

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5368 - L2 Version 5  
Chandra X-Ray Center

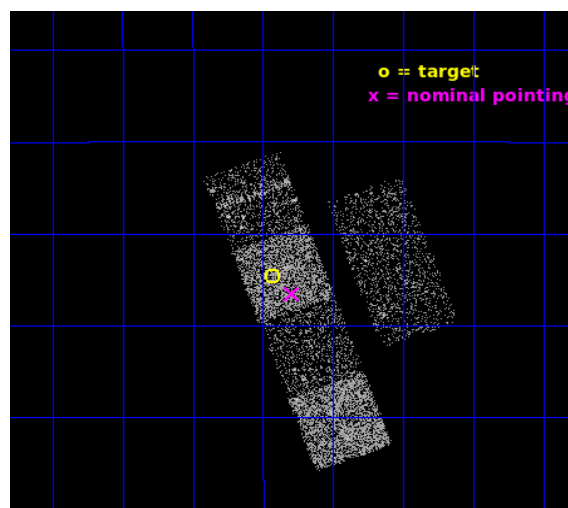
L2 Processing Date : Oct 9 2020

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# 1 Front

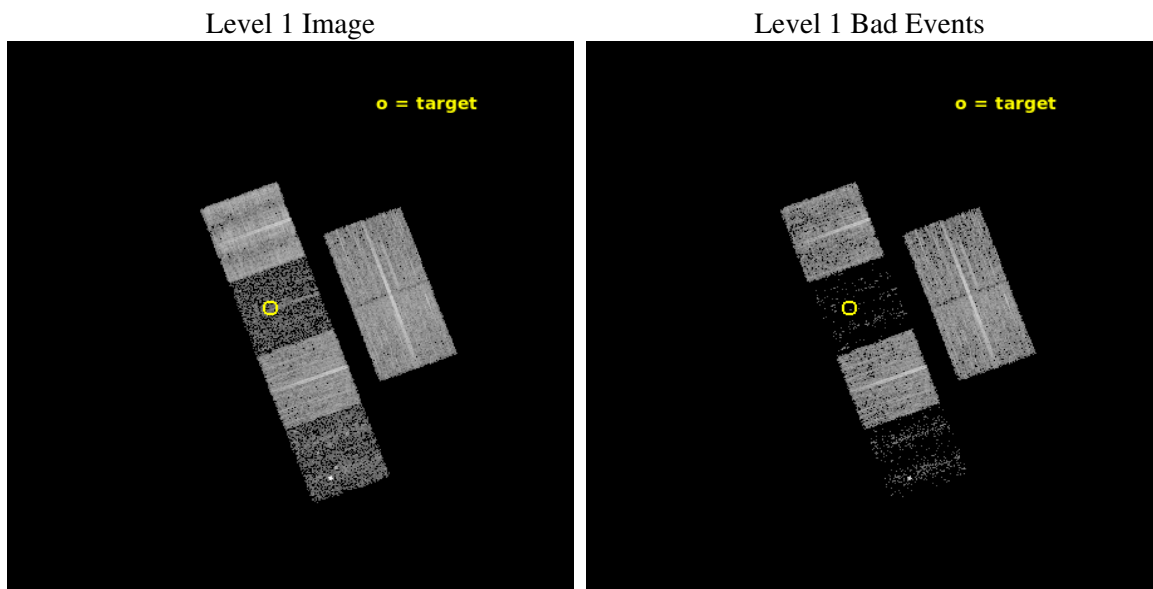
seq_num	100056	Sequence number
obs_id	5368	Observation id
title	Comet 9P/Tempel 1 During the Deep Impact Encounter	Proposal title
observer	Carey Lisse	Principal investigator
object	Comet 9P/Tempel 1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.733569	Observer's specified target RA [deg]
dec_targ	-12.244569	Observer's specified target Dec [deg]
ra_nom	207.69846691608	Nominal RA [deg]
dec_nom	-12.275765974112	Nominal Dec [deg]
roll_nom	249.70478913255	Nominal Roll [deg]
revision	5	Processing version of data
ontime	8316.0842276812	Sum of GTIs [s]
livetime	8210.7809618455	Livetime [s]
ontime2	8316.1252676845	Sum of GTIs [s]
ontime3	8315.9611076713	Sum of GTIs [s]
ontime5	8316.0431876779	Sum of GTIs [s]
ontime6	8316.0021476746	Sum of GTIs [s]
ontime7	8316.0842276812	Sum of GTIs [s]
ontime8	8312.6791073978	Sum of GTIs [s]
l2events	12769	Number of level 2 events



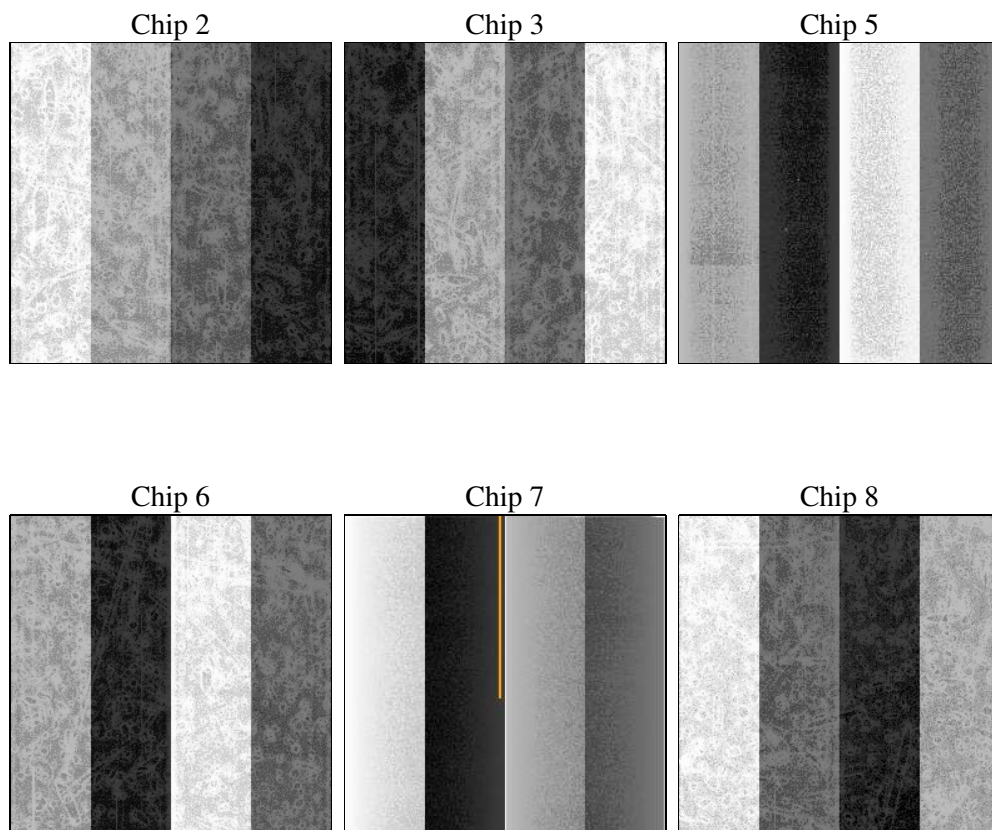
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8350.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	8316.0842276812	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	8316.1252676845	Sum of GTIs [s]
date	2020-10-09T08:28:08	Date and time of file creation	ontime3	8315.9611076713	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	8316.0431876779	Sum of GTIs [s]
			ontime6	8316.0021476746	Sum of GTIs [s]
			ontime7	8316.0842276812	Sum of GTIs [s]
			ontime8	8312.6791073978	Sum of GTIs [s]
			l1events	174805	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	41670	34284	9621	36149	5755	47326
rejected events	39786	33043	3125	34345	1385	31184
rejected %	95%	96%	32%	95%	24%	65%

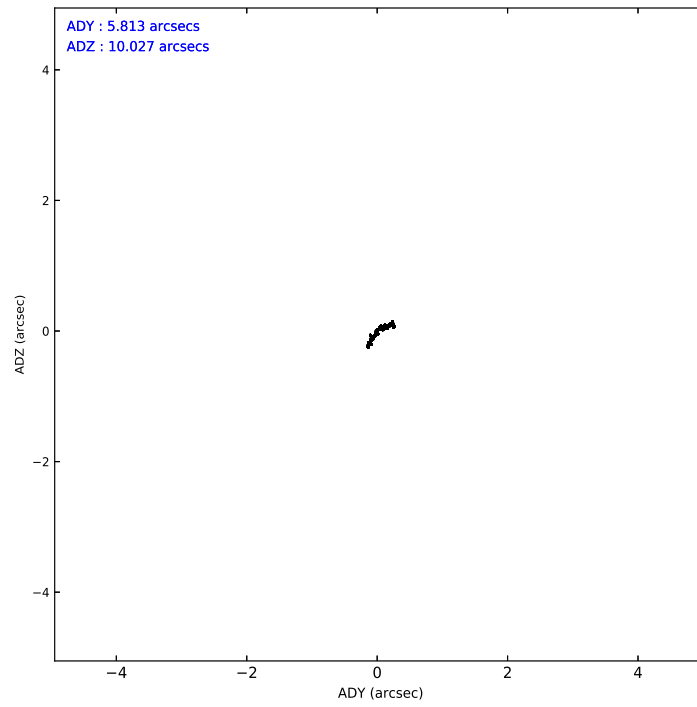
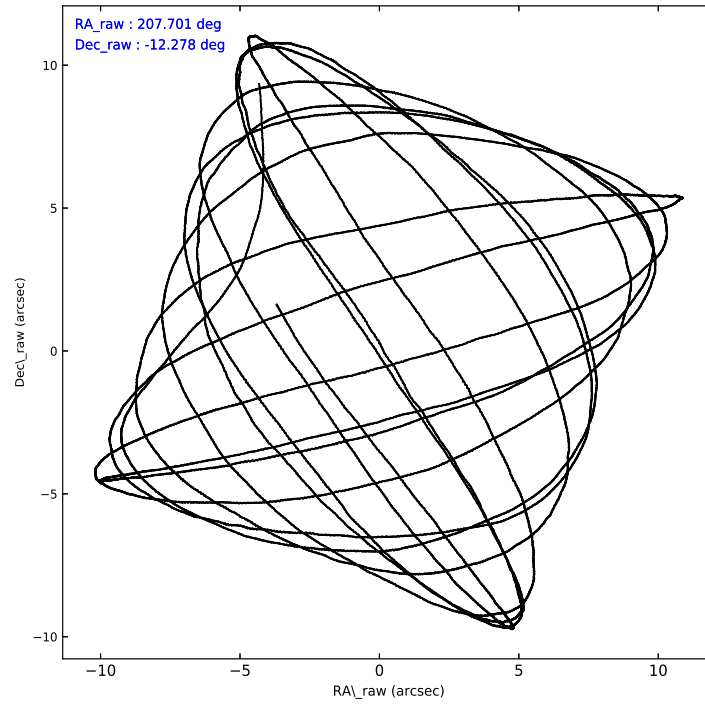
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	907	600	2031	936	1193	5427
	2%	1%	21%	2%	20%	11%
grade 1 events	17	13	47	12	26	67
	0%	0%	0%	0%	0%	0%
grade 2 events	443	163	1947	323	1512	2776
	1%	0%	20%	0%	26%	5%
grade 3 events	180	206	1406	235	634	2687
	0%	0%	14%	0%	11%	5%
grade 4 events	255	192	717	245	623	2337
	0%	0%	7%	0%	10%	4%
grade 5 events	65	26	634	37	163	263
	0%	0%	6%	0%	2%	0%
grade 6 events	174	124	577	125	546	3519
	0%	0%	5%	0%	9%	7%
grade 7 events	39629	32960	2262	34236	1058	30250
	95%	96%	23%	94%	18%	63%

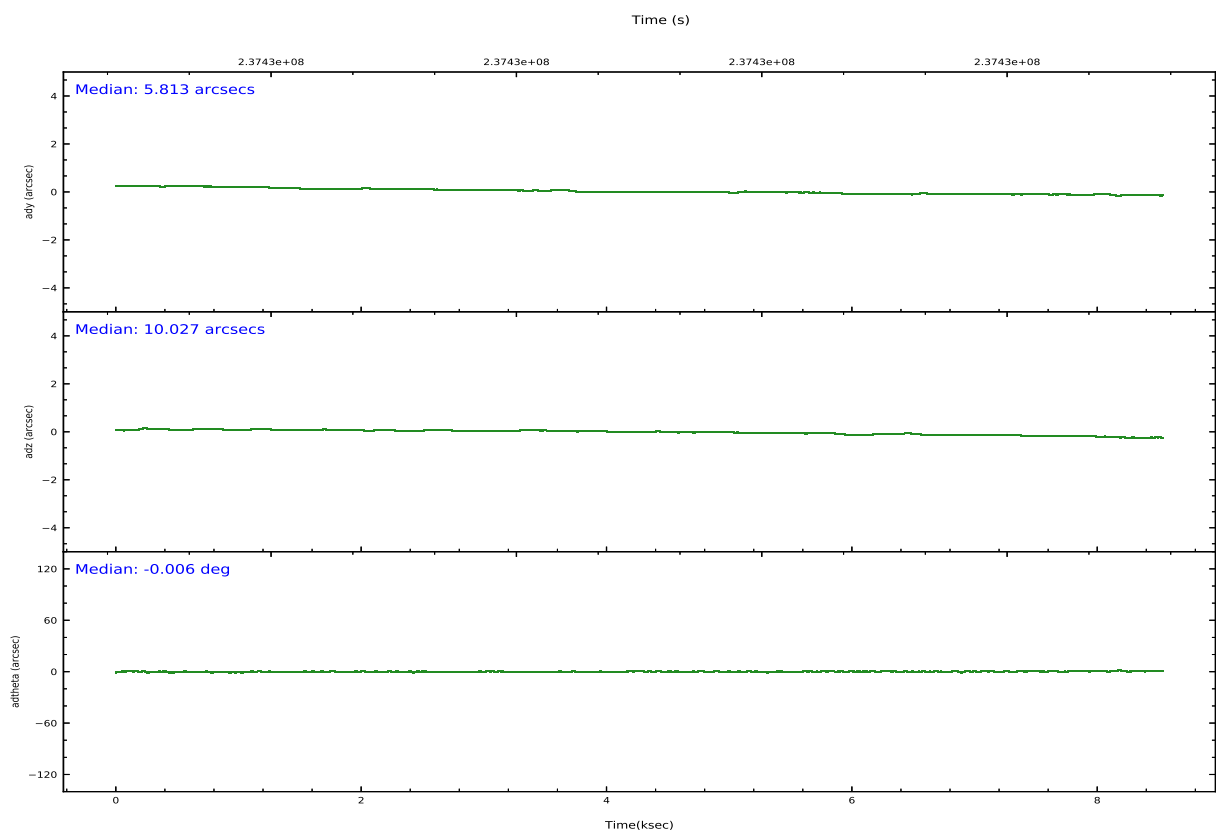
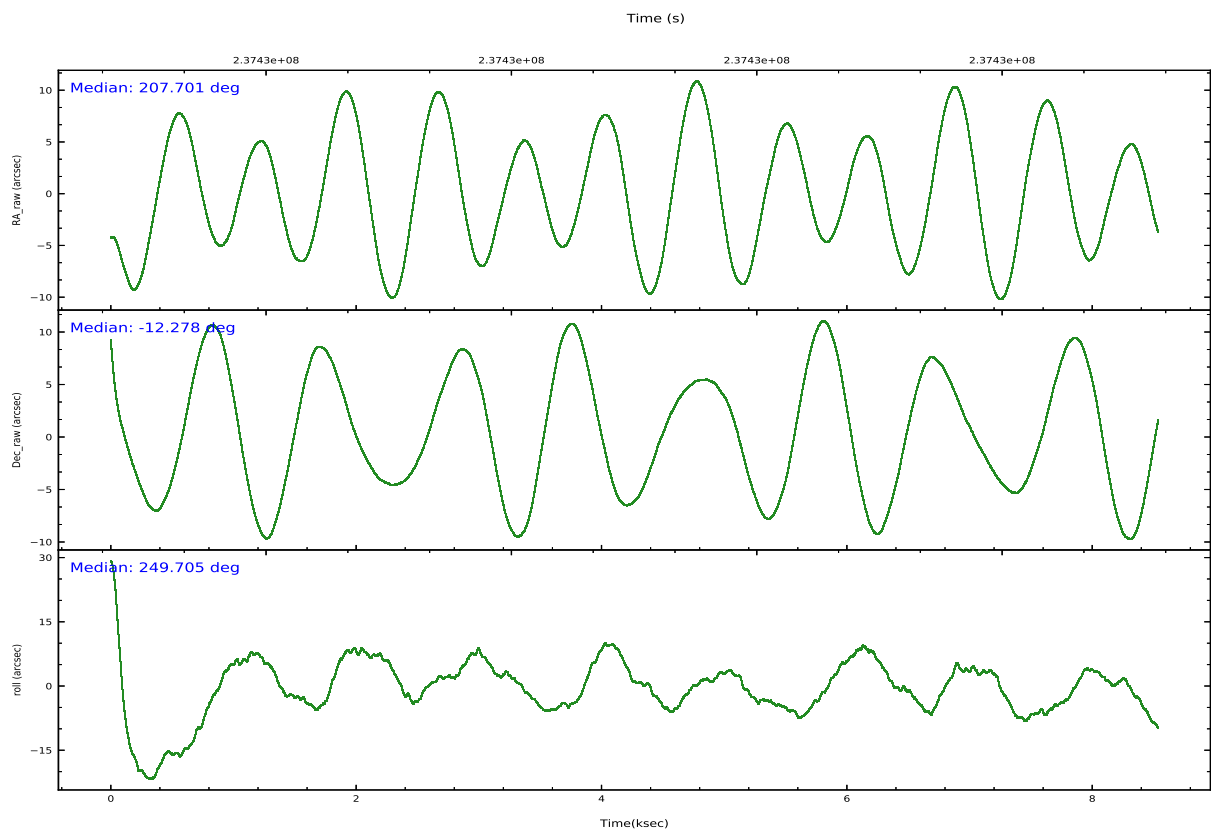


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	207.695618	207.69846691608	Subarray requested	NONE	NONE
[deg] Pointing Dec	-12.251565	-12.275765974112	Alternating exposures requested	N	N
[deg] Pointing Roll	249.551632	249.70478913255	[s] Primary exposure time	0.000000	3.2
[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)	237426921.184000	237425959.12392			
Observation start date	2005-07-10T23:54:17	2005-07-10T23:39:19			
[s] Observation end time (MET)	237435271.184000	237435536.72436			
Observation end date	2005-07-11T02:13:27	2005-07-11T02:18:56			
Read mode	TIMED	TIMED			

## 2.3 Aspect



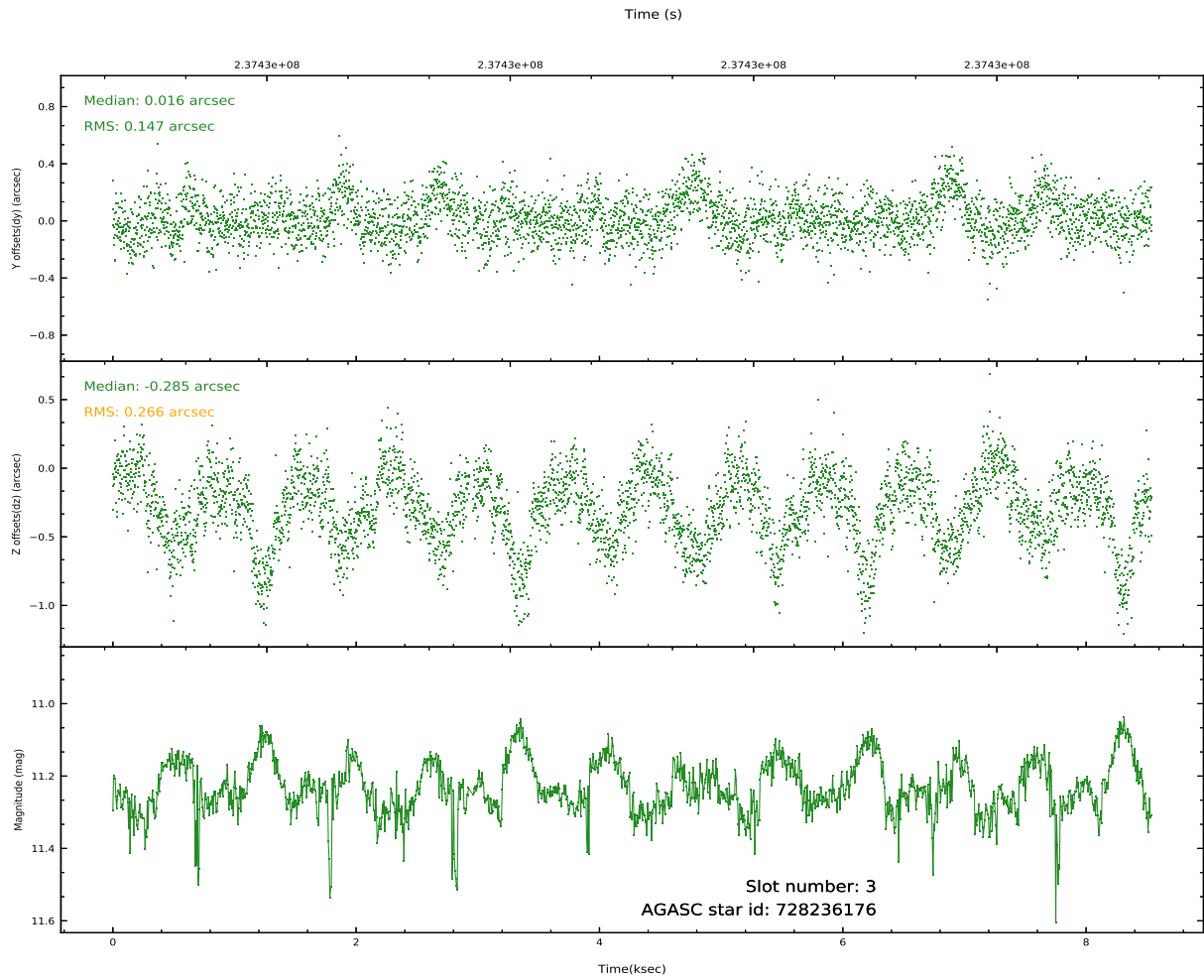
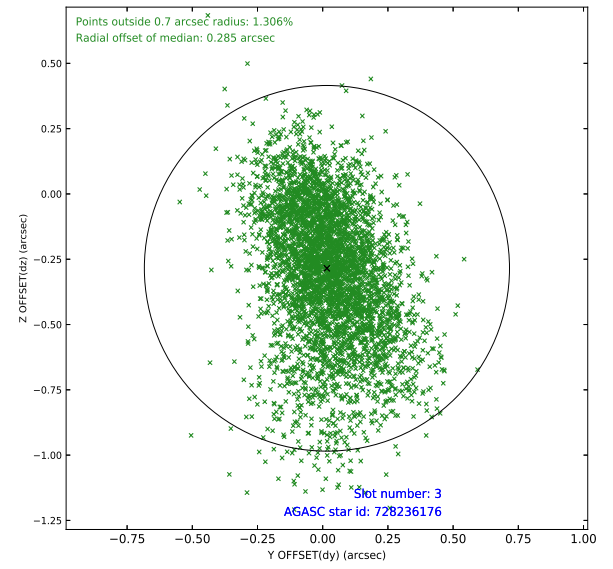
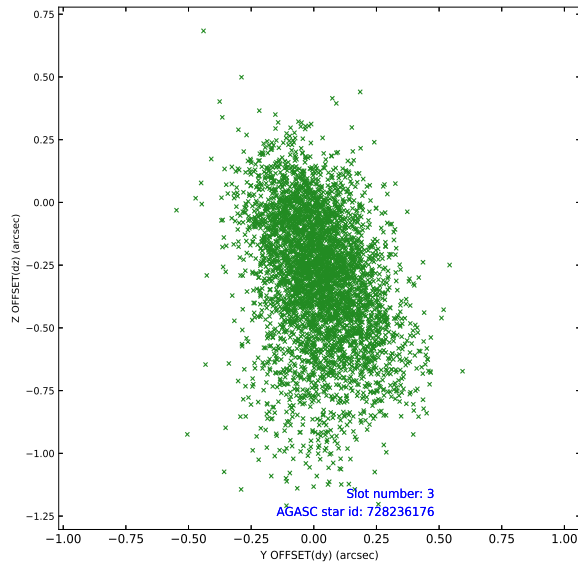


Slot Statistics

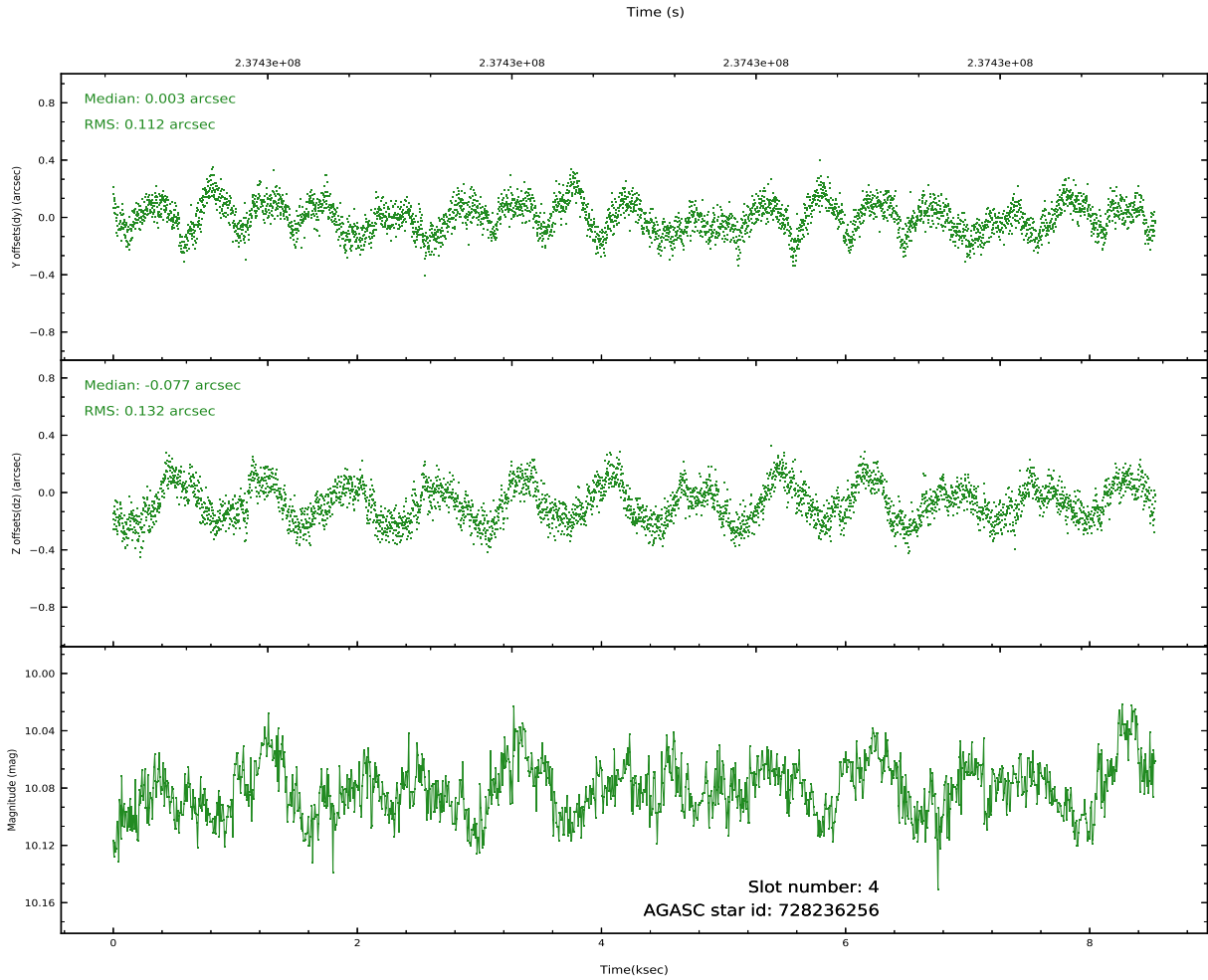
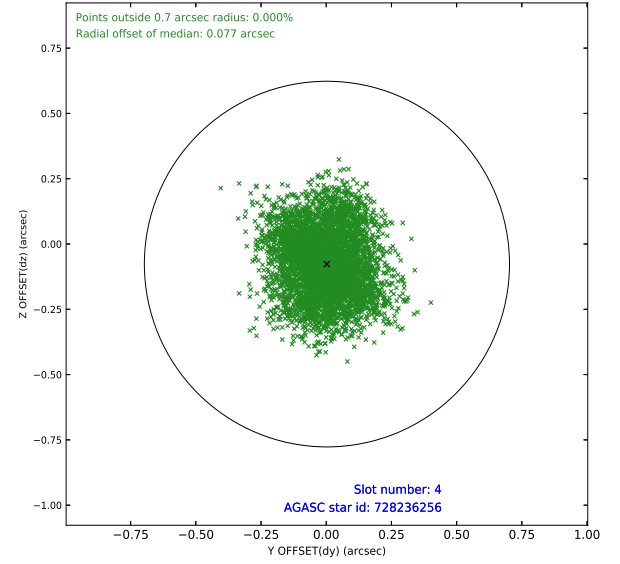
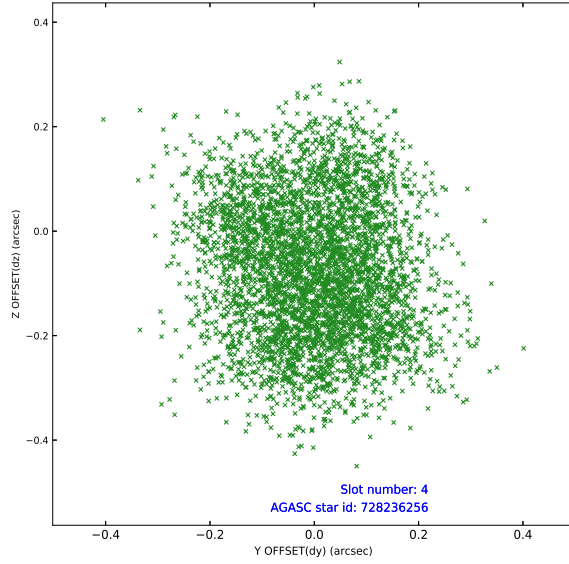
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2083	1.000	-0.102	-0.069	0.008	0.013	0.000000	0.000000	-758.61	-1731
1	FID		ACIS-S-4	7.21	2083	1.000	0.177	0.067	0.006	0.012	0.000000	0.000000	2154.59	176
2	FID		ACIS-S-5	7.23	2083	1.000	-0.106	0.010	0.008	0.013	0.000000	0.000000	-1810.68	170
3	GUIDE	used	728236176	11.23	4134	1.000	0.016	-0.285	0.312	0.562	207.320935	-12.141152	89.64	-1374
4	GUIDE	used	728236256	10.08	4160	1.000	0.003	-0.077	0.191	0.283	207.126175	-12.399367	1200.47	-1689
5	GUIDE	used	728243160	10.06	4098	1.000	-0.134	0.137	0.170	0.274	208.309960	-11.797392	-2286.02	1457
6	GUIDE	used	728246264	10.55	4165	1.000	0.050	-0.031	0.170	0.272	207.655266	-11.635836	-2027.45	-907
7	GUIDE	used	728633928	10.35	4162	1.000	0.055	0.273	0.204	0.322	208.253445	-12.706055	849.81	2408

## 2.4 Star Slots

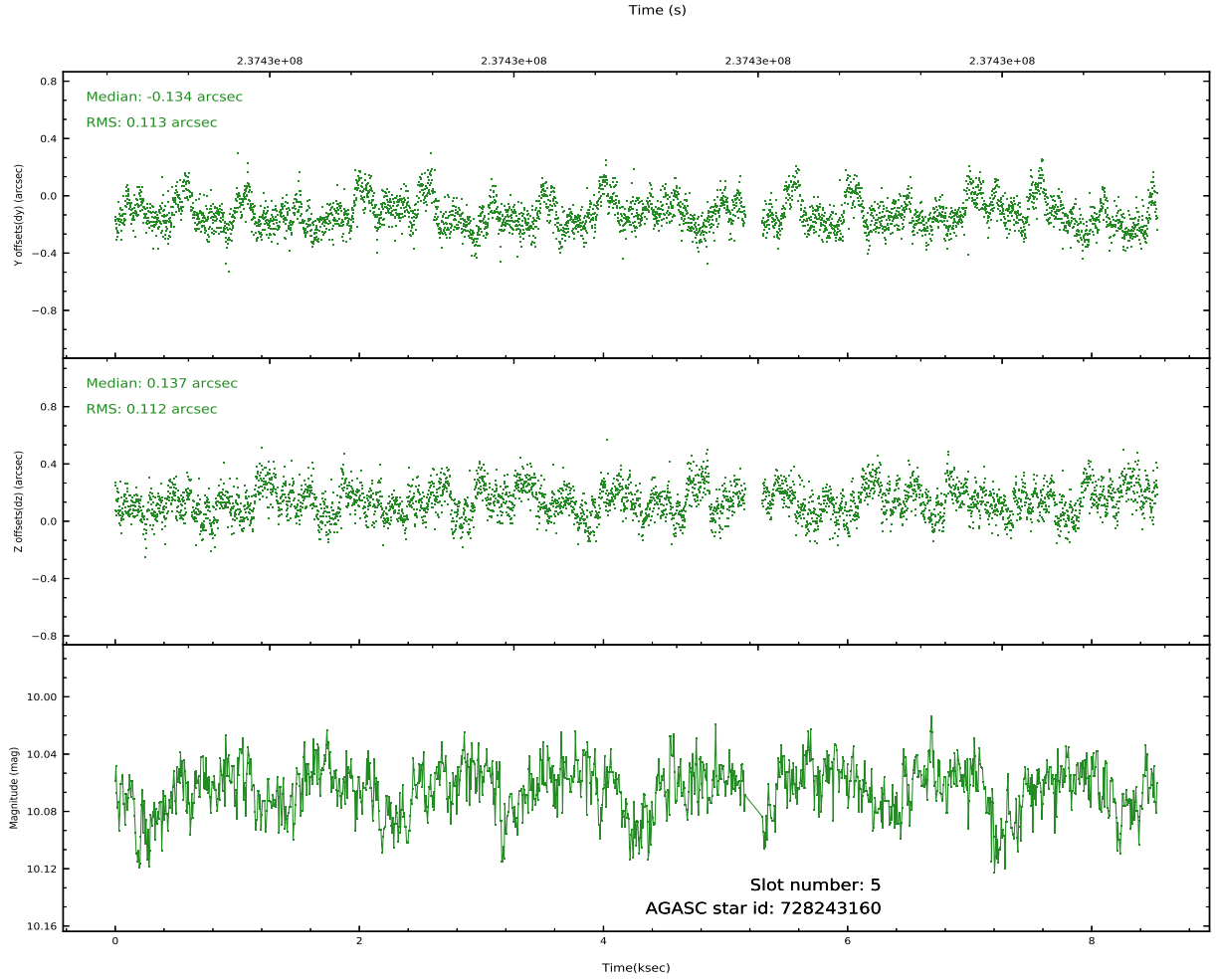
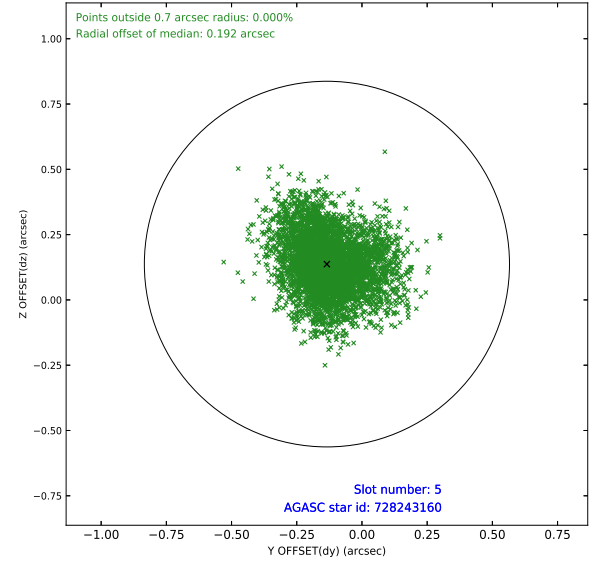
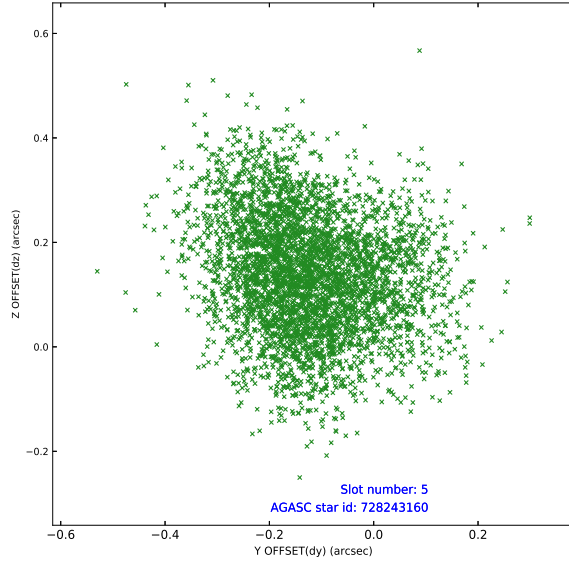
### 2.4.1 Slot 3



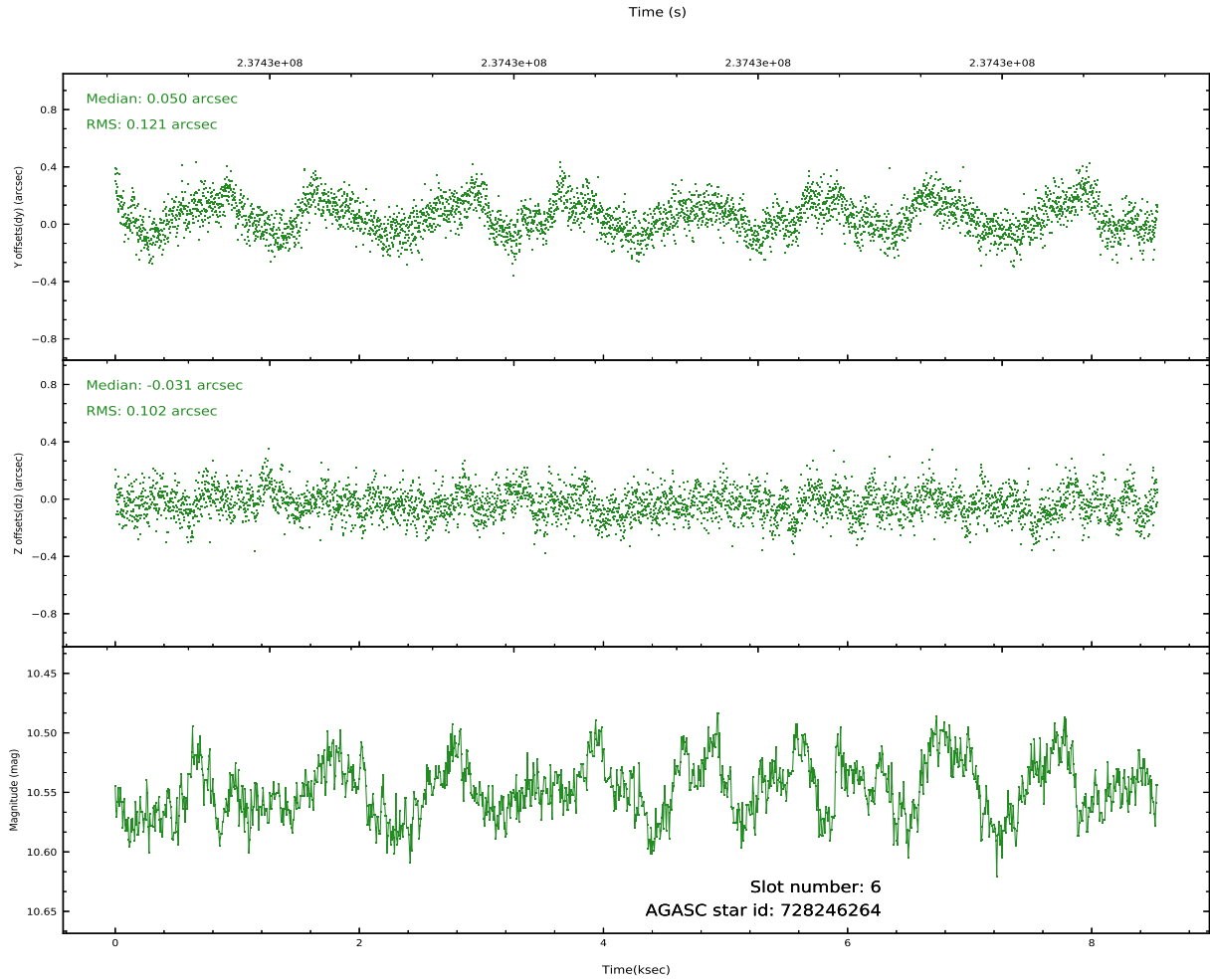
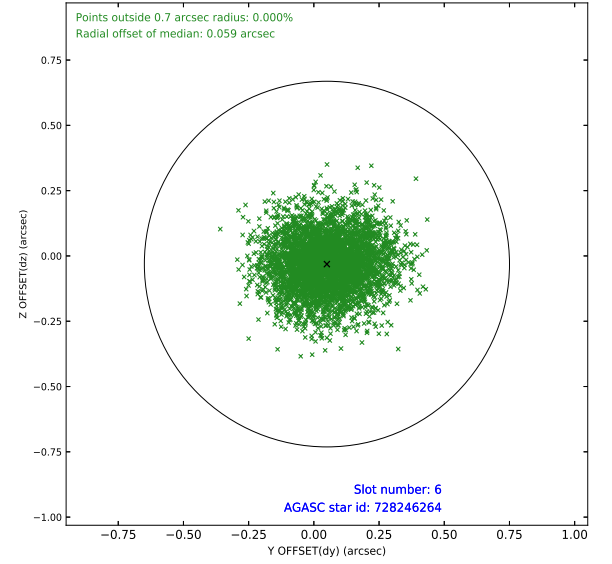
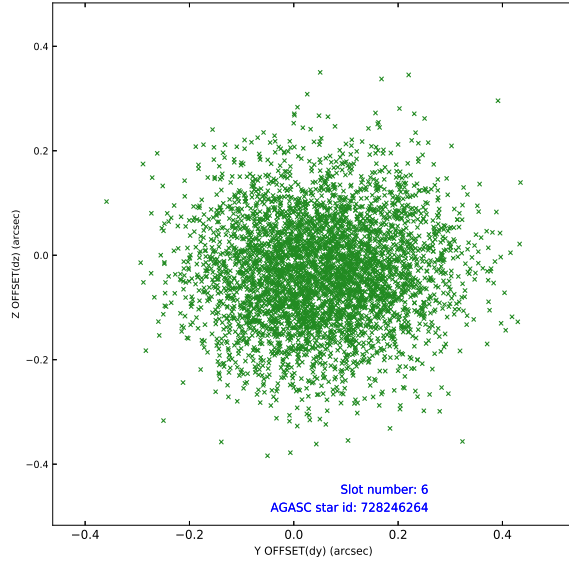
## 2.4.2 Slot 4



### 2.4.3 Slot 5

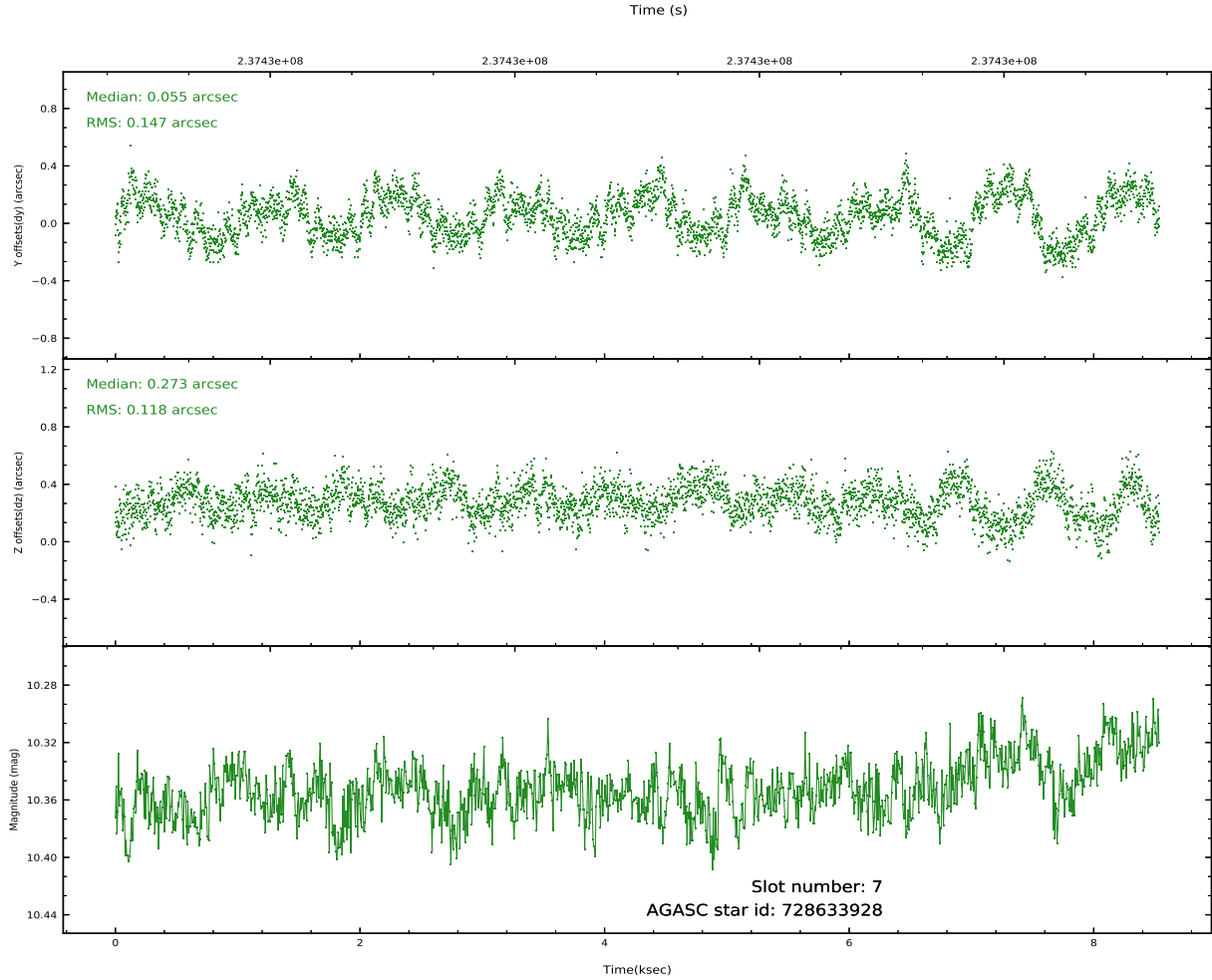
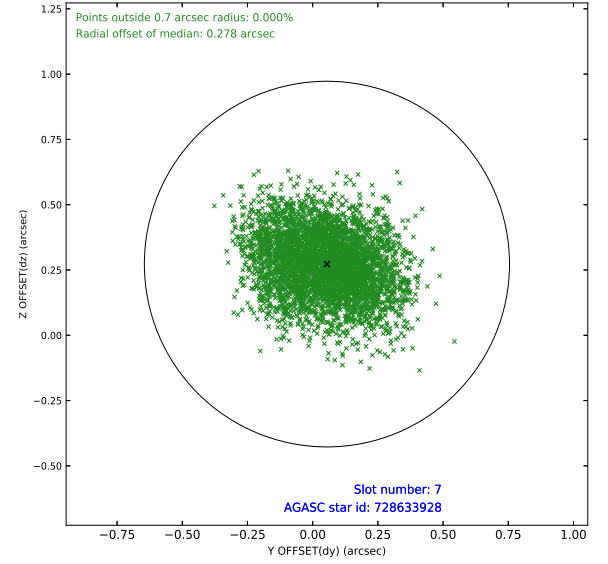
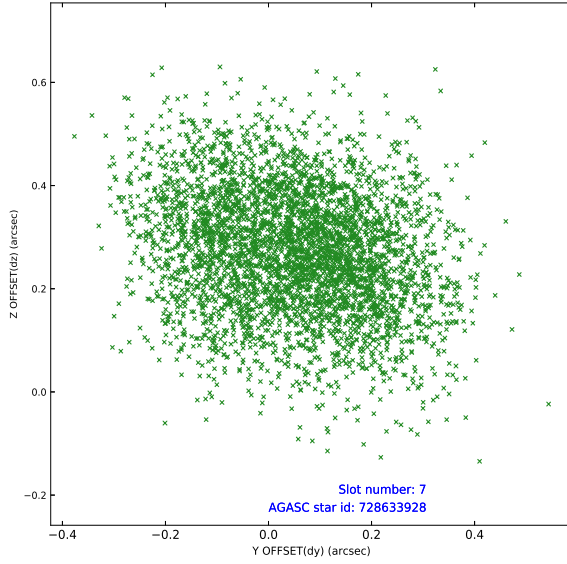


## 2.4.4 Slot 6



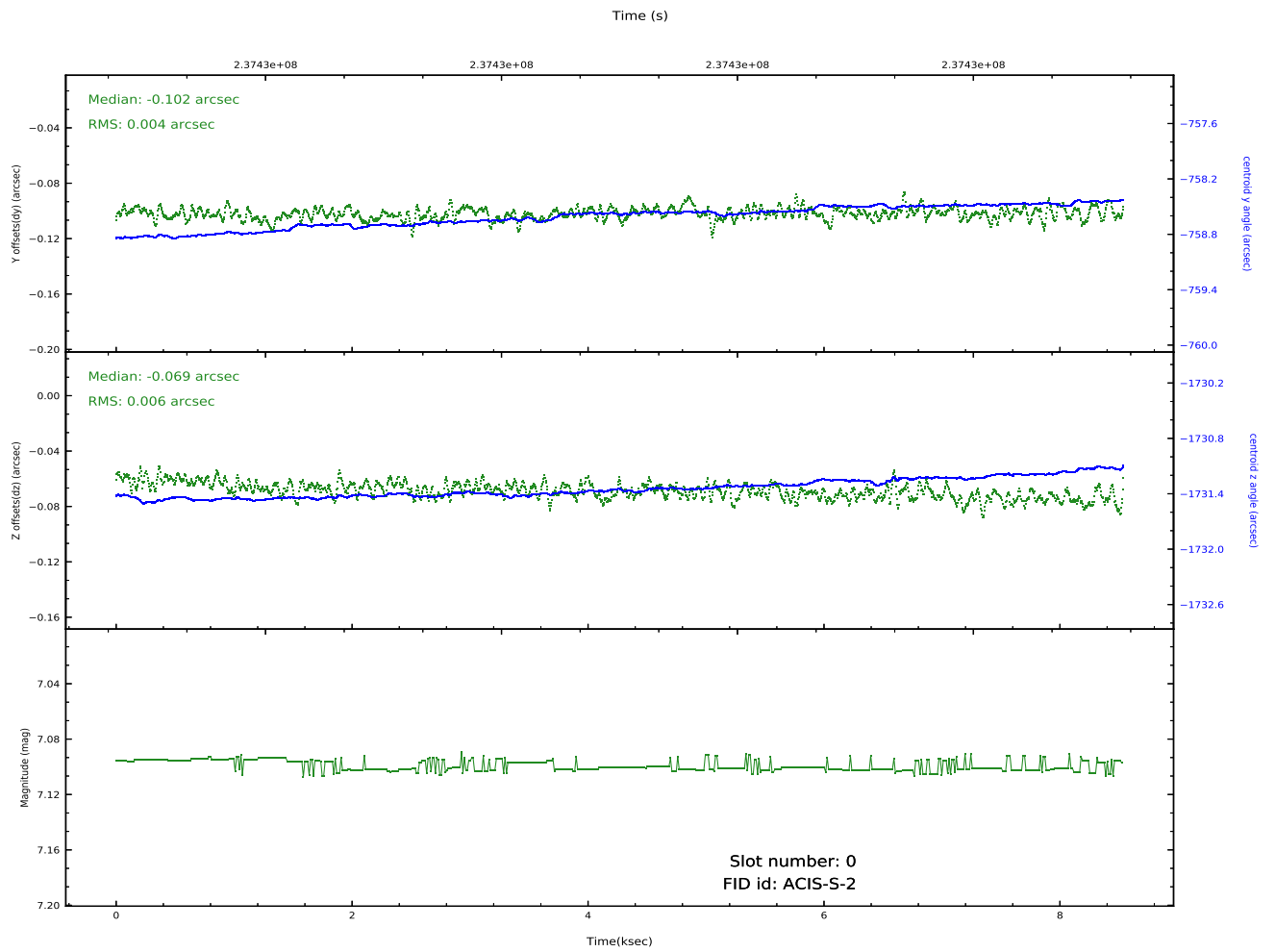
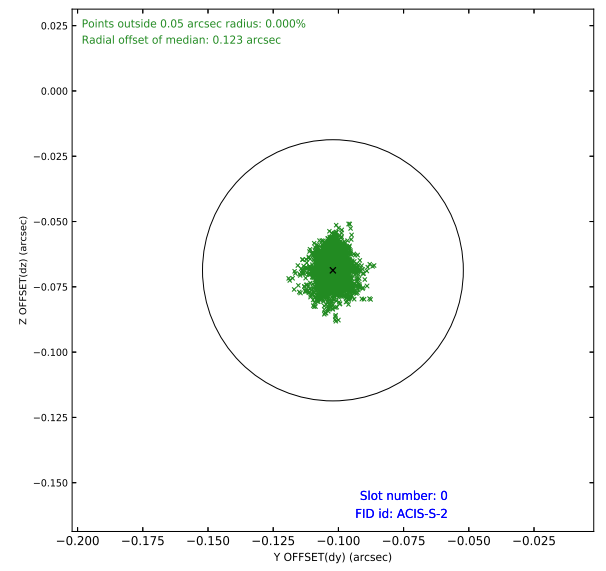
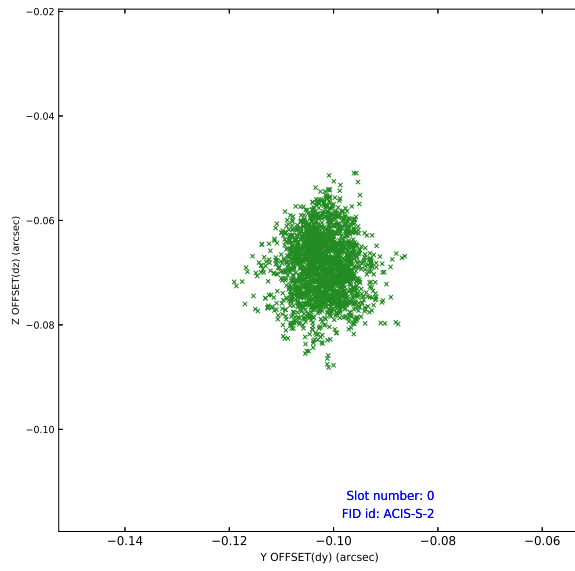


## 2.4.5 Slot 7

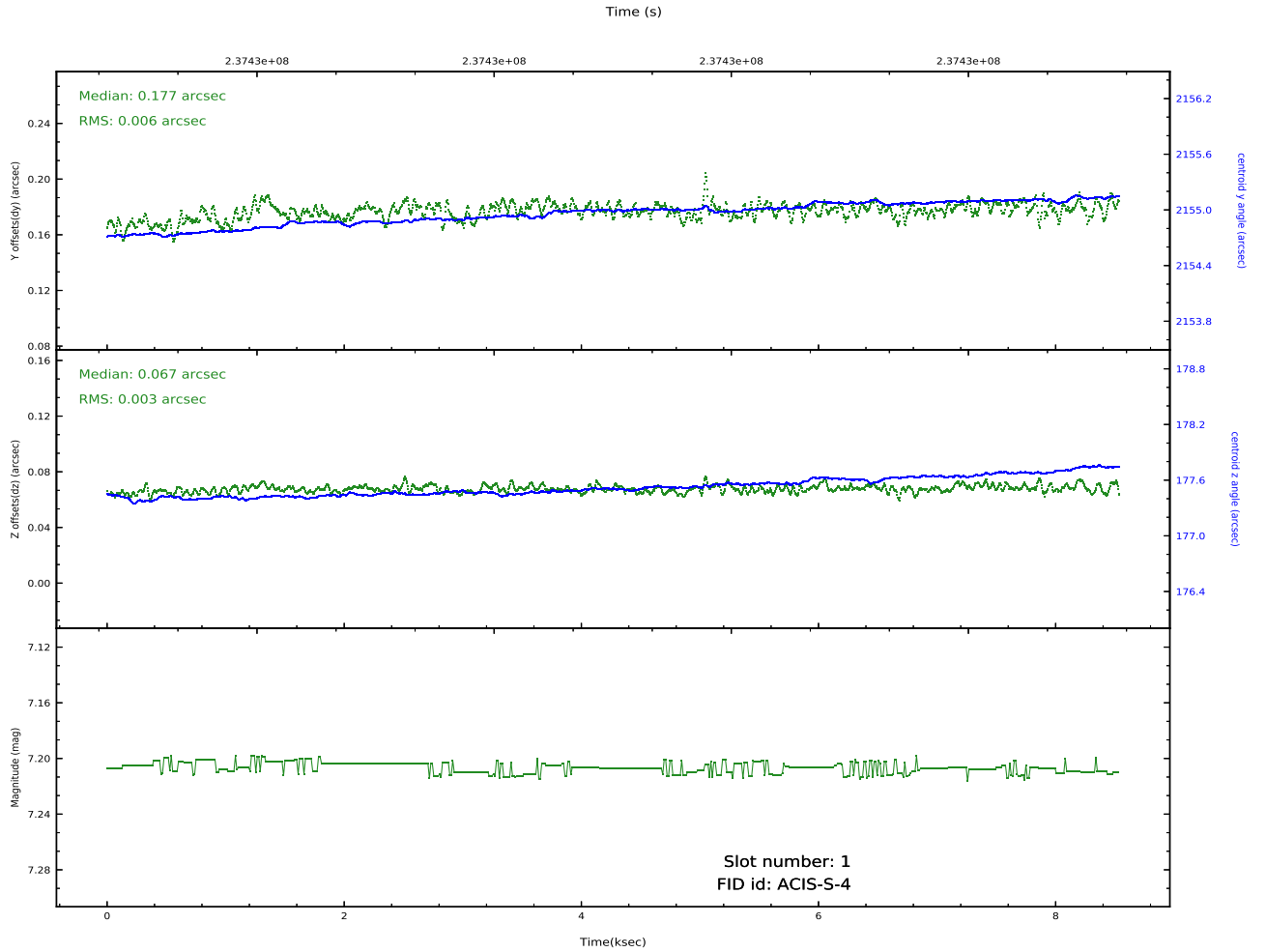
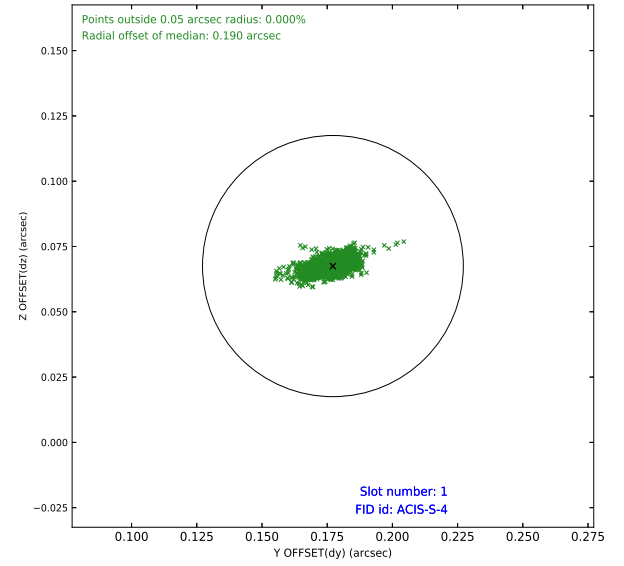
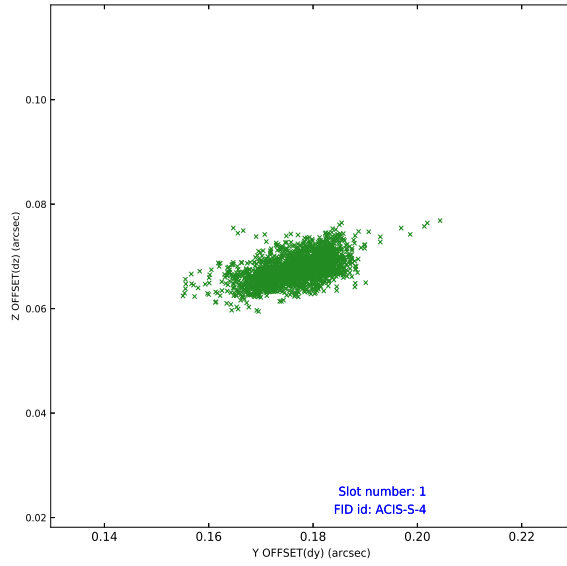


## 2.5 FID Slots

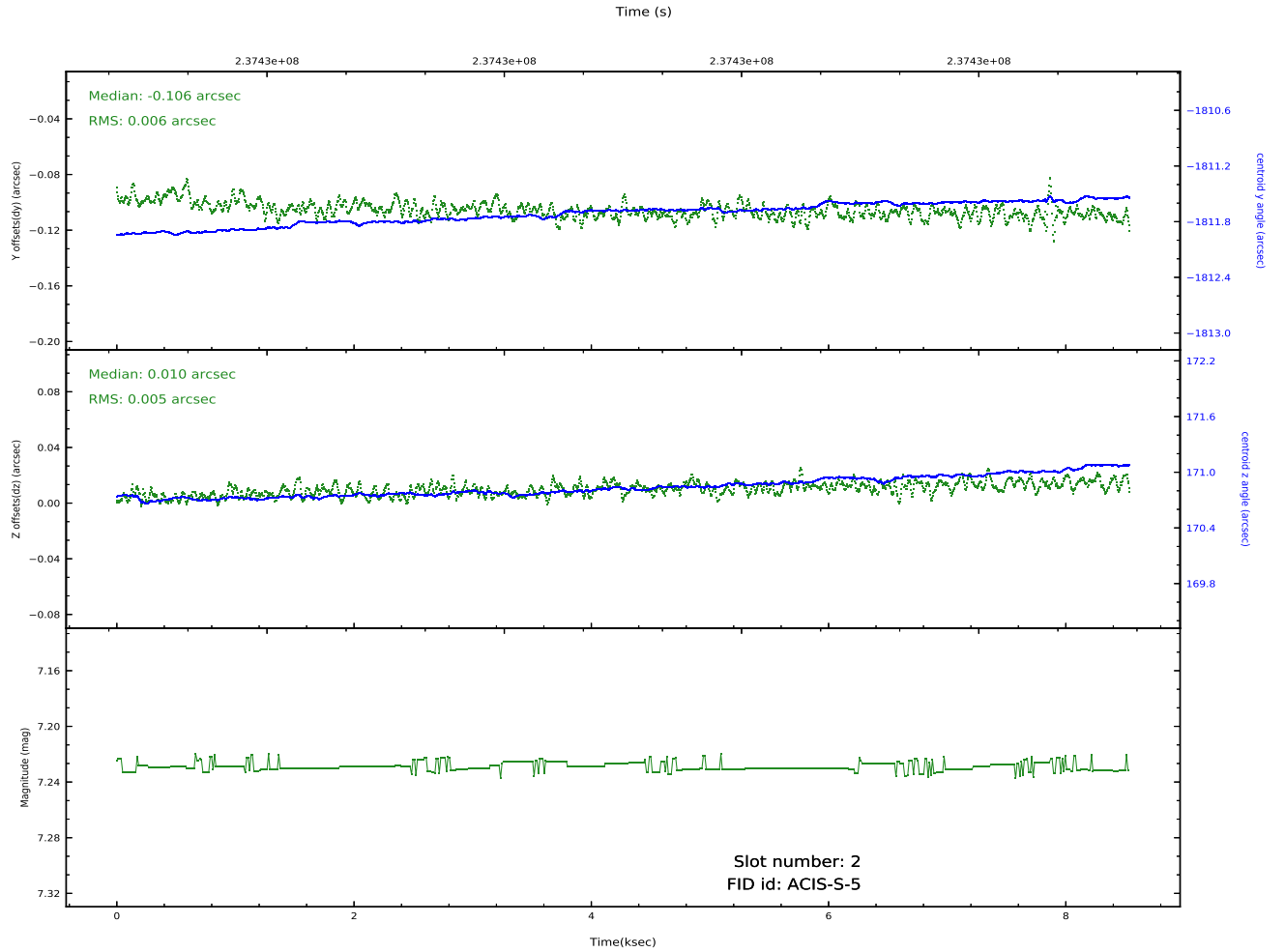
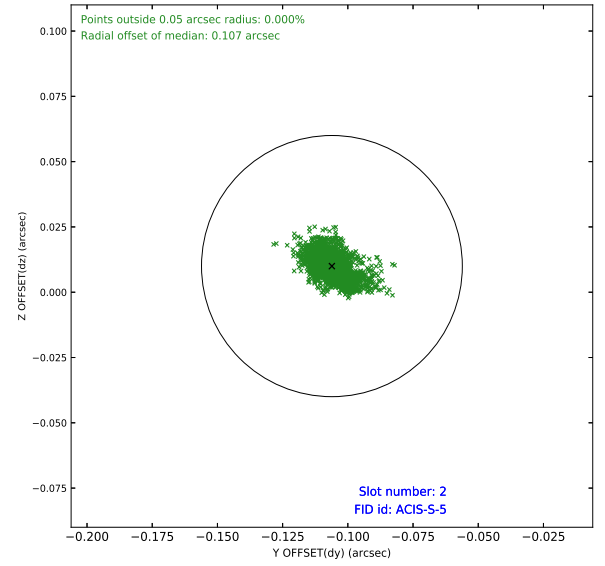
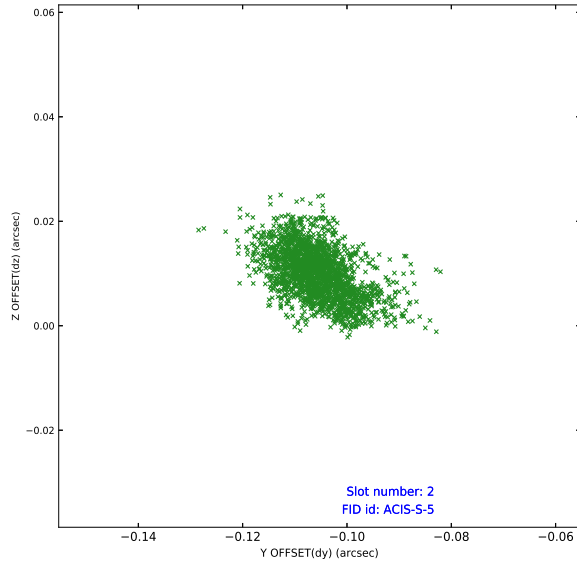
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.316799

## A.2 Comments

This is a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.