

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20551 - L2 Version 2  
Chandra X-Ray Center

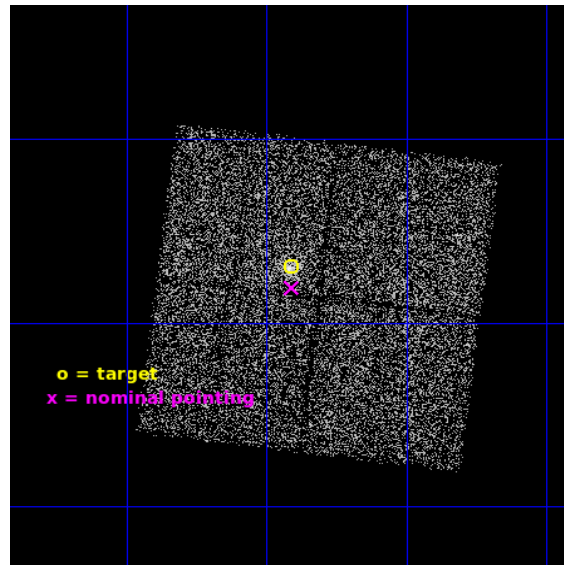
L2 Processing Date : Oct 28 2020

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# 1 Front

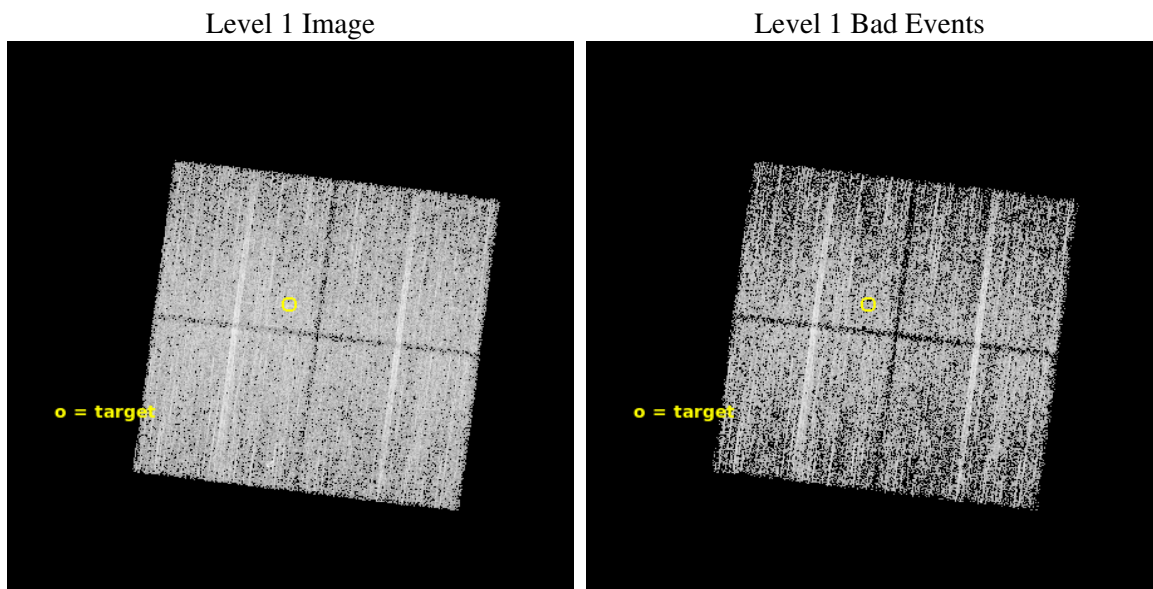
seq_num	801761	Sequence number
obs_id	20551	Observation id
title	Hiding in Plain Sight - Recovering Clusters with the Strongest AGN in their Cores	Proposal title
observer	Paul Nulsen	Principal investigator
object	1RXSJ235324.6-125657	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	358.3525	Observer's specified target RA [deg]
dec_targ	-12.949167	Observer's specified target Dec [deg]
ra_nom	358.35242603323	Nominal RA [deg]
dec_nom	-12.968282438946	Nominal Dec [deg]
roll_nom	277.20391359983	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10075.000077605	Sum of GTIs [s]
livetime	9943.3627844842	Livetime [s]
ontime0	10075.000077605	Sum of GTIs [s]
ontime1	10065.577116609	Sum of GTIs [s]
ontime2	10075.000077605	Sum of GTIs [s]
ontime3	10075.000077605	Sum of GTIs [s]
l2events	24363	Number of level 2 events



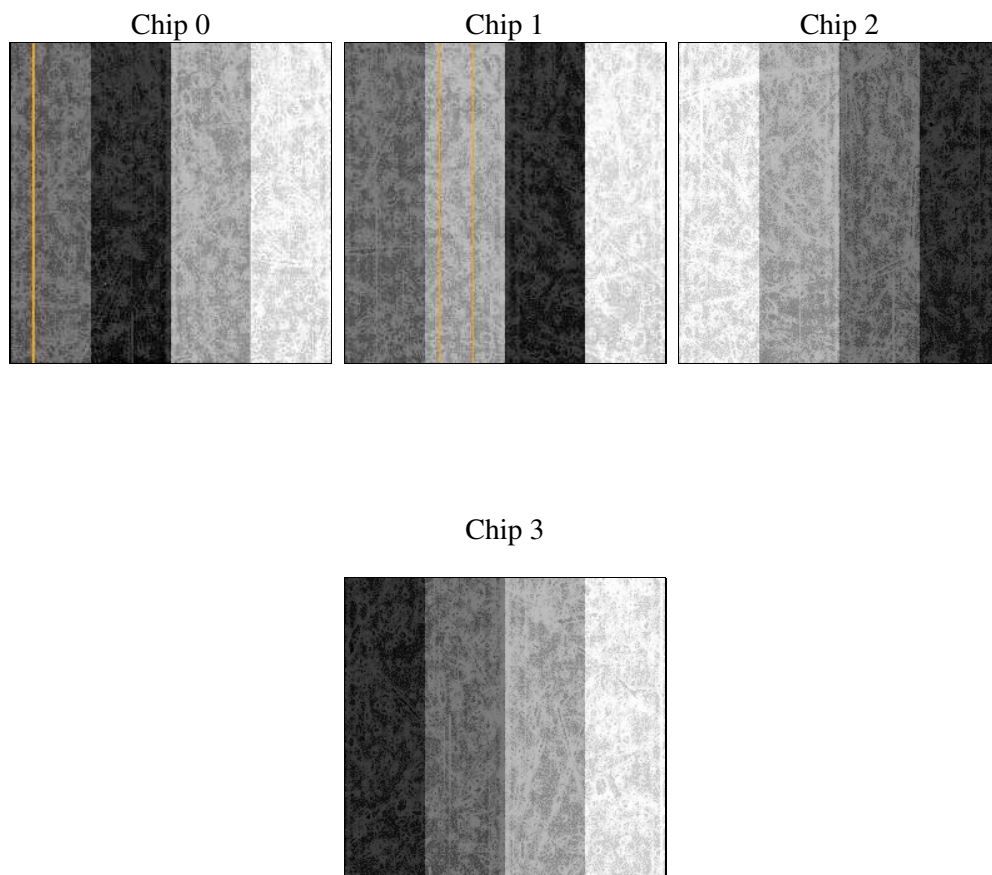
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	10075.000077605	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime0	10075.000077605	Sum of GTIs [s]
date	2020-10-29T01:43:40	Date and time of file creation	ontime1	10065.577116609	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10075.000077605	Sum of GTIs [s]
			ontime3	10075.000077605	Sum of GTIs [s]
			l1events	272299	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	65510	64548	74831	67410
rejected events	57981	56813	67603	60127
rejected %	88%	88%	90%	89%

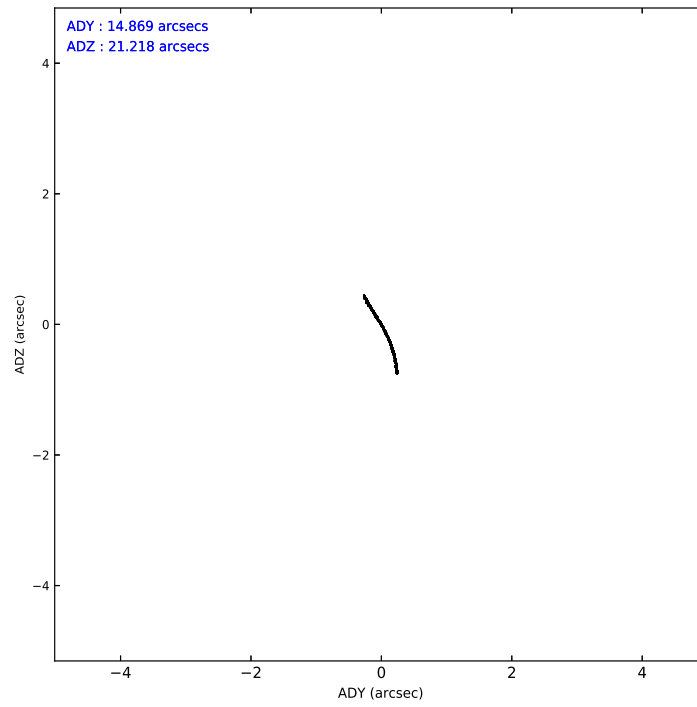
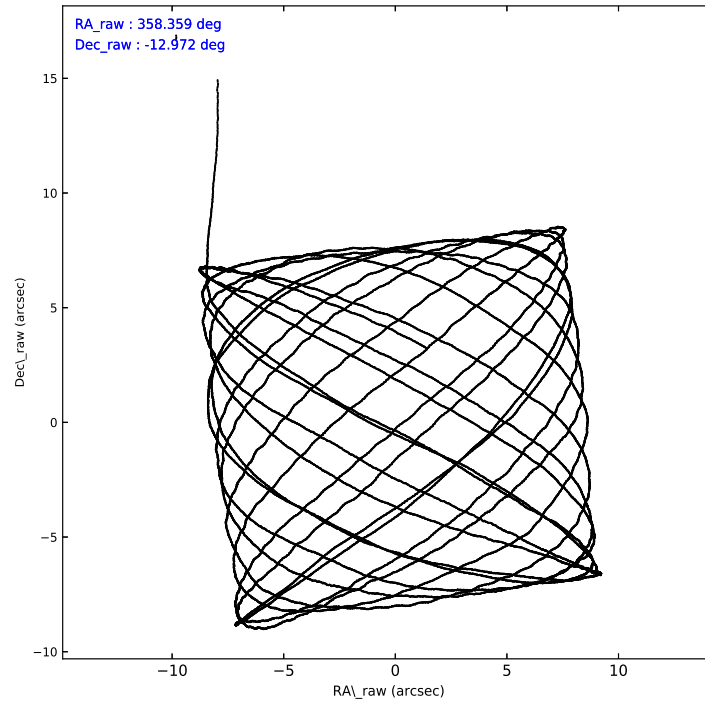
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	2694	2549	2802	2791
	4%	3%	3%	4%
grade 1 events	31	42	43	59
	0%	0%	0%	0%
grade 2 events	1933	2023	1724	1552
	2%	3%	2%	2%
grade 3 events	759	707	672	778
	1%	1%	0%	1%
grade 4 events	672	696	739	728
	1%	1%	0%	1%
grade 5 events	2441	2497	2185	2696
	3%	3%	2%	3%
grade 6 events	1477	1765	1293	1438
	2%	2%	1%	2%
grade 7 events	55503	54269	65373	57368
	84%	84%	87%	85%

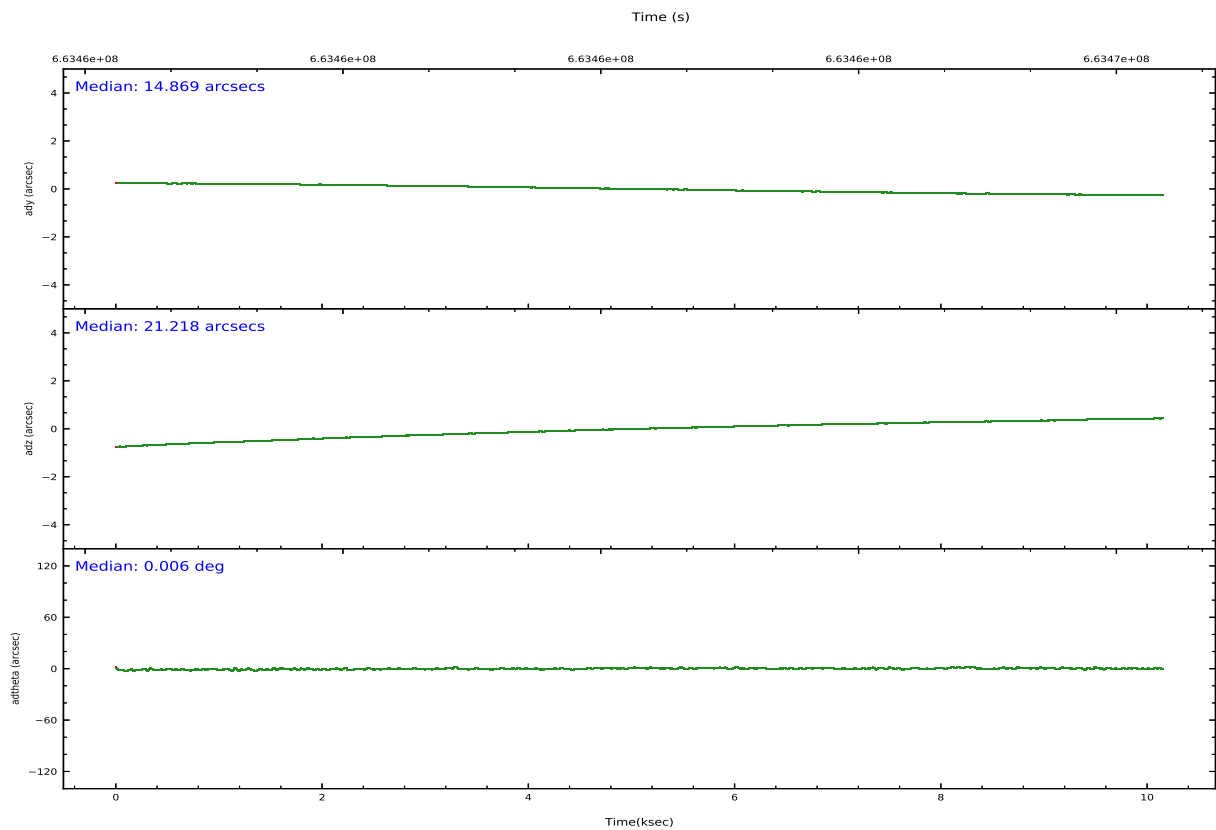
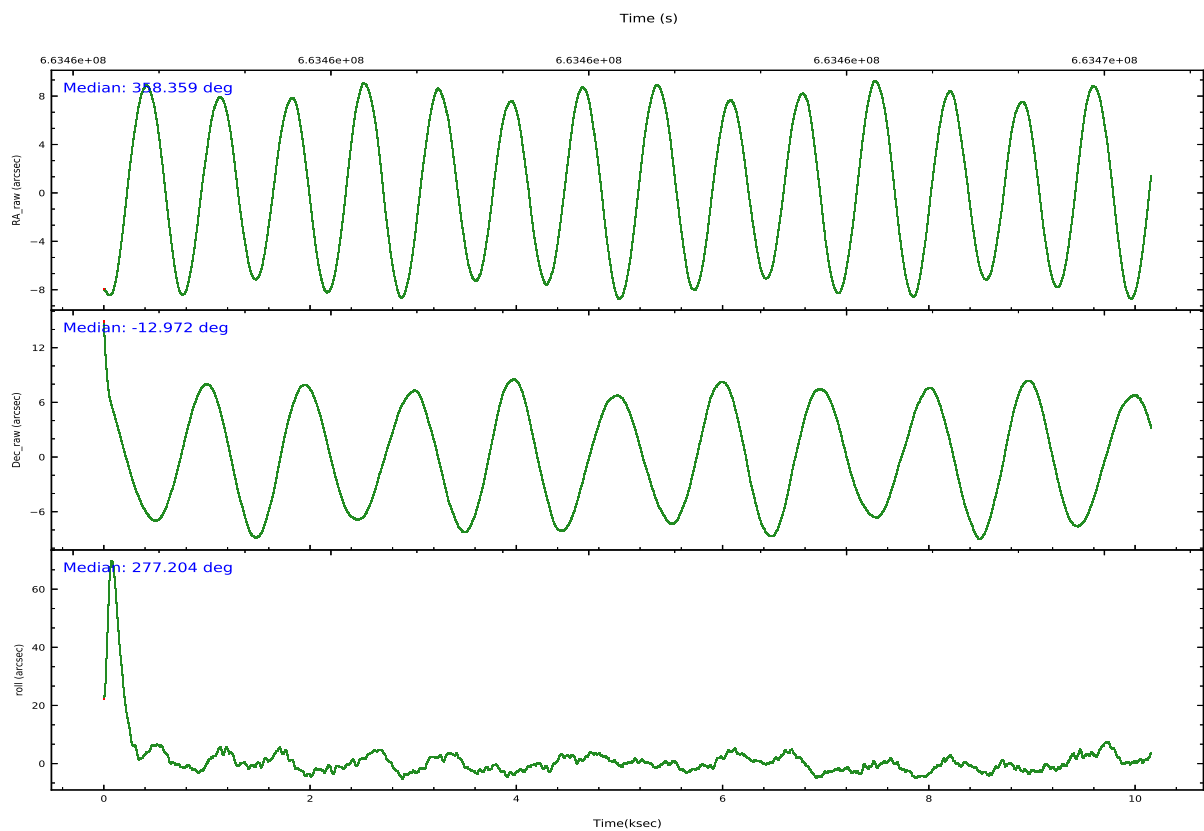


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-0123	ACIS-0123	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	358.341781	358.35242603323	Subarray requested	NONE	NONE
[deg] Pointing Dec	-12.949879	-12.968282438946	Alternating exposures requested	N	N
[deg] Pointing Roll	276.997601	277.20391359983	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-230.662463	-230.6733430263207			
[mm] SIM translation stage offset	-2.93	-2.919109976609036			
[s] Observation start time (MET)	663457954.184000	663456774.09554			
Observation start date	2019-01-09T21:51:25	2019-01-09T21:32:54			
[s] Observation end time (MET)	663467954.184000	663468590.80875			
Observation end date	2019-01-10T00:38:05	2019-01-10T00:49:50			
Read mode	TIMED	TIMED			

## 2.3 Aspect



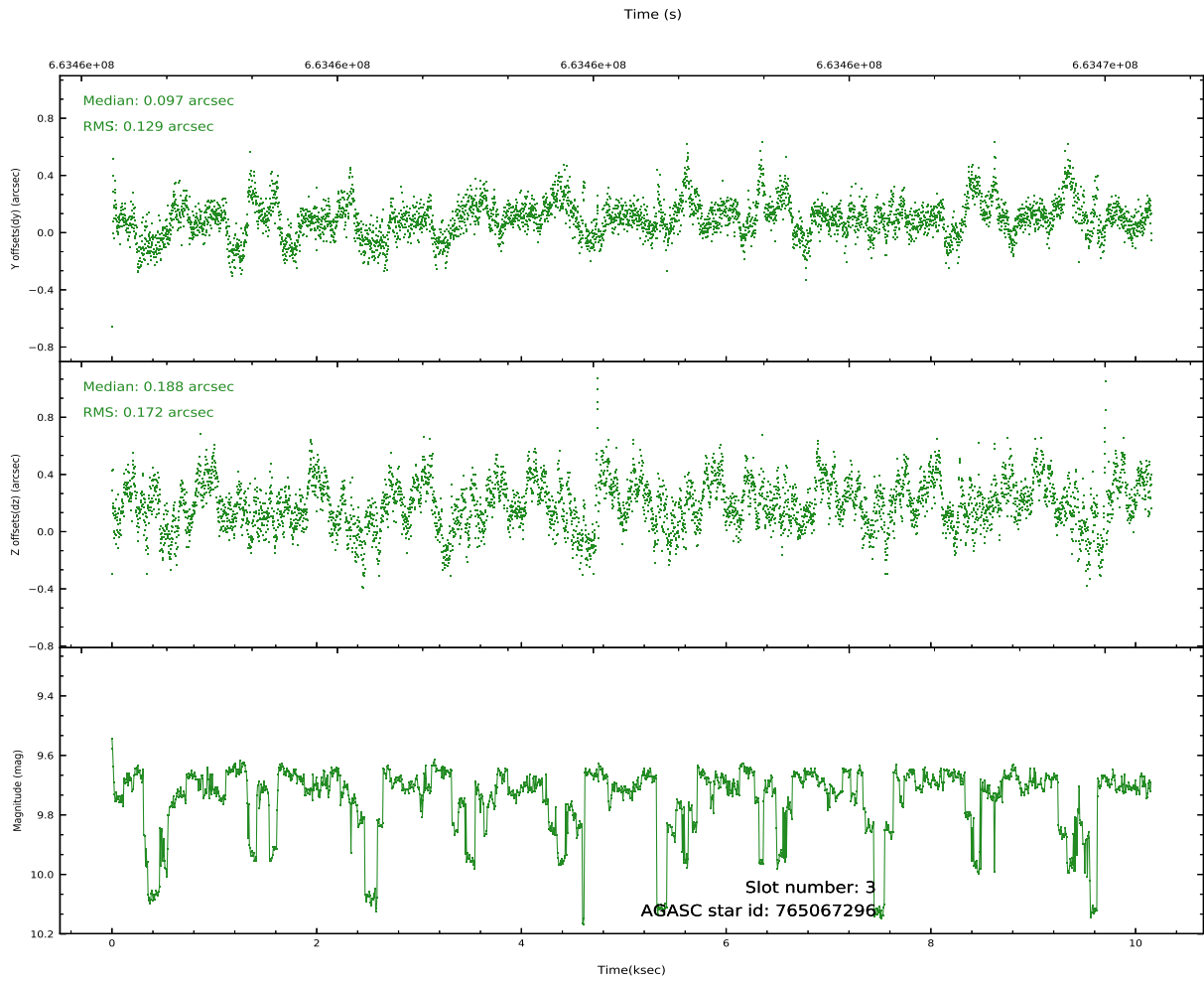
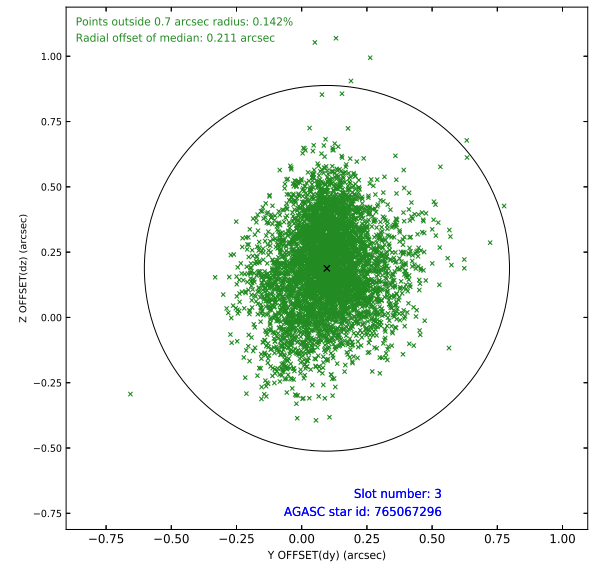
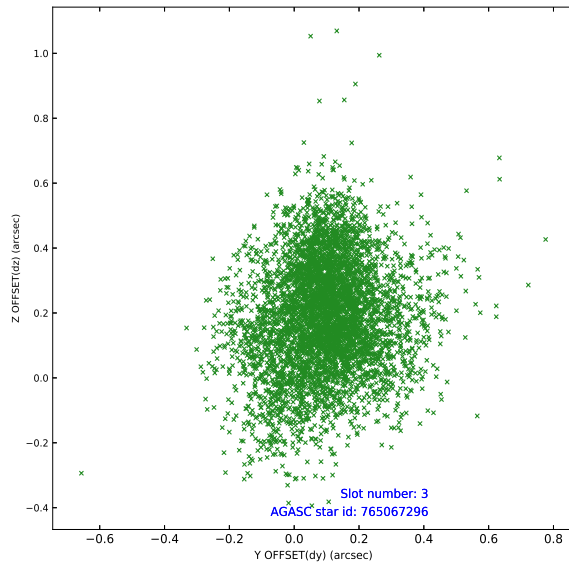


Slot Statistics

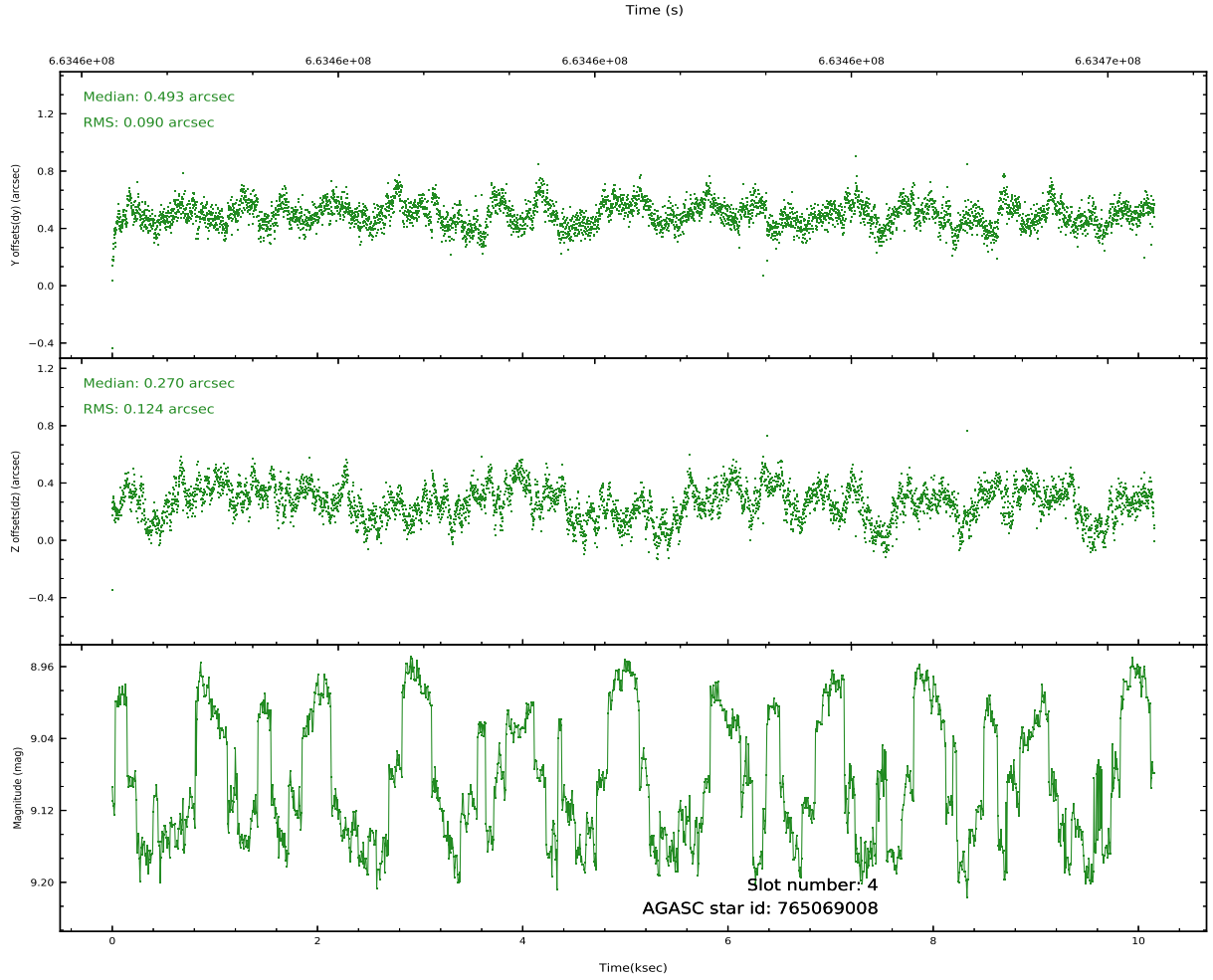
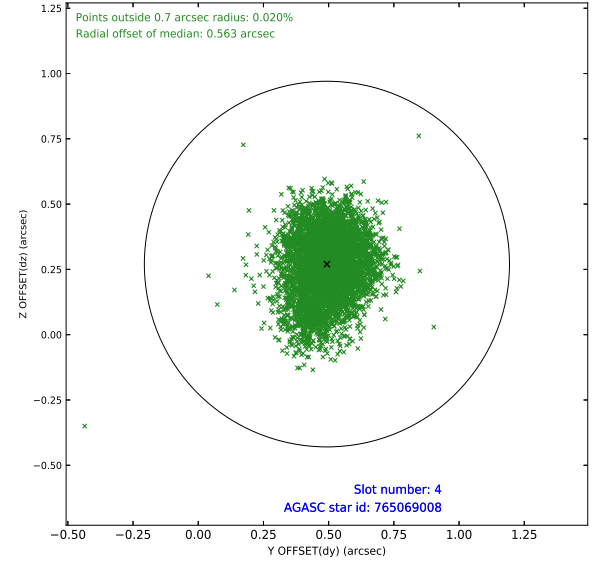
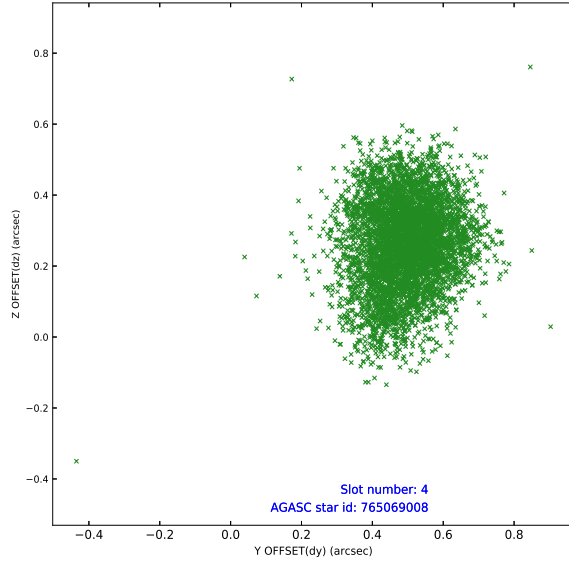
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.29	2478	1.000	0.265	-0.219	0.010	0.016	0.000000	0.000000	924.67	-905
1	FID		ACIS-I-4	7.18	2478	1.000	0.085	0.049	0.008	0.014	0.000000	0.000000	2144.92	994
2	FID		ACIS-I-5	7.25	2477	1.000	-0.448	0.241	0.007	0.013	0.000000	0.000000	-1823.11	993
3	GUIDE	used	765067296	9.71	4926	1.000	0.097	0.188	0.229	0.374	357.603619	-12.538226	-1782.60	-2395
4	GUIDE	used	765069008	9.10	4947	1.000	0.493	0.270	0.163	0.264	359.064260	-13.511217	2318.16	2263
5	GUIDE	used	765069552	9.92	4939	1.000	-0.339	-0.249	0.294	0.448	358.554504	-12.957837	120.65	736
6	GUIDE	used	765069664	9.86	4764	1.000	-0.043	-0.164	0.233	0.389	358.747849	-12.959817	210.05	1413
7	GUIDE	used	765069712	6.39	4953	1.000	-0.216	-0.040	0.118	0.185	358.940386	-13.152582	983.74	1992

## 2.4 Star Slots

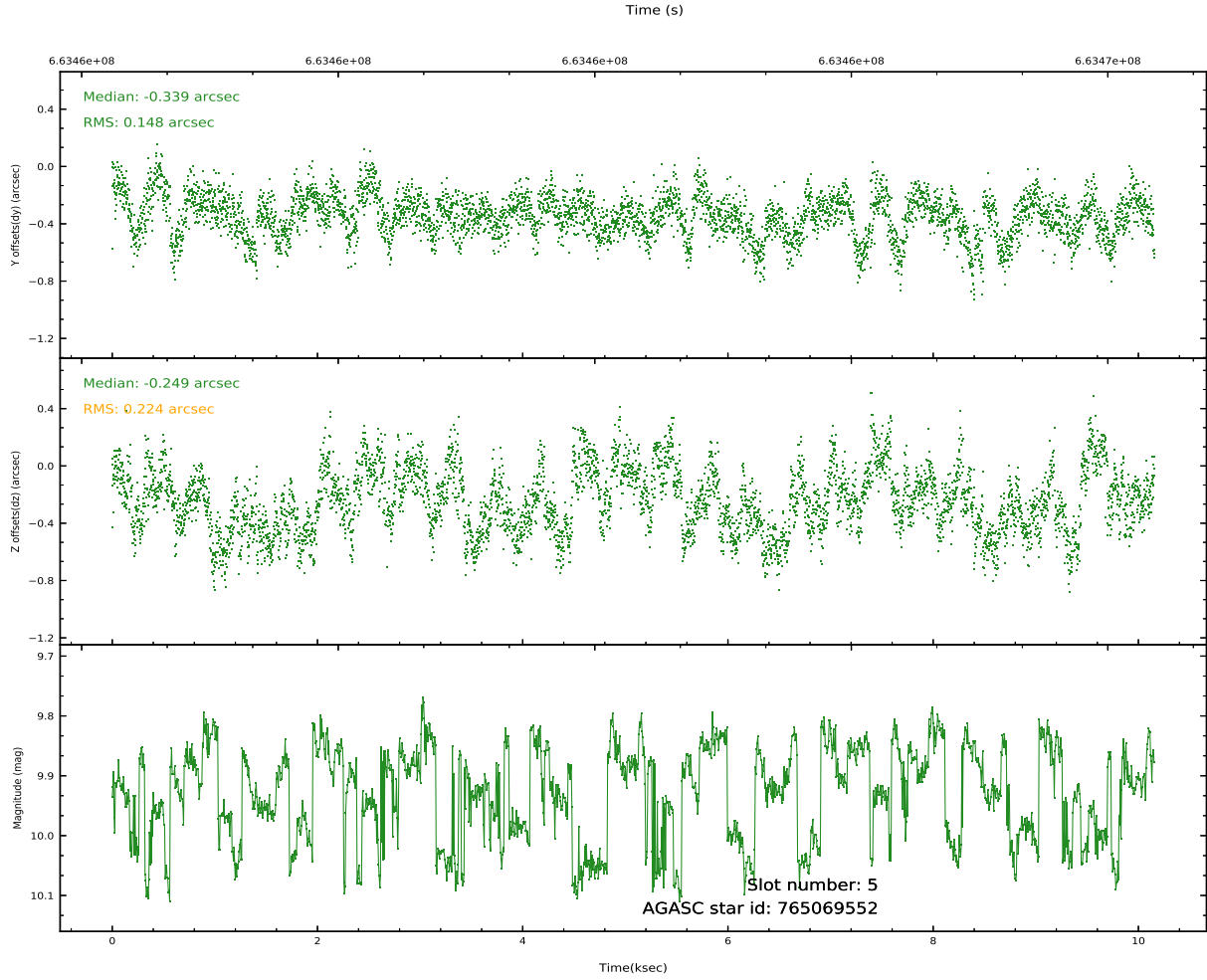
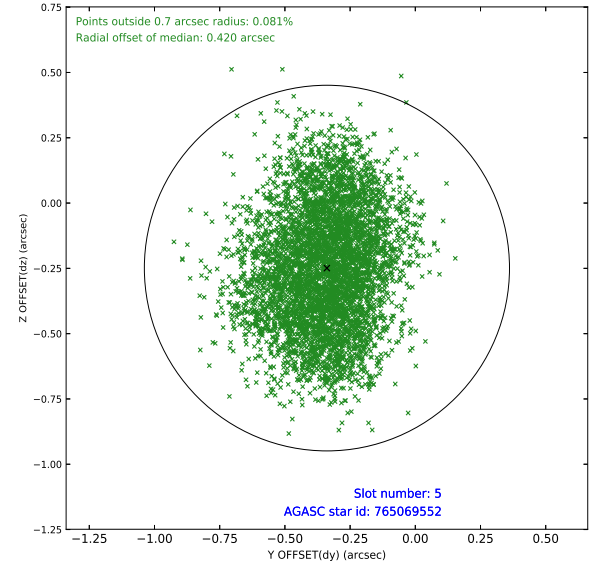
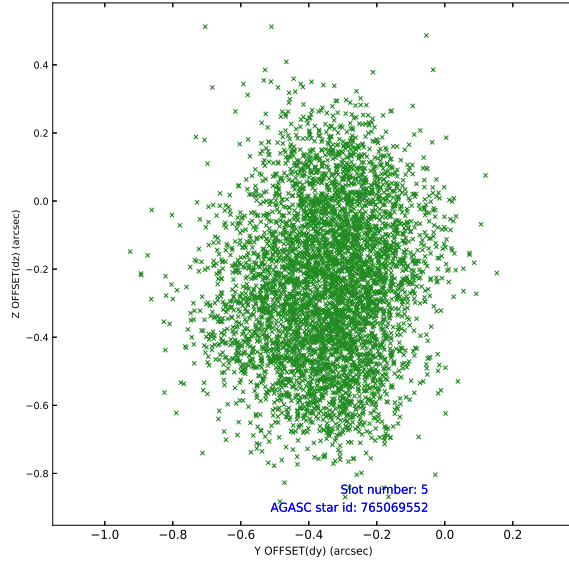
### 2.4.1 Slot 3



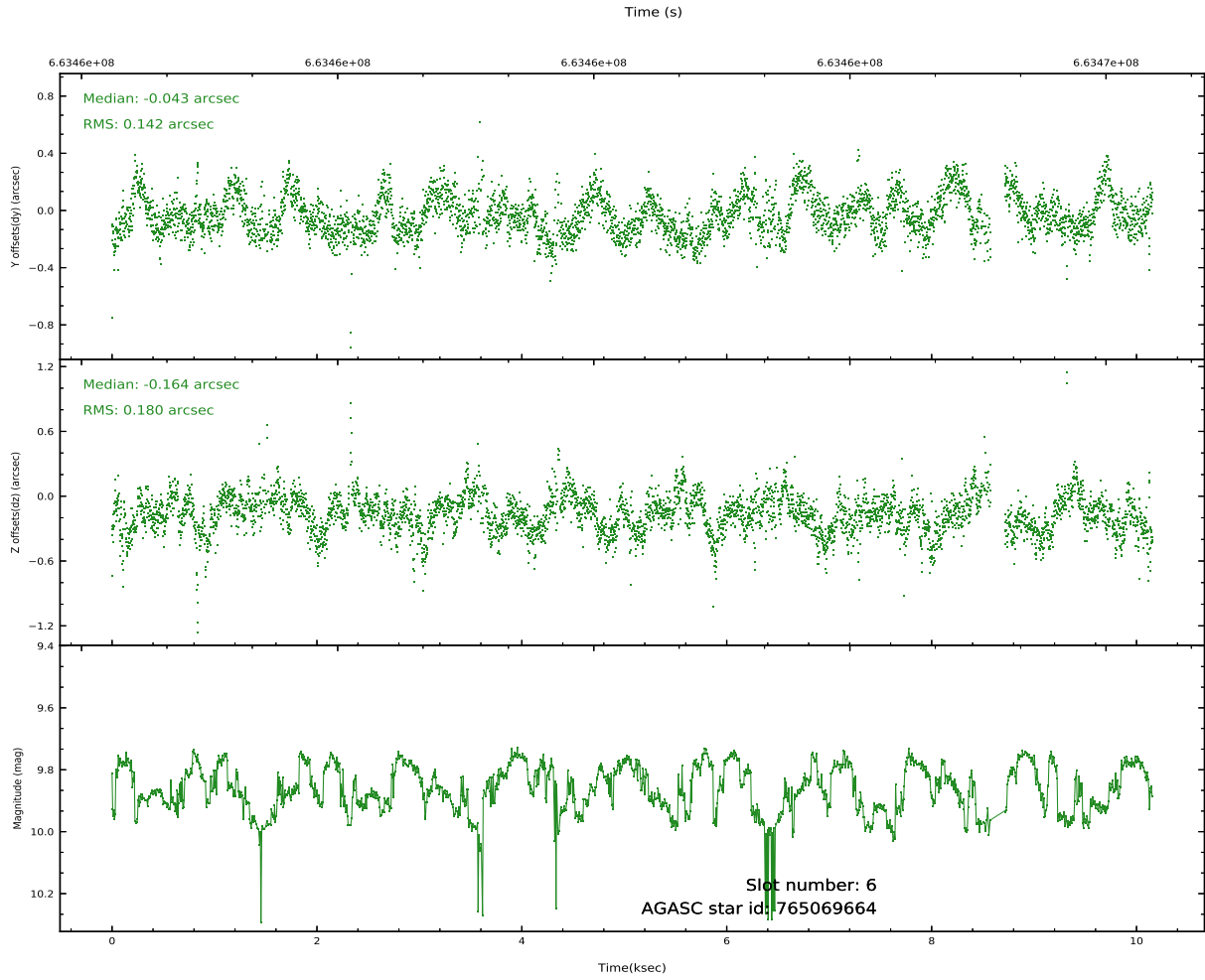
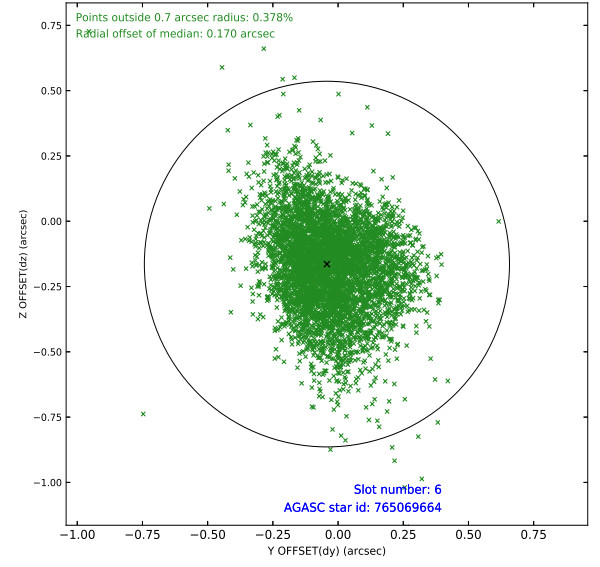
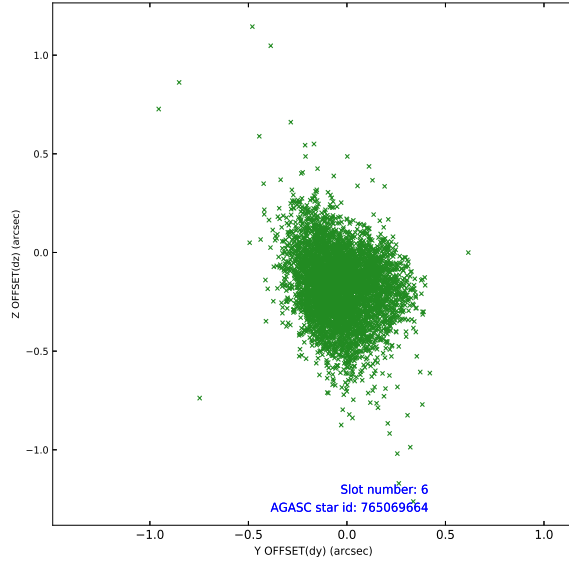
## 2.4.2 Slot 4



### 2.4.3 Slot 5

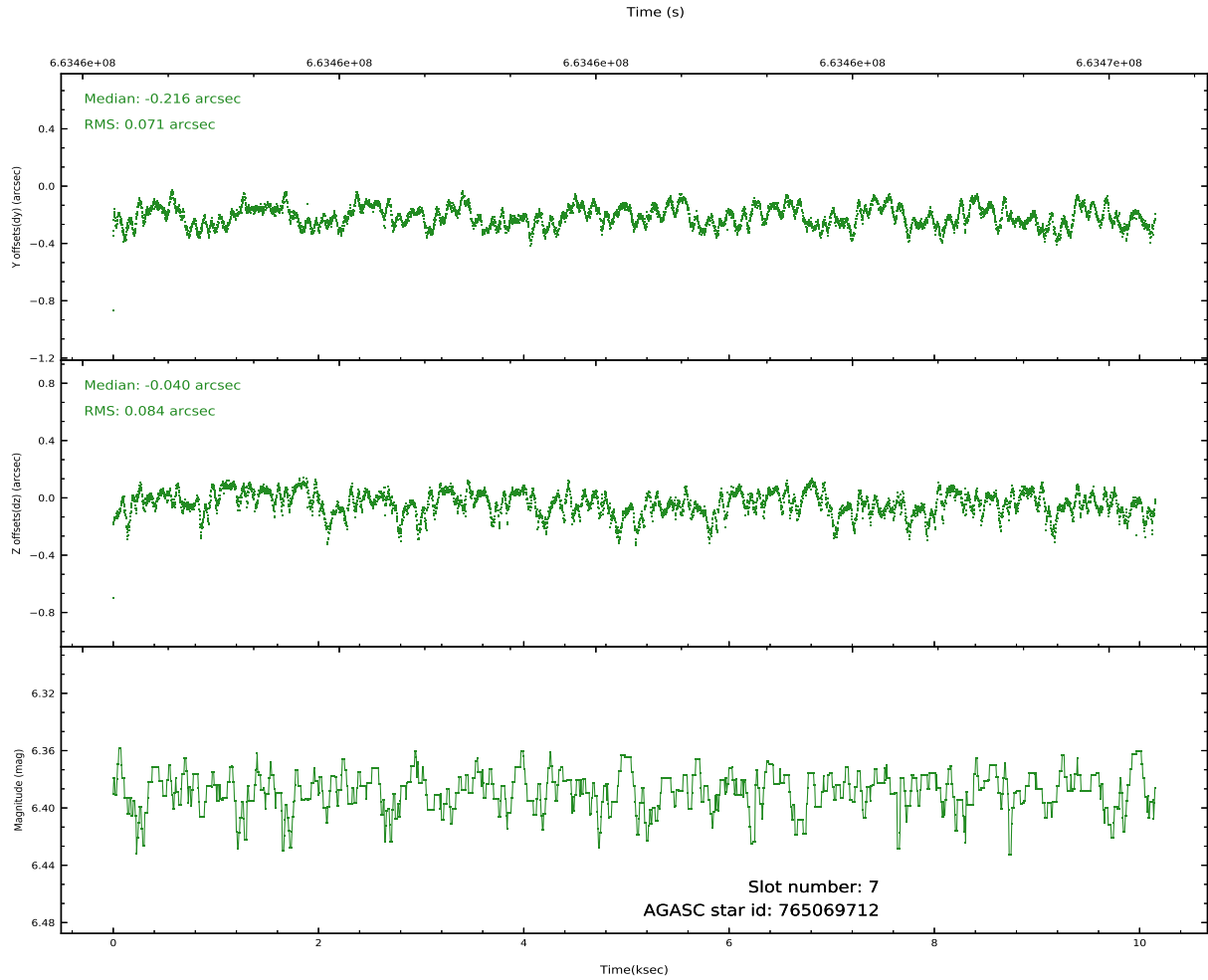
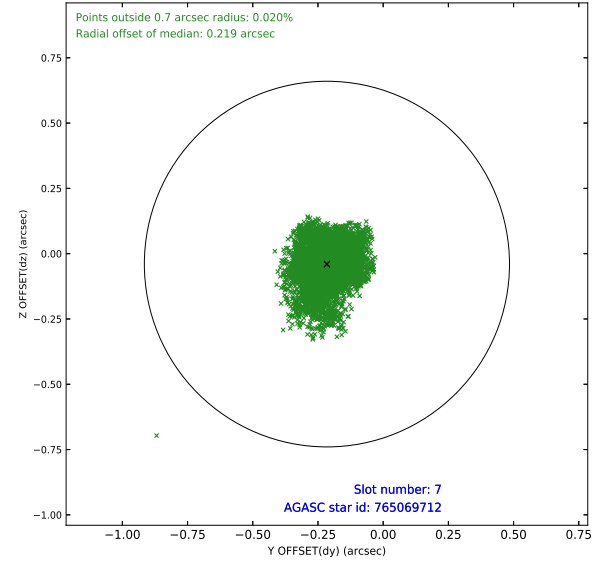
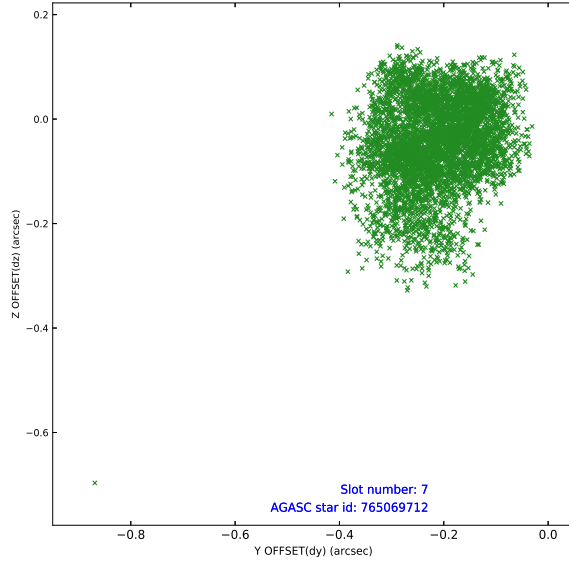


## 2.4.4 Slot 6



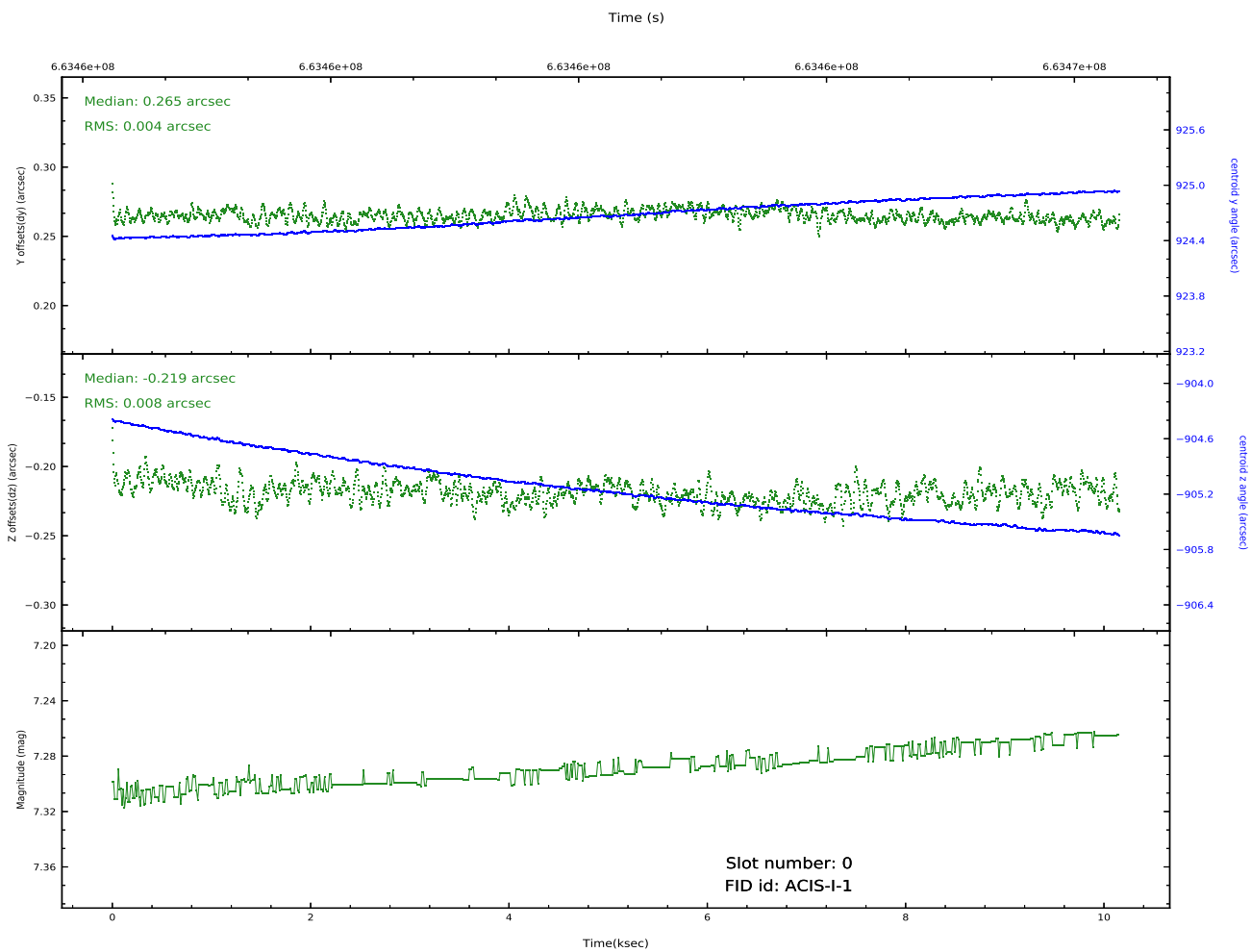
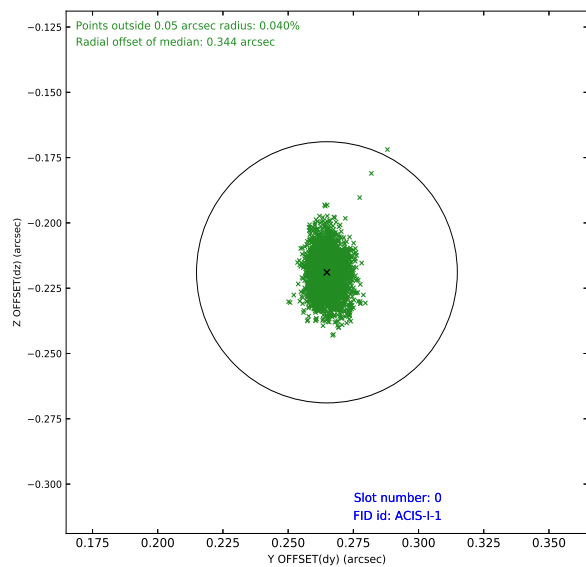
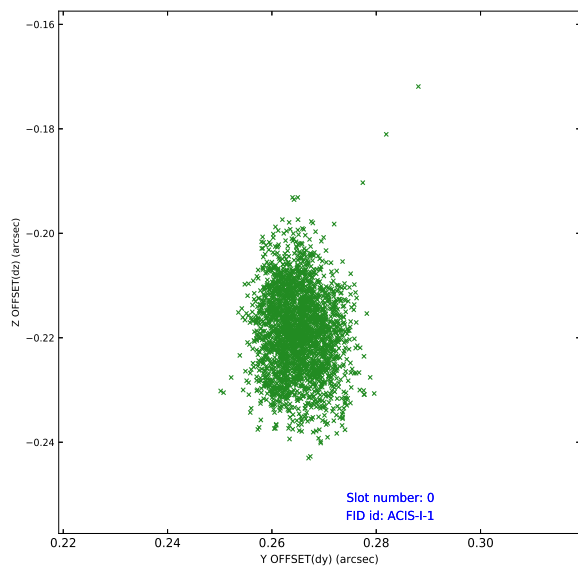


## 2.4.5 Slot 7

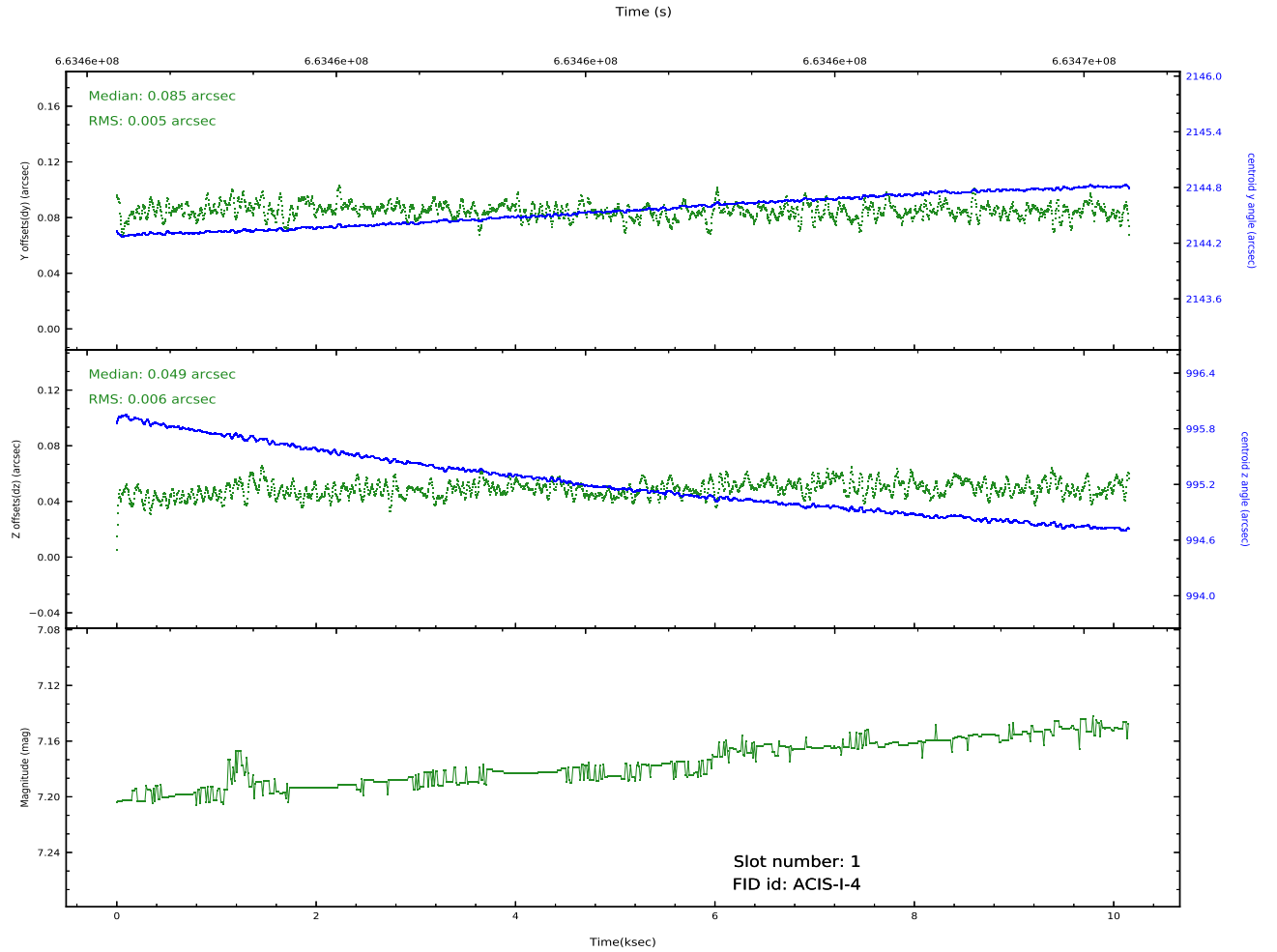
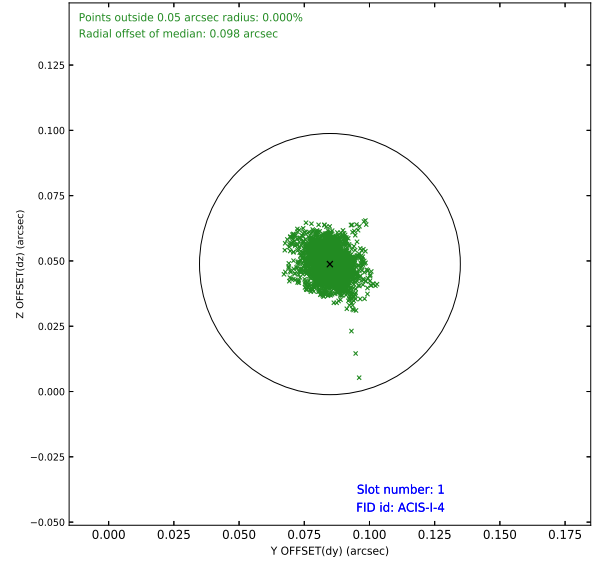
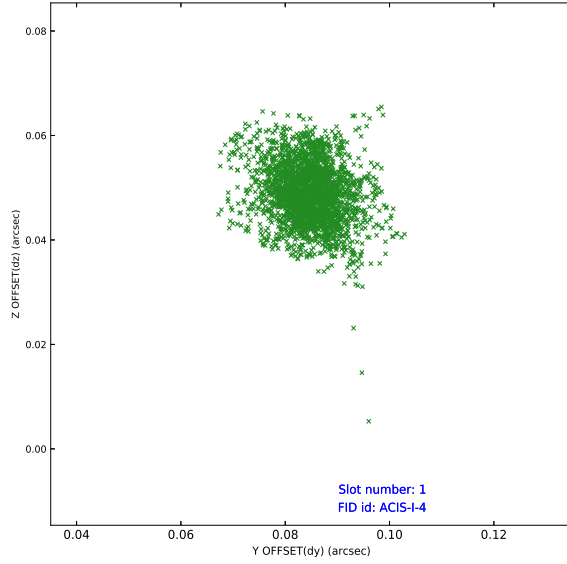


## 2.5 FID Slots

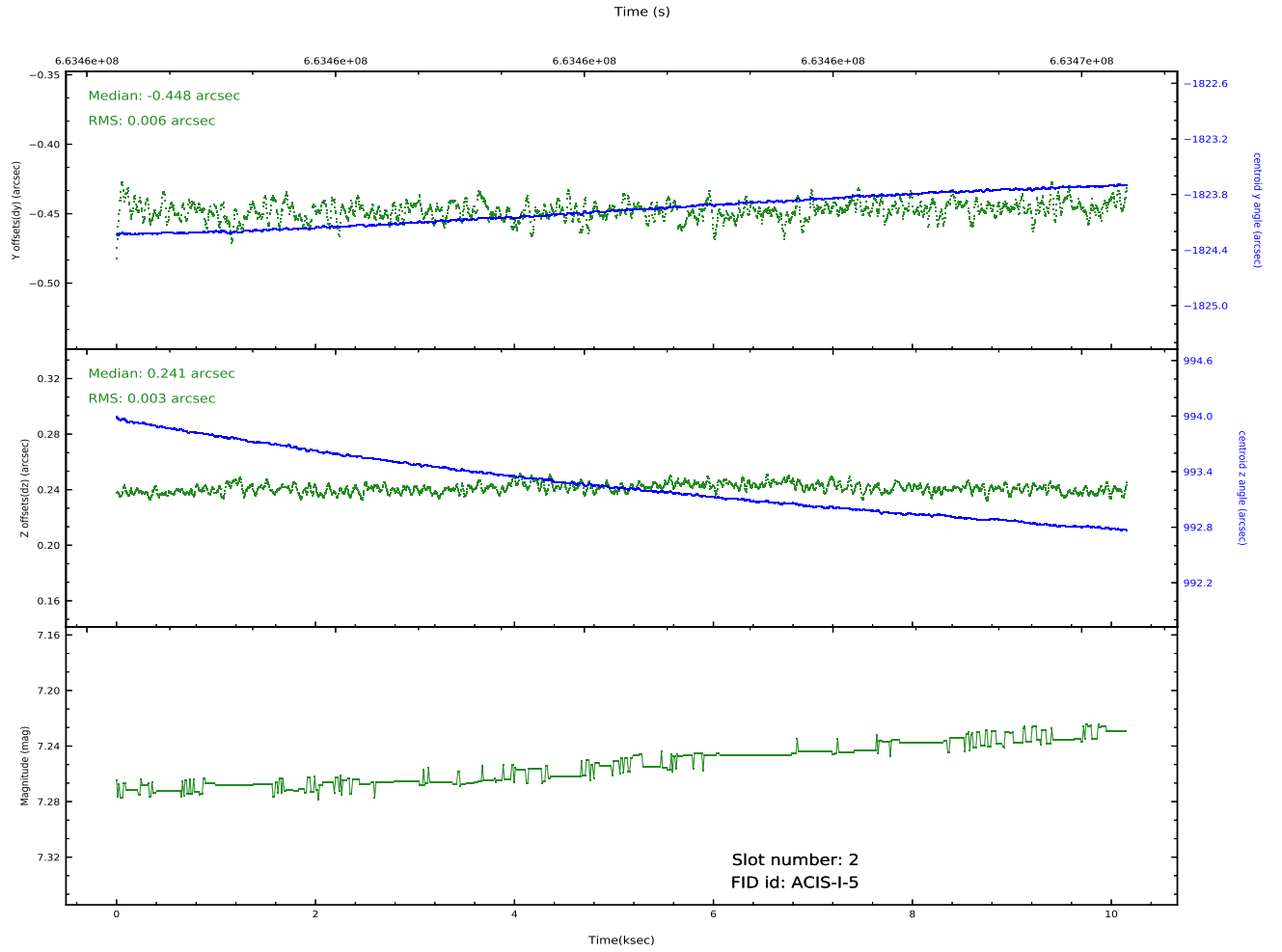
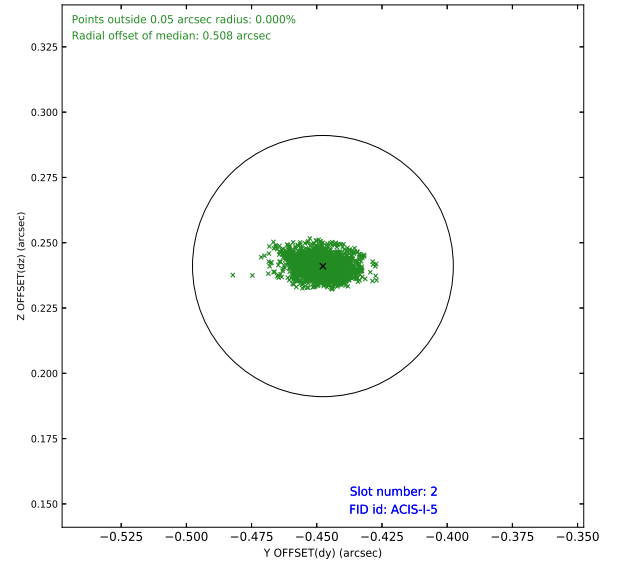
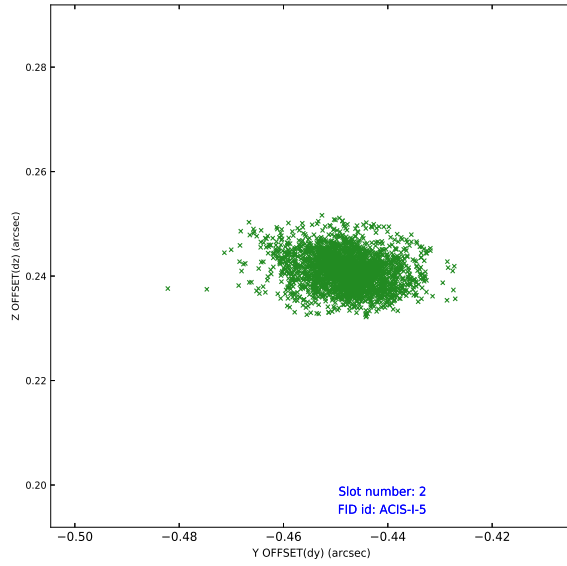
### 2.5.1 Slot 0



## 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)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.075000077605

### **A.2 Comments**