

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6281 - L2 Version 4  
Chandra X-Ray Center

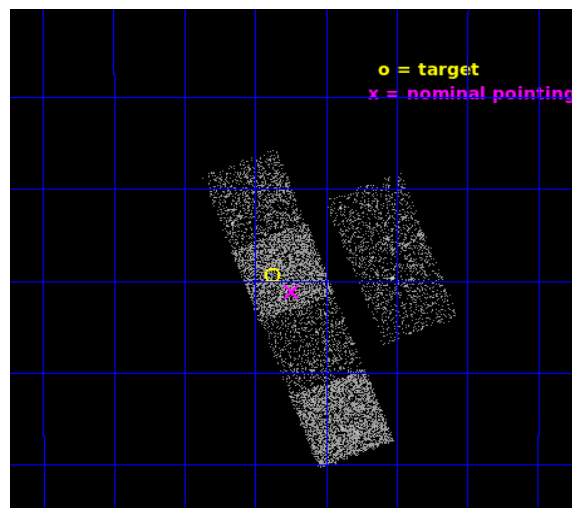
L2 Processing Date : Oct 9 2020

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

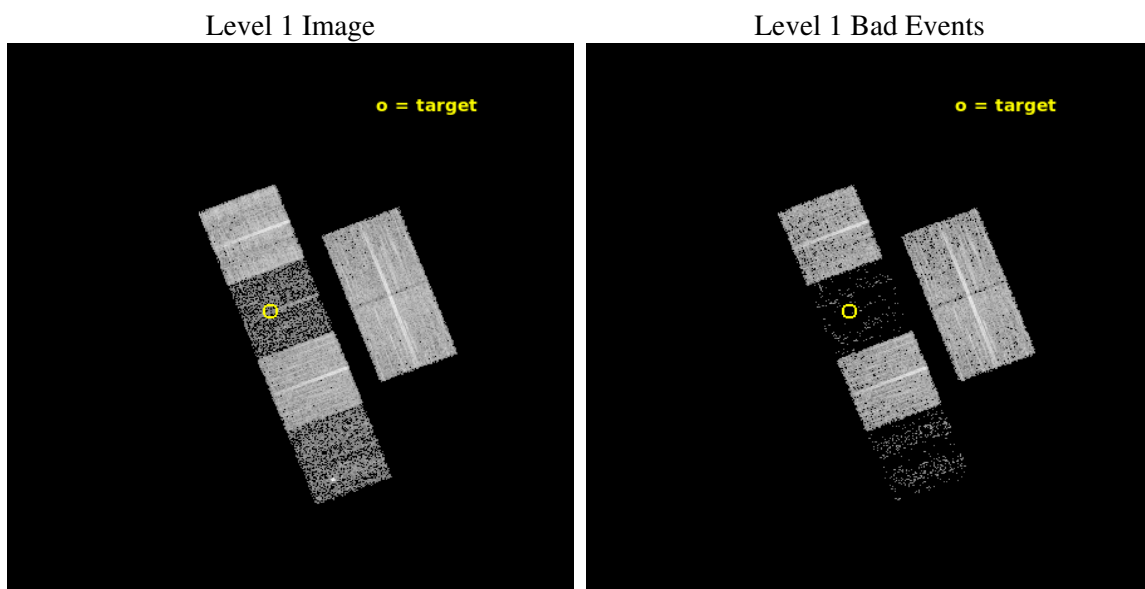
seq_num	100060	Sequence number
obs_id	6281	Observation id
title	Comet 9P/Tempel 1 During the Deep Impact Encounter	Proposal title
observer	Carey Lisse	Principal investigator
object	Comet 9P/Tempel 1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	204.720229	Observer's specified target RA [deg]
dec_targ	-9.82286	Observer's specified target Dec [deg]
ra_nom	204.6852549774	Nominal RA [deg]
dec_nom	-9.8528358921075	Nominal Dec [deg]
roll_nom	248.89213643036	Nominal Roll [deg]
revision	4	Processing version of data
ontime	8211.1999694109	Sum of GTIs [s]
livetime	8107.2248112072	Livetime [s]
ontime2	8207.9590091109	Sum of GTIs [s]
ontime3	8211.1999694109	Sum of GTIs [s]
ontime5	8211.1999694109	Sum of GTIs [s]
ontime6	8211.1999694109	Sum of GTIs [s]
ontime7	8211.1999694109	Sum of GTIs [s]
ontime8	8211.1999694109	Sum of GTIs [s]
l2events	12025	Number of level 2 events



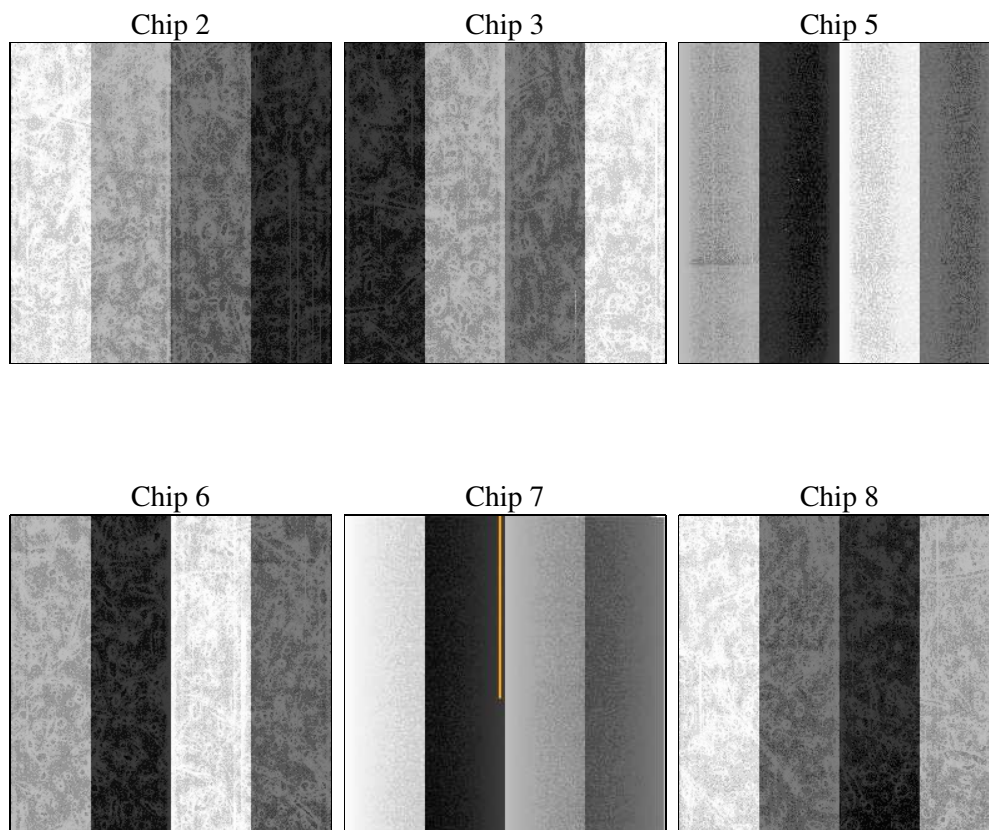
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8029.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	8211.1999694109	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	8207.9590091109	Sum of GTIs [s]
date	2020-10-09T07:52:02	Date and time of file creation	ontime3	8211.1999694109	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	8211.1999694109	Sum of GTIs [s]
			ontime6	8211.1999694109	Sum of GTIs [s]
			ontime7	8211.1999694109	Sum of GTIs [s]
			ontime8	8211.1999694109	Sum of GTIs [s]
			l1events	167269	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	42164	34724	7205	35329	5306	42541
rejected events	40399	33384	2307	33776	1224	31859
rejected %	95%	96%	32%	95%	23%	74%

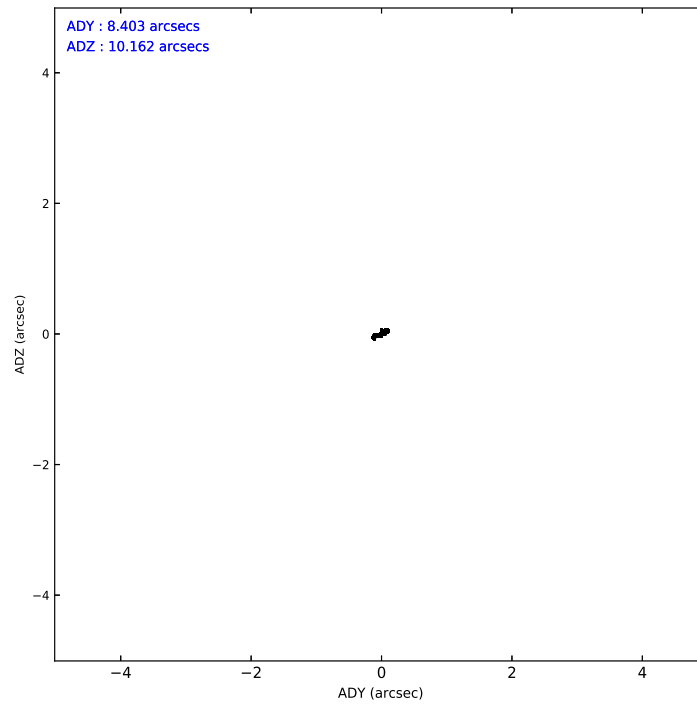
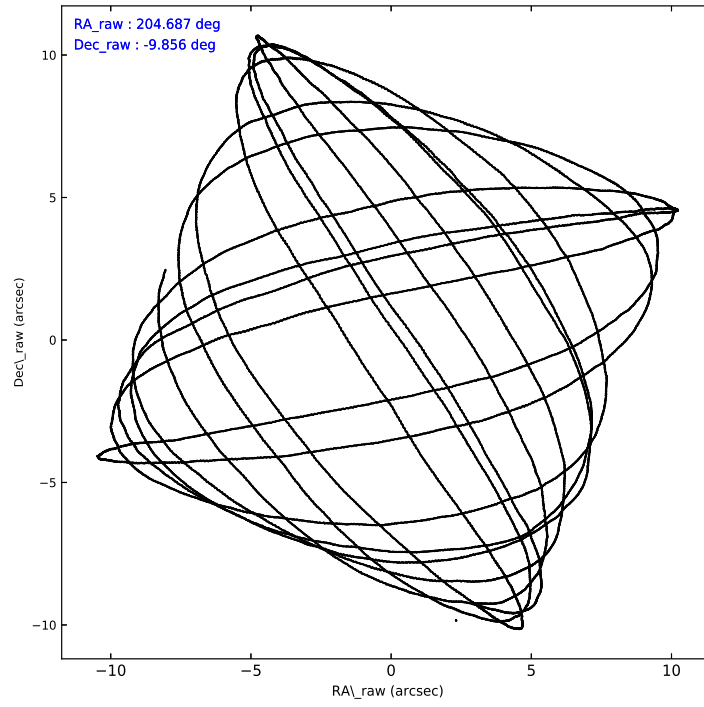
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	752	679	1647	725	1097	2912
	1%	1%	22%	2%	20%	6%
grade 1 events	18	3	46	17	31	23
	0%	0%	0%	0%	0%	0%
grade 2 events	394	176	1804	292	1357	2542
	0%	0%	25%	0%	25%	5%
grade 3 events	224	218	537	228	609	1195
	0%	0%	7%	0%	11%	2%
grade 4 events	249	188	519	206	597	1097
	0%	0%	7%	0%	11%	2%
grade 5 events	49	20	381	32	142	235
	0%	0%	5%	0%	2%	0%
grade 6 events	193	101	492	123	509	3097
	0%	0%	6%	0%	9%	7%
grade 7 events	40285	33339	1779	33706	964	31440
	95%	96%	24%	95%	18%	73%

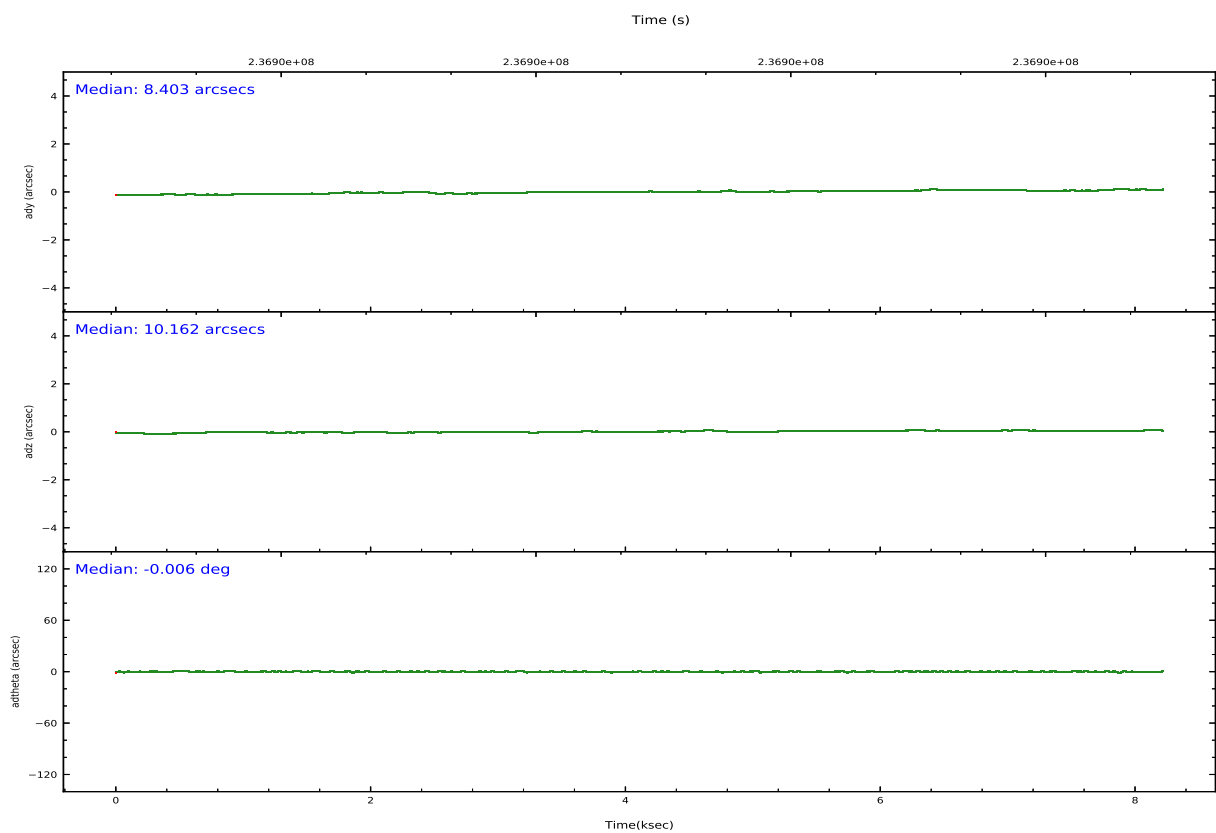
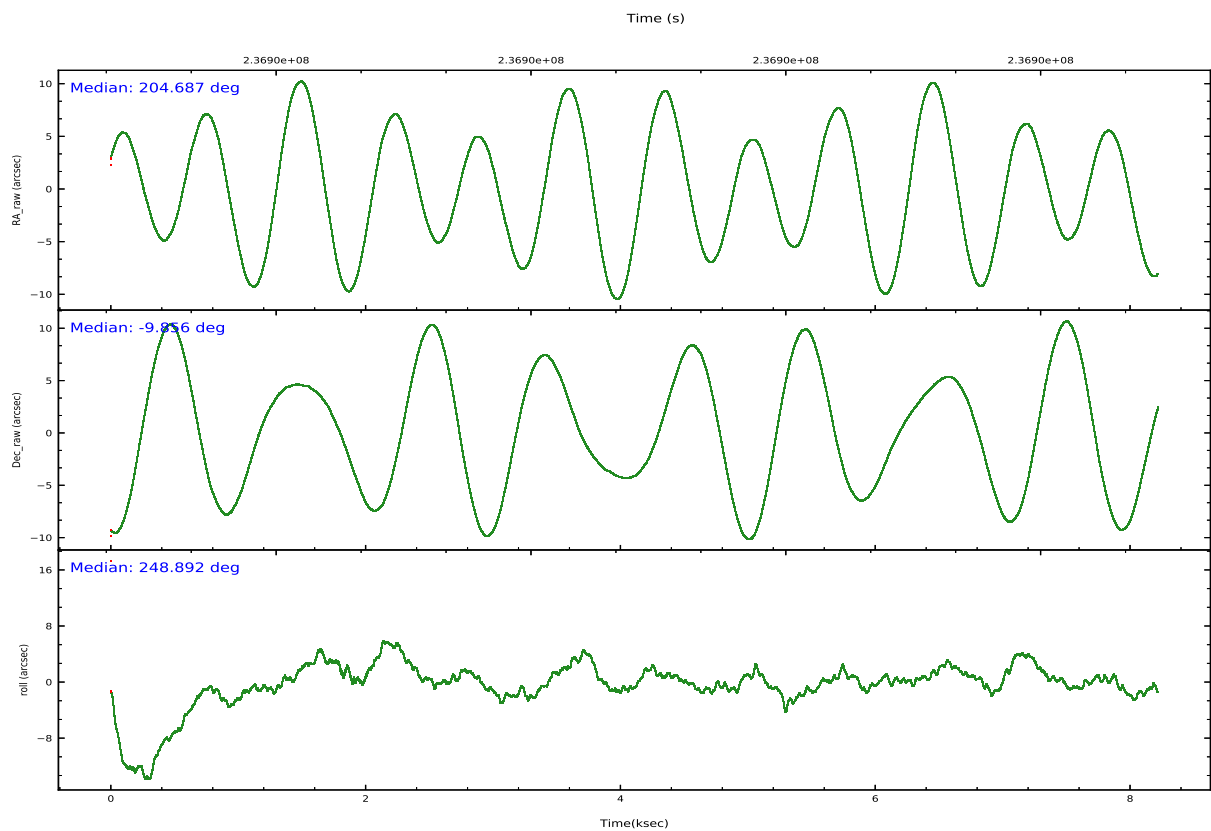


## 2.2 Compared Parameters

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	204.682505	204.6852549774	Subarray requested	NONE	NONE
[deg] Pointing Dec	-9.829316	-9.8528358921075	Alternating exposures requested	N	N
[deg] Pointing Roll	248.732865	248.89213643036	[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	-190.145094680475			
[mm] SIM translation stage offset	0	0.01257209746719923			
[s] Observation start time (MET)	236894893.184000	236894517.09961			
Observation start date	2005-07-04T20:07:09	2005-07-04T20:01:57			
[s] Observation end time (MET)	236902922.184000	236903147.08751			
Observation end date	2005-07-04T22:20:58	2005-07-04T22:25:47			
Read mode	TIMED	TIMED			

## 2.3 Aspect



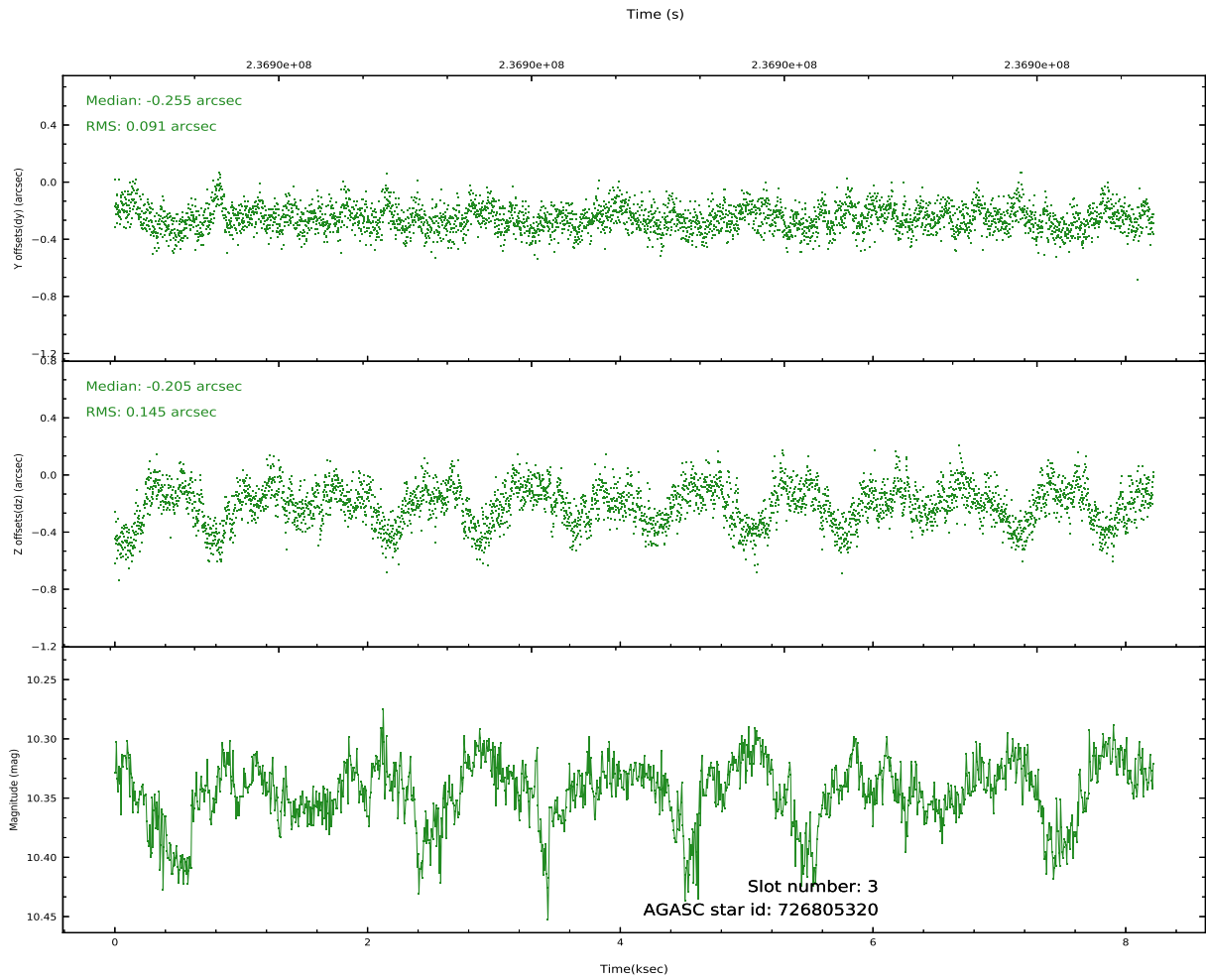
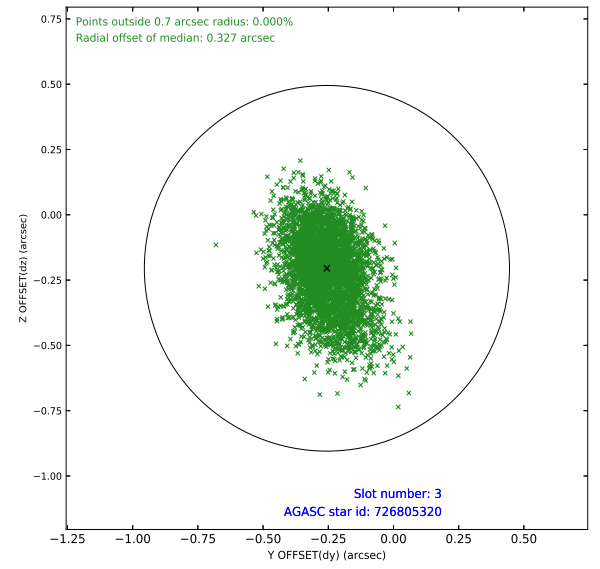
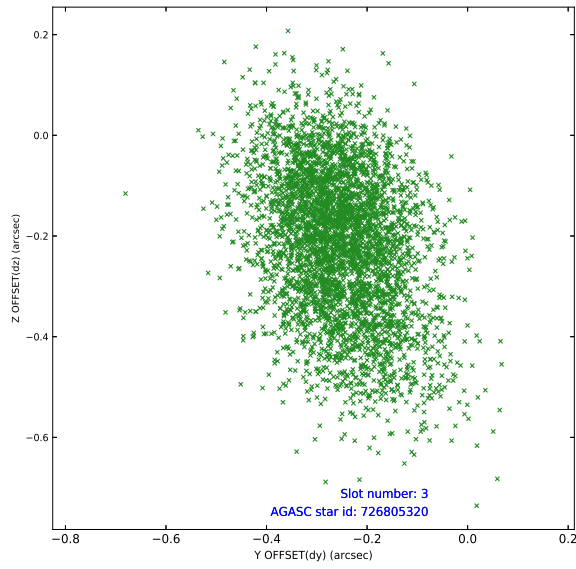


Slot Statistics

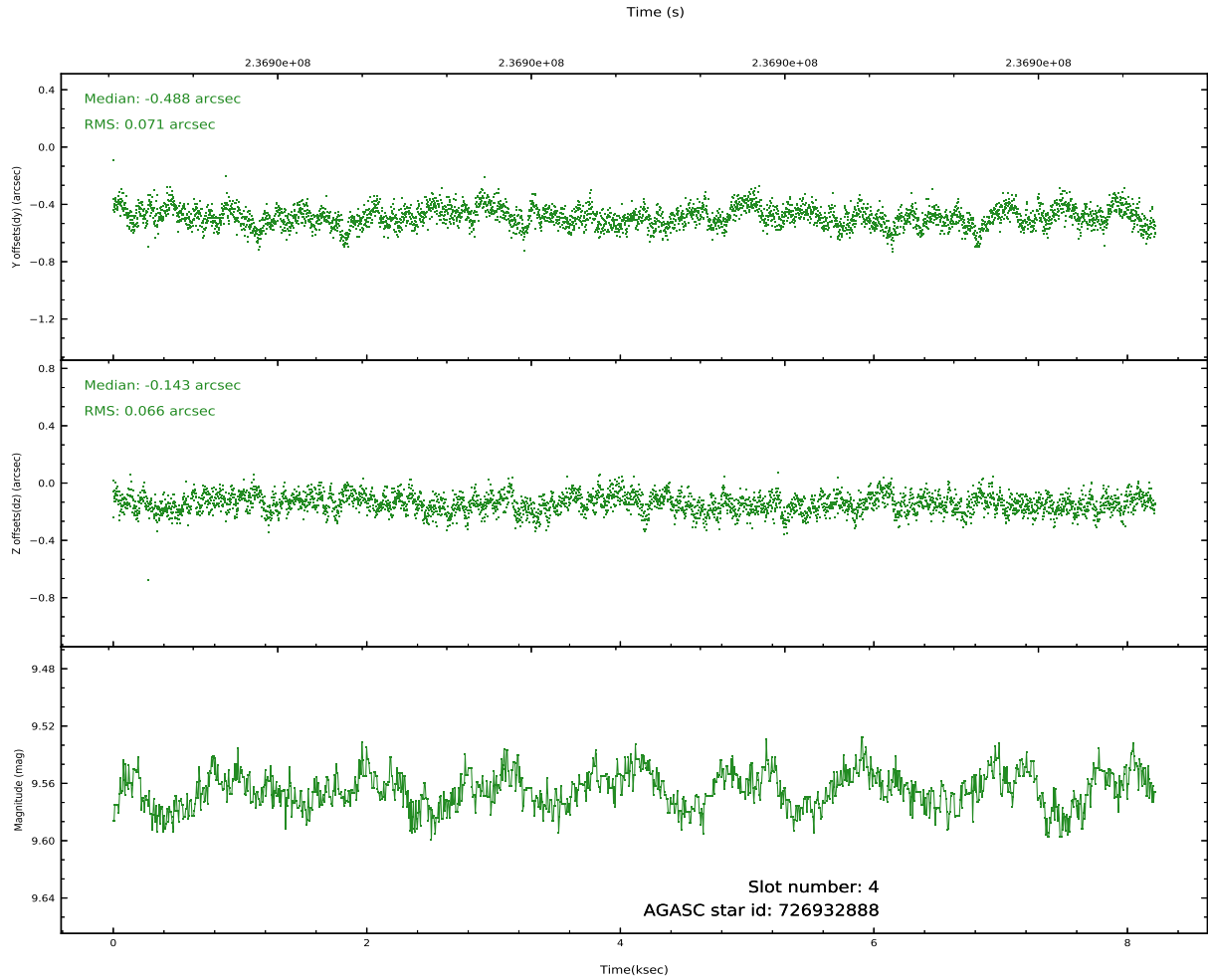
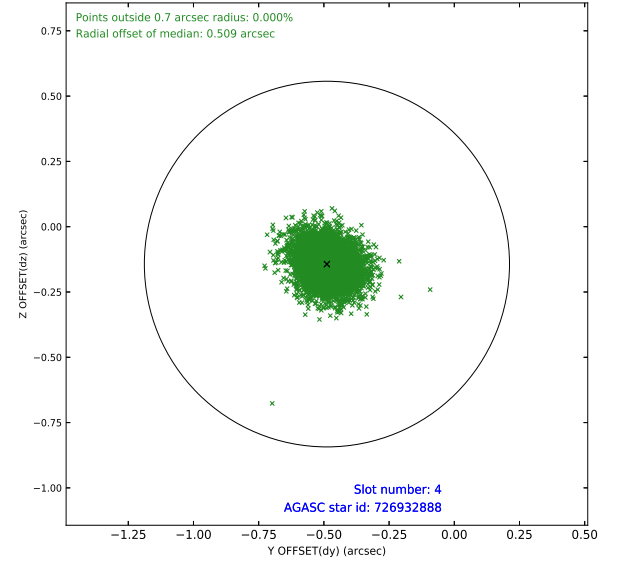
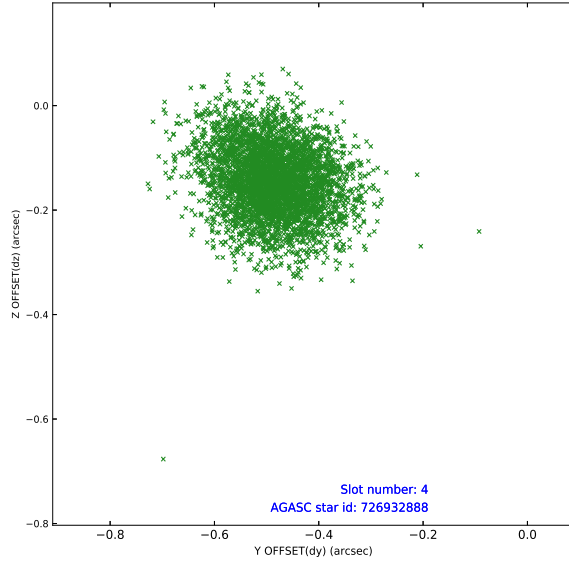
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.11	2006	1.000	-0.072	-0.067	0.007	0.012	0.000000	0.000000	-761.19	-1731
1	FID		ACIS-S-4	7.20	2006	1.000	0.194	0.053	0.007	0.012	0.000000	0.000000	2151.97	176
2	FID		ACIS-S-5	7.23	2006	1.000	-0.152	0.023	0.007	0.012	0.000000	0.000000	-1813.31	170
3	GUIDE	used	726805320	10.34	4007	1.000	-0.255	-0.205	0.178	0.306	204.212849	-9.734967	289.08	-1675
4	GUIDE	used	726932888	9.56	4007	1.000	-0.488	-0.143	0.103	0.168	204.640397	-9.165404	-2173.07	-1007
5	GUIDE	used	726935840	9.51	4006	1.000	0.523	-0.169	0.105	0.175	205.084608	-9.297514	-2301.14	636
6	GUIDE	used	727320712	10.44	3998	1.000	0.199	0.233	0.157	0.247	204.468965	-10.254166	1699.89	-149
7	GUIDE	used	727321032	9.99	4008	1.000	0.020	0.293	0.141	0.224	205.073686	-10.196206	729.52	1771

## 2.4 Star Slots

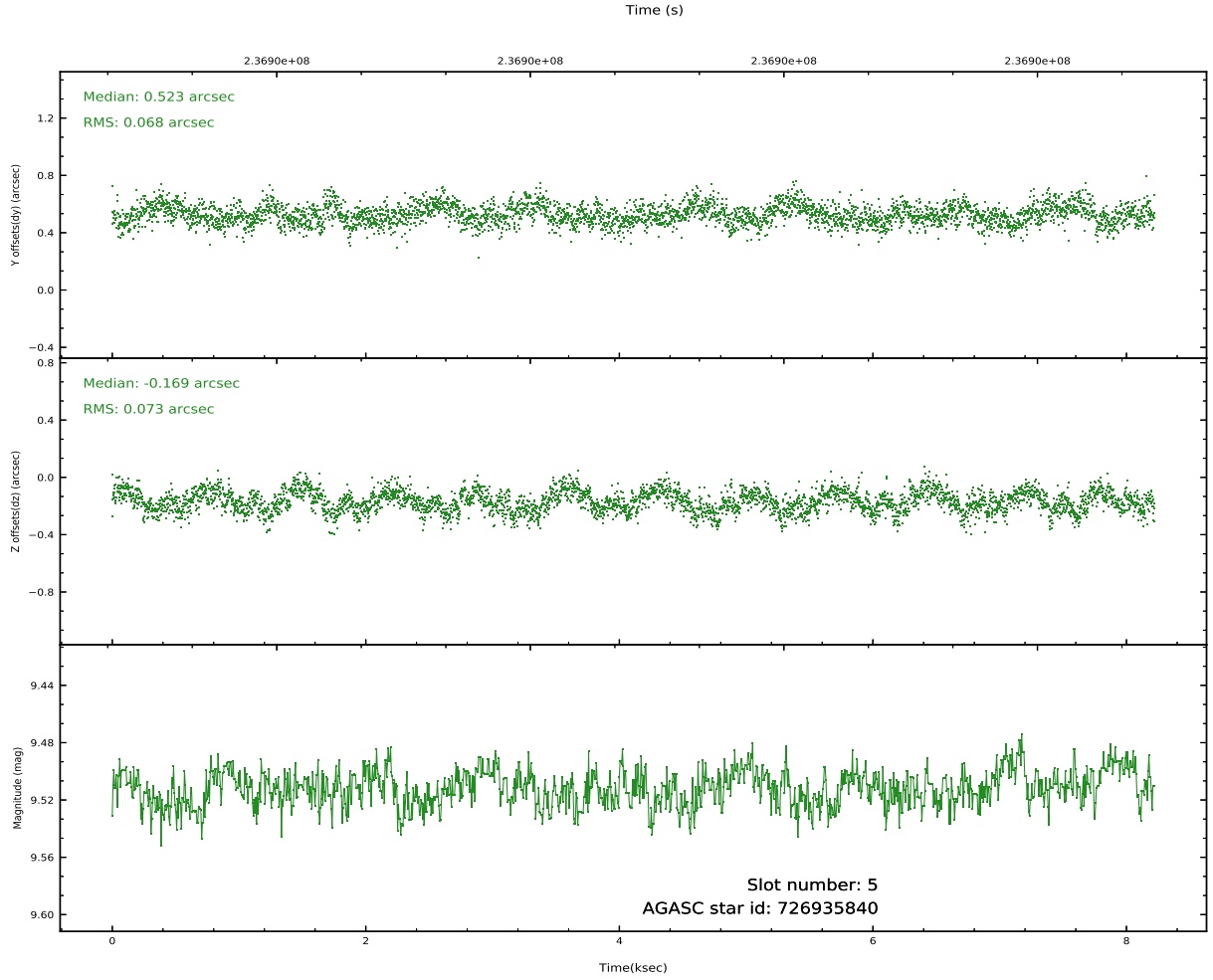
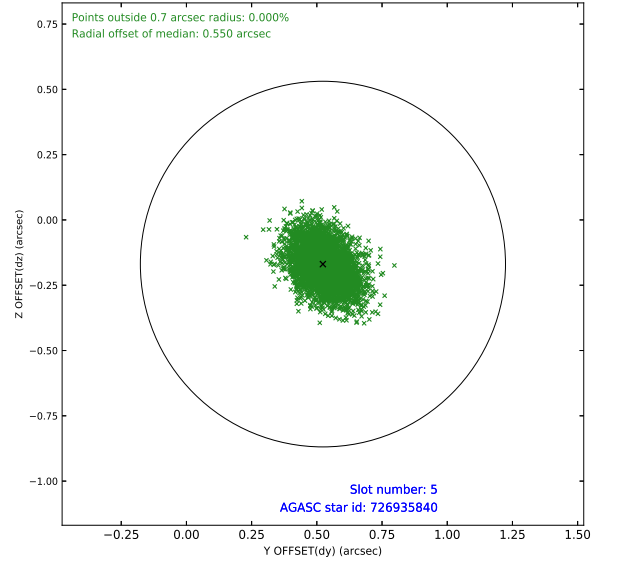
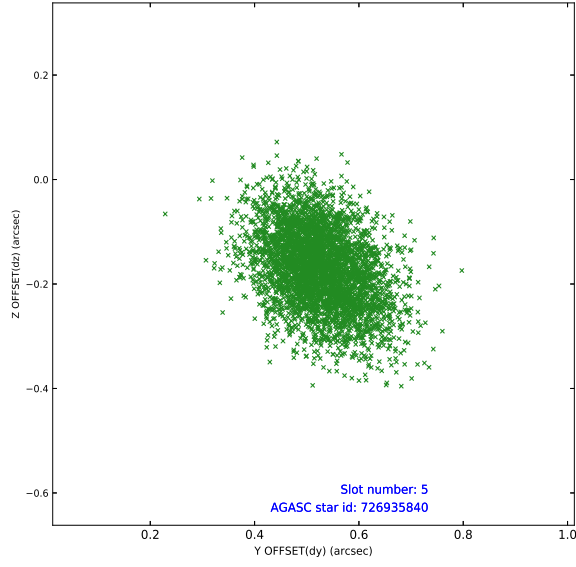
### 2.4.1 Slot 3



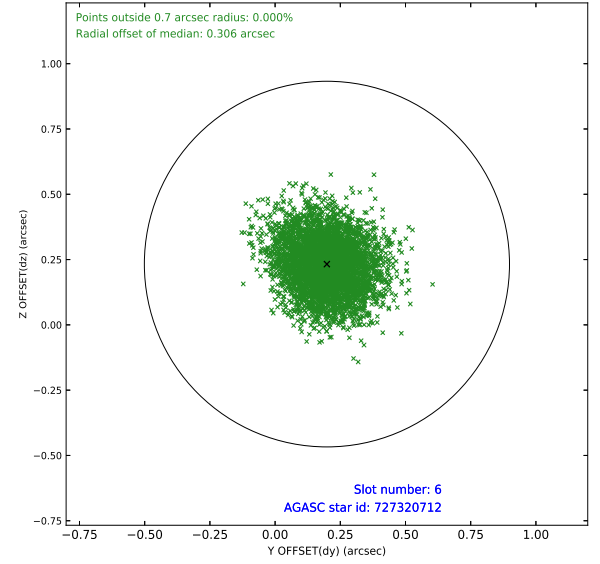
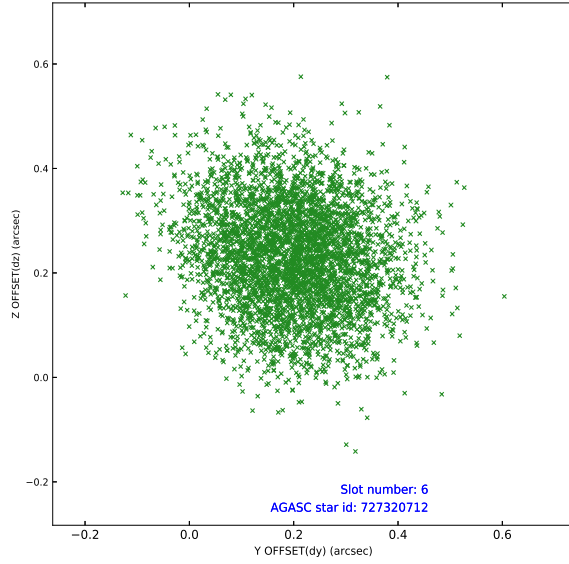
## 2.4.2 Slot 4



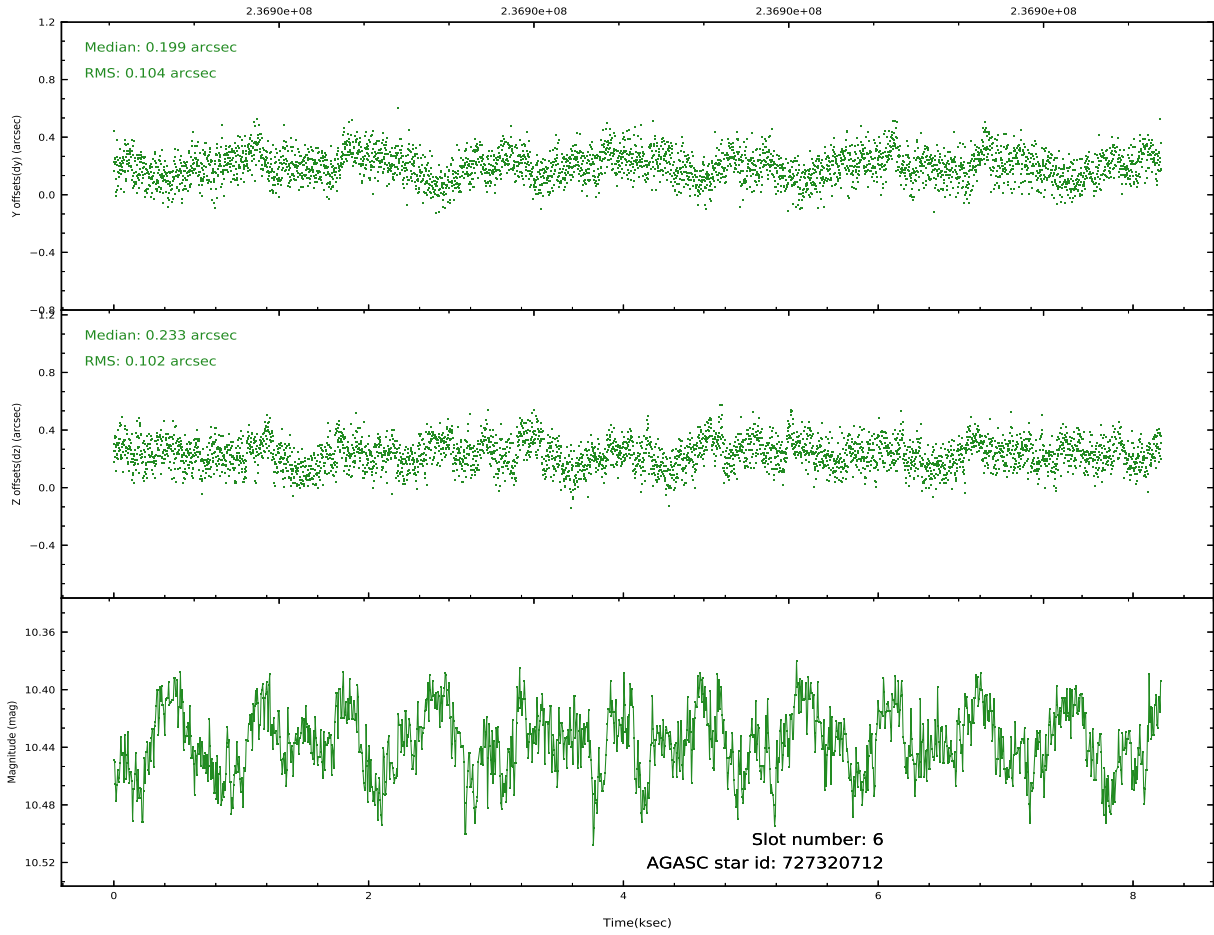
### 2.4.3 Slot 5



## 2.4.4 Slot 6

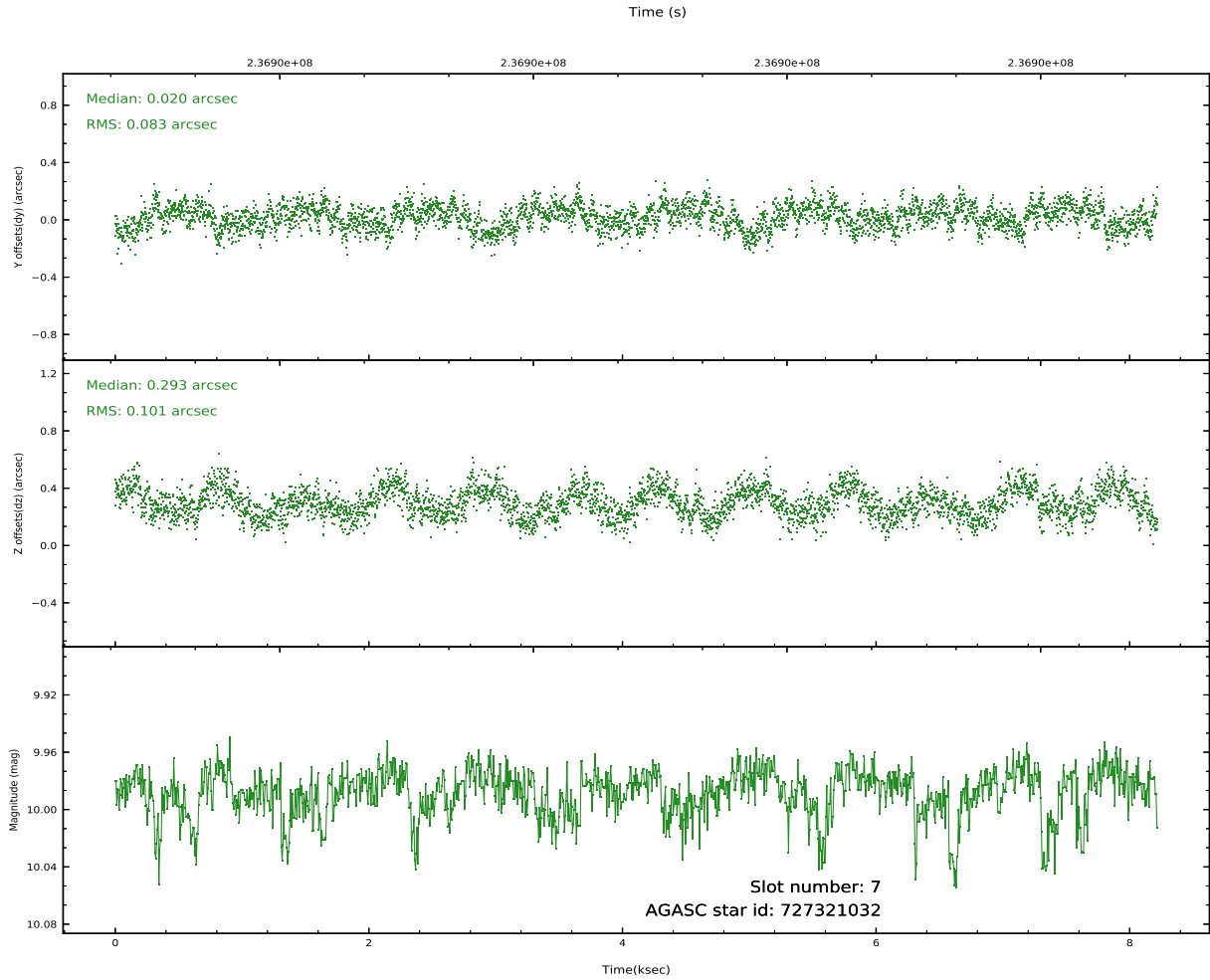
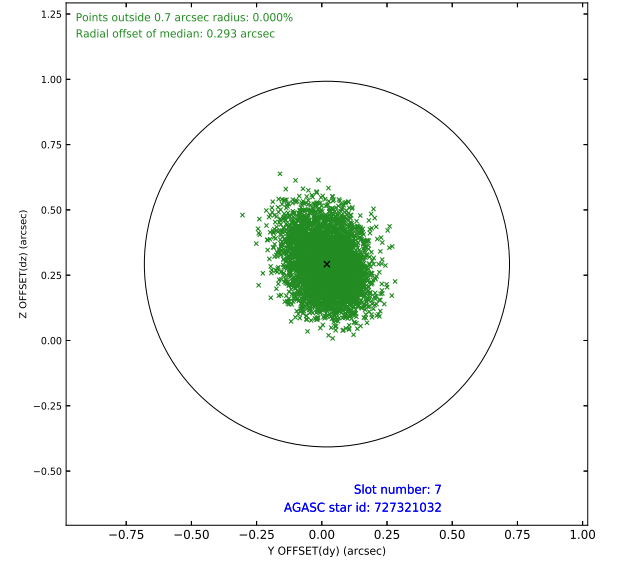
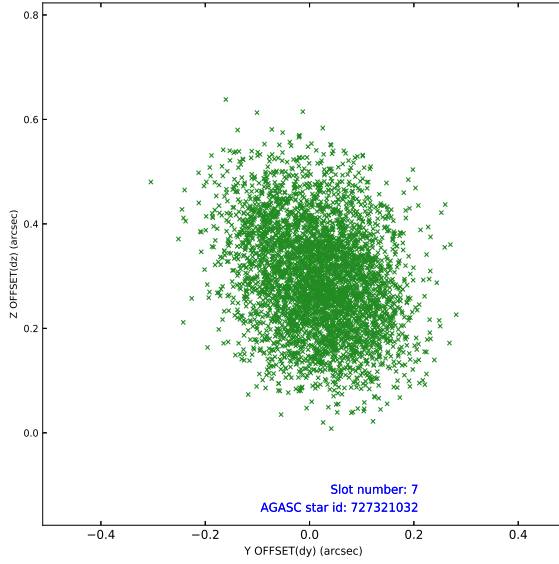


Time (s)



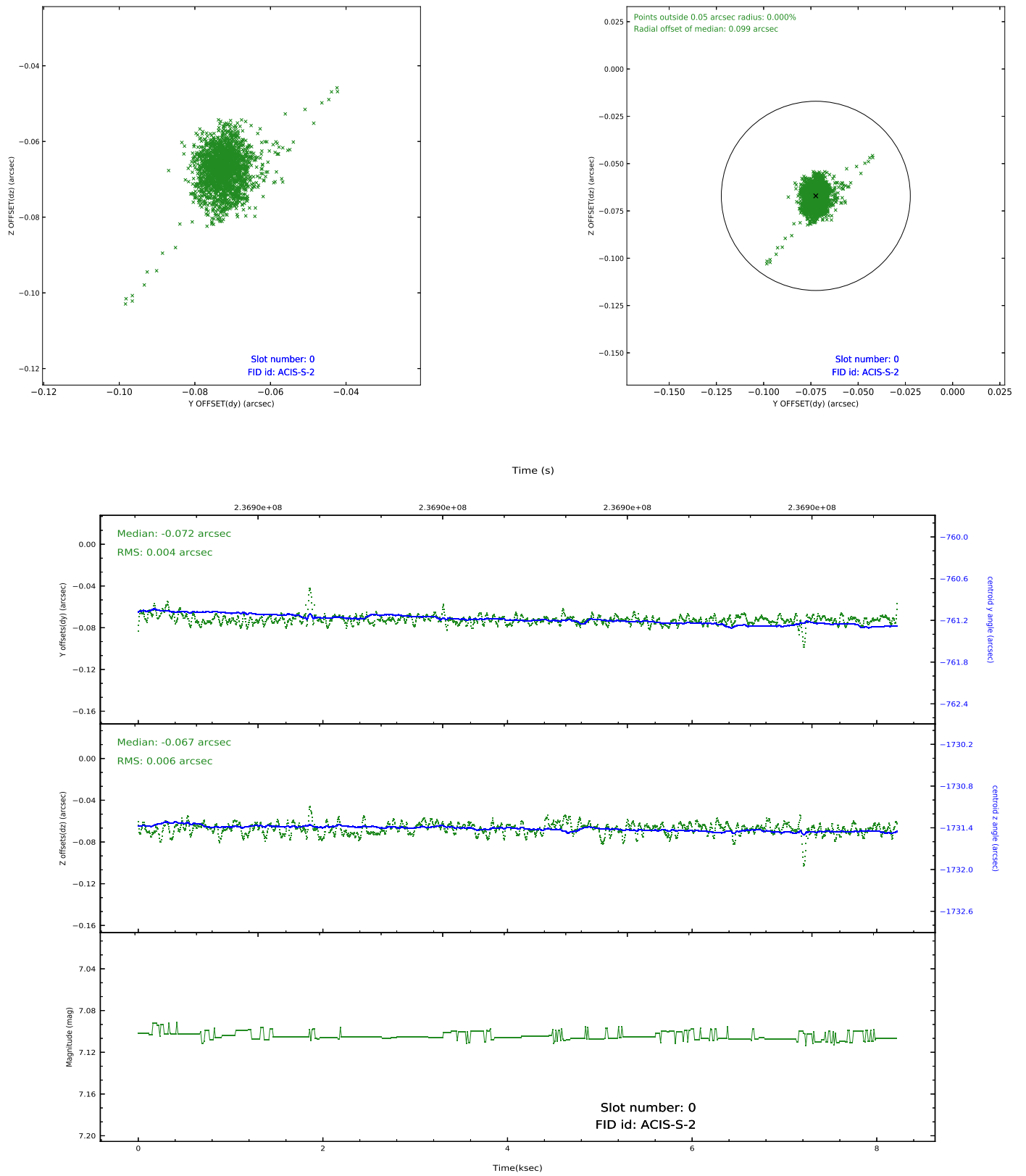


## 2.4.5 Slot 7

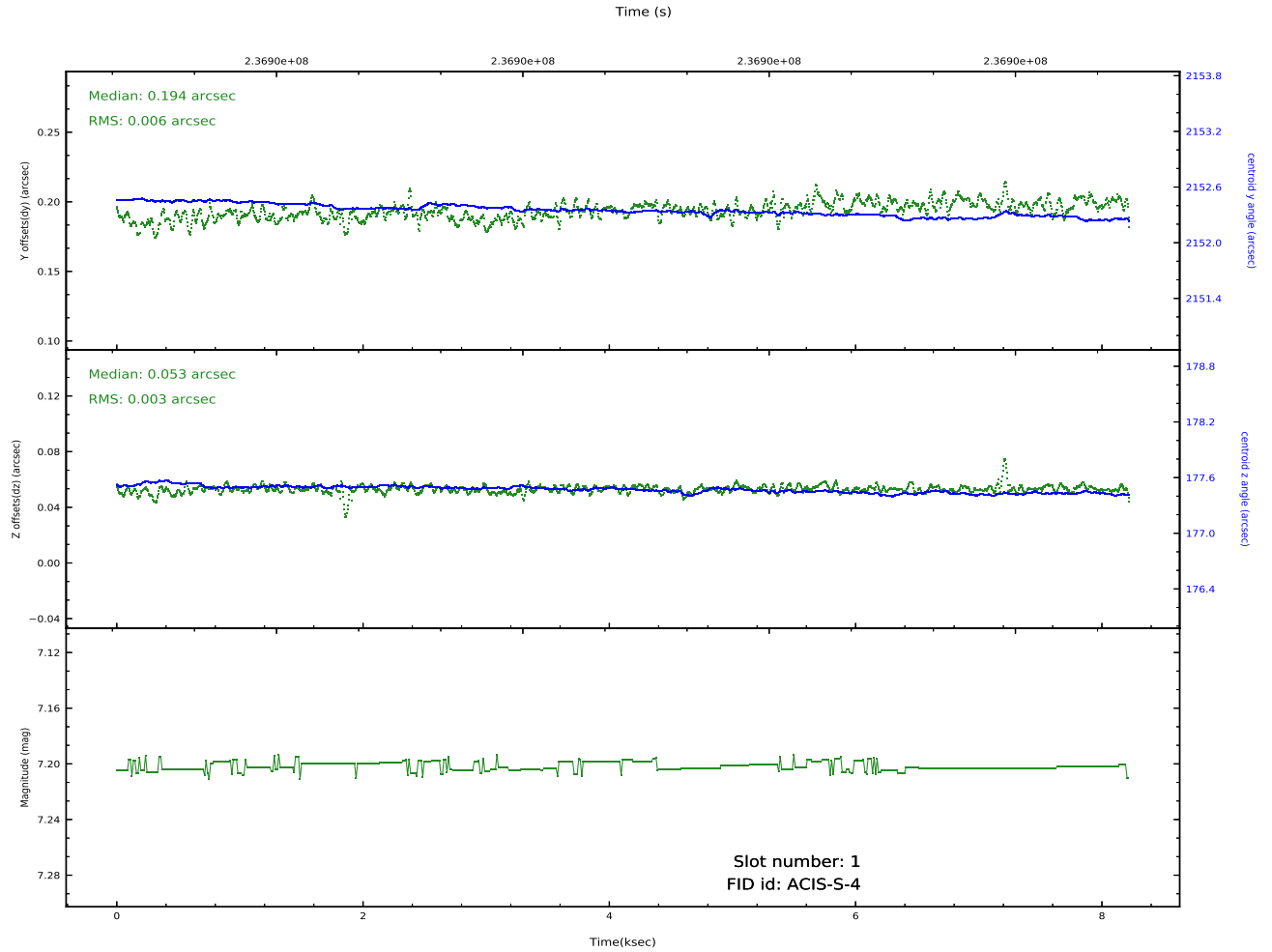
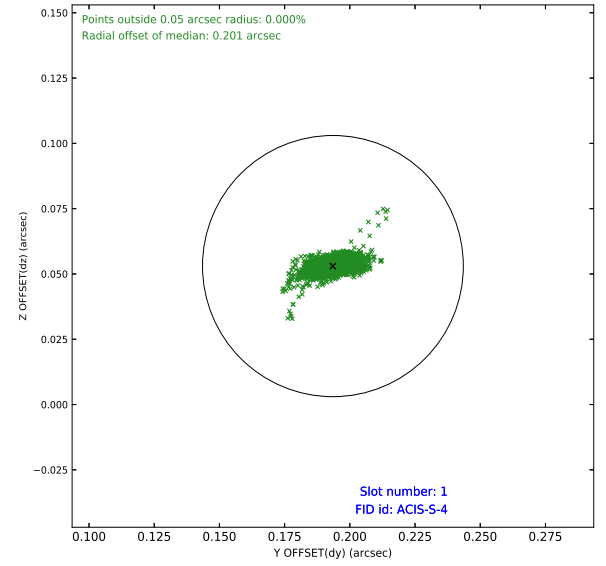
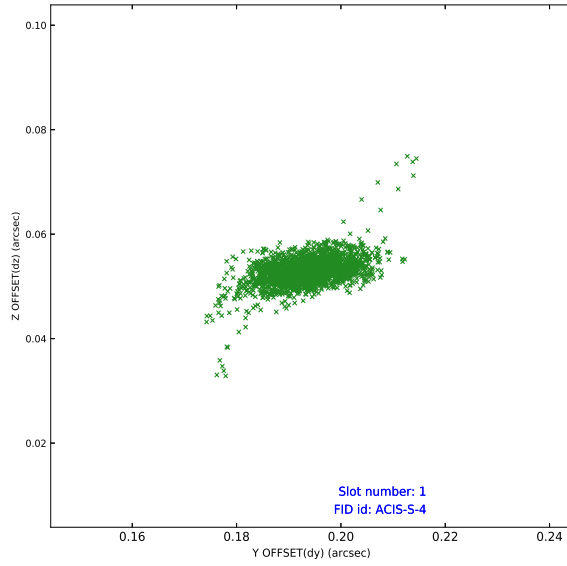


## 2.5 FID Slots

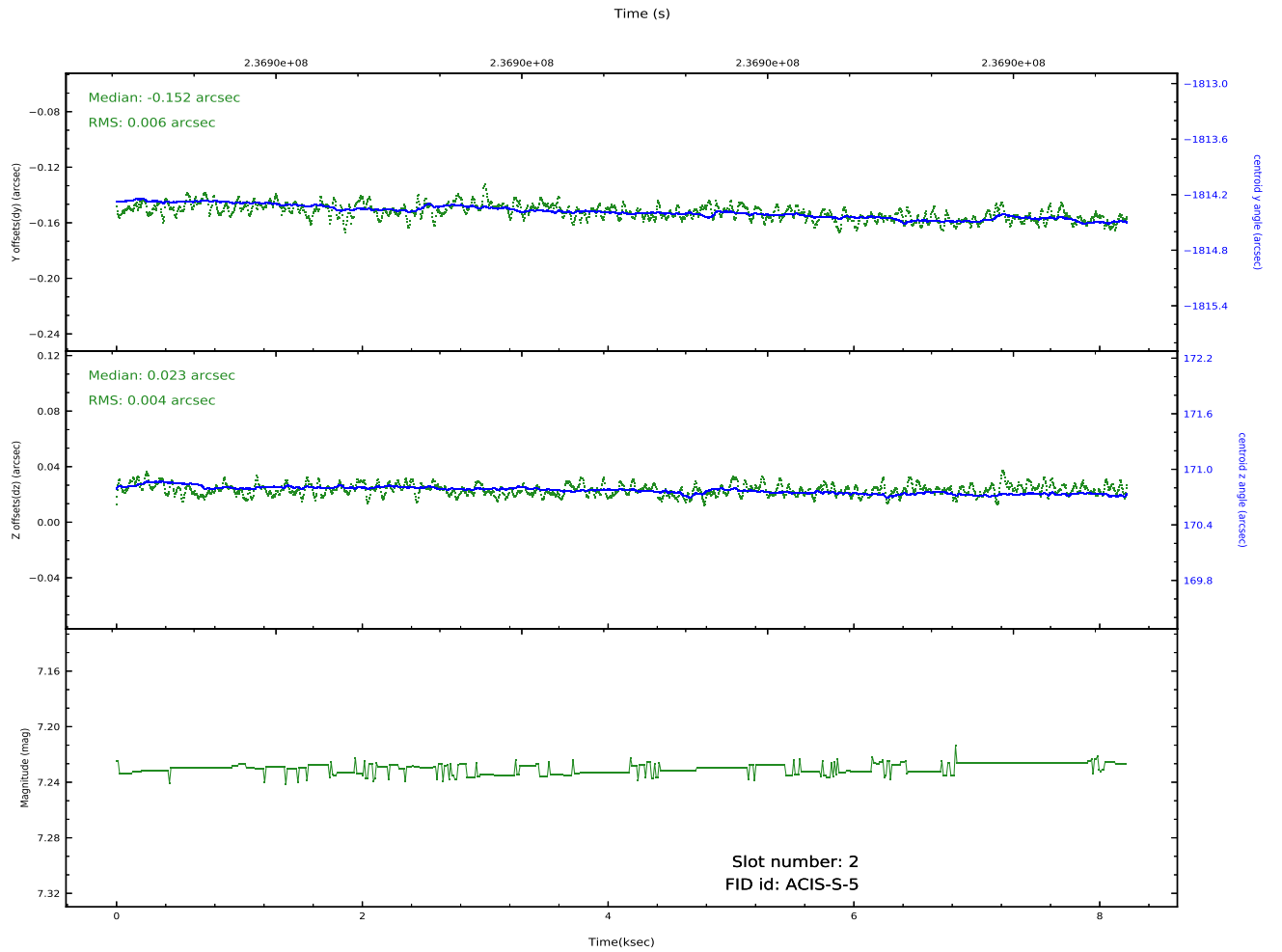
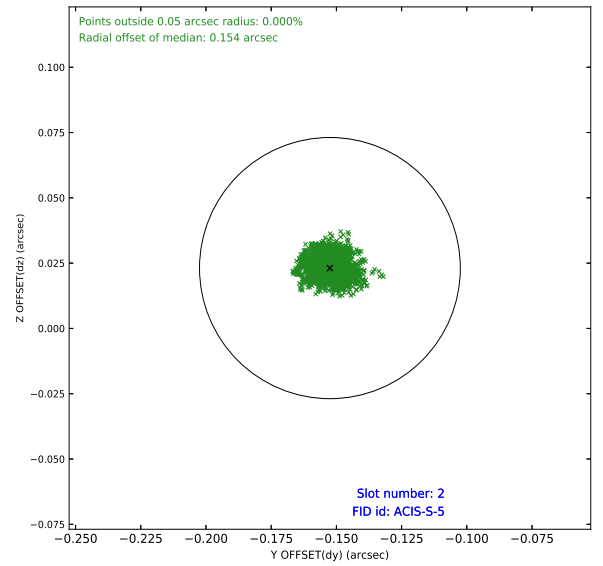
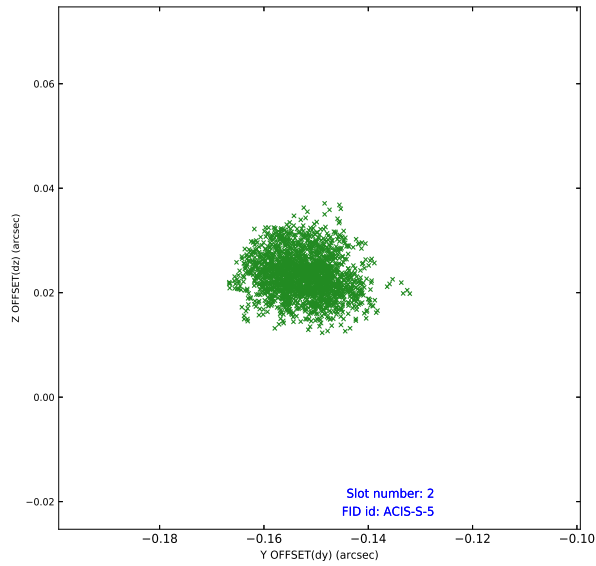
### 2.5.1 Slot 0



## 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)	2020.10.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.211199

## A.2 Comments

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.