

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4875 - L2 Version 4  
Chandra X-Ray Center

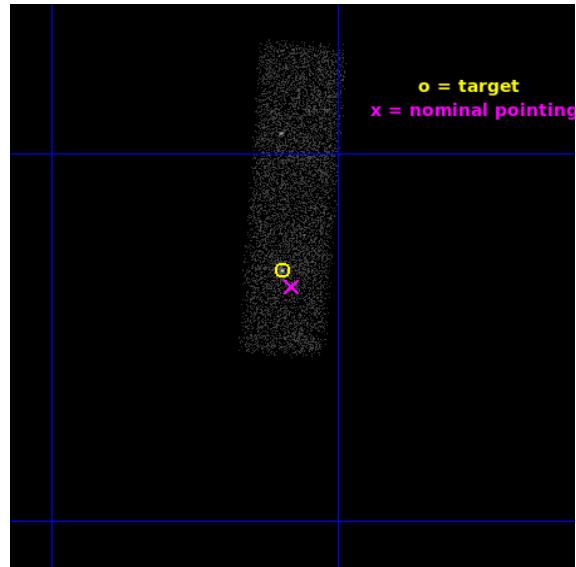
L2 Processing Date : Sep 24 2020

## 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	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	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

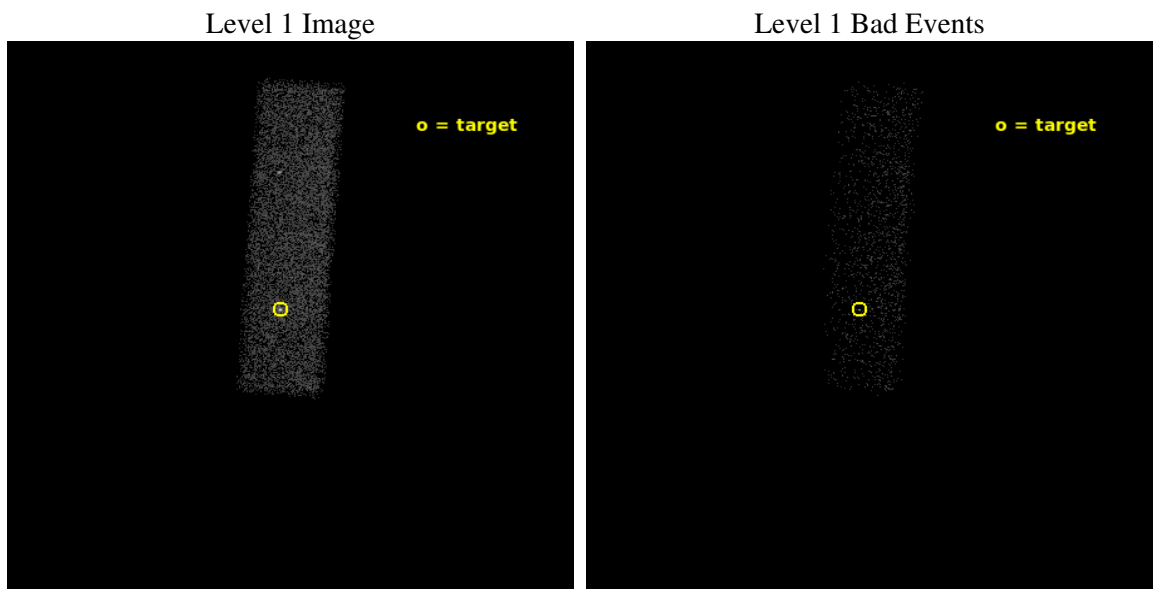
seq_num	700957	Sequence number
obs_id	4875	Observation id
title	Scattering in Seyfert 2 Galaxies With Polarized Broad Lines	Propos
observer	Andrew Young	Principal investigator
object	Mrk 1210	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	121.024167	Observer's specified target RA [deg]
dec_targ	5.113889	Observer's specified target Dec [deg]
ra_nom	121.01994833356	Nominal RA [deg]
dec_nom	5.1064752957584	Nominal Dec [deg]
roll_nom	273.8395879007	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10944.80016309	Sum of GTIs [s]
livetime	10410.729728042	Livetime [s]
ontime7	10944.80016309	Sum of GTIs [s]
l2events	10275	Number of level 2 events



## 2 OBI

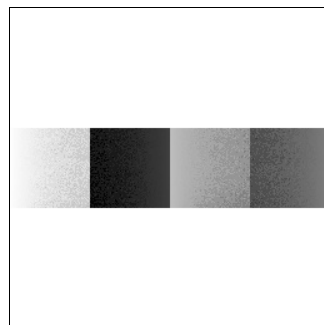
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10762.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10944.80016309	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime7	10944.80016309	Sum of GTIs [s]
date	2020-09-24T18:29:51	Date and time of file creation	l1events	20755	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	20755
rejected events	9911
rejected %	47%

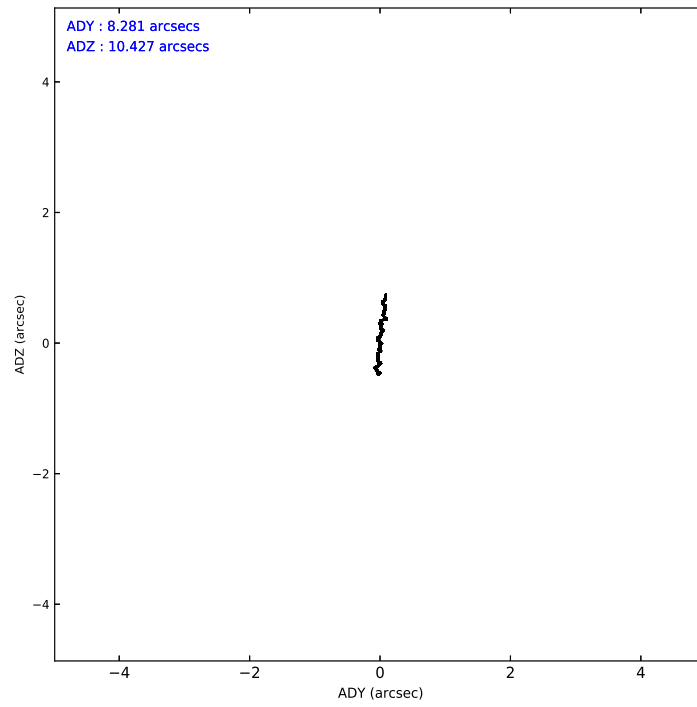
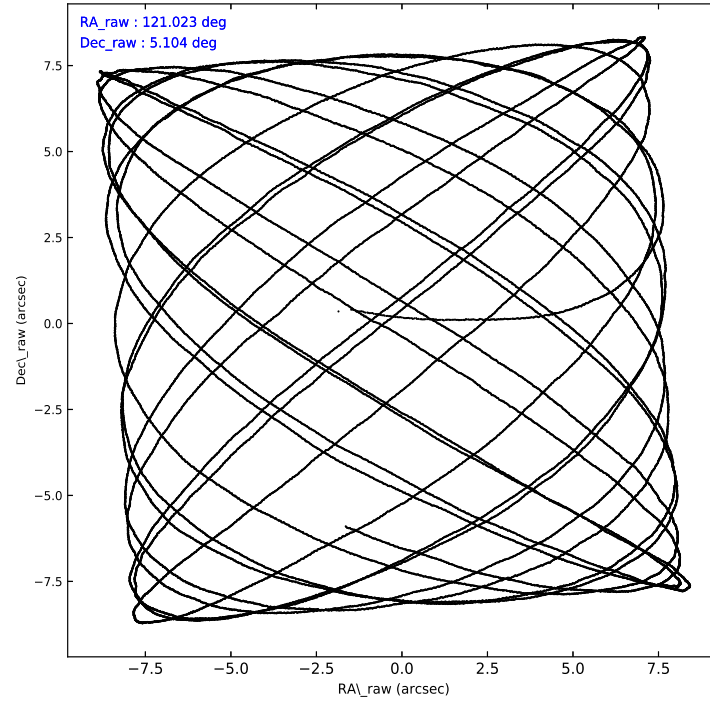
	<b>ccd 7</b>
grade 0 events	1577
	7%
grade 1 events	21
	0%
grade 2 events	2362
	11%
grade 3 events	1313
	6%
grade 4 events	1314
	6%
grade 5 events	2018
	9%
grade 6 events	4826
	23%
grade 7 events	7324
	35%

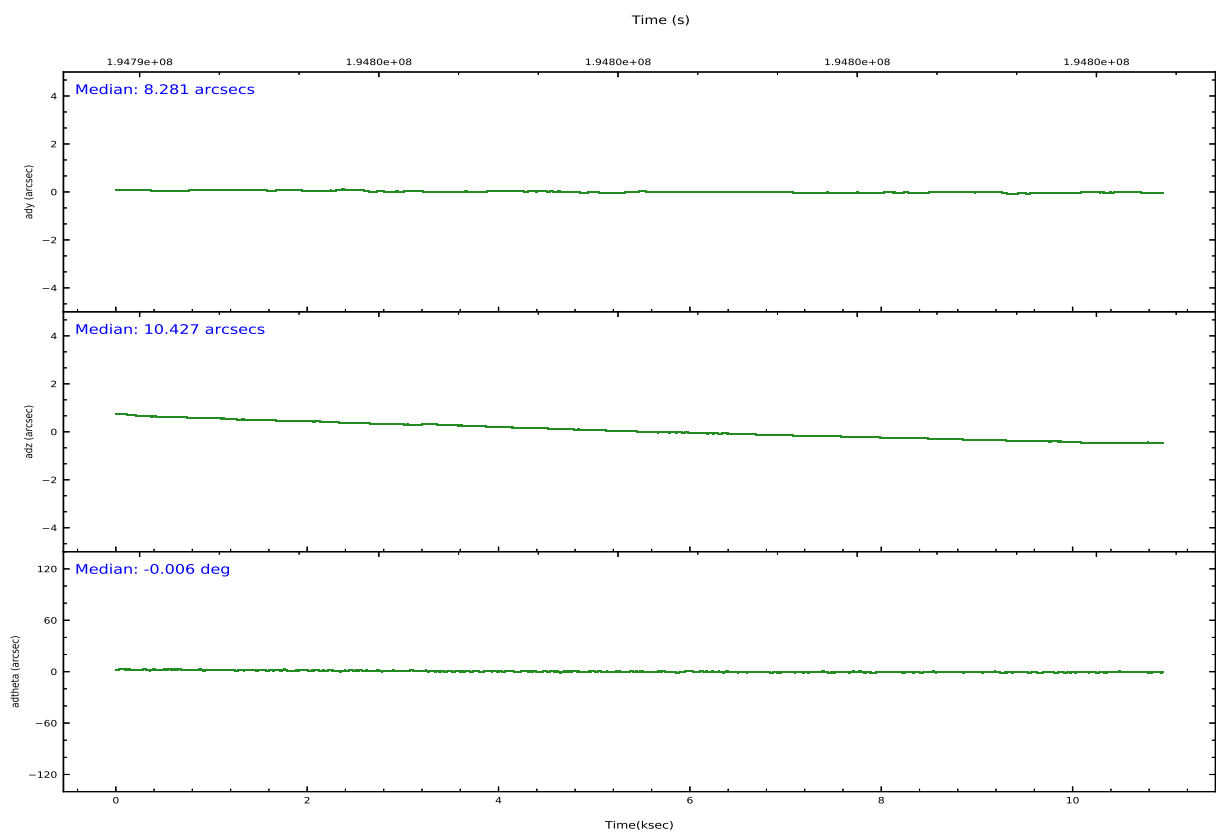
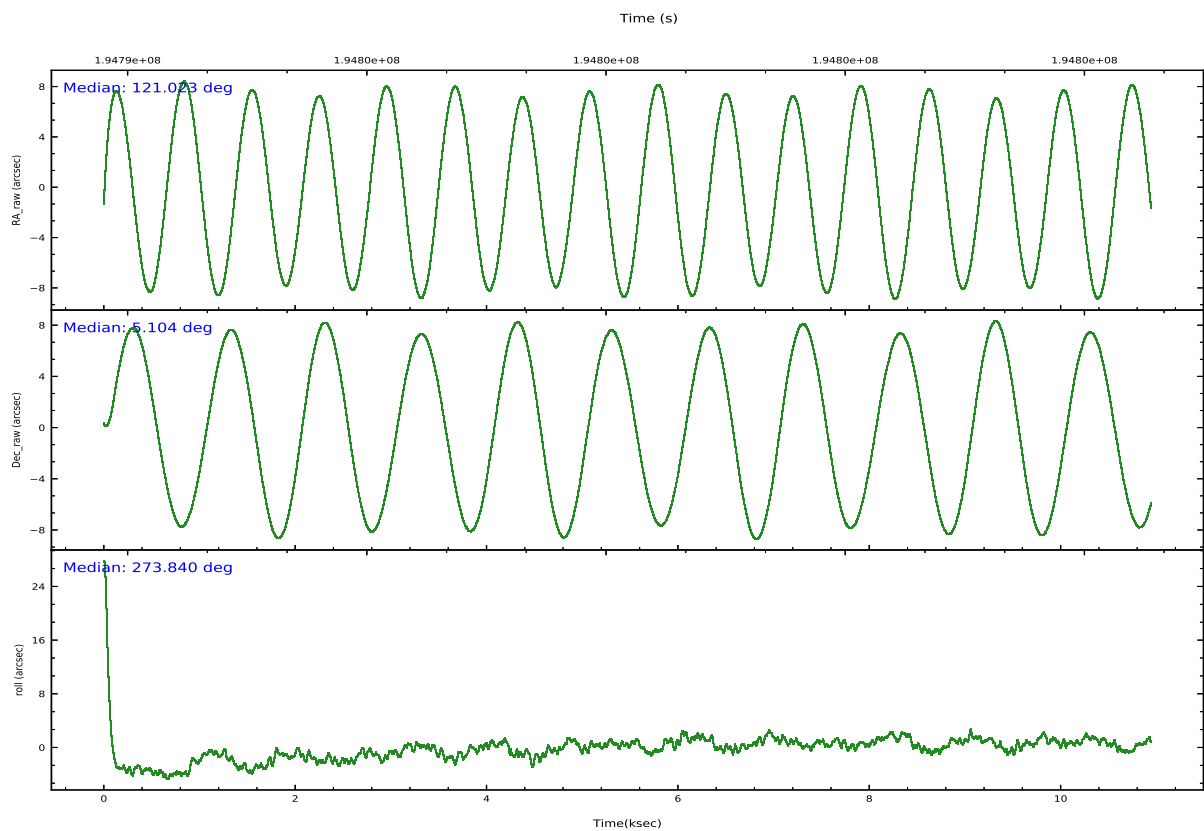


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	121.007580	121.01994833356	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	5.126684	5.1064752957584	Subarray start row	385	385
[deg] Pointing Roll	273.685916	273.8395879007	Subarray row count	256	256
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.8
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	194792434.184000	194789726.13762			
Observation start date	2004-03-04T12:59:30	2004-03-04T12:15:26			
[s] Observation end time (MET)	194803196.184000	194804069.98825			
Observation end date	2004-03-04T15:58:52	2004-03-04T16:14:29			
Read mode	TIMED	TIMED			

## 2.3 Aspect



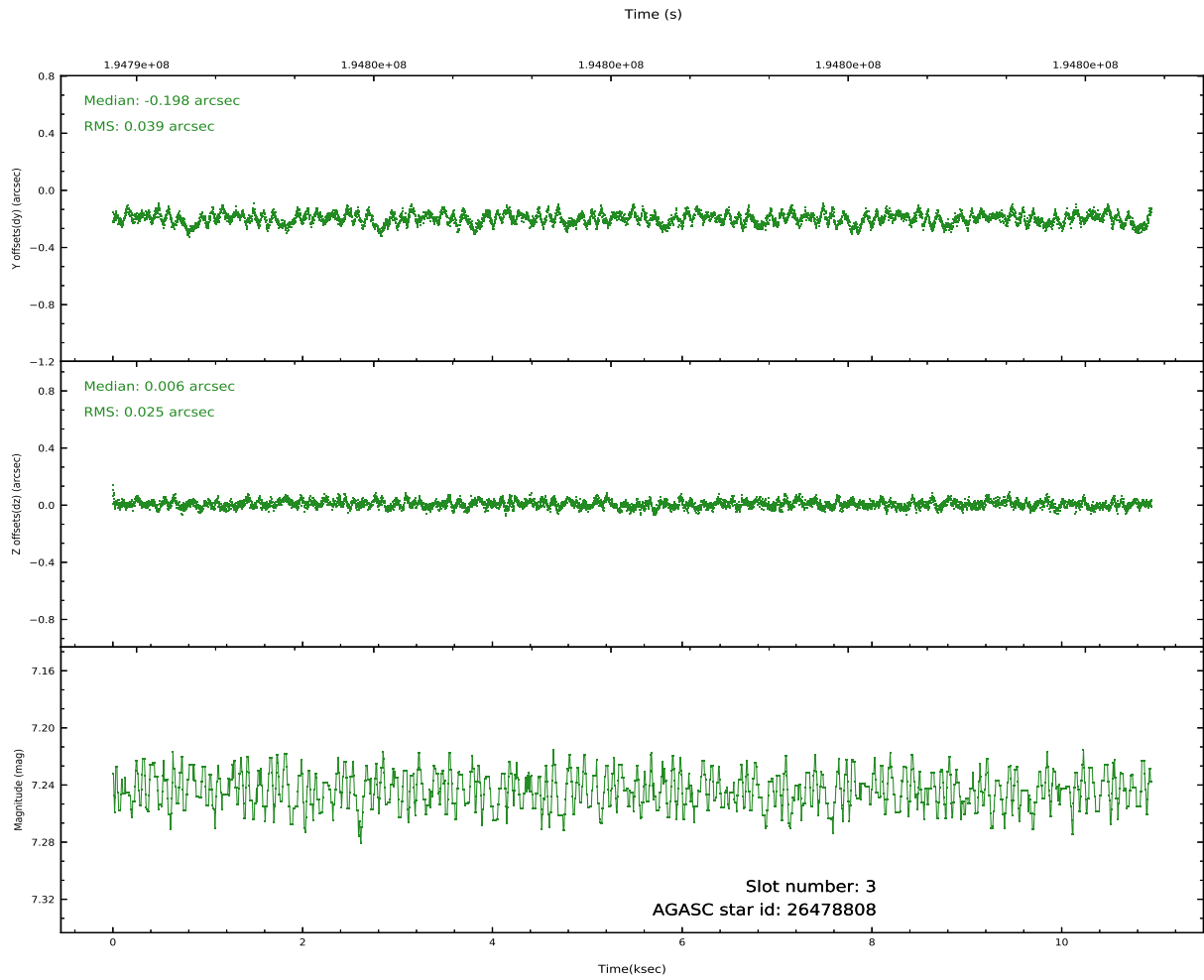
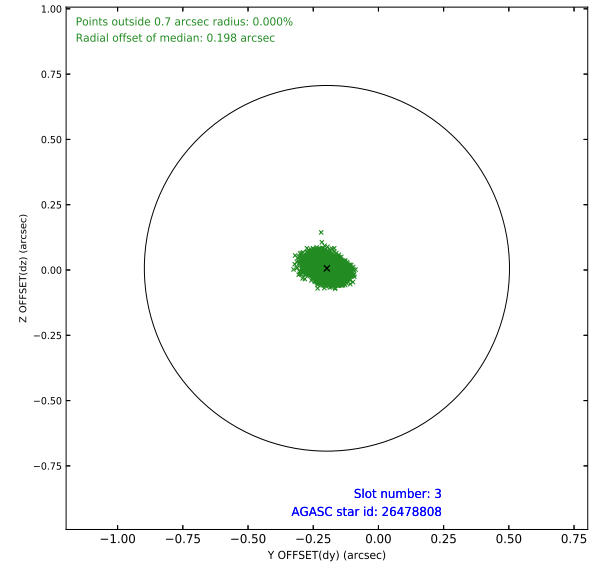
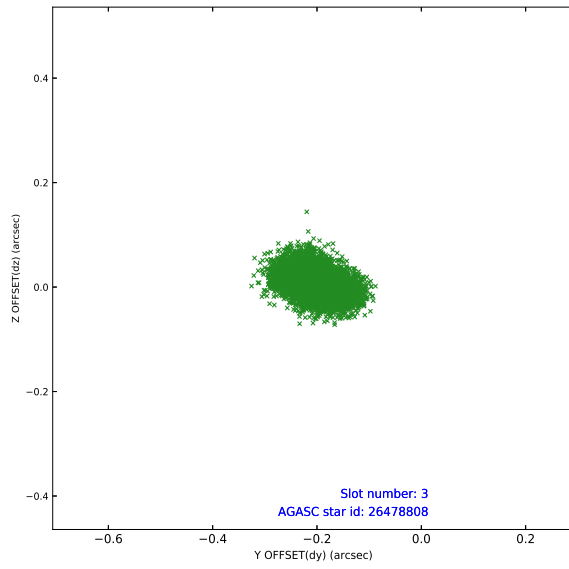


Slot Statistics

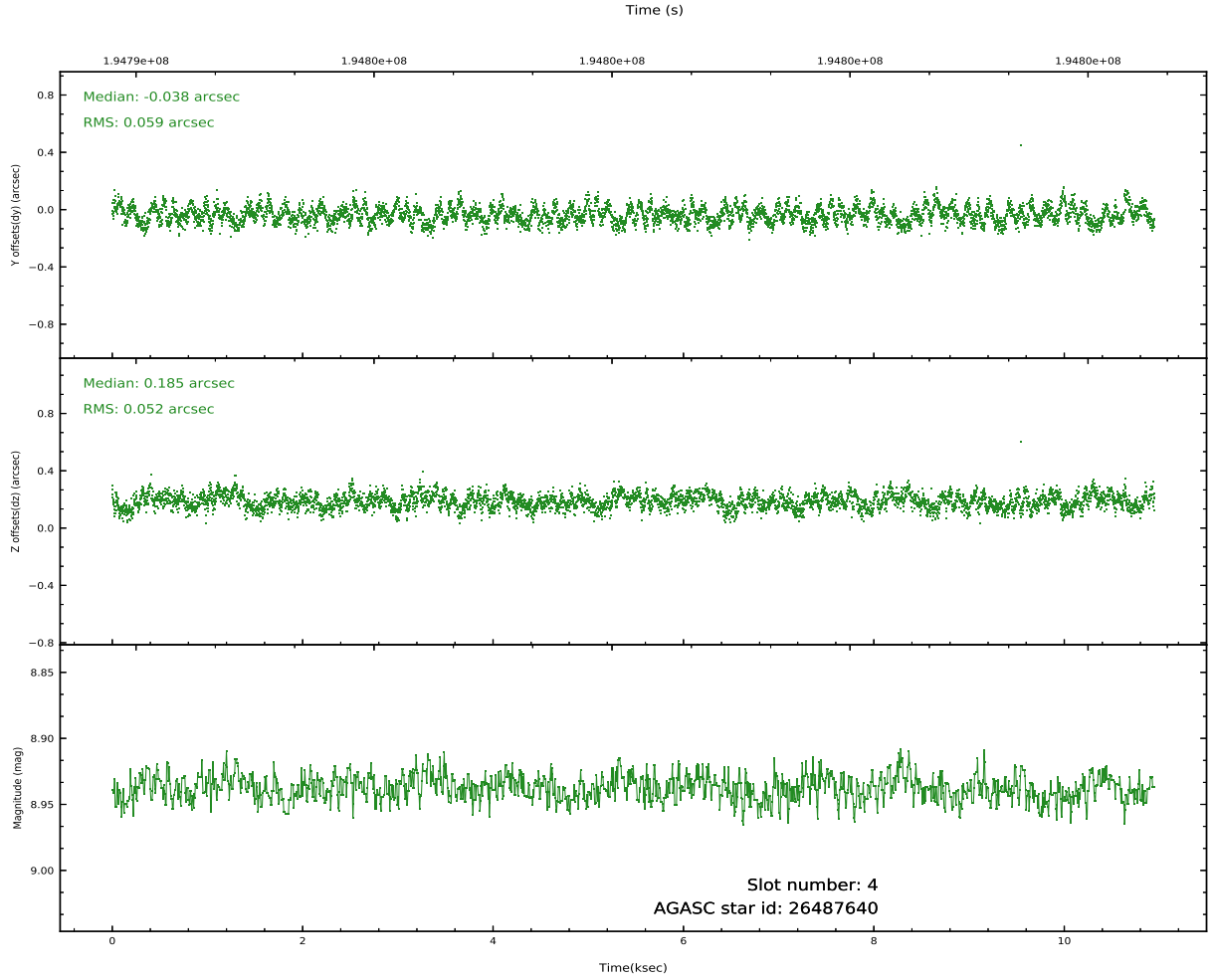
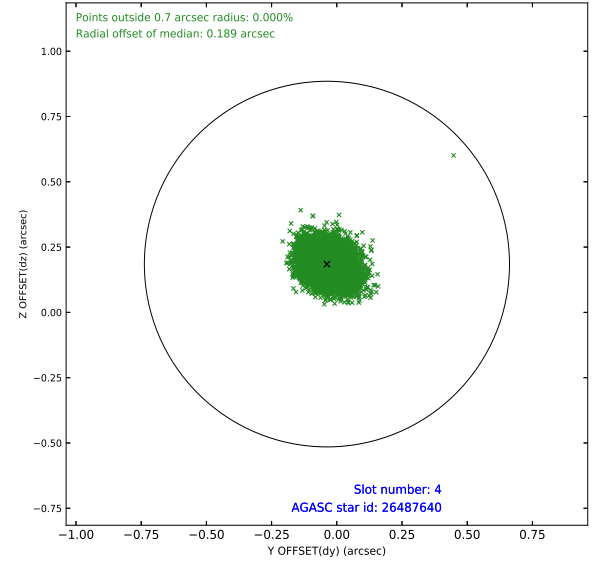
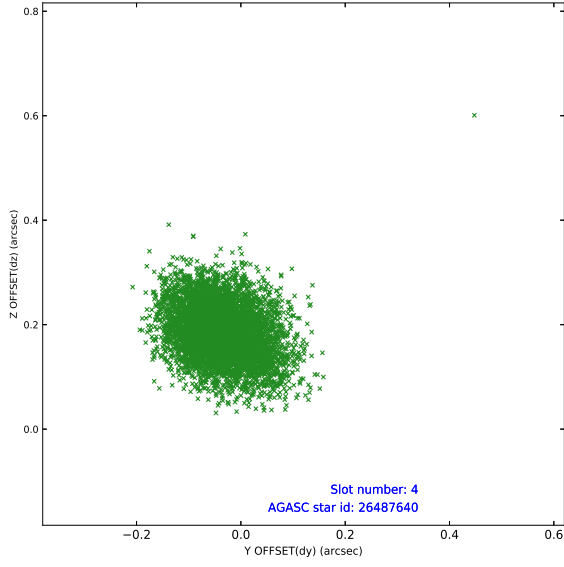
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.18	2669	1.000	0.049	-0.072	0.022	0.033	0.000000	0.000000	935.03	-1727
1	FID		ACIS-S-5	7.24	2669	1.000	-0.109	0.020	0.007	0.011	0.000000	0.000000	-1813.88	169
2	FID		ACIS-S-6	7.34	2670	1.000	0.039	0.067	0.020	0.029	0.000000	0.000000	400.04	814
3	GUIDE	used	26478808	7.24	5340	1.000	-0.198	0.006	0.050	0.082	121.530150	5.559485	-1435.55	1968
4	GUIDE	used	26487640	8.94	5338	1.000	-0.038	0.185	0.084	0.133	121.326715	5.418691	-976.05	1209
5	GUIDE	used	26487648	9.35	5340	1.000	0.313	-0.125	0.084	0.137	121.080640	4.583420	1968.88	136
6	GUIDE	used	26479800	7.60	5341	1.000	-0.117	0.036	0.043	0.069	121.536270	5.582081	-1514.91	1995
7	GUIDE	used	26487192	6.90	5340	1.000	0.041	-0.102	0.060	0.103	120.481632	4.541449	1980.70	-2018

## 2.4 Star Slots

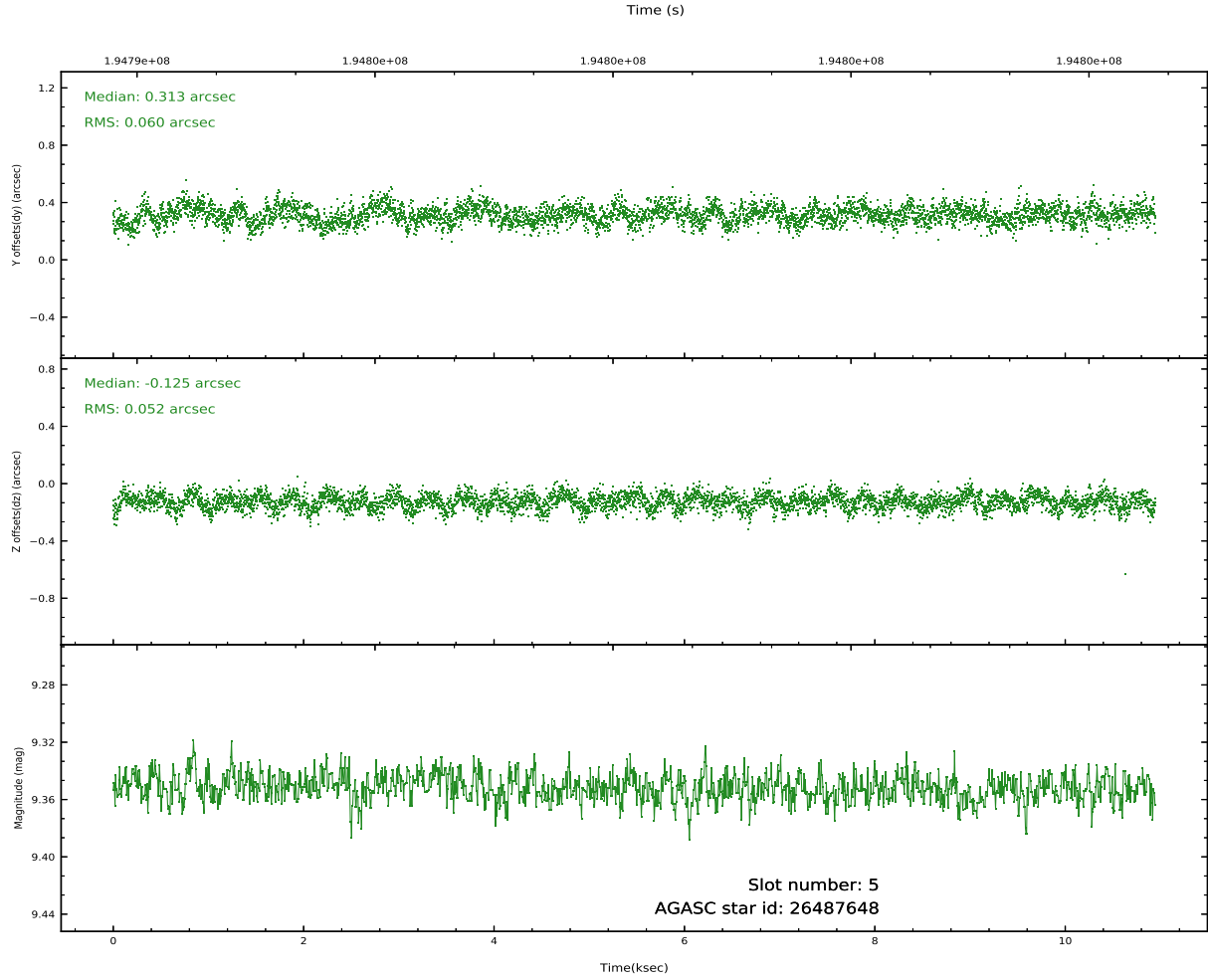
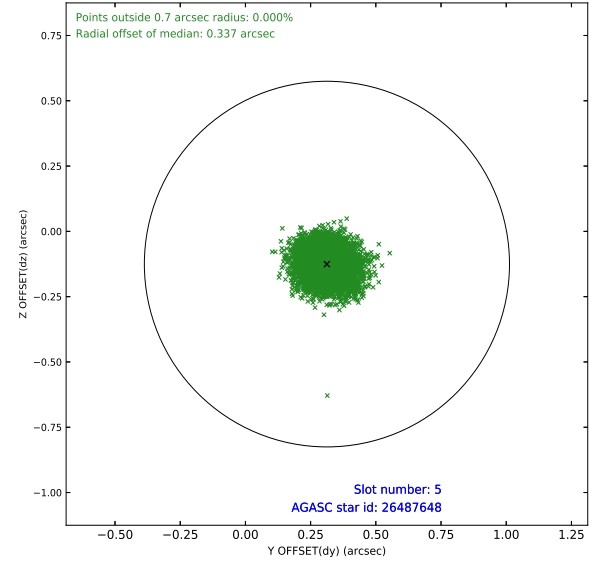
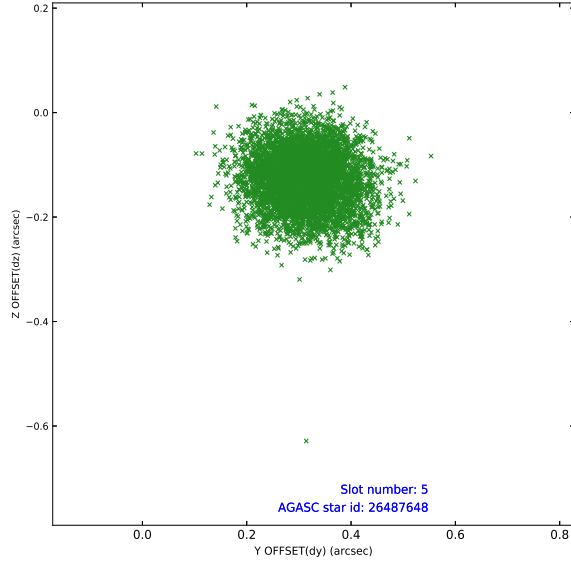
### 2.4.1 Slot 3



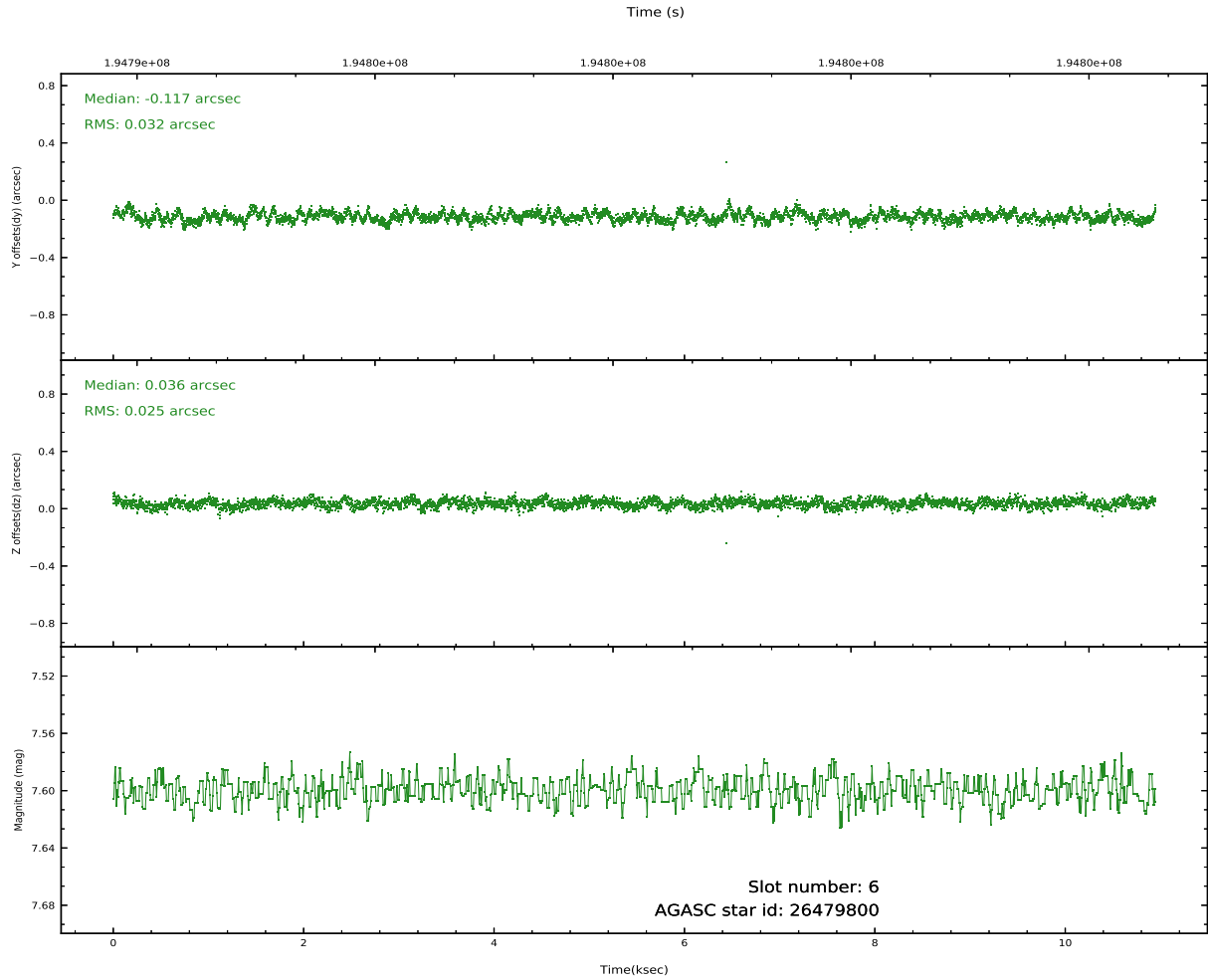
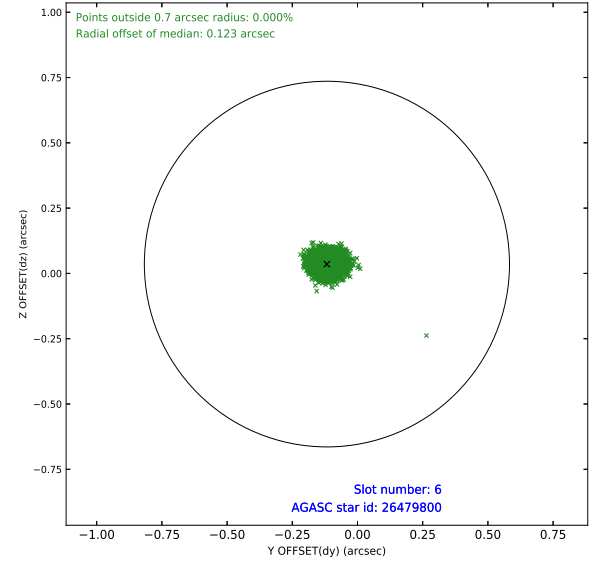
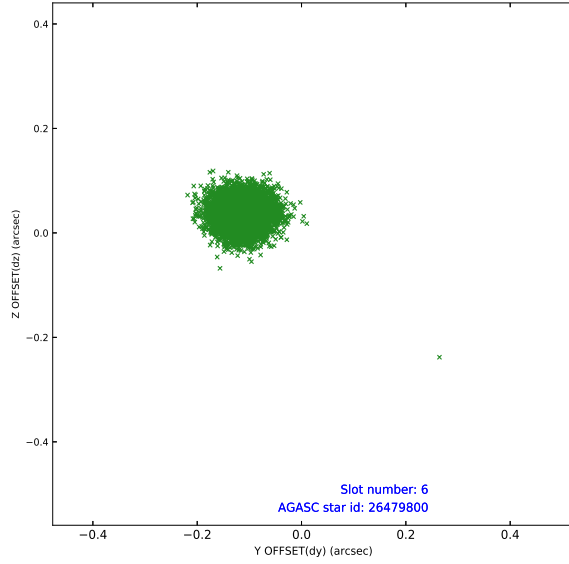
## 2.4.2 Slot 4



### 2.4.3 Slot 5

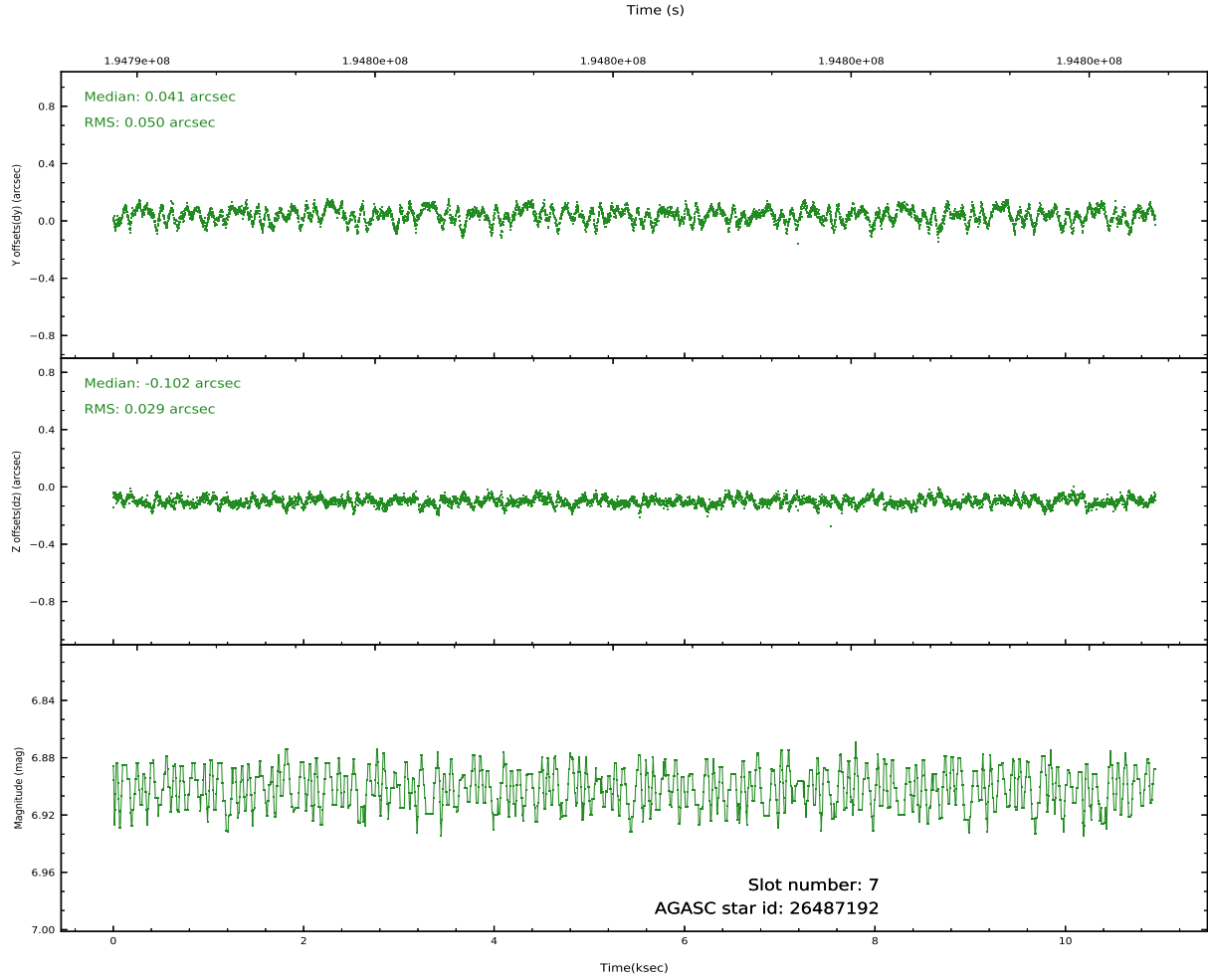
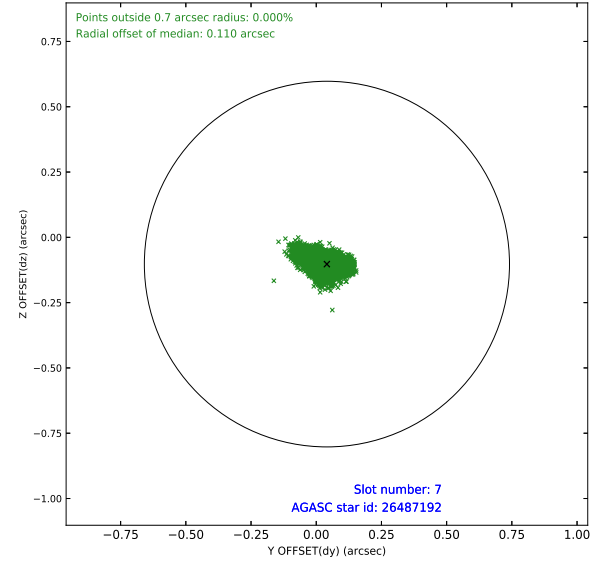
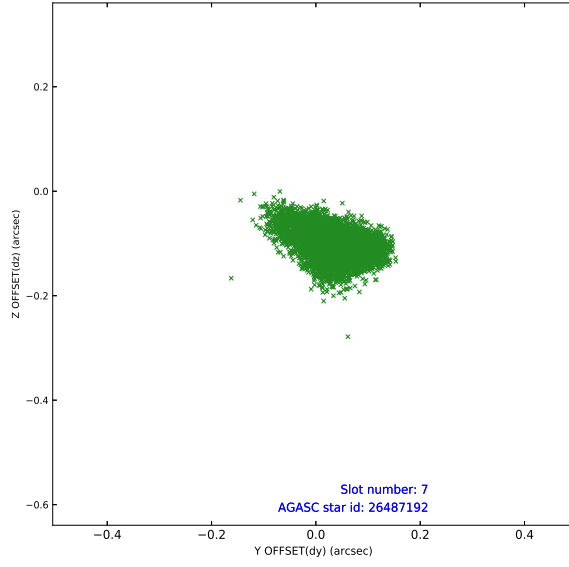


## 2.4.4 Slot 6



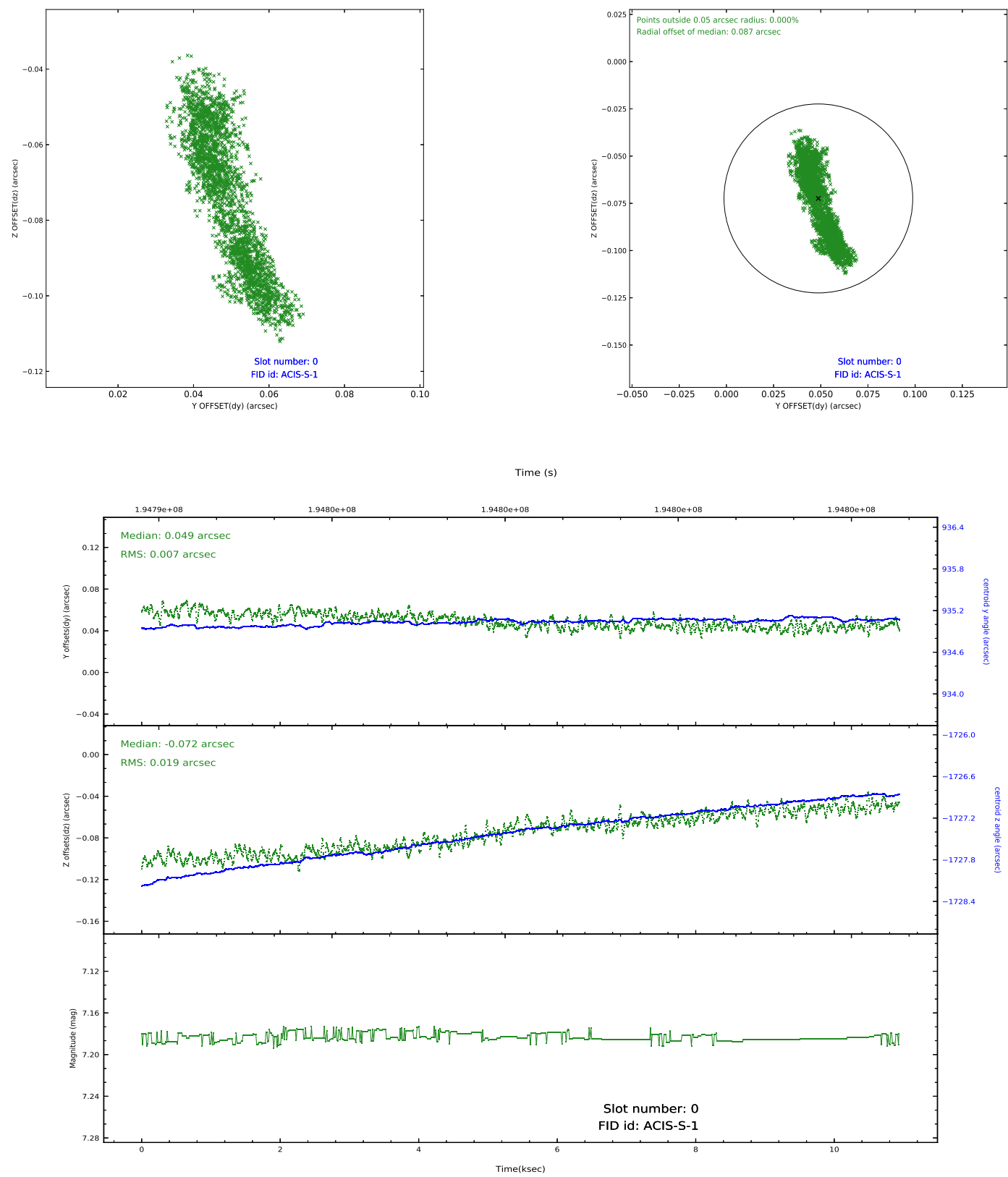


## 2.4.5 Slot 7

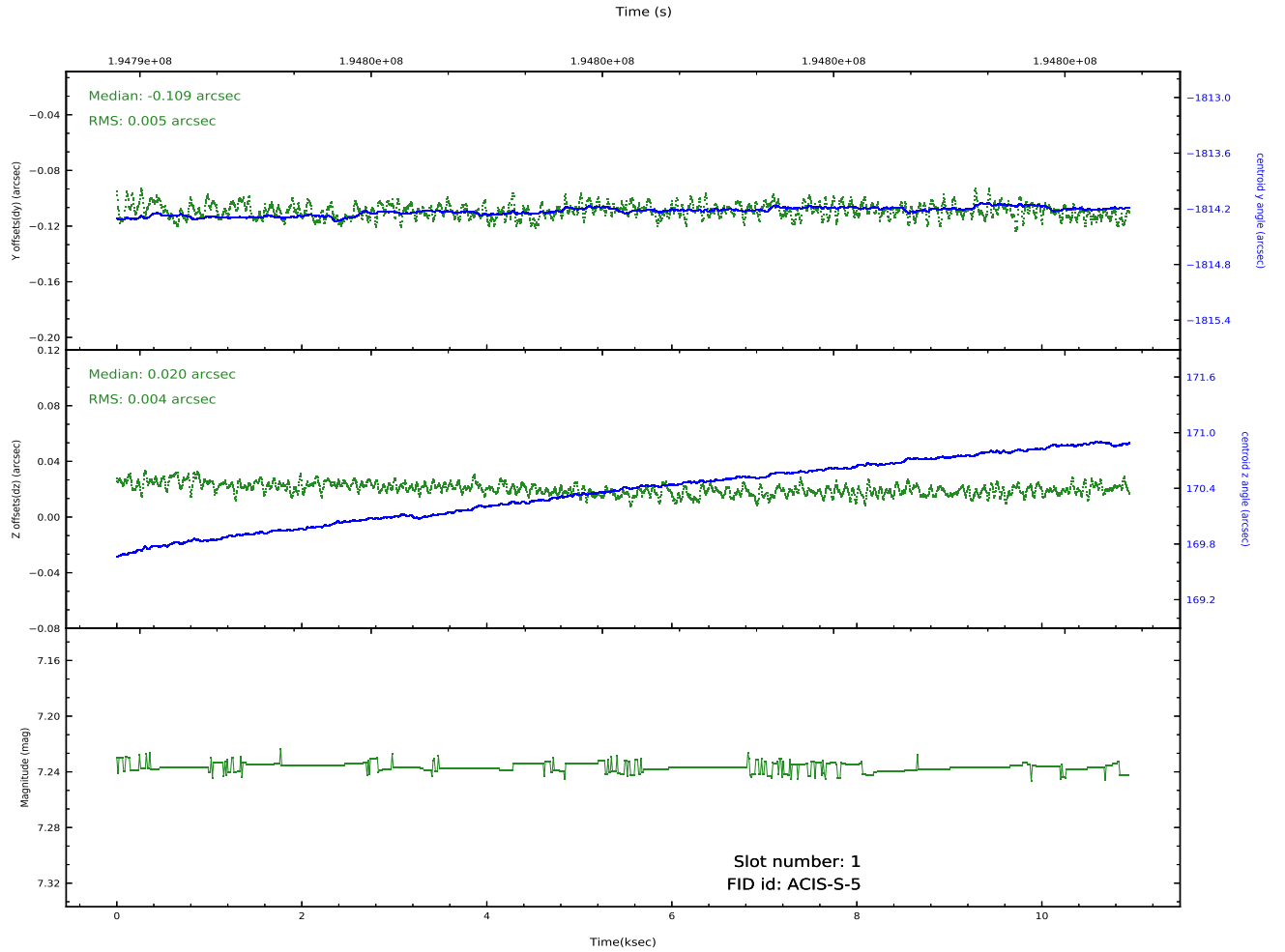
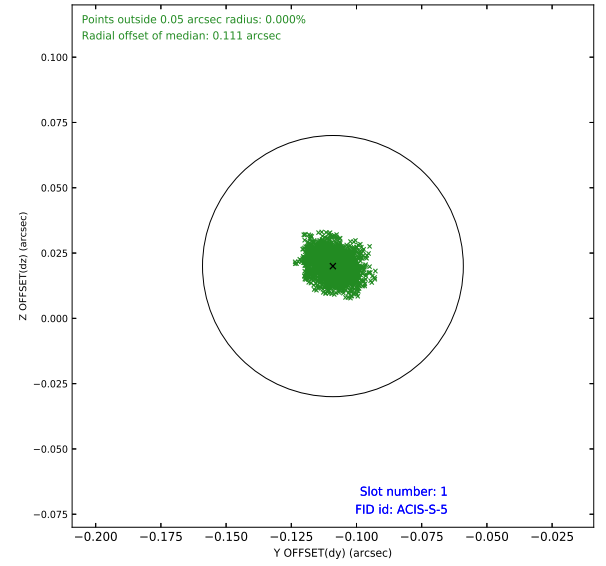
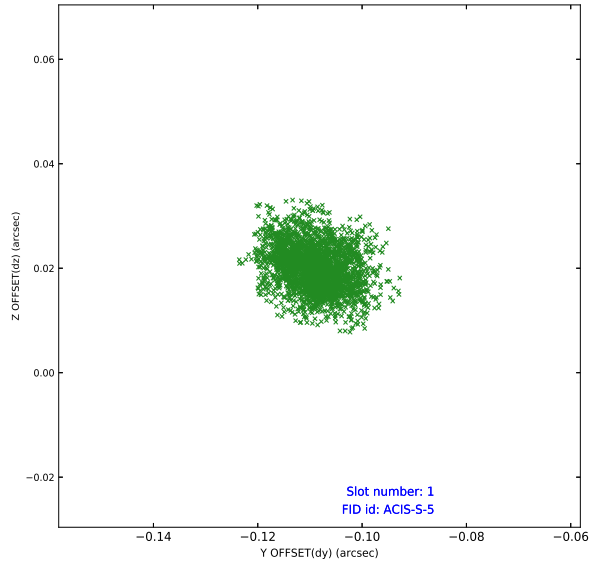


# 2.5 FID Slots

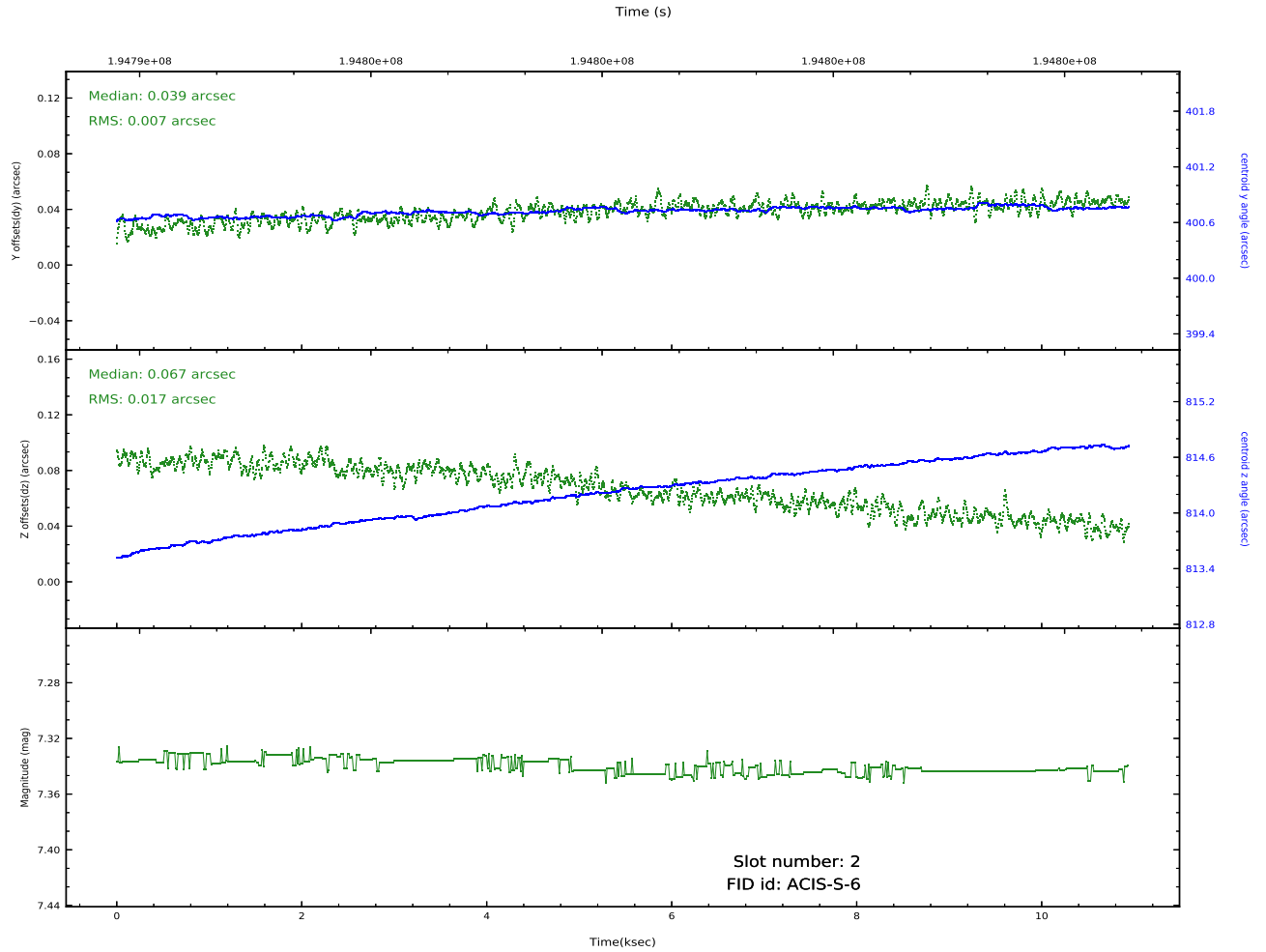
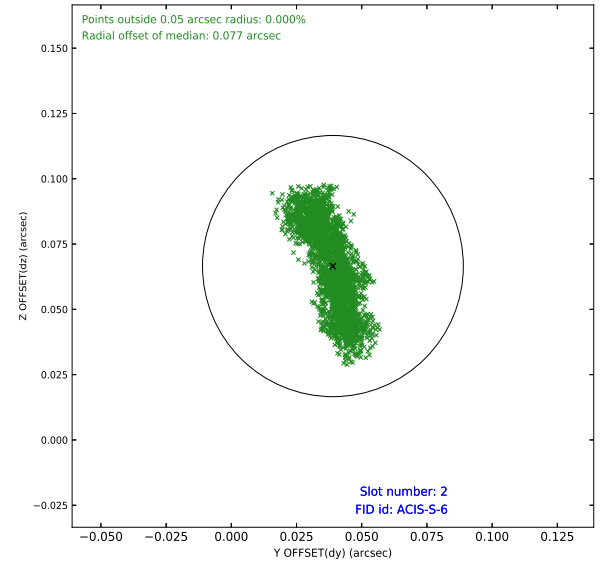
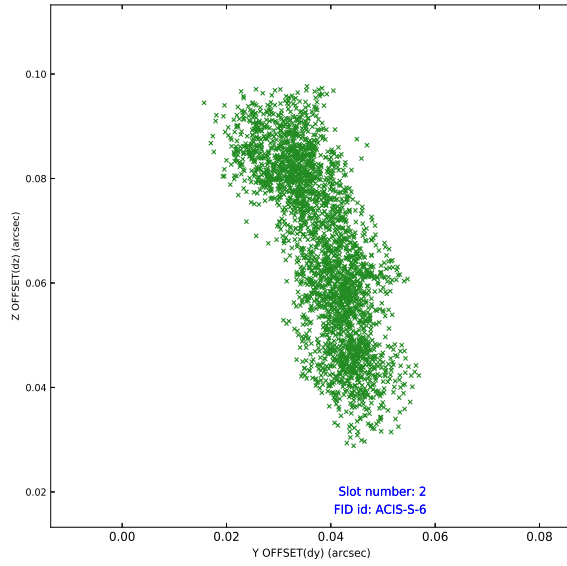
## 2.5.1 Slot 0



## 2.5.2 Slot 1



## 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.945

### A.2 Comments