

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3973 - L2 Version 5  
Chandra X-Ray Center

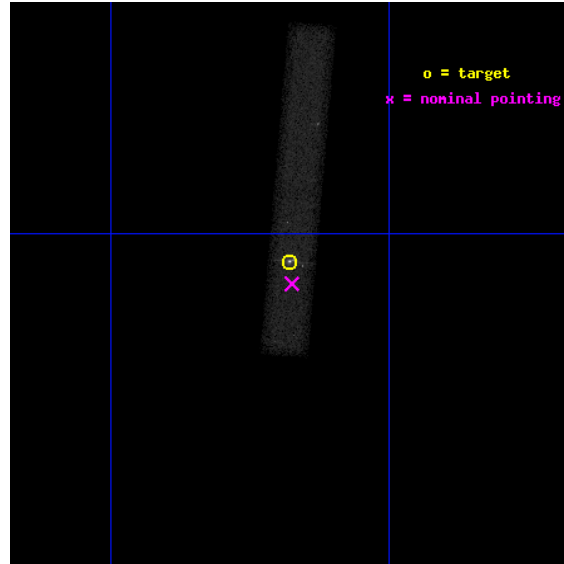
L2 Processing Date : Jan 1 2013

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# 1 Front

seq_num	700652	Sequence number
obs_id	3973	Observation id
title	THE PHYSICS OF RELATIVISTIC JETS: DEEP CHANDRA AND HST OBSERVATIONS OF TWO NEWLY DISCOVERED JETS	Proposal title
observer	Dr. Rita Sambruna	Principal investigator
object	1136-135	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	174.794583	Observer's specified target RA [deg]
dec_targ	-13.845556	Observer's specified target Dec [deg]
ra_nom	174.79368063115	Nominal RA [deg]
dec_nom	-13.855164940524	Nominal Dec [deg]
roll_nom	274.92553100654	Nominal Roll [deg]
revision	5	Processing version of data
ontime	77374.401152939	Sum of GTIs [s]
livetime	70174.49768995	Livetime [s]
ontime7	77374.401152939	Sum of GTIs [s]
l2events	59276	Number of level 2 events

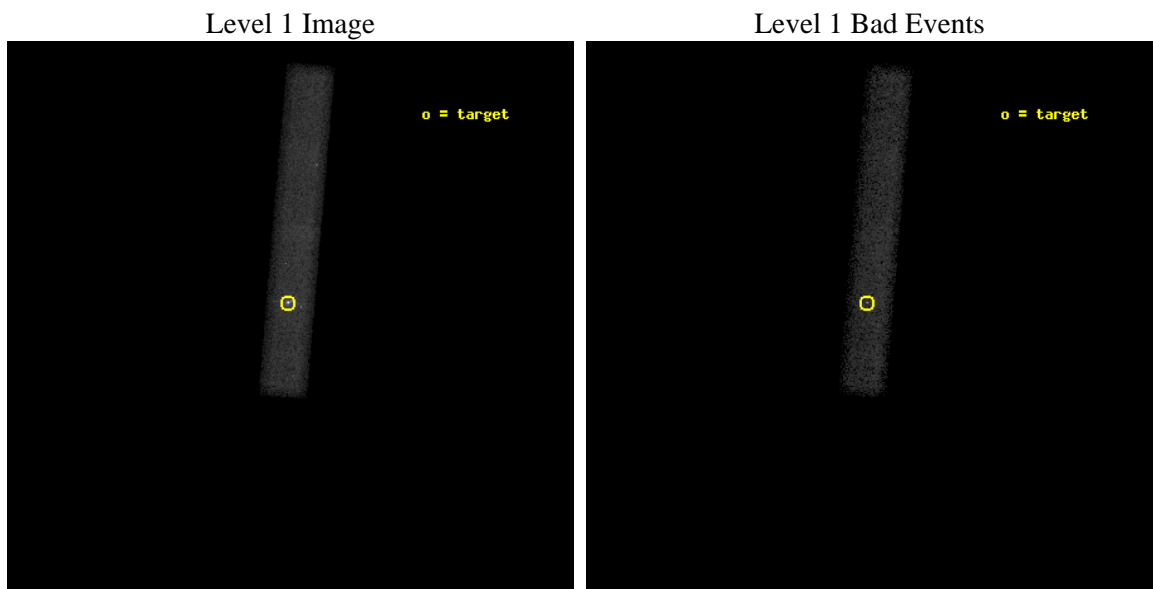




## 2 OBI

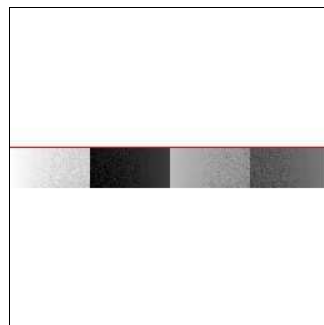
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	77000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	77374.401152939	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime7	77374.401152939	Sum of GTIs [s]
date	2013-01-01T22:28:30	Date and time of file creation	l1events	107345	Number of level 1 events
revision	5	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	107345
rejected events	46452
rejected %	43%

	<b>ccd 7</b>
grade 0 events	11378
	10%
grade 1 events	162
	0%
grade 2 events	12888
	12%
grade 3 events	7690
	7%
grade 4 events	7450
	6%
grade 5 events	8265
	7%
grade 6 events	21738
	20%
grade 7 events	37774
	35%

## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	174.777324	174.7936806311465
[deg] Pointing Dec	-13.833070	-13.8551649405241
[deg] Pointing Roll	274.764993	274.9255310065361
[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)	166842773.184000	166841719.7737
Observation start date	2003-04-16T01:11:49	2003-04-16T00:55:19
[s] Observation end time (MET)	166919773.184000	166920760.08954
Observation end date	2003-04-16T22:35:09	2003-04-16T22:52:40
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
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	CUSTOM	1/8
Subarray start row	449	449
Subarray row count	128	128
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0.4

## 2.3 Aspect

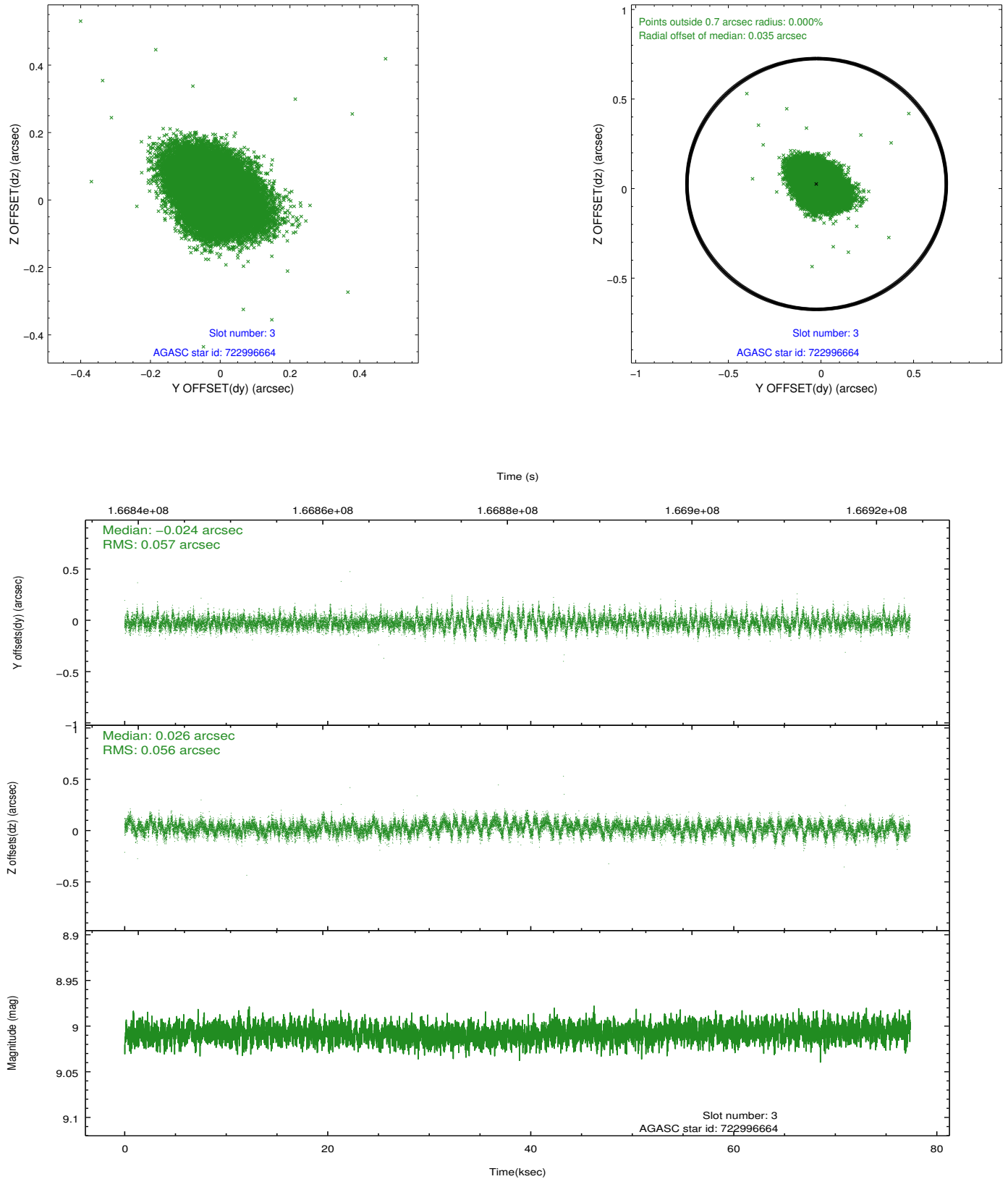


### Slot Statistics

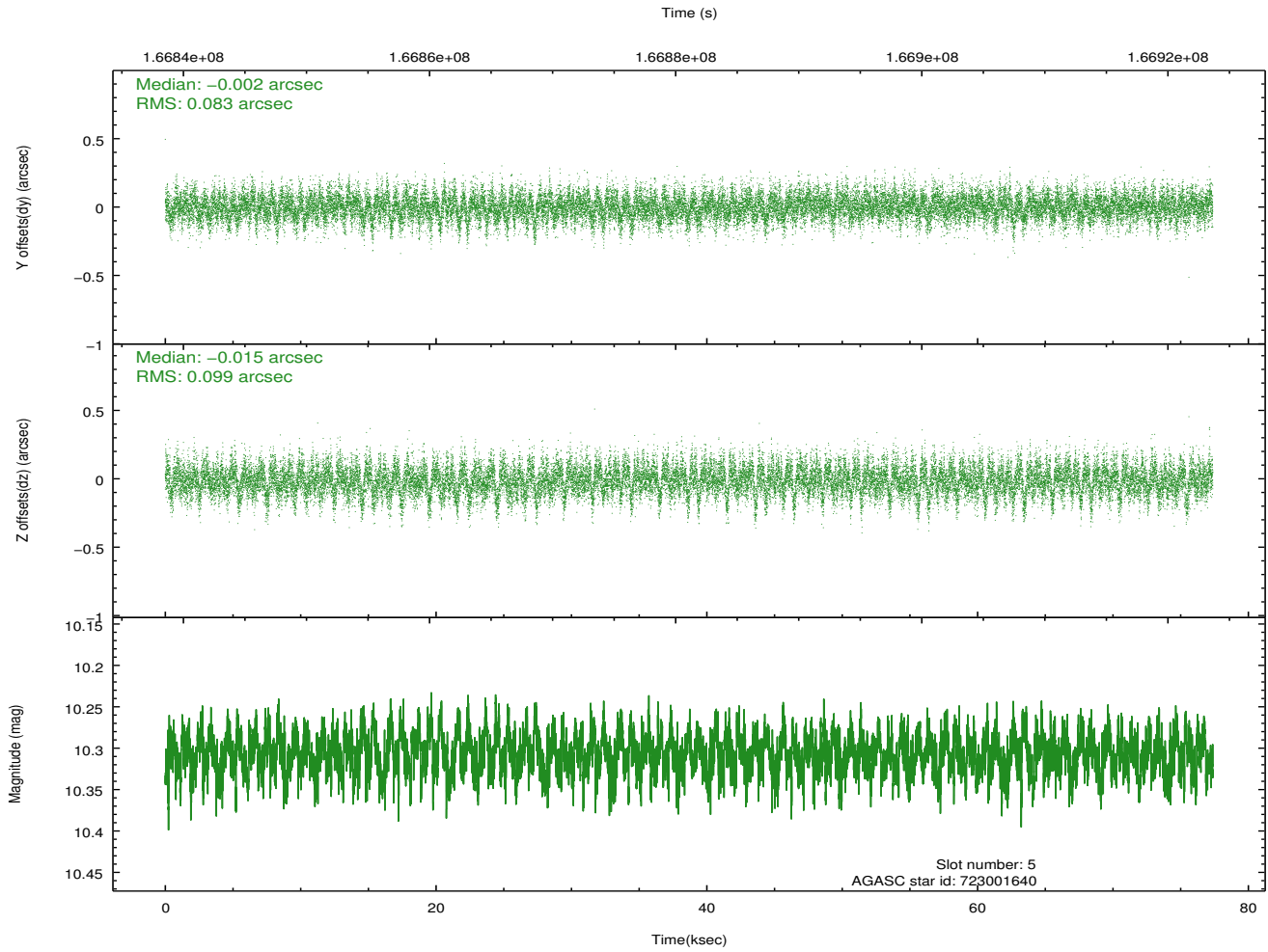
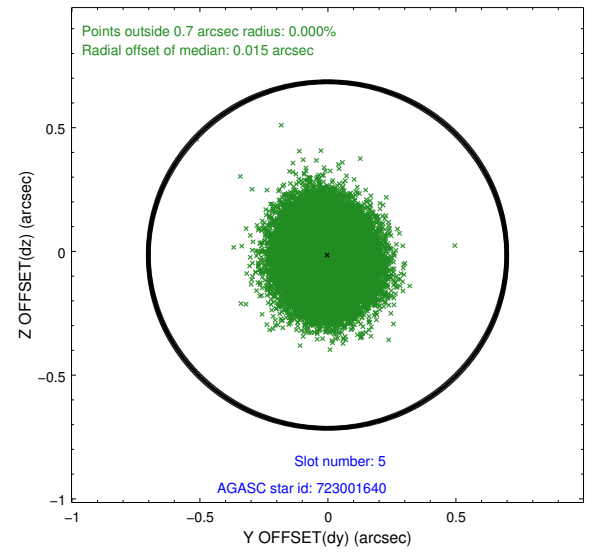
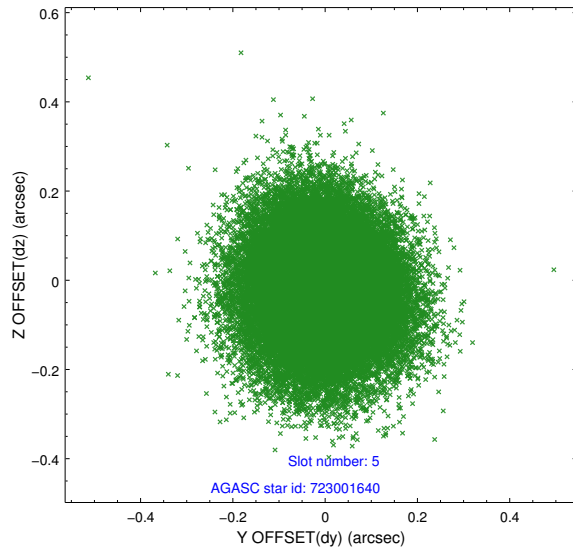
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	18872	-0.043	-0.002	0.008	0.015	0.000000	0.000000	-755.21	-1727.74
1	FID	ACIS-S-4	7.21	18871	0.005	0.021	0.007	0.013	0.000000	0.000000	2158.11	180.89
2	FID	ACIS-S-5	7.24	18873	0.006	-0.010	0.008	0.014	0.000000	0.000000	-1808.13	174.38
3	GUIDE	722996664	9.01	37733	-0.024	0.026	0.083	0.142	174.774975	-13.414720	-1501.03	117.00
4	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	723001640	10.31	37682	-0.002	-0.015	0.137	0.226	174.422337	-14.161760	1078.00	-1333.01
6	GUIDE	723005464	10.36	37259	0.083	0.043	0.187	0.307	174.188317	-13.735268	-518.64	-2023.52
7	GUIDE	723005784	6.70	37743	-0.056	-0.052	0.084	0.127	174.963005	-14.468539	2334.26	455.21

## 2.4 Star Slots

### 2.4.1 Slot 3

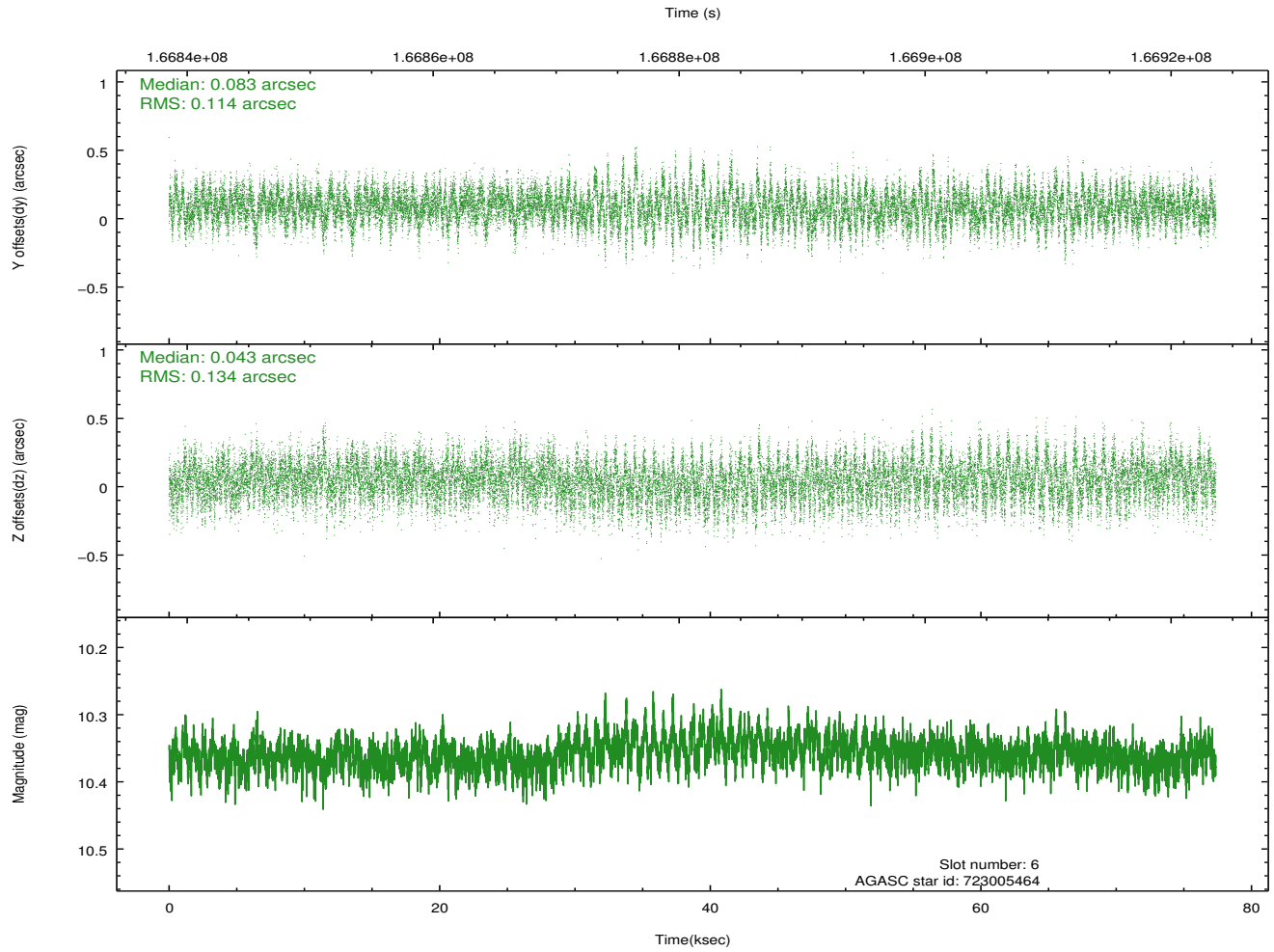
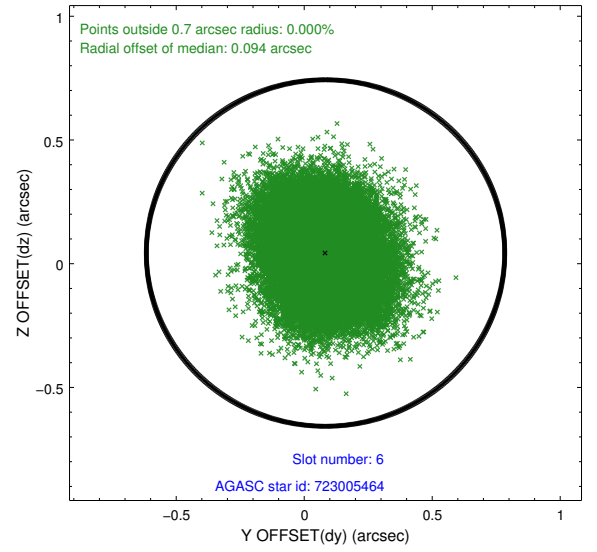
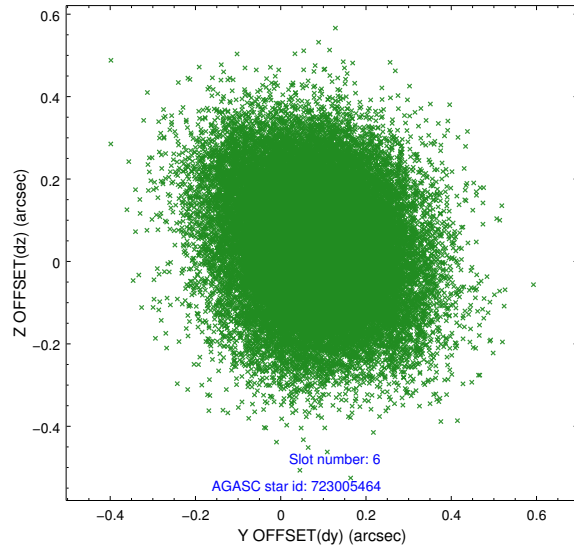


## 2.4.2 Slot 5

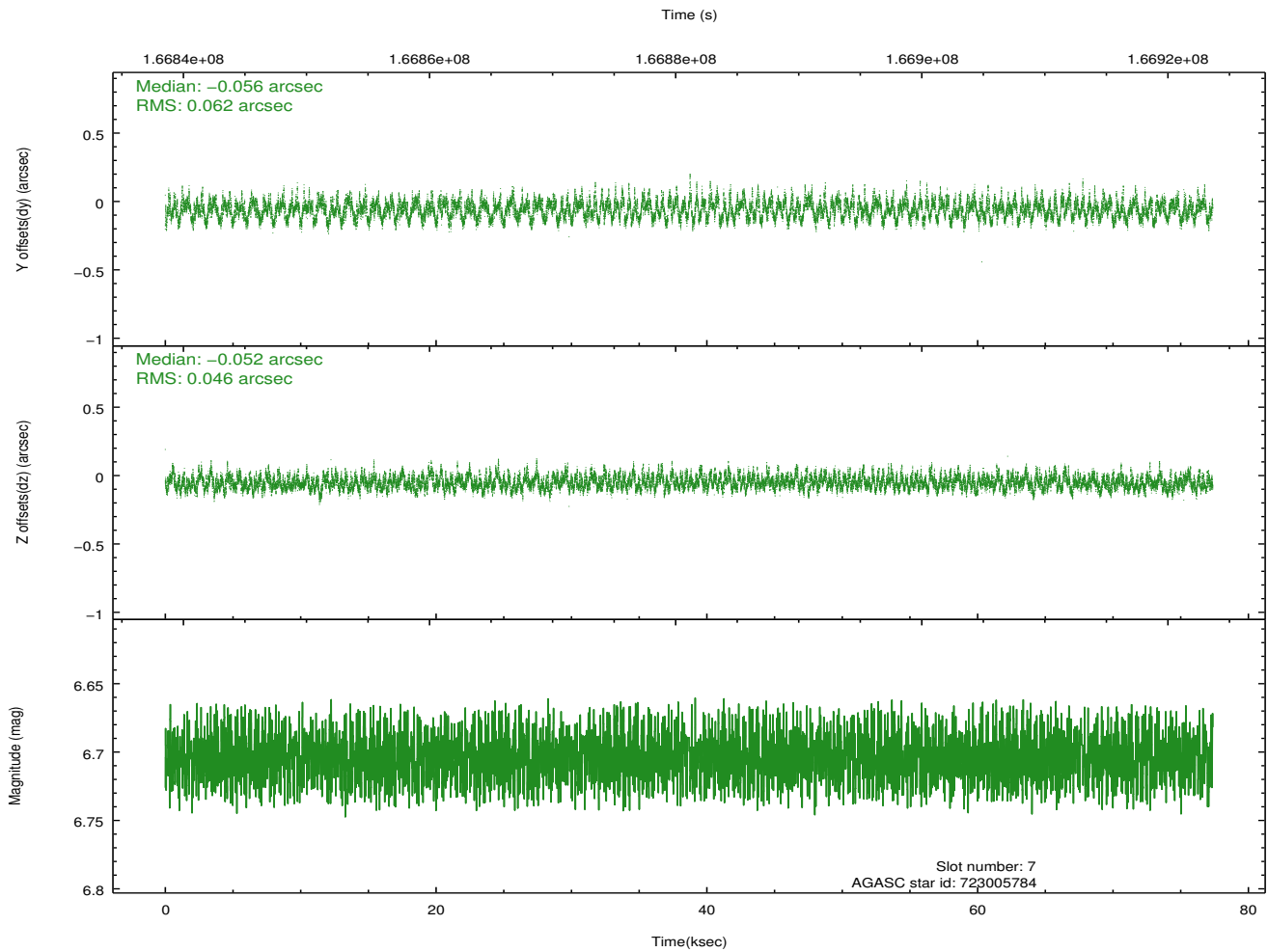
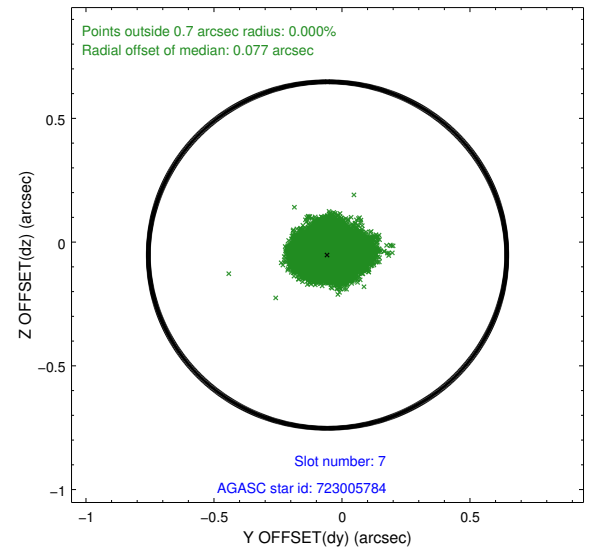
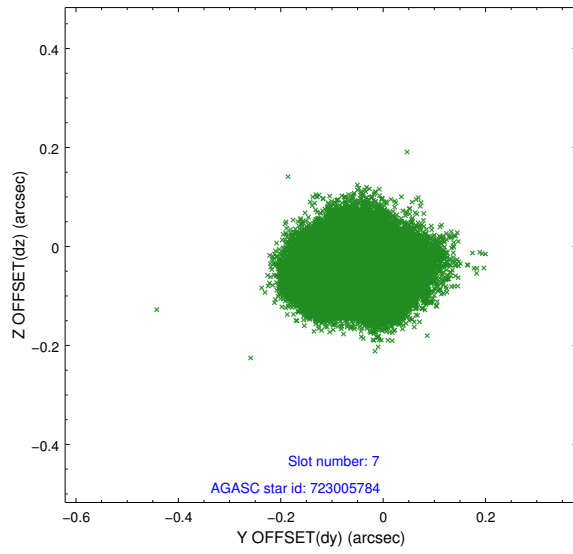




### 2.4.3 Slot 6

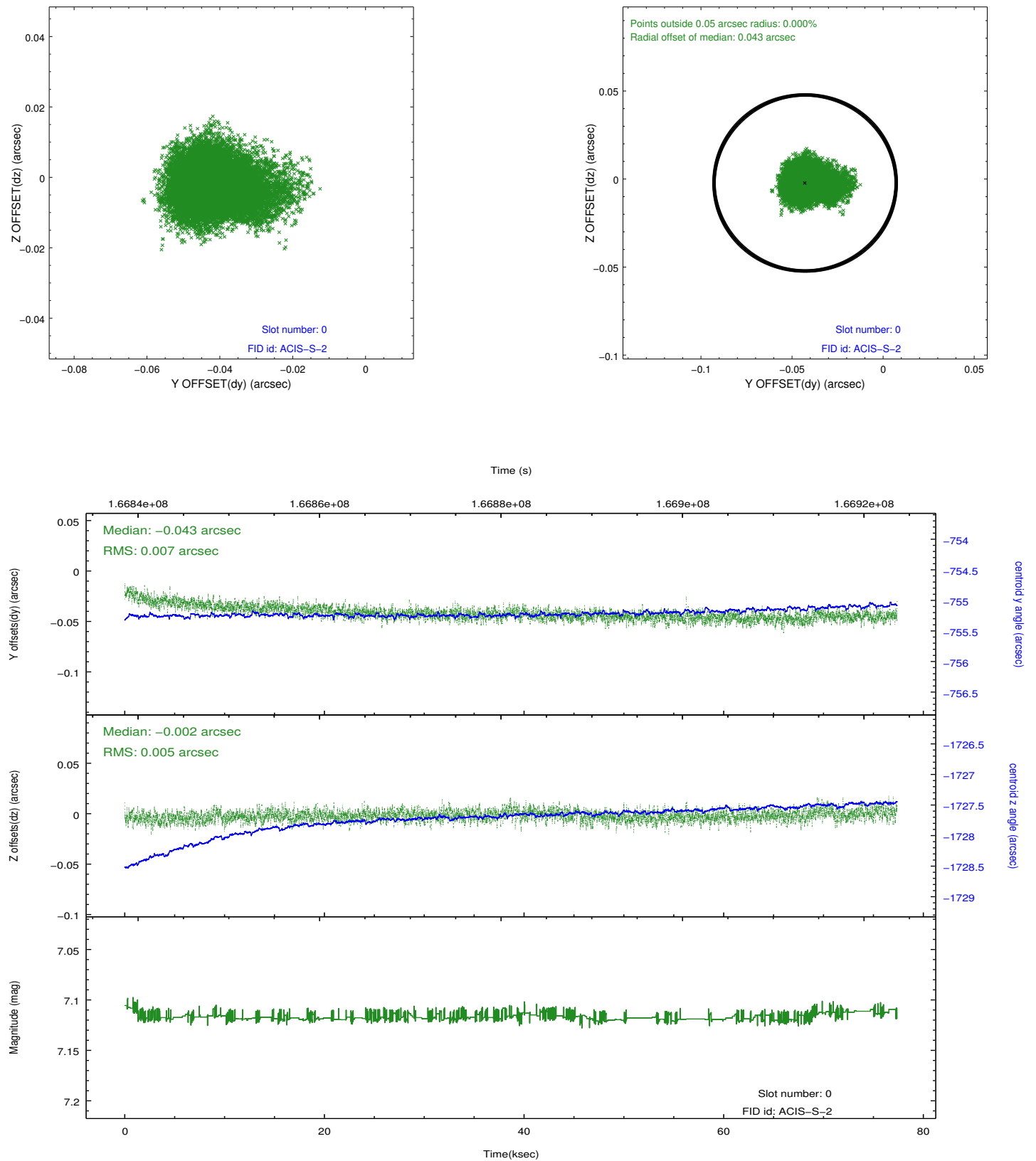


## 2.4.4 Slot 7

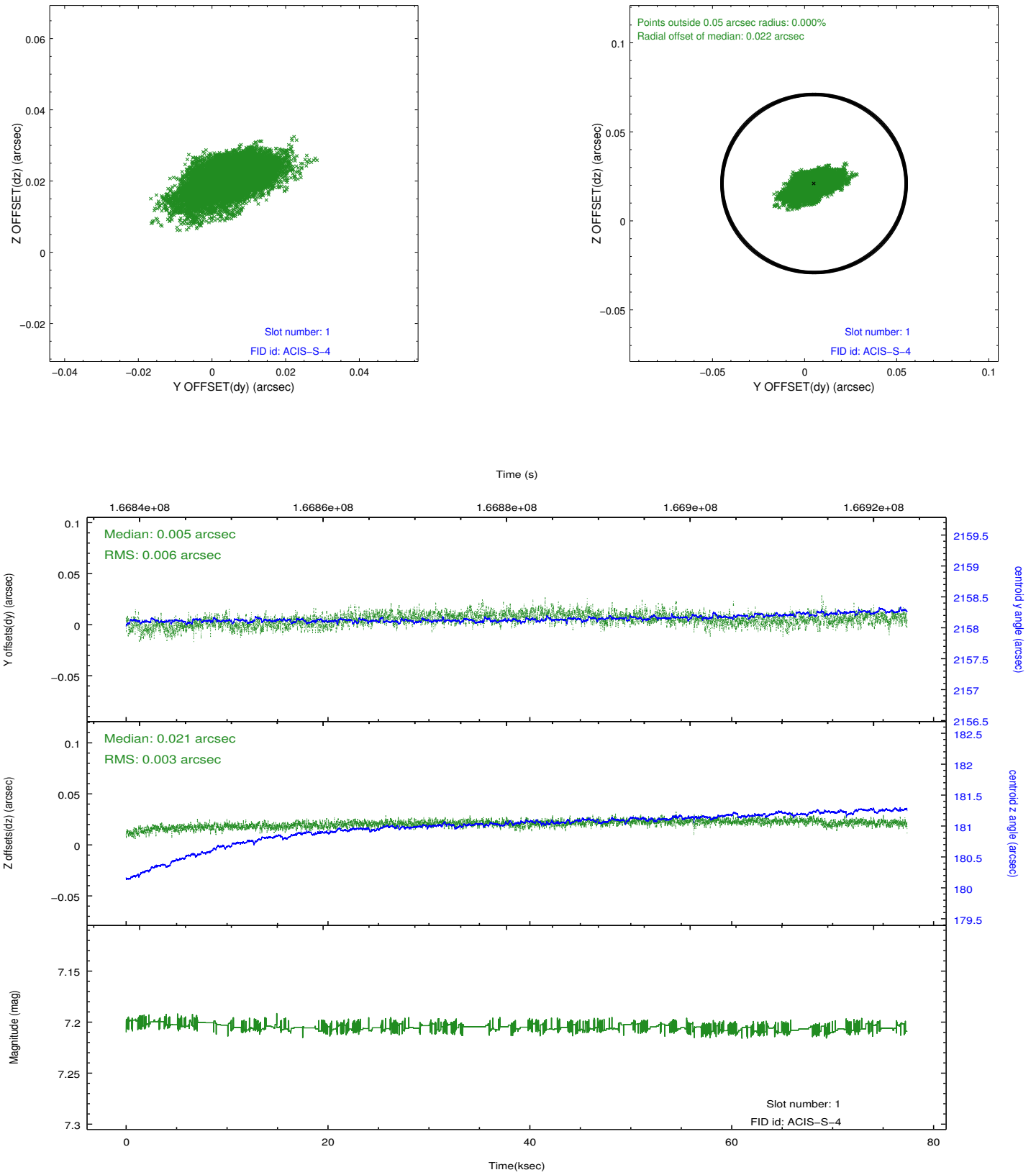


## 2.5 FID Slots

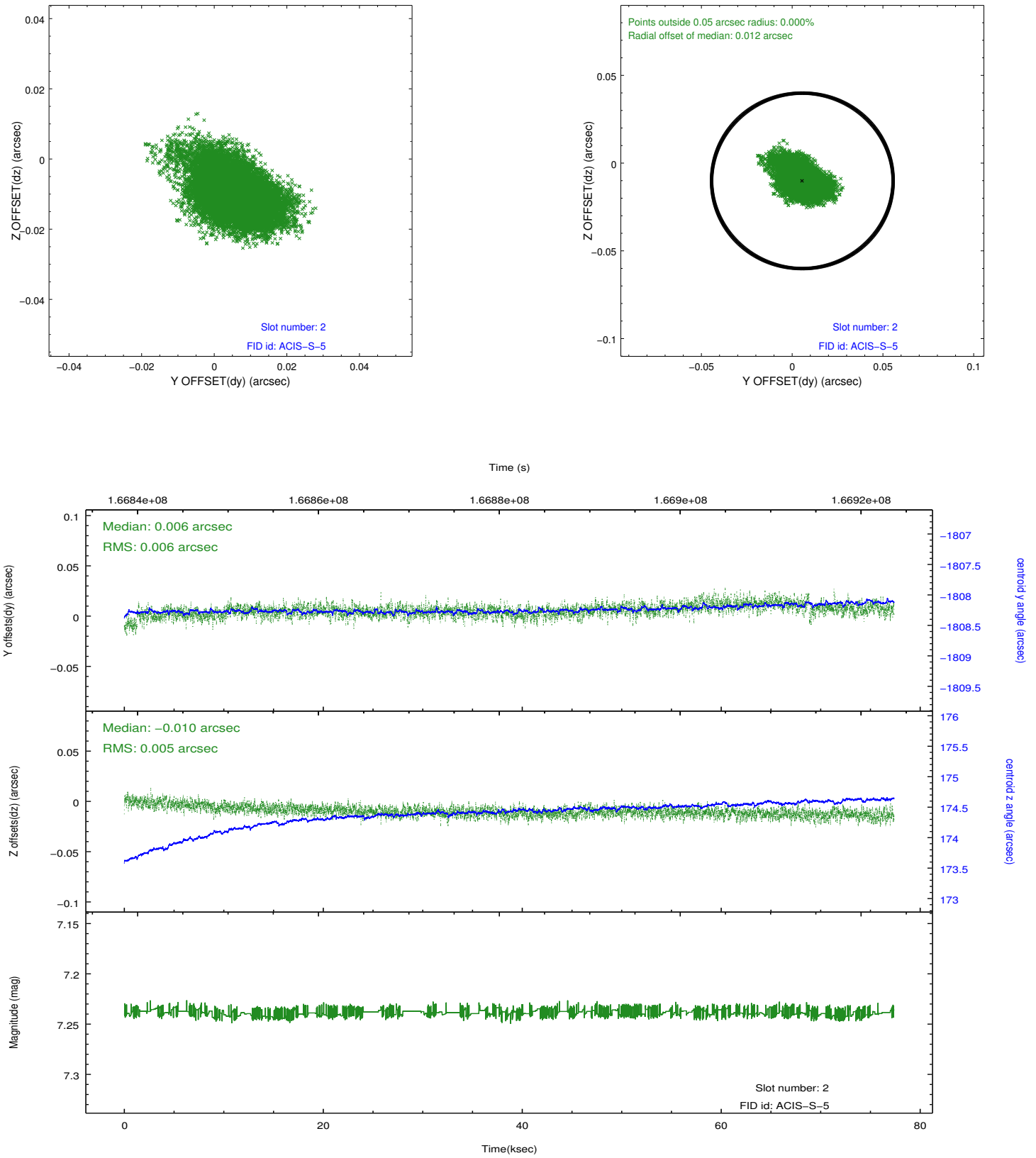
### 2.5.1 Slot 0



## 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)	2013.01.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	77.374

## A.2 Comments

Joint proposal with HST.

The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.