

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5823 - L2 Version 3  
Chandra X-Ray Center

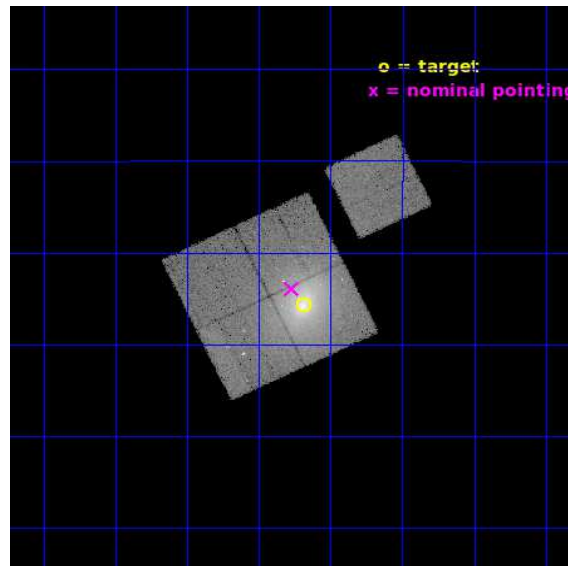
L2 Processing Date : Oct 11 2020

## 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

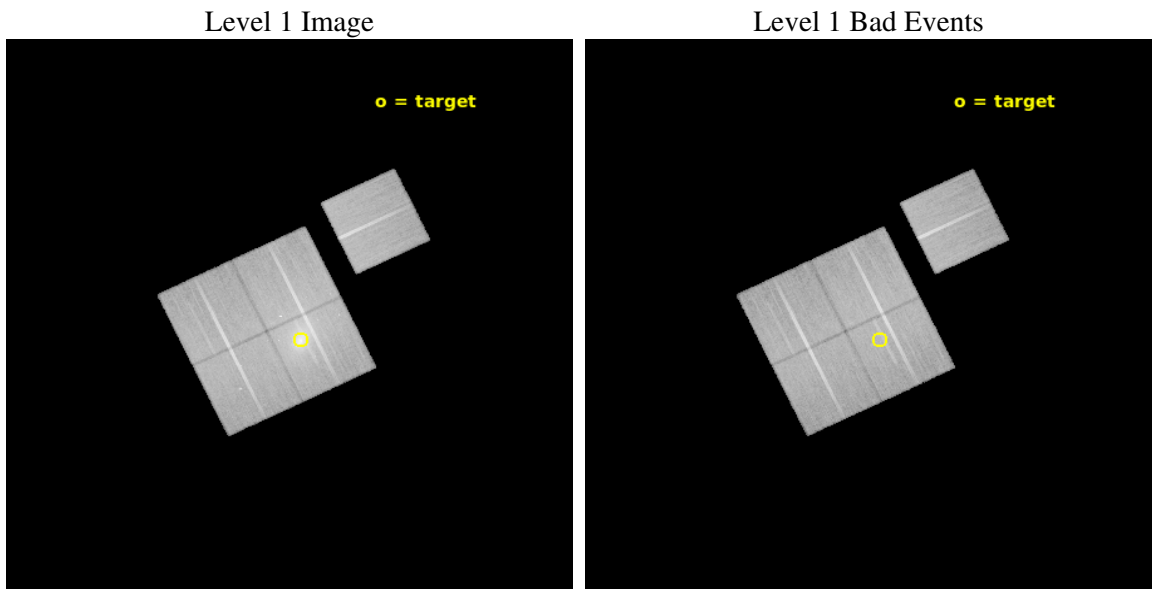
seq_num	800535	Sequence number
obs_id	5823	Observation id
title	A Deep Observation of a Radio-Quiet Cooling Flow	Proposal title
observer	Megan Donahue	Principal investigator
object	Abell 1650	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.672083	Observer's specified target RA [deg]
dec_targ	-1.761389	Observer's specified target Dec [deg]
ra_nom	194.69248376744	Nominal RA [deg]
dec_nom	-1.7318079841095	Nominal Dec [deg]
roll_nom	64.231618588198	Nominal Roll [deg]
revision	3	Processing version of data
ontime	40129.336001992	Sum of GTIs [s]
livetime	39605.016684339	Livetime [s]
ontime0	40129.33612144	Sum of GTIs [s]
ontime1	40119.913131028	Sum of GTIs [s]
ontime2	40119.91311118	Sum of GTIs [s]
ontime3	40129.336001992	Sum of GTIs [s]
ontime6	40129.336031795	Sum of GTIs [s]
l2events	239762	Number of level 2 events



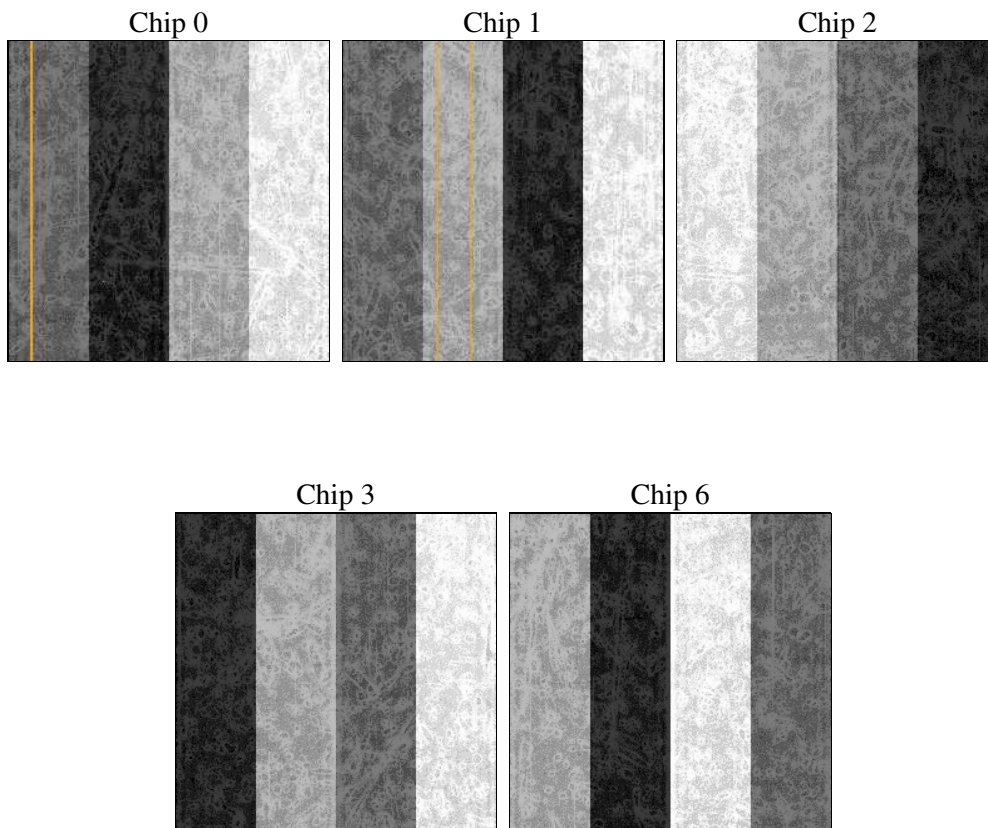
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	40129.336001992	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	40129.33612144	Sum of GTIs [s]
date	2020-10-11T17:48:10	Date and time of file creation	ontime1	40119.913131028	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	40119.91311118	Sum of GTIs [s]
			ontime3	40129.336001992	Sum of GTIs [s]
			ontime6	40129.336031795	Sum of GTIs [s]
			l1events	1499671	Number of level 1 events

### 2.1.4 Events

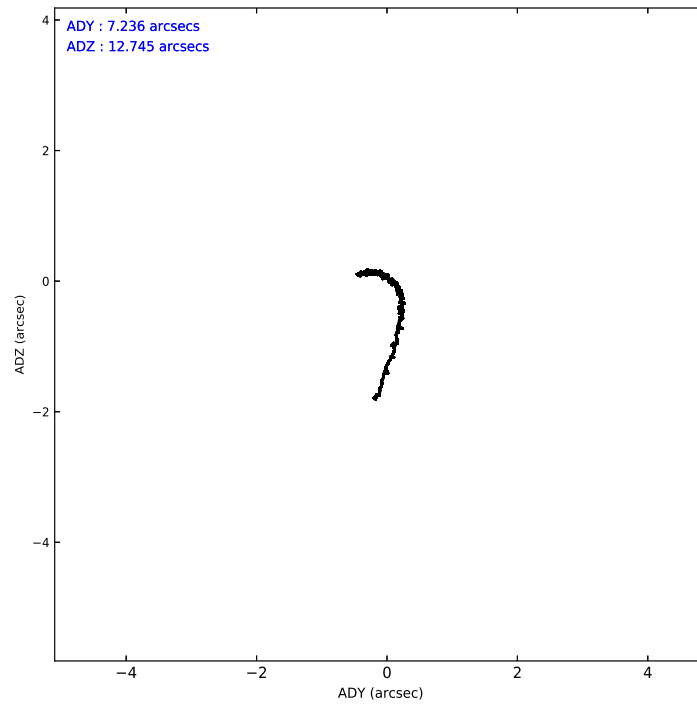
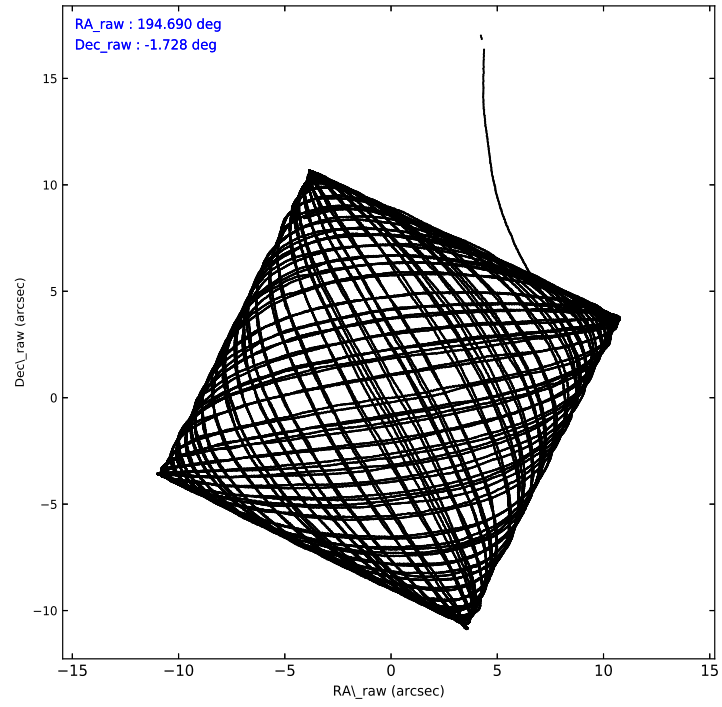
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	265729	268833	309338	380492	275279
rejected events	236811	227425	269773	250469	246733
rejected %	89%	84%	87%	65%	89%

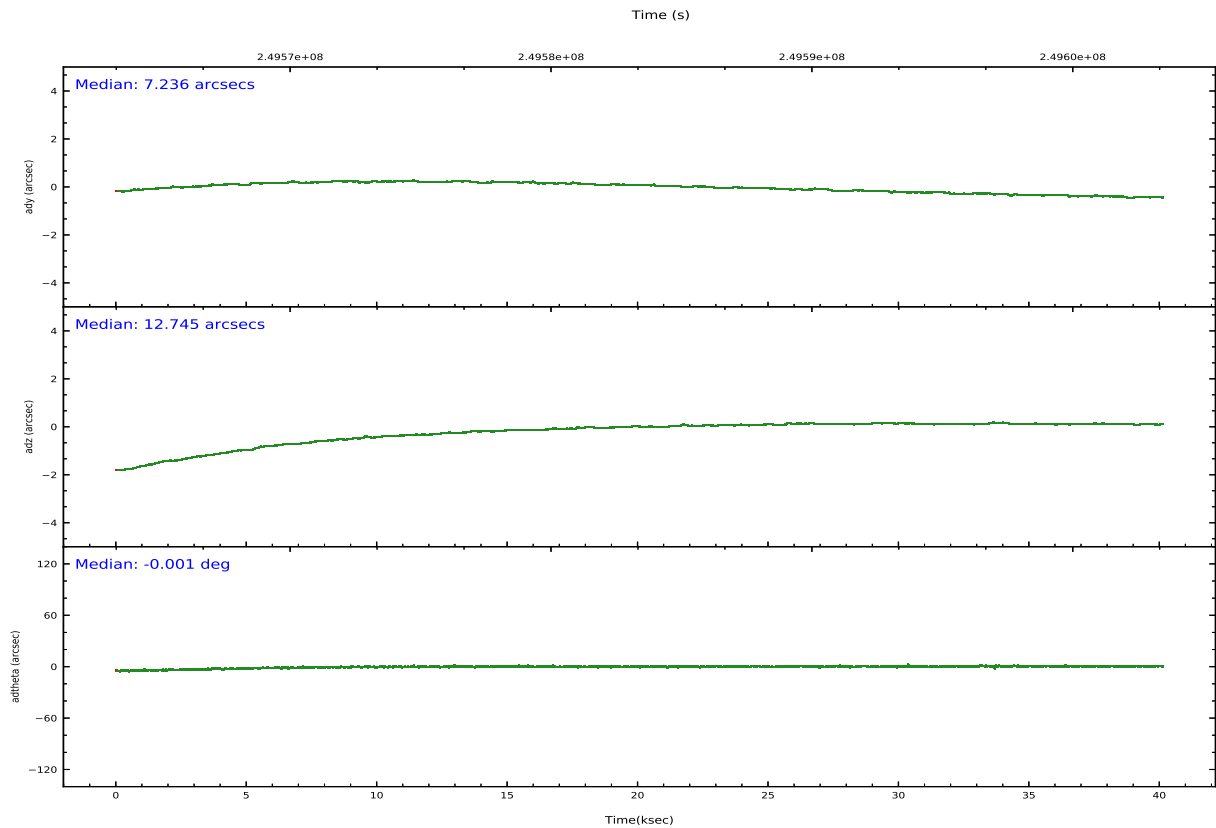
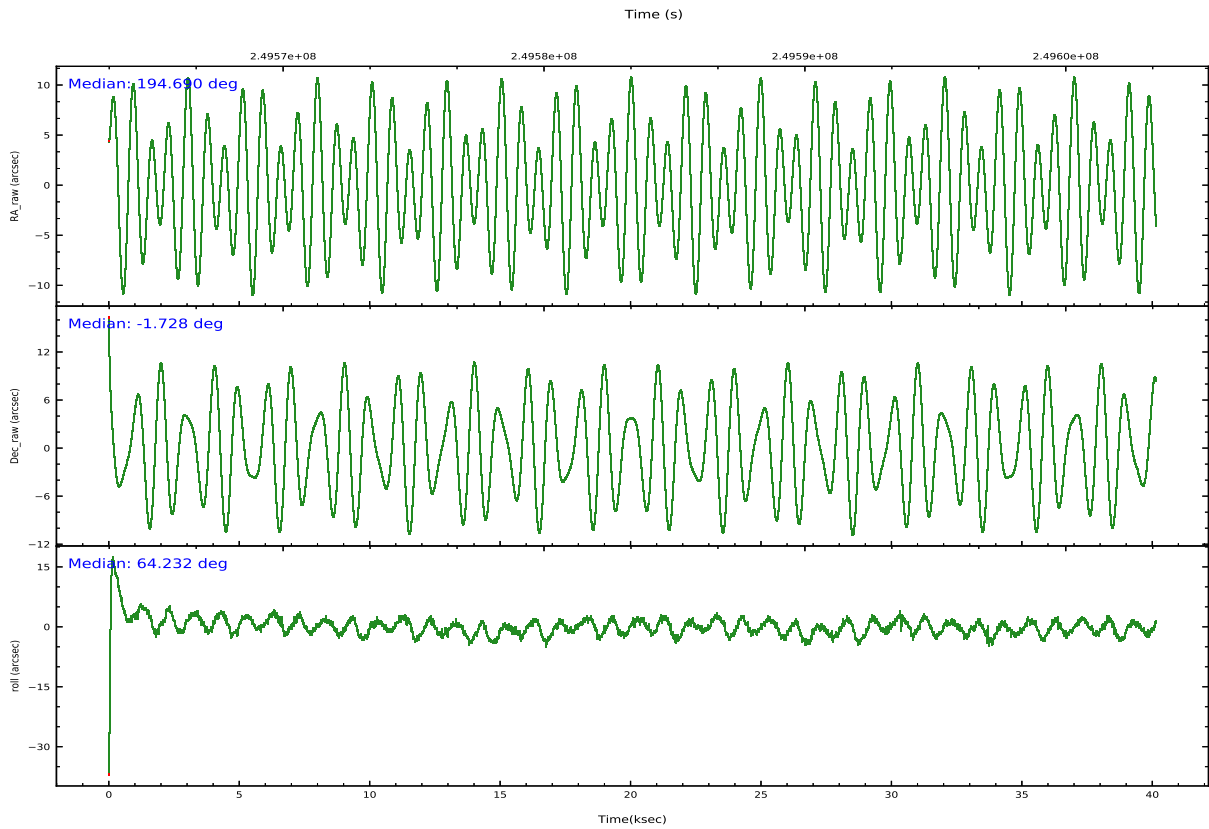
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	11036	20149	20508	95863	10300
	4%	7%	6%	25%	3%
grade 1 events	149	185	197	659	136
	0%	0%	0%	0%	0%
grade 2 events	6736	7849	7640	15335	6096
	2%	2%	2%	4%	2%
grade 3 events	3365	3759	3199	5997	3306
	1%	1%	1%	1%	1%
grade 4 events	2972	3656	3372	6004	3121
	1%	1%	1%	1%	1%
grade 5 events	9357	10576	8789	11567	10671
	3%	3%	2%	3%	3%
grade 6 events	5190	6480	5321	7673	6076
	1%	2%	1%	2%	2%
grade 7 events	226924	216179	260312	237394	235573
	85%	80%	84%	62%	85%

## 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	194.692307	194.69248376744	Subarray requested	NONE	NONE
[deg] Pointing Dec	-1.755666	-1.7318079841095	Alternating exposures requested	N	N
[deg] Pointing Roll	64.023664	64.231618588198	[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	-227.592463	-227.5933067819097			
[mm] SIM translation stage offset	-6	-5.999146221020027			
[s] Observation start time (MET)	249563465.184000	249562225.15684			
Observation start date	2005-11-28T11:10:01	2005-11-28T10:50:25			
[s] Observation end time (MET)	249603465.184000	249604568.9338			
Observation end date	2005-11-28T22:16:41	2005-11-28T22:36:08			
Read mode	TIMED	TIMED			

## 2.3 Aspect





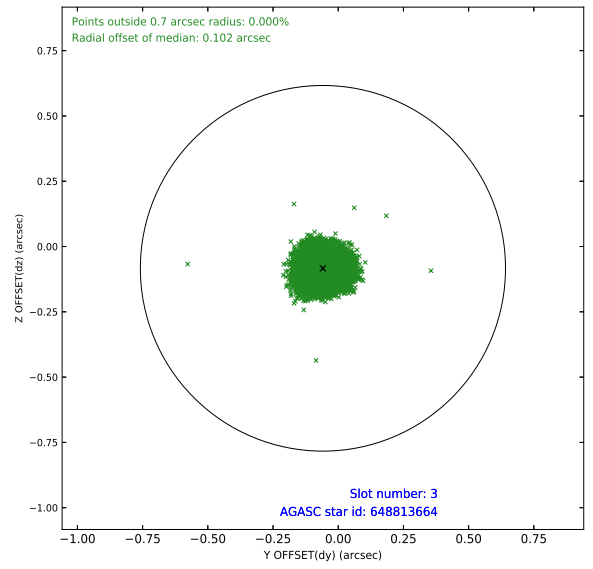
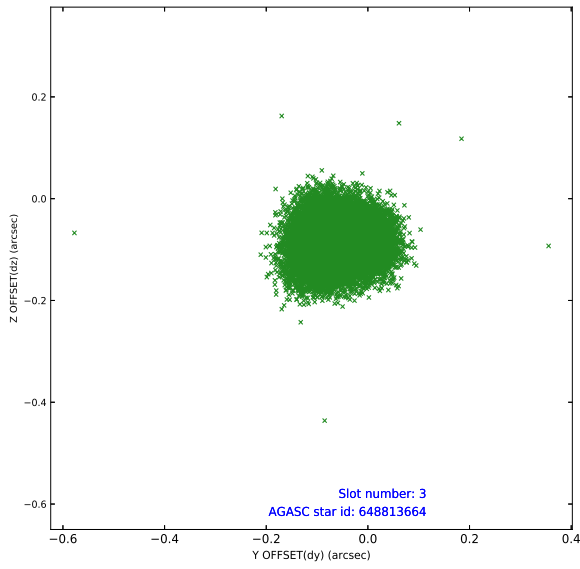
### Slot Statistics

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	7.23	9789	1.000	0.125	-0.116	0.011	0.024	0.000000	0.000000	932.47	-959
1	FID		ACIS-I-5	7.22	9788	1.000	-0.274	0.099	0.011	0.025	0.000000	0.000000	-1816.00	938
2	FID		ACIS-I-6	7.26	9789	1.000	0.057	0.089	0.014	0.030	0.000000	0.000000	397.96	1582
3	GUIDE	used	648813664	8.36	19570	1.000	-0.059	-0.083	0.065	0.102	194.615044	-1.051809	2156.26	1360
4	GUIDE	used	648813840	9.24	19567	1.000	0.144	0.136	0.115	0.176	194.717621	-1.945504	-574.27	-381
5	GUIDE	used	648814560	8.80	19513	1.000	-0.125	-0.149	0.066	0.106	194.841018	-1.130344	2258.23	504
6	GUIDE	used	648815800	9.56	19565	1.000	0.218	-0.069	0.091	0.147	194.475560	-2.052849	-1302.65	232
7	GUIDE	used	649730488	7.86	19576	1.000	-0.187	0.167	0.065	0.101	195.031921	-1.185947	2379.18	-200

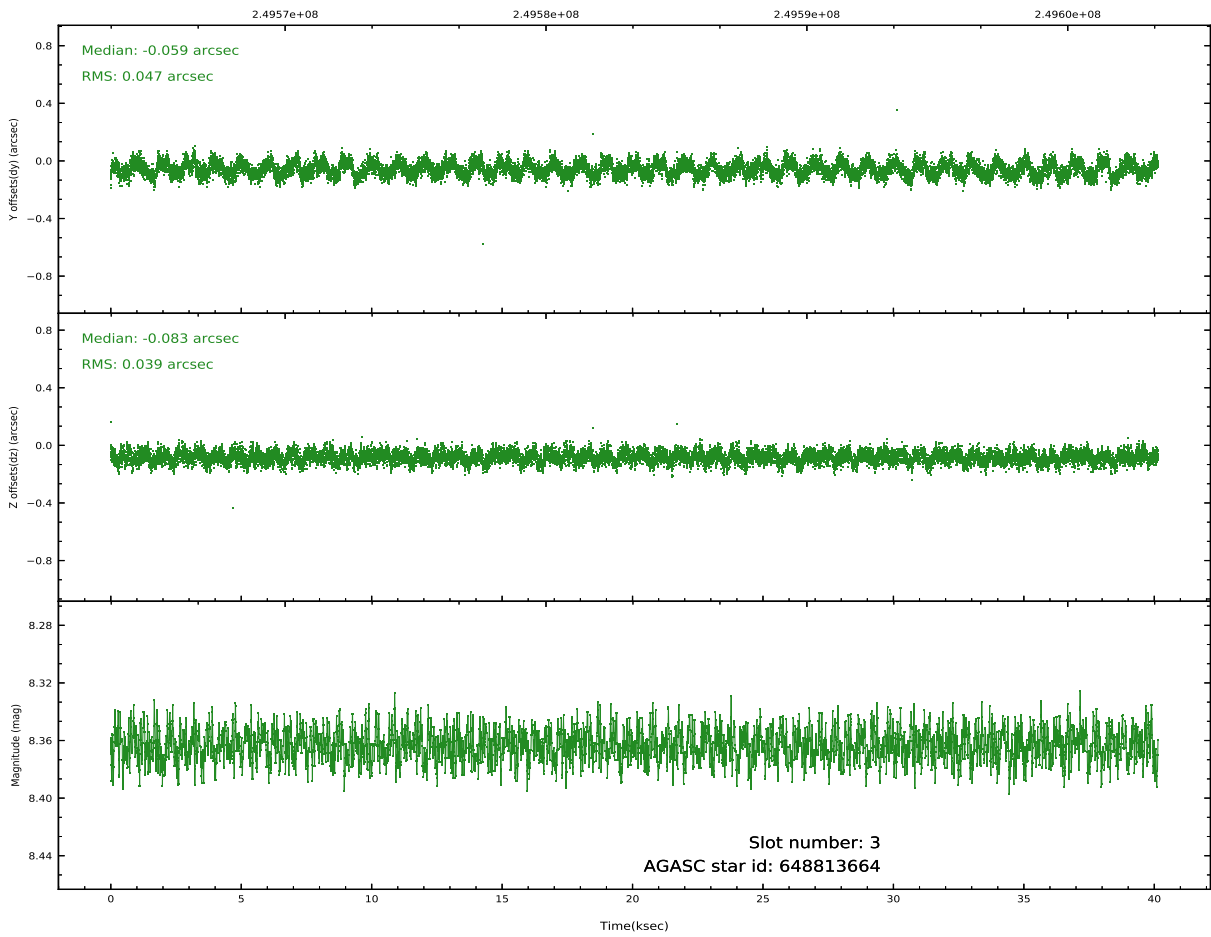
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## 2.4 Star Slots

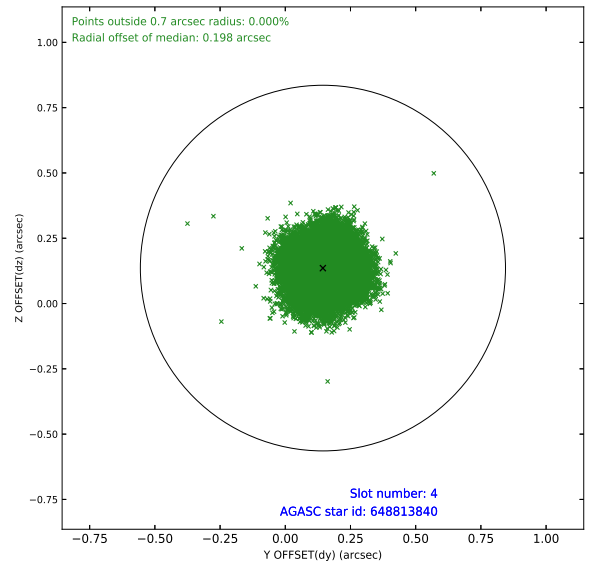
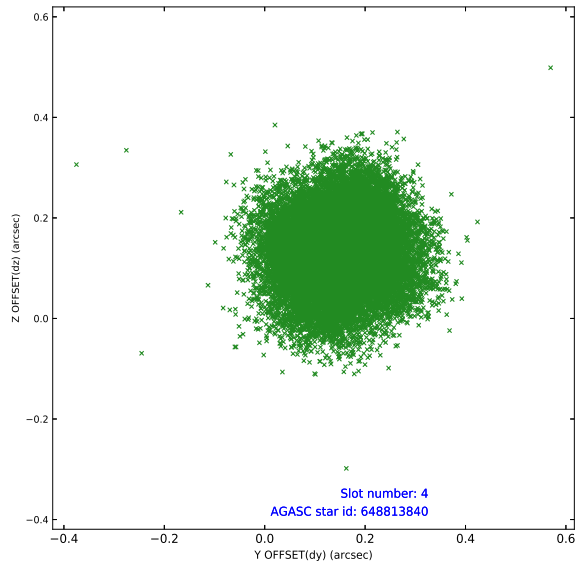
### 2.4.1 Slot 3



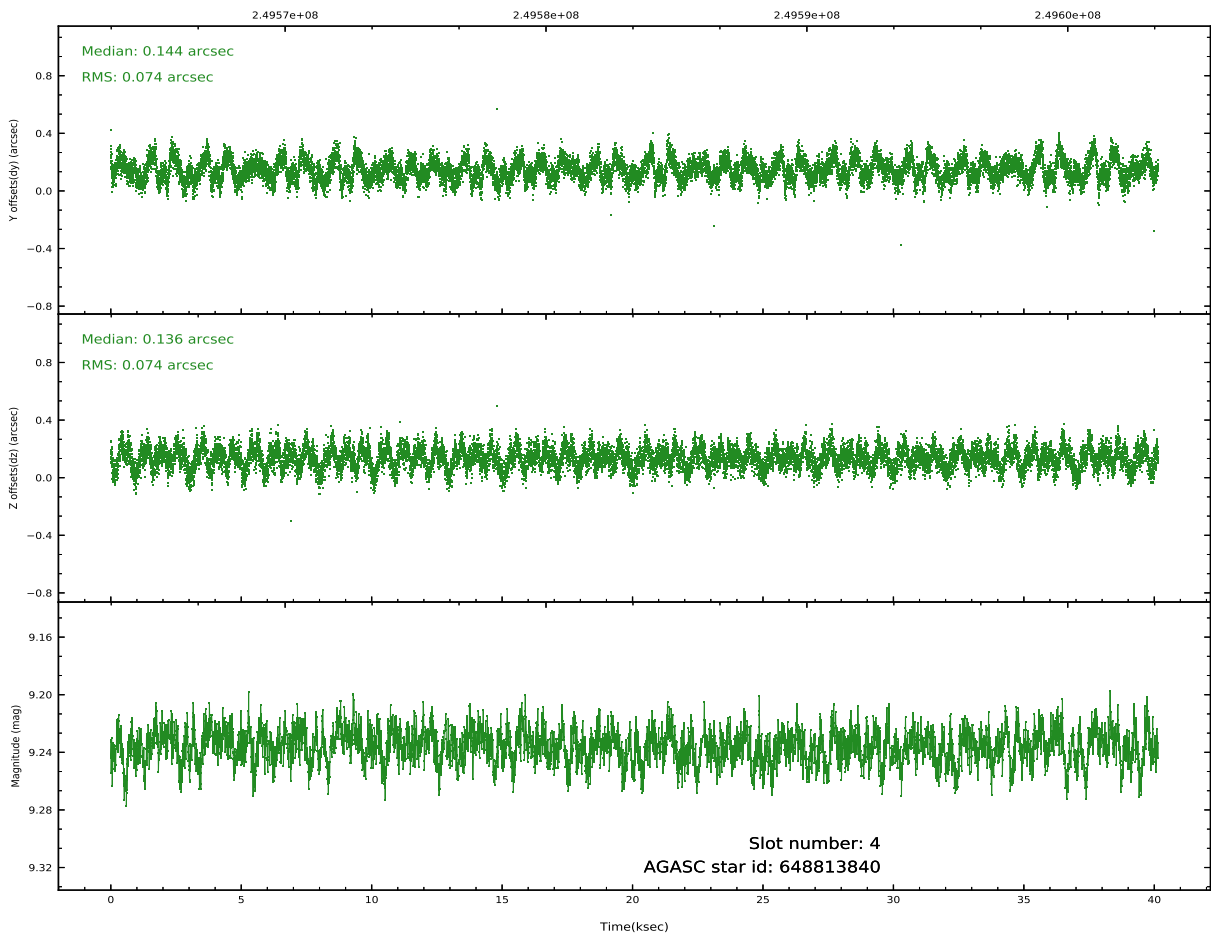
Time (s)



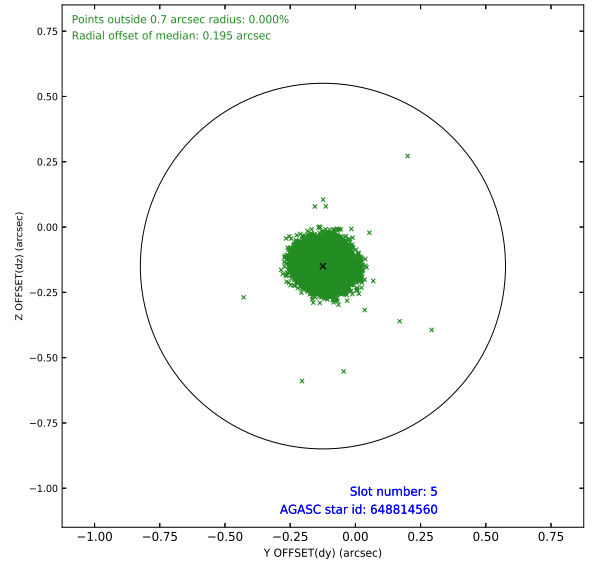
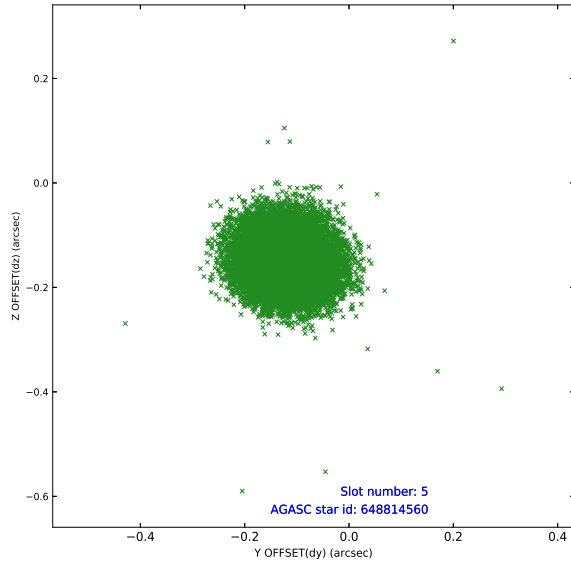
## 2.4.2 Slot 4



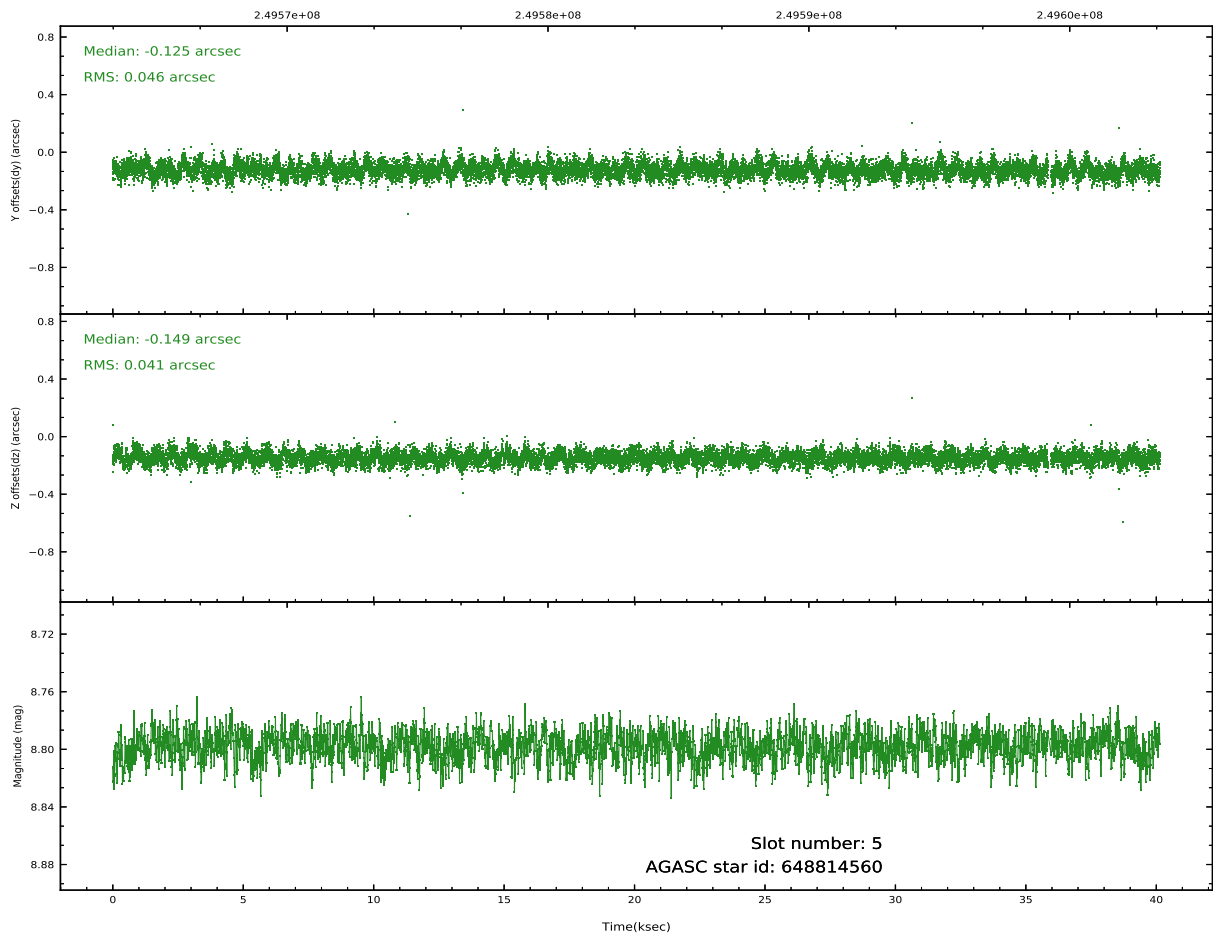
Time (s)



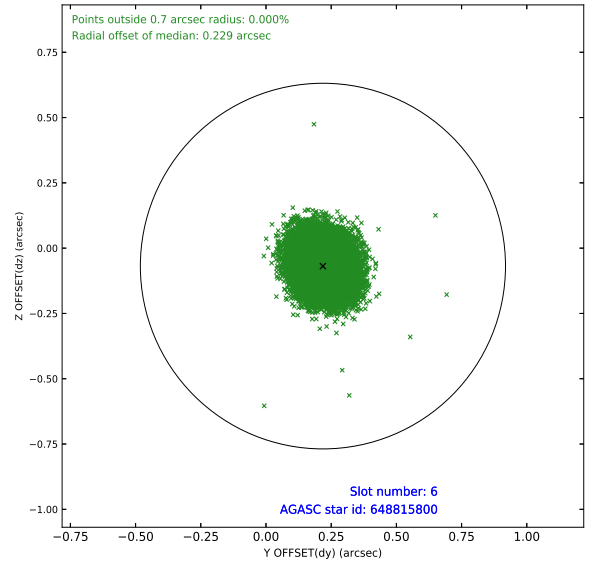
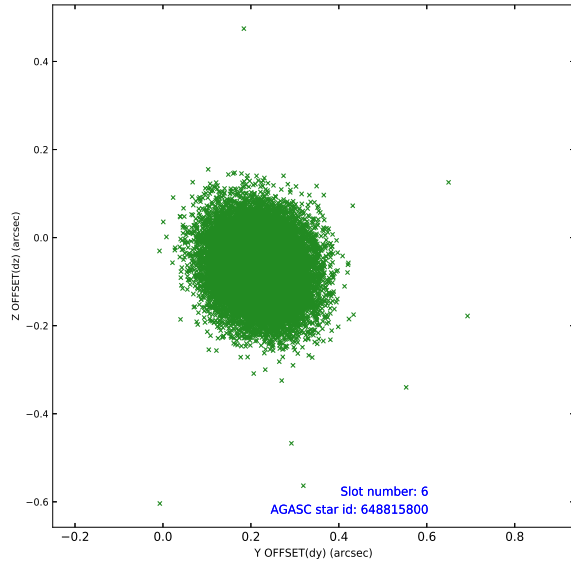
### 2.4.3 Slot 5



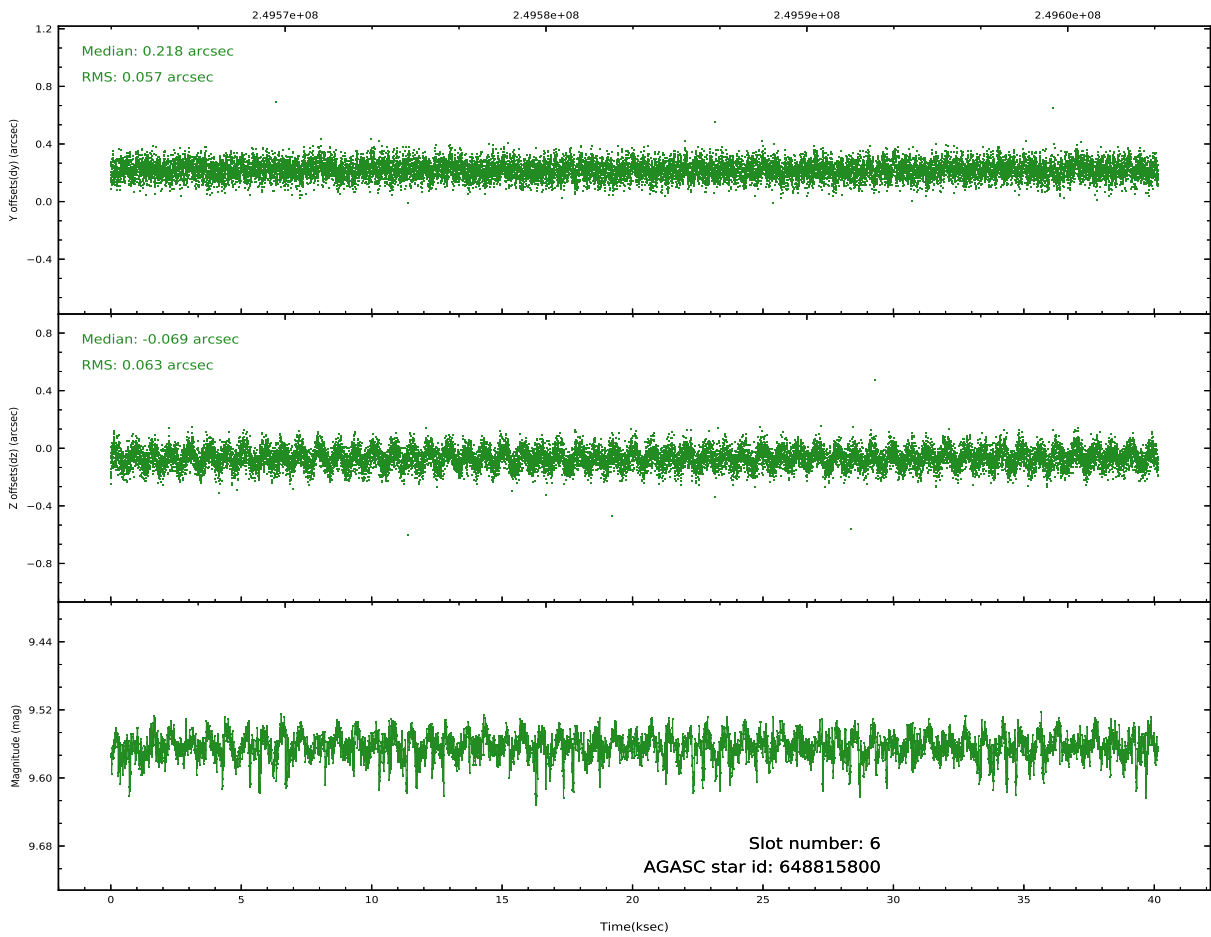
Time (s)



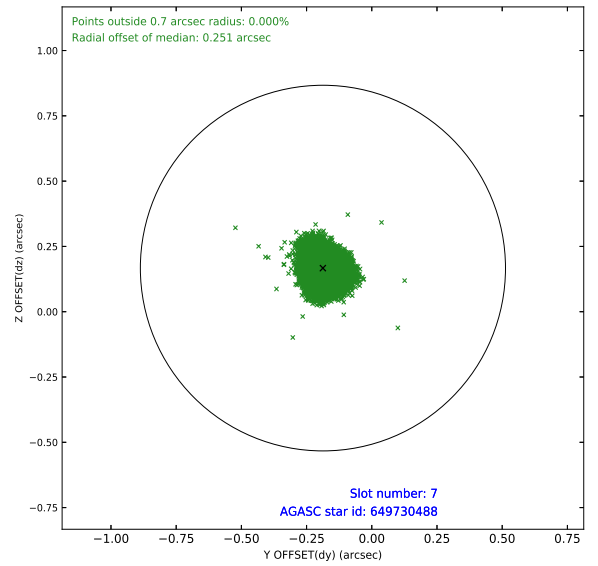
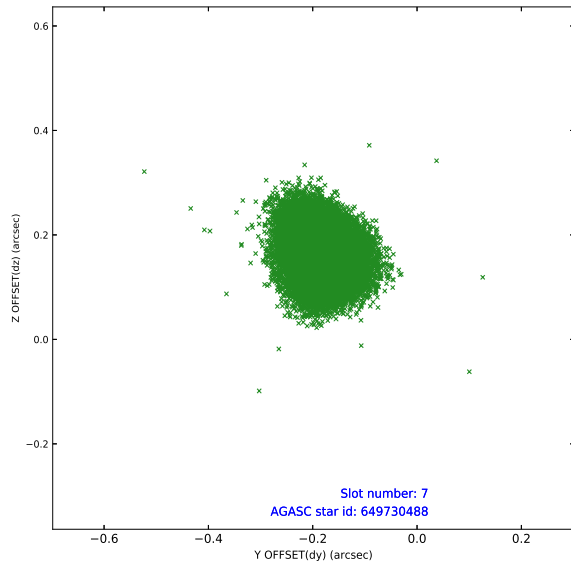
## 2.4.4 Slot 6



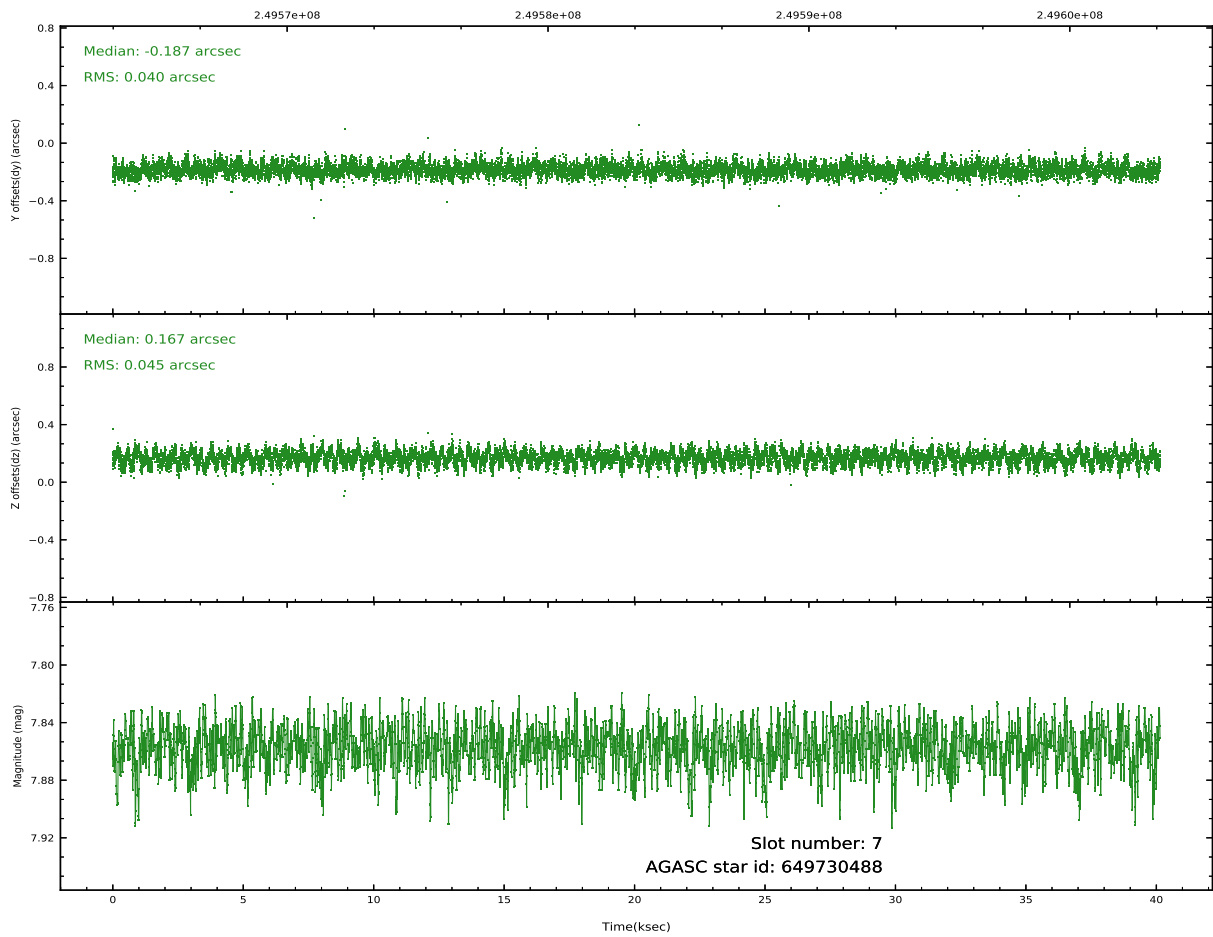
Time (s)



## 2.4.5 Slot 7

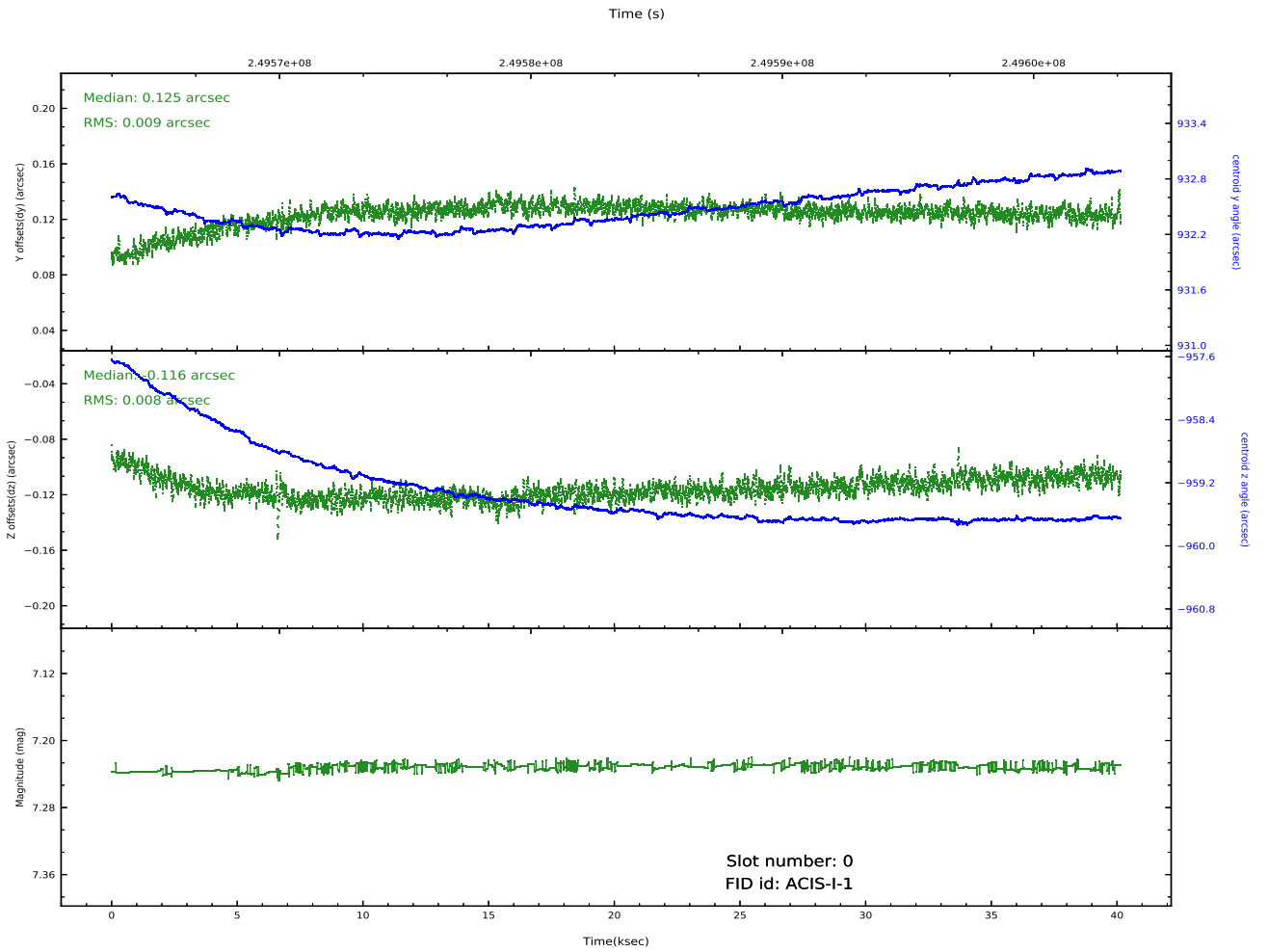
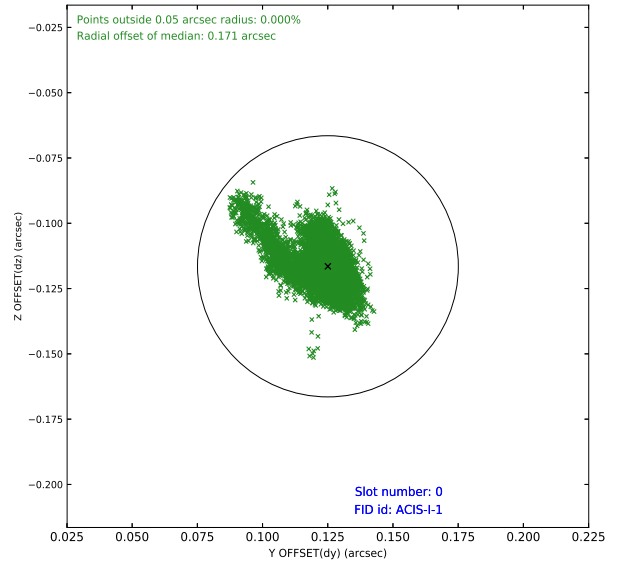
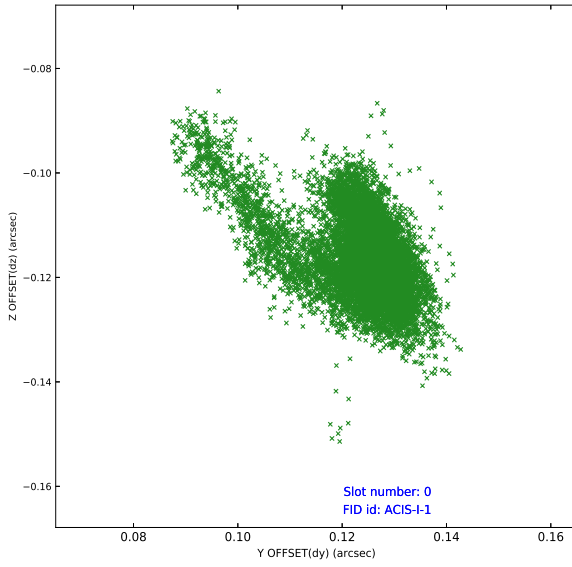


Time (s)

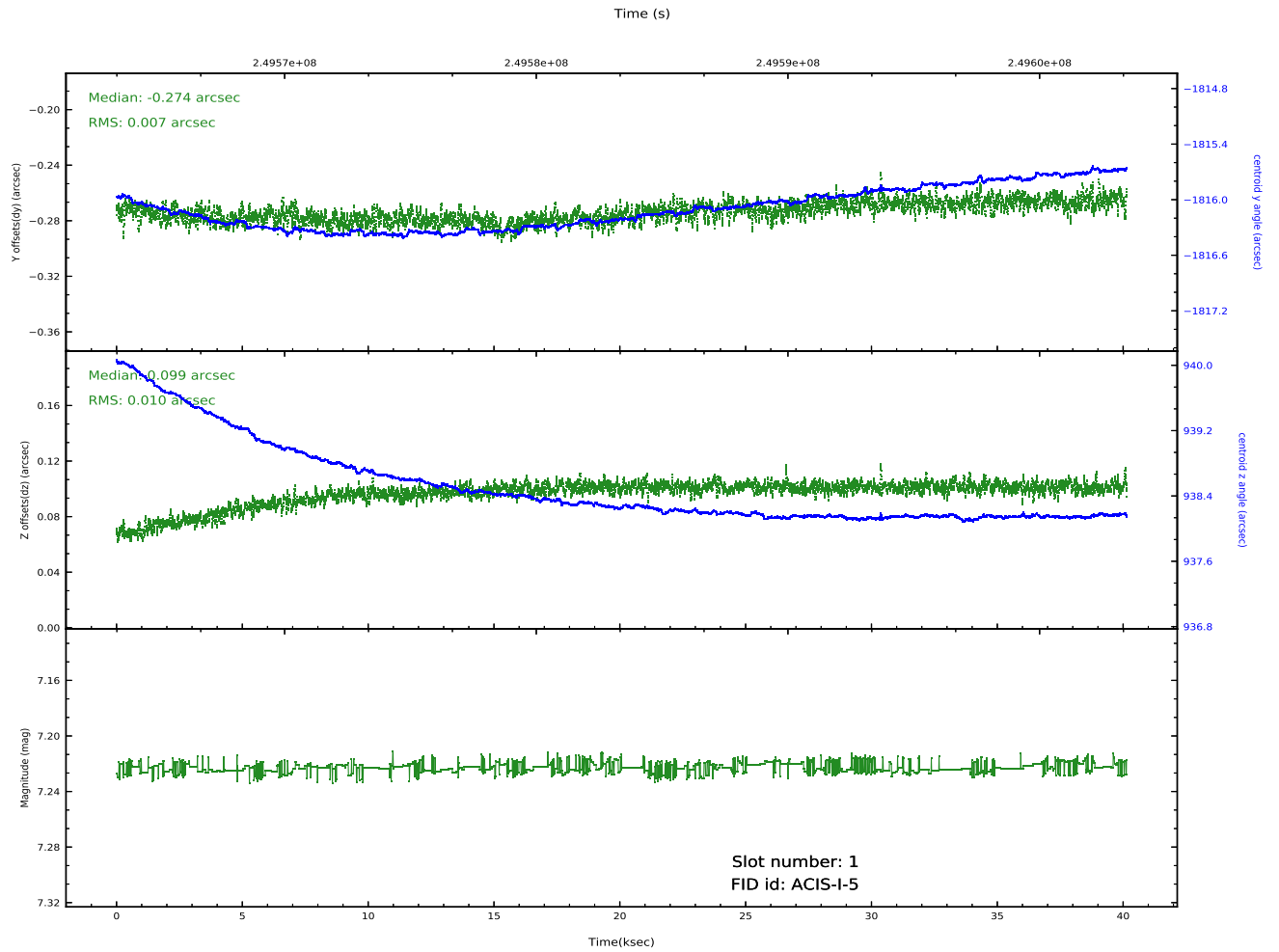
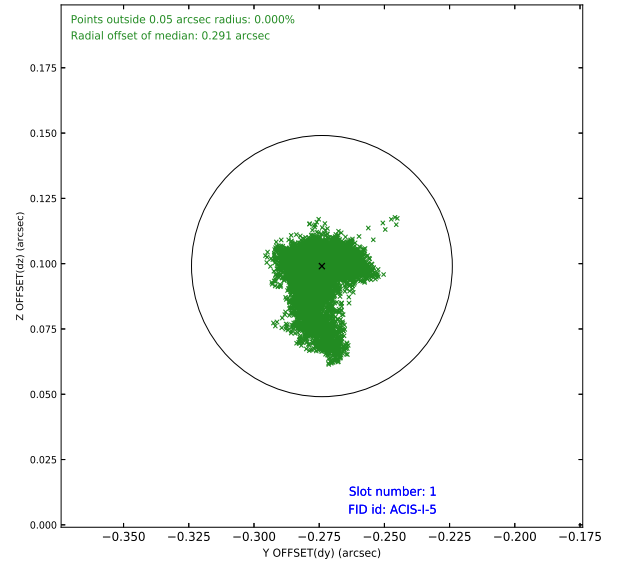
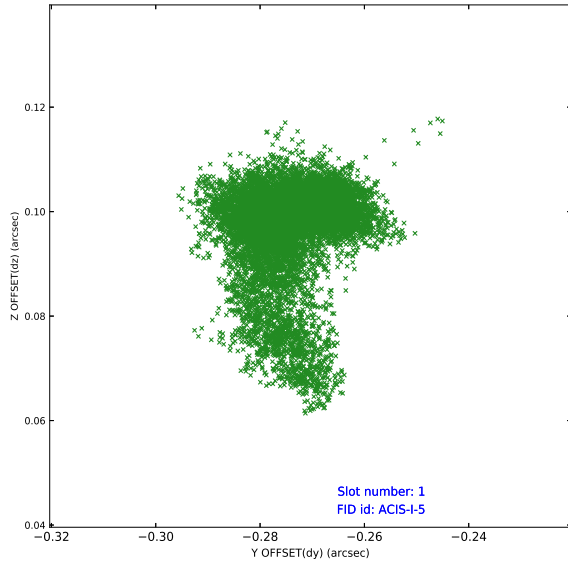


## 2.5 FID Slots

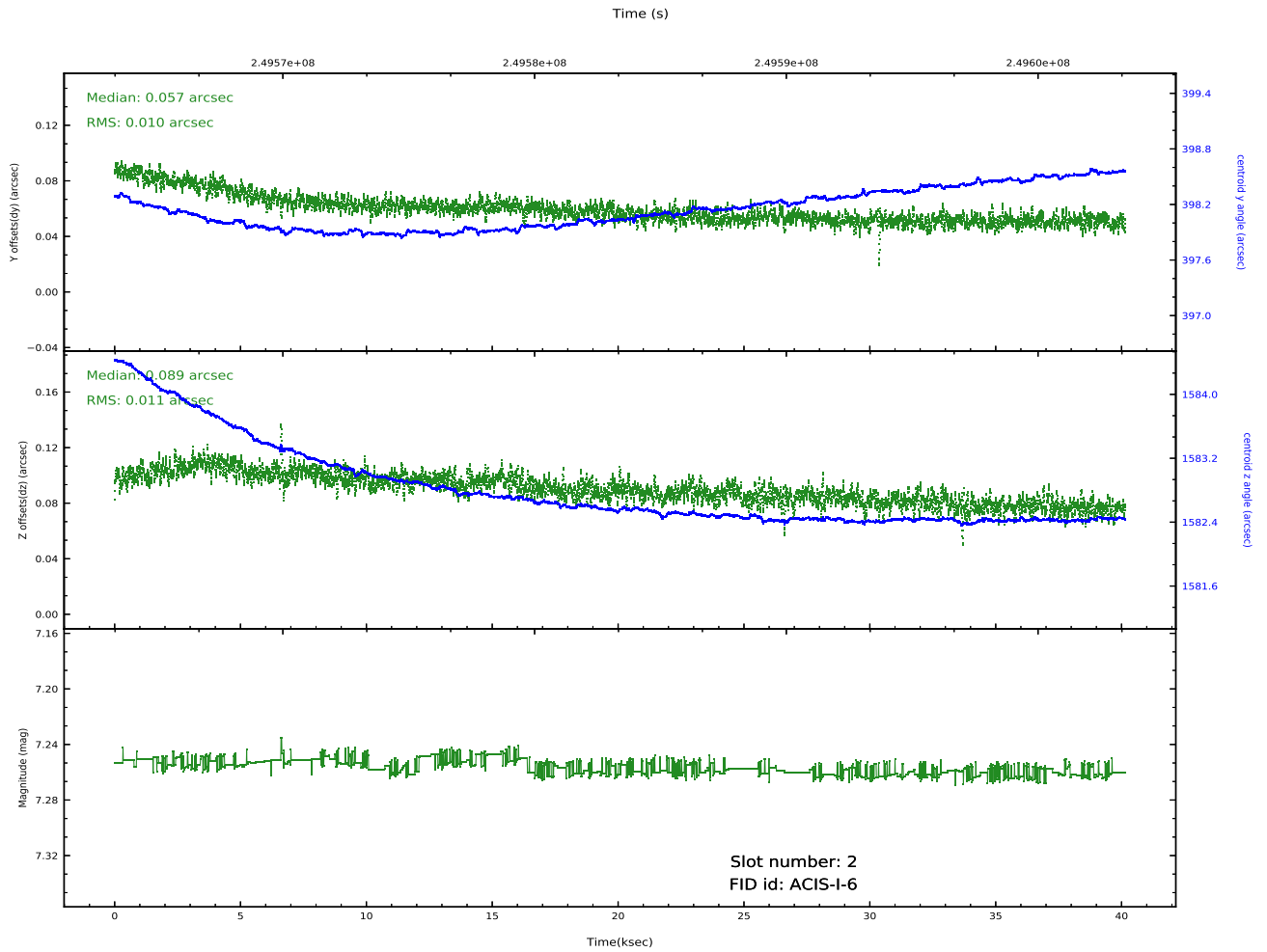
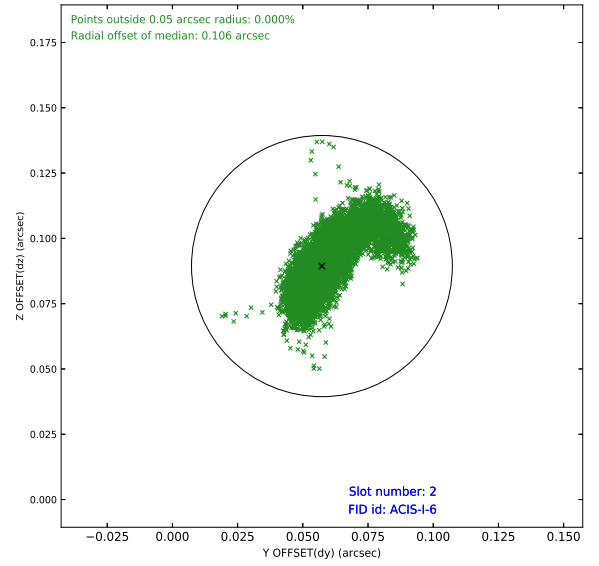
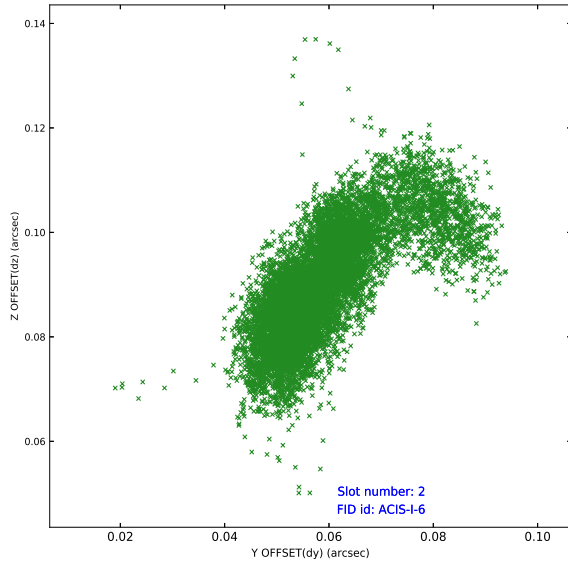
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.12933

## A.2 Comments