

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4006 - L2 Version 4  
Chandra X-Ray Center

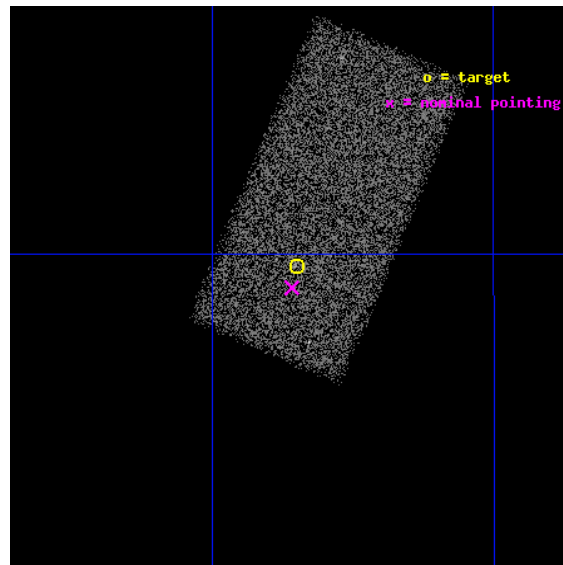
L2 Processing Date : Oct 18 2012

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# 1 Front

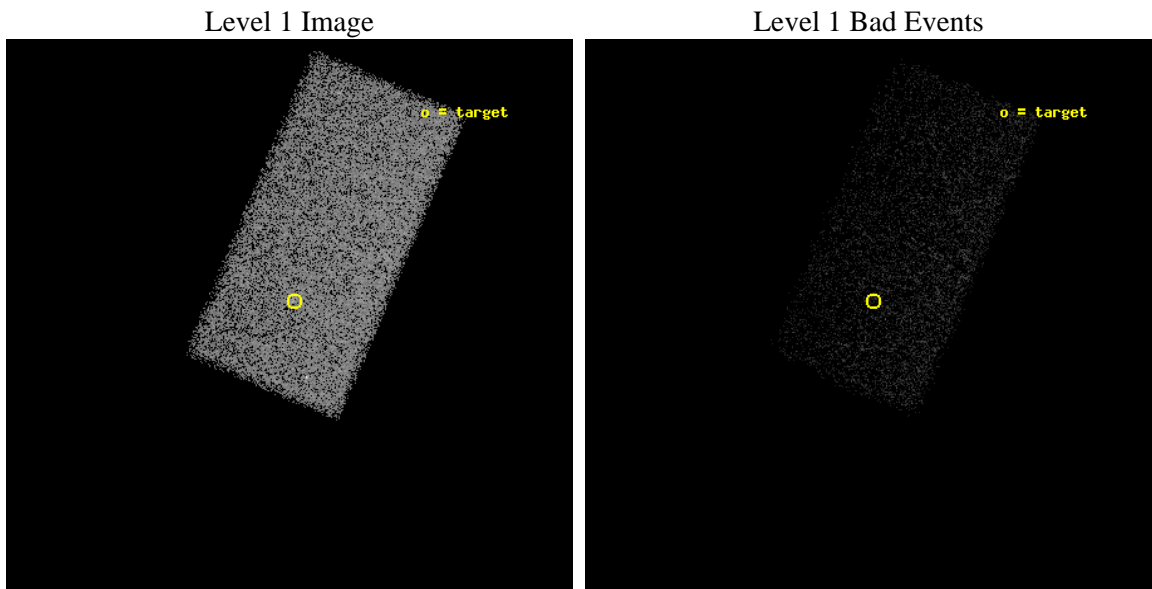
seq_num	700685	Sequence number
obs_id	4006	Observation id
title	QUIESCENT SUPERMASSIVE BLACK HOLES	Proposal title
observer	Dr. Giuseppina Fabbiano	Principal investigator
object	NGC 821	Source name
dtycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	32.0875	Observer's specified target RA [deg]
dec_targ	10.994722	Observer's specified target Dec [deg]
ra_nom	32.089719302128	Nominal RA [deg]
dec_nom	10.985348171728	Nominal Dec [deg]
roll_nom	293.01819922685	Nominal Roll [deg]
revision	4	Processing version of data
ontime	13684.5	Sum of GTIs [s]
liveltime	13320.063074287	Livetime [s]
ontime7	13684.5	Sum of GTIs [s]
l2events	24293	Number of level 2 events



## 2 OBI

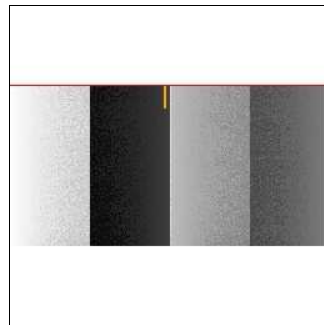
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	13500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	13684.5	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime7	13684.5	Sum of GTIs [s]
date	2012-10-18T09:07:38	Date and time of file creation	l1events	68943	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

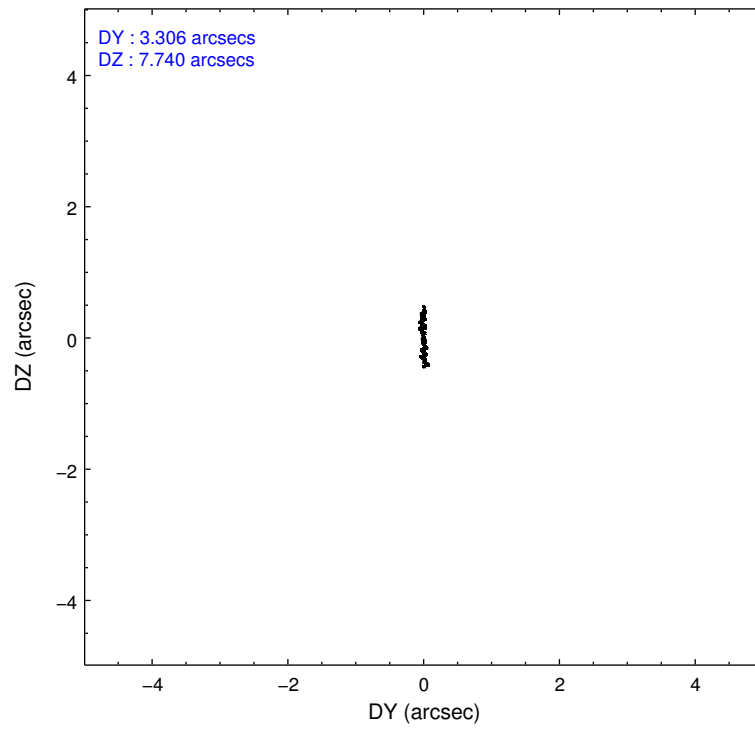
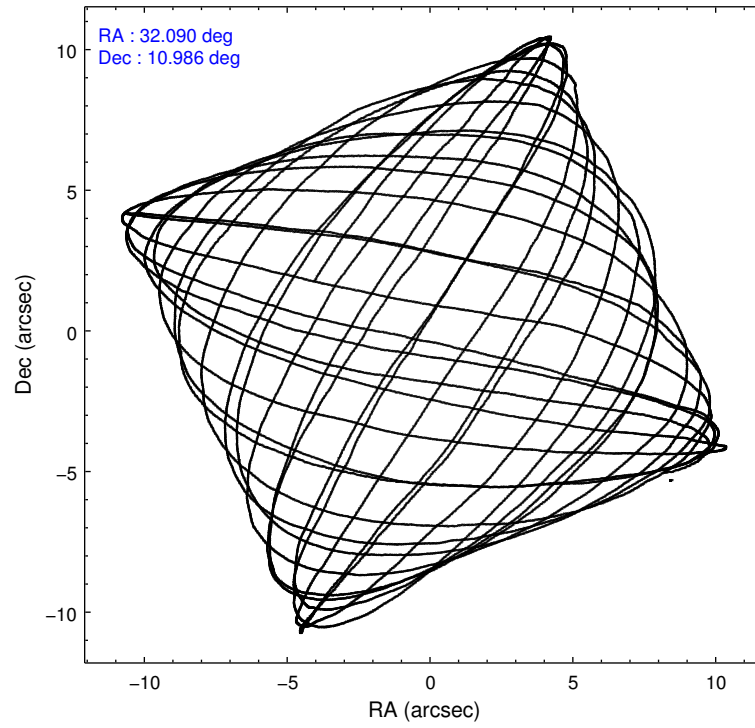
	<b>ccd 7</b>
level 1 events	68943
rejected events	44052
rejected %	63%

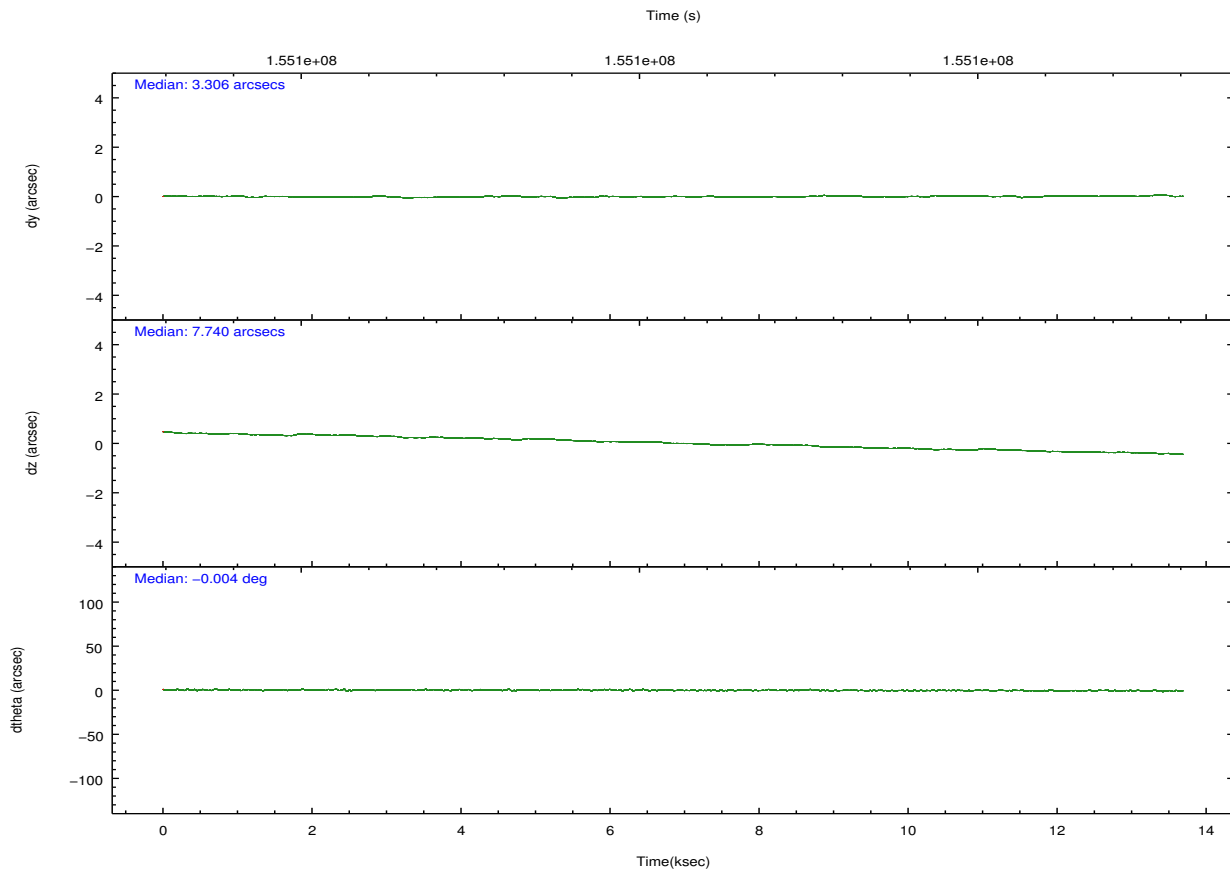
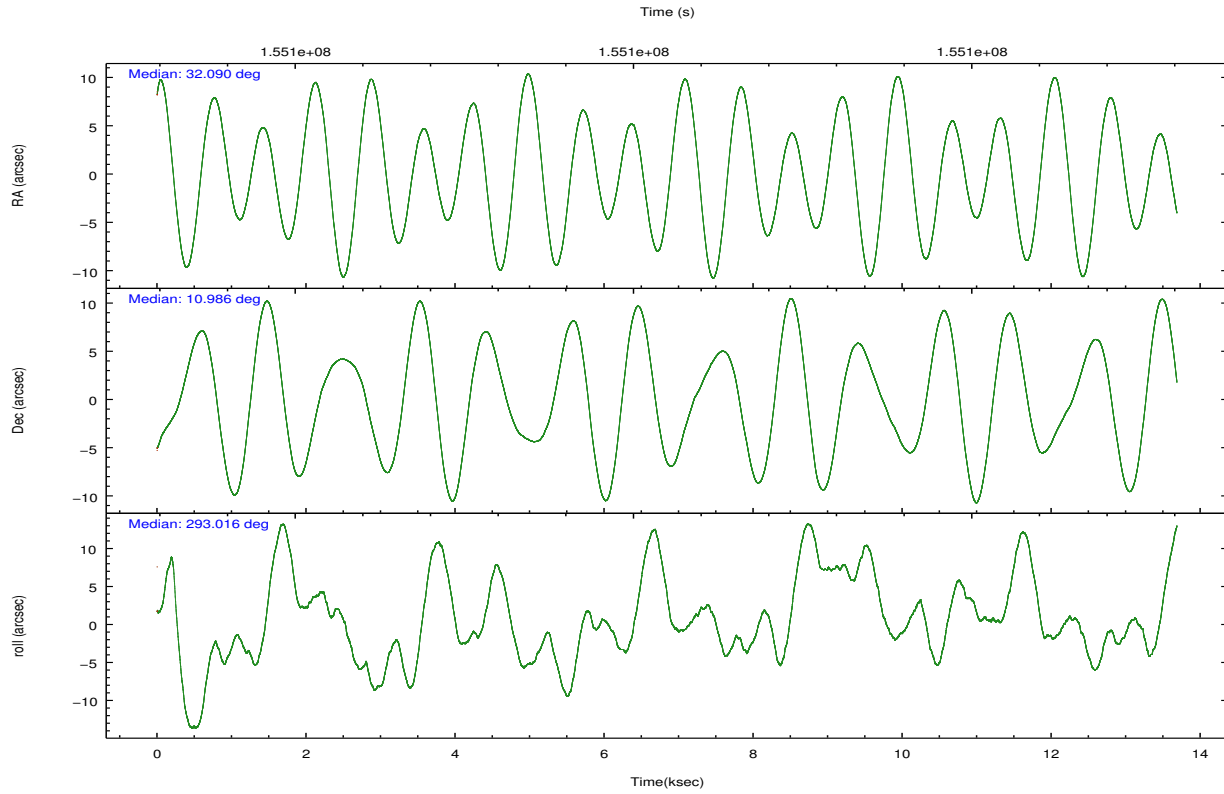
	<b>ccd 7</b>
grade 0 events	4768
	6%
grade 1 events	56
	0%
grade 2 events	7108
	10%
grade 3 events	3525
	5%
grade 4 events	3419
	4%
grade 5 events	5848
	8%
grade 6 events	15511
	22%
grade 7 events	28708
	41%

## 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	32.067314	32.08971930212834	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	11.001377	10.9853481717278	Subarray start row	257	257
[deg] Pointing Roll	292.865850	293.0181992268504	Subarray row count	512	512
[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	1.5
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	155093838.184000	155092765.94319			
Observation start date	2002-12-01T01:36:14	2002-12-01T01:19:25			
[s] Observation end time (MET)	155107338.184000	155108052.79383			
Observation end date	2002-12-01T05:21:14	2002-12-01T05:34:12			
Read mode	TIMED	TIMED			

## 2.3 Aspect



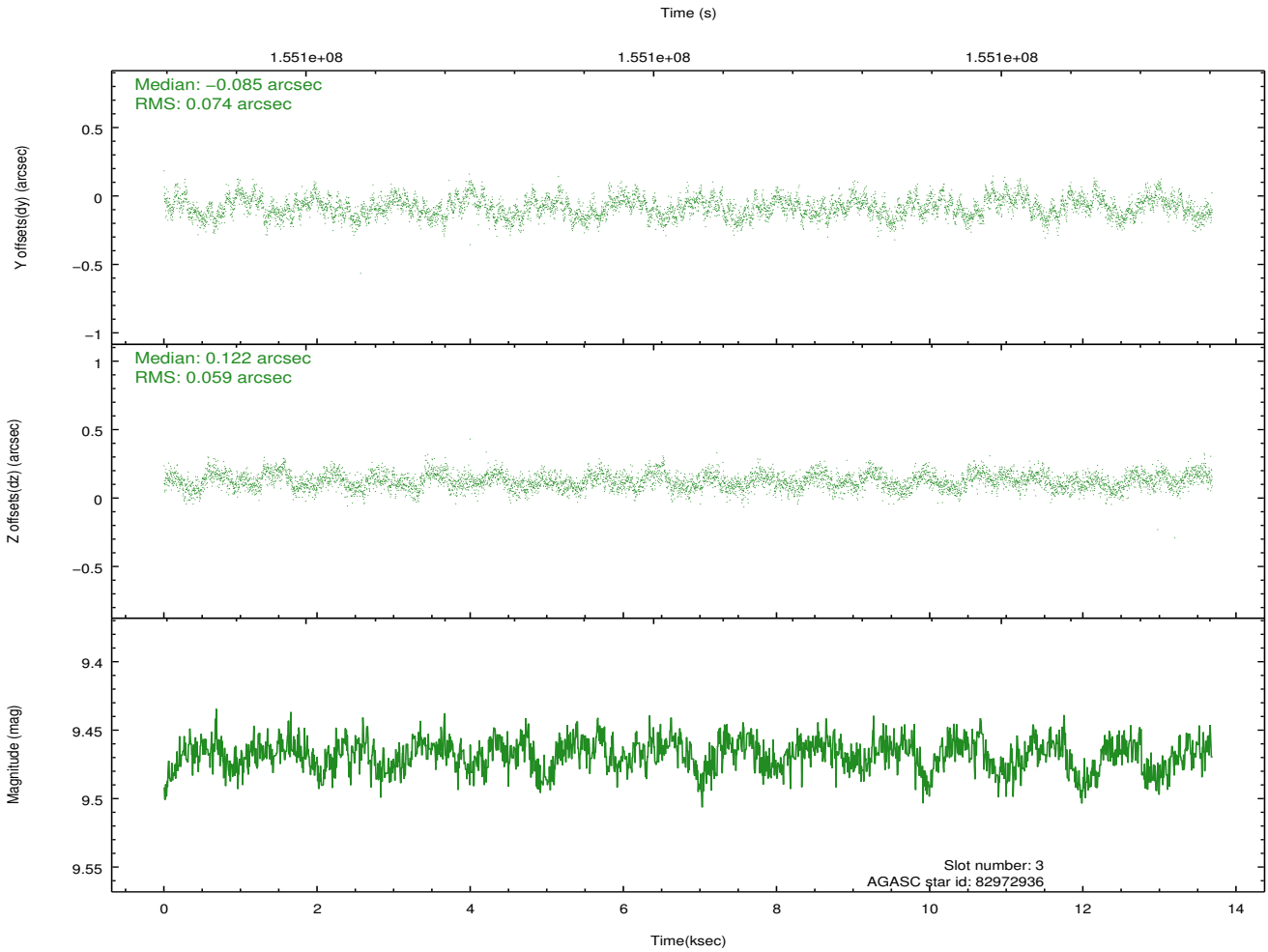
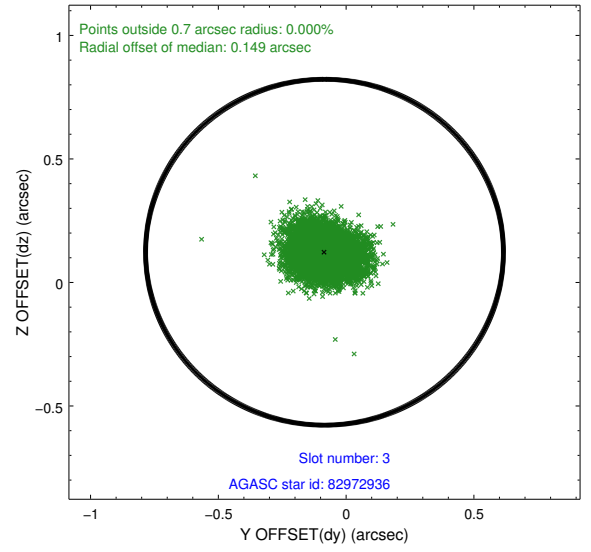
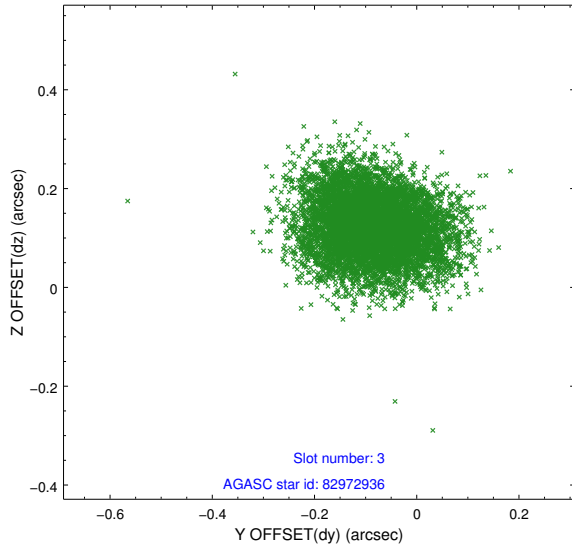


### Slot Statistics

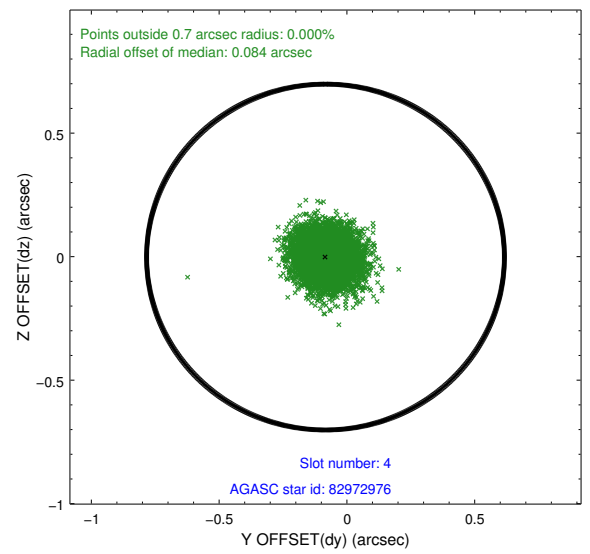
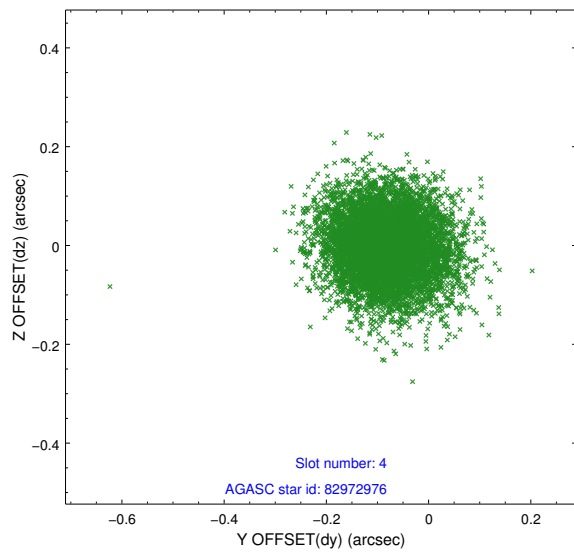
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	3339	-0.010	-0.008	0.008	0.012	0.000000	0.000000	-755.97	-1728.94
1	FID	ACIS-S-4	7.20	3339	0.006	0.007	0.006	0.010	0.000000	0.000000	2157.17	179.18
2	FID	ACIS-S-5	7.24	3338	-0.028	0.009	0.007	0.012	0.000000	0.000000	-1808.38	173.27
3	GUIDE	82972936	9.47	6670	-0.085	0.122	0.101	0.161	31.880349	11.323150	-1322.92	-157.66
4	GUIDE	82972976	9.71	6667	-0.084	-0.002	0.094	0.153	31.722409	11.276757	-1386.24	-736.39
5	GUIDE	82976896	10.73	6448	0.154	0.013	0.238	0.436	32.651084	10.578772	2204.00	1313.48
6	GUIDE	82974960	9.81	6669	-0.094	-0.131	0.121	0.194	31.911636	11.621581	-2269.32	362.01
7	GUIDE	82976744	9.51	6673	0.127	-0.005	0.103	0.170	32.095784	10.602457	1363.33	-464.92

## 2.4 Star Slots

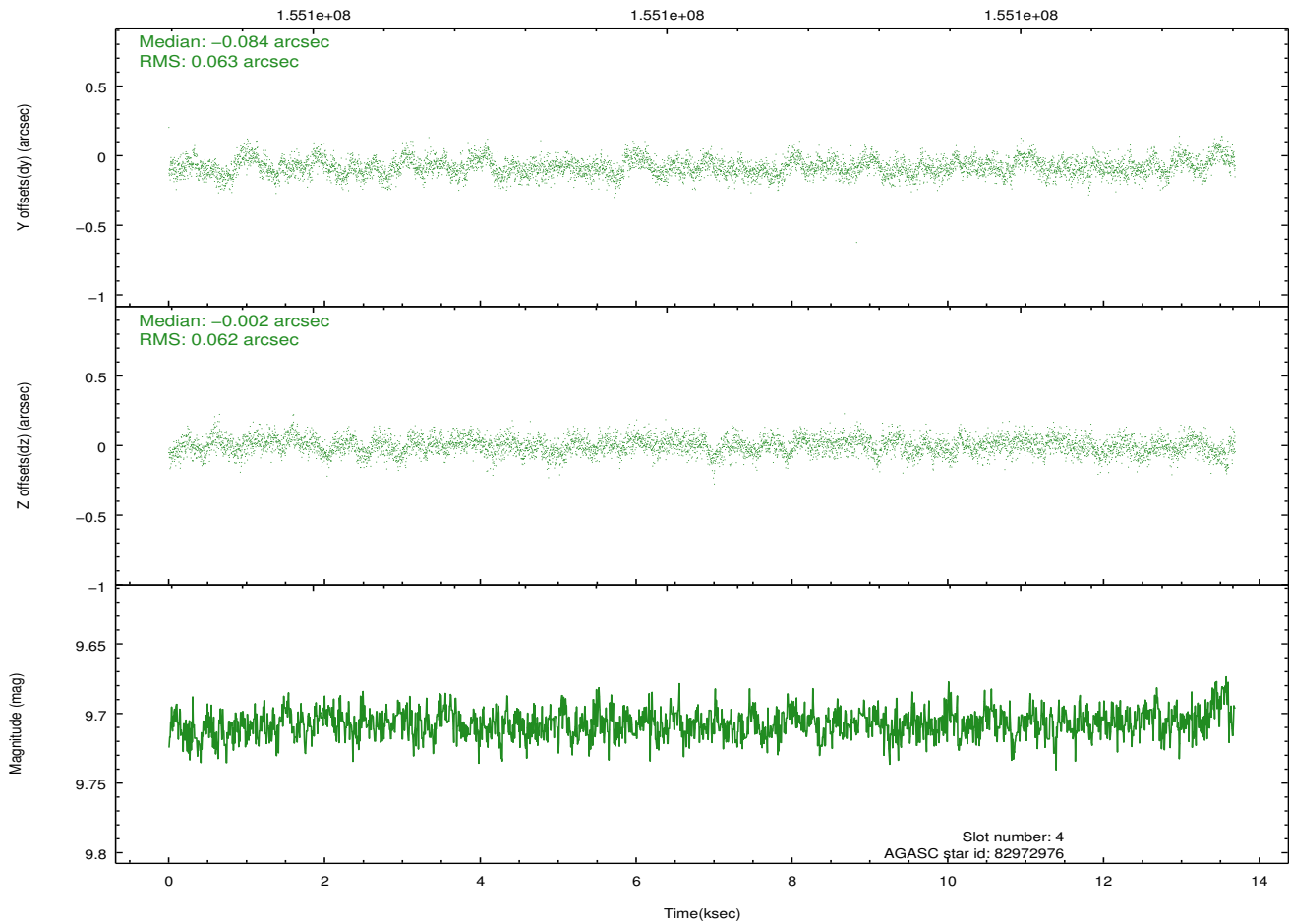
### 2.4.1 Slot 3



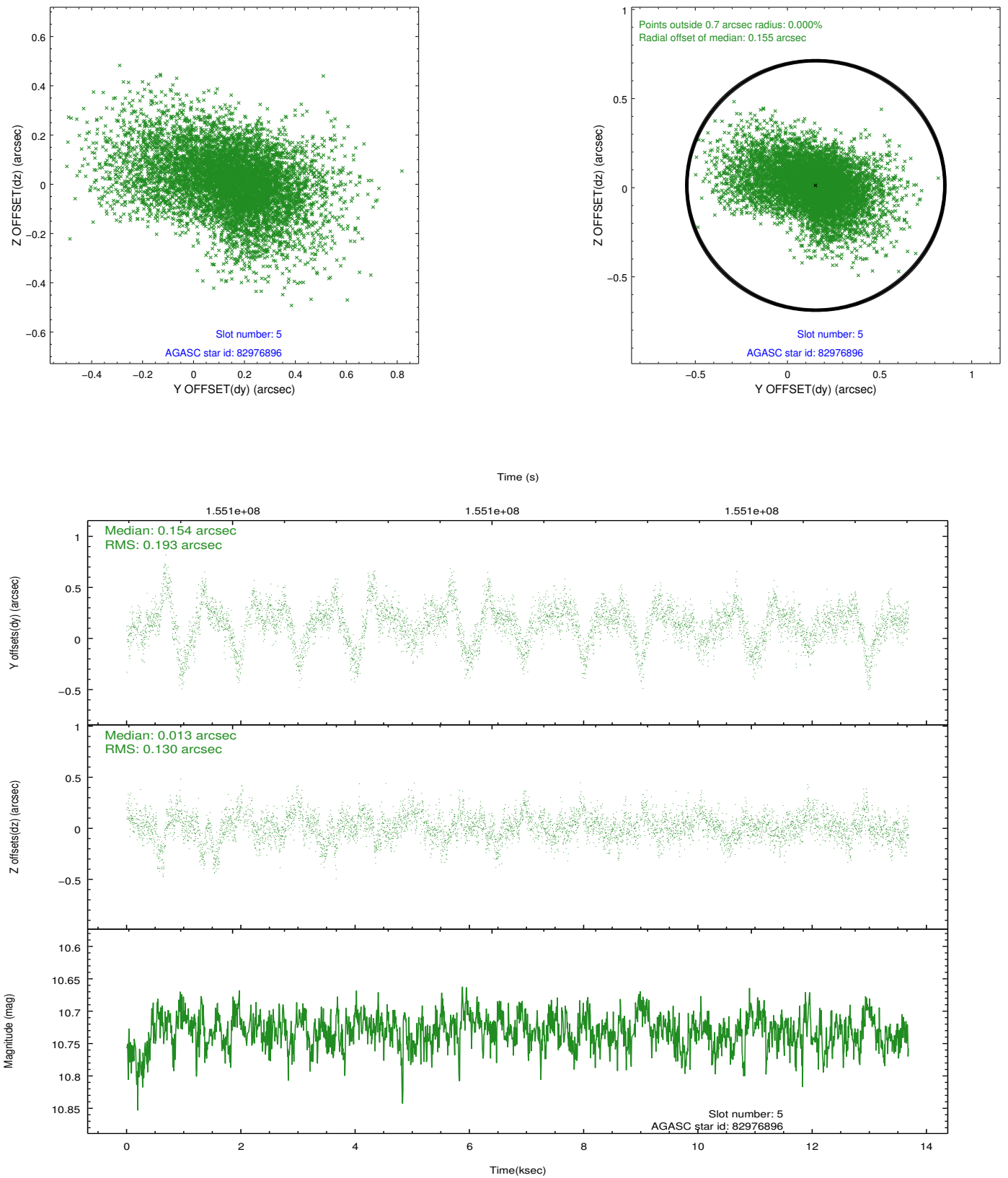
## 2.4.2 Slot 4



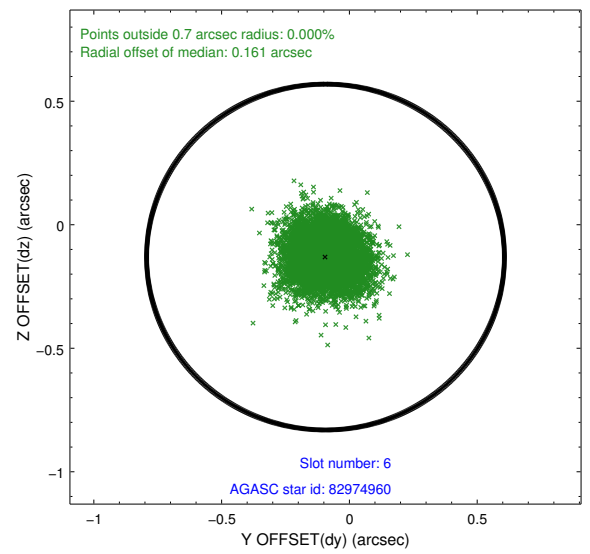
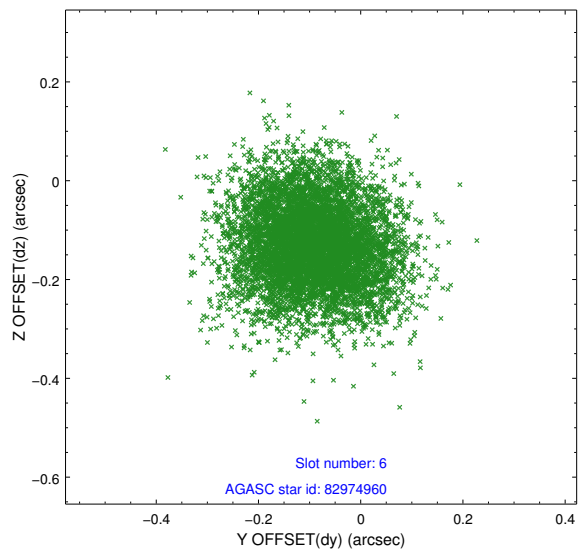
Time (s)



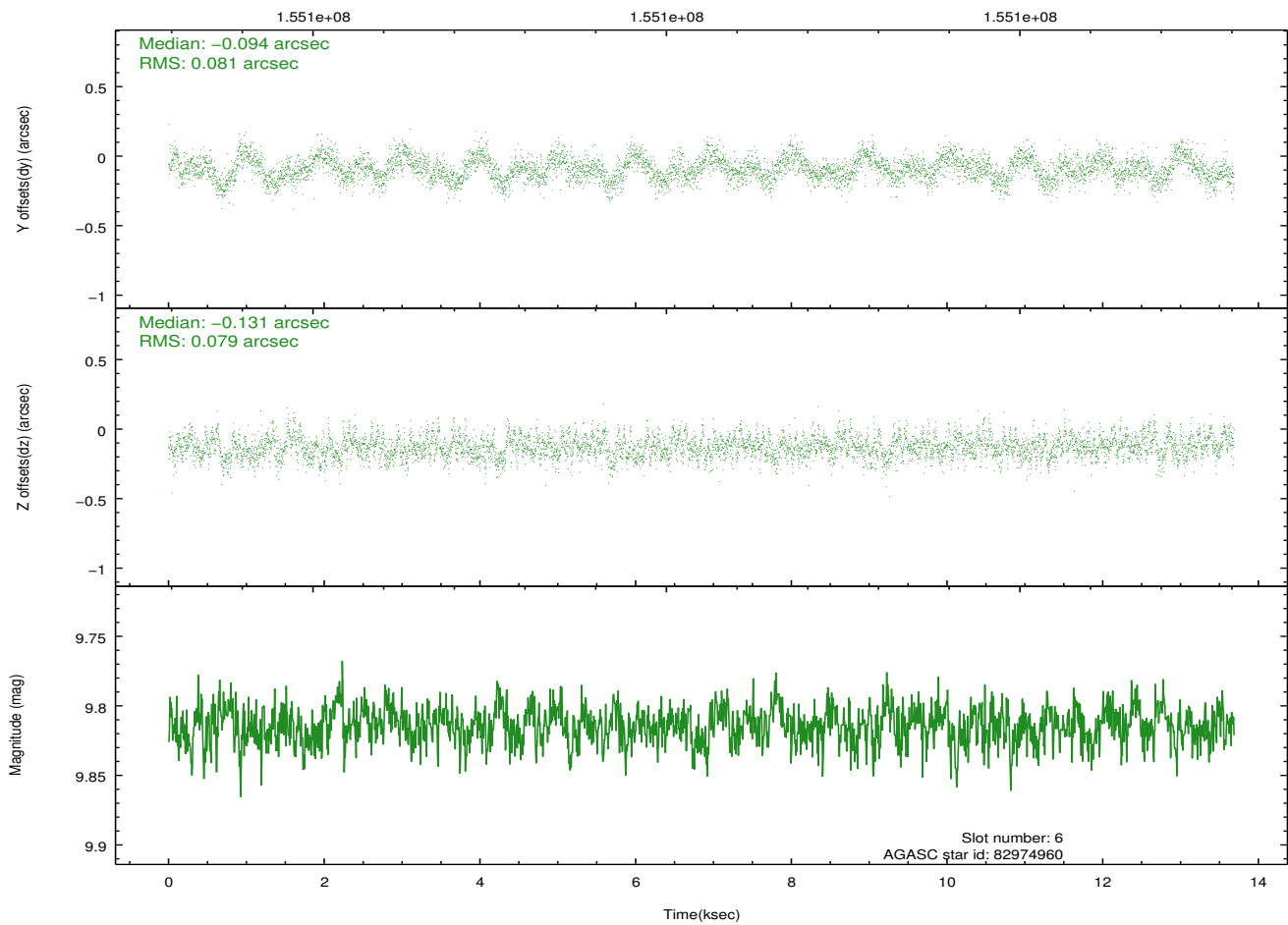
### 2.4.3 Slot 5



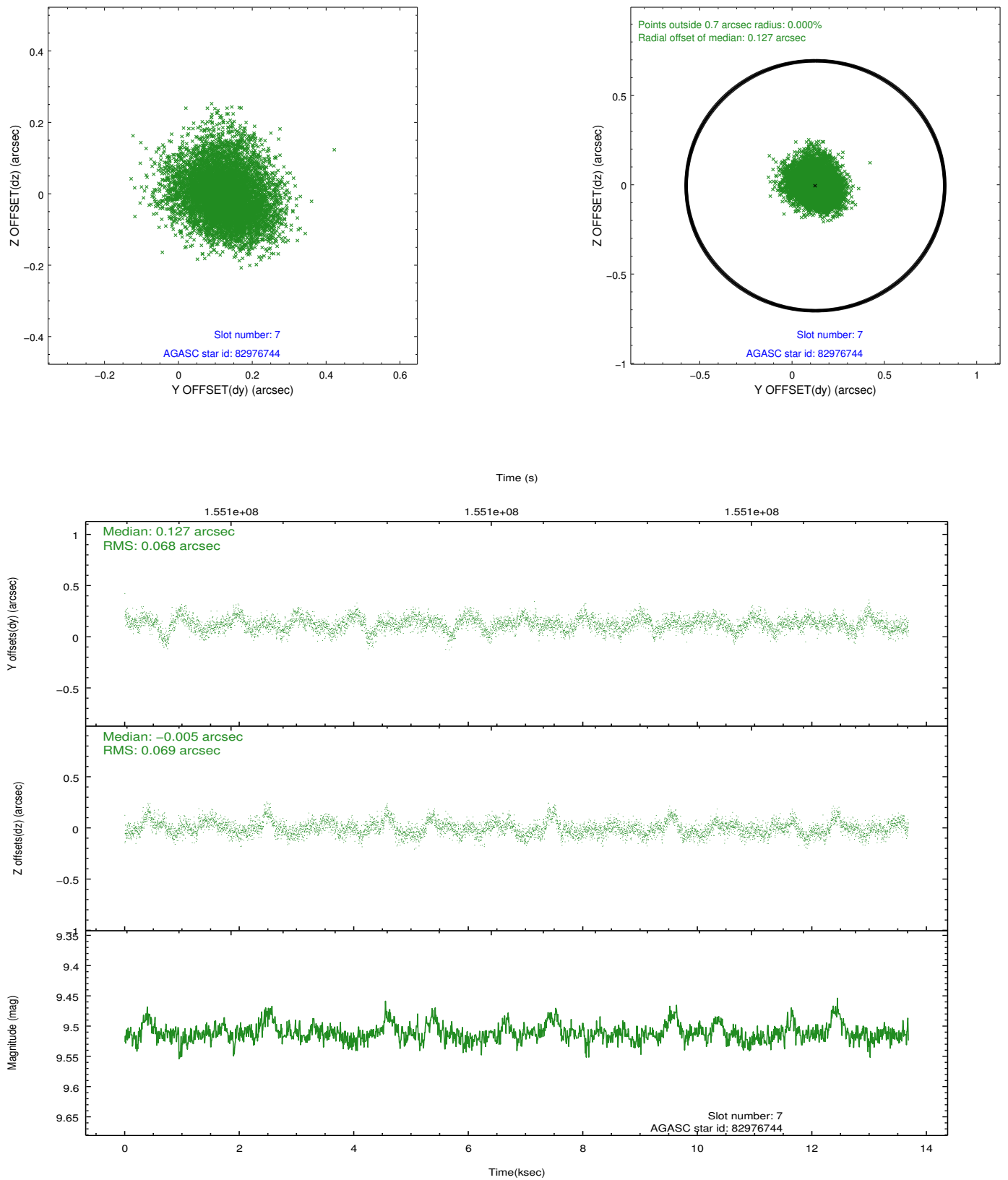
## 2.4.4 Slot 6



Time (s)

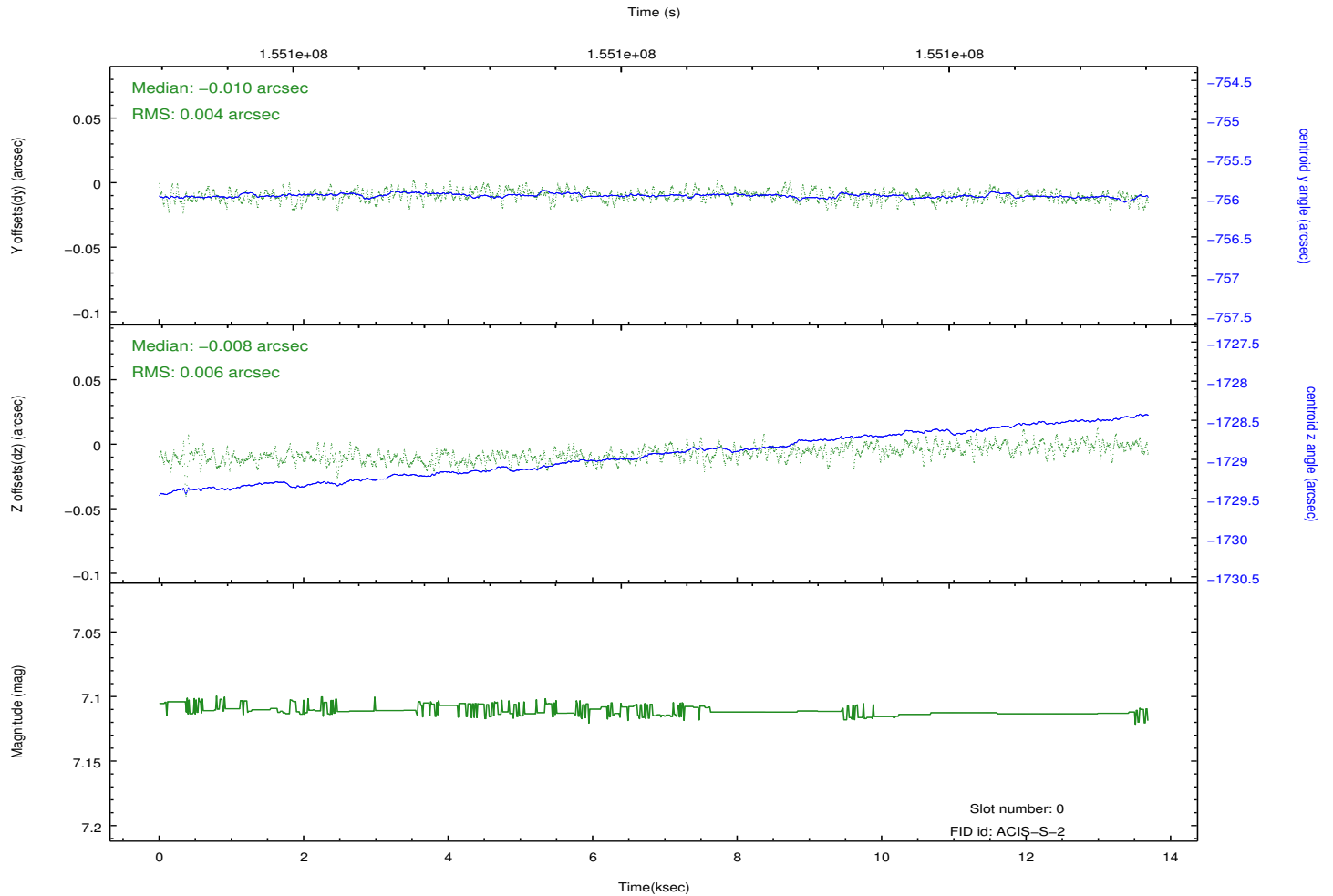
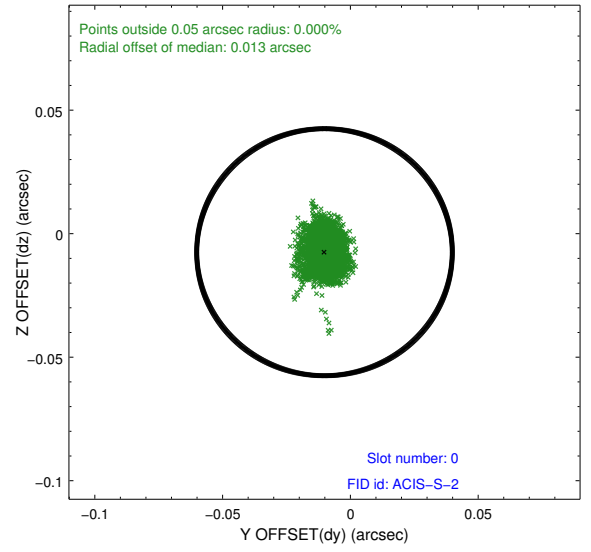
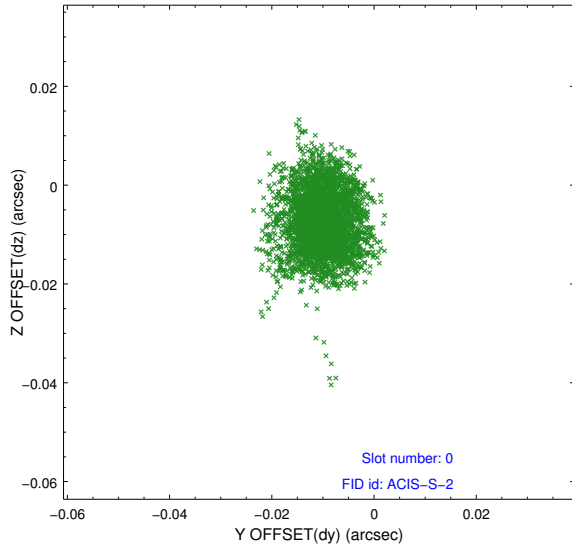


## 2.4.5 Slot 7

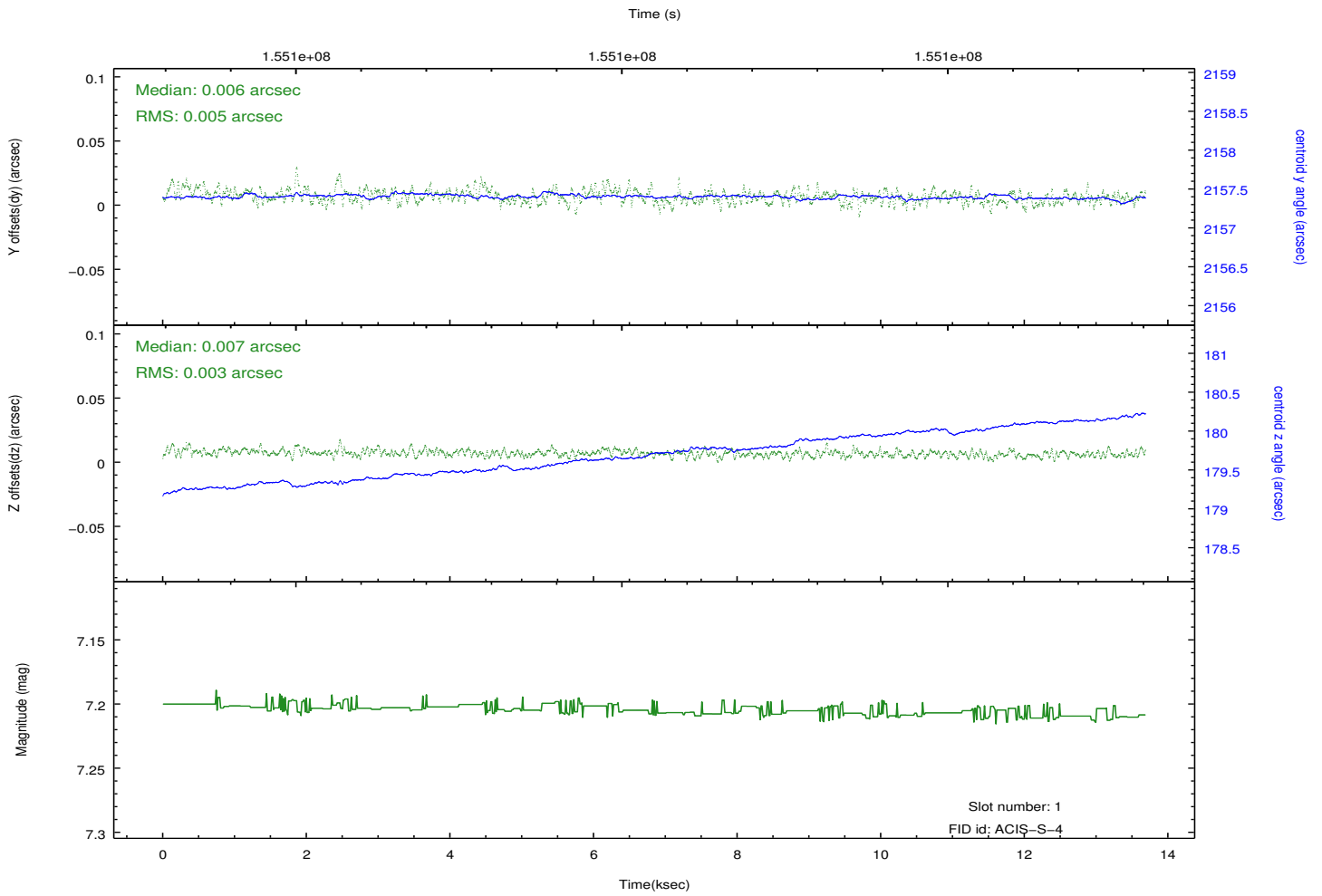
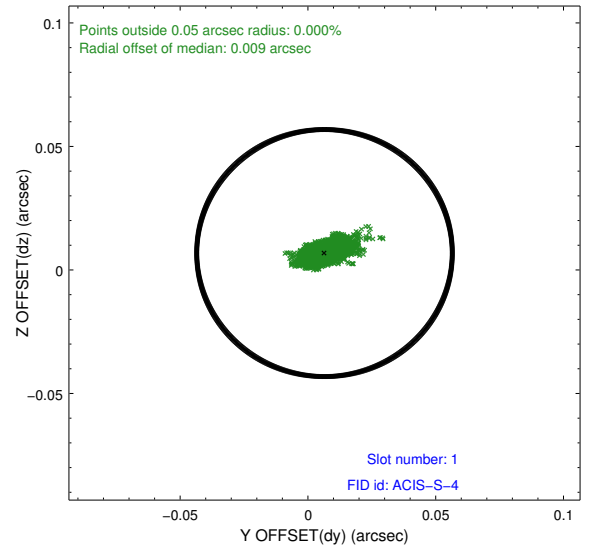
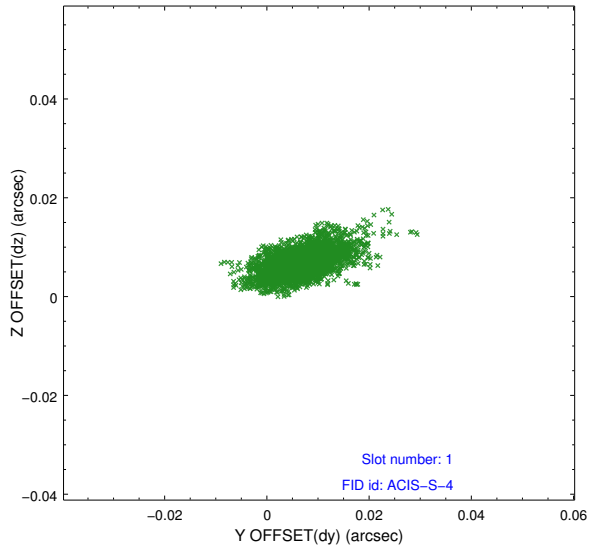


## 2.5 FID Slots

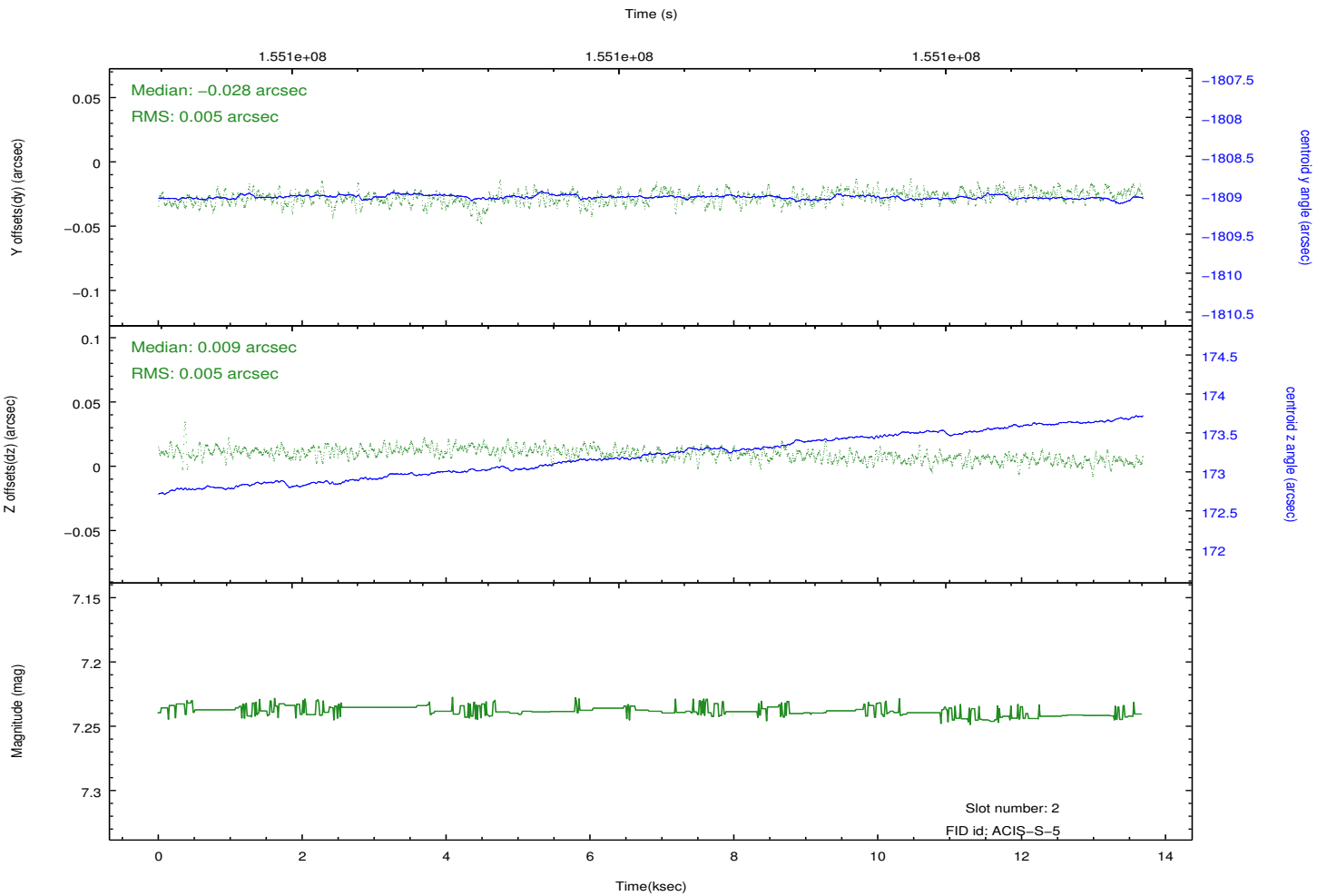
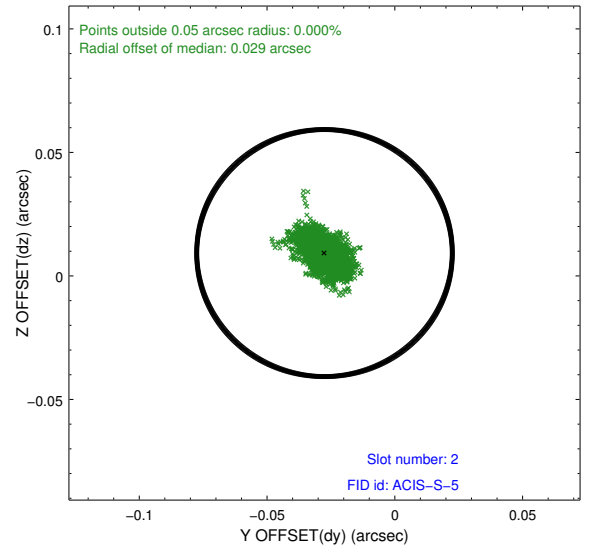
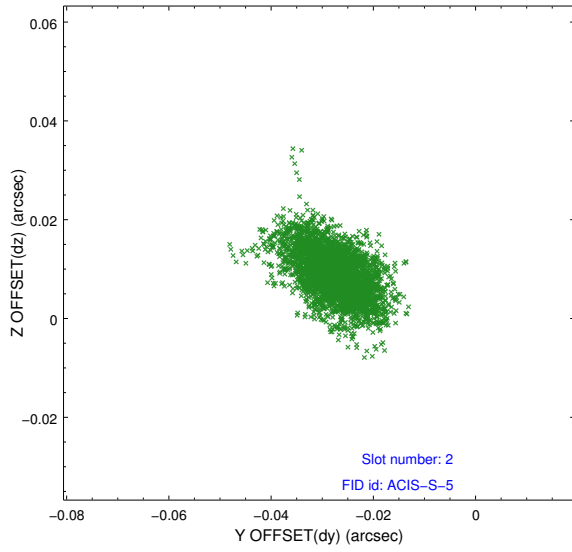
### 2.5.1 Slot 0



## 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)	2012.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.684

## A.2 Comments