

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4858 - L2 Version 4  
Chandra X-Ray Center

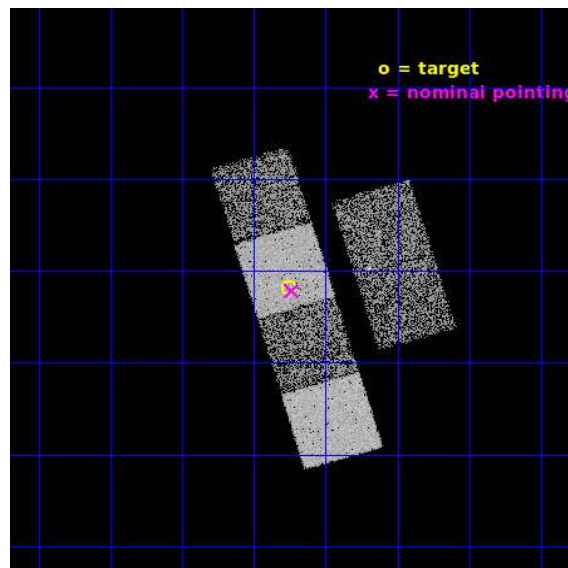
L2 Processing Date : Sep 24 2020

## 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

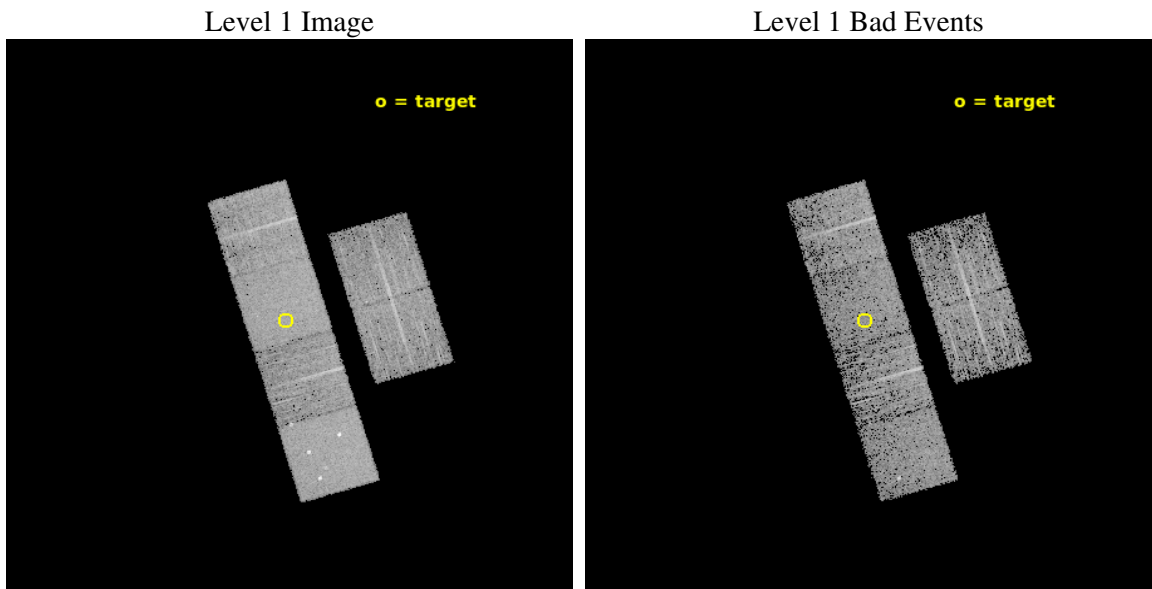
seq_num	700940	Sequence number
obs_id	4858	Observation id
title	X-ray Properties of Dust Reddened Quasars from the Sloan Digital Sky Survey	Proposal title
observer	Gordon Richards	Principal investigator
object	SDSS J113345.62+005813.4	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	173.44	Observer's specified target RA [deg]
dec_targ	0.970389	Observer's specified target Dec [deg]
ra_nom	173.43384290228	Nominal RA [deg]
dec_nom	0.96446568434463	Nominal Dec [deg]
roll_nom	253.1978763109	Nominal Roll [deg]
revision	4	Processing version of data
ontime	4310.3999839425	Sum of GTIs [s]
livetime	4255.8191039346	Livetime [s]
ontime2	4310.3999839425	Sum of GTIs [s]
ontime3	4310.3999839425	Sum of GTIs [s]
ontime5	4310.3999839425	Sum of GTIs [s]
ontime6	4310.3999839425	Sum of GTIs [s]
ontime7	4310.3999839425	Sum of GTIs [s]
ontime8	4310.3999839425	Sum of GTIs [s]
l2events	51956	Number of level 2 events



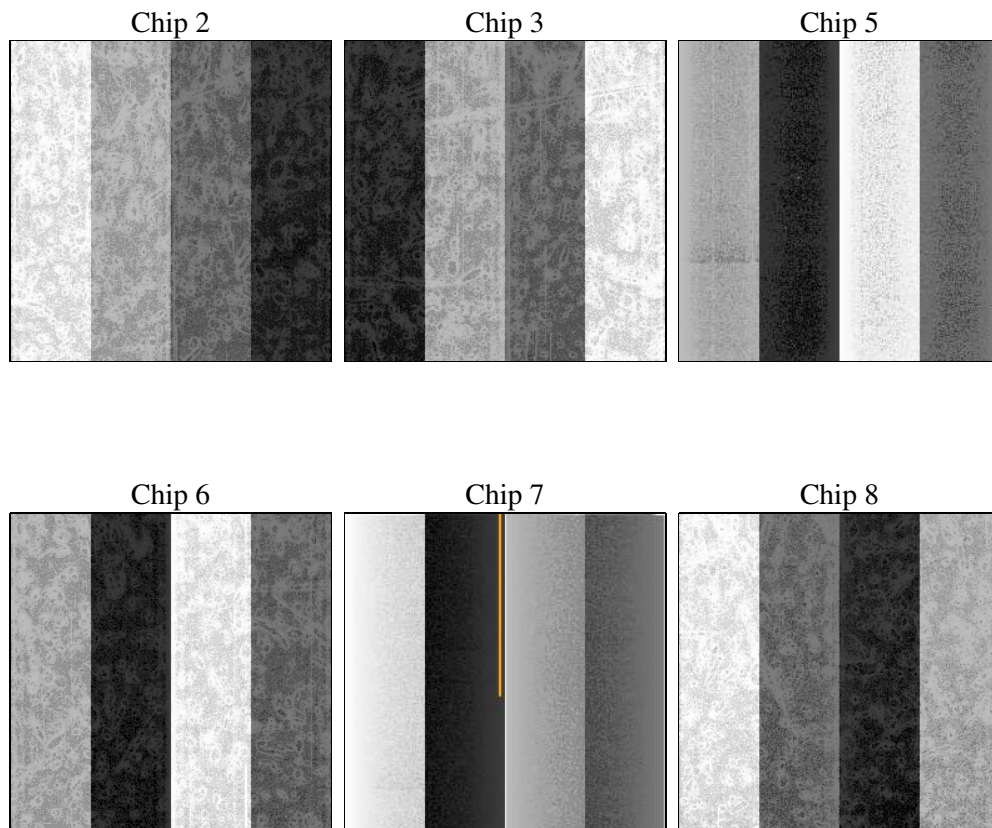
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4350.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	4310.3999839425	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	4310.3999839425	Sum of GTIs [s]
date	2020-09-24T13:06:08	Date and time of file creation	ontime3	4310.3999839425	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	4310.3999839425	Sum of GTIs [s]
			ontime6	4310.3999839425	Sum of GTIs [s]
			ontime7	4310.3999839425	Sum of GTIs [s]
			ontime8	4310.3999839425	Sum of GTIs [s]
			l1events	218178	Number of level 1 events

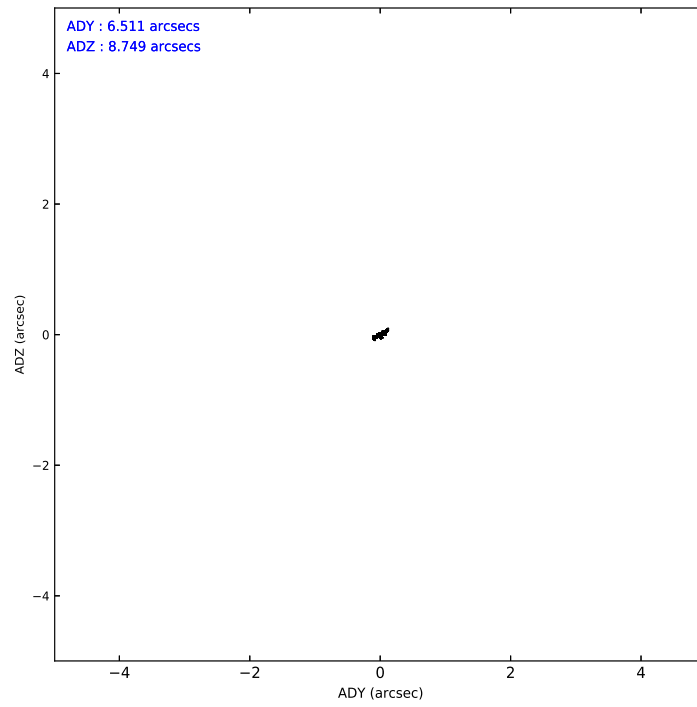
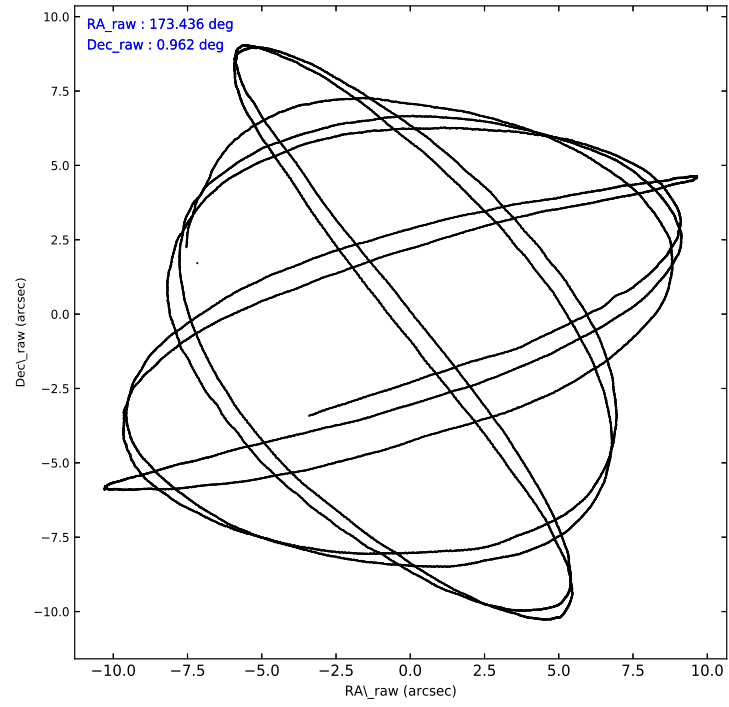
### 2.1.4 Events

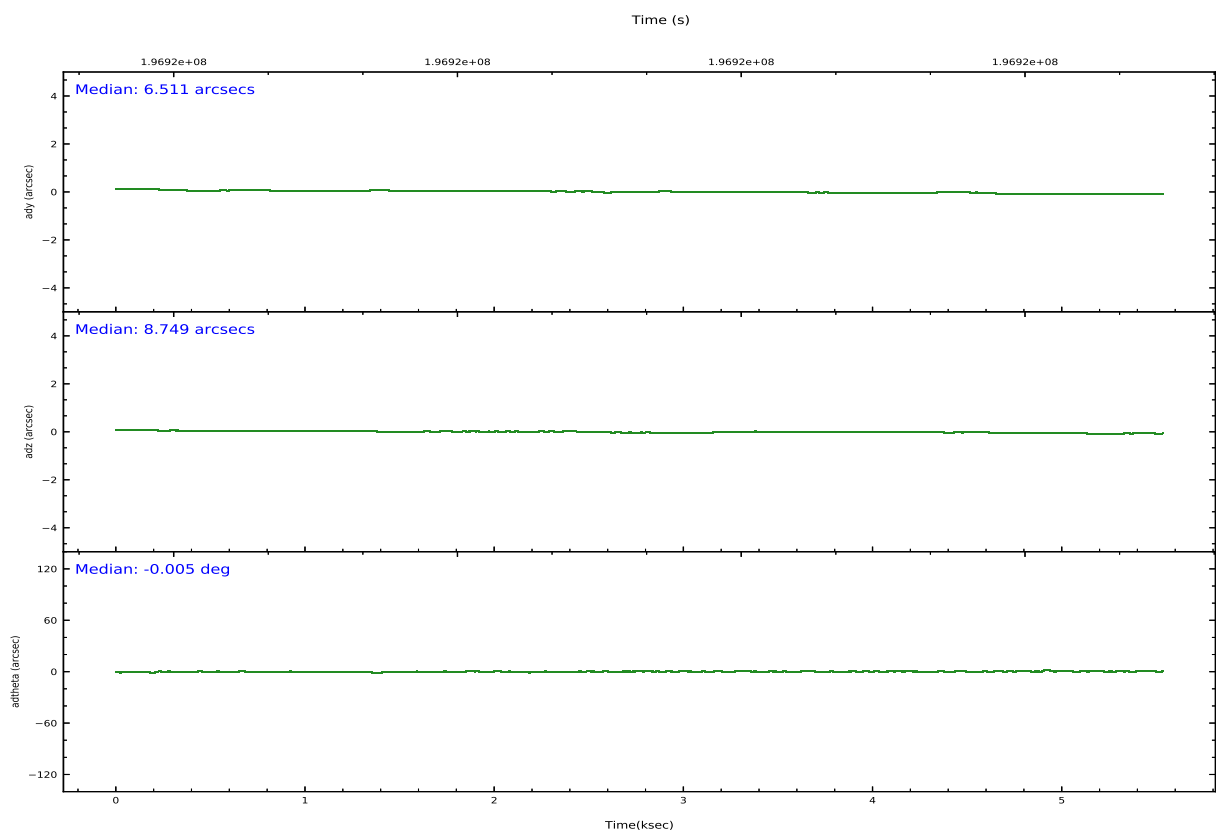
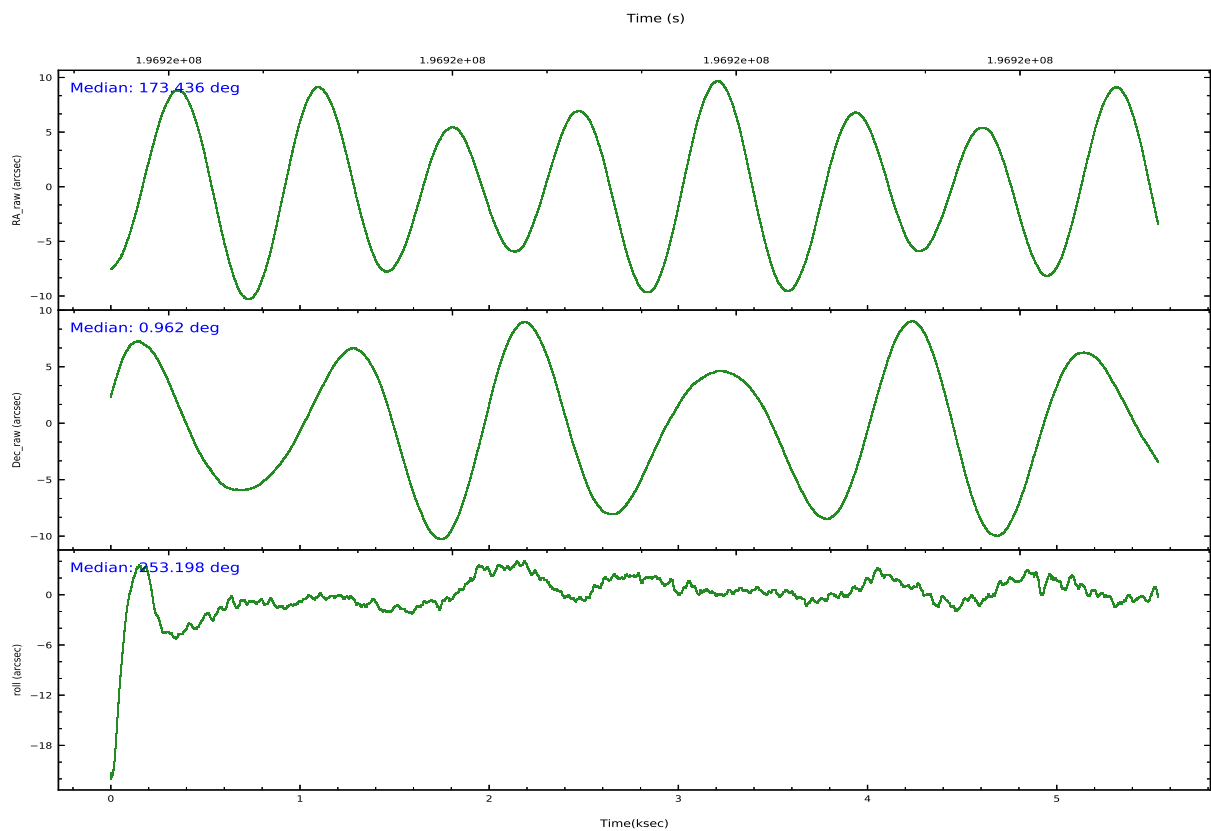
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	31061	29665	47138	30701	41161	38452	grade 0 events	1984	2219	3669	1903	1644	3026
rejected events	26921	25218	24247	26337	23661	29877		6%	7%	7%	6%	3%	7%
rejected %	86%	85%	51%	85%	57%	77%	grade 1 events	25	24	92	19	34	32
								0%	0%	0%	0%	0%	0%
							grade 2 events	795	780	6633	847	3435	1802
								2%	2%	14%	2%	8%	4%
							grade 3 events	355	402	873	396	1526	863
								1%	1%	1%	1%	3%	2%
							grade 4 events	397	400	755	377	1491	813
								1%	1%	1%	1%	3%	2%
							grade 5 events	1214	1304	3340	1344	3871	1729
								3%	4%	7%	4%	9%	4%
							grade 6 events	612	660	11000	854	9441	2088
								1%	2%	23%	2%	22%	5%
							grade 7 events	25679	23876	20776	24961	19719	28099
								82%	80%	44%	81%	47%	73%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	173.429048	173.43384290228	Subarray requested	NONE	NONE
[deg] Pointing Dec	0.988194	0.96446568434463	Alternating exposures requested	N	N
[deg] Pointing Roll	253.040394	253.1978763109	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	196915881.184000	196914416.44338			
Observation start date	2004-03-29T02:50:17	2004-03-29T02:26:56			
[s] Observation end time (MET)	196920231.184000	196921055.36867			
Observation end date	2004-03-29T04:02:47	2004-03-29T04:17:35			
Read mode	TIMED	TIMED			

## 2.3 Aspect



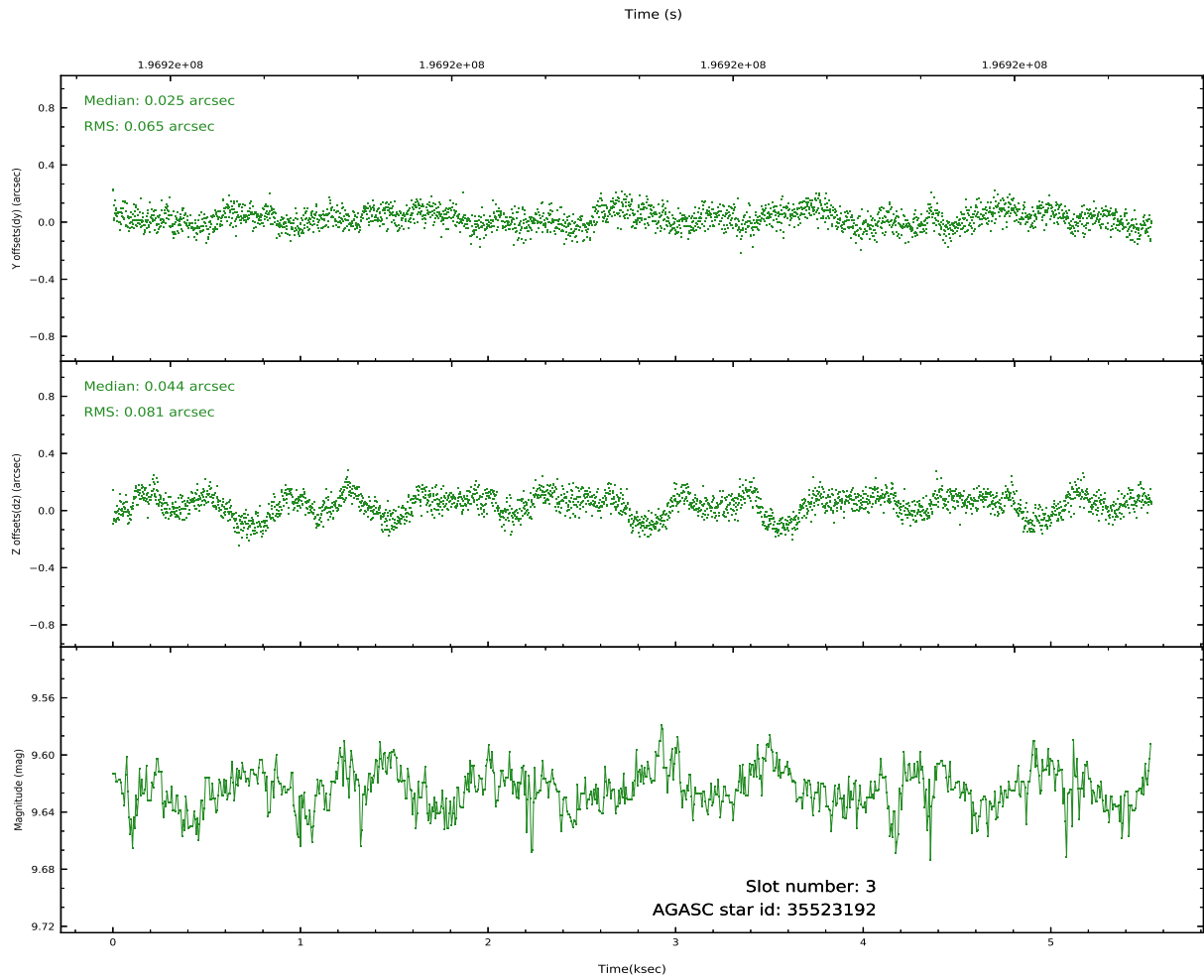
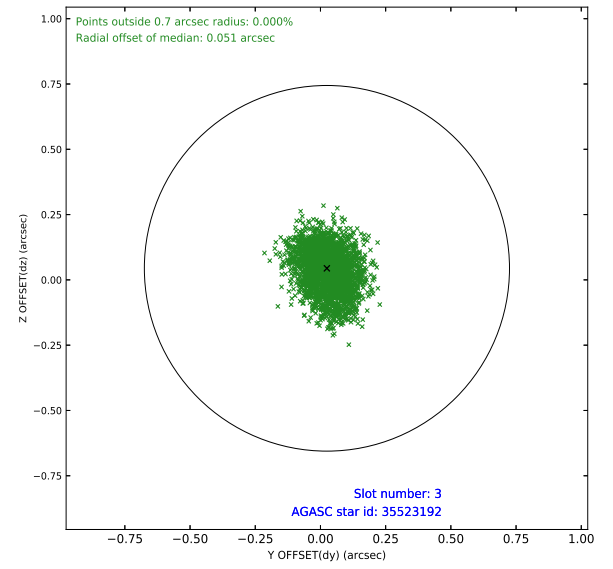
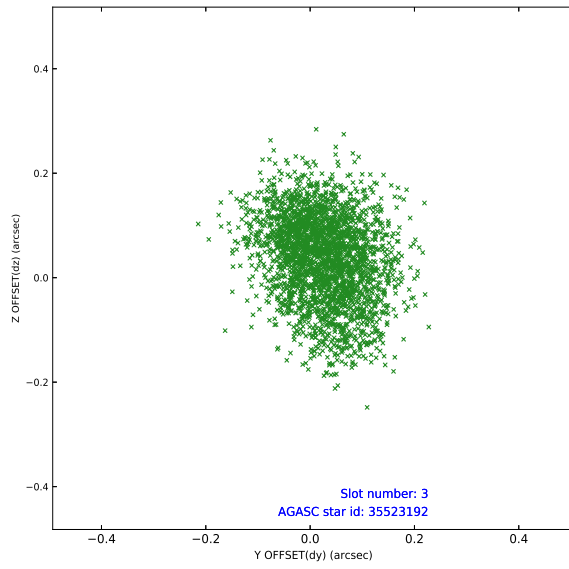


Slot Statistics

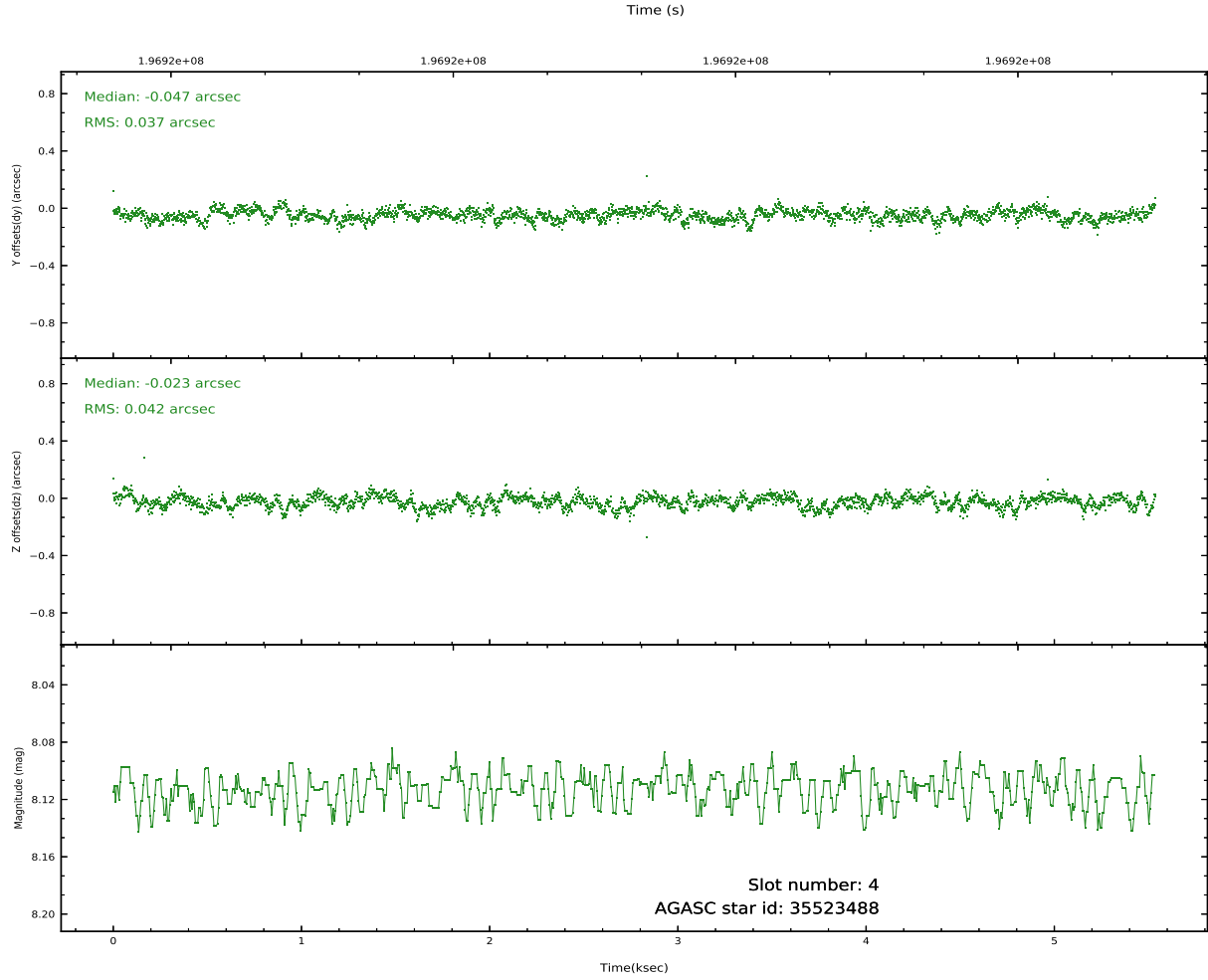
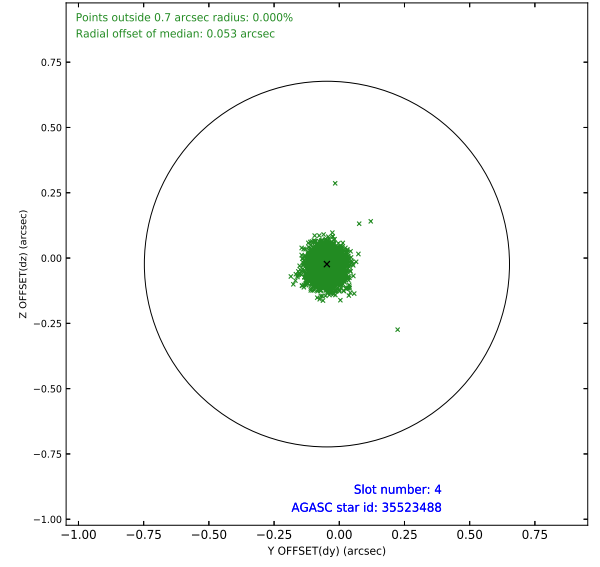
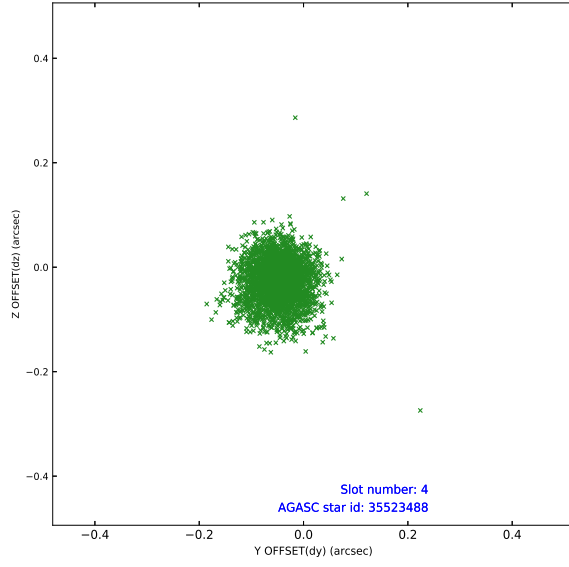
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1351	1.000	-0.066	-0.077	0.007	0.011	0.000000	0.000000	-759.30	-1729
1	FID		ACIS-S-4	7.20	1351	1.000	0.131	0.052	0.006	0.010	0.000000	0.000000	2153.66	177
2	FID		ACIS-S-5	7.23	1351	1.000	-0.097	0.034	0.007	0.011	0.000000	0.000000	-1810.80	172
3	GUIDE	used	35523192	9.62	2700	1.000	0.025	0.044	0.111	0.183	173.097773	0.596002	1699.19	-728
4	GUIDE	used	35523488	8.11	2700	1.000	-0.047	-0.023	0.058	0.096	173.259338	1.285912	-845.53	-897
5	GUIDE	used	35523696	9.78	2702	1.000	0.016	-0.030	0.105	0.186	173.049226	0.720444	1321.35	-1027
6	GUIDE	used	35523952	8.66	2698	1.000	0.013	-0.077	0.071	0.112	173.151656	1.340213	-919.34	-1325
7	GUIDE	used	35528048	9.44	2699	1.000	-0.001	0.093	0.091	0.152	173.938879	1.190096	-1230.27	1542

## 2.4 Star Slots

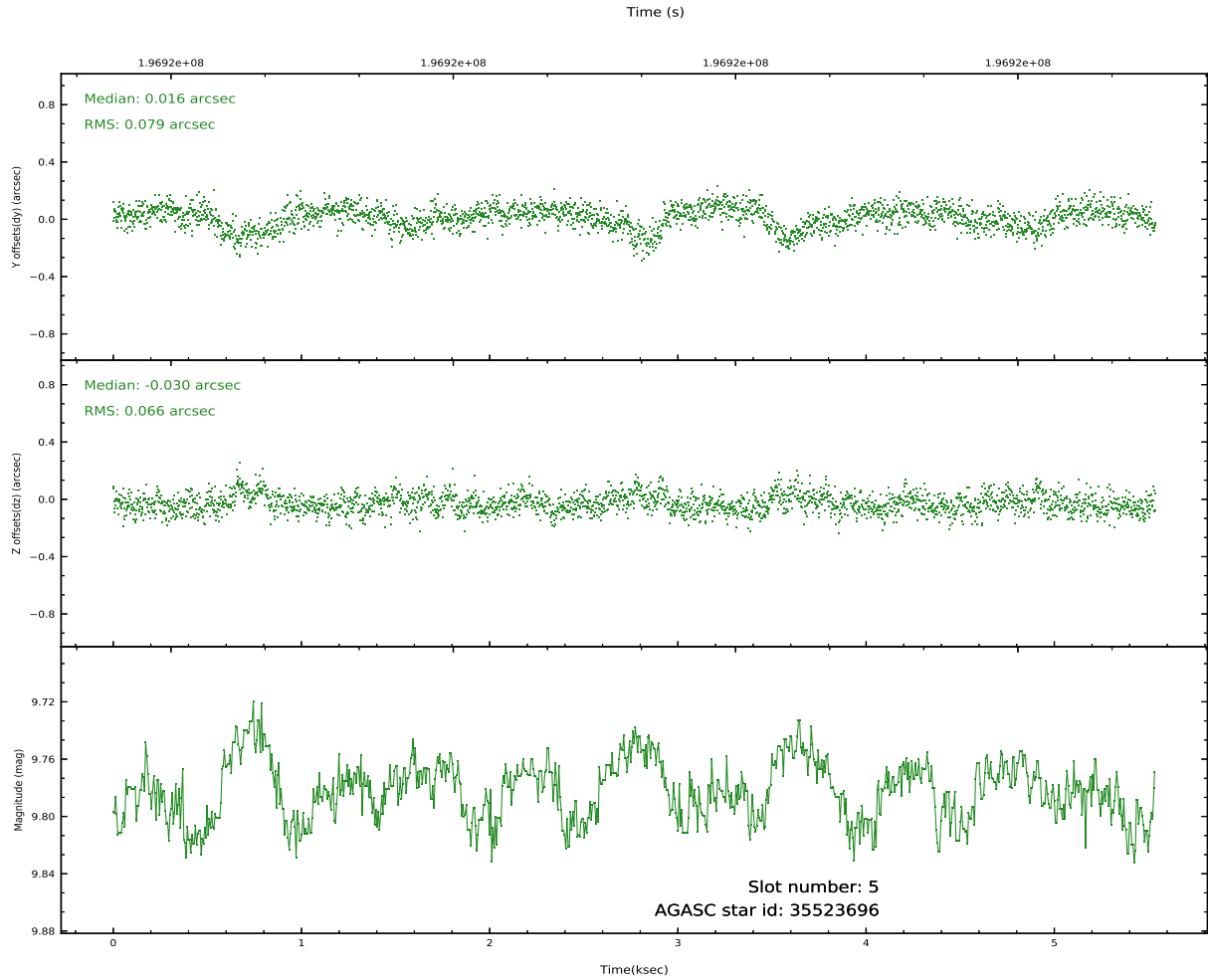
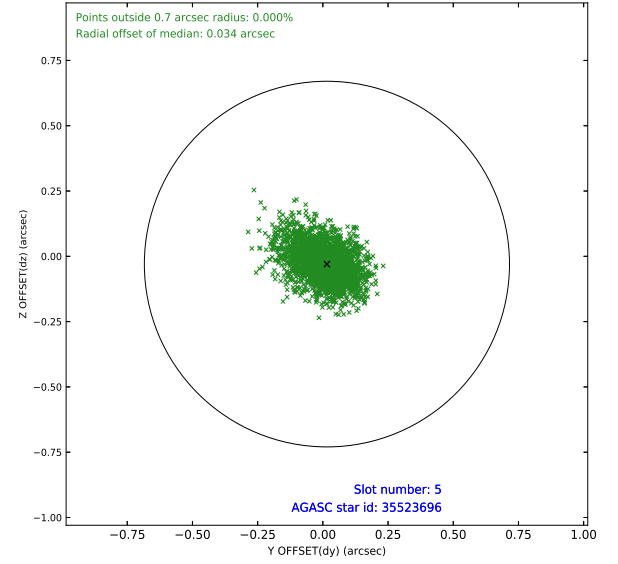
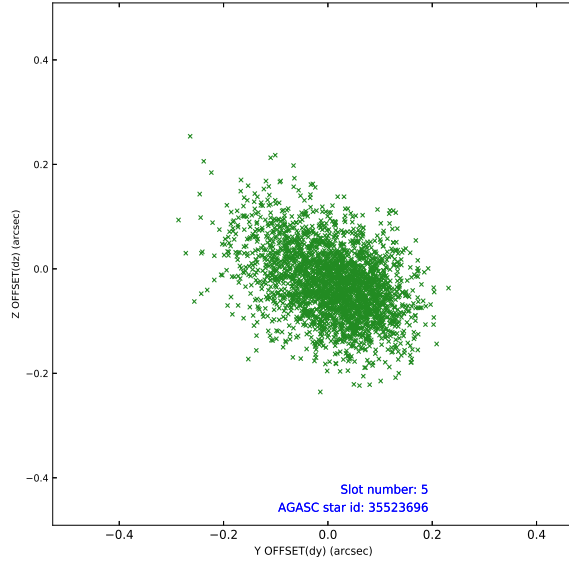
### 2.4.1 Slot 3



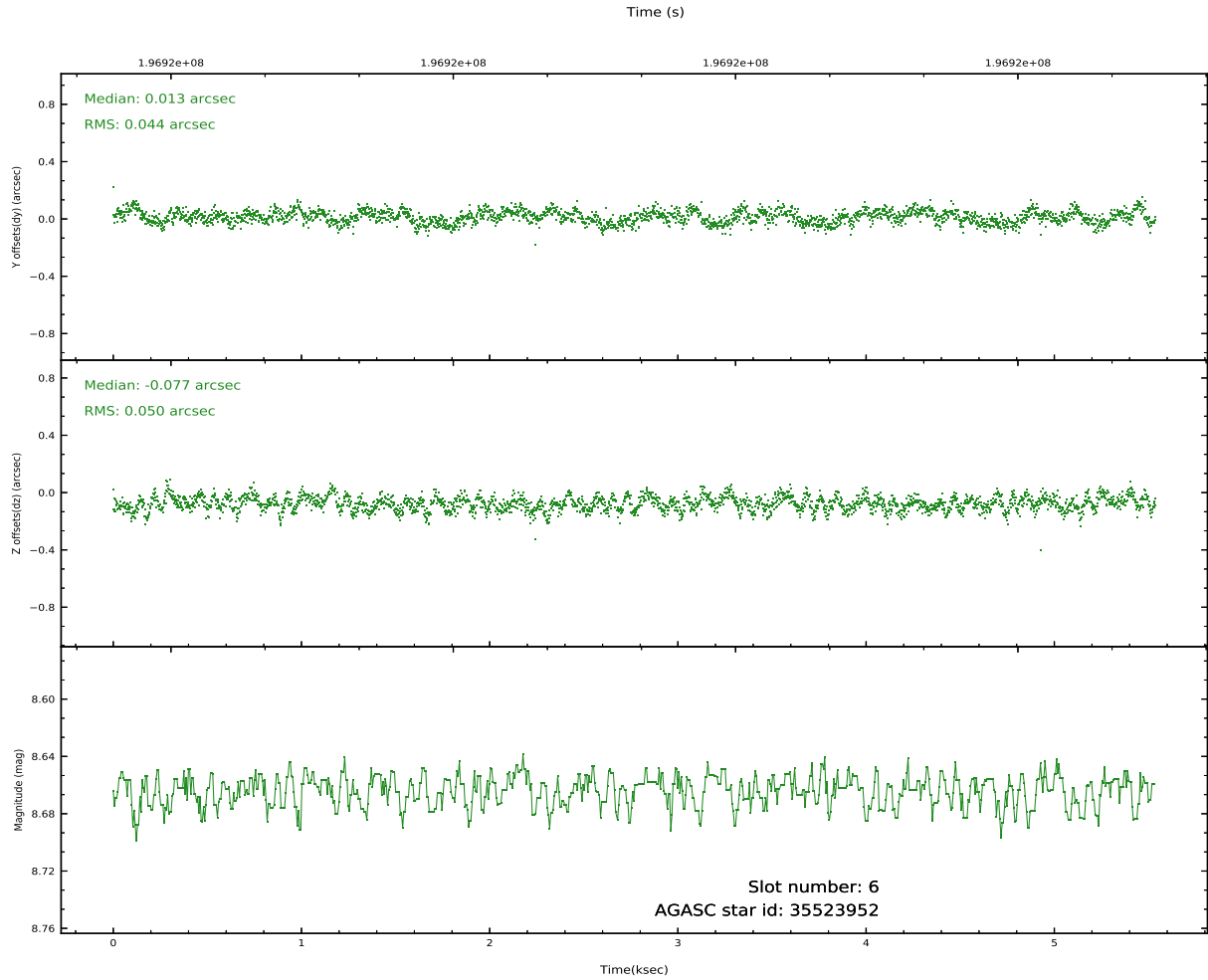
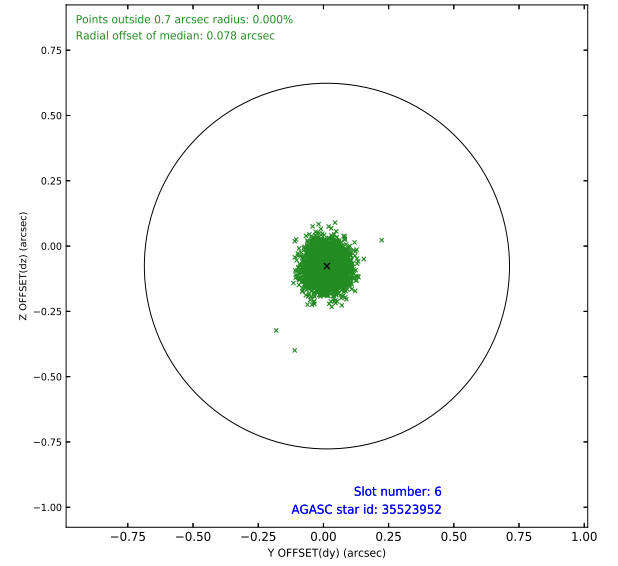
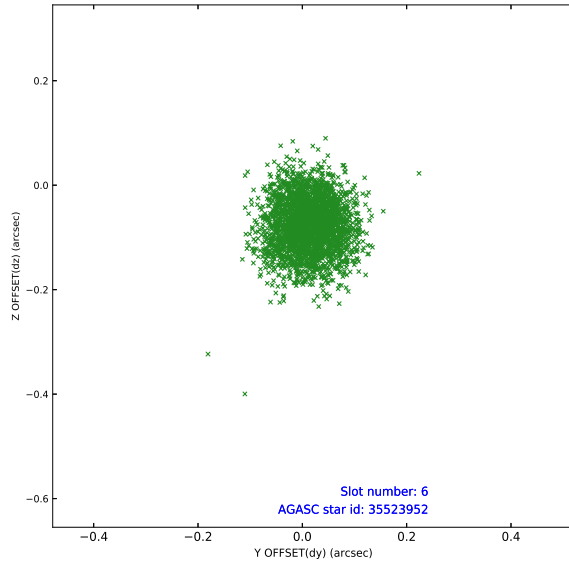
## 2.4.2 Slot 4



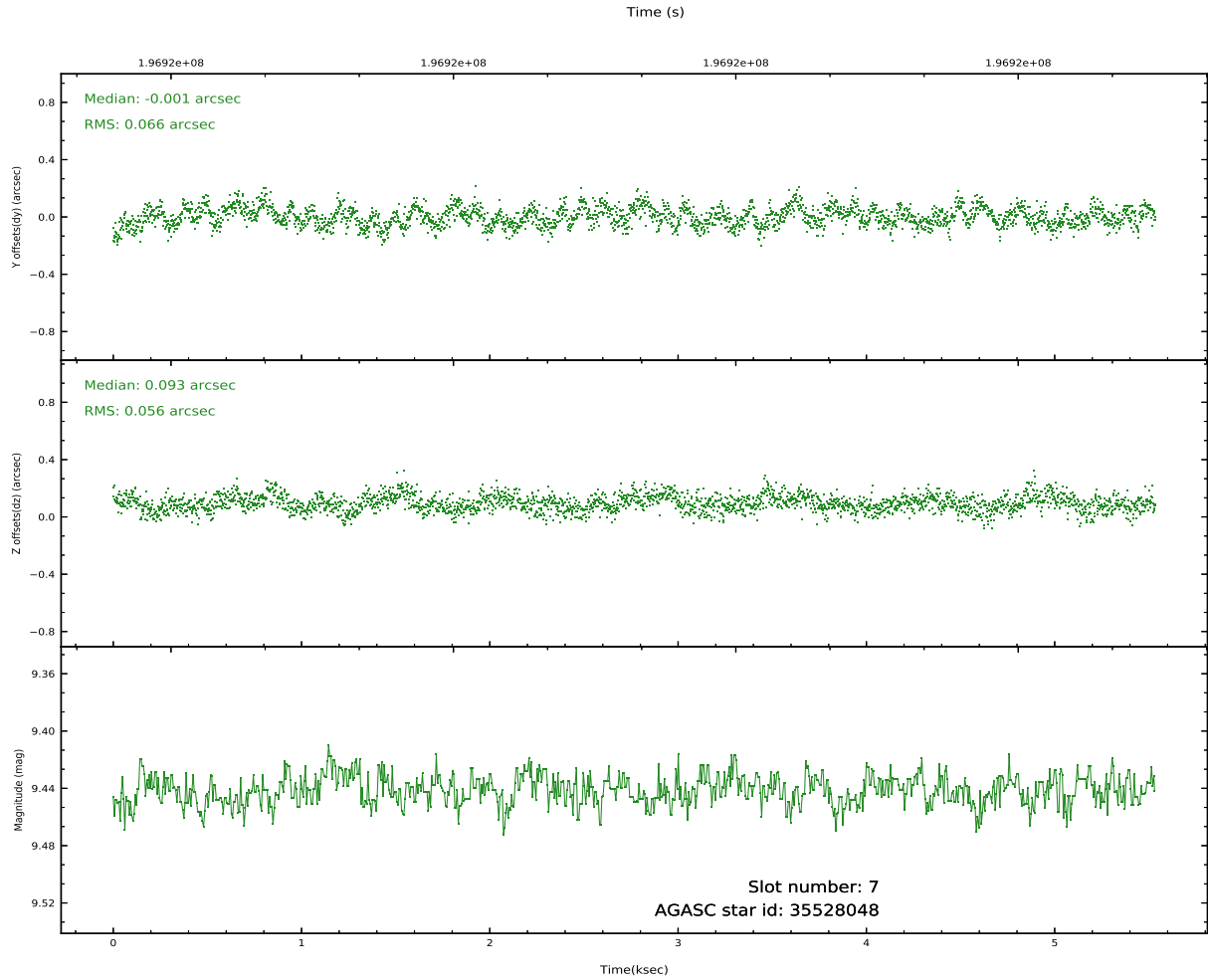
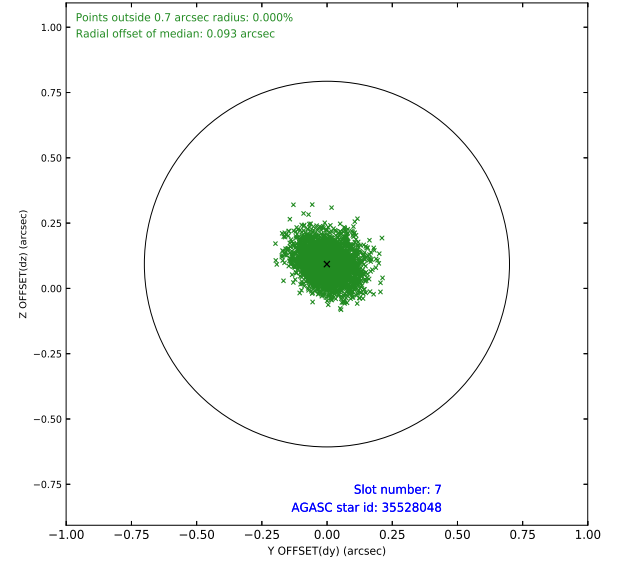
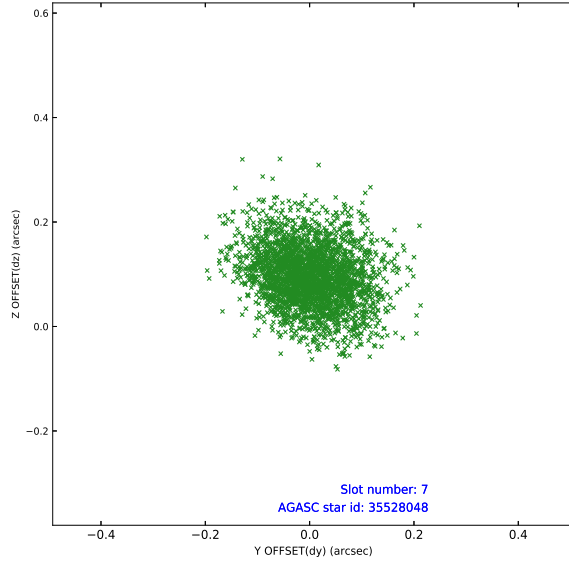
### 2.4.3 Slot 5



## 2.4.4 Slot 6

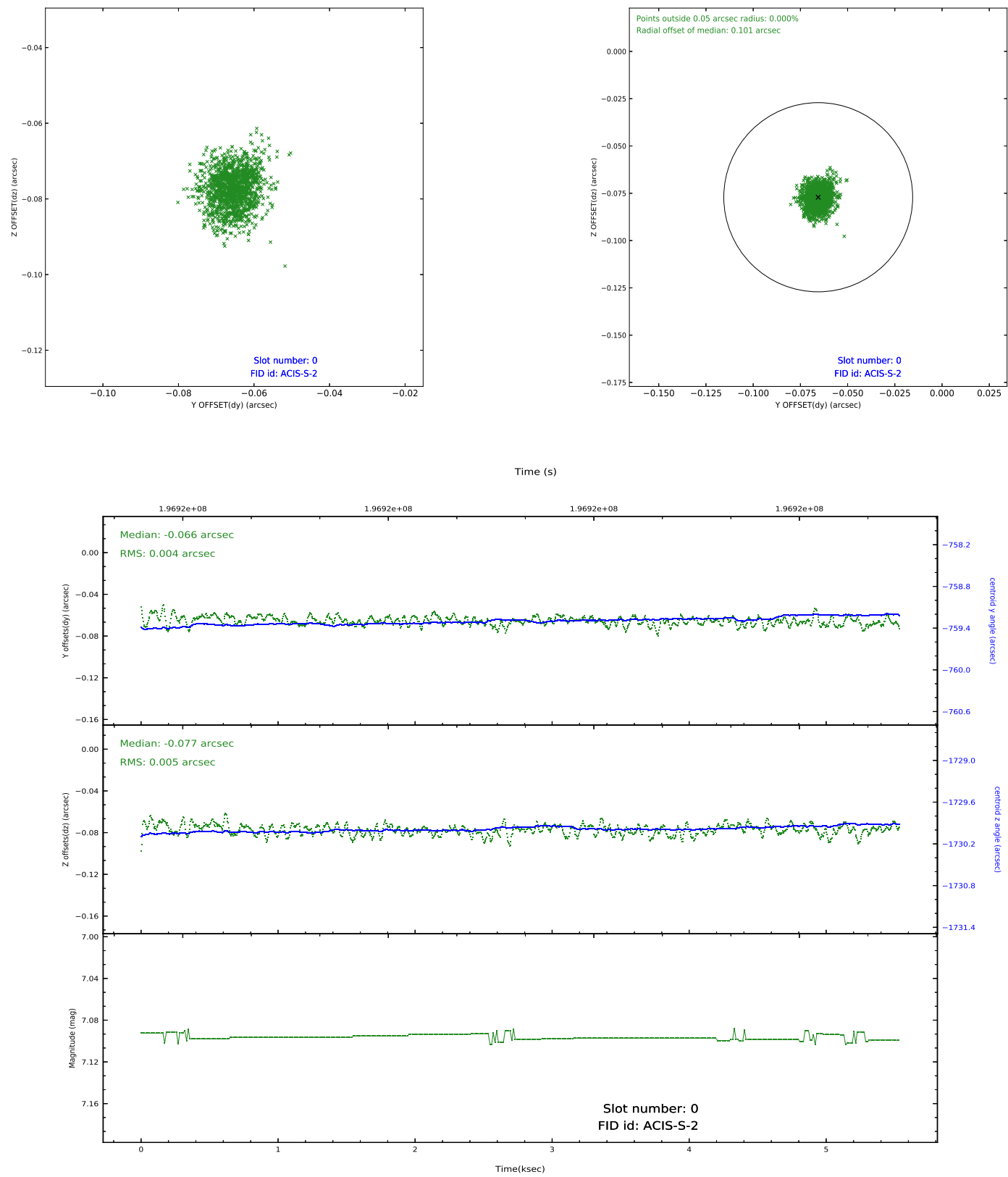


## 2.4.5 Slot 7

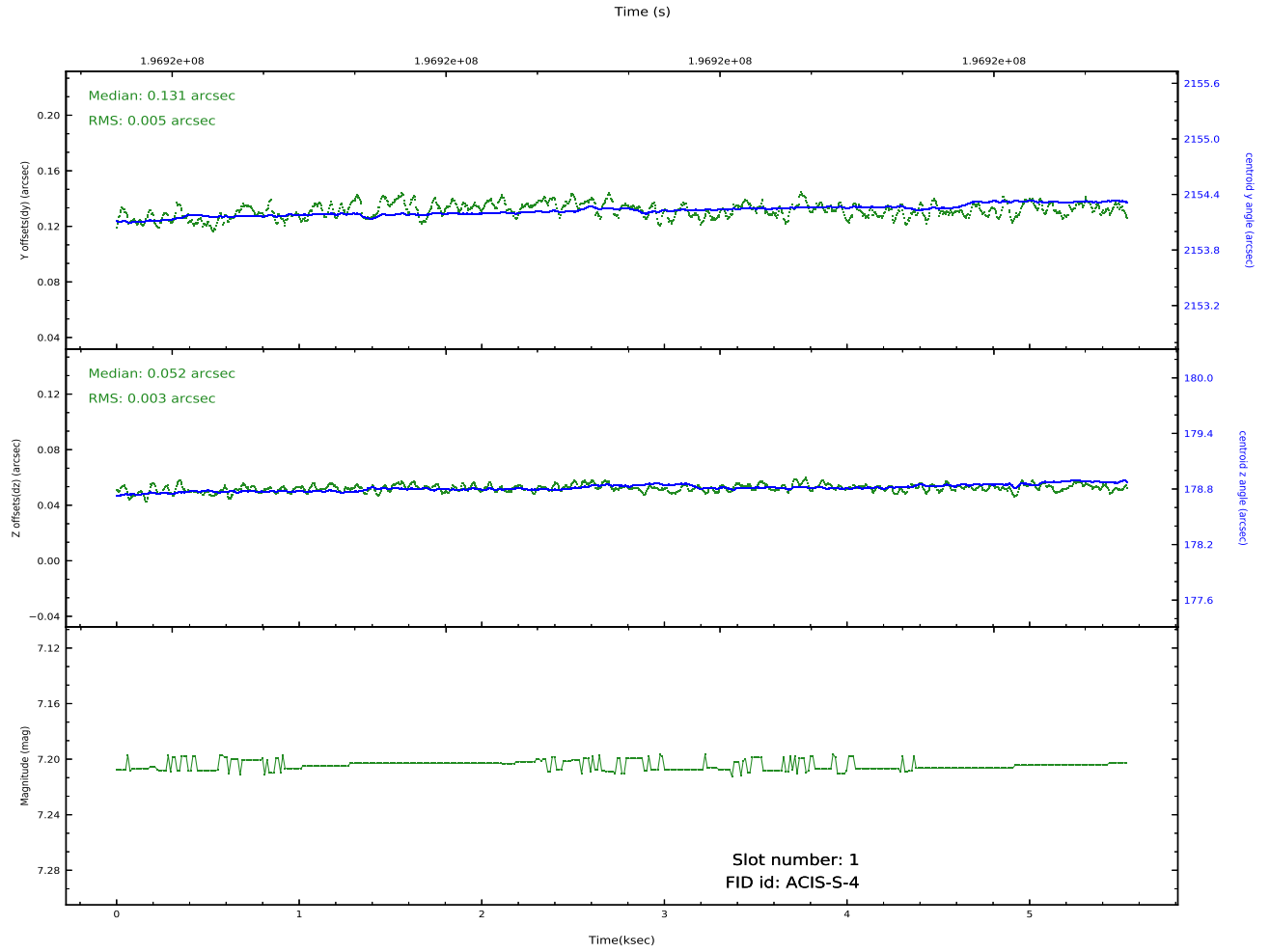
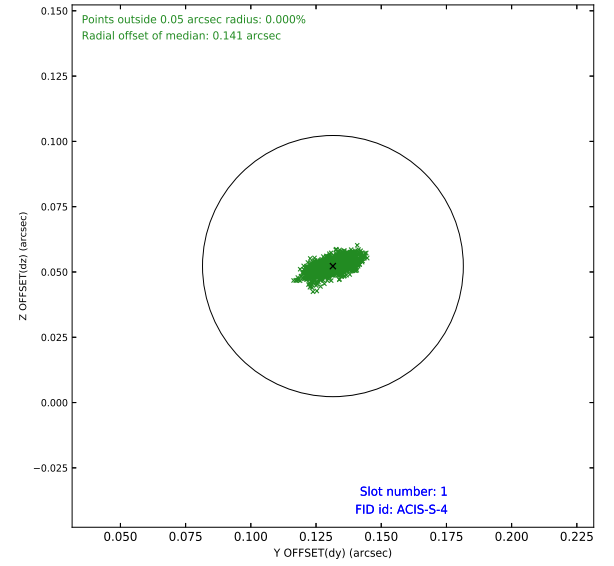
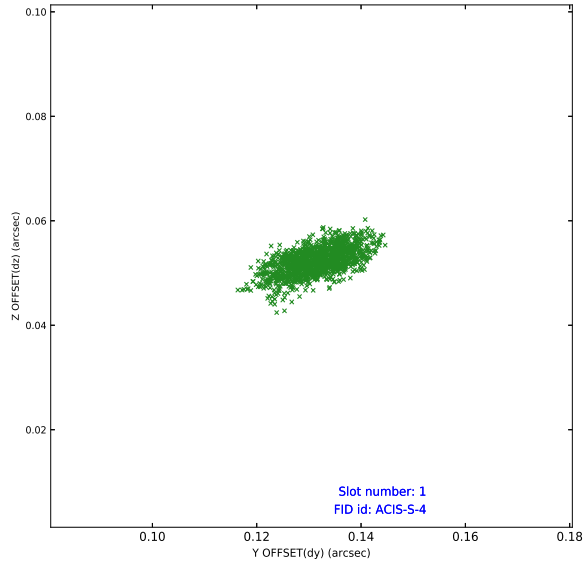


# 2.5 FID Slots

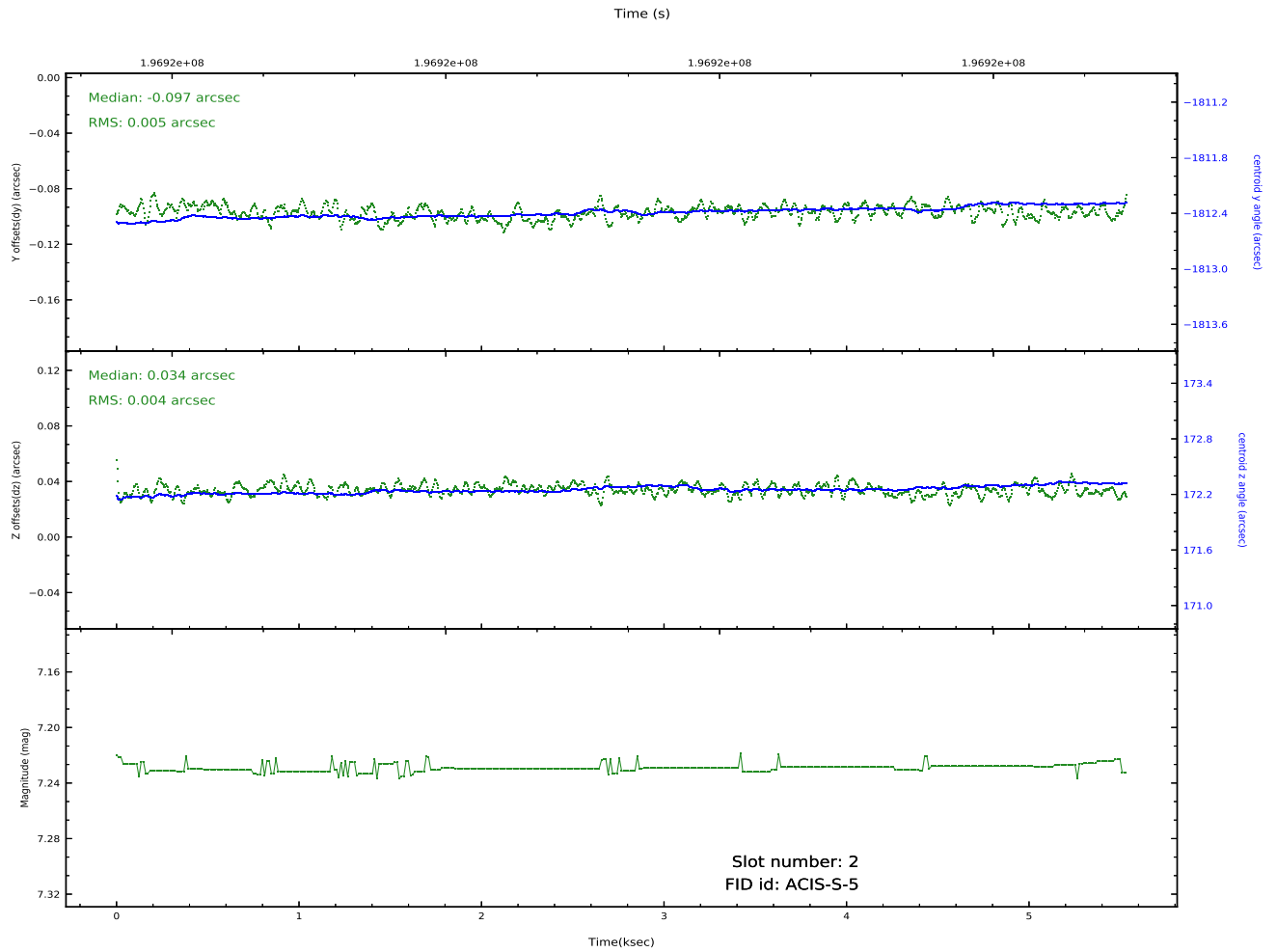
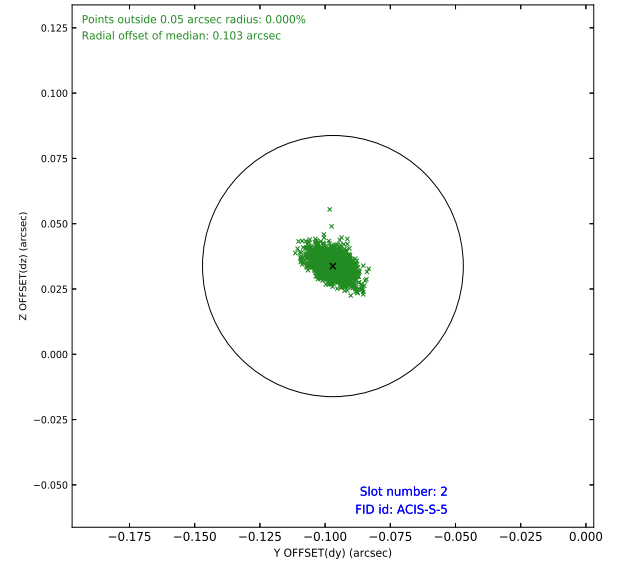
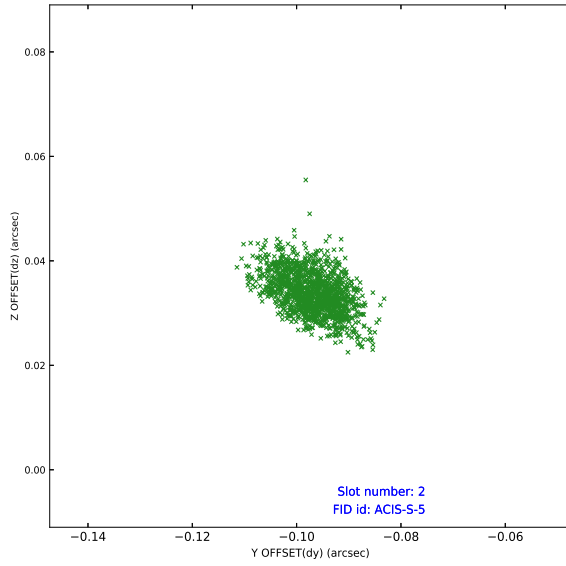
## 2.5.1 Slot 0



## 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)	2020.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.313

### A.2 Comments