

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5765 - L2 Version 4  
Chandra X-Ray Center

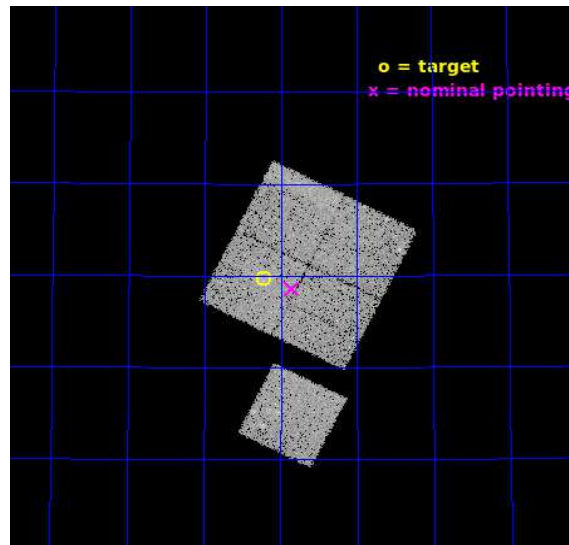
L2 Processing Date : Oct 6 2020

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# 1 Front

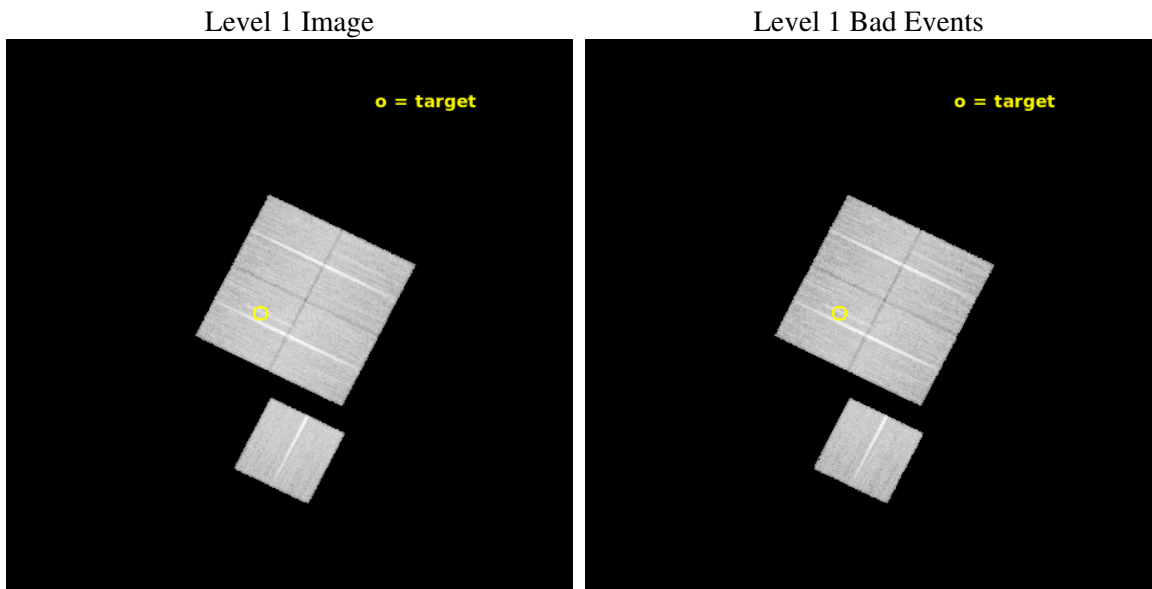
seq_num	800478	Sequence number
obs_id	5765	Observation id
title	DARK ENERGY WITH X-RAY CLUSTERS: CHANDRA OBSERVATIONS OF 41 HIGH-REDSHIFT CLUSTERS FROM THE 400 deg <sup>2</sup> ROSAT PSPC SURVEY	Proposal titl
observer	Dr Alexey Vikhlinin	Principal investigator
object	CIG J0853+5759	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	133.305833	Observer's specified target RA [deg]
dec_targ	57.995556	Observer's specified target Dec [deg]
ra_nom	133.21311111216	Nominal RA [deg]
dec_nom	57.976582671838	Nominal Dec [deg]
roll_nom	206.54353836674	Nominal Roll [deg]
revision	4	Processing version of data
ontime	24914.618001461	Sum of GTIs [s]
livetime	24589.090175397	Livetime [s]
ontime0	24920.899952054	Sum of GTIs [s]
ontime1	24920.899952054	Sum of GTIs [s]
ontime2	24914.617971539	Sum of GTIs [s]
ontime3	24914.618001461	Sum of GTIs [s]
ontime6	24914.617991567	Sum of GTIs [s]
l2events	63811	Number of level 2 events



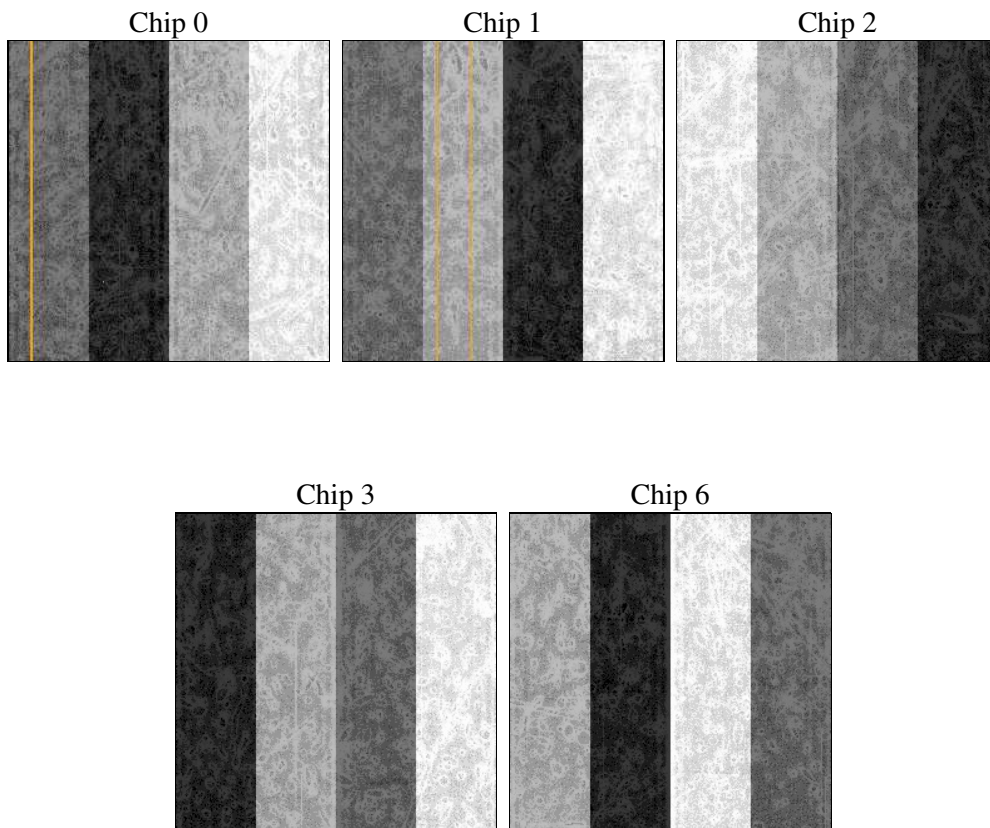
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25145.658000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	24914.618001461	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	24920.899952054	Sum of GTIs [s]
date	2020-10-06T21:49:30	Date and time of file creation	ontime1	24920.899952054	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	24914.617971539	Sum of GTIs [s]
			ontime3	24914.618001461	Sum of GTIs [s]
			ontime6	24914.617991567	Sum of GTIs [s]
			l1events	727601	Number of level 1 events

### 2.1.4 Events

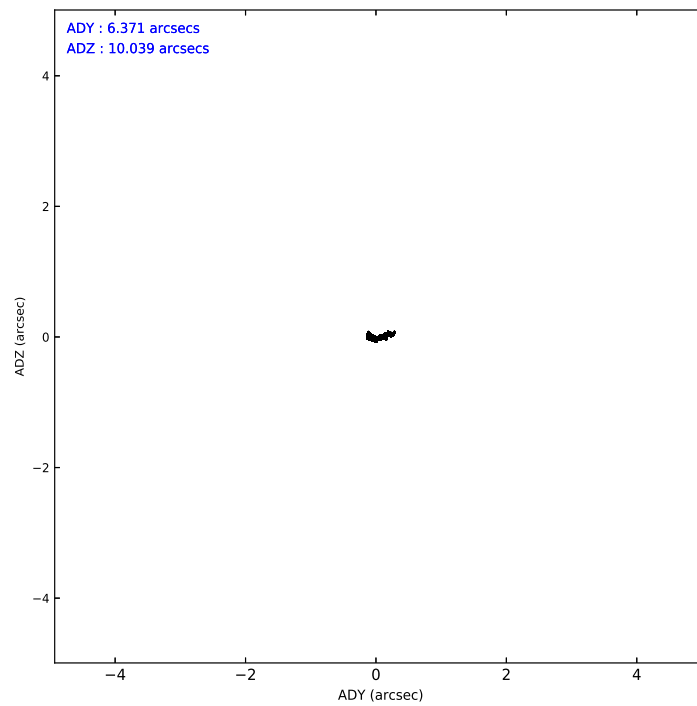
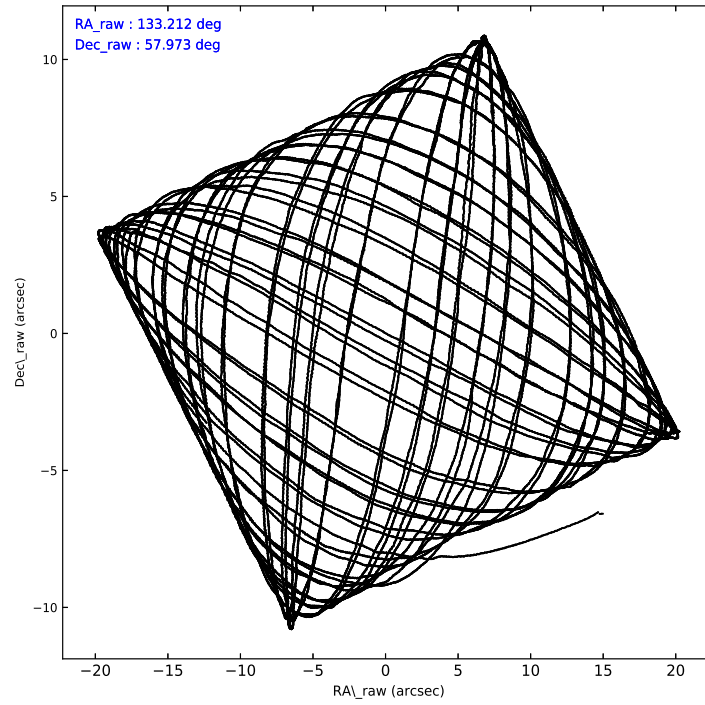
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	138059	139019	153249	148390	148884
rejected events	123103	122255	138393	133350	133155
rejected %	89%	87%	90%	89%	89%

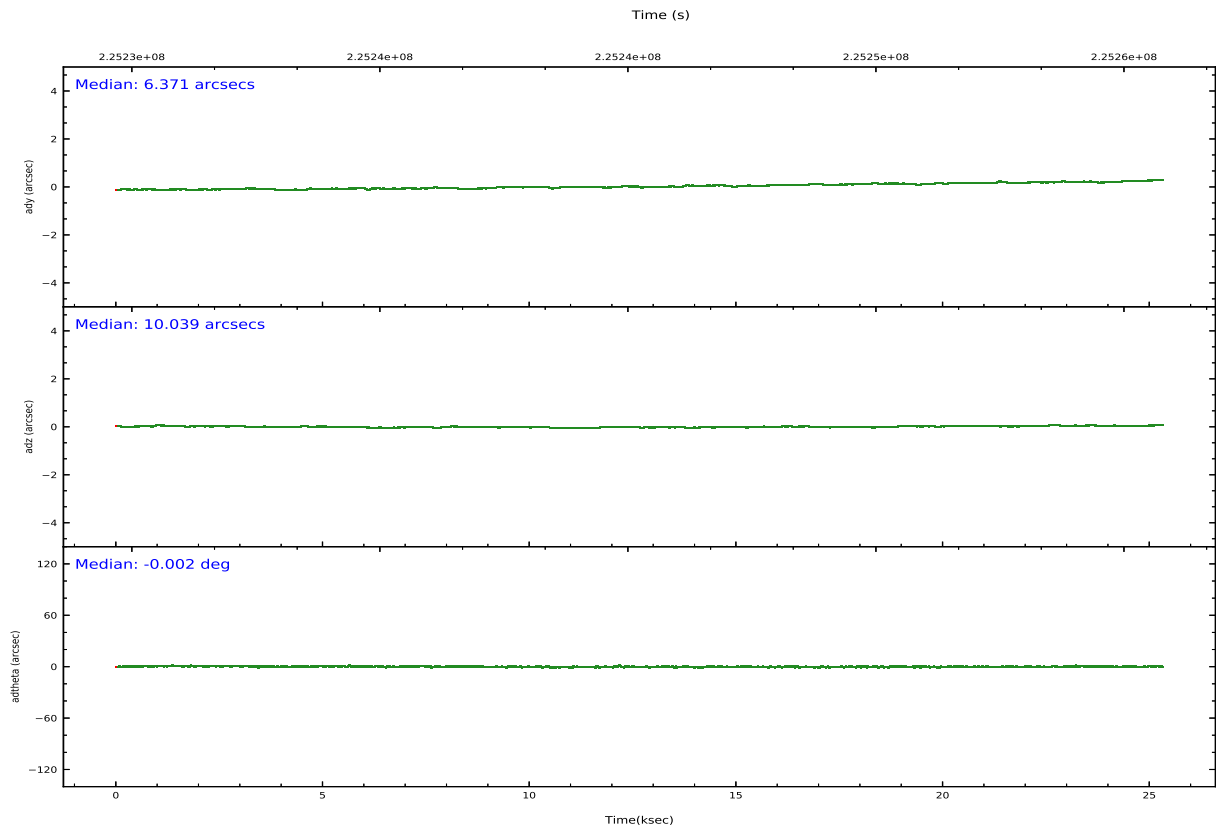
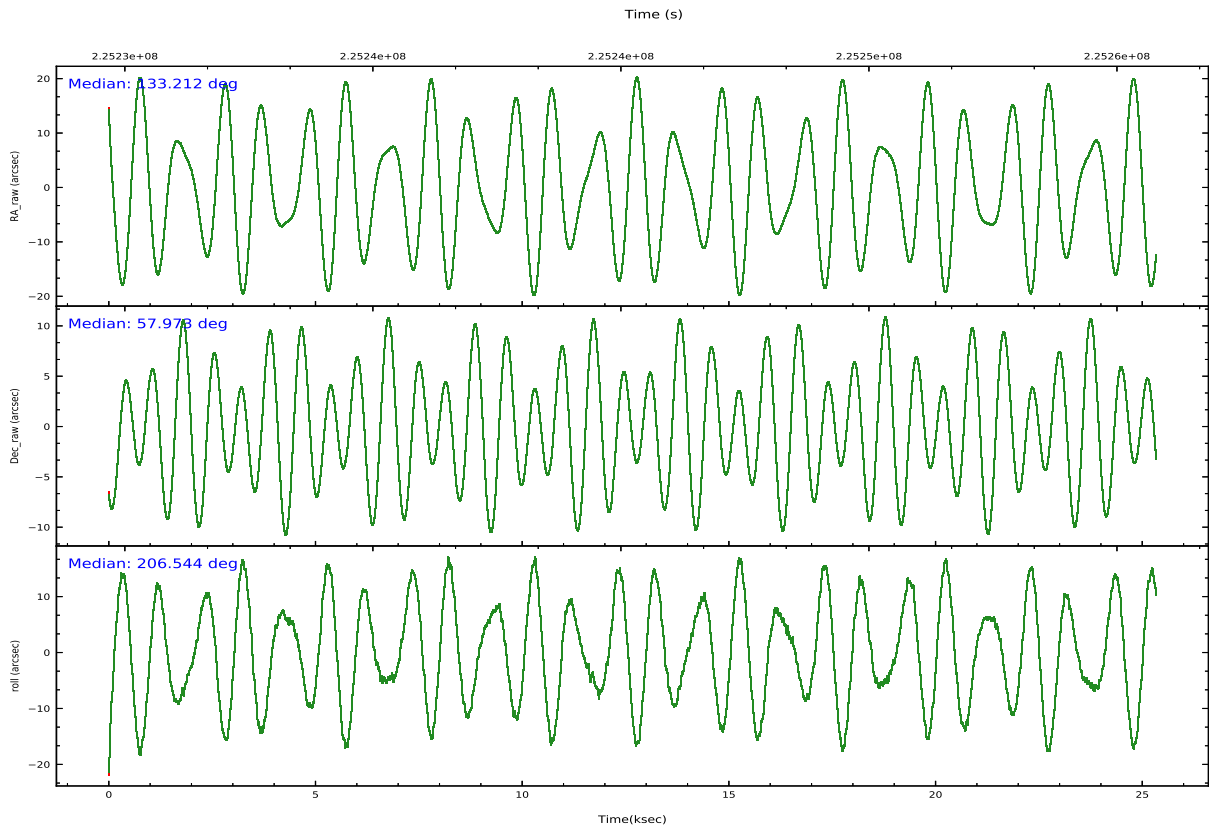
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5286	6105	5466	5732	5768
	3%	4%	3%	3%	3%
grade 1 events	75	68	76	93	65
	0%	0%	0%	0%	0%
grade 2 events	3565	3669	3388	3107	3262
	2%	2%	2%	2%	2%
grade 3 events	1698	1818	1603	1706	1714
	1%	1%	1%	1%	1%
grade 4 events	1633	1798	1675	1645	1708
	1%	1%	1%	1%	1%
grade 5 events	5205	5569	5036	5884	5898
	3%	4%	3%	3%	3%
grade 6 events	2781	3378	2725	2854	3282
	2%	2%	1%	1%	2%
grade 7 events	117816	116614	133280	127369	127187
	85%	83%	86%	85%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	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	133.240866	133.21311111216	Subarray requested	NONE	NONE
[deg] Pointing Dec	57.996035	57.976582671838	Alternating exposures requested	N	N
[deg] Pointing Roll	206.314279	206.54353836674	[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	-225.840463	-225.848371962627			
[mm] SIM translation stage offset	-7.752	-7.744081040302689			
[s] Observation start time (MET)	225231803.184000	225231152.26899			
Observation start date	2005-02-19T20:22:19	2005-02-19T20:12:32			
[s] Observation end time (MET)	225256949.184000	225257170.35767			
Observation end date	2005-02-20T03:21:25	2005-02-20T03:26:10			
Read mode	TIMED	TIMED			

## 2.3 Aspect





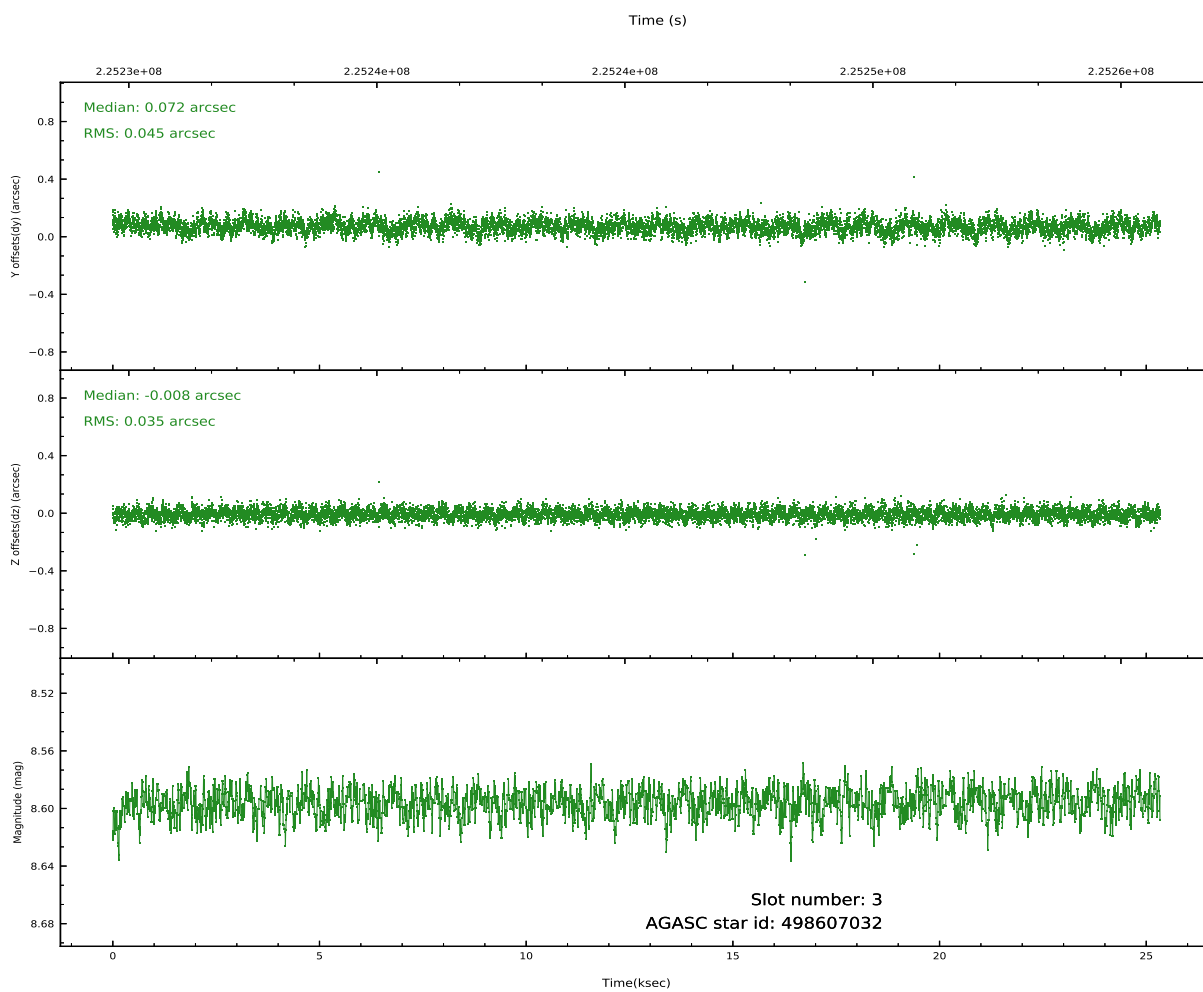
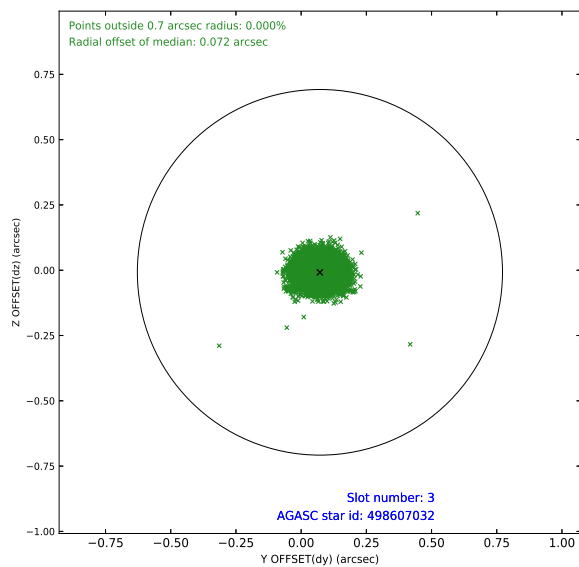
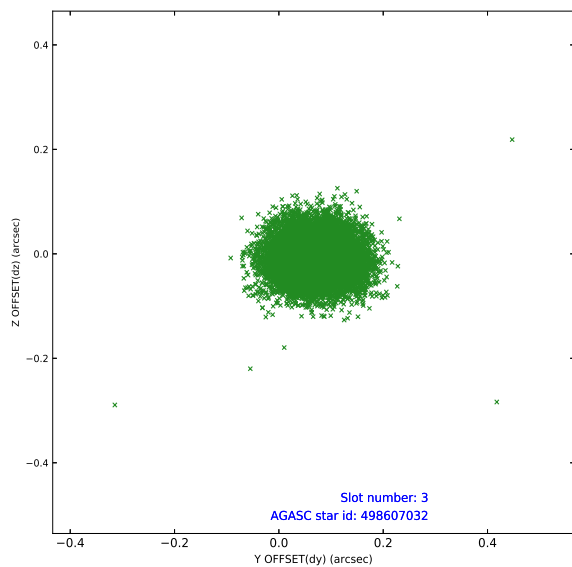
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	6180	1.000	0.105	-0.115	0.007	0.013	0.000000	0.000000	933.26	-992
1	FID		ACIS-I-5	7.22	6180	1.000	-0.265	0.078	0.008	0.015	0.000000	0.000000	-1815.16	904
2	FID		ACIS-I-6	7.26	6179	1.000	0.069	0.108	0.007	0.012	0.000000	0.000000	398.63	1549
3	GUIDE	used	498607032	8.60	12354	1.000	0.072	-0.008	0.060	0.098	132.440614	57.644577	1938.94	443
4	GUIDE	used	498607272	8.58	12355	1.000	0.080	0.048	0.063	0.100	132.975623	58.126700	243.37	-645
5	GUIDE	used	498611040	8.22	12359	1.000	-0.068	-0.021	0.062	0.099	133.169312	58.672803	-959.83	-2243
6	GUIDE	used	499519688	7.26	12360	1.000	-0.187	-0.136	0.063	0.110	134.354711	58.218797	-2256.21	201
7	GUIDE	used	499136048	8.84	12354	1.000	0.101	0.123	0.091	0.142	133.767198	57.426937	-8.21	2285

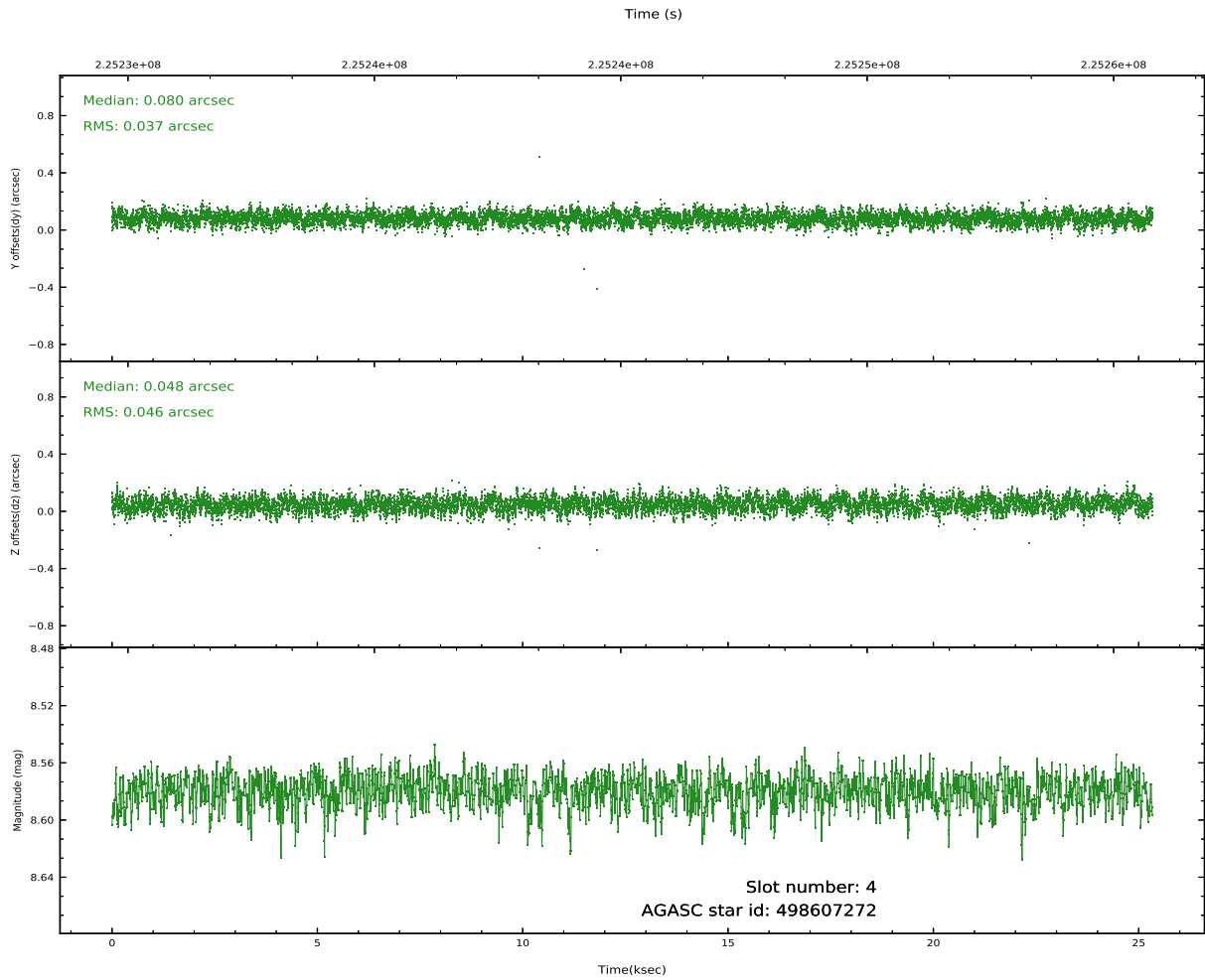
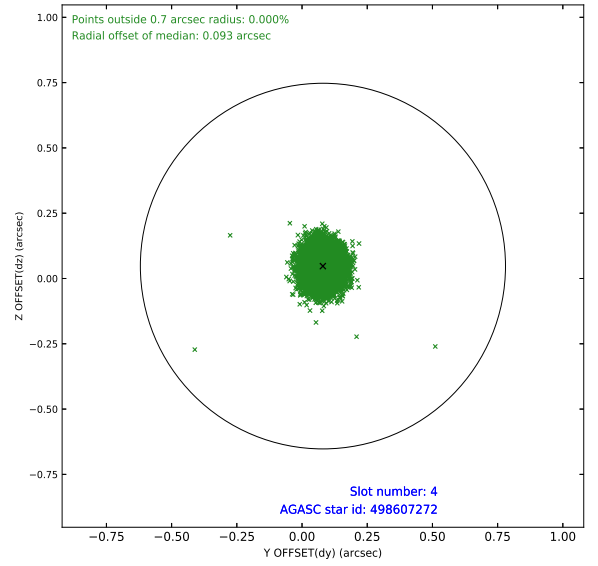
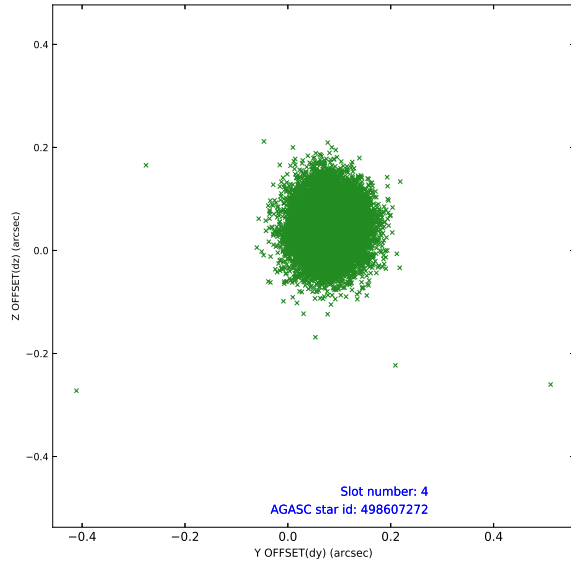
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## 2.4 Star Slots

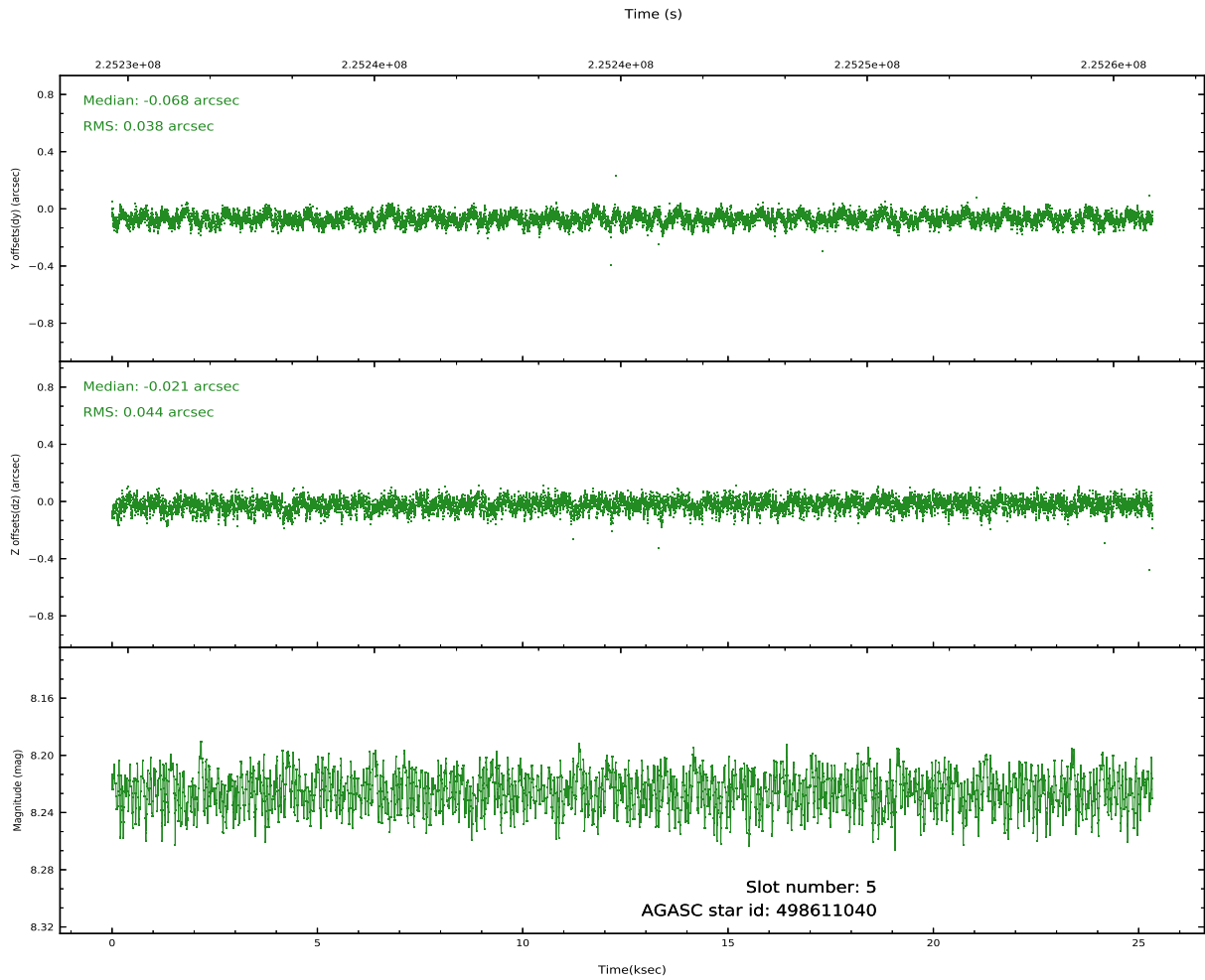
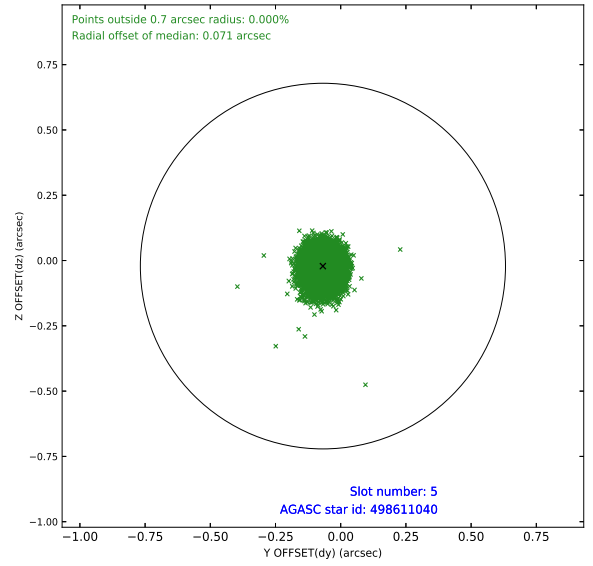
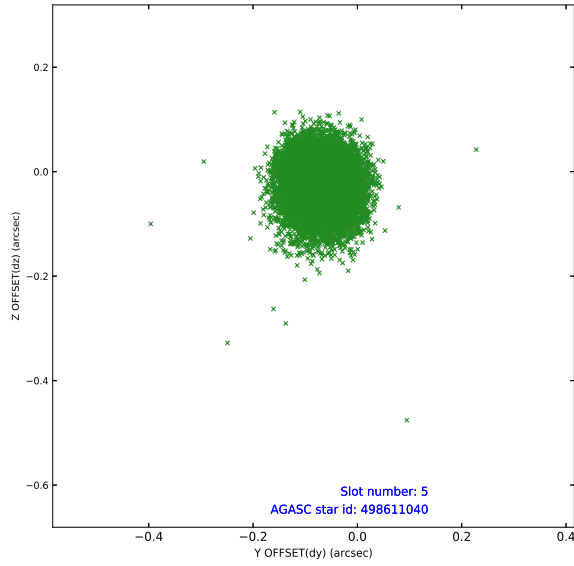
### 2.4.1 Slot 3



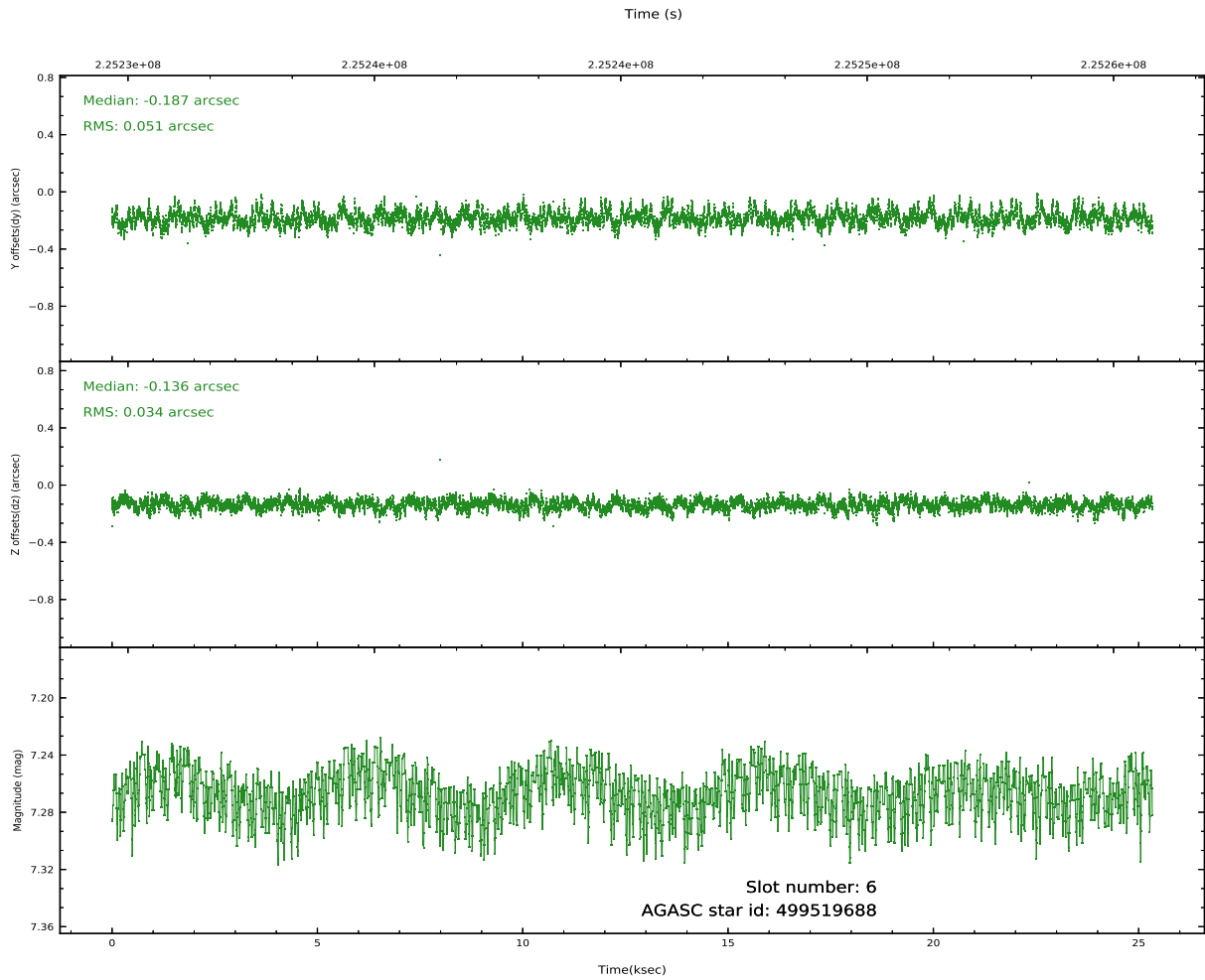
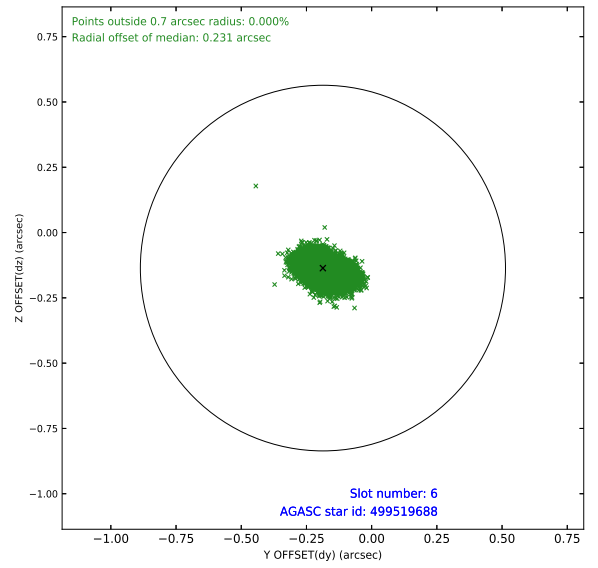
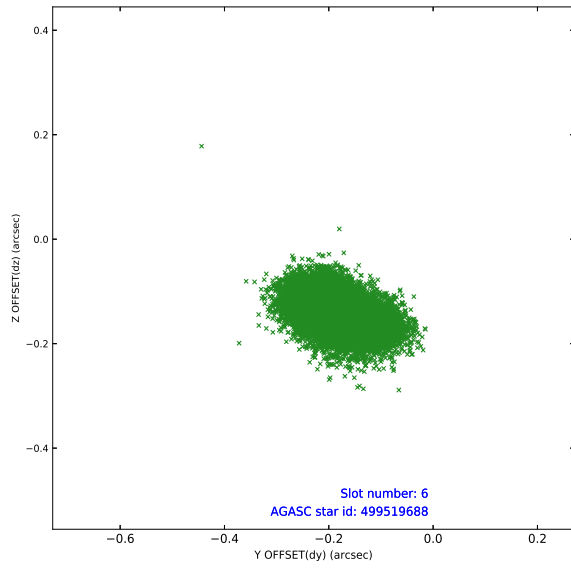
## 2.4.2 Slot 4



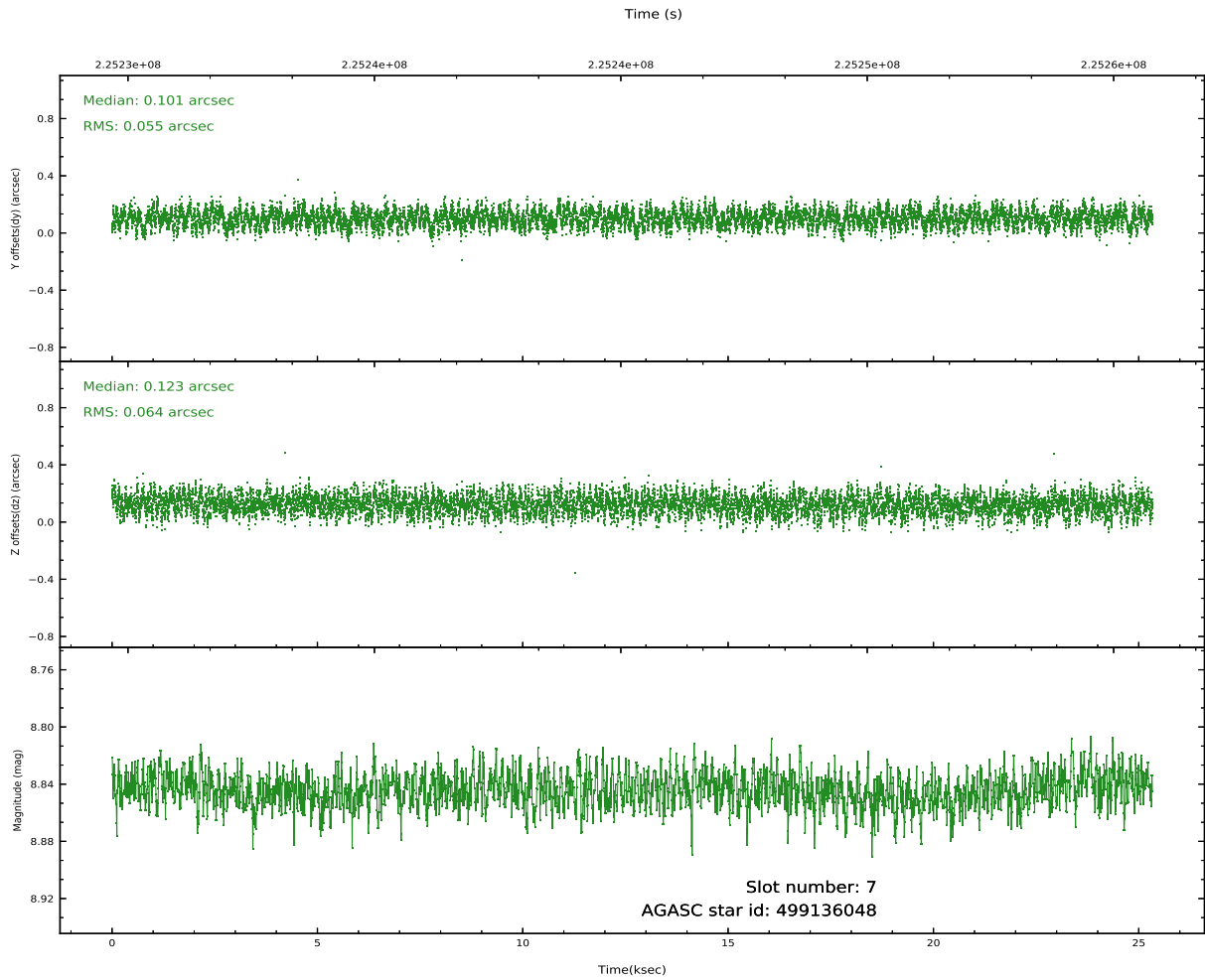
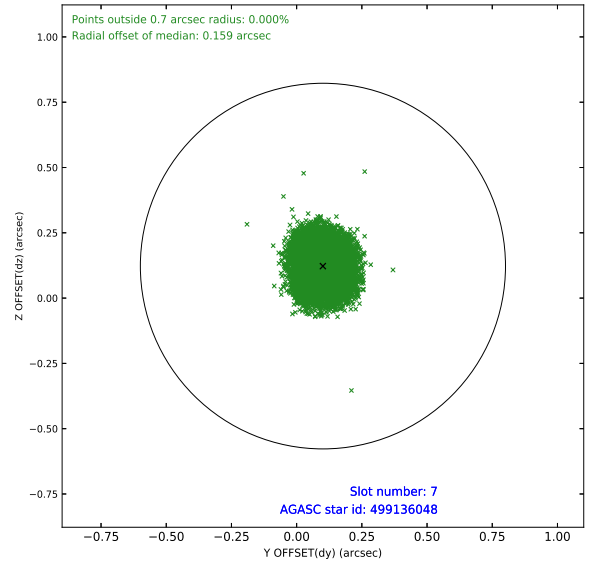
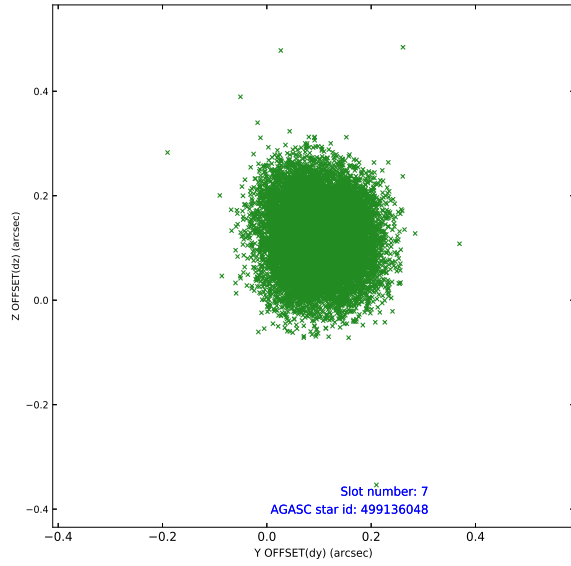
### 2.4.3 Slot 5



## 2.4.4 Slot 6

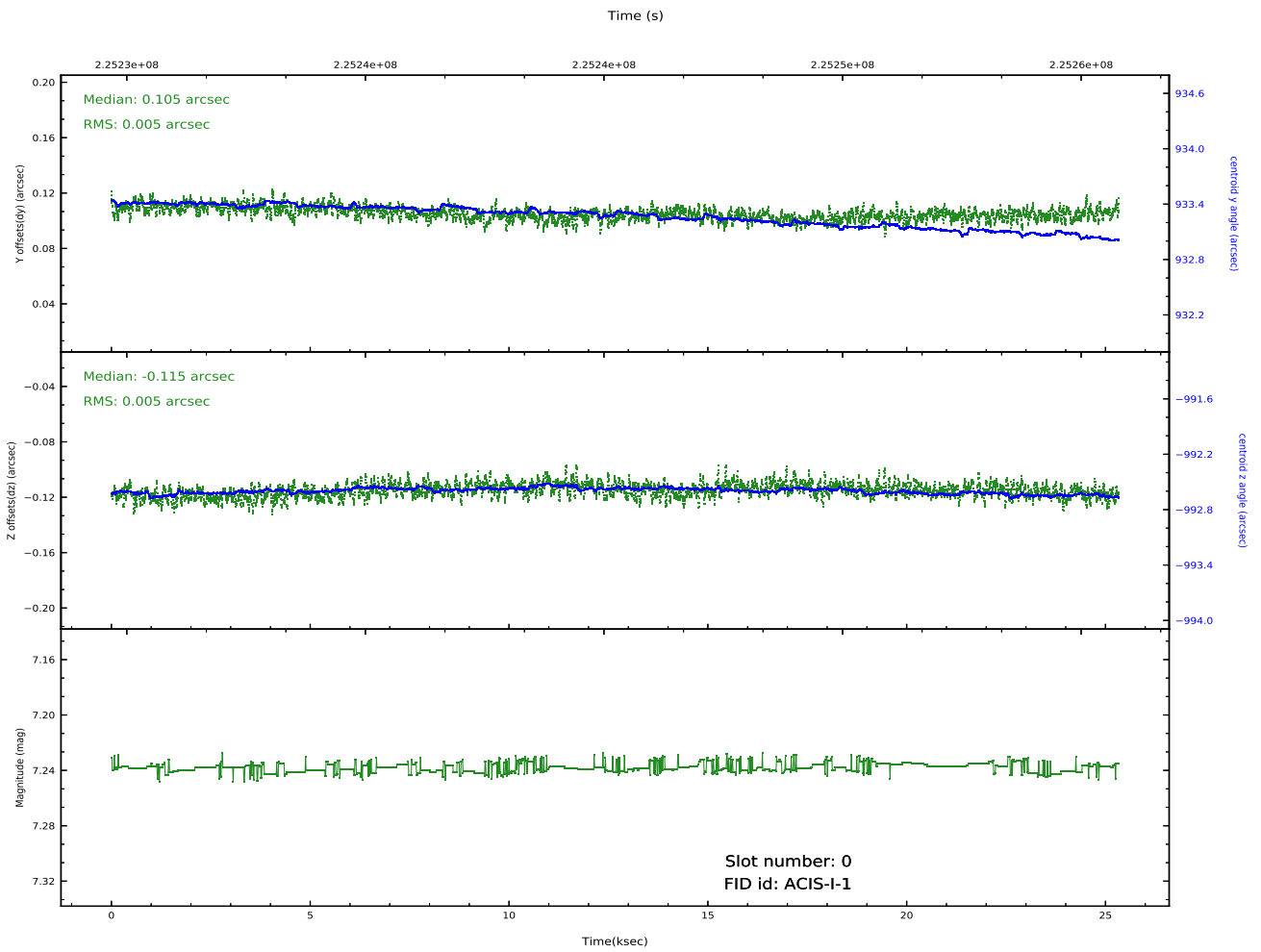
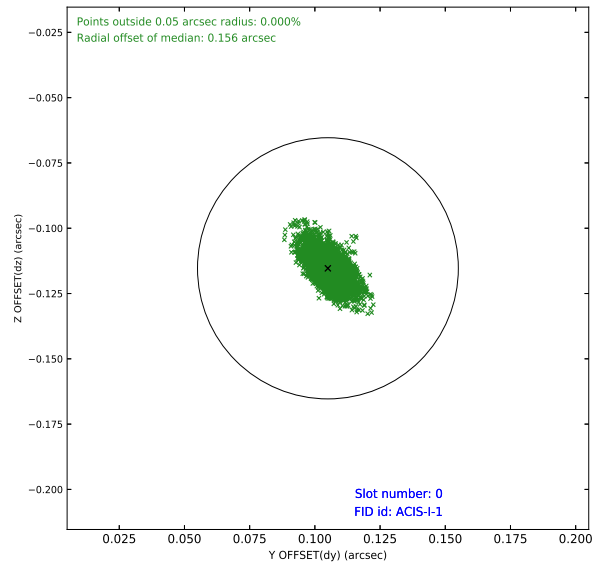
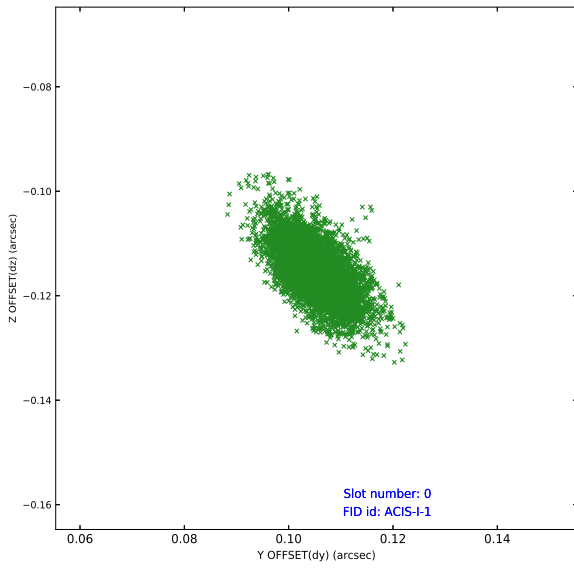


## 2.4.5 Slot 7

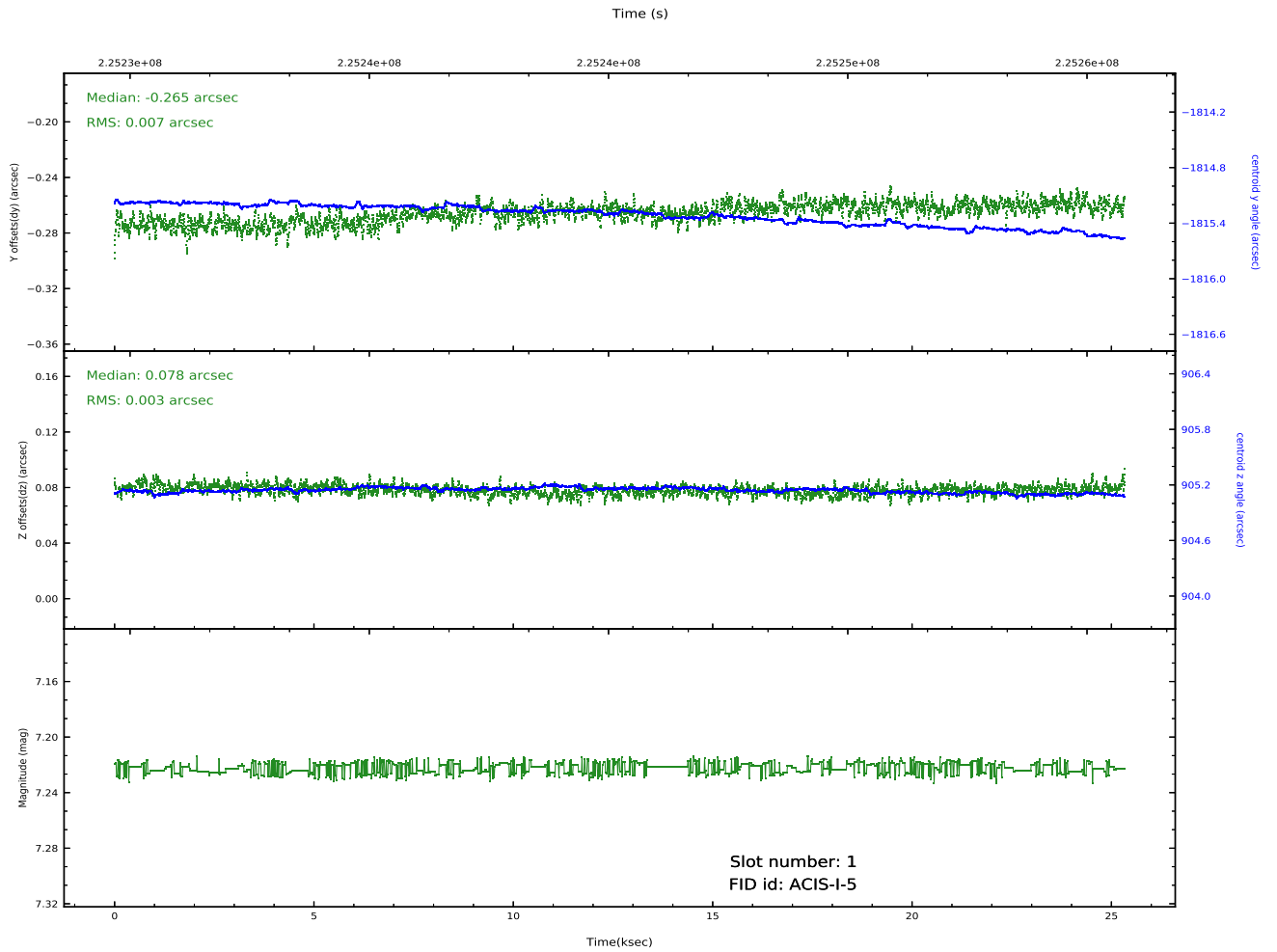
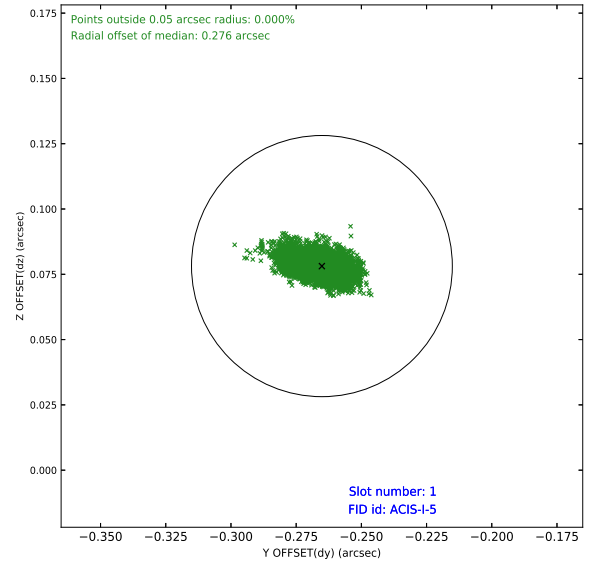
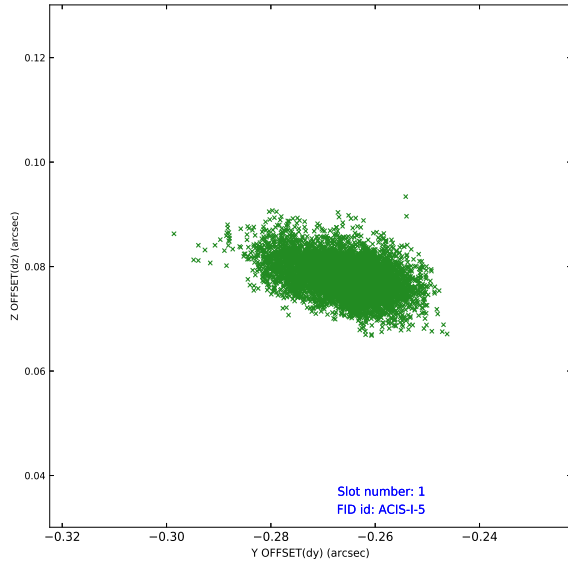


## 2.5 FID Slots

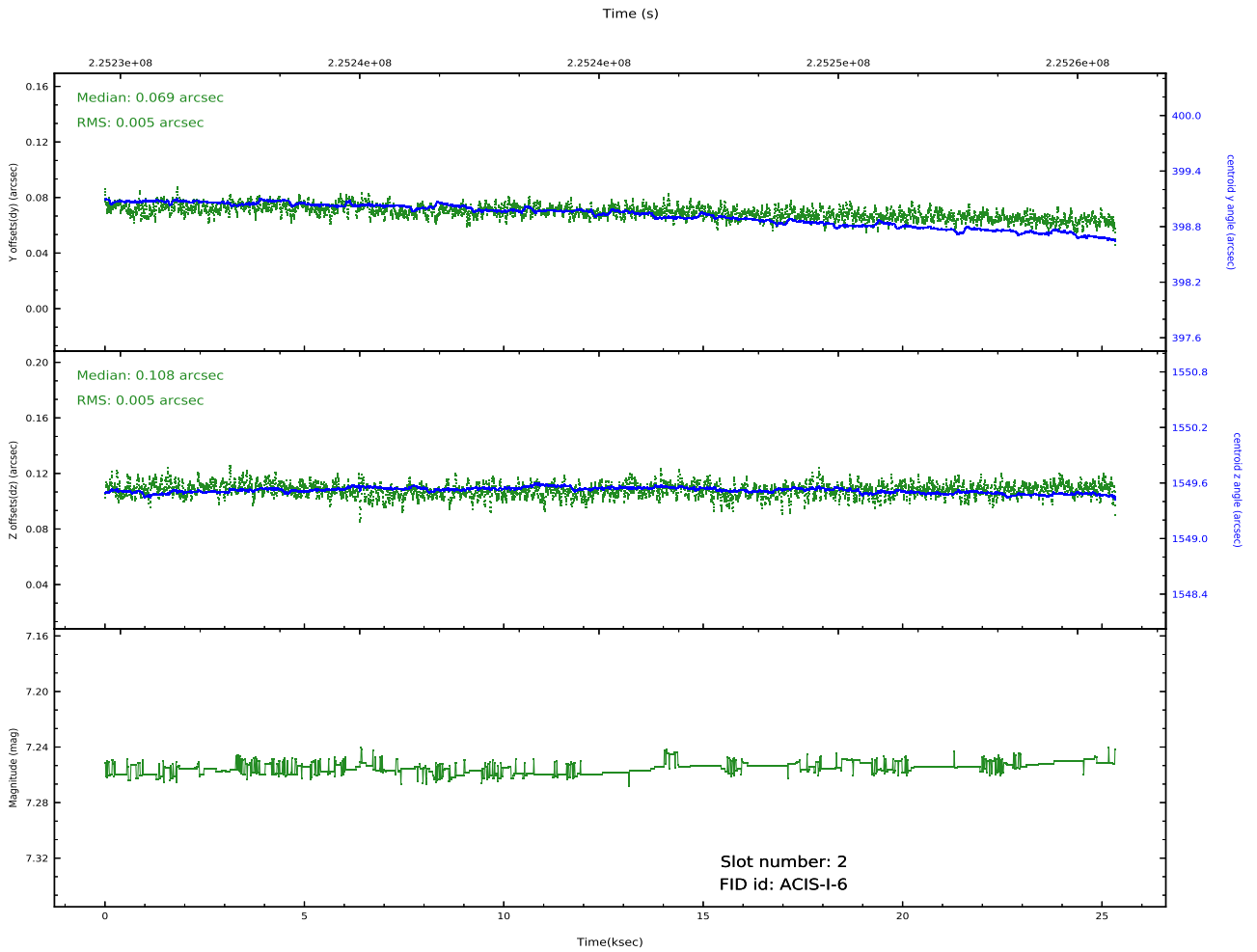
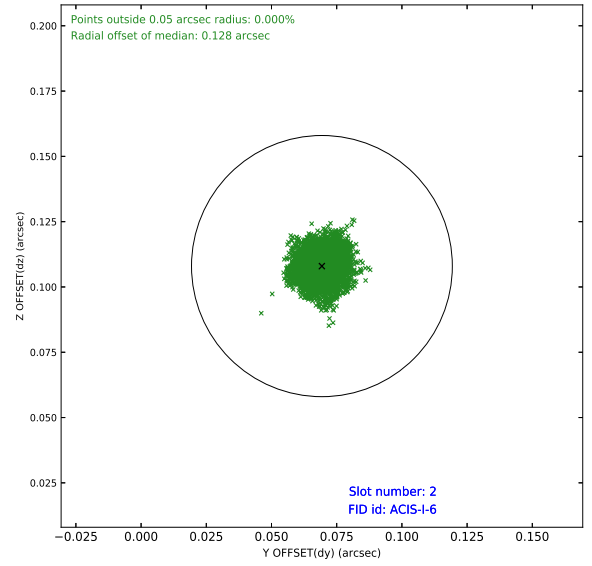
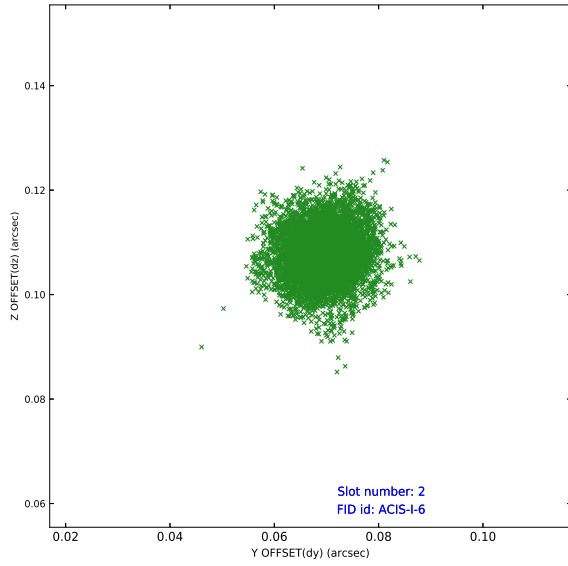
### 2.5.1 Slot 0



## 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	24.91461

## A.2 Comments