

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20167 - L2 Version 2  
Chandra X-Ray Center

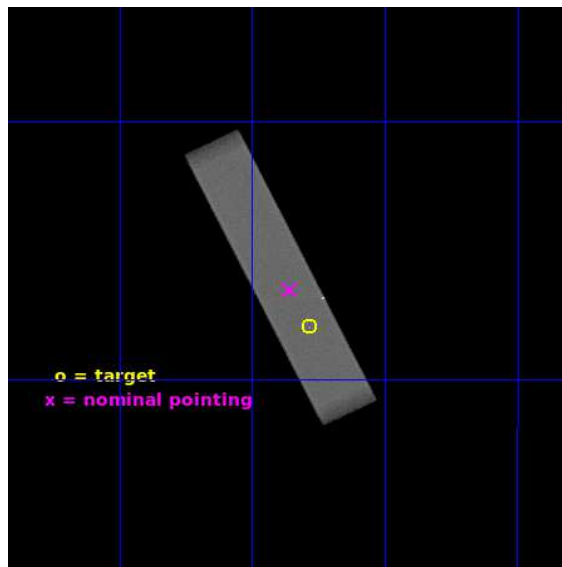
L2 Processing Date : Oct 26 2020

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# 1 Front

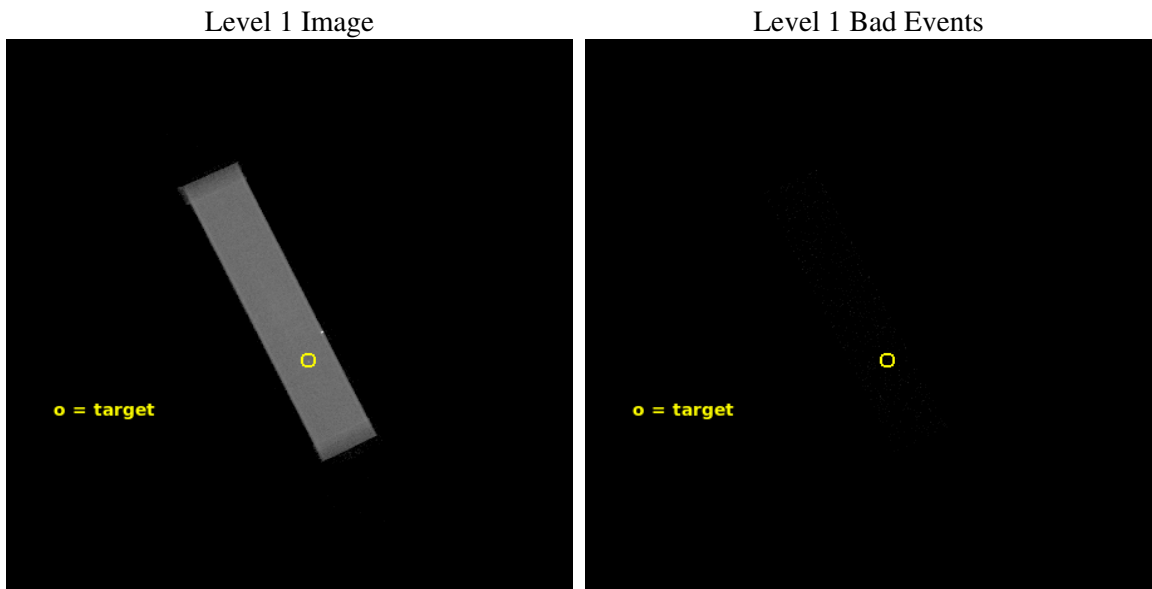
seq_num	201184	Sequence number
obs_id	20167	Observation id
title	THE EXTREME ULTRAVIOLET FLUX OF VERY LOW MASS STARS	Proposal title
observer	Jeremy Drake	Principal investigator
object	vB 8	Source name
ra_targ	253.892869	Observer's specified target RA [deg]
dec_targ	-8.398637	Observer's specified target Dec [deg]
ra_nom	253.92873636299	Nominal RA [deg]
dec_nom	-8.32622062362	Nominal Dec [deg]
roll_nom	243.76458172298	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10730.981885672	[s]
liveltime	10640.846000953	Ontime multiplied by DTCOR
l2events	680416	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	10600.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	10730.981885672	[s]
caldbver	4.9.3	&#160	l1events	881982	Number of level 1 events
date	2020-10-26T18:07:43	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

Level 1 Events

	segment 1	segment 2	segment 3
level 1 events	2	881974	6
rejected events	2	84331	6
rejected %	100%	9%	100%

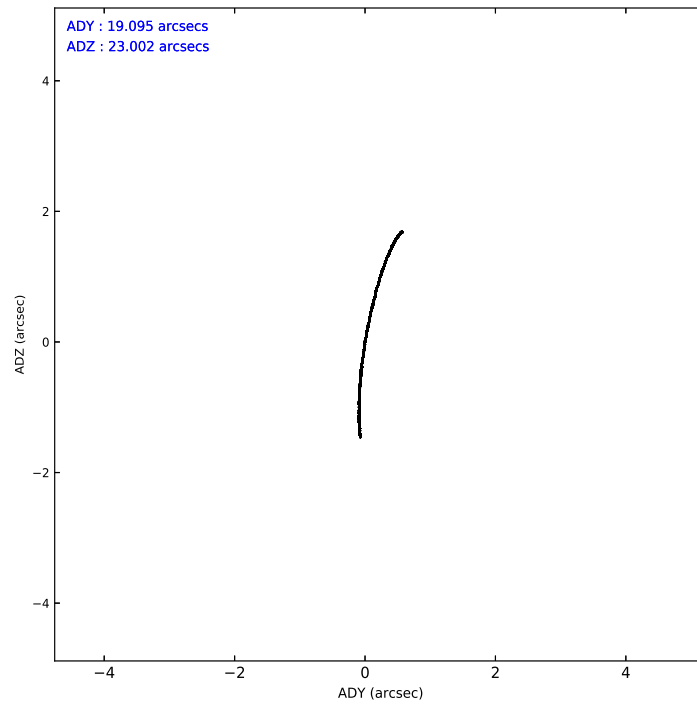
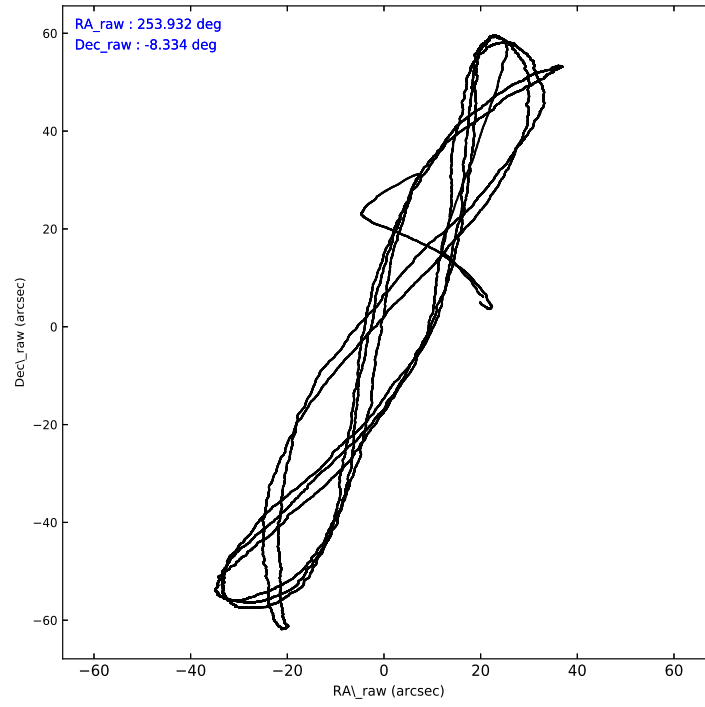


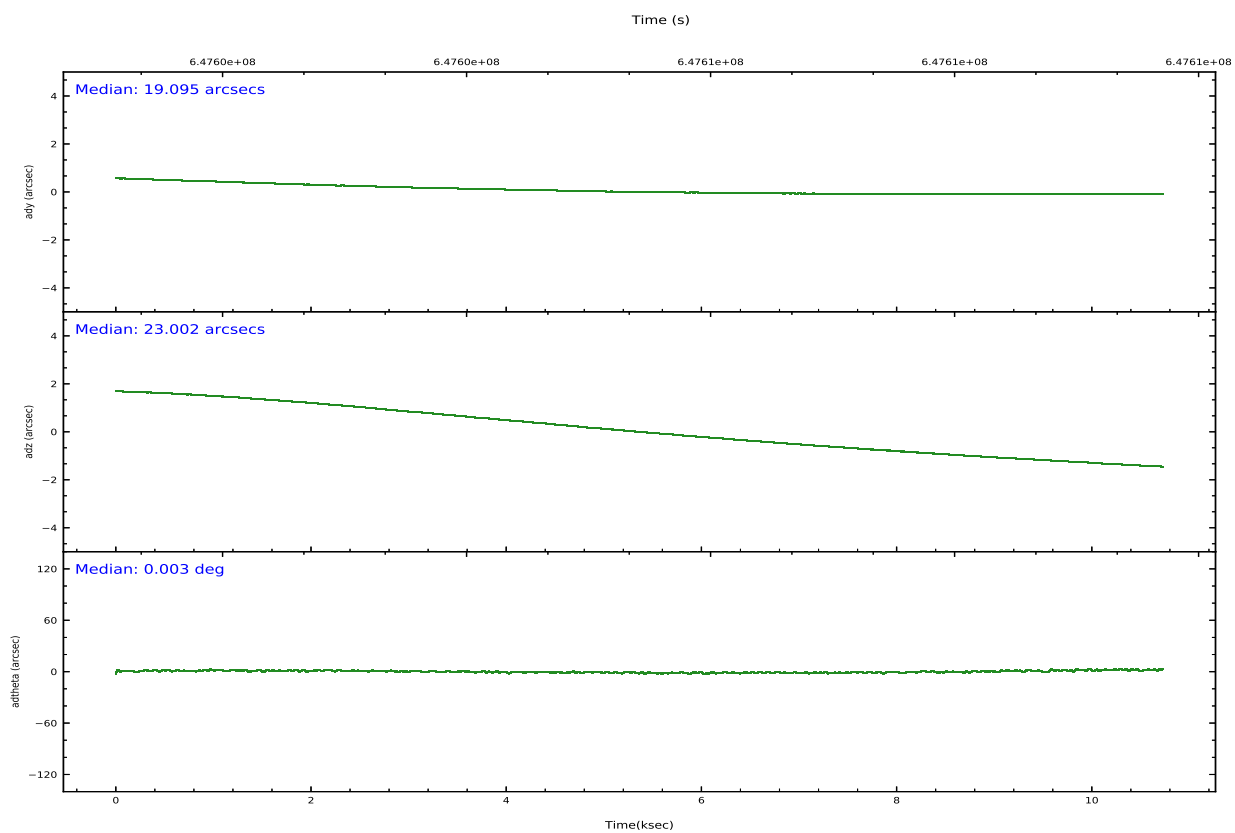
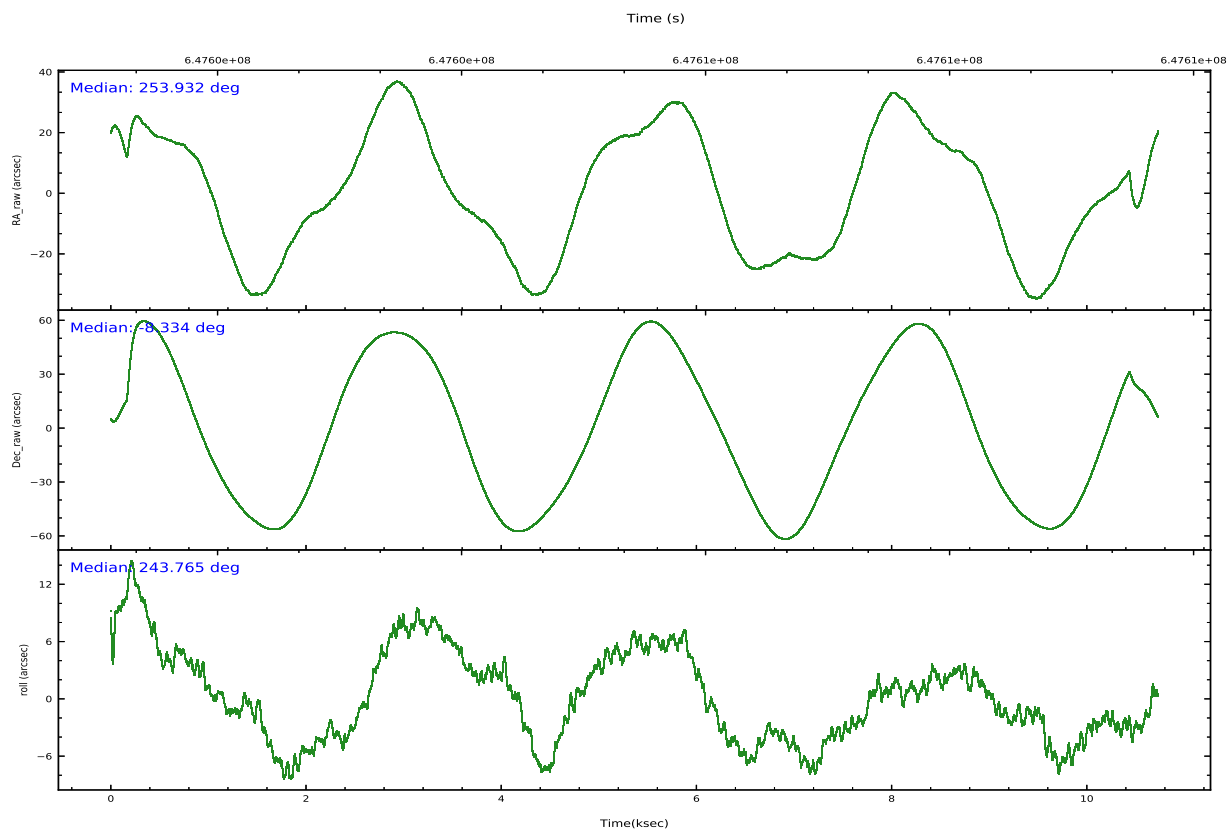
## 2.2 Compared Parameters

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	253.928969	253.92873636299
[deg] Pointing Dec	-8.305302	-8.326220623619999
[deg] Pointing Roll	243.708291	243.76458172298
[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)	647601536.184000	647600317.76027
Observation start date	2018-07-10T09:17:47	2018-07-10T08:58:37
[s] Observation end time (MET)	647612136.184000	647612918.08601
Observation end date	2018-07-10T12:14:27	2018-07-10T12:28:38

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

## 2.3 Aspect



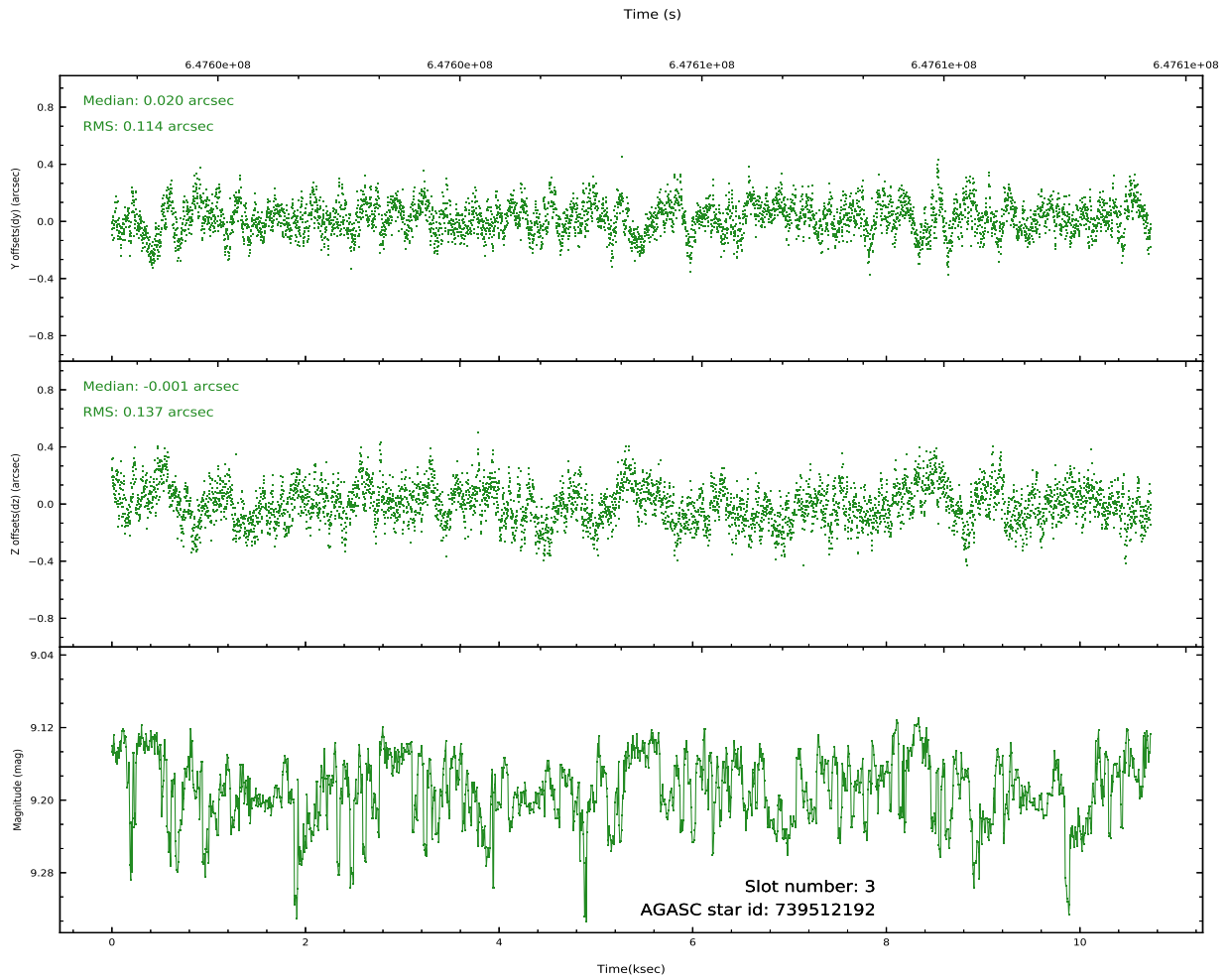
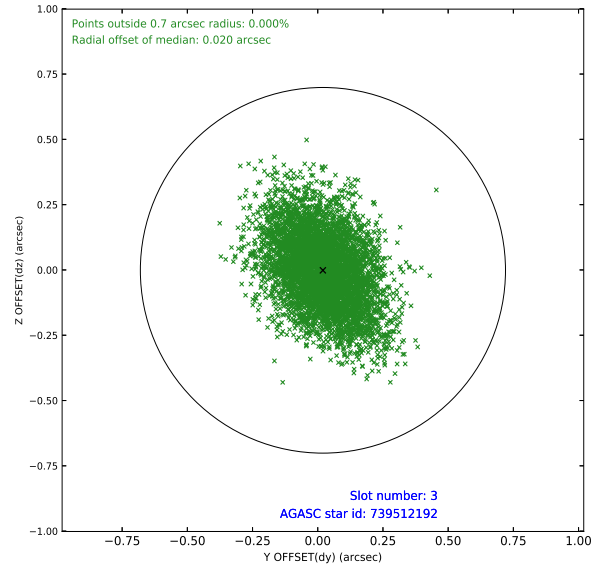
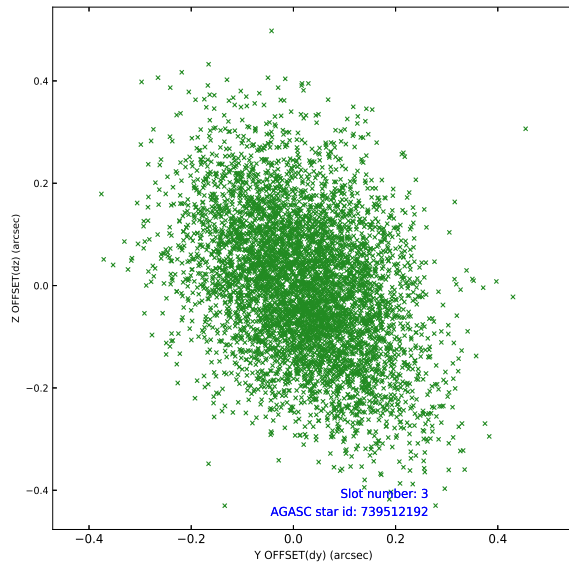


Slot Statistics

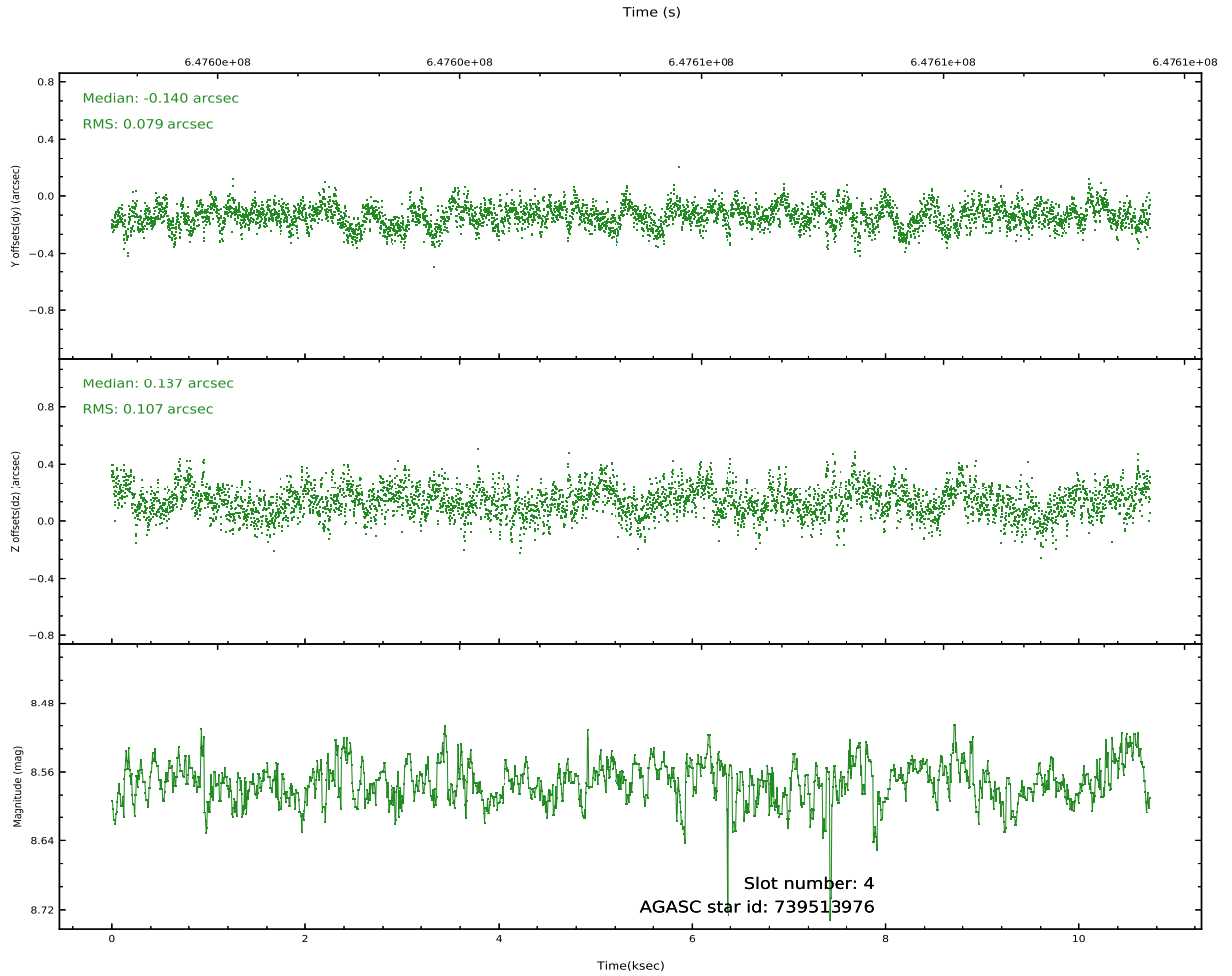
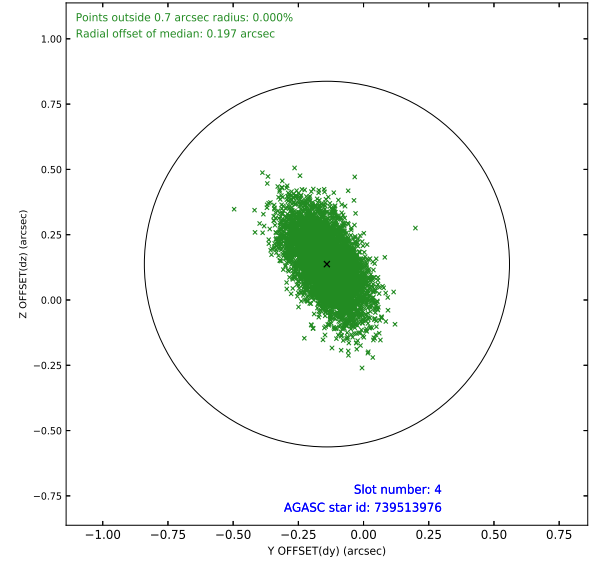
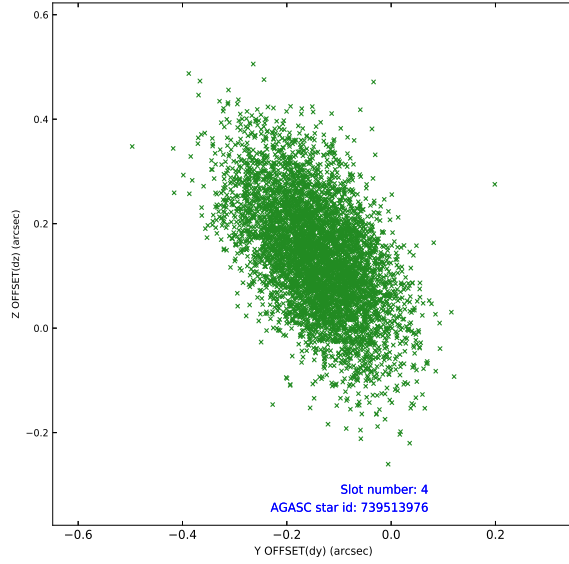
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.06	2618	1.000	0.107	-0.178	0.024	0.033	0.000000	0.000000	-1173.69	-472
1	FID		HRC-S-2	7.02	2618	1.000	0.237	-0.136	0.009	0.021	0.000000	0.000000	1225.65	-465
2	FID		HRC-S-3	7.05	2618	1.000	0.046	0.011	0.028	0.041	0.000000	0.000000	-1175.90	557
3	GUIDE	used	739512192	9.19	5229	1.000	0.020	-0.001	0.188	0.317	253.280429	-8.391770	1304.57	-1932
4	GUIDE	used	739513976	8.57	5233	1.000	-0.140	0.137	0.136	0.239	254.317335	-8.384528	-356.50	1366
5	GUIDE	used	739519240	9.00	5230	1.000	0.092	-0.007	0.206	0.345	253.539385	-8.286636	555.00	-1273
6	GUIDE	used	739520216	8.22	5231	1.000	-0.012	-0.089	0.132	0.231	253.307243	-8.330126	1062.85	-1945
7	GUIDE	used	739509616	8.66	5227	1.000	0.041	-0.045	0.141	0.239	254.061991	-9.076494	2279.43	1654

## 2.4 Star Slots

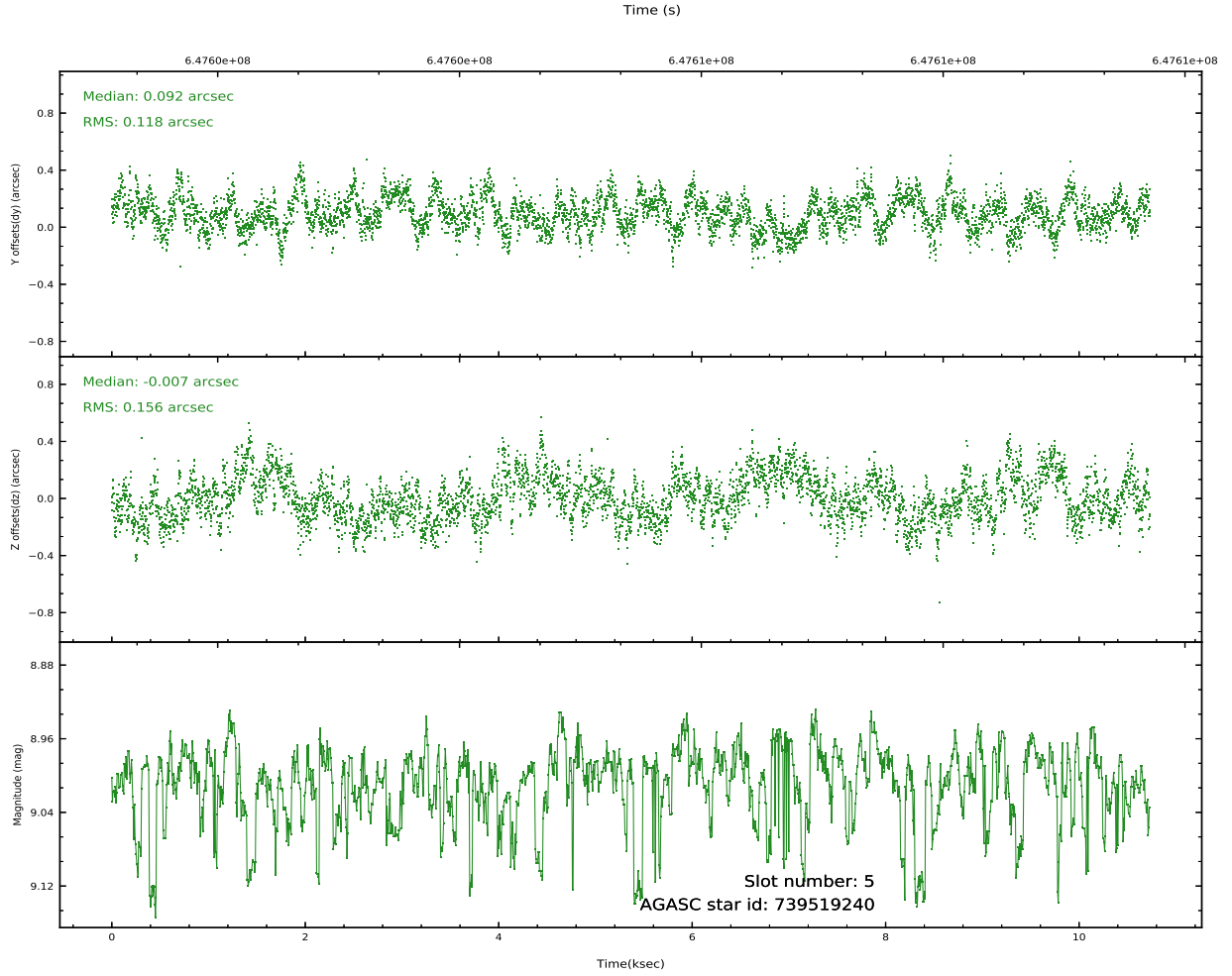
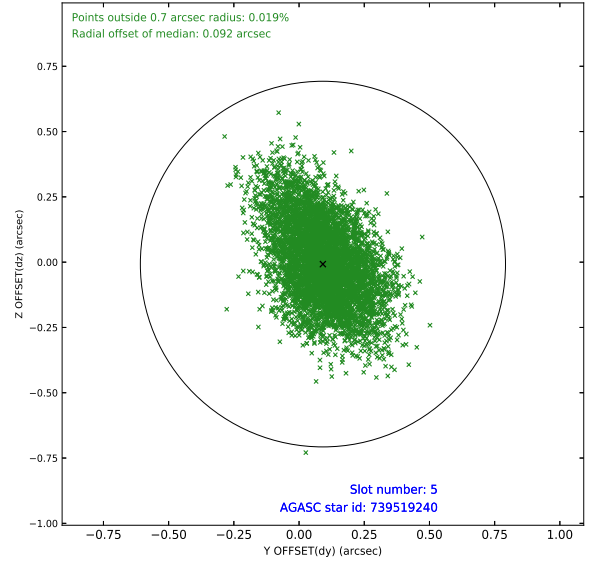
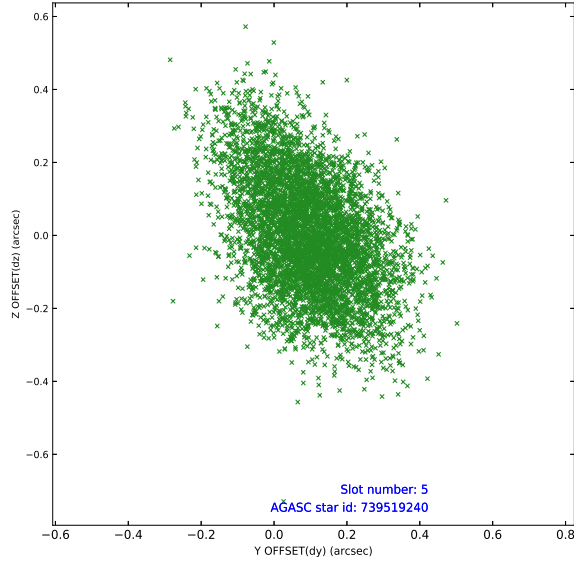
### 2.4.1 Slot 3



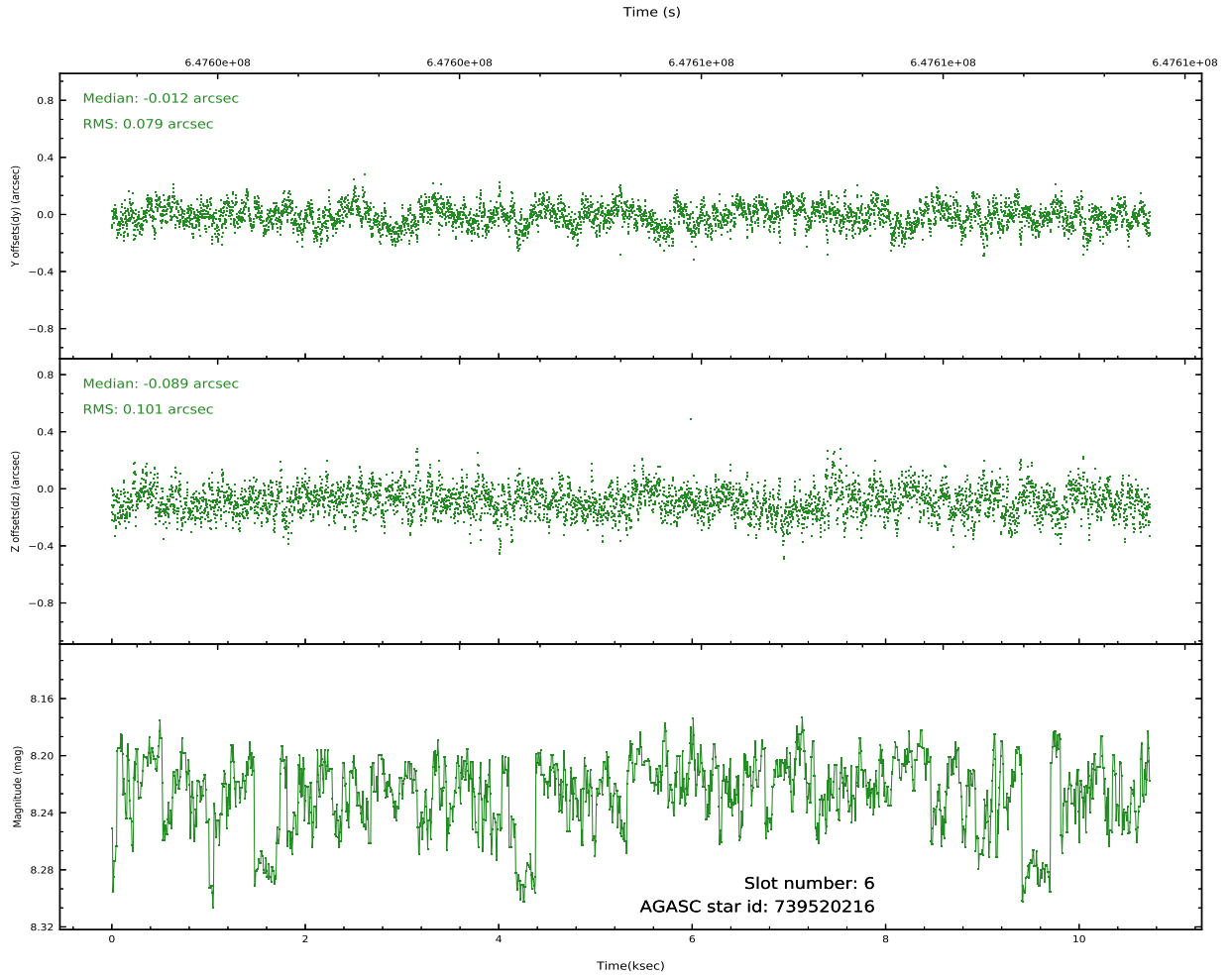
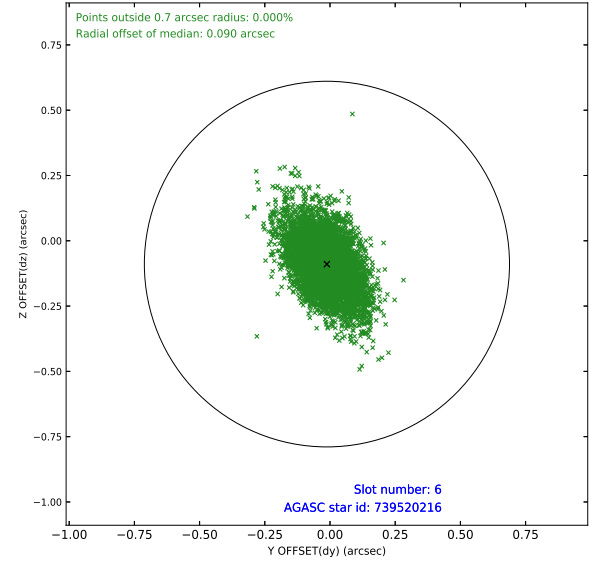
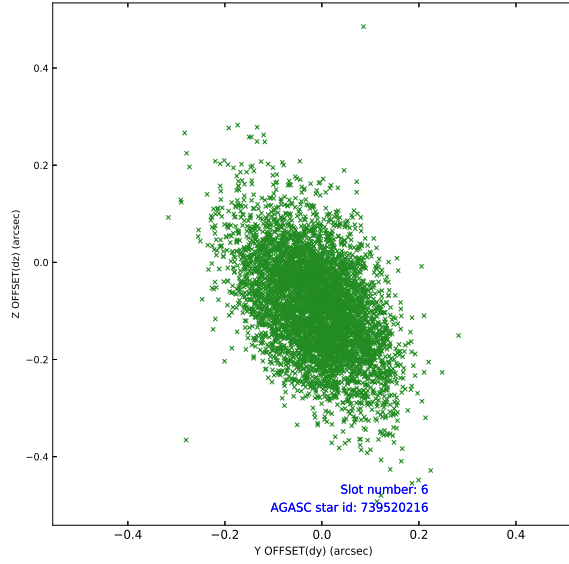
## 2.4.2 Slot 4



### 2.4.3 Slot 5

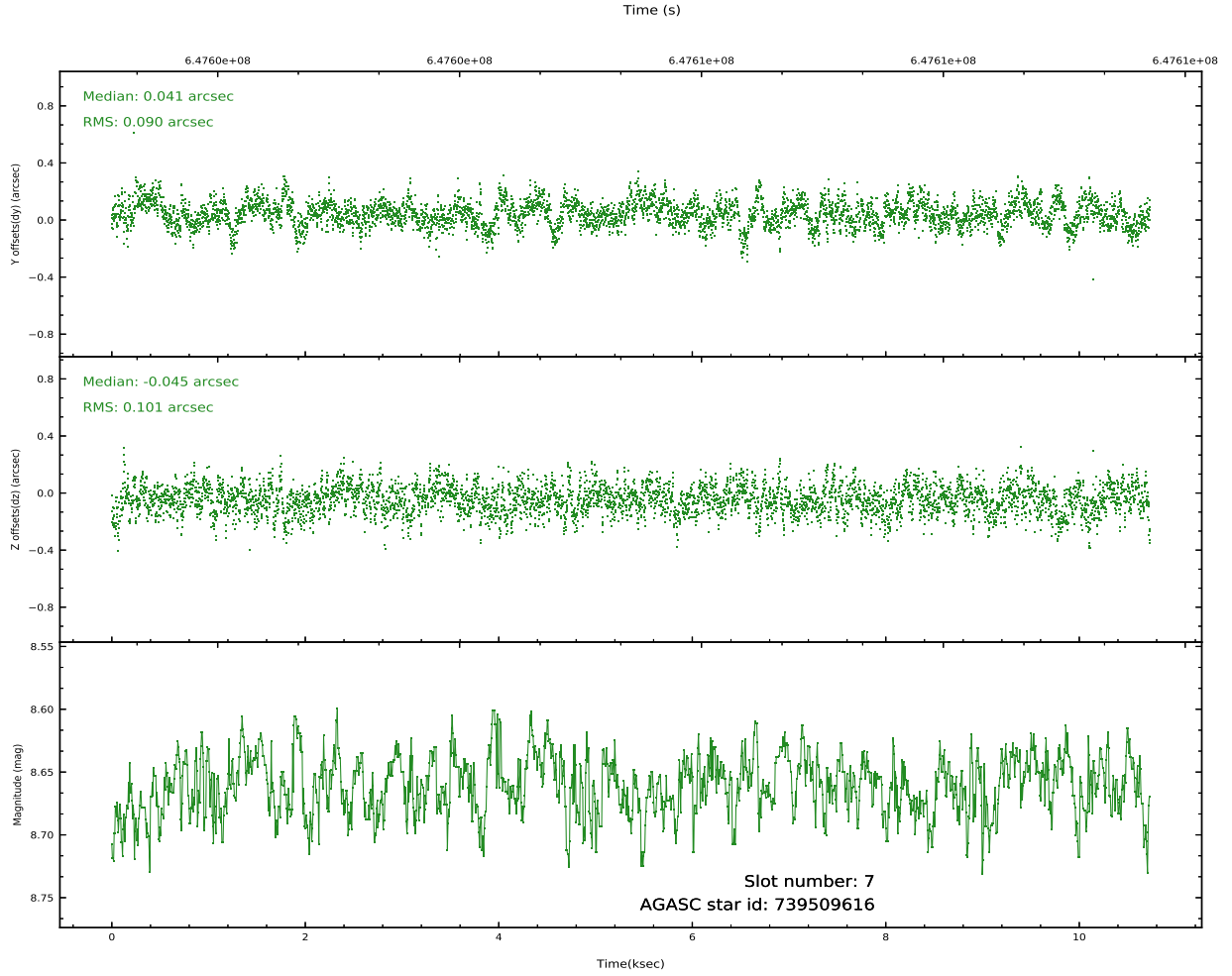
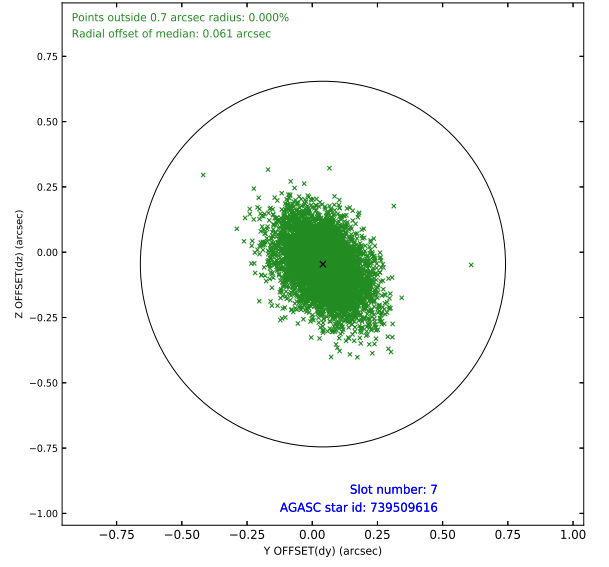
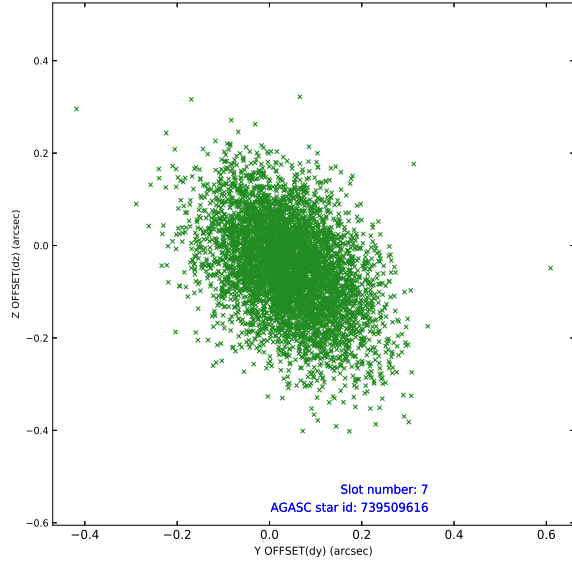


## 2.4.4 Slot 6



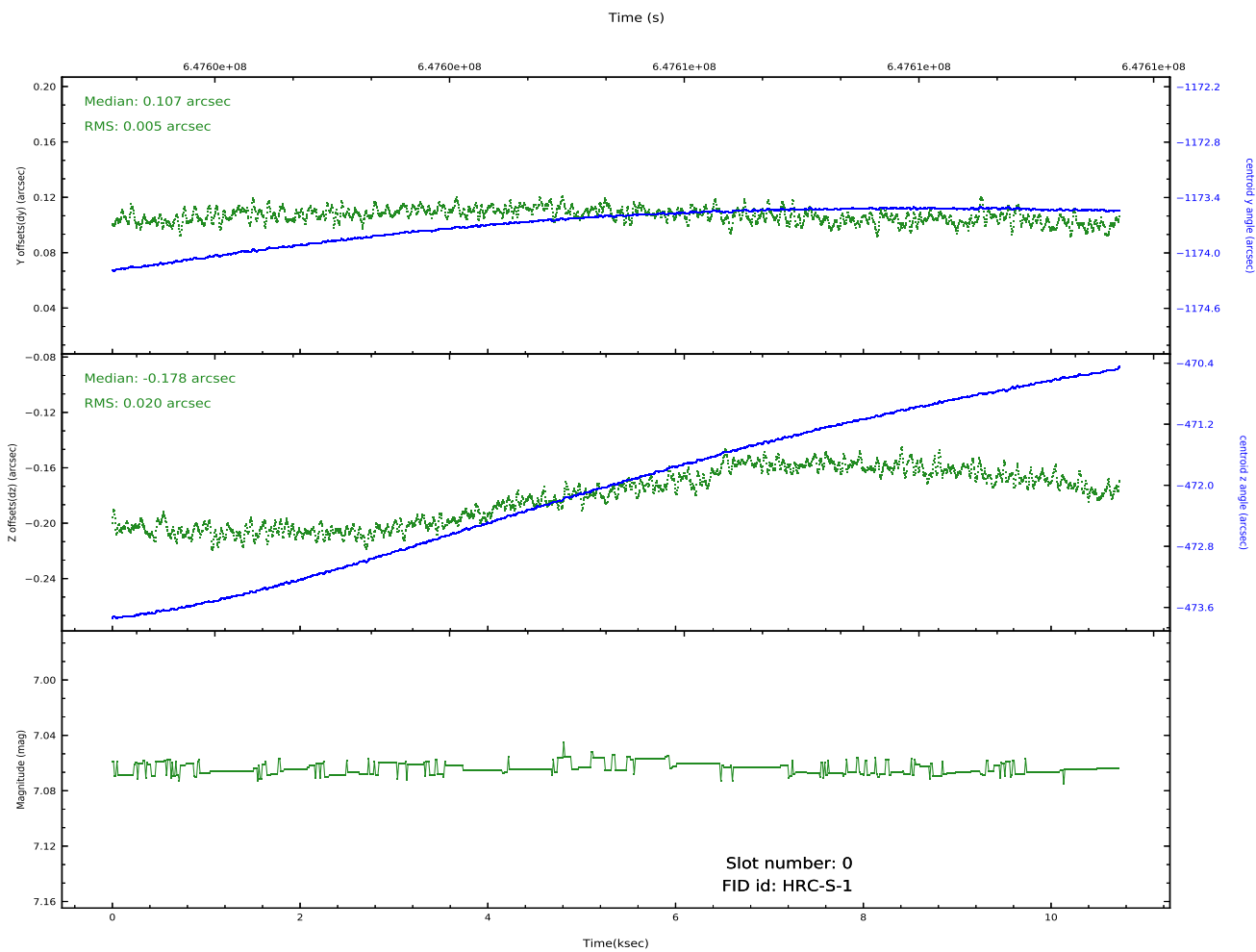
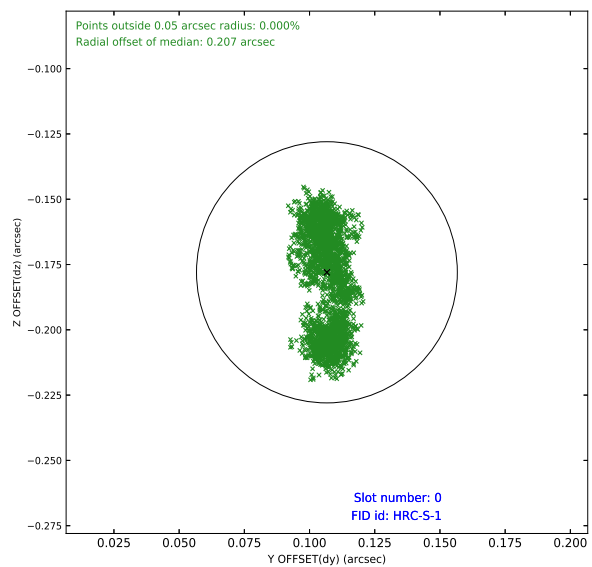
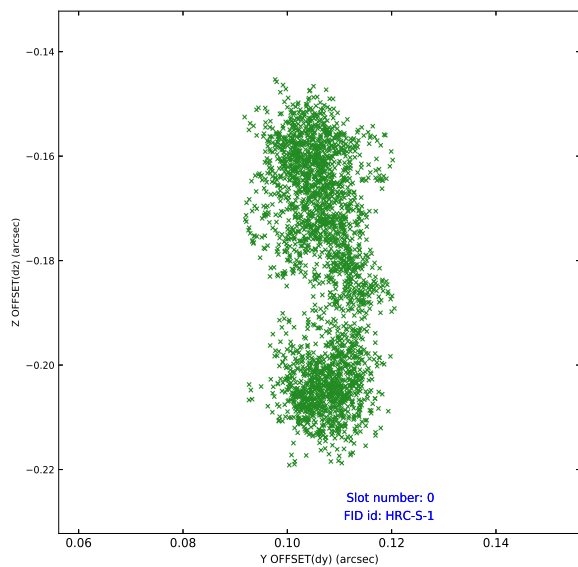


## 2.4.5 Slot 7

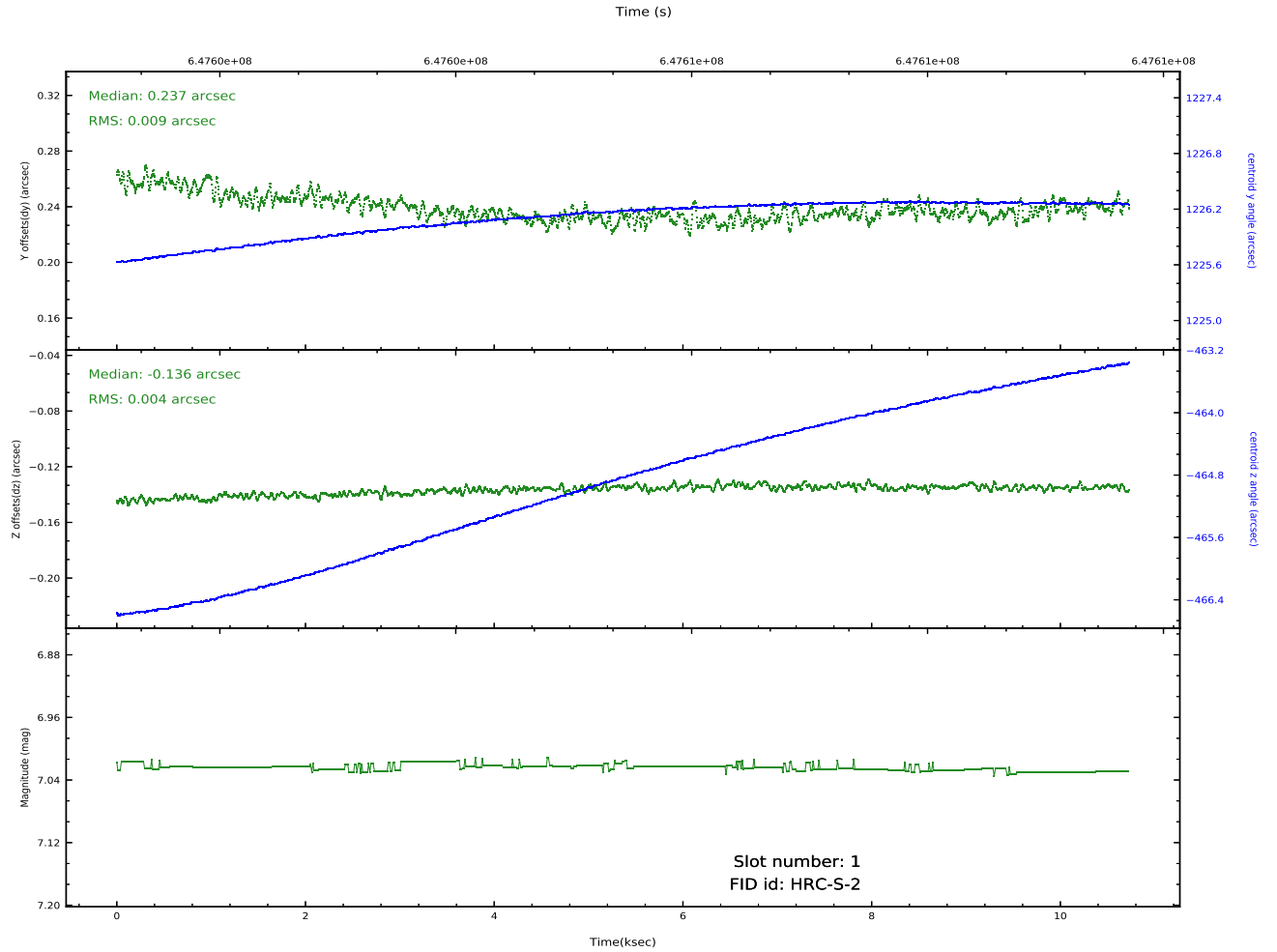
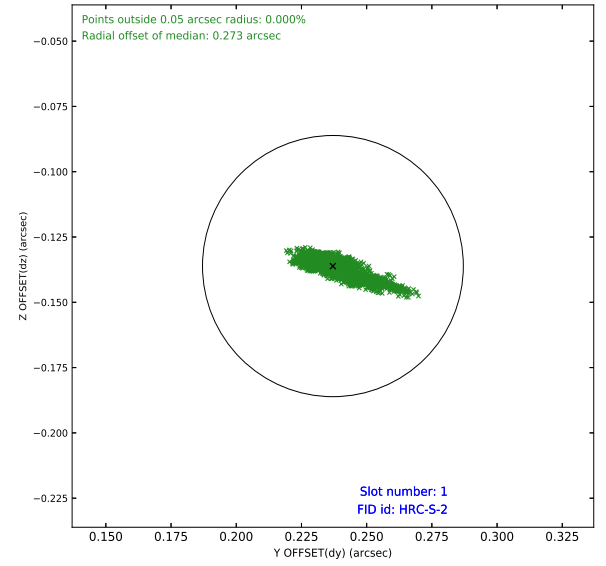
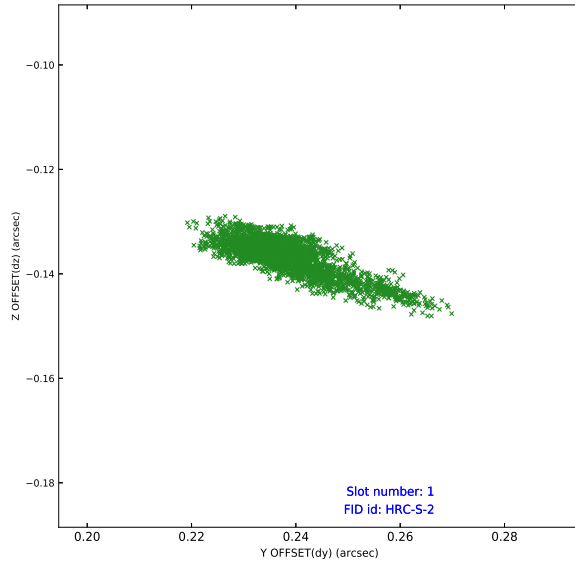


## 2.5 FID Slots

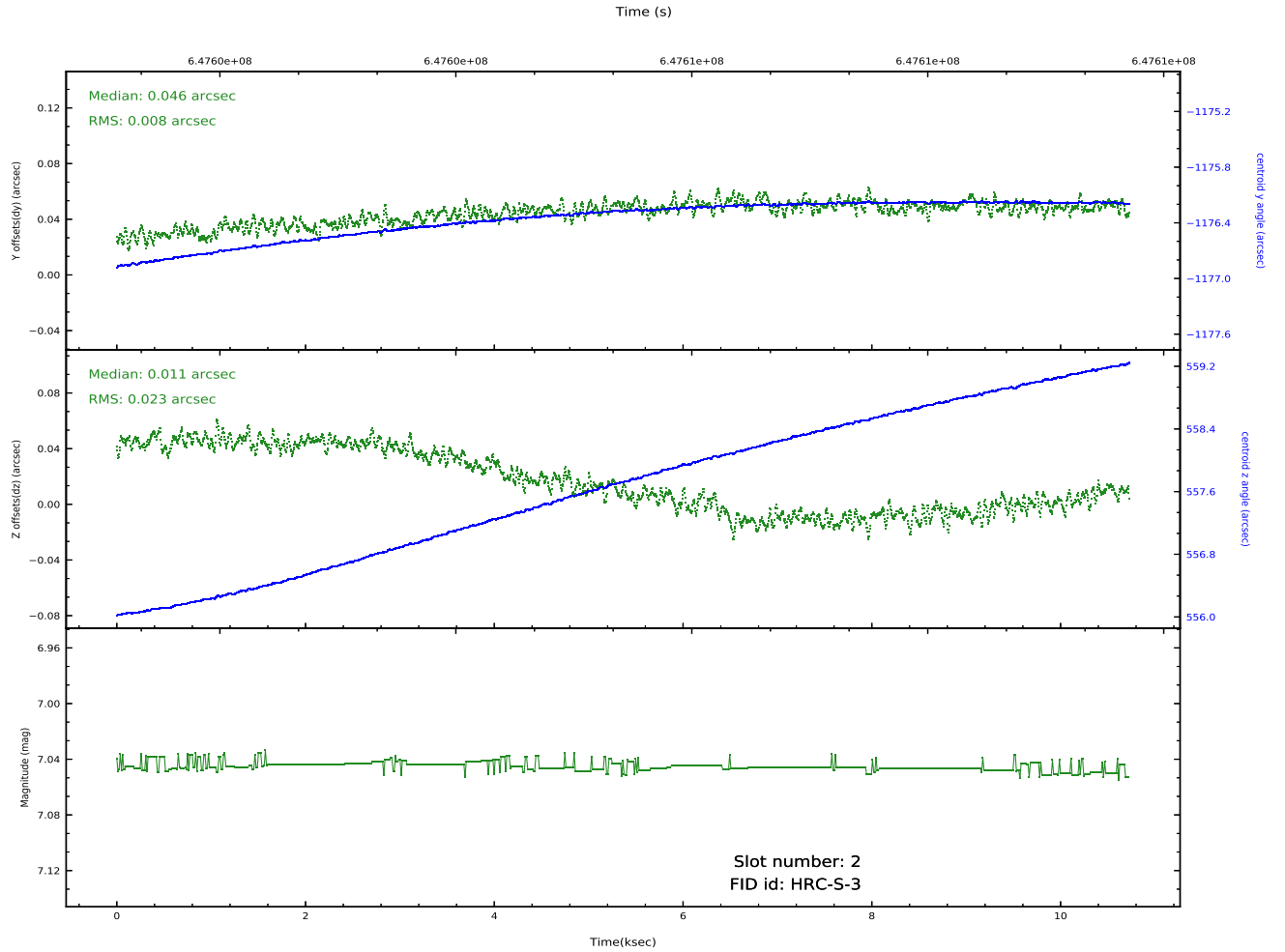
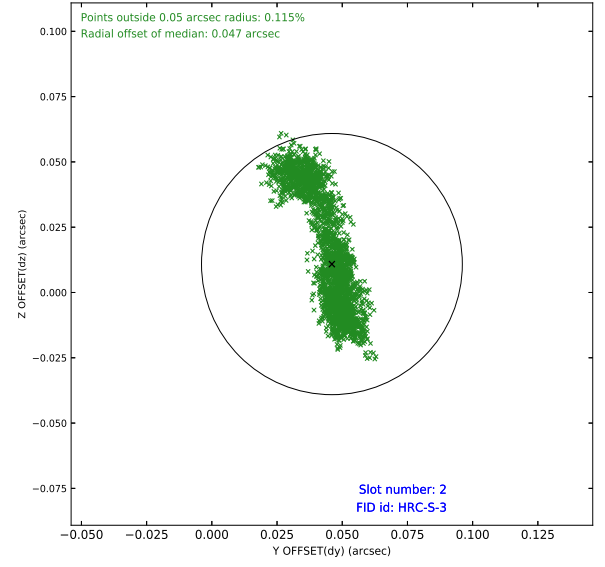
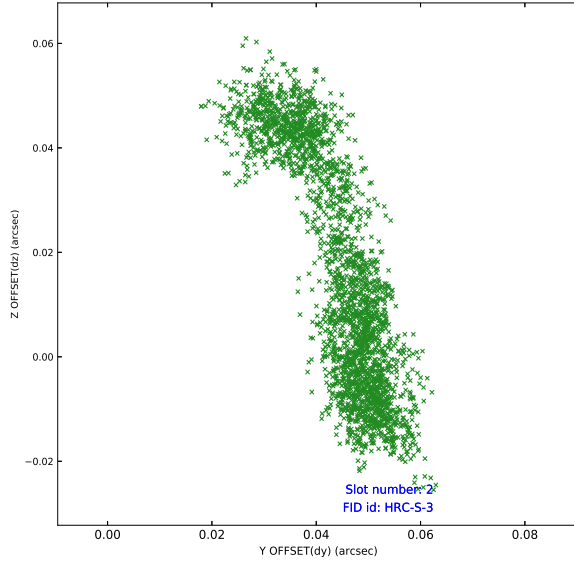
### 2.5.1 Slot 0



## 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	10.730725635886

## A.2 Comments

Warning: this is an observation with custom dither parameters or "big dither" - the amplitude is about 2 arcmin. Scientific analysis should consider the large range in detector response covered.

=====

The source at the target location is ~5' off-axis. The shape and orientation of the source is consistent with the PSF at that distance.

=====

The bright "blob" dithering off the edge of the detector is a very bright source. It is assumed the degap calibration at the edge is insufficient causing poor event location in chip coords and thus poor event reconstruction in sky coords.