

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4665 - L2 Version 4  
Chandra X-Ray Center

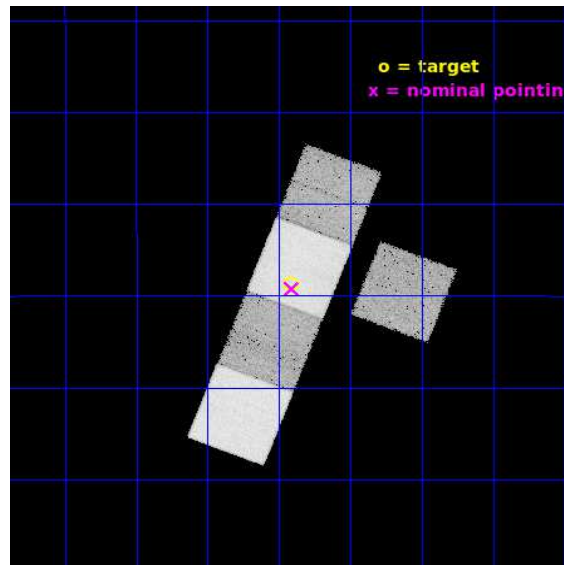
L2 Processing Date : Oct 2 2020

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# 1 Front

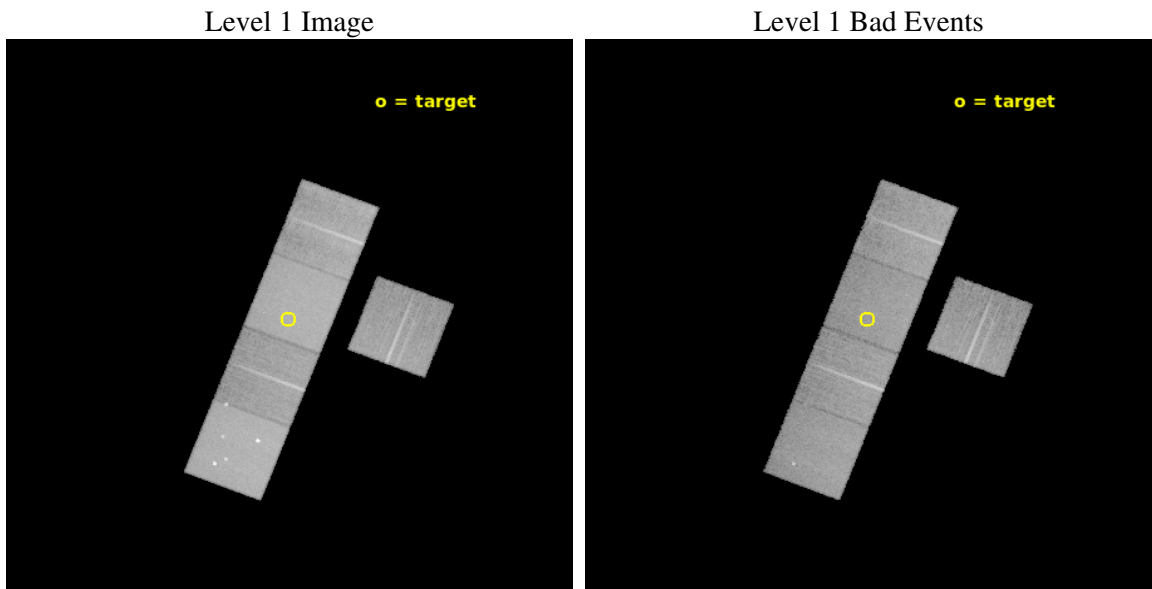
seq_num	500484	Sequence number
obs_id	4665	Observation id
title	The Energetics and Host Galaxies of X-Ray Flashes	Proposal title
observer	Prof. Derek Fox	Principal investigator
object	XRF040916	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	345.229583	Observer's specified target RA [deg]
dec_targ	-5.645278	Observer's specified target Dec [deg]
ra_nom	345.22759136944	Nominal RA [deg]
dec_nom	-5.6537091904781	Nominal Dec [deg]
roll_nom	291.16503241808	Nominal Roll [deg]
revision	4	Processing version of data
ontime	18984.399963468	Sum of GTIs [s]
livetime	18736.354801834	Livetime [s]
ontime3	18981.258963346	Sum of GTIs [s]
ontime5	18984.399963468	Sum of GTIs [s]
ontime6	18984.399963468	Sum of GTIs [s]
ontime7	18984.399963468	Sum of GTIs [s]
ontime8	18981.258963317	Sum of GTIs [s]
l2events	289622	Number of level 2 events



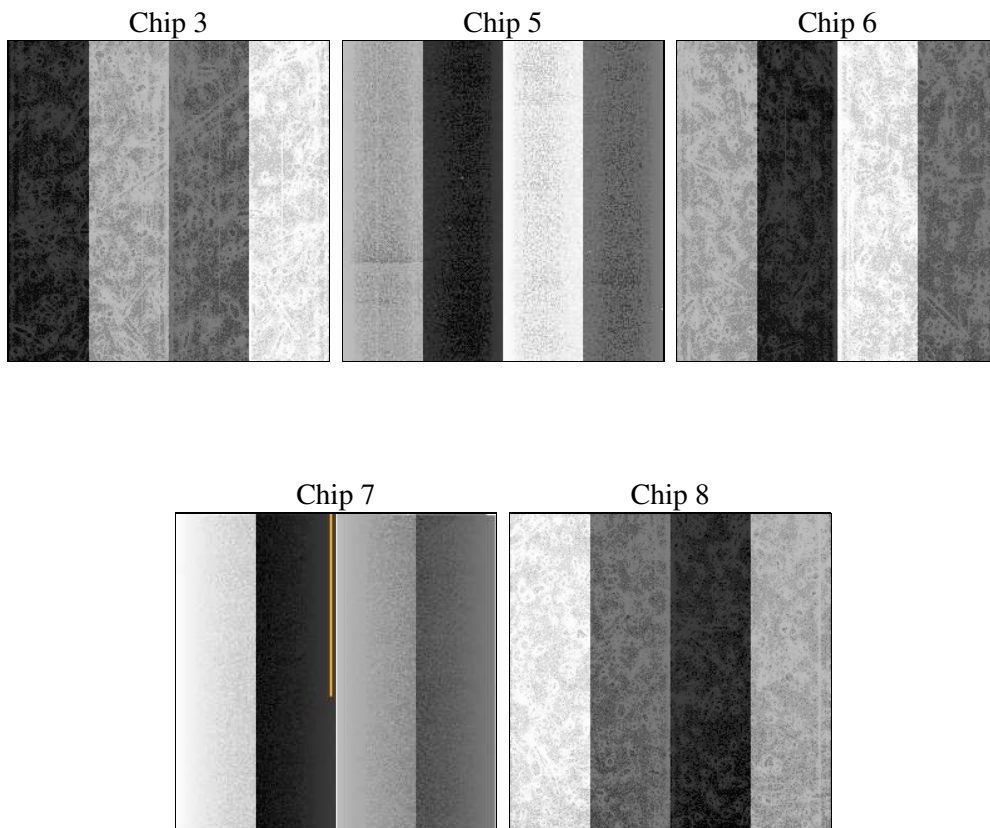
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18843.752000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	18984.399963468	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime3	18981.258963346	Sum of GTIs [s]
date	2020-10-02T10:32:39	Date and time of file creation	ontime5	18984.399963468	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	18984.399963468	Sum of GTIs [s]
			ontime7	18984.399963468	Sum of GTIs [s]
			ontime8	18981.258963317	Sum of GTIs [s]
			l1events	983474	Number of level 1 events

### 2.1.4 Events

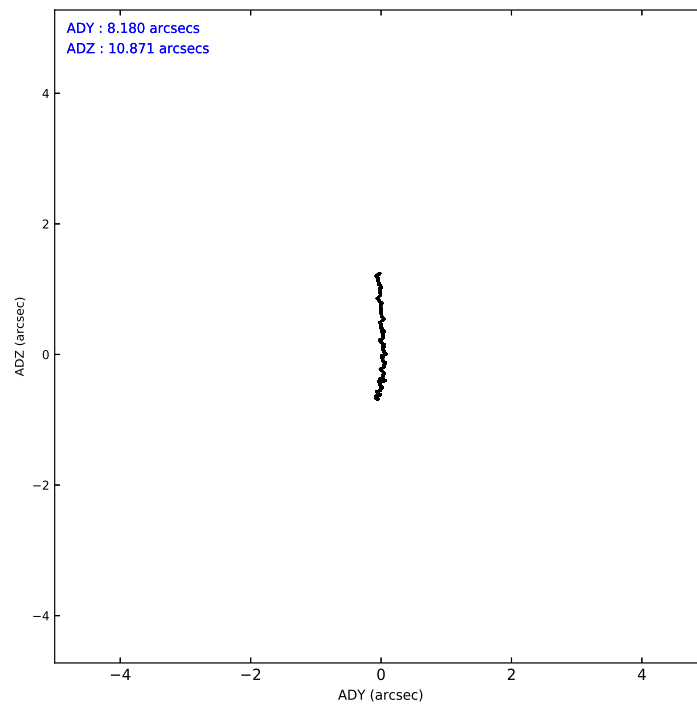
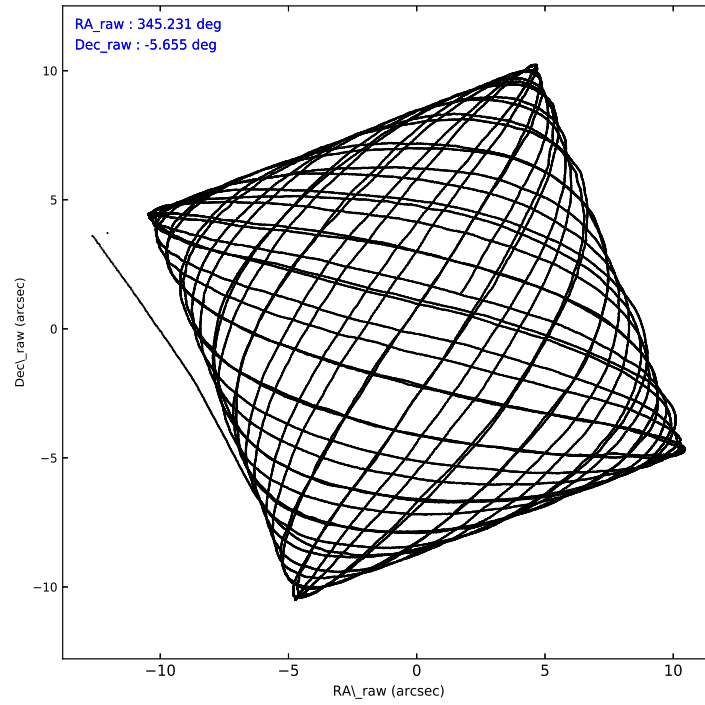
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	147596	258931	153653	230930	192364
rejected events	126933	126641	130622	119239	148021
rejected %	86%	48%	85%	51%	76%

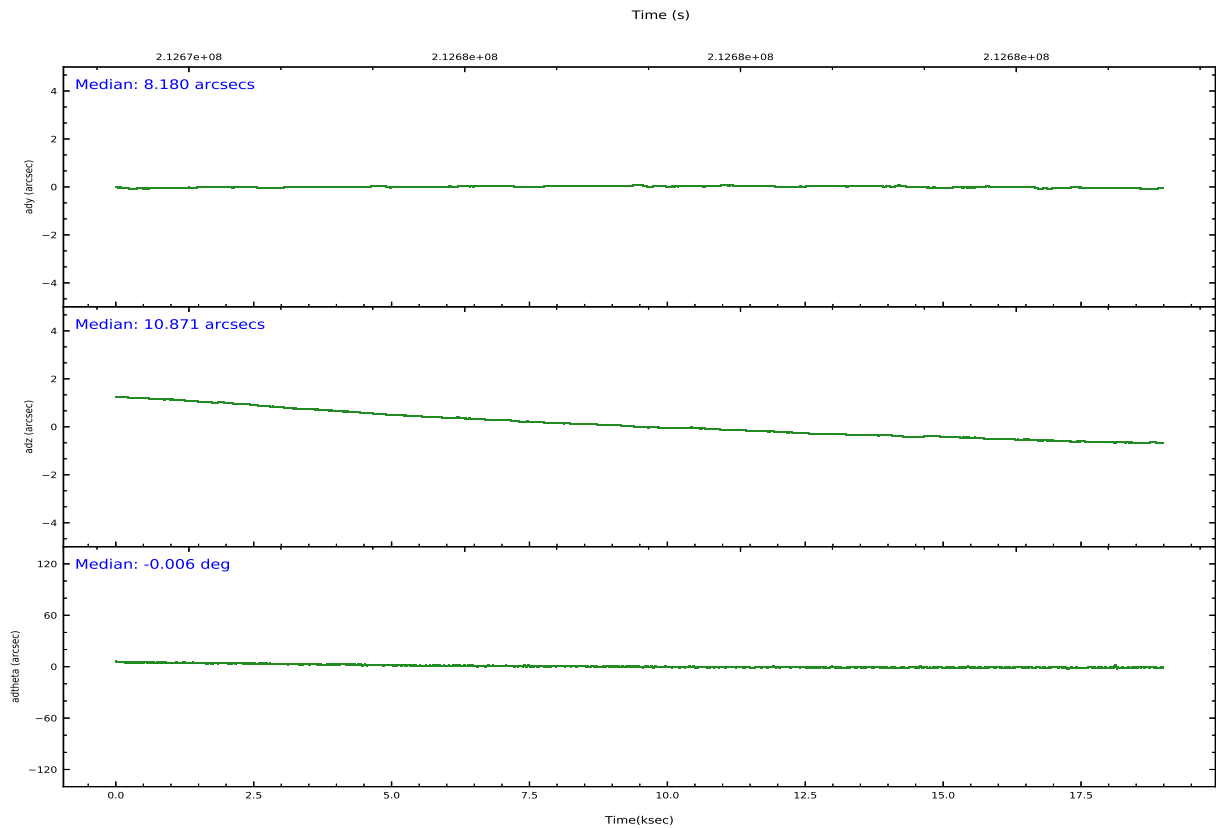
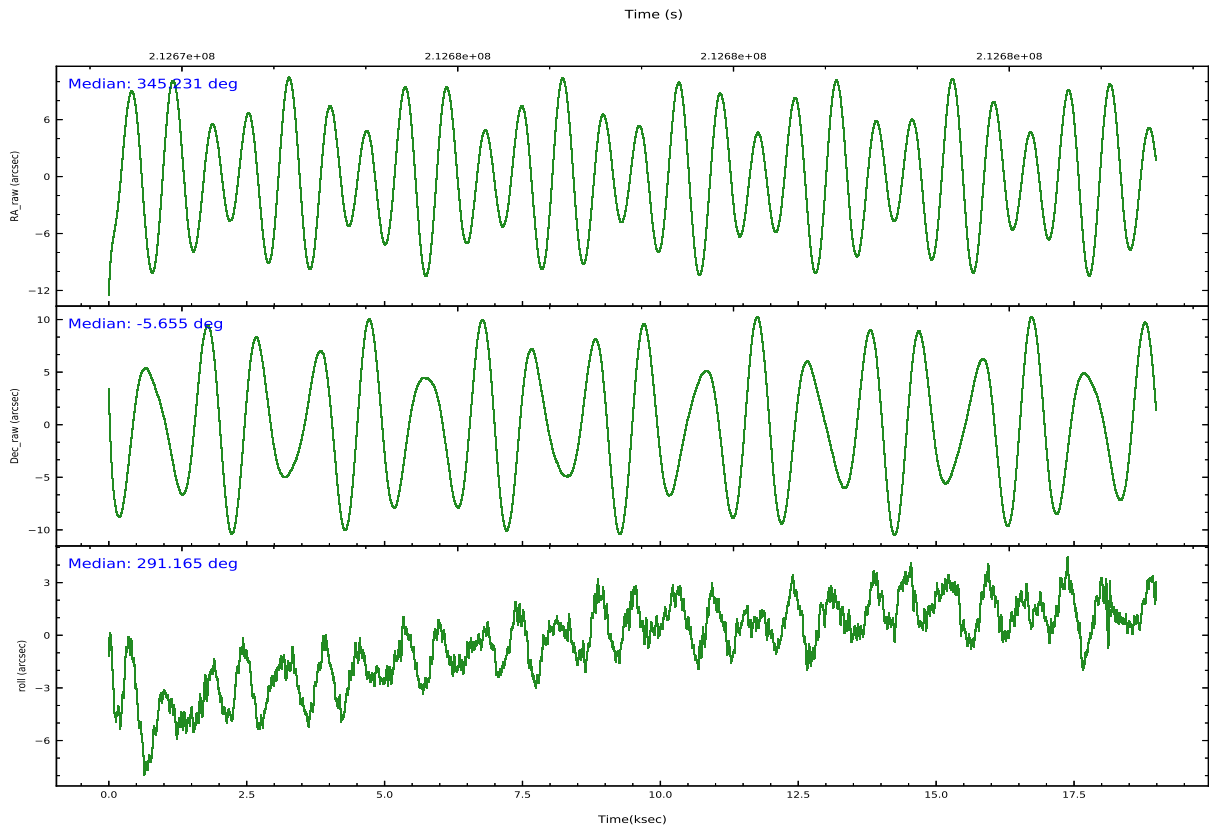
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	10817	18842	11942	10528	17026
	7%	7%	7%	4%	8%
grade 1 events	97	420	89	198	152
	0%	0%	0%	0%	0%
grade 2 events	3597	39338	4295	21399	9409
	2%	15%	2%	9%	4%
grade 3 events	1824	5813	1814	9500	4203
	1%	2%	1%	4%	2%
grade 4 events	1717	5436	1814	9416	3969
	1%	2%	1%	4%	2%
grade 5 events	6537	16802	6752	19092	8868
	4%	6%	4%	8%	4%
grade 6 events	3096	65378	3578	62794	10468
	2%	25%	2%	27%	5%
grade 7 events	119911	106902	123369	98003	138269
	81%	41%	80%	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	345.209905	345.22759136944	Subarray requested	NONE	NONE
[deg] Pointing Dec	-5.637986	-5.6537091904781	Alternating exposures requested	N	N
[deg] Pointing Roll	291.007122	291.16503241808	[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)	212668818.184000	212667608.3165			
Observation start date	2004-09-27T10:39:14	2004-09-27T10:20:08			
[s] Observation end time (MET)	212687662.184000	212687888.96741			
Observation end date	2004-09-27T15:53:18	2004-09-27T15:58:08			
Read mode	TIMED	TIMED			

## 2.3 Aspect





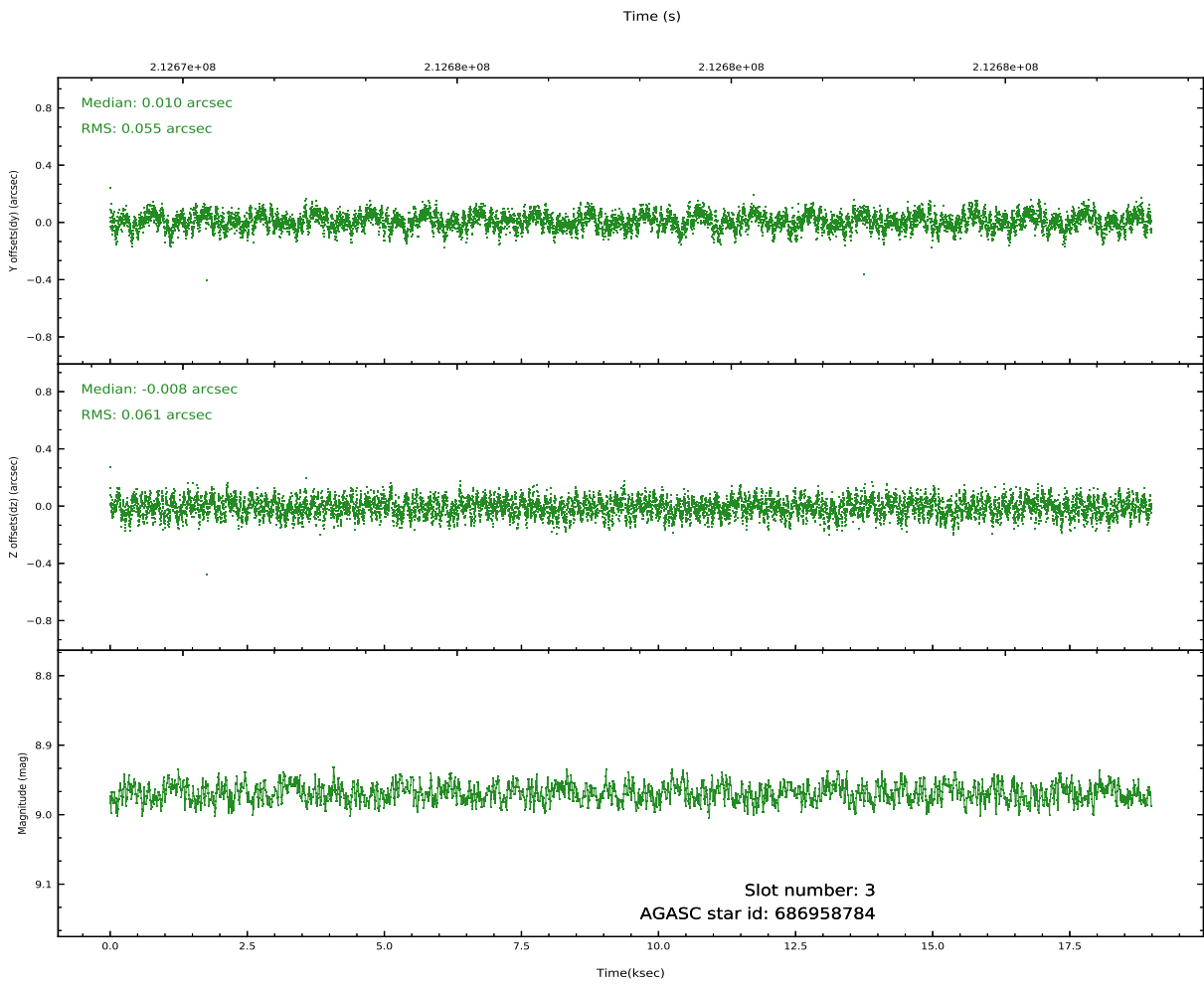
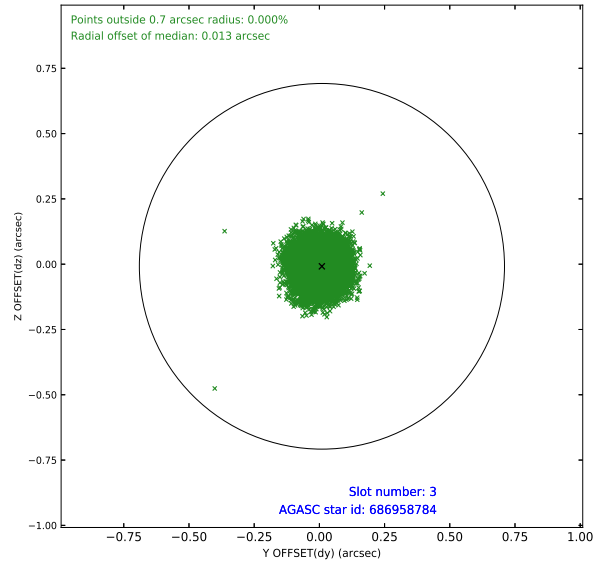
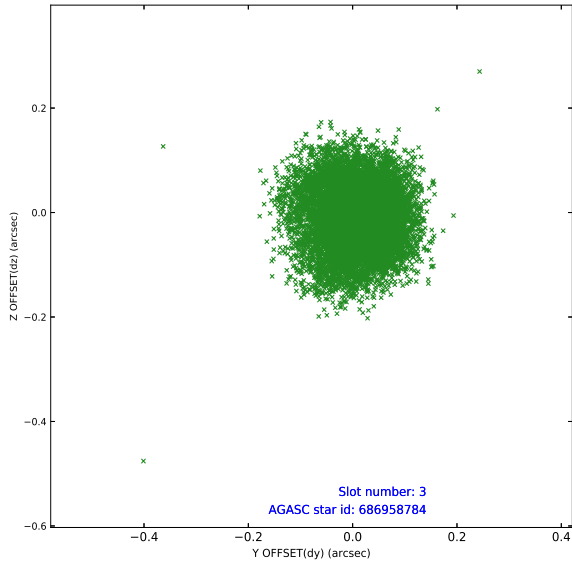
### Slot Statistics

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	4632	1.000	0.015	-0.097	0.023	0.033	0.000000	0.000000	935.11	-1727
1	FID		ACIS-S-4	7.20	4632	1.000	0.126	0.062	0.014	0.022	0.000000	0.000000	2152.71	176
2	FID		ACIS-S-5	7.23	4631	1.000	-0.168	0.044	0.012	0.019	0.000000	0.000000	-1813.71	169
3	GUIDE	used	686958784	8.97	9259	1.000	0.010	-0.008	0.089	0.138	344.467722	-5.536527	-1292.15	-2352
4	GUIDE	used	686959336	7.61	9259	1.000	0.001	-0.055	0.057	0.093	344.648349	-5.673907	-599.22	-1924
5	GUIDE	used	687477712	8.89	9260	1.000	-0.077	0.054	0.080	0.128	345.588655	-4.951575	-1819.67	2153
6	GUIDE	used	687868160	7.78	9262	1.000	0.128	-0.062	0.058	0.090	345.476220	-5.966283	1445.64	467
7	GUIDE	used	687870736	8.58	9258	1.000	-0.064	0.079	0.070	0.109	345.435859	-5.326304	-756.79	1158

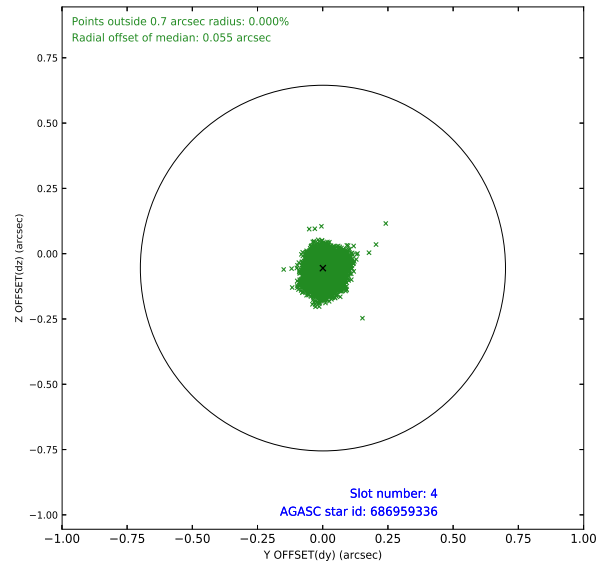
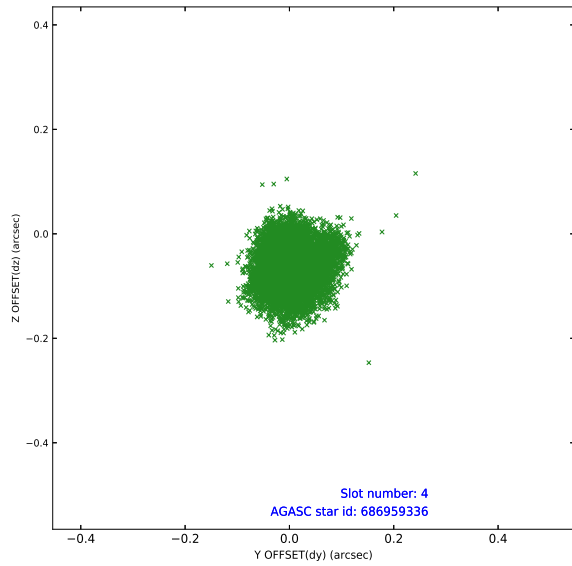
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## 2.4 Star Slots

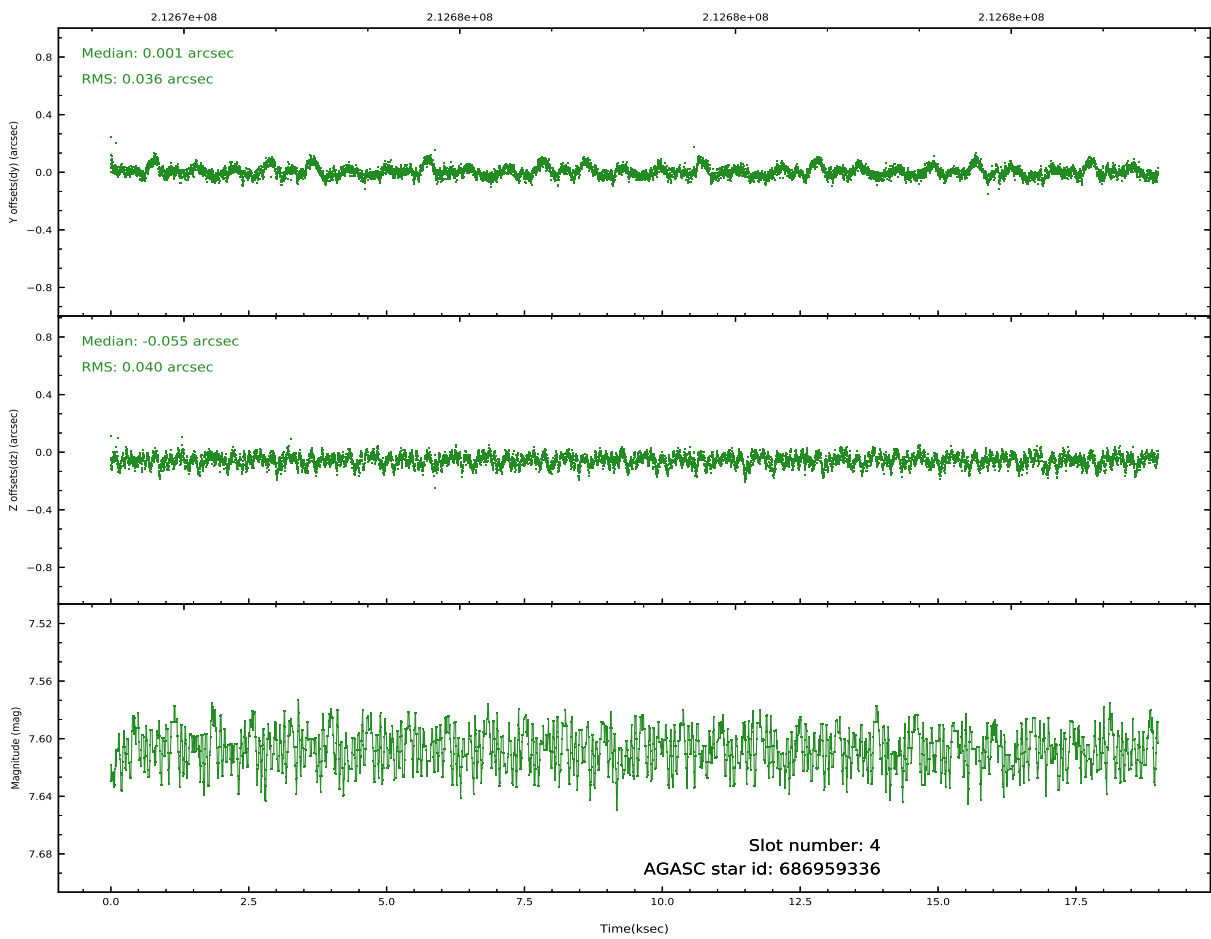
### 2.4.1 Slot 3



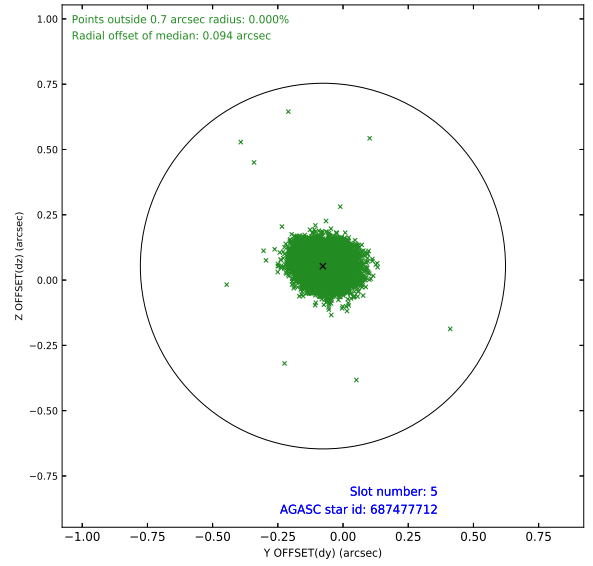
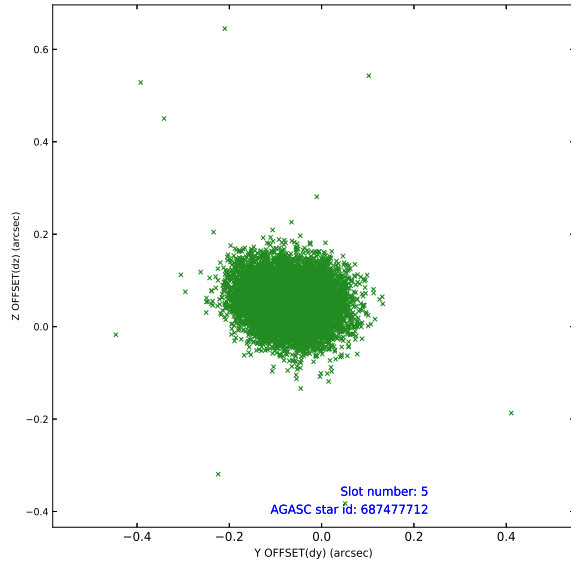
## 2.4.2 Slot 4



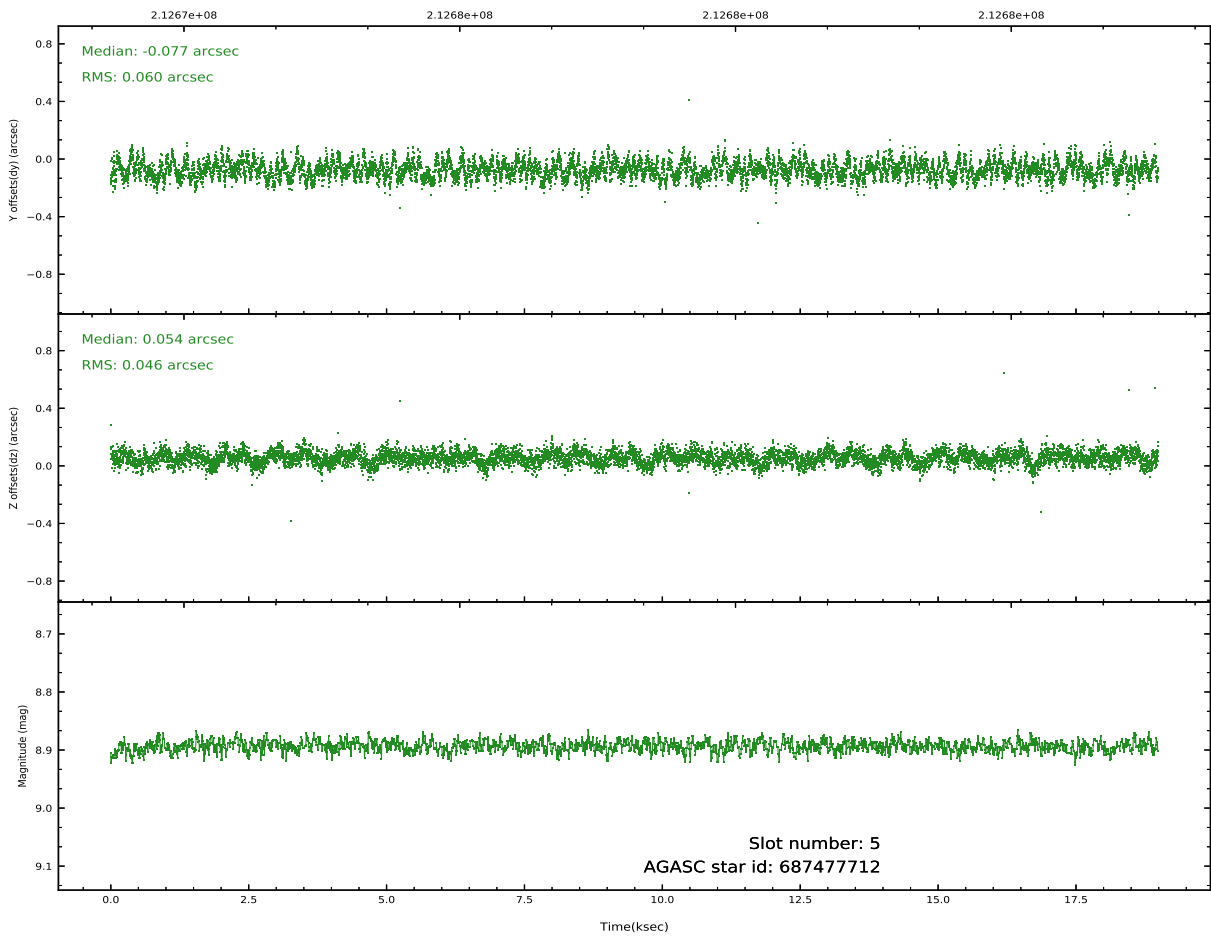
Time (s)



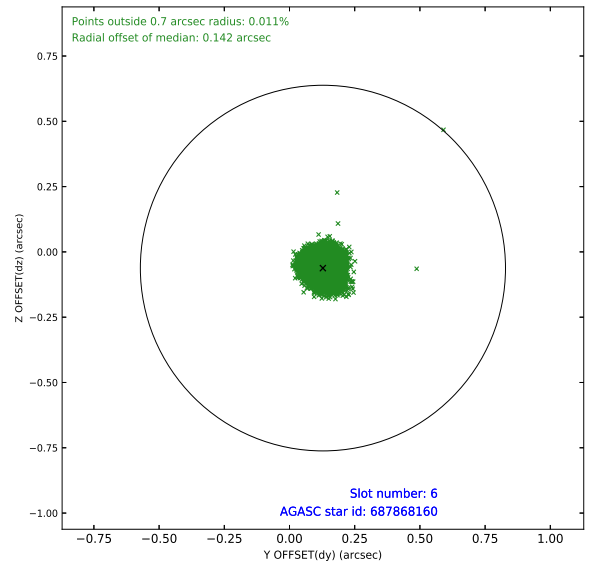
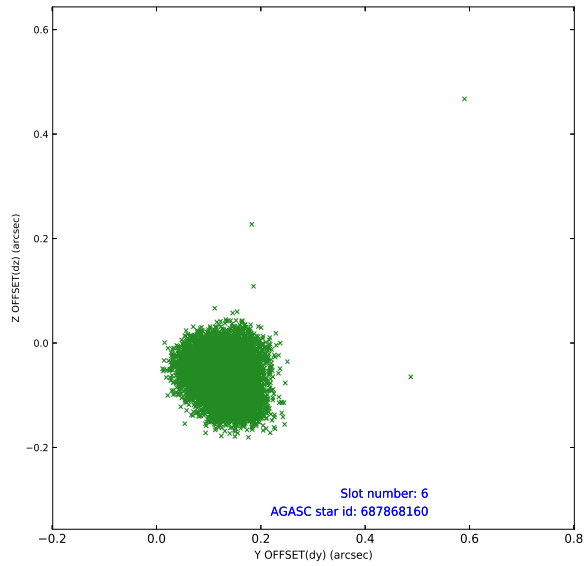
### 2.4.3 Slot 5



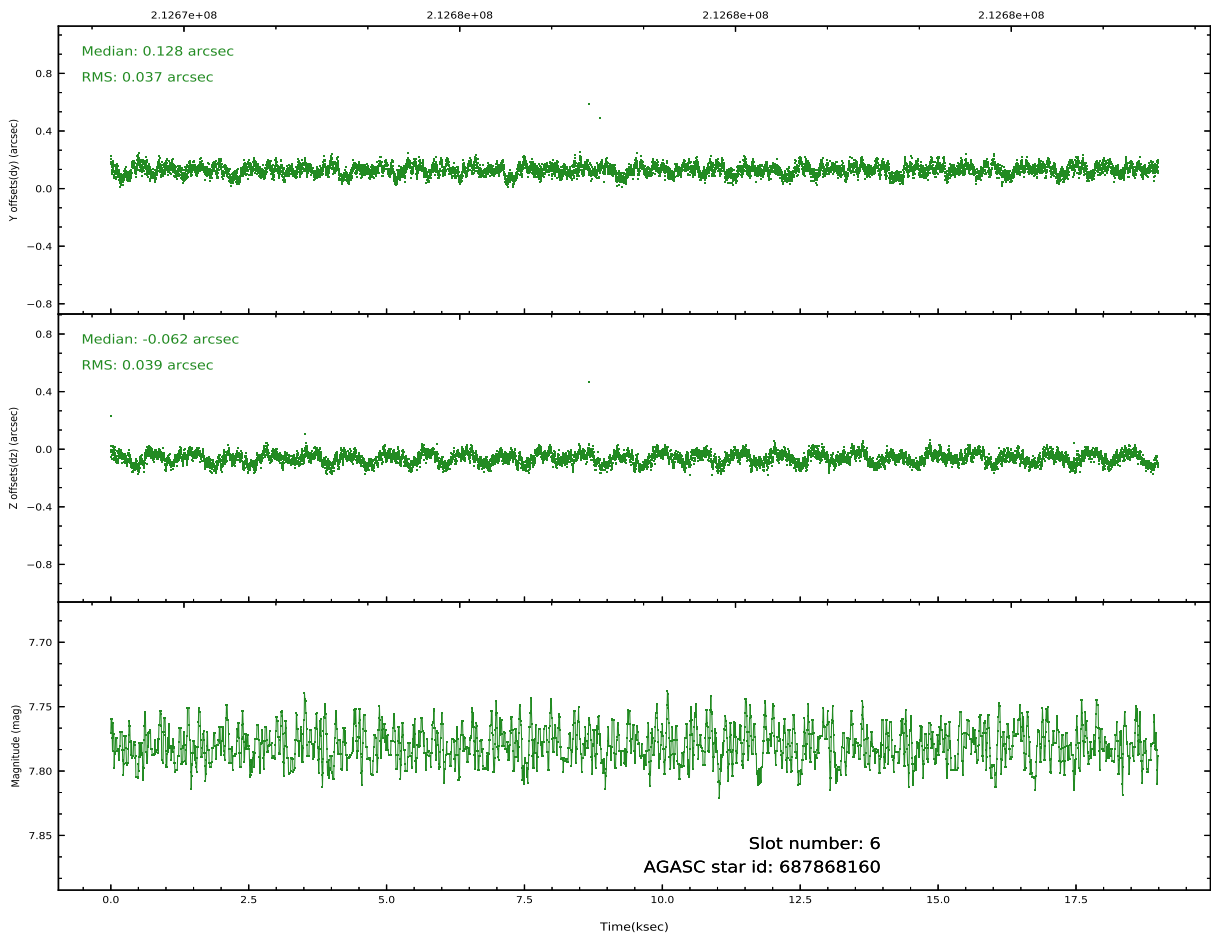
Time (s)



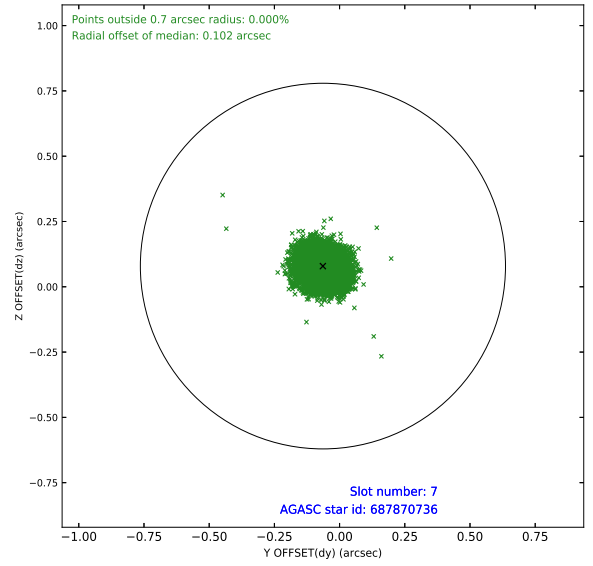
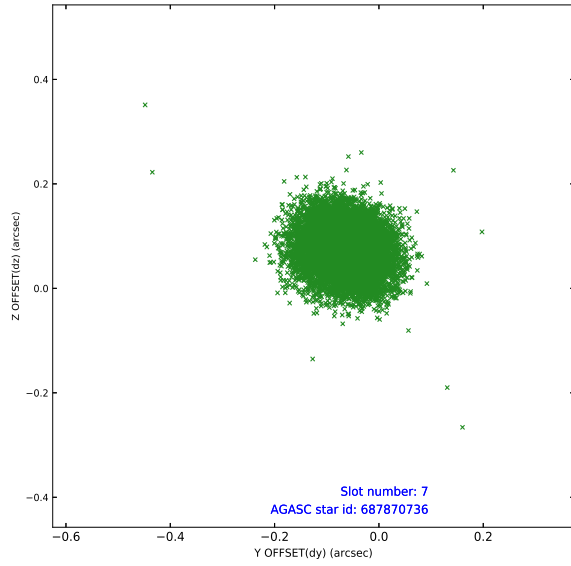
## 2.4.4 Slot 6



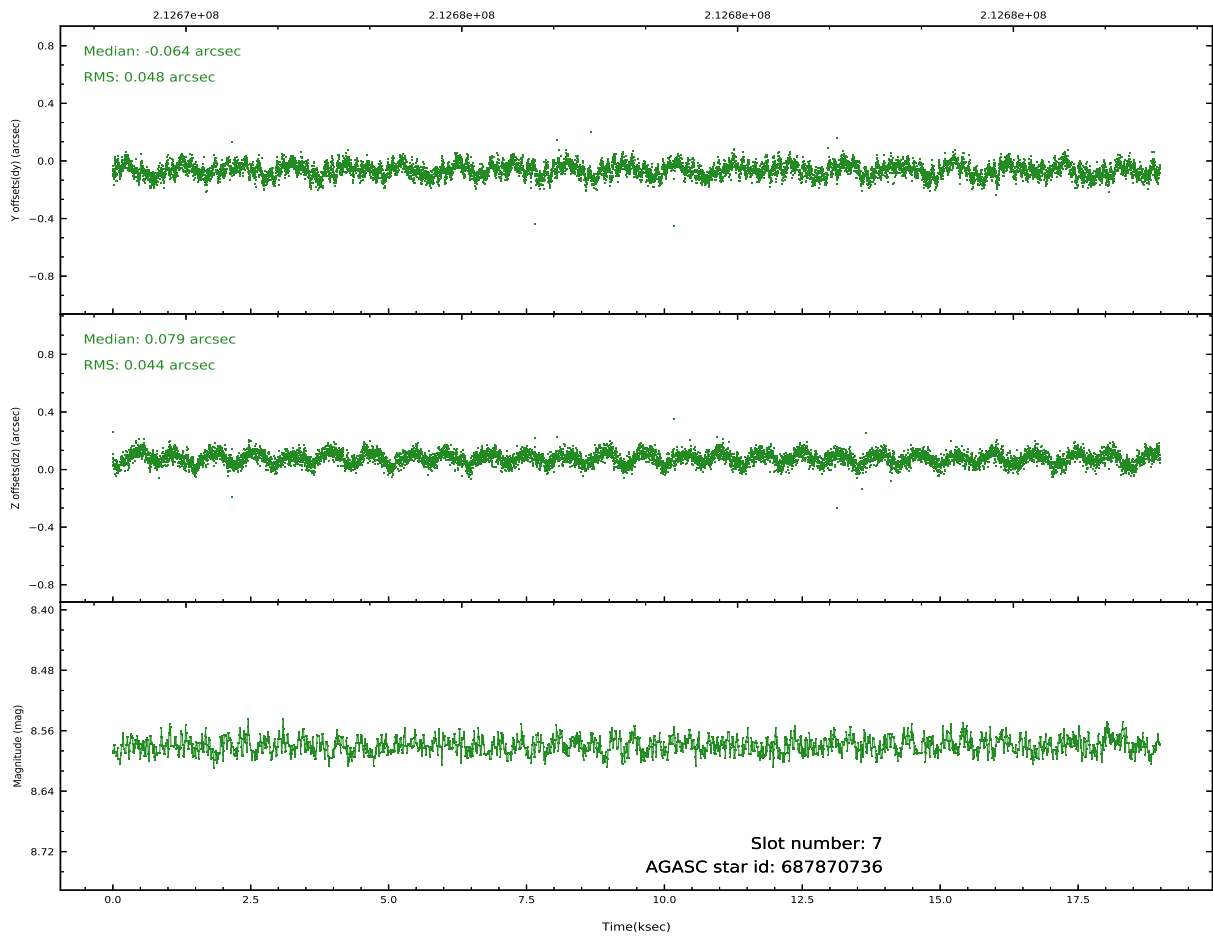
Time (s)



## 2.4.5 Slot 7

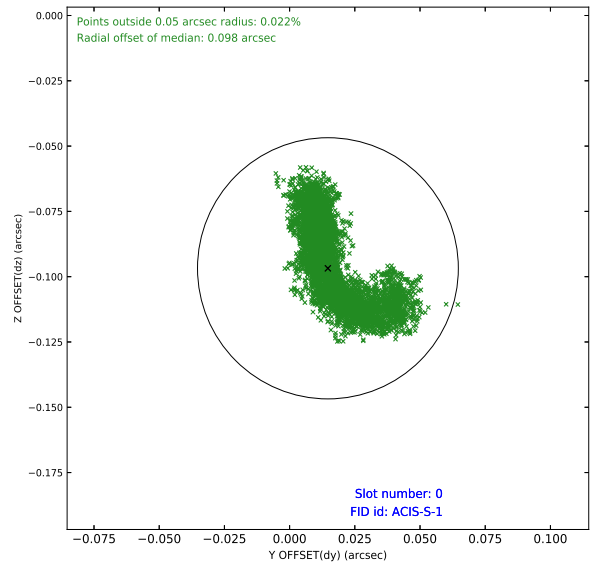
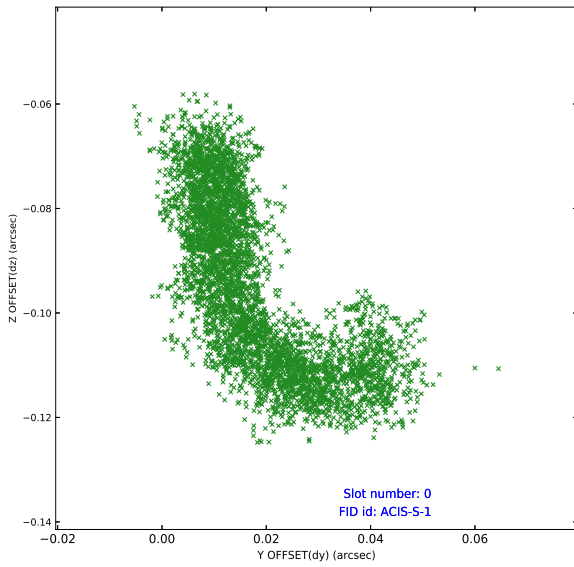


Time (s)

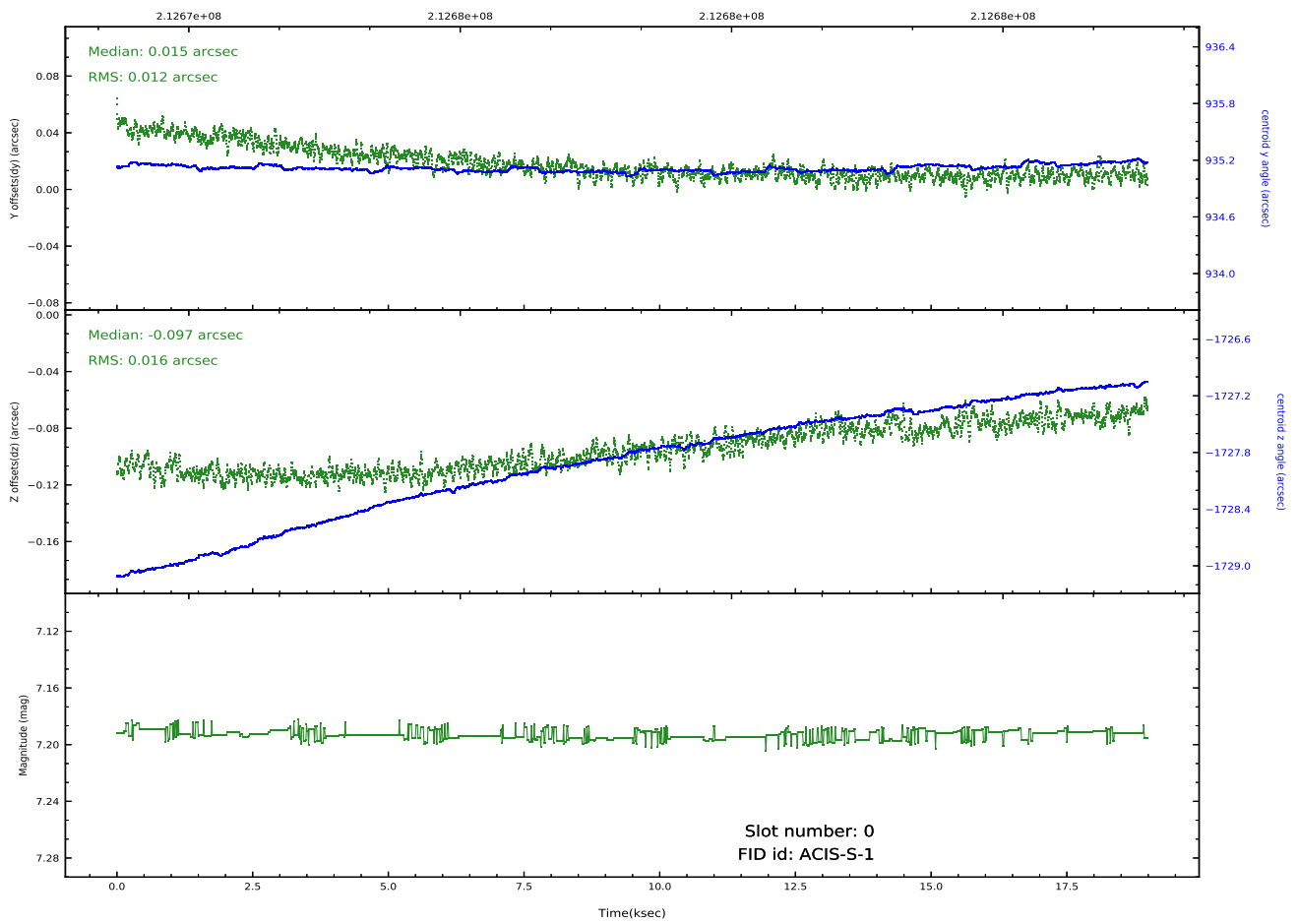


## 2.5 FID Slots

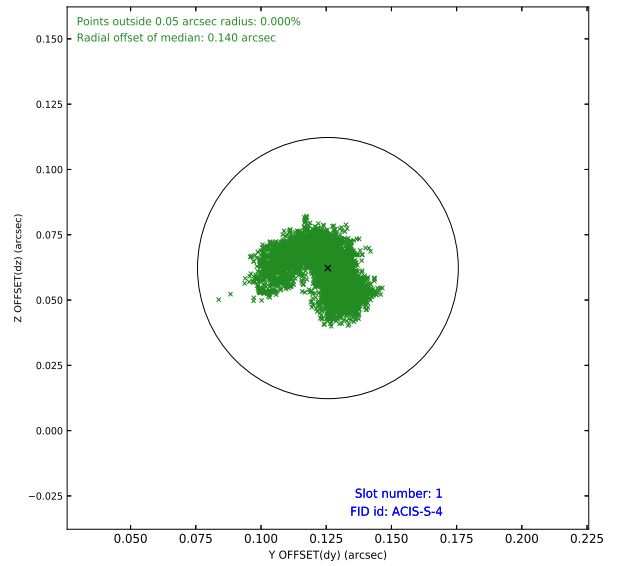
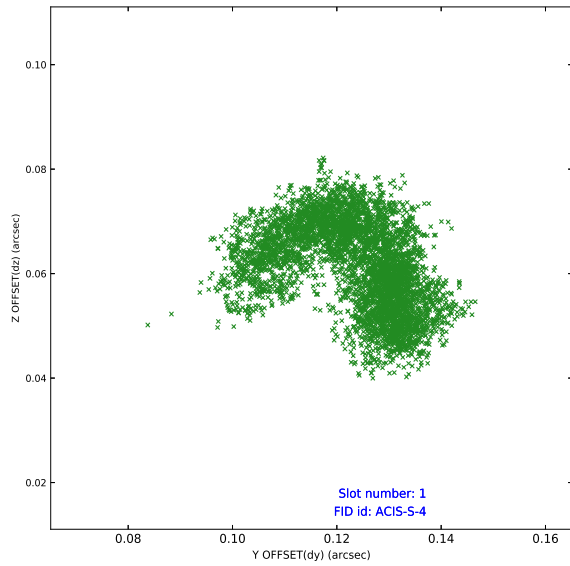
### 2.5.1 Slot 0



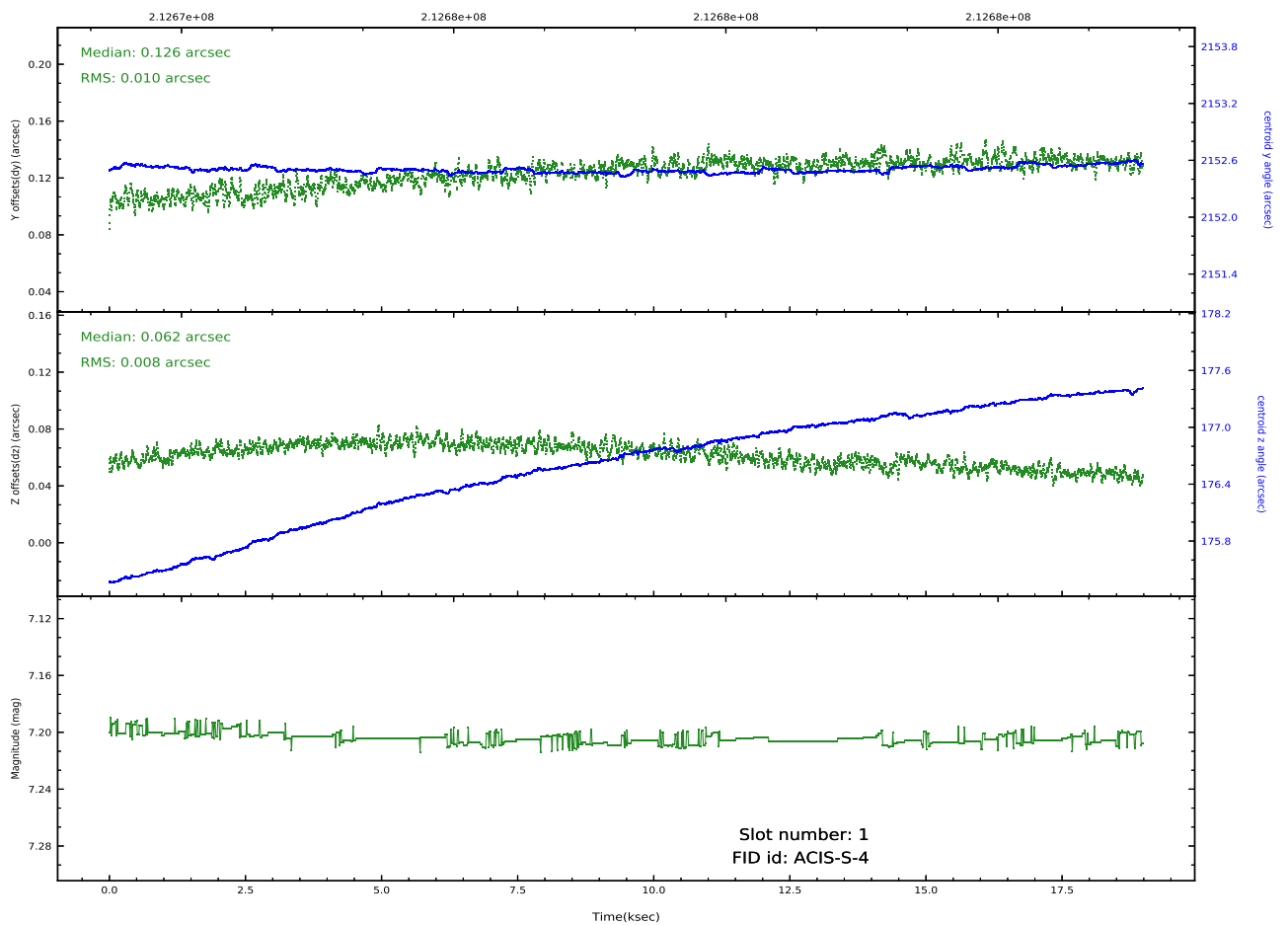
Time (s)



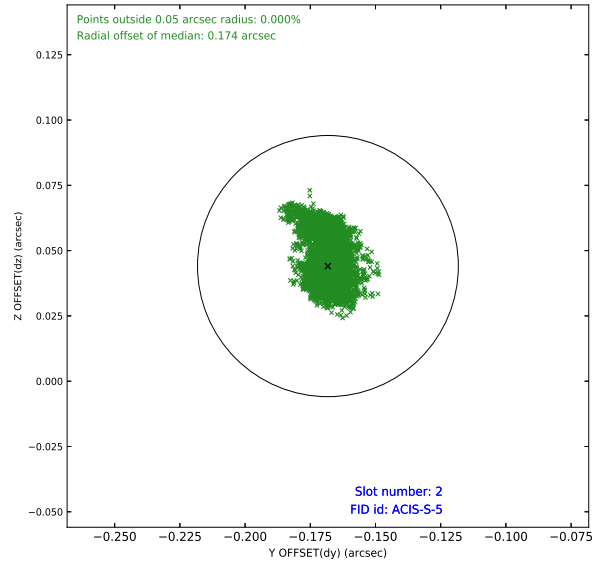
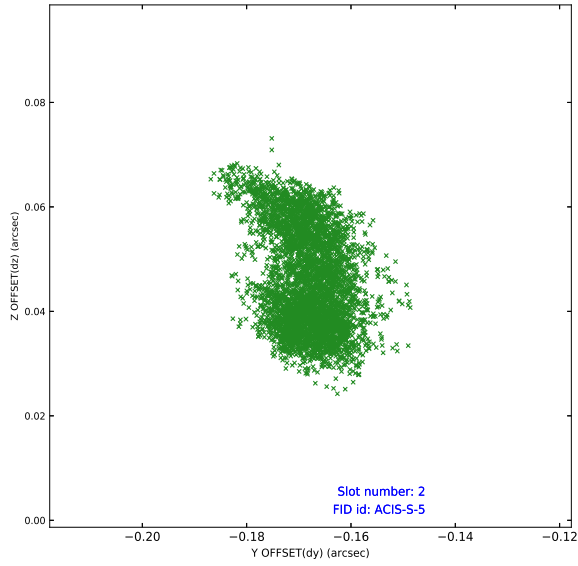
## 2.5.2 Slot 1



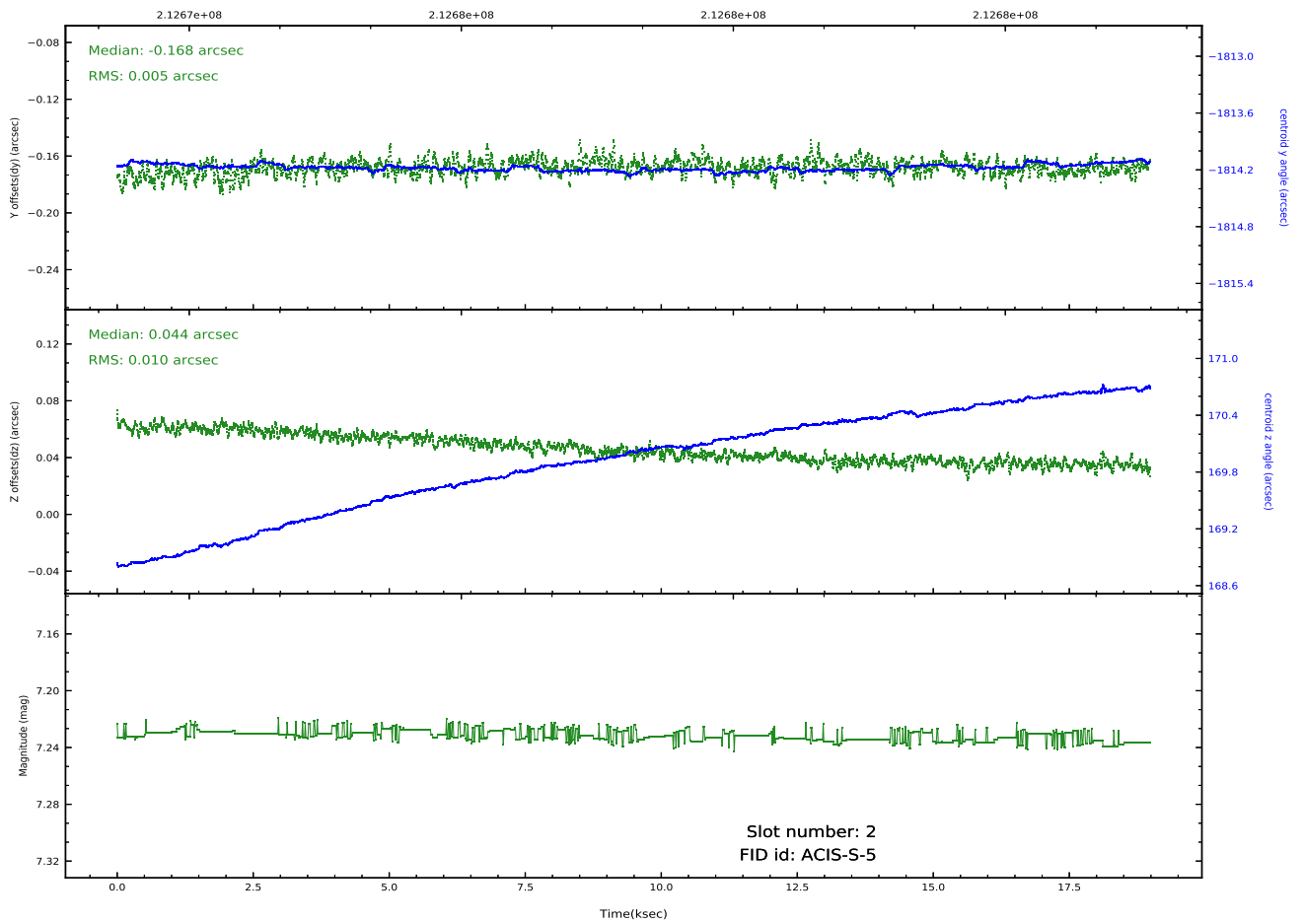
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.984

## A.2 Comments