

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4941 - L2 Version 4  
Chandra X-Ray Center

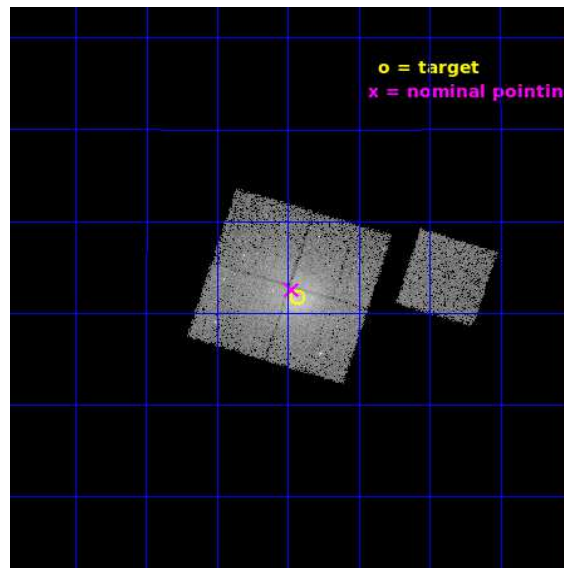
L2 Processing Date : Sep 25 2020

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# 1 Front

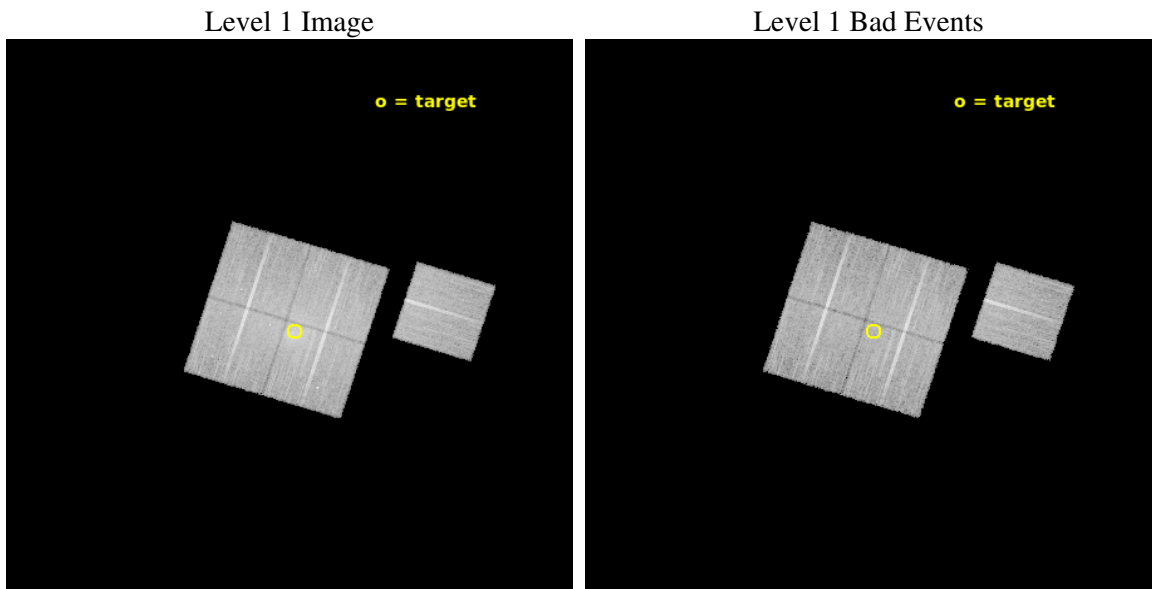
seq_num	800392	Sequence number
obs_id	4941	Observation id
title	THE HIFLUGCS CLUSTER SURVEY: A CORNERSTONE FOR COSMOLOGY	Proposal
observer	Dr. Thomas Reiprich	Principal investigator
object	A2657	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	356.233333	Observer's specified target RA [deg]
dec_targ	9.195194	Observer's specified target Dec [deg]
ra_nom	356.24300193818	Nominal RA [deg]
dec_nom	9.2092260400255	Nominal Dec [deg]
roll_nom	107.53233369194	Nominal Roll [deg]
revision	4	Processing version of data
ontime	16361.564406842	Sum of GTIs [s]
livetime	16147.788522658	Livetime [s]
ontime0	16358.300316602	Sum of GTIs [s]
ontime1	16355.200386345	Sum of GTIs [s]
ontime2	16358.382396609	Sum of GTIs [s]
ontime3	16361.564406842	Sum of GTIs [s]
ontime6	16361.400246829	Sum of GTIs [s]
l2events	84412	Number of level 2 events



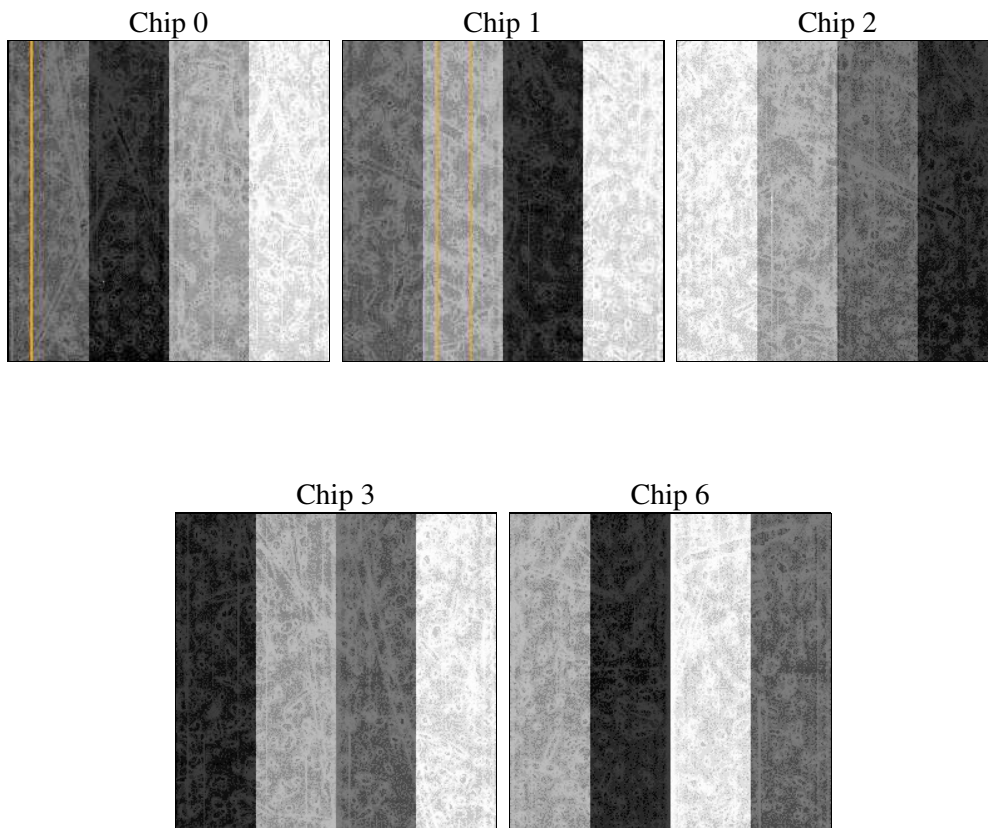
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16592.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	16361.564406842	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	16358.300316602	Sum of GTIs [s]
date	2020-09-26T02:43:31	Date and time of file creation	ontime1	16355.200386345	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	16358.382396609	Sum of GTIs [s]
			ontime3	16361.564406842	Sum of GTIs [s]
			ontime6	16361.400246829	Sum of GTIs [s]
			l1events	546839	Number of level 1 events

### 2.1.4 Events

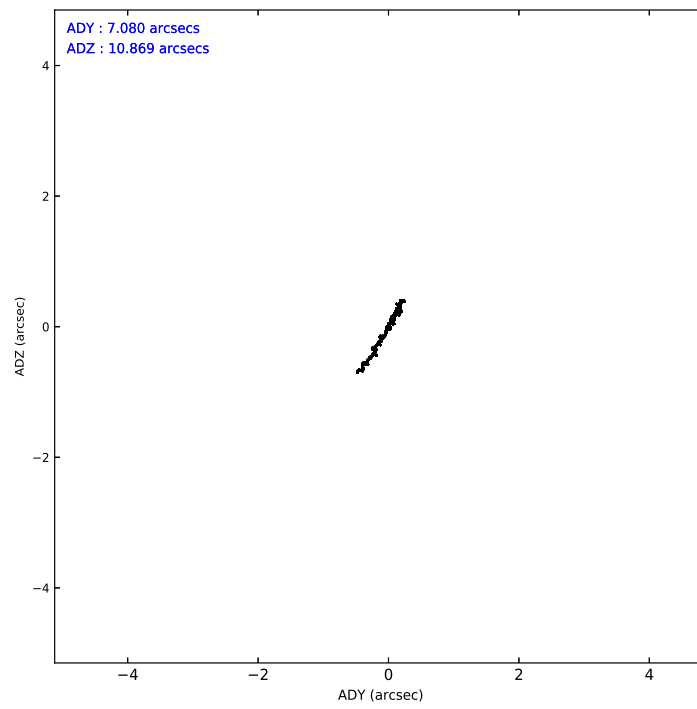
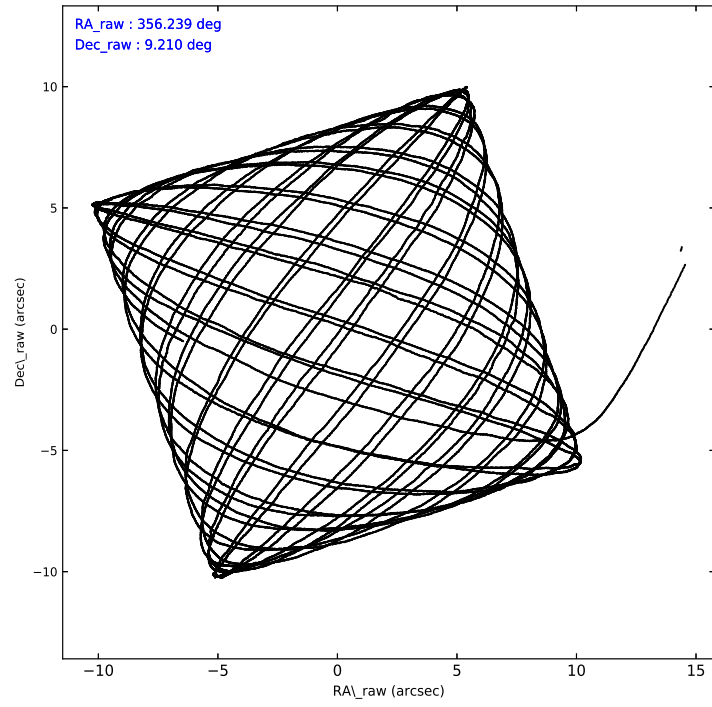
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	100192	108269	117140	120212	101026
rejected events	84182	87133	98001	91794	90454
rejected %	84%	80%	83%	76%	89%

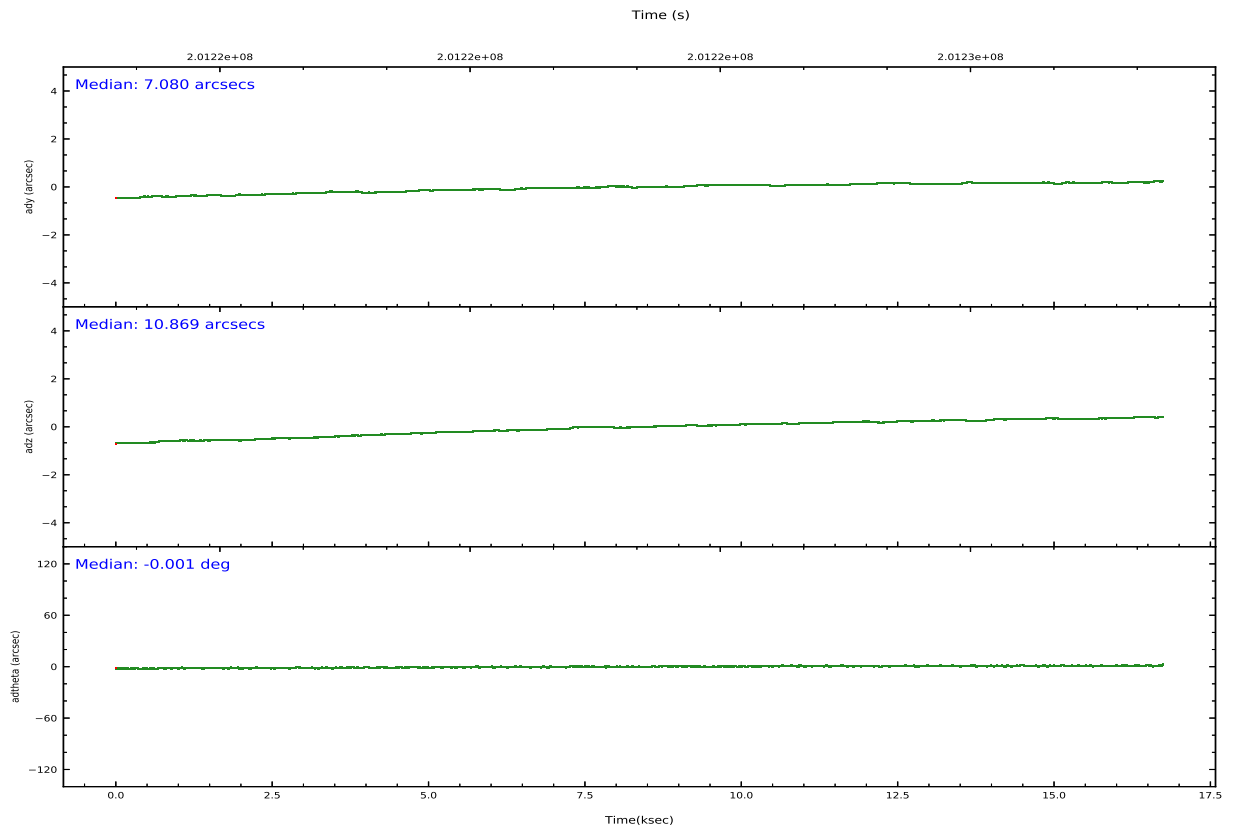
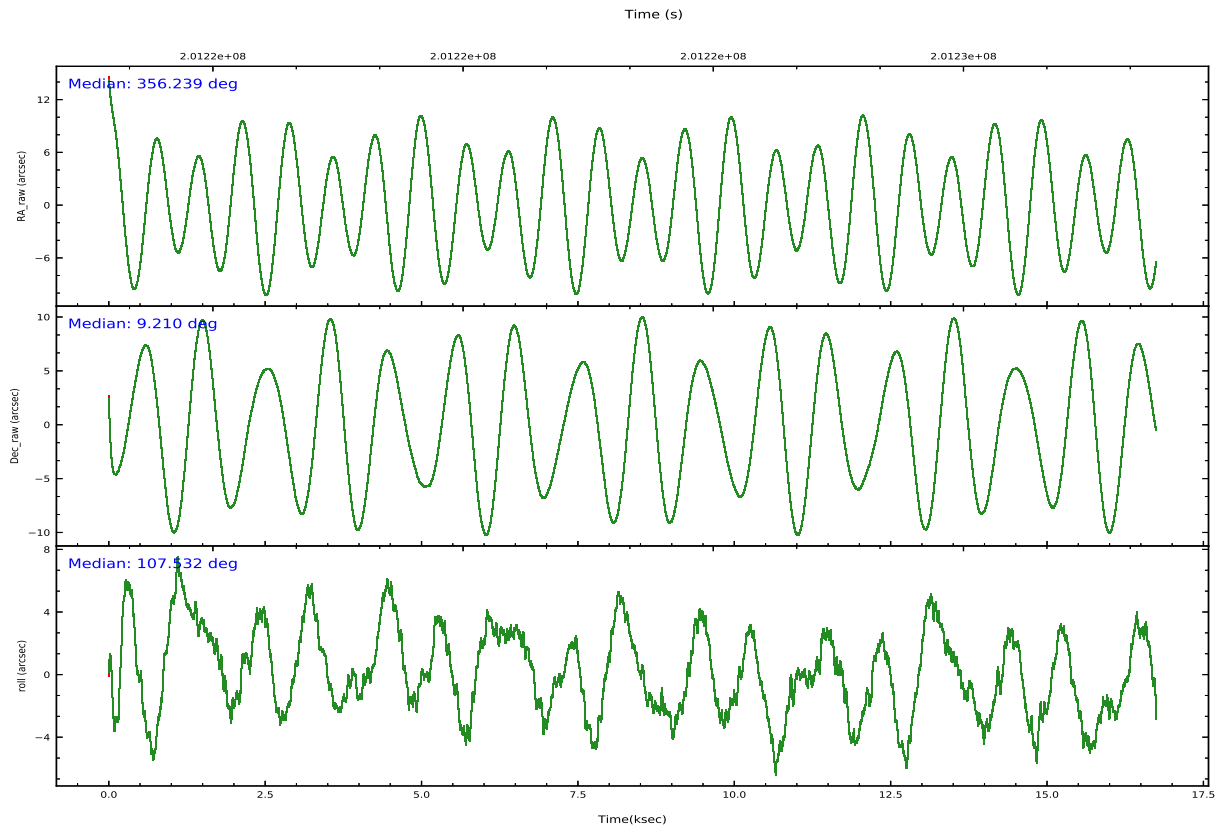
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8352	12252	11148	19150	3696
	8%	11%	9%	15%	3%
grade 1 events	61	74	98	140	45
	0%	0%	0%	0%	0%
grade 2 events	2975	3359	3226	3790	2213
	2%	3%	2%	3%	2%
grade 3 events	1388	1561	1300	1626	1231
	1%	1%	1%	1%	1%
grade 4 events	1227	1575	1381	1618	1226
	1%	1%	1%	1%	1%
grade 5 events	3457	3889	3346	4004	4017
	3%	3%	2%	3%	3%
grade 6 events	2076	2392	2088	2241	2211
	2%	2%	1%	1%	2%
grade 7 events	80656	83167	94553	87643	86387
	80%	76%	80%	72%	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	356.259862	356.24300193818	Subarray requested	NONE	NONE
[deg] Pointing Dec	9.191845	9.2092260400255	Alternating exposures requested	N	N
[deg] Pointing Roll	107.326348	107.53233369194	[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	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	201214489.184000	201213524.93278			
Observation start date	2004-05-17T20:53:45	2004-05-17T20:38:44			
[s] Observation end time (MET)	201231081.184000	201232184.0336			
Observation end date	2004-05-18T01:30:17	2004-05-18T01:49:44			
Read mode	TIMED	TIMED			

## 2.3 Aspect





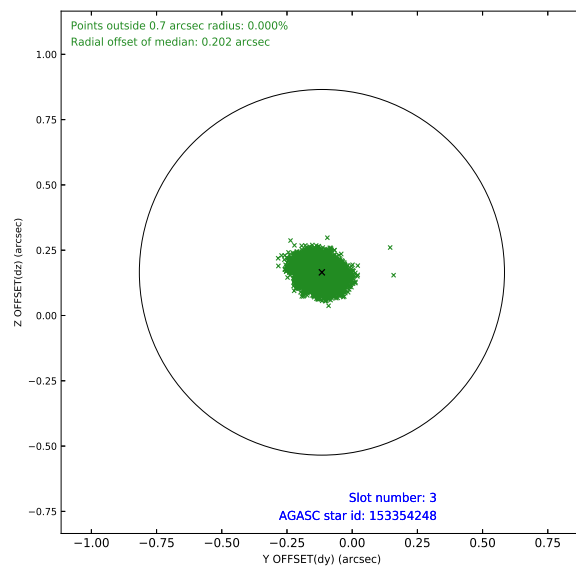
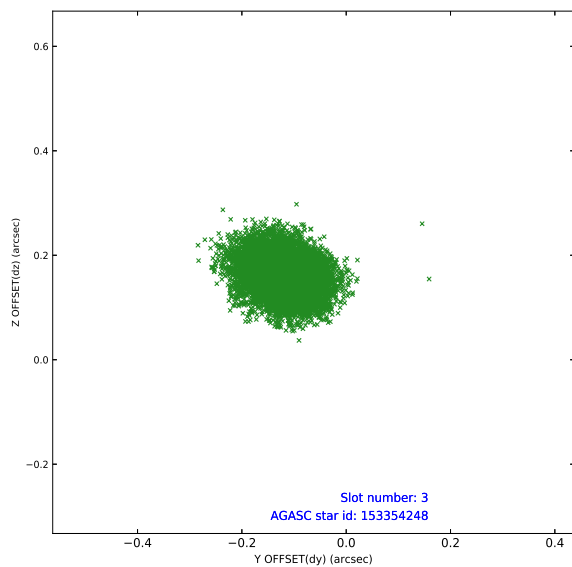
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	4084	1.000	0.034	-0.029	0.017	0.034	0.000000	0.000000	932.67	-834
1	FID		ACIS-I-5	7.23	4085	1.000	-0.189	0.039	0.013	0.020	0.000000	0.000000	-1815.50	1063
2	FID		ACIS-I-6	7.25	4085	1.000	0.066	0.060	0.009	0.016	0.000000	0.000000	397.99	1707
3	GUIDE	used	153354248	7.62	8167	1.000	-0.116	0.165	0.063	0.099	356.576457	9.785073	1704.46	-1707
4	GUIDE	used	153358760	8.32	8166	1.000	-0.133	0.171	0.069	0.114	356.765278	9.548473	693.00	-2095
5	GUIDE	used	153360112	9.70	8165	1.000	0.089	0.030	0.104	0.170	356.410984	8.881808	-1224.94	-180
6	GUIDE	used	153361184	9.77	8161	1.000	0.096	-0.156	0.130	0.213	356.028772	8.942994	-610.10	1051
7	GUIDE	used	153362184	10.06	8154	1.000	0.068	-0.211	0.111	0.186	356.049778	8.873365	-871.60	1054

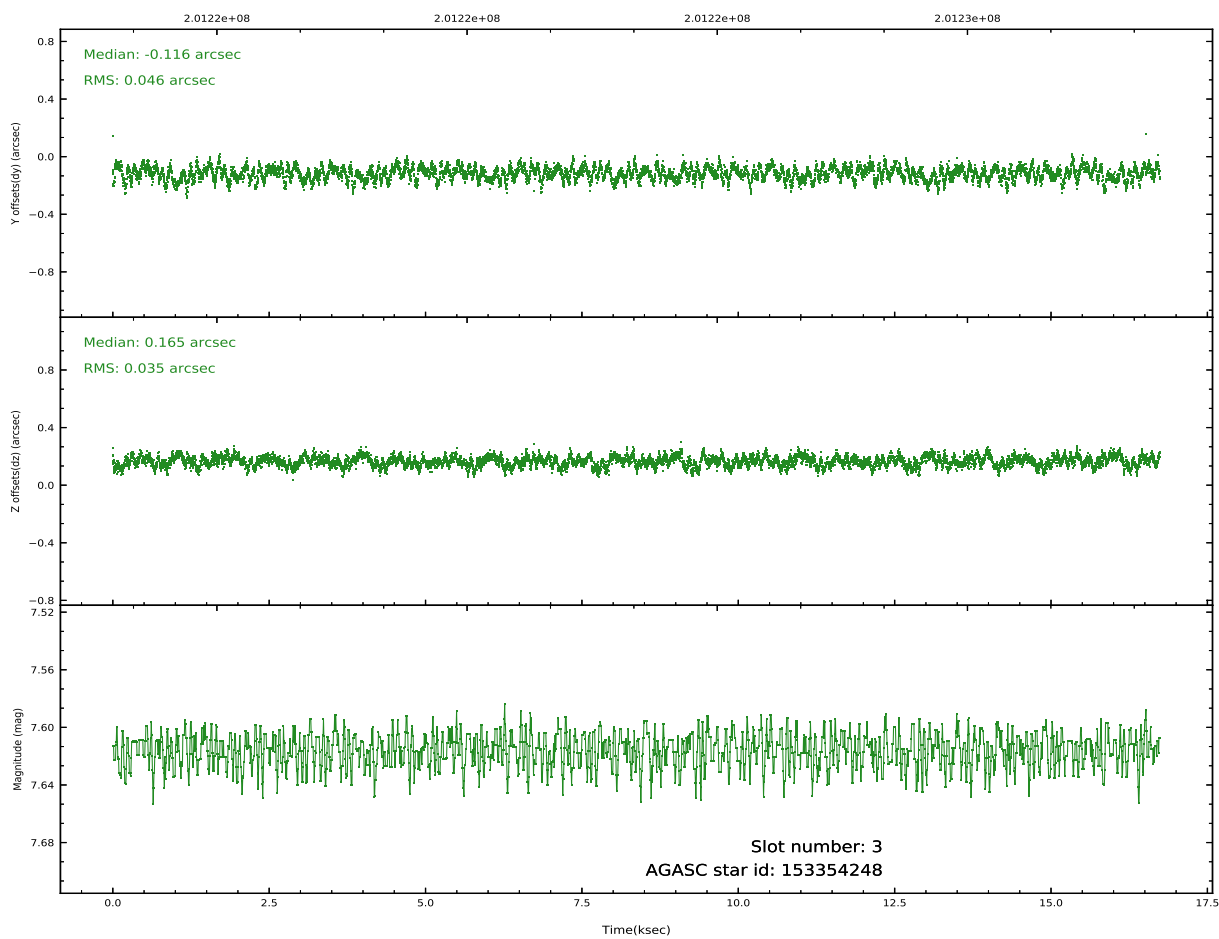
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## 2.4 Star Slots

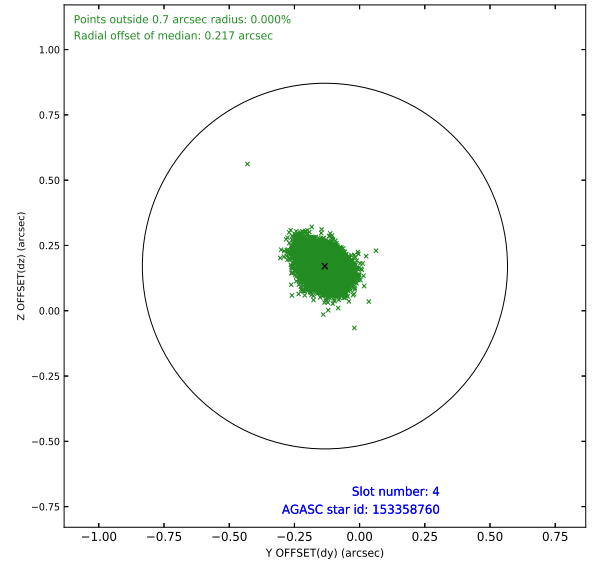
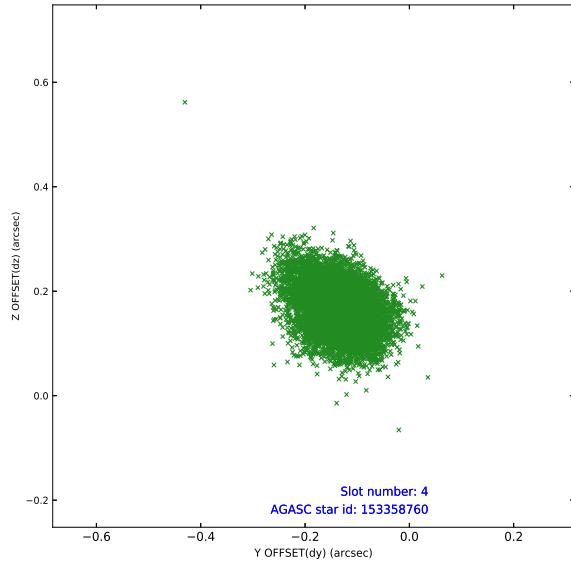
### 2.4.1 Slot 3



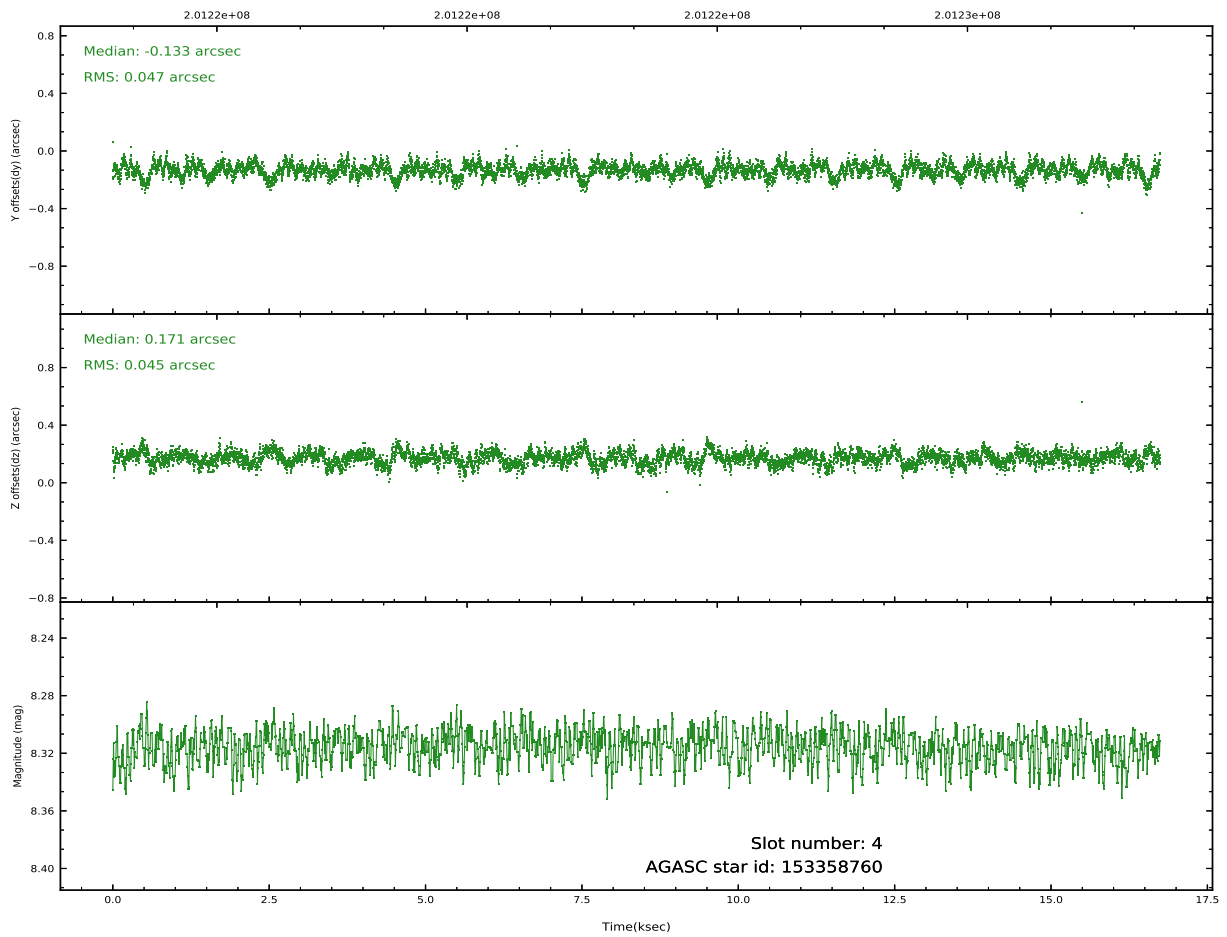
Time (s)



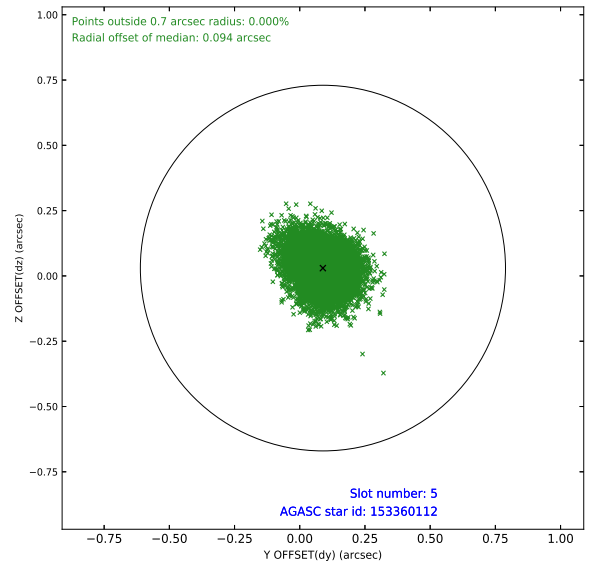
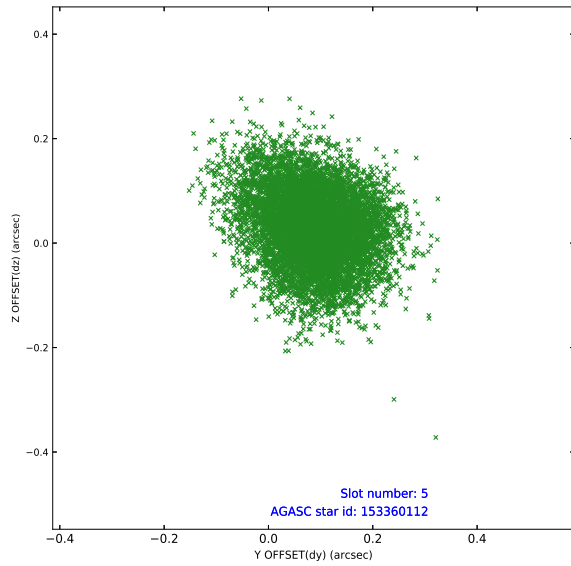
## 2.4.2 Slot 4



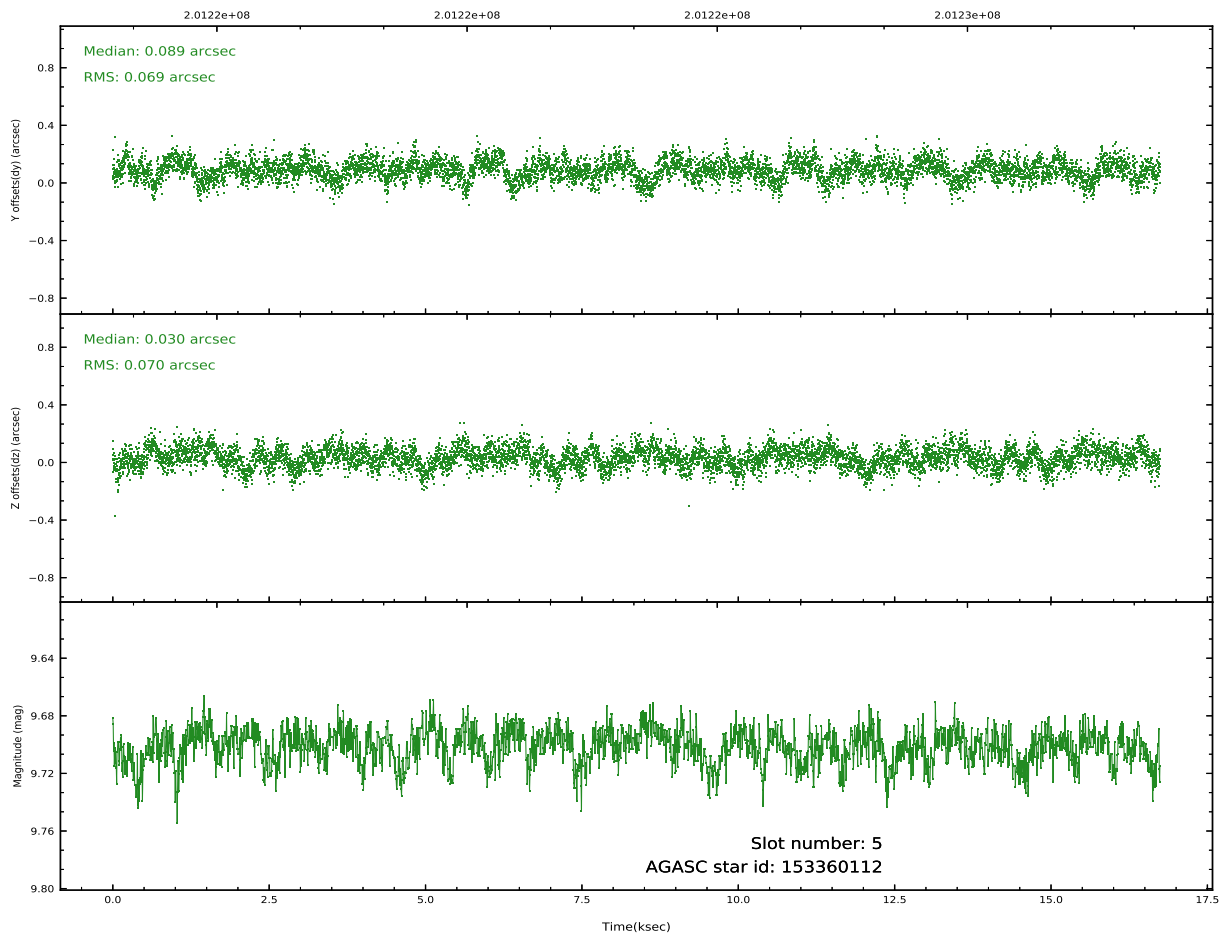
Time (s)



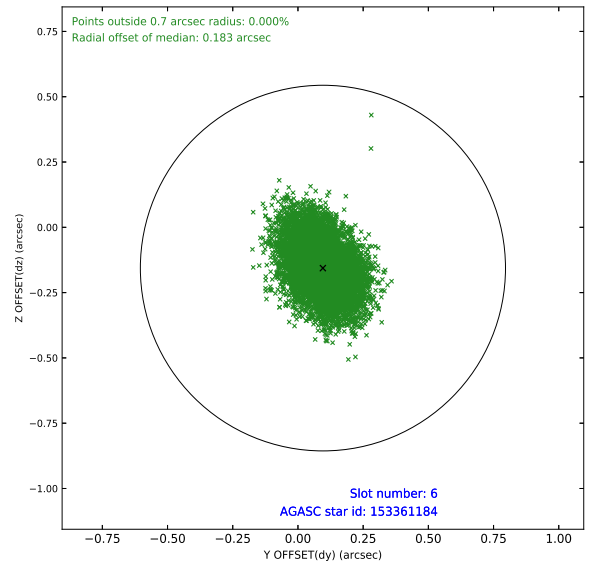
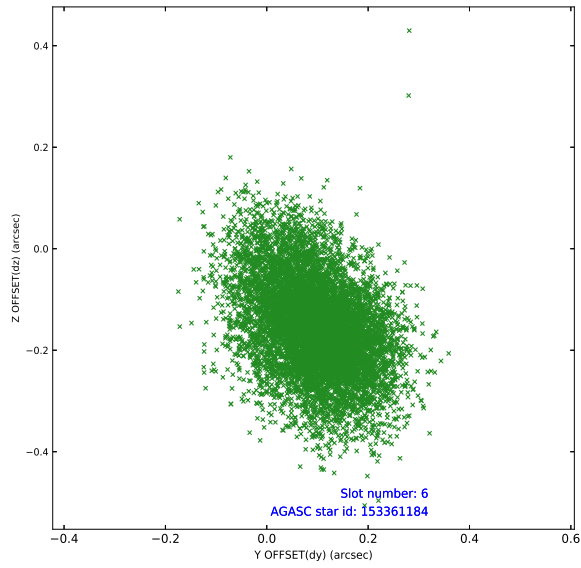
### 2.4.3 Slot 5



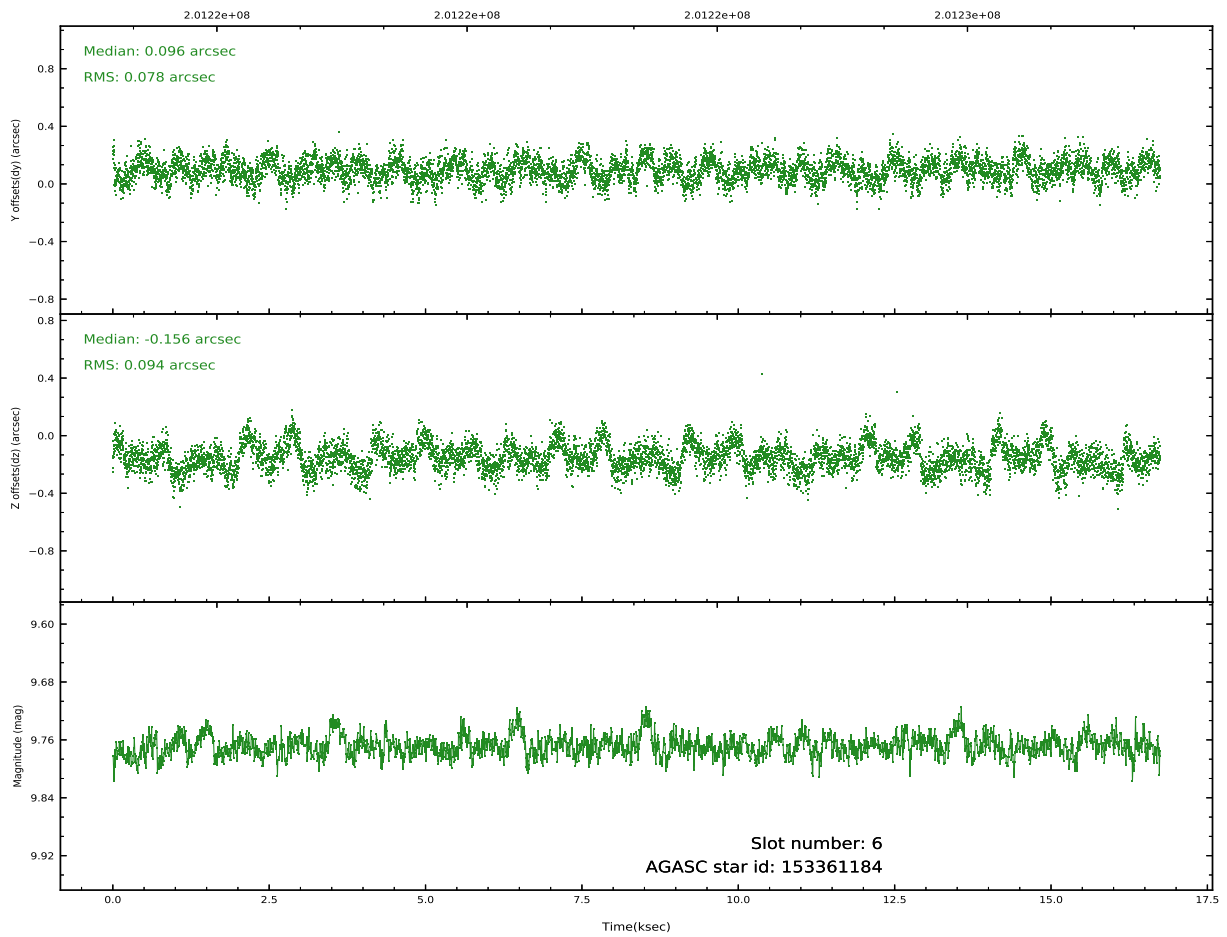
Time (s)



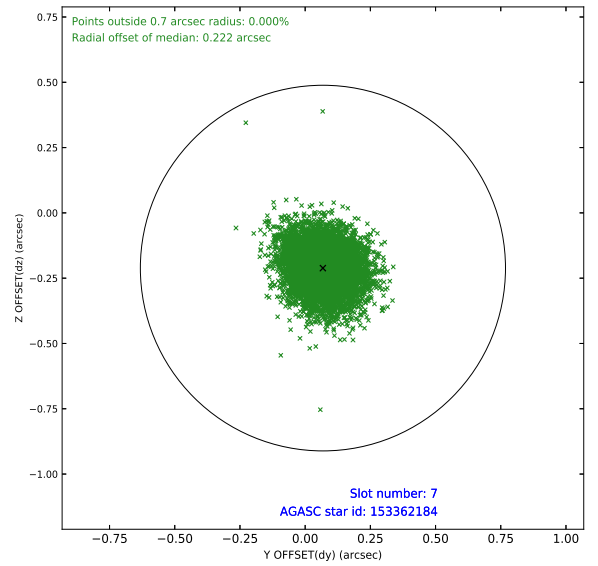
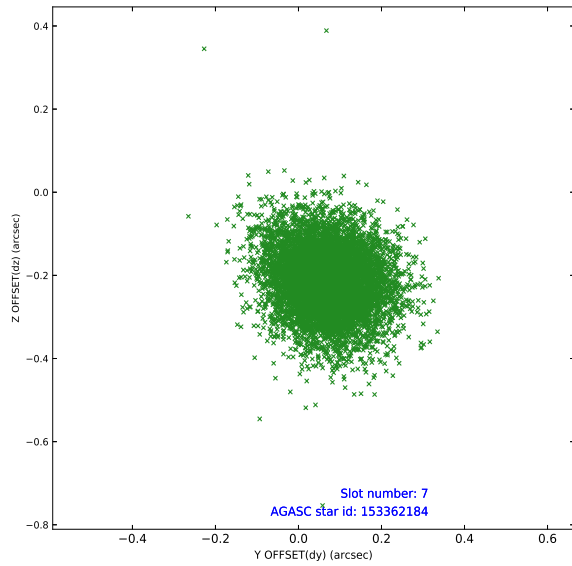
## 2.4.4 Slot 6



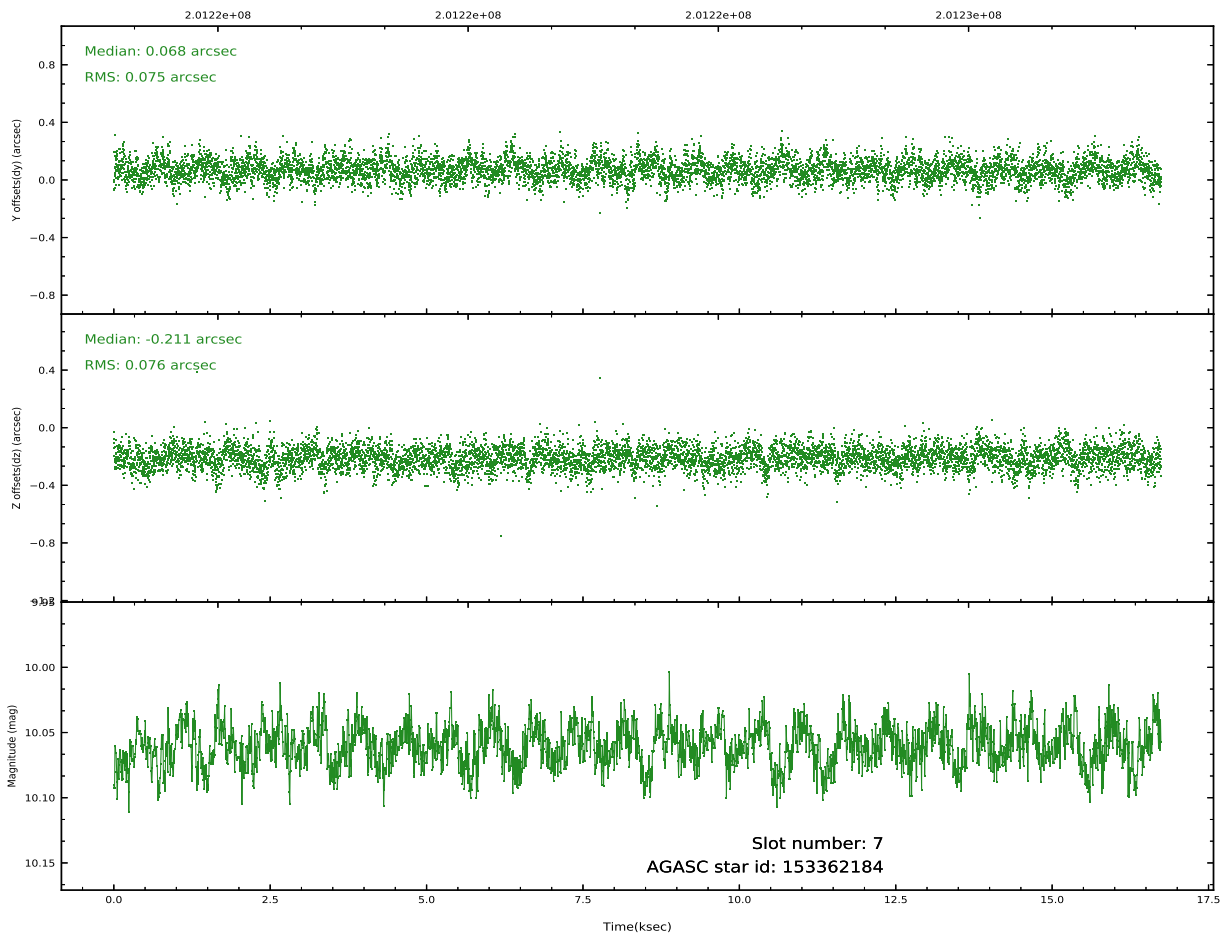
Time (s)



## 2.4.5 Slot 7

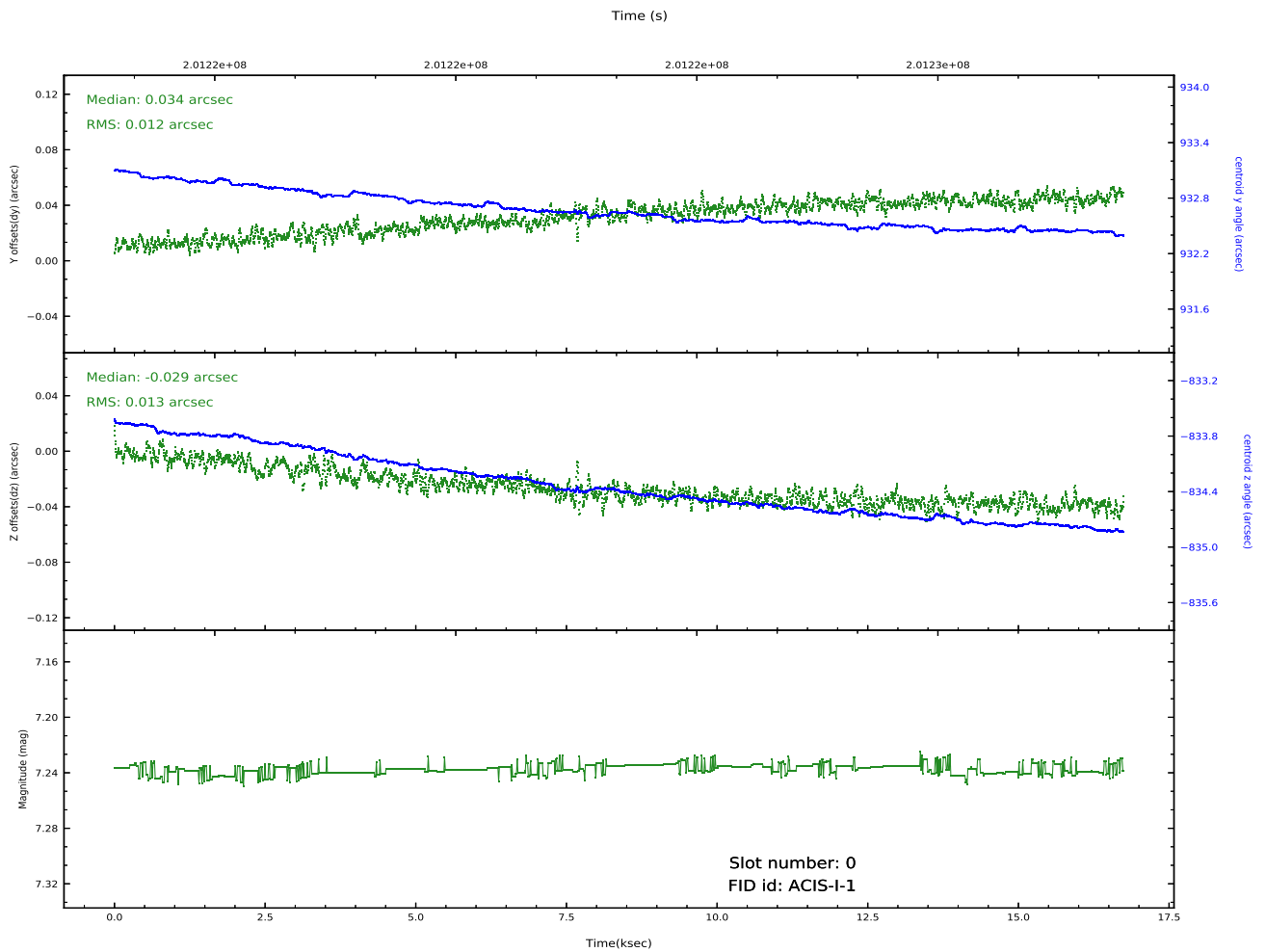
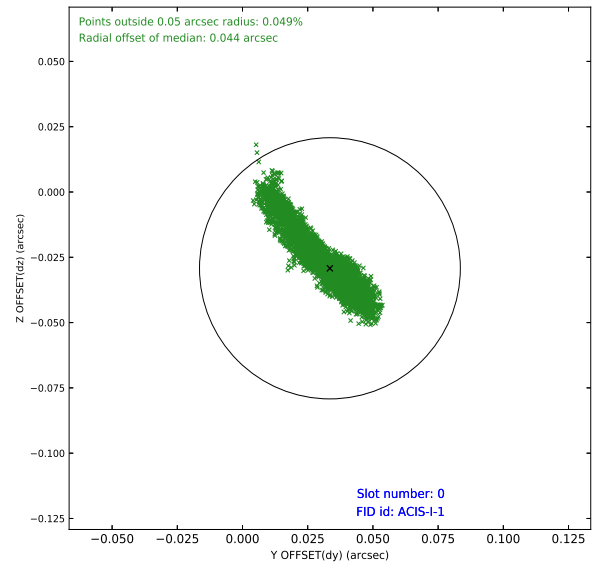
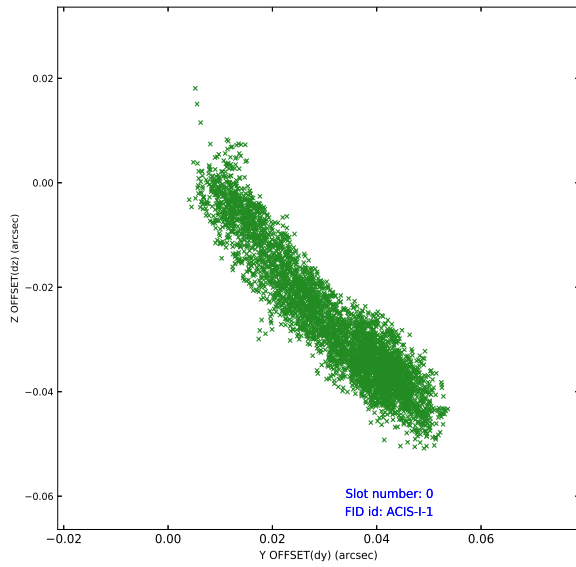


Time (s)

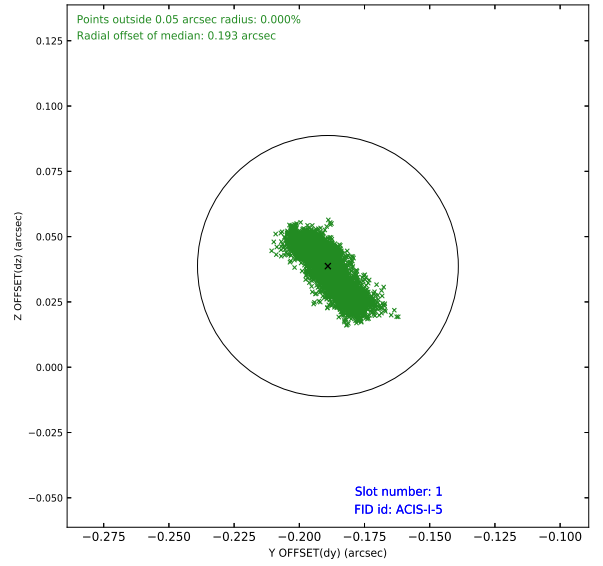
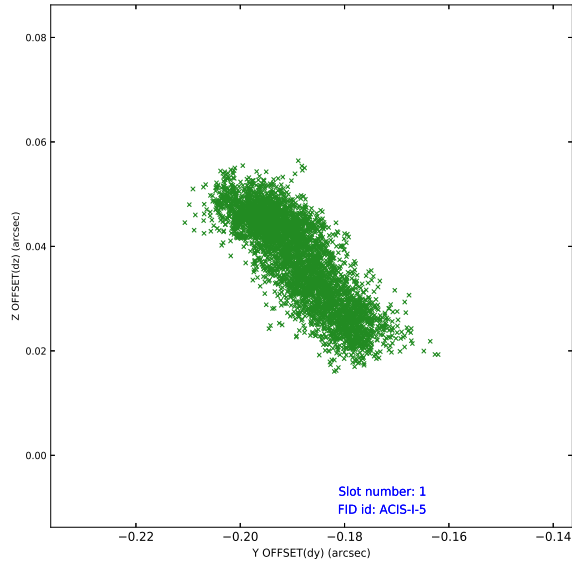


## 2.5 FID Slots

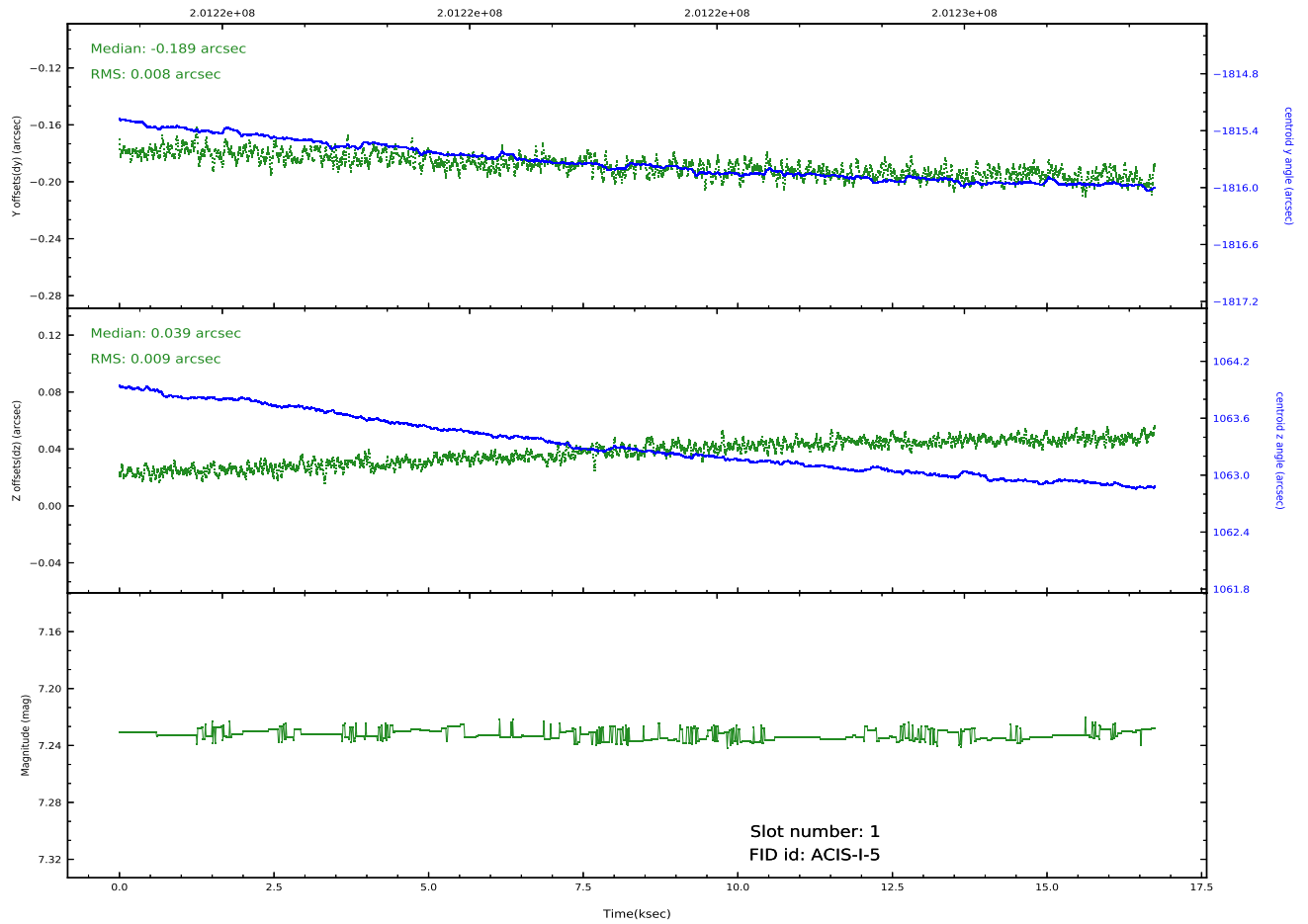
### 2.5.1 Slot 0



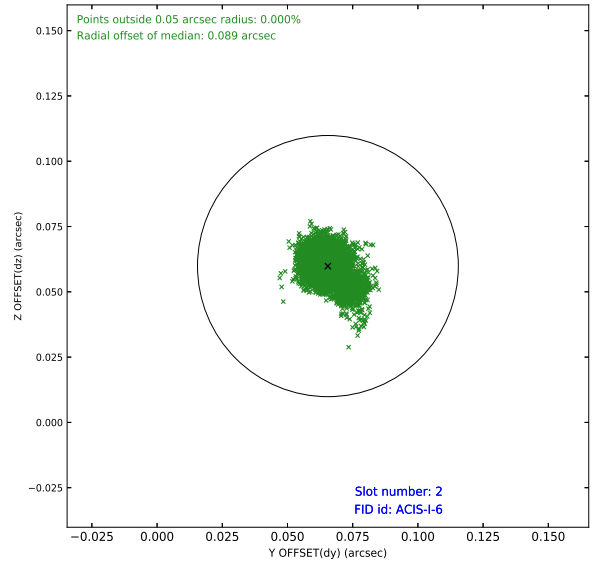
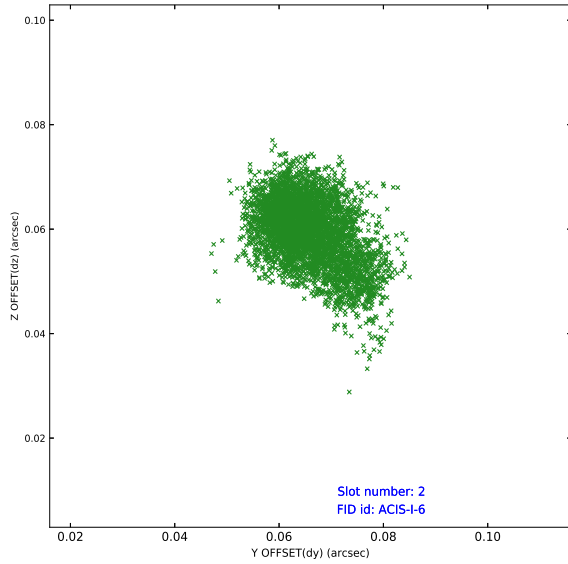
## 2.5.2 Slot 1



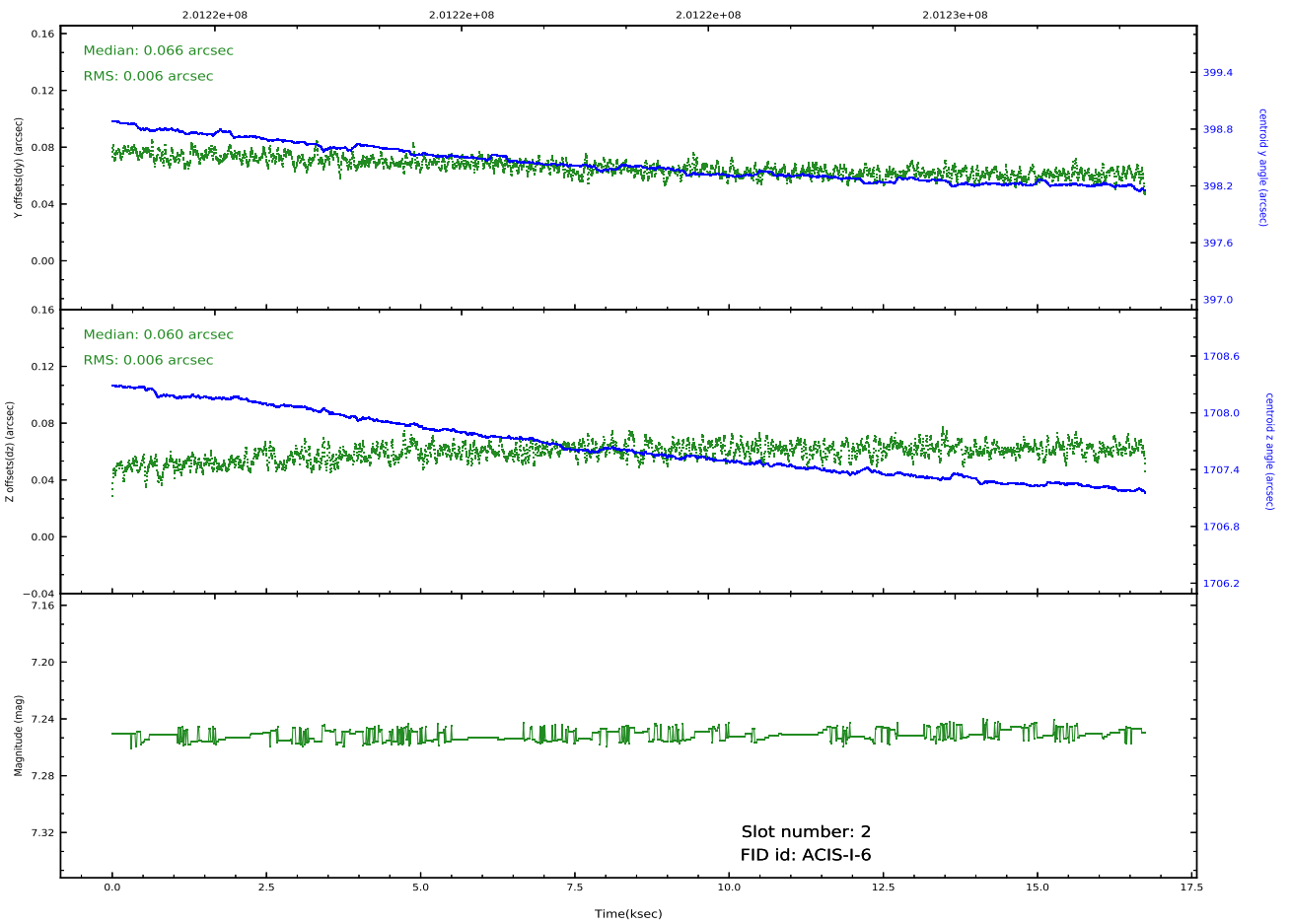
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.09.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.361

## A.2 Comments