

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5833 - L2 Version 4  
Chandra X-Ray Center

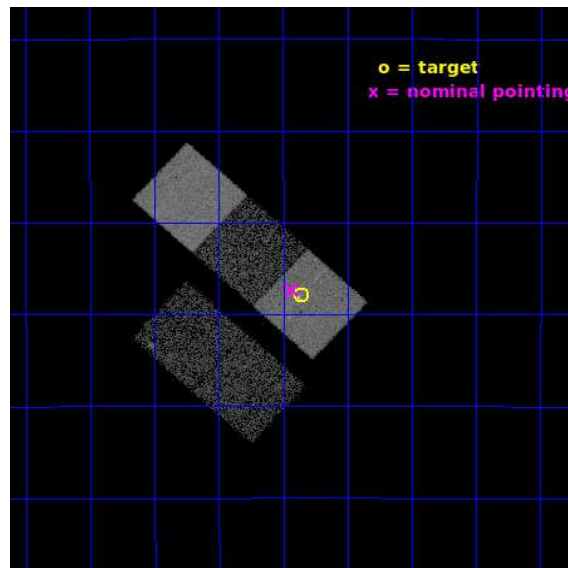
L2 Processing Date : Oct 6 2020

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# 1 Front

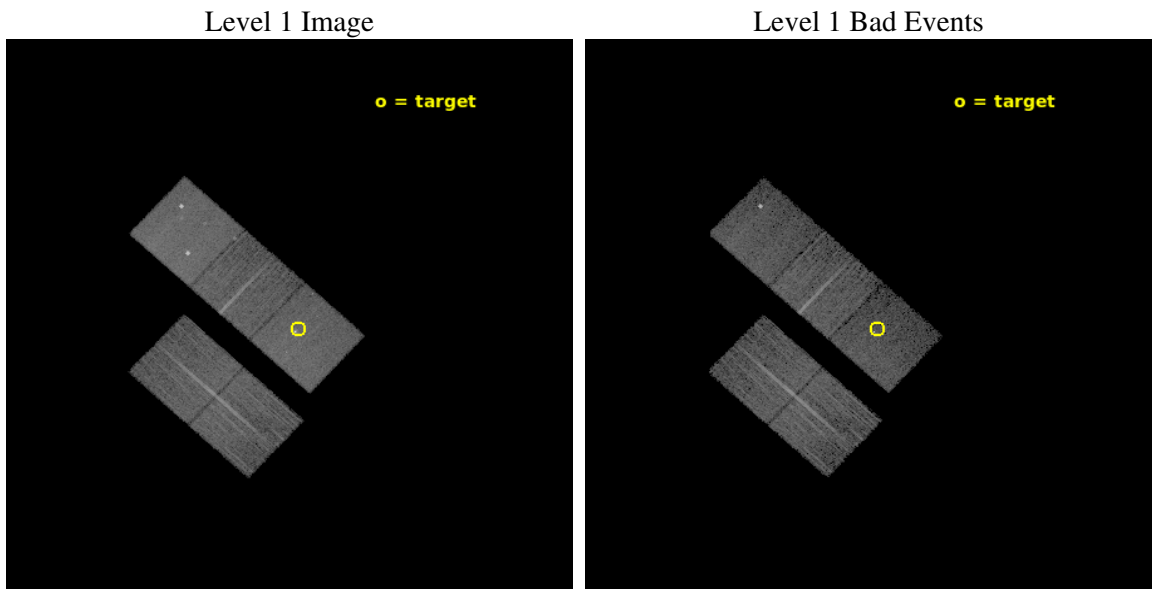
seq_num	800542	Sequence number
obs_id	5833	Observation id
title	X-ray emission from clusters of galaxies from the REFLEX sample.	P
observer	Dr. Peter Predehl	Principal investigator
object	ACO 3507	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	183.339167	Observer's specified target RA [deg]
dec_targ	-26.2975	Observer's specified target Dec [deg]
ra_nom	183.35795551355	Nominal RA [deg]
dec_nom	-26.288442902771	Nominal Dec [deg]
roll_nom	42.632269655992	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10037.79998067	Sum of GTIs [s]
livetime	9906.6487342019	Livetime [s]
ontime2	10037.79998067	Sum of GTIs [s]
ontime3	10037.79998067	Sum of GTIs [s]
ontime5	10037.79998067	Sum of GTIs [s]
ontime6	10037.79998067	Sum of GTIs [s]
ontime7	10037.79998067	Sum of GTIs [s]
l2events	86487	Number of level 2 events



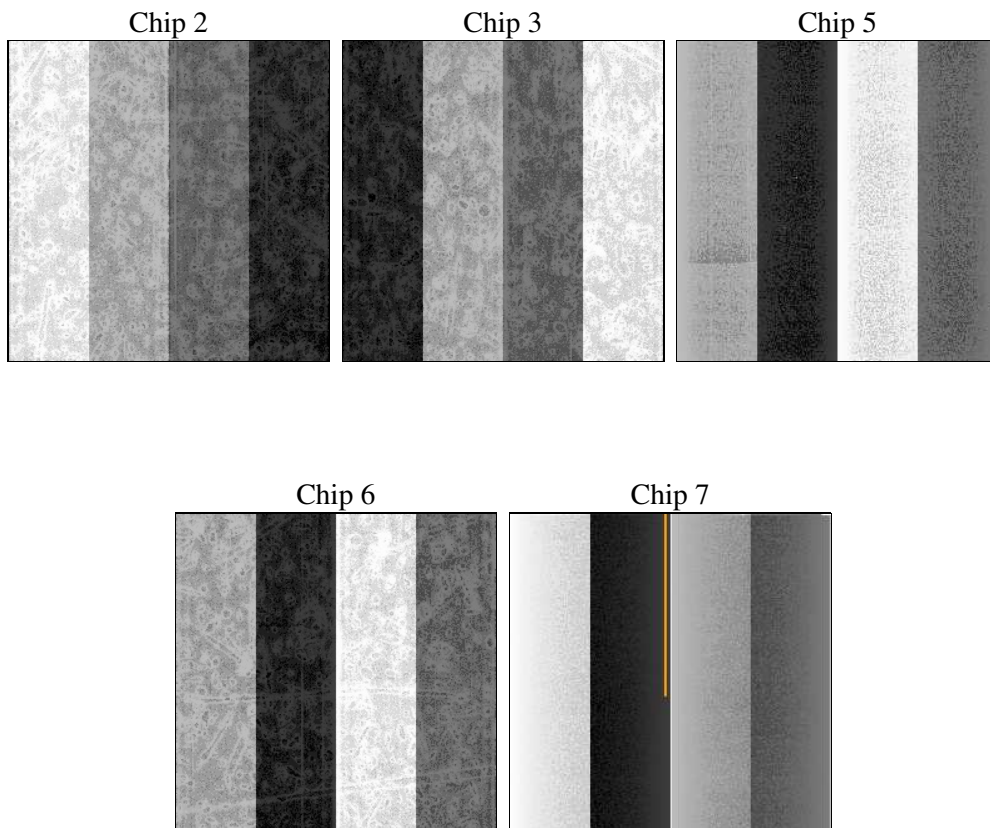
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10037.79998067	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	10037.79998067	Sum of GTIs [s]
date	2020-10-06T21:40:40	Date and time of file creation	ontime3	10037.79998067	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	10037.79998067	Sum of GTIs [s]
			ontime6	10037.79998067	Sum of GTIs [s]
			ontime7	10037.79998067	Sum of GTIs [s]
			l1events	338810	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	59388	60100	86635	59316	73371
rejected events	53179	54416	43394	52719	39440
rejected %	89%	90%	50%	88%	53%

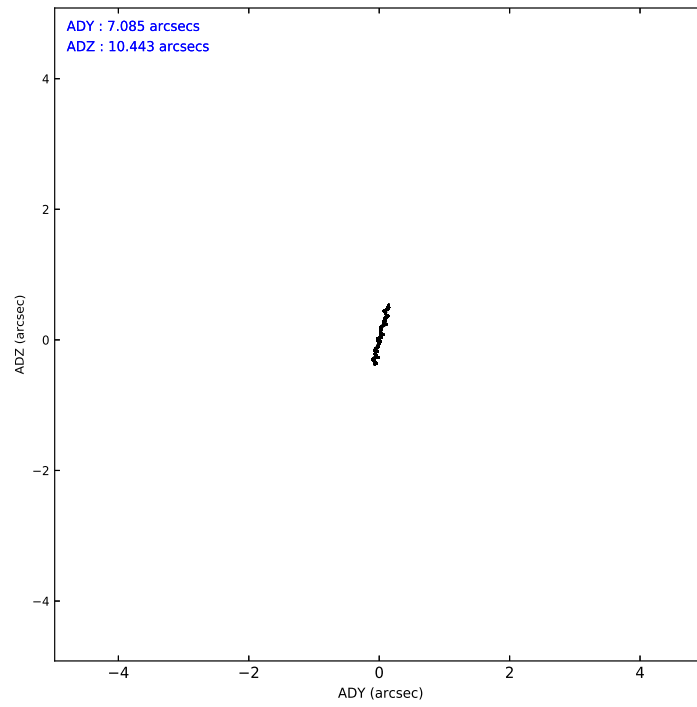
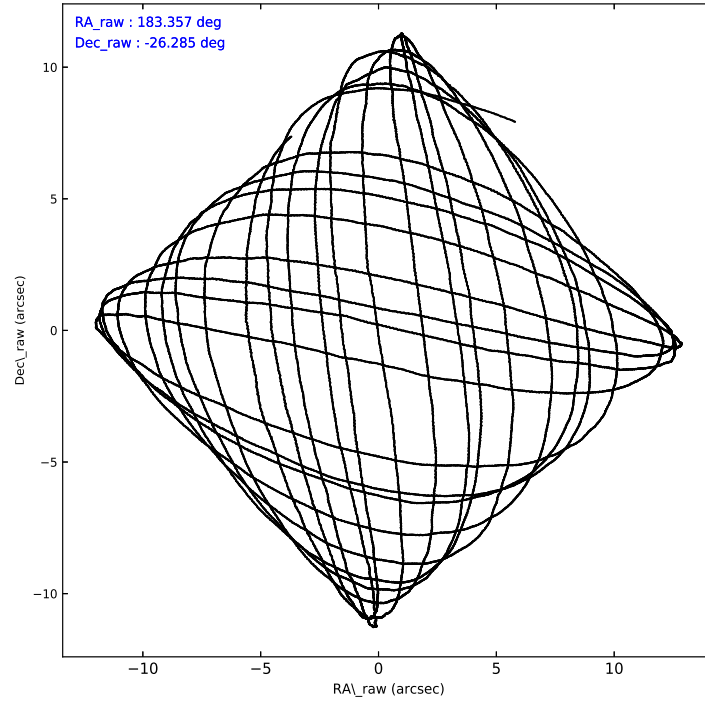
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	2303	2033	5806	2446	3508
	3%	3%	6%	4%	4%
grade 1 events	30	25	106	27	130
	0%	0%	0%	0%	0%
grade 2 events	1423	1212	12628	1404	6825
	2%	2%	14%	2%	9%
grade 3 events	667	682	1836	730	3246
	1%	1%	2%	1%	4%
grade 4 events	688	656	1799	683	3216
	1%	1%	2%	1%	4%
grade 5 events	1836	2319	6629	2391	7599
	3%	3%	7%	4%	10%
grade 6 events	1133	1103	21185	1334	17148
	1%	1%	24%	2%	23%
grade 7 events	51308	52070	36646	50301	31699
	86%	86%	42%	84%	43%

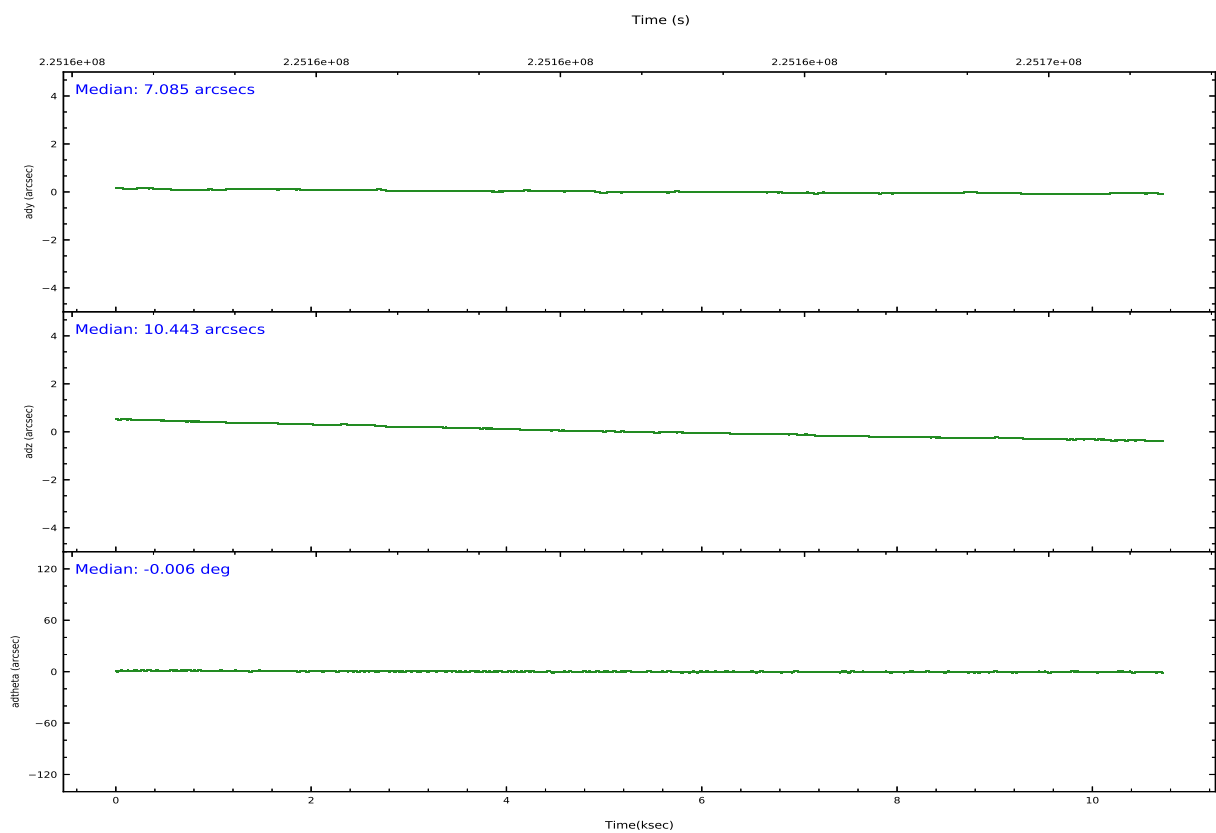
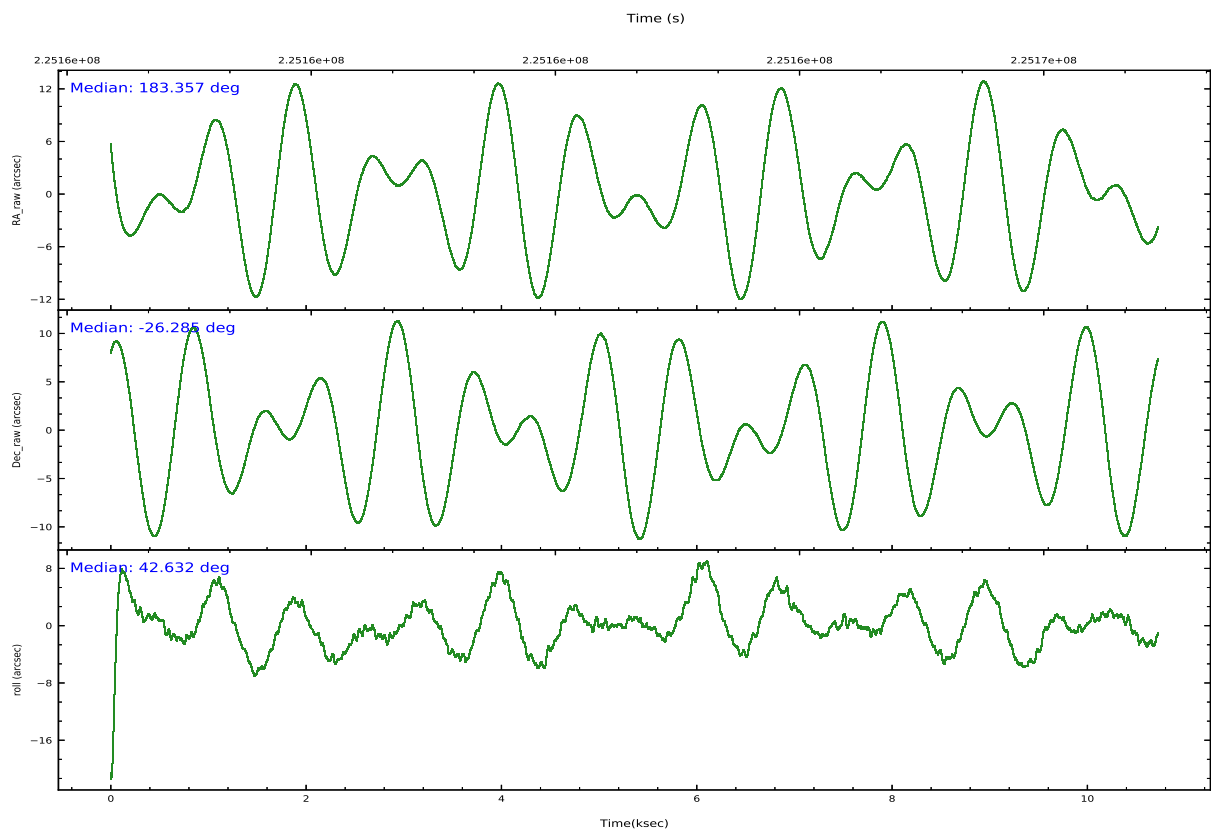


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23567	ACIS-23567	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	183.348775	183.35795551355	Subarray requested	NONE	NONE
[deg] Pointing Dec	-26.310851	-26.288442902771	Alternating exposures requested	N	N
[deg] Pointing Roll	42.469157	42.632269655992	[s] Primary exposure time	0.000000	3.1
[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)	225158671.184000	225157470.65316			
Observation start date	2005-02-19T00:03:27	2005-02-18T23:44:30			
[s] Observation end time (MET)	225168671.184000	225169454.9537			
Observation end date	2005-02-19T02:50:07	2005-02-19T03:04:14			
Read mode	TIMED	TIMED			

## 2.3 Aspect



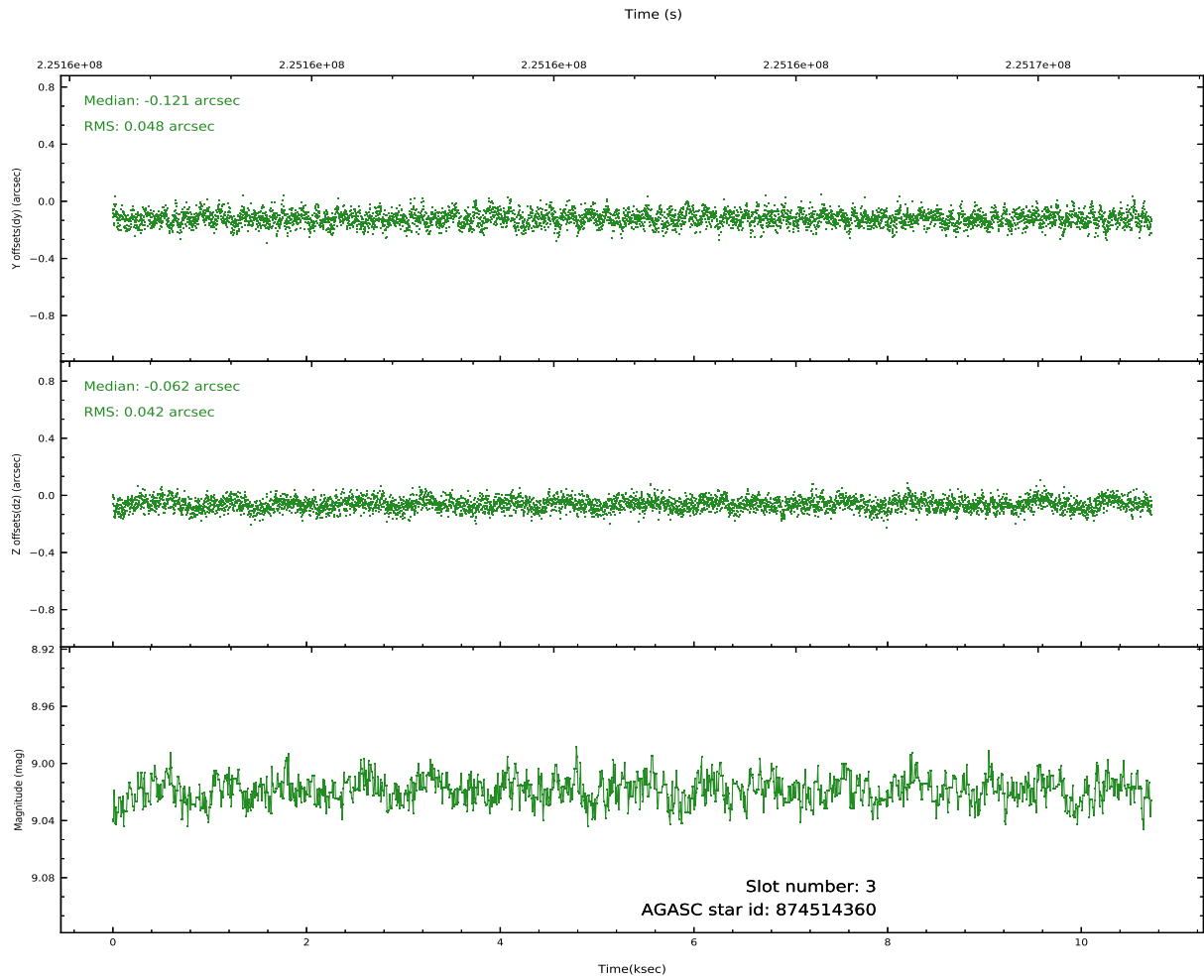
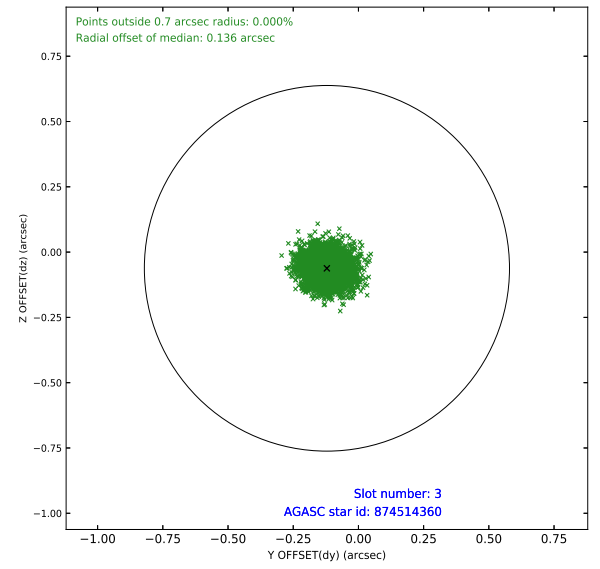
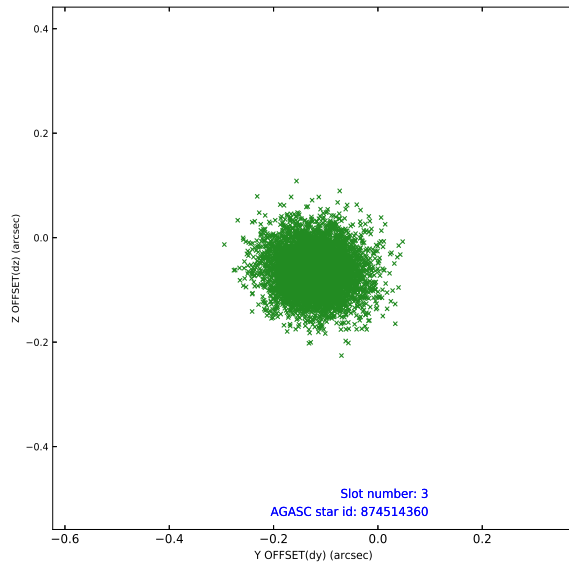


Slot Statistics

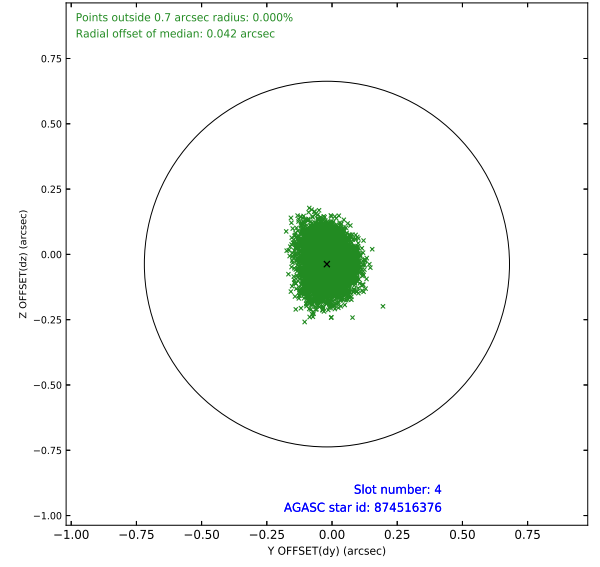
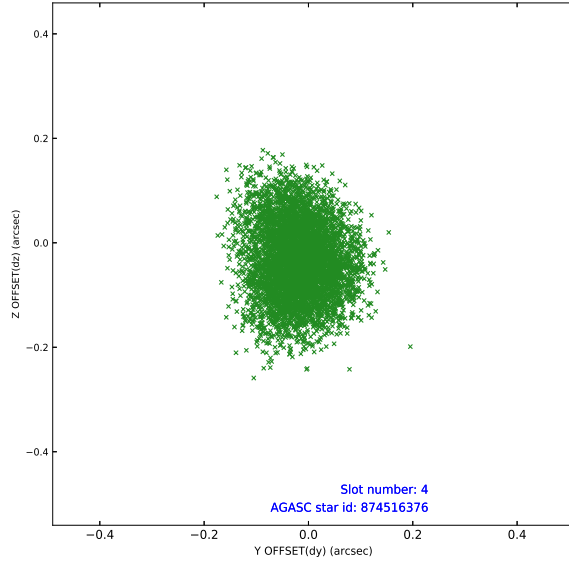
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.18	2616	1.000	0.047	-0.087	0.018	0.028	0.000000	0.000000	936.26	-1727
1	FID		ACIS-S-5	7.24	2617	1.000	-0.104	0.016	0.006	0.011	0.000000	0.000000	-1812.64	169
2	FID		ACIS-S-6	7.35	2616	1.000	0.035	0.084	0.016	0.024	0.000000	0.000000	401.25	814
3	GUIDE	used	874514360	9.02	5231	1.000	-0.121	-0.062	0.068	0.112	183.822590	-25.851738	2246.78	180
4	GUIDE	used	874516376	9.06	5228	1.000	-0.020	-0.037	0.094	0.149	183.172138	-25.821197	768.54	1686
5	GUIDE	used	875044224	9.30	5230	1.000	0.186	0.065	0.085	0.136	183.334680	-26.976618	-1650.70	-1737
6	GUIDE	used	875044344	8.44	5230	1.000	-0.033	0.125	0.073	0.117	183.999961	-26.564539	926.67	-2093
7	GUIDE	used	874515864	9.23	5229	1.000	-0.018	-0.089	0.069	0.114	183.646817	-25.860385	1806.99	543

## 2.4 Star Slots

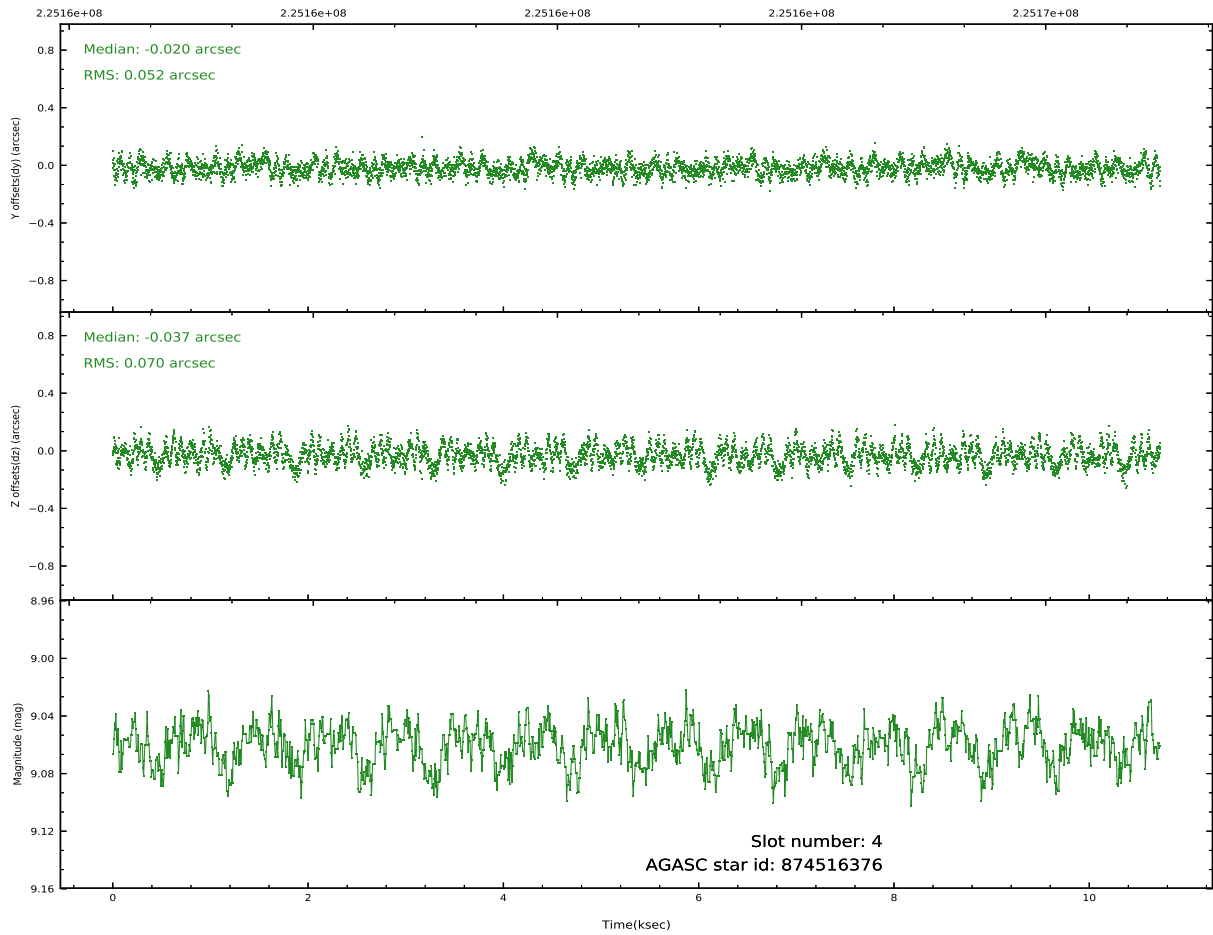
### 2.4.1 Slot 3



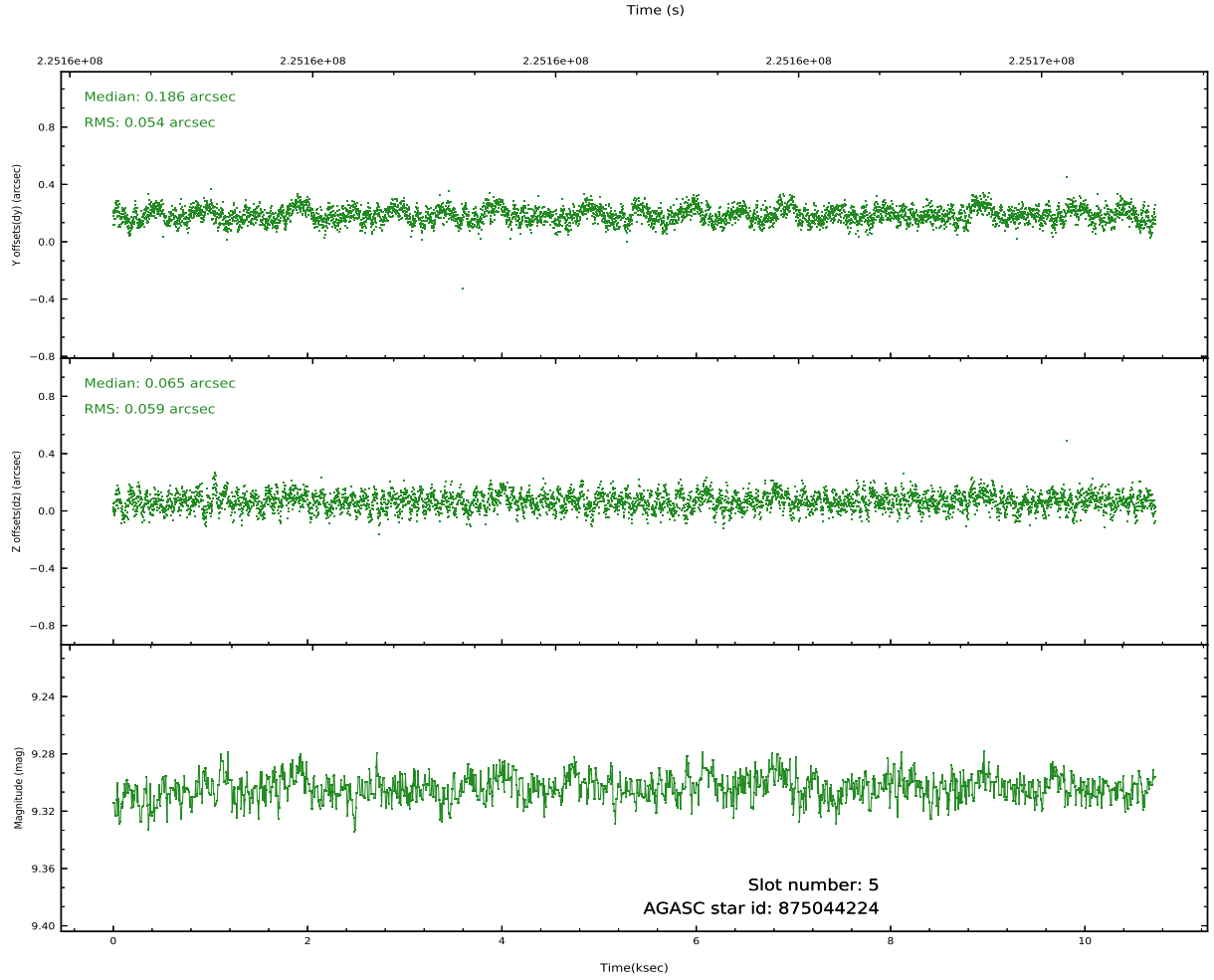
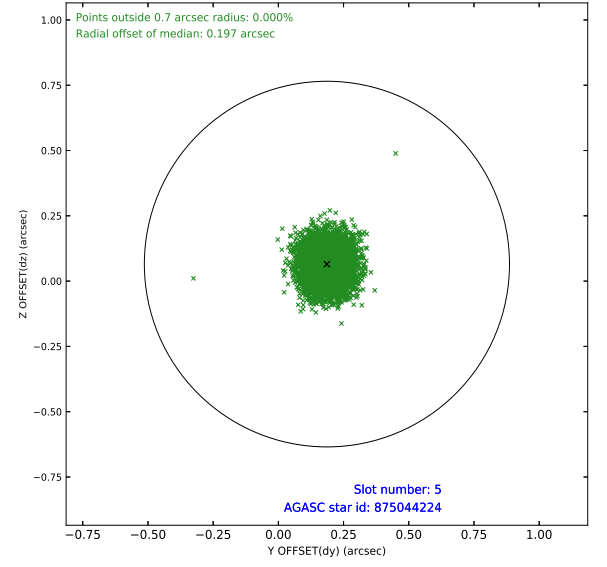
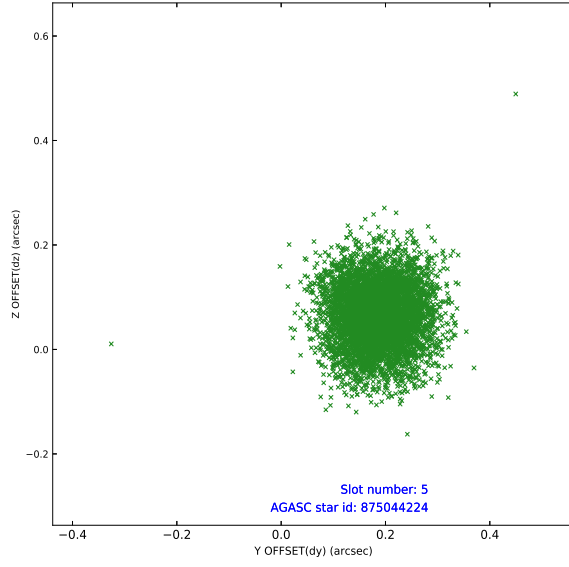
## 2.4.2 Slot 4



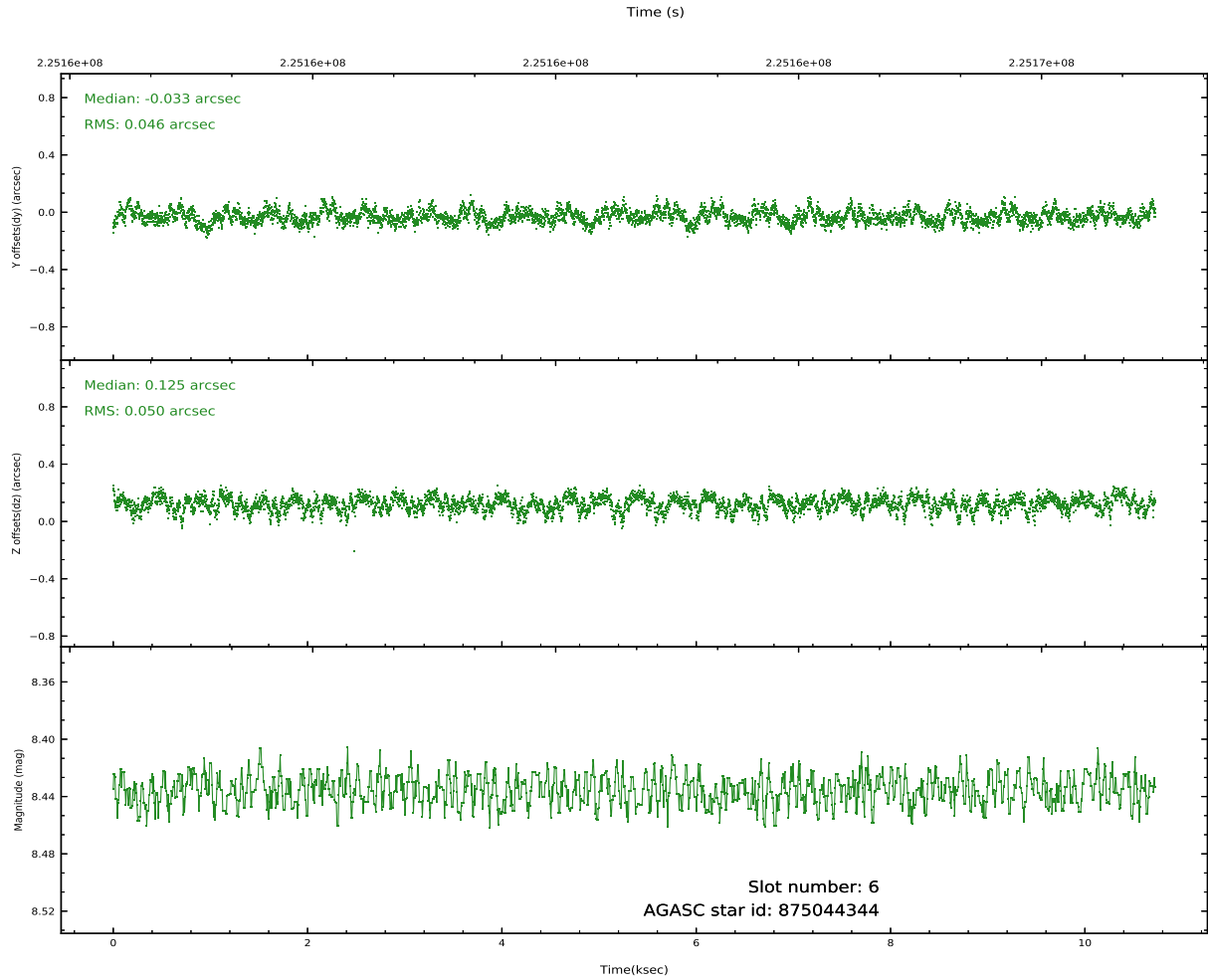
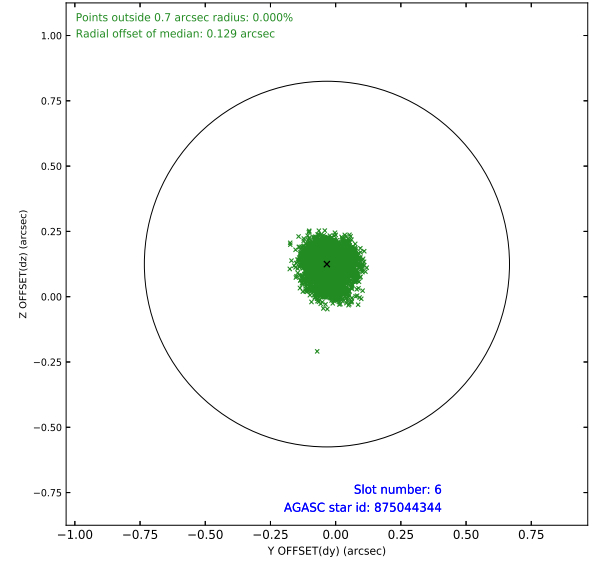
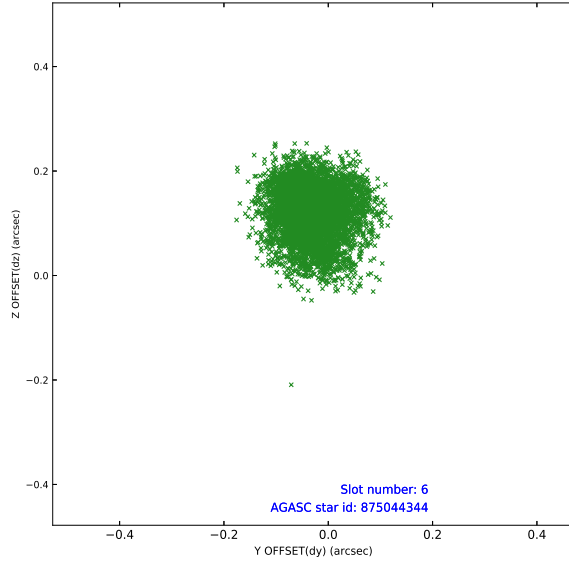
Time (s)



### 2.4.3 Slot 5

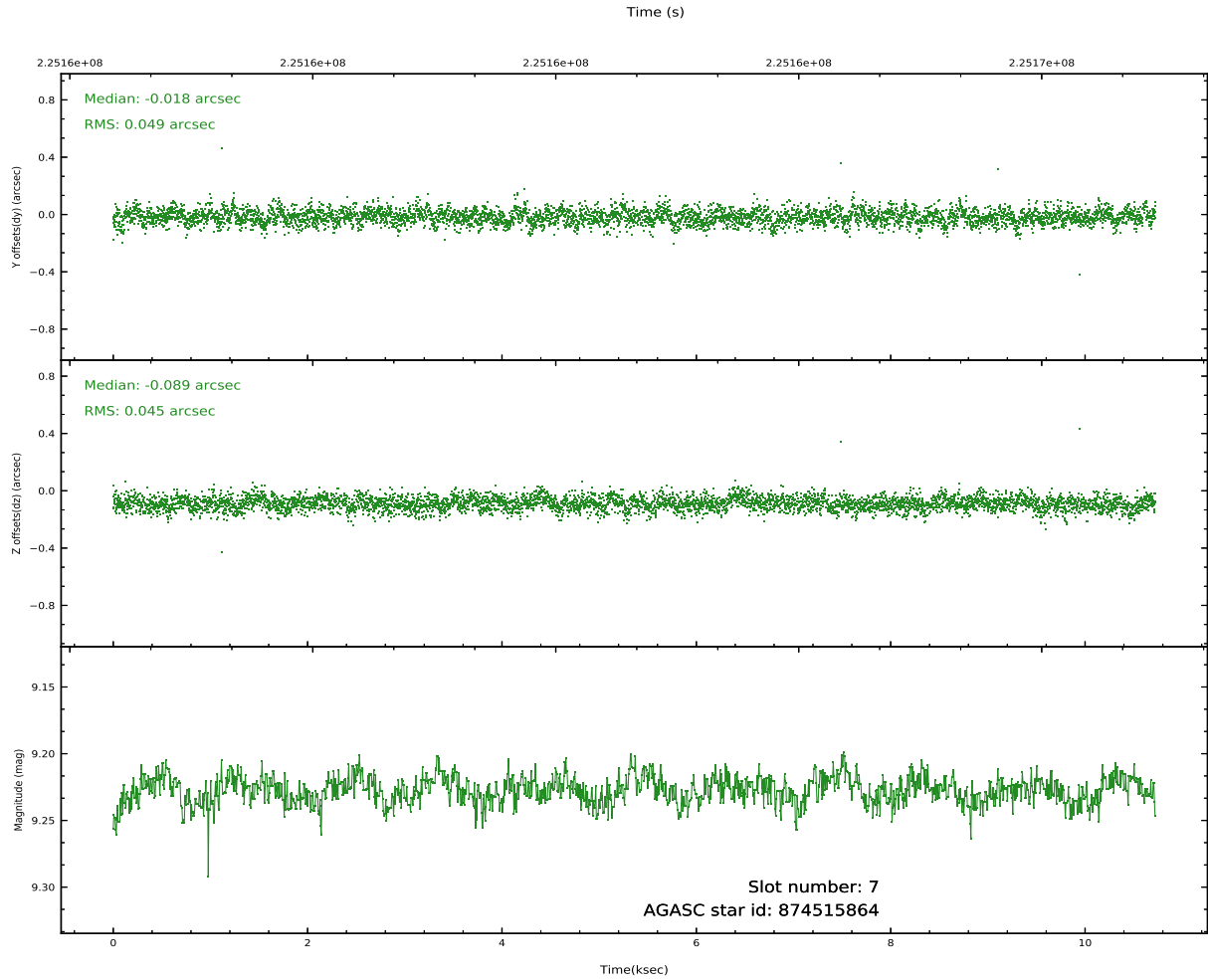
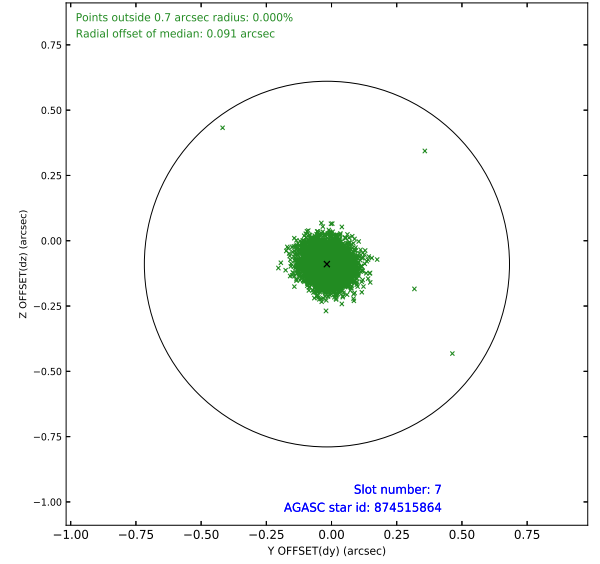
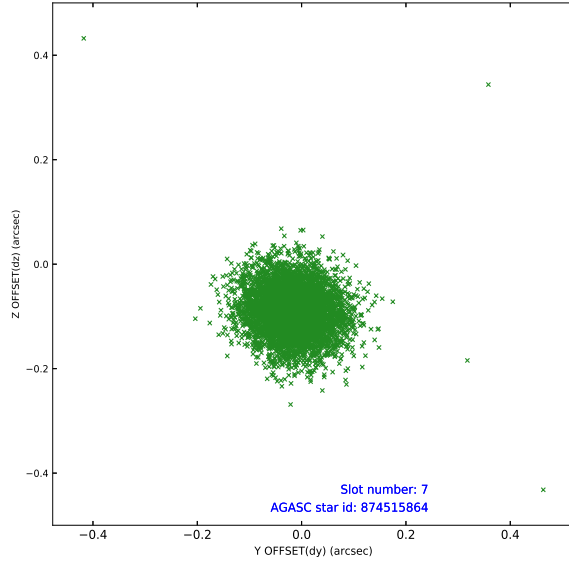


## 2.4.4 Slot 6



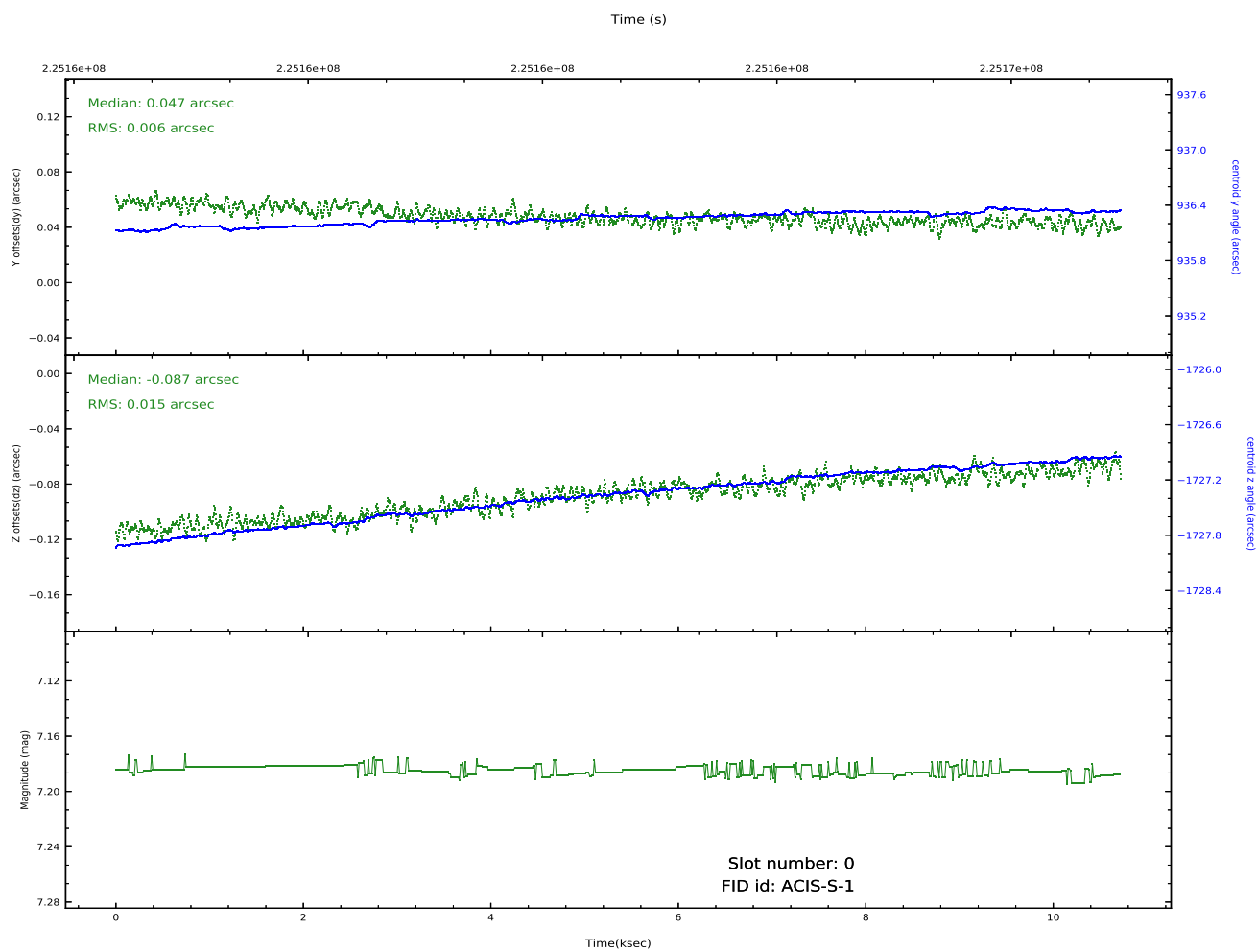
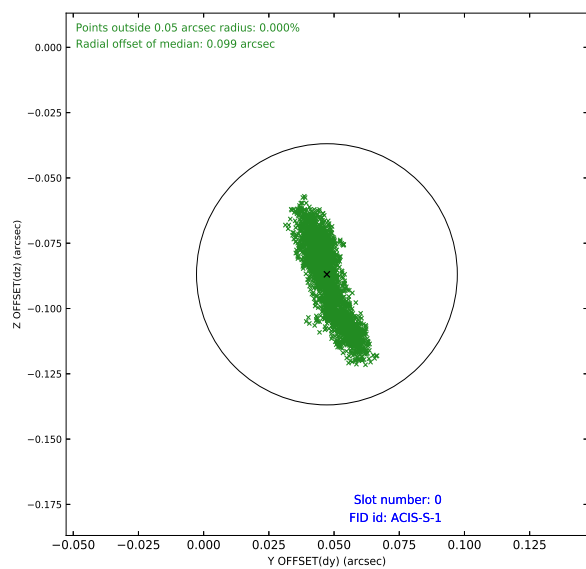
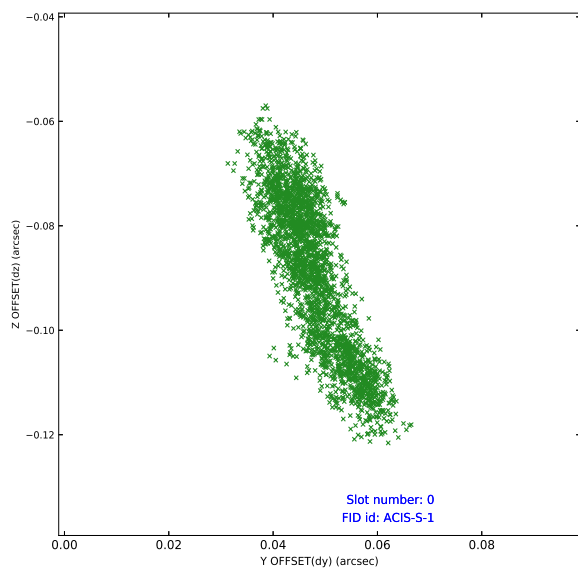


## 2.4.5 Slot 7

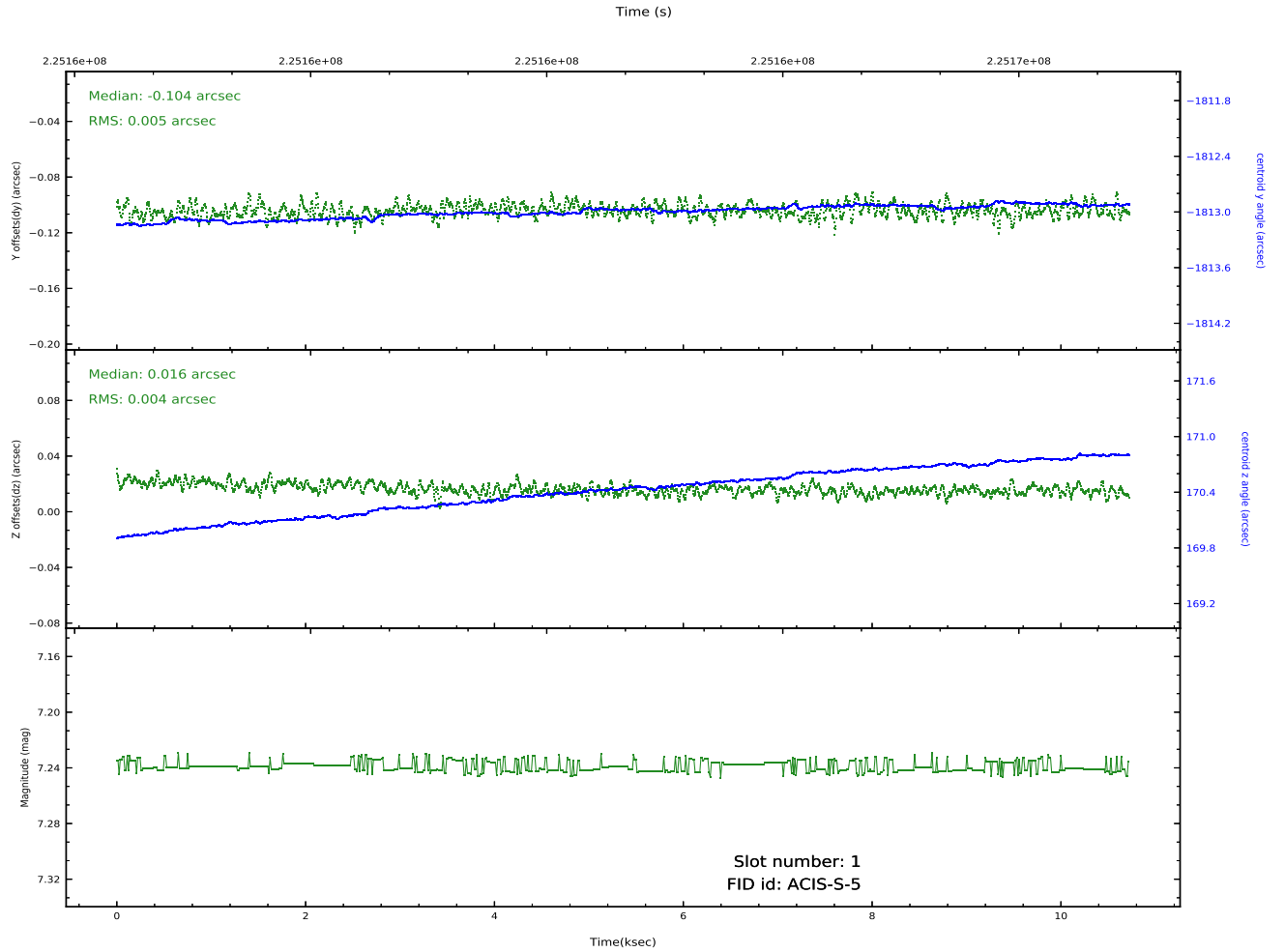
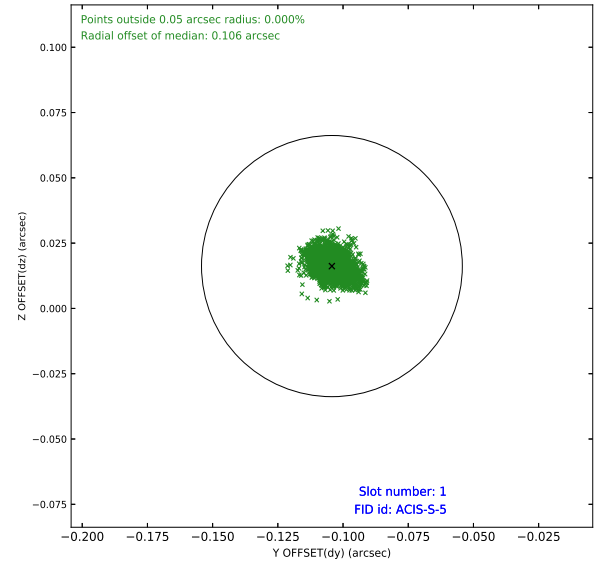
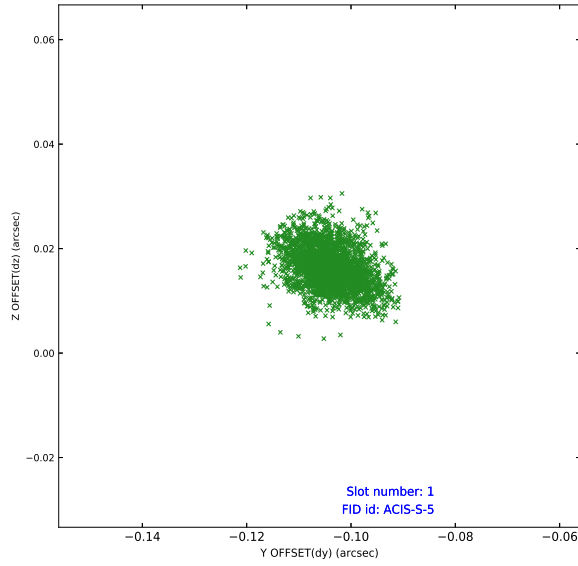


## 2.5 FID Slots

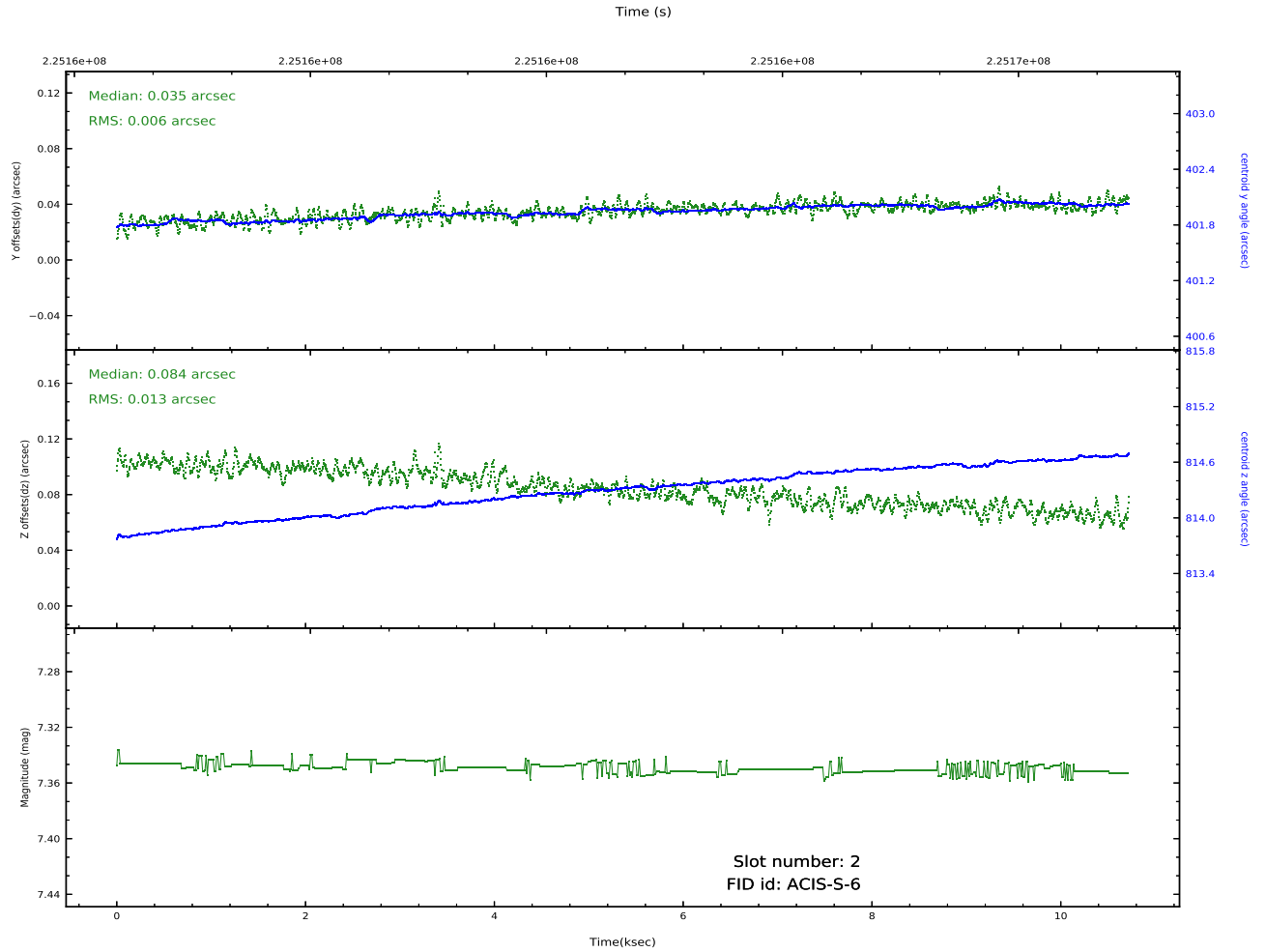
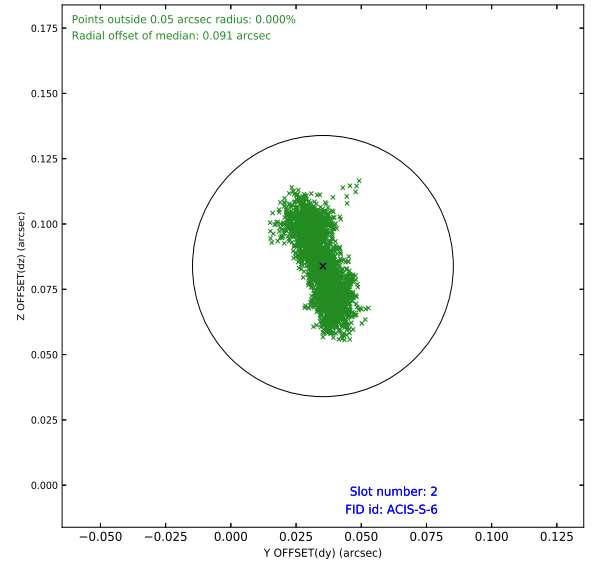
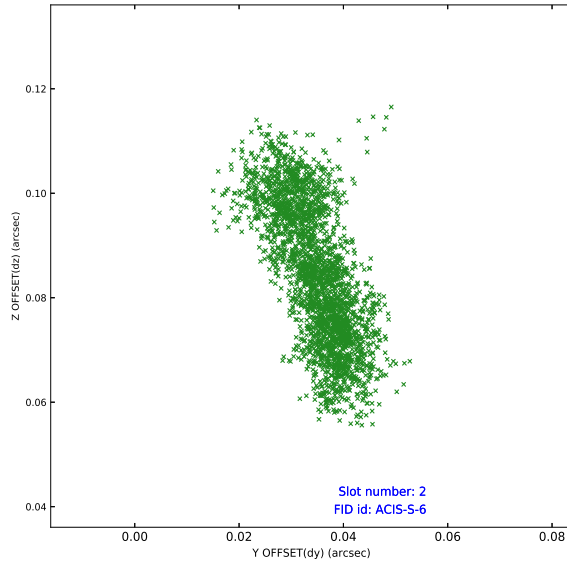
### 2.5.1 Slot 0



## 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)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.03779

### A.2 Comments