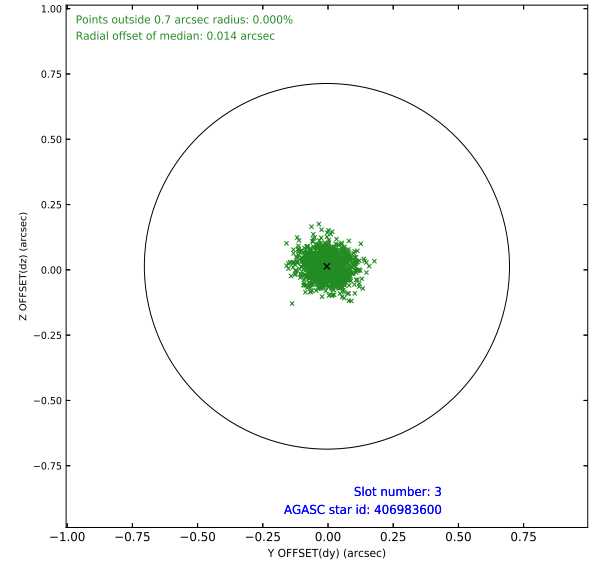
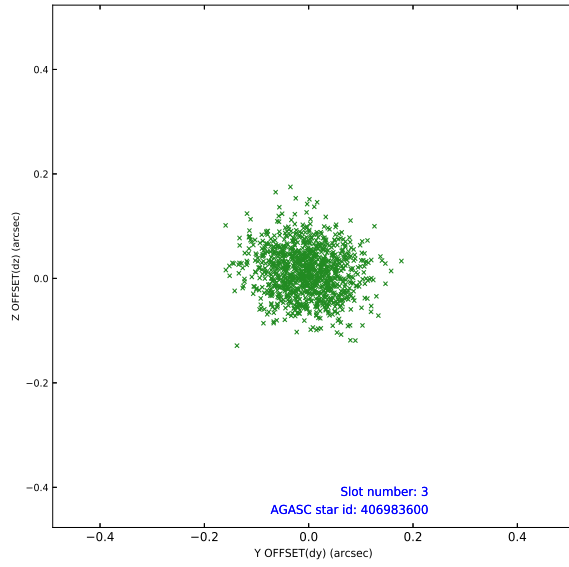
Slot Statistics

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	533	1.000	0.105	-0.121	0.008	0.014	0.000000	0.000000	-1161.87	-460
1	FID		HRC-S-2	7.02	533	1.000	0.170	-0.107	0.006	0.011	0.000000	0.000000	1235.70	-454
2	FID		HRC-S-3	7.04	533	1.000	0.115	-0.075	0.008	0.014	0.000000	0.000000	-1162.29	567
3	GUIDE	used	406983600	8.93	1066	1.000	-0.004	0.014	0.077	0.125	279.940957	39.020708	2121.48	-600
4	GUIDE	used	406985120	7.42	1066	1.000	0.032	0.021	0.063	0.106	278.839732	38.894839	-495.48	1087
5	GUIDE	used	406989616	8.23	1063	1.000	0.056	-0.003	0.065	0.101	279.202881	38.520843	-623.08	-595
6	GUIDE	used	406990192	8.99	1066	1.000	-0.027	-0.044	0.078	0.119	278.510952	38.533654	-2052.10	728
7	GUIDE	used	406993992	7.62	1065	1.000	-0.057	0.019	0.056	0.090	279.053714	38.034587	-2097.16	-1631

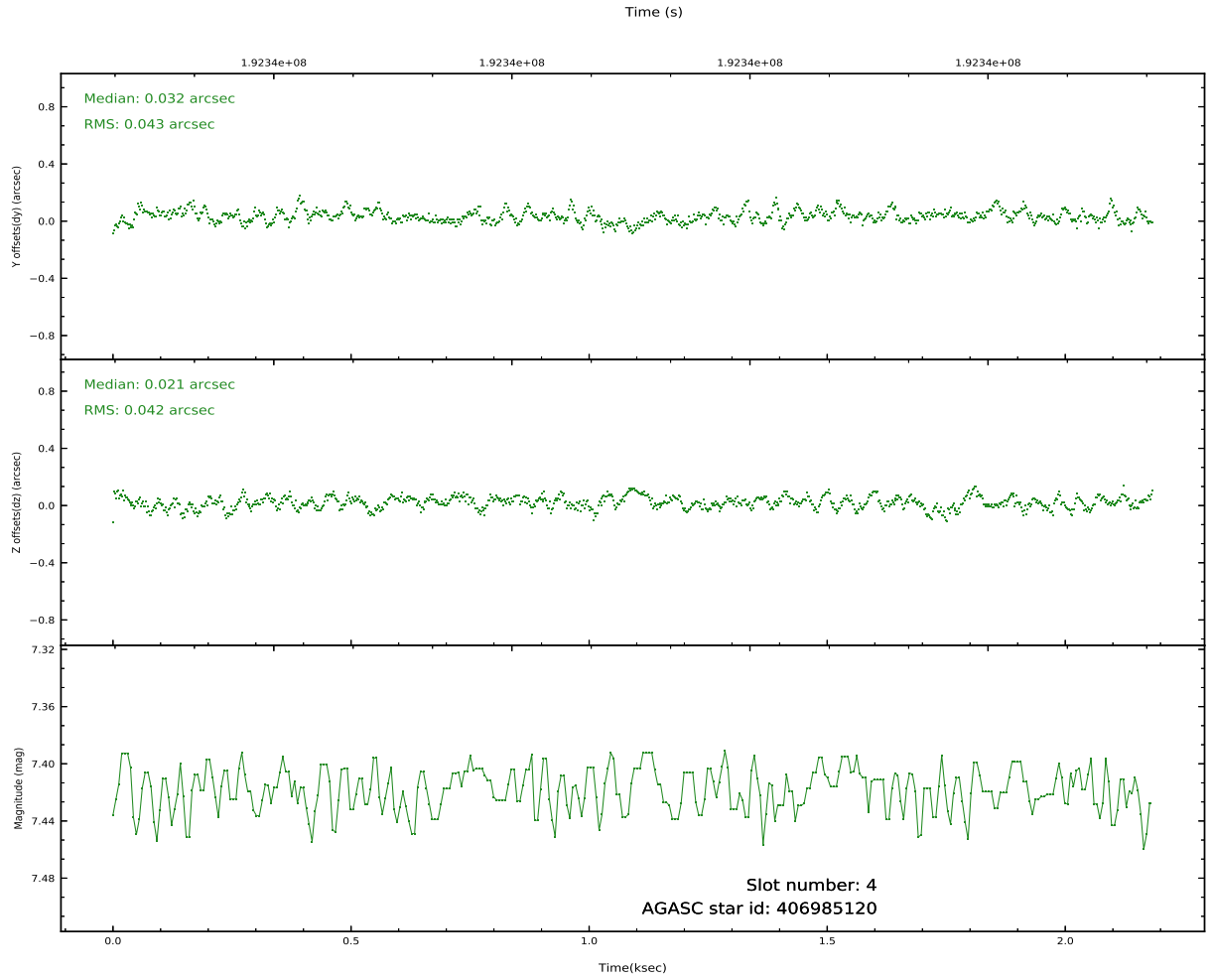
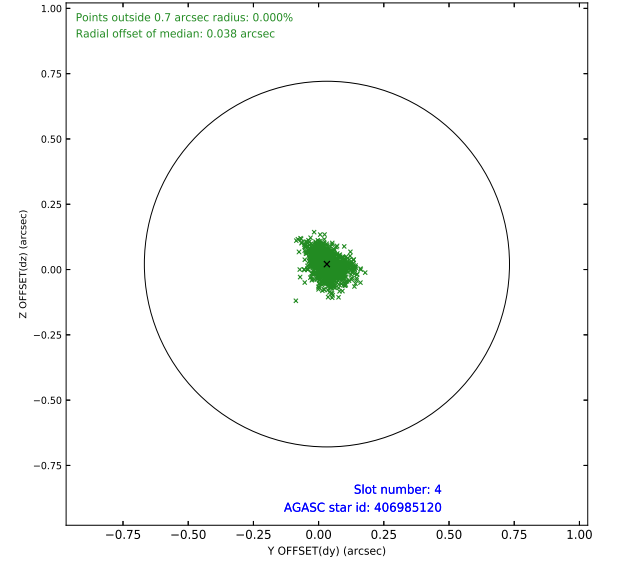
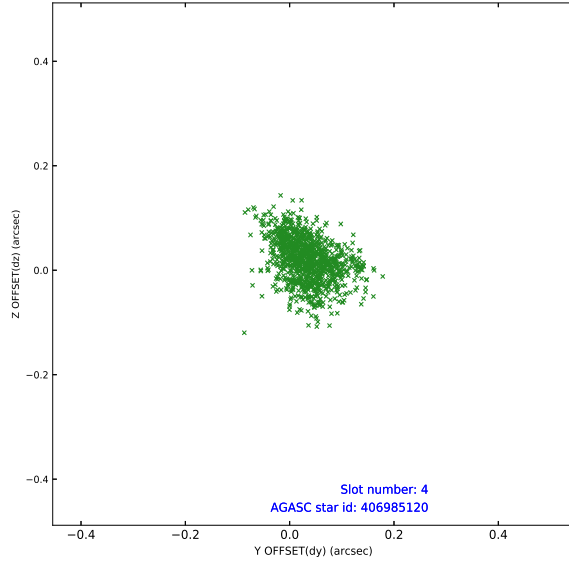


## 2.4 Star Slots

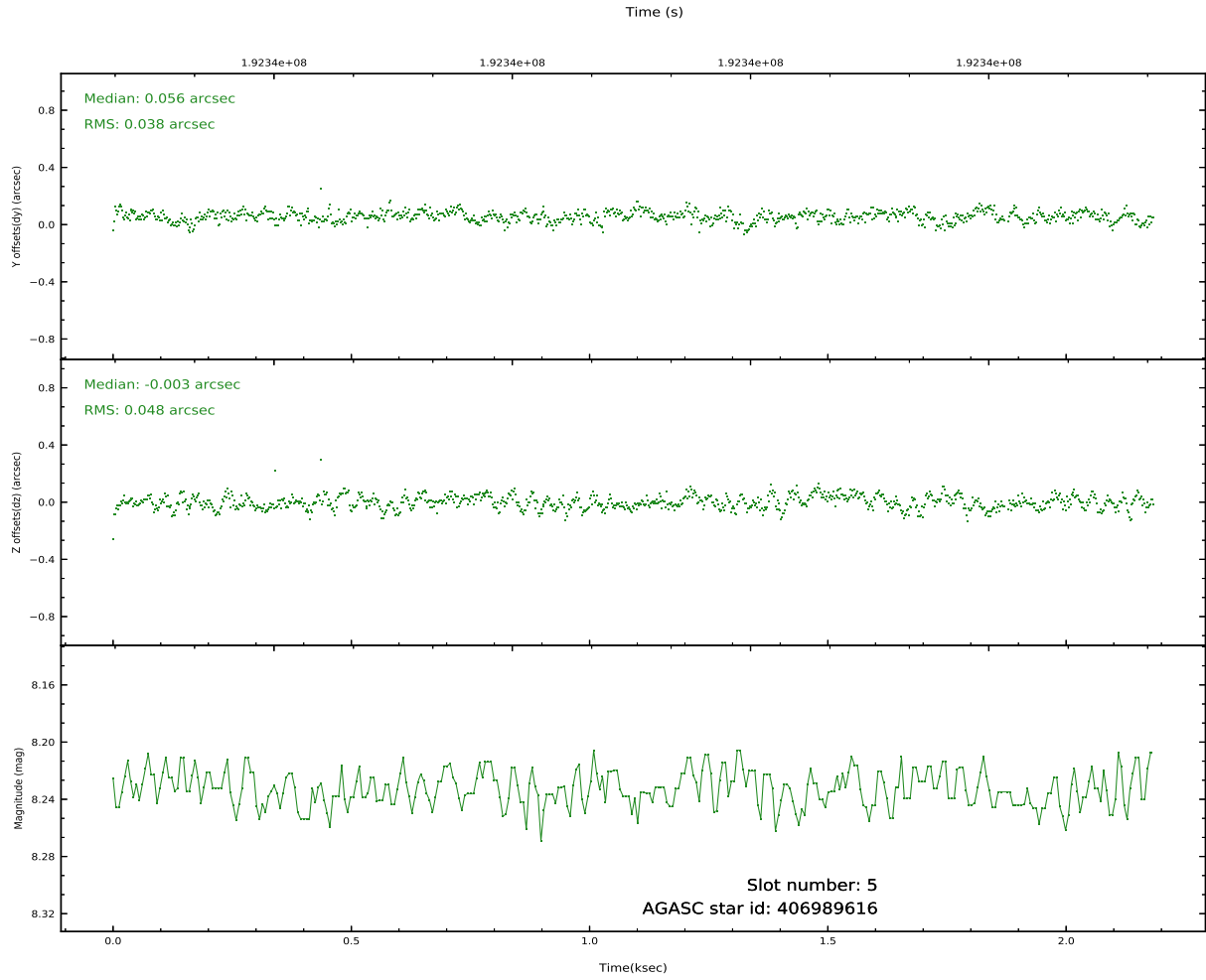
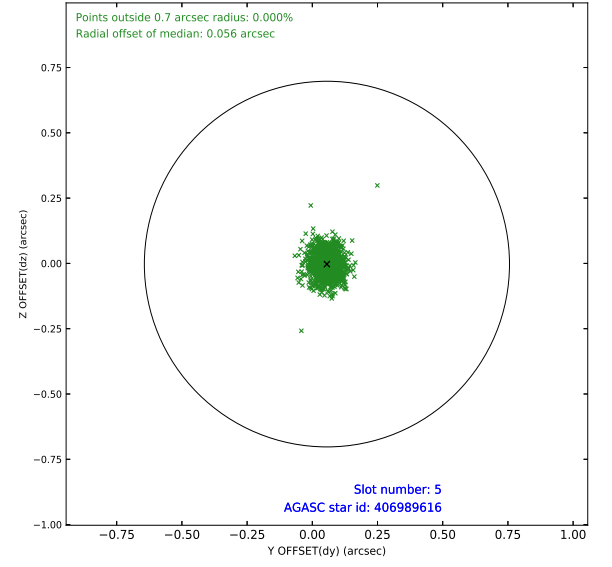
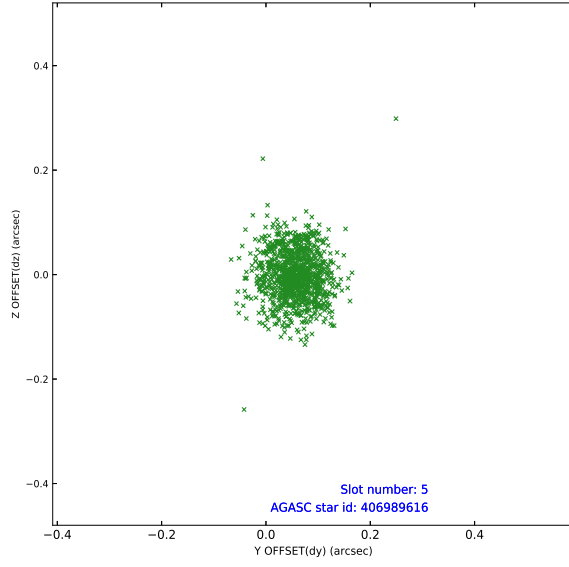
### 2.4.1 Slot 3



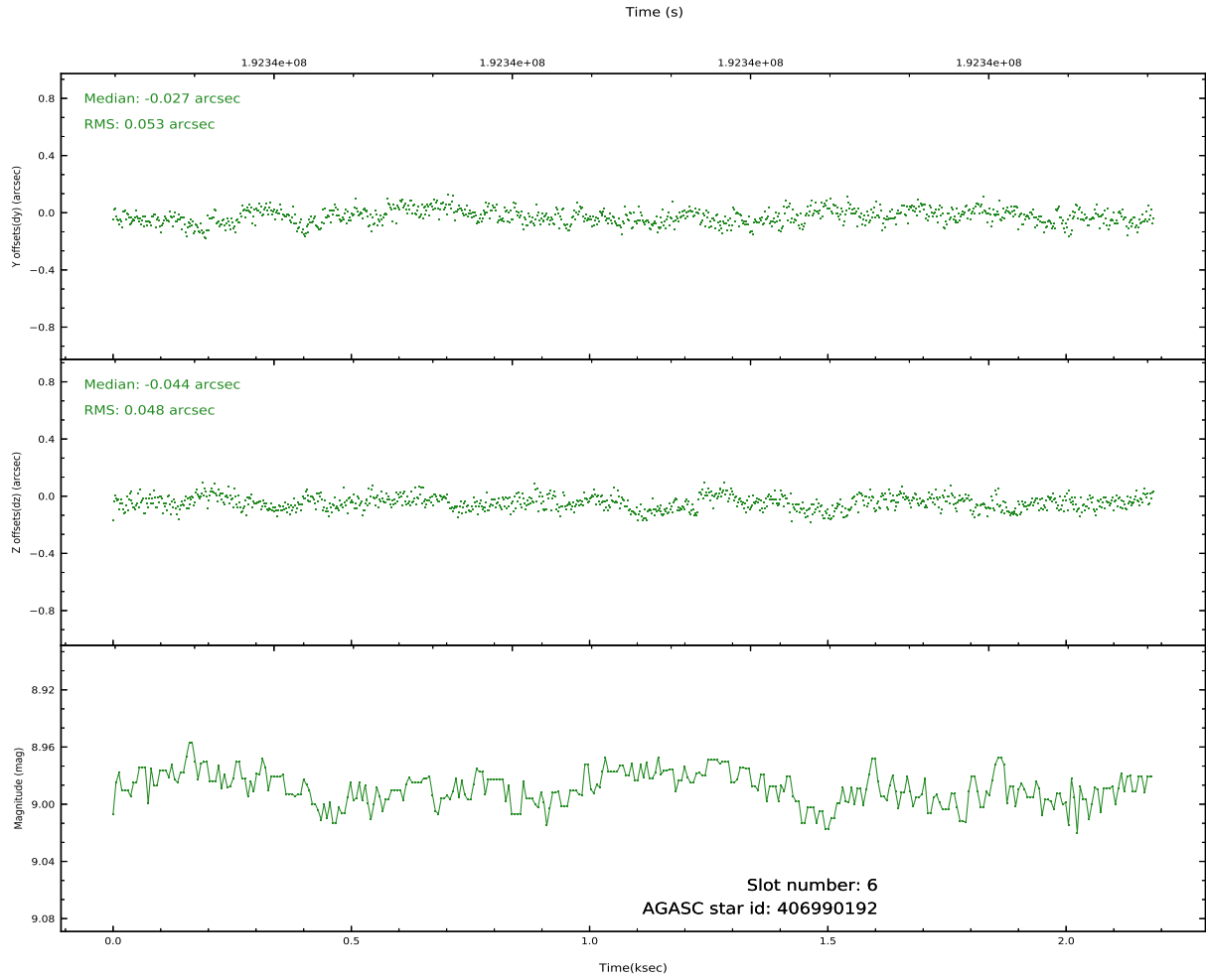
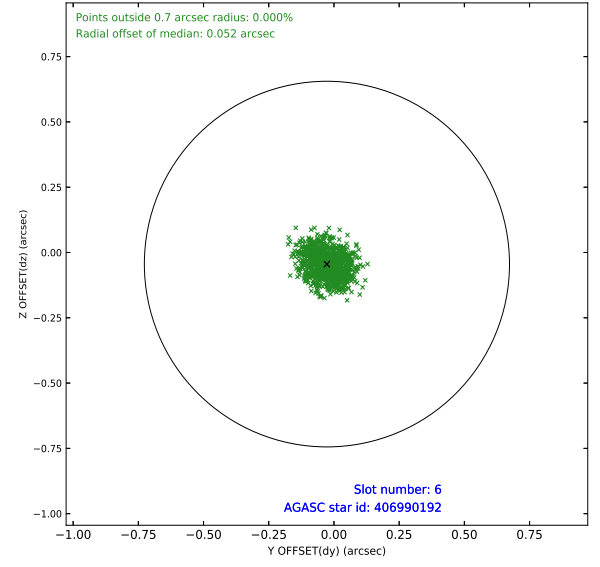
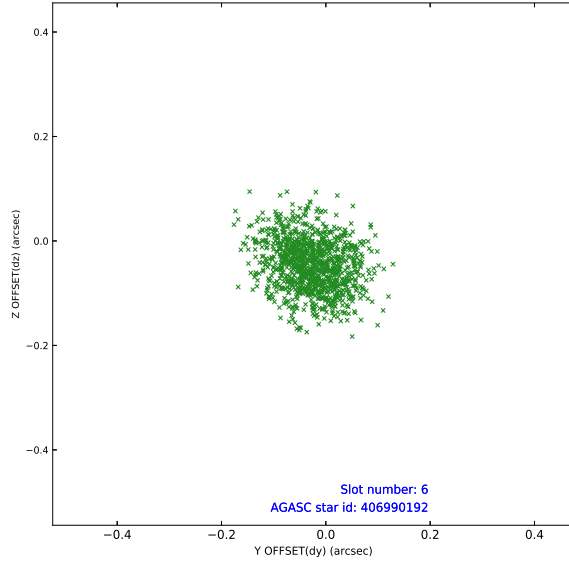
## 2.4.2 Slot 4



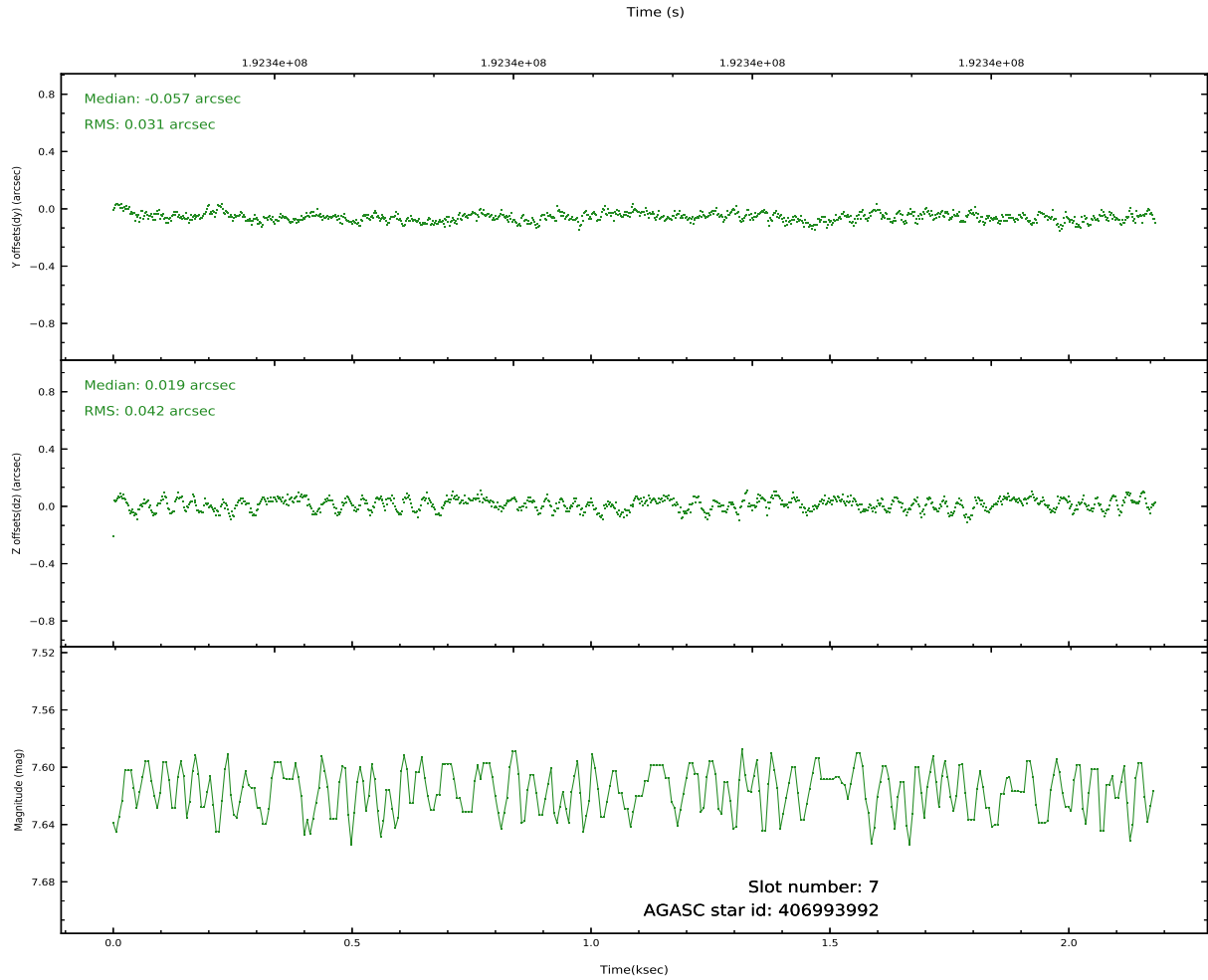
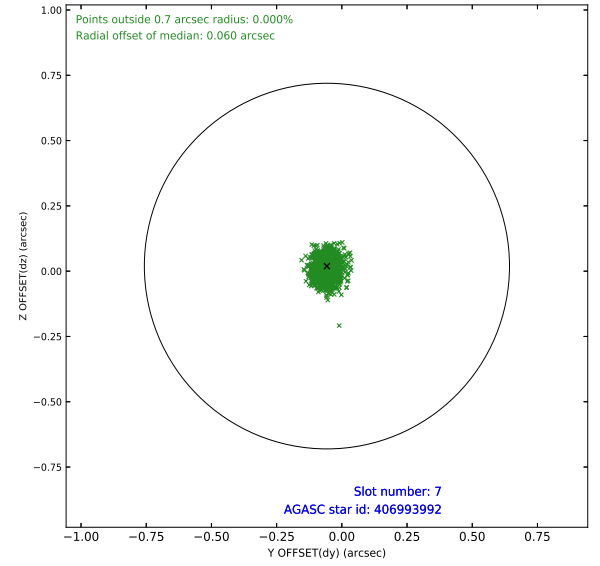
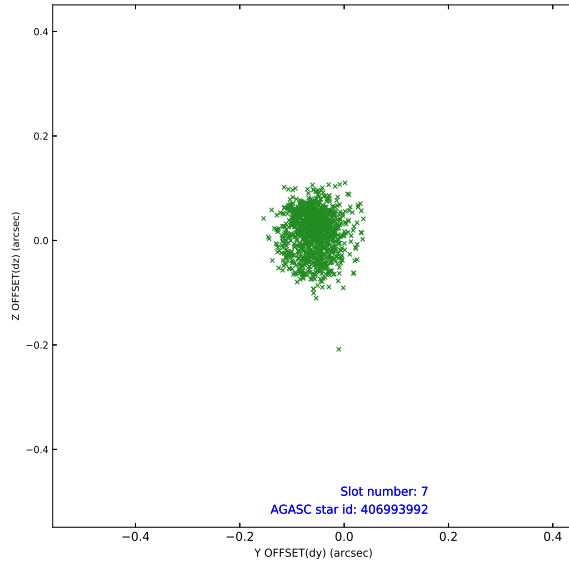
### 2.4.3 Slot 5



## 2.4.4 Slot 6

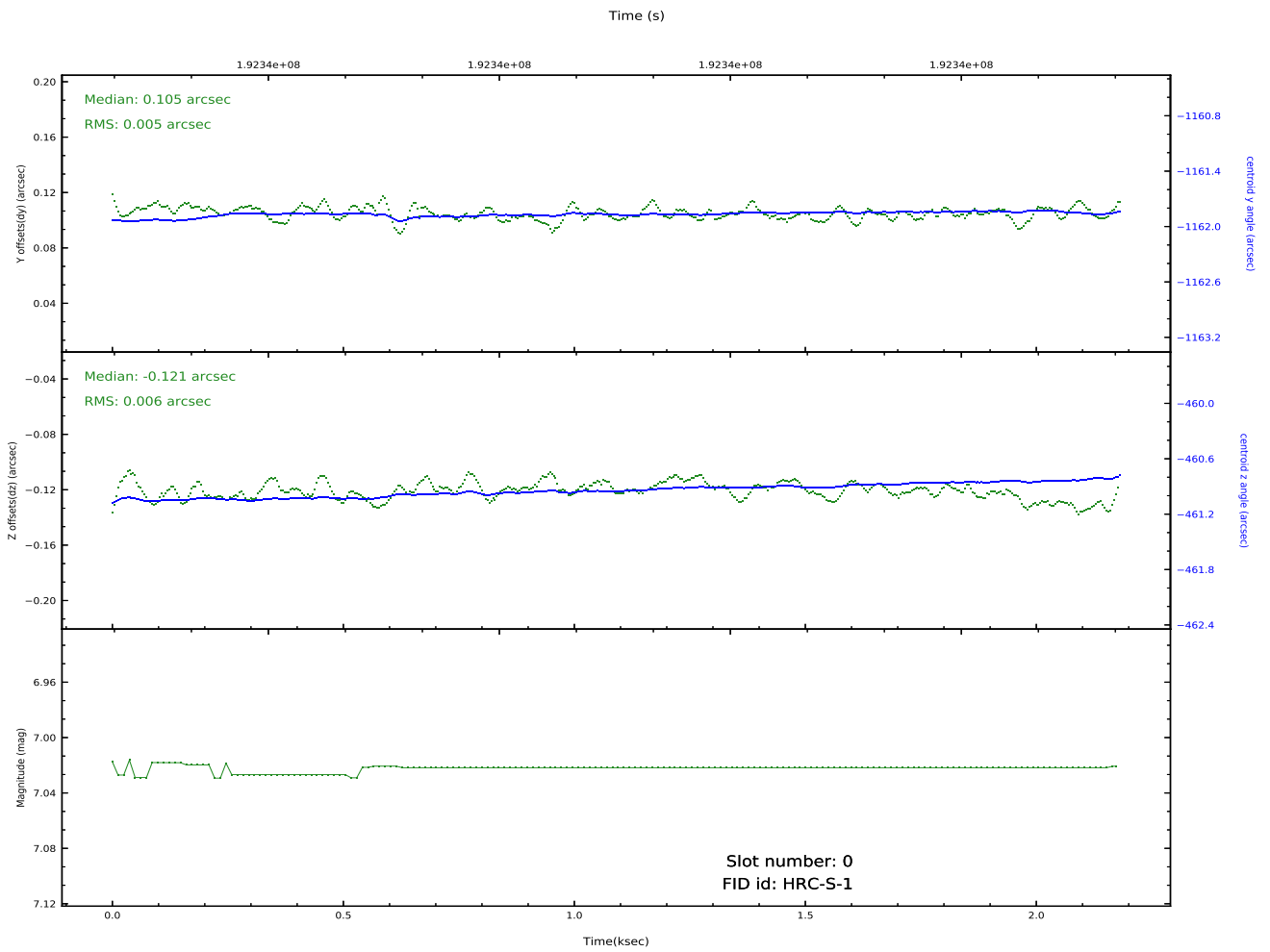
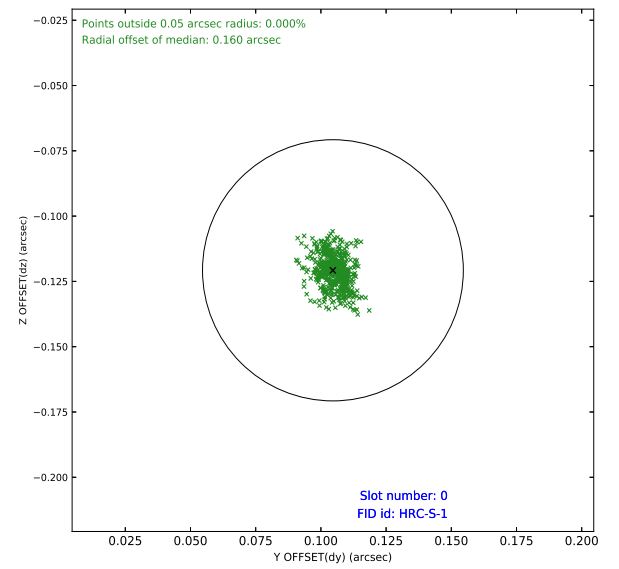
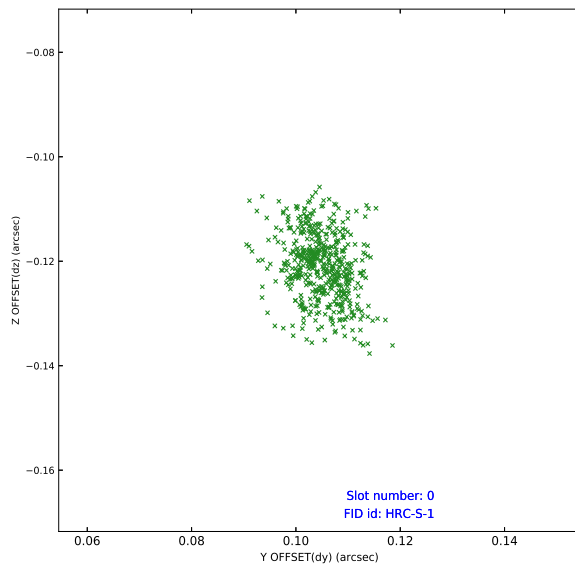


## 2.4.5 Slot 7

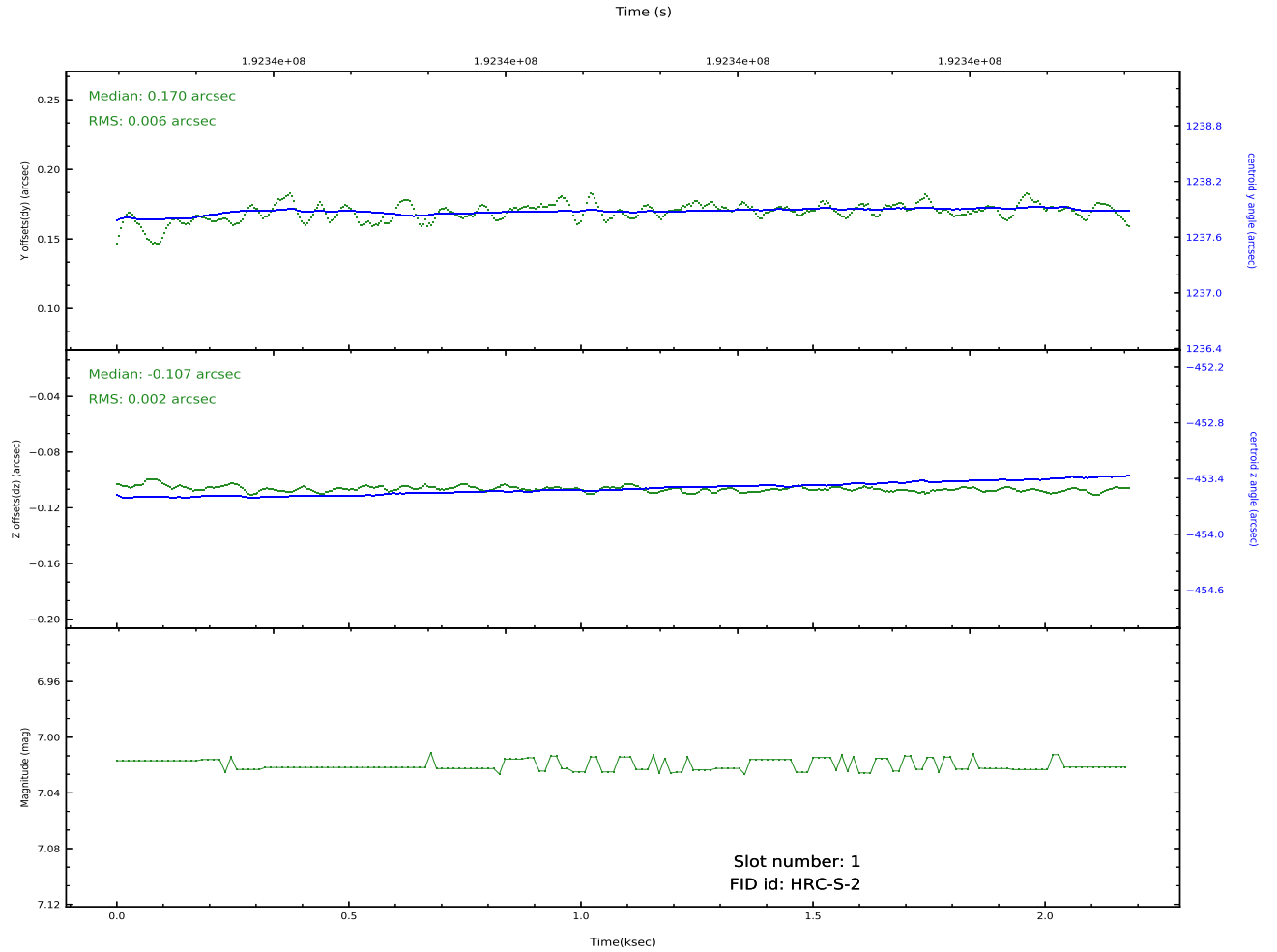
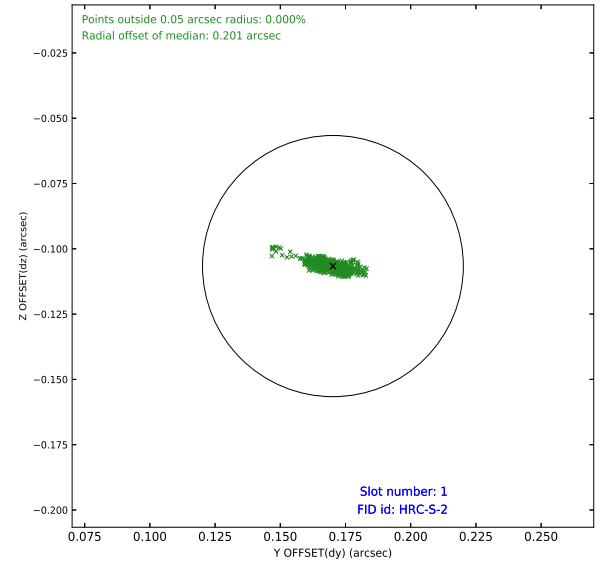
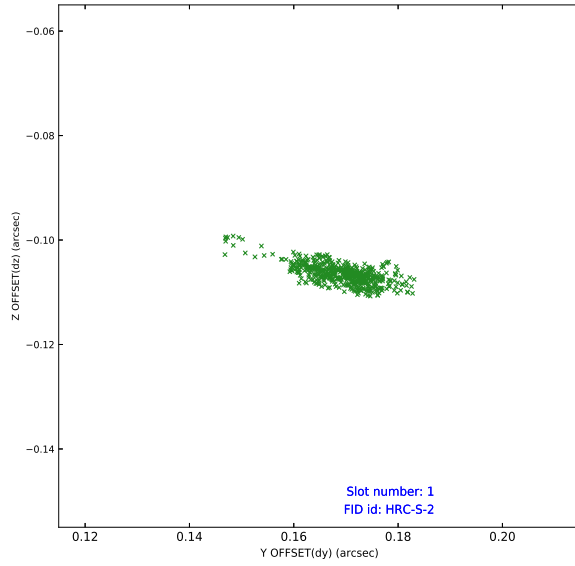


## 2.5 FID Slots

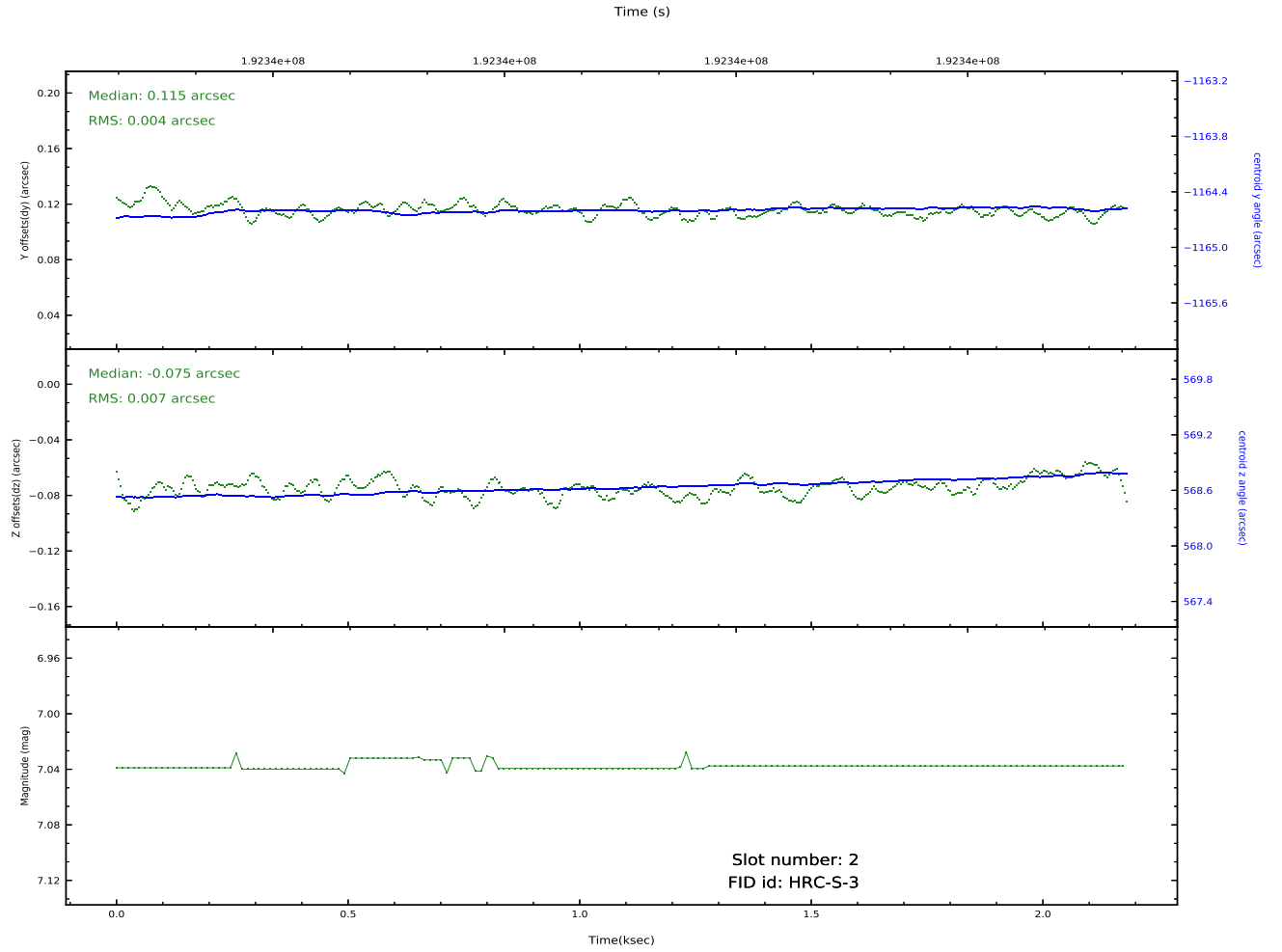
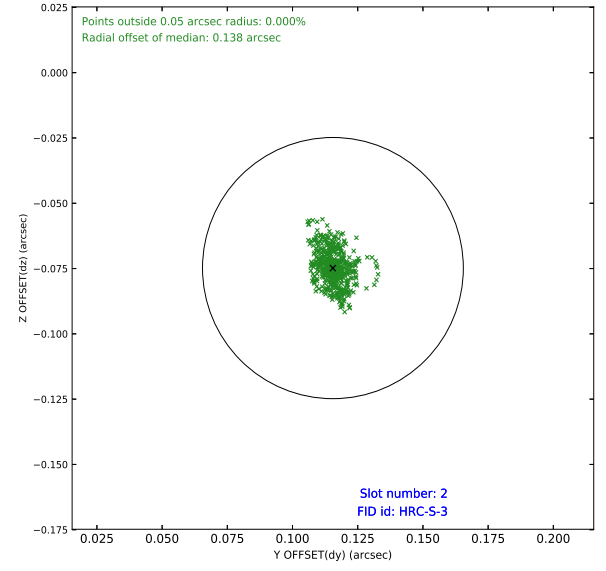
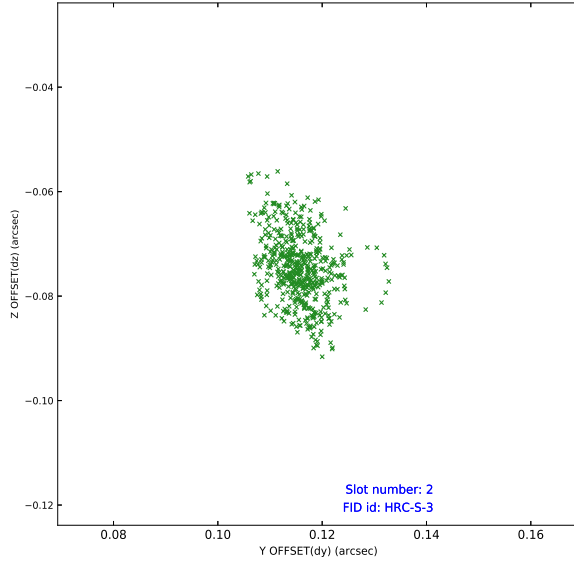
### 2.5.1 Slot 0



## 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	1.842

## A.2 Comments

Window constraint satisfied.

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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.