

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6075 - L2 Version 4  
Chandra X-Ray Center

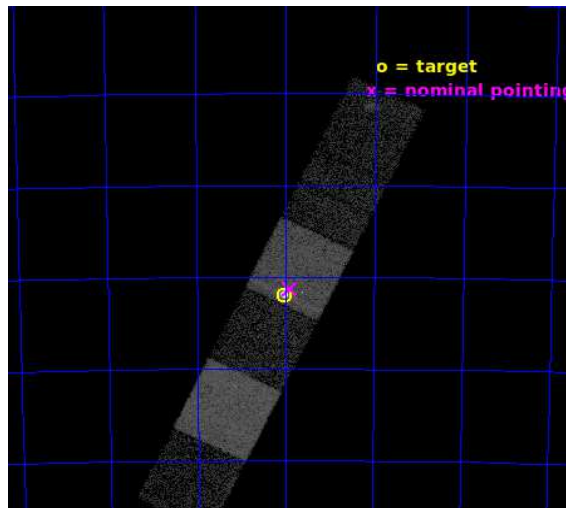
L2 Processing Date : Oct 5 2020

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# 1 Front

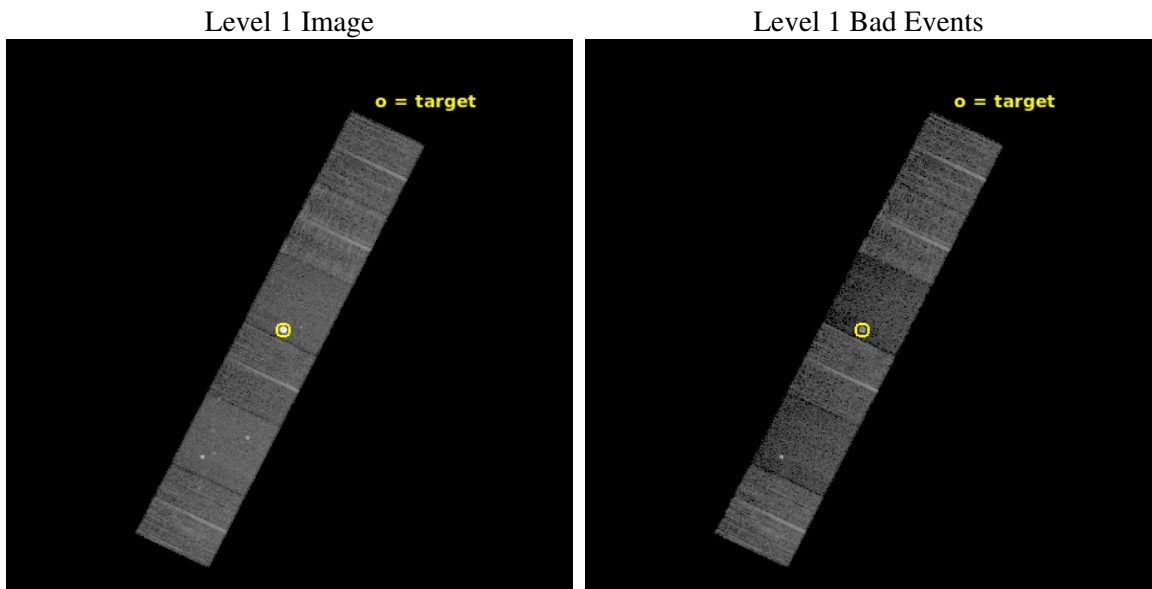
seq_num	590402	Sequence number
obs_id	6075	Observation id
title	AO6A ACIS-S Calibration Observations of E0102-72	Proposal title
observer	CXC Calibration	Principal investigator
object	E0102-72.3	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.974924141328	Nominal RA [deg]
dec_nom	-72.021126930585	Nominal Dec [deg]
roll_nom	296.10990139795	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7954.7551374137	Sum of GTIs [s]
livetime	7854.0272380853	Livetime [s]
ontime4	7954.796177417	Sum of GTIs [s]
ontime5	7954.7140974104	Sum of GTIs [s]
ontime6	7954.6730574071	Sum of GTIs [s]
ontime7	7954.7551374137	Sum of GTIs [s]
ontime8	7954.6320174038	Sum of GTIs [s]
ontime9	7954.5909774303	Sum of GTIs [s]
l2events	122915	Number of level 2 events



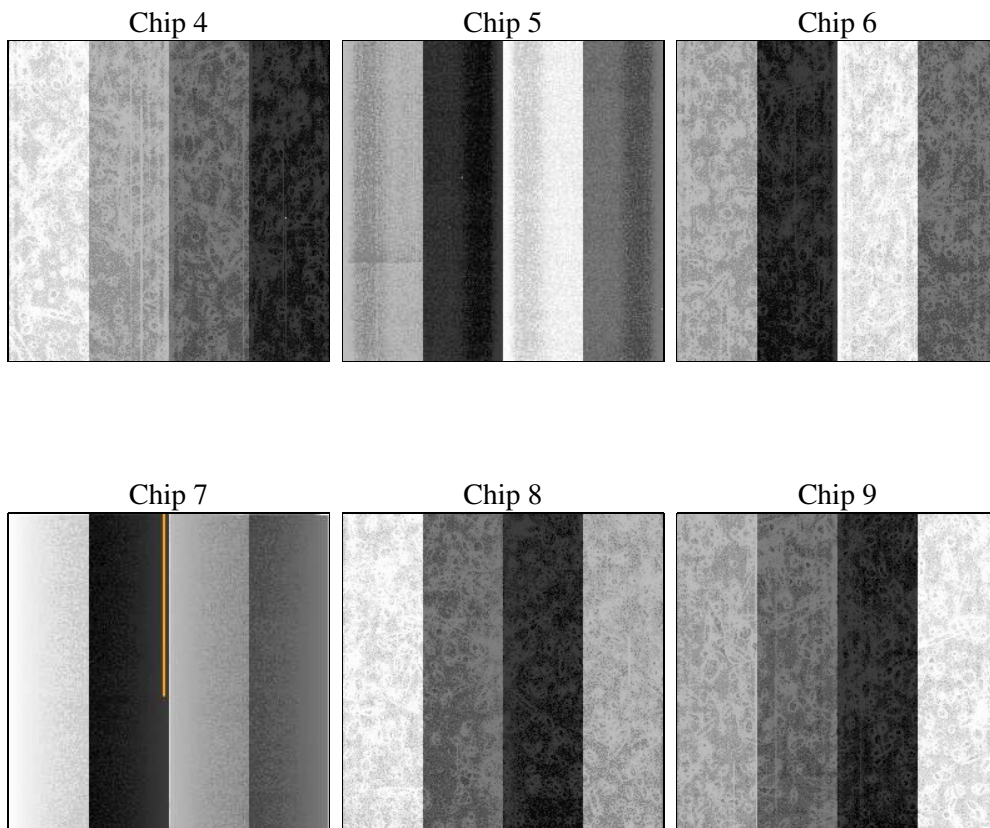
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	7954.7551374137	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime4	7954.796177417	Sum of GTIs [s]
date	2020-10-05T17:51:40	Date and time of file creation	ontime5	7954.7140974104	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	7954.6730574071	Sum of GTIs [s]
			ontime7	7954.7551374137	Sum of GTIs [s]
			ontime8	7954.6320174038	Sum of GTIs [s]
			ontime9	7954.5909774303	Sum of GTIs [s]
			l1events	378746	Number of level 1 events

### 2.1.4 Events

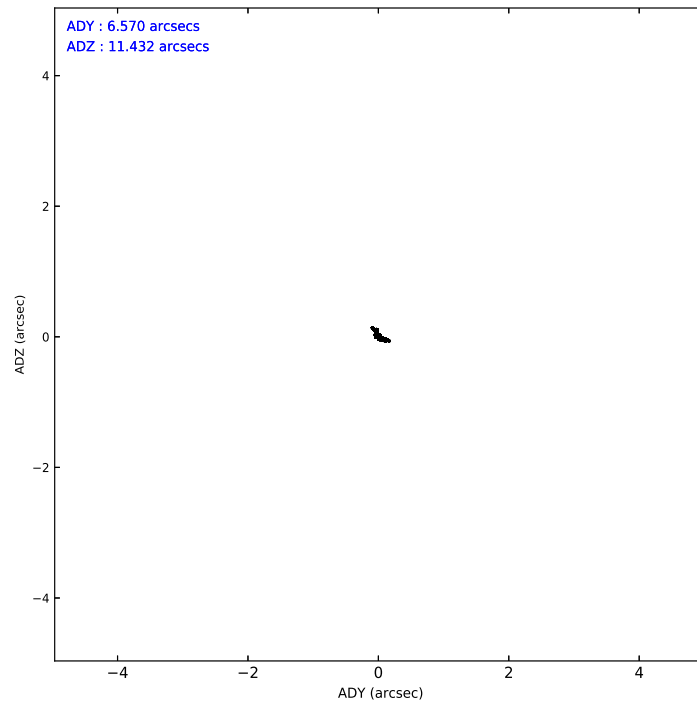
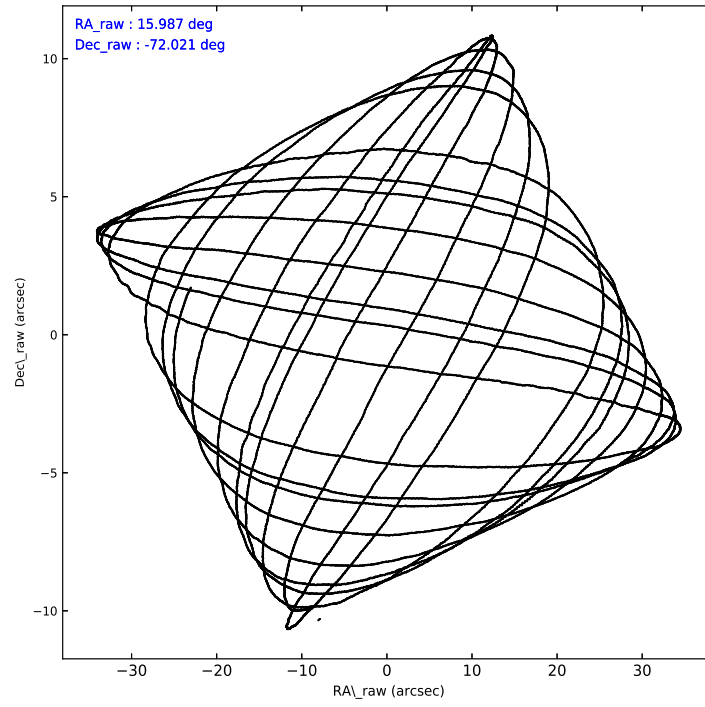
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	58734	61240	49858	101746	60240	46928	grade 0 events	2136	3661	2300	19179	3791	1860
rejected events	53432	28611	44374	24841	46852	41966		3%	5%	4%	18%	6%	3%
rejected %	90%	46%	89%	24%	77%	89%	grade 1 events	54	91	28	378	50	29
								0%	0%	0%	0%	0%	0%
							grade 2 events	1192	10202	1126	20074	2978	1008
								2%	16%	2%	19%	4%	2%
							grade 3 events	622	1501	544	8995	1460	578
								1%	2%	1%	8%	2%	1%
							grade 4 events	530	1539	554	8700	1404	573
								0%	2%	1%	8%	2%	1%
							grade 5 events	1590	5281	1575	5826	2413	1828
								2%	8%	3%	5%	4%	3%
							grade 6 events	828	15746	966	20029	3758	950
								1%	25%	1%	19%	6%	2%
							grade 7 events	51782	23219	42765	18565	44386	40102
								88%	37%	85%	18%	73%	85%

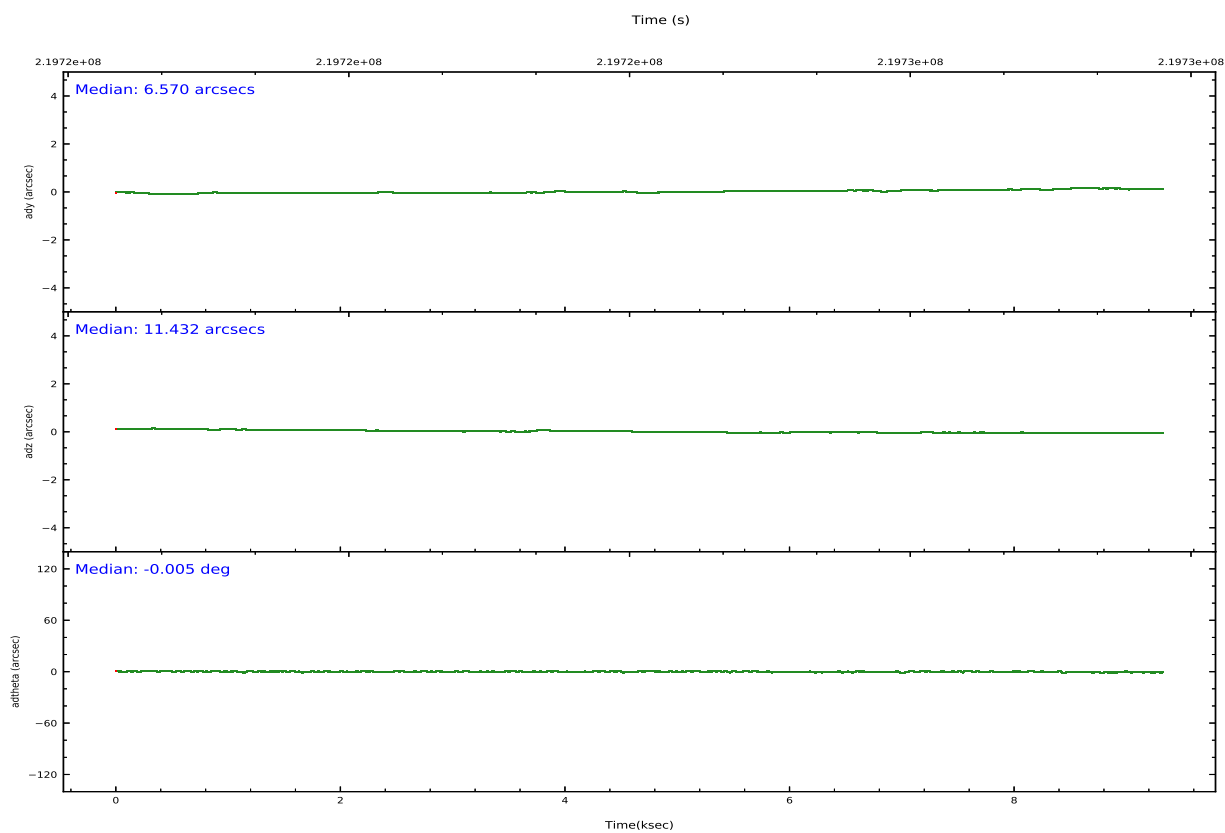
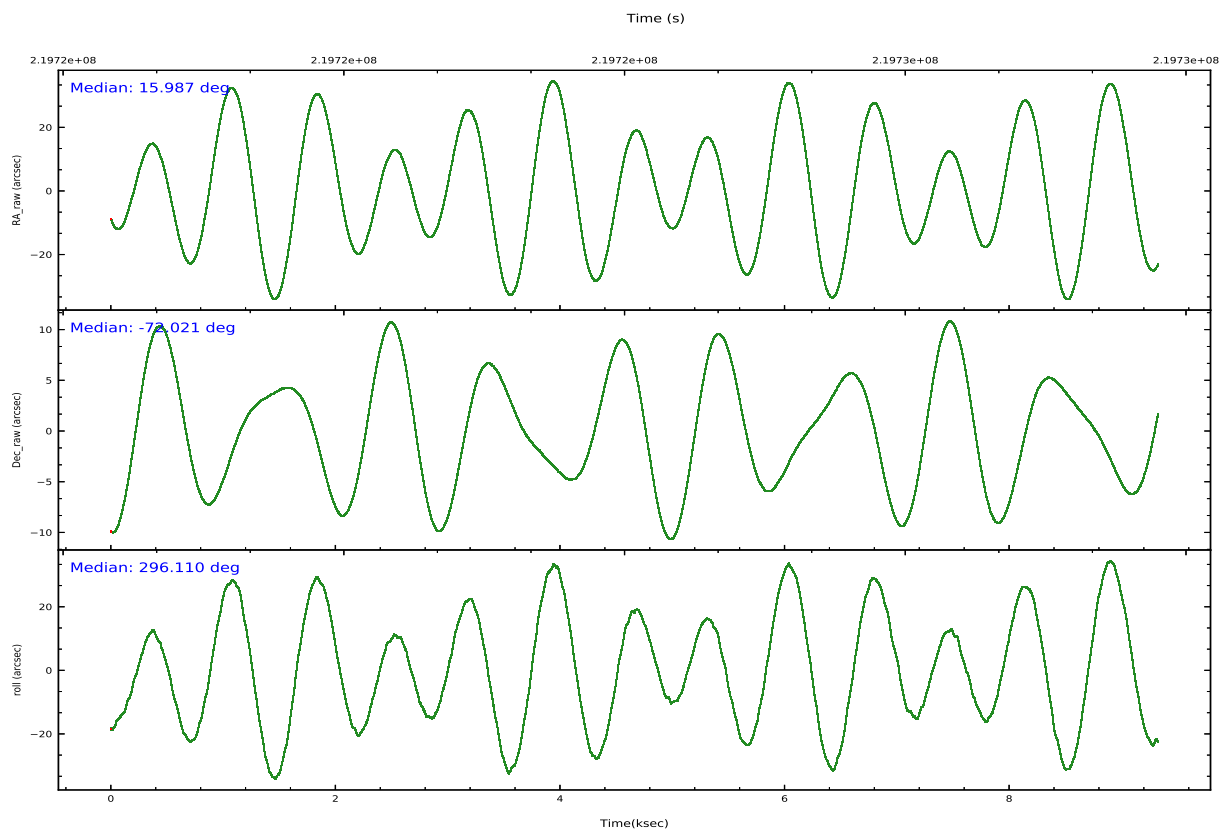
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	15.913361	15.974924141328
[deg] Pointing Dec	-72.006516	-72.021126930585
[deg] Pointing Roll	295.885307	296.10990139795
[s] Window start time (MET)	215654464.184000	215654464.184000
[s] Window stop time (MET)	220838464.184000	220838464.184000
[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)	219721753.184000	219720222.60774
Observation start date	2004-12-18T01:48:09	2004-12-18T01:23:42
[s] Observation end time (MET)	219729753.184000	219730552.5582
Observation end date	2004-12-18T04:01:29	2004-12-18T04:15:52
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



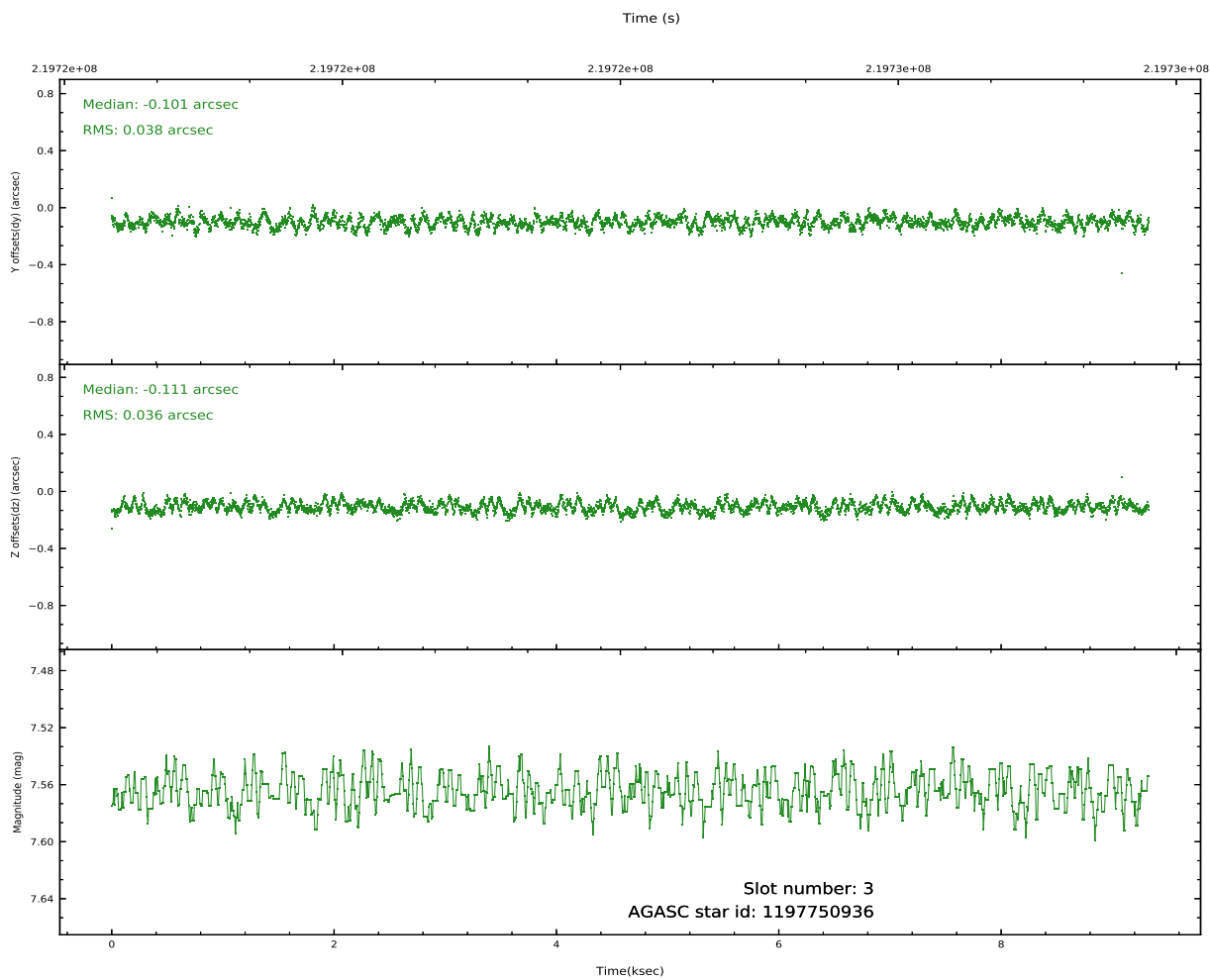
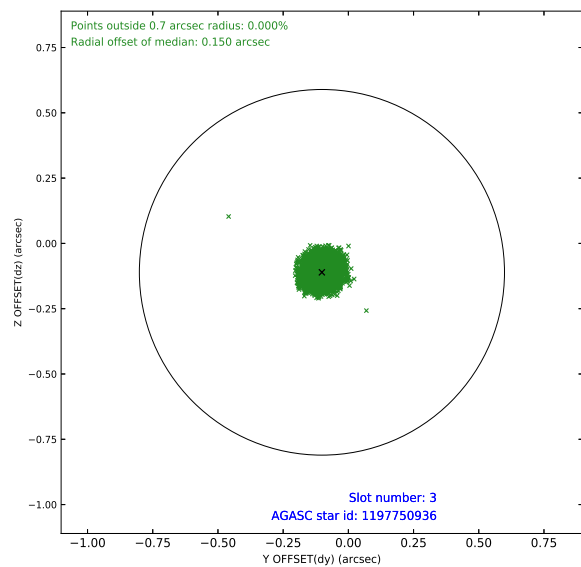
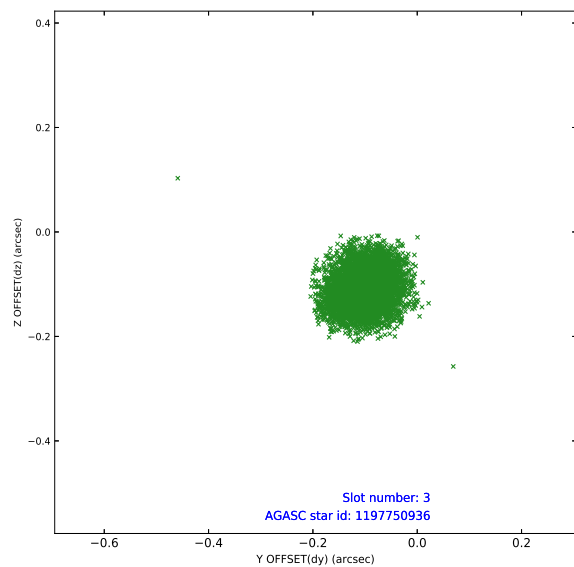


Slot Statistics

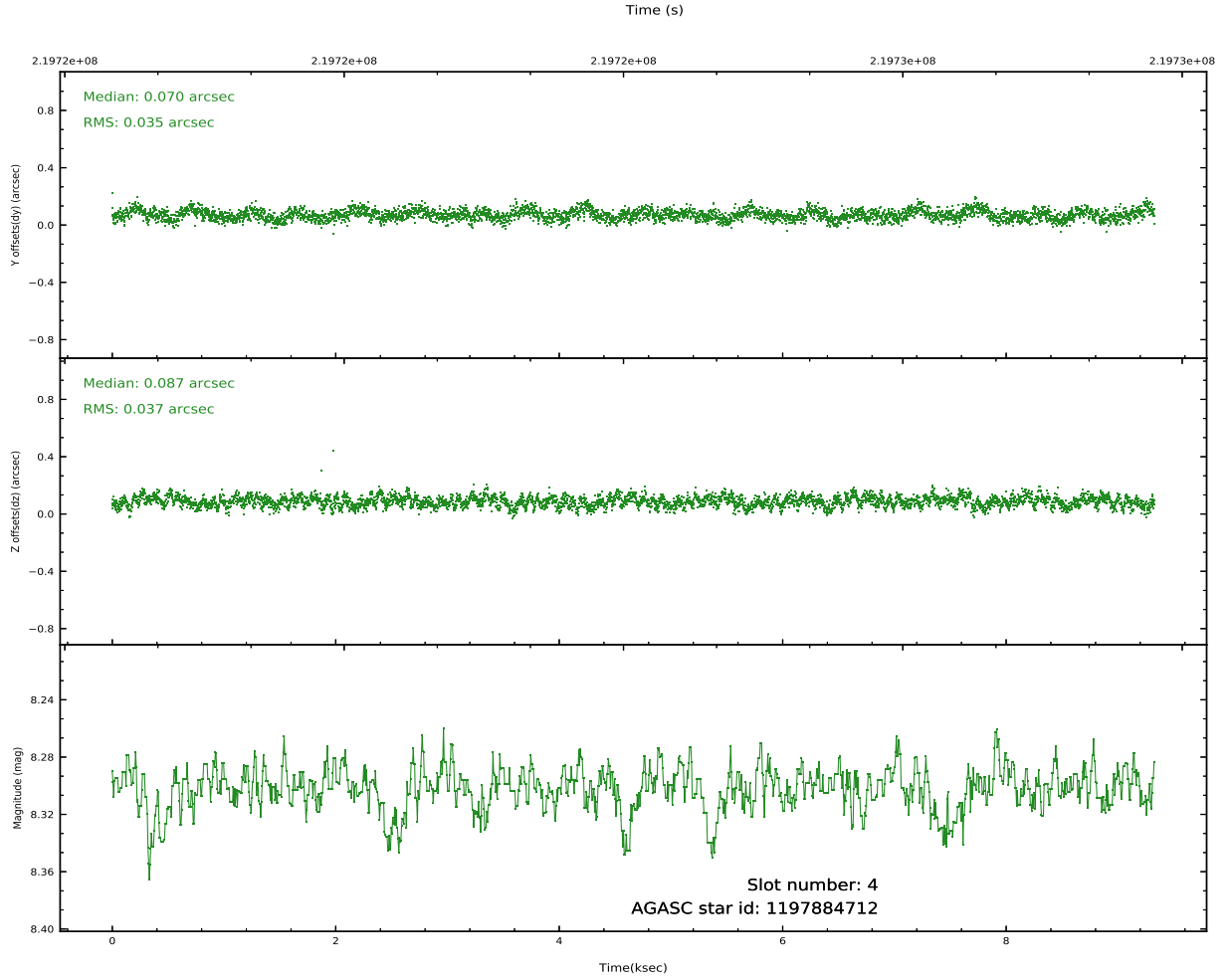
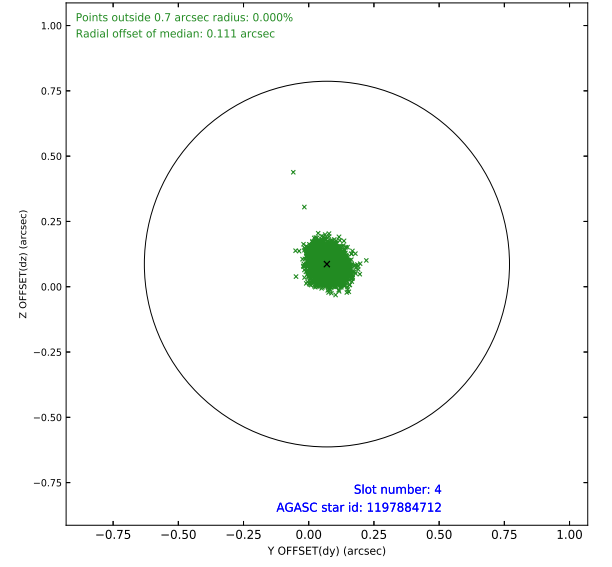
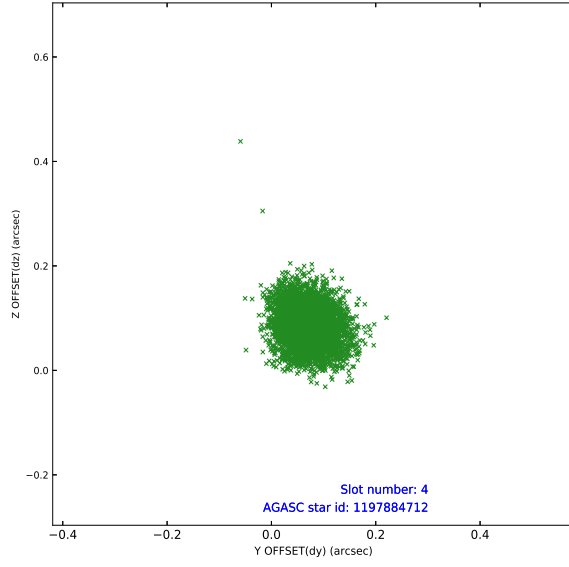
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2276	1.000	-0.099	-0.085	0.006	0.010	0.000000	0.000000	-759.40	-1732
1	FID		ACIS-S-4	7.20	2276	1.000	0.086	0.044	0.006	0.010	0.000000	0.000000	2153.77	175
2	FID		ACIS-S-6	7.35	2276	1.000	-0.015	0.048	0.007	0.011	0.000000	0.000000	403.38	813
3	GUIDE	used	1197750936	7.57	4551	1.000	-0.101	-0.111	0.057	0.087	15.387940	-71.549550	-1738.74	178
4	GUIDE	used	1197884712	8.30	4551	1.000	0.070	0.087	0.053	0.086	16.087398	-72.252690	880.88	-214
5	GUIDE	used	1197885104	9.35	4546	1.000	0.115	0.066	0.089	0.142	17.845067	-72.189368	1551.93	1611
6	GUIDE	used	1197885328	7.23	4550	1.000	-0.002	-0.010	0.054	0.082	16.283090	-71.733943	-699.08	804
7	GUIDE	used	1198189696	7.39	4549	1.000	-0.081	-0.031	0.055	0.089	15.223750	-72.697522	1919.80	-1751

## 2.4 Star Slots

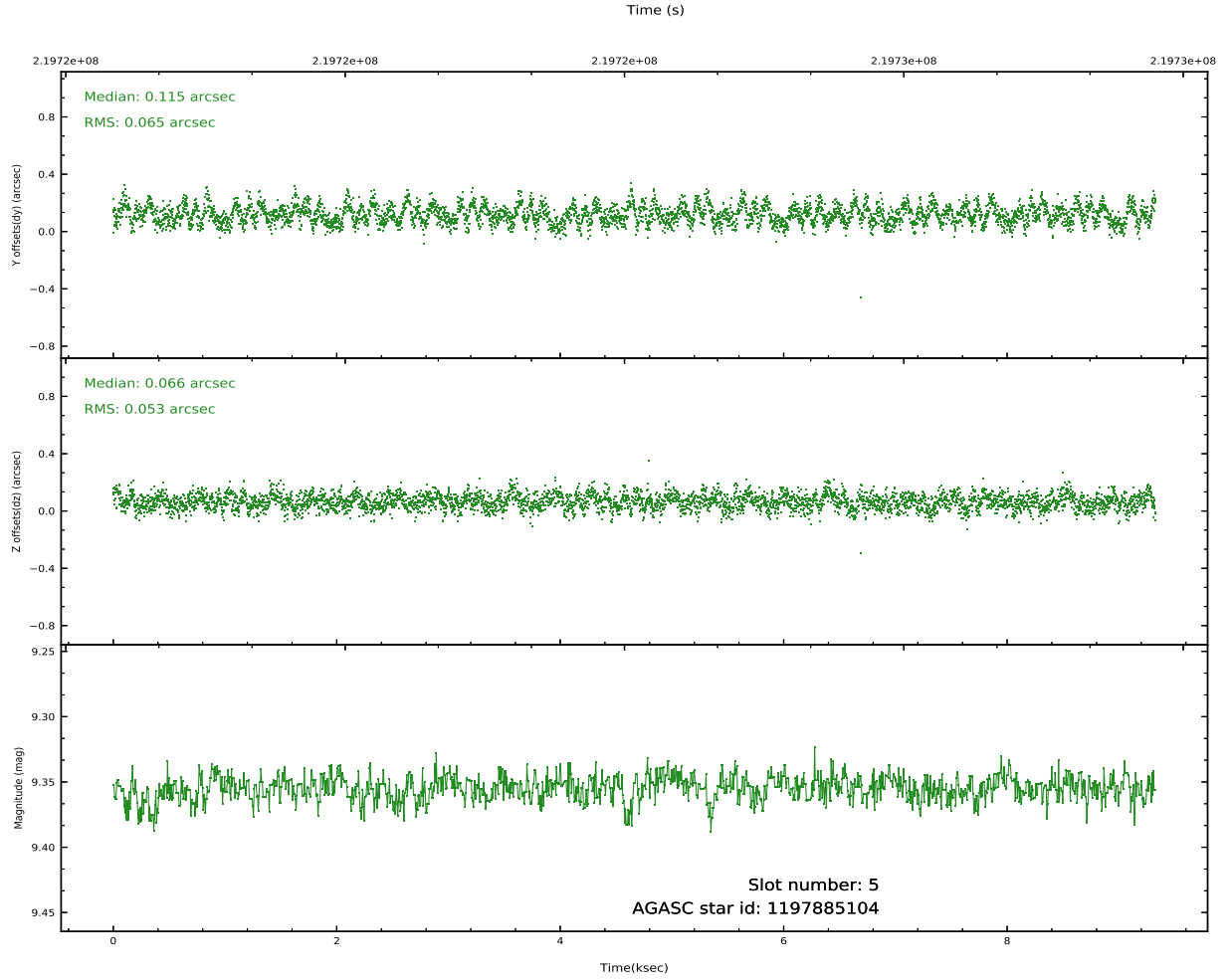
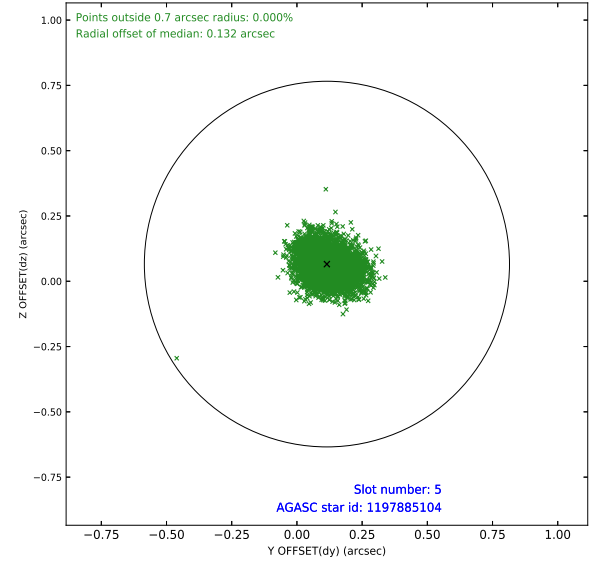
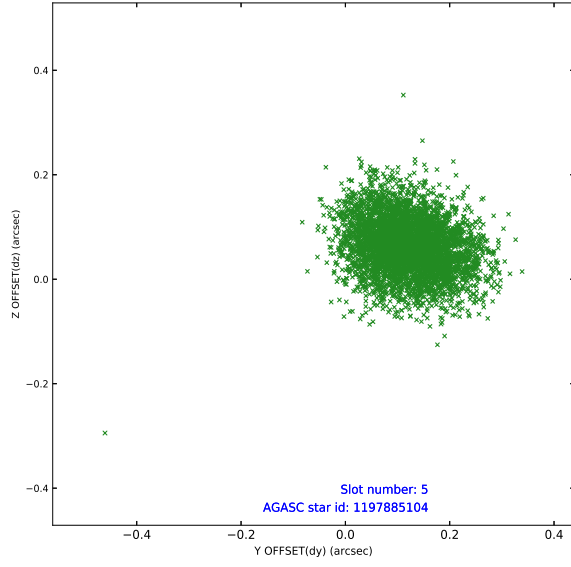
### 2.4.1 Slot 3



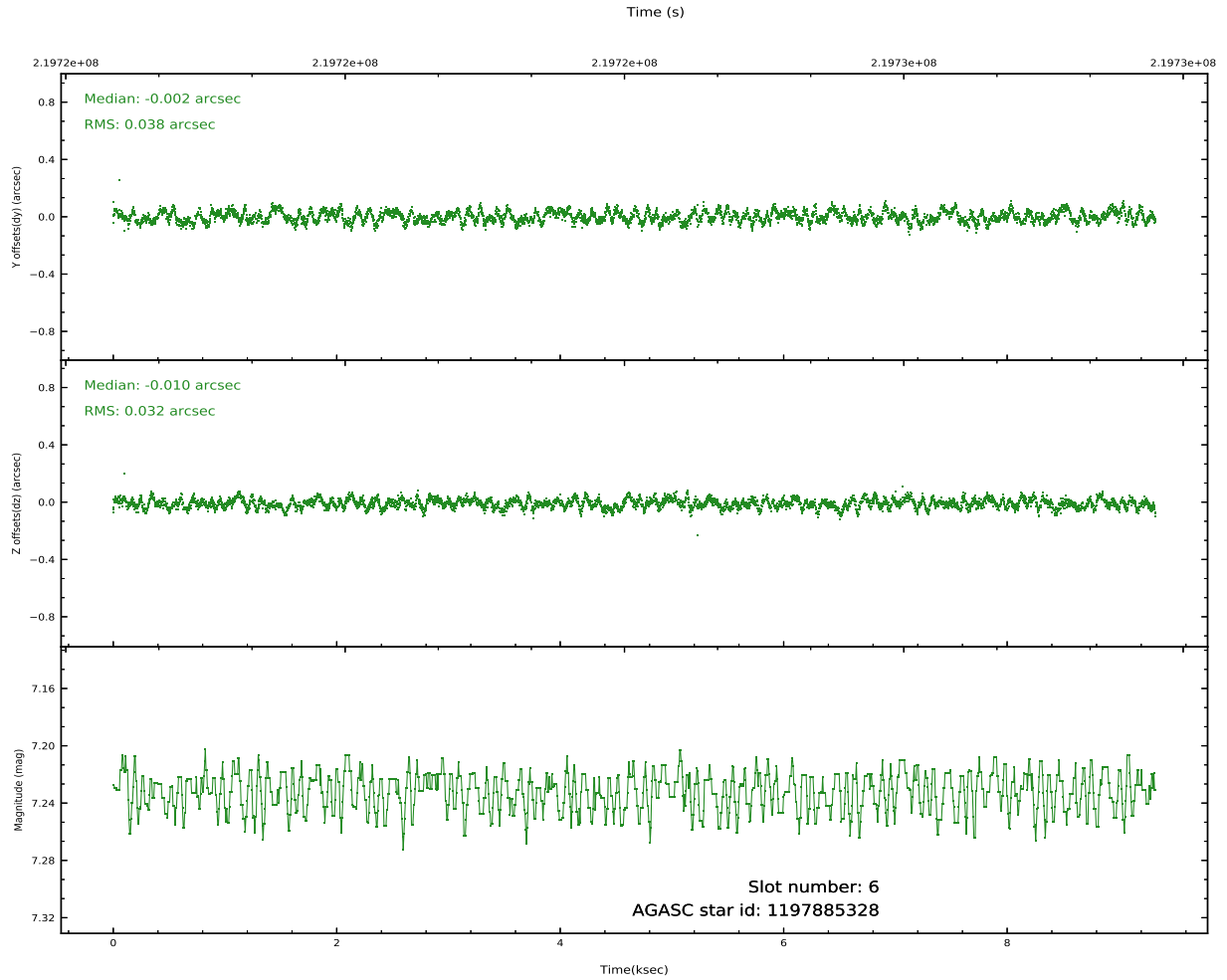
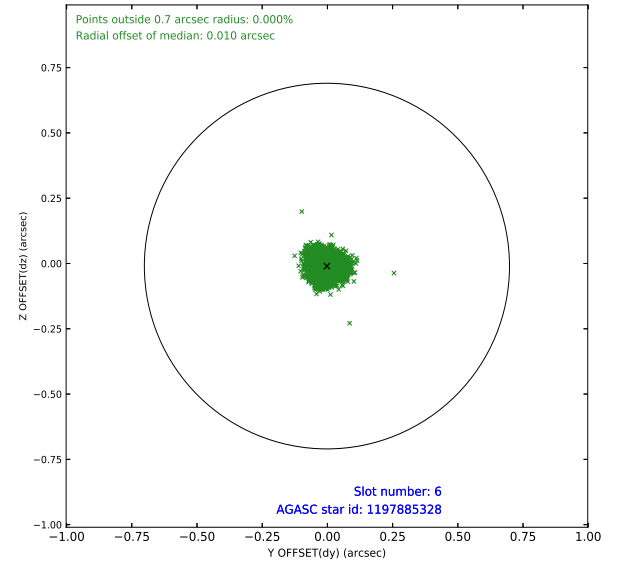
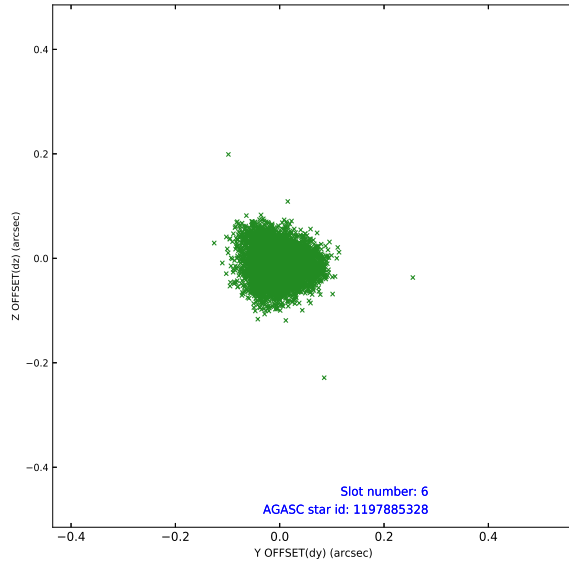
## 2.4.2 Slot 4



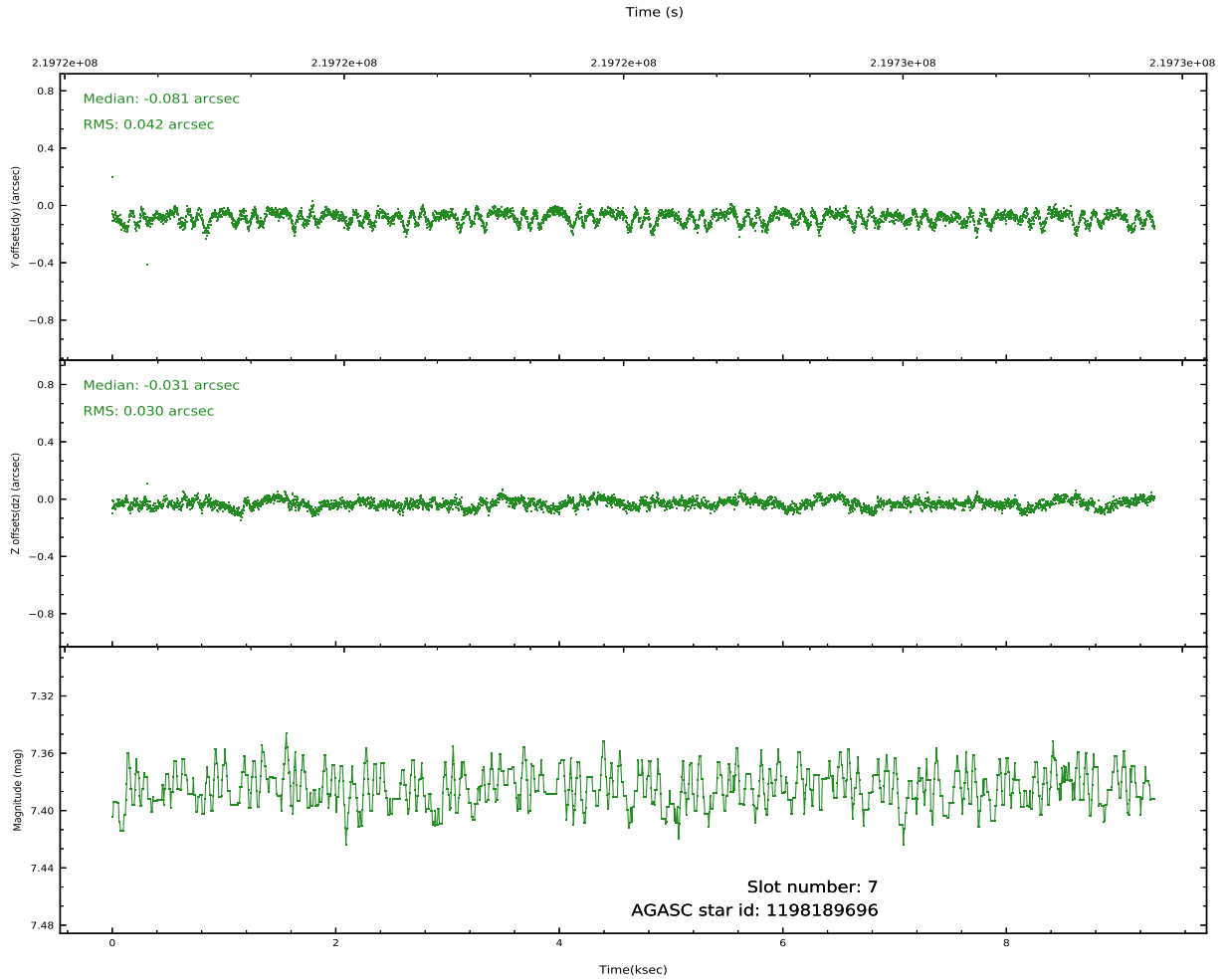
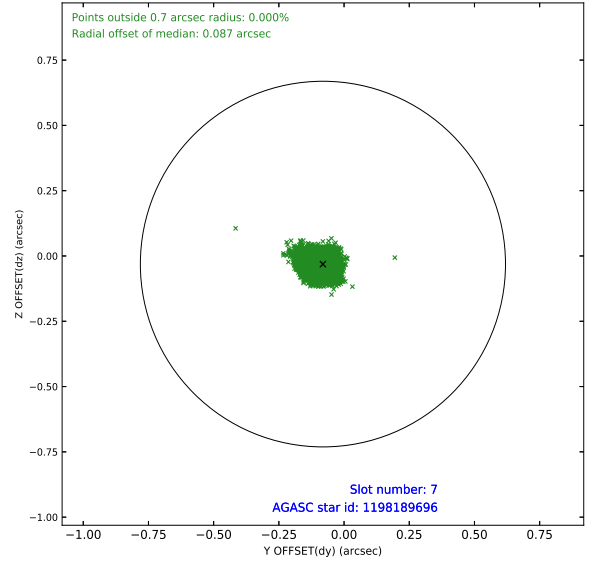
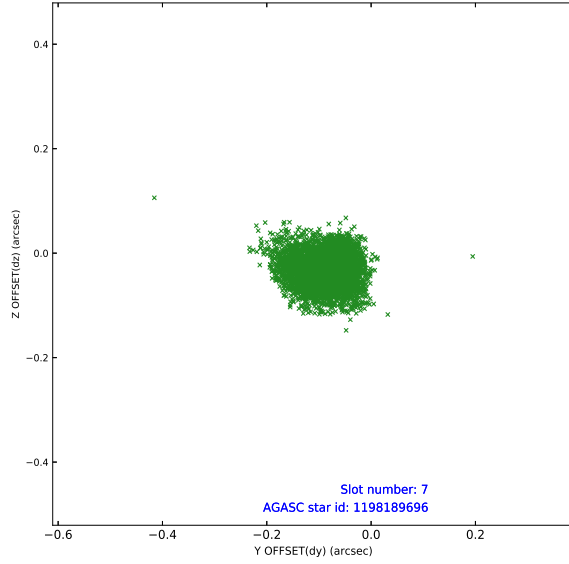
### 2.4.3 Slot 5



## 2.4.4 Slot 6

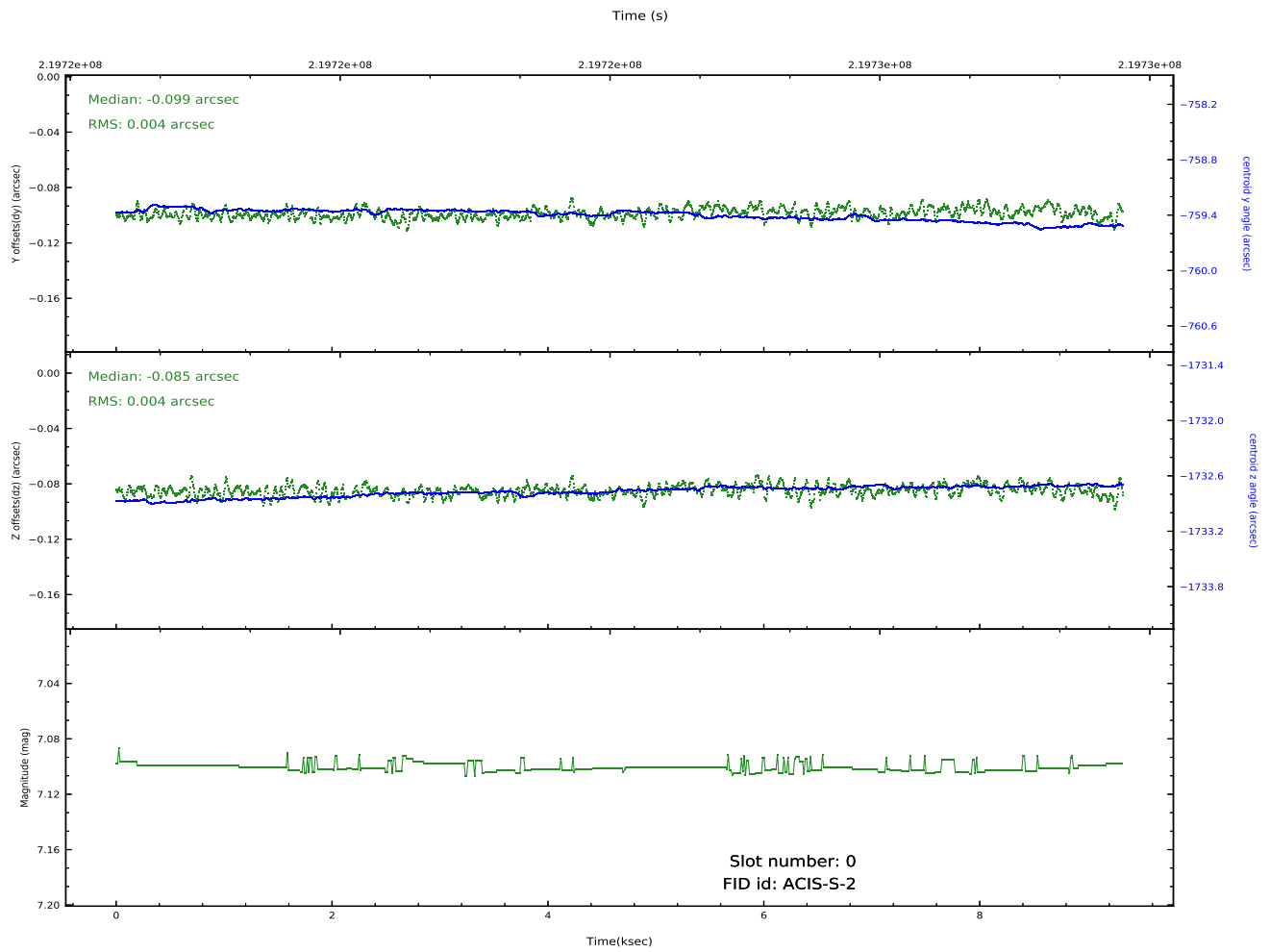
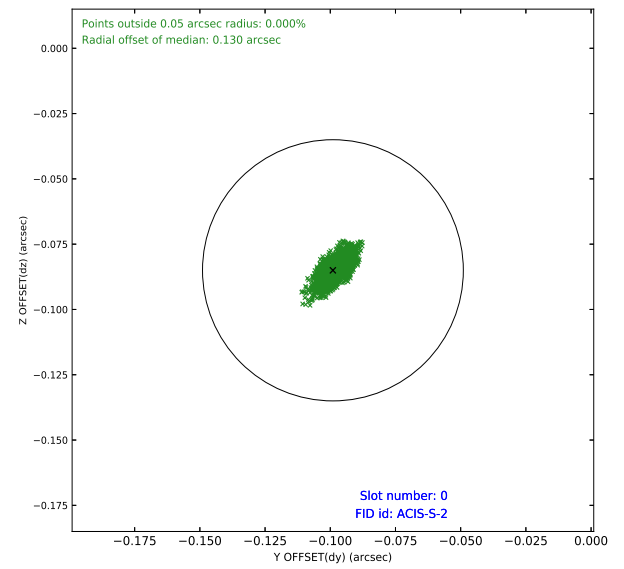
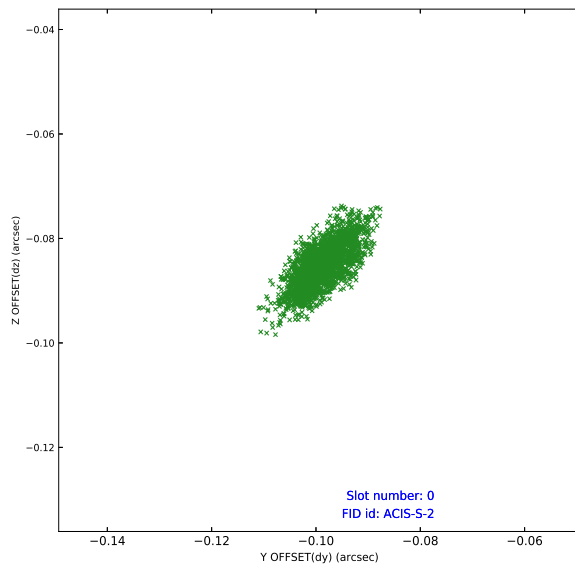


## 2.4.5 Slot 7

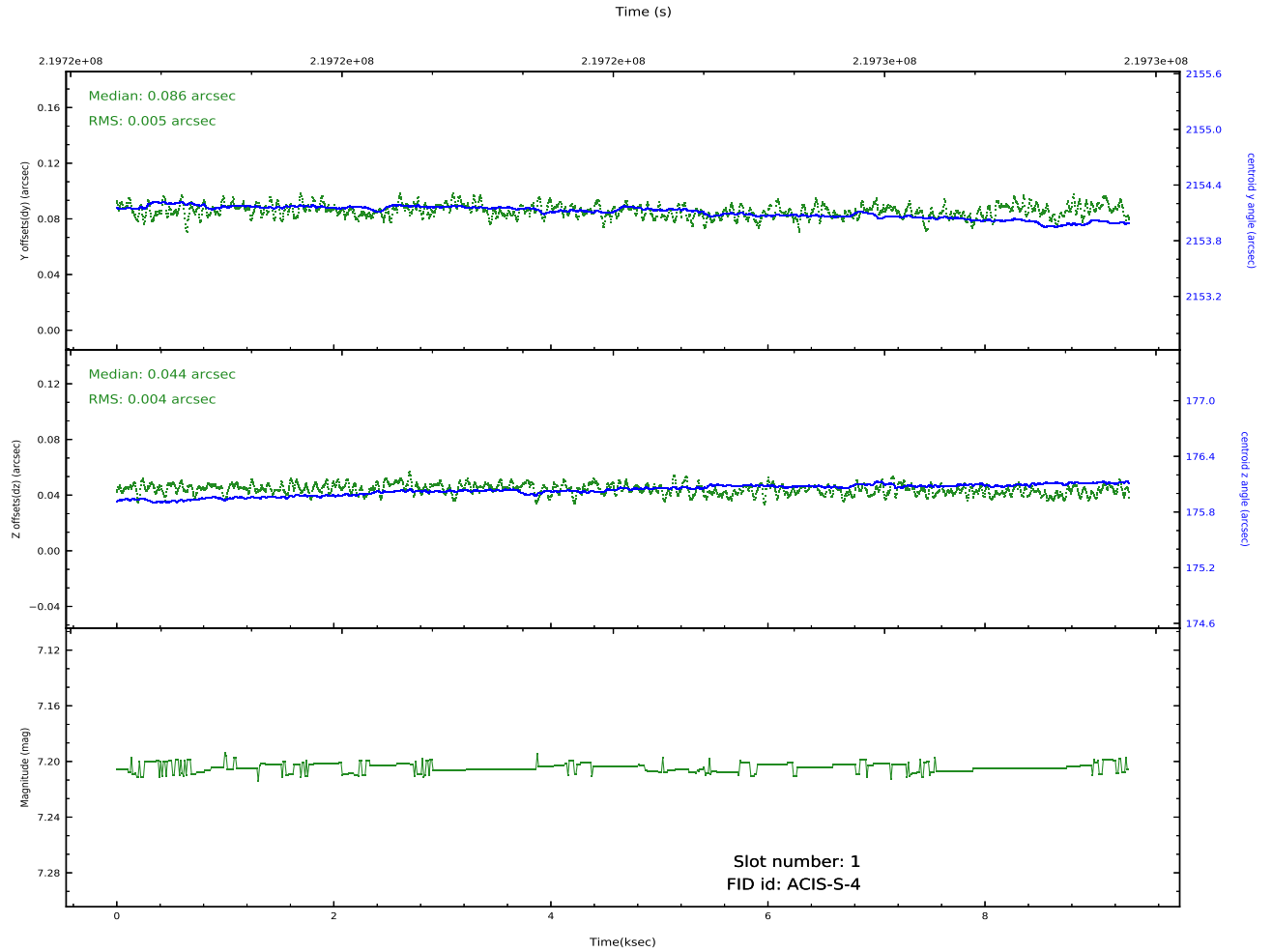
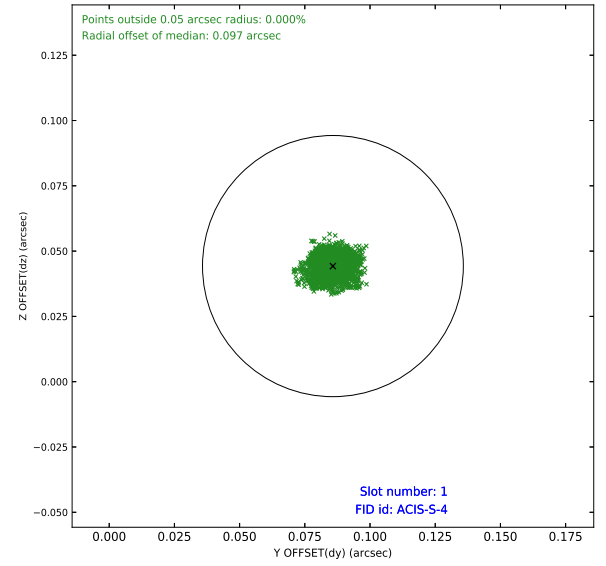
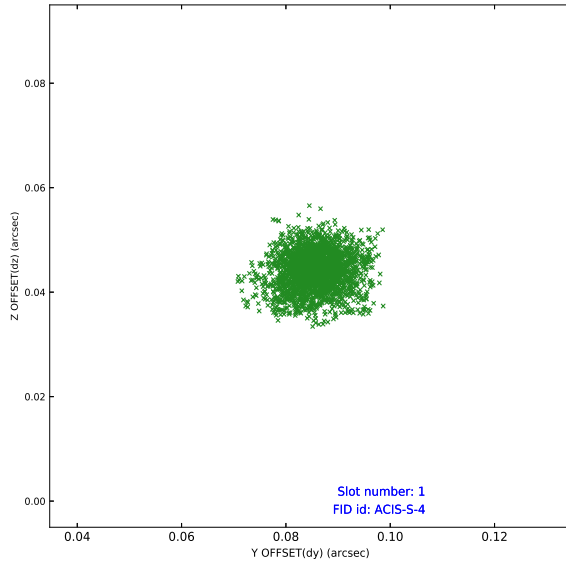


## 2.5 FID Slots

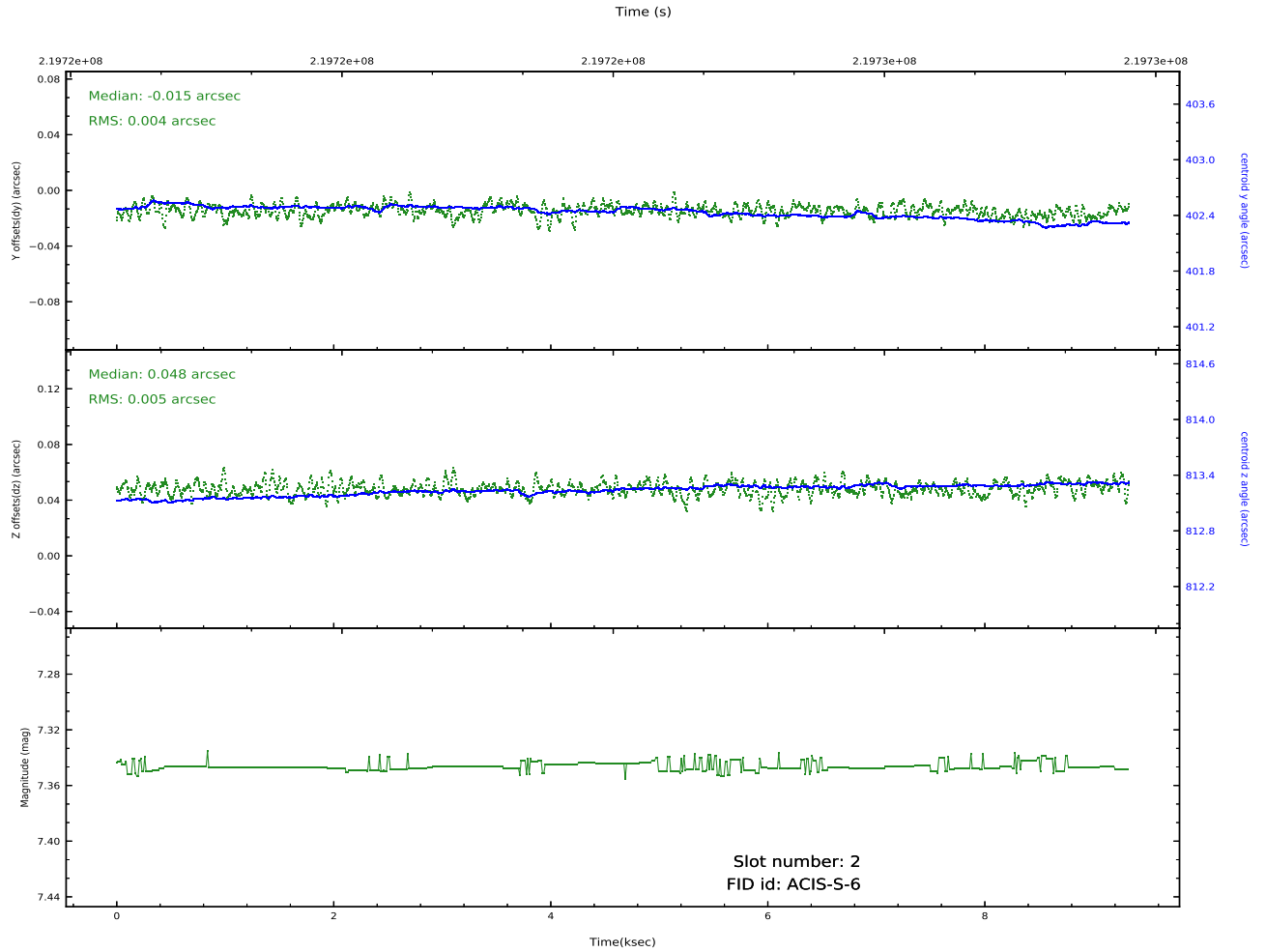
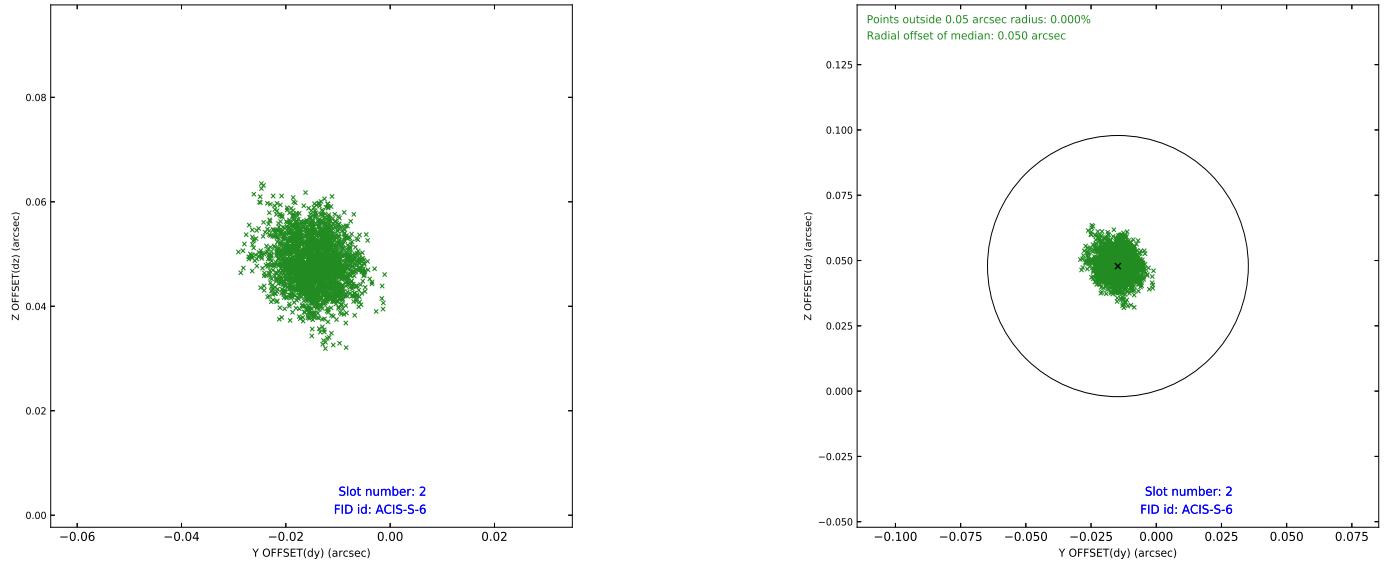
### 2.5.1 Slot 0



## 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)	2020.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.955199

### A.2 Comments

Window constraint met.