

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5063 - L2 Version 5  
Chandra X-Ray Center

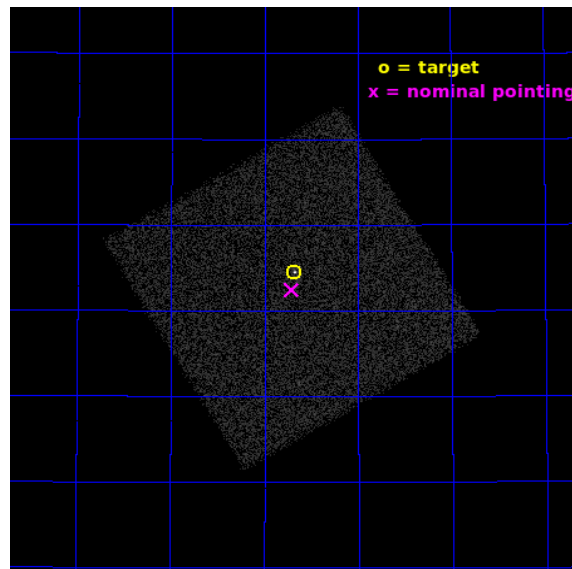
L2 Processing Date : Oct 5 2020

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Parameters . . . . .	4
2.1.3	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

seq_num	290336	Sequence number
obs_id	5063	Observation id
title	AO5 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.17669062512	Nominal RA [deg]
dec_nom	45.707394367663	Nominal Dec [deg]
roll_nom	284.38408204695	Nominal Roll [deg]
revision	5	Processing version of data
ontime	1067.2812979817	[s]
livetime	1059.6147107948	Ontime multiplied by DTCOR
l2events	42763	Number of level 2 events

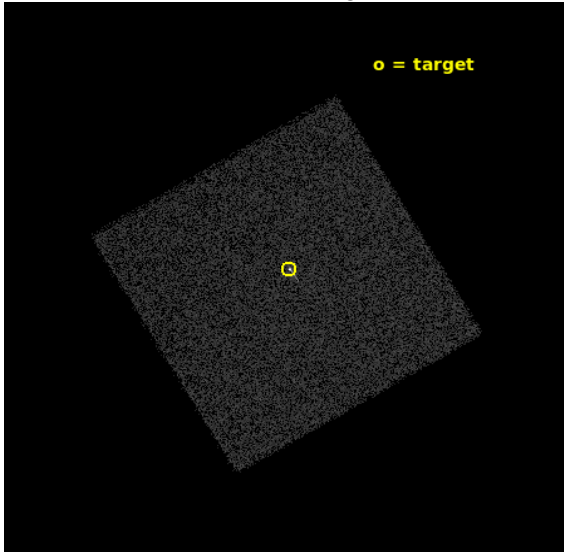


## 2 OBI

### 2.1 OBI

#### 2.1.1 Images

Level 1 Image



Level 1 Bad Events



### 2.1.2 Parameters

obi_num	1	Obi number	sched_exp_time	900.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	1067.2812979817	[s]
caldbver	4.9.2	&#160	l1events	148383	Number of level 1 events
date	2020-10-05T06:21:02	Date and time of file creation			
revision	5	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

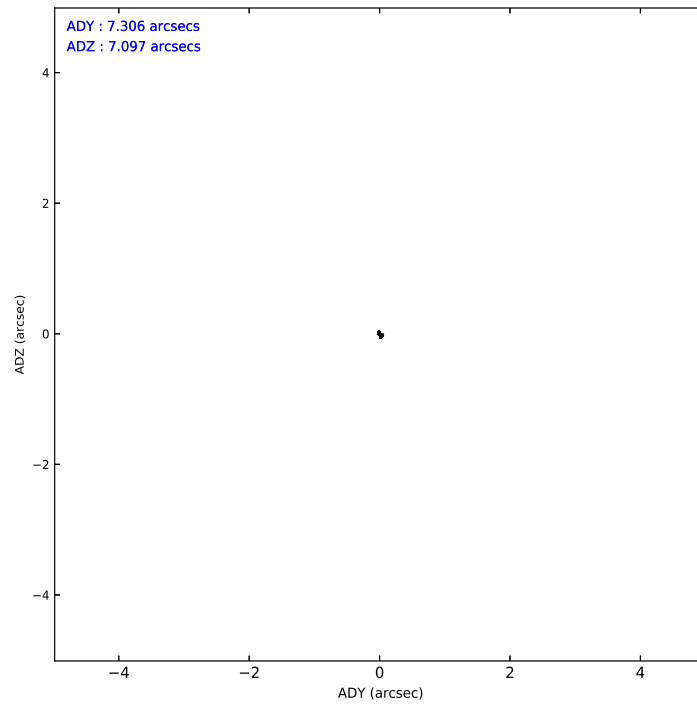
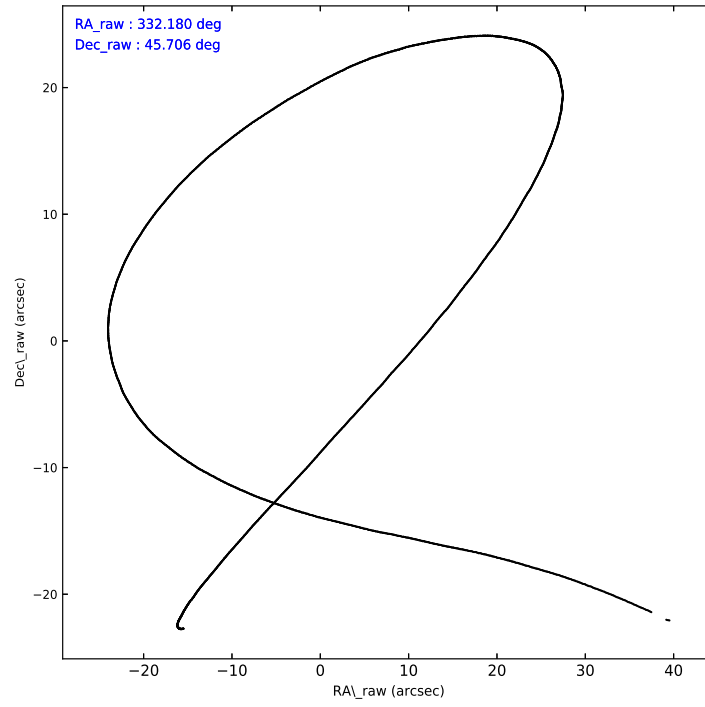
	<b>segment 0</b>
level 1 events	148383
rejected events	86685
rejected %	<b>58%</b>

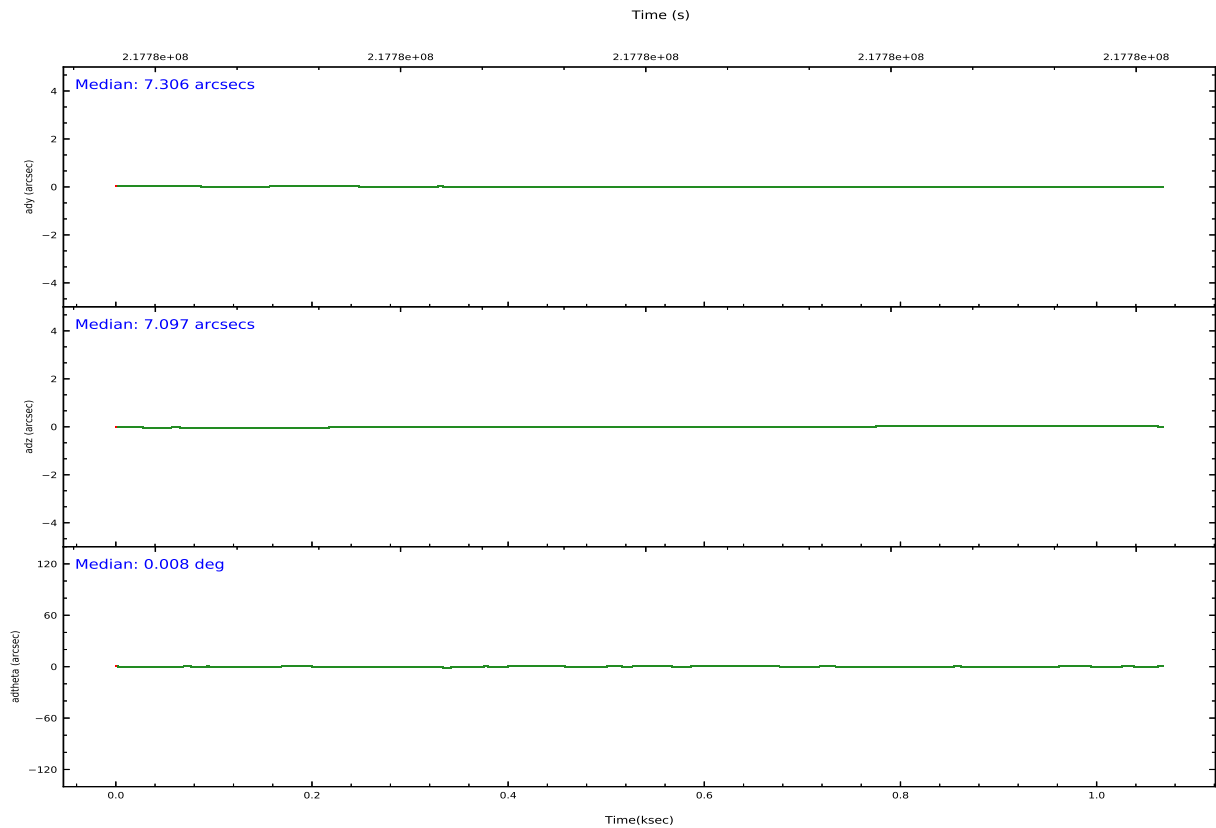
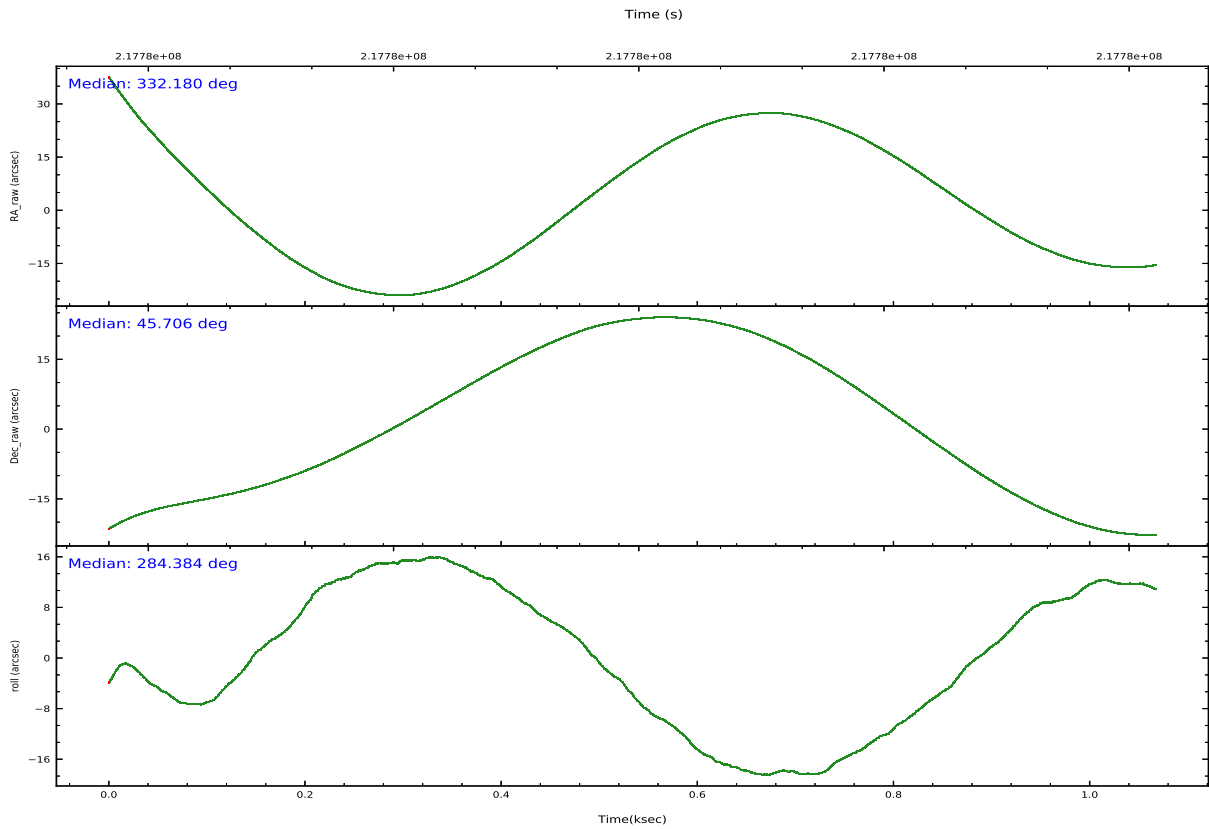
## 2.2 Compared Parameters

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	332.153299	332.17669062512
[deg] Pointing Dec	45.724820	45.707394367663
[deg] Pointing Roll	284.514742	284.38408204695
[mm] SIM focus pos	-1.040293	-1.038866356238299
[mm] SIM defocus	0	0.001426264420575141
[mm] SIM translation stage pos	126.985494	126.9854943052878
[mm] SIM translation stage offset	0	-5.413686238853188e-06
[s] Observation start time (MET)	217778877.184000	217777227.39534
Observation start date	2004-11-25T14:06:53	2004-11-25T13:40:27
[s] Observation end time (MET)	217779777.184000	217779911.35796
Observation end date	2004-11-25T14:21:53	2004-11-25T14:25:11

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

## 2.3 Aspect





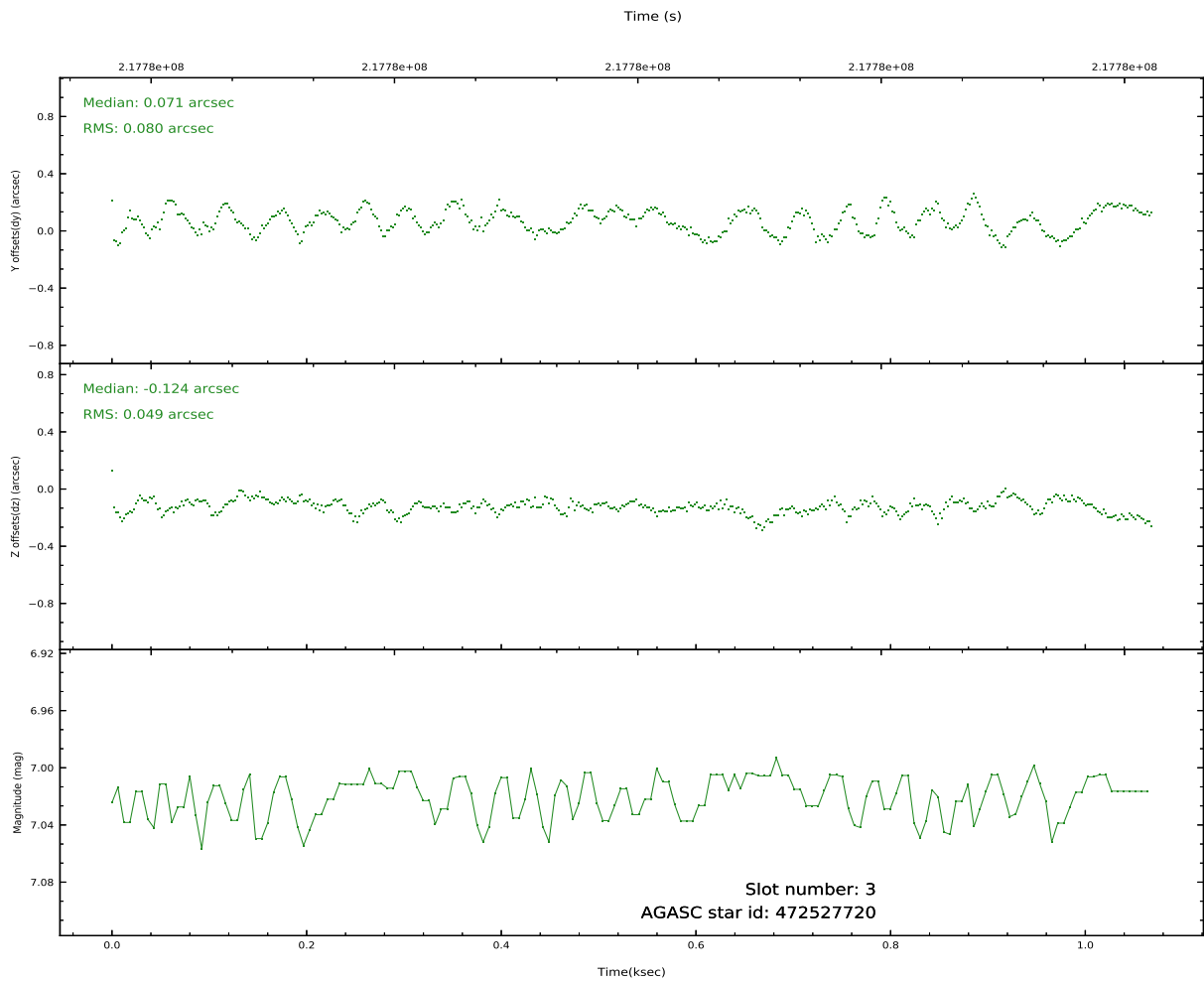
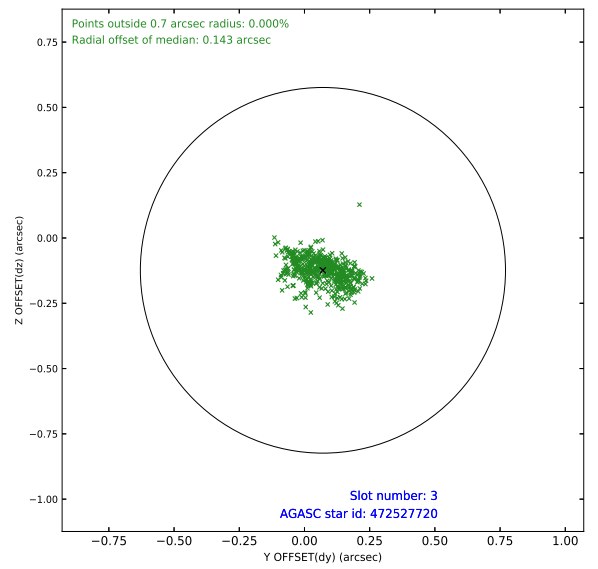
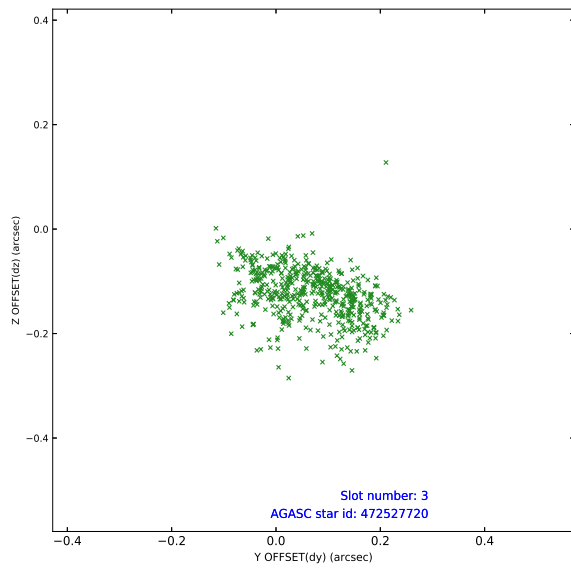
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-I-1	7.01	261	1.000	-0.014	-0.016	0.007	0.010	0.000000	0.000000	-762.91	-1295
1	FID		HRC-I-2	7.05	261	1.000	0.149	-0.097	0.005	0.008	0.000000	0.000000	846.96	-1301
2	FID		HRC-I-3	7.10	261	1.000	-0.016	0.024	0.006	0.013	0.000000	0.000000	-1188.17	1004
3	GUIDE	used	472527720	7.02	522	1.000	0.071	-0.124	0.104	0.157	331.460205	45.112509	1686.24	-2253
4	GUIDE	used	472654568	9.45	522	1.000	0.059	0.079	0.112	0.215	332.194449	45.063576	2334.66	-497
5	GUIDE	used	472655152	9.44	516	1.000	0.032	0.115	0.103	0.174	332.504239	45.862991	-257.86	977
6	GUIDE	used	472659832	9.46	520	1.000	-0.106	0.082	0.106	0.192	332.780399	46.098139	-914.92	1857
7	GUIDE	used	472523760	8.24	521	1.000	-0.055	-0.145	0.065	0.102	331.645363	45.403260	793.92	-1526

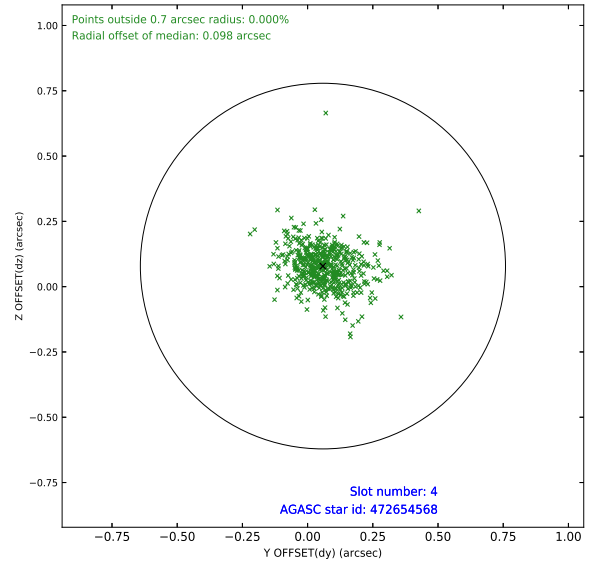
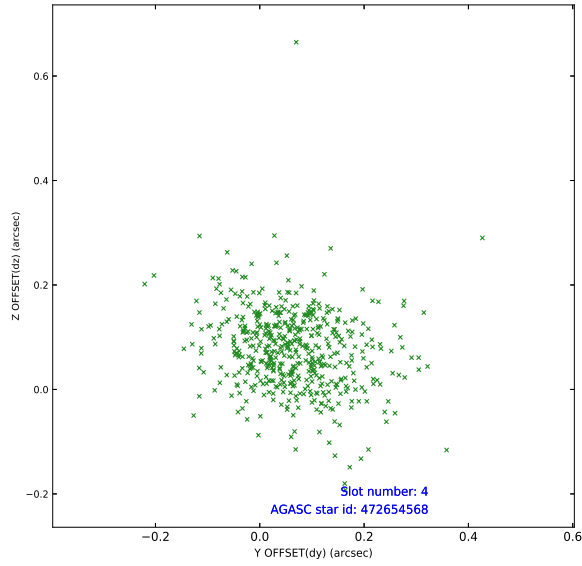
∞

## 2.4 Star Slots

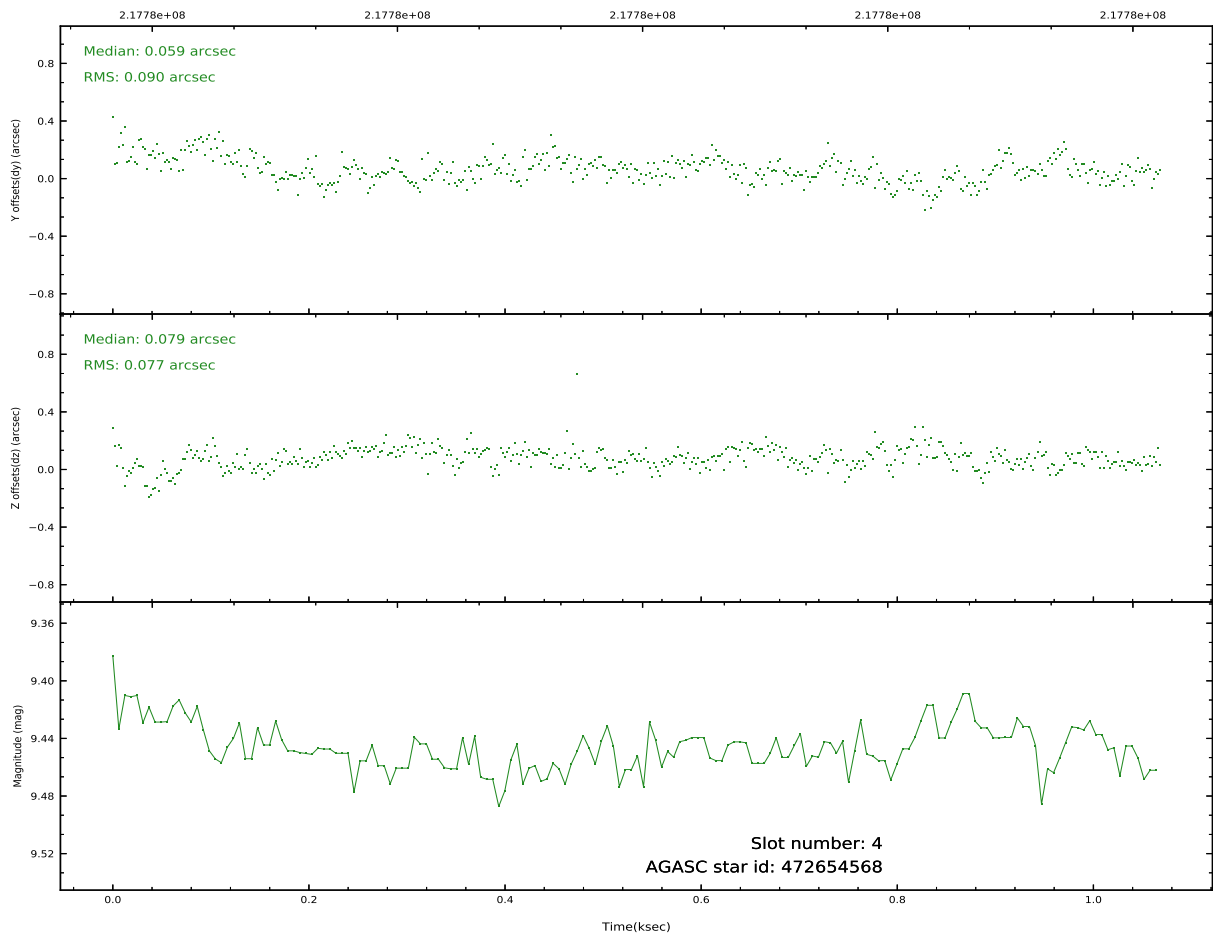
### 2.4.1 Slot 3



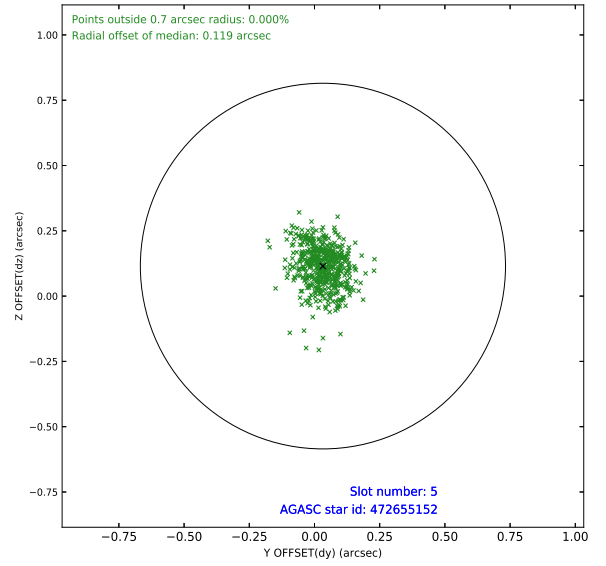
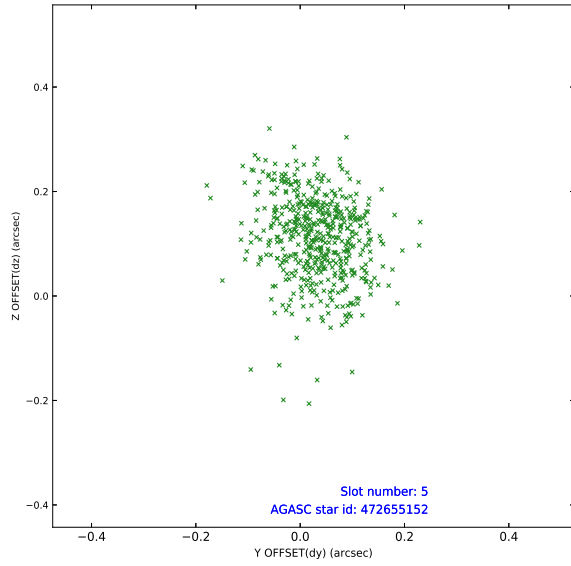
## 2.4.2 Slot 4



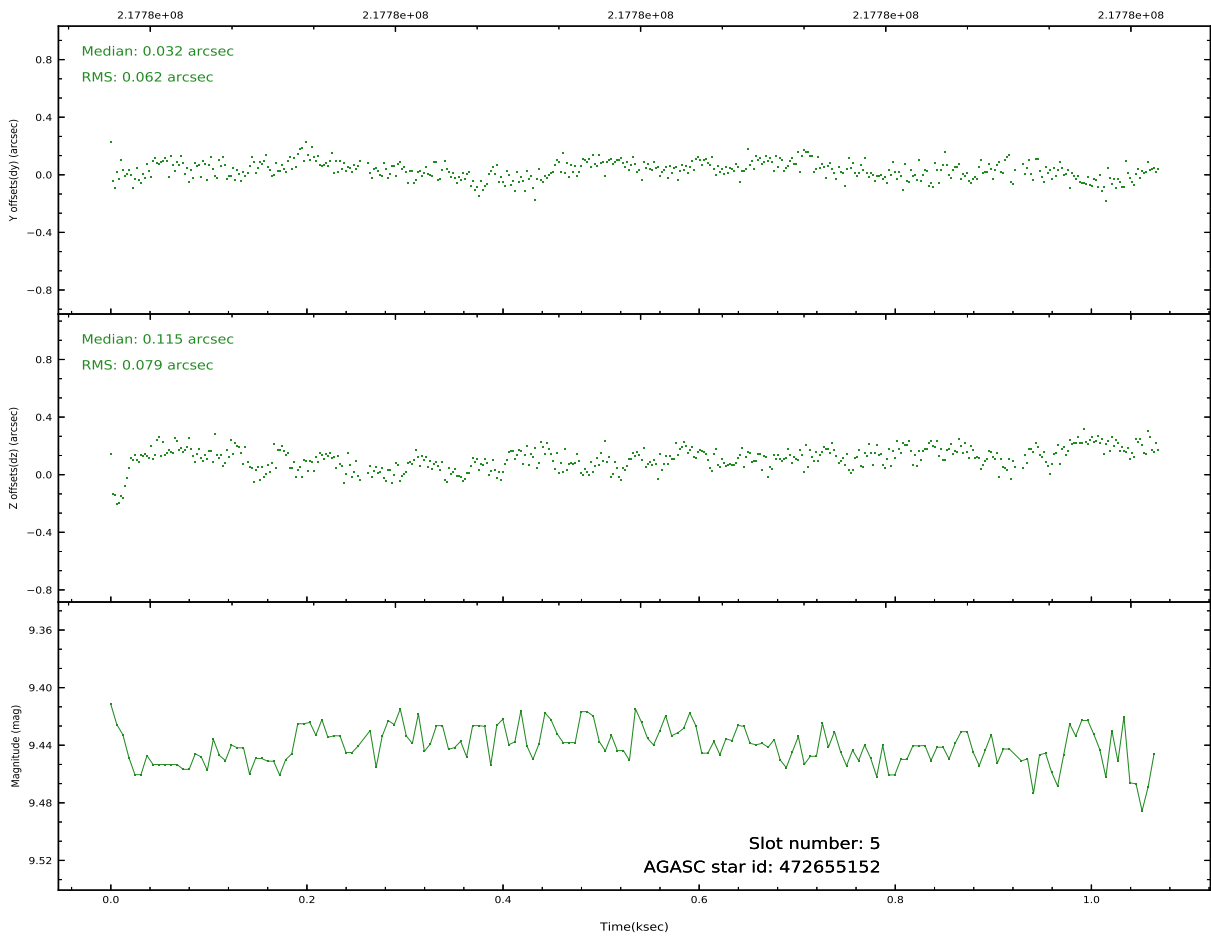
Time (s)



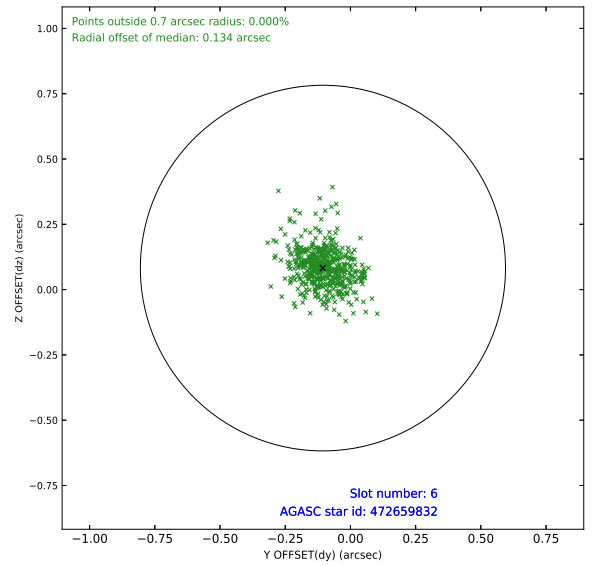
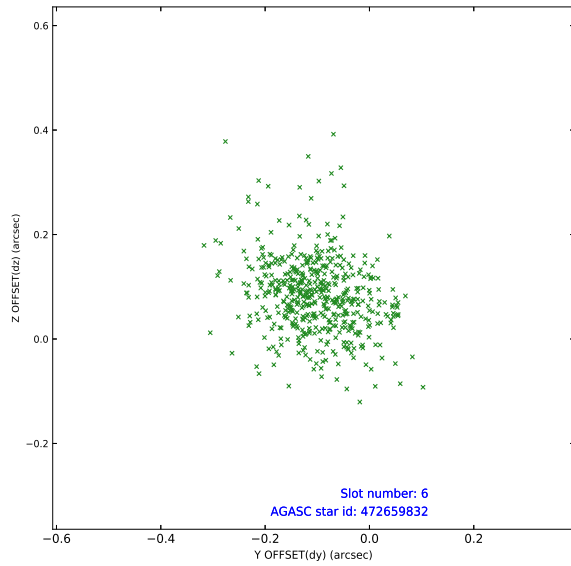
### 2.4.3 Slot 5



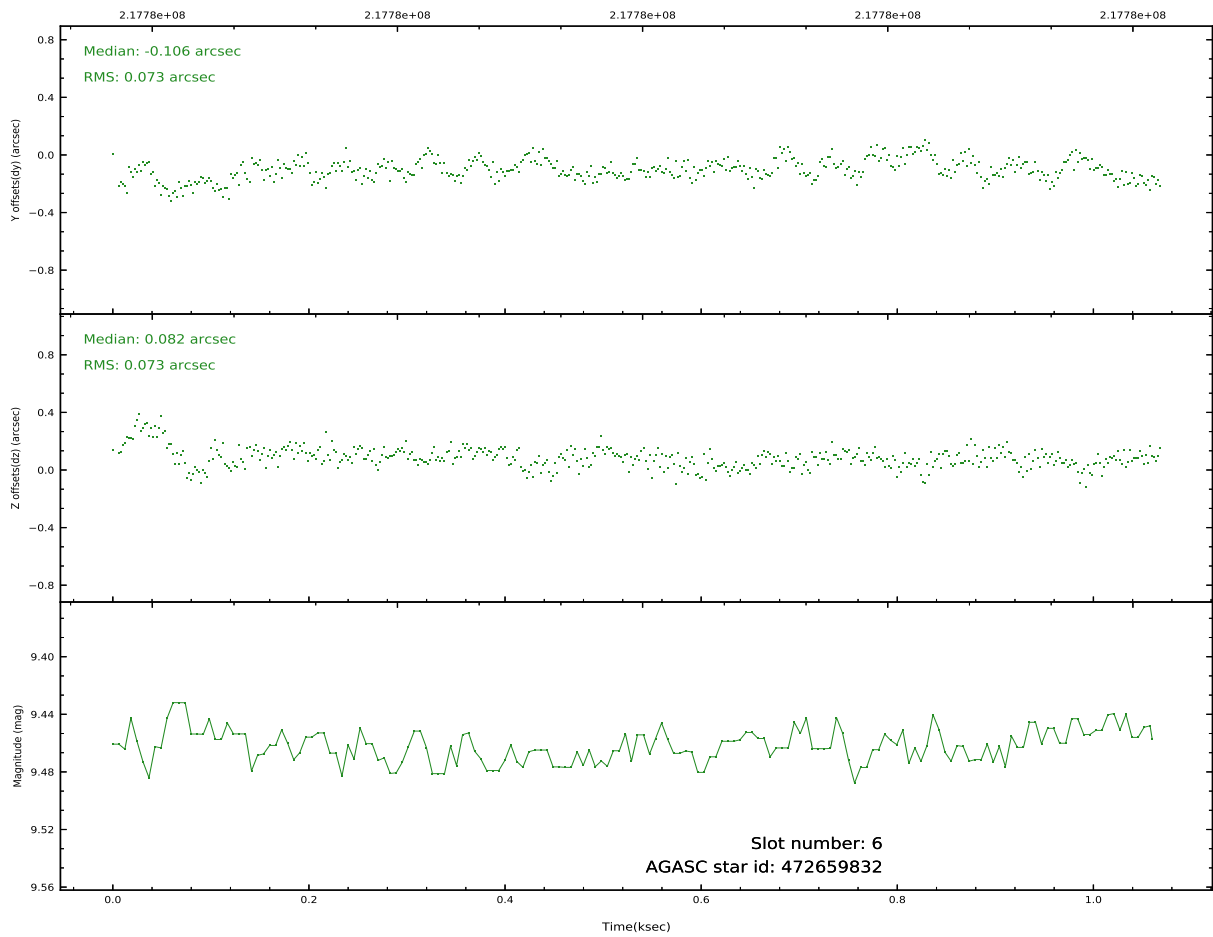
Time (s)



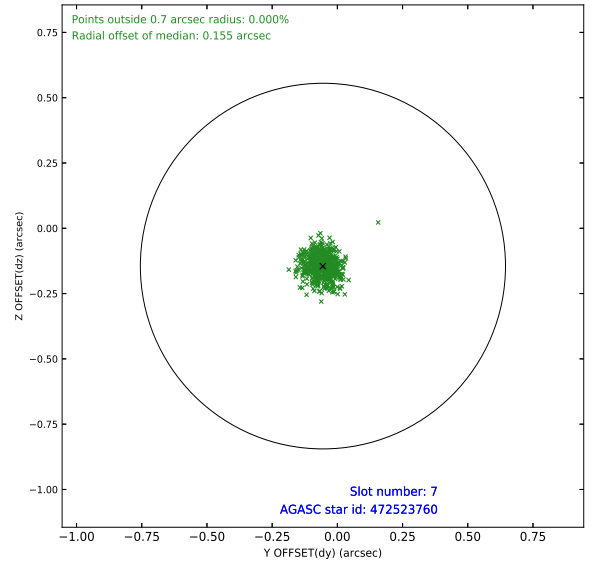
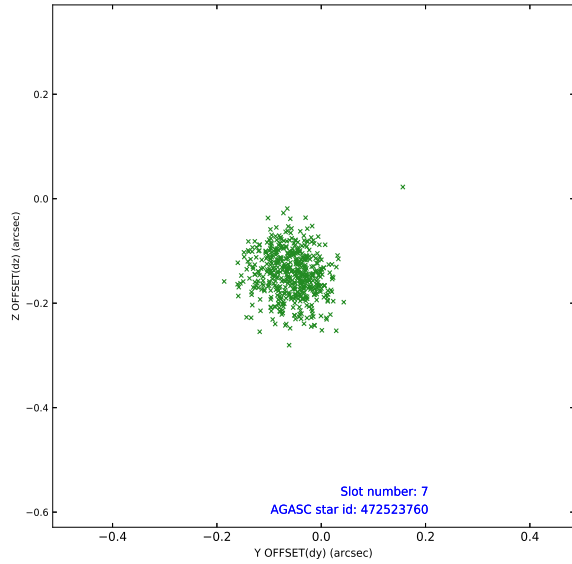
## 2.4.4 Slot 6



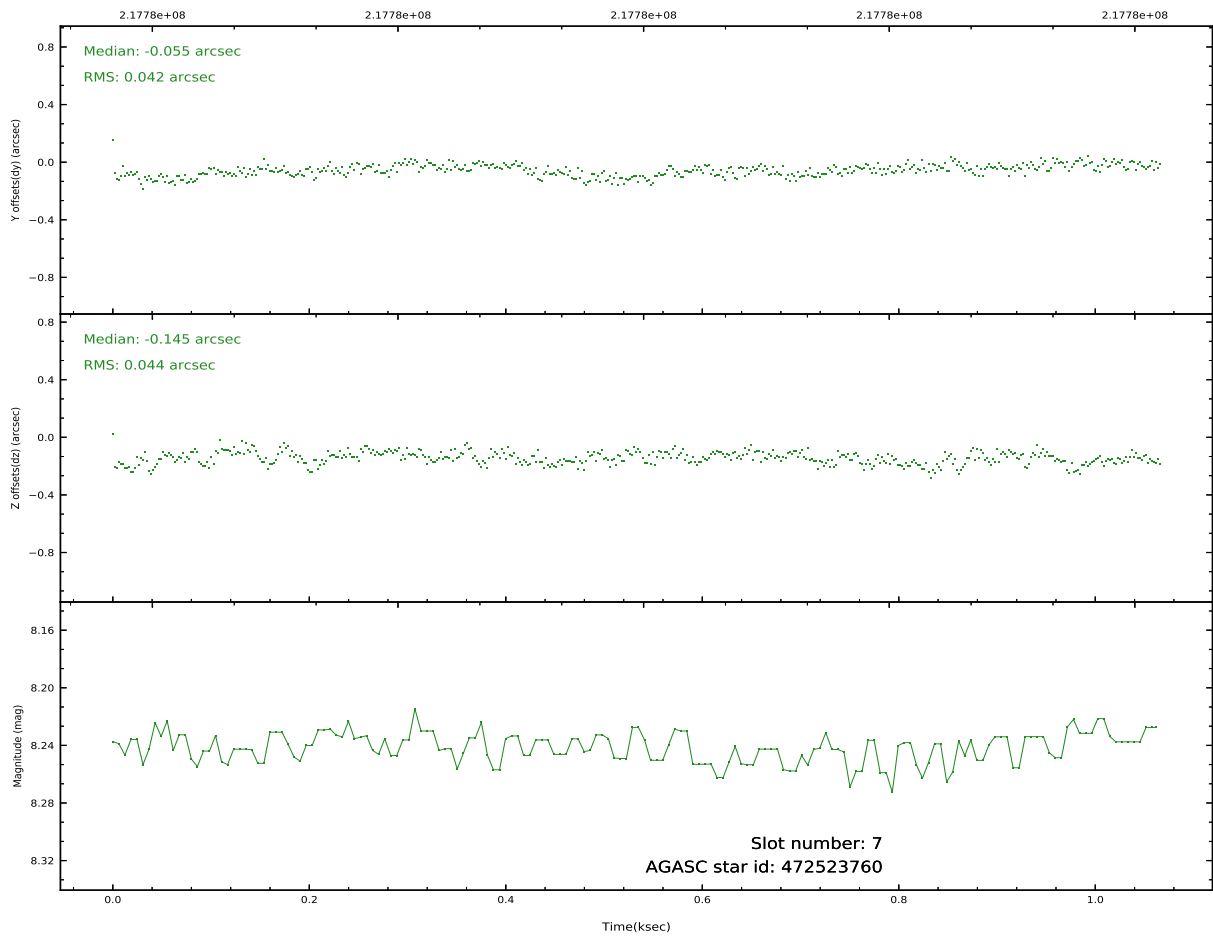
Time (s)



## 2.4.5 Slot 7

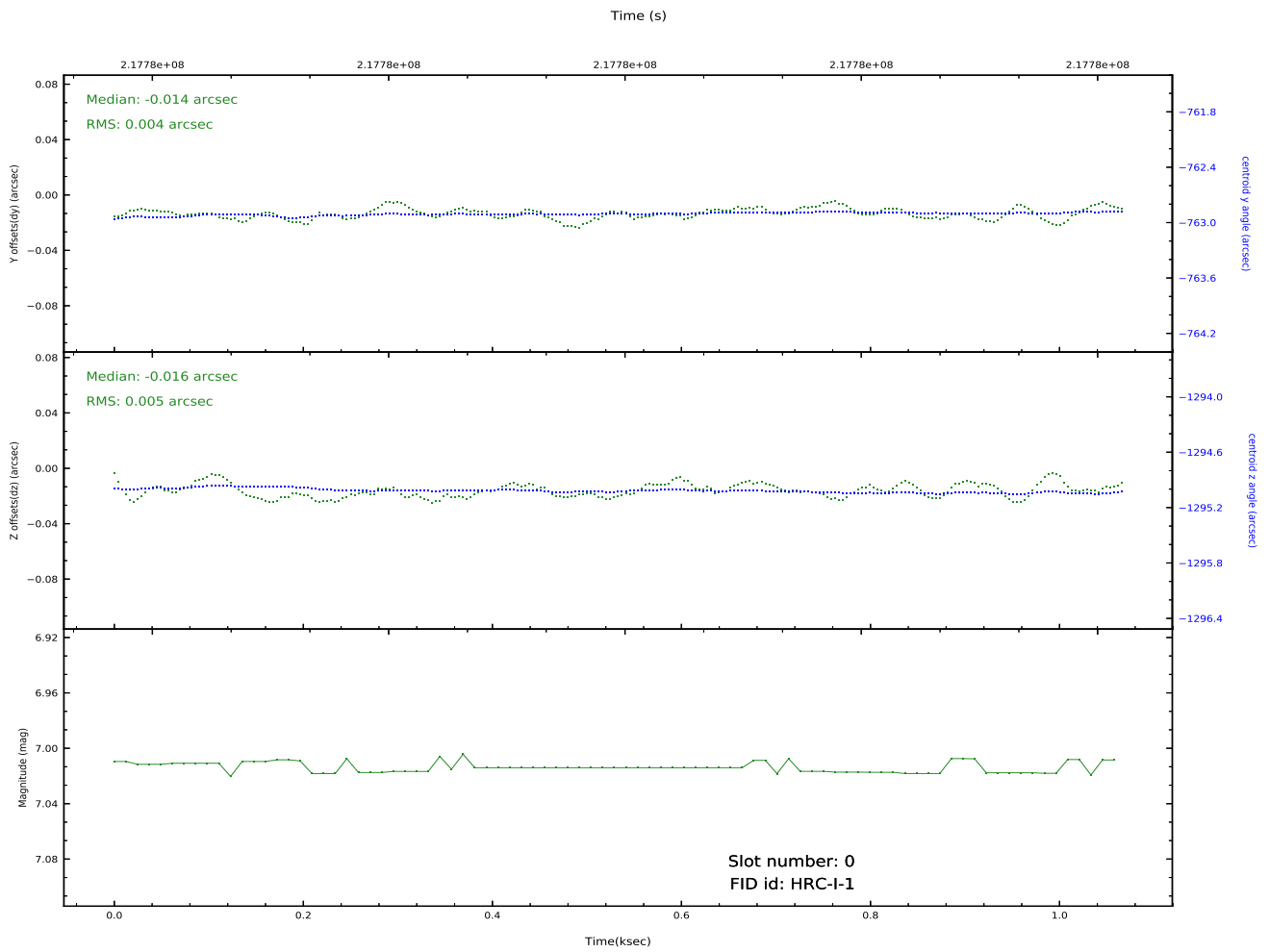
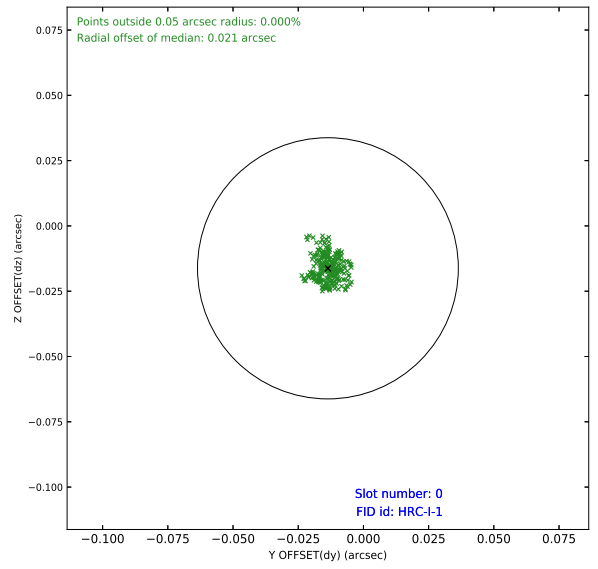
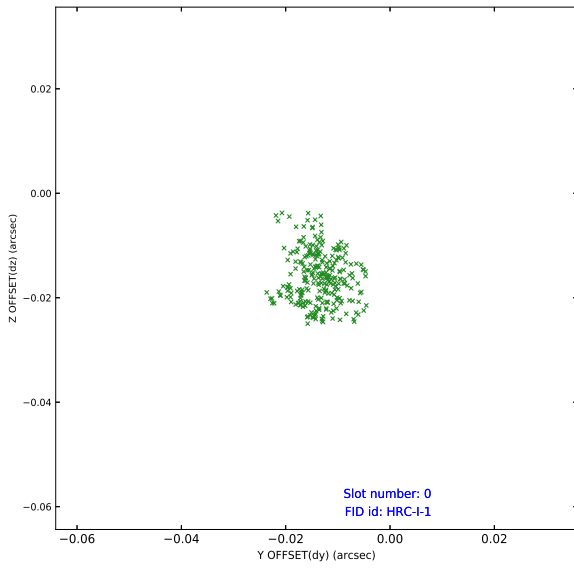


Time (s)

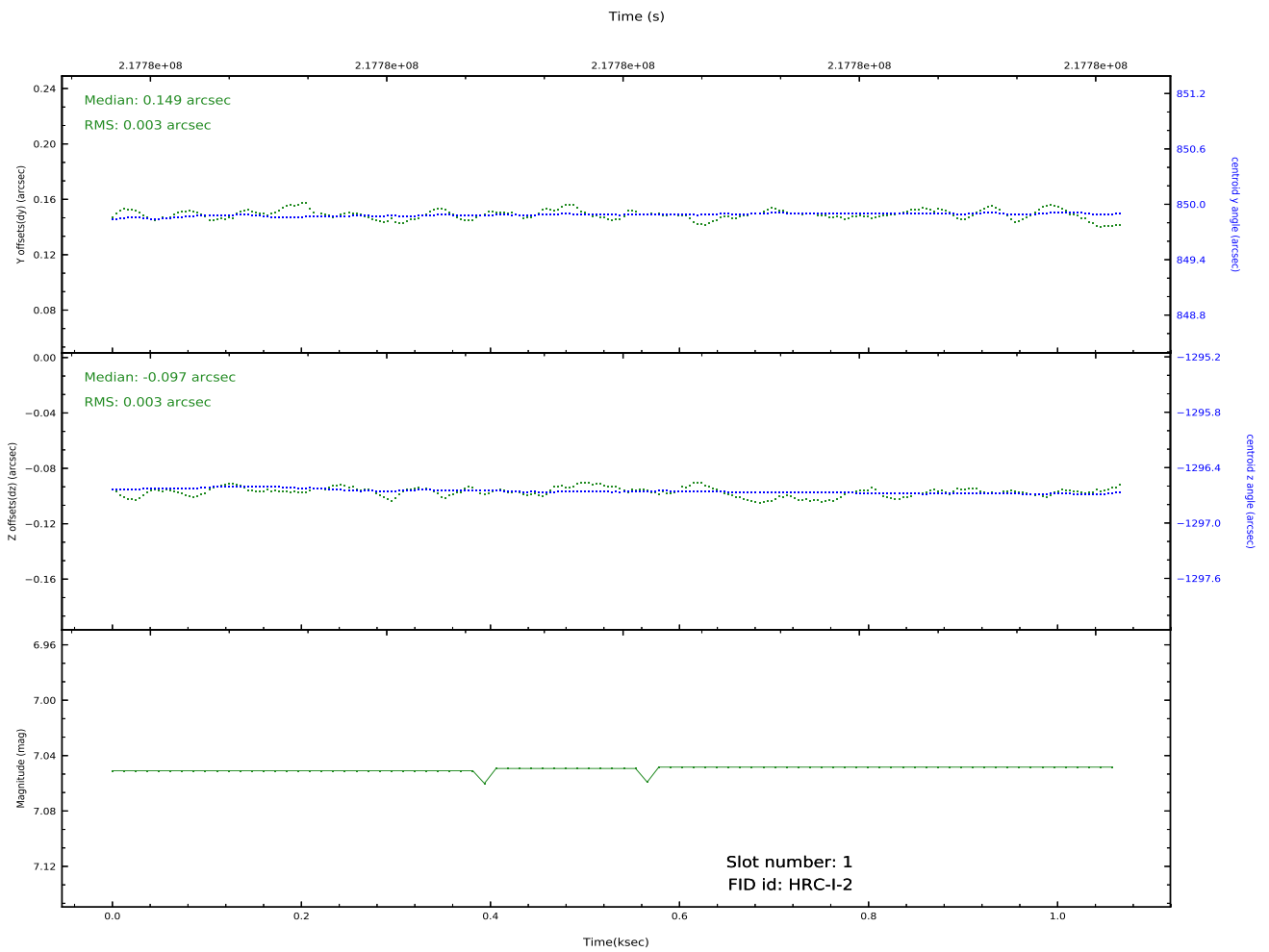
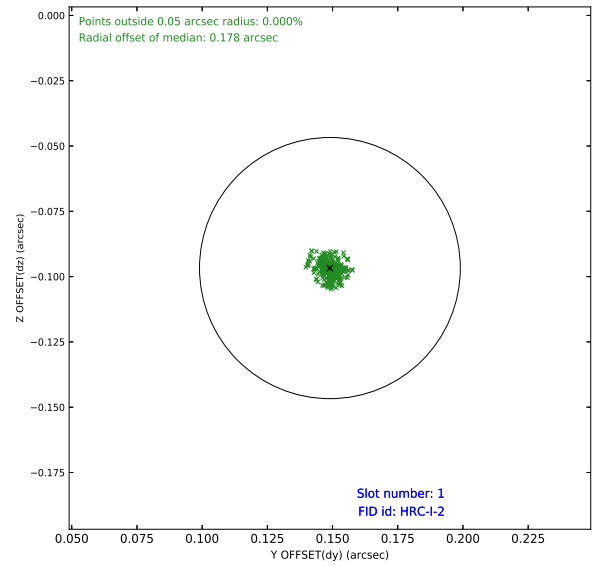
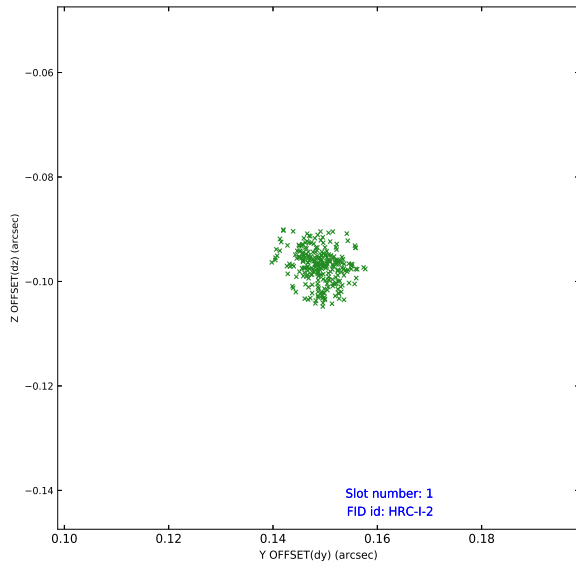


## 2.5 FID Slots

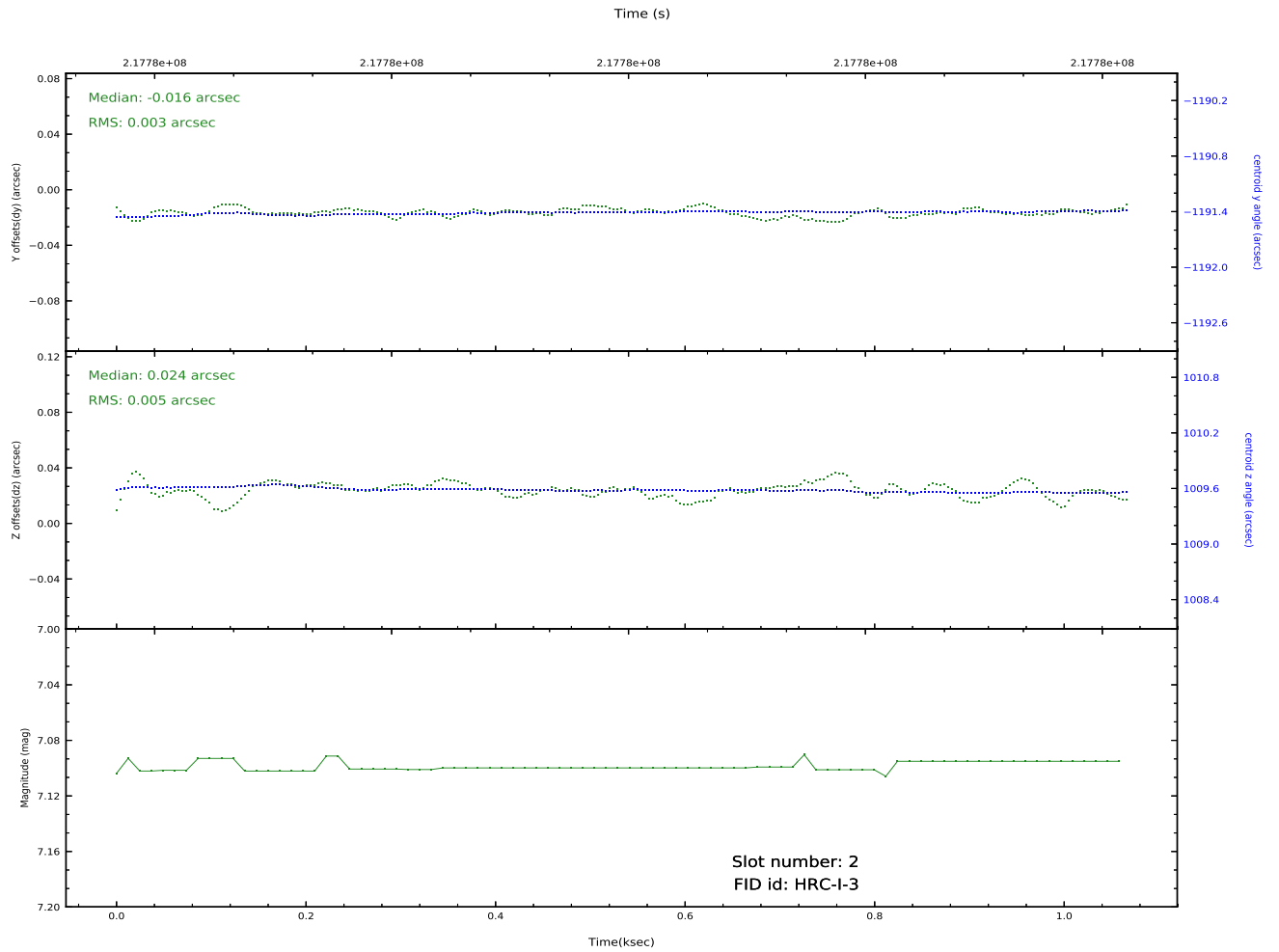
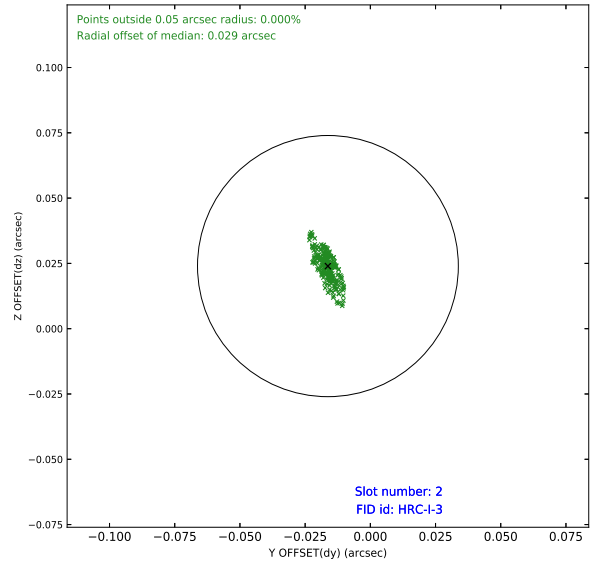
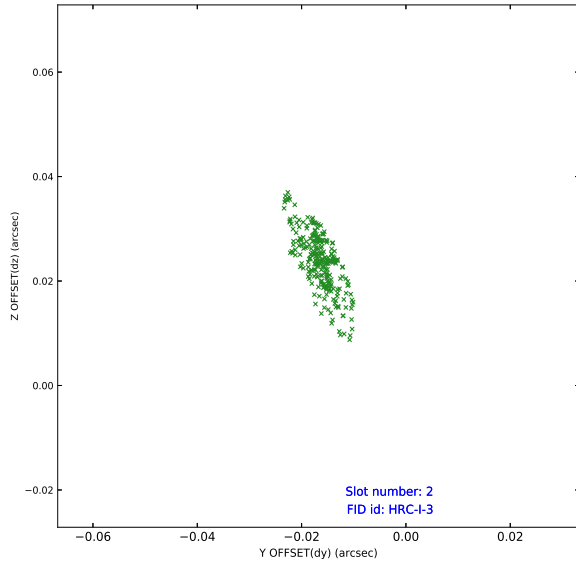
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.067281

## A.2 Comments