

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 4907 - L2 Version 4  
Chandra X-Ray Center

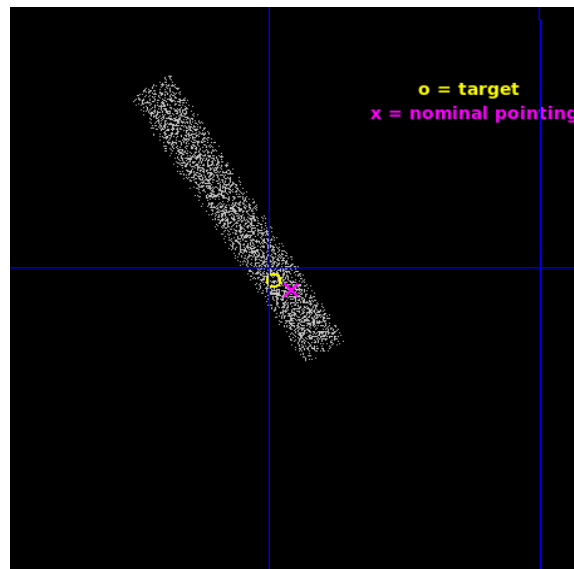
L2 Processing Date : Sep 24 2020

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# 1 Front

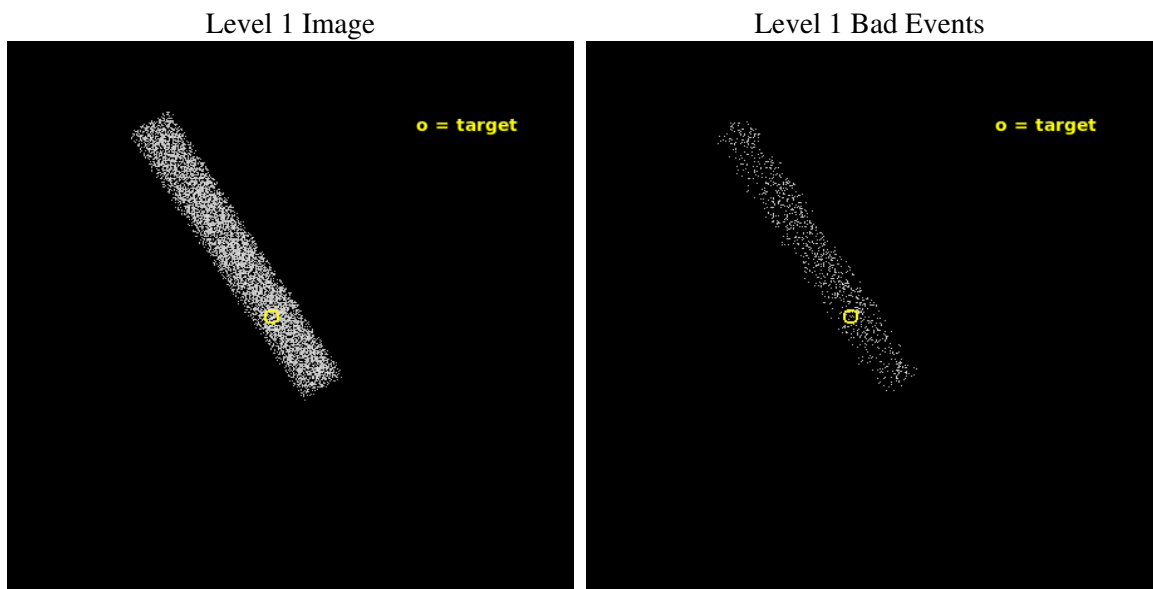
seq_num	700988	Sequence number
obs_id	4907	Observation id
title	The X-ray Spectra of Red Quasars	Proposal title
observer	Dr Mark Lacy	Principal investigator
object	FTM 1022+1929	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	155.6225	Observer's specified target RA [deg]
dec_targ	19.494167	Observer's specified target Dec [deg]
ra_nom	155.61432195516	Nominal RA [deg]
dec_nom	19.49014664726	Nominal Dec [deg]
roll_nom	237.62601713318	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7284.8001085222	Sum of GTIs [s]
livetime	6606.9291751516	Livetime [s]
ontime7	7284.8001085222	Sum of GTIs [s]
l2events	3892	Number of level 2 events



## 2 OBI

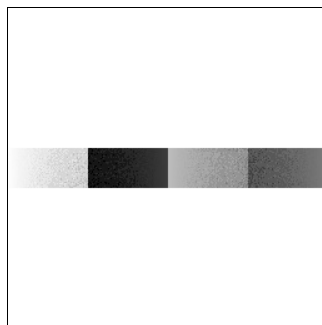
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7100.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	7284.8001085222	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime7	7284.8001085222	Sum of GTIs [s]
date	2020-09-24T12:43:53	Date and time of file creation	l1events	10896	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	10896
rejected events	6853
rejected %	62%

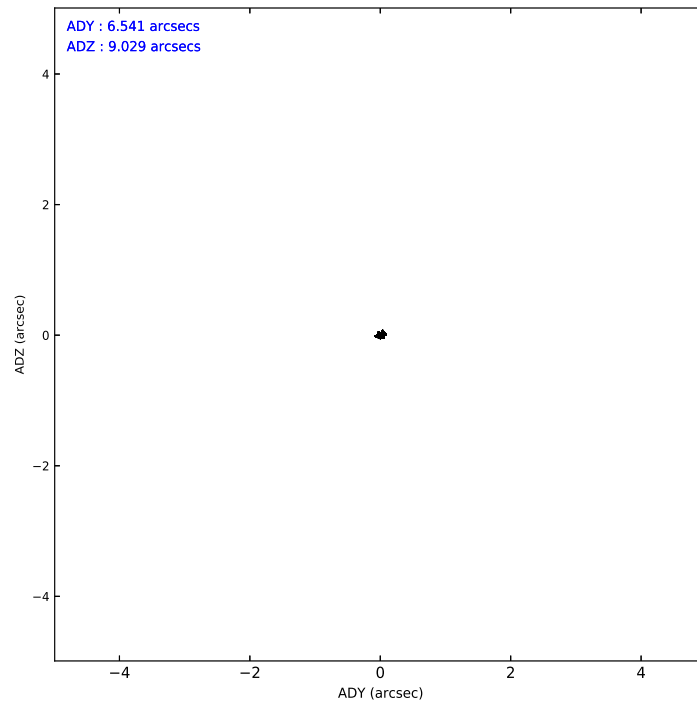
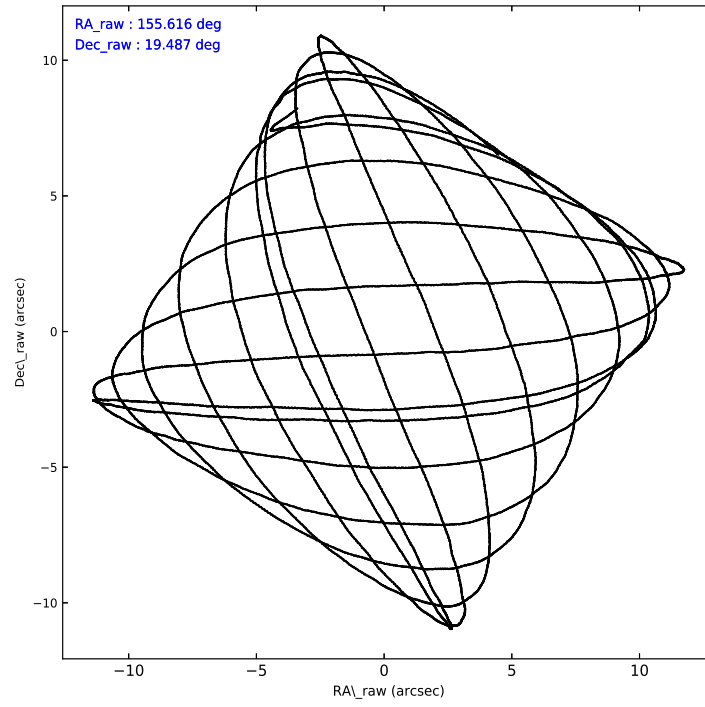
	<b>ccd 7</b>
grade 0 events	524
	4%
grade 1 events	14
	0%
grade 2 events	940
	8%
grade 3 events	631
	5%
grade 4 events	618
	5%
grade 5 events	1015
	9%
grade 6 events	2233
	20%
grade 7 events	4921
	45%

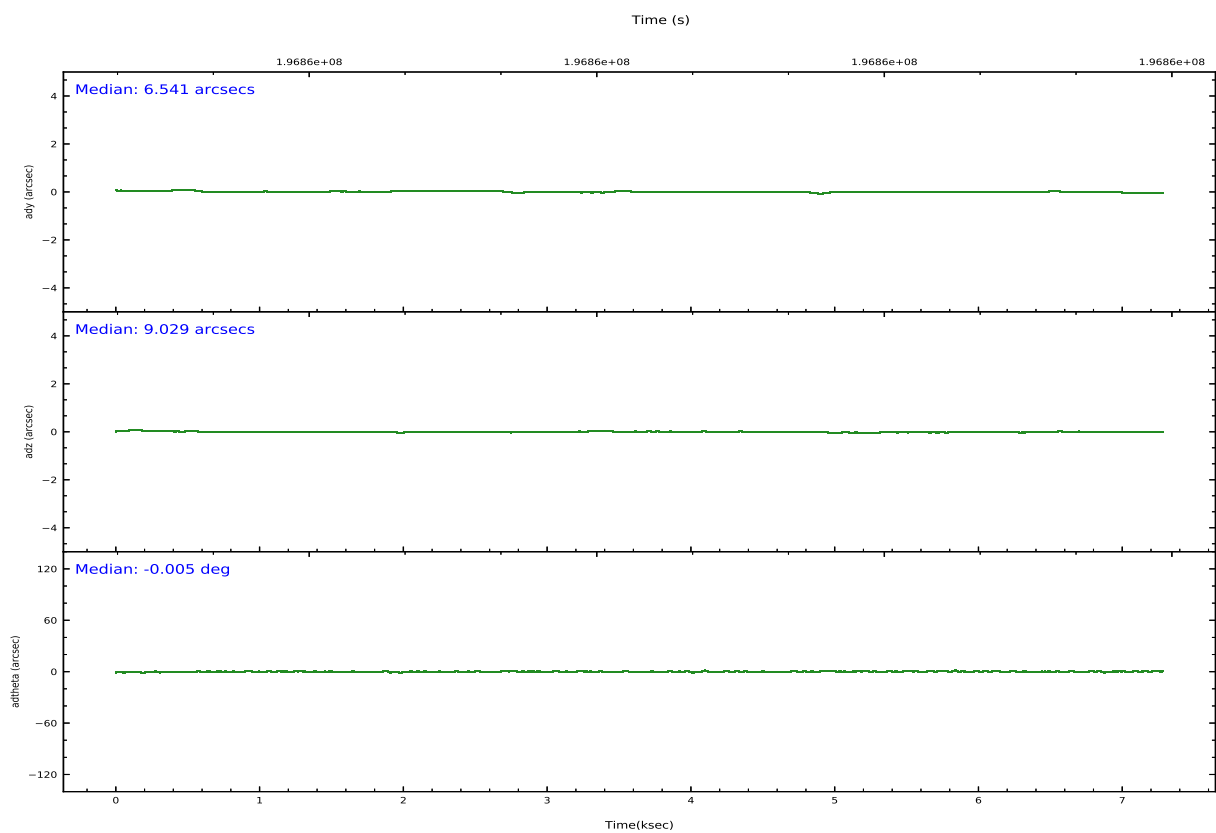
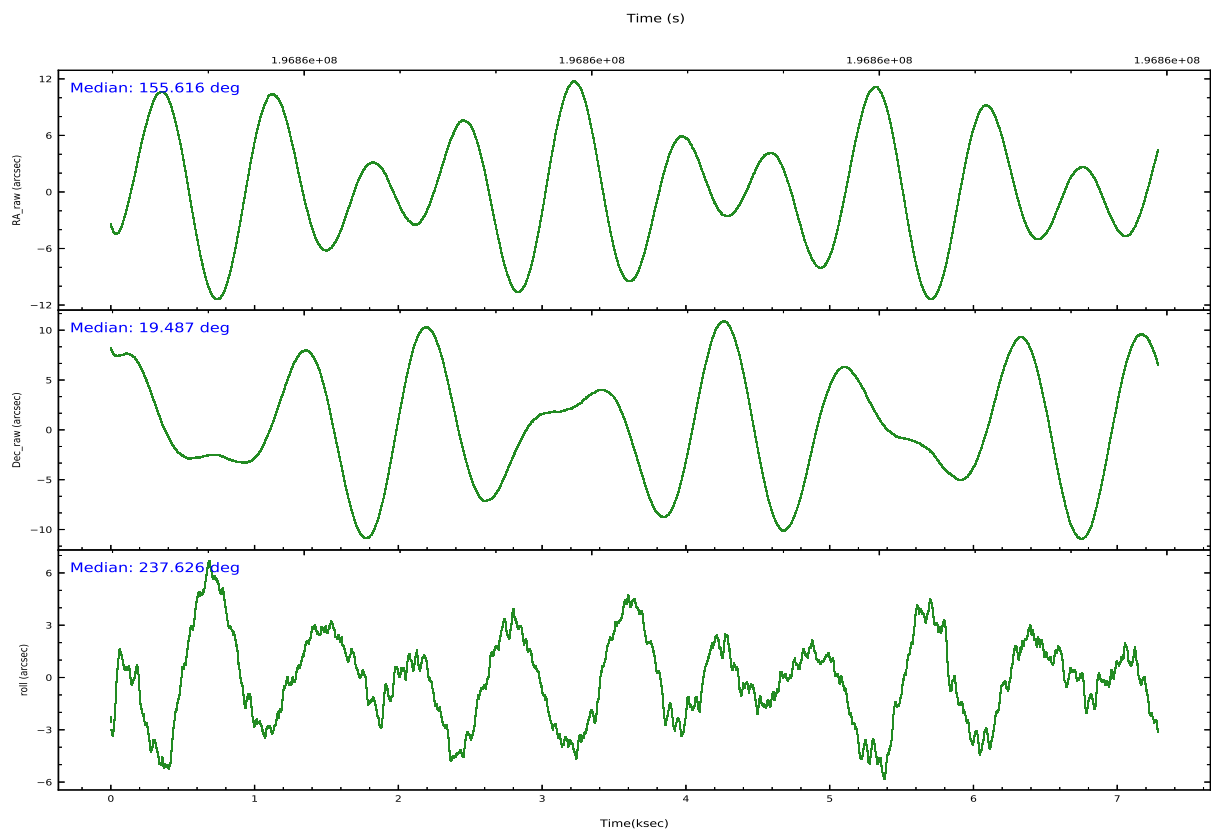


## 2.2 Compared Parameters

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	155.616379	155.61432195516	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	19.514254	19.49014664726	Subarray start row	449	449
[deg] Pointing Roll	237.470938	237.62601713318	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	196856840.184000	196855213.97828			
Observation start date	2004-03-28T10:26:16	2004-03-28T10:00:13			
[s] Observation end time (MET)	196863940.184000	196864564.02869			
Observation end date	2004-03-28T12:24:36	2004-03-28T12:36:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect



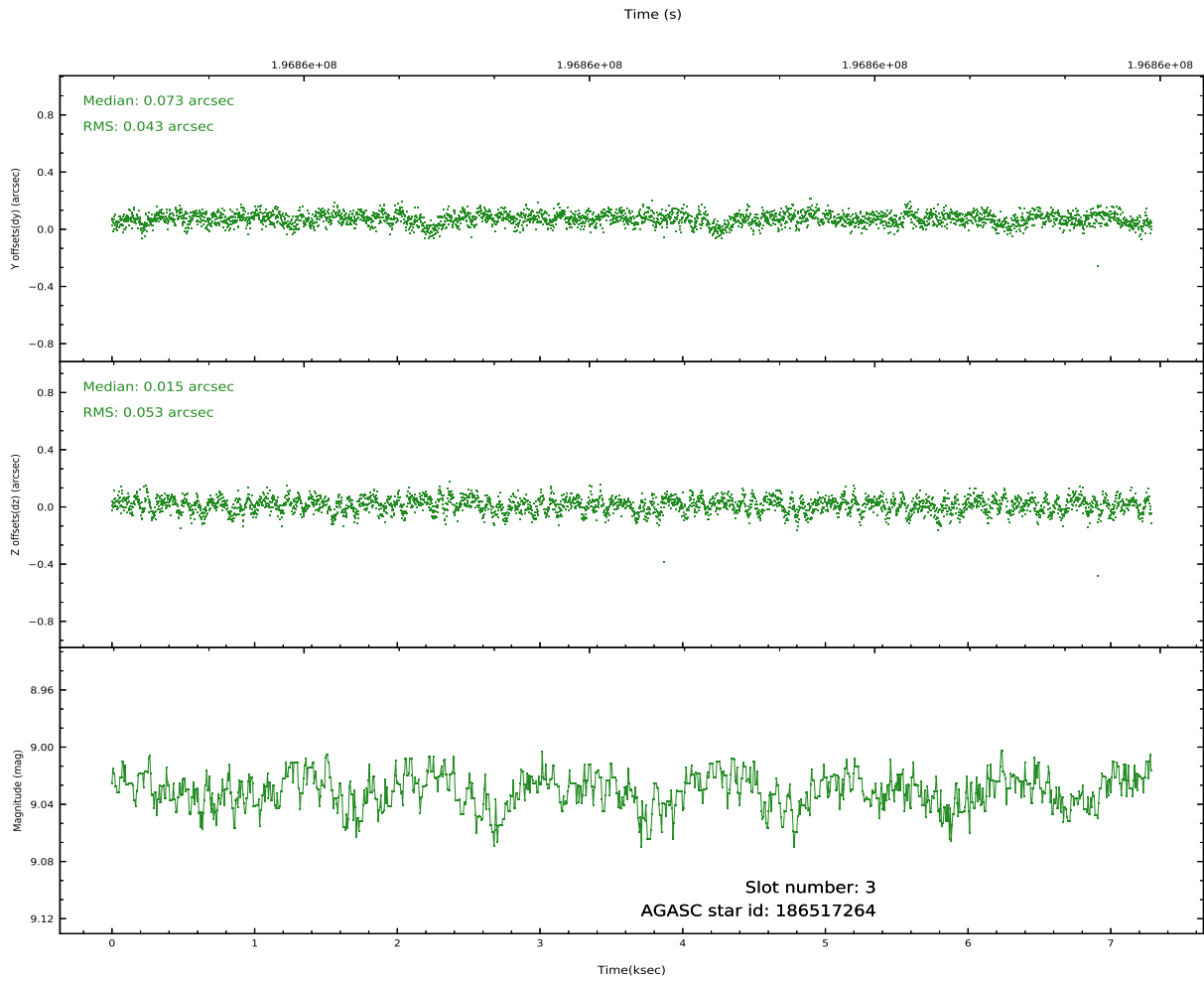
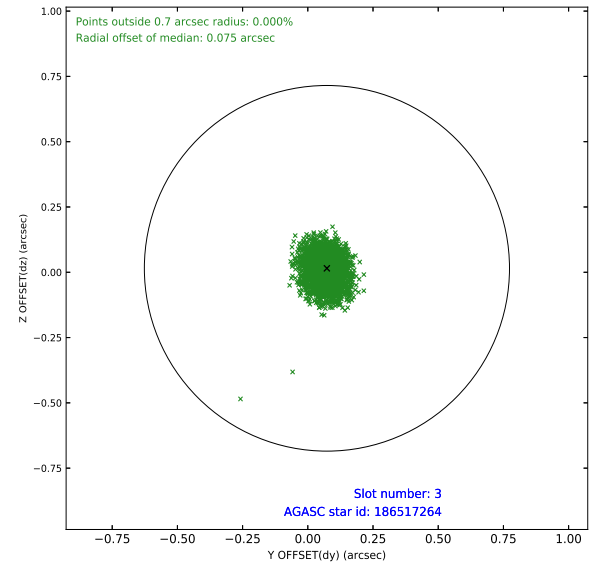
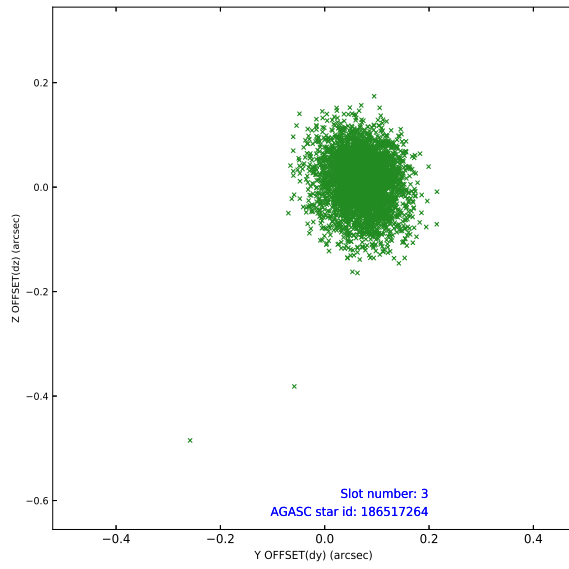


Slot Statistics

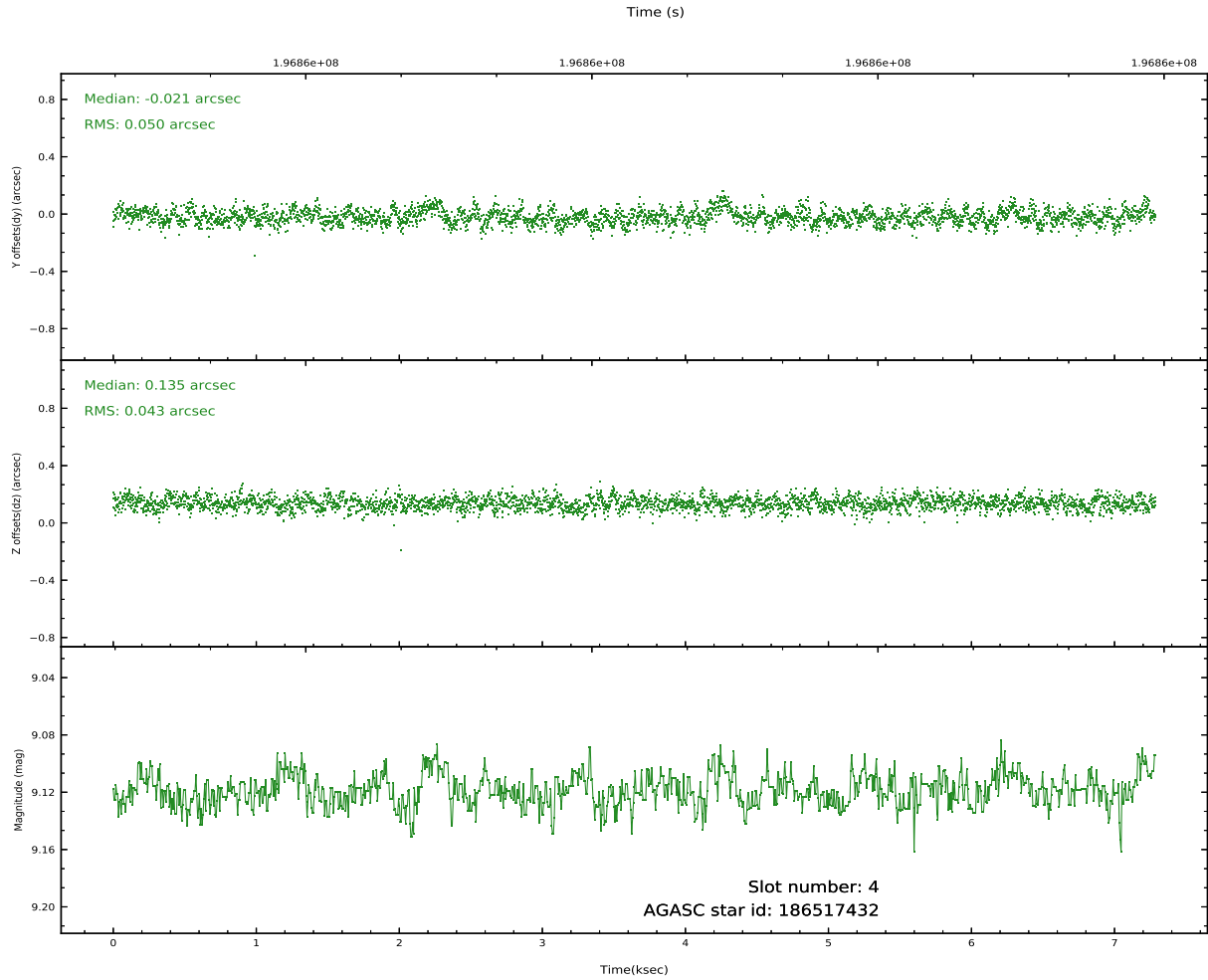
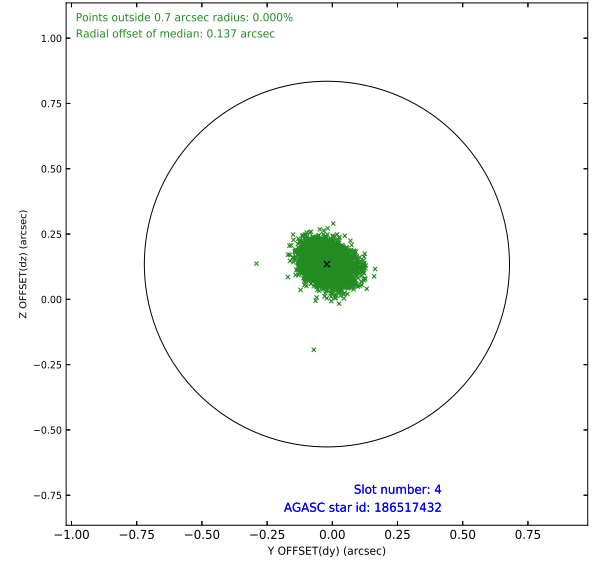
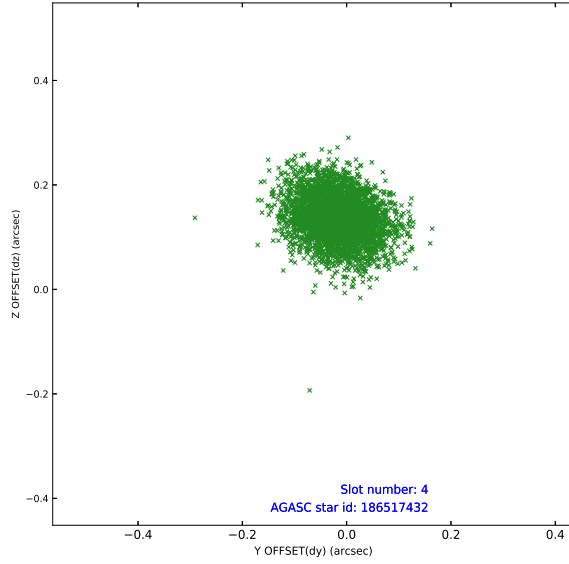
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.19	1777	1.000	0.052	-0.040	0.007	0.011	0.000000	0.000000	936.79	-1725
1	FID		ACIS-S-5	7.24	1777	1.000	-0.107	0.032	0.006	0.011	0.000000	0.000000	-1811.91	170
2	FID		ACIS-S-6	7.35	1777	1.000	0.034	0.019	0.008	0.013	0.000000	0.000000	401.50	815
3	GUIDE	used	186517264	9.03	3554	1.000	0.073	0.015	0.071	0.118	155.474034	19.793179	-586.56	-946
4	GUIDE	used	186517432	9.12	3553	1.000	-0.021	0.135	0.071	0.115	155.977538	19.585156	-874.61	894
5	GUIDE	used	186517504	8.29	3555	1.000	0.094	-0.076	0.062	0.100	155.199091	19.538995	685.36	-1241
6	GUIDE	used	186519112	7.02	3555	1.000	-0.005	0.032	0.055	0.089	155.746796	19.130951	925.34	1115
7	GUIDE	used	186915152	8.63	3553	1.000	-0.140	-0.103	0.067	0.105	155.481319	20.053598	-1390.76	-1428

## 2.4 Star Slots

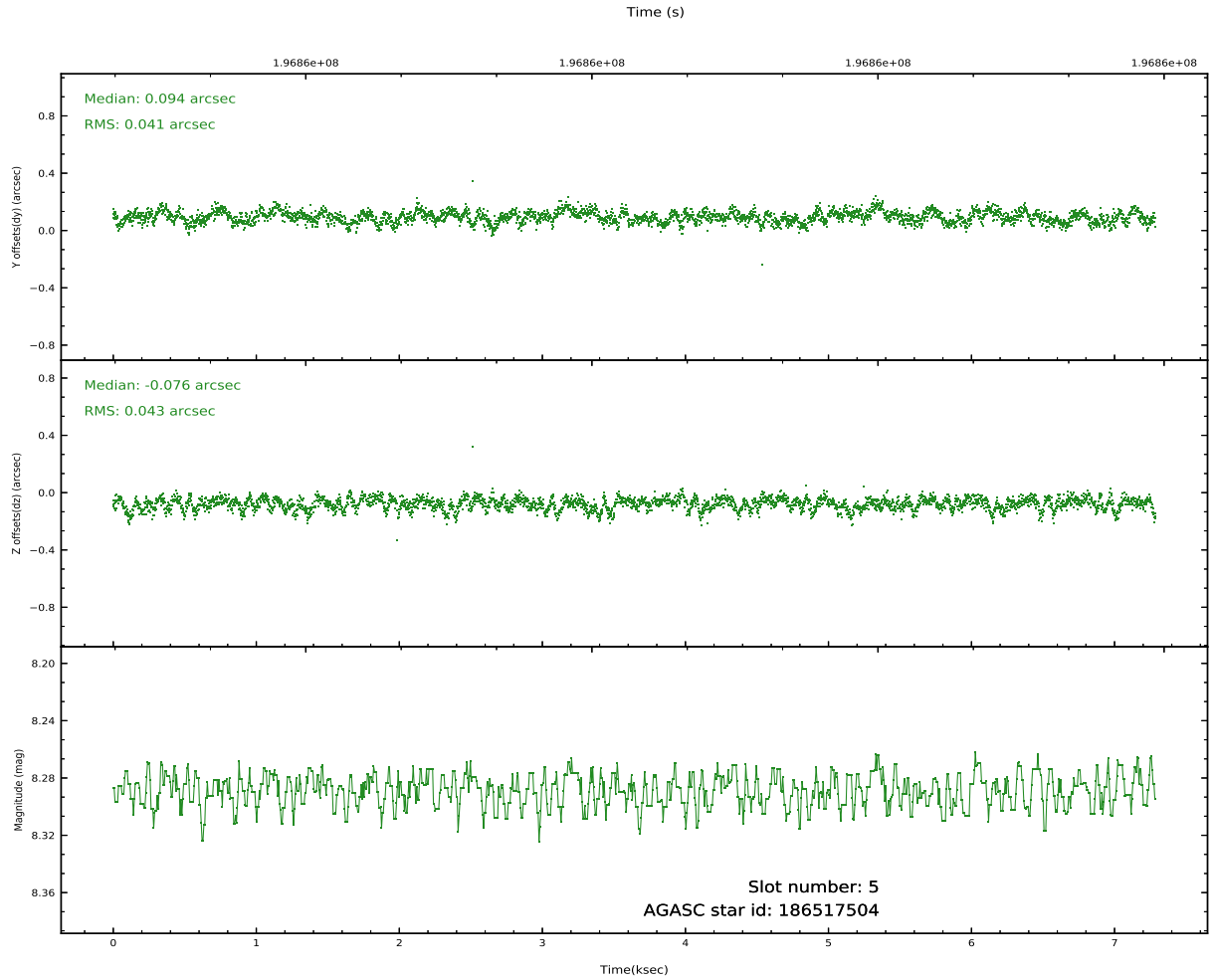
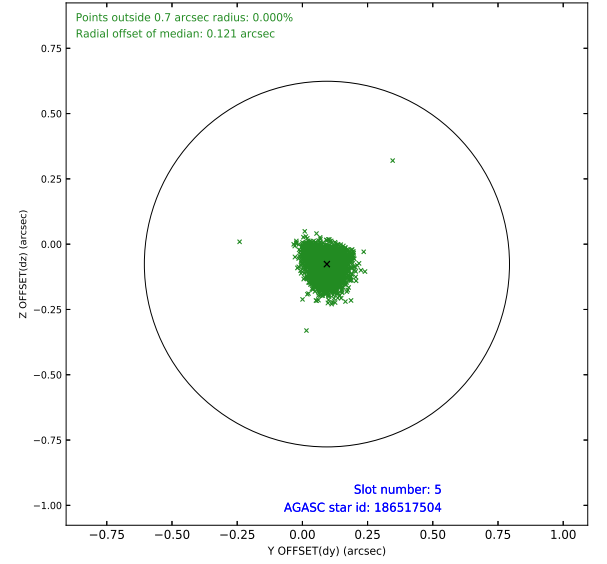
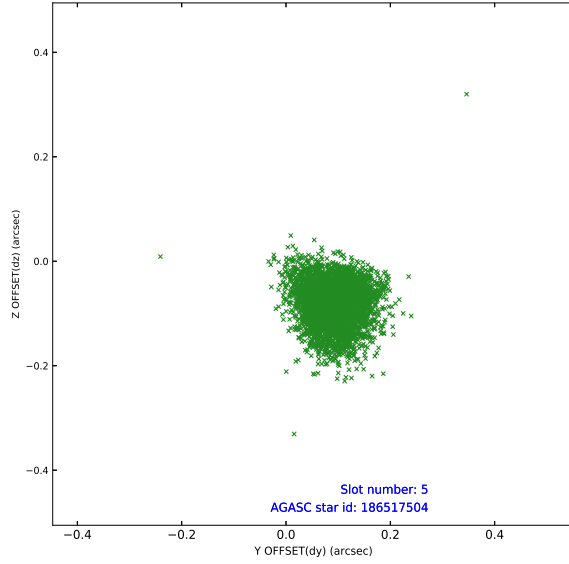
### 2.4.1 Slot 3



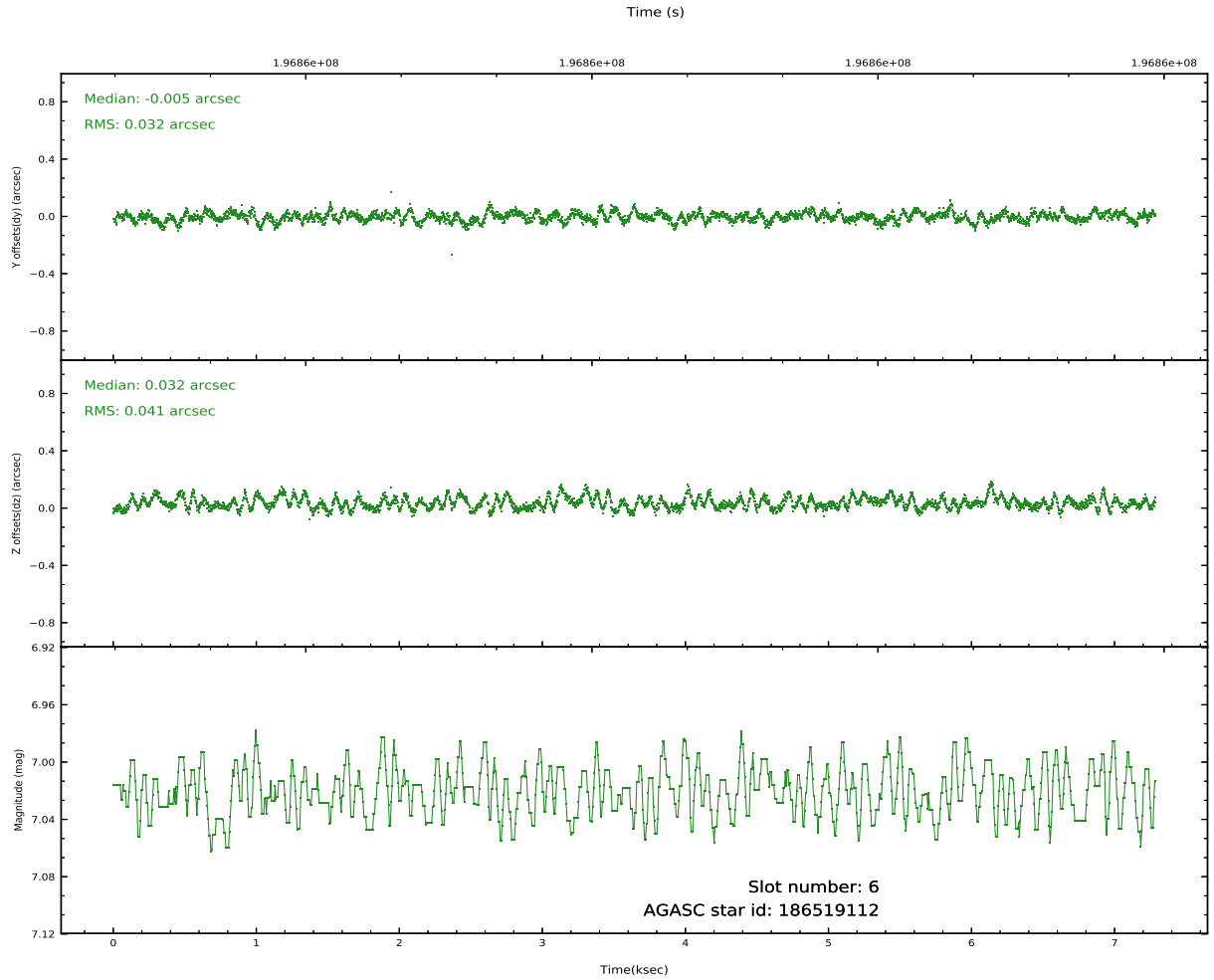
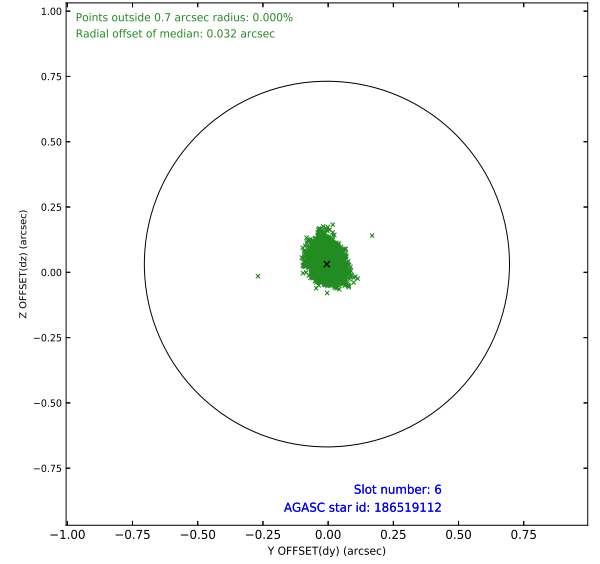
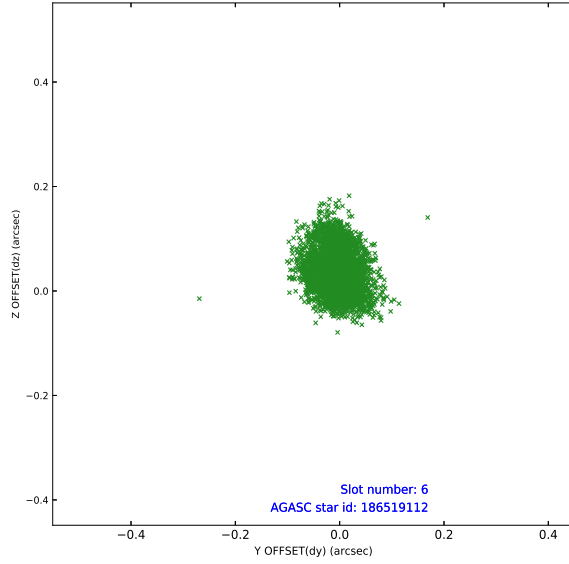
## 2.4.2 Slot 4



### 2.4.3 Slot 5

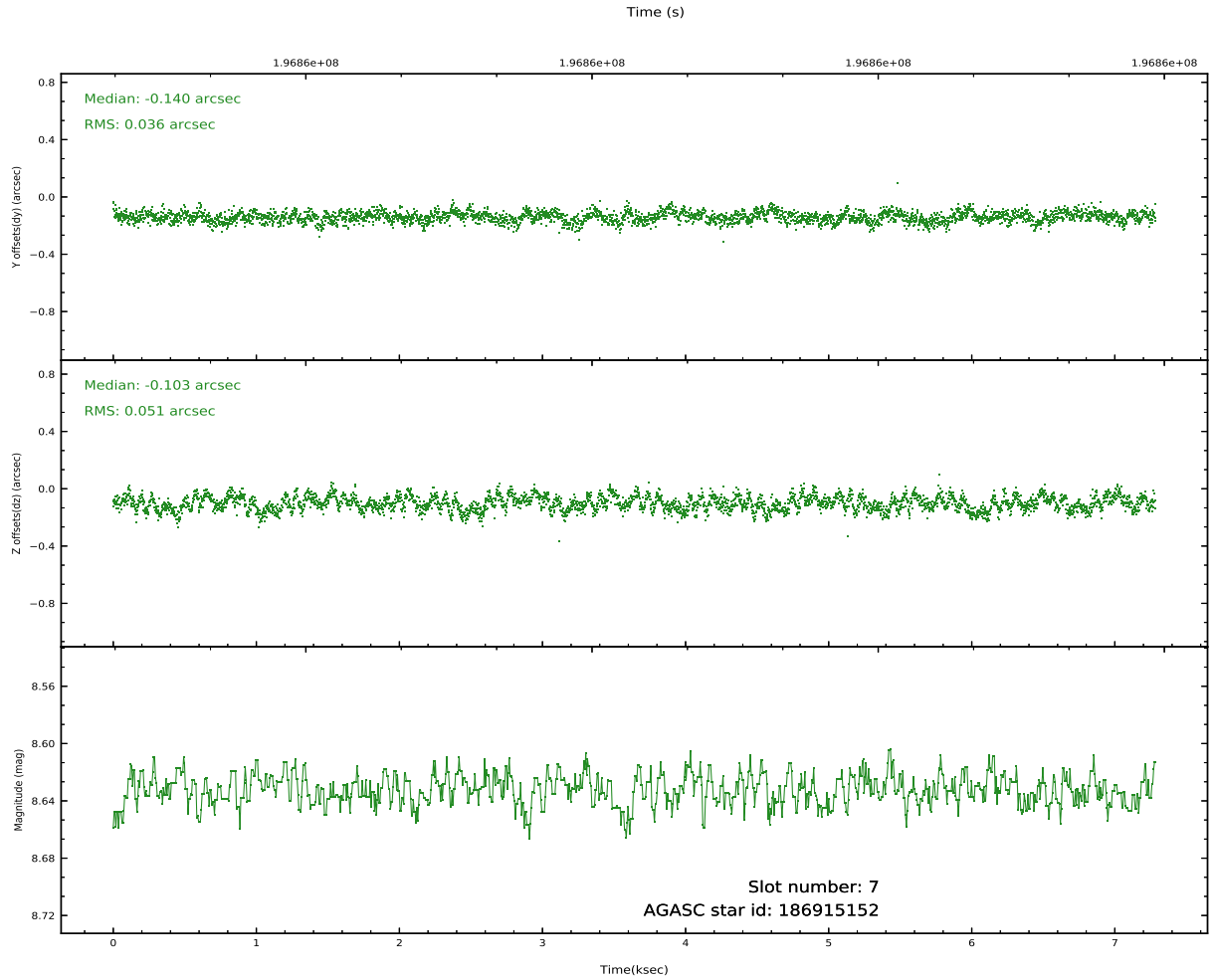
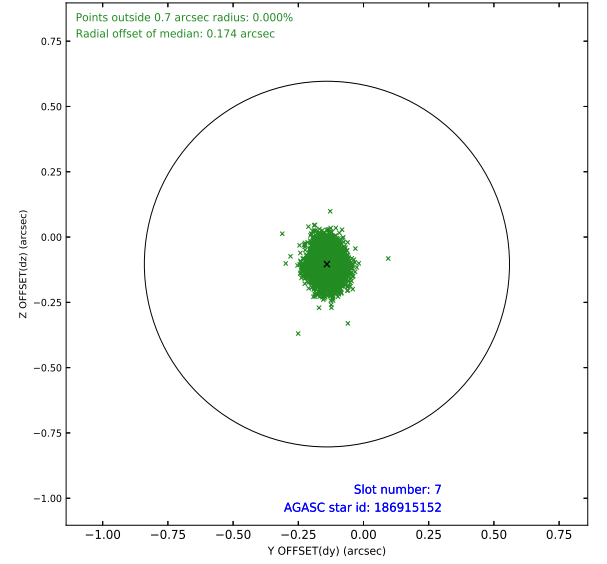
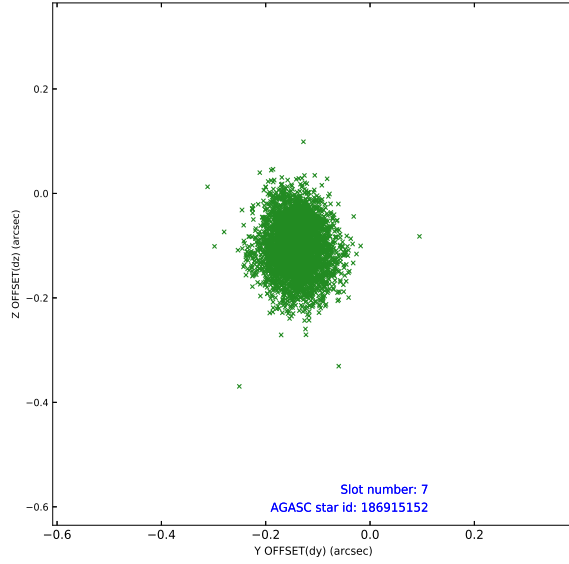


## 2.4.4 Slot 6



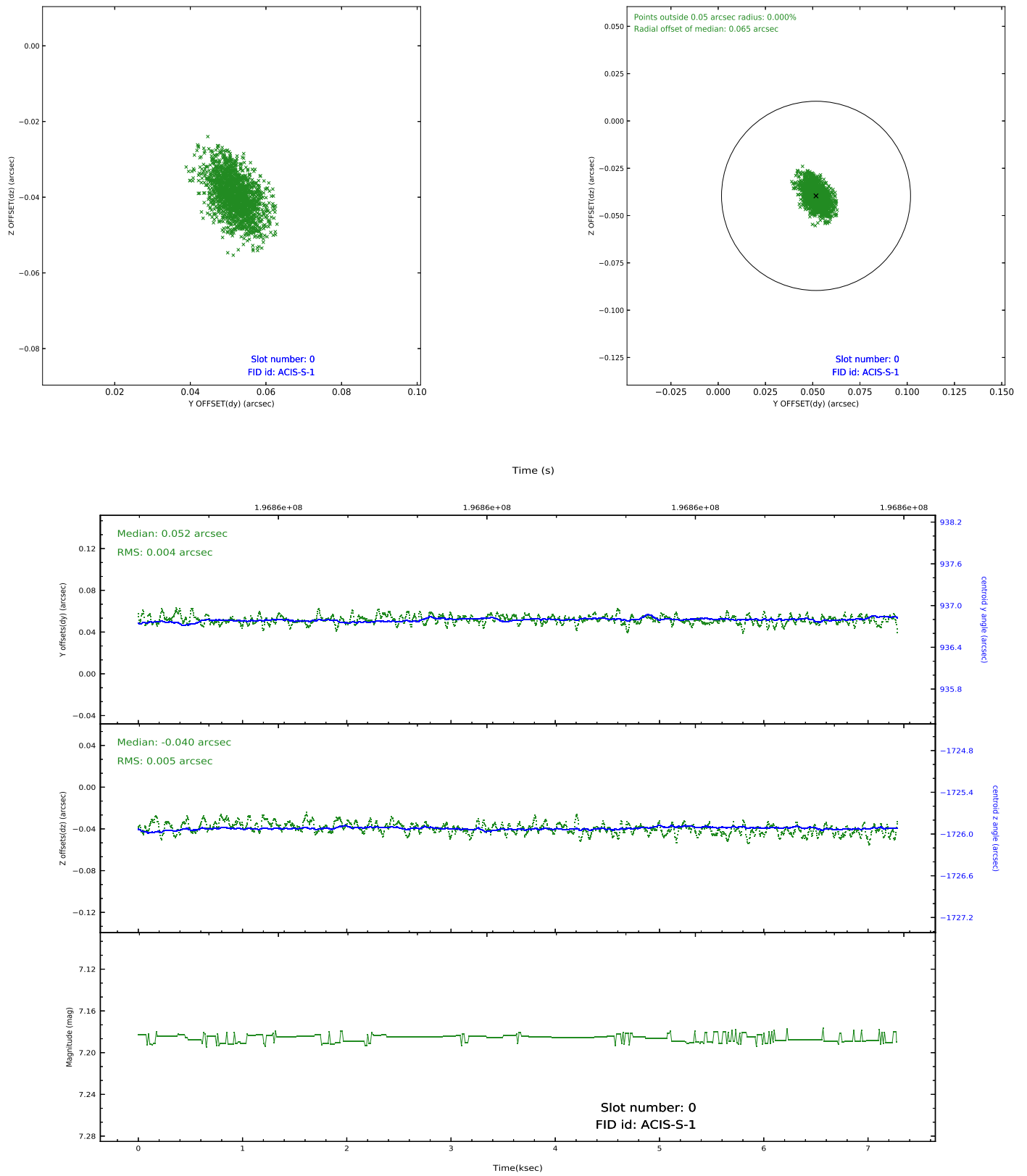


## 2.4.5 Slot 7

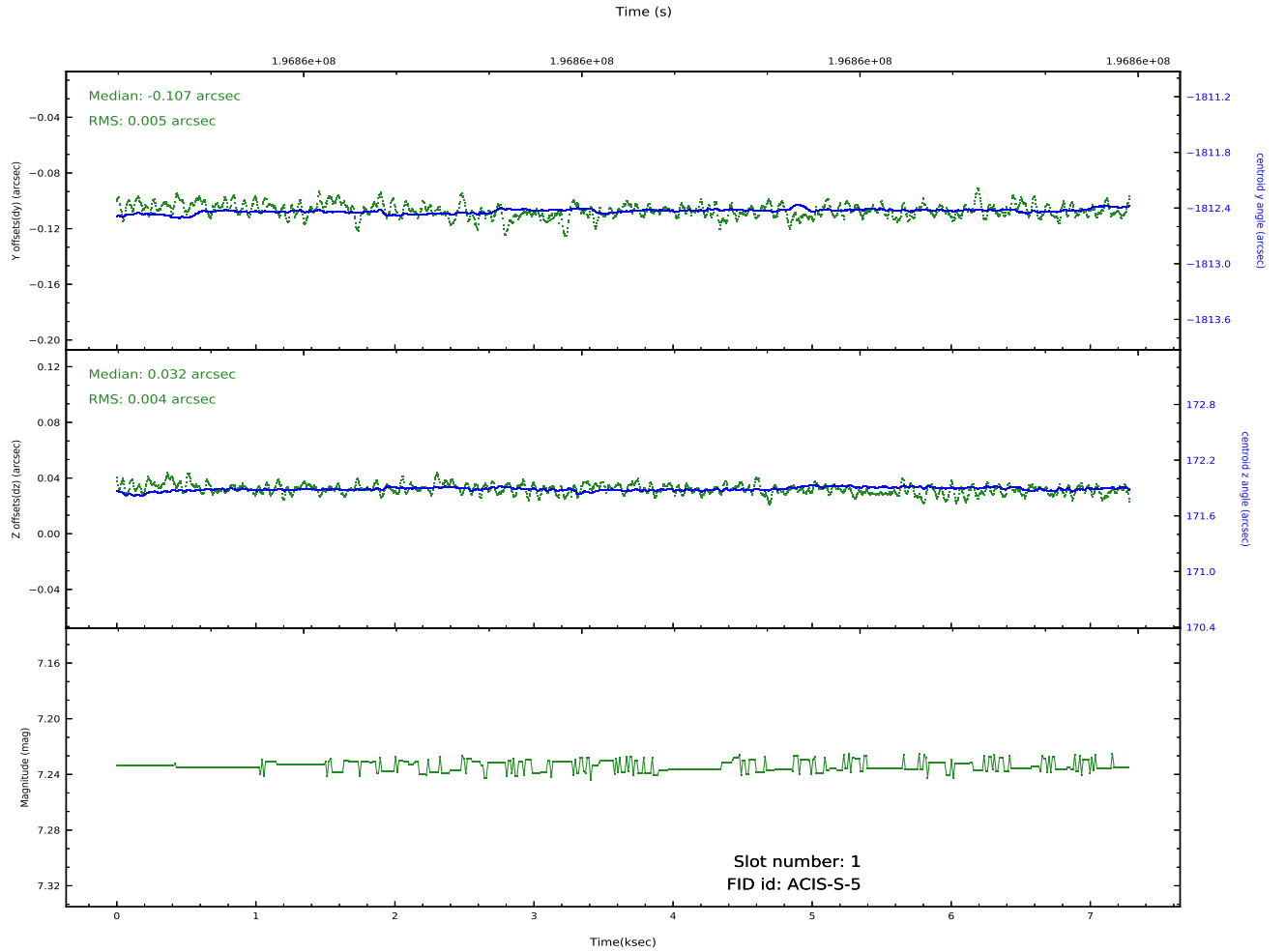
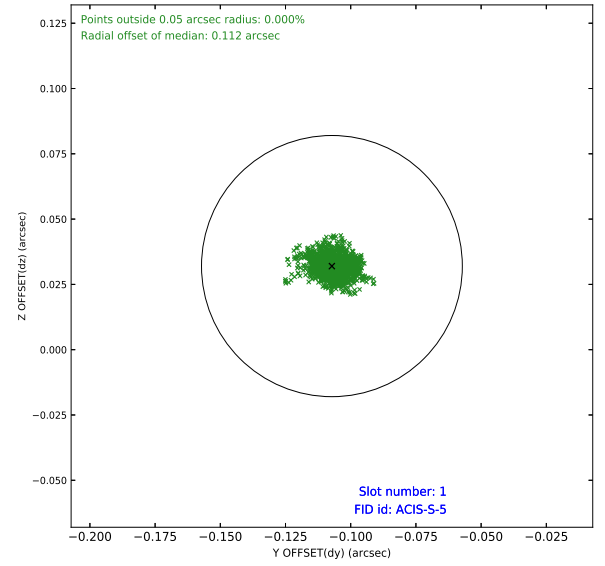
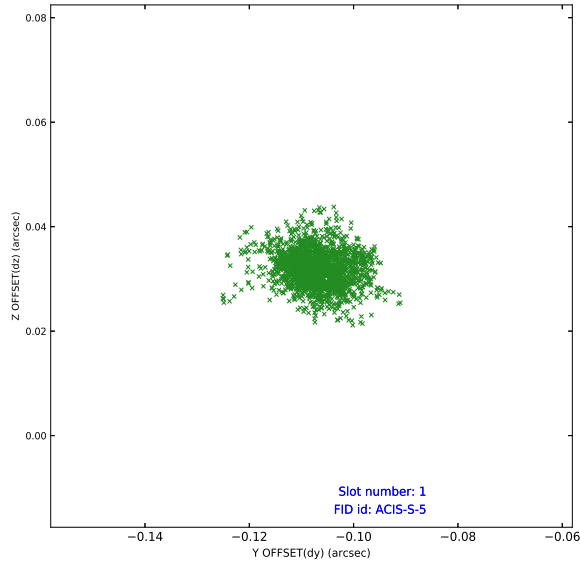


## 2.5 FID Slots

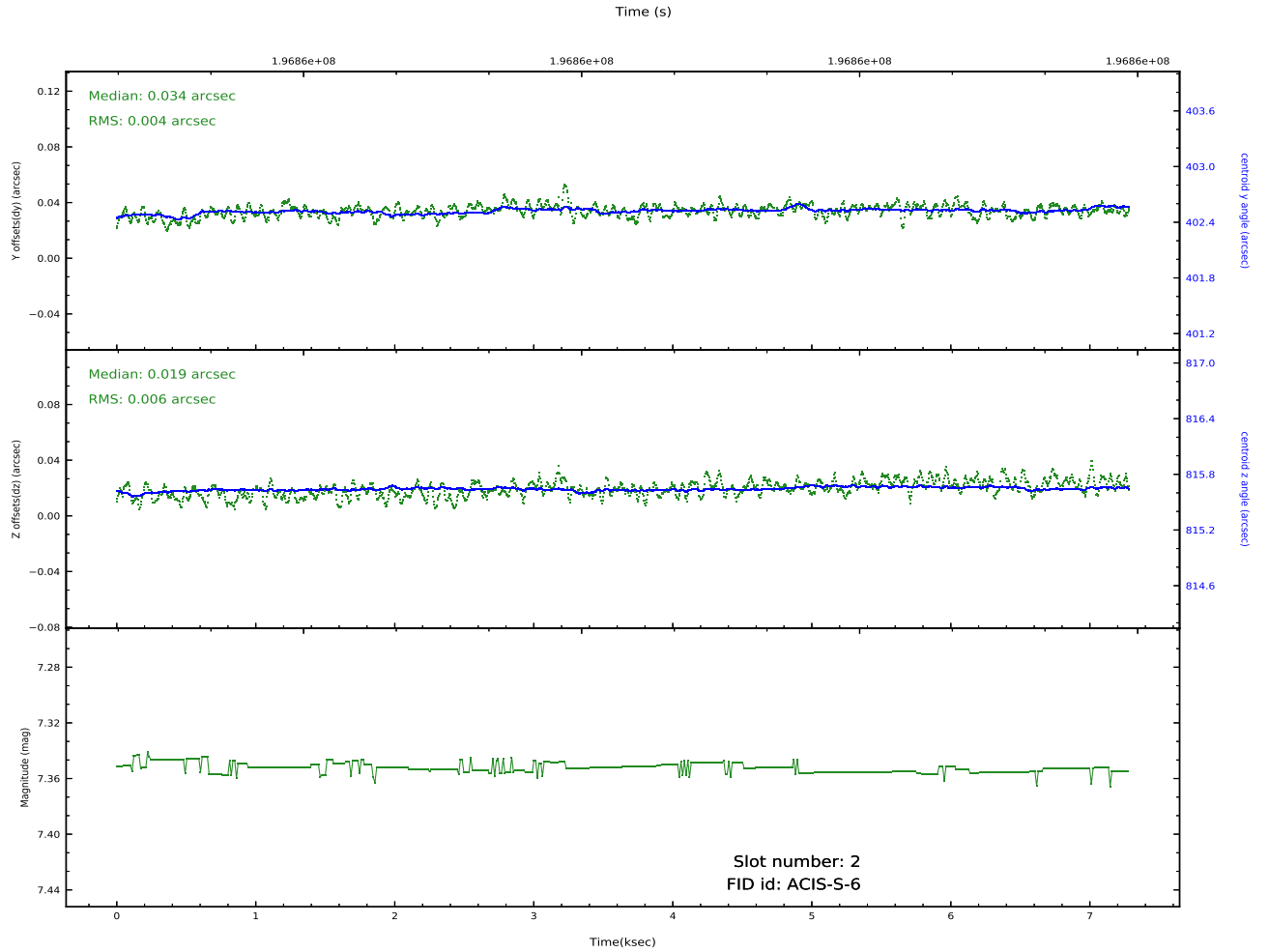
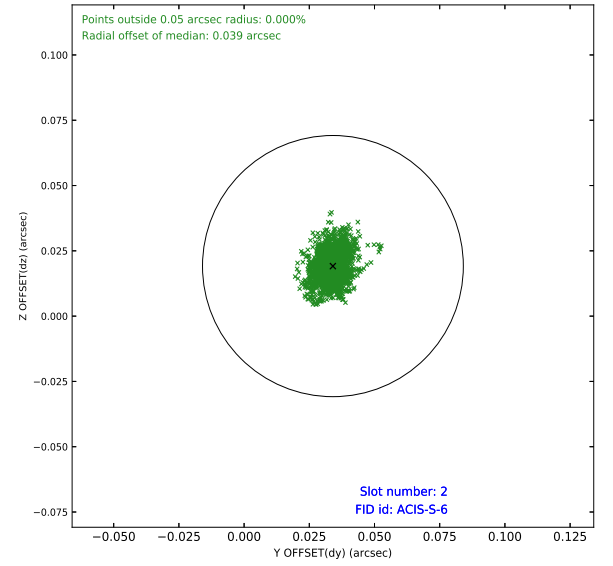
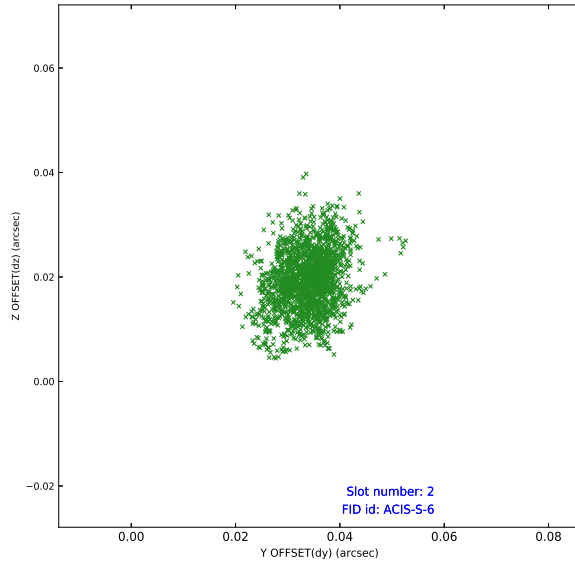
### 2.5.1 Slot 0



## 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)	2020.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.284

### A.2 Comments