

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4527 - L2 Version 5  
Chandra X-Ray Center

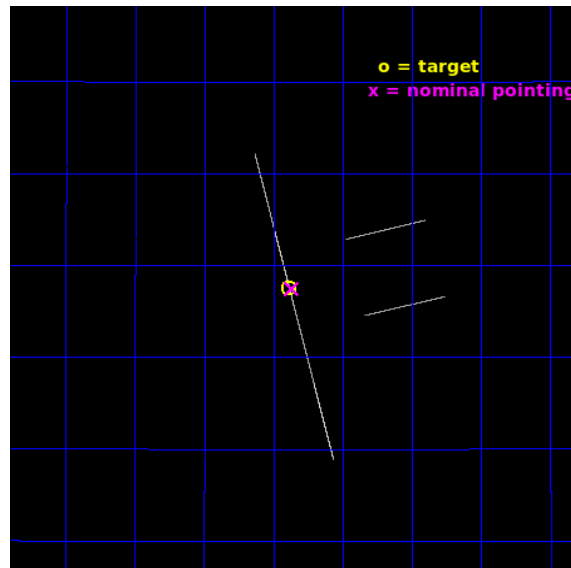
L2 Processing Date : Sep 25 2020

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# 1 Front

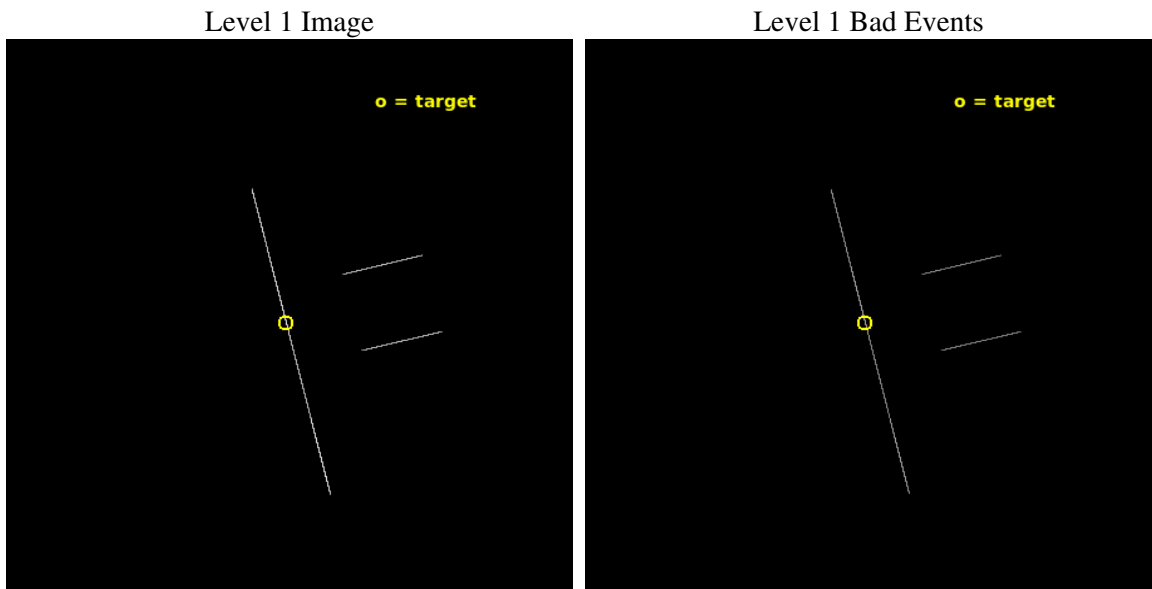
seq_num	300121	Sequence number
obs_id	4527	Observation id
title	Timing the Orbit of RX J0806.3+1527	Proposal title
observer	Tod Strohmayer	Principal investigator
object	RX J0806.3+1527	Source name
ra_targ	121.596667	Observer's specified target RA [deg]
dec_targ	15.458389	Observer's specified target Dec [deg]
ra_nom	121.59143249256	Nominal RA [deg]
dec_nom	15.457653416938	Nominal Dec [deg]
roll_nom	256.12605070033	Nominal Roll [deg]
revision	5	Processing version of data
ontime	10231.75	Sum of GTIs [s]
livetime	10191.782226562	Livetime [s]
ontime2	10231.75	Sum of GTIs [s]
ontime3	10231.75	Sum of GTIs [s]
ontime5	10231.75	Sum of GTIs [s]
ontime6	10231.75	Sum of GTIs [s]
ontime7	10231.75	Sum of GTIs [s]
ontime8	10231.75	Sum of GTIs [s]
l2events	135045	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10231.75	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	10231.75	Sum of GTIs [s]
date	2020-09-25T20:11:12	Date and time of file creation	ontime3	10231.75	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	10231.75	Sum of GTIs [s]
			ontime6	10231.75	Sum of GTIs [s]
			ontime7	10231.75	Sum of GTIs [s]
			ontime8	10231.75	Sum of GTIs [s]
			l1events	199671	Number of level 1 events

### 2.1.3 Events

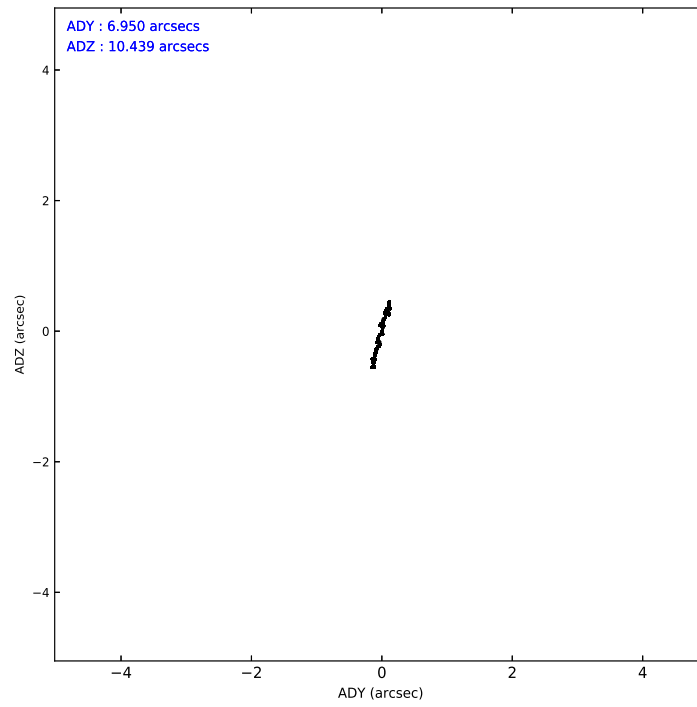
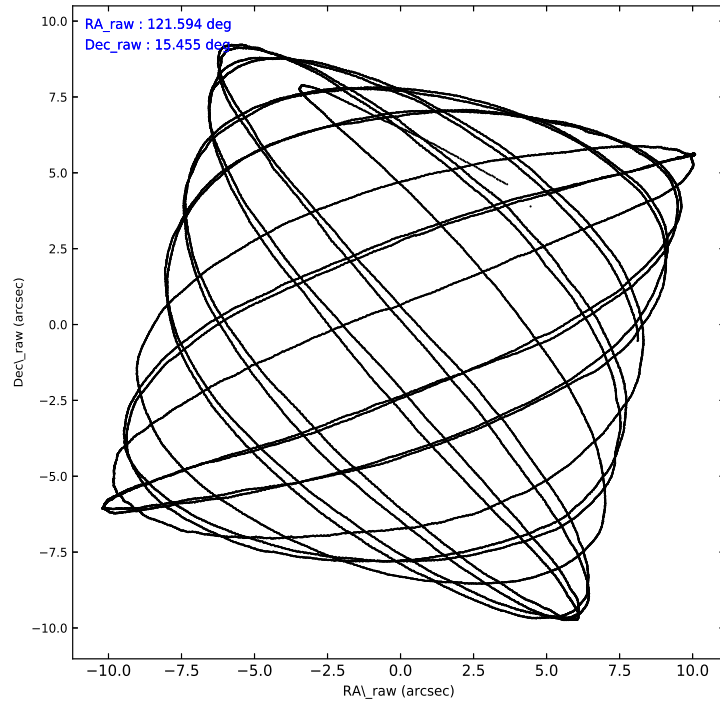
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	15155	16514	63799	16735	53448	34020
rejected events	3613	3926	10675	4178	10514	6411
rejected %	23%	23%	16%	24%	19%	18%

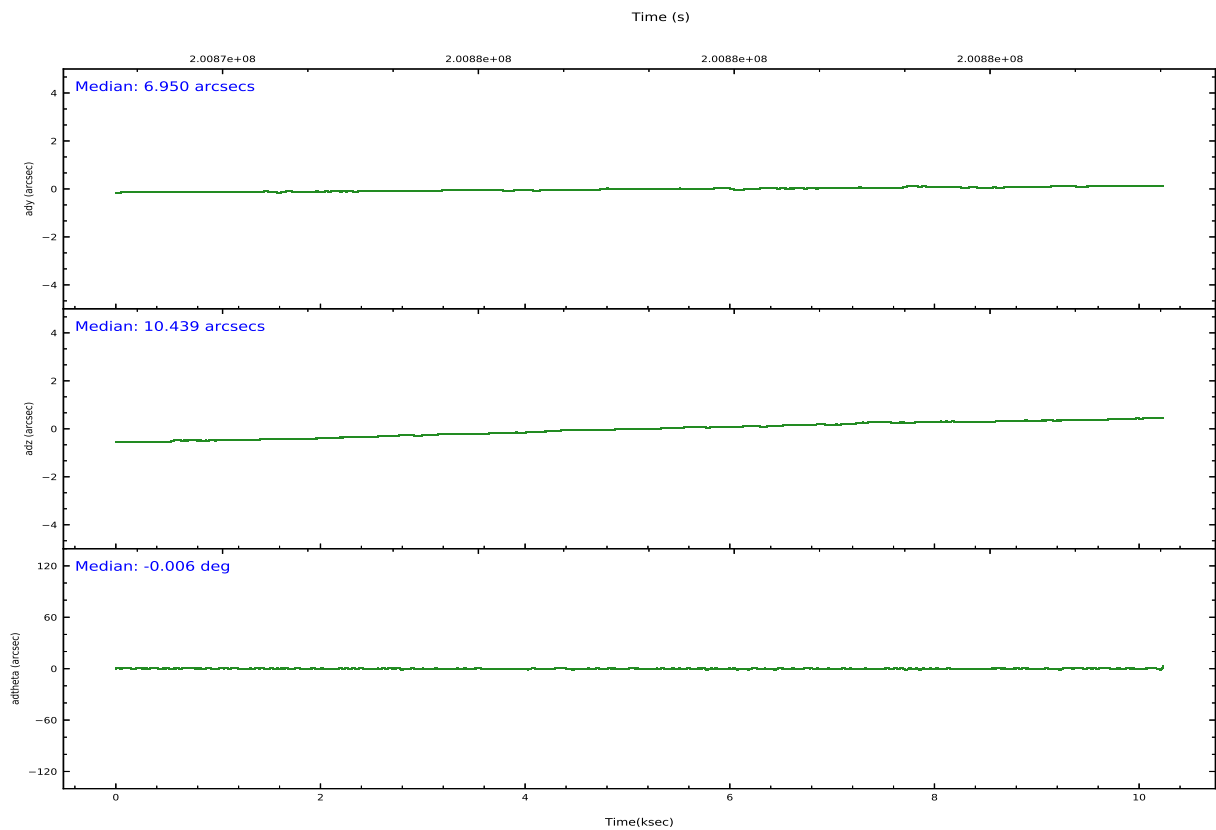
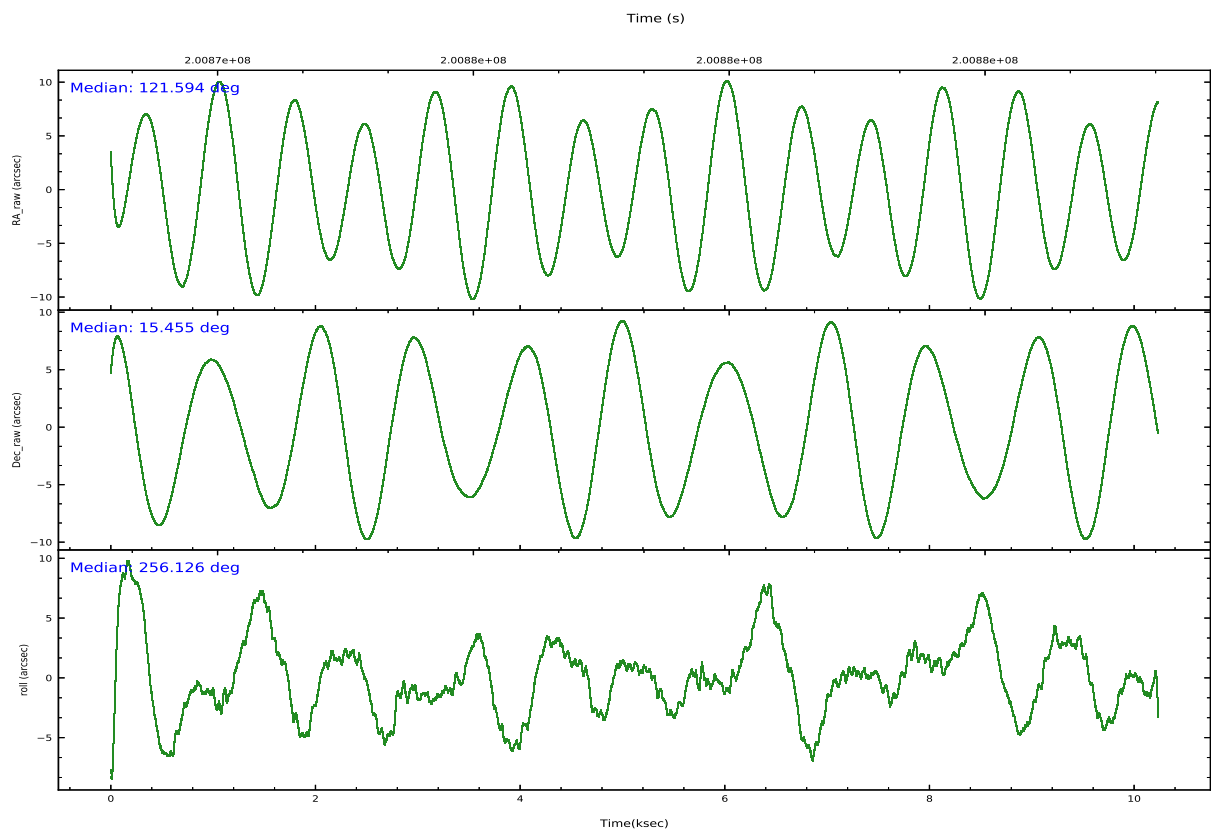
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1542	1539	3953	1521	4048	5607
	10%	9%	6%	9%	7%	16%
grade 1 events	56	53	82	62	68	92
	0%	0%	0%	0%	0%	0%
grade 2 events	4736	5143	17255	5106	11935	9236
	31%	31%	27%	30%	22%	27%
grade 3 events	1579	1905	1191	1711	1772	3464
	10%	11%	1%	10%	3%	10%
grade 4 events	1562	1651	1167	1575	1750	3327
	10%	9%	1%	9%	3%	9%
grade 5 events	2741	2979	6404	3251	7637	4366
	18%	18%	10%	19%	14%	12%
grade 6 events	2939	3244	33747	3509	26238	7928
	19%	19%	52%	20%	49%	23%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

## 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	CC33_GRADED	CC33_GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	121.585760	121.59143249256	Subarray requested	NONE	NONE
[deg] Pointing Dec	15.480948	15.457653416938	Alternating exposures requested	N	N
[deg] Pointing Roll	255.970544	256.12605070033	[s] Primary exposure time	0.000000	0
[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)	200871693.184000	200870704.95513			
Observation start date	2004-05-13T21:40:29	2004-05-13T21:25:04			
[s] Observation end time (MET)	200881693.184000	200882687.20566			
Observation end date	2004-05-14T00:27:09	2004-05-14T00:44:47			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



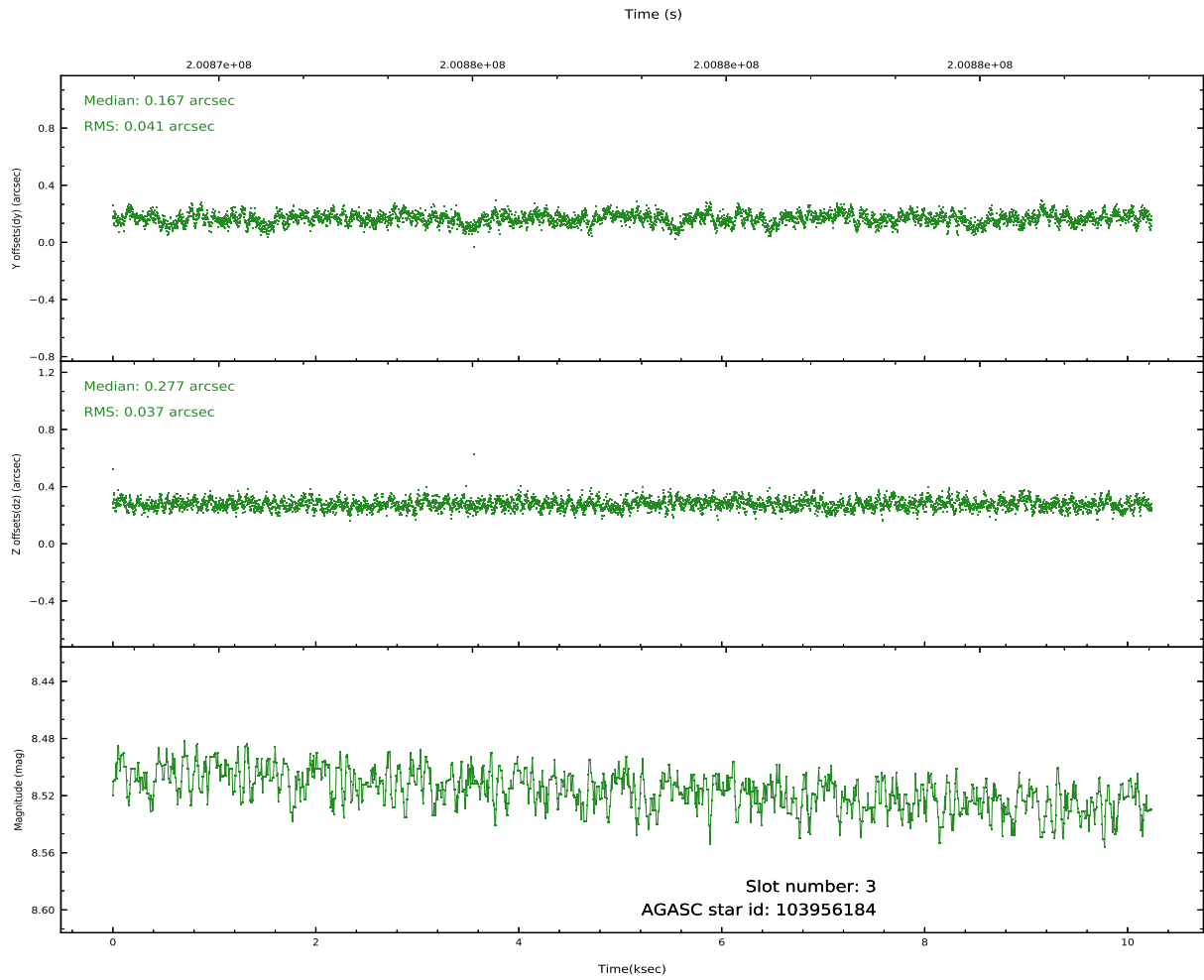
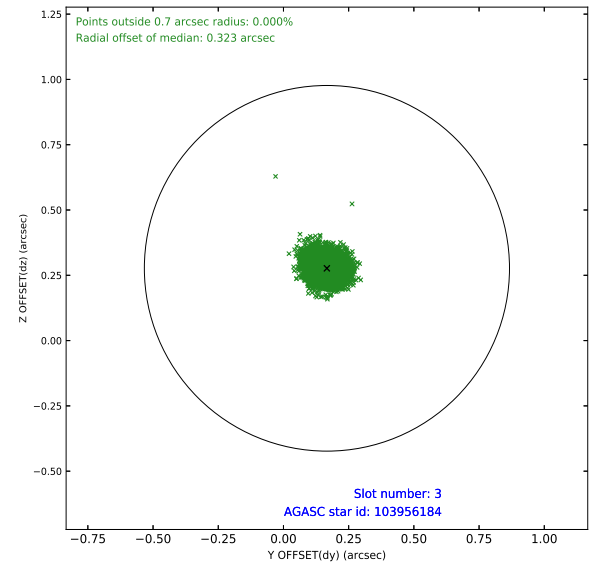
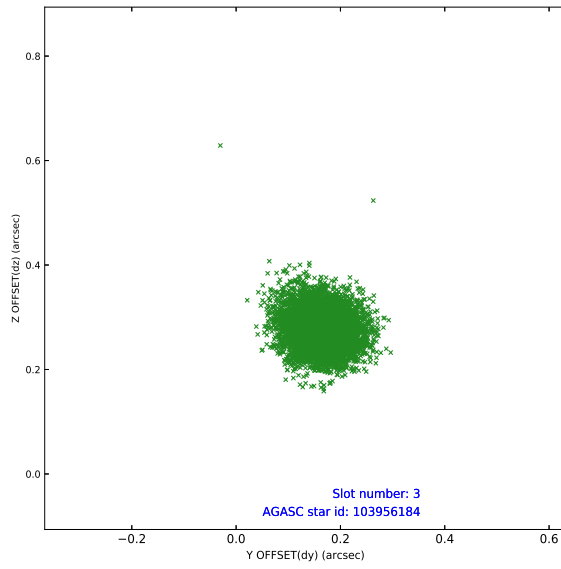


Slot Statistics

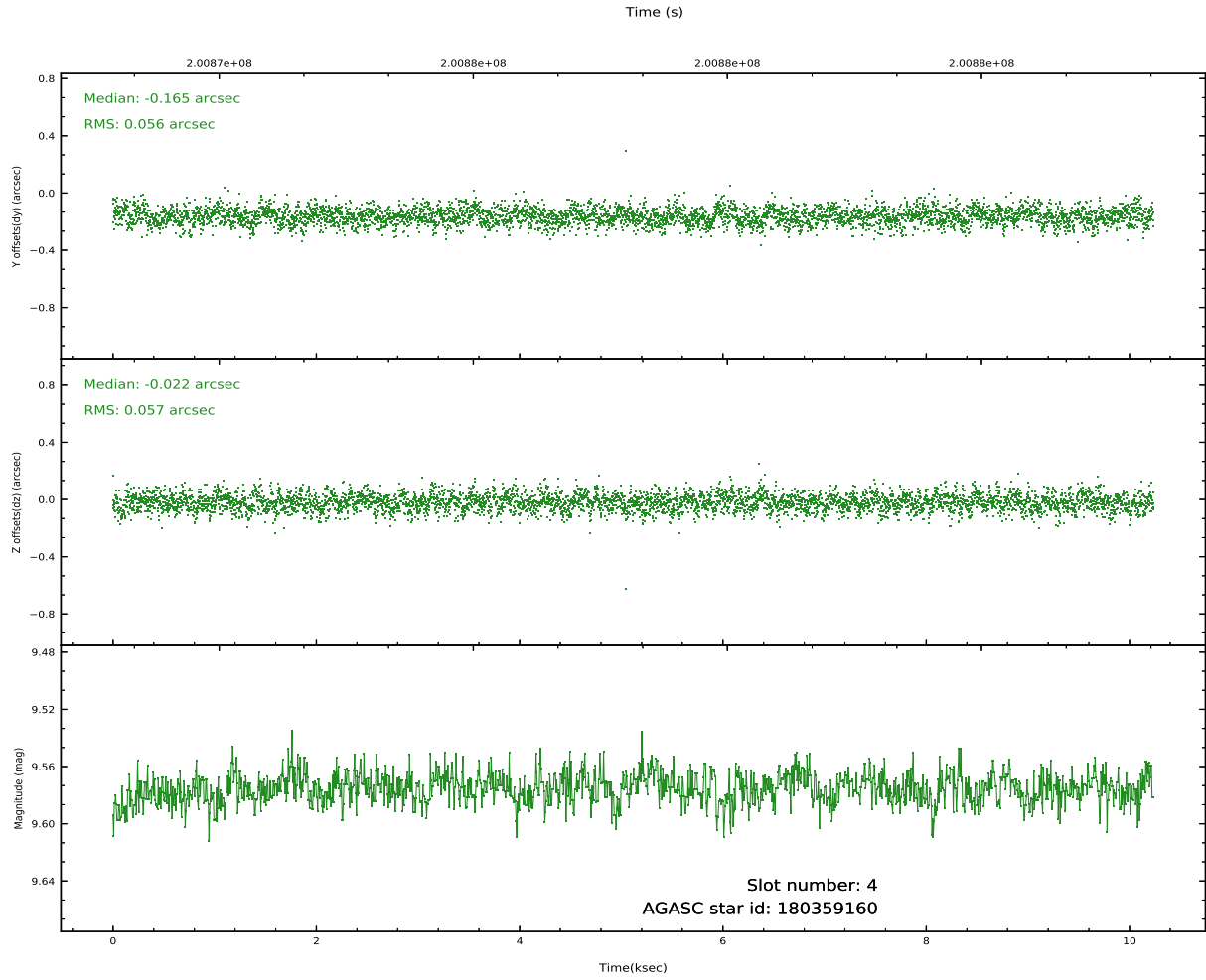
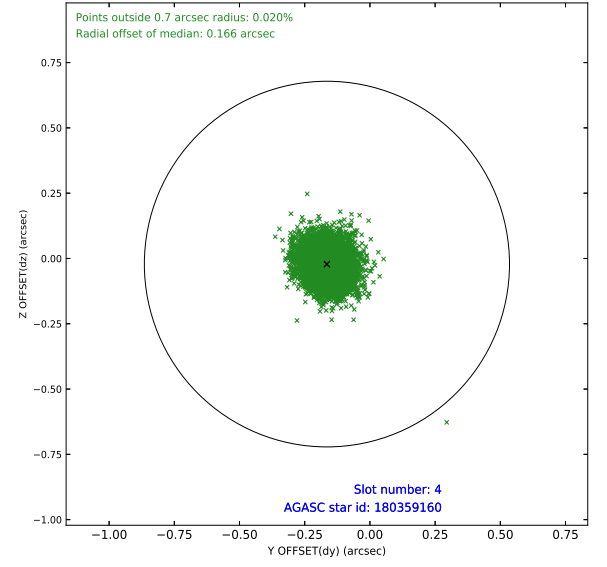
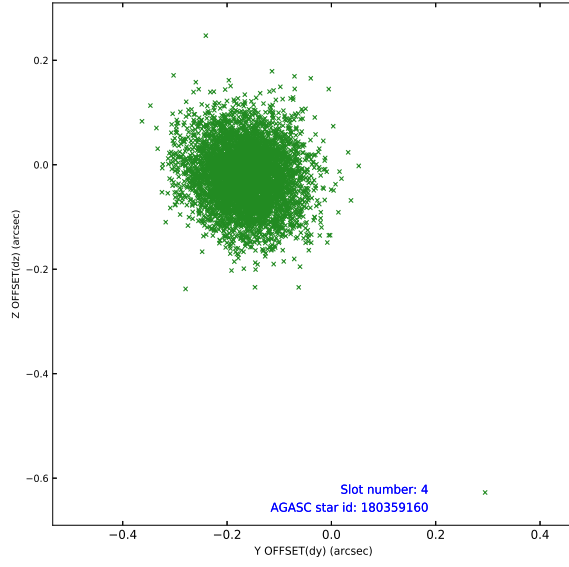
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2497	1.000	-0.081	-0.047	0.007	0.012	0.000000	0.000000	-759.70	-1731
1	FID		ACIS-S-4	7.20	2497	1.000	0.131	0.052	0.007	0.012	0.000000	0.000000	2153.49	176
2	FID		ACIS-S-5	7.23	2496	1.000	-0.081	0.004	0.007	0.012	0.000000	0.000000	-1811.95	170
3	GUIDE	used	103956184	8.52	4994	1.000	0.167	0.277	0.058	0.093	122.093586	14.853591	1761.31	2262
4	GUIDE	used	180359160	9.58	4985	1.000	-0.165	-0.022	0.083	0.137	121.837257	16.020694	-2095.93	373
5	GUIDE	used	180367416	9.13	4985	1.000	-0.075	-0.166	0.089	0.139	120.920648	15.525818	399.33	-2278
6	GUIDE	used	180370112	8.39	4991	1.000	0.057	-0.176	0.077	0.117	121.144488	15.364256	779.33	-1385
7	GUIDE	used	180372496	7.92	4993	1.000	0.015	0.088	0.045	0.072	121.745221	15.155380	1003.21	821

## 2.4 Star Slots

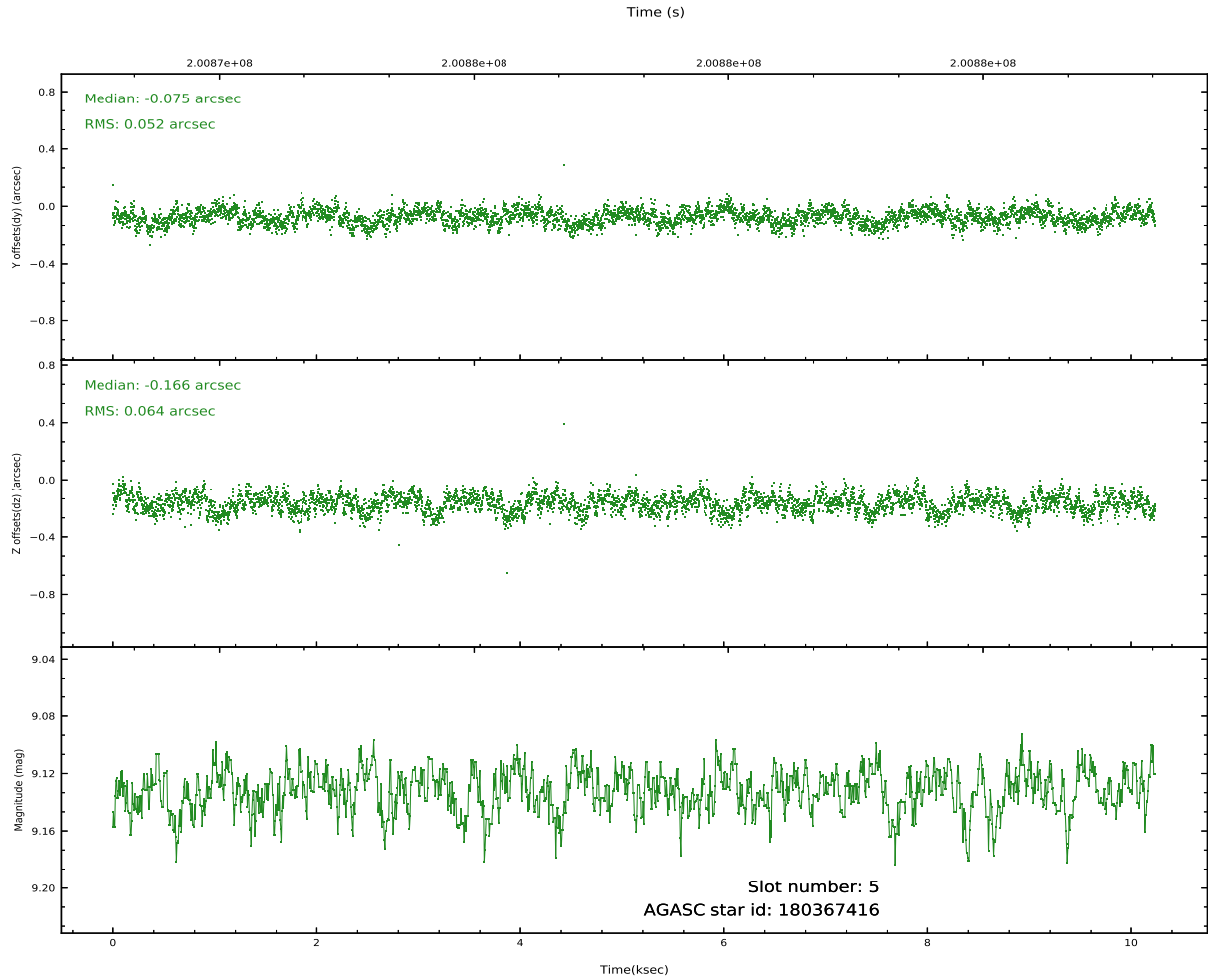
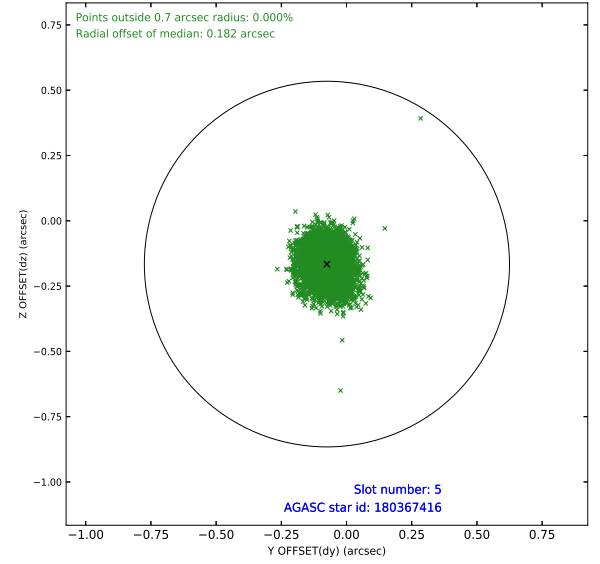
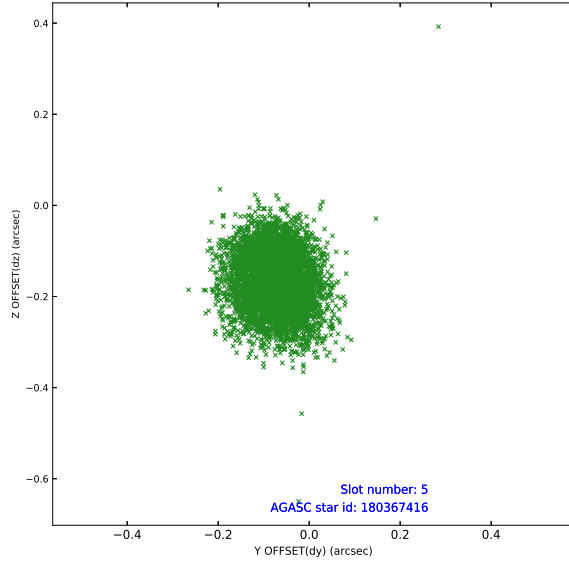
### 2.4.1 Slot 3



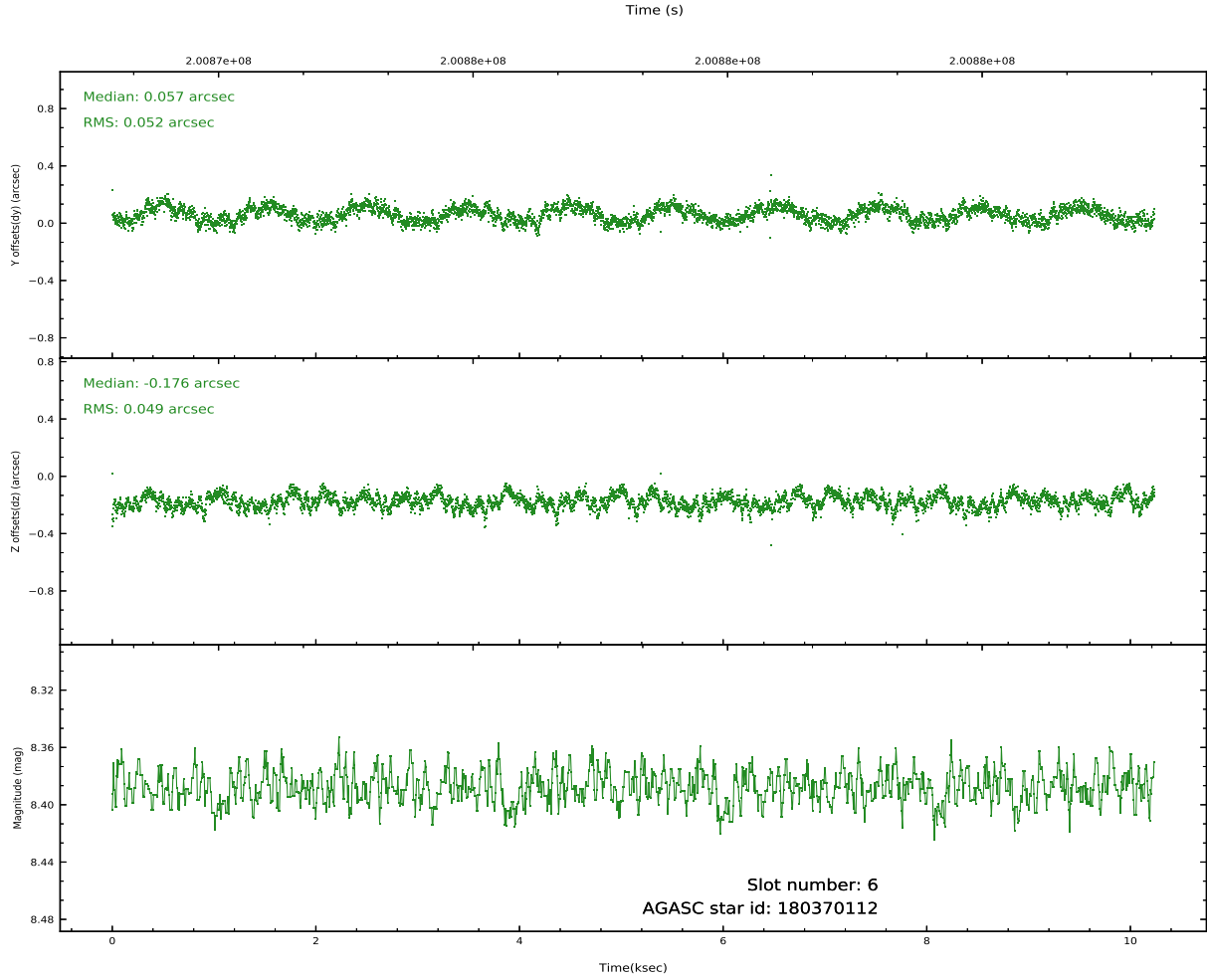
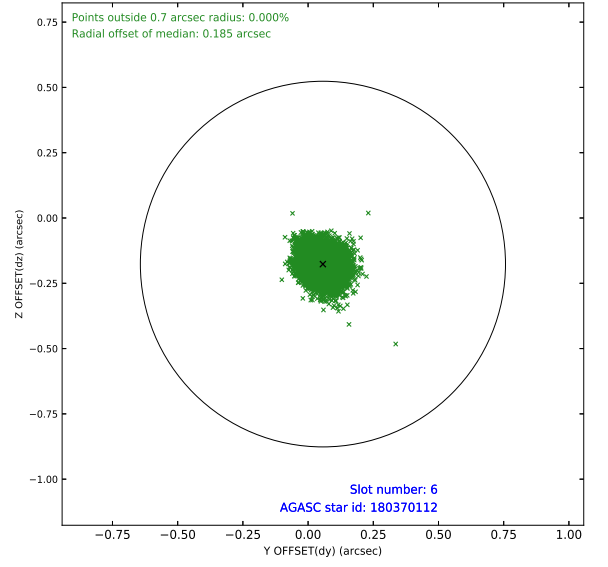
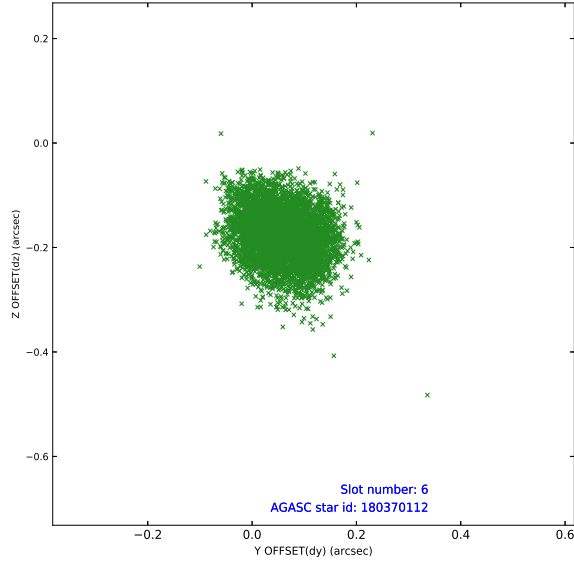
## 2.4.2 Slot 4



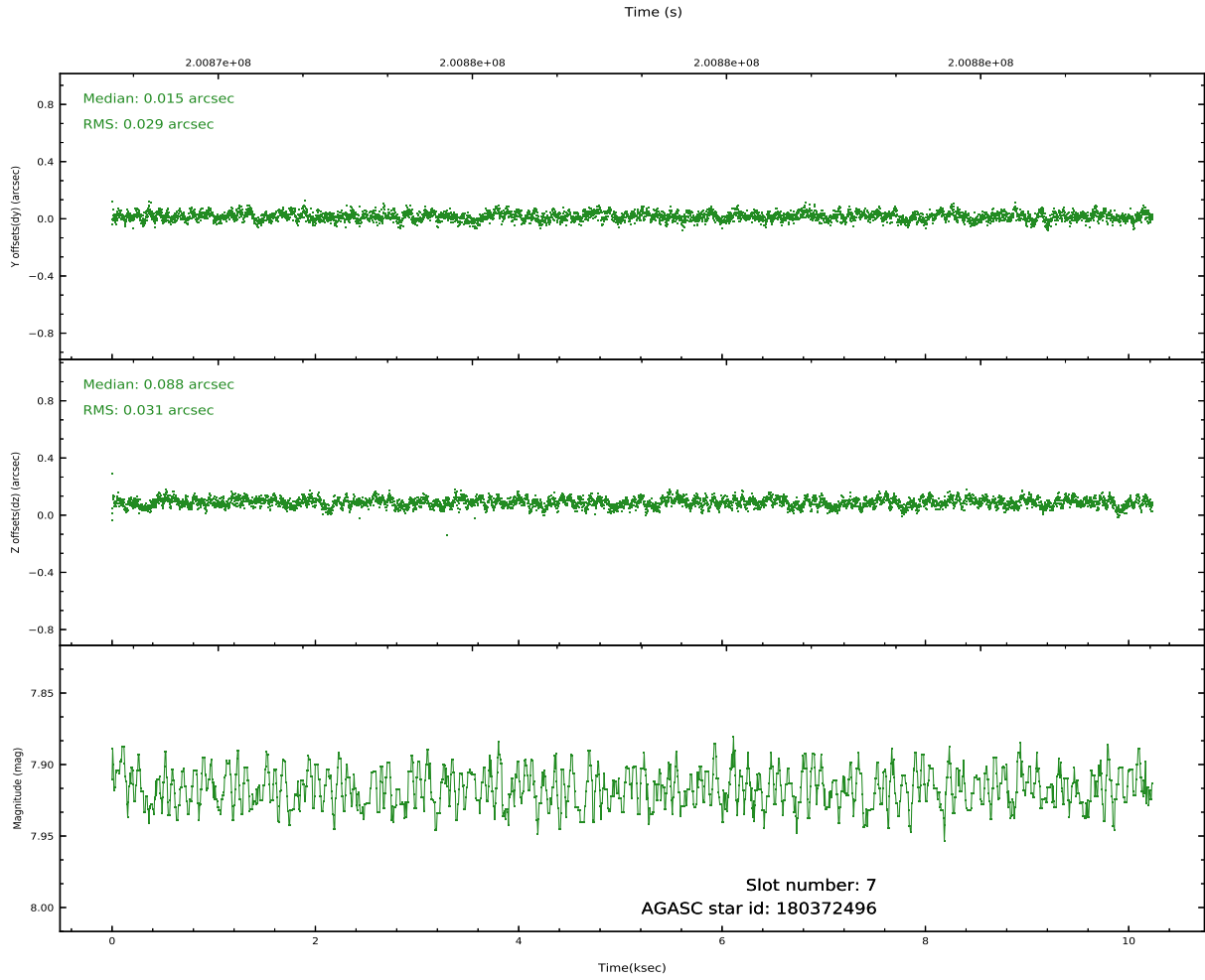
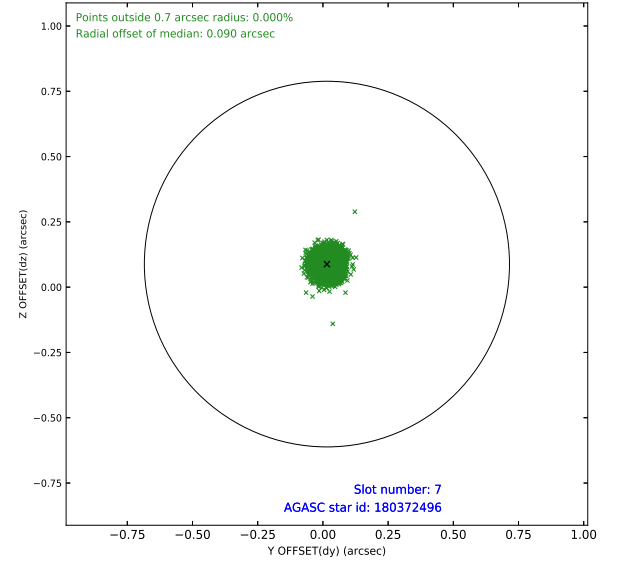
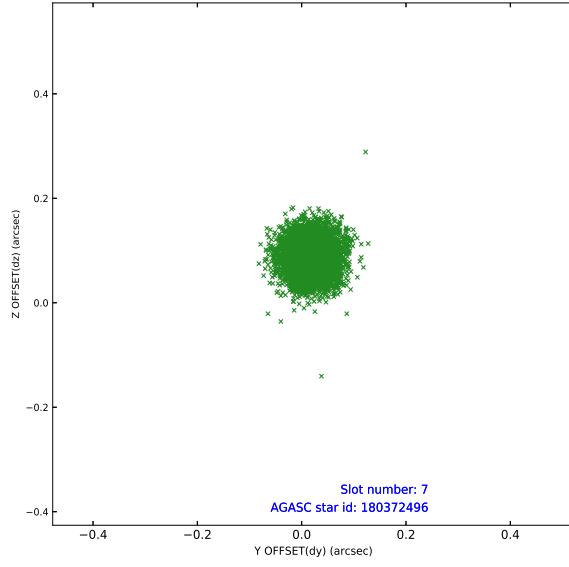
### 2.4.3 Slot 5



## 2.4.4 Slot 6

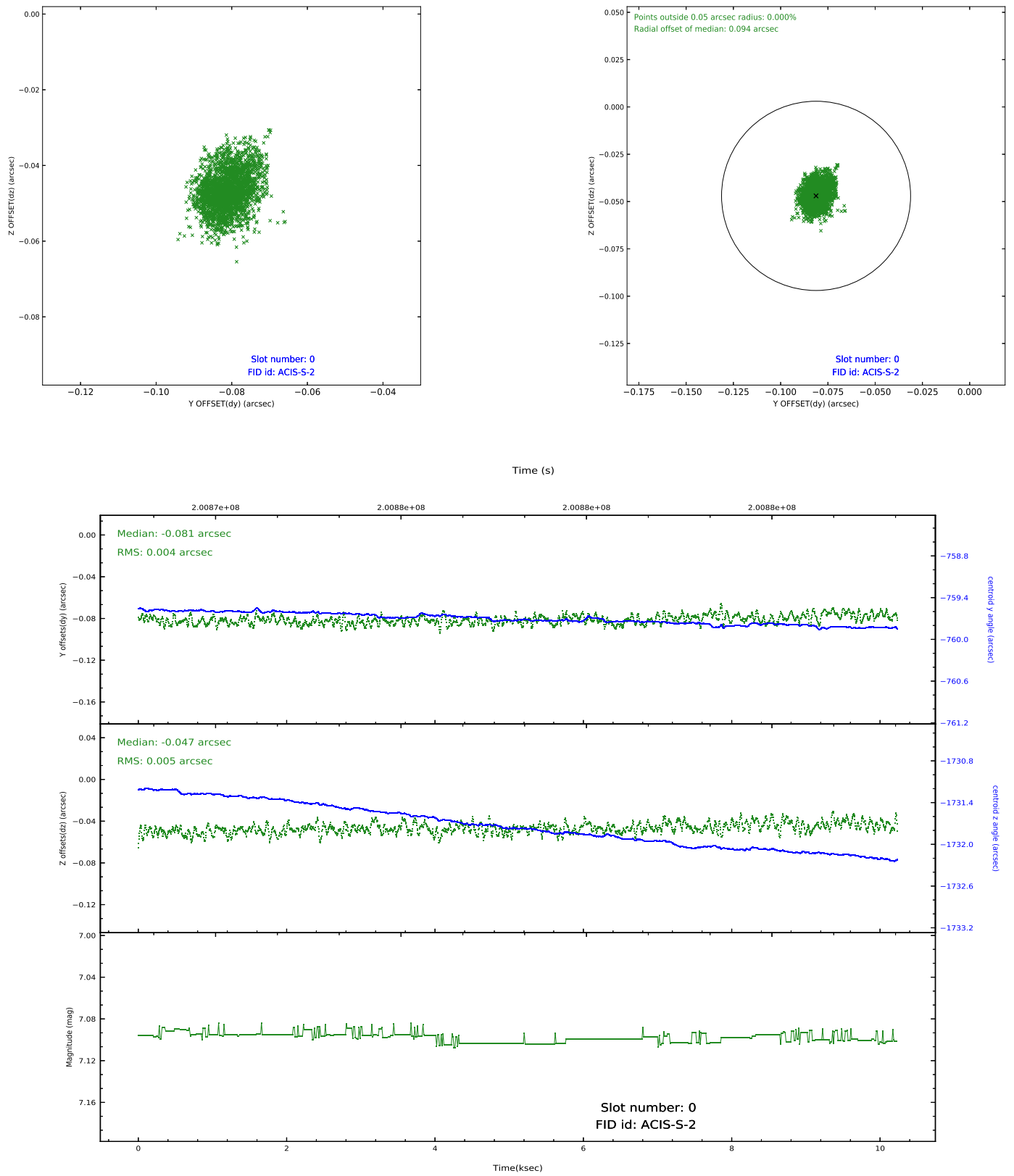


## 2.4.5 Slot 7

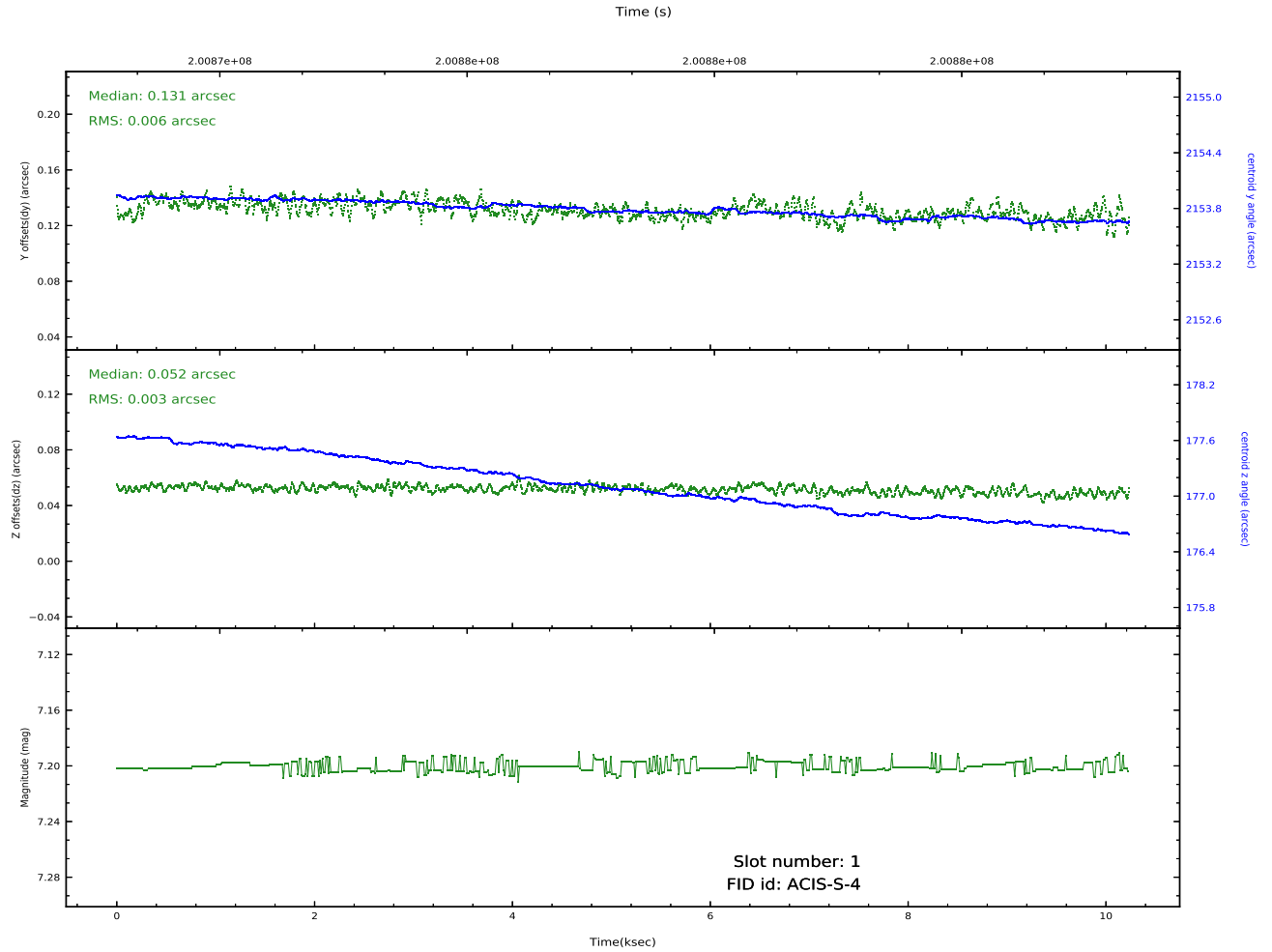
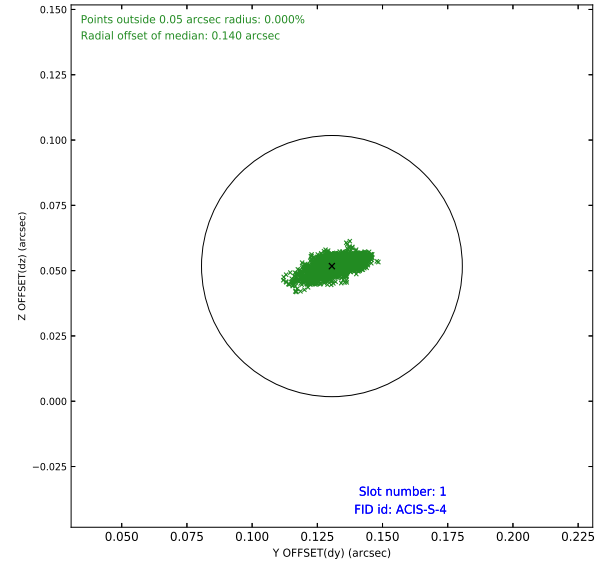
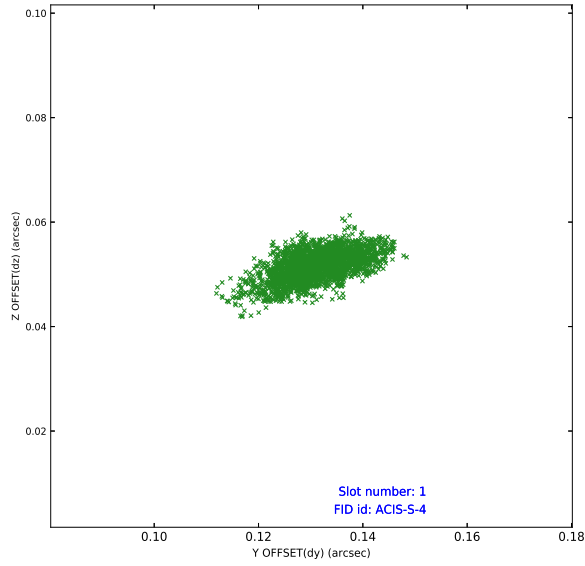


## 2.5 FID Slots

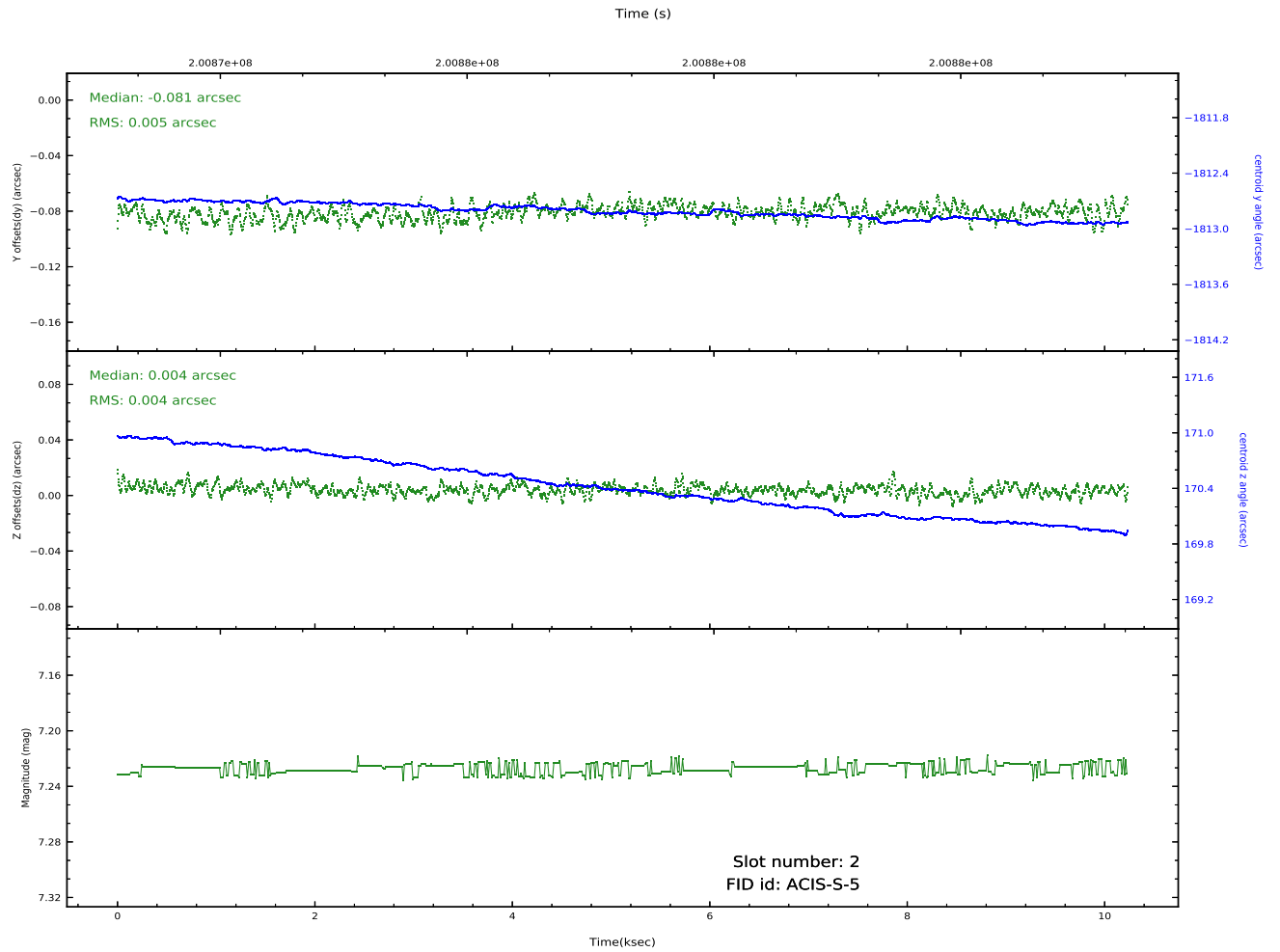
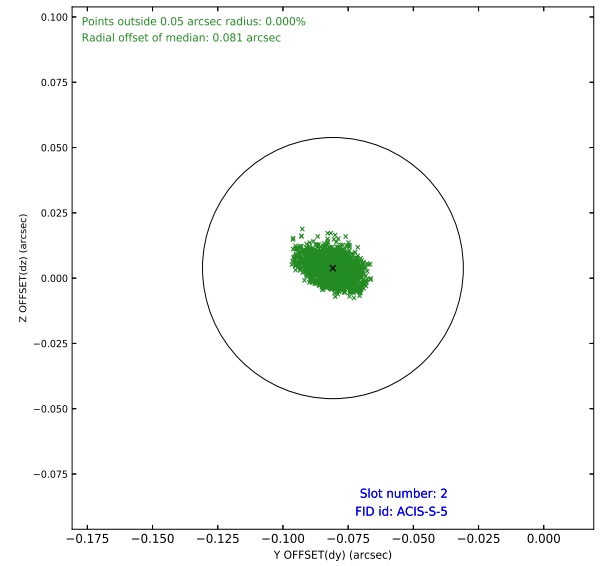
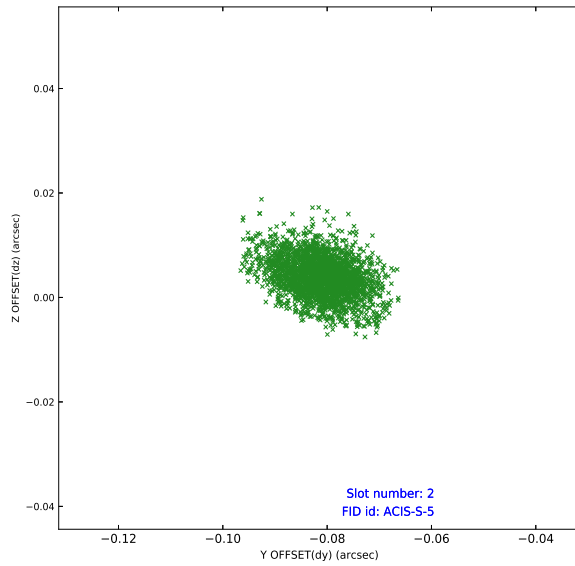
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.234

### A.2 Comments