

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6227 - L2 Version 5  
Chandra X-Ray Center

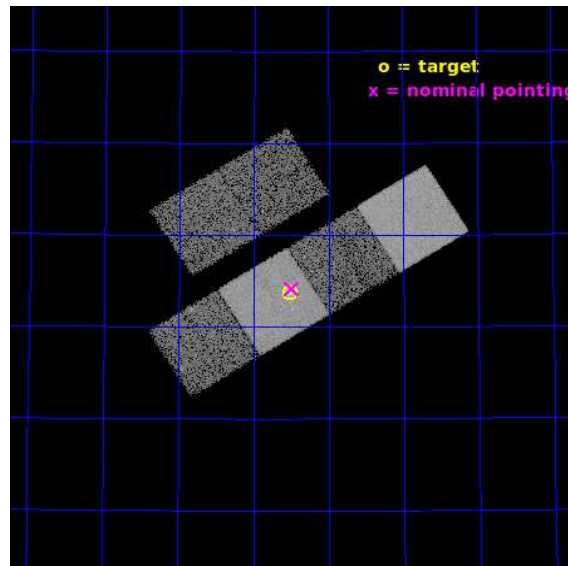
L2 Processing Date : Oct 6 2020

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# 1 Front

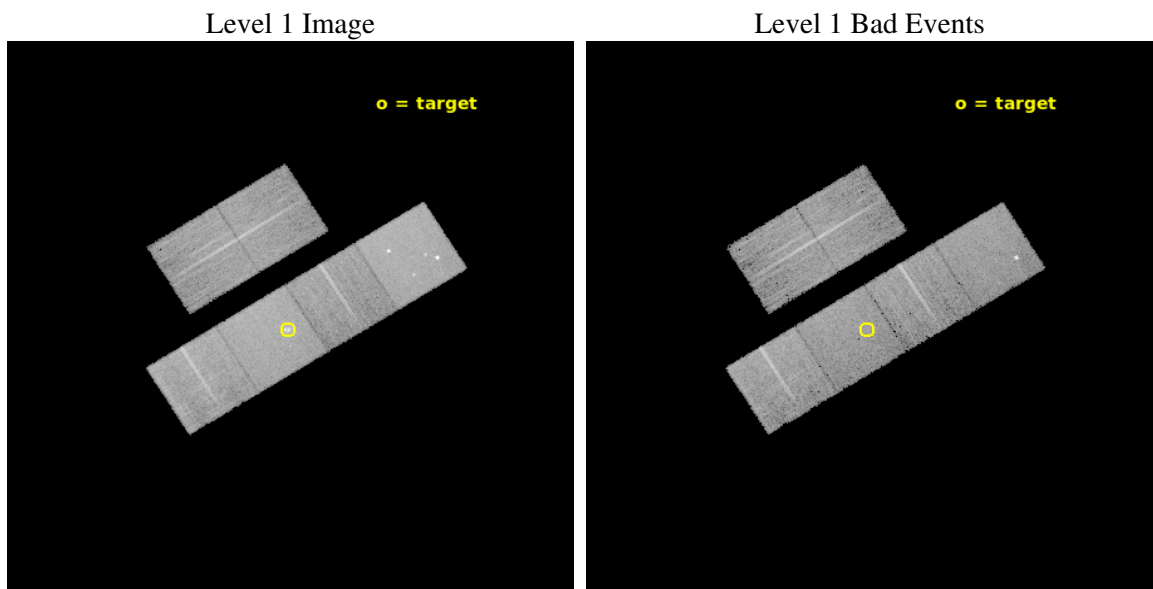
seq_num	701172	Sequence number
obs_id	6227	Observation id
title	An accretion eruption in the western nucleus of Arp 299	Proposal t
observer	Prof Kirpal Nandra	Principal investigator
object	NGC 3690	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.13	Observer's specified target RA [deg]
dec_targ	58.561306	Observer's specified target Dec [deg]
ra_nom	172.12275589978	Nominal RA [deg]
dec_nom	58.569530394136	Nominal Dec [deg]
roll_nom	148.03900708635	Nominal Roll [deg]
revision	5	Processing version of data
ontime	10323.199961543	Sum of GTIs [s]
livetime	10192.481387745	Livetime [s]
ontime2	10319.958981276	Sum of GTIs [s]
ontime3	10323.199961543	Sum of GTIs [s]
ontime5	10323.199961543	Sum of GTIs [s]
ontime6	10323.199961543	Sum of GTIs [s]
ontime7	10323.199961543	Sum of GTIs [s]
ontime8	10323.199961543	Sum of GTIs [s]
l2events	125036	Number of level 2 events



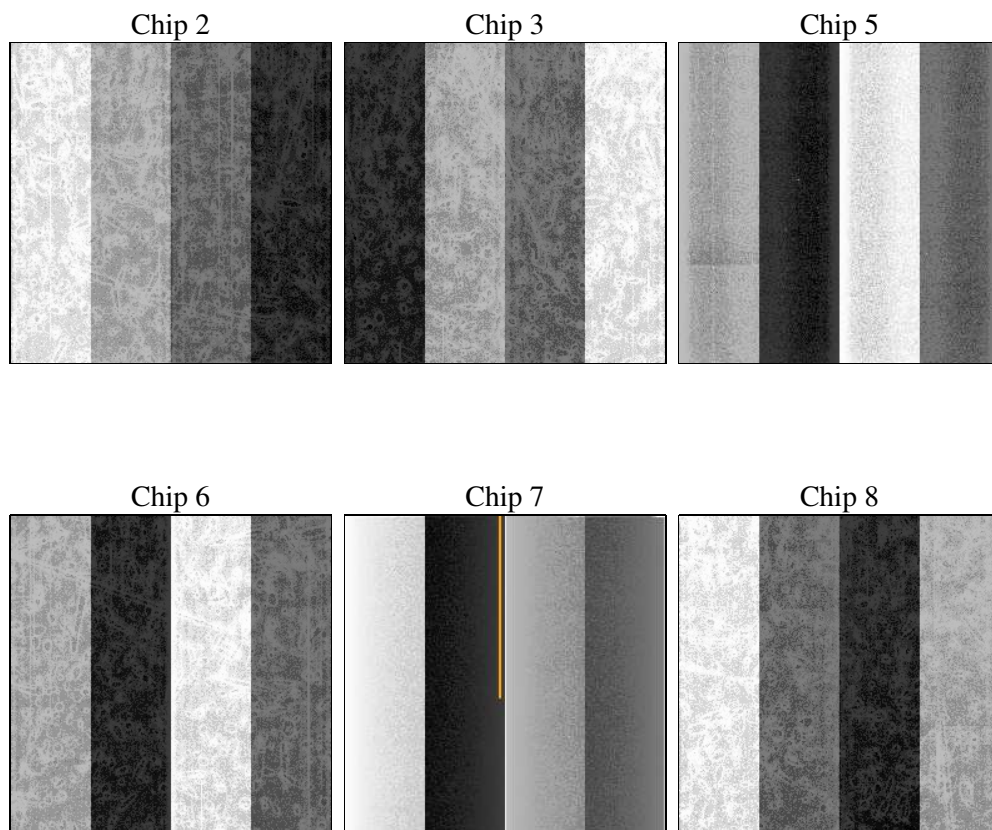
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10200.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10323.199961543	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	10319.958981276	Sum of GTIs [s]
date	2020-10-06T16:52:52	Date and time of file creation	ontime3	10323.199961543	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	10323.199961543	Sum of GTIs [s]
			ontime6	10323.199961543	Sum of GTIs [s]
			ontime7	10323.199961543	Sum of GTIs [s]
			ontime8	10323.199961543	Sum of GTIs [s]
			l1events	642141	Number of level 1 events

### 2.1.4 Events

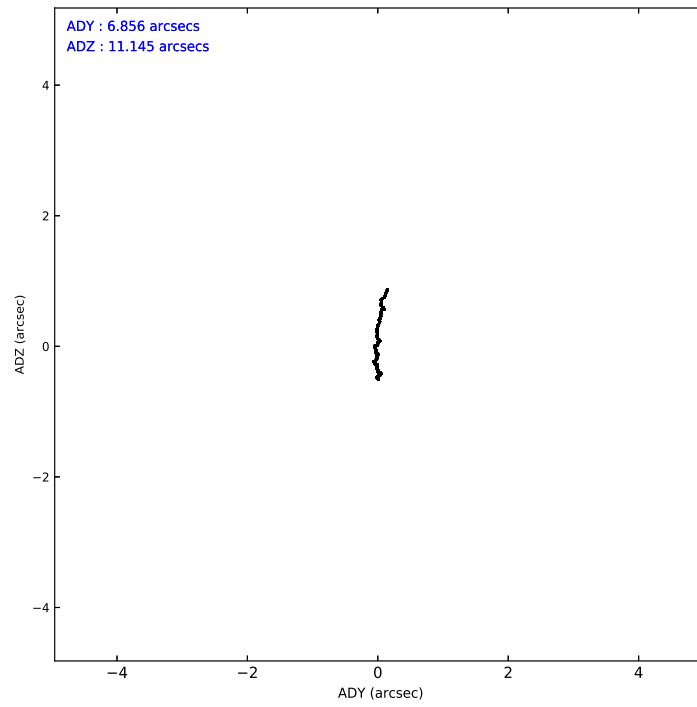
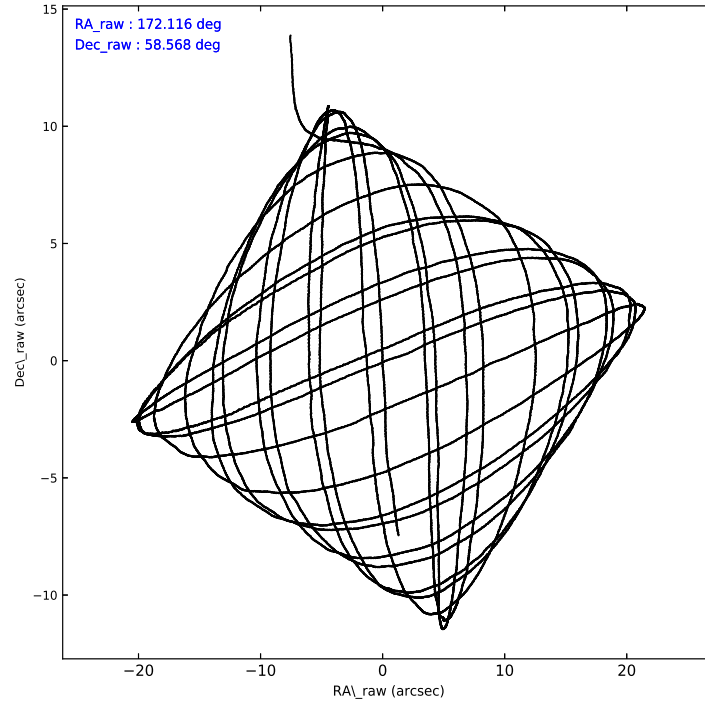
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	87301	87555	139186	89043	126224	112832	grade 0 events	4601	4771	7319	4360	5638	7755
rejected events	78591	78565	85961	79867	80461	92478		5%	5%	5%	4%	4%	6%
rejected %	90%	89%	61%	89%	63%	81%	grade 1 events	44	46	404	46	112	78
								0%	0%	0%	0%	0%	0%
							grade 2 events	2108	2024	18258	2269	11056	5407
								2%	2%	13%	2%	8%	4%
							grade 3 events	1025	1049	2942	1011	4975	2641
								1%	1%	2%	1%	3%	2%
							grade 4 events	1025	1027	2325	1023	4923	2327
								1%	1%	1%	1%	3%	2%
							grade 5 events	3566	3941	11461	4252	11805	5476
								4%	4%	8%	4%	9%	4%
							grade 6 events	1696	1828	32688	2282	27298	6283
								1%	2%	23%	2%	21%	5%
							grade 7 events	73236	72869	63789	73800	60417	82865
								83%	83%	45%	82%	47%	73%

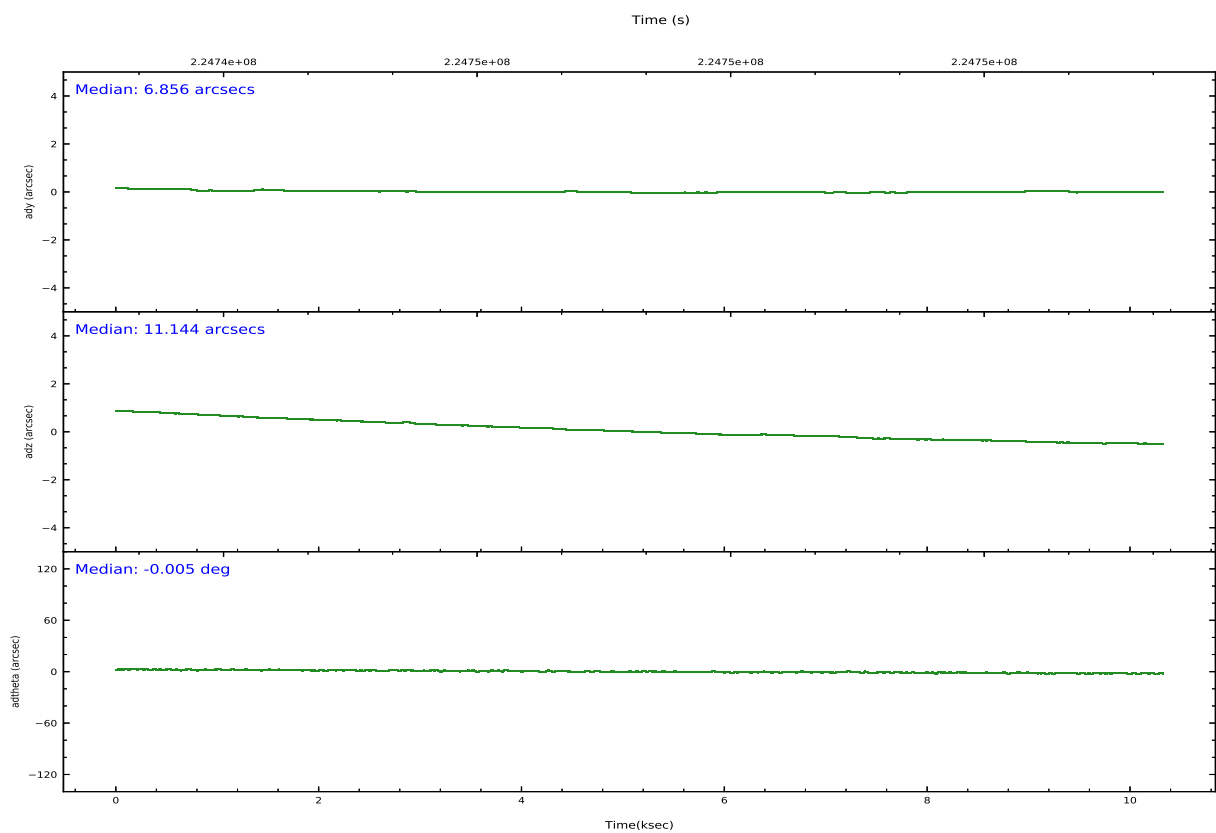
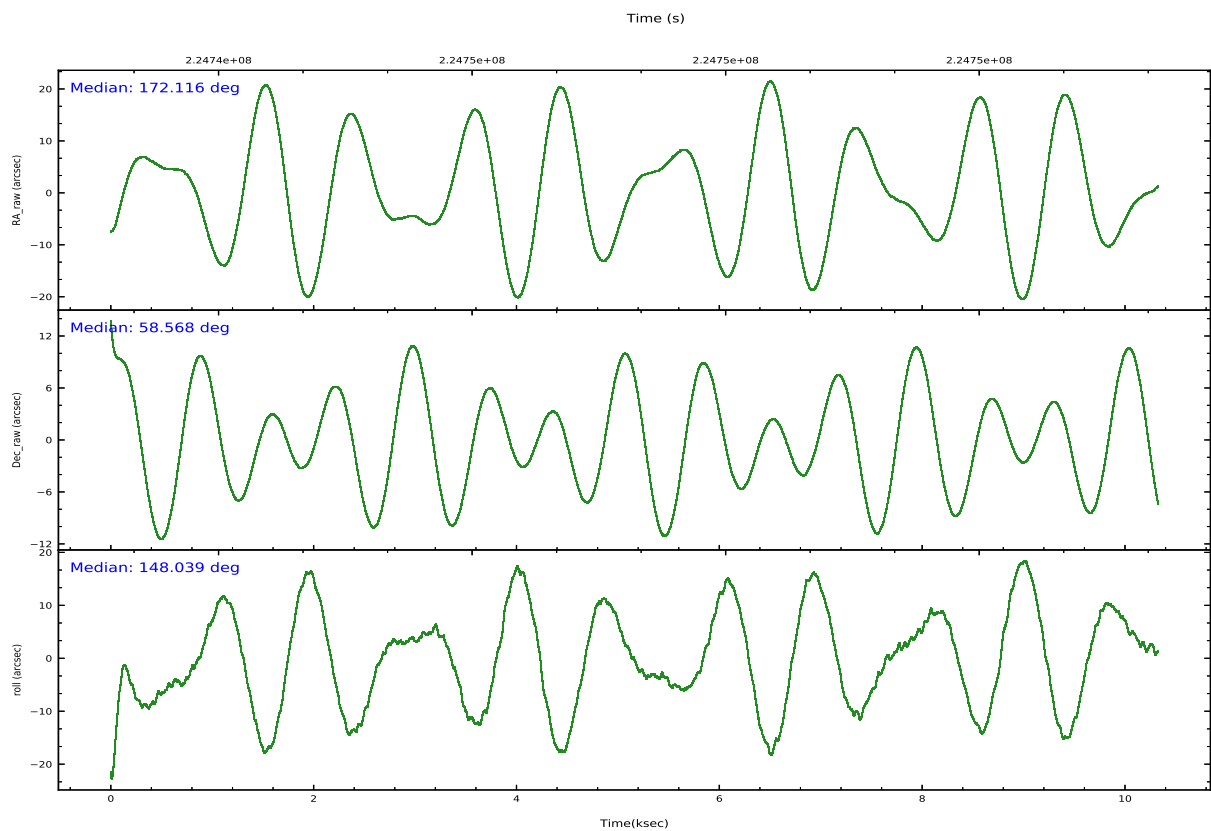


## 2.2 Compared Parameters

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	172.168441	172.12275589978	Subarray requested	NONE	NONE
[deg] Pointing Dec	58.567197	58.569530394136	Alternating exposures requested	N	N
[deg] Pointing Roll	147.832689	148.03900708635	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	224744064.184000	224741966.38435			
Observation start date	2005-02-14T04:53:20	2005-02-14T04:19:26			
[s] Observation end time (MET)	224754264.184000	224755129.43495			
Observation end date	2005-02-14T07:43:20	2005-02-14T07:58:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect



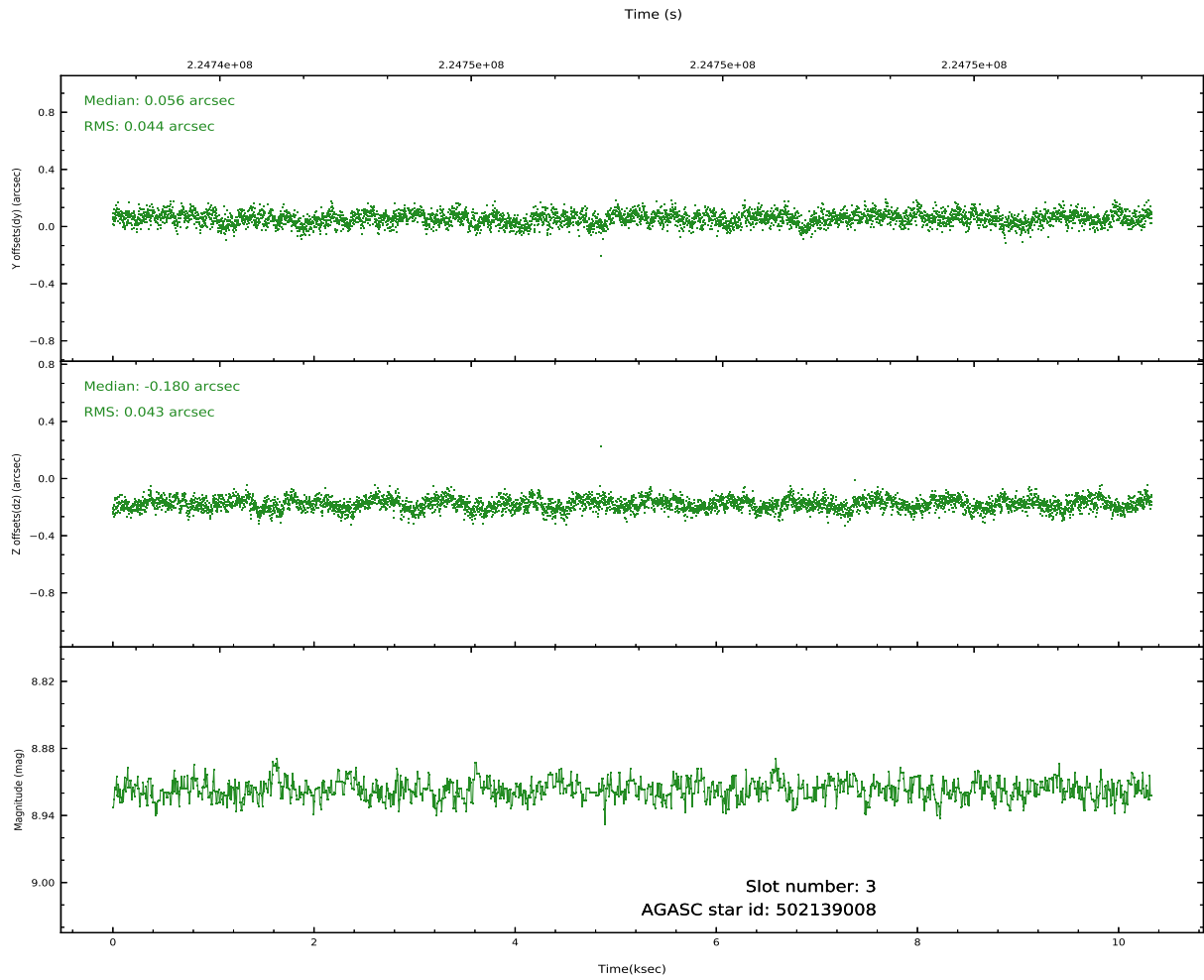
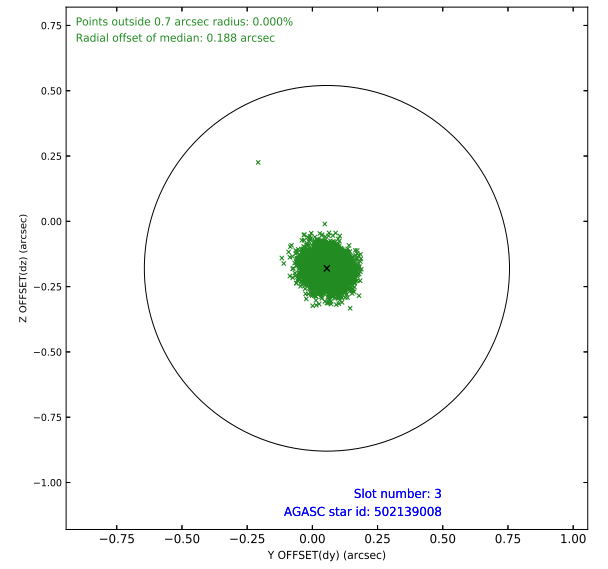
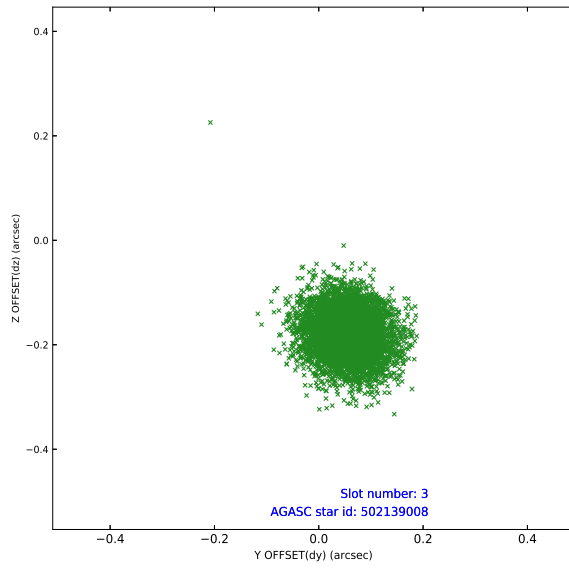


Slot Statistics

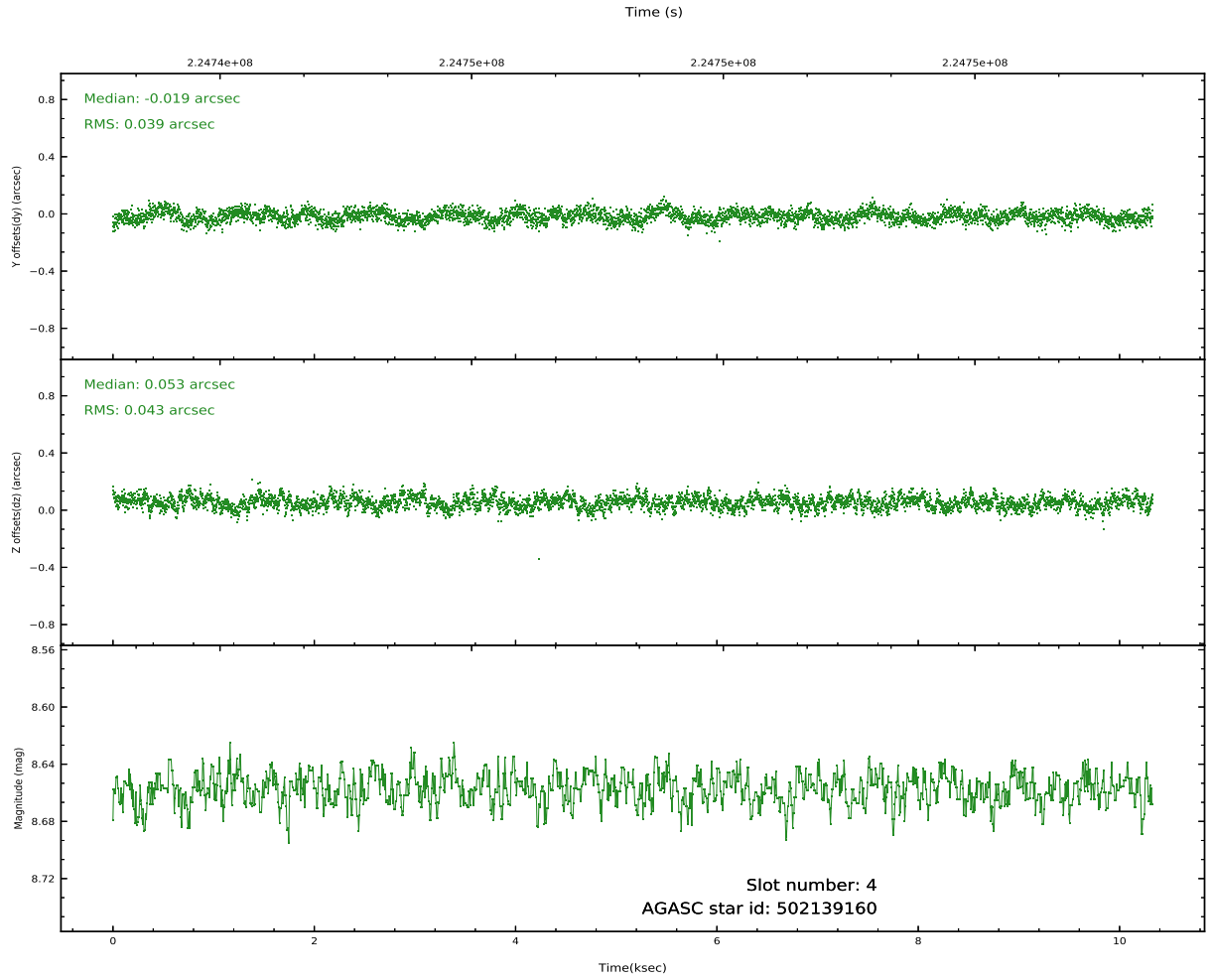
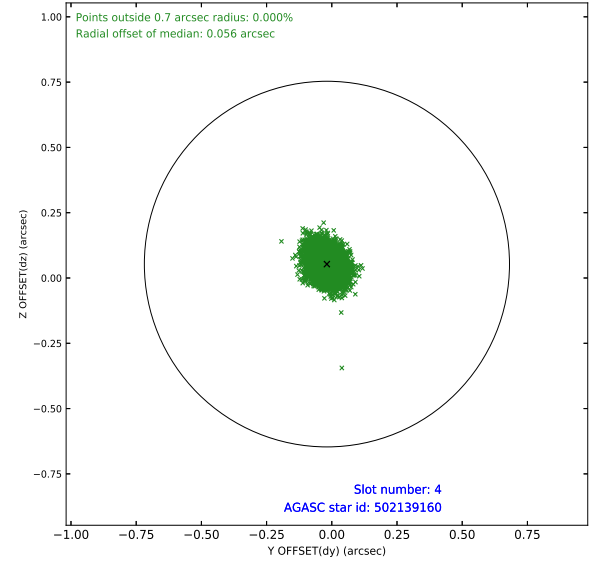
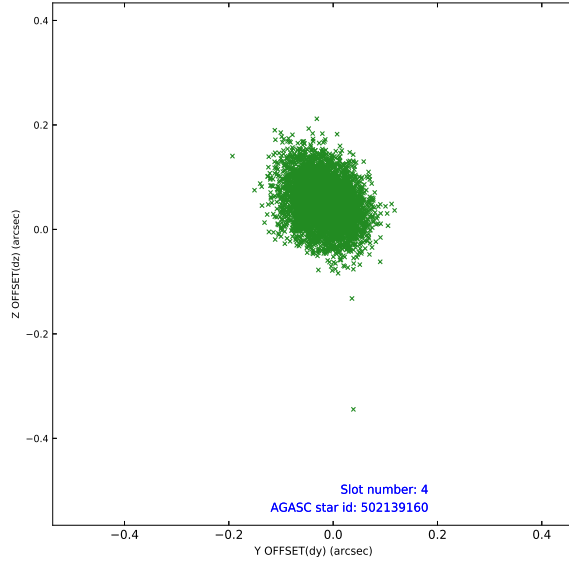
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.19	2519	1.000	0.053	-0.111	0.018	0.027	0.000000	0.000000	936.47	-1728
1	FID		ACIS-S-5	7.24	2517	1.000	-0.094	0.020	0.011	0.021	0.000000	0.000000	-1812.38	168
2	FID		ACIS-S-6	7.35	2519	1.000	0.018	0.099	0.014	0.021	0.000000	0.000000	401.45	813
3	GUIDE	used	502139008	8.92	5035	1.000	0.056	-0.180	0.066	0.106	171.461493	58.762354	1495.06	102
4	GUIDE	used	502139160	8.66	5038	1.000	-0.019	0.053	0.062	0.099	171.922858	58.702202	648.35	-167
5	GUIDE	used	502140120	9.86	5033	1.000	0.060	0.013	0.118	0.188	172.990279	58.650244	-1138.30	-1080
6	GUIDE	used	502141424	8.83	5039	1.000	-0.075	0.074	0.072	0.114	170.796377	58.588126	2233.02	1284
7	GUIDE	used	502143776	8.97	5037	1.000	-0.022	0.043	0.068	0.109	172.980797	58.430865	-1551.51	-406

## 2.4 Star Slots

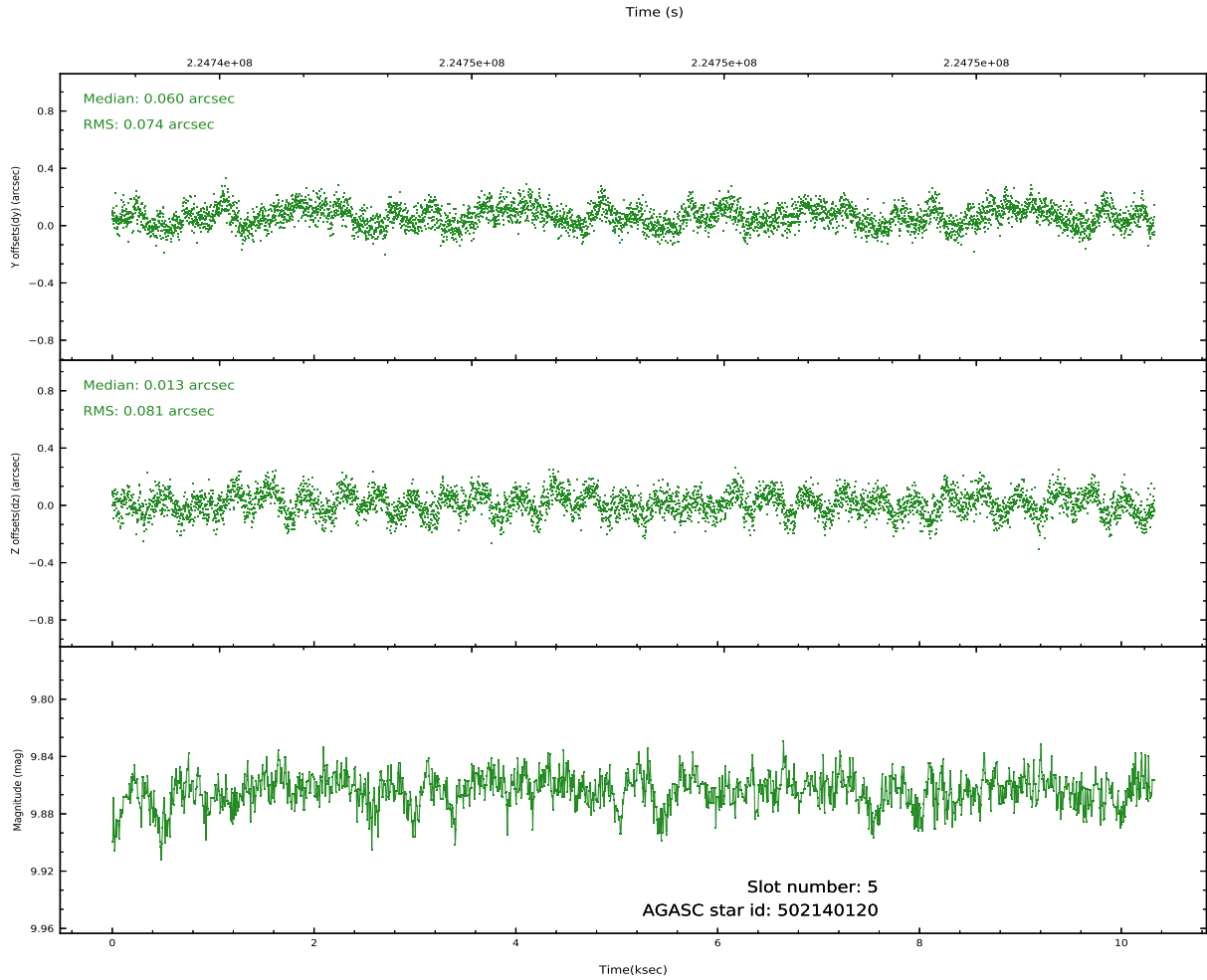
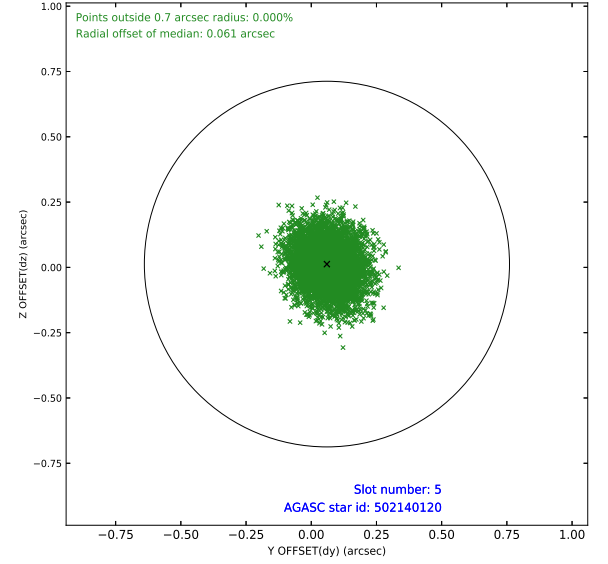
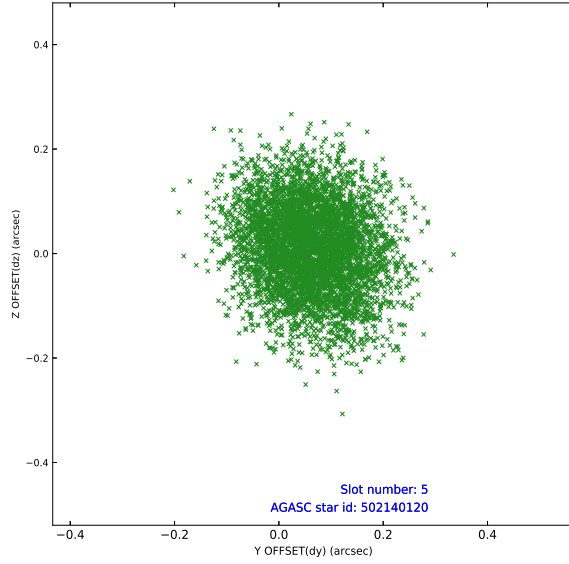
### 2.4.1 Slot 3



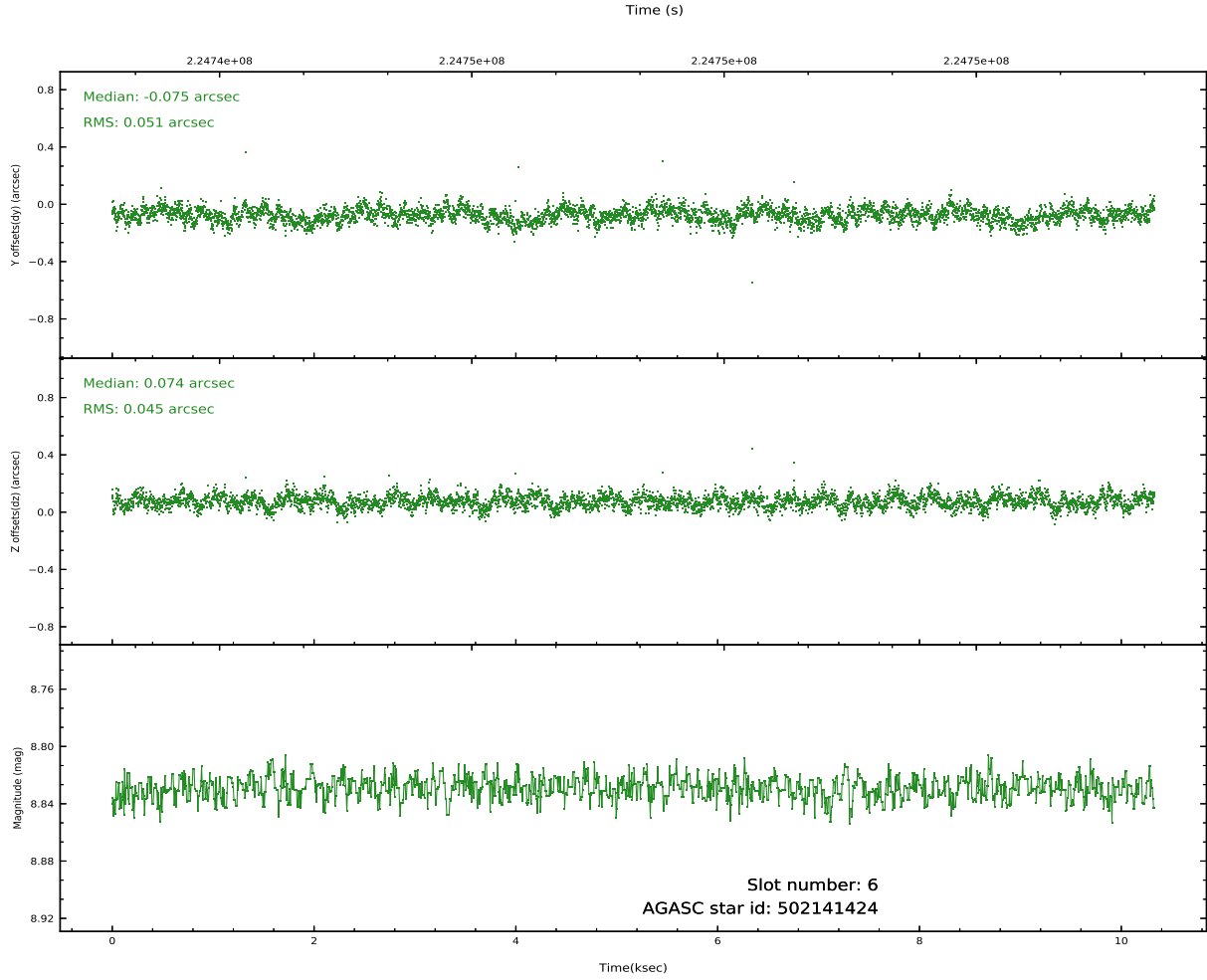
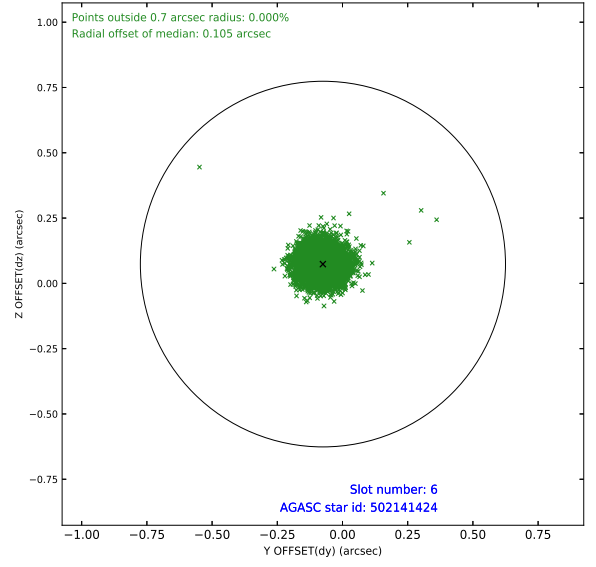
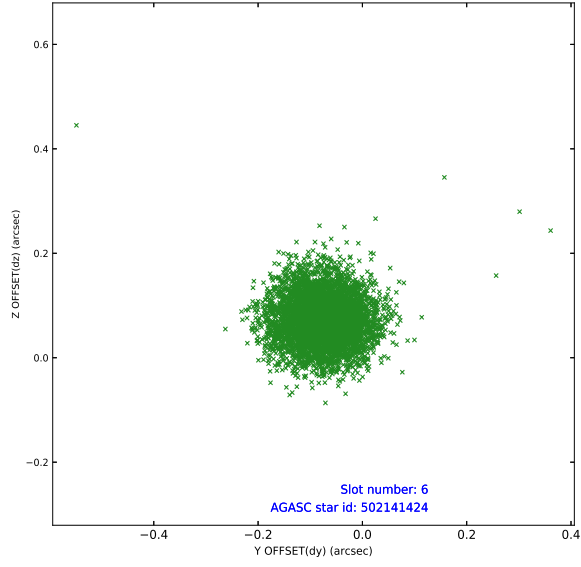
## 2.4.2 Slot 4



### 2.4.3 Slot 5

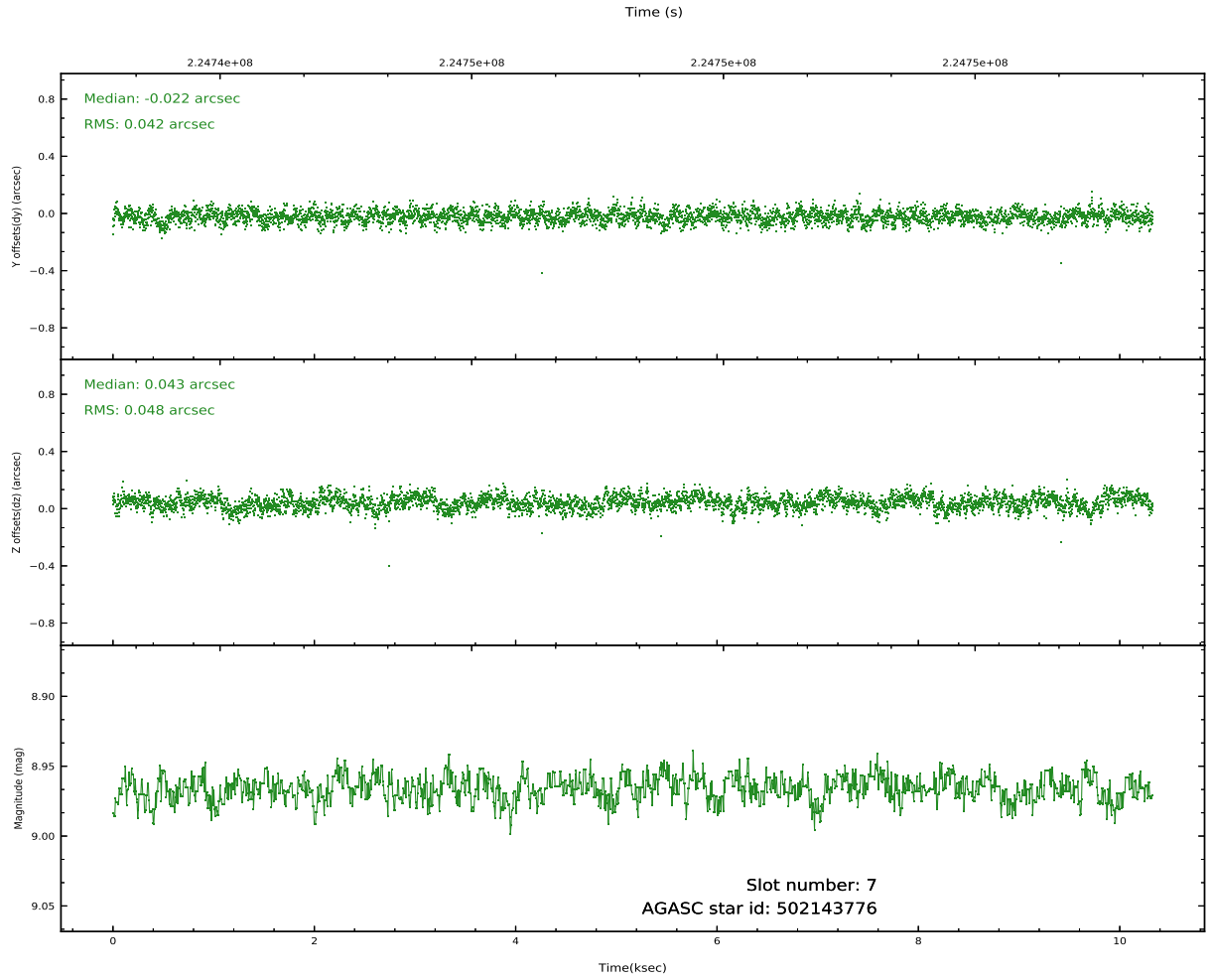
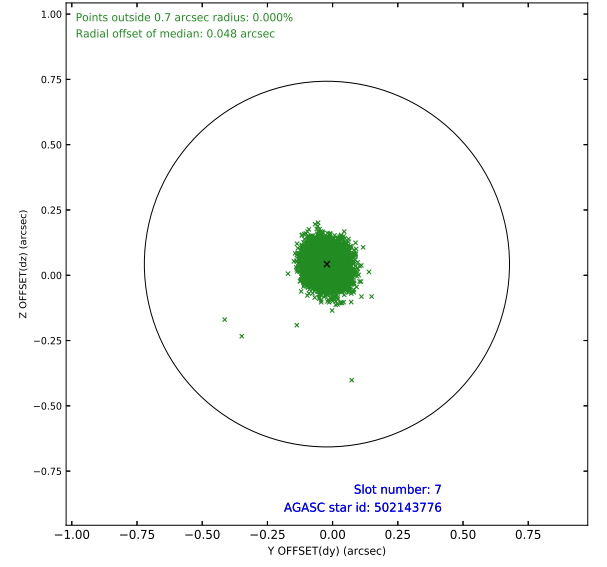
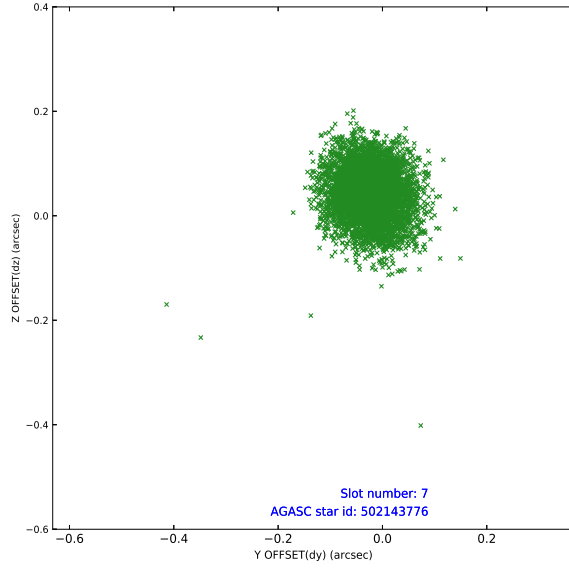


## 2.4.4 Slot 6



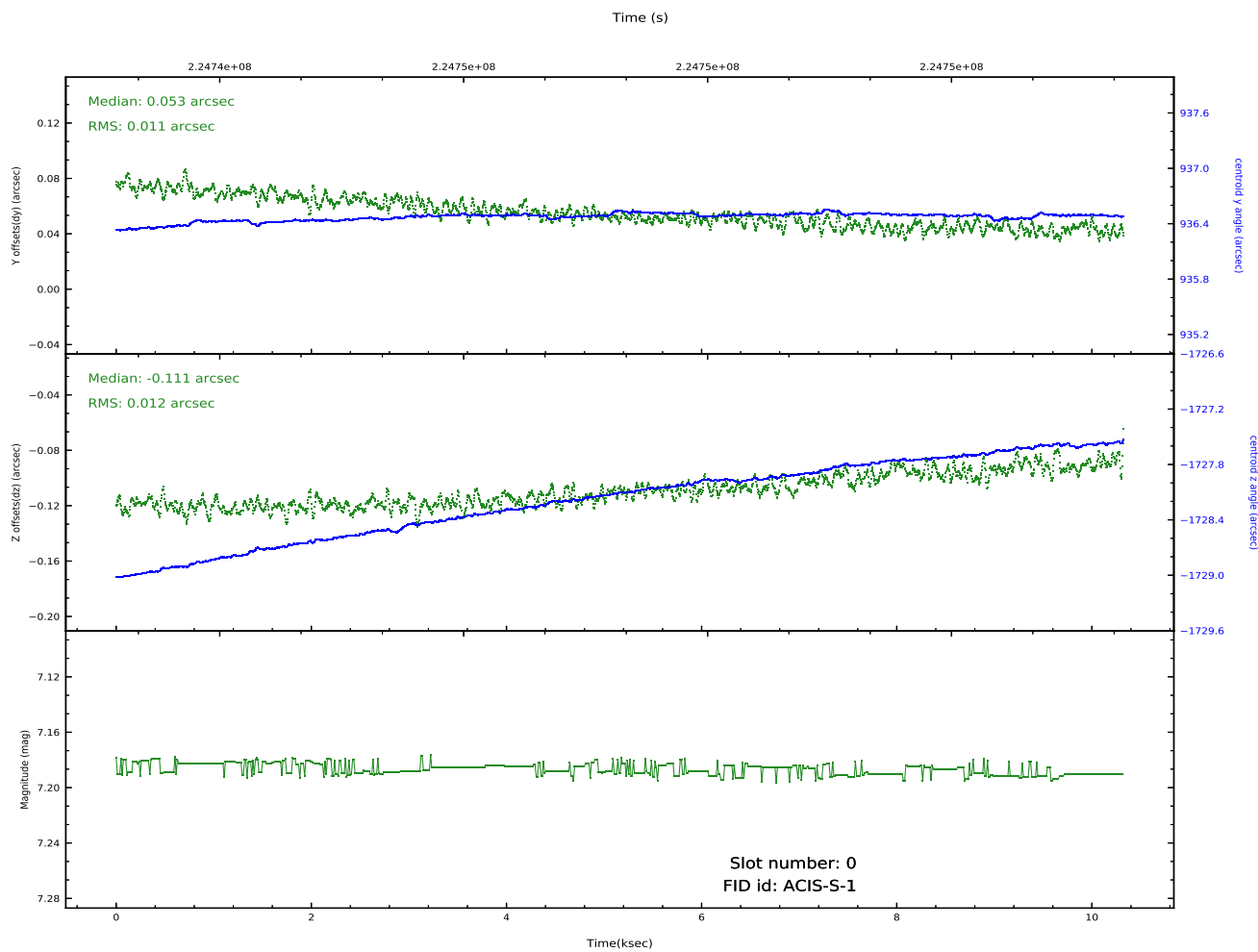
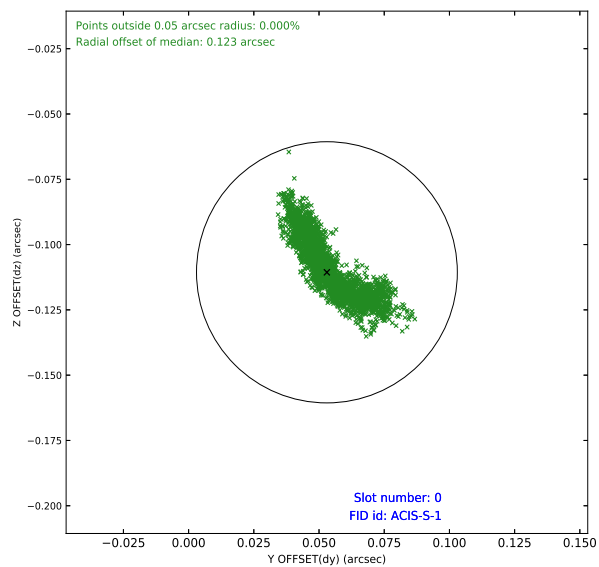
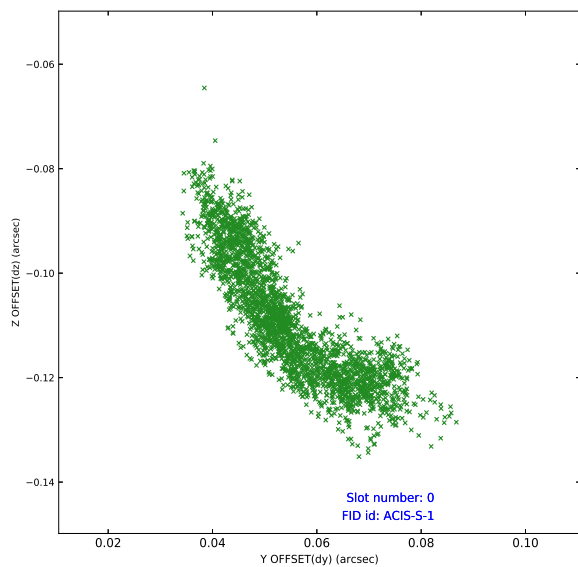


## 2.4.5 Slot 7

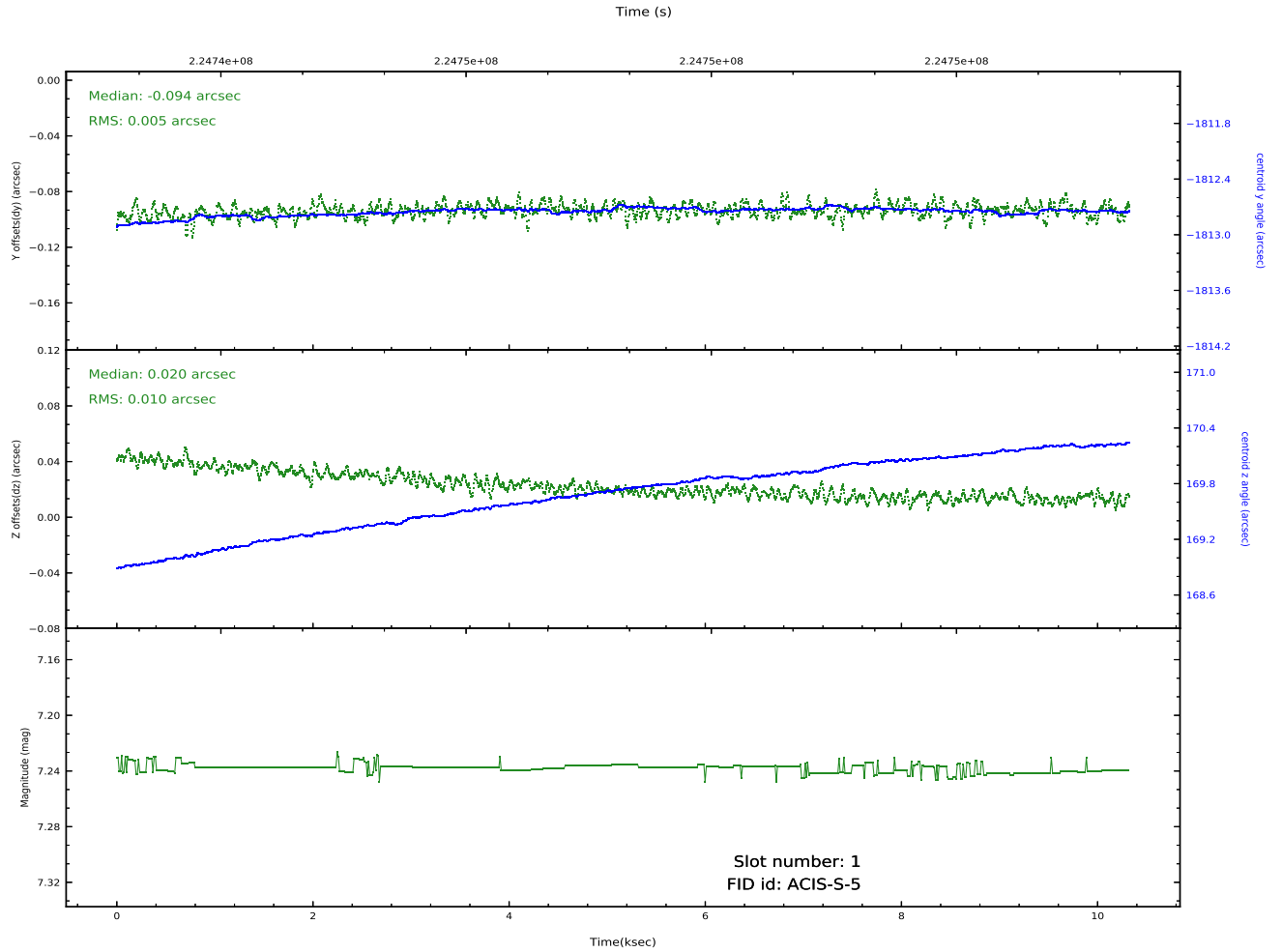
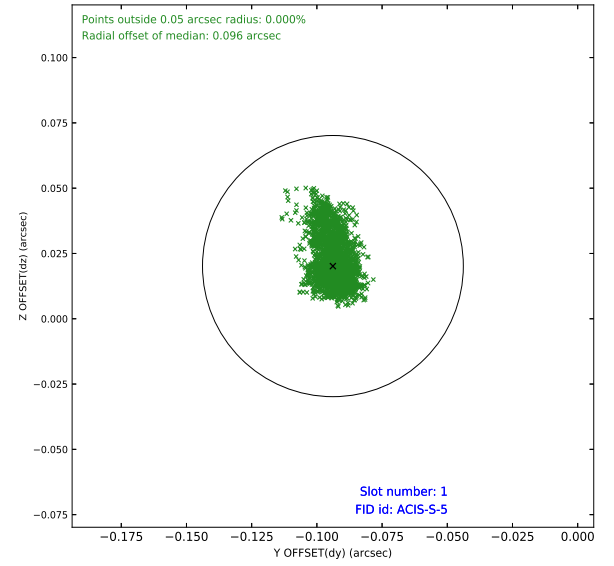
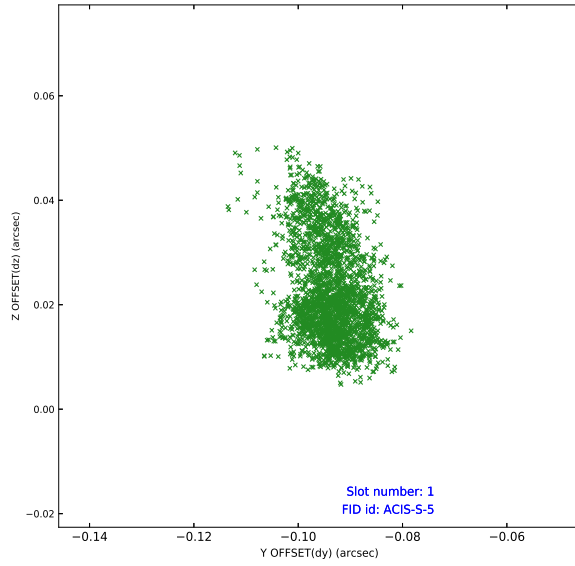


## 2.5 FID Slots

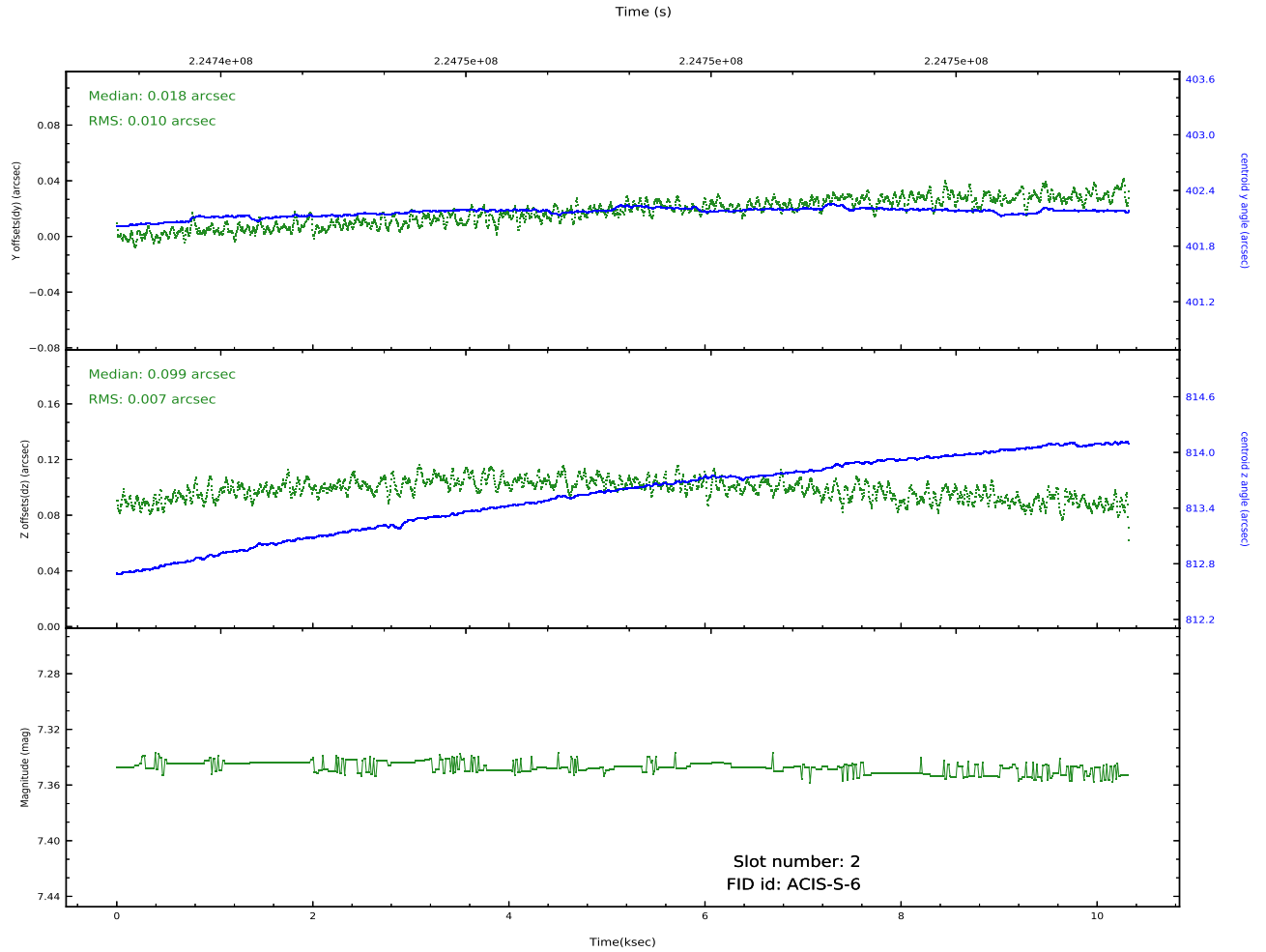
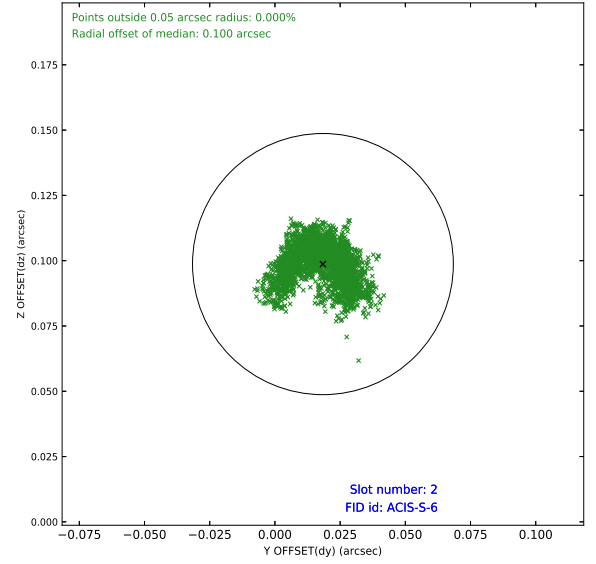
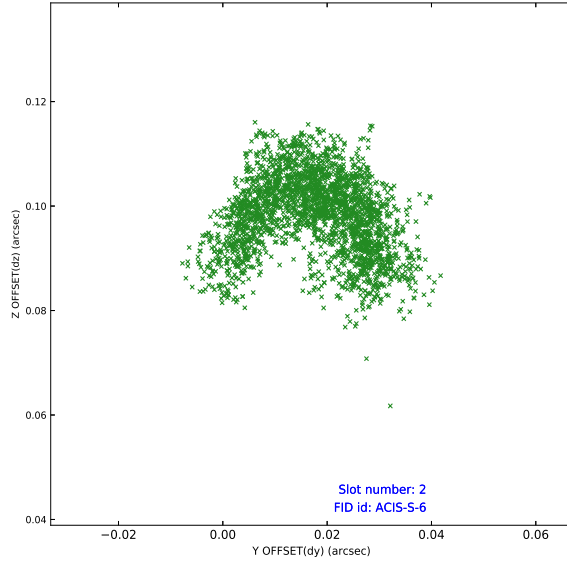
### 2.5.1 Slot 0



## 2.5.2 Slot 1



## 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.32319

### A.2 Comments