

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6316 - L2 Version 4  
Chandra X-Ray Center

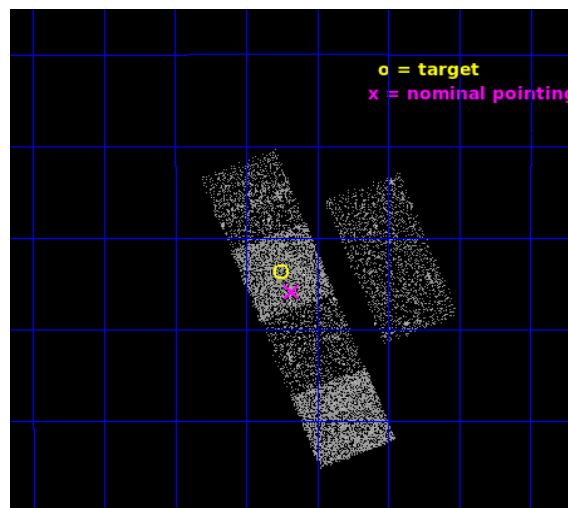
L2 Processing Date : Oct 9 2020

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# 1 Front

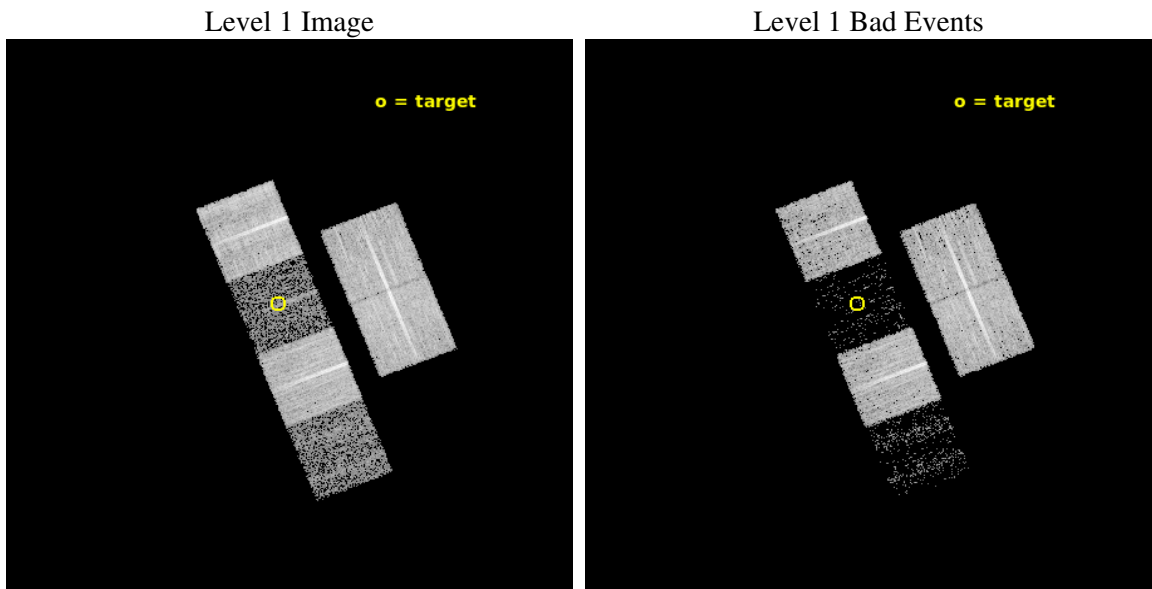
seq_num	100054	Sequence number
obs_id	6316	Observation id
title	Comet 9P/Tempel 1 During the Deep Impact Encounter	Proposal title
observer	Carey Lisse	Principal investigator
object	Comet 9P/Tempel 1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	202.93924	Observer's specified target RA [deg]
dec_targ	-8.227905	Observer's specified target Dec [deg]
ra_nom	202.91959243745	Nominal RA [deg]
dec_nom	-8.2641315190034	Nominal Dec [deg]
roll_nom	248.35172906936	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10188.799962044	Sum of GTIs [s]
livetime	10059.783241966	Livetime [s]
ontime2	10188.799962044	Sum of GTIs [s]
ontime3	10188.799962044	Sum of GTIs [s]
ontime5	10188.799962044	Sum of GTIs [s]
ontime6	10188.799962044	Sum of GTIs [s]
ontime7	10188.799962044	Sum of GTIs [s]
ontime8	10182.318001539	Sum of GTIs [s]
l2events	14457	Number of level 2 events



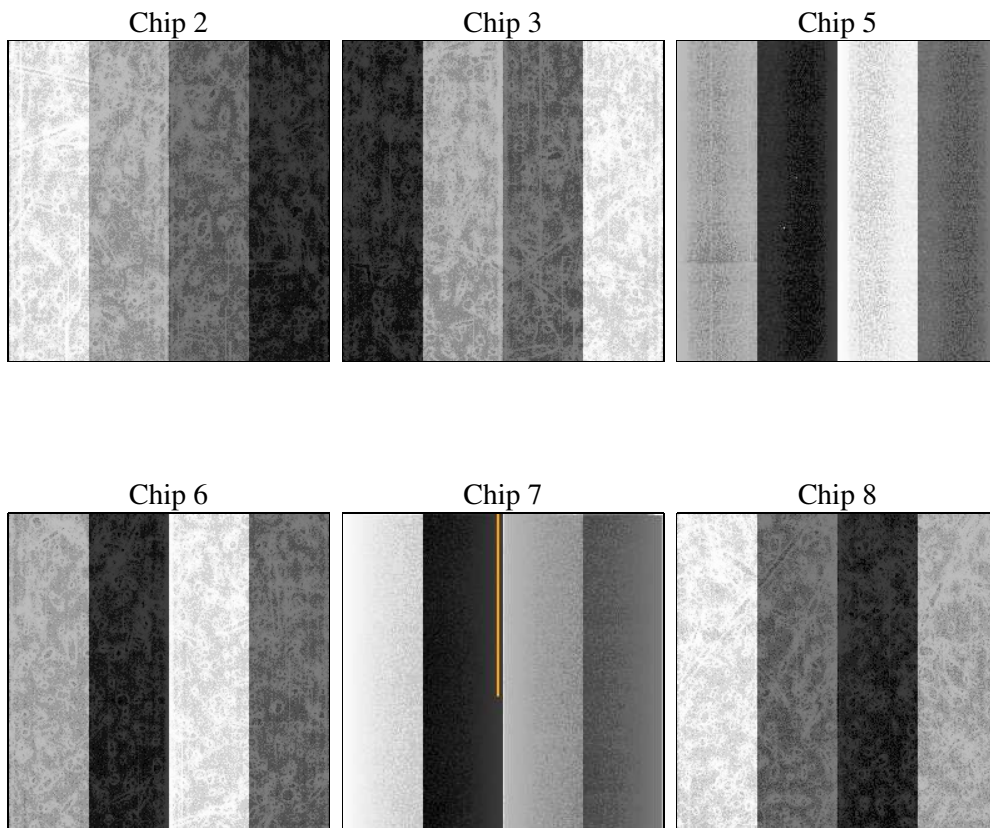
## 2 OBI

### 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	10188.799962044	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	10188.799962044	Sum of GTIs [s]
date	2020-10-09T07:18:12	Date and time of file creation	ontime3	10188.799962044	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	10188.799962044	Sum of GTIs [s]
			ontime6	10188.799962044	Sum of GTIs [s]
			ontime7	10188.799962044	Sum of GTIs [s]
			ontime8	10182.318001539	Sum of GTIs [s]
			l1events	209446	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	51127	45301	7861	46484	6671	52002
rejected events	48916	43772	2791	44457	1594	39415
rejected %	95%	96%	35%	95%	23%	75%

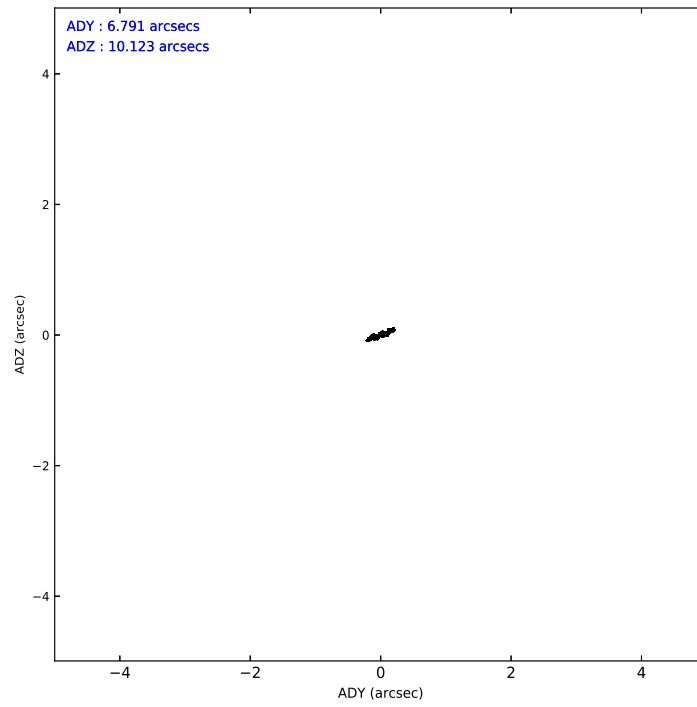
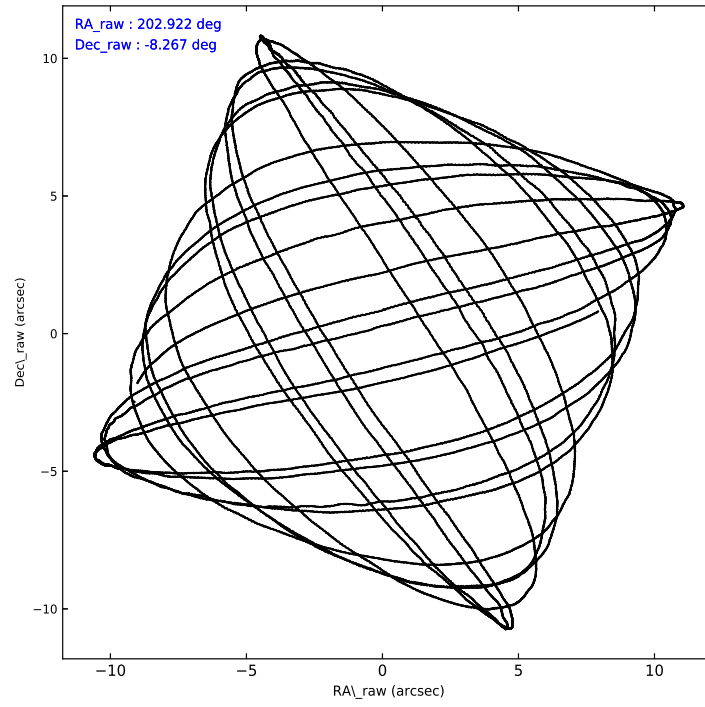
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	962	721	1280	1054	1440	3571
	1%	1%	16%	2%	21%	6%
grade 1 events	18	8	49	13	44	34
	0%	0%	0%	0%	0%	0%
grade 2 events	467	224	2010	360	1696	2905
	0%	0%	25%	0%	25%	5%
grade 3 events	286	288	687	266	730	1422
	0%	0%	8%	0%	10%	2%
grade 4 events	320	236	625	296	742	1307
	0%	0%	7%	0%	11%	2%
grade 5 events	46	36	462	43	192	238
	0%	0%	5%	0%	2%	0%
grade 6 events	239	114	629	112	610	3765
	0%	0%	8%	0%	9%	7%
grade 7 events	48789	43674	2119	44340	1217	38760
	95%	96%	26%	95%	18%	74%

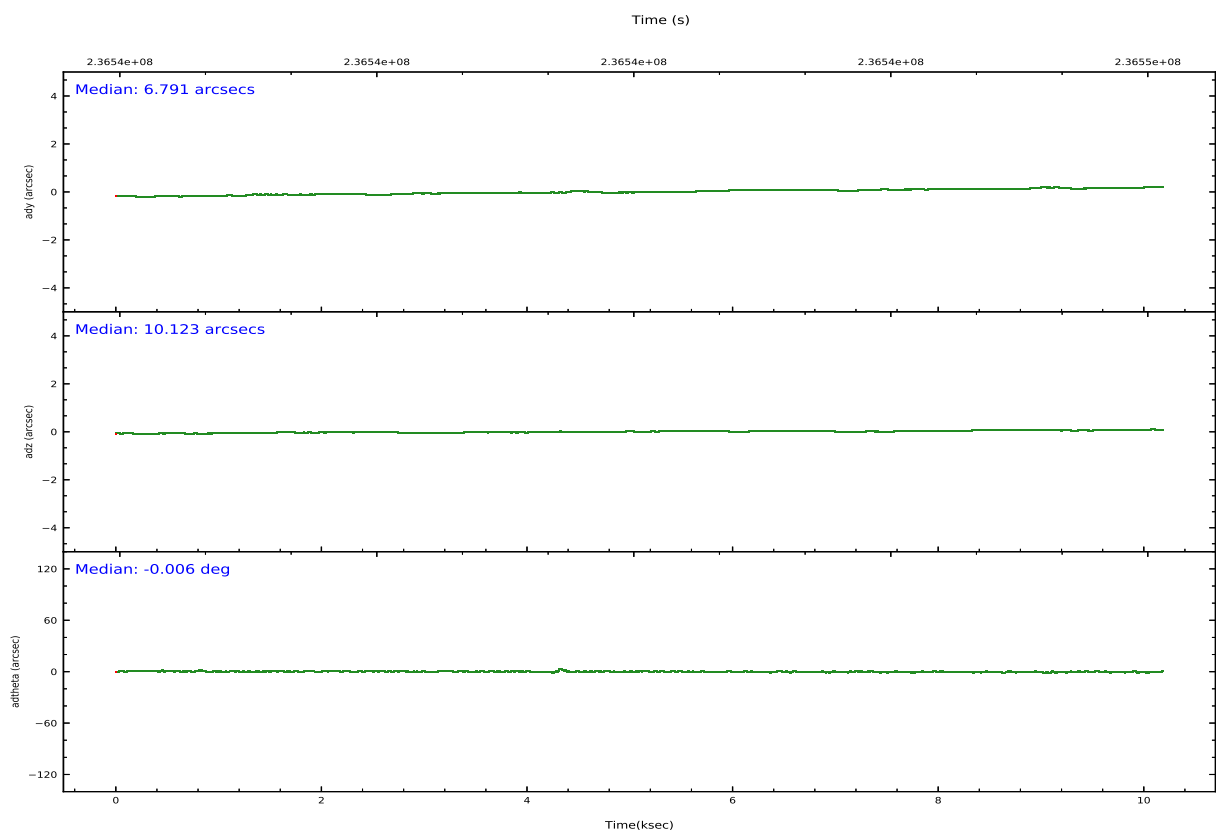
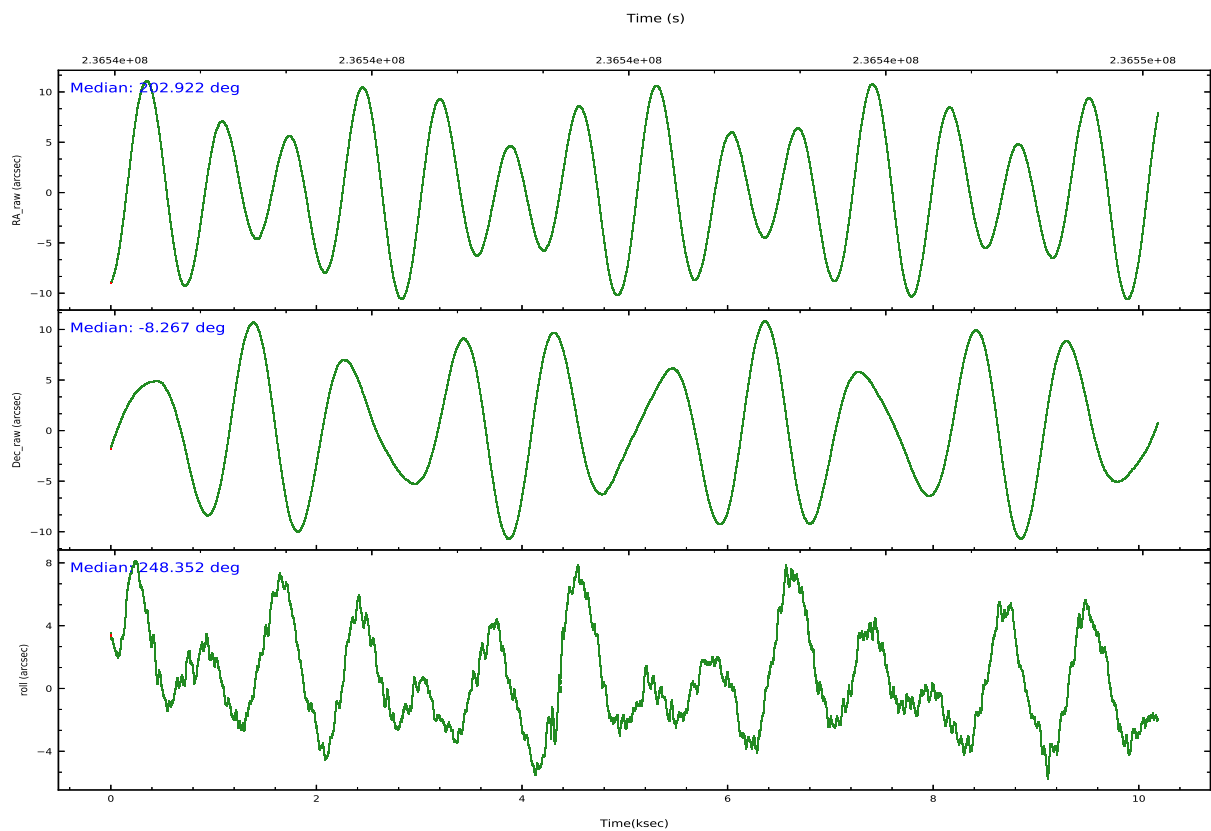


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	202.917256	202.91959243745	Subarray requested	NONE	NONE
[deg] Pointing Dec	-8.240200	-8.264131519003399	Alternating exposures requested	N	N
[deg] Pointing Roll	248.193098	248.35172906936	[s] Primary exposure time	0.000000	3.2
[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)	236537650.184000	236537274.34577			
Observation start date	2005-06-30T16:53:06	2005-06-30T16:47:54			
[s] Observation end time (MET)	236547650.184000	236547784.18375			
Observation end date	2005-06-30T19:39:46	2005-06-30T19:43:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect



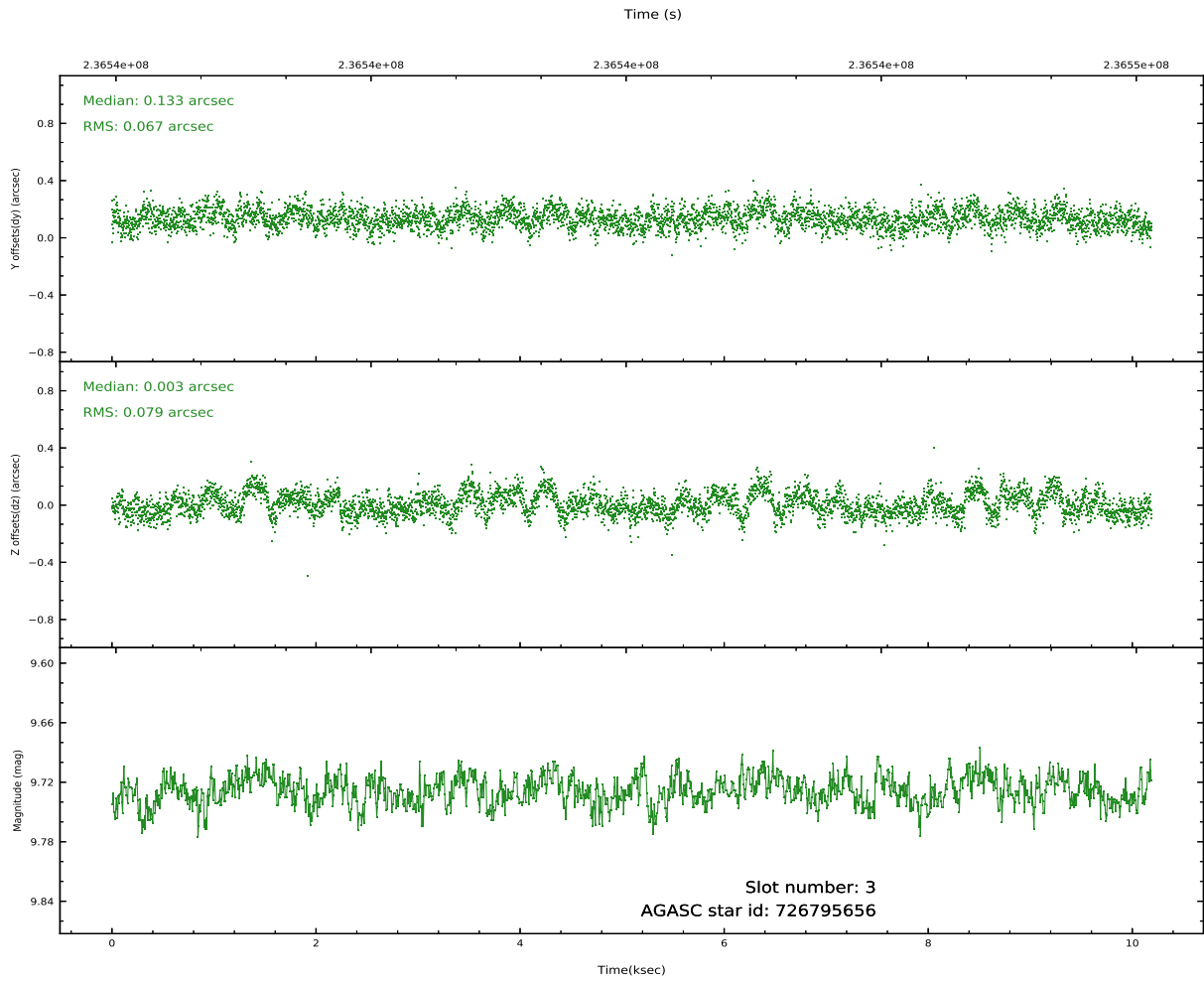
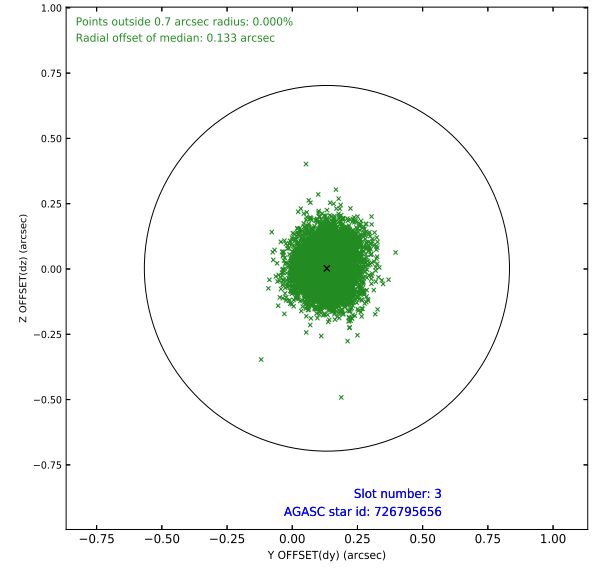
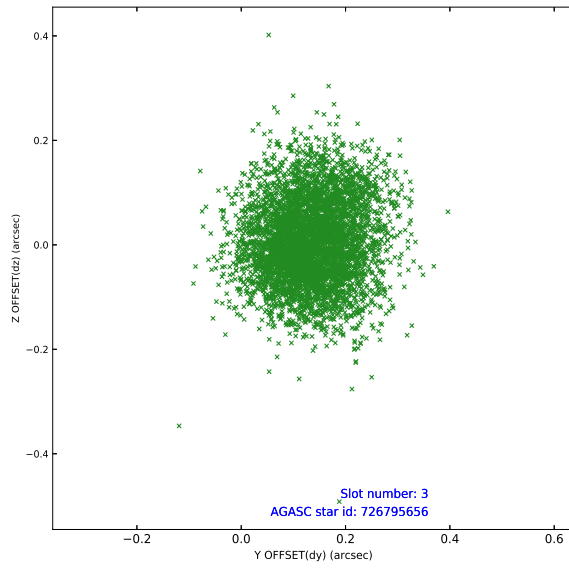


Slot Statistics

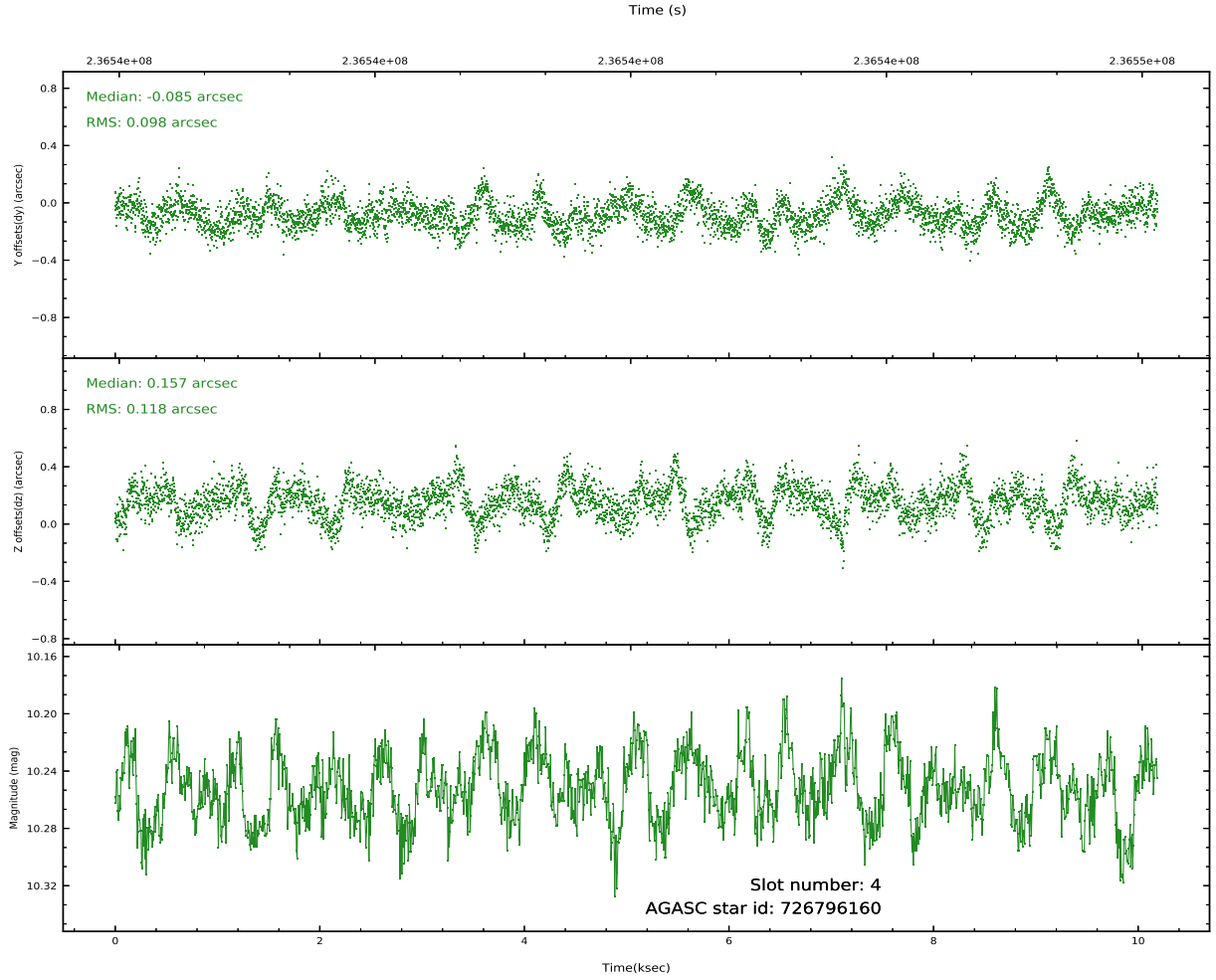
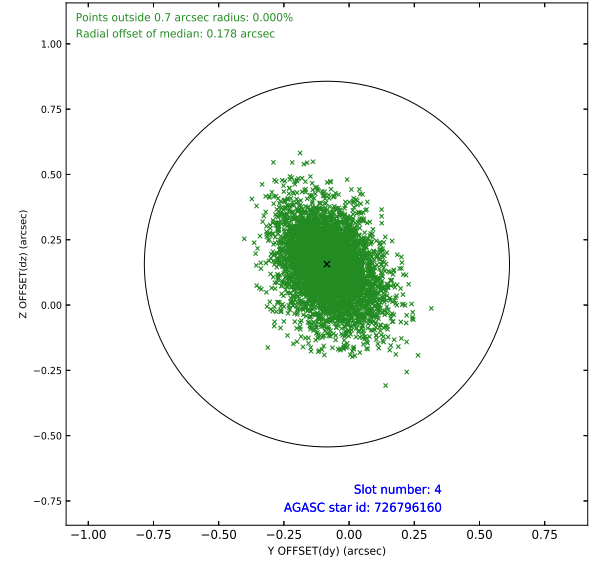
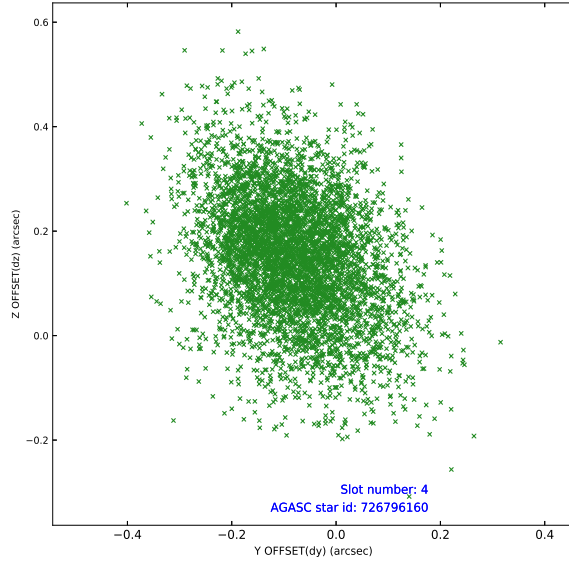
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.18	2486	1.000	0.044	-0.073	0.007	0.013	0.000000	0.000000	936.56	-1727
1	FID		ACIS-S-5	7.24	2486	1.000	-0.113	0.014	0.007	0.011	0.000000	0.000000	-1812.32	170
2	FID		ACIS-S-6	7.35	2486	1.000	0.048	0.070	0.008	0.013	0.000000	0.000000	401.53	814
3	GUIDE	used	726795656	9.73	4964	1.000	0.133	0.003	0.110	0.176	202.576235	-8.591995	1627.79	-656
4	GUIDE	used	726796160	10.25	4964	1.000	-0.085	0.157	0.160	0.275	203.337231	-8.169596	-790.74	1295
5	GUIDE	used	726799000	10.10	4953	1.000	0.259	-0.185	0.140	0.230	202.090075	-8.567627	2191.84	-2294
6	GUIDE	used	726800704	9.03	4968	1.000	-0.354	0.021	0.097	0.151	202.986094	-7.587280	-2273.01	-645
7	GUIDE	used	726800992	9.58	4955	1.000	0.049	0.007	0.113	0.182	202.715522	-8.788144	2098.11	66

## 2.4 Star Slots

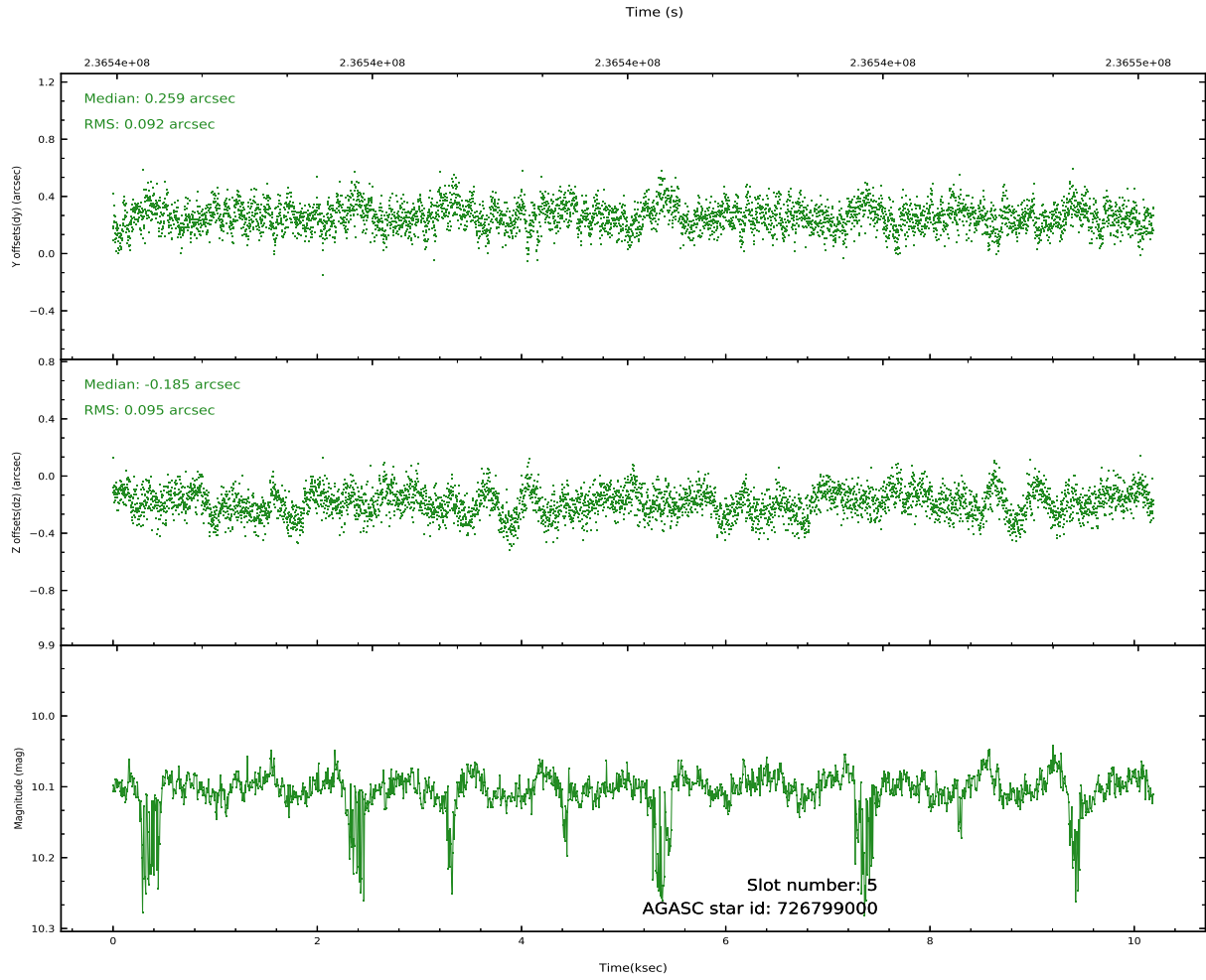
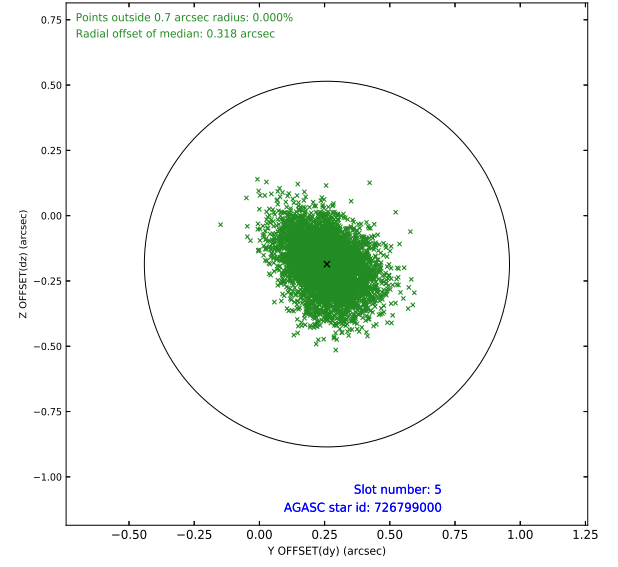
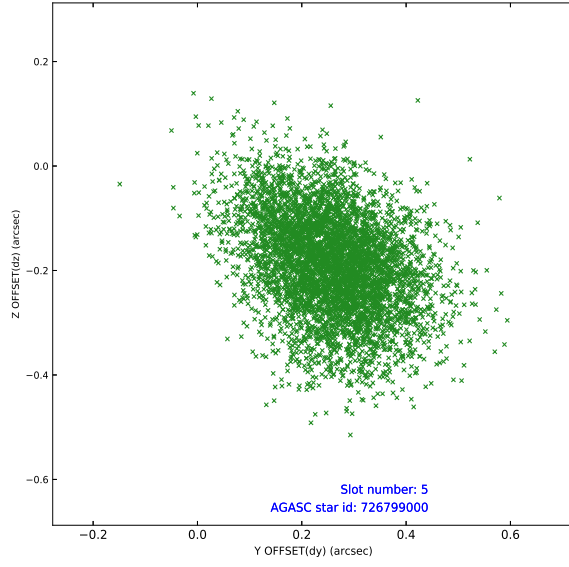
### 2.4.1 Slot 3



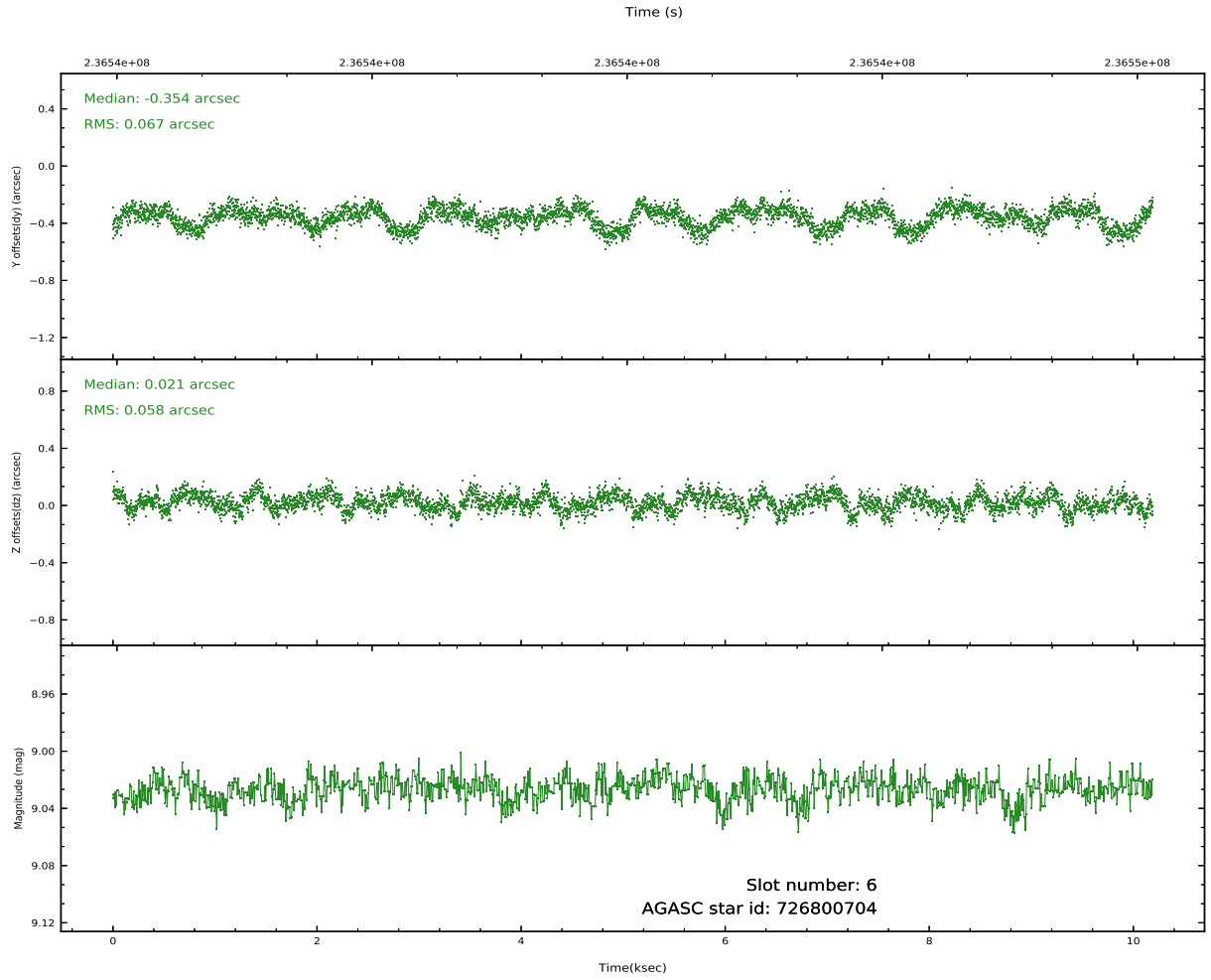
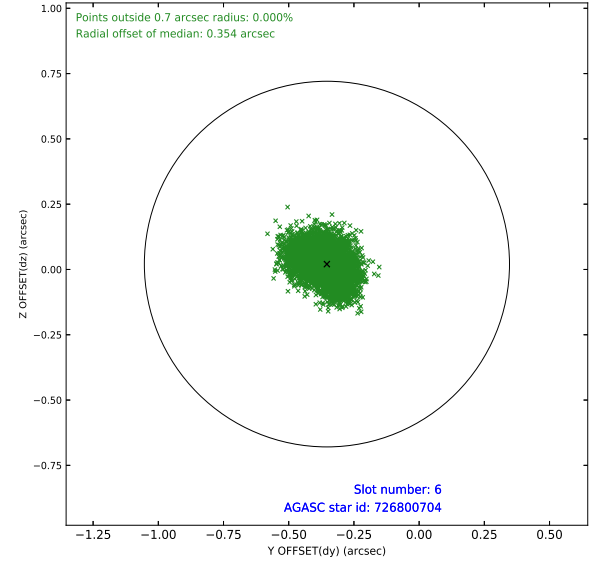
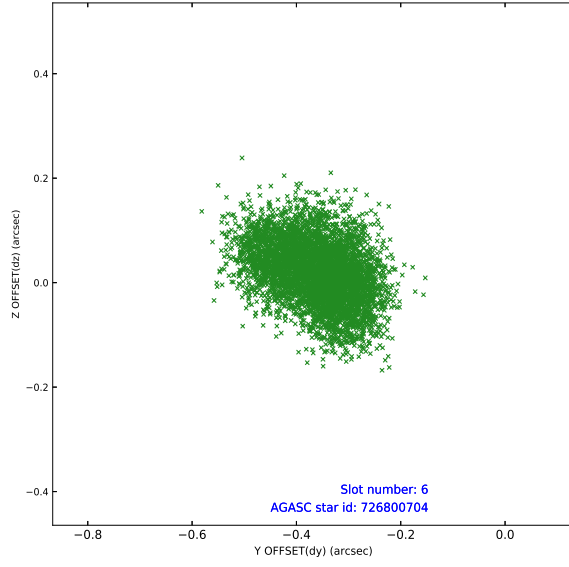
## 2.4.2 Slot 4



### 2.4.3 Slot 5

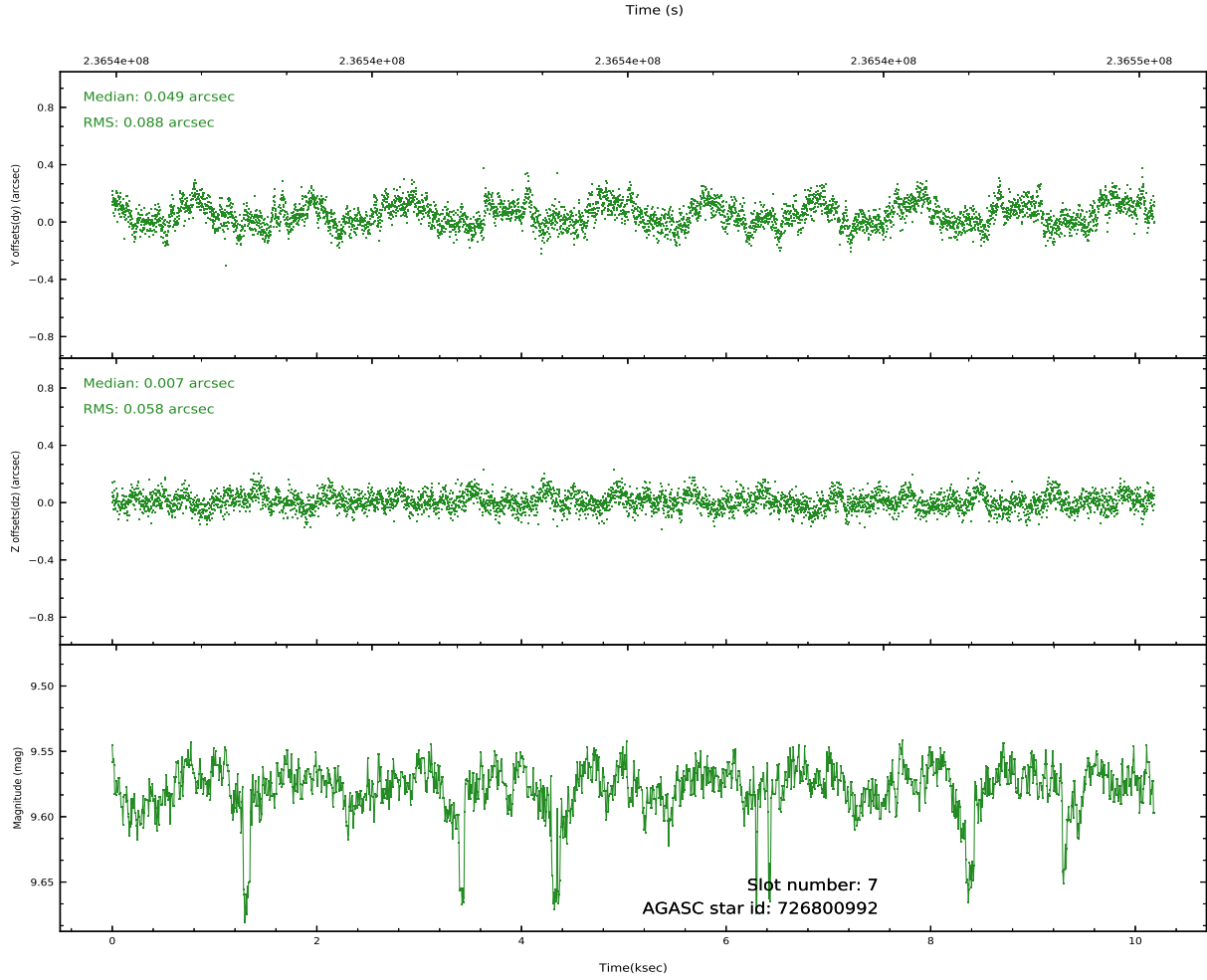
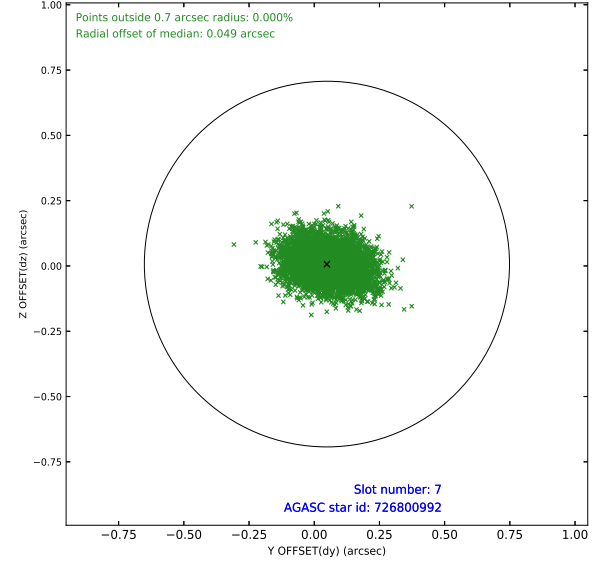
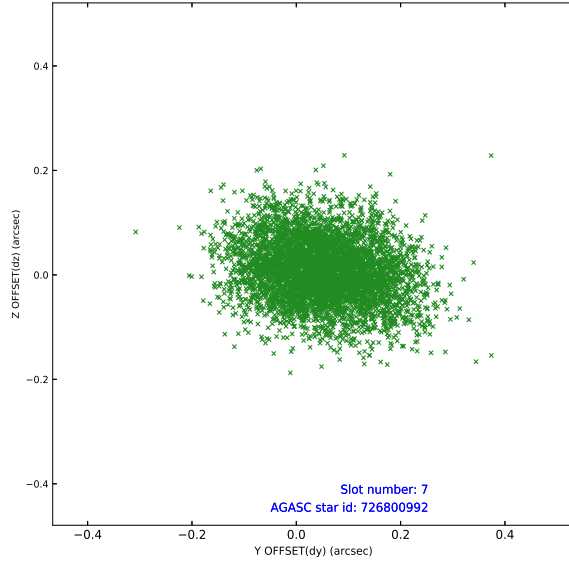


## 2.4.4 Slot 6



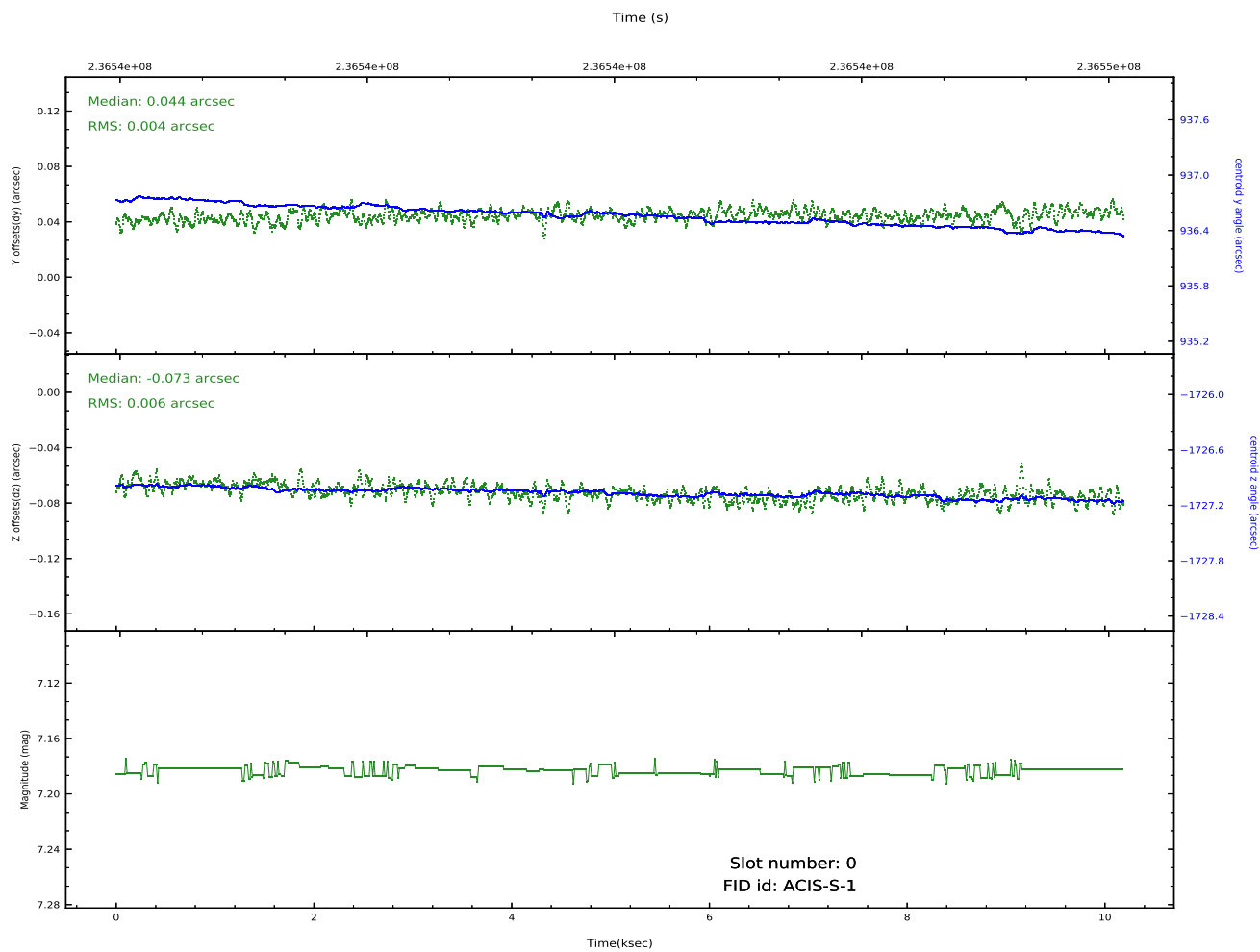
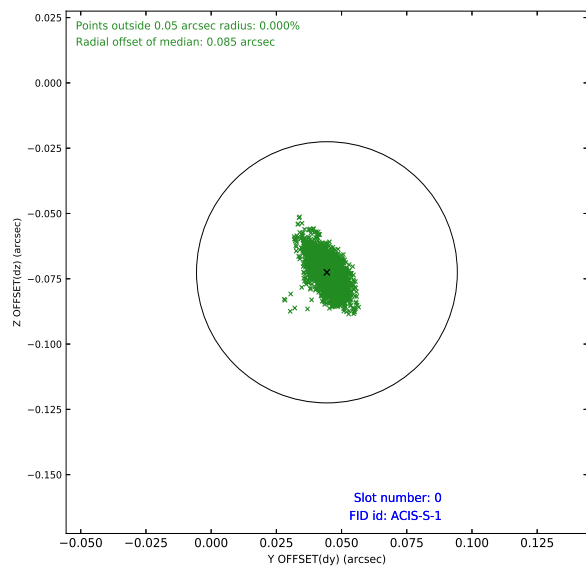
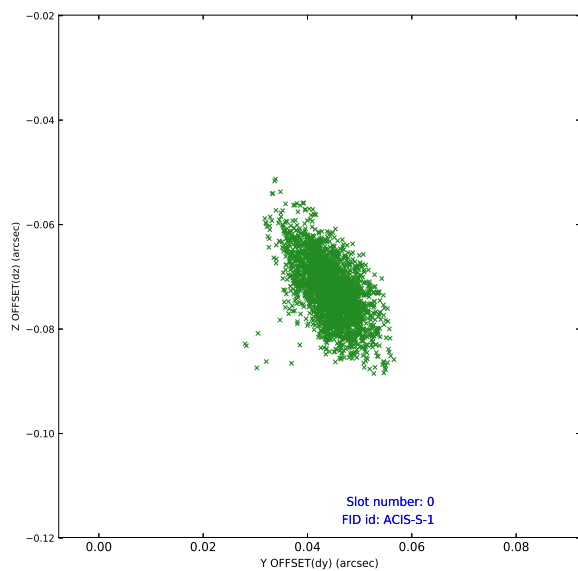


## 2.4.5 Slot 7

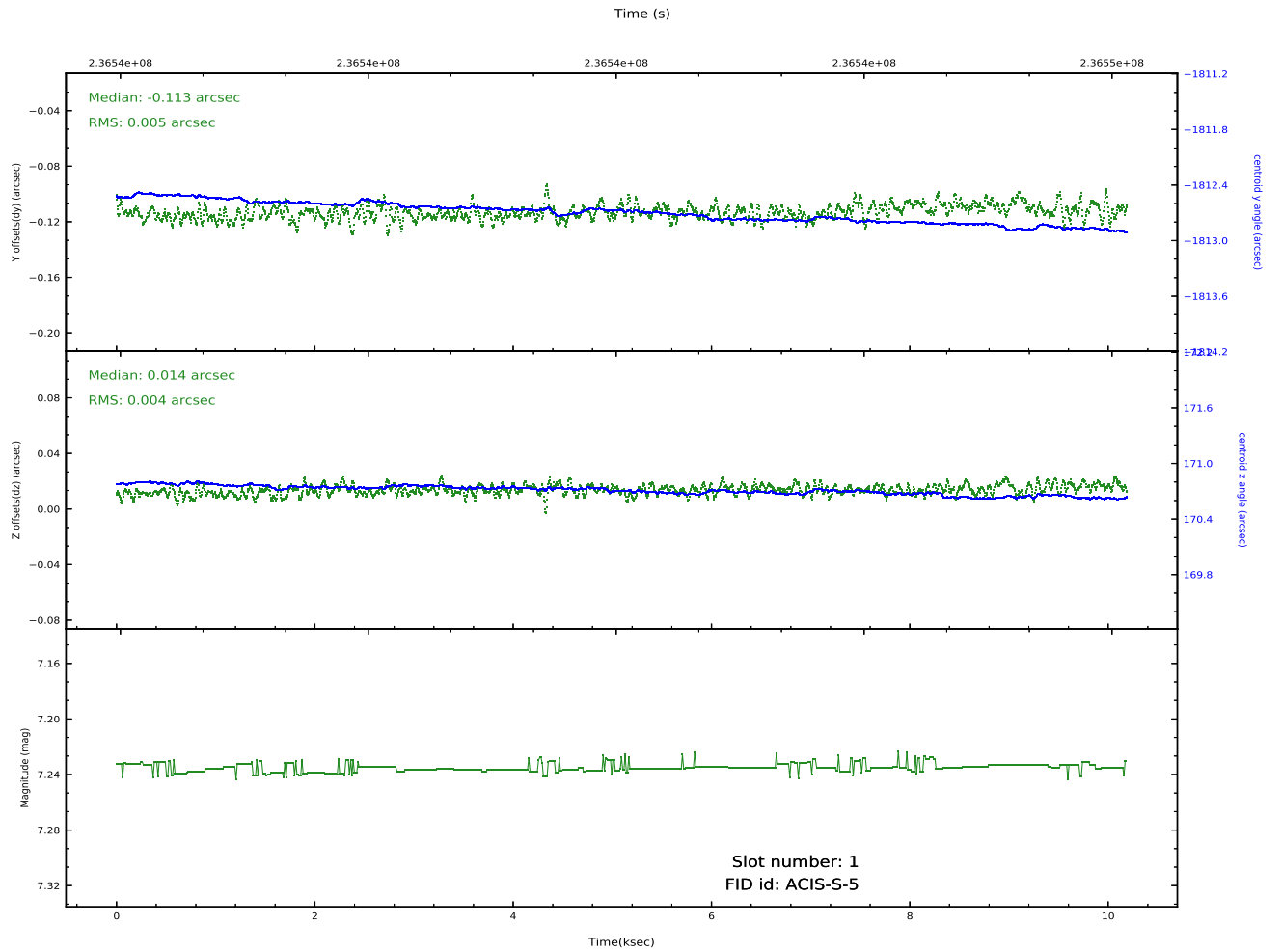
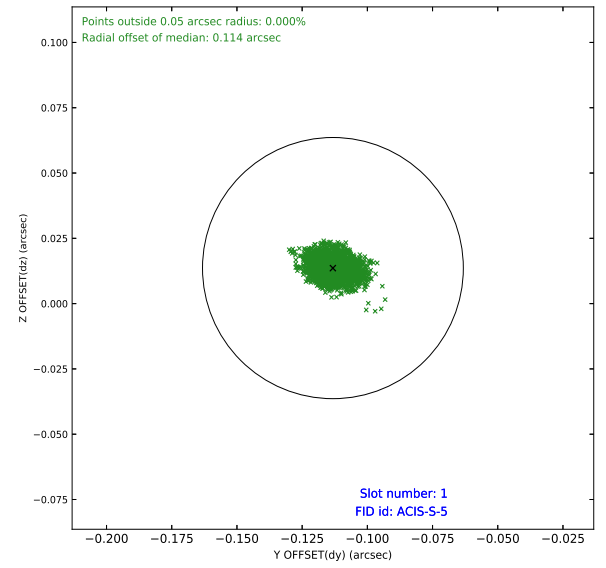
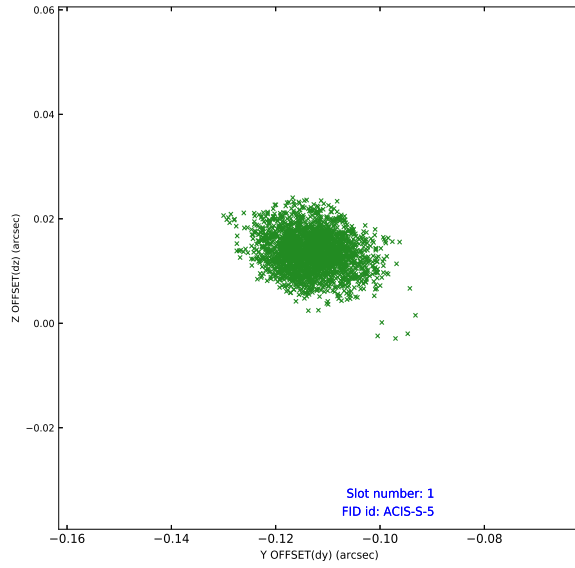


## 2.5 FID Slots

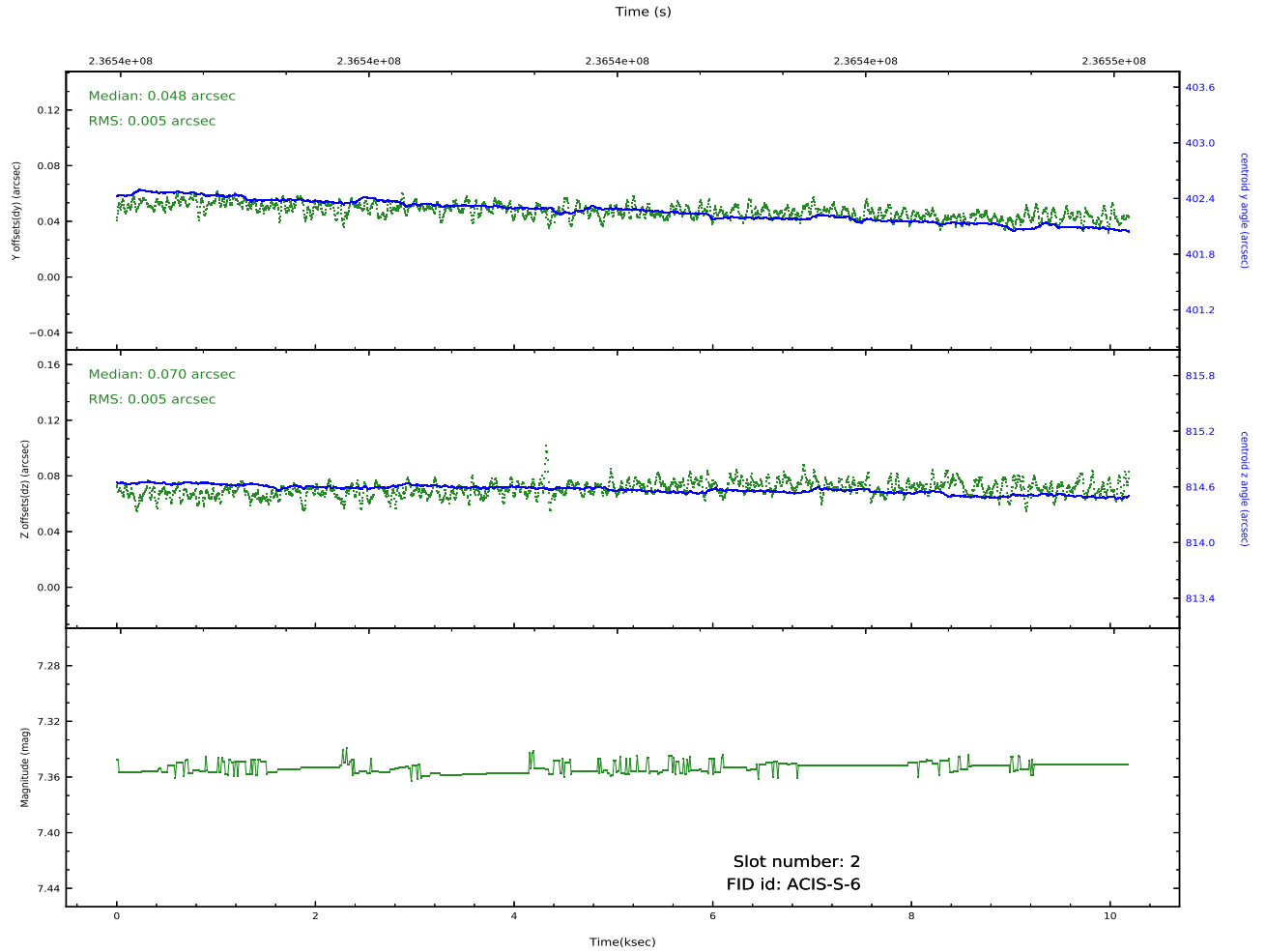
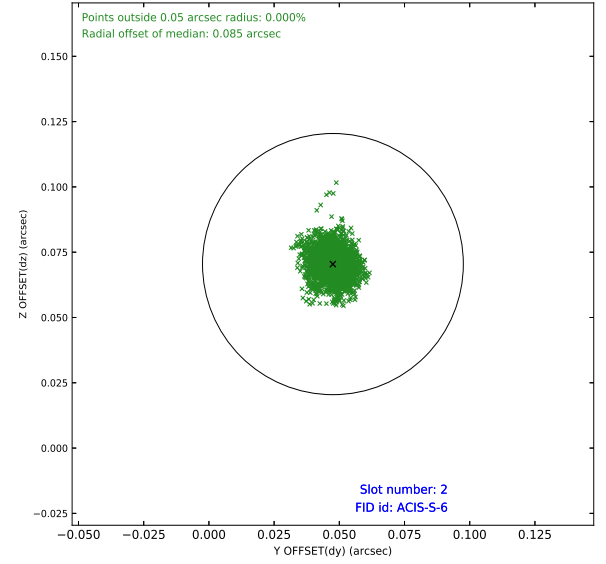
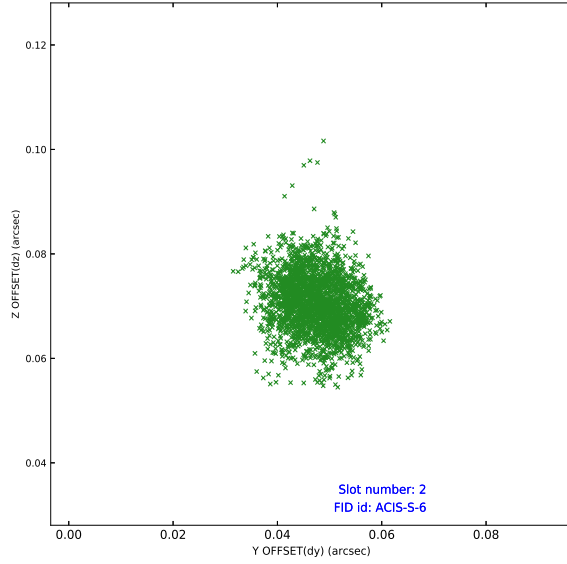
### 2.5.1 Slot 0



## 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)	2020.10.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.18879

## A.2 Comments

This is a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.