

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5952 - L2 Version 5  
Chandra X-Ray Center

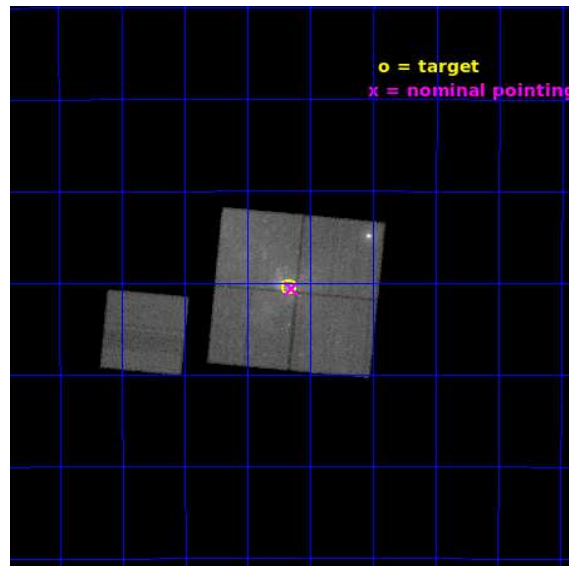
L2 Processing Date : Oct 9 2020

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

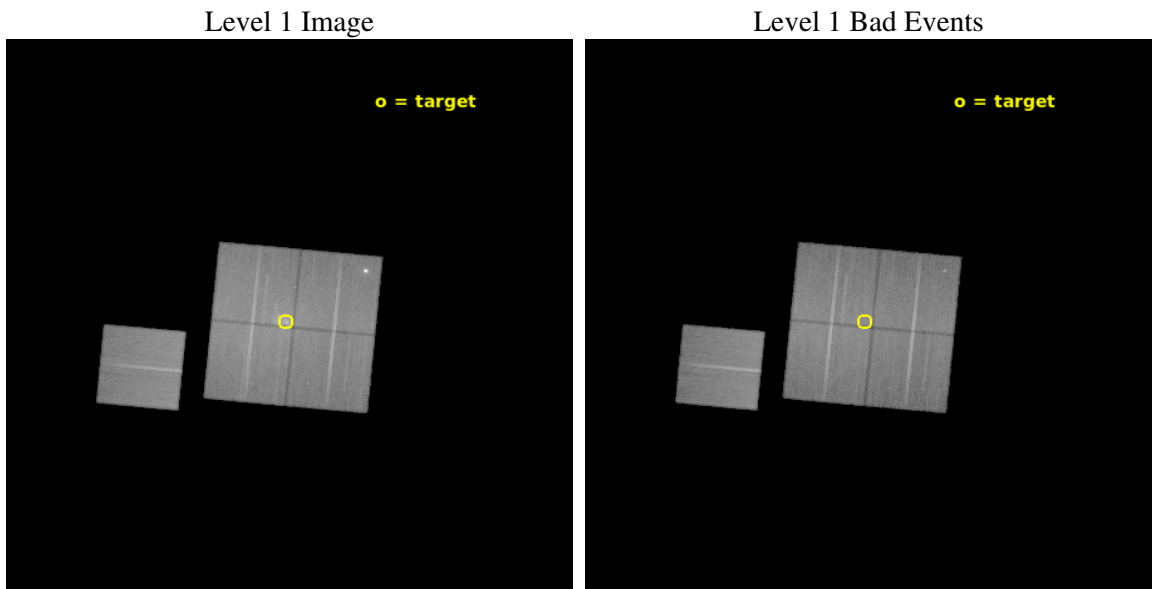
seq_num	600471	Sequence number
obs_id	5952	Observation id
title	Simultaneous Gamma-Ray to Sub-Millimeter Monitoring of Sagittarius A*	Proposal title
observer	Frederick Baganoff	Principal investigator
object	Sgr A*	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.007778	Observer's specified target Dec [deg]
ra_nom	266.41173265615	Nominal RA [deg]
dec_nom	-29.010562002961	Nominal Dec [deg]
roll_nom	275.47848301987	Nominal Roll [deg]
revision	5	Processing version of data
ontime	45926.458901495	Sum of GTIs [s]
livetime	45326.39590538	Livetime [s]
ontime0	45923.317951083	Sum of GTIs [s]
ontime1	45926.458921492	Sum of GTIs [s]
ontime2	45926.458921403	Sum of GTIs [s]
ontime3	45926.458901495	Sum of GTIs [s]
ontime6	45929.59991166	Sum of GTIs [s]
l2events	471752	Number of level 2 events



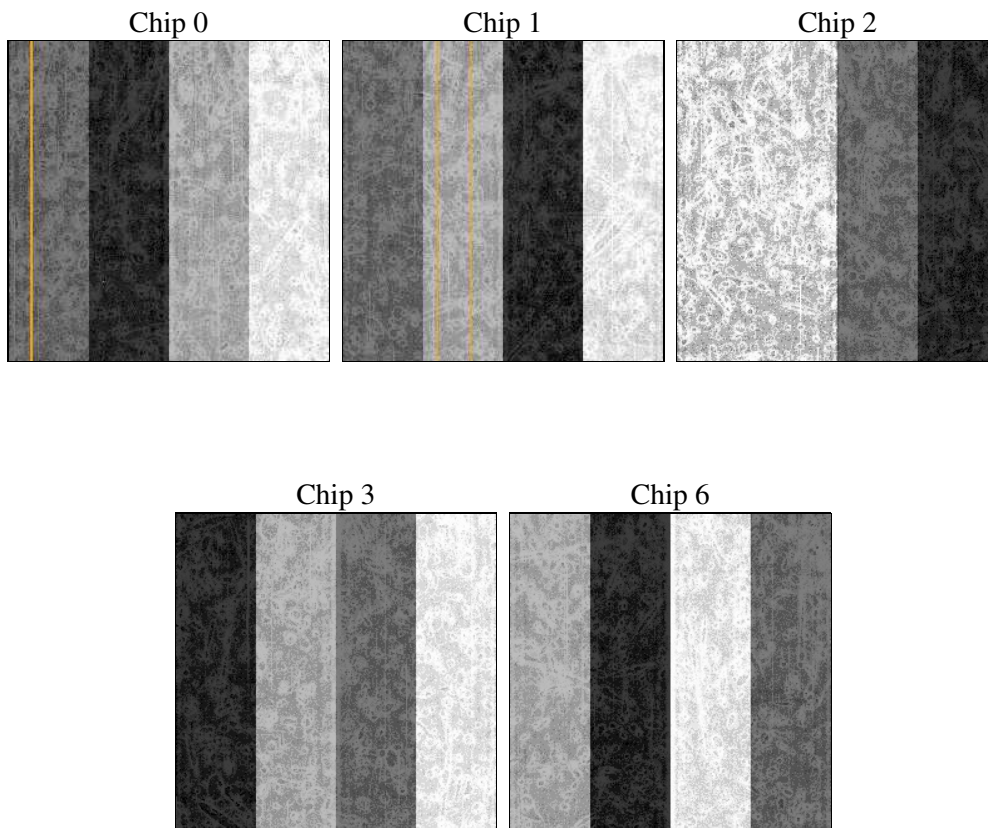
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	45800.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	45926.458901495	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime0	45923.317951083	Sum of GTIs [s]
date	2020-10-09T14:39:33	Date and time of file creation	ontime1	45926.458921492	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	45926.458921403	Sum of GTIs [s]
			ontime3	45926.458901495	Sum of GTIs [s]
			ontime6	45929.59991166	Sum of GTIs [s]
			l1events	2299050	Number of level 1 events

### 2.1.4 Events

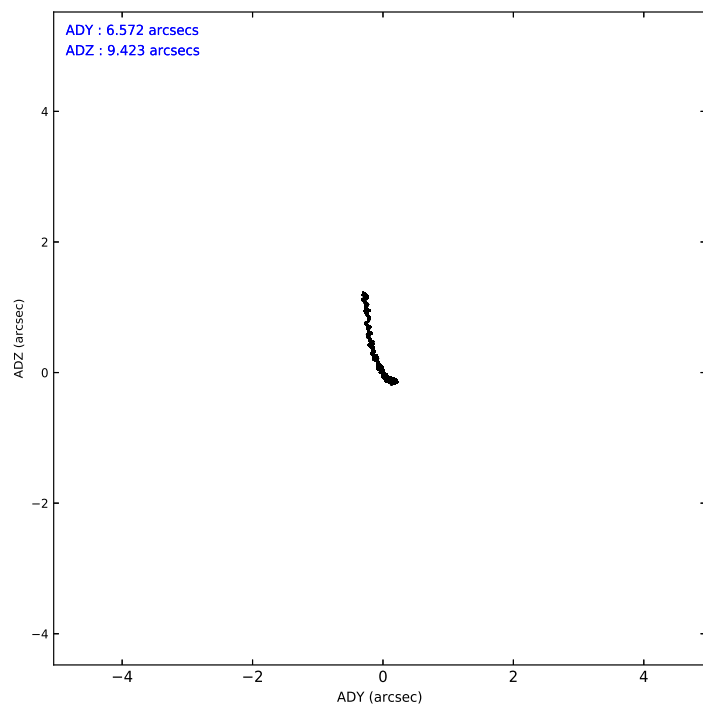
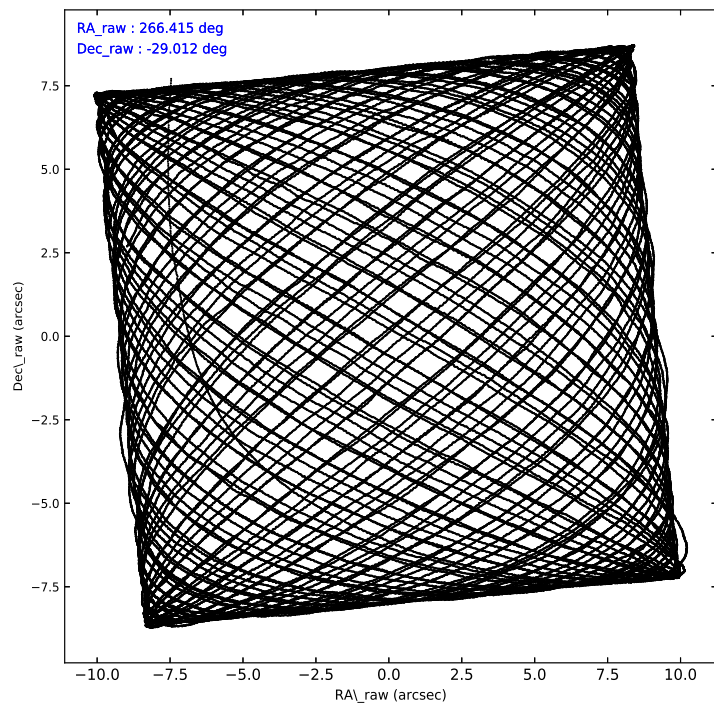
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	404561	457081	483499	511429	442480
rejected events	311755	334549	378810	366191	372359
rejected %	77%	73%	78%	71%	84%

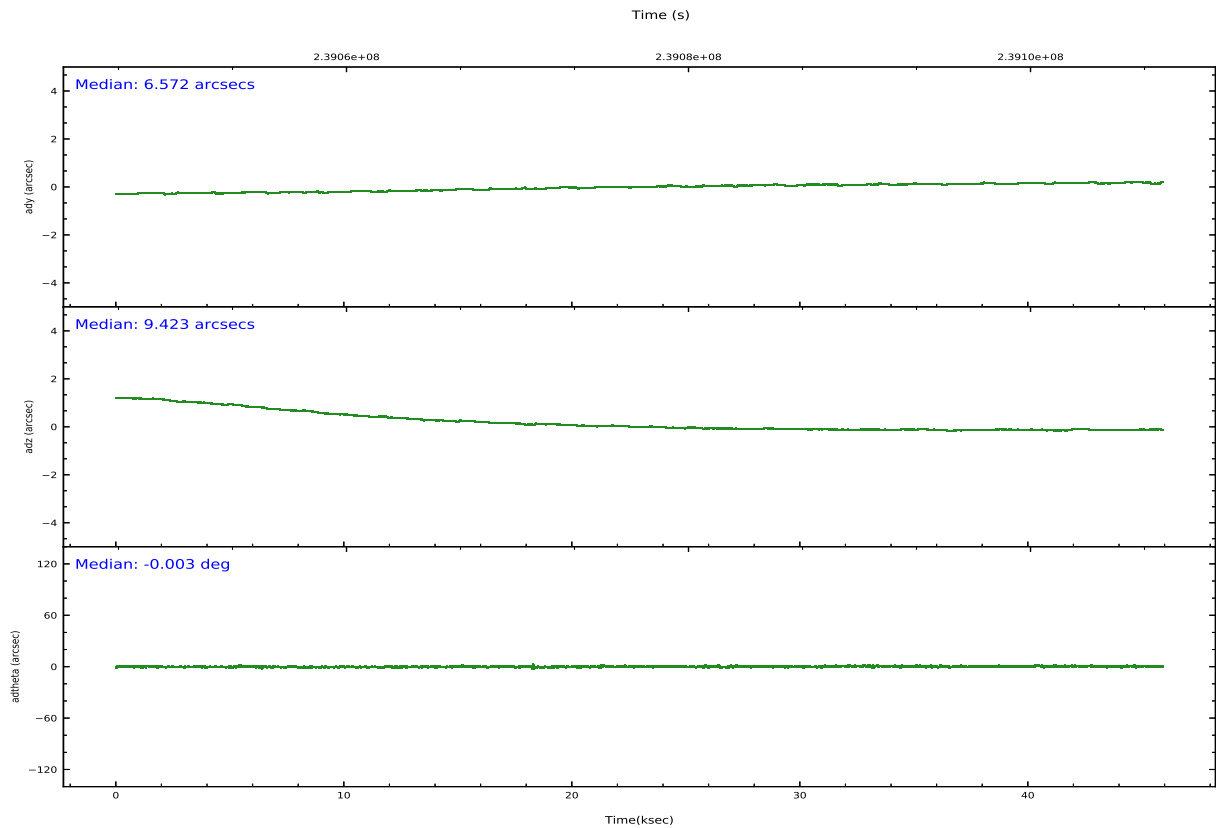
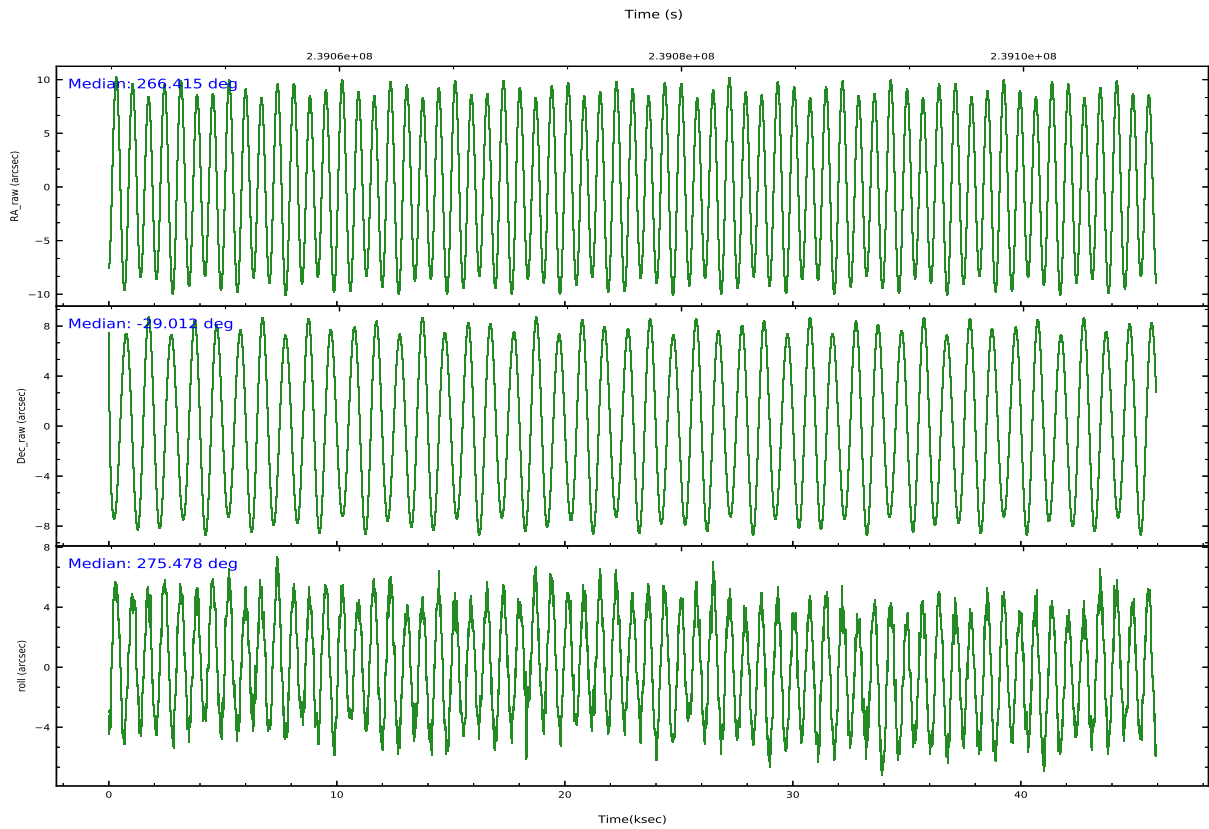
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	48793	65519	58645	86826	32153
	12%	14%	12%	16%	7%
grade 1 events	402	560	491	676	260
	0%	0%	0%	0%	0%
grade 2 events	19158	23887	20278	23809	15967
	4%	5%	4%	4%	3%
grade 3 events	6260	8201	6452	9101	5030
	1%	1%	1%	1%	1%
grade 4 events	6109	8121	7138	9086	5001
	1%	1%	1%	1%	1%
grade 5 events	14297	15810	13647	16731	16072
	3%	3%	2%	3%	3%
grade 6 events	13093	17497	12959	17210	12576
	3%	3%	2%	3%	2%
grade 7 events	296449	317486	363889	347990	355421
	73%	69%	75%	68%	80%

## 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	266.396793	266.41173265615	Subarray requested	NONE	NONE
[deg] Pointing Dec	-28.989968	-29.010562002961	Alternating exposures requested	N	N
[deg] Pointing Roll	275.263346	275.47848301987	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	239052424.184000	239052424.184000			
[s] Window stop time (MET)	239101444.184000	239101444.184000			
[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)	239055018.184000	239053871.37344			
Observation start date	2005-07-29T20:09:14	2005-07-29T19:51:11			
[s] Observation end time (MET)	239100818.184000	239101659.43813			
Observation end date	2005-07-30T08:52:34	2005-07-30T09:07:39			
Read mode	TIMED	TIMED			

## 2.3 Aspect





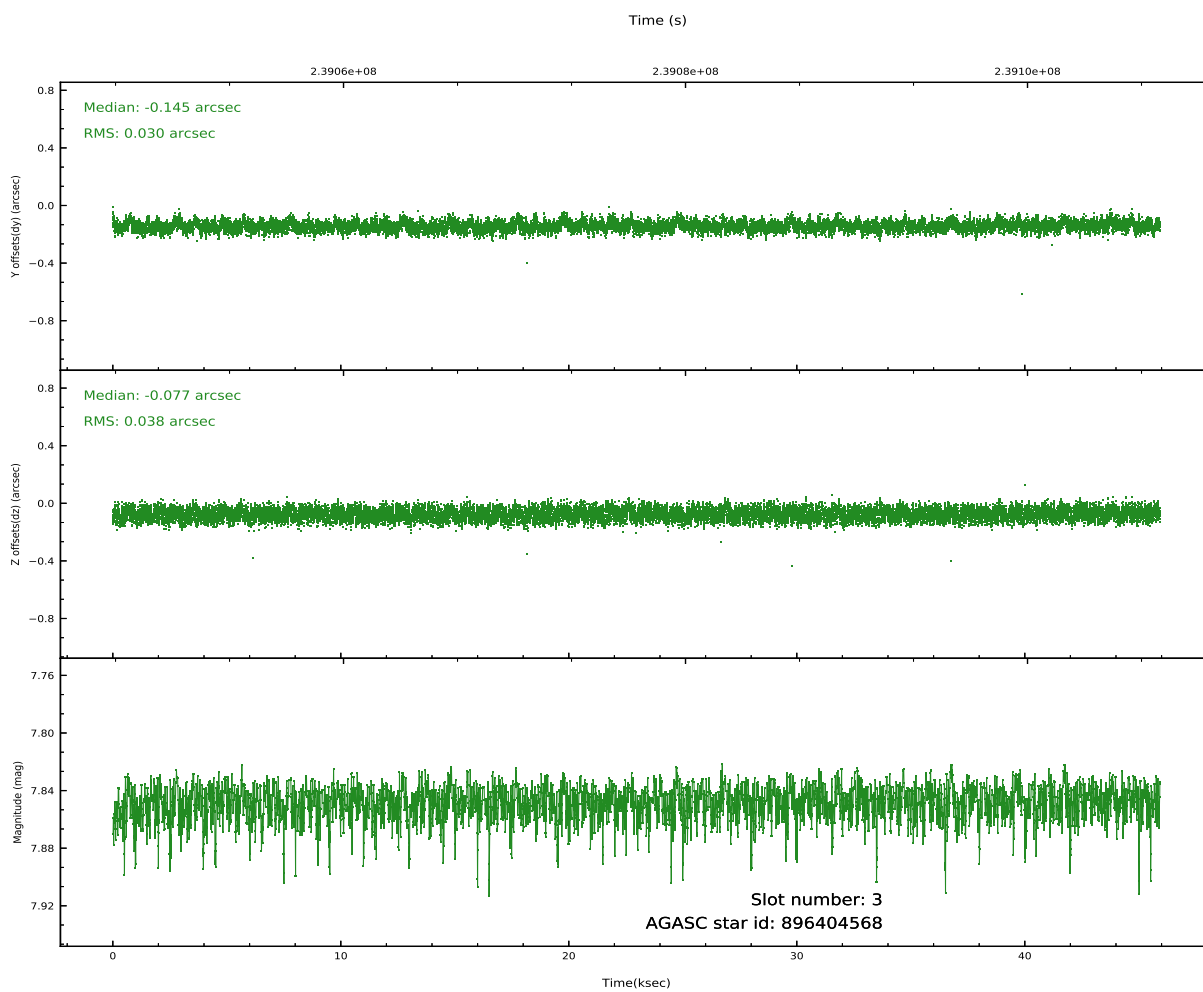
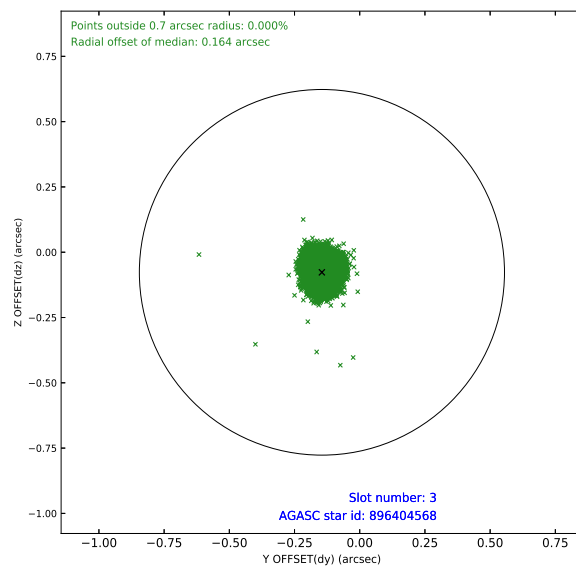
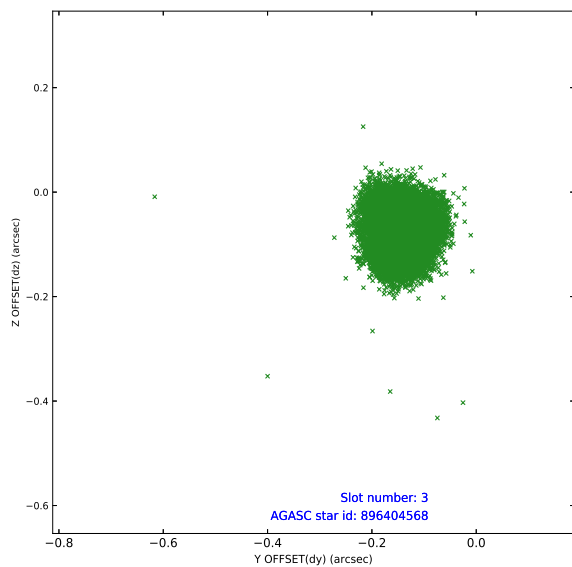
### Slot Statistics

pt	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	11202	1.000	-0.028	0.017	0.018	0.069	0.000000	0.000000	933.14	-833
1	FID		ACIS-I-4	7.18	11203	1.000	0.166	0.027	0.017	0.045	0.000000	0.000000	2153.34	1066
2	FID		ACIS-I-5	7.23	11202	1.000	-0.236	0.028	0.013	0.032	0.000000	0.000000	-1815.10	1064
3	GUIDE	used	896404568	7.85	22405	1.000	-0.145	-0.077	0.052	0.081	265.687293	-28.431080	-2202.68	-2053
4	GUIDE	used	896533888	7.02	22409	1.000	0.017	-0.033	0.052	0.077	266.666434	-29.392757	1522.63	709
5	GUIDE	used	896540808	7.47	22408	1.000	0.069	0.001	0.043	0.069	265.985401	-29.308604	1026.55	-1391
6	GUIDE	used	896541360	7.72	22403	1.000	0.116	0.052	0.043	0.068	266.684478	-29.453744	1746.72	744
7	GUIDE	used	896541576	8.18	22402	1.000	-0.060	0.057	0.066	0.103	267.051055	-28.762912	-618.82	2130

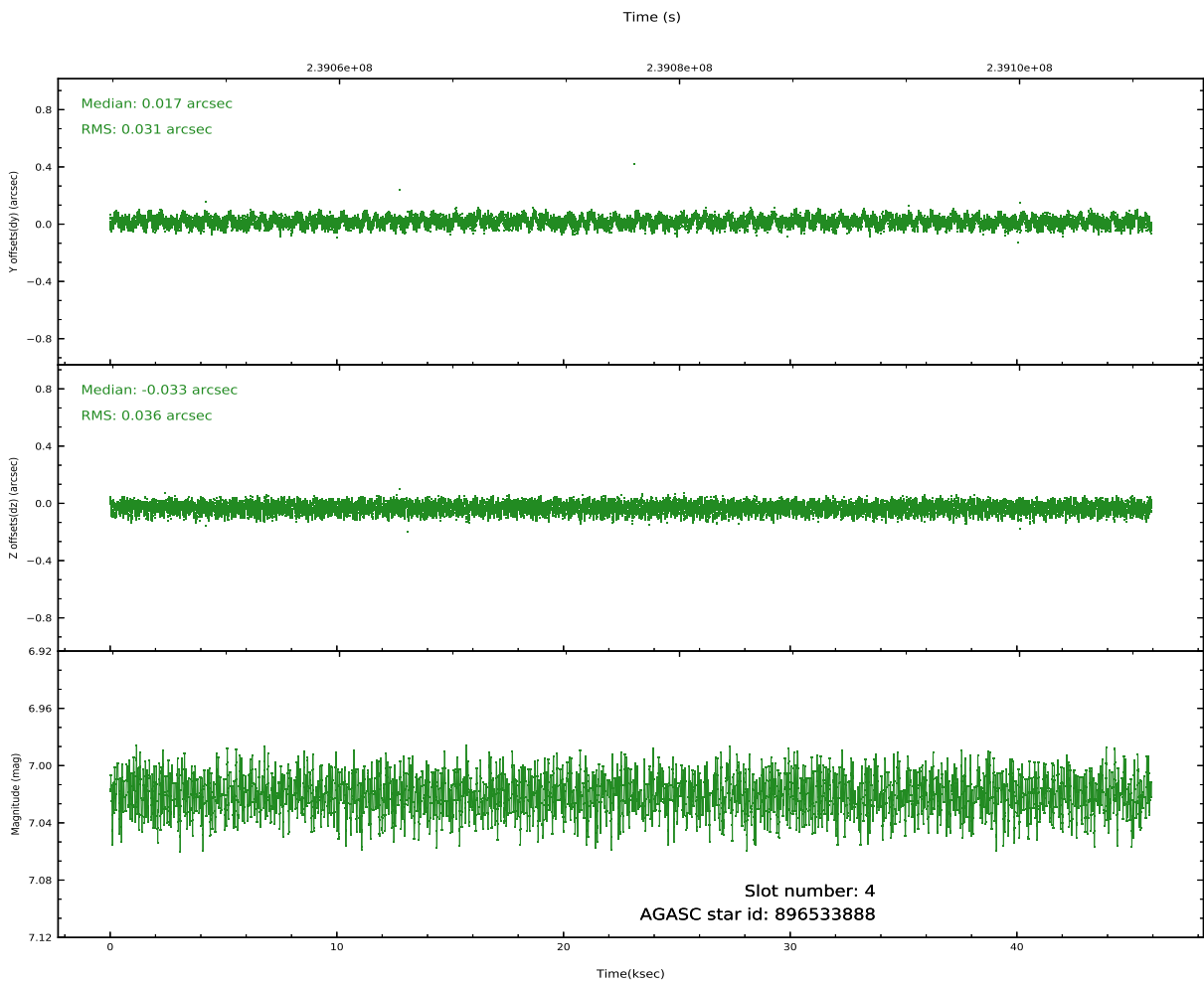
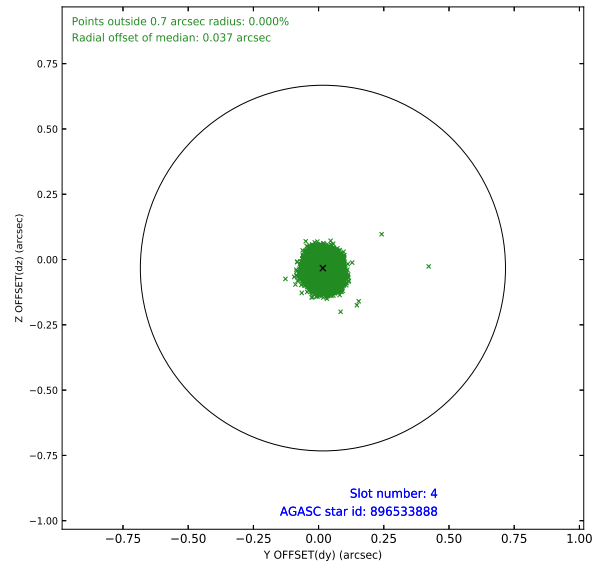
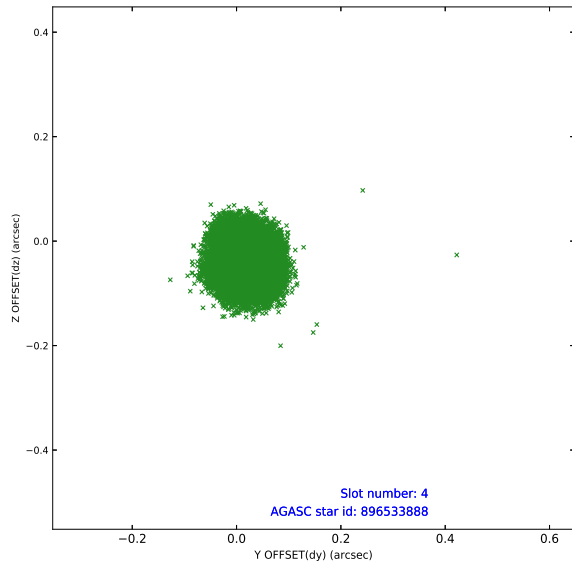
∞

## 2.4 Star Slots

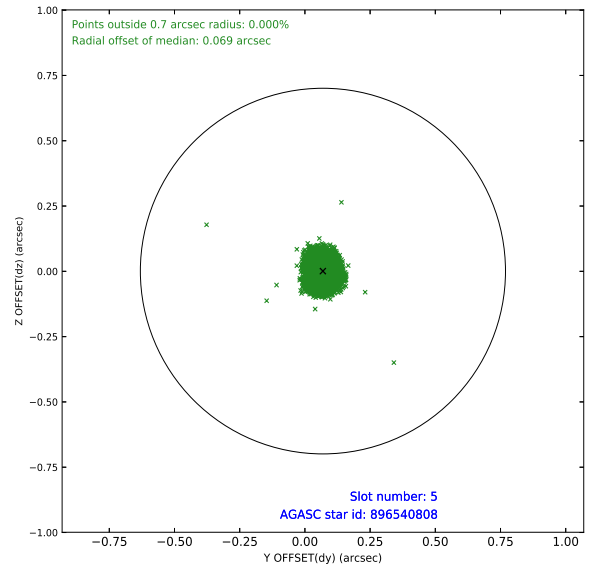
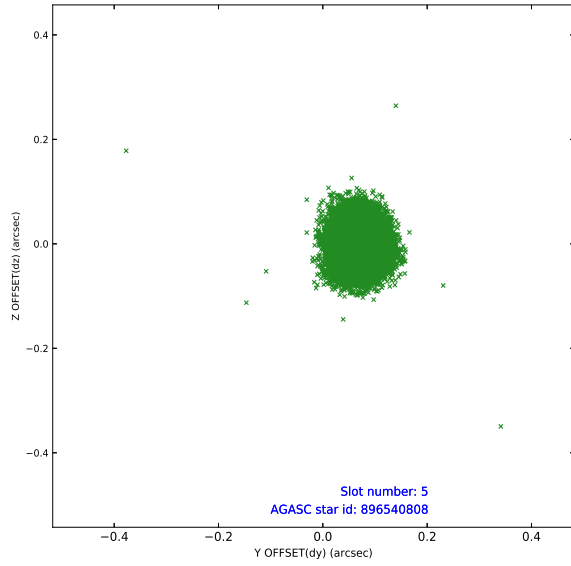
### 2.4.1 Slot 3



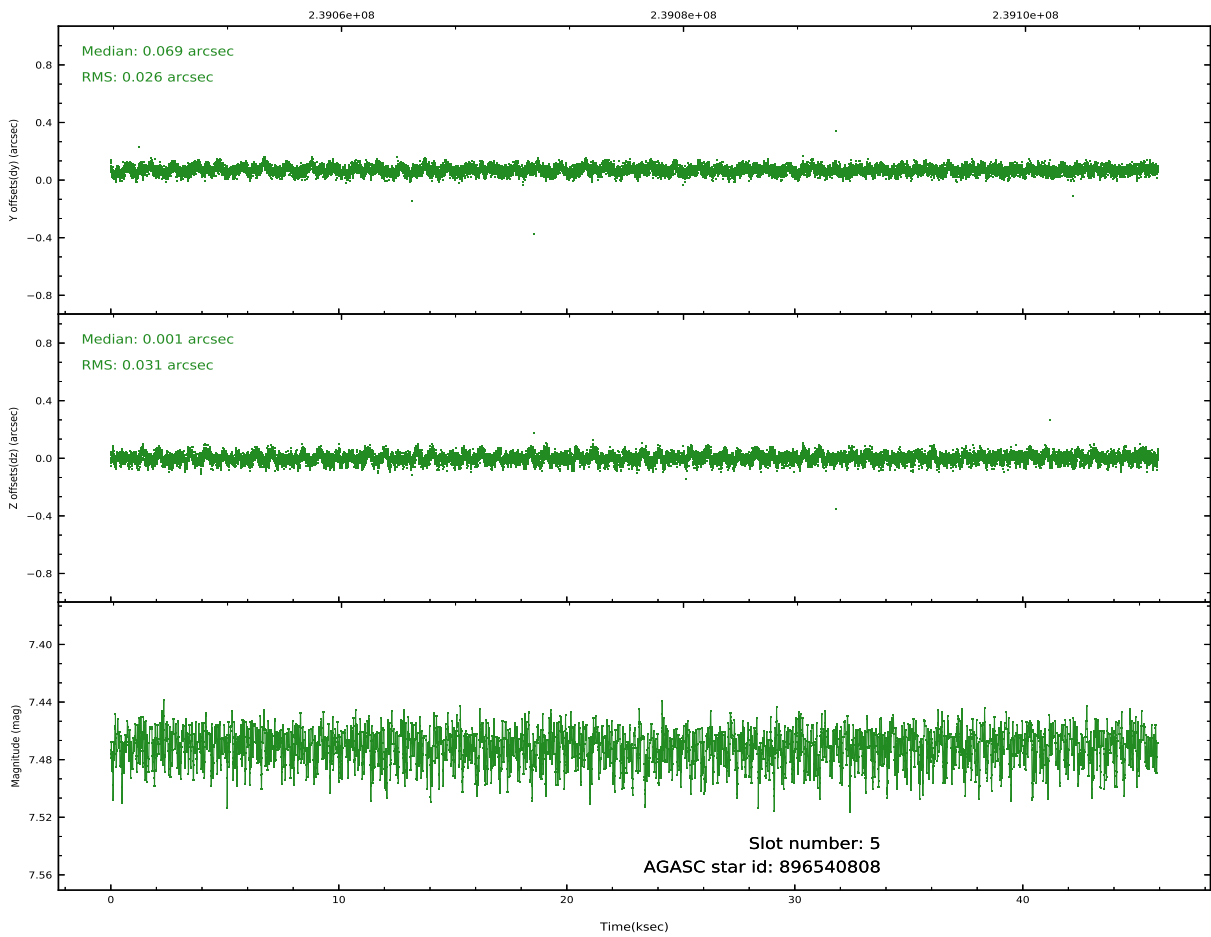
## 2.4.2 Slot 4



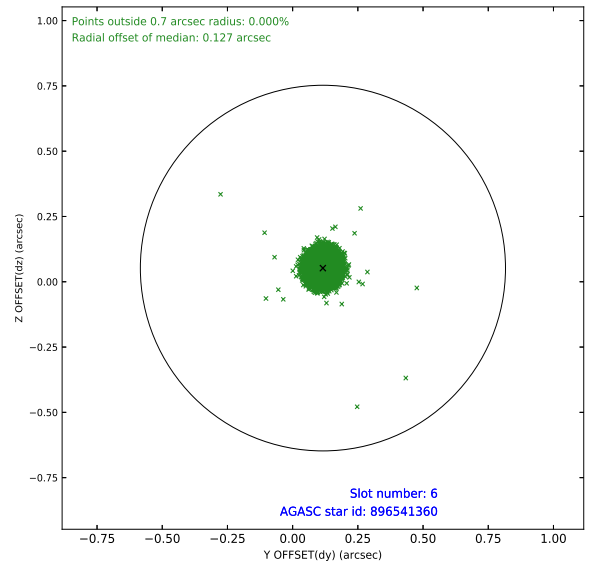
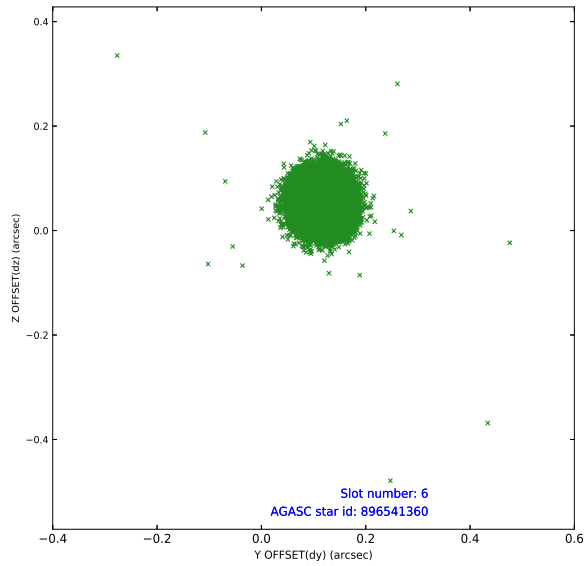
### 2.4.3 Slot 5



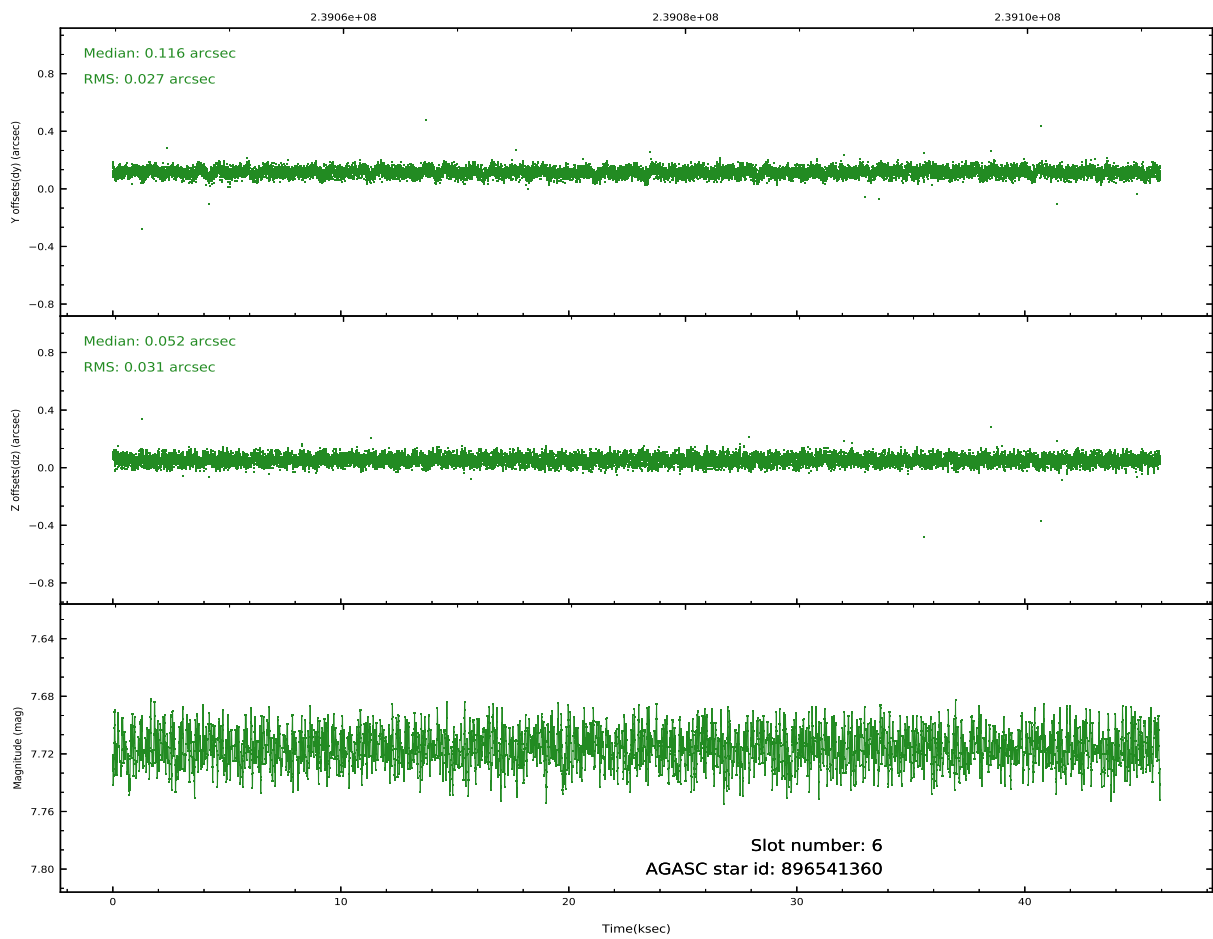
Time (s)



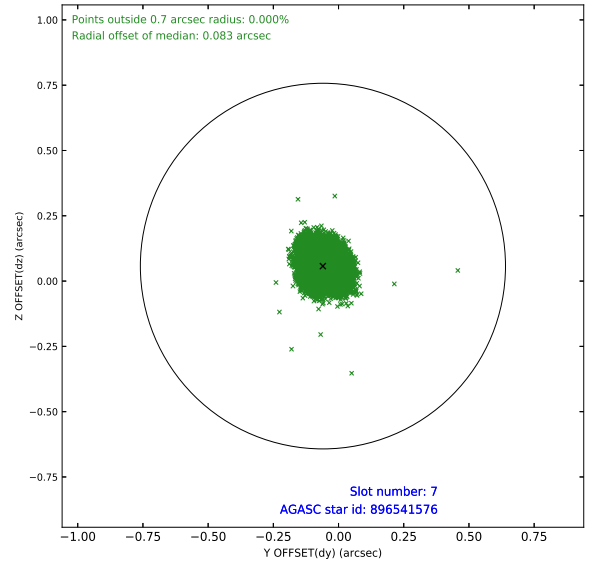
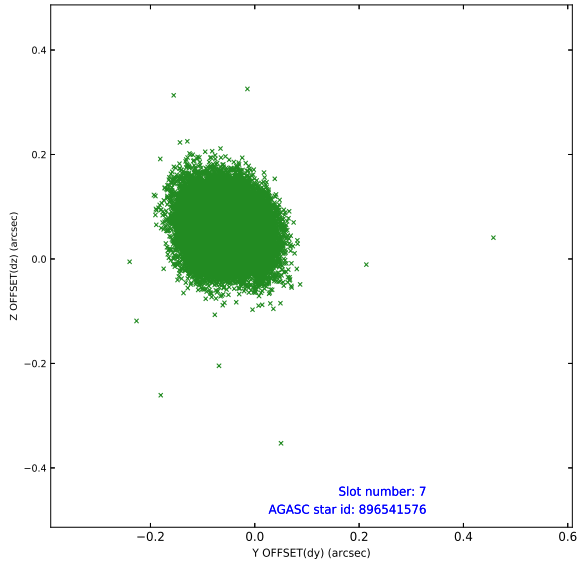
## 2.4.4 Slot 6



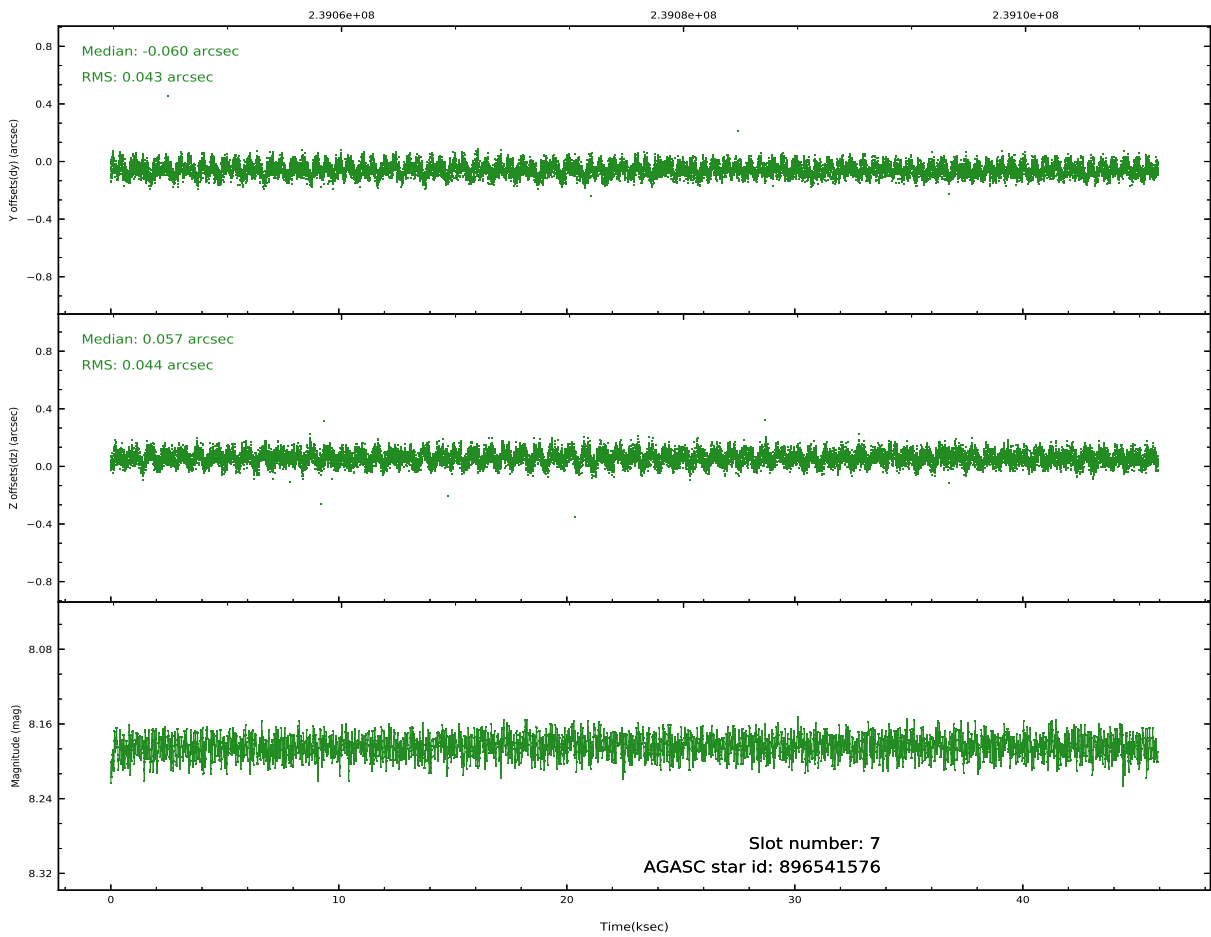
Time (s)



## 2.4.5 Slot 7

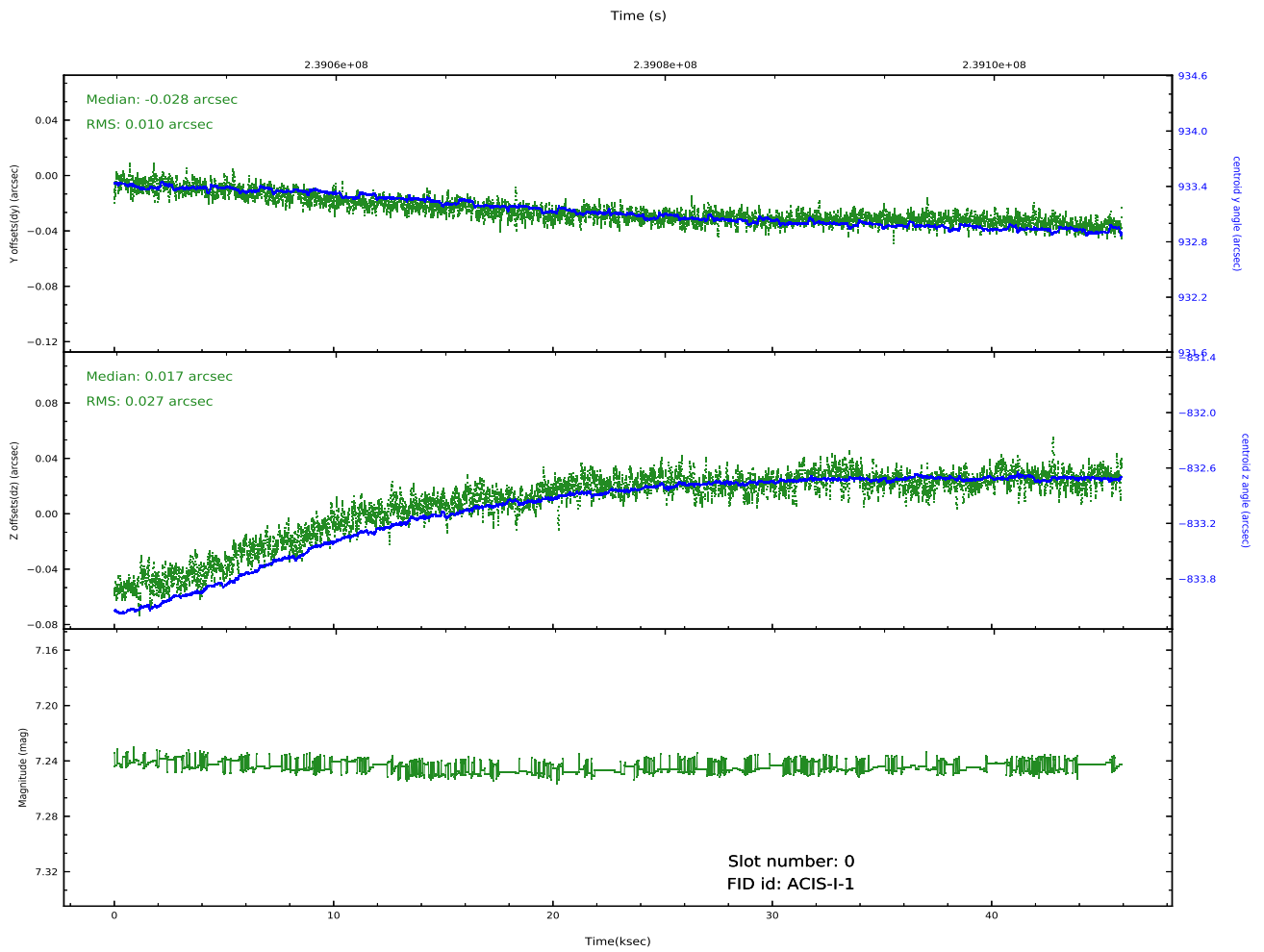
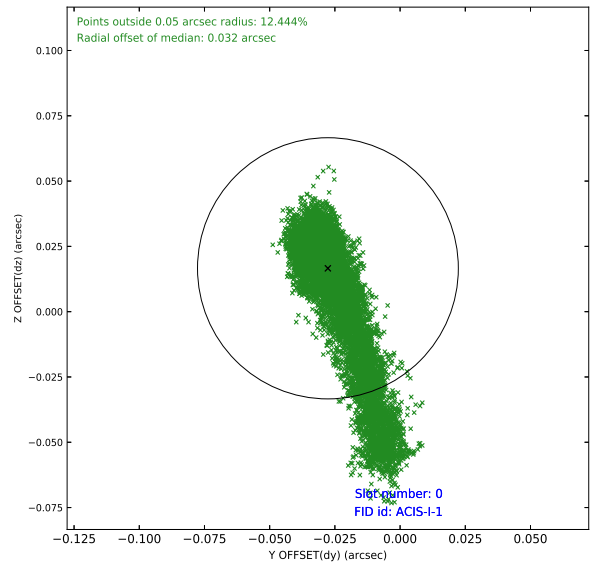
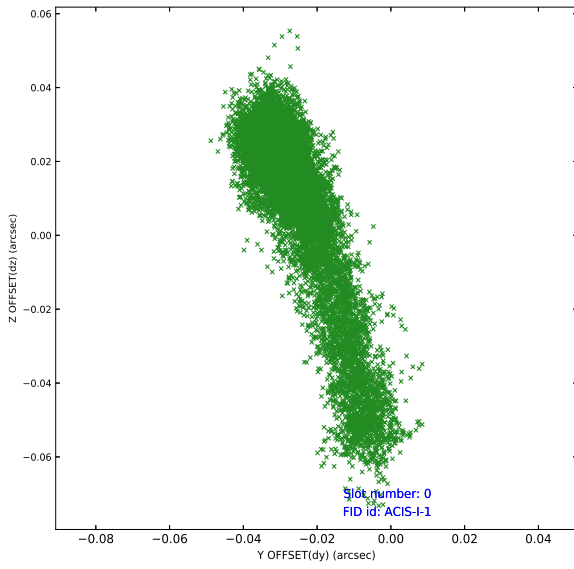


Time (s)

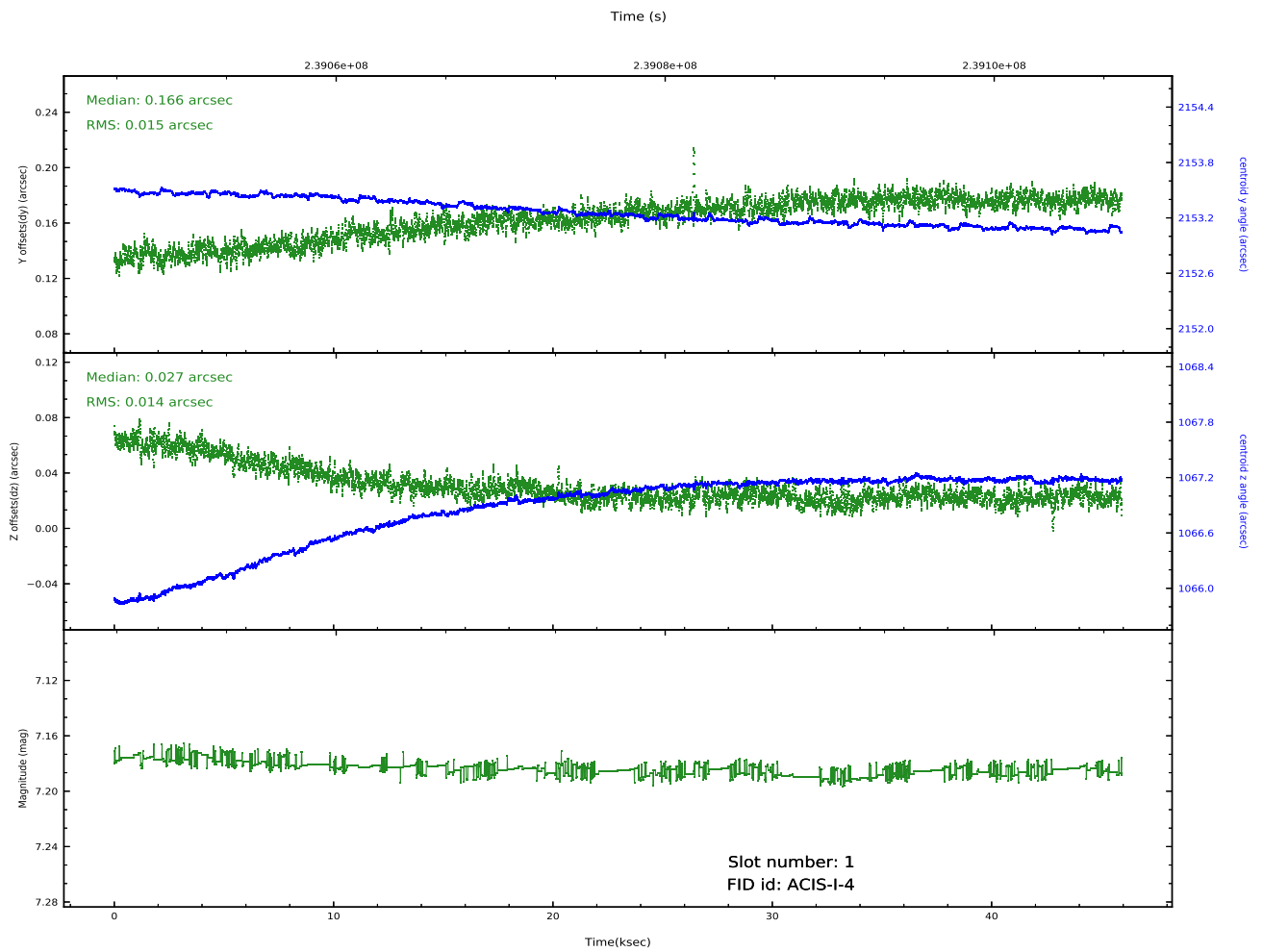
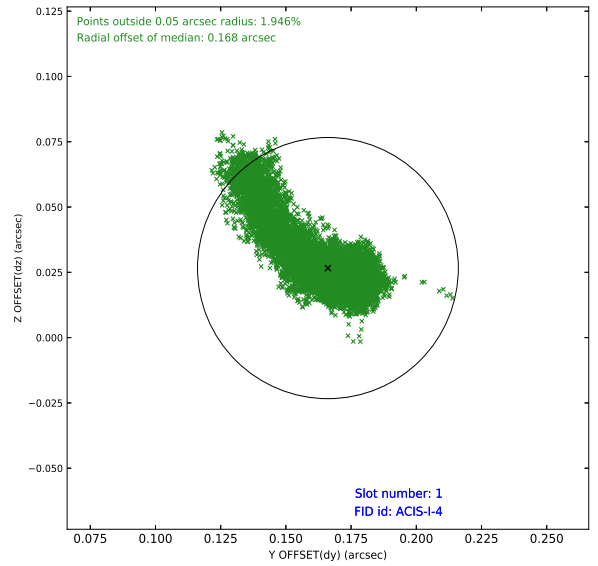
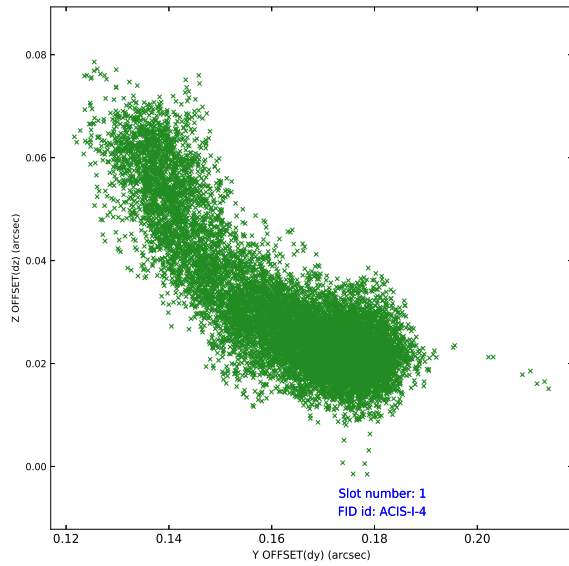


## 2.5 FID Slots

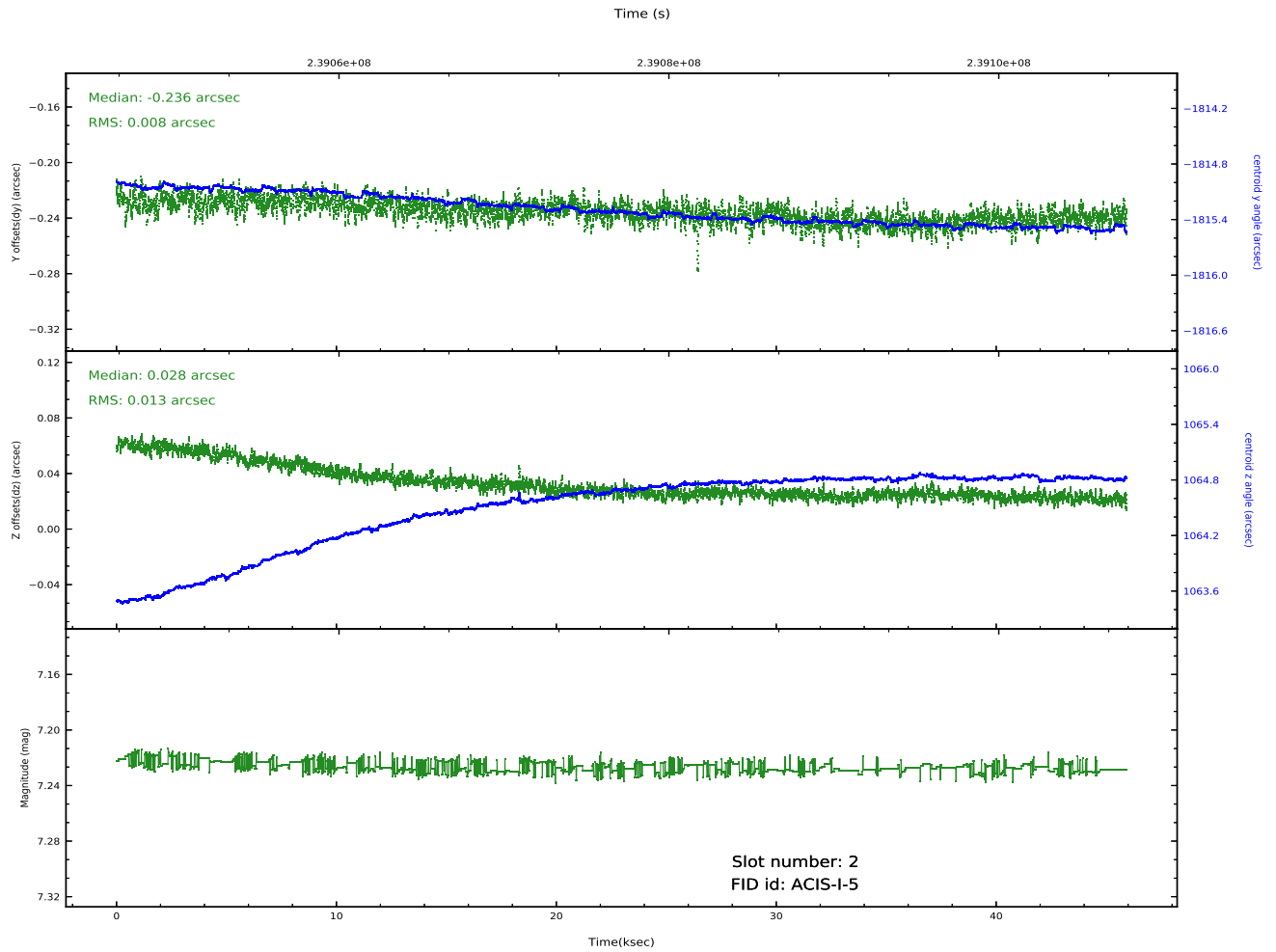
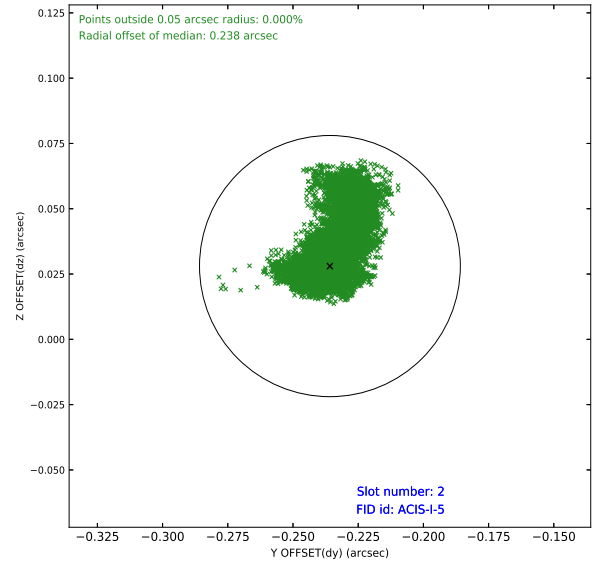
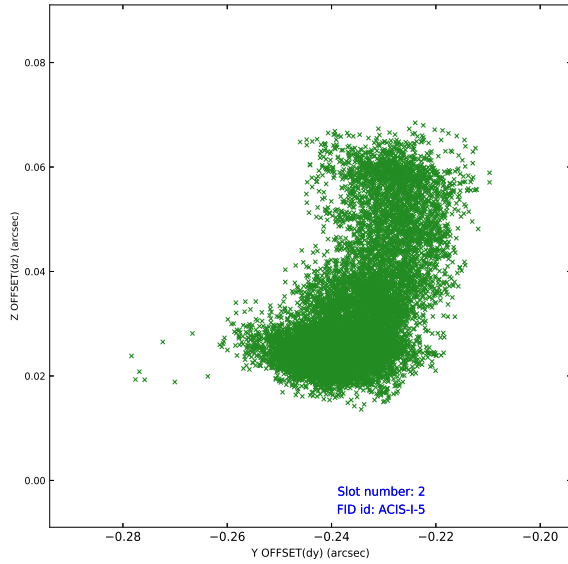
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	46.28594

## A.2 Comments

Window constraint met.

===

Charge time for this observation remains at previous value of 46.28594 ksec, although with the current processing the charge time would have been 45.926 ksec.