

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4831 - L2 Version 4  
Chandra X-Ray Center

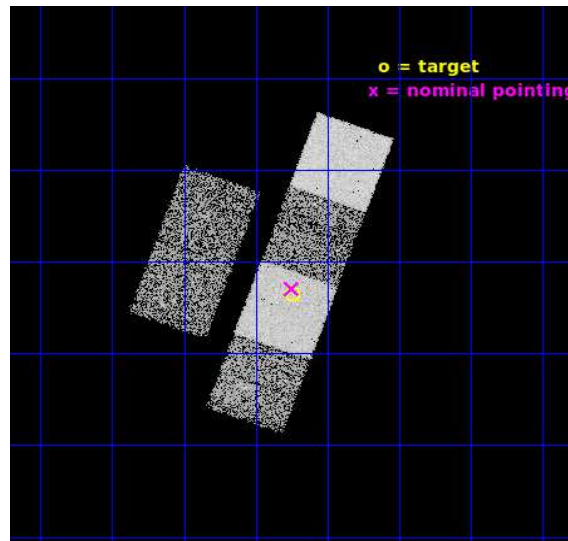
L2 Processing Date : Sep 29 2020

## 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

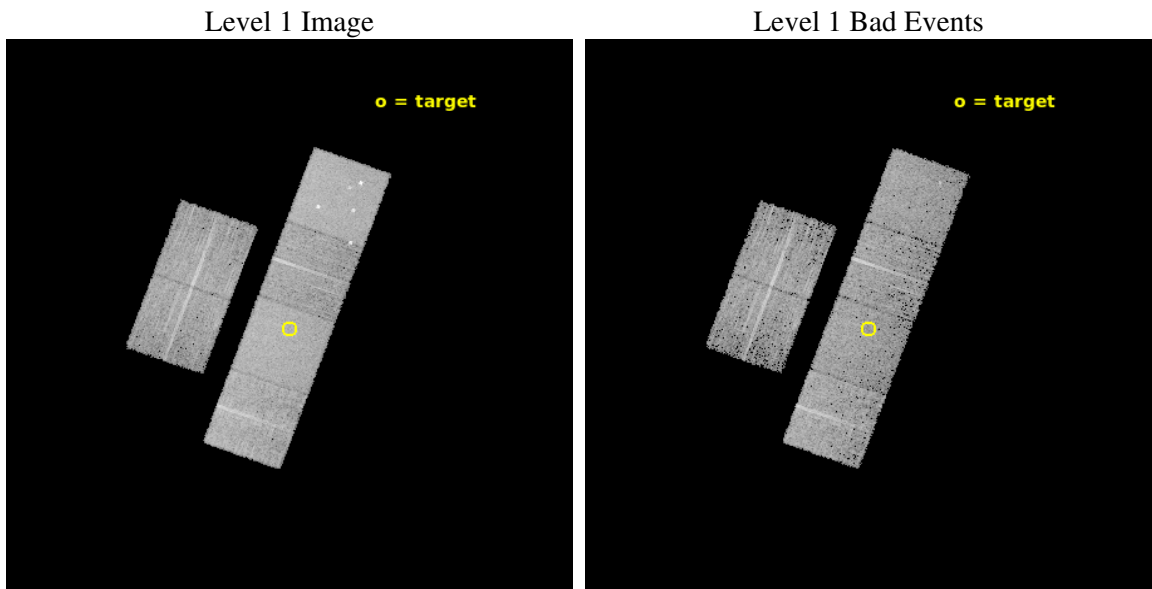
seq_num	700913	Sequence number
obs_id	4831	Observation id
title	Constraining the Hard-X-ray Through Submm SEDs of a Complete Sample of Broad Absorption Line Quasars	Proposal title
observer	Dr. Sarah Gallagher	Principal investigator
object	LBQS 0054+0200	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	14.185833	Observer's specified target RA [deg]
dec_targ	2.275028	Observer's specified target Dec [deg]
ra_nom	14.186883245868	Nominal RA [deg]
dec_nom	2.2841280346015	Nominal Dec [deg]
roll_nom	109.87160306616	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5958.3999778032	Sum of GTIs [s]
livetime	5882.9511295666	Livetime [s]
ontime2	5958.3999778032	Sum of GTIs [s]
ontime3	5958.3999778032	Sum of GTIs [s]
ontime5	5958.3999778032	Sum of GTIs [s]
ontime6	5958.3999778032	Sum of GTIs [s]
ontime7	5958.3999778032	Sum of GTIs [s]
ontime8	5958.3999778032	Sum of GTIs [s]
l2events	68994	Number of level 2 events



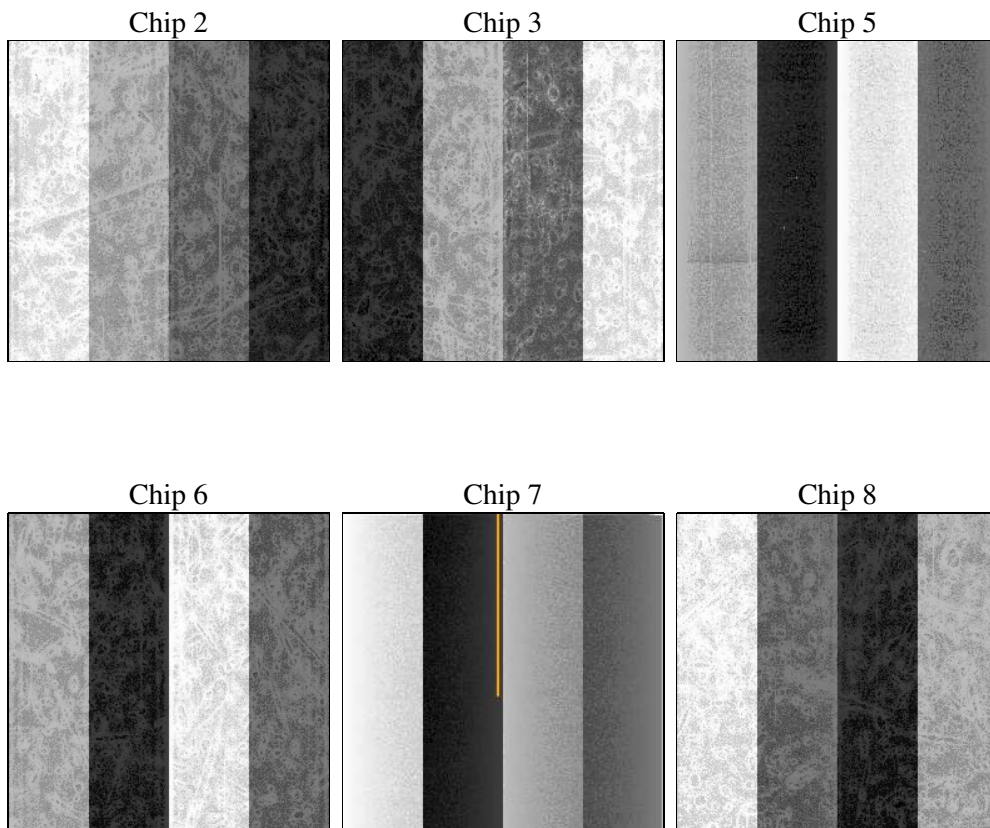
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	5958.3999778032	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	5958.3999778032	Sum of GTIs [s]
date	2020-09-29T06:48:34	Date and time of file creation	ontime3	5958.3999778032	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	5958.3999778032	Sum of GTIs [s]
			ontime6	5958.3999778032	Sum of GTIs [s]
			ontime7	5958.3999778032	Sum of GTIs [s]
			ontime8	5958.3999778032	Sum of GTIs [s]
			l1events	312989	Number of level 1 events

### 2.1.4 Events

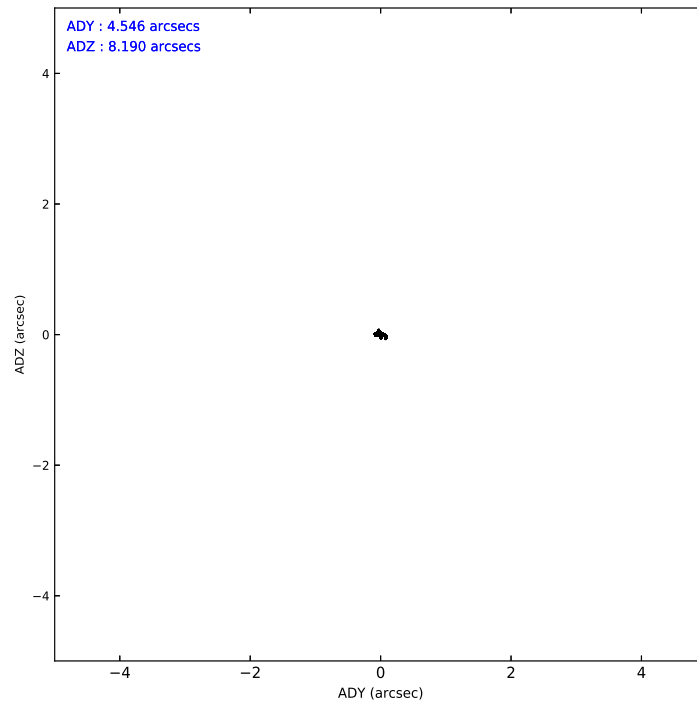
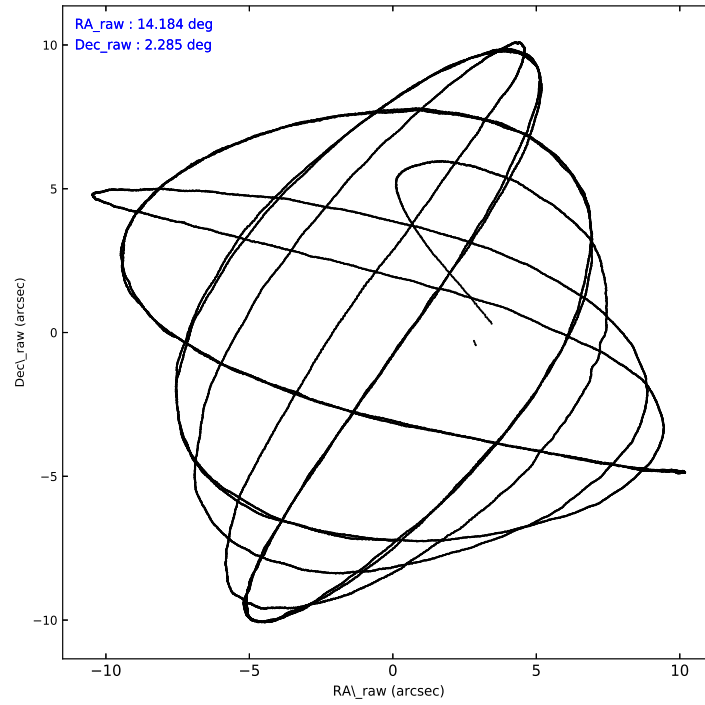
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	44923	41006	67069	43414	58379	58198	grade 0 events	2143	2196	4874	2091	2131	3920
rejected events	39882	36028	35520	38247	34390	45767		4%	5%	7%	4%	3%	6%
rejected %	88%	87%	52%	88%	58%	78%	grade 1 events	23	25	217	15	58	35
								0%	0%	0%	0%	0%	0%
							grade 2 events	1082	954	8974	1090	4774	2686
								2%	2%	13%	2%	8%	4%
							grade 3 events	465	482	1164	470	2087	1262
								1%	1%	1%	1%	3%	2%
							grade 4 events	469	484	1077	492	2062	1250
								1%	1%	1%	1%	3%	2%
							grade 5 events	1671	1850	4538	1985	5568	2648
								3%	4%	6%	4%	9%	4%
							grade 6 events	884	863	15480	1025	12949	3329
								1%	2%	23%	2%	22%	5%
							grade 7 events	38186	34152	30745	36246	28750	43068
								85%	83%	45%	83%	49%	74%

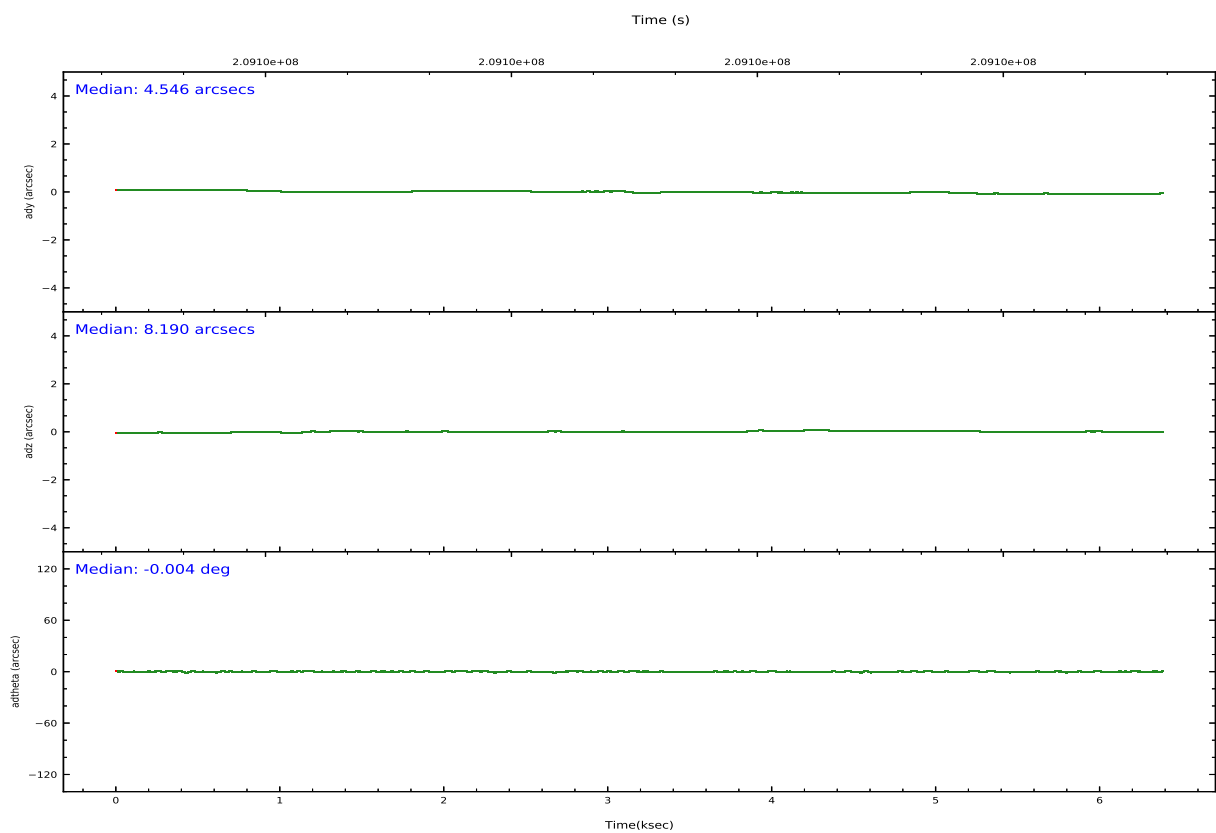
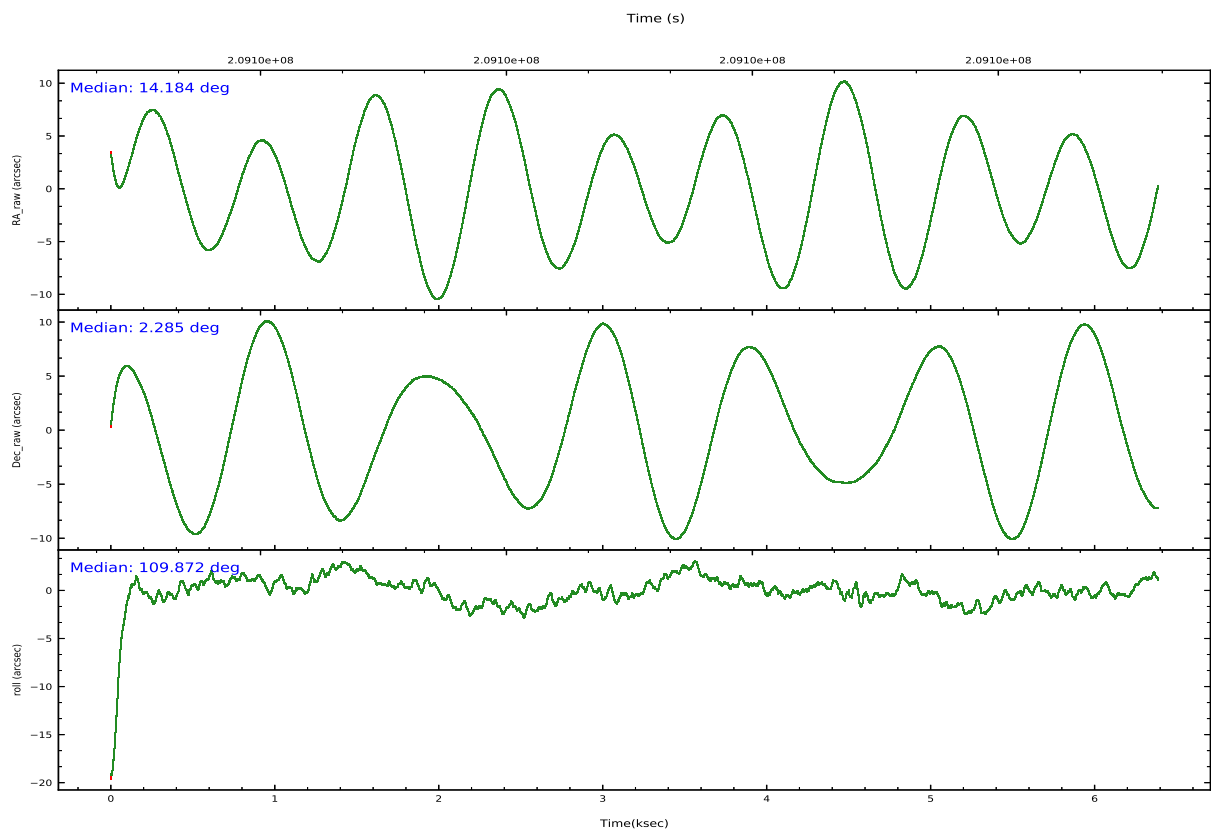


## 2.2 Compared Parameters

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	14.205264	14.186883245868	Subarray requested	NONE	NONE
[deg] Pointing Dec	2.267289	2.2841280346015	Alternating exposures requested	N	N
[deg] Pointing Roll	109.712471	109.87160306616	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	209098975.184000	209097914.45728			
Observation start date	2004-08-17T03:01:51	2004-08-17T02:45:14			
[s] Observation end time (MET)	209104975.184000	209105642.95762			
Observation end date	2004-08-17T04:41:51	2004-08-17T04:54:02			
Read mode	TIMED	TIMED			

## 2.3 Aspect



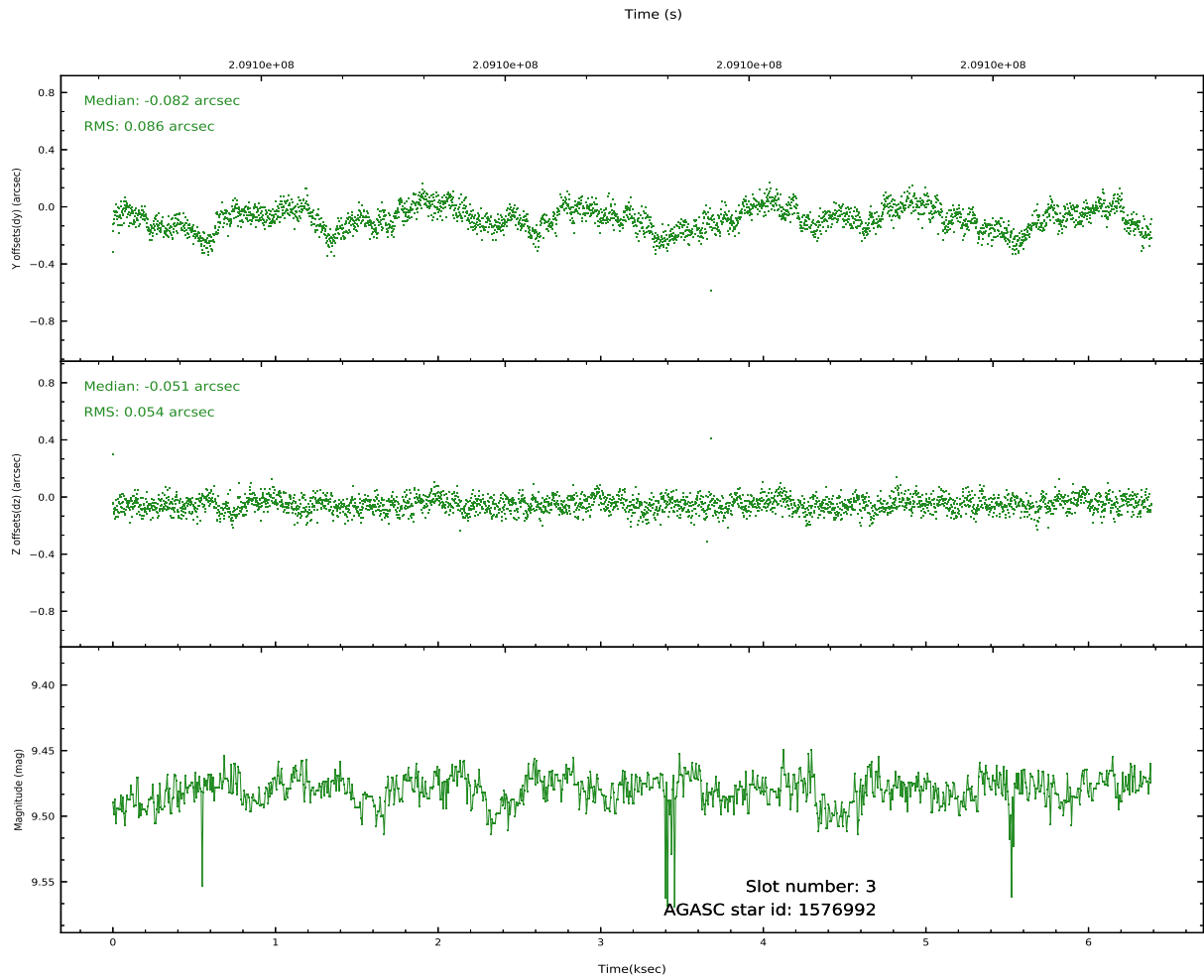
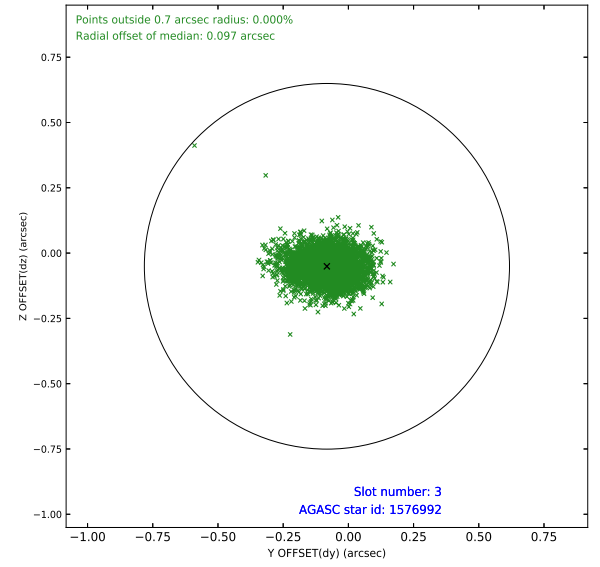
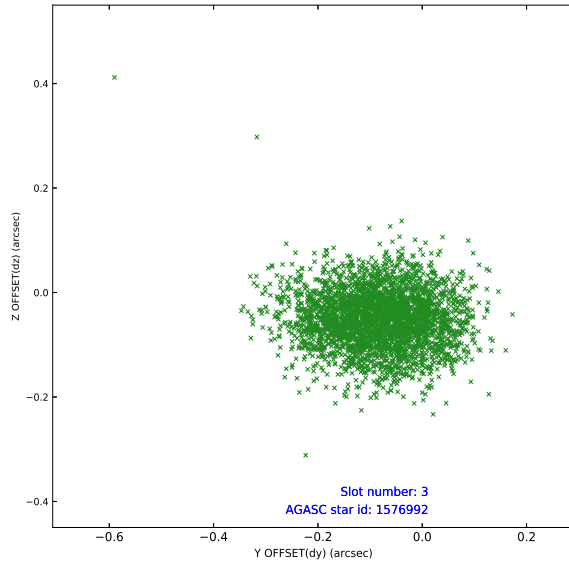


Slot Statistics

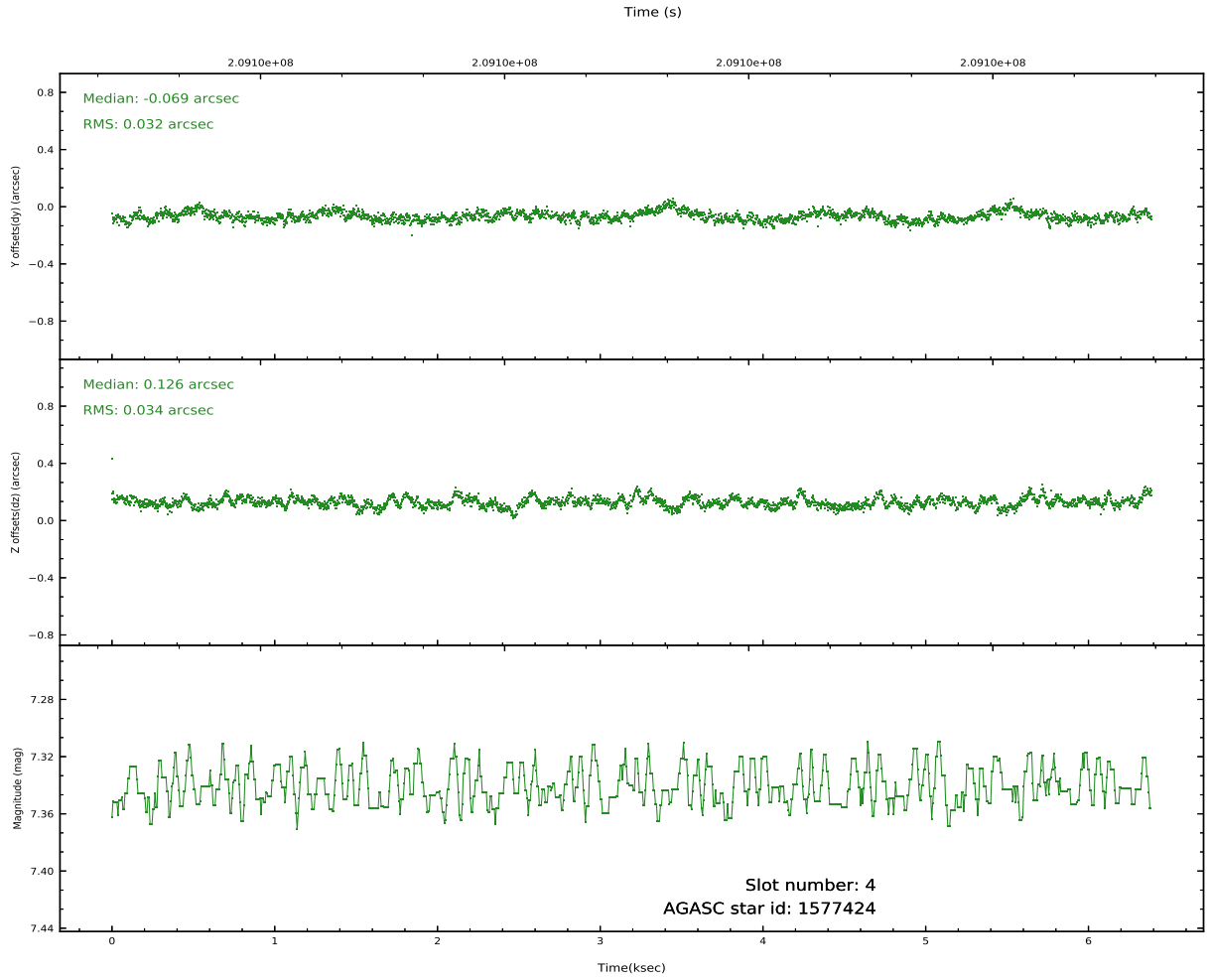
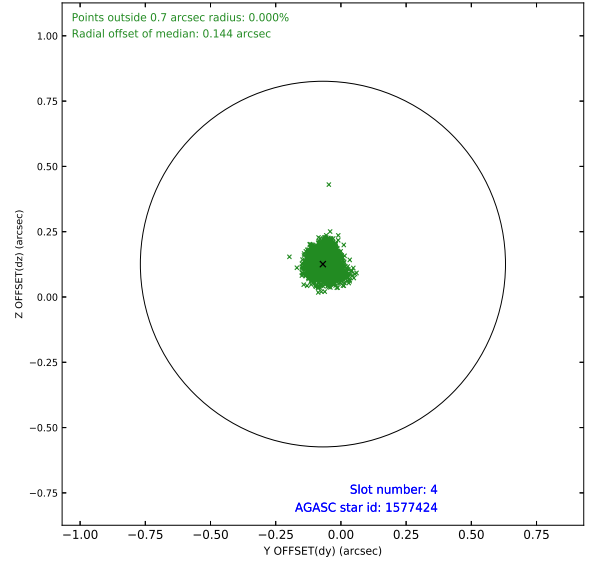
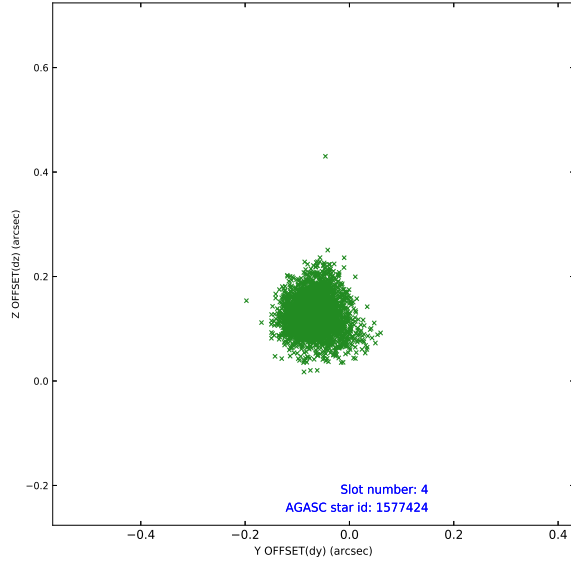
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.11	1559	1.000	-0.063	-0.083	0.006	0.011	0.000000	0.000000	-757.29	-1729
1	FID		ACIS-S-4	7.20	1559	1.000	0.162	0.053	0.006	0.011	0.000000	0.000000	2155.80	178
2	FID		ACIS-S-5	7.23	1559	1.000	-0.130	0.039	0.006	0.011	0.000000	0.000000	-1809.02	172
3	GUIDE	used	1576992	9.48	3103	1.000	-0.082	-0.051	0.107	0.174	13.873856	2.296553	501.40	1086
4	GUIDE	used	1577424	7.34	3117	1.000	-0.069	0.126	0.049	0.082	14.496263	2.486296	389.46	-1250
5	GUIDE	used	1578704	8.82	3115	1.000	0.108	-0.121	0.061	0.102	14.213044	1.680901	-1996.50	685
6	GUIDE	used	1578896	6.71	3117	1.000	-0.018	0.178	0.063	0.097	14.415232	1.785609	-1887.71	-125
7	GUIDE	used	1581504	9.30	3115	1.000	0.059	-0.134	0.084	0.137	14.179515	1.875214	-1298.14	563

## 2.4 Star Slots

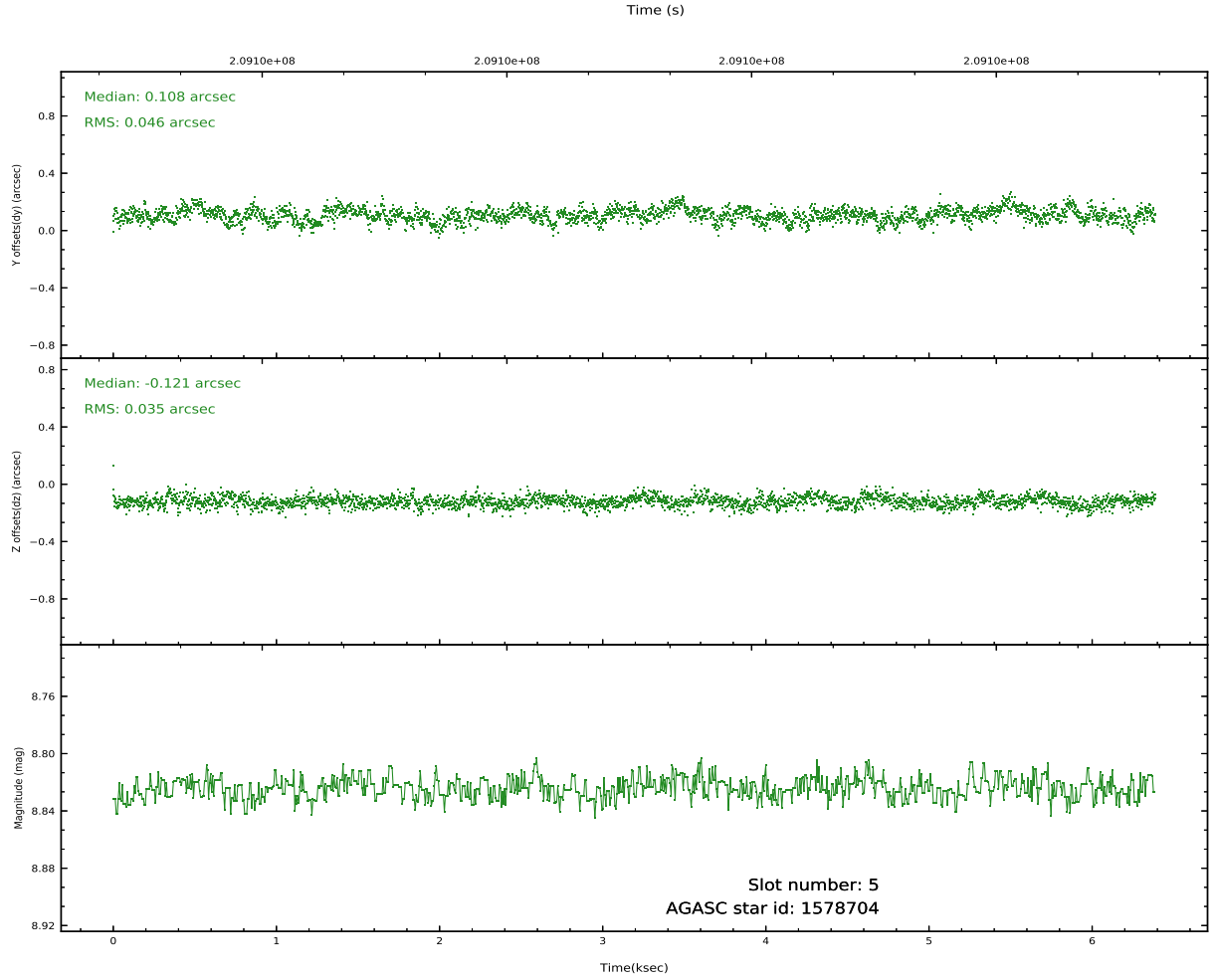
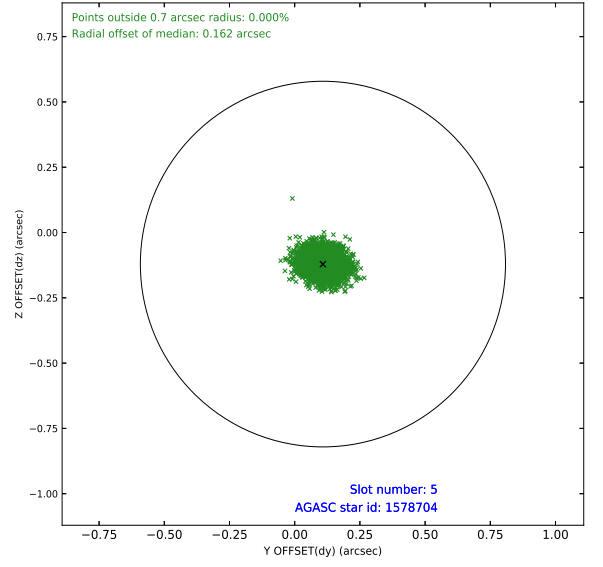
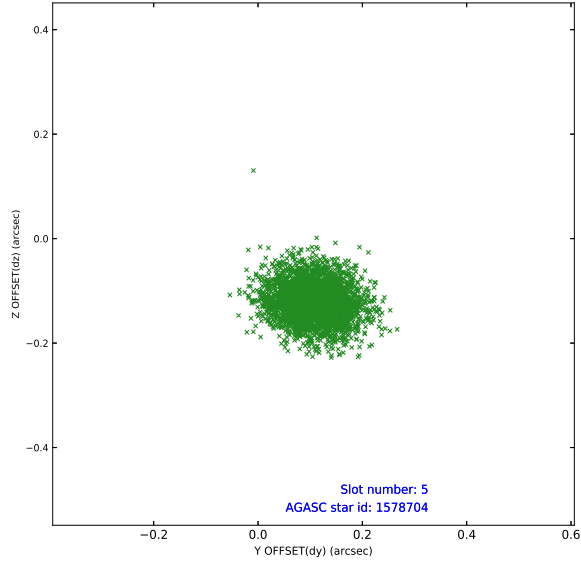
### 2.4.1 Slot 3



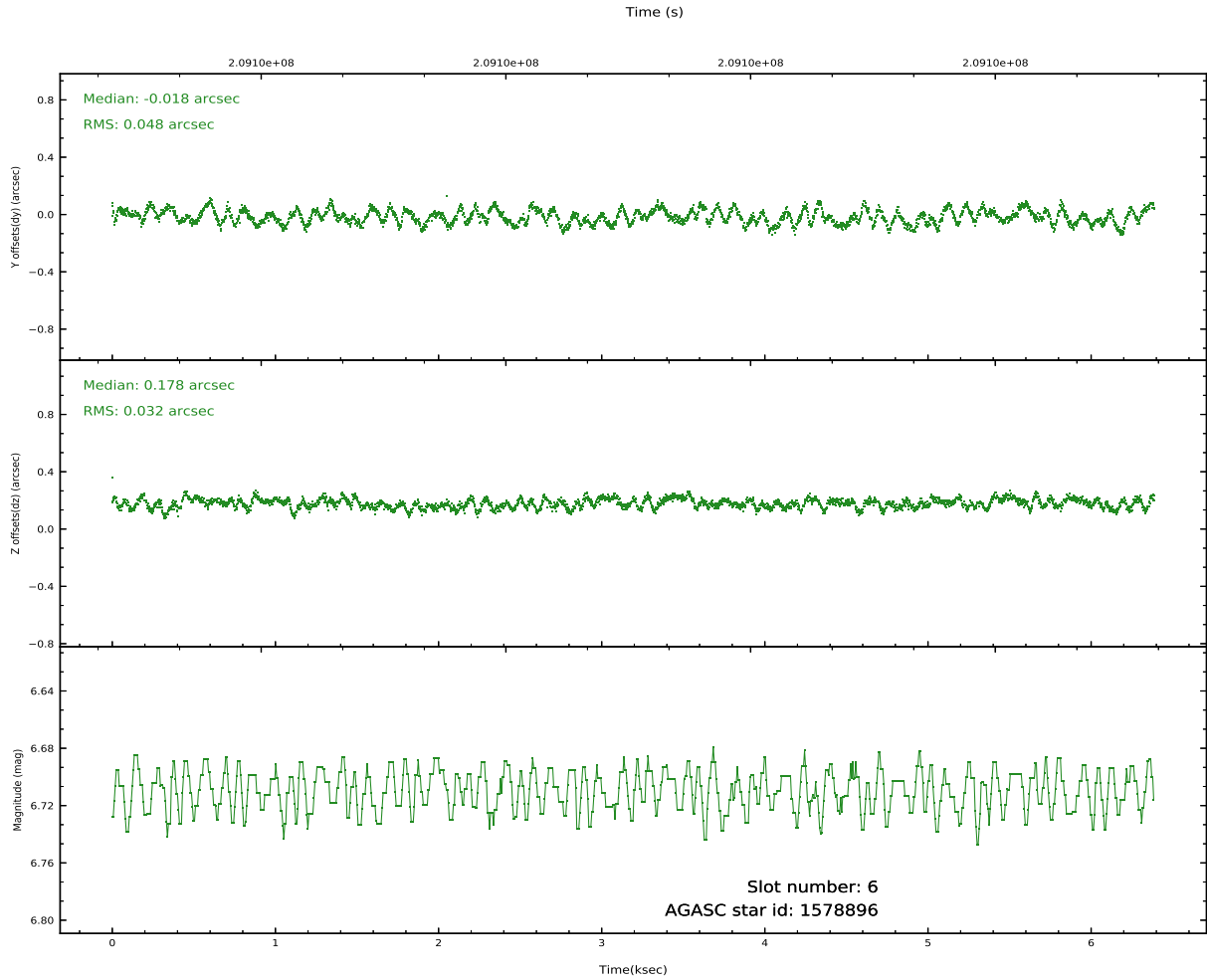
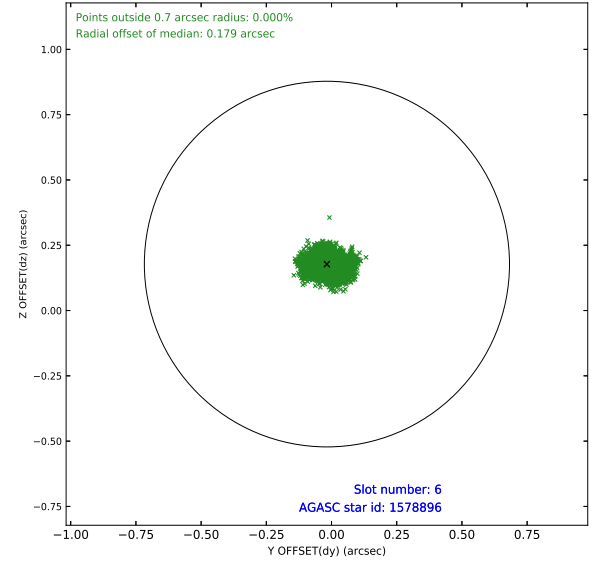
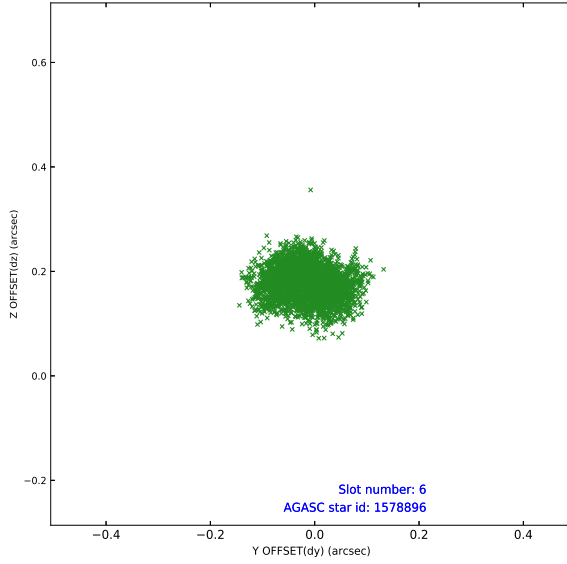
## 2.4.2 Slot 4



### 2.4.3 Slot 5

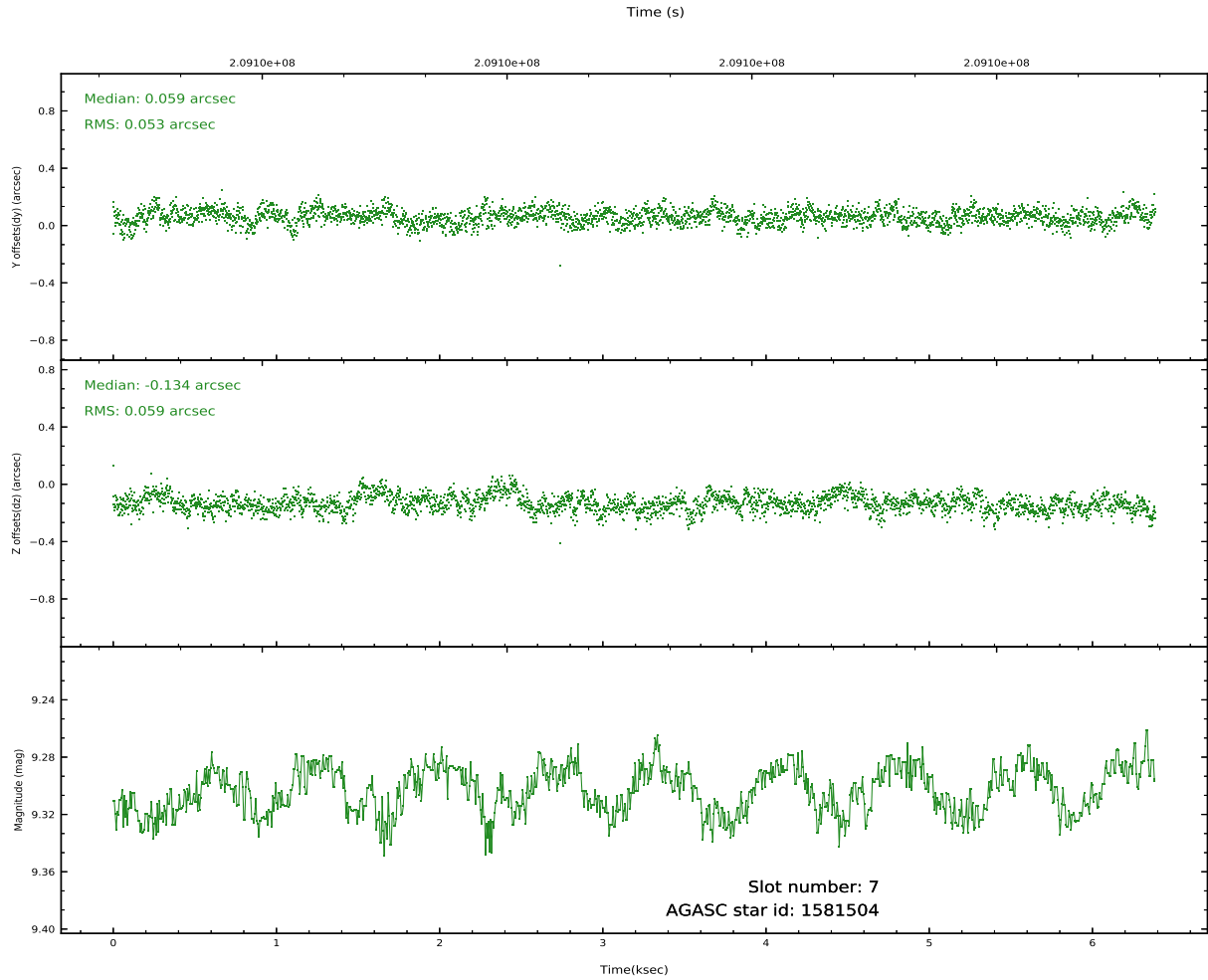
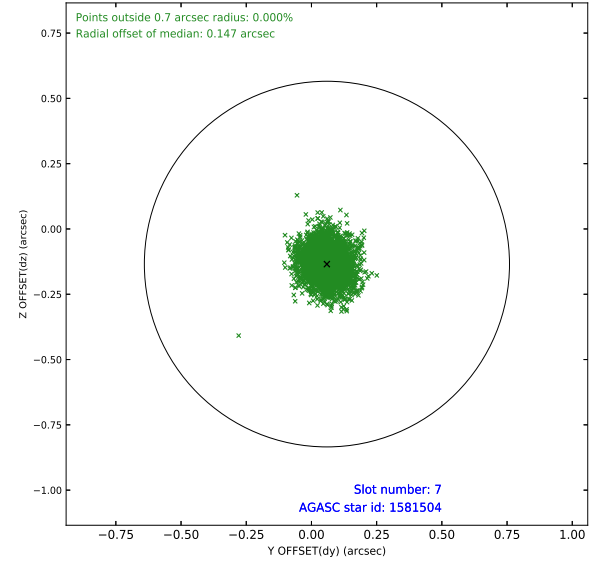
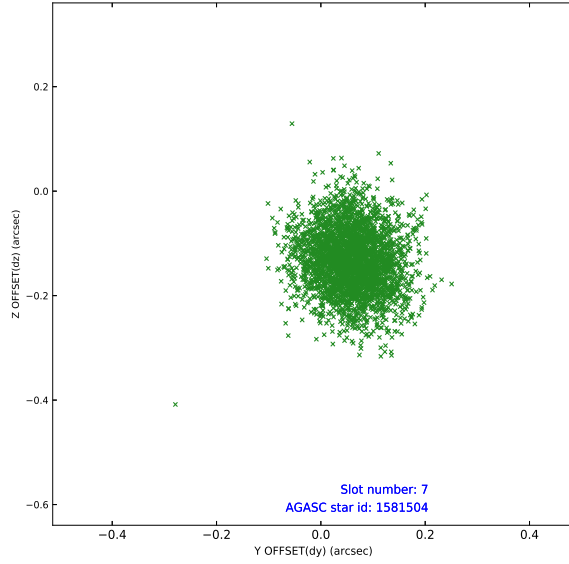


## 2.4.4 Slot 6



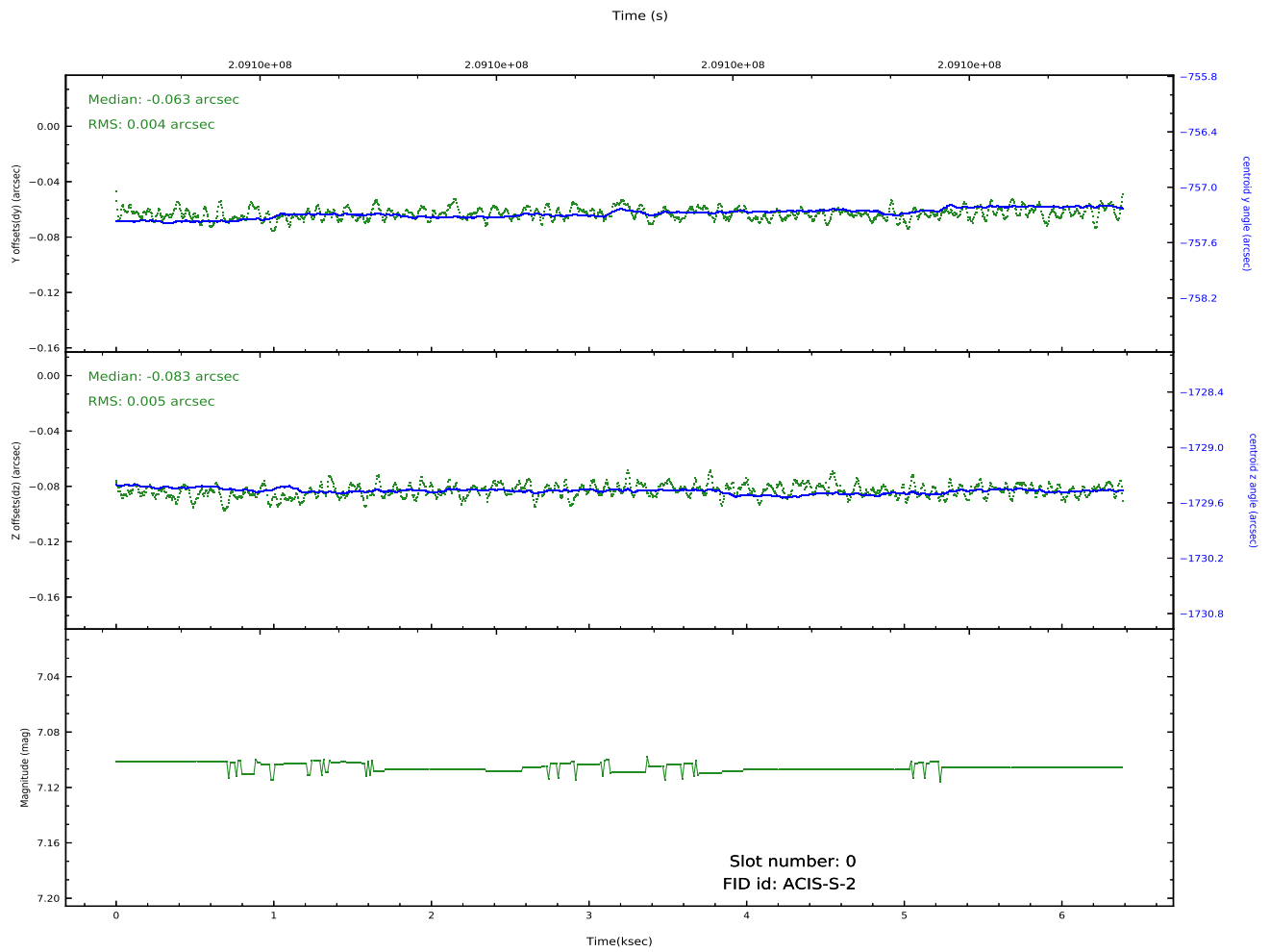
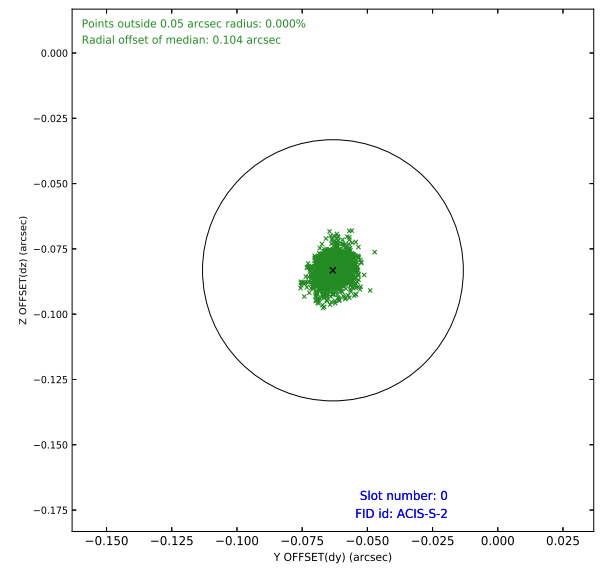
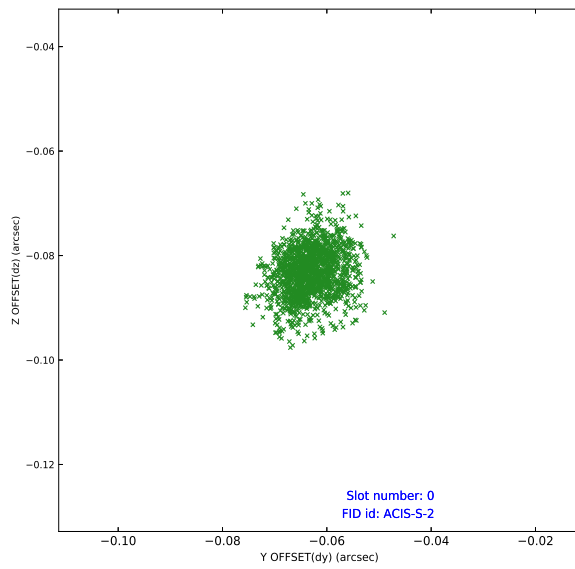


## 2.4.5 Slot 7

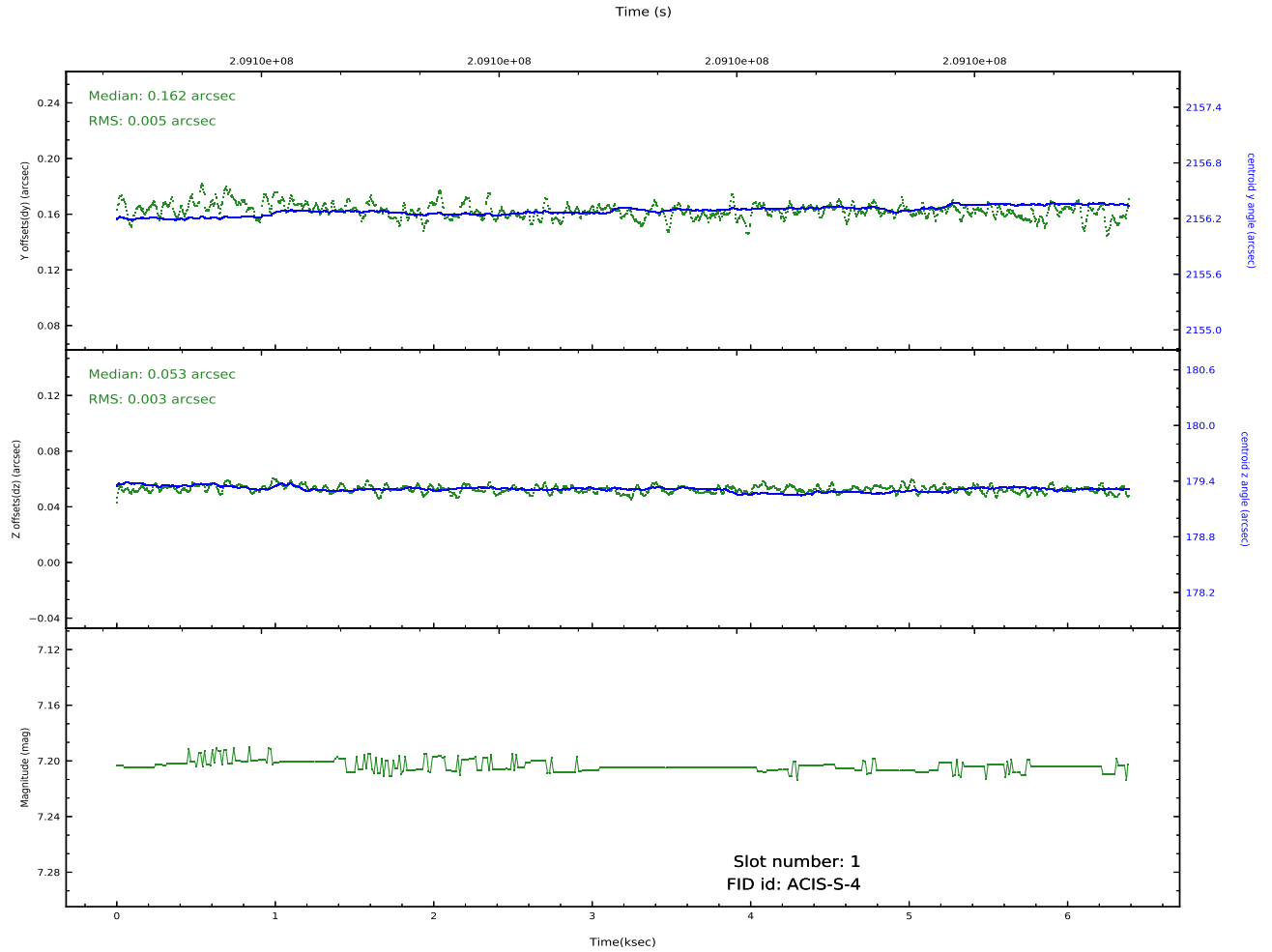
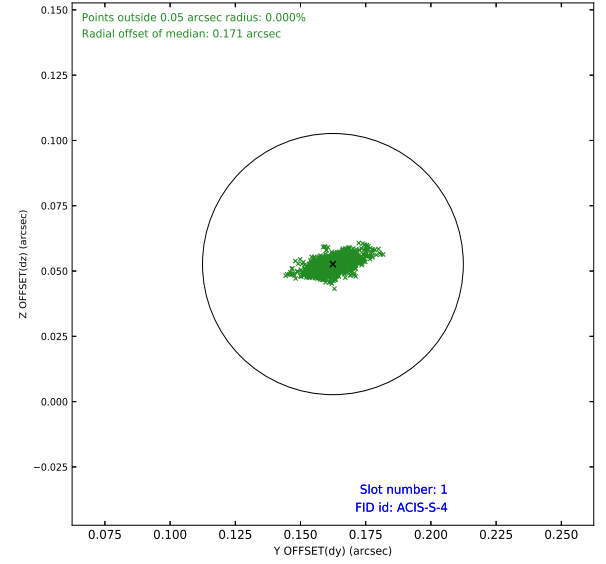
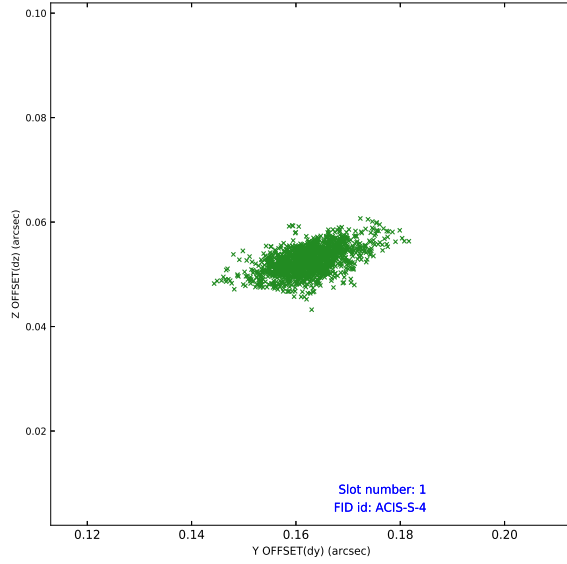


## 2.5 FID Slots

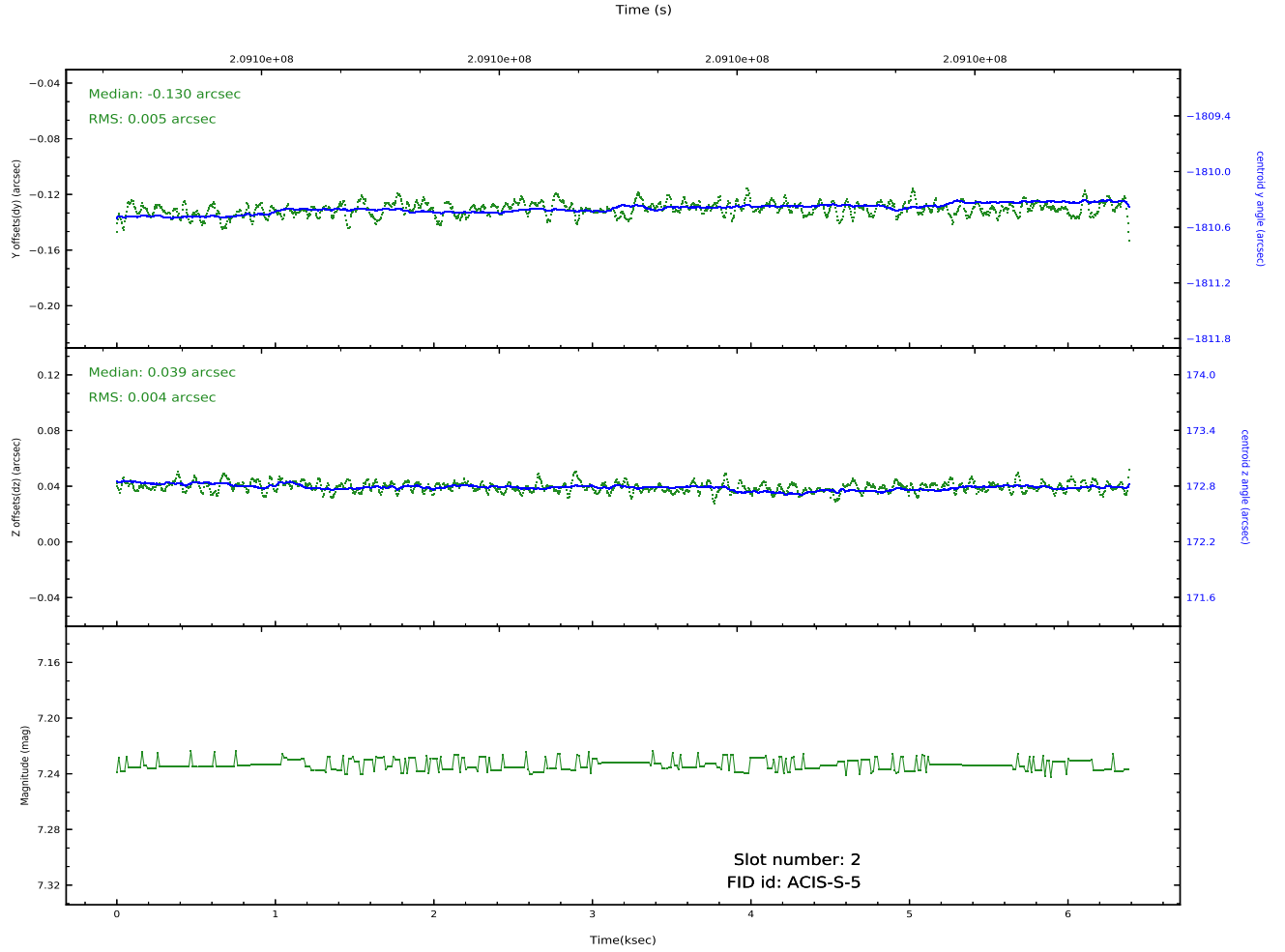
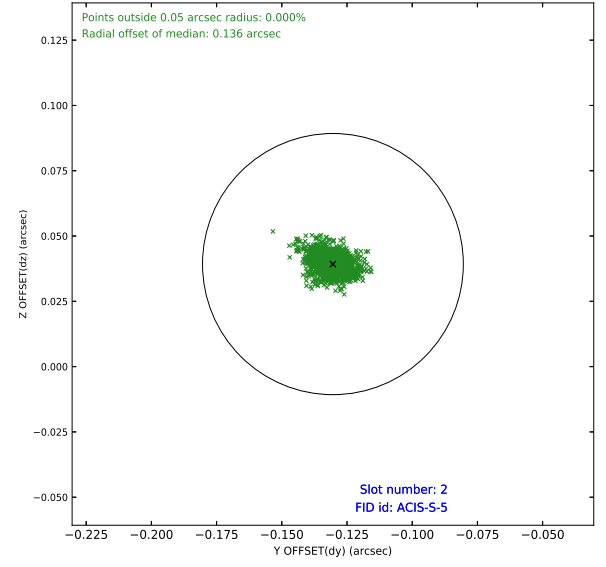
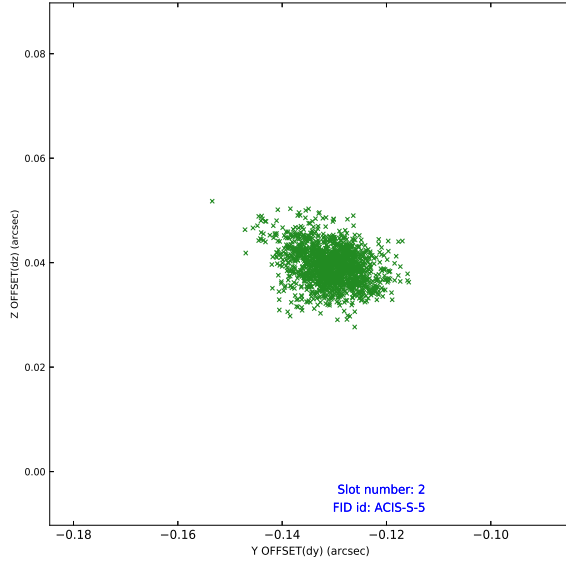
### 2.5.1 Slot 0



## 2.5.2 Slot 1



## 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.09.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.958

### A.2 Comments