

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5435 - L2 Version 4  
Chandra X-Ray Center

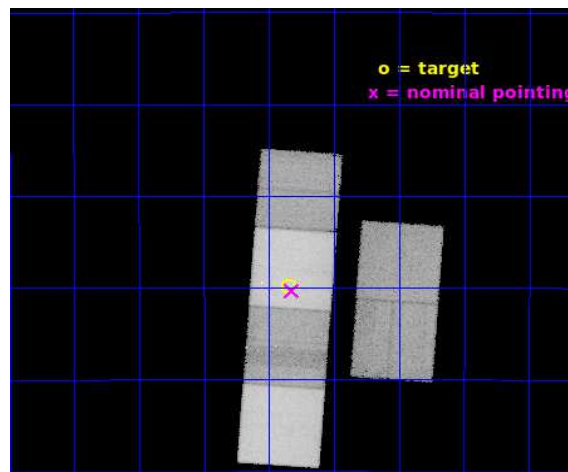
L2 Processing Date : Oct 9 2020

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# 1 Front

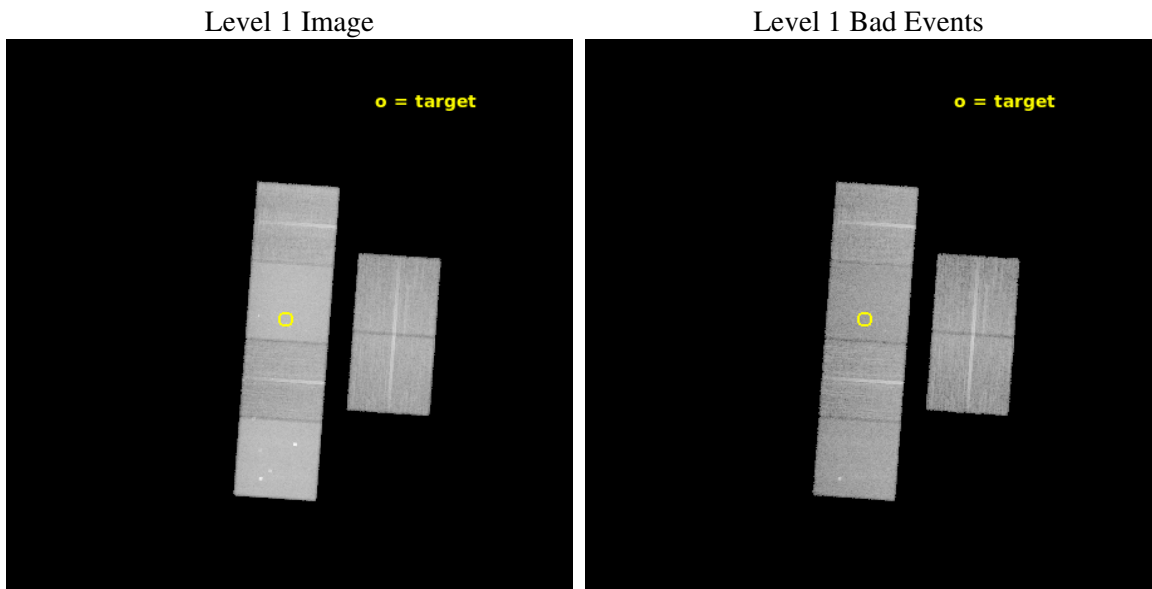
seq_num	300151	Sequence number
obs_id	5435	Observation id
title	A Uniform Study of Globular Cluster X-ray Sources: the Keys to Cluster Dynamical Evolution	Proposal title
observer	Prof. Walter Lewin	Principal investigator
object	NGC 6544	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	271.835833	Observer's specified target RA [deg]
dec_targ	-24.9975	Observer's specified target Dec [deg]
ra_nom	271.83105590638	Nominal RA [deg]
dec_nom	-25.005382256059	Nominal Dec [deg]
roll_nom	274.09950076868	Nominal Roll [deg]
revision	4	Processing version of data
ontime	16486.399938583	Sum of GTIs [s]
livetime	16277.639215643	Livetime [s]
ontime2	16483.158948362	Sum of GTIs [s]
ontime3	16486.399938583	Sum of GTIs [s]
ontime5	16486.399938583	Sum of GTIs [s]
ontime6	16486.399938583	Sum of GTIs [s]
ontime7	16486.399938583	Sum of GTIs [s]
ontime8	16486.399938583	Sum of GTIs [s]
l2events	477515	Number of level 2 events



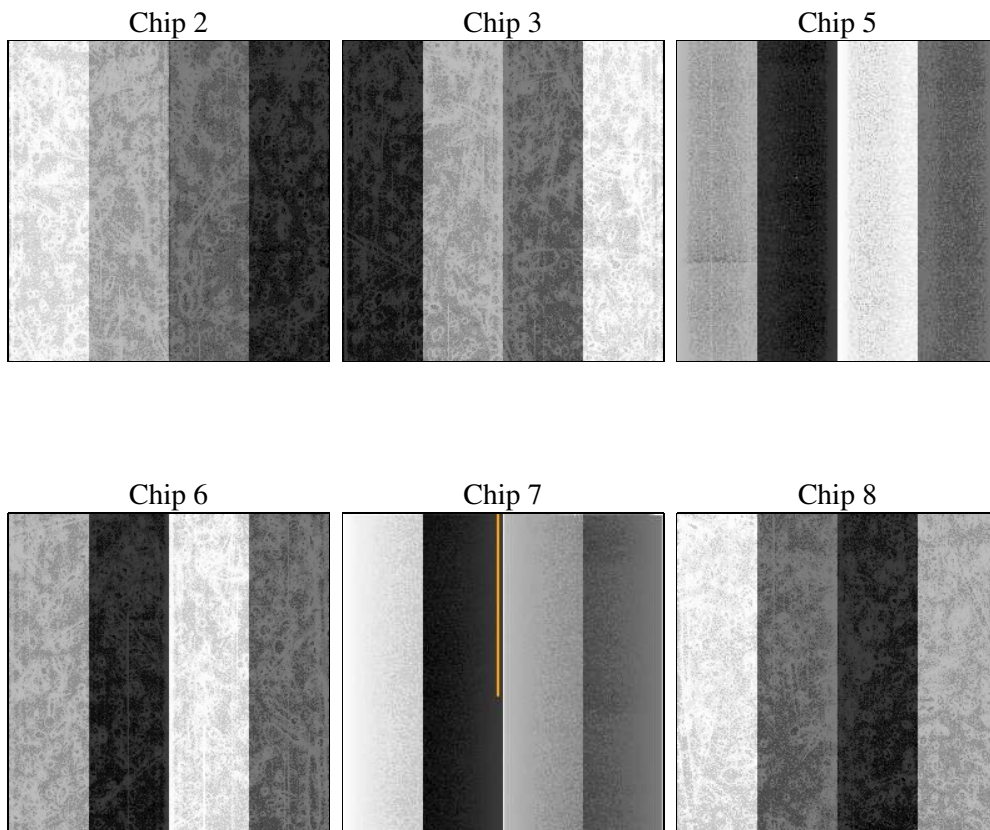
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16309.472000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	16486.399938583	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	16483.158948362	Sum of GTIs [s]
date	2020-10-09T12:43:55	Date and time of file creation	ontime3	16486.399938583	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	16486.399938583	Sum of GTIs [s]
			ontime6	16486.399938583	Sum of GTIs [s]
			ontime7	16486.399938583	Sum of GTIs [s]
			ontime8	16486.399938583	Sum of GTIs [s]
			l1events	1216424	Number of level 1 events

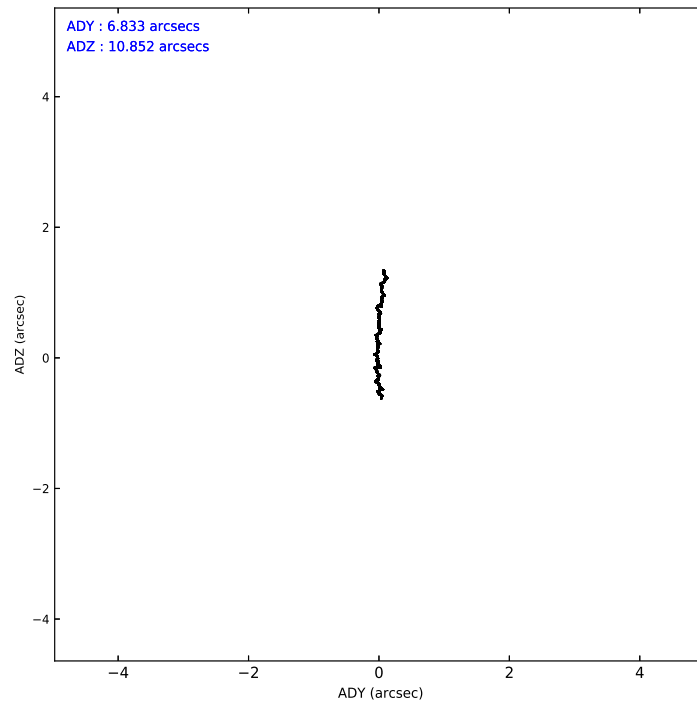
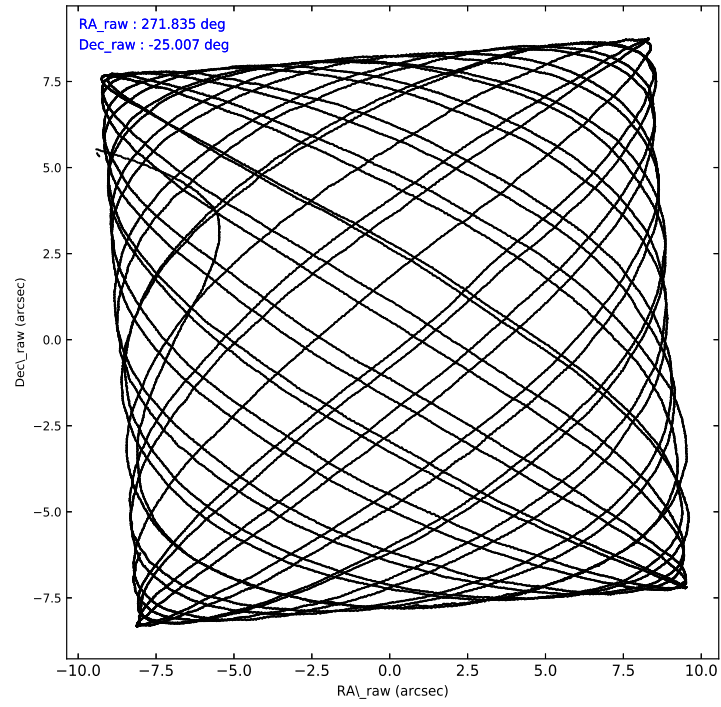
### 2.1.4 Events

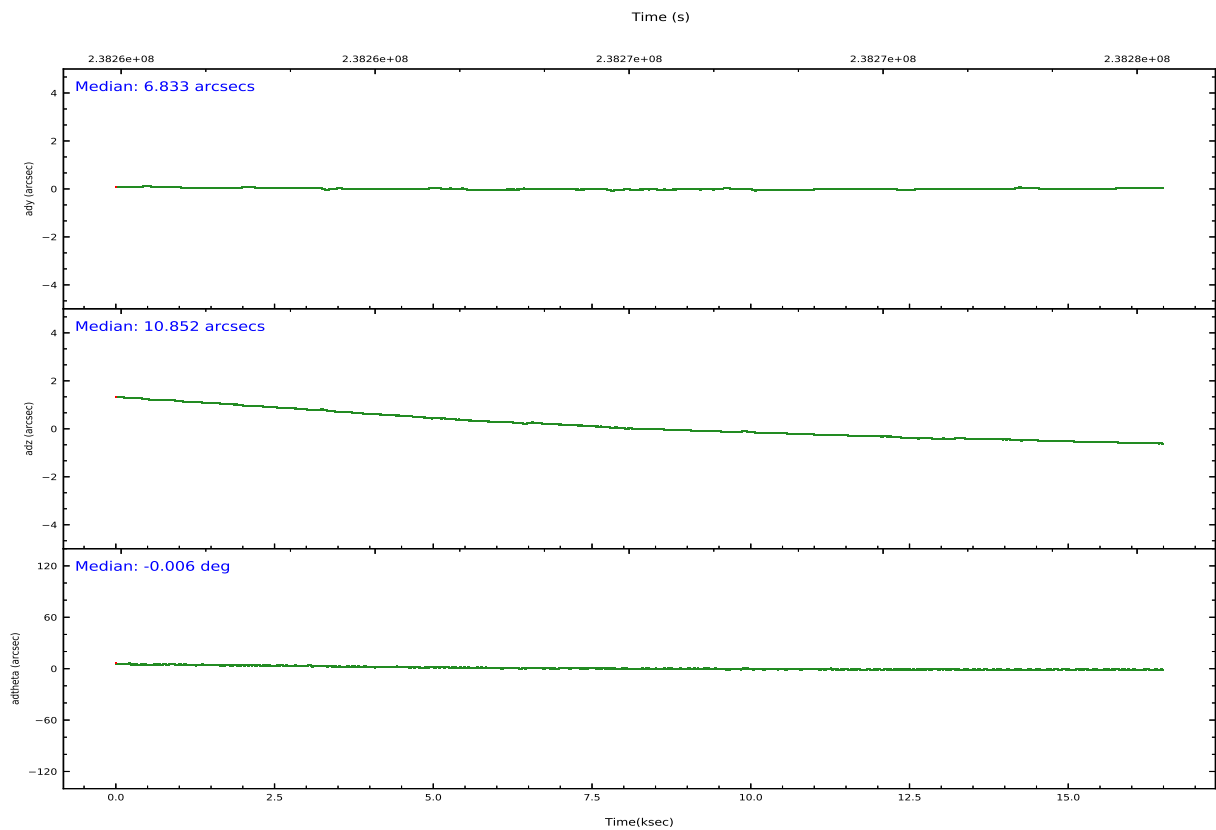
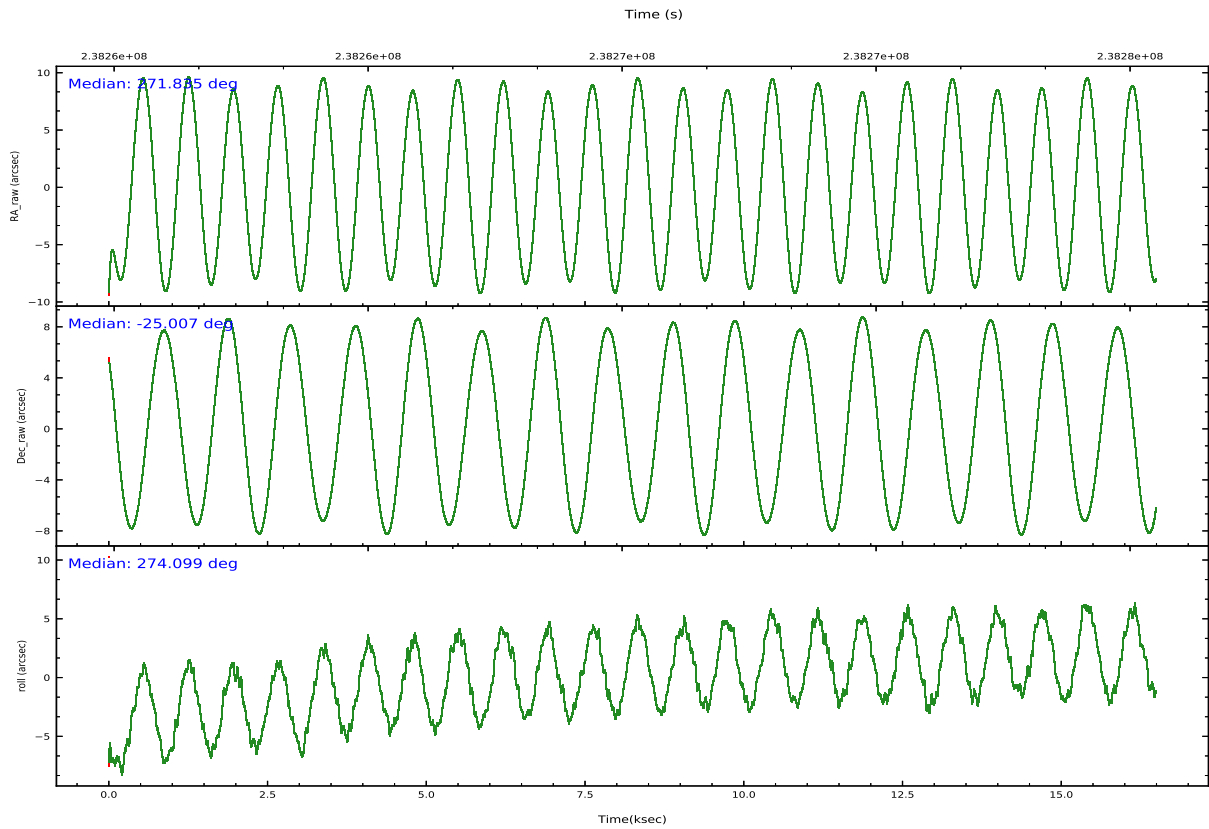
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	156326	153374	278661	166173	265069	196821	grade 0 events	28040	28088	21764	32679	15559	38571
rejected events	115121	111795	114884	116682	106009	127731		17%	18%	7%	19%	5%	19%
rejected %	73%	72%	41%	70%	39%	64%	grade 1 events	167	189	325	167	191	224
								0%	0%	0%	0%	0%	0%
							grade 2 events	5988	5888	47955	8306	28746	11891
								3%	3%	17%	4%	10%	6%
							grade 3 events	2087	2211	7891	2375	12267	4741
								1%	1%	2%	1%	4%	2%
							grade 4 events	2084	2235	7583	2218	12147	4430
								1%	1%	2%	1%	4%	2%
							grade 5 events	5230	5729	15488	6050	16876	8022
								3%	3%	5%	3%	6%	4%
							grade 6 events	3305	3417	79929	4212	91453	10031
								2%	2%	28%	2%	34%	5%
							grade 7 events	109425	105617	97726	110166	87830	118911
								69%	68%	35%	66%	33%	60%

## 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	271.817537	271.83105590638	Subarray requested	NONE	NONE
[deg] Pointing Dec	-24.984779	-25.005382256059	Alternating exposures requested	N	N
[deg] Pointing Roll	273.935167	274.09950076868	[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)	238260101.184000	238258861.86205			
Observation start date	2005-07-20T15:20:37	2005-07-20T15:01:01			
[s] Observation end time (MET)	238276410.184000	238276638.95036			
Observation end date	2005-07-20T19:52:26	2005-07-20T19:57:18			
Read mode	TIMED	TIMED			

## 2.3 Aspect





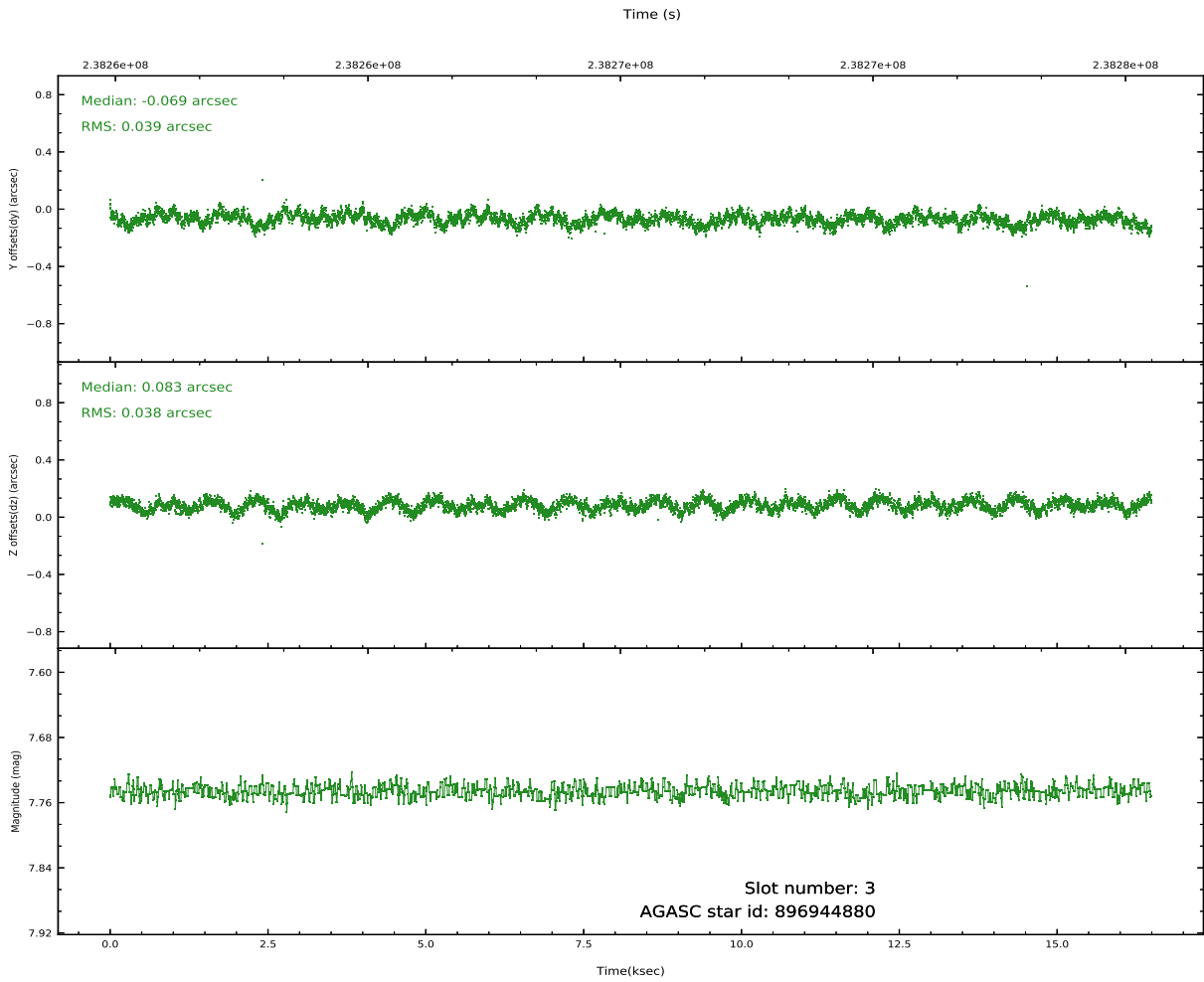
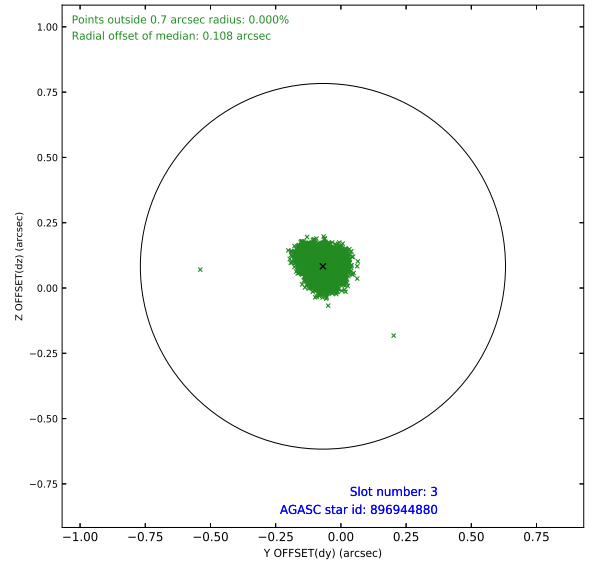
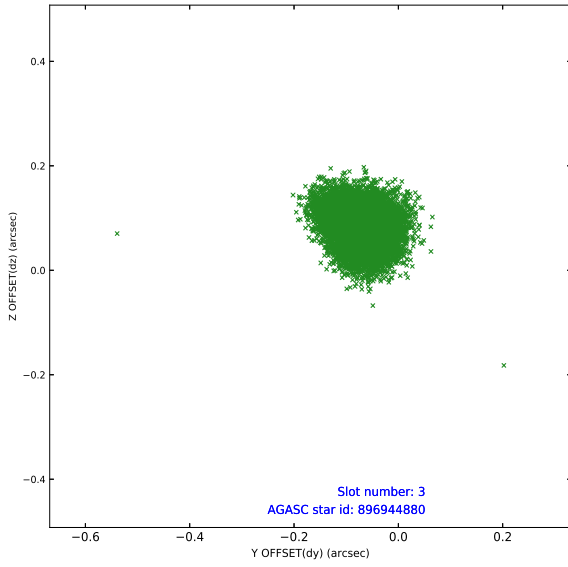
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-1	7.19	4024	1.000	0.000	-0.103	0.026	0.035	0.000000	0.000000	936.47	-1727
1	FID		ACIS-S-4	7.21	4024	1.000	0.106	0.074	0.016	0.023	0.000000	0.000000	2154.09	176
2	FID		ACIS-S-5	7.23	4023	1.000	-0.135	0.039	0.013	0.021	0.000000	0.000000	-1812.23	169
3	GUIDE	used	896944880	7.75	8046	1.000	-0.069	0.083	0.059	0.092	272.225160	-24.357987	-2157.52	1488
4	GUIDE	used	897321896	8.06	8046	1.000	0.065	0.049	0.058	0.094	271.639414	-25.476837	1728.15	-698
5	GUIDE	used	897327936	7.20	8046	1.000	-0.193	-0.052	0.049	0.083	271.293962	-24.398569	-2219.64	-1568
6	GUIDE	used	897328728	7.32	8046	1.000	0.175	-0.101	0.066	0.109	271.202031	-25.605697	2097.77	-2147
7	GUIDE	used	897465768	7.84	8041	1.000	0.026	0.028	0.049	0.082	272.486247	-25.285827	1236.27	2096

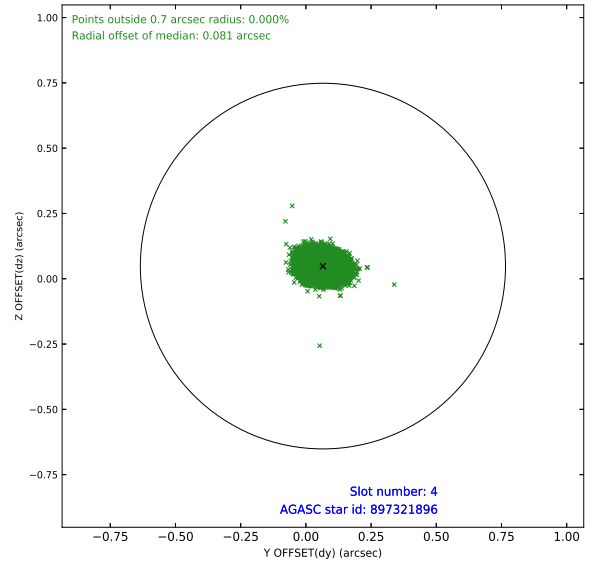
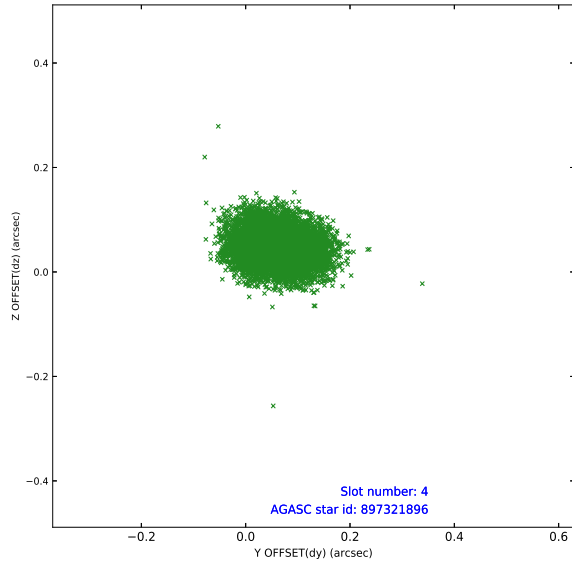
∞

## 2.4 Star Slots

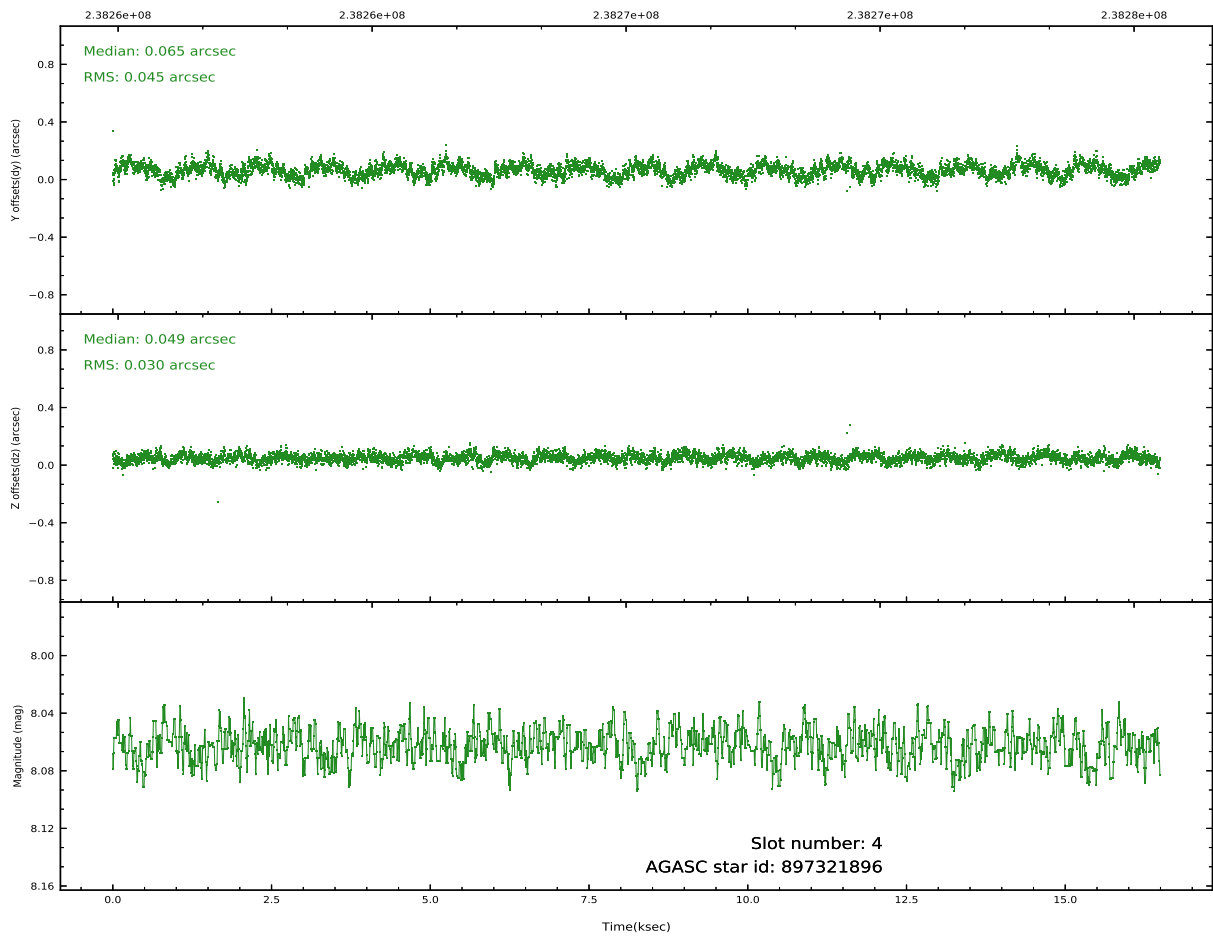
### 2.4.1 Slot 3



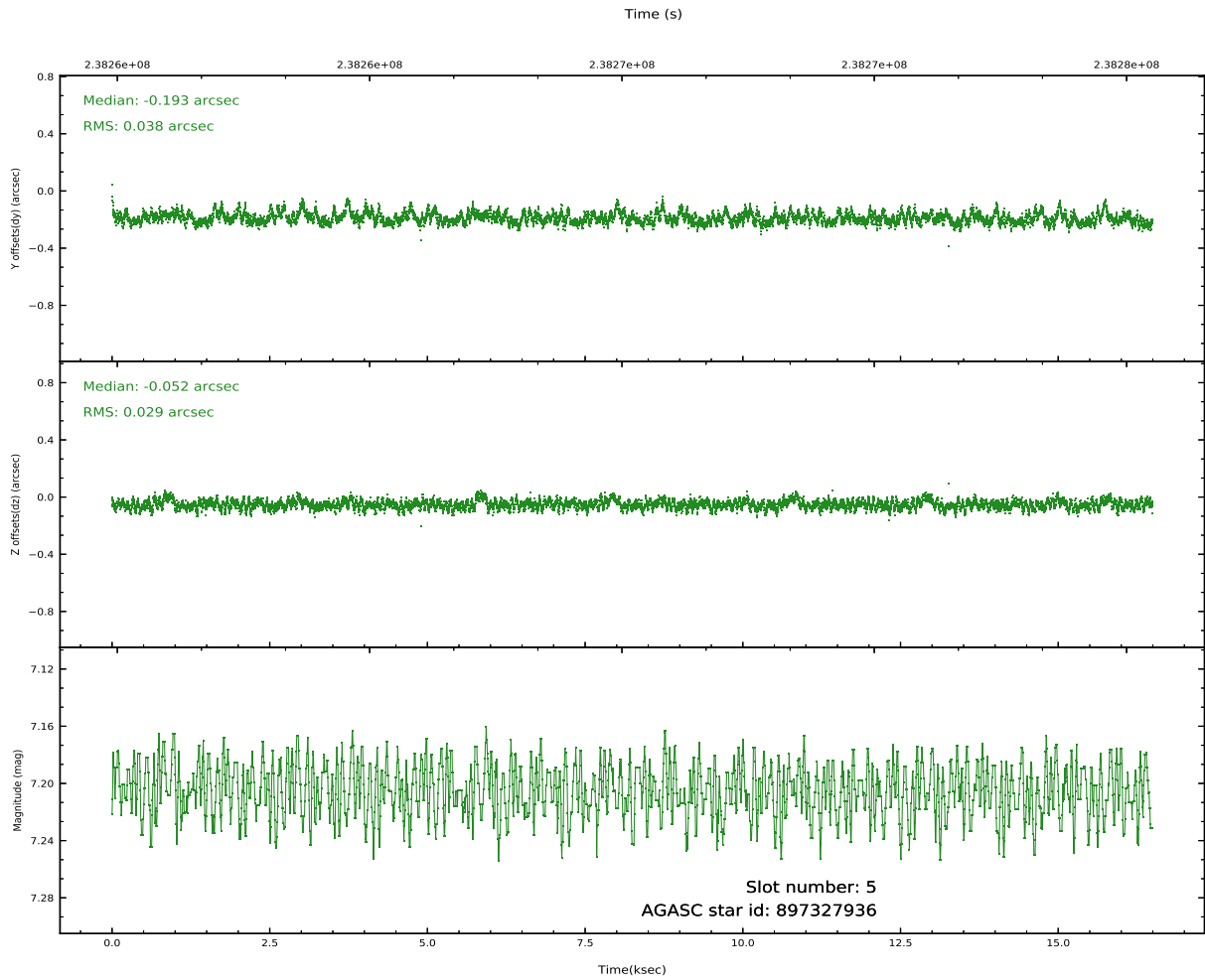
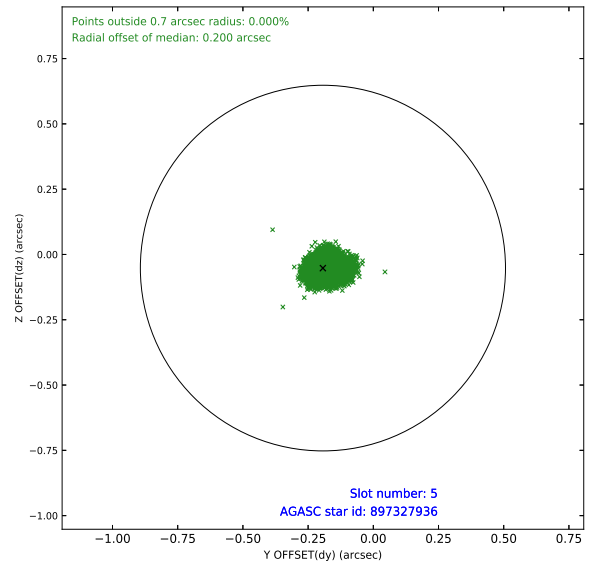
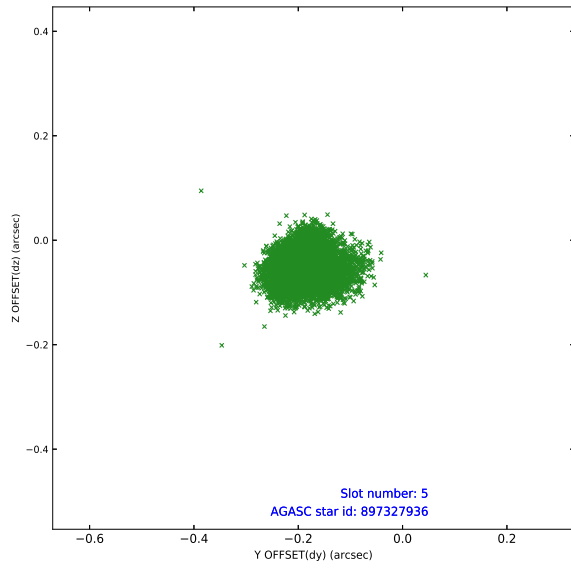
## 2.4.2 Slot 4



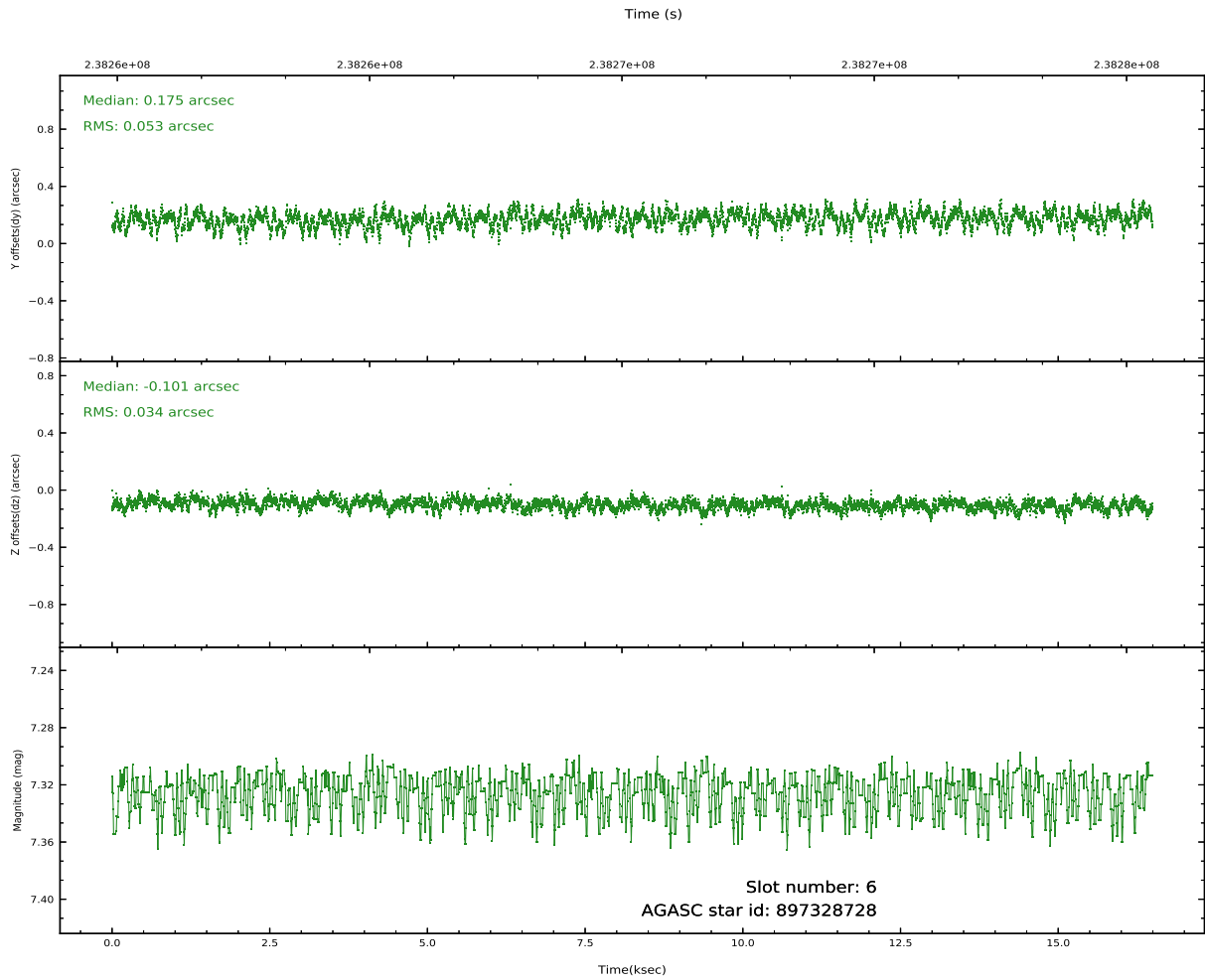
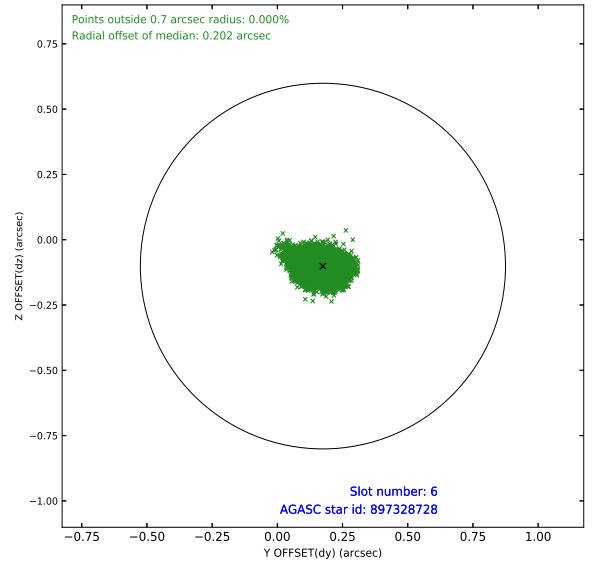
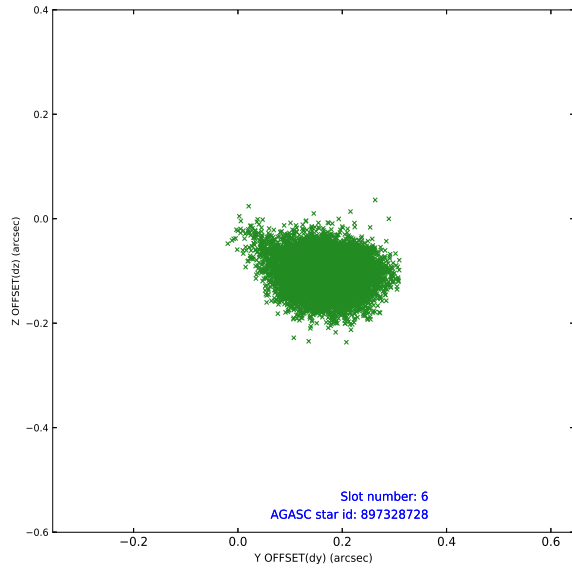
Time (s)



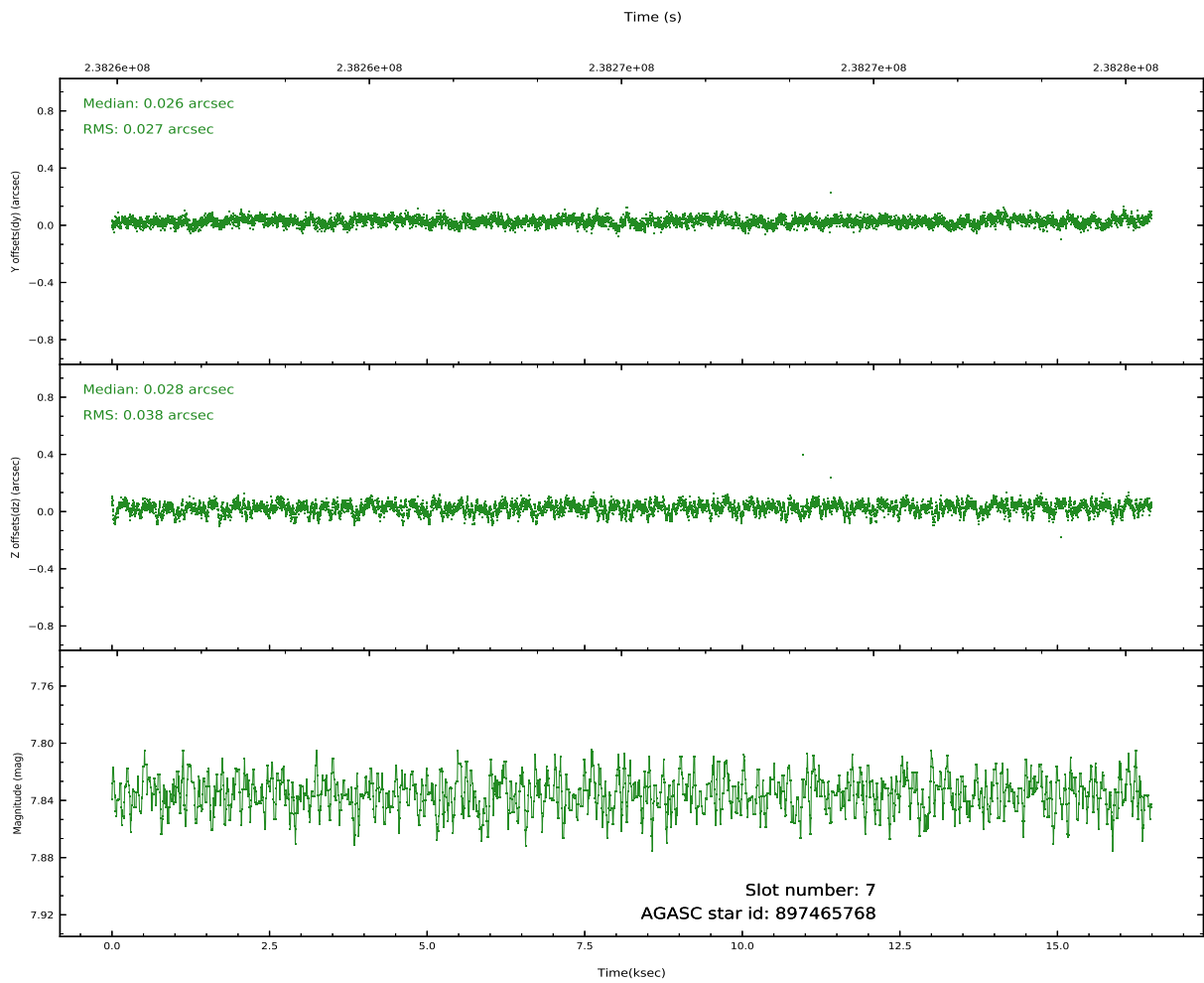
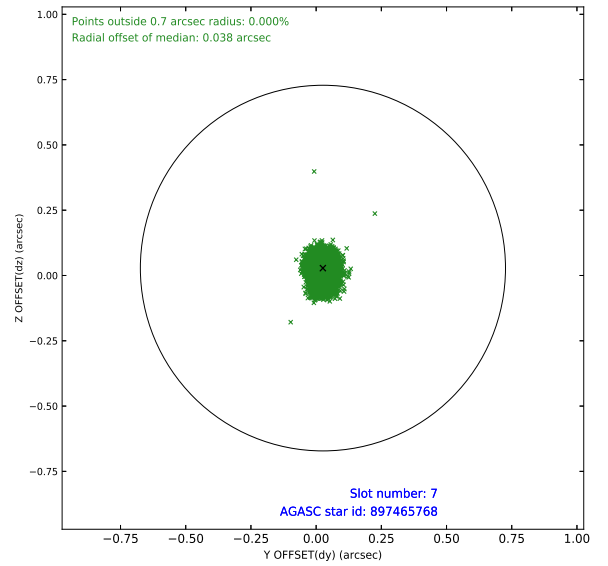
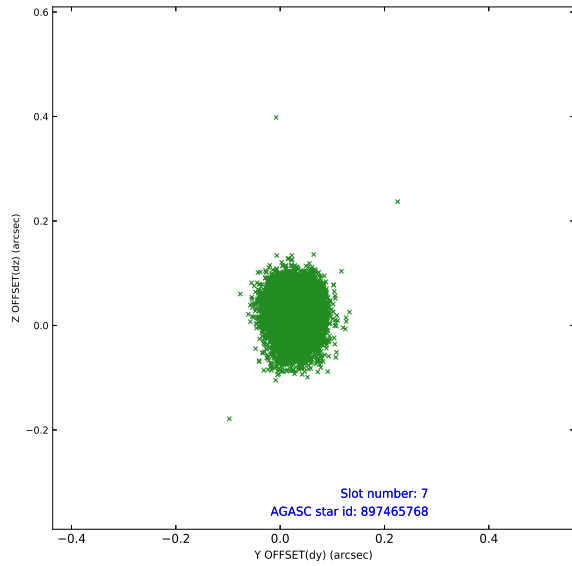
### 2.4.3 Slot 5



## 2.4.4 Slot 6

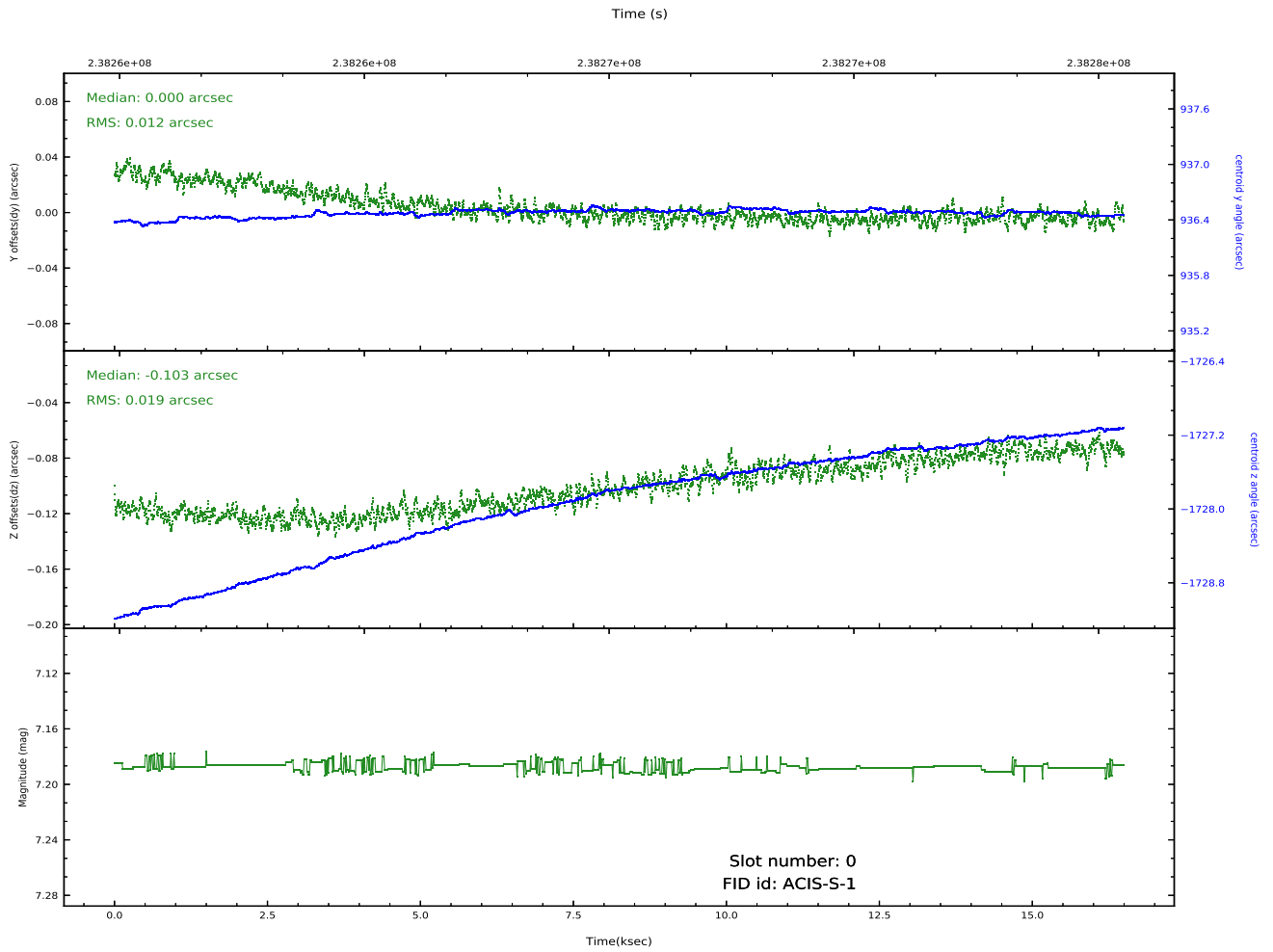
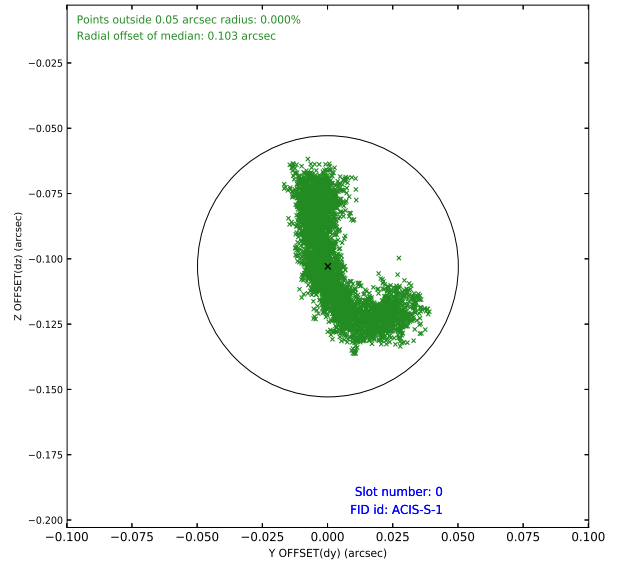
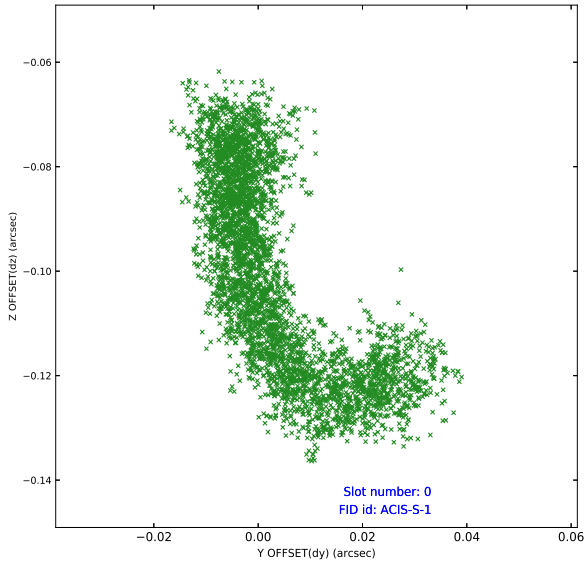


## 2.4.5 Slot 7

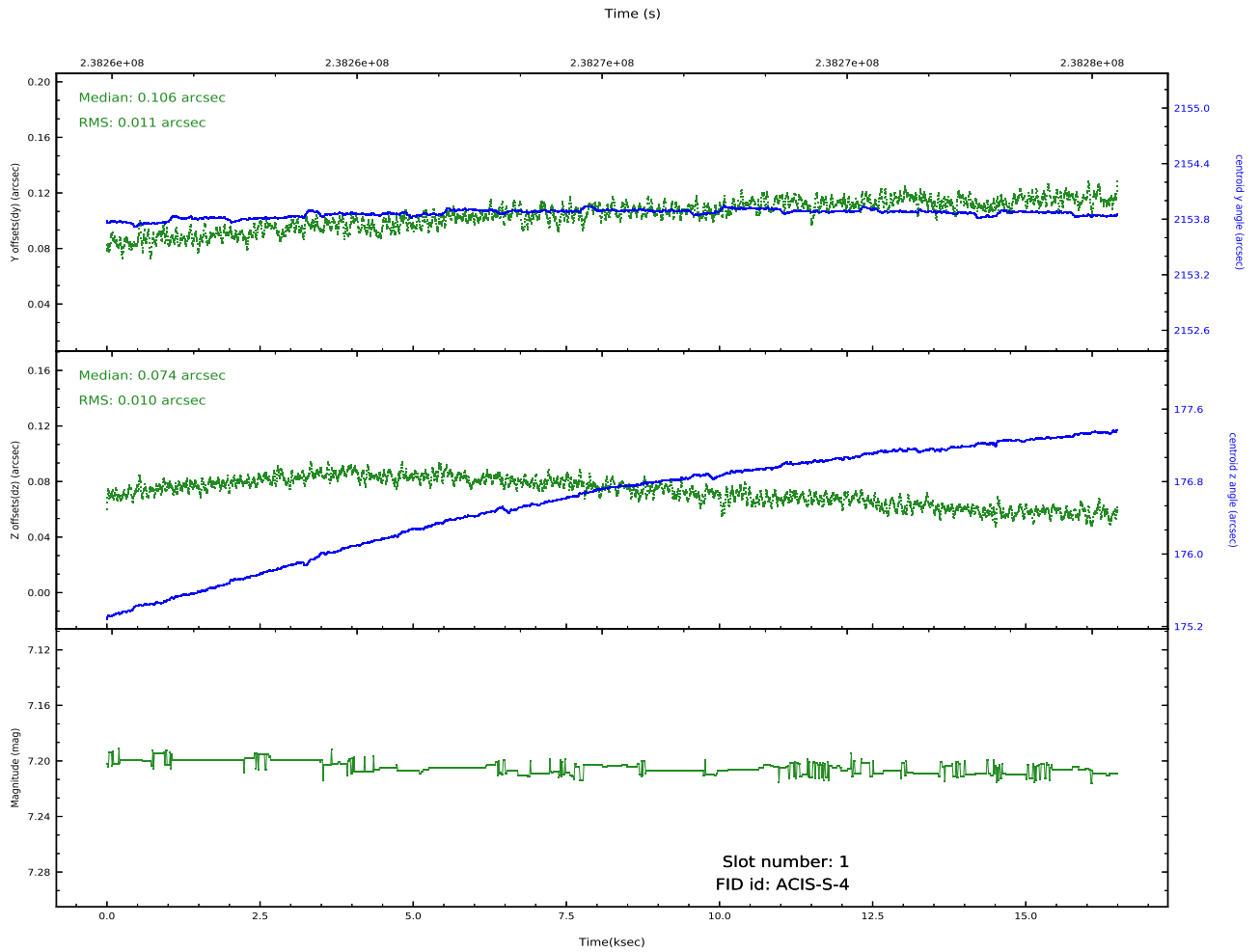
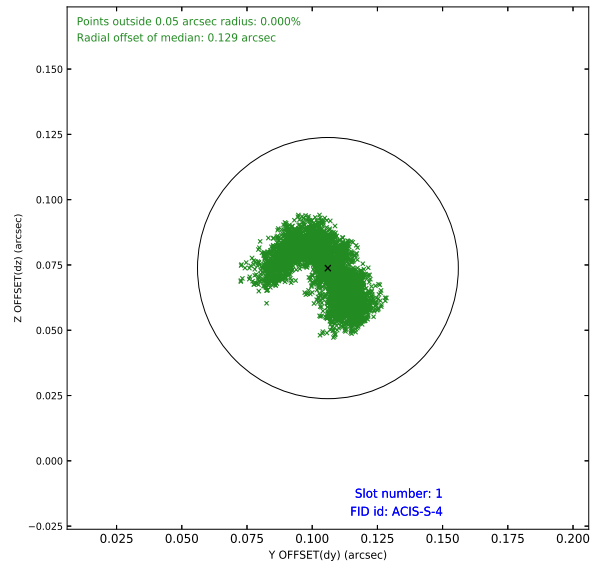
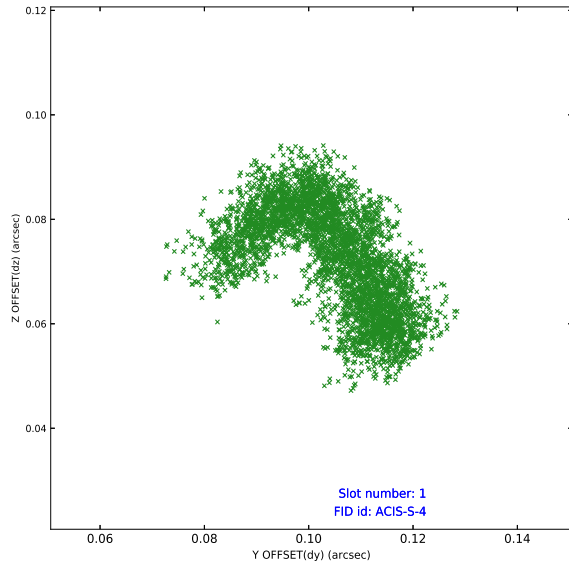


## 2.5 FID Slots

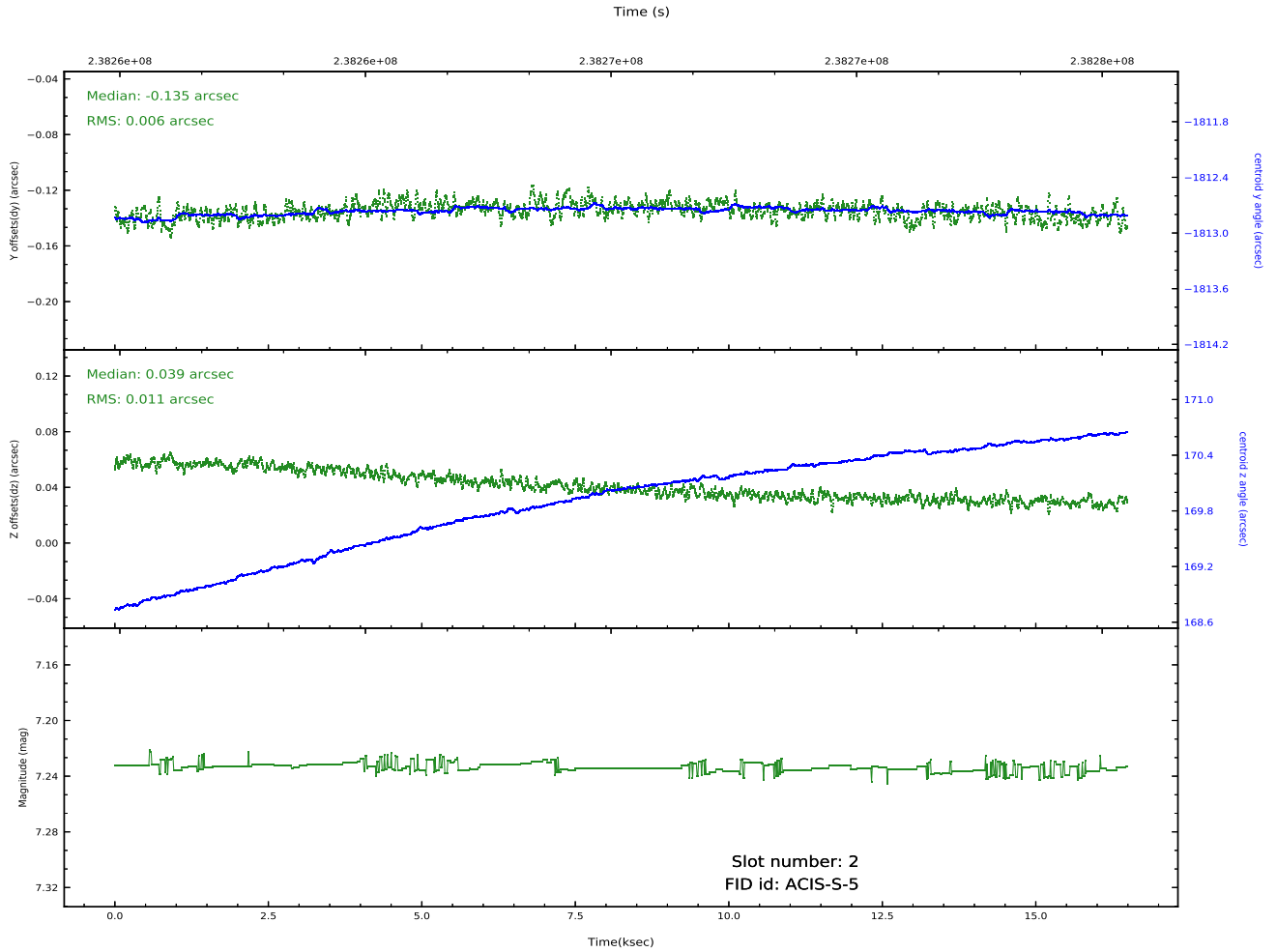
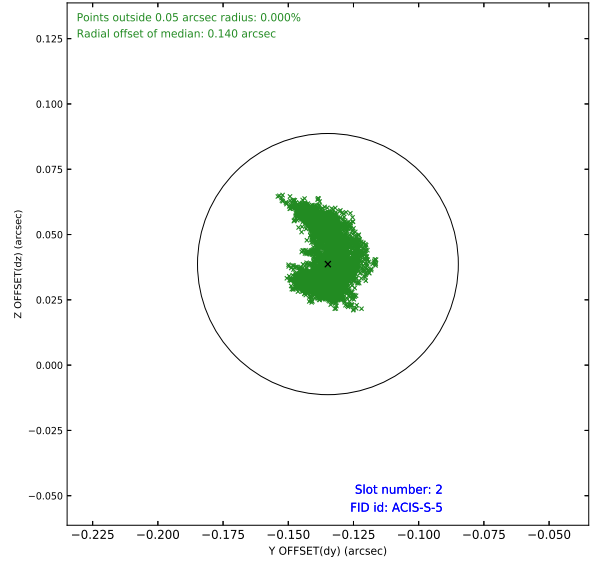
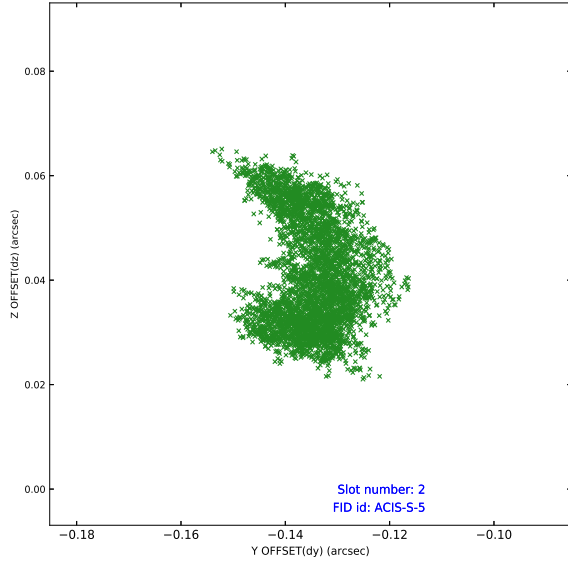
### 2.5.1 Slot 0



## 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)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.48639

## A.2 Comments

Joint Proposal: HST