

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20268 - L2 Version 2  
Chandra X-Ray Center

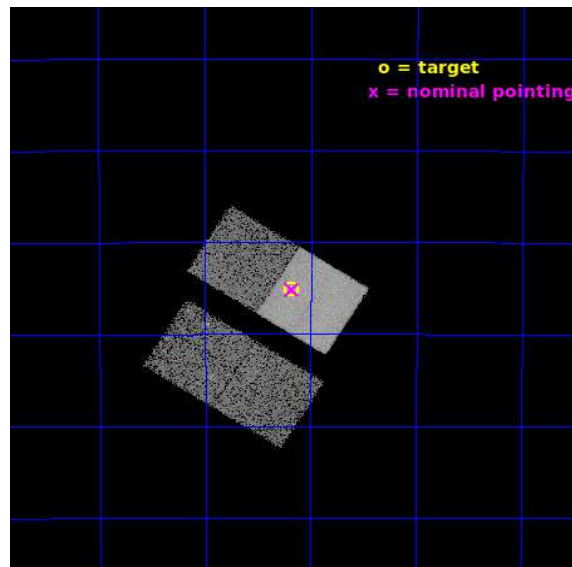
L2 Processing Date : Oct 27 2020

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# 1 Front

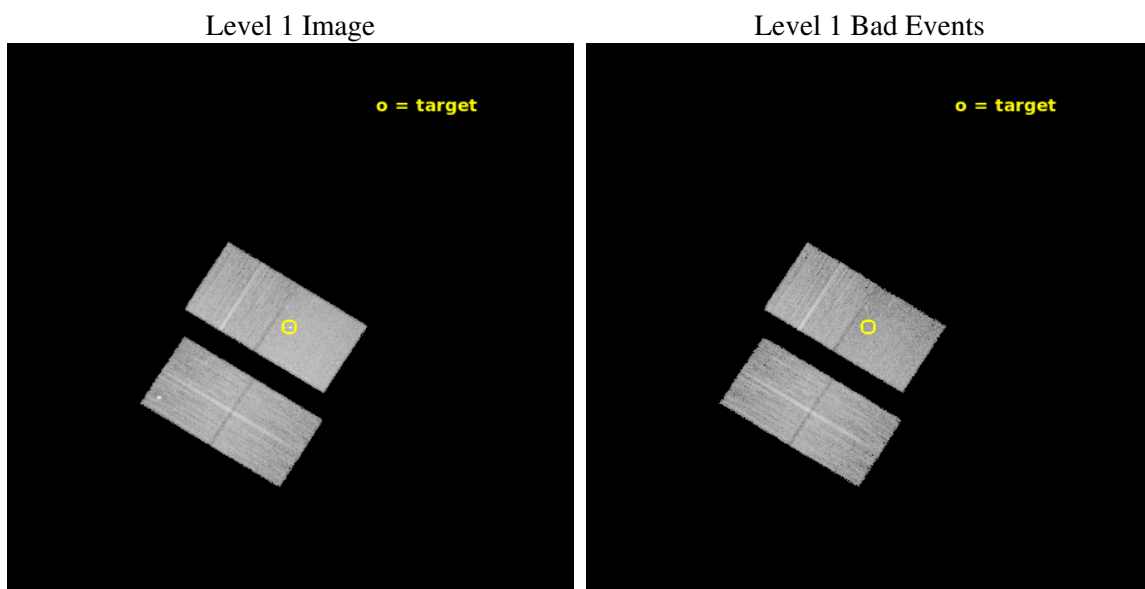
seq_num	401994	Sequence number
obs_id	20268	Observation id
title	Searching for Obscured ULX in LIRGS: a Deep Observation of NGC7552	&#160
observer	Andrea Prestwich	Principal investigator
object	NGC 7552	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	349.044583	Observer's specified target RA [deg]
dec_targ	-42.584722	Observer's specified target Dec [deg]
ra_nom	349.04458551754	Nominal RA [deg]
dec_nom	-42.586083699397	Nominal Dec [deg]
roll_nom	32.150948524945	Nominal Roll [deg]
revision	2	Processing version of data
ontime	12040.374048233	Sum of GTIs [s]
livetime	11883.057697298	Livetime [s]
ontime2	12037.109848022	Sum of GTIs [s]
ontime3	12040.291968226	Sum of GTIs [s]
ontime6	12040.333008289	Sum of GTIs [s]
ontime7	12040.374048233	Sum of GTIs [s]
l2events	74152	Number of level 2 events



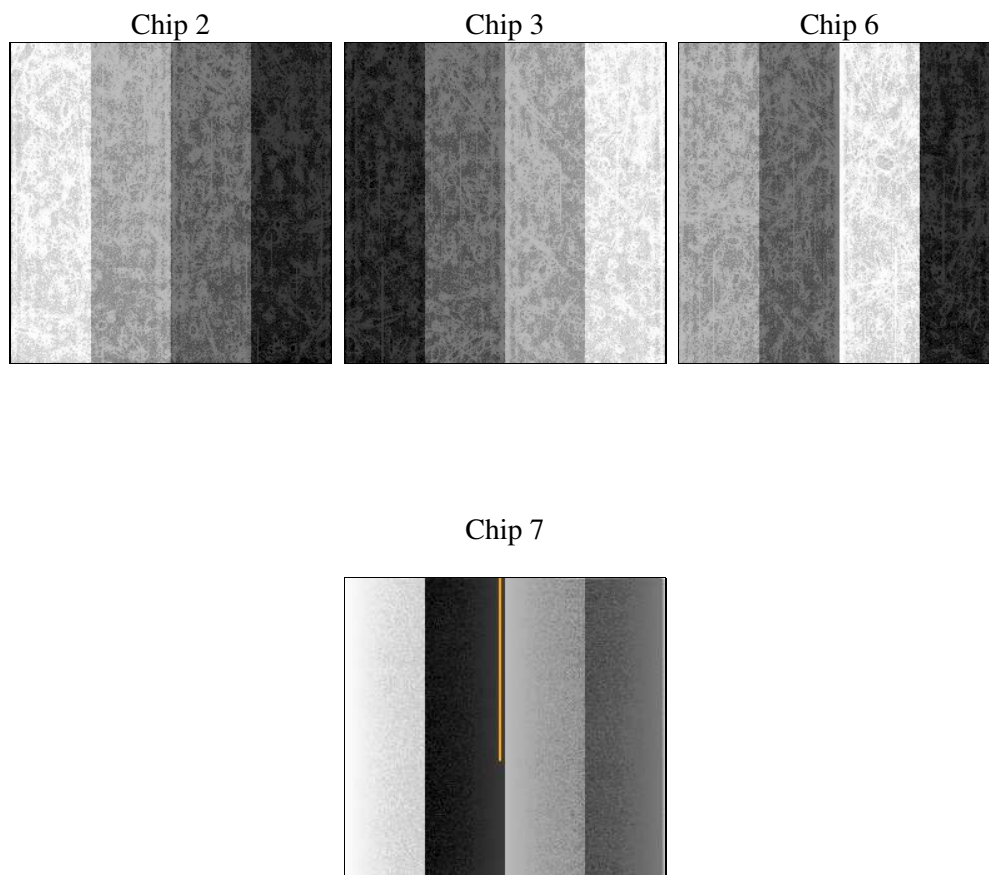
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11974.091000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	12040.374048233	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime2	12037.109848022	Sum of GTIs [s]
date	2020-10-27T08:26:17	Date and time of file creation	ontime3	12040.291968226	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	12040.333008289	Sum of GTIs [s]
			ontime7	12040.374048233	Sum of GTIs [s]
			l1events	390647	Number of level 1 events

### 2.1.4 Events

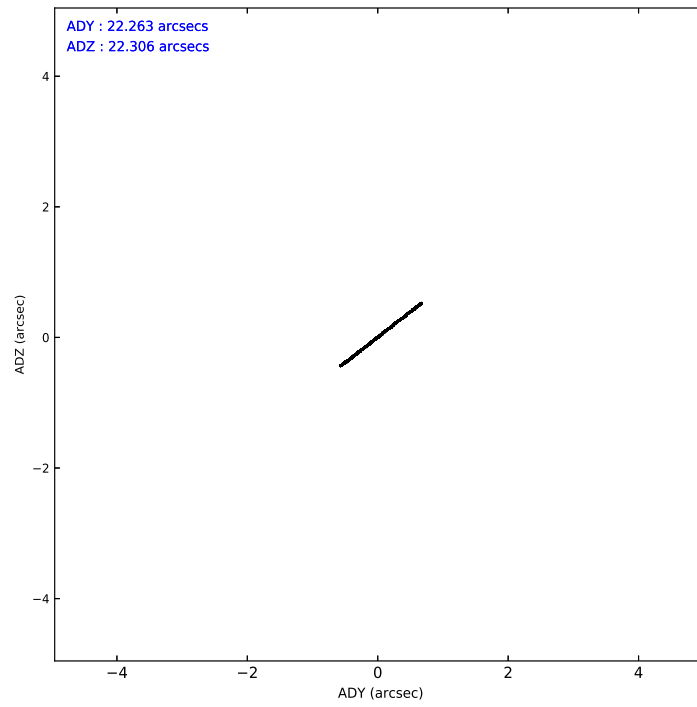
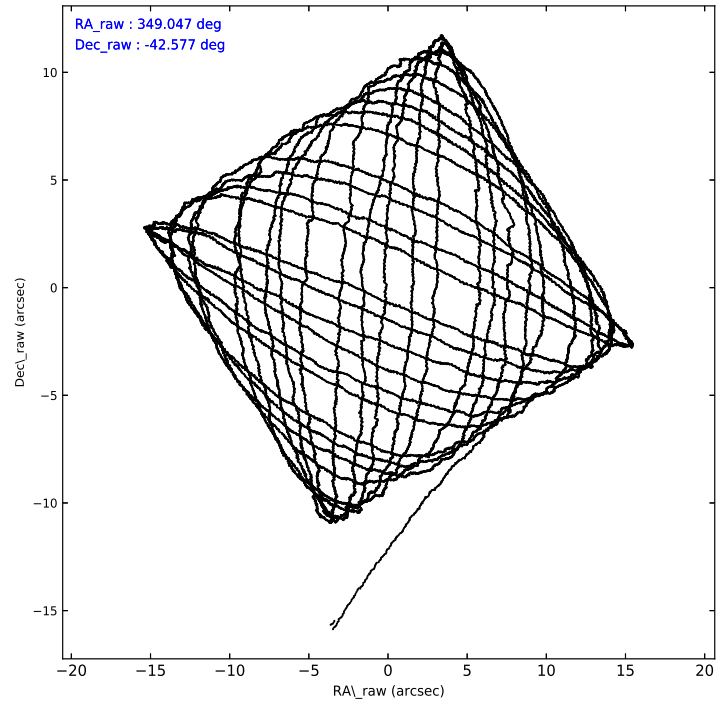
	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>
level 1 events	90087	87074	96297	117189
rejected events	79728	78107	86204	66176
rejected %	88%	89%	89%	56%

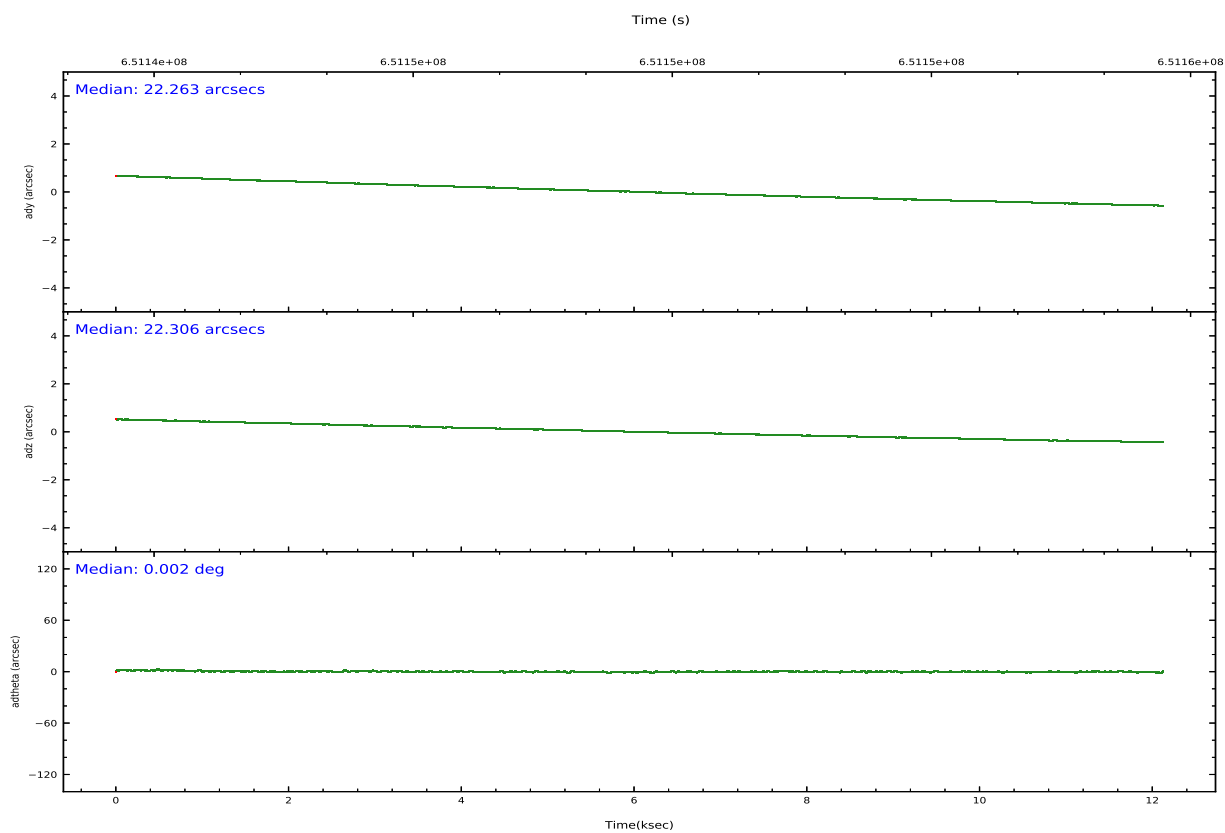
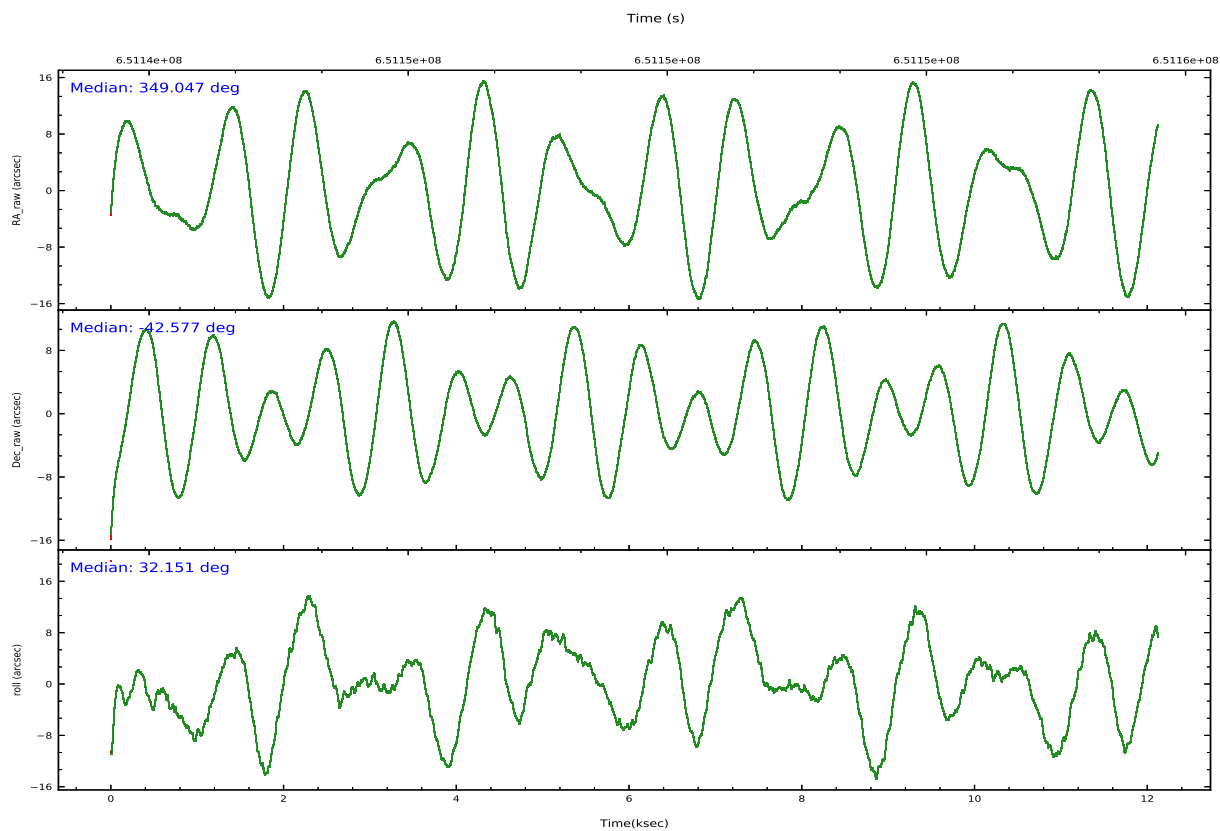
	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>
grade 0 events	4436	3146	3095	4376
	4%	3%	3%	3%
grade 1 events	64	44	41	166
	0%	0%	0%	0%
grade 2 events	2276	1926	2523	10746
	2%	2%	2%	9%
grade 3 events	969	967	955	3967
	1%	1%	0%	3%
grade 4 events	893	994	886	3905
	0%	1%	0%	3%
grade 5 events	3263	4077	3978	11213
	3%	4%	4%	9%
grade 6 events	1788	1940	2637	28044
	1%	2%	2%	23%
grade 7 events	76398	73980	82182	54772
	84%	84%	85%	46%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	349.030331	349.04458551754	CCD I2 on	O1	Y
[deg] Pointing Dec	-42.601644	-42.586083699397	CCD I3 on	O2	Y
[deg] Pointing Roll	31.990359	32.150948524945	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	651144709.184000	651142986.00783	CCD S5 on	N	N
Observation start date	2018-08-20T09:30:40	2018-08-20T09:03:06	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	651156683.184000	651157665.0337	On-chip summing requested	N	N
Observation end date	2018-08-20T12:50:14	2018-08-20T13:07:45	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



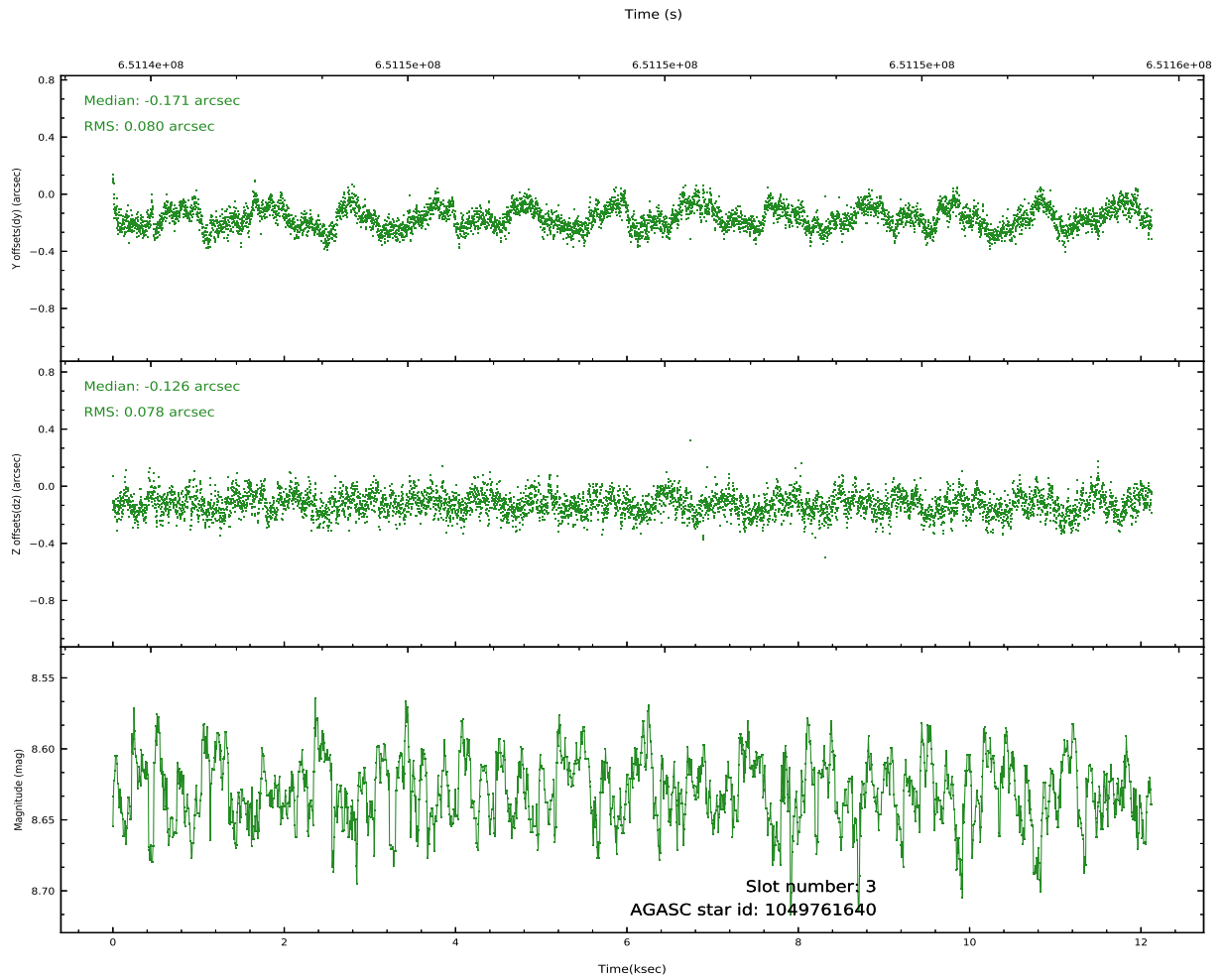
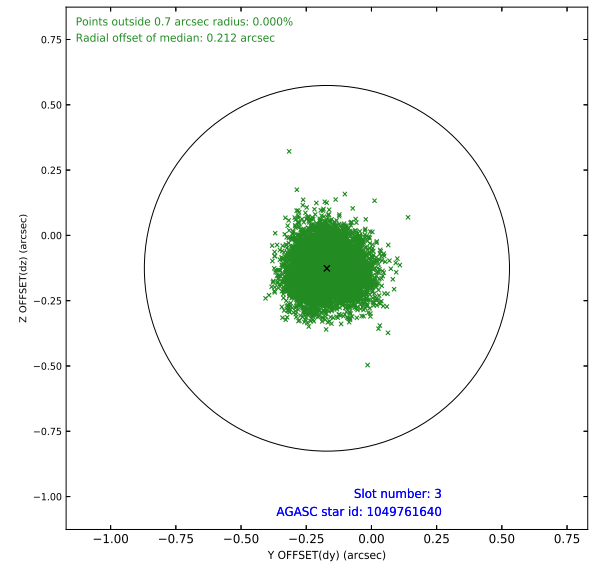
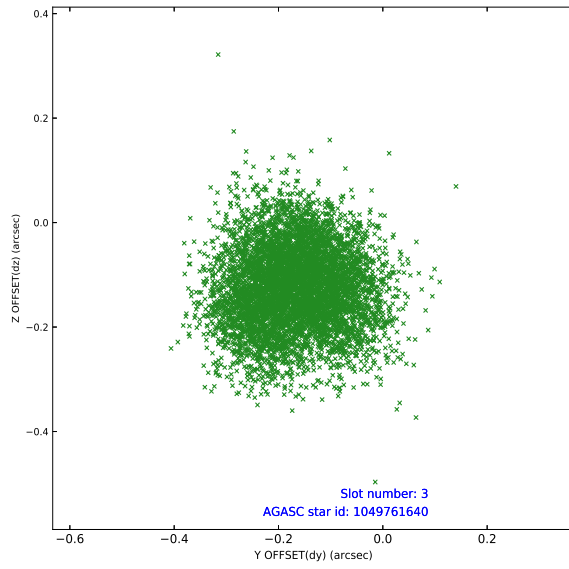


Slot Statistics

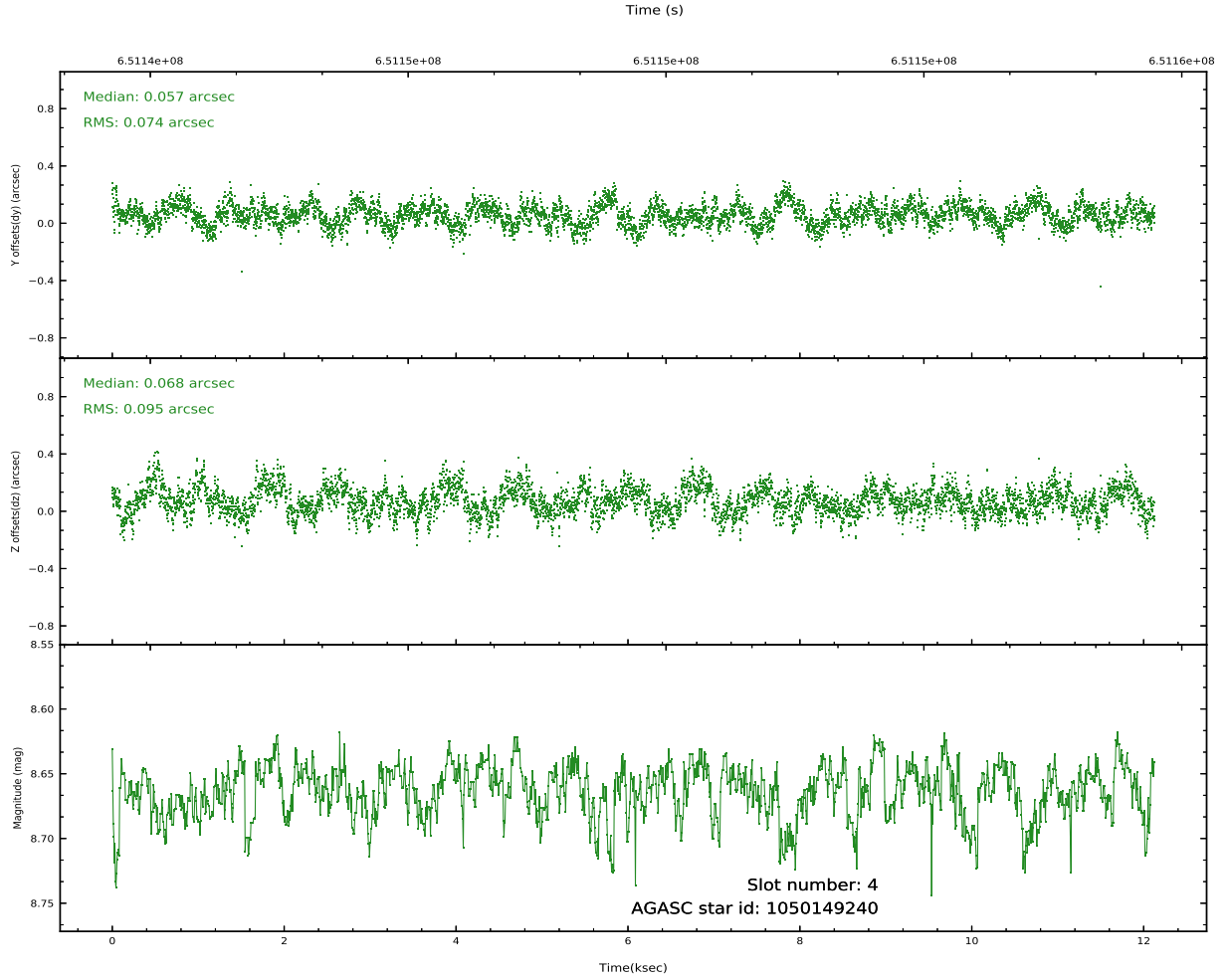
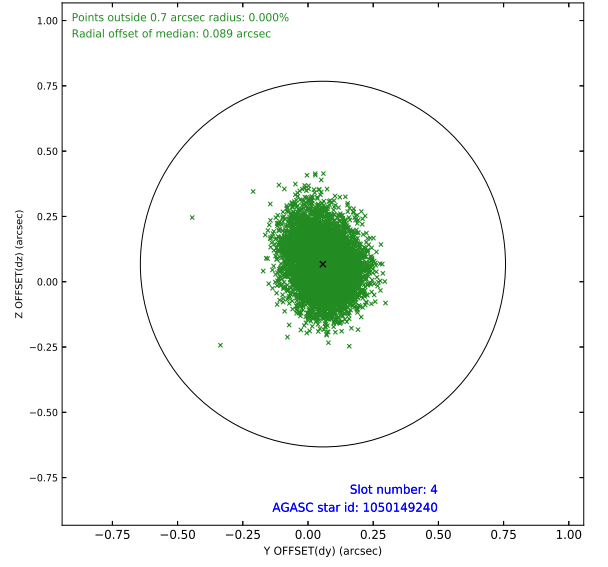
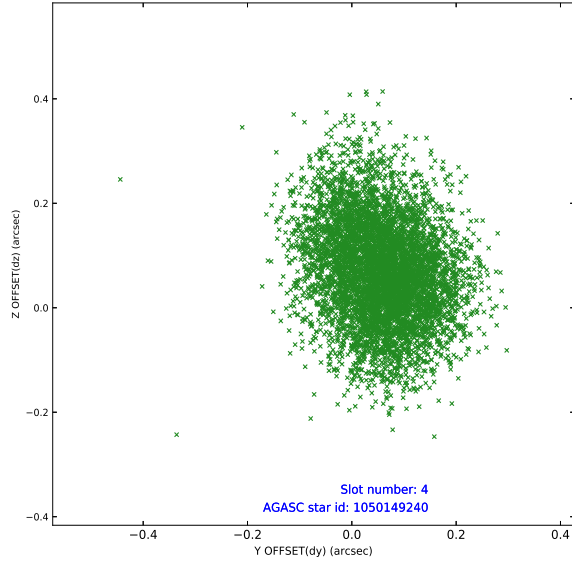
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2958	1.000	0.058	0.018	0.009	0.025	0.000000	0.000000	-775.56	-1743
1	FID		ACIS-S-4	7.20	2958	1.000	0.046	-0.101	0.009	0.015	0.000000	0.000000	2137.70	163
2	FID		ACIS-S-6	7.37	2958	1.000	-0.132	0.089	0.011	0.021	0.000000	0.000000	387.00	802
3	GUIDE	used	1049761640	8.63	5915	1.000	-0.171	-0.126	0.121	0.187	349.142415	-42.207499	1005.07	1045
4	GUIDE	used	1050149240	8.66	5905	1.000	0.057	0.068	0.128	0.208	348.341636	-42.784486	-1895.51	399
5	GUIDE	used	1050152160	9.25	5800	1.000	0.147	0.355	0.167	0.274	348.746192	-43.299080	-1961.87	-1735
6	GUIDE	used	1050158072	9.06	5912	1.000	0.176	-0.139	0.185	0.308	348.738453	-42.733577	-906.48	4
7	GUIDE	used	1049761400	8.44	5909	1.000	-0.223	-0.149	0.110	0.183	348.802242	-41.955316	713.95	2296

## 2.4 Star Slots

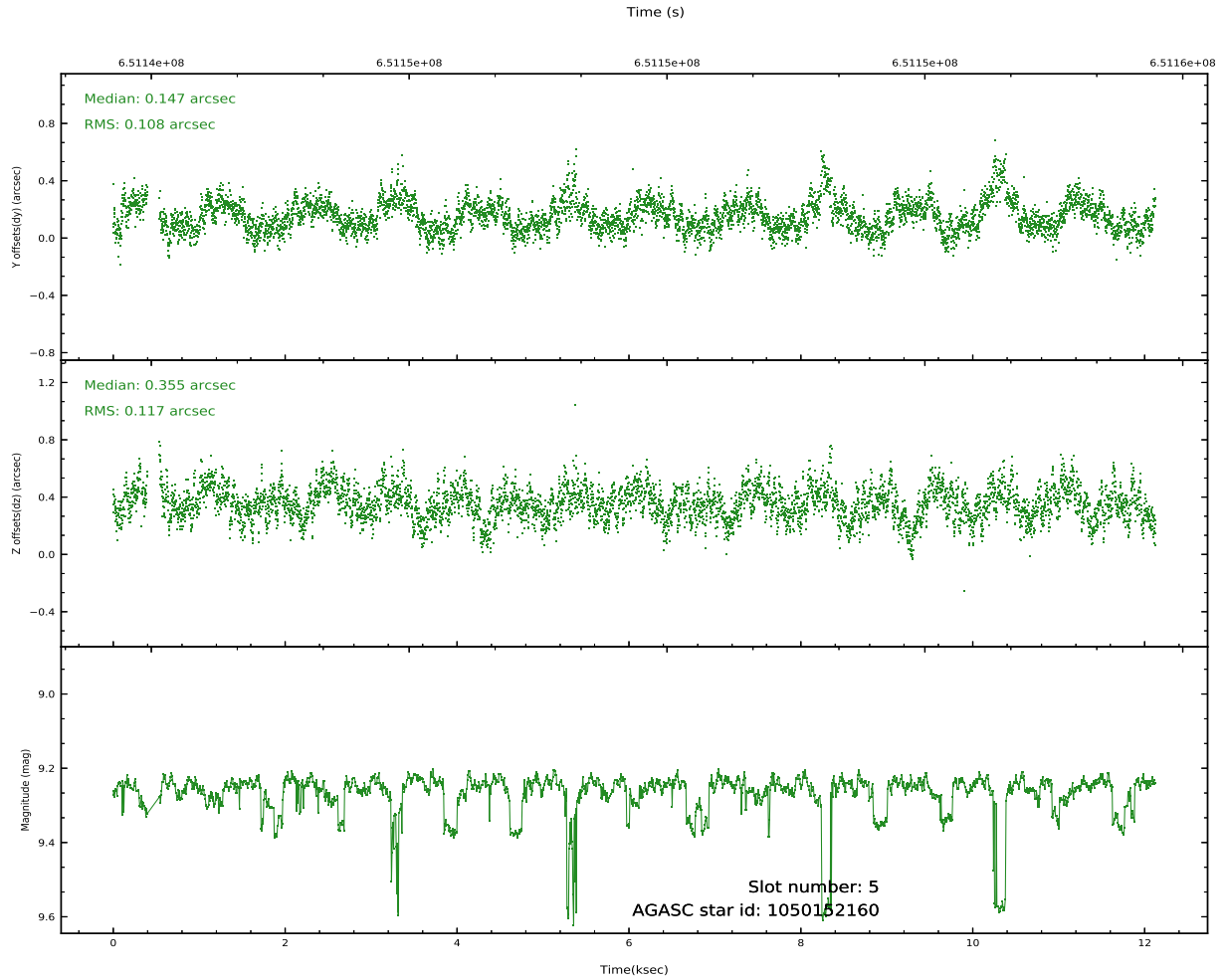
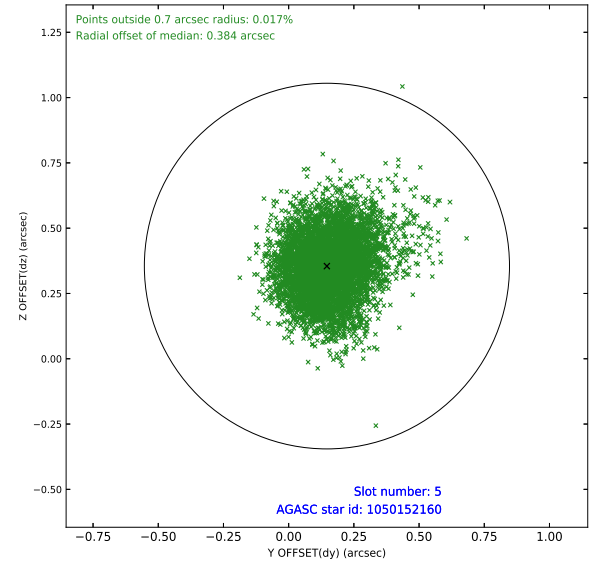
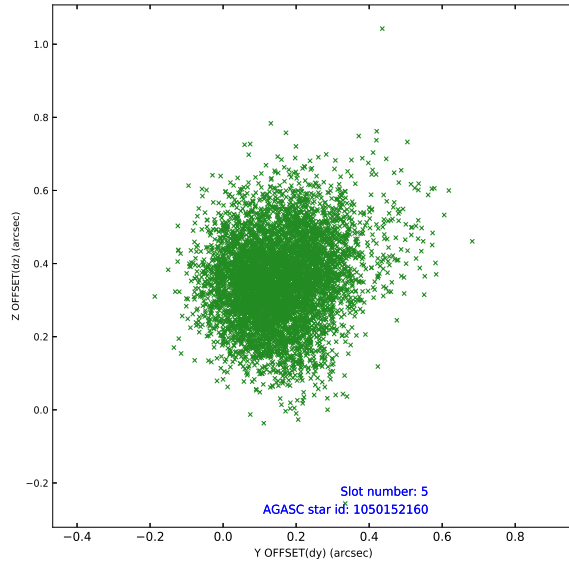
### 2.4.1 Slot 3



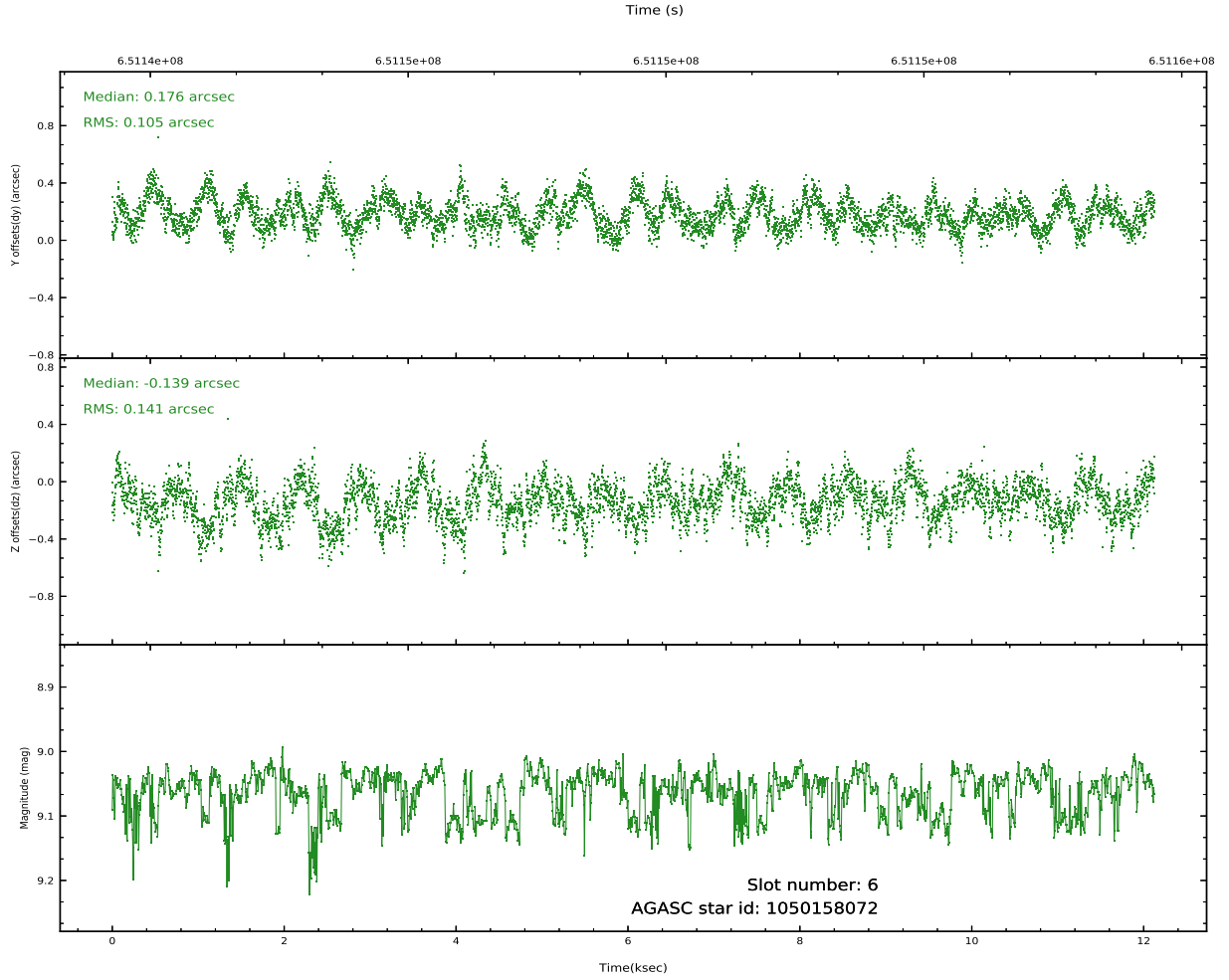
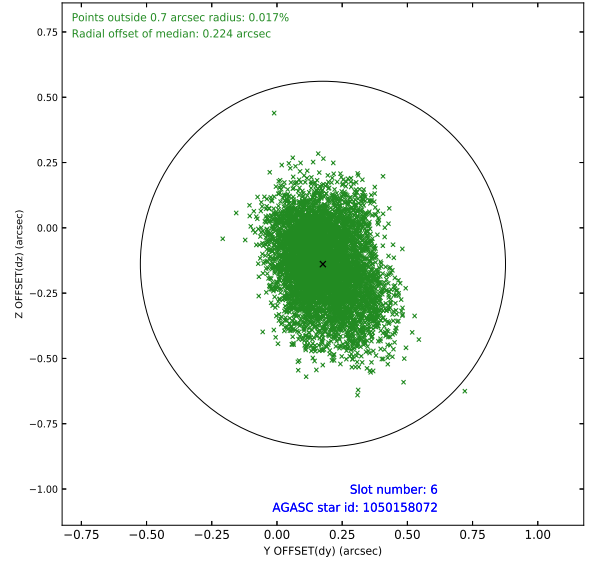
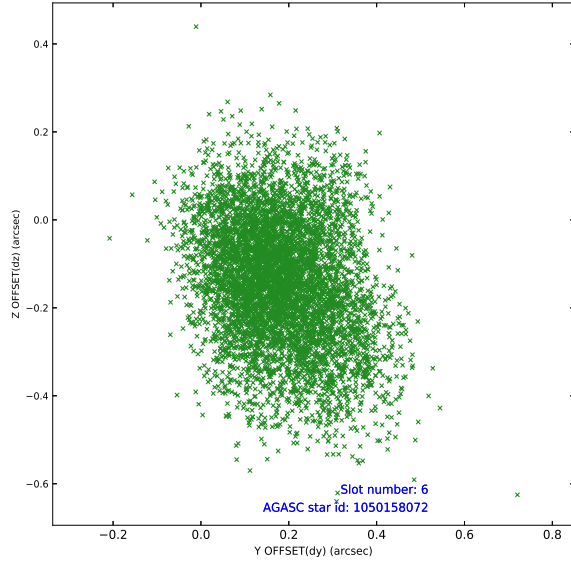
## 2.4.2 Slot 4



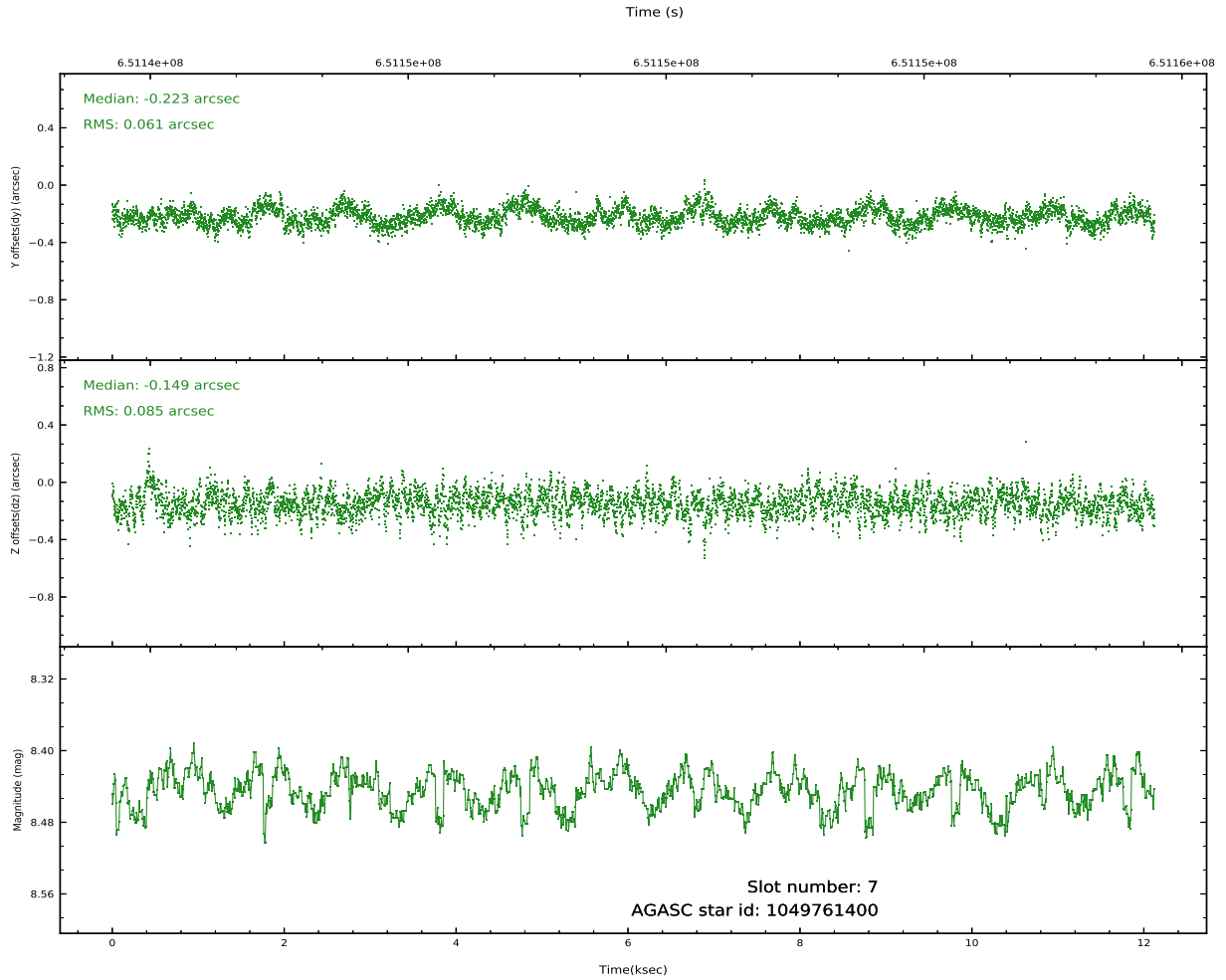
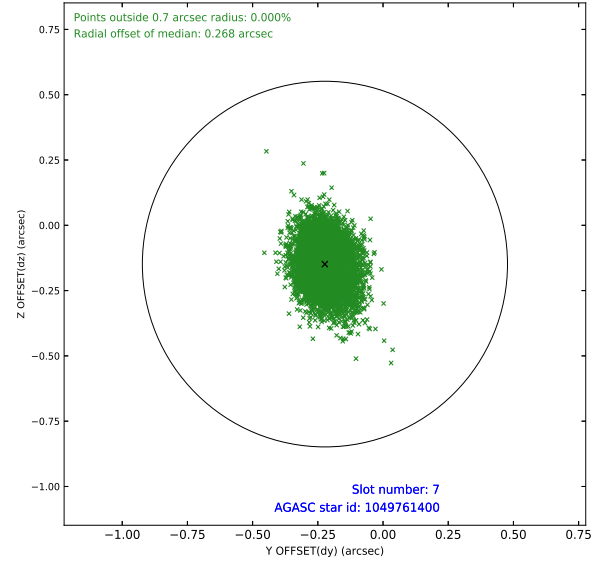
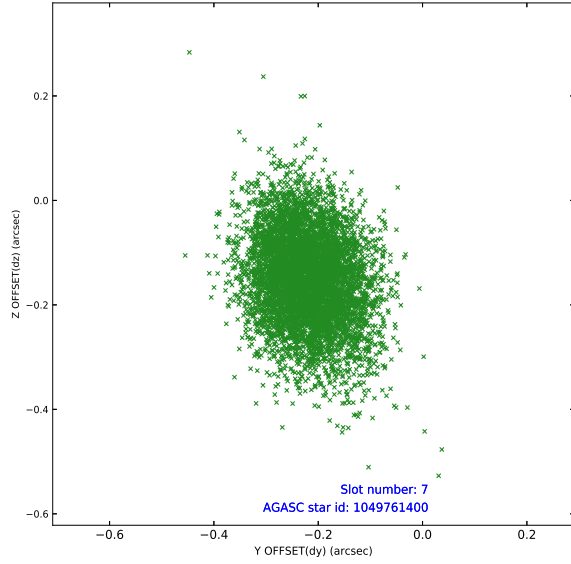
### 2.4.3 Slot 5



## 2.4.4 Slot 6

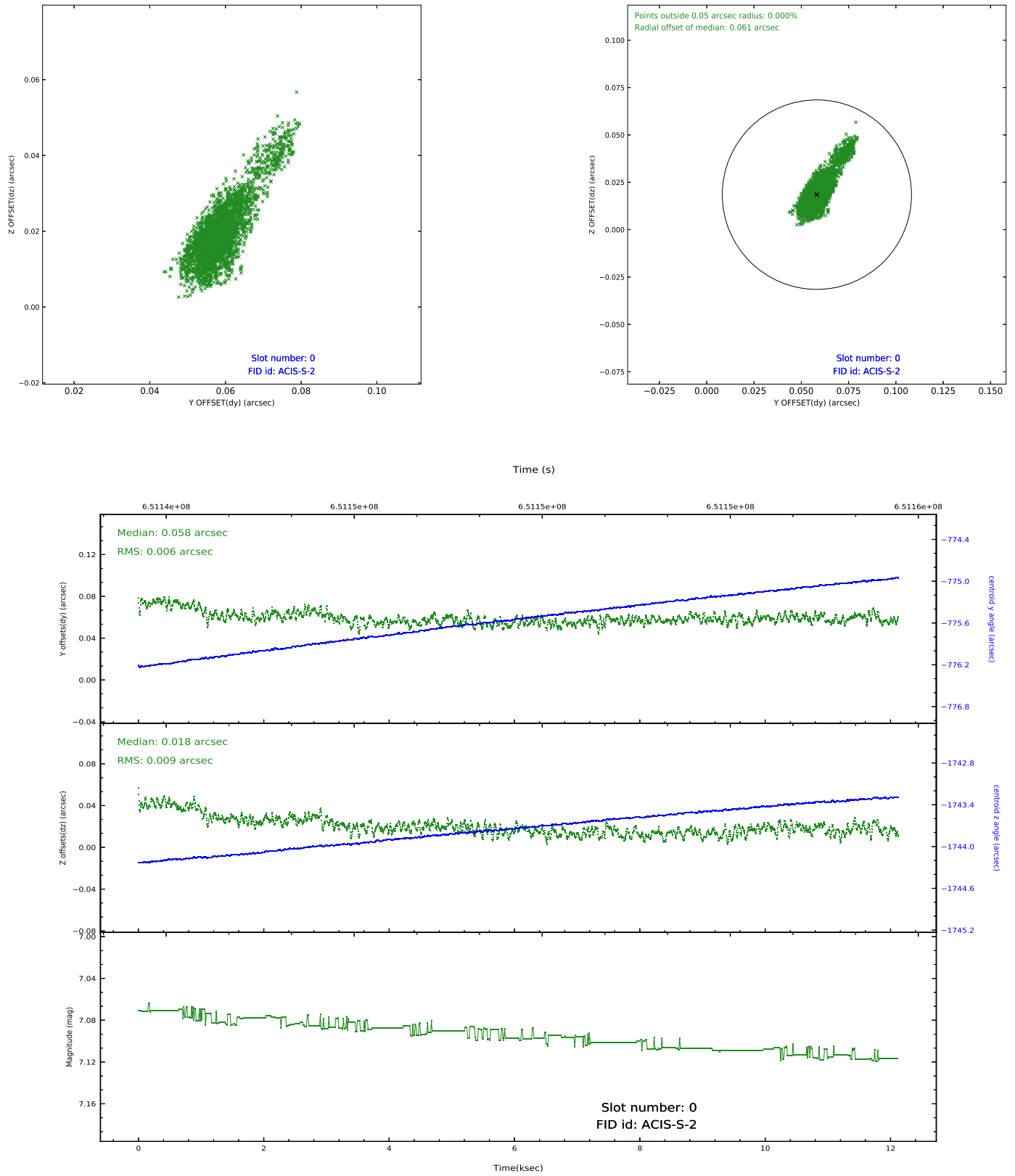


## 2.4.5 Slot 7

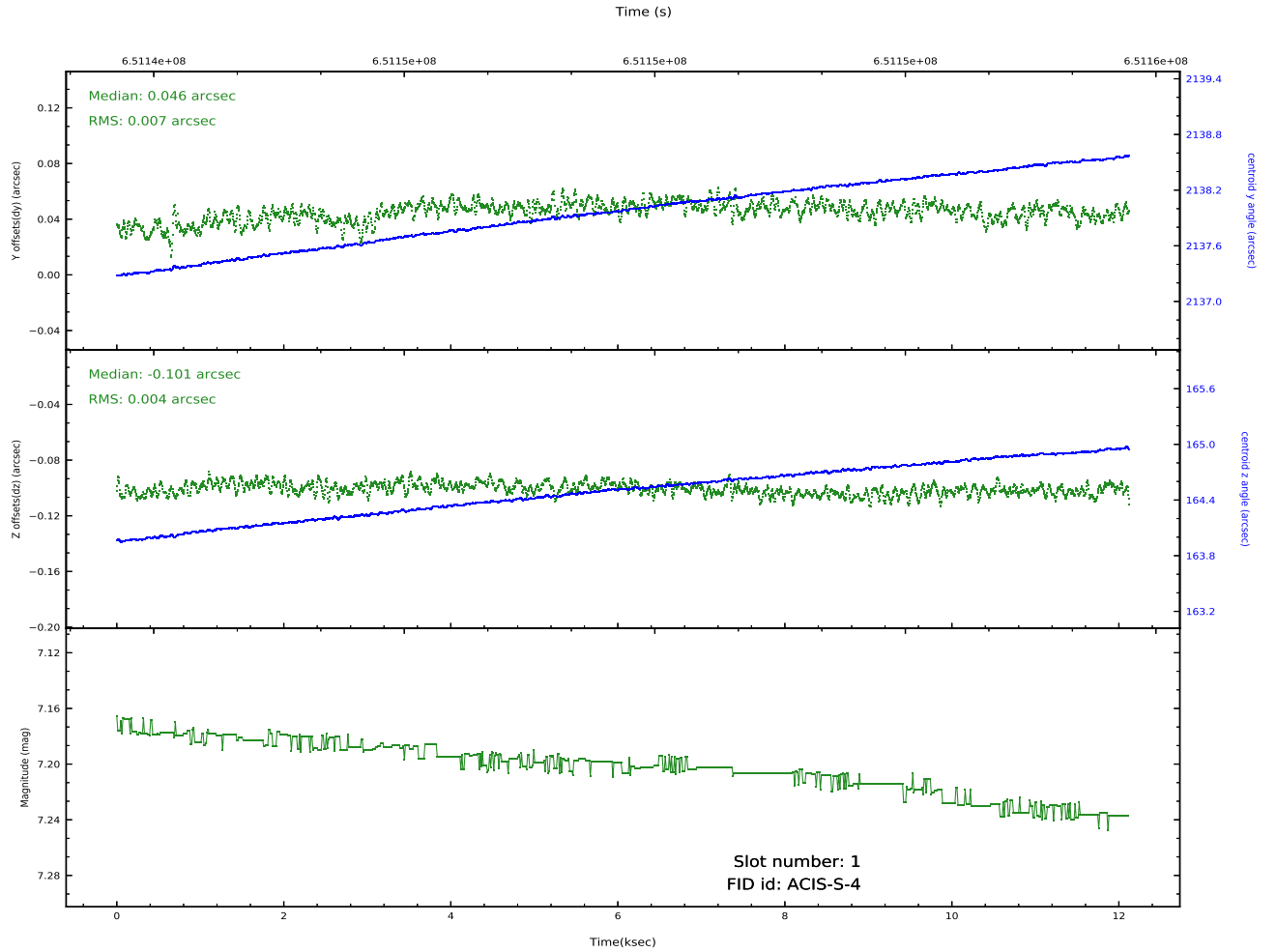
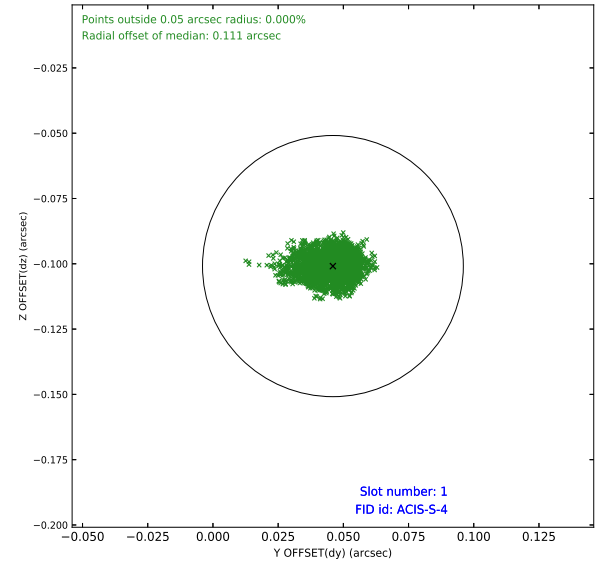
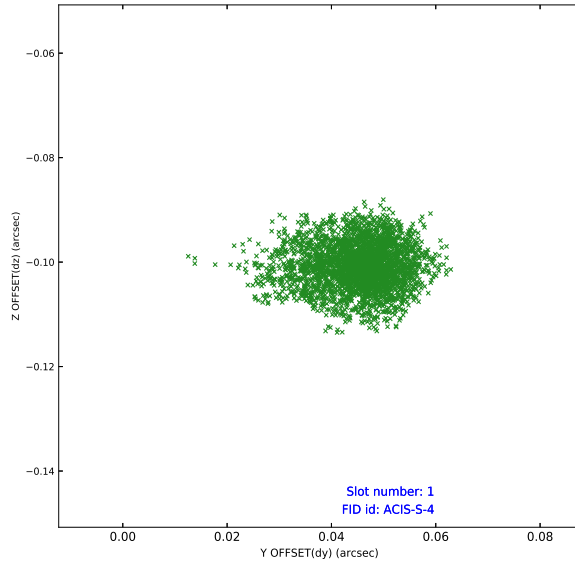


## 2.5 FID Slots

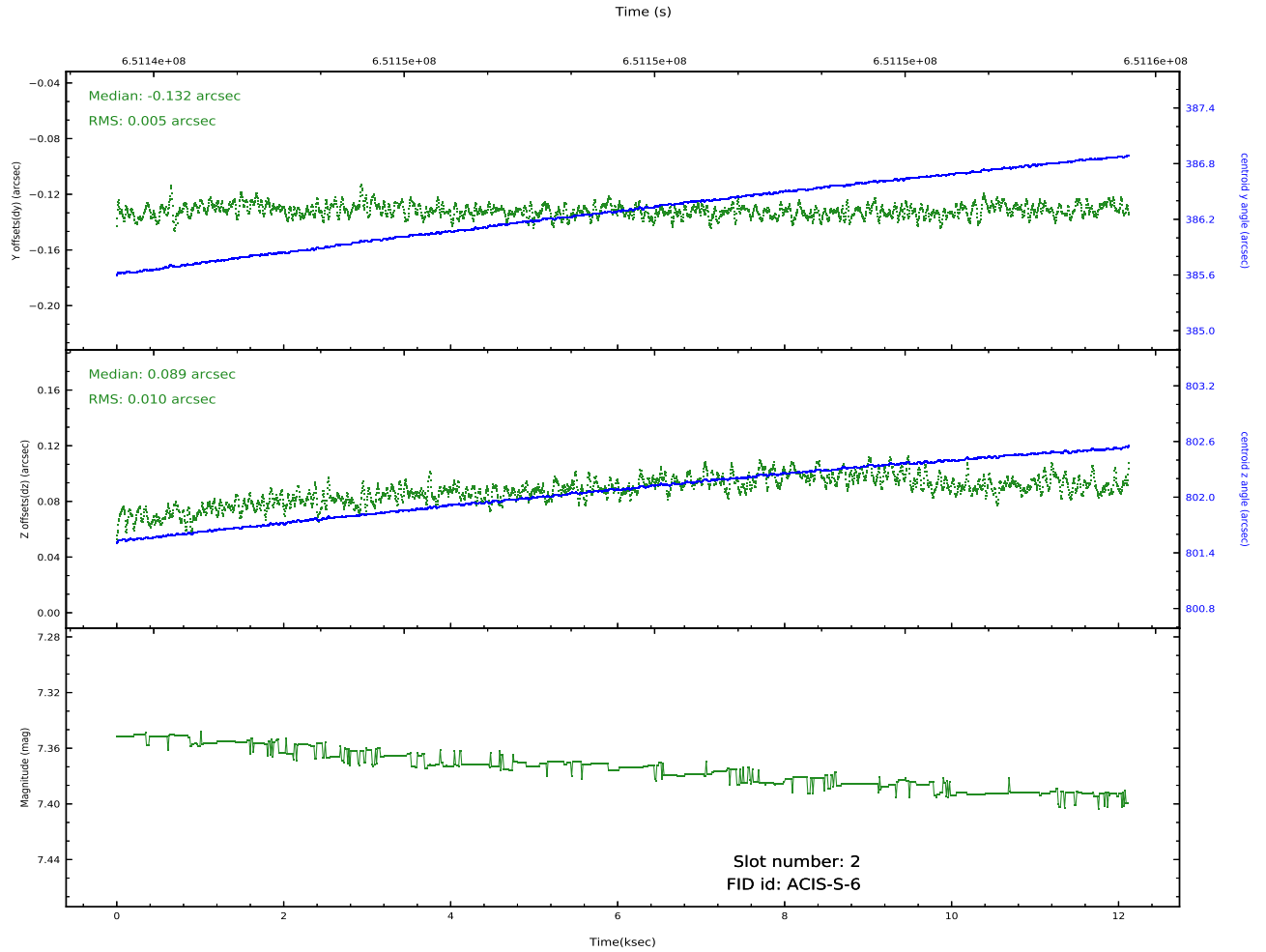
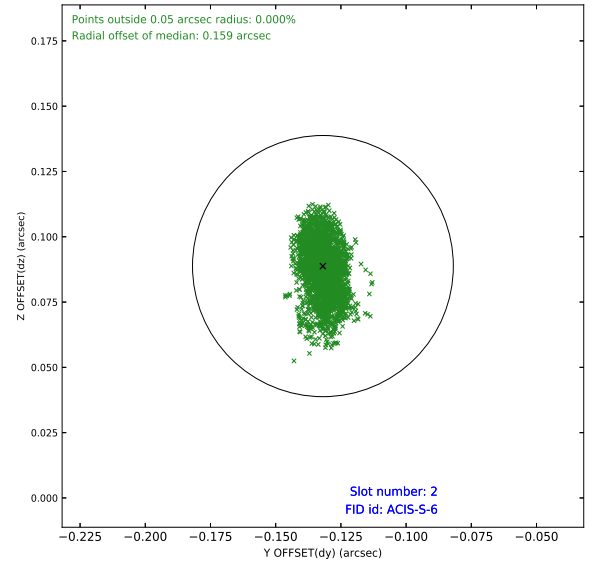
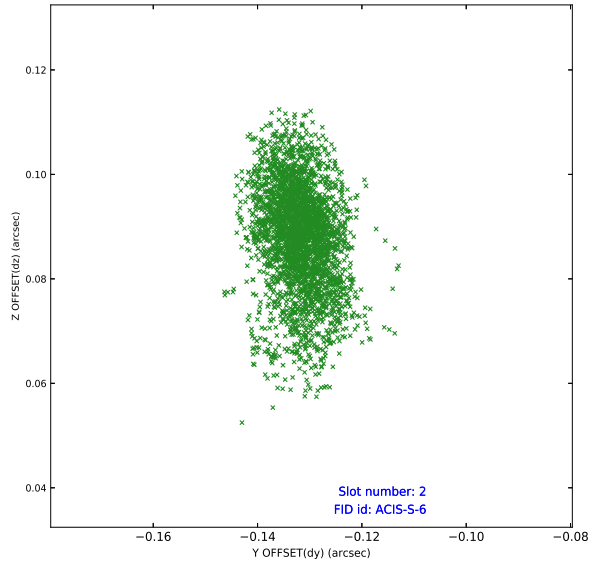
### 2.5.1 Slot 0



## 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)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.040374043703

### A.2 Comments