

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 4671 - L2 Version 4  
Chandra X-Ray Center

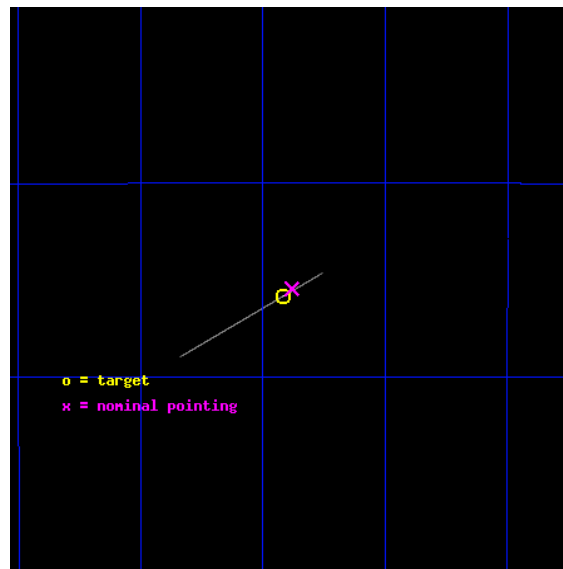
L2 Processing Date : Dec 6 2012

## 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>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

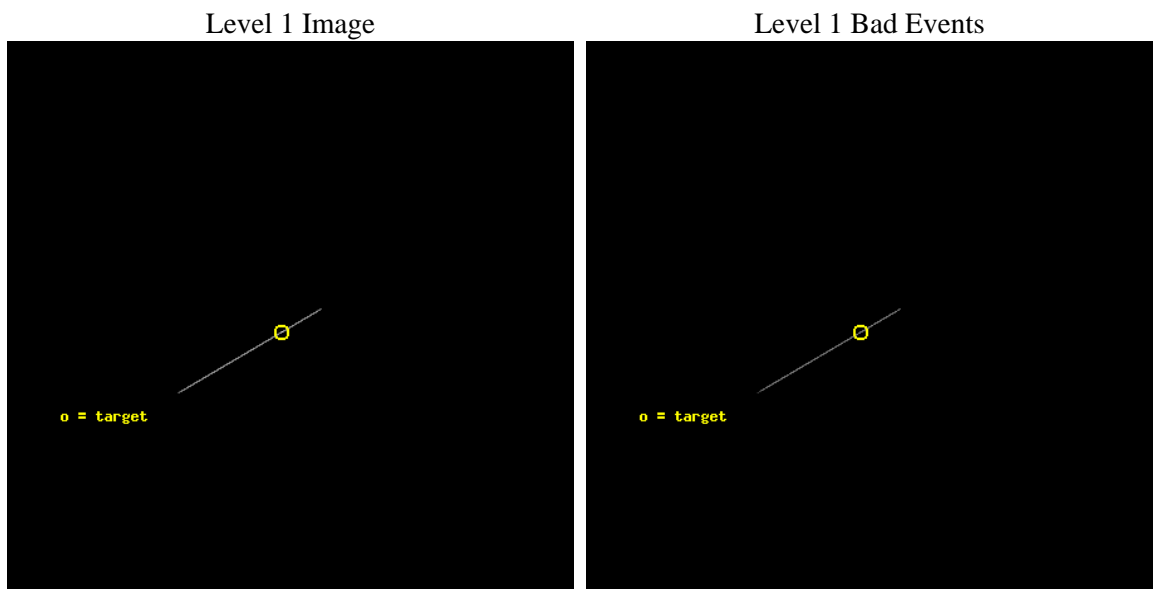
seq_num	500490	Sequence number
obs_id	4671	Observation id
title	Timing the Enigmatic Nearby Neutron Star RX J0720.4-3125	Proposal
observer	Prof. David Kaplan	Principal investigator
object	RX J0720.4-3125	Source name
ra_targ	110.104167	Observer's specified target RA [deg]
dec_targ	-31.430444	Observer's specified target Dec [deg]
ra_nom	110.09551599705	Nominal RA [deg]
dec_nom	-31.424259700433	Nominal Dec [deg]
roll_nom	149.79812359316	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5143.25	Sum of GTIs [s]
livetime	5123.1591796875	Livetime [s]
ontime7	5143.25	Sum of GTIs [s]
l2events	27392	Number of level 2 events



## 2 OBI

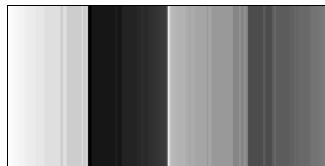
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	5143.25	Sum of GTIs [s]
caldsver	4.5.4	&#160	ontime7	5143.25	Sum of GTIs [s]
date	2012-12-06T23:01:05	Date and time of file creation	l1events	39966	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	39966
rejected events	11592
rejected %	29%

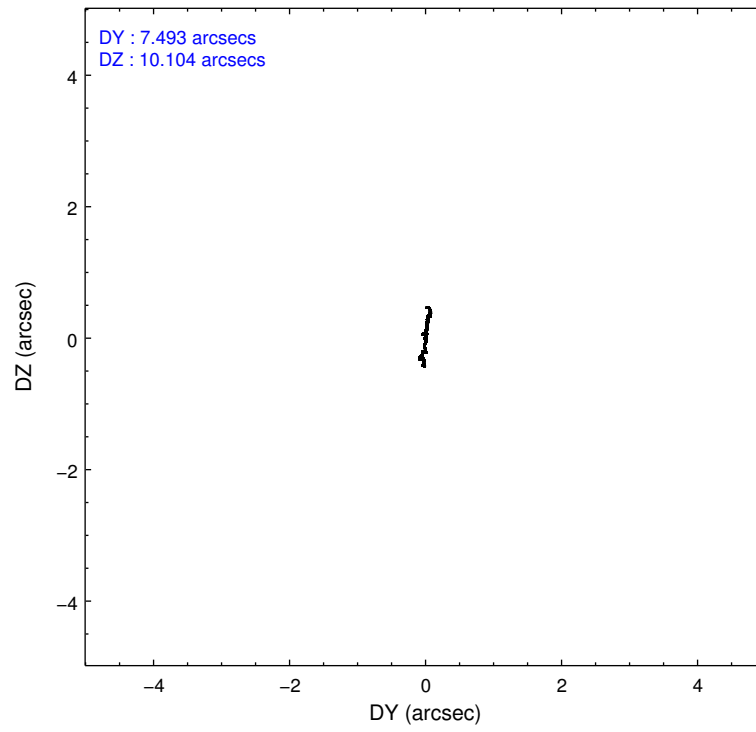
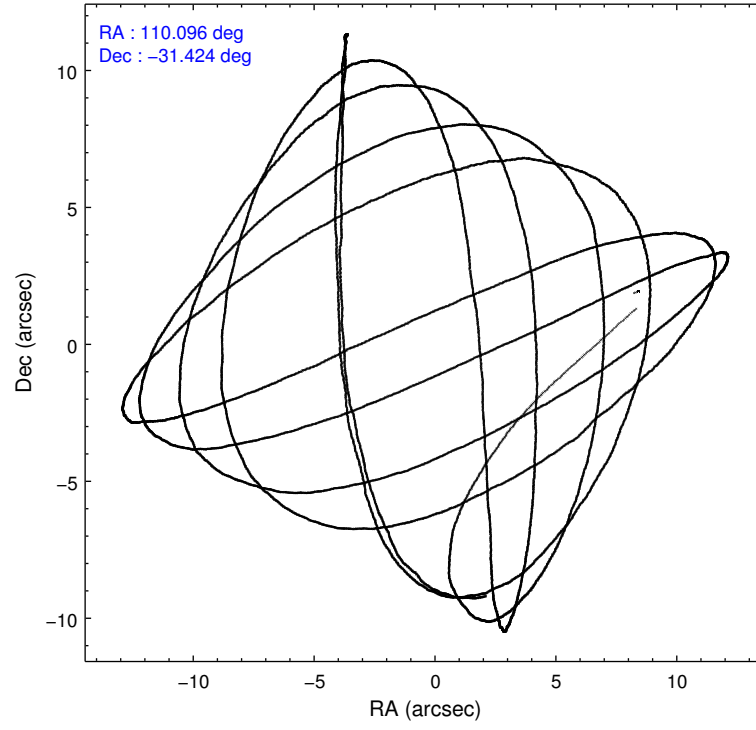
	<b>ccd 7</b>
grade 0 events	8004
	20%
grade 1 events	78
	0%
grade 2 events	8144
	20%
grade 3 events	2637
	6%
grade 4 events	2597
	6%
grade 5 events	5192
	12%
grade 6 events	13314
	33%
grade 7 events	0
	0%

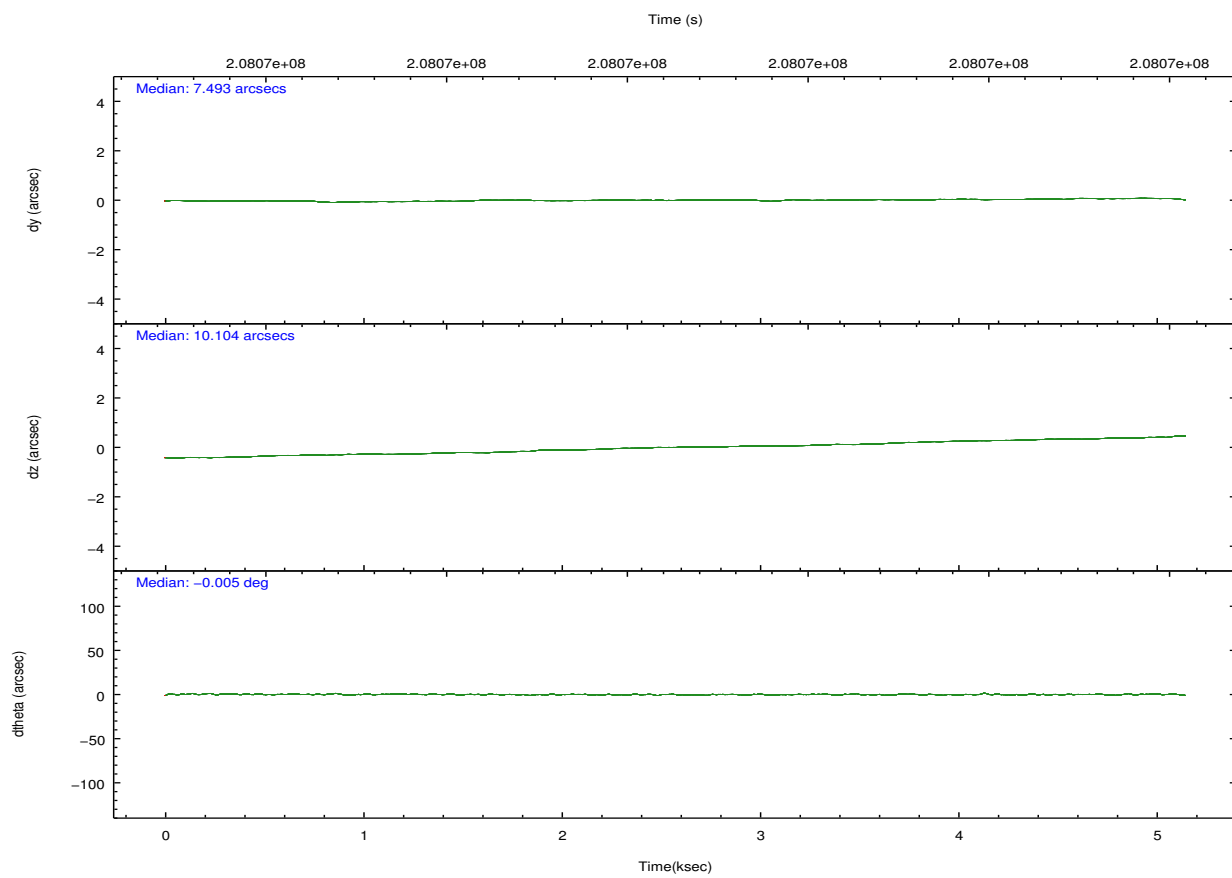
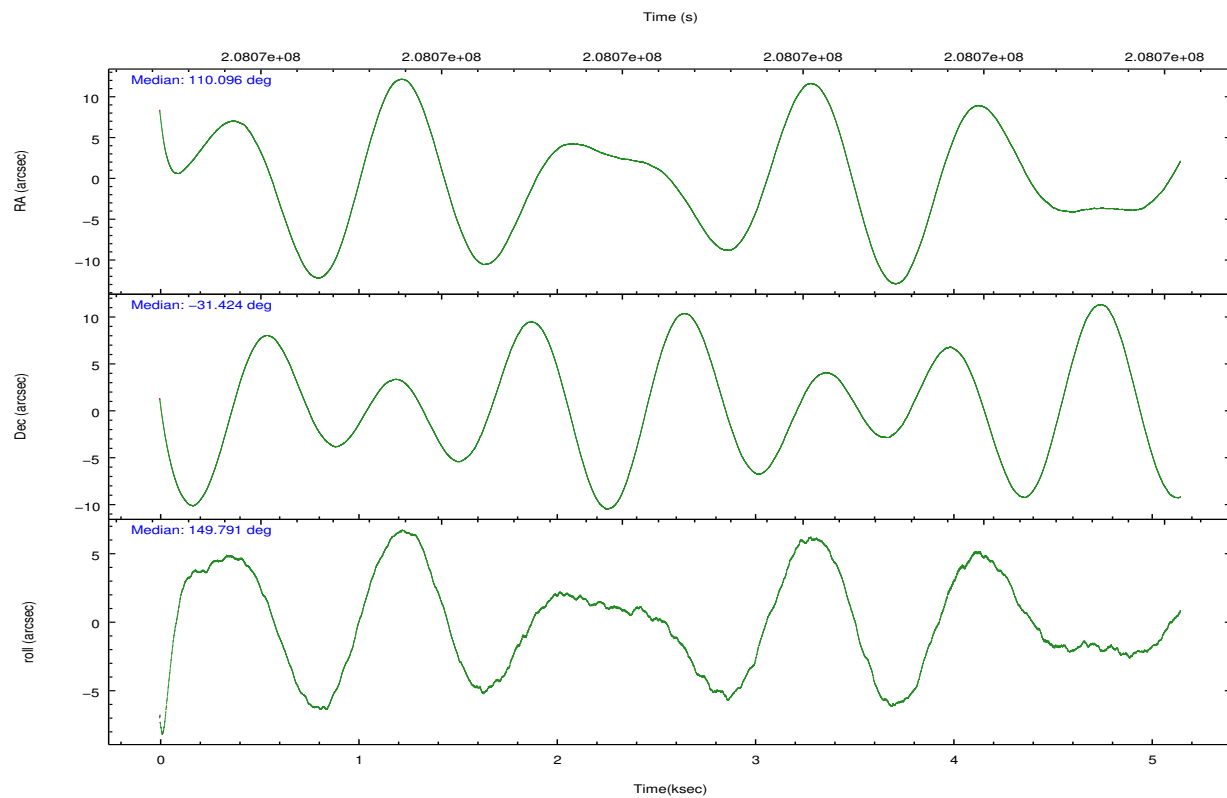


## 2.2 Compared Parameters

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	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	110.127433	110.0955159970476	Subarray requested	NONE	NONE
[deg] Pointing Dec	-31.423915	-31.42425970043292	Alternating exposures requested	N	N
[deg] Pointing Roll	149.658169	149.7981235931636	[s] Primary exposure time	0.000000	0
[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)	208067839.184000	208066012.06139			
Observation start date	2004-08-05T04:36:15	2004-08-05T04:06:52			
[s] Observation end time (MET)	208072839.184000	208073979.38674			
Observation end date	2004-08-05T05:59:35	2004-08-05T06:19:39			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



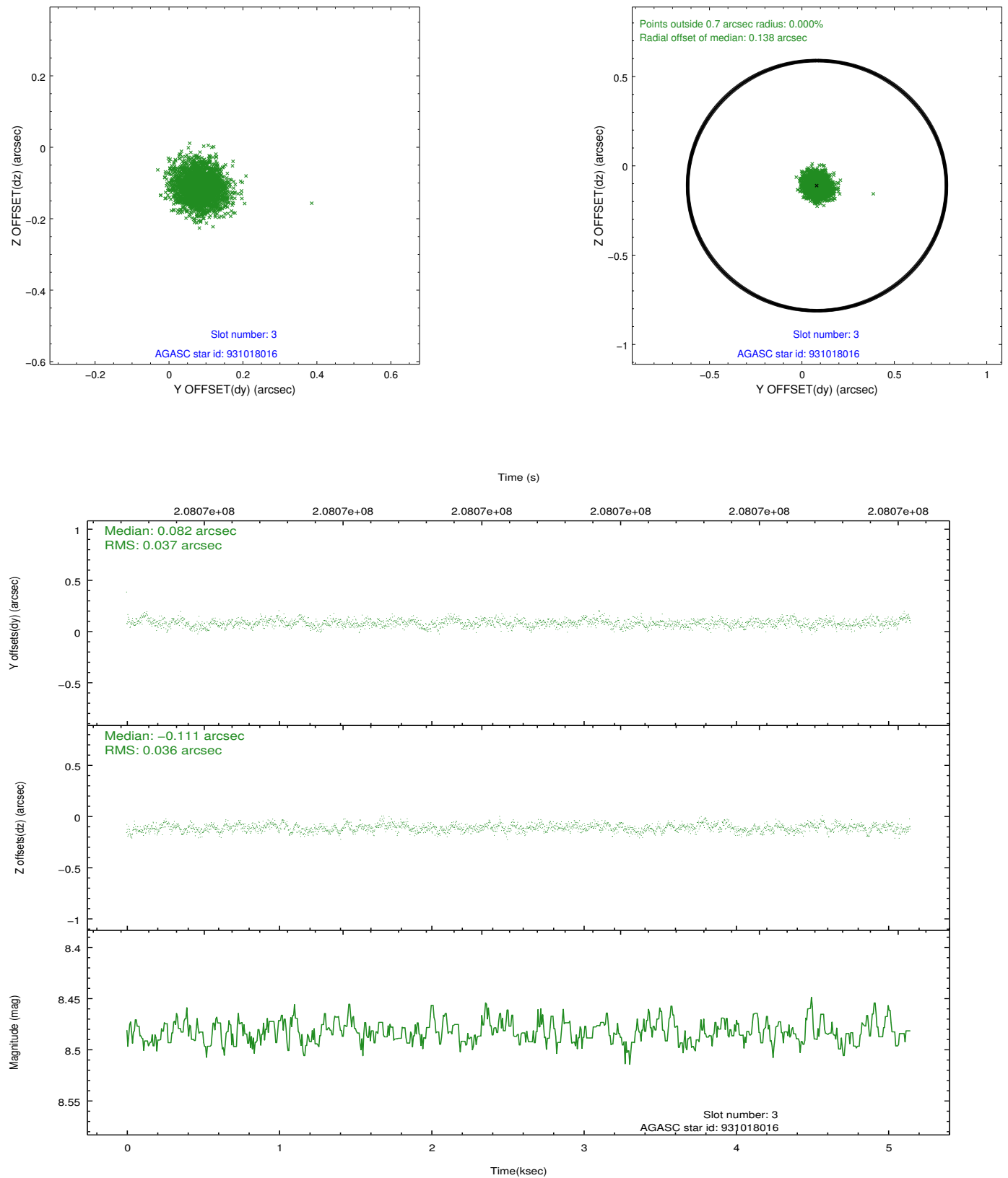


### Slot Statistics

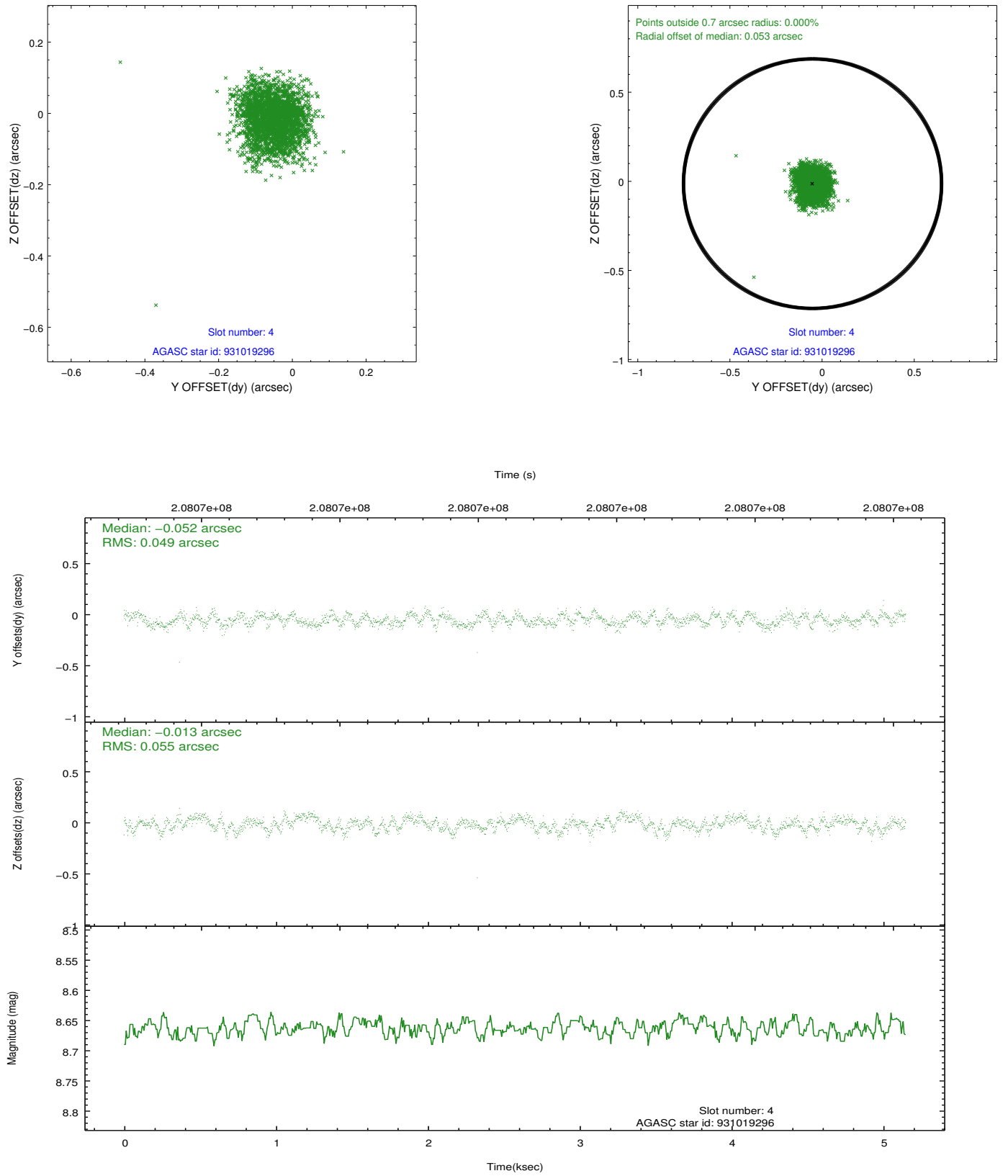
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1256	-0.059	-0.040	0.006	0.011	0.000000	0.000000	-760.29	-1731.39
1	FID	ACIS-S-4	7.20	1256	0.065	0.024	0.007	0.011	0.000000	0.000000	2152.55	175.98
2	FID	ACIS-S-6	7.34	1256	-0.033	0.023	0.008	0.013	0.000000	0.000000	403.19	814.69
3	GUIDE	931018016	8.48	2512	0.082	-0.111	0.055	0.087	109.684535	-31.226562	1534.56	77.96
4	GUIDE	931019296	8.66	2512	-0.052	-0.013	0.077	0.122	109.471771	-31.694370	1239.01	1860.36
5	GUIDE	931160352	8.62	2512	0.018	0.146	0.070	0.121	110.268138	-30.864891	642.41	-1955.47
6	GUIDE	931163512	8.45	2511	0.010	0.076	0.064	0.100	110.894384	-31.299941	-1814.00	-1570.95
7	GUIDE	931022960	8.94	2509	-0.058	-0.096	0.081	0.130	109.733092	-31.864448	237.57	1978.81

## 2.4 Star Slots

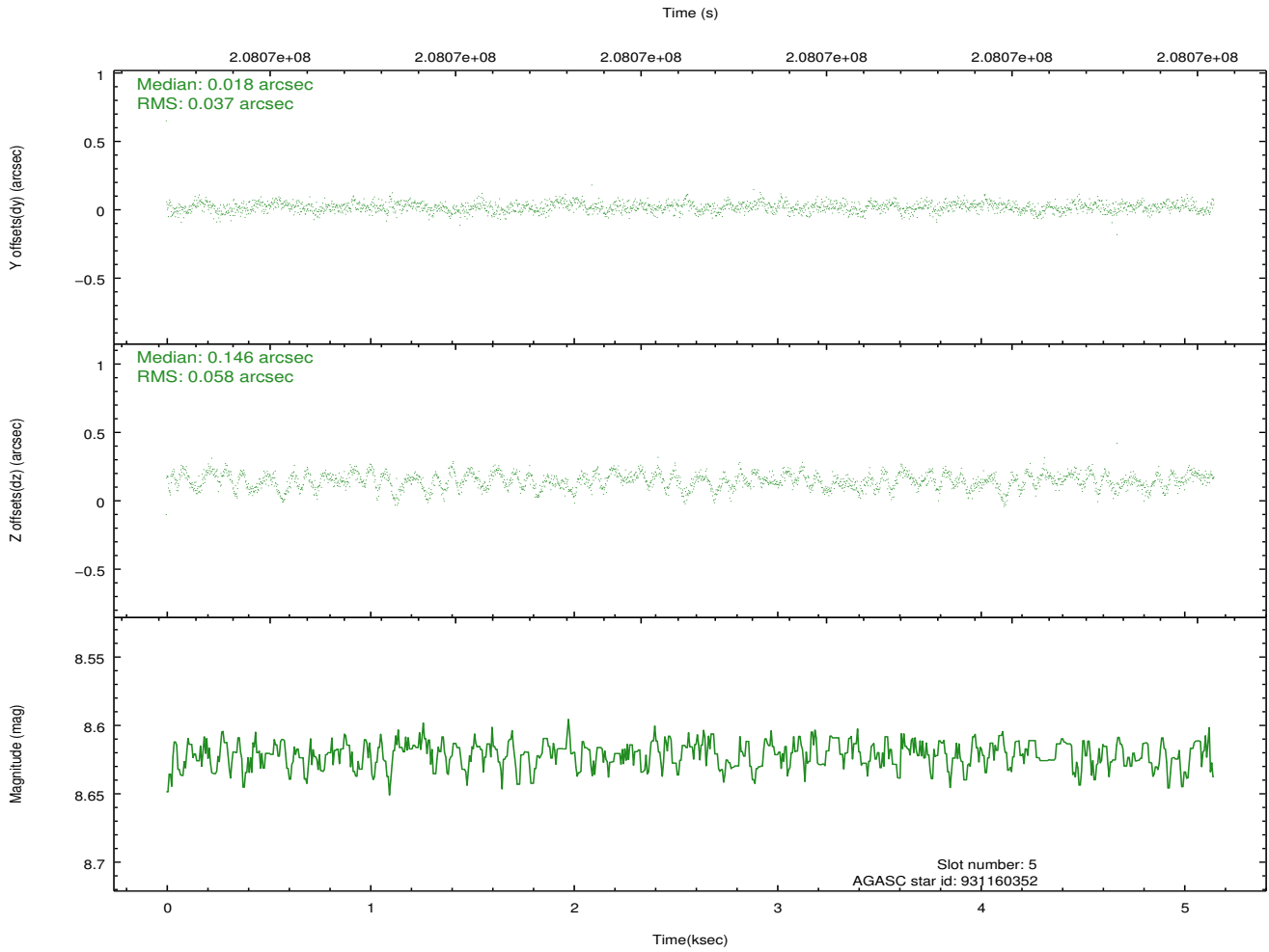
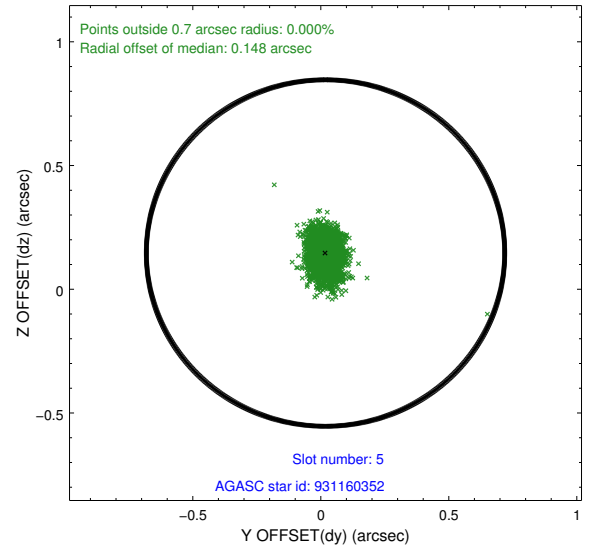
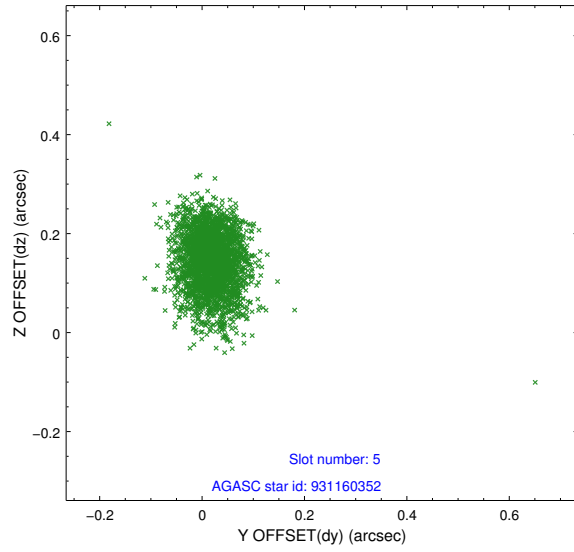
### 2.4.1 Slot 3



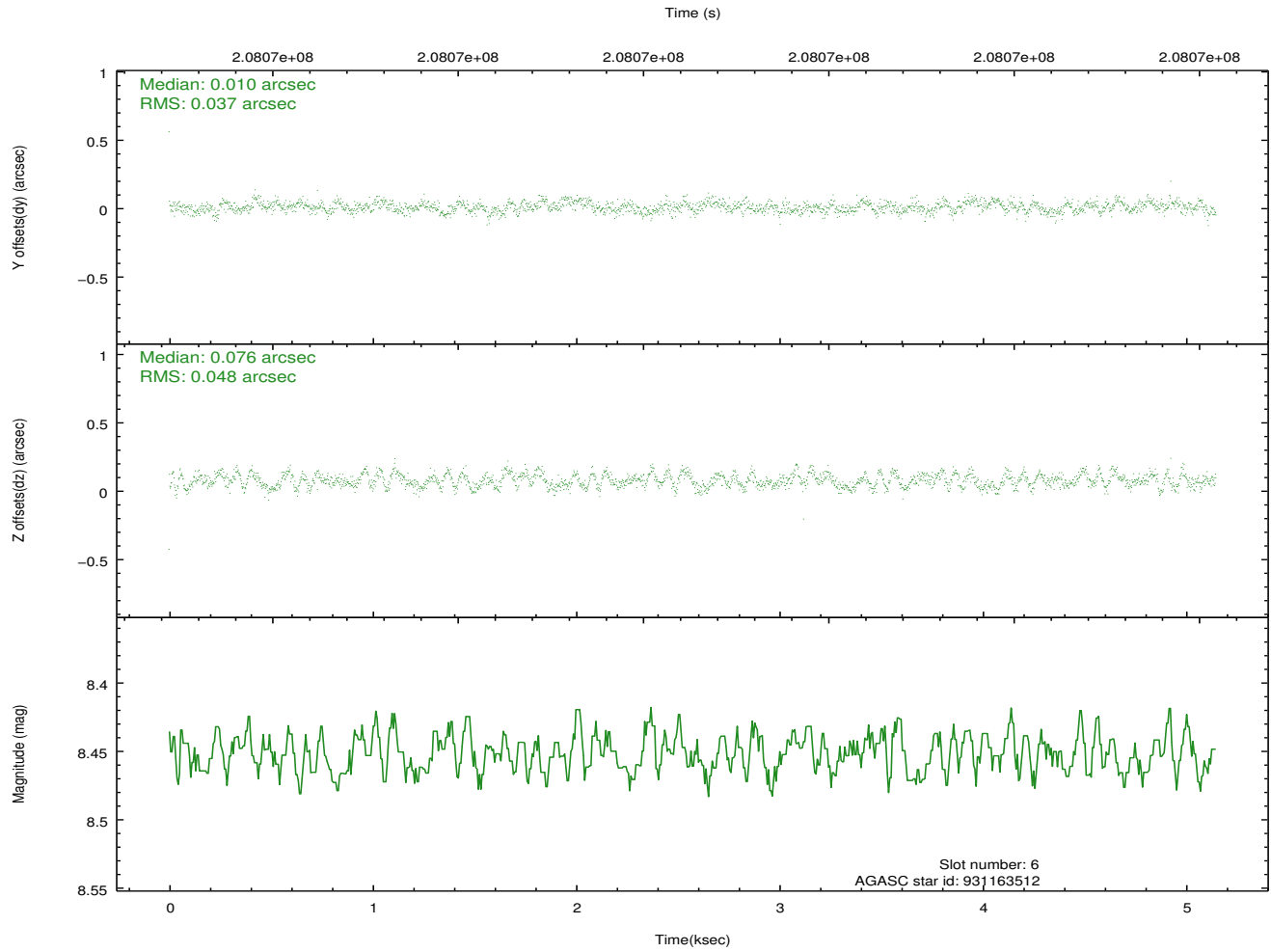
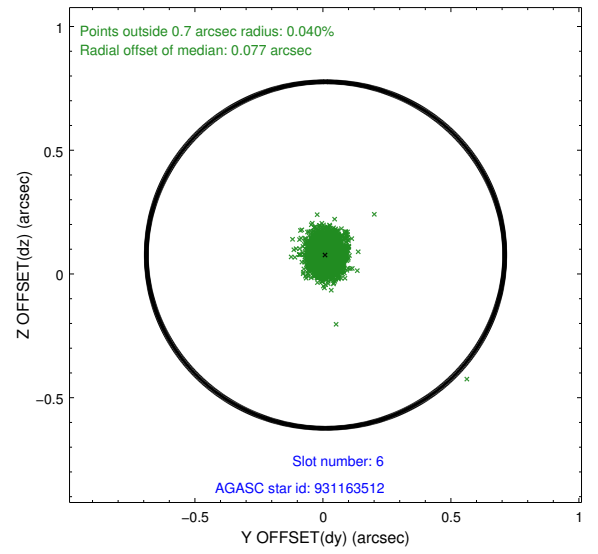
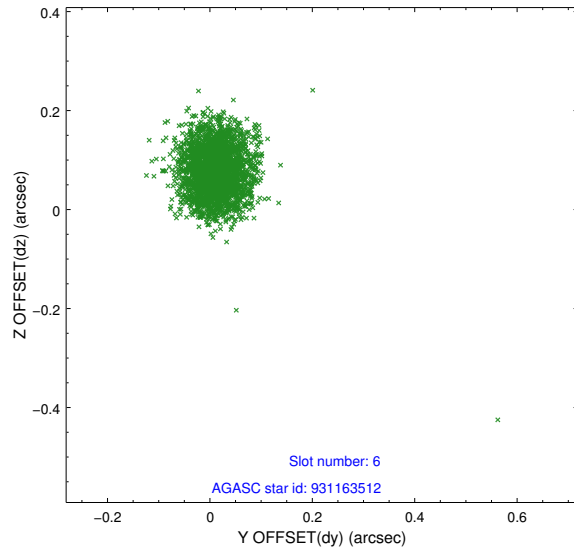
## 2.4.2 Slot 4



### 2.4.3 Slot 5

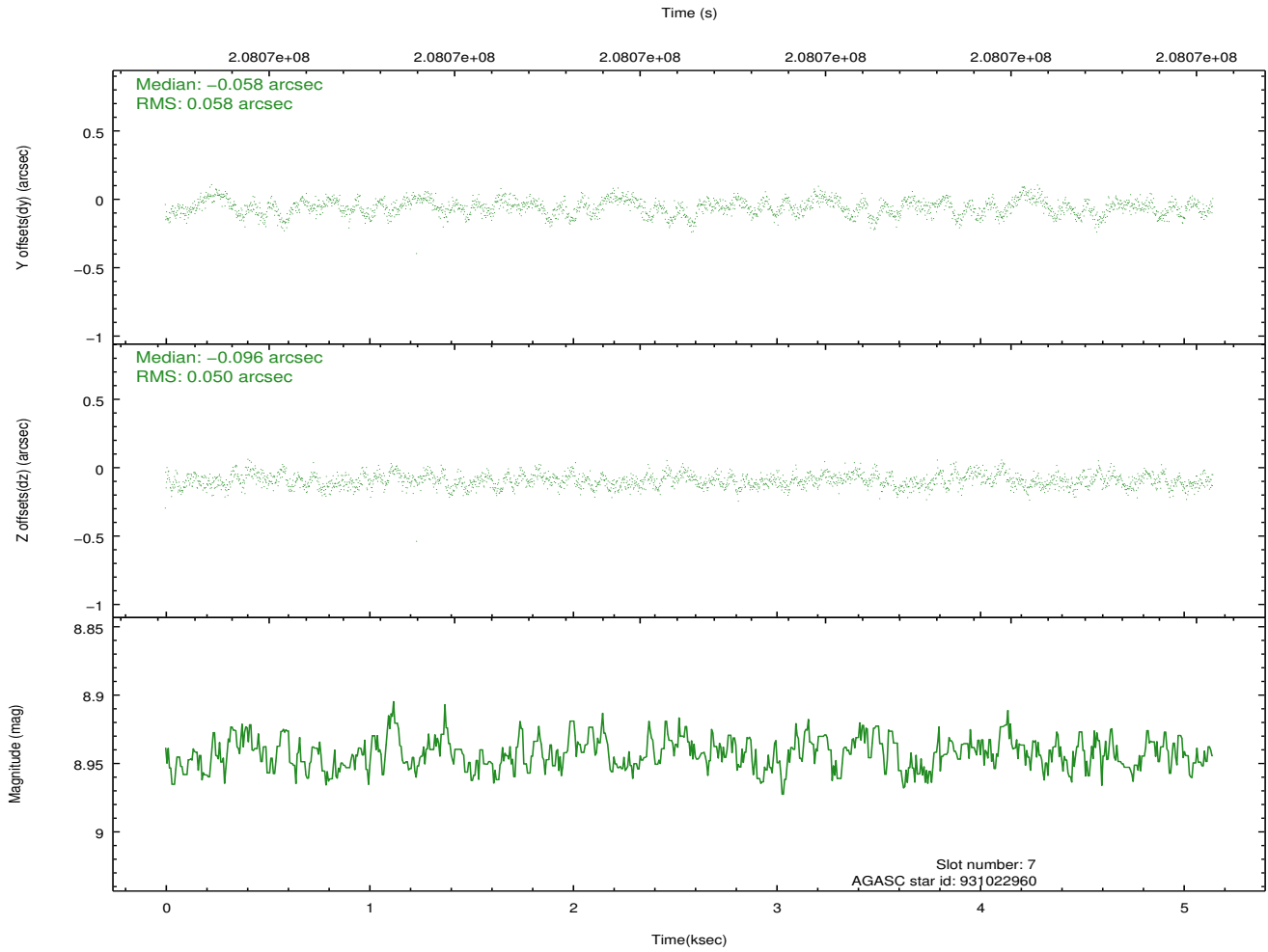
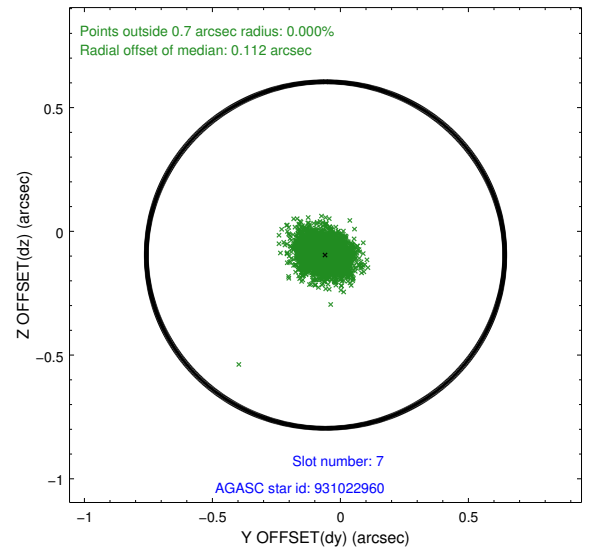
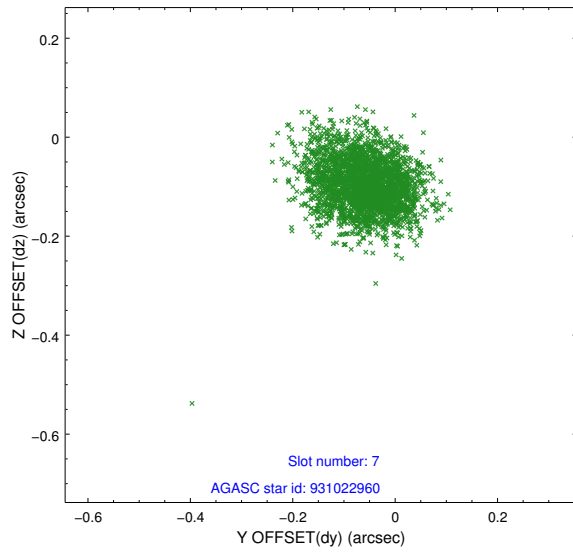


## 2.4.4 Slot 6



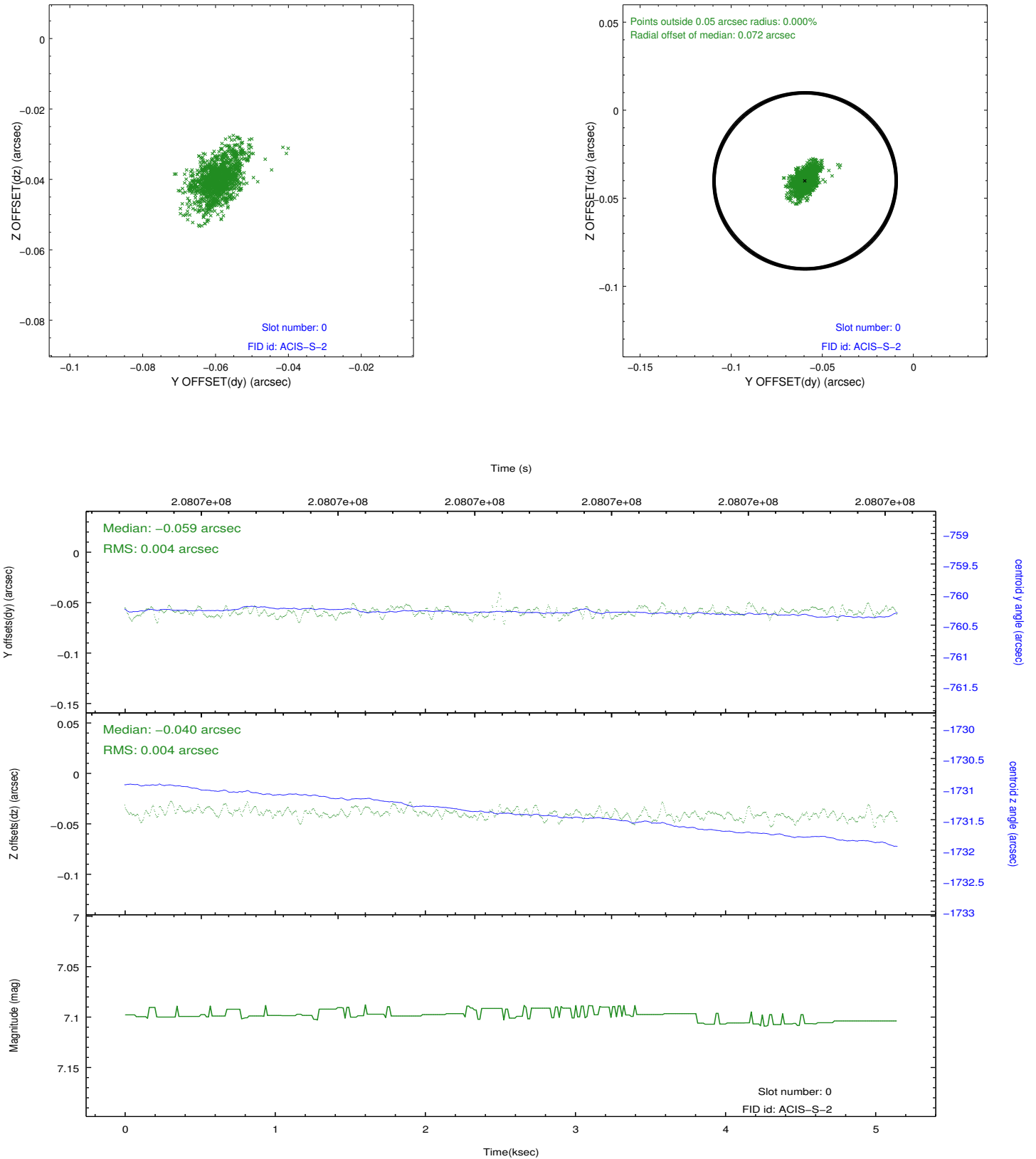


## 2.4.5 Slot 7

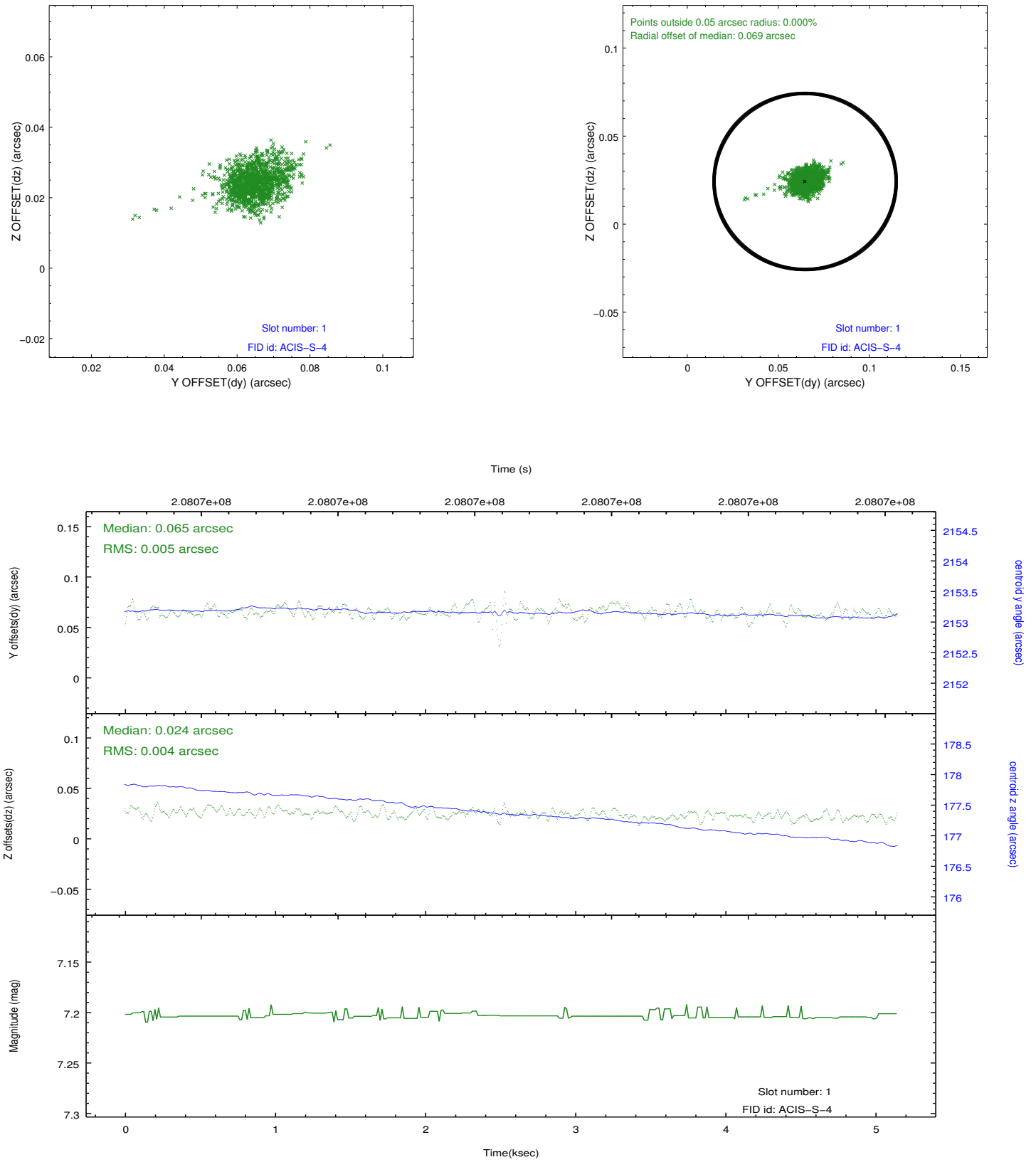


## 2.5 FID Slots

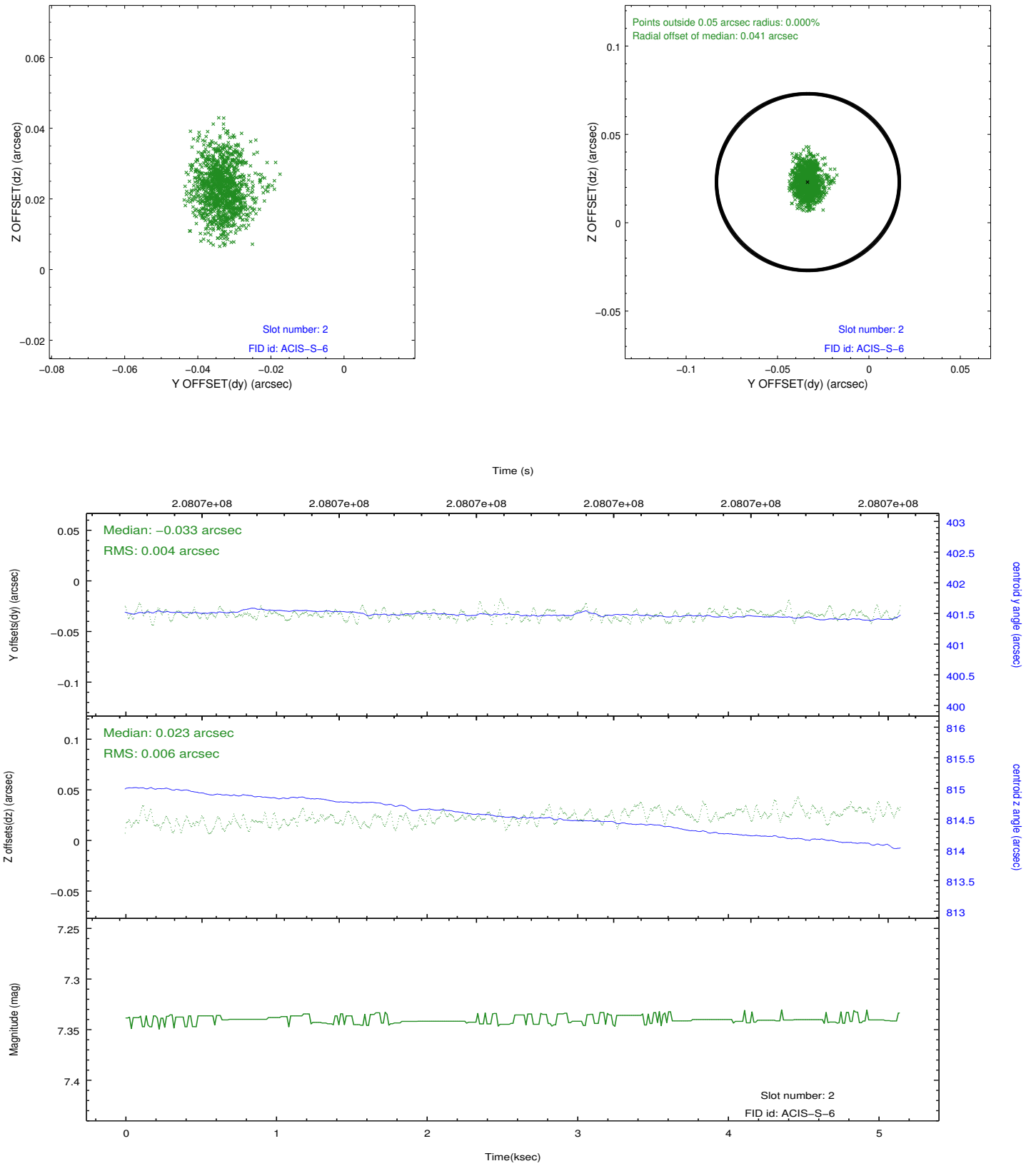
### 2.5.1 Slot 0



## 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)	2012.12.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.146

### A.2 Comments