

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5779 - L2 Version 4  
Chandra X-Ray Center

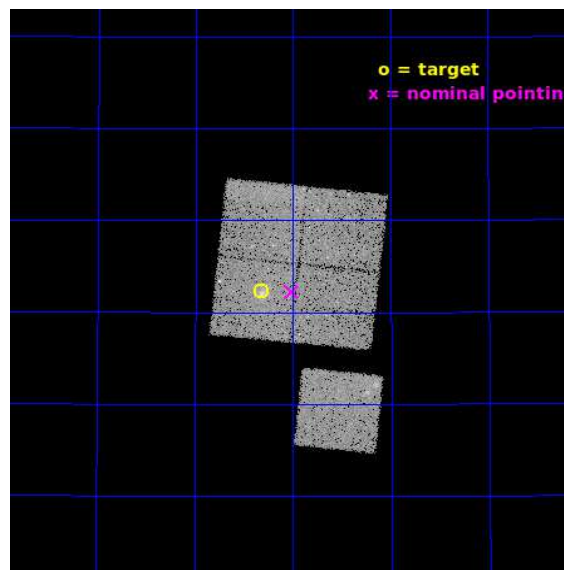
L2 Processing Date : Oct 6 2020

## 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

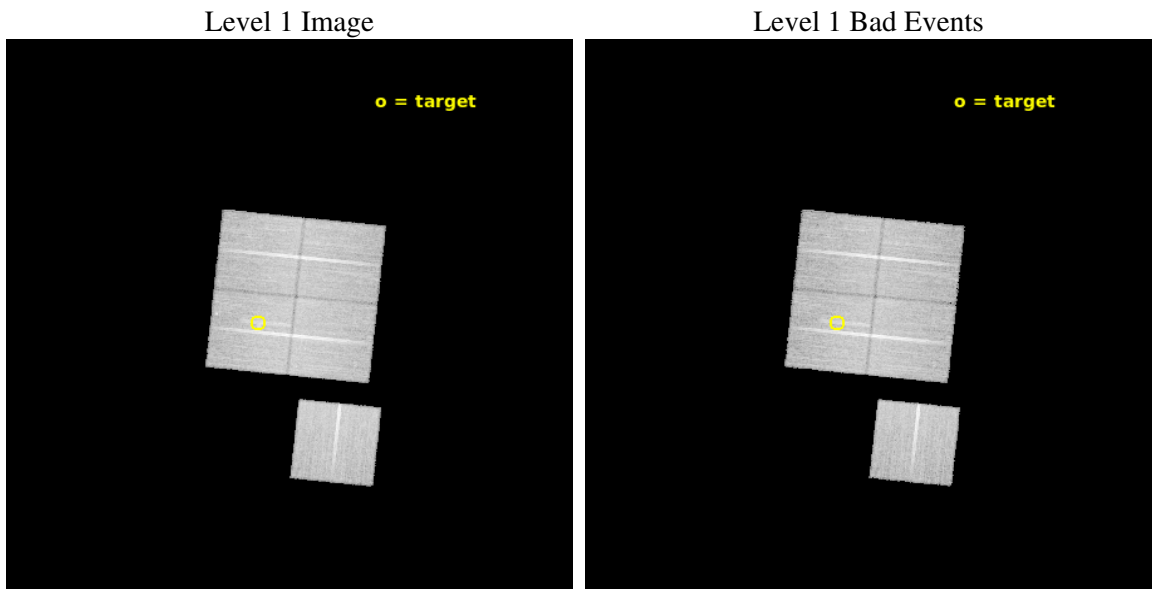
seq_num	800492	Sequence number
obs_id	5779	Observation id
title	Chandra observations of high-redshift clusters of galaxies from the 400 Square Degrees ROSAT PSPC survey	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	CIG J0958+4702	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	149.580417	Observer's specified target RA [deg]
dec_targ	47.038056	Observer's specified target Dec [deg]
ra_nom	149.50302682182	Nominal RA [deg]
dec_nom	47.037673919554	Nominal Dec [deg]
roll_nom	185.98532070068	Nominal Roll [deg]
revision	4	Processing version of data
ontime	25565.617970377	Sum of GTIs [s]
livetime	25231.58435046	Livetime [s]
ontime0	25568.758970529	Sum of GTIs [s]
ontime1	25568.758940637	Sum of GTIs [s]
ontime2	25565.61800018	Sum of GTIs [s]
ontime3	25565.617970377	Sum of GTIs [s]
ontime6	25568.758950621	Sum of GTIs [s]
l2events	65662	Number of level 2 events



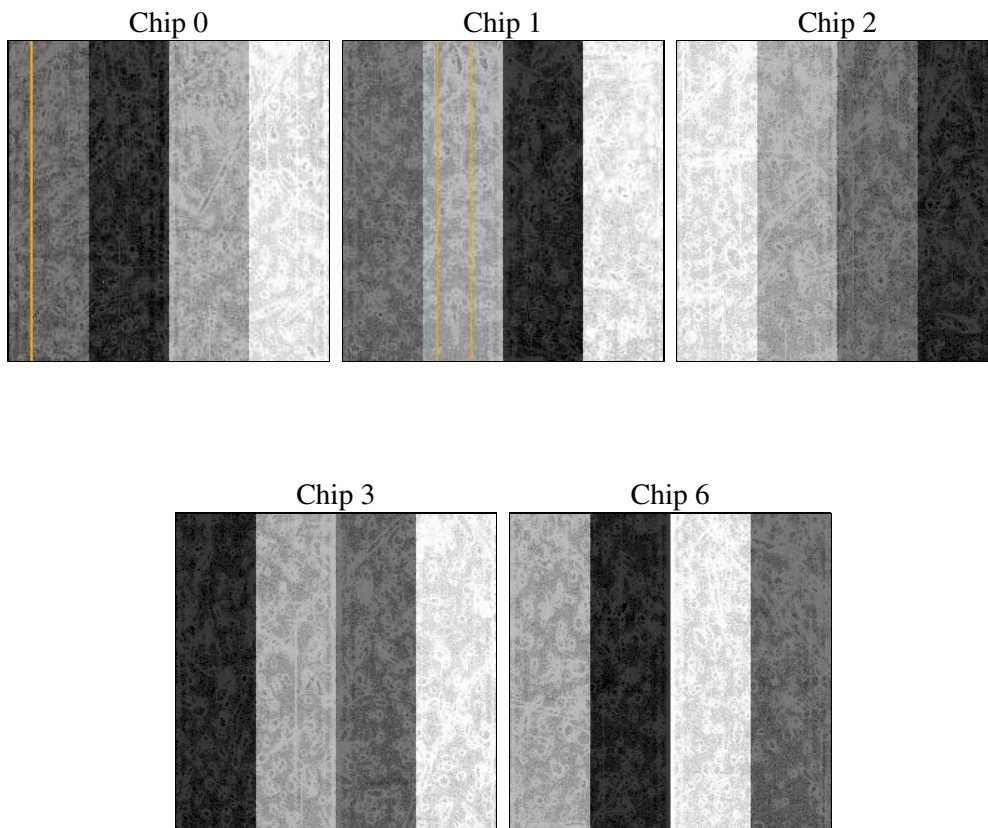
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25800.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	25565.617970377	Sum of GTIs [s]
caldbver	4.9.2	&#160	ontime0	25568.758970529	Sum of GTIs [s]
date	2020-10-06T21:46:12	Date and time of file creation	ontime1	25568.758940637	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	25565.61800018	Sum of GTIs [s]
			ontime3	25565.617970377	Sum of GTIs [s]
			ontime6	25568.758950621	Sum of GTIs [s]
			l1events	740218	Number of level 1 events

### 2.1.4 Events

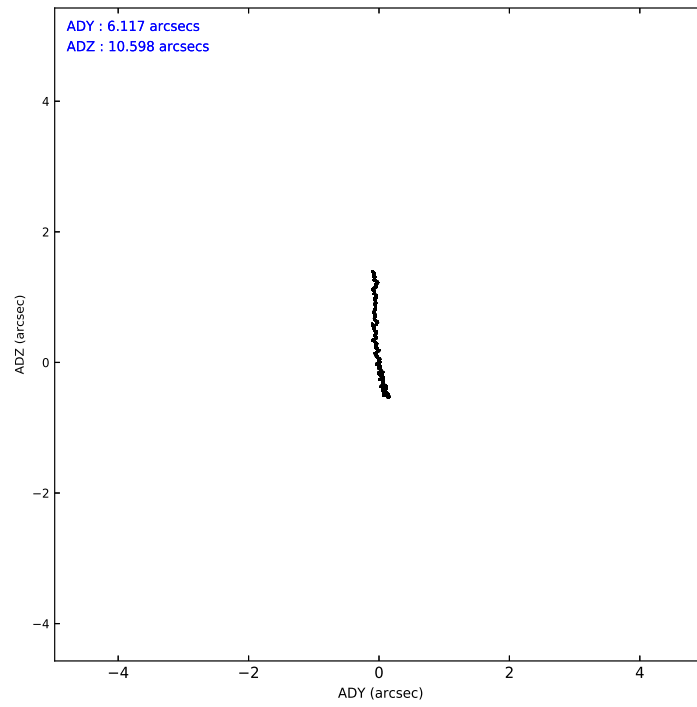
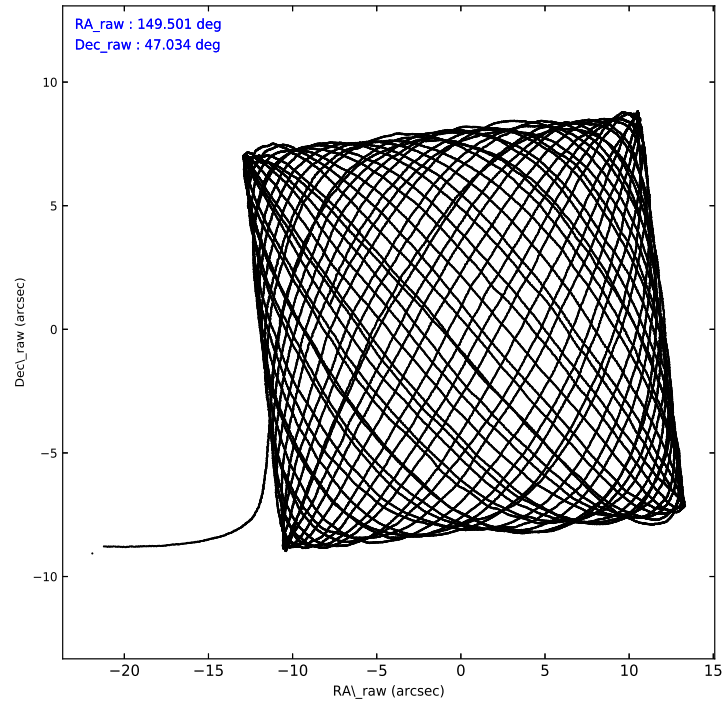
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	139318	141194	157120	150612	151974
rejected events	123837	124150	141832	134876	135869
rejected %	88%	87%	90%	89%	89%

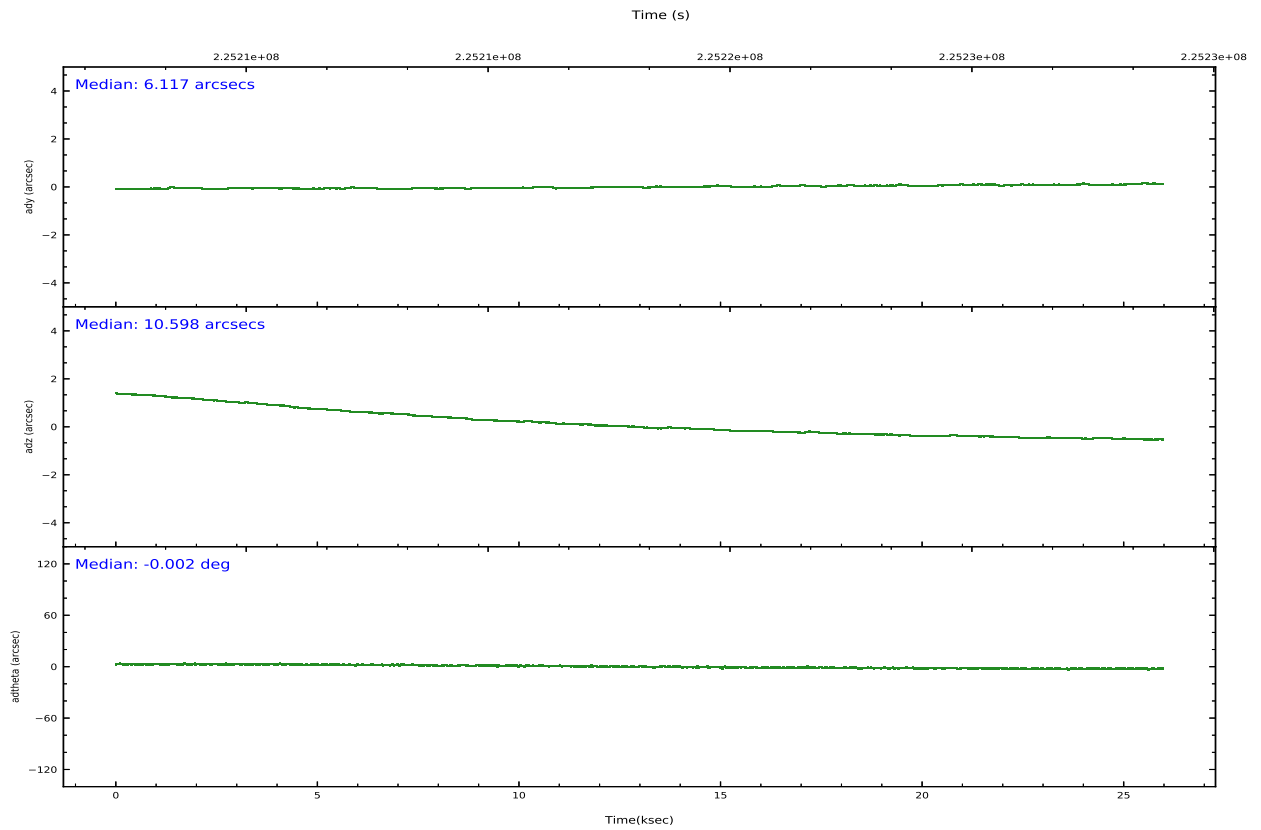
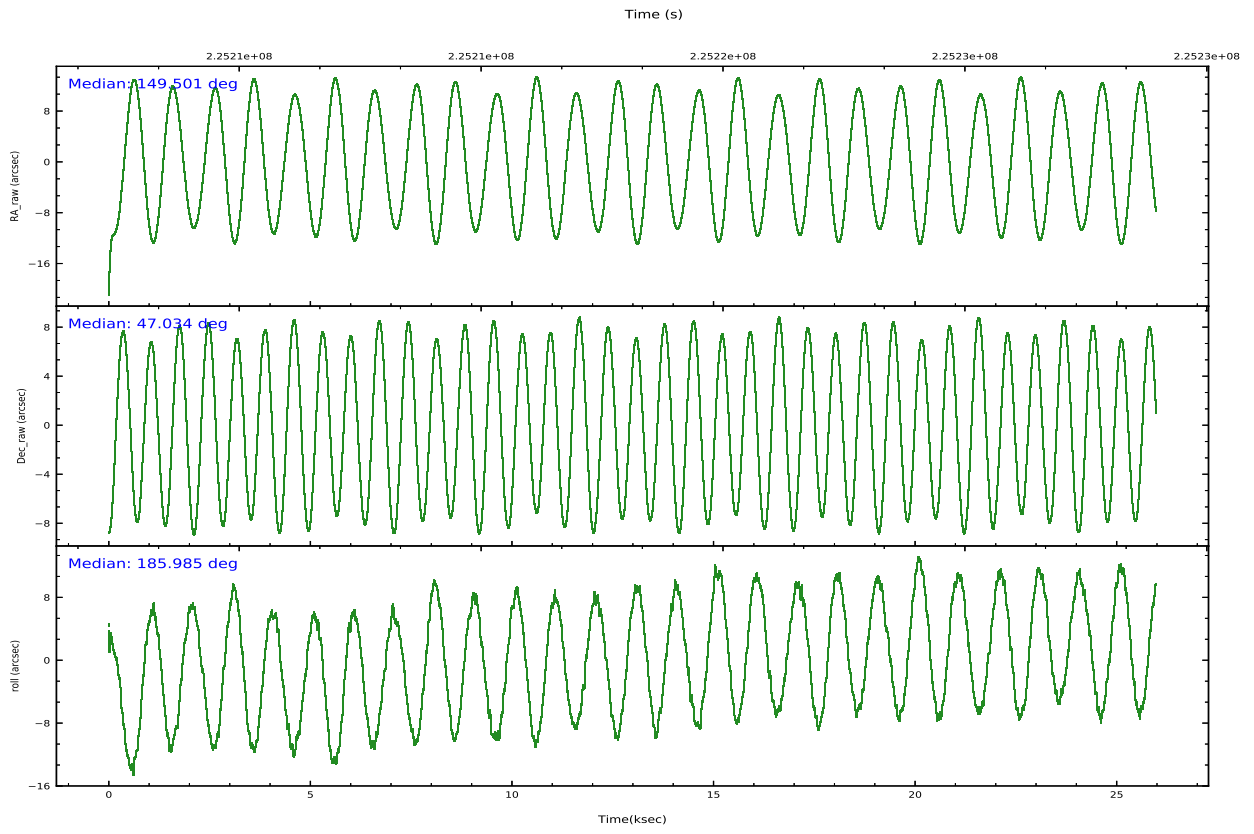
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5590	6131	5562	6153	5816
	4%	4%	3%	4%	3%
grade 1 events	71	75	85	75	60
	0%	0%	0%	0%	0%
grade 2 events	3610	3710	3534	3234	3353
	2%	2%	2%	2%	2%
grade 3 events	1770	1946	1695	1728	1771
	1%	1%	1%	1%	1%
grade 4 events	1614	1908	1683	1727	1767
	1%	1%	1%	1%	1%
grade 5 events	5342	5707	5144	6067	5913
	3%	4%	3%	4%	3%
grade 6 events	2899	3349	2814	2895	3398
	2%	2%	1%	1%	2%
grade 7 events	118422	118368	136603	128733	129896
	85%	83%	86%	85%	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	149.533339	149.50302682182	Subarray requested	NONE	NONE
[deg] Pointing Dec	47.050576	47.037673919554	Alternating exposures requested	N	N
[deg] Pointing Roll	185.759515	185.98532070068	[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	-225.840463	-225.848371962627			
[mm] SIM translation stage offset	-7.752	-7.744081040302689			
[s] Observation start time (MET)	225204944.184000	225203764.26775			
Observation start date	2005-02-19T12:54:40	2005-02-19T12:36:04			
[s] Observation end time (MET)	225230744.184000	225231152.26899			
Observation end date	2005-02-19T20:04:40	2005-02-19T20:12:32			
Read mode	TIMED	TIMED			

## 2.3 Aspect





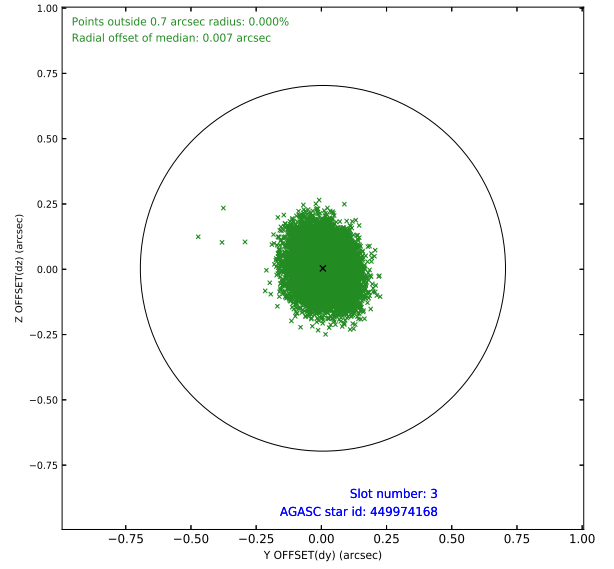
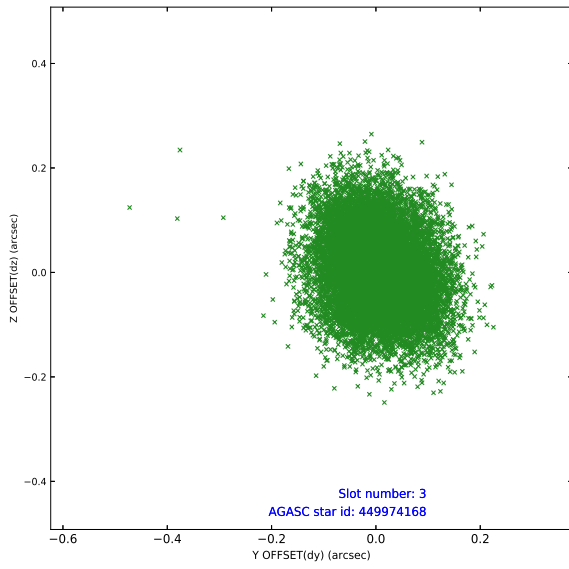
### Slot Statistics

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	6337	1.000	0.124	-0.128	0.021	0.029	0.000000	0.000000	933.56	-993
1	FID		ACIS-I-5	7.22	6337	1.000	-0.277	0.092	0.018	0.030	0.000000	0.000000	-1814.88	904
2	FID		ACIS-I-6	7.26	6337	1.000	0.062	0.105	0.015	0.029	0.000000	0.000000	398.93	1548
3	GUIDE	used	449974168	9.56	12659	1.000	0.006	0.004	0.105	0.167	149.675378	46.468450	-140.28	2120
4	GUIDE	used	449977912	9.60	12665	1.000	0.046	0.114	0.116	0.184	148.746474	46.699576	2058.82	1053
5	GUIDE	used	449979224	8.46	12673	1.000	-0.022	0.006	0.063	0.105	149.269187	47.303585	550.58	-971
6	GUIDE	used	449980528	8.94	12668	1.000	0.031	-0.122	0.073	0.118	149.486514	46.952477	150.52	340
7	GUIDE	used	450372632	9.63	12667	1.000	-0.060	-0.001	0.108	0.180	149.402650	47.628471	107.21	-2101

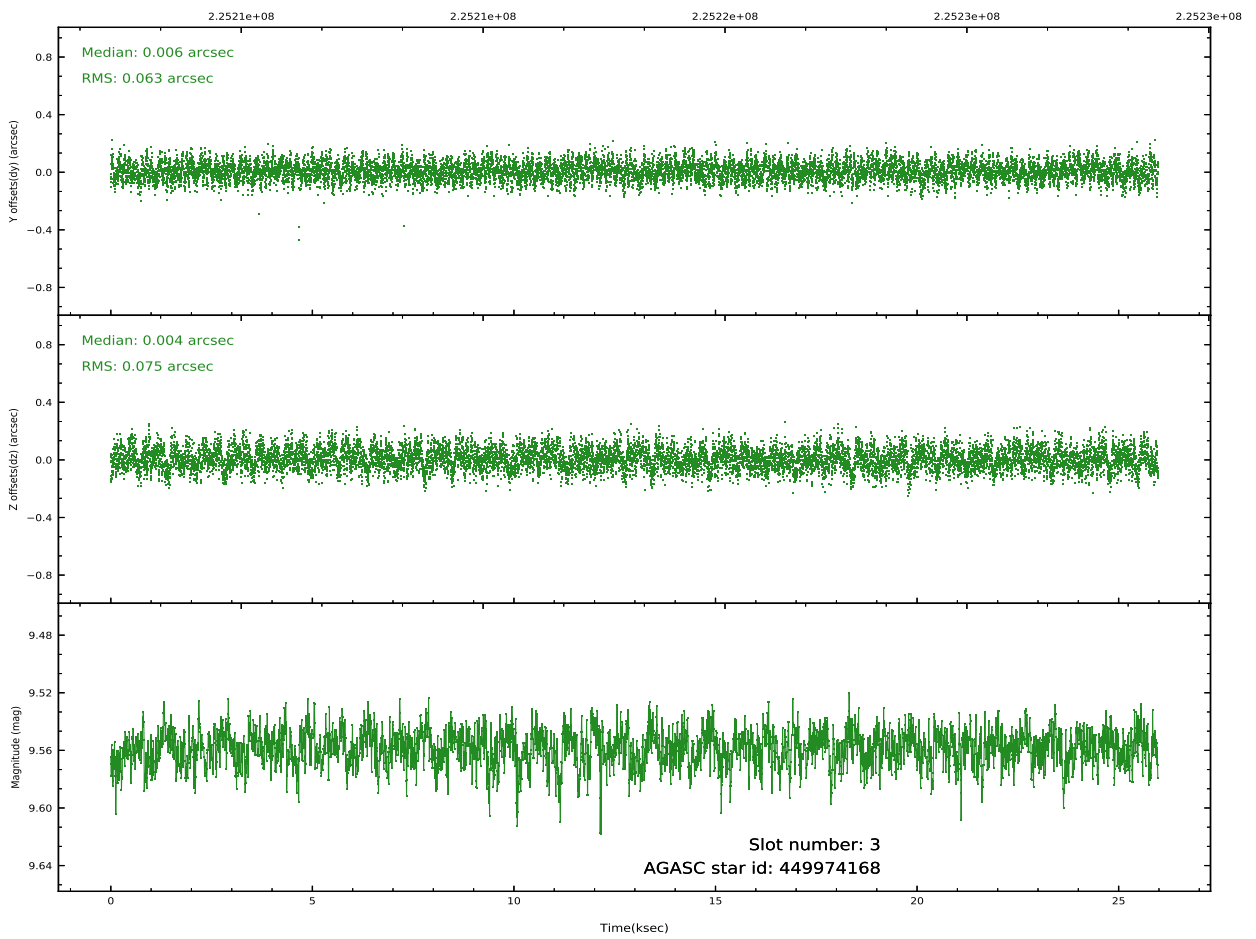
∞

## 2.4 Star Slots

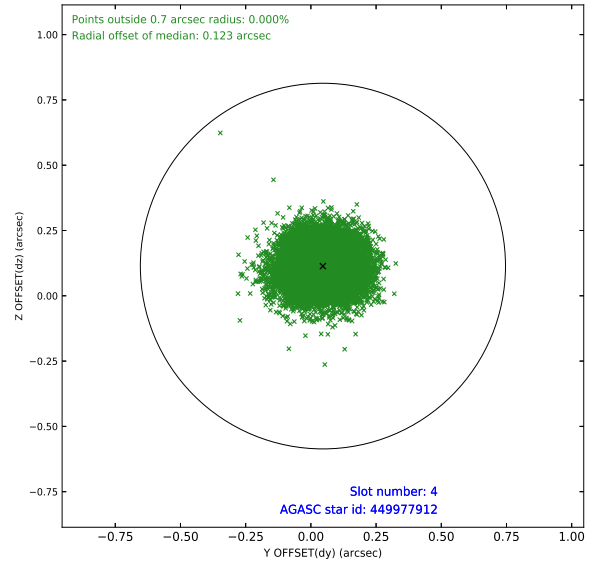
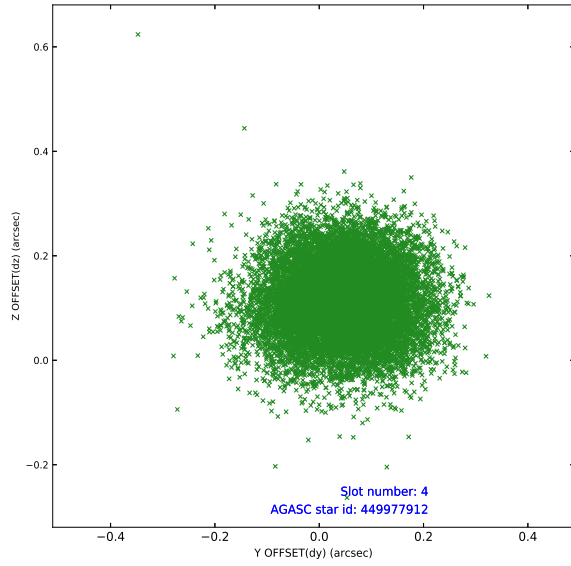
### 2.4.1 Slot 3



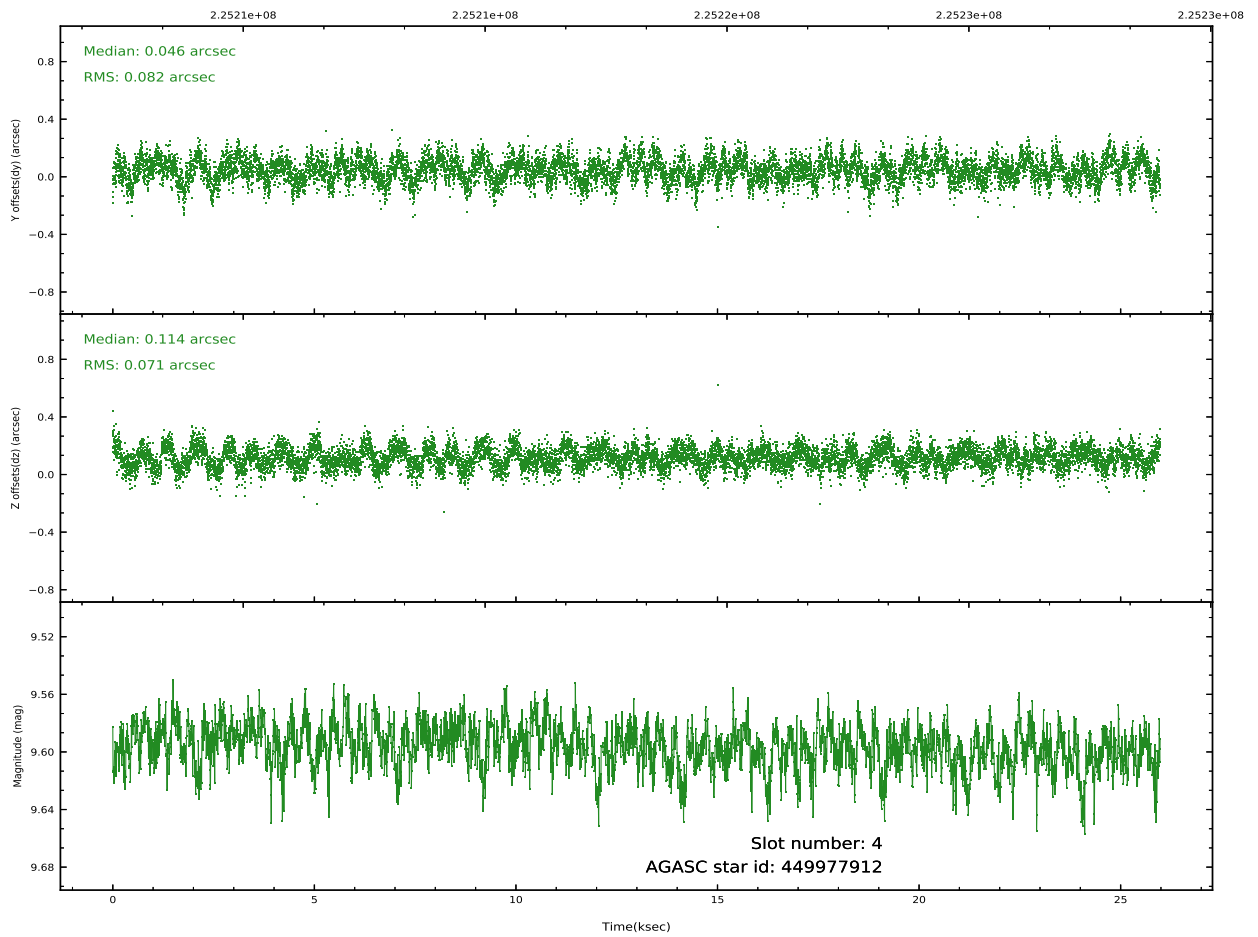
Time (s)



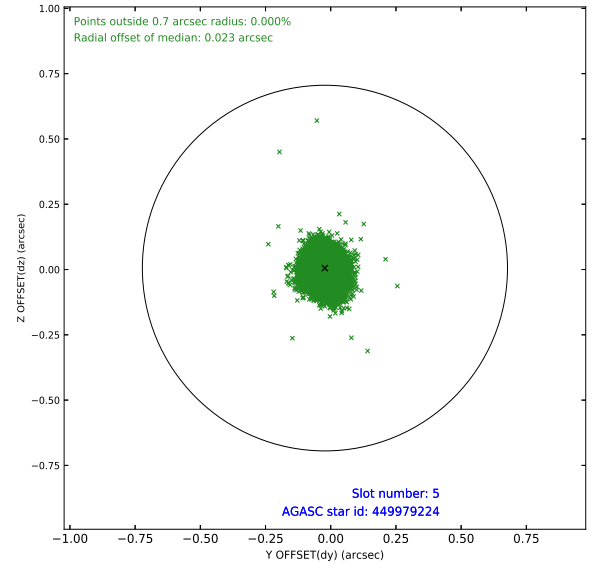
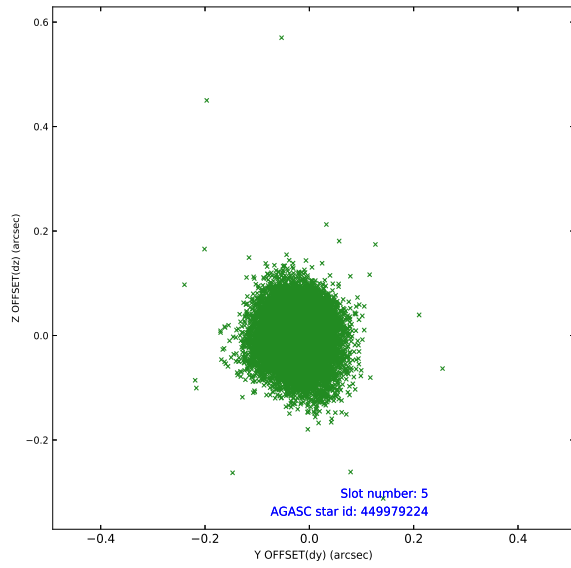
## 2.4.2 Slot 4



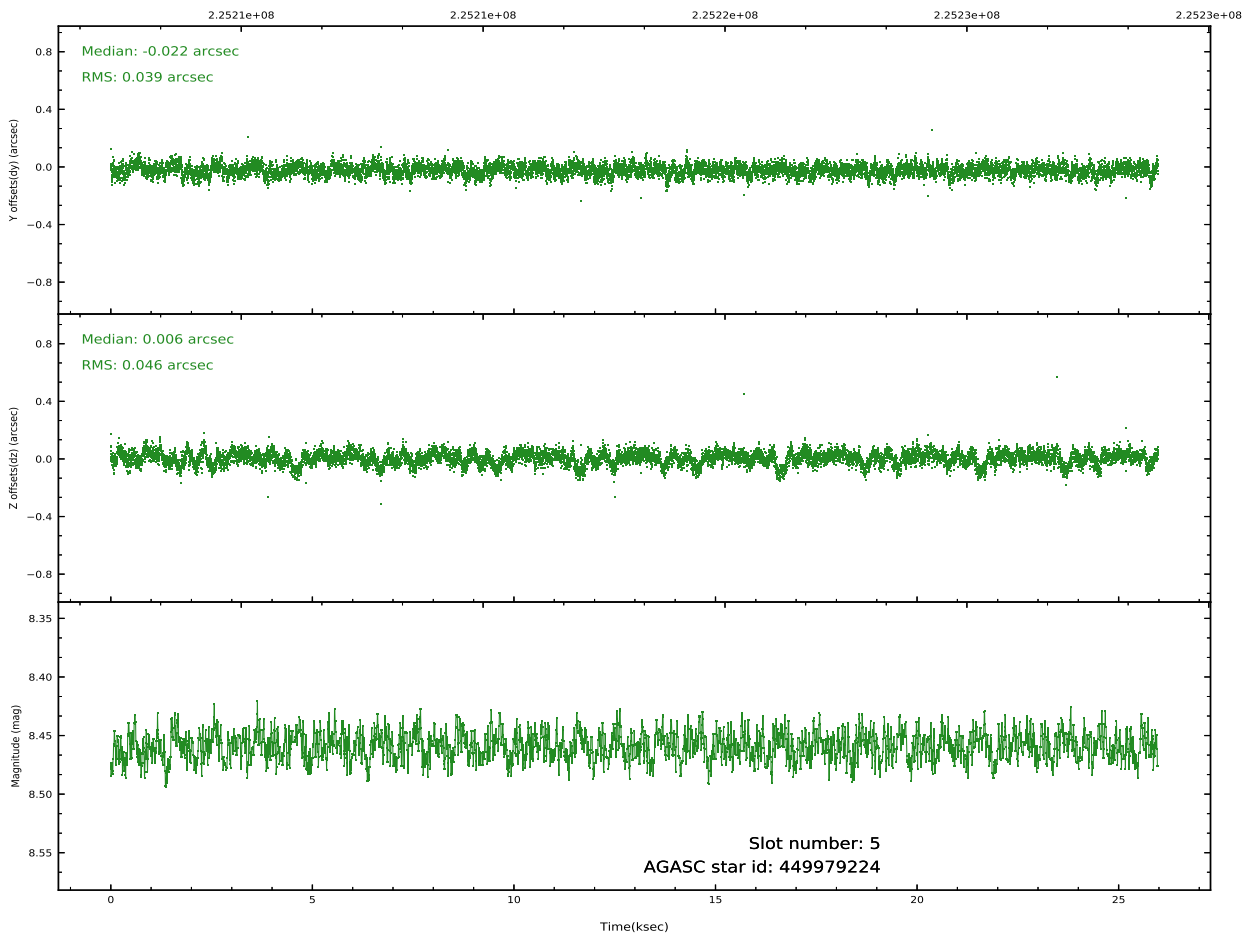
Time (s)



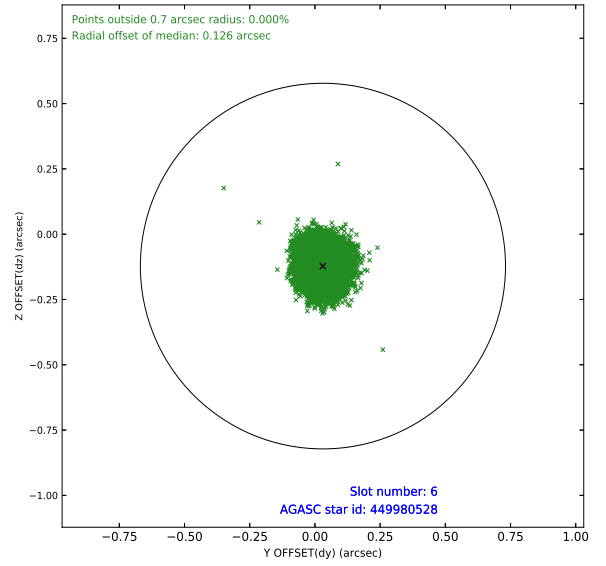
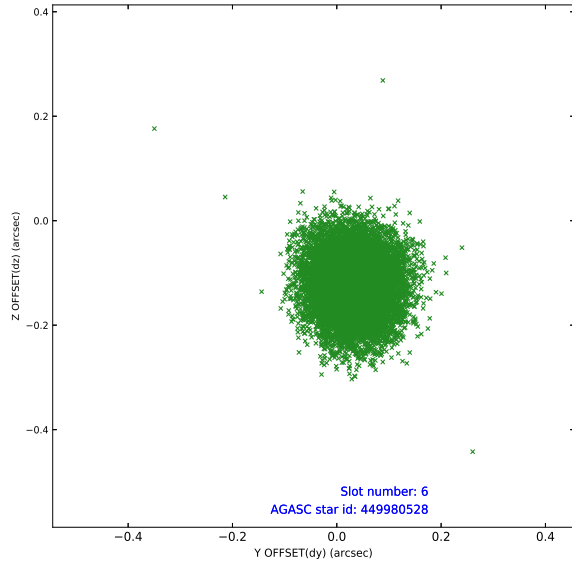
### 2.4.3 Slot 5



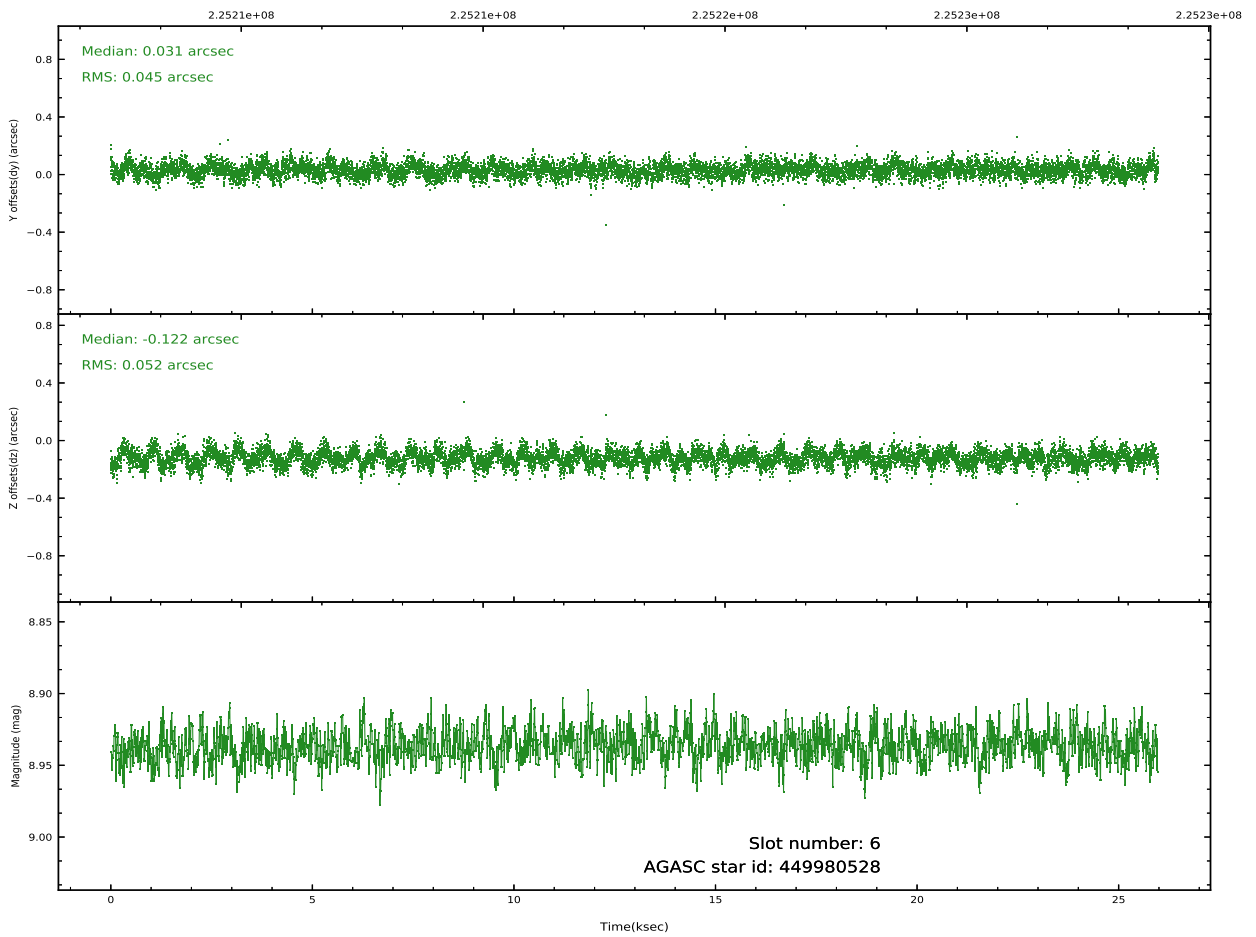
Time (s)



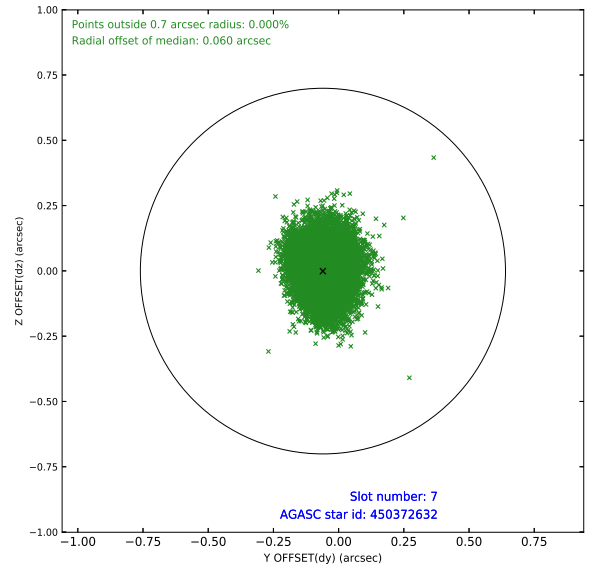
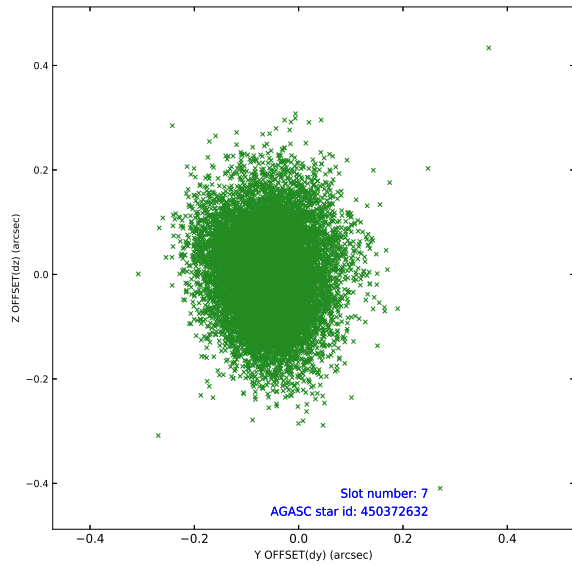
## 2.4.4 Slot 6



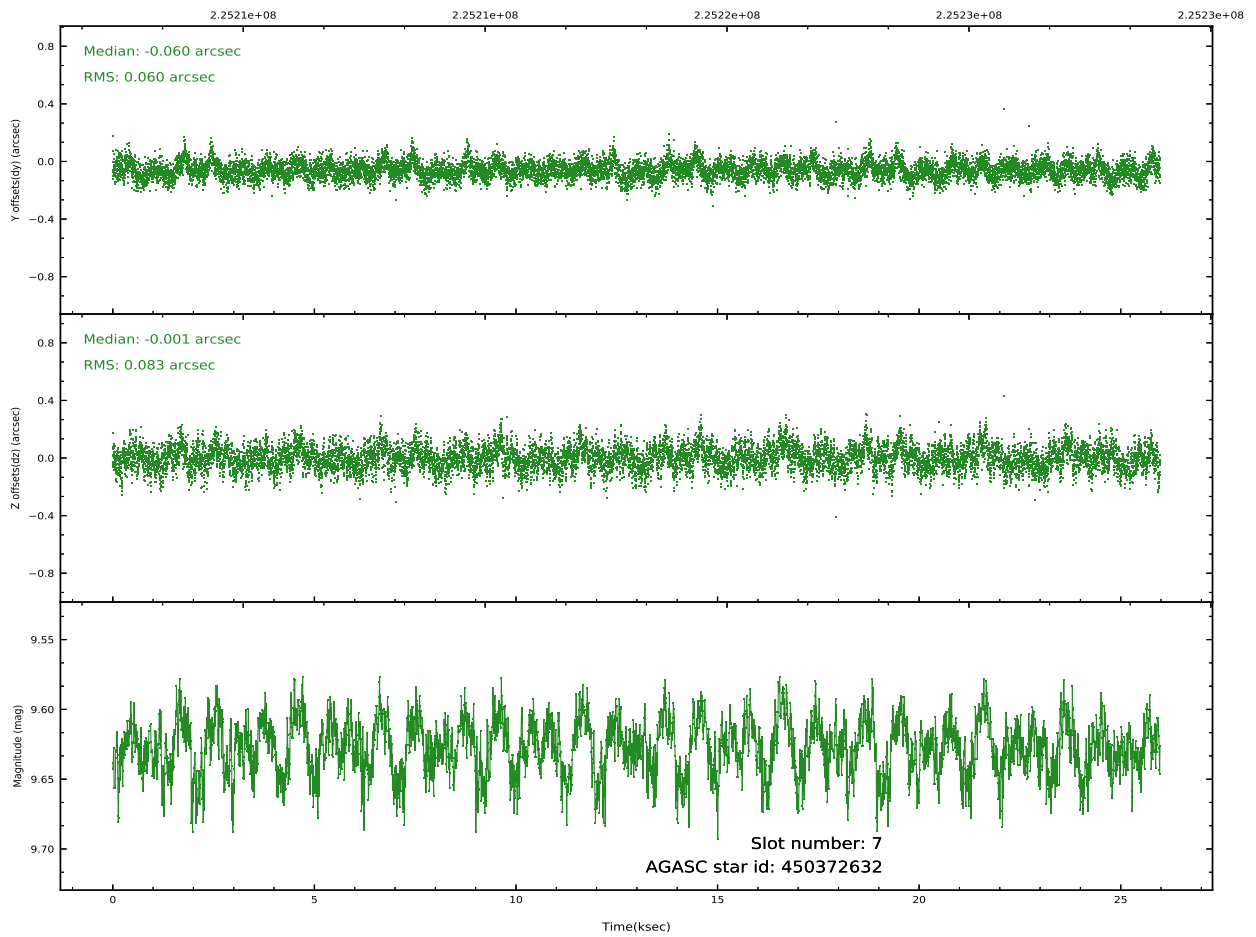
Time (s)



## 2.4.5 Slot 7

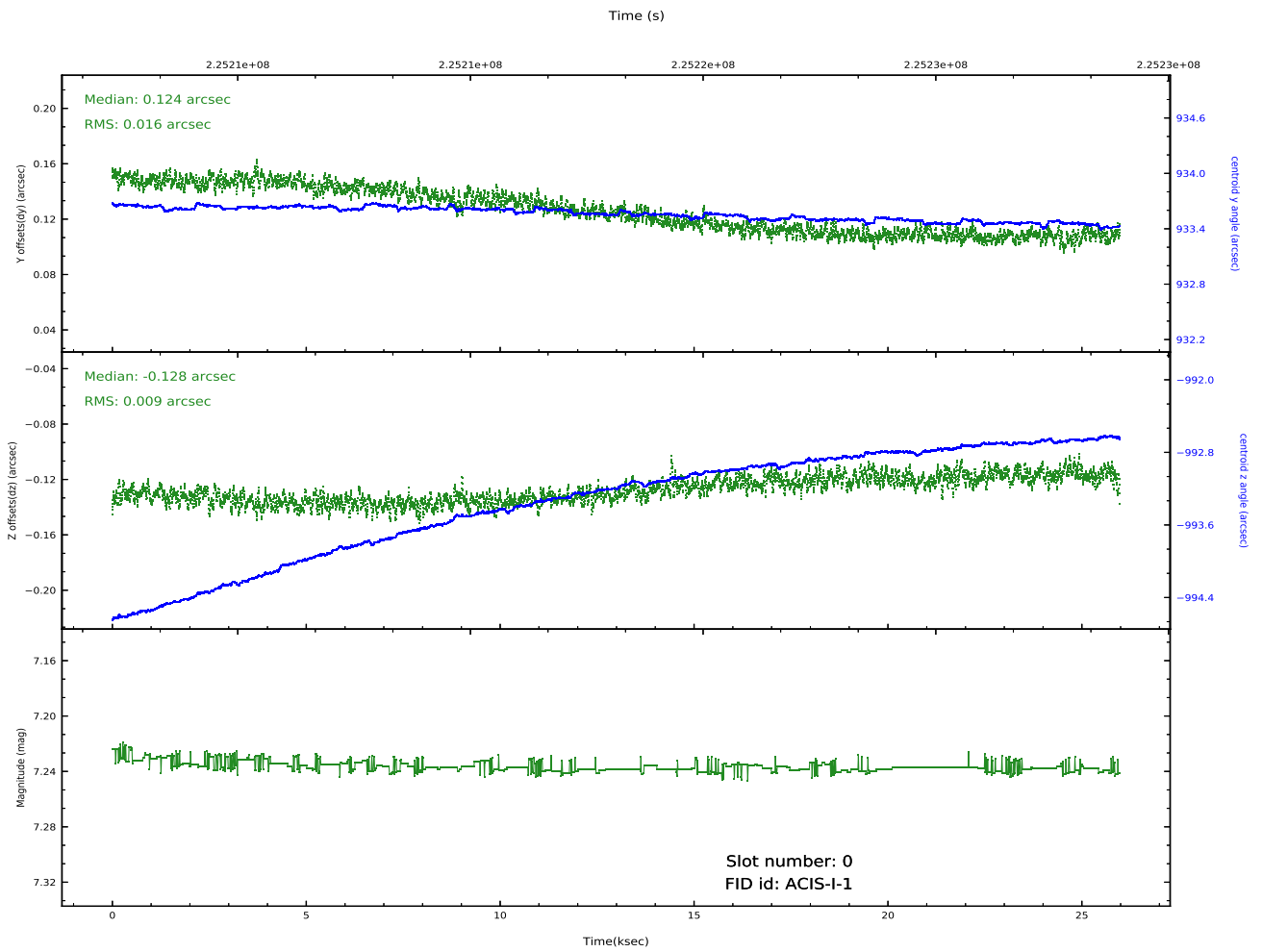
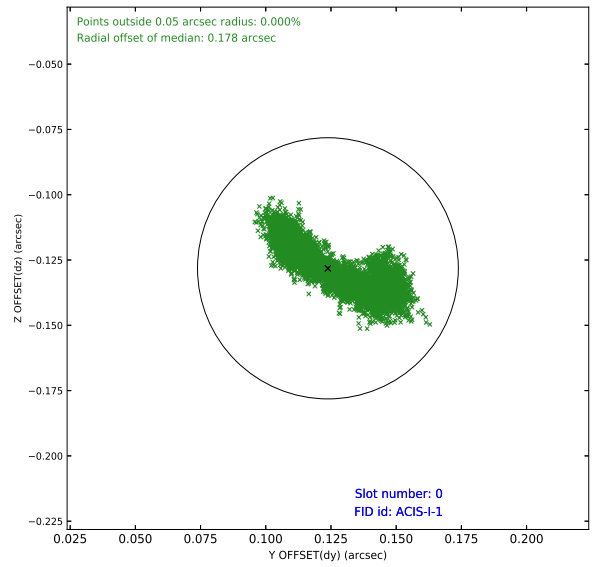
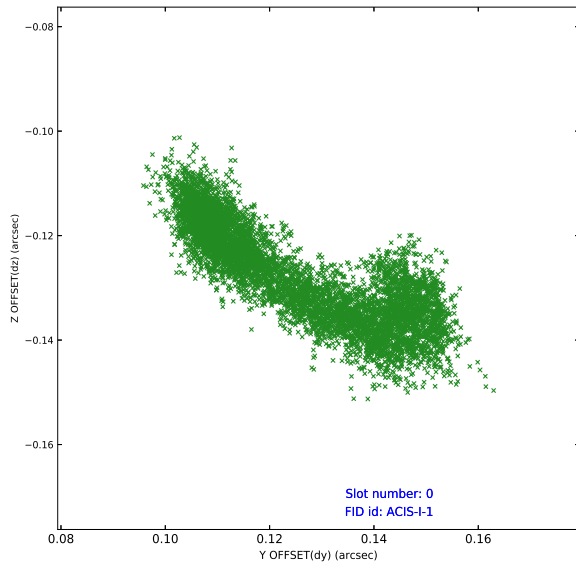


Time (s)

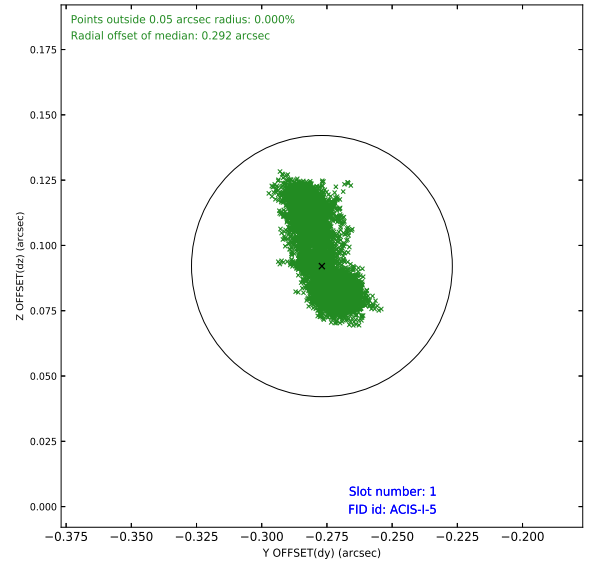
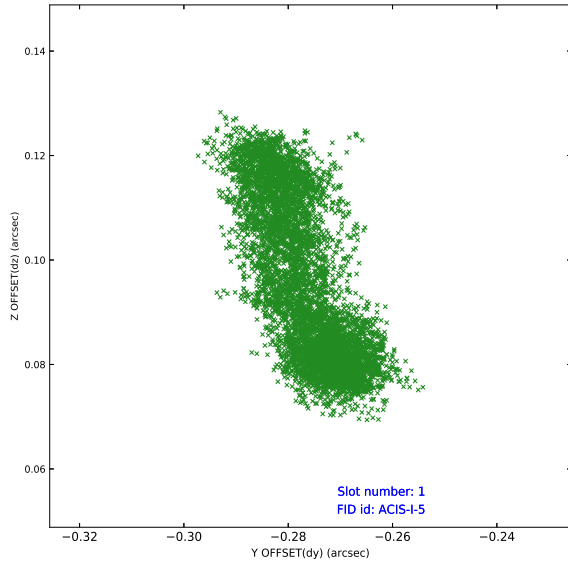


## 2.5 FID Slots

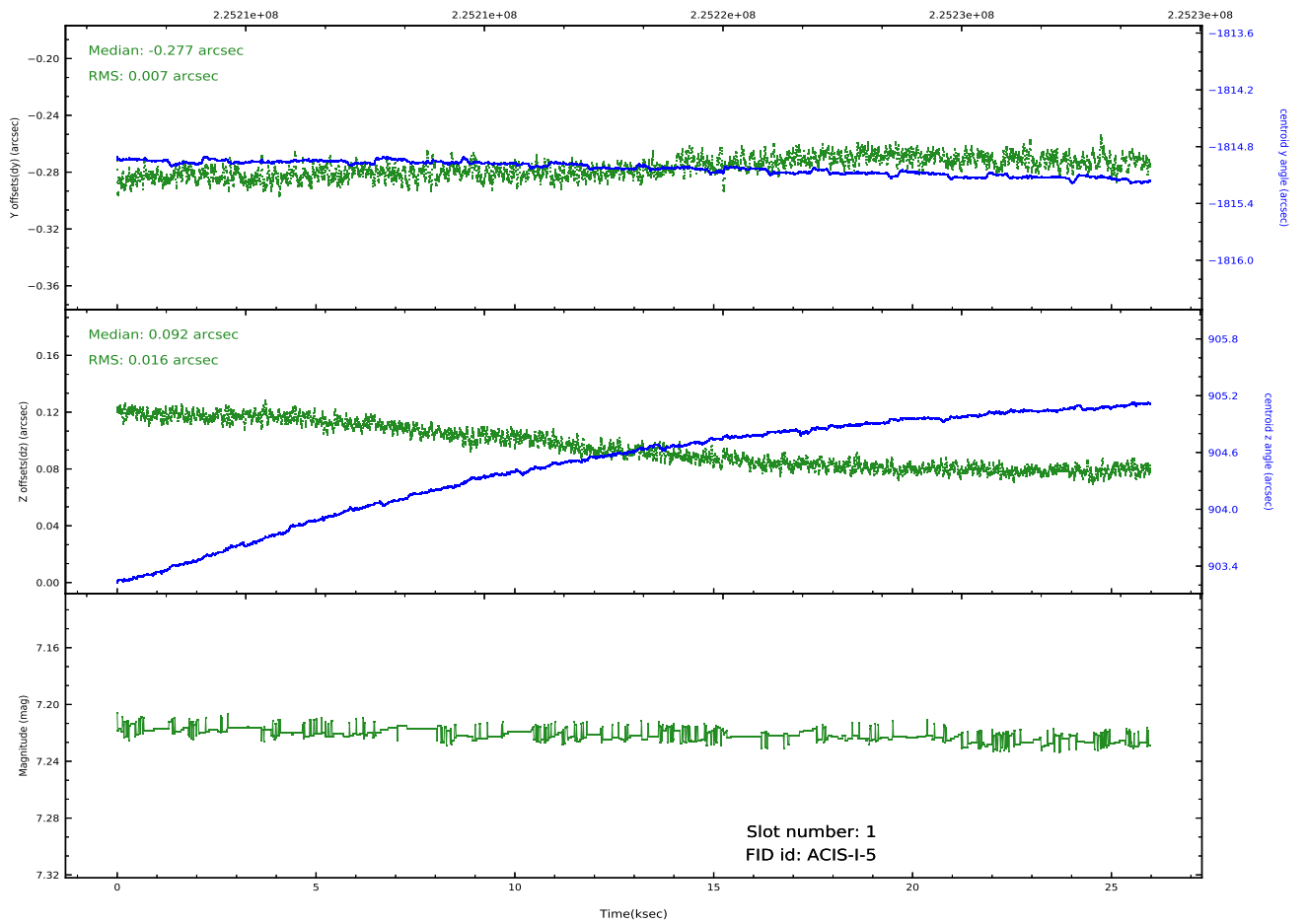
### 2.5.1 Slot 0



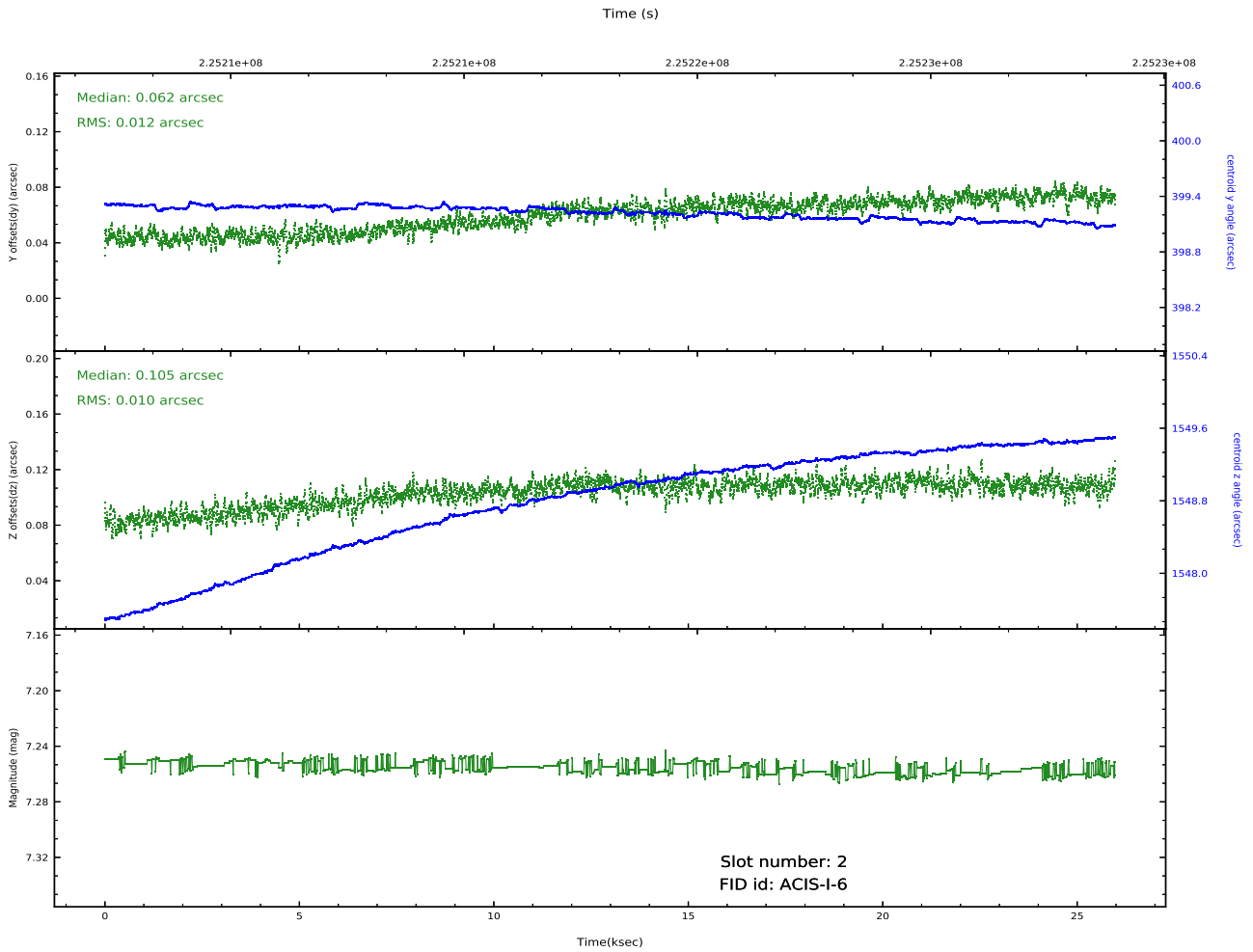
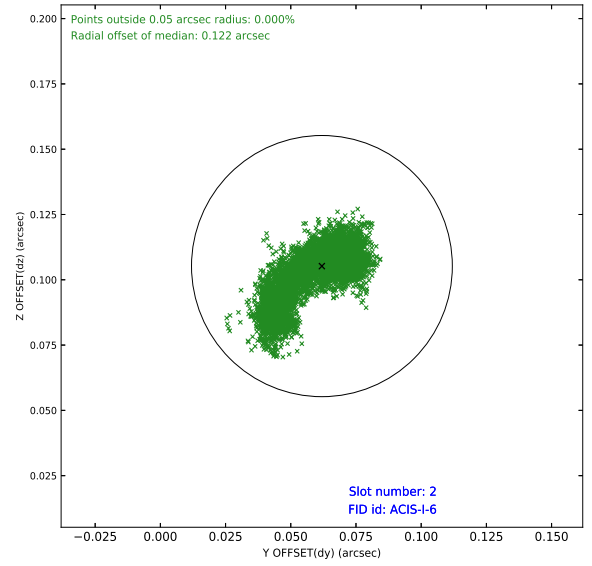
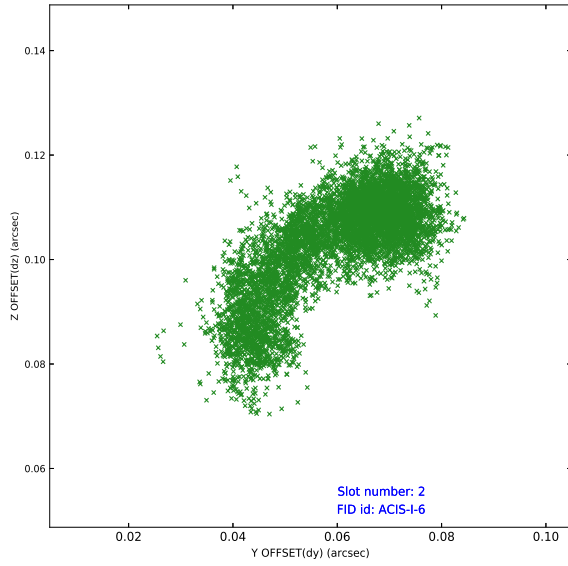
## 2.5.2 Slot 1



Time (s)



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.56561

## A.2 Comments