

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4669 - L2 Version 5  
Chandra X-Ray Center

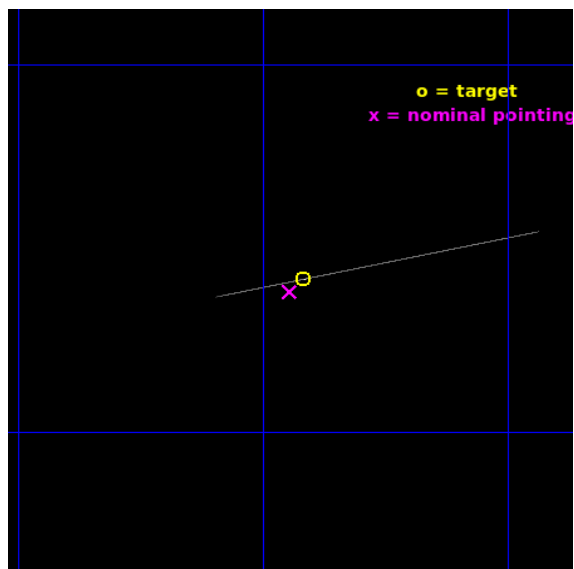
L2 Processing Date : Sep 24 2020

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# 1 Front

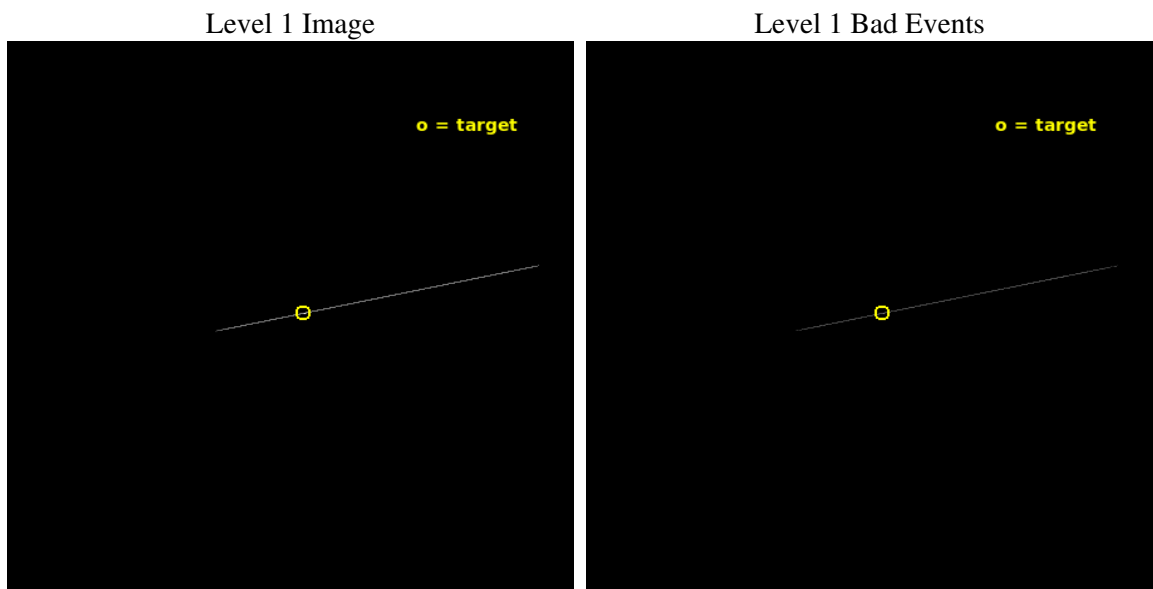
seq_num	500488	Sequence number
obs_id	4669	Observation id
title	Timing the Enigmatic Nearby Neutron Star RX J0720.4-3125	Proposal
observer	Prof. David Kaplan	Principal investigator
object	RX J0720.4-3125	Source name
ra_targ	110.104167	Observer's specified target RA [deg]
dec_targ	-31.430444	Observer's specified target Dec [deg]
ra_nom	110.11123116468	Nominal RA [deg]
dec_nom	-31.43631503135	Nominal Dec [deg]
roll_nom	348.046508487	Nominal Roll [deg]
revision	5	Processing version of data
ontime	5213.1601481736	Sum of GTIs [s]
livetime	5192.7962413448	Livetime [s]
ontime7	5213.1601481736	Sum of GTIs [s]
l2events	27729	Number of level 2 events



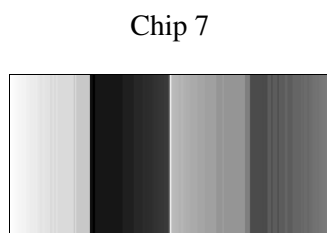
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	5213.1601481736	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime7	5213.1601481736	Sum of GTIs [s]
date	2020-09-23T13:13:19	Date and time of file creation	l1events	36058	Number of level 1 events
revision	5	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	36058
rejected events	7516
rejected %	20%

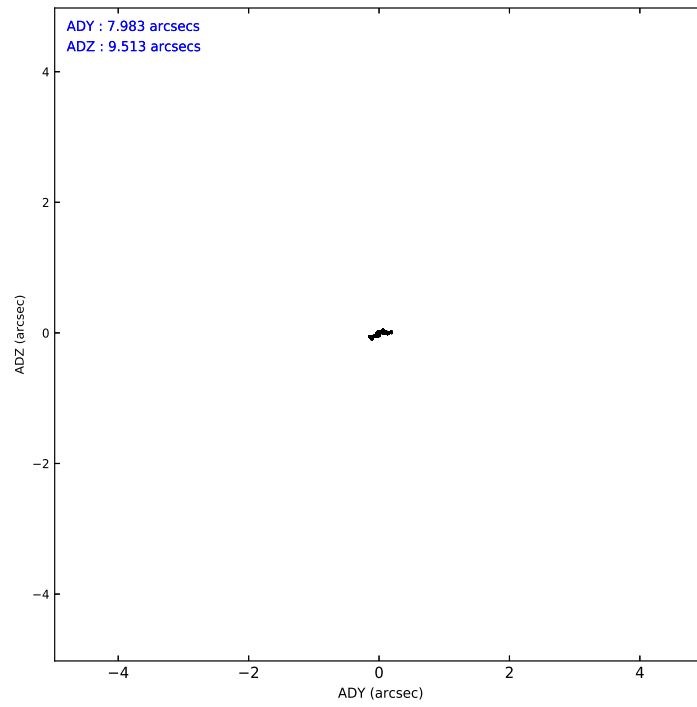
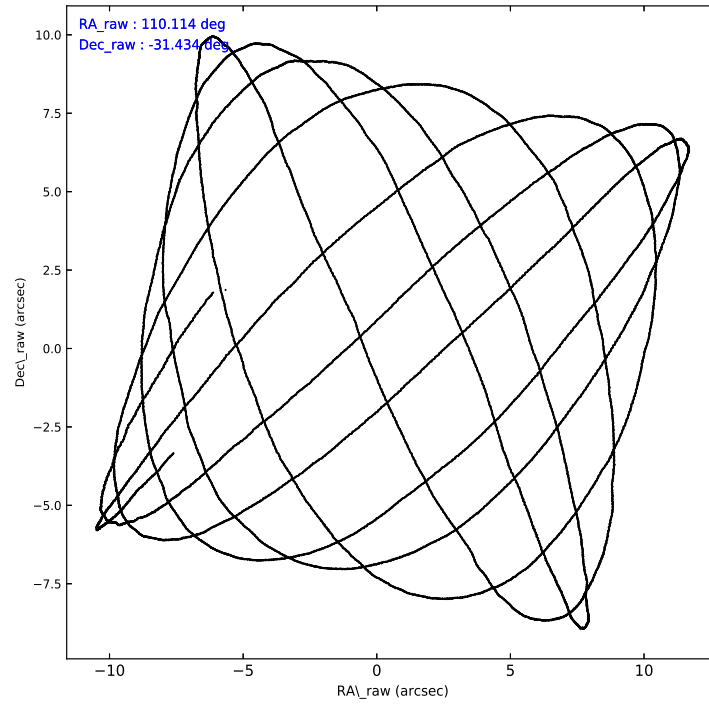
	<b>ccd 7</b>
grade 0 events	8243
	22%
grade 1 events	74
	0%
grade 2 events	7098
	19%
grade 3 events	2365
	6%
grade 4 events	2457
	6%
grade 5 events	4503
	12%
grade 6 events	11318
	31%
grade 7 events	0
	0%

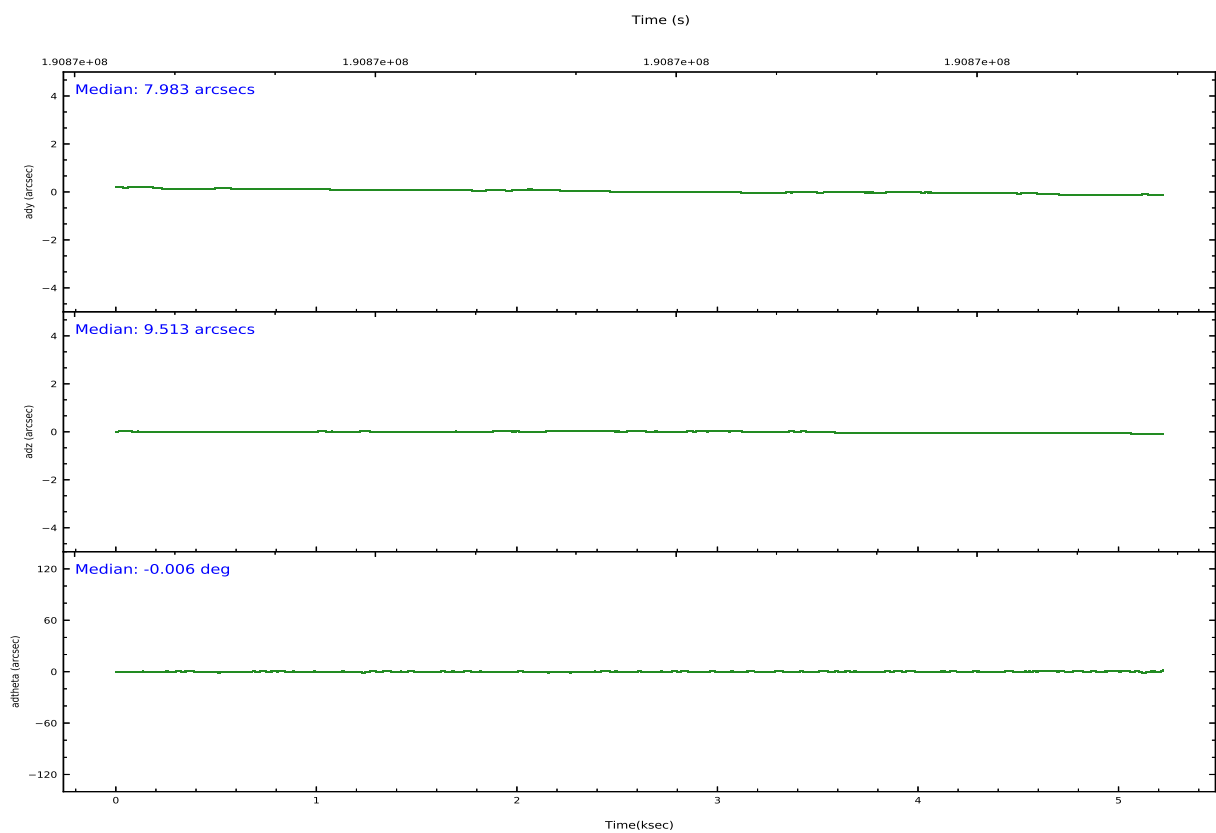
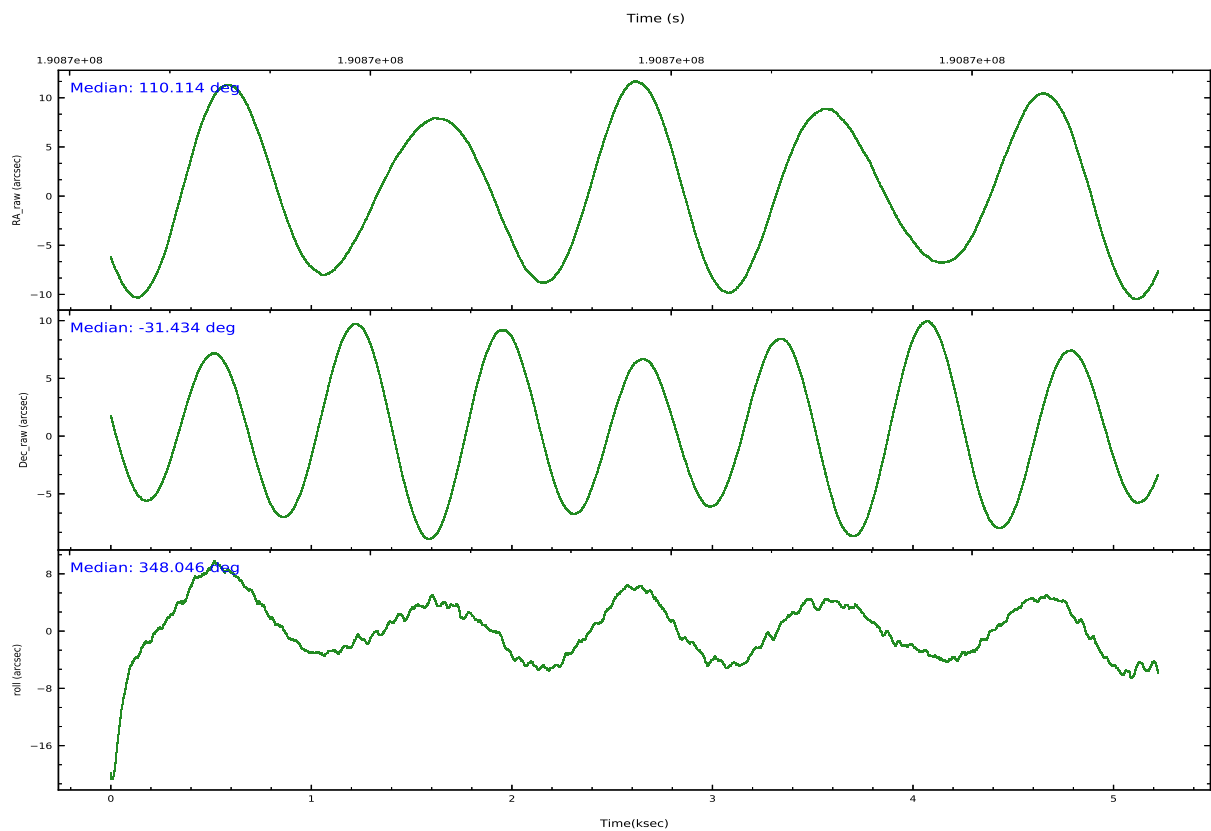


## 2.2 Compared Parameters

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	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	110.084456	110.11123116468	Subarray requested	NONE	NONE
[deg] Pointing Dec	-31.442857	-31.43631503135	Alternating exposures requested	N	N
[deg] Pointing Roll	347.872715	348.046508487	[s] Primary exposure time	0.000000	0
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	190865929.184000	190864949.716			
Observation start date	2004-01-19T02:17:45	2004-01-19T02:02:29			
[s] Observation end time (MET)	190870929.184000	190871996.59131			
Observation end date	2004-01-19T03:41:05	2004-01-19T03:59:56			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



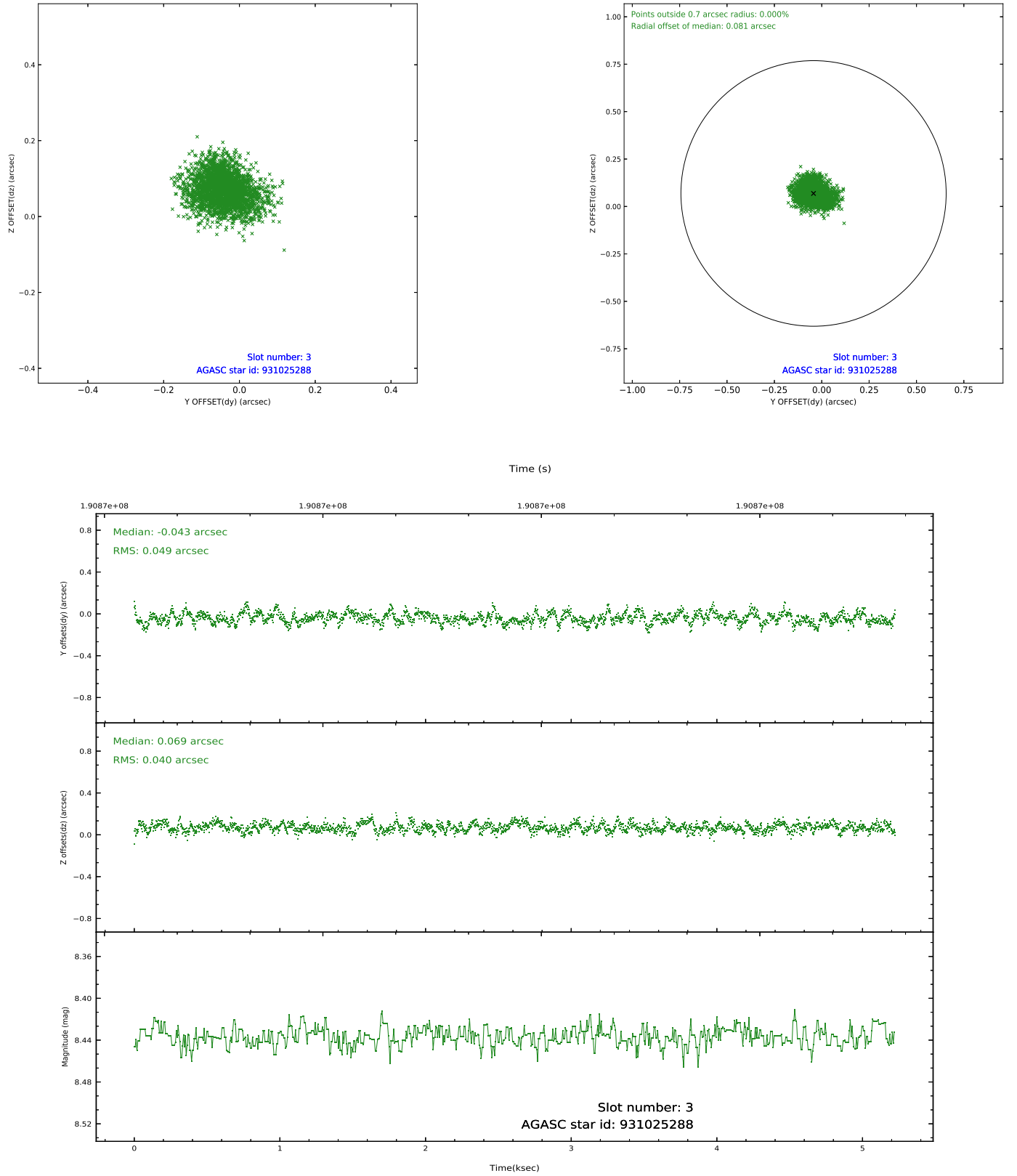


Slot Statistics

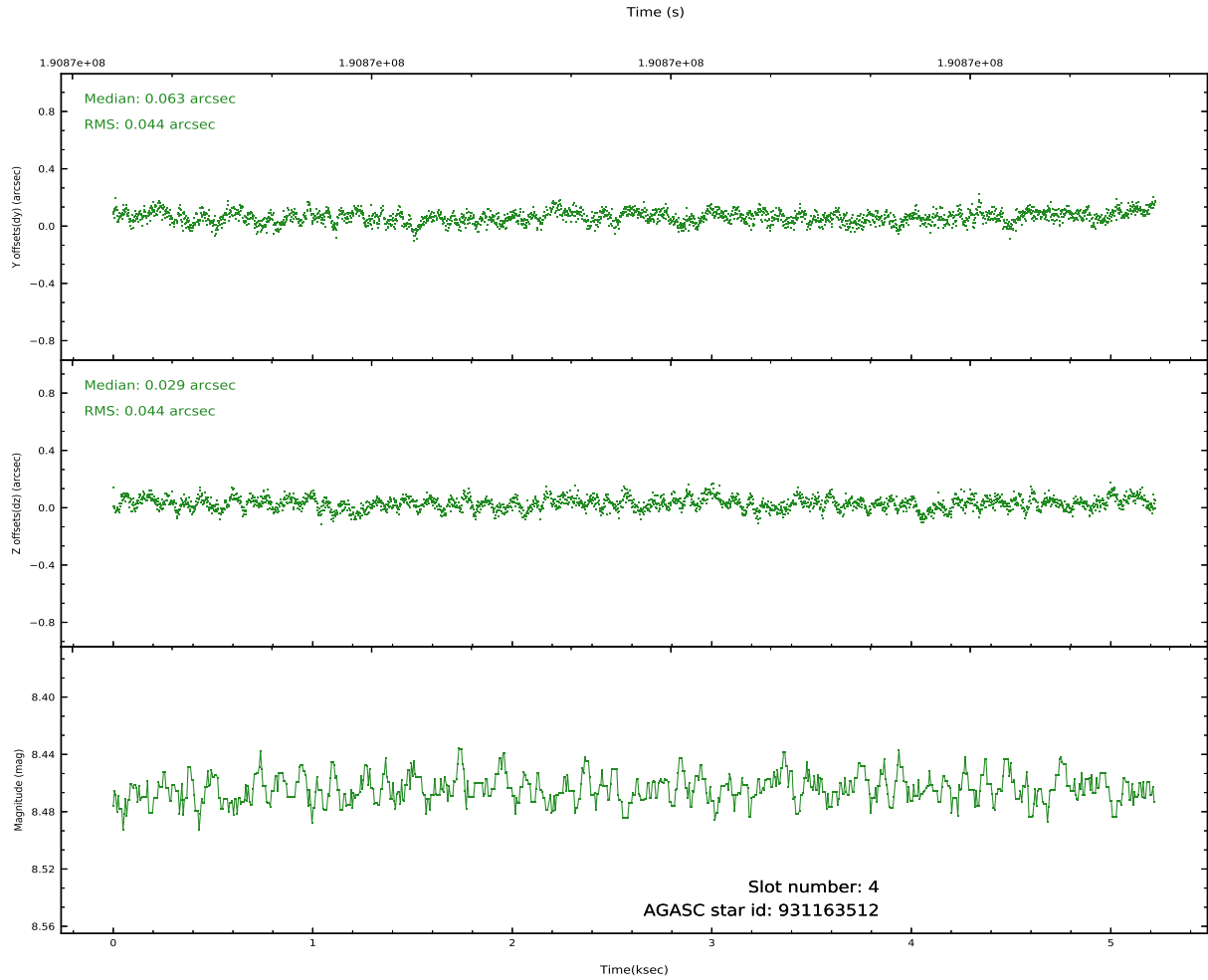
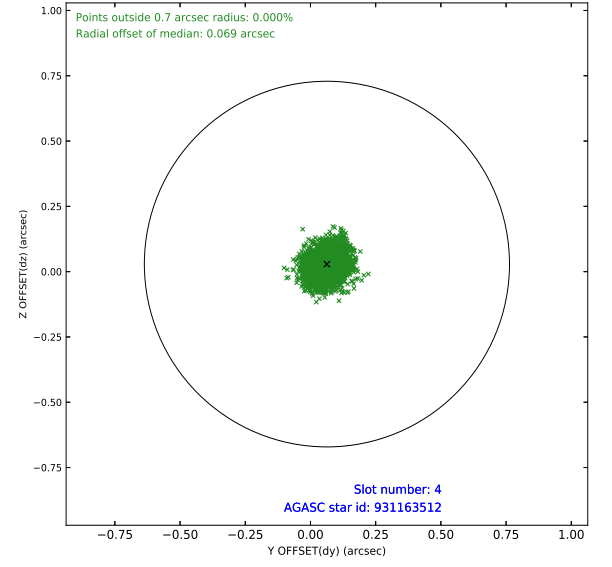
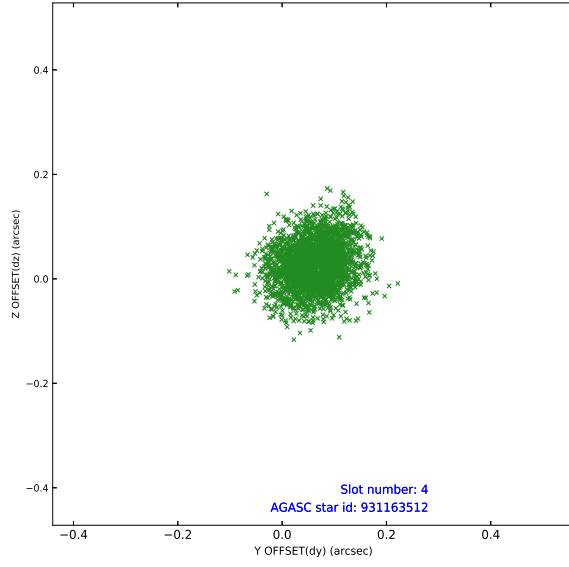
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.19	1270	1.000	0.025	-0.044	0.007	0.013	0.000000	0.000000	935.29	-1726
1	FID		ACIS-S-4	7.20	1269	1.000	0.111	0.023	0.006	0.011	0.000000	0.000000	2153.41	176
2	FID		ACIS-S-5	7.23	1272	1.000	-0.163	0.034	0.007	0.013	0.000000	0.000000	-1812.30	171
3	GUIDE	used	931025288	8.44	2542	1.000	-0.043	0.069	0.067	0.110	109.511084	-30.937793	-2111.68	1401
4	GUIDE	used	931163512	8.46	2542	1.000	0.063	0.029	0.067	0.107	110.894384	-31.299941	2329.26	1018
5	GUIDE	used	931695048	7.40	2542	1.000	0.100	-0.067	0.077	0.128	110.648539	-32.046020	2141.64	-1764
6	GUIDE	used	931019296	8.66	2543	1.000	-0.060	-0.002	0.061	0.095	109.471771	-31.694370	-1642.24	-1285
7	GUIDE	used	931160352	8.64	2543	1.000	-0.062	-0.035	0.075	0.119	110.268138	-30.864891	117.46	2152

## 2.4 Star Slots

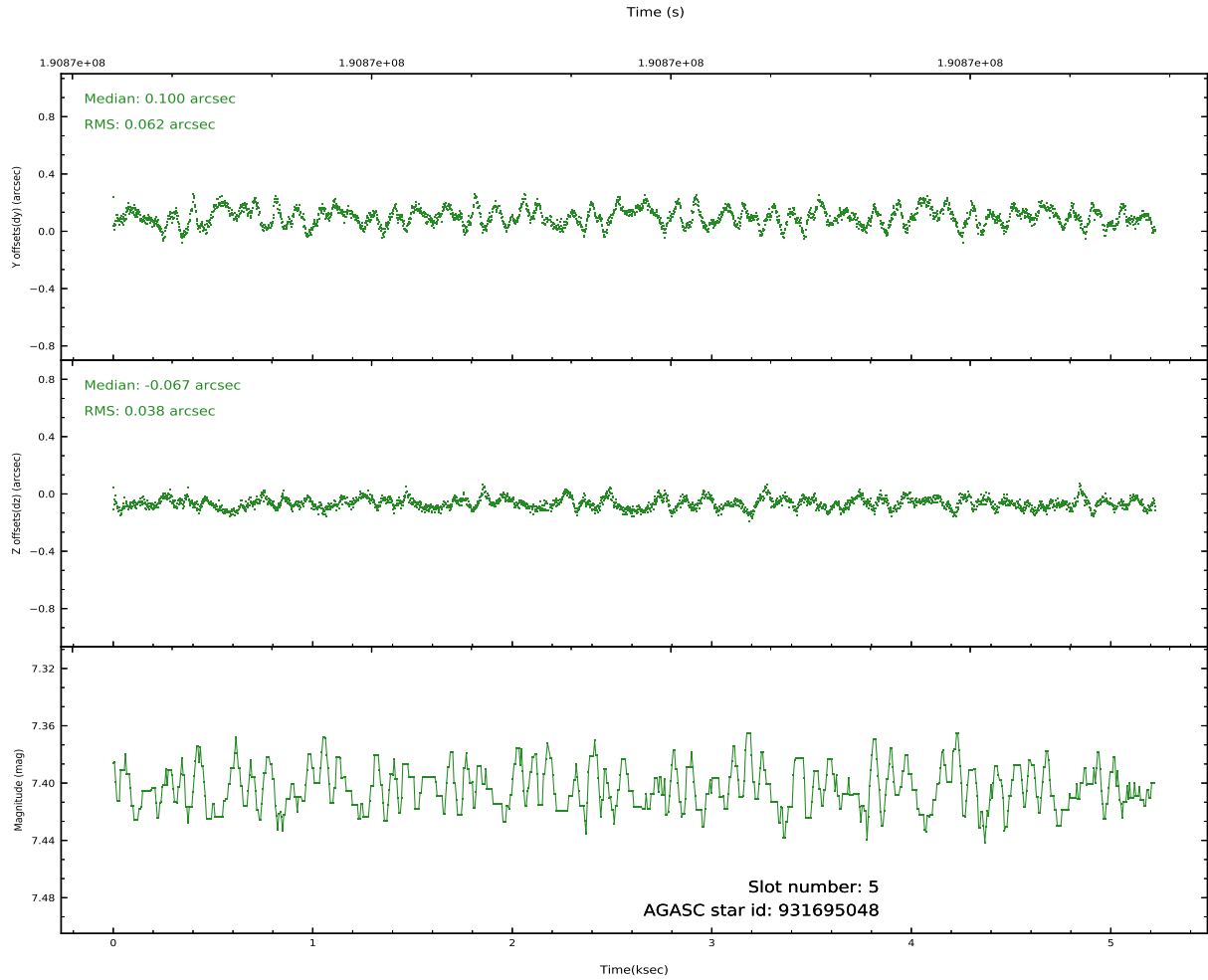
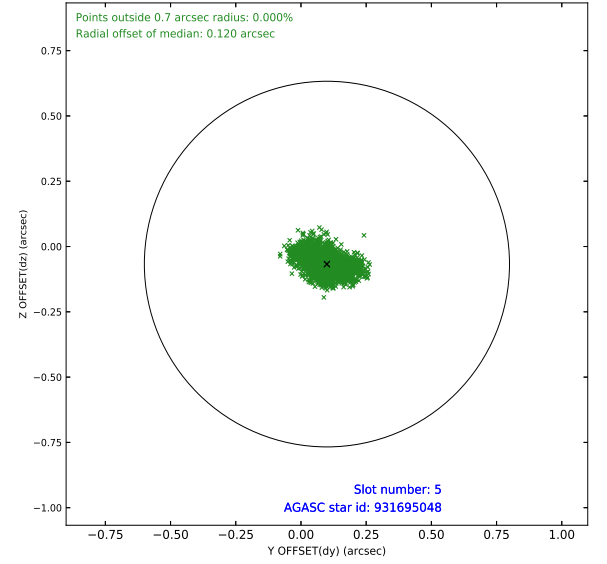
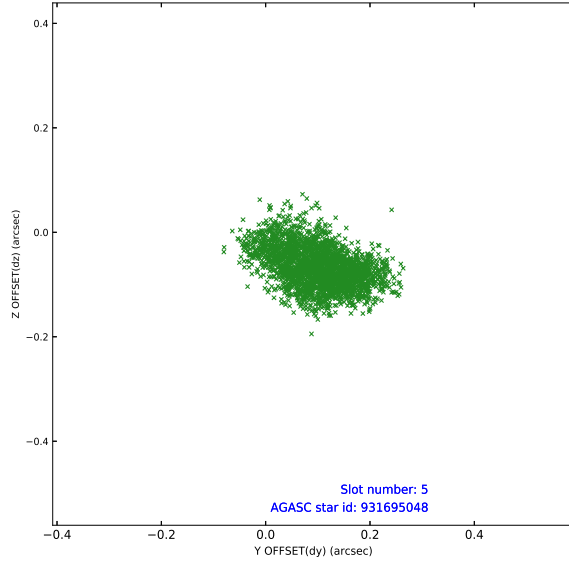
### 2.4.1 Slot 3



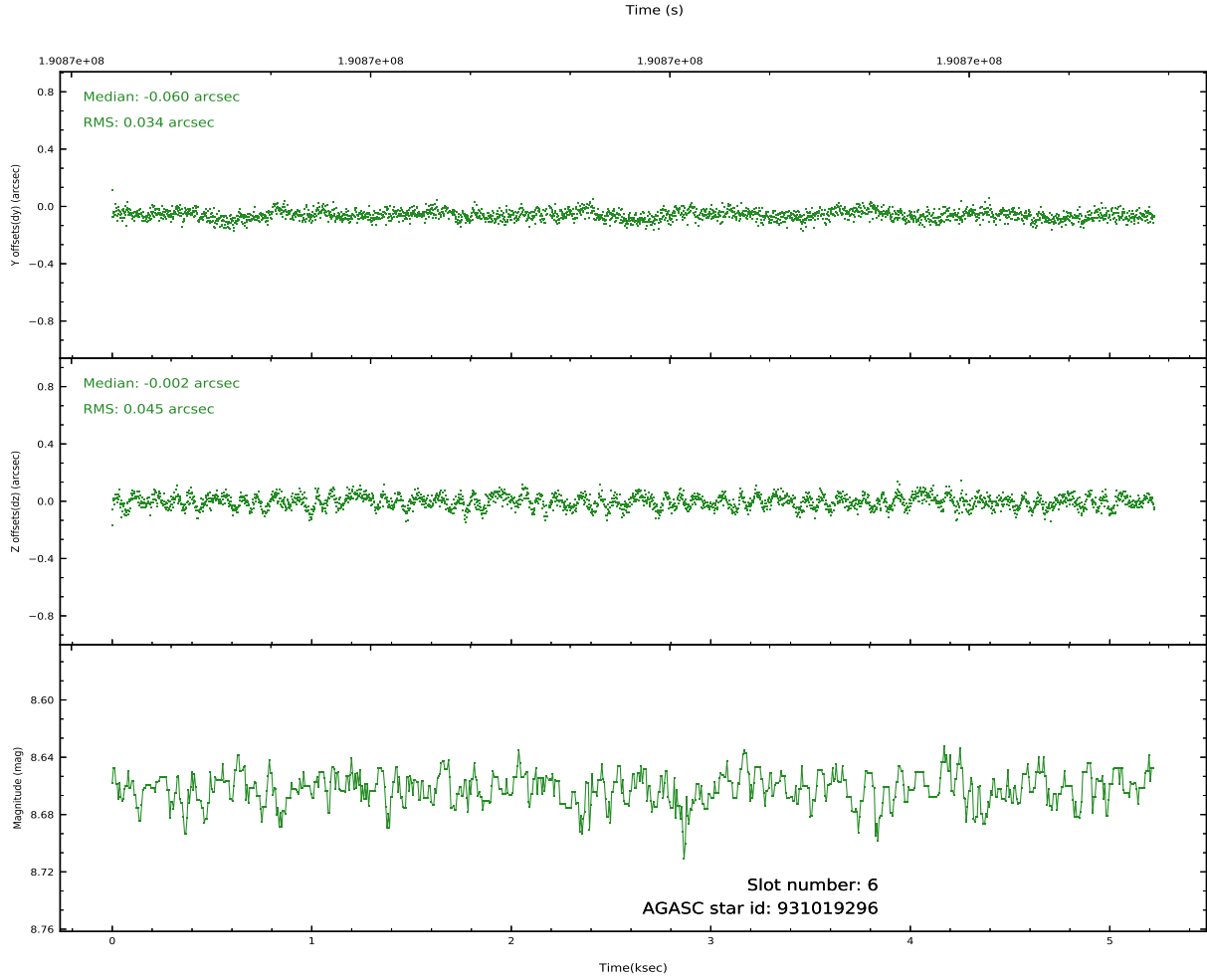
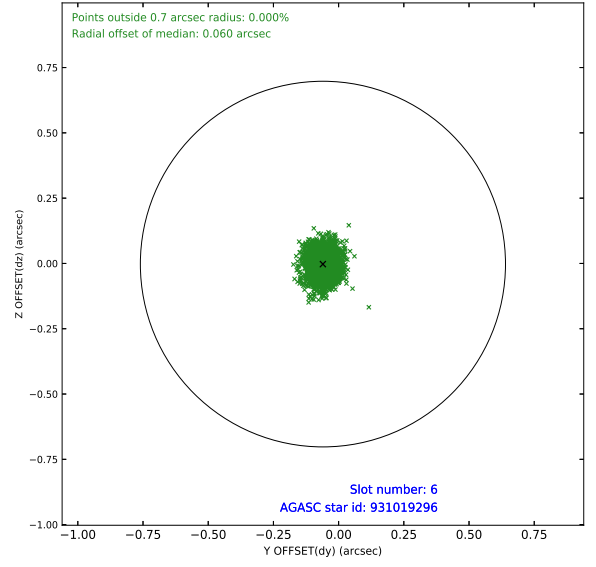
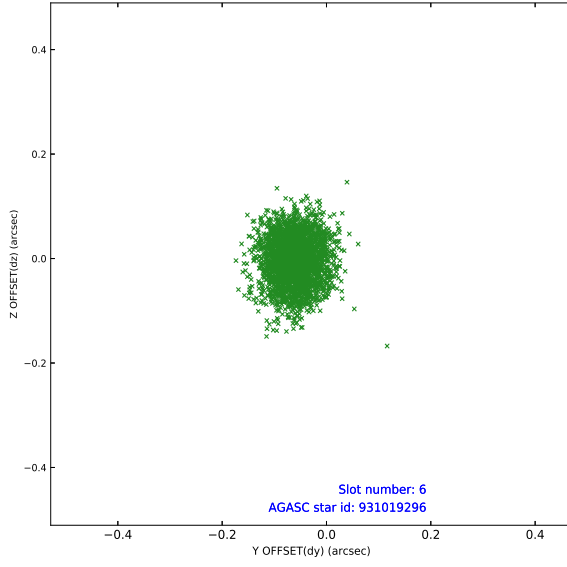
## 2.4.2 Slot 4



### 2.4.3 Slot 5

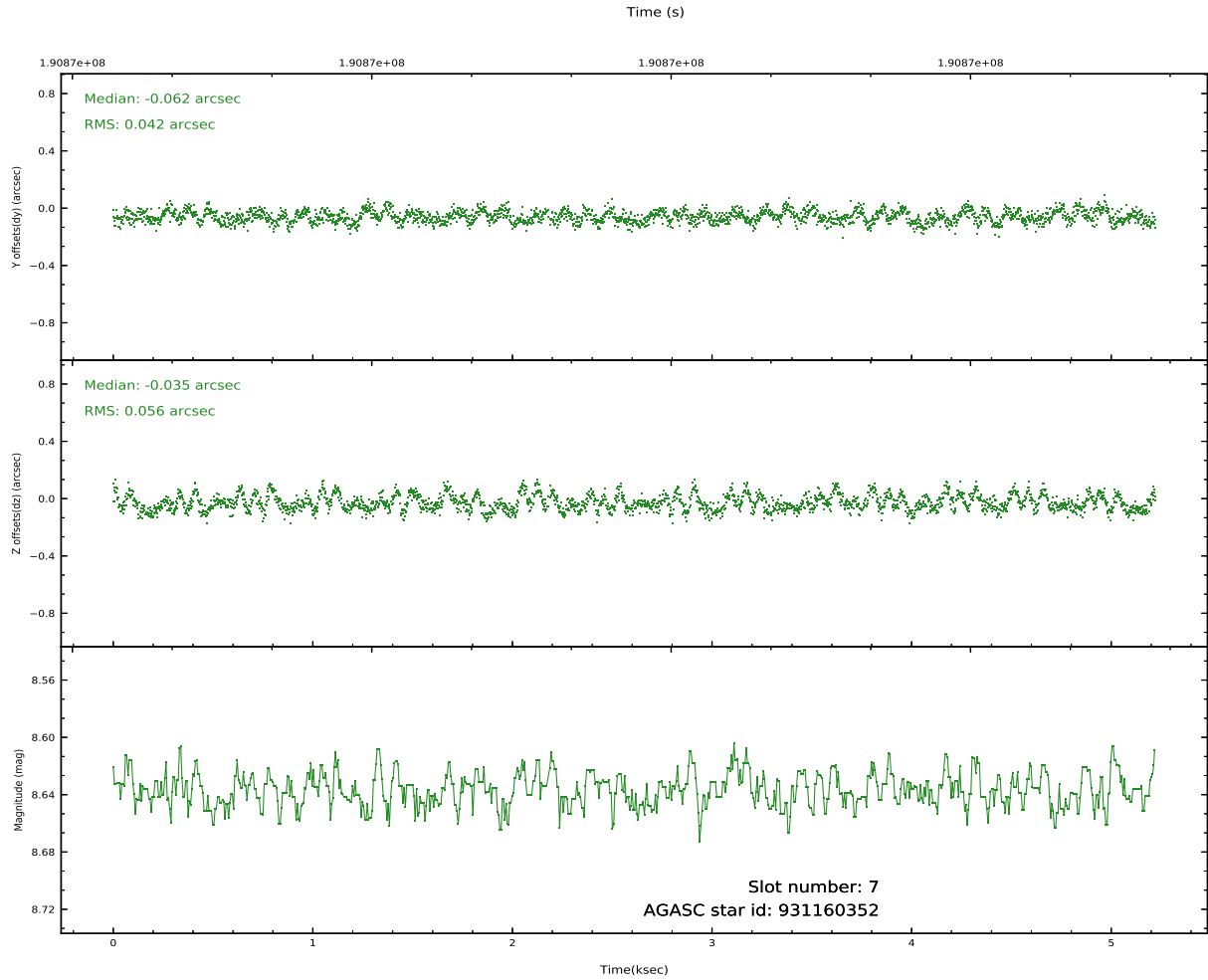
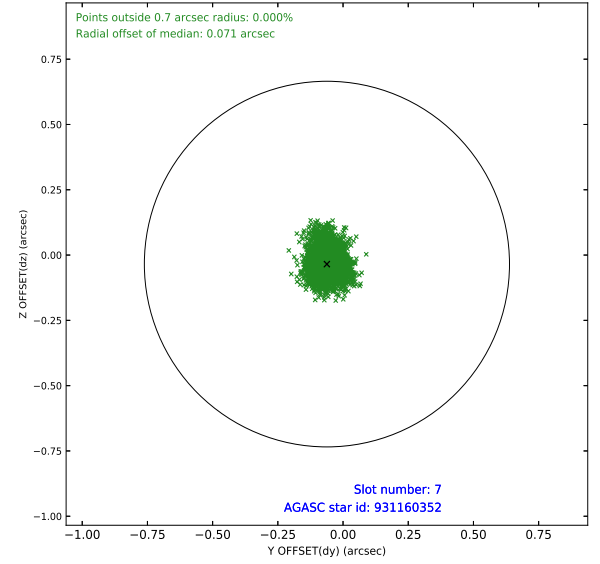
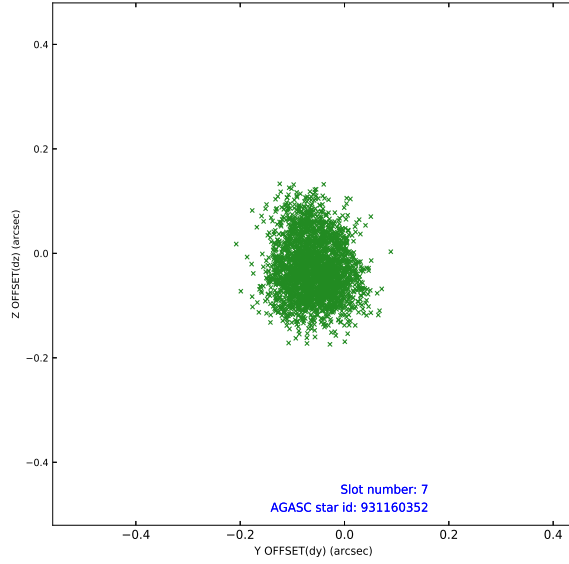


## 2.4.4 Slot 6



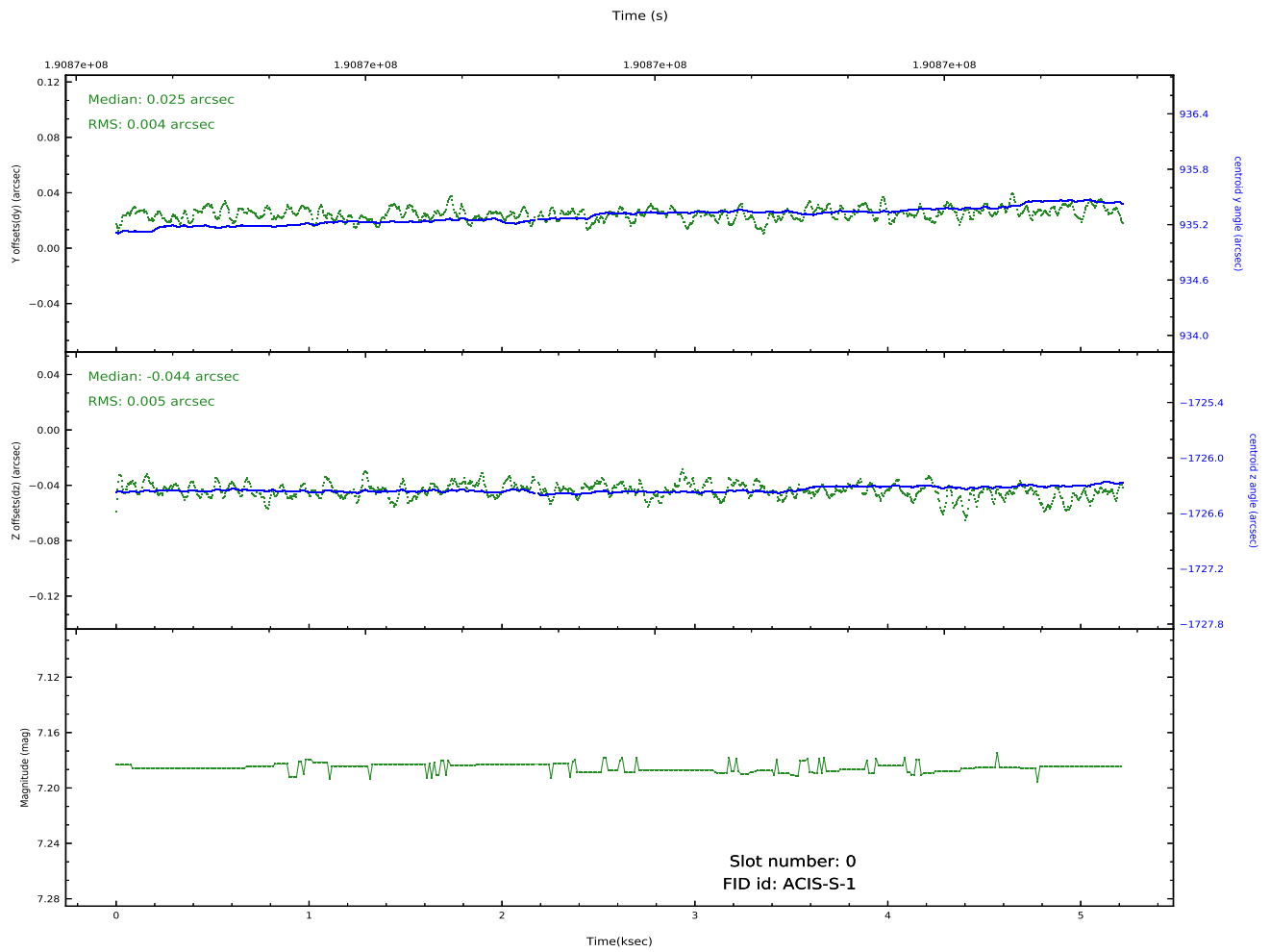
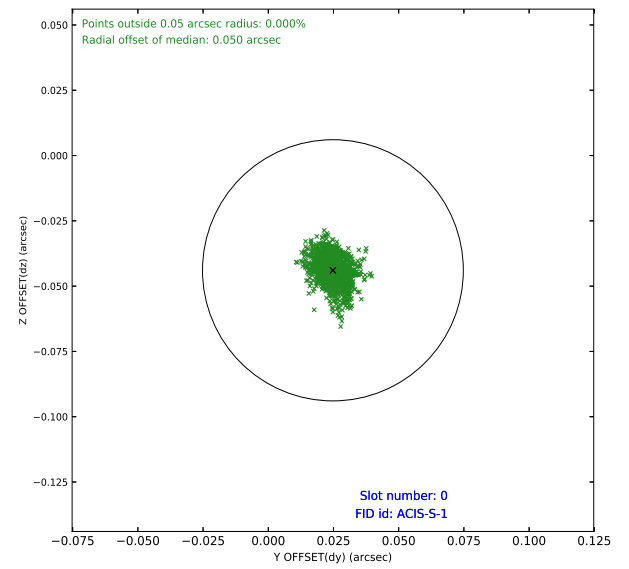
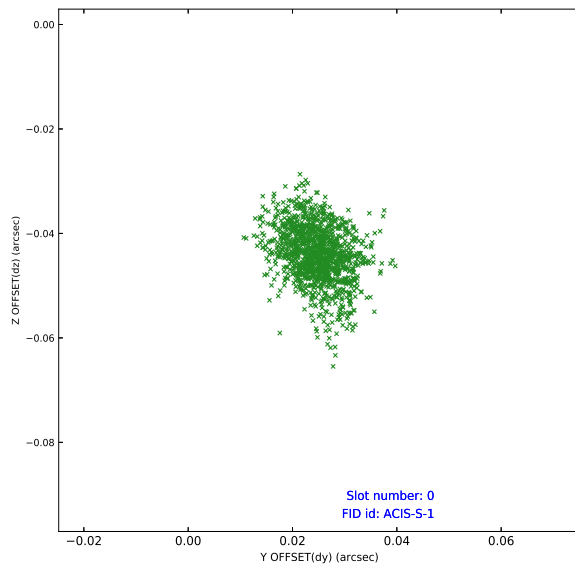


## 2.4.5 Slot 7

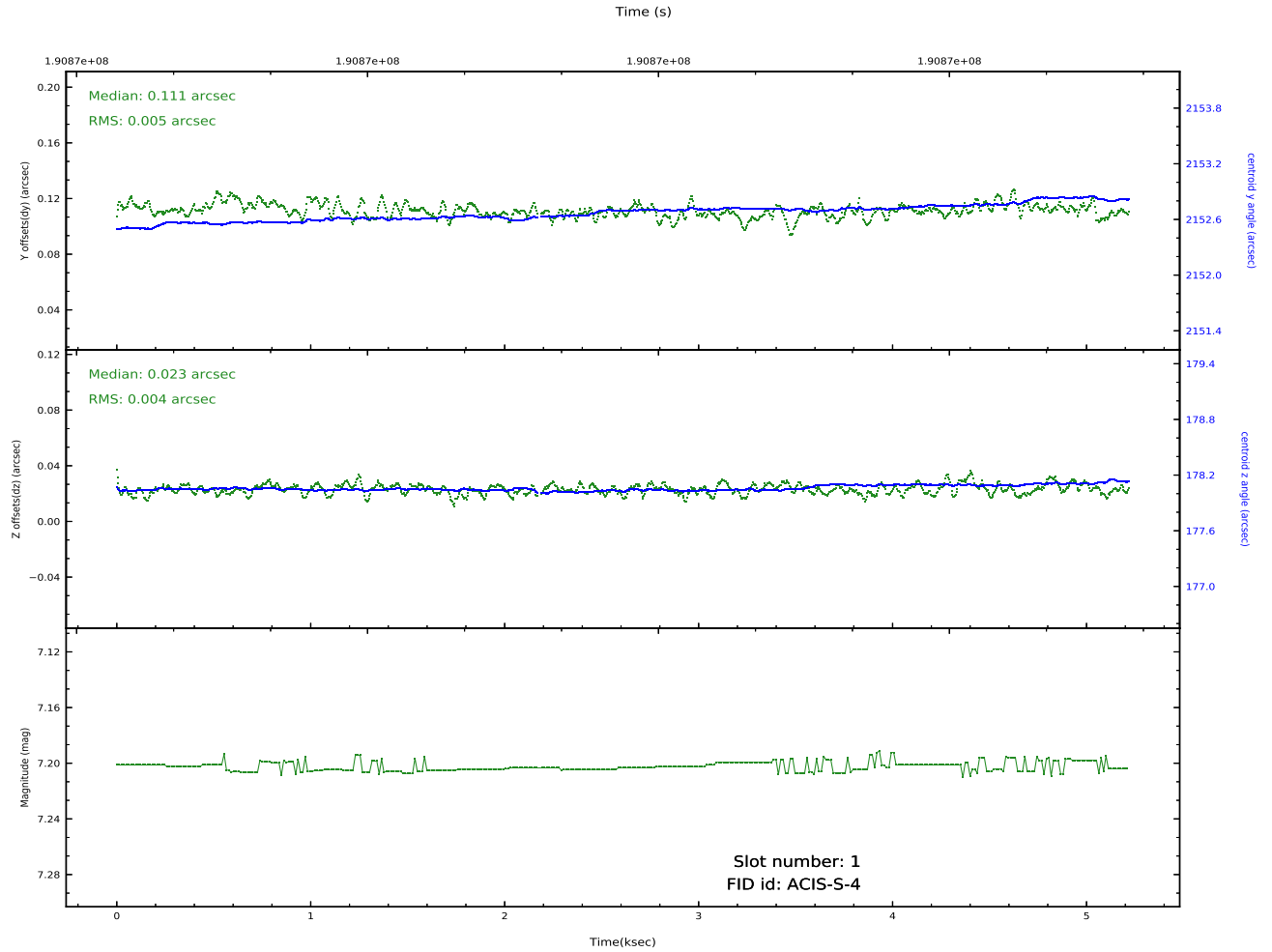
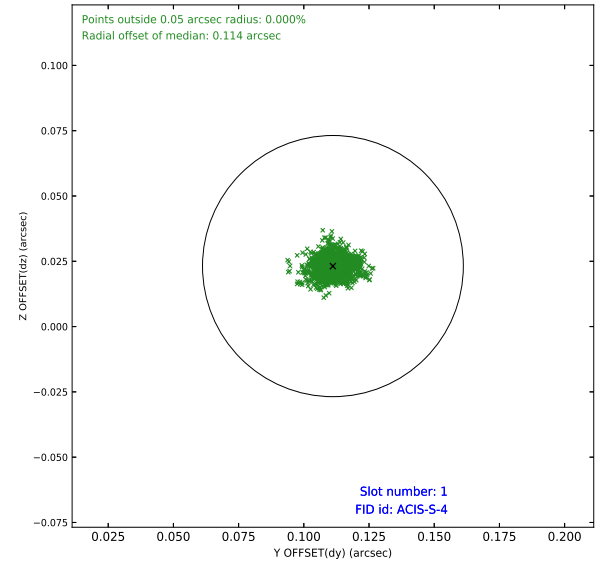
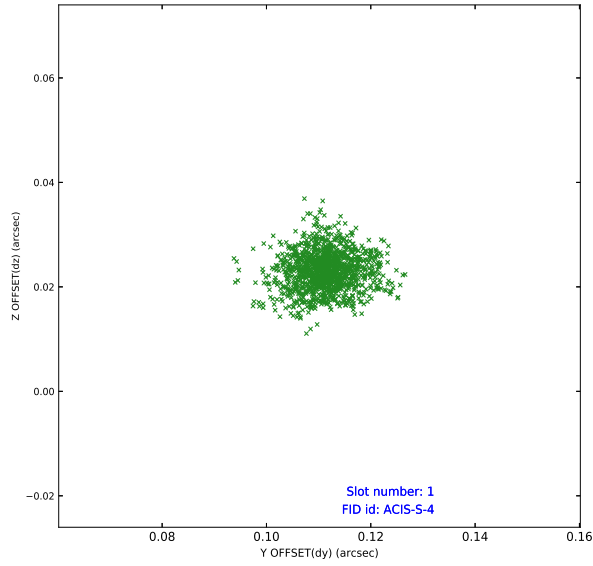


## 2.5 FID Slots

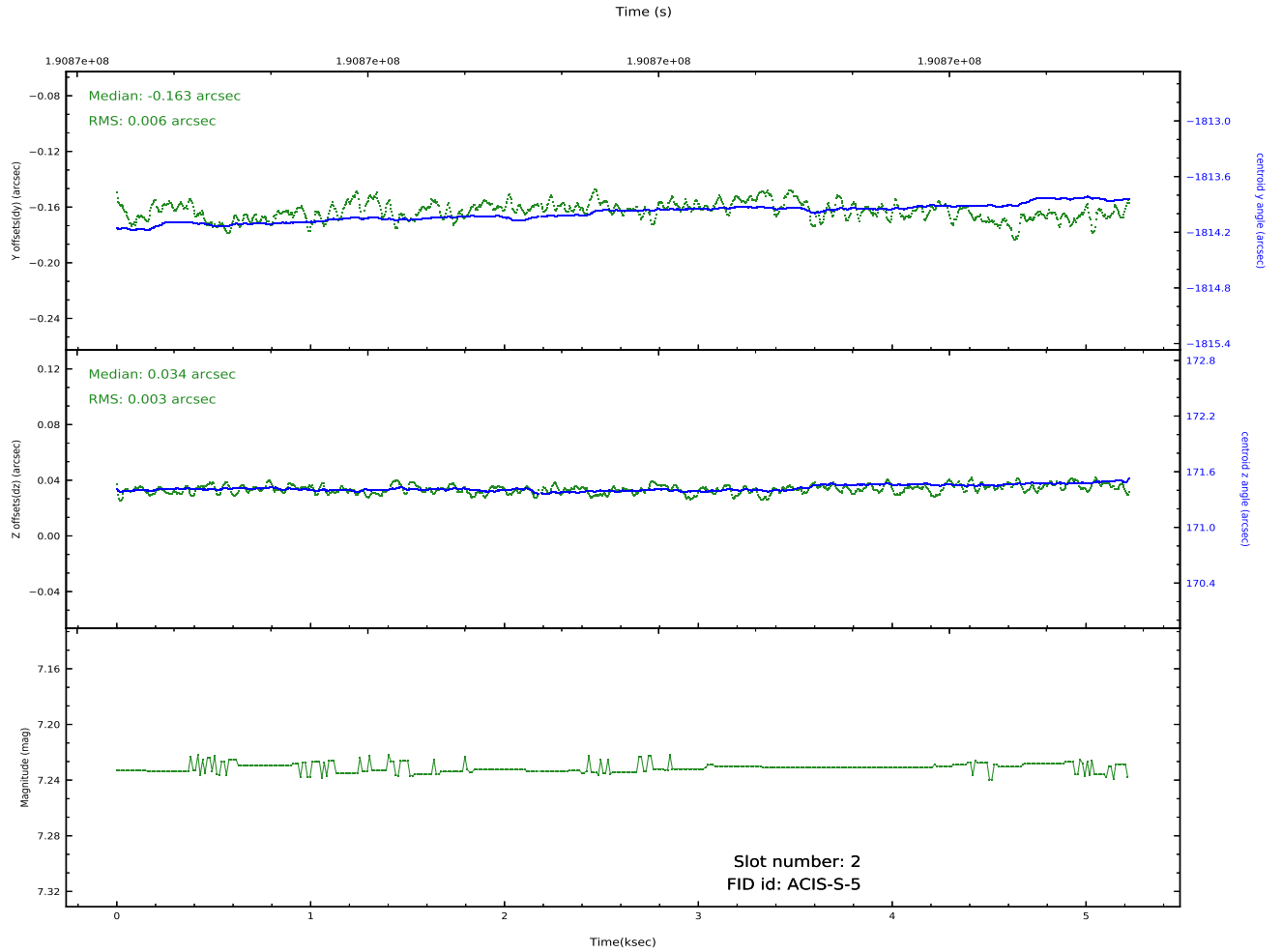
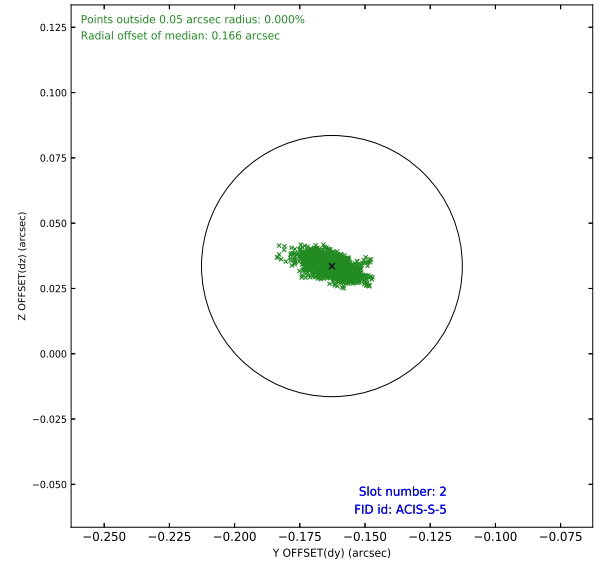
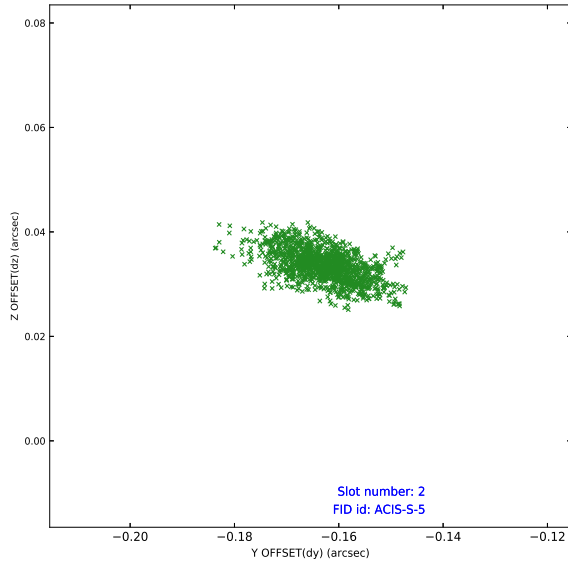
### 2.5.1 Slot 0



## 2.5.2 Slot 1



## 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2020.09.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.216

### A.2 Comments