

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5178 - L2 Version 4  
Chandra X-Ray Center

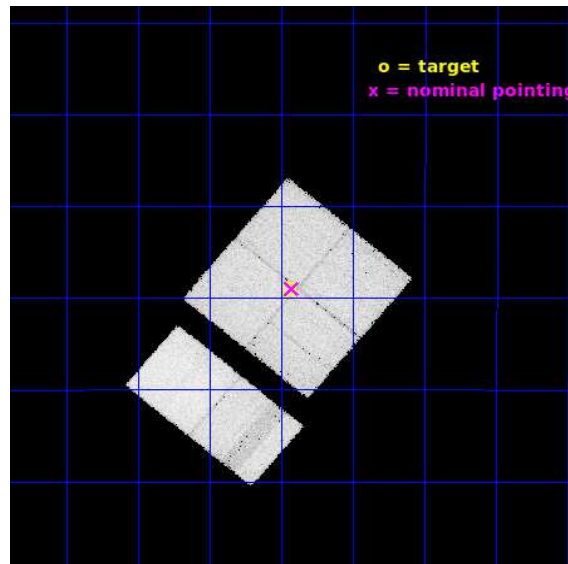
L2 Processing Date : Sep 26 2020

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# 1 Front

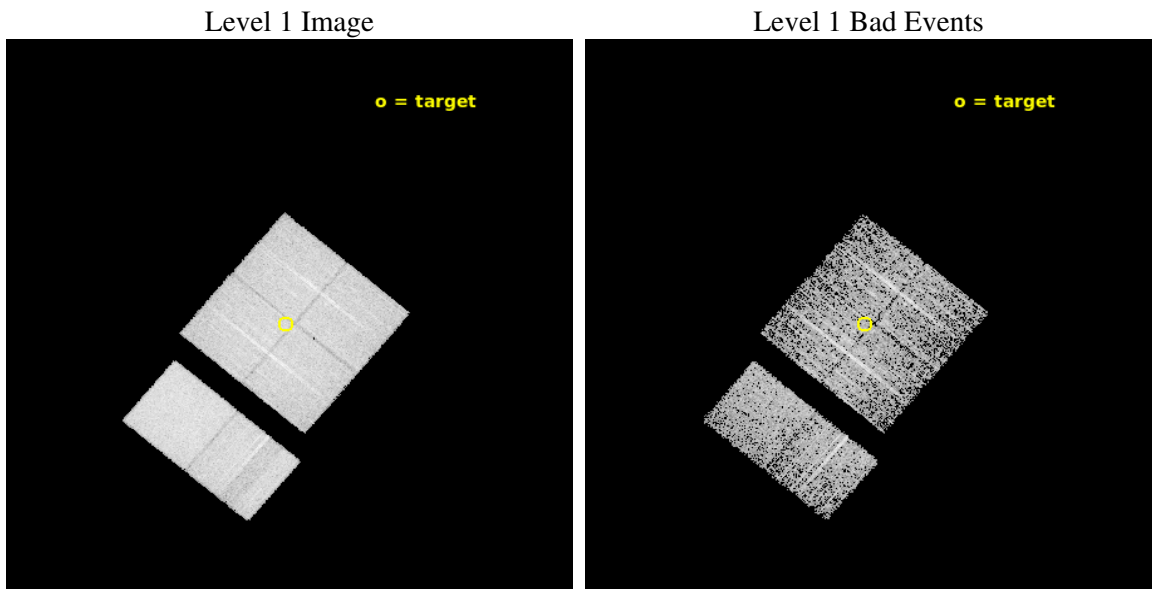
seq_num	200286	Sequence number
obs_id	5178	Observation id
title	Alternate - Search for beta Pic analogs extension	Proposal title
observer	Gordon Garmire	Principal investigator
object	HR 5875	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	237.236667	Observer's specified target RA [deg]
dec_targ	-3.818333	Observer's specified target Dec [deg]
ra_nom	237.23223966658	Nominal RA [deg]
dec_nom	-3.8164016520661	Nominal Dec [deg]
roll_nom	219.90981100959	Nominal Roll [deg]
revision	4	Processing version of data
ontime	2921.5999891162	Sum of GTIs [s]
livetime	2884.6049308777	Livetime [s]
ontime0	2921.4850625694	Sum of GTIs [s]
ontime1	2921.5261025429	Sum of GTIs [s]
ontime2	2921.5671425462	Sum of GTIs [s]
ontime3	2921.5999891162	Sum of GTIs [s]
ontime6	2921.5999891162	Sum of GTIs [s]
ontime7	2921.5999891162	Sum of GTIs [s]
l2events	206605	Number of level 2 events



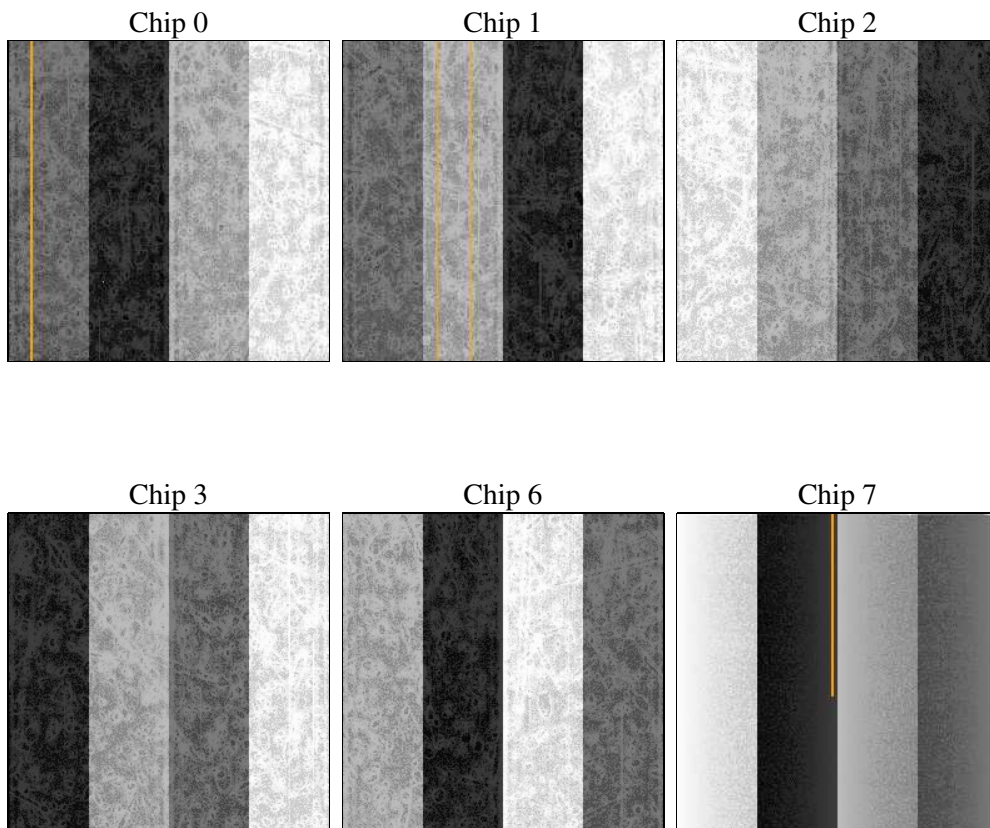
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2963.965000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	2921.5999891162	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	2921.4850625694	Sum of GTIs [s]
date	2020-09-26T10:22:47	Date and time of file creation	ontime1	2921.5261025429	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	2921.5671425462	Sum of GTIs [s]
			ontime3	2921.5999891162	Sum of GTIs [s]
			ontime6	2921.5999891162	Sum of GTIs [s]
			ontime7	2921.5999891162	Sum of GTIs [s]
			l1events	338870	Number of level 1 events

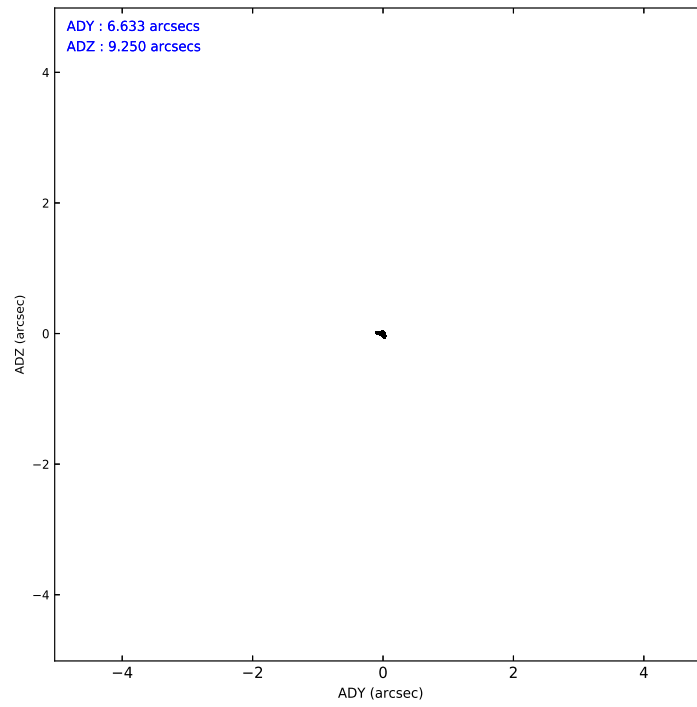
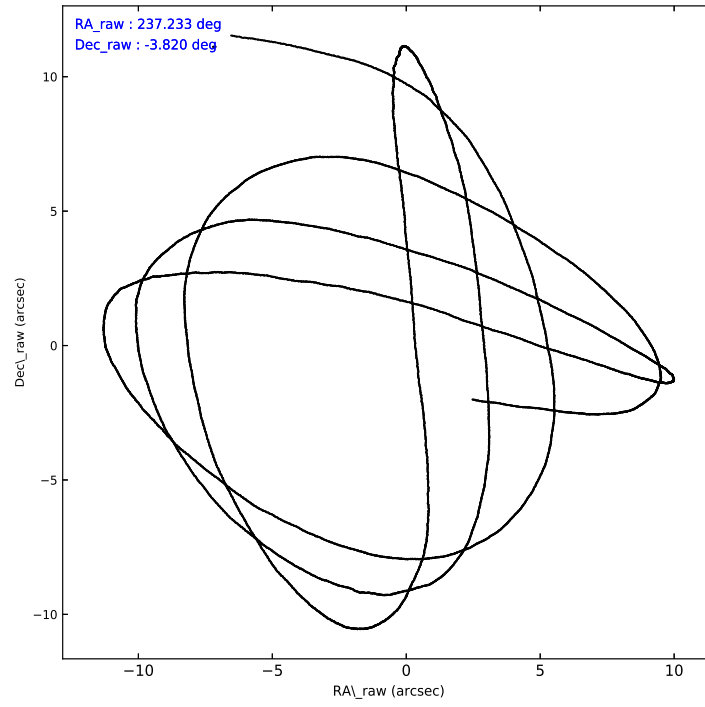
### 2.1.4 Events

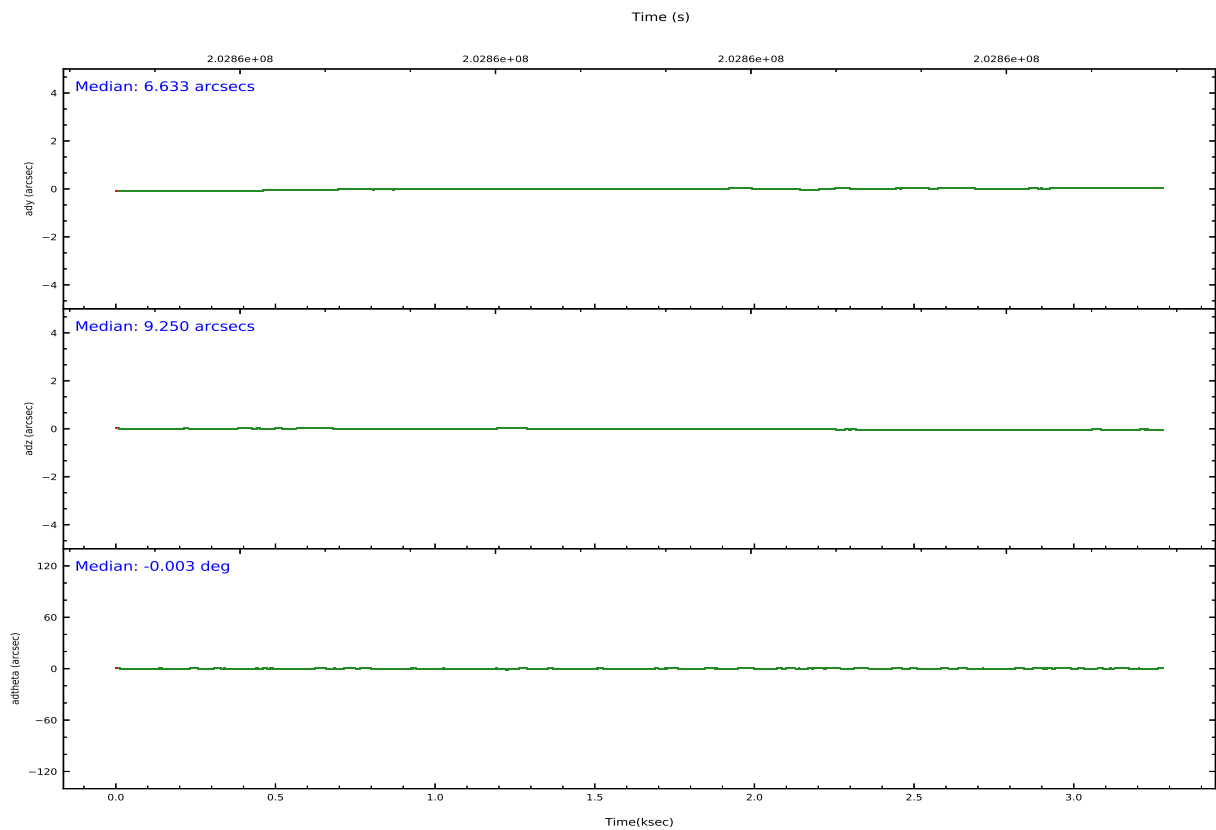
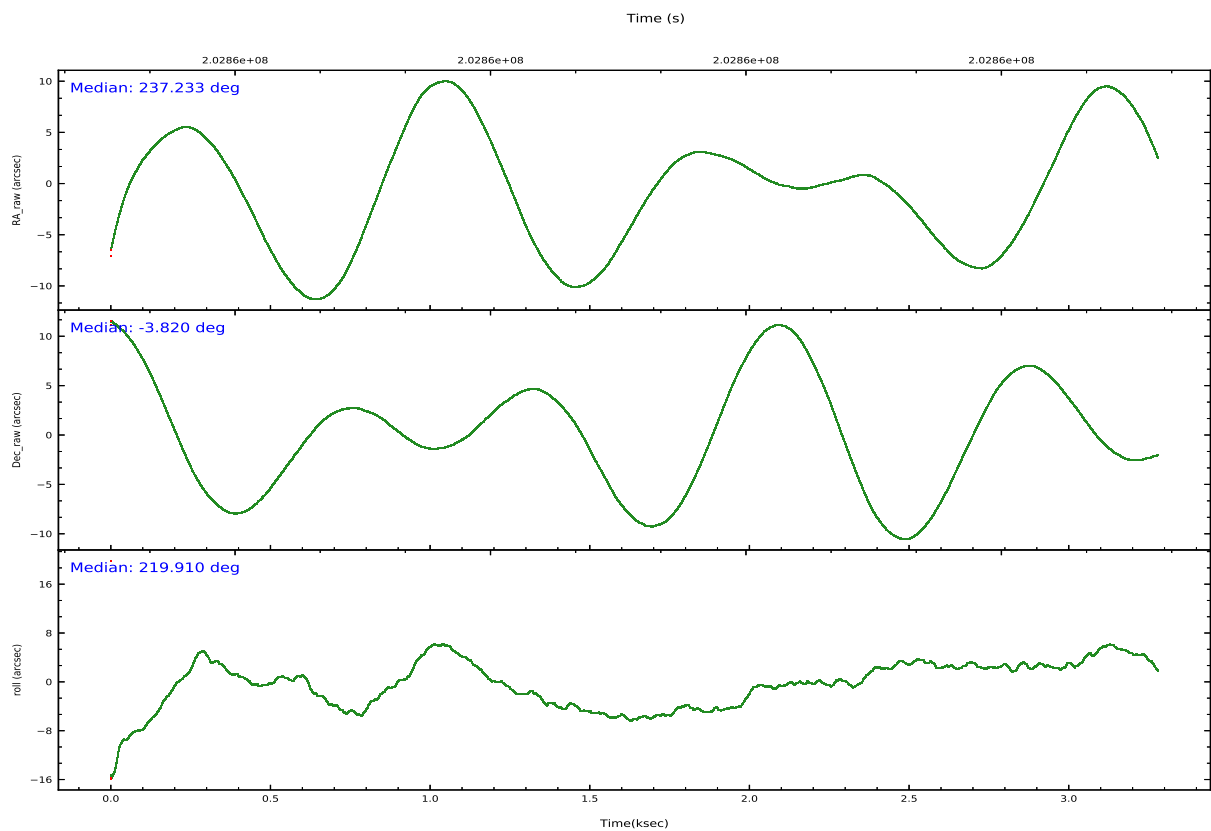
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	51912	52978	53954	55231	55129	69666	grade 0 events	25352	24230	26197	26420	25251	4626
rejected events	18664	19320	20486	20877	21046	20247		48%	45%	48%	47%	45%	6%
rejected %	35%	36%	37%	37%	38%	29%	grade 1 events	139	109	165	175	104	29
								0%	0%	0%	0%	0%	0%
							grade 2 events	3593	4678	3170	3429	4154	7703
								6%	8%	5%	6%	7%	11%
							grade 3 events	1324	1364	1307	1419	1280	3134
								2%	2%	2%	2%	2%	4%
							grade 4 events	1273	1363	1236	1377	1325	3126
								2%	2%	2%	2%	2%	4%
							grade 5 events	966	992	995	1027	1128	3057
								1%	1%	1%	1%	2%	4%
							grade 6 events	1761	2073	1604	1759	2125	30925
								3%	3%	2%	3%	3%	44%
							grade 7 events	17504	18169	19280	19625	19762	17066
								33%	34%	35%	35%	35%	24%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	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	237.241538	237.23223966658	Subarray requested	NONE	NONE
[deg] Pointing Dec	-3.793934	-3.8164016520661	Alternating exposures requested	N	N
[deg] Pointing Roll	219.705173	219.90981100959	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	202862326.184000	202861300.14306			
Observation start date	2004-06-05T22:37:42	2004-06-05T22:21:40			
[s] Observation end time (MET)	202865290.184000	202865521.09324			
Observation end date	2004-06-05T23:27:06	2004-06-05T23:32:01			
Read mode	TIMED	TIMED			

## 2.3 Aspect



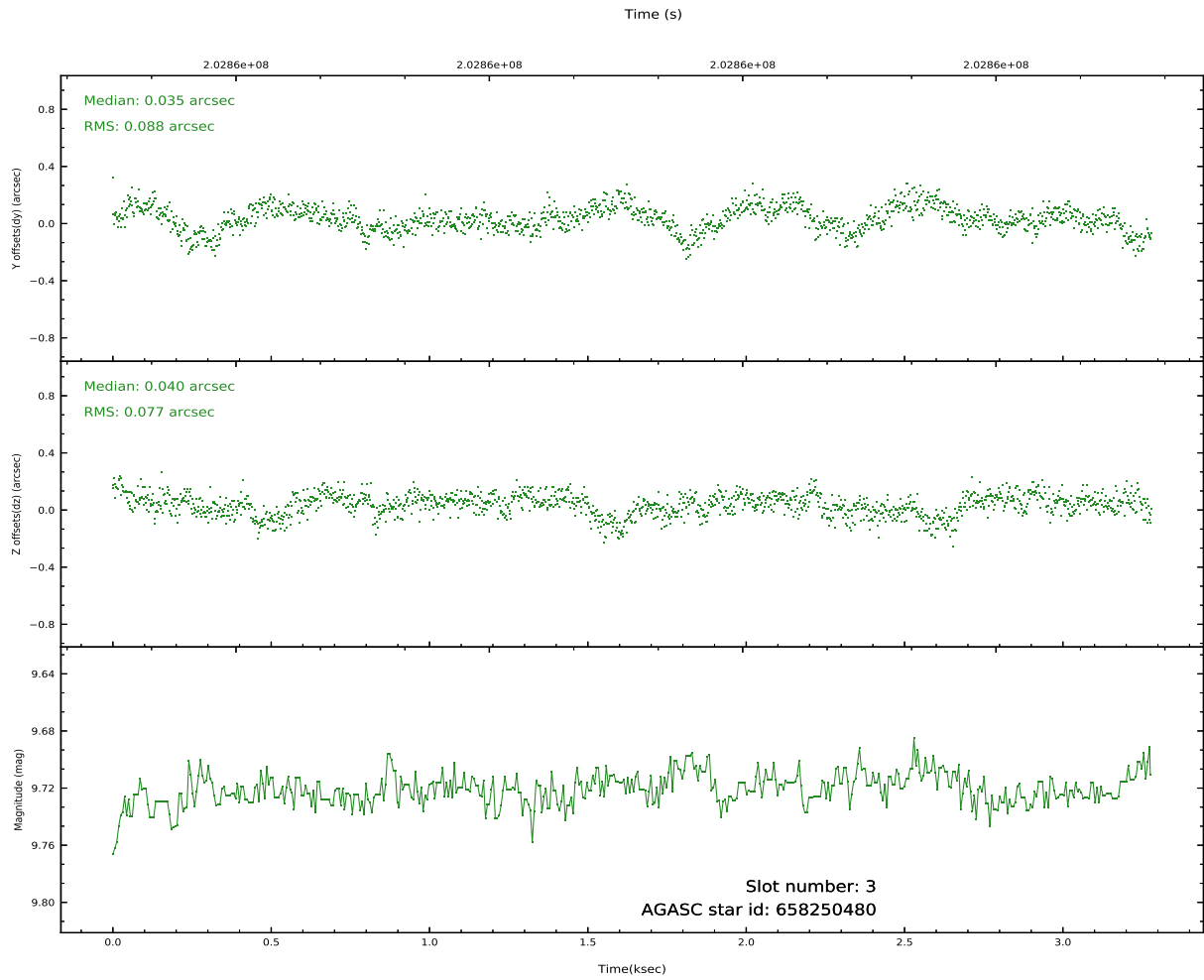
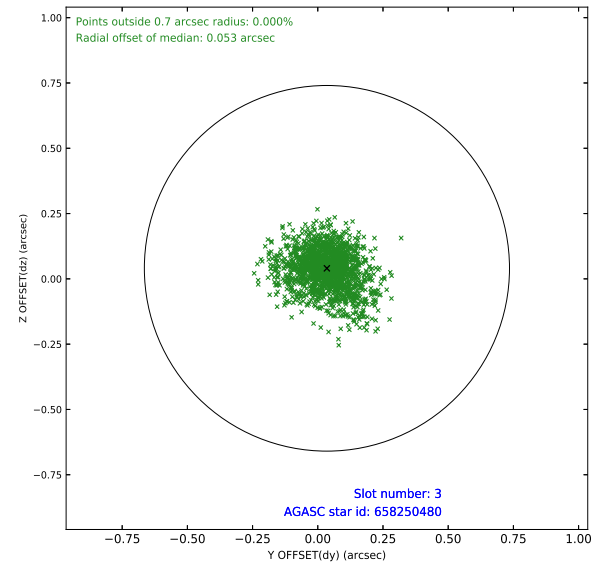
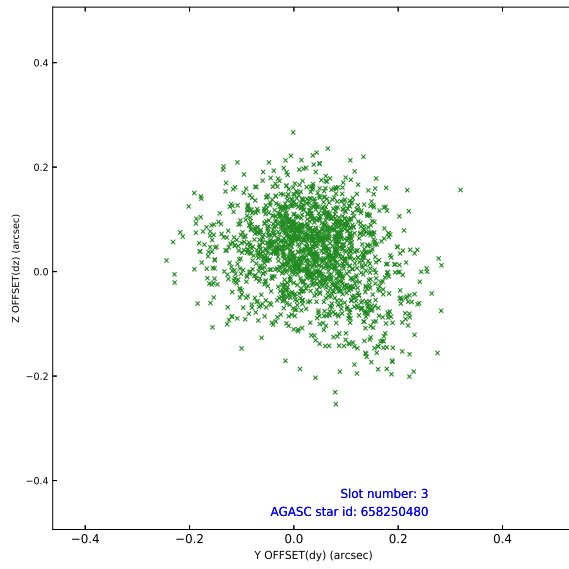


Slot Statistics

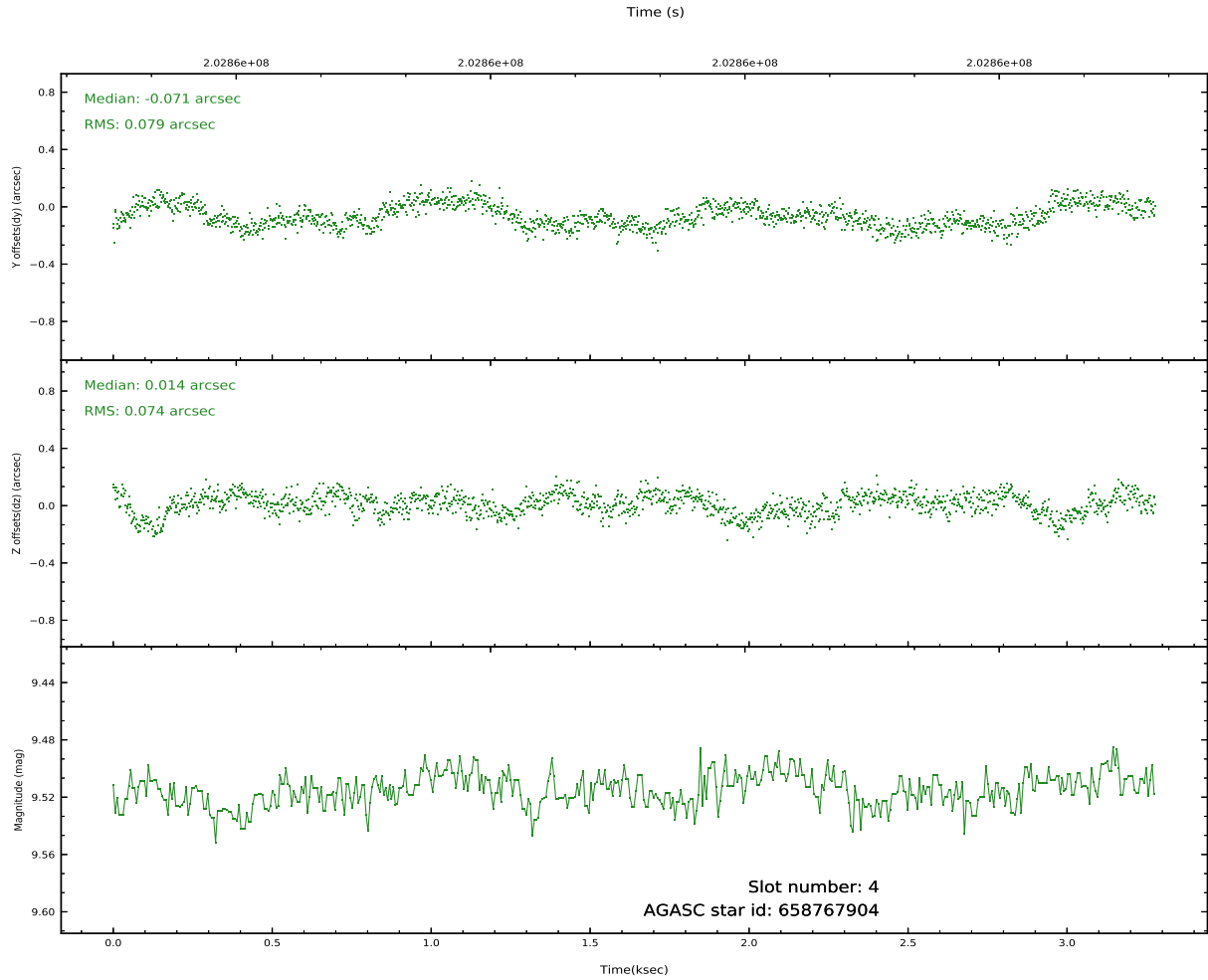
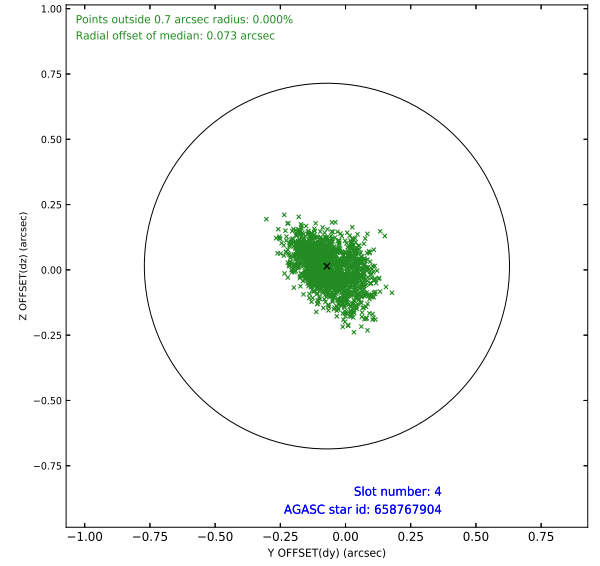
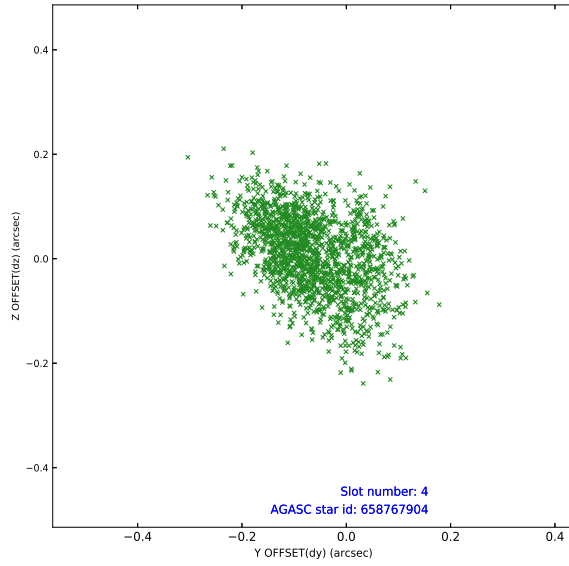
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	801	1.000	0.003	0.028	0.007	0.010	0.000000	0.000000	933.08	-832
1	FID		ACIS-I-5	7.23	801	1.000	-0.181	0.020	0.006	0.010	0.000000	0.000000	-1814.15	1063
2	FID		ACIS-I-6	7.25	801	1.000	0.087	0.022	0.007	0.011	0.000000	0.000000	396.59	1710
3	GUIDE	used	658250480	9.72	1600	1.000	0.035	0.040	0.121	0.213	237.316992	-3.637366	-567.64	-260
4	GUIDE	used	658767904	9.52	1599	1.000	-0.071	0.014	0.116	0.190	237.638455	-4.051308	-504.07	1622
5	GUIDE	used	658772672	9.49	1599	1.000	-0.038	-0.054	0.091	0.152	236.669407	-3.822099	1647.00	-1233
6	GUIDE	used	658773496	9.39	1601	1.000	0.071	-0.106	0.112	0.179	236.554007	-3.936477	2230.39	-1183
7	GUIDE	used	658771168	10.44	1577	1.000	-0.012	0.123	0.206	0.321	237.327066	-4.593406	1604.77	2409

## 2.4 Star Slots

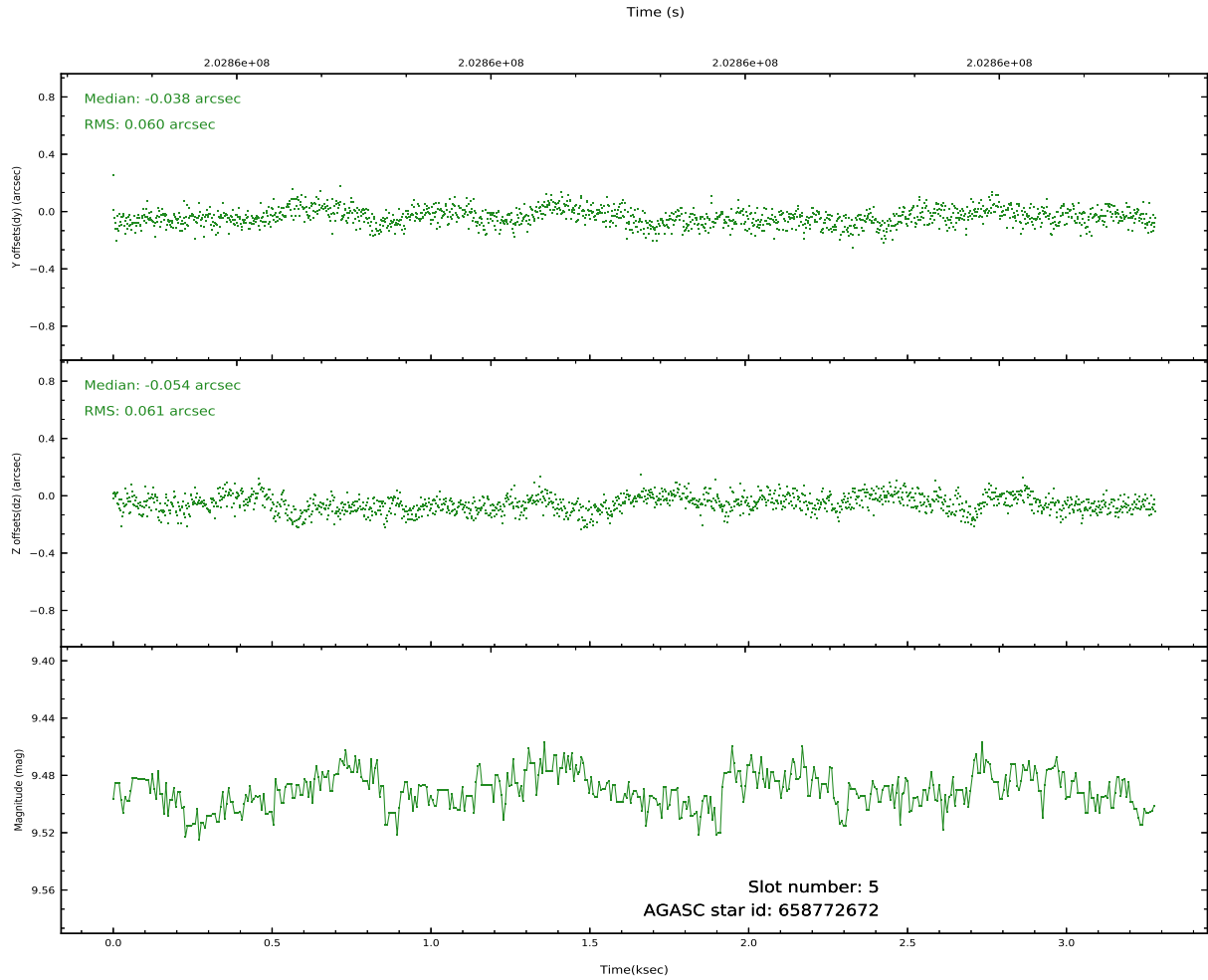
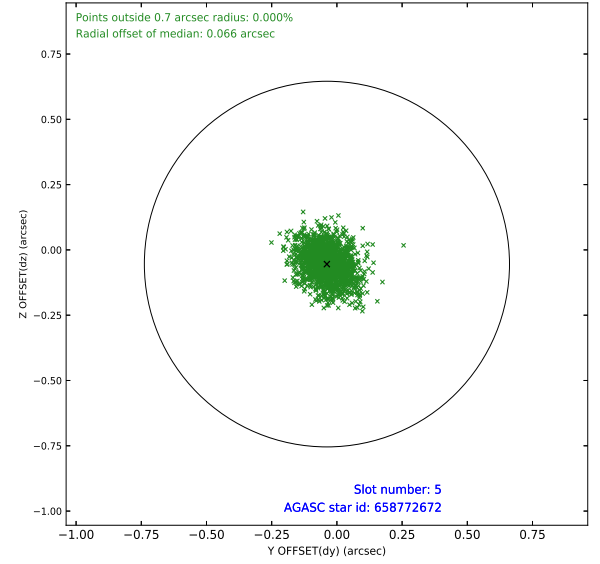
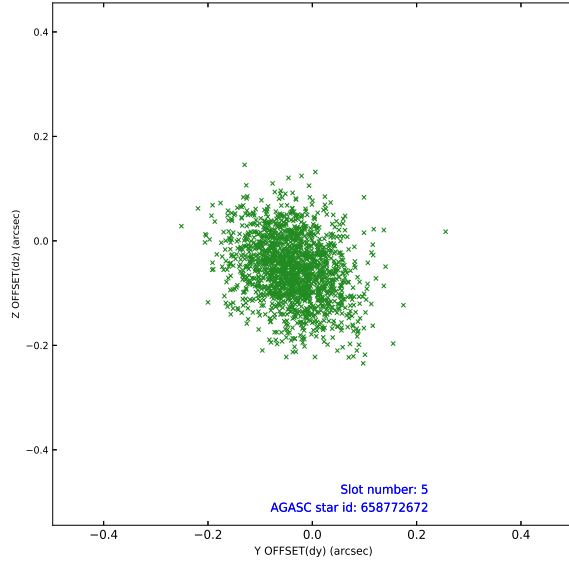
### 2.4.1 Slot 3



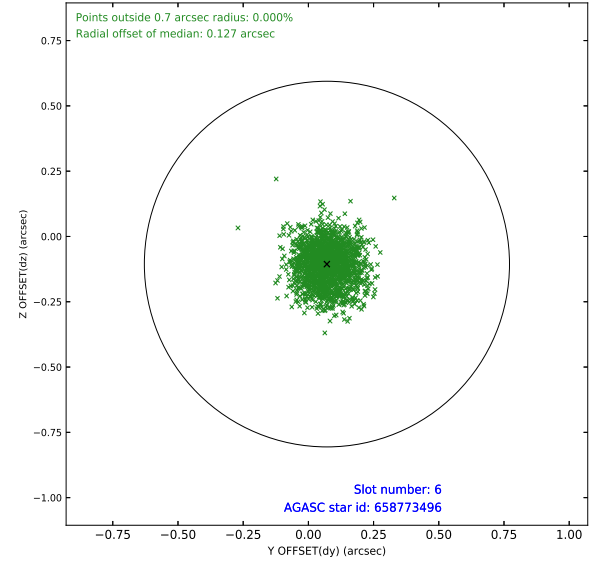
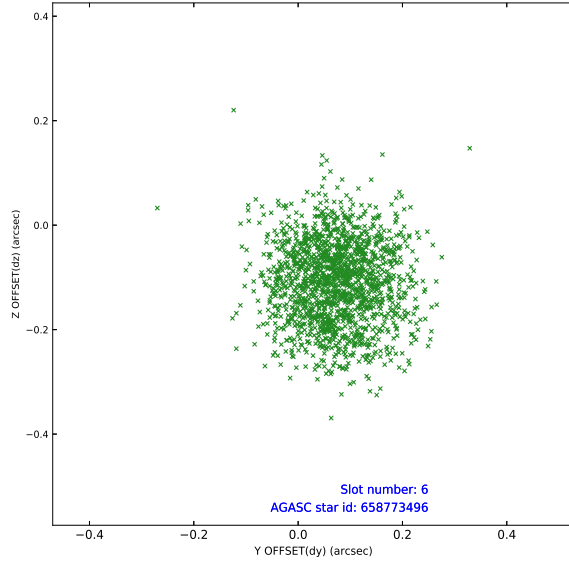
## 2.4.2 Slot 4



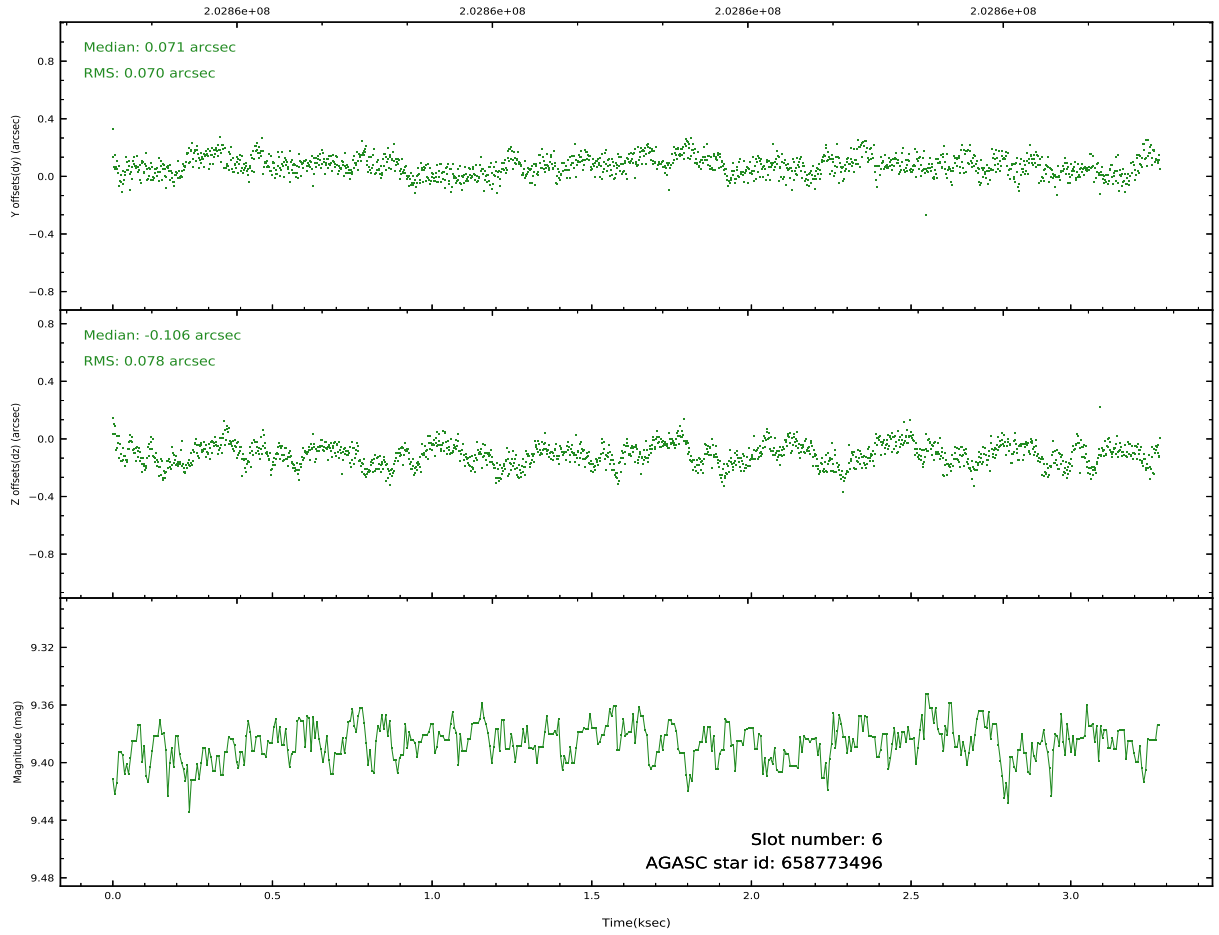
### 2.4.3 Slot 5



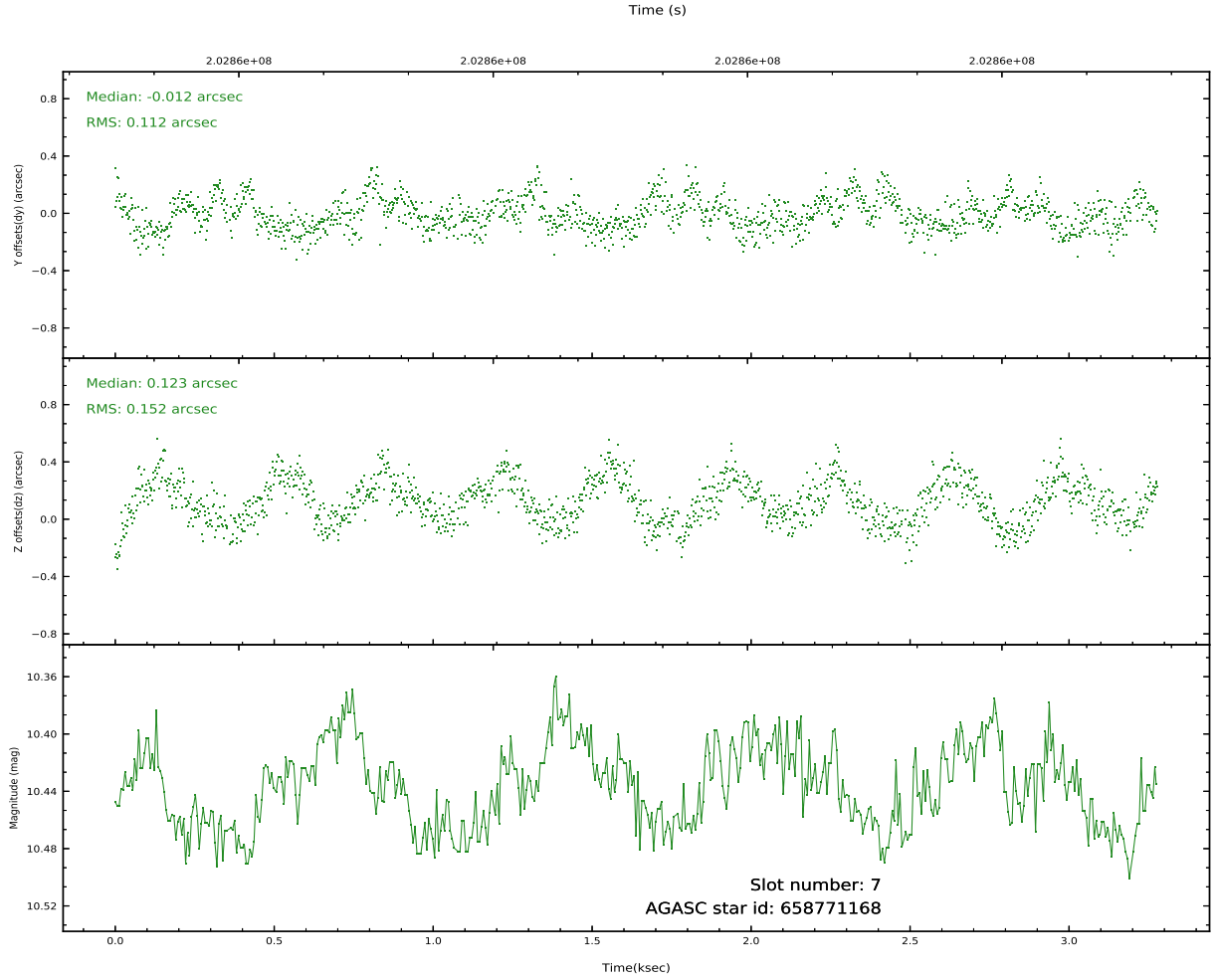
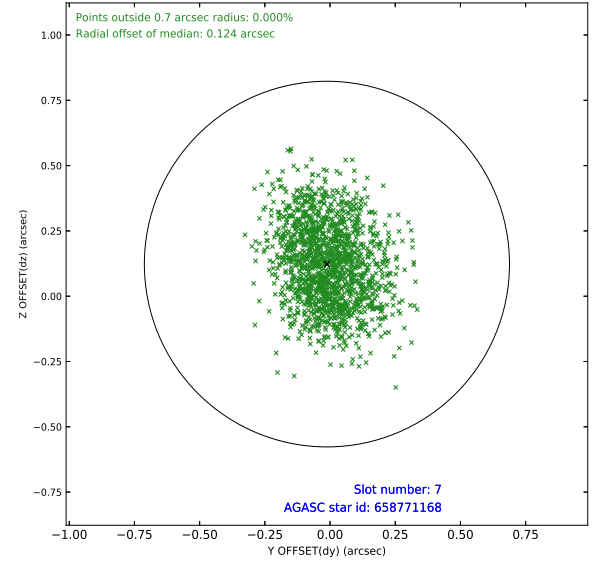
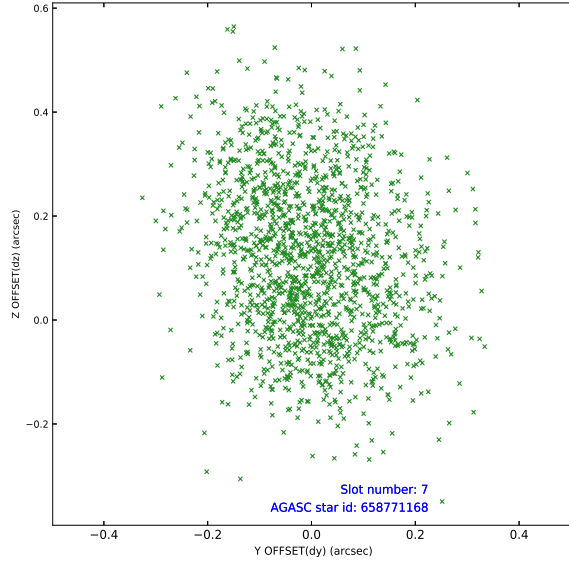
## 2.4.4 Slot 6



Time (s)

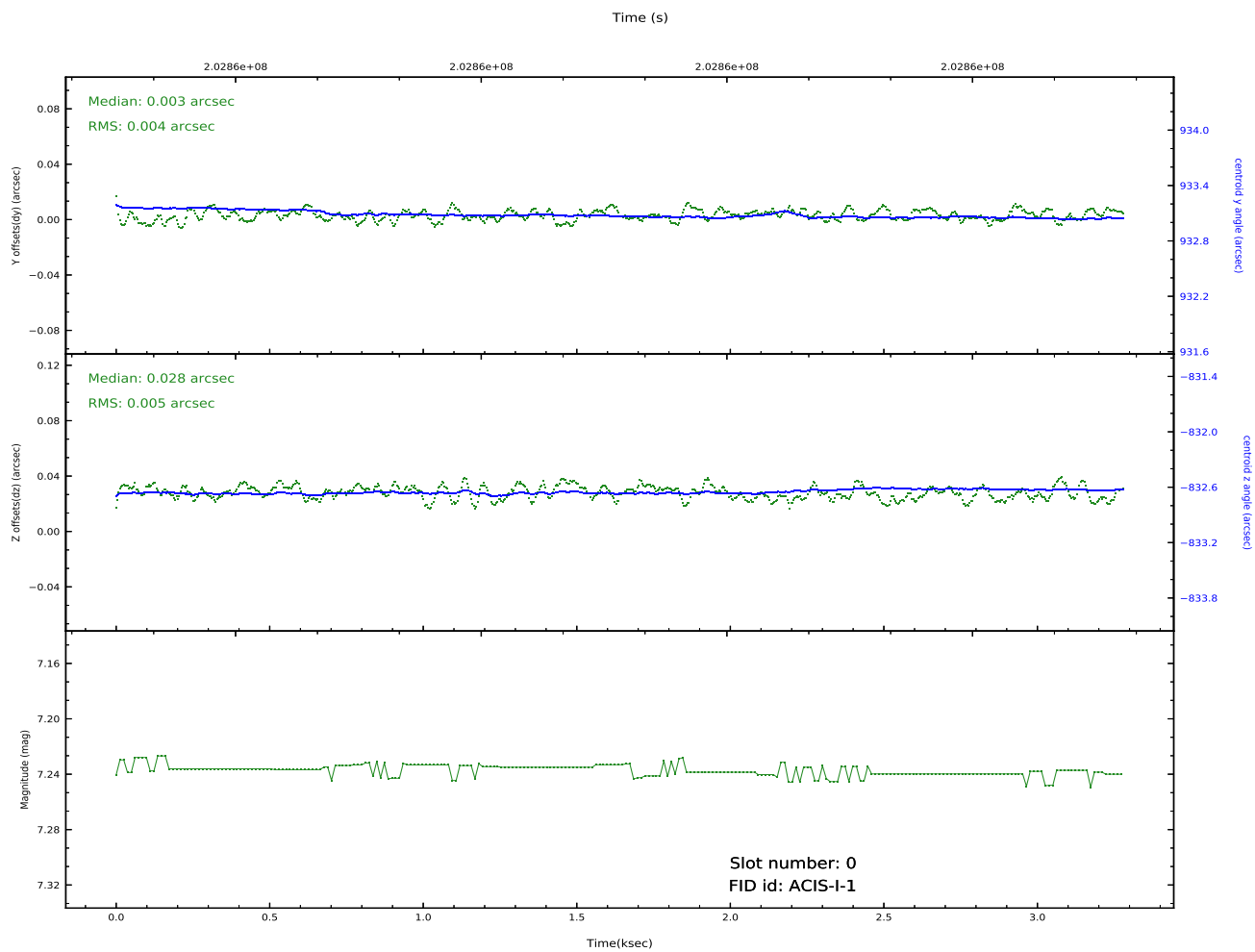
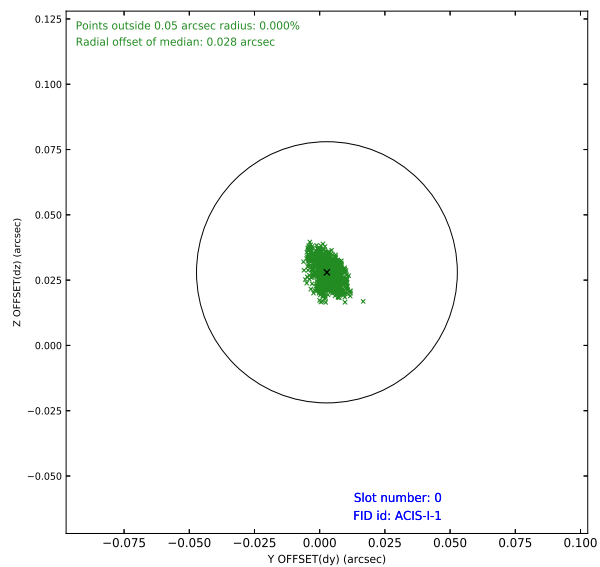
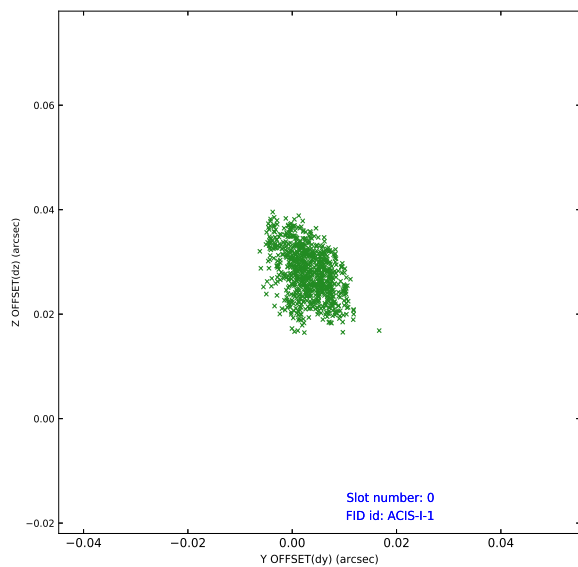


## 2.4.5 Slot 7

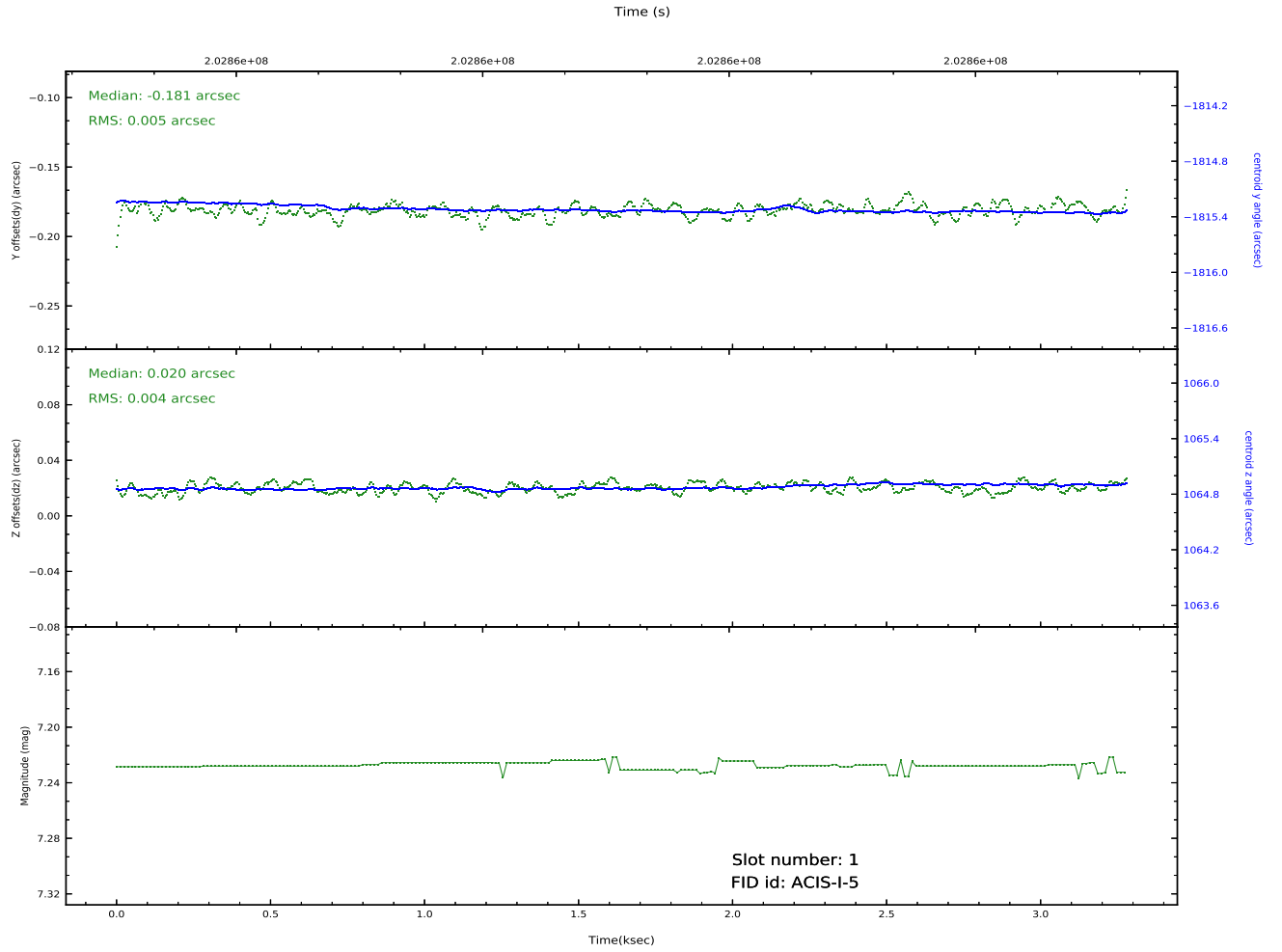
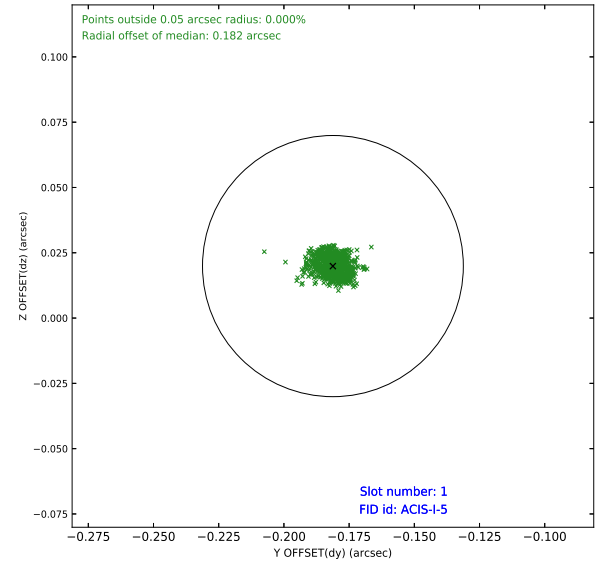
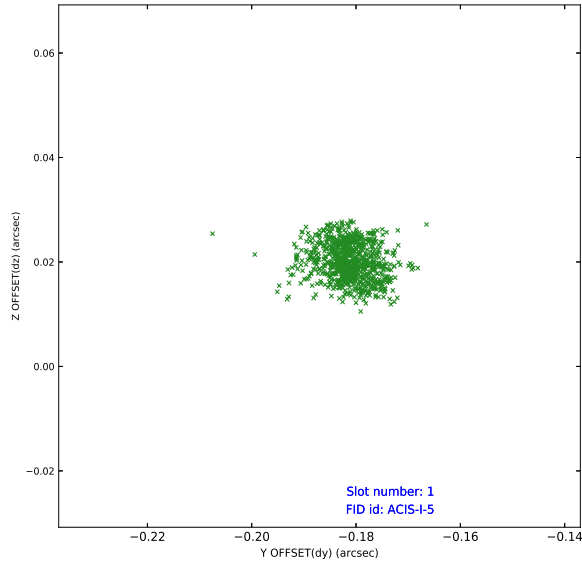


## 2.5 FID Slots

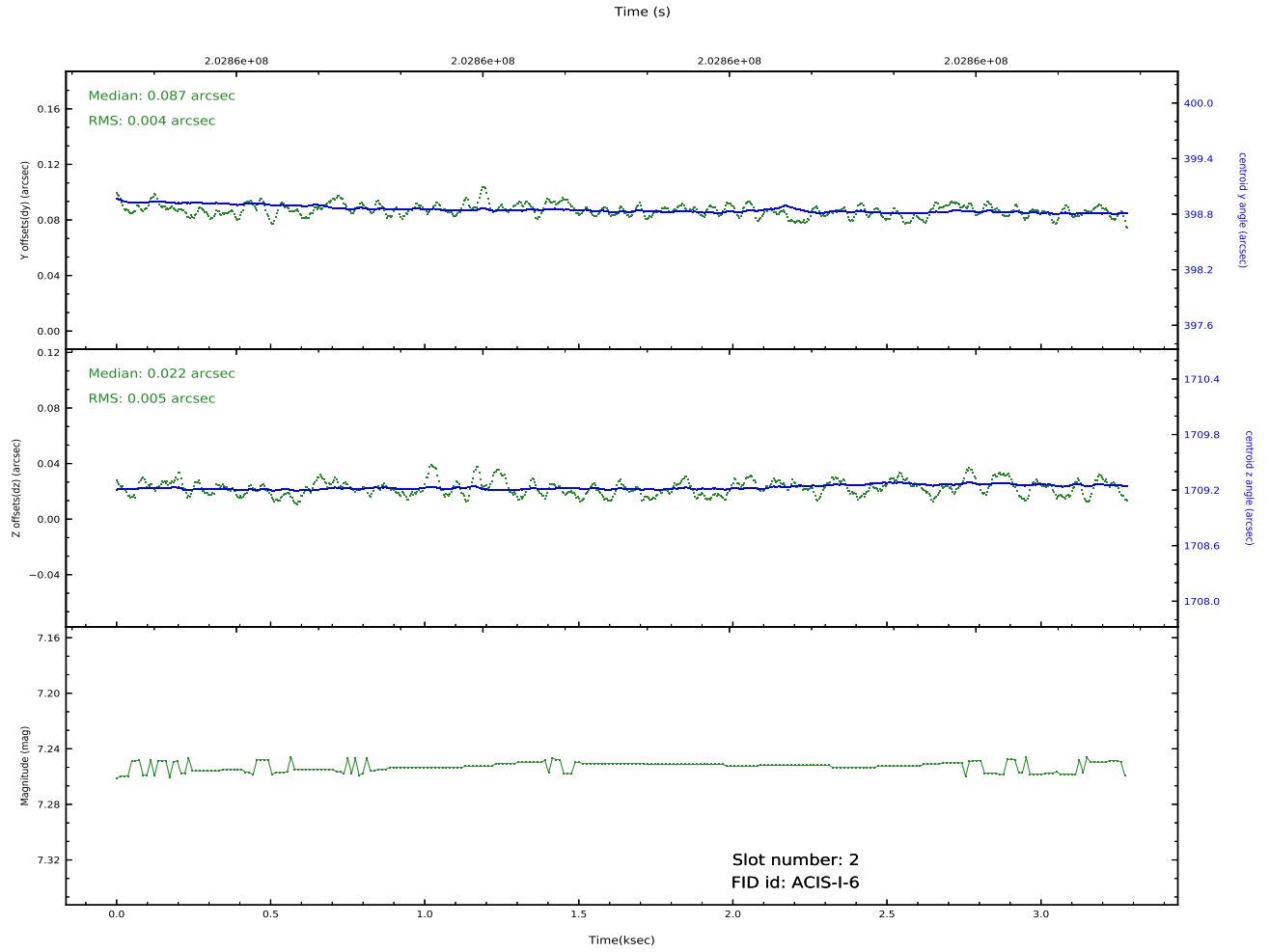
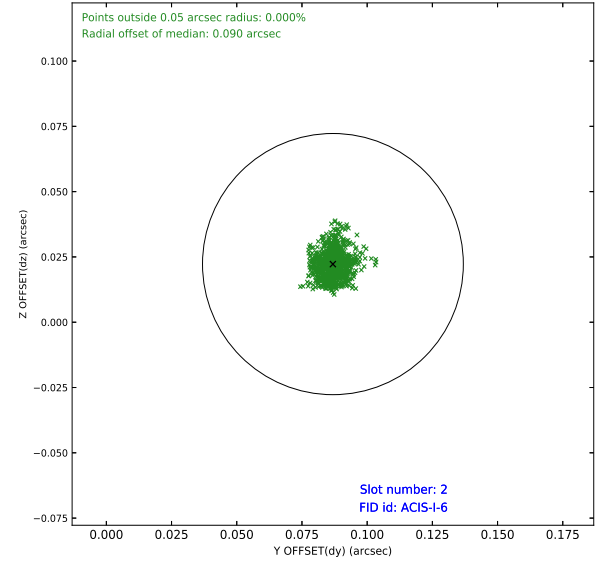
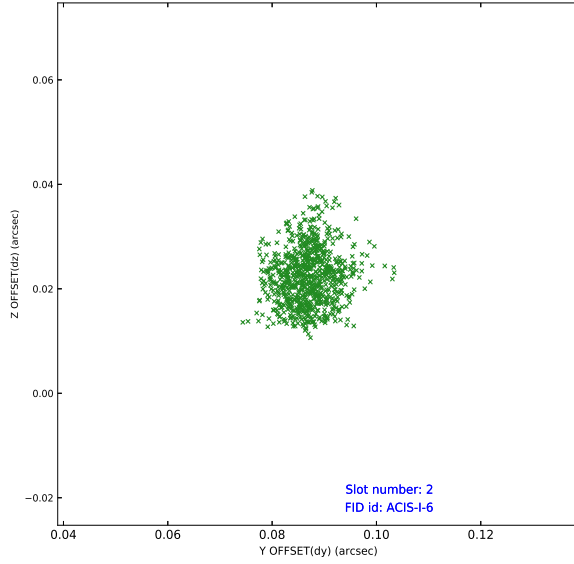
### 2.5.1 Slot 0



## 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)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.924

### A.2 Comments