

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 4078 - L2 Version 001  
Chandra X-Ray Center

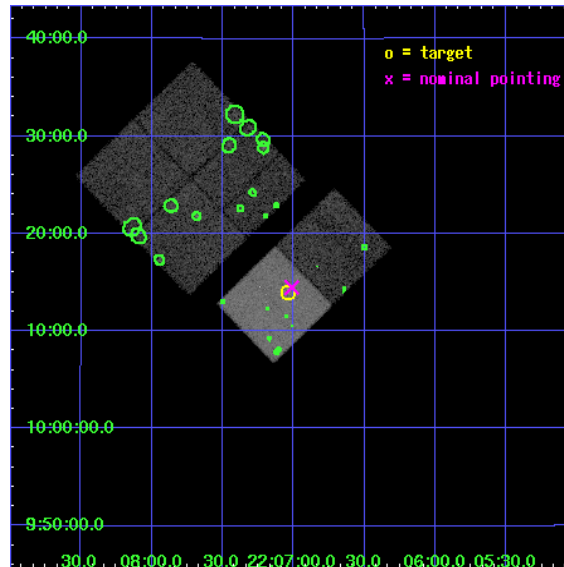
L2 Processing Date : Jul 14 2006

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>3</b>	<b>Point Sources</b>	<b>17</b>
<b>A</b>	<b>Summary</b>	<b>18</b>
A.1	Status . . . . .	18
A.2	Comments . . . . .	18

# 1 Front

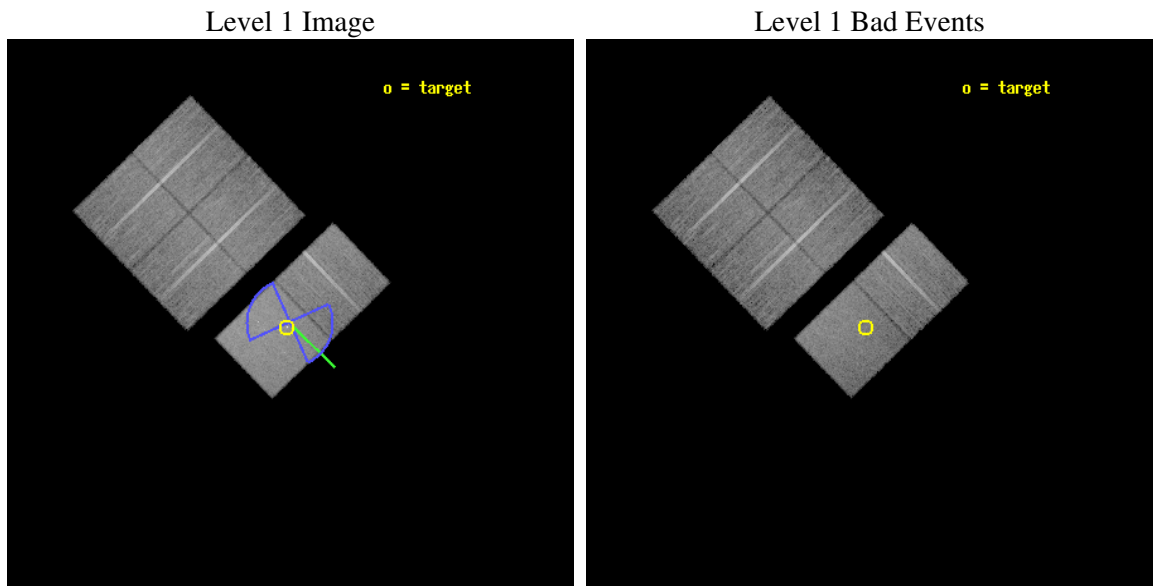
seq_num	700757
obs_id	4078
title	PROBING THE STRUCTURE OF THE NARROW-LINE REGION IN SEYFERT GALAXIES WITH CXO IMAGING SPECTROSCOPY
observer	PROF. STEVEN KRAEMER
object	NGC 7212
dtcycle	0
cycle	P
ra_targ	331.75875
dec_targ	10.2335
ra_nom	331.75300357691
dec_nom	10.241349428664
roll_nom	135.94051103566
revision	2
ontime	20150.399924934
livetime	19895.24342797
ontime0	20147.158924758
ontime1	20143.918004215
ontime2	20150.399924934
ontime3	20147.158944666
ontime6	20150.399924934
ontime7	20150.399924934
l2events	125276



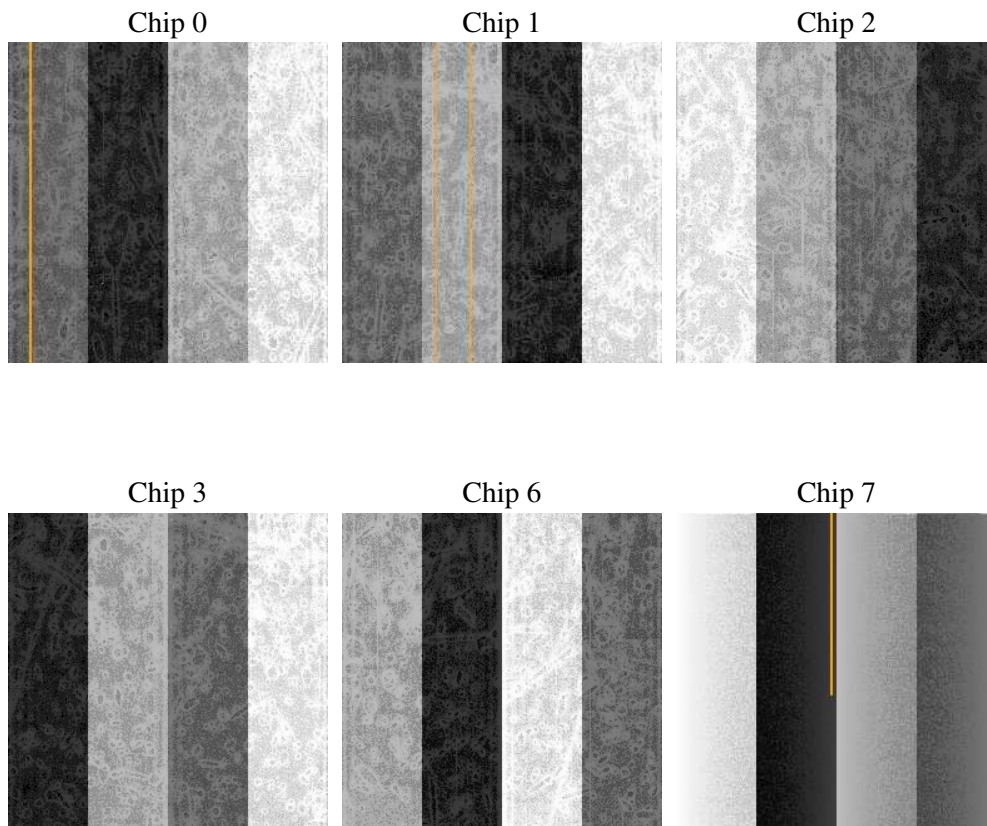
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.8
caldsver	3.2.2
date	2006-07-14T16:07:12
revision	2

sched_exp_time	20000.000000
ontime	21604.559411377
ontime0	21361.485992283
ontime1	21355.004300952
ontime2	21355.004111737
ontime3	21380.931953818
ontime6	21419.823746443
ontime7	21604.559411377
l1events	974305

### 2.1.4 Events

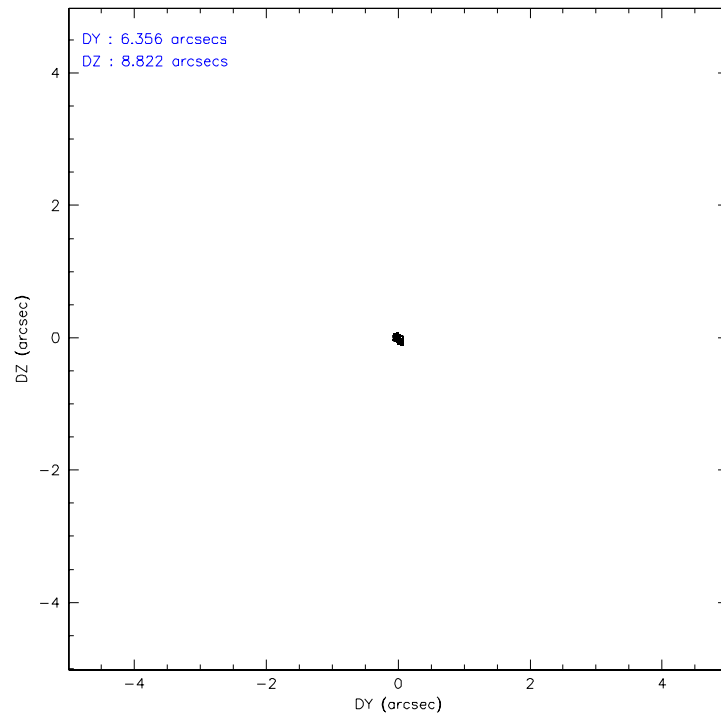
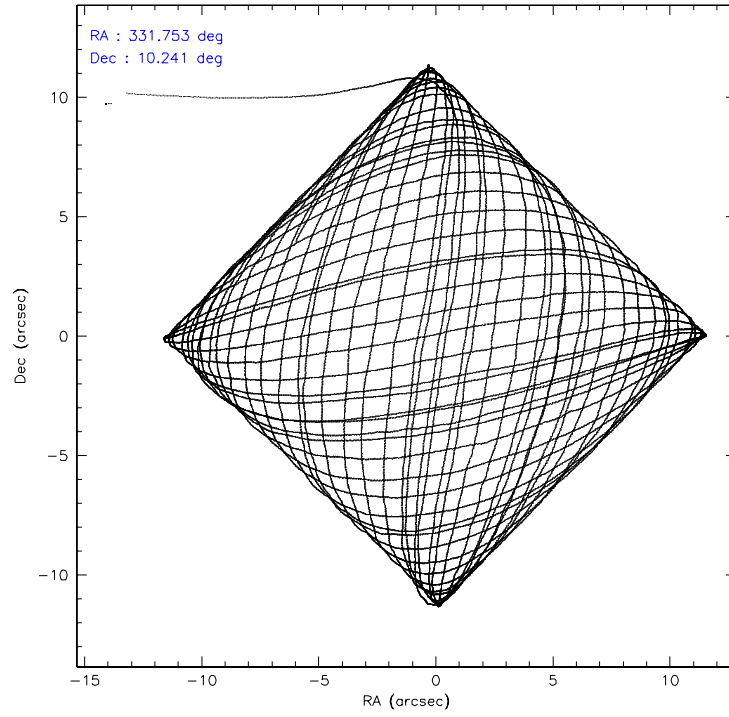
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	152397	146957	152365	152248	160718	209620
rejected events	137261	131609	138057	137825	146434	146172
rejected %	90%	89%	90%	90%	91%	69%

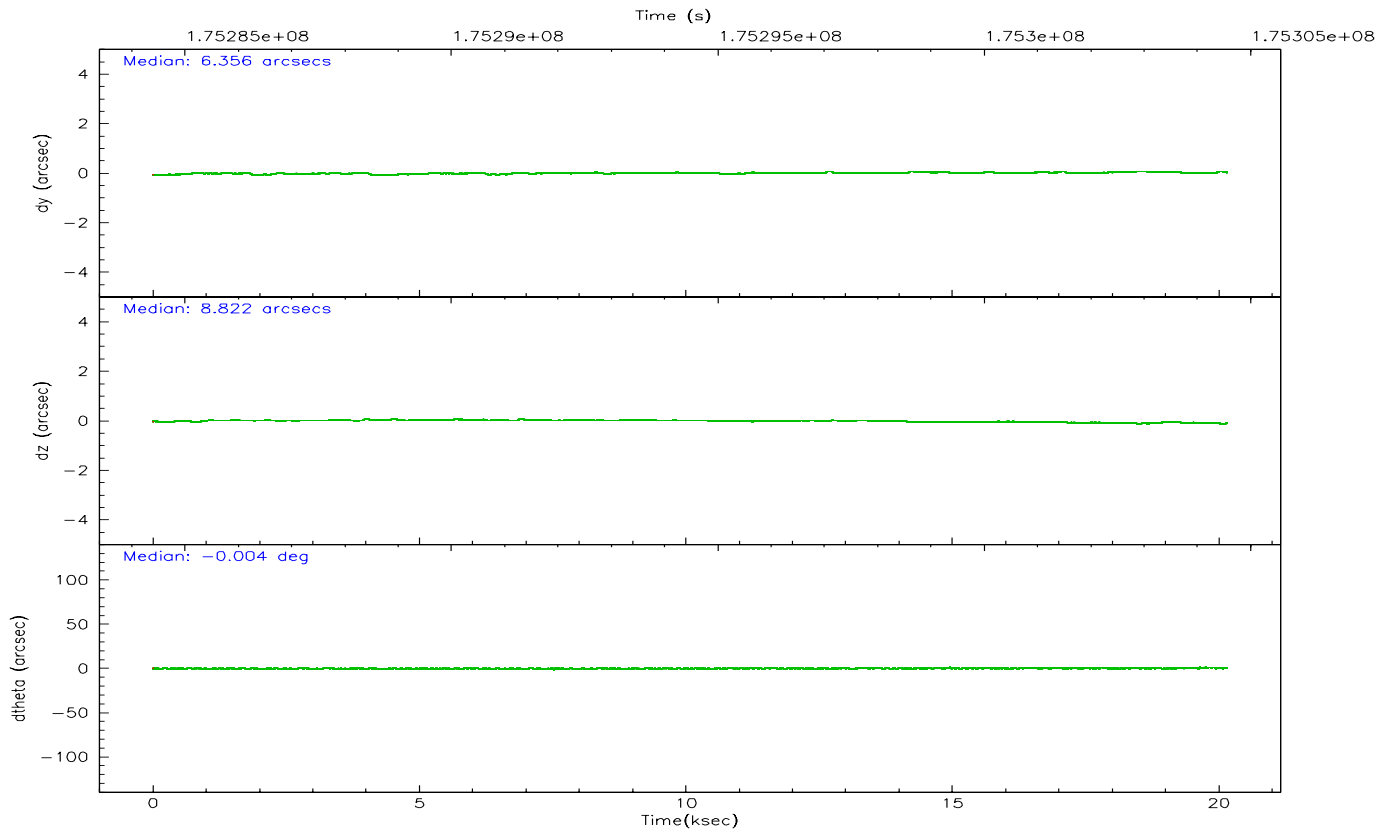
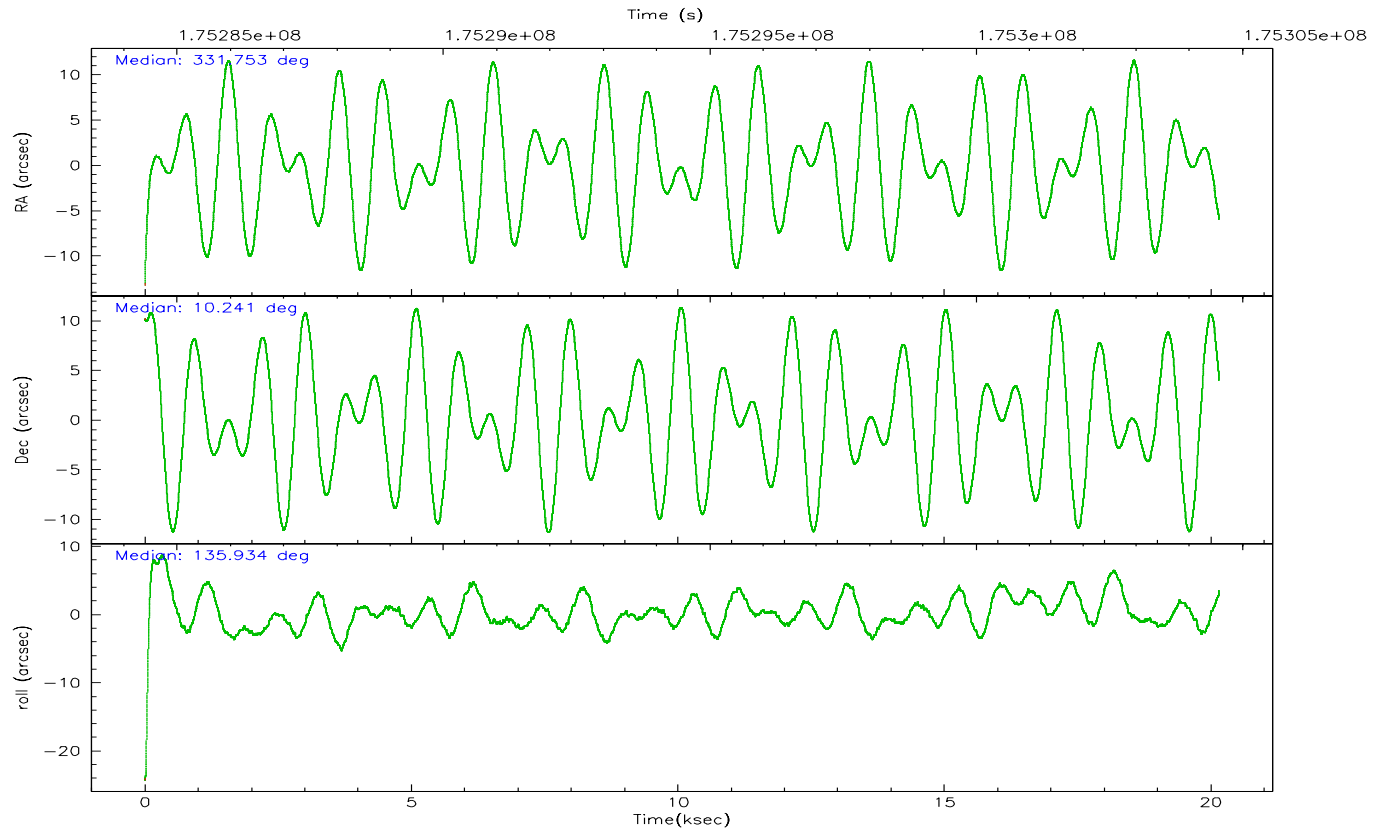
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	19609	19217	19784	19812	19500	9562
	12%	13%	12%	13%	12%	4%
grade 1 events	159	124	134	147	121	108
	0%	0%	0%	0%	0%	0%
grade 2 events	7391	7710	6779	6790	7464	25545
	4%	5%	4%	4%	4%	12%
grade 3 events	3147	3113	2887	3020	3041	5734
	2%	2%	1%	1%	1%	2%
grade 4 events	2883	3040	2972	3088	2969	5509
	1%	2%	1%	2%	1%	2%
grade 5 events	5557	5365	5145	5689	5996	12197
	3%	3%	3%	3%	3%	5%
grade 6 events	6272	6673	5620	5816	7104	50648
	4%	4%	3%	3%	4%	24%
grade 7 events	107379	101715	109044	107886	114523	100317
	70%	69%	71%	70%	71%	47%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	331.779924	331.7530035769145	Alternating exposures requested	N	N
Pointing Dec	10.235077	10.24134942866399	Primary exposure time	0.000000	3.2
Pointing Roll	135.779121	135.9405110356579			
Roll angle	110.000000	110.000000			
Roll tolerance	45.000000	45.000000			
Roll constraint allows 180D rotation	Y	Y			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	175284557.184000	175282777.58186			
Observation start date	2003-07-22T18:08:13	2003-07-22T17:39:37			
Observation end time	175304557.184000	175305504.39533			
Observation end date	2003-07-22T23:41:33	2003-07-22T23:58:24			
Read mode	TIMED	TIMED			

## 2.3 Aspect





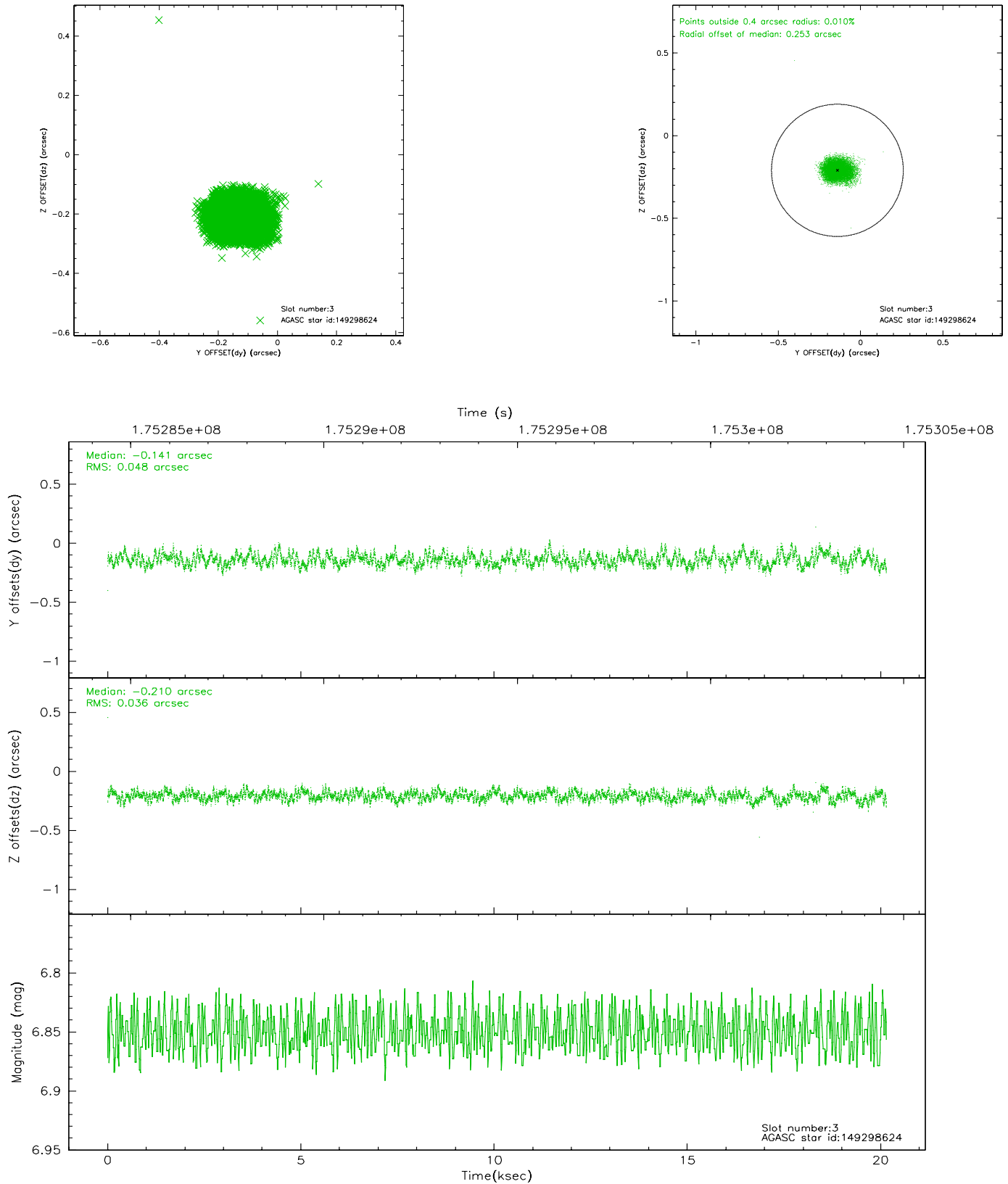
# Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4917	-0.028	-0.017	0.006	0.010	0.000000	0.000000	-759.12	-1730.04
1	FID	ACIS-S-4	7.20	4917	0.020	0.018	0.005	0.009	0.000000	0.000000	2154.13	178.27
2	FID	ACIS-S-5	7.23	4917	-0.024	0.008	0.006	0.010	0.000000	0.000000	-1811.72	172.16
3	GUIDE	149298624	6.85	9797	-0.141	-0.210	0.065	0.102	331.129517	10.240318	1666.05	1592.07
4	GUIDE	149301600	9.34	9830	-0.054	-0.052	0.090	0.145	331.187914	10.167764	1335.83	1635.68
5	GUIDE	149422576	9.09	9830	0.122	0.089	0.079	0.124	332.176591	10.487328	-371.70	-1630.36
6	GUIDE	149423712	8.78	9831	0.152	0.099	0.065	0.105	332.085700	10.215641	-824.60	-705.68
7	GUIDE	149429576	8.77	9828	-0.081	0.070	0.096	0.165	331.975238	10.608542	442.71	-1445.49

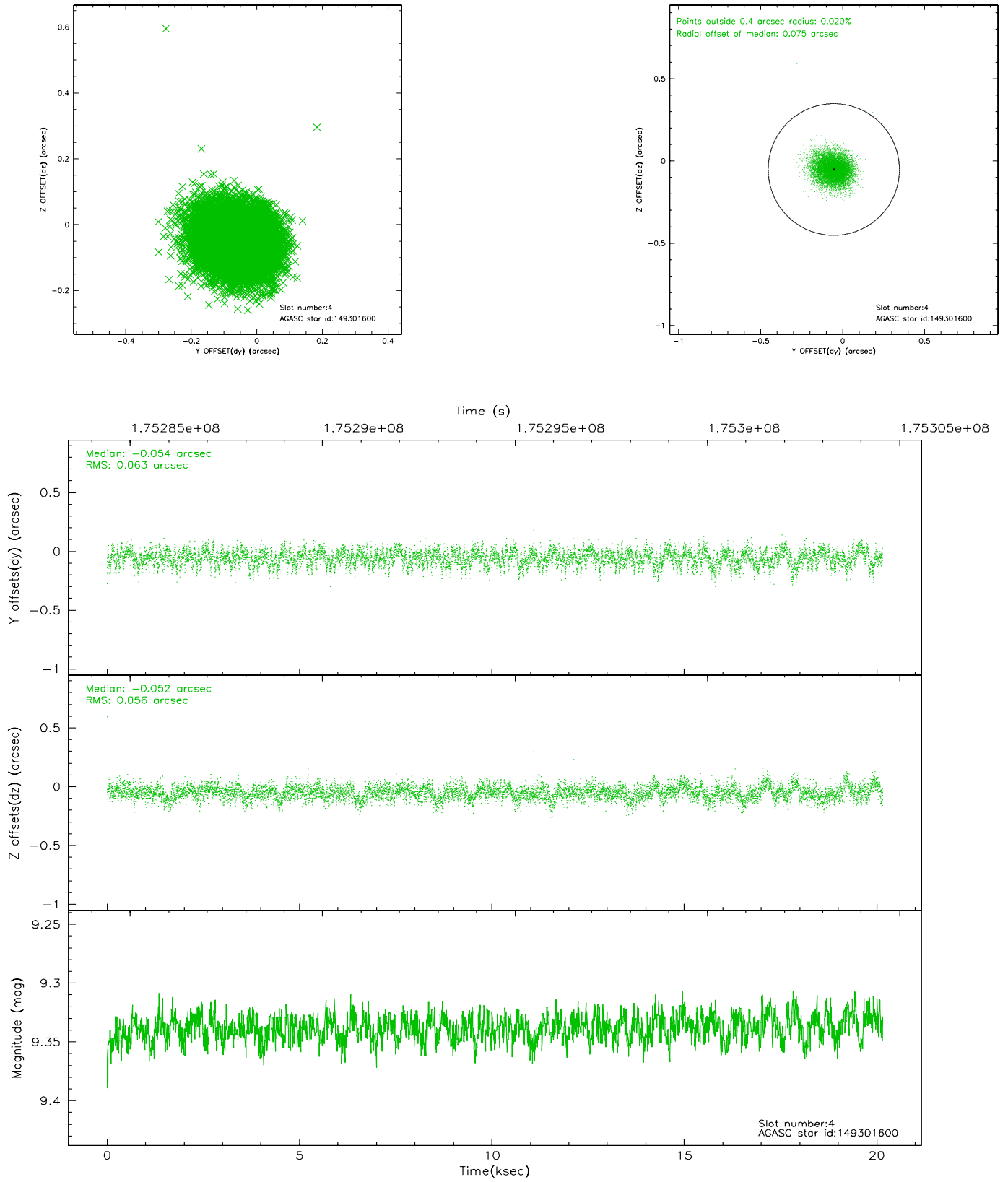


## 2.4 Star Slots

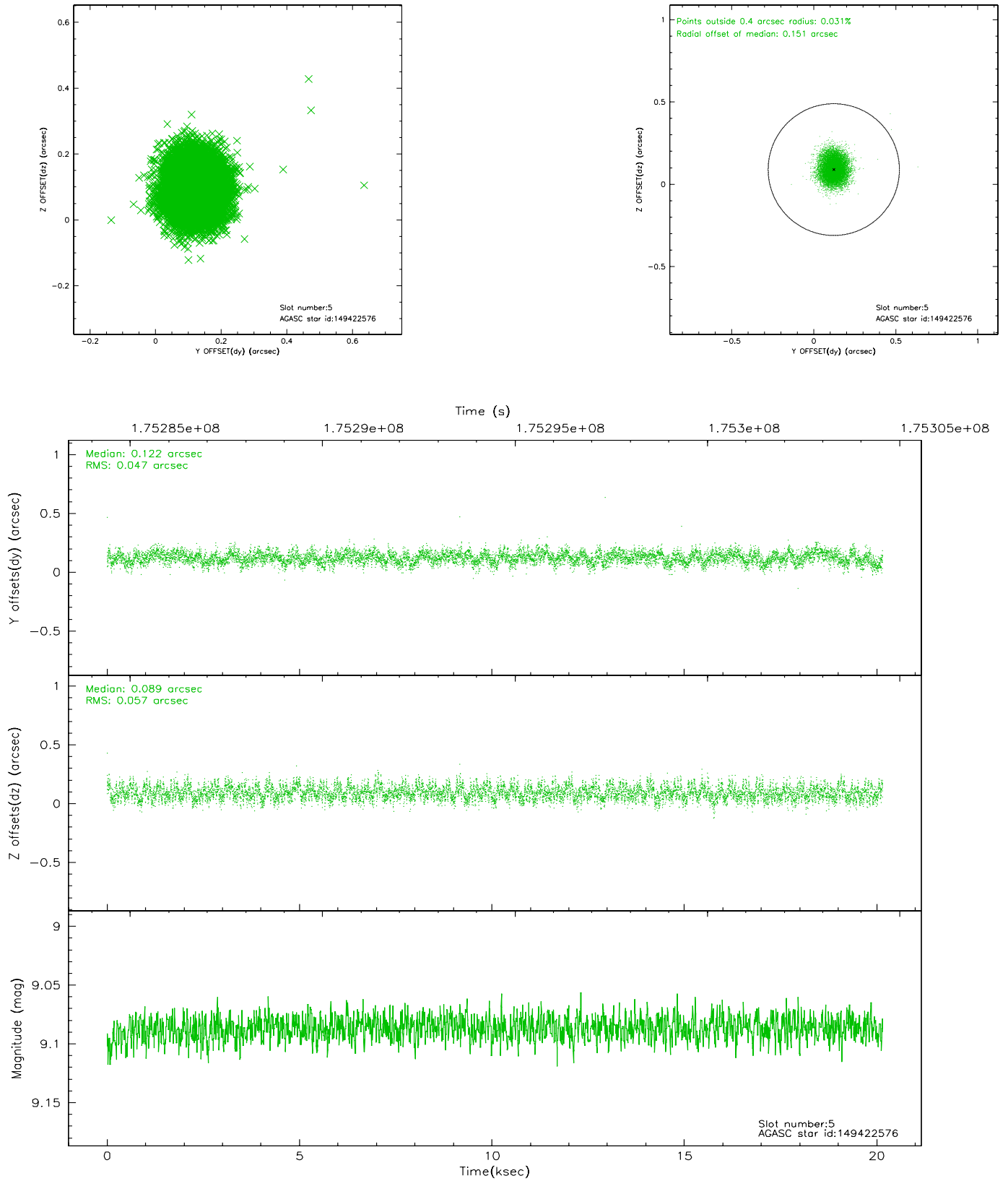
### 2.4.1 Slot 3



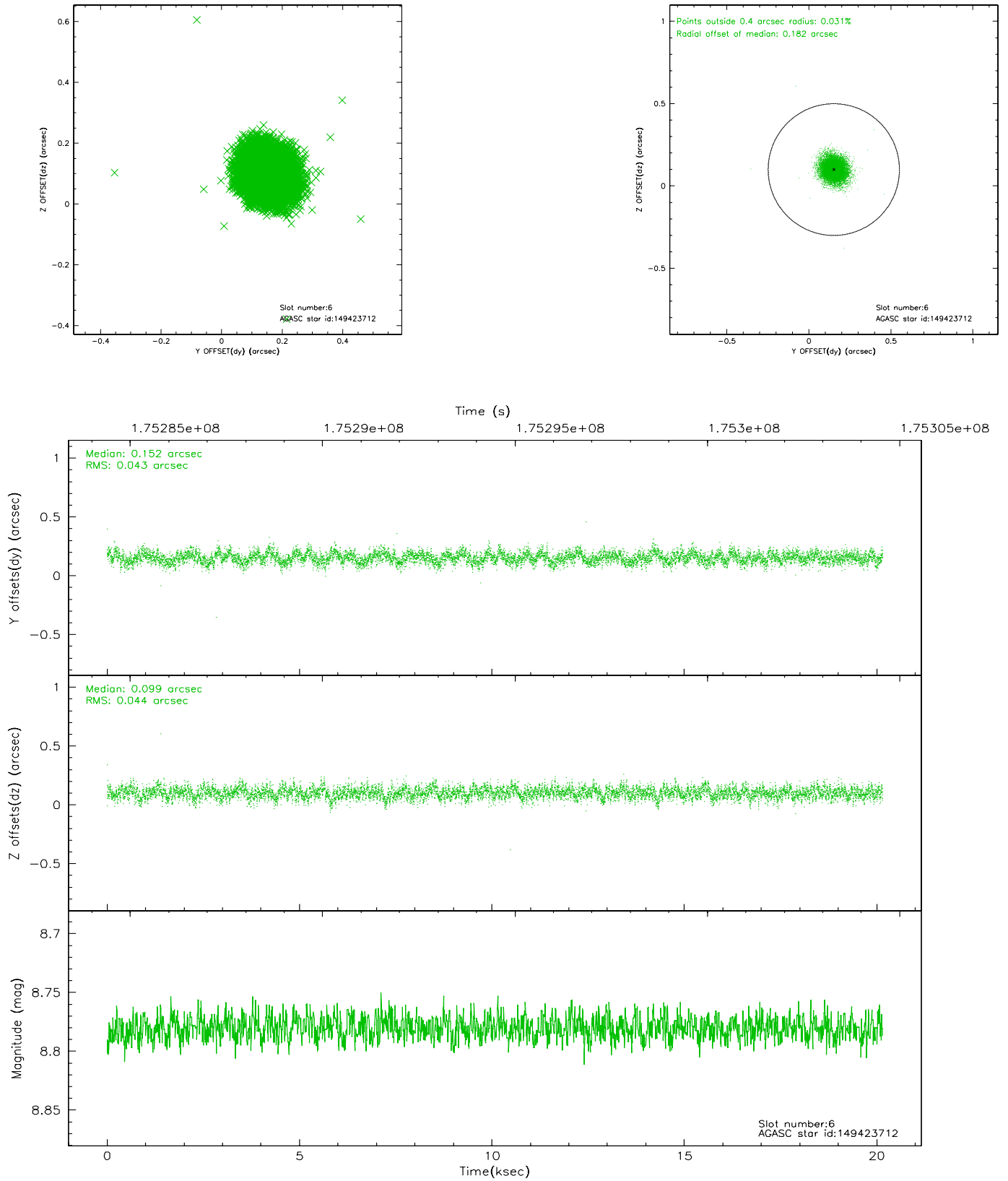
## 2.4.2 Slot 4



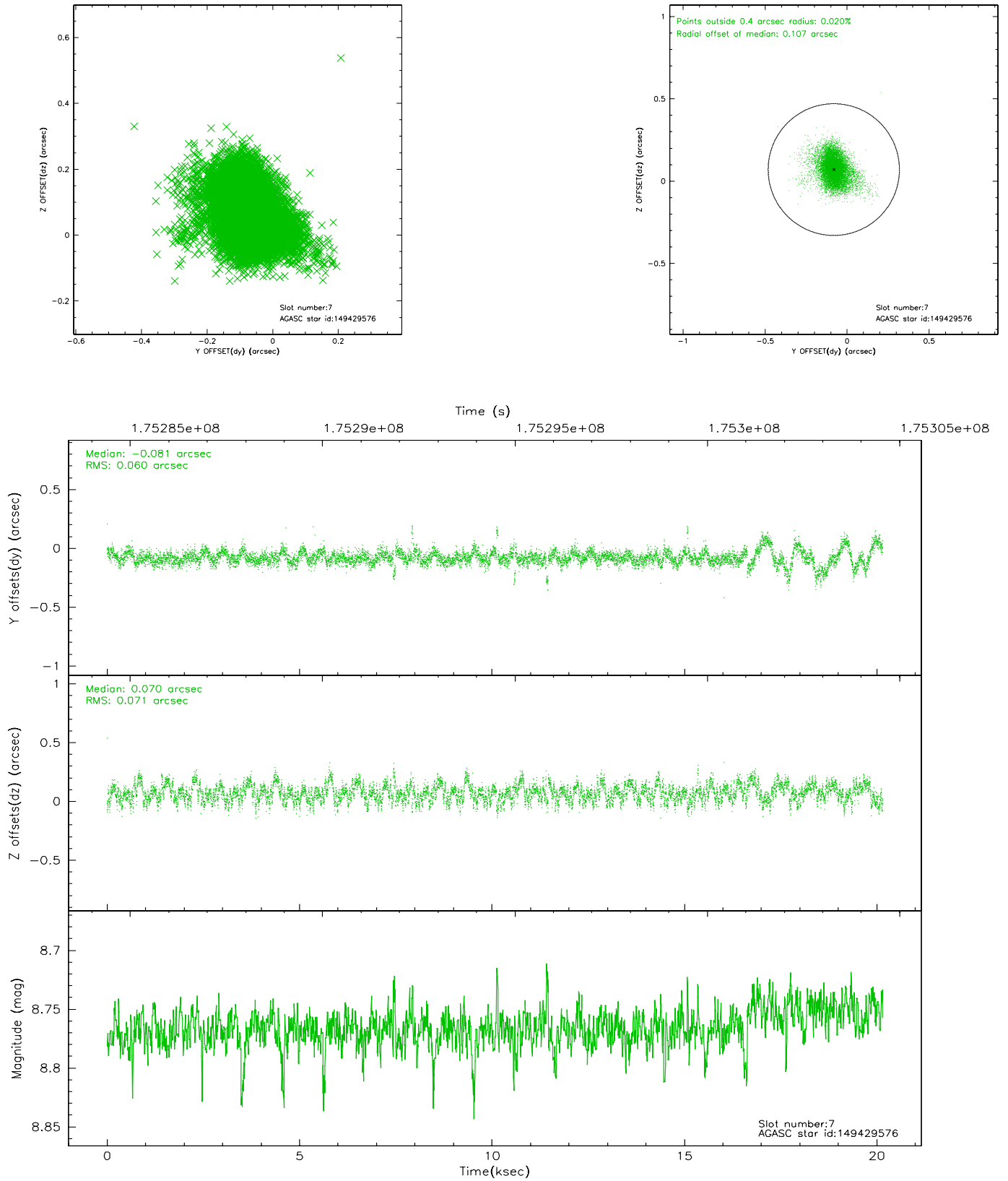
### 2.4.3 Slot 5



## 2.4.4 Slot 6

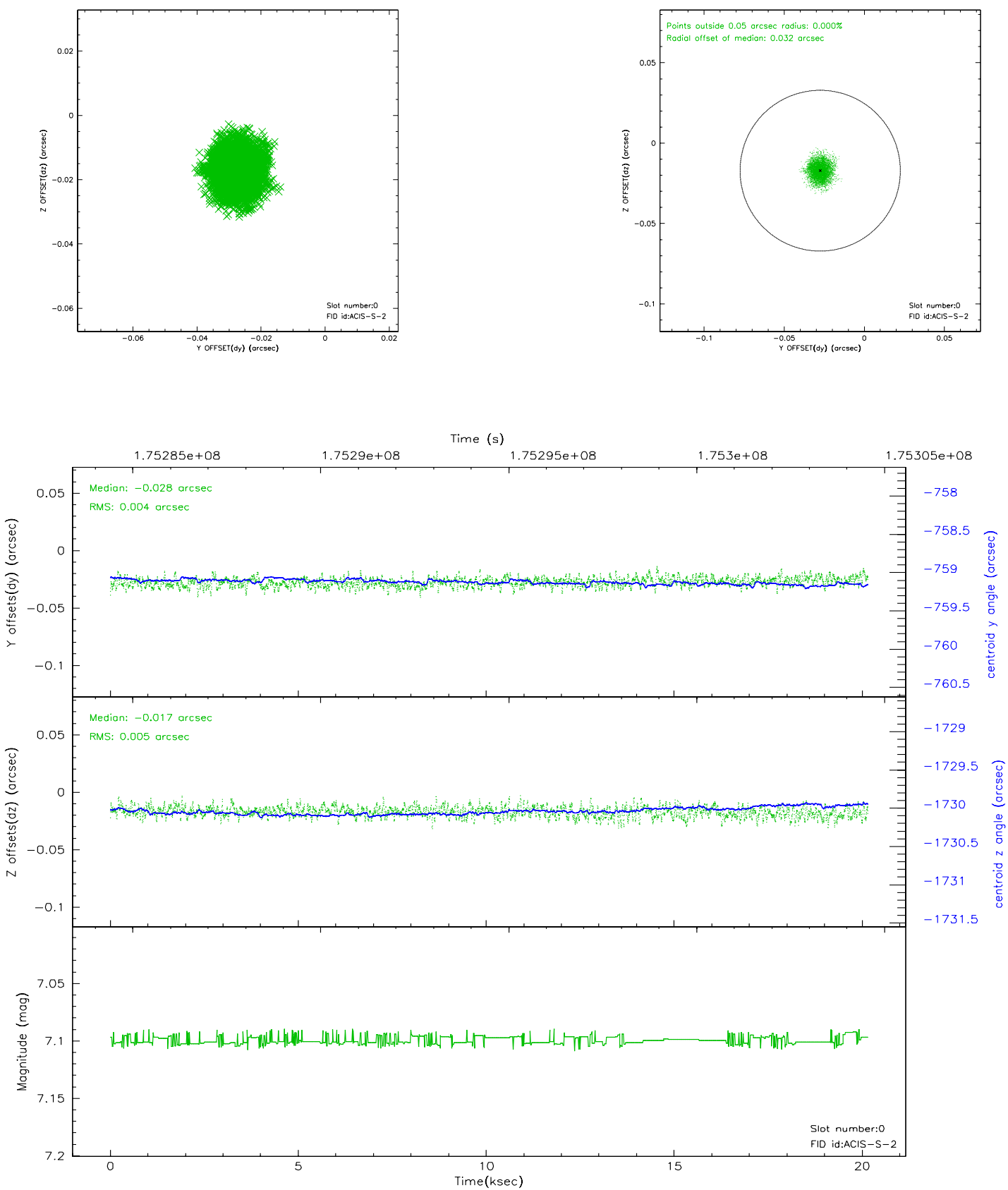


## 2.4.5 Slot 7

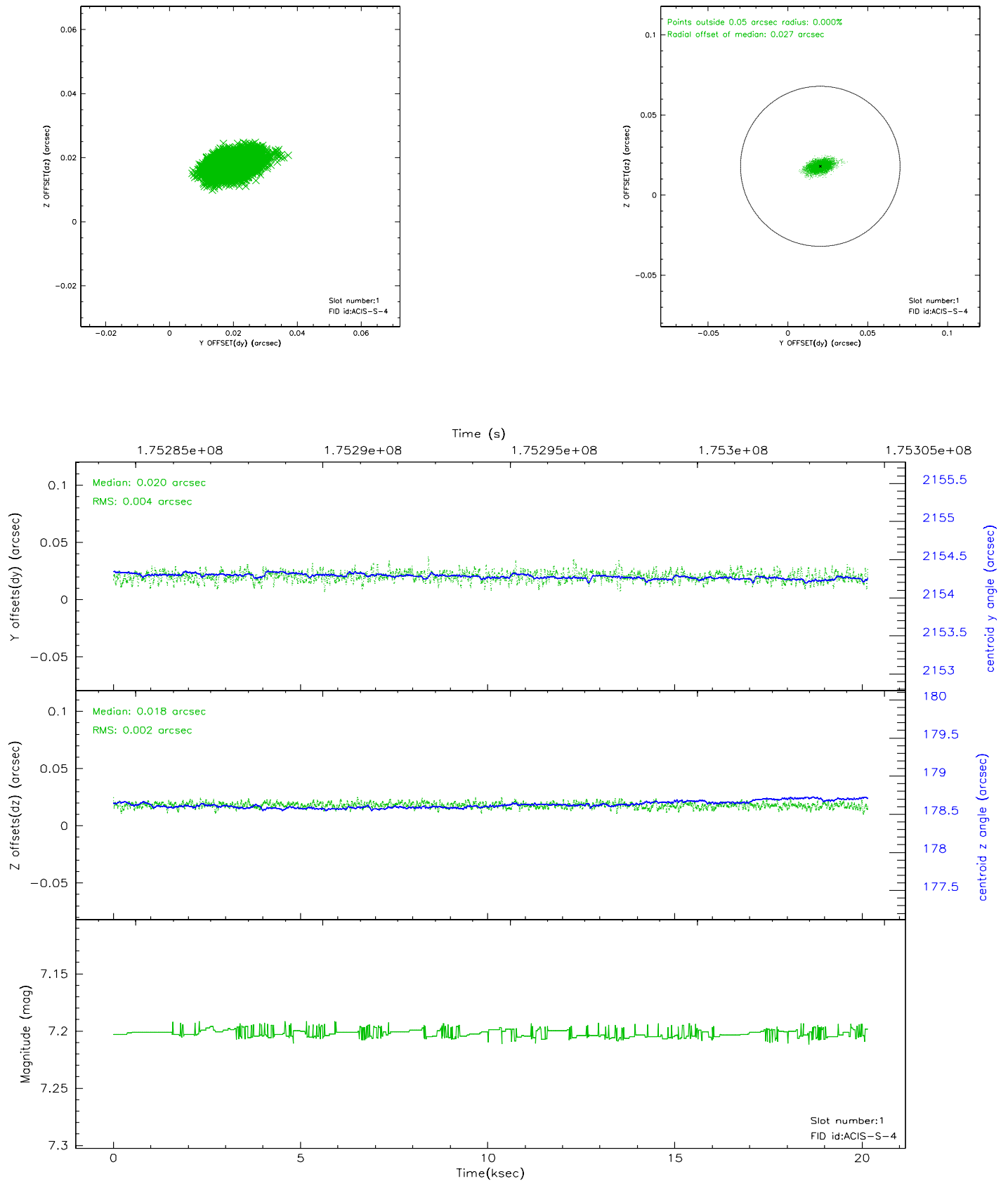


## 2.5 FID Slots

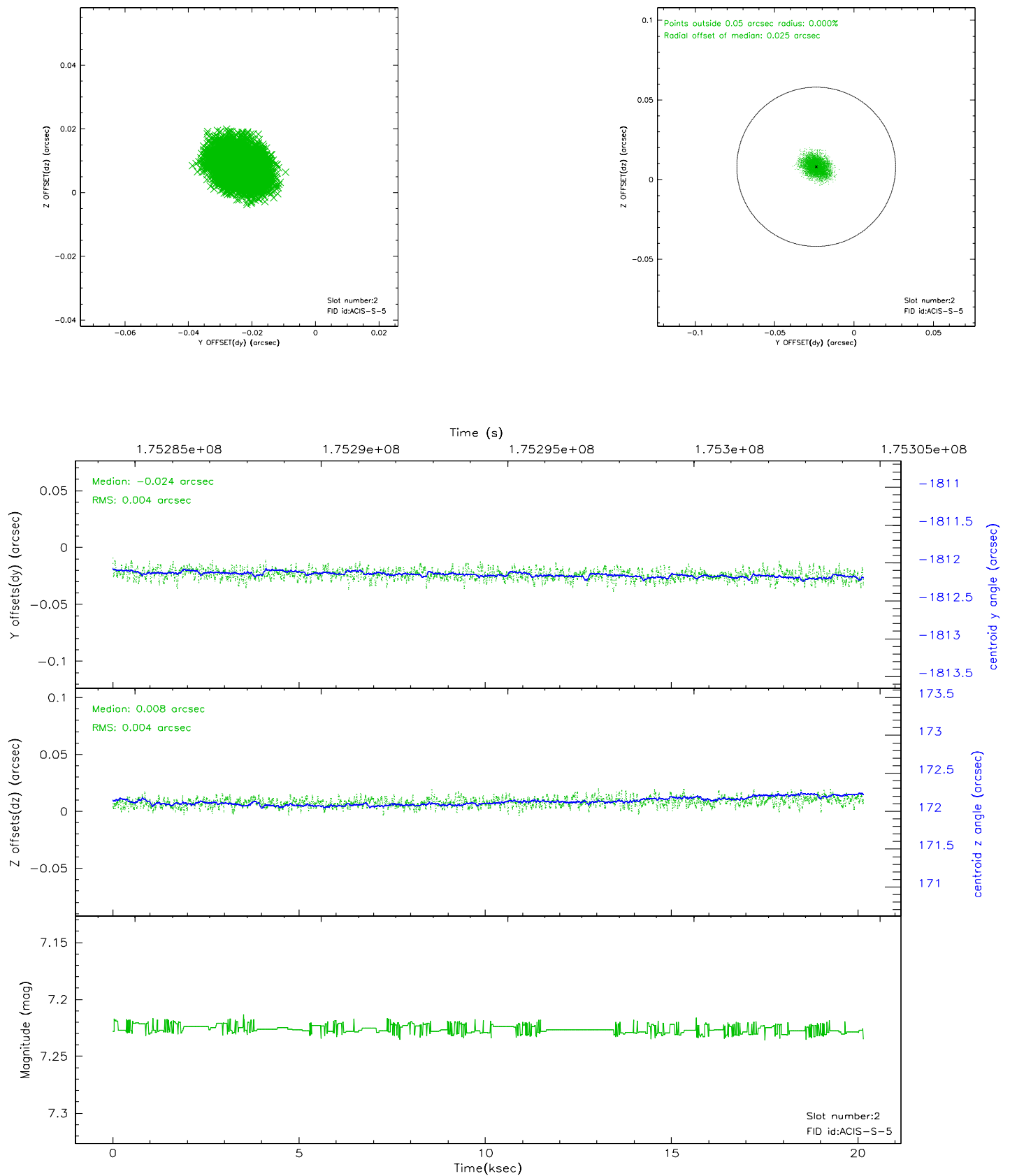
### 2.5.1 Slot 0



## 2.5.2 Slot 1

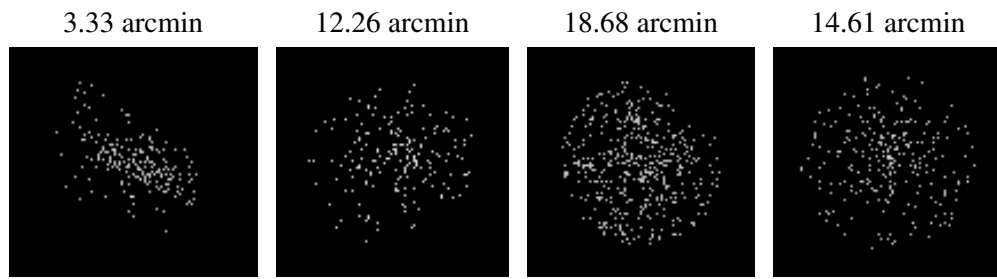


### 2.5.3 Slot 2





### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.07.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.15

## A.2 Comments

Roll constraint satisfied.

Focal plane temperature is warmer than -118 degrees during initial ~5 ksec of observation. The ACIS calibrations are not verified or necessarily applicable for focal plane temperatures warmer than -118 degrees.