

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5951 - L2 Version 4  
Chandra X-Ray Center

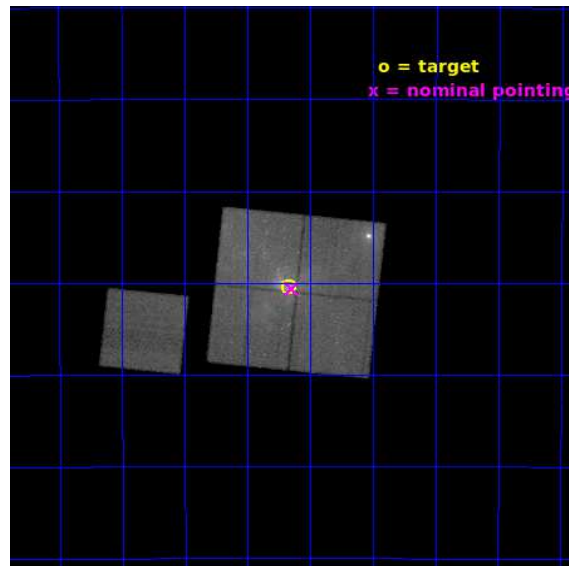
L2 Processing Date : Oct 9 2020

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# 1 Front

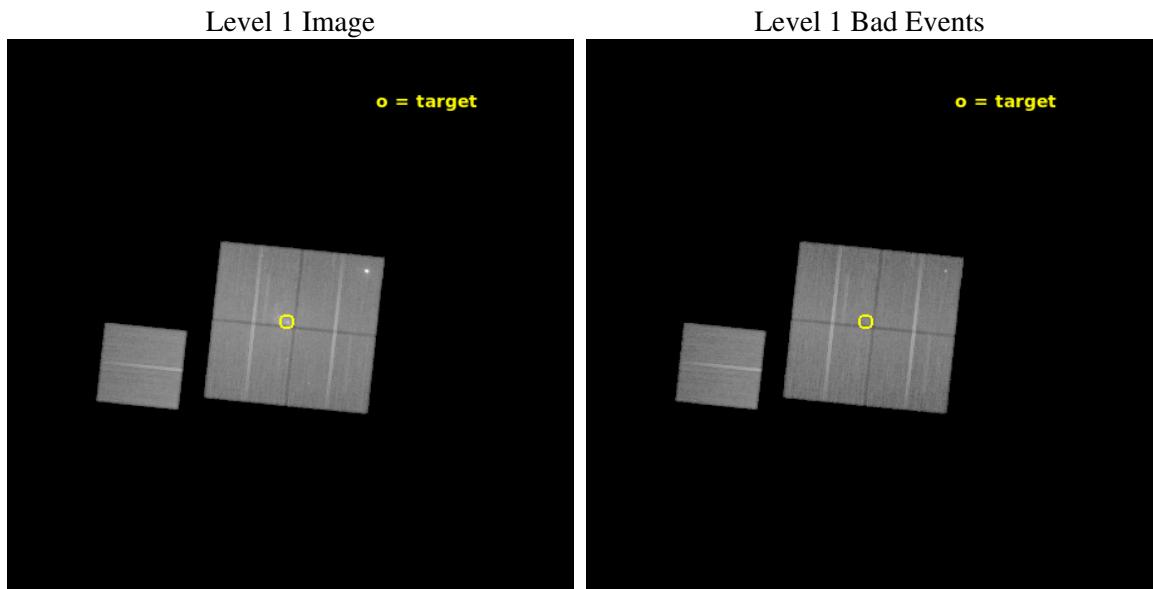
seq_num	600470	Sequence number
obs_id	5951	Observation id
title	Simultaneous Gamma-Ray to Sub-Millimeter Monitoring of Sagittarius A*	Proposal title
observer	Frederick Baganoff	Principal investigator
object	Sgr A*	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.007778	Observer's specified target Dec [deg]
ra_nom	266.41161156559	Nominal RA [deg]
dec_nom	-29.010399922323	Nominal Dec [deg]
roll_nom	275.97107408381	Nominal Roll [deg]
revision	4	Processing version of data
ontime	45176.258922875	Sum of GTIs [s]
livetime	44585.99784177	Livetime [s]
ontime0	45179.399913102	Sum of GTIs [s]
ontime1	45179.399913102	Sum of GTIs [s]
ontime2	45179.399913102	Sum of GTIs [s]
ontime3	45176.258922875	Sum of GTIs [s]
ontime6	45179.399913102	Sum of GTIs [s]
l2events	482046	Number of level 2 events



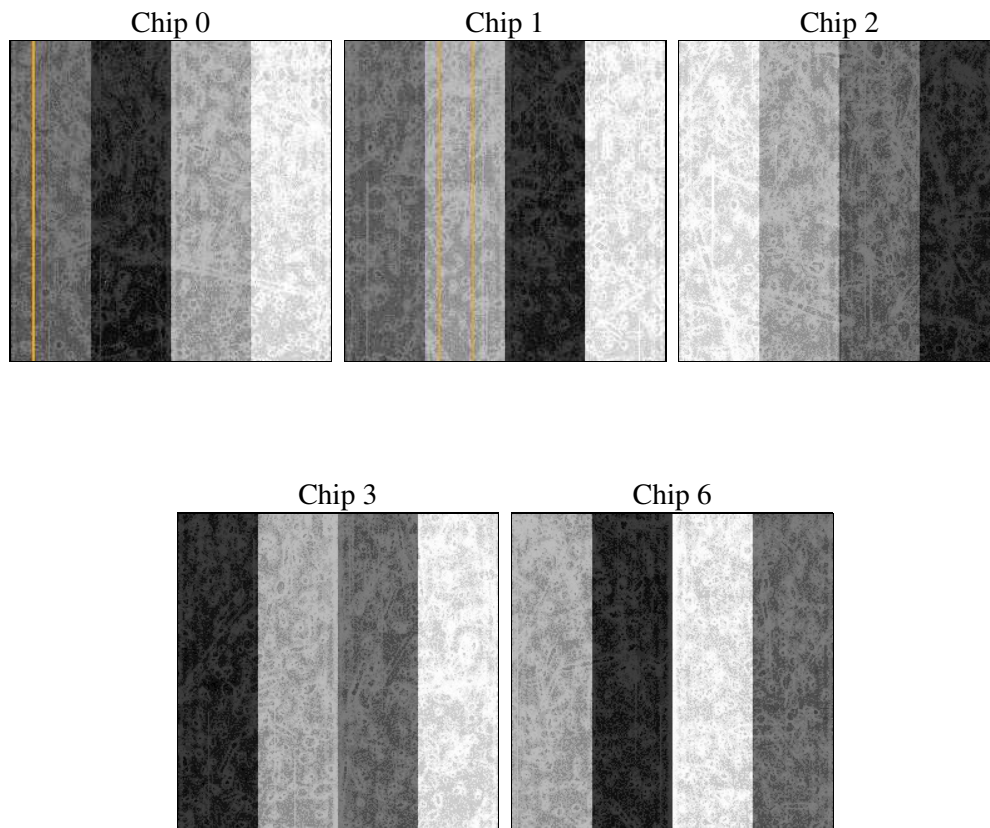
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	45176.258922875	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	45179.399913102	Sum of GTIs [s]
date	2020-10-09T14:34:50	Date and time of file creation	ontime1	45179.399913102	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	45179.399913102	Sum of GTIs [s]
			ontime3	45176.258922875	Sum of GTIs [s]
			ontime6	45179.399913102	Sum of GTIs [s]
			l1events	2202197	Number of level 1 events

### 2.1.4 Events

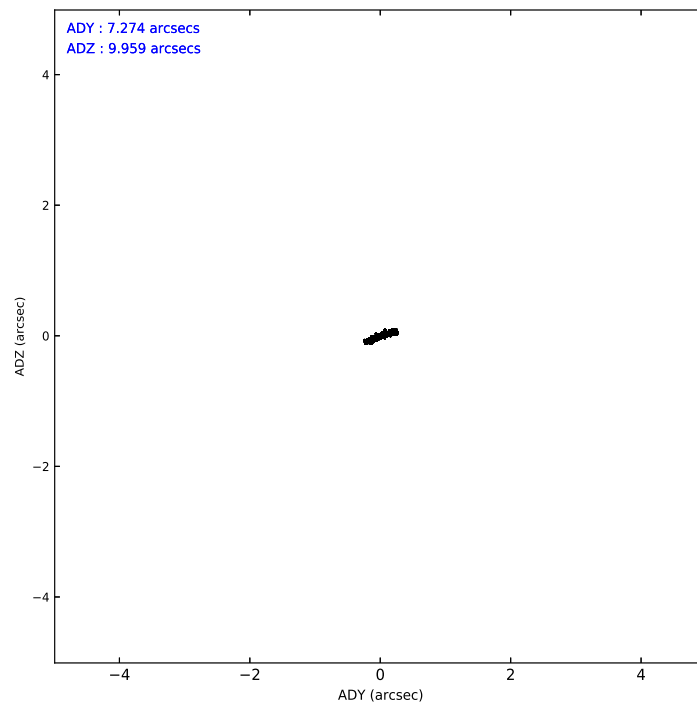
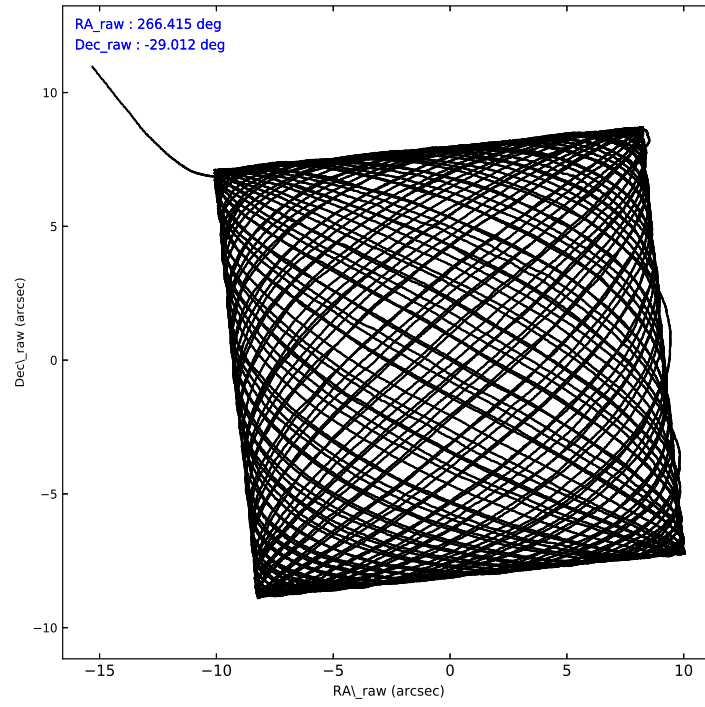
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	401472	452504	447812	486427	413982
rejected events	312684	319810	348863	343171	347852
rejected %	77%	70%	77%	70%	84%

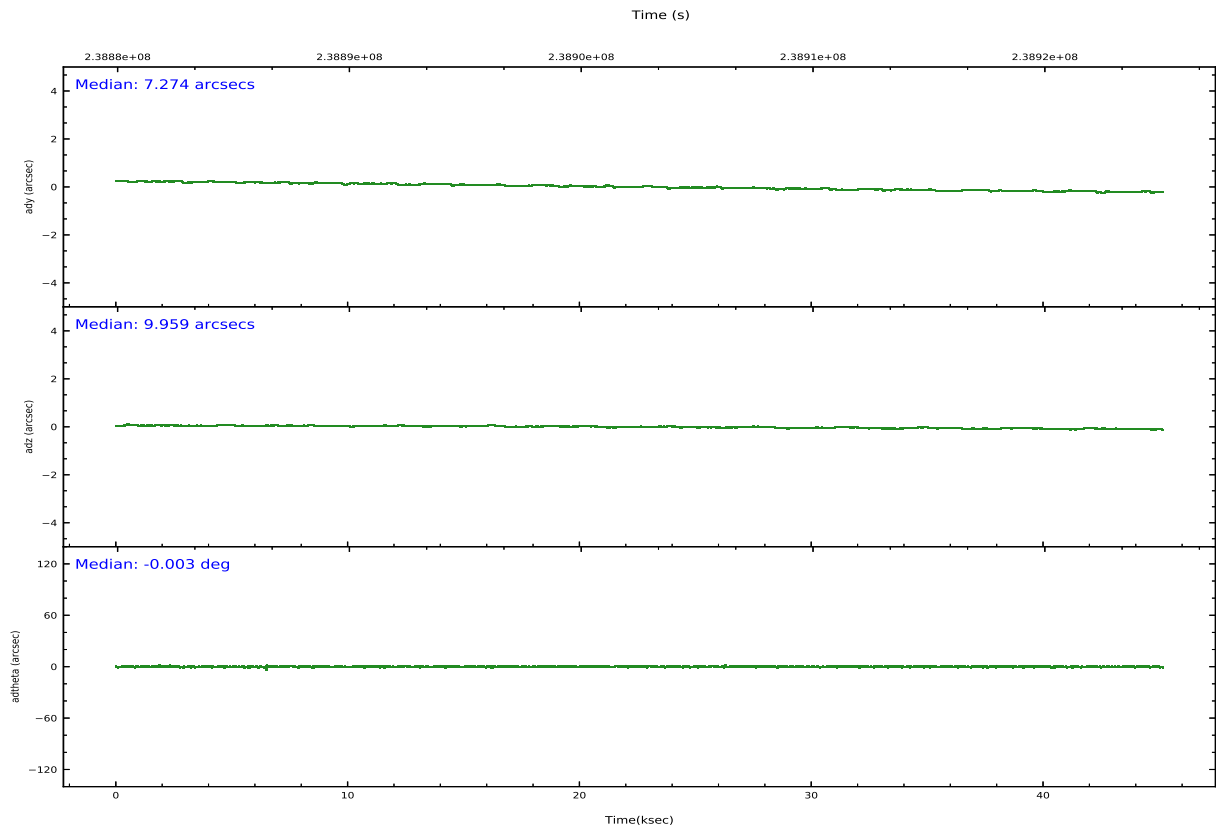
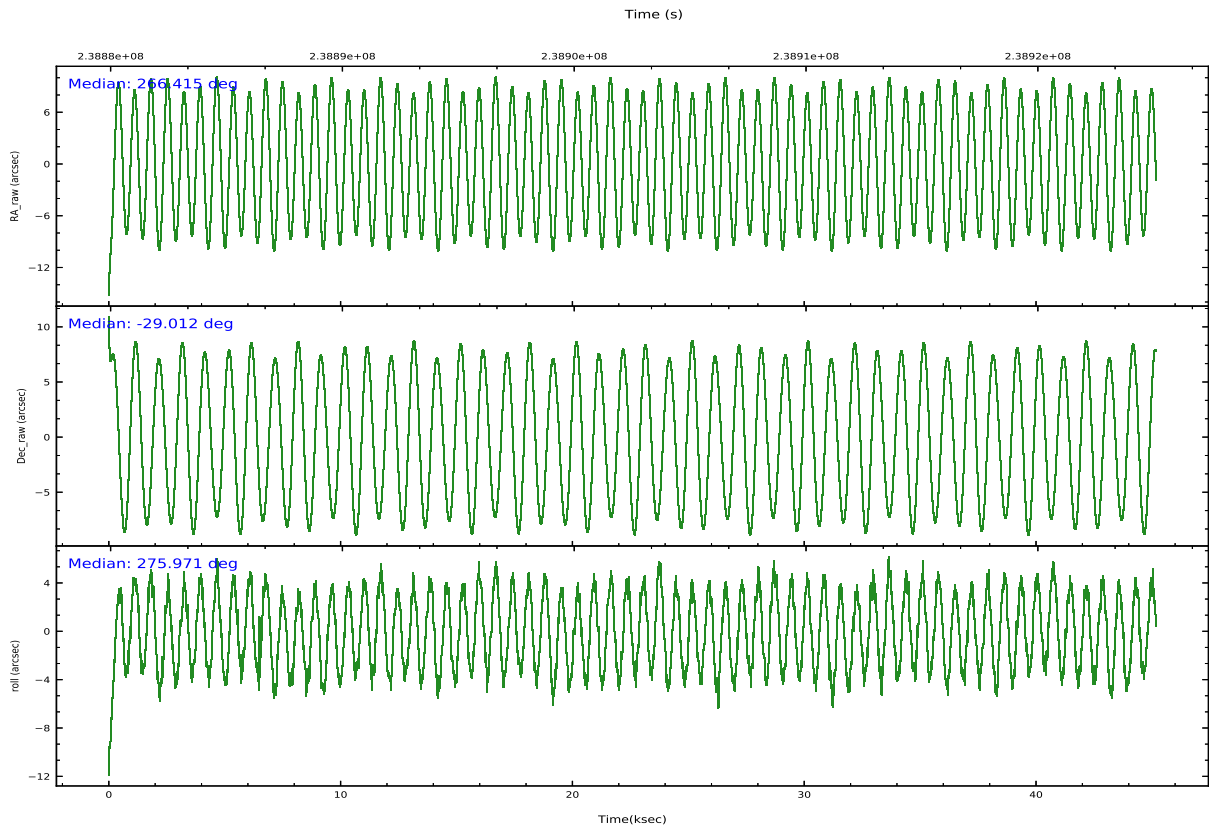
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	48999	75051	57979	87796	31495
	12%	16%	12%	18%	7%
grade 1 events	387	655	534	694	256
	0%	0%	0%	0%	0%
grade 2 events	16528	24040	17063	22534	13501
	4%	5%	3%	4%	3%
grade 3 events	6393	9003	6670	9172	5373
	1%	1%	1%	1%	1%
grade 4 events	6210	8847	6868	9101	5217
	1%	1%	1%	1%	1%
grade 5 events	15688	16466	14926	17434	17024
	3%	3%	3%	3%	4%
grade 6 events	12282	17591	12100	16394	12055
	3%	3%	2%	3%	2%
grade 7 events	294985	300851	331672	323302	329061
	73%	66%	74%	66%	79%

## 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	266.396628	266.41161156559	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.990113	-29.010399922323	Alternating exposures requested	N	N
[deg] Pointing Roll	275.756669	275.97107408381	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	238880104.184000	238880104.184000			
[s] Window stop time (MET)	238929124.184000	238929124.184000			
[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)	238880104.184000	238878496.94041			
Observation start date	2005-07-27T19:34:00	2005-07-27T19:08:16			
[s] Observation end time (MET)	238925104.184000	238926468.99261			
Observation end date	2005-07-28T08:04:00	2005-07-28T08:27:48			
Read mode	TIMED	TIMED			

## 2.3 Aspect



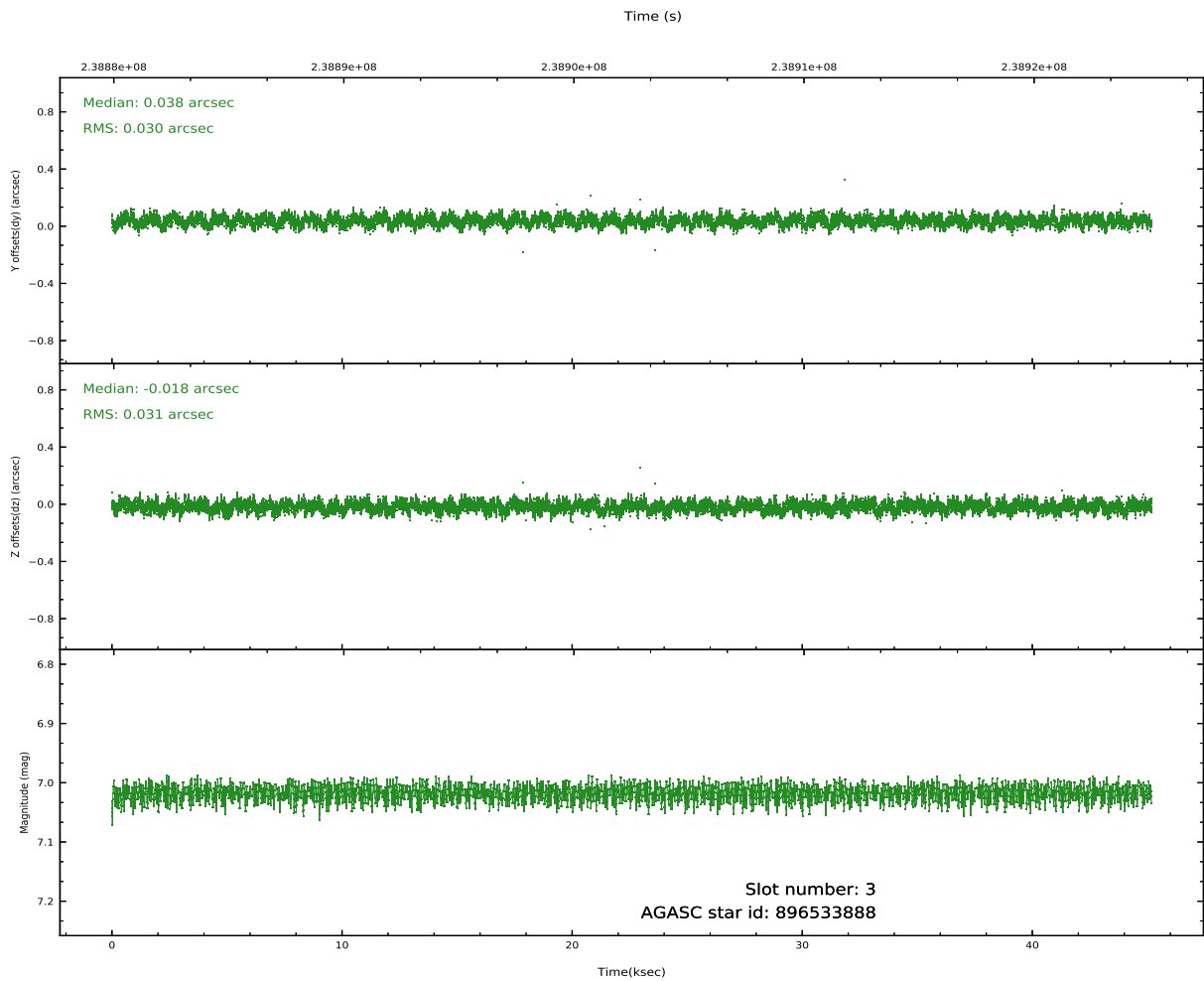
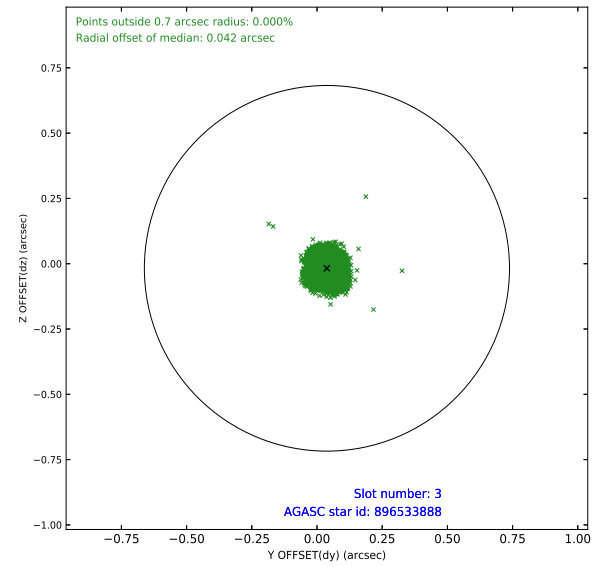
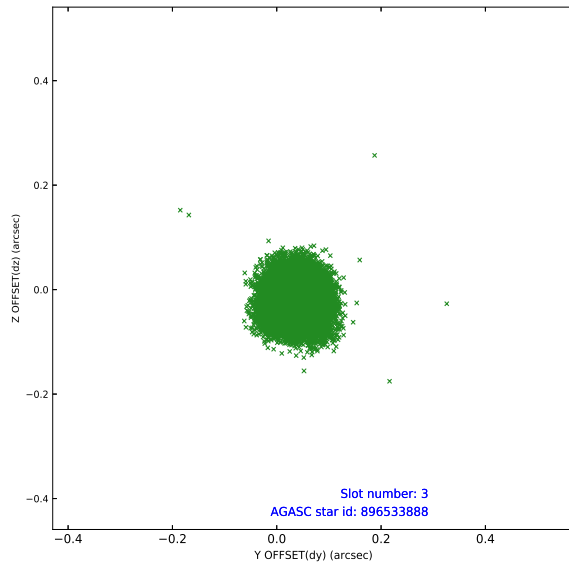


### Slot Statistics

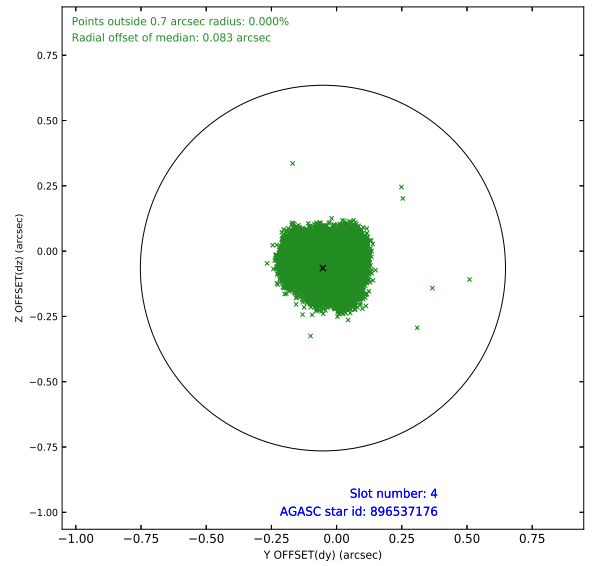
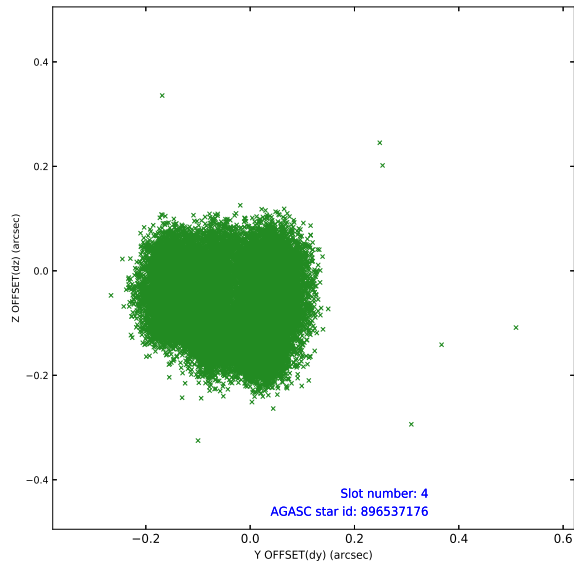
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-1	7.25	11019	1.000	0.018	-0.011	0.009	0.016	0.000000	0.000000	932.42	-833
1	FID		ACIS-I-5	7.23	11019	1.000	-0.207	0.020	0.008	0.014	0.000000	0.000000	-1815.93	1064
2	FID		ACIS-I-6	7.25	11019	1.000	0.098	0.061	0.008	0.013	0.000000	0.000000	398.02	1708
3	GUIDE	used	896533888	7.02	22041	1.000	0.038	-0.018	0.047	0.073	266.666434	-29.392757	1528.32	696
4	GUIDE	used	896537176	8.04	22035	1.000	-0.052	-0.065	0.120	0.162	266.498272	-28.678259	-1084.39	431
5	GUIDE	used	896540808	7.47	22039	1.000	0.098	0.036	0.079	0.116	265.985401	-29.308604	1013.98	-1399
6	GUIDE	used	896541576	8.19	22039	1.000	0.013	0.078	0.058	0.092	267.051055	-28.762912	-600.92	2136
7	GUIDE	used	896404568	7.86	22040	1.000	-0.098	-0.031	0.051	0.083	265.687293	-28.431080	-2220.71	-2033

## 2.4 Star Slots

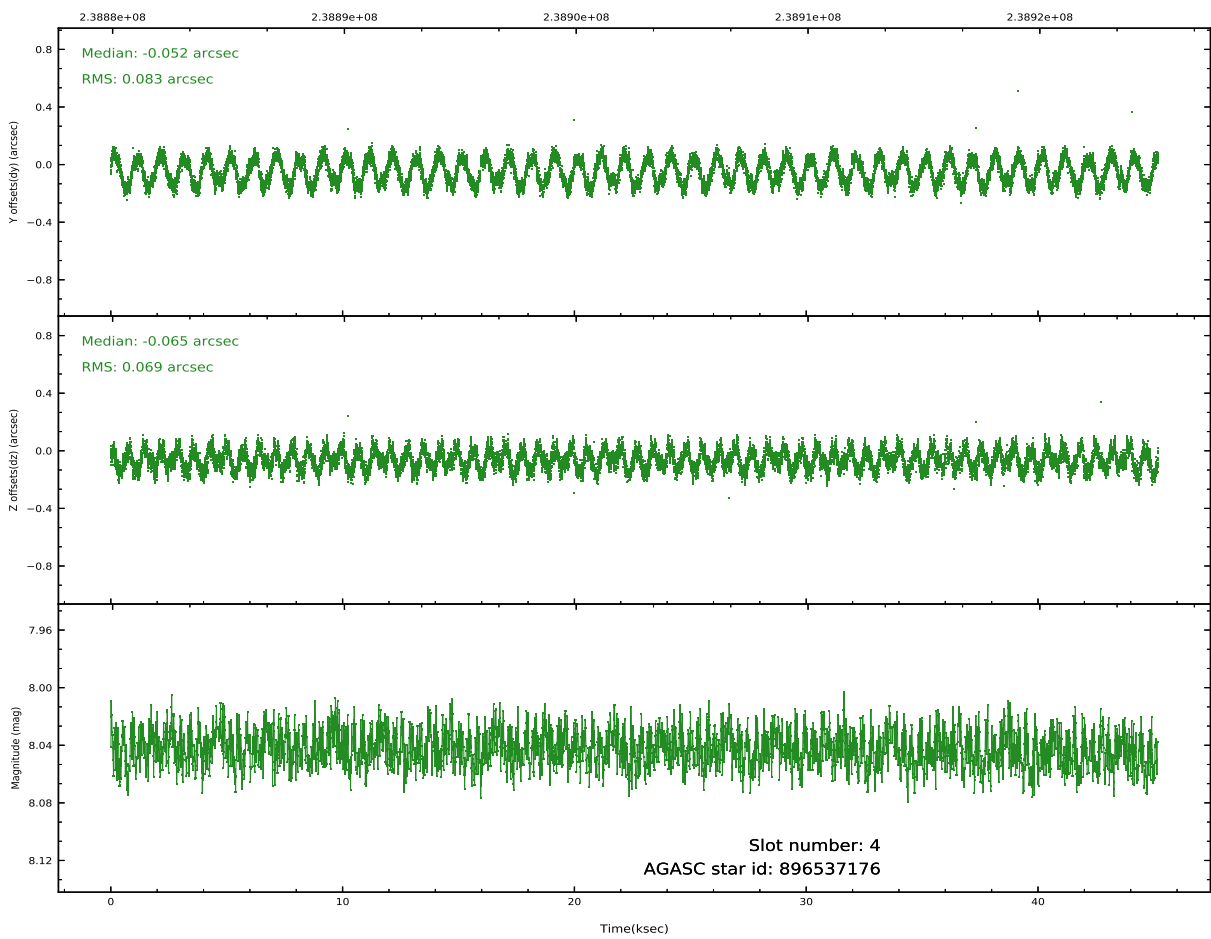
### 2.4.1 Slot 3



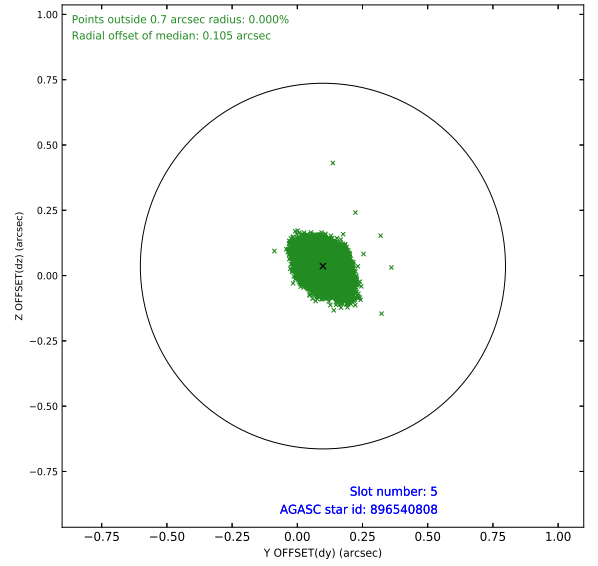
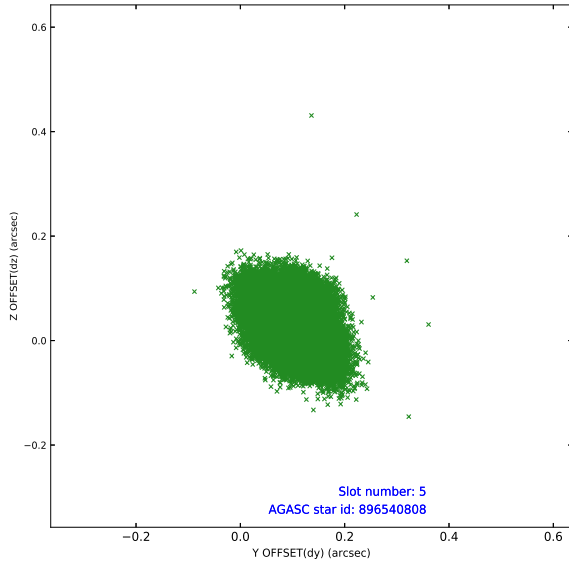
## 2.4.2 Slot 4



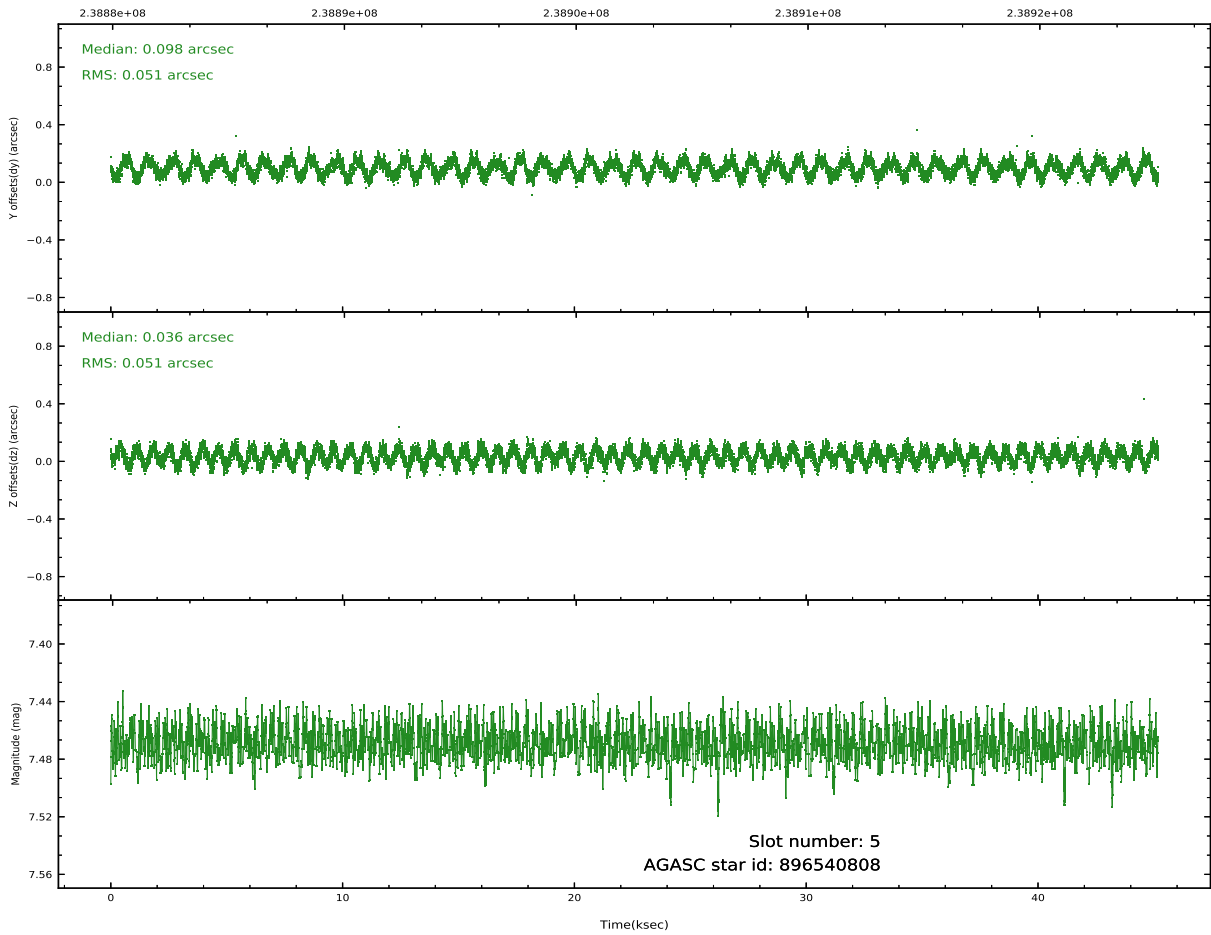
Time (s)



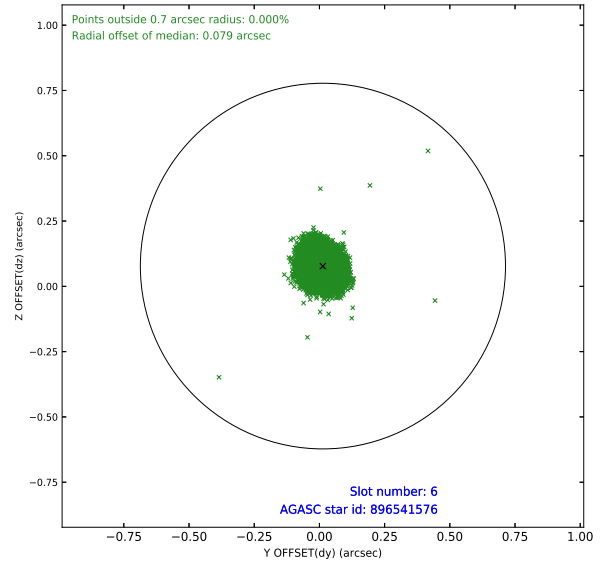
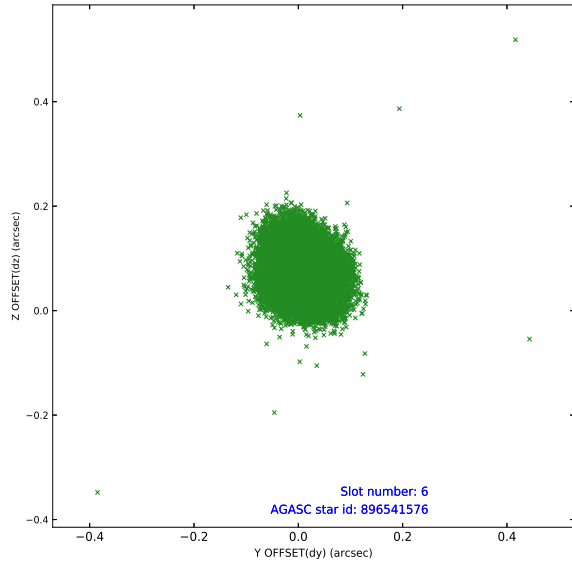
### 2.4.3 Slot 5



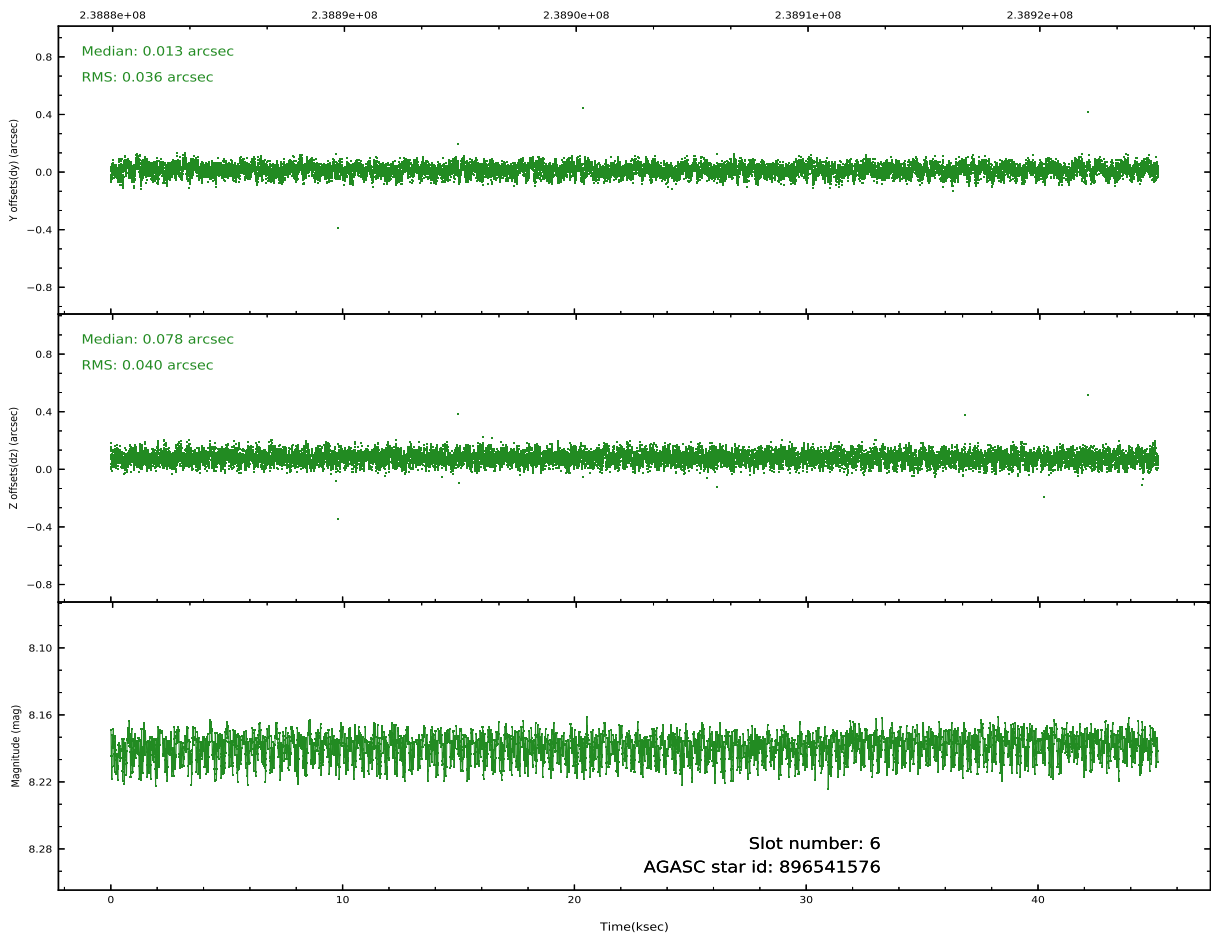
Time (s)



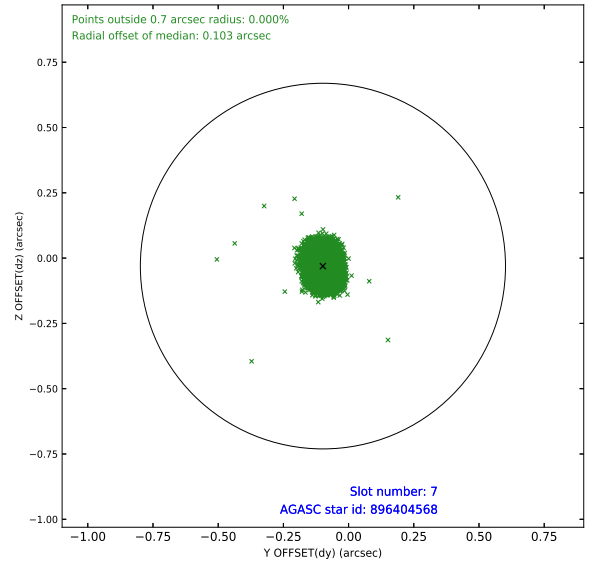
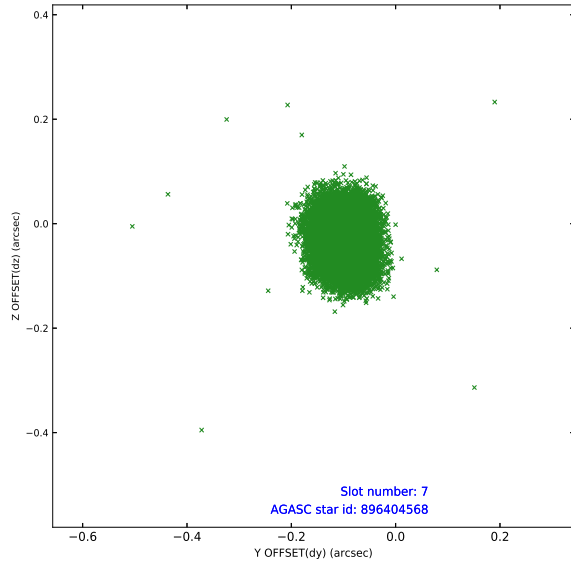
## 2.4.4 Slot 6



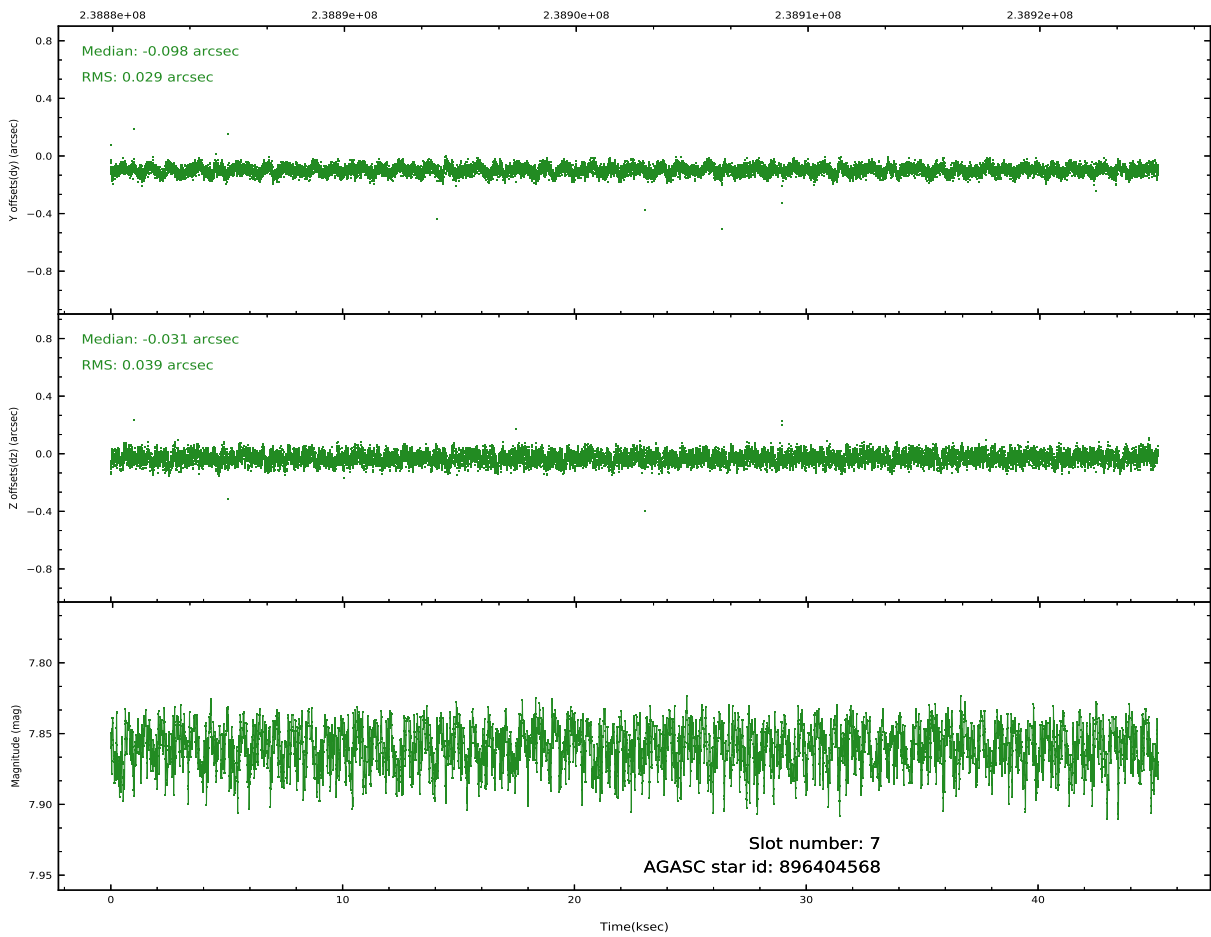
Time (s)



## 2.4.5 Slot 7

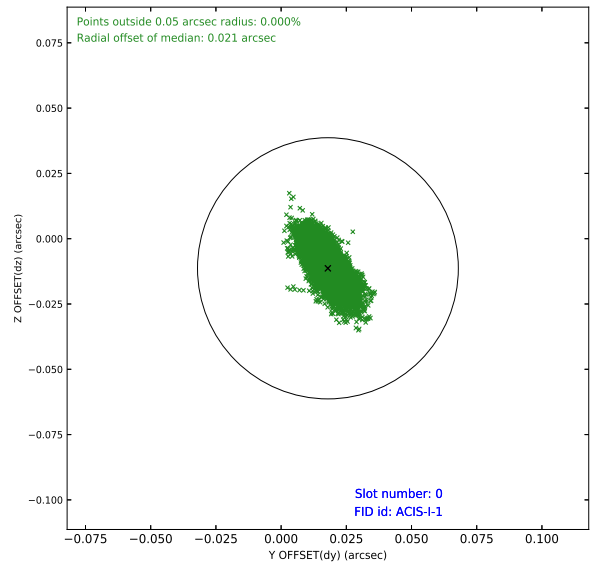
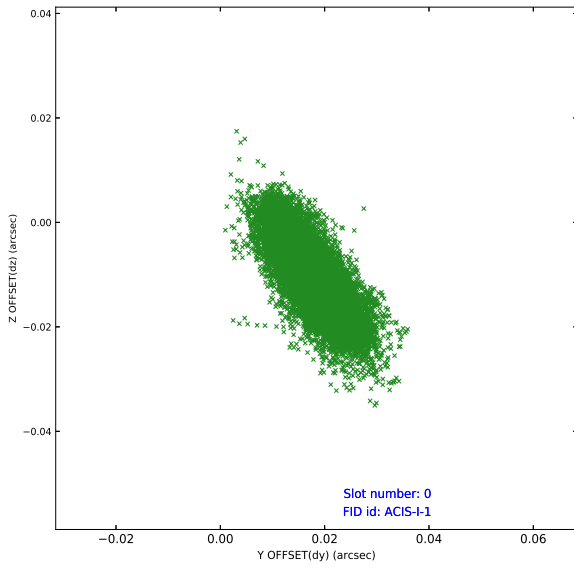


Time (s)

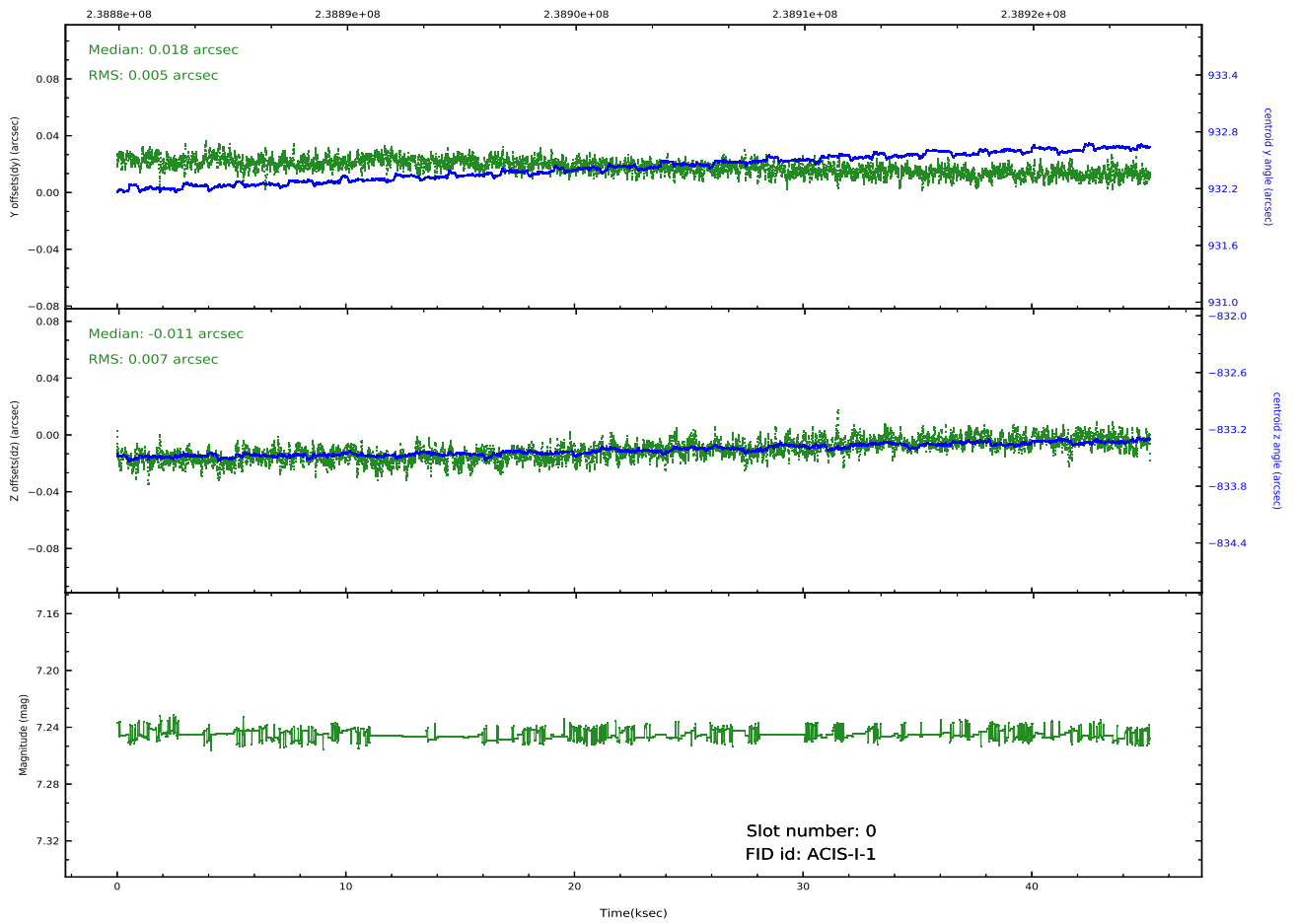


## 2.5 FID Slots

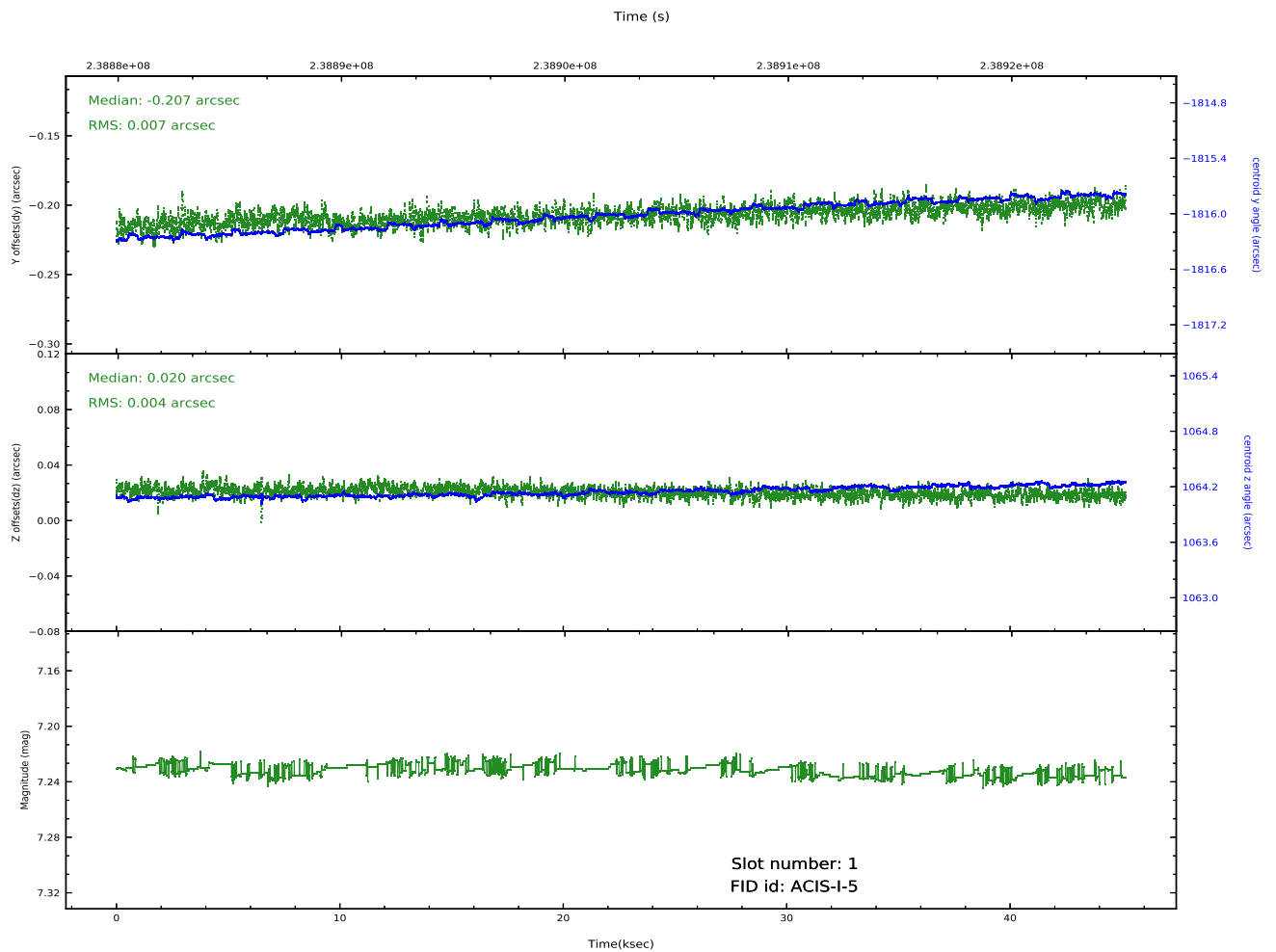
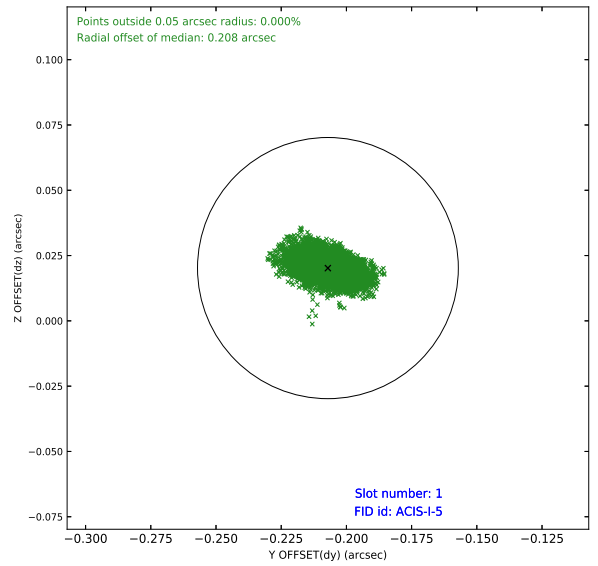
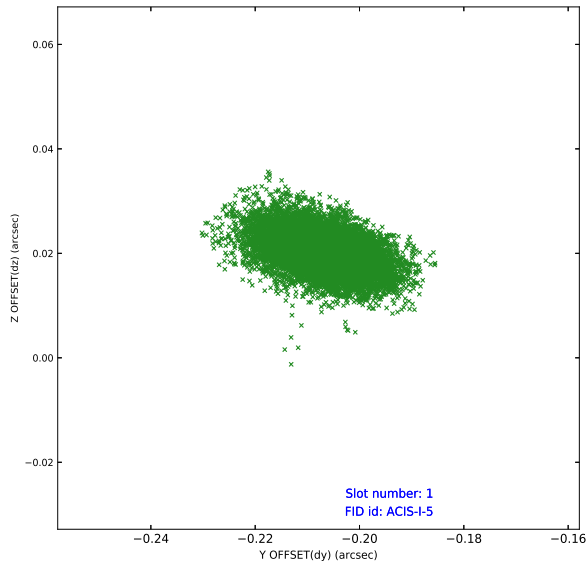
### 2.5.1 Slot 0



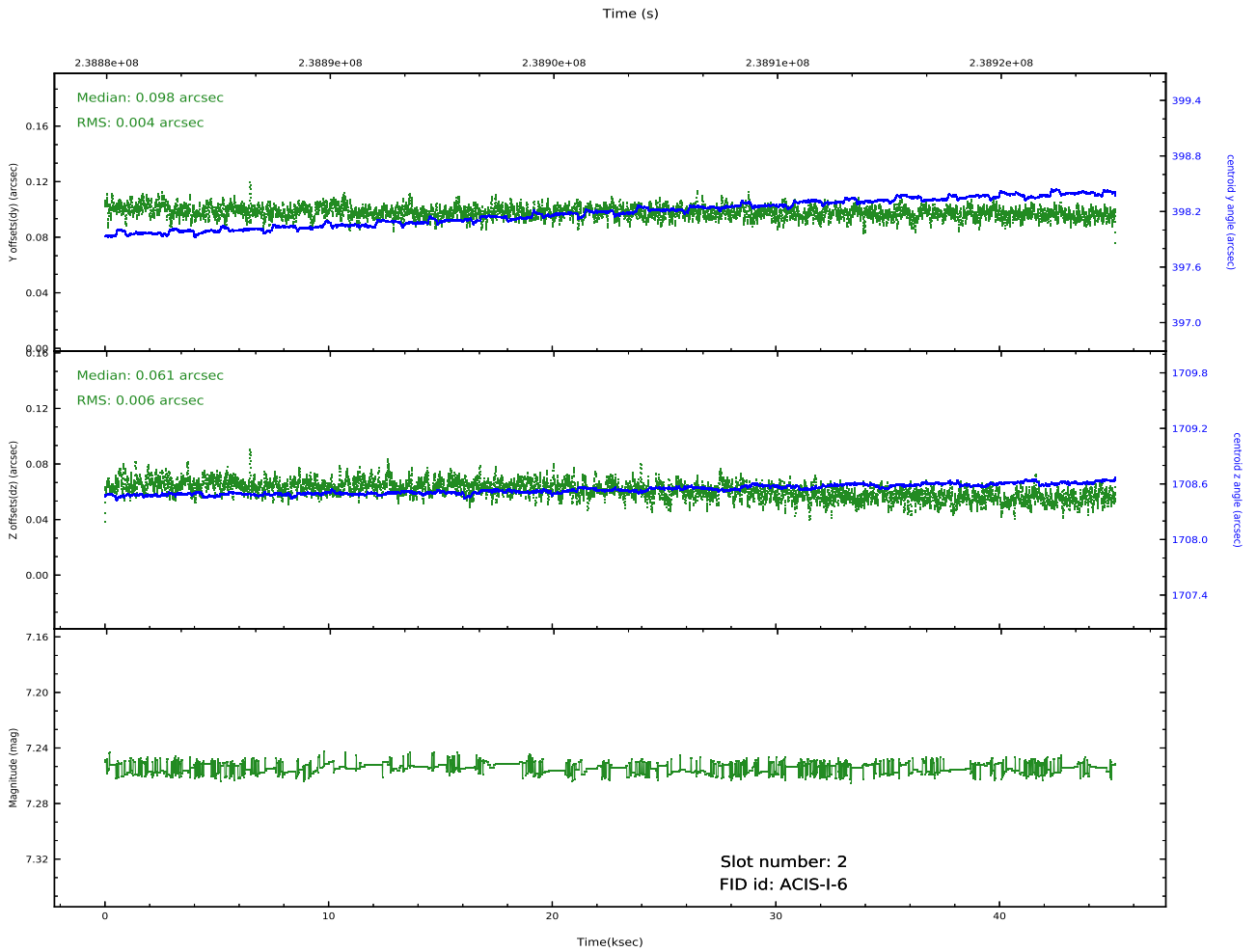
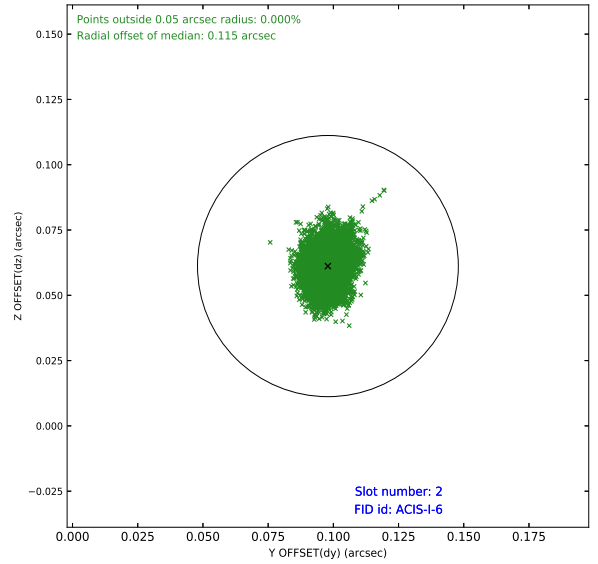
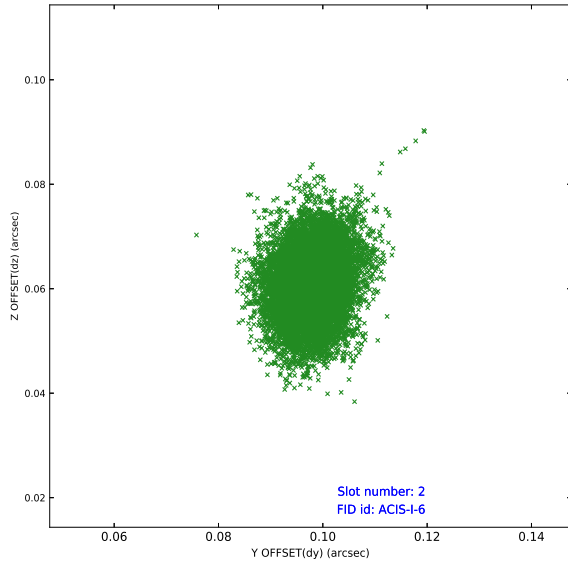
Time (s)



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# 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	46.40847

## A.2 Comments

Charge time:

Charge time for this ObsId remains at previous value of 46.40847 ks.

Window preference met.