

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20320 - L2 Version 2  
Chandra X-Ray Center

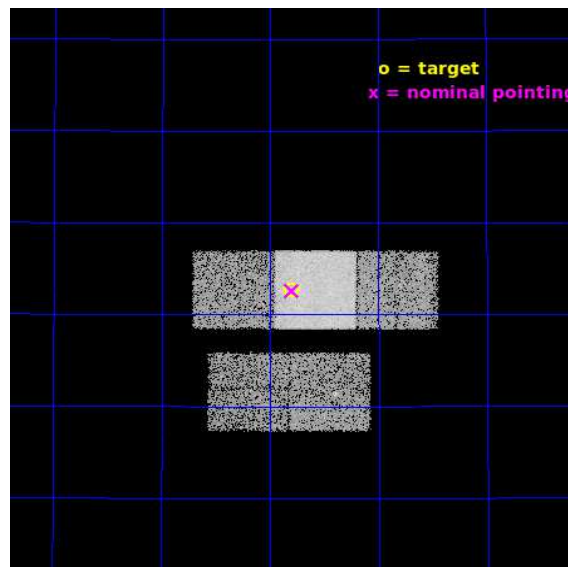
L2 Processing Date : Oct 28 2020

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# 1 Front

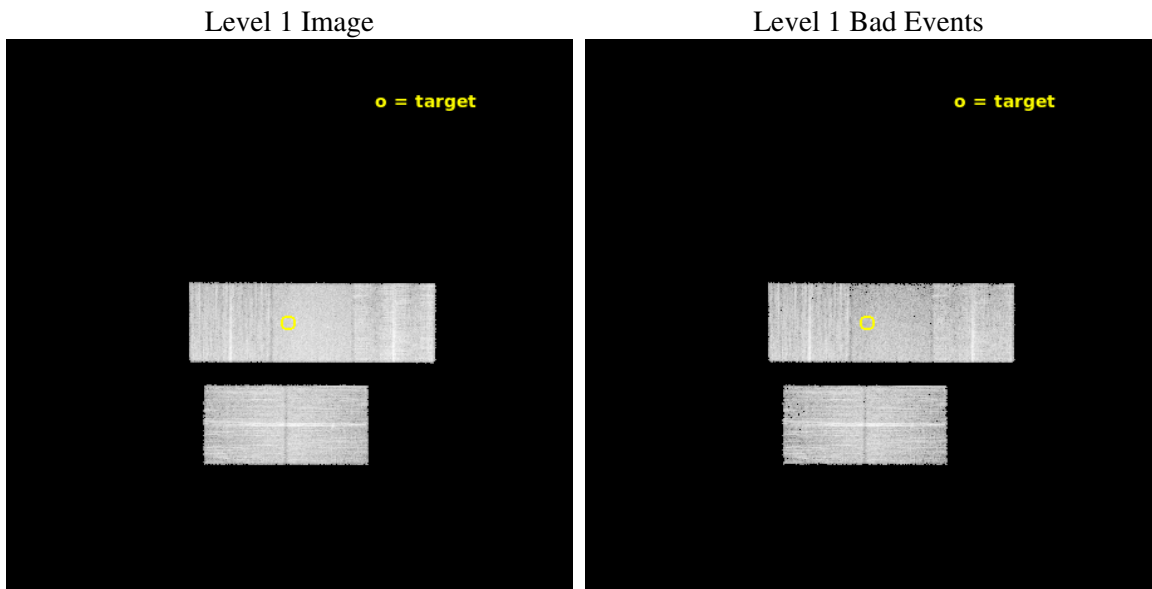
seq_num	503014	Sequence number
obs_id	20320	Observation id
title	Unraveling the physics of engine-driven SNe with ZTF+Chandra	Propo
observer	Alessandra Corsi	Principal investigator
object	AT2018gep	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	250.950926	Observer's specified target RA [deg]
dec_targ	41.04538	Observer's specified target Dec [deg]
ra_nom	250.9497762623	Nominal RA [deg]
dec_nom	41.043603264375	Nominal Dec [deg]
roll_nom	0.15077613527361	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10056.217910647	Sum of GTIs [s]
livetime	9924.8260203649	Livetime [s]
ontime2	10056.053750634	Sum of GTIs [s]
ontime3	10056.135830641	Sum of GTIs [s]
ontime6	10056.176870704	Sum of GTIs [s]
ontime7	10056.217910647	Sum of GTIs [s]
ontime8	10056.094790697	Sum of GTIs [s]
l2events	70063	Number of level 2 events



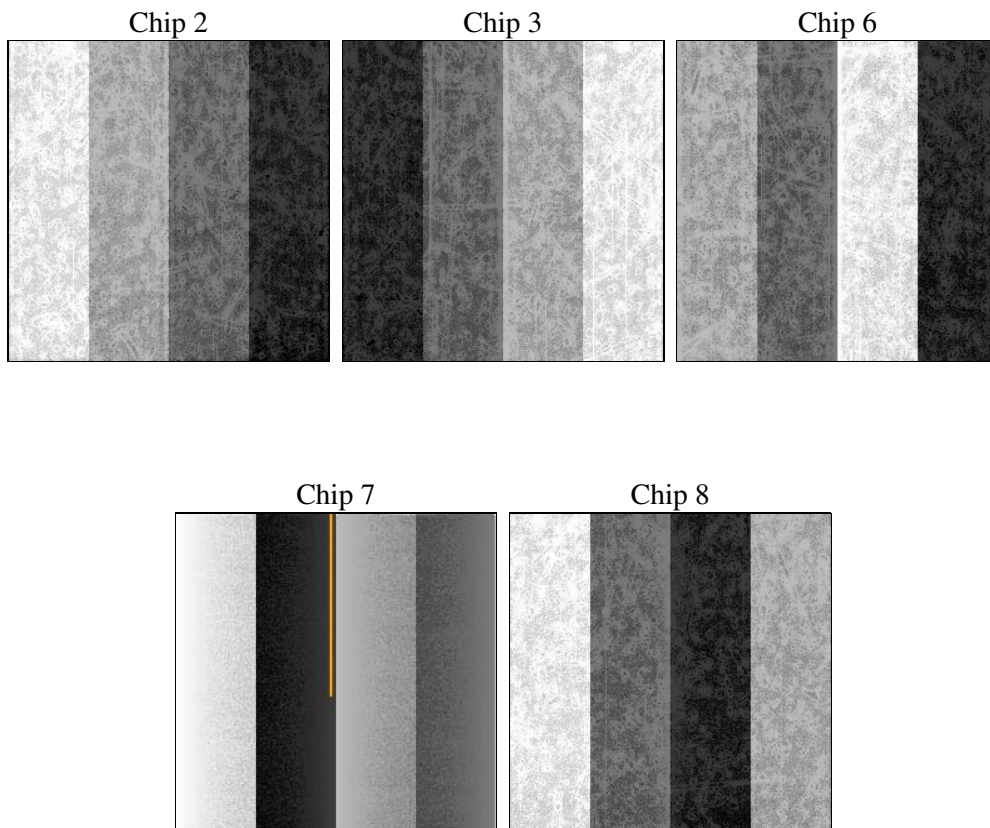
## 2 OBI

### 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	10056.217910647	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime2	10056.053750634	Sum of GTIs [s]
date	2020-10-28T14:05:32	Date and time of file creation	ontime3	10056.135830641	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10056.176870704	Sum of GTIs [s]
			ontime7	10056.217910647	Sum of GTIs [s]
			ontime8	10056.094790697	Sum of GTIs [s]
			l1events	428948	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	74741	74784	82348	95342	101733
rejected events	66923	66643	73704	54062	74375
rejected %	89%	89%	89%	56%	73%

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2673	3100	2682	3567	7870
	3%	4%	3%	3%	7%
grade 1 events	38	48	35	144	79
	0%	0%	0%	0%	0%
grade 2 events	1935	1717	2272	8759	6727
	2%	2%	2%	9%	6%
grade 3 events	824	790	792	3182	2699
	1%	1%	0%	3%	2%
grade 4 events	814	814	771	3156	2625
	1%	1%	0%	3%	2%
grade 5 events	2845	3443	3360	9544	5340
	3%	4%	4%	10%	5%
grade 6 events	1573	1721	2130	22633	7444
	2%	2%	2%	23%	7%
grade 7 events	64039	63151	70306	44357	68949
	85%	84%	85%	46%	67%

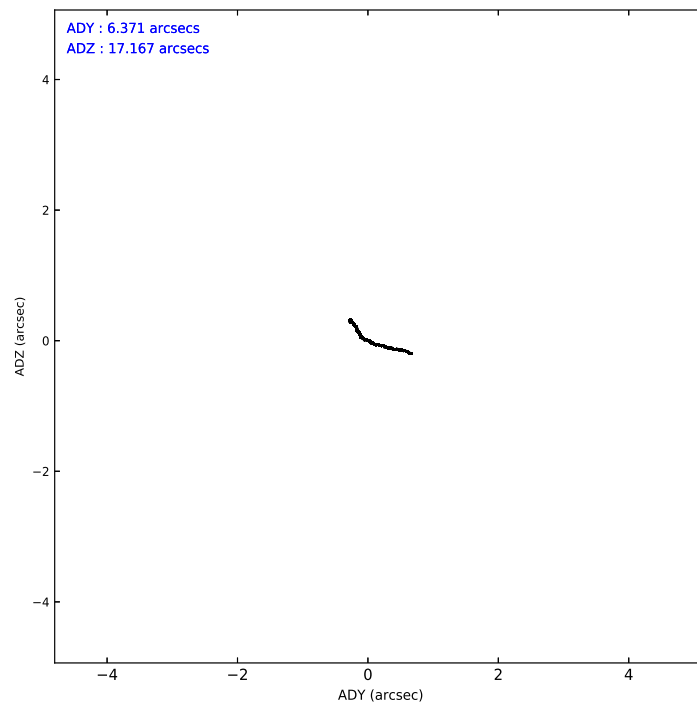
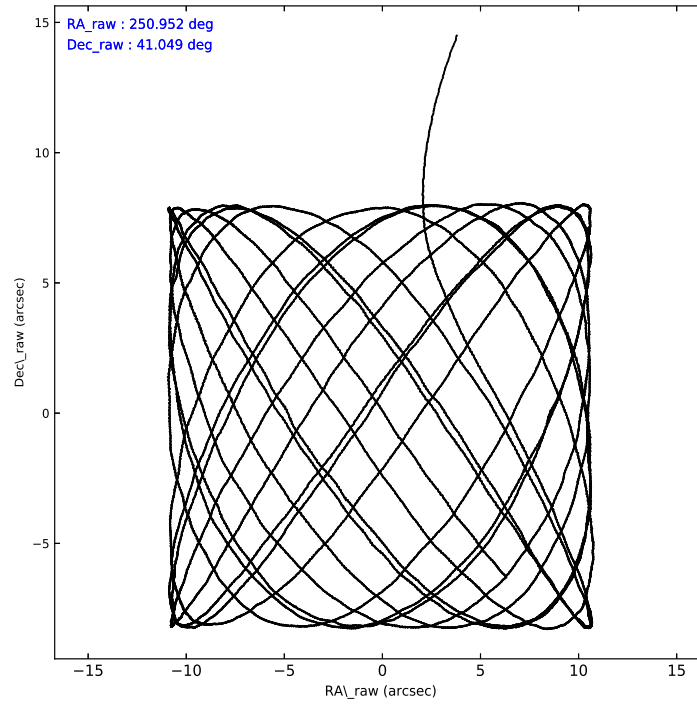


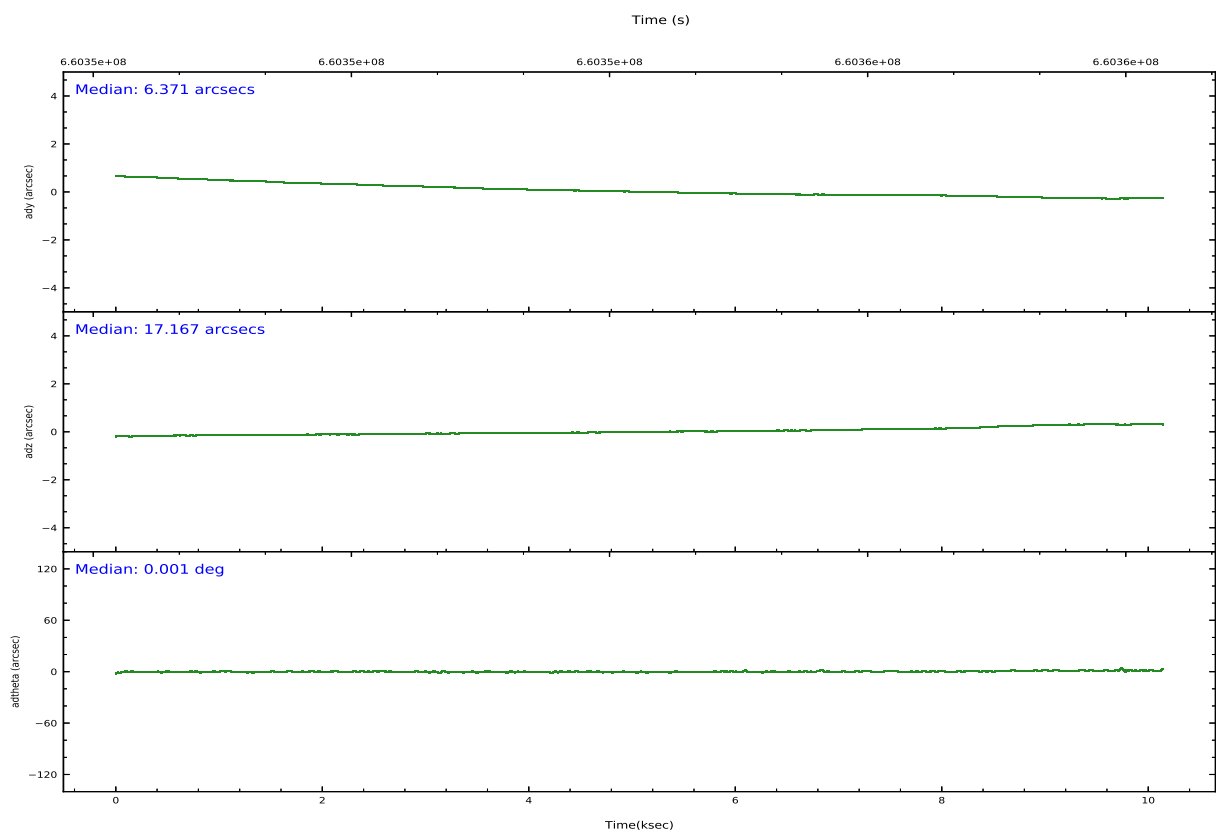
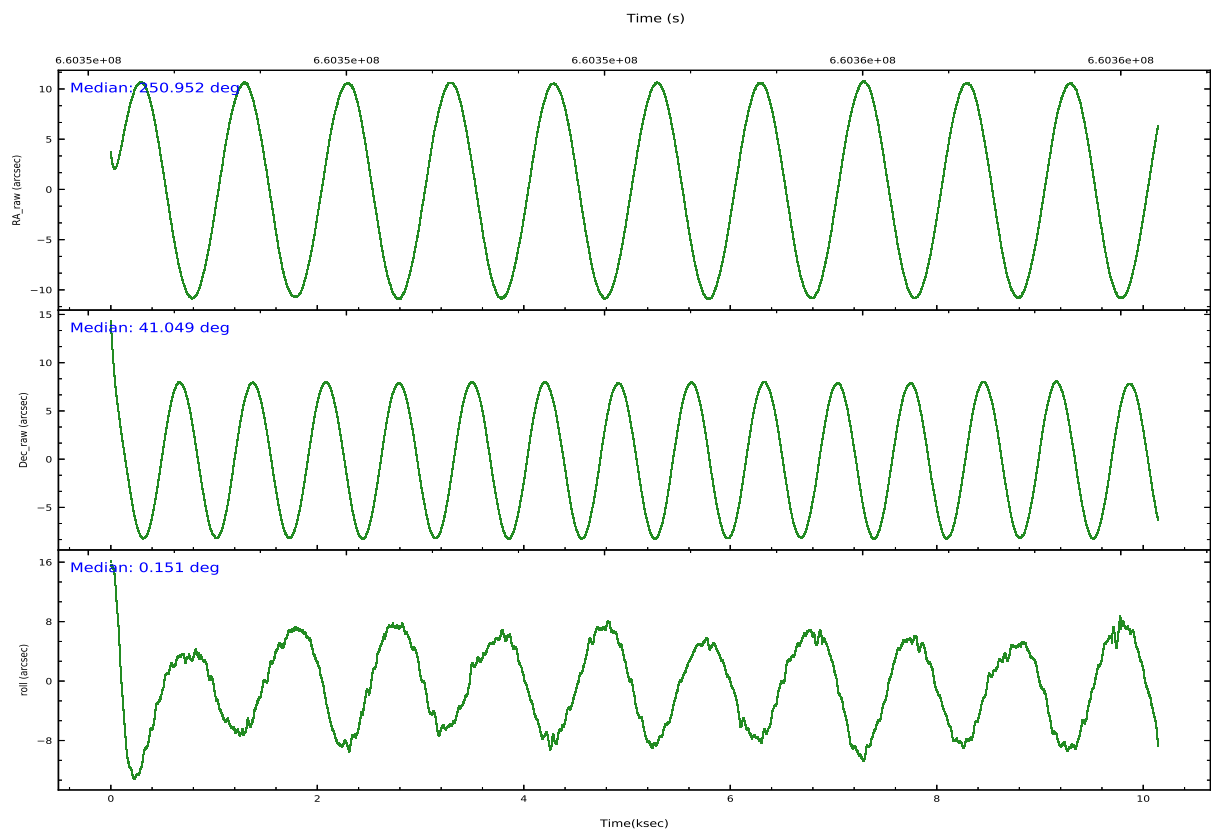
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	250.921121	250.9497762623
[deg] Pointing Dec	41.034410	41.043603264375
[deg] Pointing Roll	0.026436	0.15077613527361
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	660347863.184000	660346272.5225199
Observation start date	2018-12-04T21:56:34	2018-12-04T21:31:12
[s] Observation end time (MET)	660357863.184000	660358367.52324
Observation end date	2018-12-05T00:43:14	2018-12-05T00:52:47
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O1	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
CCD S5 on	N	N
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



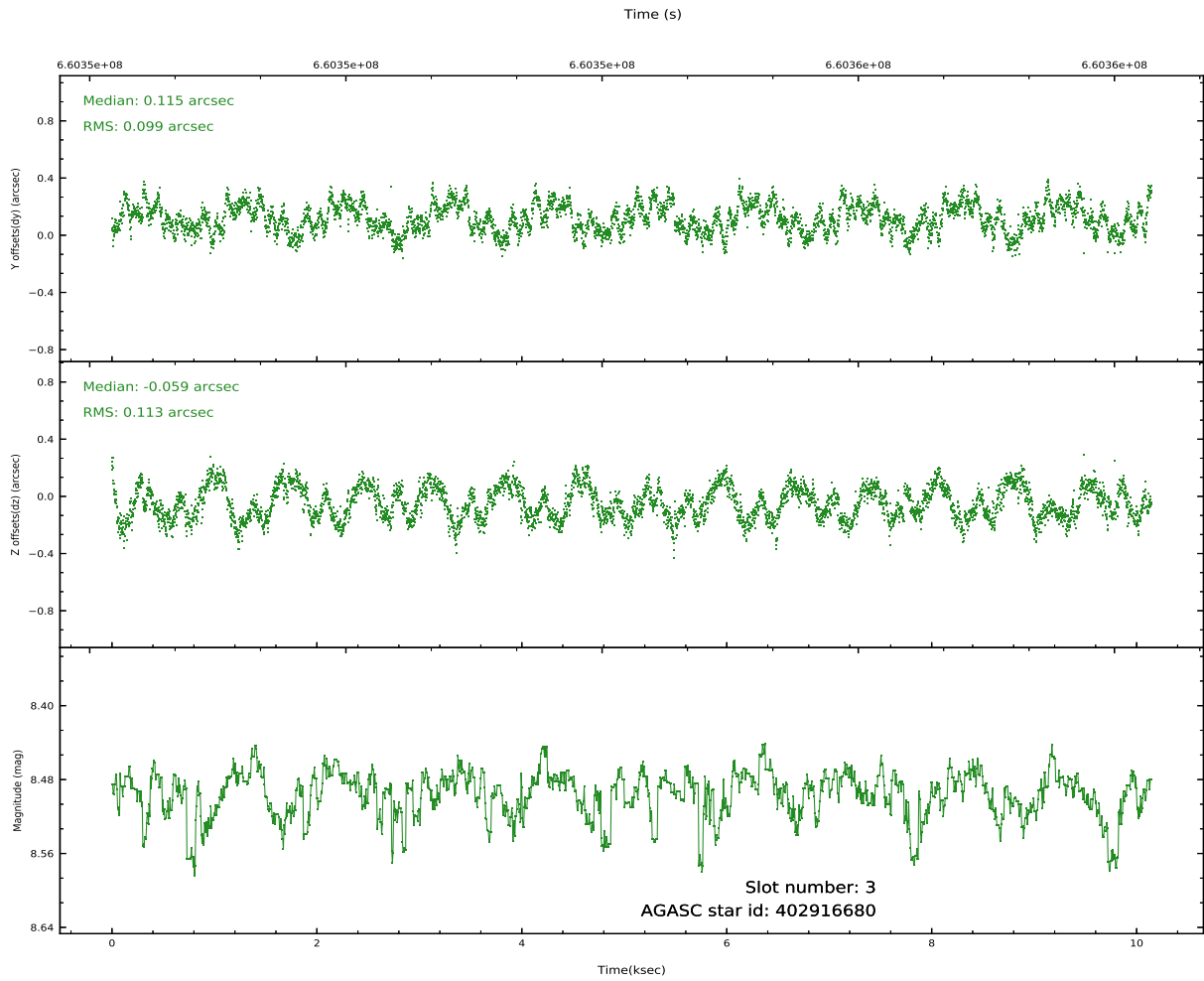
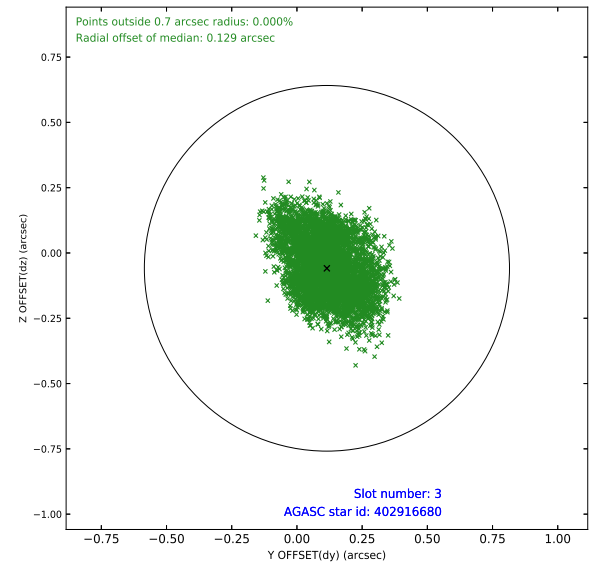
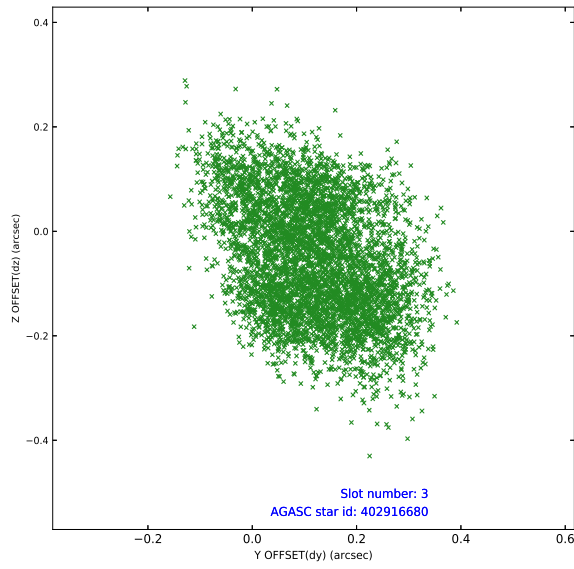


Slot Statistics

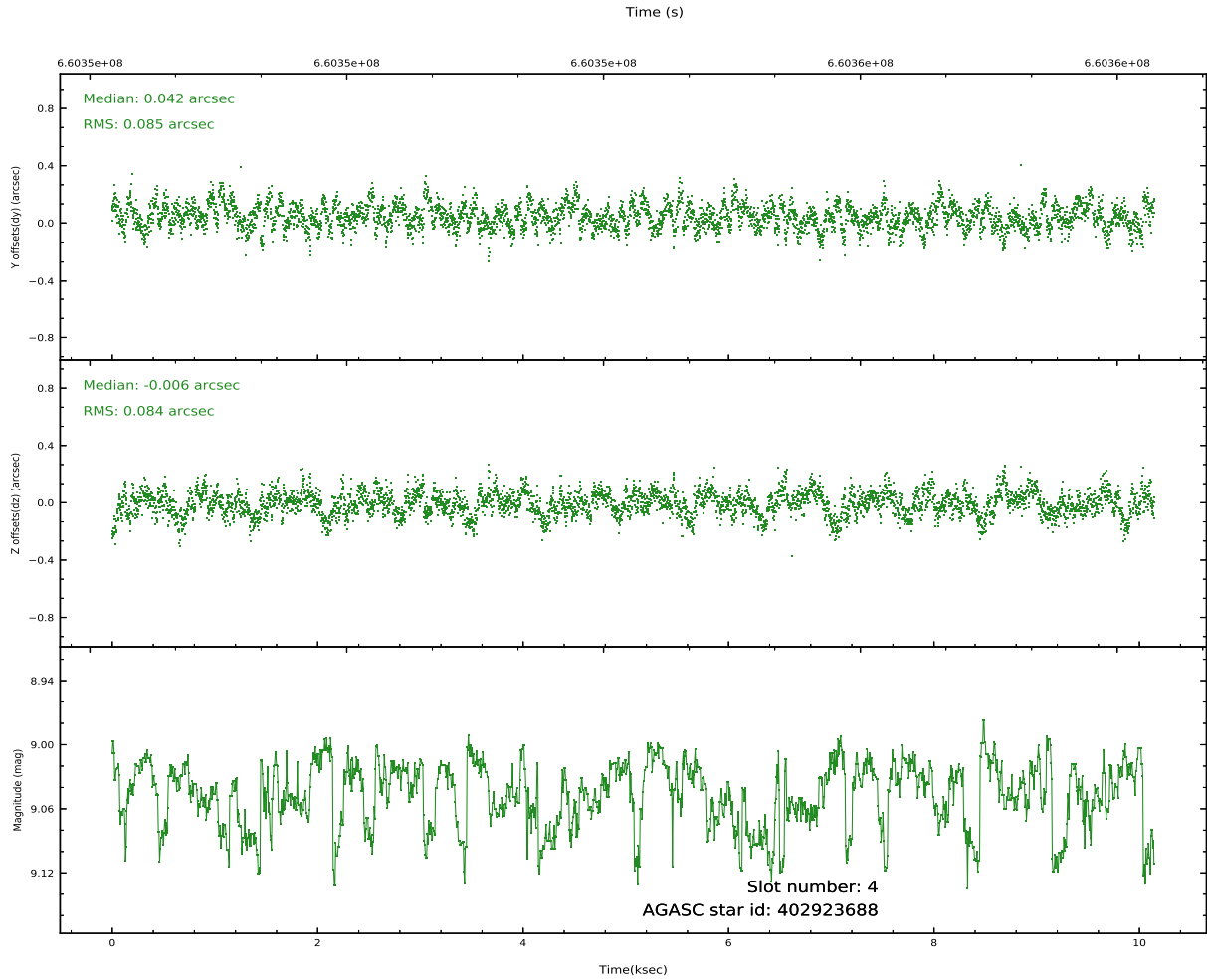
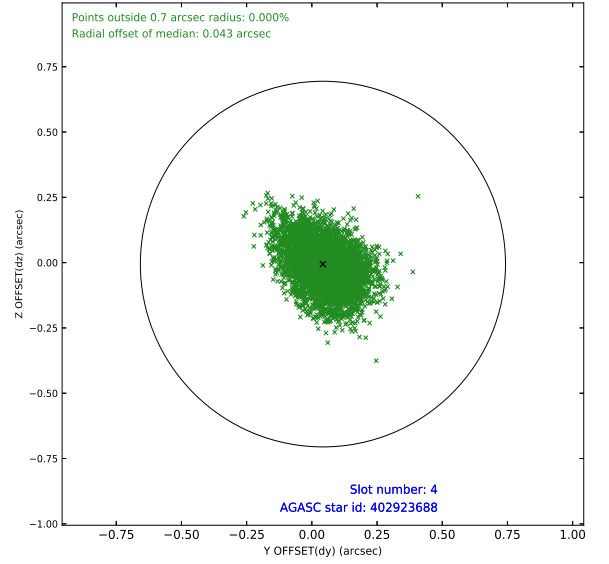
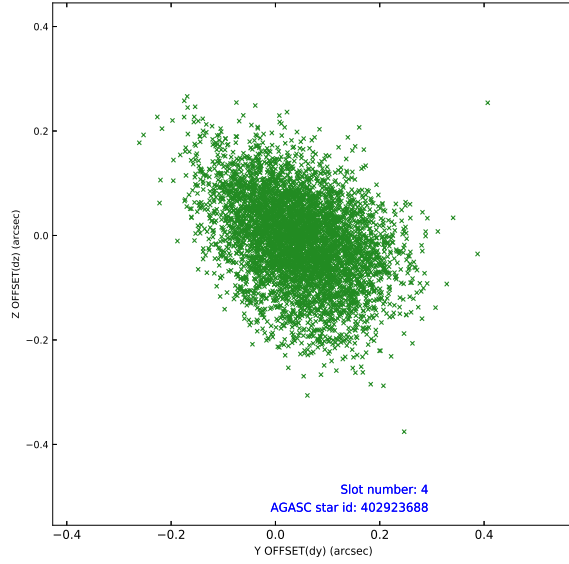
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.02	2475	1.000	-0.025	-0.025	0.013	0.029	0.000000	0.000000	-759.35	-1738
1	FID		ACIS-S-4	7.15	2475	1.000	0.115	-0.035	0.012	0.022	0.000000	0.000000	2153.98	169
2	FID		ACIS-S-6	7.28	2475	1.000	-0.120	0.067	0.009	0.014	0.000000	0.000000	403.41	807
3	GUIDE	used	402916680	8.49	4948	1.000	0.115	-0.059	0.162	0.248	251.274115	40.638184	964.26	-1424
4	GUIDE	used	402923688	9.04	4946	1.000	0.042	-0.006	0.127	0.210	251.612014	40.564152	1889.72	-1686
5	GUIDE	used	403440824	8.58	4944	1.000	-0.040	-0.068	0.116	0.202	251.315347	41.374636	1066.07	1226
6	GUIDE	used	403440864	8.44	4950	1.000	-0.041	0.200	0.120	0.212	250.141314	41.685542	-2095.72	2354
7	GUIDE	used	403440592	8.92	4945	1.000	-0.078	-0.059	0.136	0.218	251.018721	41.677629	263.86	2314

## 2.4 Star Slots

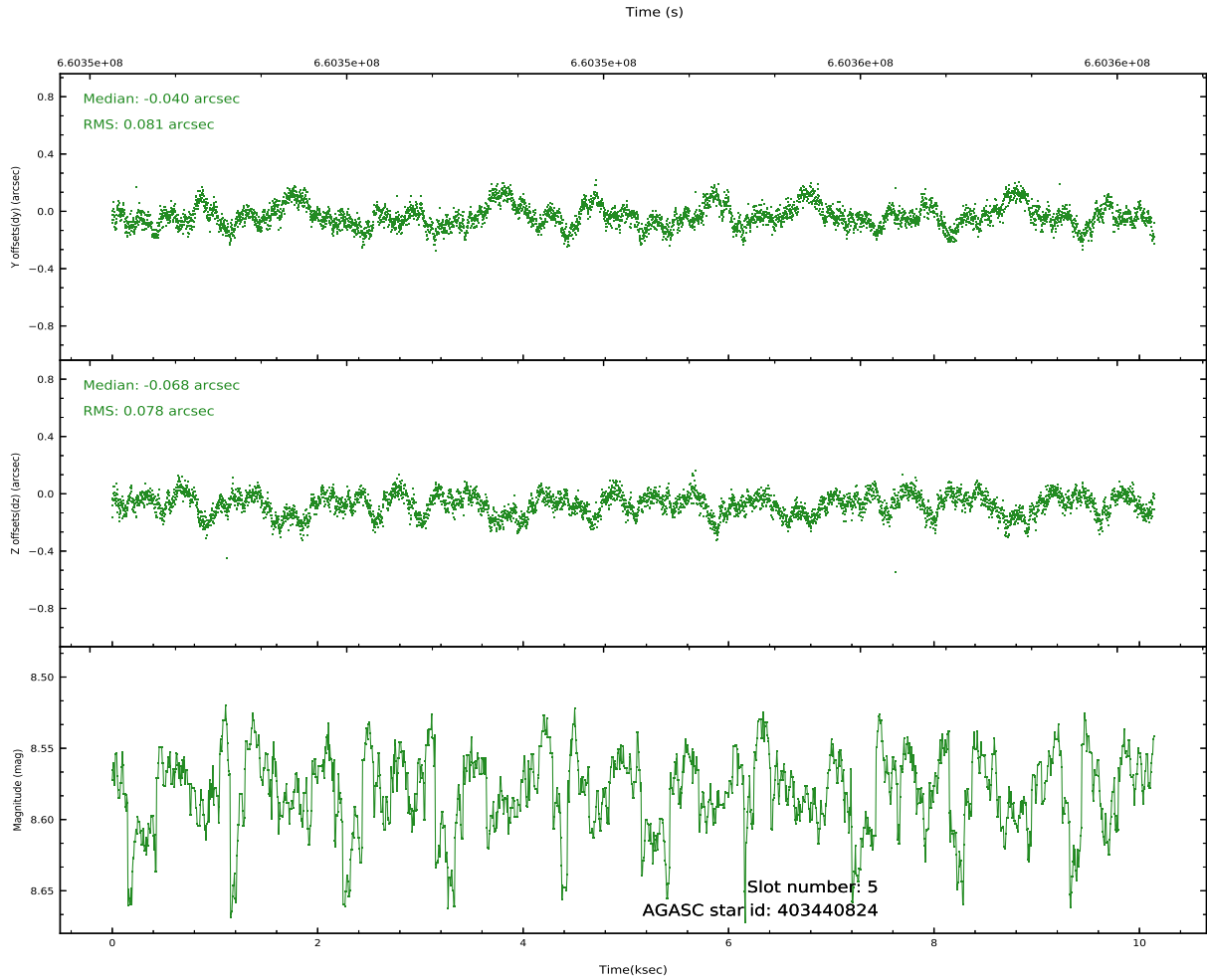
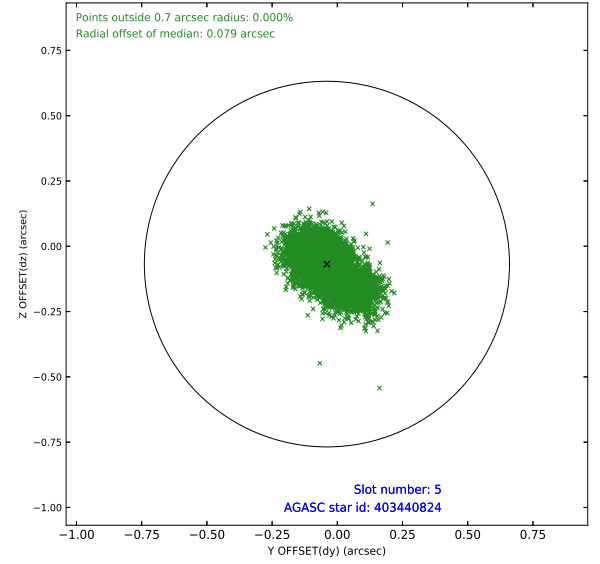
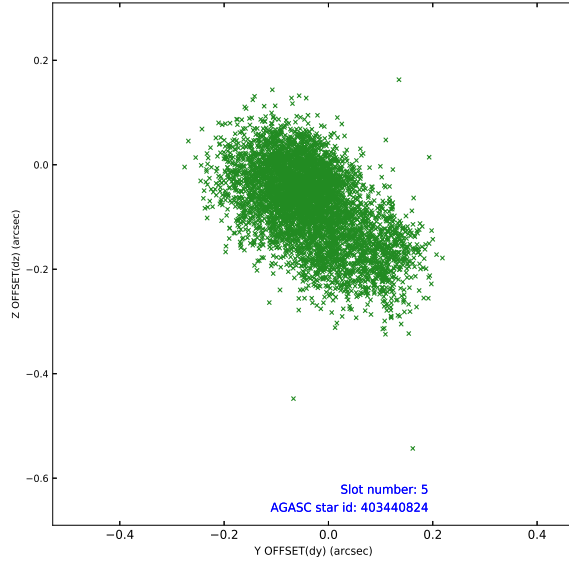
### 2.4.1 Slot 3



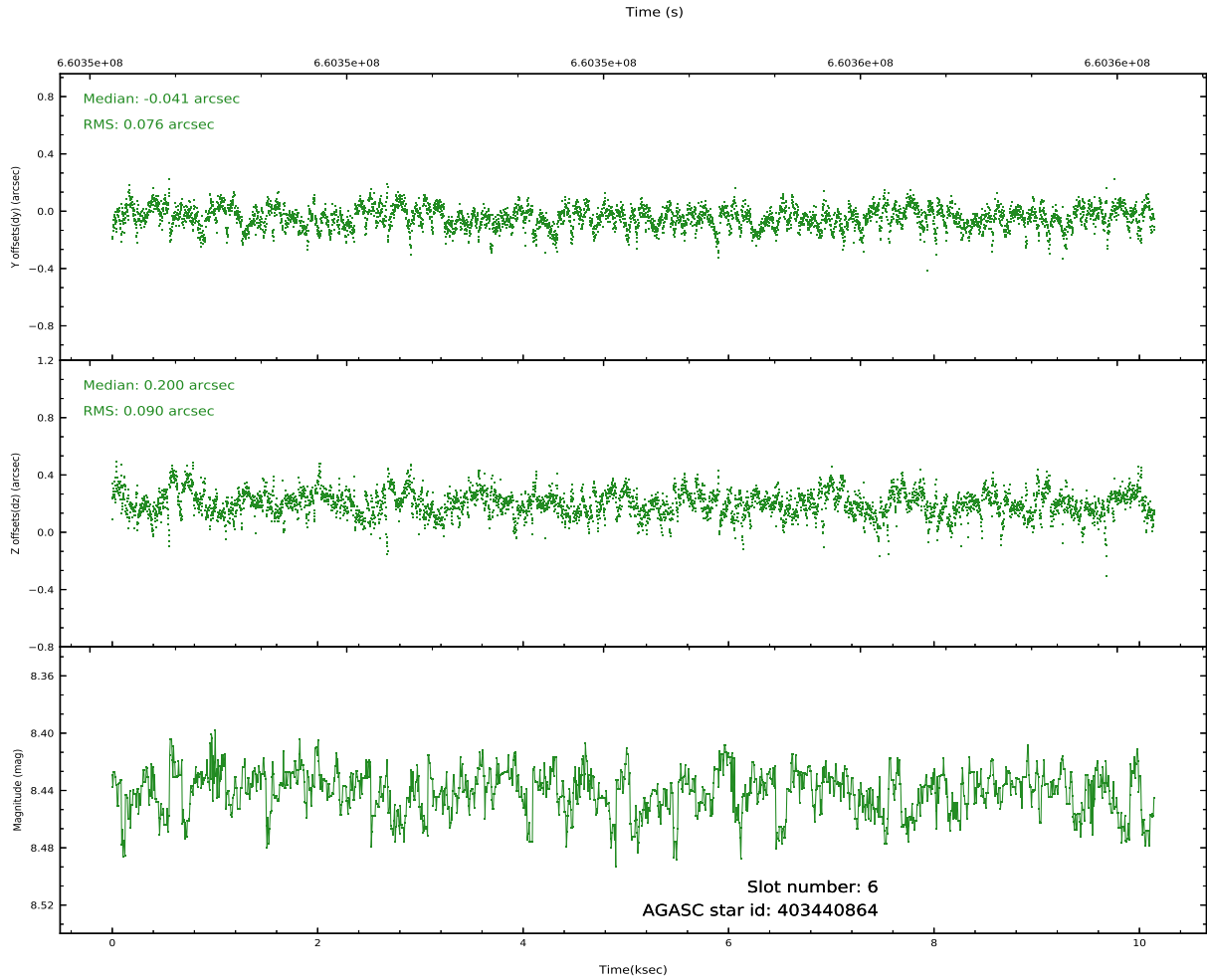
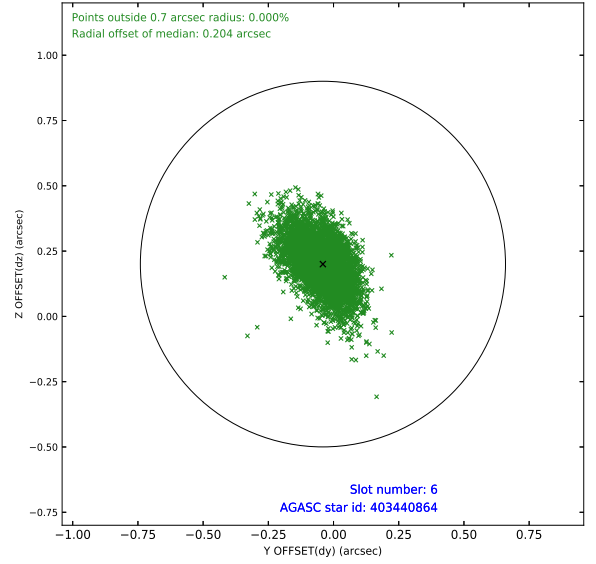
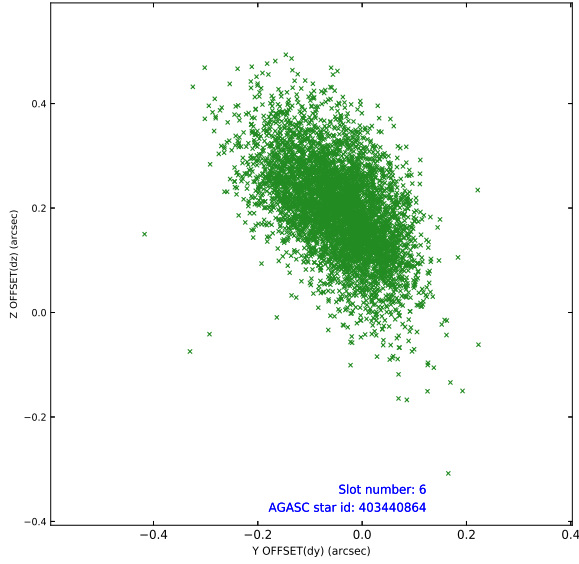
## 2.4.2 Slot 4



### 2.4.3 Slot 5

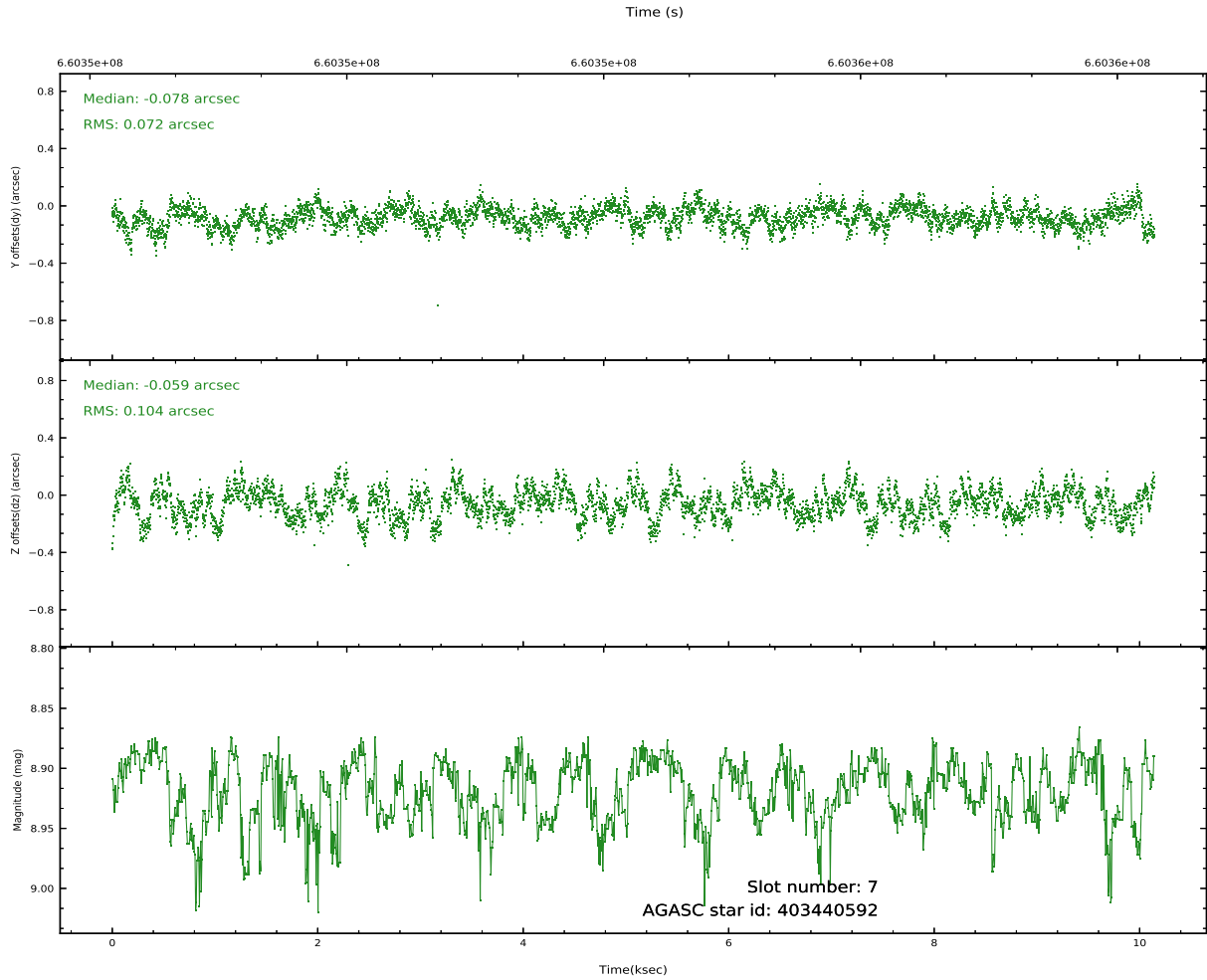
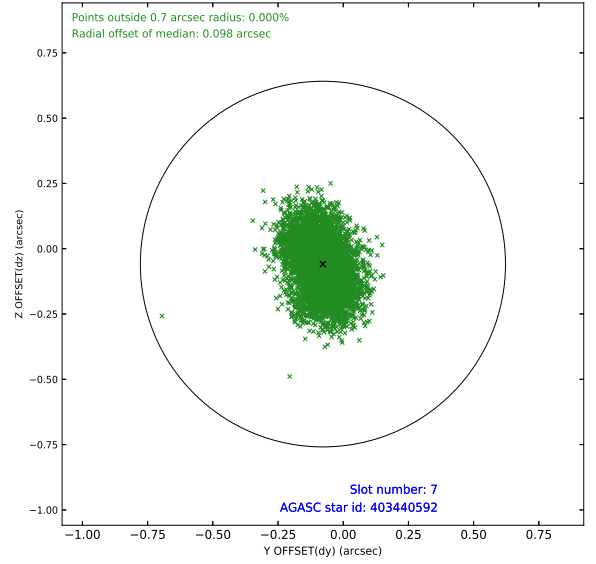
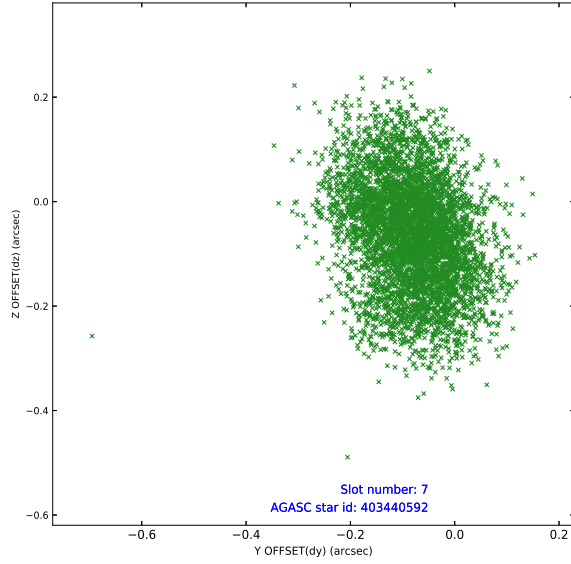


## 2.4.4 Slot 6



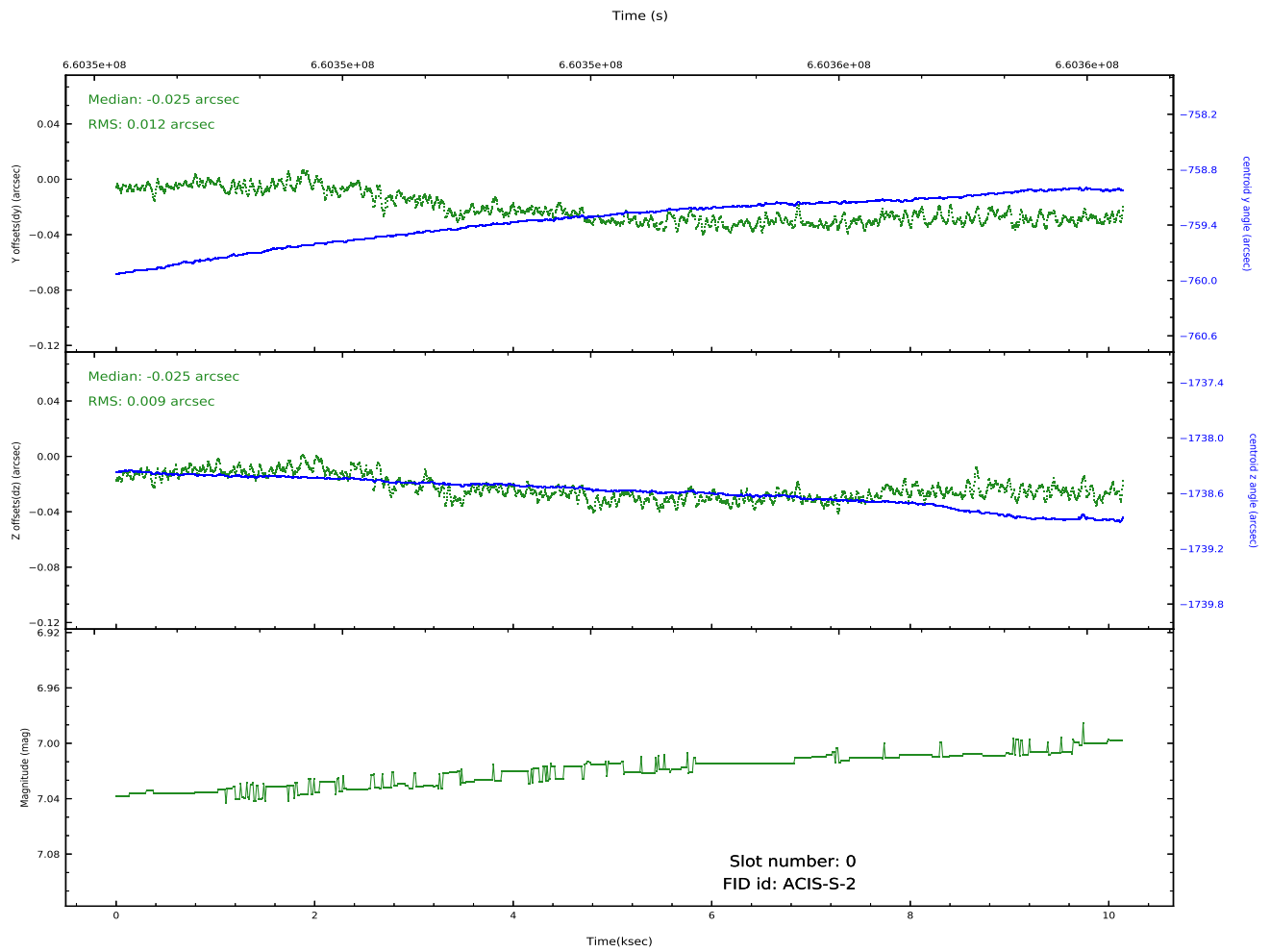
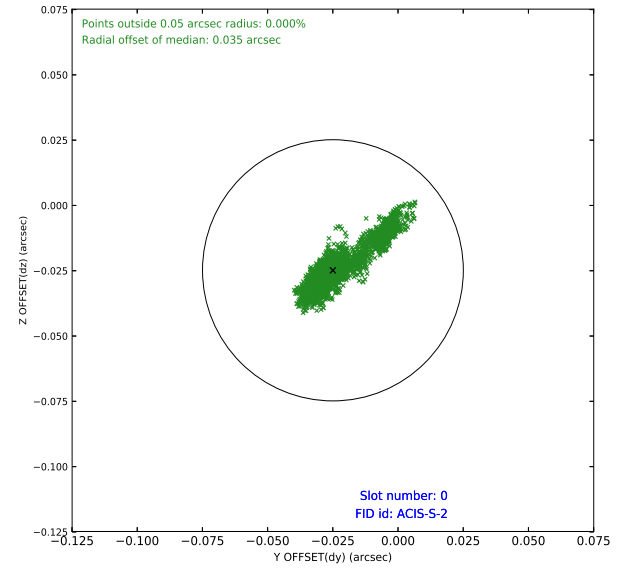
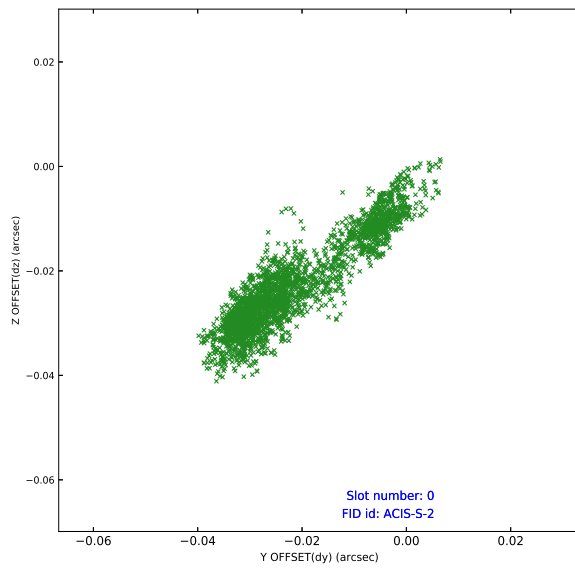


## 2.4.5 Slot 7

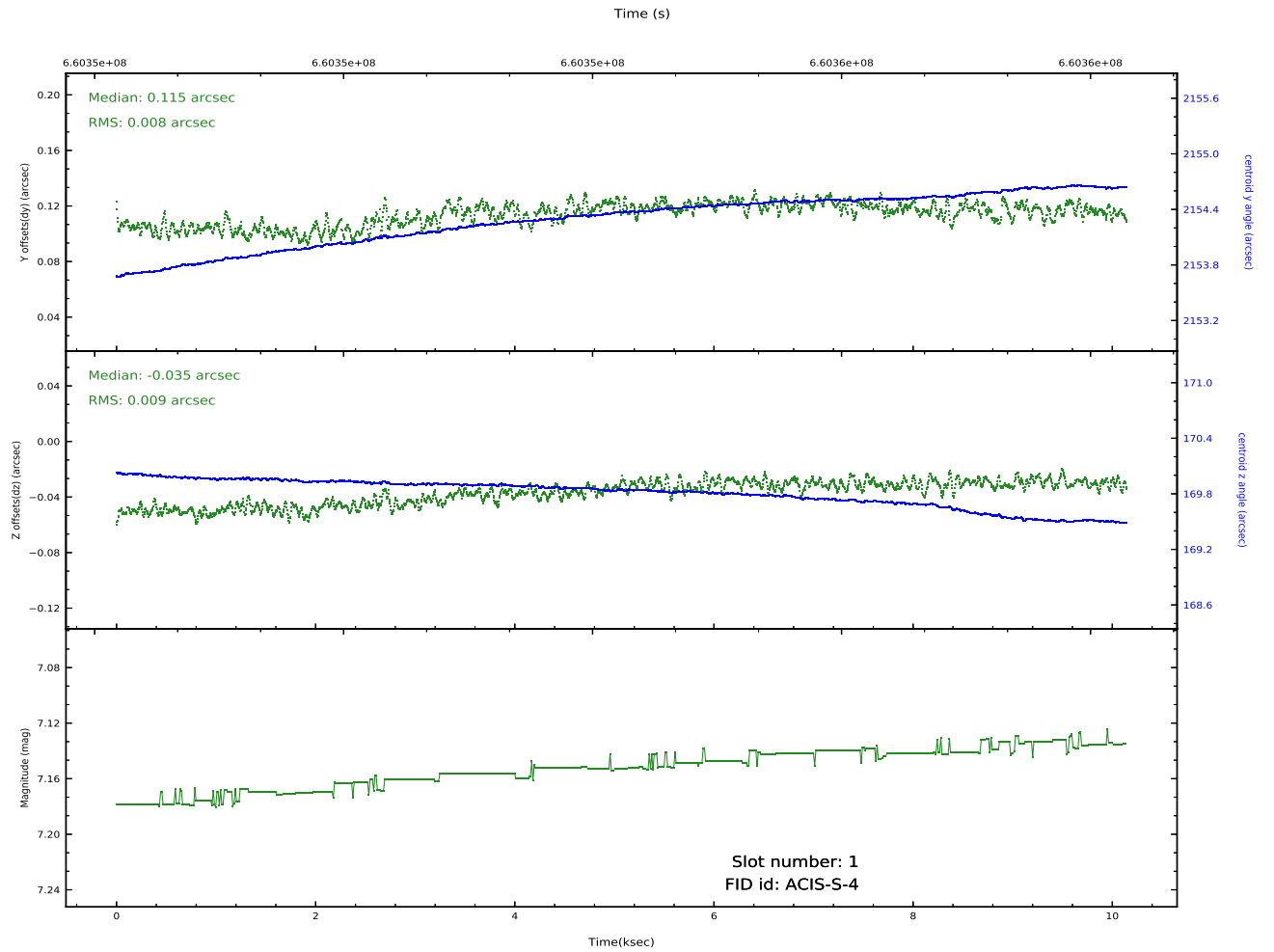
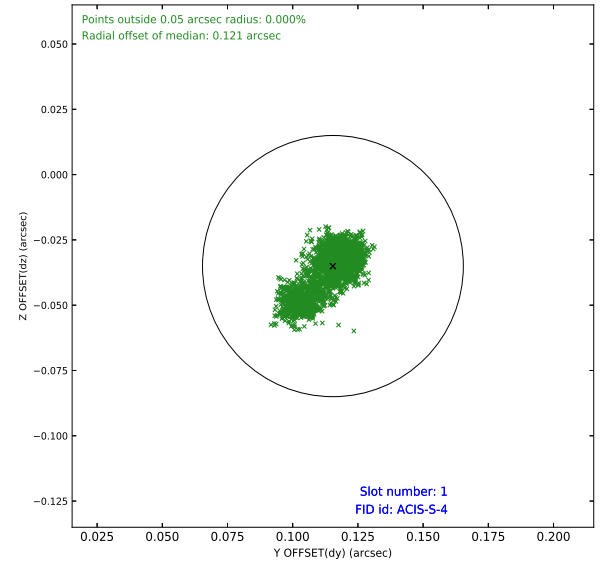
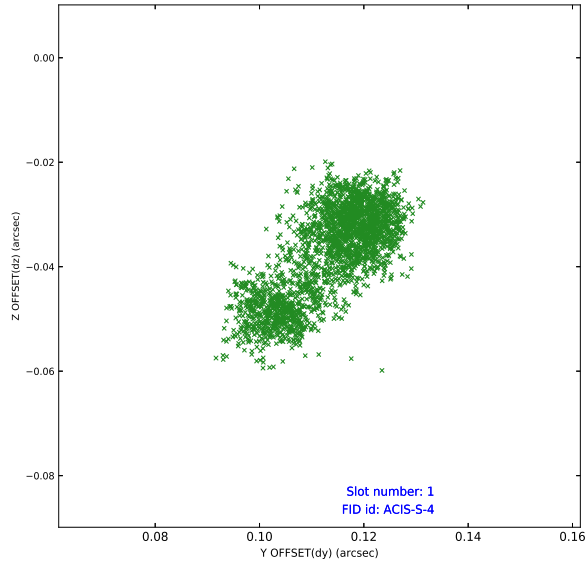


## 2.5 FID Slots

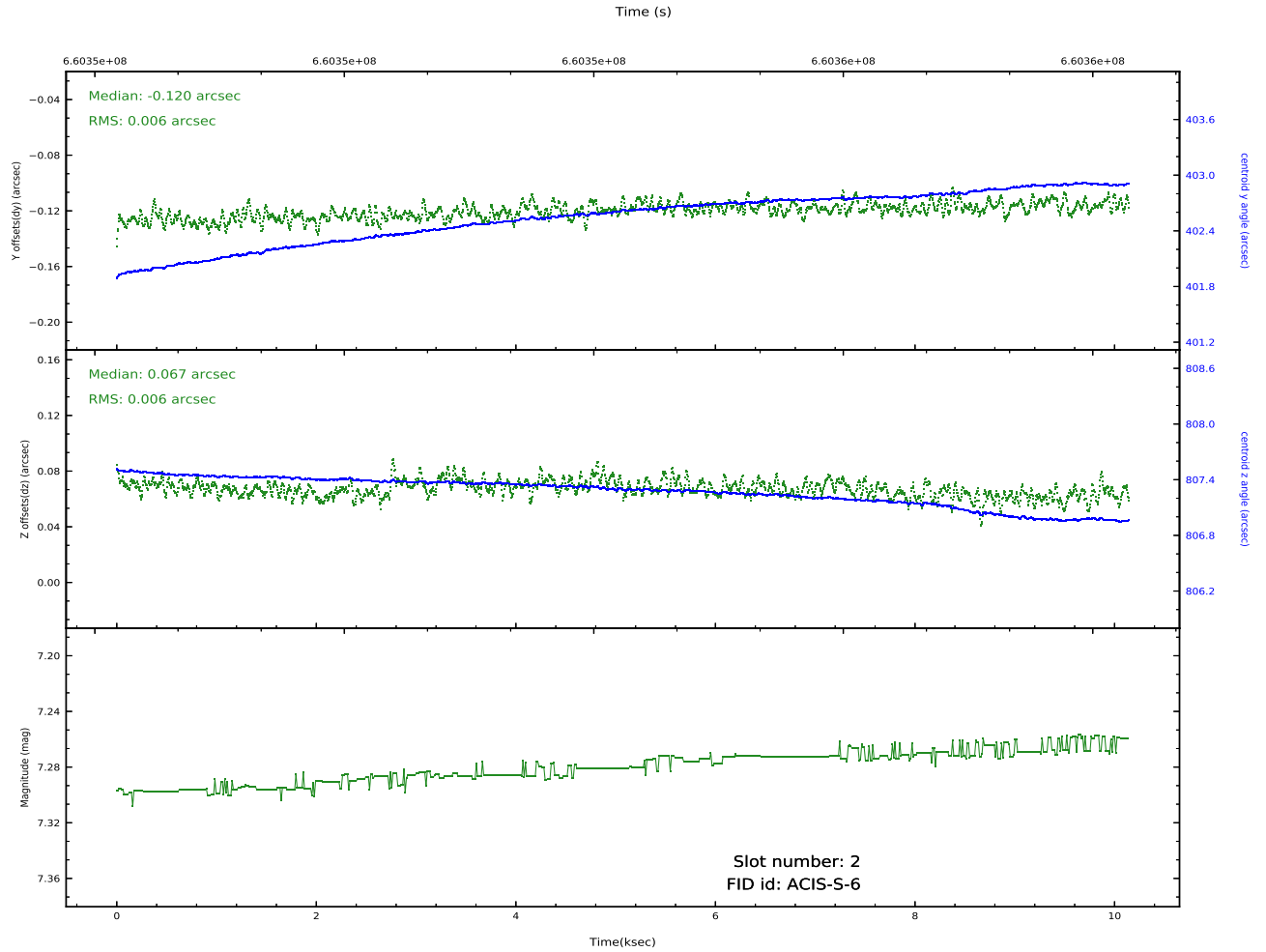
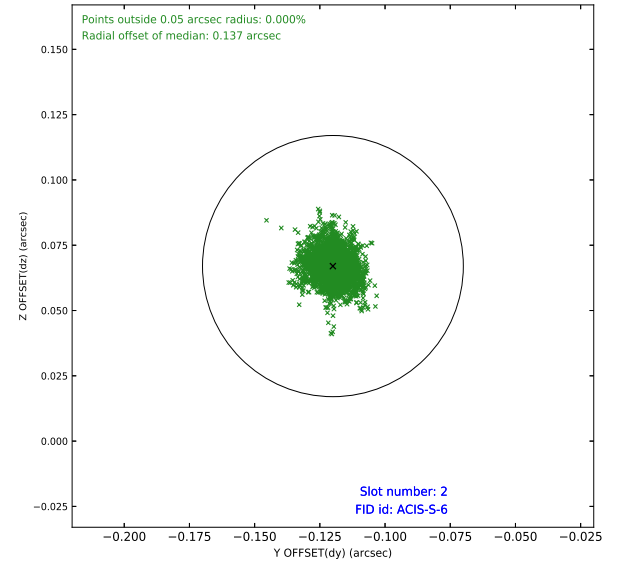
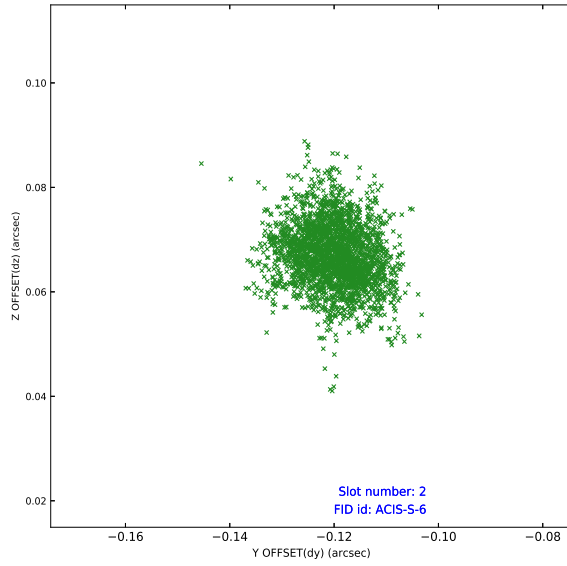
### 2.5.1 Slot 0



## 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)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.056217906356

### A.2 Comments

Monitor constraint met.