

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 19698 - L2 Version 2  
Chandra X-Ray Center

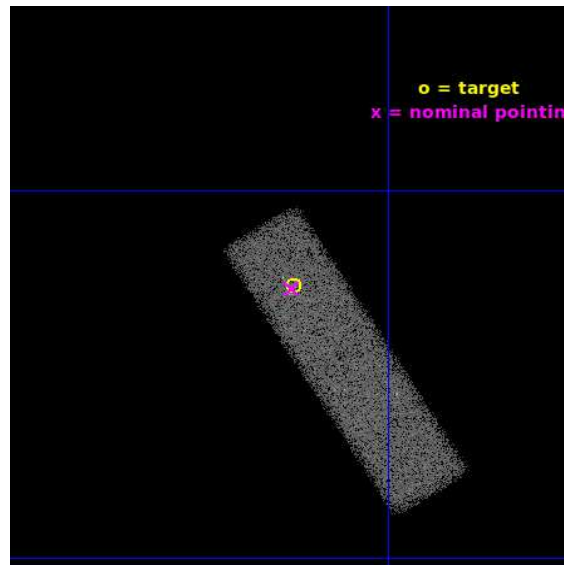
L2 Processing Date : Oct 24 2020

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# 1 Front

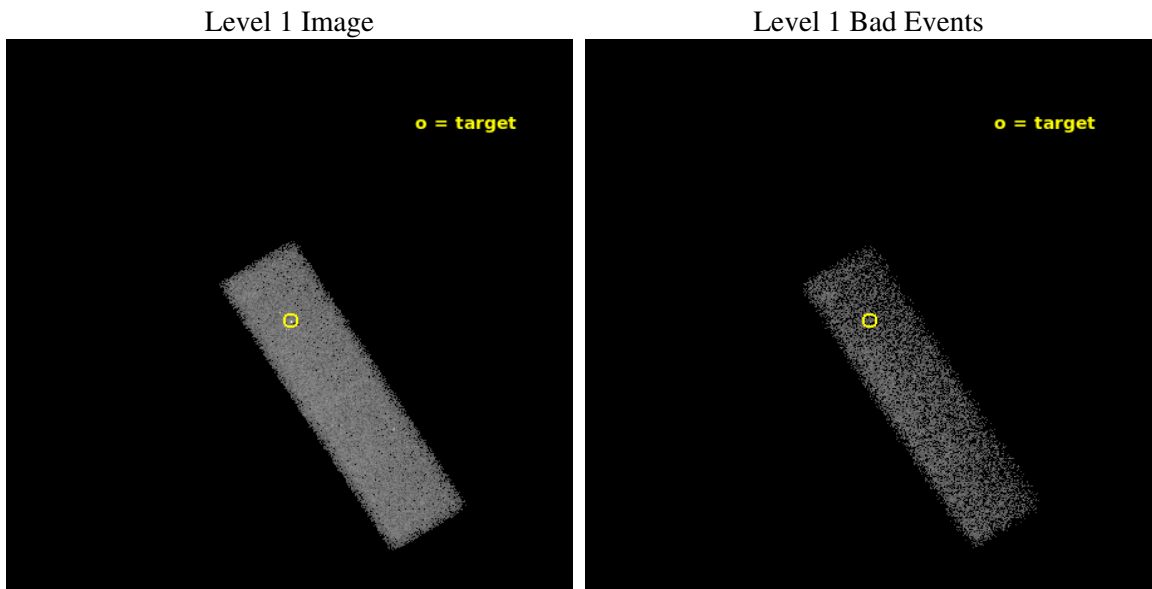
seq_num	502956	Sequence number
obs_id	19698	Observation id
title	PSR J2032+4127: A Be/Gamma-ray Pulsar Binary Heading Toward Periastron	Proposal title
observer	Jules Halpern	Principal investigator
object	PSR J2032+4127	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	308.054583	Observer's specified target RA [deg]
dec_targ	41.456806	Observer's specified target Dec [deg]
ra_nom	308.05591563238	Nominal RA [deg]
dec_nom	41.455642073461	Nominal Dec [deg]
roll_nom	58.076554391432	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30660.43561697	Sum of GTIs [s]
livetime	29164.306684077	Livetime [s]
ontime7	30660.43561697	Sum of GTIs [s]
l2events	37590	Number of level 2 events



## 2 OBI

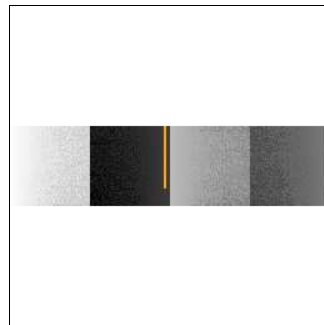
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30600.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	30660.43561697	Sum of GTIs [s]
caldbver	4.9.3	&#160	ontime7	30660.43561697	Sum of GTIs [s]
date	2020-10-25T03:29:38	Date and time of file creation	l1events	77761	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

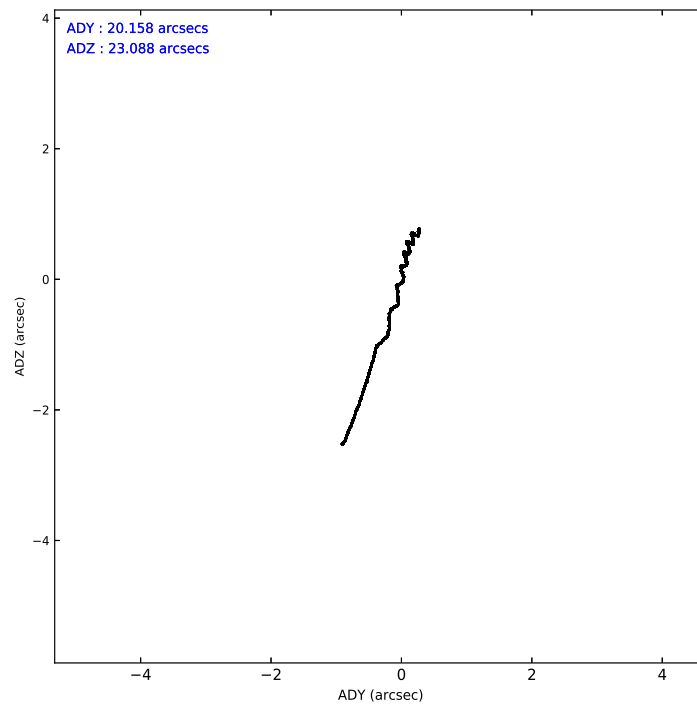
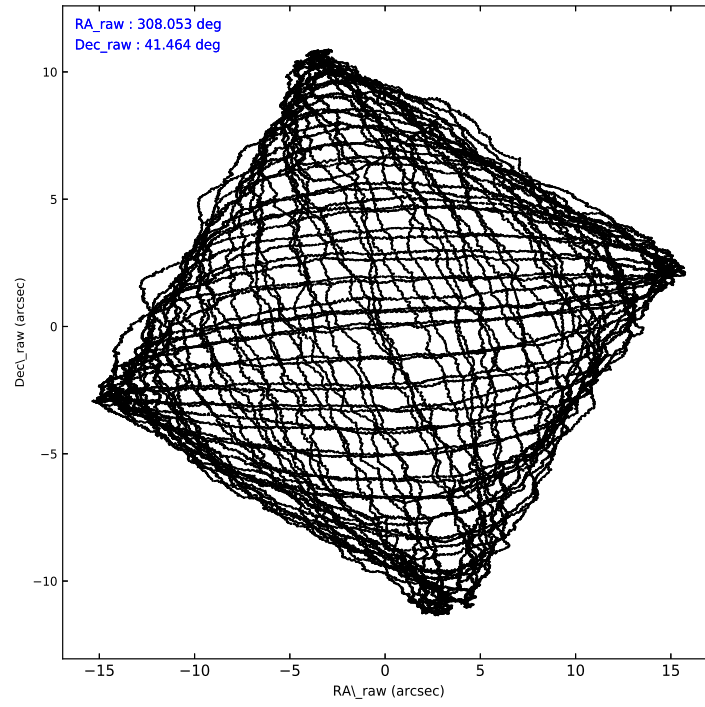
	<b>ccd 7</b>
level 1 events	77761
rejected events	38952
rejected %	50%

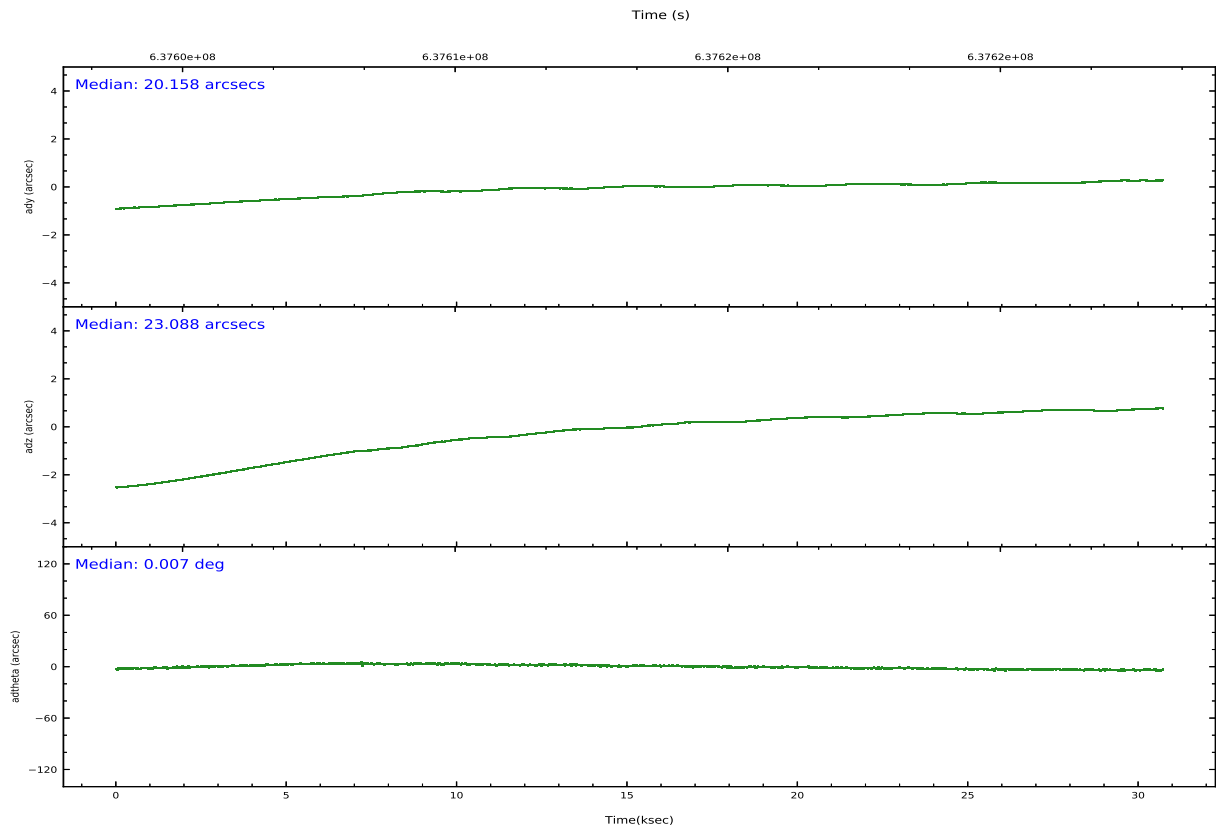
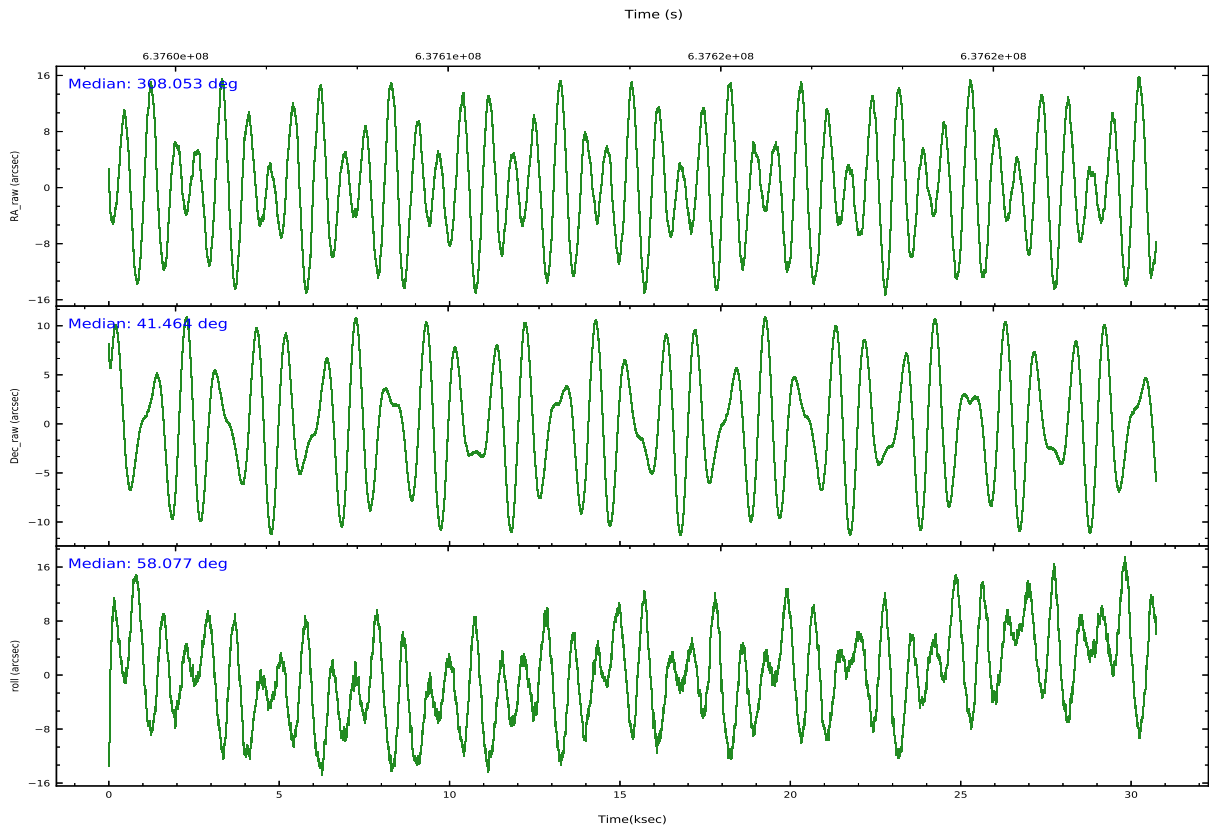
	<b>ccd 7</b>
grade 0 events	4236
	5%
grade 1 events	127
	0%
grade 2 events	8218
	10%
grade 3 events	4302
	5%
grade 4 events	4274
	5%
grade 5 events	7764
	9%
grade 6 events	17782
	22%
grade 7 events	31058
	39%

## 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	308.051834	308.05591563238	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	41.436524	41.455642073461	Subarray start row	385	385
[deg] Pointing Roll	57.930718	58.076554391432	Subarray row count	256	256
[s] Window start time (MET)	636422469.184000	636422469.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	641692869.184000	641692869.184000	[s] Primary exposure time	0.000000	0.8
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	637598176.184000	637596844.53162			
Observation start date	2018-03-16T14:35:07	2018-03-16T14:14:04			
[s] Observation end time (MET)	637628776.184000	637629668.10855			
Observation end date	2018-03-16T23:05:07	2018-03-16T23:21:08			
Read mode	TIMED	TIMED			

## 2.3 Aspect





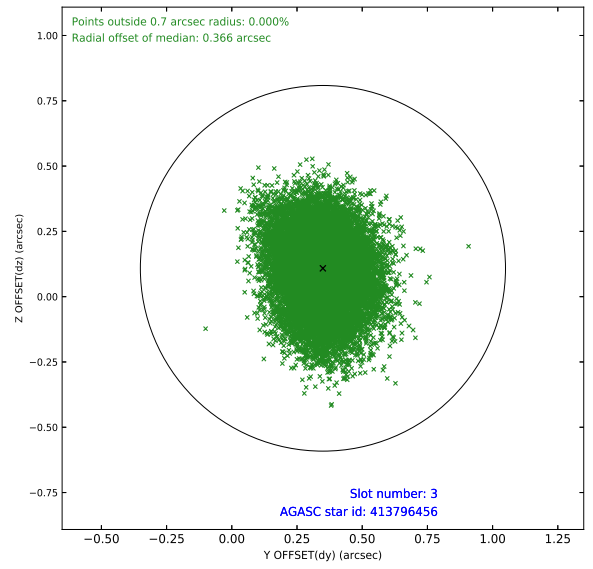
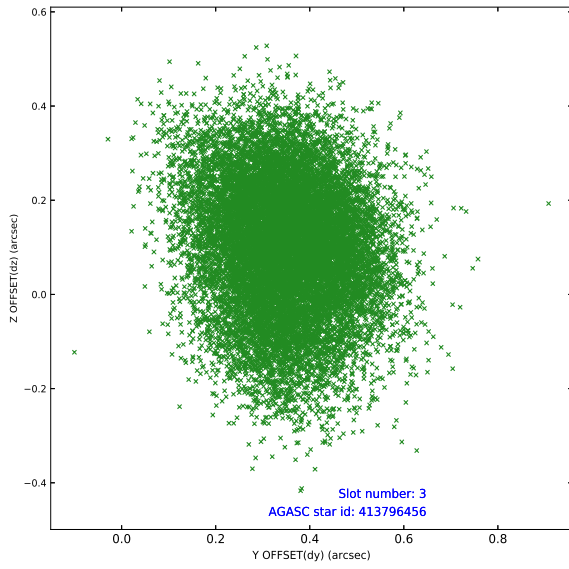
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-4	7.21	7496	1.000	0.177	0.020	0.022	0.037	0.000000	0.000000	2140.41	163
1	FID		ACIS-S-5	7.22	7497	1.000	-0.155	0.030	0.017	0.043	0.000000	0.000000	-1826.04	158
2	FID		ACIS-S-6	7.37	7496	1.000	-0.049	-0.036	0.012	0.017	0.000000	0.000000	388.49	801
3	GUIDE	used	413796456	8.67	14988	1.000	0.349	0.109	0.184	0.297	308.312084	40.613132	-2132.81	-2175
4	GUIDE	used	413805792	7.31	14993	1.000	0.008	0.244	0.126	0.214	307.778748	40.858024	-2157.87	-474
5	GUIDE	used	414324952	9.00	14978	1.000	-0.043	-0.178	0.136	0.236	307.998954	42.060645	1828.87	1312
6	GUIDE	used	414326136	7.35	14990	1.000	-0.057	0.036	0.144	0.246	308.256176	41.473642	407.34	-395
7	GUIDE	used	414322472	8.50	14977	1.000	-0.263	-0.202	0.122	0.218	307.661586	42.199898	1777.94	2342

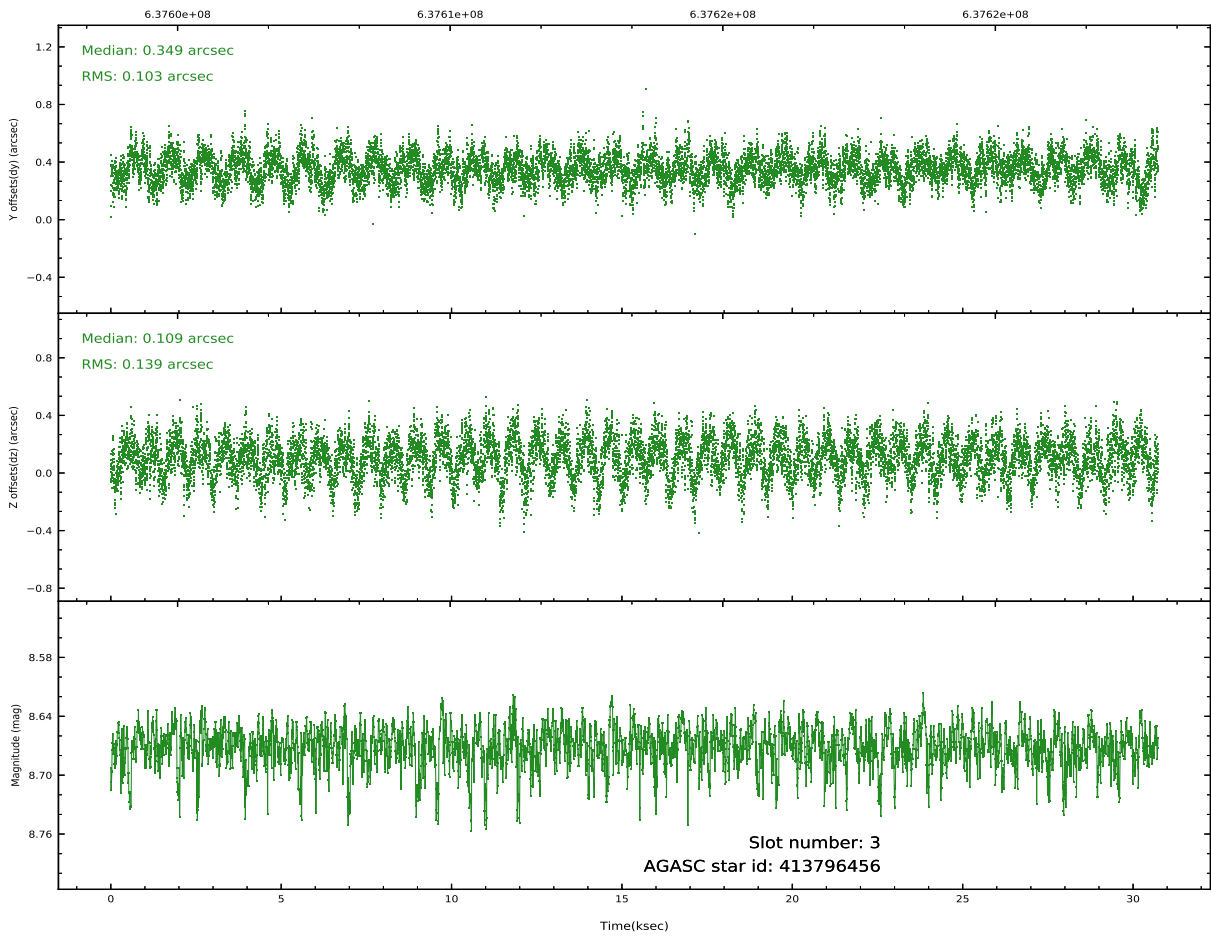
∞

## 2.4 Star Slots

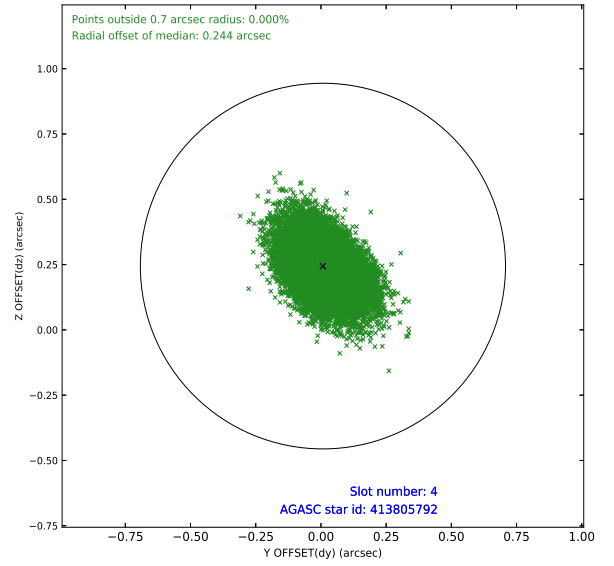
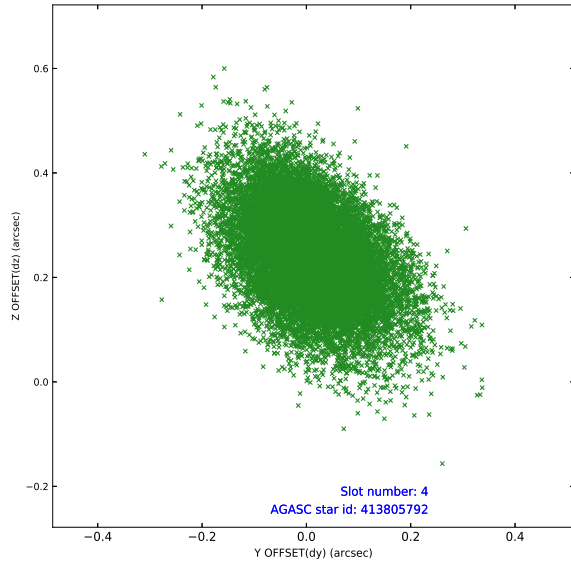
### 2.4.1 Slot 3



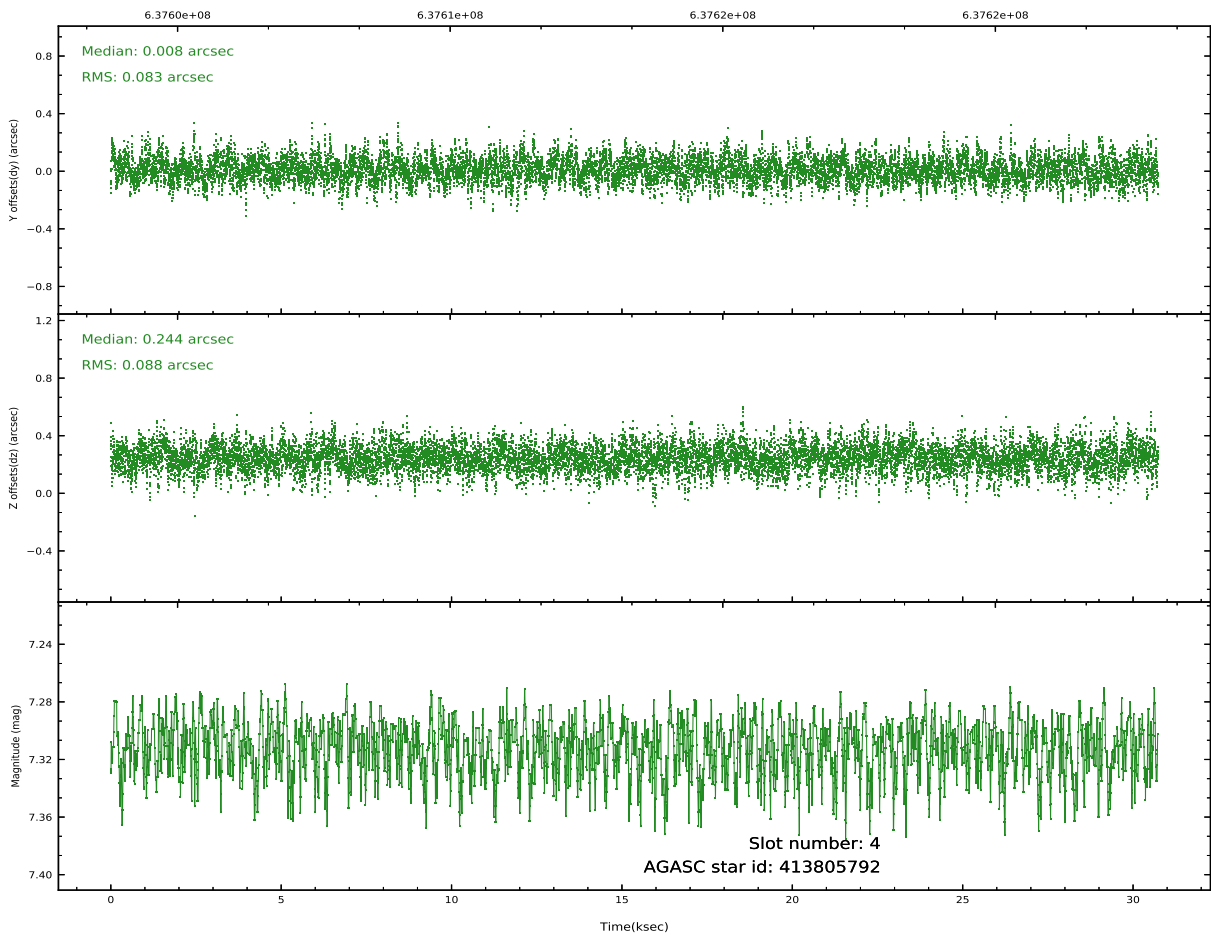
Time (s)



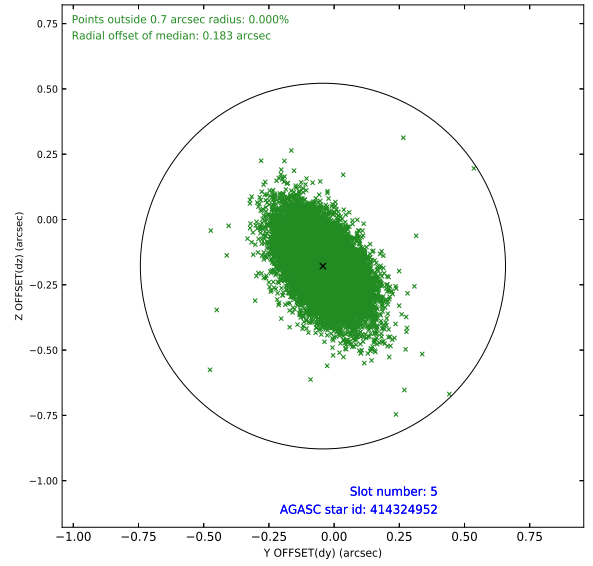
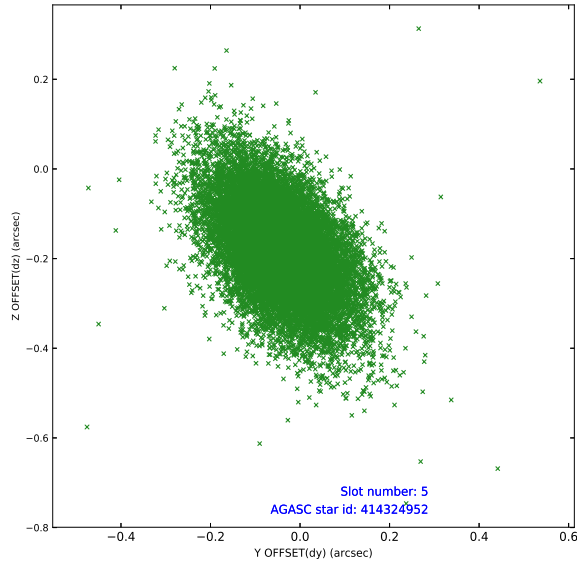
## 2.4.2 Slot 4



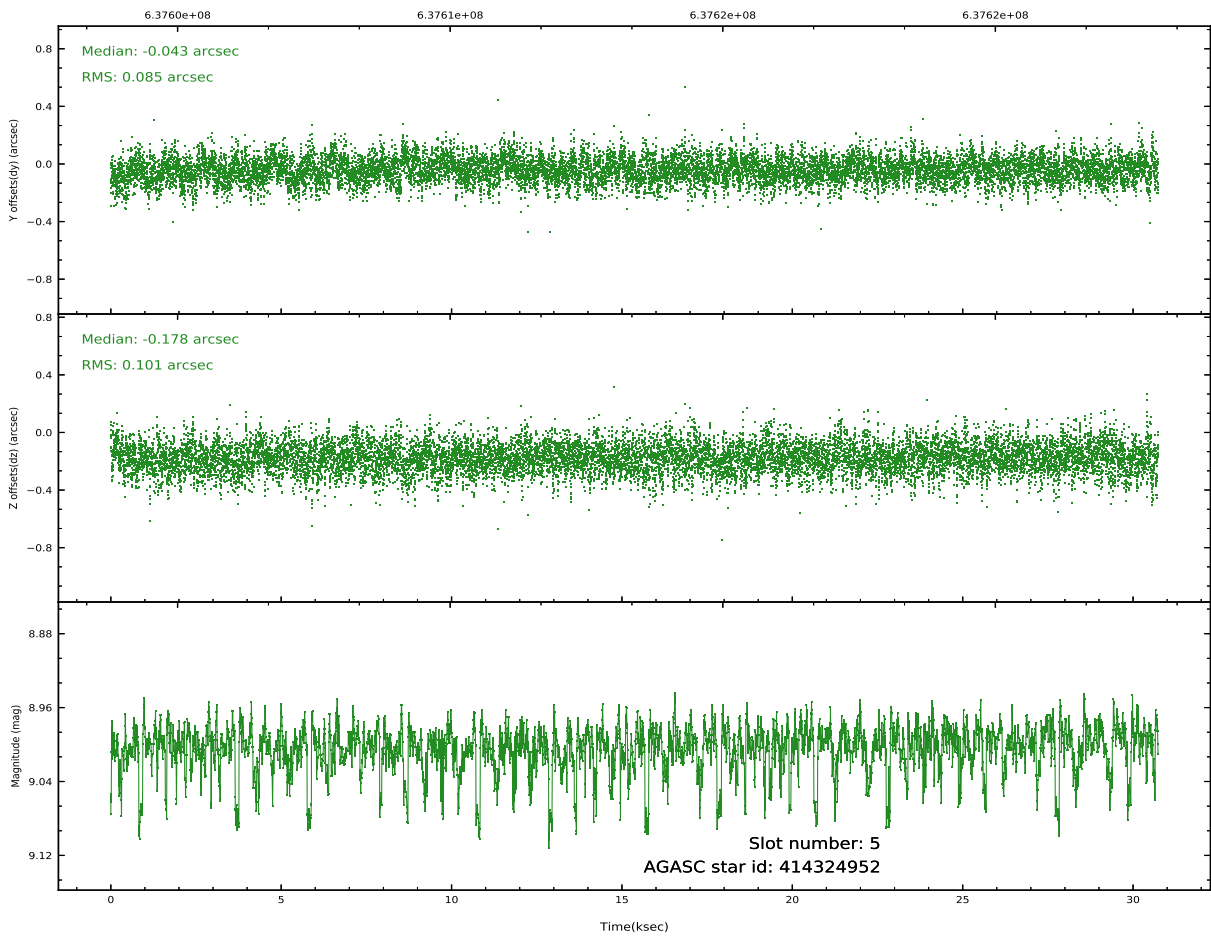
Time (s)



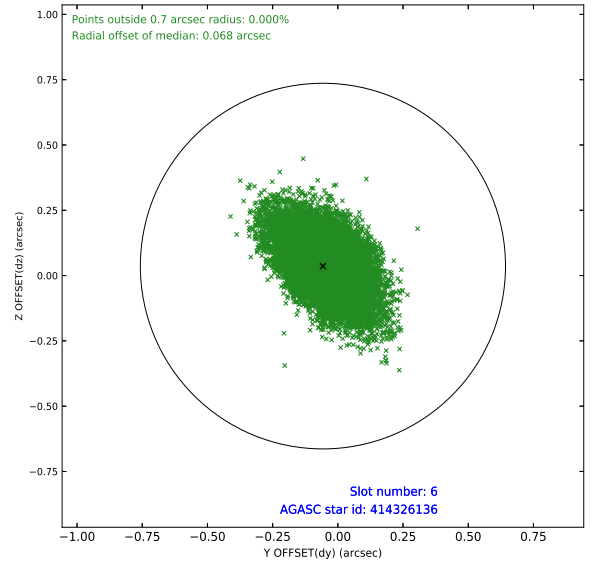
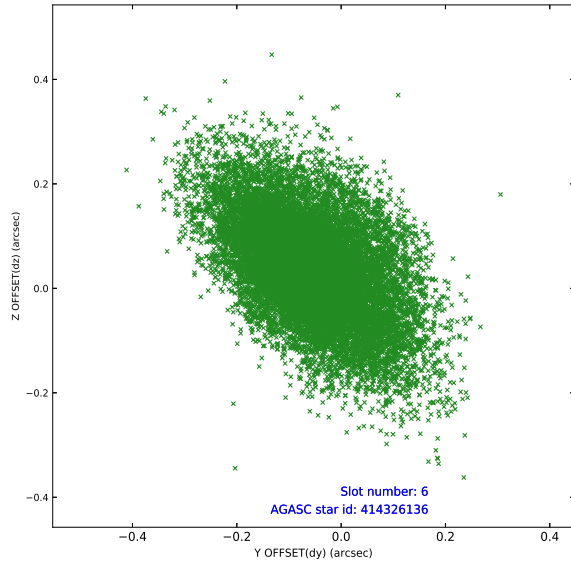
### 2.4.3 Slot 5



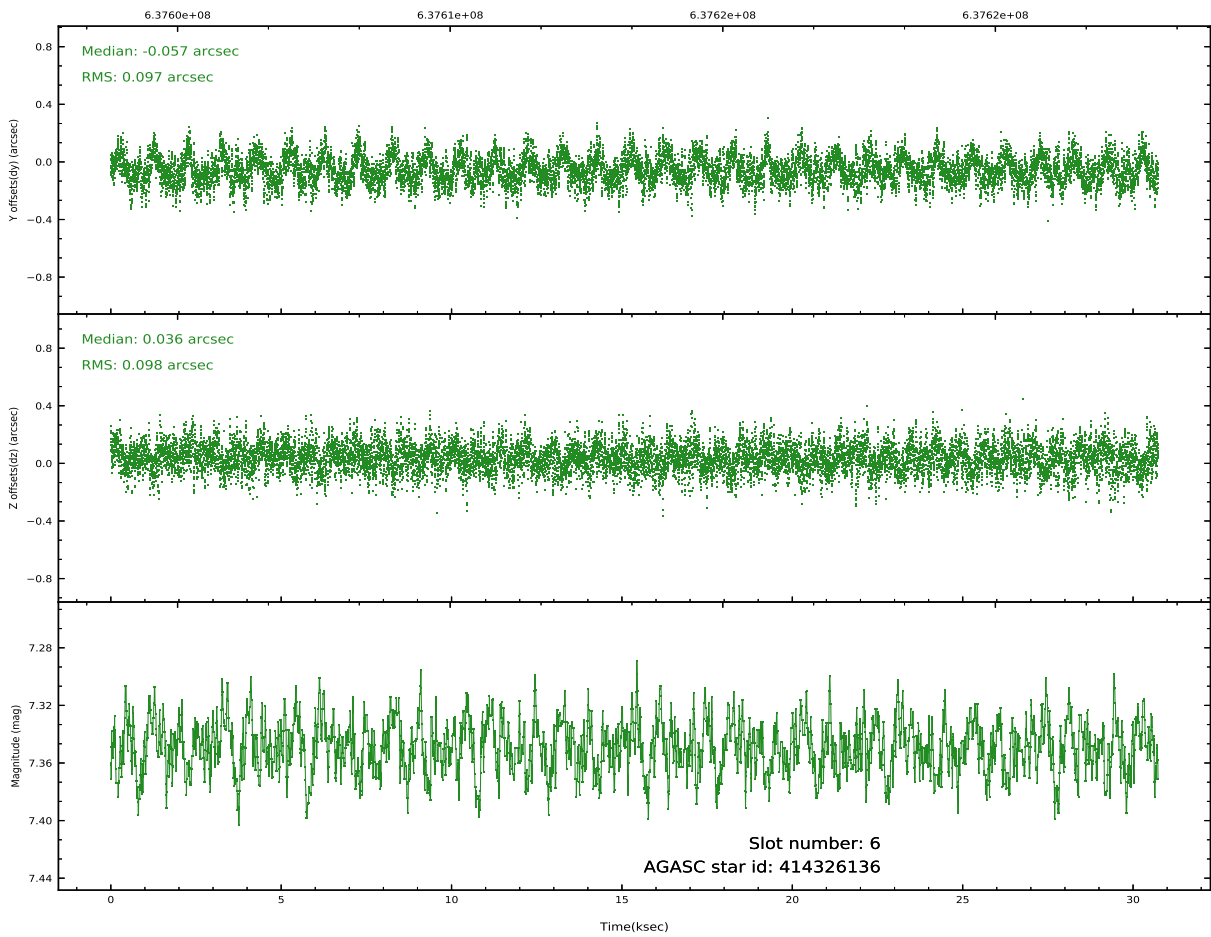
Time (s)



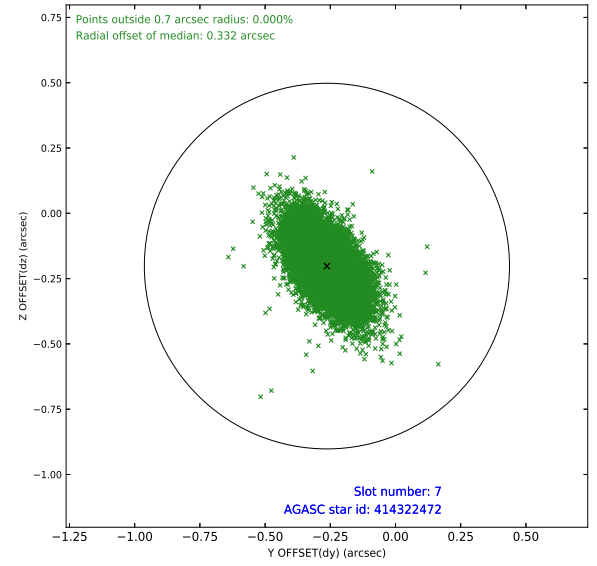
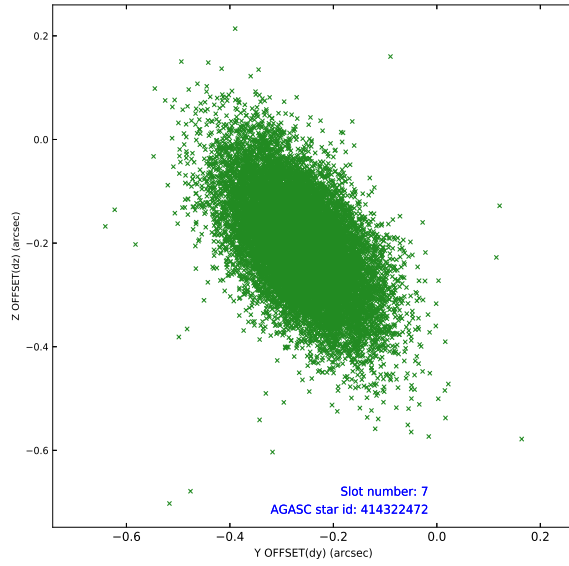
## 2.4.4 Slot 6



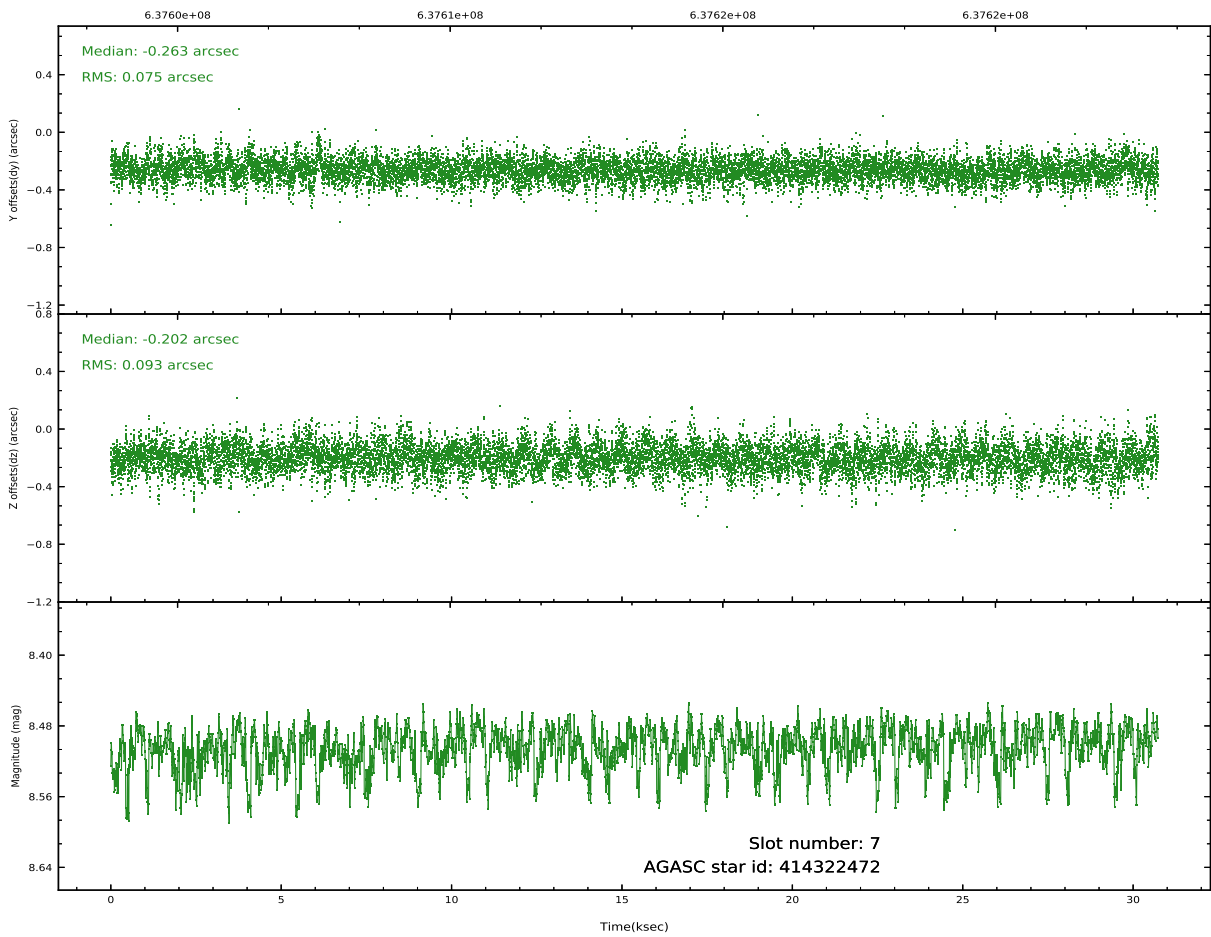
Time (s)



## 2.4.5 Slot 7

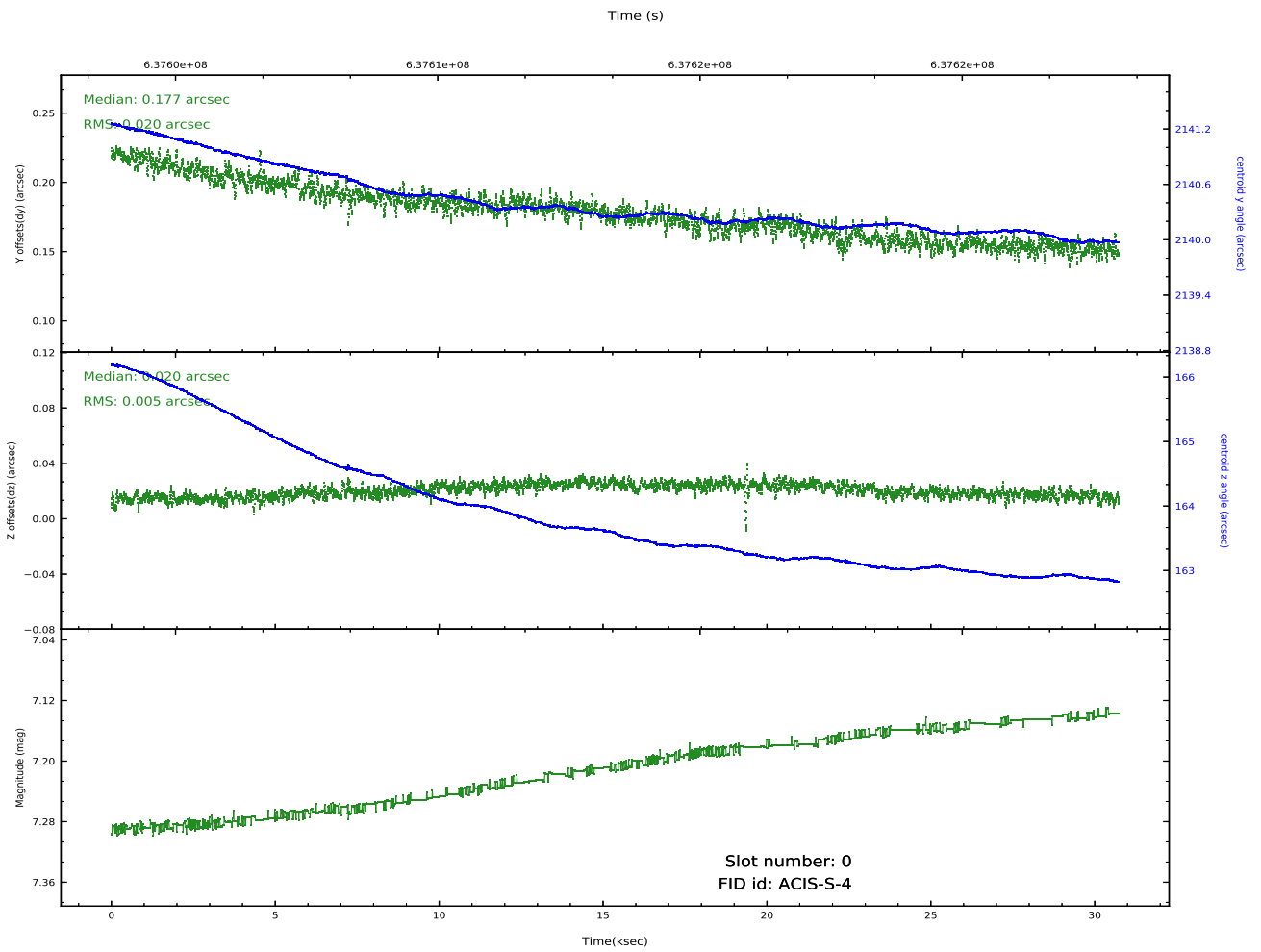
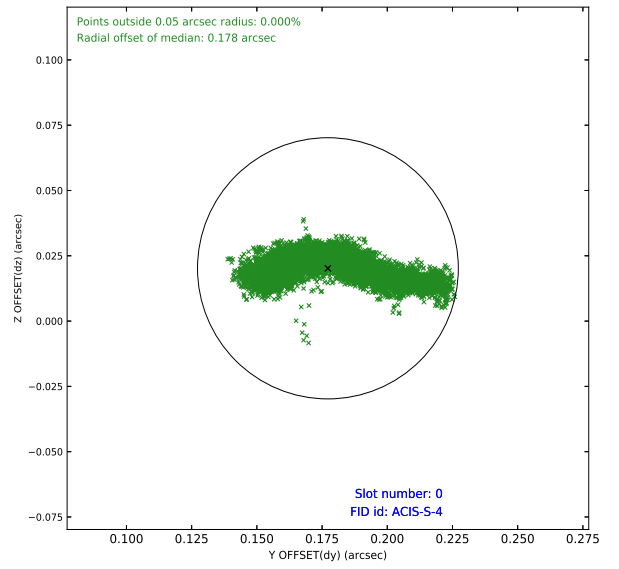
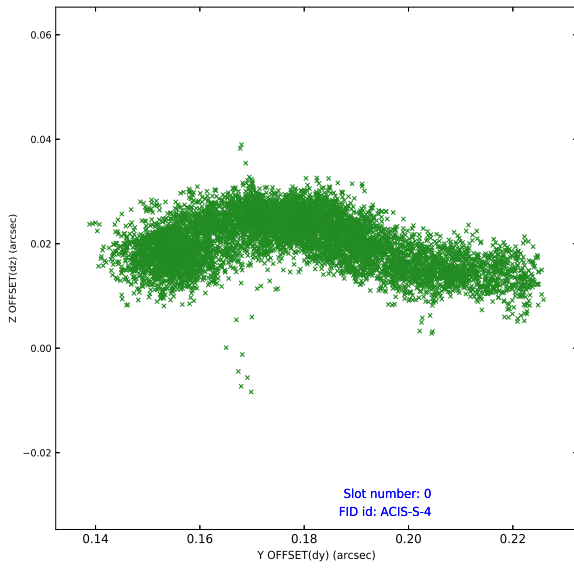


Time (s)

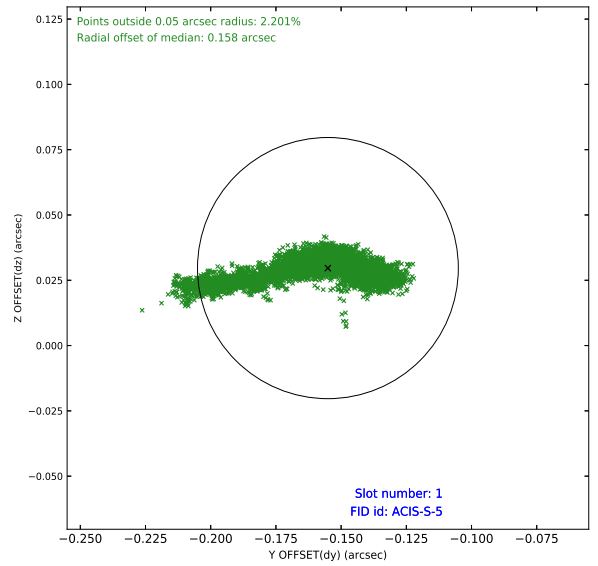
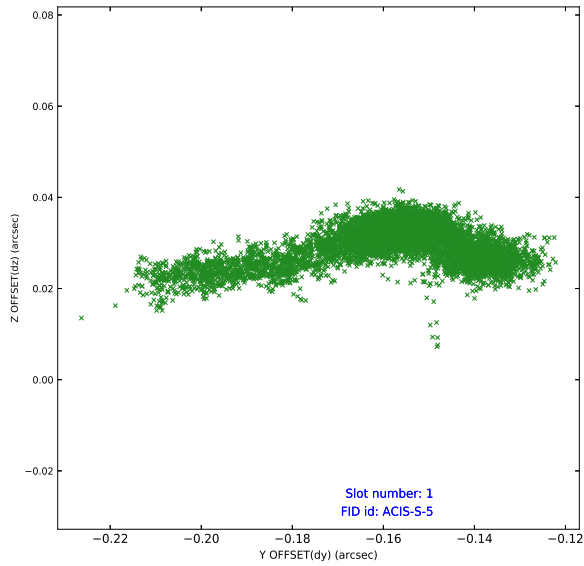


## 2.5 FID Slots

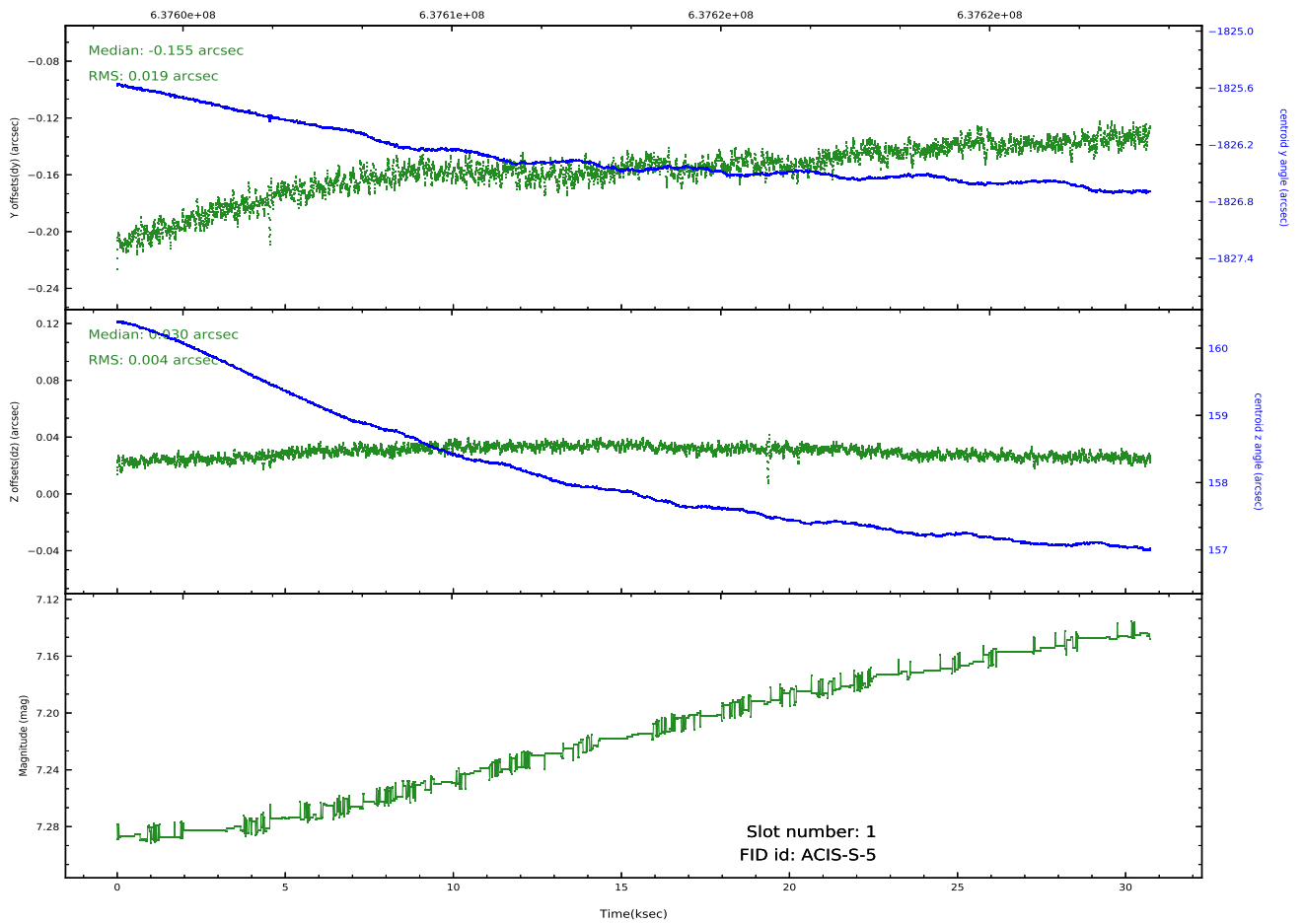
### 2.5.1 Slot 0



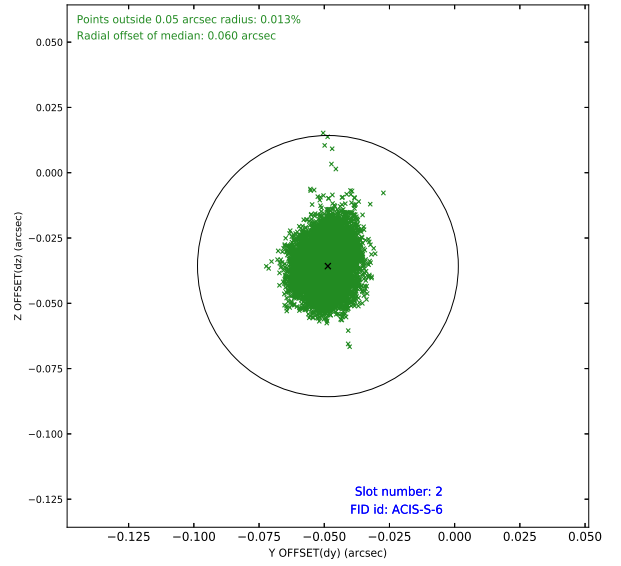
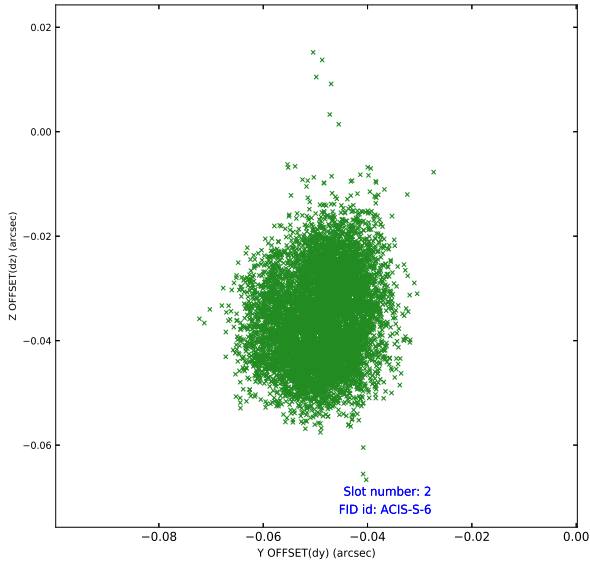
## 2.5.2 Slot 1



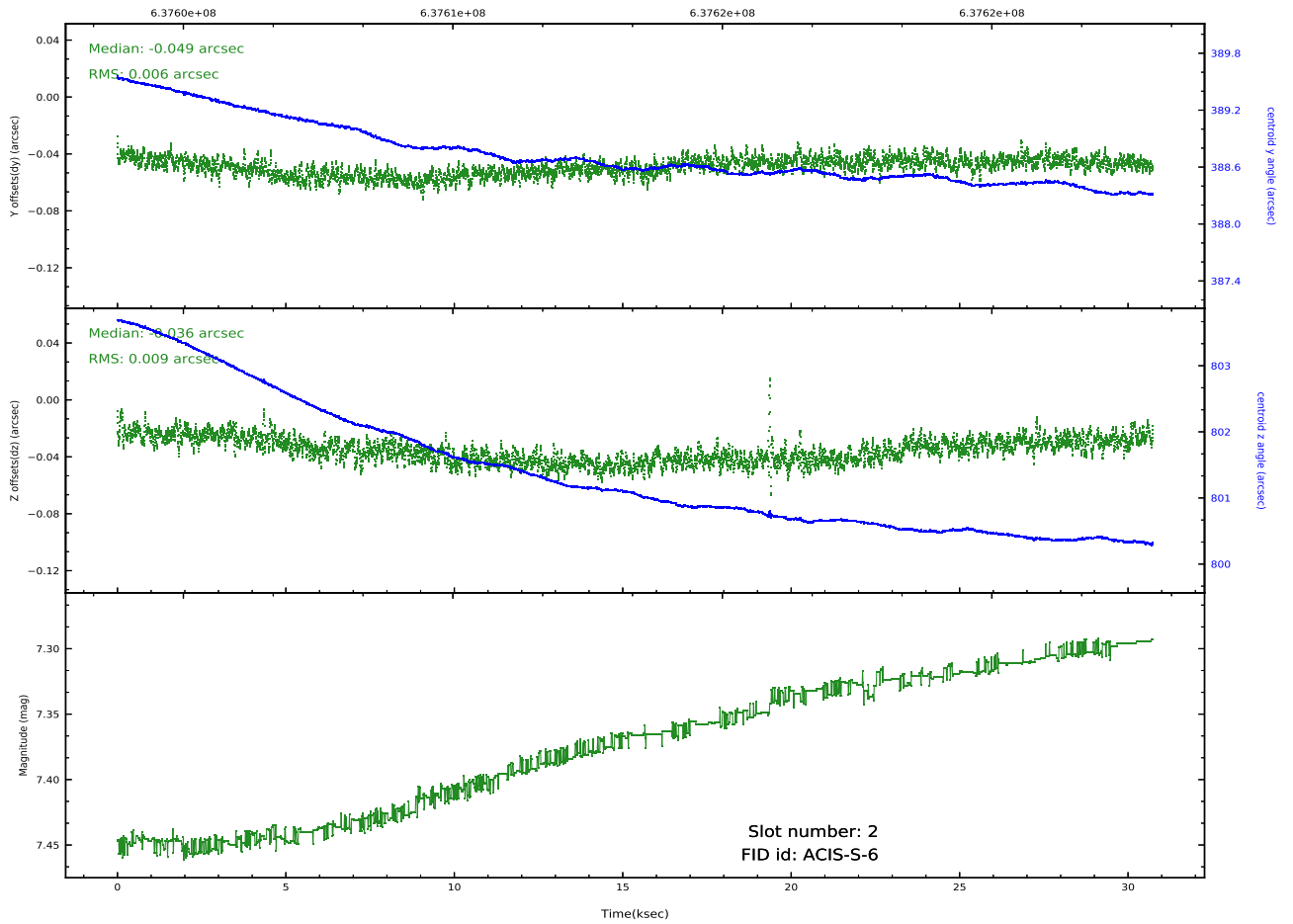
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.660435614109

## A.2 Comments

Window constraint was met.