

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6359 - L2 Version 5  
Chandra X-Ray Center

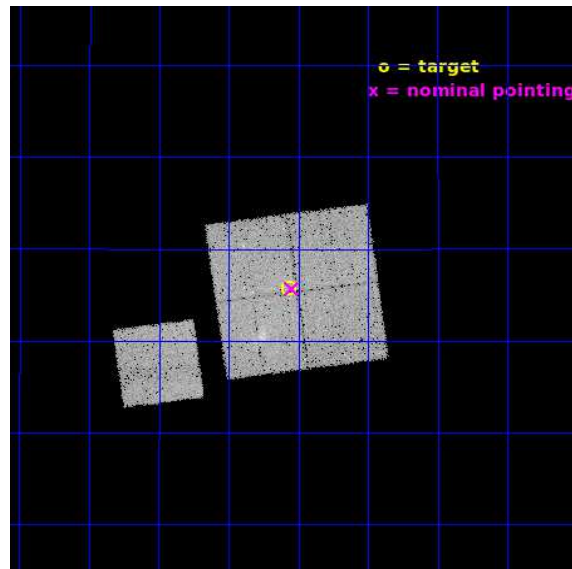
L2 Processing Date : Oct 10 2020

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# 1 Front

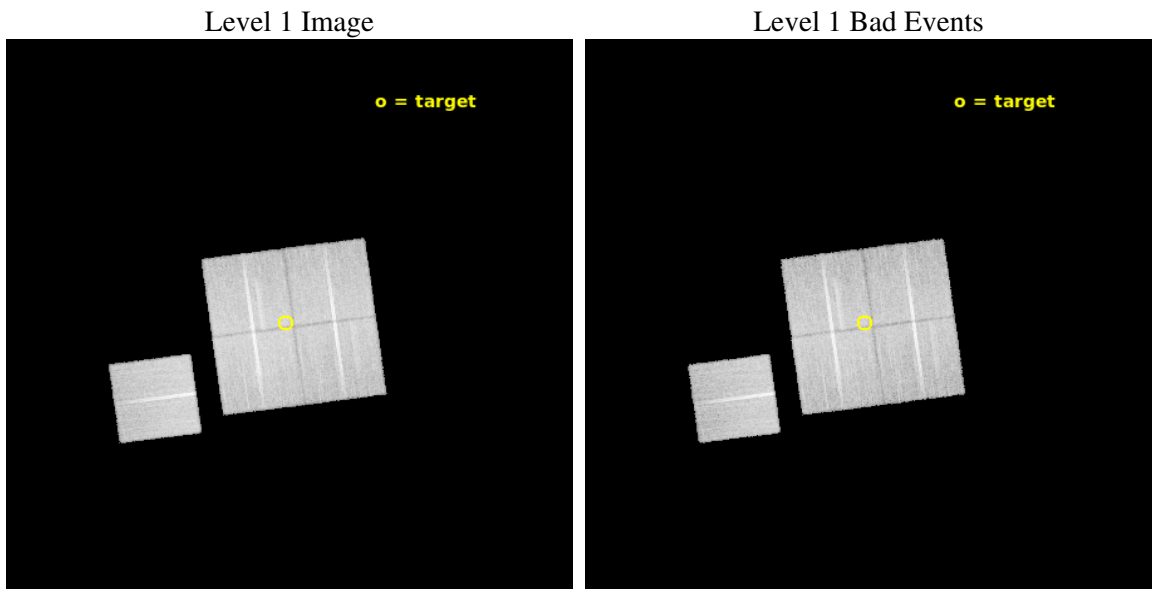
seq_num	701058	Sequence number
obs_id	6359	Observation id
title	A Chandra Study of Two Nearby, Powerful Radio Galaxies in Poor Environments	Proposal title
observer	Ralph Kraft	Principal investigator
object	3C 442A	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	333.6418	Observer's specified target RA [deg]
dec_targ	13.9296	Observer's specified target Dec [deg]
ra_nom	333.63650400203	Nominal RA [deg]
dec_nom	13.928017819619	Nominal Dec [deg]
roll_nom	262.318250942	Nominal Roll [deg]
revision	5	Processing version of data
ontime	20153.017990708	Sum of GTIs [s]
livetime	19889.703974224	Livetime [s]
ontime0	20156.159020871	Sum of GTIs [s]
ontime1	20156.158970952	Sum of GTIs [s]
ontime2	20149.876990378	Sum of GTIs [s]
ontime3	20153.017990708	Sum of GTIs [s]
ontime6	20159.299961209	Sum of GTIs [s]
l2events	85166	Number of level 2 events



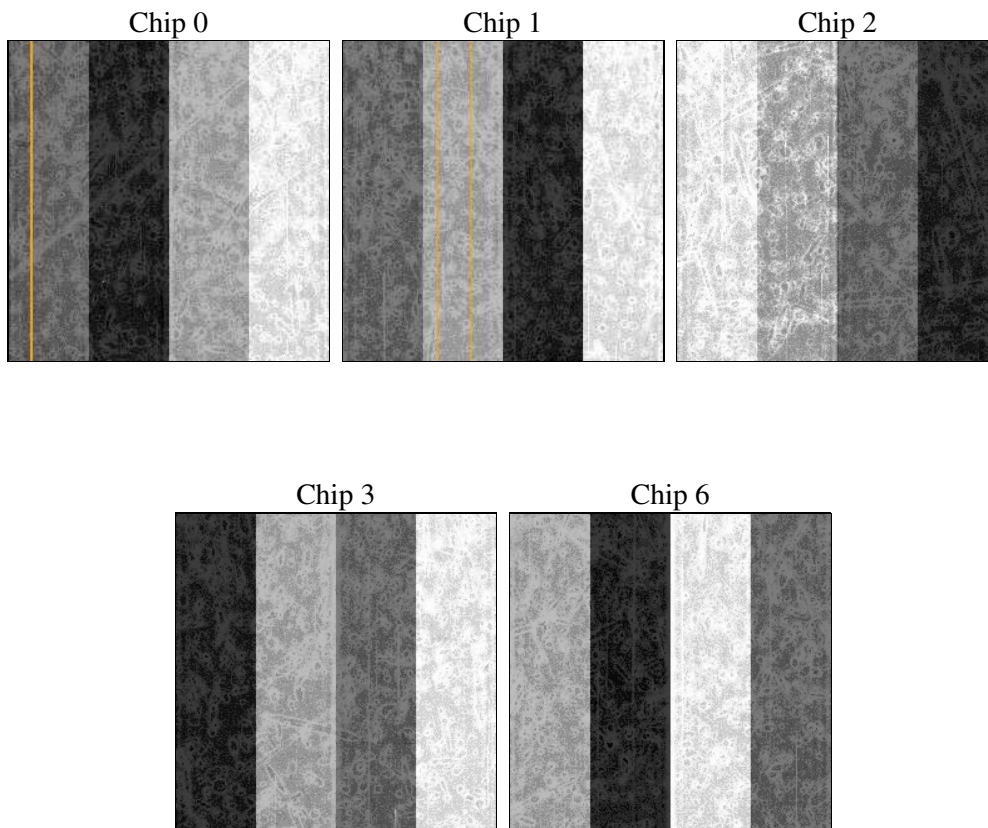
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	20153.017990708	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	20156.159020871	Sum of GTIs [s]
date	2020-10-11T01:38:43	Date and time of file creation	ontime1	20156.158970952	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	20149.876990378	Sum of GTIs [s]
			ontime3	20153.017990708	Sum of GTIs [s]
			ontime6	20159.299961209	Sum of GTIs [s]
			l1events	809449	Number of level 1 events

### 2.1.4 Events

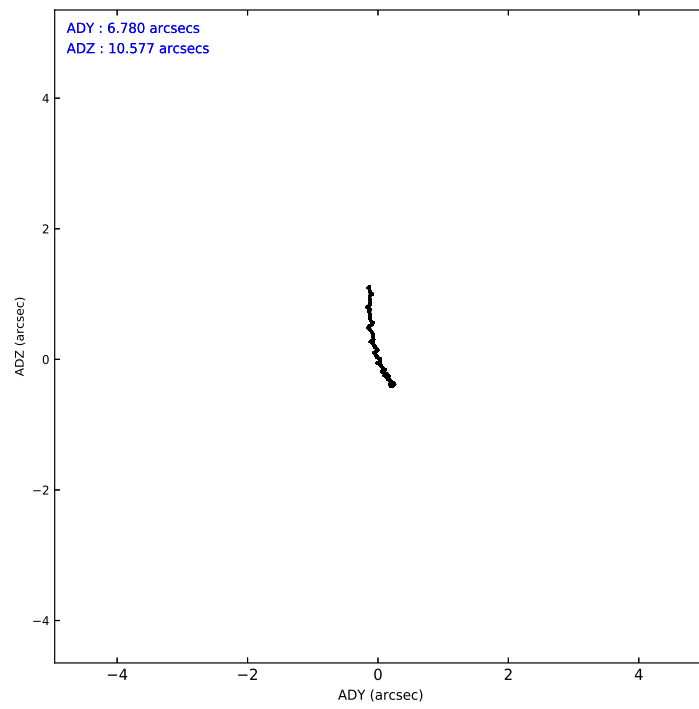
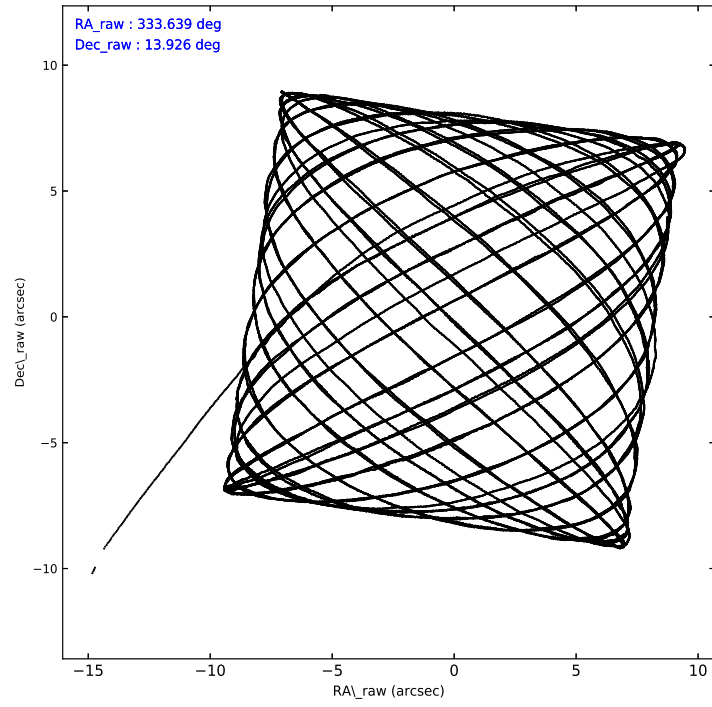
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	153674	150789	174744	163572	166670
rejected events	134822	131269	152190	144582	148167
rejected %	87%	87%	87%	88%	88%

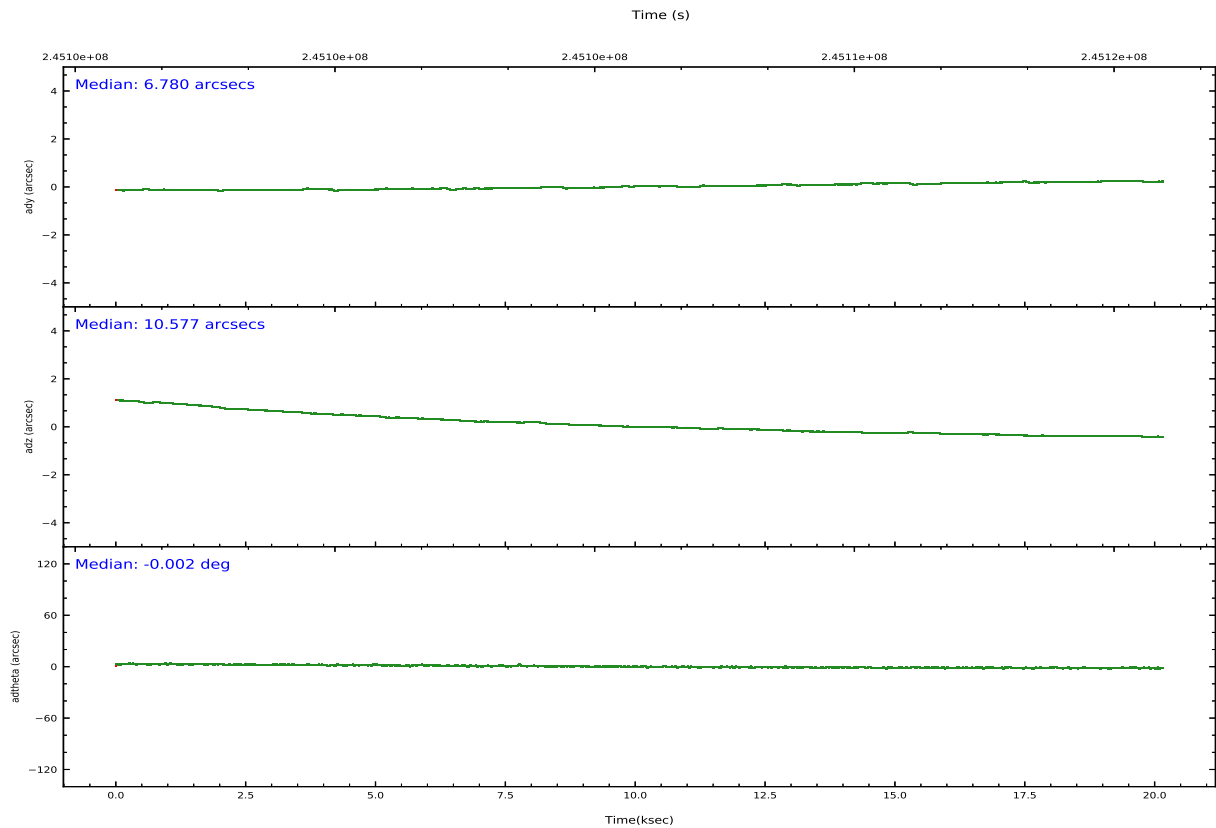
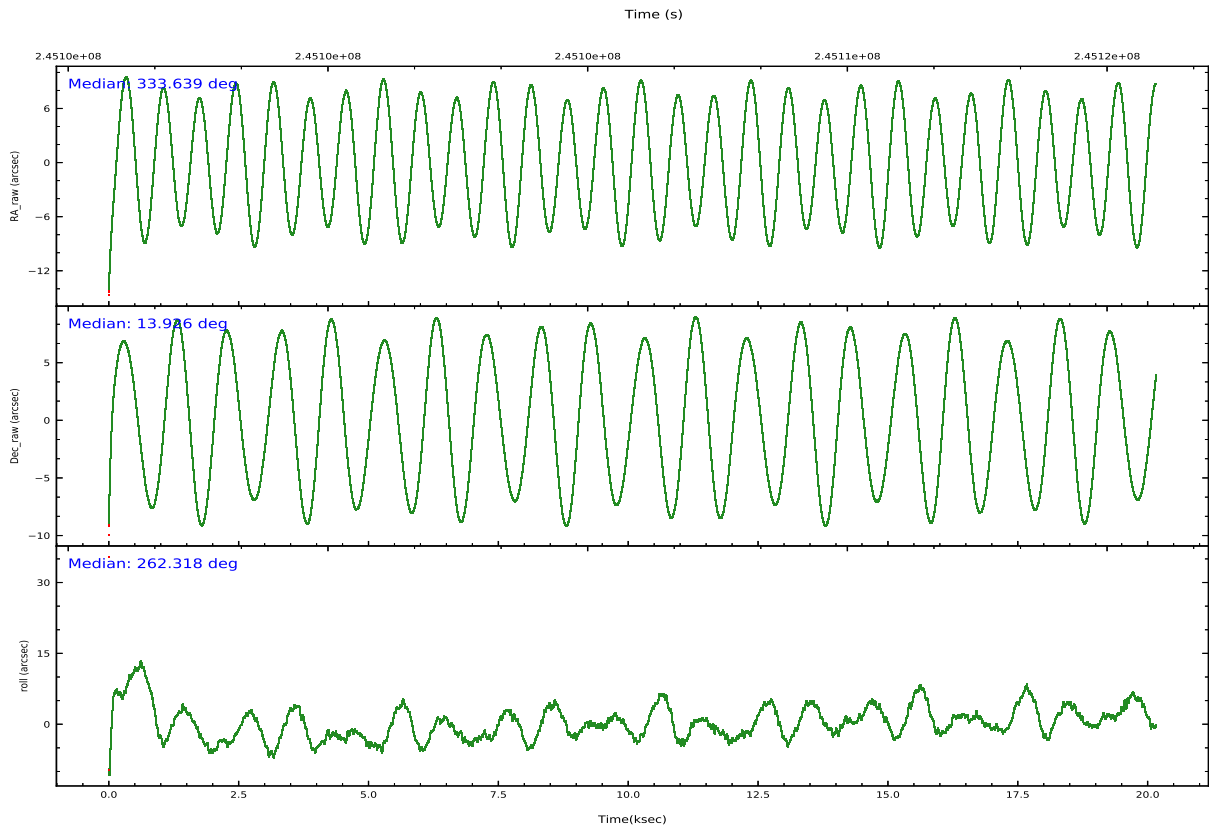
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8911	8403	12462	9184	8025
	5%	5%	7%	5%	4%
grade 1 events	95	84	129	114	79
	0%	0%	0%	0%	0%
grade 2 events	4302	4811	4405	3934	4200
	2%	3%	2%	2%	2%
grade 3 events	1892	2051	1976	1976	1877
	1%	1%	1%	1%	1%
grade 4 events	1812	1924	2002	1917	1898
	1%	1%	1%	1%	1%
grade 5 events	6640	7209	6599	7642	7722
	4%	4%	3%	4%	4%
grade 6 events	3478	3972	3217	3524	4032
	2%	2%	1%	2%	2%
grade 7 events	126544	122335	143954	135281	138837
	82%	81%	82%	82%	83%

## 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	333.628545	333.63650400203	Subarray requested	NONE	NONE
[deg] Pointing Dec	13.950894	13.928017819619	Alternating exposures requested	N	N
[deg] Pointing Roll	262.119795	262.318250942	[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)	245095945.184000	245094091.07578			
Observation start date	2005-10-07T18:11:21	2005-10-07T17:41:31			
[s] Observation end time (MET)	245115945.184000	245116835.82683			
Observation end date	2005-10-07T23:44:41	2005-10-08T00:00:35			
Read mode	TIMED	TIMED			

## 2.3 Aspect





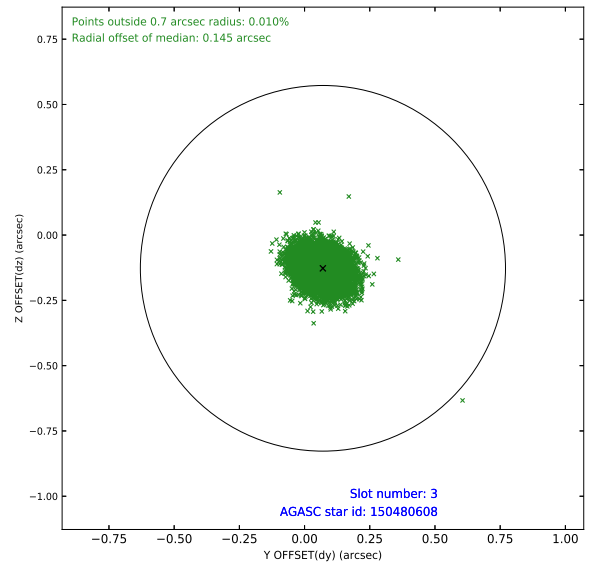
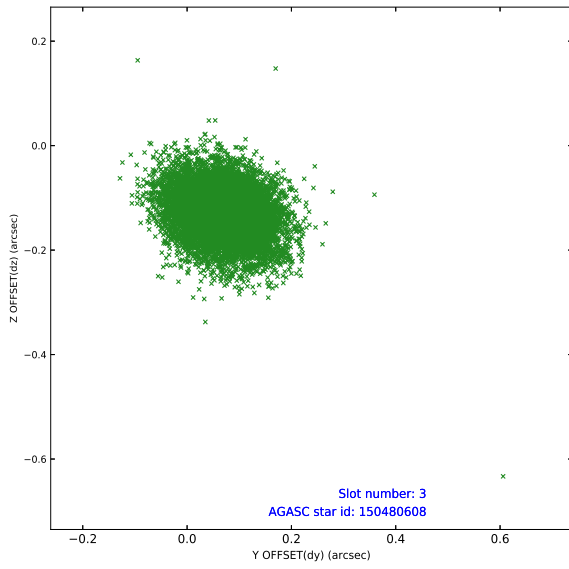
### Slot Statistics

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	7.25	4919	1.000	0.033	-0.037	0.025	0.036	0.000000	0.000000	932.91	-834
1	FID		ACIS-I-5	7.23	4919	1.000	-0.194	0.035	0.015	0.027	0.000000	0.000000	-1815.31	1063
2	FID		ACIS-I-6	7.26	4918	1.000	0.069	0.070	0.012	0.019	0.000000	0.000000	398.31	1707
3	GUIDE	used	150480608	8.71	9826	1.000	0.070	-0.127	0.075	0.125	333.055796	13.488769	1921.40	-1757
4	GUIDE	used	150606032	8.77	9765	1.000	0.010	-0.004	0.058	0.095	333.468551	13.881130	325.97	-519
5	GUIDE	used	150611320	9.65	9825	1.000	0.060	0.034	0.120	0.192	333.975779	13.562036	1219.43	1395
6	GUIDE	used	150614840	8.68	9834	1.000	-0.101	0.081	0.082	0.131	333.996804	13.803587	347.97	1348
7	GUIDE	used	150610392	9.93	9825	1.000	-0.038	0.018	0.112	0.182	333.859193	14.324725	-1443.46	612

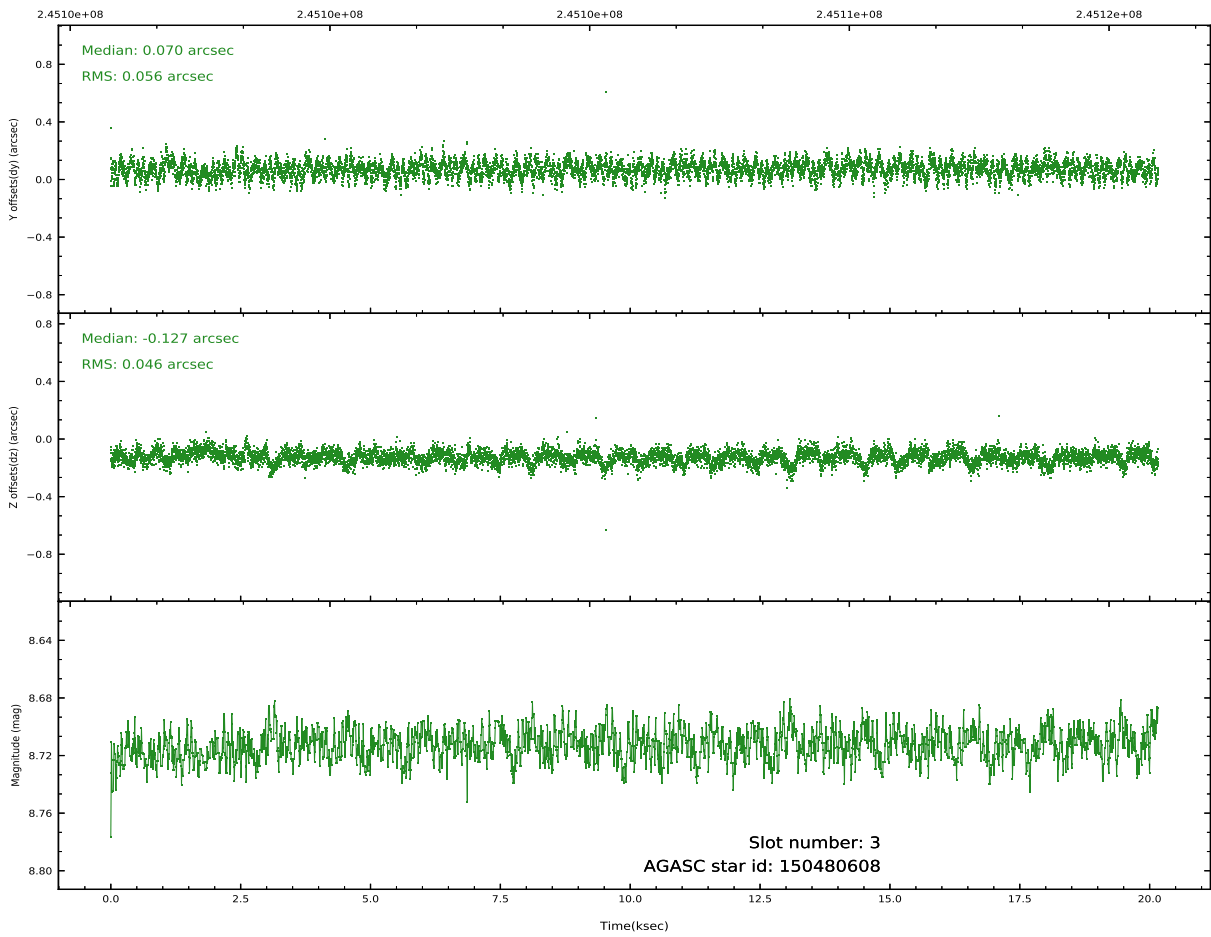
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## 2.4 Star Slots

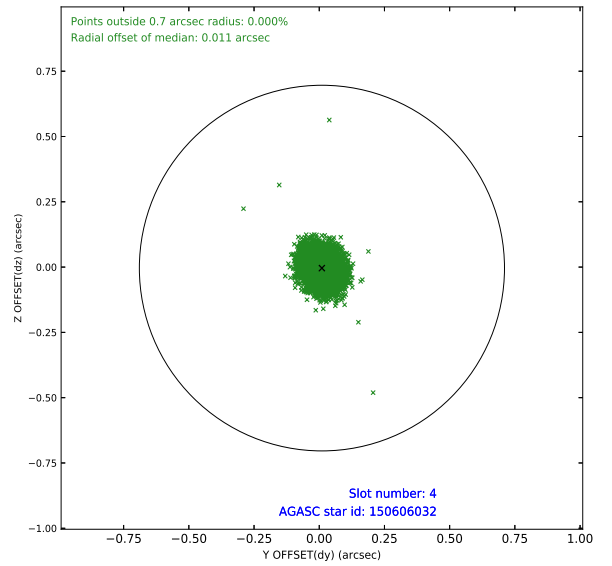
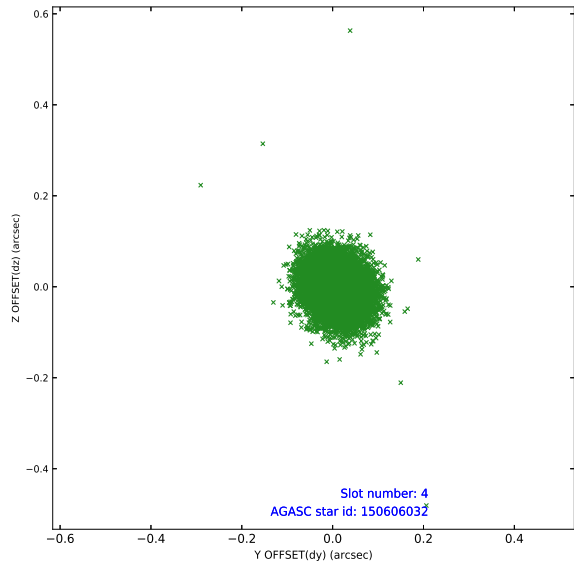
### 2.4.1 Slot 3



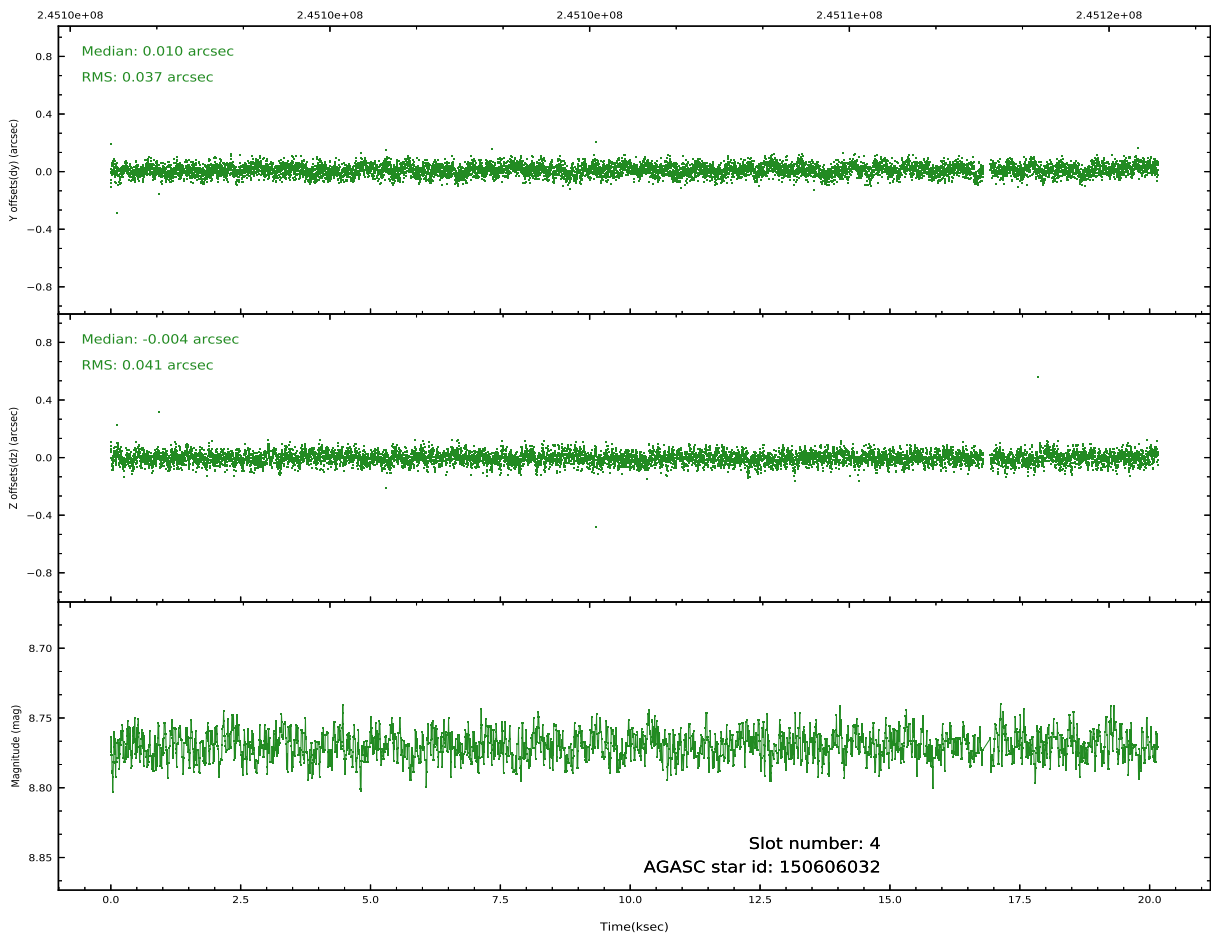
Time (s)



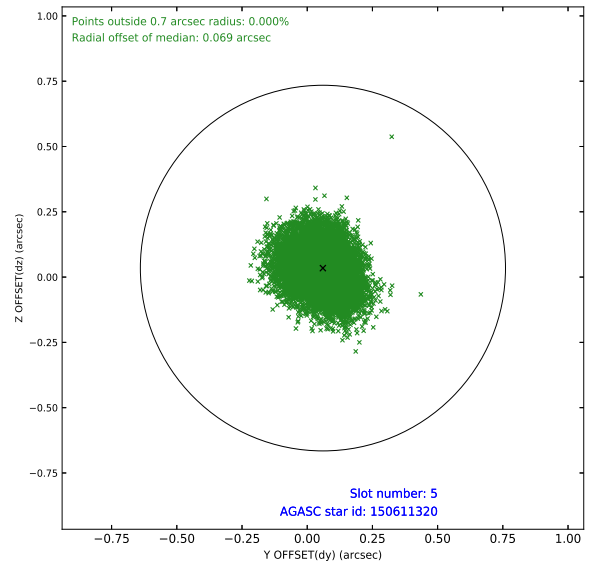
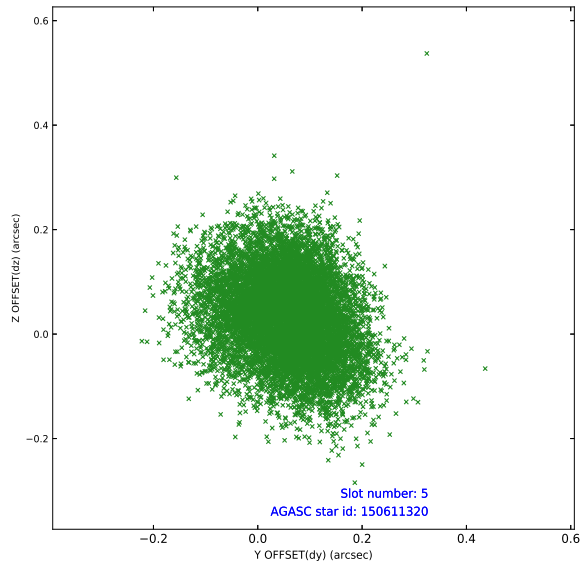
## 2.4.2 Slot 4



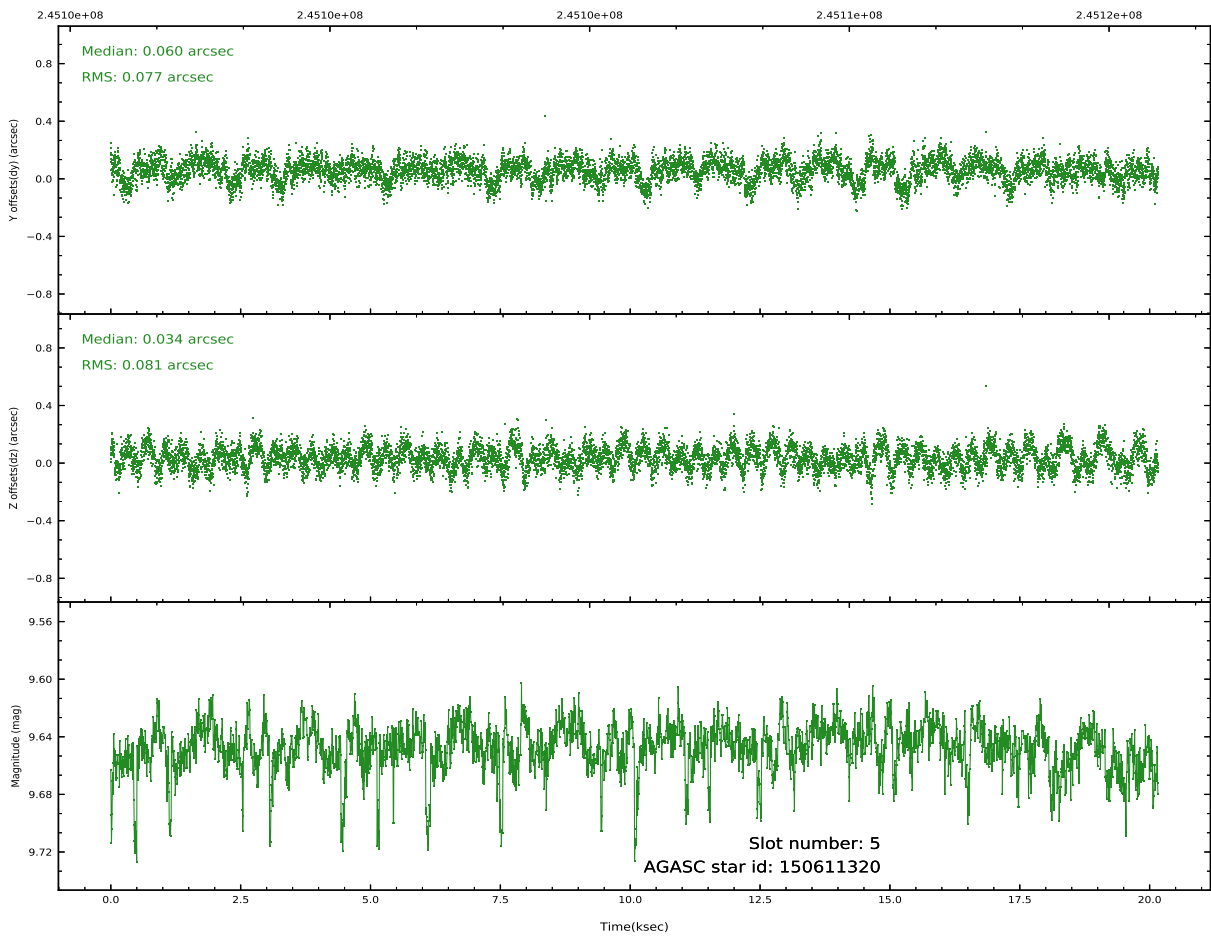
Time (s)



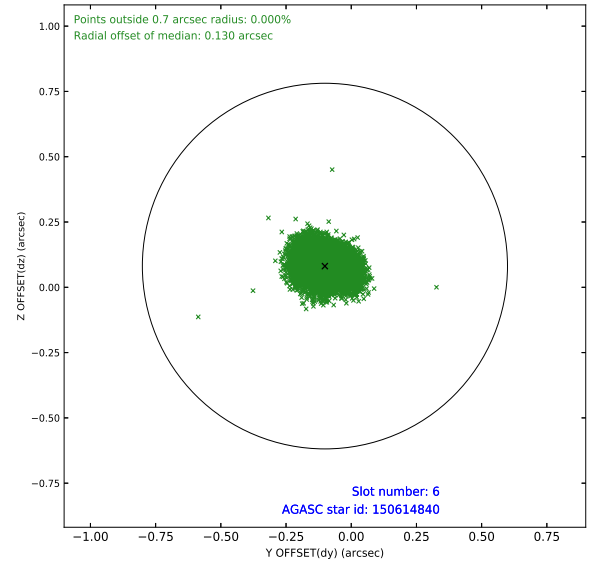
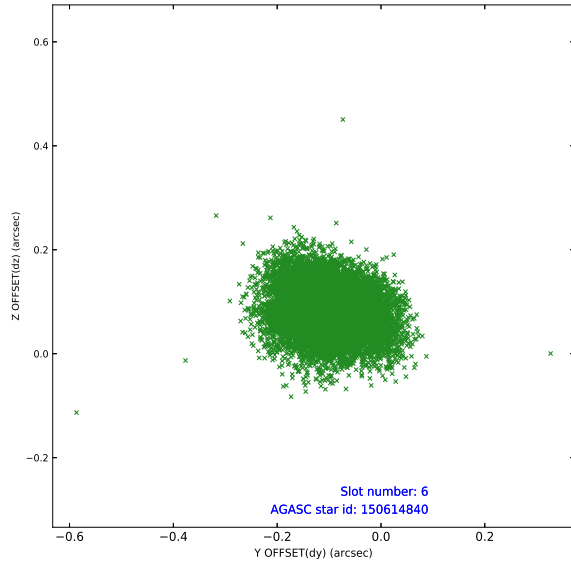
### 2.4.3 Slot 5



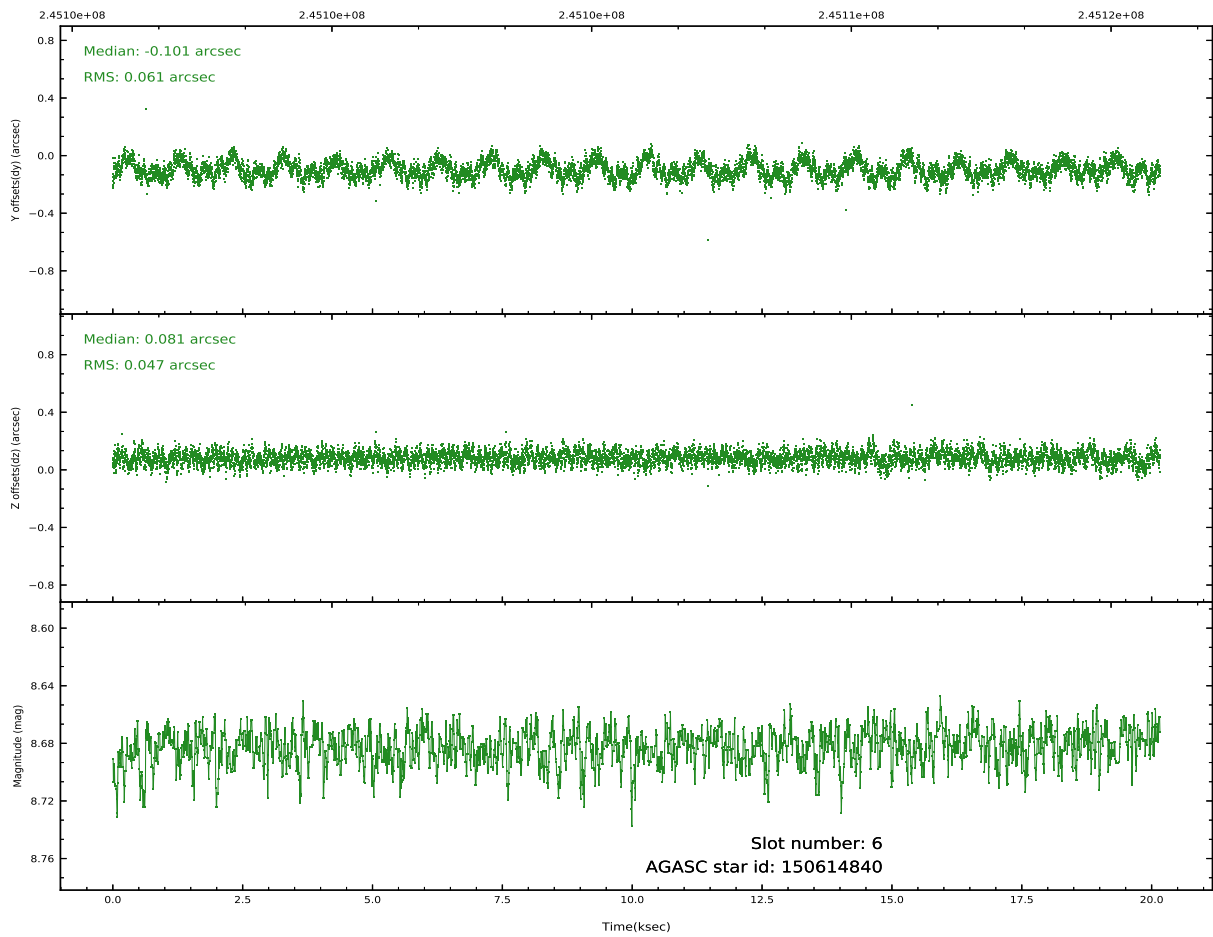
Time (s)



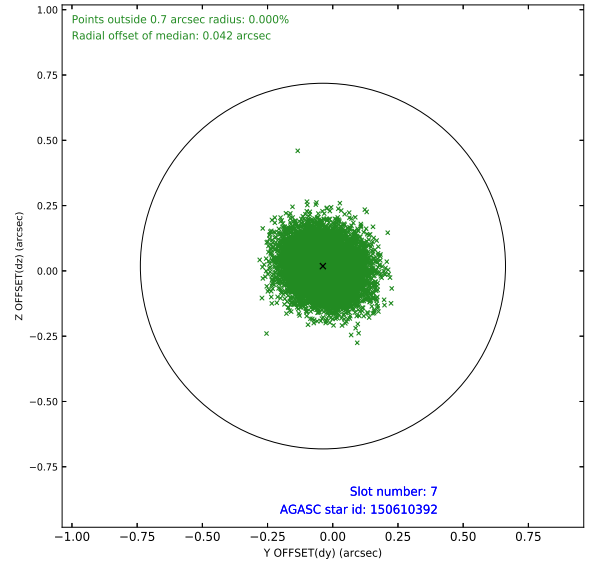
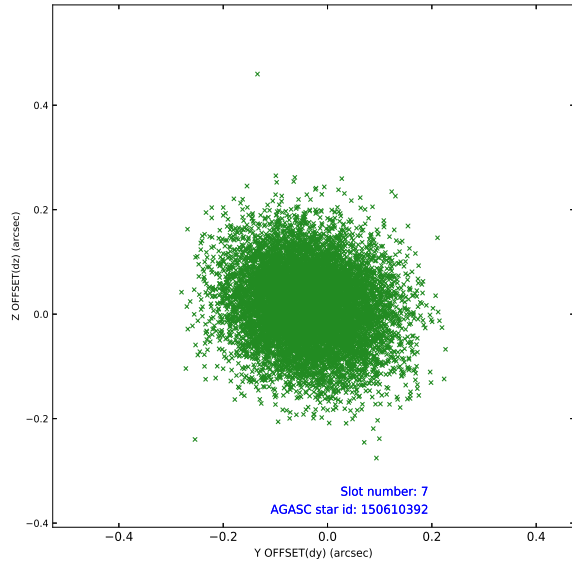
## 2.4.4 Slot 6



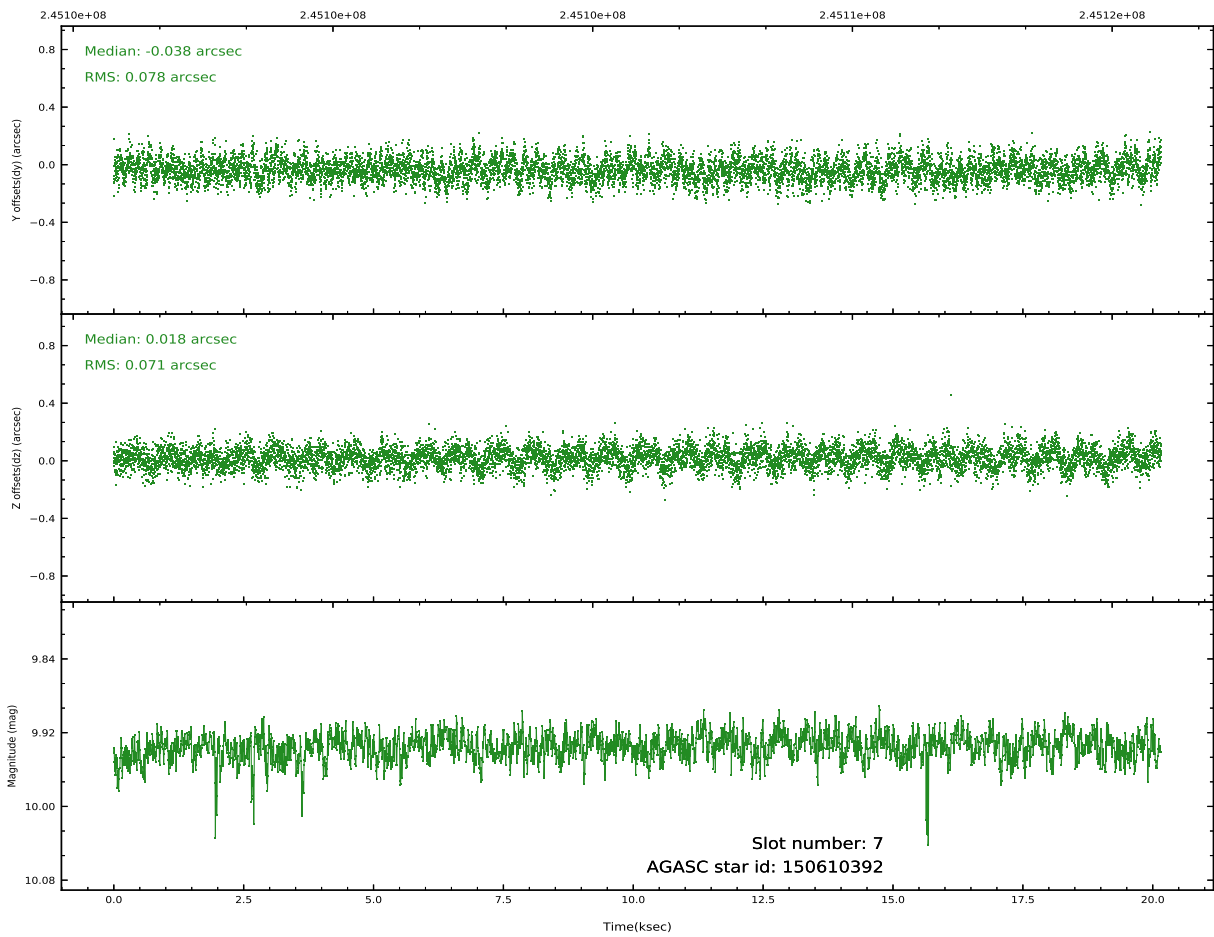
Time (s)



## 2.4.5 Slot 7

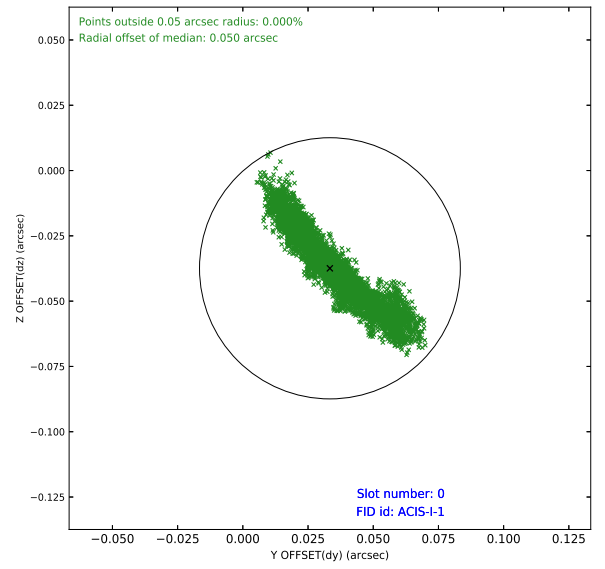
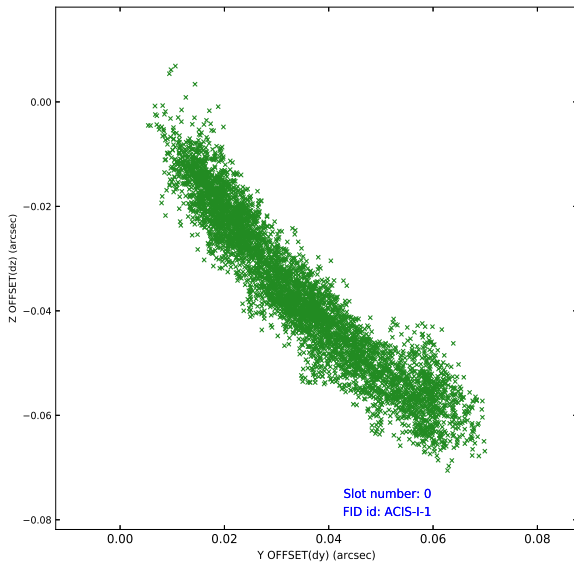


Time (s)

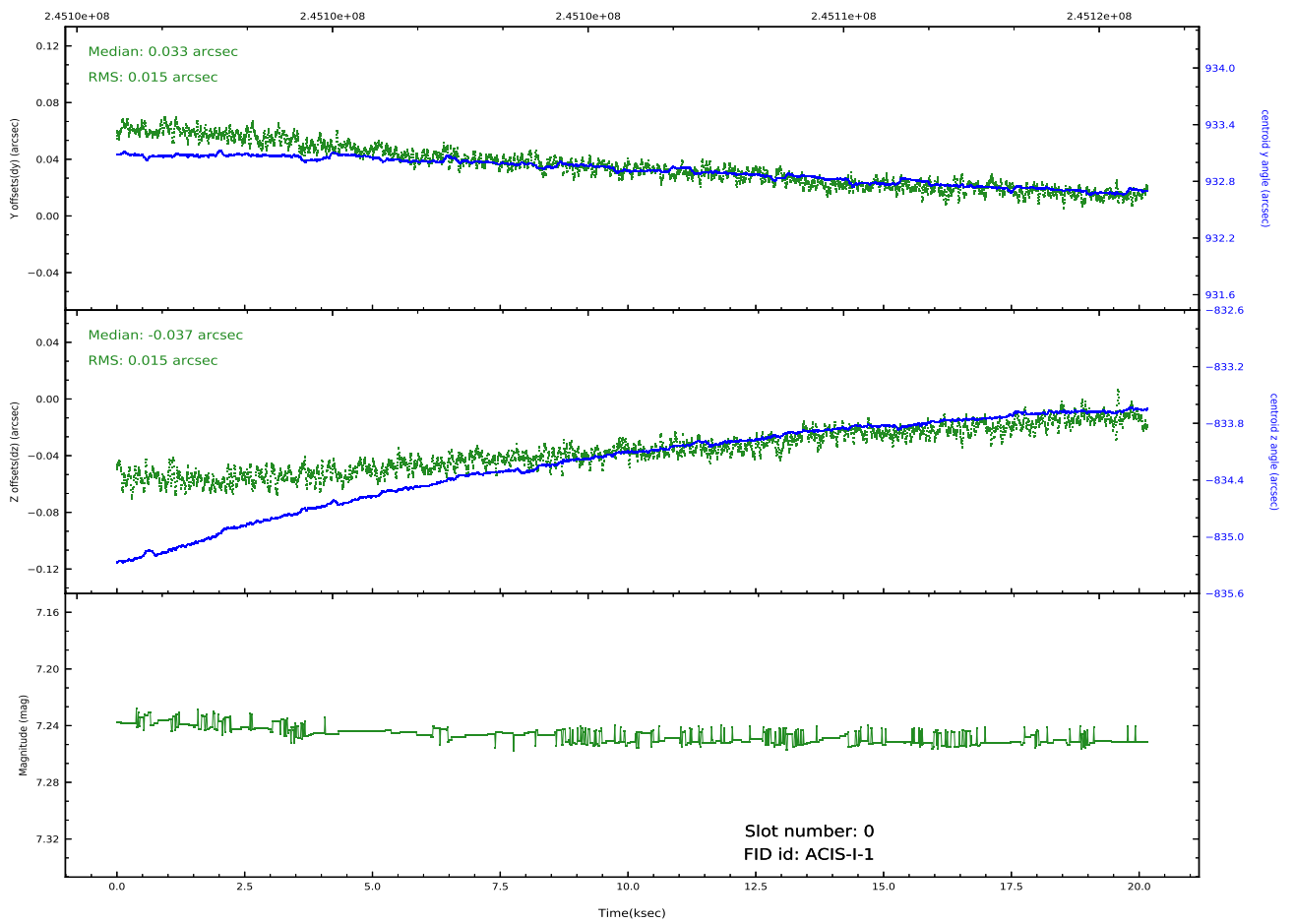


## 2.5 FID Slots

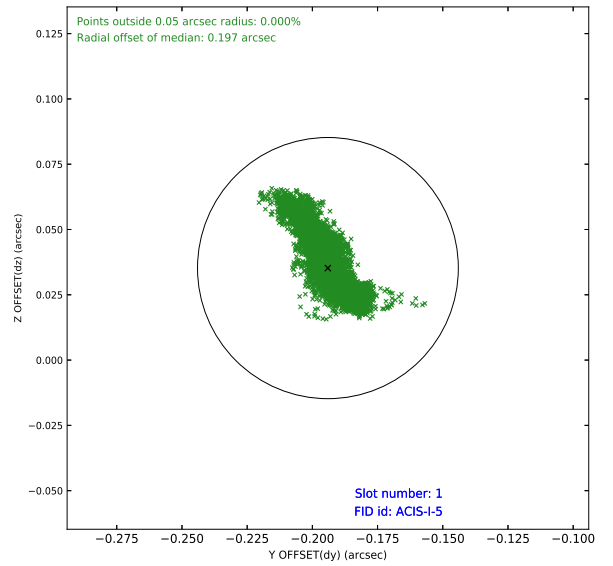
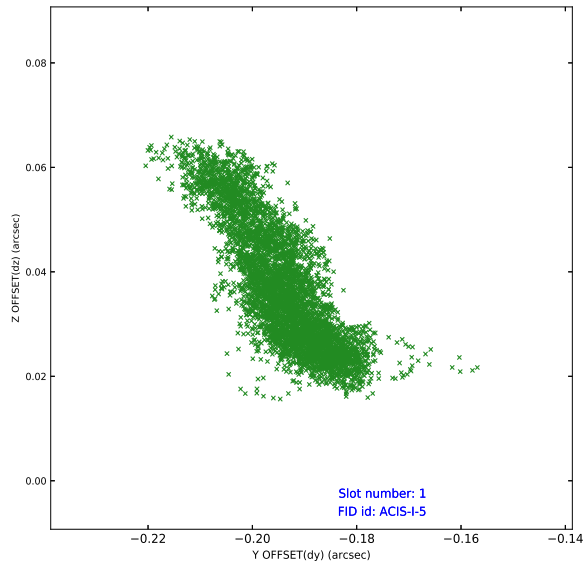
### 2.5.1 Slot 0



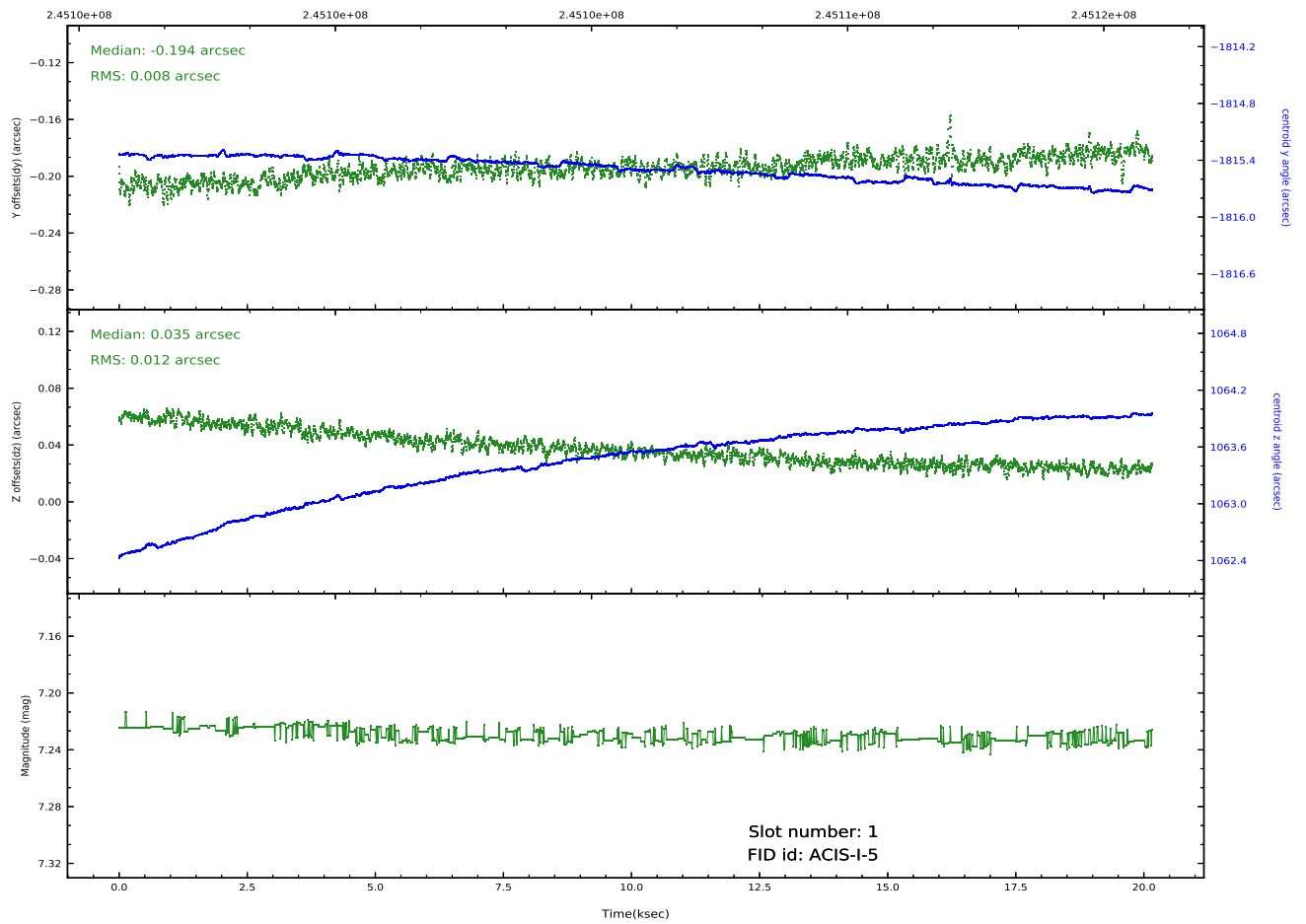
Time (s)



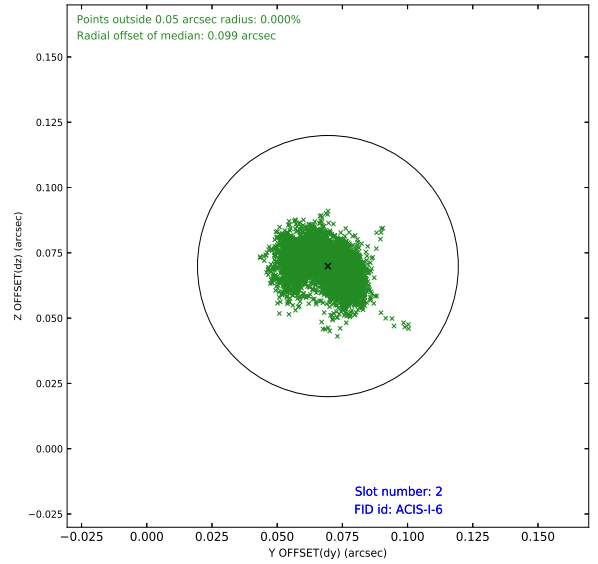
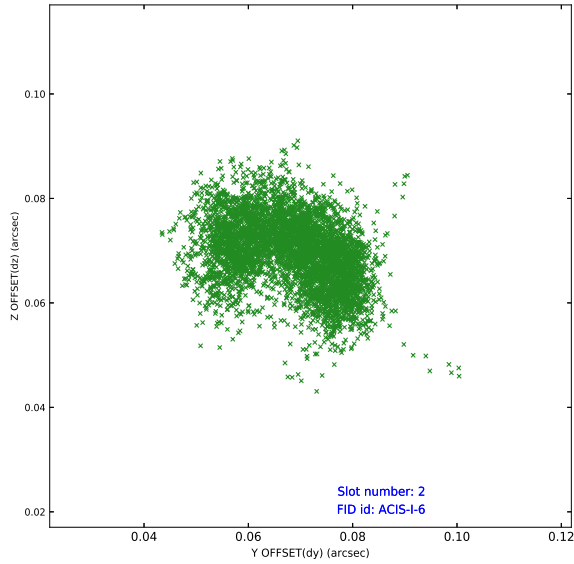
## 2.5.2 Slot 1



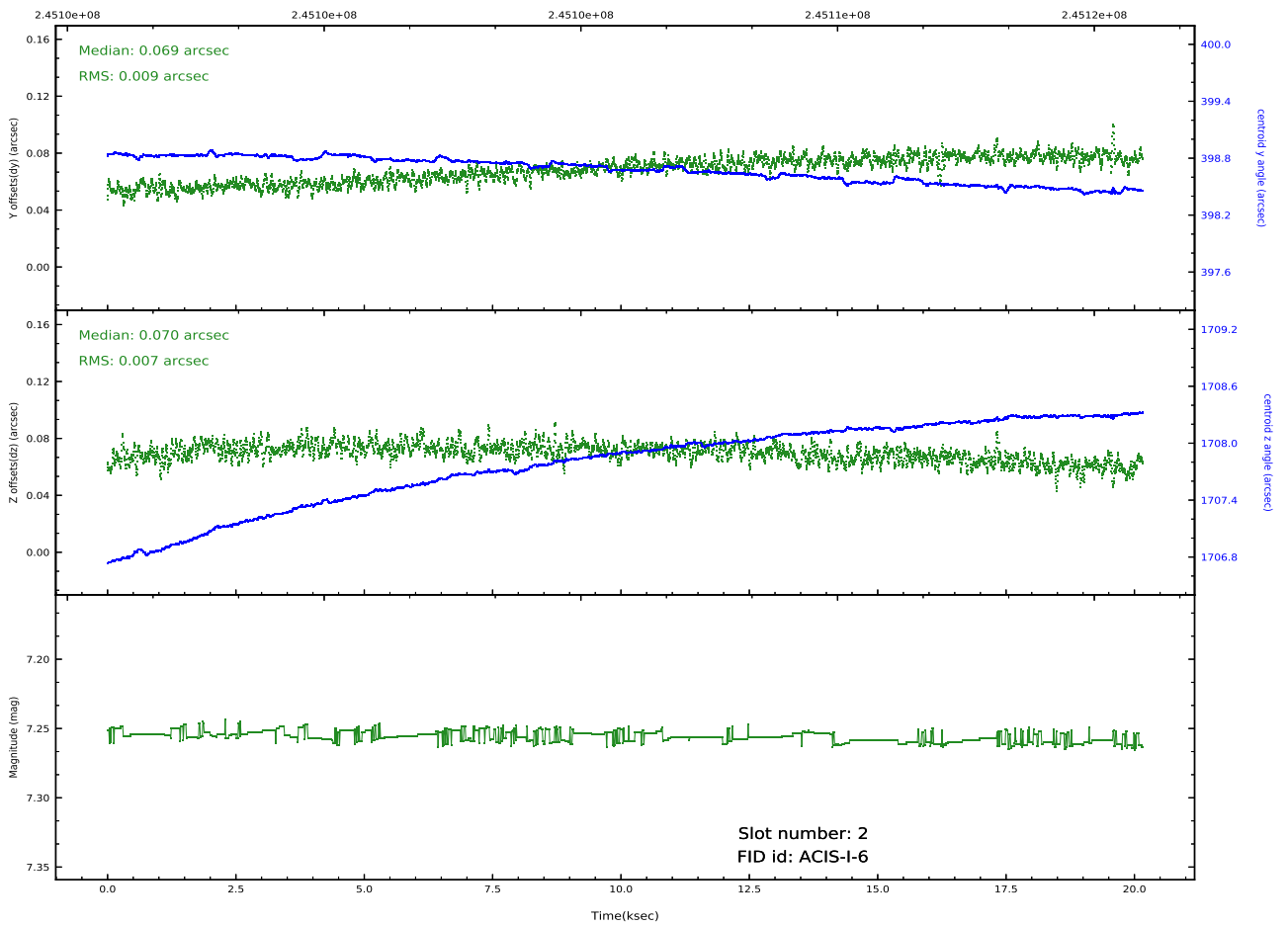
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.14681

## A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files ARE INCORRECT by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct.