

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6258 - L2 Version 4  
Chandra X-Ray Center

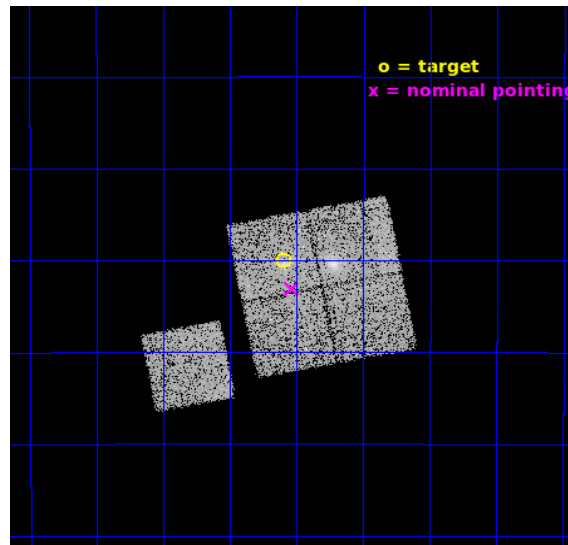
L2 Processing Date : Oct 7 2020

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# 1 Front

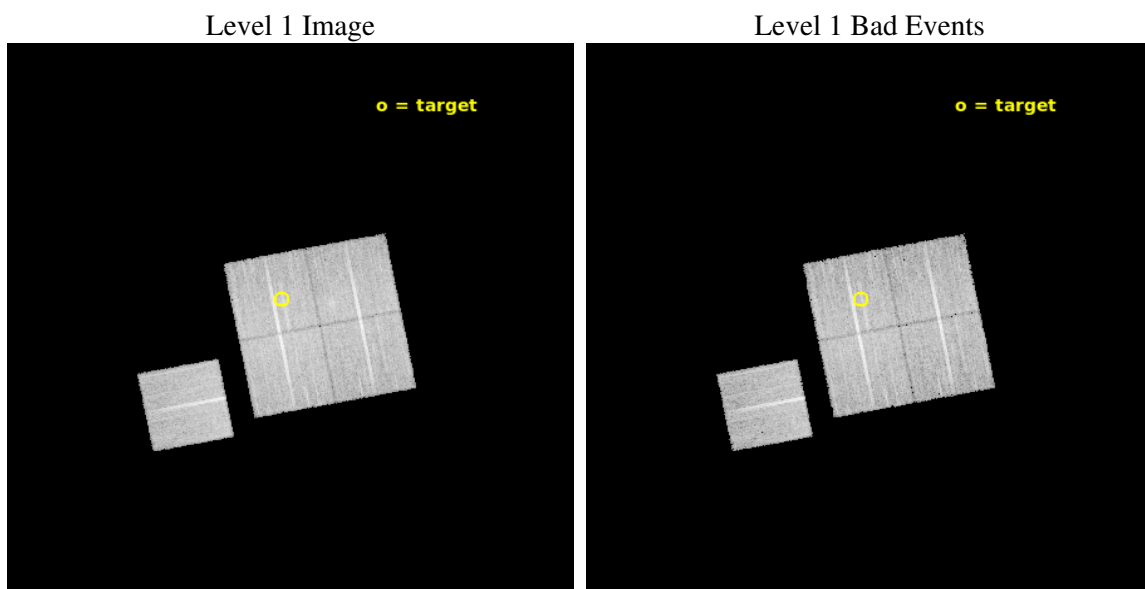
seq_num	800468	Sequence number
obs_id	6258	Observation id
title	DARK ENERGY WITH X-RAY CLUSTERS: CHANDRA OBSERVATIONS OF 41 HIGH-REDSHIFT CLUSTERS FROM THE 400 deg^2 ROSAT PSPC SURVEY	Proposal titl
observer	Dr Alexey Vikhlinin	Principal investigator
object	CIG J0328-2140	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	52.150417	Observer's specified target RA [deg]
dec_targ	-21.667778	Observer's specified target Dec [deg]
ra_nom	52.134056803601	Nominal RA [deg]
dec_nom	-21.718194360971	Nominal Dec [deg]
roll_nom	258.99727765289	Nominal Roll [deg]
revision	4	Processing version of data
ontime	13271.059014201	Sum of GTIs [s]
livetime	13097.662858169	Livetime [s]
ontime0	13274.199974447	Sum of GTIs [s]
ontime1	13271.059004188	Sum of GTIs [s]
ontime2	13274.199974447	Sum of GTIs [s]
ontime3	13271.059014201	Sum of GTIs [s]
ontime6	13274.199974447	Sum of GTIs [s]
l2events	40080	Number of level 2 events



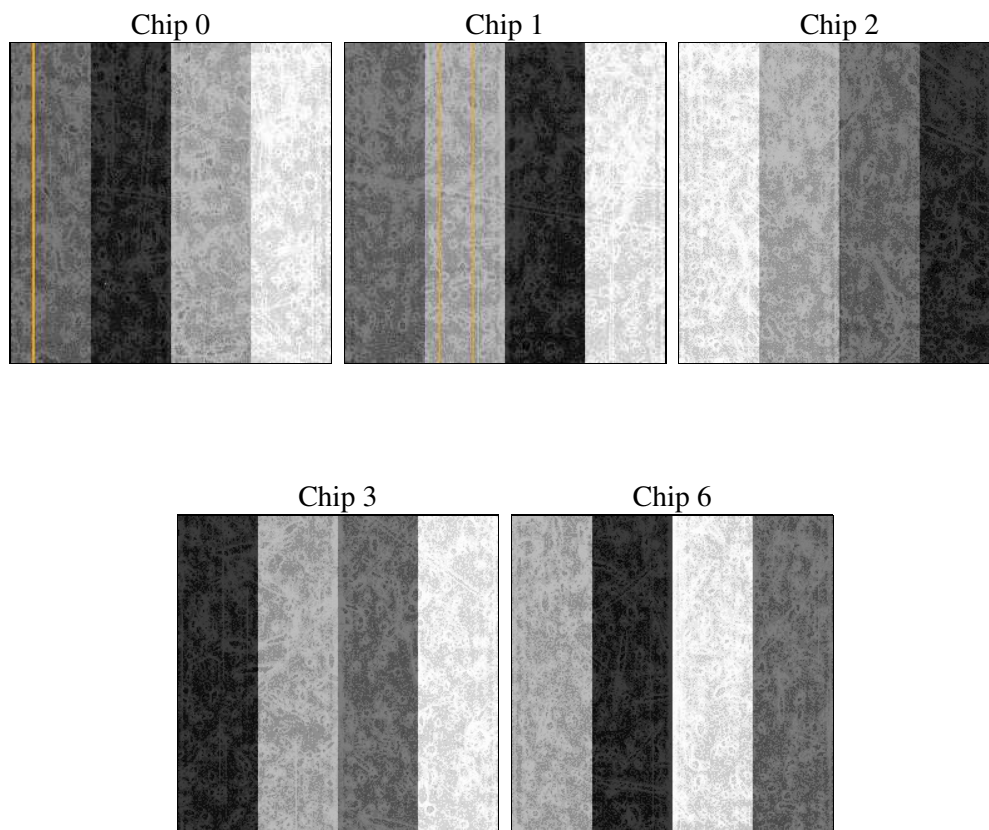
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13165.662000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	13271.059014201	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	13274.199974447	Sum of GTIs [s]
date	2020-10-07T10:39:52	Date and time of file creation	ontime1	13271.059004188	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	13274.199974447	Sum of GTIs [s]
			ontime3	13271.059014201	Sum of GTIs [s]
			ontime6	13274.199974447	Sum of GTIs [s]
			l1events	451498	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	84800	86809	96144	93793	89952
rejected events	75846	75359	87119	84506	80671
rejected %	89%	86%	90%	90%	89%

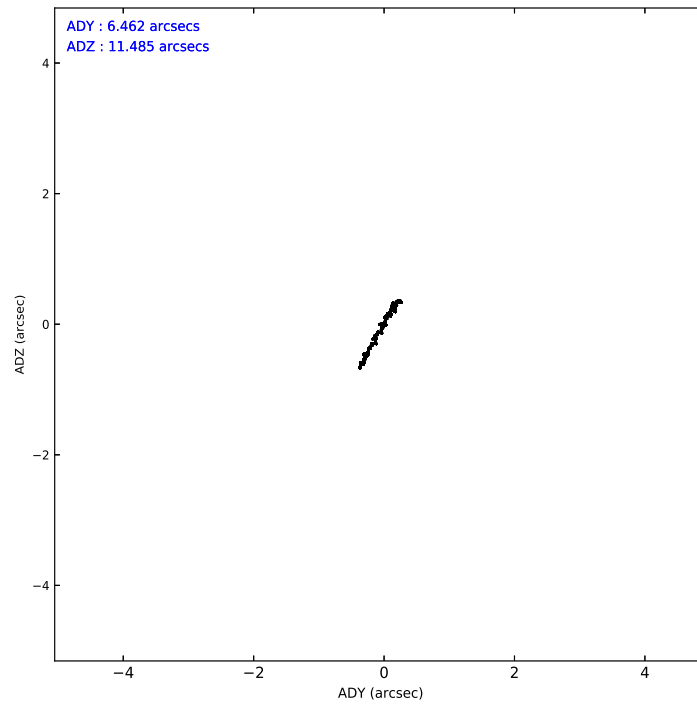
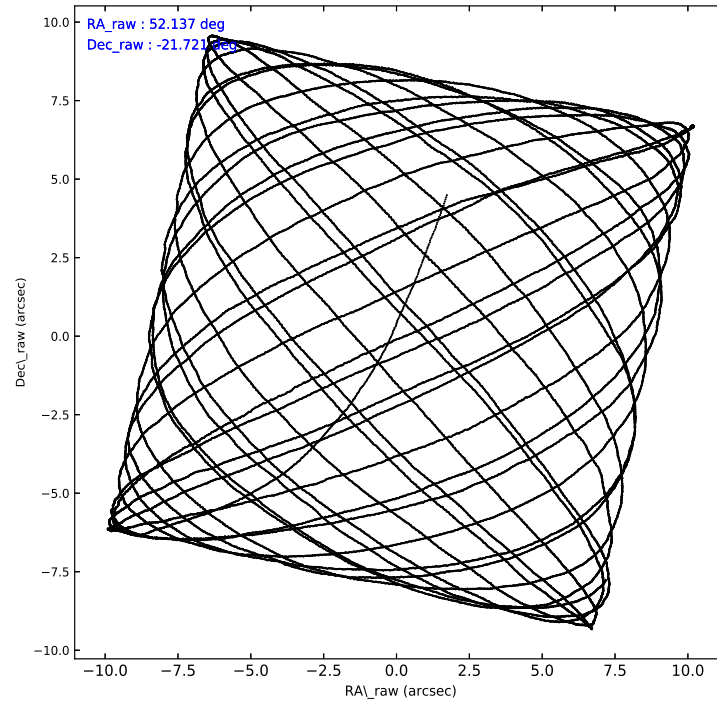
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3589	5283	3831	4155	3776
	4%	6%	3%	4%	4%
grade 1 events	56	41	39	61	45
	0%	0%	0%	0%	0%
grade 2 events	2214	2493	2224	2081	2011
	2%	2%	2%	2%	2%
grade 3 events	1096	1182	991	1021	1130
	1%	1%	1%	1%	1%
grade 4 events	986	1179	1020	1076	1119
	1%	1%	1%	1%	1%
grade 5 events	3177	3454	2949	3666	3604
	3%	3%	3%	3%	4%
grade 6 events	1810	2204	1769	1717	2045
	2%	2%	1%	1%	2%
grade 7 events	71872	70973	83321	80016	76222
	84%	81%	86%	85%	84%

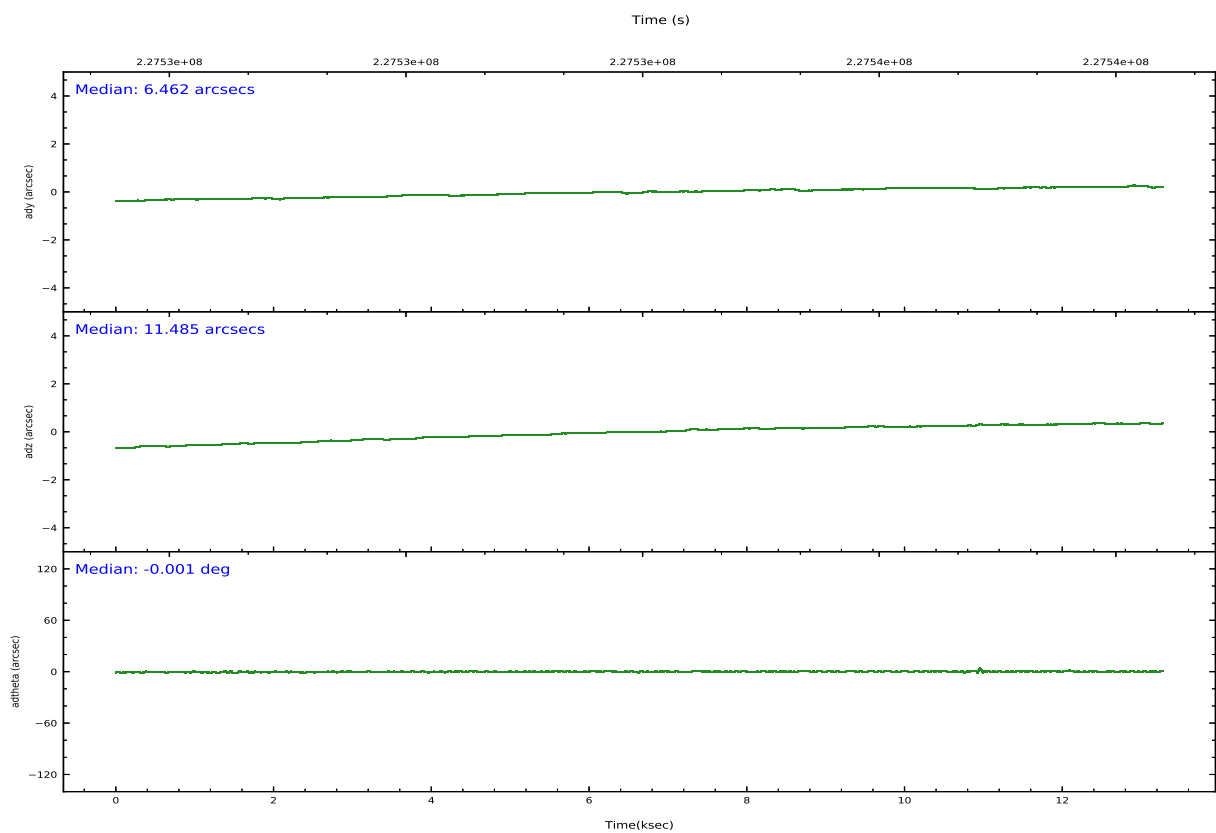
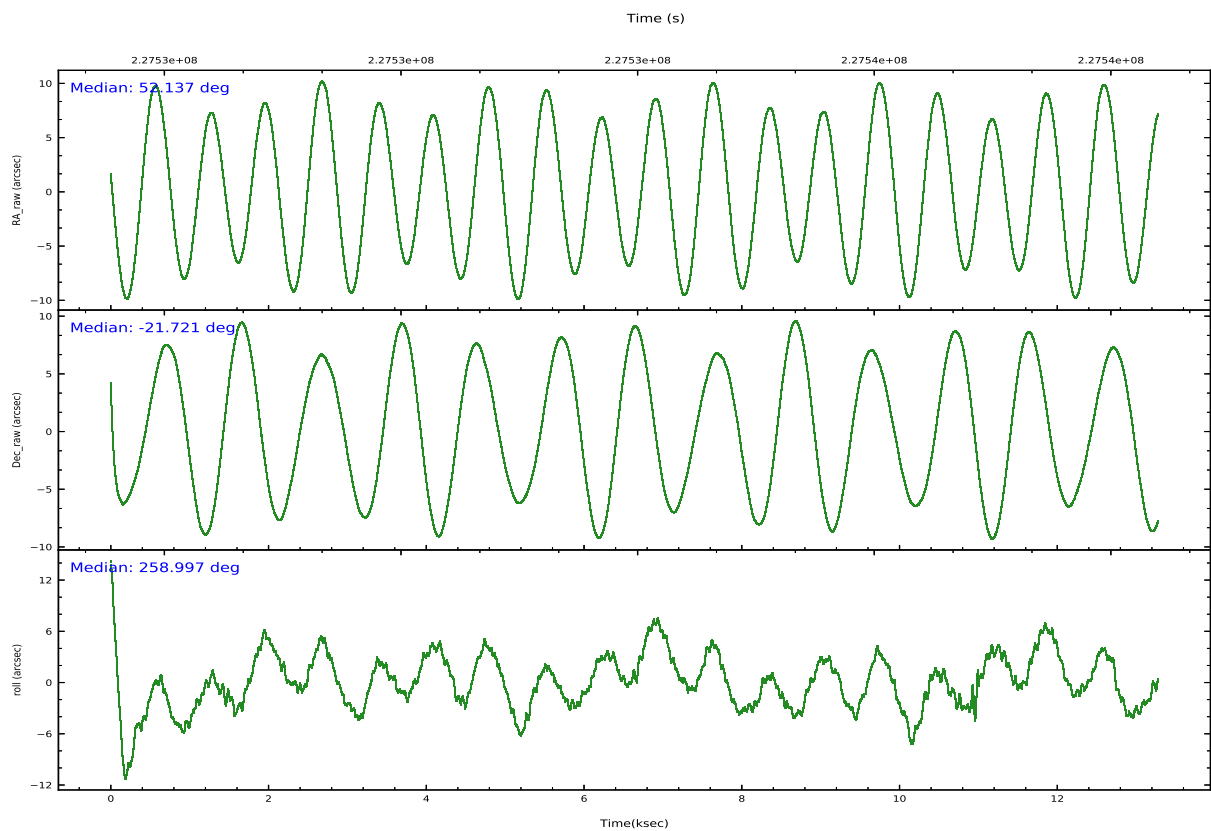


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	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	52.127464	52.134056803601	Subarray requested	NONE	NONE
[deg] Pointing Dec	-21.694819	-21.718194360971	Alternating exposures requested	N	N
[deg] Pointing Roll	258.791511	258.99727765289	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-225.840463	-225.8433433320239			
[mm] SIM translation stage offset	-7.752	-7.749109670905796			
[s] Observation start time (MET)	227526433.184000	227524876.87291			
Observation start date	2005-03-18T09:46:09	2005-03-18T09:21:16			
[s] Observation end time (MET)	227539599.184000	227539831.62359			
Observation end date	2005-03-18T13:25:35	2005-03-18T13:30:31			
Read mode	TIMED	TIMED			

## 2.3 Aspect



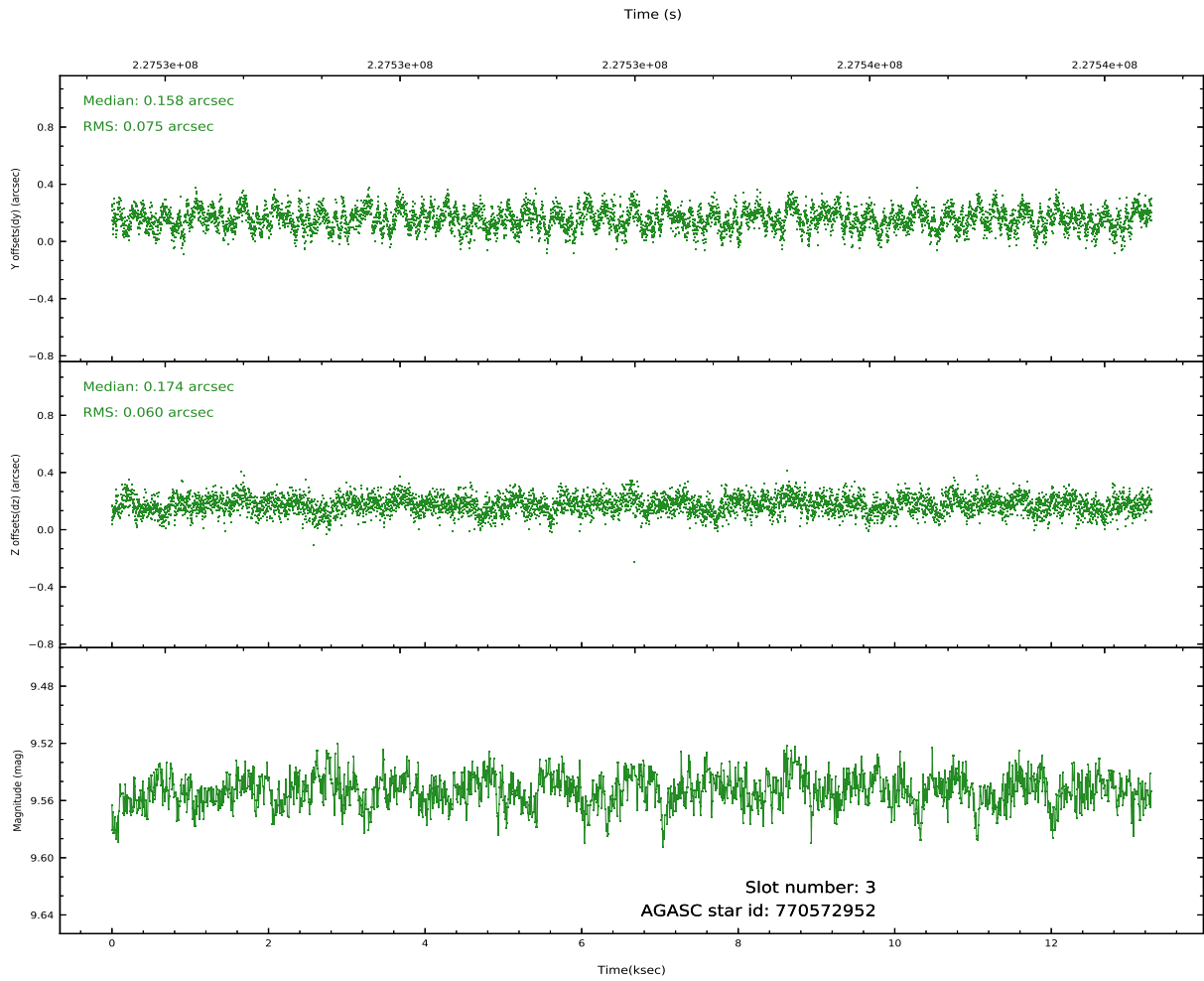
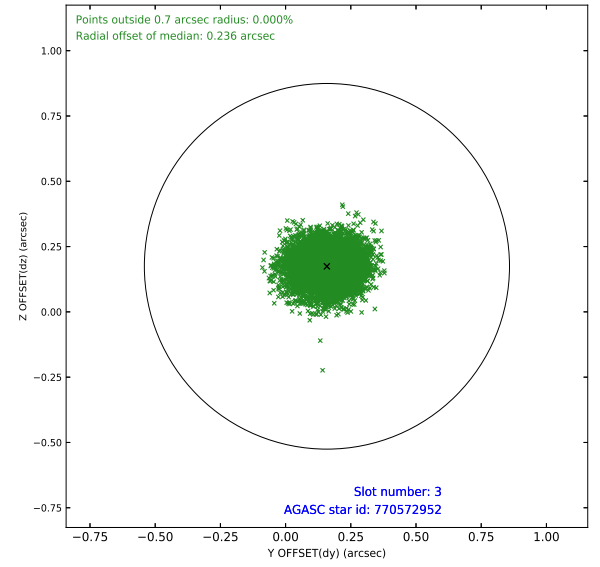
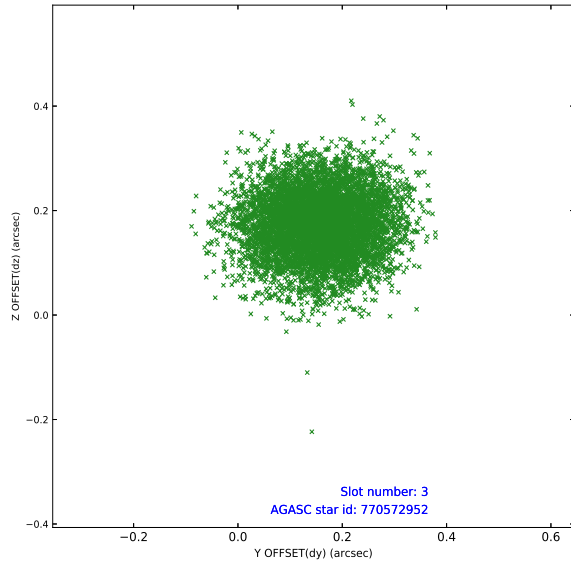


Slot Statistics

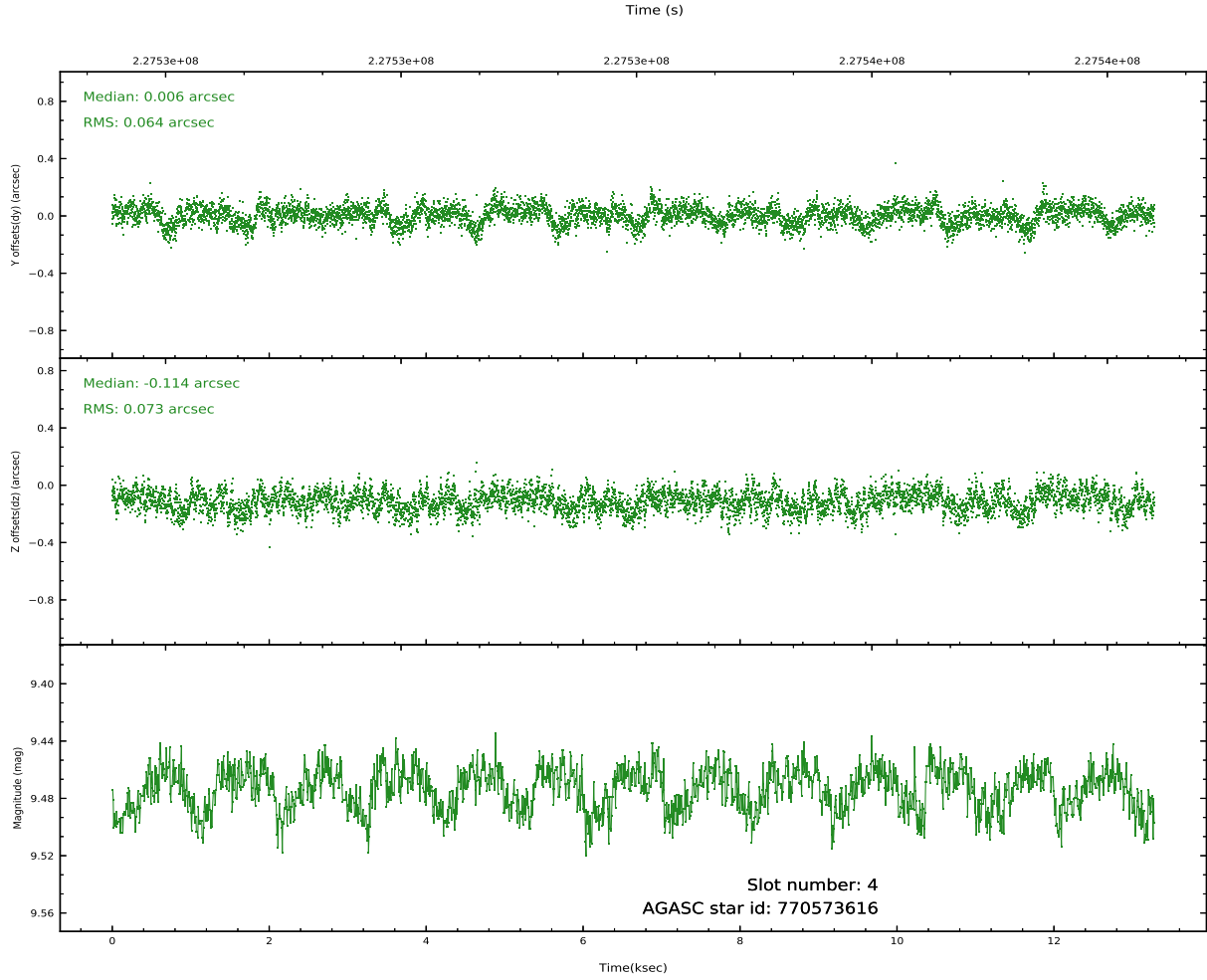
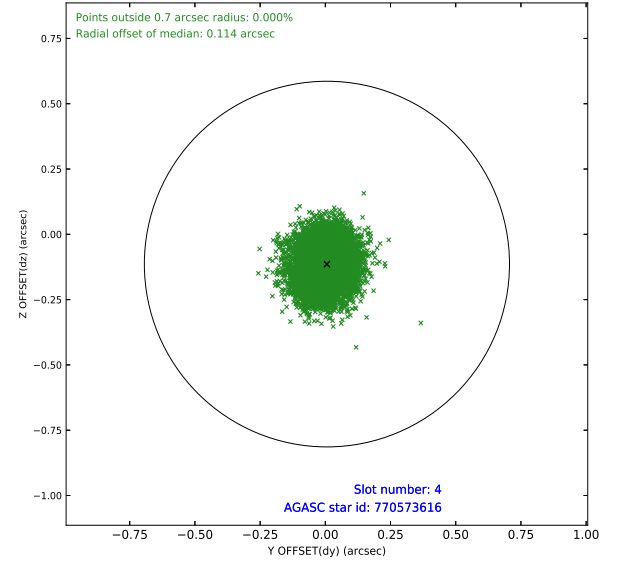
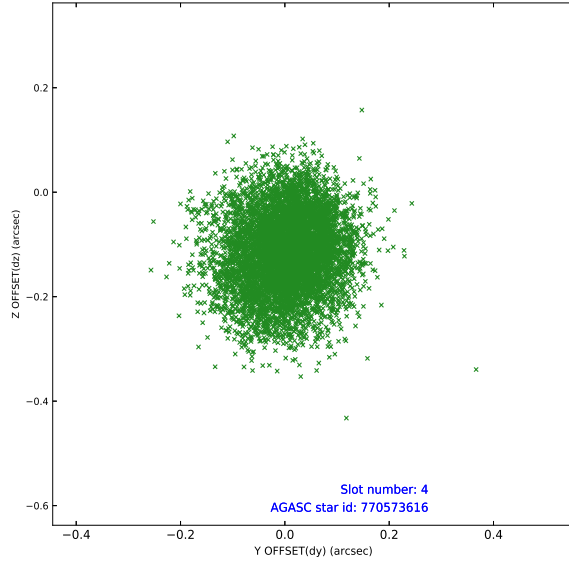
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.23	3239	1.000	0.137	-0.134	0.008	0.013	0.000000	0.000000	933.25	-994
1	FID		ACIS-I-5	7.22	3239	1.000	-0.267	0.110	0.010	0.016	0.000000	0.000000	-1815.04	903
2	FID		ACIS-I-6	7.25	3239	1.000	0.038	0.094	0.014	0.022	0.000000	0.000000	398.33	1548
3	GUIDE	used	770572952	9.55	6476	1.000	0.158	0.174	0.104	0.164	52.678188	-22.321624	1860.40	2239
4	GUIDE	used	770573616	9.47	6465	1.000	0.006	-0.114	0.105	0.166	51.694921	-21.667566	187.68	-1437
5	GUIDE	used	770575272	8.84	6475	1.000	0.049	-0.012	0.091	0.153	51.531858	-22.160854	2035.90	-1620
6	GUIDE	used	770575376	8.46	6476	1.000	-0.020	-0.037	0.066	0.104	51.490218	-22.063612	1719.99	-1825
7	GUIDE	used	770581640	7.84	6477	1.000	-0.188	-0.006	0.058	0.092	52.322400	-21.371182	-1269.20	414

## 2.4 Star Slots

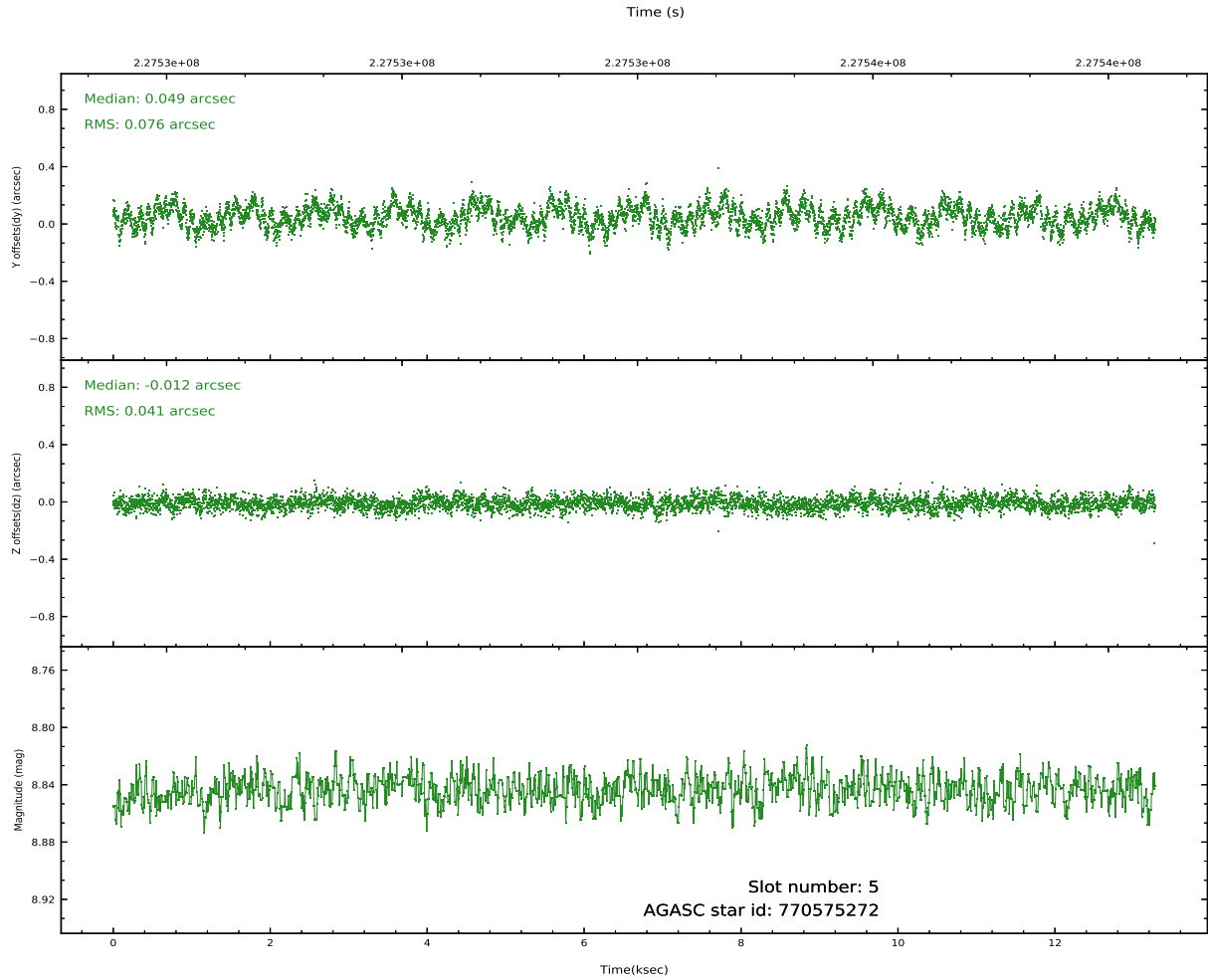
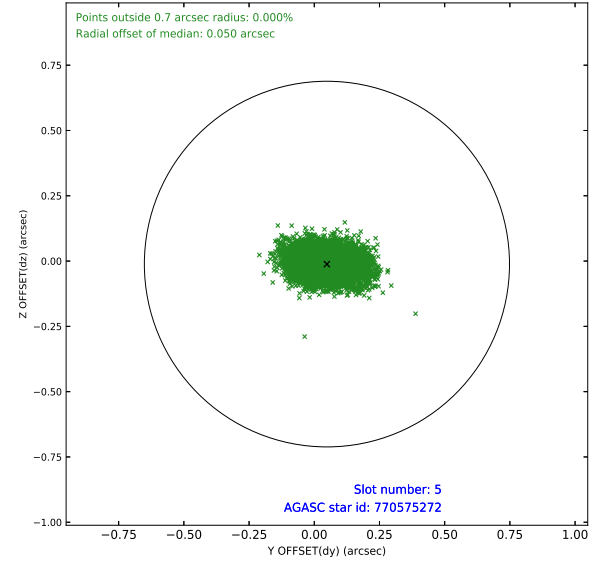
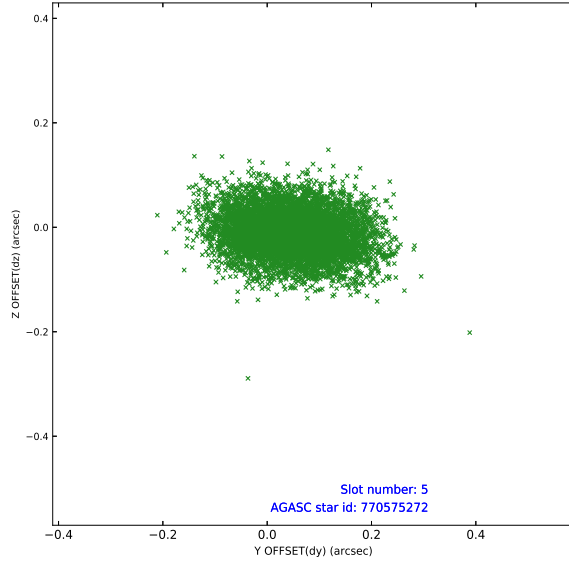
### 2.4.1 Slot 3



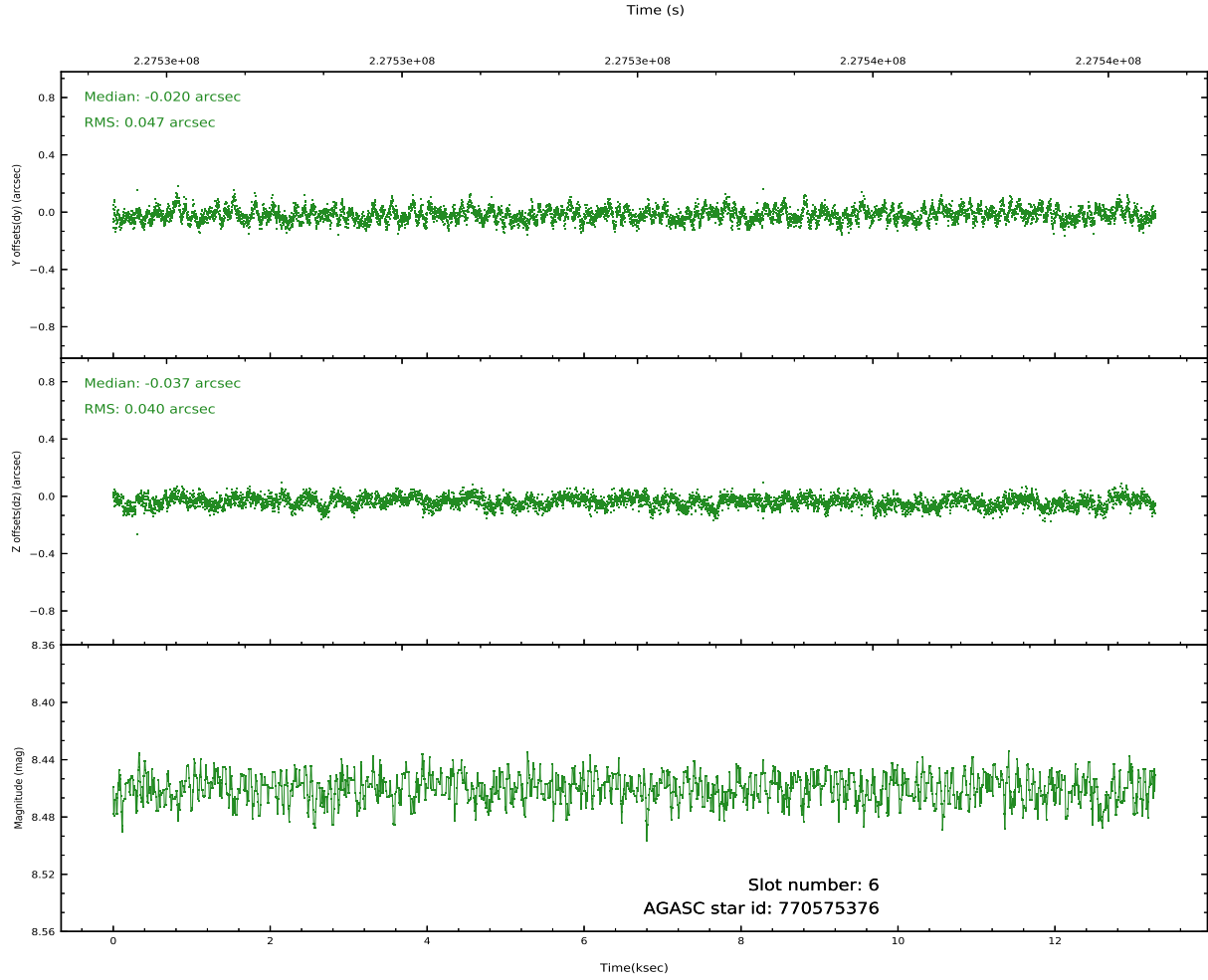
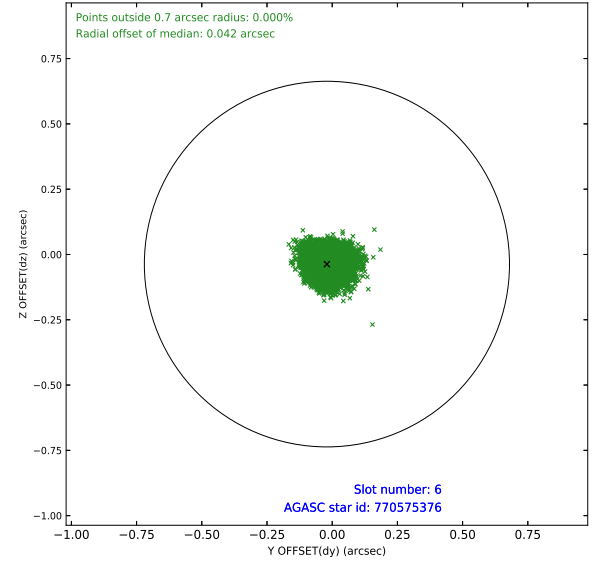
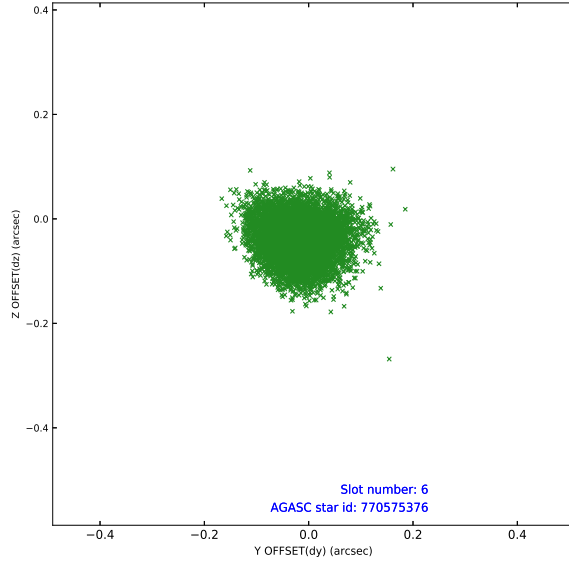
## 2.4.2 Slot 4



### 2.4.3 Slot 5

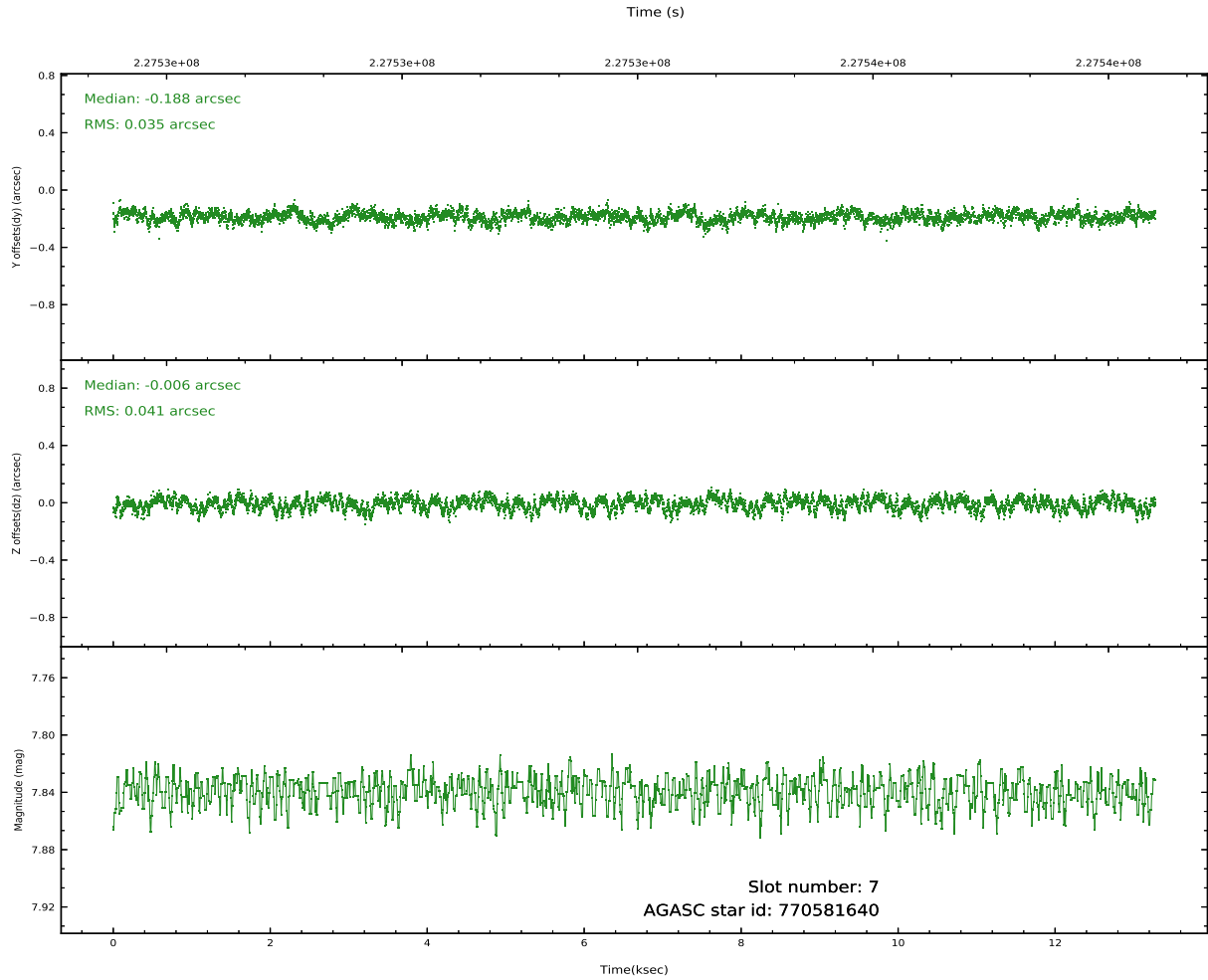
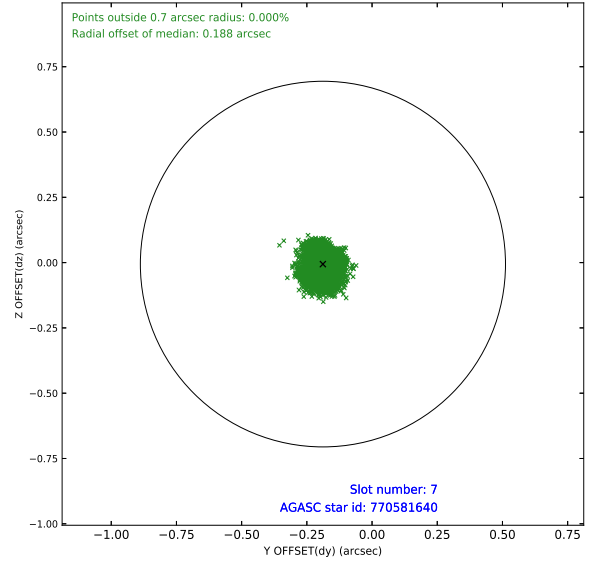
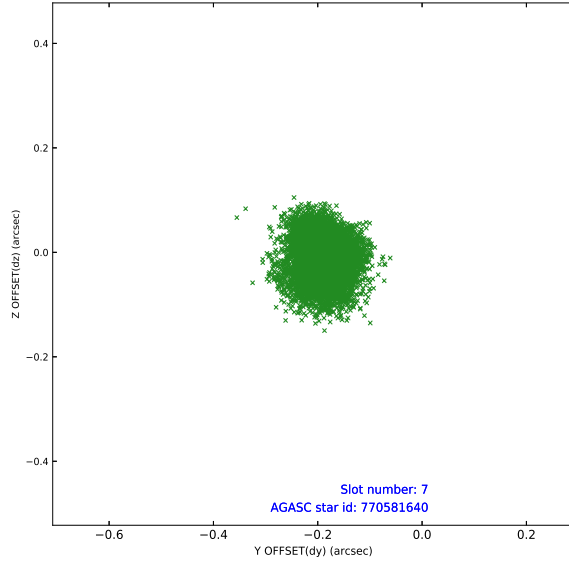


## 2.4.4 Slot 6



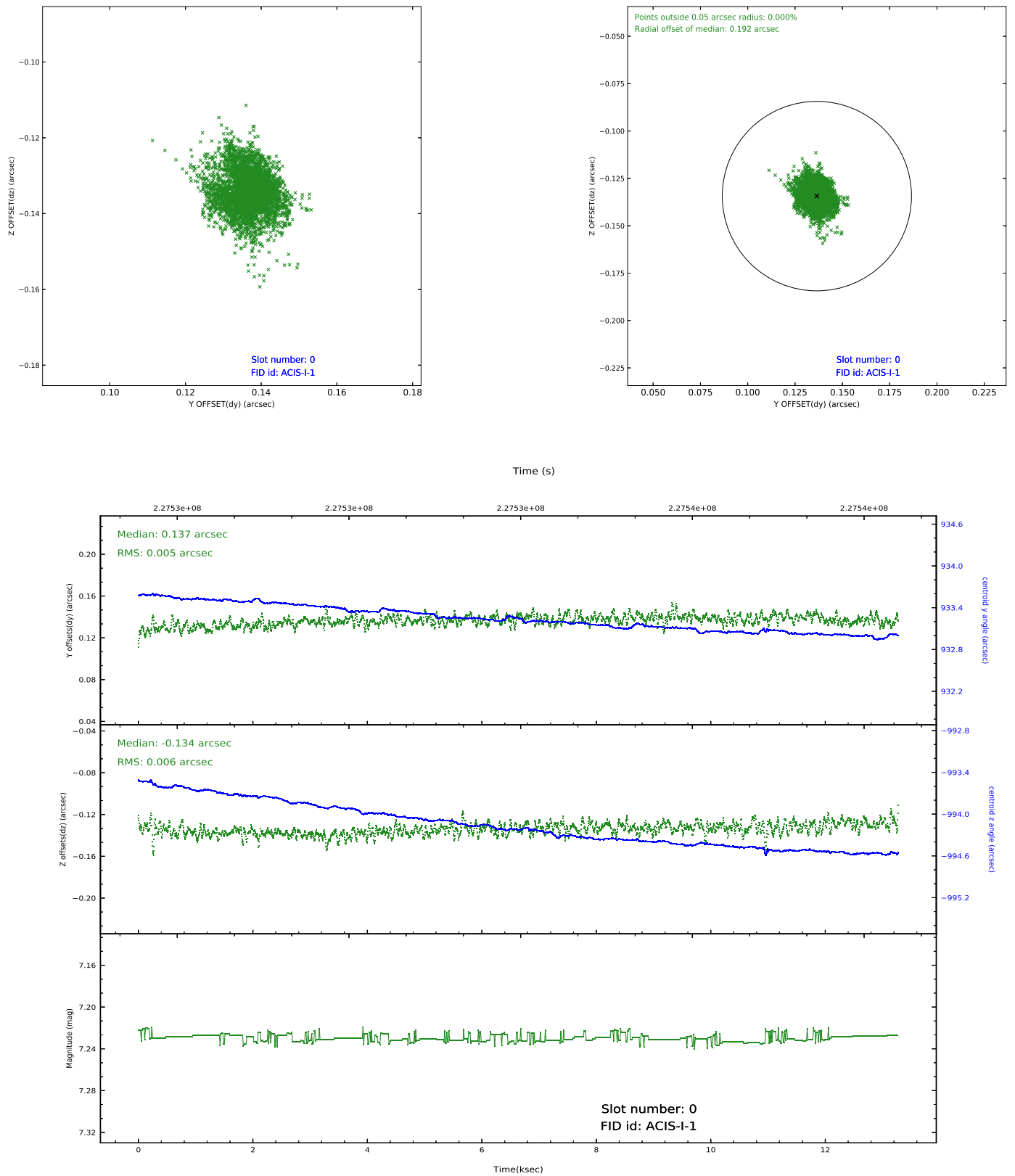


## 2.4.5 Slot 7

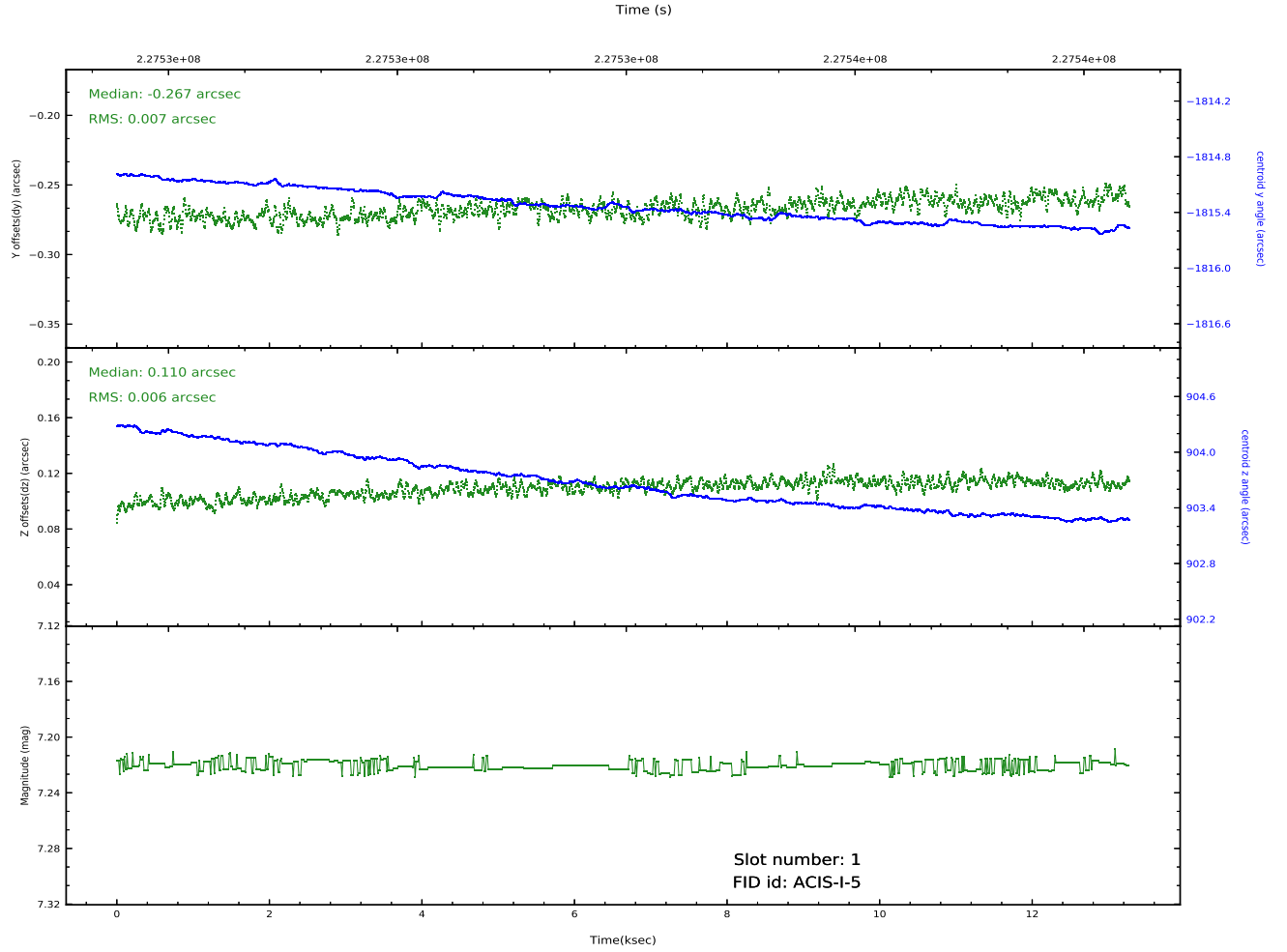
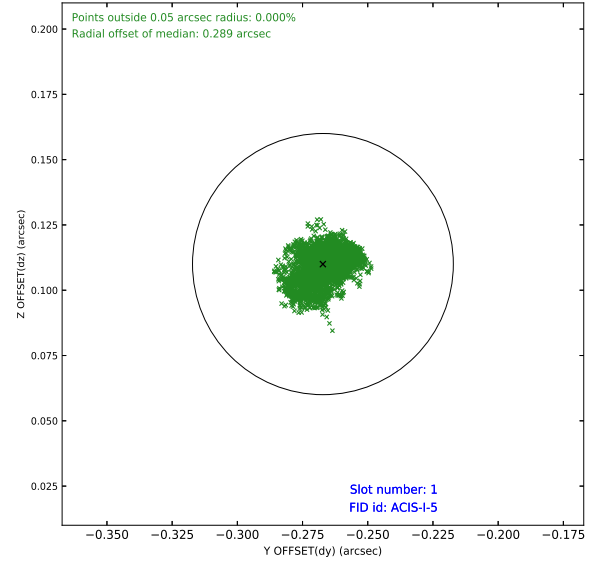
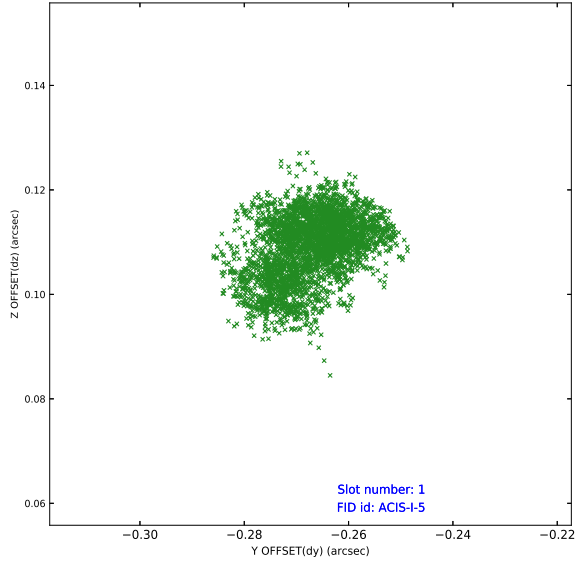


## 2.5 FID Slots

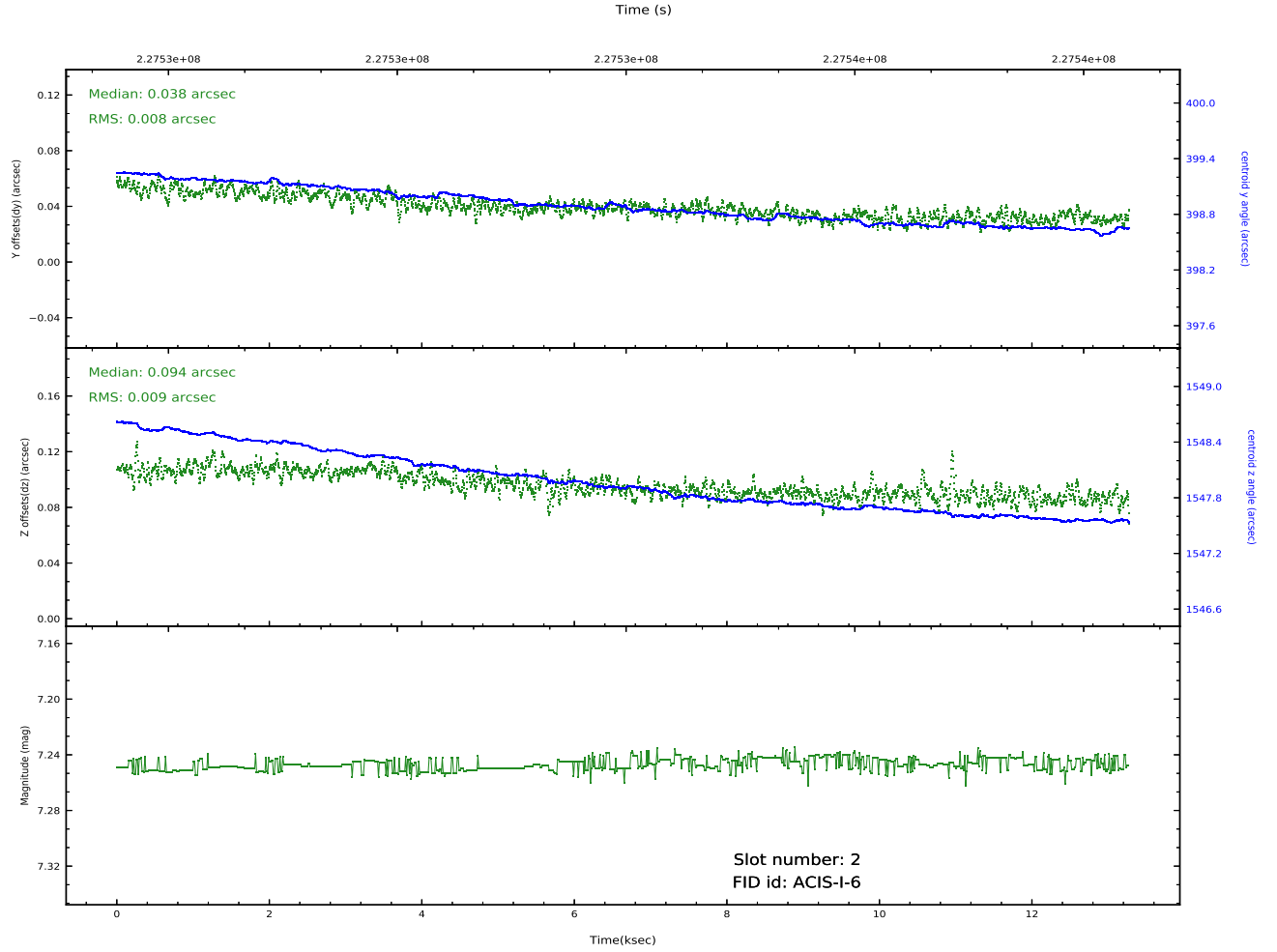
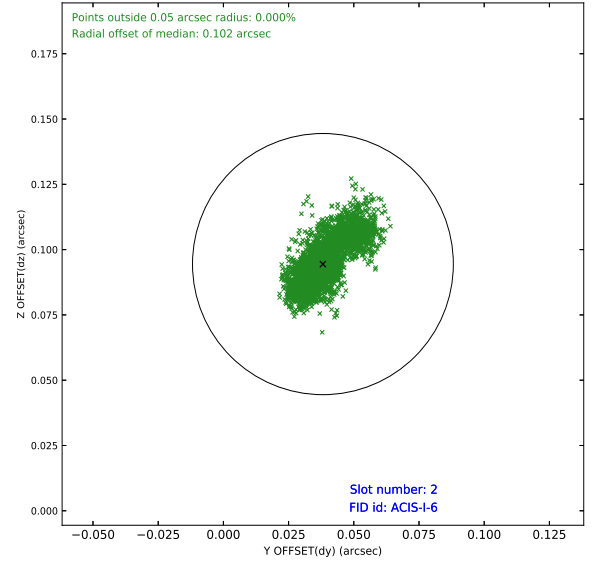
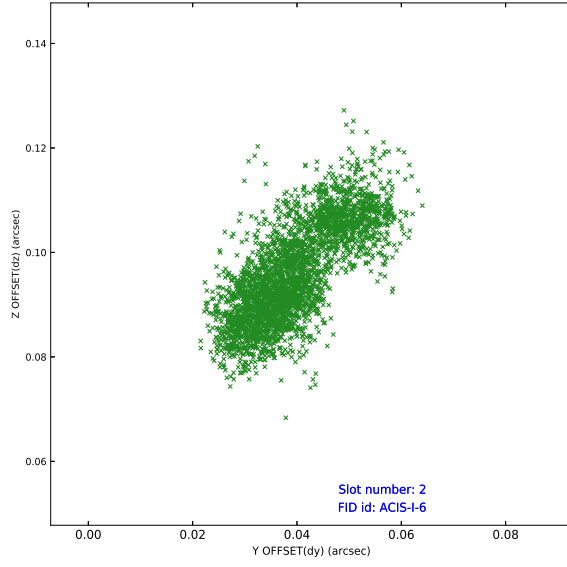
### 2.5.1 Slot 0



## 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)	2020.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.27105

### A.2 Comments