

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 7059 - L2 Version 3  
Chandra X-Ray Center

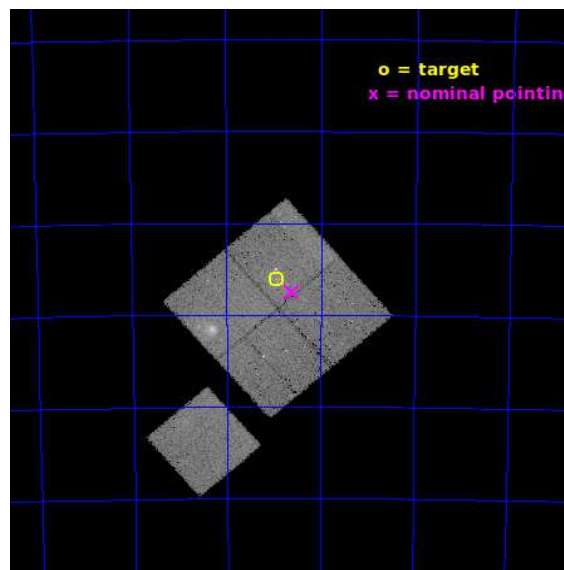
L2 Processing Date : Oct 12 2020

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# 1 Front

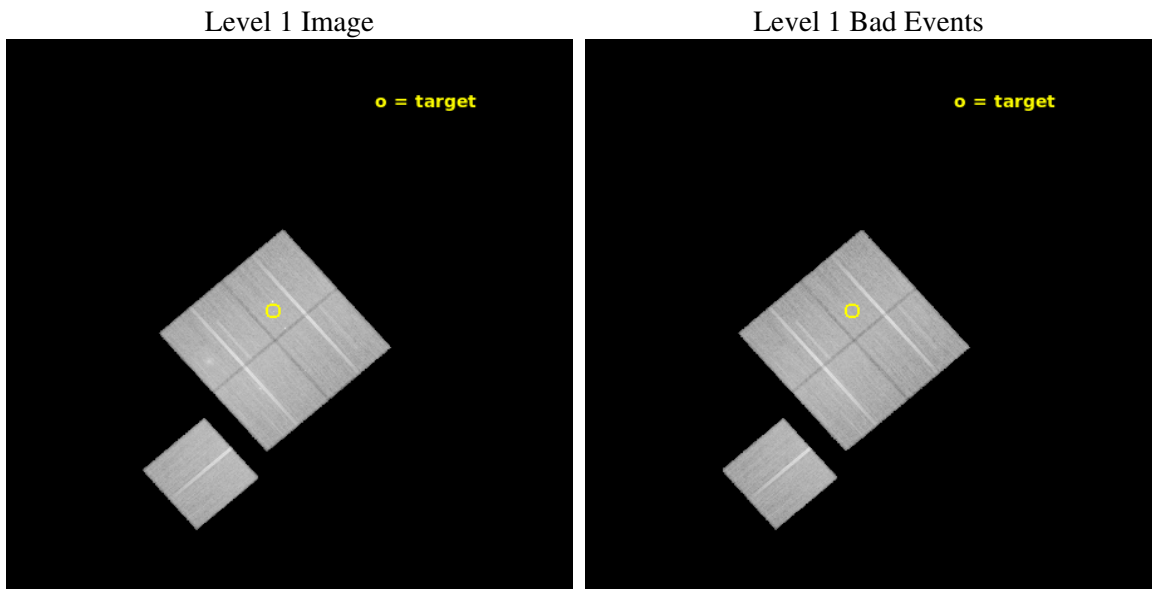
seq_num	600497	Sequence number
obs_id	7059	Observation id
title	Gas-Dynamics of a High Speed Encounter: The Interaction of NGC 6872 with the Pavo Group	Proposal title
observer	Dr. Marie Machacek	Principal investigator
object	NGC6872	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	304.235417	Observer's specified target RA [deg]
dec_targ	-70.76825	Observer's specified target Dec [deg]
ra_nom	304.15283374086	Nominal RA [deg]
dec_nom	-70.791237036072	Nominal Dec [deg]
roll_nom	228.82872899193	Nominal Roll [deg]
revision	3	Processing version of data
ontime	41161.595089495	Sum of GTIs [s]
livetime	40623.788546925	Livetime [s]
ontime0	41167.876980066	Sum of GTIs [s]
ontime1	41161.595089495	Sum of GTIs [s]
ontime2	41171.017930418	Sum of GTIs [s]
ontime3	41174.158930629	Sum of GTIs [s]
ontime6	41171.017980278	Sum of GTIs [s]
l2events	130821	Number of level 2 events



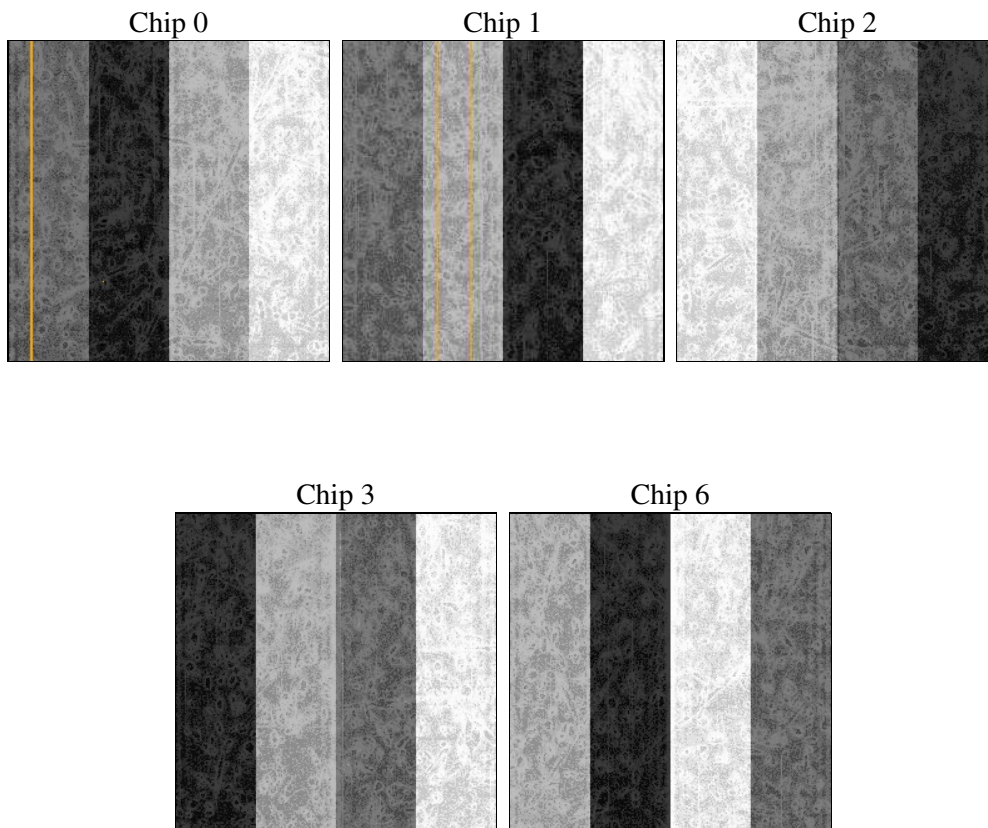
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	41000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	41161.595089495	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	41167.876980066	Sum of GTIs [s]
date	2020-10-12T05:41:07	Date and time of file creation	ontime1	41161.595089495	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	41171.017930418	Sum of GTIs [s]
			ontime3	41174.158930629	Sum of GTIs [s]
			ontime6	41171.017980278	Sum of GTIs [s]
			l1events	1401656	Number of level 1 events

### 2.1.4 Events

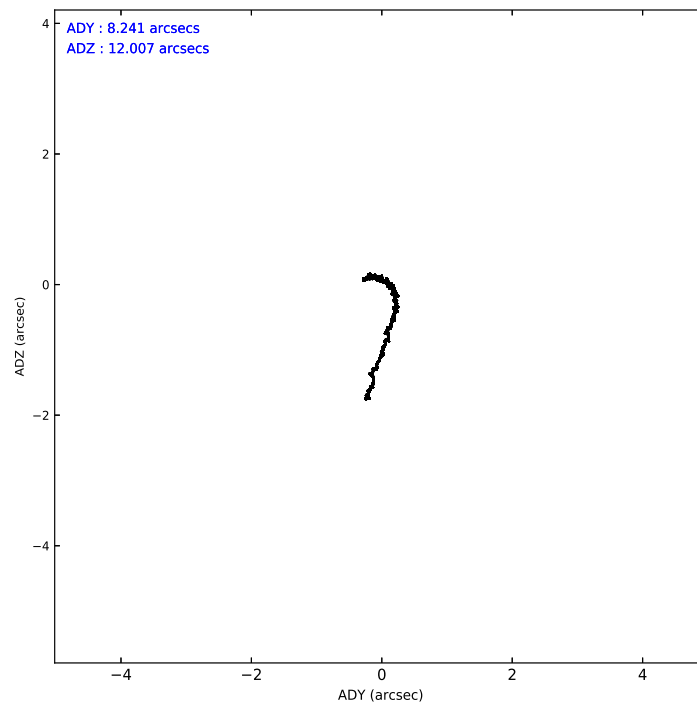
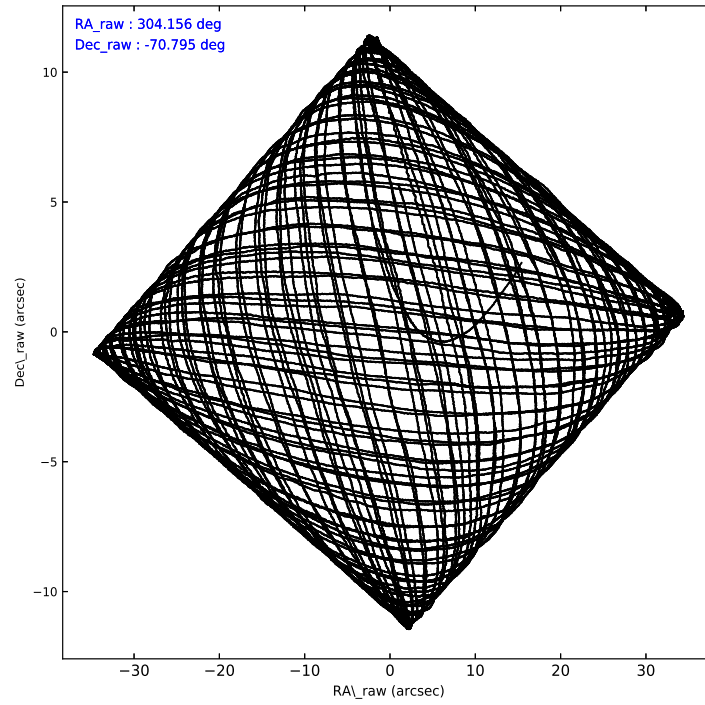
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	268025	270567	297186	288624	277254
rejected events	239054	234682	268142	255174	248055
rejected %	89%	86%	90%	88%	89%

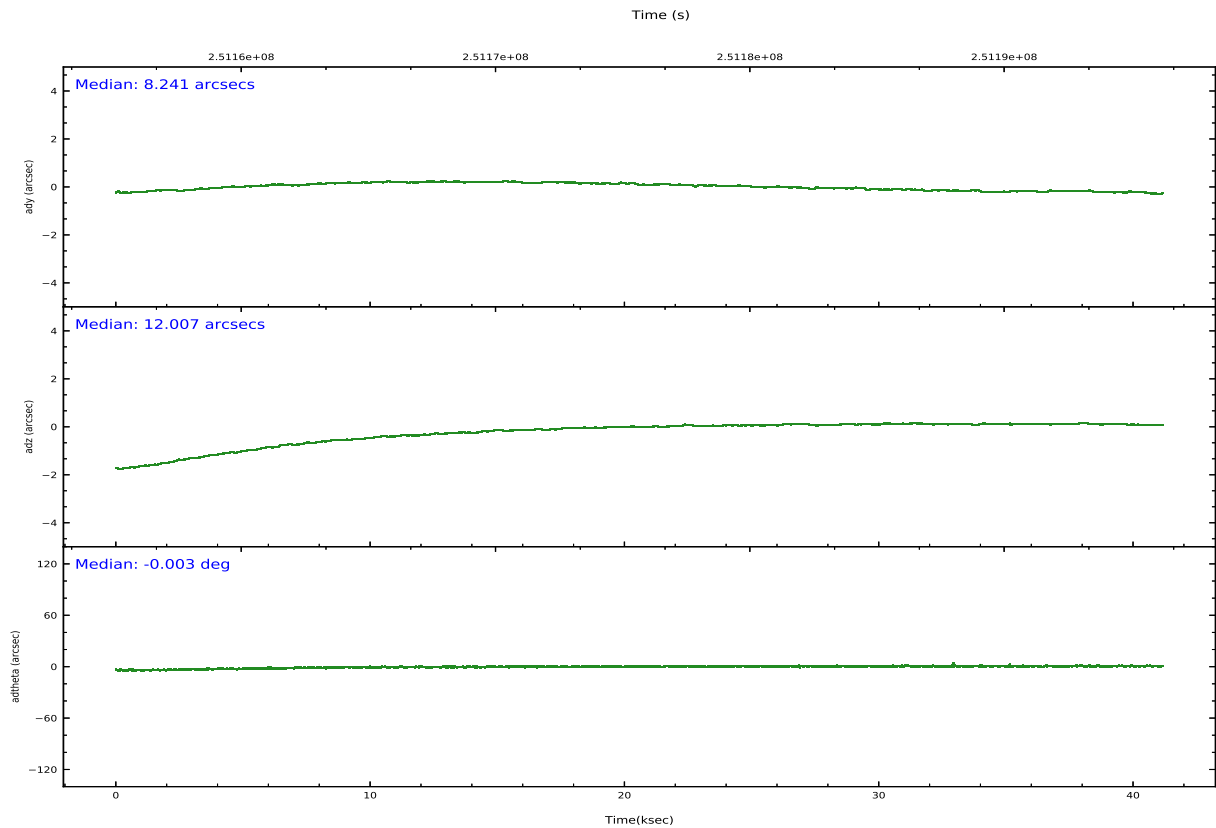
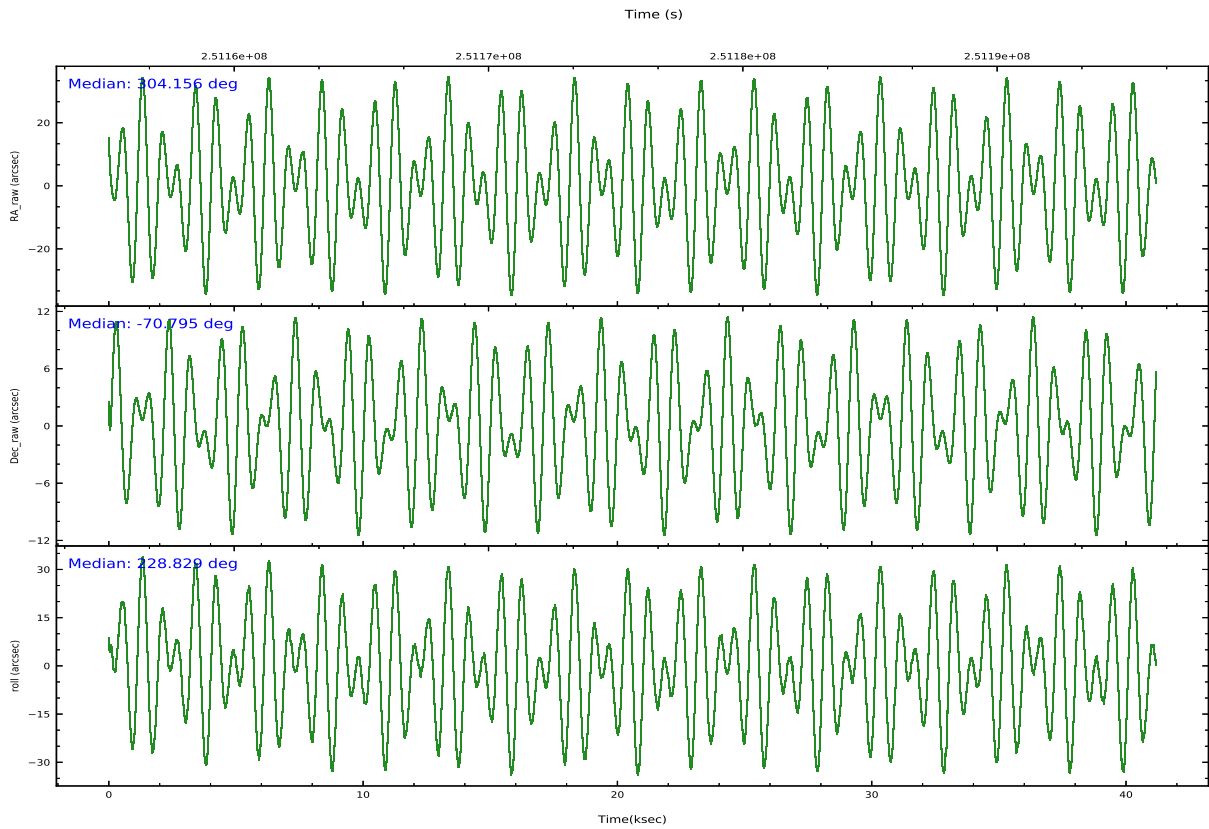
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	10733	14889	11518	15688	10699
	4%	5%	3%	5%	3%
grade 1 events	137	151	162	167	105
	0%	0%	0%	0%	0%
grade 2 events	6842	7376	6562	6271	6075
	2%	2%	2%	2%	2%
grade 3 events	3224	3606	2983	3171	3168
	1%	1%	1%	1%	1%
grade 4 events	2979	3543	2979	3194	3245
	1%	1%	1%	1%	1%
grade 5 events	9424	10820	8826	11274	11148
	3%	3%	2%	3%	4%
grade 6 events	5280	6565	5085	5203	6072
	1%	2%	1%	1%	2%
grade 7 events	229406	223617	259071	243656	236742
	85%	82%	87%	84%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	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	304.171632	304.15283374086	Subarray requested	NONE	NONE
[deg] Pointing Dec	-70.768408	-70.791237036072	Alternating exposures requested	N	N
[deg] Pointing Roll	228.639773	228.82872899193	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-241.592463	-241.5930143809957			
[mm] SIM translation stage offset	8	8.000561378066038			
[s] Observation start time (MET)	251155252.184000	251154150.68046			
Observation start date	2005-12-16T21:19:48	2005-12-16T21:02:30			
[s] Observation end time (MET)	251196252.184000	251197162.75745			
Observation end date	2005-12-17T08:43:08	2005-12-17T08:59:22			
Read mode	TIMED	TIMED			

## 2.3 Aspect



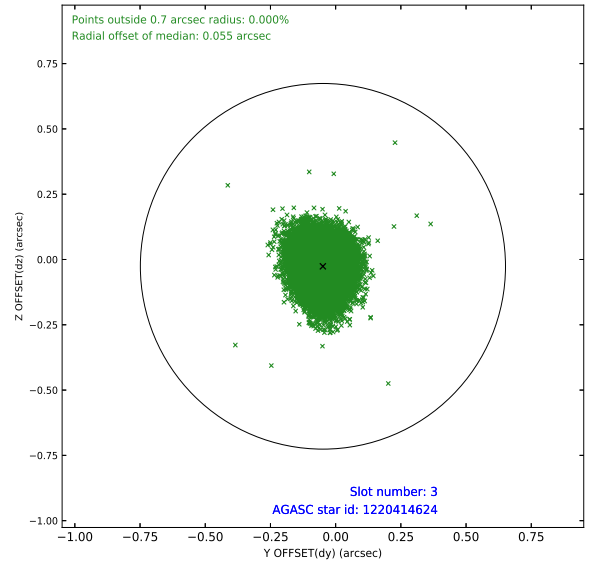
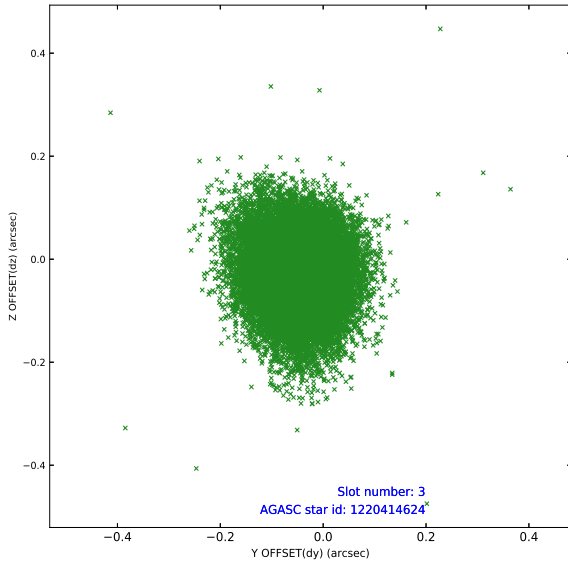


### Slot Statistics

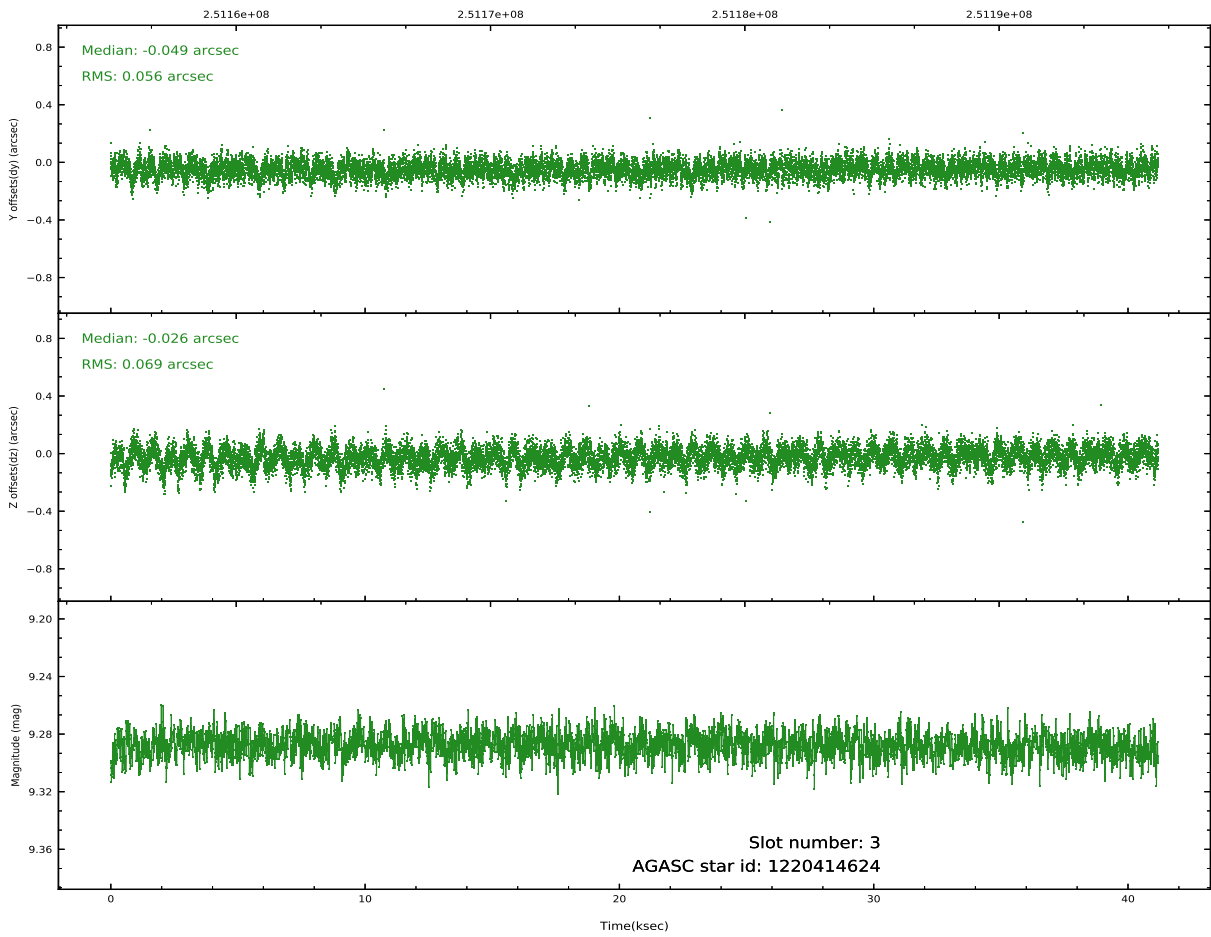
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-1	7.28	10044	1.000	0.005	-0.017	0.012	0.046	0.000000	0.000000	931.57	-670
1	FID		ACIS-I-5	7.24	10044	1.000	-0.140	0.023	0.009	0.017	0.000000	0.000000	-1816.71	1226
2	FID		ACIS-I-6	7.23	10045	1.000	0.045	0.063	0.012	0.031	0.000000	0.000000	397.10	1871
3	GUIDE	used	1220414624	9.29	20076	1.000	-0.049	-0.026	0.094	0.151	304.430463	-70.145362	-1891.76	-1244
4	GUIDE	used	1220417792	8.66	20083	1.000	0.060	-0.076	0.088	0.150	301.715364	-70.796240	2041.35	-2076
5	GUIDE	used	1220415312	9.66	20077	1.000	-0.078	0.107	0.123	0.198	305.075864	-71.229088	558.80	1887
6	GUIDE	used	1220547248	9.81	20059	1.000	-0.008	-0.024	0.162	0.260	306.006962	-71.080661	-547.47	2372
7	GUIDE	used	1220552432	9.66	20047	1.000	0.067	0.011	0.223	0.342	306.817733	-70.729720	-2129.93	2312

## 2.4 Star Slots

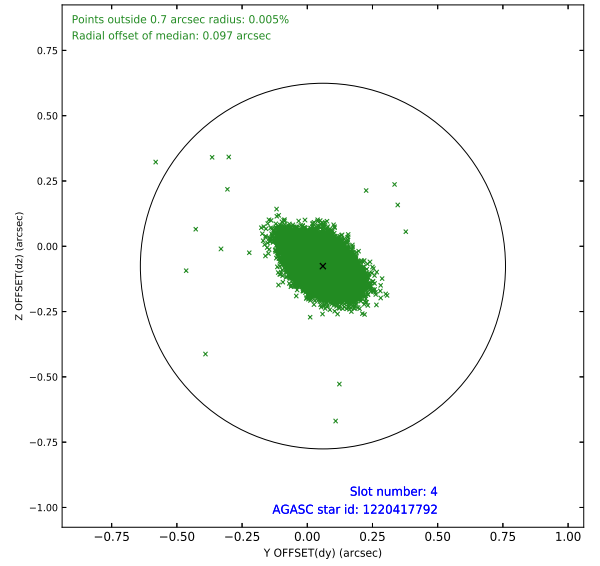
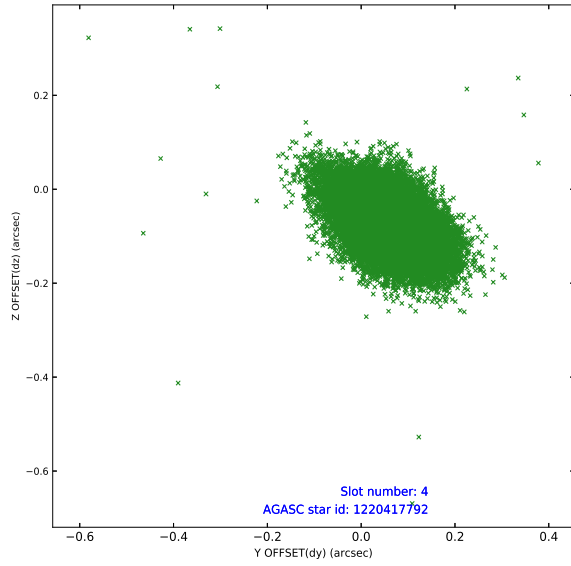
### 2.4.1 Slot 3



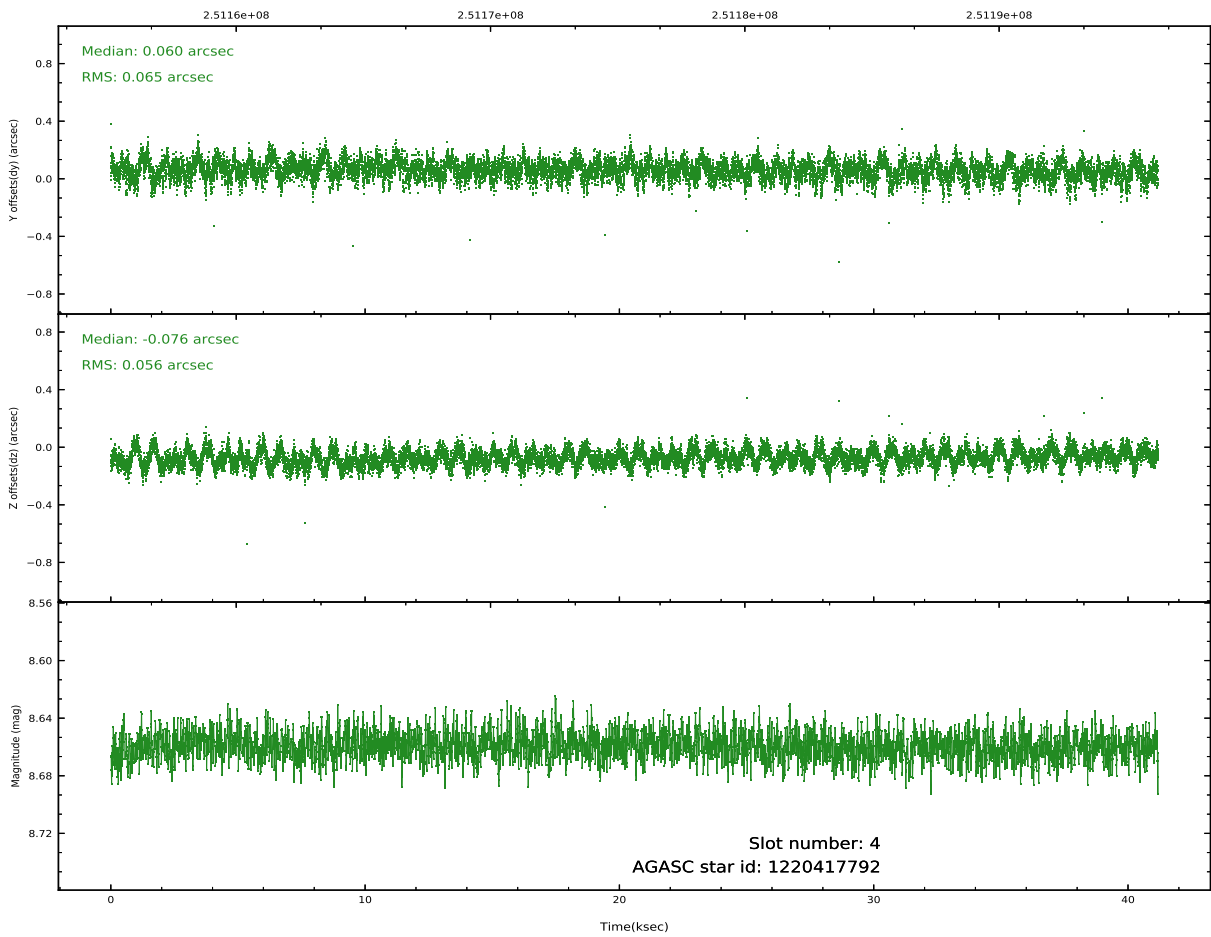
Time (s)



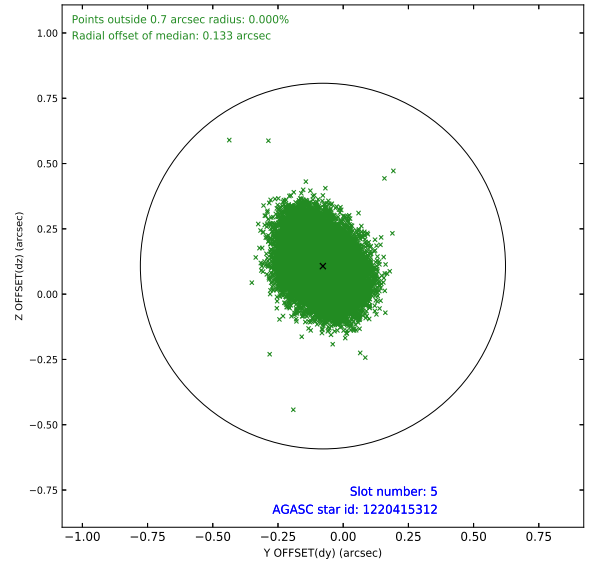
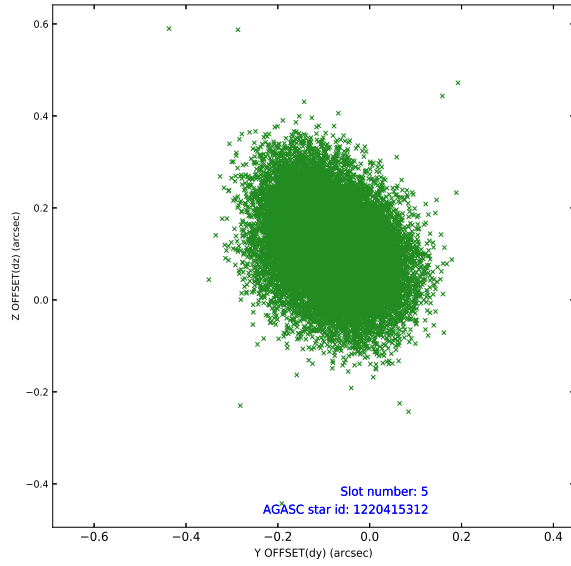
## 2.4.2 Slot 4



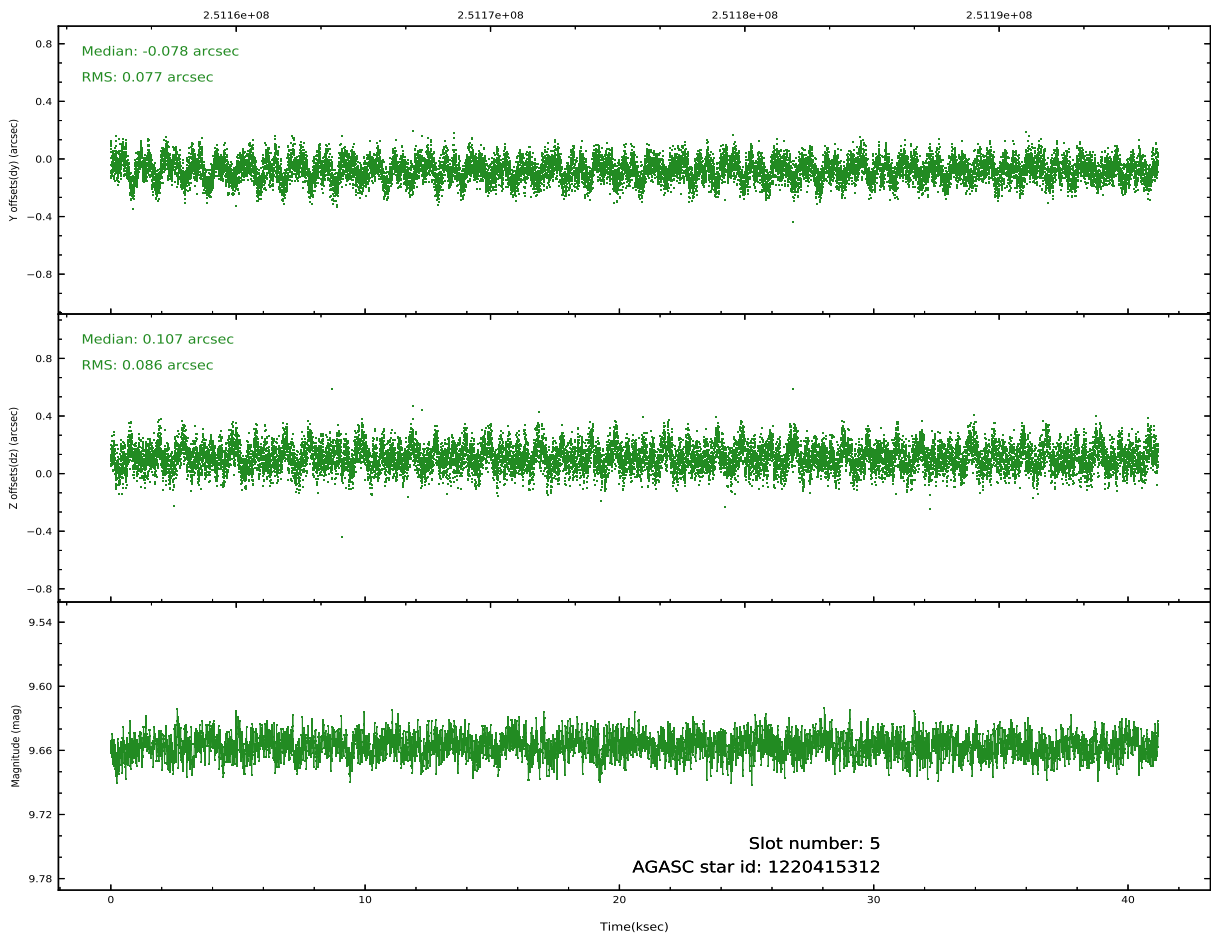
Time (s)



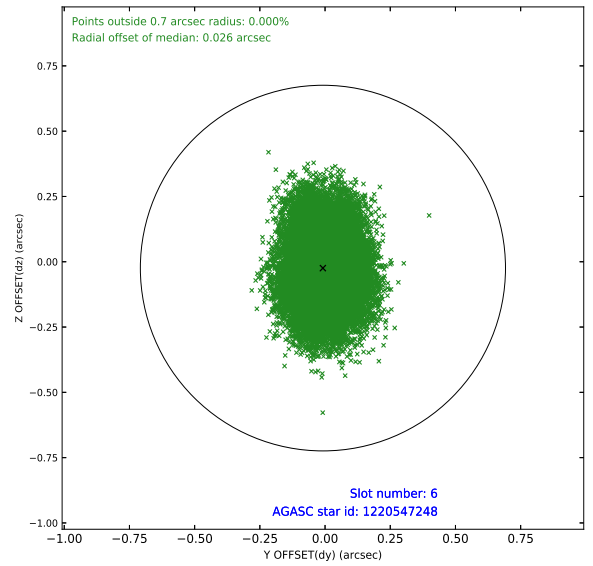
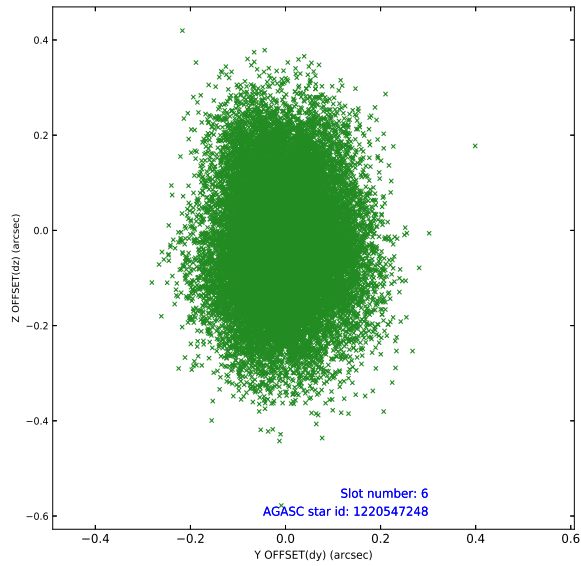
### 2.4.3 Slot 5



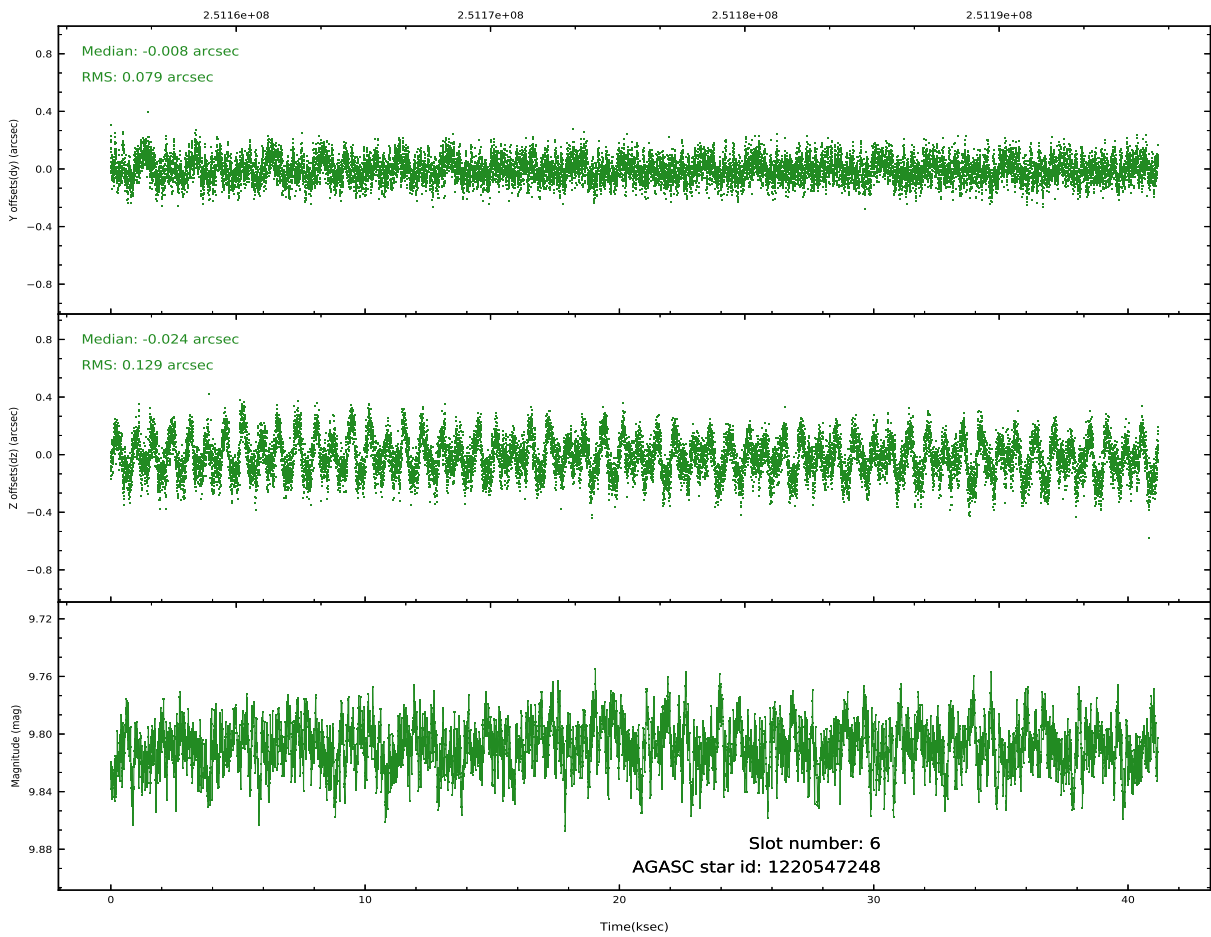
Time (s)



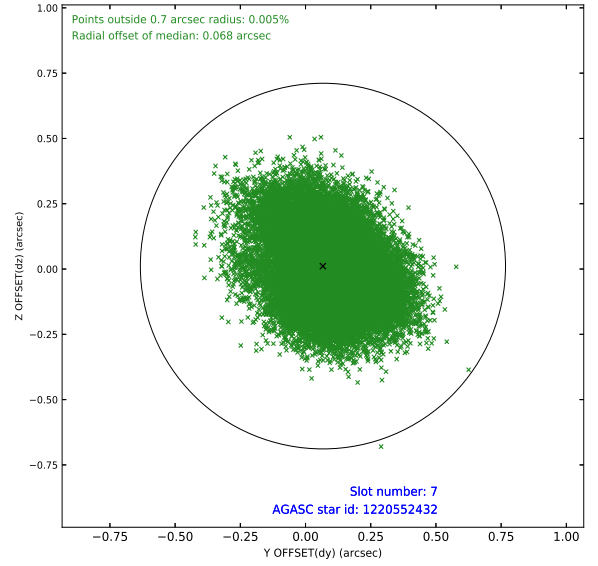
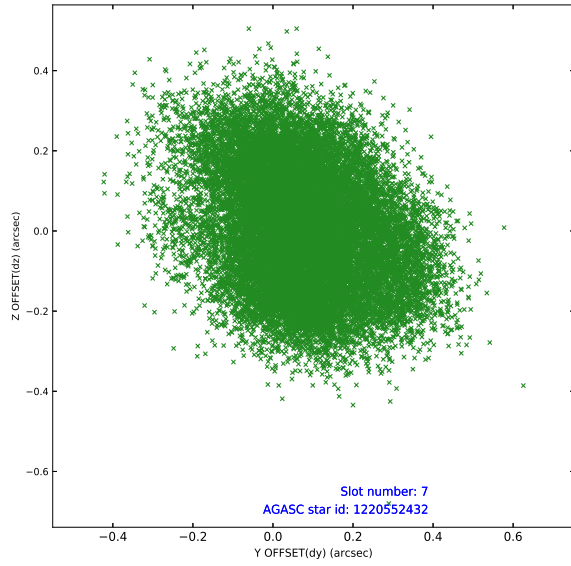
## 2.4.4 Slot 6



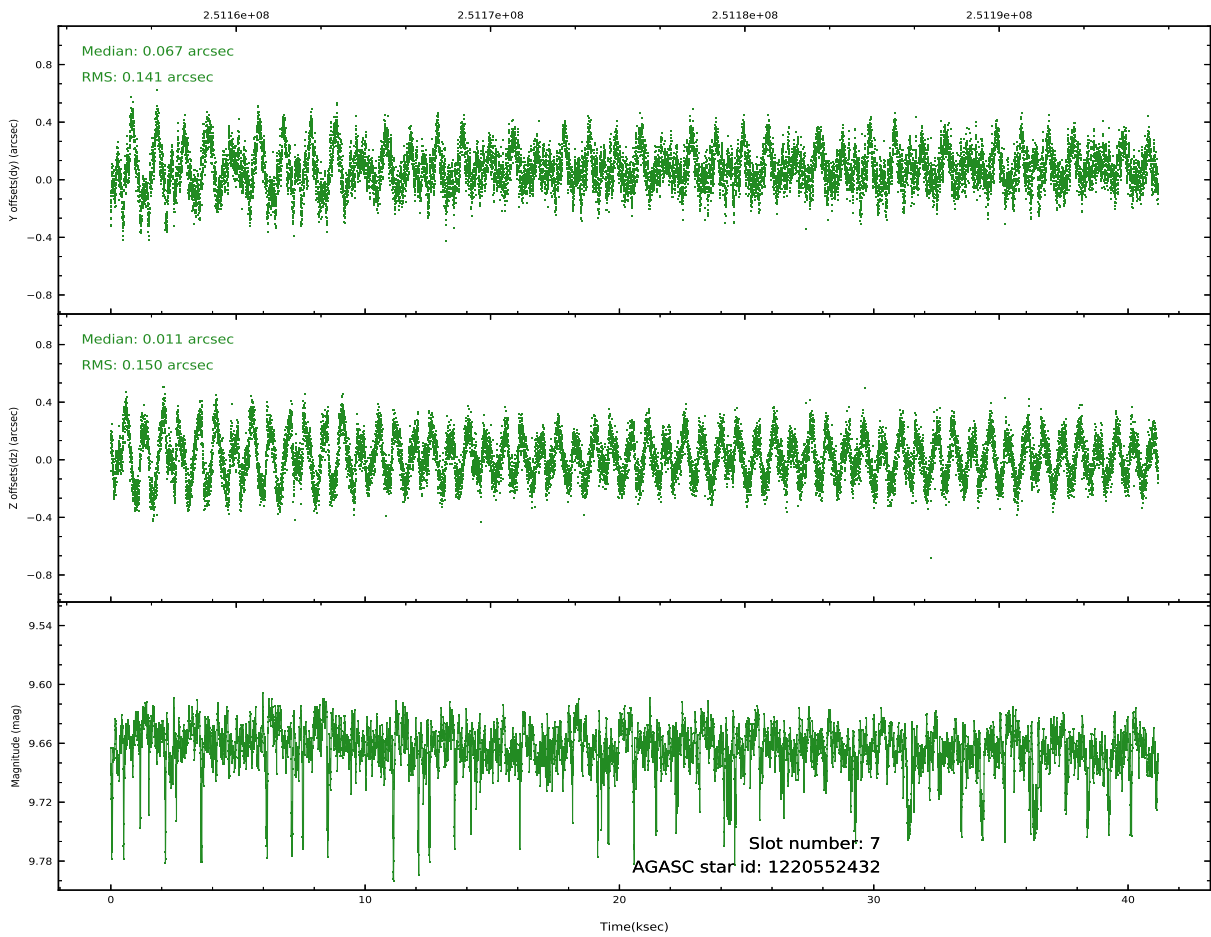
Time (s)



## 2.4.5 Slot 7

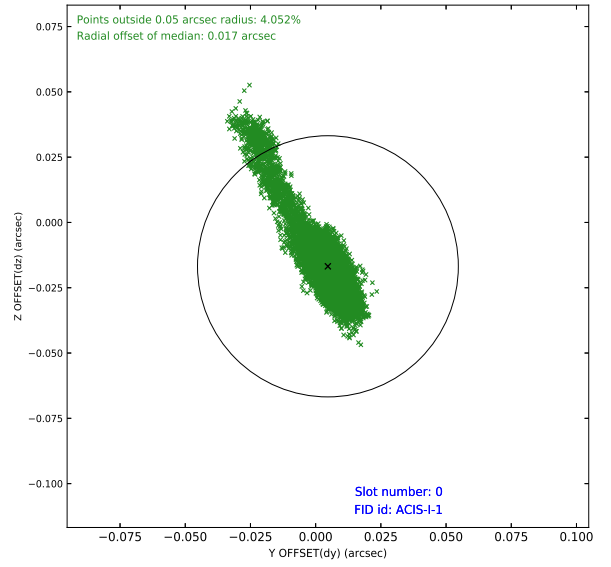
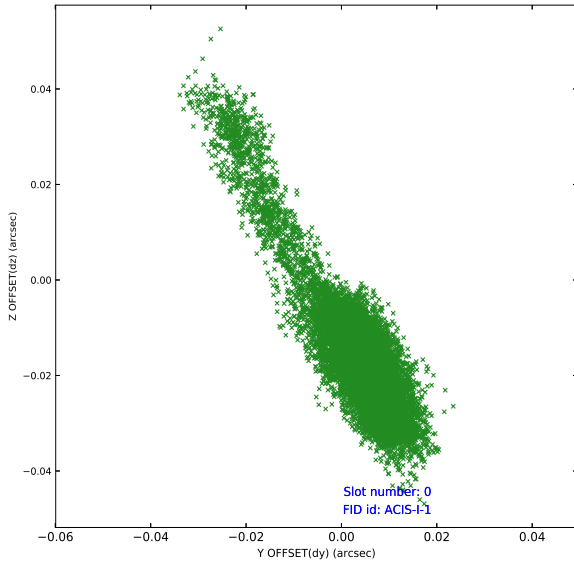


Time (s)

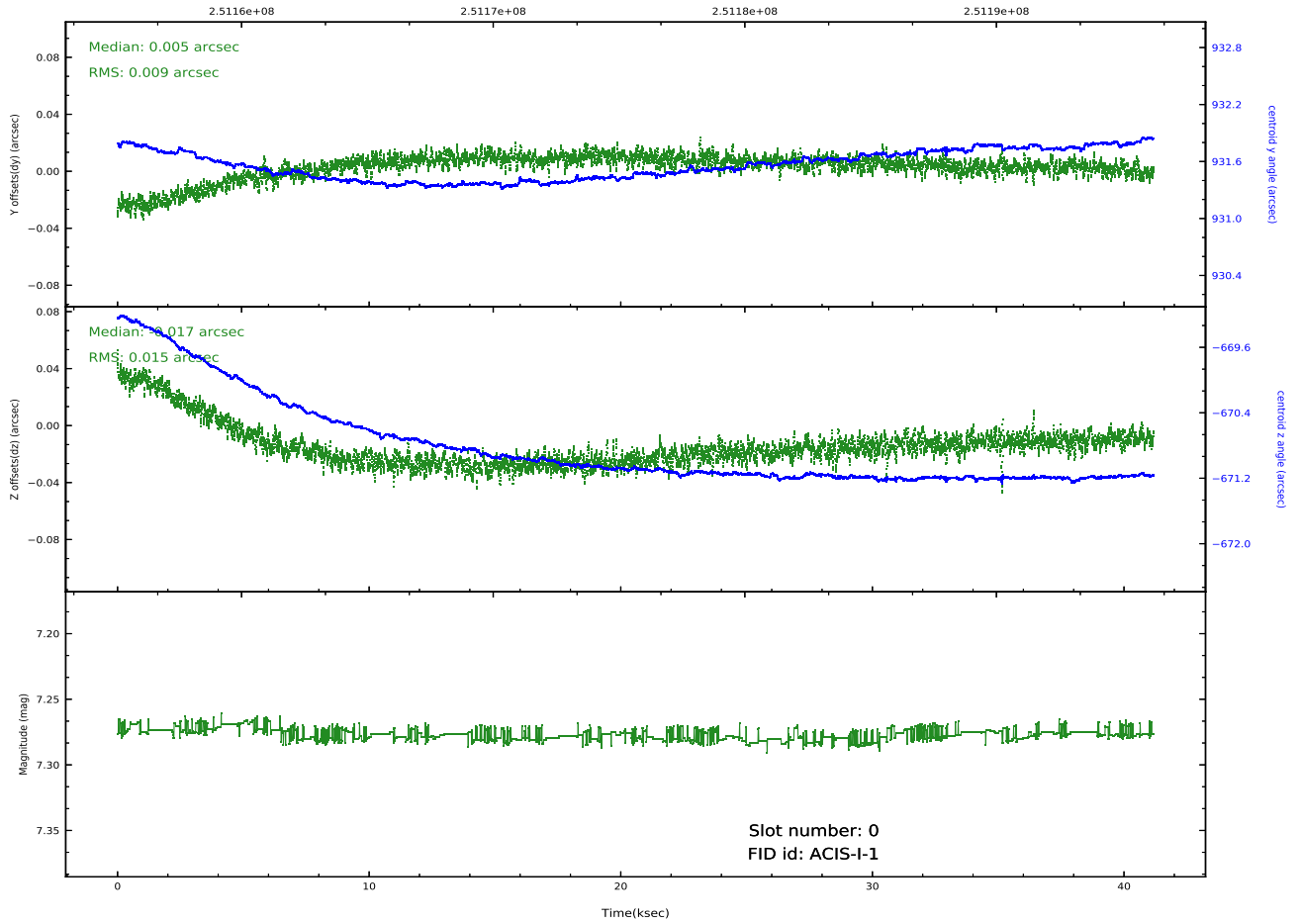


## 2.5 FID Slots

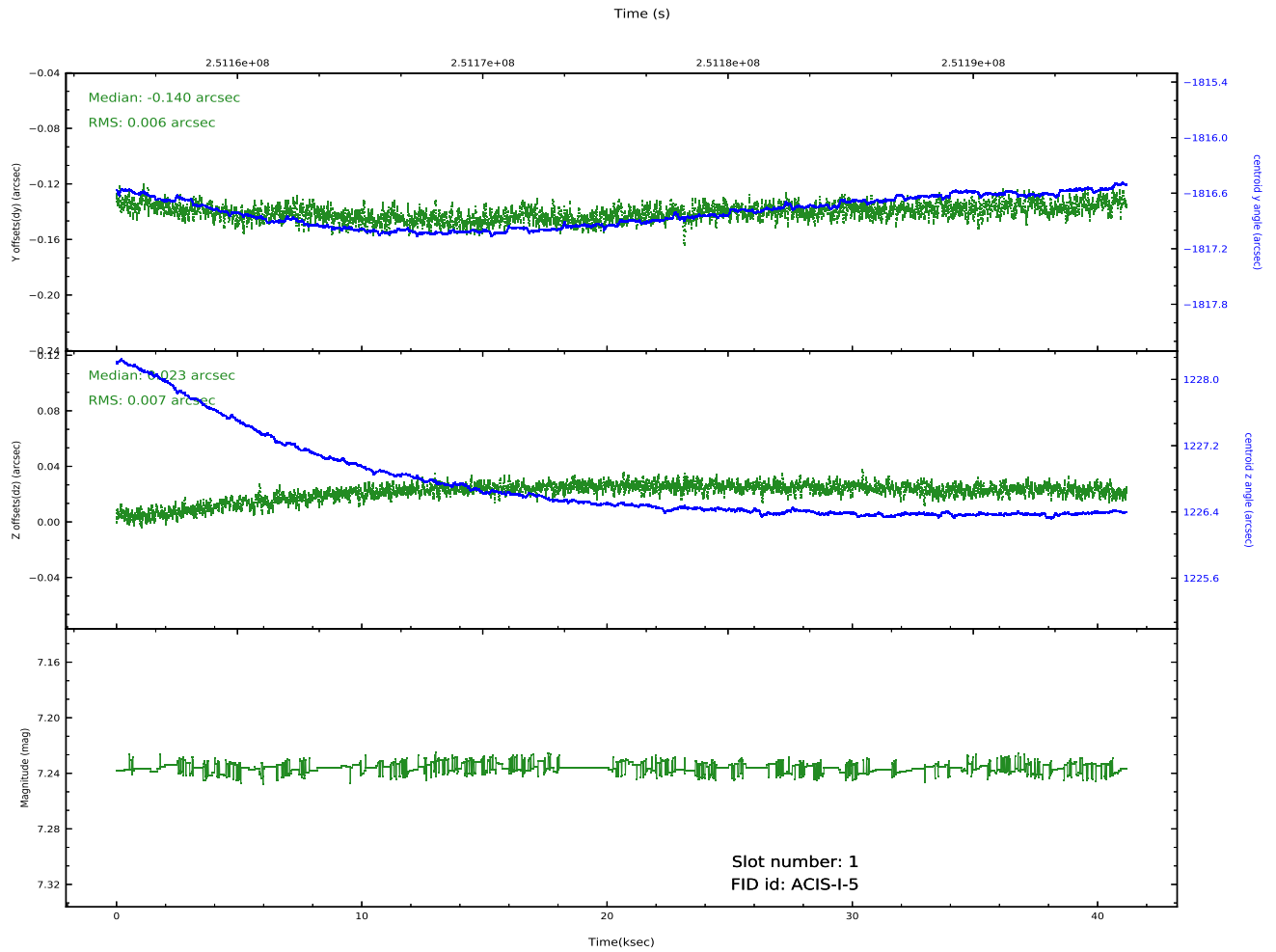
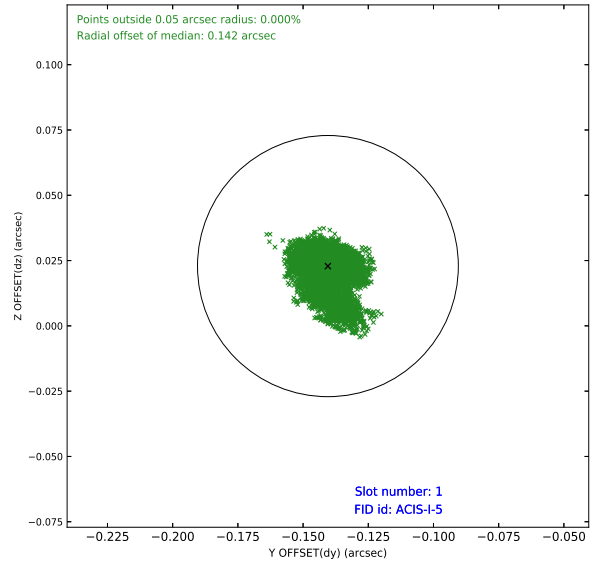
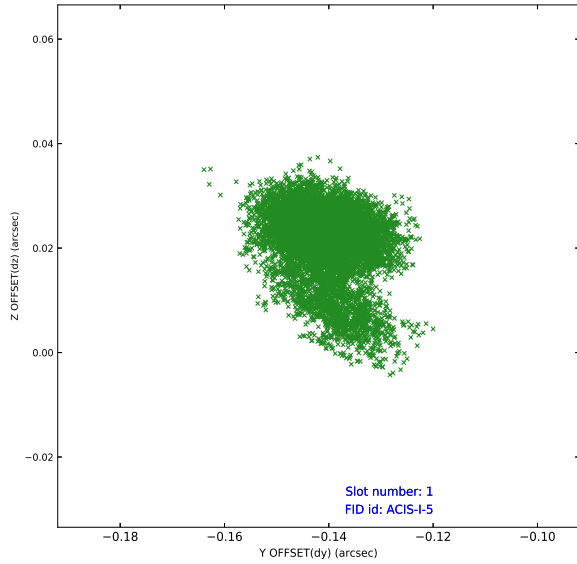
### 2.5.1 Slot 0



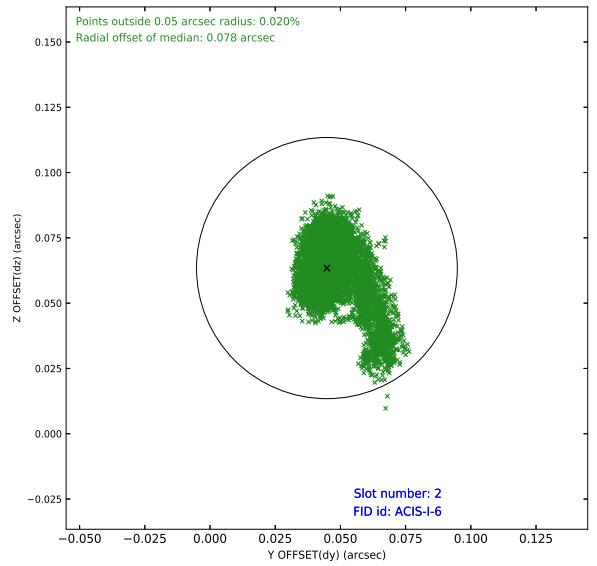
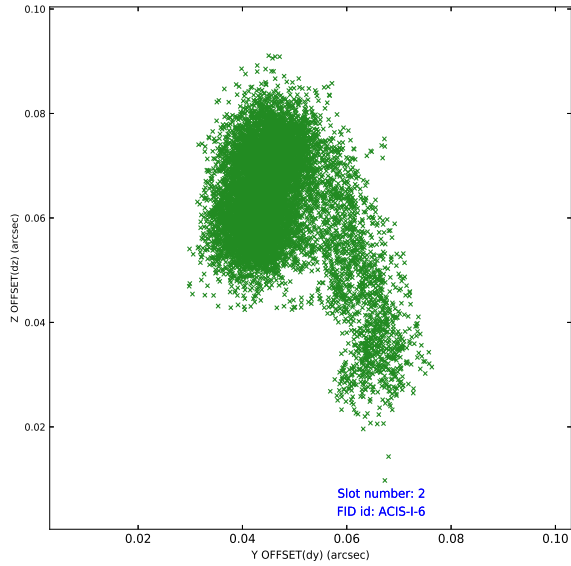
Time (s)



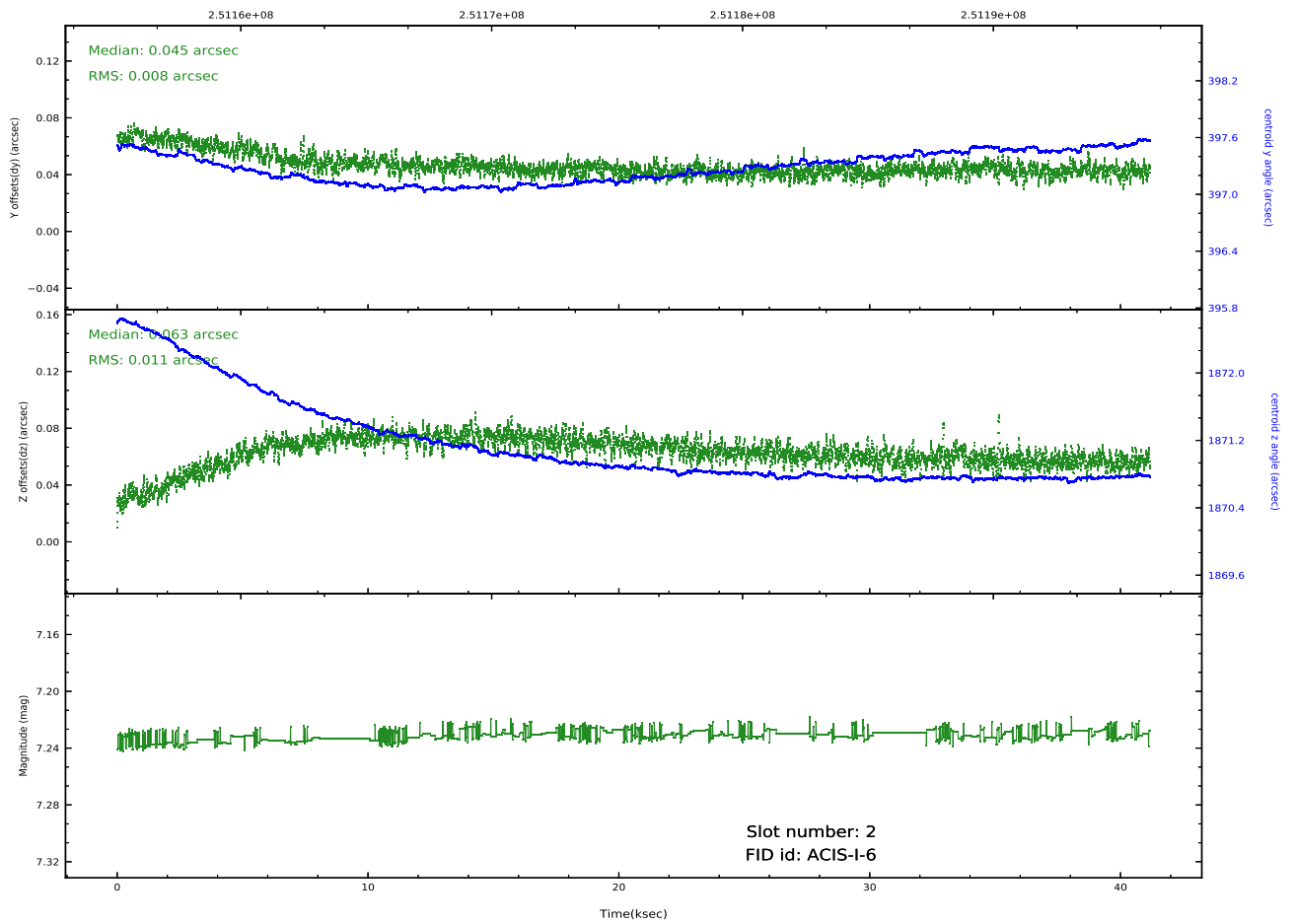
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Francesca Civano
V&V Date (YYYY-MM-DD)	2020.10.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	41.16159

## A.2 Comments