

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5927 - L2 Version 5  
Chandra X-Ray Center

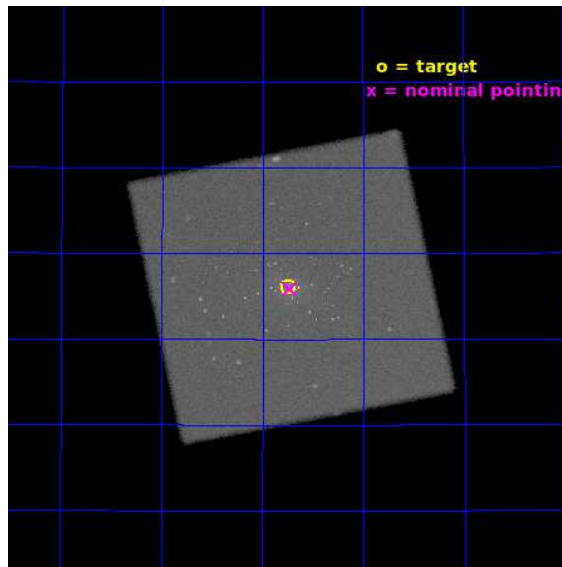
L2 Processing Date : Oct 6 2020

## 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	600446	Sequence number
obs_id	5927	Observation id
title	M31* - The Nearest Extra-galactic SuperMassive Black Hole	Proposal
observer	Dr. Michael Garcia	Principal investigator
object	M31*	Source name
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.268972	Observer's specified target Dec [deg]
ra_nom	10.681714756899	Nominal RA [deg]
dec_nom	41.265195232629	Nominal Dec [deg]
roll_nom	303.48623711373	Nominal Roll [deg]
revision	5	Processing version of data
ontime	27188.382479459	[s]
livetime	26999.89238197	Ontime multiplied by DTCOR
l2events	1071157	Number of level 2 events

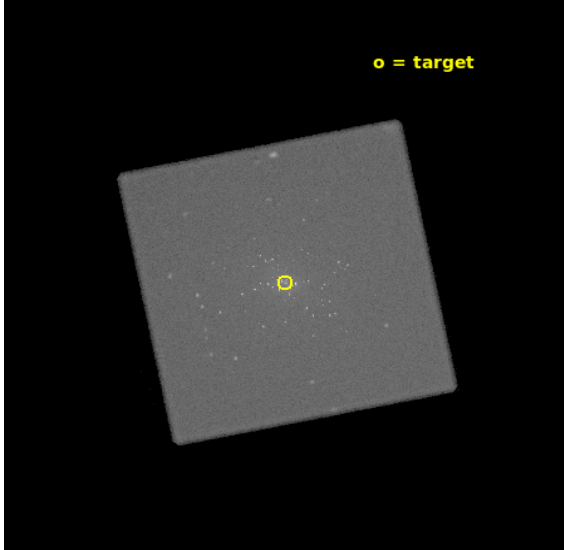


## 2 OBI

### 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	27000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	27188.382479459	[s]
caldbver	4.9.2	&#160	l1events	1606301	Number of level 1 events
date	2020-10-06T09:47:05	Date and time of file creation			
revision	5	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

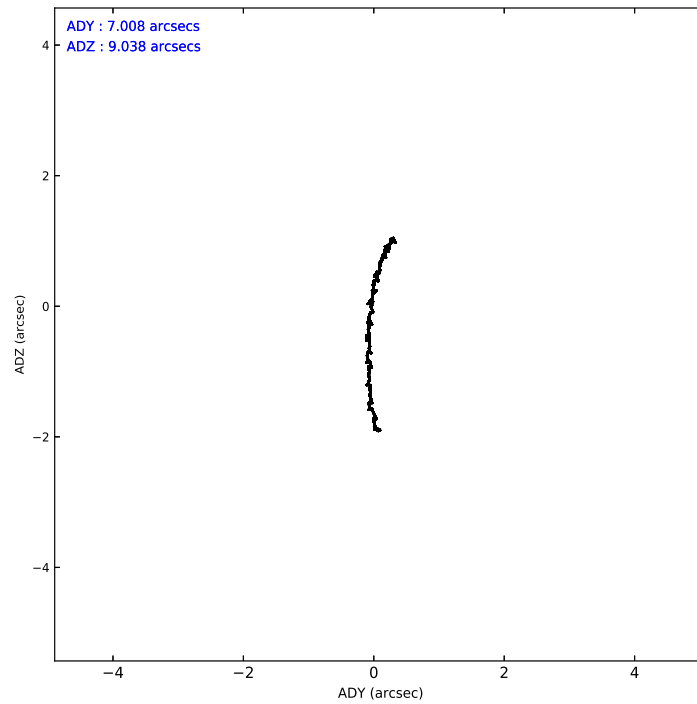
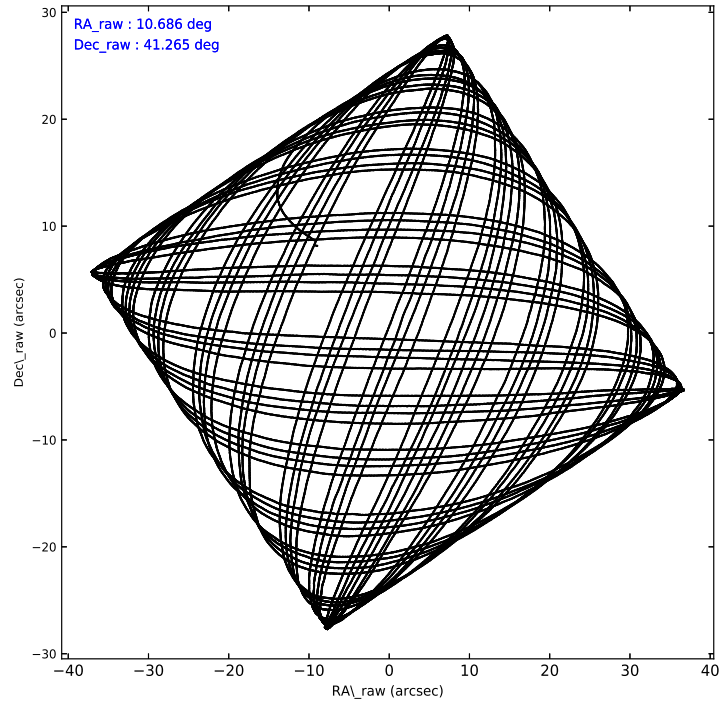
	<b>segment 0</b>
level 1 events	1606301
rejected events	51148
rejected %	3%

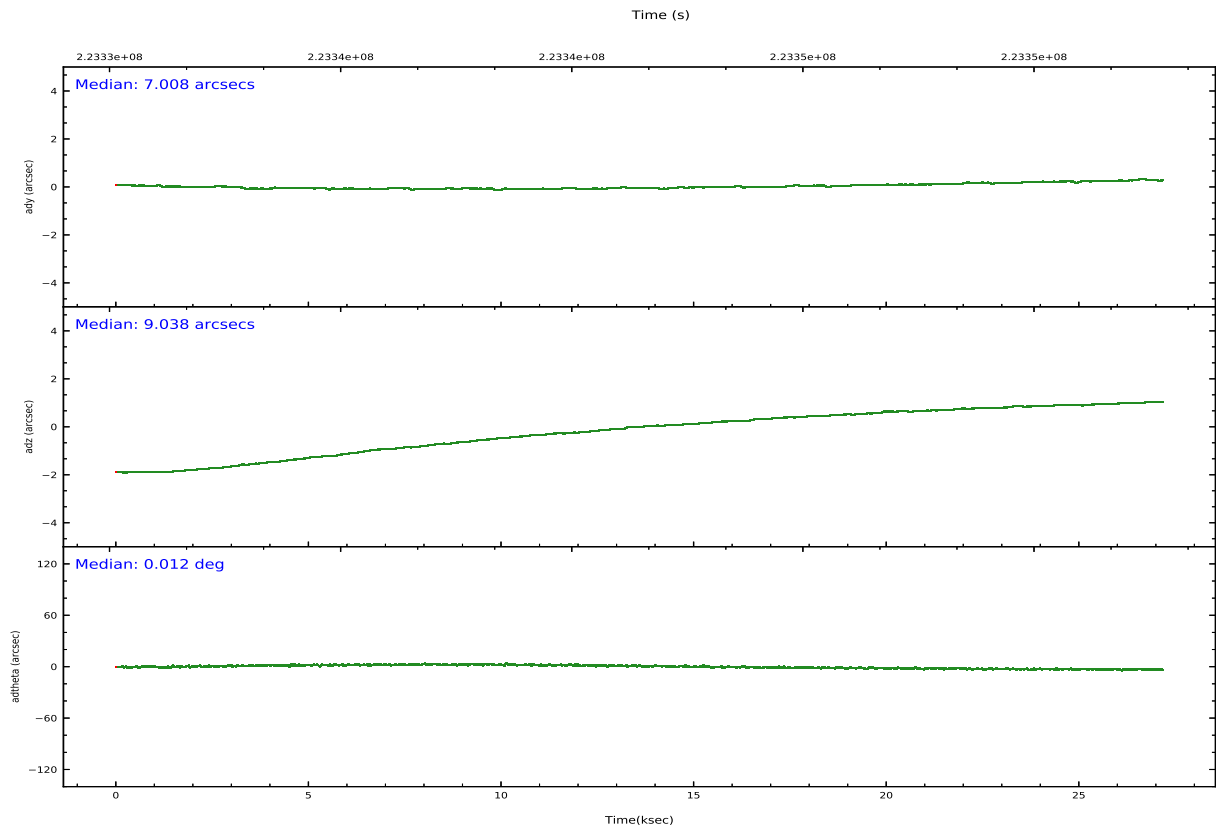
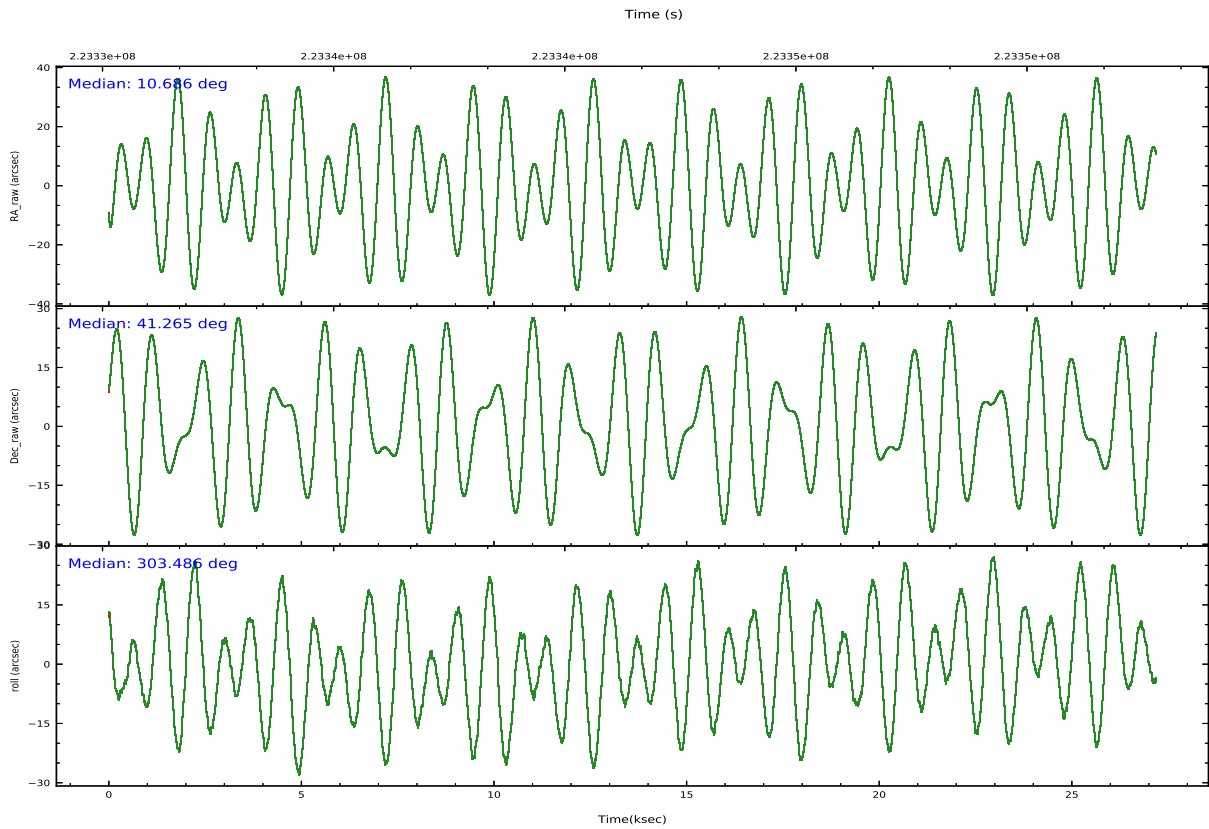
## 2.2 Compared Parameters

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	10.653396	10.681714756899
[deg] Pointing Dec	41.276393	41.265195232629
[deg] Pointing Roll	303.620850	303.48623711373
[mm] SIM focus pos	-1.040293	-1.038866356238299
[mm] SIM defocus	0	0.001426264420575141
[mm] SIM translation stage pos	126.985494	126.9829799899862
[mm] SIM translation stage offset	0	0.002508901615314585
[s] Observation start time (MET)	223330352.184000	223329287.23296
Observation start date	2005-01-28T20:11:28	2005-01-28T19:54:47
[s] Observation end time (MET)	223357352.184000	223358183.00926
Observation end date	2005-01-29T03:41:28	2005-01-29T03:56:23

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

## 2.3 Aspect



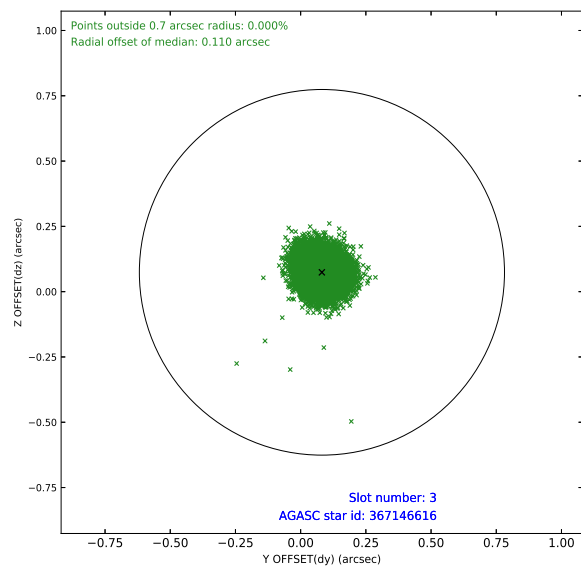
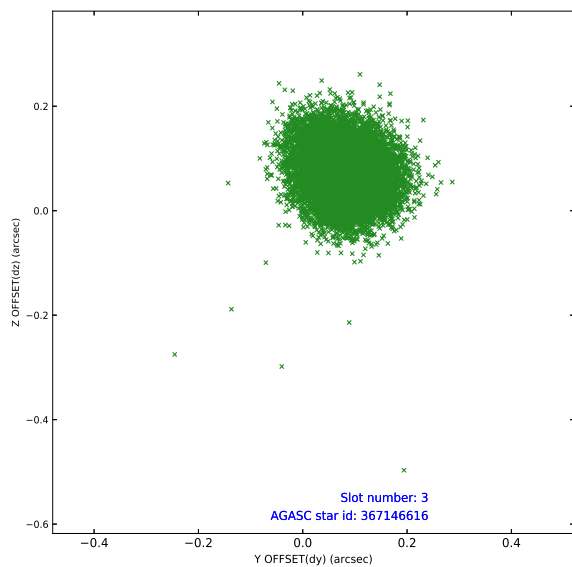


### Slot Statistics

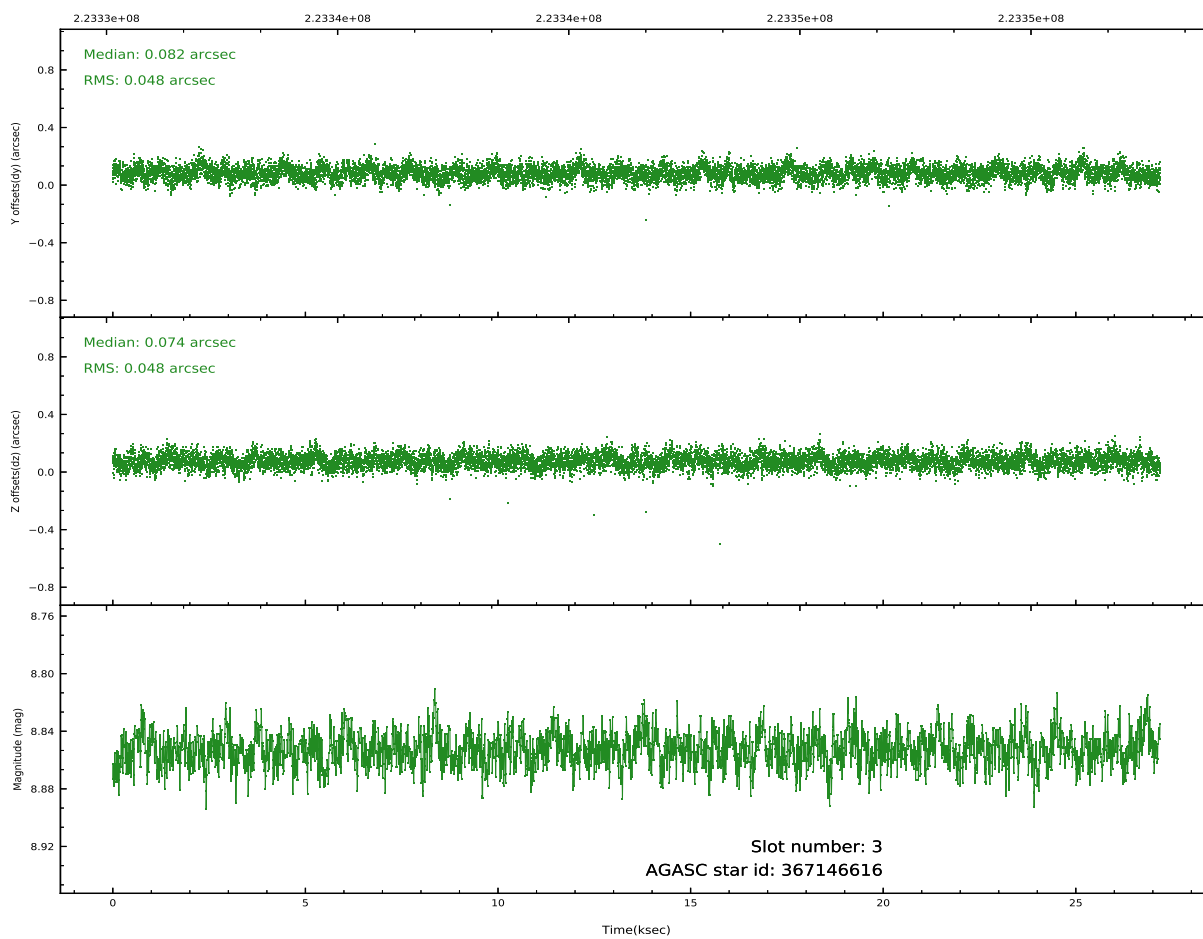
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		HRC-I-1	7.00	6632	1.000	-0.051	-0.057	0.023	0.032	0.000000	0.000000	-762.76	-1296
1	FID		HRC-I-2	7.03	6632	1.000	0.102	-0.072	0.018	0.025	0.000000	0.000000	849.91	-1298
2	FID		HRC-I-4	7.03	6632	1.000	0.067	0.037	0.016	0.022	0.000000	0.000000	1280.42	1005
3	GUIDE	used	367146616	8.85	13251	1.000	0.082	0.074	0.072	0.116	11.418645	41.190163	1398.94	1559
4	GUIDE	used	367148872	7.23	13264	1.000	0.066	-0.155	0.064	0.100	10.505940	40.688258	1540.78	-1507
5	GUIDE	used	367657896	9.02	13258	1.000	-0.015	0.041	0.080	0.130	11.197765	41.313576	699.96	1302
6	GUIDE	used	367663272	9.29	13237	1.000	-0.113	0.005	0.088	0.148	10.656279	41.699429	-1263.84	849
7	GUIDE	used	367674552	8.85	13251	1.000	-0.024	0.037	0.081	0.132	11.016238	41.570845	-343.26	1401

## 2.4 Star Slots

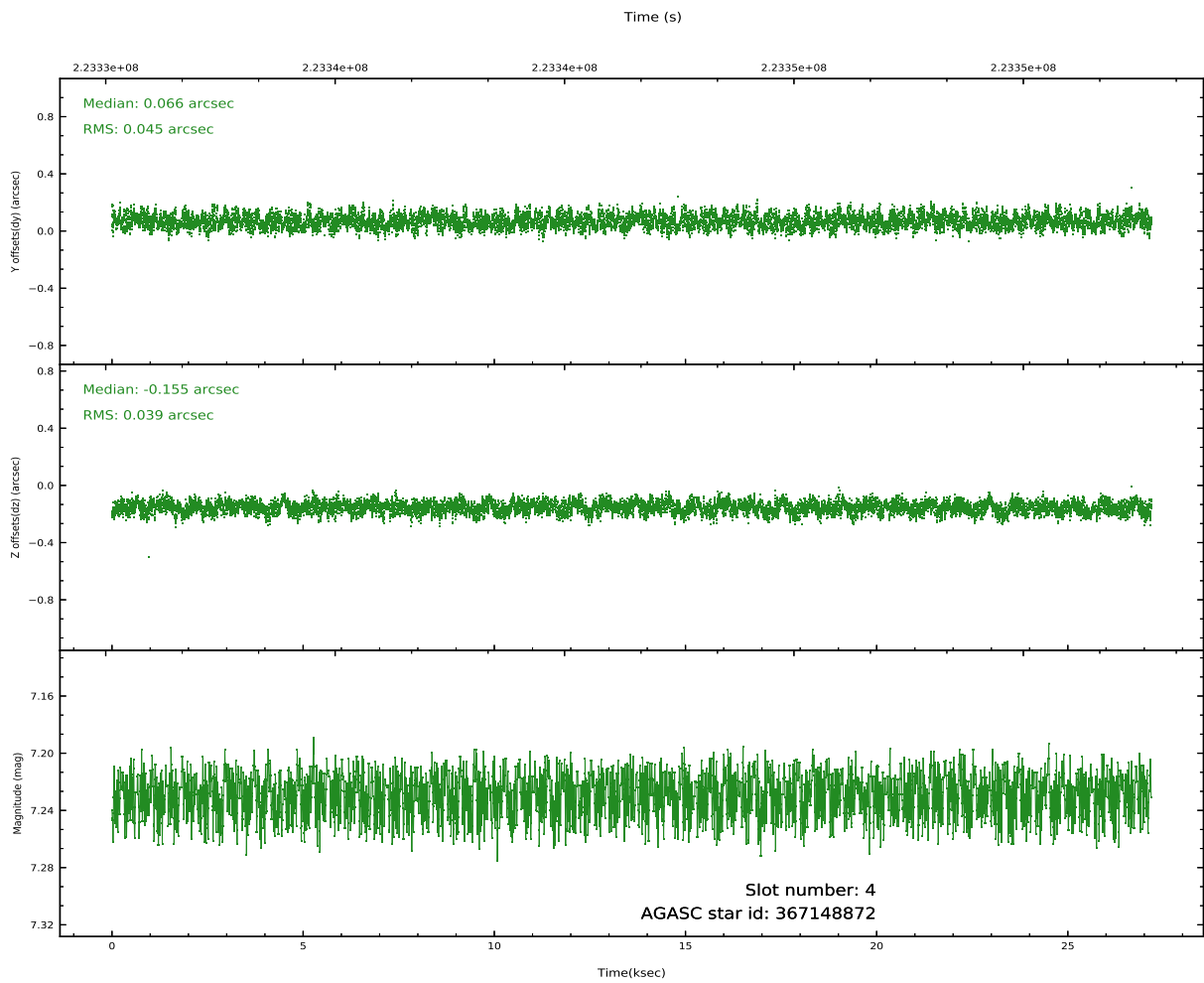
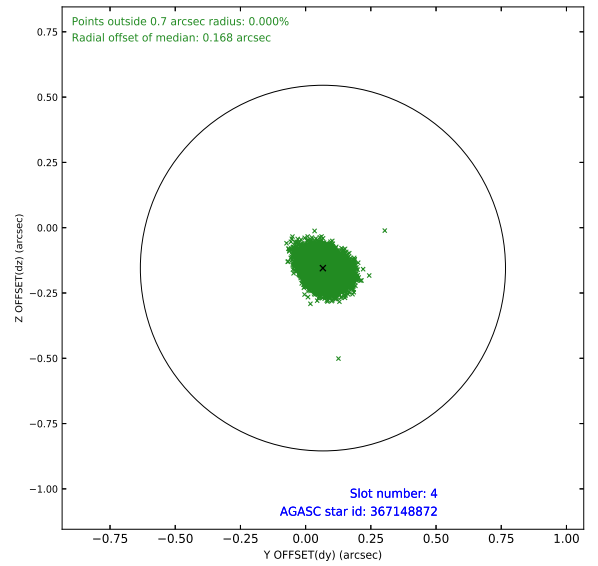
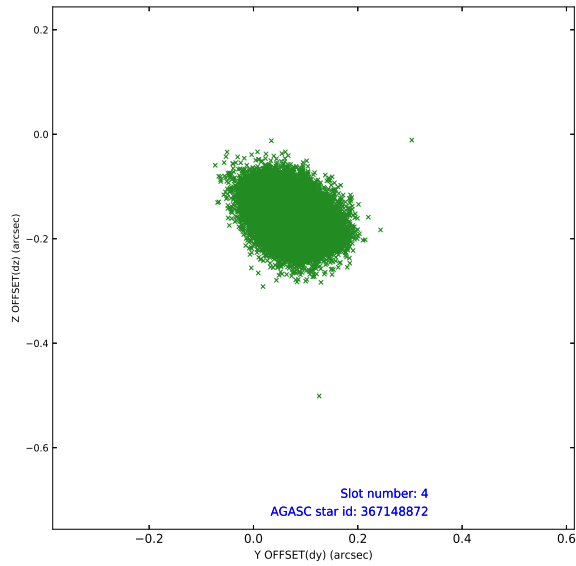
### 2.4.1 Slot 3



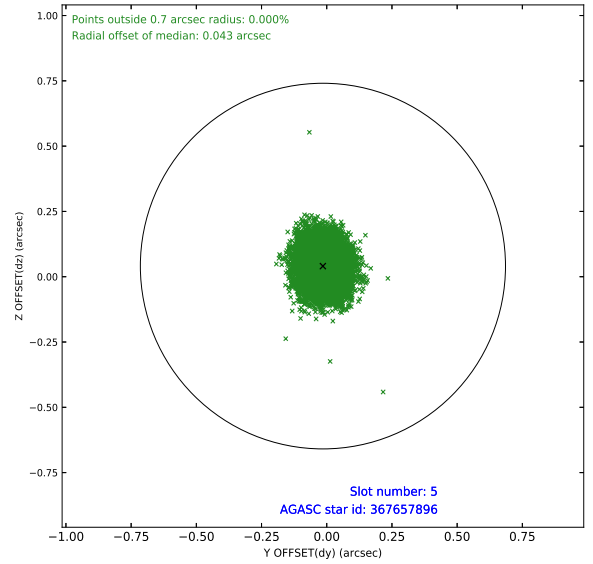
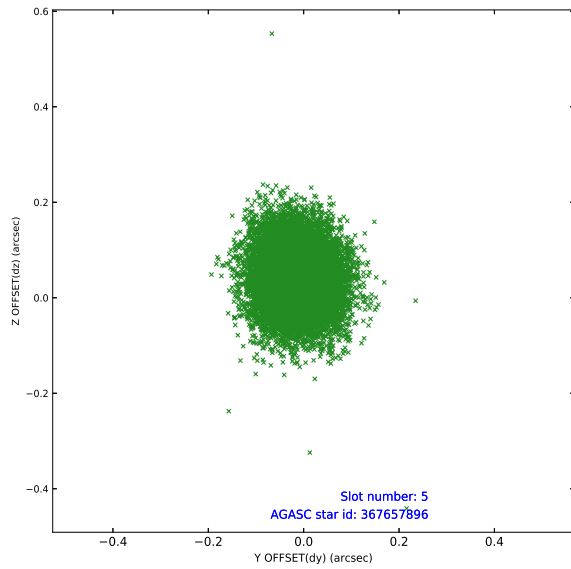
Time (s)



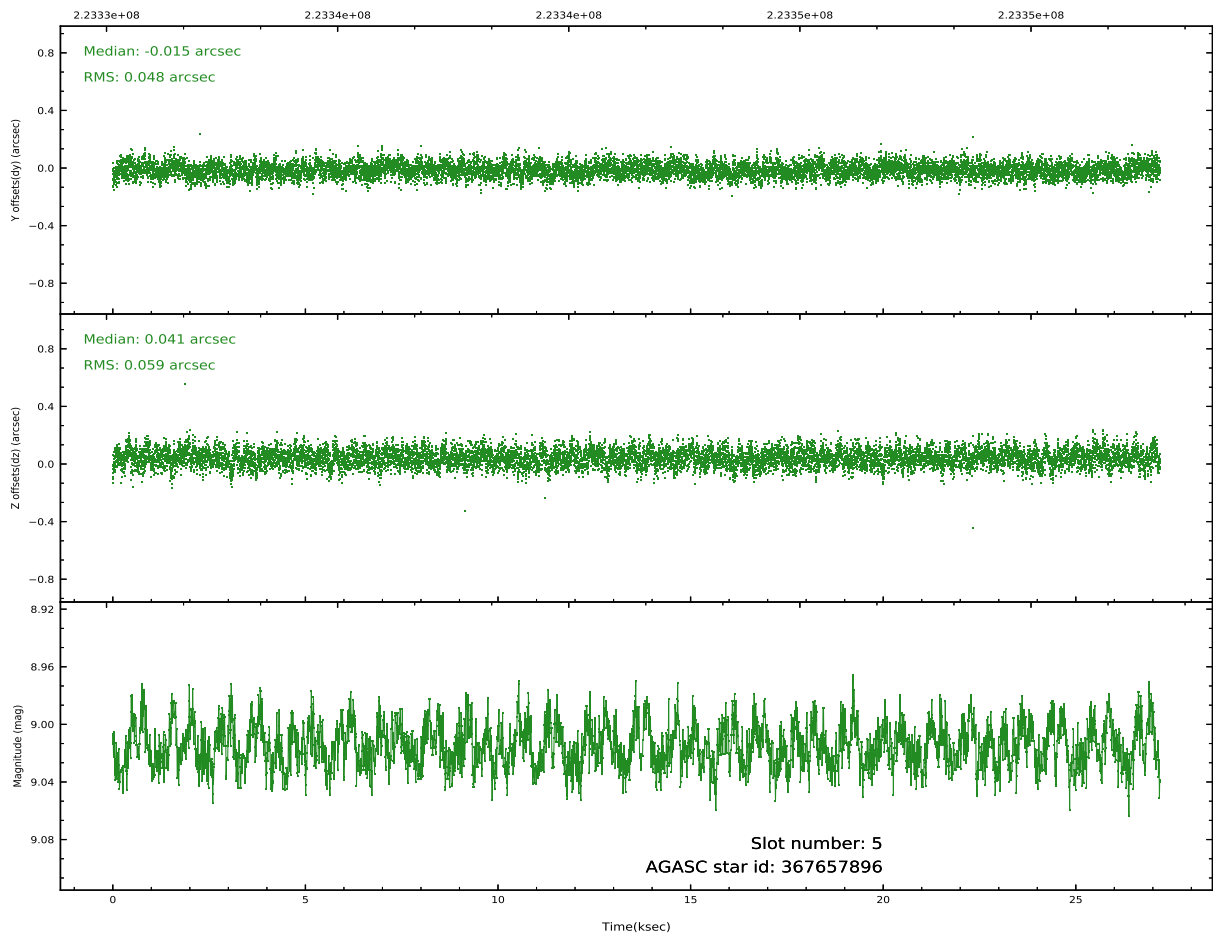
## 2.4.2 Slot 4



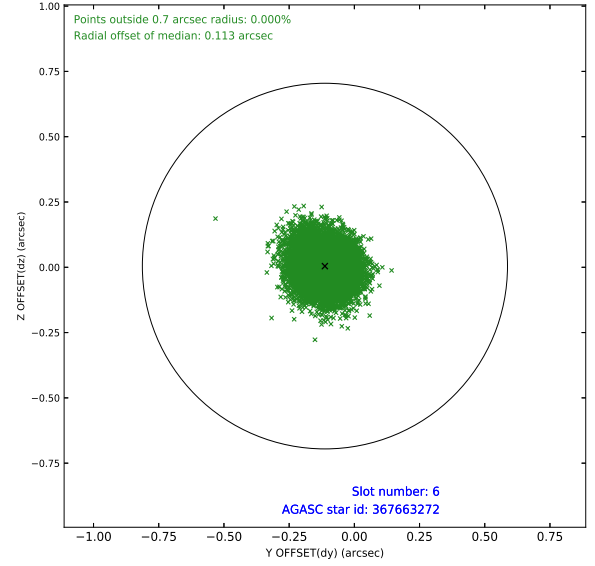
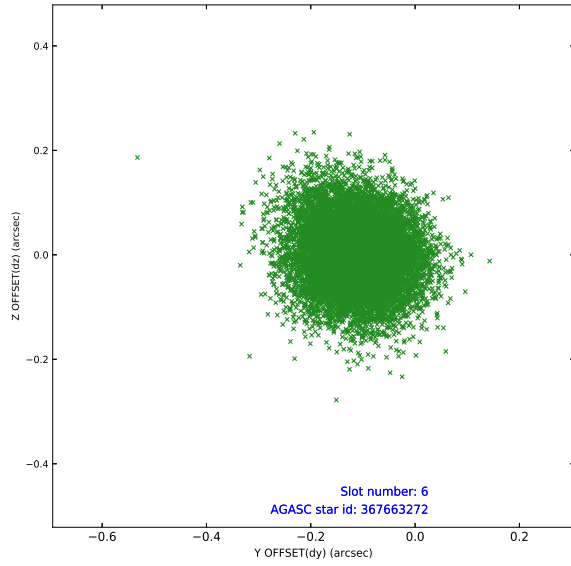
### 2.4.3 Slot 5



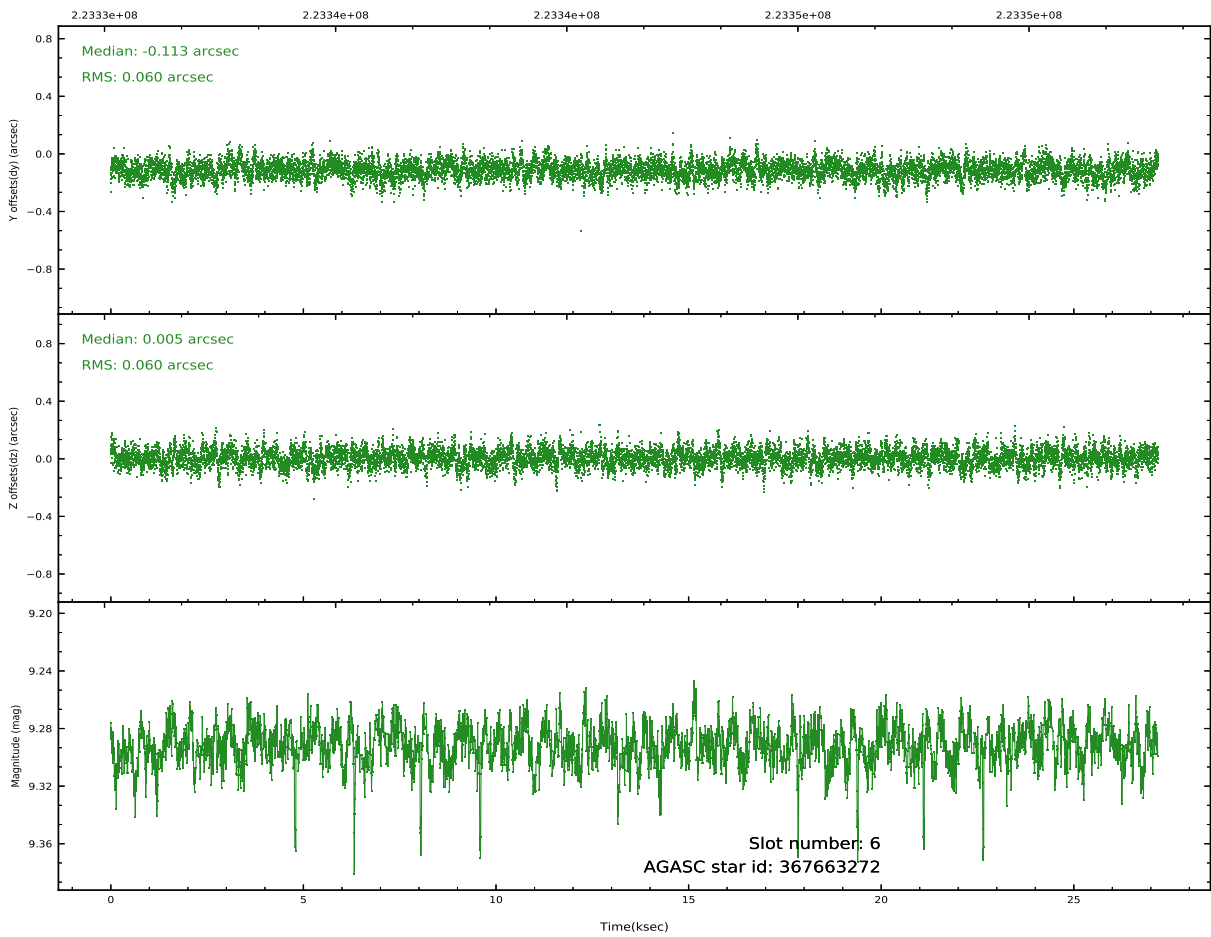
Time (s)



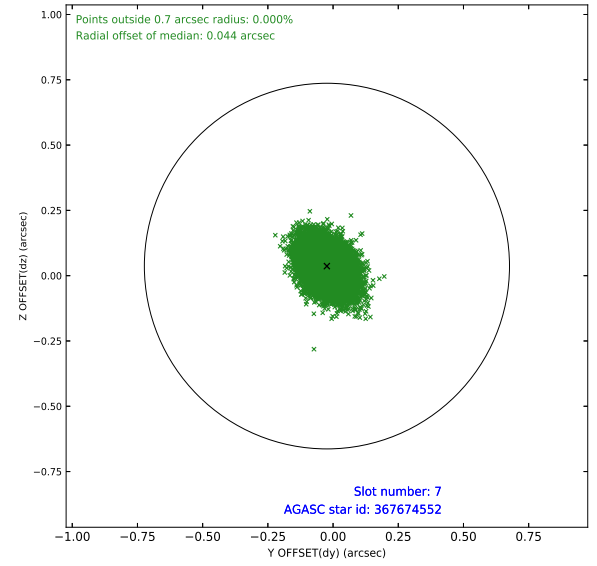
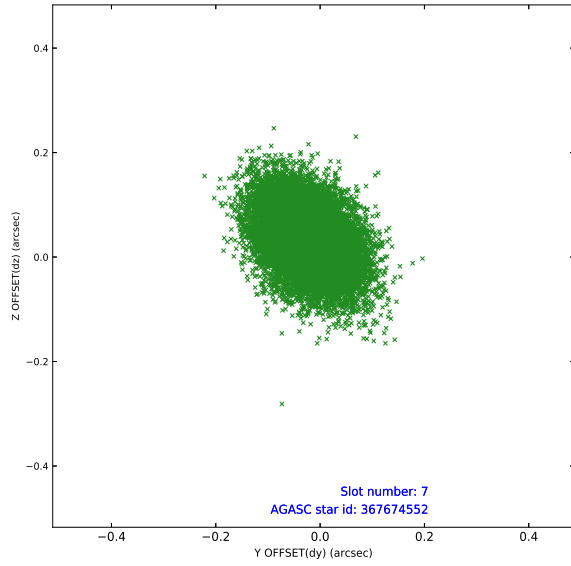
## 2.4.4 Slot 6



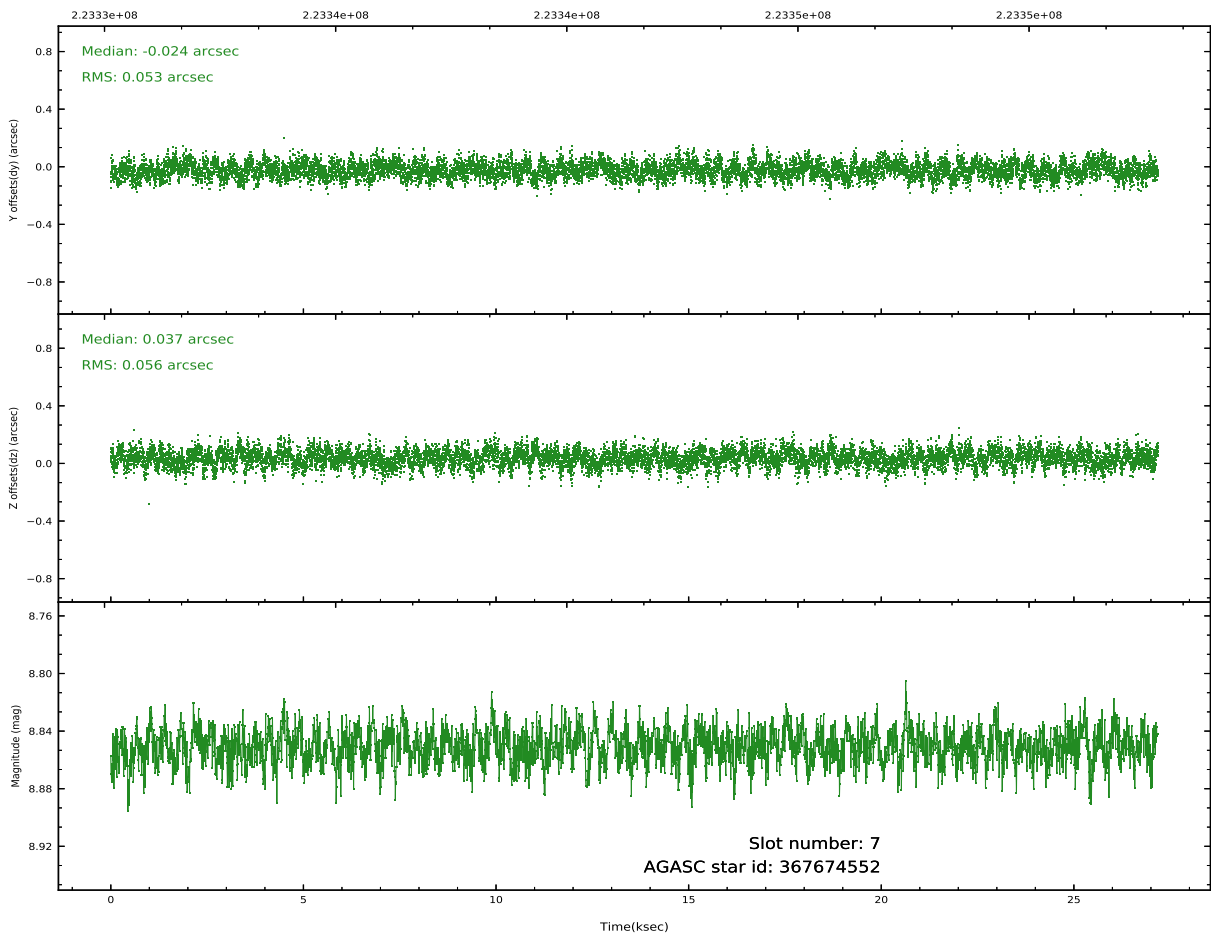
Time (s)



## 2.4.5 Slot 7

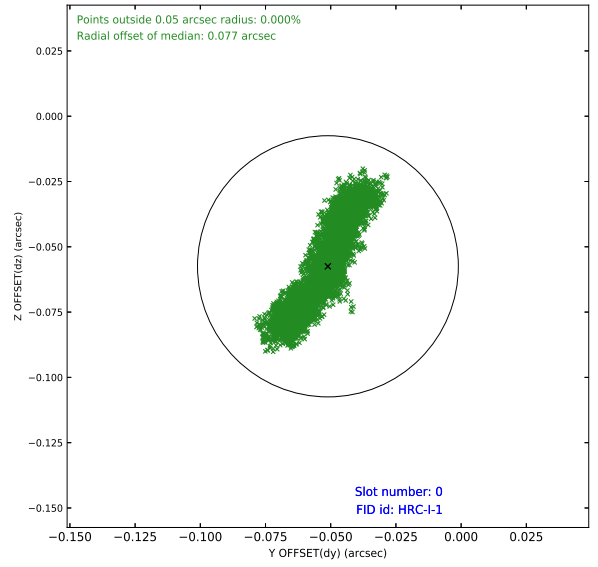
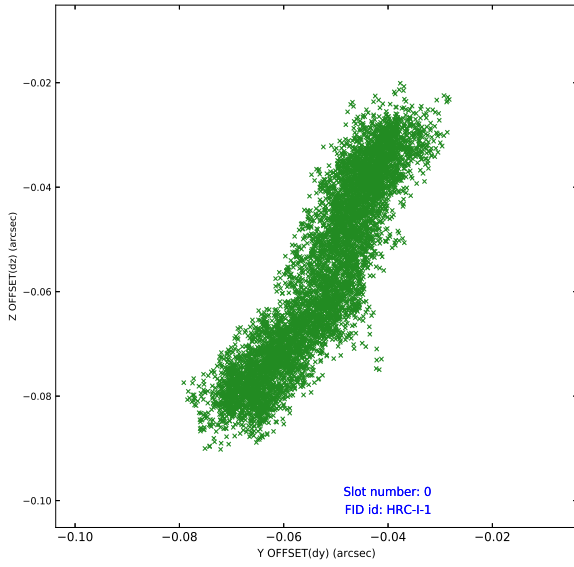


Time (s)

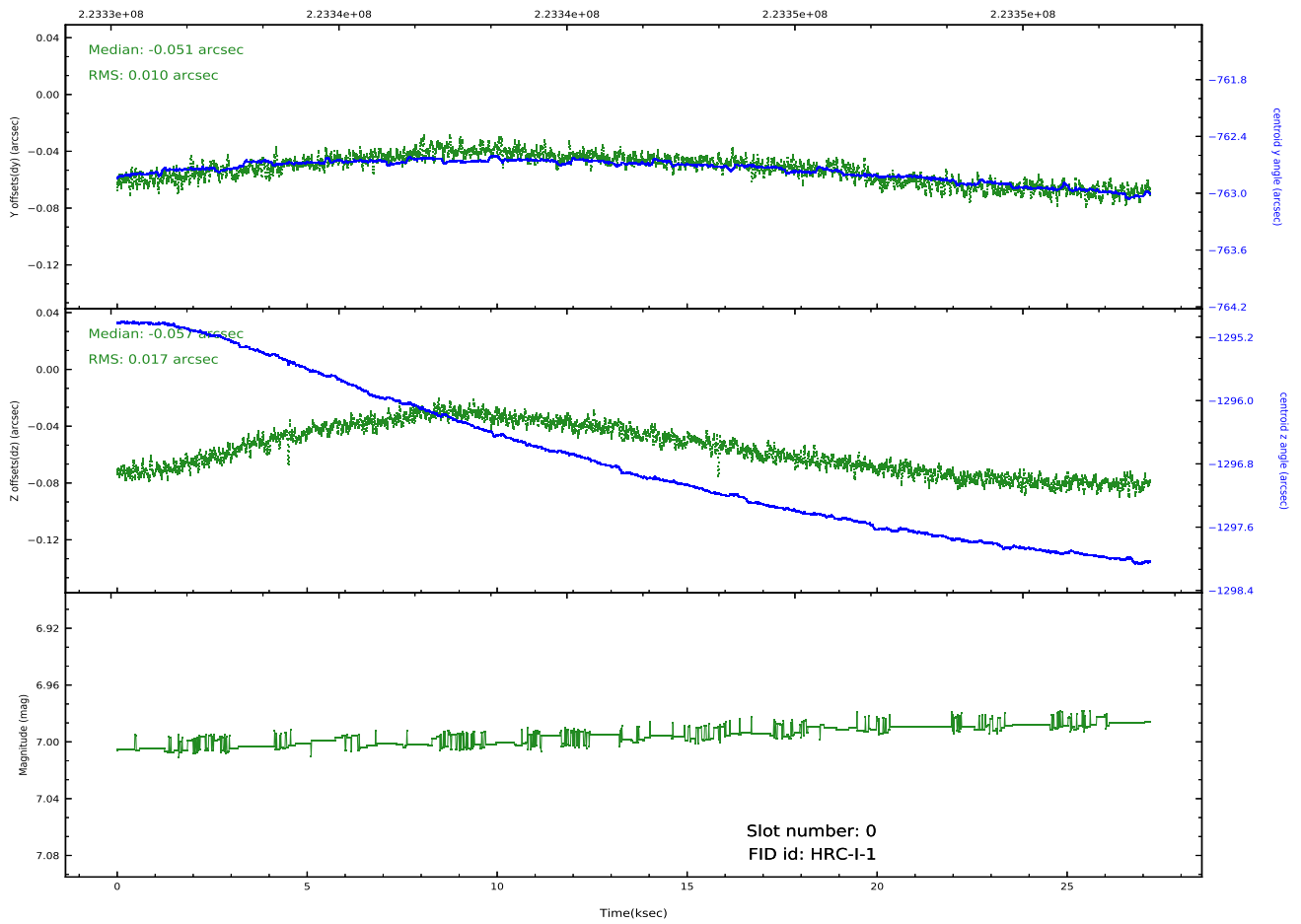


## 2.5 FID Slots

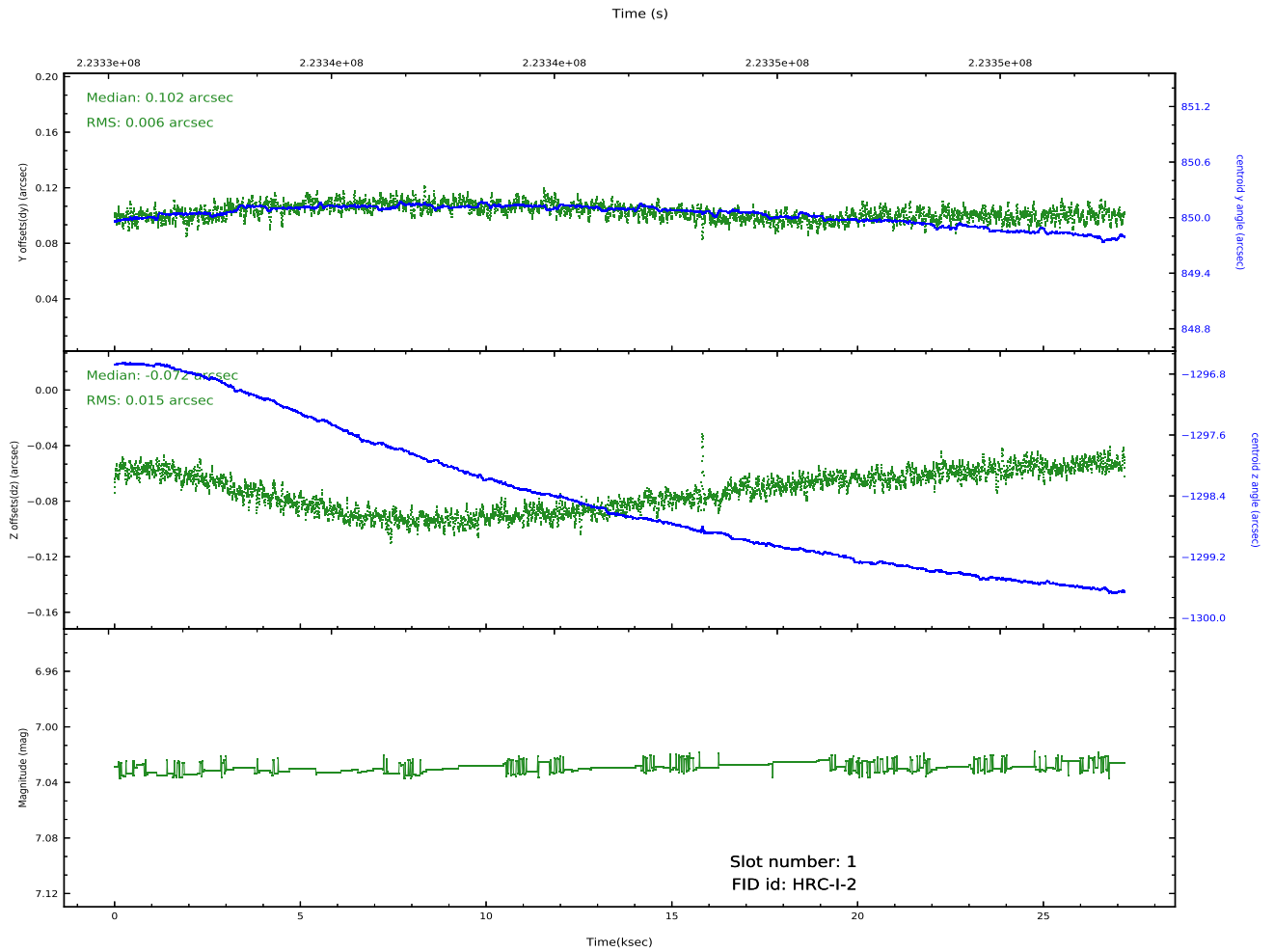
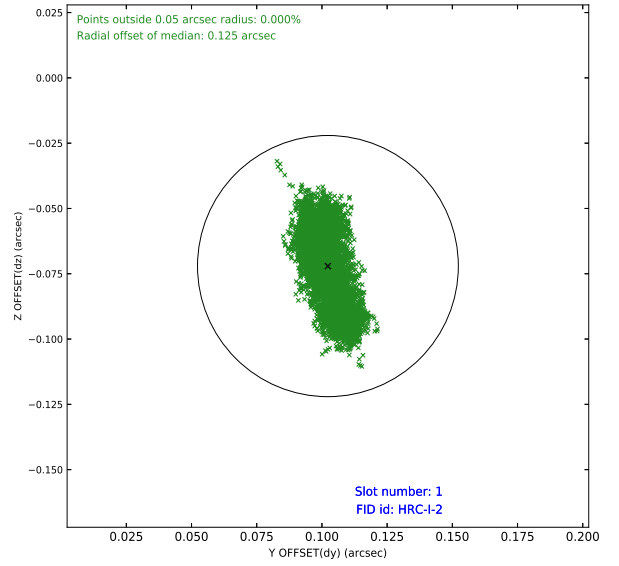
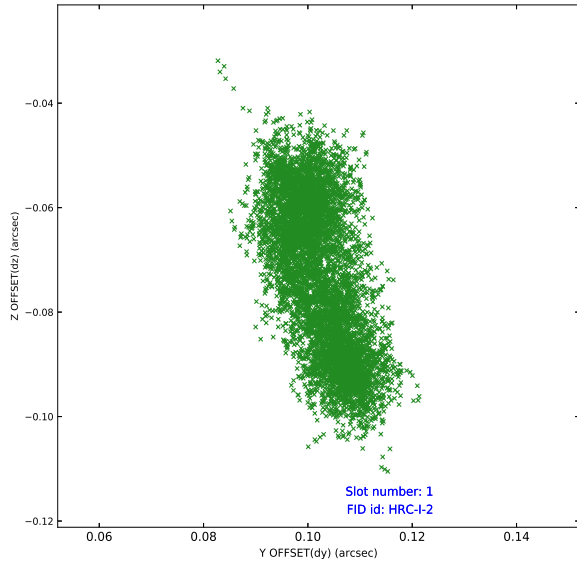
### 2.5.1 Slot 0



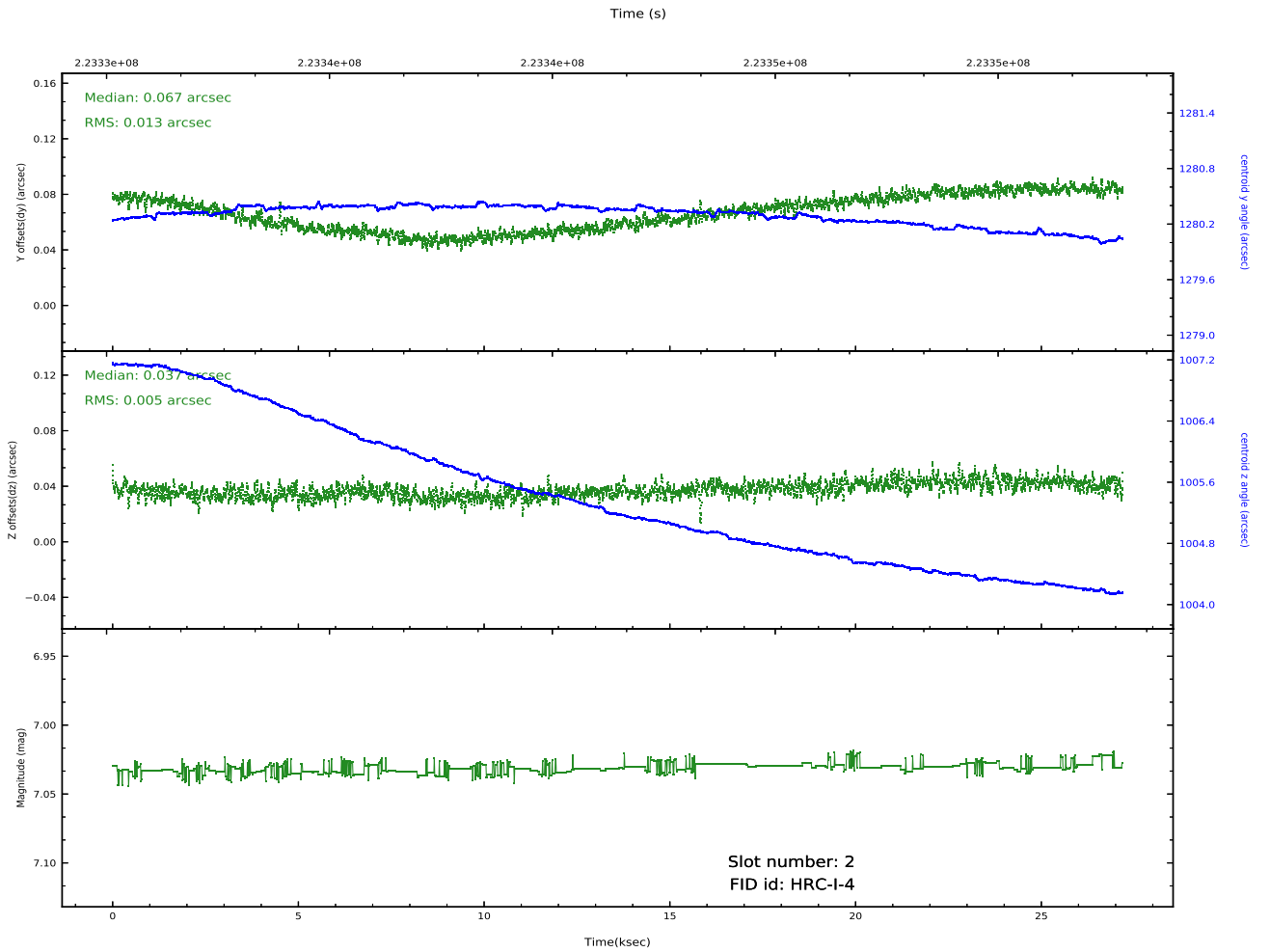
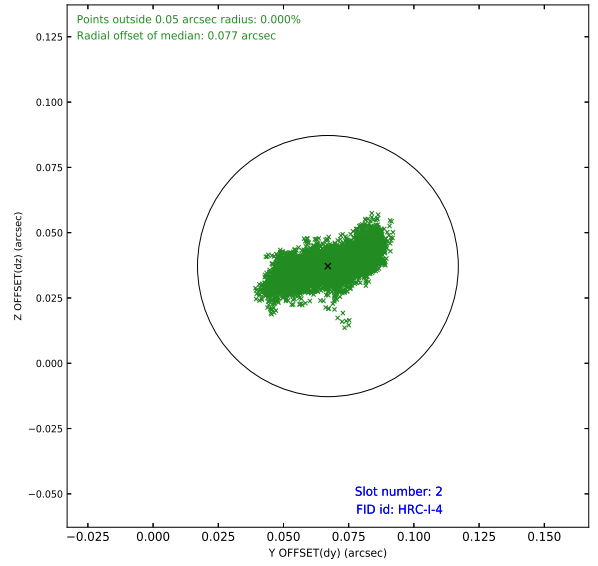
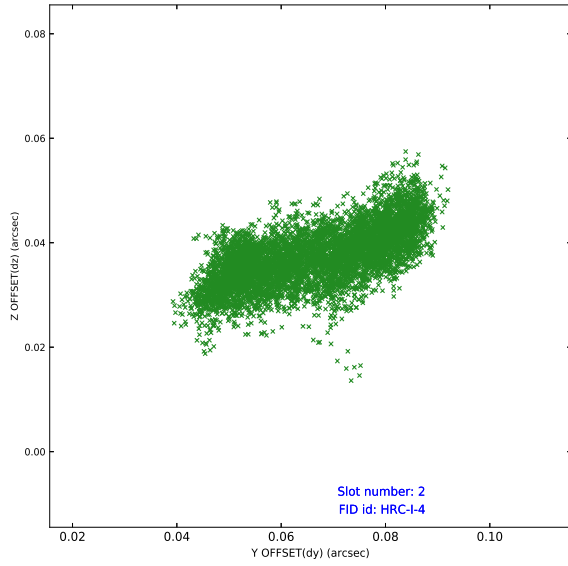
Time (s)



## 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)	2020.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.18838

## A.2 Comments

Joint Proposal: NRAO