

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20550 - L2 Version 2  
Chandra X-Ray Center

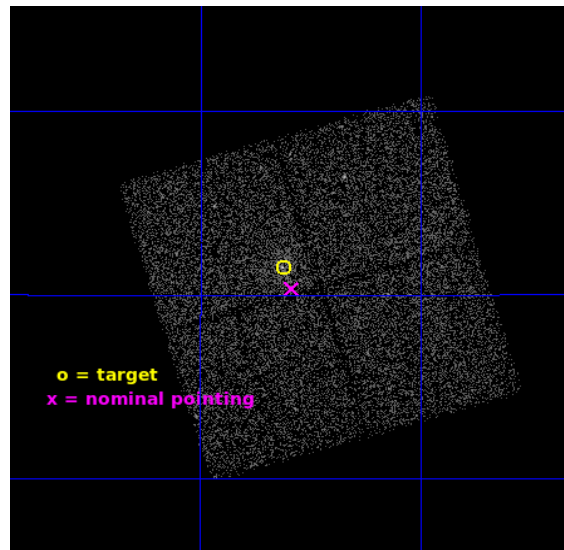
L2 Processing Date : Oct 27 2020

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# 1 Front

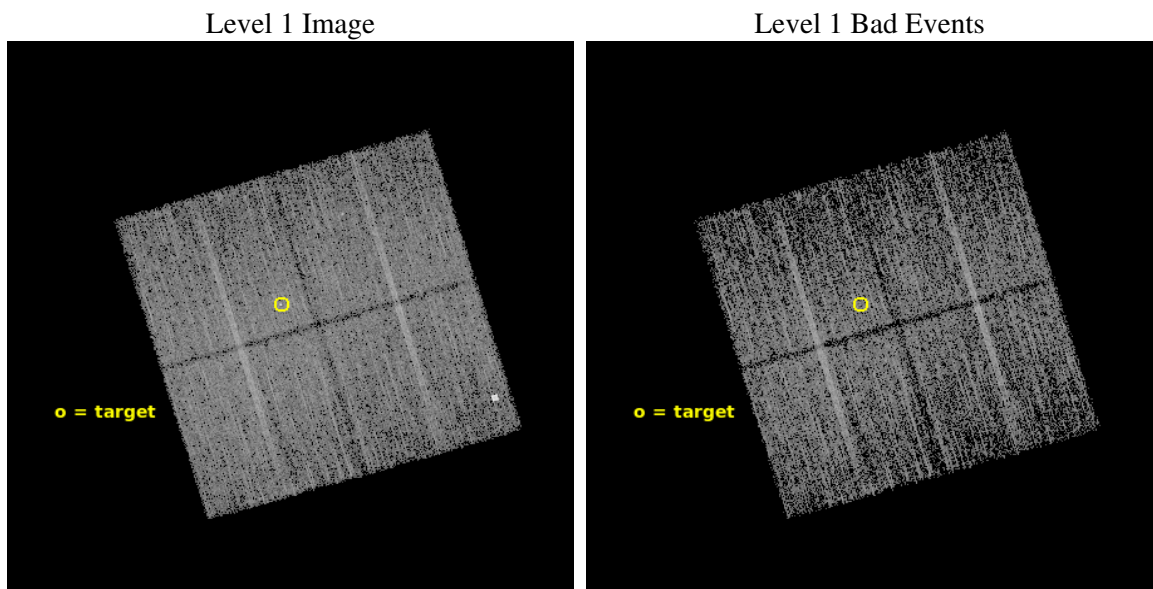
seq_num	801760	Sequence number
obs_id	20550	Observation id
title	Hiding in Plain Sight - Recovering Clusters with the Strongest AGN in their Cores	Proposal title
observer	Paul Nulsen	Principal investigator
object	1RXSJ174537.3+395128	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.405417	Observer's specified target RA [deg]
dec_targ	39.857778	Observer's specified target Dec [deg]
ra_nom	266.39601025689	Nominal RA [deg]
dec_nom	39.83905015996	Nominal Dec [deg]
roll_nom	253.34548803176	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10078.100077629	Sum of GTIs [s]
livetime	9946.4222807255	Livetime [s]
ontime0	10078.100077629	Sum of GTIs [s]
ontime1	10078.100077629	Sum of GTIs [s]
ontime2	10074.959077239	Sum of GTIs [s]
ontime3	10078.100077629	Sum of GTIs [s]
l2events	26480	Number of level 2 events



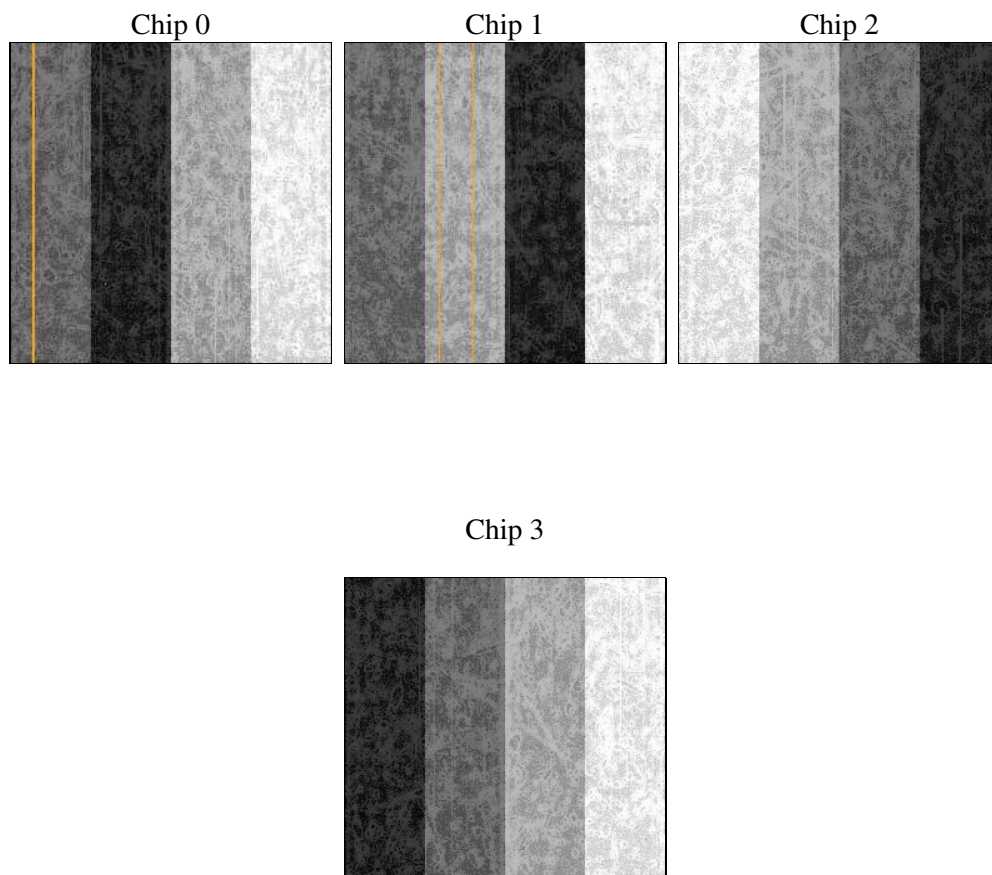
## 2 OBI

### 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	10.9.2	Processing system revision	ontime	10078.100077629	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime0	10078.100077629	Sum of GTIs [s]
date	2020-10-27T15:54:08	Date and time of file creation	ontime1	10078.100077629	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10074.959077239	Sum of GTIs [s]
			ontime3	10078.100077629	Sum of GTIs [s]
			l1events	269372	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	66829	63058	72455	67030
rejected events	55680	54869	64696	58805
rejected %	83%	87%	89%	87%

	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	5987	2825	2845	3419
	8%	4%	3%	5%
grade 1 events	52	33	53	49
	0%	0%	0%	0%
grade 2 events	2073	1976	2055	1727
	3%	3%	2%	2%
grade 3 events	791	828	743	783
	1%	1%	1%	1%
grade 4 events	783	824	723	843
	1%	1%	0%	1%
grade 5 events	2549	2742	2496	3006
	3%	4%	3%	4%
grade 6 events	1520	1739	1395	1454
	2%	2%	1%	2%
grade 7 events	53074	52091	62145	55749
	79%	82%	85%	83%

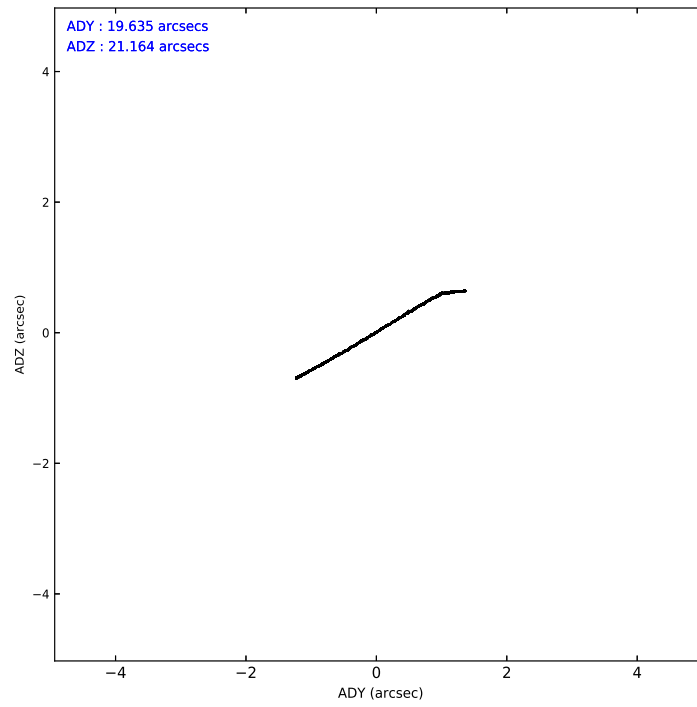
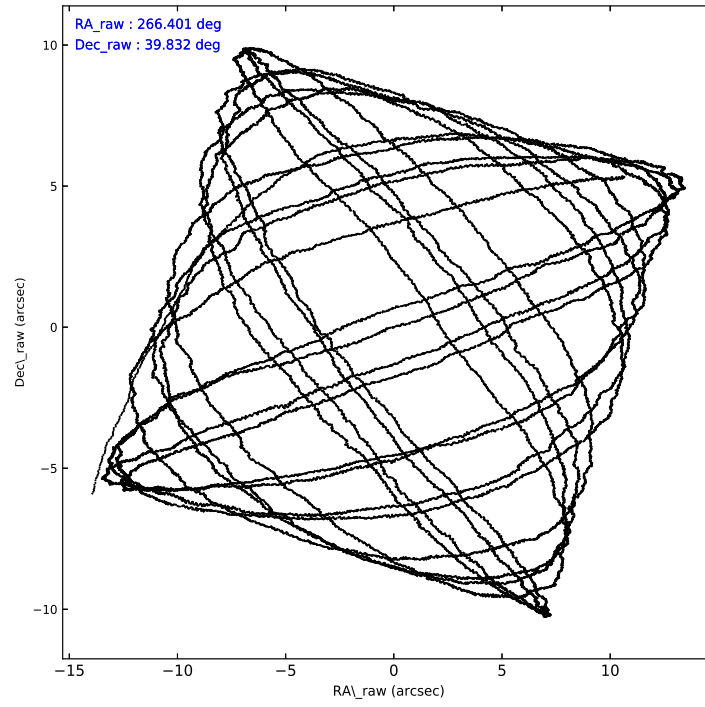


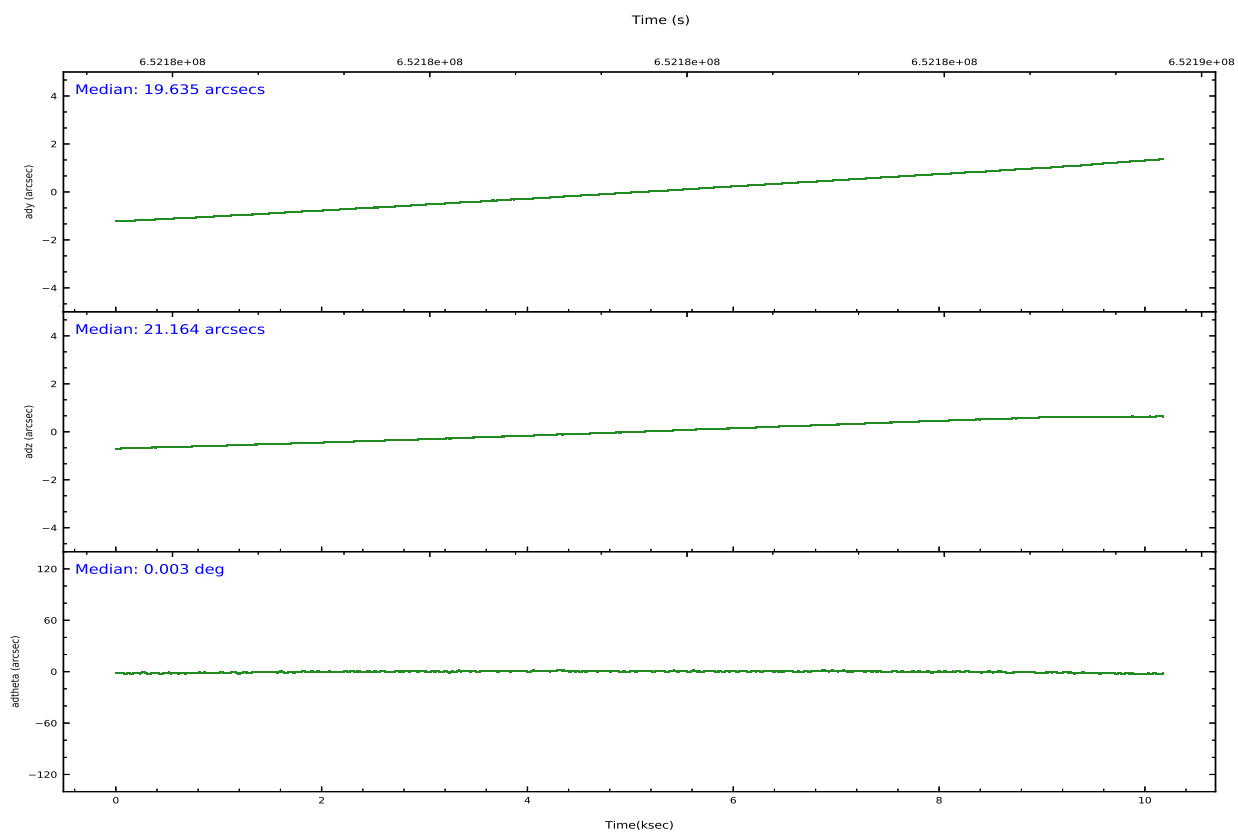
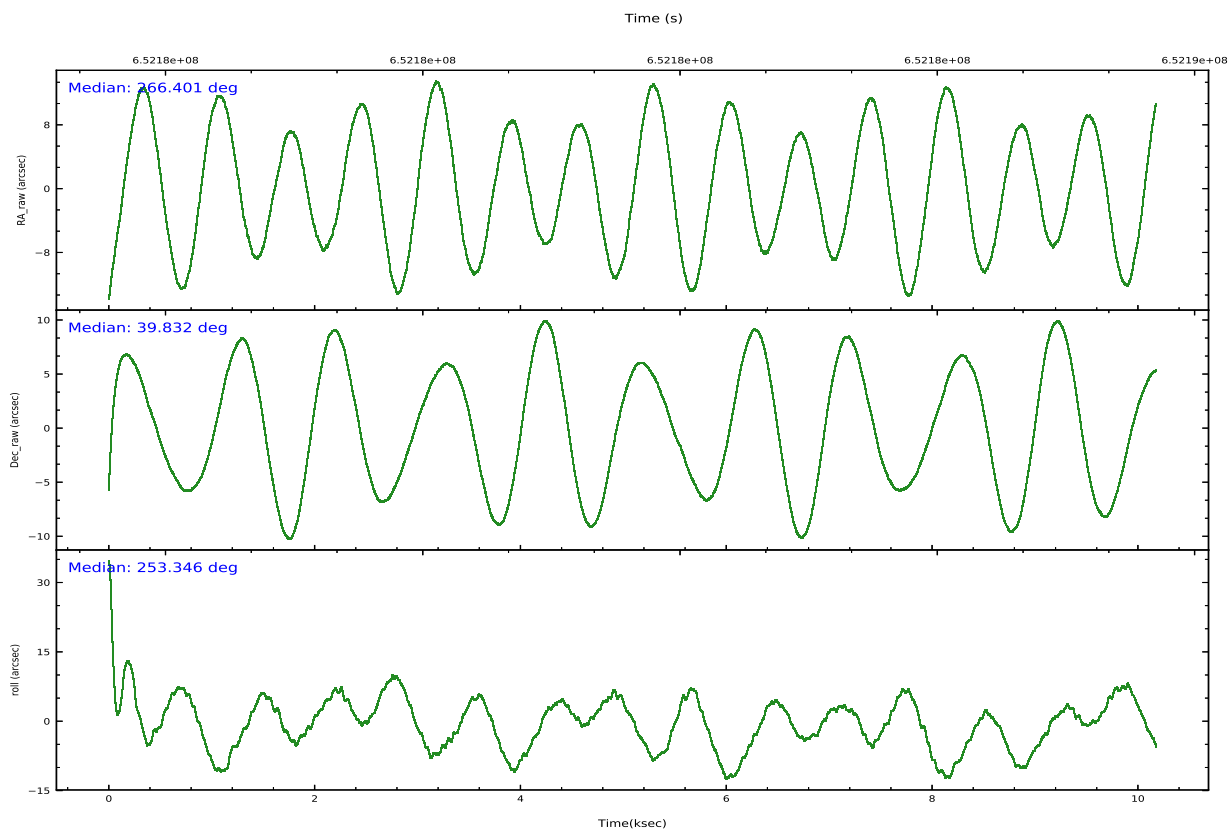
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	266.393116	266.39601025689
[deg] Pointing Dec	39.858609	39.83905015996
[deg] Pointing Roll	253.151937	253.34548803176
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-230.662463	-230.6733430263207
[mm] SIM translation stage offset	-2.93	-2.919109976609036
[s] Observation start time (MET)	652177126.184000	652176135.84417
Observation start date	2018-09-01T08:17:37	2018-09-01T08:02:15
[s] Observation end time (MET)	652187126.184000	652187942.3073699
Observation end date	2018-09-01T11:04:17	2018-09-01T11:19:02
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



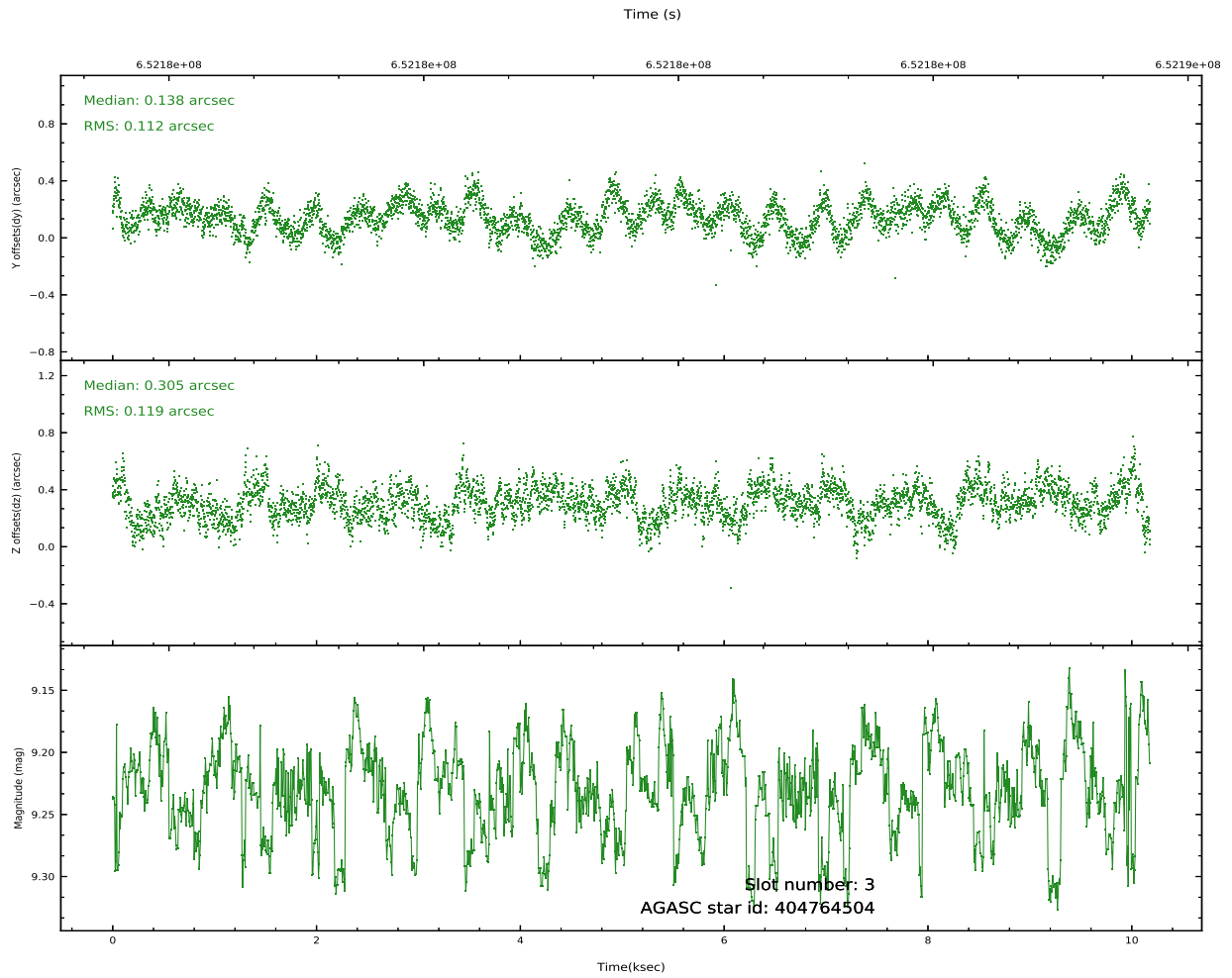
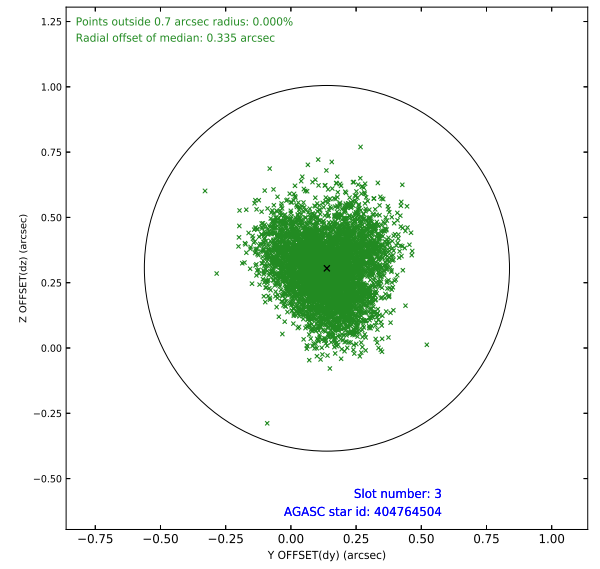
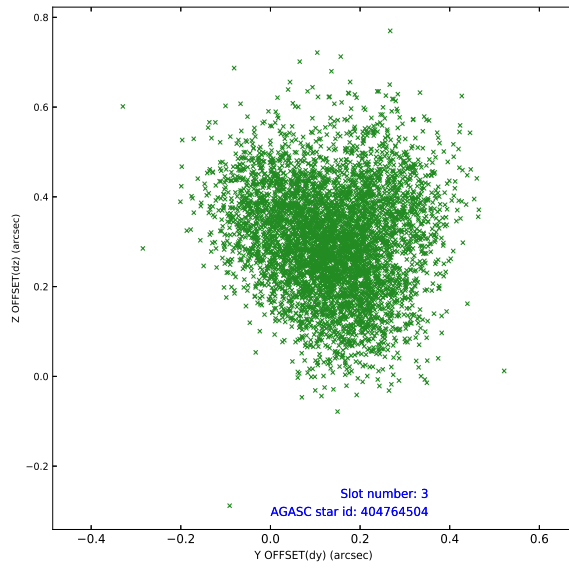


Slot Statistics

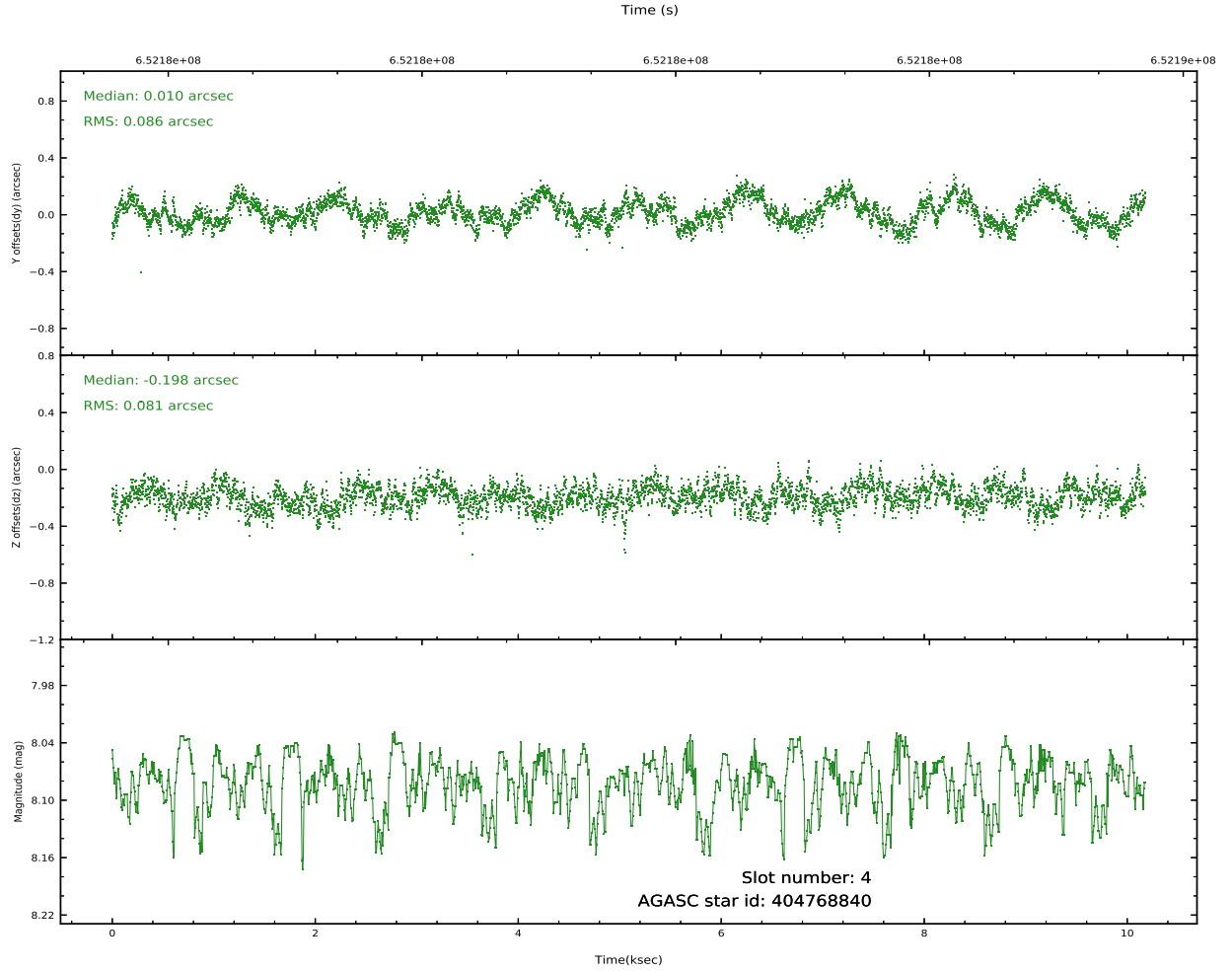
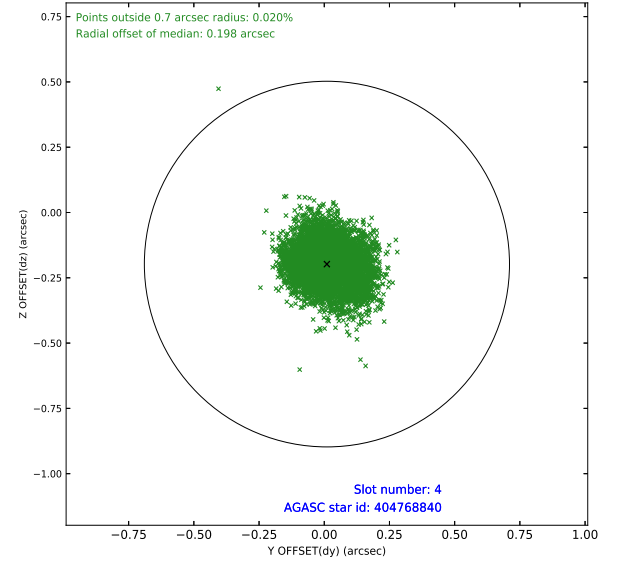
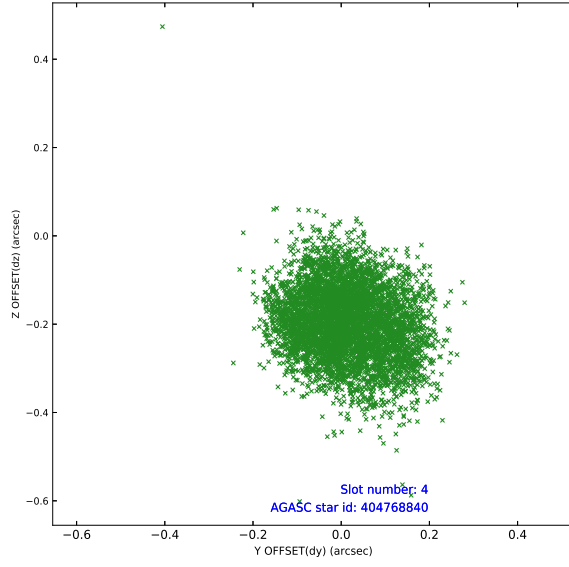
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.14	2483	1.000	0.247	-0.150	0.016	0.024	0.000000	0.000000	919.79	-905
1	FID		ACIS-I-5	7.12	2483	1.000	-0.320	0.214	0.019	0.026	0.000000	0.000000	-1828.43	992
2	FID		ACIS-I-6	7.12	2483	1.000	-0.015	0.013	0.030	0.044	0.000000	0.000000	384.72	1637
3	GUIDE	used	404764504	9.23	4965	1.000	0.138	0.305	0.177	0.276	266.857958	39.116910	2176.52	2016
4	GUIDE	used	404768840	8.08	4964	1.000	0.010	-0.198	0.128	0.194	266.357241	39.362163	1740.25	423
5	GUIDE	used	405283480	8.15	4964	1.000	0.173	0.083	0.118	0.188	266.185750	40.060168	-528.63	-756
6	GUIDE	used	405287536	9.35	4956	1.000	-0.209	-0.266	0.199	0.316	266.479086	39.431109	1403.86	674
7	GUIDE	used	405288184	7.95	4965	1.000	-0.118	0.074	0.119	0.194	266.994002	39.980810	-908.51	1457

## 2.4 Star Slots

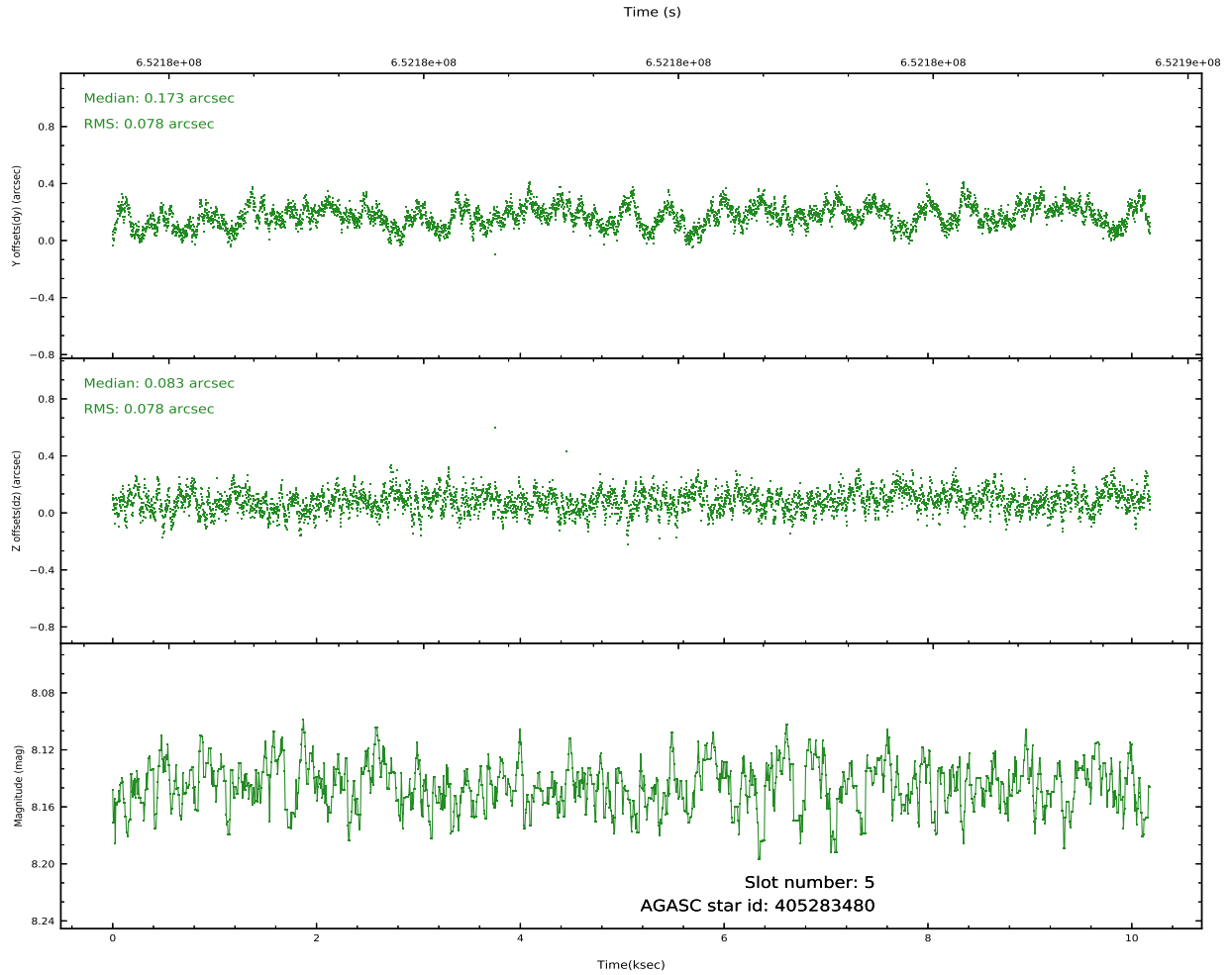
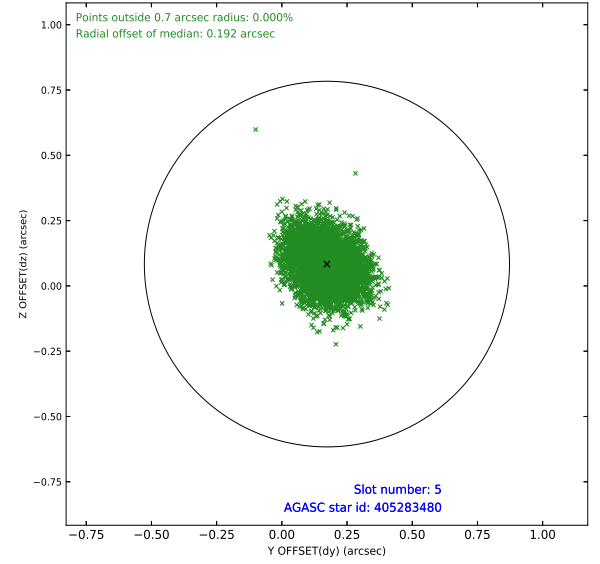
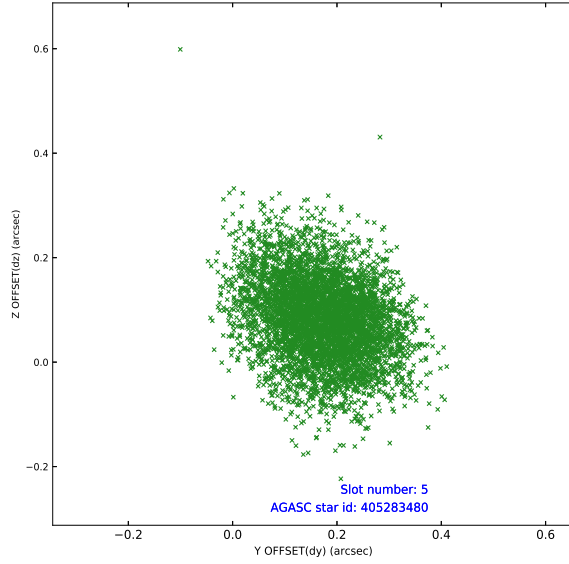
### 2.4.1 Slot 3



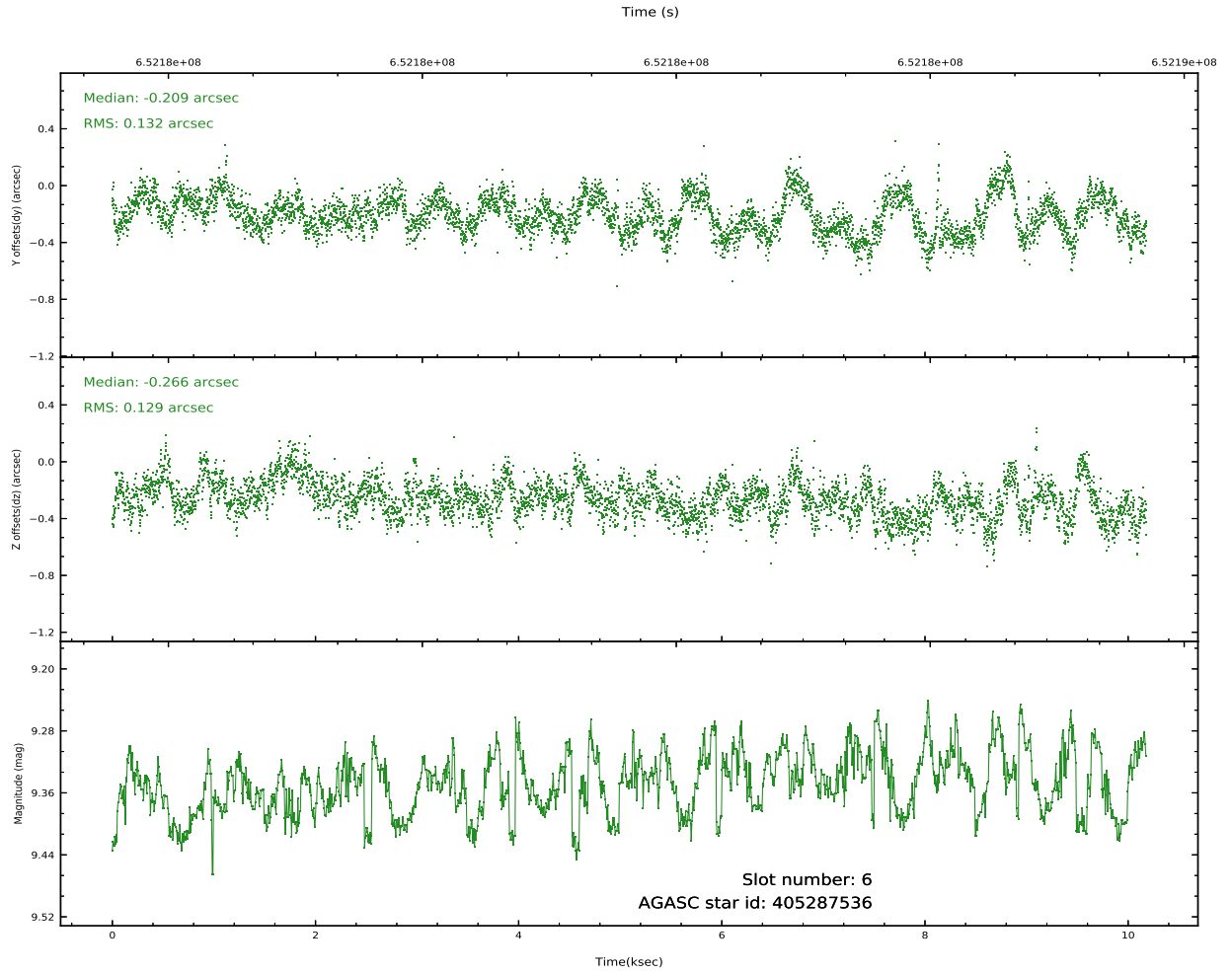
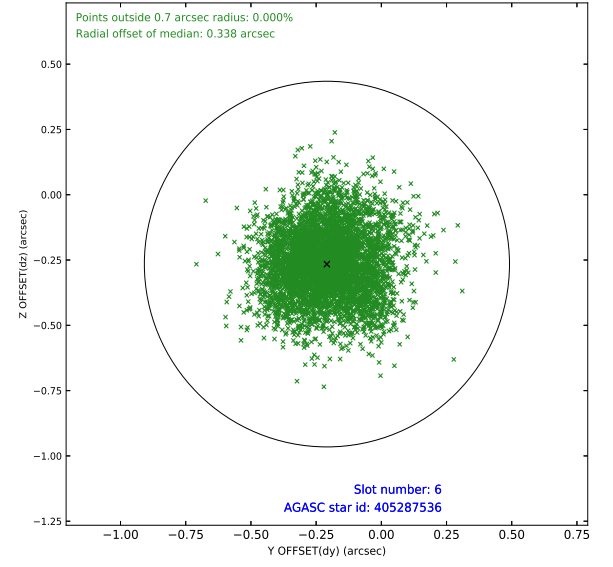
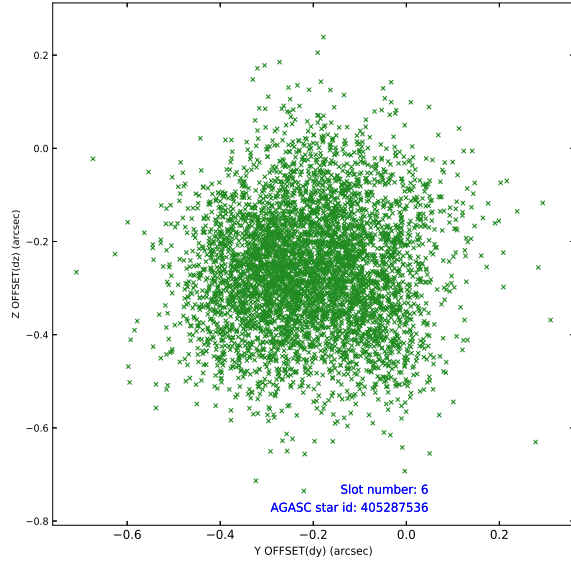
## 2.4.2 Slot 4



### 2.4.3 Slot 5

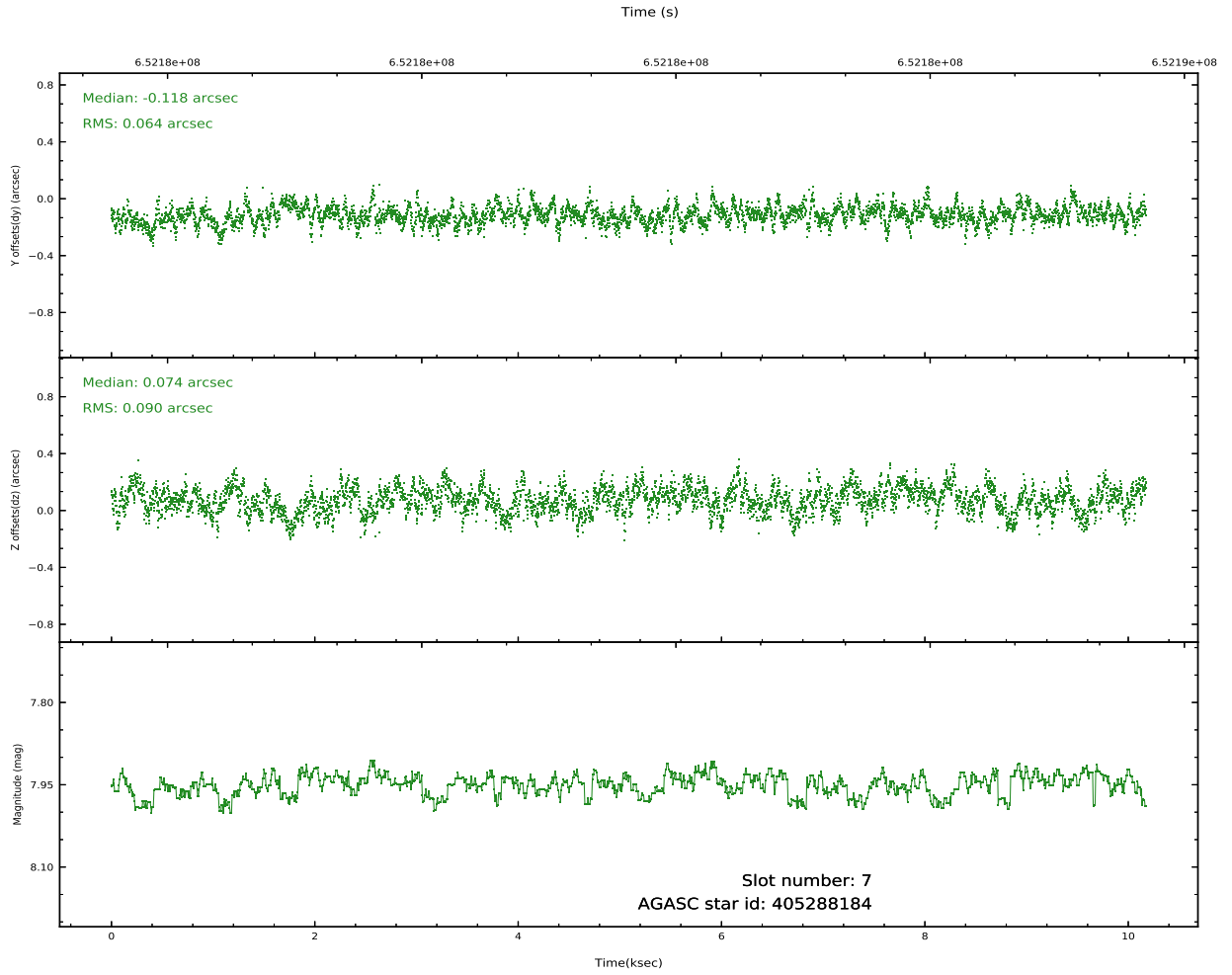
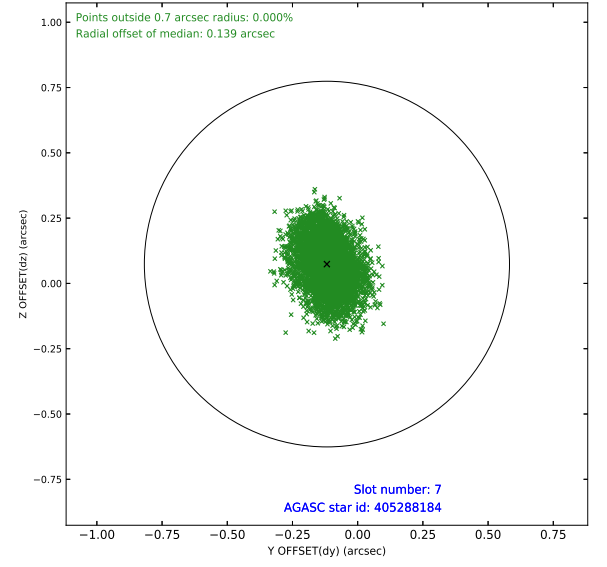
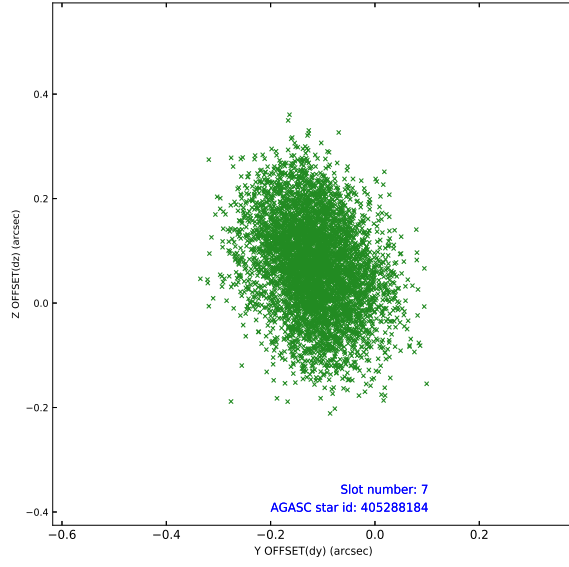


## 2.4.4 Slot 6



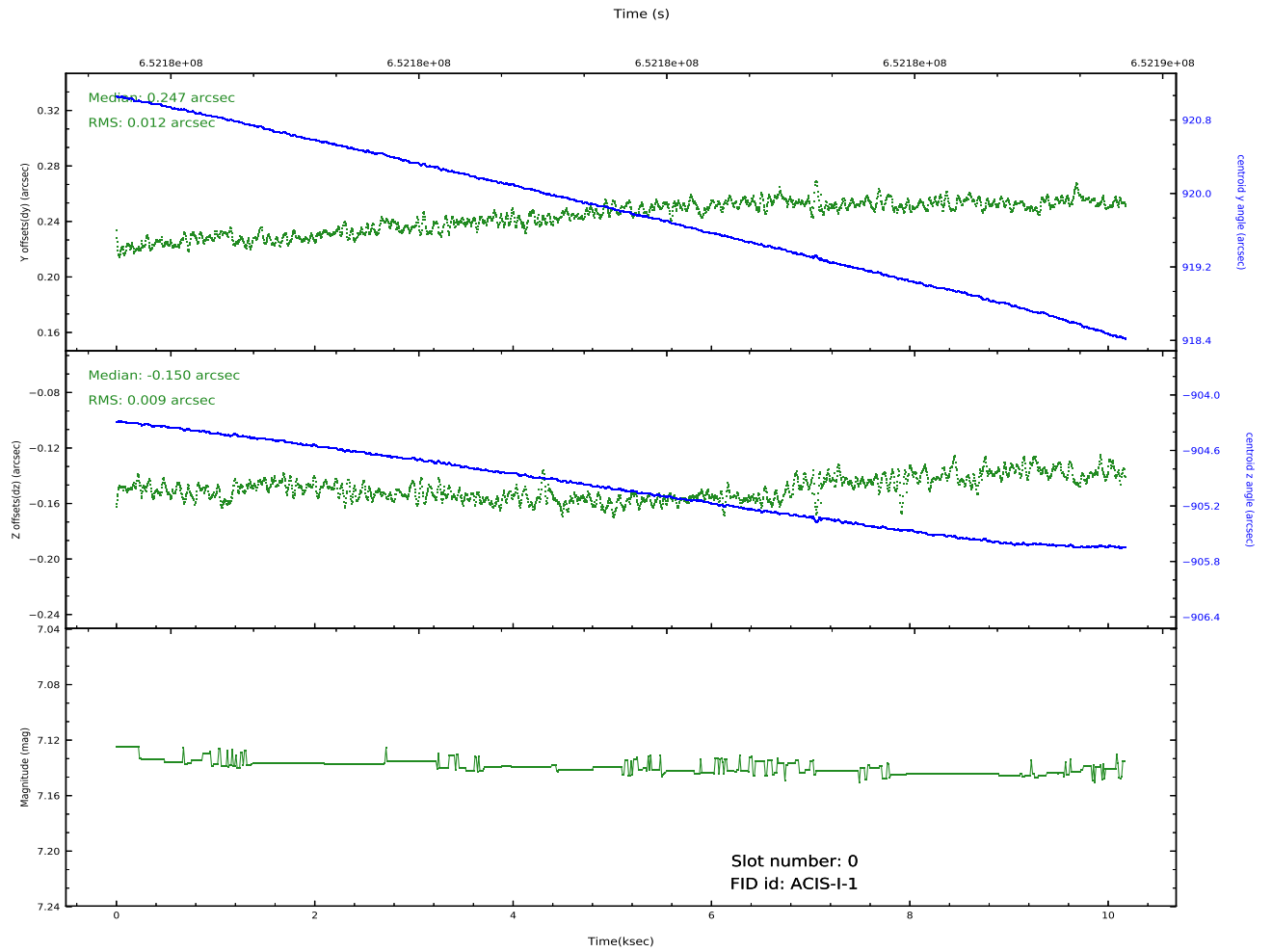
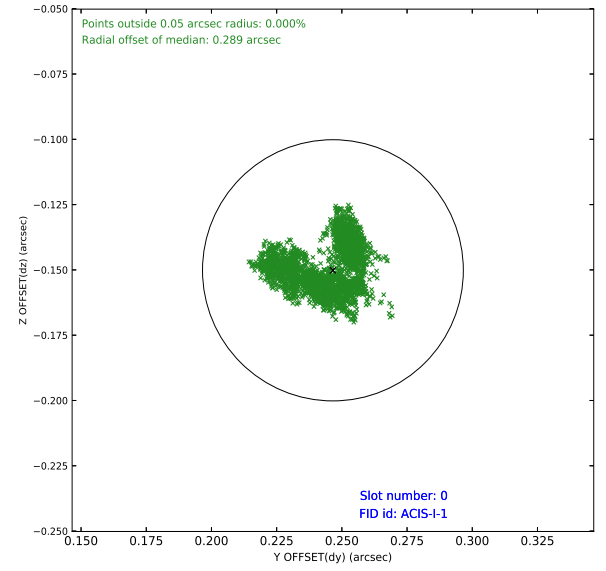
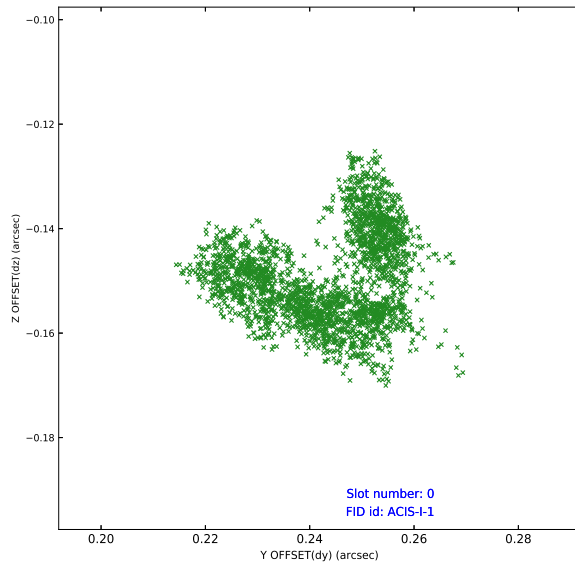


## 2.4.5 Slot 7

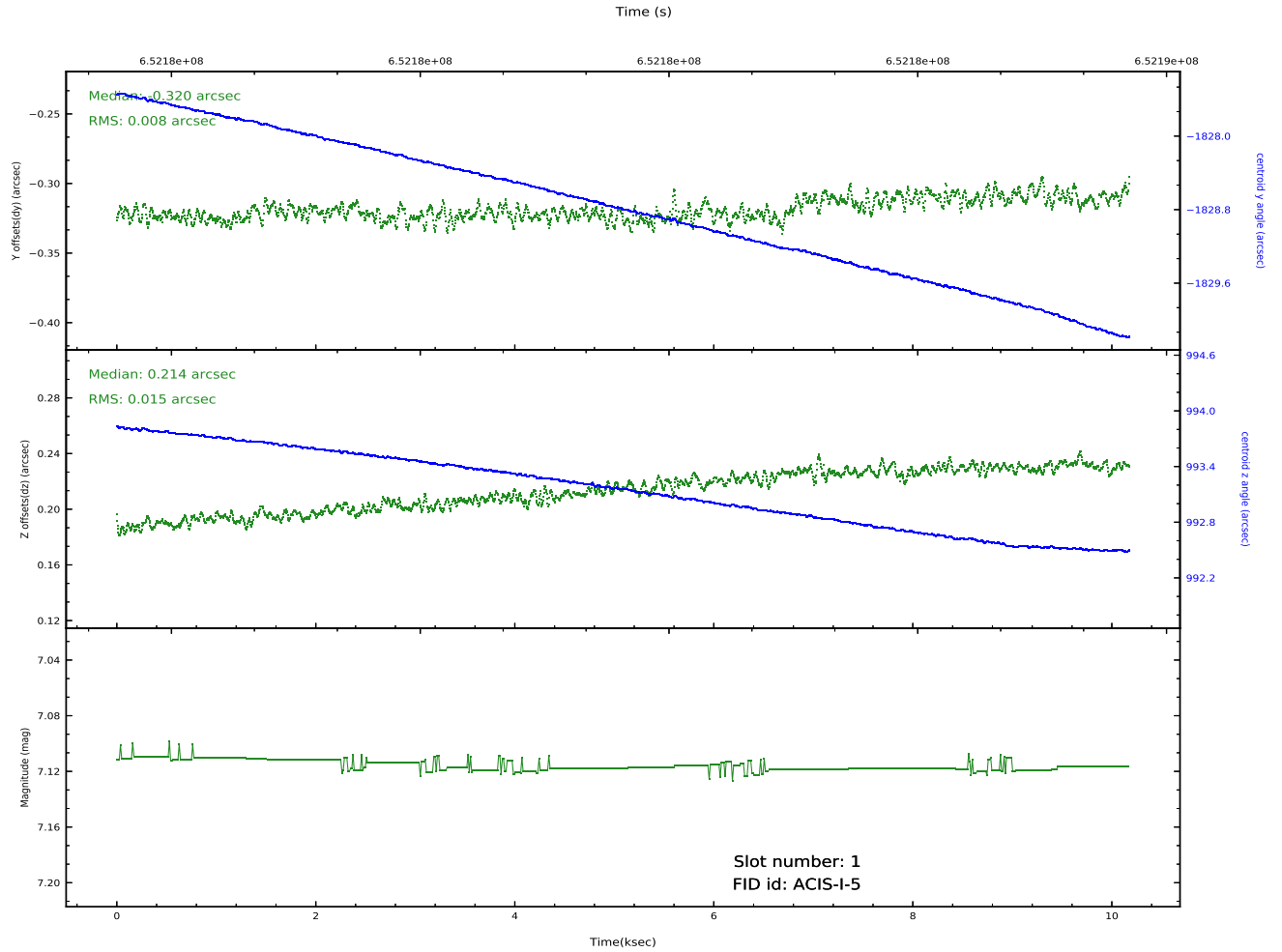
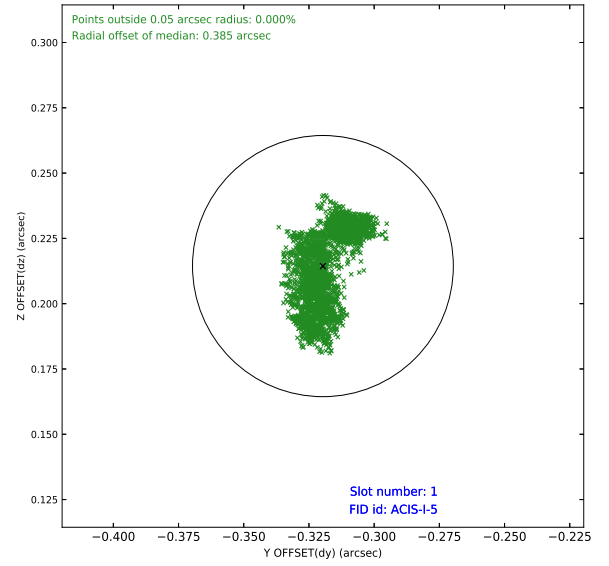
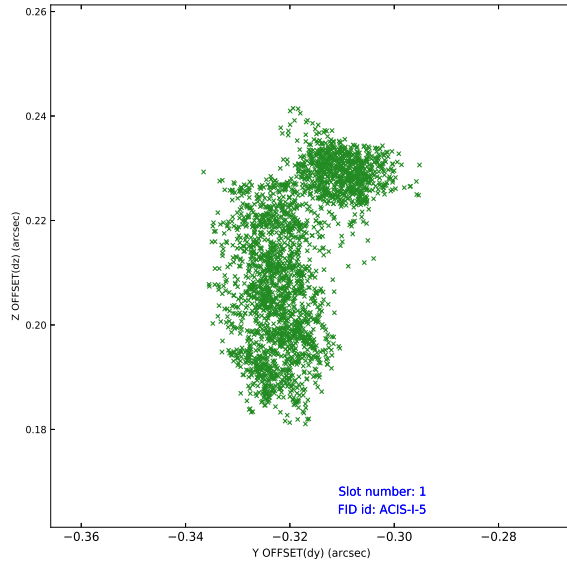


## 2.5 FID Slots

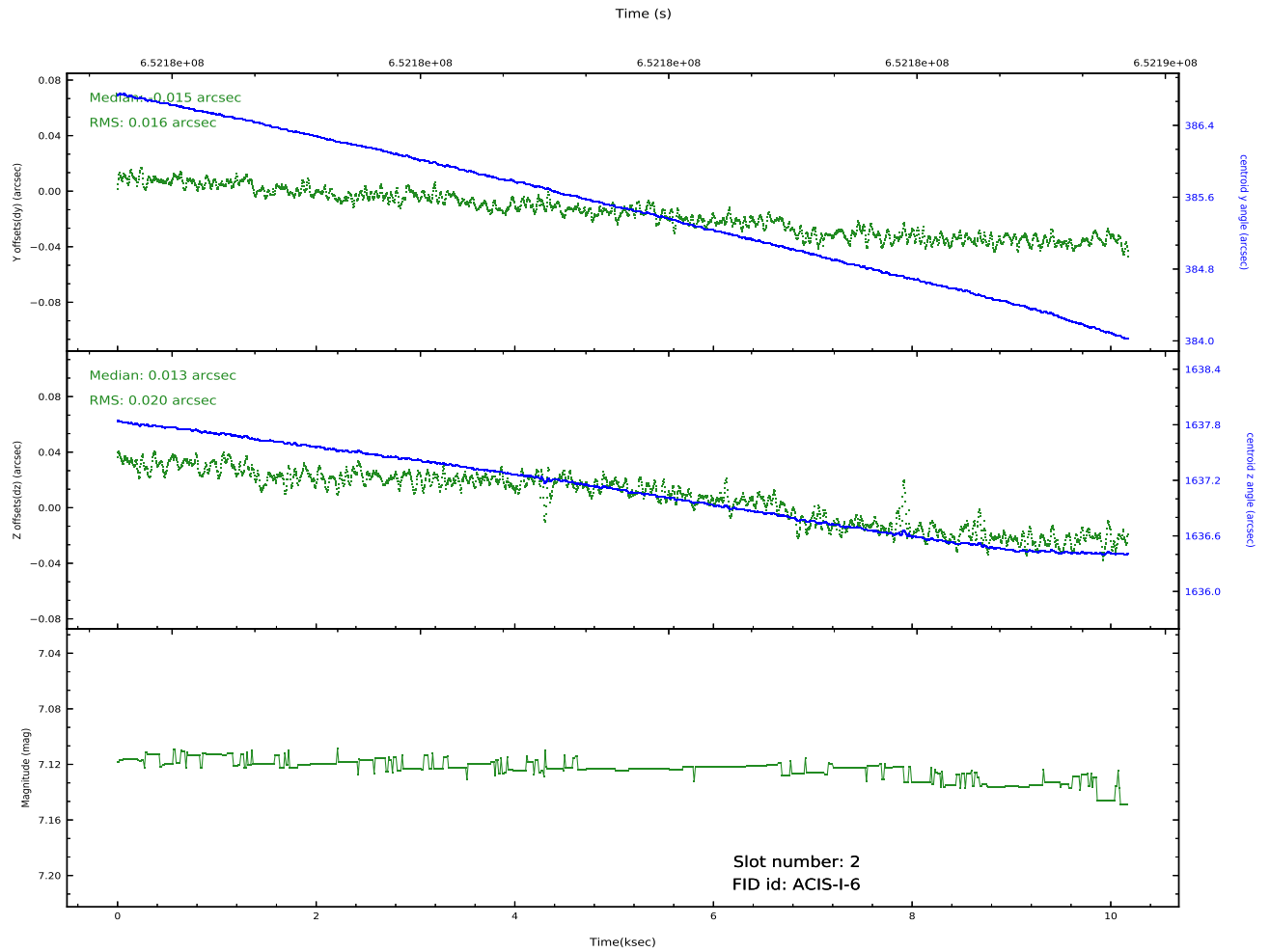
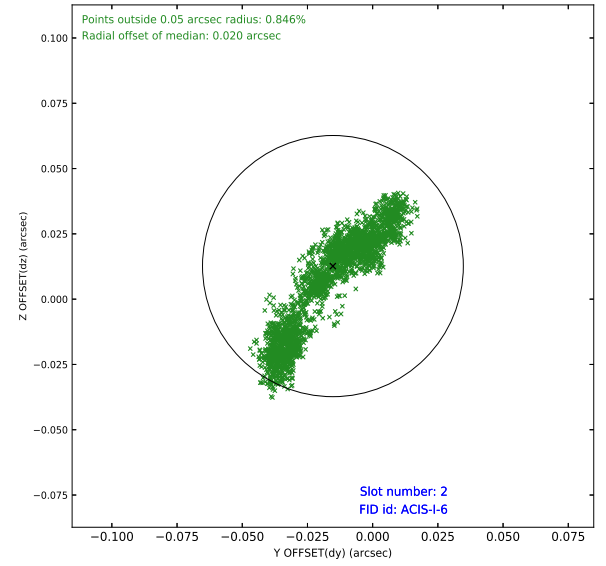
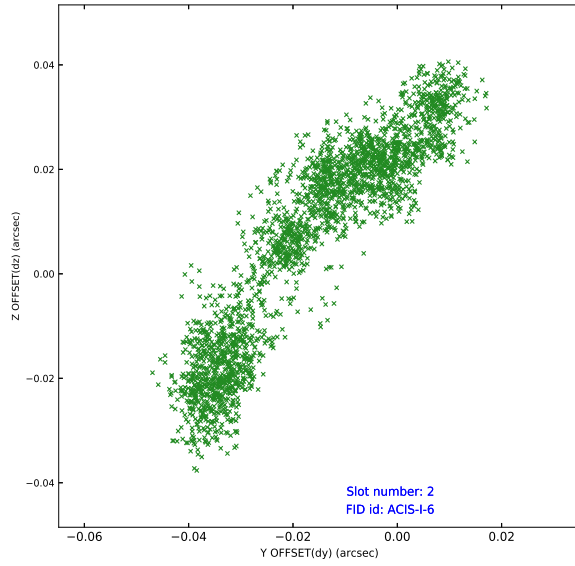
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## **A Summary**

### **A.1 Status**

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.078100077629

### **A.2 Comments**