

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6544 - L2 Version 5  
Chandra X-Ray Center

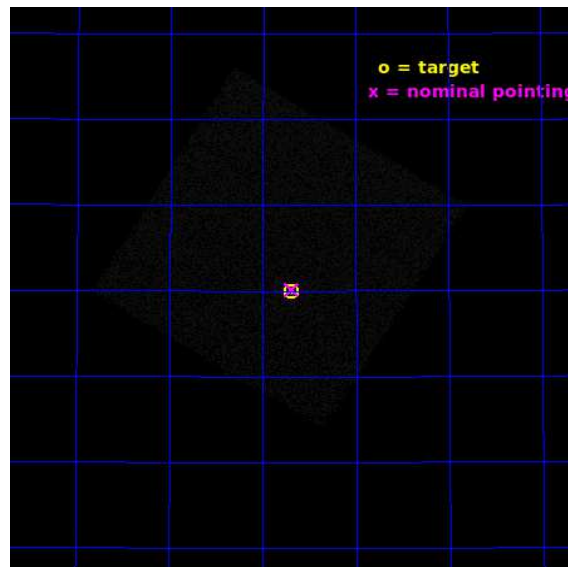
L2 Processing Date : Oct 12 2020

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# 1 Front

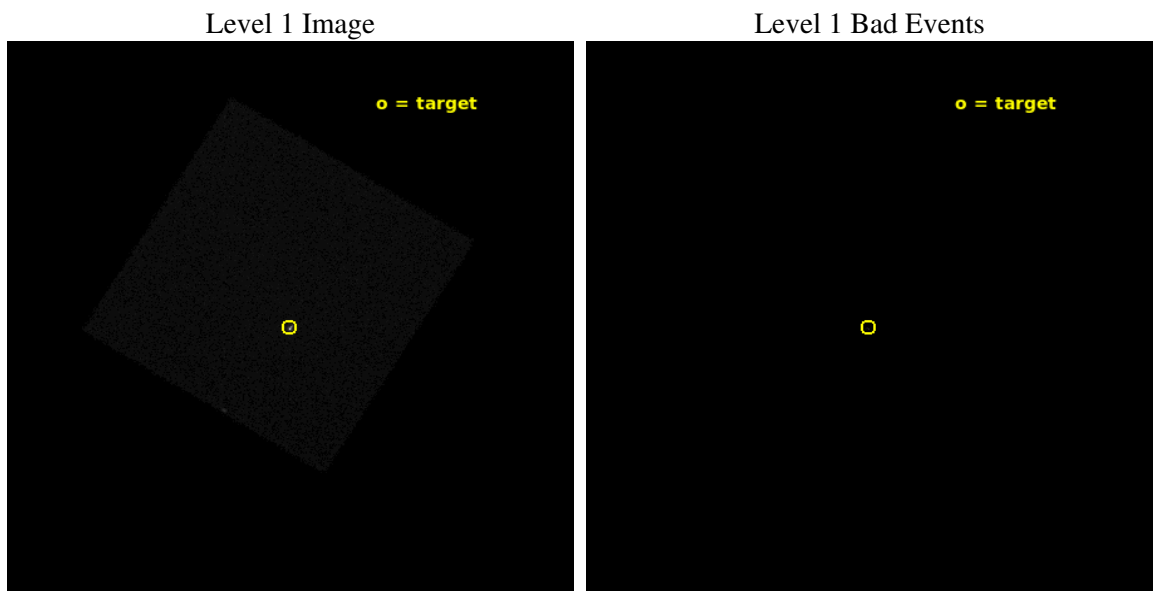
seq_num	290637	Sequence number
obs_id	6544	Observation id
title	Improving the De-Gap Corrections for the HRC-I	Proposal title
observer	CXC Calibration	Principal investigator
object	Capella	Source name
ra_targ	79.1725	Observer's specified target RA [deg]
dec_targ	45.998	Observer's specified target Dec [deg]
ra_nom	79.171882660178	Nominal RA [deg]
dec_nom	46.002556027198	Nominal Dec [deg]
roll_nom	166.62972718088	Nominal Roll [deg]
revision	5	Processing version of data
ontime	5185.4752397537	[s]
livetime	5138.279061121	Ontime multiplied by DTCOR
l2events	326083	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	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	5185.4752397537	[s]
caldbver	4.9.2	&#160	l1events	452035	Number of level 1 events
date	2020-10-12T03:32:55	Date and time of file creation			
revision	5	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

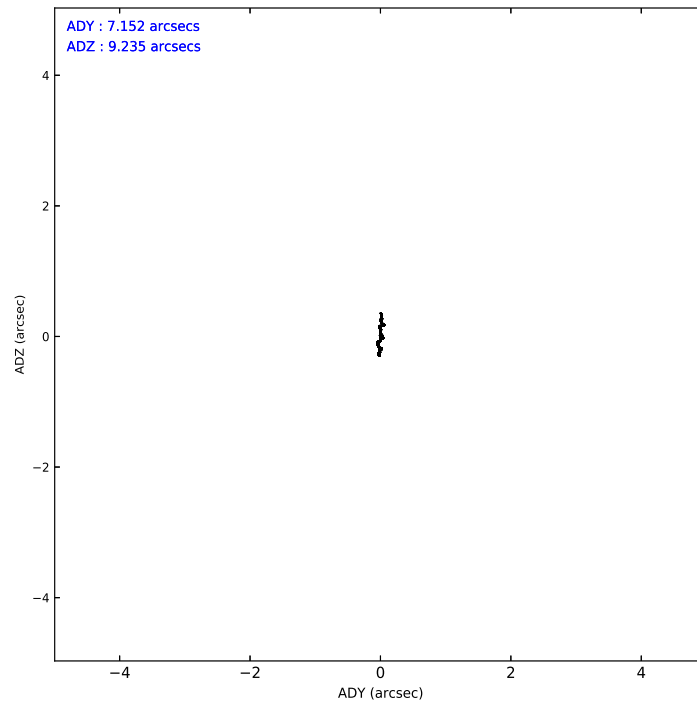
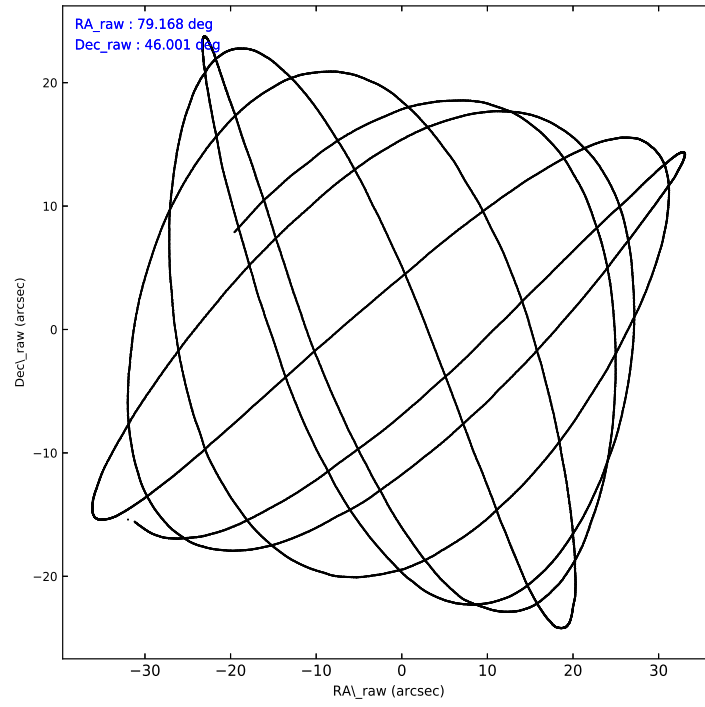
	<b>segment 0</b>
level 1 events	452035
rejected events	19230
rejected %	4%

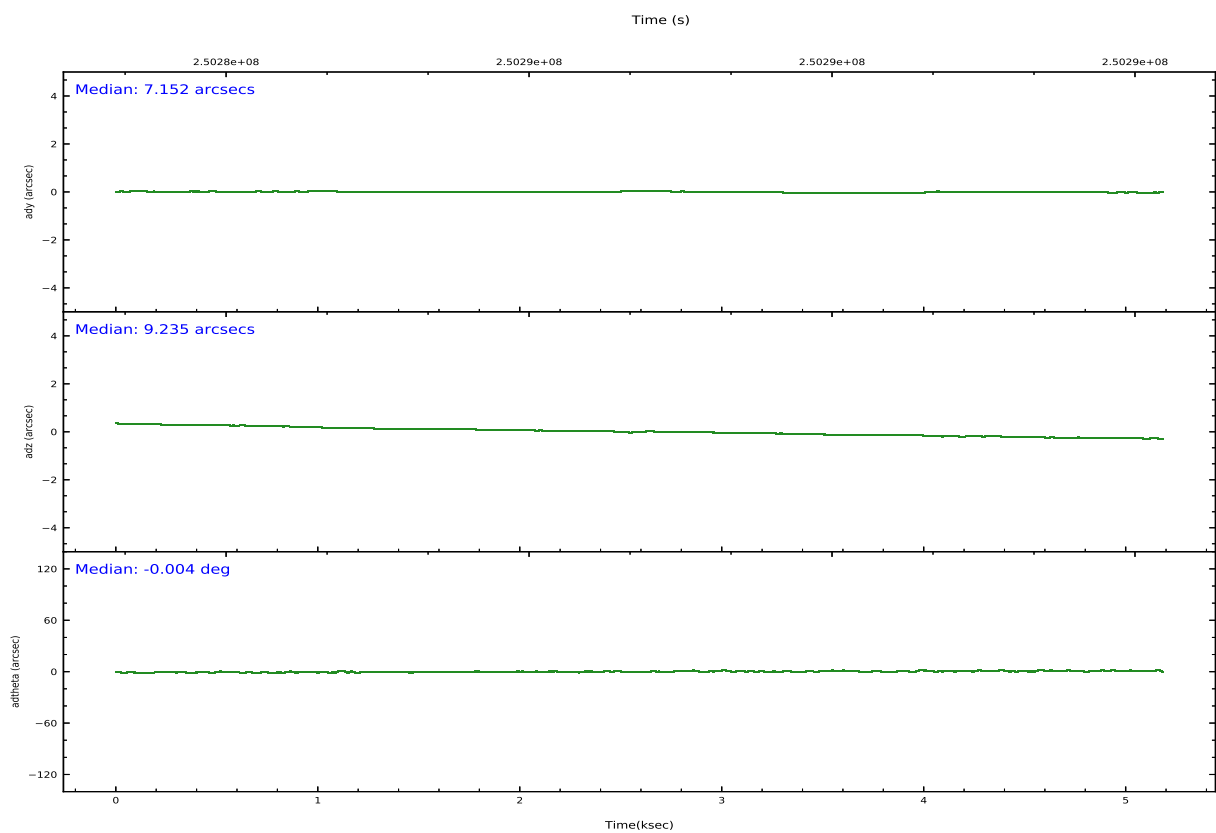
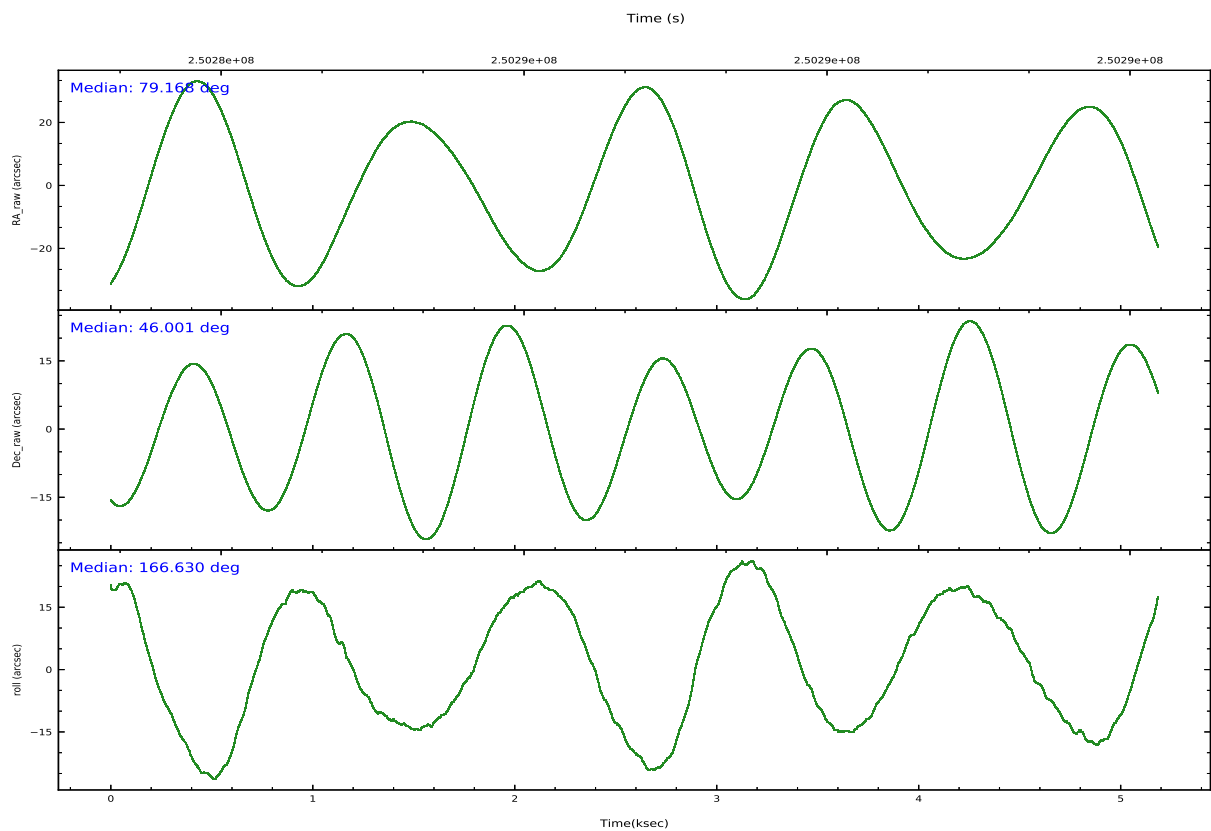
## 2.2 Compared Parameters

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	79.204775	79.171882660178
[deg] Pointing Dec	46.008794	46.002556027198
[deg] Pointing Roll	166.704238	166.62972718088
[mm] SIM focus pos	-1.040293	-1.038866356238299
[mm] SIM defocus	0	0.001426264420575141
[mm] SIM translation stage pos	141.985494	141.9884137096963
[mm] SIM translation stage offset	-15	-15.00292481809475
[s] Observation start time (MET)	250284640.184000	250284263.89022
Observation start date	2005-12-06T19:29:36	2005-12-06T19:24:23
[s] Observation end time (MET)	250289640.184000	250290650.15302
Observation end date	2005-12-06T20:52:56	2005-12-06T21:10:50

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

## 2.3 Aspect



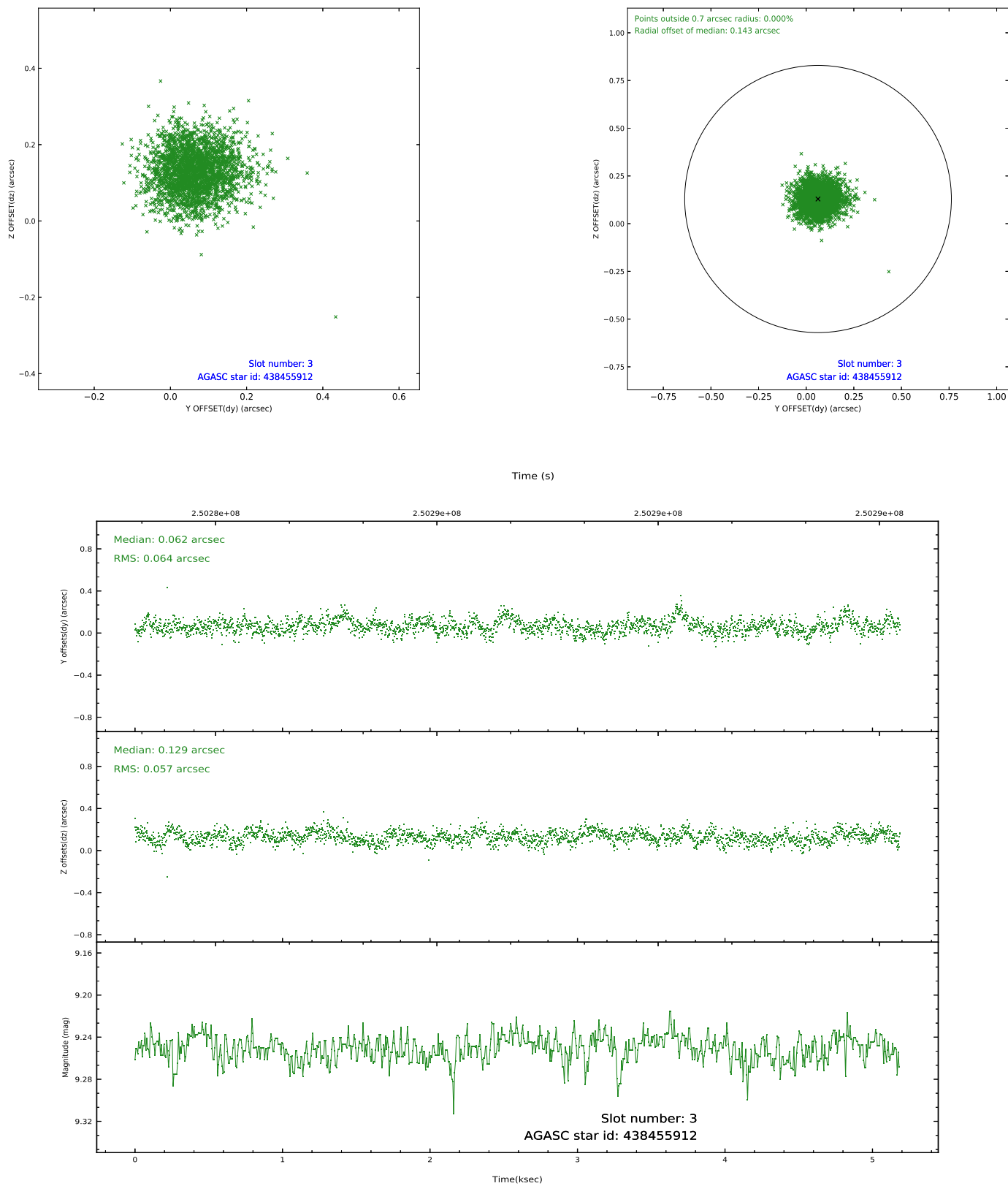


Slot Statistics

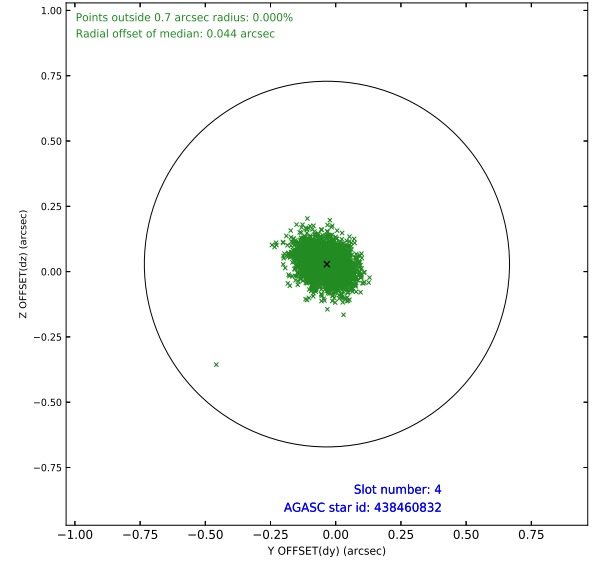
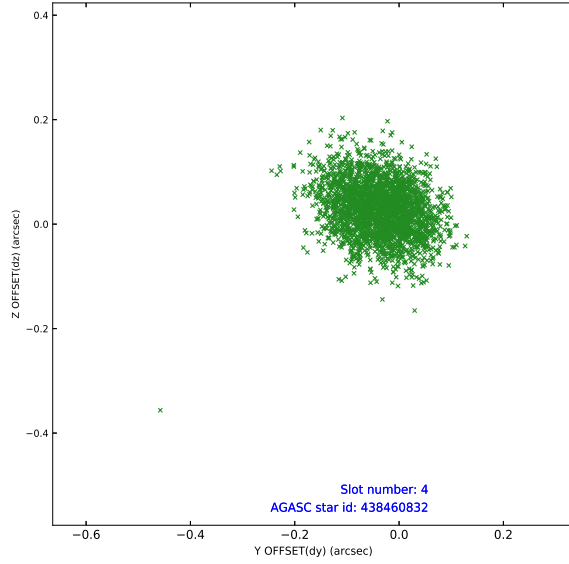
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-I-1	6.97	1265	1.000	0.159	-0.733	0.009	0.013	0.000000	0.000000	-762.81	-1605
1	FID		HRC-I-2	7.06	1265	1.000	-0.086	0.123	0.009	0.015	0.000000	0.000000	849.84	-1608
2	FID		HRC-I-3	7.13	1265	1.000	0.046	0.518	0.009	0.016	0.000000	0.000000	-1190.36	697
3	GUIDE	used	438455912	9.25	2530	1.000	0.062	0.129	0.091	0.149	78.251946	45.690923	2073.01	1651
4	GUIDE	used	438460832	8.98	2529	1.000	-0.034	0.029	0.083	0.134	78.414614	45.554782	1566.48	2040
5	GUIDE	used	440140240	9.98	2524	1.000	-0.081	-0.064	0.141	0.235	78.889349	46.726437	1354.27	-2335
6	GUIDE	used	440150048	7.15	2531	1.000	0.007	-0.041	0.066	0.110	79.112838	46.416060	561.29	-1375
7	GUIDE	used	440163960	8.88	2529	1.000	0.039	-0.050	0.078	0.124	79.298370	45.827072	-377.58	582

## 2.4 Star Slots

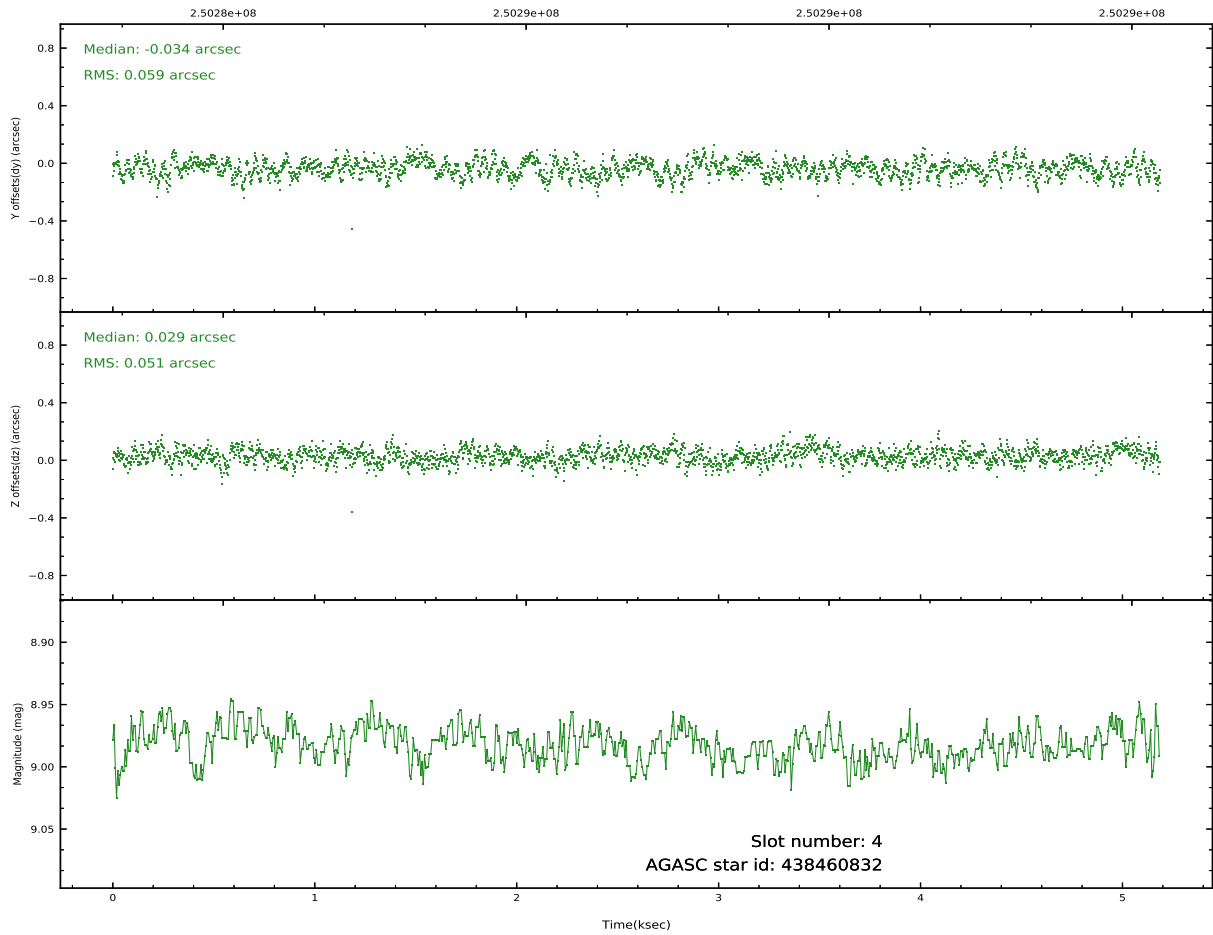
### 2.4.1 Slot 3



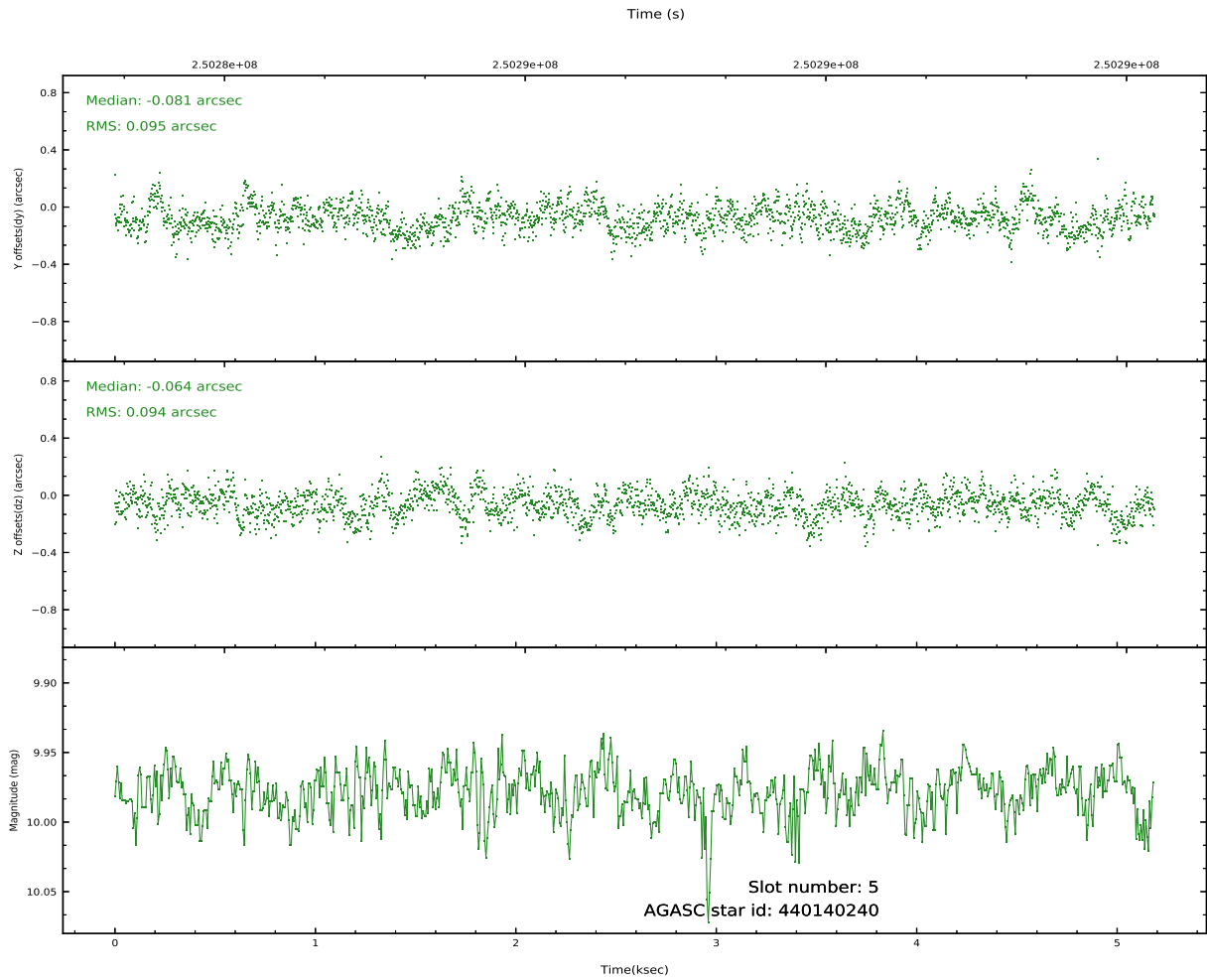
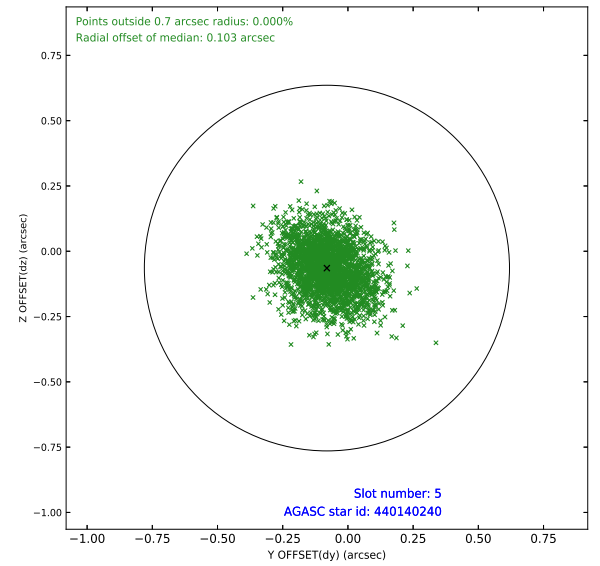
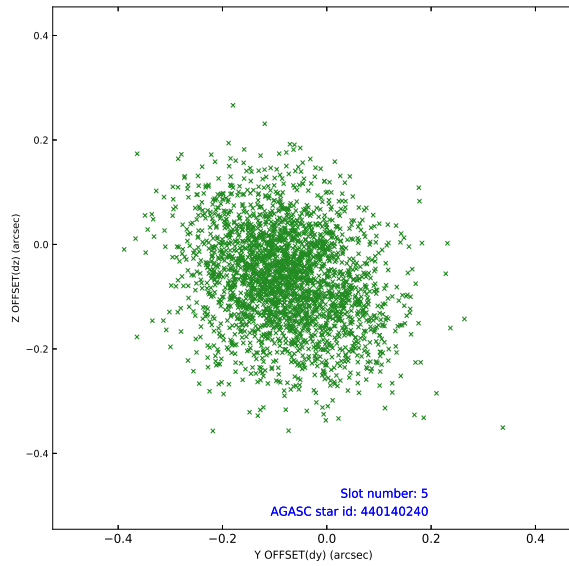
## 2.4.2 Slot 4



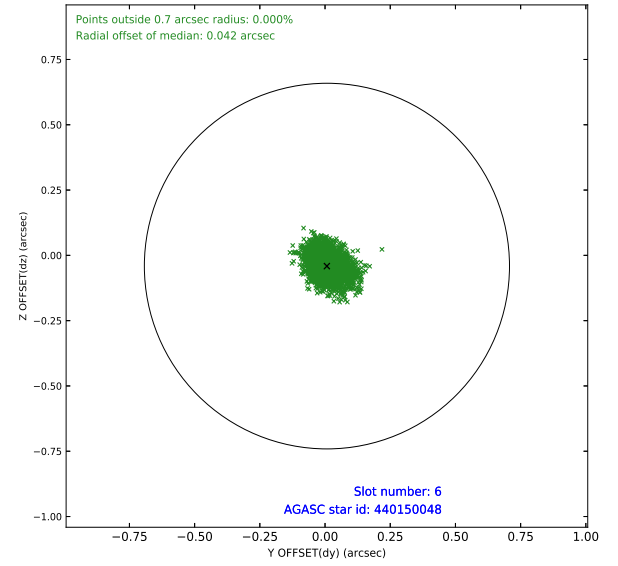
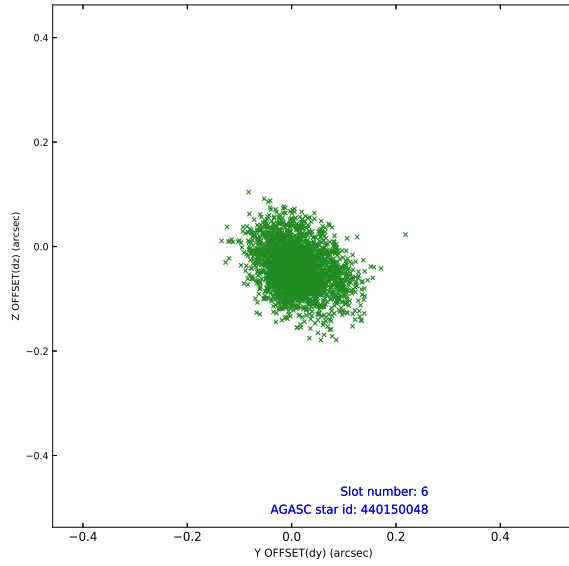
Time (s)



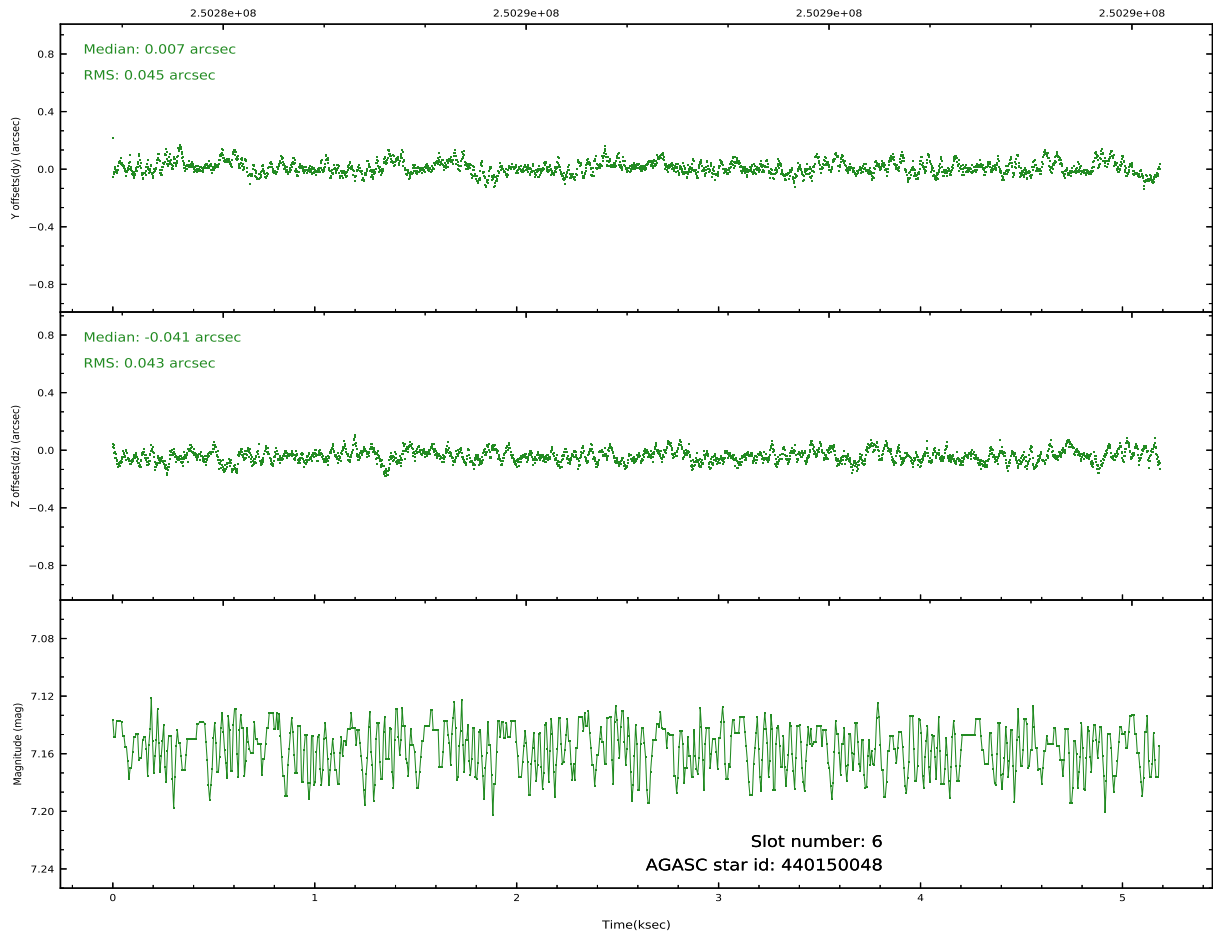
### 2.4.3 Slot 5



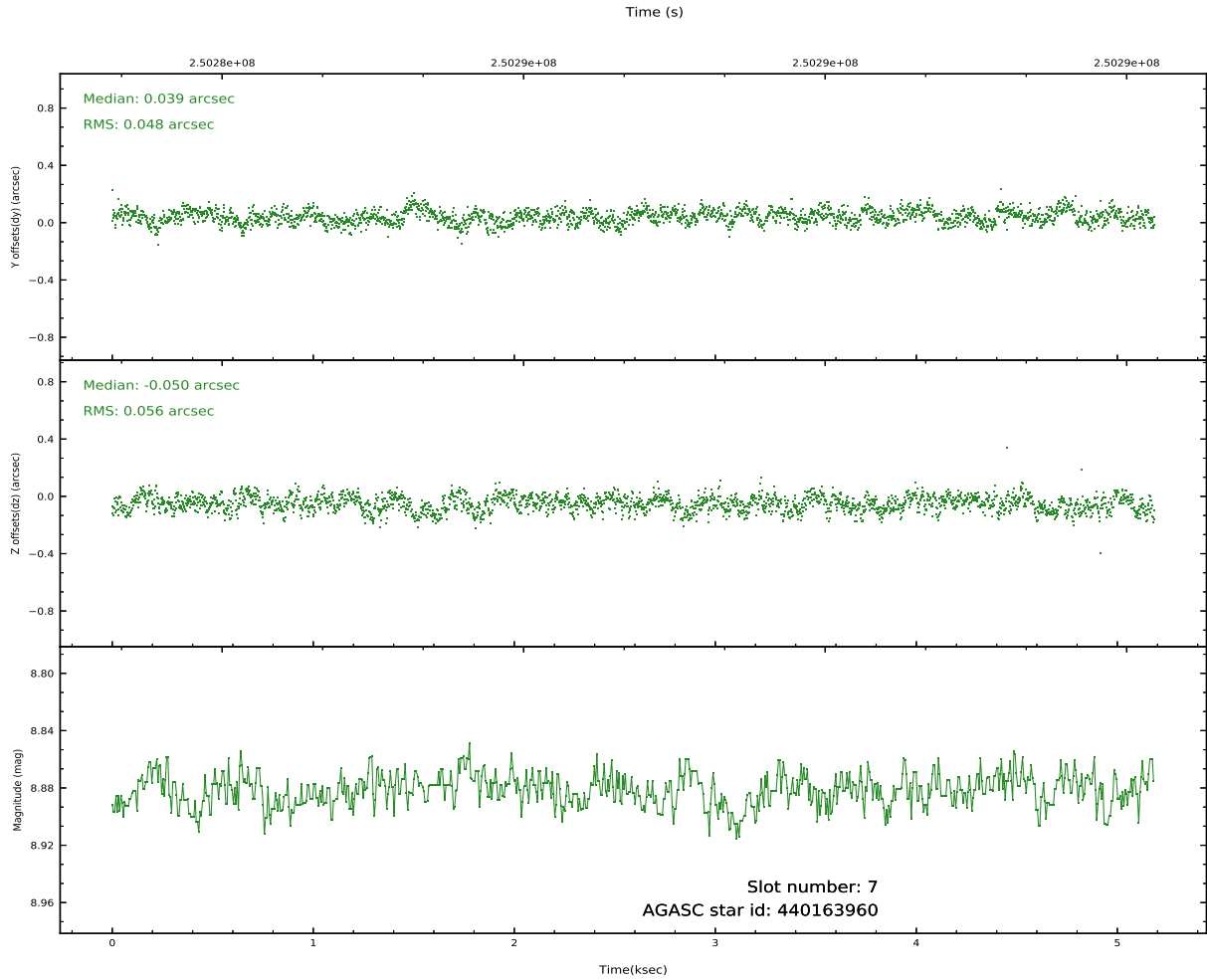
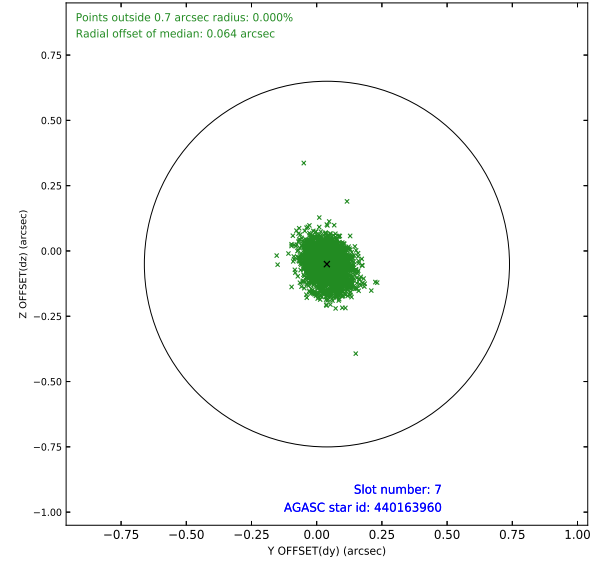
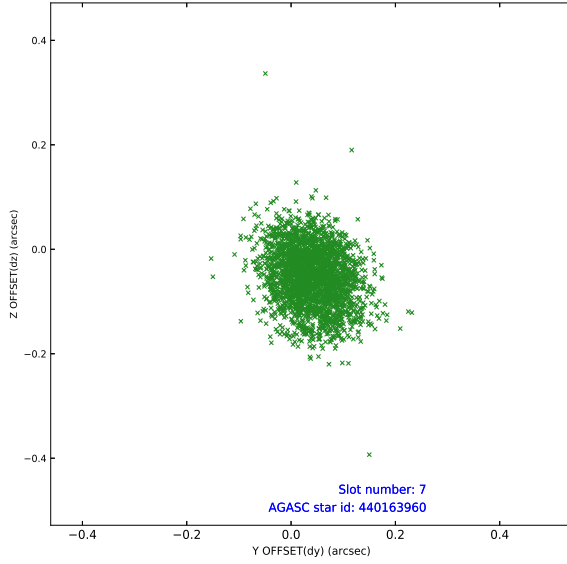
## 2.4.4 Slot 6



Time (s)

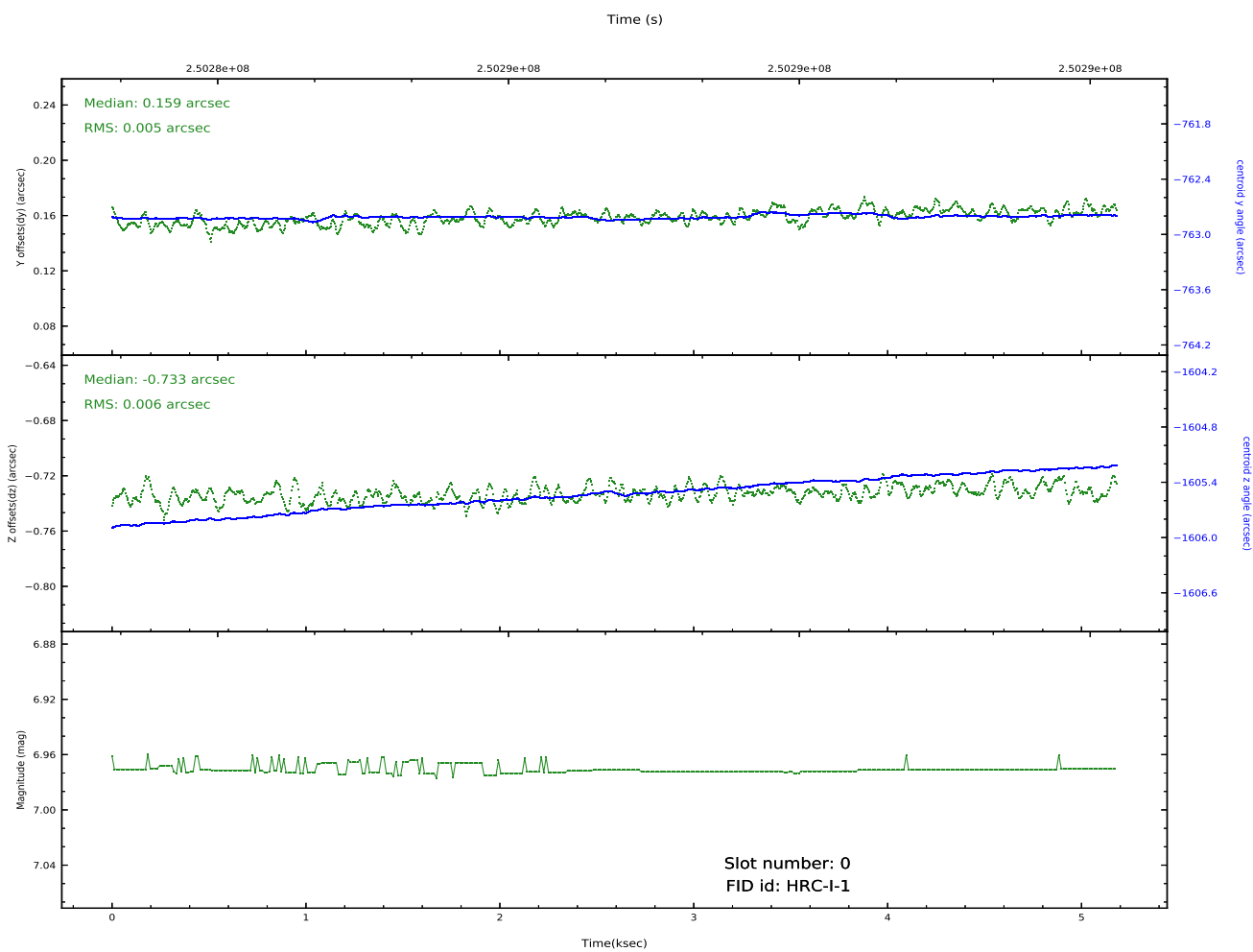
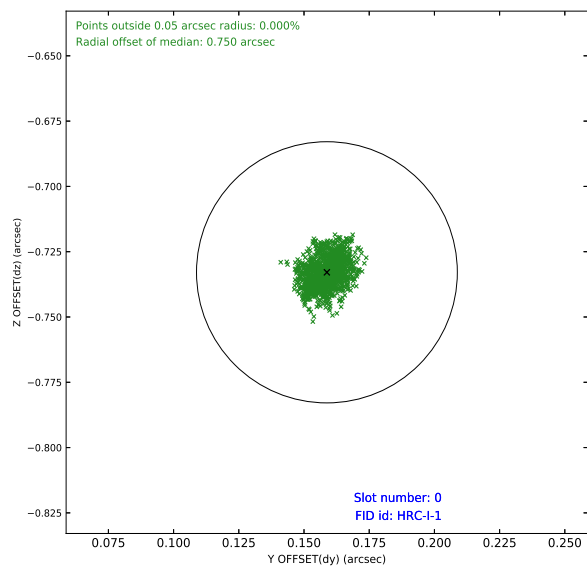
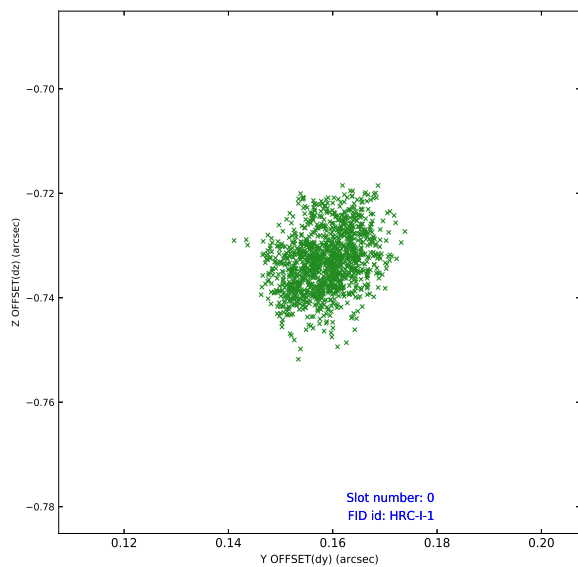


## 2.4.5 Slot 7

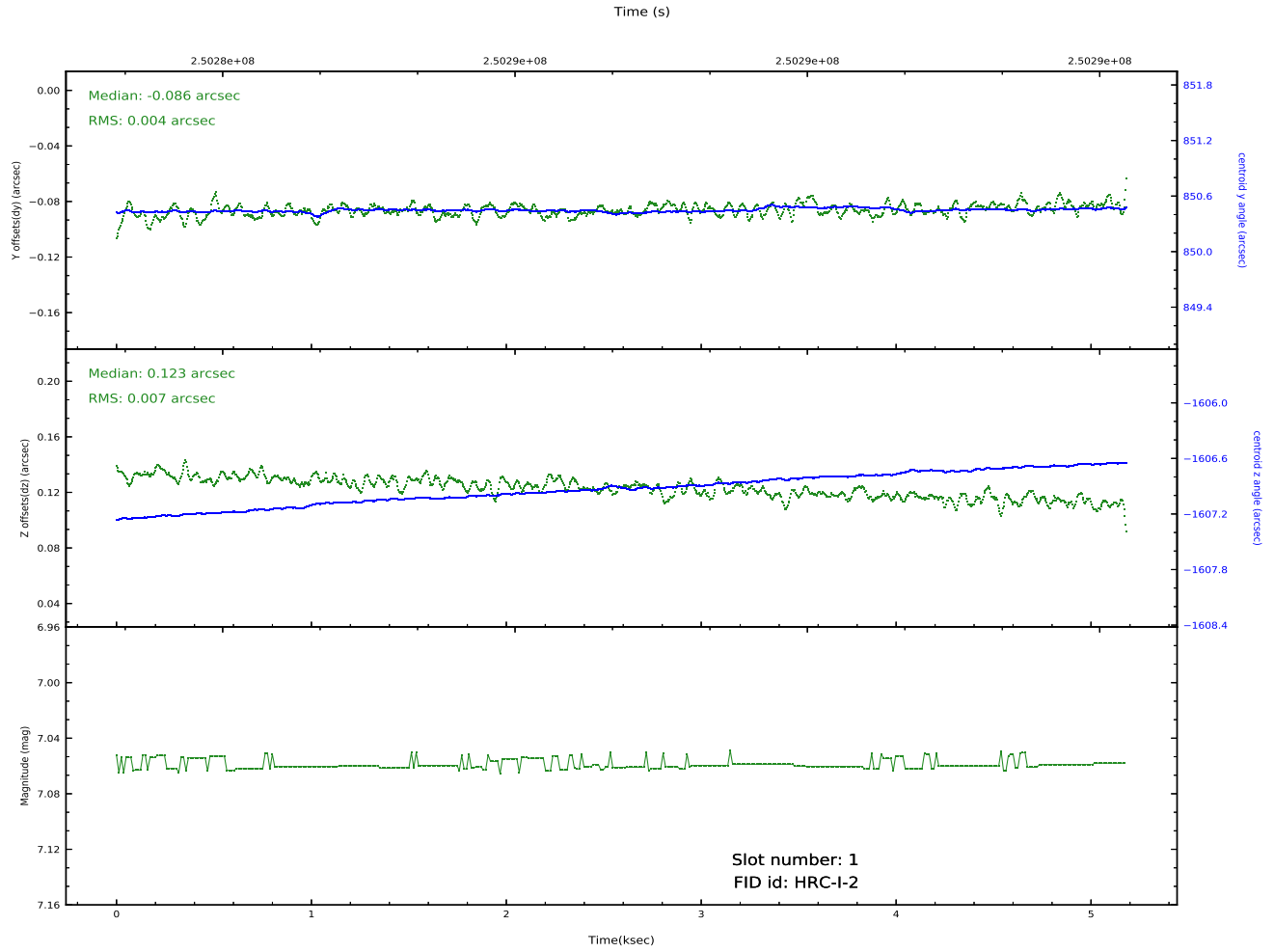
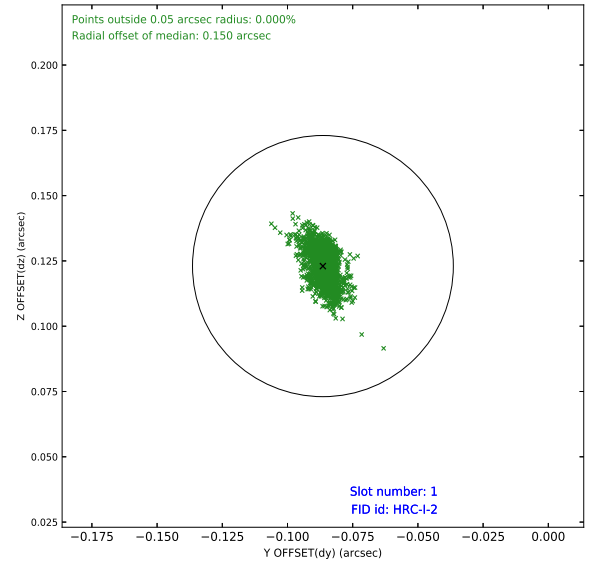
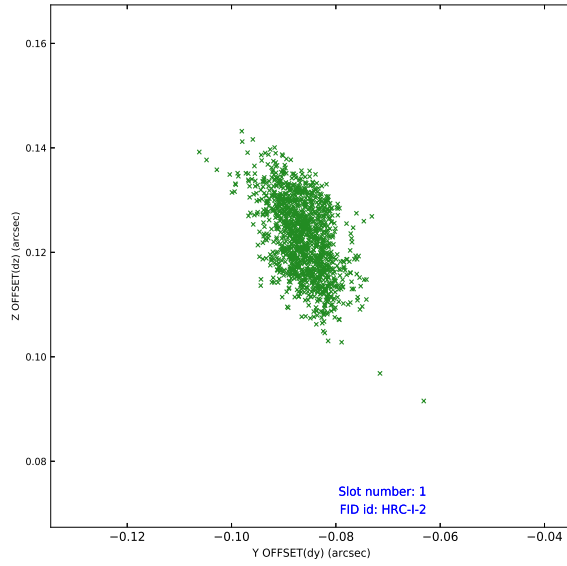


## 2.5 FID Slots

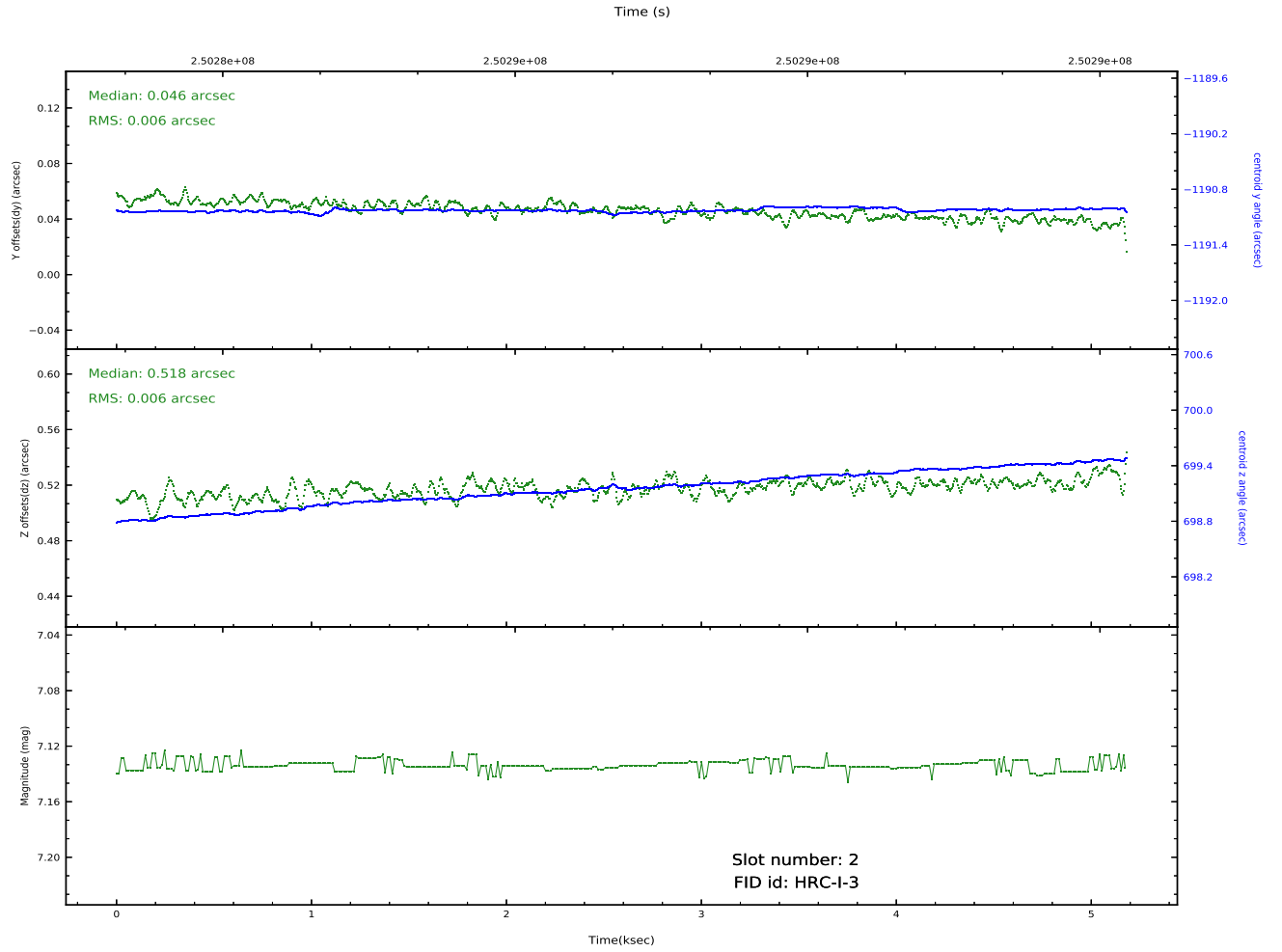
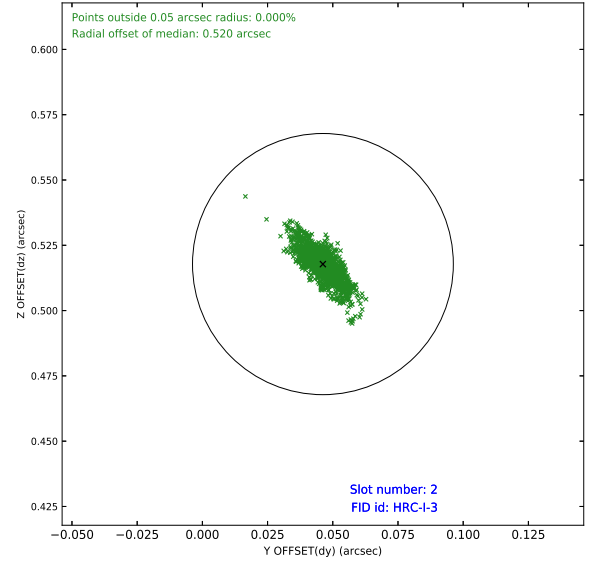
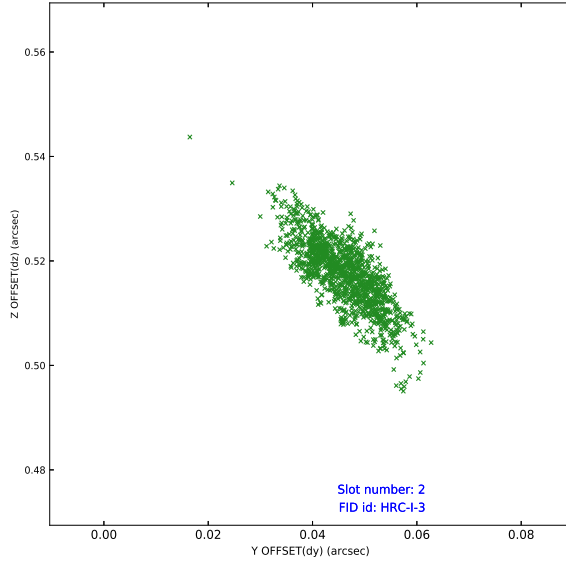
### 2.5.1 Slot 0



## 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)	2020.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.185218

## A.2 Comments

This observation was performed with a large SIM offset. As a result, the fid light positions are offset beyond normally expected ranges.