

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5722 - L2 Version 4  
Chandra X-Ray Center

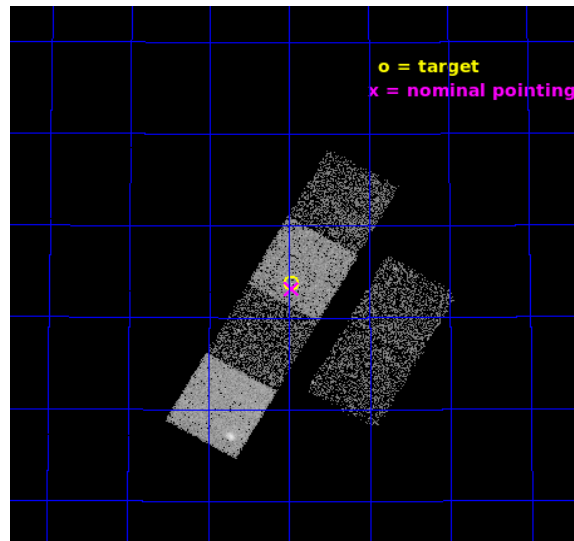
L2 Processing Date : Oct 9 2020

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# 1 Front

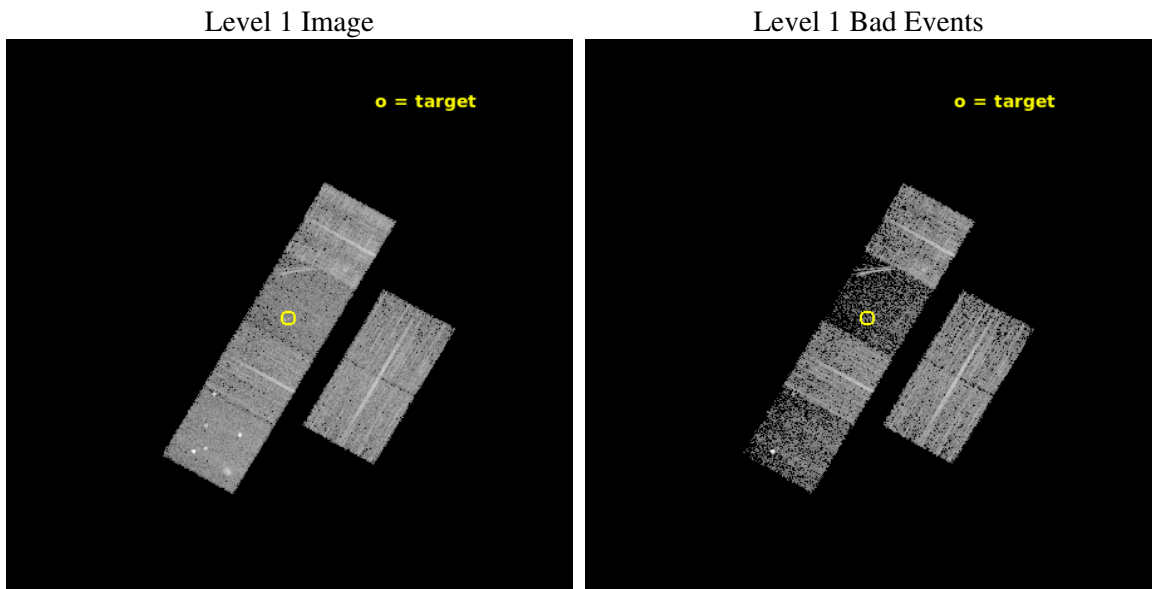
seq_num	701144	Sequence number
obs_id	5722	Observation id
title	What kind of Jets does Nature make? X-ray characterization of the FIRST Flat Spectrum Sample	Proposal title
observer	Dr. Giovanni Fossati	Principal investigator
object	7C 131256.29+561932.00	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	198.743333	Observer's specified target RA [deg]
dec_targ	56.061667	Observer's specified target Dec [deg]
ra_nom	198.7419610177	Nominal RA [deg]
dec_nom	56.052560219293	Nominal Dec [deg]
roll_nom	299.83040380582	Nominal Roll [deg]
revision	4	Processing version of data
ontime	6143.9999771118	Sum of GTIs [s]
livetime	6066.200949929	Livetime [s]
ontime2	6143.9999771118	Sum of GTIs [s]
ontime3	6140.7590068579	Sum of GTIs [s]
ontime5	6143.9999771118	Sum of GTIs [s]
ontime6	6143.9999771118	Sum of GTIs [s]
ontime7	6143.9999771118	Sum of GTIs [s]
ontime8	6140.7590068281	Sum of GTIs [s]
l2events	36941	Number of level 2 events



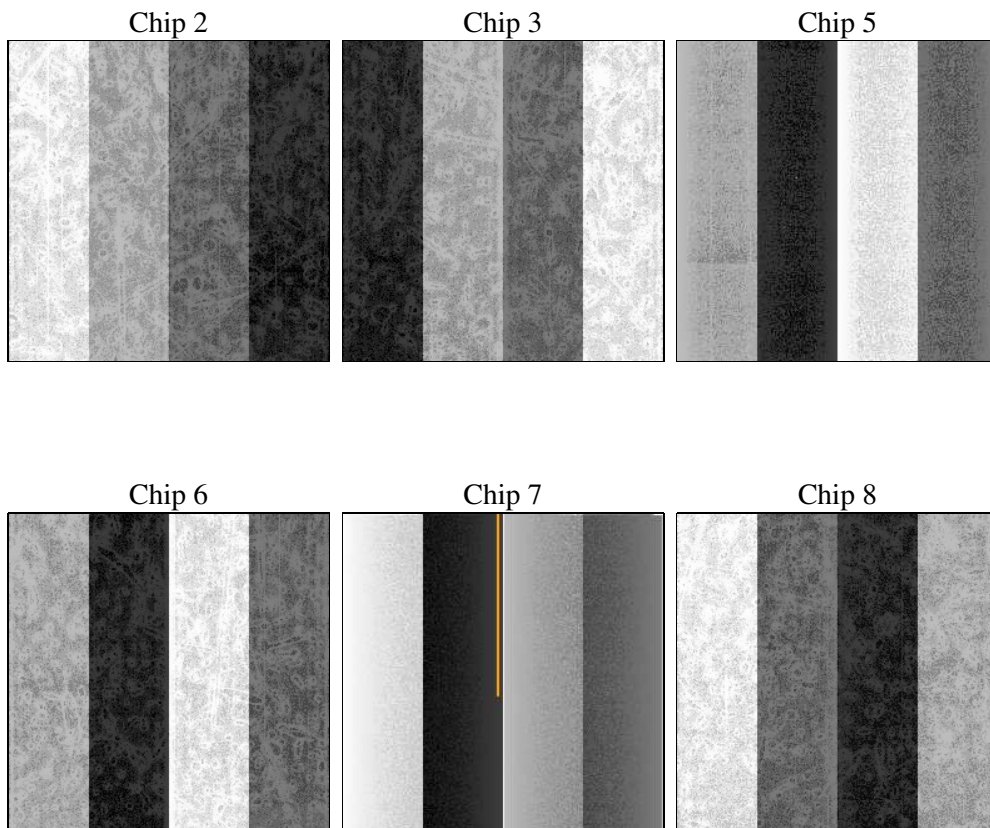
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	6143.9999771118	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	6143.9999771118	Sum of GTIs [s]
date	2020-10-09T23:08:12	Date and time of file creation	ontime3	6140.7590068579	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	6143.9999771118	Sum of GTIs [s]
			ontime6	6143.9999771118	Sum of GTIs [s]
			ontime7	6143.9999771118	Sum of GTIs [s]
			ontime8	6140.7590068281	Sum of GTIs [s]
			l1events	194124	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	35697	31997	34103	31260	20591	40476
rejected events	32885	29353	13981	28205	9389	30544
rejected %	92%	91%	40%	90%	45%	75%

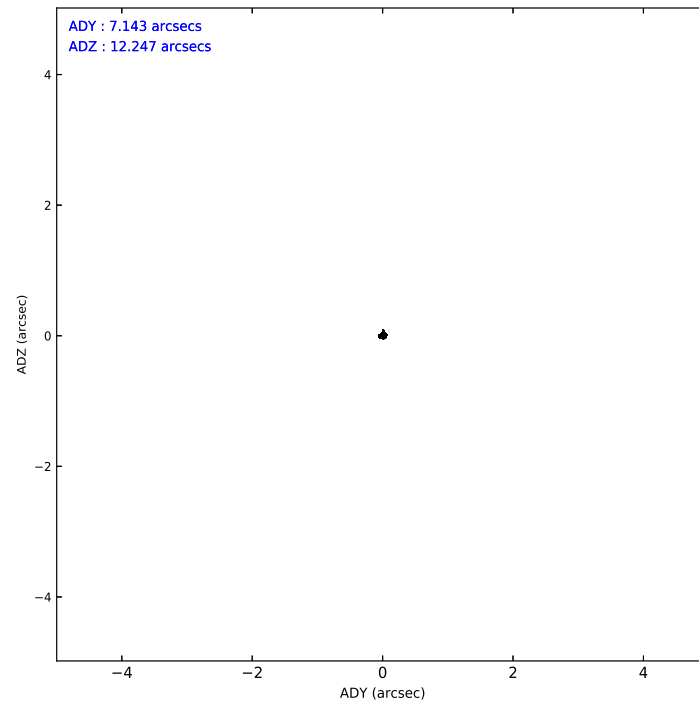
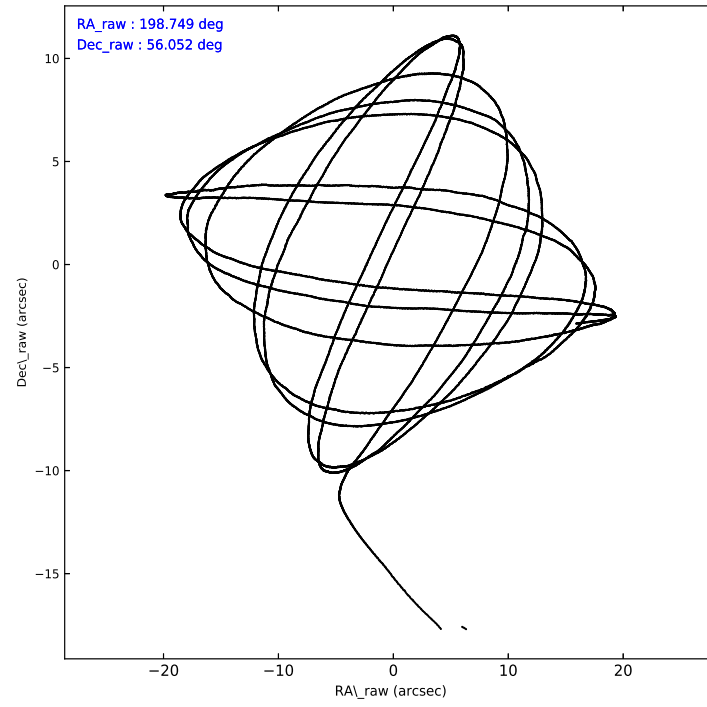
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1182	1142	4248	1272	1473	2919
	3%	3%	12%	4%	7%	7%
grade 1 events	20	13	133	15	47	32
	0%	0%	0%	0%	0%	0%
grade 2 events	649	582	6099	674	2752	2351
	1%	1%	17%	2%	13%	5%
grade 3 events	303	312	1052	364	1181	1241
	0%	0%	3%	1%	5%	3%
grade 4 events	317	286	1088	345	1227	1131
	0%	0%	3%	1%	5%	2%
grade 5 events	468	680	2843	687	2069	1145
	1%	2%	8%	2%	10%	2%
grade 6 events	407	373	8038	464	4809	2510
	1%	1%	23%	1%	23%	6%
grade 7 events	32351	28609	10602	27439	7033	29147
	90%	89%	31%	87%	34%	72%

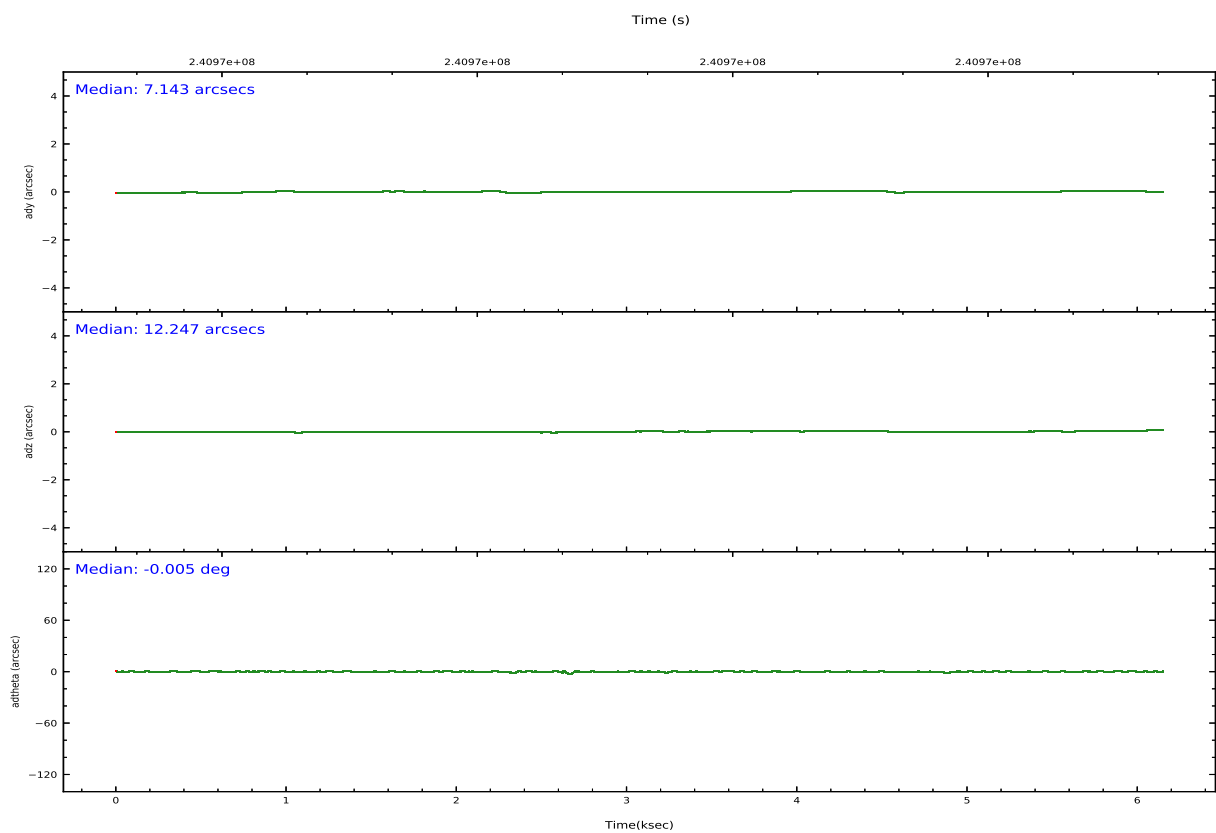
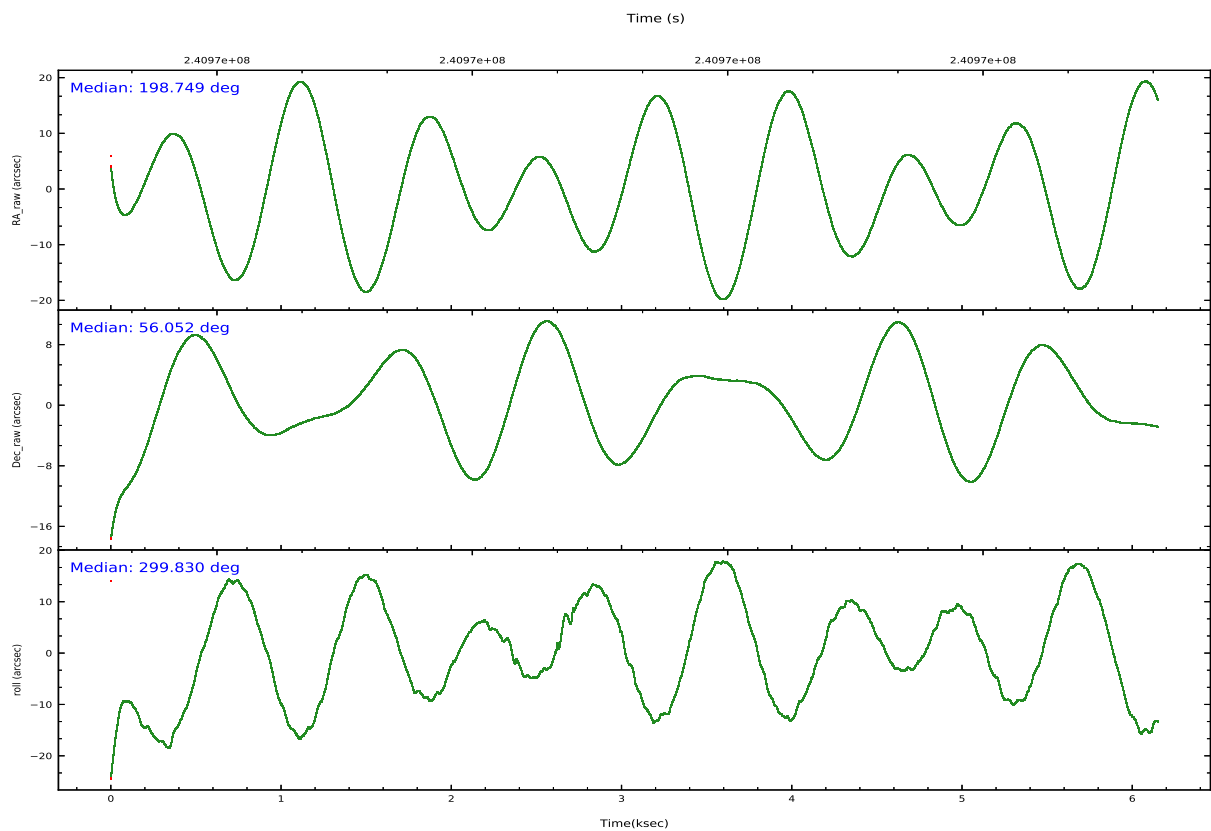


## 2.2 Compared Parameters

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	198.706684	198.7419610177	Subarray requested	NONE	NONE
[deg] Pointing Dec	56.065934	56.052560219293	Alternating exposures requested	N	N
[deg] Pointing Roll	299.709879	299.83040380582	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	240969528.184000	240968267.54869			
Observation start date	2005-08-20T23:57:44	2005-08-20T23:37:47			
[s] Observation end time (MET)	240975528.184000	240976453.71157			
Observation end date	2005-08-21T01:37:44	2005-08-21T01:54:13			
Read mode	TIMED	TIMED			

## 2.3 Aspect



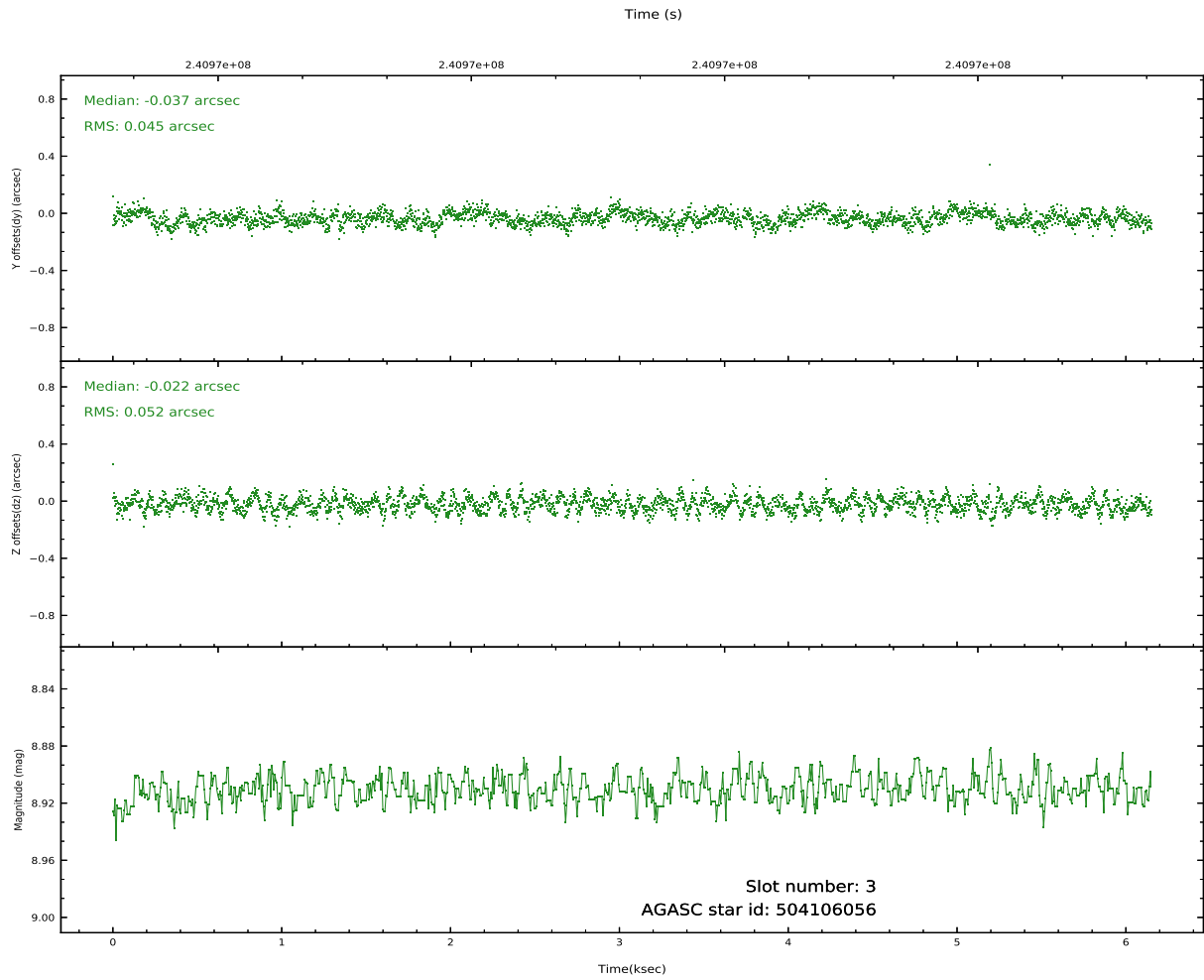
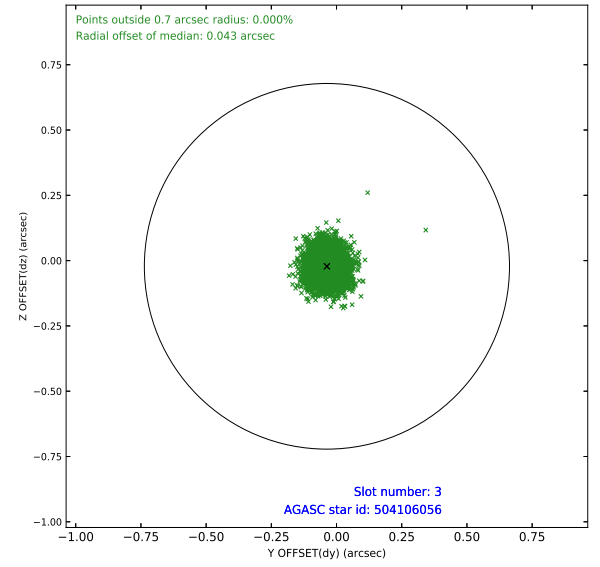
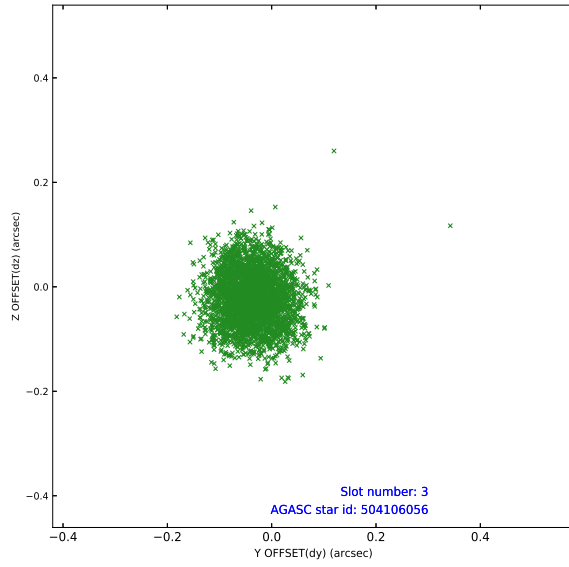


Slot Statistics

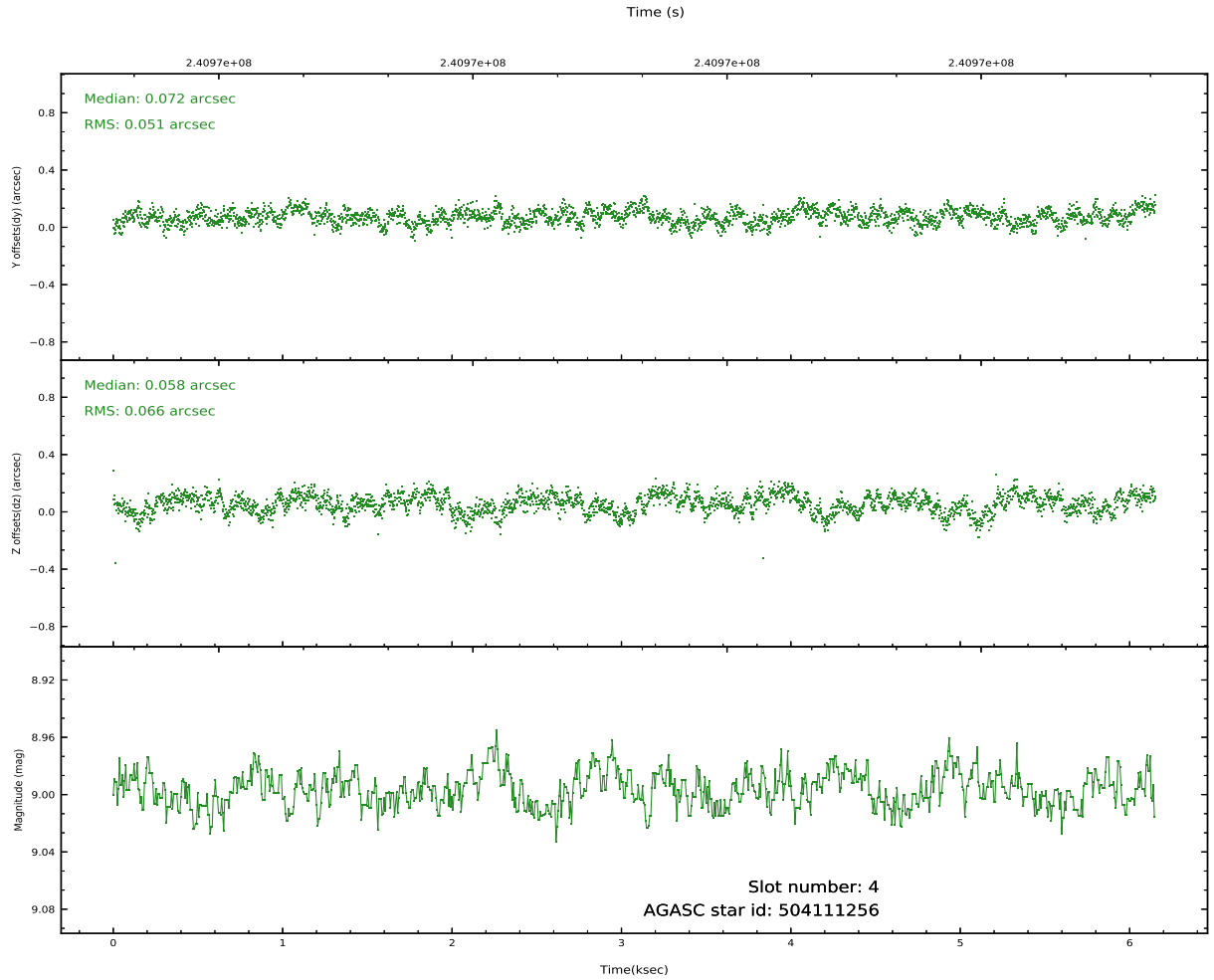
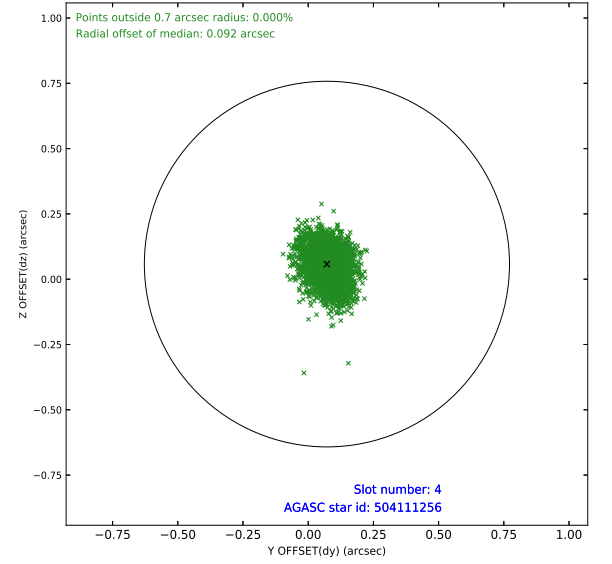
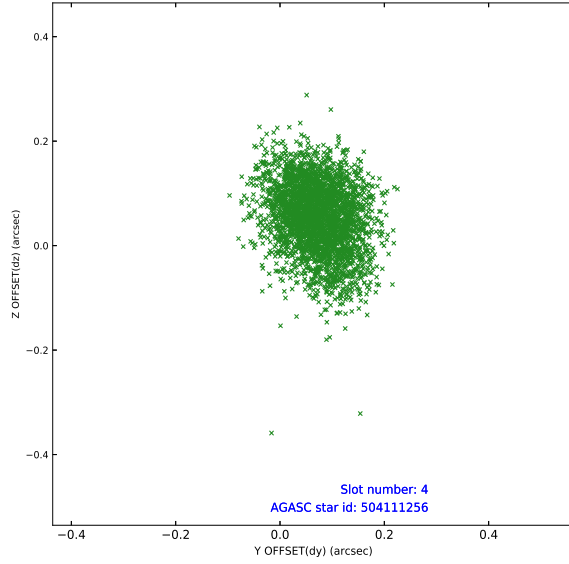
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1501	1.000	-0.053	-0.069	0.007	0.011	0.000000	0.000000	-759.93	-1733
1	FID		ACIS-S-4	7.20	1500	1.000	0.133	0.044	0.005	0.009	0.000000	0.000000	2153.07	174
2	FID		ACIS-S-5	7.23	1501	1.000	-0.111	0.034	0.006	0.011	0.000000	0.000000	-1811.62	168
3	GUIDE	used	504106056	8.91	3001	1.000	-0.037	-0.022	0.074	0.114	197.917232	55.926583	-361.09	-1626
4	GUIDE	used	504111256	9.00	2995	1.000	0.072	0.058	0.087	0.144	199.426283	56.400609	-342.85	1845
5	GUIDE	used	504112592	9.41	2999	1.000	0.105	-0.118	0.090	0.151	199.067370	55.838193	1071.03	228
6	GUIDE	used	505021576	9.27	2998	1.000	0.054	0.120	0.096	0.148	200.004199	55.821901	2042.19	1856
7	GUIDE	used	504110312	6.91	3001	1.000	-0.196	-0.035	0.066	0.096	198.404207	56.708267	-2305.07	628

## 2.4 Star Slots

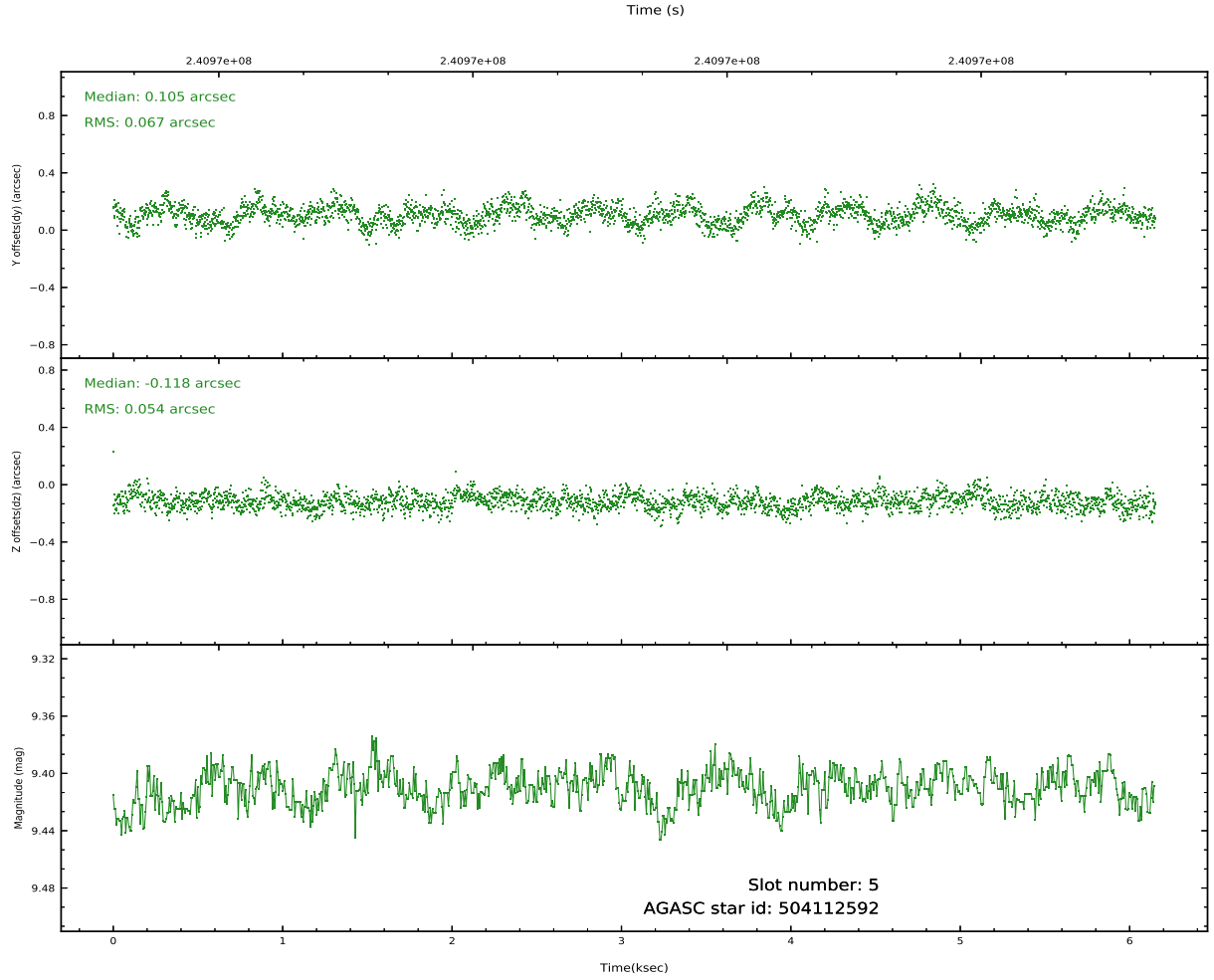
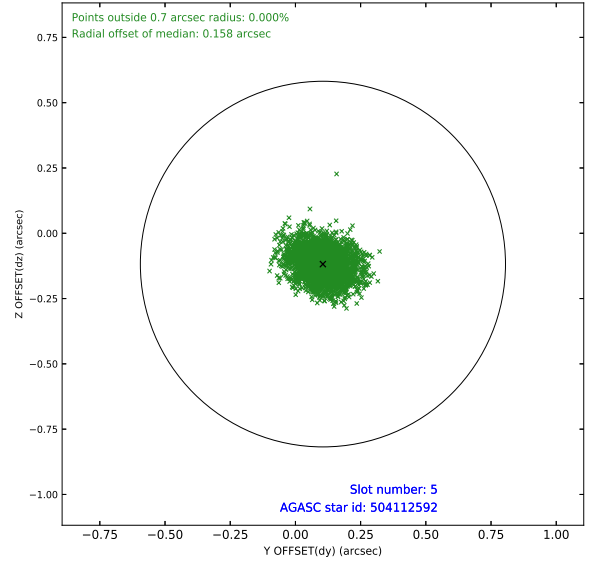
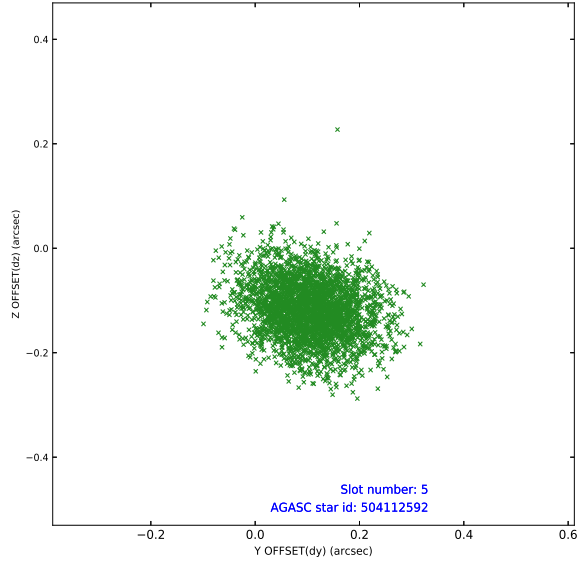
### 2.4.1 Slot 3



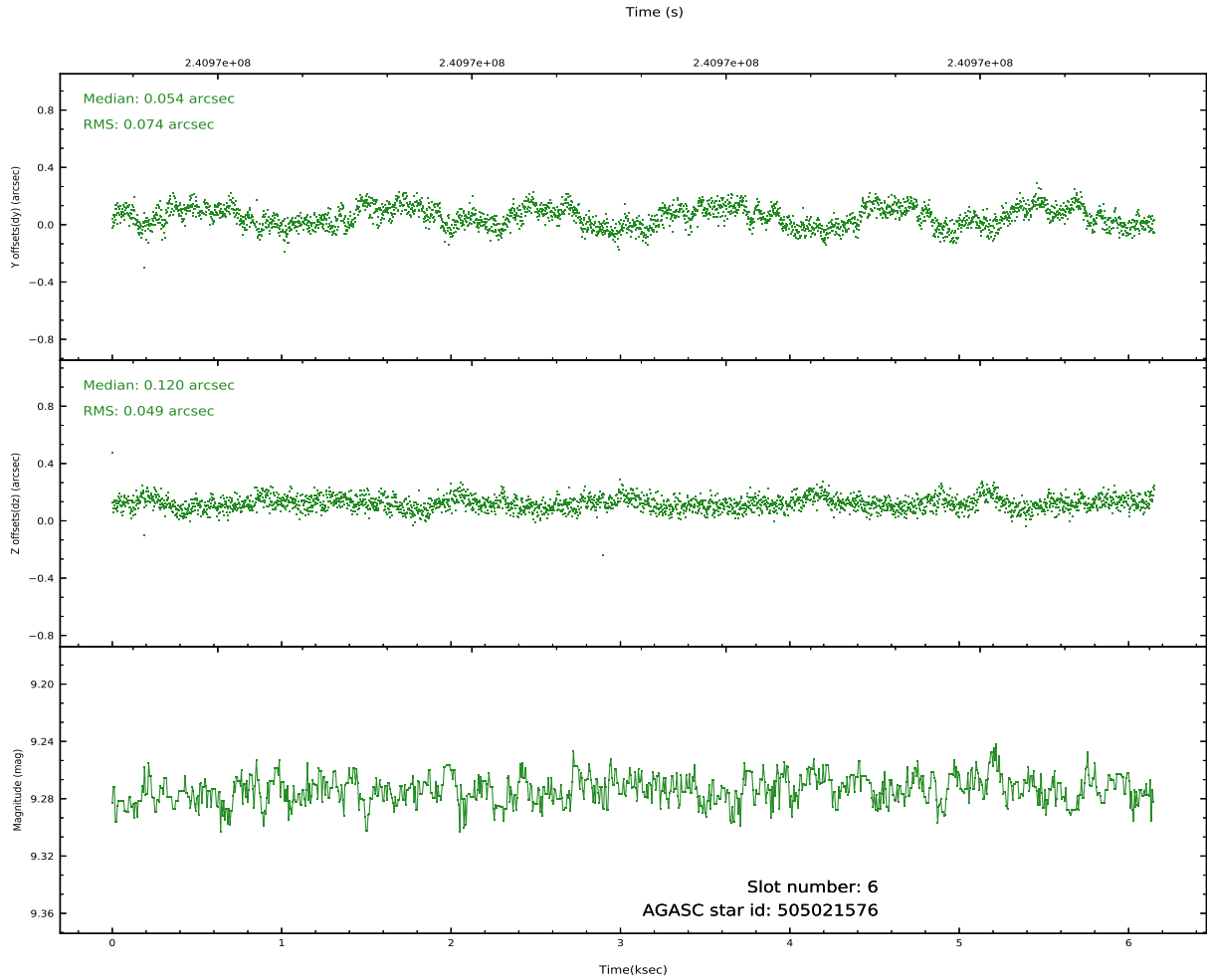
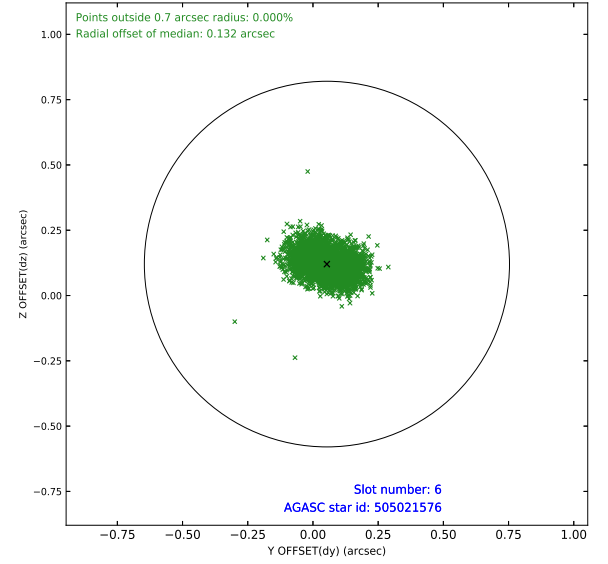
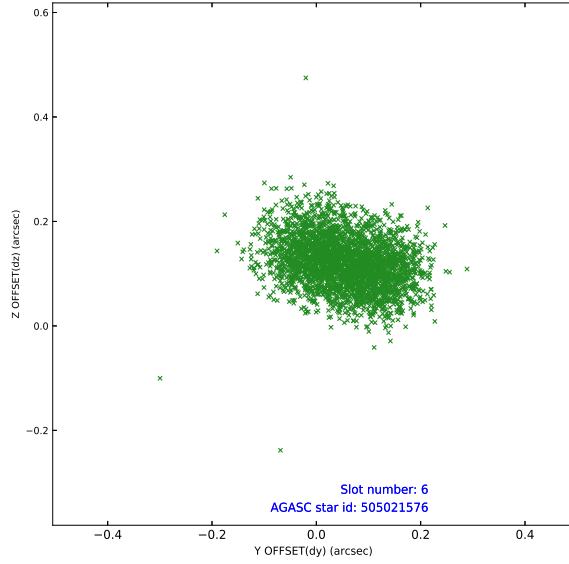
## 2.4.2 Slot 4



### 2.4.3 Slot 5

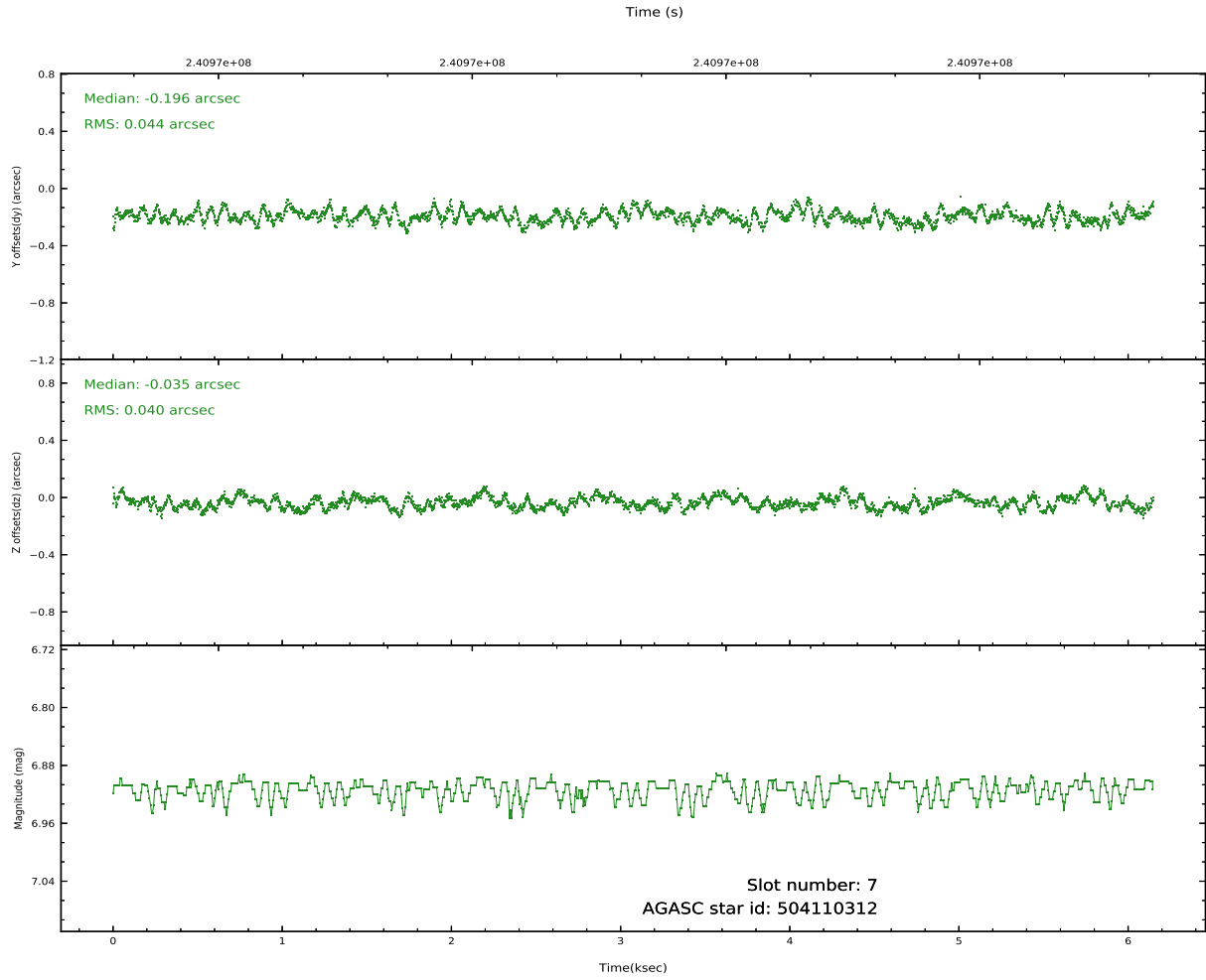
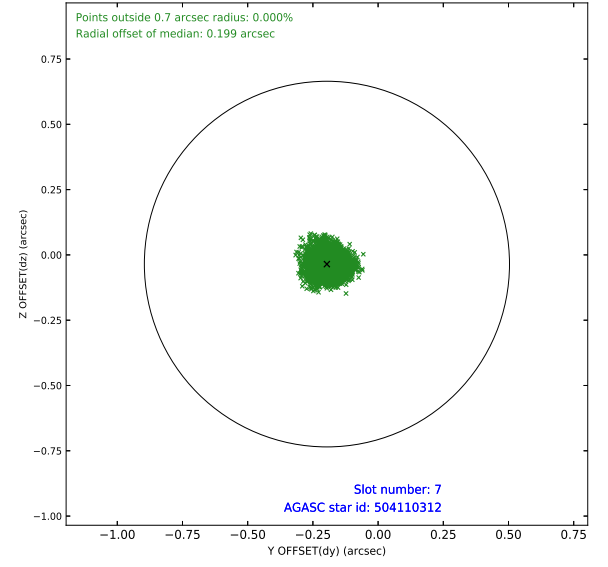
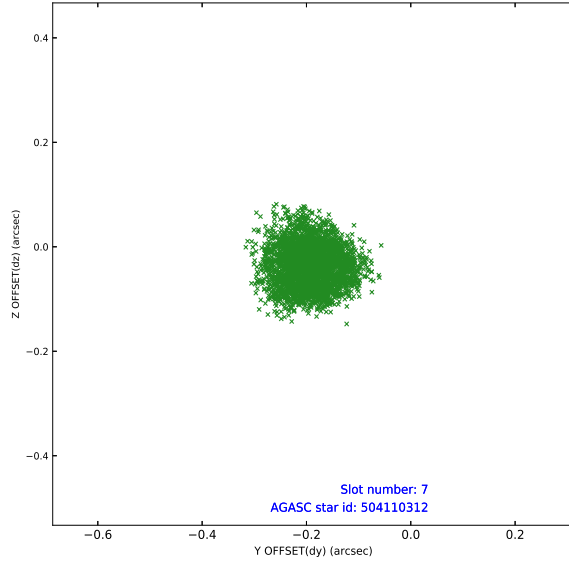


## 2.4.4 Slot 6



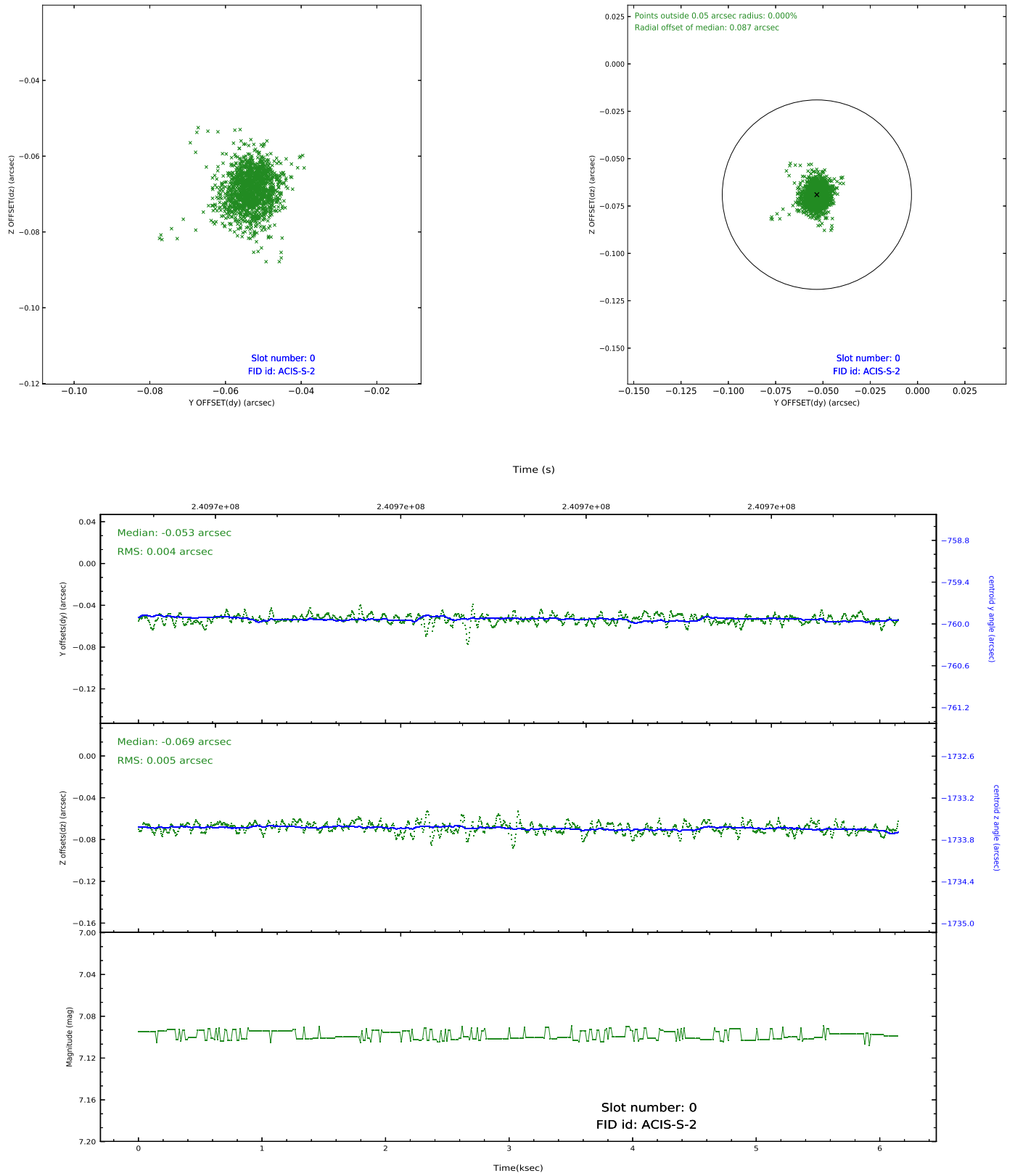


## 2.4.5 Slot 7

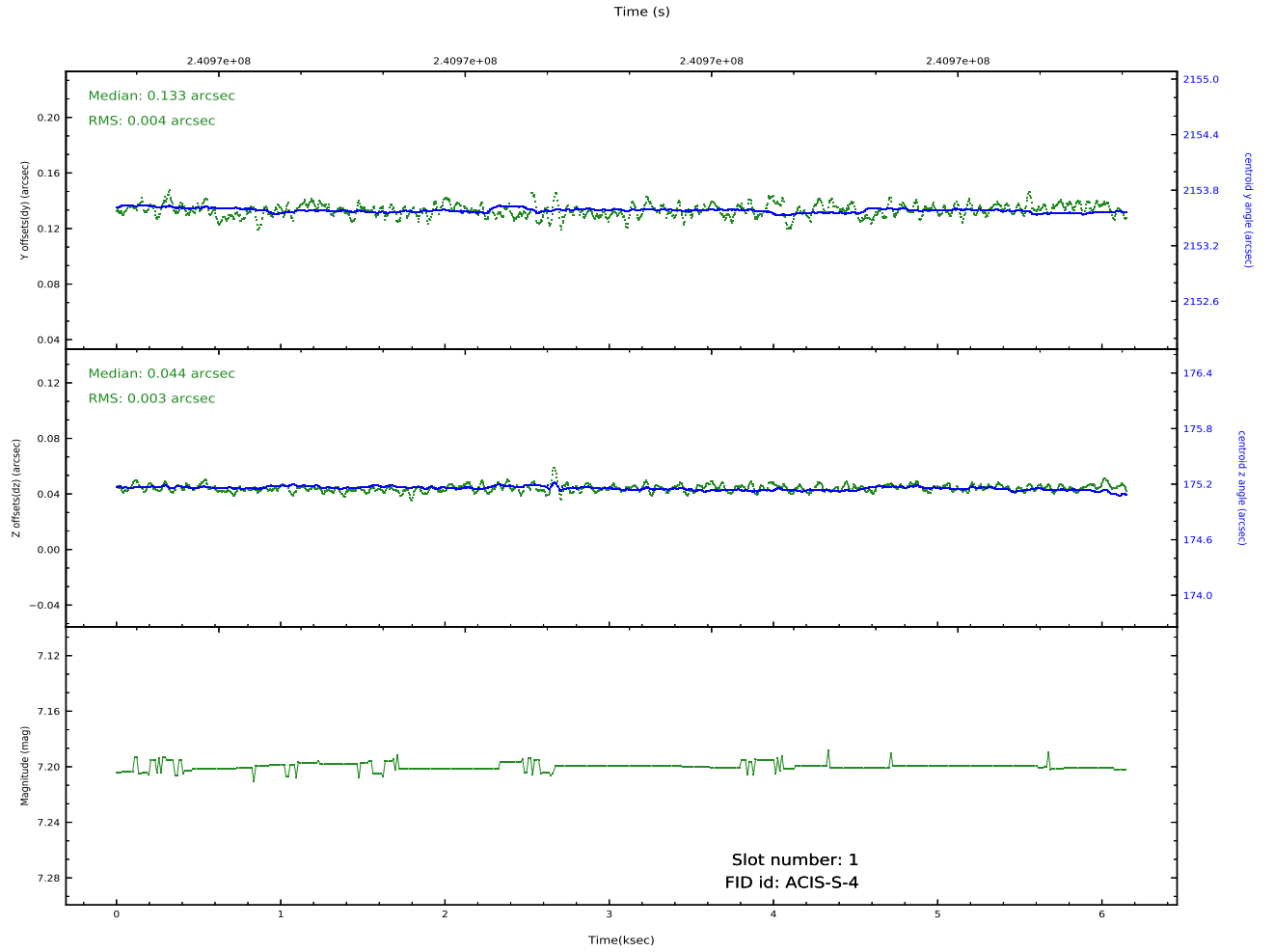
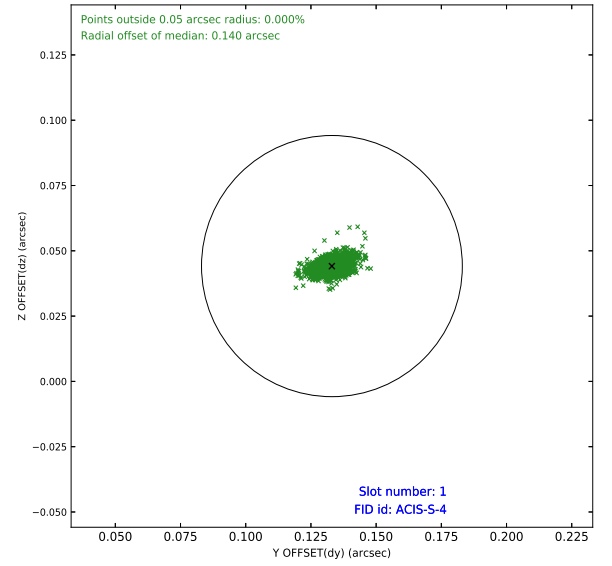
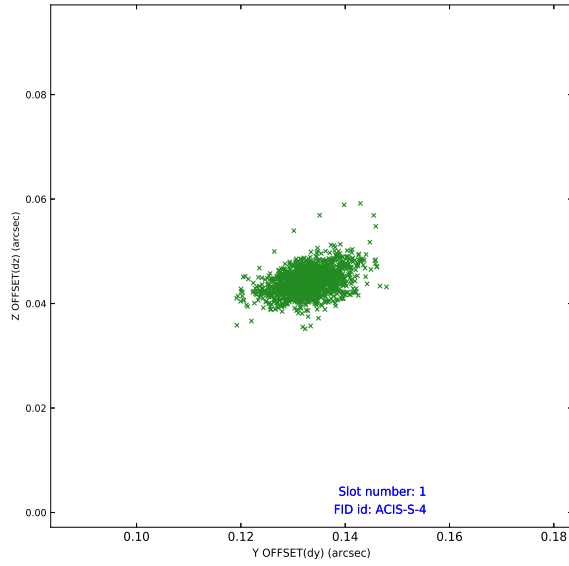


## 2.5 FID Slots

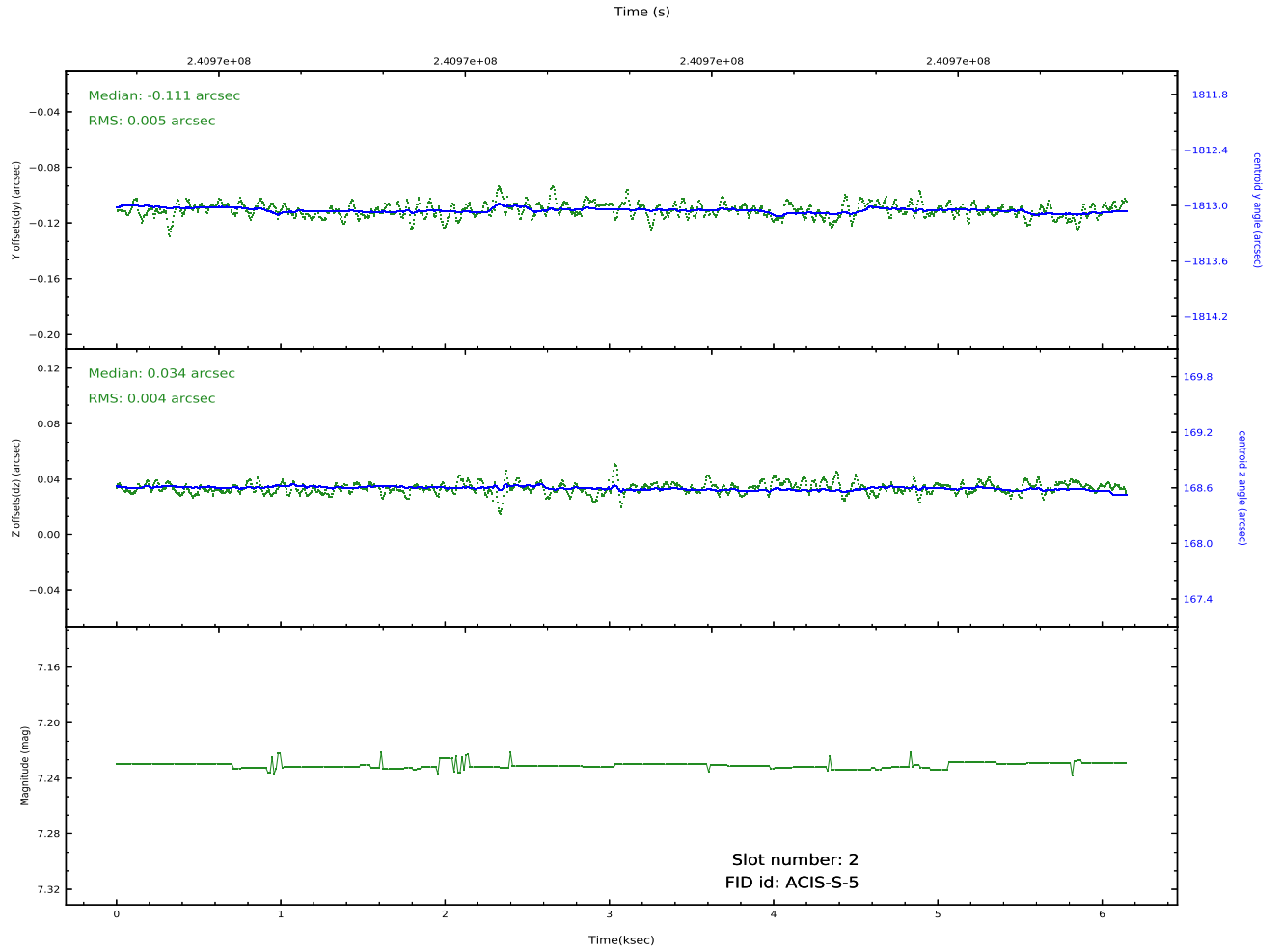
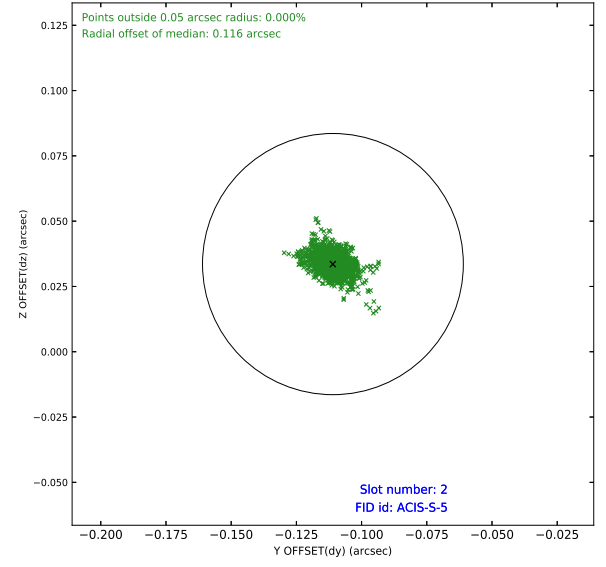
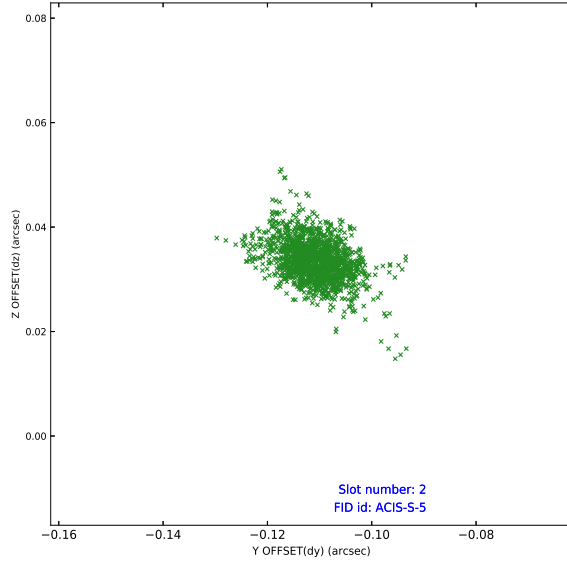
### 2.5.1 Slot 0



## 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)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.143999

### A.2 Comments