

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 14402 - L2 Version 1  
Chandra X-Ray Center

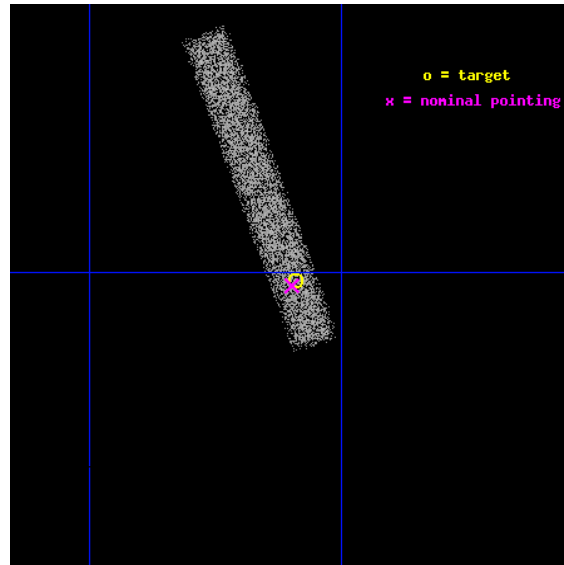
L2 Processing Date : Apr 6 2012

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# 1 Front

seq_num	200830	Sequence number
obs_id	14402	Observation id
title	X-ray irradiation and evaporation of a super-Earth exoplanet	Propo
observer	Dr Peter Wheatley	Principal investigator
object	55 Cnc	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	133.1475	Observer's specified target RA [deg]
dec_targ	28.330028	Observer's specified target Dec [deg]
ra_nom	133.14959538931	Nominal RA [deg]
dec_nom	28.327604618305	Nominal Dec [deg]
roll_nom	250.01924644023	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20069.598803759	Sum of GTIs [s]
livetime	18202.066754724	Livetime [s]
ontime7	20069.598803759	Sum of GTIs [s]
l2events	9432	Number of level 2 events

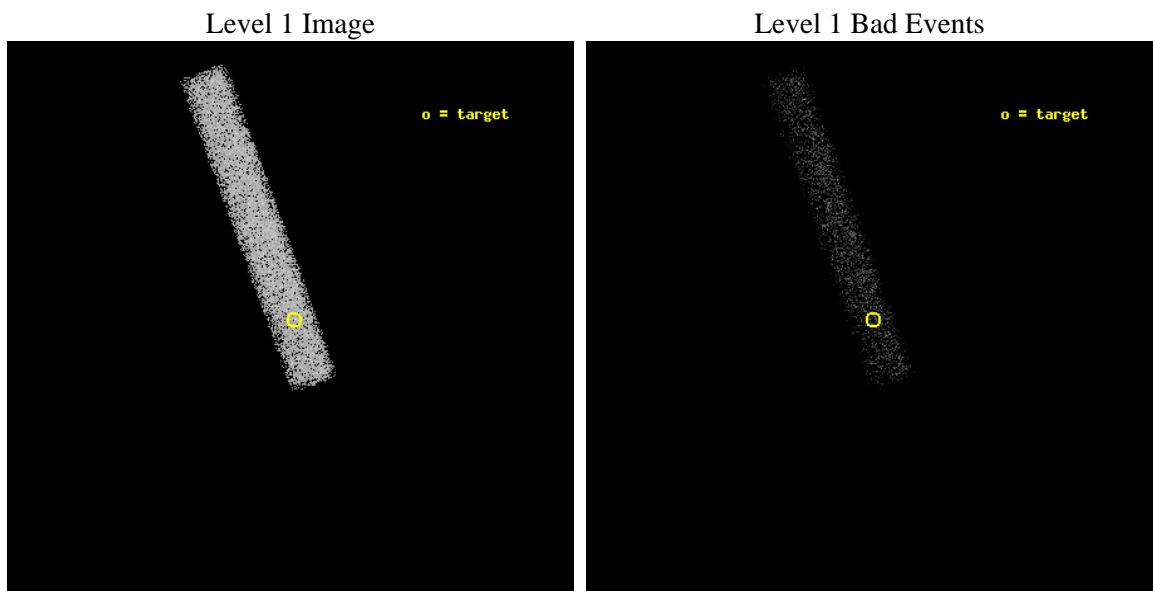




## 2 OBI

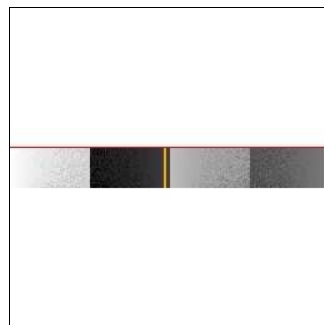
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	20069.598803759	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime7	20069.598803759	Sum of GTIs [s]
date	2012-04-06T03:23:41	Date and time of file creation	l1events	20242	Number of level 1 events
revision	1	Processing version of data			

### 2.1.4 Events

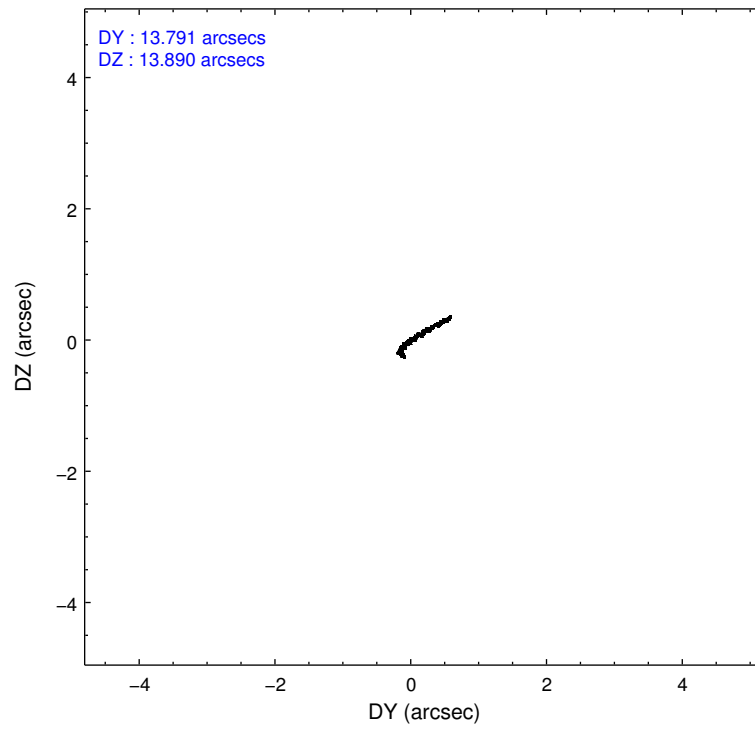
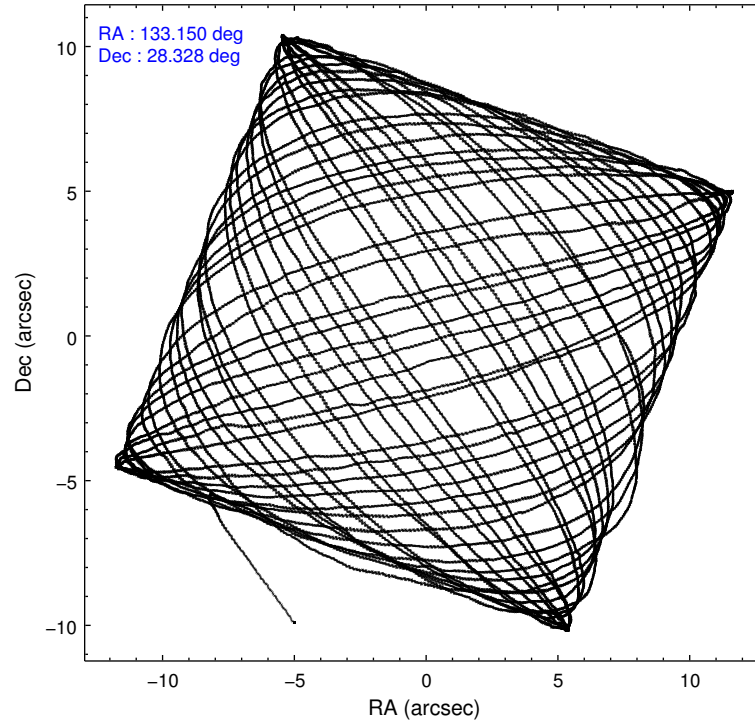
	<b>ccd 7</b>
level 1 events	20242
rejected events	10397
rejected %	<b>51%</b>

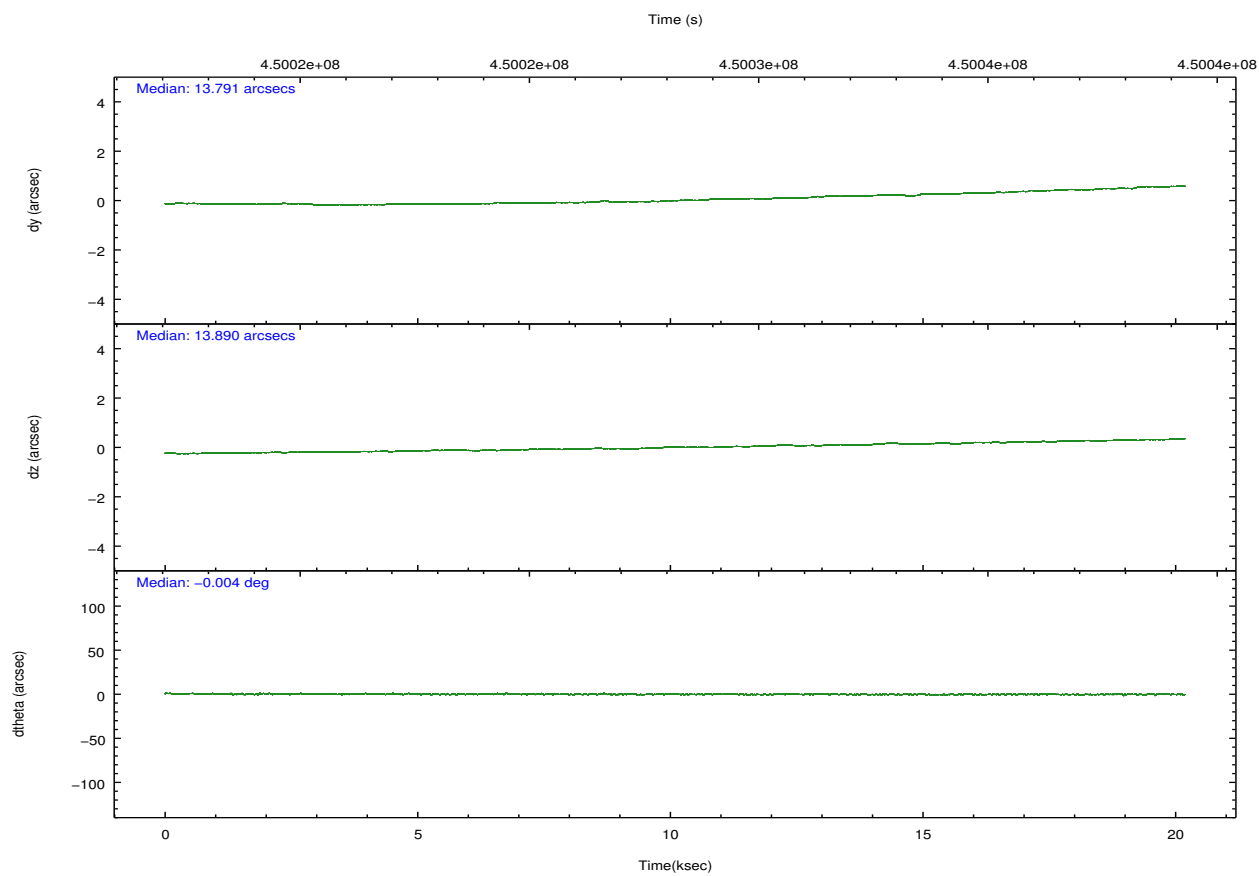
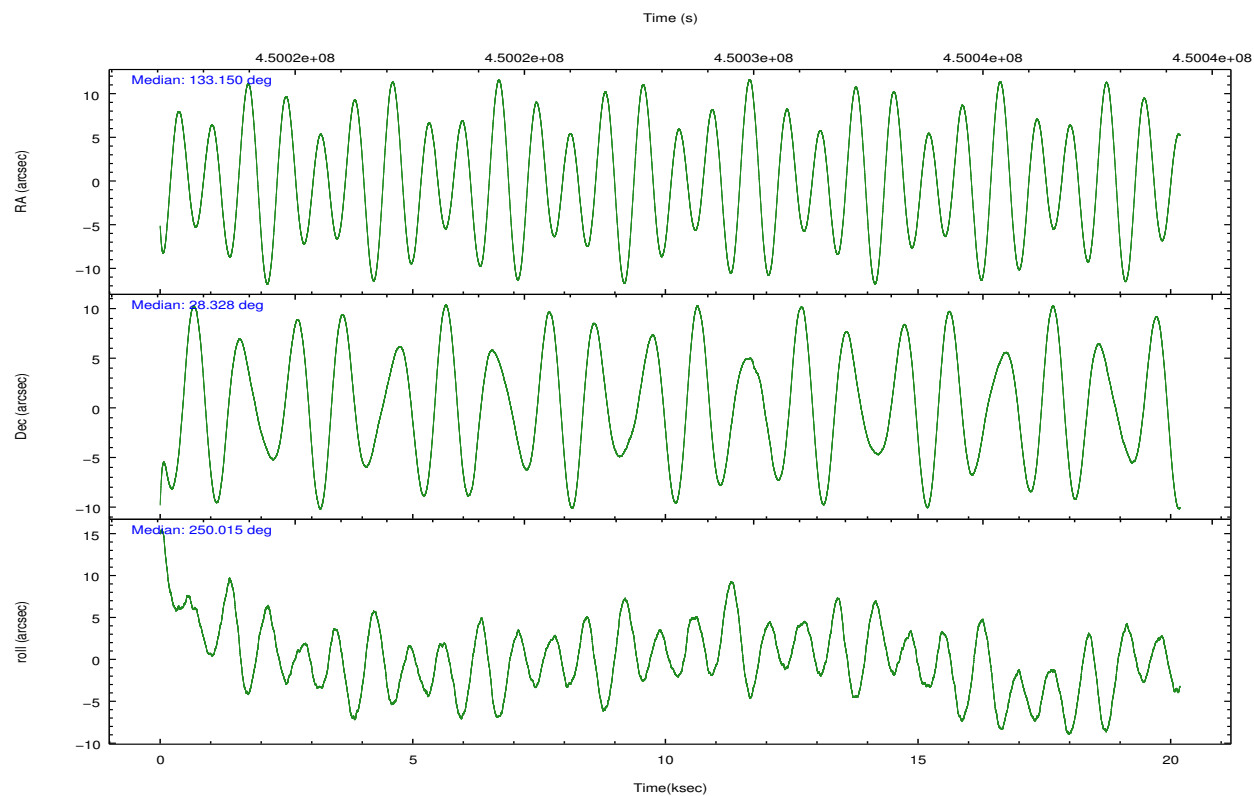
	<b>ccd 7</b>
grade 0 events	1032
	5%
grade 1 events	24
	0%
grade 2 events	1812
	8%
grade 3 events	1350
	6%
grade 4 events	1219
	6%
grade 5 events	2098
	10%
grade 6 events	4432
	21%
grade 7 events	8275
	40%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	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	133.143771	133.1495953893082	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	28.354491	28.32760461830496	Subarray start row	449	449
[deg] Pointing Roll	249.865377	250.0192464402309	Subarray row count	128	128
[s] Window start time (MET)	449931066.184000	449931066.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	450103866.184000	450103866.184000	[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)	450018263.184000	450017371.47033			
Observation start date	2012-04-05T13:03:17	2012-04-05T12:49:31			
[s] Observation end time (MET)	450038263.184000	450038913.38397			
Observation end date	2012-04-05T18:36:37	2012-04-05T18:48:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect



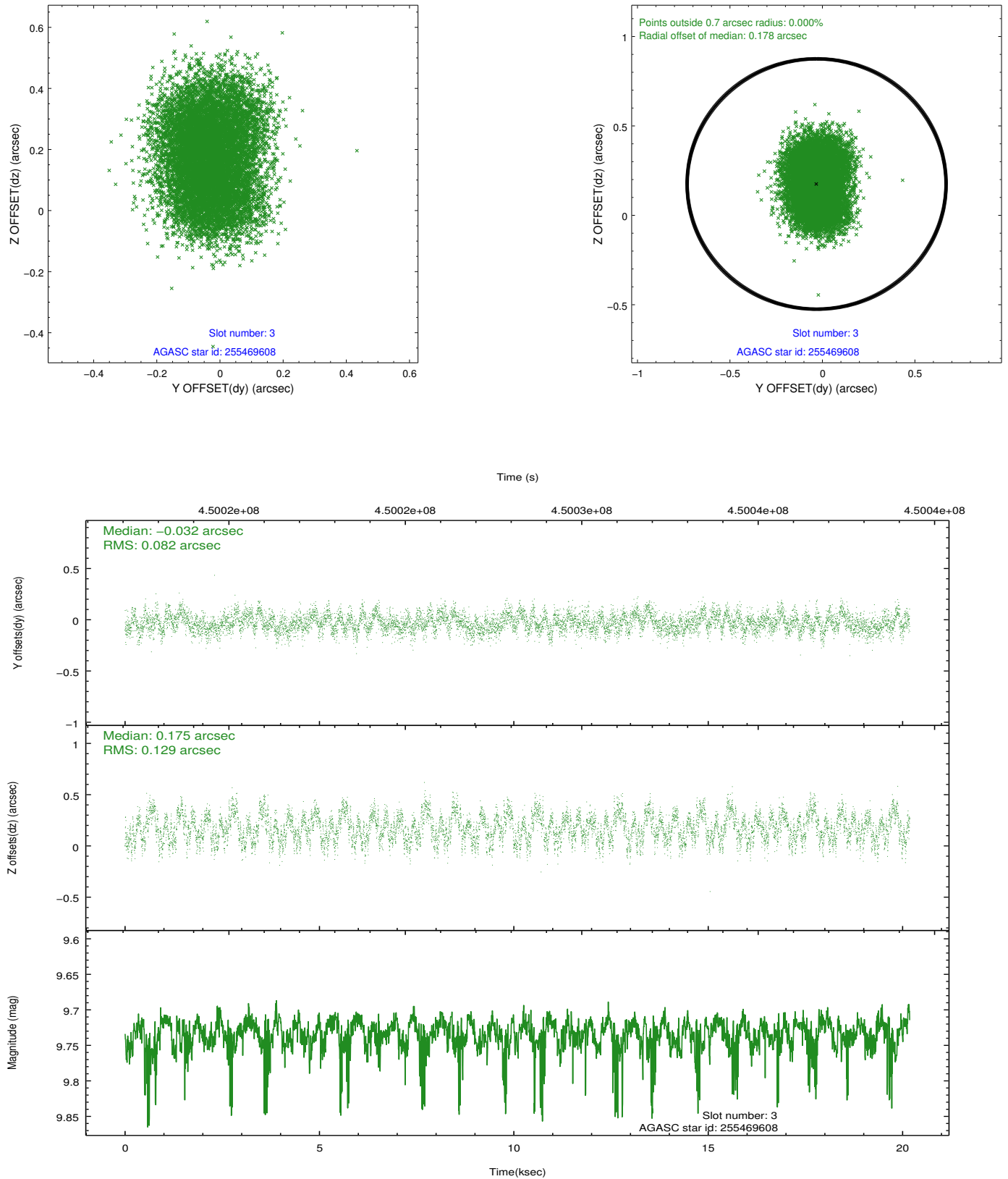


### Slot Statistics

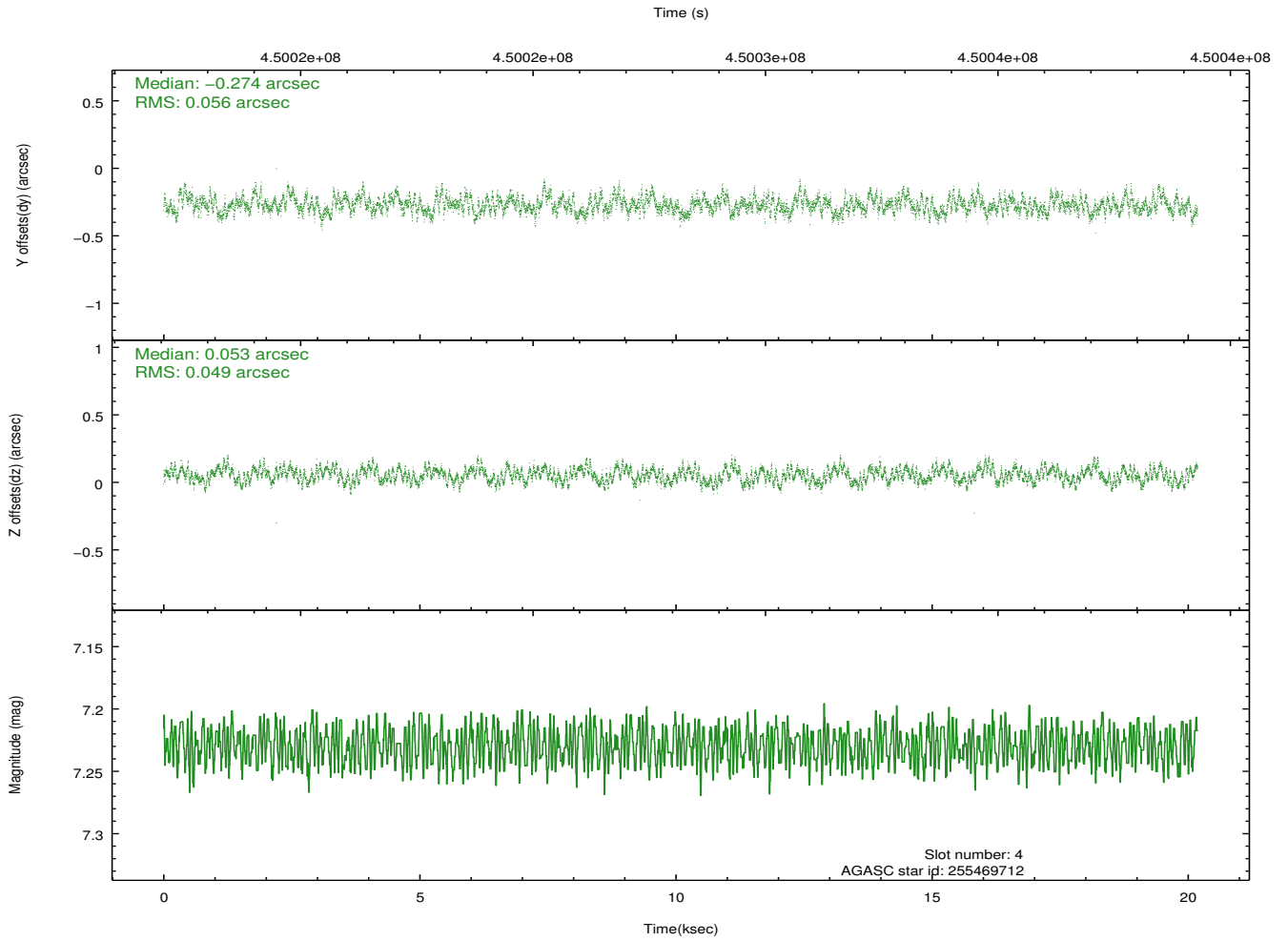
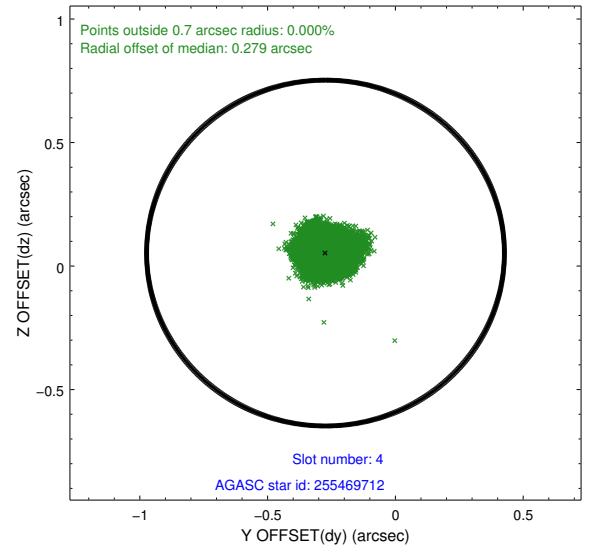
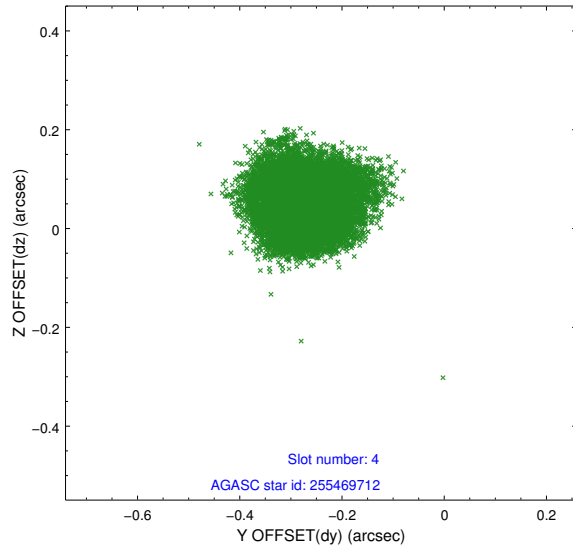
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.01	4923	-0.073	-0.051	0.013	0.026	0.000000	0.000000	-766.89	-1735.30
1	FID	ACIS-S-4	7.10	4923	0.232	0.049	0.018	0.034	0.000000	0.000000	2146.62	173.08
2	FID	ACIS-S-5	7.13	4924	-0.191	0.010	0.009	0.015	0.000000	0.000000	-1819.60	166.94
3	GUIDE	255469608	9.73	9824	-0.032	0.175	0.166	0.258	133.139462	28.557588	-680.72	-262.98
4	GUIDE	255469712	7.23	9846	-0.274	0.053	0.081	0.123	133.072289	28.856520	-1619.15	-833.41
5	GUIDE	255474504	8.75	9841	-0.055	0.184	0.085	0.134	132.940588	28.021724	1346.77	-193.60
6	GUIDE	255472000	8.73	9838	0.196	-0.104	0.099	0.160	132.648499	28.117541	1340.07	-1183.68
7	GUIDE	255463576	9.51	9807	0.168	-0.317	0.135	0.221	132.330901	28.340405	927.02	-2403.78

## 2.4 Star Slots

### 2.4.1 Slot 3

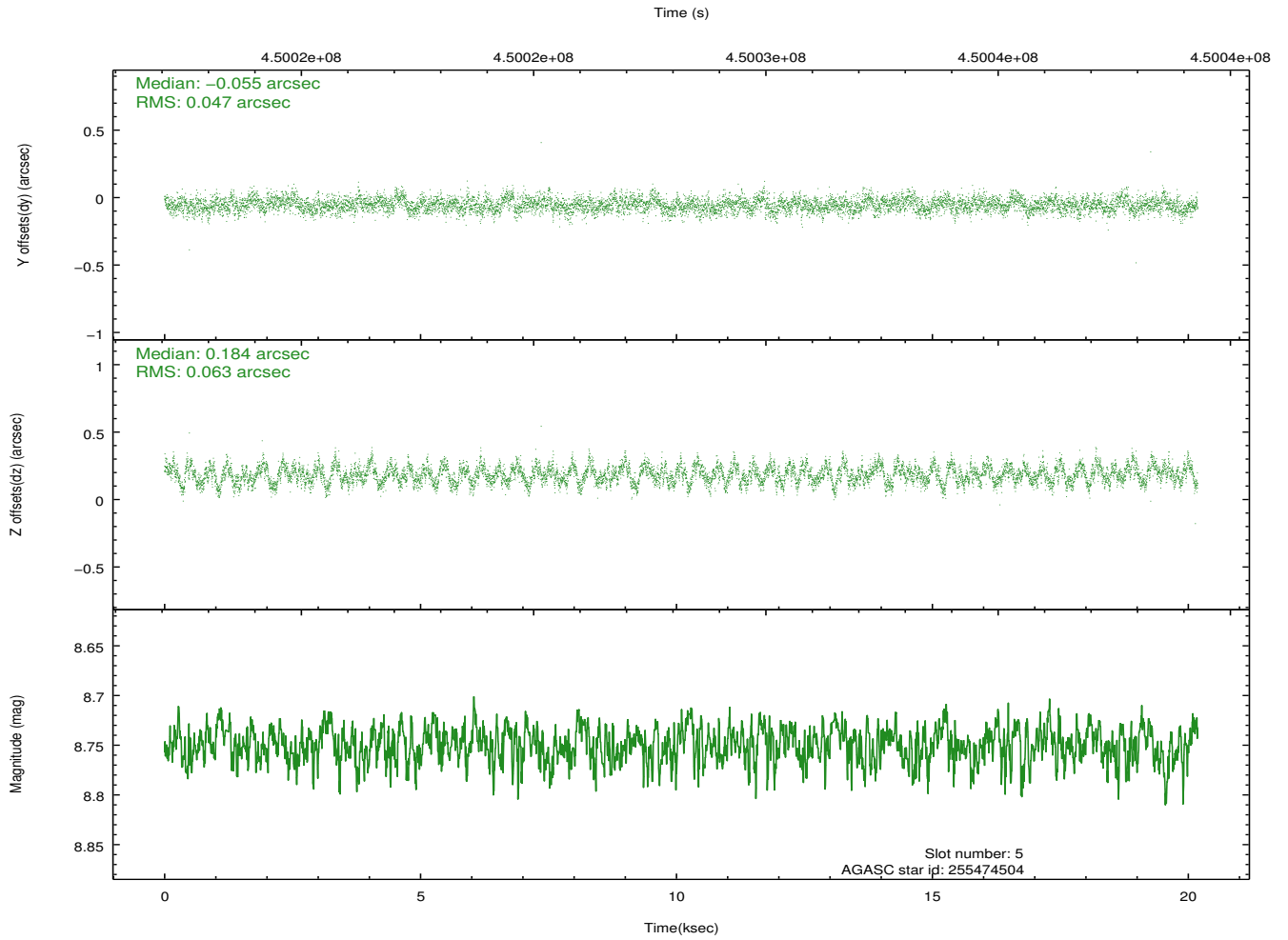
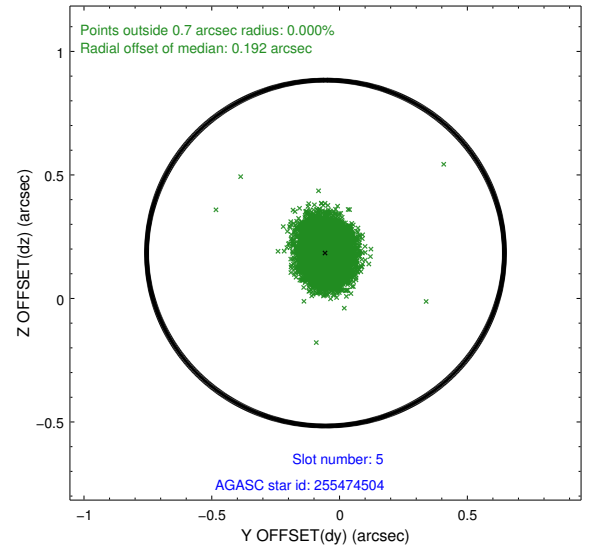
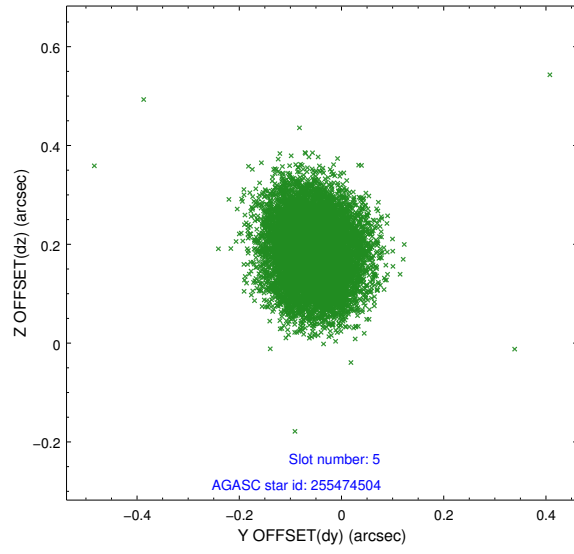


## 2.4.2 Slot 4

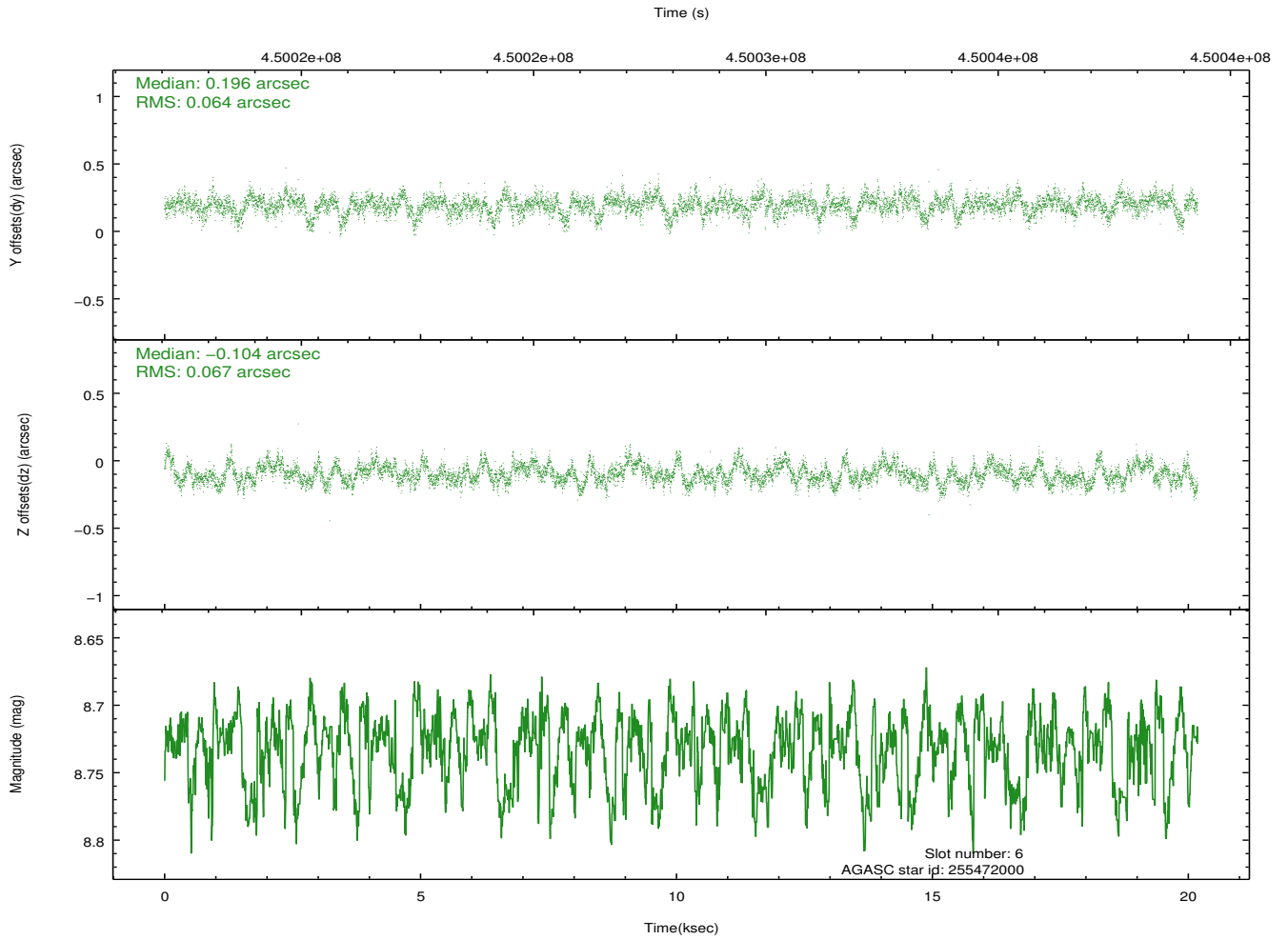
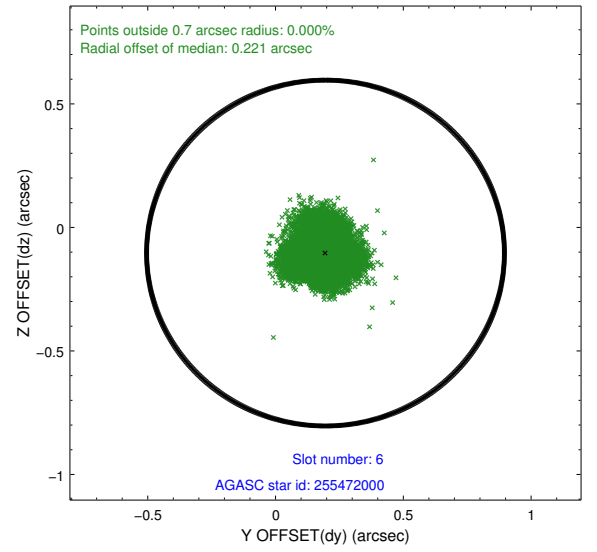
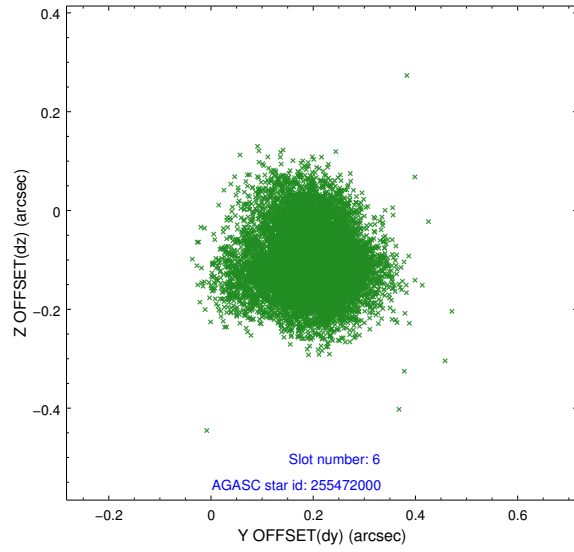




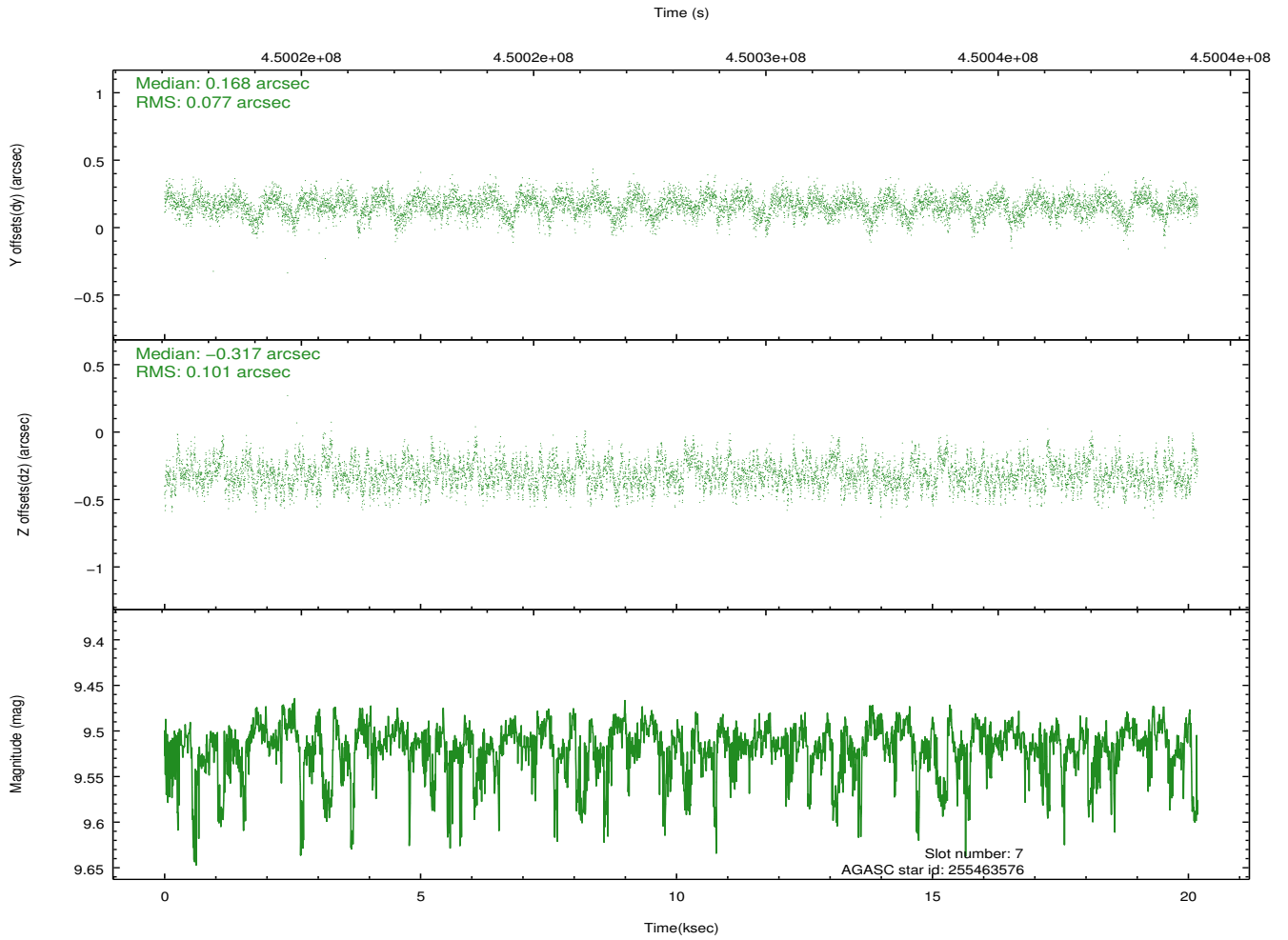
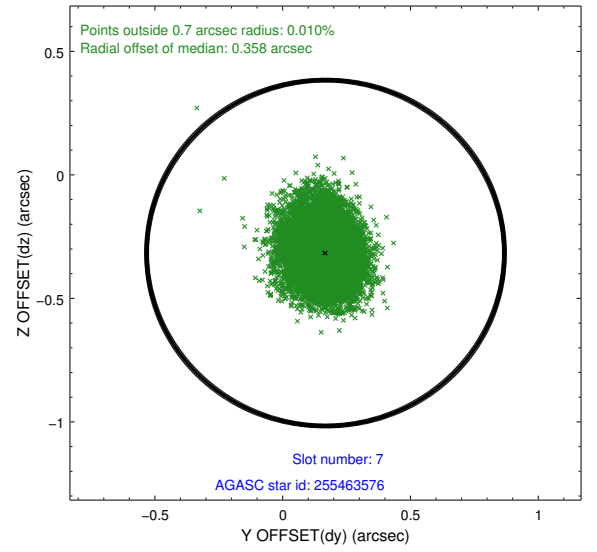
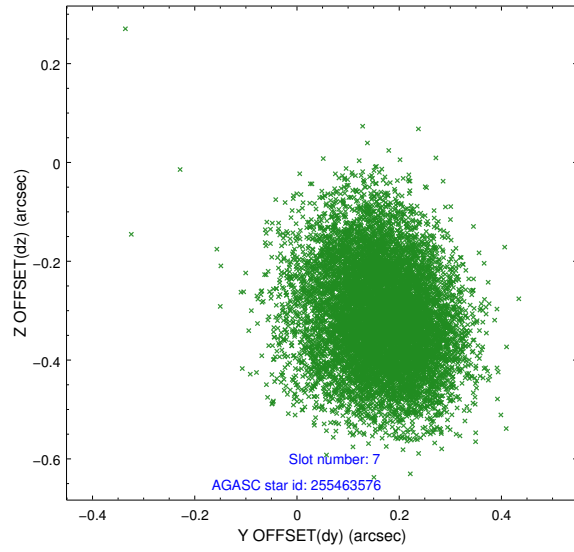
### 2.4.3 Slot 5



## 2.4.4 Slot 6

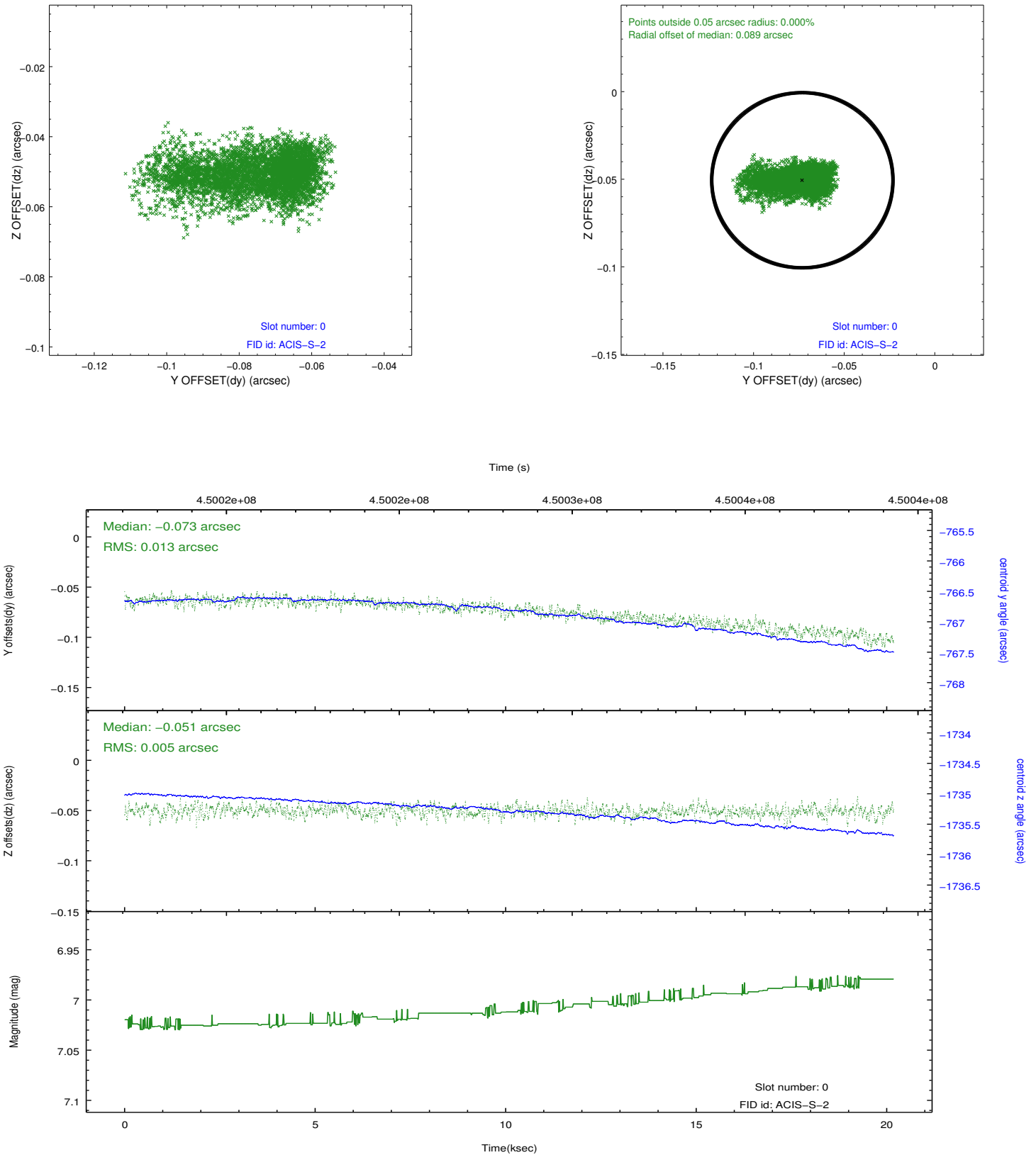


## 2.4.5 Slot 7

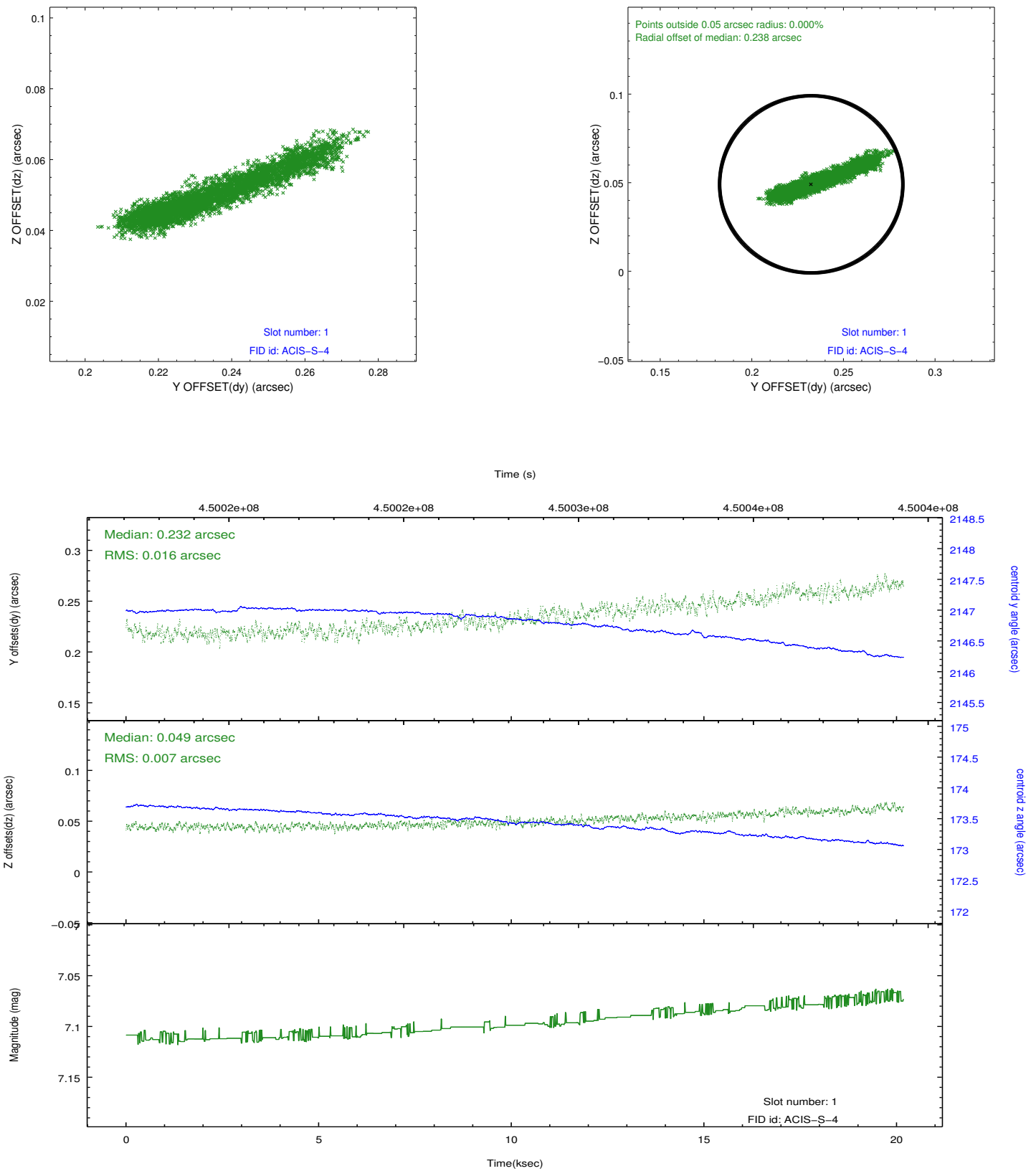


## 2.5 FID Slots

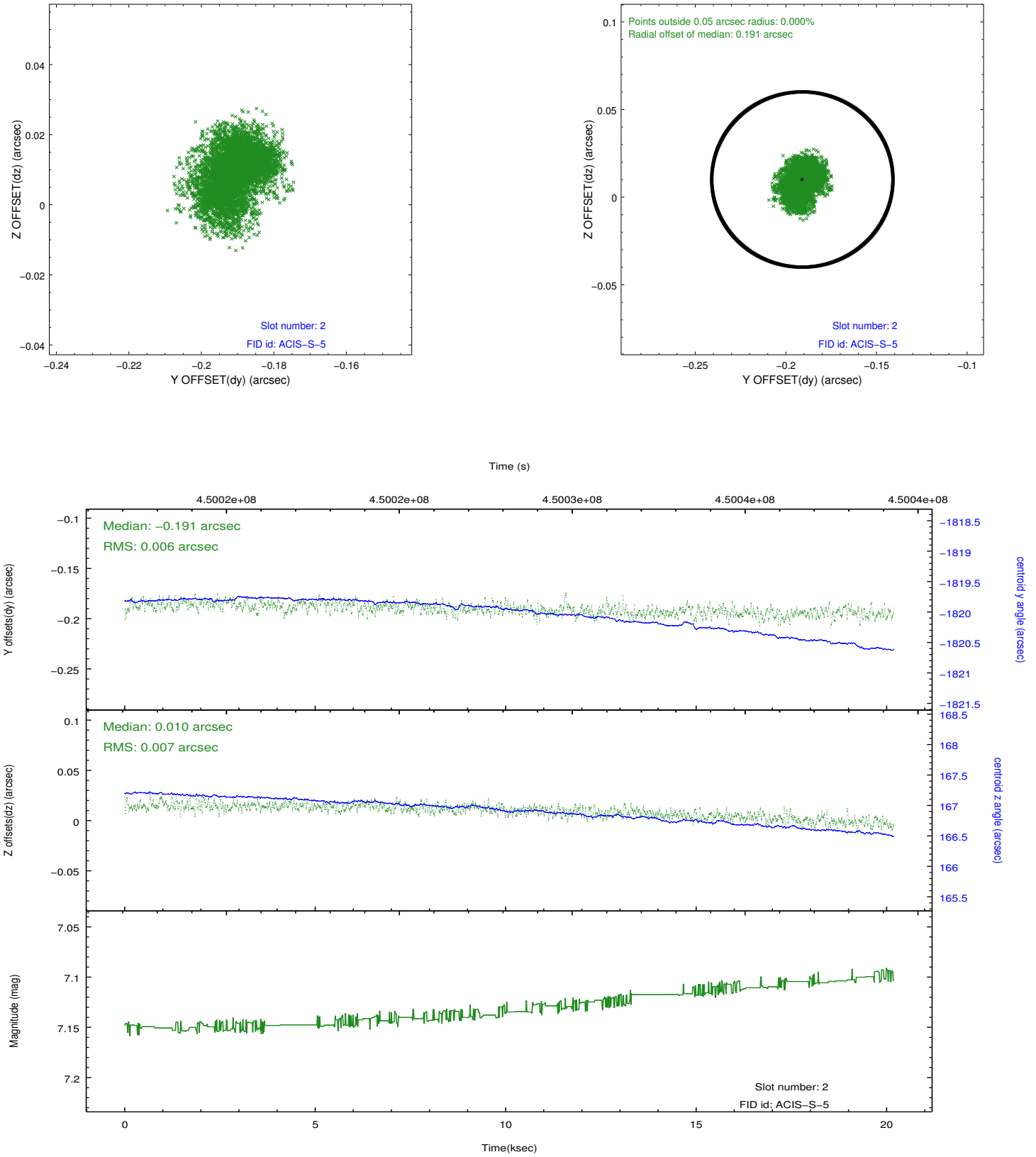
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.069598803759

### A.2 Comments

Time constraint met. Coordinated with HST.