

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5295 - L2 Version 4  
Chandra X-Ray Center

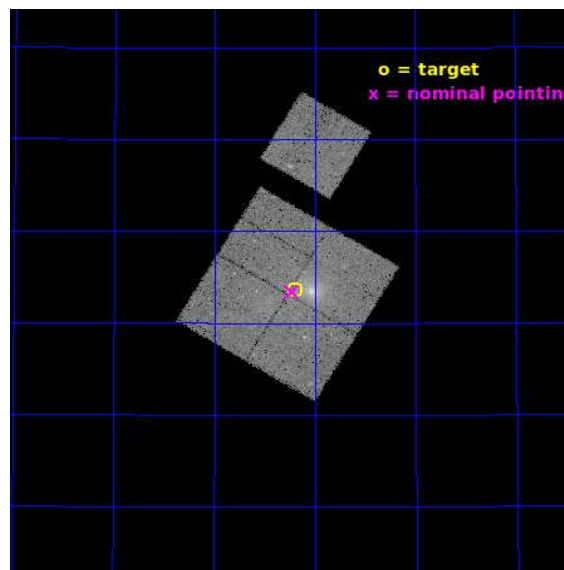
L2 Processing Date : Sep 23 2020

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# 1 Front

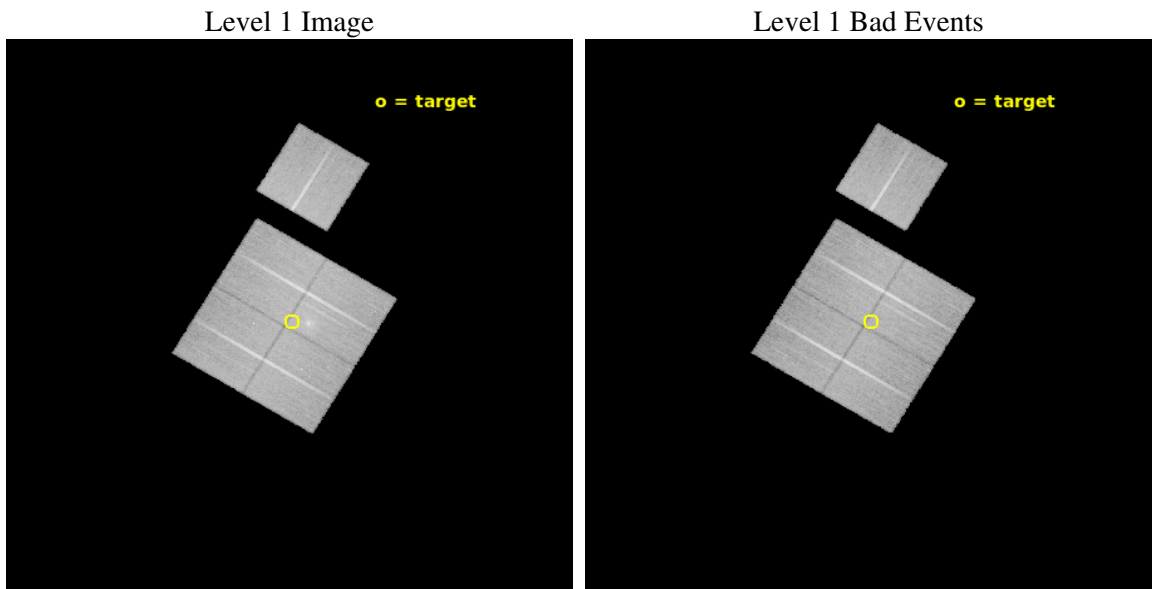
seq_num	700842	Sequence number
obs_id	5295	Observation id
title	Shocks and Bubbles in the ICM: A Chandra Observation of 3C 388	Pro
observer	Dr. Stephen Murray	Principal investigator
object	3C 388	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	281.05064	Observer's specified target RA [deg]
dec_targ	45.560172	Observer's specified target Dec [deg]
ra_nom	281.05738673103	Nominal RA [deg]
dec_nom	45.557190029477	Nominal Dec [deg]
roll_nom	31.026098855417	Nominal Roll [deg]
revision	4	Processing version of data
ontime	31114.658969879	Sum of GTIs [s]
livetime	30708.123044159	Livetime [s]
ontime0	31114.658999801	Sum of GTIs [s]
ontime1	31114.658950001	Sum of GTIs [s]
ontime2	31114.658979923	Sum of GTIs [s]
ontime3	31114.658969879	Sum of GTIs [s]
ontime6	31114.658969879	Sum of GTIs [s]
l2events	114760	Number of level 2 events



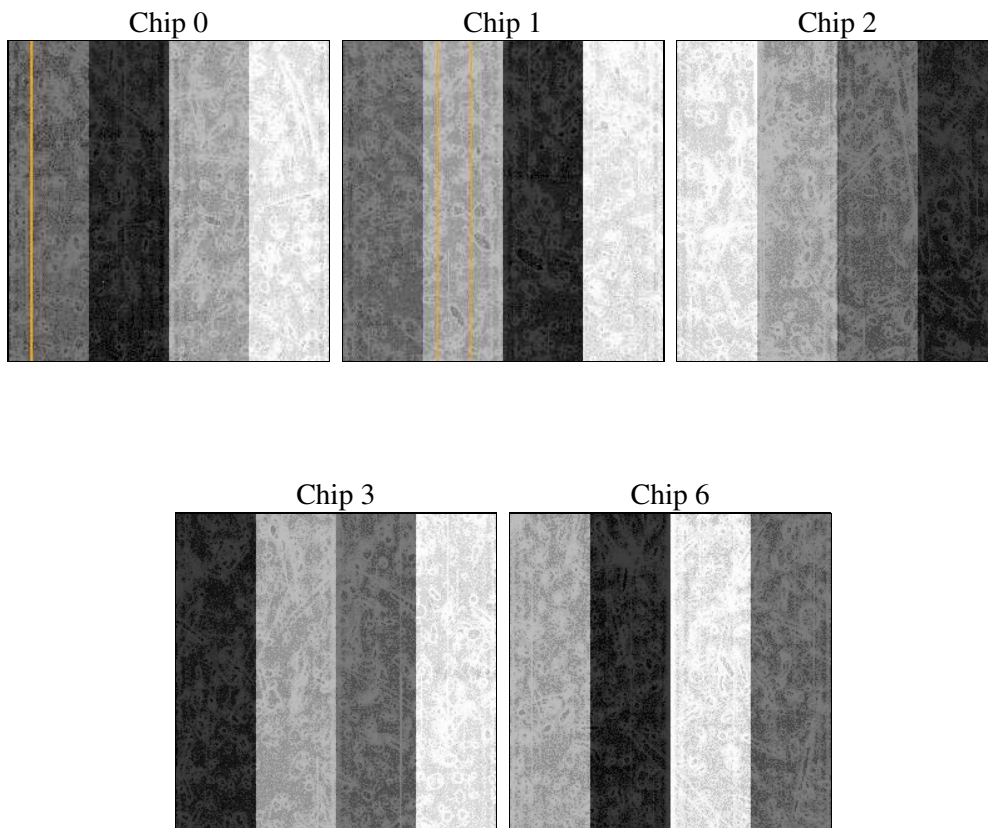
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	31000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	31114.658969879	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	31114.658999801	Sum of GTIs [s]
date	2020-09-23T16:38:58	Date and time of file creation	ontime1	31114.658950001	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	31114.658979923	Sum of GTIs [s]
			ontime3	31114.658969879	Sum of GTIs [s]
			ontime6	31114.658969879	Sum of GTIs [s]
			l1events	920074	Number of level 1 events

### 2.1.4 Events

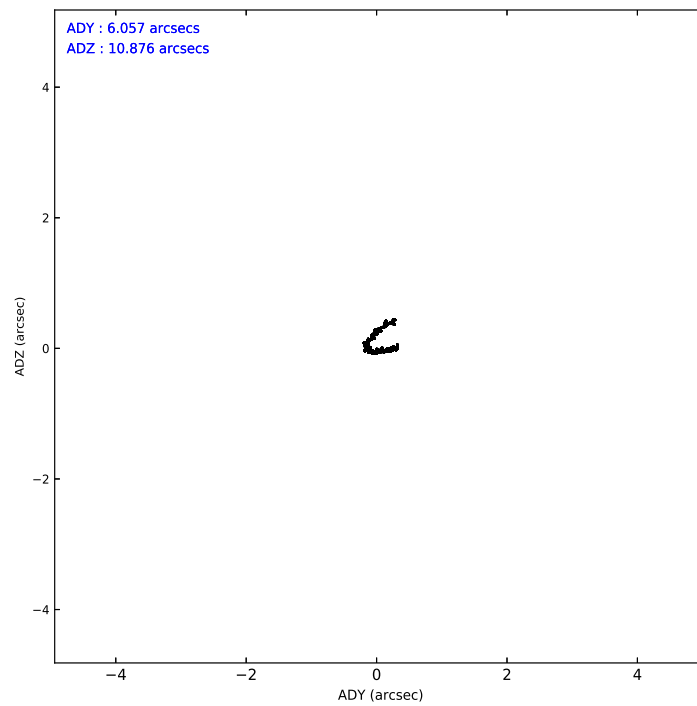
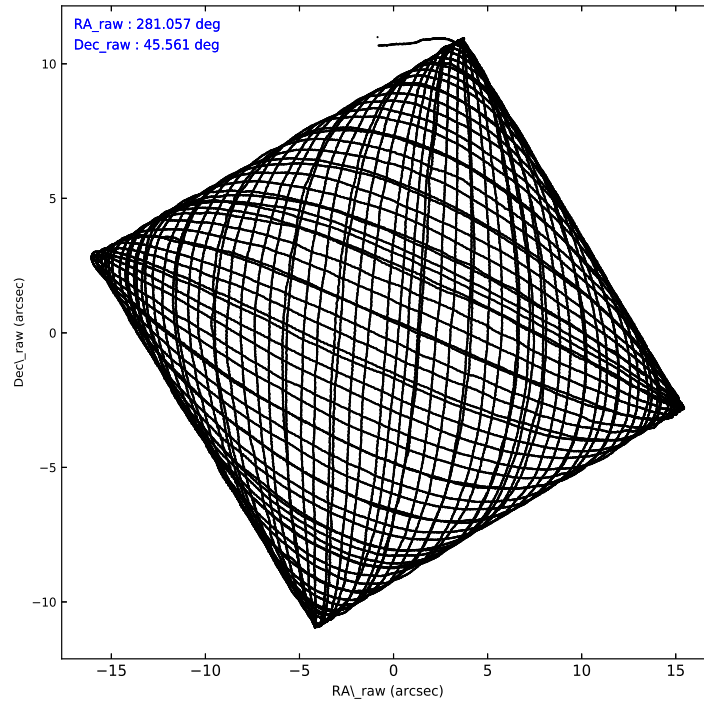
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	172248	178840	187833	195888	185265
rejected events	146668	152687	163757	163321	162452
rejected %	85%	85%	87%	83%	87%

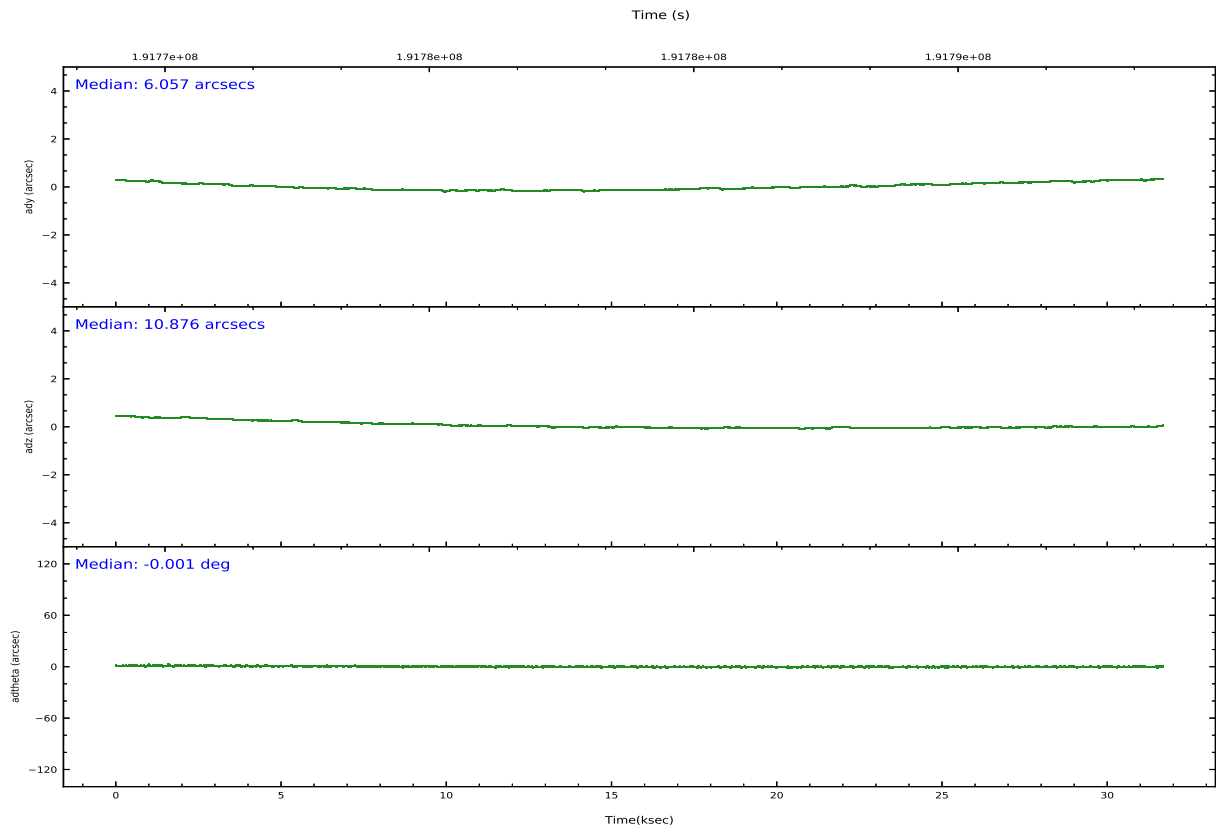
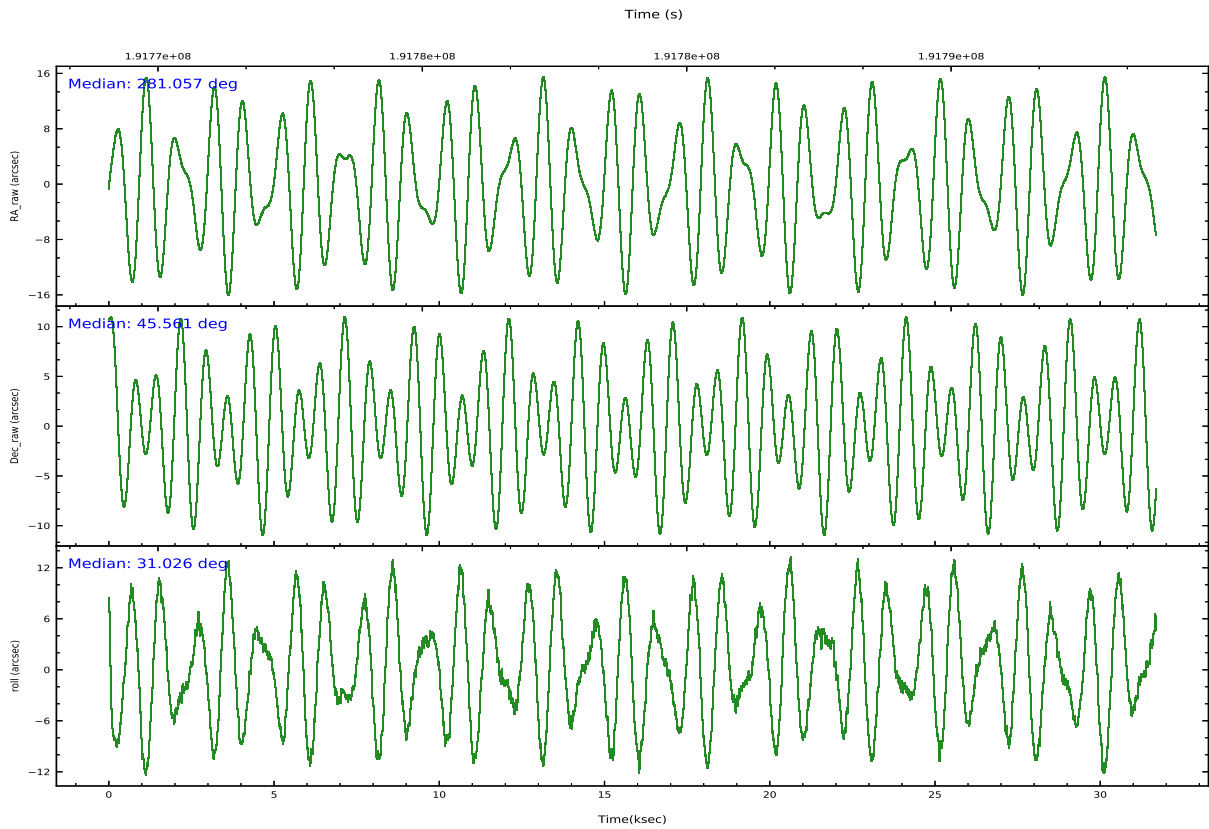
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	11641	11184	11342	18331	9153
	6%	6%	6%	9%	4%
grade 1 events	132	86	117	153	93
	0%	0%	0%	0%	0%
grade 2 events	5149	5339	4786	5242	4561
	2%	2%	2%	2%	2%
grade 3 events	2434	2492	2158	2502	2225
	1%	1%	1%	1%	1%
grade 4 events	2202	2407	2140	2412	2261
	1%	1%	1%	1%	1%
grade 5 events	7734	8125	7533	8646	8596
	4%	4%	4%	4%	4%
grade 6 events	4161	4736	3656	4089	4615
	2%	2%	1%	2%	2%
grade 7 events	138795	144471	156101	154513	153761
	80%	80%	83%	78%	82%

## 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	281.038407	281.05738673103	Subarray requested	NONE	NONE
[deg] Pointing Dec	45.536821	45.557190029477	Alternating exposures requested	N	N
[deg] Pointing Roll	30.839625	31.026098855417	[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)	191767204.184000	191765989.84282			
Observation start date	2004-01-29T12:39:00	2004-01-29T12:19:49			
[s] Observation end time (MET)	191798204.184000	191799716.9568			
Observation end date	2004-01-29T21:15:40	2004-01-29T21:41:56			
Read mode	TIMED	TIMED			

## 2.3 Aspect





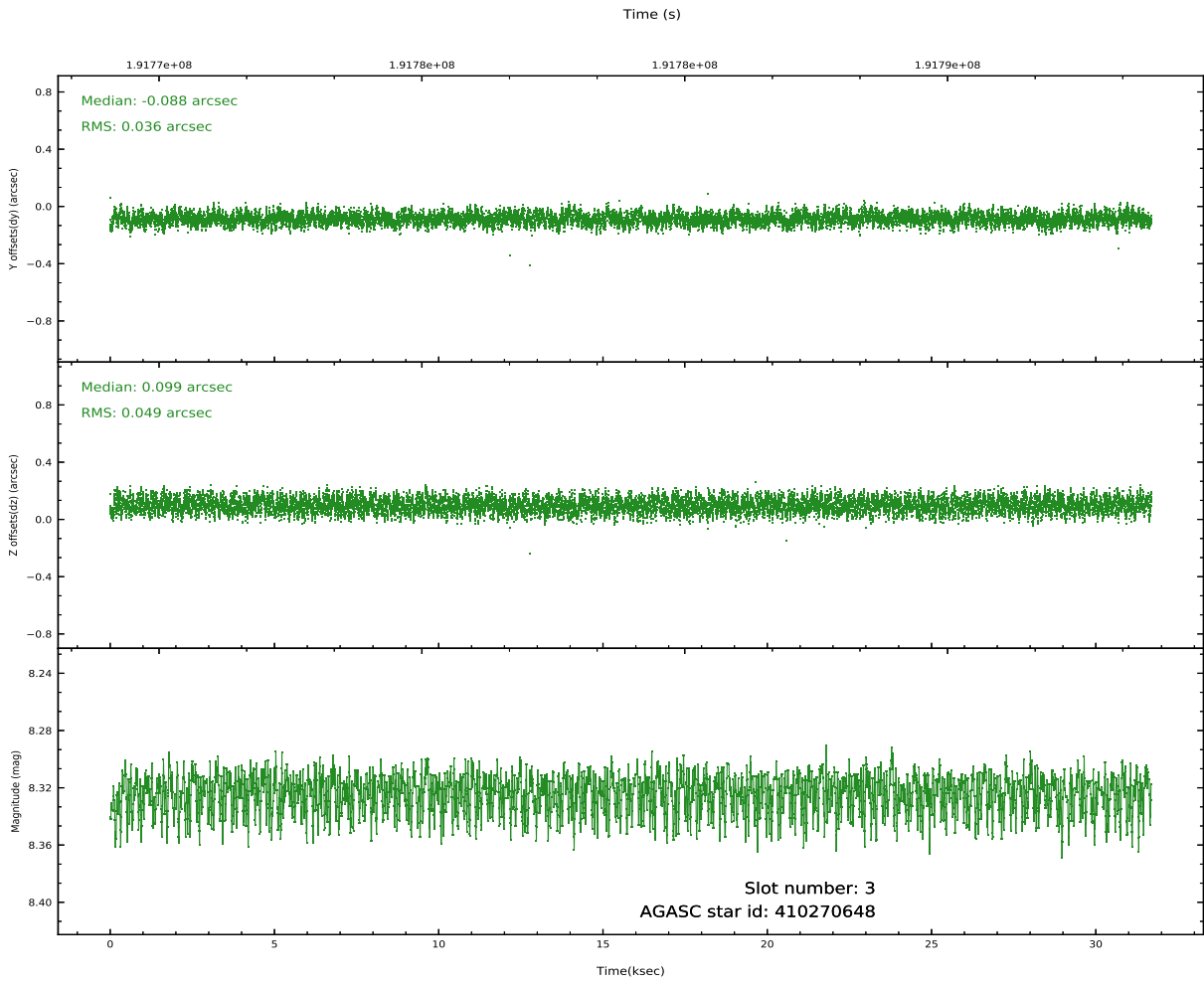
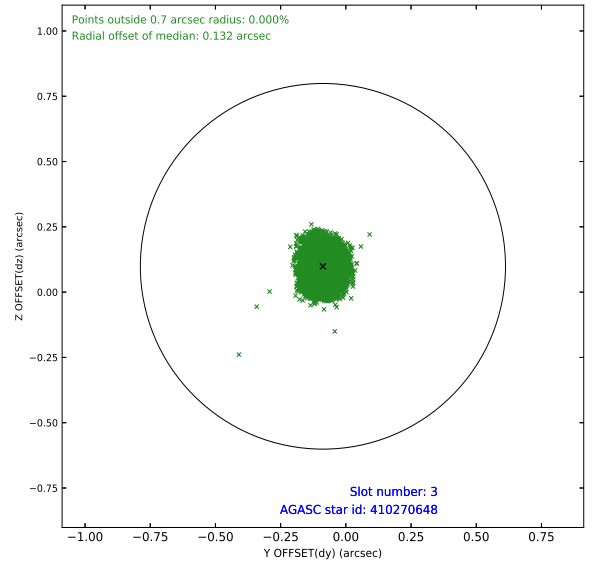
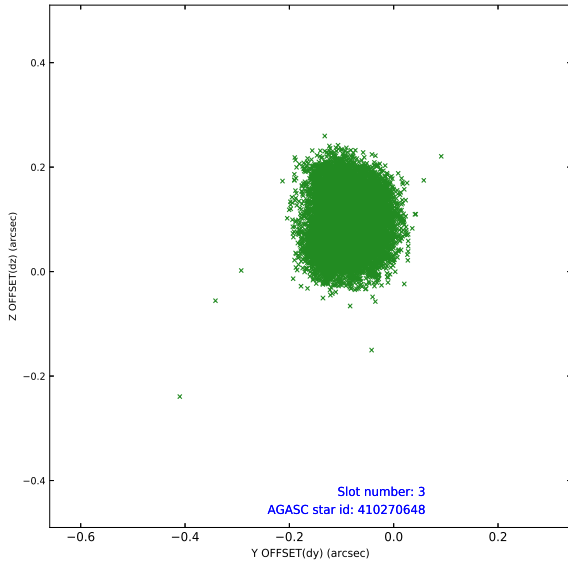
### Slot Statistics

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	7730	1.000	0.038	-0.032	0.009	0.016	0.000000	0.000000	933.65	-834
1	FID		ACIS-I-5	7.23	7730	1.000	-0.187	0.044	0.009	0.015	0.000000	0.000000	-1814.62	1063
2	FID		ACIS-I-6	7.25	7729	1.000	0.058	0.058	0.007	0.012	0.000000	0.000000	399.18	1707
3	GUIDE	used	410270648	8.32	15460	1.000	-0.088	0.099	0.066	0.103	281.097411	44.889988	-1063.94	-2076
4	GUIDE	used	462307888	8.51	15456	1.000	0.031	-0.044	0.067	0.104	280.411703	45.917665	-641.85	1987
5	GUIDE	used	464017248	8.33	15457	1.000	0.076	-0.041	0.078	0.137	282.279643	45.321328	2312.99	-2255
6	GUIDE	used	464018424	7.26	15460	1.000	0.033	0.021	0.081	0.126	282.151184	45.261757	1924.43	-2278
7	GUIDE	used	462305872	9.14	15451	1.000	-0.062	-0.031	0.108	0.189	280.002199	45.867625	-1611.29	2368

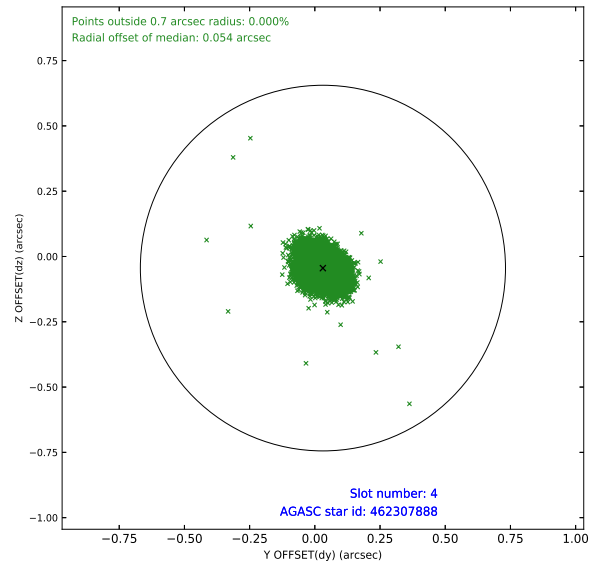
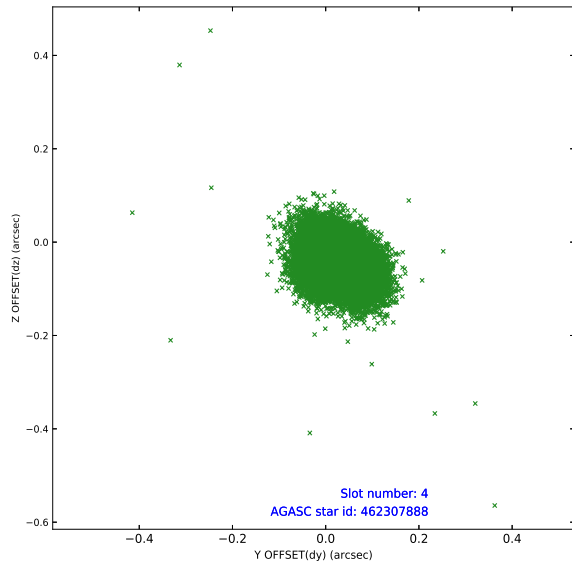
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## 2.4 Star Slots

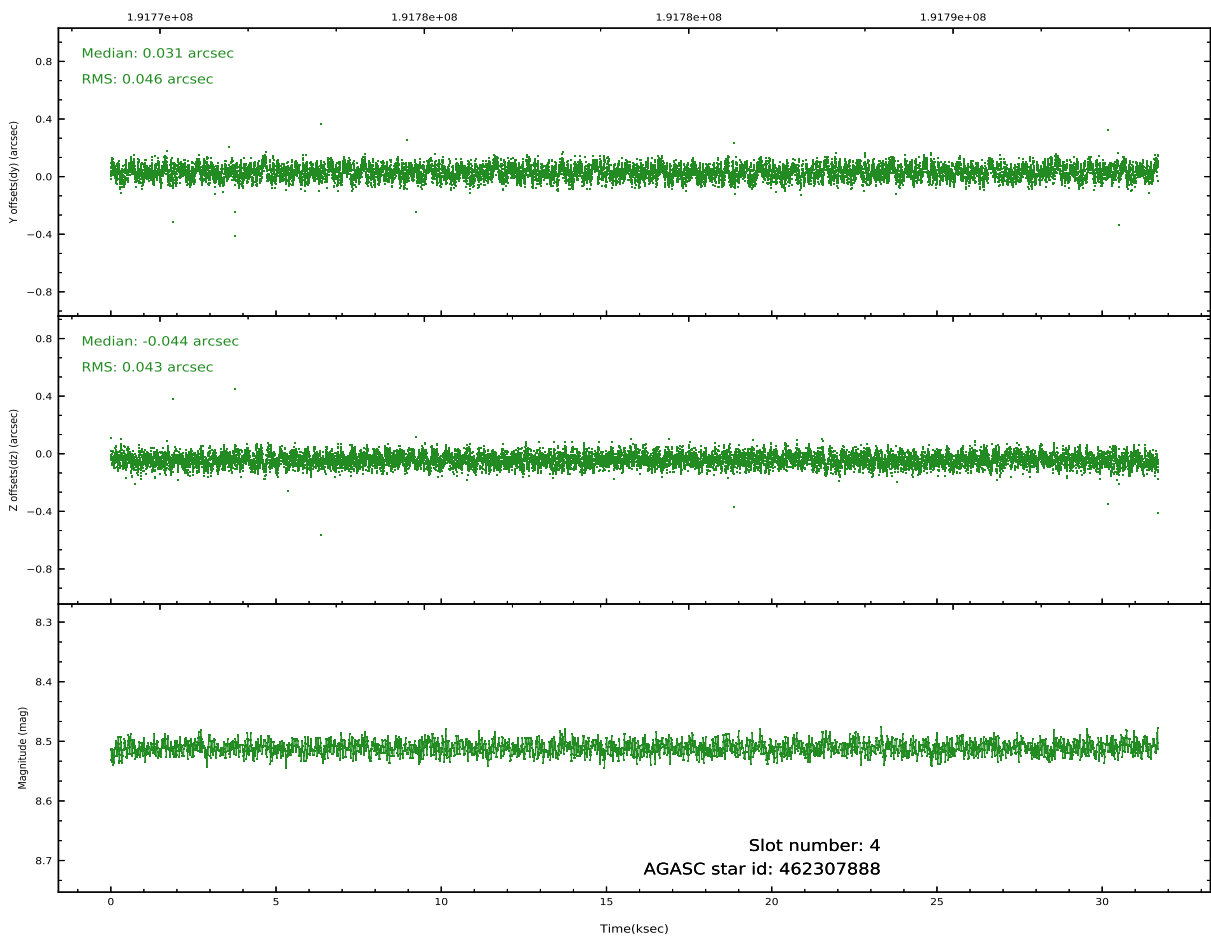
### 2.4.1 Slot 3



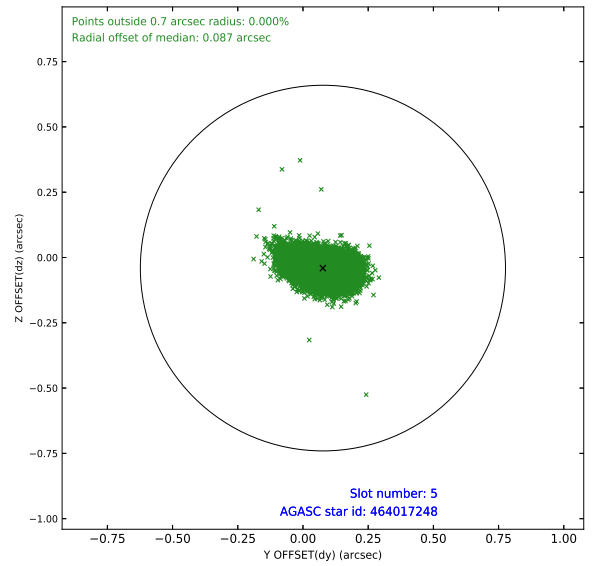
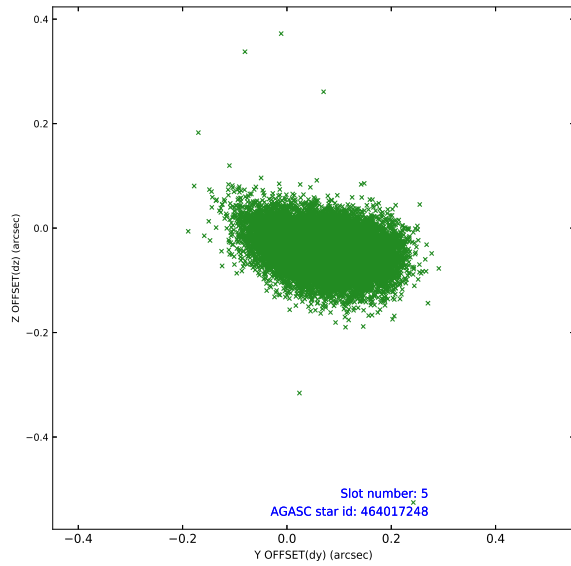
## 2.4.2 Slot 4



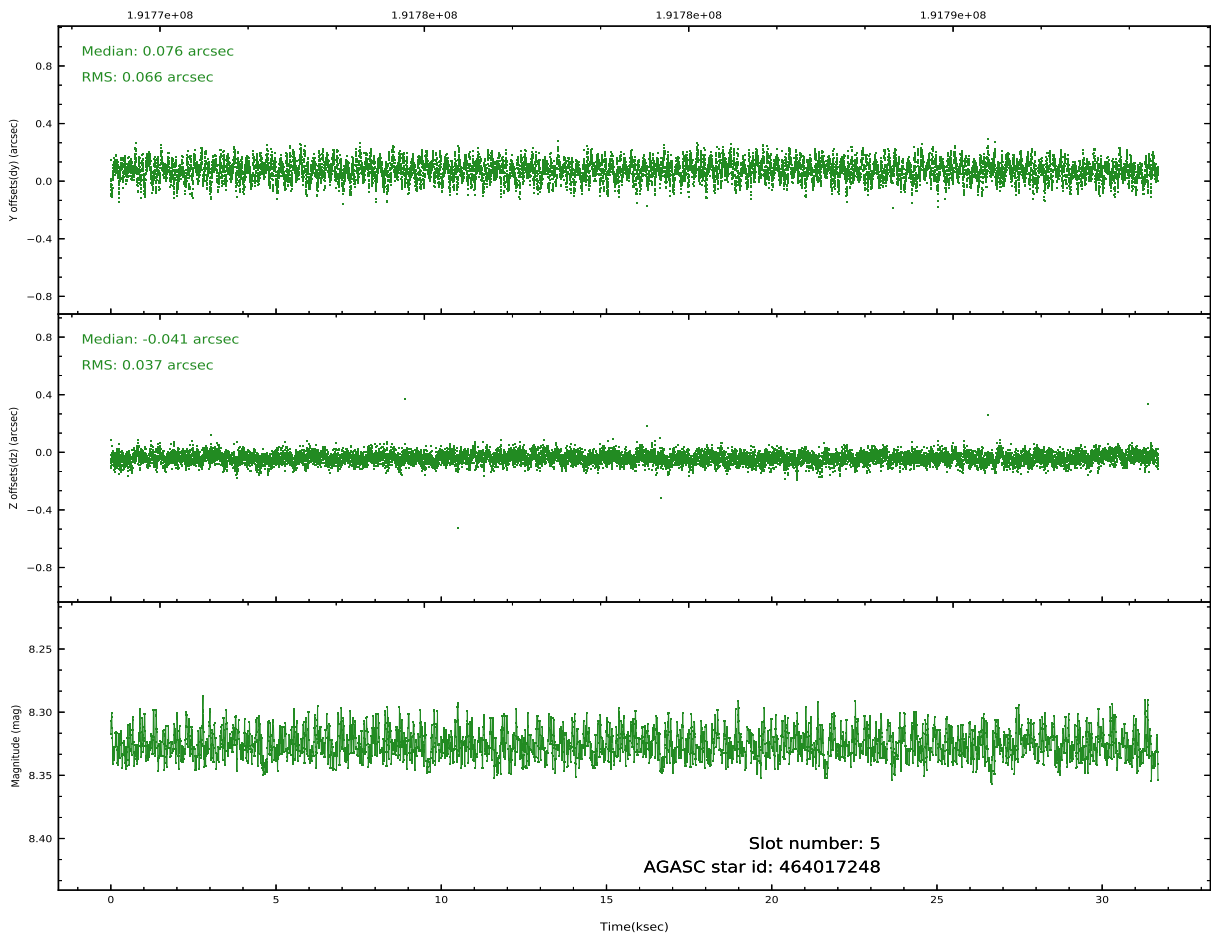
Time (s)



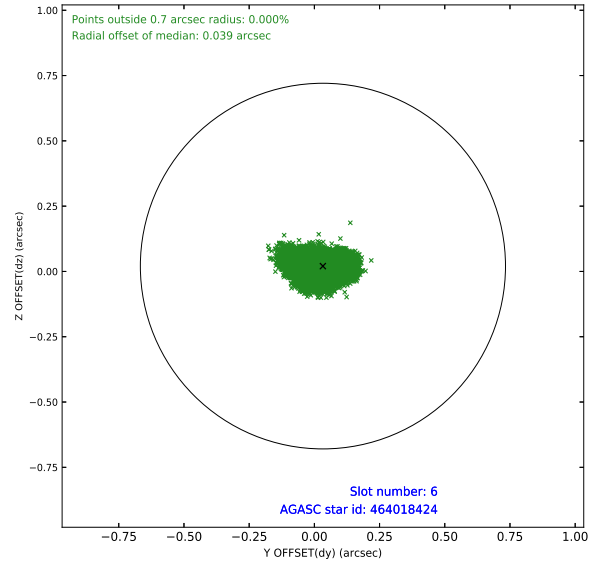
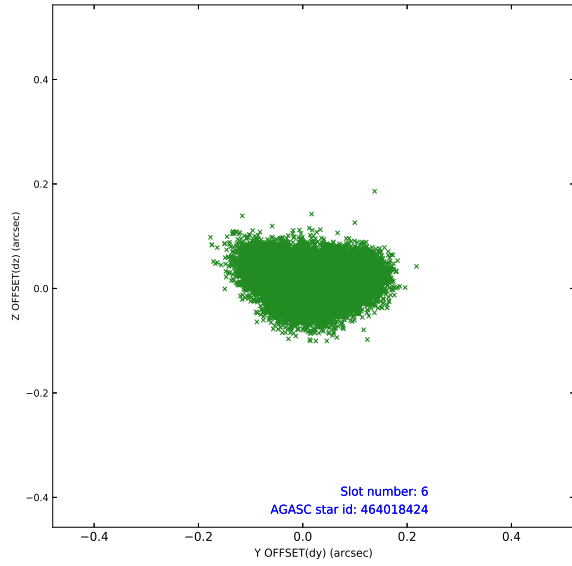
### 2.4.3 Slot 5



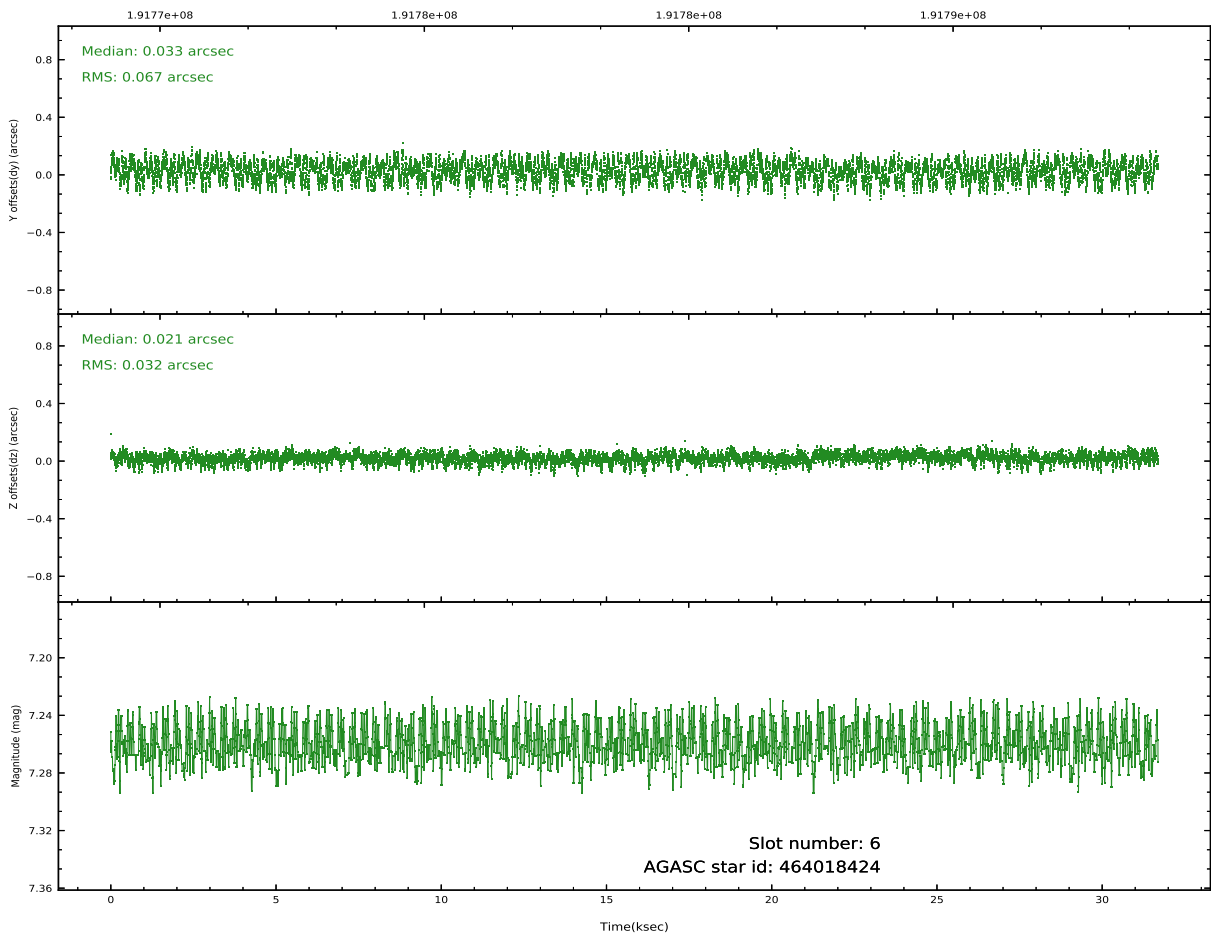
Time (s)



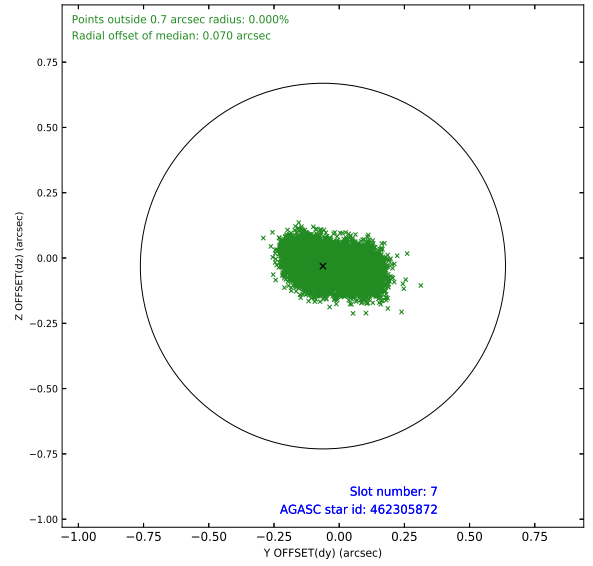
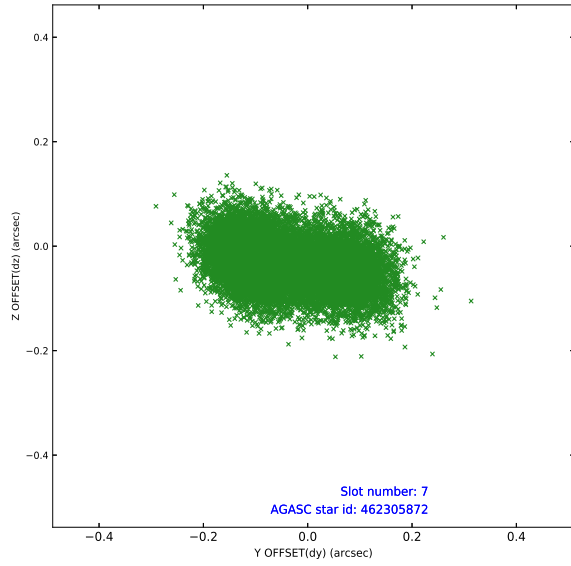
## 2.4.4 Slot 6



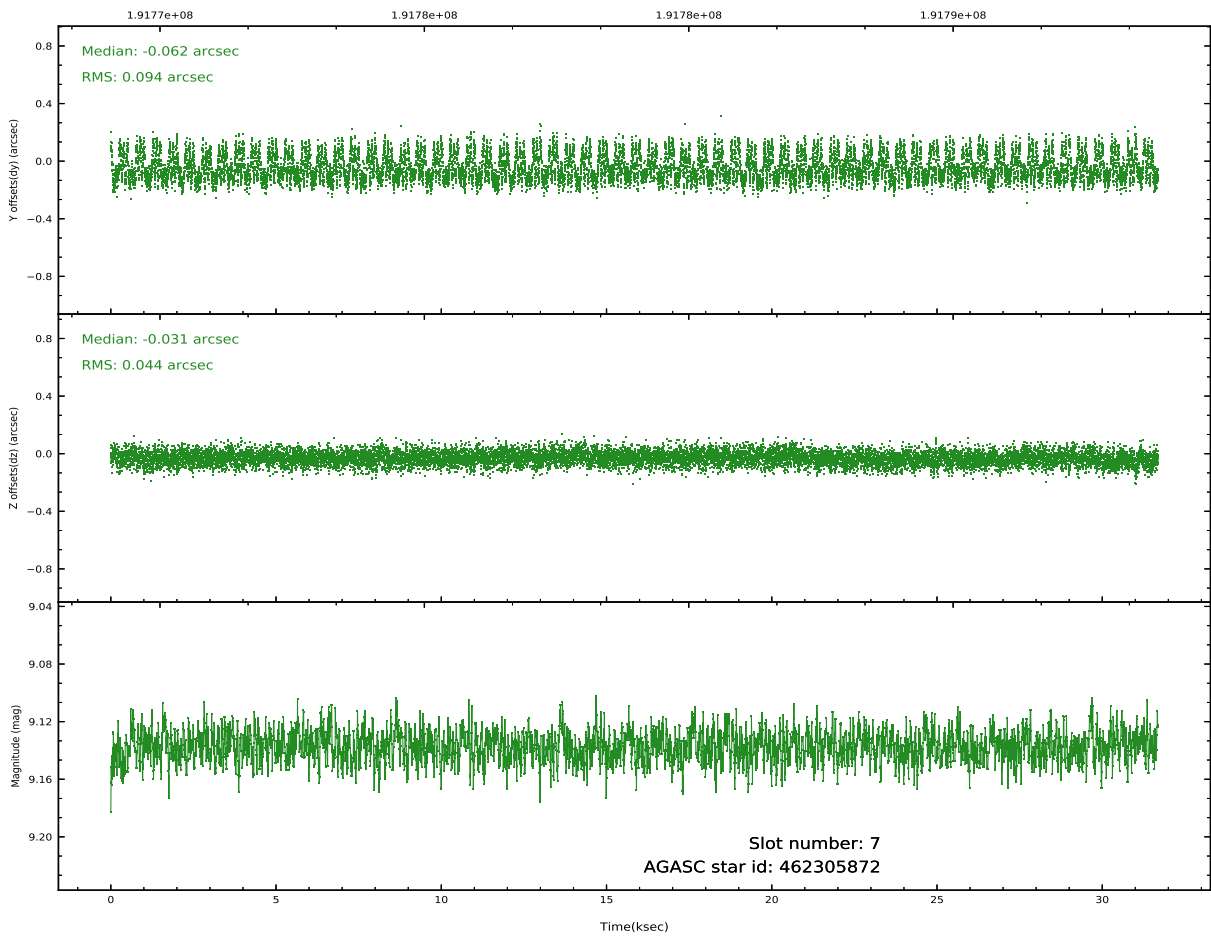
Time (s)



## 2.4.5 Slot 7

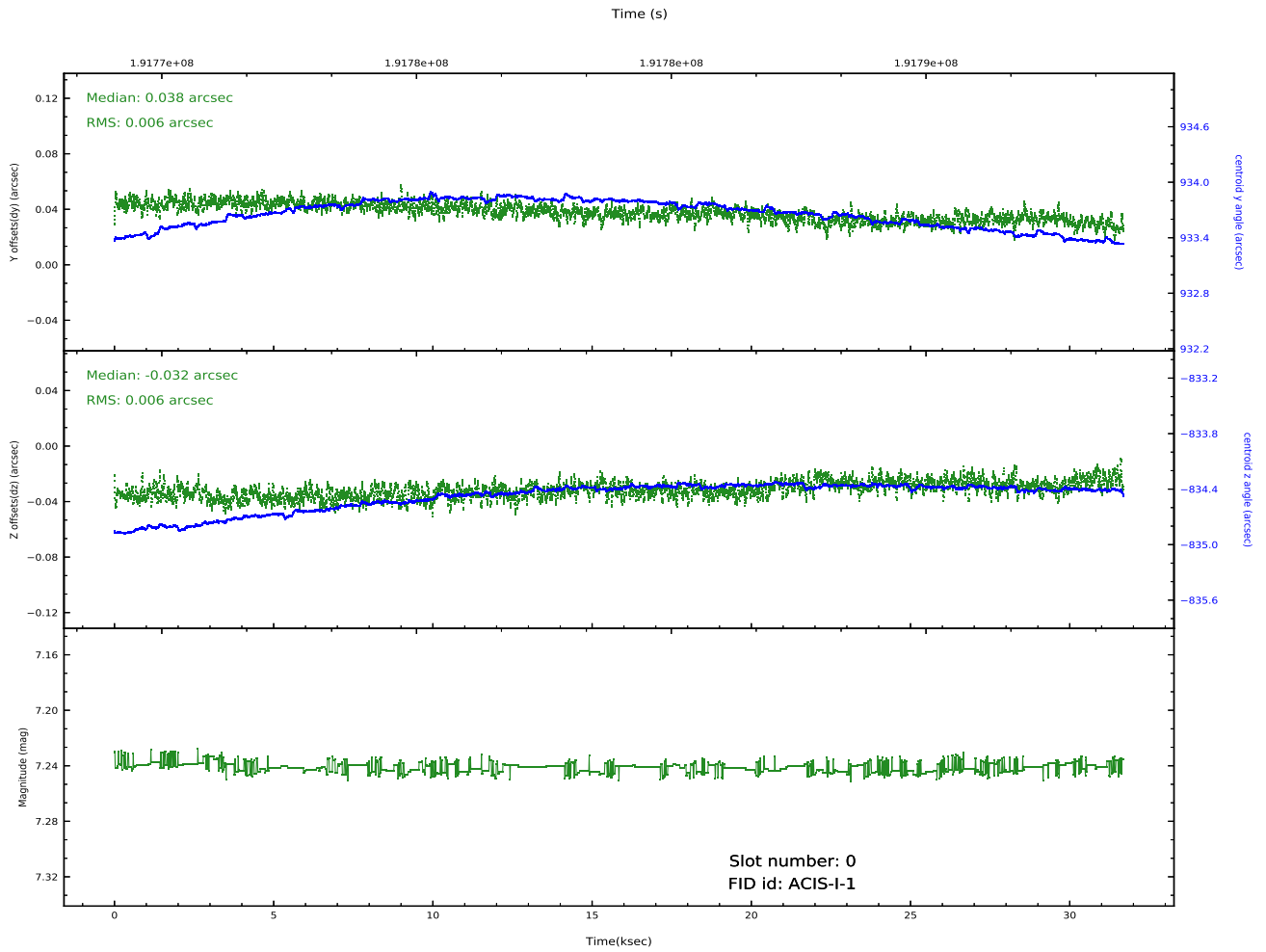
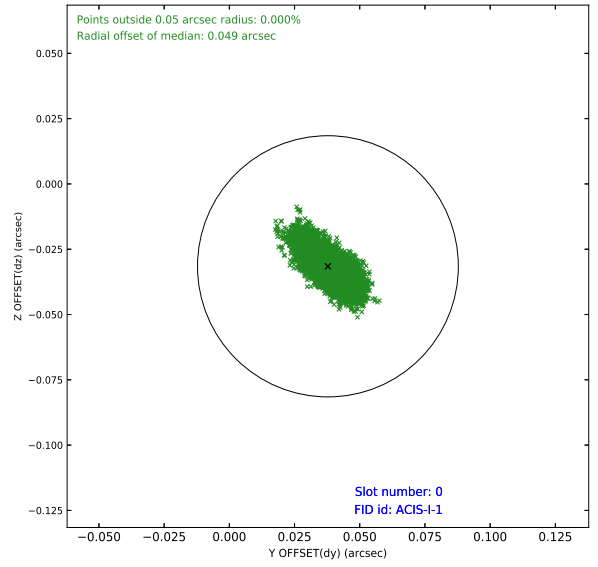
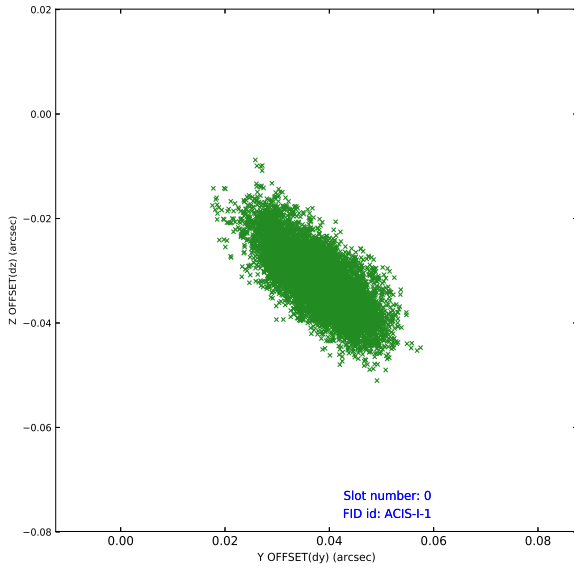


Time (s)

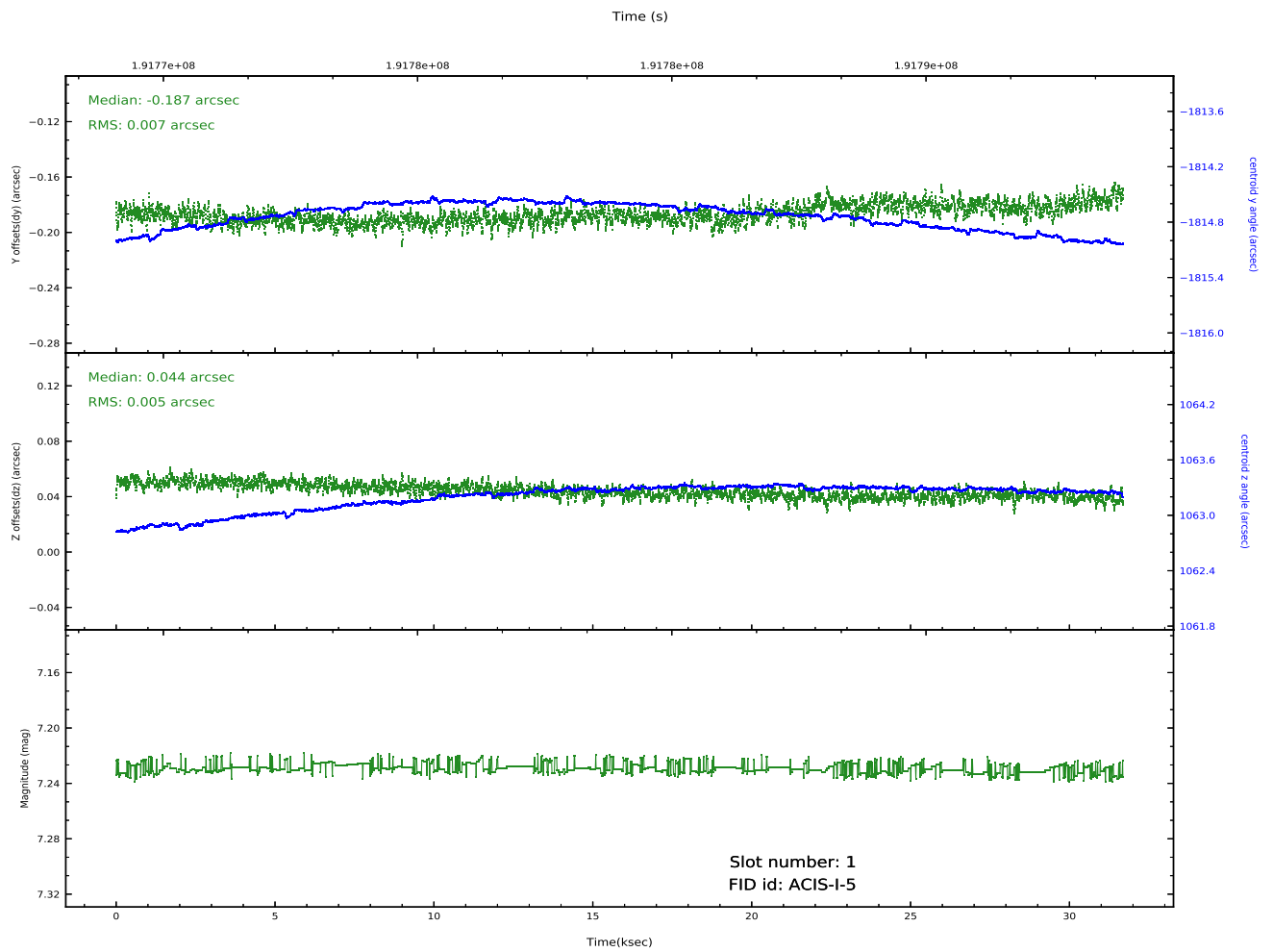
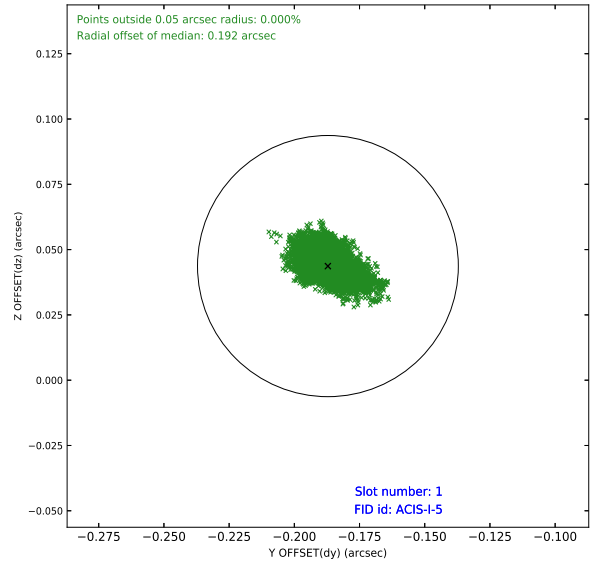
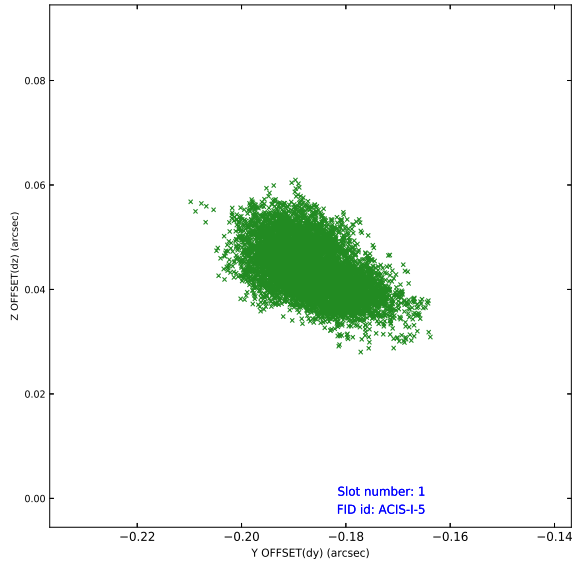


## 2.5 FID Slots

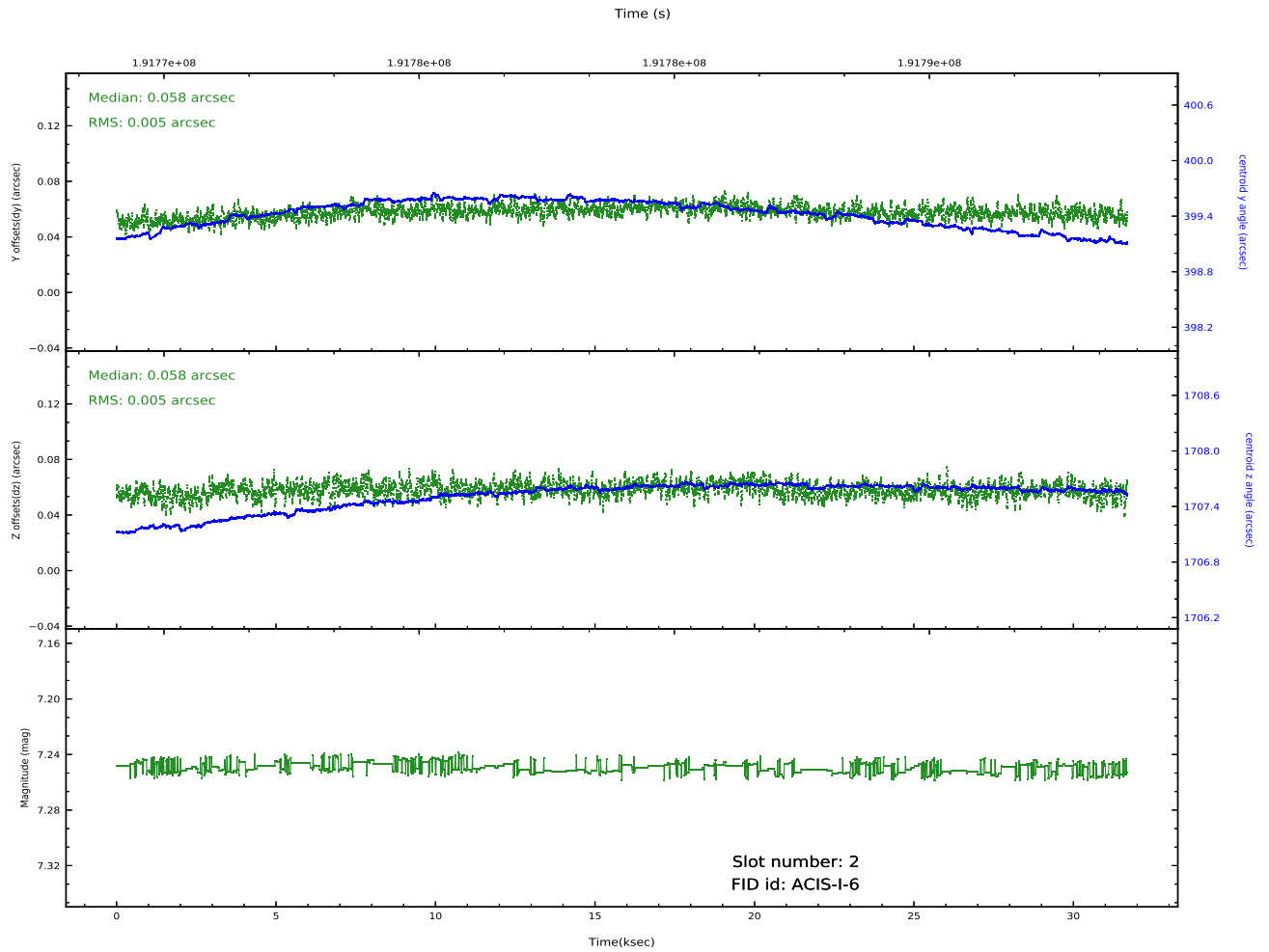
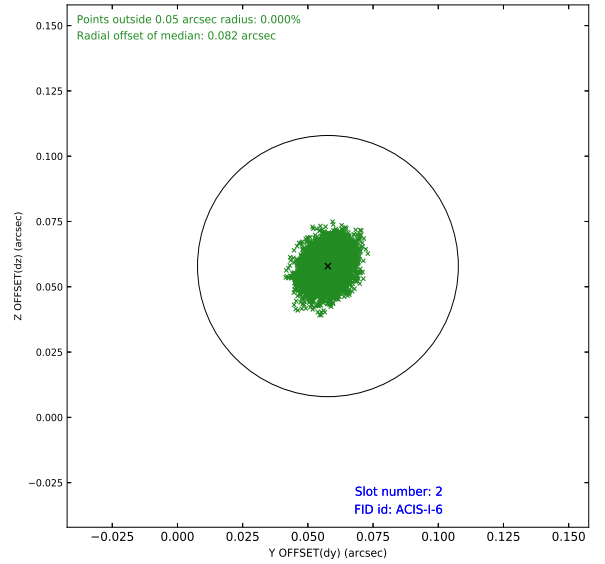
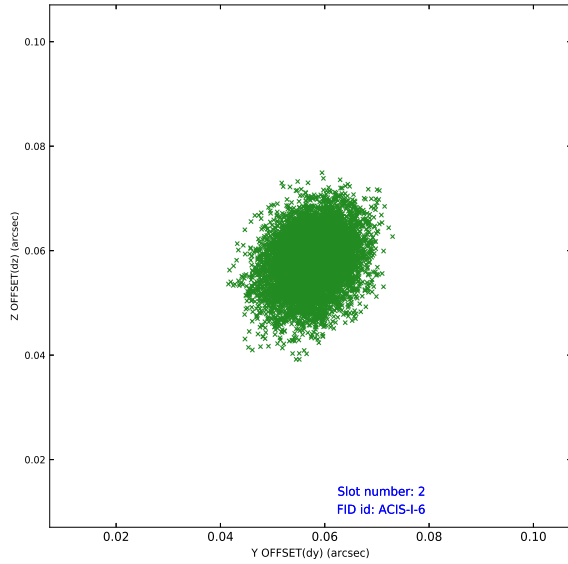
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Francesca Civano
V&V Date (YYYY-MM-DD)	2020.09.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	31.117

## A.2 Comments