

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 20978 - L2 Version 2  
Chandra X-Ray Center

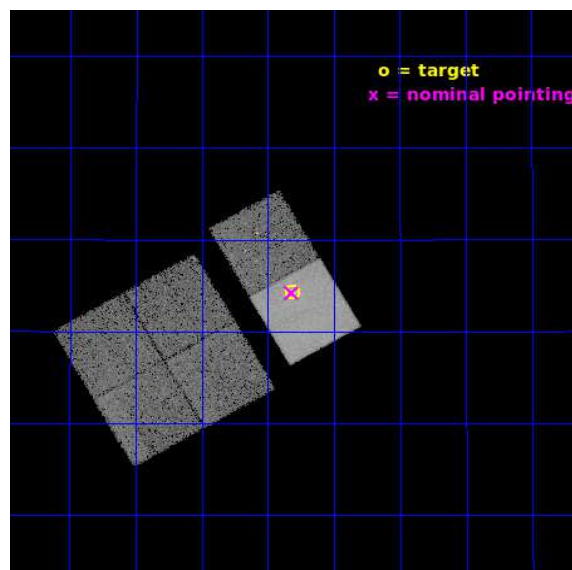
L2 Processing Date : Oct 24 2020

## 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

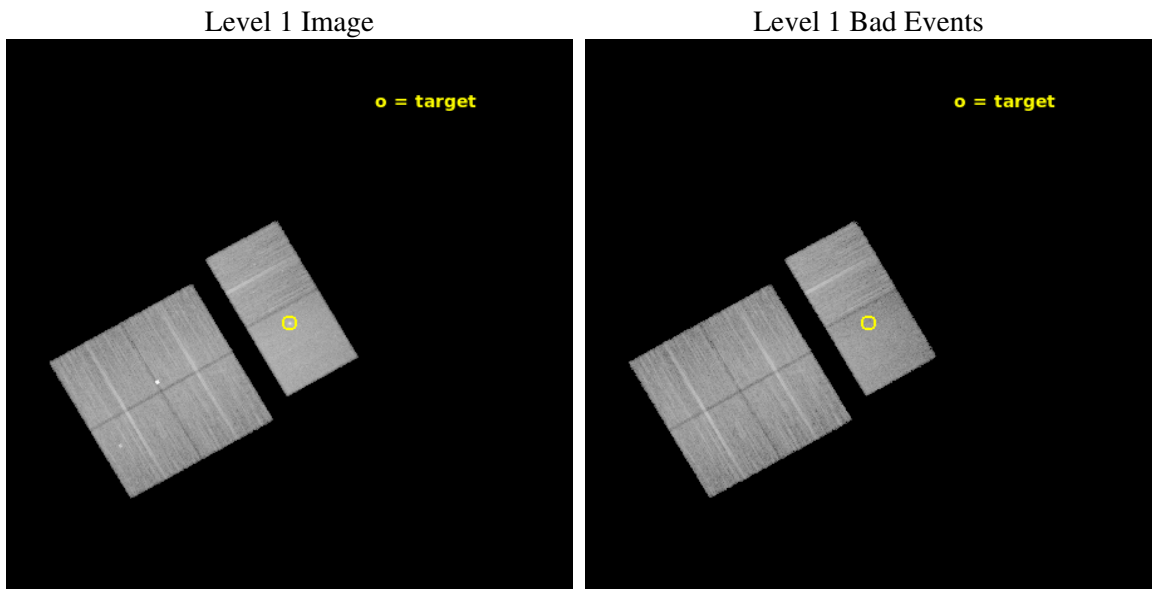
seq_num	801674	Sequence number
obs_id	20978	Observation id
title	The Unusually High Concentration of the Fossil Group NGC 6482	Prop
observer	David Buote	Principal investigator
object	NGC 6482	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.953333	Observer's specified target RA [deg]
dec_targ	23.071944	Observer's specified target Dec [deg]
ra_nom	267.95462960109	Nominal RA [deg]
dec_nom	23.070734654422	Nominal Dec [deg]
roll_nom	60.142428543656	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20137.600300074	Sum of GTIs [s]
livetime	19882.605879667	Livetime [s]
ontime0	20137.600300074	Sum of GTIs [s]
ontime1	20137.600300074	Sum of GTIs [s]
ontime2	20137.600300074	Sum of GTIs [s]
ontime3	20131.118498683	Sum of GTIs [s]
ontime6	20137.600300074	Sum of GTIs [s]
ontime7	20137.600300074	Sum of GTIs [s]
l2events	154930	Number of level 2 events



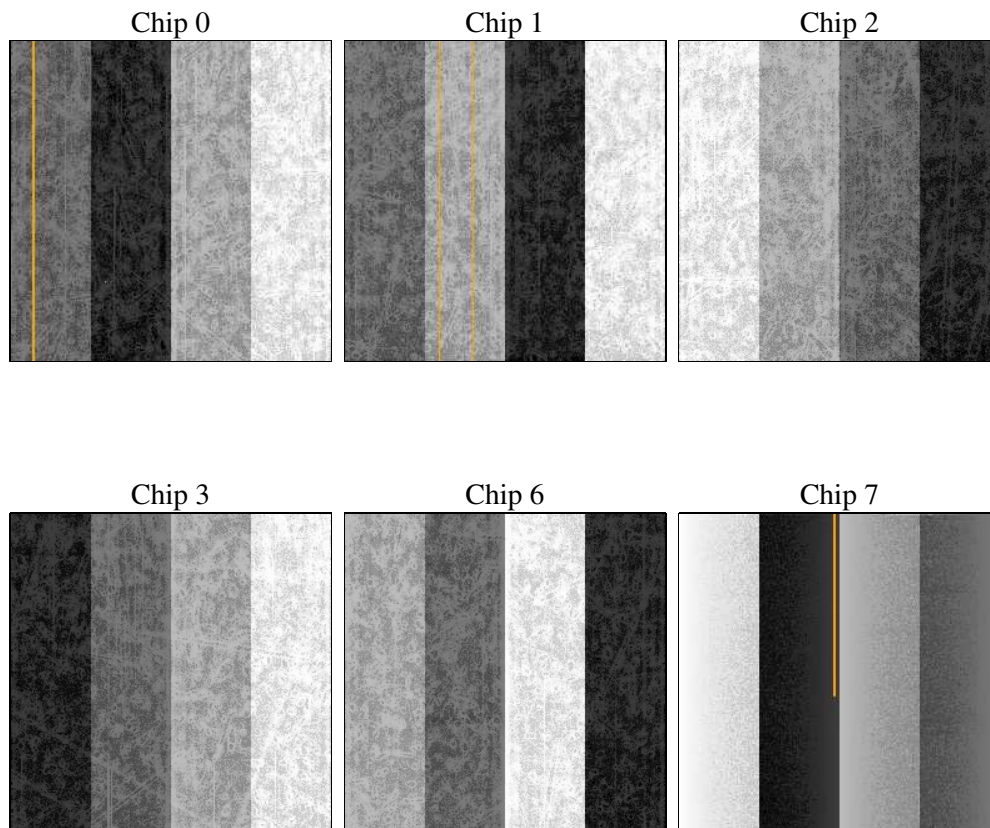
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	20137.600300074	Sum of GTIs [s]
caldbver	4.9.3	&#160	ontime0	20137.600300074	Sum of GTIs [s]
date	2020-10-24T18:35:04	Date and time of file creation	ontime1	20137.600300074	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20137.600300074	Sum of GTIs [s]
			ontime3	20131.118498683	Sum of GTIs [s]
			ontime6	20137.600300074	Sum of GTIs [s]
			ontime7	20137.600300074	Sum of GTIs [s]
			l1events	961722	Number of level 1 events

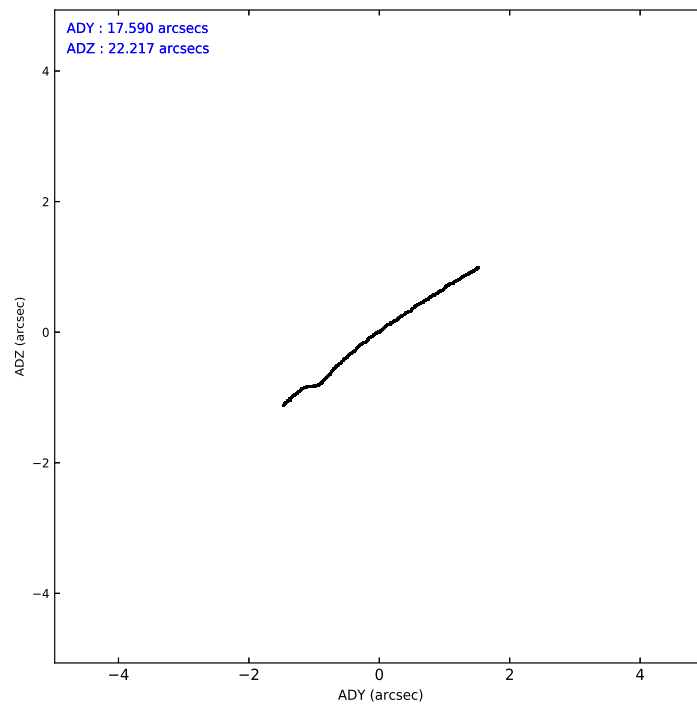
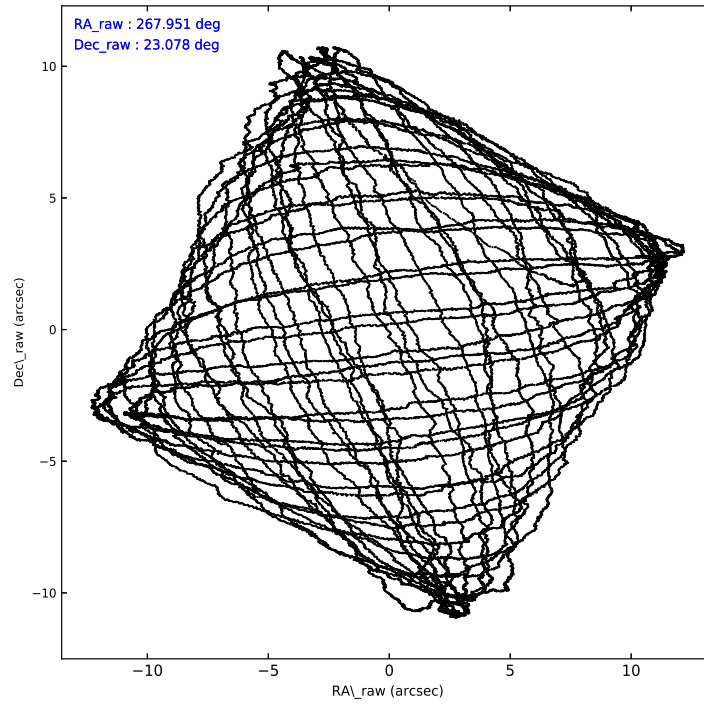
### 2.1.4 Events

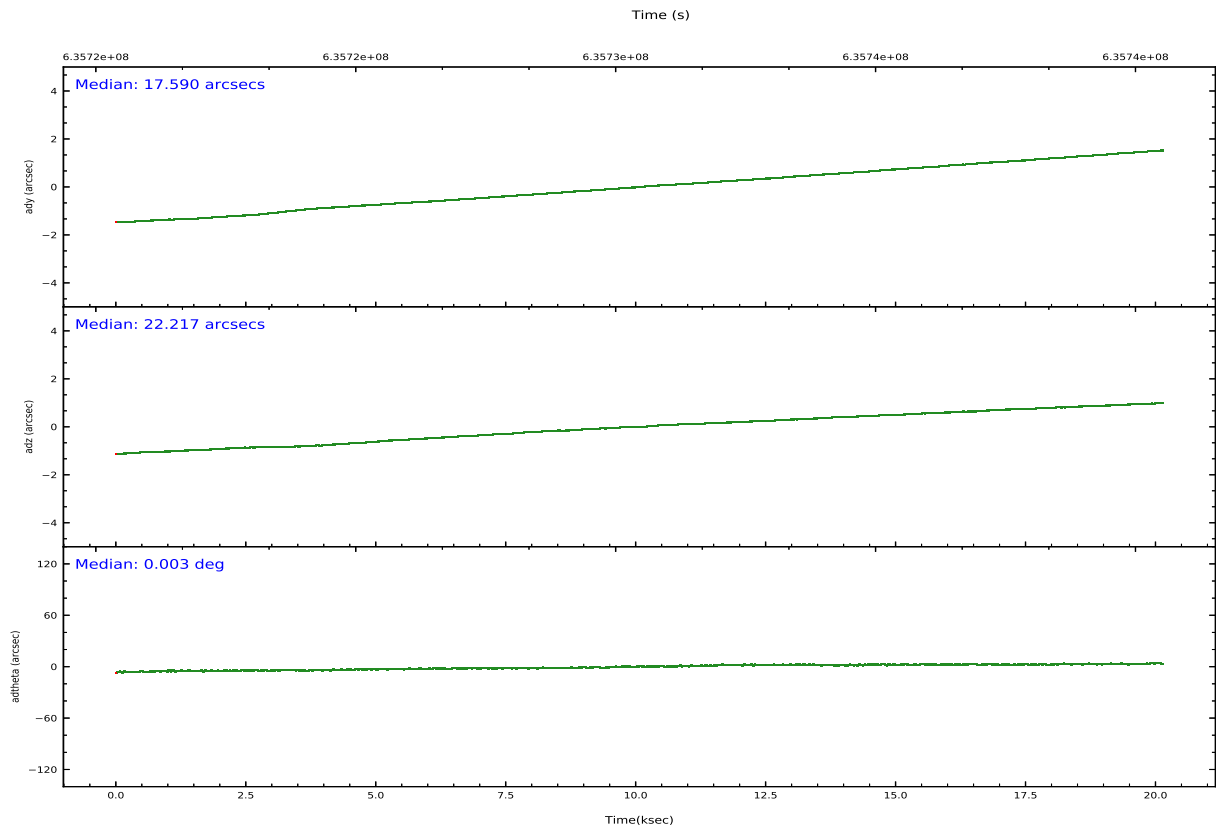
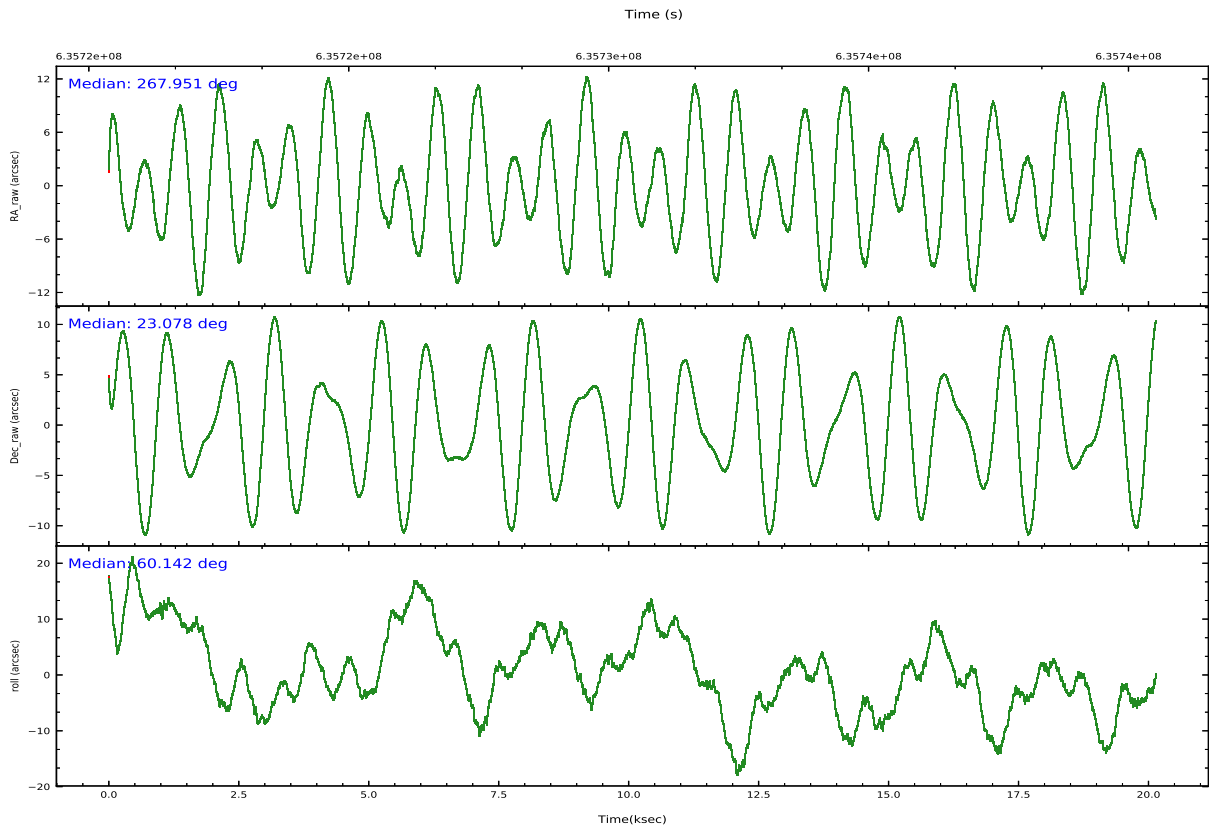
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	146428	144175	161389	147014	160565	202151	grade 0 events	5931	7506	12004	6205	6385	8619
rejected events	129742	124997	139593	131208	143251	114837		4%	5%	7%	4%	3%	4%
rejected %	88%	86%	86%	89%	89%	56%	grade 1 events	74	93	148	102	75	291
								0%	0%	0%	0%	0%	0%
							grade 2 events	4614	4880	4311	3663	4146	19761
								3%	3%	2%	2%	2%	9%
							grade 3 events	1804	1881	1649	1629	1787	7395
								1%	1%	1%	1%	1%	3%
							grade 4 events	1637	1803	1650	1715	1697	7526
								1%	1%	1%	1%	1%	3%
							grade 5 events	6813	6884	5836	7425	7381	19780
								4%	4%	3%	5%	4%	9%
							grade 6 events	3550	4183	3248	3386	4148	48161
								2%	2%	2%	2%	2%	23%
							grade 7 events	122005	116945	132543	122889	134946	90618
								83%	81%	82%	83%	84%	44%

## 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	VFAINT	VFAINT	CCD I0 on	O2	Y
Observation mode	POINTING	POINTING	CCD I1 on	O1	Y
[deg] Pointing RA	267.951844	267.95462960109	CCD I2 on	Y	Y
[deg] Pointing Dec	23.050890	23.070734654422	CCD I3 on	Y	Y
[deg] Pointing Roll	60.000588	60.142428543656	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	635720533.184000	635719409.32093	CCD S5 on	N	N
Observation start date	2018-02-22T21:01:04	2018-02-22T20:43:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	635740533.184000	635741449.89723	On-chip summing requested	N	N
Observation end date	2018-02-23T02:34:24	2018-02-23T02:50:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



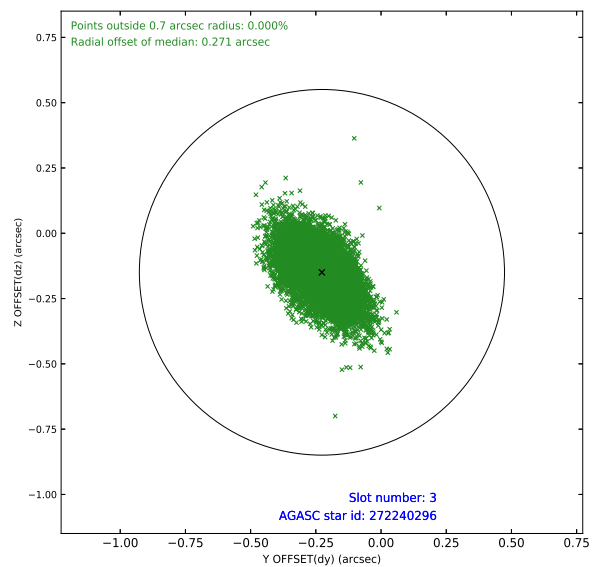
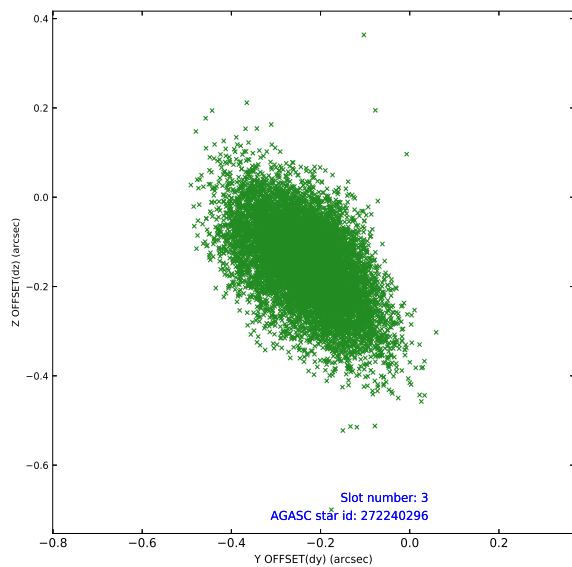


### Slot Statistics

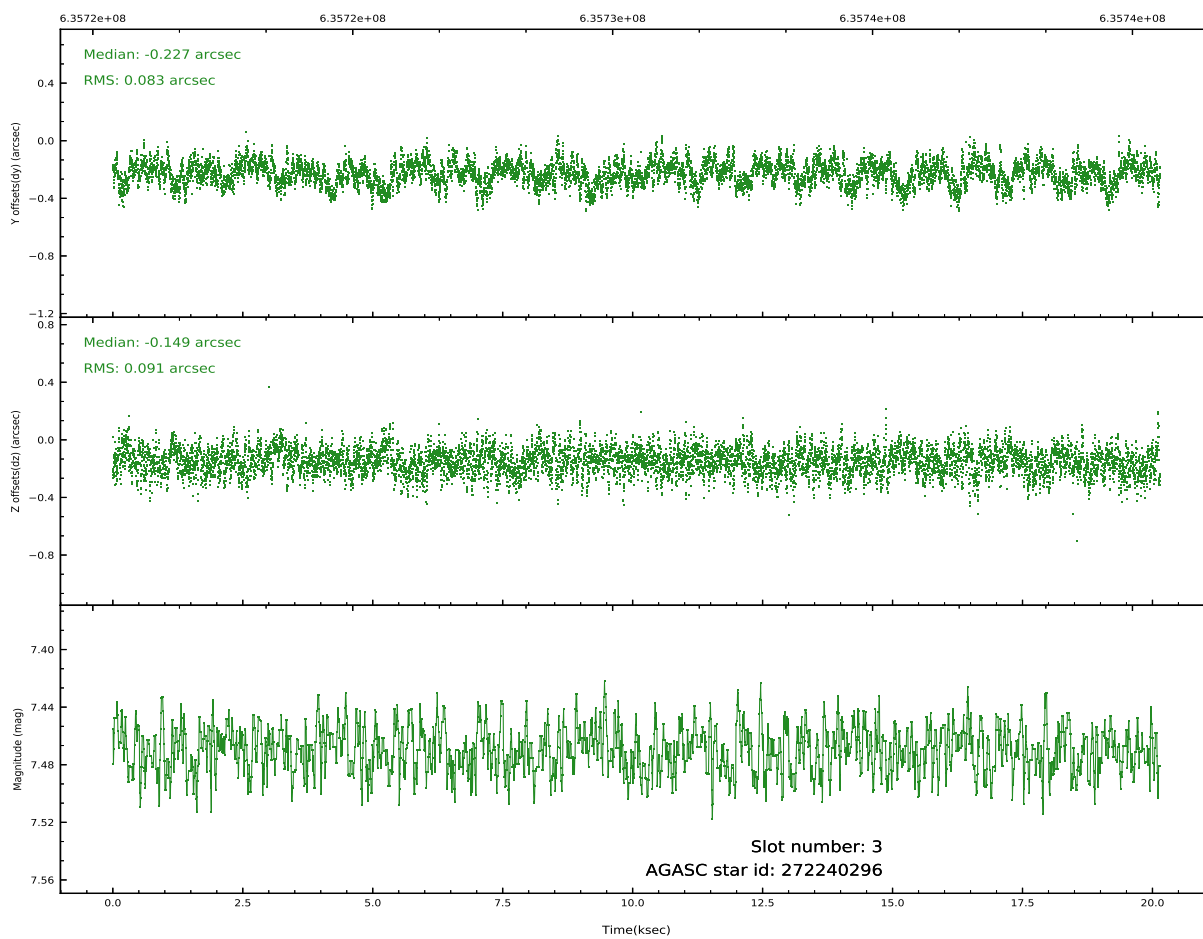
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.98	4915	1.000	0.134	-0.094	0.020	0.056	0.000000	0.000000	-770.72	-1743
1	FID		ACIS-S-4	7.09	4915	1.000	0.064	-0.040	0.015	0.029	0.000000	0.000000	2142.65	164
2	FID		ACIS-S-5	7.09	4915	1.000	-0.229	0.145	0.019	0.053	0.000000	0.000000	-1823.44	158
3	GUIDE	used	272240296	7.47	9825	1.000	-0.227	-0.149	0.127	0.218	267.638660	23.255916	121.90	1266
4	GUIDE	used	272261632	8.33	9824	1.000	0.082	-0.167	0.122	0.209	267.202505	22.973470	-1478.12	2014
5	GUIDE	used	273948672	8.81	9824	1.000	0.061	-0.088	0.187	0.304	268.631849	23.232305	1695.30	-1618
6	GUIDE	used	273969496	8.99	9815	1.000	-0.018	0.044	0.147	0.250	268.396476	22.968275	481.42	-1424
7	GUIDE	used	273976672	8.96	9817	1.000	0.106	0.368	0.159	0.252	267.916715	22.762899	-955.14	-416

## 2.4 Star Slots

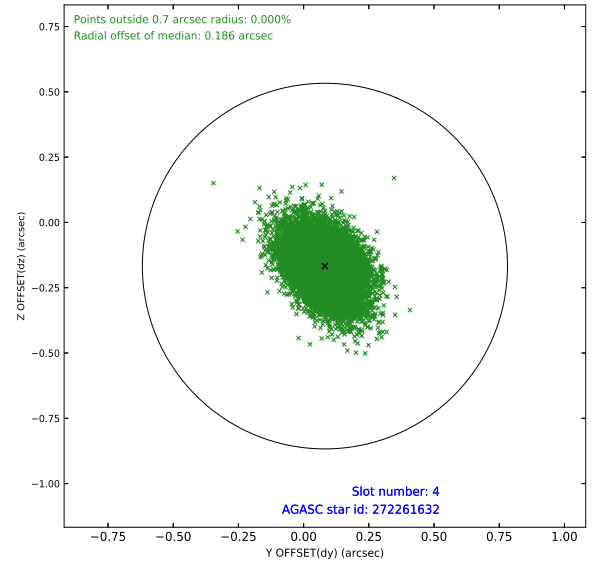
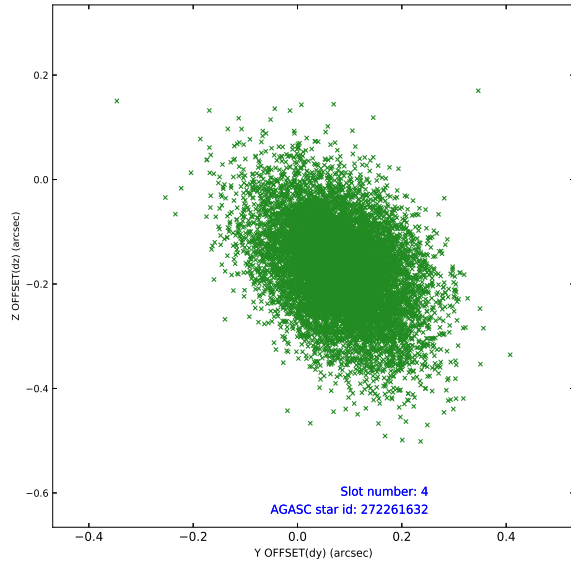
### 2.4.1 Slot 3



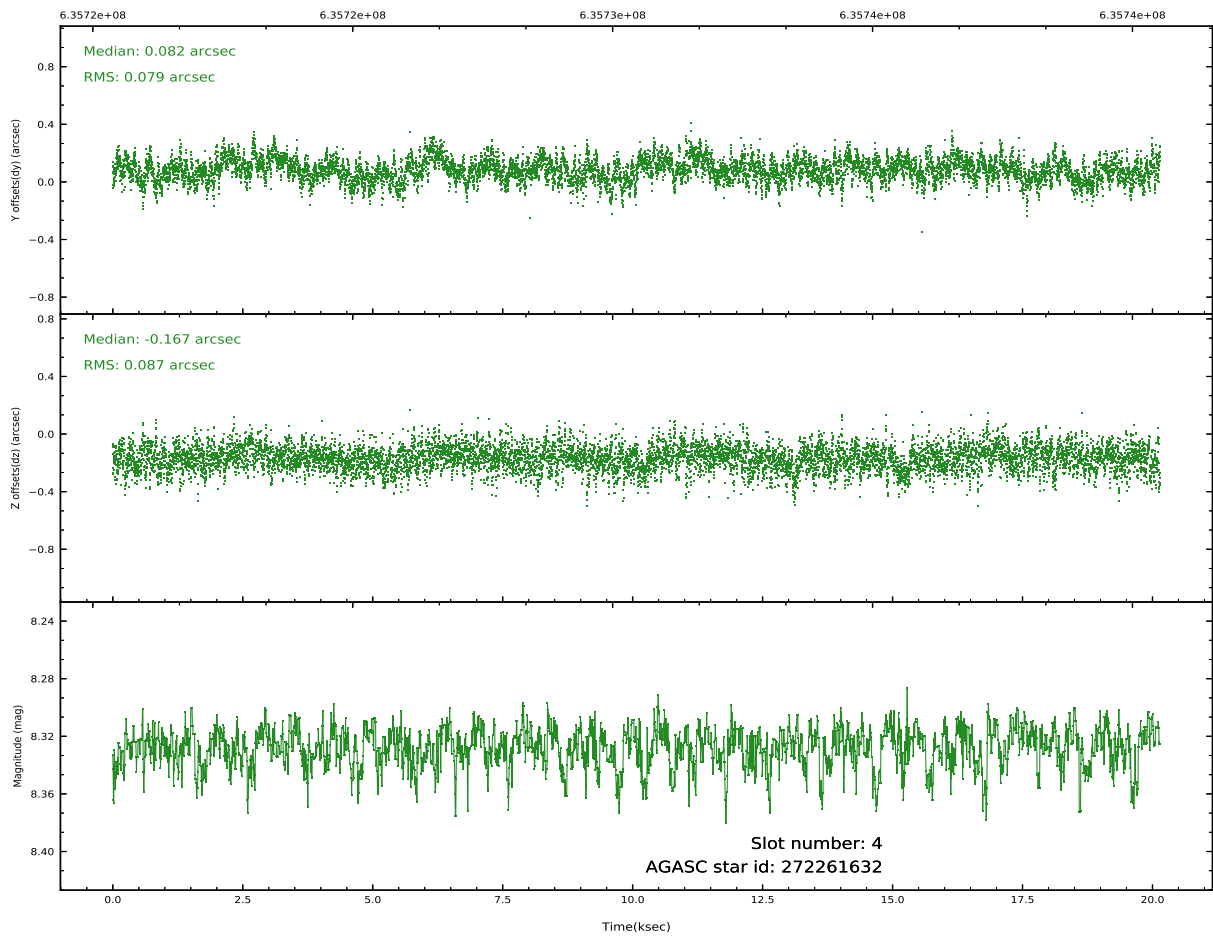
Time (s)



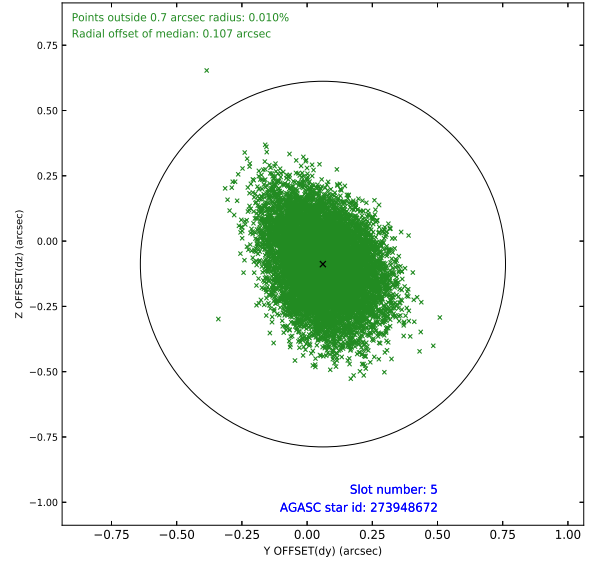
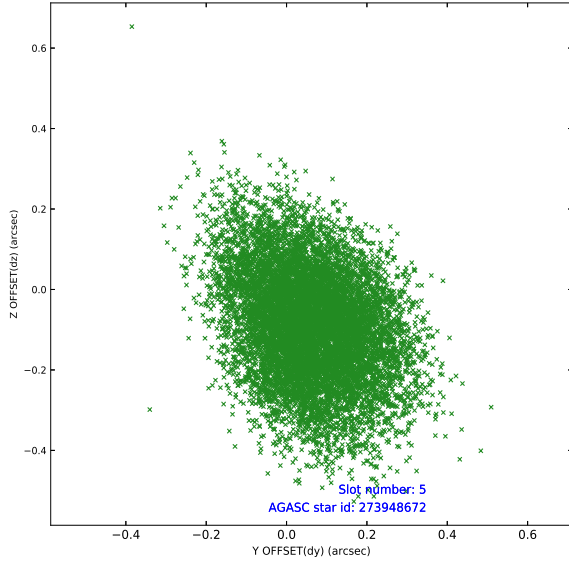
## 2.4.2 Slot 4



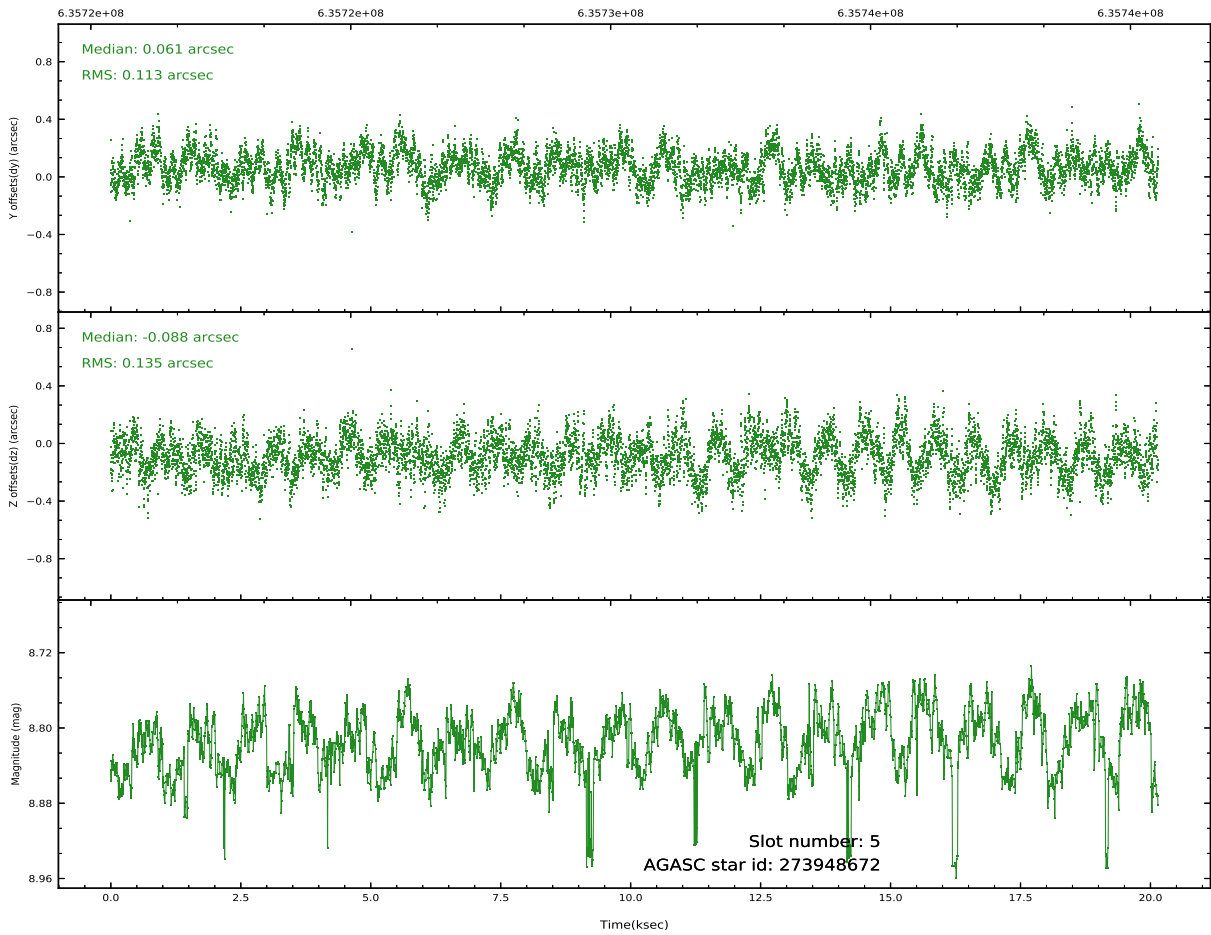
Time (s)



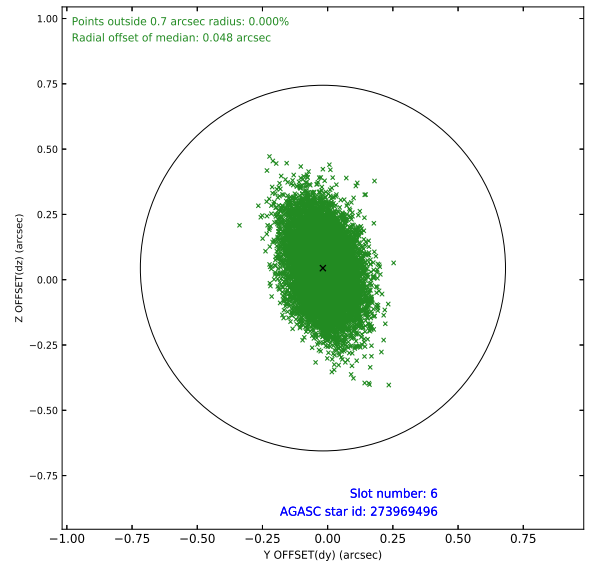
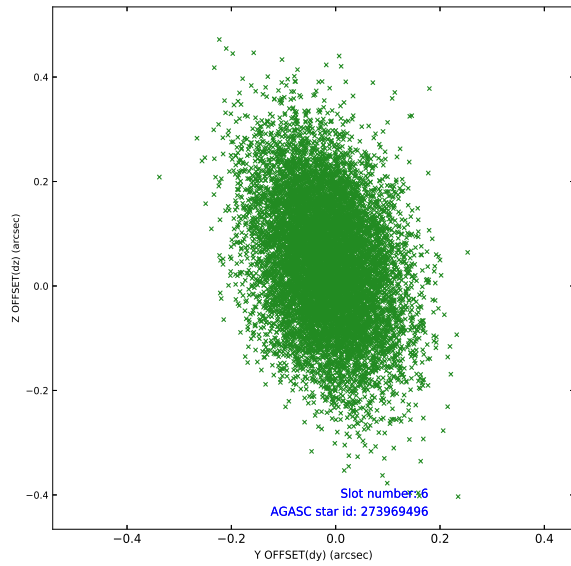
### 2.4.3 Slot 5



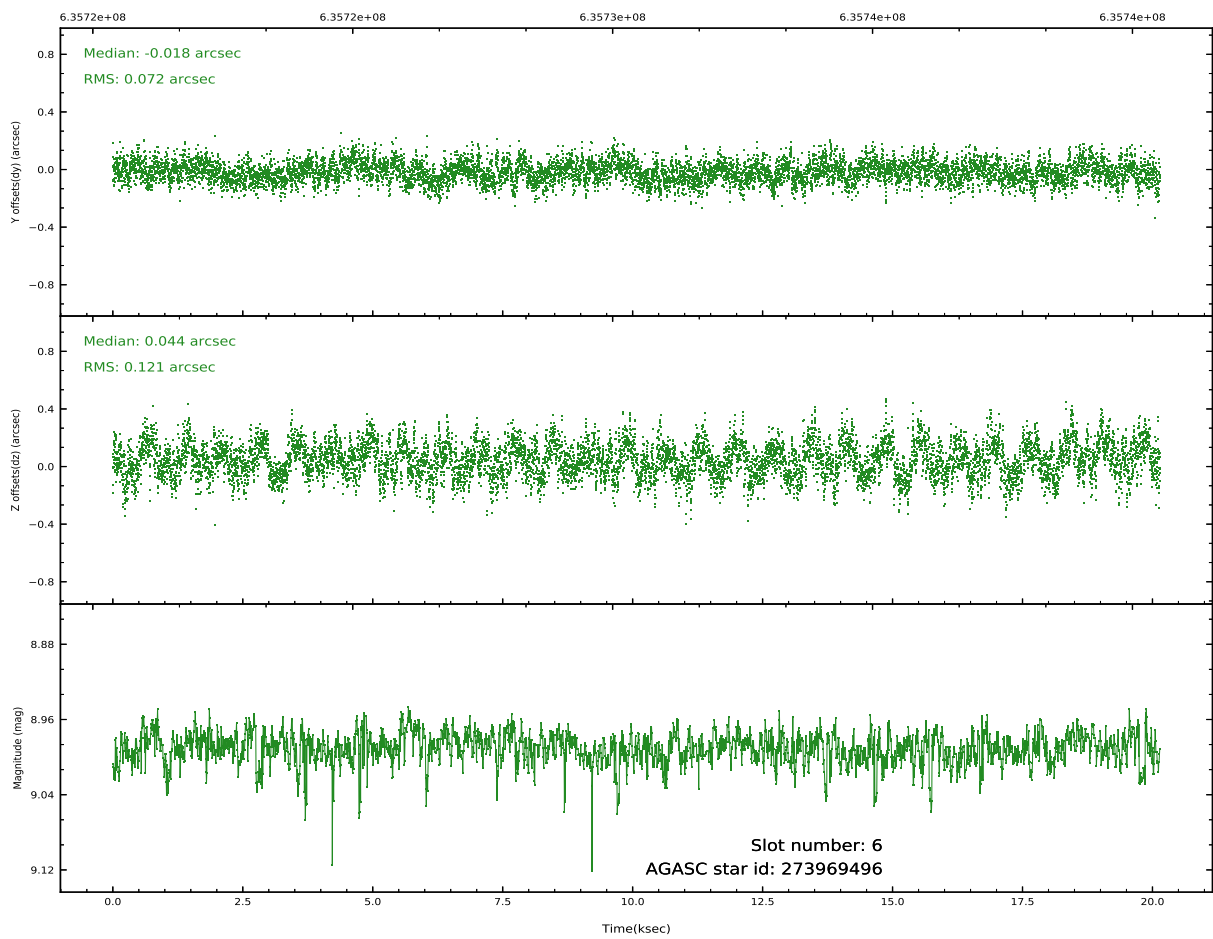
Time (s)



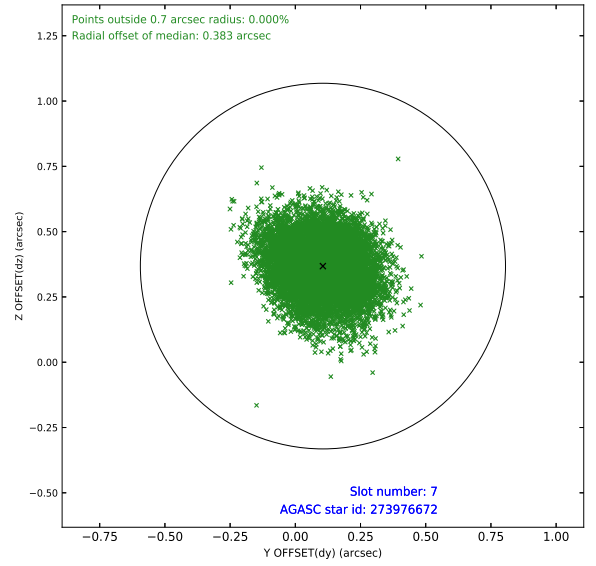
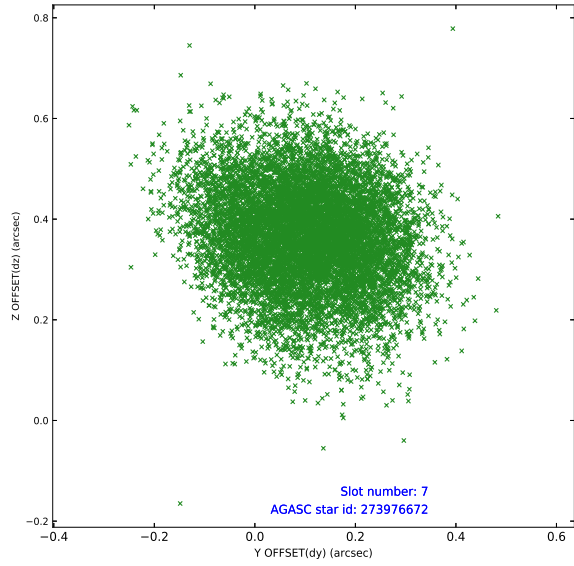
## 2.4.4 Slot 6



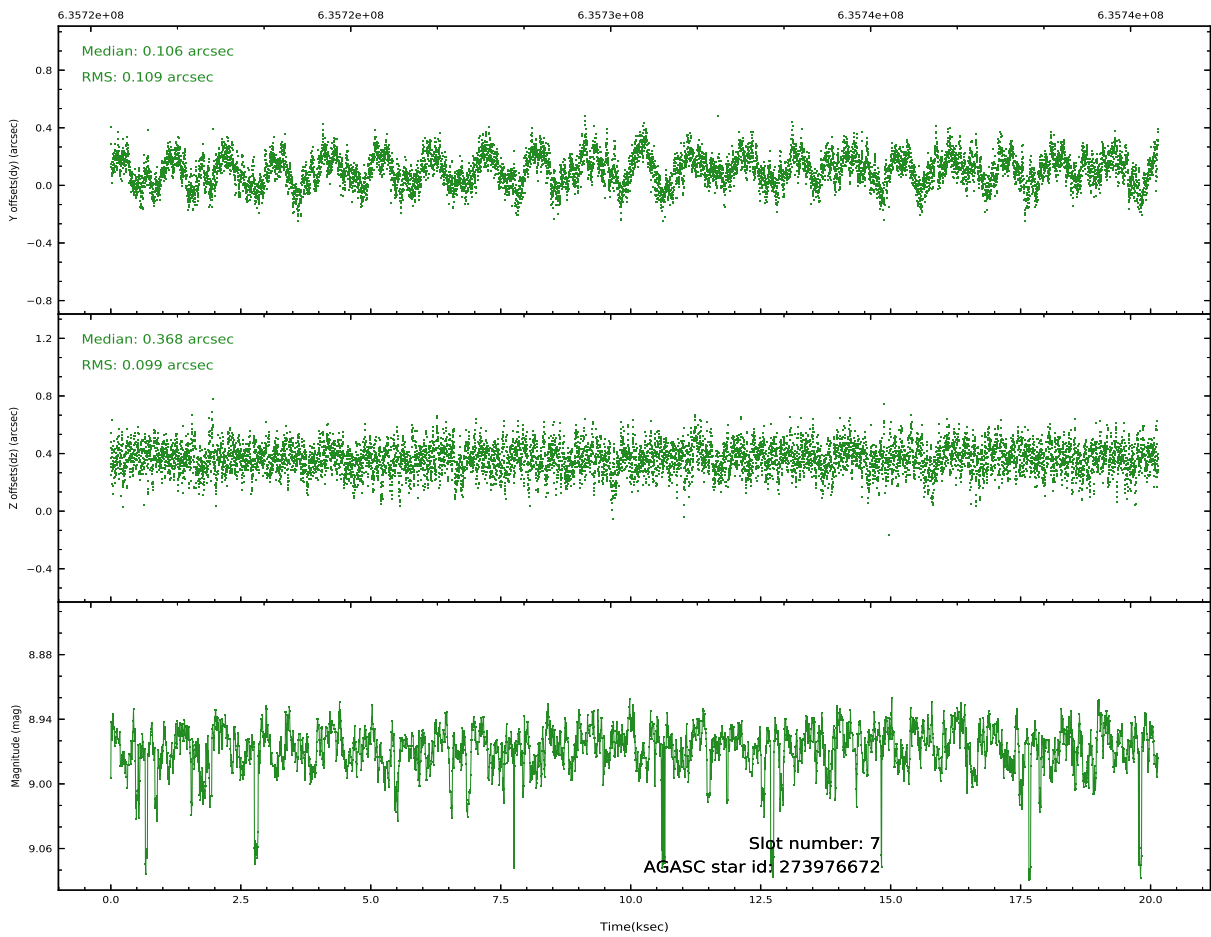
Time (s)



## 2.4.5 Slot 7

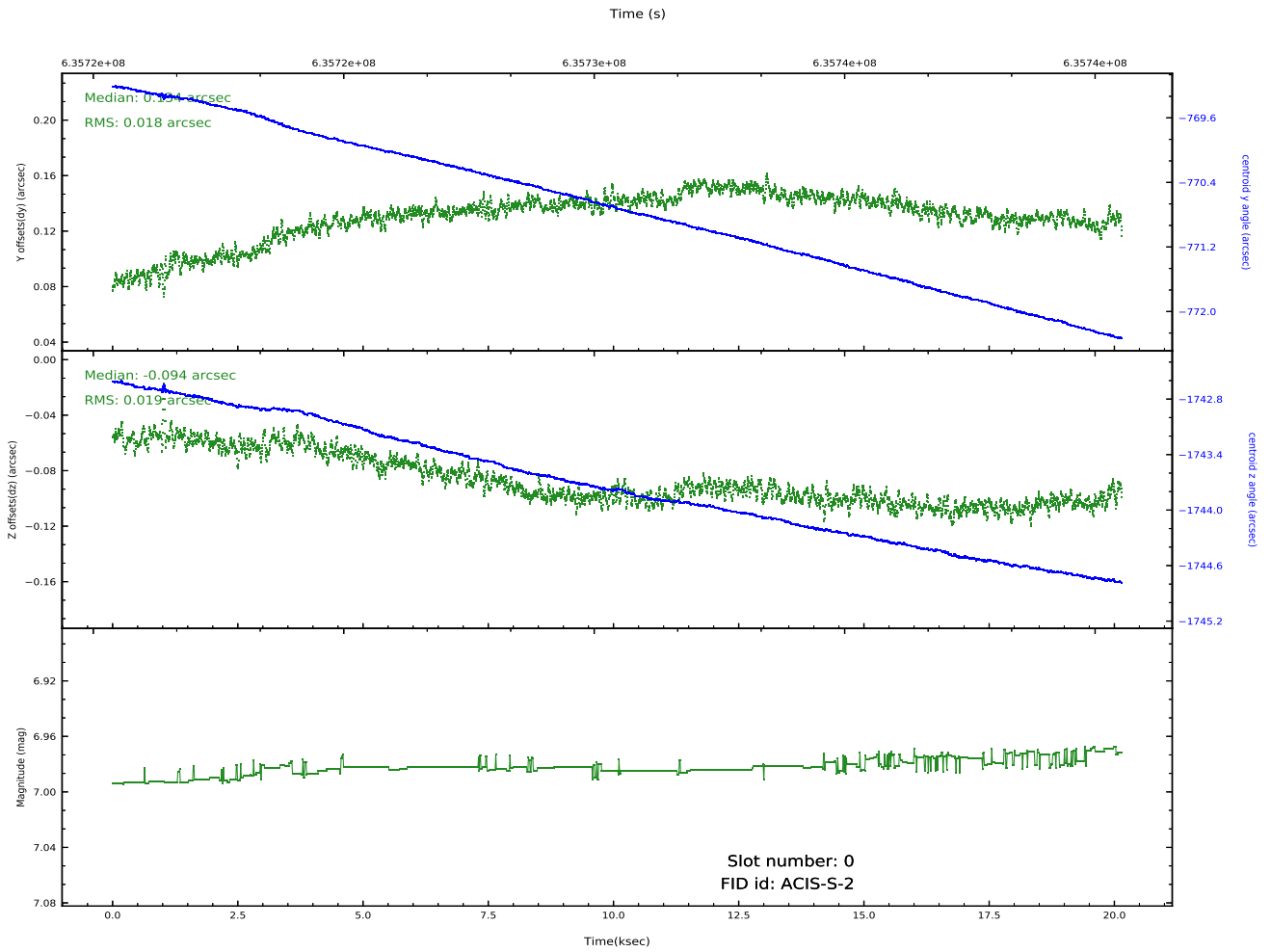
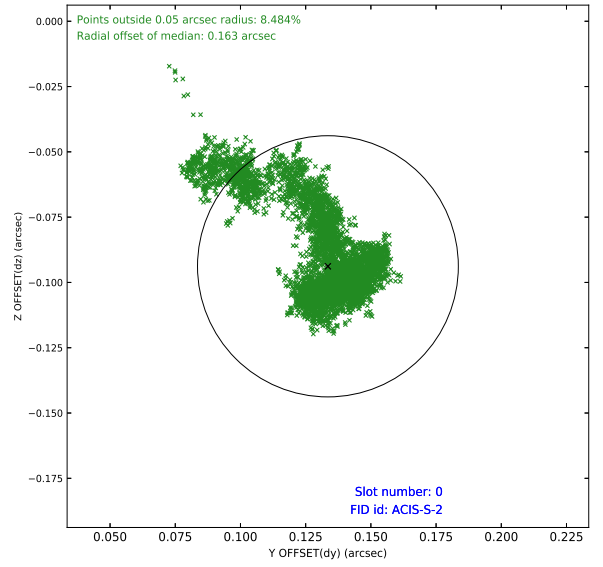
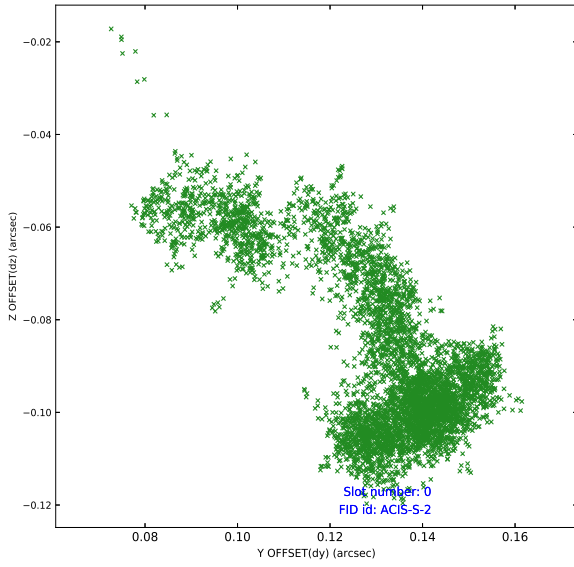


Time (s)

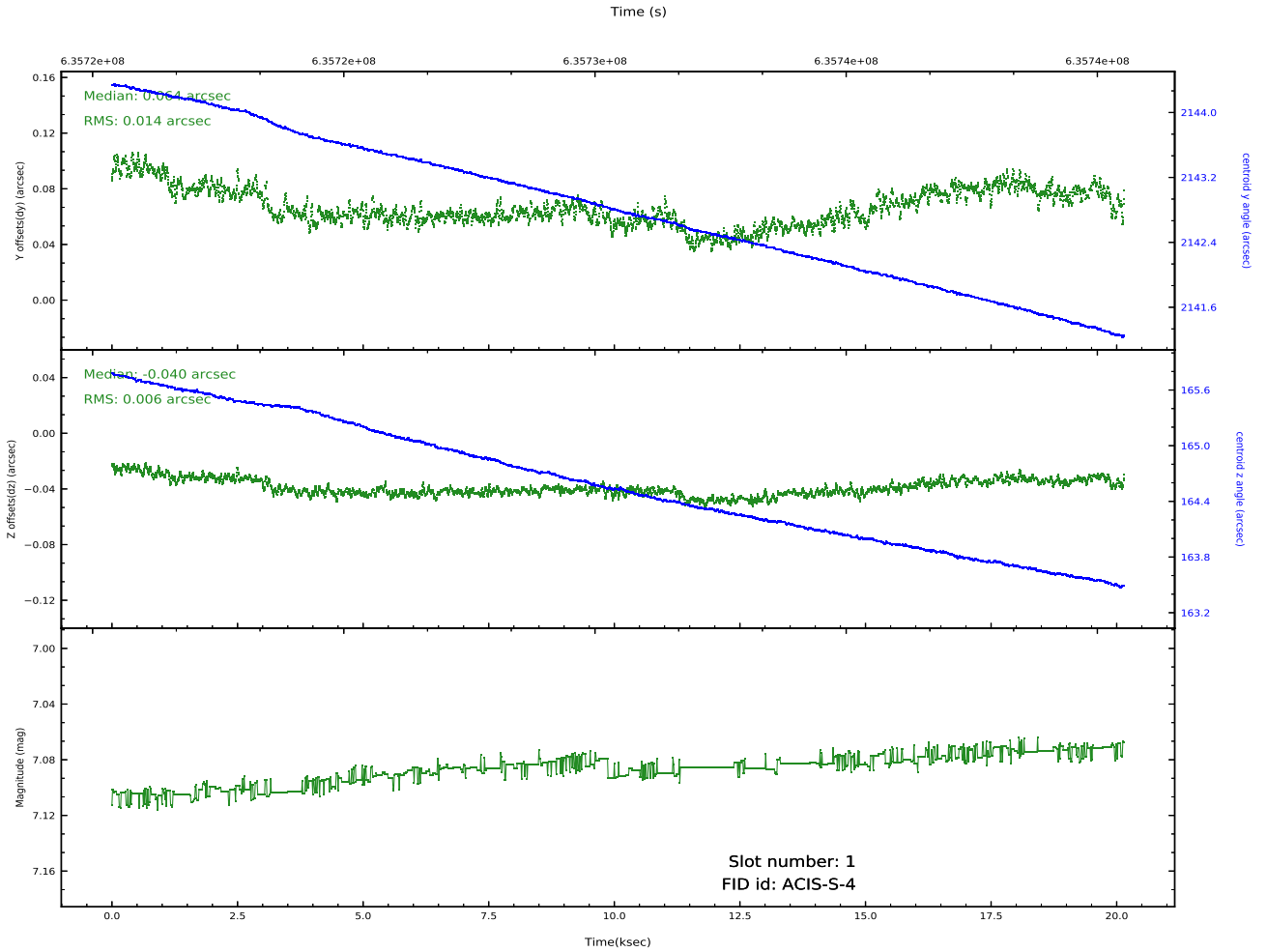
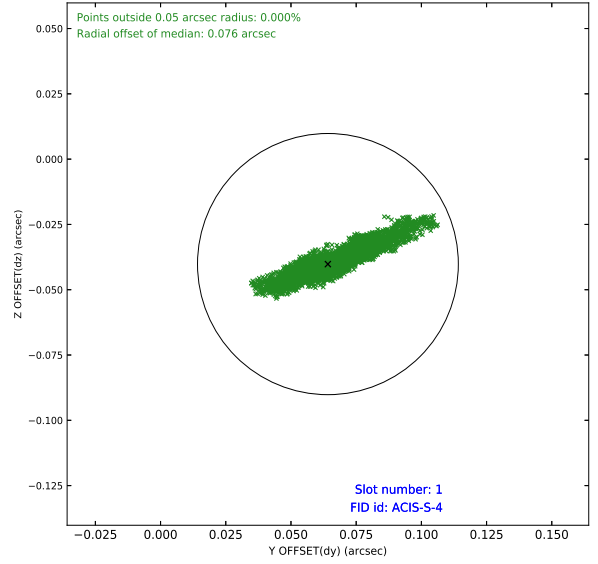
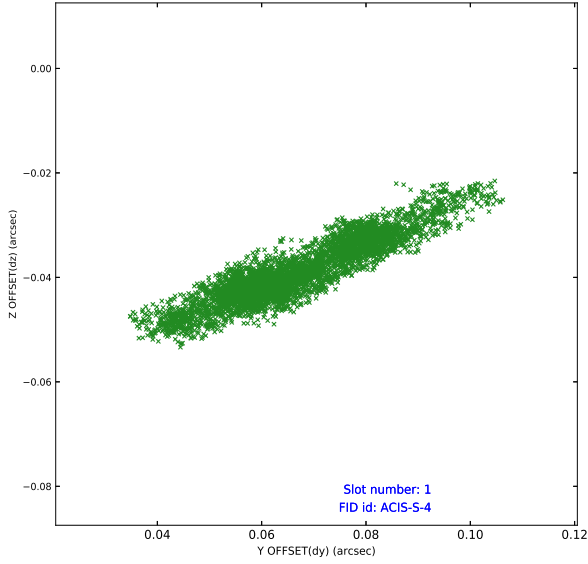


## 2.5 FID Slots

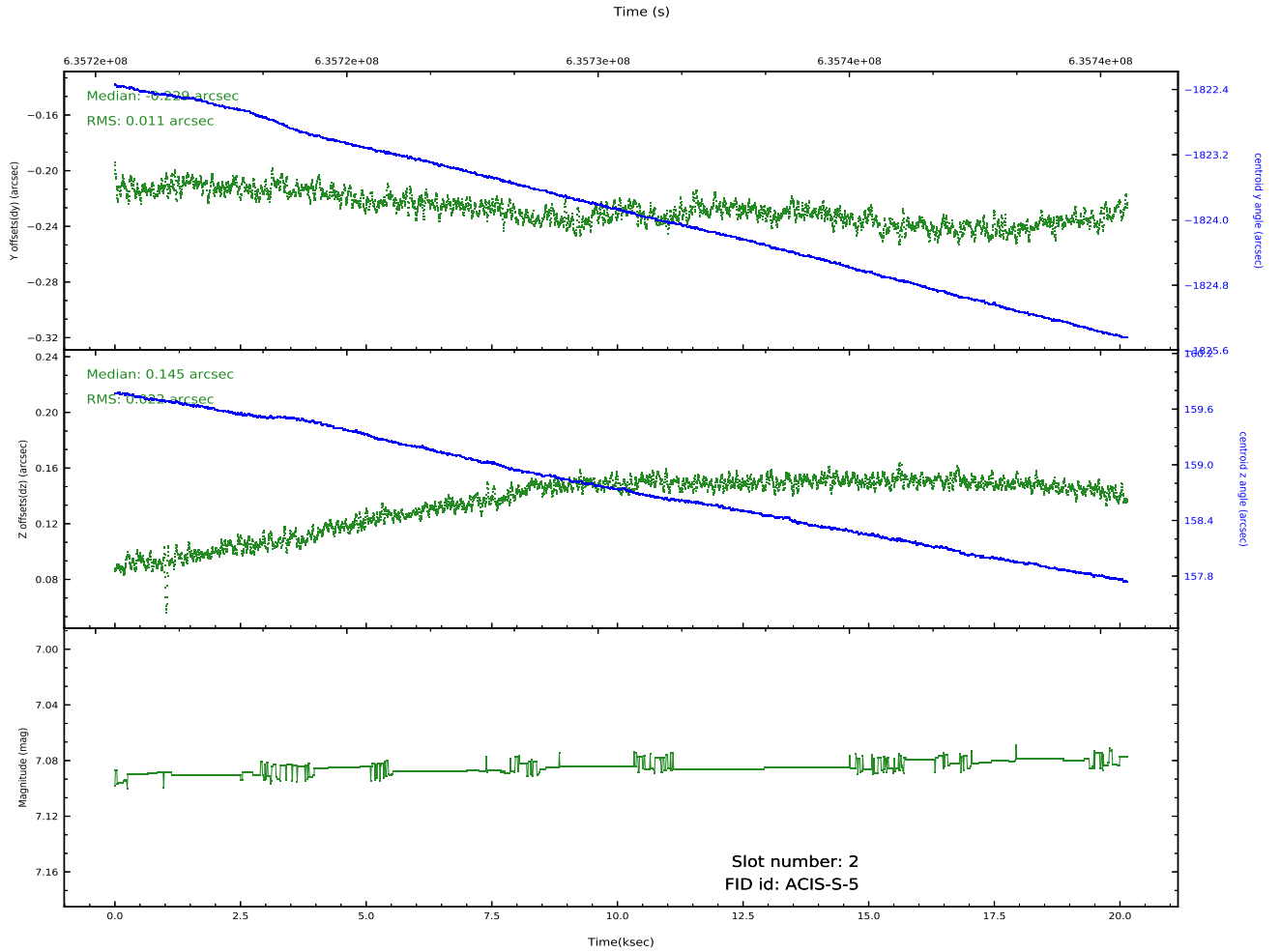
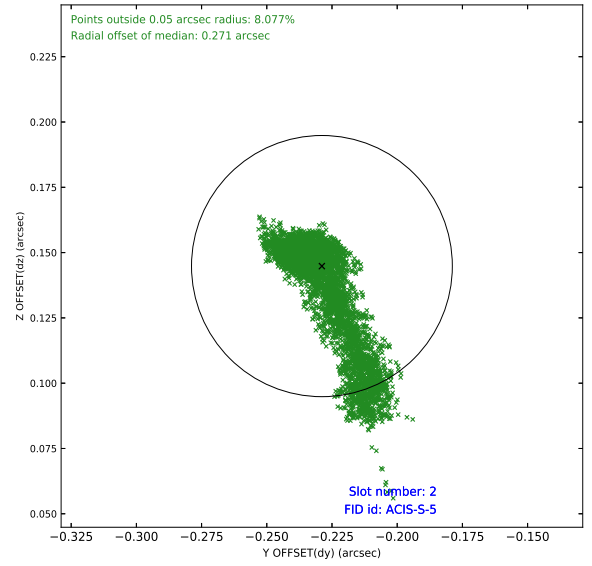
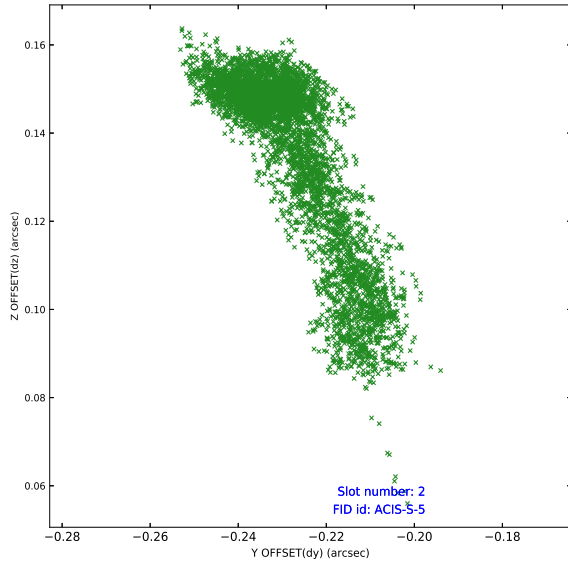
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.137600300074

## A.2 Comments