

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5307 - L2 Version 5  
Chandra X-Ray Center

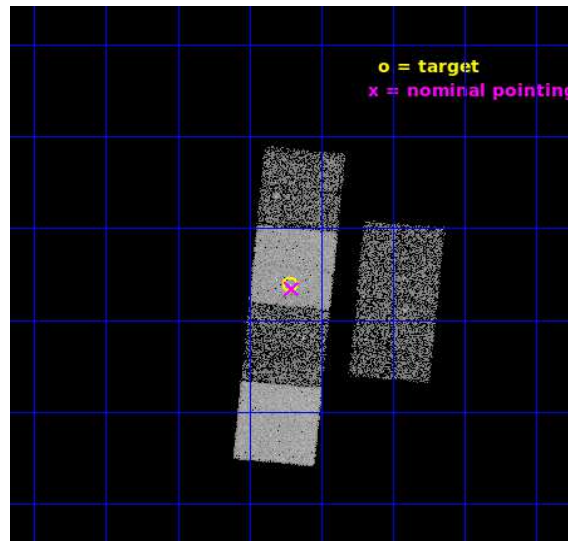
L2 Processing Date : Sep 24 2020

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# 1 Front

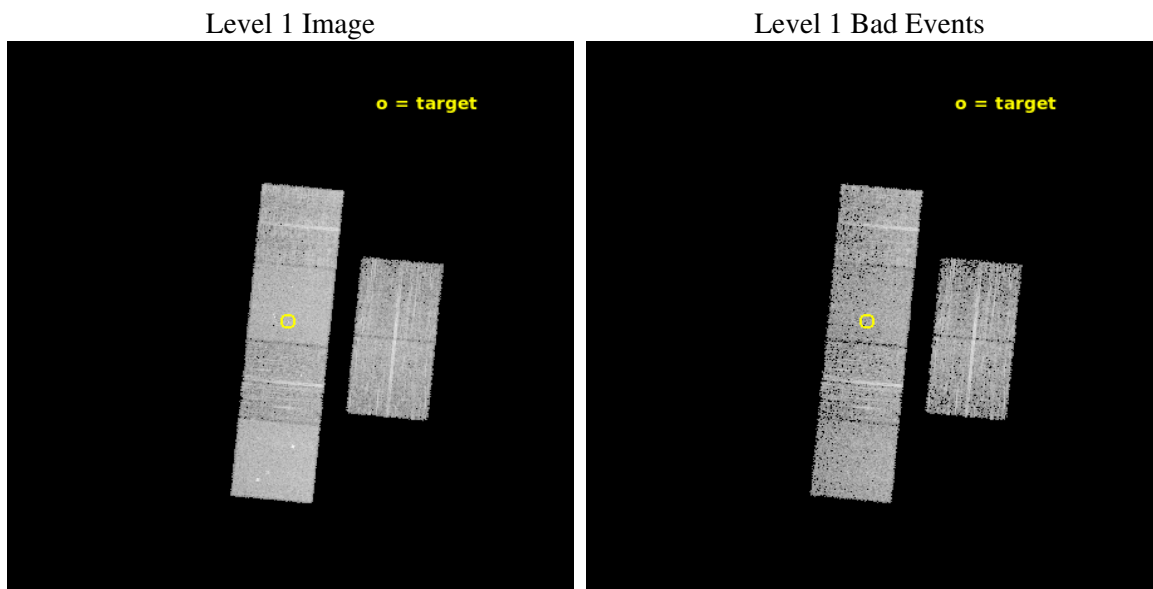
seq_num	200297	Sequence number
obs_id	5307	Observation id
title	A Star is Born: X-ray Imaging of the Onset of an FU Ori Outburst	P
observer	Joel Kastner	Principal investigator
object	IRAS05436-0007	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	86.554583	Observer's specified target RA [deg]
dec_targ	-0.101389	Observer's specified target Dec [deg]
ra_nom	86.551282694437	Nominal RA [deg]
dec_nom	-0.10968876250088	Nominal Dec [deg]
roll_nom	275.49093979639	Nominal Roll [deg]
revision	5	Processing version of data
ontime	5561.5999792814	Sum of GTIs [s]
livetime	5491.1756515503	Livetime [s]
ontime2	5561.5999792814	Sum of GTIs [s]
ontime3	5561.5999792814	Sum of GTIs [s]
ontime5	5561.5999792814	Sum of GTIs [s]
ontime6	5561.5999792814	Sum of GTIs [s]
ontime7	5561.5999792814	Sum of GTIs [s]
ontime8	5561.5999792814	Sum of GTIs [s]
l2events	58923	Number of level 2 events



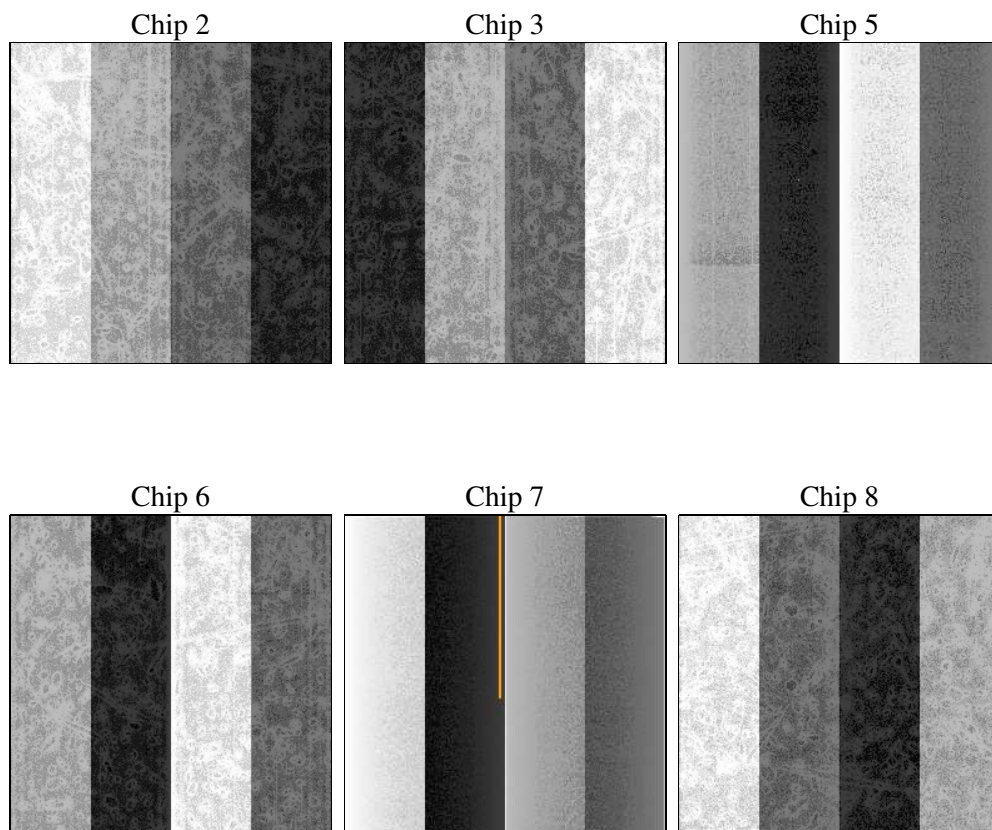
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5425.288000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	5561.5999792814	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	5561.5999792814	Sum of GTIs [s]
date	2020-09-24T18:27:40	Date and time of file creation	ontime3	5561.5999792814	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	5561.5999792814	Sum of GTIs [s]
			ontime6	5561.5999792814	Sum of GTIs [s]
			ontime7	5561.5999792814	Sum of GTIs [s]
			ontime8	5561.5999792814	Sum of GTIs [s]
			l1events	276833	Number of level 1 events

### 2.1.4 Events

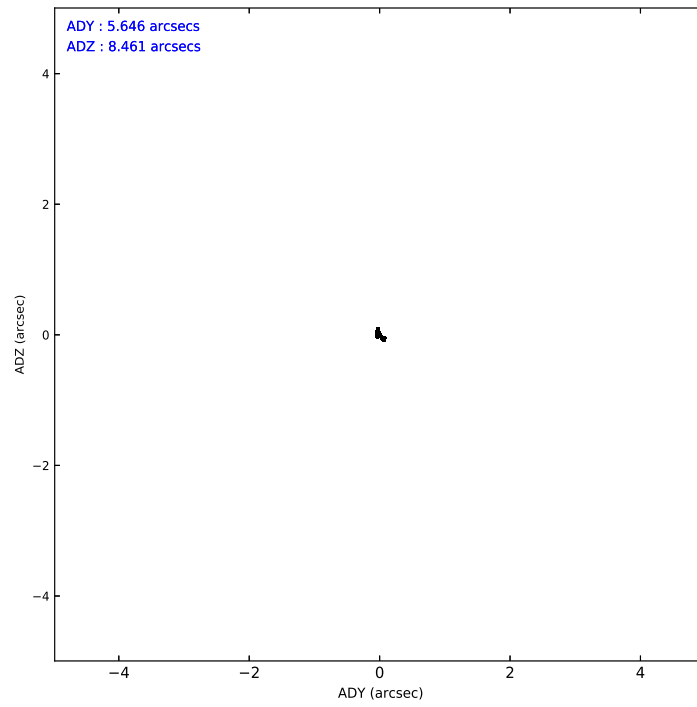
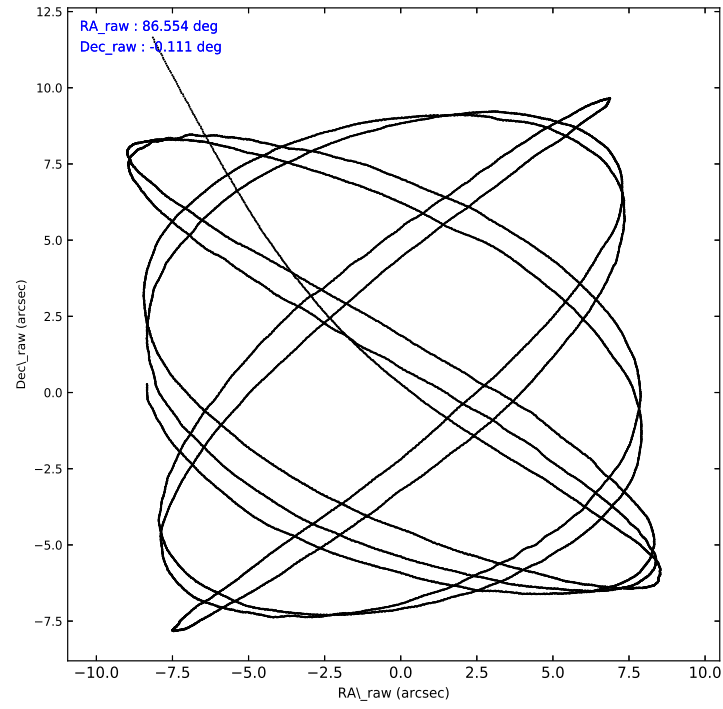
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	40337	37518	58118	38968	52685	49207	grade 0 events	2035	1902	2506	1963	1920	3187
rejected events	35976	33292	33070	34435	32312	39570		5%	5%	4%	5%	3%	6%
rejected %	89%	88%	56%	88%	61%	80%	grade 1 events	29	19	80	23	51	33
								0%	0%	0%	0%	0%	0%
							grade 2 events	929	873	7793	994	4146	2280
								2%	2%	13%	2%	7%	4%
							grade 3 events	421	432	982	461	1897	1093
								1%	1%	1%	1%	3%	2%
							grade 4 events	445	423	983	445	1965	1080
								1%	1%	1%	1%	3%	2%
							grade 5 events	1633	1684	4191	1749	4915	2314
								4%	4%	7%	4%	9%	4%
							grade 6 events	752	790	14203	900	11576	2521
								1%	2%	24%	2%	21%	5%
							grade 7 events	34093	31395	27380	32433	26215	36699
								84%	83%	47%	83%	49%	74%

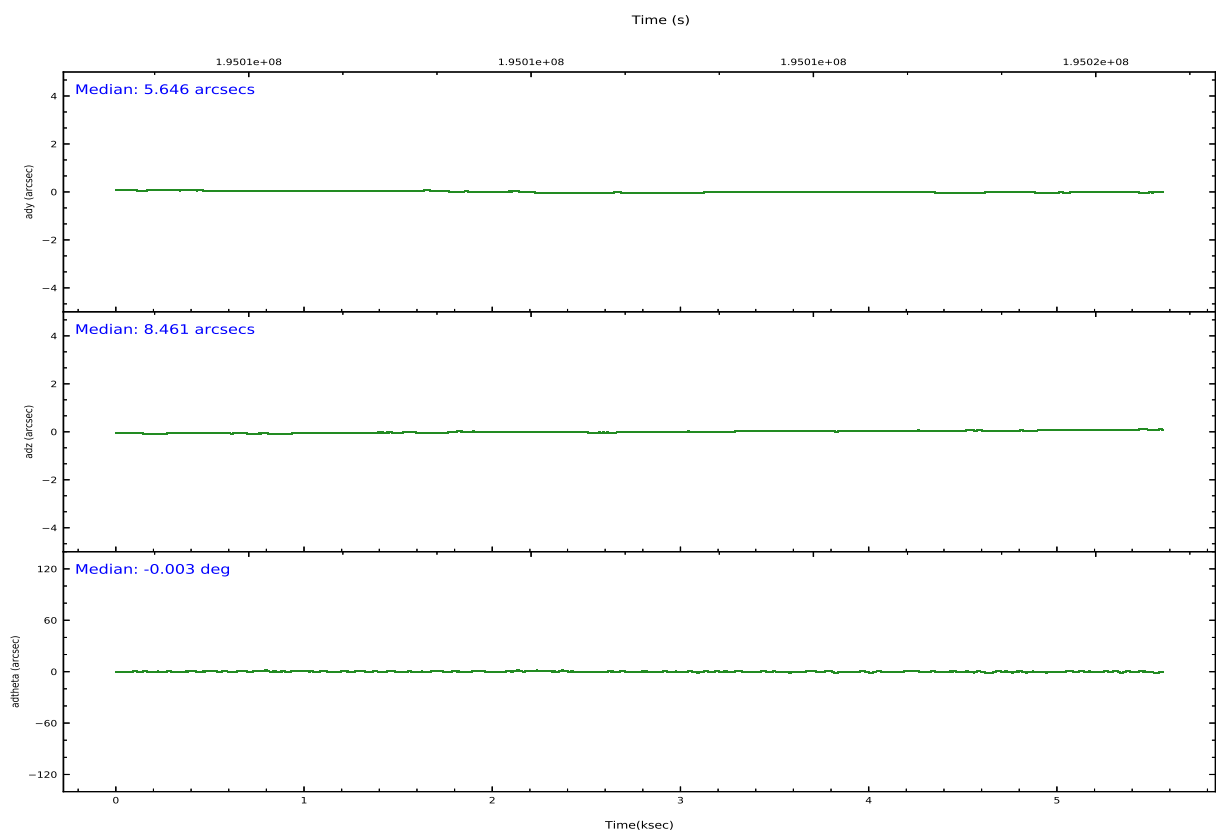
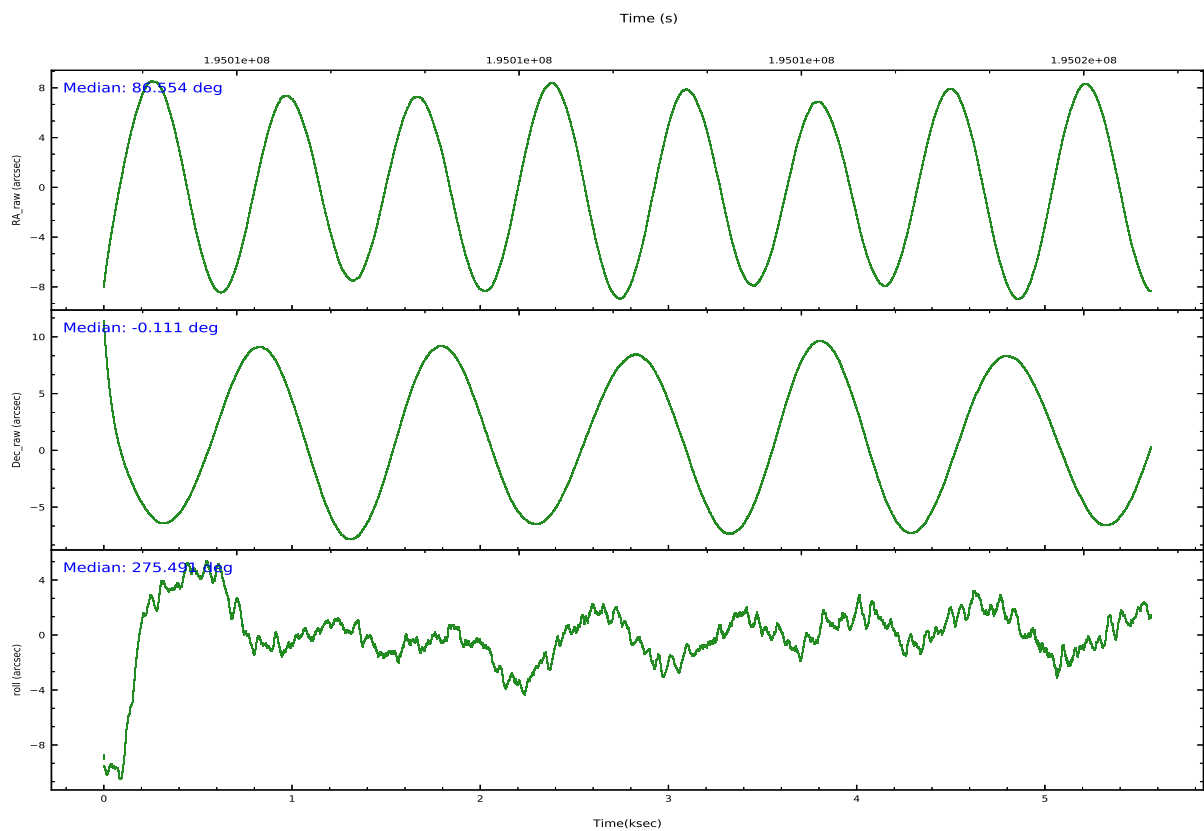


## 2.2 Compared Parameters

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	86.537703	86.55128269443701	Subarray requested	NONE	NONE
[deg] Pointing Dec	-0.089068	-0.10968876250088	Alternating exposures requested	N	N
[deg] Pointing Roll	275.337159	275.49093979639	[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)	195010934.184000	195009740.85977			
Observation start date	2004-03-07T01:41:10	2004-03-07T01:22:20			
[s] Observation end time (MET)	195016359.184000	195018246.31014			
Observation end date	2004-03-07T03:11:35	2004-03-07T03:44:06			
Read mode	TIMED	TIMED			

## 2.3 Aspect



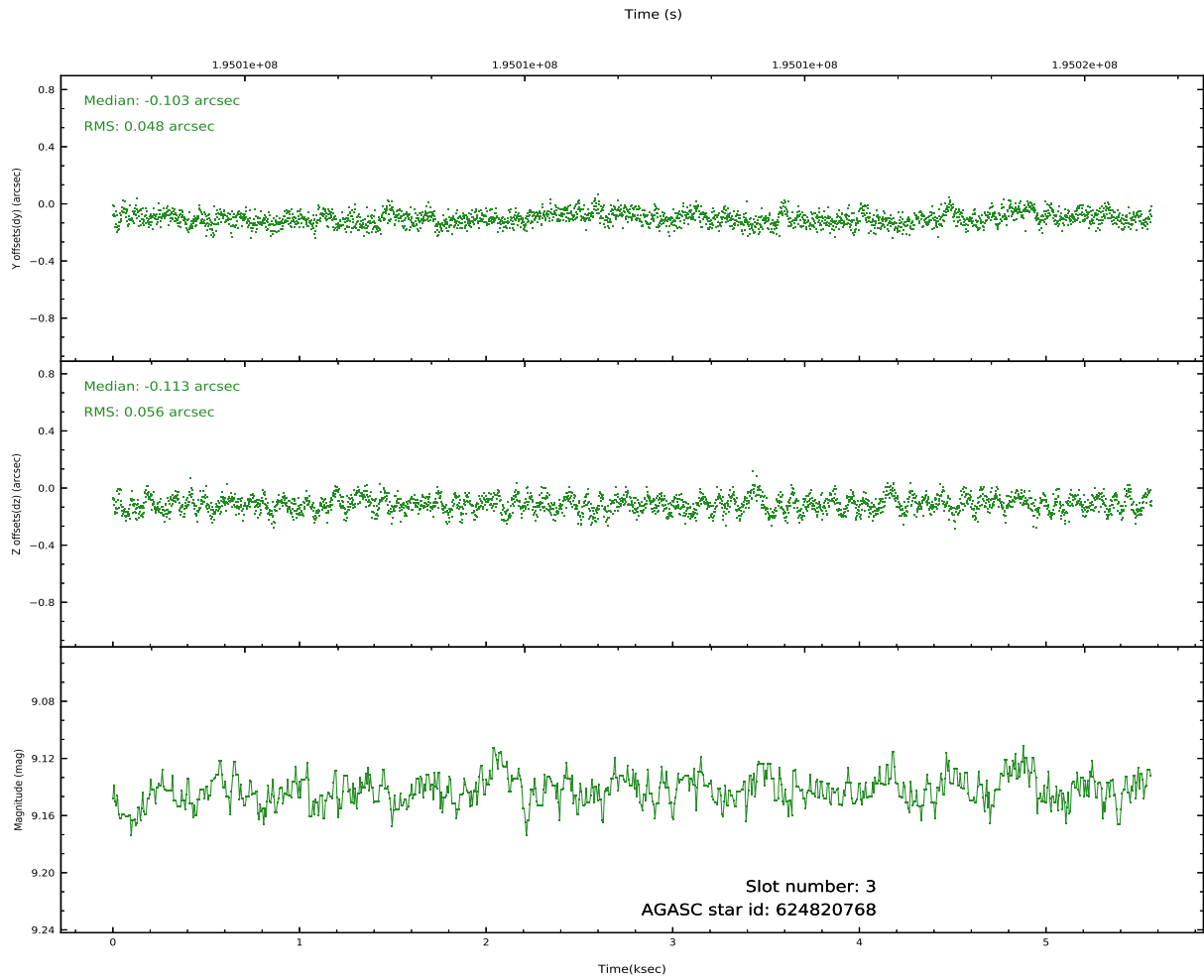
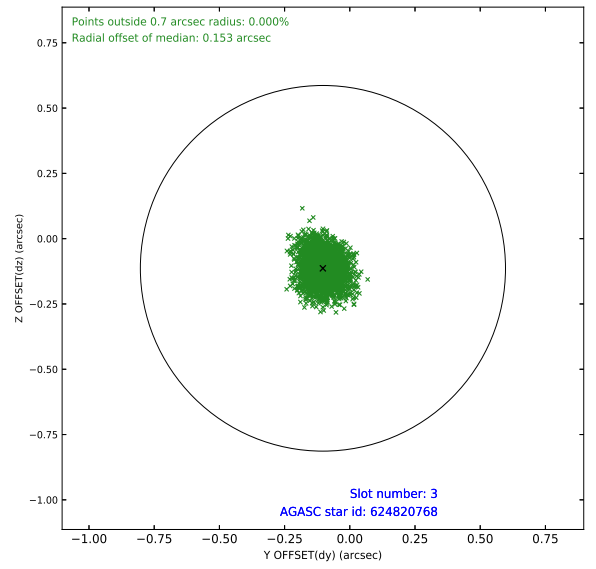
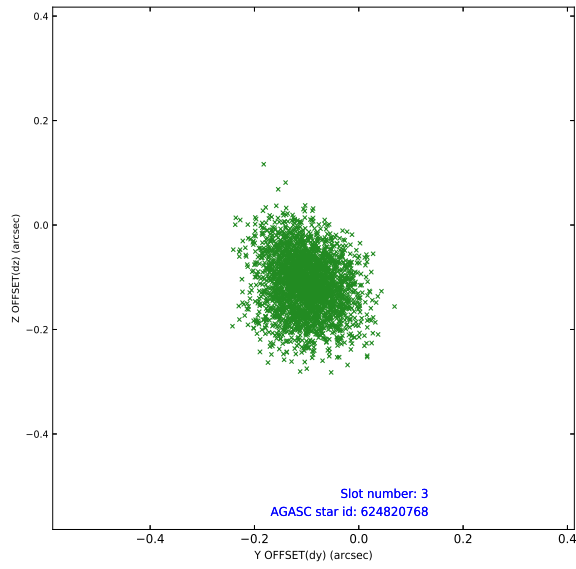


Slot Statistics

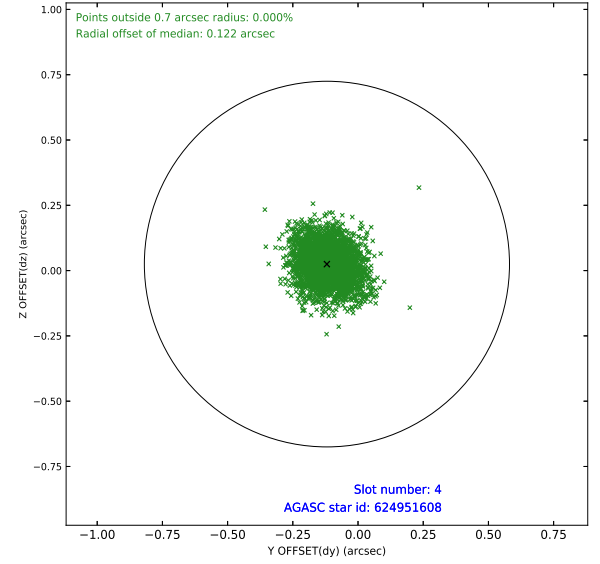
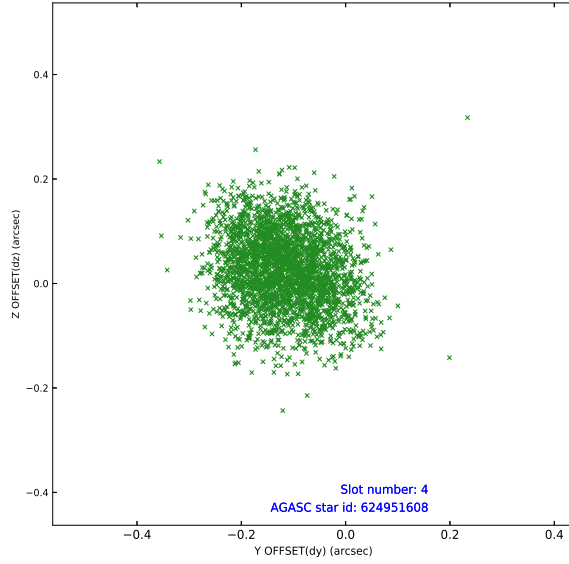
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1358	1.000	-0.006	-0.072	0.006	0.010	0.000000	0.000000	-758.42	-1729
1	FID		ACIS-S-5	7.23	1358	1.000	-0.092	0.022	0.007	0.011	0.000000	0.000000	-1812.05	171
2	FID		ACIS-S-6	7.35	1358	1.000	0.072	0.058	0.005	0.010	0.000000	0.000000	402.17	816
3	GUIDE	used	624820768	9.14	2712	1.000	-0.103	-0.113	0.080	0.128	86.202480	-0.061953	-209.52	-1192
4	GUIDE	used	624951608	9.63	2715	1.000	-0.119	0.025	0.109	0.171	86.354222	-0.045842	-216.63	-643
5	GUIDE	used	624953040	8.69	2715	1.000	0.008	0.189	0.054	0.087	87.231595	-0.668980	2311.07	2293
6	GUIDE	used	624954088	9.60	2712	1.000	0.122	-0.040	0.104	0.170	86.606399	-0.671650	2112.09	52
7	GUIDE	used	624954400	9.19	2713	1.000	0.084	-0.062	0.083	0.136	86.607838	-0.762568	2438.32	25

## 2.4 Star Slots

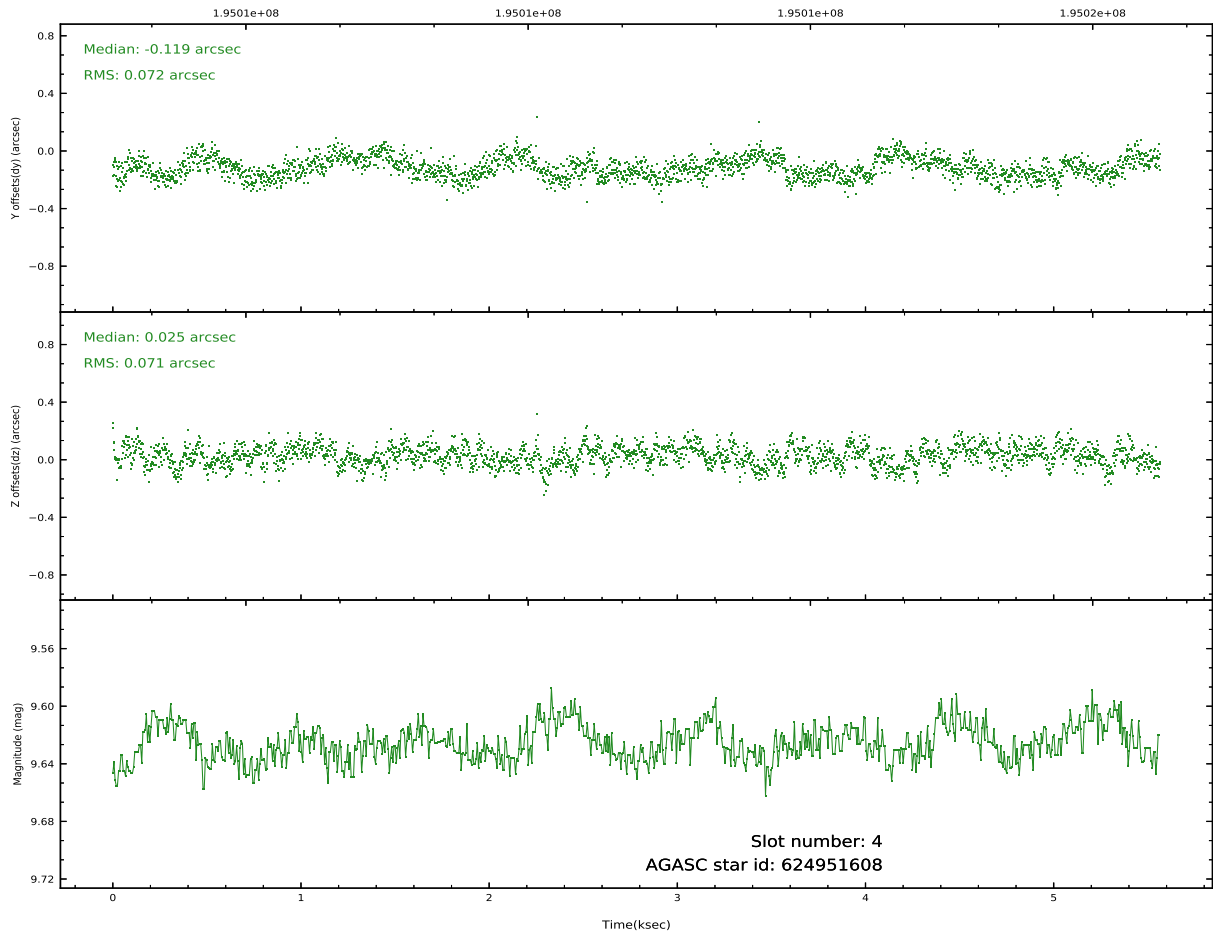
### 2.4.1 Slot 3



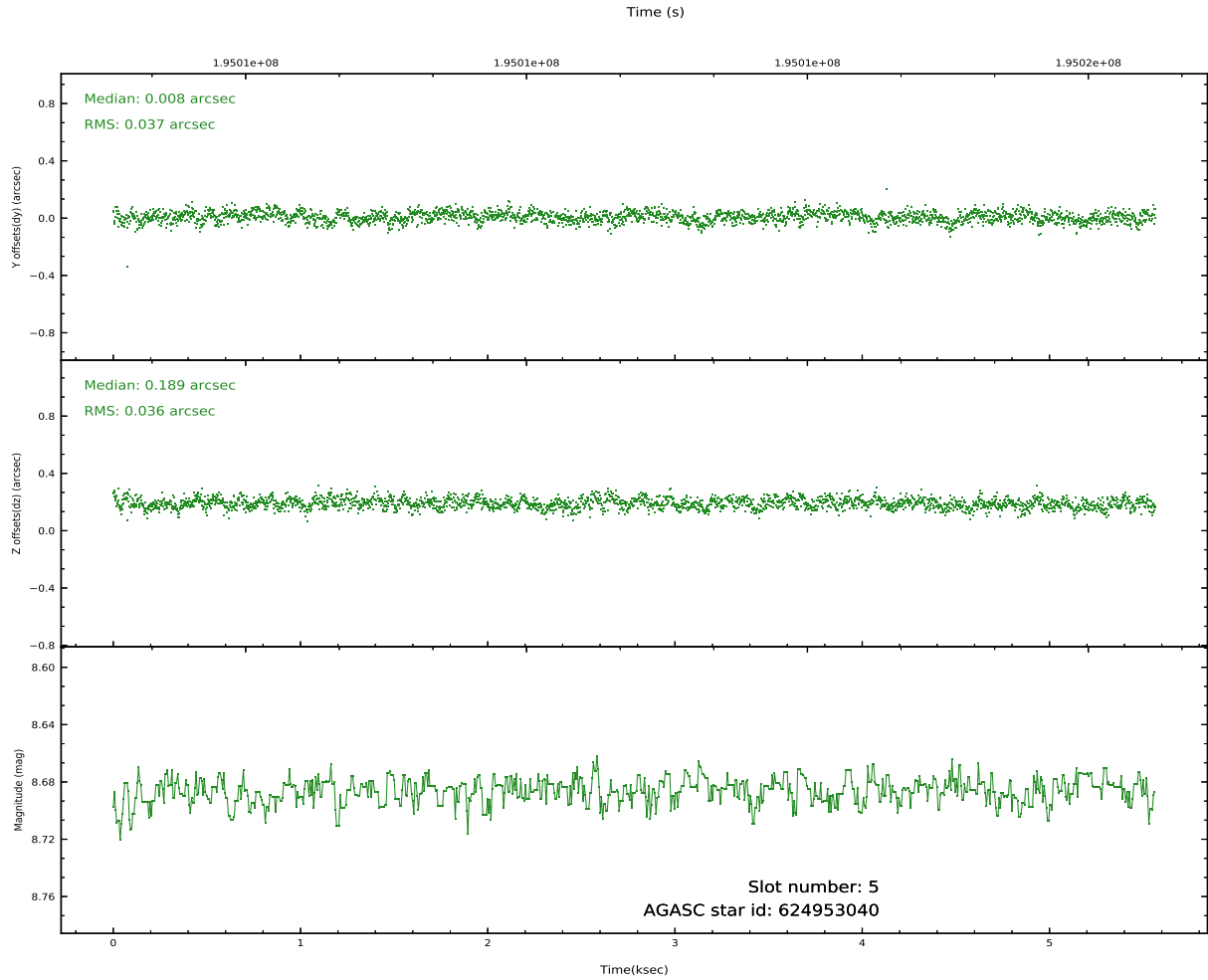
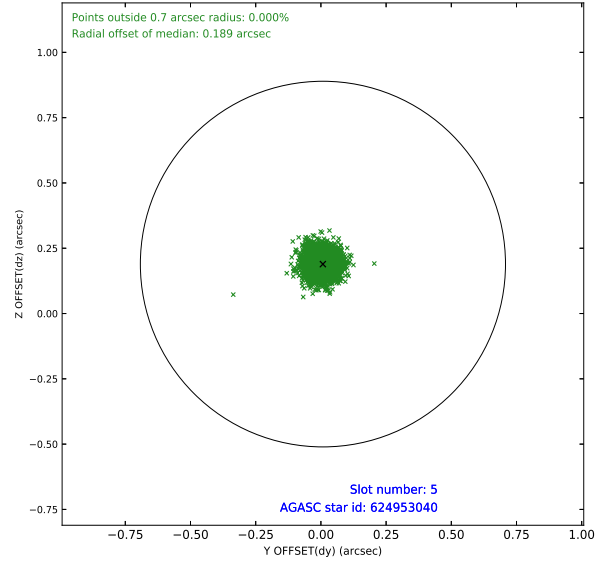
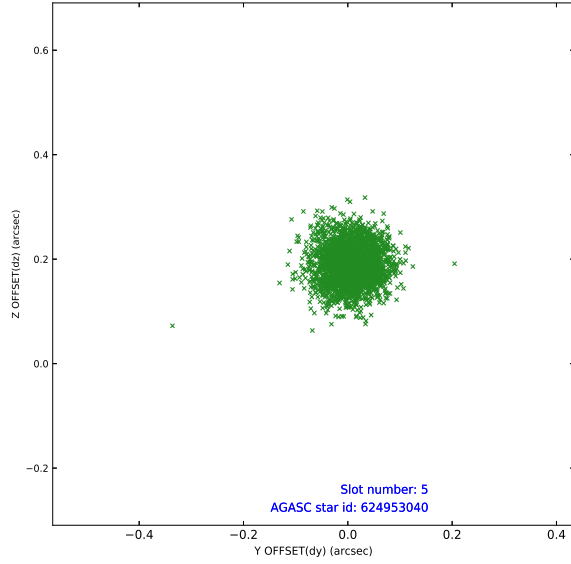
## 2.4.2 Slot 4



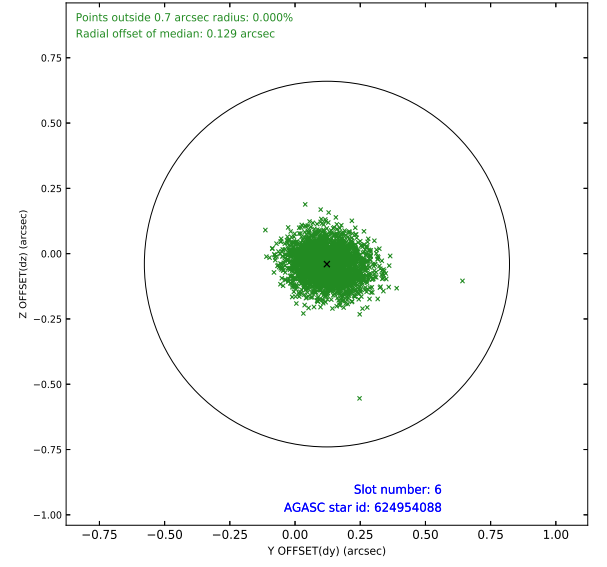
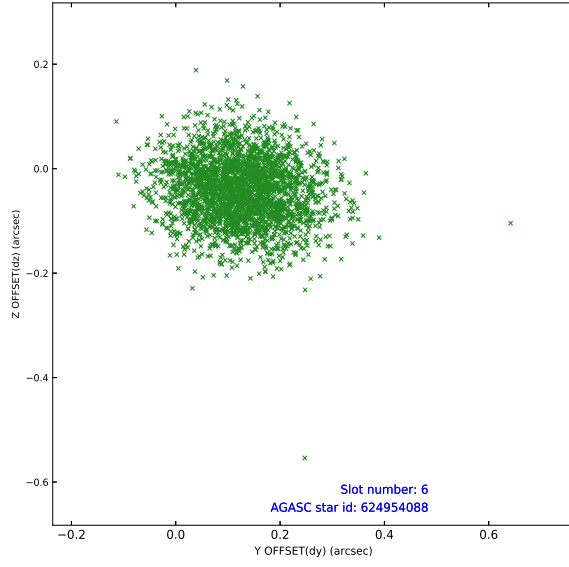
Time (s)



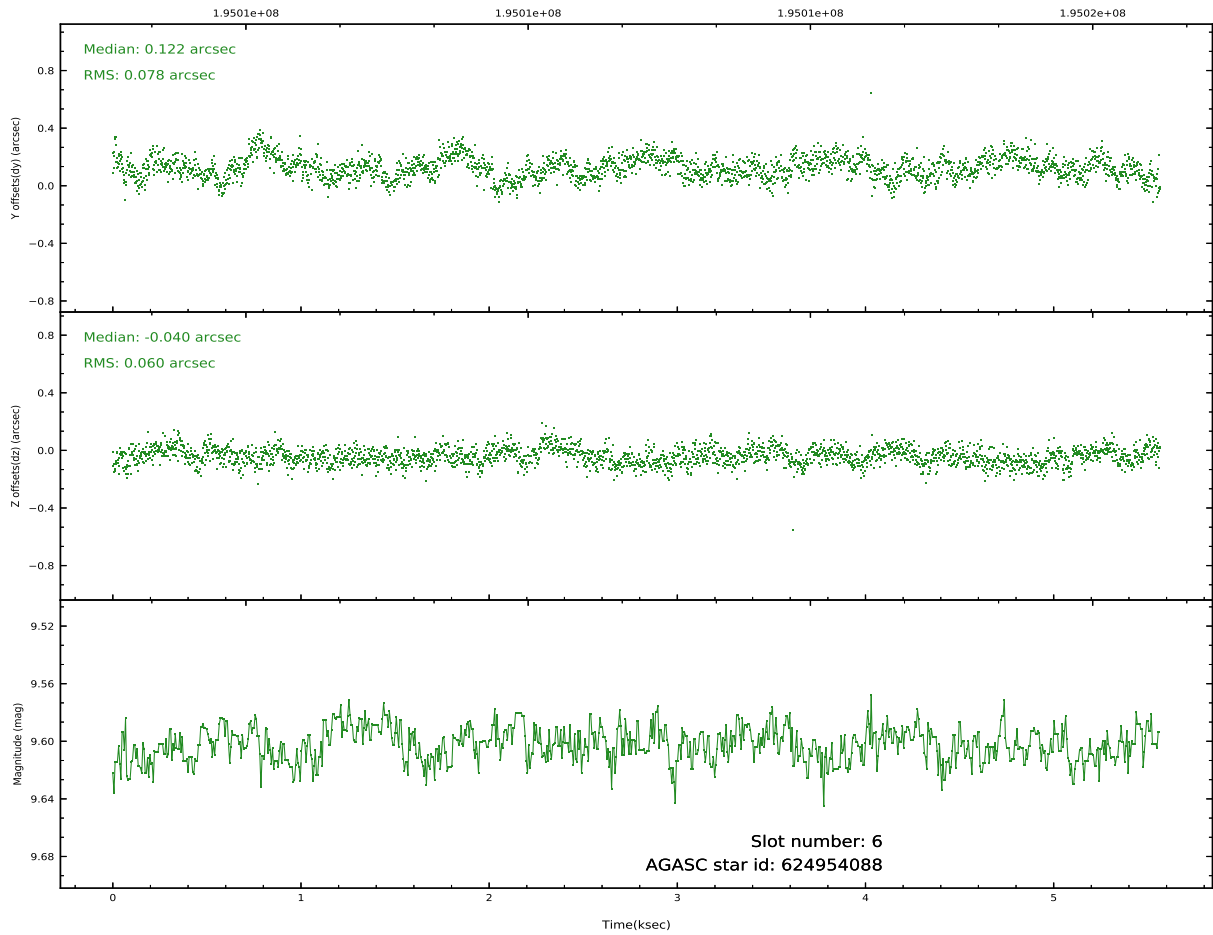
### 2.4.3 Slot 5



## 2.4.4 Slot 6

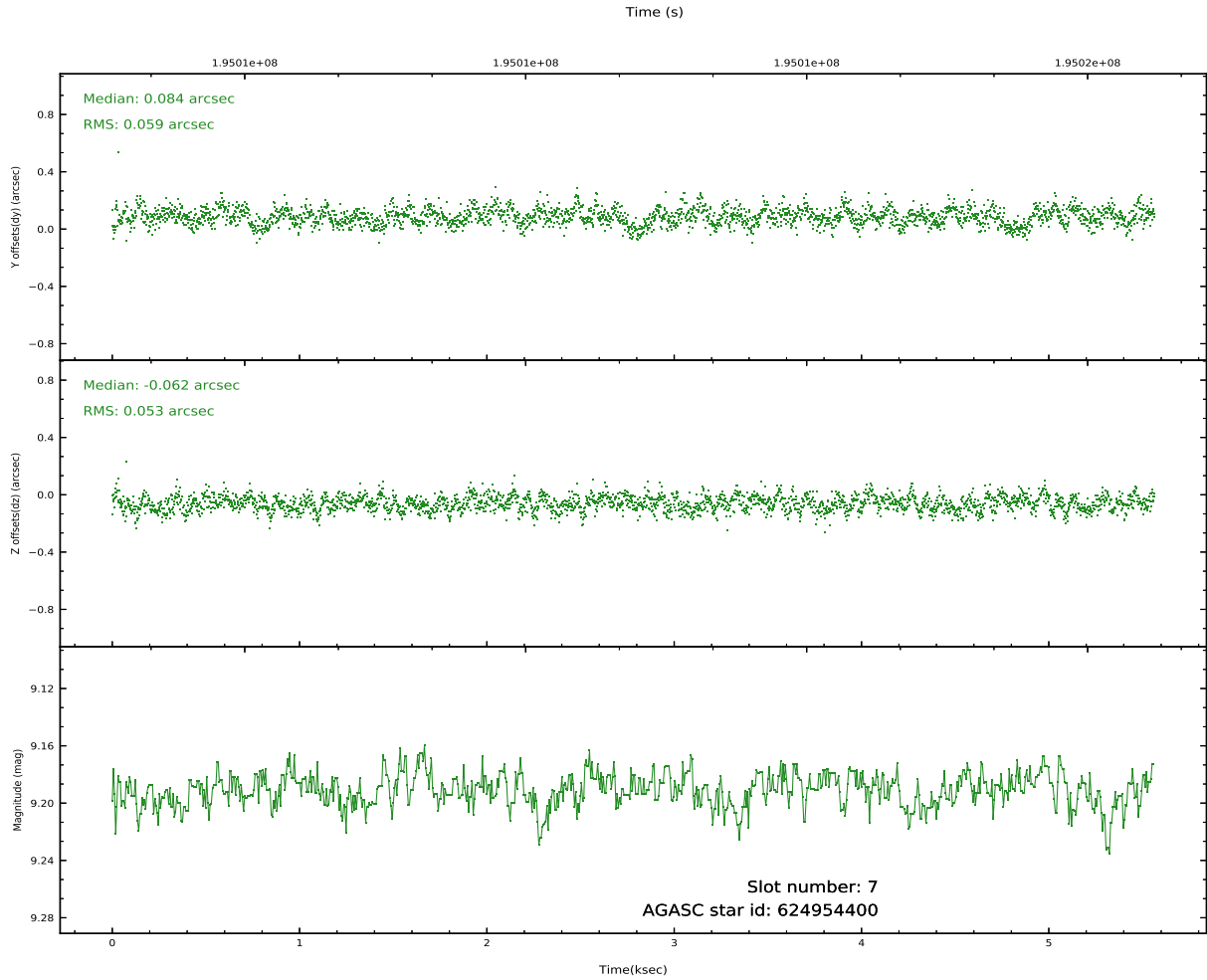
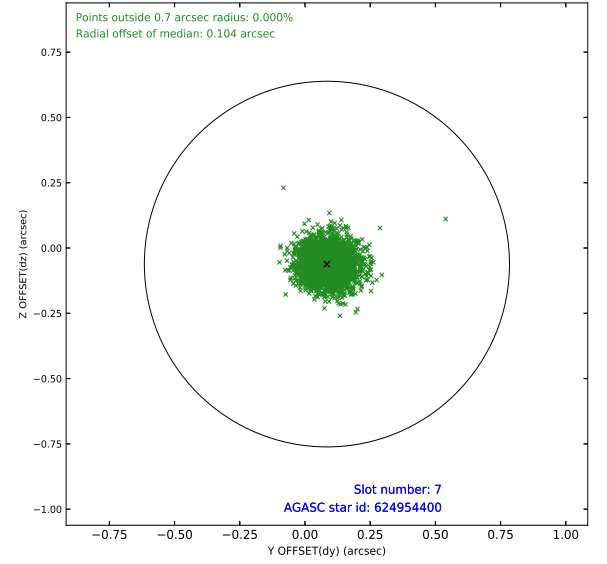
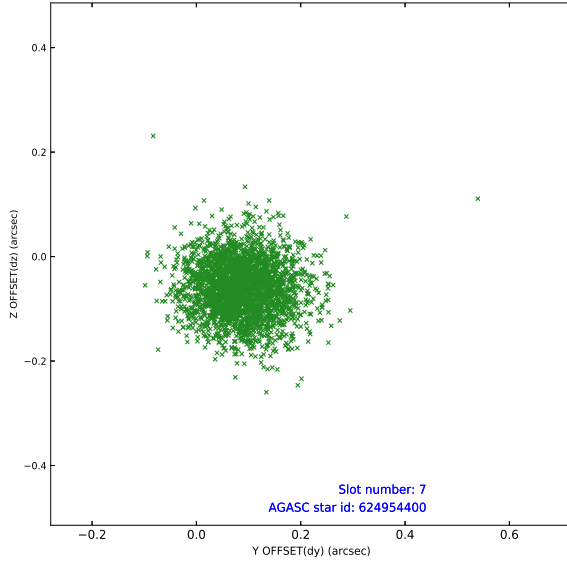


Time (s)



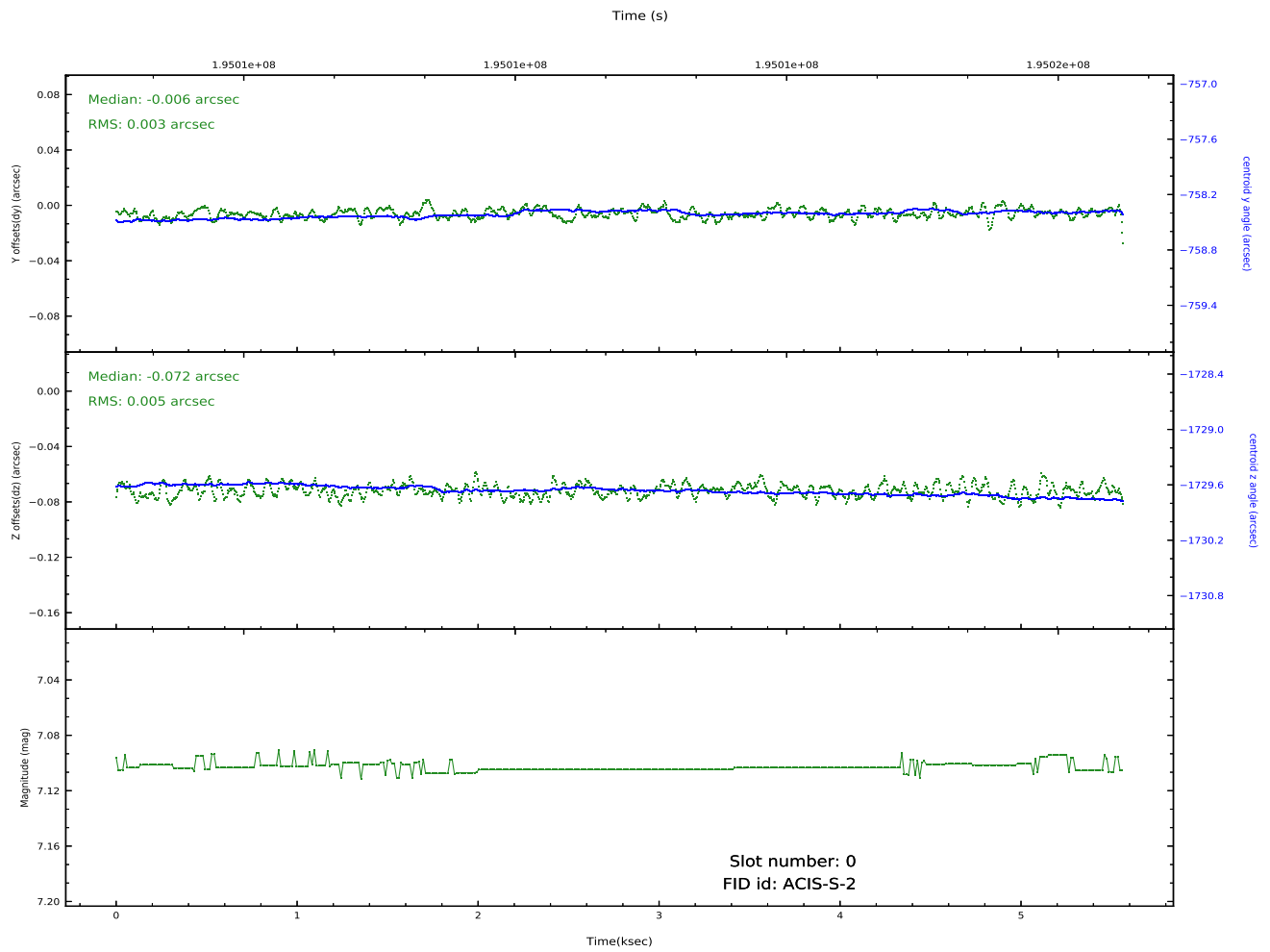
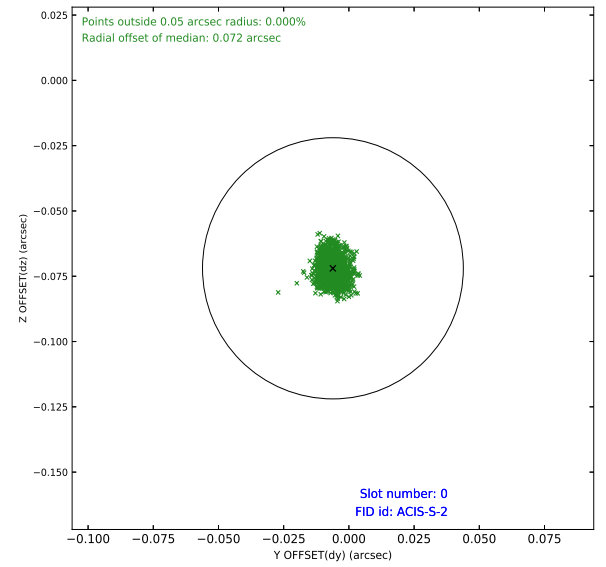
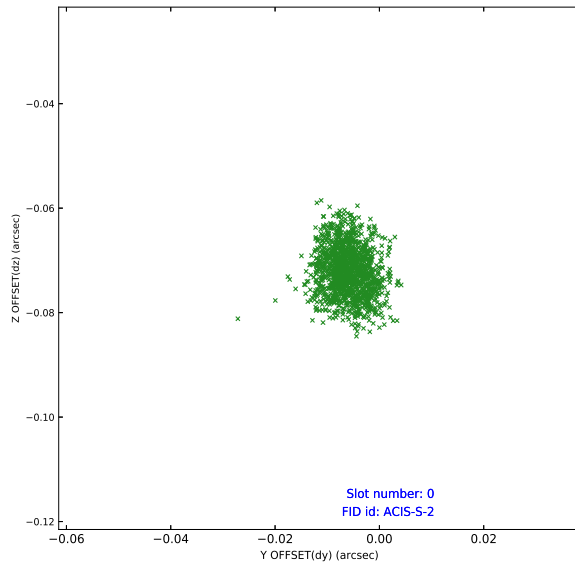


## 2.4.5 Slot 7

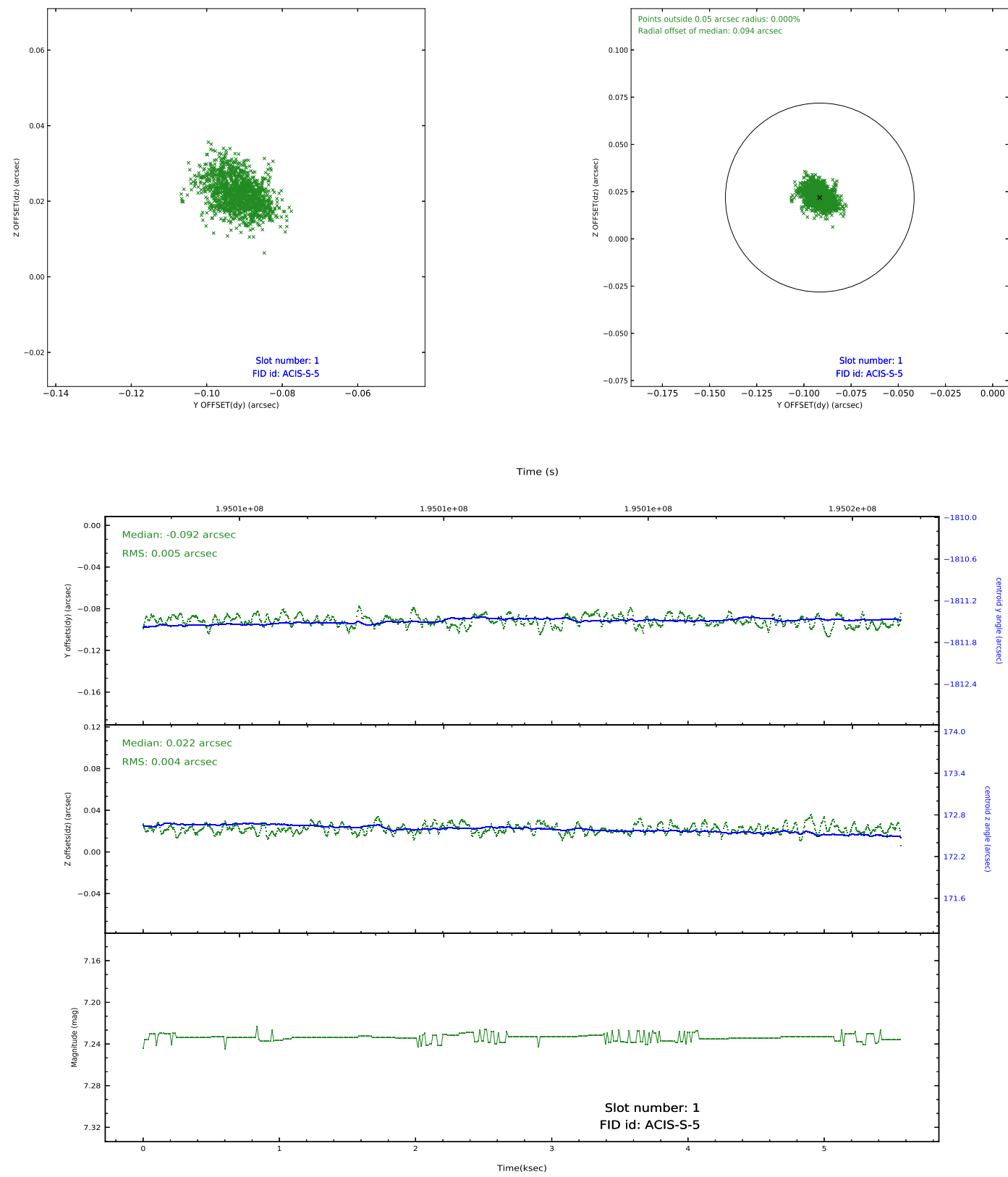


## 2.5 FID Slots

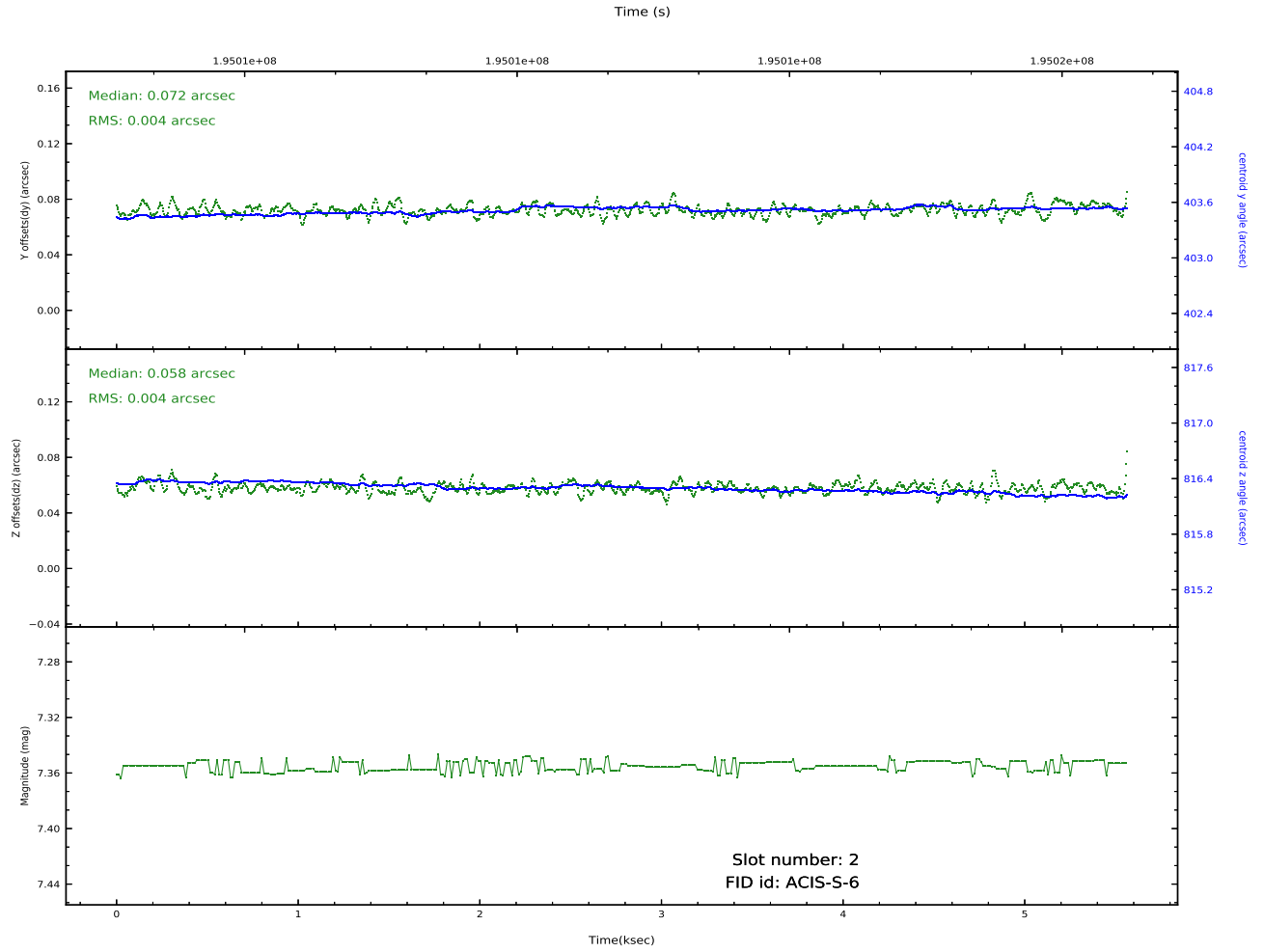
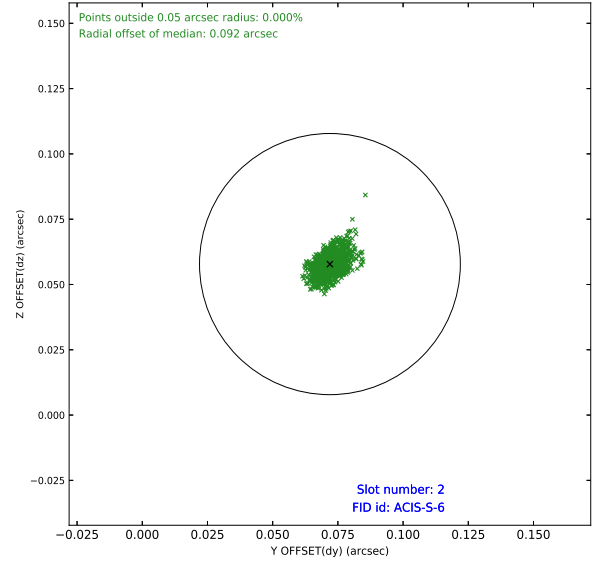
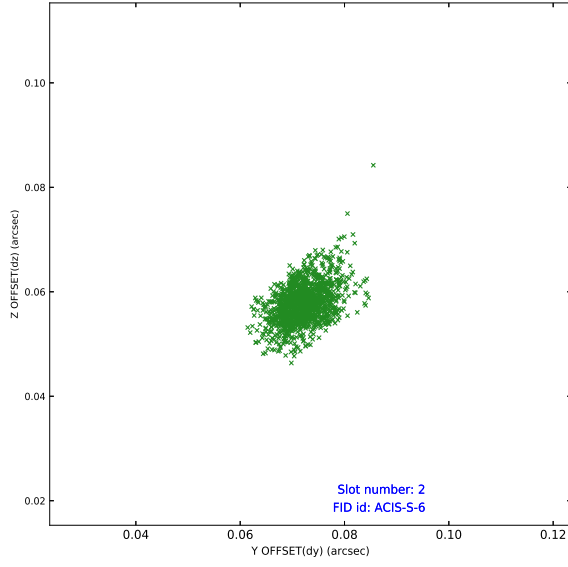
### 2.5.1 Slot 0



2.5.2 Slot 1



## 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.561

### A.2 Comments