

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5637 - L2 Version 4  
Chandra X-Ray Center

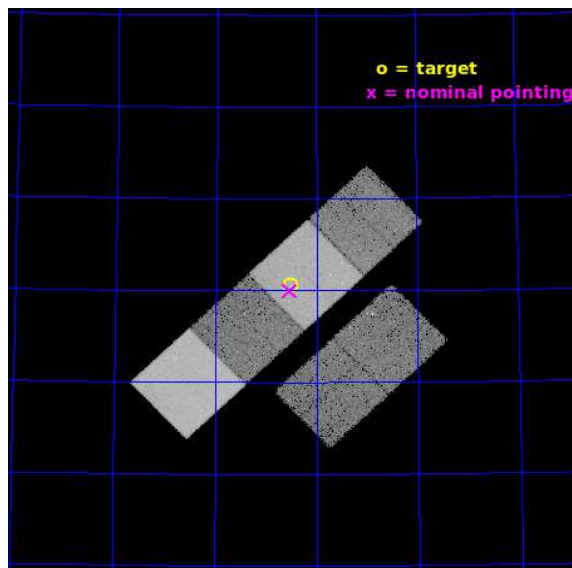
L2 Processing Date : Oct 9 2020

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# 1 Front

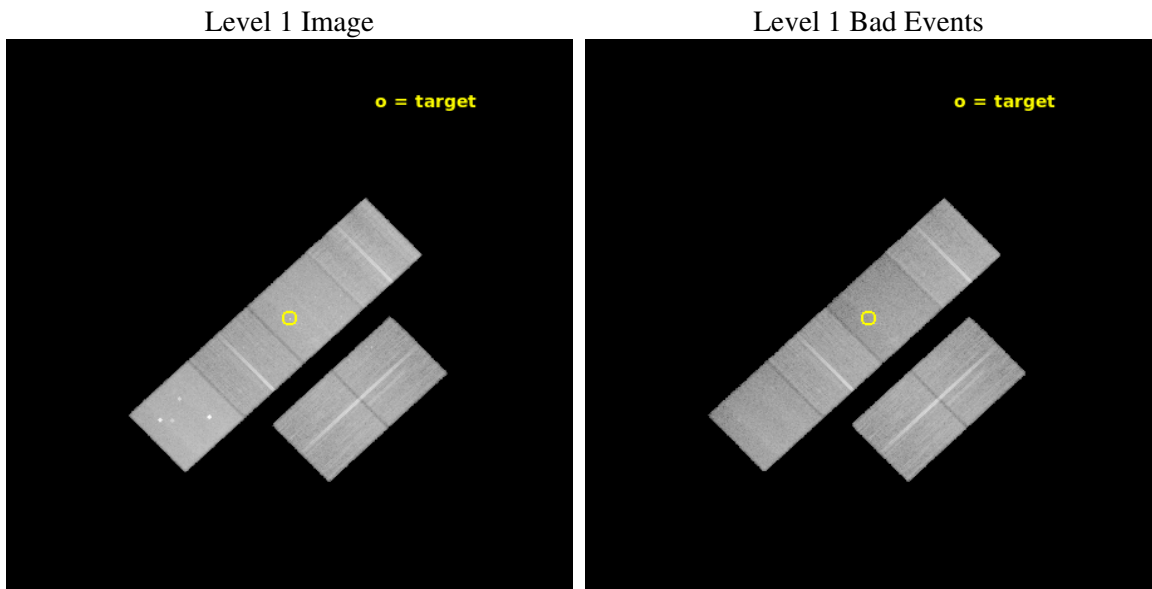
seq_num	701060	Sequence number
obs_id	5637	Observation id
title	An X-ray Exposure of the Highest-redshift Blazar: IC/CMB Jets	Prop
observer	Roger Romani	Principal investigator
object	QSO J0906+6930	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	136.627917	Observer's specified target RA [deg]
dec_targ	69.508556	Observer's specified target Dec [deg]
ra_nom	136.63285067314	Nominal RA [deg]
dec_nom	69.499696598013	Nominal Dec [deg]
roll_nom	316.24969734519	Nominal Roll [deg]
revision	4	Processing version of data
ontime	30172.758927286	Sum of GTIs [s]
livetime	29790.693285894	Livetime [s]
ontime2	30175.999887586	Sum of GTIs [s]
ontime3	30175.999887586	Sum of GTIs [s]
ontime5	30175.999887586	Sum of GTIs [s]
ontime6	30175.999887586	Sum of GTIs [s]
ontime7	30172.758927286	Sum of GTIs [s]
ontime8	30172.758927286	Sum of GTIs [s]
l2events	287571	Number of level 2 events



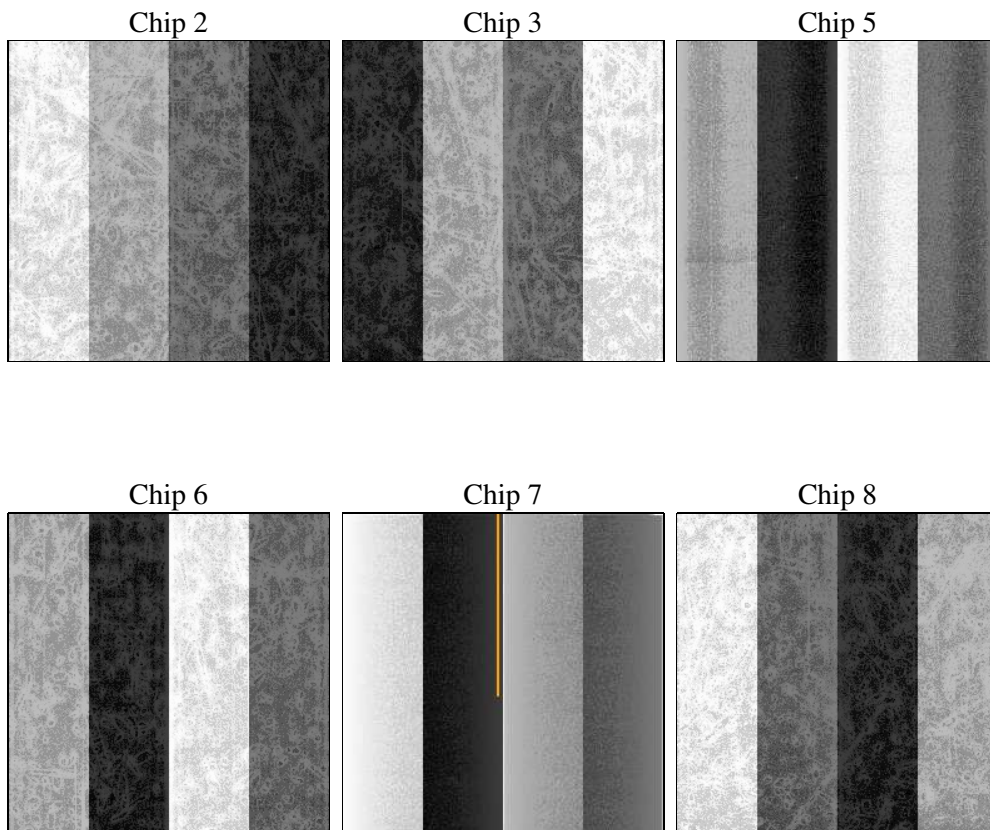
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	30172.758927286	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime2	30175.999887586	Sum of GTIs [s]
date	2020-10-09T07:19:01	Date and time of file creation	ontime3	30175.999887586	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	30175.999887586	Sum of GTIs [s]
			ontime6	30175.999887586	Sum of GTIs [s]
			ontime7	30172.758927286	Sum of GTIs [s]
			ontime8	30172.758927286	Sum of GTIs [s]
			l1events	1324636	Number of level 1 events

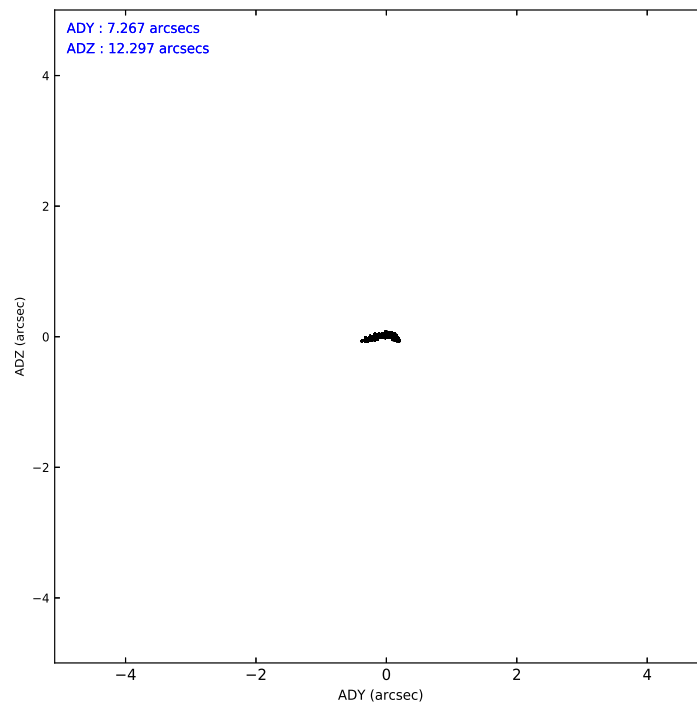
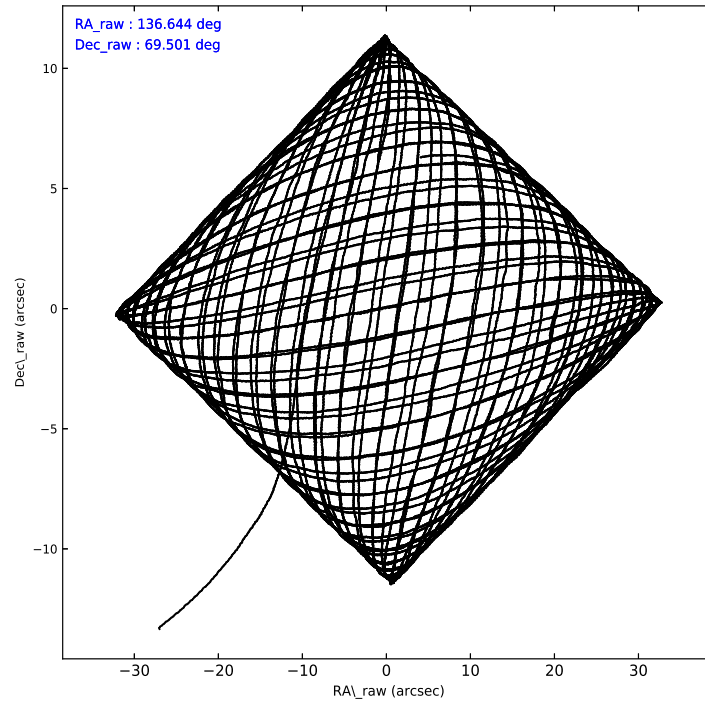
### 2.1.4 Events

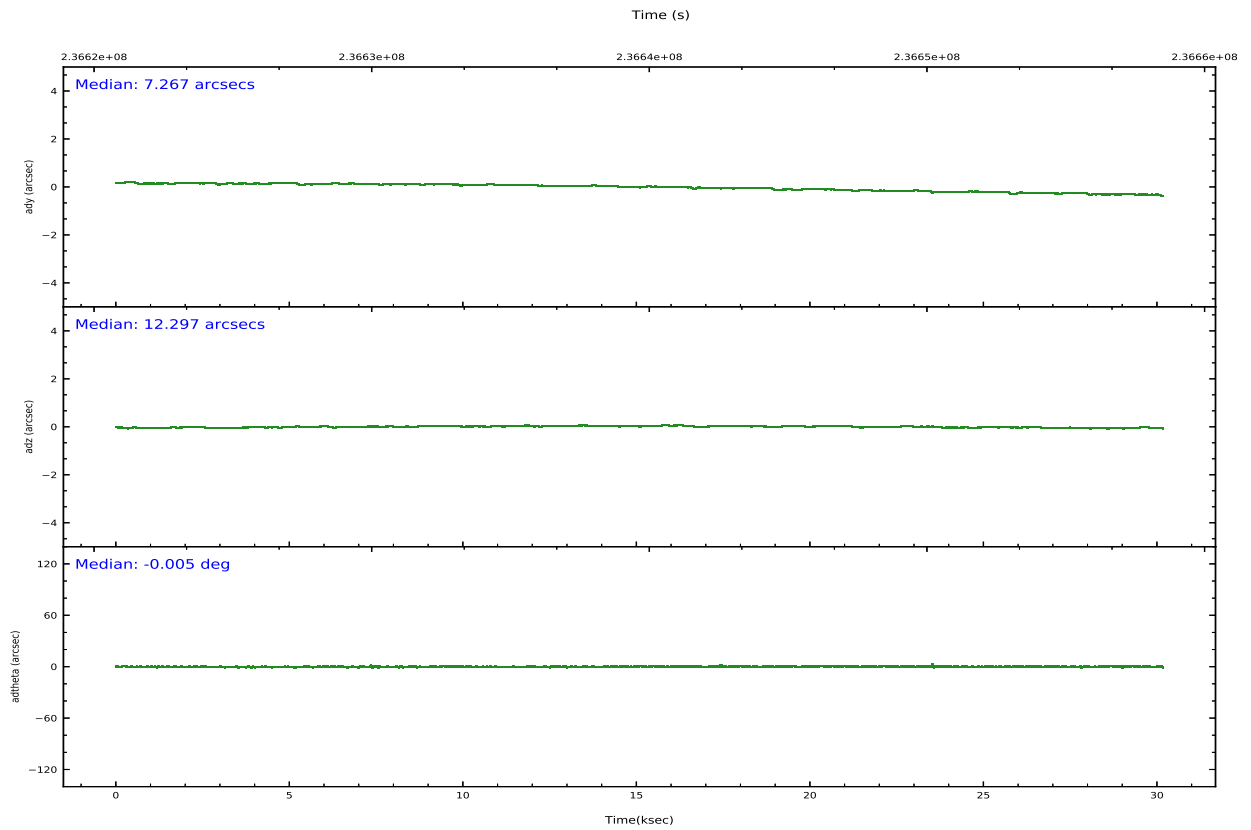
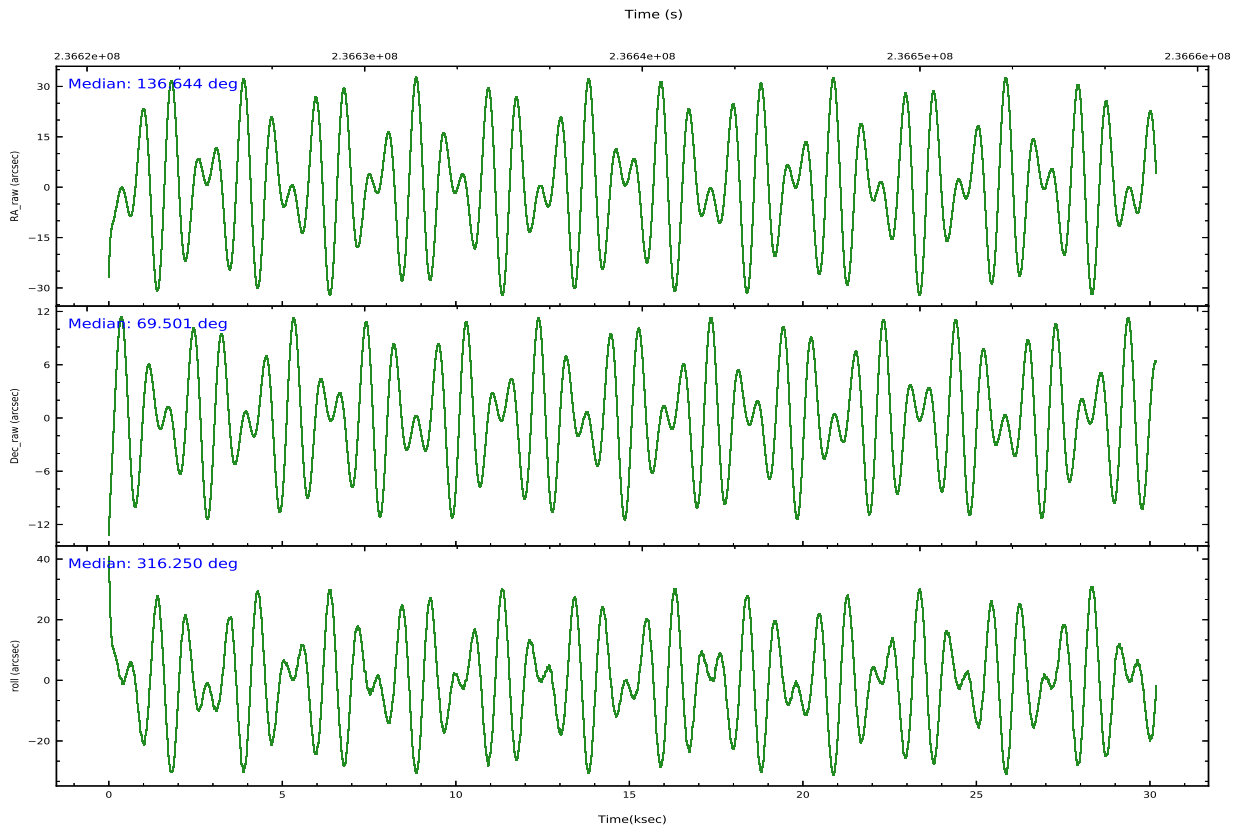
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	207945	187788	271621	194181	219602	243499	grade 0 events	6667	6483	17174	6924	8928	16786
rejected events	188886	169809	134630	174312	120224	188036		3%	3%	6%	3%	4%	6%
rejected %	90%	90%	49%	89%	54%	77%	grade 1 events	93	98	389	83	245	181
								0%	0%	0%	0%	0%	0%
							grade 2 events	4640	3749	39649	4300	20329	12700
								2%	1%	14%	2%	9%	5%
							grade 3 events	2072	2065	5877	2278	9432	5759
								0%	1%	2%	1%	4%	2%
							grade 4 events	2126	2036	5614	2199	9370	5493
								1%	1%	2%	1%	4%	2%
							grade 5 events	6566	7561	21699	7848	23290	11137
								3%	4%	7%	4%	10%	4%
							grade 6 events	3578	3661	68877	4202	51438	14774
								1%	1%	25%	2%	23%	6%
							grade 7 events	182203	162135	112342	166347	96570	176669
								87%	86%	41%	85%	43%	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	136.568425	136.63285067314	Subarray requested	NONE	NONE
[deg] Pointing Dec	69.506853	69.499696598013	Alternating exposures requested	N	N
[deg] Pointing Roll	316.167210	316.24969734519	[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)	236624806.184000	236623718.74973			
Observation start date	2005-07-01T17:05:42	2005-07-01T16:48:38			
[s] Observation end time (MET)	236654806.184000	236655454.80118			
Observation end date	2005-07-02T01:25:42	2005-07-02T01:37:34			
Read mode	TIMED	TIMED			

## 2.3 Aspect





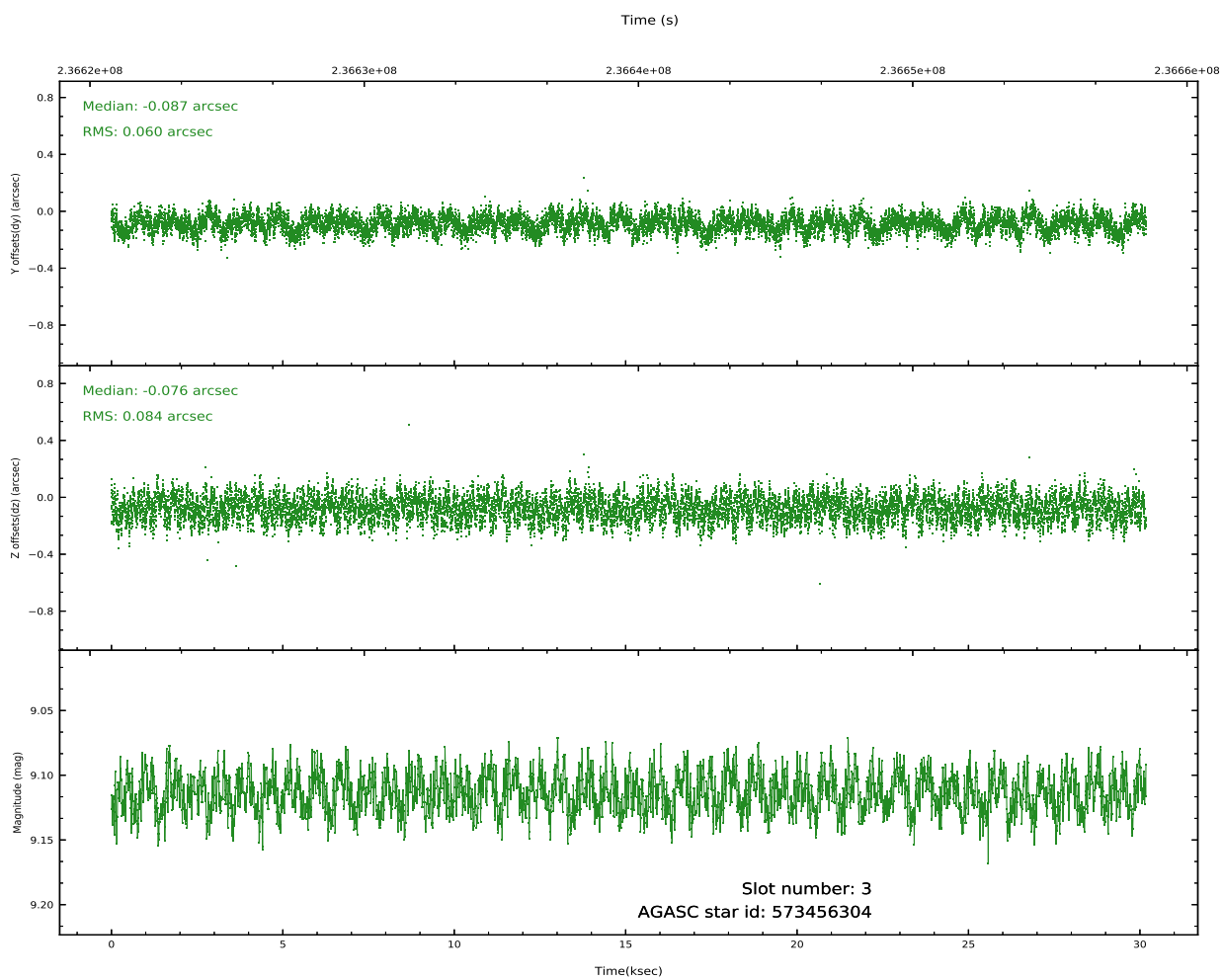
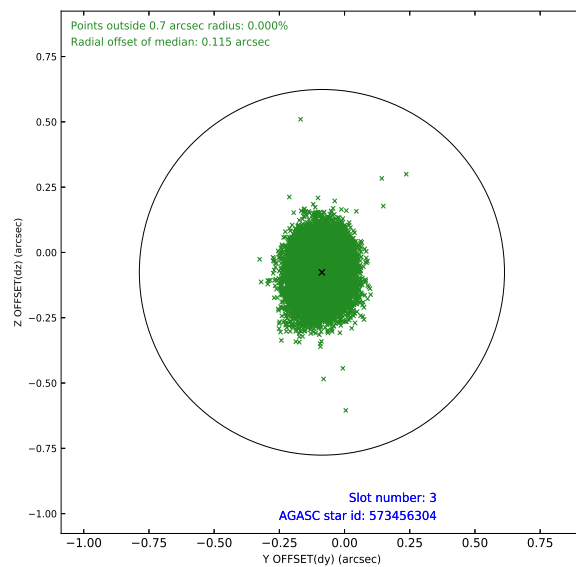
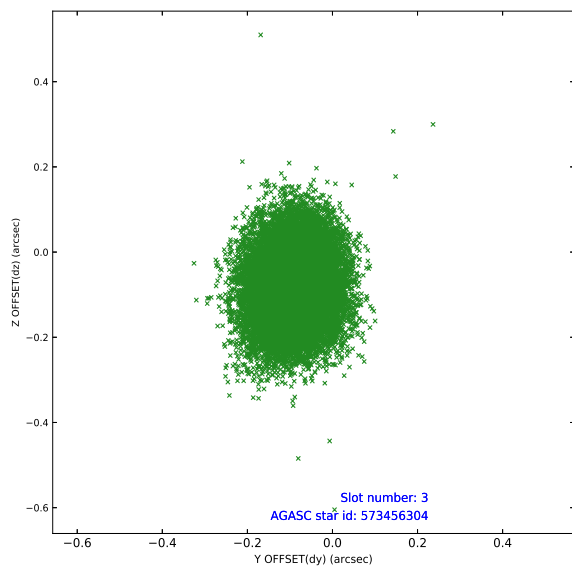
### Slot Statistics

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	7361	1.000	-0.052	-0.068	0.007	0.012	0.000000	0.000000	-760.03	-1733
1	FID		ACIS-S-4	7.20	7360	1.000	0.130	0.043	0.006	0.011	0.000000	0.000000	2153.38	174
2	FID		ACIS-S-5	7.23	7360	1.000	-0.110	0.034	0.008	0.013	0.000000	0.000000	-1812.86	168
3	GUIDE	used	573456304	9.11	14713	1.000	-0.087	-0.076	0.111	0.172	134.615950	69.251915	-1187.34	-2357
4	GUIDE	used	573578128	9.26	14712	1.000	0.119	0.076	0.092	0.149	138.875514	69.410462	2308.84	1812
5	GUIDE	used	573578808	8.60	14711	1.000	-0.012	-0.001	0.065	0.104	137.585442	69.790129	199.12	1619
6	GUIDE	used	573579960	9.19	14715	1.000	0.060	-0.086	0.094	0.165	136.136306	69.025526	797.66	-1634
7	GUIDE	used	573582680	5.98	14722	1.000	-0.076	0.091	0.045	0.072	137.271195	69.210753	1382.83	-143

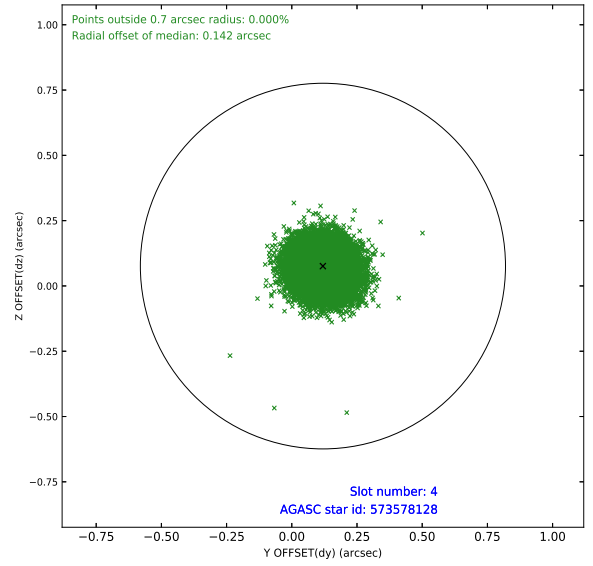
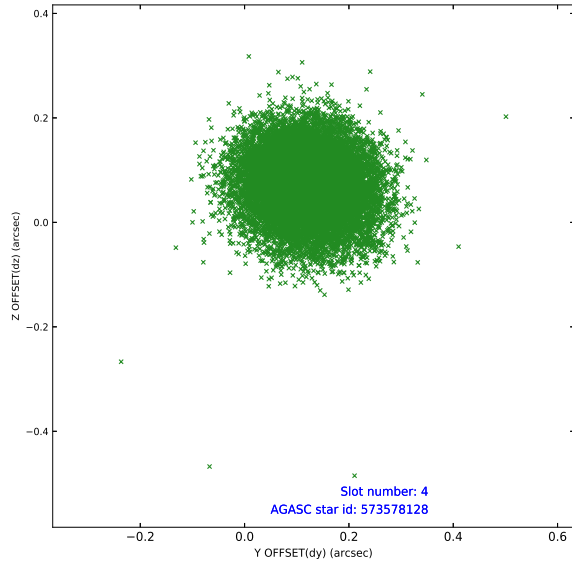
∞

## 2.4 Star Slots

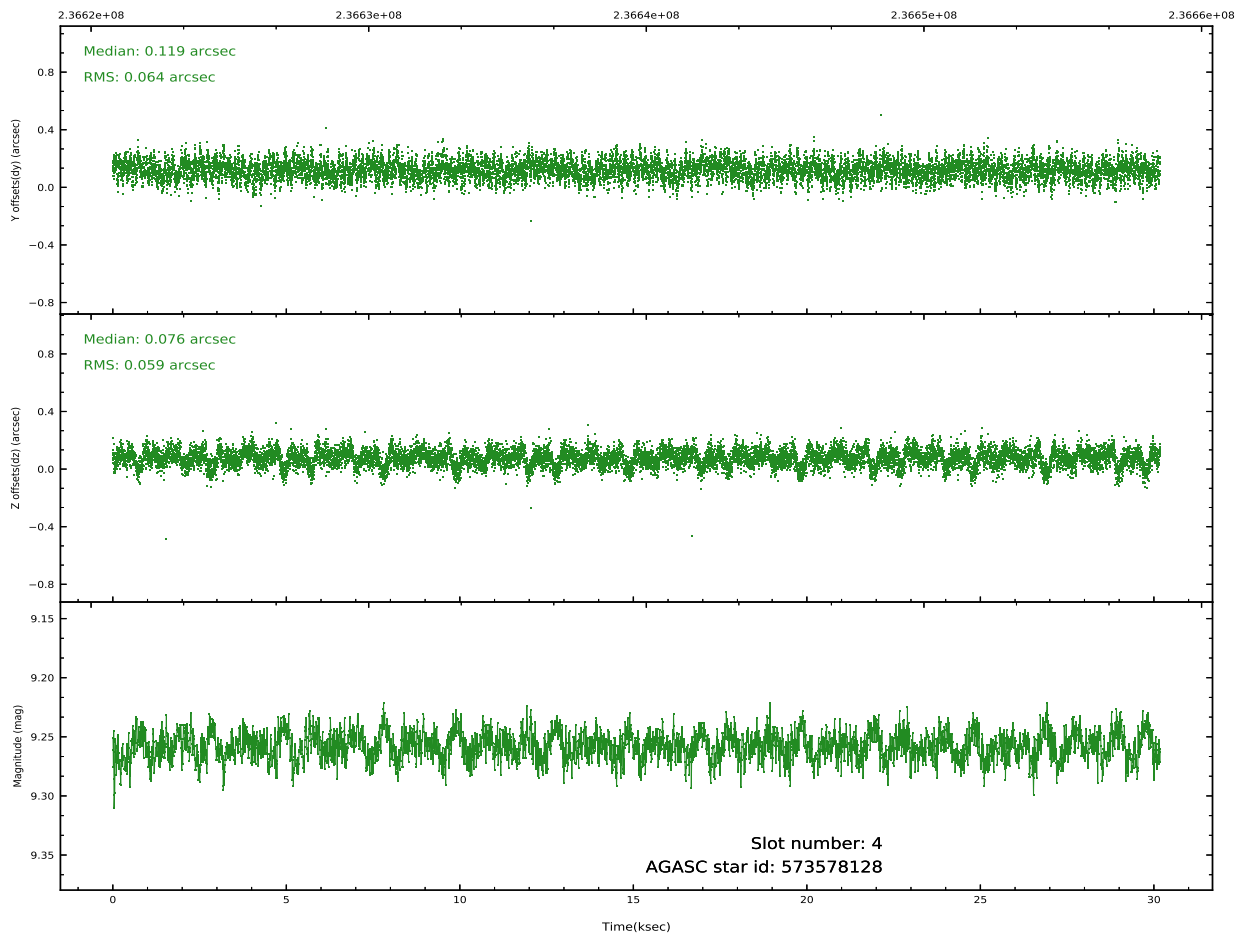
### 2.4.1 Slot 3



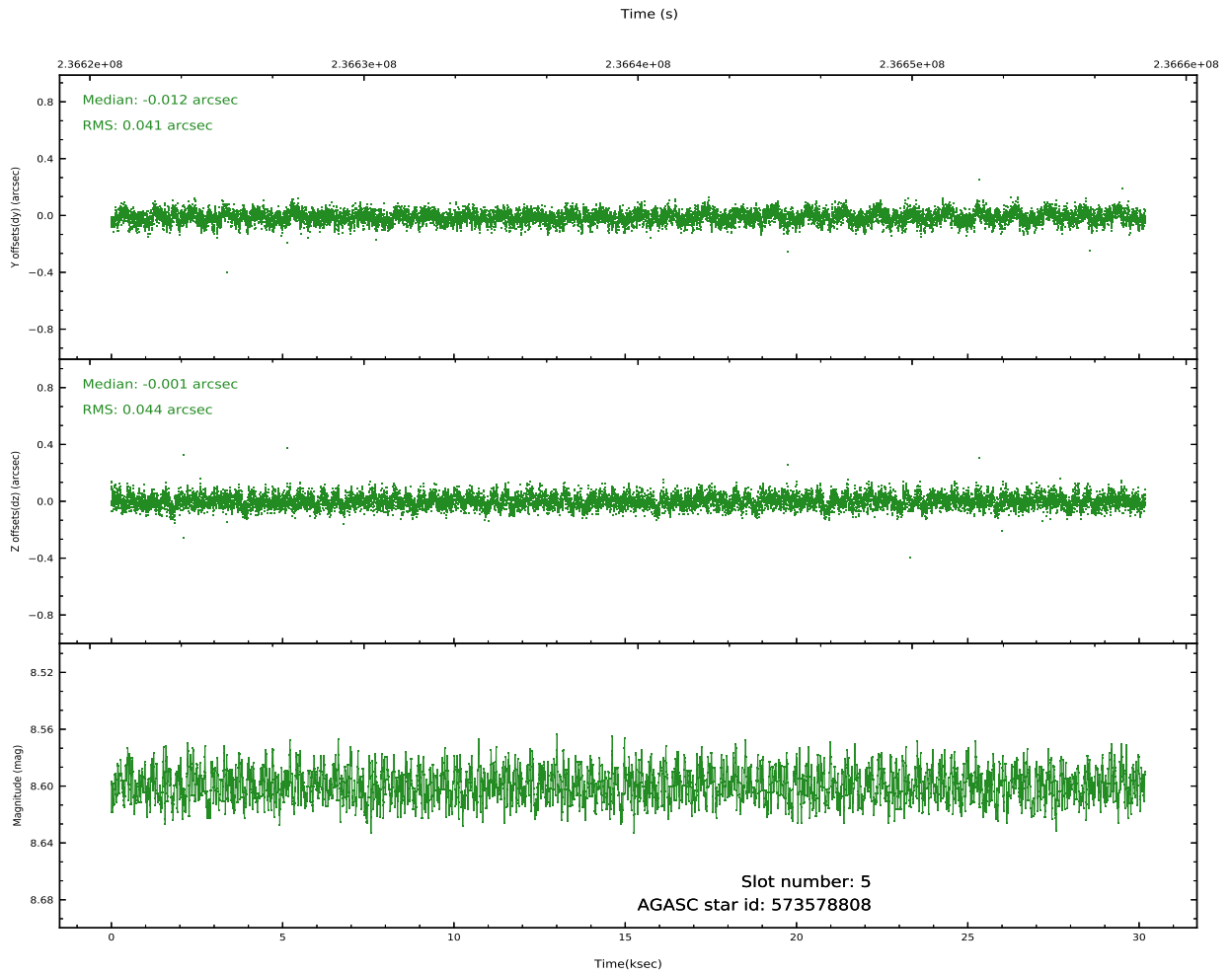
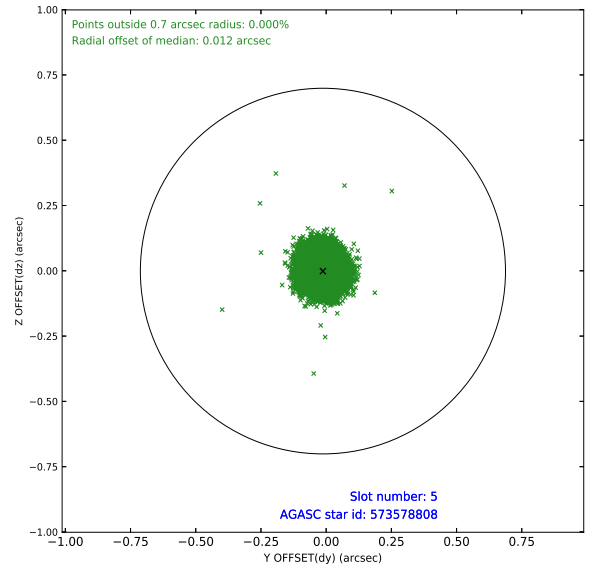
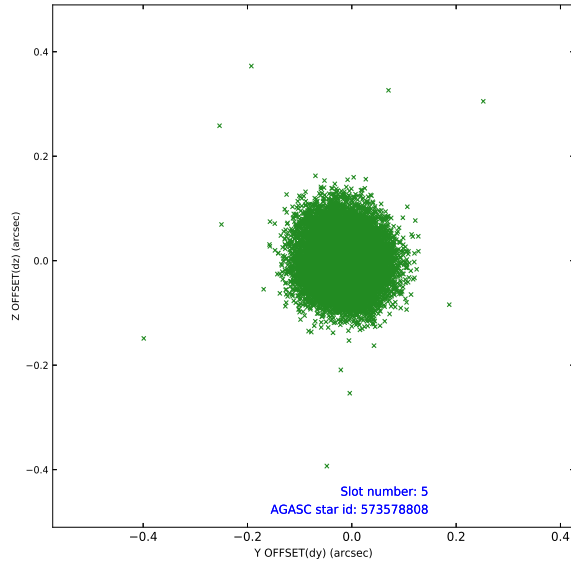
## 2.4.2 Slot 4



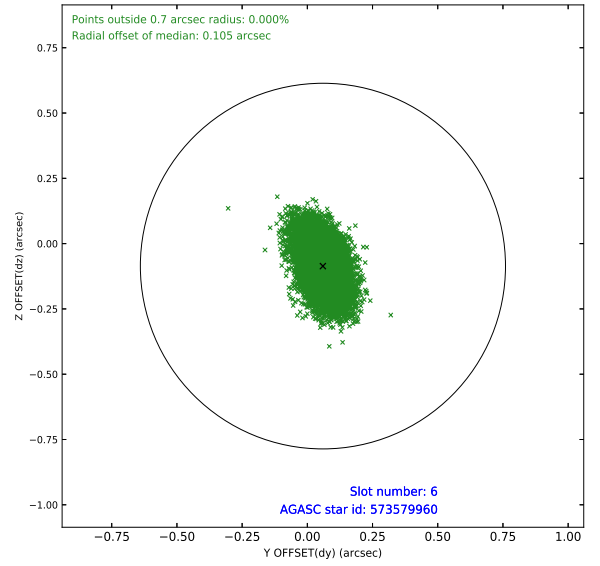
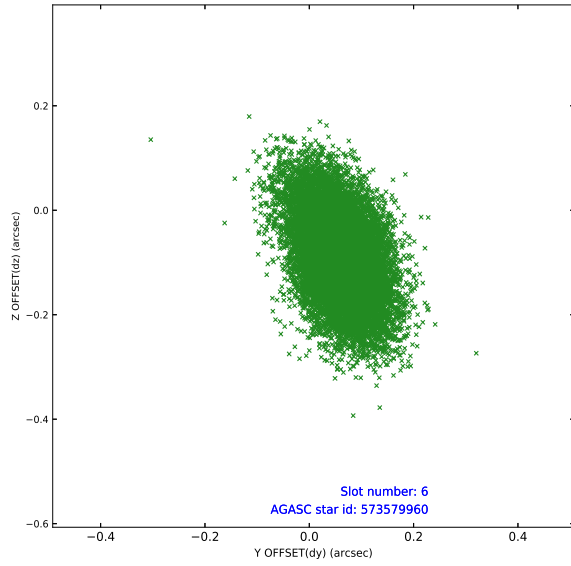
Time (s)



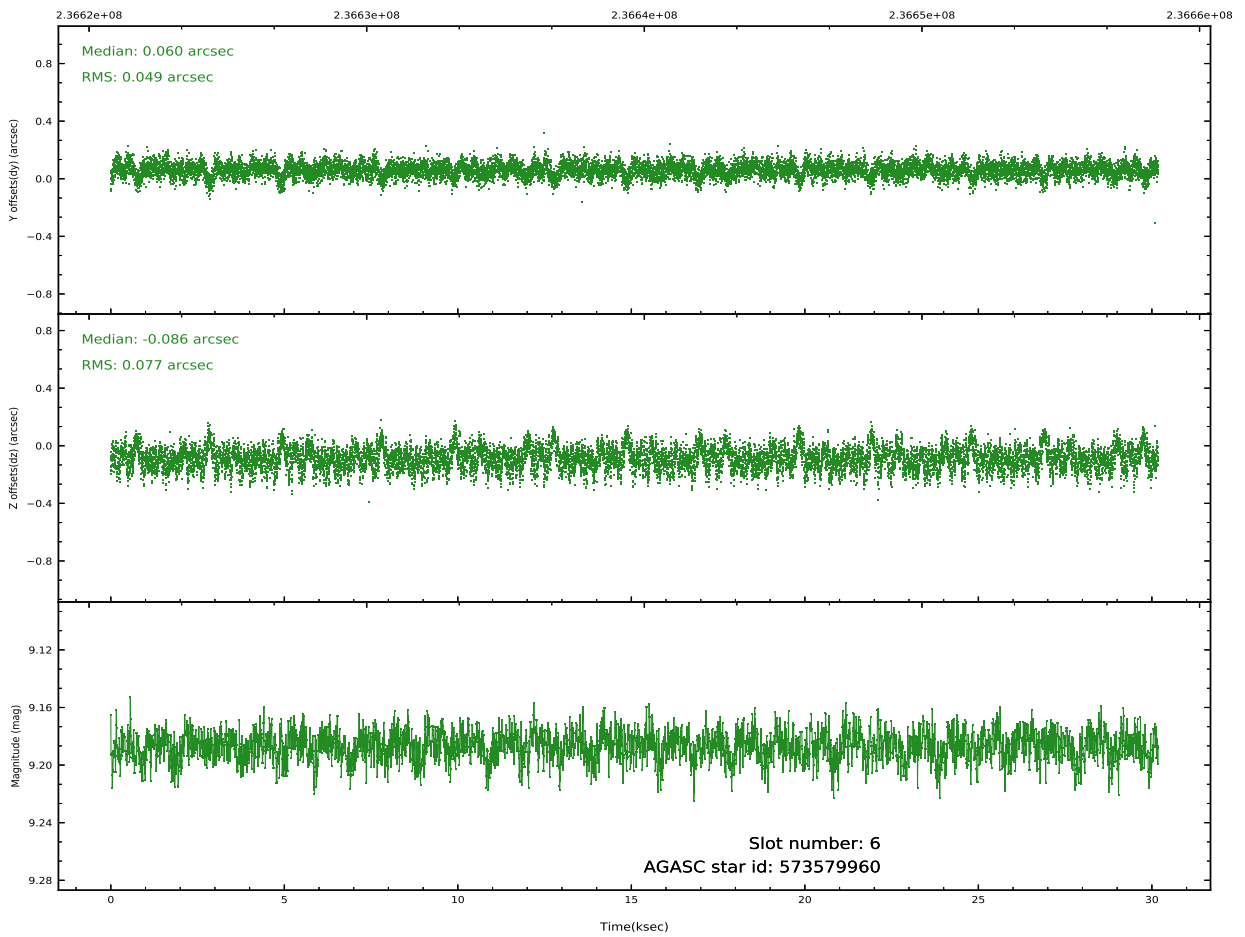
### 2.4.3 Slot 5



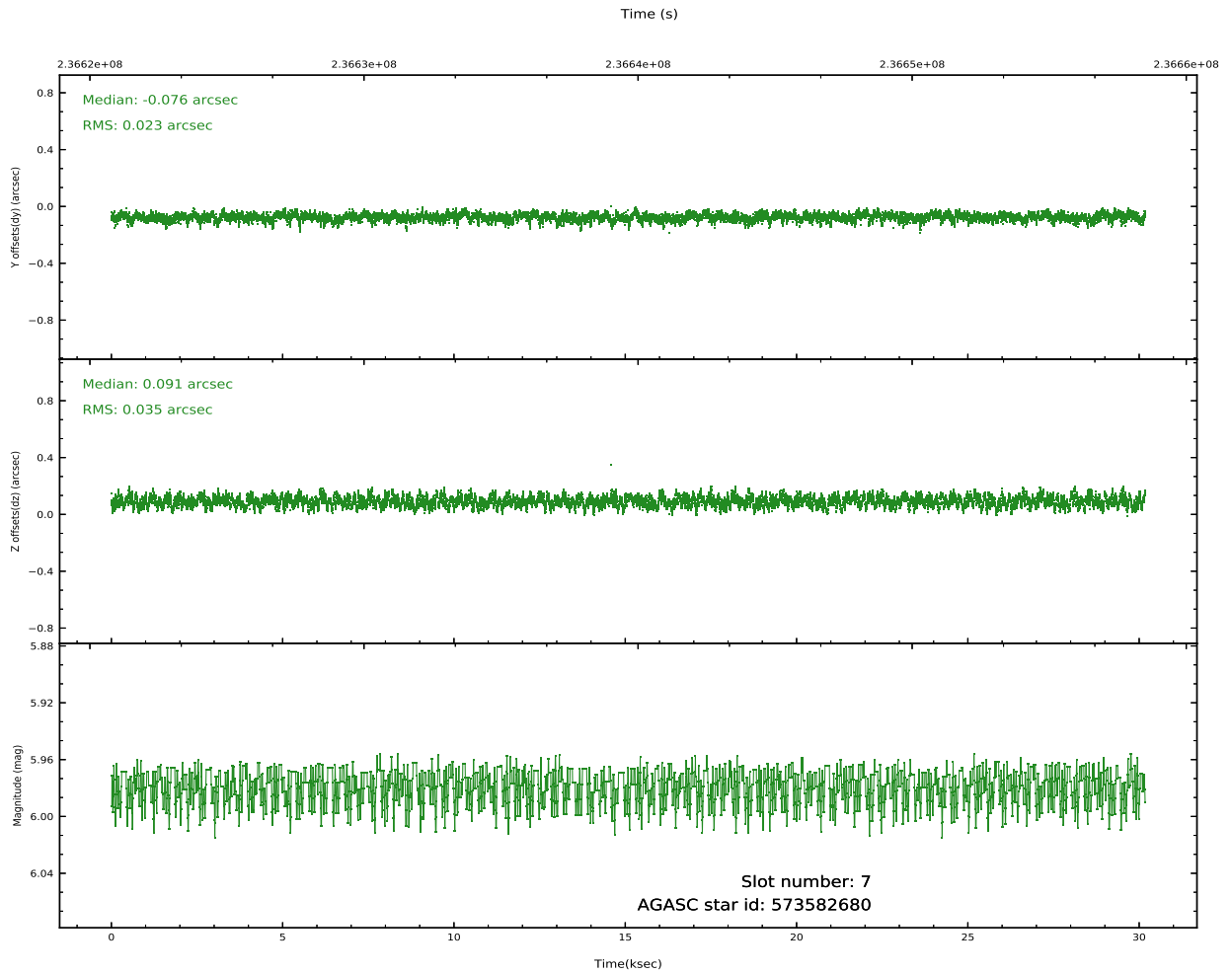
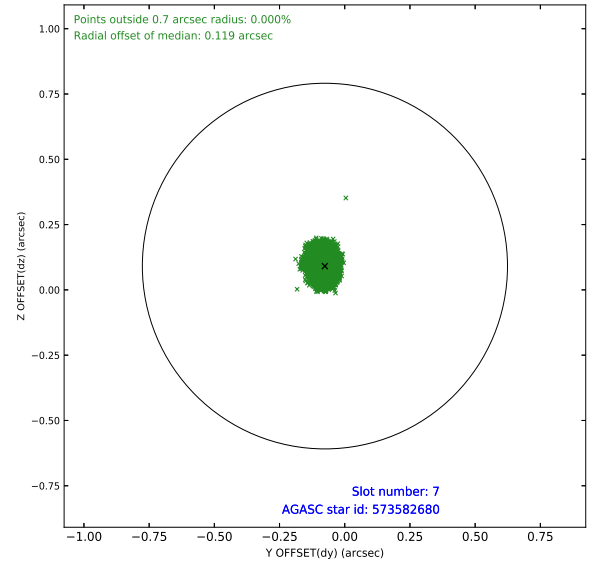
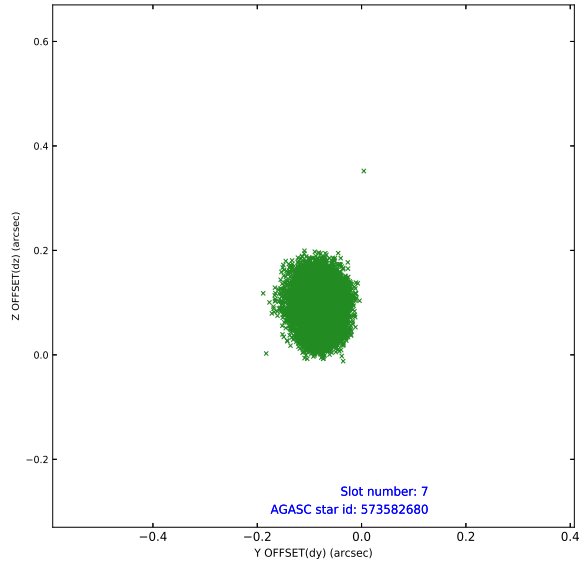
## 2.4.4 Slot 6



Time (s)

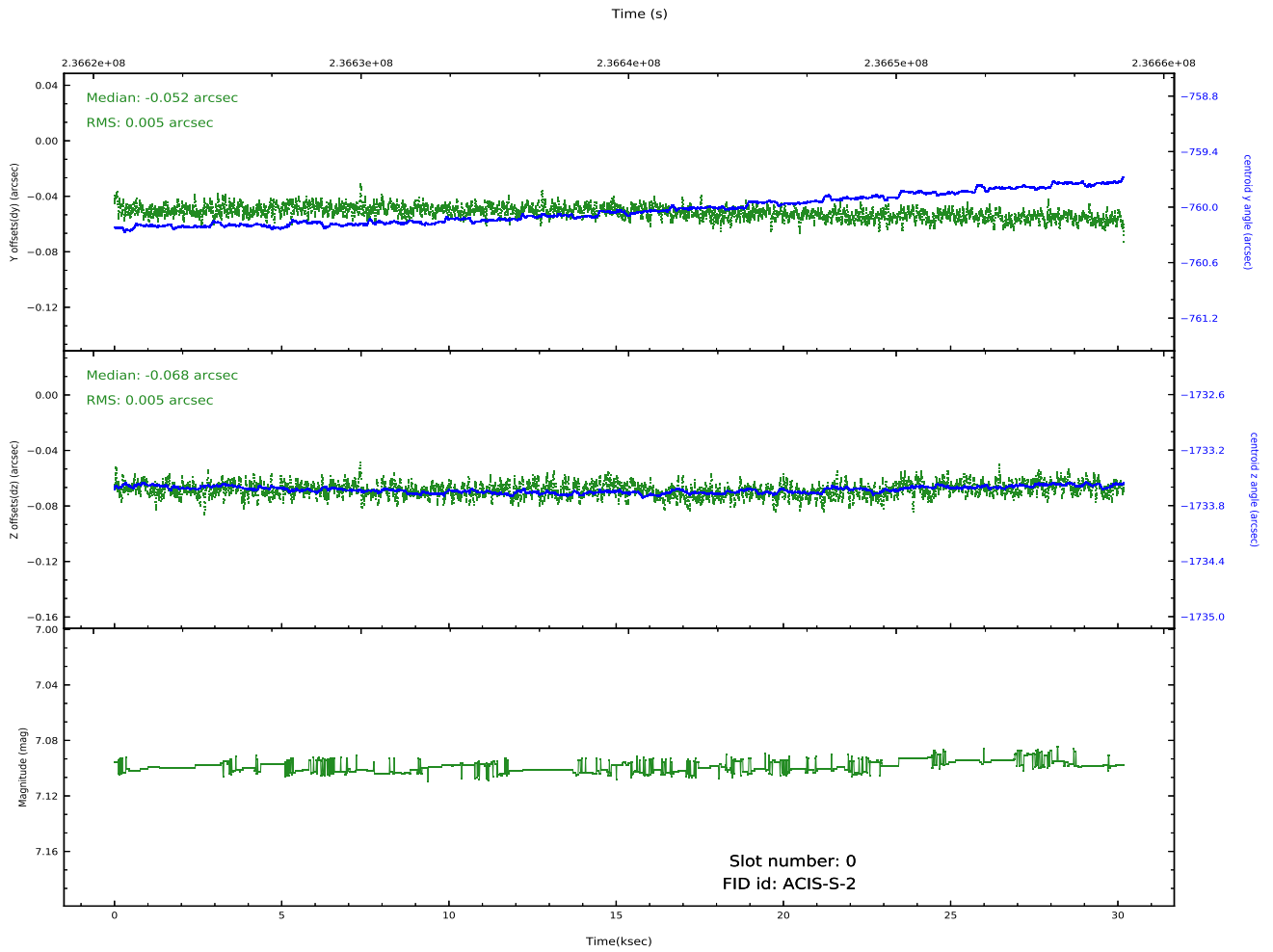
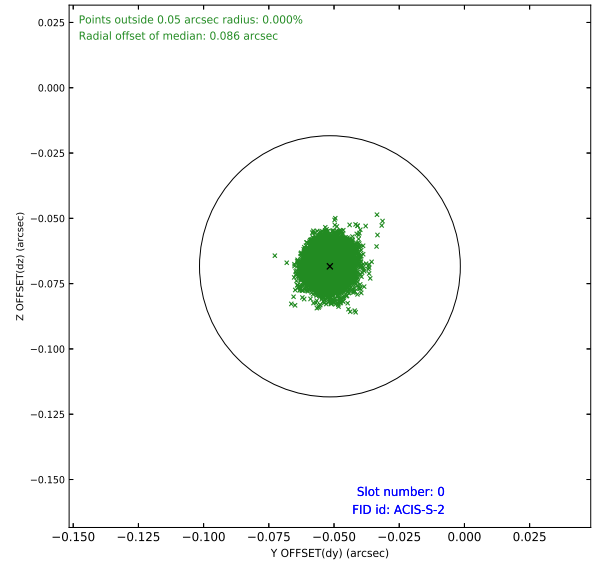
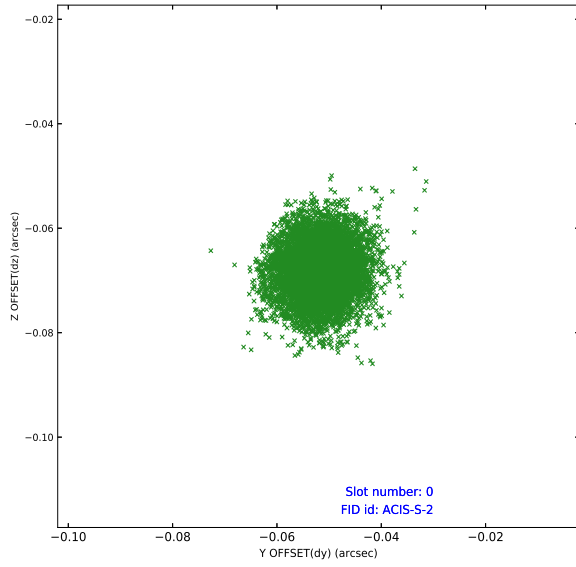


## 2.4.5 Slot 7

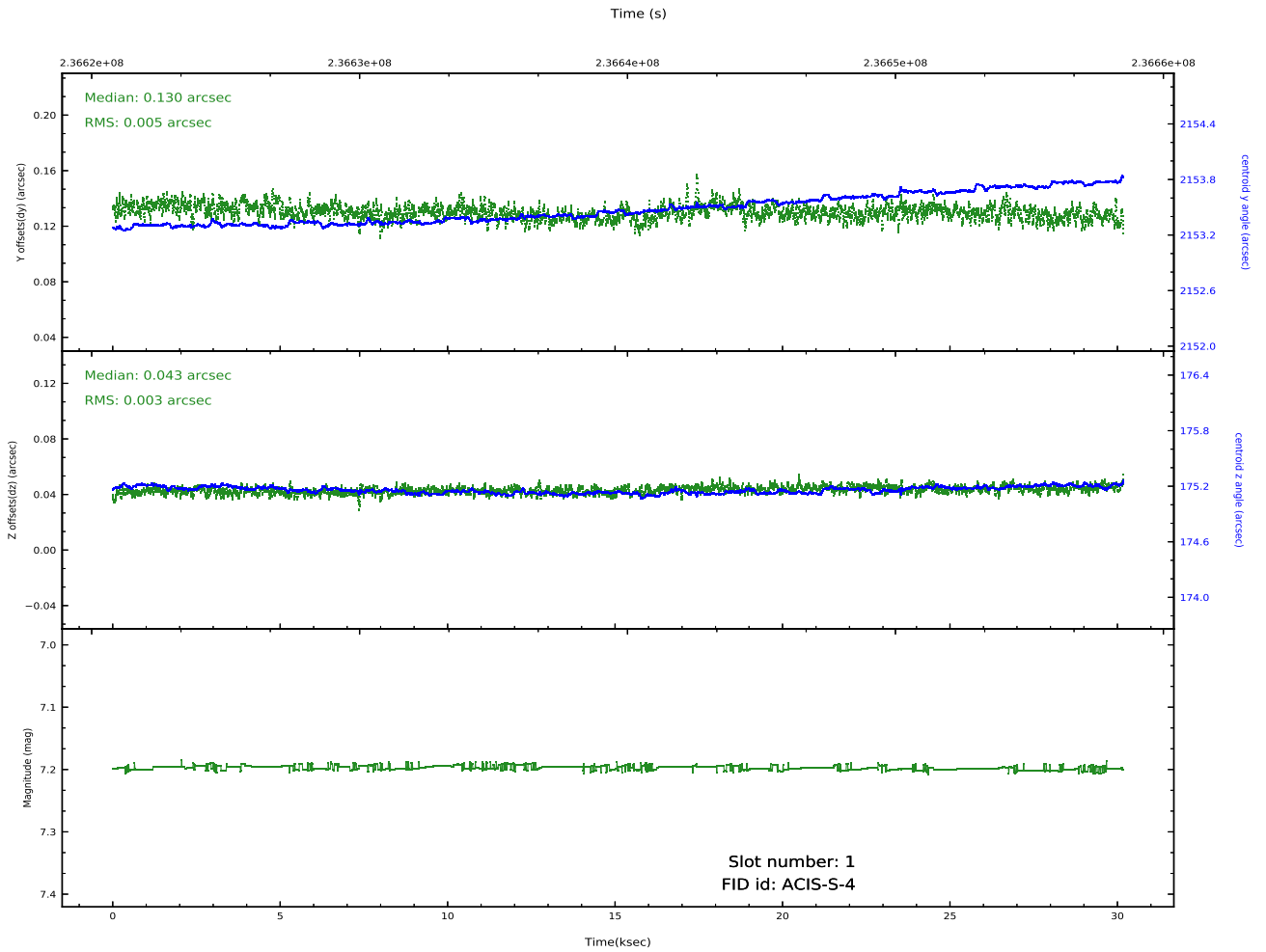
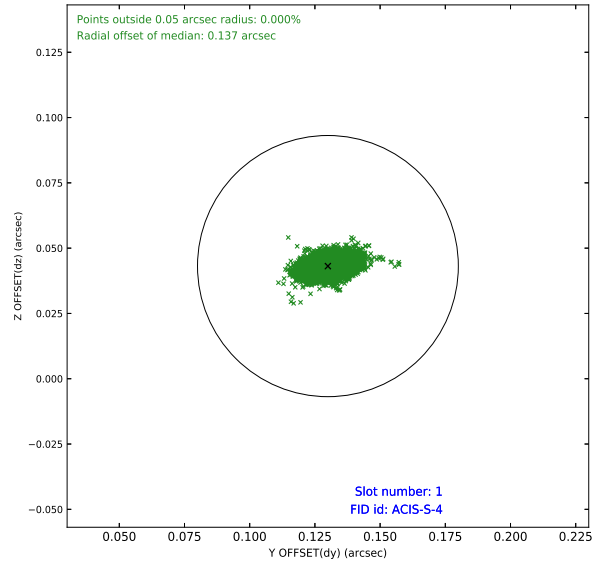
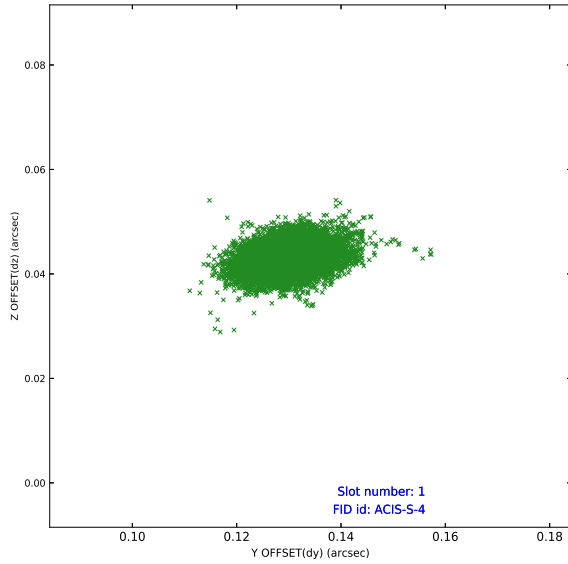


## 2.5 FID Slots

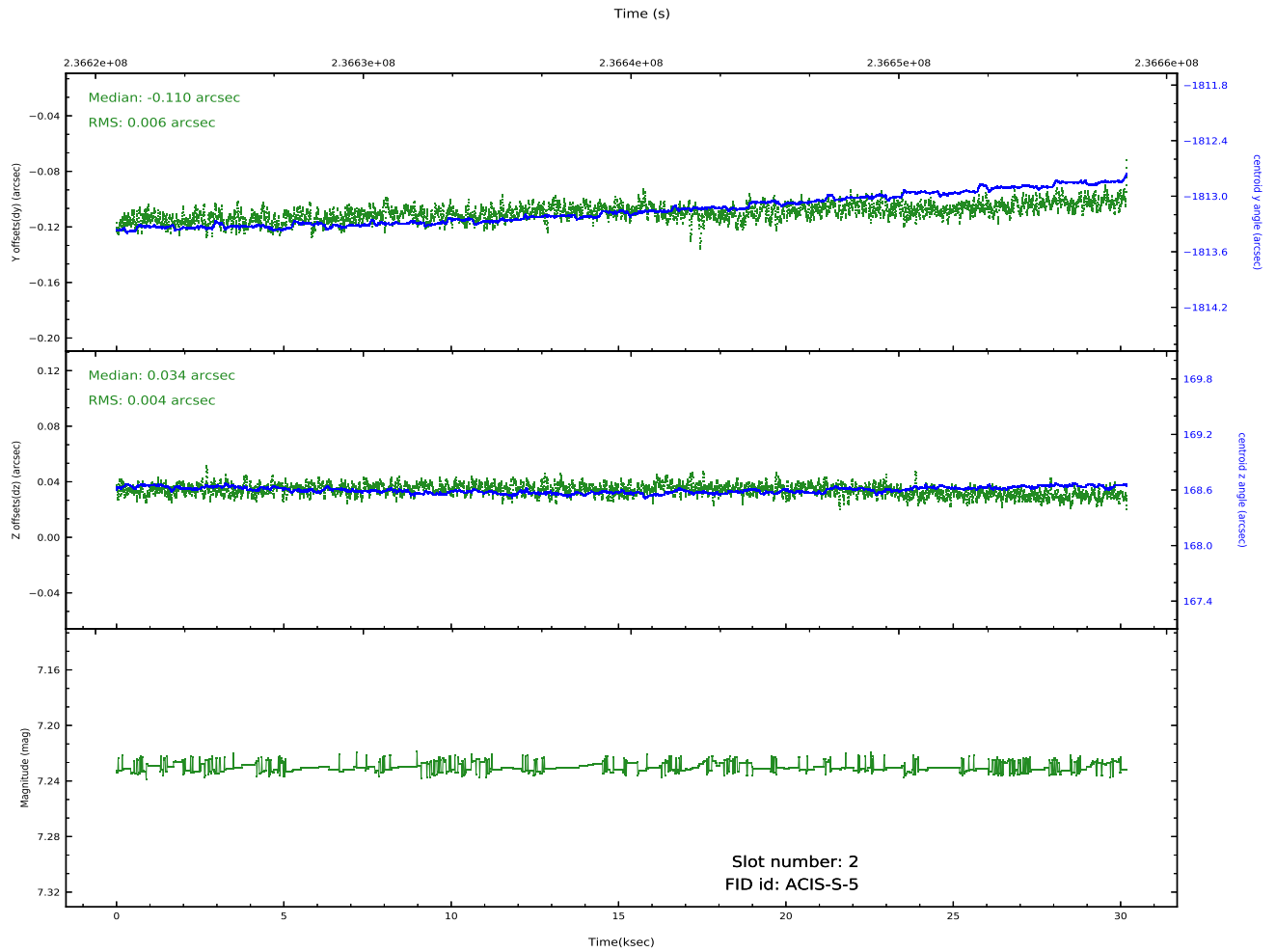
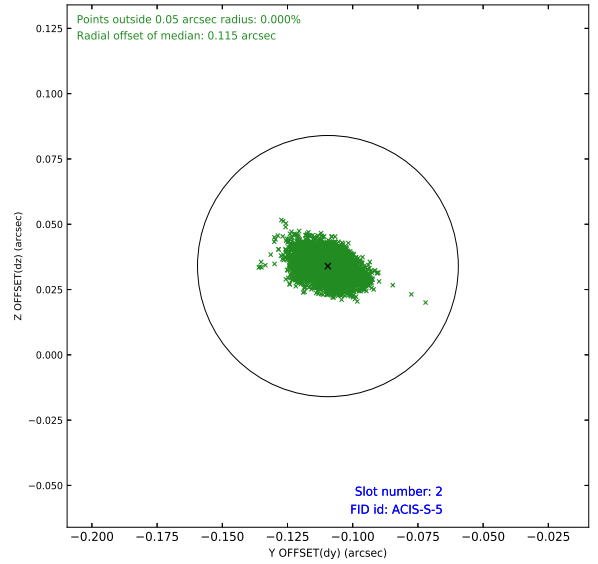
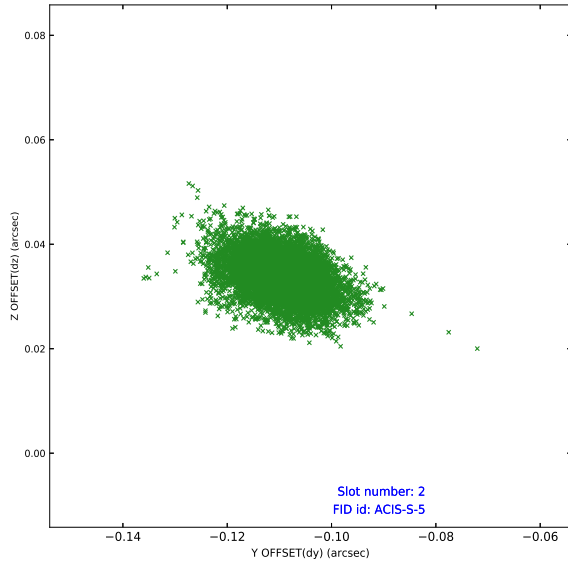
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	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	30.17275

## A.2 Comments