

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4562 - L2 Version 4  
Chandra X-Ray Center

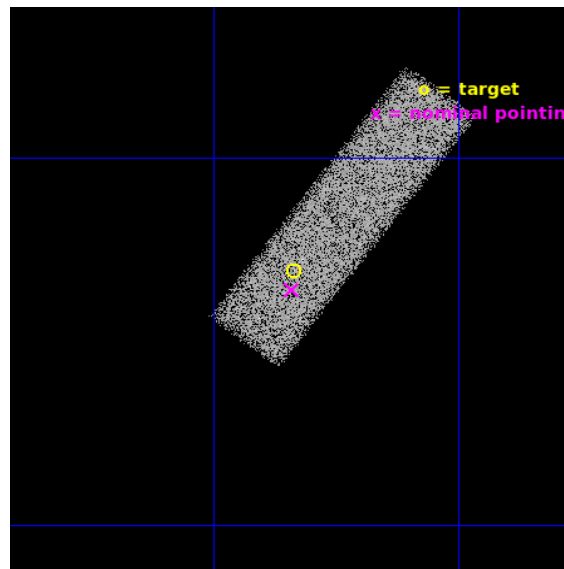
L2 Processing Date : Sep 24 2020

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# 1 Front

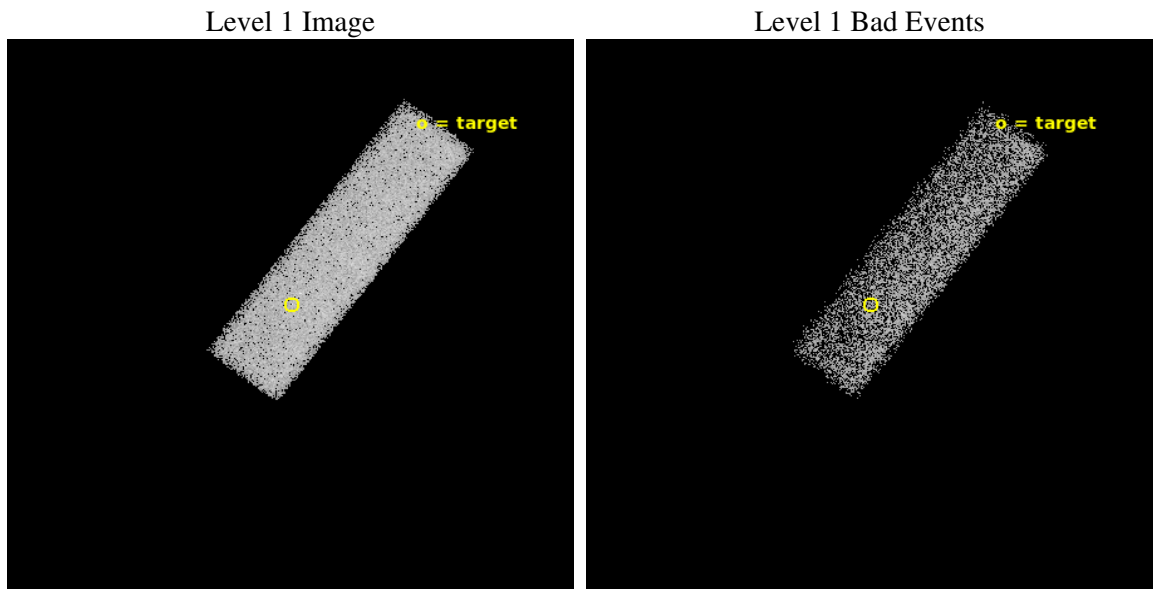
seq_num	400345	Sequence number
obs_id	4562	Observation id
title	Chandra observations of accretion-driven millisecond X-ray pulsars in quiescence	Proposal title
observer	Rudy Wijnands	Principal investigator
object	XTE J0929-314	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	142.33375	Observer's specified target RA [deg]
dec_targ	-31.384528	Observer's specified target Dec [deg]
ra_nom	142.33493762168	Nominal RA [deg]
dec_nom	-31.393096791155	Nominal Dec [deg]
roll_nom	306.97161419809	Nominal Roll [deg]
revision	4	Processing version of data
ontime	25700.00038296	Sum of GTIs [s]
liveltime	24445.924458252	Livetime [s]
ontime7	25700.00038296	Sum of GTIs [s]
l2events	25574	Number of level 2 events



## 2 OBI

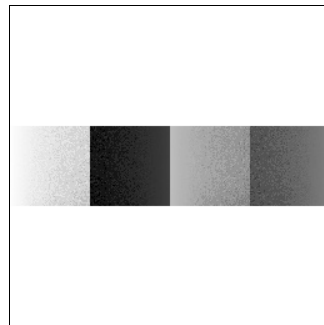
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25181.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	25700.00038296	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime7	25700.00038296	Sum of GTIs [s]
date	2020-09-24T11:45:44	Date and time of file creation	l1events	60169	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

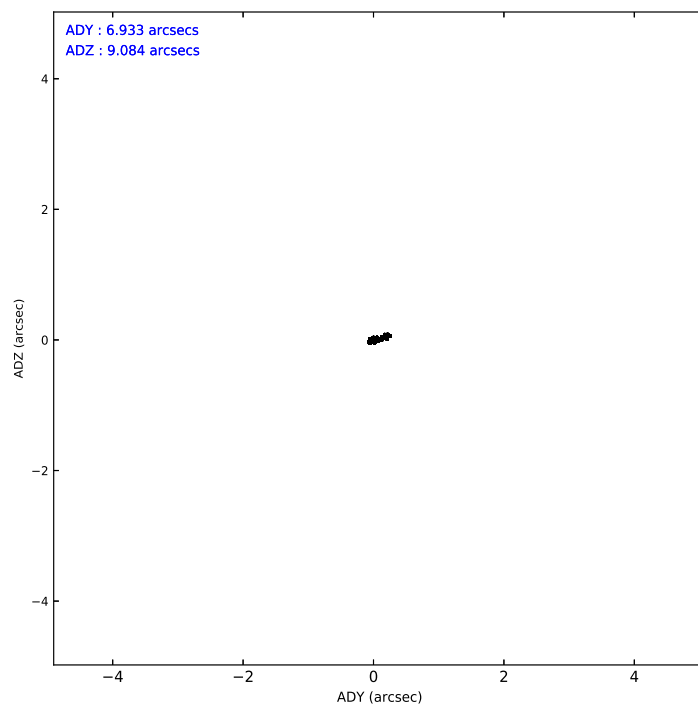
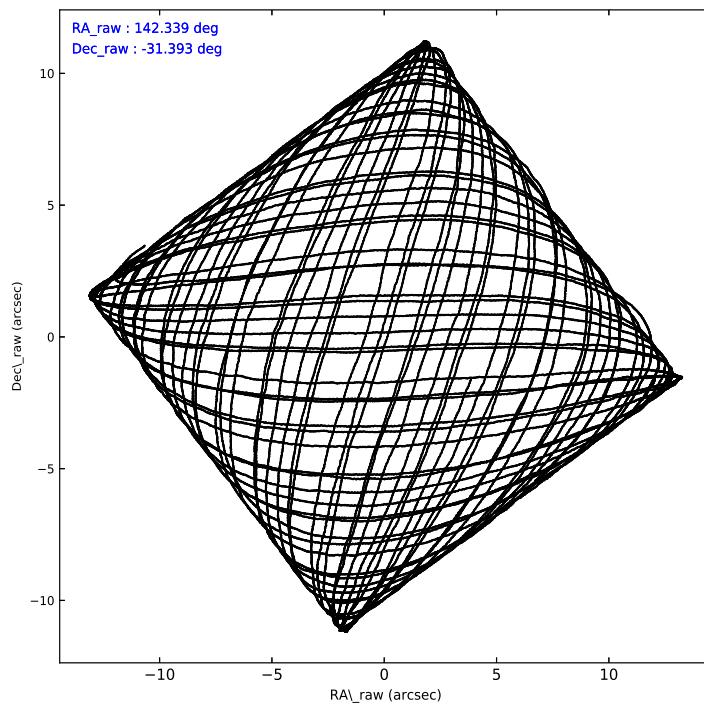
	<b>ccd 7</b>
level 1 events	60169
rejected events	33767
rejected %	<b>56%</b>

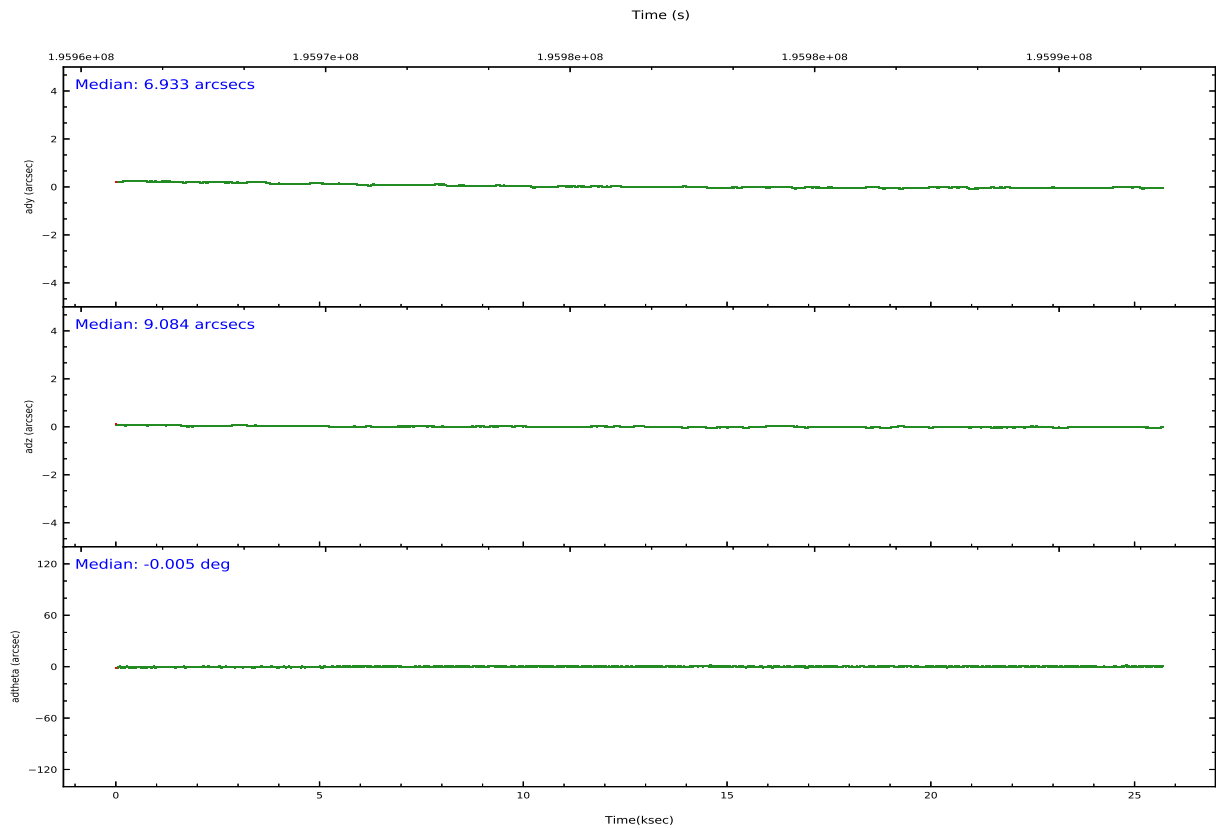
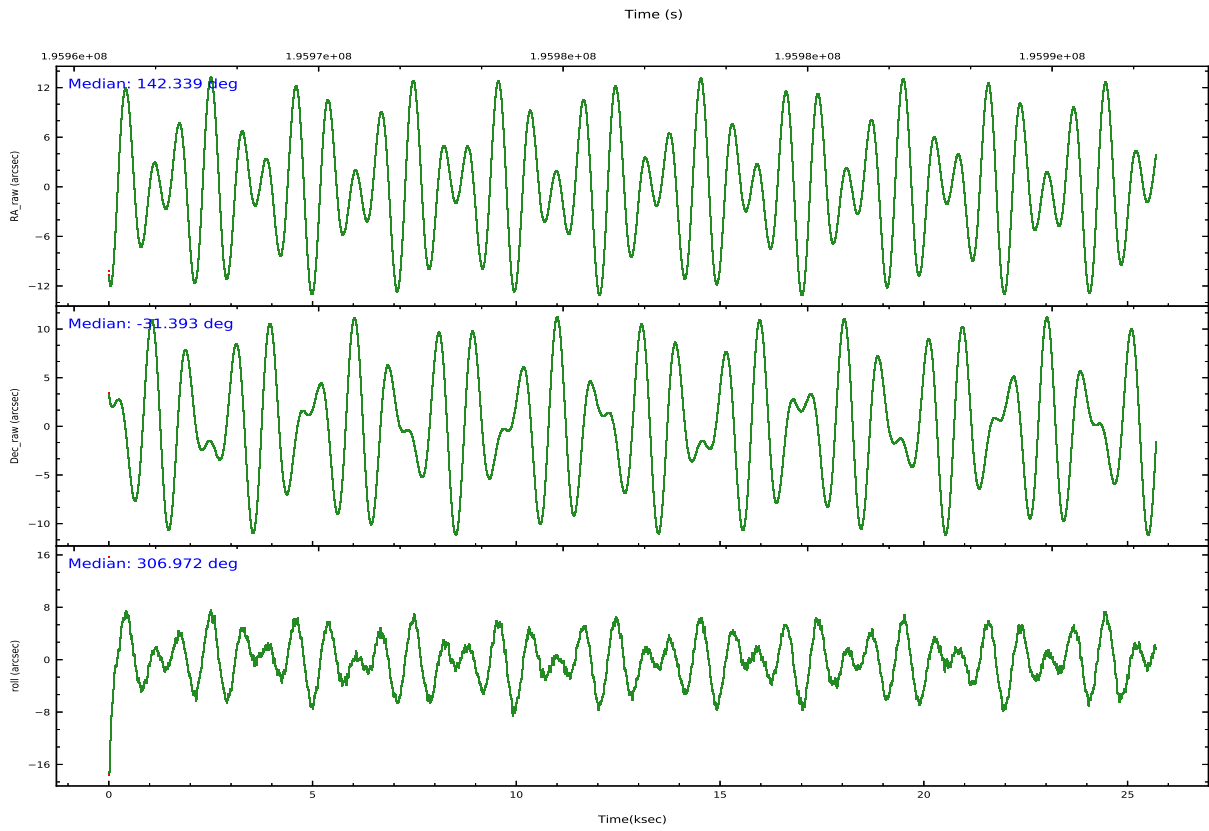
	<b>ccd 7</b>
grade 0 events	2528
	4%
grade 1 events	54
	0%
grade 2 events	5268
	8%
grade 3 events	2940
	4%
grade 4 events	2845
	4%
grade 5 events	5861
	9%
grade 6 events	12882
	21%
grade 7 events	27791
	46%

## 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	142.309348	142.33493762168	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-31.382835	-31.393096791155	Subarray start row	384	385
[deg] Pointing Roll	306.799803	306.97161419809	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)	195965372.184000	195964245.50164			
Observation start date	2004-03-18T02:48:28	2004-03-18T02:30:45			
[s] Observation end time (MET)	195990553.184000	195991344.96533			
Observation end date	2004-03-18T09:48:09	2004-03-18T10:02:24			
Read mode	TIMED	TIMED			

## 2.3 Aspect



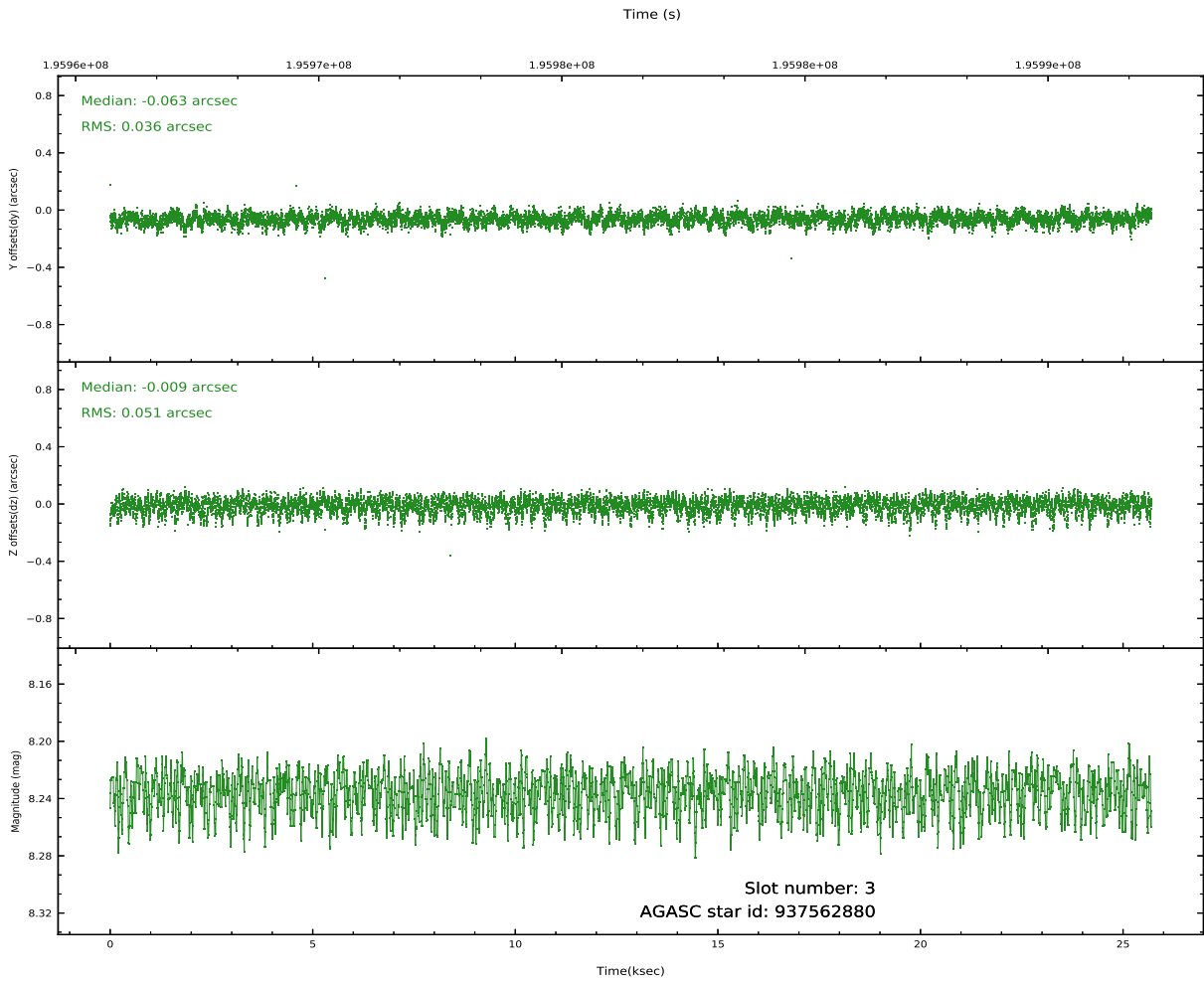
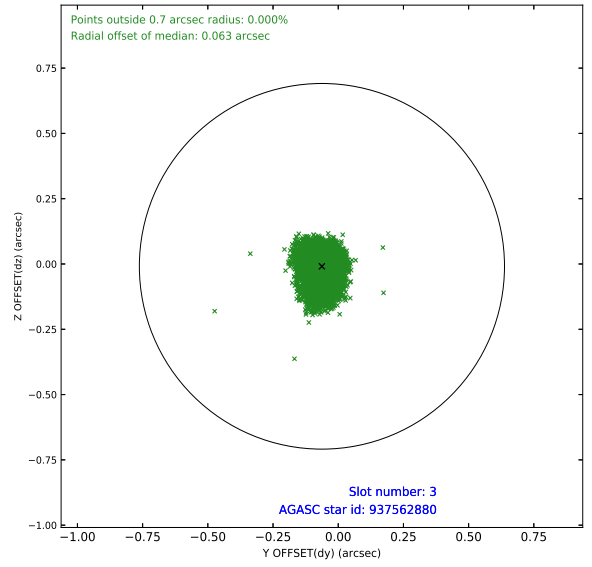
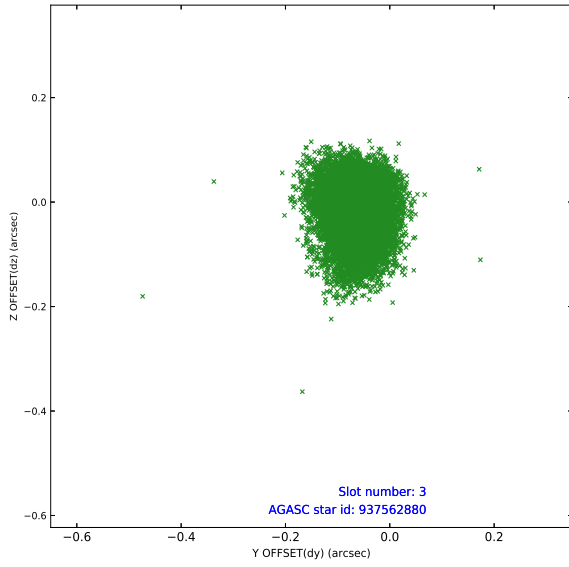


### Slot Statistics

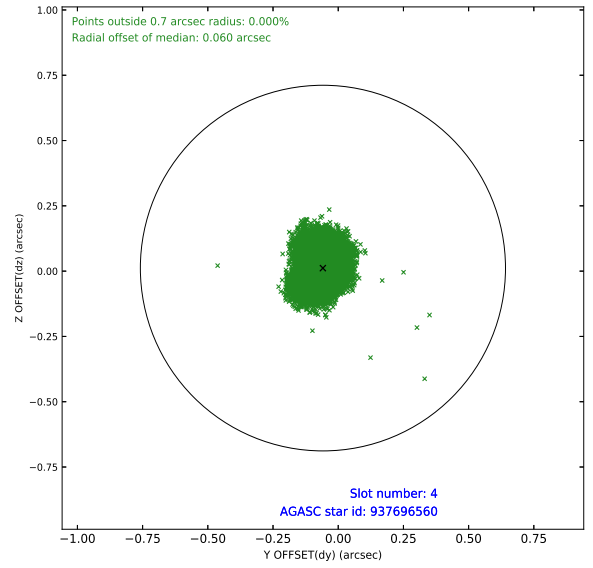
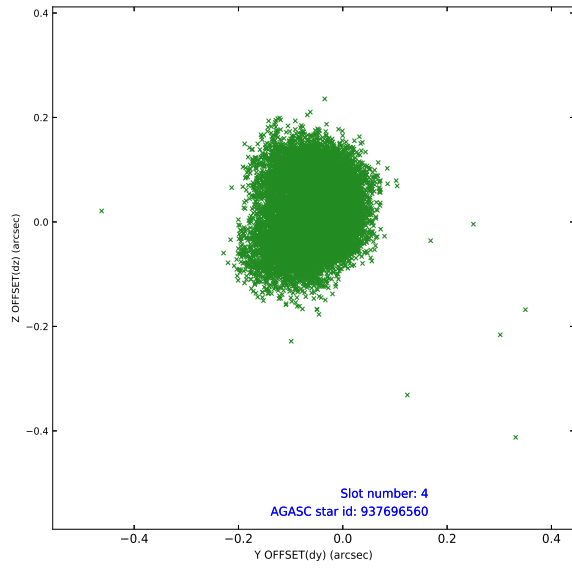
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.10	6269	1.000	-0.061	-0.067	0.007	0.011	0.000000	0.000000	-759.74	-1730
1	FID		ACIS-S-4	7.20	6269	1.000	0.122	0.047	0.006	0.010	0.000000	0.000000	2153.62	178
2	FID		ACIS-S-5	7.23	6269	1.000	-0.092	0.029	0.007	0.012	0.000000	0.000000	-1812.52	171
3	GUIDE	used	937562880	8.24	12537	1.000	-0.063	-0.009	0.066	0.112	141.495546	-31.369017	-1530.51	-1978
4	GUIDE	used	937696560	8.55	12537	1.000	-0.059	0.012	0.088	0.136	143.127288	-31.389604	1532.65	1992
5	GUIDE	used	937697504	9.31	12532	1.000	0.010	0.061	0.089	0.142	142.201640	-31.796736	996.39	-1156
6	GUIDE	used	937698384	7.86	12537	1.000	0.004	0.015	0.059	0.093	141.887562	-31.505027	-420.81	-1301
7	GUIDE	used	937702016	7.40	12537	1.000	0.111	-0.079	0.048	0.075	142.591301	-31.549956	1000.88	331

## 2.4 Star Slots

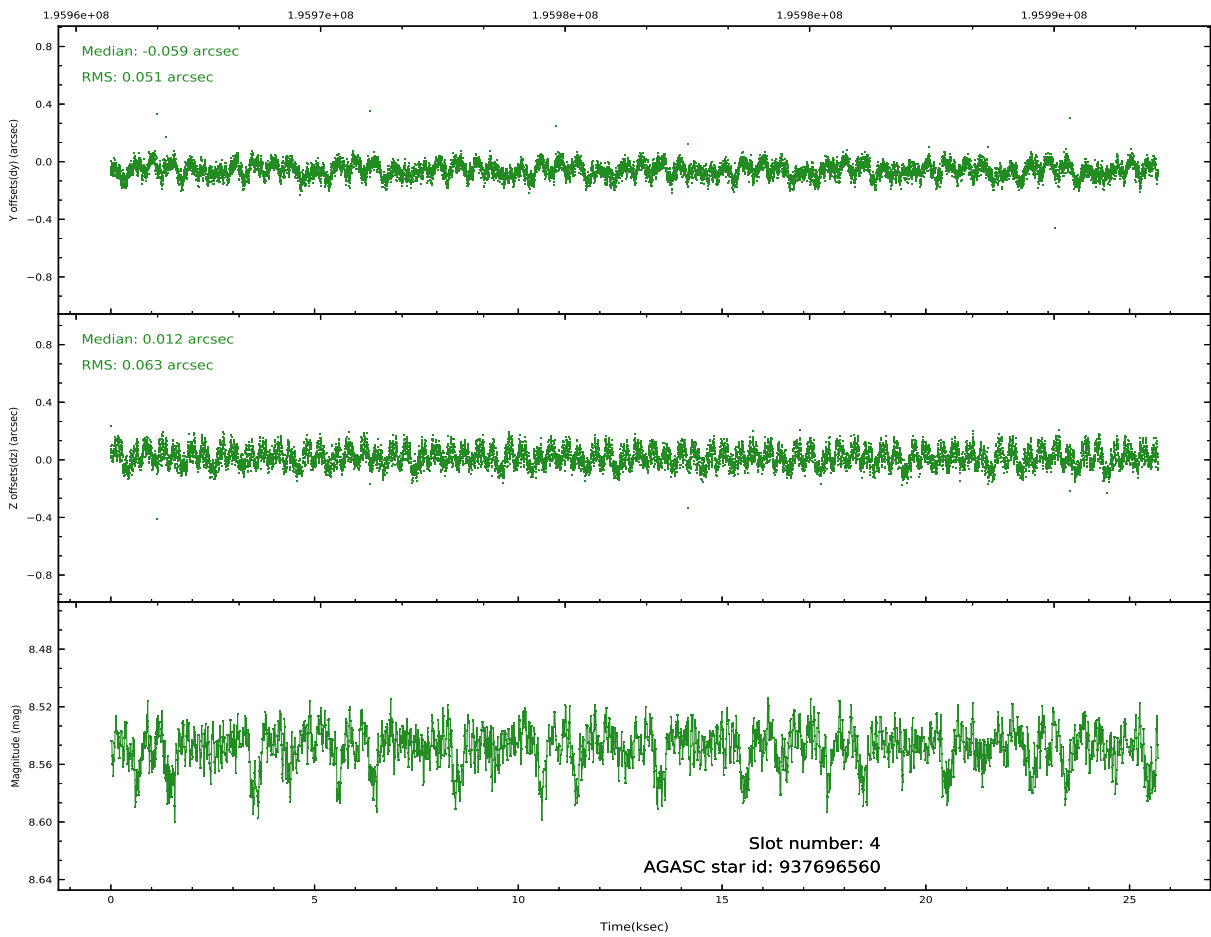
### 2.4.1 Slot 3



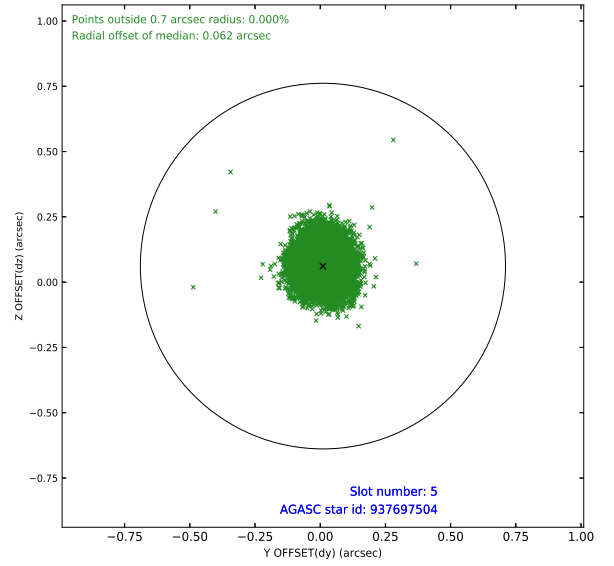
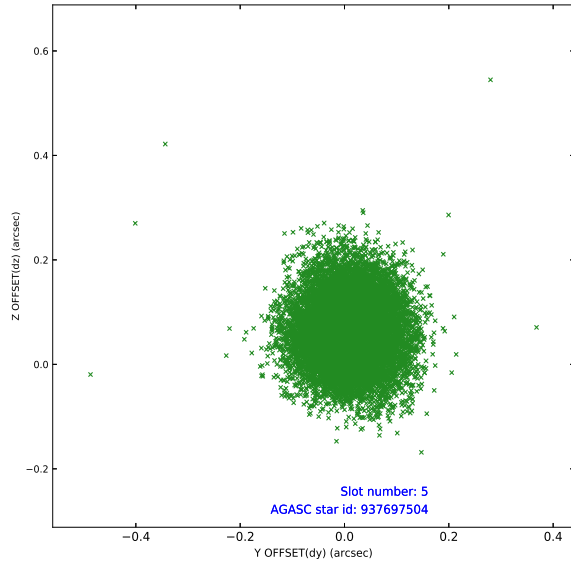
## 2.4.2 Slot 4



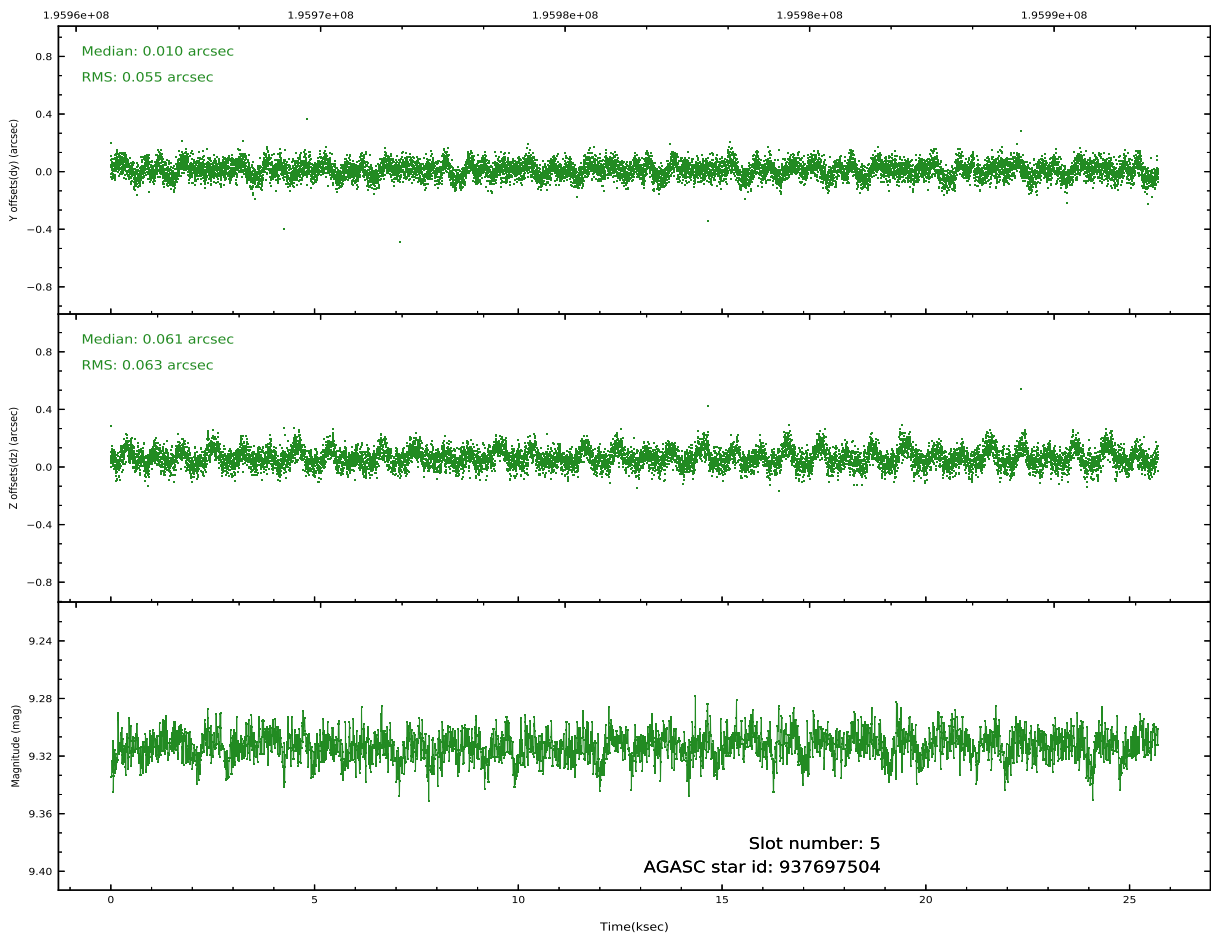
Time (s)



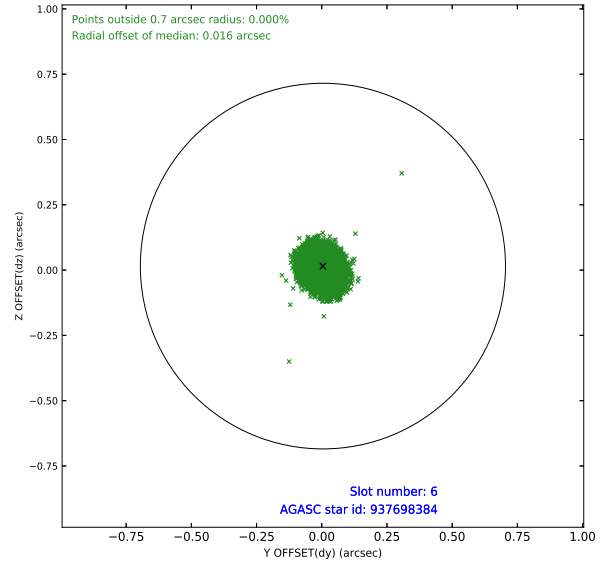
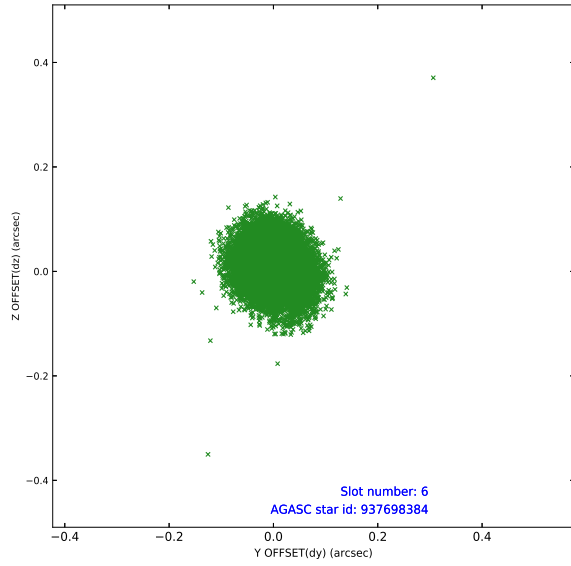
### 2.4.3 Slot 5



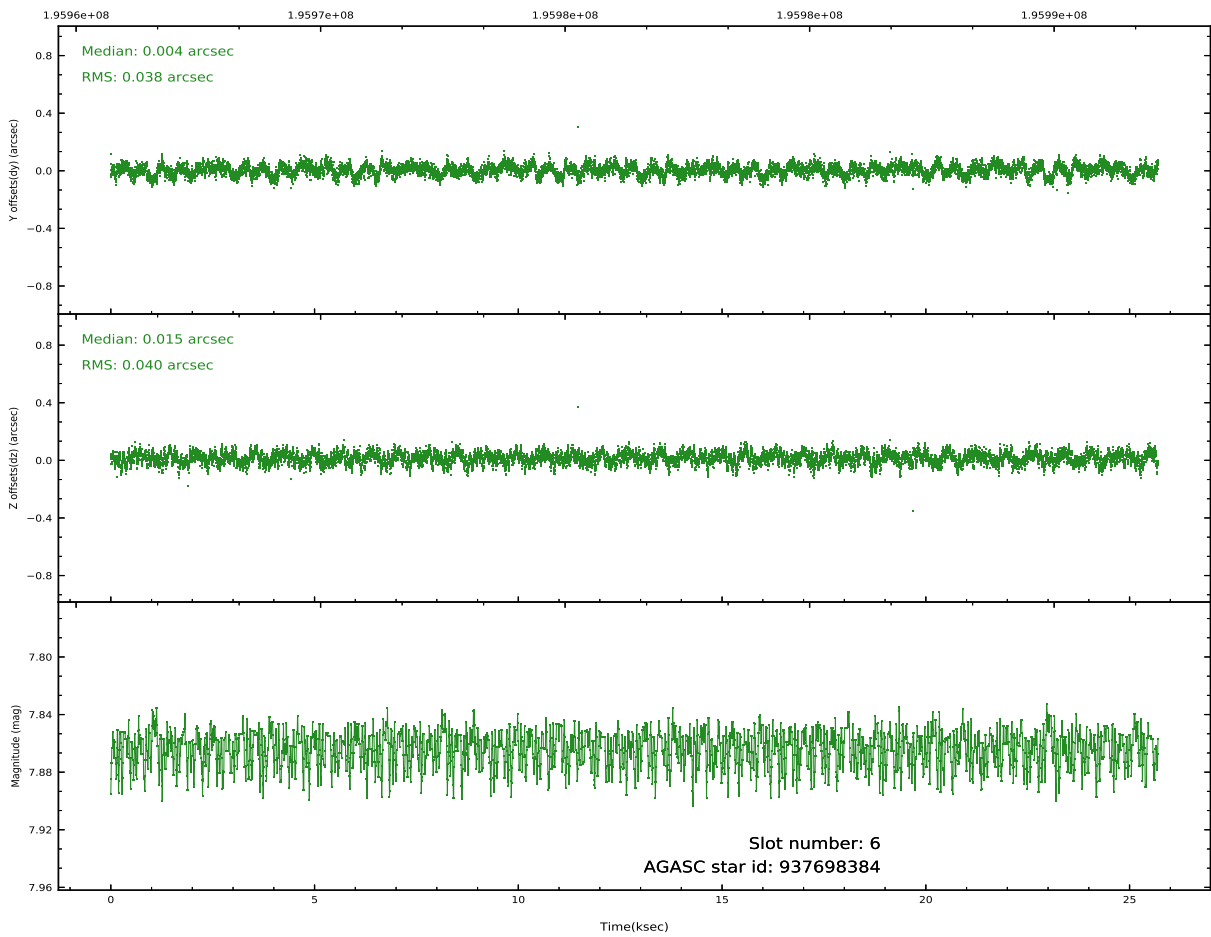
Time (s)



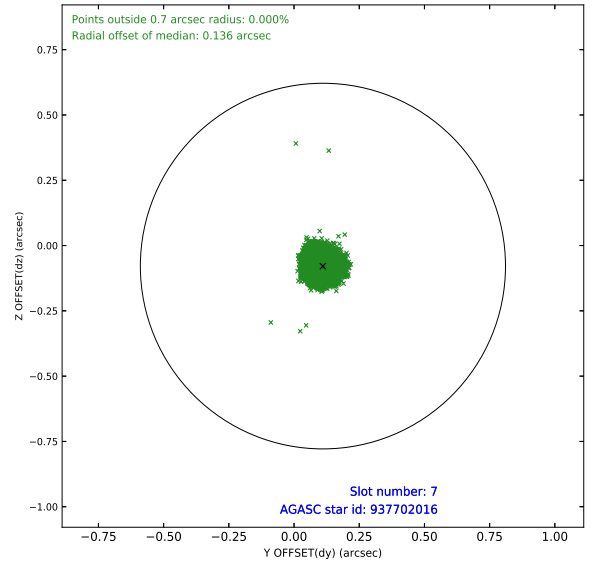
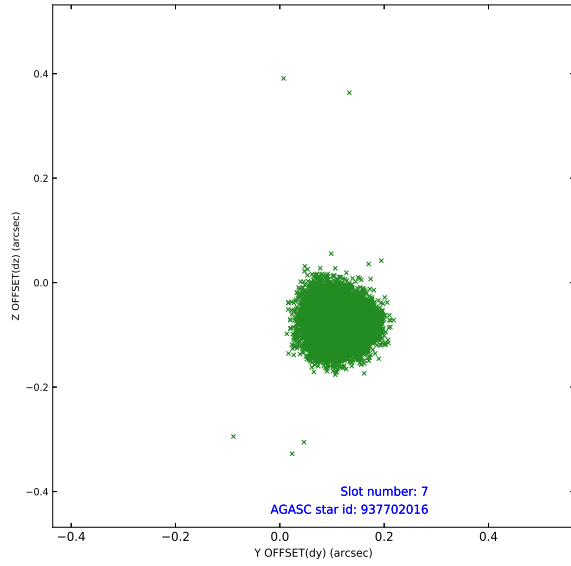
## 2.4.4 Slot 6



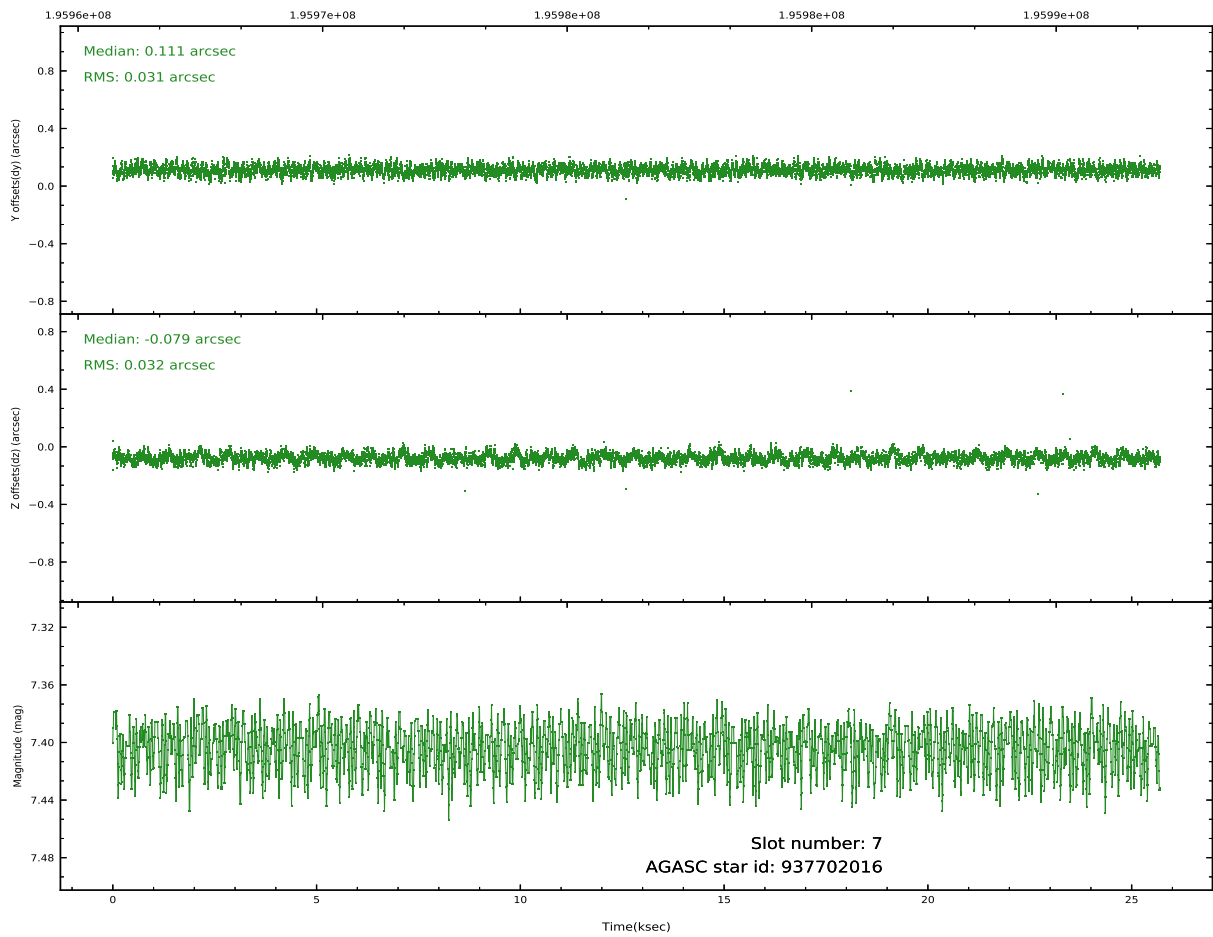
Time (s)



## 2.4.5 Slot 7

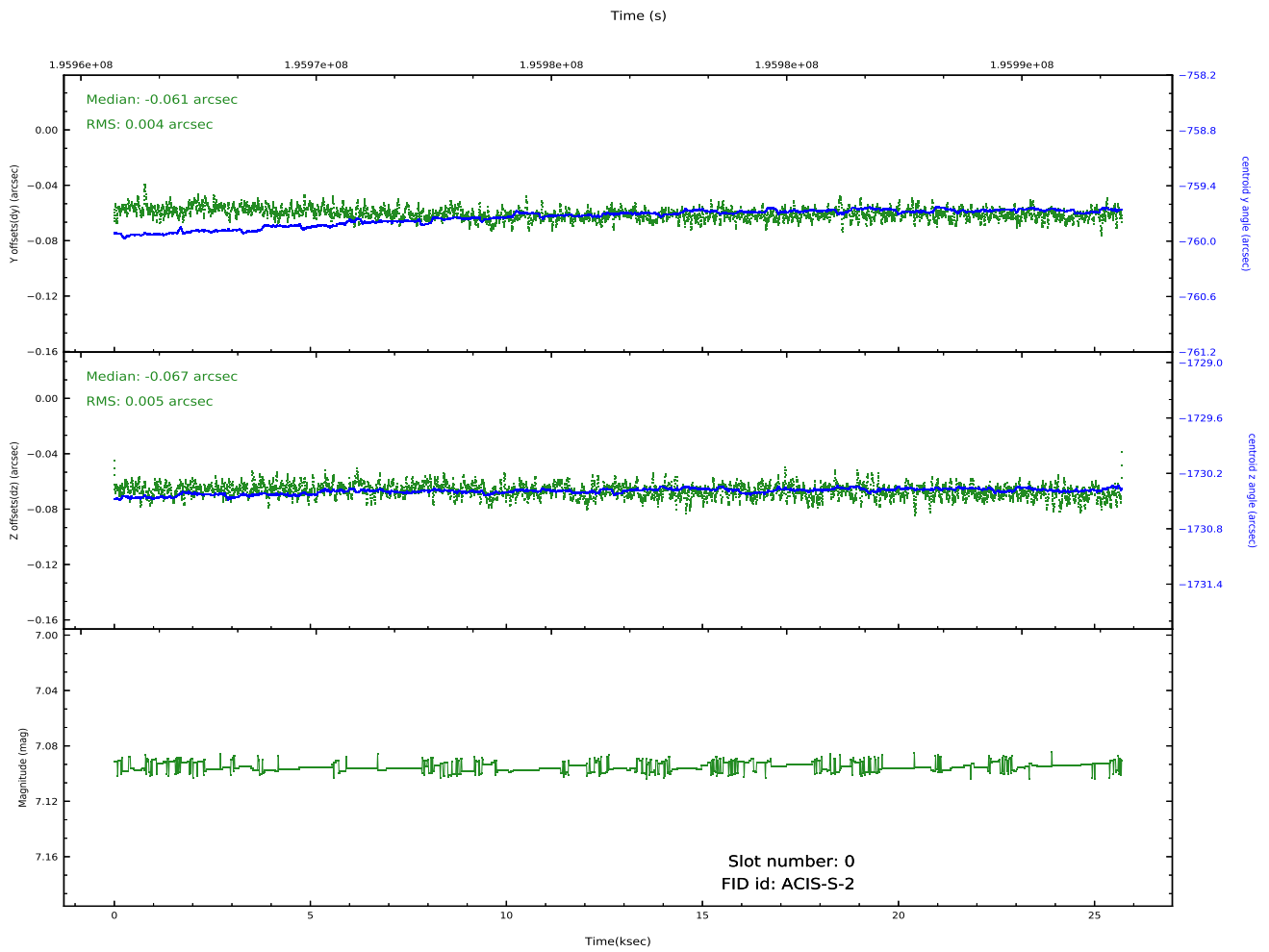
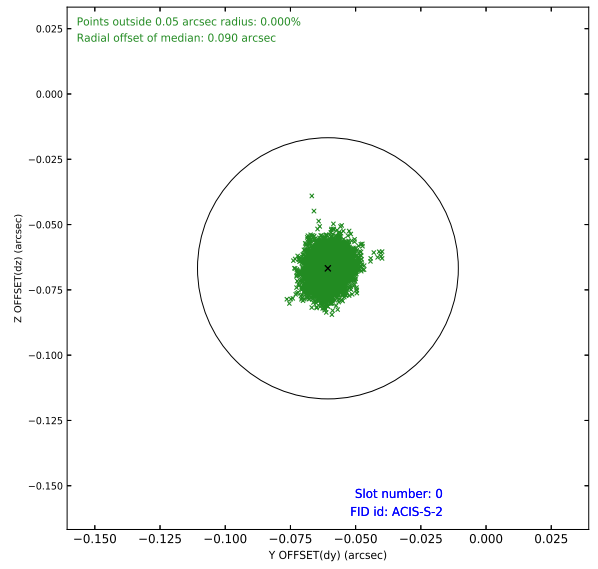
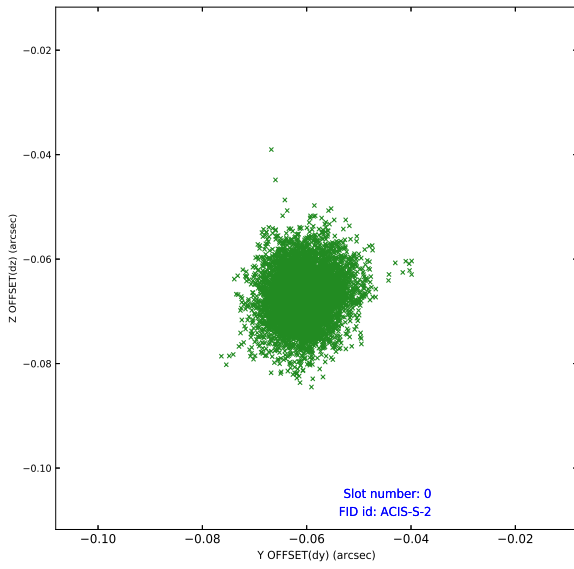


Time (s)

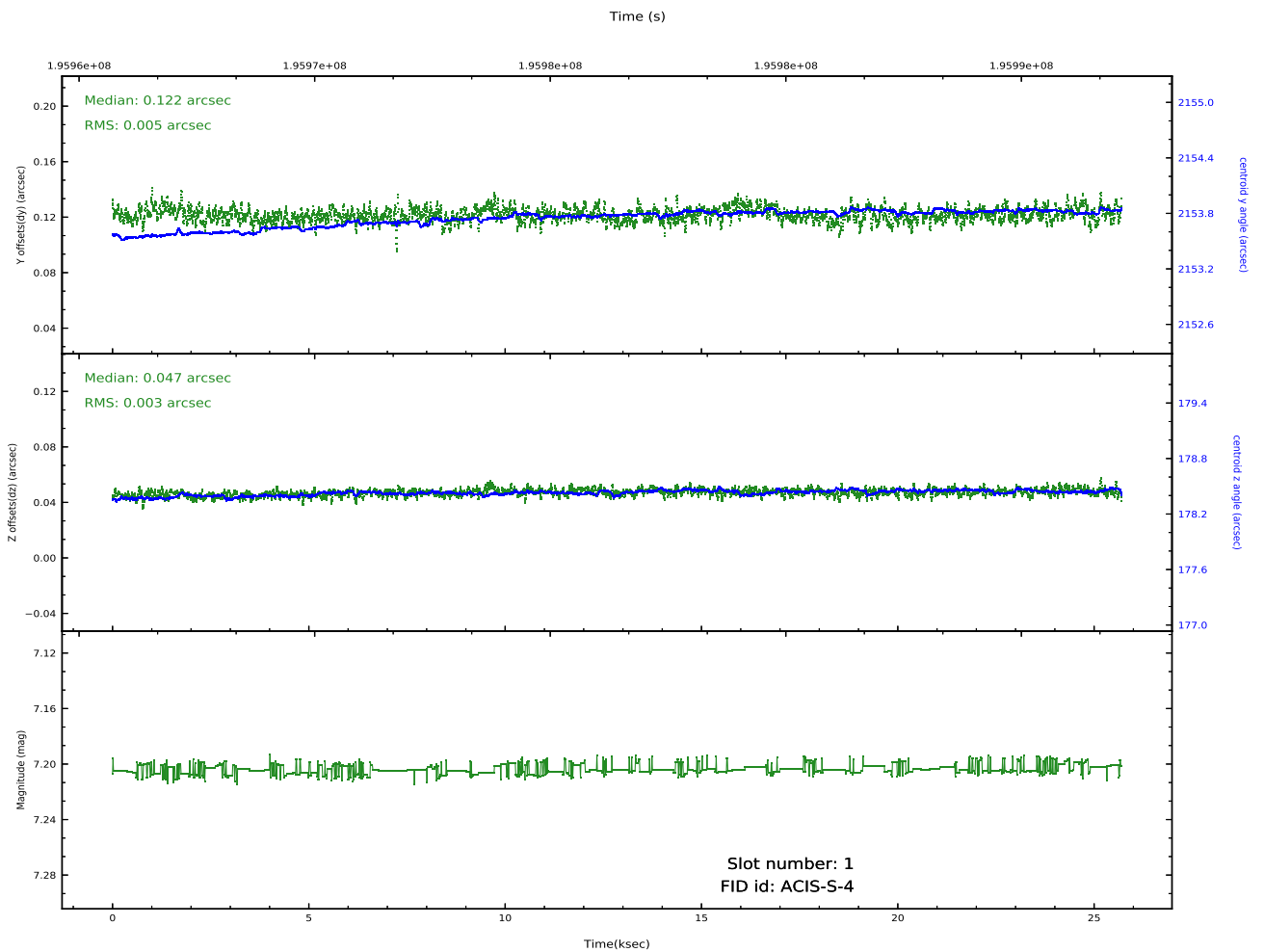
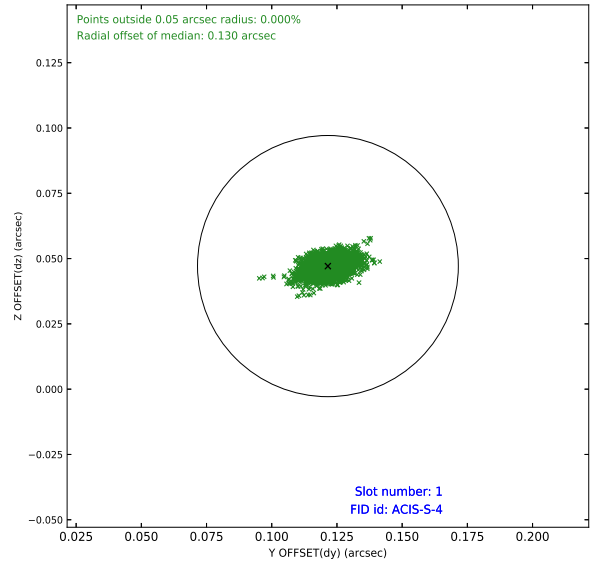
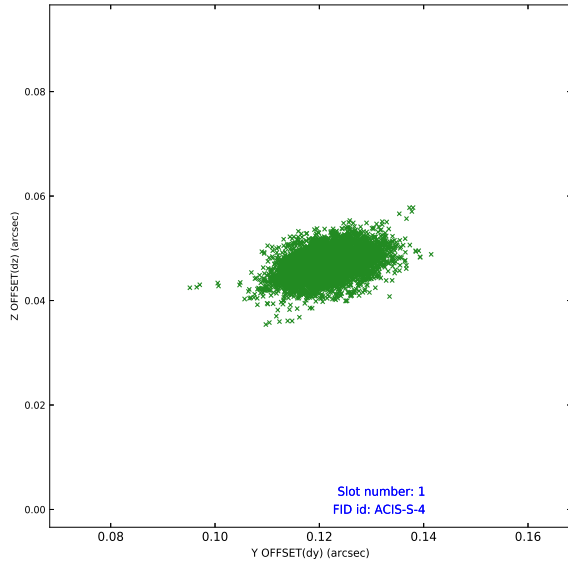


## 2.5 FID Slots

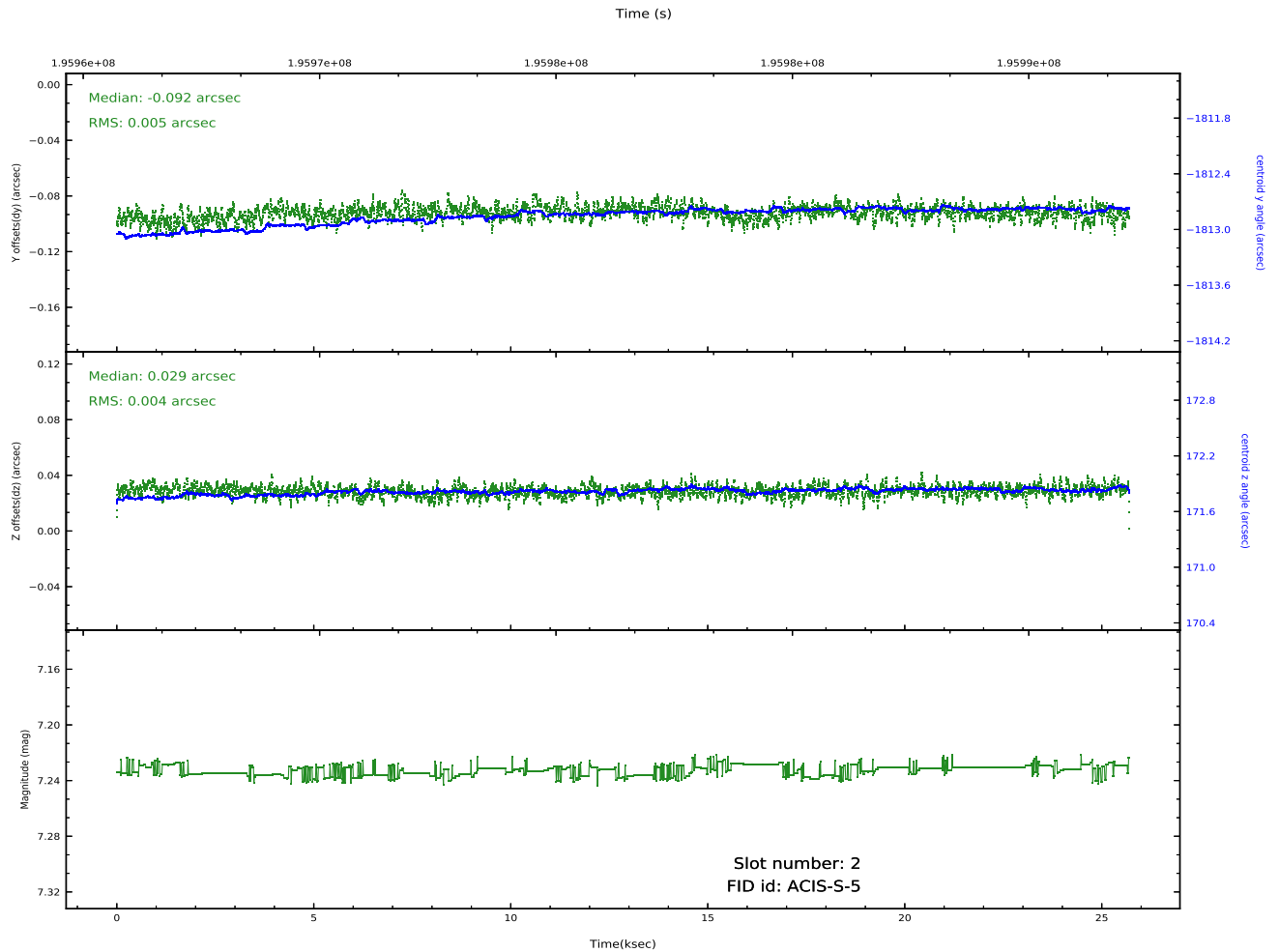
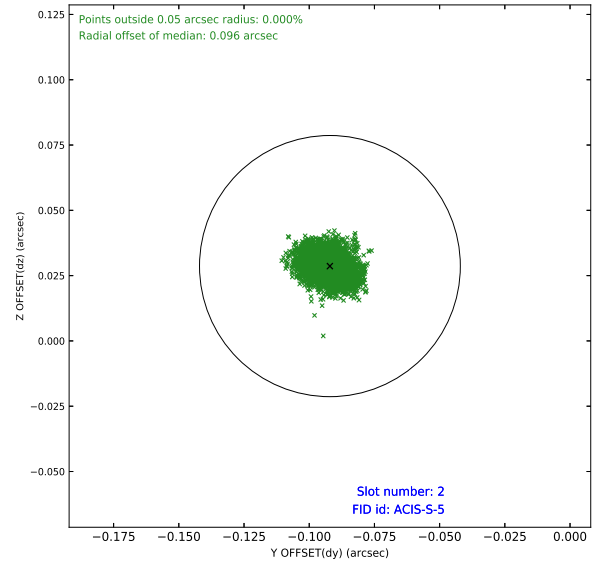
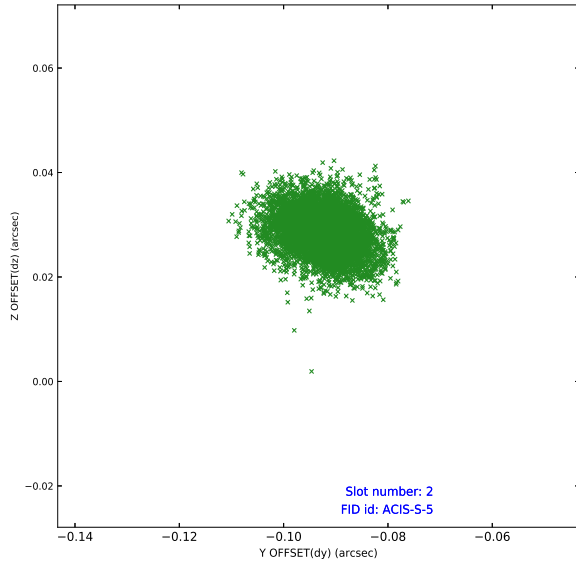
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	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	25.7

## A.2 Comments