

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 1541 - L2 Version 001  
Chandra X-Ray Center

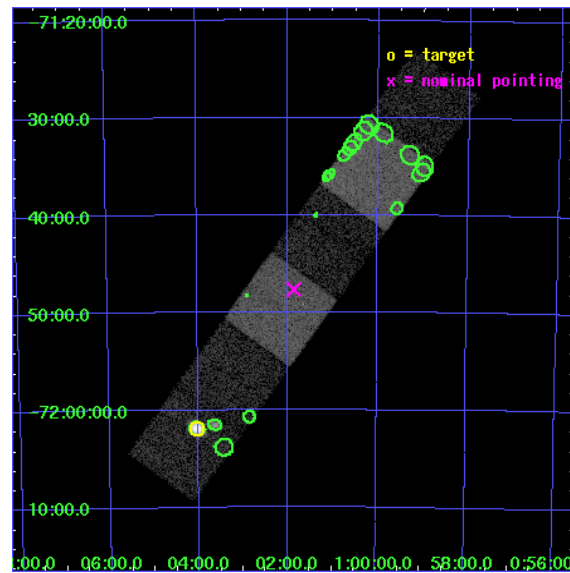
L2 Processing Date : Nov 27 2006

## 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

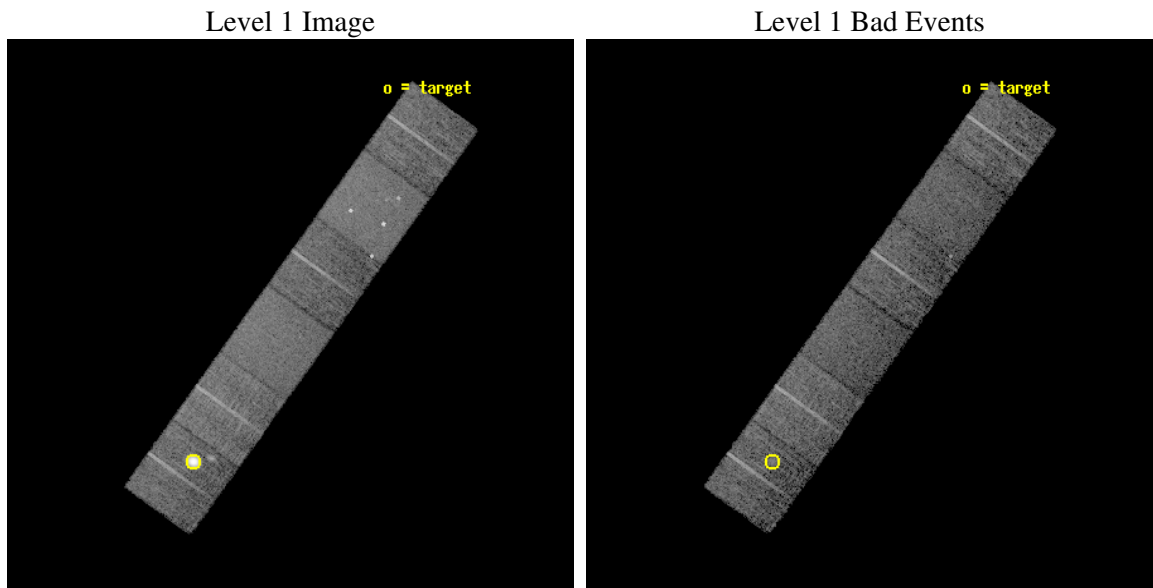
seq_num	590150
obs_id	1541
title	ACIS CALIBRATION OBSERVATION OF THE SUPERNOVA REMNANT E0102-72 (JUNE 2001)
observer	Dr. CXC Calibration
object	E0102-72.3 [Chip S5, T=120, Offsets=-17,0,0]
dtcycle	0
cycle	P
ra_targ	16.01
dec_targ	-72.032028
ra_nom	15.463341499823
dec_nom	-71.794038227073
roll_nom	125.71655817624
revision	2
ontime	7513.6000069976
livetime	7418.4582795622
ontime4	7513.6000069976
ontime5	7513.6000069976
ontime6	7513.6000069976
ontime7	7513.6000069976
ontime8	7513.6000069976
ontime9	7513.6000069976
l2events	95371



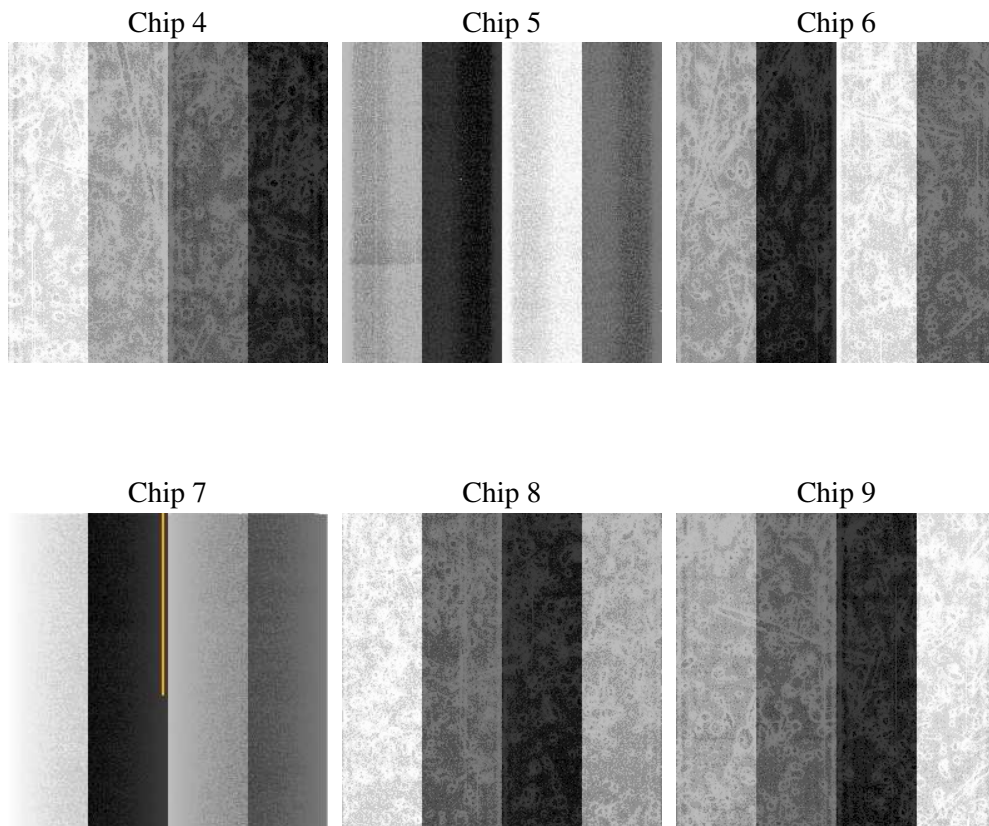
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldbver	3.2.4
date	2006-11-28T03:13:06
revision	2

sched_exp_time	7755.000000
ontime	7519.1177327037
ontime4	7519.1177327037
ontime5	7519.1177526265
ontime6	7519.1177327037
ontime7	7519.1177526265
ontime8	7519.1176330298
ontime9	7519.1177327037
l1events	379541

### 2.1.4 Events

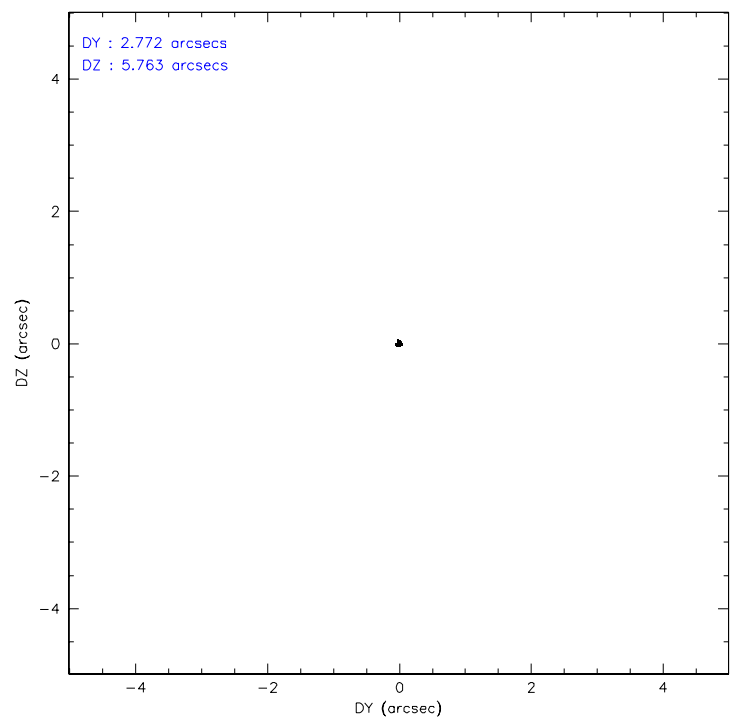
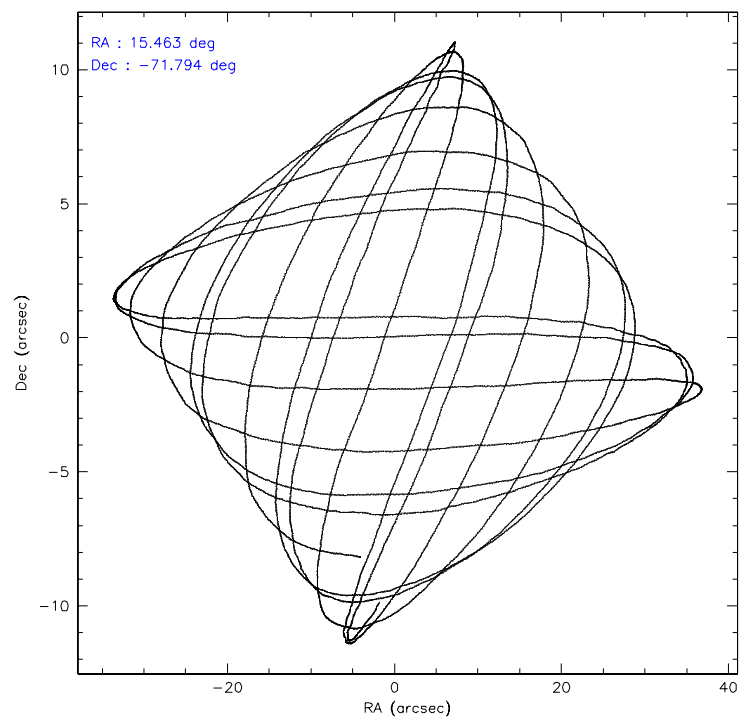
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	55478	72278	49598	62625	67070	72492
rejected events	49561	38862	43879	38198	53051	43044
rejected %	89%	53%	88%	60%	79%	59%

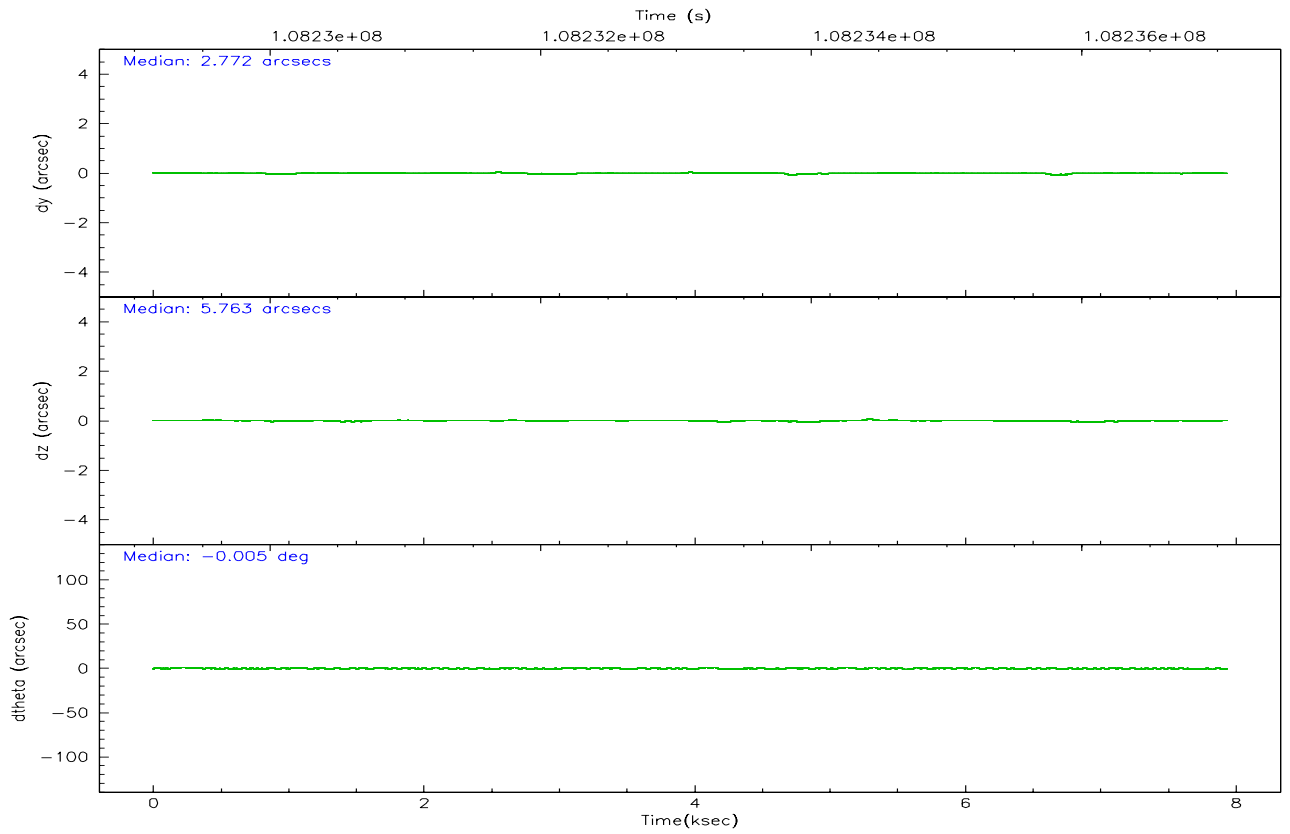
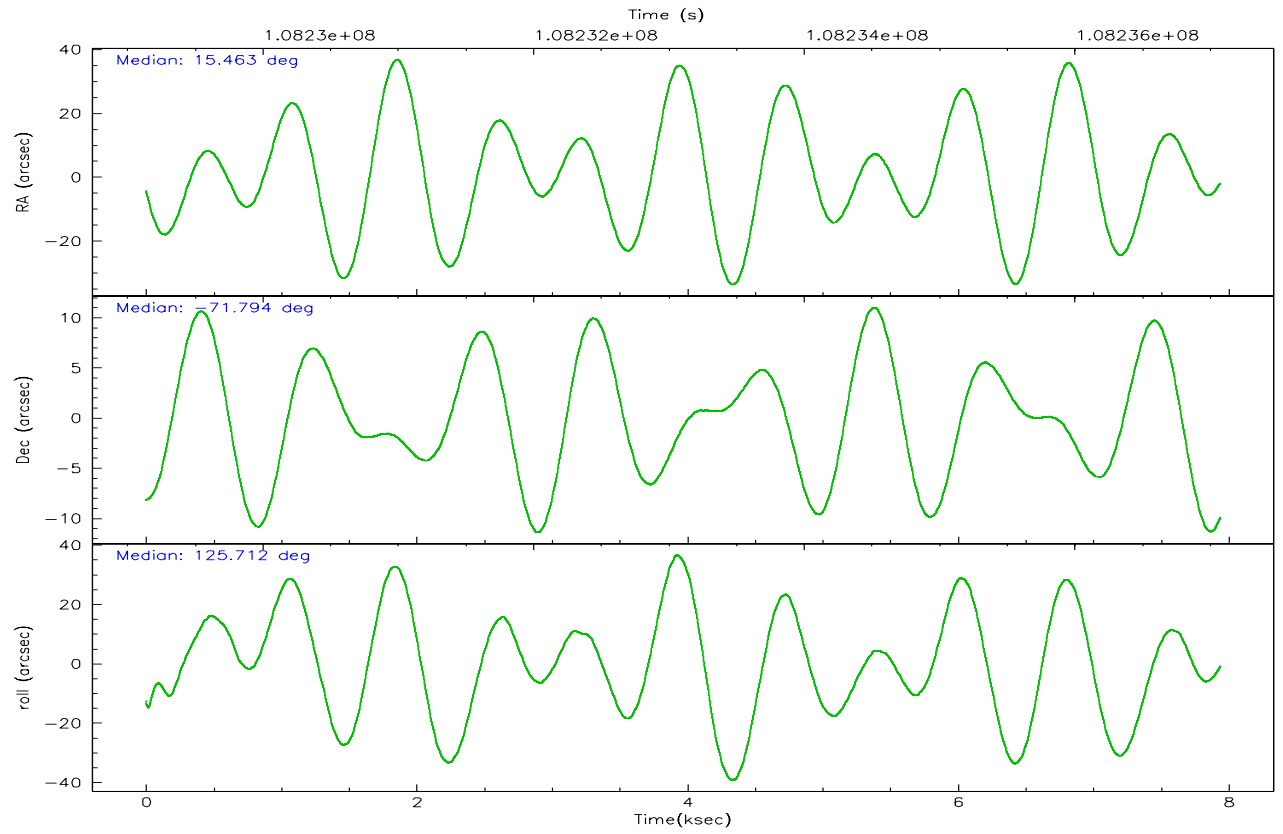
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	2352	5372	2358	1620	4509	23352
	4%	7%	4%	2%	6%	32%
grade 1 events	25	134	16	37	45	133
	0%	0%	0%	0%	0%	0%
grade 2 events	1479	9272	1125	6032	2885	2823
	2%	12%	2%	9%	4%	3%
grade 3 events	507	781	580	1328	1656	972
	0%	1%	1%	2%	2%	1%
grade 4 events	548	704	554	1284	1574	969
	0%	0%	1%	2%	2%	1%
grade 5 events	1655	3471	2182	4259	2633	2174
	2%	4%	4%	6%	3%	2%
grade 6 events	1037	17318	1110	14178	3396	1351
	1%	23%	2%	22%	5%	1%
grade 7 events	47875	35226	41673	33887	50372	40718
	86%	48%	84%	54%	75%	56%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	15.543532	15.46334149982268	Subarray requested	NONE	NONE
Pointing Dec	-71.804960	-71.79403822707286	Alternating exposures requested	N	N
Pointing Roll	125.636122	125.7165581762361	Primary exposure time	0.000000	3.2
Window start time	107740864.184000	107740864.184000			
Window stop time	110246464.184000	110246464.184000			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1425803651734			
SIM translation stage offset (mm)	0	0.01005778216563158			
Observation start time	108229316.184000	108228939.94962			
Observation start date	2001-06-06T15:40:52	2001-06-06T15:35:39			
Observation end time	108237071.184000	108238218.24999			
Observation end date	2001-06-06T17:50:07	2001-06-06T18:10:18			
Read mode	TIMED	TIMED			

## 2.3 Aspect





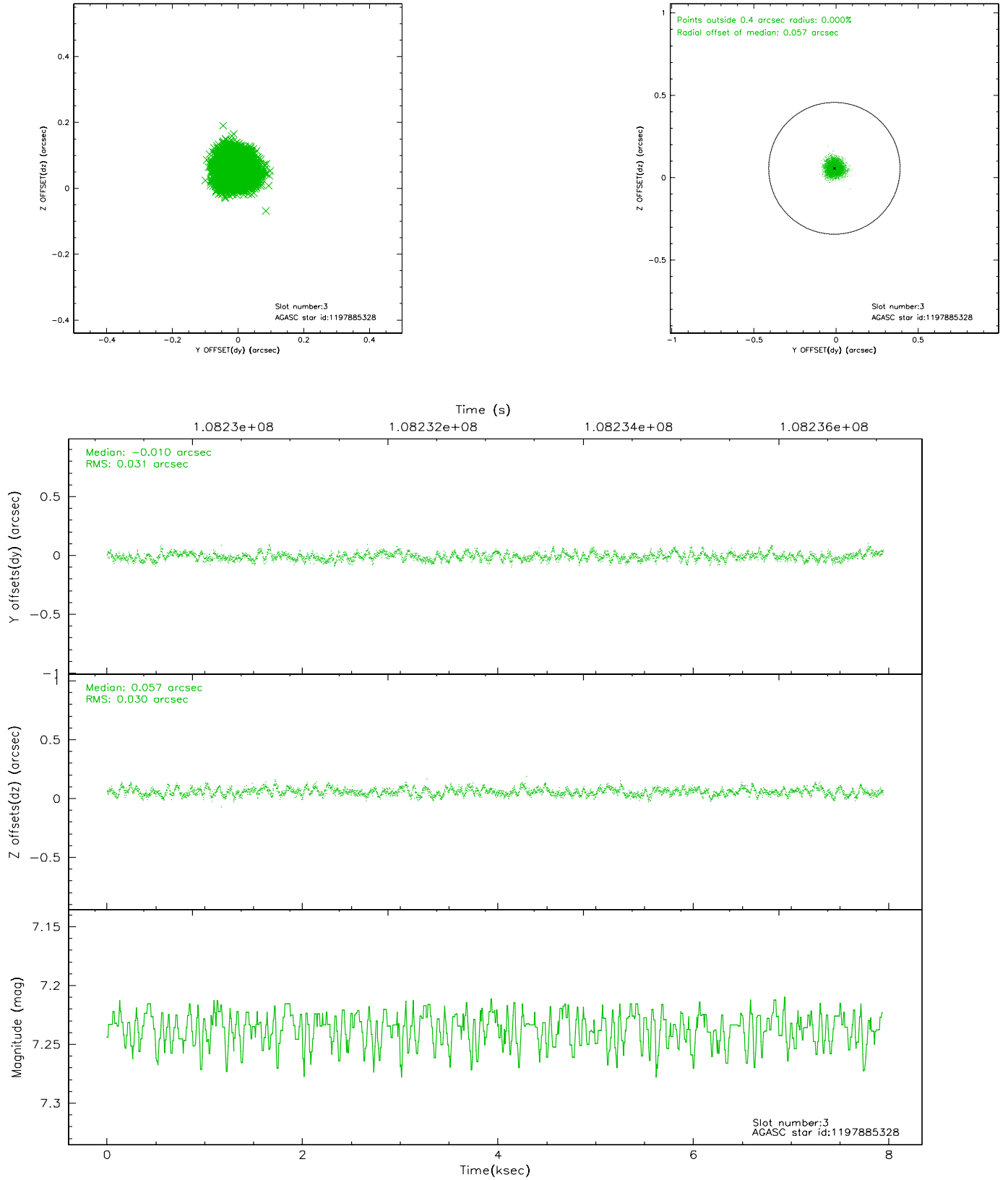
### Slot Statistics

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	1937	-0.011	0.038	0.006	0.010	0.000000	0.000000	-755.37	-1726.83
1	FID	ACIS-S-4	7.20	1937	-0.089	-0.005	0.005	0.008	0.000000	0.000000	2157.46	180.96
2	FID	ACIS-S-5	7.24	1937	0.069	-0.025	0.006	0.010	0.000000	0.000000	-1807.27	175.32
3	GUIDE	1197885328	7.24	3873	-0.010	0.057	0.047	0.072	16.283090	-71.733943	-282.33	-824.80
4	GUIDE	1197750936	7.56	3874	-0.061	0.072	0.041	0.066	15.387940	-71.549550	850.43	-392.07
5	GUIDE	1197884536	8.49	3874	0.034	0.066	0.059	0.098	17.160729	-71.835289	-1165.30	-1397.79
6	GUIDE	1197884712	8.30	3873	0.053	-0.097	0.056	0.093	16.087398	-72.252690	-1660.00	454.52
7	GUIDE	1197750160	10.26	3833	-0.020	-0.096	0.138	0.219	12.997994	-71.773722	1711.29	2298.26

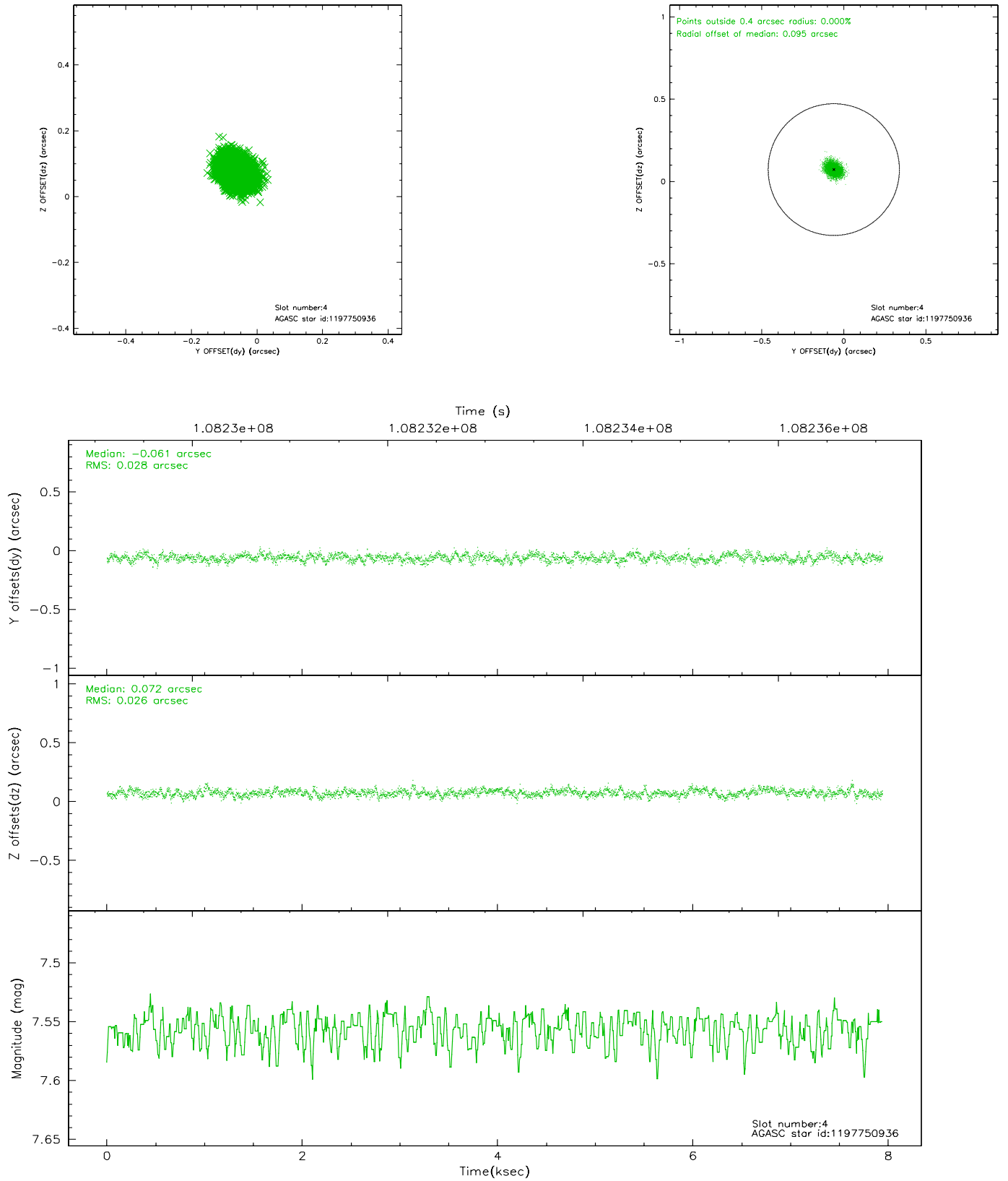


## 2.4 Star Slots

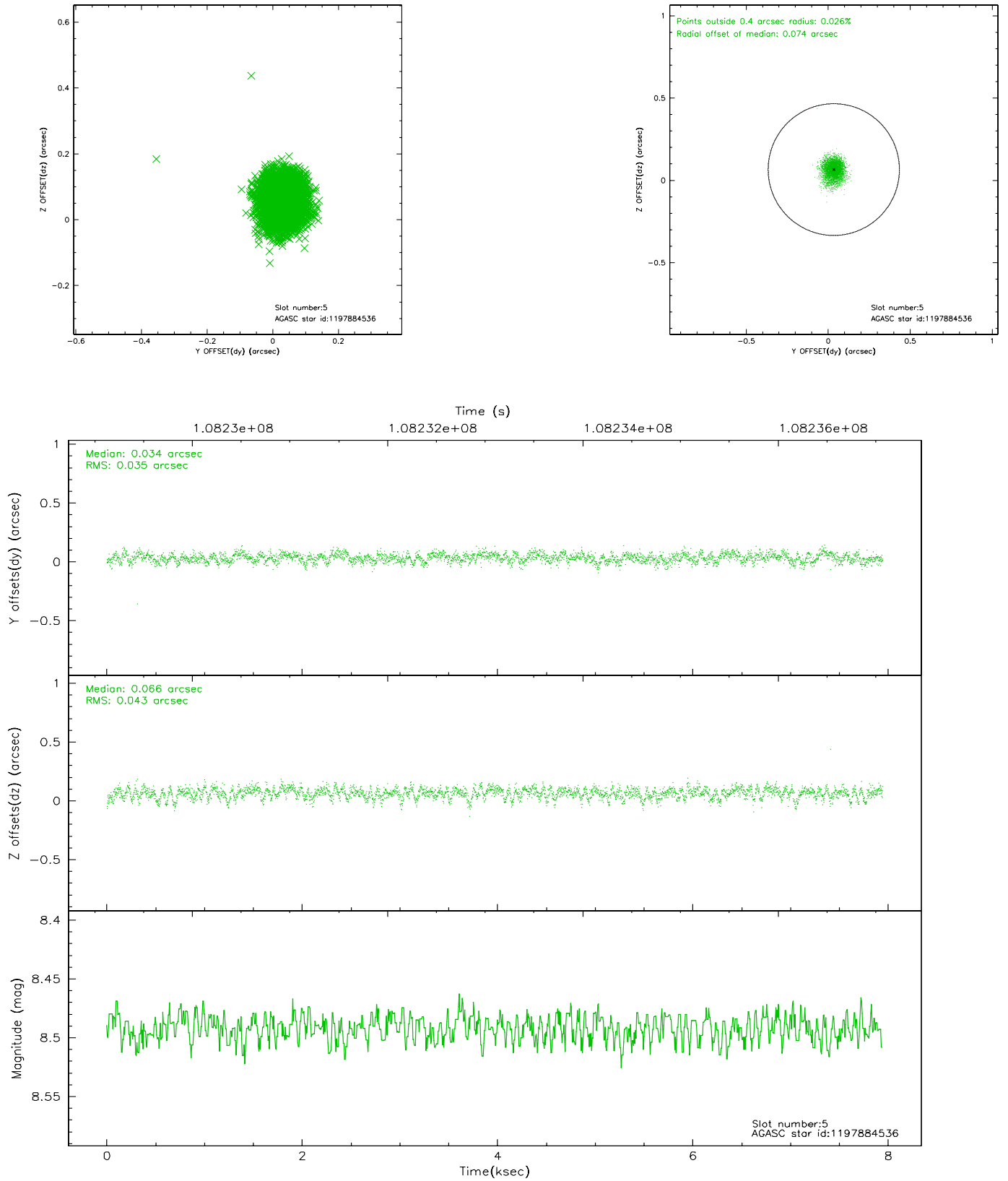
### 2.4.1 Slot 3



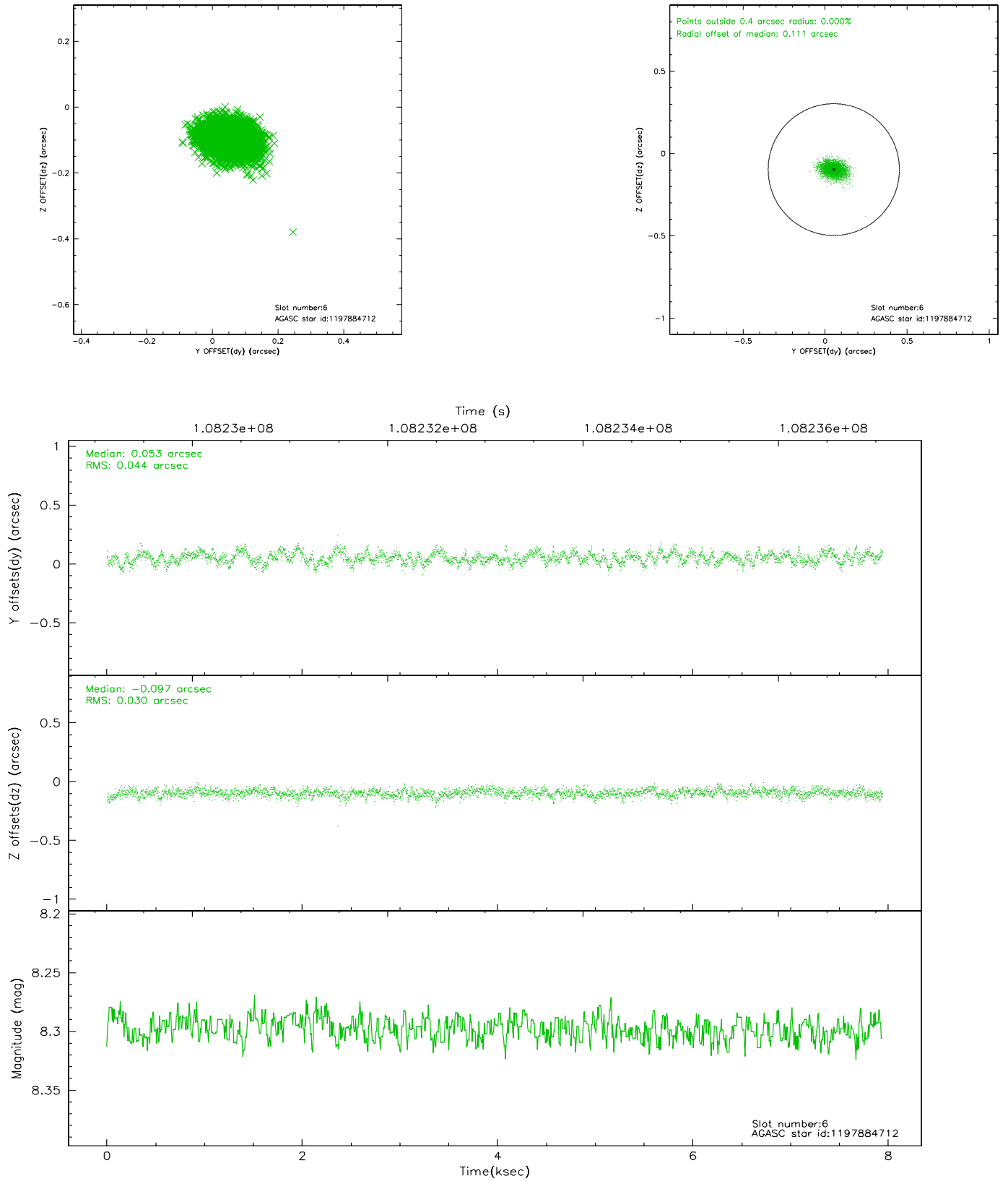
## 2.4.2 Slot 4



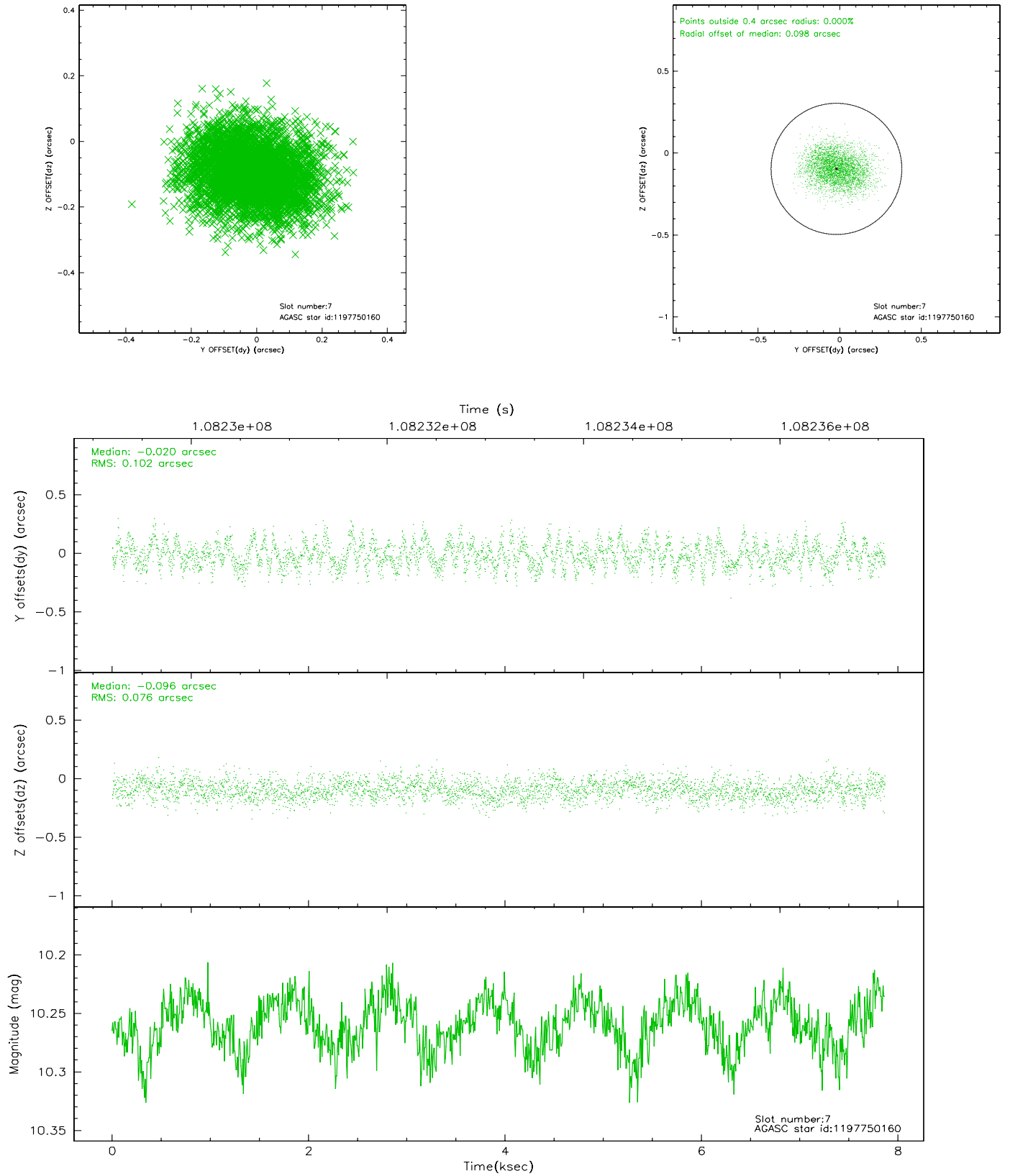
### 2.4.3 Slot 5



## 2.4.4 Slot 6

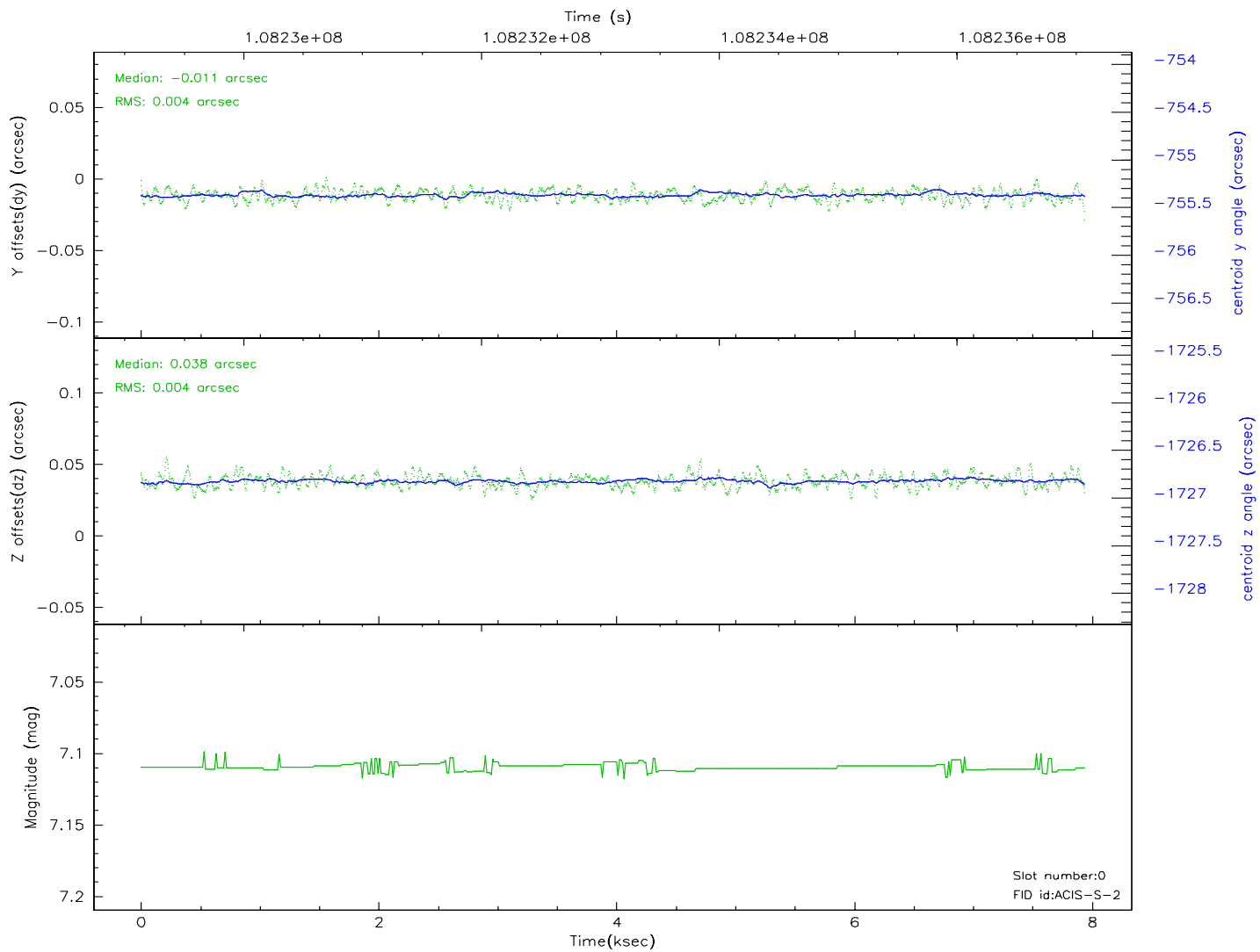
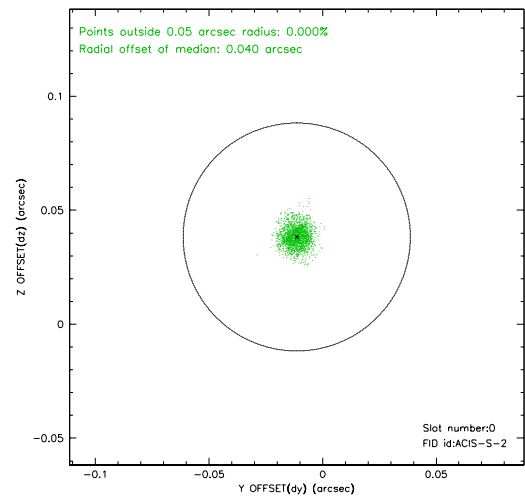
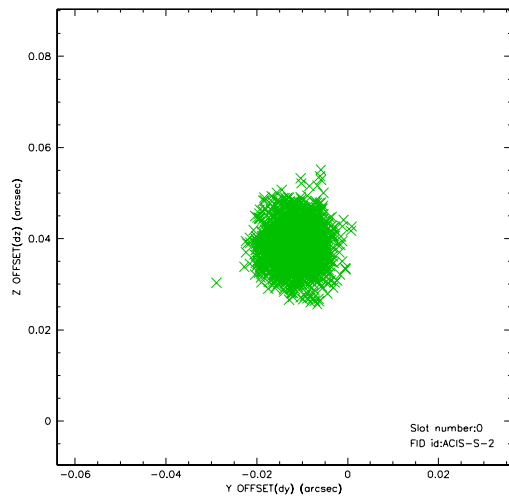


## 2.4.5 Slot 7

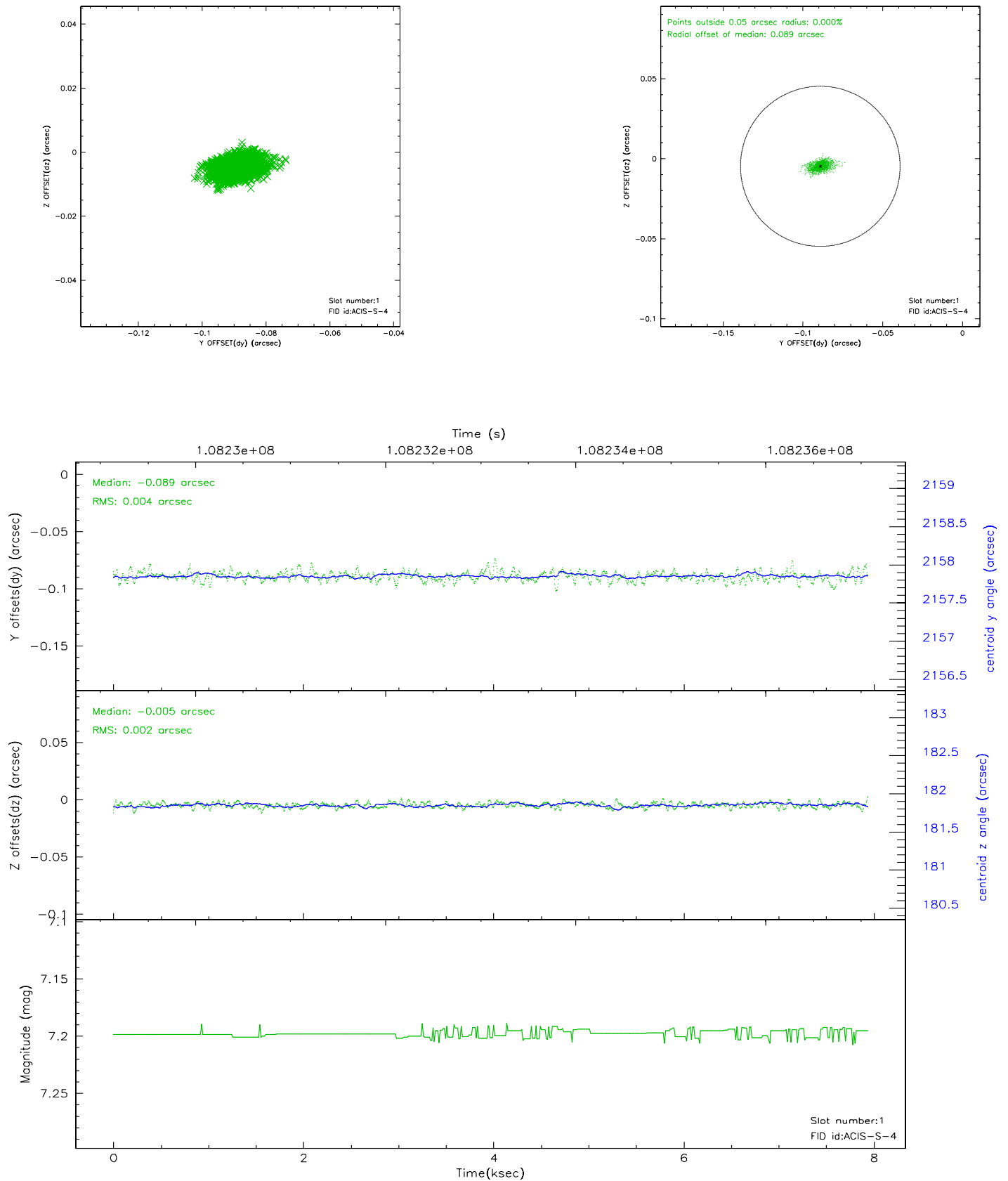


## 2.5 FID Slots

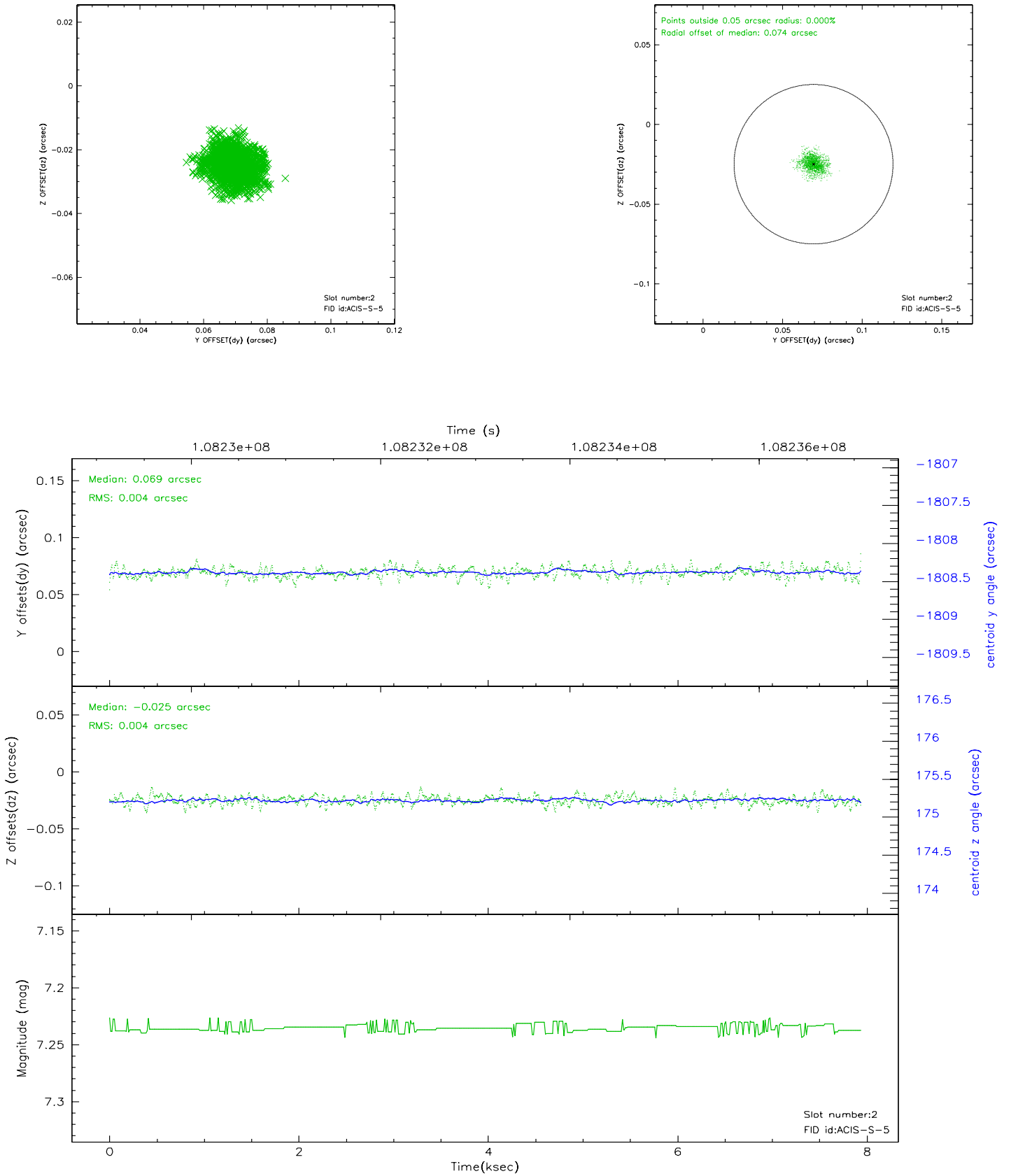
### 2.5.1 Slot 0



## 2.5.2 Slot 1

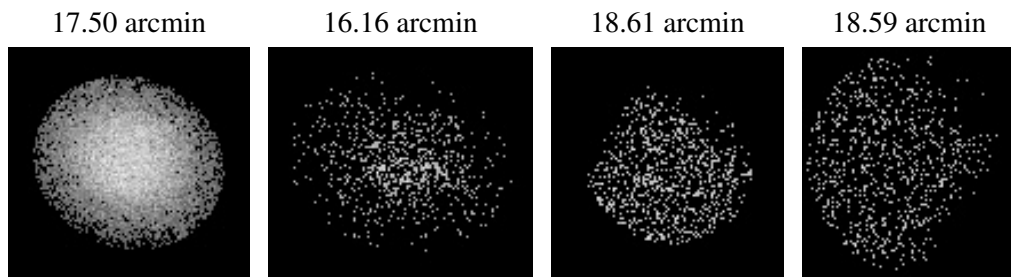


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.5

### A.2 Comments

Window constraint met.

The target is away from the aimpoint and consequently extended and asymmetric.