

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5741 - L2 Version 4  
Chandra X-Ray Center

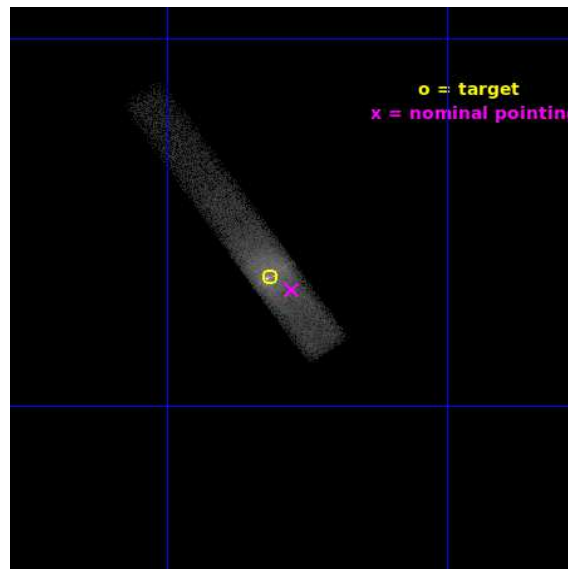
L2 Processing Date : Oct 8 2020

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# 1 Front

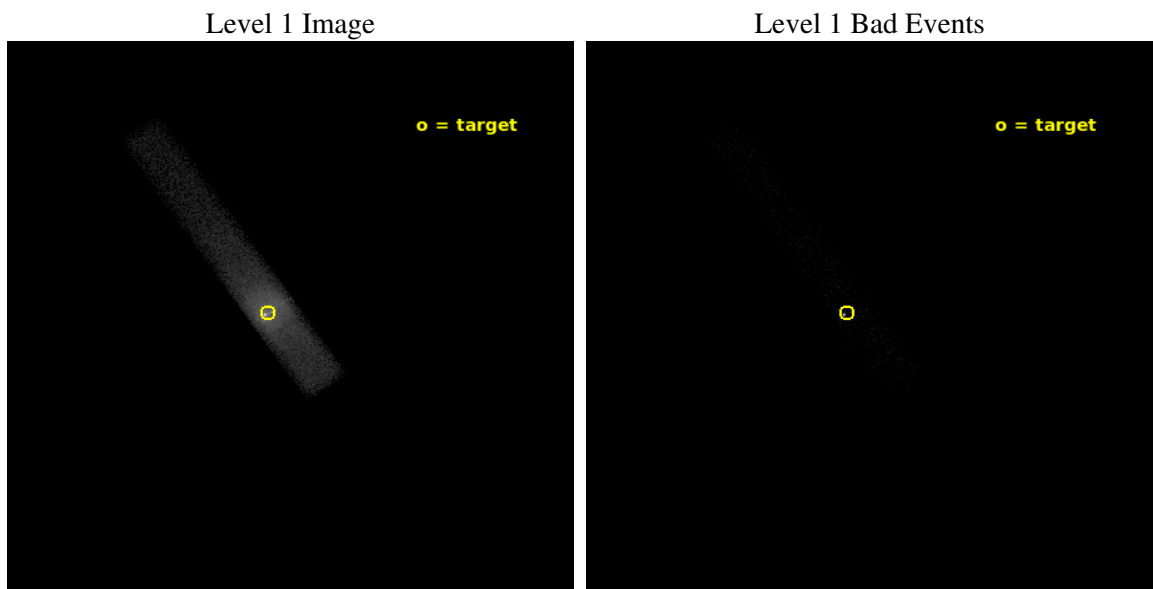
seq_num	701163	Sequence number
obs_id	5741	Observation id
title	The X-ray Flares of Knot 'HST-1' in the M87 Jet (monitoring)	Pro
observer	Dr. John Biretta	Principal investigator
object	M87	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.704167	Observer's specified target RA [deg]
dec_targ	12.391667	Observer's specified target Dec [deg]
ra_nom	187.69430985829	Nominal RA [deg]
dec_nom	12.386124726129	Nominal Dec [deg]
roll_nom	235.16022217509	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5179.6000771523	Sum of GTIs [s]
livetime	4697.623868268	Livetime [s]
ontime7	5179.6000771523	Sum of GTIs [s]
l2events	59033	Number of level 2 events



## 2 OBI

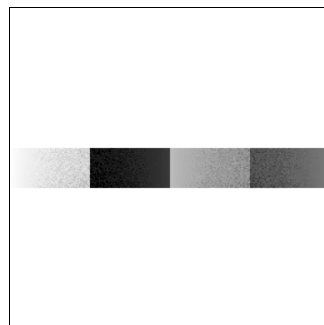
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4993.381000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	5179.6000771523	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime7	5179.6000771523	Sum of GTIs [s]
date	2020-10-08T18:31:27	Date and time of file creation	l1events	74246	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	74246
rejected events	14683
rejected %	19%

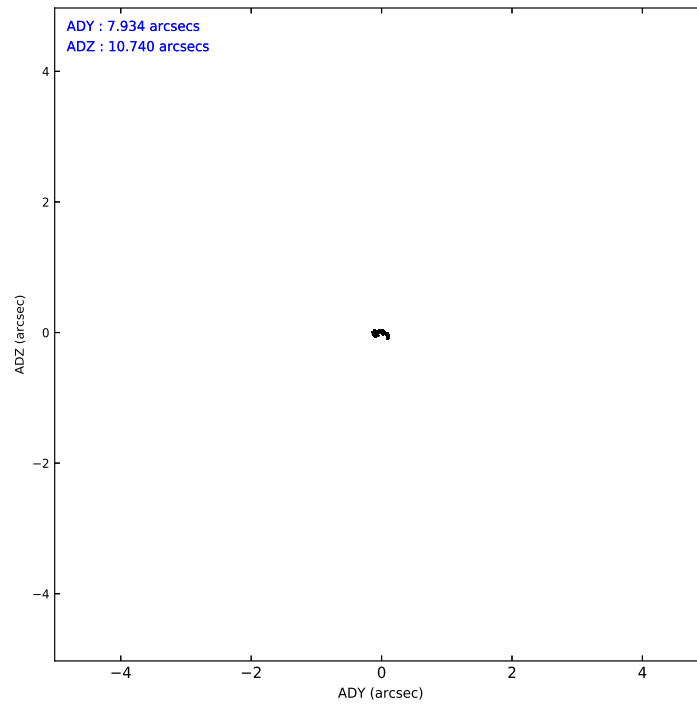
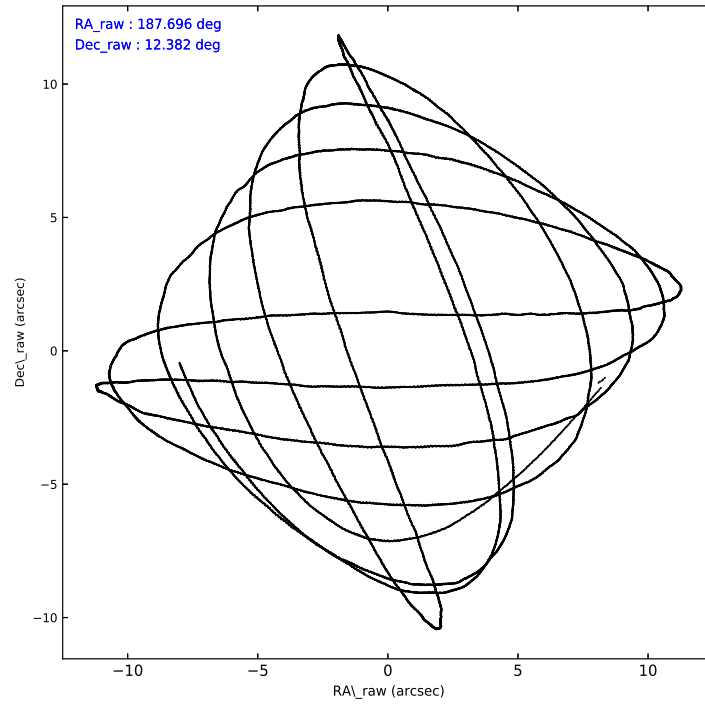
	<b>ccd 7</b>
grade 0 events	18224
	24%
grade 1 events	484
	0%
grade 2 events	15094
	20%
grade 3 events	6917
	9%
grade 4 events	6803
	9%
grade 5 events	2890
	3%
grade 6 events	14162
	19%
grade 7 events	9672
	13%

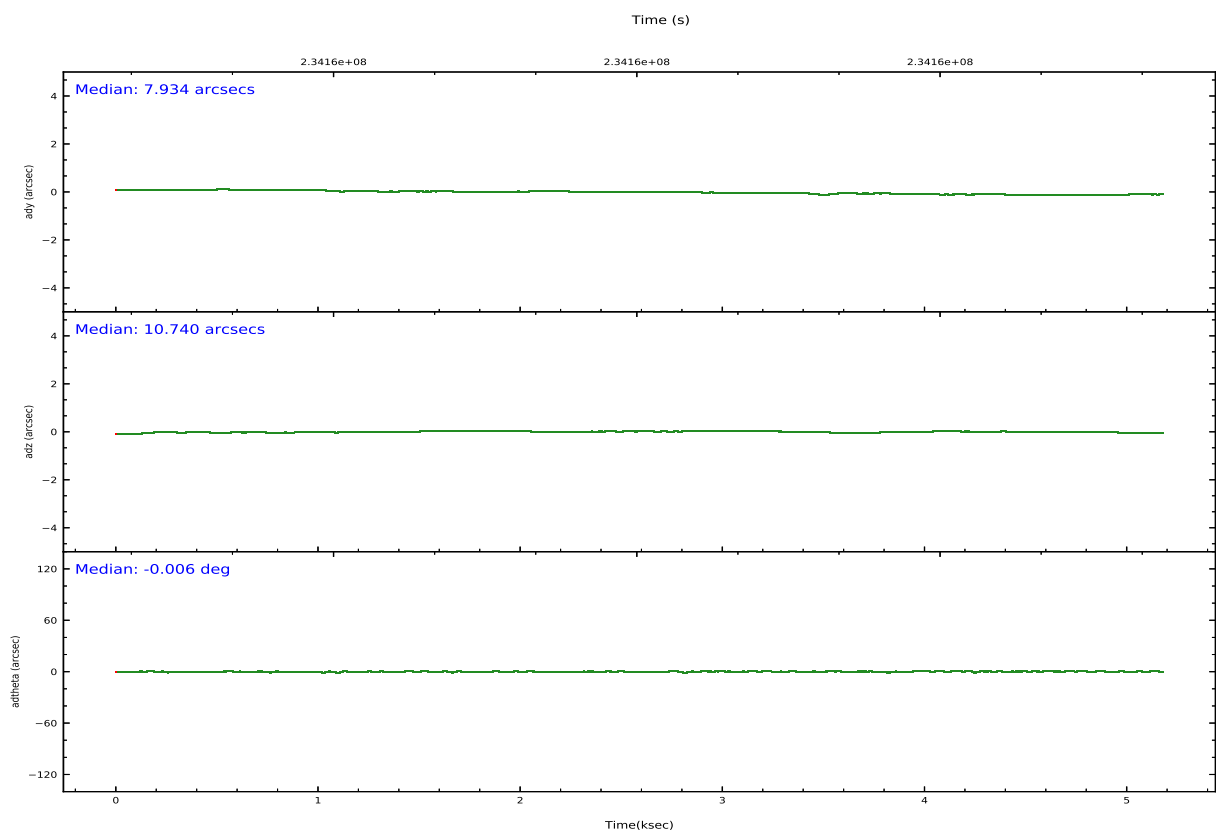
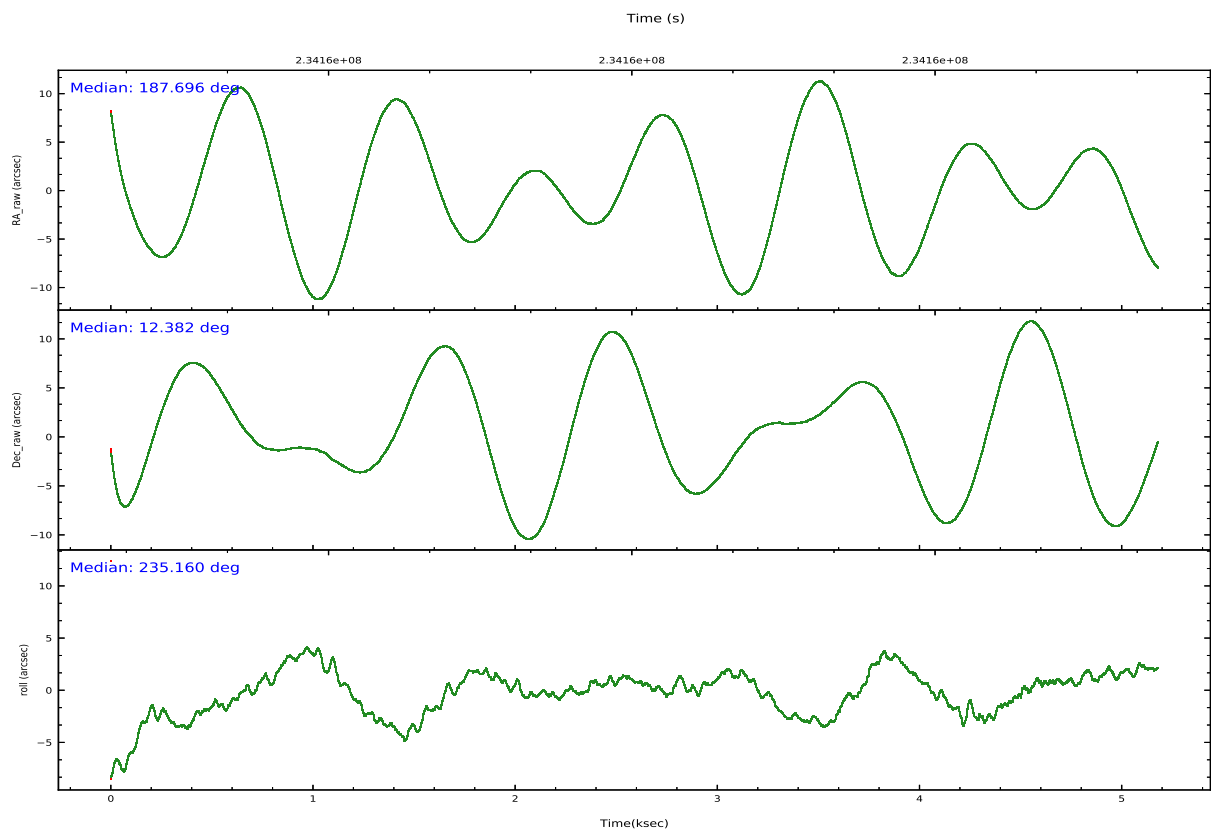


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-7	ACIS-7	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	187.697485	187.69430985829	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.409659	12.386124726129	Subarray start row	449	449
[deg] Pointing Roll	235.001432	235.16022217509	Subarray row count	128	128
[s] Window start time (MET)	233798464.184000	233798464.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	234403264.184000	234403264.184000	[s] Primary exposure time	0.000000	0.4
[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)	234157610.184000	234156703.02459			
Observation start date	2005-06-03T03:45:46	2005-06-03T03:31:43			
[s] Observation end time (MET)	234162604.184000	234162821.76236			
Observation end date	2005-06-03T05:09:00	2005-06-03T05:13:41			
Read mode	TIMED	TIMED			

## 2.3 Aspect



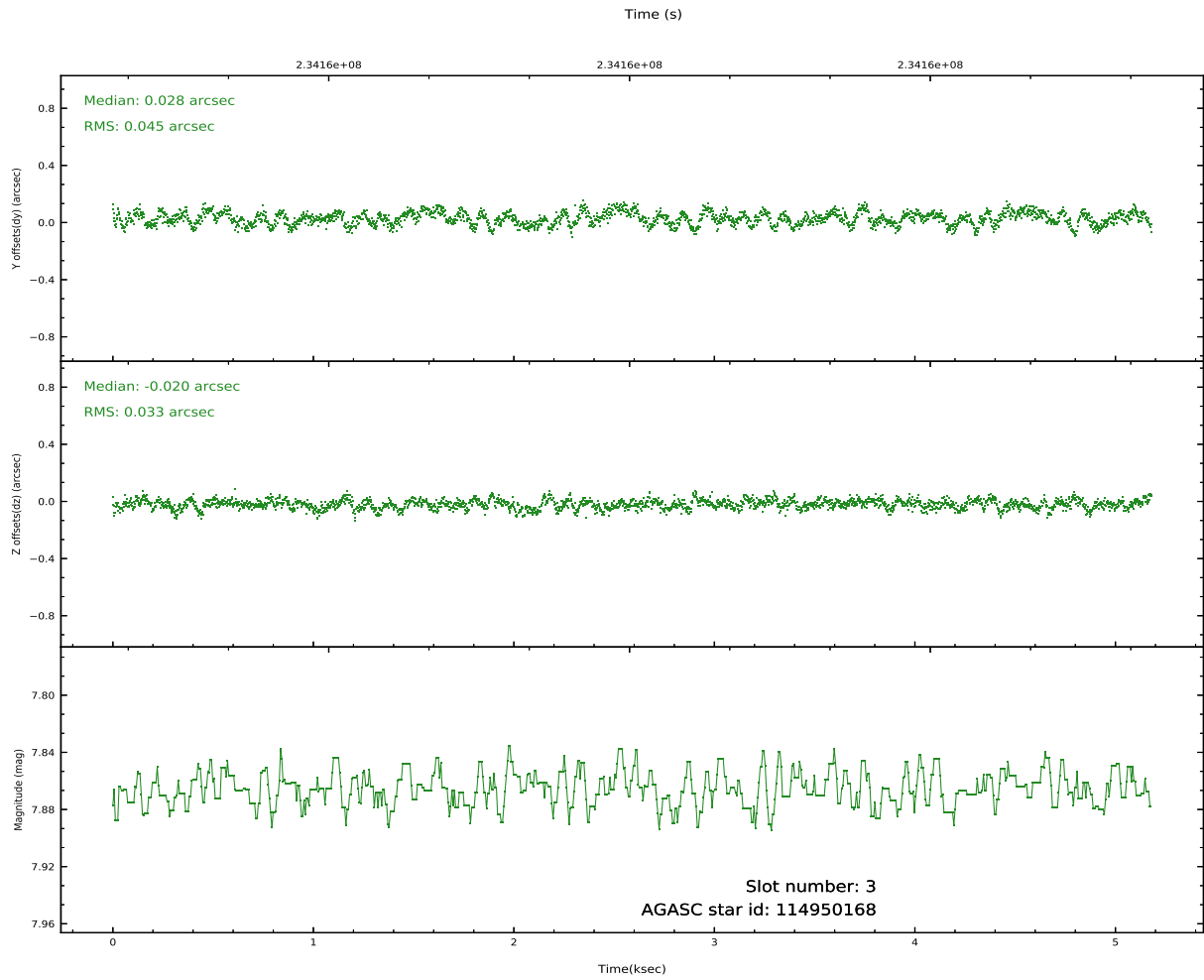
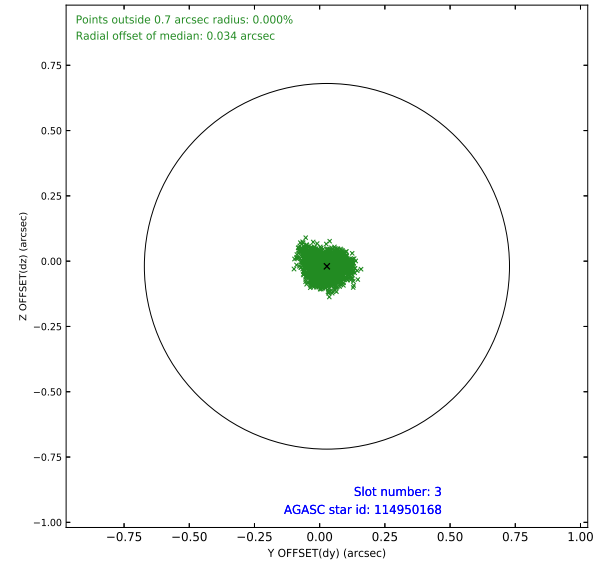
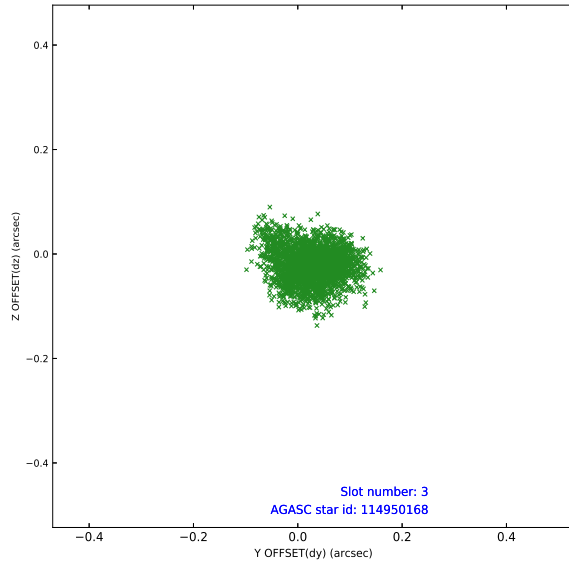


Slot Statistics

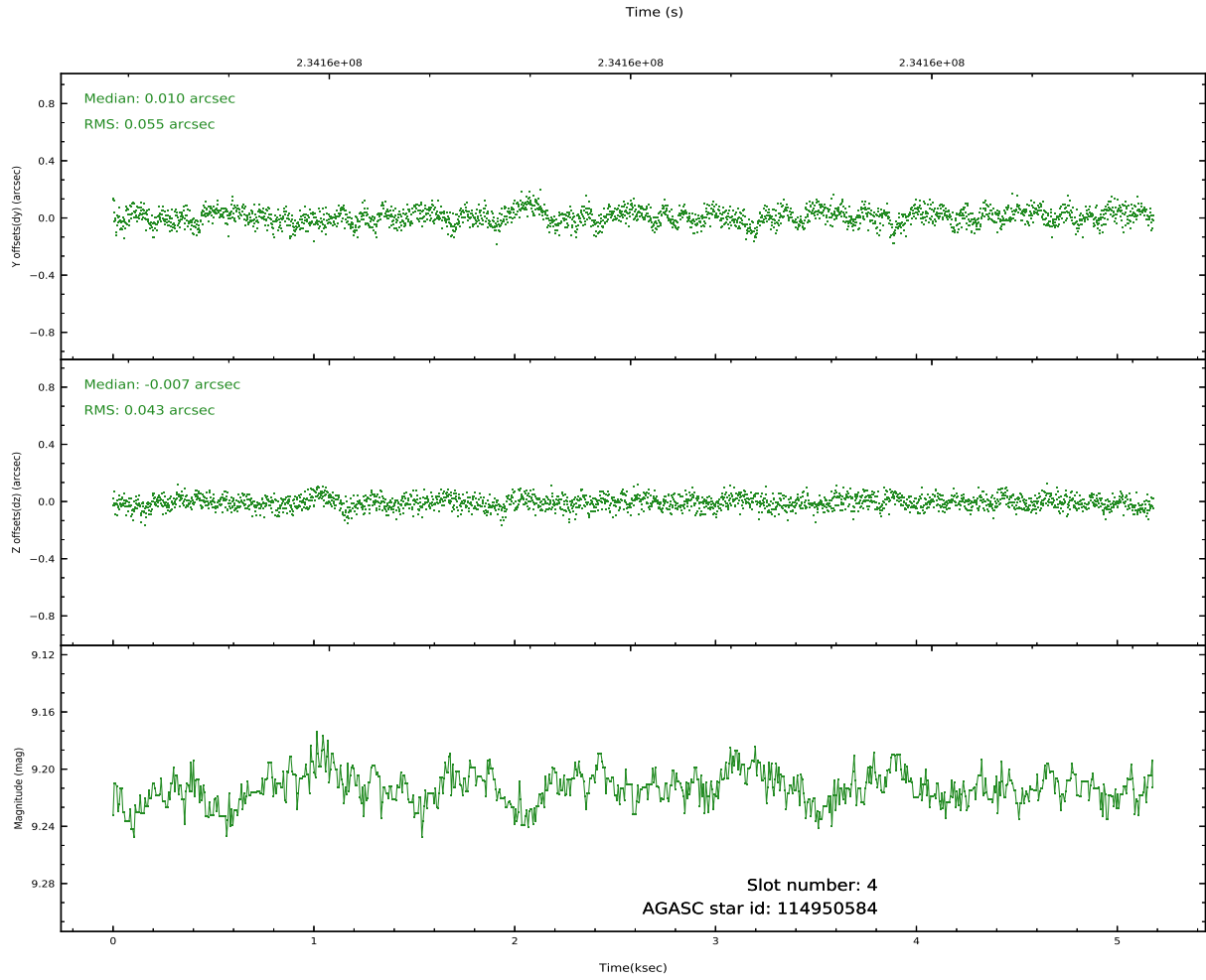
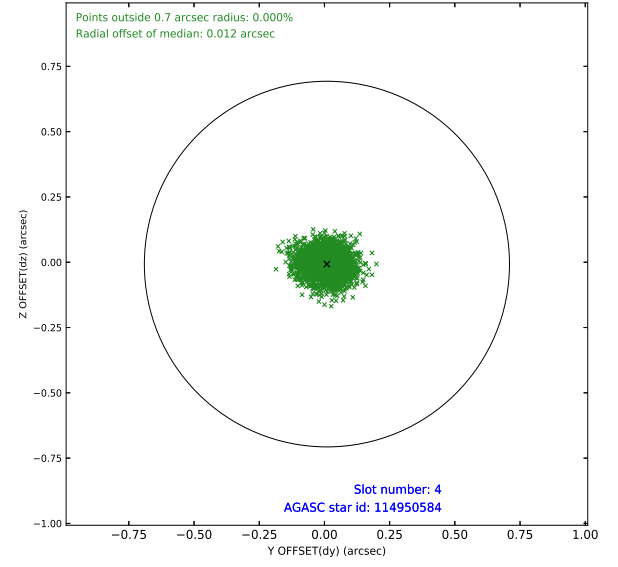
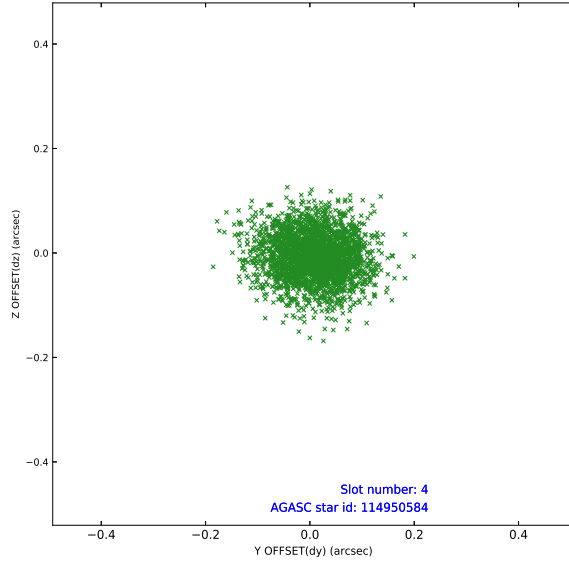
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	1264	1.000	-0.073	-0.057	0.007	0.011	0.000000	0.000000	-760.70	-1732
1	FID		ACIS-S-4	7.20	1264	1.000	0.176	0.051	0.006	0.011	0.000000	0.000000	2152.22	175
2	FID		ACIS-S-5	7.23	1264	1.000	-0.134	0.015	0.008	0.013	0.000000	0.000000	-1812.17	170
3	GUIDE	used	114950168	7.87	2528	1.000	0.028	-0.020	0.060	0.095	187.143398	12.117441	1979.10	-995
4	GUIDE	used	114950584	9.21	2527	1.000	0.010	-0.007	0.075	0.121	187.487323	11.827248	2143.13	595
5	GUIDE	used	114952824	8.57	2524	1.000	-0.030	0.053	0.064	0.104	187.703904	12.486727	-239.02	-140
6	GUIDE	used	114954440	9.21	2528	1.000	0.120	-0.186	0.087	0.147	186.915066	12.219118	2137.80	-1863
7	GUIDE	used	114955056	8.31	2525	1.000	-0.128	0.163	0.059	0.095	187.914001	12.127854	394.77	1205

## 2.4 Star Slots

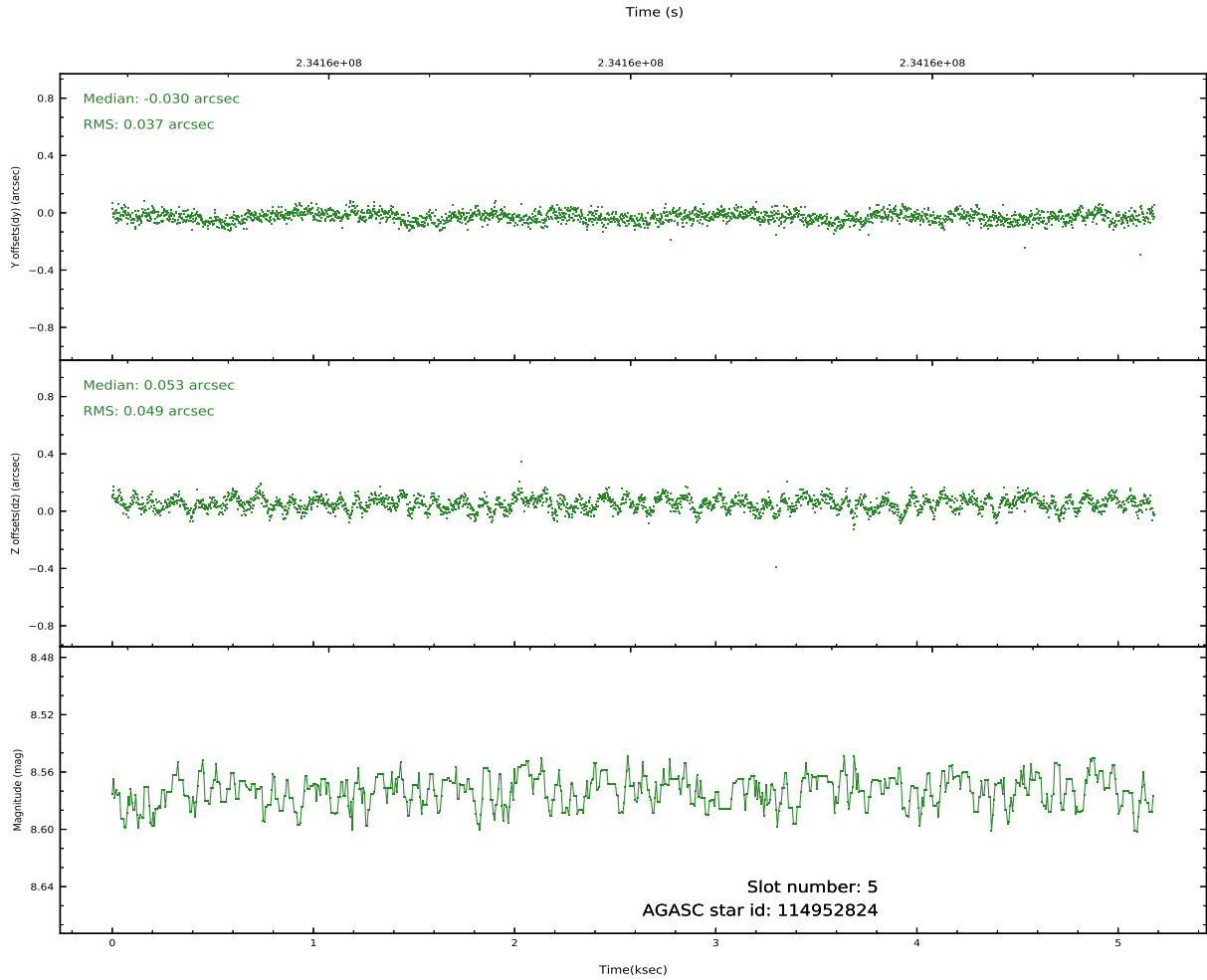
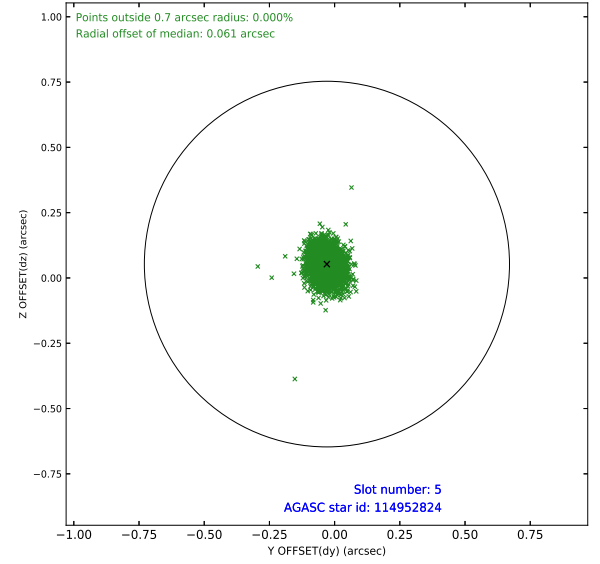
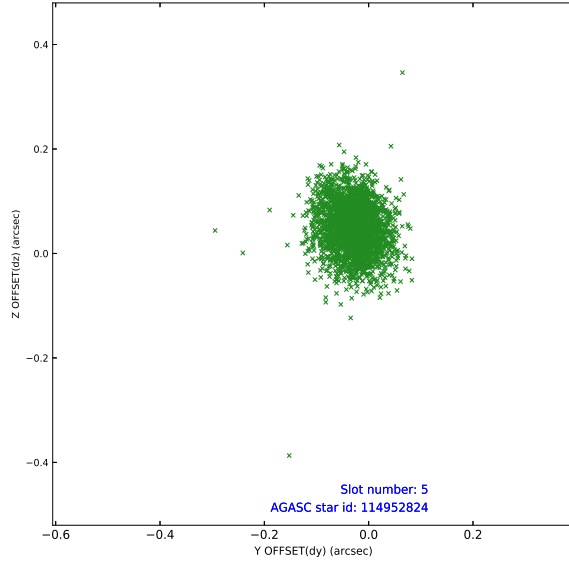
### 2.4.1 Slot 3



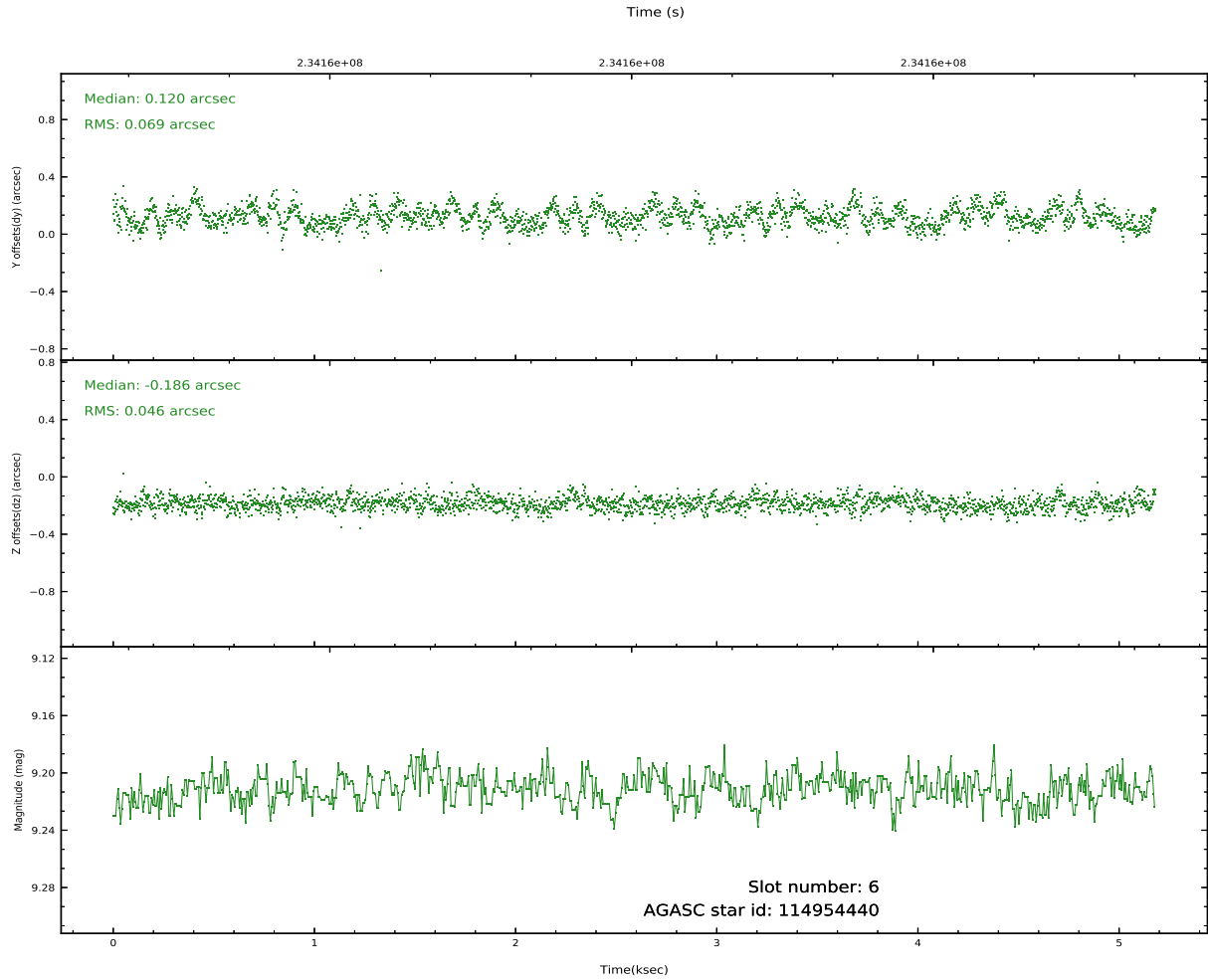
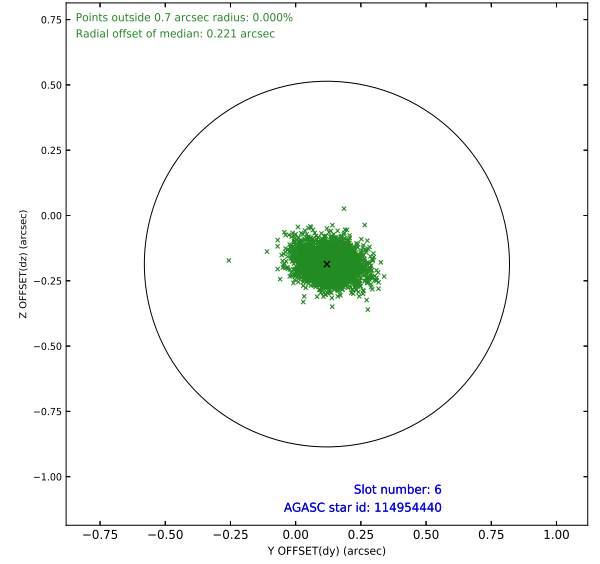
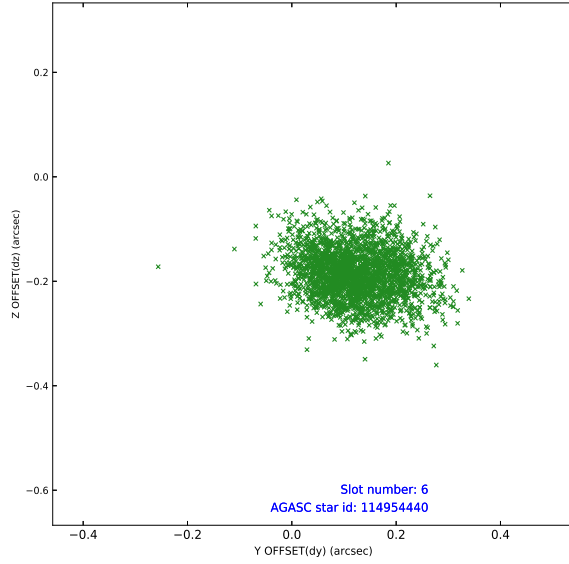
## 2.4.2 Slot 4



### 2.4.3 Slot 5

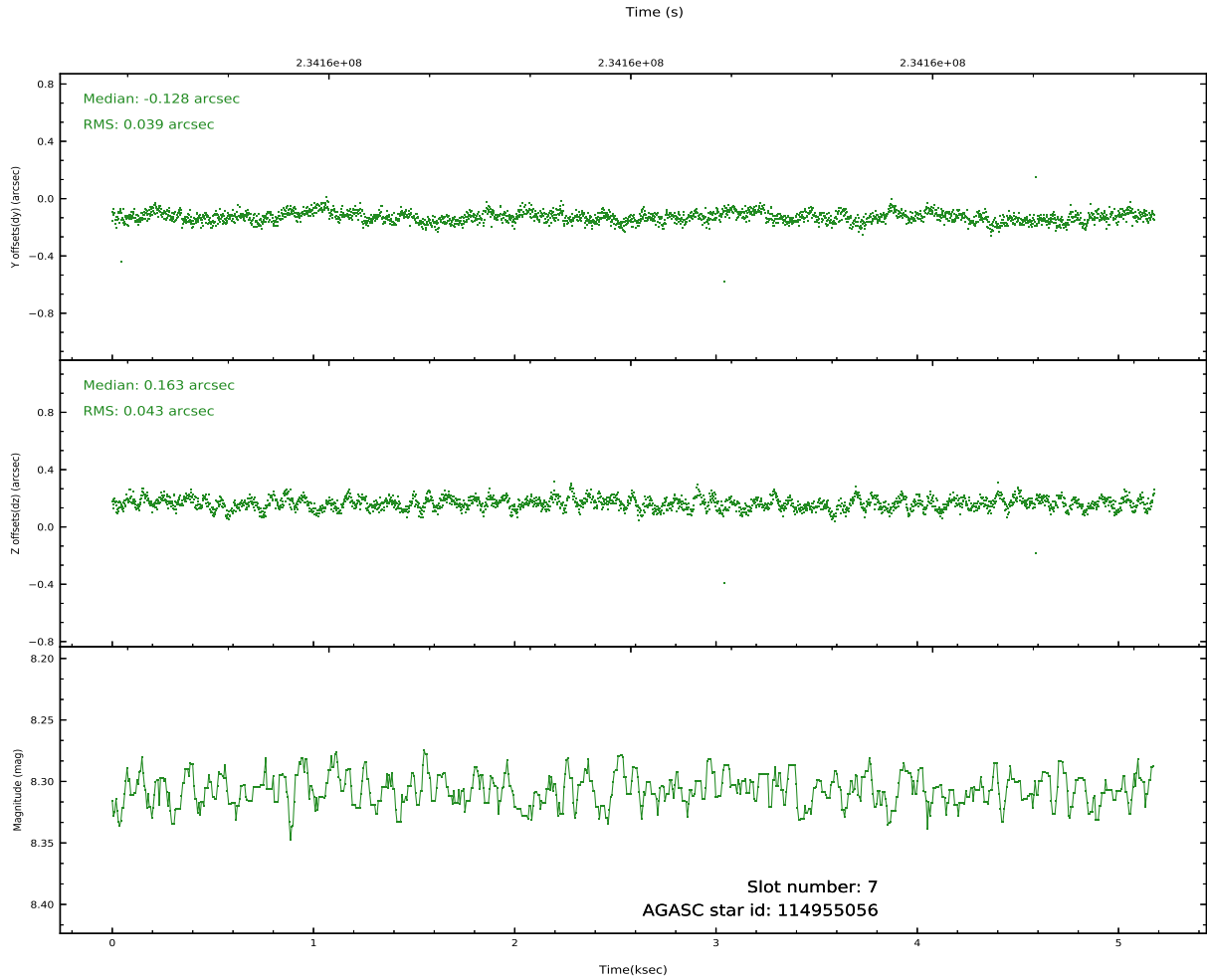
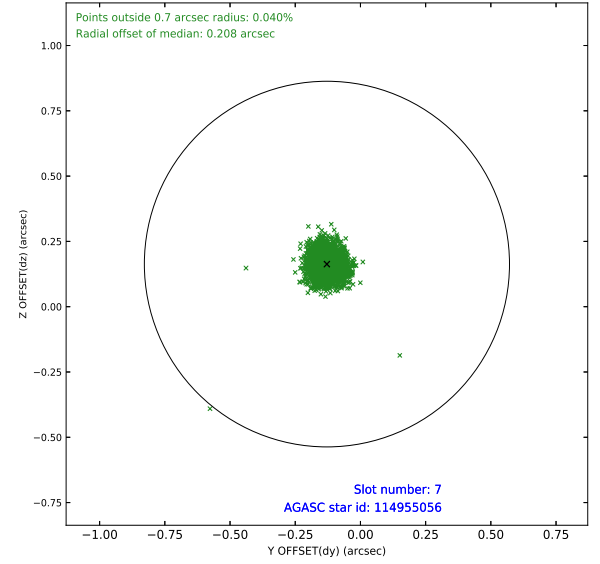
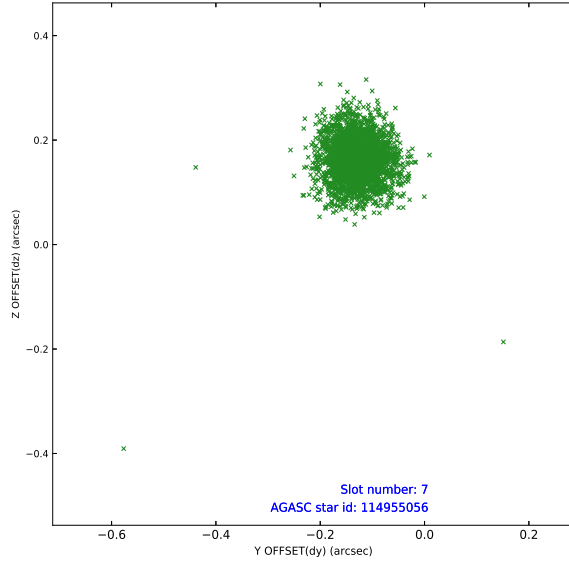


## 2.4.4 Slot 6



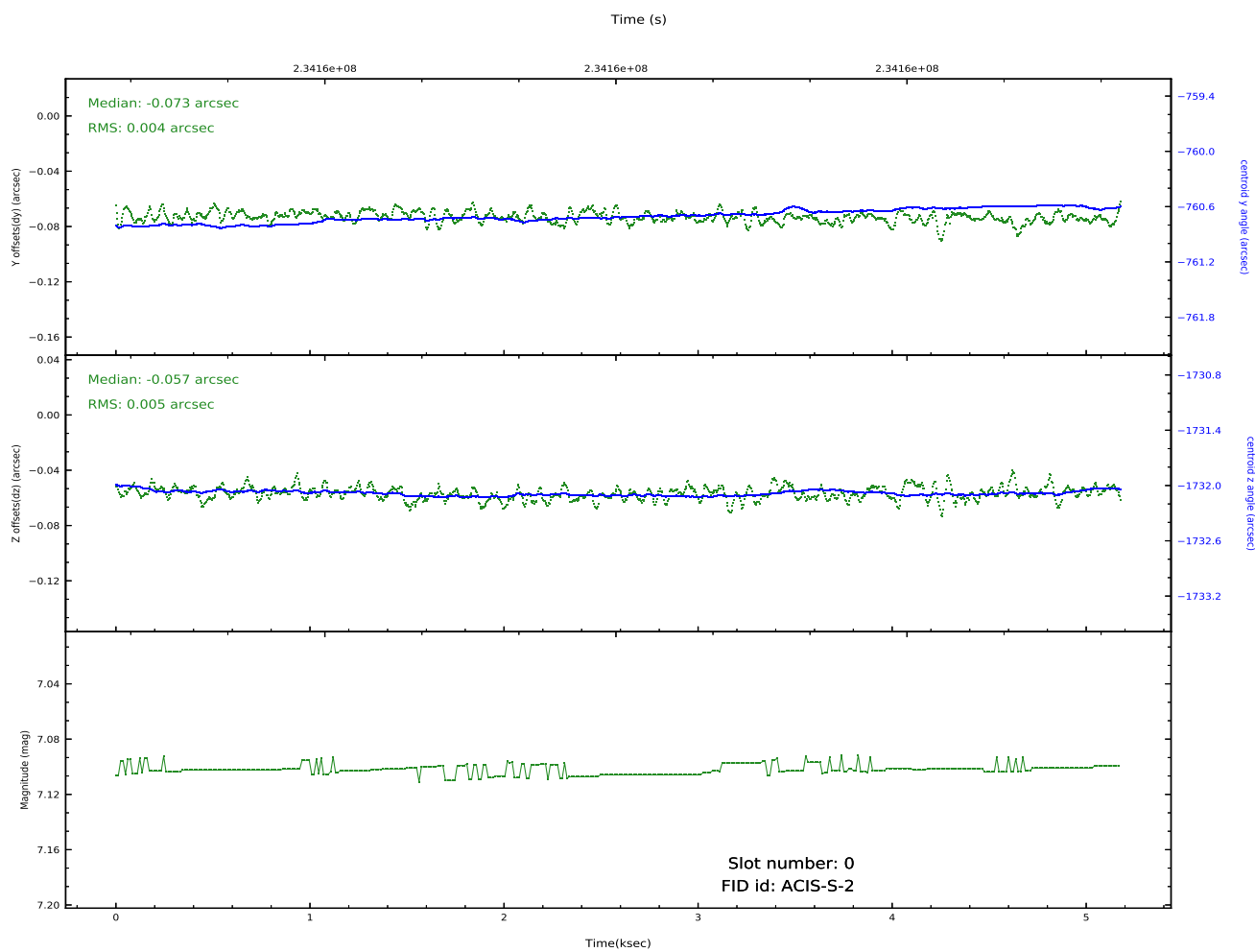
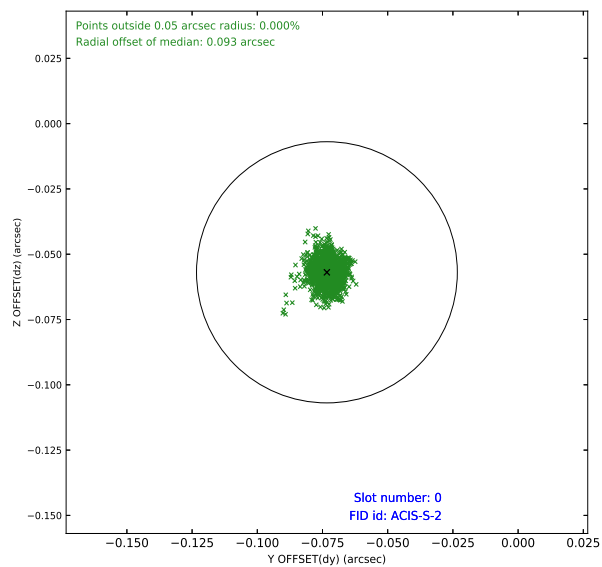
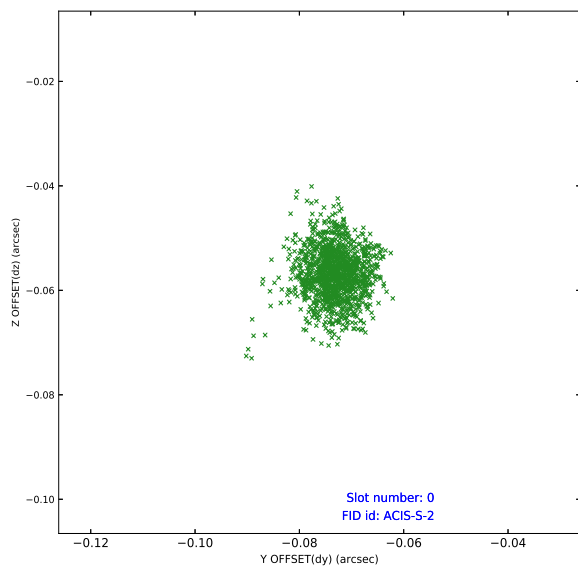


## 2.4.5 Slot 7

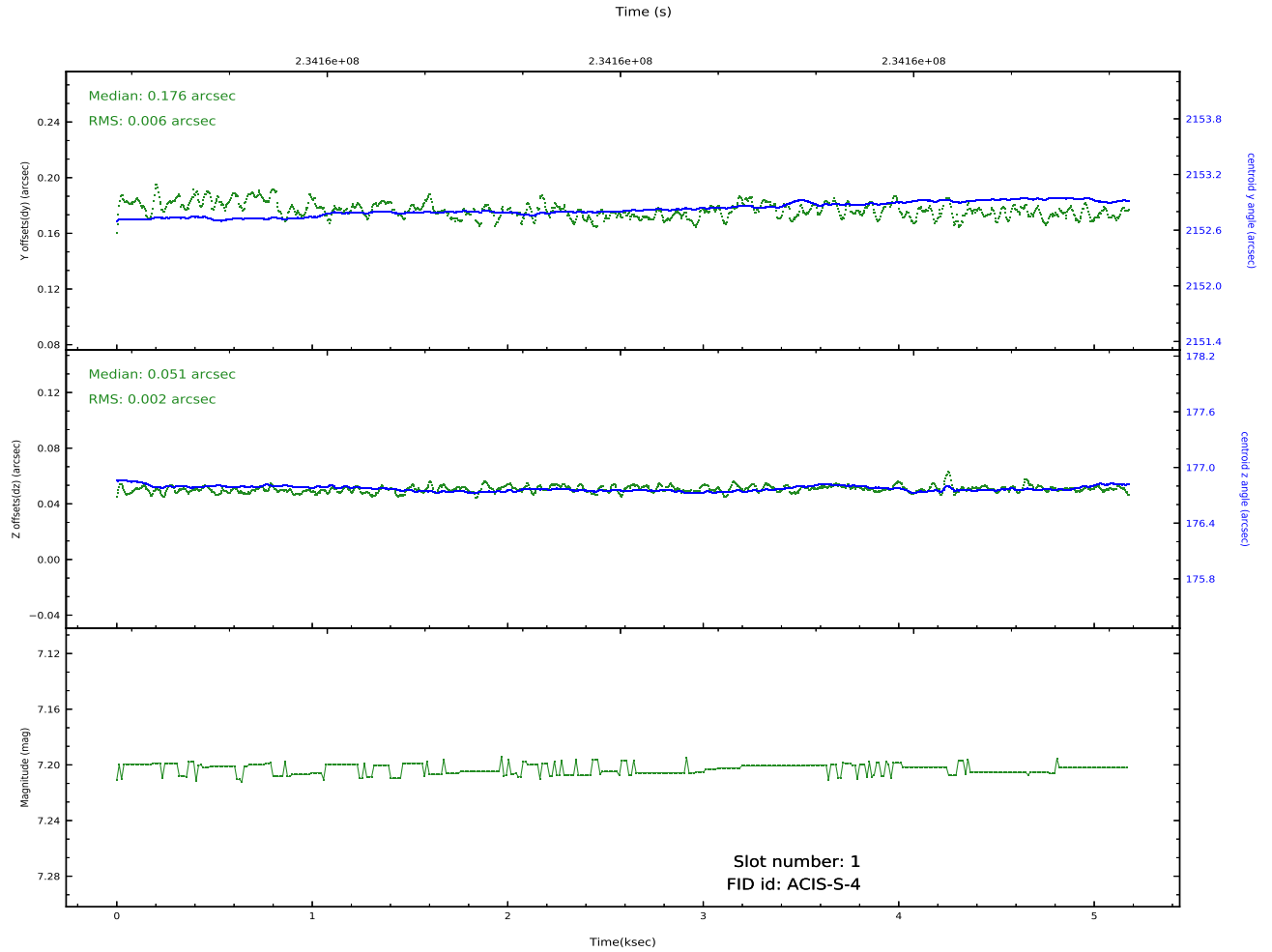
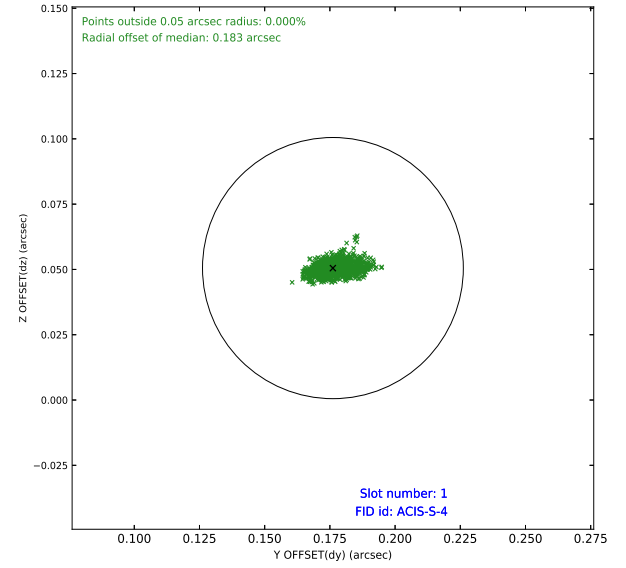
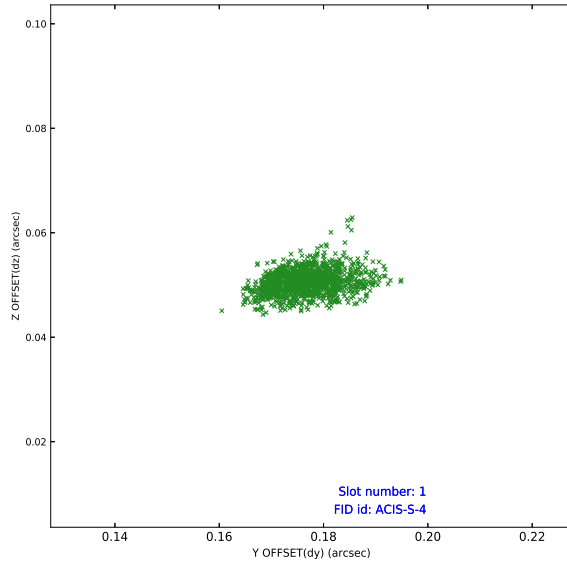


## 2.5 FID Slots

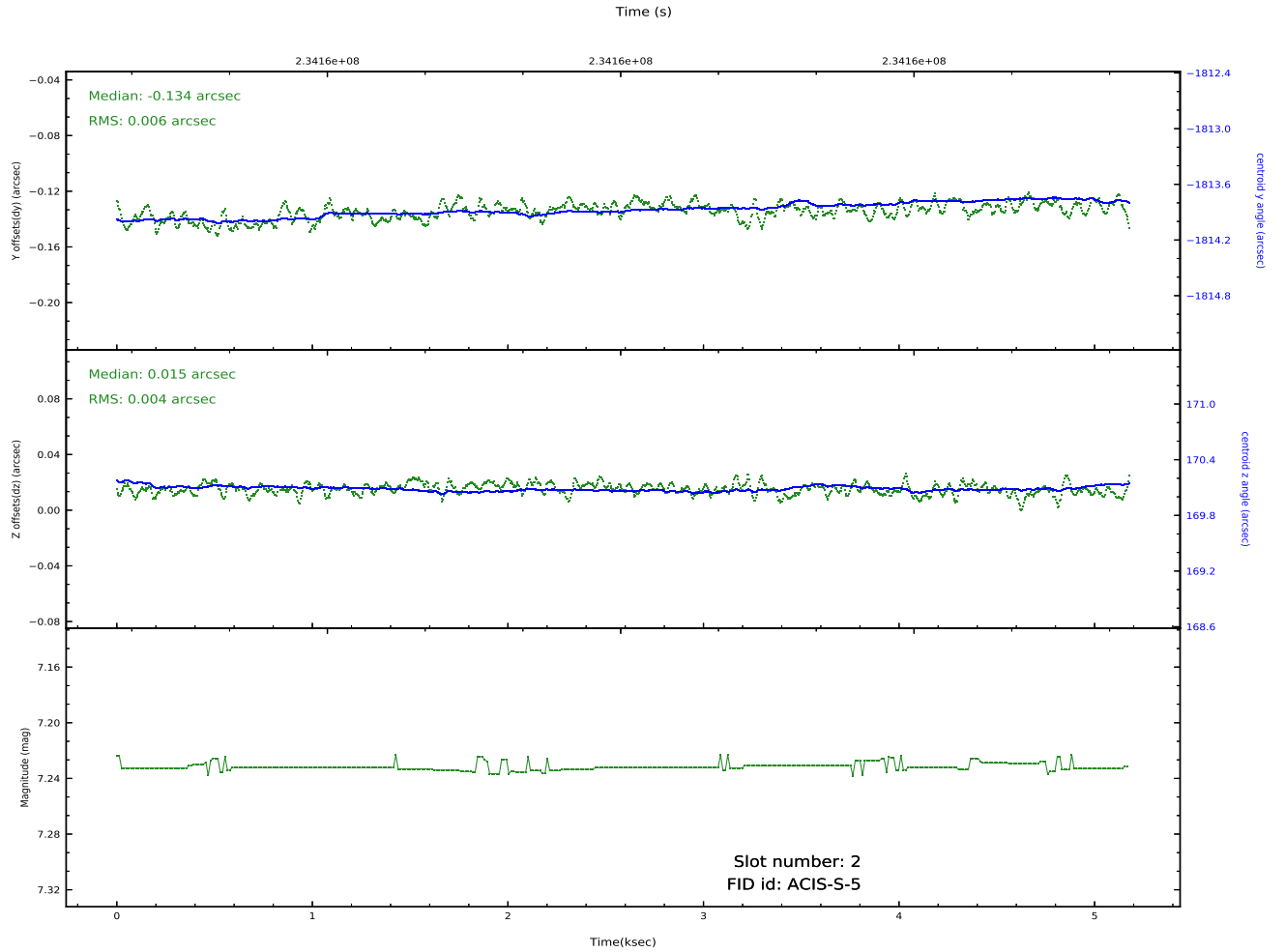
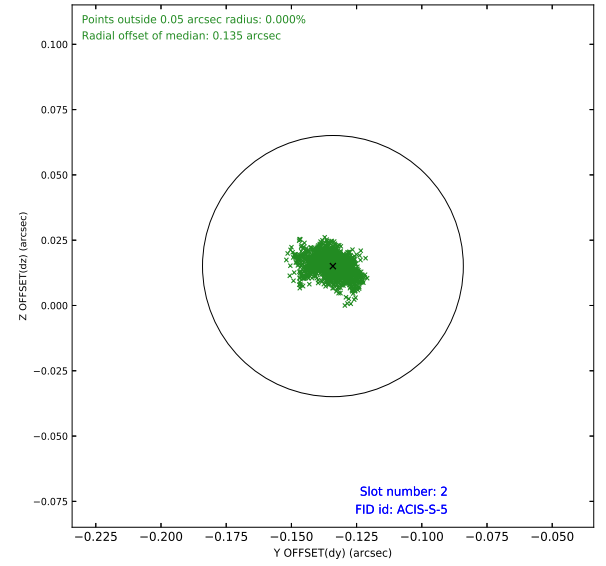
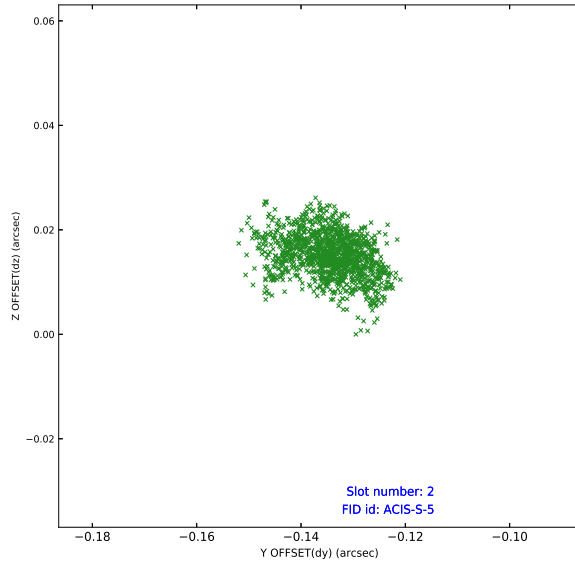
### 2.5.1 Slot 0



## 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)	2020.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.1796

## A.2 Comments

Joint proposal with HST.  
Window constraint was met.