

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20168 - L2 Version 2  
Chandra X-Ray Center

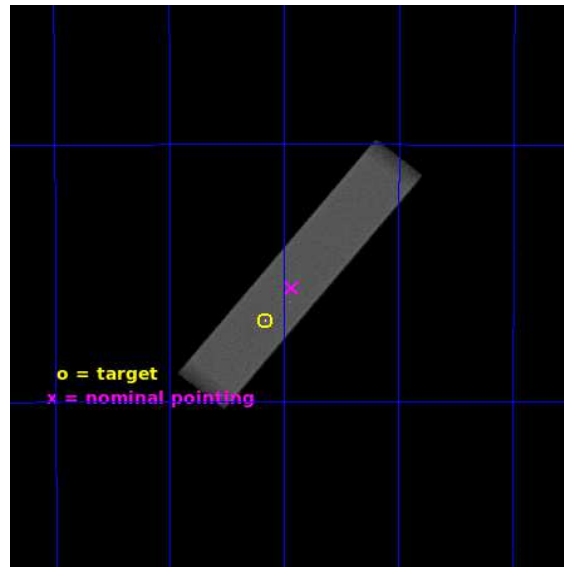
L2 Processing Date : Oct 27 2020

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# 1 Front

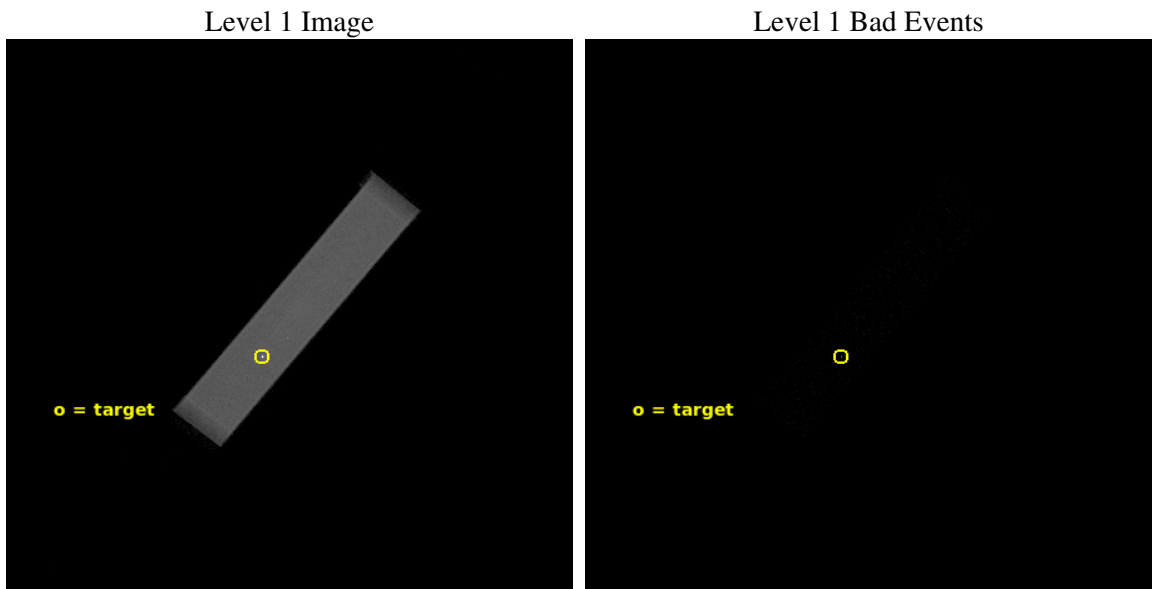
seq_num	201185	Sequence number
obs_id	20168	Observation id
title	THE EXTREME ULTRAVIOLET FLUX OF VERY LOW MASS STARS	Proposal title
observer	Jeremy Drake	Principal investigator
object	AU Mic	Source name
ra_targ	311.291474	Observer's specified target RA [deg]
dec_targ	-31.342754	Observer's specified target Dec [deg]
ra_nom	311.23245856348	Nominal RA [deg]
dec_nom	-31.279292750238	Nominal Dec [deg]
roll_nom	309.03622763197	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10484.725622416	[s]
livetime	10397.480113711	Ontime multiplied by DTCOR
l2events	668953	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	10330.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	10484.725622416	[s]
caldsver	4.9.3	&#160	l1events	904132	Number of level 1 events
date	2020-10-27T08:49:50	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

Level 1 Events

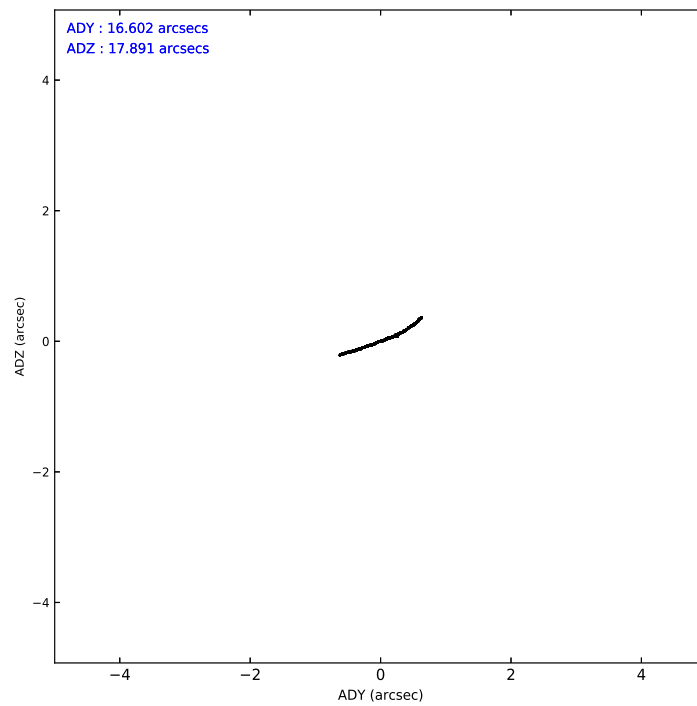
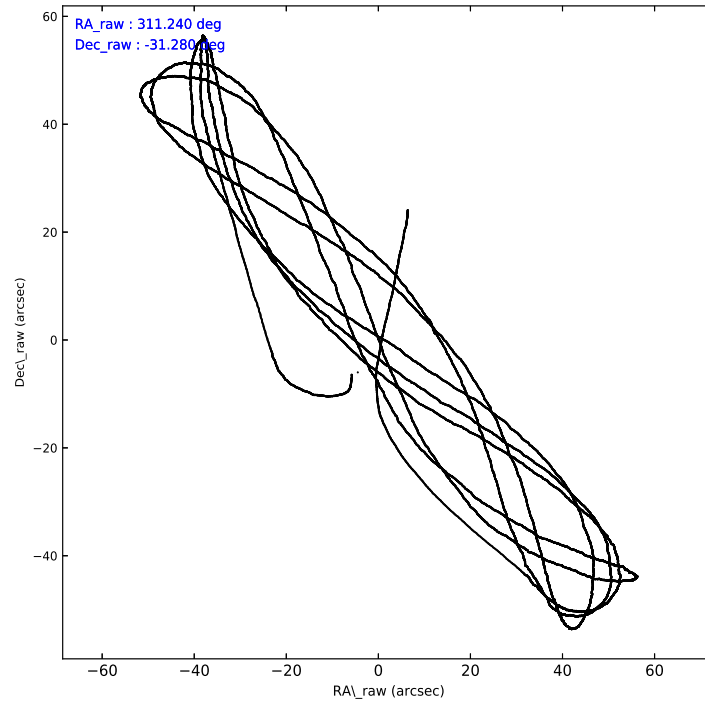
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	6	904121	5
rejected events	6	123001	5
rejected %	100%	13%	100%

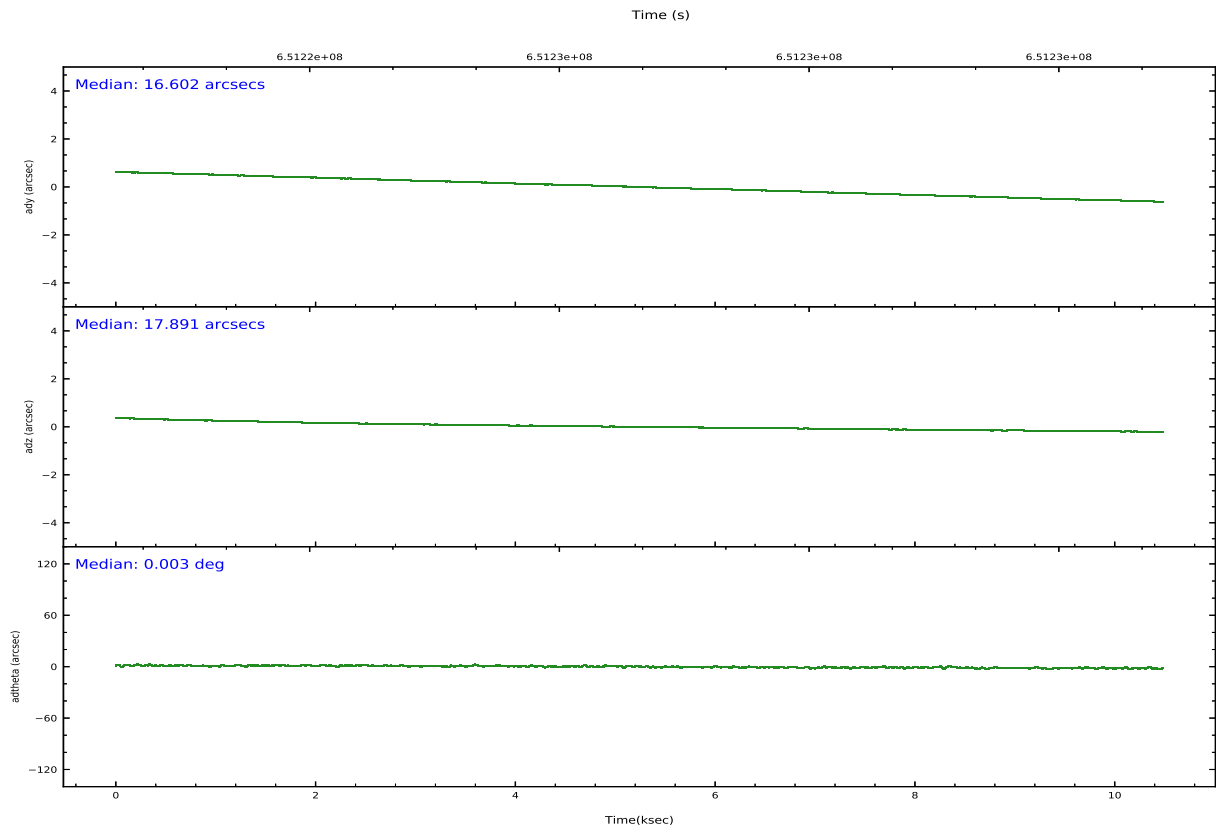
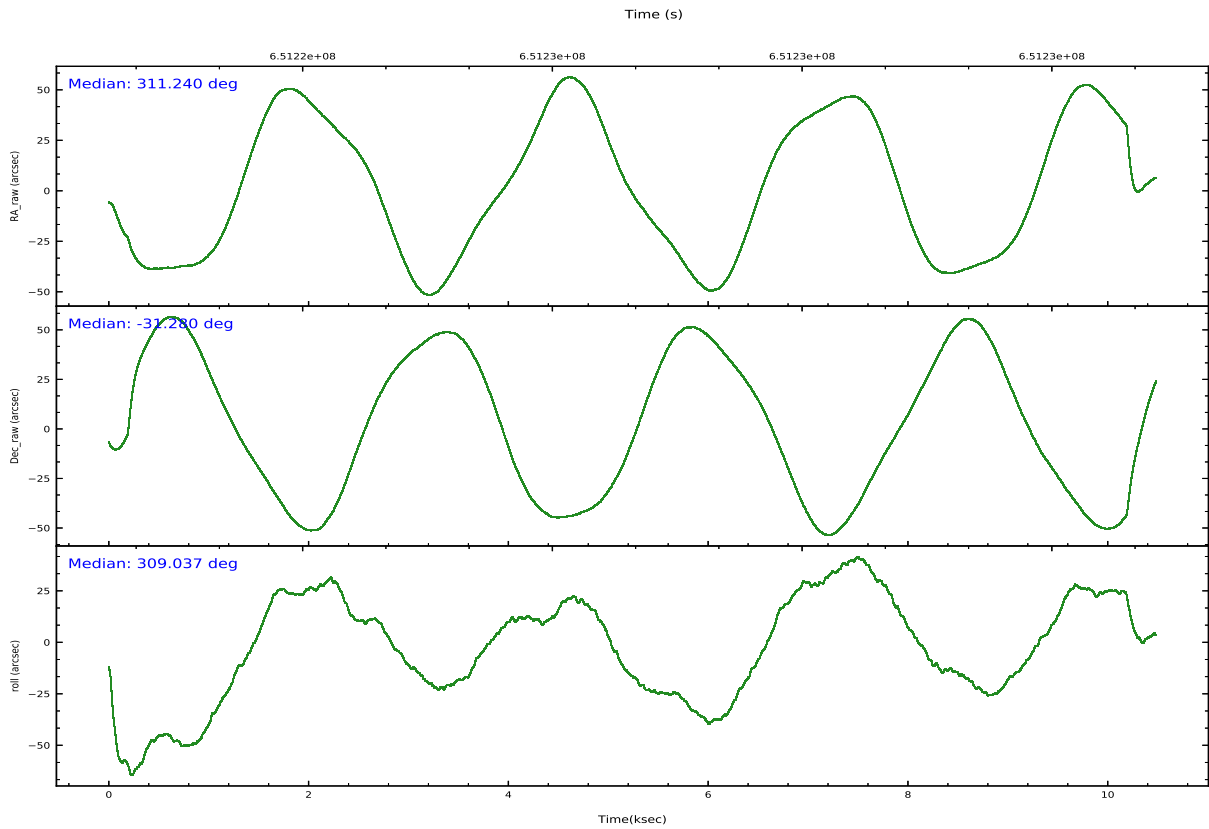
## 2.2 Compared Parameters

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	311.208753	311.23245856348
[deg] Pointing Dec	-31.270875	-31.279292750238
[deg] Pointing Roll	308.957028	309.03622763197
[mm] SIM focus pos	-1.533336	-1.526339935833849
[mm] SIM defocus	7.710433287538843e-07	0.006996703570447904
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	651223215.184000	651221457.44999
Observation start date	2018-08-21T07:19:06	2018-08-21T06:50:57
[s] Observation end time (MET)	651233545.184000	651234335.55075
Observation end date	2018-08-21T10:11:16	2018-08-21T10:25:35

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

## 2.3 Aspect





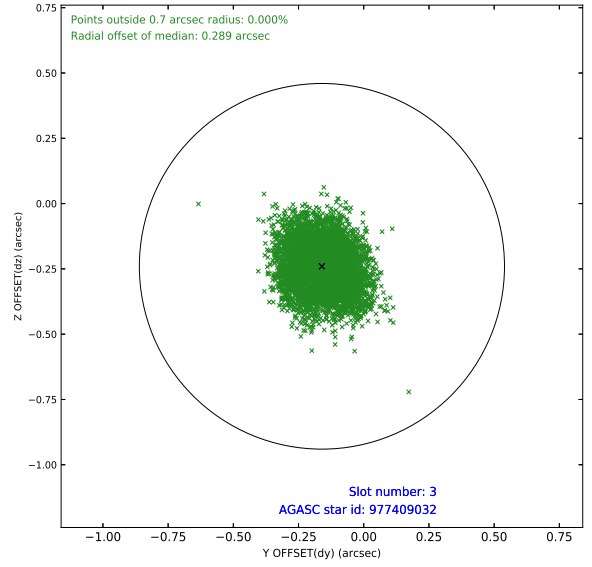
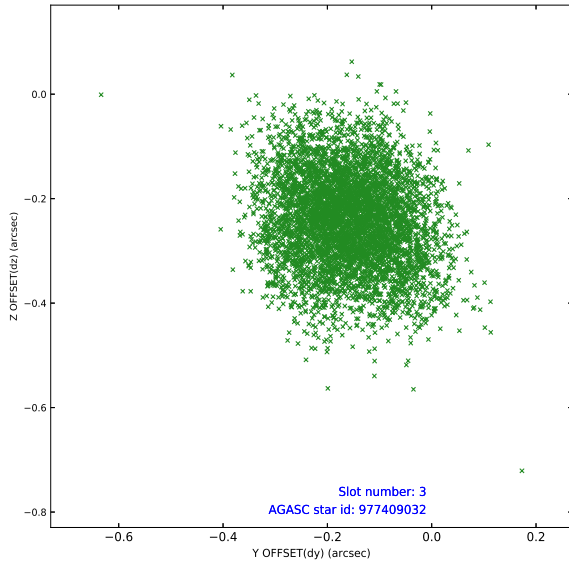
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		HRC-S-1	7.03	2558	1.000	0.073	-0.177	0.014	0.026	0.000000	0.000000	-1171.10	-466
1	FID		HRC-S-2	7.01	2558	1.000	0.310	-0.152	0.011	0.021	0.000000	0.000000	1228.34	-459
2	FID		HRC-S-3	7.03	2558	1.000	0.009	0.027	0.010	0.020	0.000000	0.000000	-1173.28	562
3	GUIDE	used	977409032	7.84	5114	1.000	-0.160	-0.240	0.134	0.209	311.289707	-31.340900	361.85	34
4	GUIDE	used	977414712	8.82	5112	1.000	0.134	-0.038	0.143	0.244	311.577379	-31.522390	1417.95	309
5	GUIDE	used	977416336	8.86	5110	1.000	-0.093	0.125	0.150	0.251	311.811088	-31.455987	1687.95	1017
6	GUIDE	used	977282416	9.54	5108	1.000	0.045	0.061	0.258	0.422	310.136108	-31.217330	-2212.43	-2456
7	GUIDE	used	977405808	8.98	5104	1.000	0.056	0.096	0.151	0.248	310.636168	-31.037508	-1759.59	-848

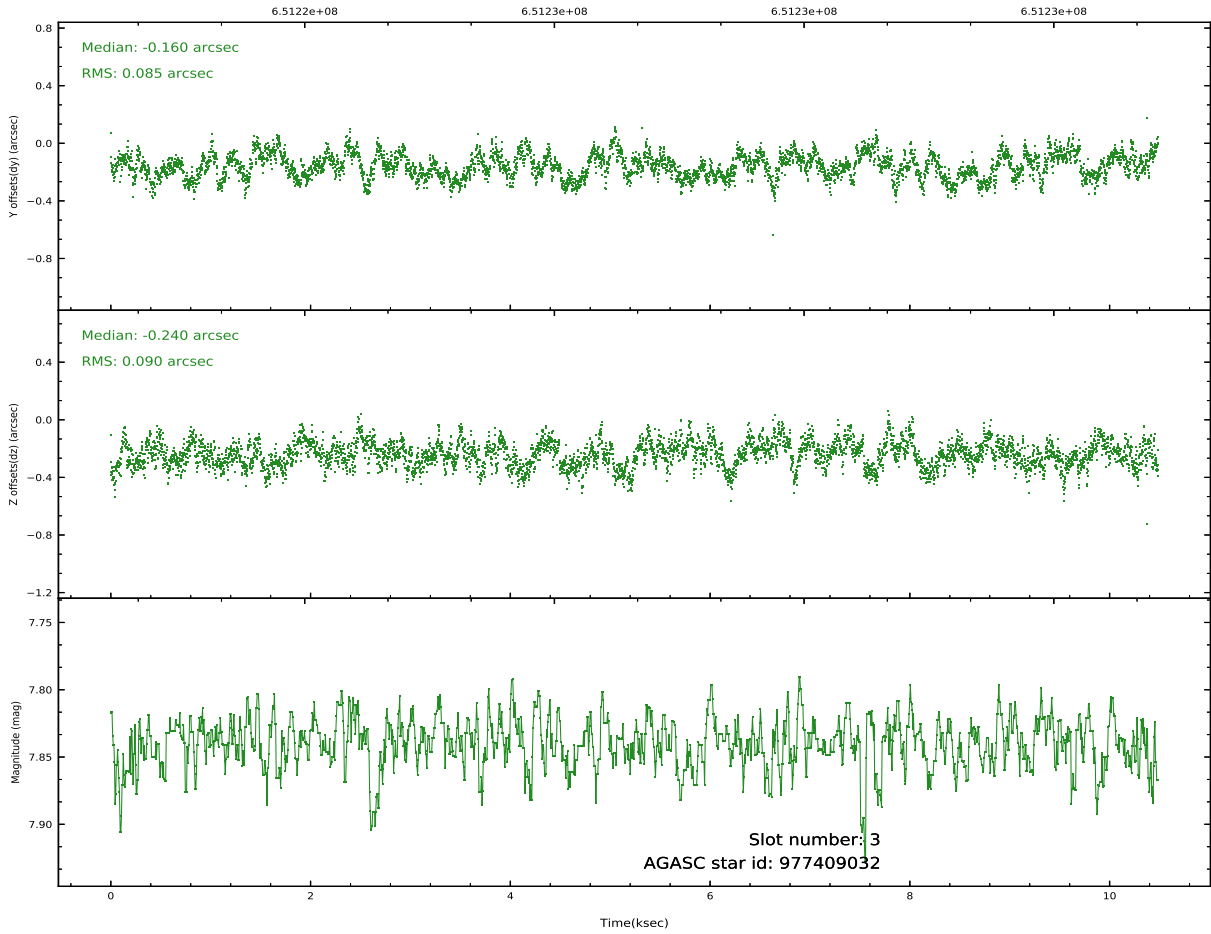
∞

## 2.4 Star Slots

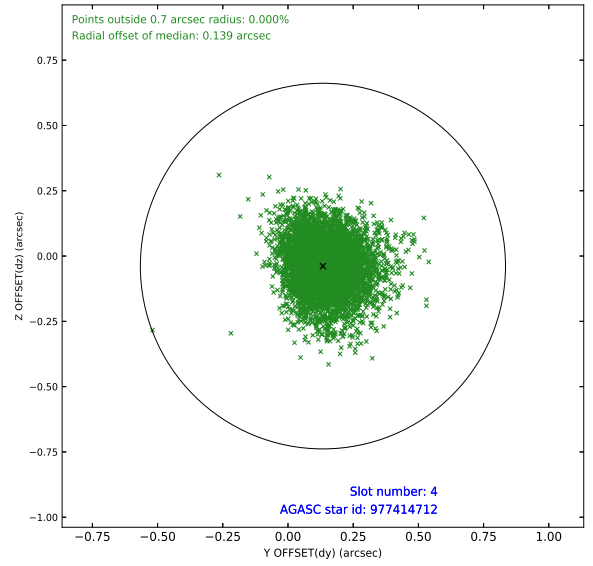
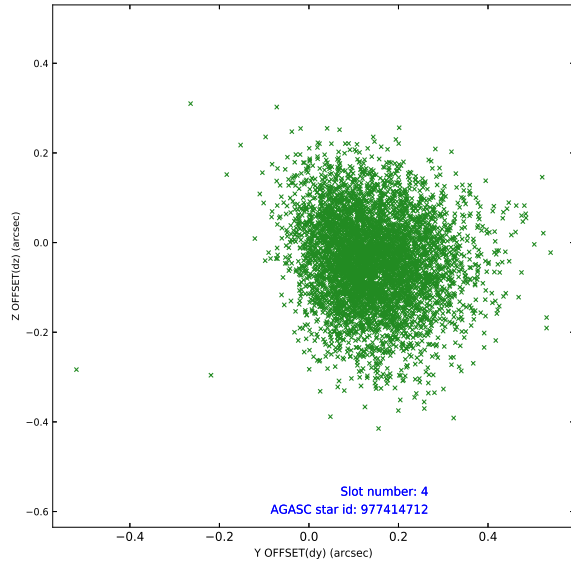
### 2.4.1 Slot 3



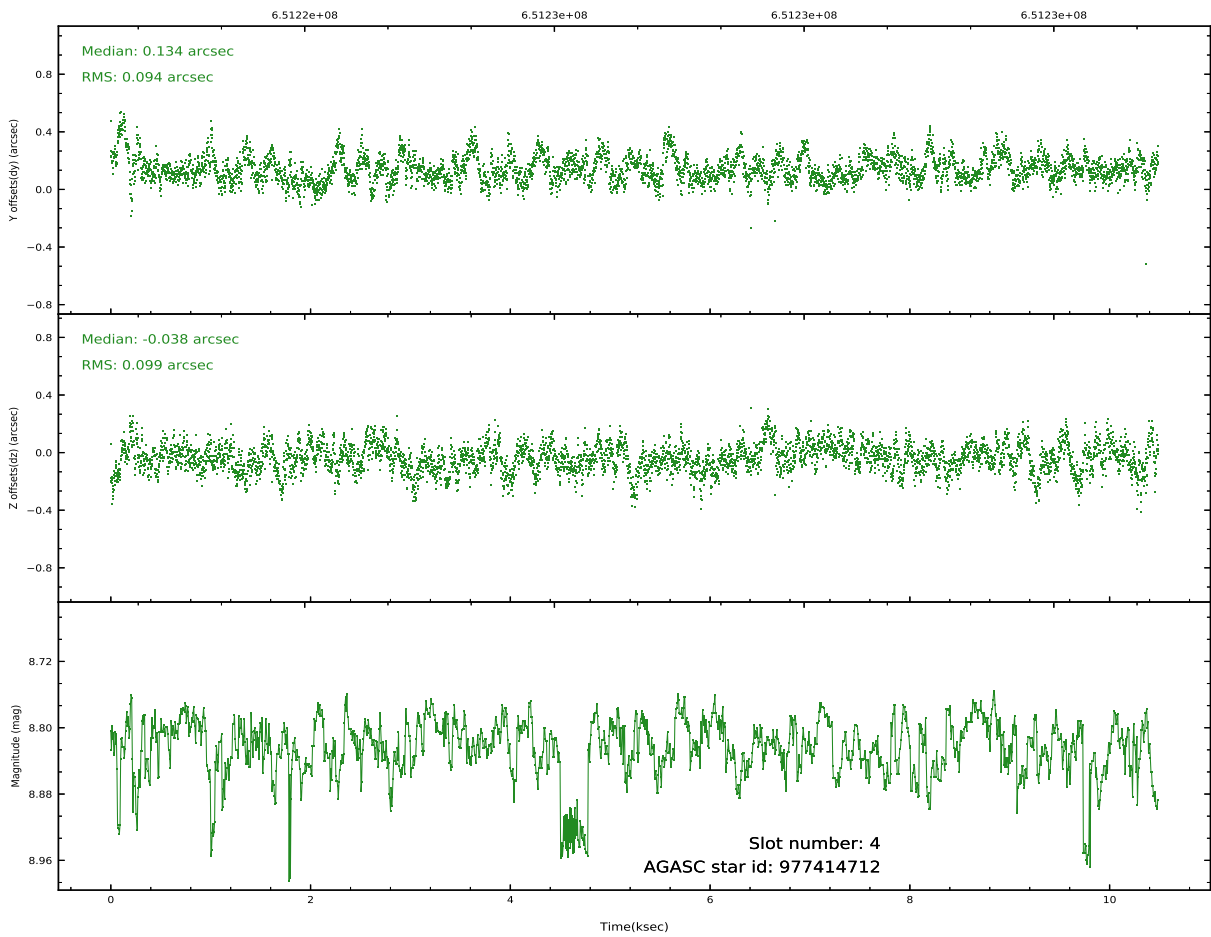
Time (s)



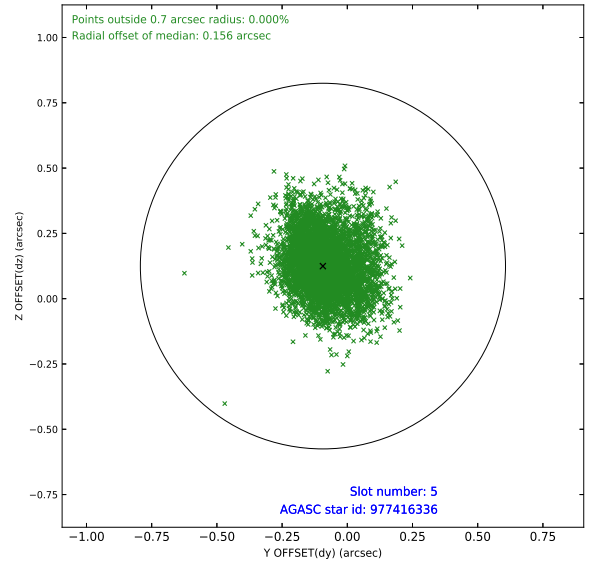
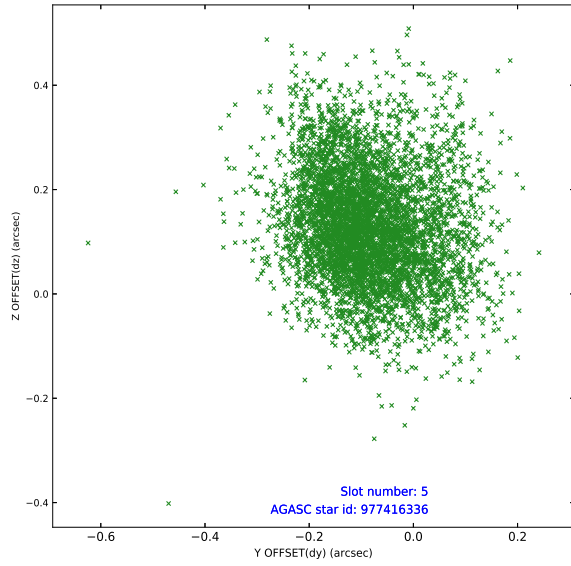
## 2.4.2 Slot 4



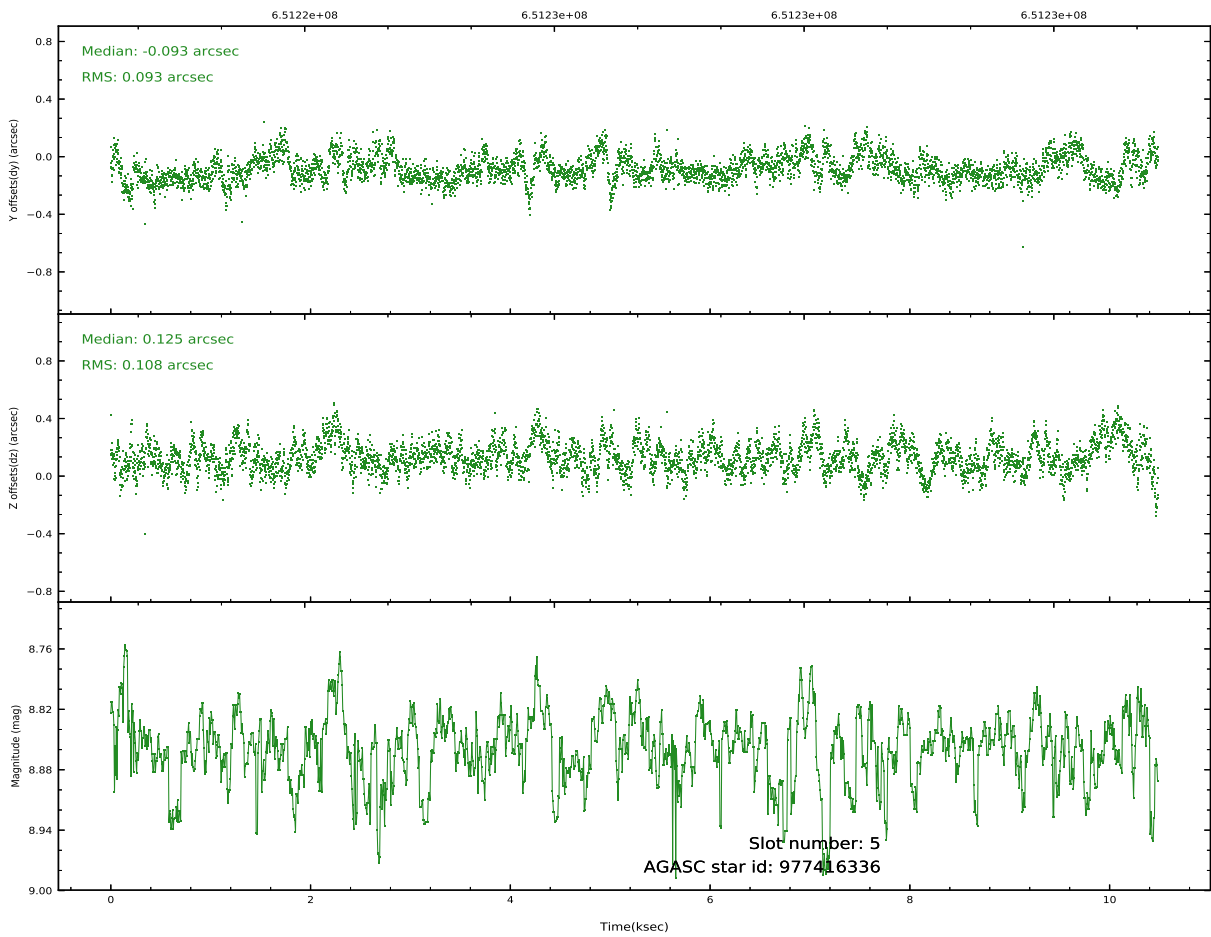
Time (s)



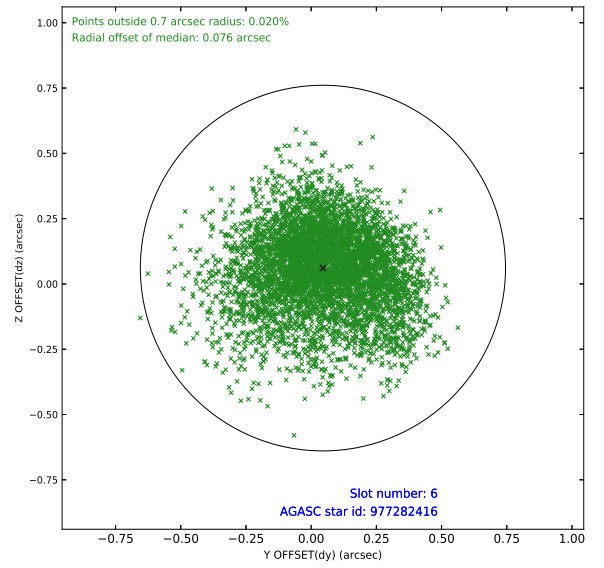
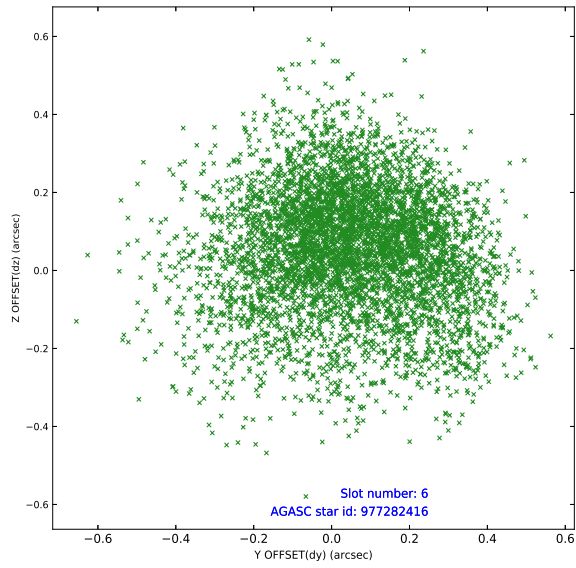
### 2.4.3 Slot 5



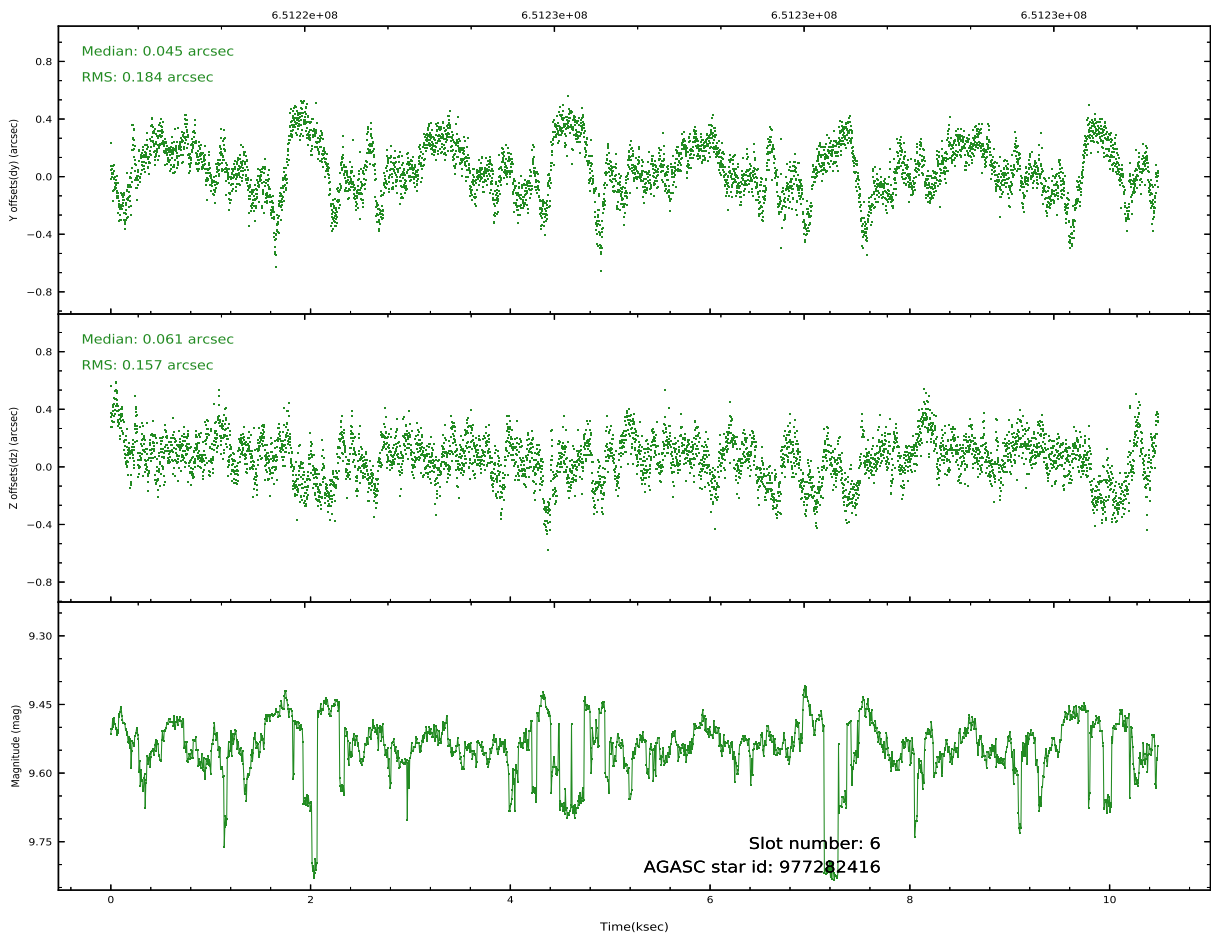
Time (s)



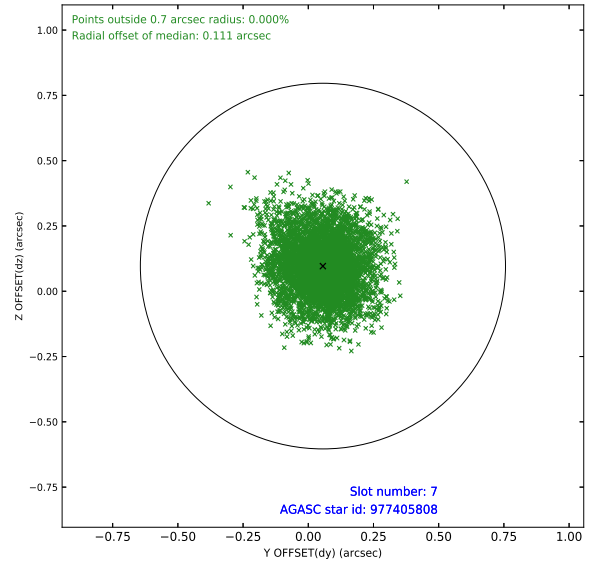
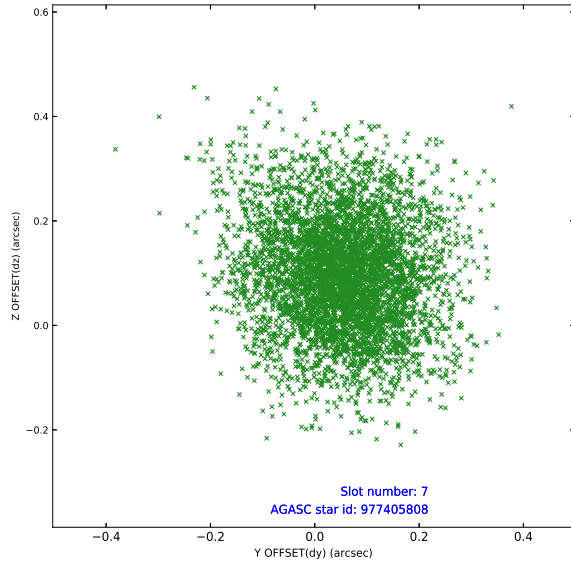
## 2.4.4 Slot 6



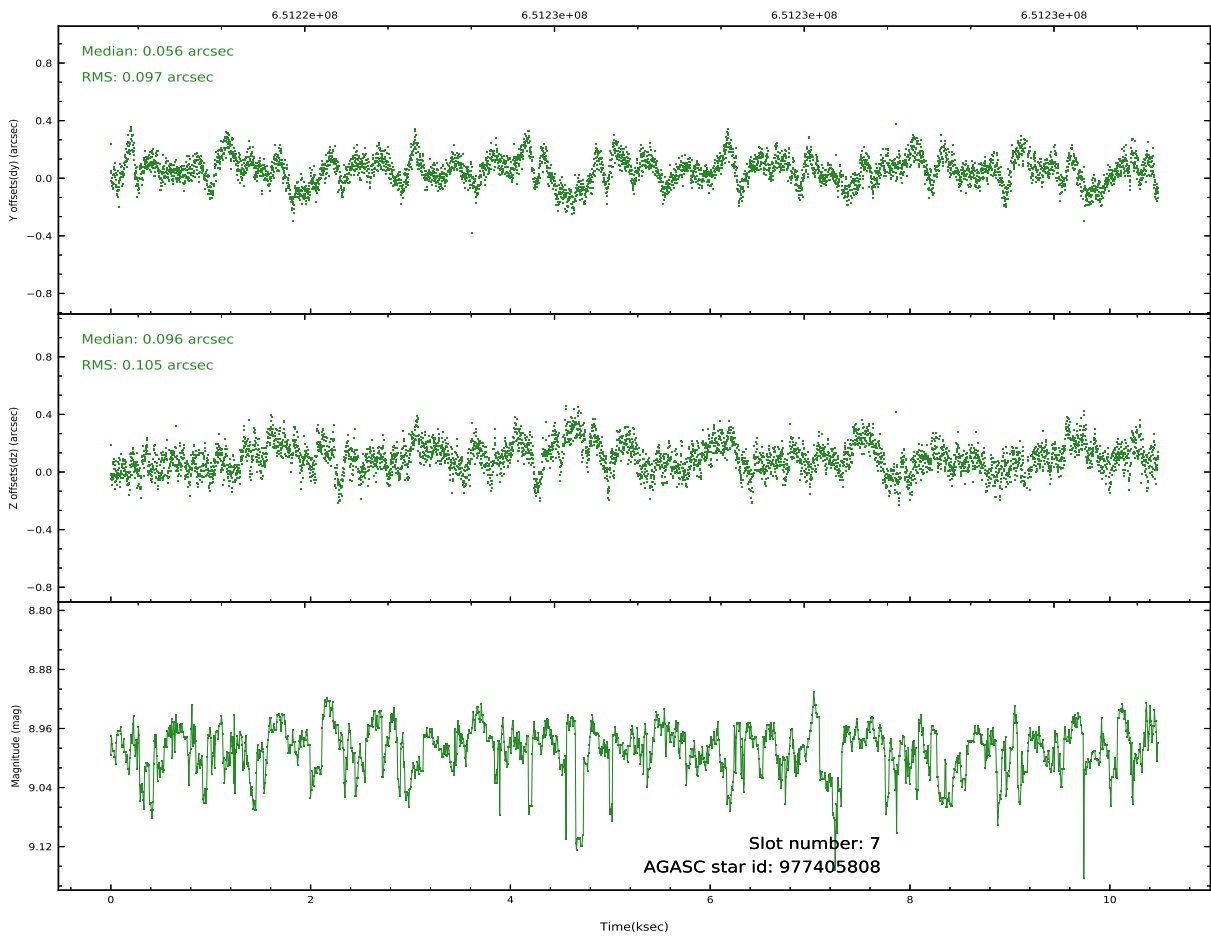
Time (s)



## 2.4.5 Slot 7

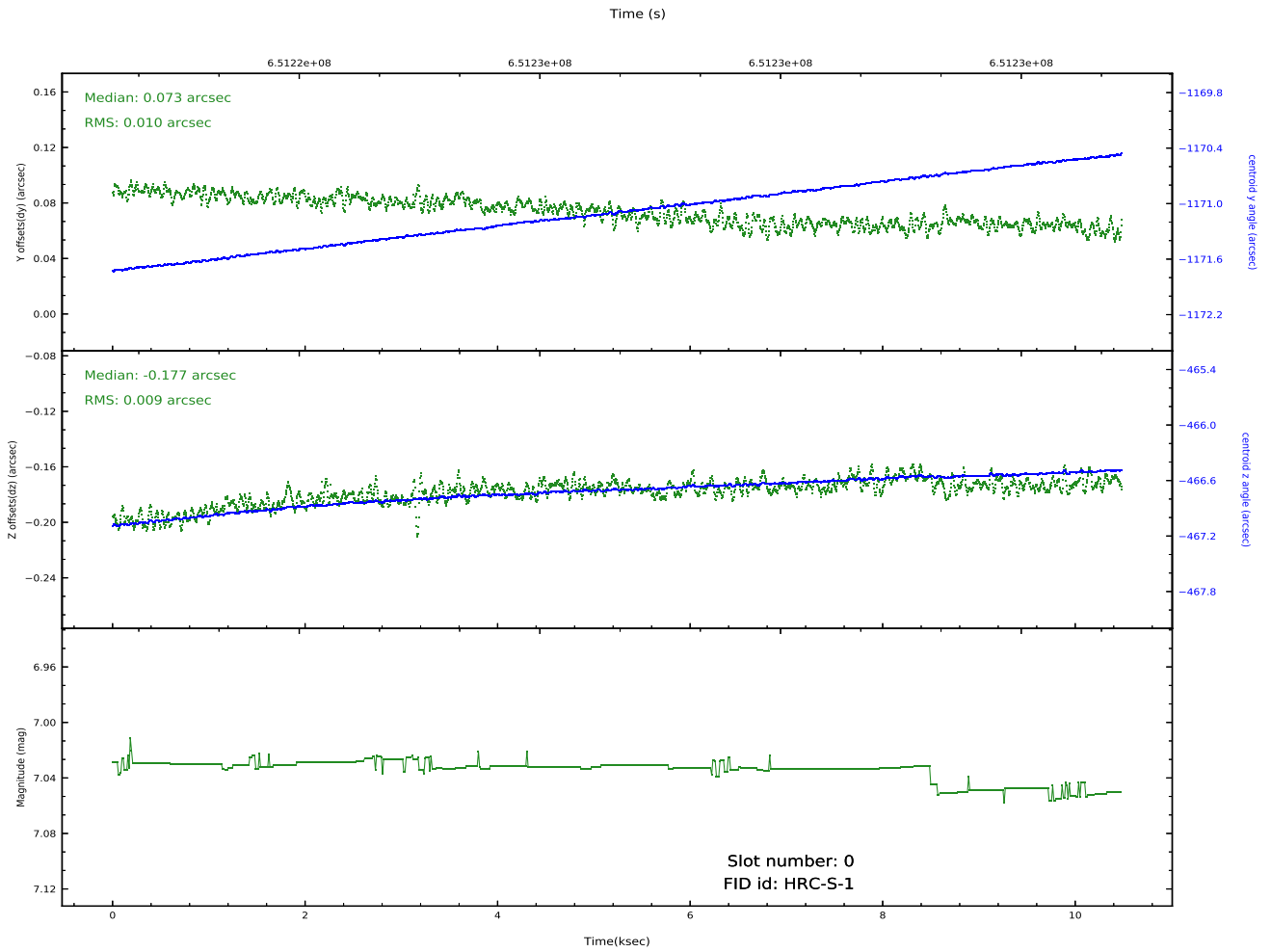
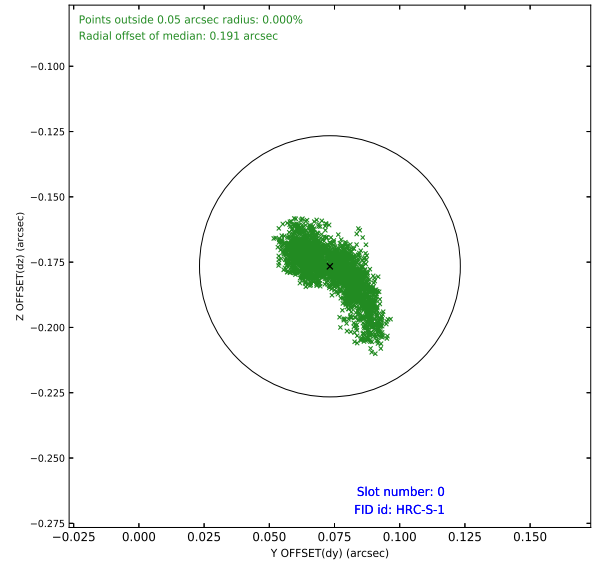
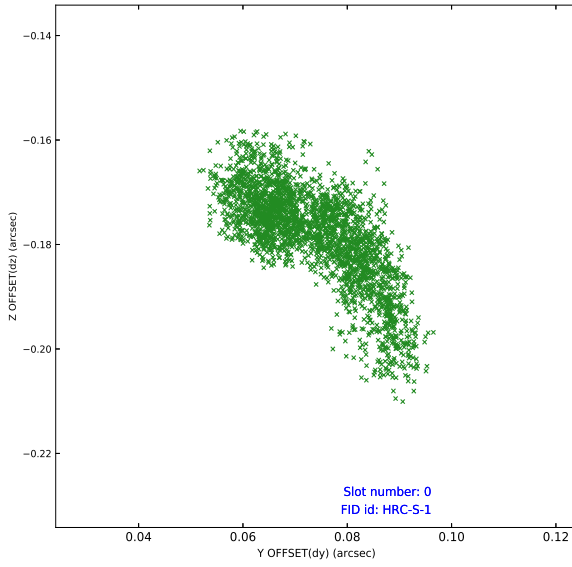


Time (s)

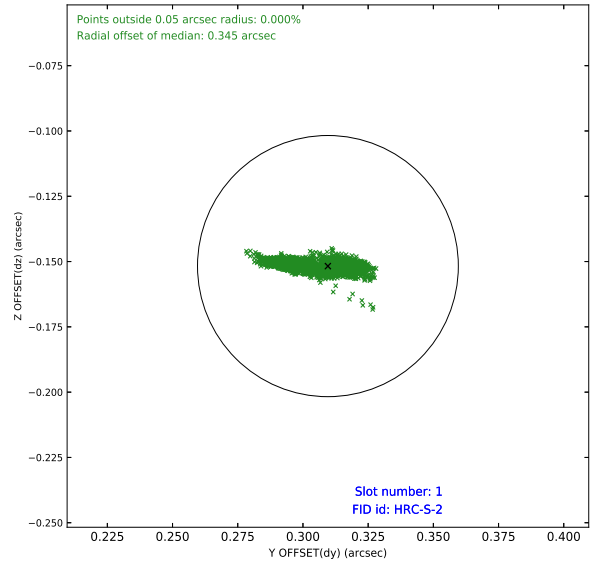
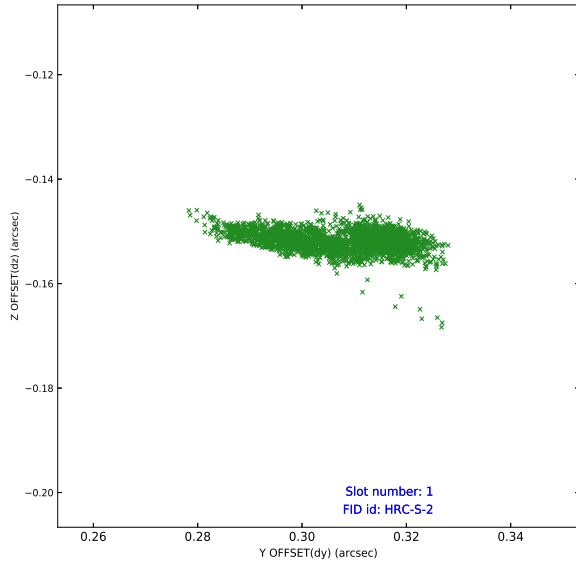


## 2.5 FID Slots

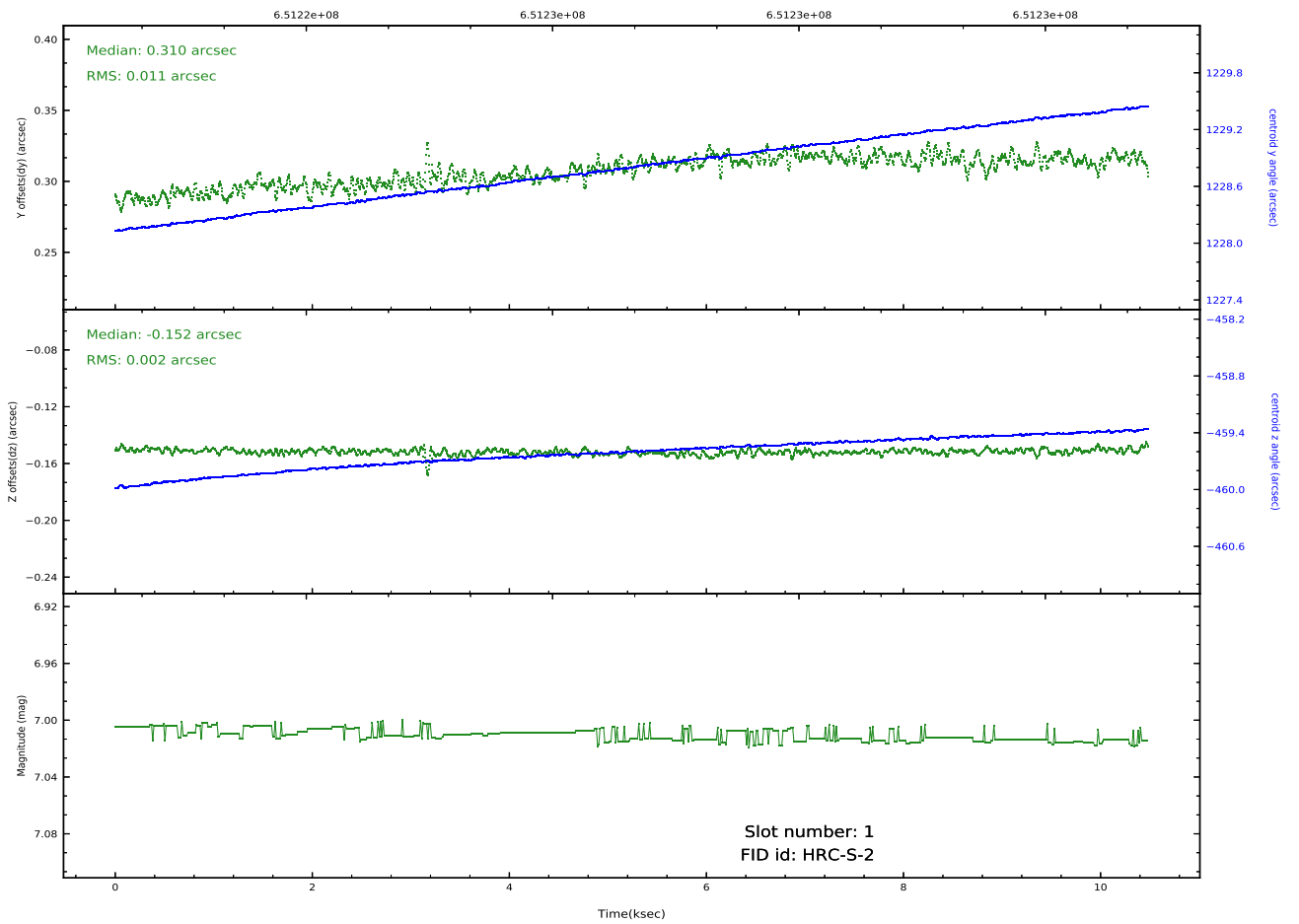
### 2.5.1 Slot 0



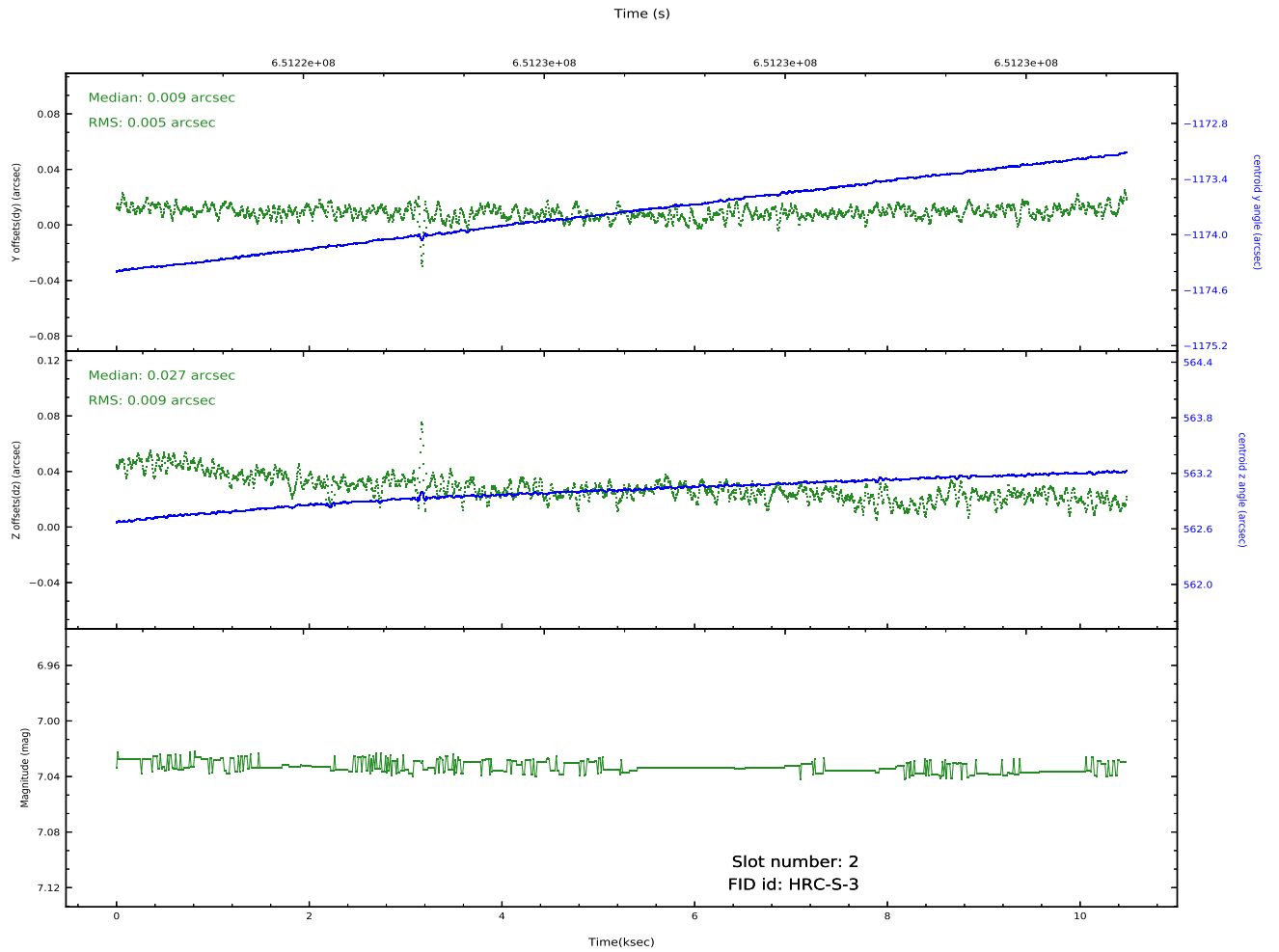
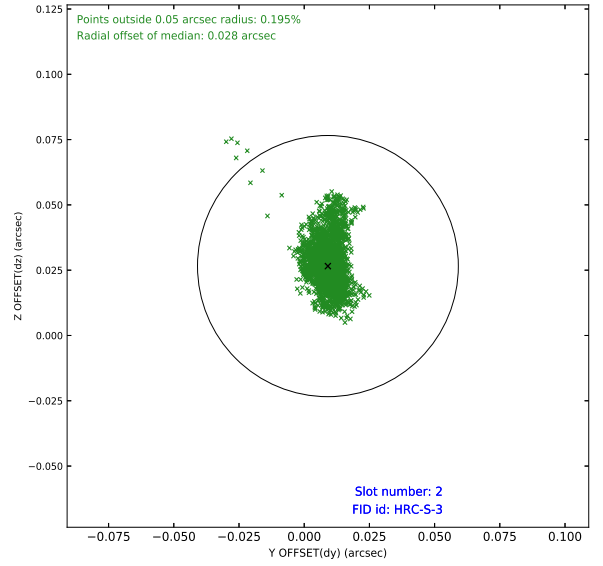
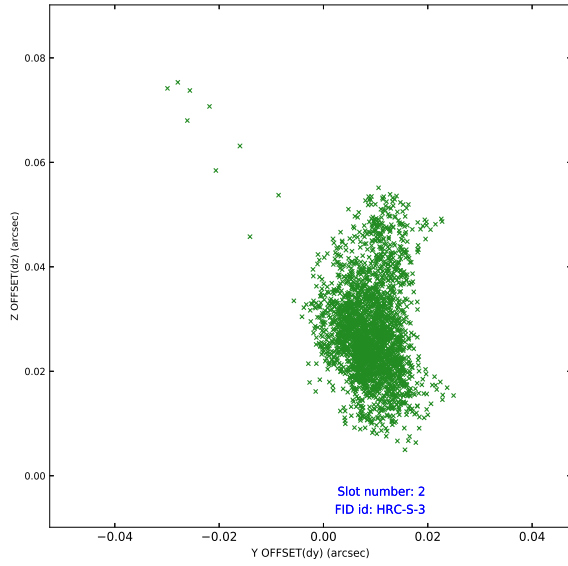
## 2.5.2 Slot 1



Time (s)



### 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	10.484725622296

## A.2 Comments

Custom dither parameters used. Target placed off-axis on HRC-S thin Al" filter that is sensitive to EUV emission in the 50-200 A range.