

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4826 - L2 Version 4  
Chandra X-Ray Center

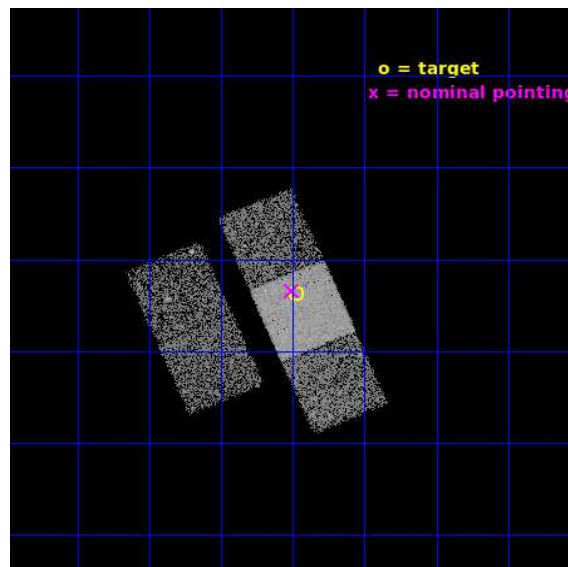
L2 Processing Date : Sep 21 2020

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# 1 Front

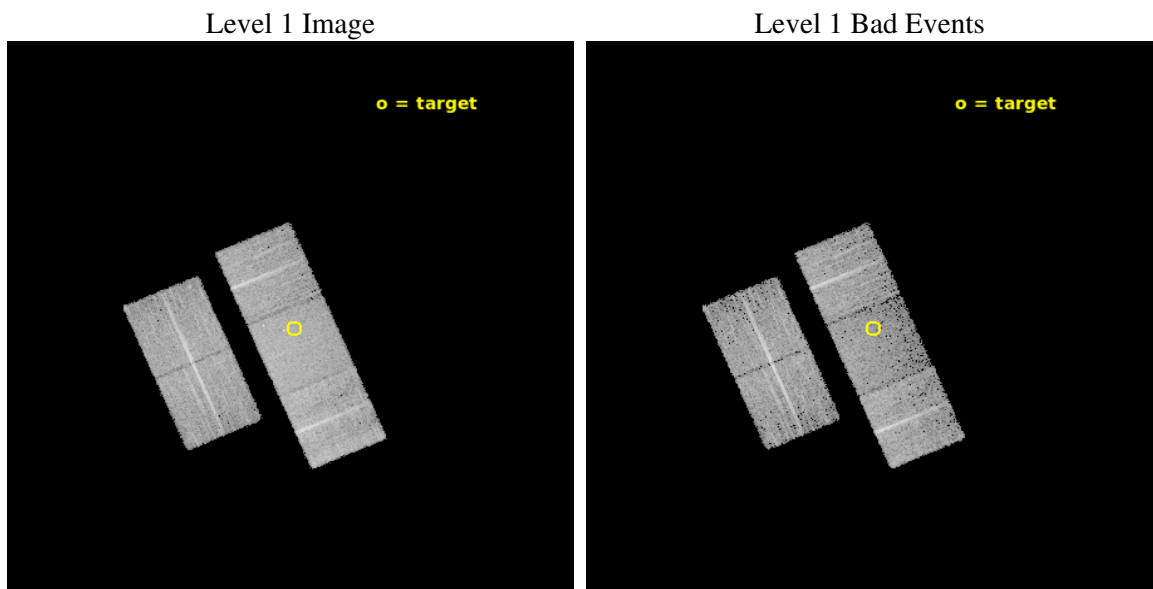
seq_num	700908	Sequence number
obs_id	4826	Observation id
title	Destroying Degeneracy: Spanning the Luminosity Range for Radio-Quiet Quasars at z=4	Proposal title
observer	Dr. Jill Bechtold	Principal investigator
object	QSO J1444-0123	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	221.119583	Observer's specified target RA [deg]
dec_targ	-1.395556	Observer's specified target Dec [deg]
ra_nom	221.12673203426	Nominal RA [deg]
dec_nom	-1.3901802068602	Nominal Dec [deg]
roll_nom	66.693266317277	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10133.899980485	Sum of GTIs [s]
livetime	10001.493116772	Livetime [s]
ontime2	10133.899980485	Sum of GTIs [s]
ontime3	10130.759030133	Sum of GTIs [s]
ontime6	10133.899980485	Sum of GTIs [s]
ontime7	10133.899980485	Sum of GTIs [s]
ontime8	10133.899980485	Sum of GTIs [s]
l2events	42789	Number of level 2 events



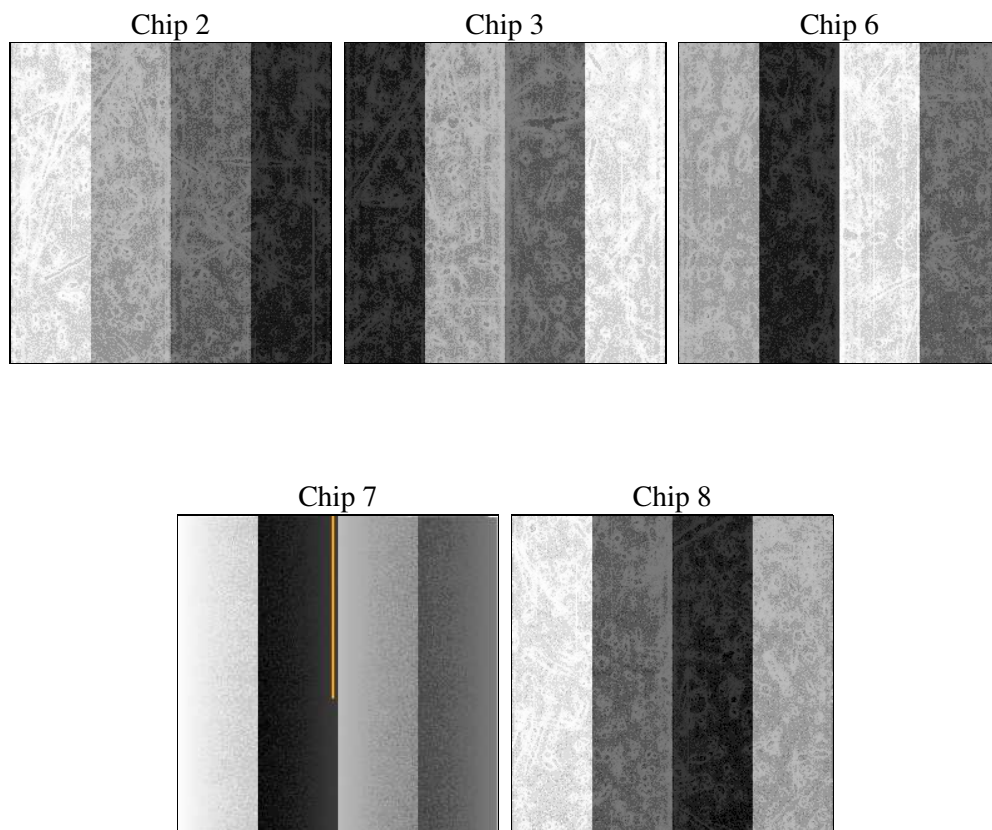
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	10133.899980485	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	10133.899980485	Sum of GTIs [s]
date	2020-09-22T01:25:58	Date and time of file creation	ontime3	10130.759030133	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	10133.899980485	Sum of GTIs [s]
			ontime7	10133.899980485	Sum of GTIs [s]
			ontime8	10133.899980485	Sum of GTIs [s]
			l1events	305401	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	56009	55019	57312	64232	72829
rejected events	51118	50332	52000	38931	57527
rejected %	91%	91%	90%	60%	78%

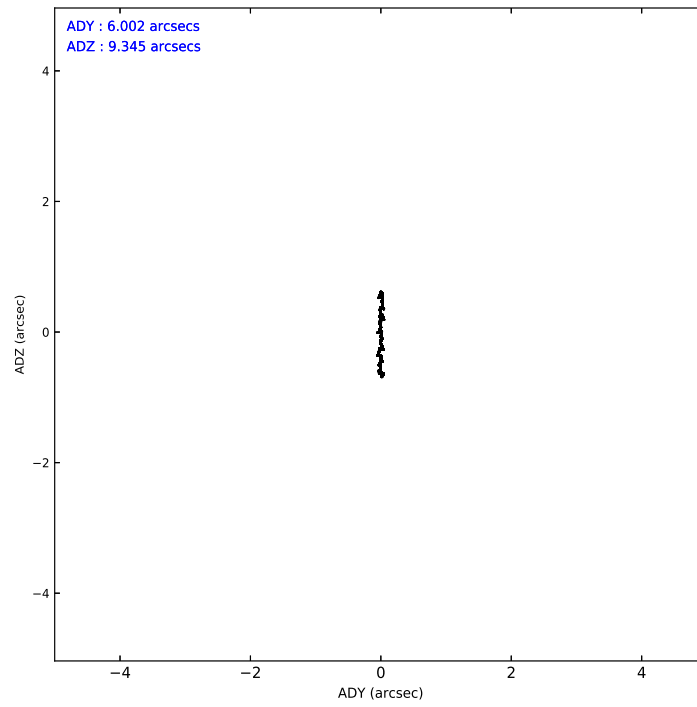
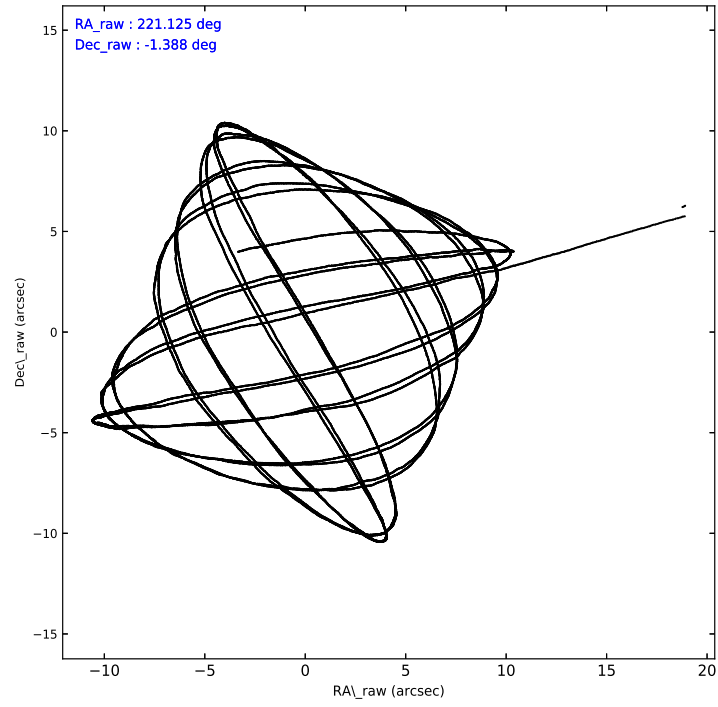
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2224	1938	2248	2856	5631
	3%	3%	3%	4%	7%
grade 1 events	34	21	19	55	53
	0%	0%	0%	0%	0%
grade 2 events	1271	1249	1286	5895	3750
	2%	2%	2%	9%	5%
grade 3 events	648	614	647	2733	1939
	1%	1%	1%	4%	2%
grade 4 events	606	636	654	2734	1848
	1%	1%	1%	4%	2%
grade 5 events	1859	2153	2258	6766	3305
	3%	3%	3%	10%	4%
grade 6 events	994	1031	1336	14953	4571
	1%	1%	2%	23%	6%
grade 7 events	48373	47377	48864	28240	51732
	86%	86%	85%	43%	71%

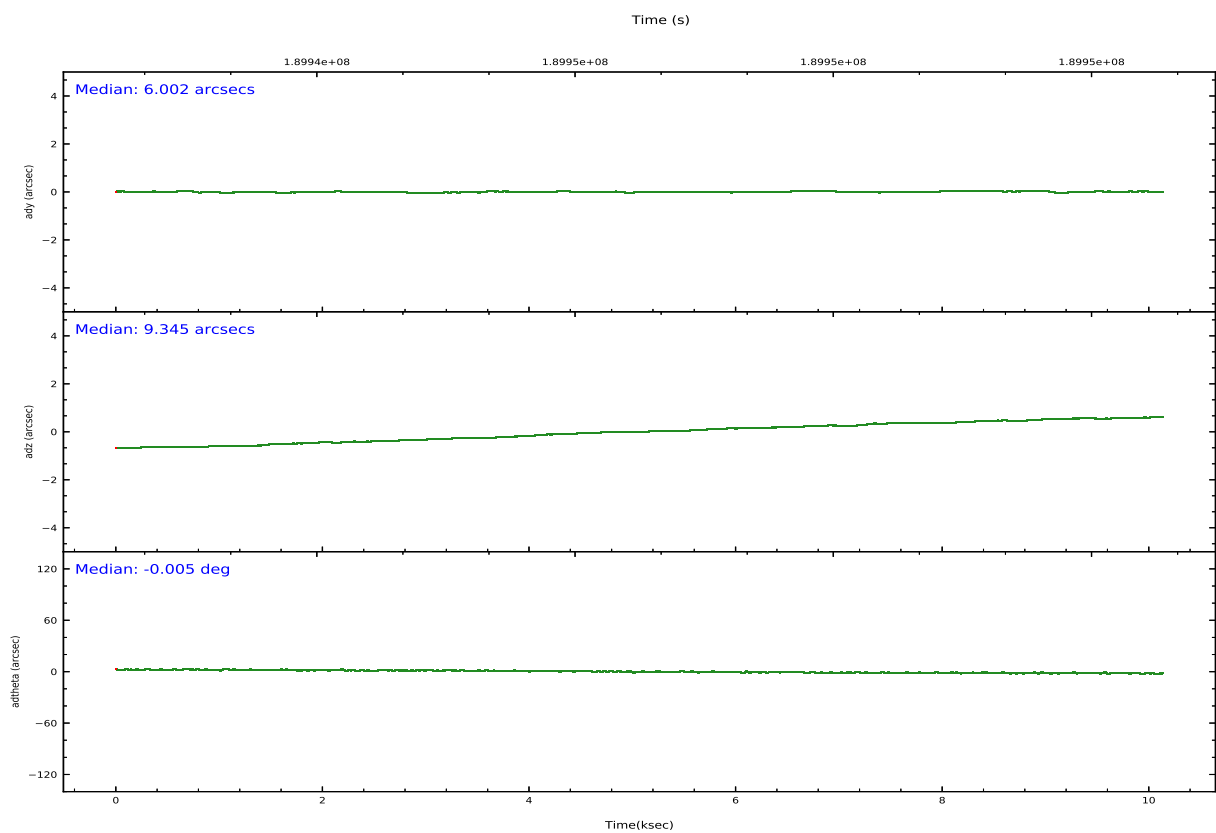
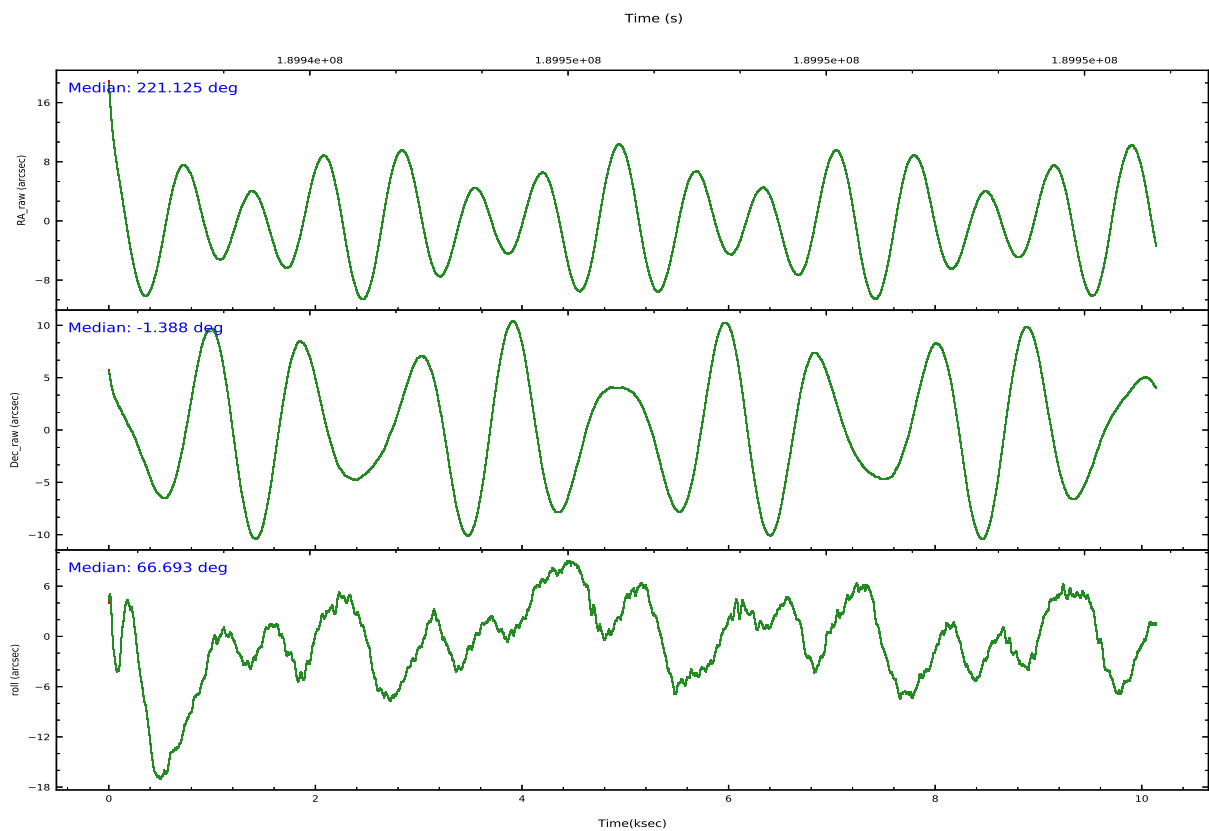


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23678	ACIS-23678	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	221.128454	221.12673203426	Subarray requested	NONE	NONE
[deg] Pointing Dec	-1.414485	-1.3901802068602	Alternating exposures requested	N	N
[deg] Pointing Roll	66.539802	66.69326631727699	[s] Primary exposure time	0.000000	3.1
[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)	189943194.184000	189941419.55076			
Observation start date	2004-01-08T09:58:50	2004-01-08T09:30:19			
[s] Observation end time (MET)	189953194.184000	189953528.90128			
Observation end date	2004-01-08T12:45:30	2004-01-08T12:52:08			
Read mode	TIMED	TIMED			

## 2.3 Aspect



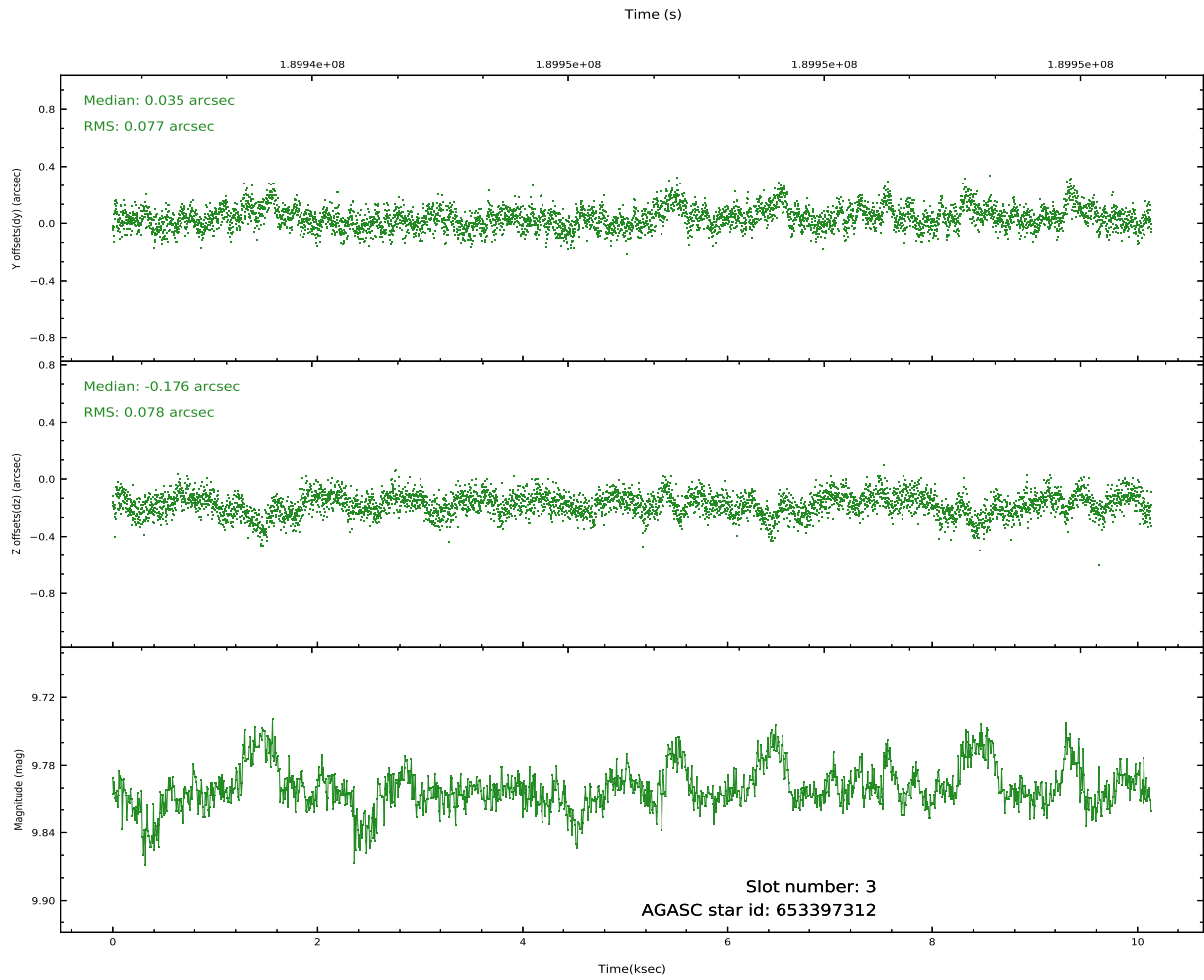
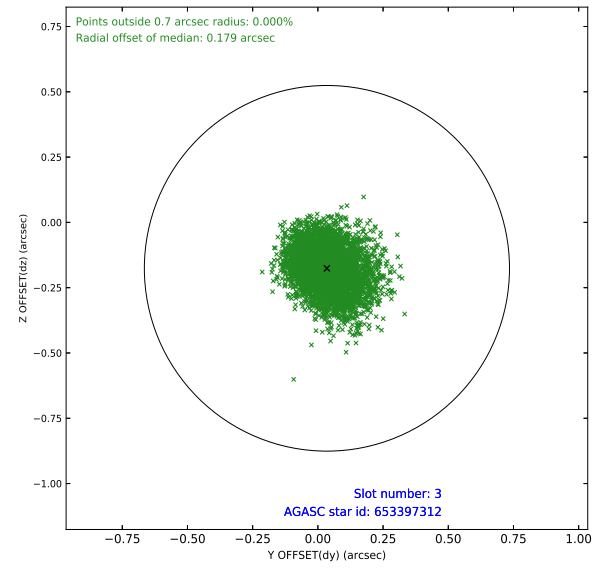
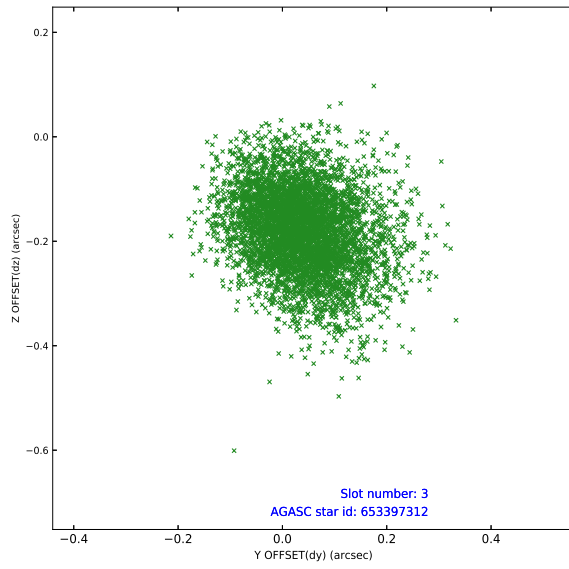


Slot Statistics

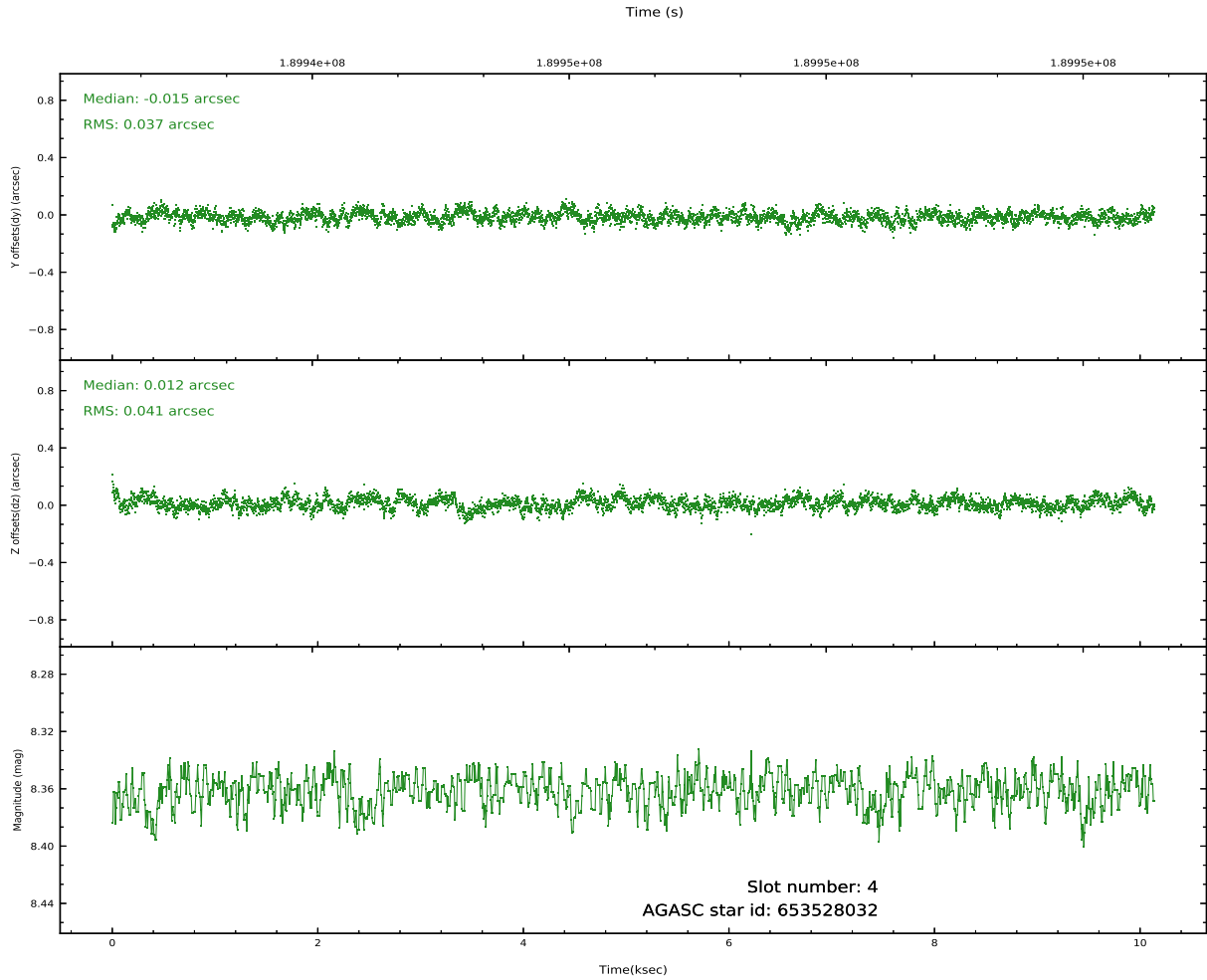
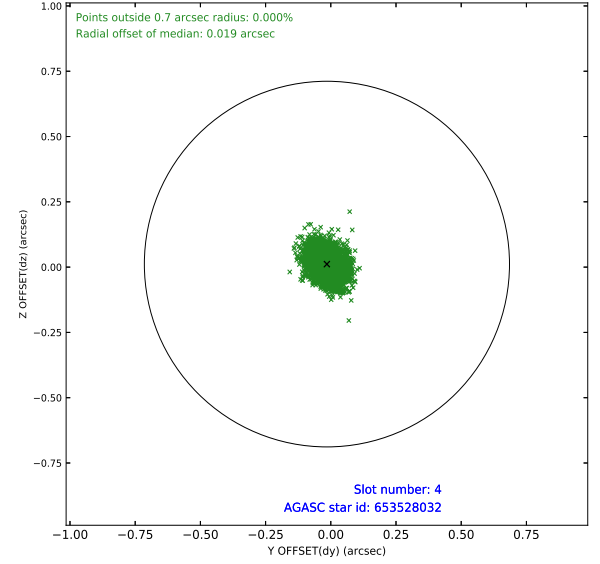
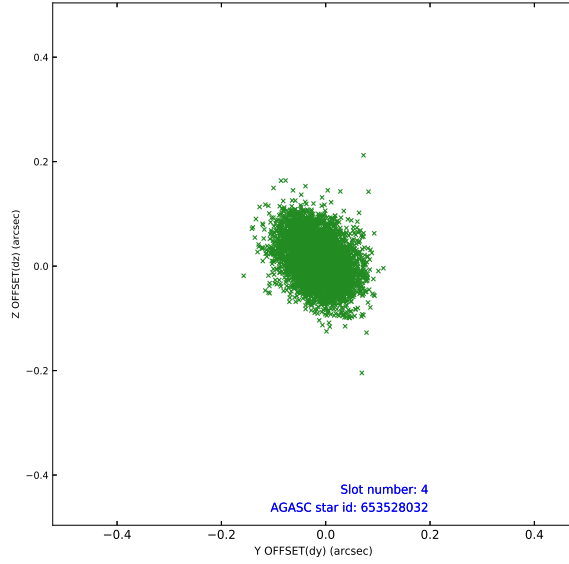
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2473	1.000	-0.080	-0.069	0.013	0.019	0.000000	0.000000	-758.77	-1730
1	FID		ACIS-S-4	7.20	2473	1.000	0.138	0.057	0.007	0.012	0.000000	0.000000	2154.45	177
2	FID		ACIS-S-5	7.23	2473	1.000	-0.090	0.022	0.012	0.018	0.000000	0.000000	-1810.99	171
3	GUIDE	used	653397312	9.80	4943	1.000	0.035	-0.176	0.115	0.195	220.908847	-1.222588	319.10	1000
4	GUIDE	used	653528032	8.36	4947	1.000	-0.015	0.012	0.058	0.096	221.612728	-1.446923	586.97	-1644
5	GUIDE	used	653530832	8.91	4945	1.000	-0.017	0.032	0.079	0.124	221.638203	-1.472740	538.29	-1766
6	GUIDE	used	653399720	10.03	4944	1.000	-0.117	-0.079	0.153	0.241	221.222055	-0.723926	2414.65	680
7	GUIDE	used	653530072	9.93	4941	1.000	0.108	0.213	0.144	0.229	221.735651	-1.734532	-186.30	-2462

## 2.4 Star Slots

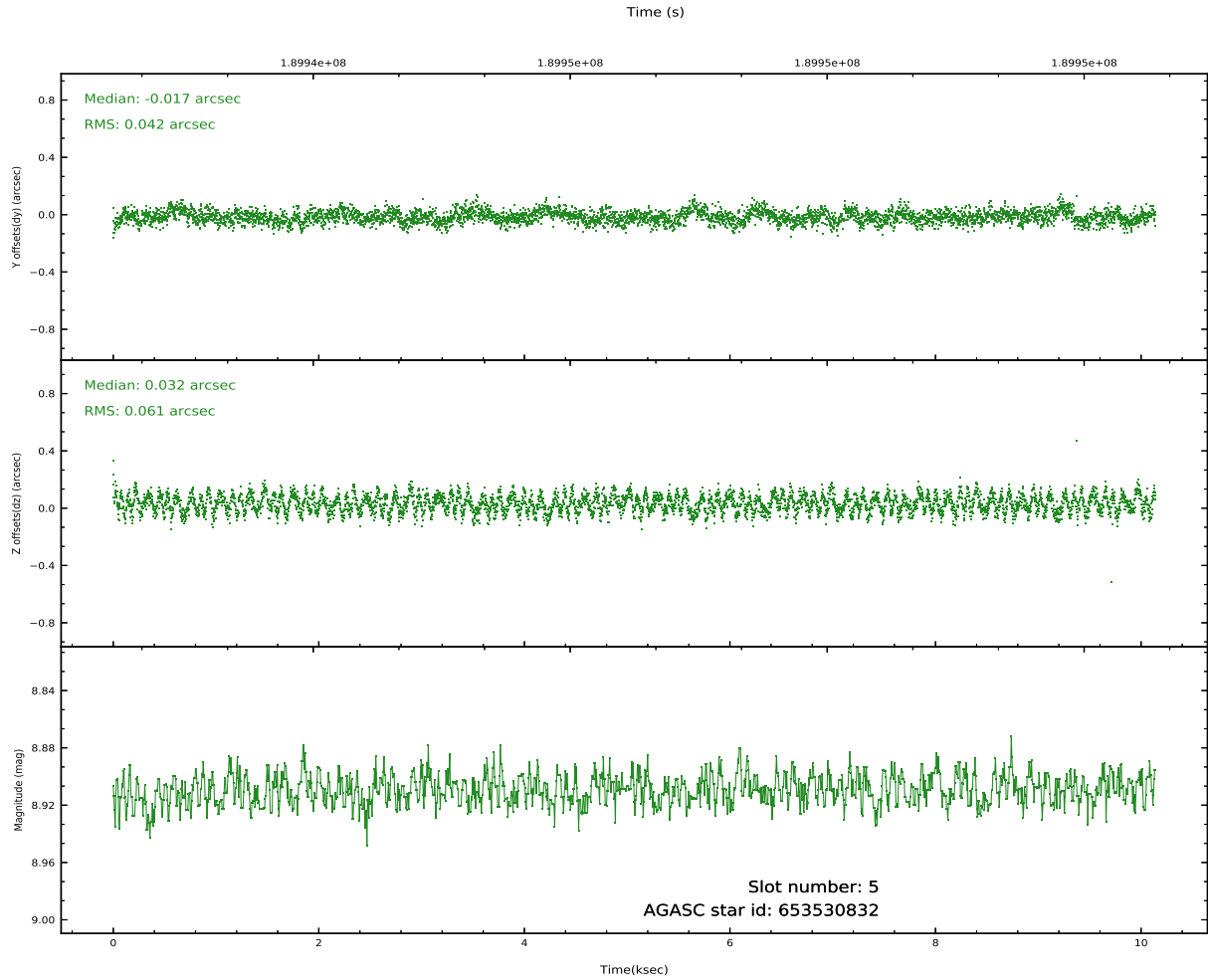
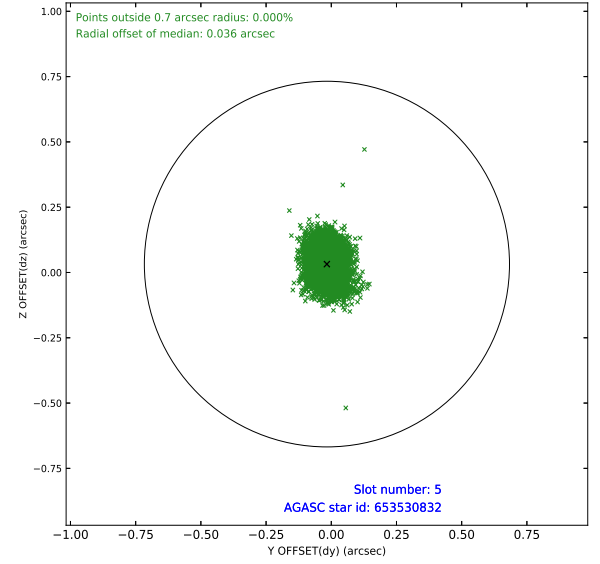
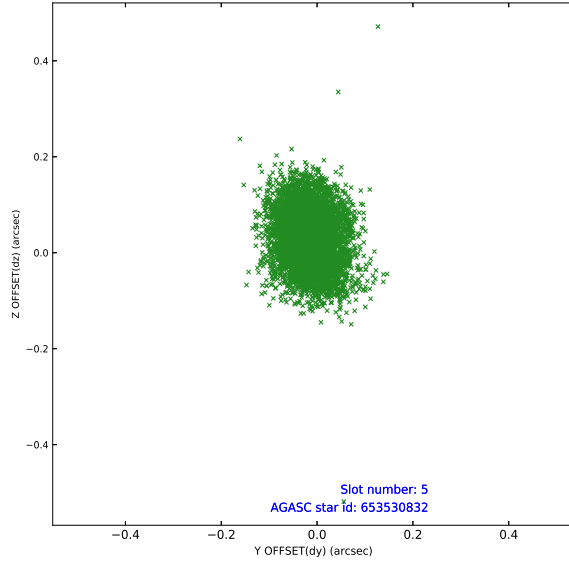
### 2.4.1 Slot 3



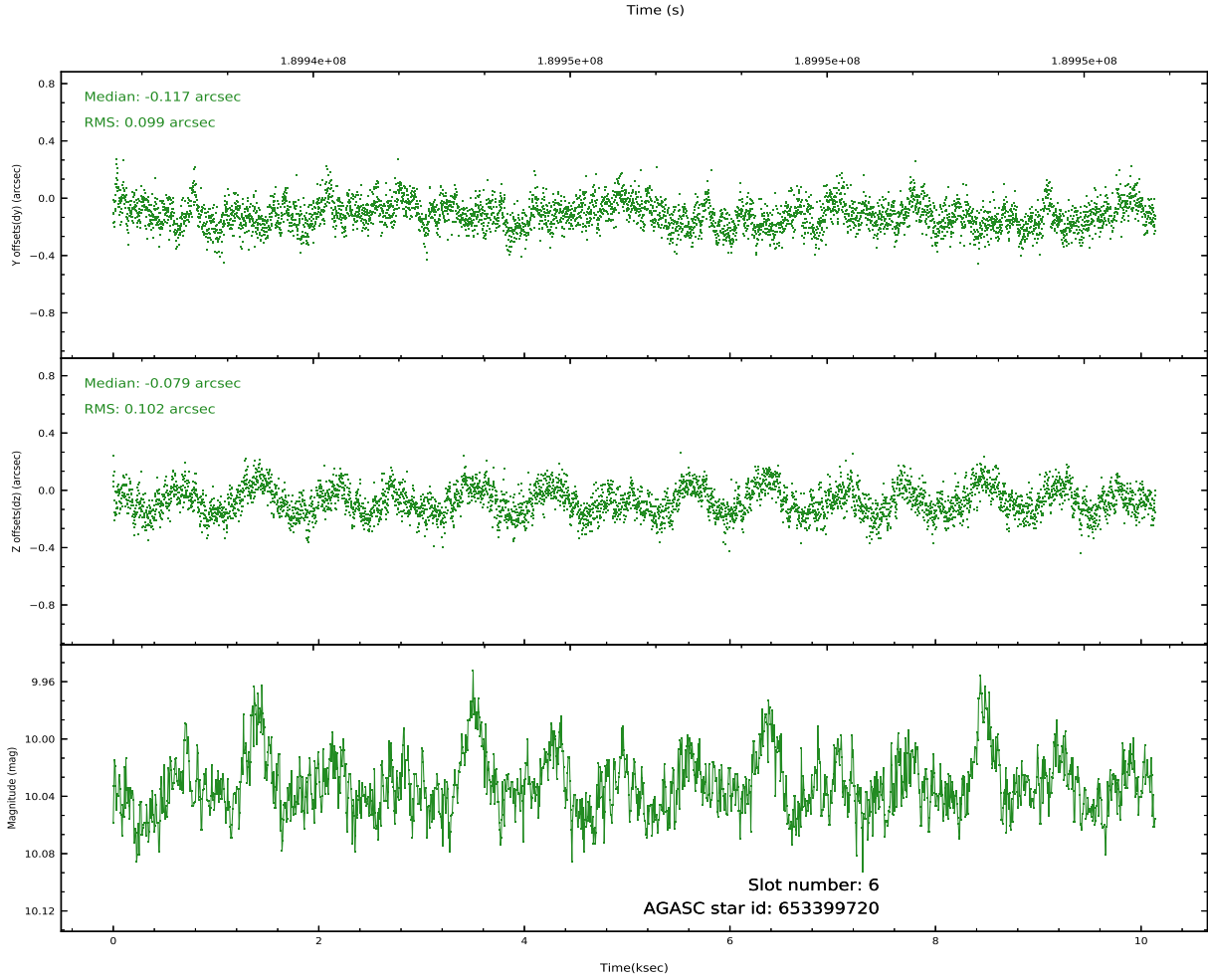
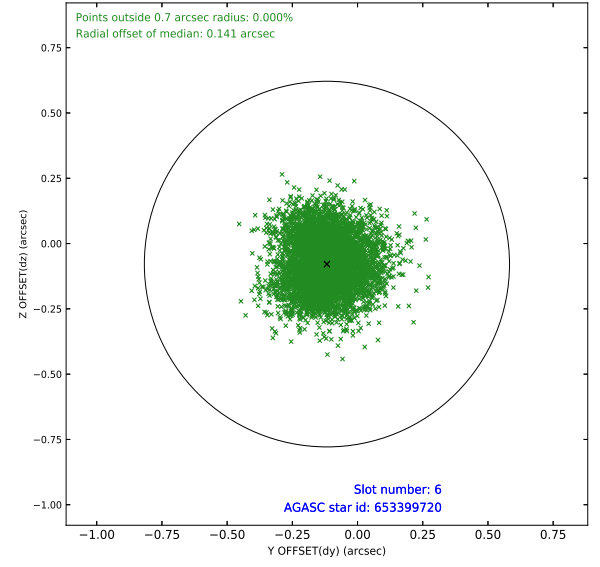
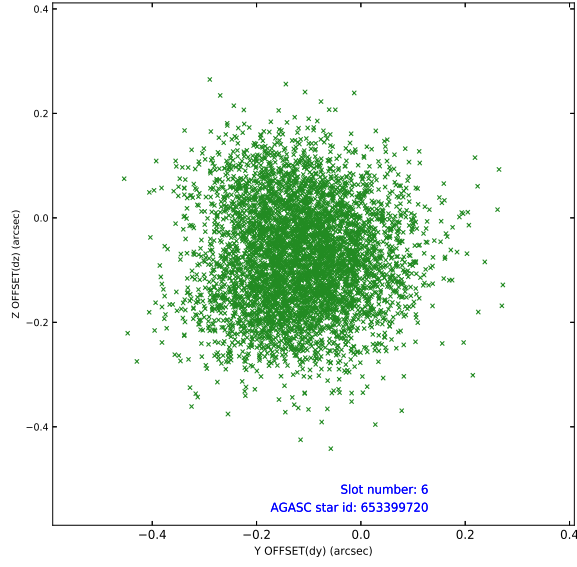
## 2.4.2 Slot 4



### 2.4.3 Slot 5

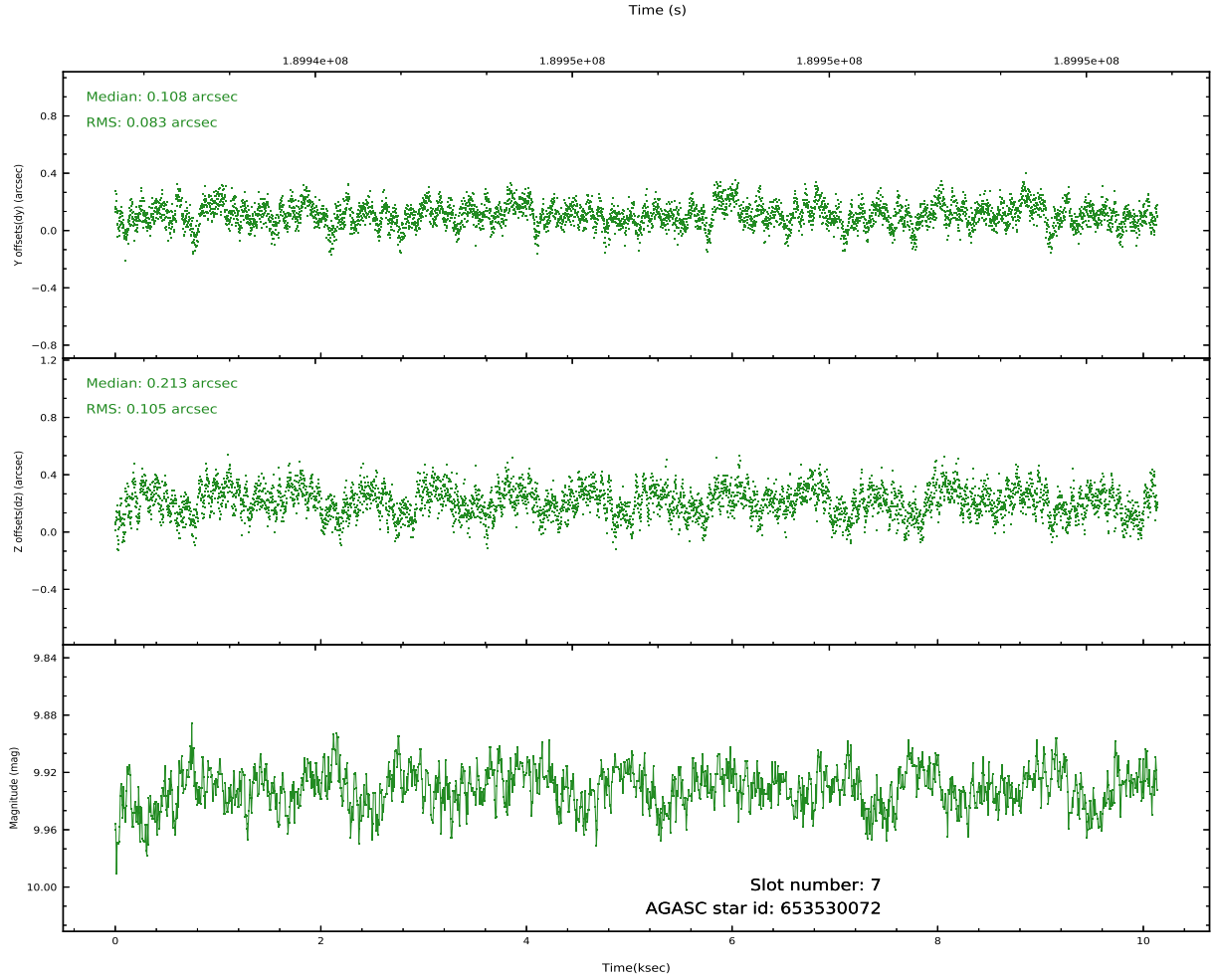
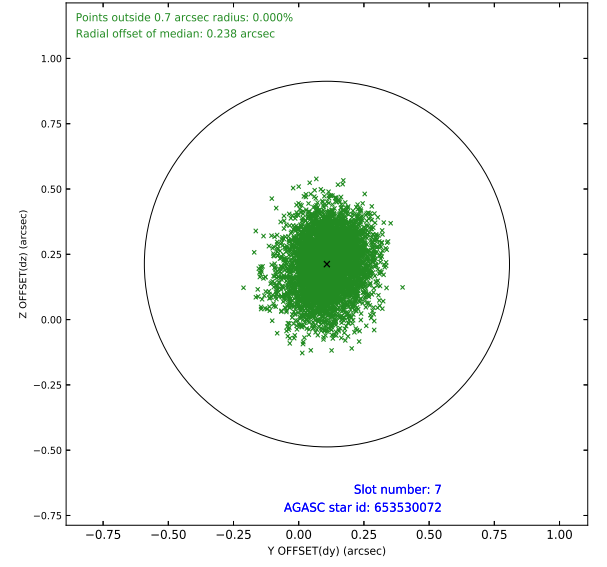
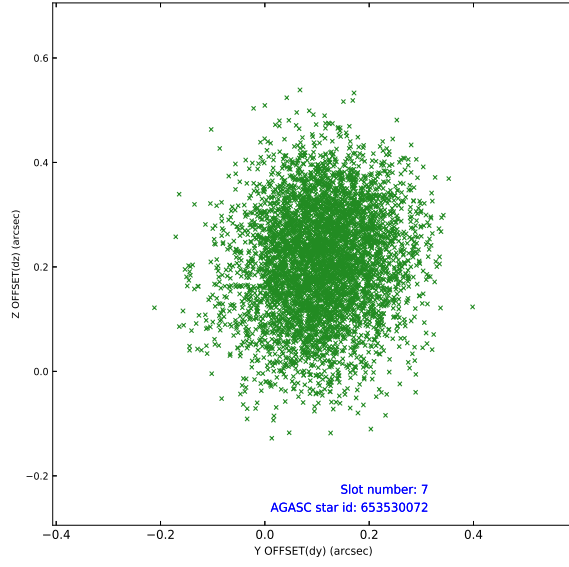


## 2.4.4 Slot 6



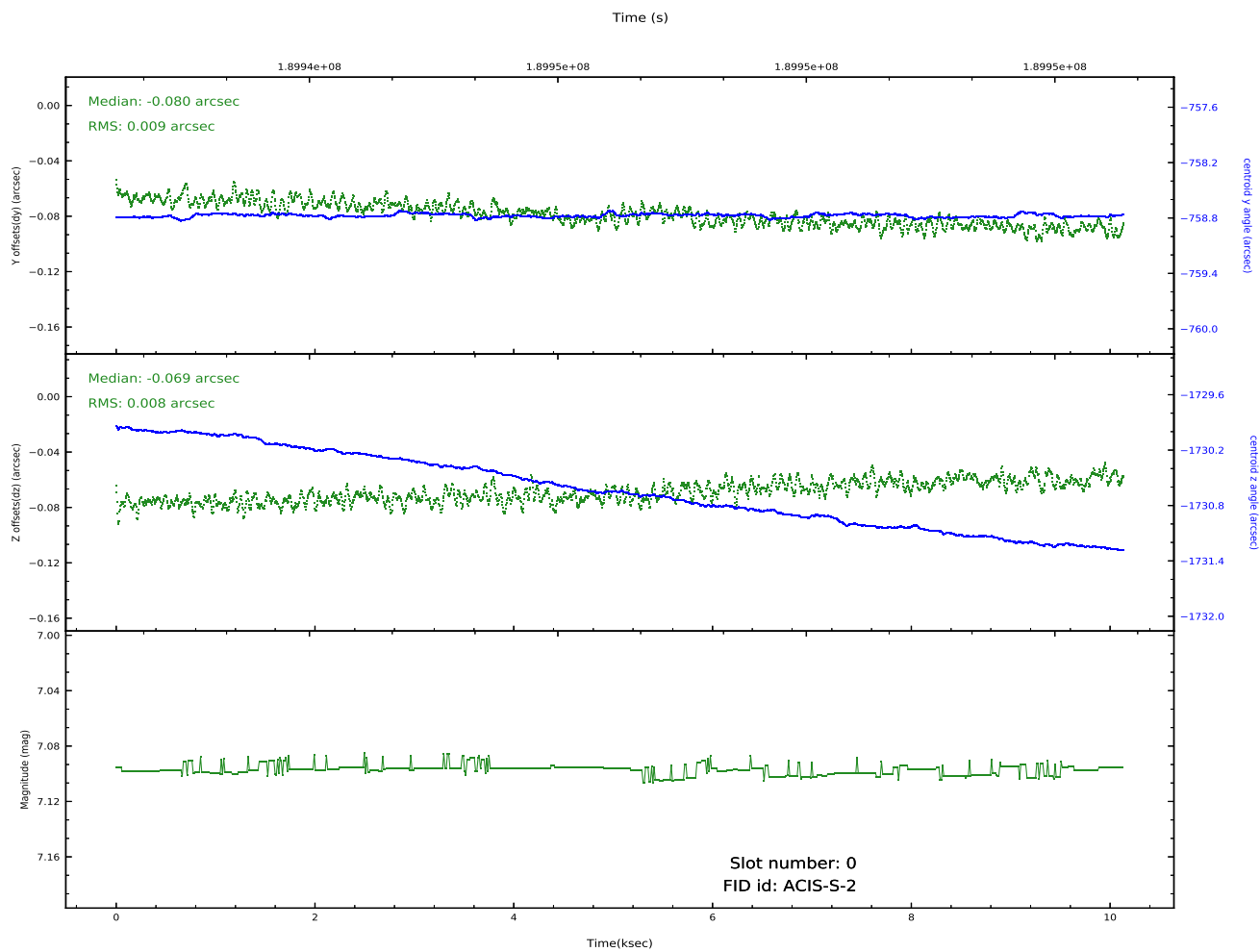
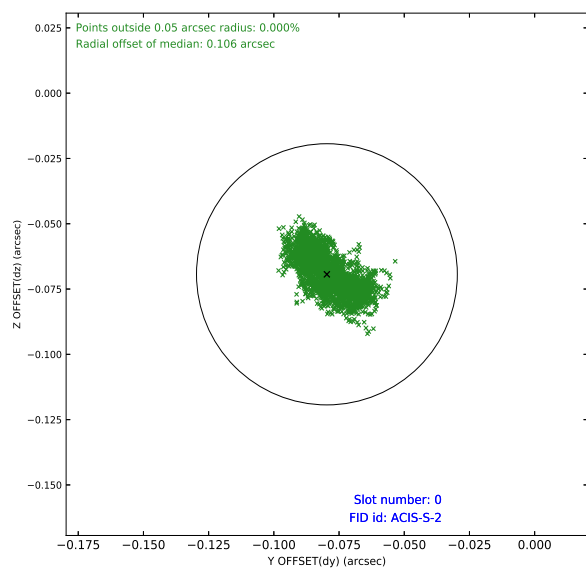
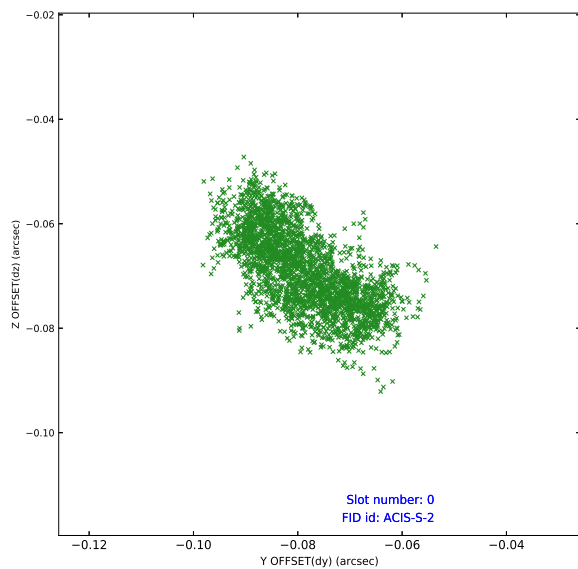


## 2.4.5 Slot 7

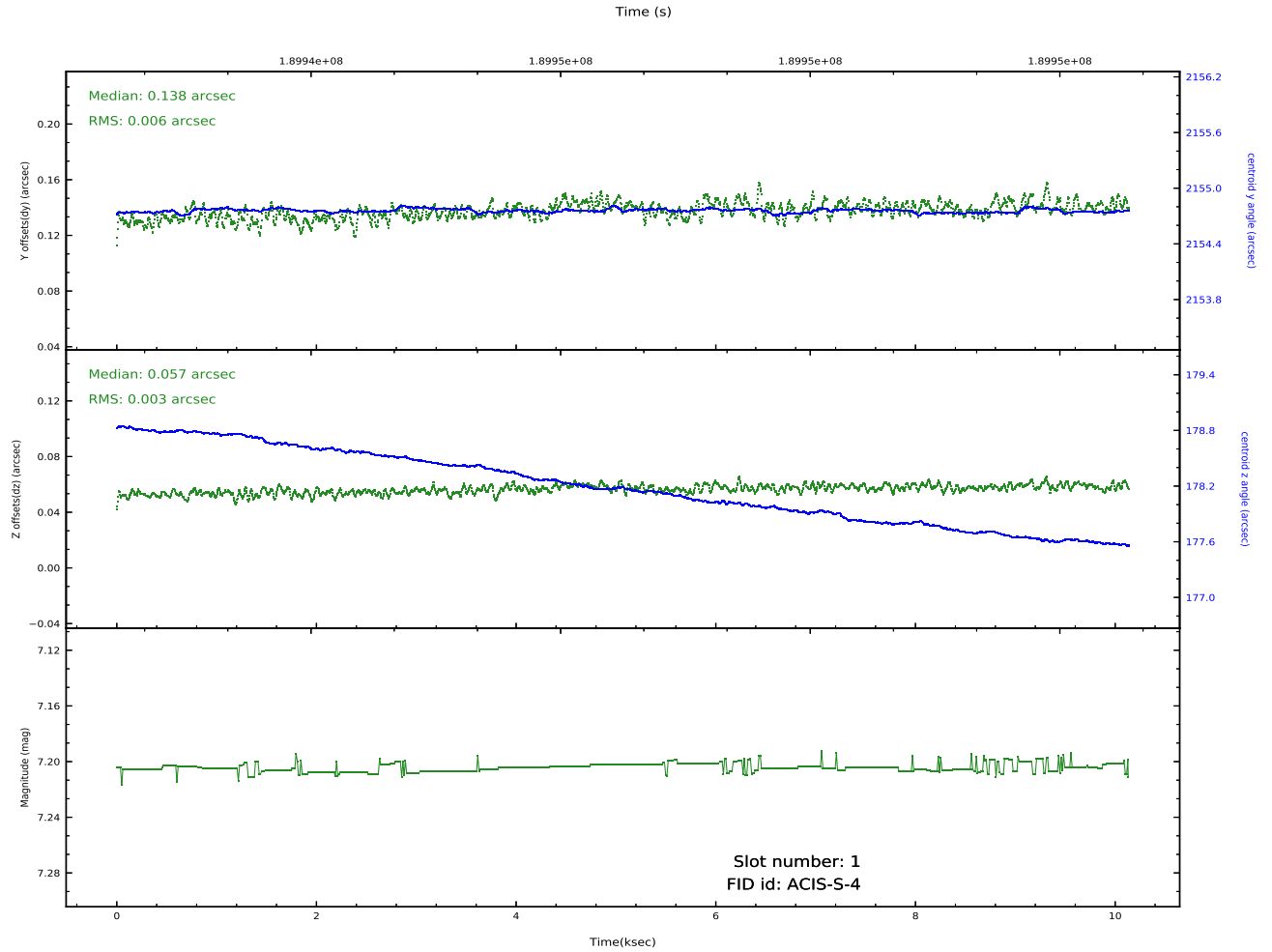
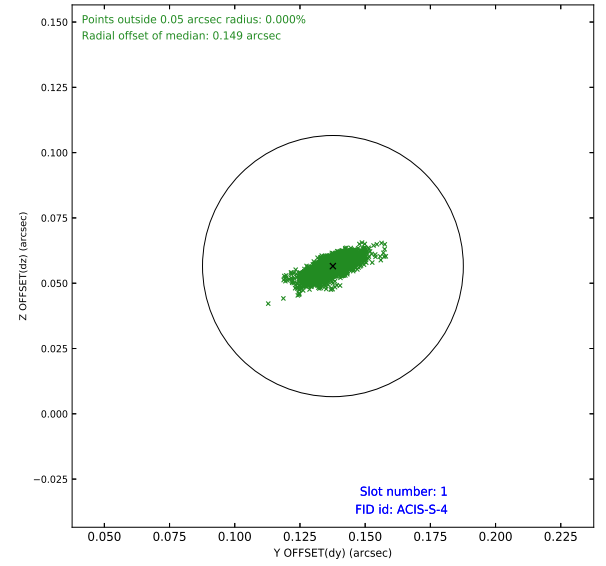
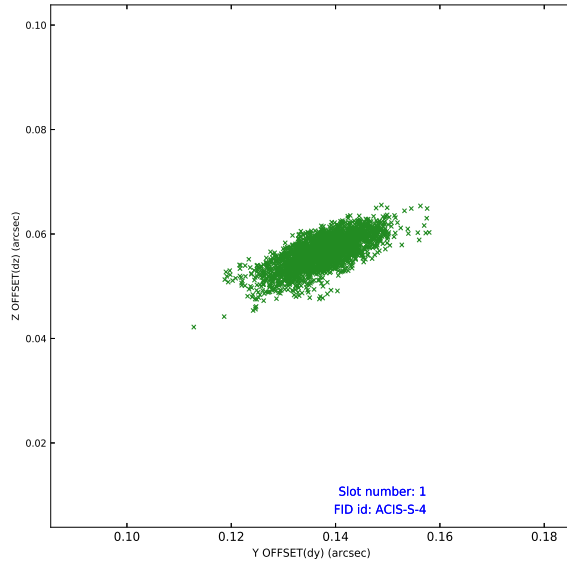


## 2.5 FID Slots

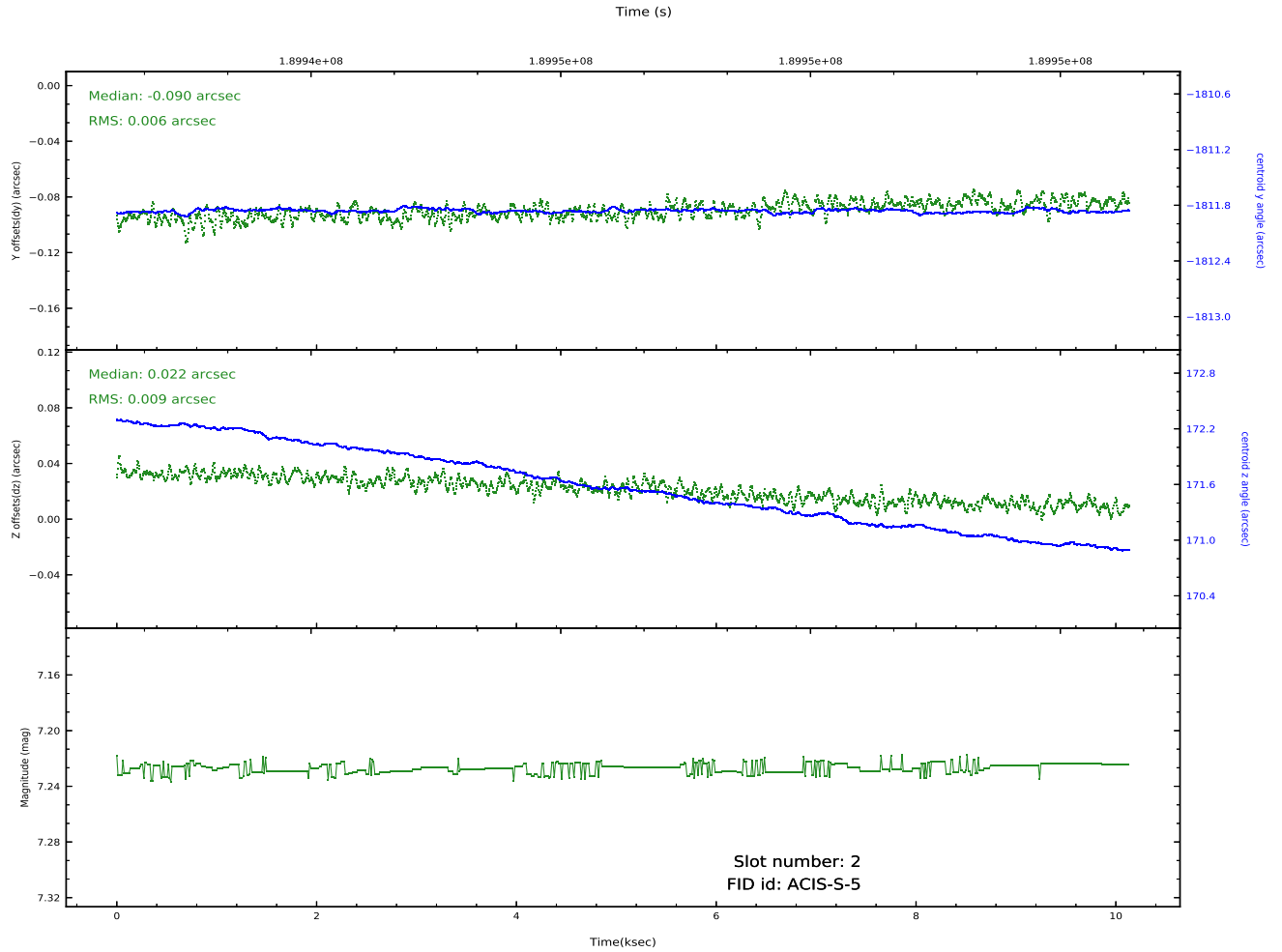
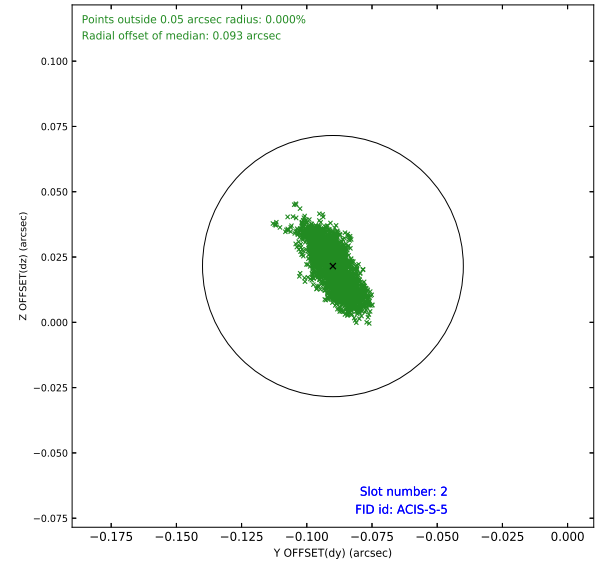
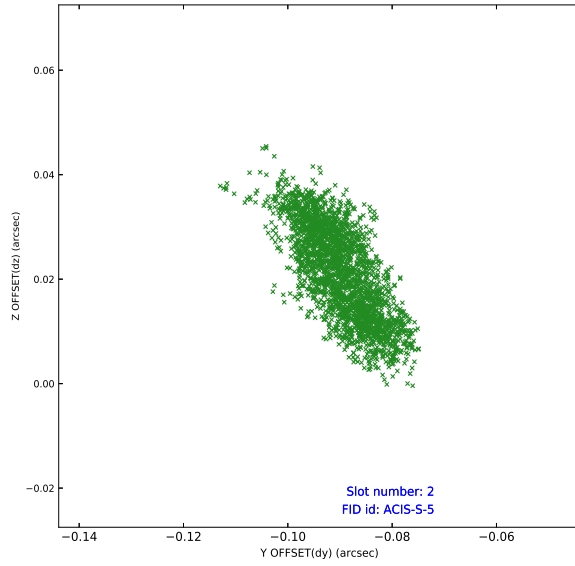
### 2.5.1 Slot 0



## 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)	2020.09.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.133

### A.2 Comments