

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6277 - L2 Version 4  
Chandra X-Ray Center

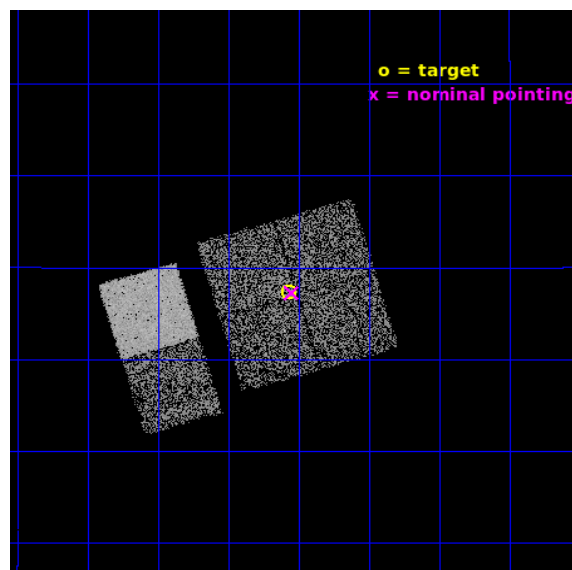
L2 Processing Date : Oct 9 2020

## 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

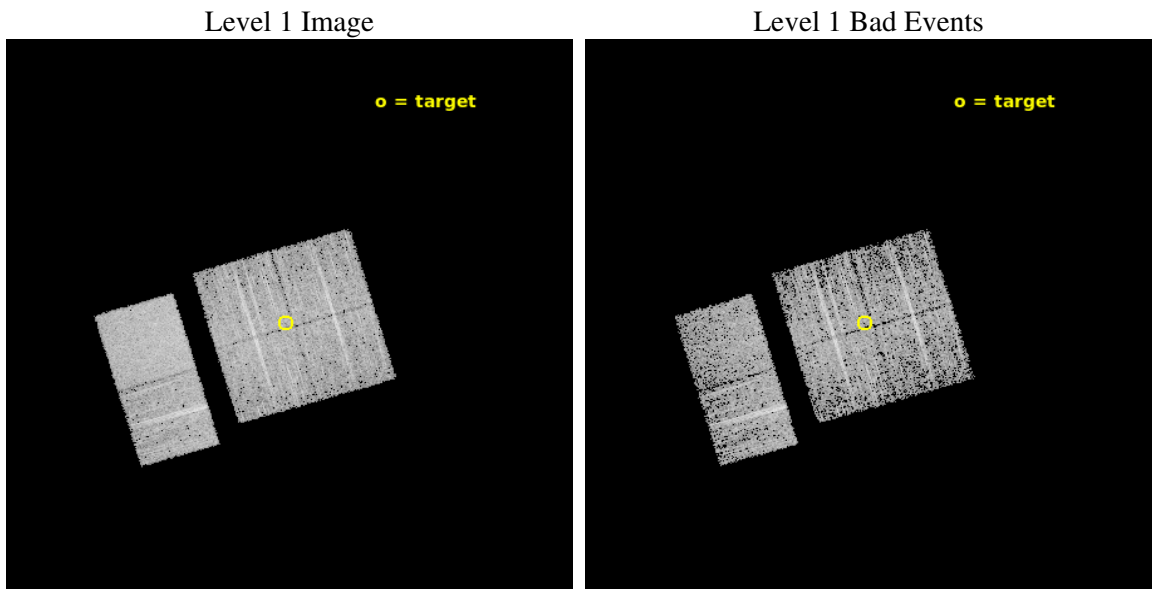
seq_num	701179	Sequence number
obs_id	6277	Observation id
title	Search for strongly obscured AGNs: support for INTEGRAL all-sky hard X-ray survey	Proposal title
observer	Prof. Rashid Sunyaev	Principal investigator
object	IGR J13091+1137	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	197.267083	Observer's specified target RA [deg]
dec_targ	11.622	Observer's specified target Dec [deg]
ra_nom	197.26185979267	Nominal RA [deg]
dec_nom	11.621087614783	Nominal Dec [deg]
roll_nom	253.43185141224	Nominal Roll [deg]
revision	4	Processing version of data
ontime	3673.5999863148	Sum of GTIs [s]
livetime	3627.0826513117	Livetime [s]
ontime0	3673.5999863148	Sum of GTIs [s]
ontime1	3673.5999863148	Sum of GTIs [s]
ontime2	3673.5999863148	Sum of GTIs [s]
ontime3	3673.5999863148	Sum of GTIs [s]
ontime6	3673.5999863148	Sum of GTIs [s]
ontime7	3673.5999863148	Sum of GTIs [s]
l2events	31932	Number of level 2 events



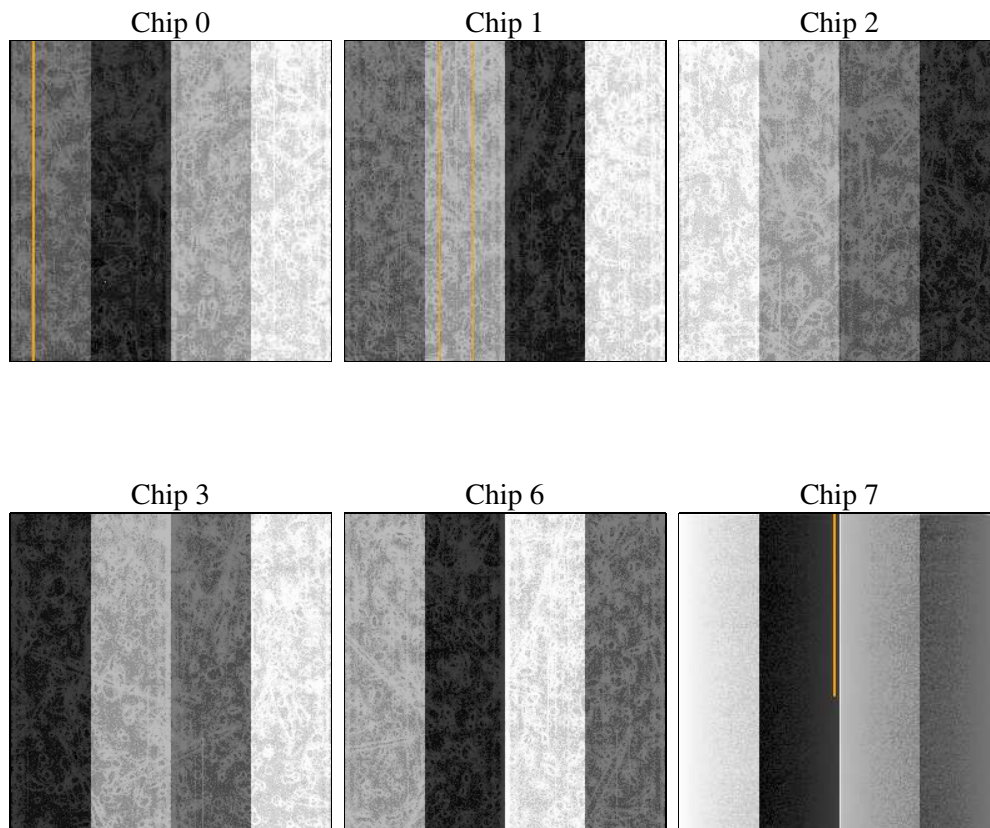
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	3673.5999863148	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	3673.5999863148	Sum of GTIs [s]
date	2020-10-09T14:03:12	Date and time of file creation	ontime1	3673.5999863148	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	3673.5999863148	Sum of GTIs [s]
			ontime3	3673.5999863148	Sum of GTIs [s]
			ontime6	3673.5999863148	Sum of GTIs [s]
			ontime7	3673.5999863148	Sum of GTIs [s]
			l1events	184754	Number of level 1 events

### 2.1.4 Events

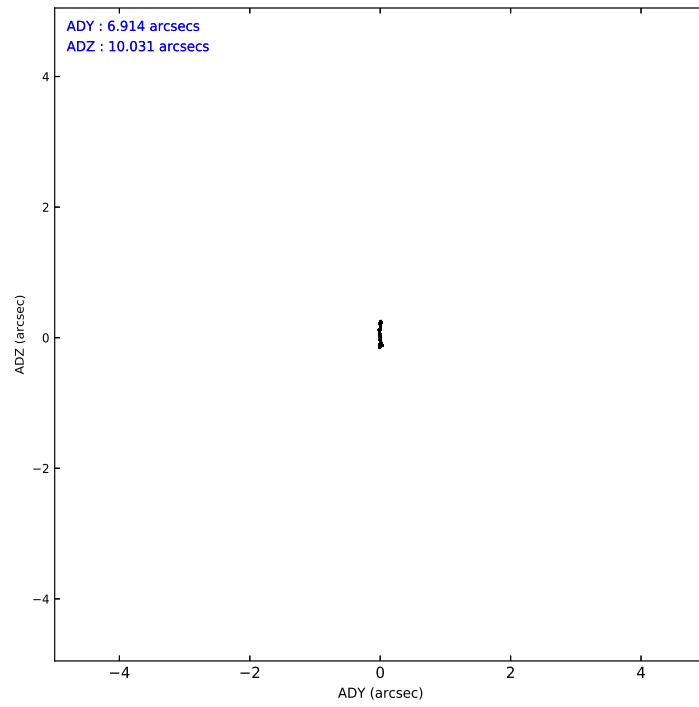
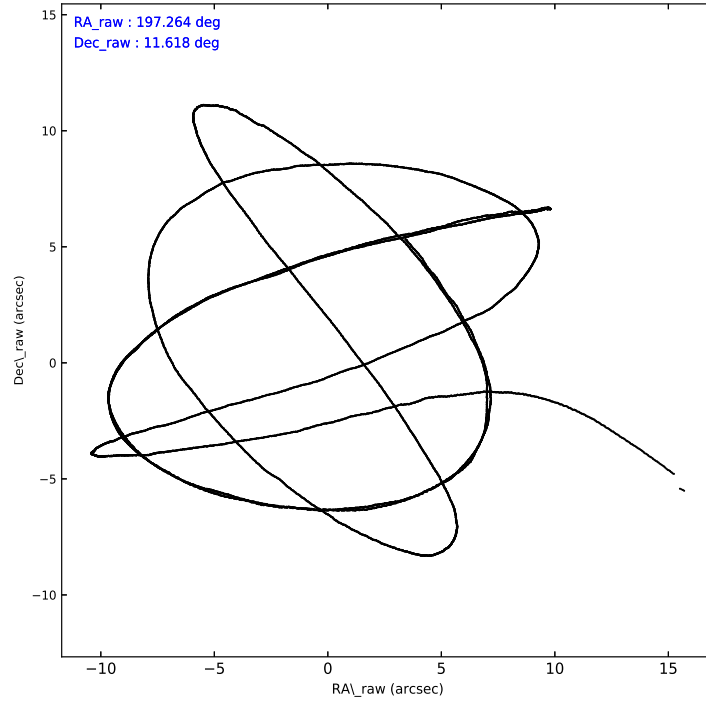
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	26713	26959	29221	30303	31543	40015
rejected events	23066	23319	25661	26509	27927	23419
rejected %	86%	86%	87%	87%	88%	58%

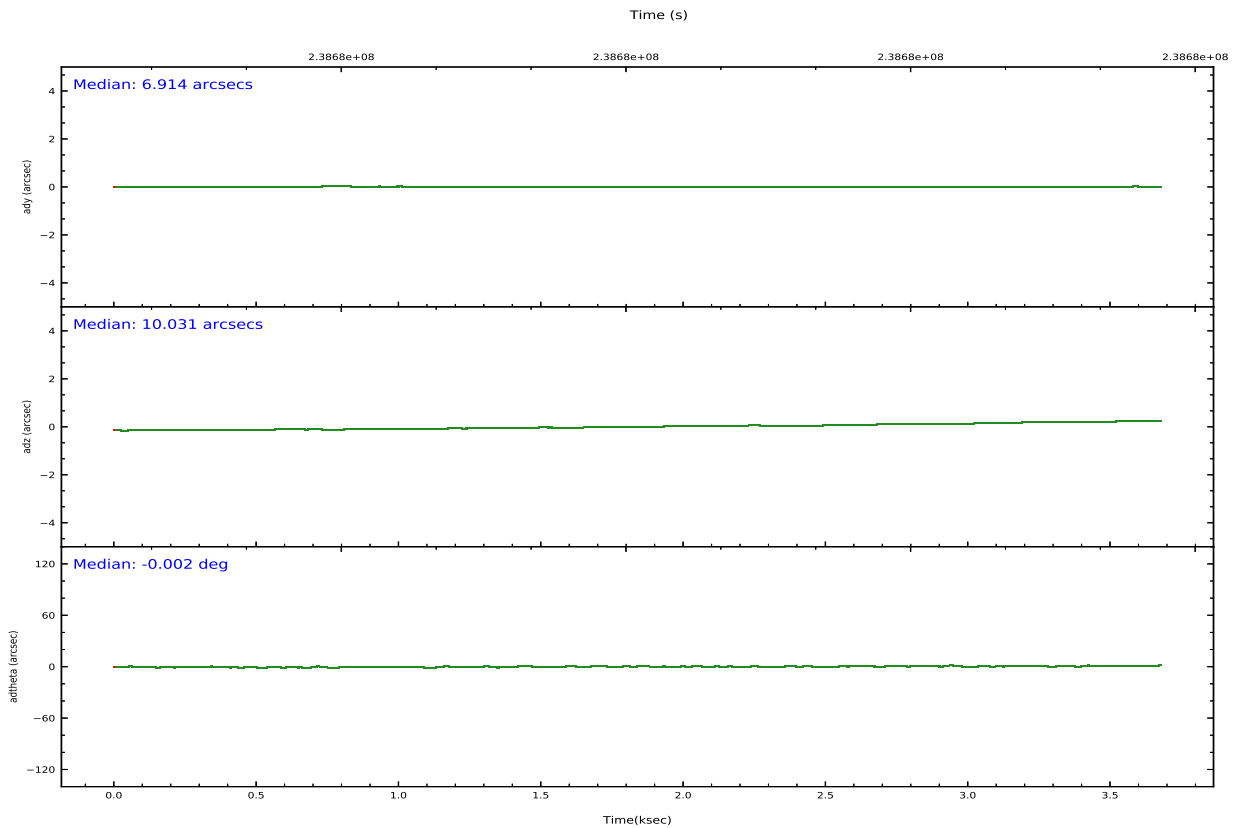
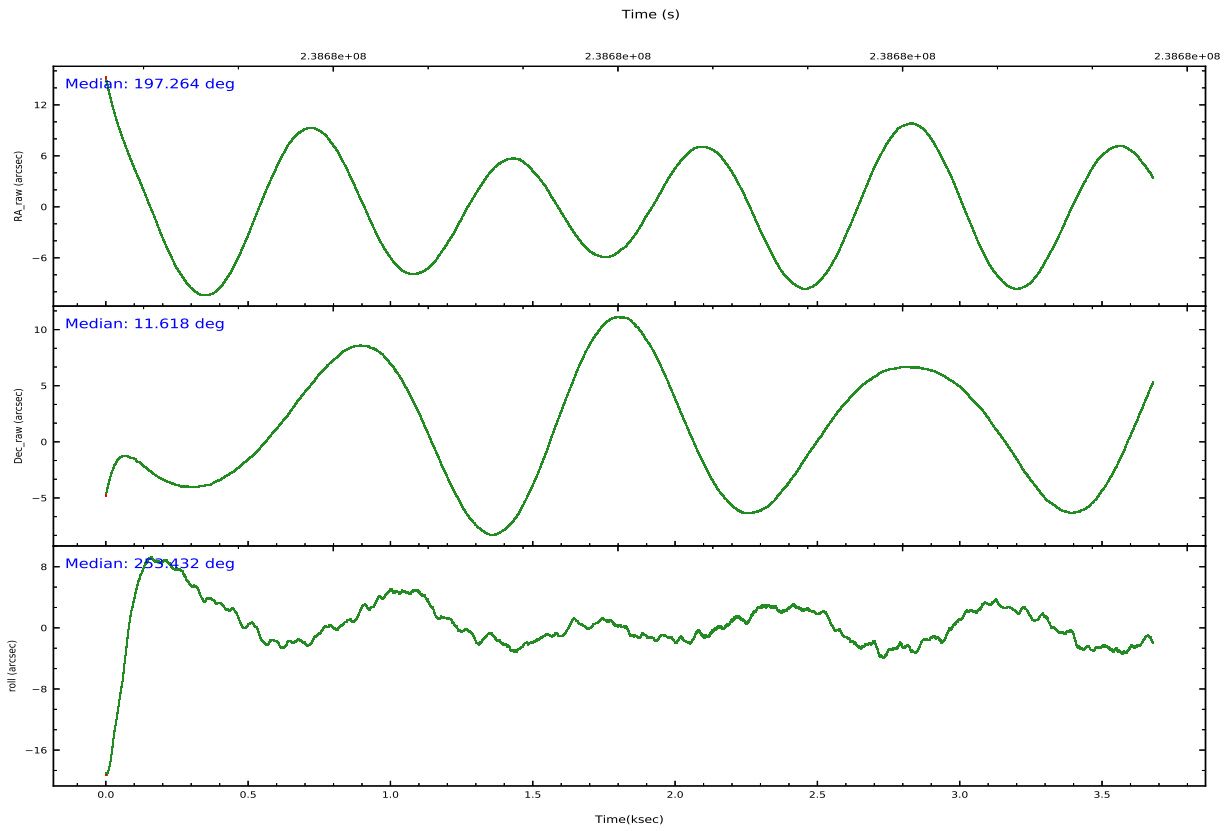
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1620	1482	1667	1738	1447	1578
	6%	5%	5%	5%	4%	3%
grade 1 events	23	12	15	24	12	35
	0%	0%	0%	0%	0%	0%
grade 2 events	803	853	671	727	738	3302
	3%	3%	2%	2%	2%	8%
grade 3 events	322	333	344	346	347	1514
	1%	1%	1%	1%	1%	3%
grade 4 events	336	352	378	376	367	1423
	1%	1%	1%	1%	1%	3%
grade 5 events	1252	1281	1150	1296	1442	3773
	4%	4%	3%	4%	4%	9%
grade 6 events	638	704	572	683	791	9158
	2%	2%	1%	2%	2%	22%
grade 7 events	21719	21942	24424	25113	26399	19232
	81%	81%	83%	82%	83%	48%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	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	197.257466	197.26185979267	Subarray requested	NONE	NONE
[deg] Pointing Dec	11.645032	11.621087614783	Alternating exposures requested	N	N
[deg] Pointing Roll	253.223013	253.43185141224	[s] Primary exposure time	0.000000	3.2
[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)	238674381.184000	238673270.91852			
Observation start date	2005-07-25T10:25:17	2005-07-25T10:07:50			
[s] Observation end time (MET)	238677881.184000	238678418.98125			
Observation end date	2005-07-25T11:23:37	2005-07-25T11:33:38			
Read mode	TIMED	TIMED			

## 2.3 Aspect





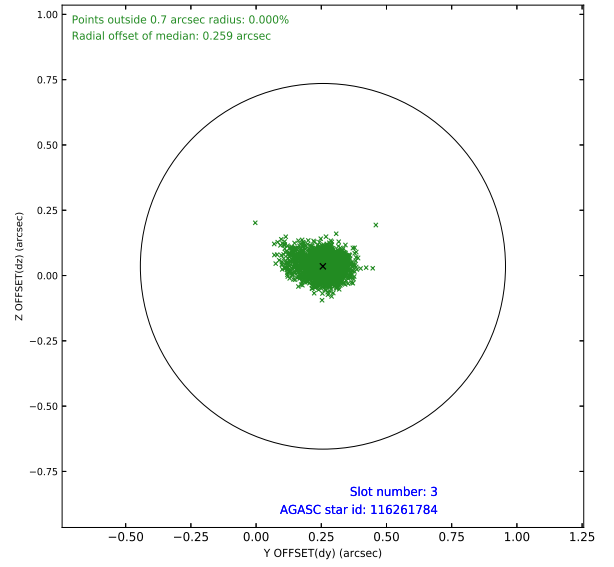
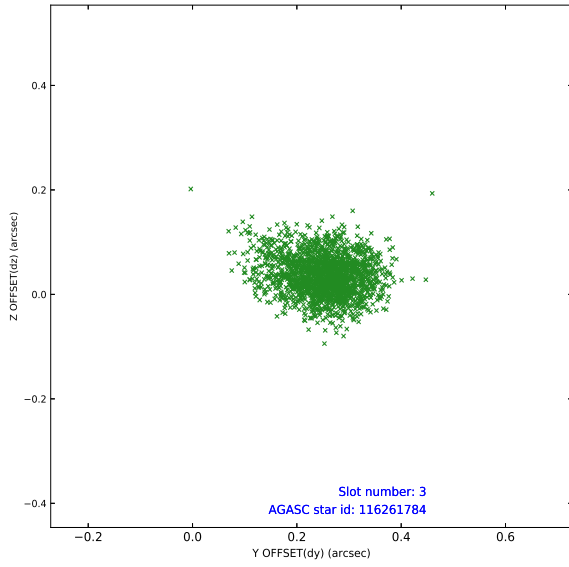
### Slot Statistics

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	7.24	898	1.000	0.014	-0.007	0.007	0.015	0.000000	0.000000	932.79	-833
1	FID		ACIS-I-5	7.23	898	1.000	-0.197	0.019	0.007	0.011	0.000000	0.000000	-1814.59	1063
2	FID		ACIS-I-6	7.26	898	1.000	0.092	0.059	0.007	0.013	0.000000	0.000000	396.54	1709
3	GUIDE	used	116261784	8.56	1796	1.000	0.256	0.035	0.072	0.125	196.853969	11.134859	2169.84	-834
4	GUIDE	used	116262664	8.44	1796	1.000	0.135	0.062	0.053	0.087	196.809372	11.278433	1720.40	-1134
5	GUIDE	used	116267520	9.31	1796	1.000	-0.058	-0.032	0.096	0.164	197.020801	12.194164	-1651.81	-1368
6	GUIDE	used	116267000	8.91	1796	1.000	-0.170	-0.050	0.089	0.148	196.866177	12.323926	-1944.39	-2024
7	GUIDE	used	116267400	9.05	1794	1.000	-0.160	-0.007	0.074	0.120	196.893154	12.273451	-1798.14	-1881

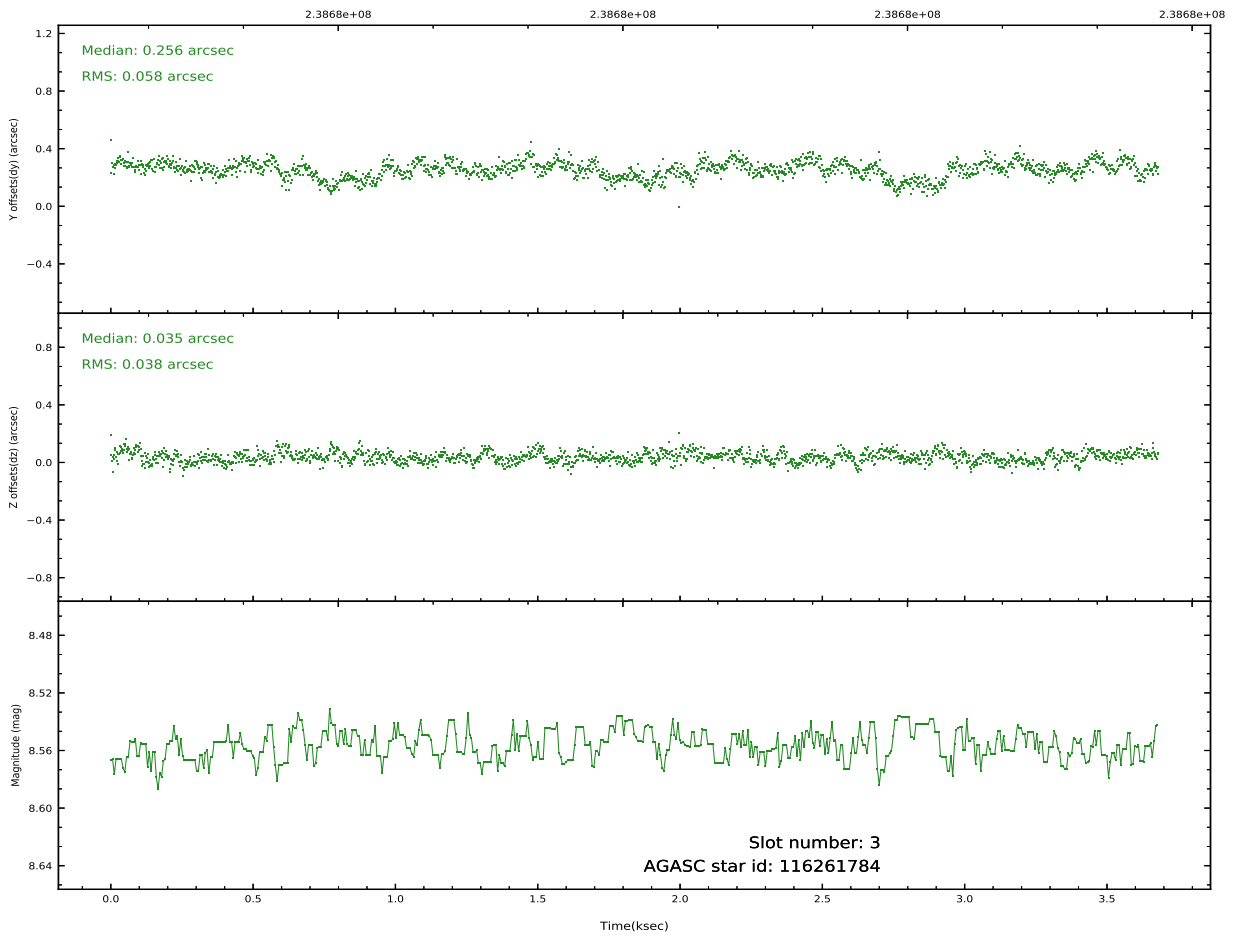
∞

## 2.4 Star Slots

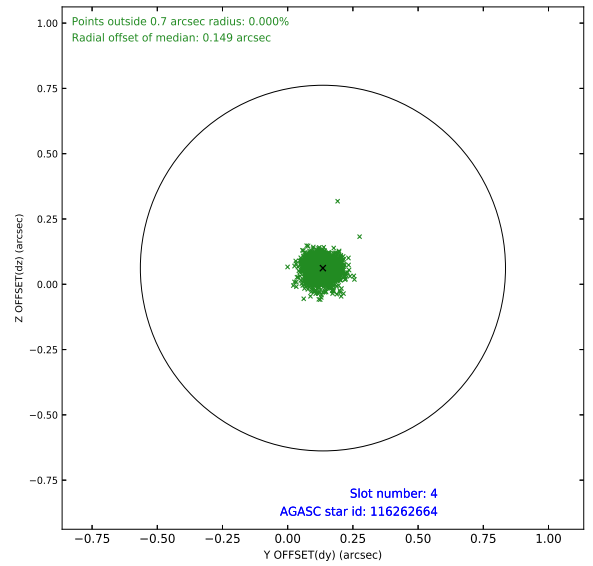
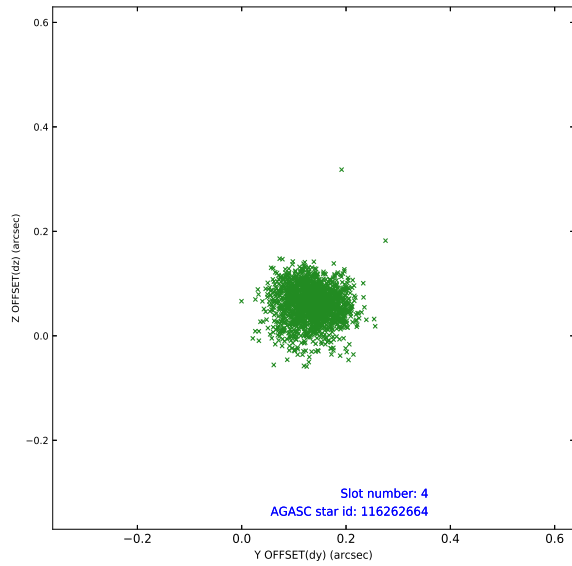
### 2.4.1 Slot 3



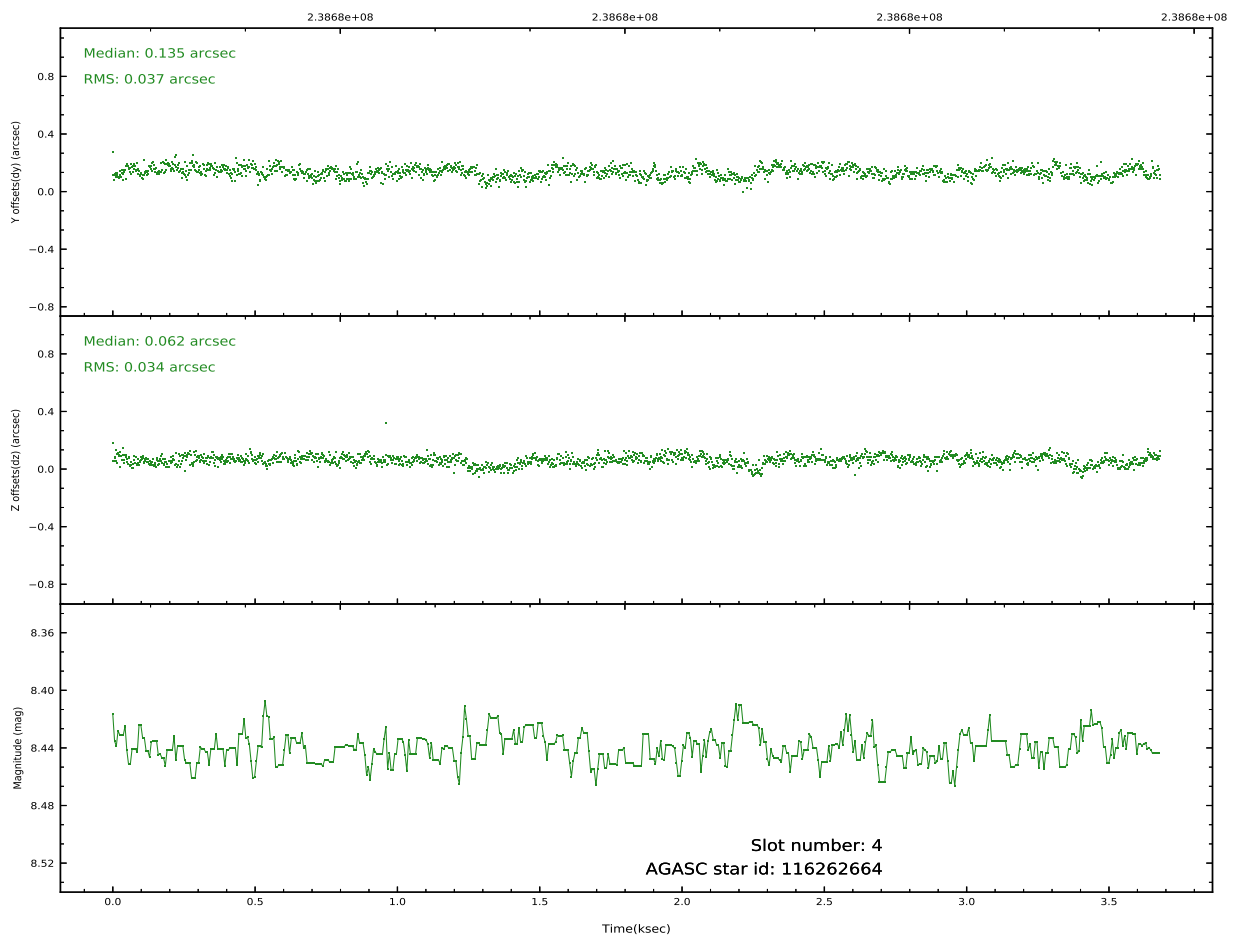
Time (s)



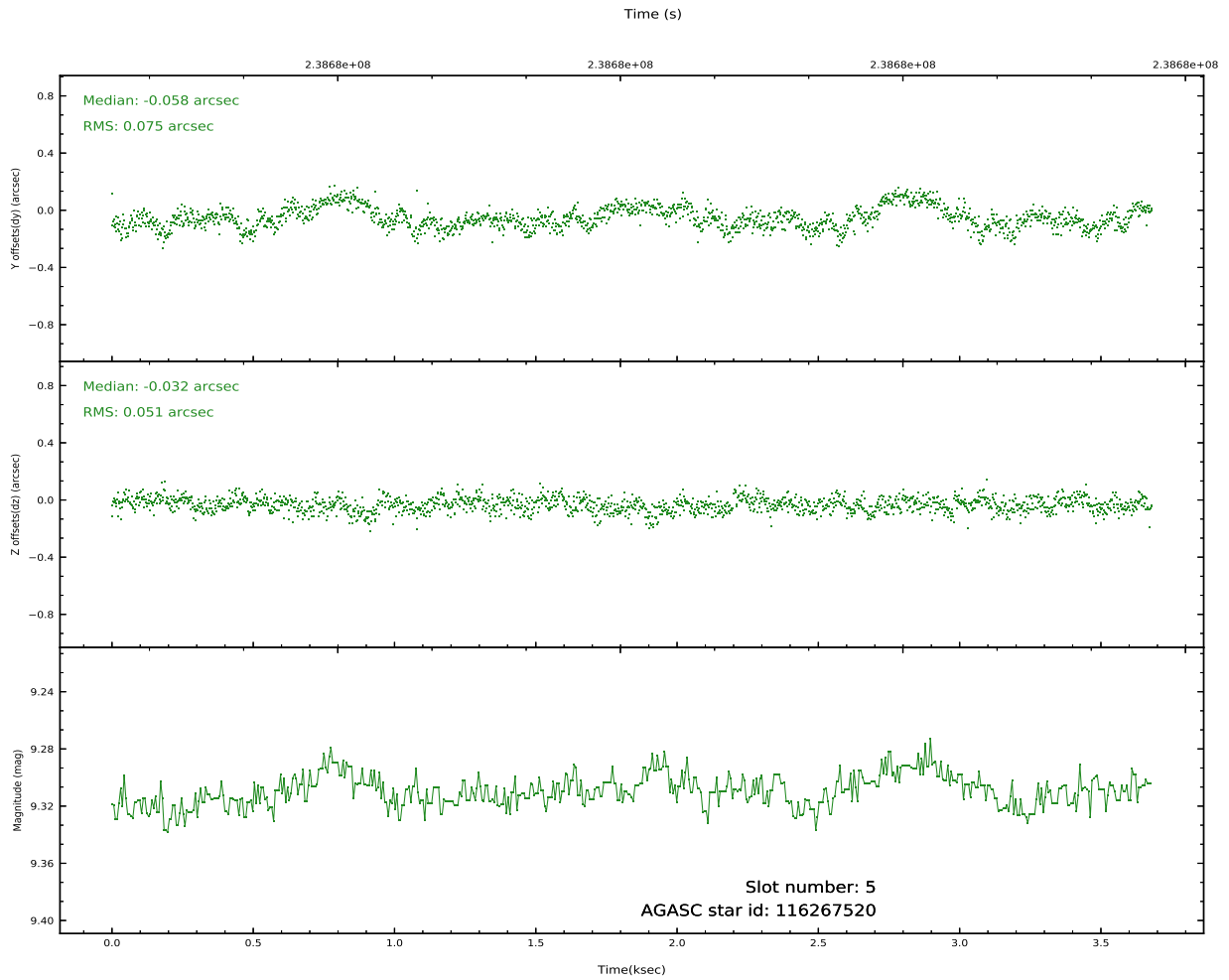
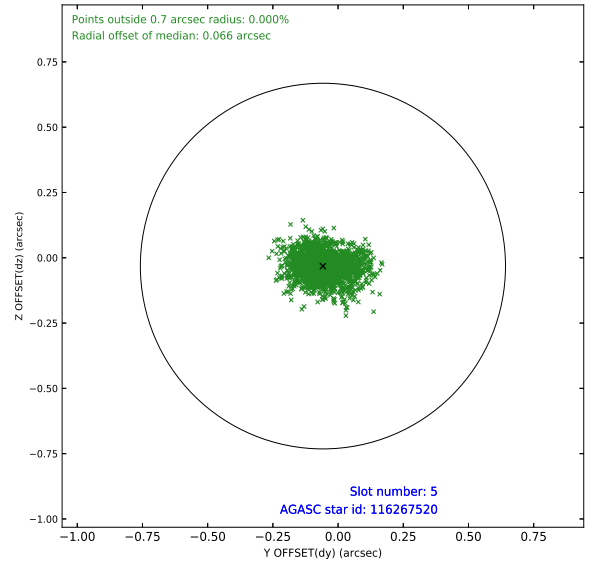
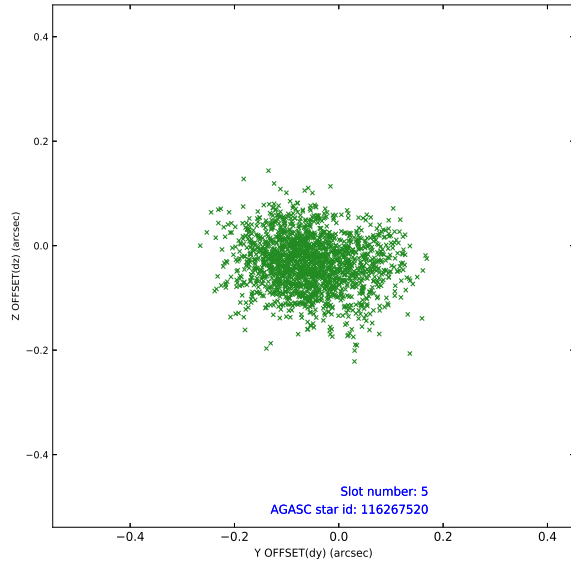
## 2.4.2 Slot 4



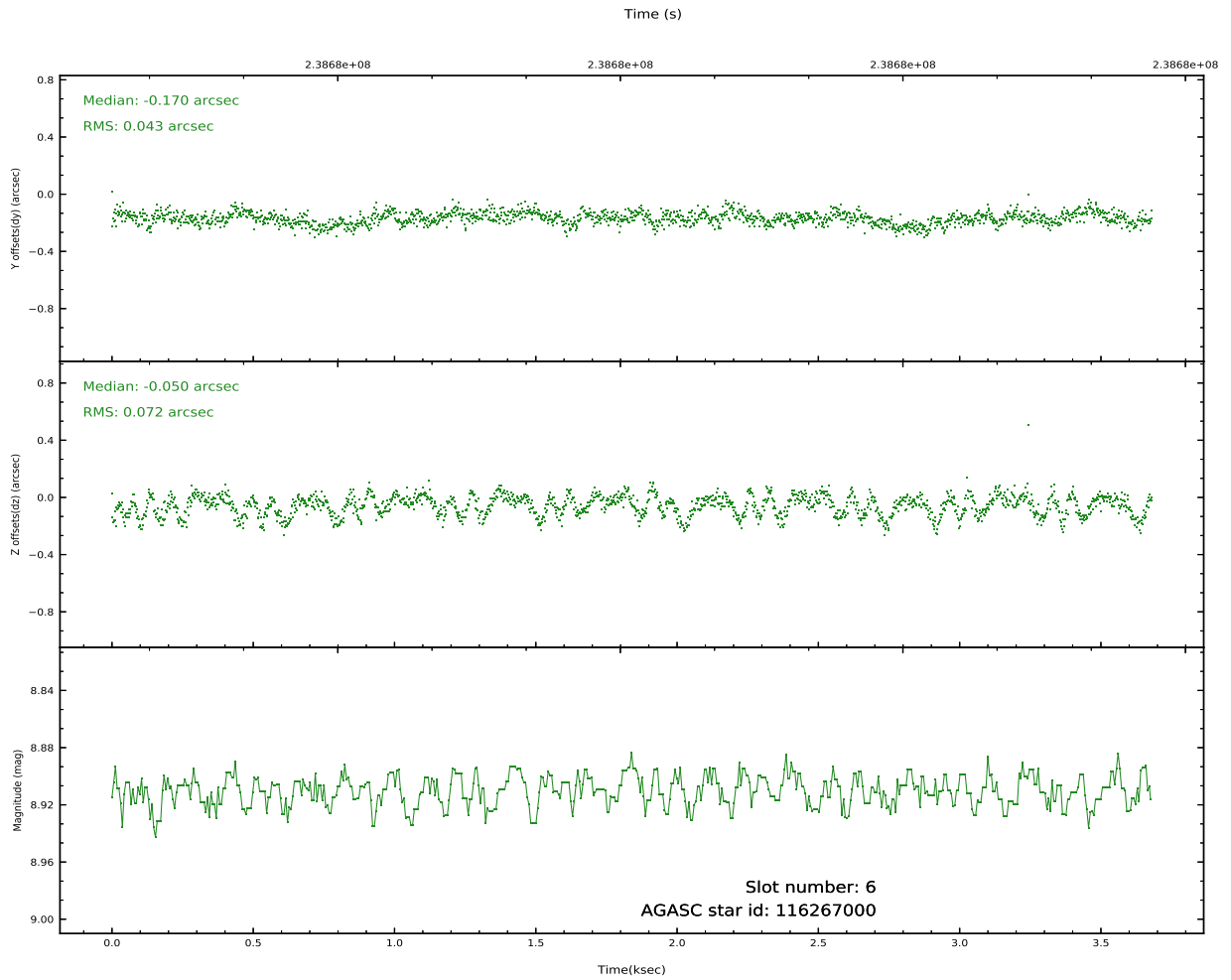
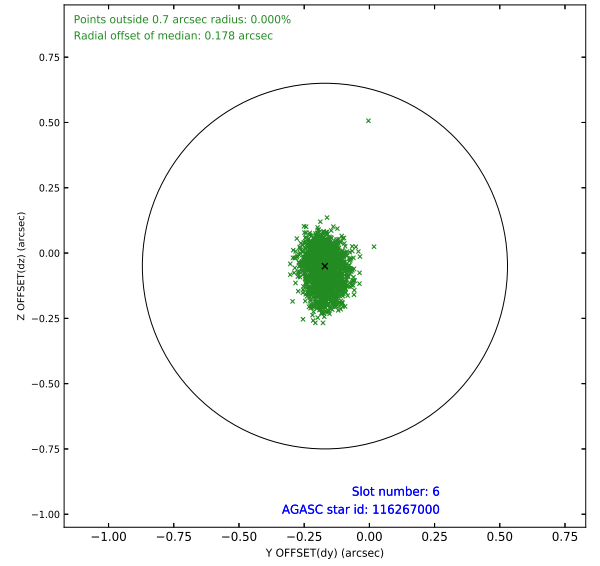
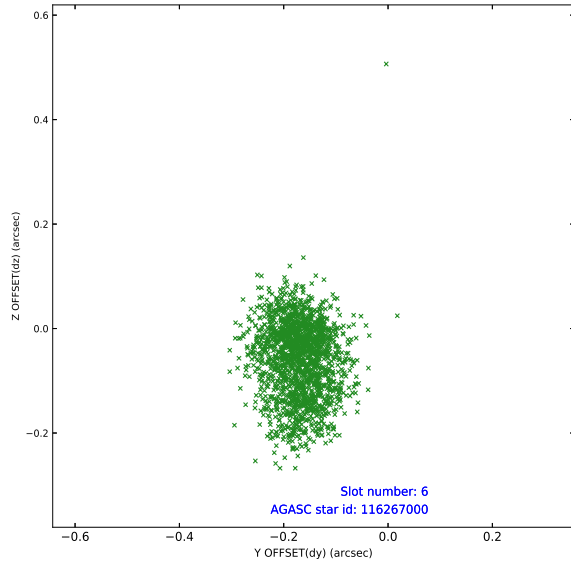
Time (s)



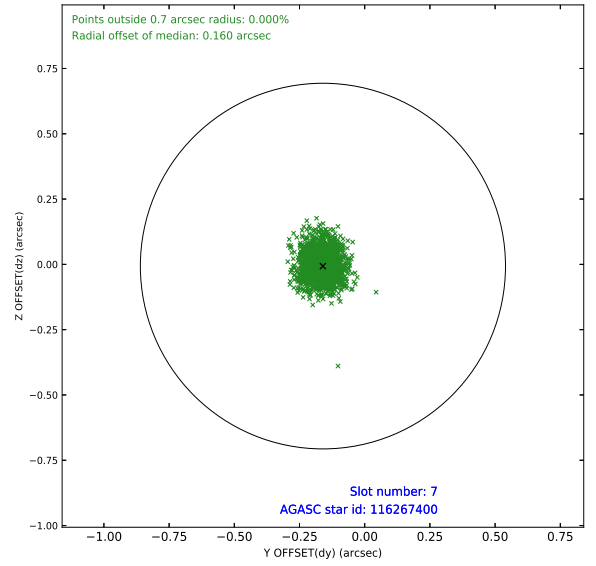
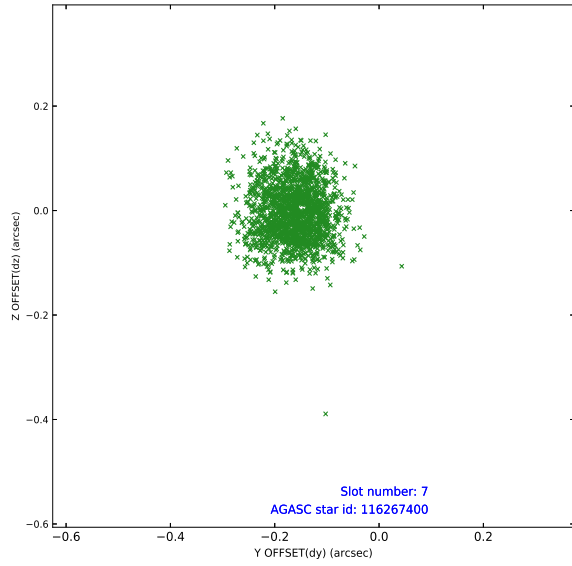
### 2.4.3 Slot 5



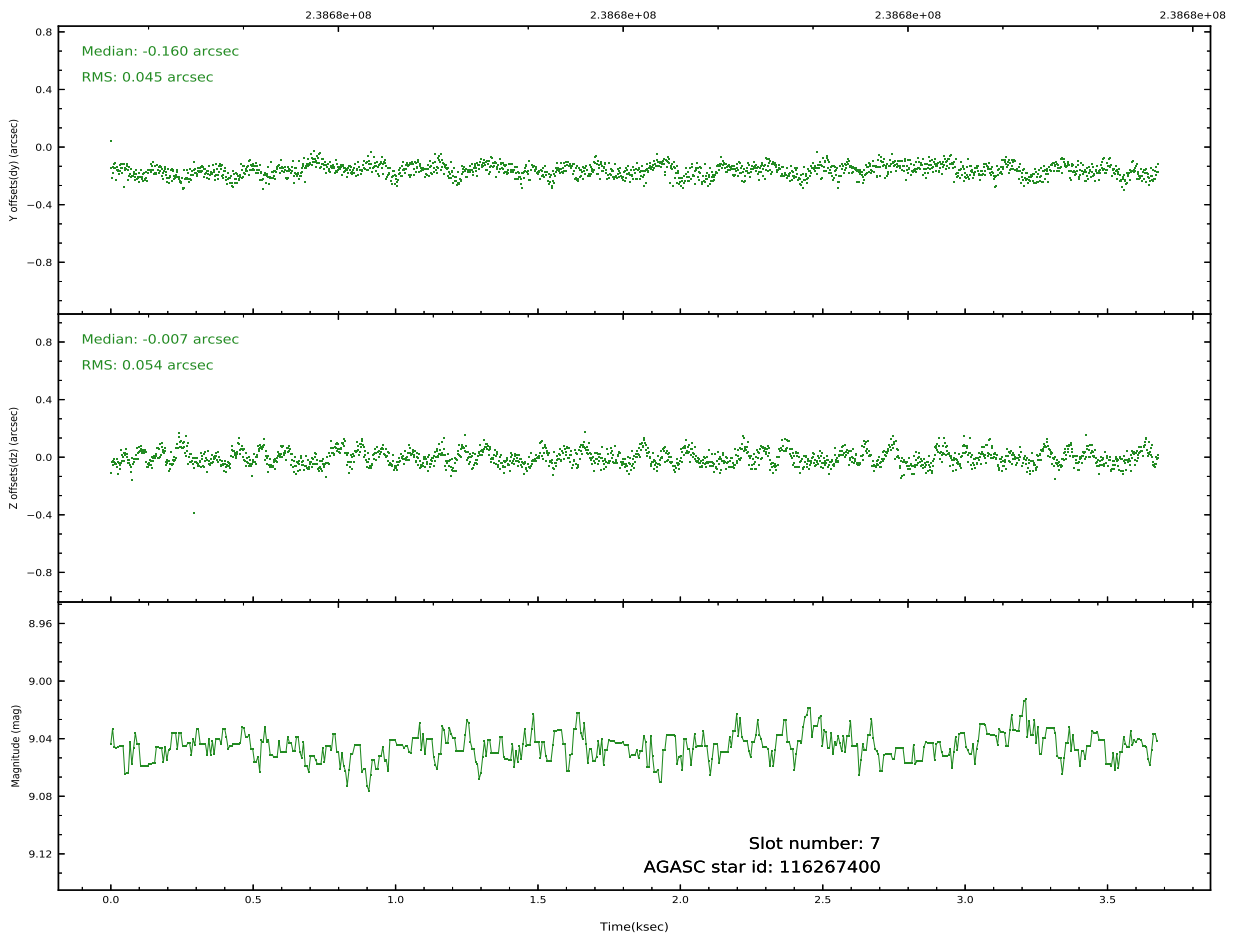
## 2.4.4 Slot 6



## 2.4.5 Slot 7

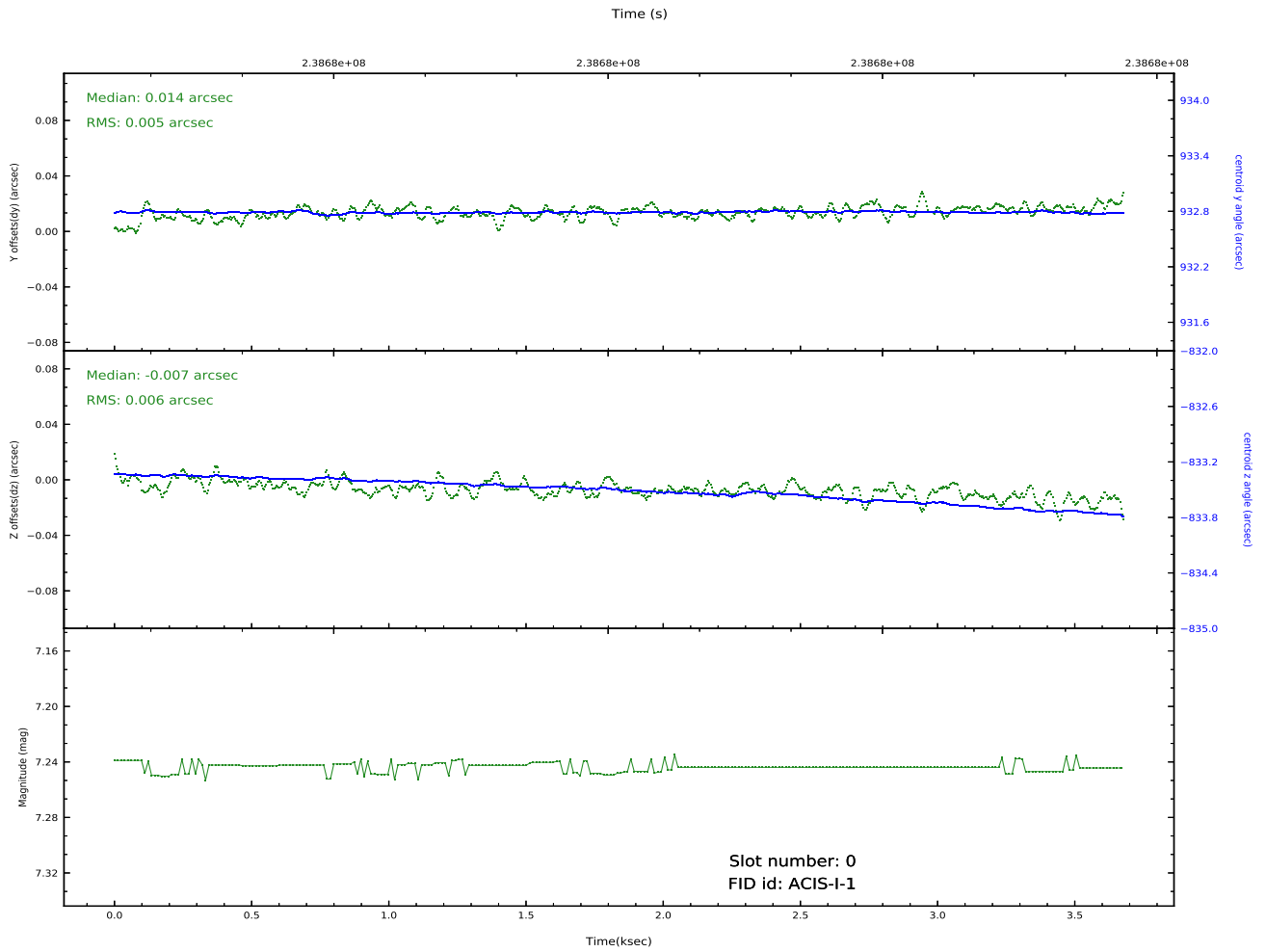
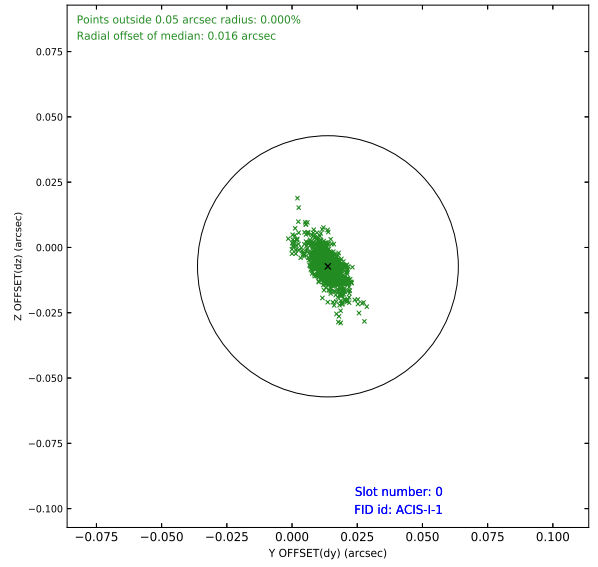
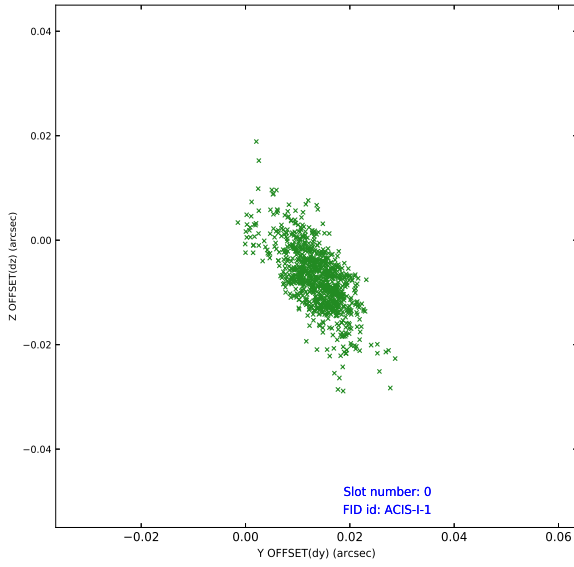


Time (s)

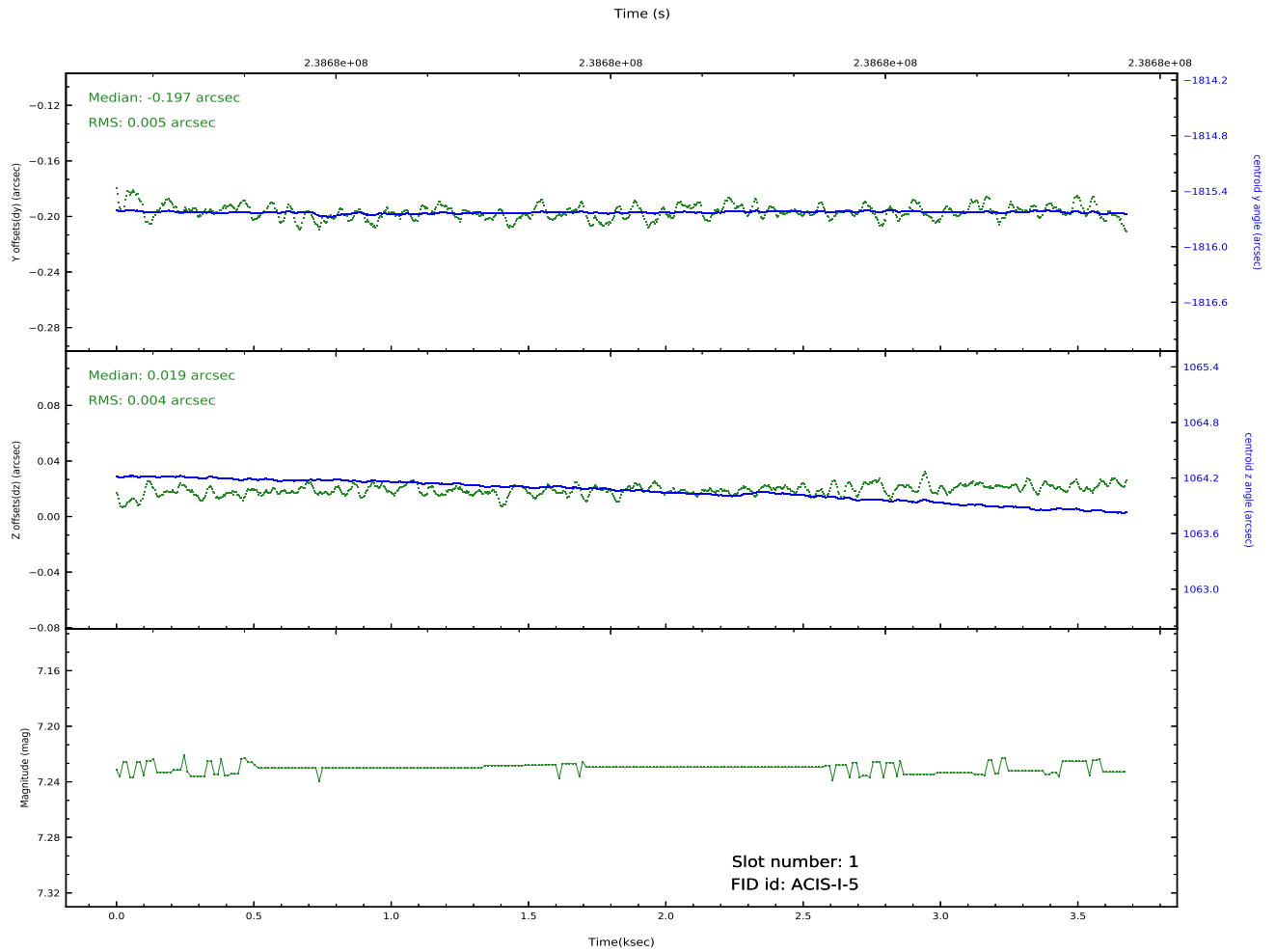
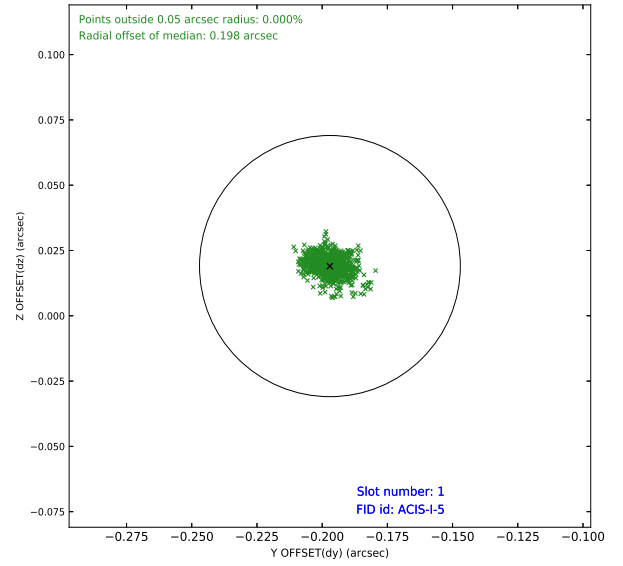
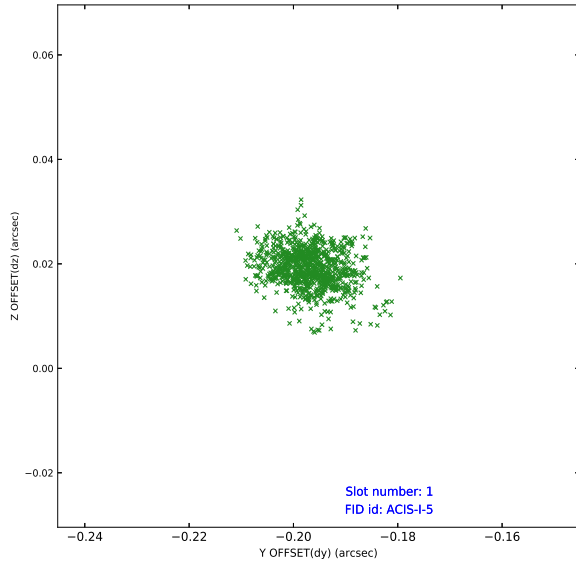


## 2.5 FID Slots

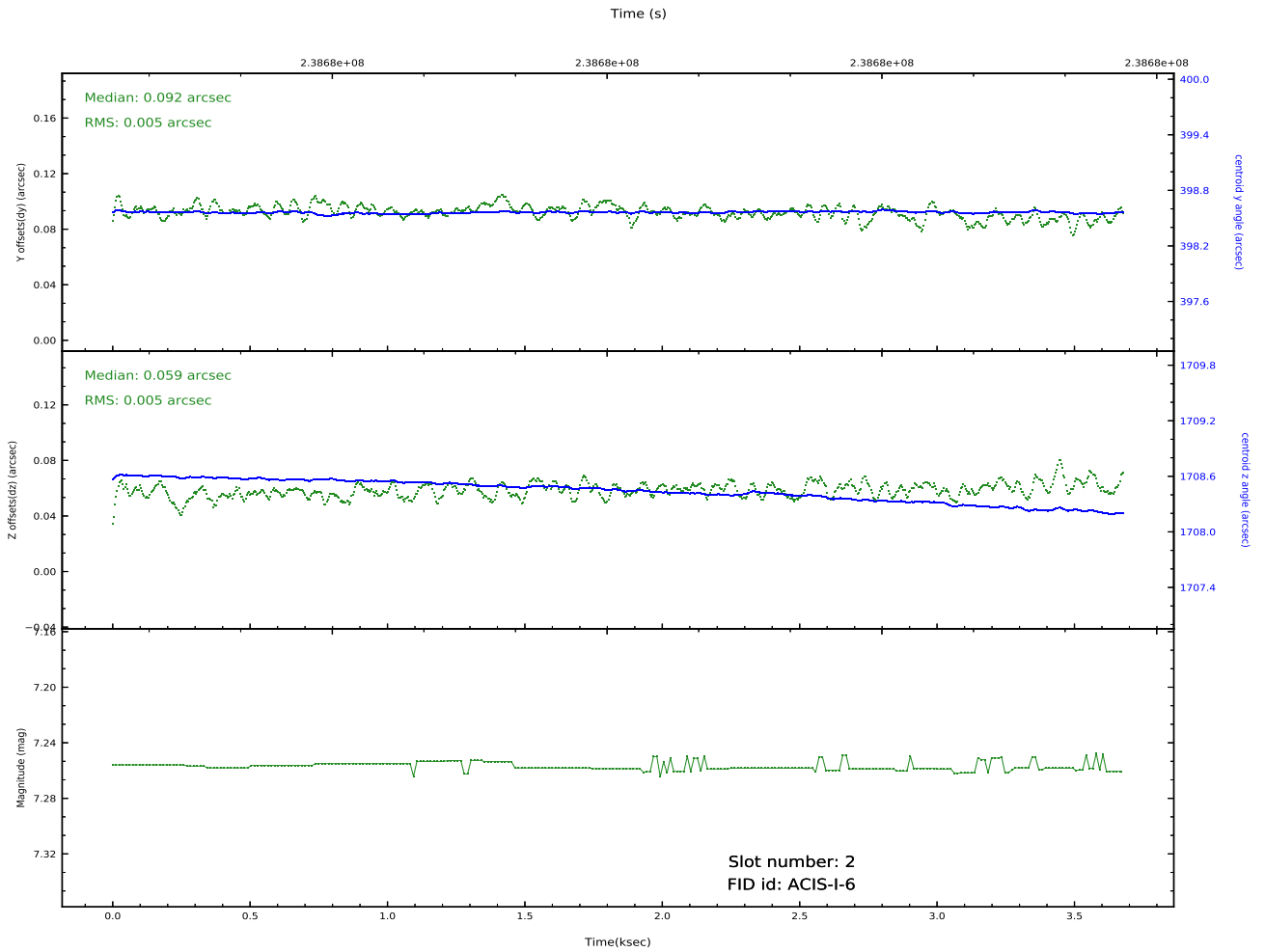
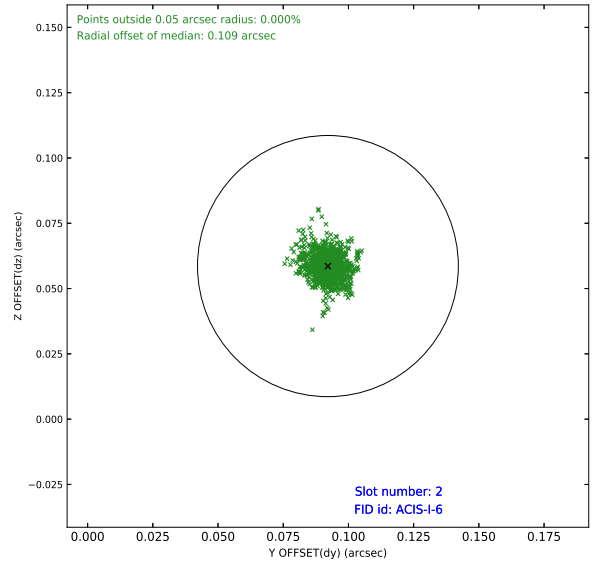
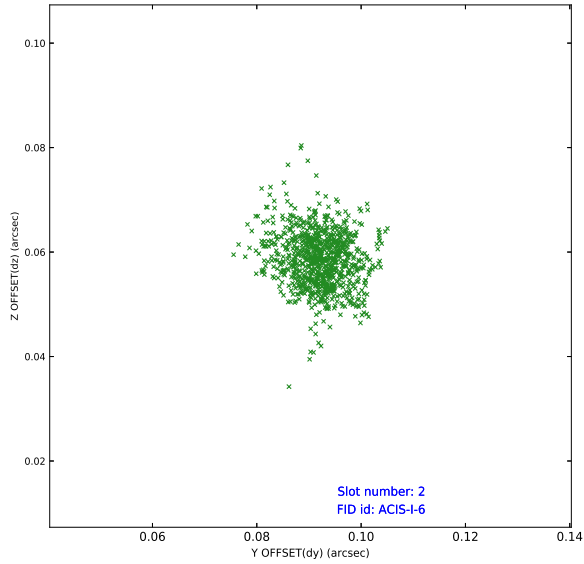
### 2.5.1 Slot 0



## 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)	2020.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.759572

## A.2 Comments

Charge time for this observation remains at previous value of 3.759572 ksec, although with the current processing the charge time would have been 3.673 ksec.