

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6351 - L2 Version 4  
Chandra X-Ray Center

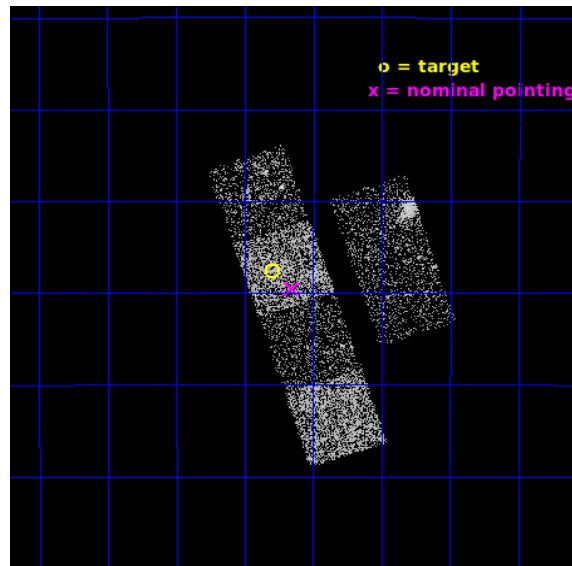
L2 Processing Date : Oct 9 2020

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# 1 Front

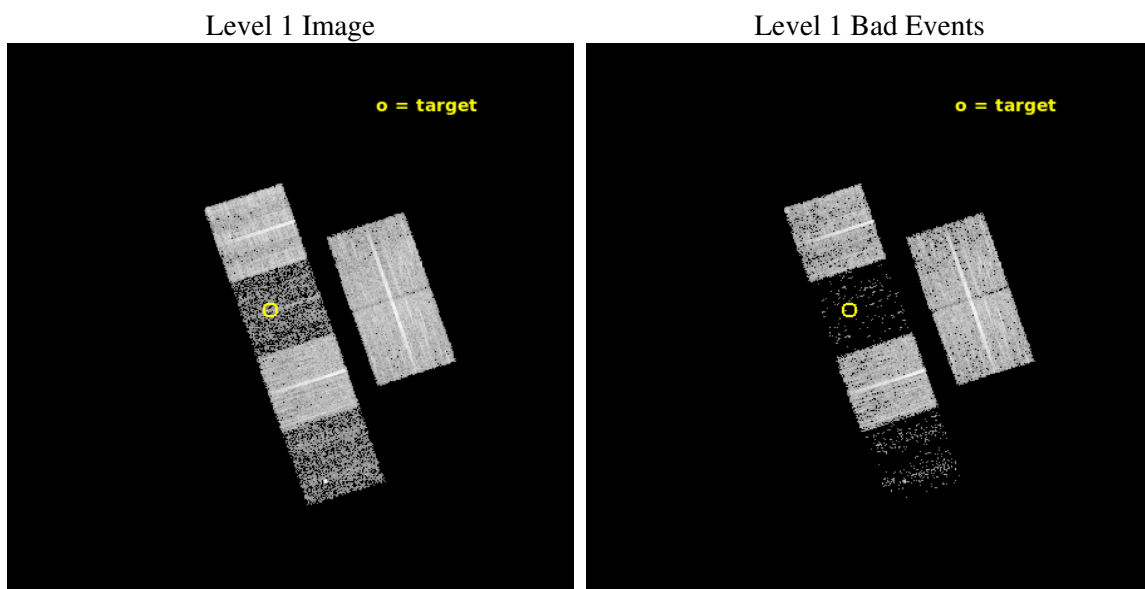
seq_num	100058	Sequence number
obs_id	6351	Observation id
title	Comet 9P/Tempel 1 During the Deep Impact Encounter	Proposal title
observer	Carey Lisse	Principal investigator
object	Comet 9P/Tempel 1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	215.073752	Observer's specified target RA [deg]
dec_targ	-17.293482	Observer's specified target Dec [deg]
ra_nom	215.03890223946	Nominal RA [deg]
dec_nom	-17.32551419629	Nominal Dec [deg]
roll_nom	251.52884849491	Nominal Roll [deg]
revision	4	Processing version of data
ontime	8188.7999694943	Sum of GTIs [s]
liveltime	8085.1084535772	Livetime [s]
ontime2	8185.5589992106	Sum of GTIs [s]
ontime3	8188.7999694943	Sum of GTIs [s]
ontime5	8188.7999694943	Sum of GTIs [s]
ontime6	8188.7999694943	Sum of GTIs [s]
ontime7	8188.7999694943	Sum of GTIs [s]
ontime8	8185.5589992106	Sum of GTIs [s]
l2events	12575	Number of level 2 events



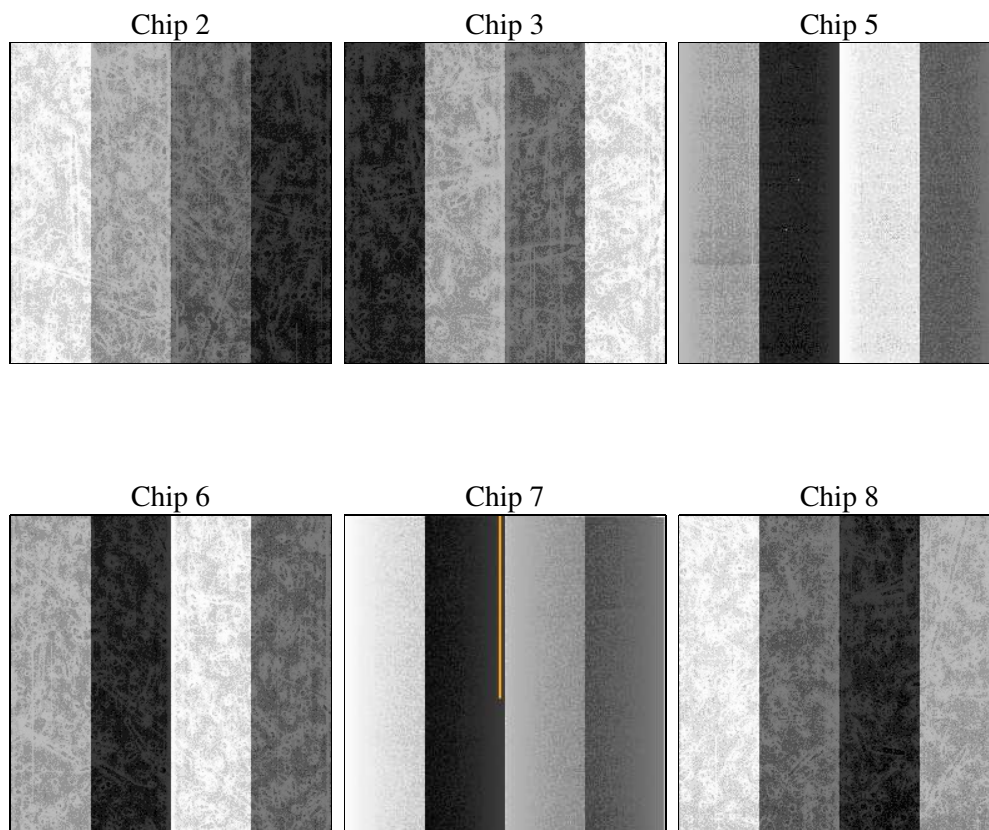
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	8188.7999694943	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	8185.5589992106	Sum of GTIs [s]
date	2020-10-09T14:03:06	Date and time of file creation	ontime3	8188.7999694943	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	8188.7999694943	Sum of GTIs [s]
			ontime6	8188.7999694943	Sum of GTIs [s]
			ontime7	8188.7999694943	Sum of GTIs [s]
			ontime8	8185.5589992106	Sum of GTIs [s]
			l1events	168621	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	41833	35848	6697	36730	5467	42046
rejected events	40162	33975	2191	35031	1273	31340
rejected %	96%	94%	32%	95%	23%	74%

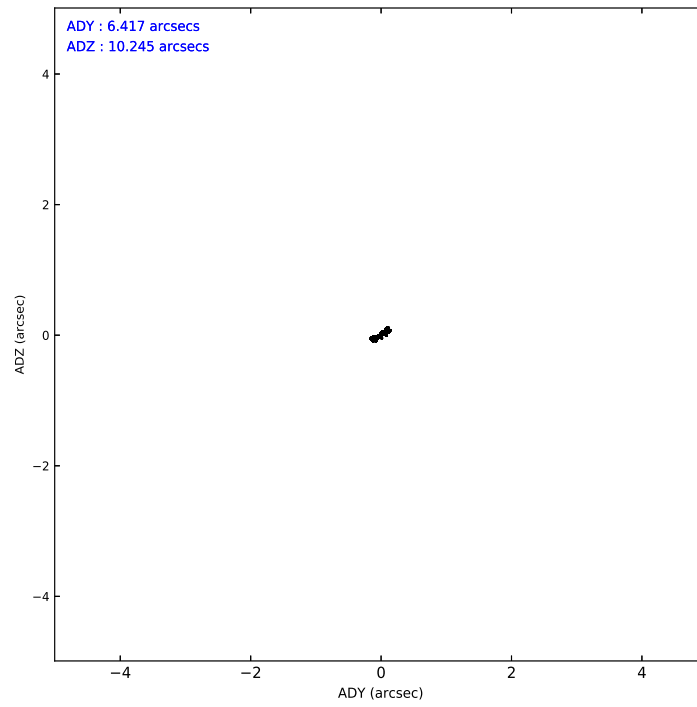
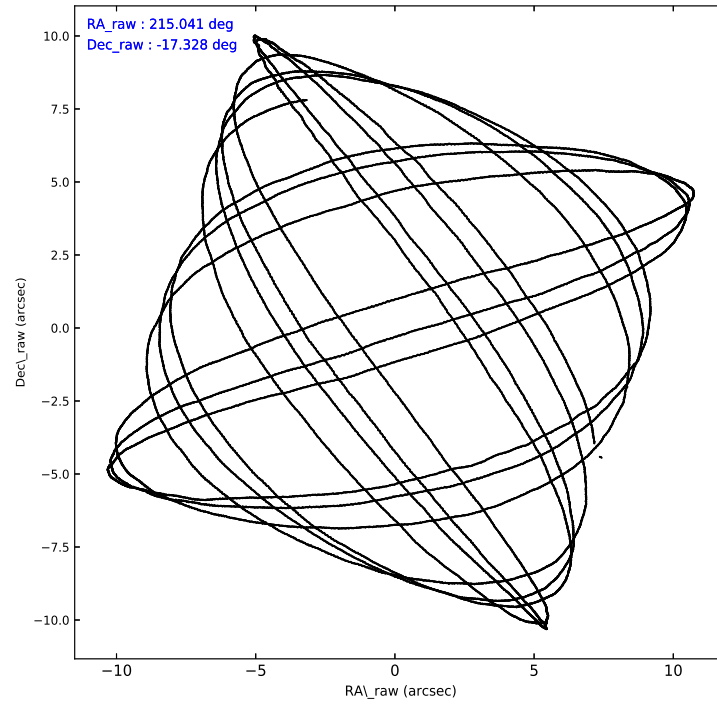
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	765	1199	1488	885	1238	3179
	1%	3%	22%	2%	22%	7%
grade 1 events	18	13	103	12	32	21
	0%	0%	1%	0%	0%	0%
grade 2 events	369	220	1545	323	1353	2550
	0%	0%	23%	0%	24%	6%
grade 3 events	193	229	588	226	647	1177
	0%	0%	8%	0%	11%	2%
grade 4 events	273	179	573	242	608	1112
	0%	0%	8%	0%	11%	2%
grade 5 events	39	33	348	27	124	230
	0%	0%	5%	0%	2%	0%
grade 6 events	129	103	493	105	519	2990
	0%	0%	7%	0%	9%	7%
grade 7 events	40047	33872	1559	34910	946	30787
	95%	94%	23%	95%	17%	73%

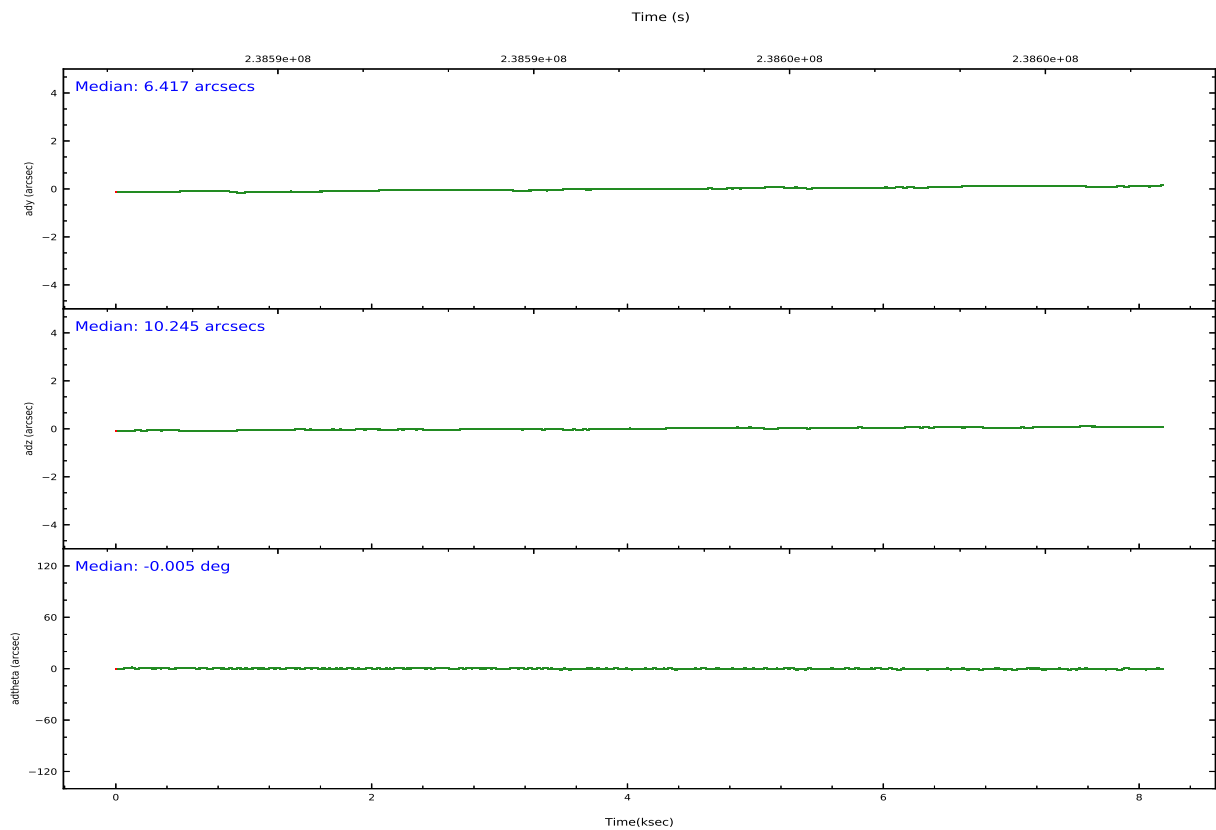
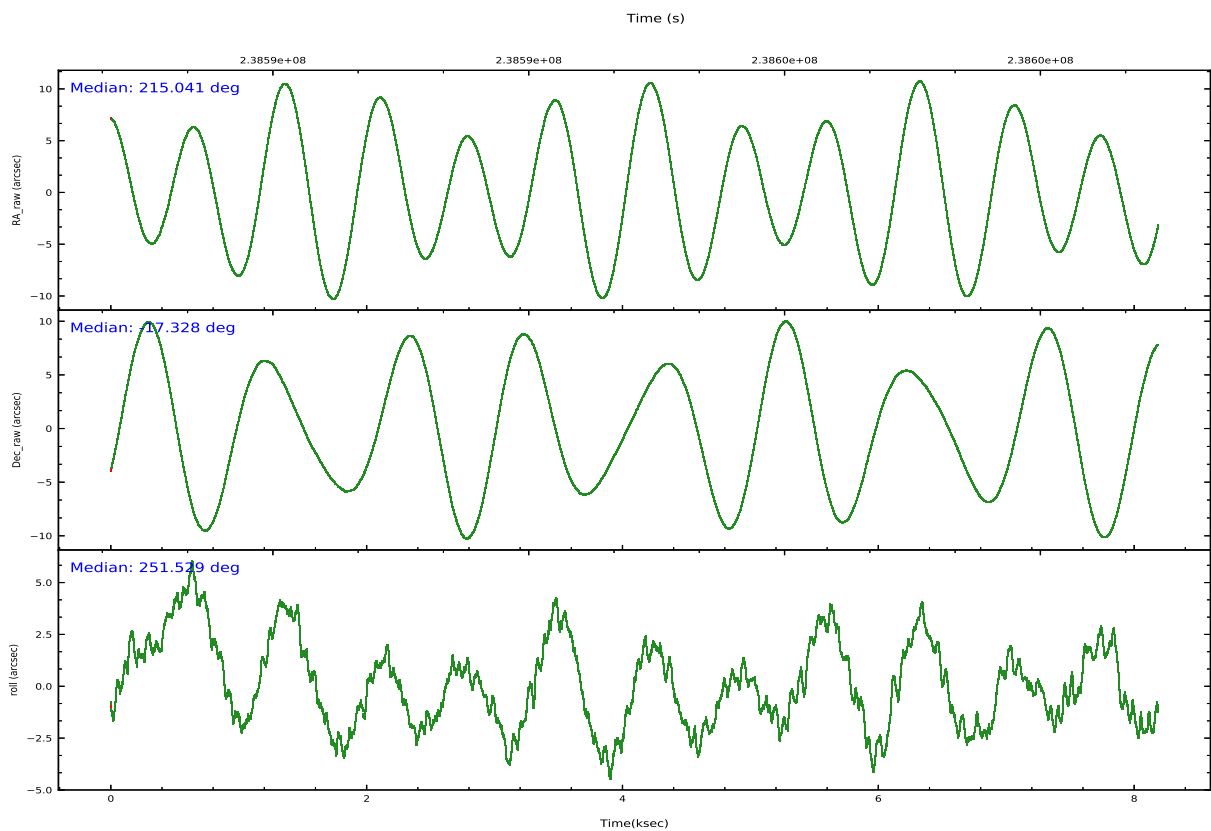


## 2.2 Compared Parameters

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	215.035149	215.03890223946	Subarray requested	NONE	NONE
[deg] Pointing Dec	-17.301655	-17.32551419629	Alternating exposures requested	N	N
[deg] Pointing Roll	251.369396	251.52884849491	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	238572064.184000	238572064.184000			
[s] Window stop time (MET)	238615264.184000	238615264.184000			
[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)	238590922.184000	238590545.72723			
Observation start date	2005-07-24T11:14:18	2005-07-24T11:09:05			
[s] Observation end time (MET)	238598922.184000	238599055.79012			
Observation end date	2005-07-24T13:27:38	2005-07-24T13:30:55			
Read mode	TIMED	TIMED			

## 2.3 Aspect



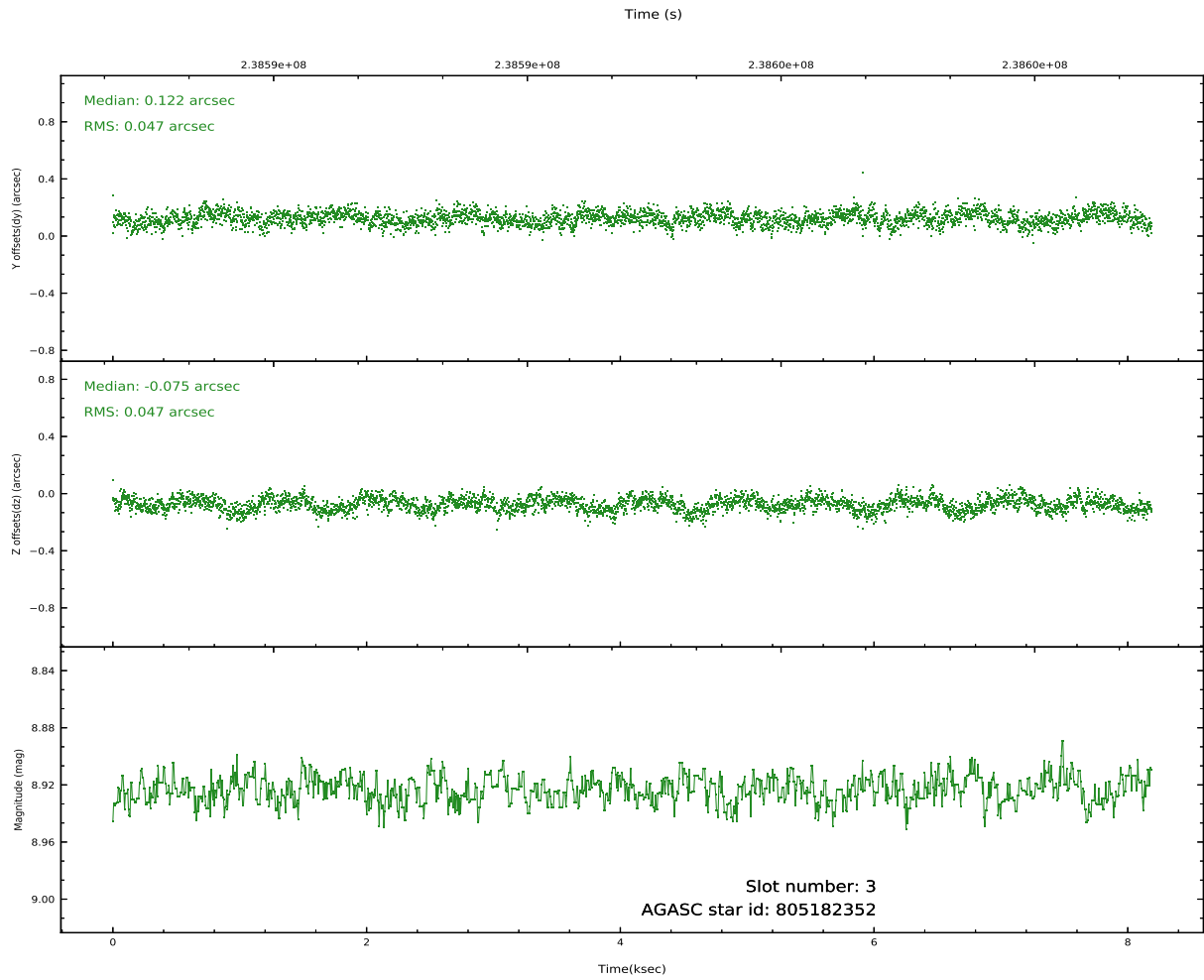
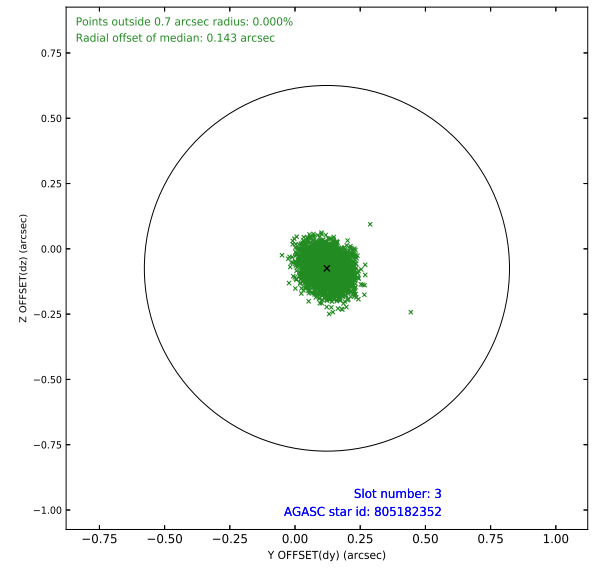
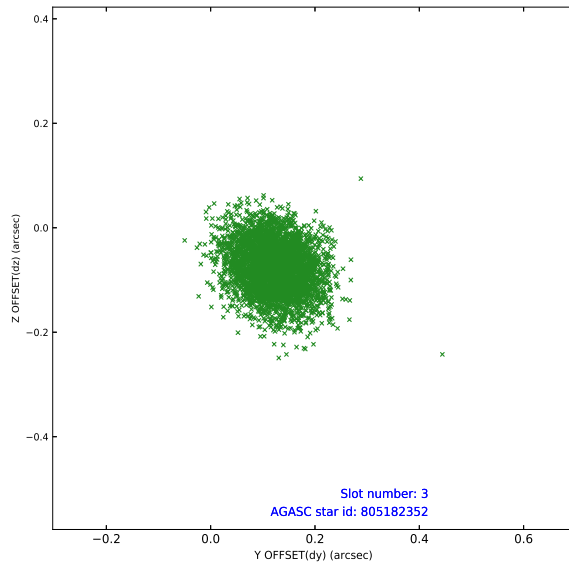


Slot Statistics

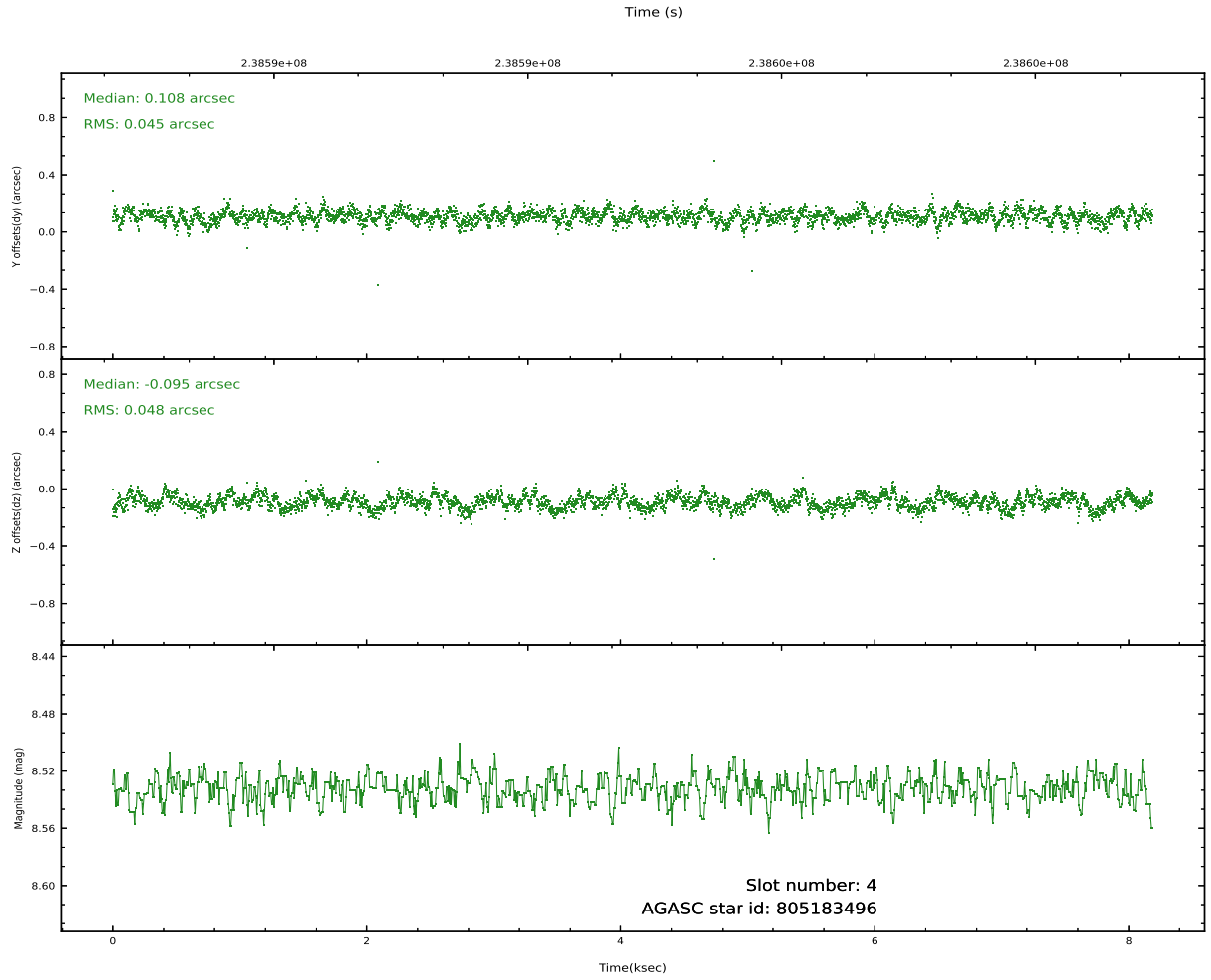
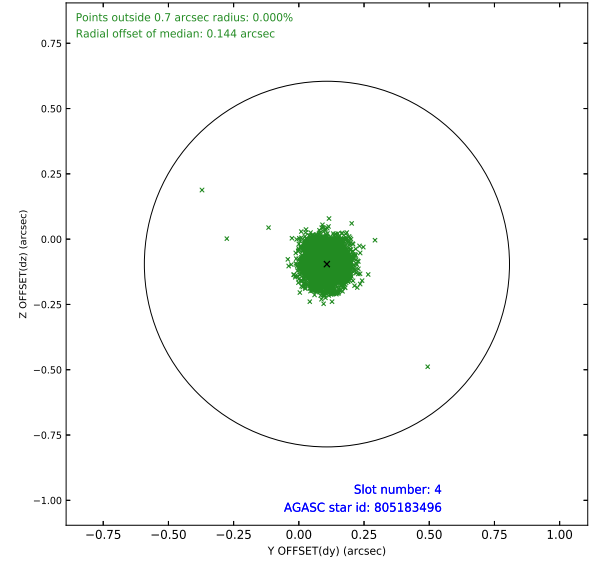
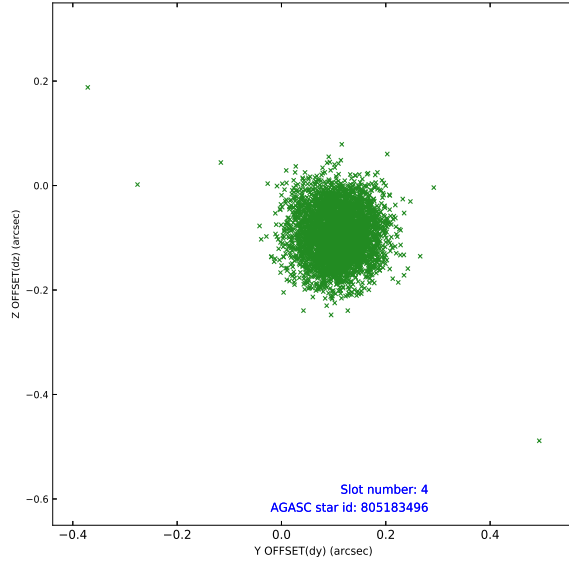
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.18	1998	1.000	0.005	-0.049	0.007	0.012	0.000000	0.000000	936.89	-1727
1	FID		ACIS-S-2	7.10	1998	1.000	-0.136	-0.057	0.006	0.009	0.000000	0.000000	-758.78	-1732
2	FID		ACIS-S-4	7.20	1998	1.000	0.106	0.112	0.005	0.009	0.000000	0.000000	2153.92	176
3	GUIDE	used	805182352	8.92	3993	1.000	0.122	-0.075	0.070	0.113	214.624580	-17.686015	1763.02	-891
4	GUIDE	used	805183496	8.53	3995	1.000	0.108	-0.095	0.069	0.109	214.568748	-17.733891	1988.36	-1018
5	GUIDE	used	805185120	8.61	3995	1.000	0.055	0.027	0.058	0.093	215.253528	-17.793163	1438.87	1274
6	GUIDE	used	805187072	8.72	3993	1.000	-0.132	0.135	0.056	0.092	215.513645	-17.149952	-1040.94	1386
7	GUIDE	used	805188160	8.98	3994	1.000	-0.154	0.009	0.063	0.101	215.356854	-16.987214	-1425.71	688

## 2.4 Star Slots

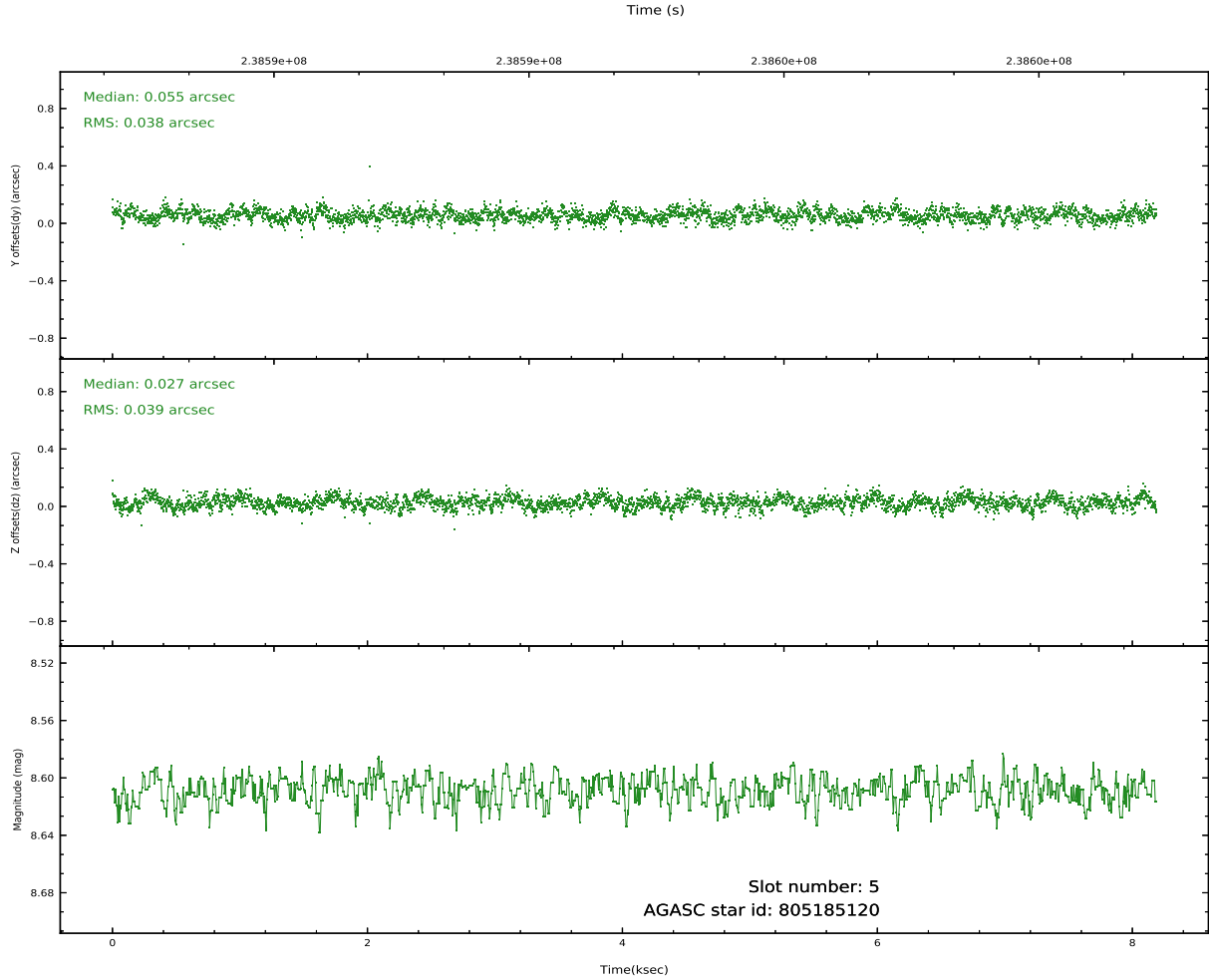
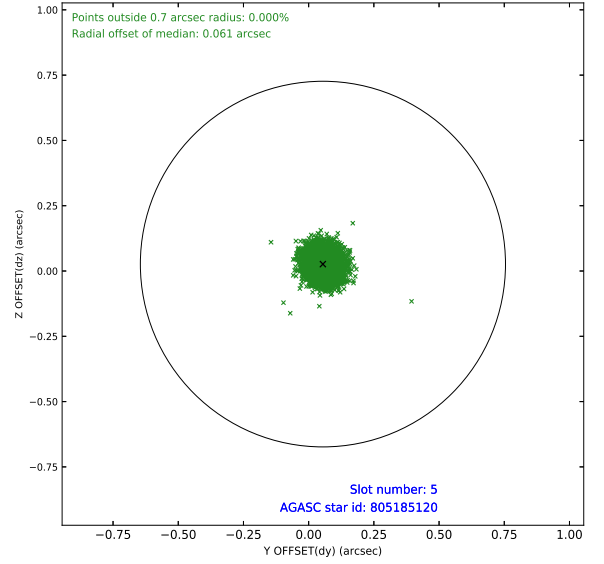
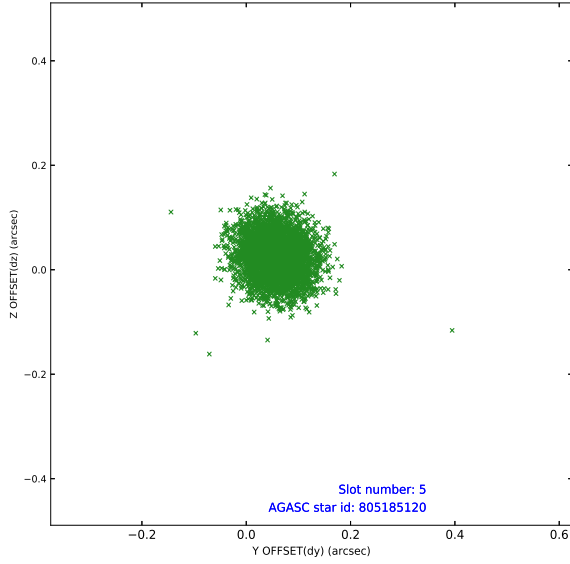
### 2.4.1 Slot 3



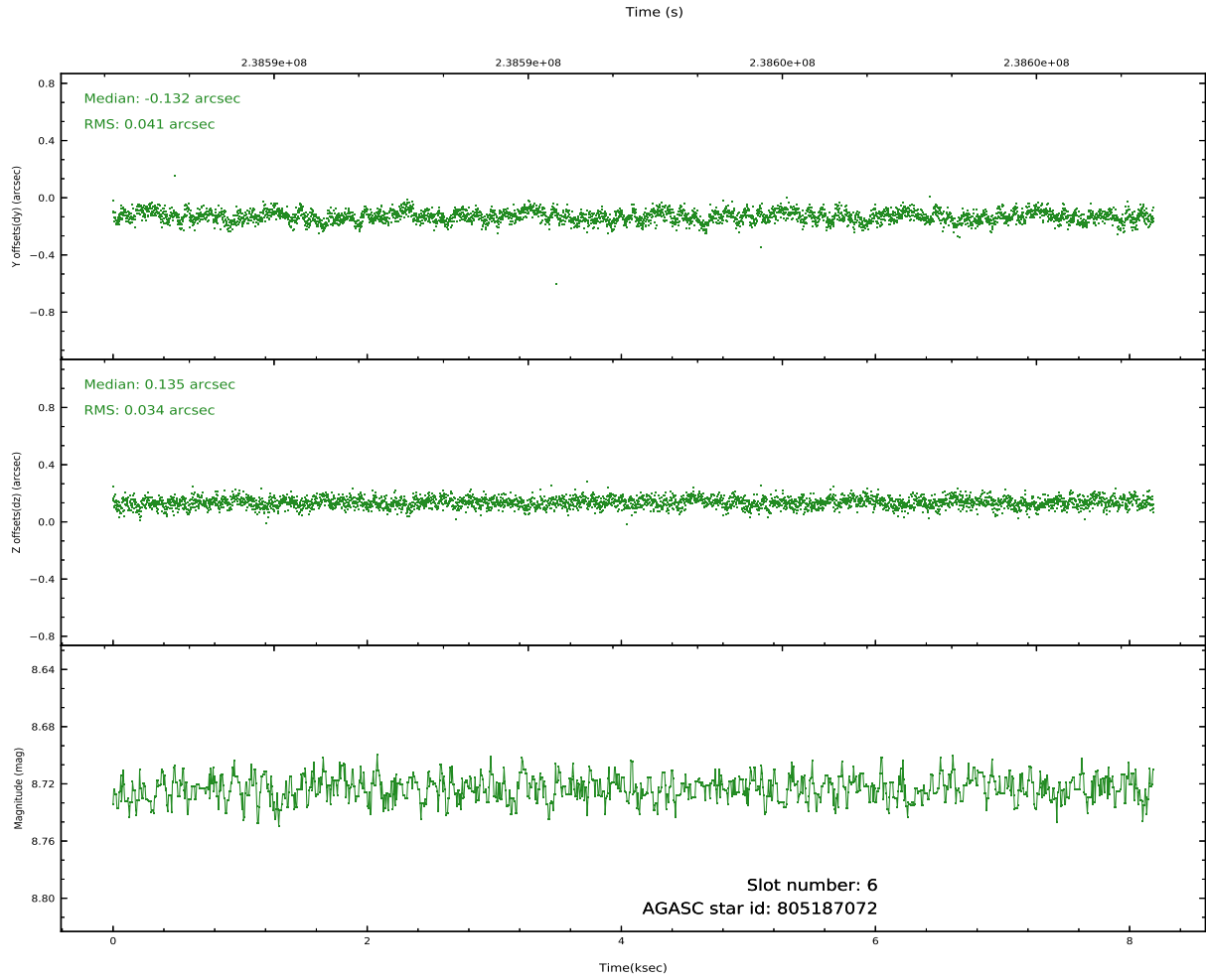
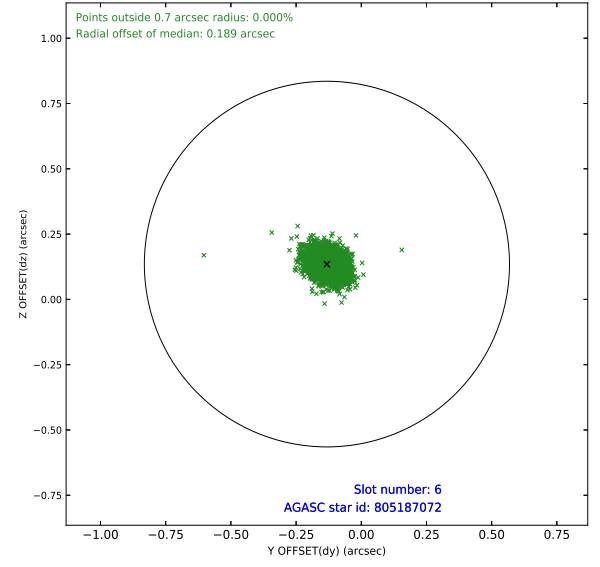
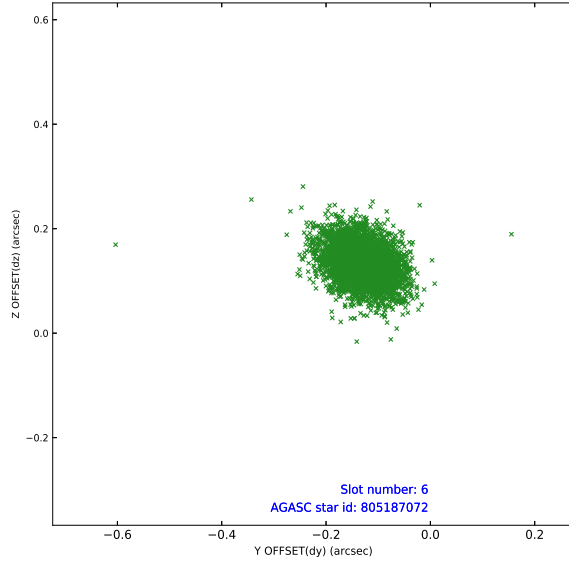
## 2.4.2 Slot 4



### 2.4.3 Slot 5

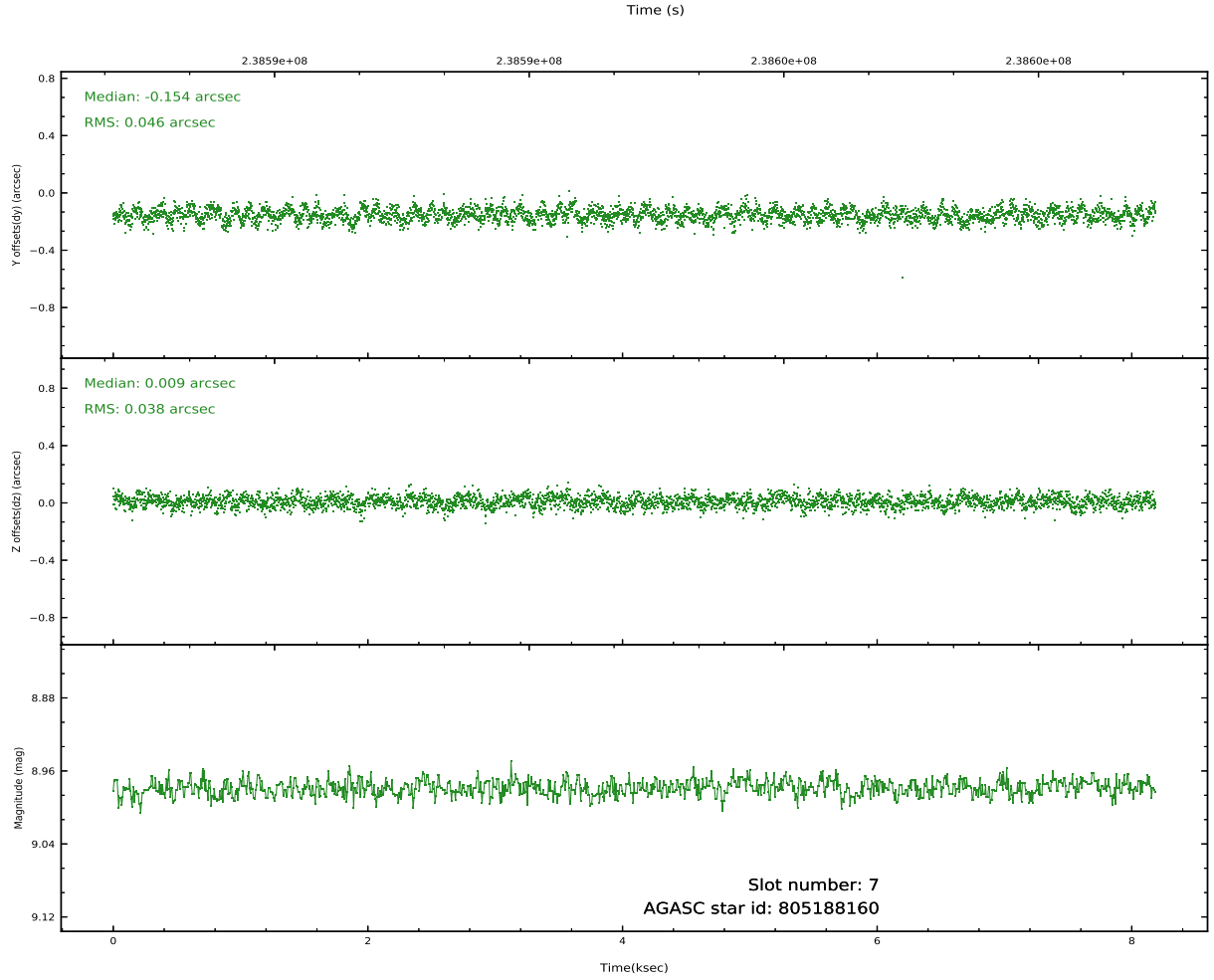
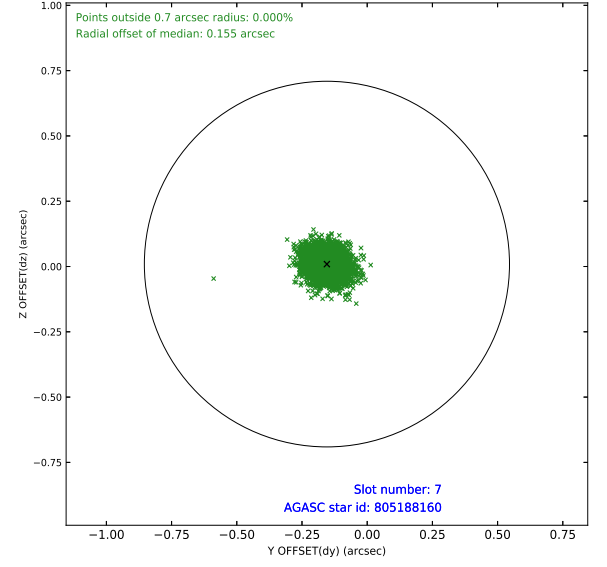
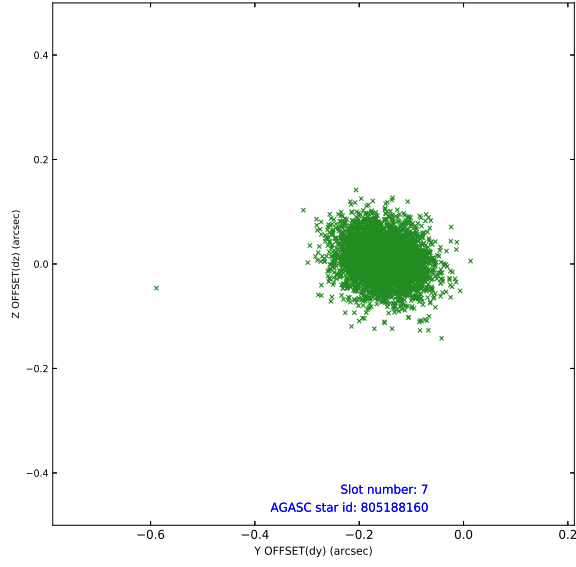


## 2.4.4 Slot 6



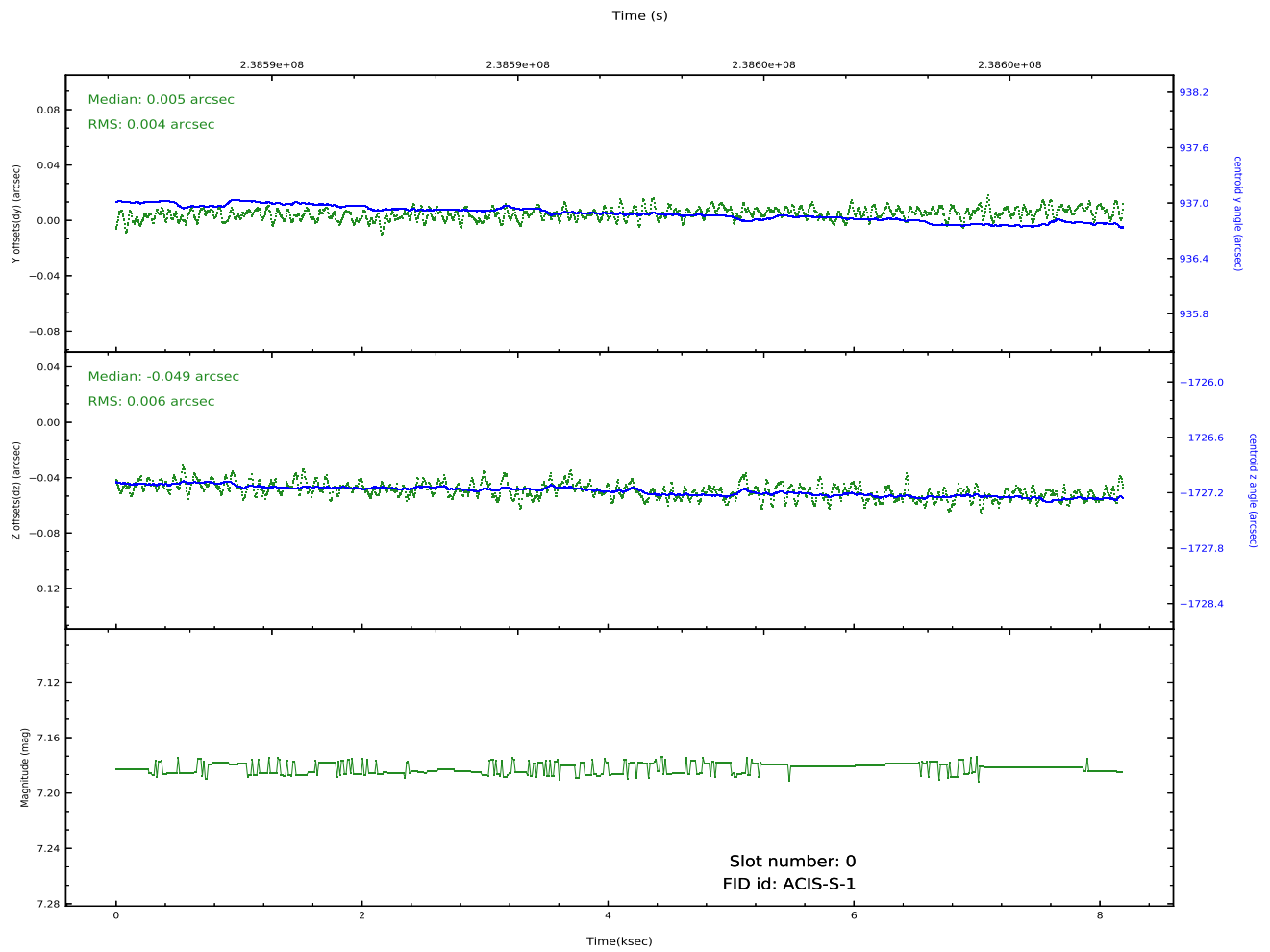
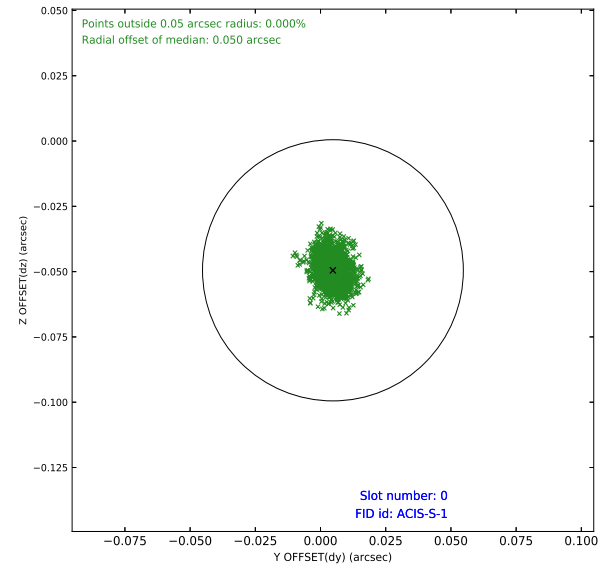
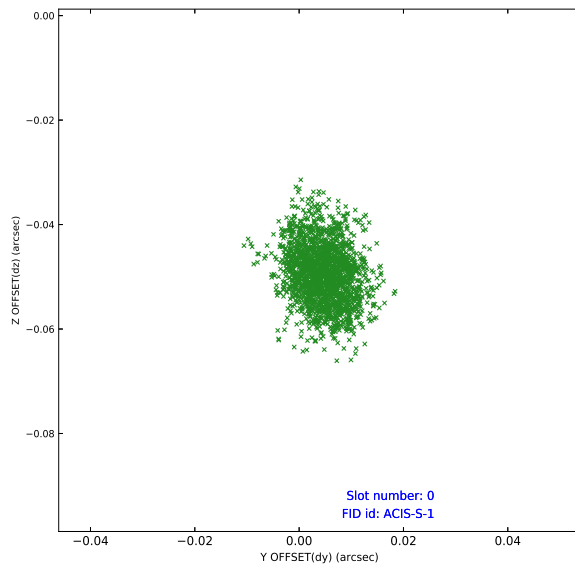


## 2.4.5 Slot 7

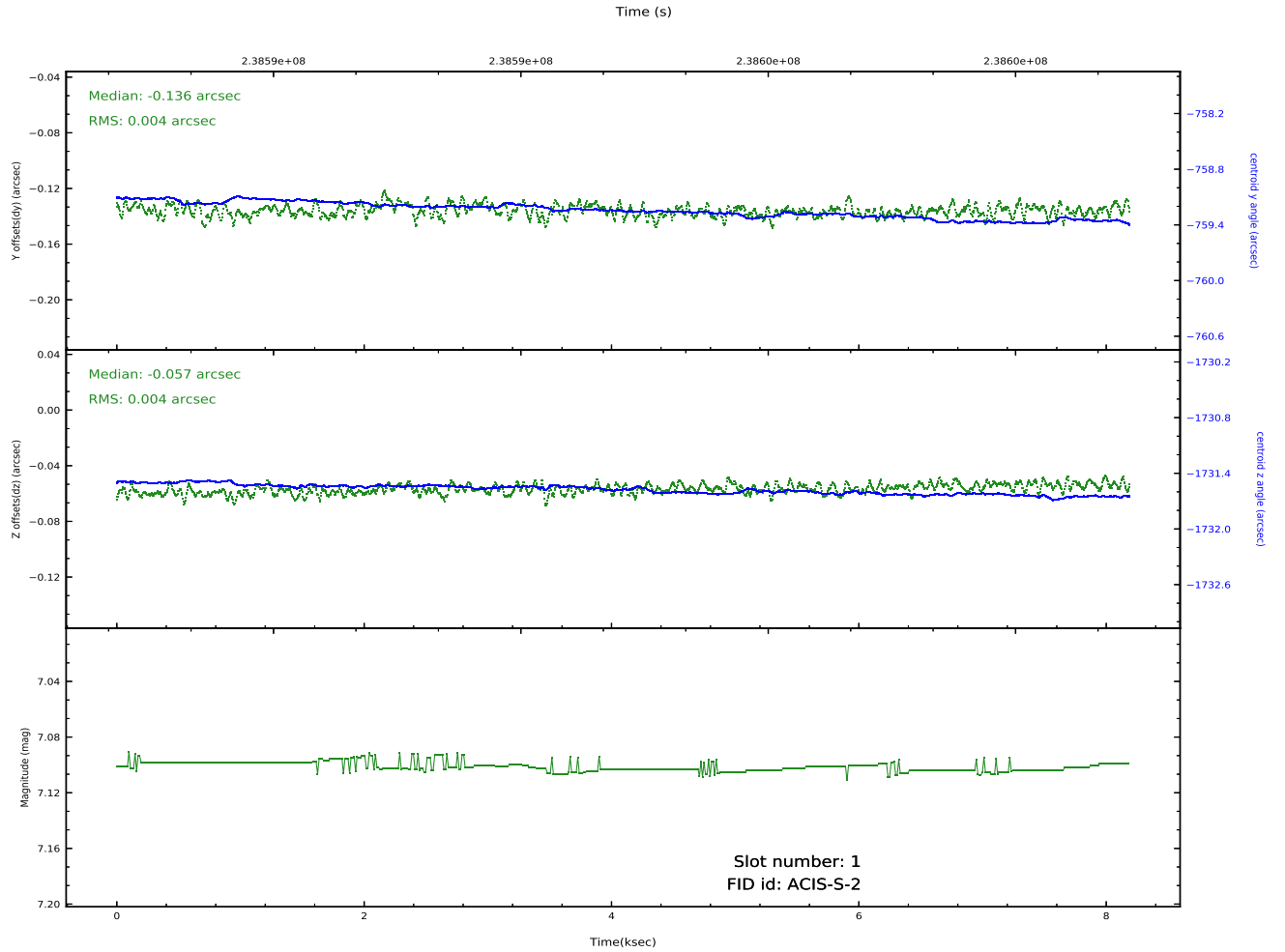
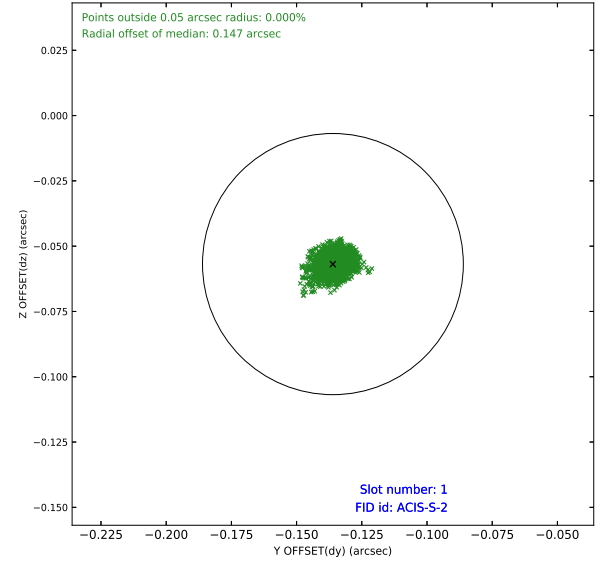
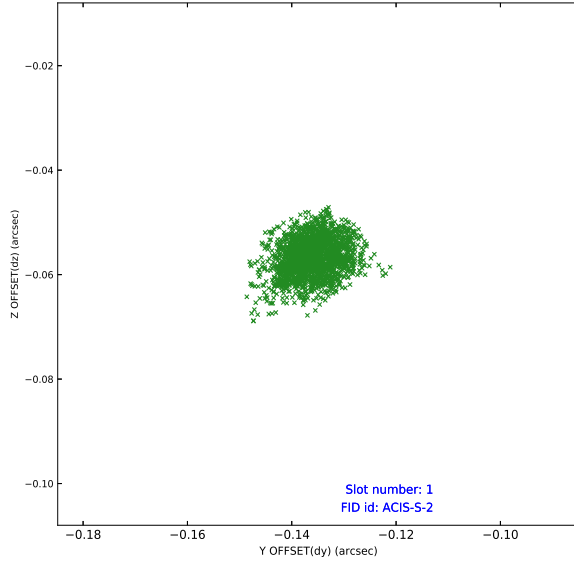


## 2.5 FID Slots

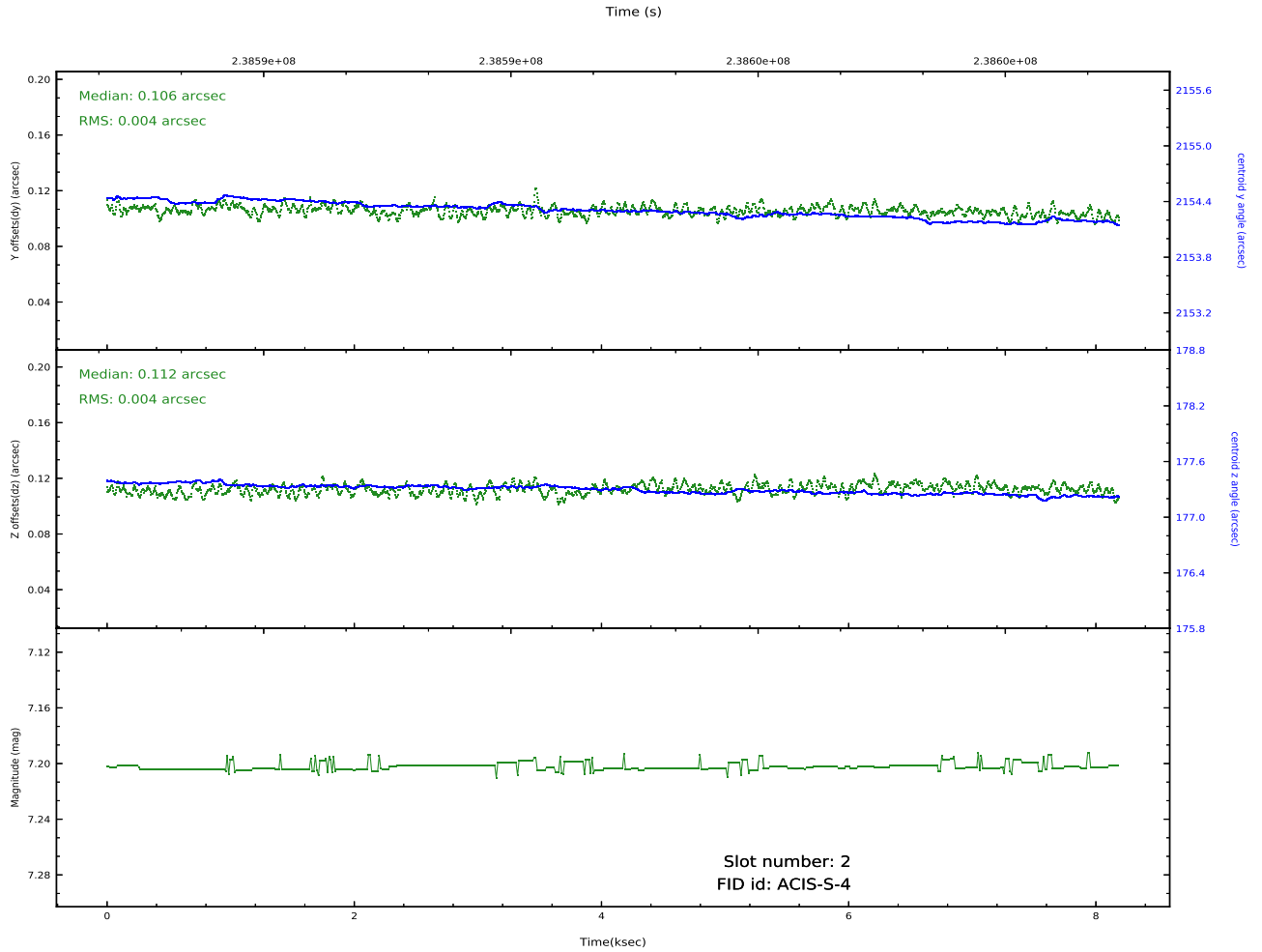
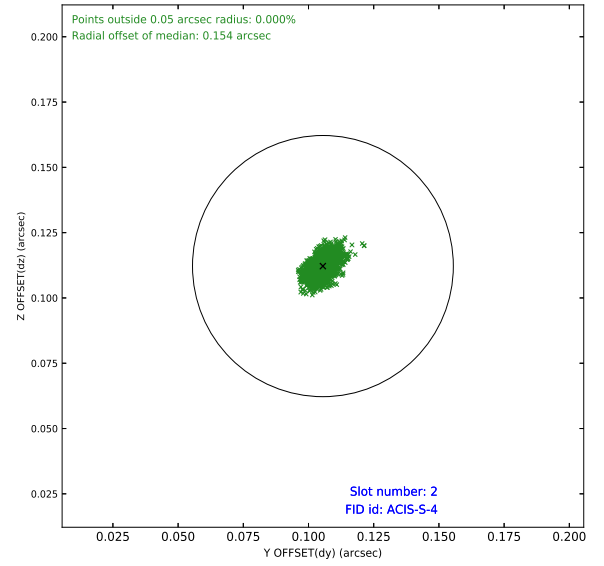
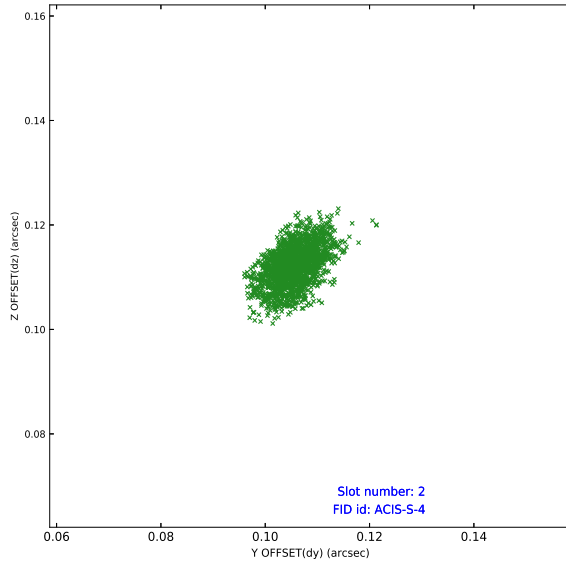
### 2.5.1 Slot 0



## 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)	2020.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.510873

## A.2 Comments

Charge time for this observation remains at previous value of 8.510873 ksec, although with the current processing the charge time would have been 8.188 ksec.

===

This is an observation of a moving target. Users will need to run sso\_freeze or similar software to position the events in the reference frame of the target.

===

Window constraint met.