

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5950 - L2 Version 4  
Chandra X-Ray Center

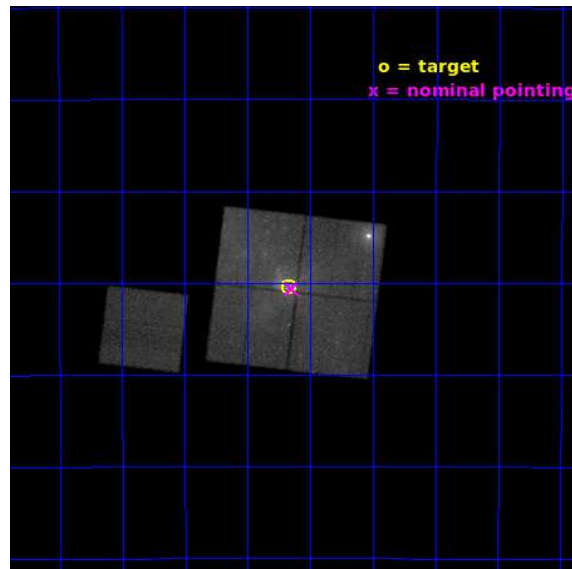
L2 Processing Date : Oct 9 2020

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# 1 Front

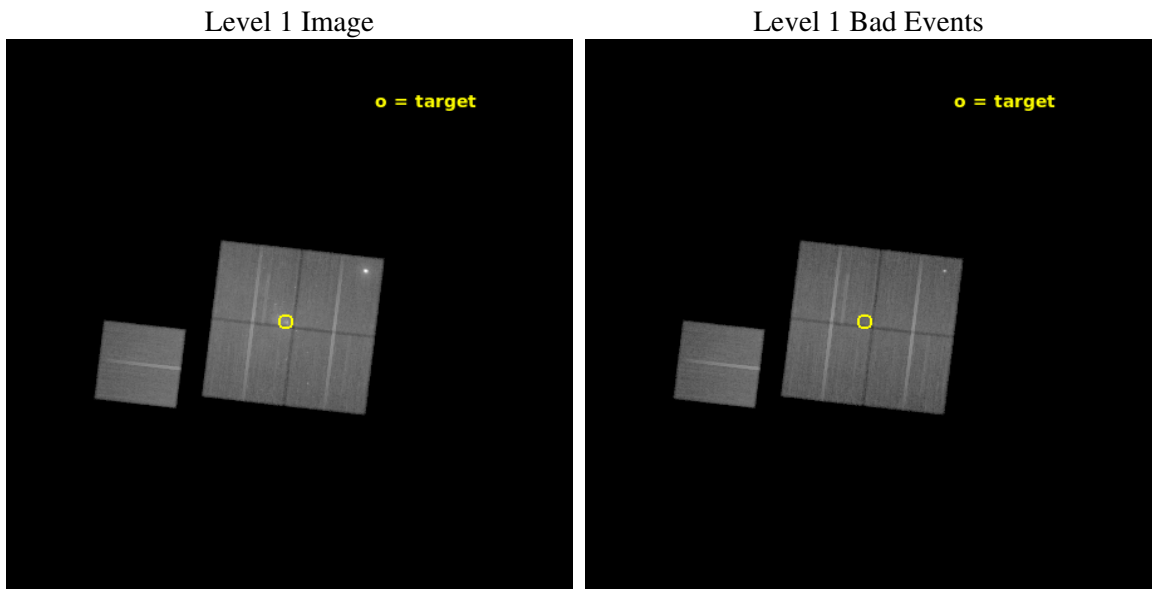
seq_num	600469	Sequence number
obs_id	5950	Observation id
title	Simultaneous Gamma-Ray to Sub-Millimeter Monitoring of Sagittarius A*	Proposal title
observer	Frederick Baganoff	Principal investigator
object	Sgr A*	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.007778	Observer's specified target Dec [deg]
ra_nom	266.41164938156	Nominal RA [deg]
dec_nom	-29.010453652972	Nominal Dec [deg]
roll_nom	276.74473177331	Nominal Roll [deg]
revision	4	Processing version of data
ontime	49175.299905419	Sum of GTIs [s]
livetime	48532.788409826	Livetime [s]
ontime0	49175.299905419	Sum of GTIs [s]
ontime1	49175.299905419	Sum of GTIs [s]
ontime2	49175.299905419	Sum of GTIs [s]
ontime3	49175.299905419	Sum of GTIs [s]
ontime6	49175.299905419	Sum of GTIs [s]
l2events	483002	Number of level 2 events



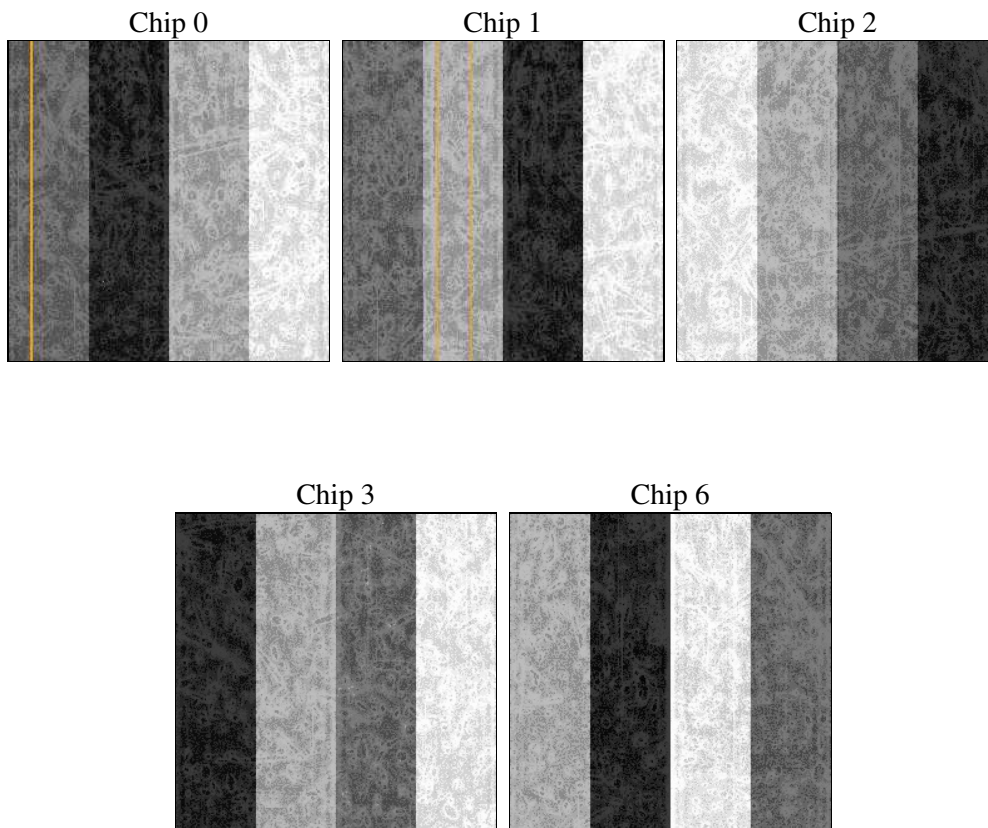
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	49000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	49175.299905419	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	49175.299905419	Sum of GTIs [s]
date	2020-10-09T14:18:37	Date and time of file creation	ontime1	49175.299905419	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	49175.299905419	Sum of GTIs [s]
			ontime3	49175.299905419	Sum of GTIs [s]
			ontime6	49175.299905419	Sum of GTIs [s]
			l1events	2207080	Number of level 1 events

### 2.1.4 Events

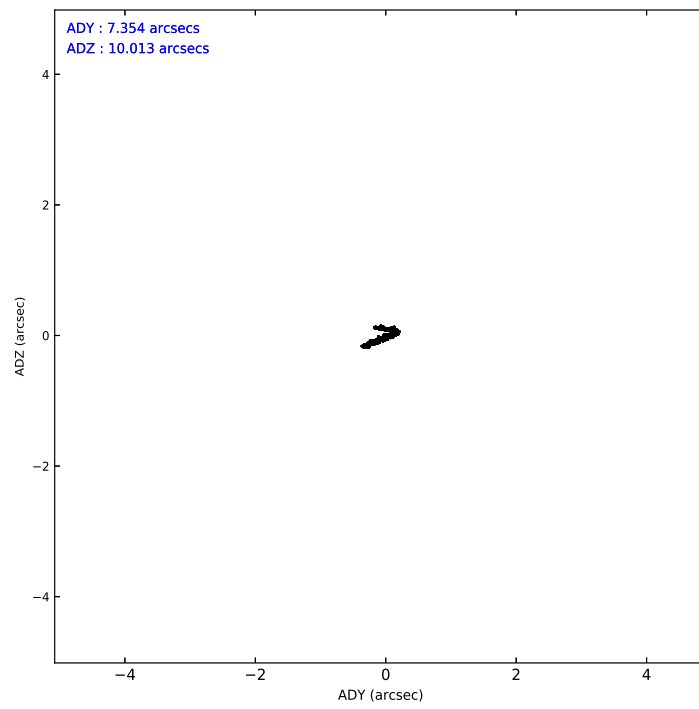
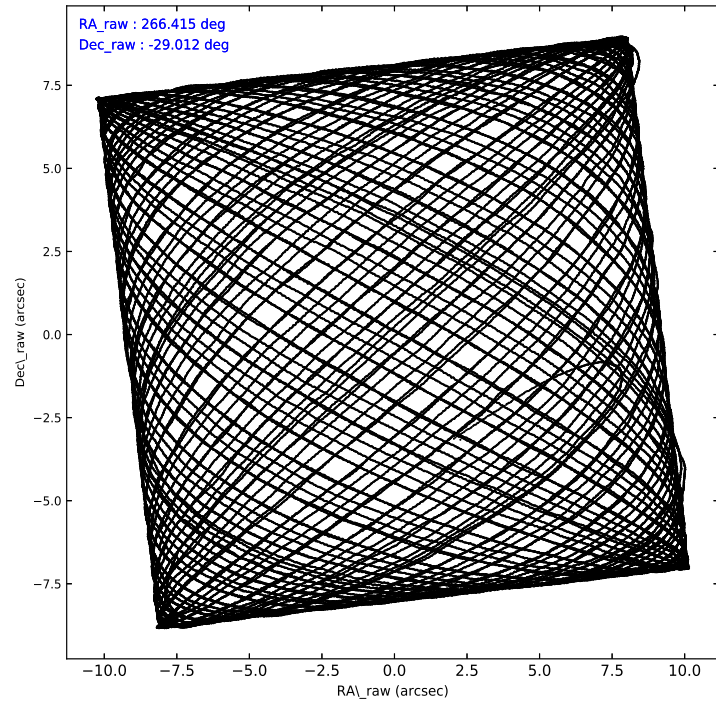
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	391535	490752	437057	485538	402198
rejected events	312359	322923	348715	348208	347513
rejected %	79%	65%	79%	71%	86%

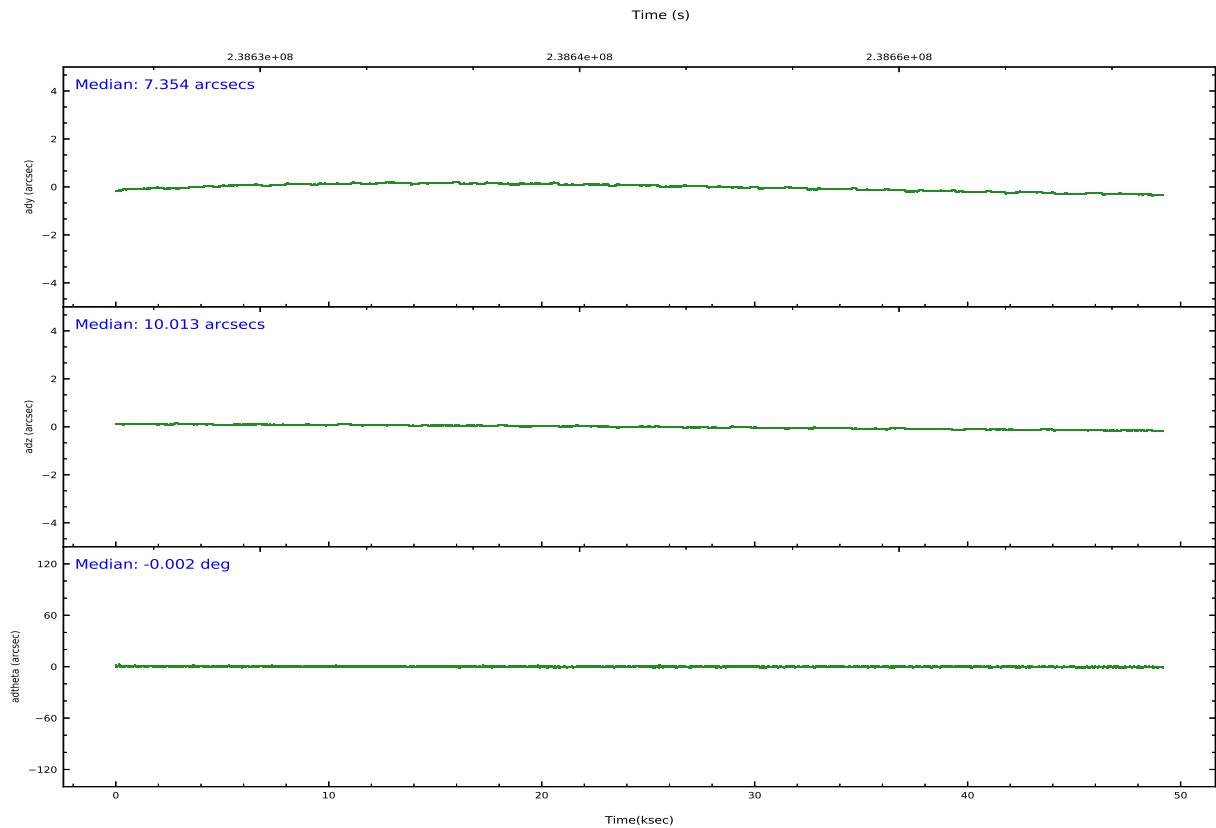
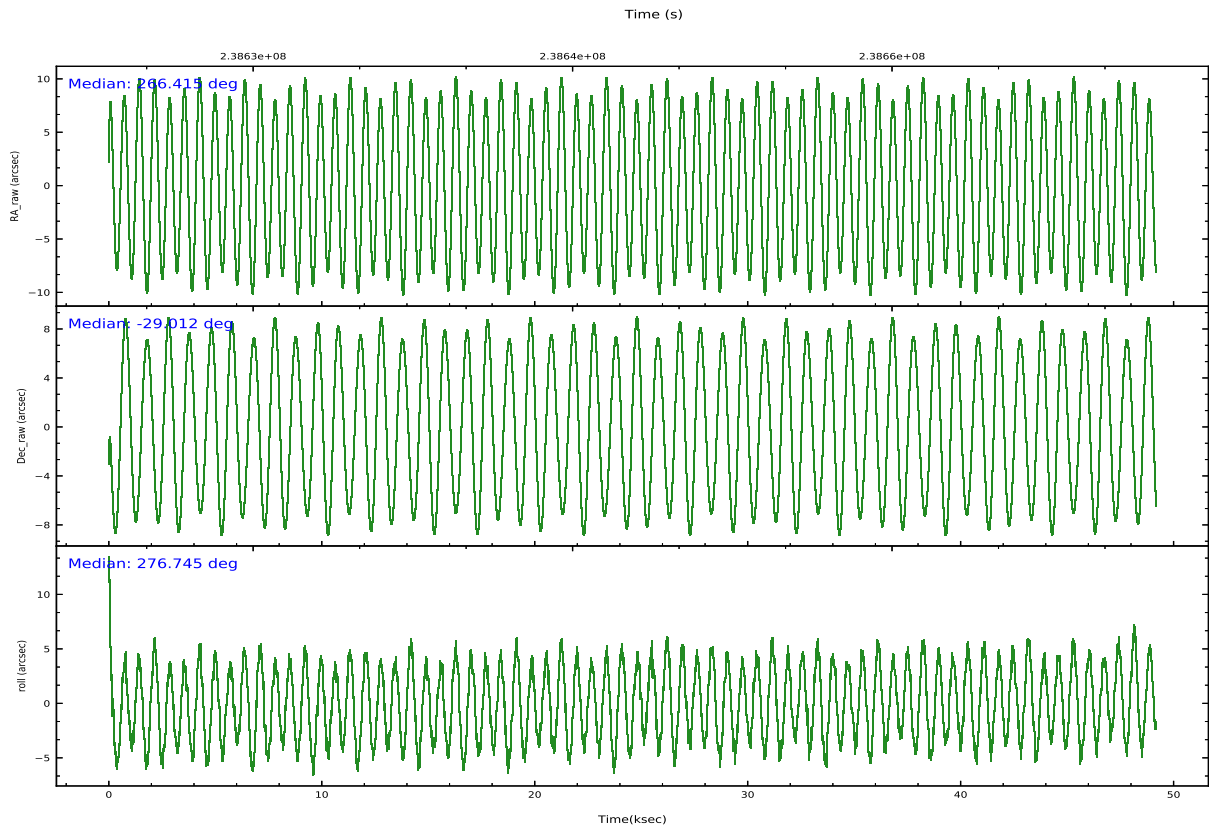
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	42181	96413	50649	83921	24560
	10%	19%	11%	17%	6%
grade 1 events	334	1216	458	696	186
	0%	0%	0%	0%	0%
grade 2 events	14486	28967	15260	21461	10694
	3%	5%	3%	4%	2%
grade 3 events	6195	11497	6121	8924	4939
	1%	2%	1%	1%	1%
grade 4 events	5869	11195	6315	8715	4893
	1%	2%	1%	1%	1%
grade 5 events	16229	17879	15404	18280	17941
	4%	3%	3%	3%	4%
grade 6 events	10771	20341	10331	14831	9845
	2%	4%	2%	3%	2%
grade 7 events	295470	303244	332519	328710	329140
	75%	61%	76%	67%	81%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	266.396354	266.41164938156	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.990358	-29.010453652972	Alternating exposures requested	N	N
[deg] Pointing Roll	276.528875	276.74473177331	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	238621624.184000	238621624.184000			
[s] Window stop time (MET)	238670644.184000	238670644.184000			
[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)	238623402.184000	238622307.91619			
Observation start date	2005-07-24T20:15:38	2005-07-24T19:58:27			
[s] Observation end time (MET)	238672402.184000	238673270.91852			
Observation end date	2005-07-25T09:52:18	2005-07-25T10:07:50			
Read mode	TIMED	TIMED			

## 2.3 Aspect



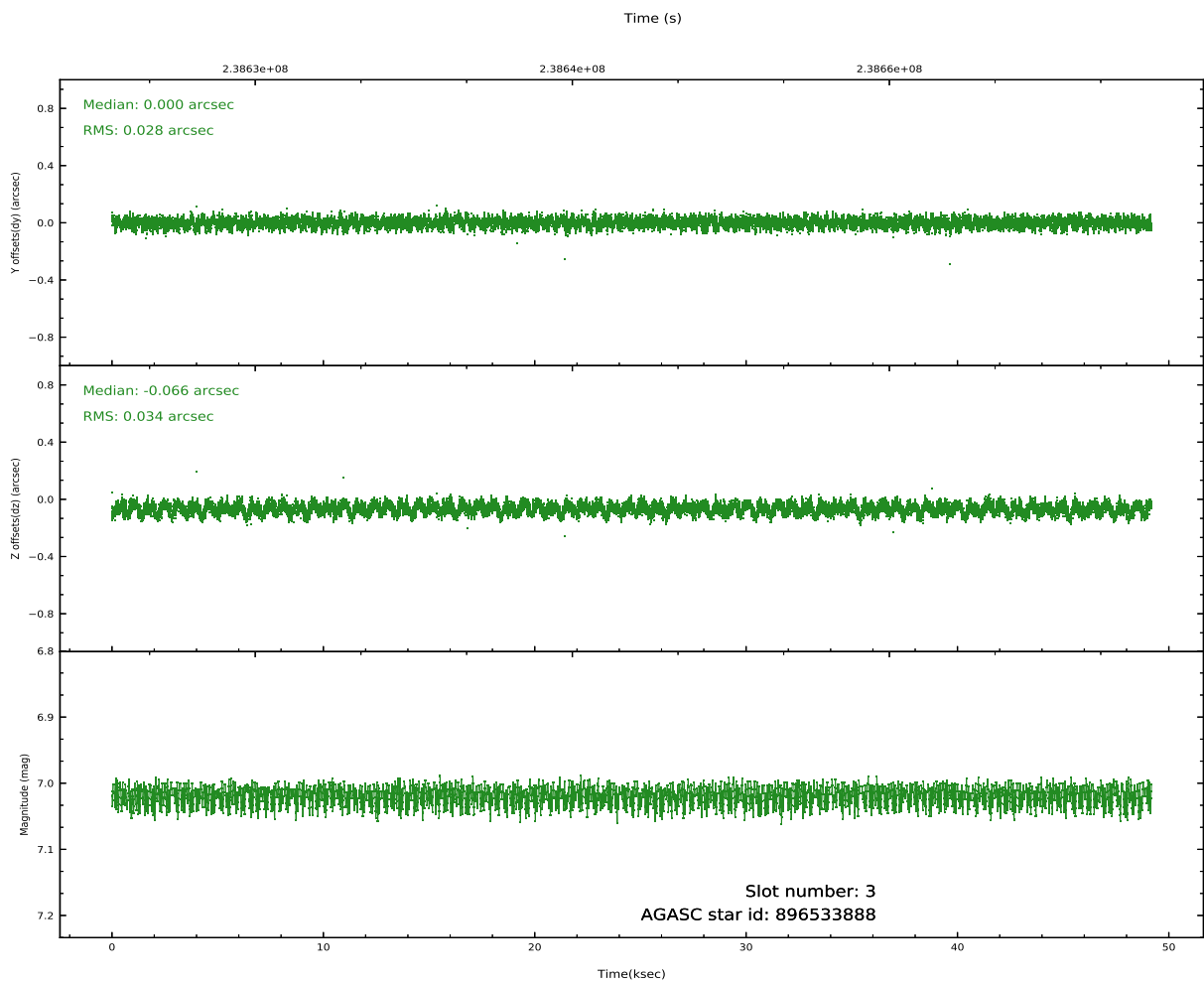
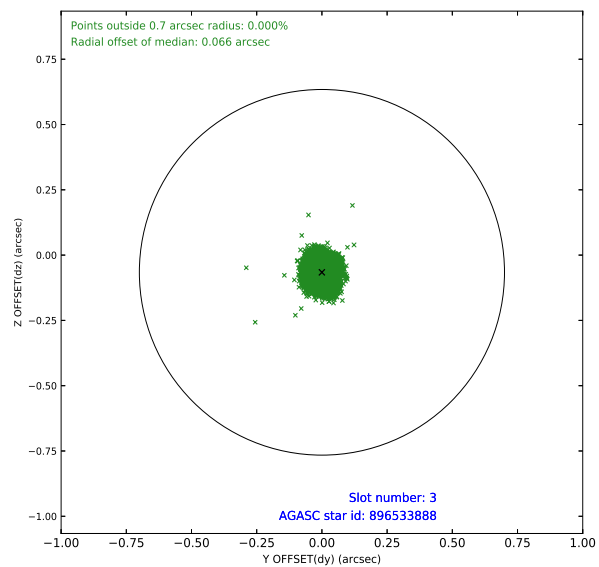
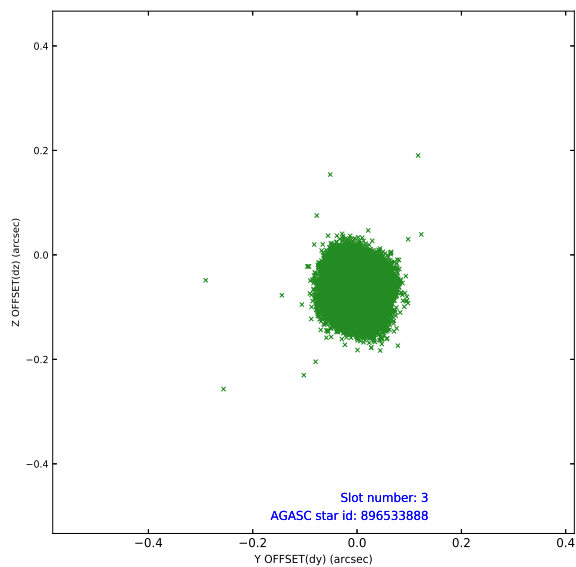


### Slot Statistics

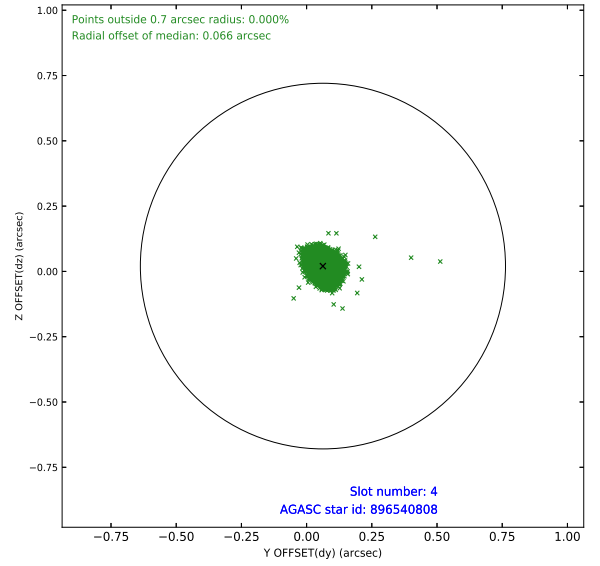
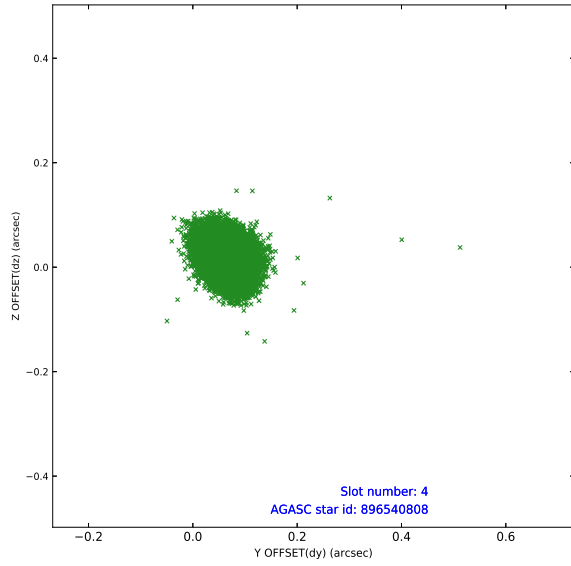
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	11996	1.000	0.019	-0.013	0.010	0.018	0.000000	0.000000	932.37	-833
1	FID		ACIS-I-5	7.23	11995	1.000	-0.206	0.021	0.008	0.015	0.000000	0.000000	-1815.99	1064
2	FID		ACIS-I-6	7.25	11995	1.000	0.096	0.063	0.008	0.013	0.000000	0.000000	397.99	1708
3	GUIDE	used	896533888	7.02	23991	1.000	0.000	-0.066	0.048	0.074	266.666434	-29.392757	1536.76	676
4	GUIDE	used	896540808	7.46	23991	1.000	0.063	0.020	0.039	0.064	265.985401	-29.308604	994.28	-1412
5	GUIDE	used	896541360	7.72	23920	1.000	0.099	0.066	0.046	0.075	266.684478	-29.453744	1761.49	707
6	GUIDE	used	896541576	8.19	23985	1.000	-0.044	0.038	0.059	0.096	267.051055	-28.762912	-572.82	2145
7	GUIDE	used	896404568	7.86	23988	1.000	-0.120	-0.052	0.051	0.083	265.687293	-28.431080	-2248.77	-2002

## 2.4 Star Slots

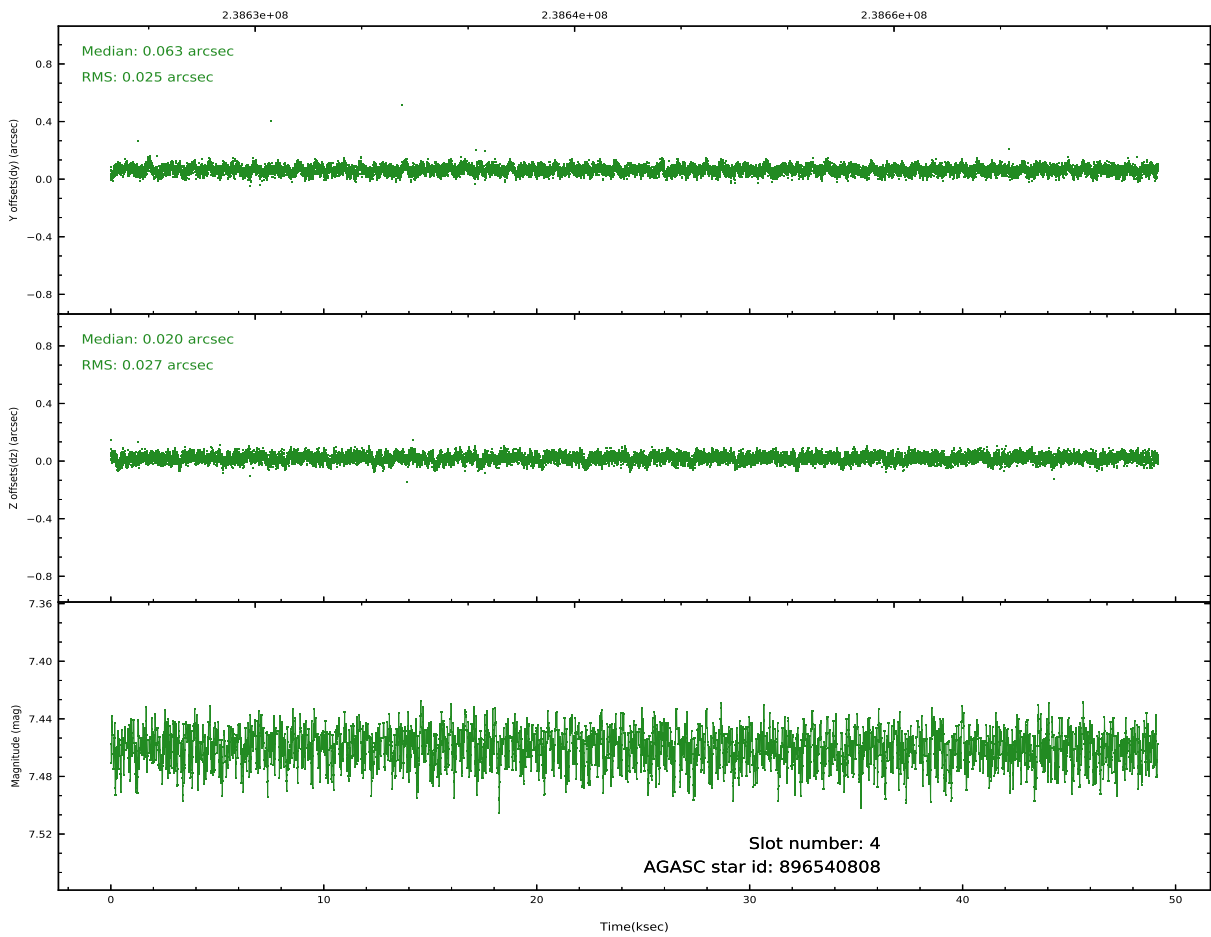
### 2.4.1 Slot 3



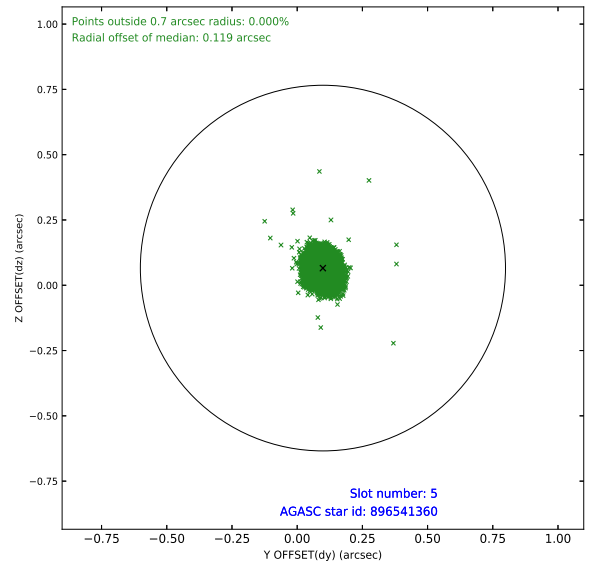
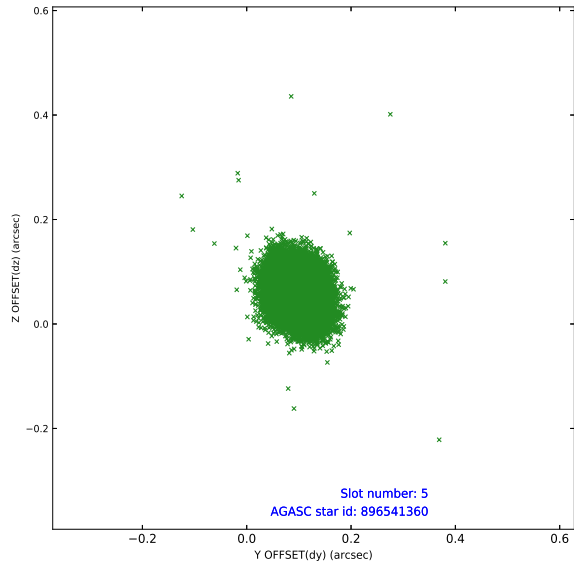
## 2.4.2 Slot 4



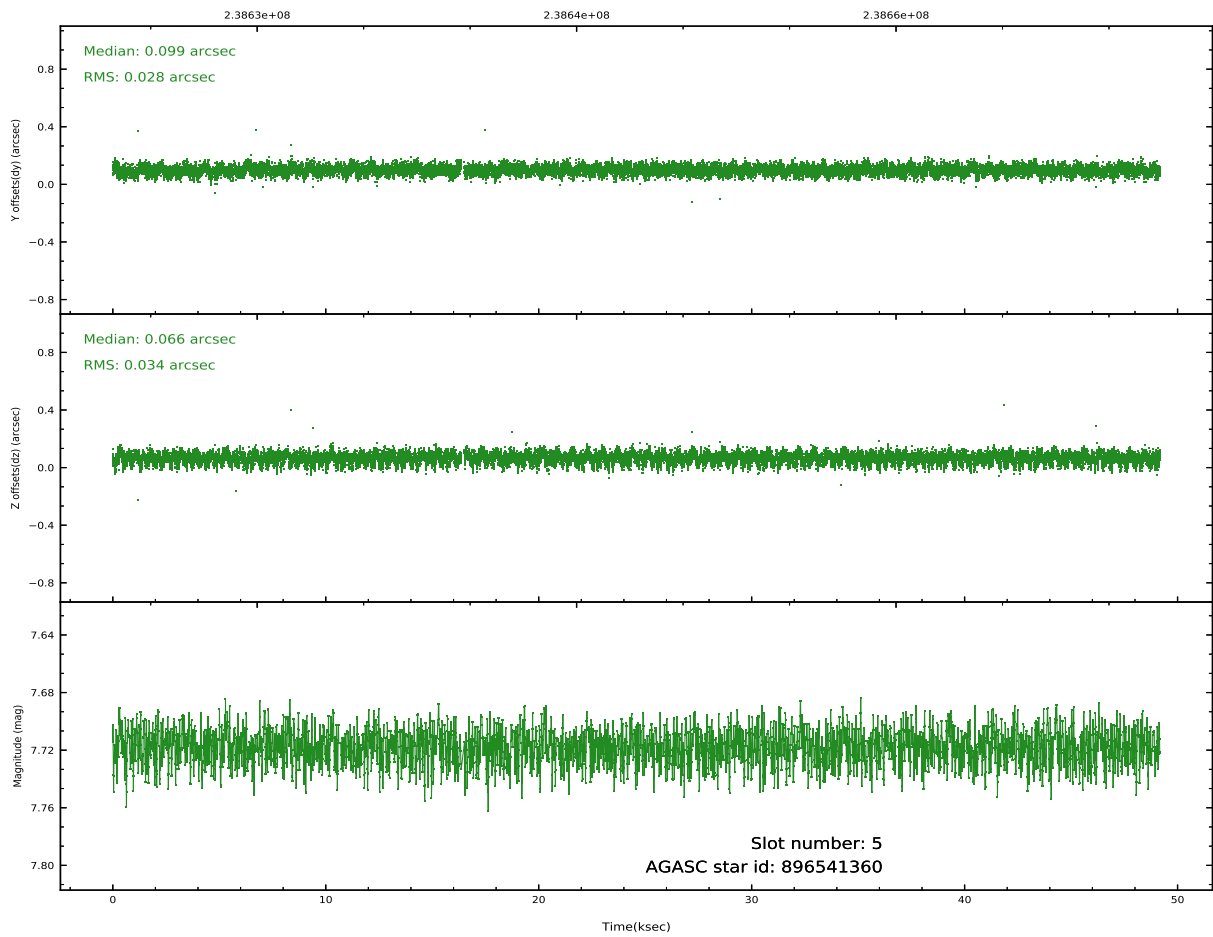
Time (s)



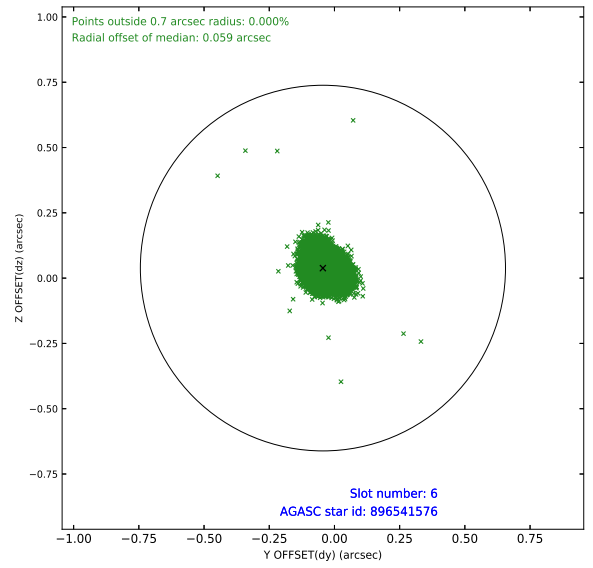
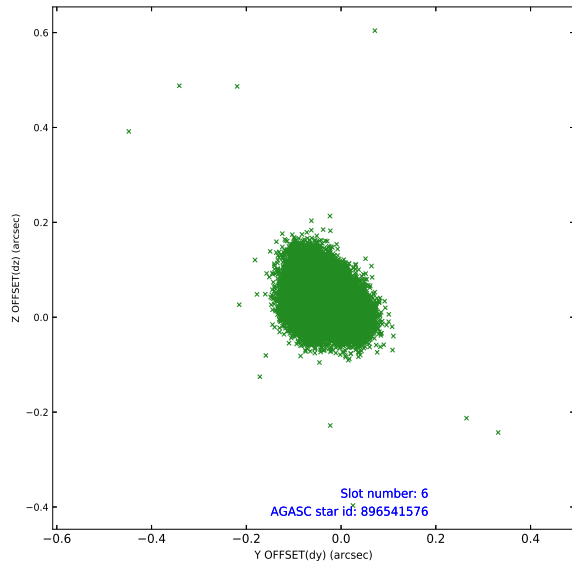
### 2.4.3 Slot 5



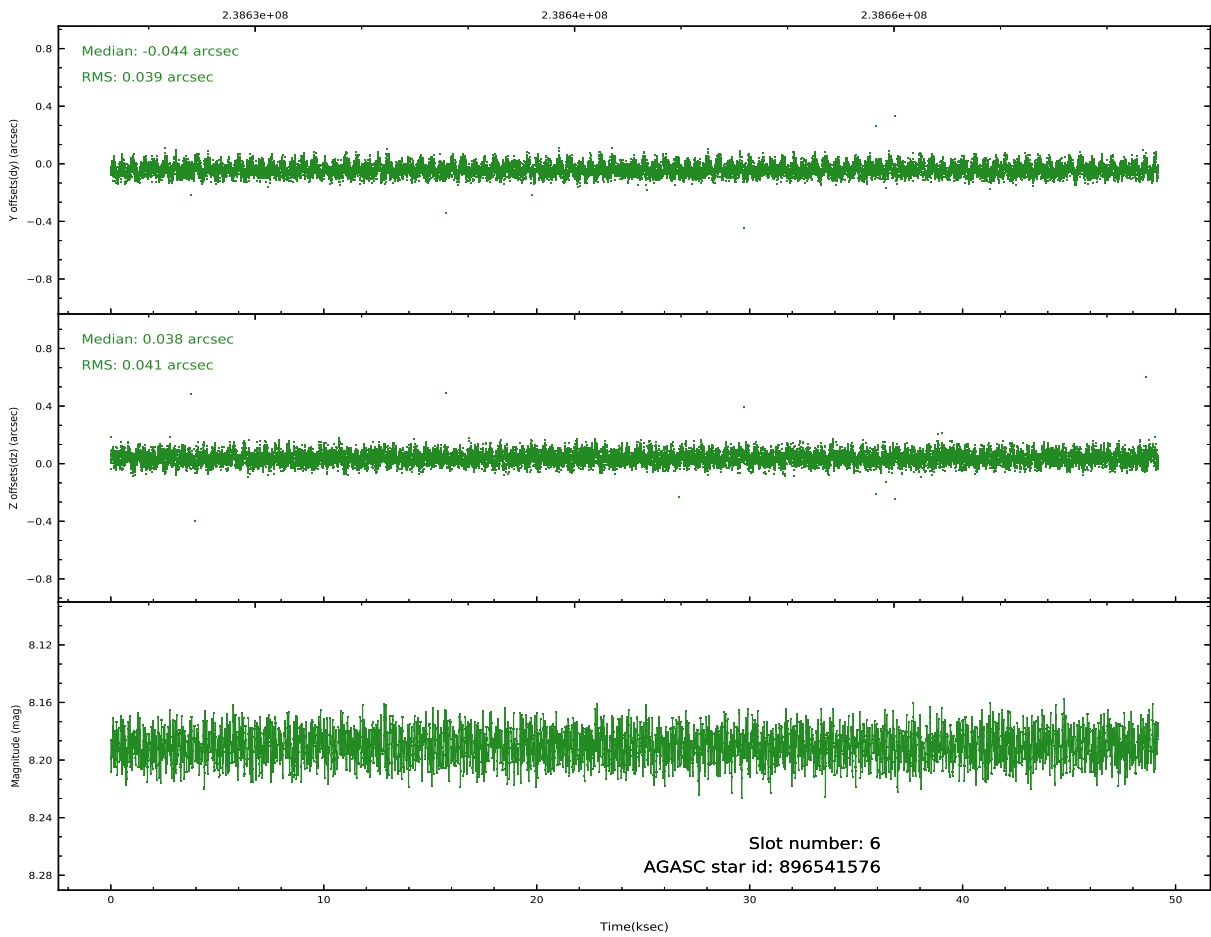
Time (s)



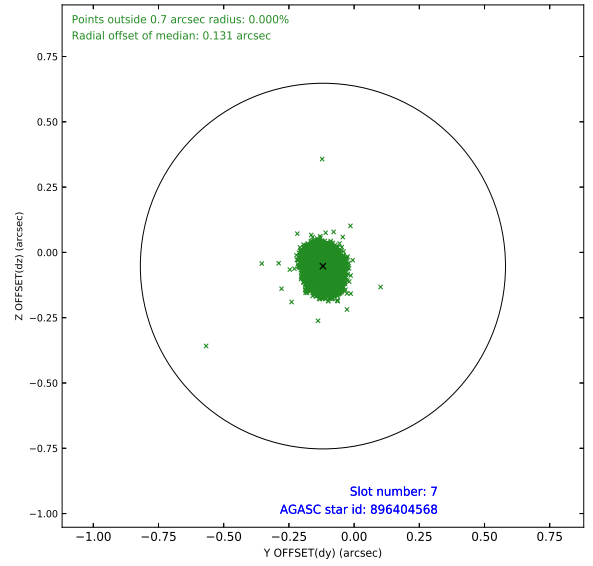
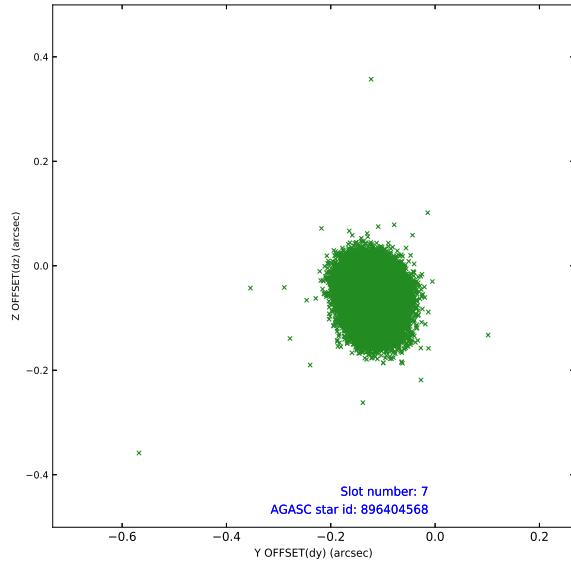
## 2.4.4 Slot 6



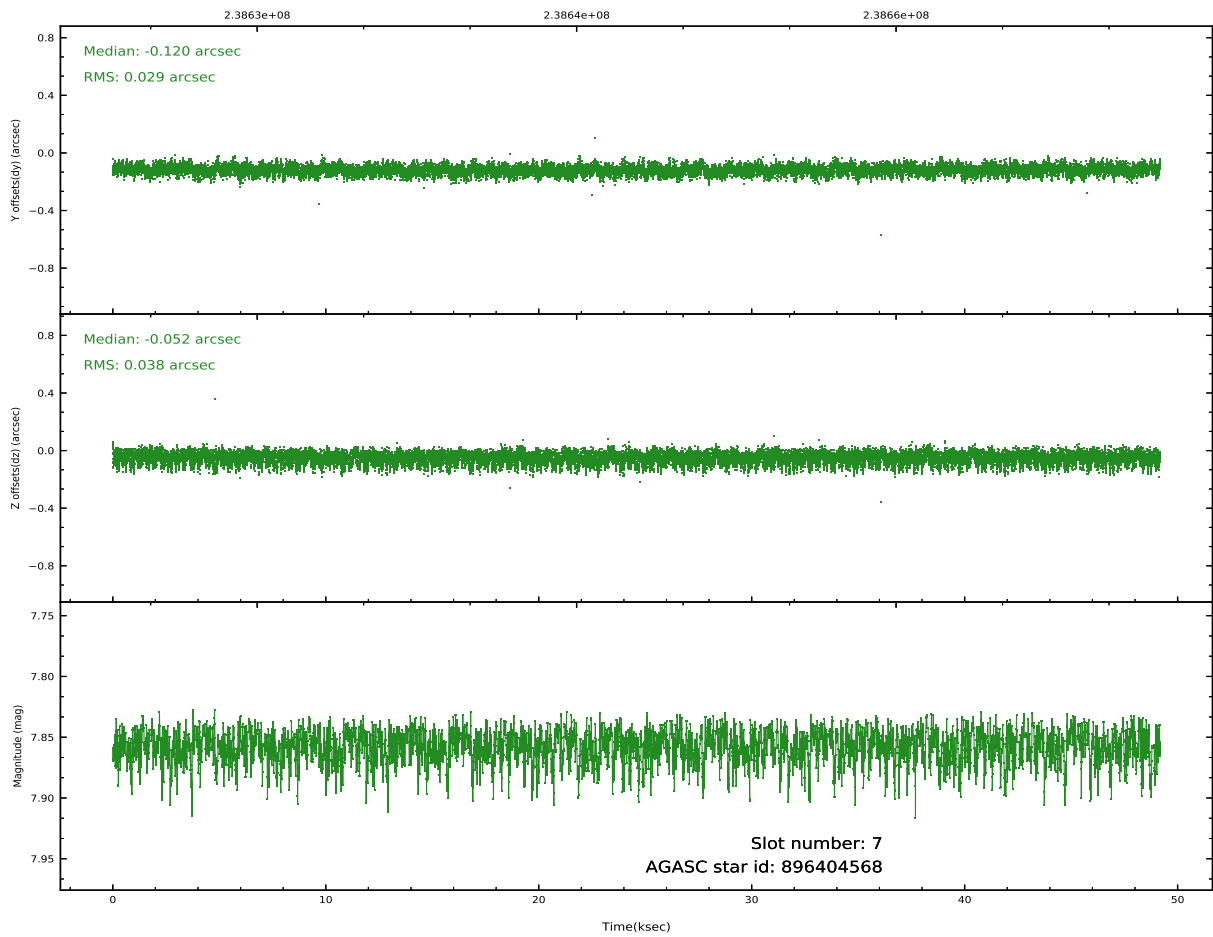
Time (s)



## 2.4.5 Slot 7

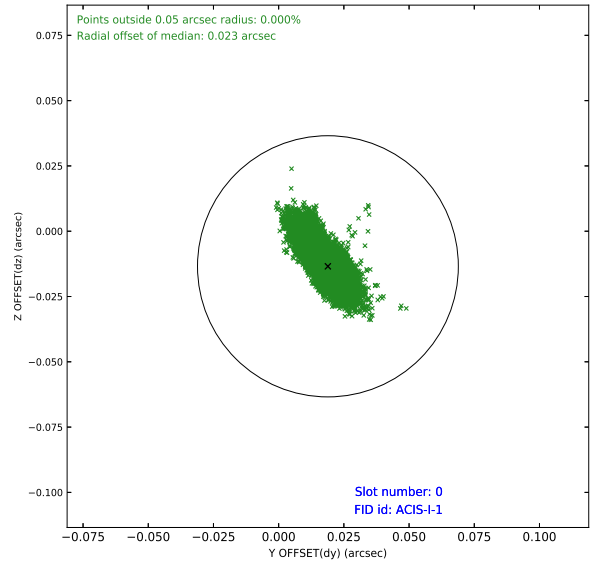
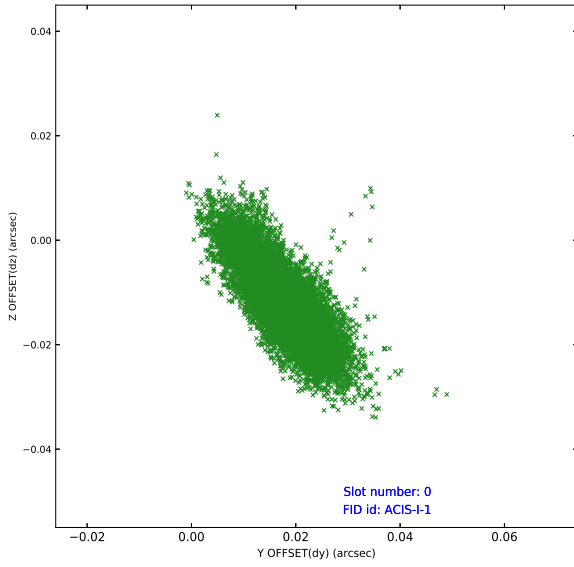


Time (s)

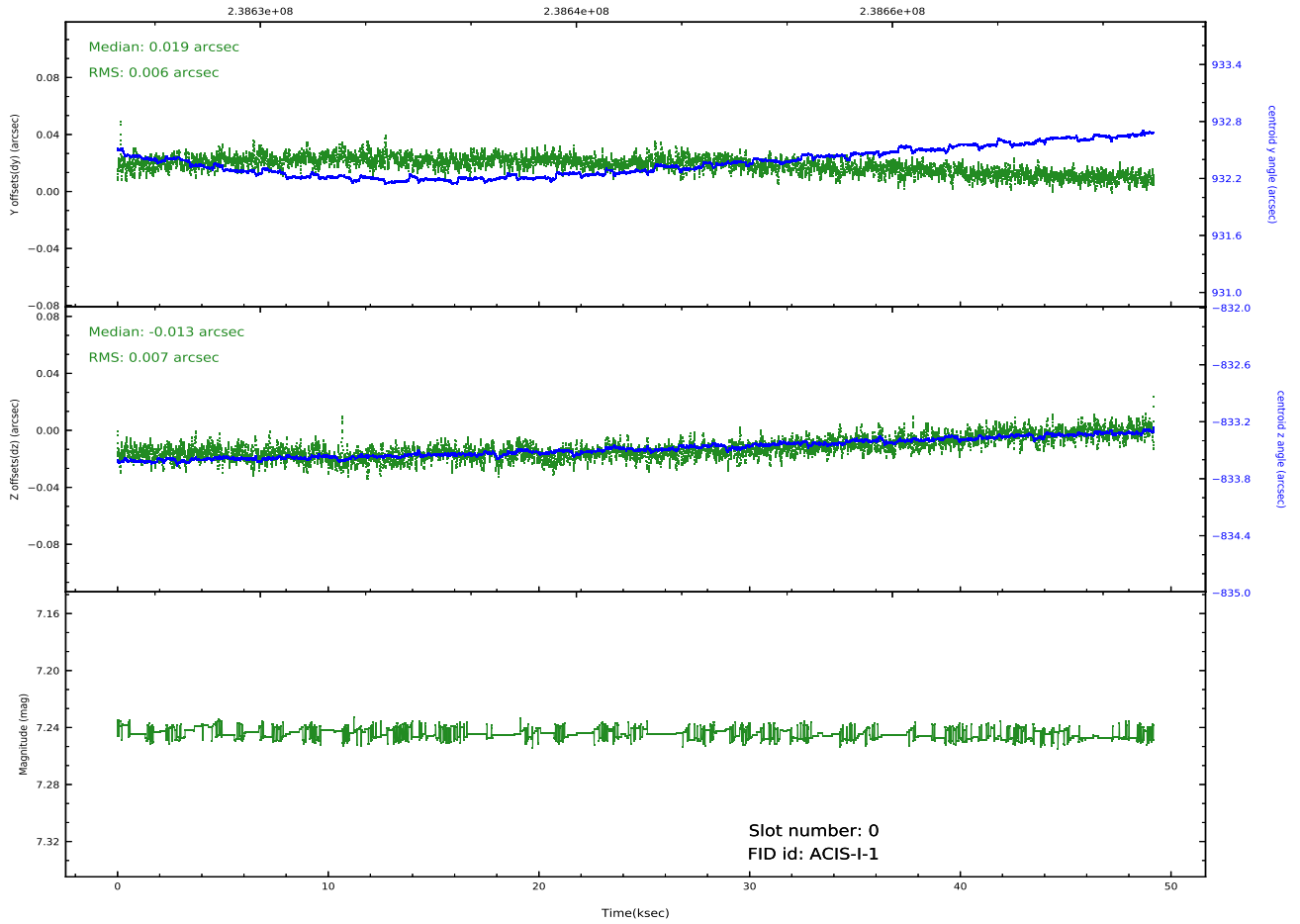


## 2.5 FID Slots

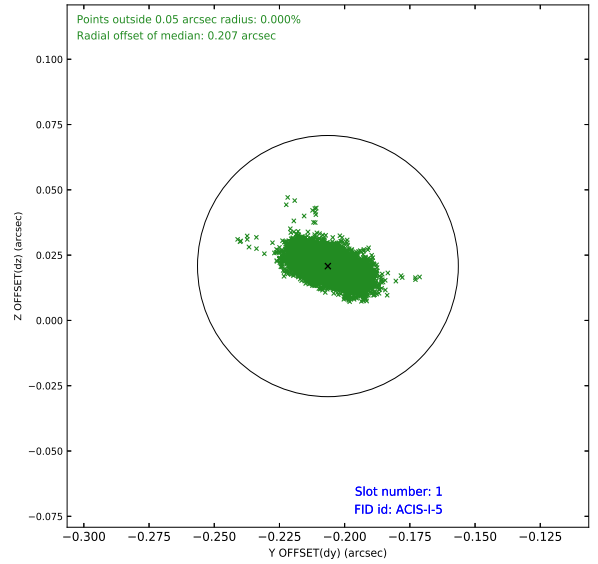
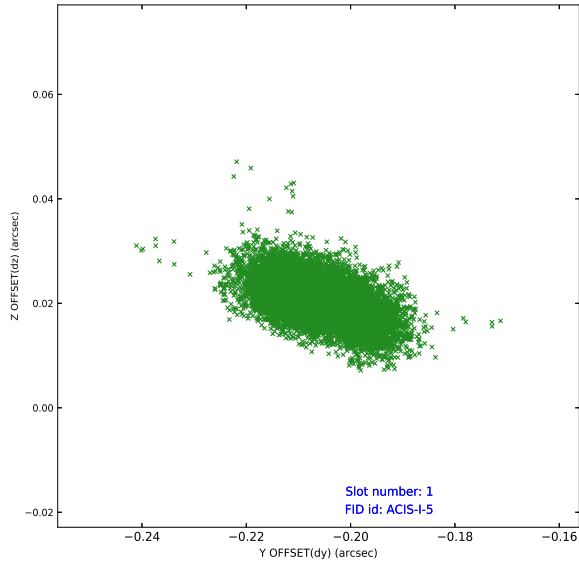
### 2.5.1 Slot 0



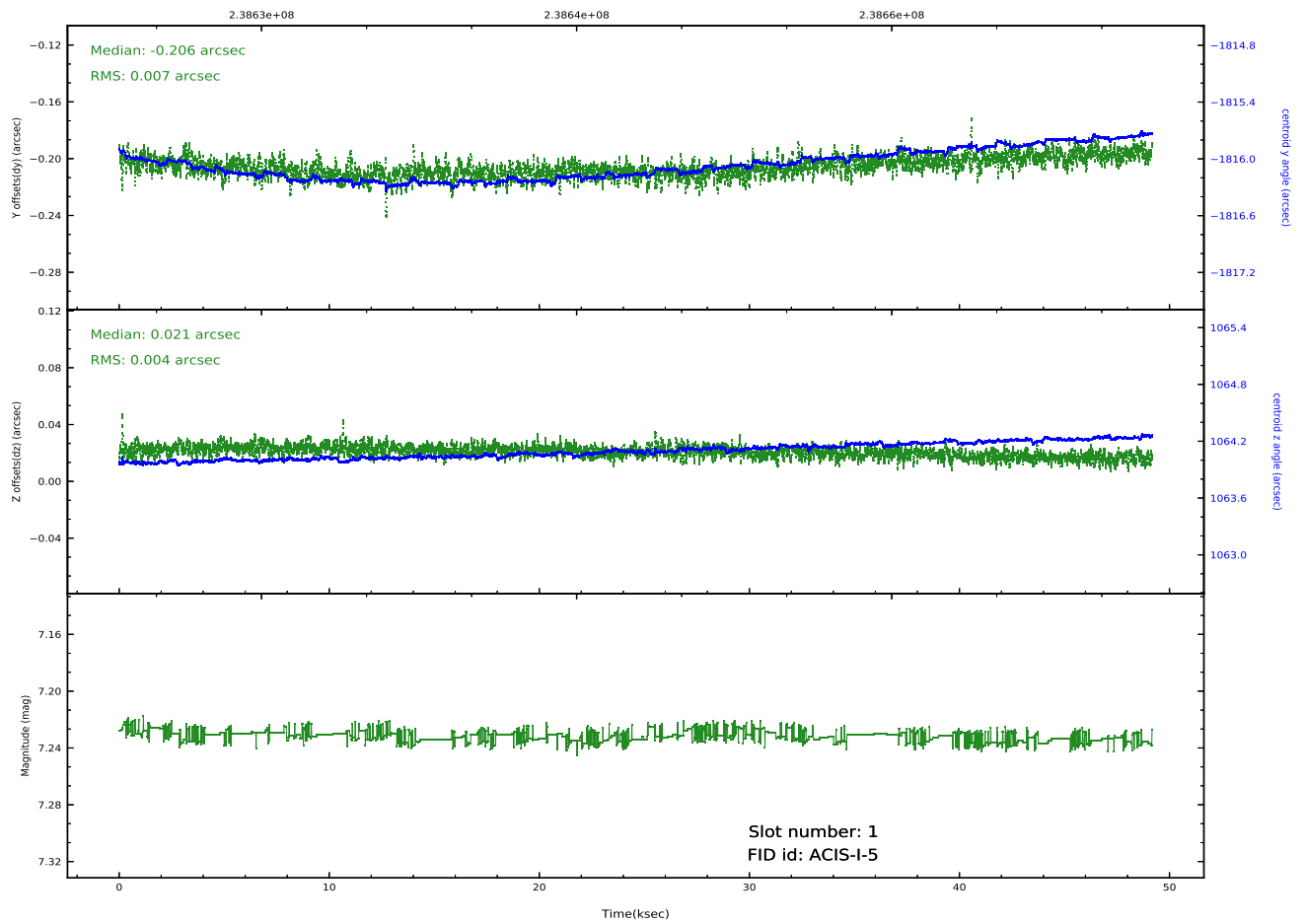
Time (s)



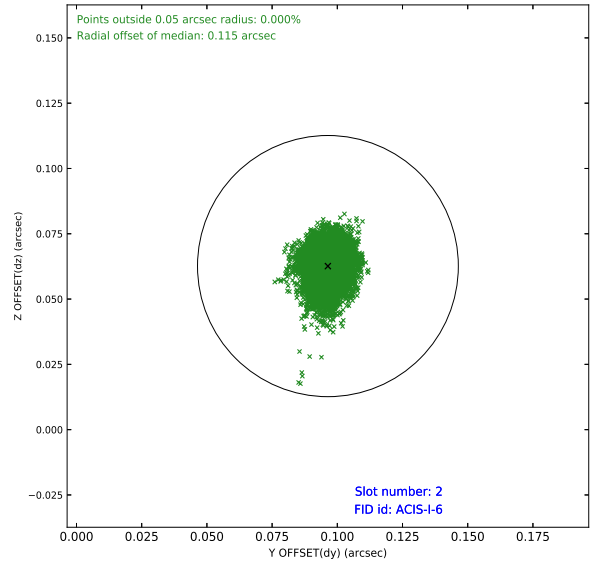
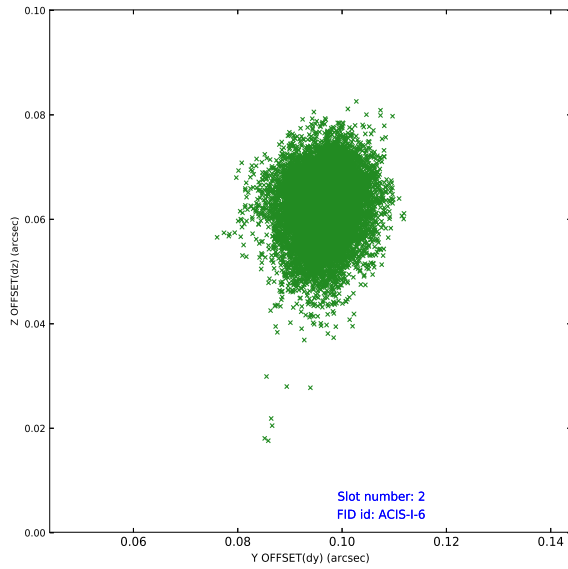
## 2.5.2 Slot 1



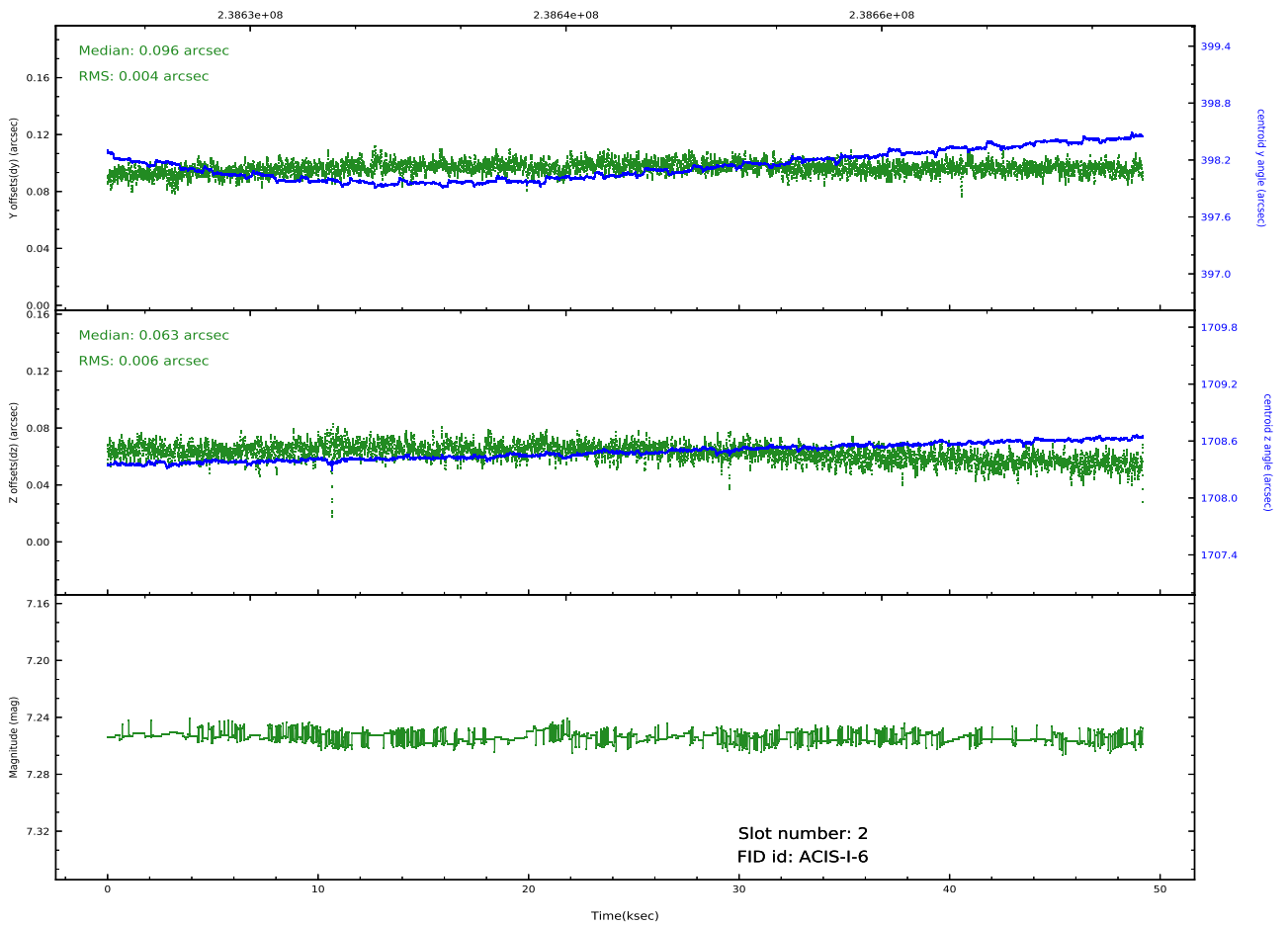
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Francesca Civano
V&V Date (YYYY-MM-DD)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.38614

## A.2 Comments

Window constraint met except for final 2400 seconds of the observation.

Charge time for this ObsId remains at original value of 49.386 ksec, although with the current processing the charge time would have been 49.175 ksec.