

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20283 - L2 Version 2  
Chandra X-Ray Center

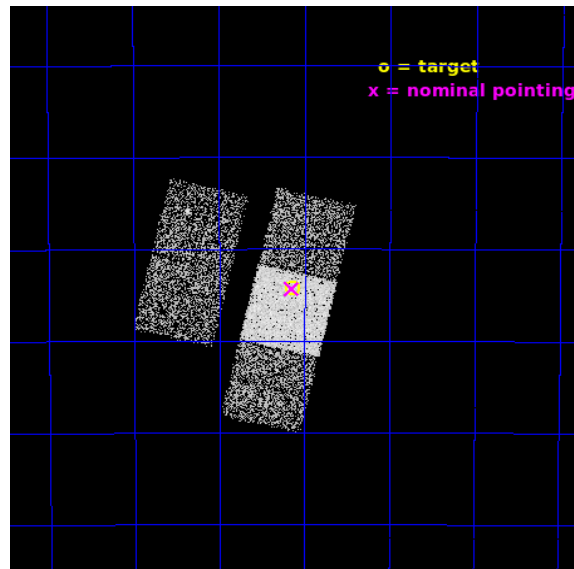
L2 Processing Date : Oct 24 2020

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# 1 Front

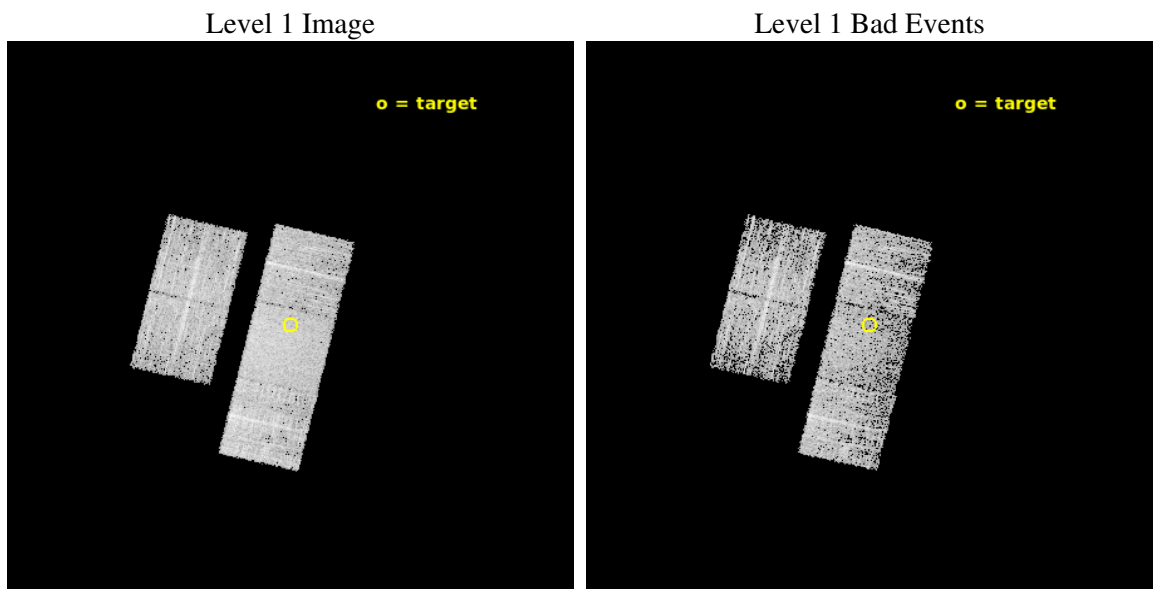
seq_num	502982	Sequence number
obs_id	20283	Observation id
title	Where Have All the Central Compact Objects Gone?	Proposal title
observer	Eric Gotthelf	Principal investigator
object	PSR J1534-5334	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	233.534583	Observer's specified target RA [deg]
dec_targ	-53.572028	Observer's specified target Dec [deg]
ra_nom	233.53680024989	Nominal RA [deg]
dec_nom	-53.572345587565	Nominal Dec [deg]
roll_nom	103.40432813054	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3548.9739618301	Sum of GTIs [s]
livetime	3502.6040043022	Livetime [s]
ontime2	3545.6687414646	Sum of GTIs [s]
ontime3	3548.8918818235	Sum of GTIs [s]
ontime6	3548.9329218864	Sum of GTIs [s]
ontime7	3548.9739618301	Sum of GTIs [s]
ontime8	3548.8508418798	Sum of GTIs [s]
l2events	23943	Number of level 2 events



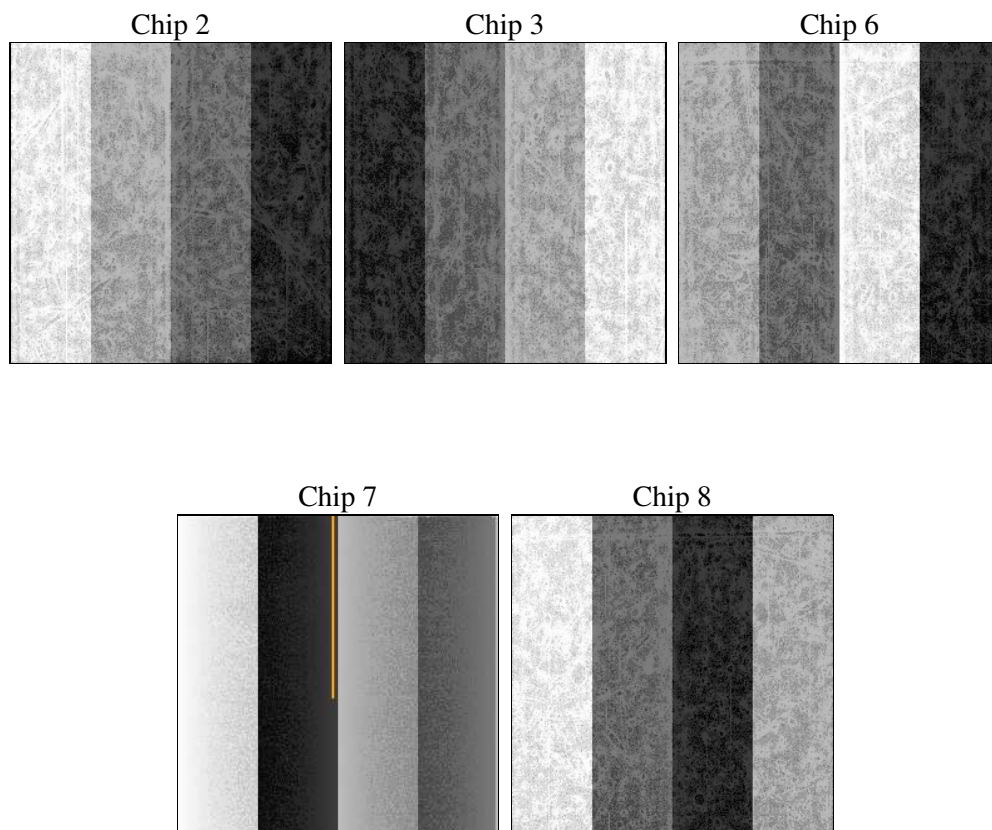
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	3548.9739618301	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime2	3545.6687414646	Sum of GTIs [s]
date	2020-10-24T06:22:45	Date and time of file creation	ontime3	3548.8918818235	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	3548.9329218864	Sum of GTIs [s]
			ontime7	3548.9739618301	Sum of GTIs [s]
			ontime8	3548.8508418798	Sum of GTIs [s]
			l1events	145527	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	26928	24971	26169	33384	34075
rejected events	24201	22328	23226	19011	25444
rejected %	89%	89%	88%	56%	74%

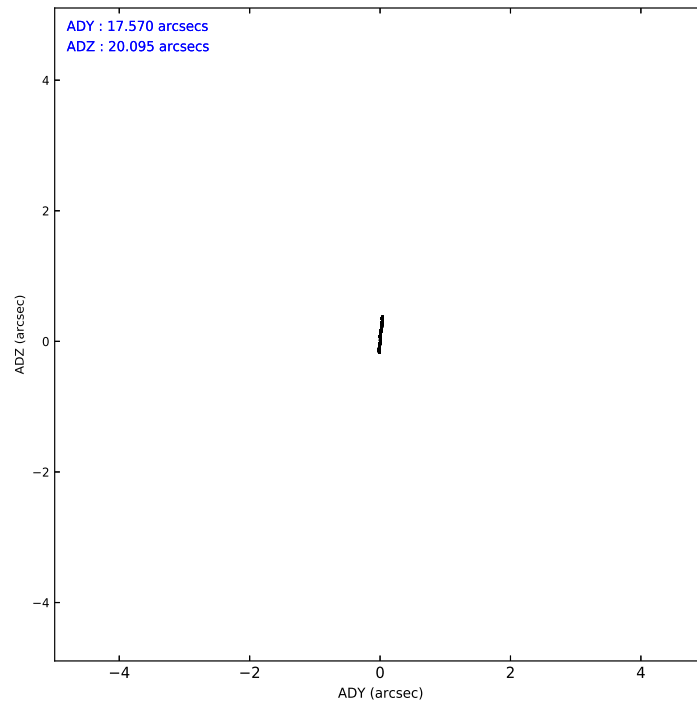
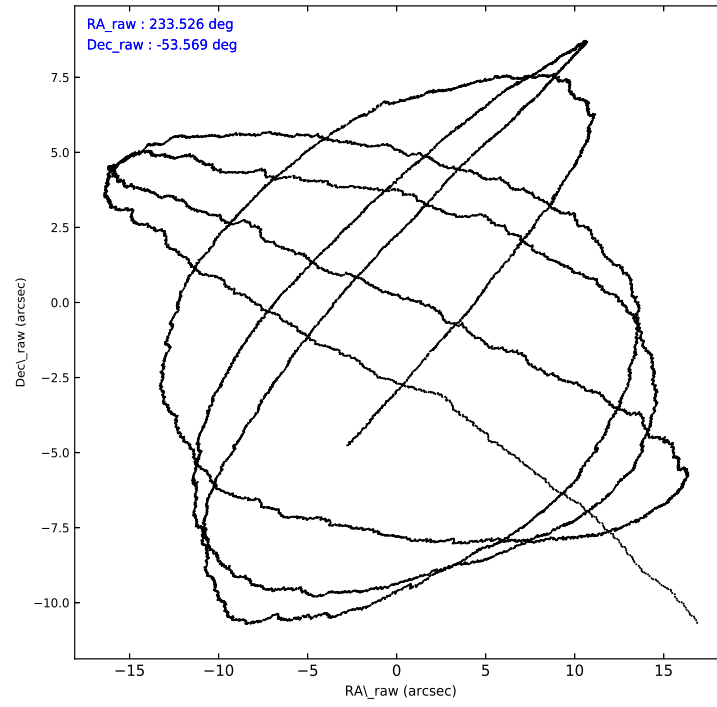
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	984	913	941	1194	2460
	3%	3%	3%	3%	7%
grade 1 events	12	13	8	41	32
	0%	0%	0%	0%	0%
grade 2 events	625	548	781	2989	2081
	2%	2%	2%	8%	6%
grade 3 events	281	278	261	1054	890
	1%	1%	0%	3%	2%
grade 4 events	298	265	261	1065	890
	1%	1%	0%	3%	2%
grade 5 events	976	1102	1116	3213	1719
	3%	4%	4%	9%	5%
grade 6 events	541	644	701	8087	2314
	2%	2%	2%	24%	6%
grade 7 events	23211	21208	22100	15741	23689
	86%	84%	84%	47%	69%

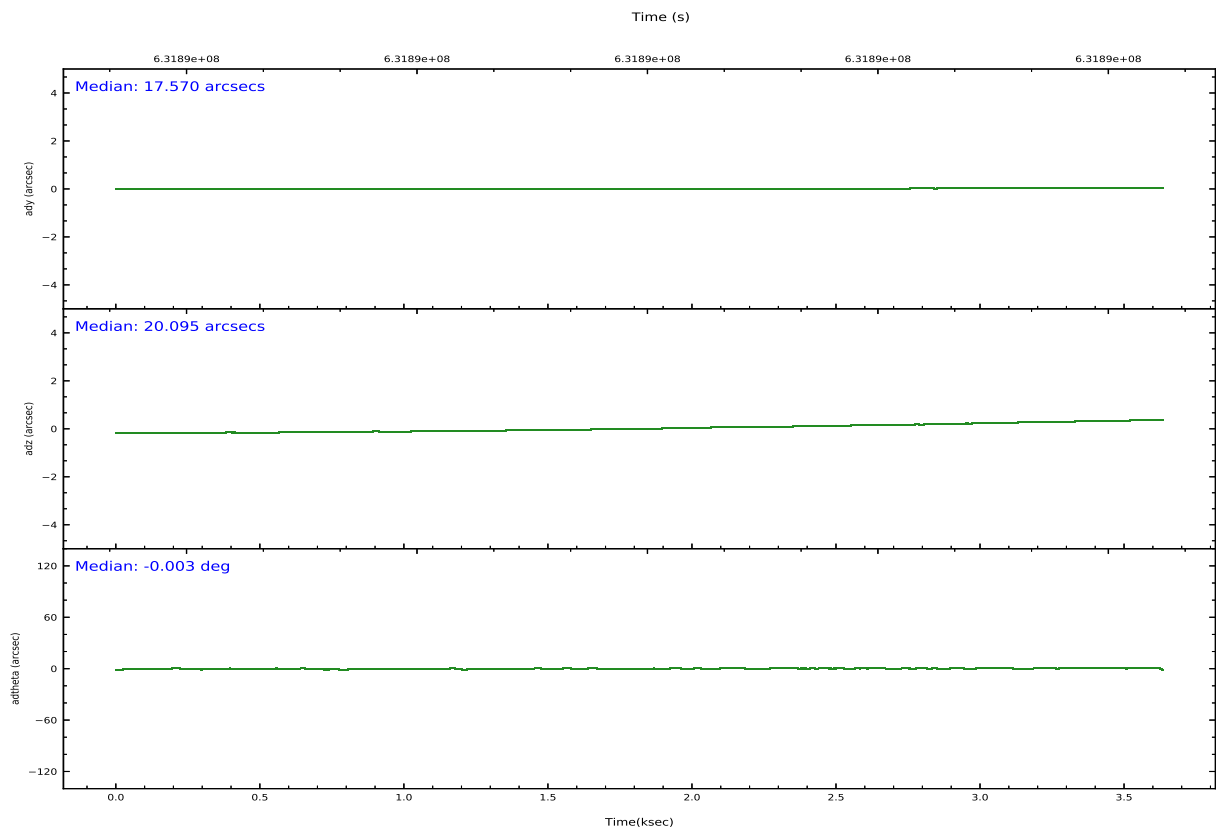
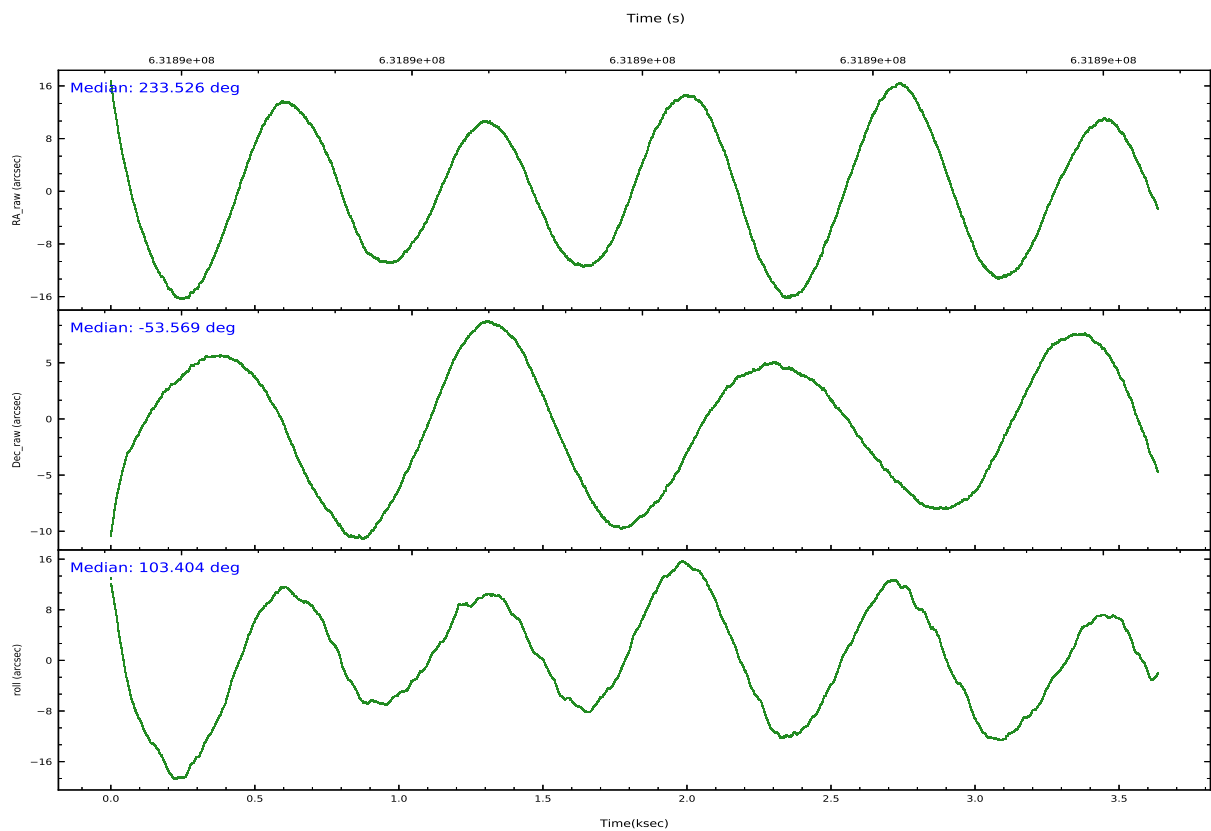
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	233.557575	233.53680024989
[deg] Pointing Dec	-53.588558	-53.572345587565
[deg] Pointing Roll	103.277728	103.40432813054
[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)	631886289.184000	631885076.7951601
Observation start date	2018-01-09T11:57:00	2018-01-09T11:37:56
[s] Observation end time (MET)	631889789.184000	631890760.93299
Observation end date	2018-01-09T12:55:20	2018-01-09T13:12:40
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	O2	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





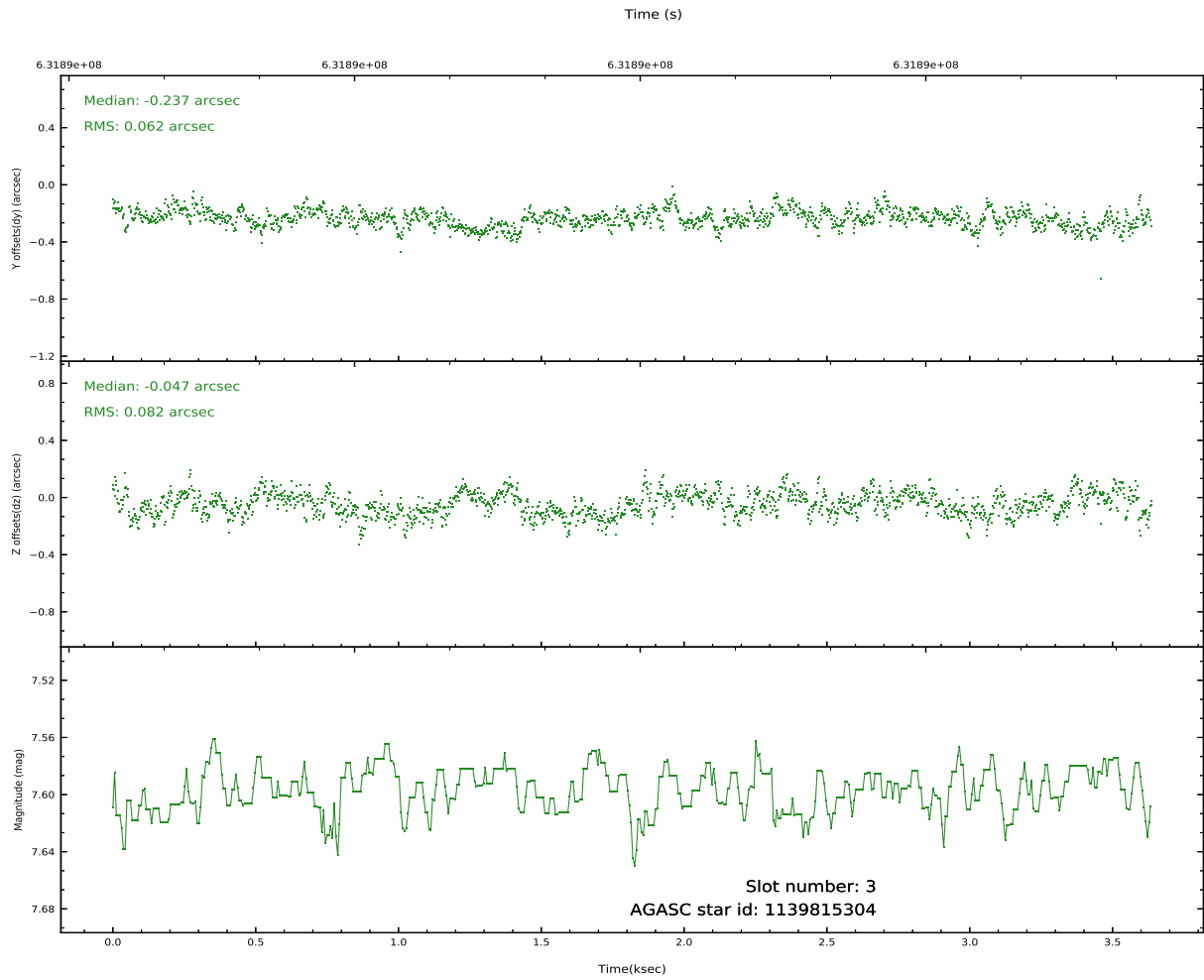
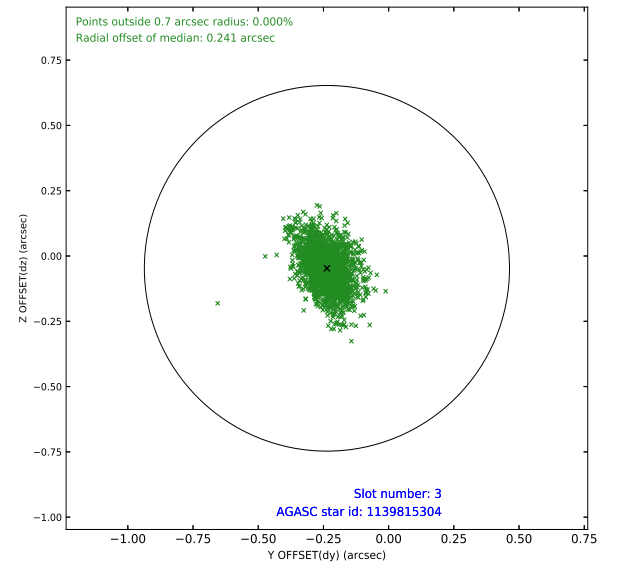
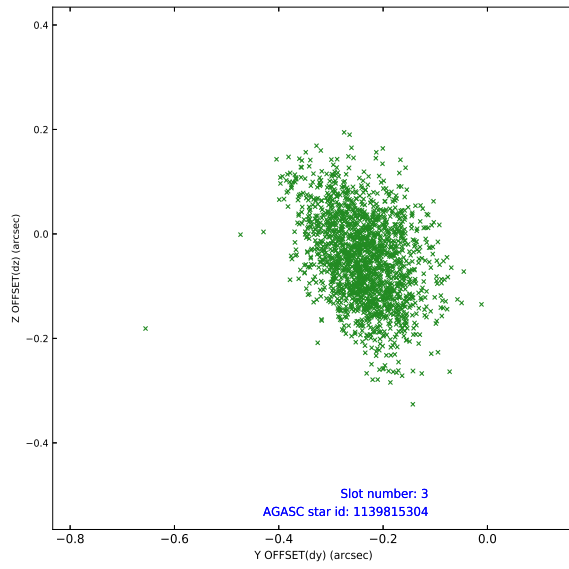
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.22	887	1.000	0.169	-0.156	0.009	0.017	0.000000	0.000000	925.52	-1737
1	FID		ACIS-S-2	7.13	888	1.000	-0.103	0.099	0.005	0.009	0.000000	0.000000	-769.70	-1743
2	FID		ACIS-S-6	7.39	887	1.000	-0.086	0.062	0.008	0.017	0.000000	0.000000	390.23	802
3	GUIDE	used	1139815304	7.60	1775	1.000	-0.237	-0.047	0.107	0.181	233.528617	-54.079713	-1707.32	465
4	GUIDE	used	1139820936	9.08	1774	1.000	0.048	-0.090	0.160	0.255	234.100143	-53.487194	82.57	-1213
5	GUIDE	used	1139691760	8.56	1774	1.000	0.137	-0.062	0.116	0.195	232.232201	-53.087955	2385.83	2381
6	GUIDE	used	1139824648	8.88	1774	1.000	-0.058	0.096	0.130	0.228	234.292445	-53.433696	174.05	-1658
7	GUIDE	used	1139806624	8.20	1773	1.000	0.104	0.107	0.139	0.228	234.604845	-53.305132	459.81	-2423

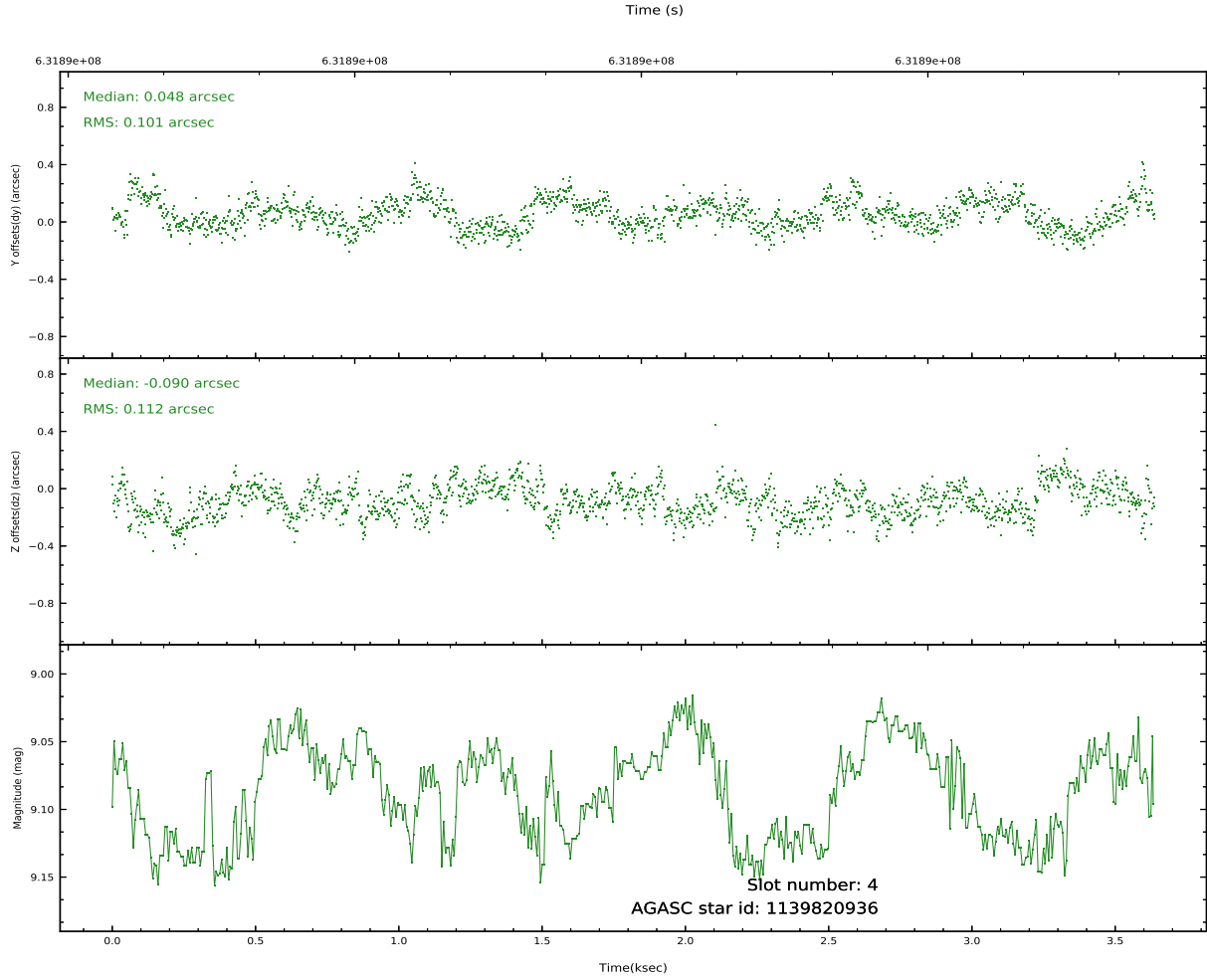
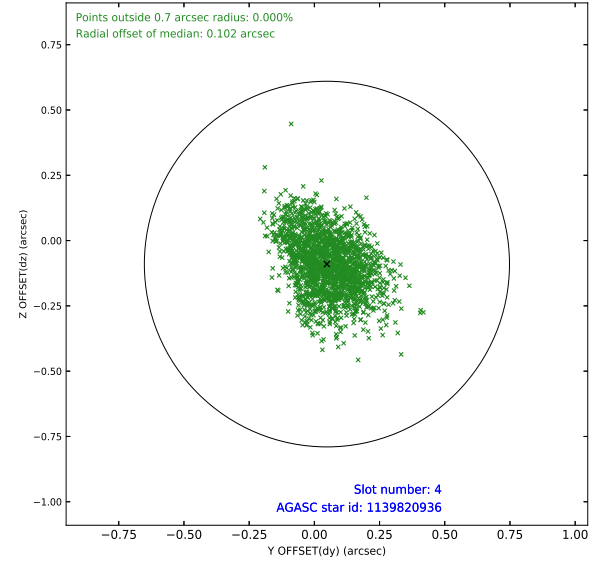
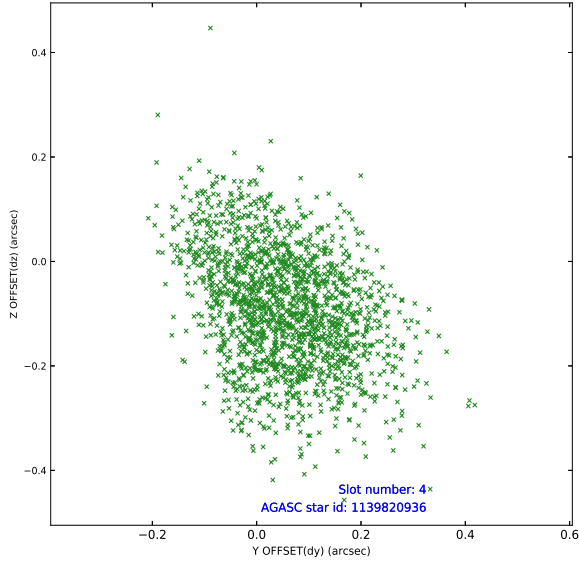


## 2.4 Star Slots

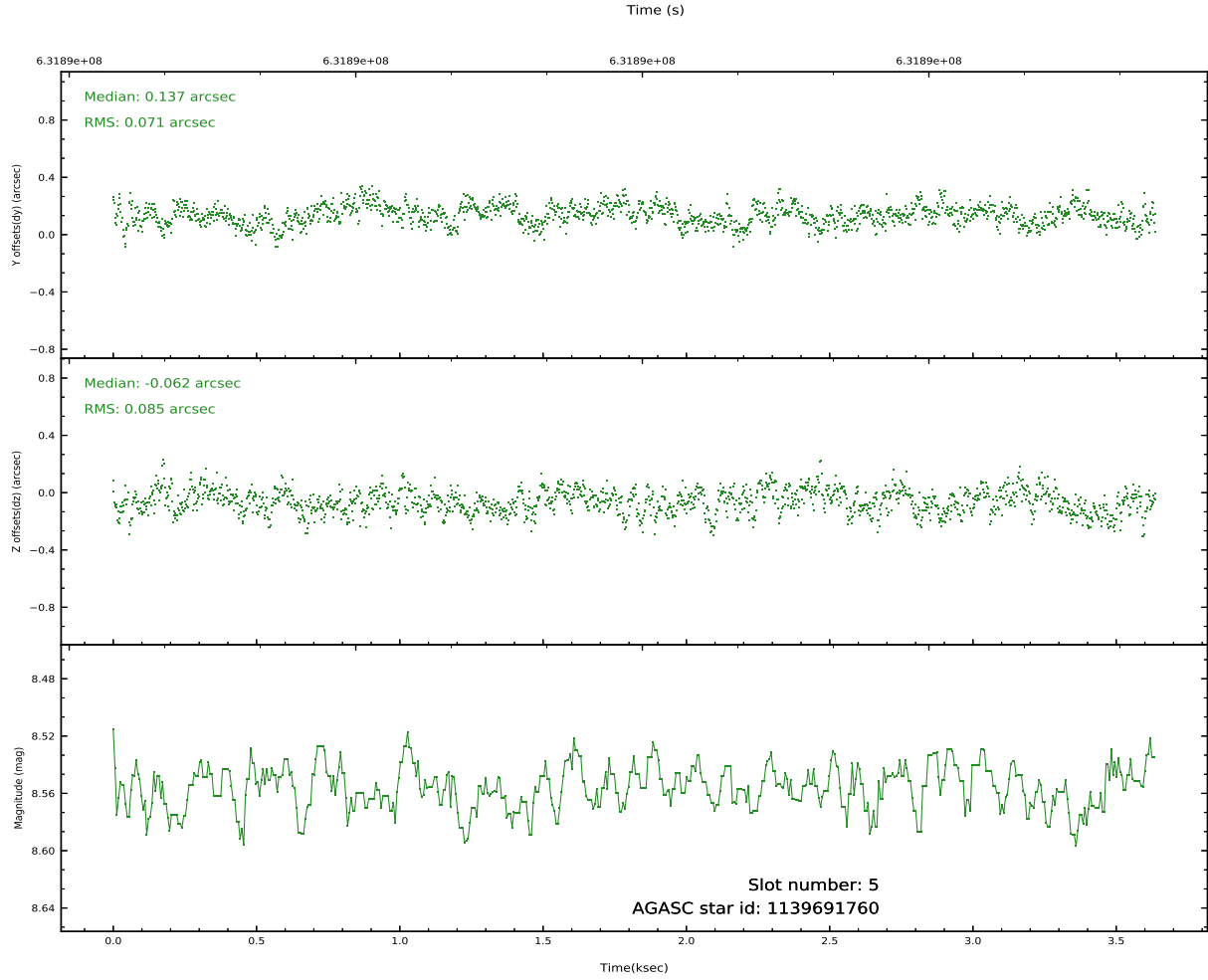
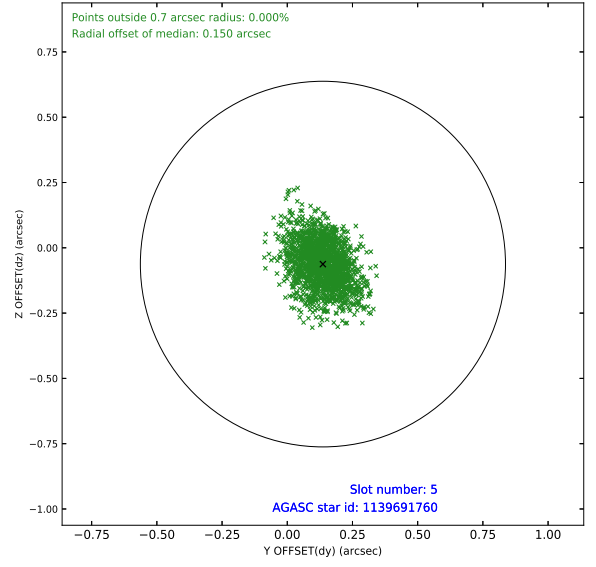
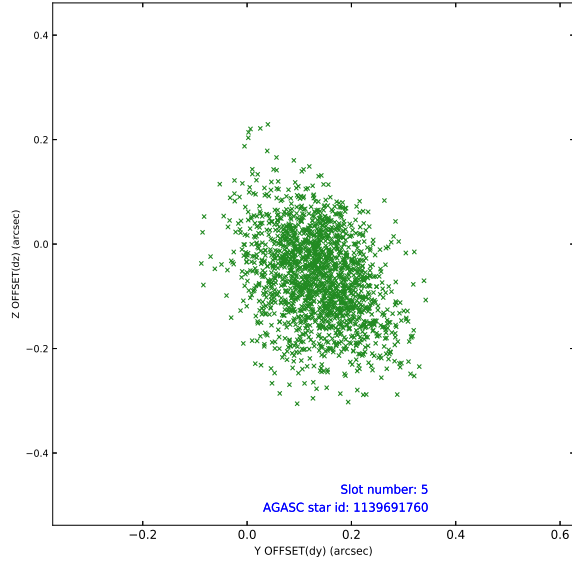
### 2.4.1 Slot 3



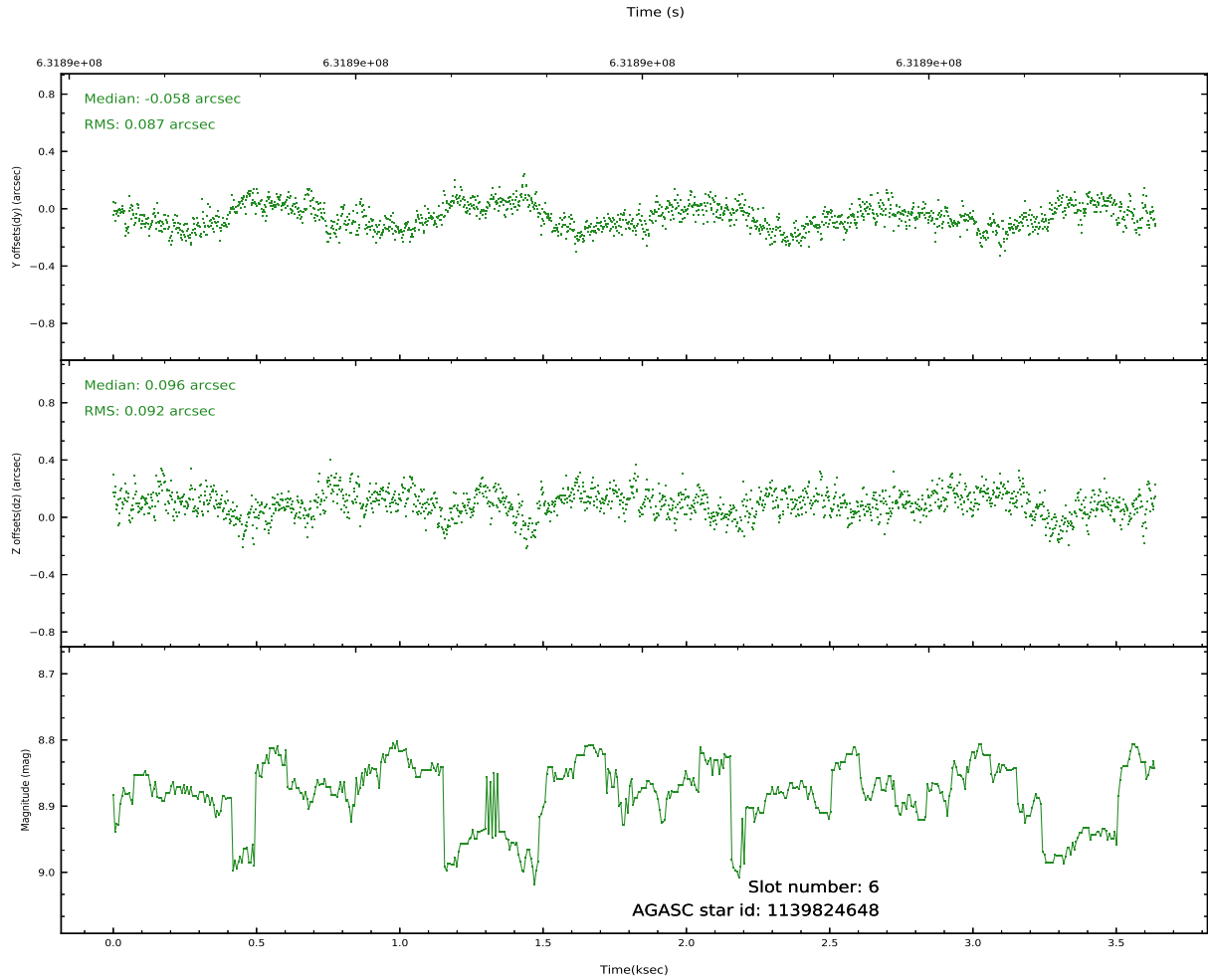
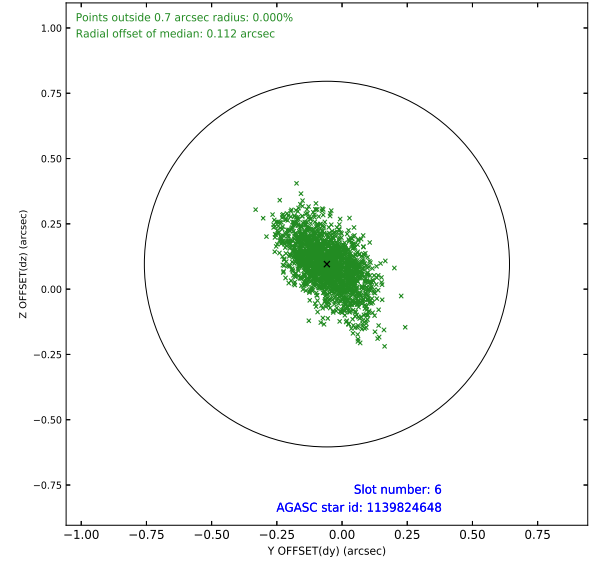
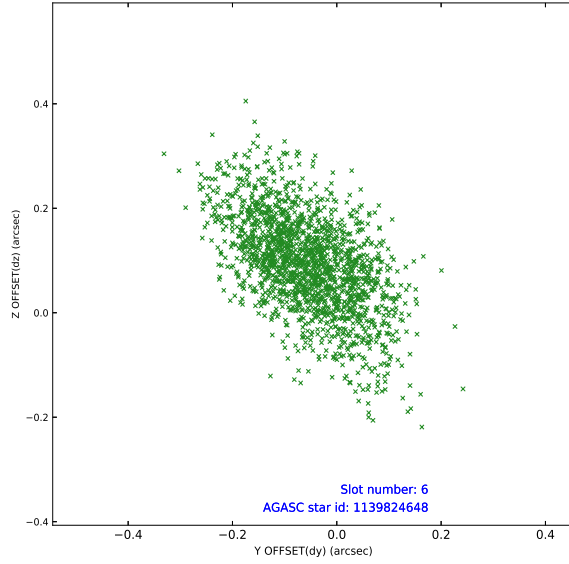
## 2.4.2 Slot 4



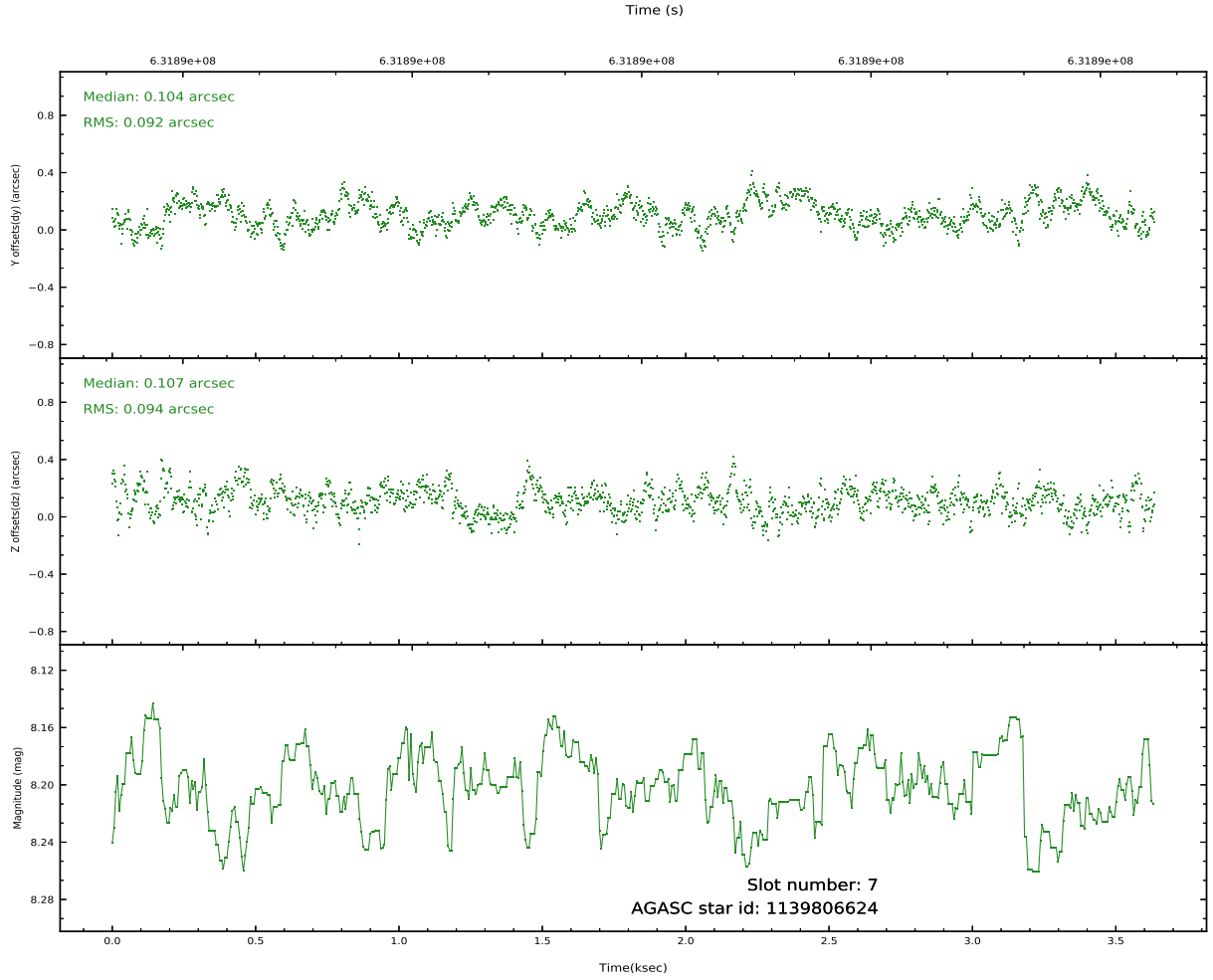
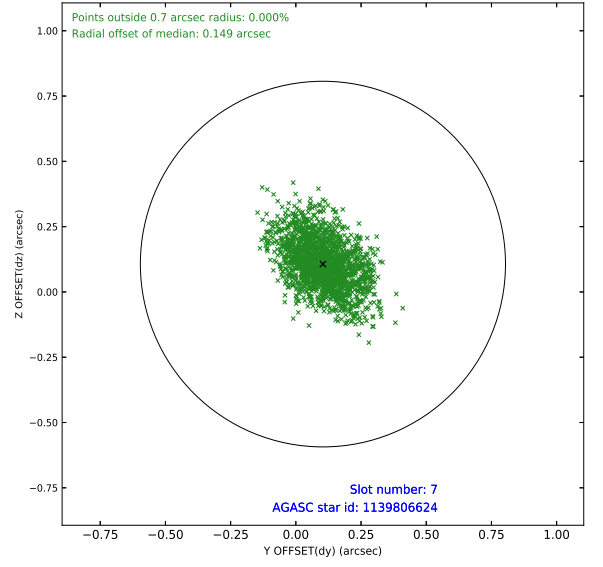
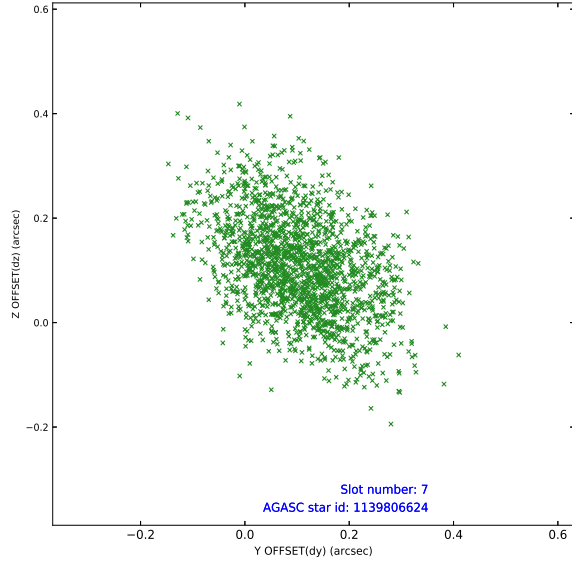
### 2.4.3 Slot 5



## 2.4.4 Slot 6

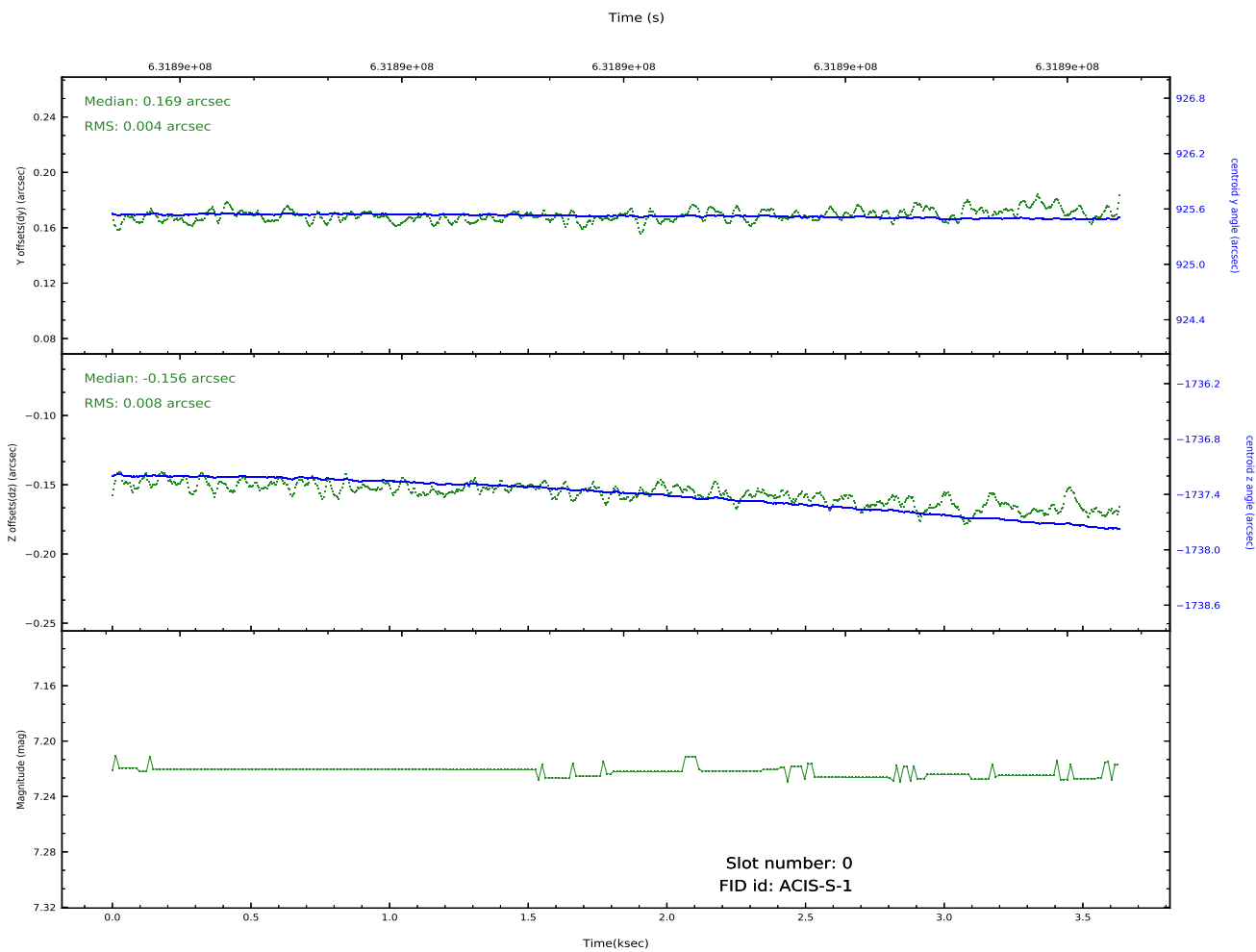
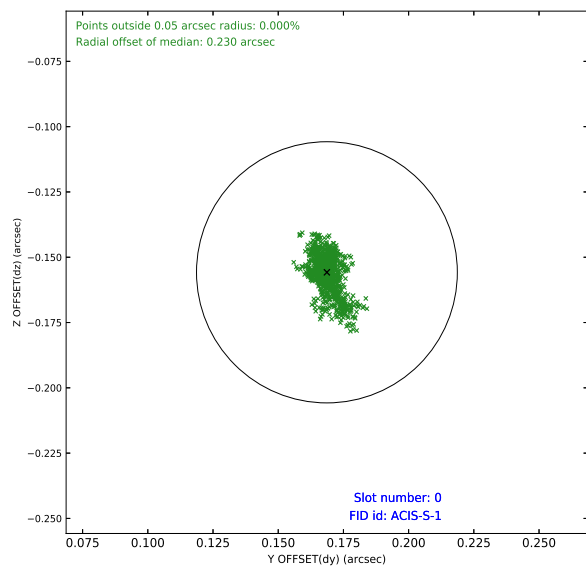
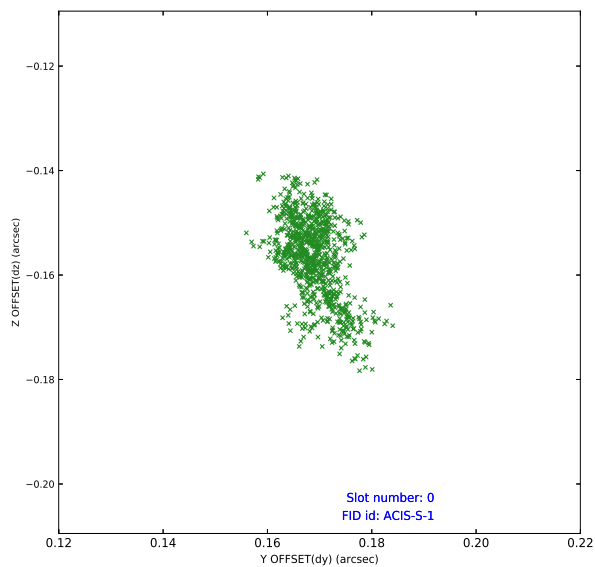


## 2.4.5 Slot 7

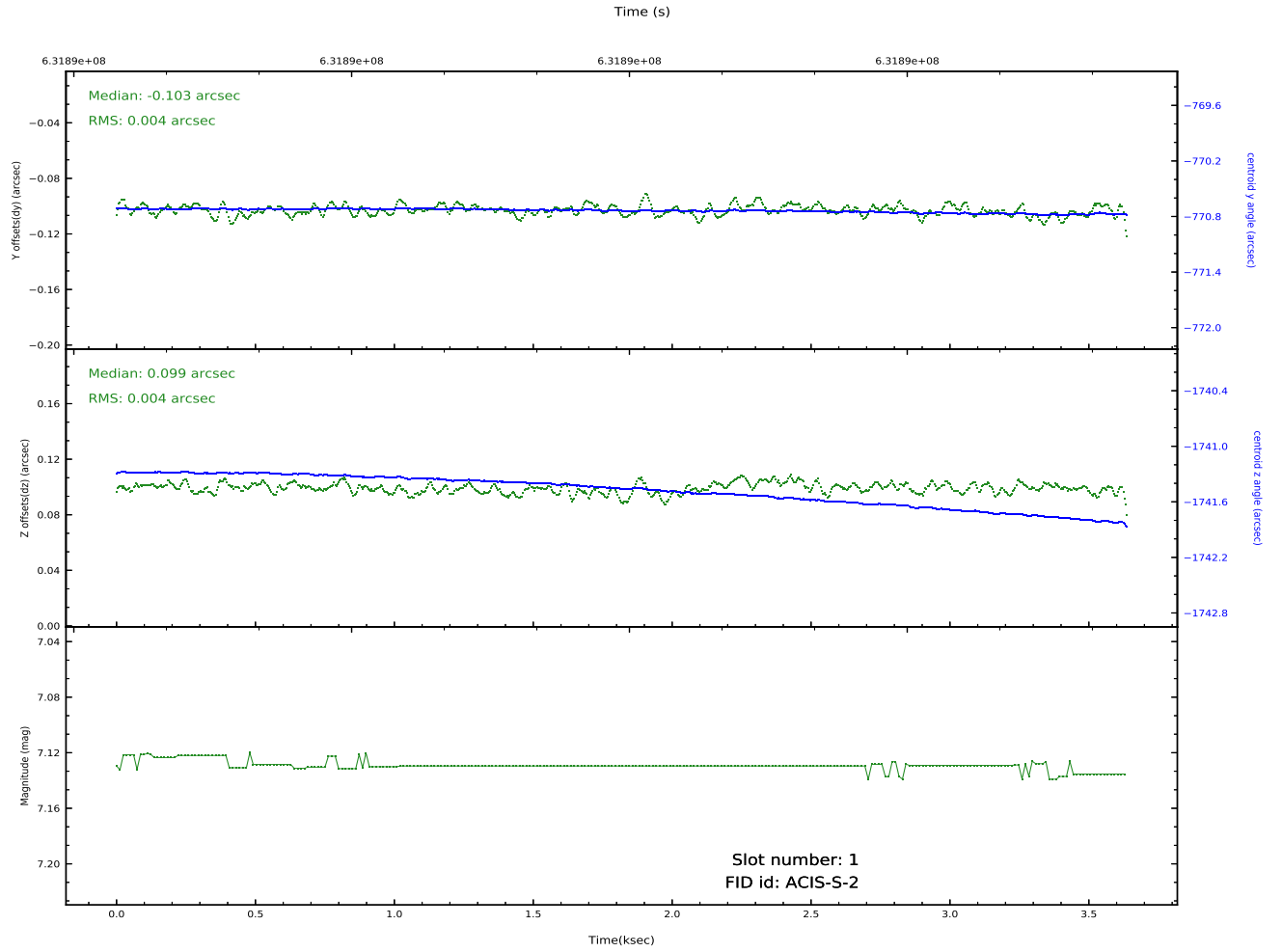
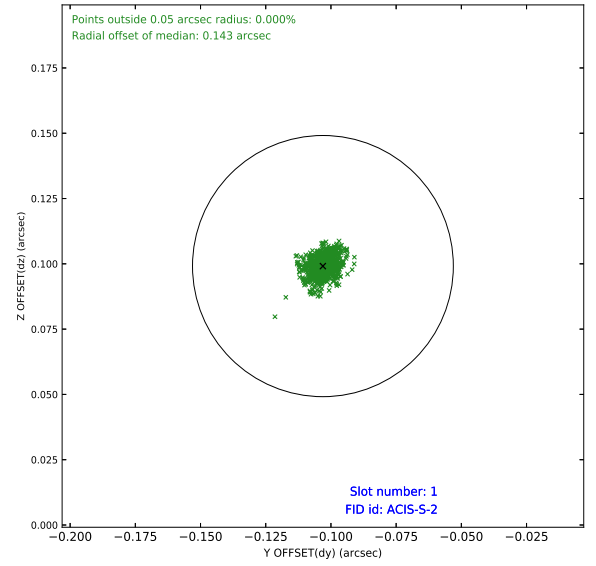
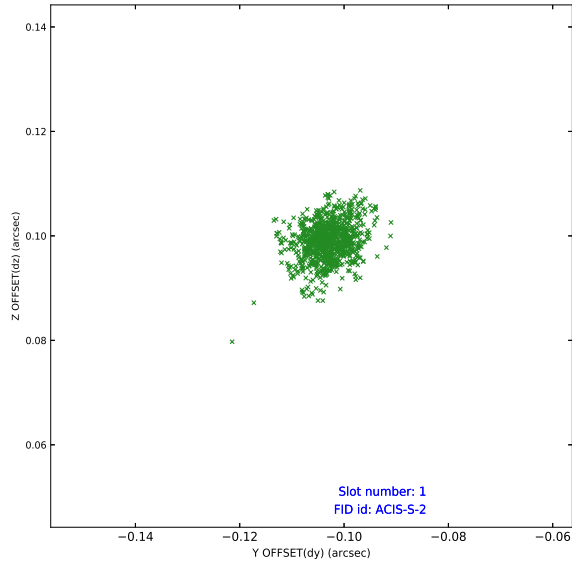


## 2.5 FID Slots

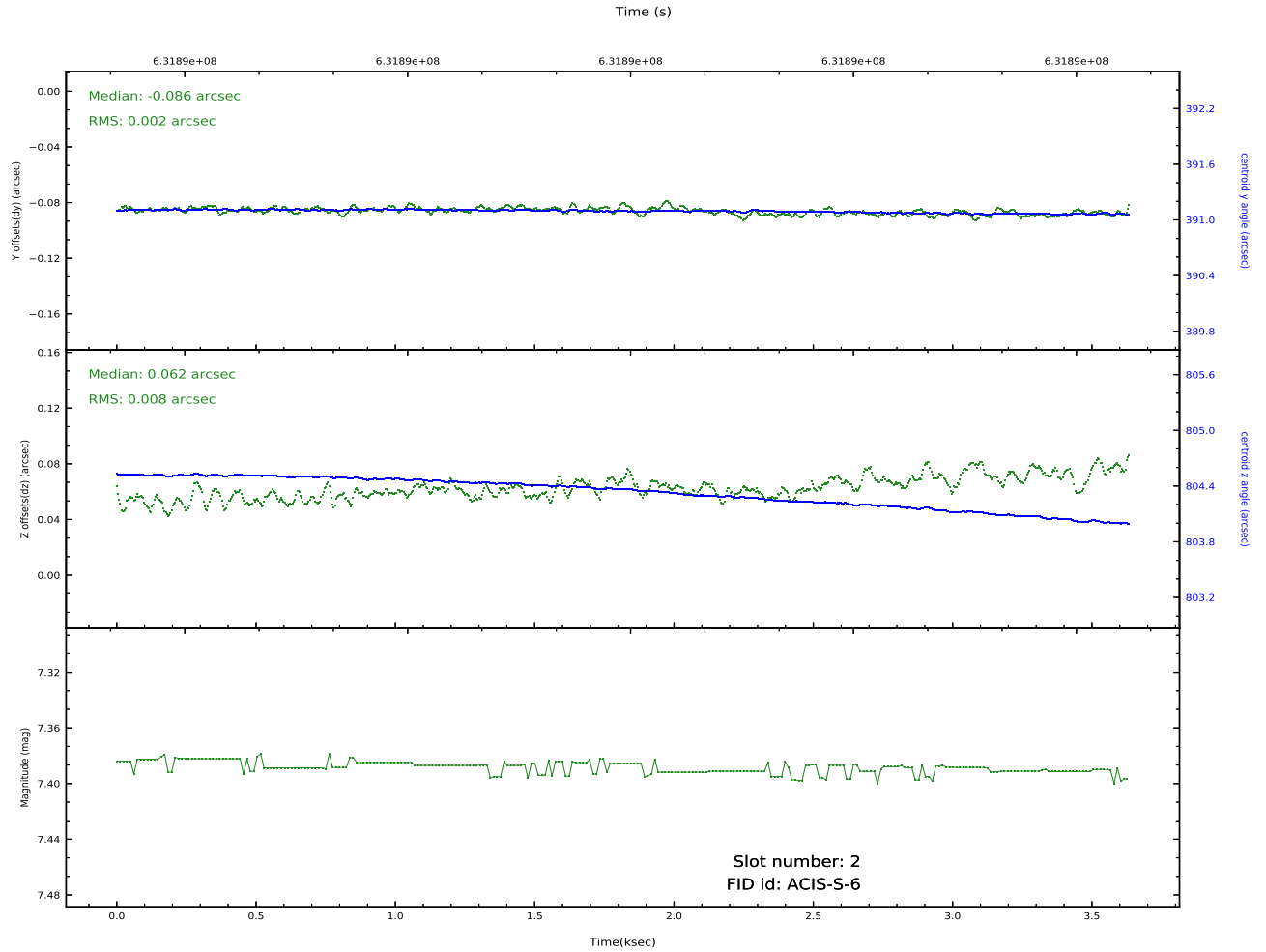
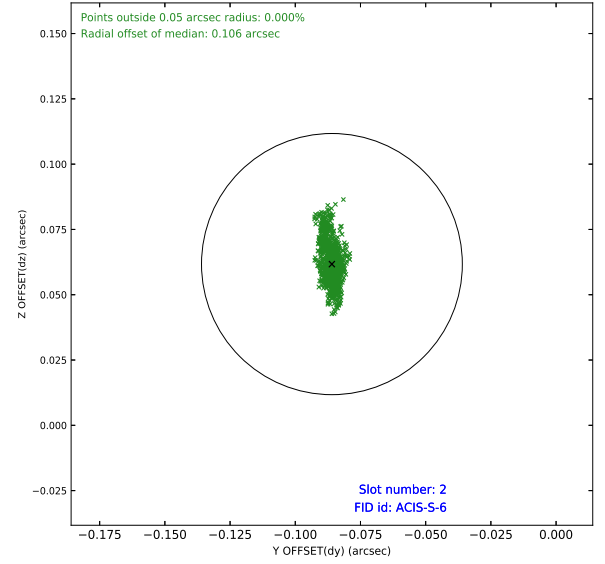
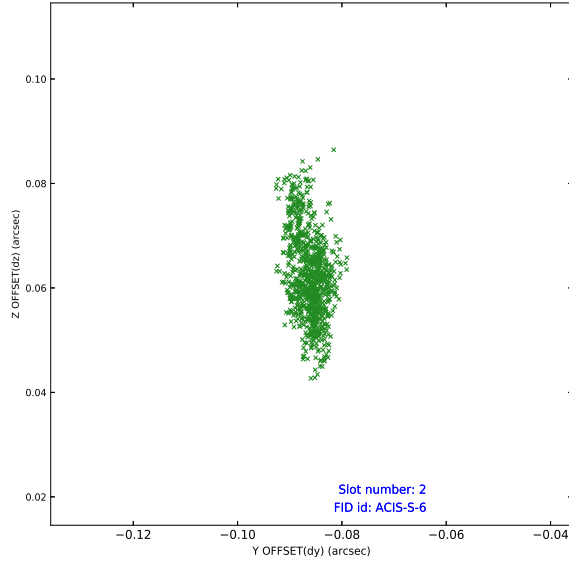
### 2.5.1 Slot 0



## 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)	2020.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.5489739632607

### A.2 Comments