

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4730 - L2 Version 4  
Chandra X-Ray Center

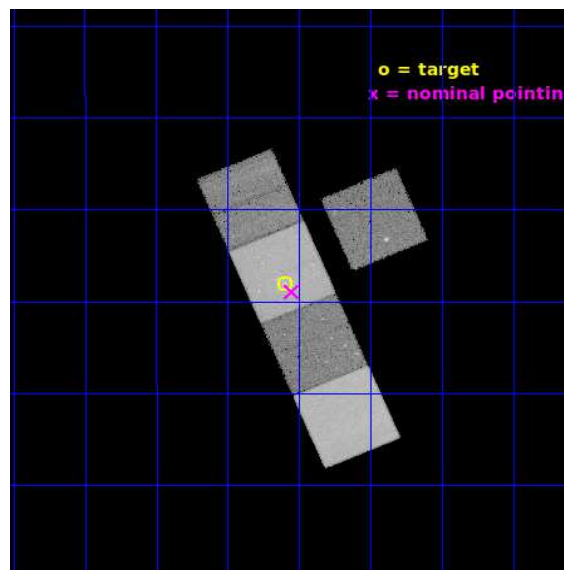
L2 Processing Date : Sep 29 2020

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# 1 Front

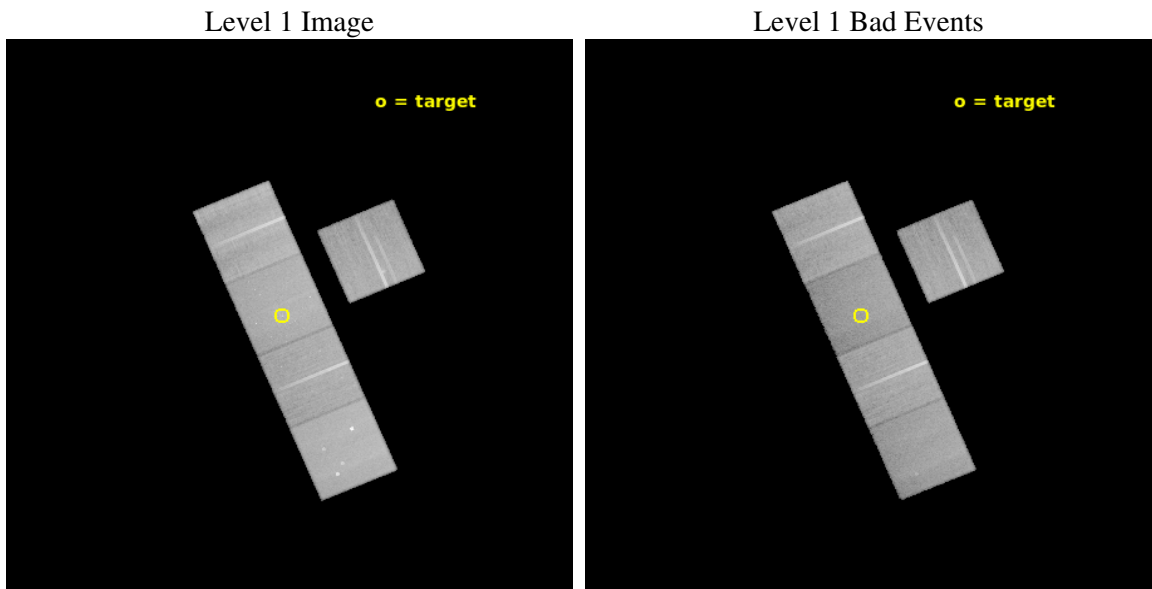
seq_num	600385	Sequence number
obs_id	4730	Observation id
title	Deep Chandra and Hubble Observations NGC 4697, the Nearest Optically Luminous, X-ray Faint Elliptical Galaxy	Proposal title
observer	Craig Sarazin	Principal investigator
object	NGC4697	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	192.149583	Observer's specified target RA [deg]
dec_targ	-5.800556	Observer's specified target Dec [deg]
ra_nom	192.13753501566	Nominal RA [deg]
dec_nom	-5.8155868476136	Nominal Dec [deg]
roll_nom	246.83243979064	Nominal Roll [deg]
revision	4	Processing version of data
ontime	40575.899921954	Sum of GTIs [s]
livetime	40045.74591793	Livetime [s]
ontime3	40569.617951691	Sum of GTIs [s]
ontime5	40575.899921954	Sum of GTIs [s]
ontime6	40572.758961707	Sum of GTIs [s]
ontime7	40575.899921954	Sum of GTIs [s]
ontime8	40575.899921954	Sum of GTIs [s]
l2events	373756	Number of level 2 events



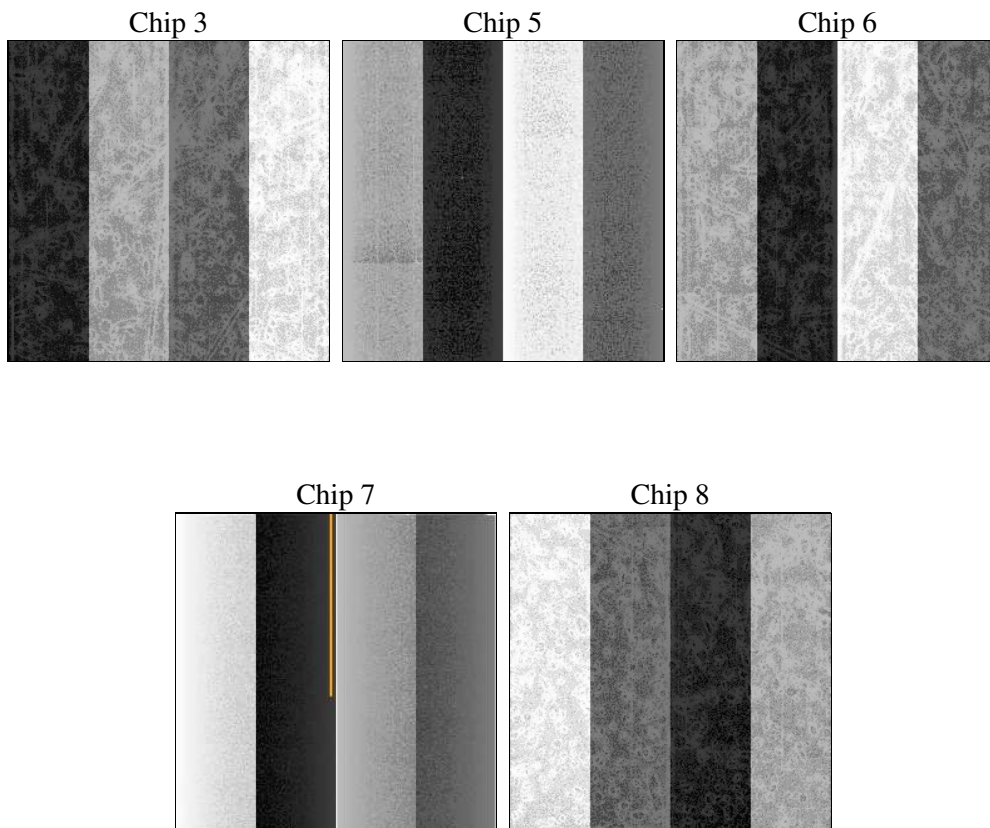
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	40400.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	40575.899921954	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime3	40569.617951691	Sum of GTIs [s]
date	2020-09-29T06:43:39	Date and time of file creation	ontime5	40575.899921954	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	40572.758961707	Sum of GTIs [s]
			ontime7	40575.899921954	Sum of GTIs [s]
			ontime8	40575.899921954	Sum of GTIs [s]
			l1events	1477451	Number of level 1 events

### 2.1.4 Events

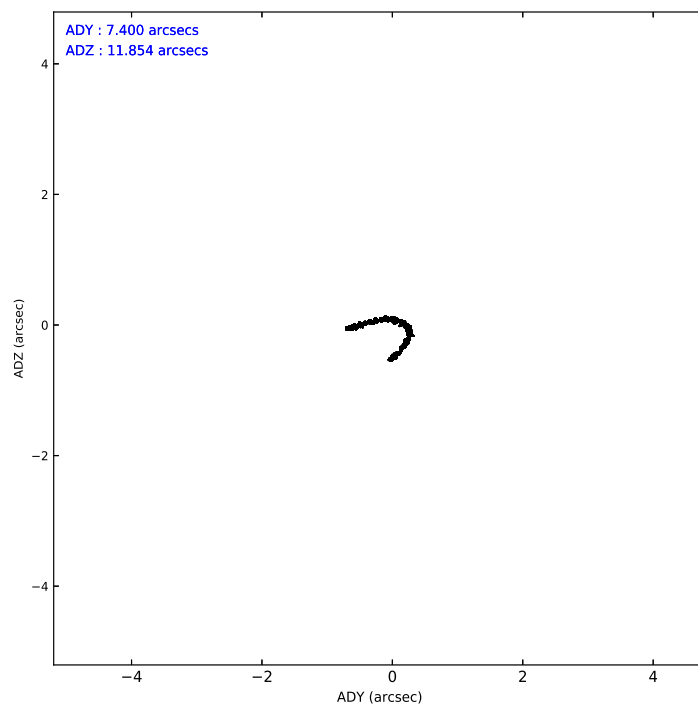
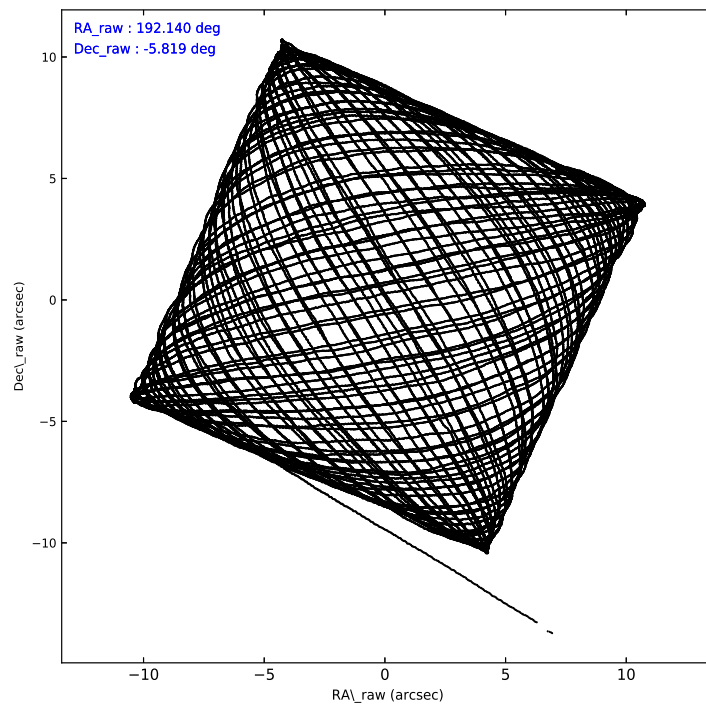
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	253565	345537	264590	290795	322964
rejected events	225322	173747	232641	154027	245813
rejected %	88%	50%	87%	52%	76%

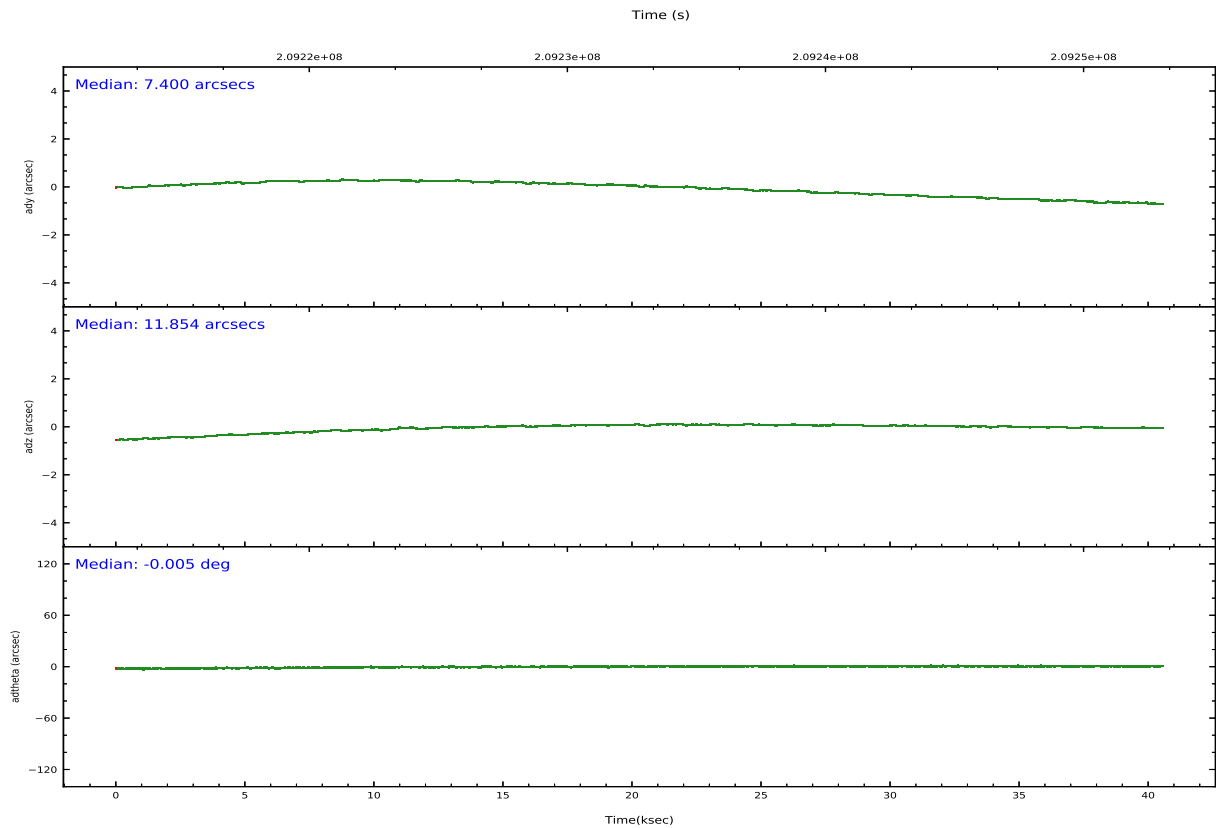
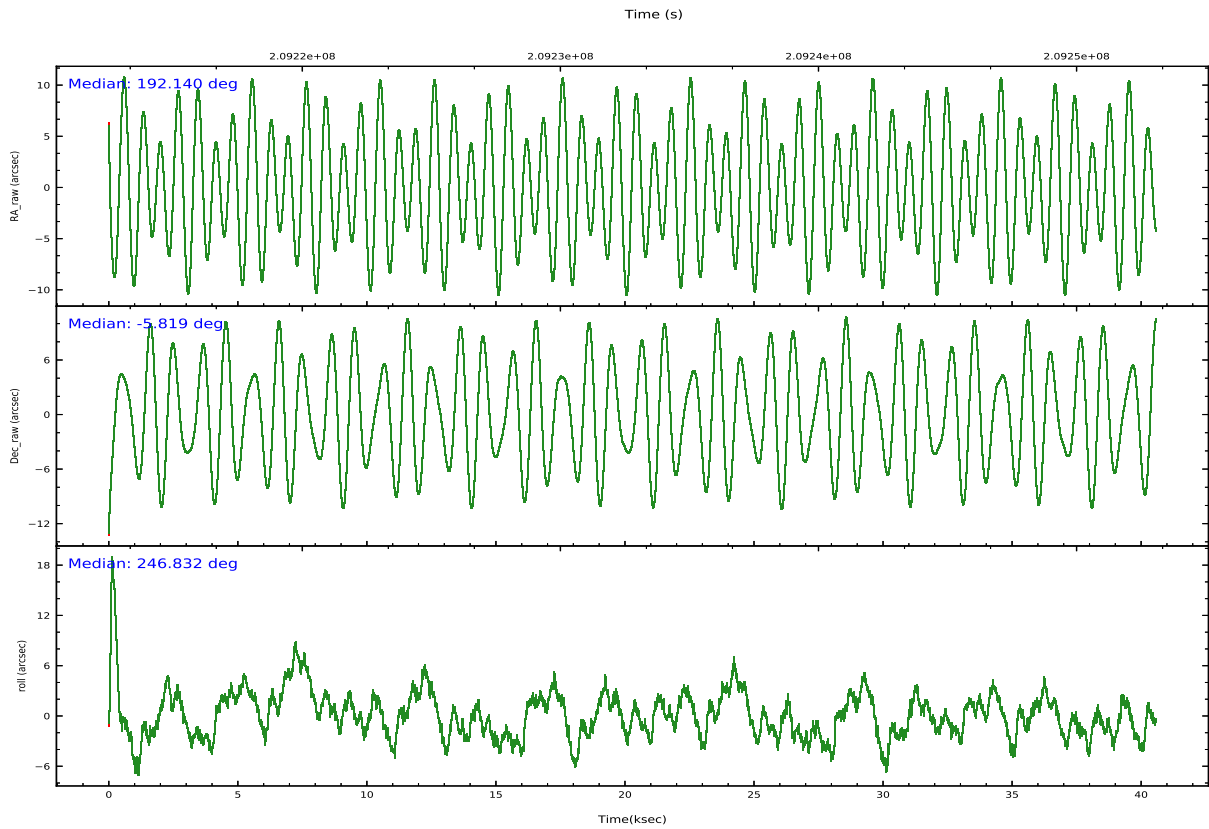
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	10473	21243	11559	15718	24127
	4%	6%	4%	5%	7%
grade 1 events	164	567	114	271	221
	0%	0%	0%	0%	0%
grade 2 events	5776	49722	6519	28283	16562
	2%	14%	2%	9%	5%
grade 3 events	3088	7616	3334	12922	8273
	1%	2%	1%	4%	2%
grade 4 events	3048	7421	3205	13078	7781
	1%	2%	1%	4%	2%
grade 5 events	9602	27760	10126	29449	14055
	3%	8%	3%	10%	4%
grade 6 events	6152	87733	7619	68264	21338
	2%	25%	2%	23%	6%
grade 7 events	215262	143475	222114	122810	230607
	84%	41%	83%	42%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-35678	ACIS-35678	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	192.136186	192.13753501566	Subarray requested	NONE	NONE
[deg] Pointing Dec	-5.791906	-5.8155868476136	Alternating exposures requested	N	N
[deg] Pointing Roll	246.675309	246.83243979064	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	209212684.184000	209211452.68733			
Observation start date	2004-08-18T10:37:00	2004-08-18T10:17:32			
[s] Observation end time (MET)	209253084.184000	209253752.38921			
Observation end date	2004-08-18T21:50:20	2004-08-18T22:02:32			
Read mode	TIMED	TIMED			

## 2.3 Aspect





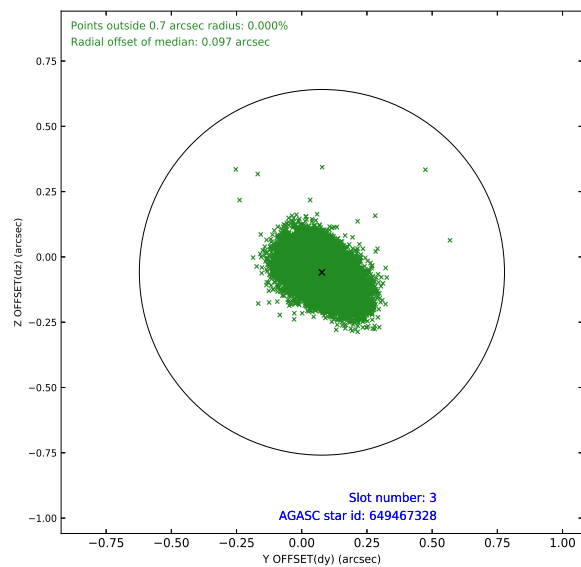
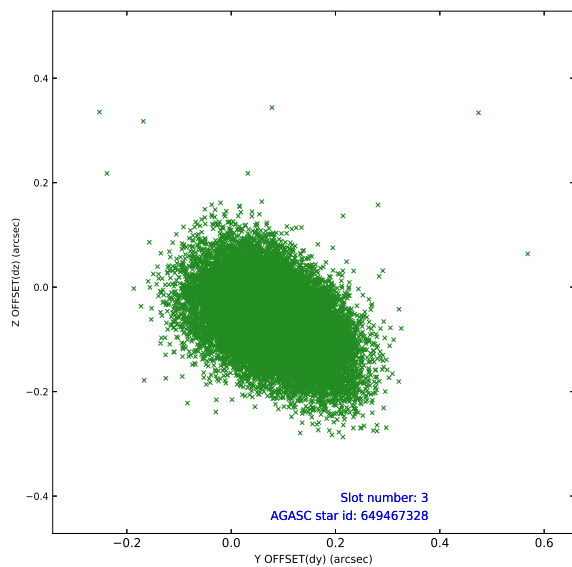
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-1	7.19	9898	1.000	0.026	-0.114	0.009	0.015	0.000000	0.000000	935.97	-1728
1	FID		ACIS-S-4	7.20	9899	1.000	0.081	0.071	0.011	0.017	0.000000	0.000000	2153.44	175
2	FID		ACIS-S-5	7.23	9899	1.000	-0.136	0.056	0.015	0.023	0.000000	0.000000	-1813.04	169
3	GUIDE	used	649467328	9.36	19782	1.000	0.077	-0.059	0.101	0.170	192.312268	-5.822418	-148.54	622
4	GUIDE	used	649467840	10.12	19764	1.000	-0.189	-0.034	0.160	0.283	191.989076	-5.066352	-2189.39	-1518
5	GUIDE	used	649469056	9.62	19746	1.000	-0.003	0.071	0.110	0.190	192.411237	-6.079132	560.16	1314
6	GUIDE	used	649471008	8.76	19784	1.000	0.033	-0.089	0.090	0.156	191.883055	-5.890695	686.15	-691
7	GUIDE	used	649472056	6.43	19796	1.000	0.082	0.110	0.069	0.108	191.889264	-6.301748	2036.04	-84

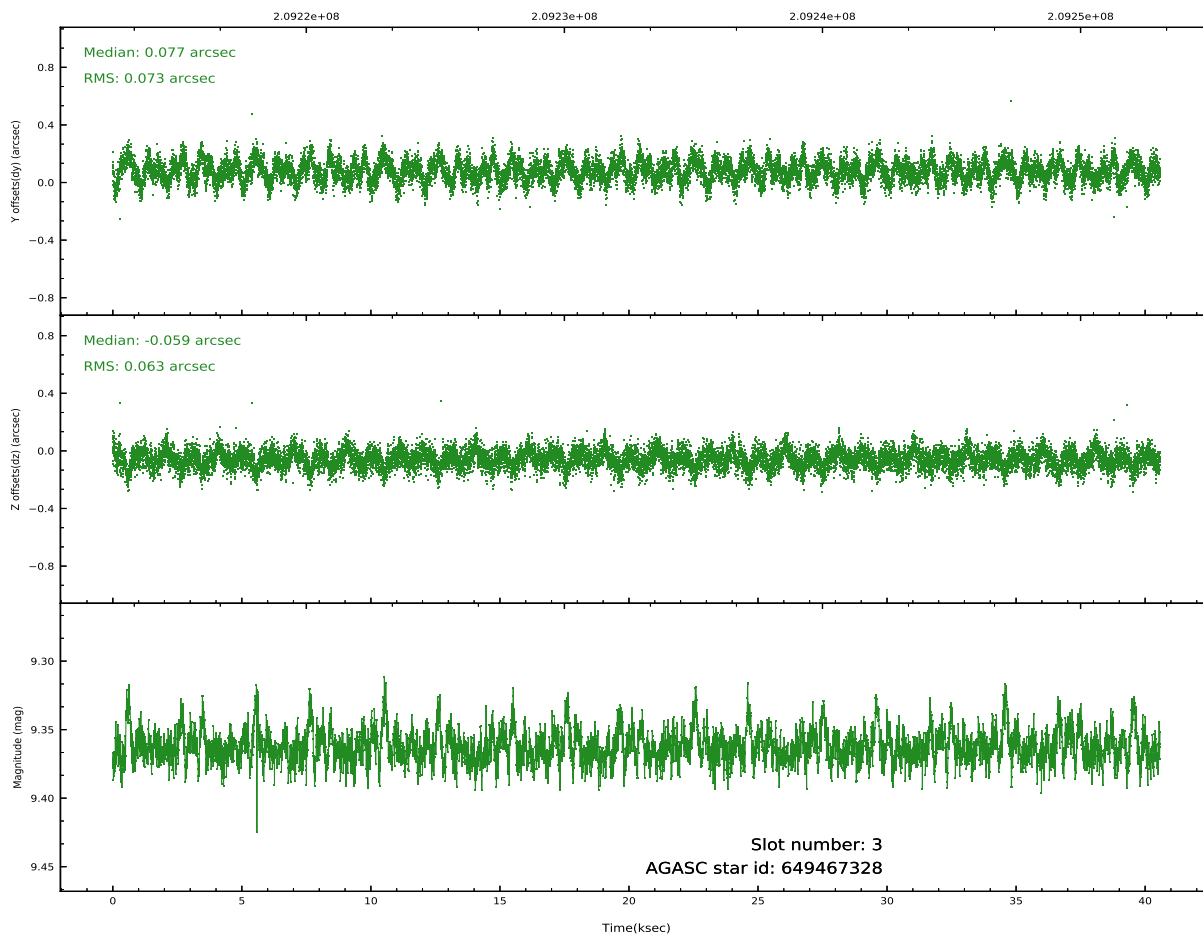
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## 2.4 Star Slots

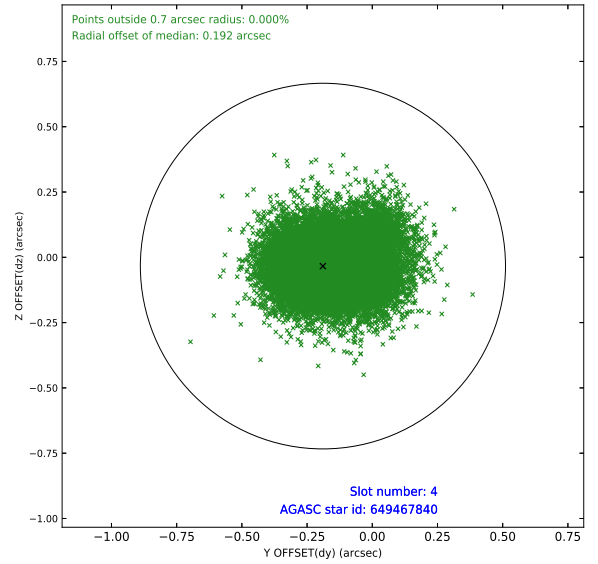
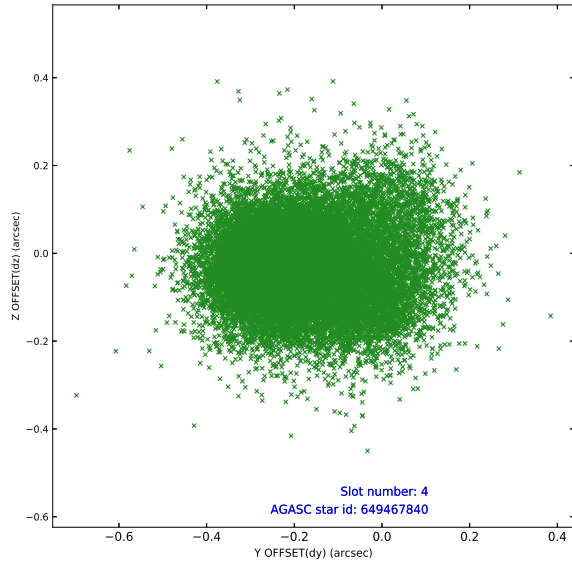
### 2.4.1 Slot 3



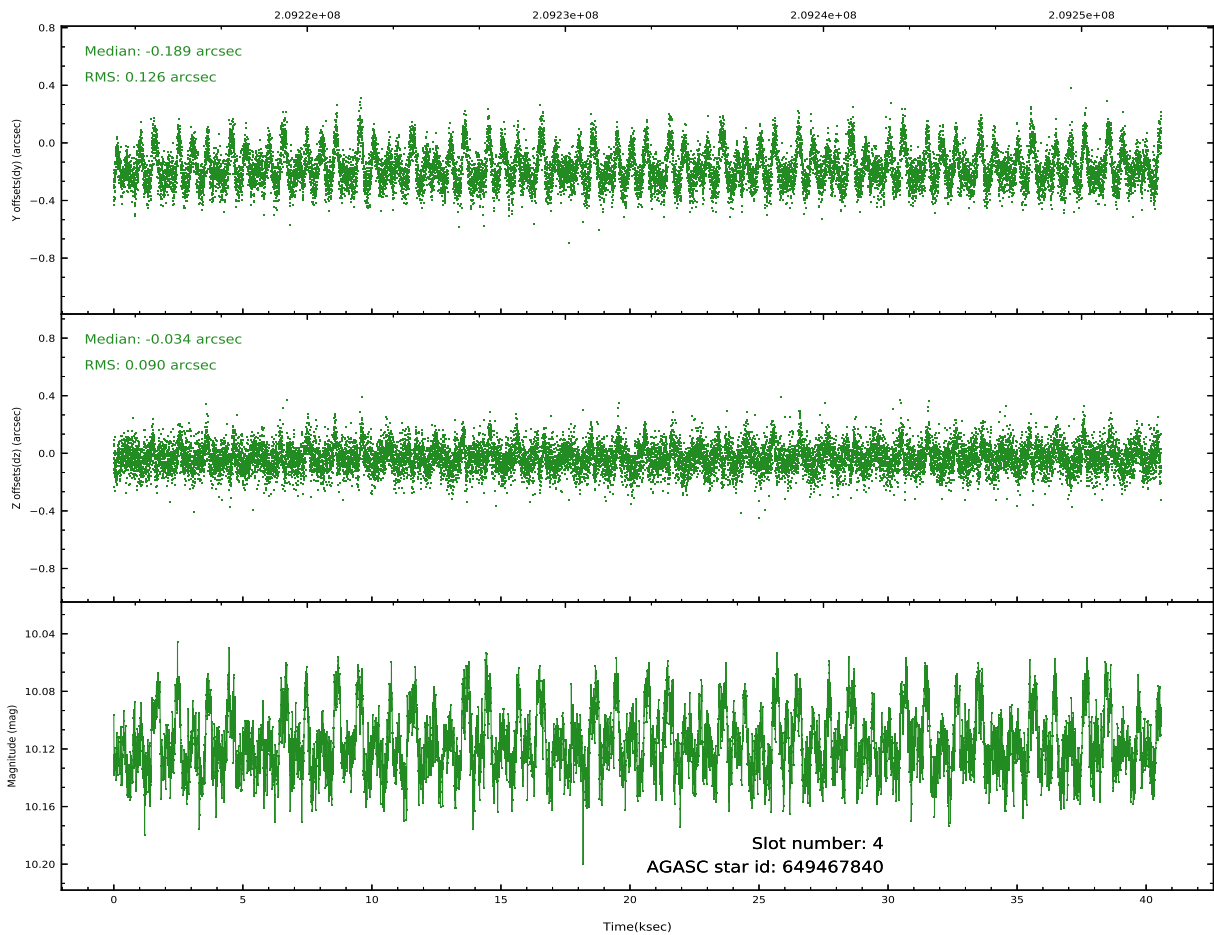
Time (s)



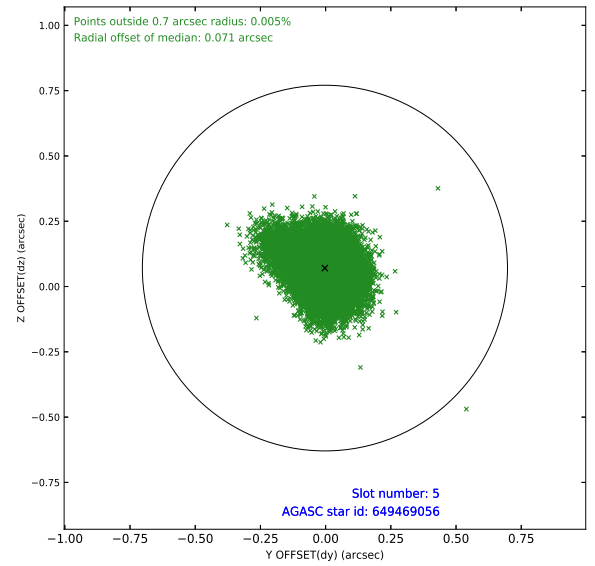
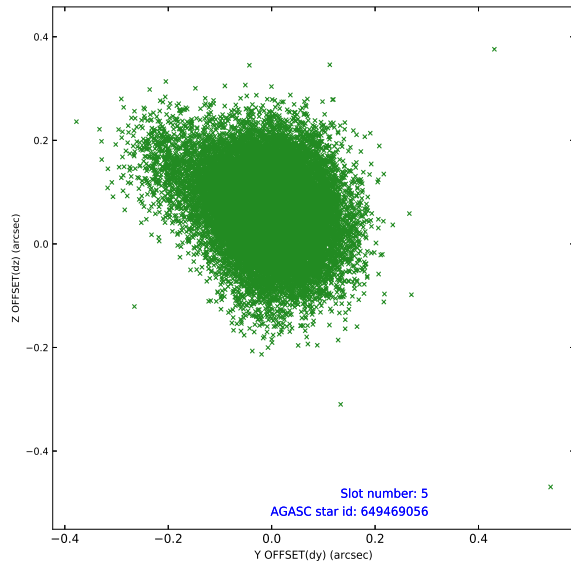
## 2.4.2 Slot 4



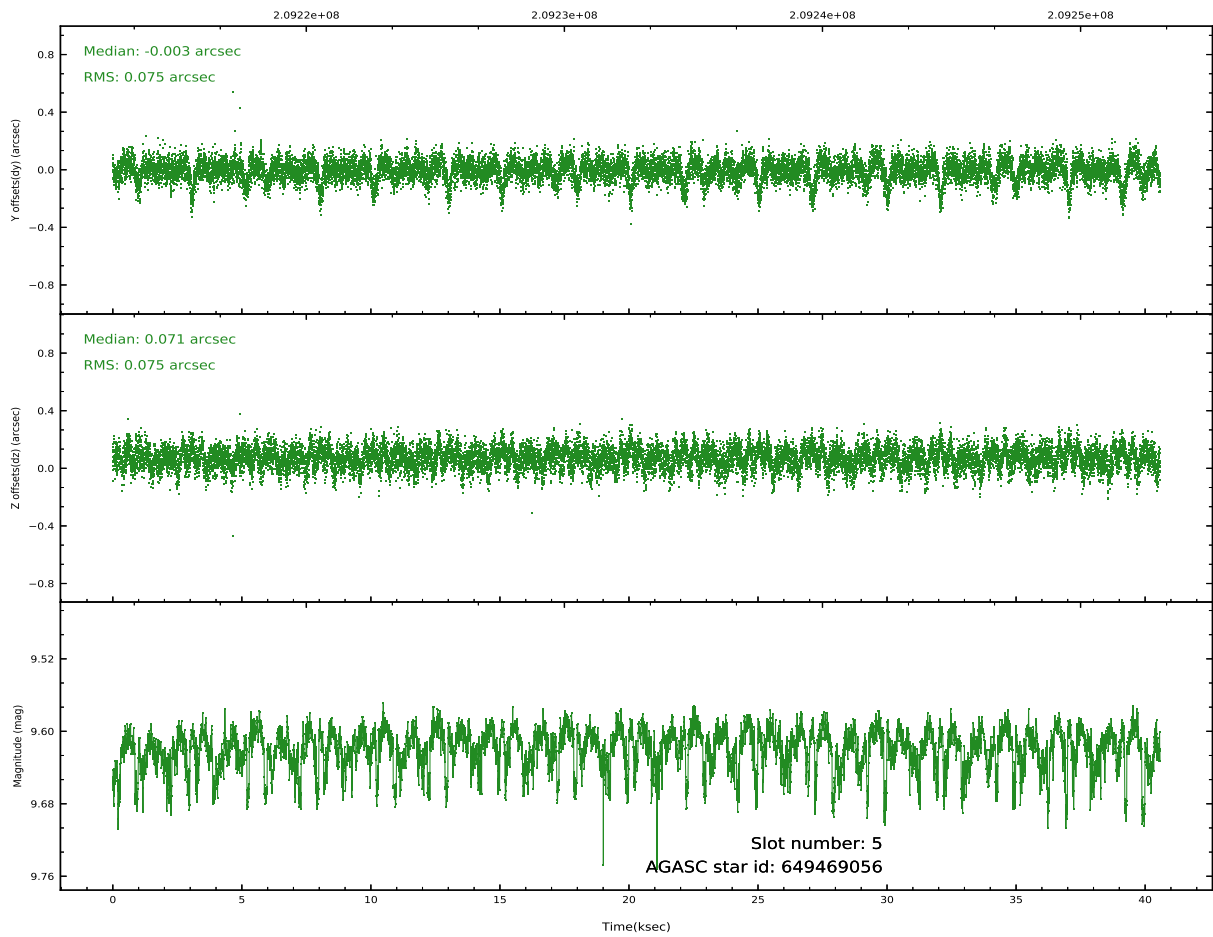
Time (s)



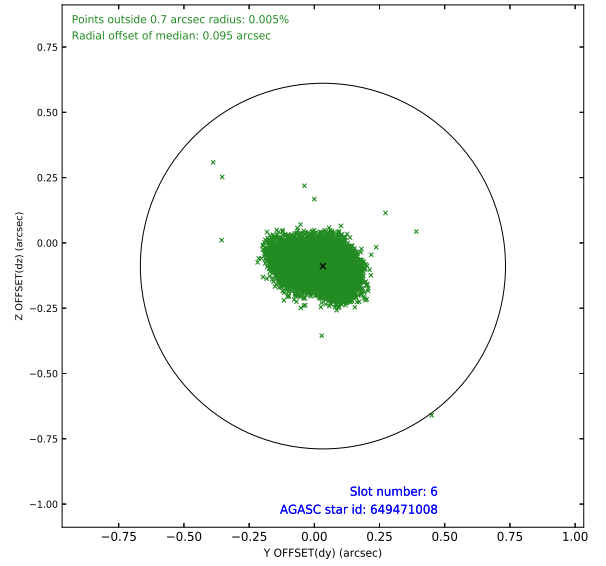
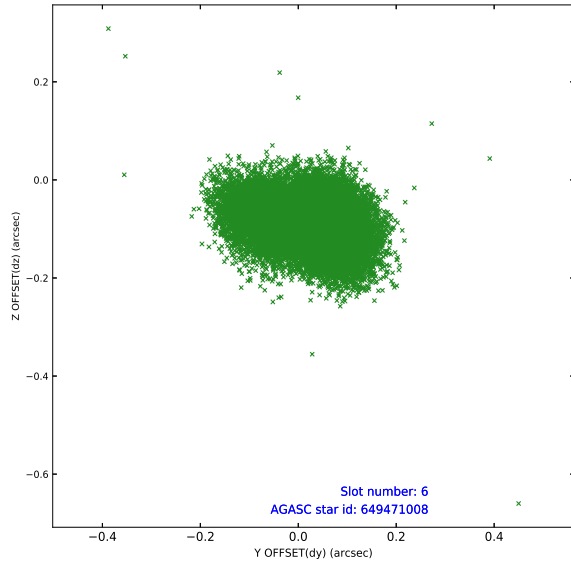
### 2.4.3 Slot 5



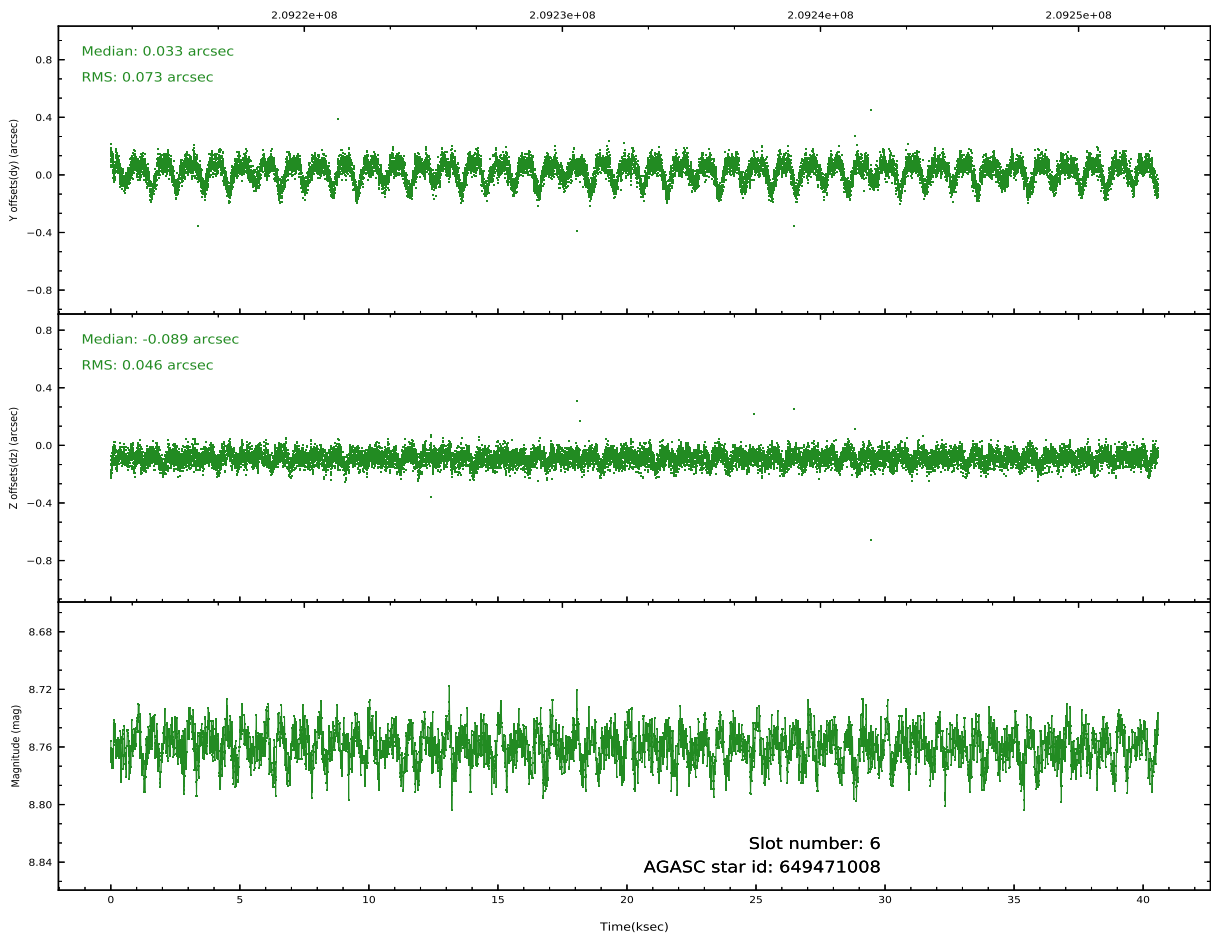
Time (s)



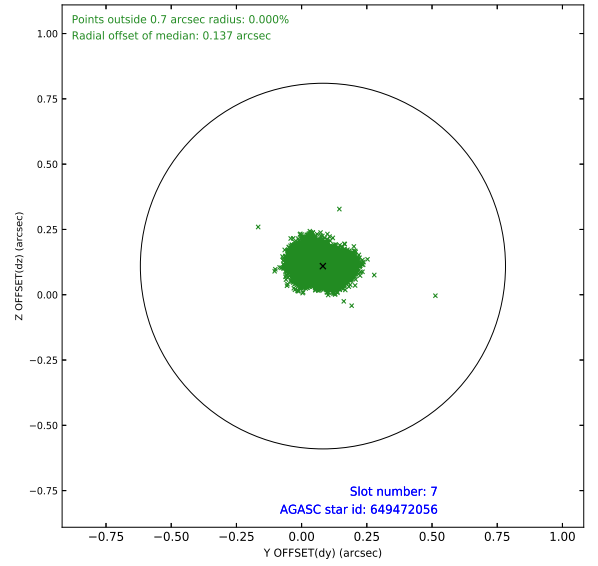
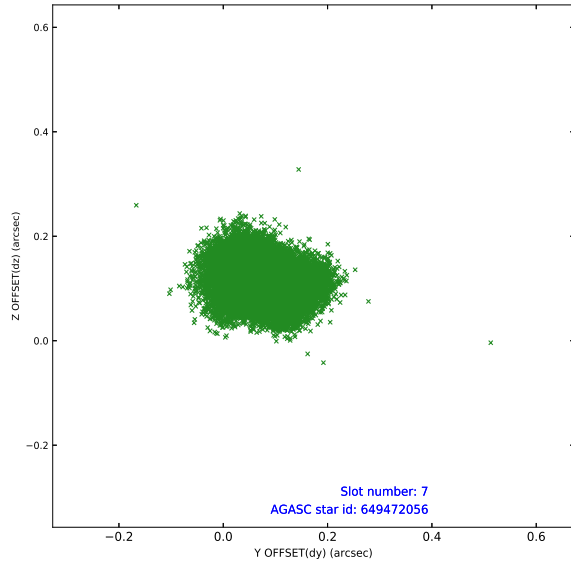
## 2.4.4 Slot 6



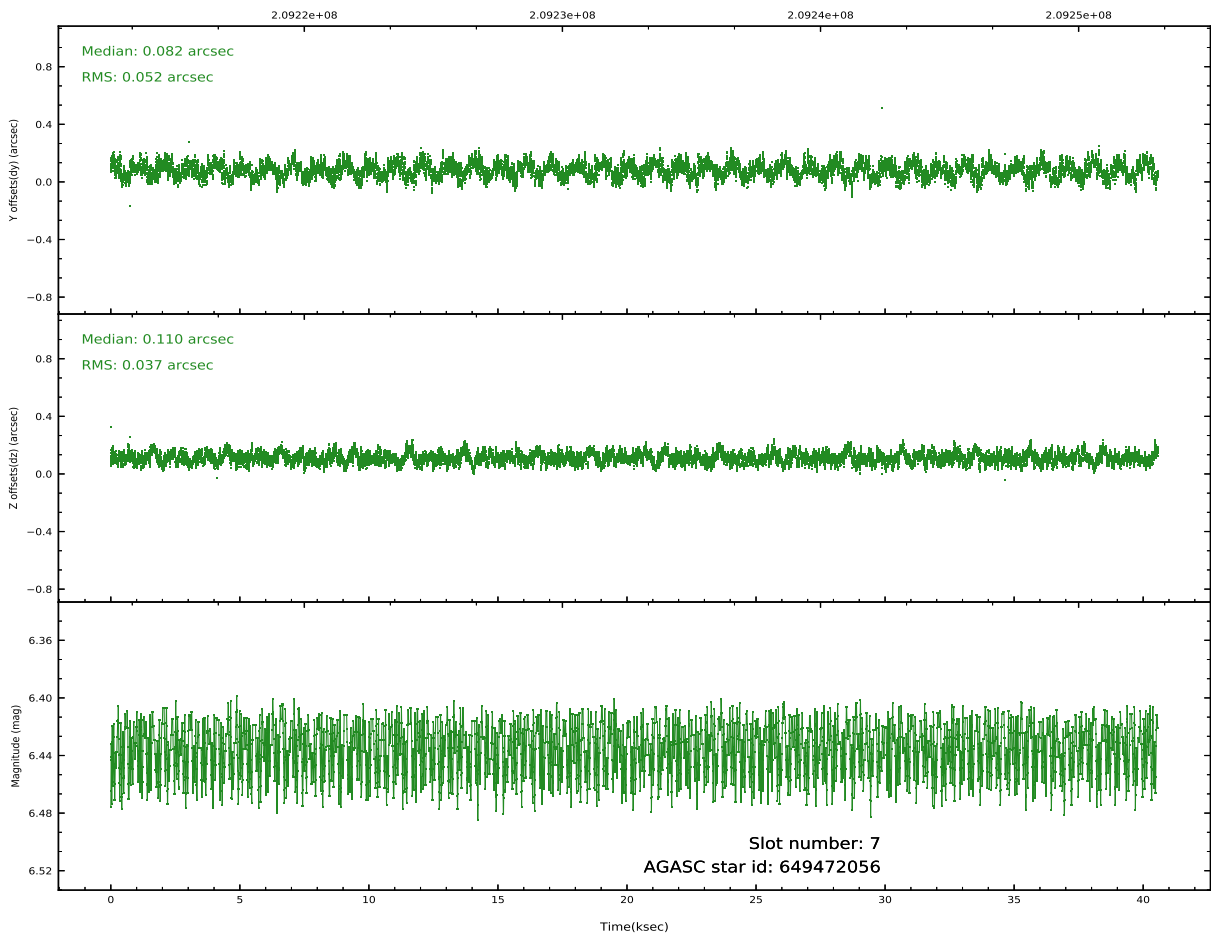
Time (s)



## 2.4.5 Slot 7

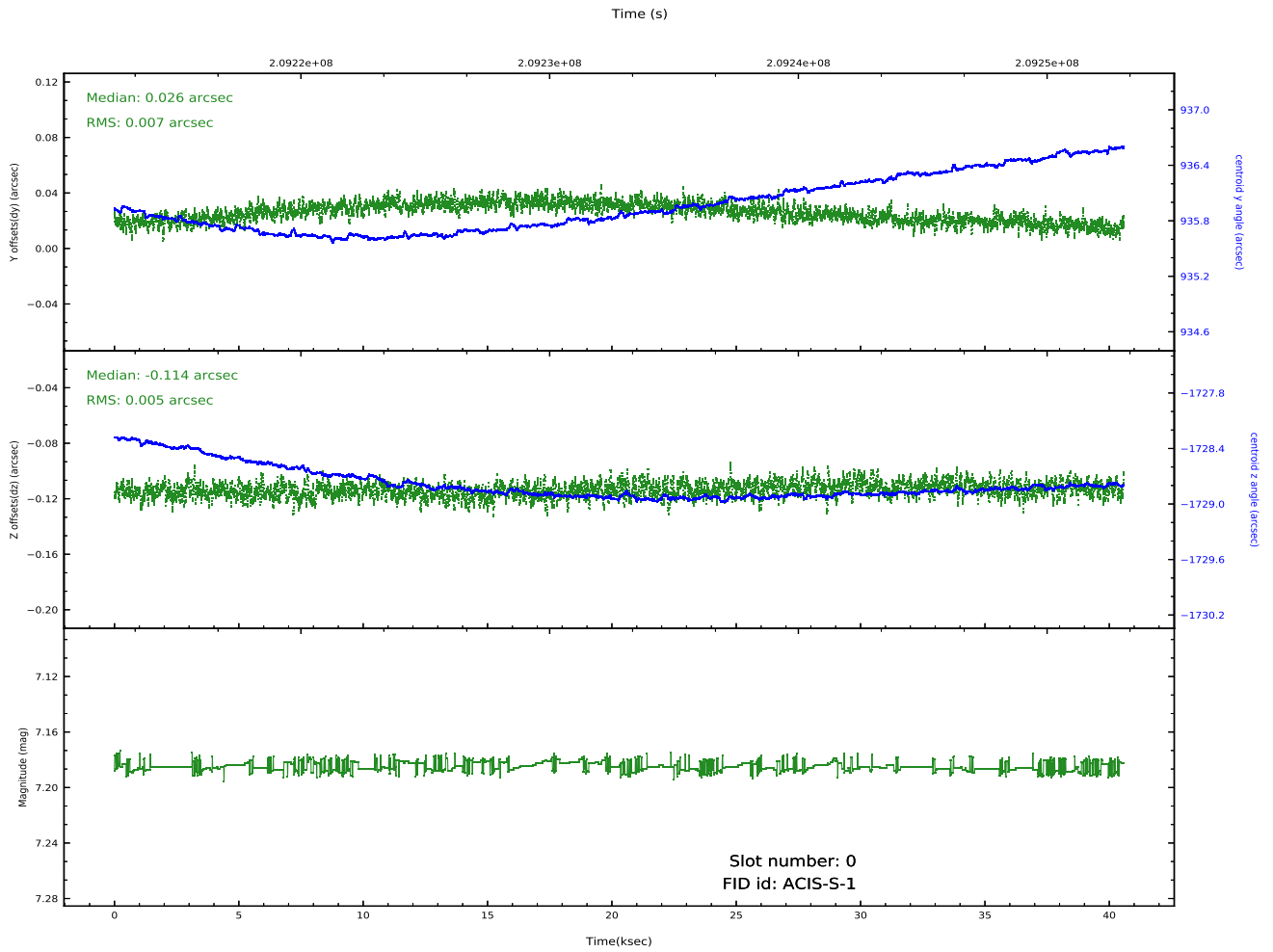
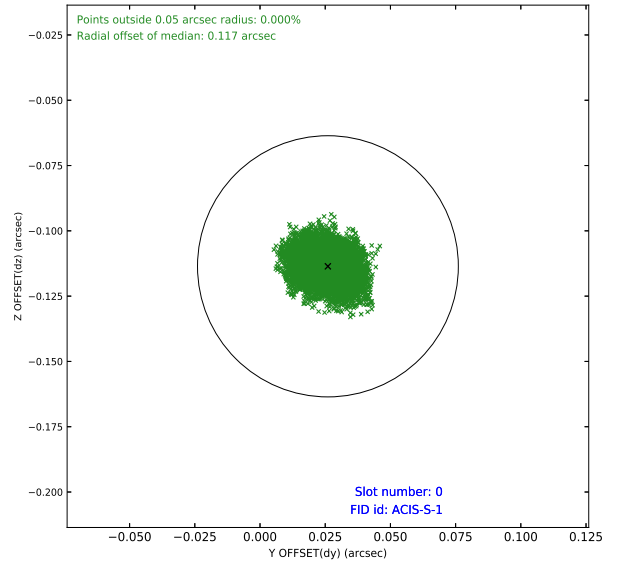
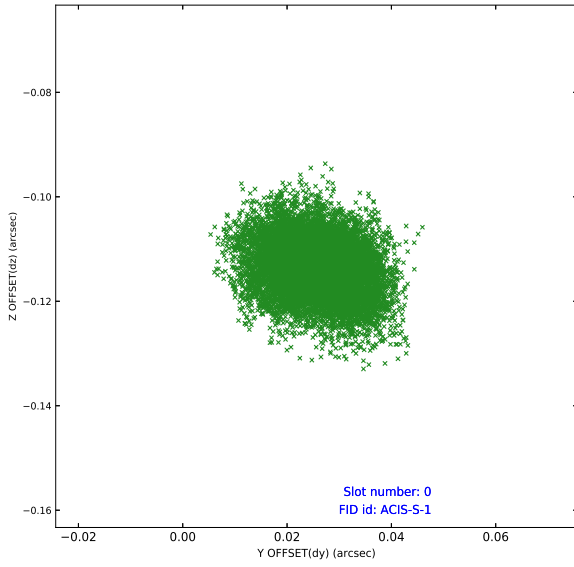


Time (s)

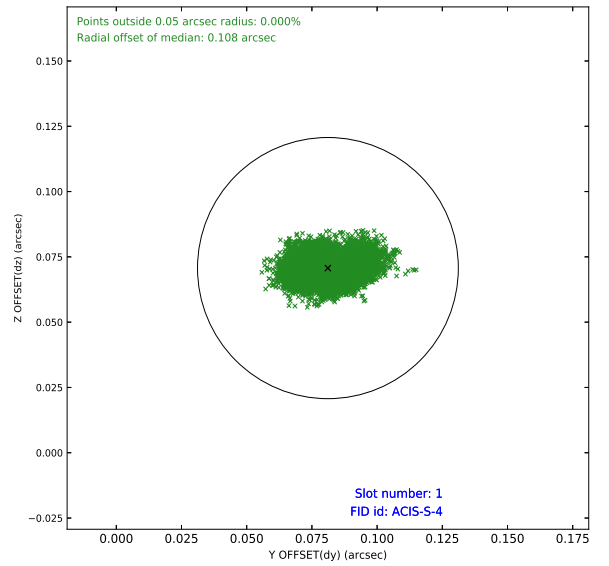
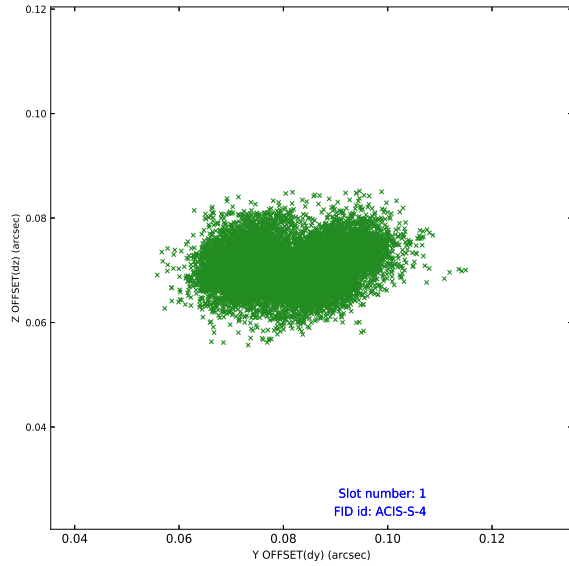


## 2.5 FID Slots

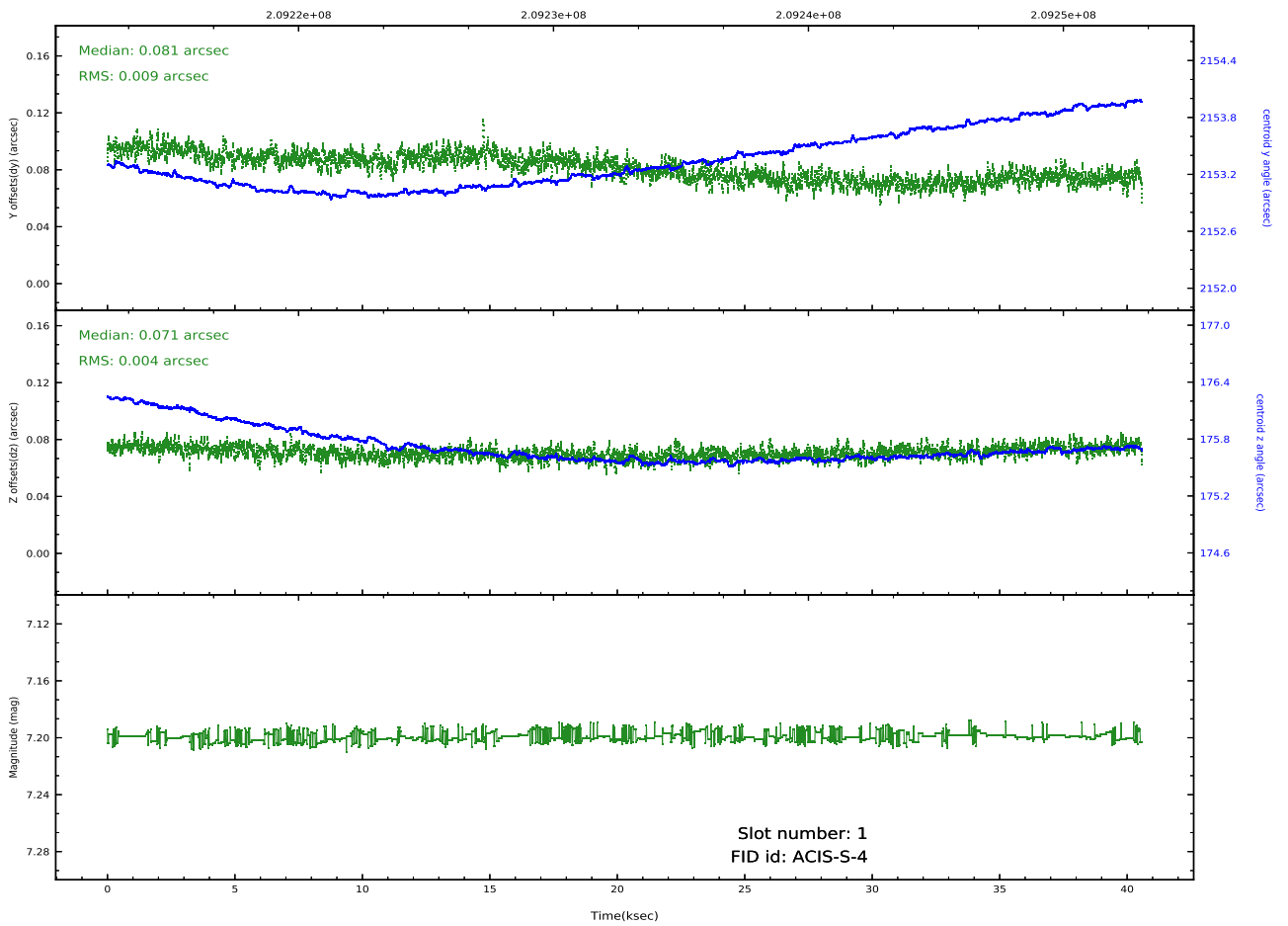
### 2.5.1 Slot 0



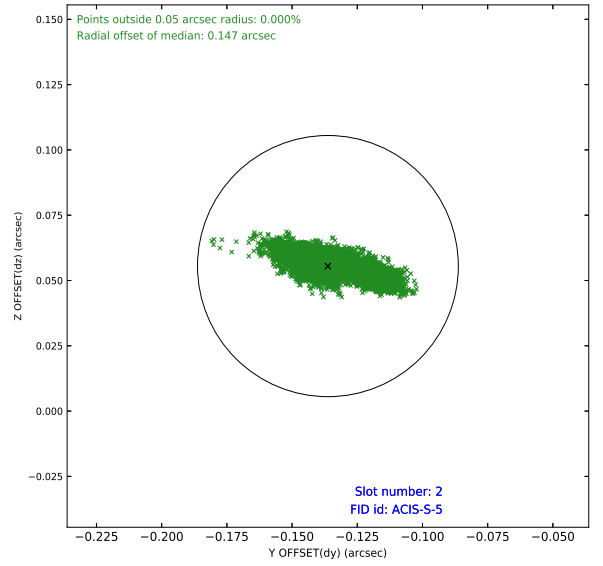
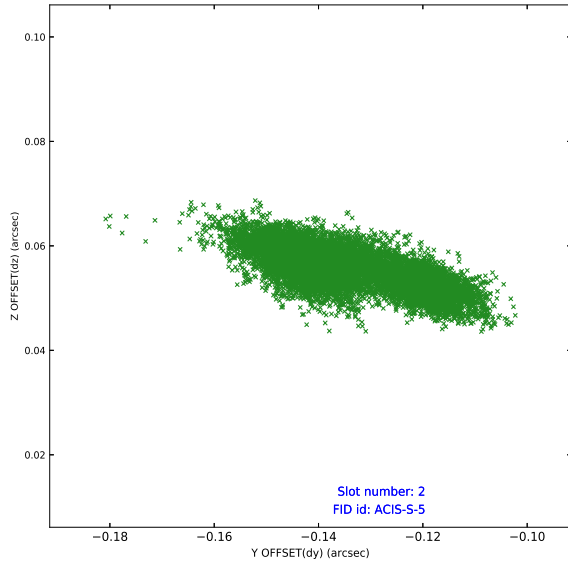
## 2.5.2 Slot 1



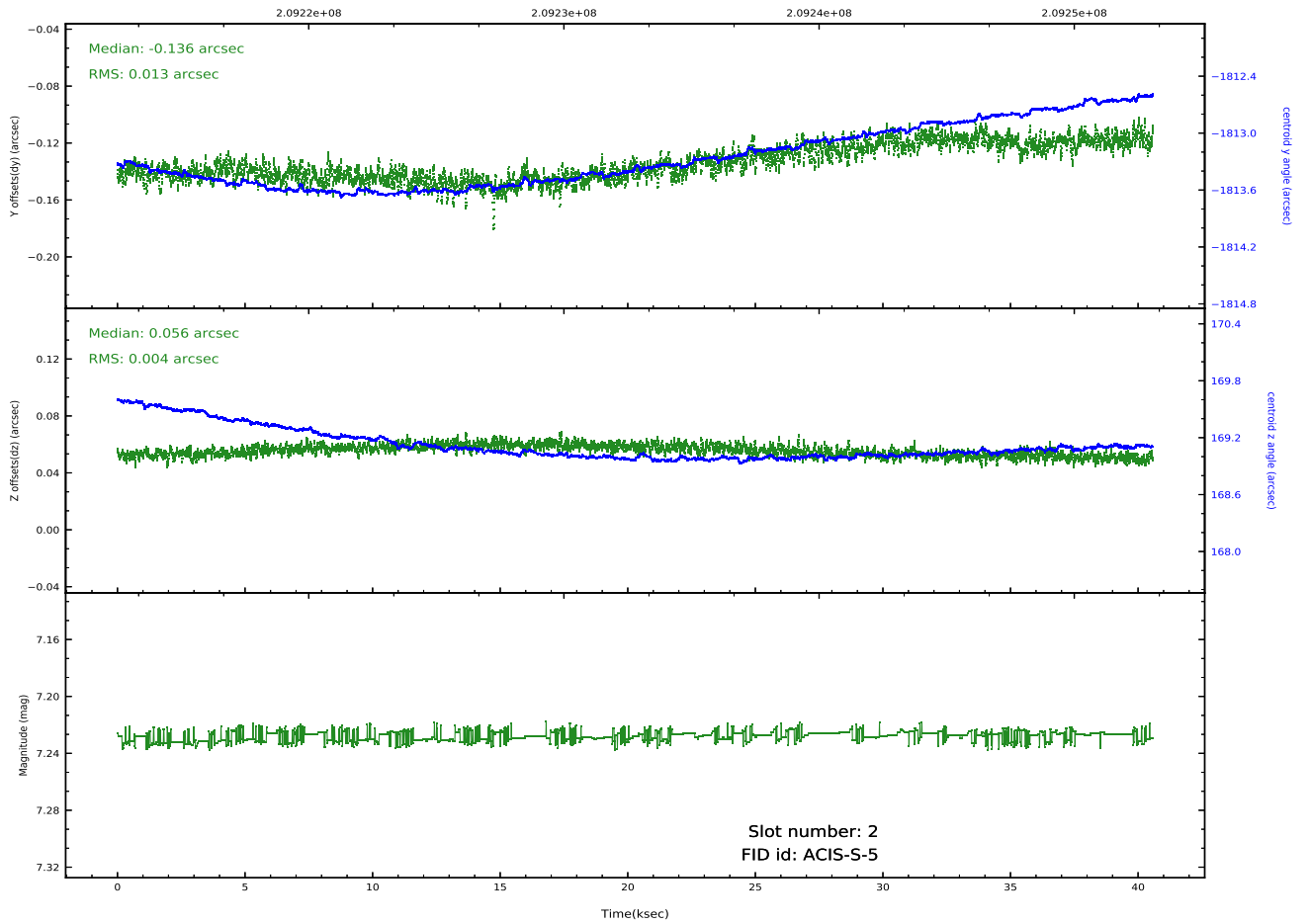
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.09.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.575

## A.2 Comments

Window preference not met. Joint Proposal: HST