

# V&V Reference Report

## L2 ASCDS Version : 10.9.2

Observation 19341 - L2 Version 2  
Chandra X-Ray Center

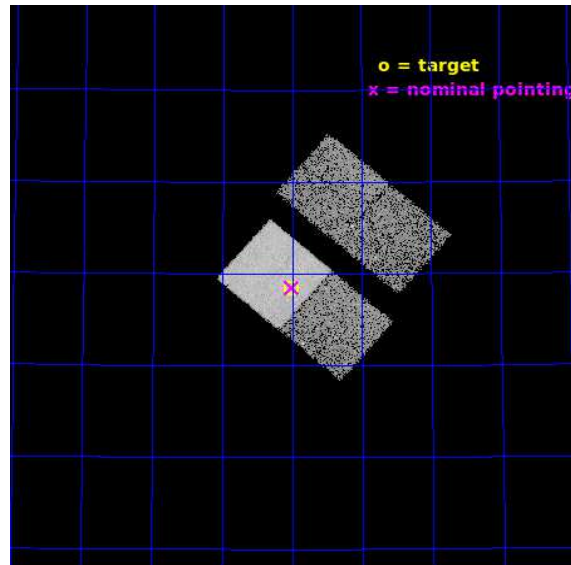
L2 Processing Date : Oct 26 2020

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# 1 Front

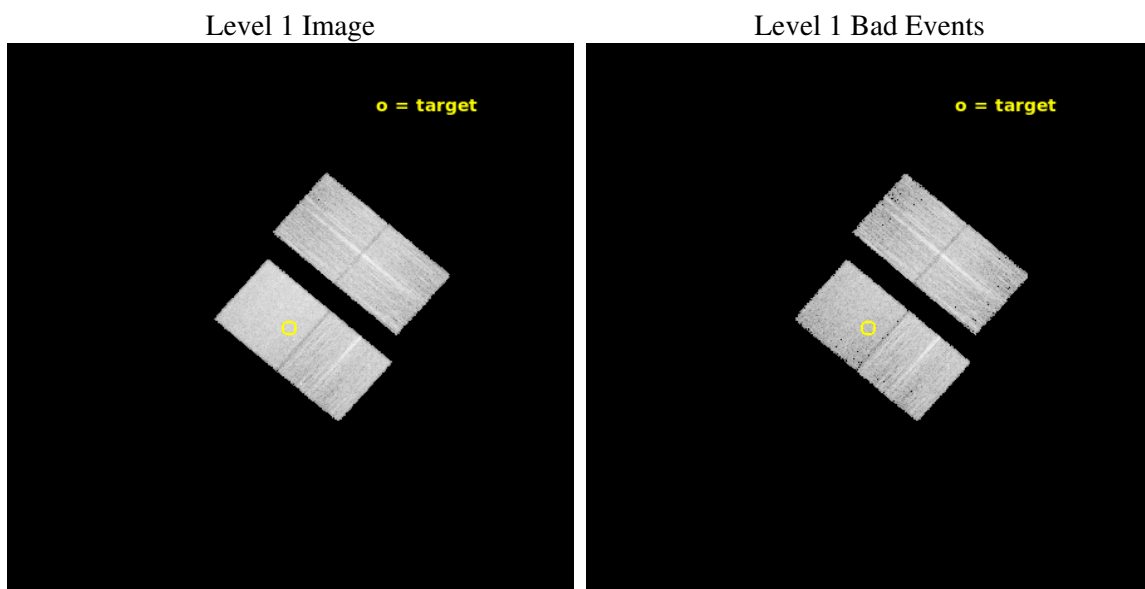
seq_num	601298	Sequence number
obs_id	19341	Observation id
title	A Statistically Complete High Resolution Chandra and Radio (eMERLIN) Survey of the Palomar Nearby Galaxies Sample	Proposal title
observer	Ian McHardy	Principal investigator
object	NGC 5308	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	206.751667	Observer's specified target RA [deg]
dec_targ	60.973028	Observer's specified target Dec [deg]
ra_nom	206.75115132604	Nominal RA [deg]
dec_nom	60.974790205716	Nominal Dec [deg]
roll_nom	220.84326580268	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10067.489244223	Sum of GTIs [s]
livetime	9935.9500856691	Livetime [s]
ontime2	10067.366124272	Sum of GTIs [s]
ontime3	10067.407164216	Sum of GTIs [s]
ontime6	10067.448204279	Sum of GTIs [s]
ontime7	10067.489244223	Sum of GTIs [s]
l2events	61567	Number of level 2 events



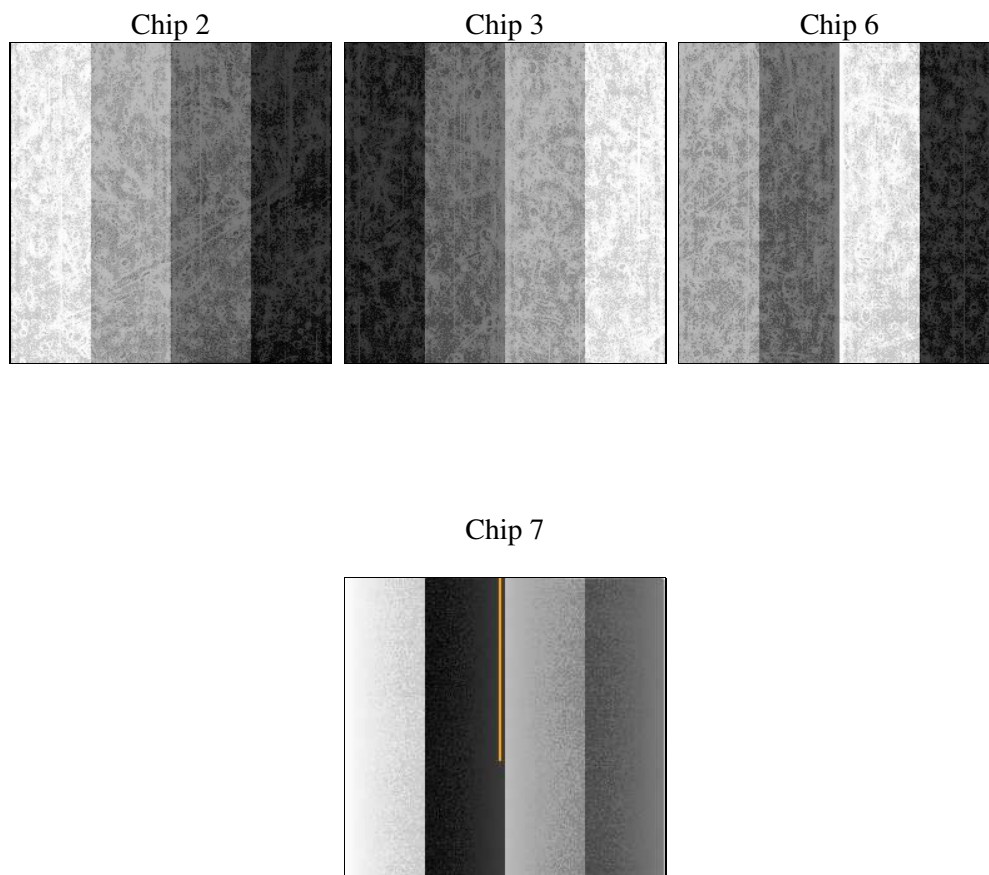
## 2 OBI

### 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	10.9.2	Processing system revision	ontime	10067.489244223	Sum of GTIs [s]
caldsver	4.9.3	&#160	ontime2	10067.366124272	Sum of GTIs [s]
date	2020-10-26T06:27:52	Date and time of file creation	ontime3	10067.407164216	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10067.448204279	Sum of GTIs [s]
			ontime7	10067.489244223	Sum of GTIs [s]
			l1events	309690	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	75069	68432	71620	94569
rejected events	67026	60355	62850	53081
rejected %	89%	88%	87%	56%

	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2779	3173	3041	3604
	3%	4%	4%	3%
grade 1 events	42	36	46	126
	0%	0%	0%	0%
grade 2 events	2091	1674	2065	8899
	2%	2%	2%	9%
grade 3 events	758	781	890	3368
	1%	1%	1%	3%
grade 4 events	800	818	836	3239
	1%	1%	1%	3%
grade 5 events	2879	3439	3578	9652
	3%	5%	4%	10%
grade 6 events	1621	1635	1943	22406
	2%	2%	2%	23%
grade 7 events	64099	56876	59221	43275
	85%	83%	82%	45%

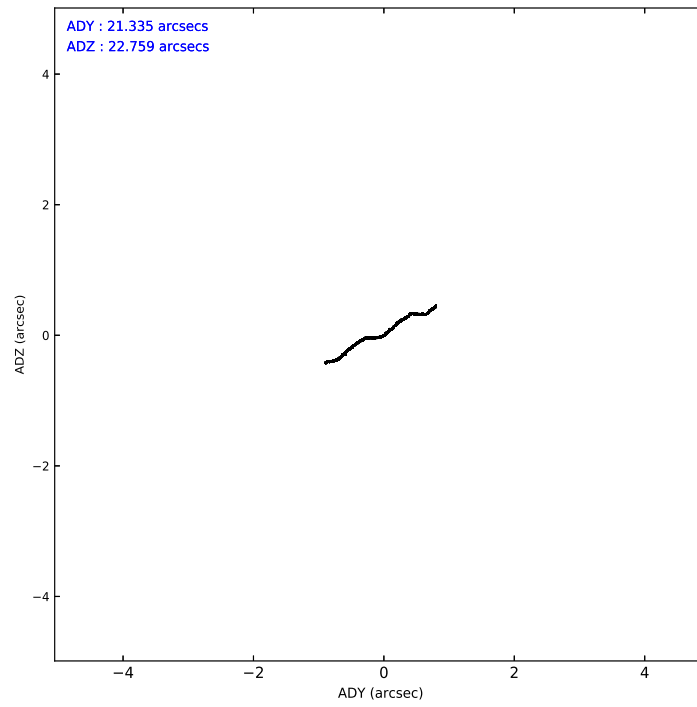
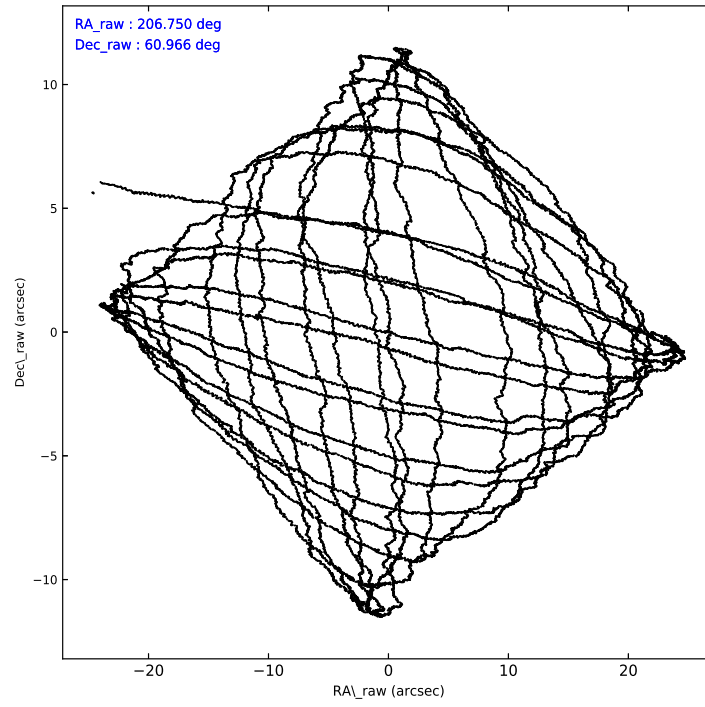


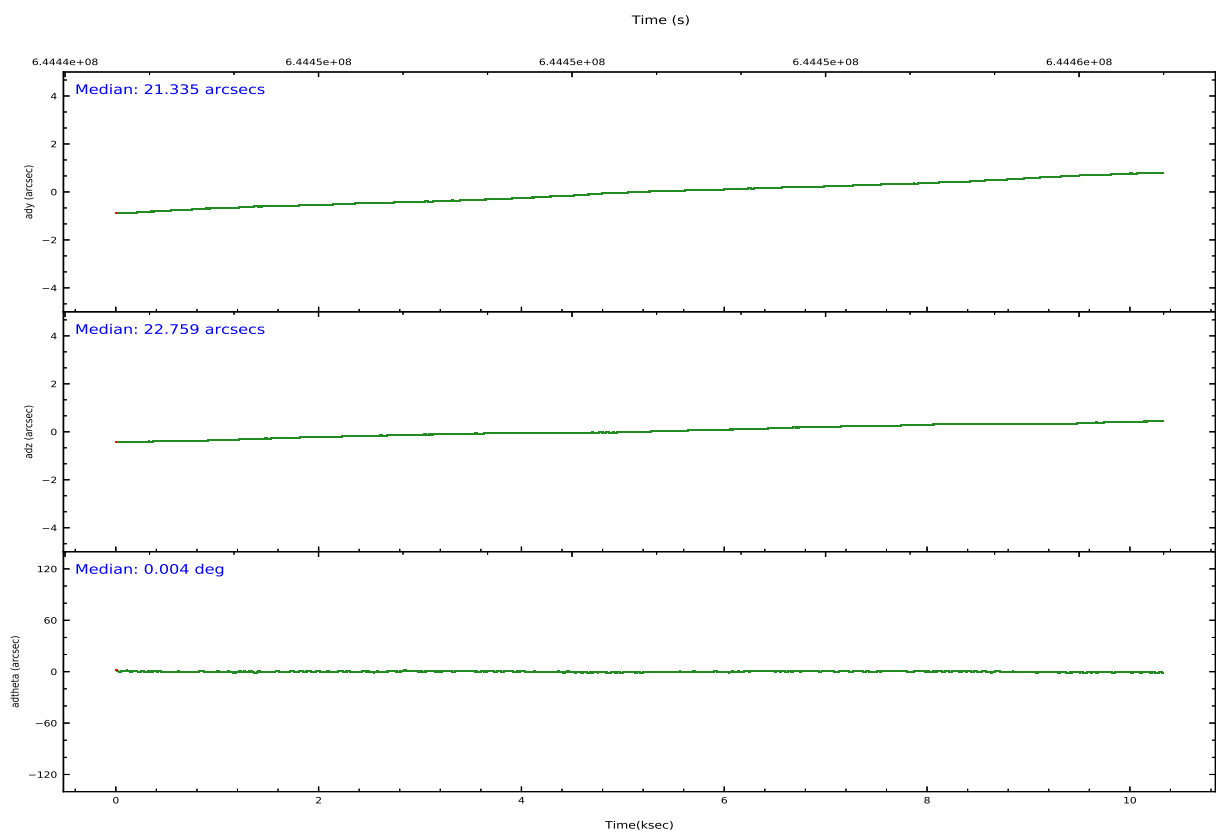
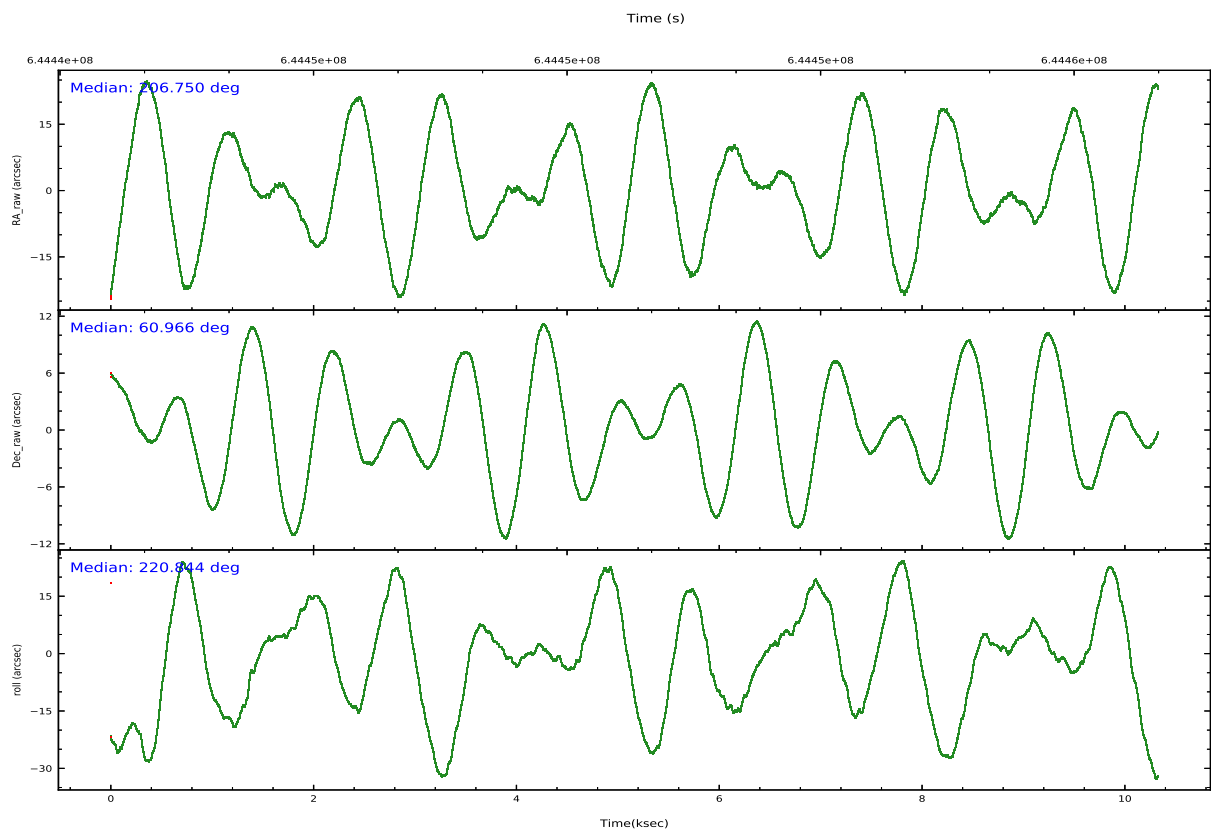
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-2367	ACIS-2367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	206.768207	206.75115132604
[deg] Pointing Dec	60.991855	60.974790205716
[deg] Pointing Roll	220.675711	220.84326580268
[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)	644445830.184000	644444878.64851
Observation start date	2018-06-03T20:42:41	2018-06-03T20:27:58
[s] Observation end time (MET)	644455830.184000	644456916.7617199
Observation end date	2018-06-03T23:29:21	2018-06-03T23:48:36
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



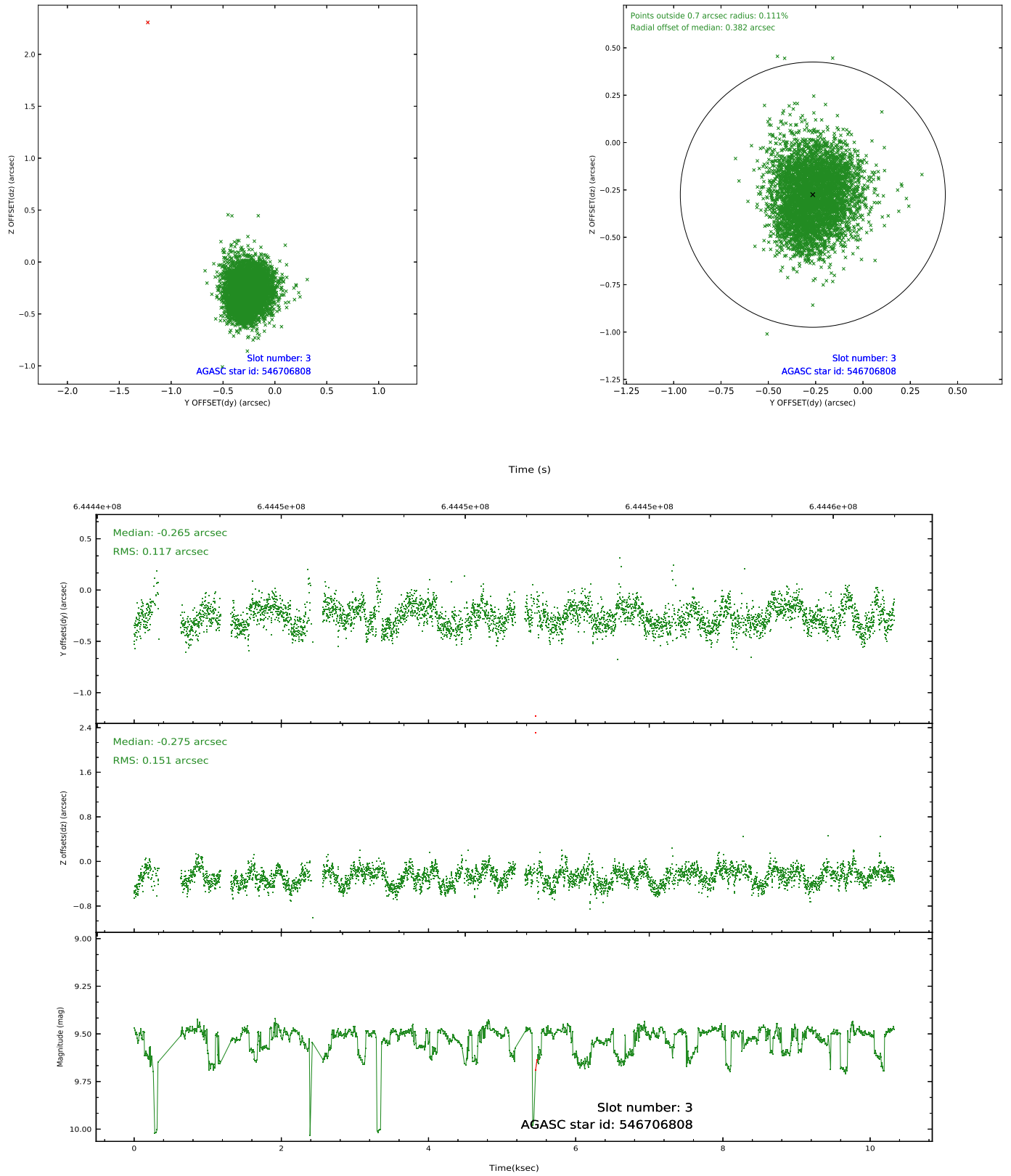


Slot Statistics

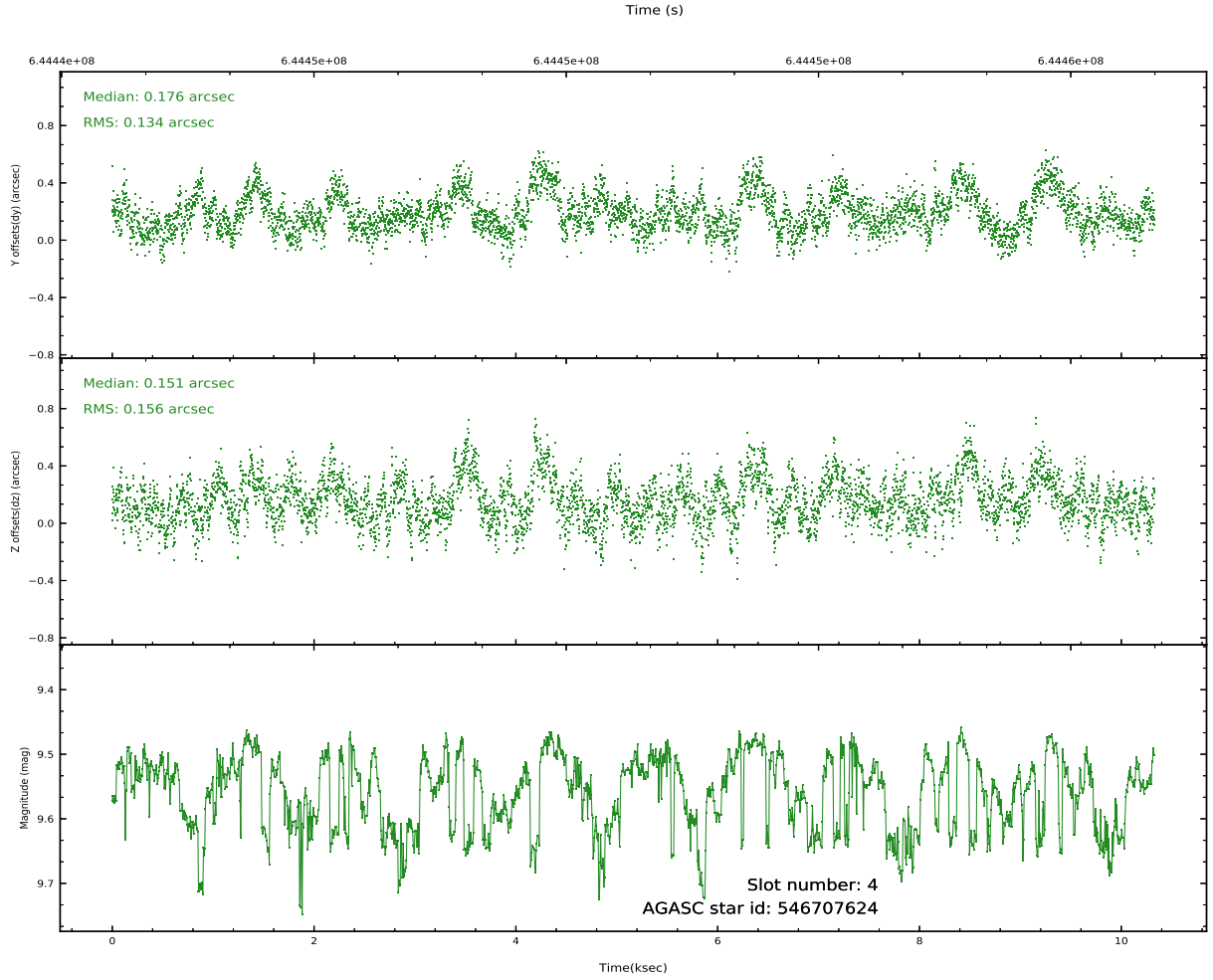
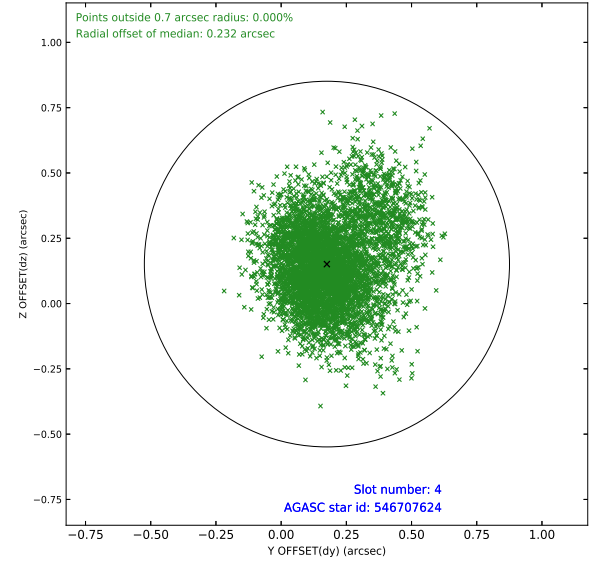
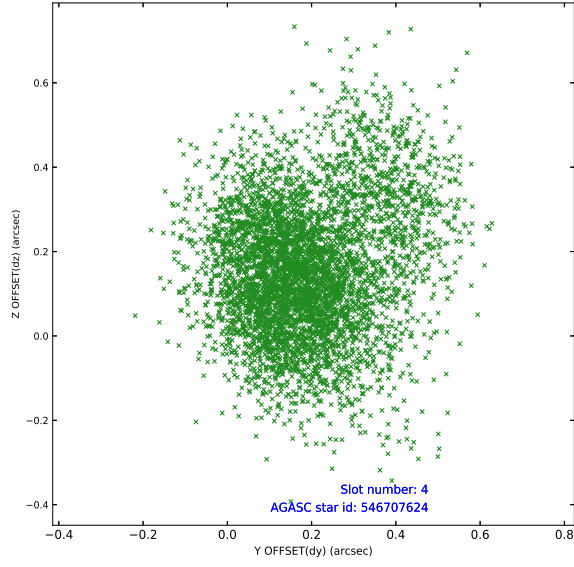
	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	m
	FID		ACIS-S-2	6.98	2520	1.000	0.153	-0.094	0.019	0.026	0.000000	0.000000	-774.54	-17
	FID		ACIS-S-4	7.08	2520	1.000	0.042	-0.047	0.015	0.025	0.000000	0.000000	2138.67	1
	FID		ACIS-S-5	7.09	2520	1.000	-0.221	0.150	0.012	0.022	0.000000	0.000000	-1826.83	1
	BAD	used	546706808	9.51	4510	1.000	-0.265	-0.275	0.202	0.318	206.441728	60.288828	2091.64	15
	GUIDE	used	546707624	9.55	5029	1.000	0.176	0.151	0.216	0.374	206.062553	61.216509	397.46	-14
	GUIDE	used	546707712	8.40	5037	1.000	-0.089	-0.063	0.134	0.230	206.850731	60.691025	595.95	9
	GUIDE	used	546712240	8.56	5033	1.000	0.138	0.037	0.128	0.220	206.739828	60.167374	1973.80	22
	GUIDE	used	546711248	8.43	5033	1.000	-0.000	0.121	0.167	0.277	207.532370	60.520351	74.96	21

## 2.4 Star Slots

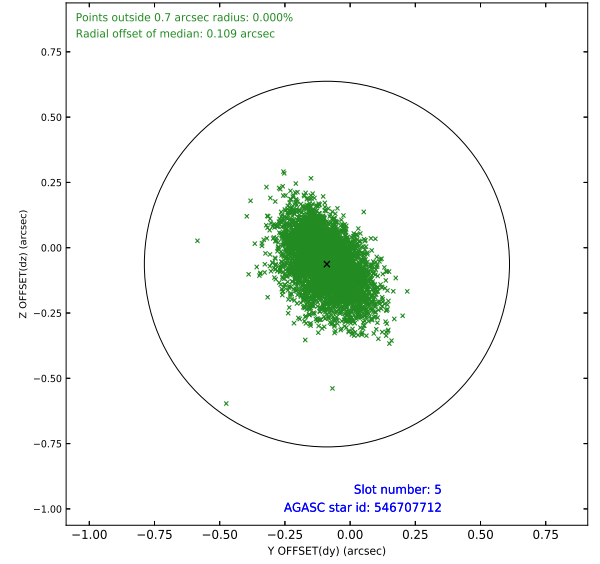
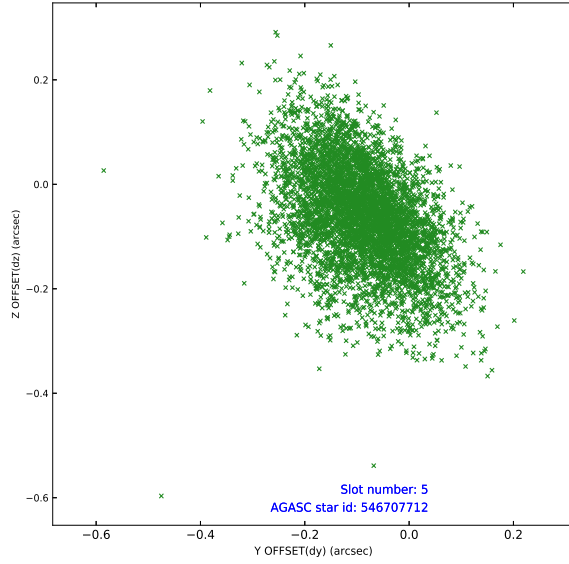
### 2.4.1 Slot 3



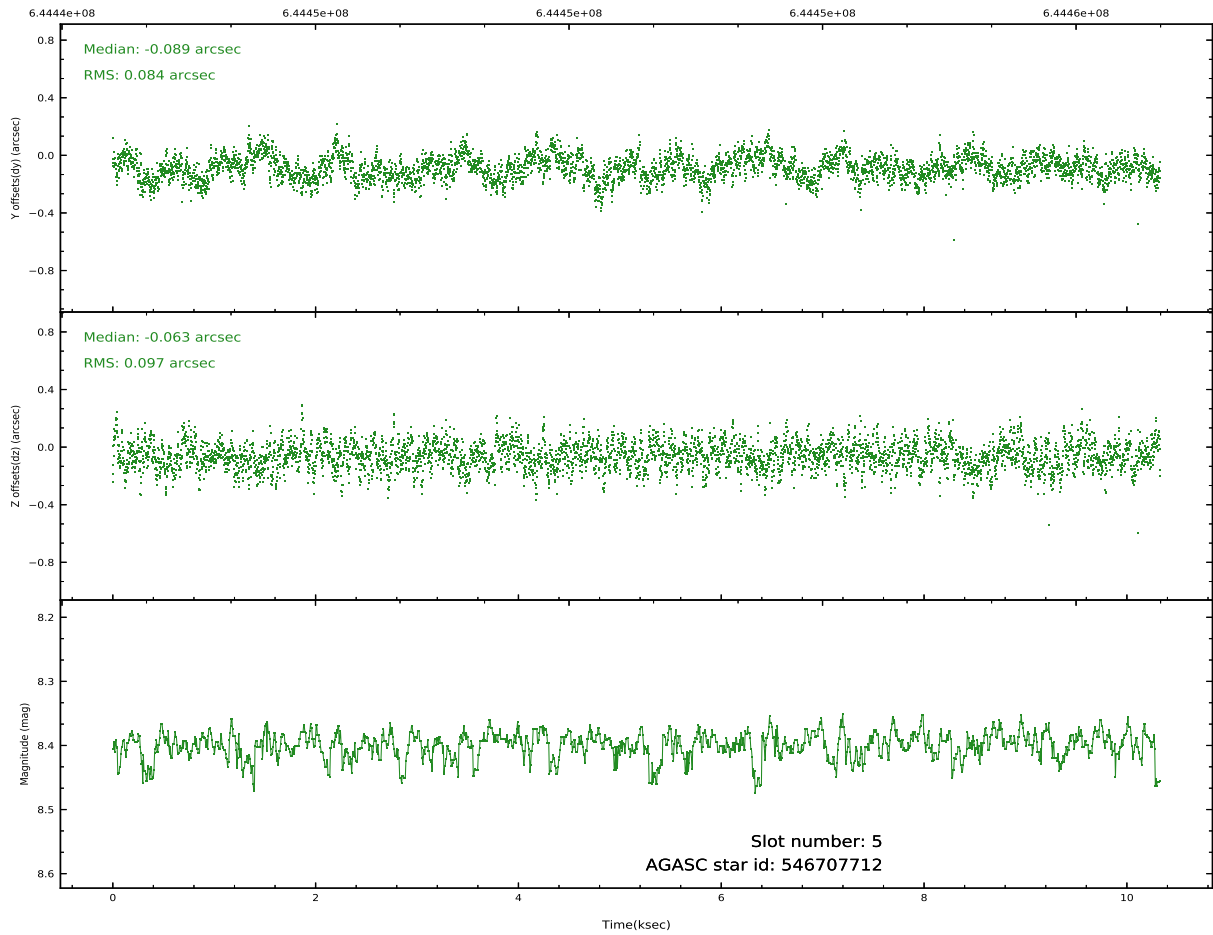
## 2.4.2 Slot 4



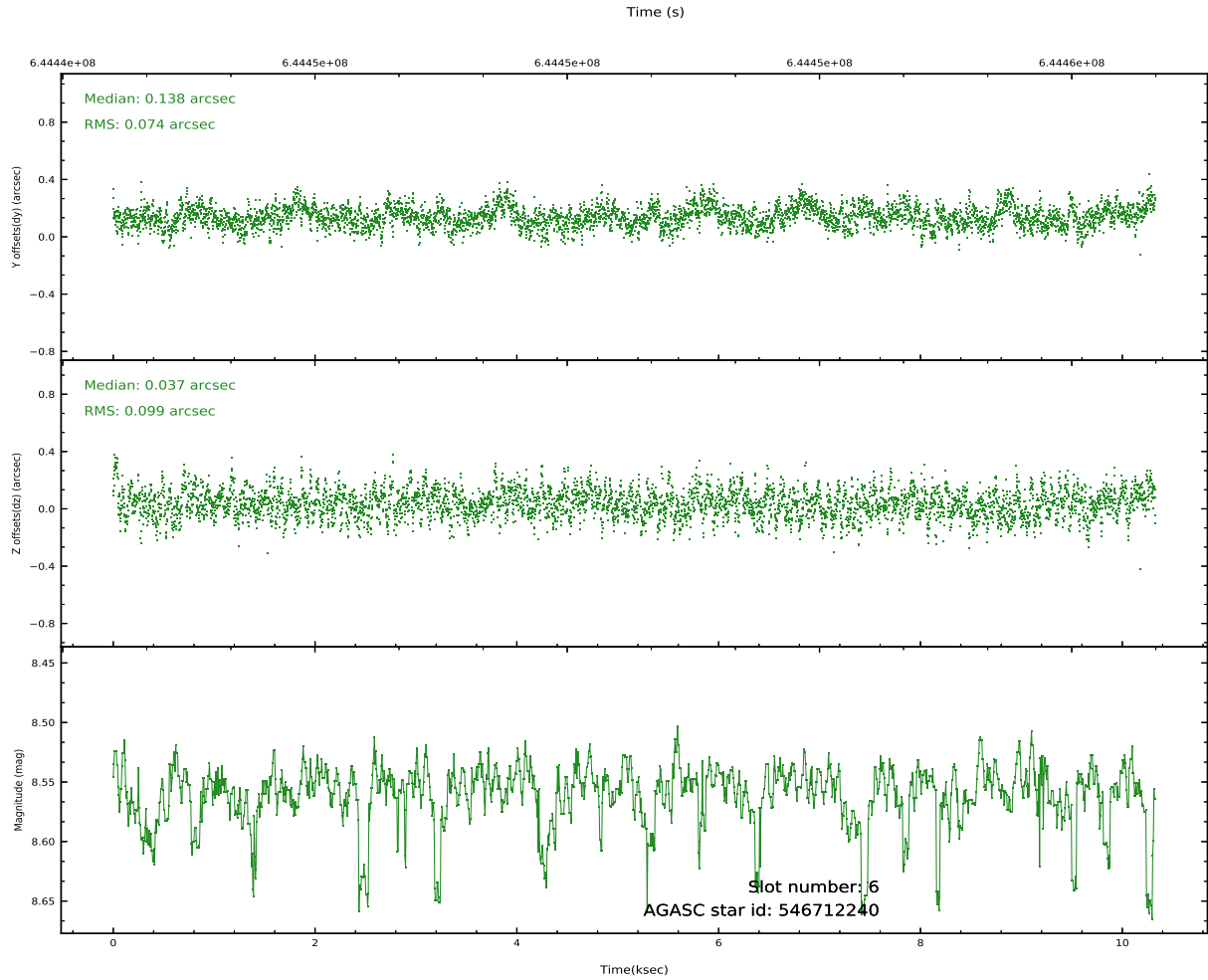
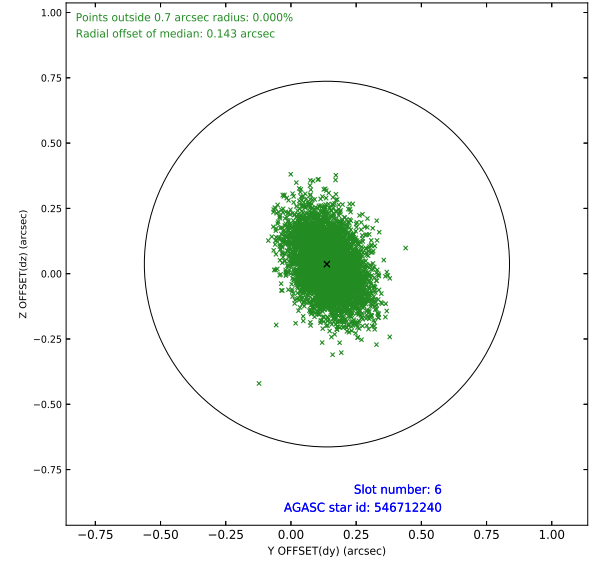
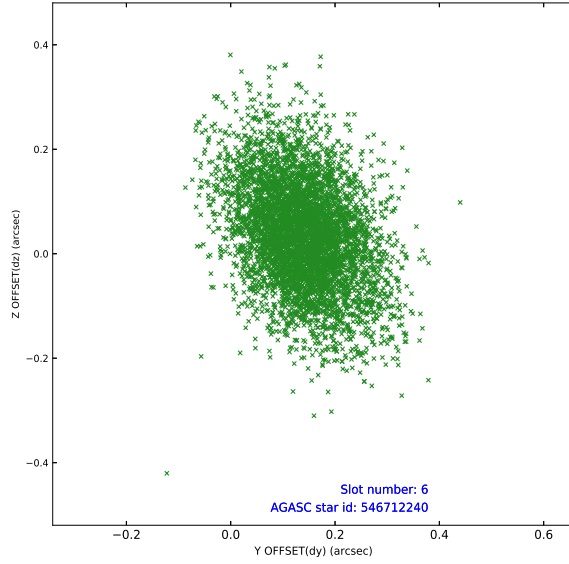
### 2.4.3 Slot 5



Time (s)

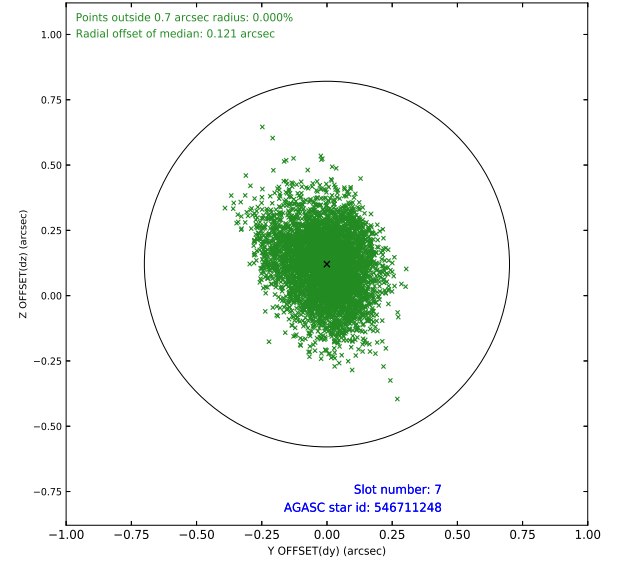
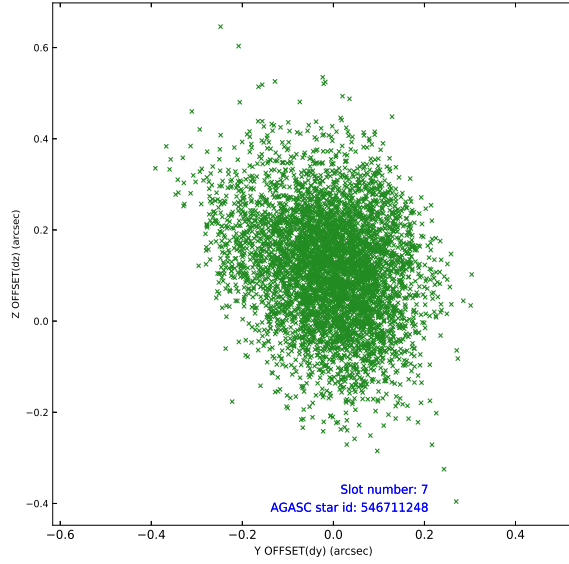


## 2.4.4 Slot 6

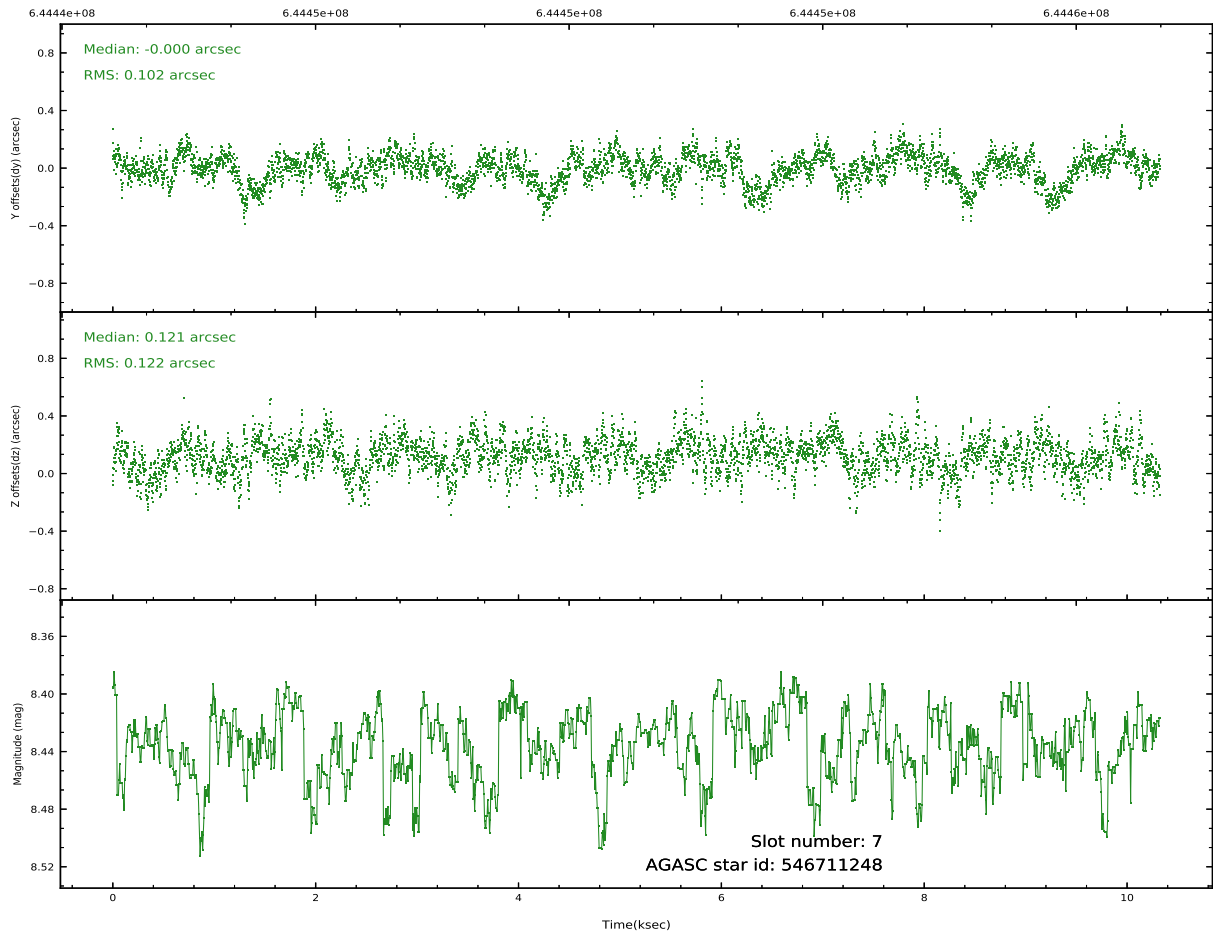




## 2.4.5 Slot 7

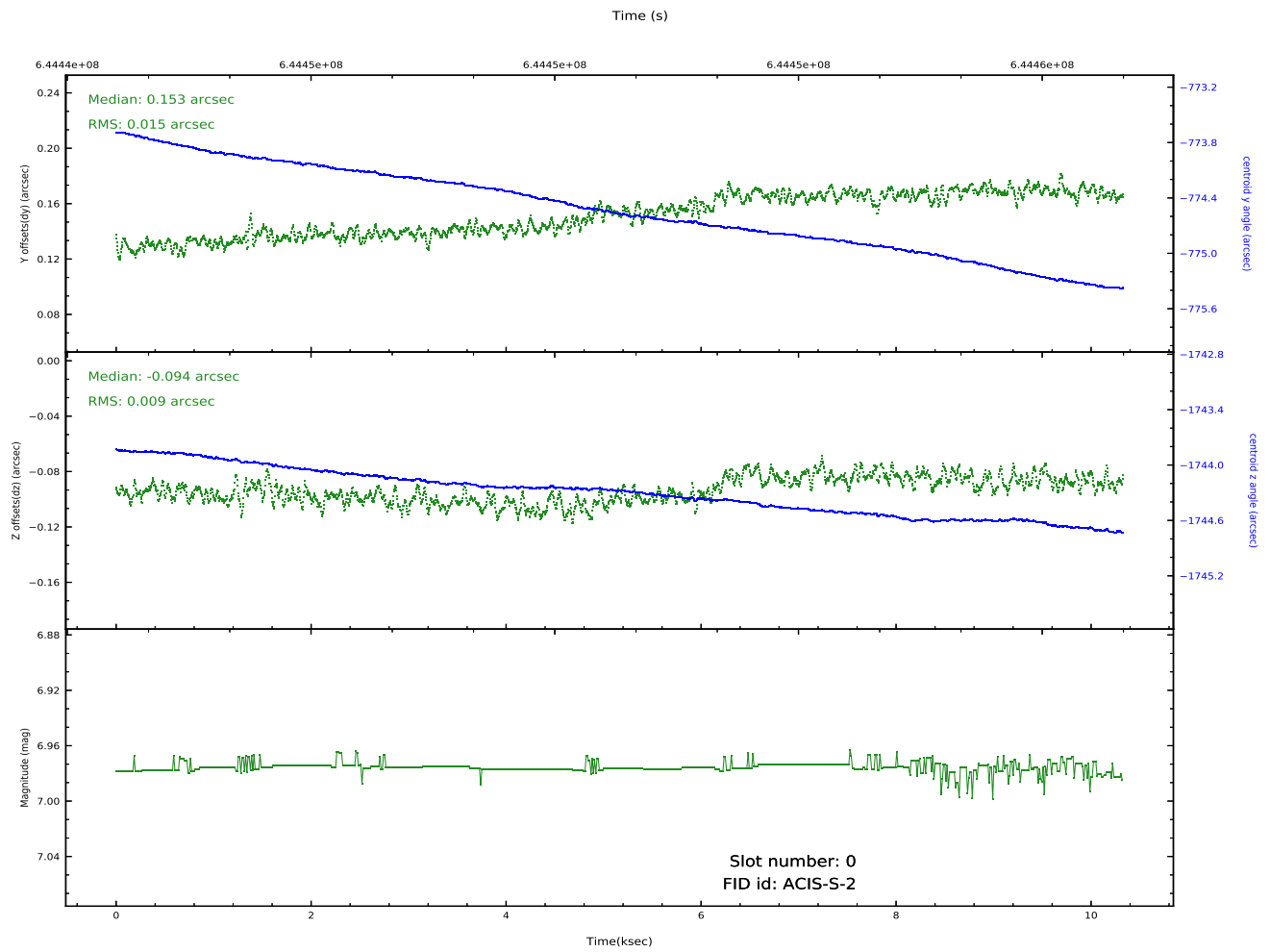
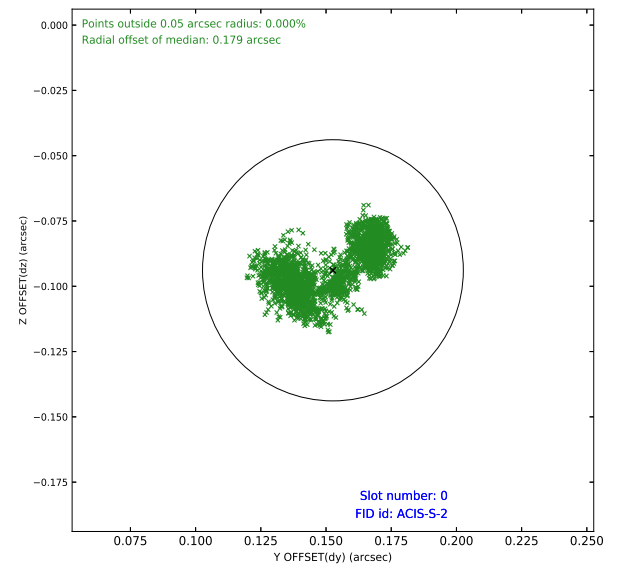
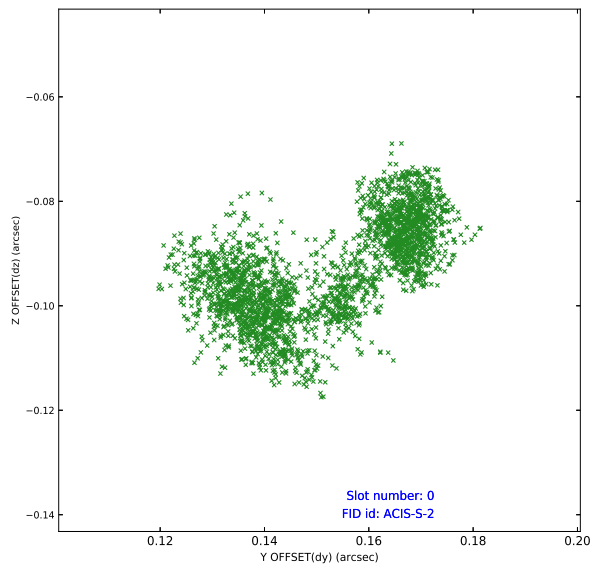


Time (s)

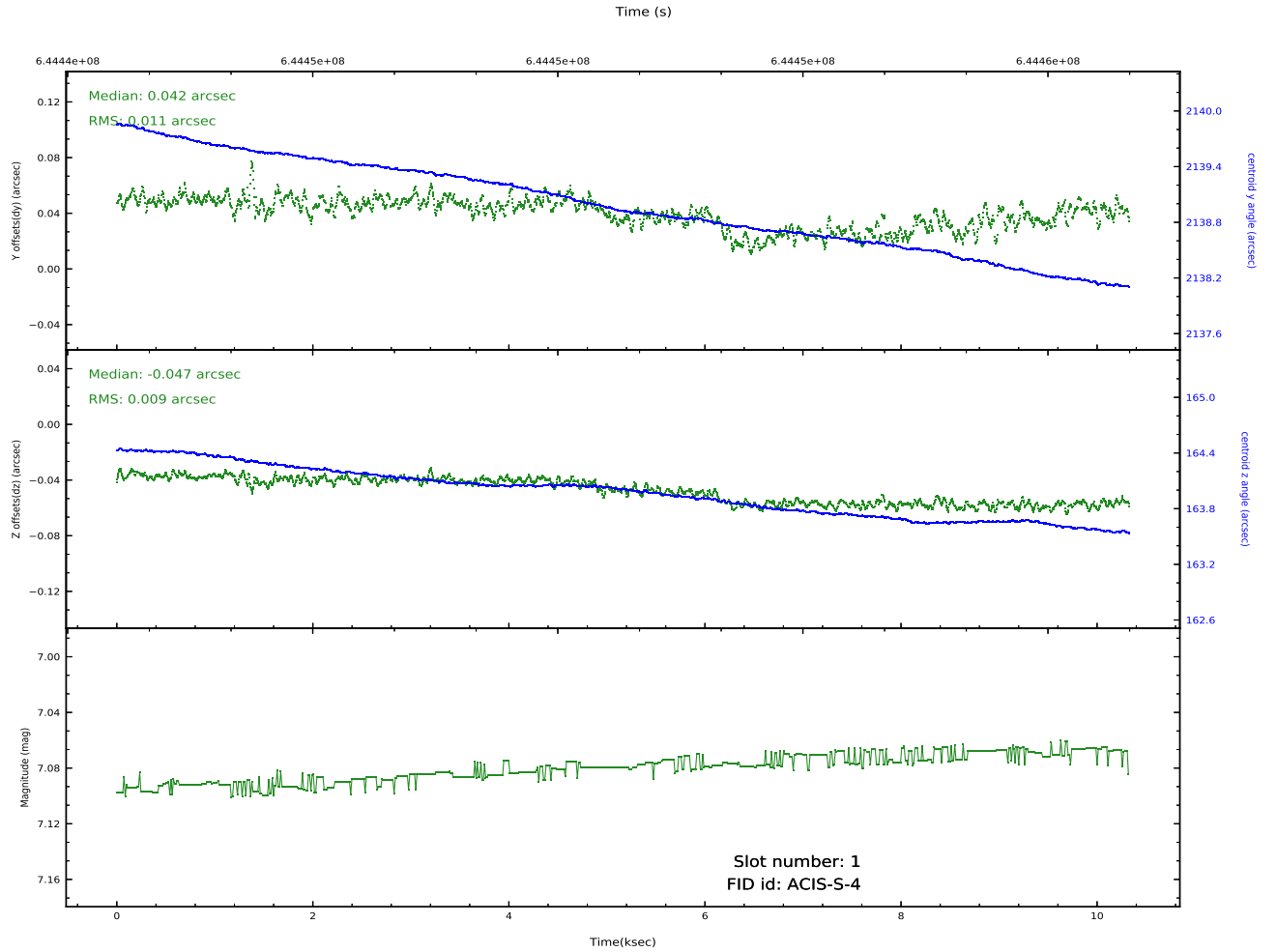
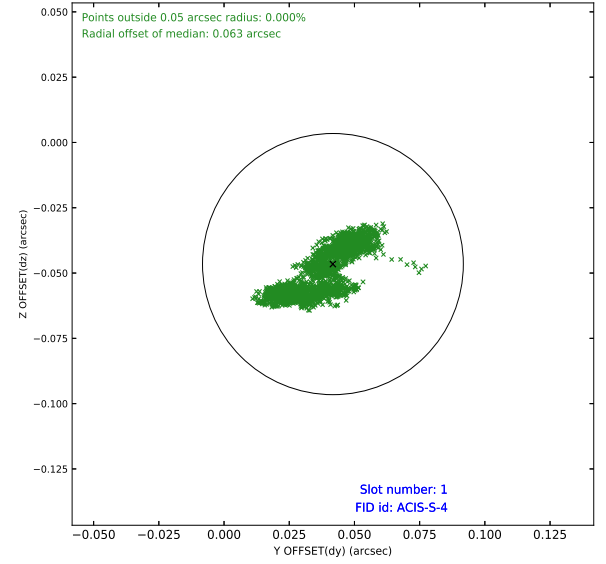
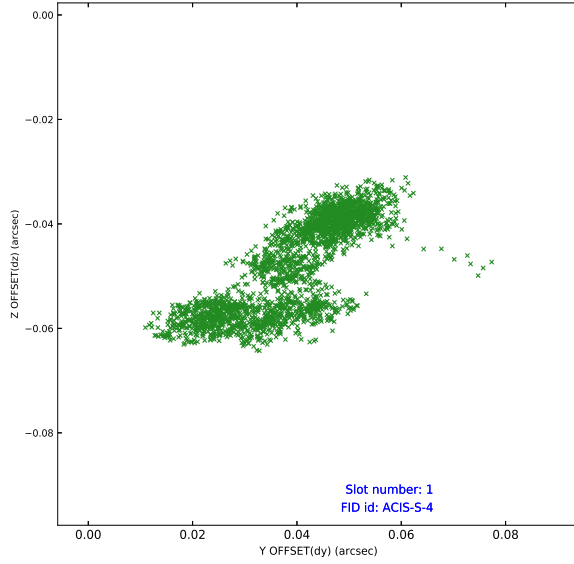


## 2.5 FID Slots

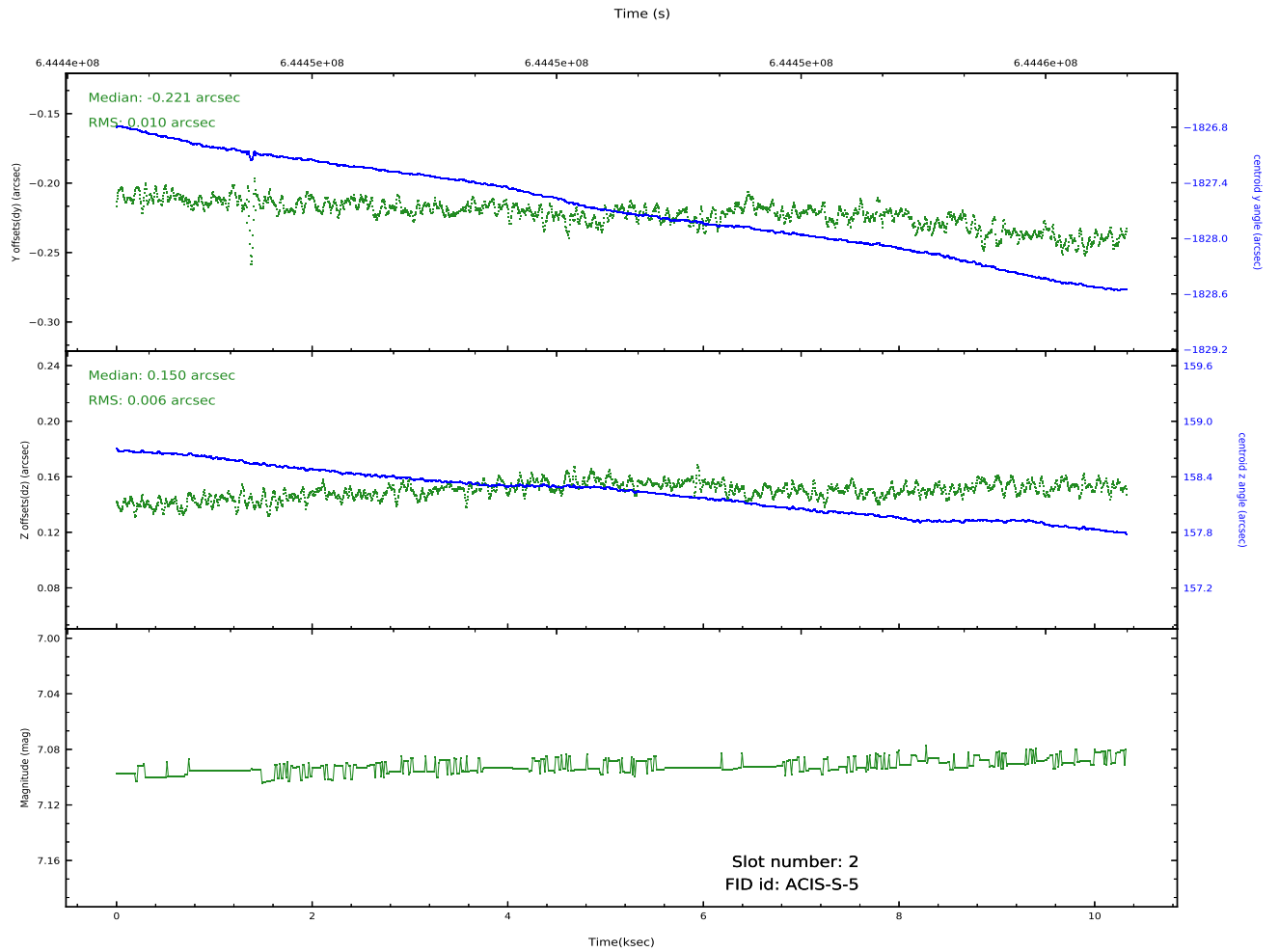
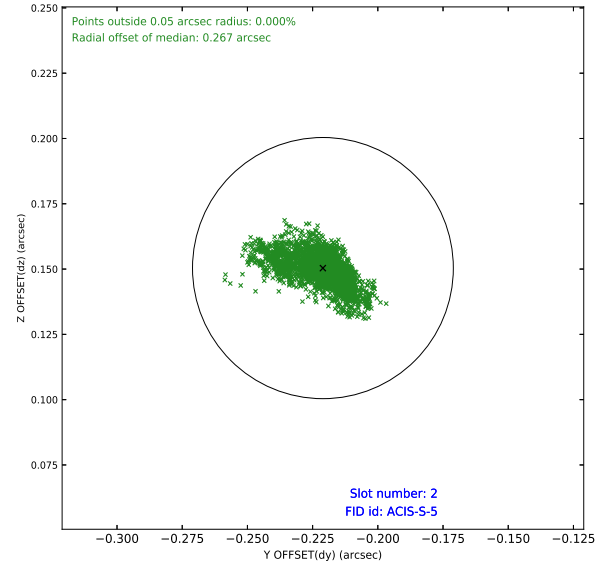
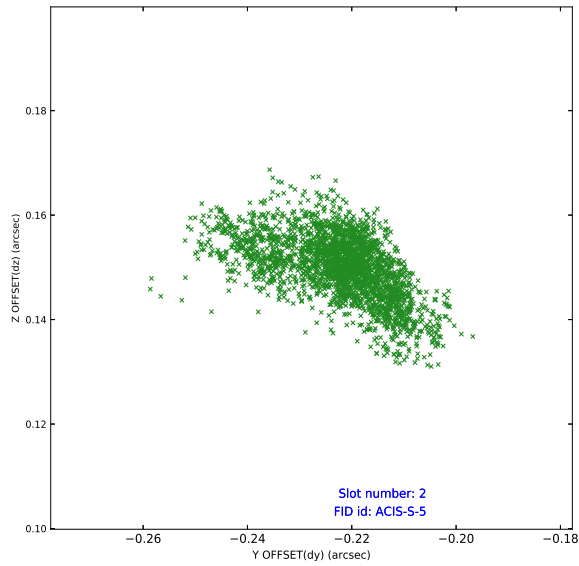
### 2.5.1 Slot 0



## 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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.067489238381

### **A.2 Comments**