

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4453 - L2 Version 4  
Chandra X-Ray Center

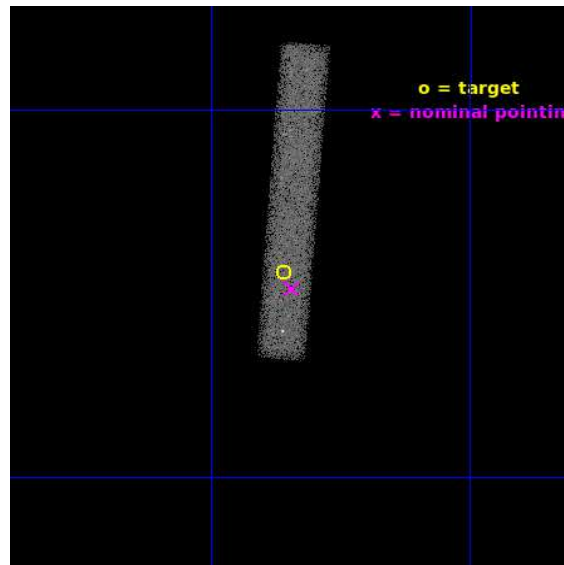
L2 Processing Date : Sep 28 2020

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# 1 Front

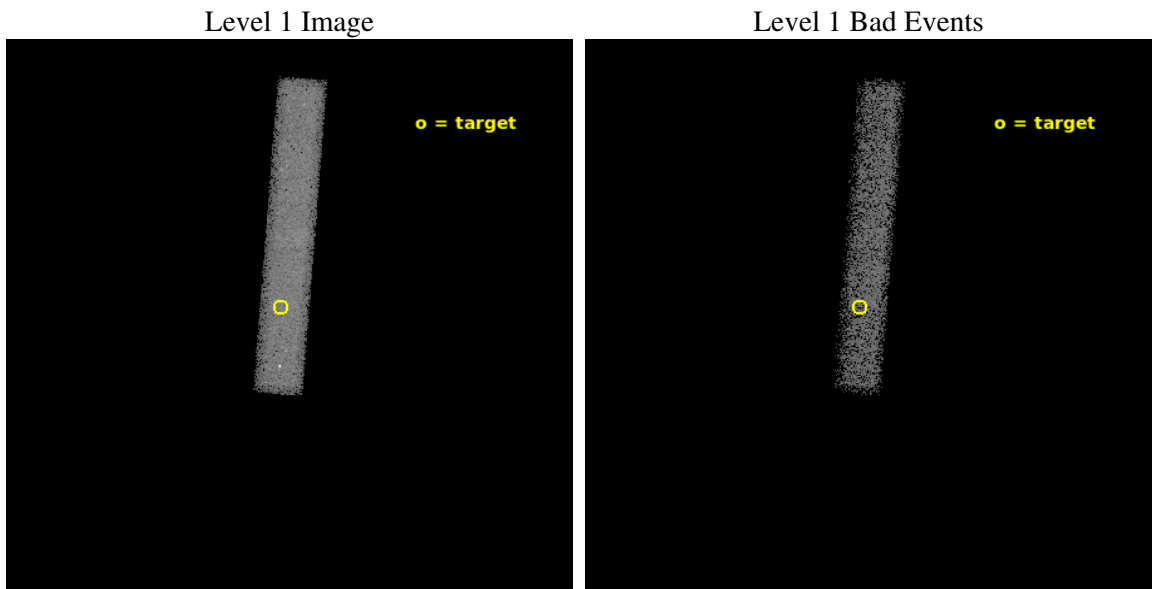
seq_num	400330	Sequence number
obs_id	4453	Observation id
title	Following a black hole candidate soft X-ray transient returning to quiescence	Proposal title
observer	Peter Jonker	Principal investigator
object	V 4641 Sgr	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	274.84	Observer's specified target RA [deg]
dec_targ	-25.407167	Observer's specified target Dec [deg]
ra_nom	274.8358525585	Nominal RA [deg]
dec_nom	-25.414512867569	Nominal Dec [deg]
roll_nom	274.27832353261	Nominal Roll [deg]
revision	4	Processing version of data
ontime	40185.200598776	Sum of GTIs [s]
livetime	36445.855794283	Livetime [s]
ontime7	40185.200598776	Sum of GTIs [s]
l2events	26237	Number of level 2 events



## 2 OBI

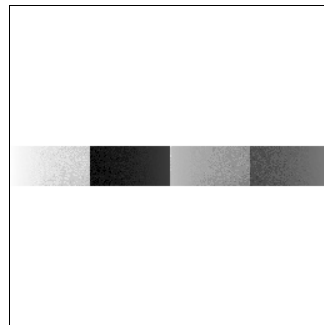
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	40185.200598776	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime7	40185.200598776	Sum of GTIs [s]
date	2020-09-28T09:59:19	Date and time of file creation	l1events	57336	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

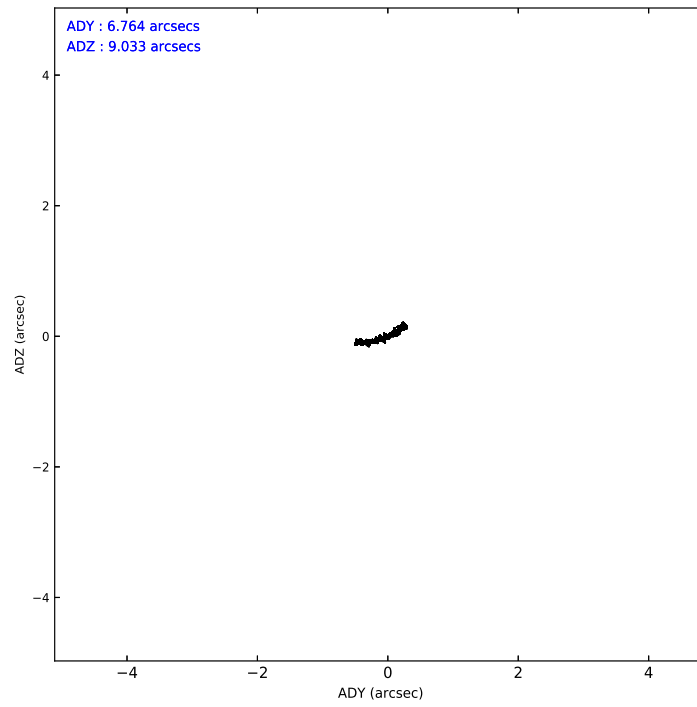
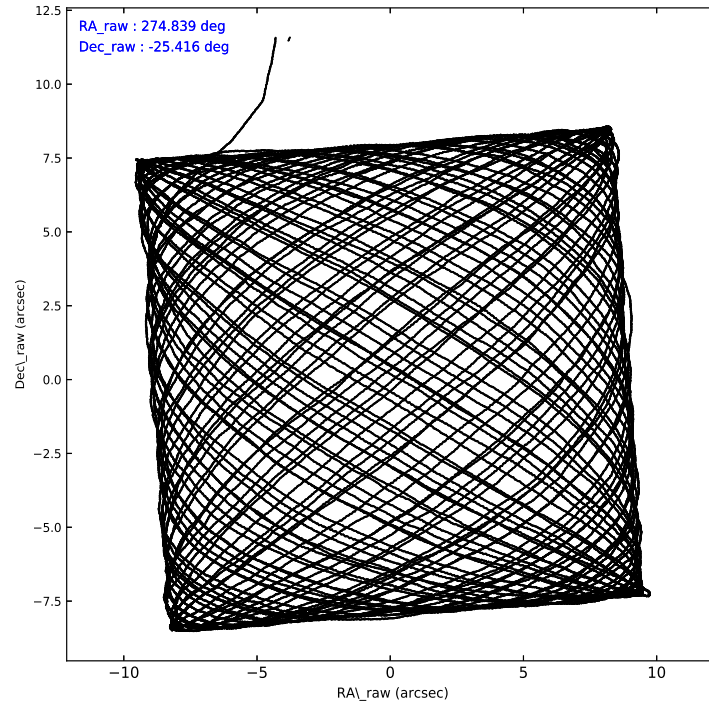
	<b>ccd 7</b>
level 1 events	57336
rejected events	30088
rejected %	<b>52%</b>

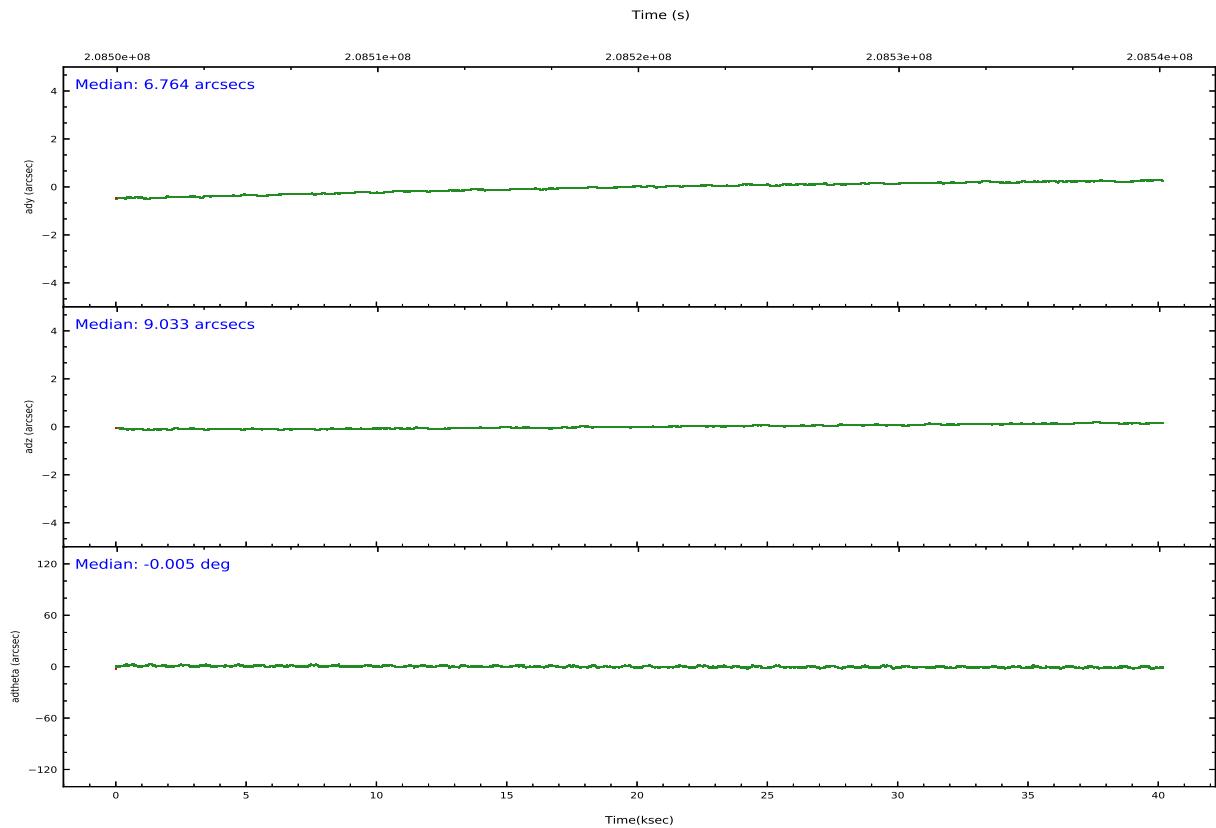
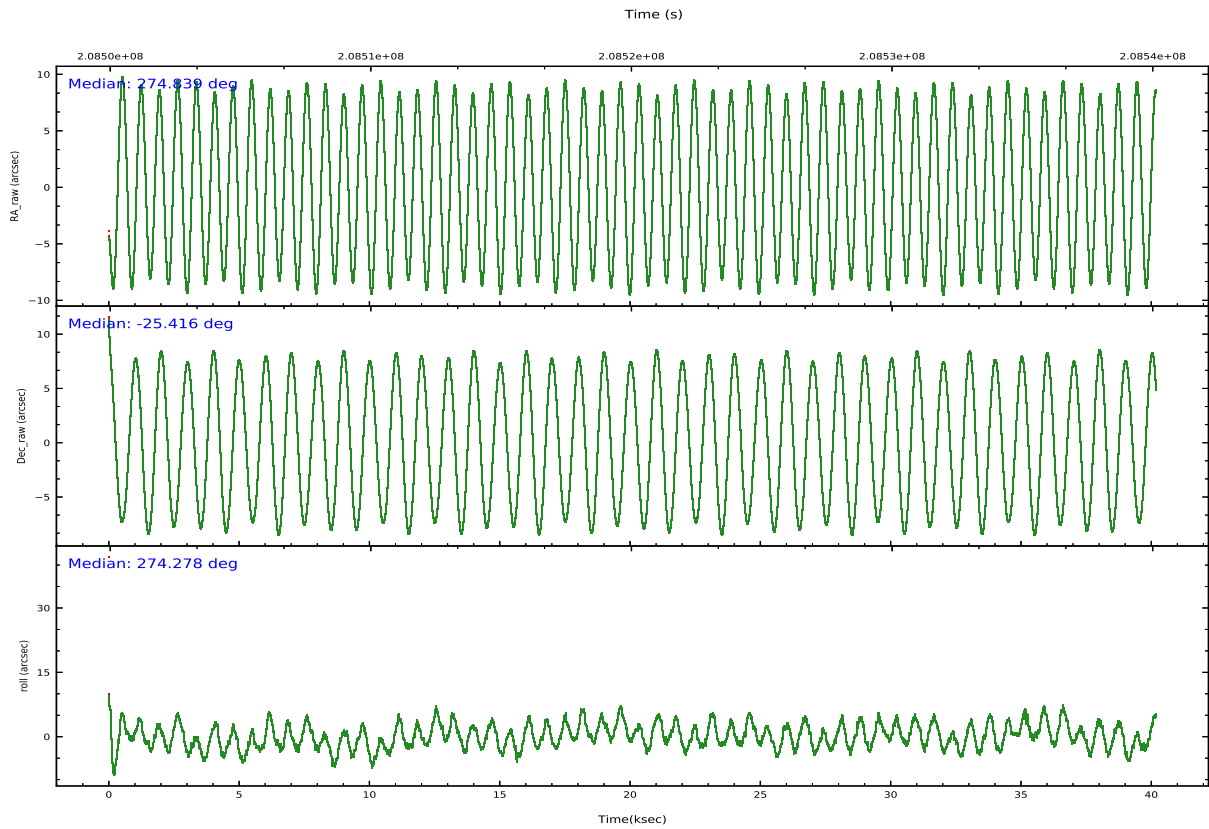
	<b>ccd 7</b>
grade 0 events	3296
	5%
grade 1 events	60
	0%
grade 2 events	5552
	9%
grade 3 events	3580
	6%
grade 4 events	3415
	5%
grade 5 events	5027
	8%
grade 6 events	12319
	21%
grade 7 events	24087
	42%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	274.821558	274.8358525585	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-25.394000	-25.414512867569	Subarray start row	449	449
[deg] Pointing Roll	274.120626	274.27832353261	Subarray row count	128	128
[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	0.4
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	208500132.184000	208498498.01812			
Observation start date	2004-08-10T04:41:08	2004-08-10T04:14:58			
[s] Observation end time (MET)	208540132.184000	208541800.68254			
Observation end date	2004-08-10T15:47:48	2004-08-10T16:16:40			
Read mode	TIMED	TIMED			

## 2.3 Aspect





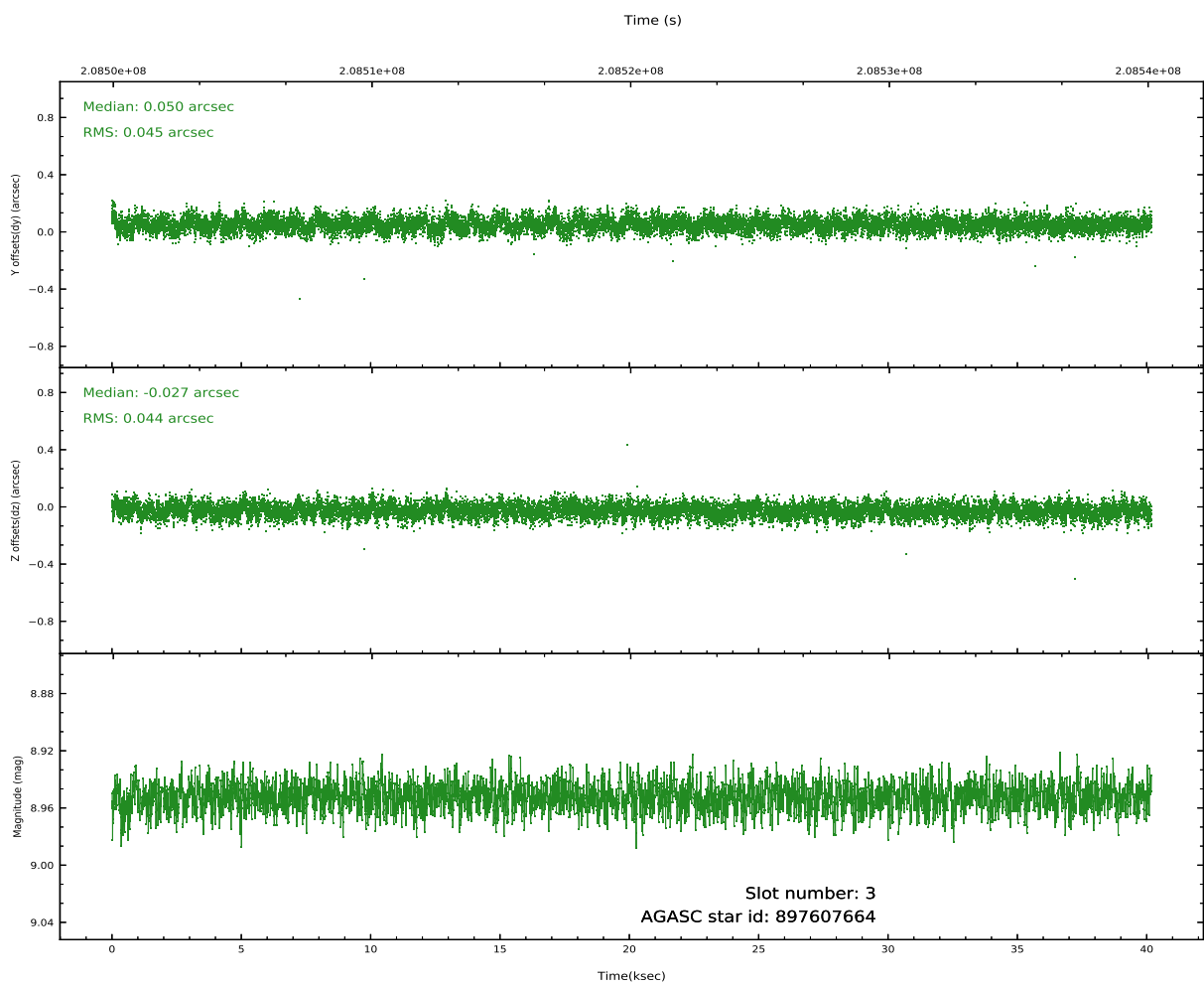
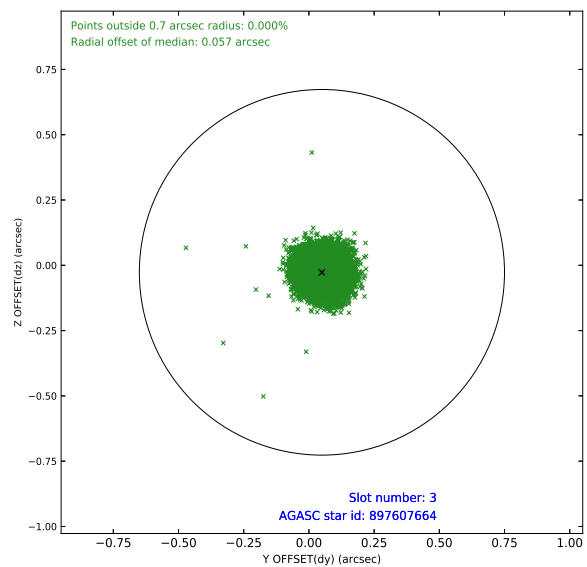
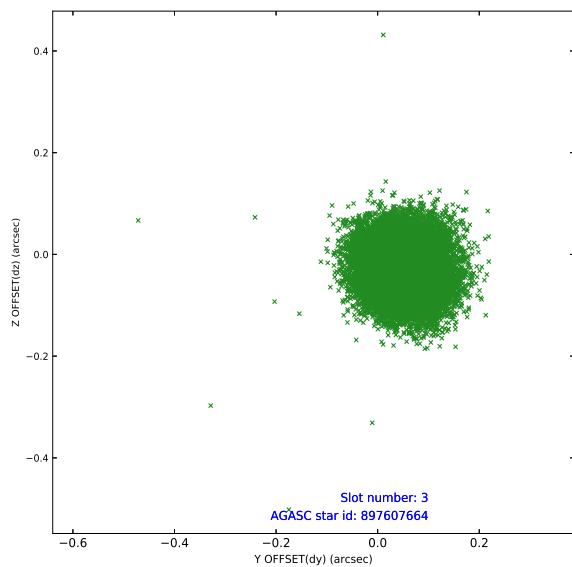
### Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	9801	1.000	-0.068	-0.086	0.014	0.023	0.000000	0.000000	-759.50	-1730
1	FID		ACIS-S-4	7.21	9802	1.000	0.128	0.056	0.009	0.017	0.000000	0.000000	2153.93	178
2	FID		ACIS-S-5	7.23	9802	1.000	-0.091	0.038	0.014	0.027	0.000000	0.000000	-1812.38	171
3	GUIDE	used	897607664	8.95	19593	1.000	0.050	-0.027	0.067	0.109	274.763984	-25.327976	-249.75	-169
4	GUIDE	used	897610120	8.48	19592	1.000	-0.086	0.022	0.093	0.154	275.375820	-25.427247	252.43	1788
5	GUIDE	used	897614272	8.74	19554	1.000	0.025	0.089	0.087	0.138	275.179042	-25.471578	363.72	1138
6	GUIDE	used	897607632	8.99	19599	1.000	0.066	0.002	0.090	0.139	275.528210	-25.239953	-381.79	2334
7	GUIDE	used	897601280	9.68	19587	1.000	-0.059	-0.079	0.143	0.233	274.221964	-25.156854	-987.01	-1887

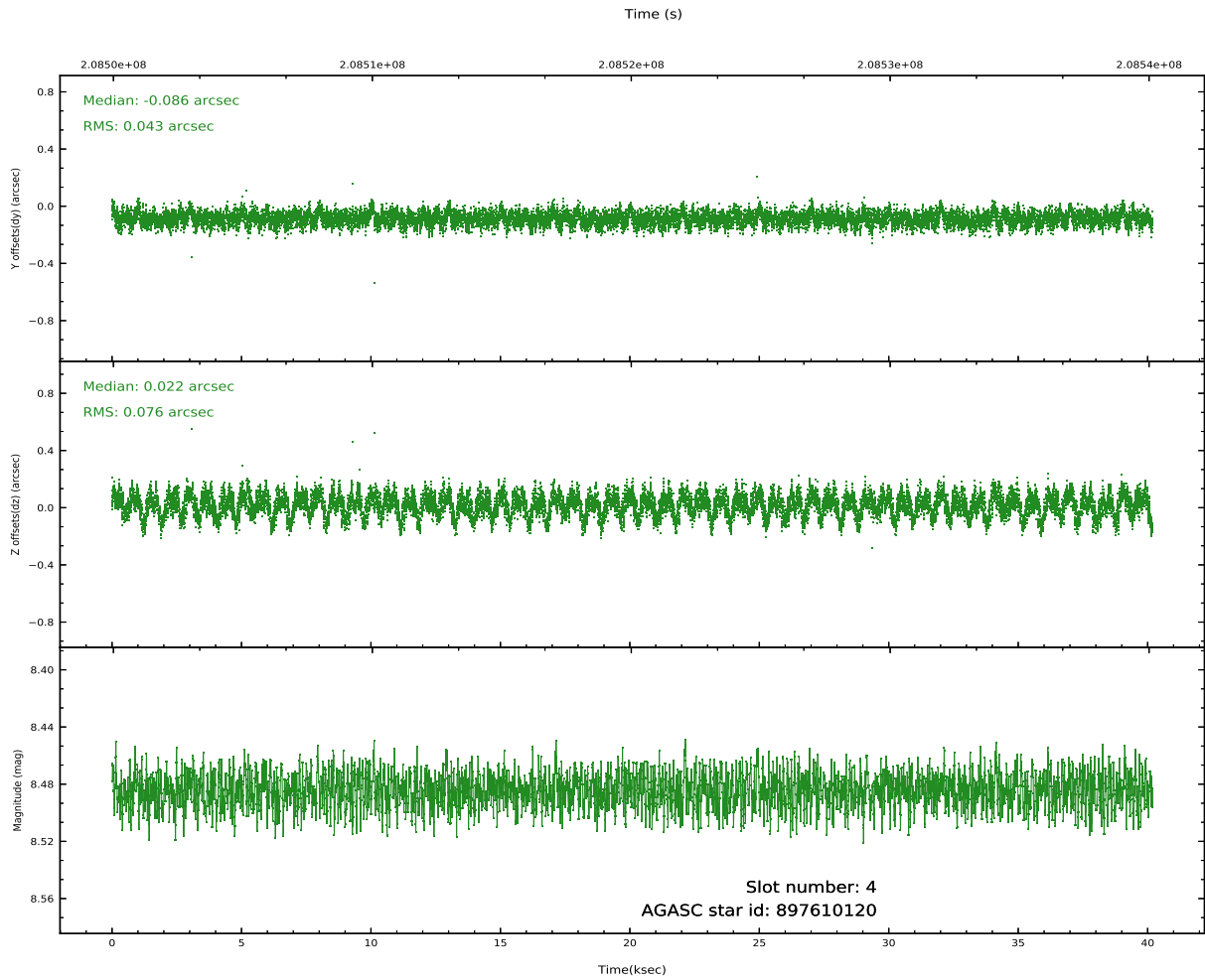
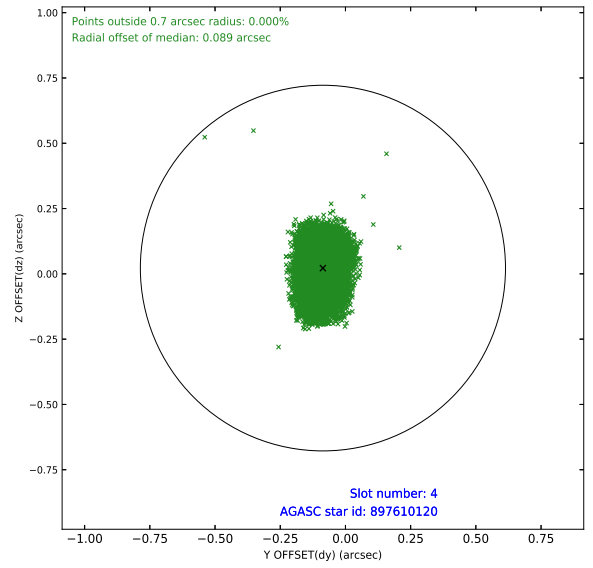
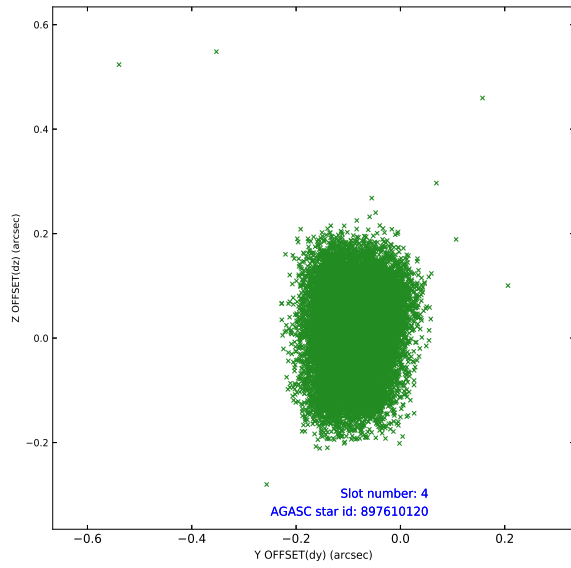
∞

## 2.4 Star Slots

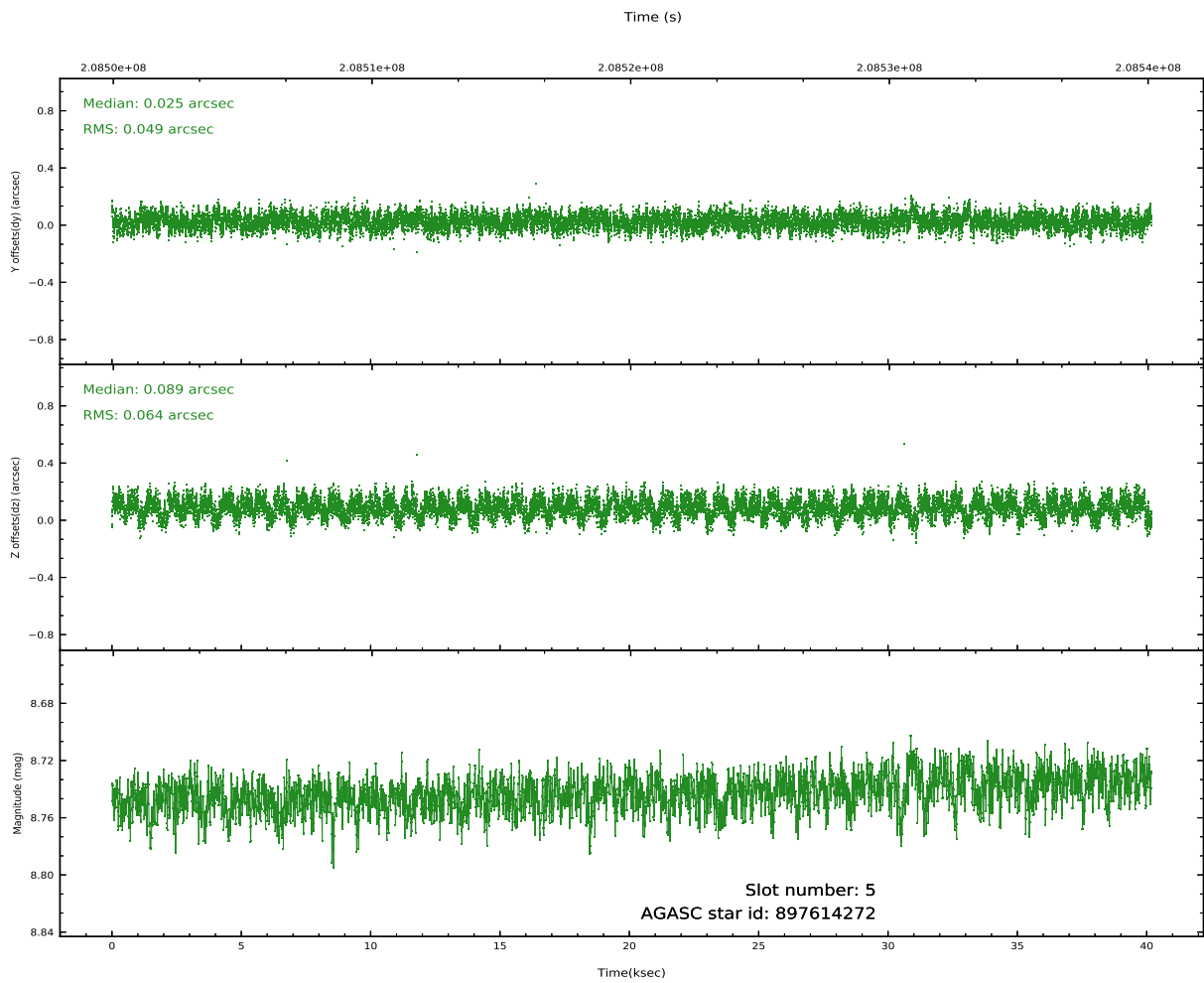
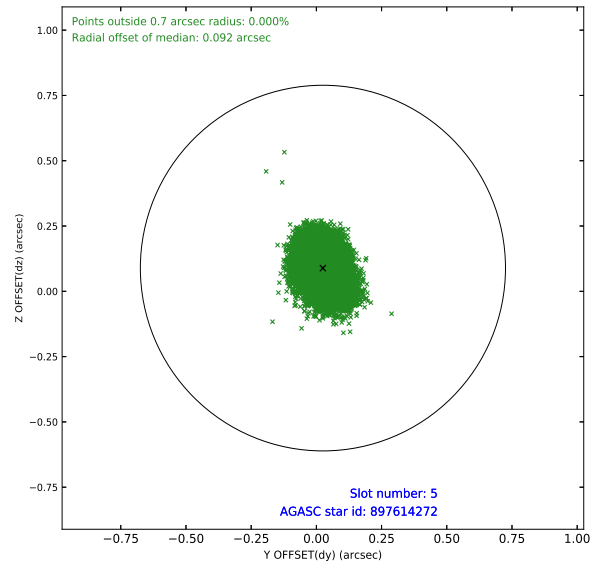
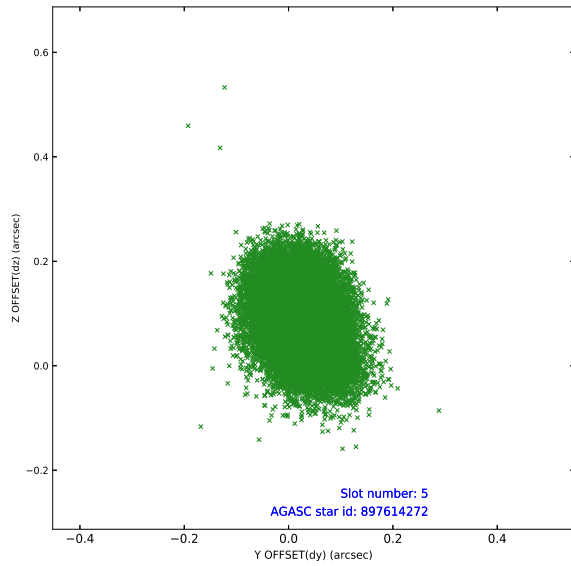
### 2.4.1 Slot 3



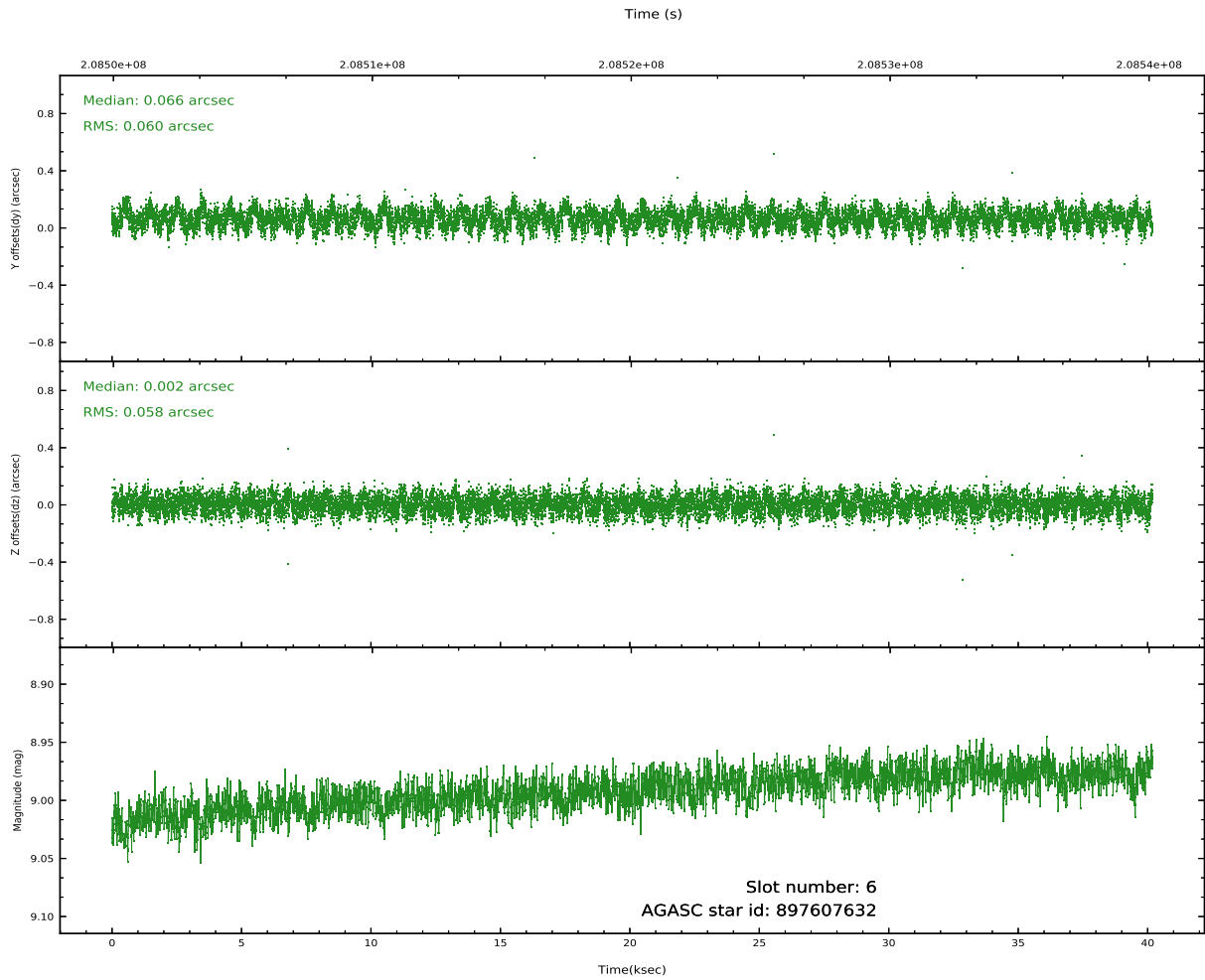
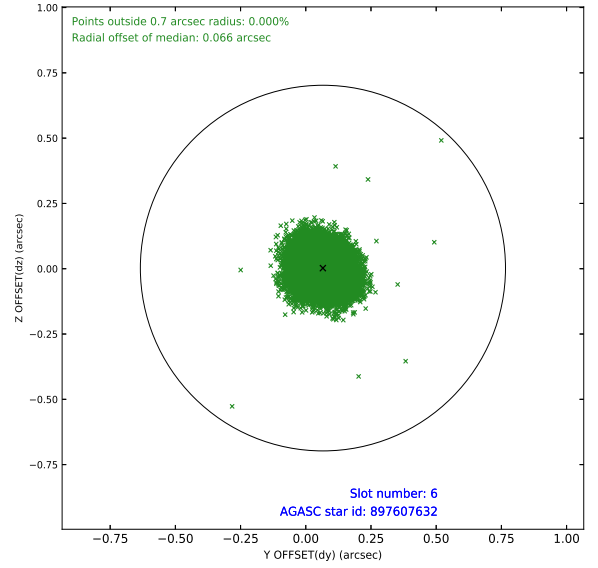
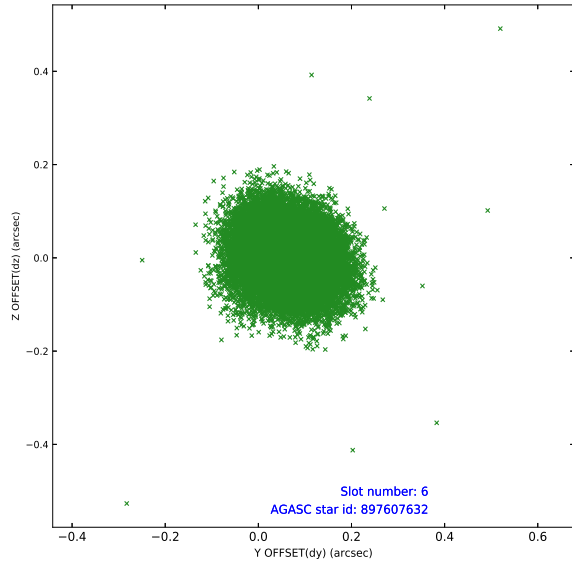
## 2.4.2 Slot 4



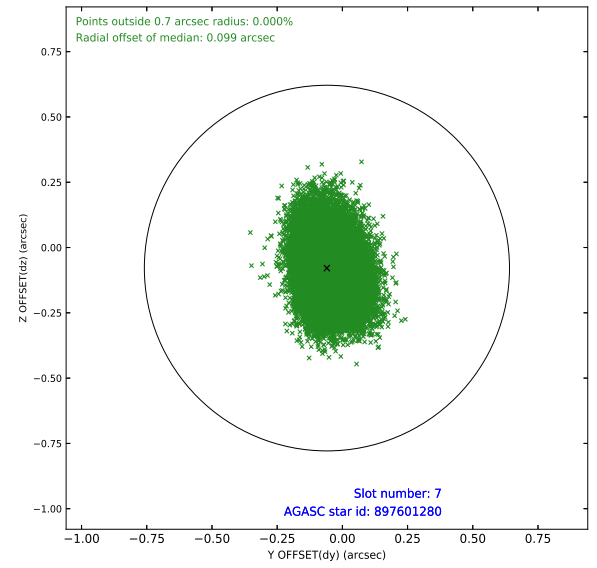
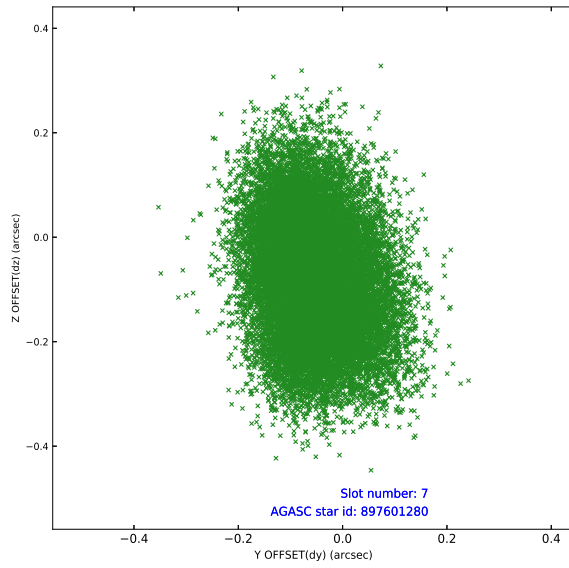
### 2.4.3 Slot 5



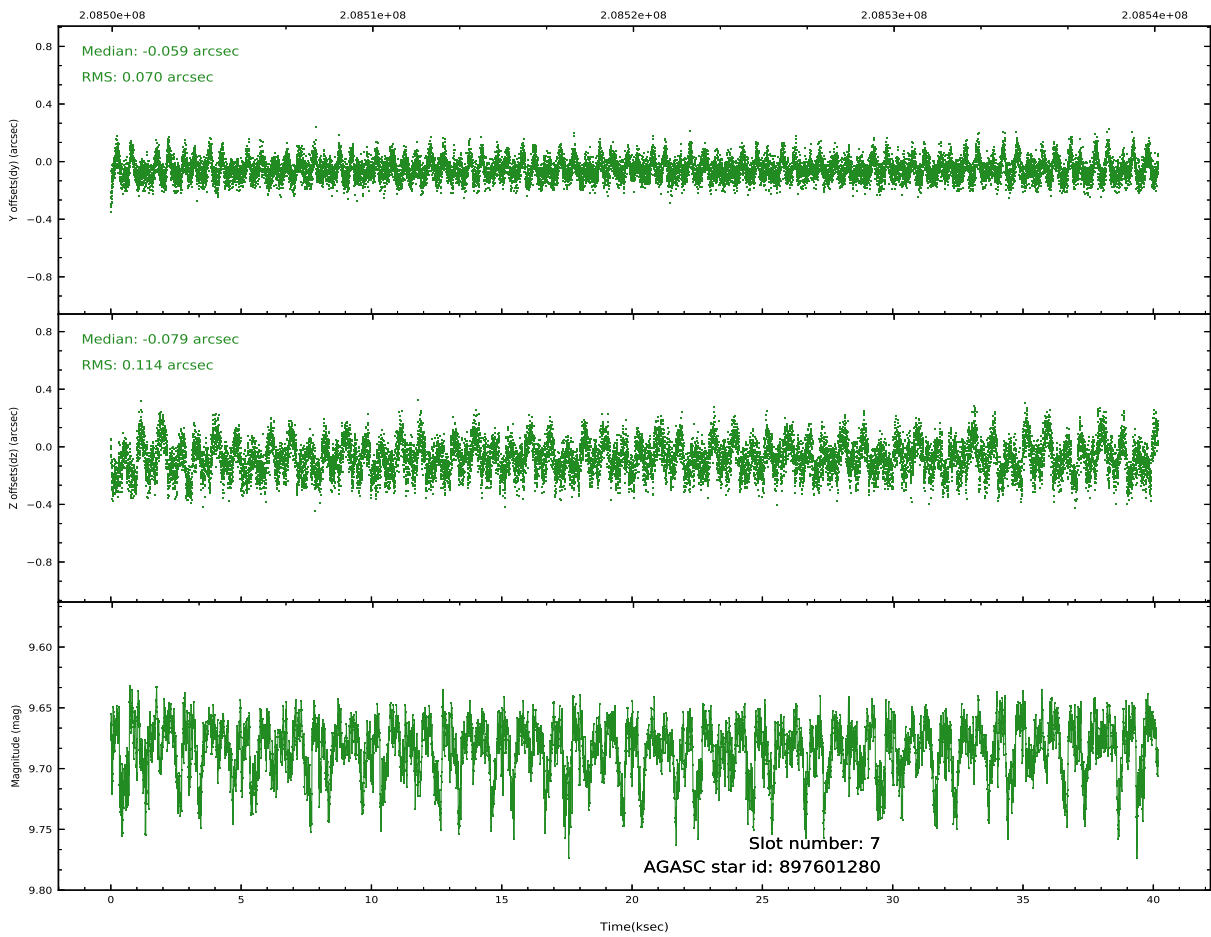
## 2.4.4 Slot 6



## 2.4.5 Slot 7

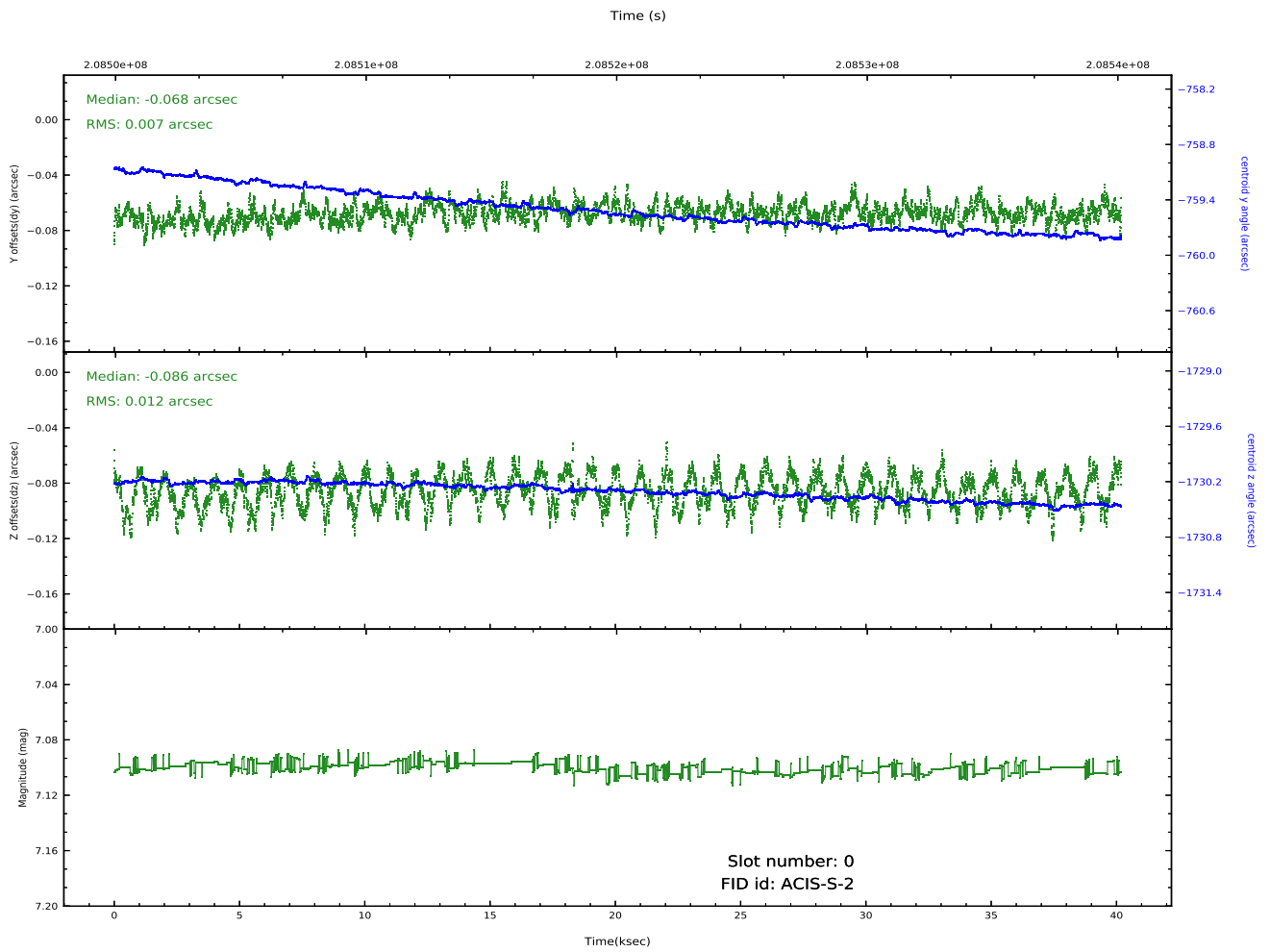
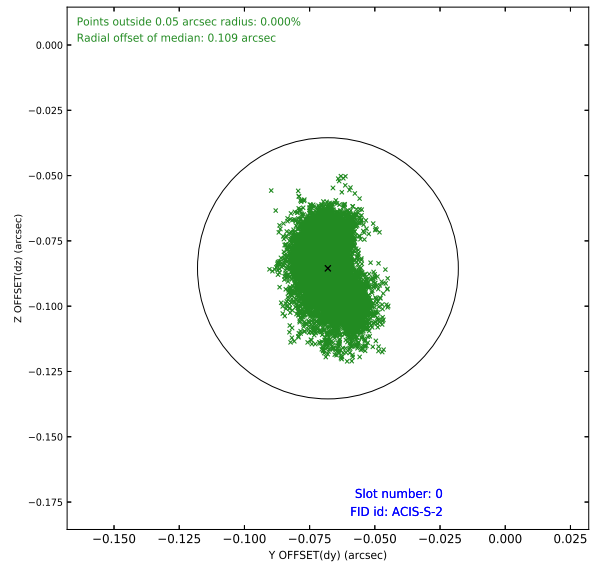
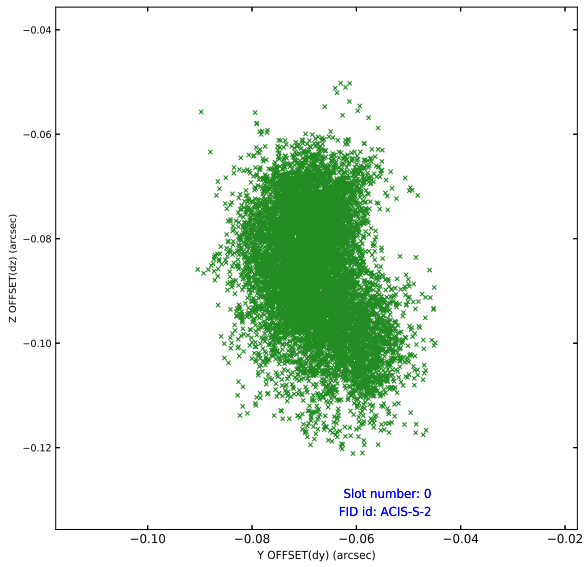


Time (s)

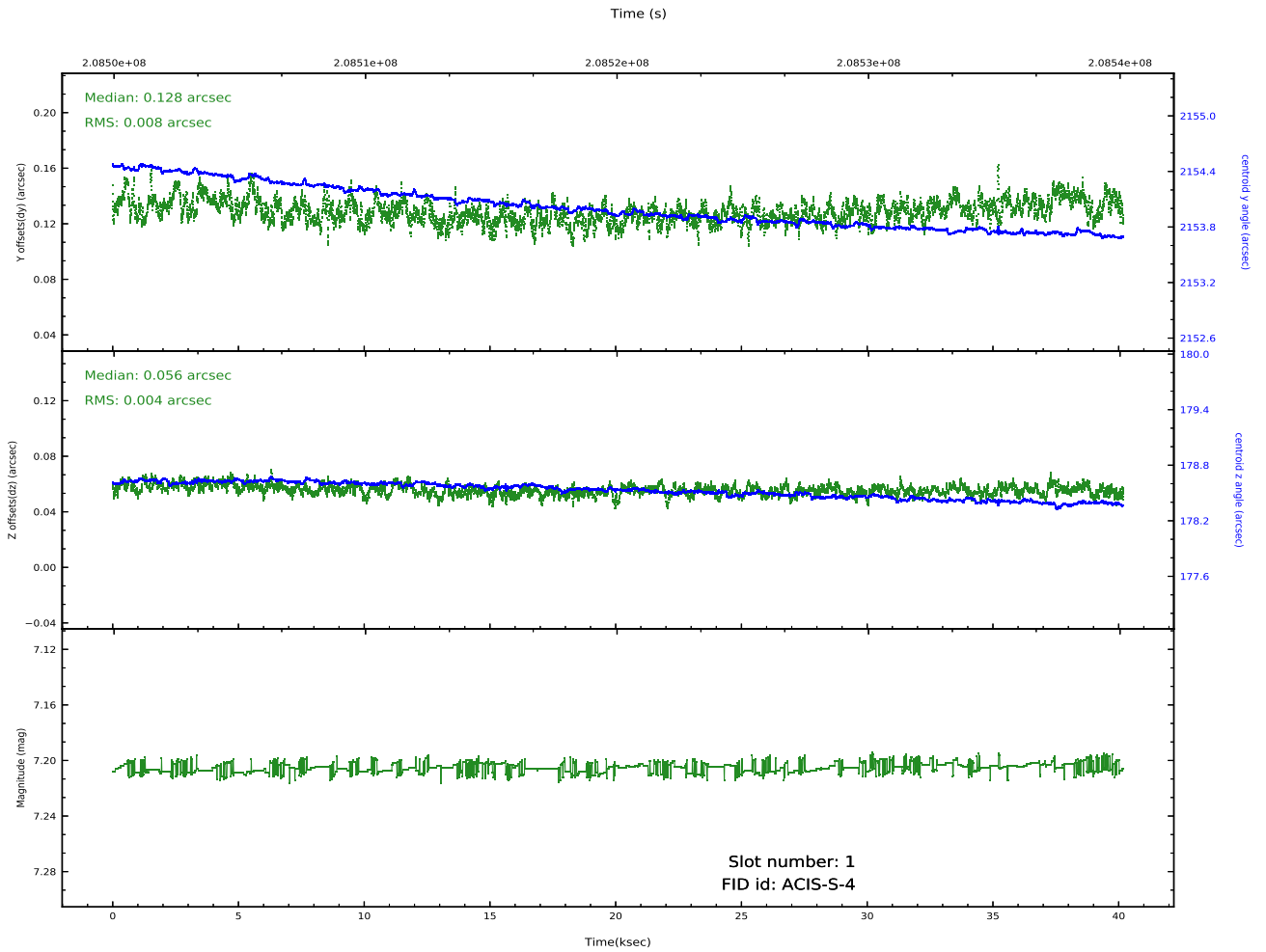
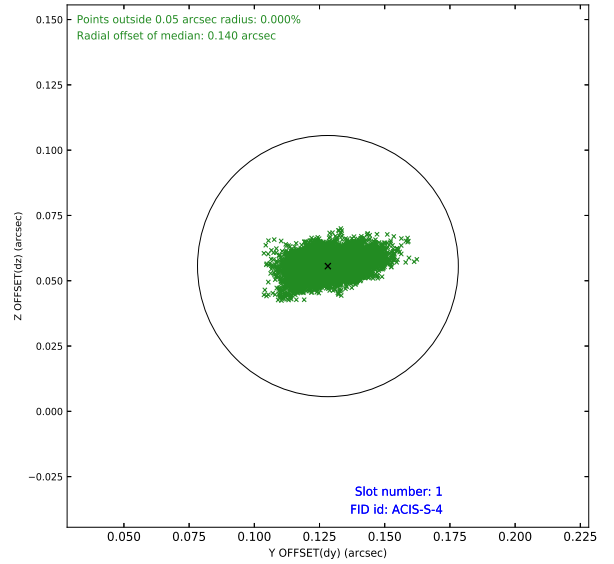
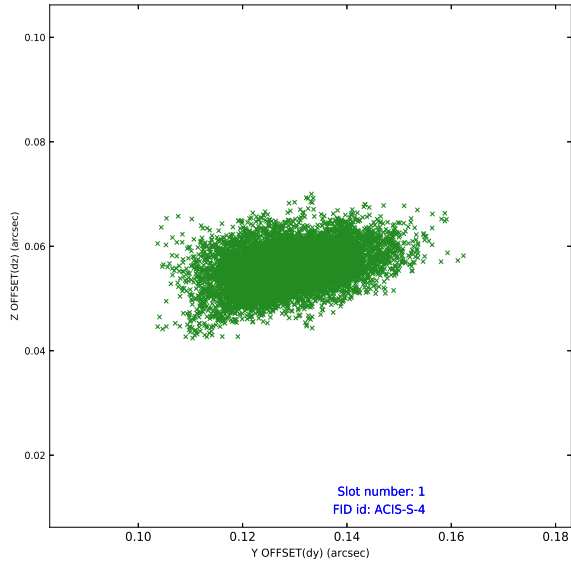


## 2.5 FID Slots

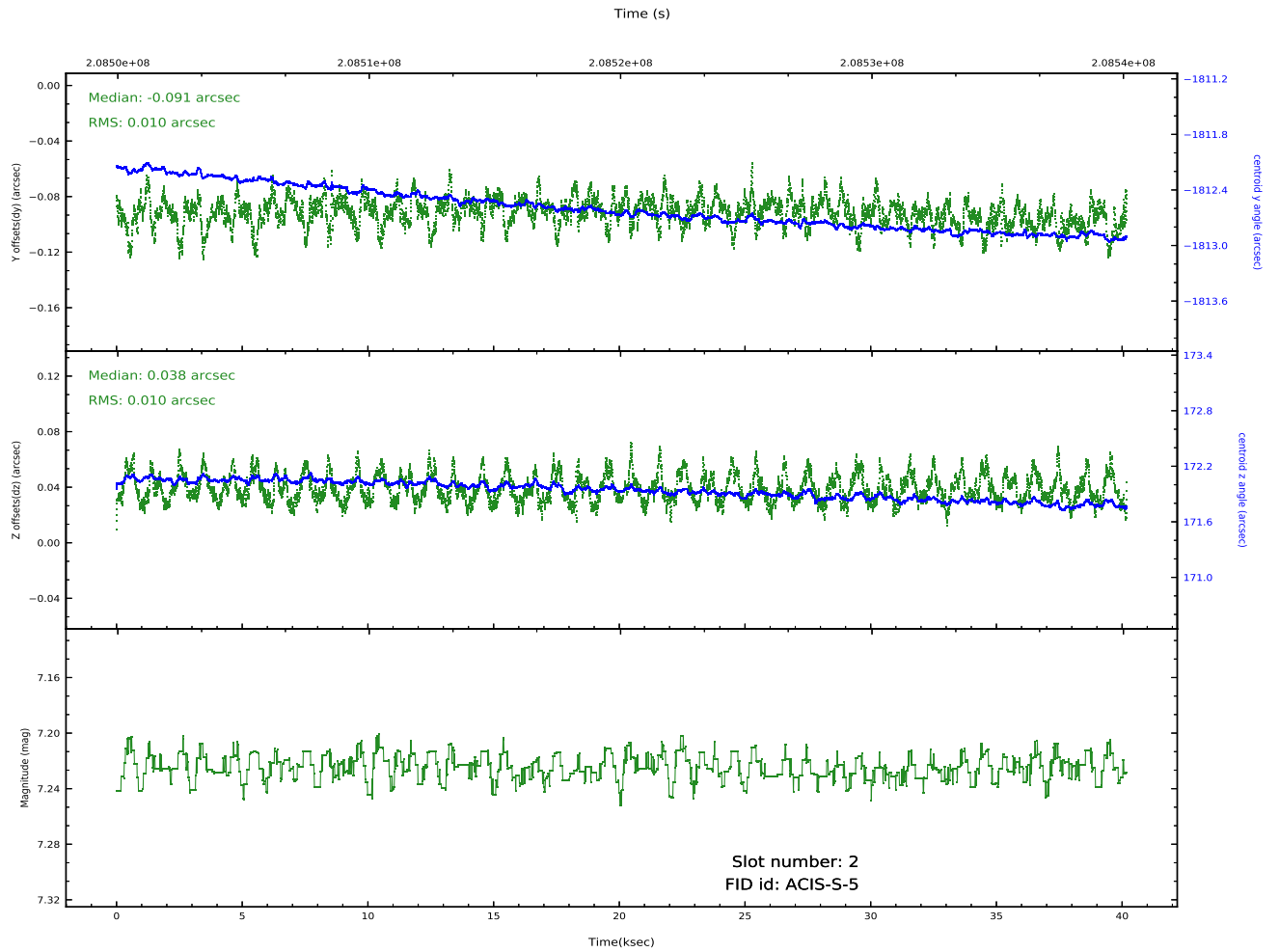
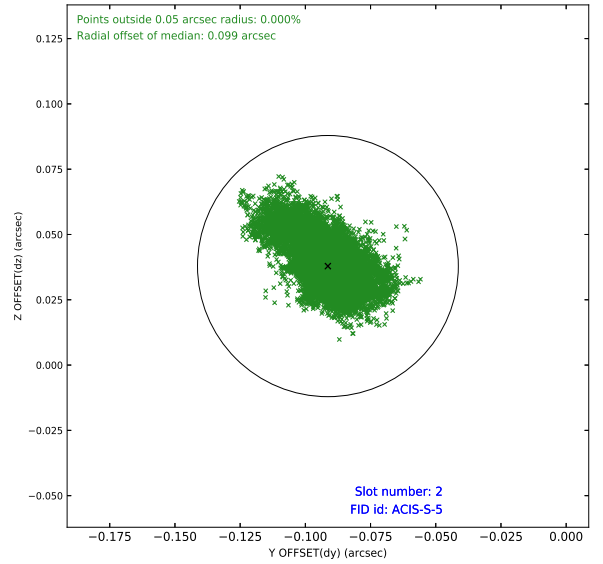
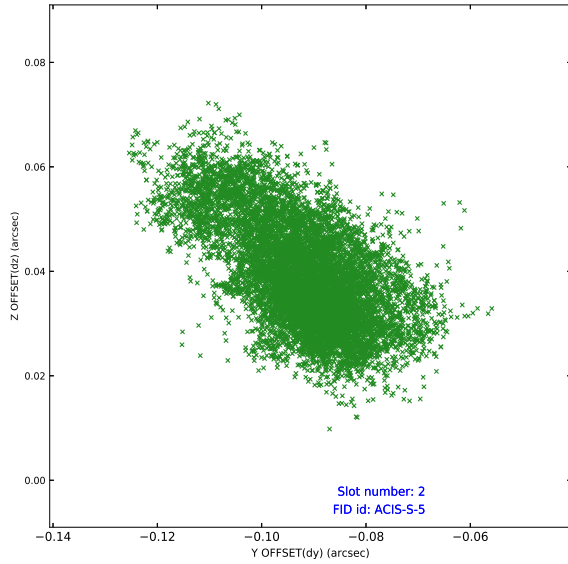
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.185

## A.2 Comments

Joint proposal with NRAO.