

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 13146 - L2 Version 2  
Chandra X-Ray Center

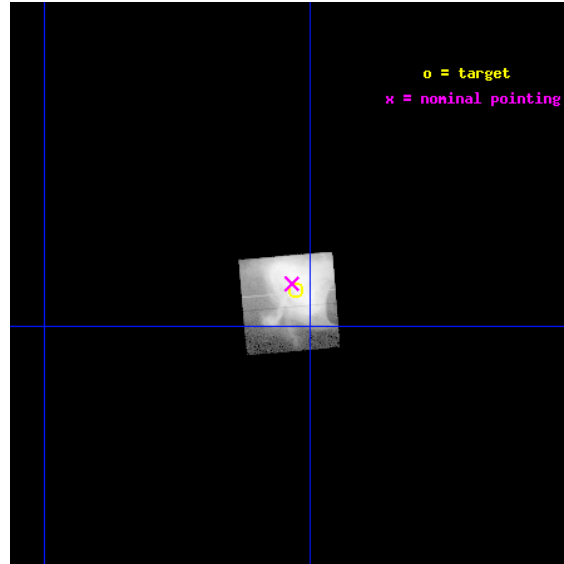
L2 Processing Date : Jul 5 2012

## 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	Parameters . . . . .	4
2.1.3	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

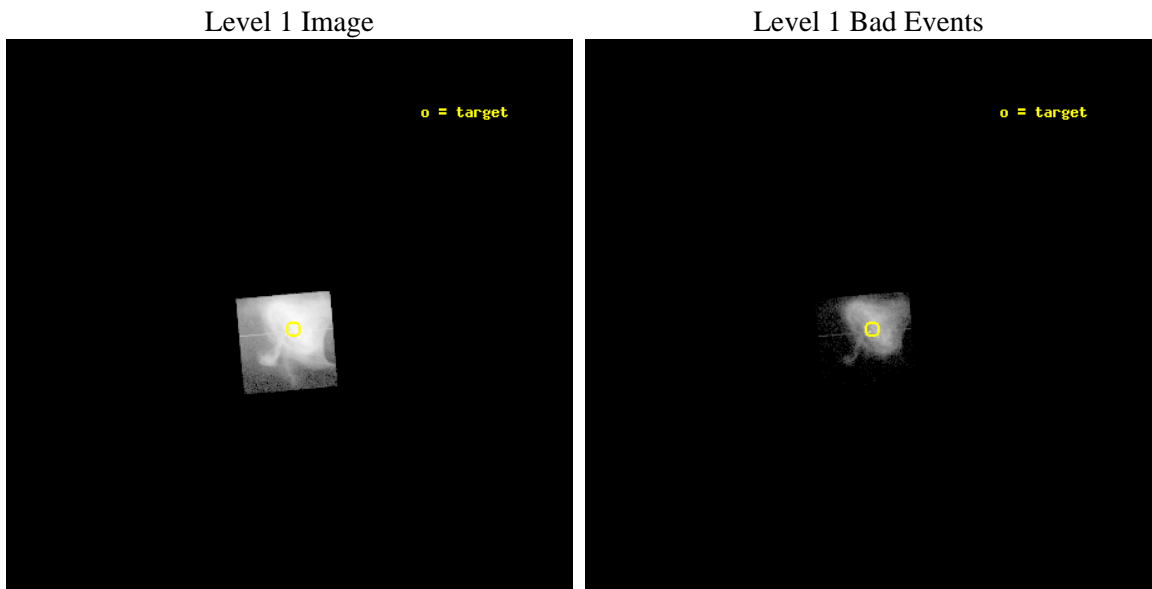
seq_num	501532	Sequence number
obs_id	13146	Observation id
title	CHANDRA imaging of the cooling front after a high energy flare	Pro
observer	Dr carlo ferrigno	Principal investigator
object	Crab	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.631667	Observer's specified target RA [deg]
dec_targ	22.015667	Observer's specified target Dec [deg]
ra_nom	83.63361888548	Nominal RA [deg]
dec_nom	22.018317173886	Nominal Dec [deg]
roll_nom	85.156017189489	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3547.2589194775	Sum of GTIs [s]
livetime	620.43217537297	Livetime [s]
ontime7	3547.2589194775	Sum of GTIs [s]
l2events	1695806	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3547.2589194775	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime7	3547.2589194775	Sum of GTIs [s]
date	2012-07-05T21:31:26	Date and time of file creation	l1events	1882594	Number of level 1 events
revision	2	Processing version of data			

### 2.1.3 Events

	<b>ccd 7</b>
level 1 events	1882594
rejected events	174014
rejected %	9%

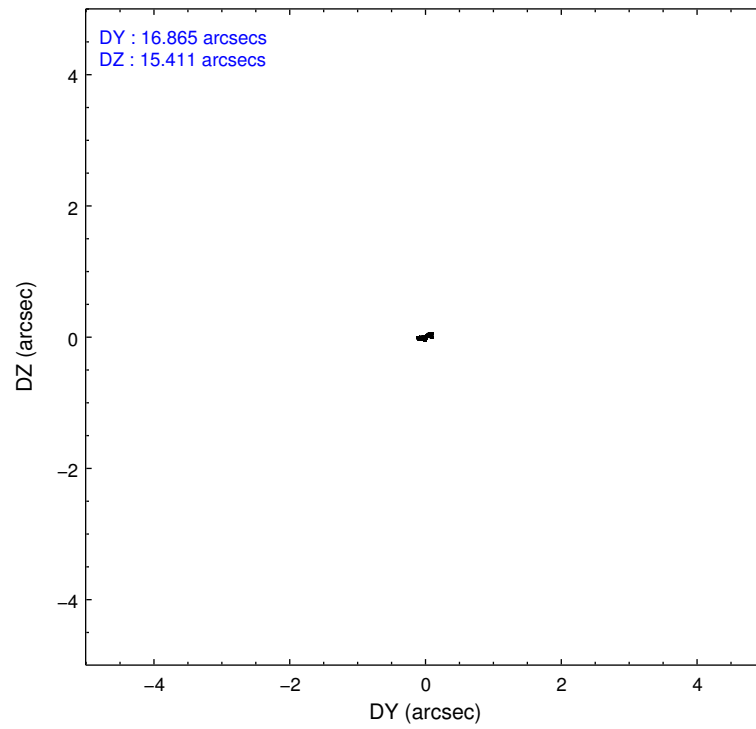
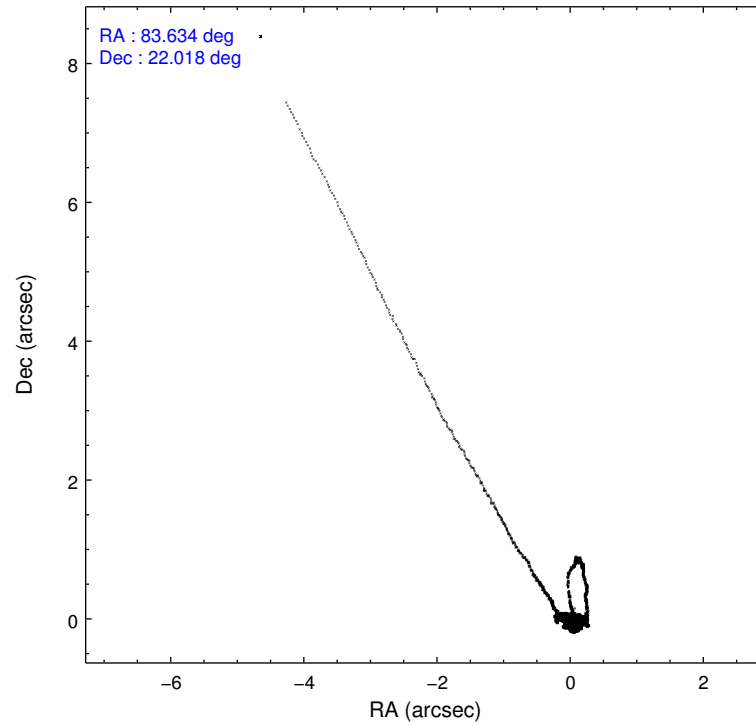
	<b>ccd 7</b>
grade 0 events	341302
	18%
grade 1 events	20015
	1%
grade 2 events	454306
	24%
grade 3 events	192117
	10%
grade 4 events	189534
	10%
grade 5 events	61680
	3%
grade 6 events	531862
	28%
grade 7 events	91778
	4%

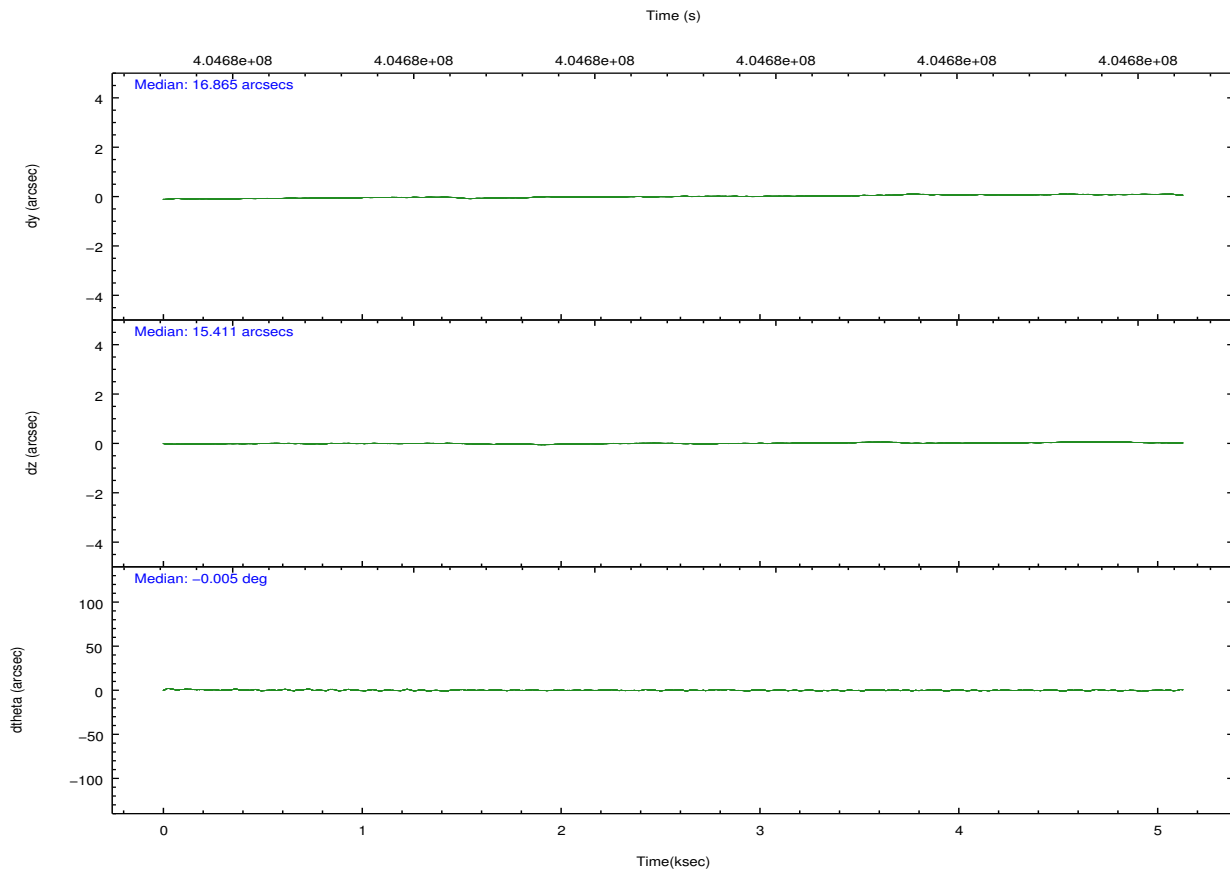
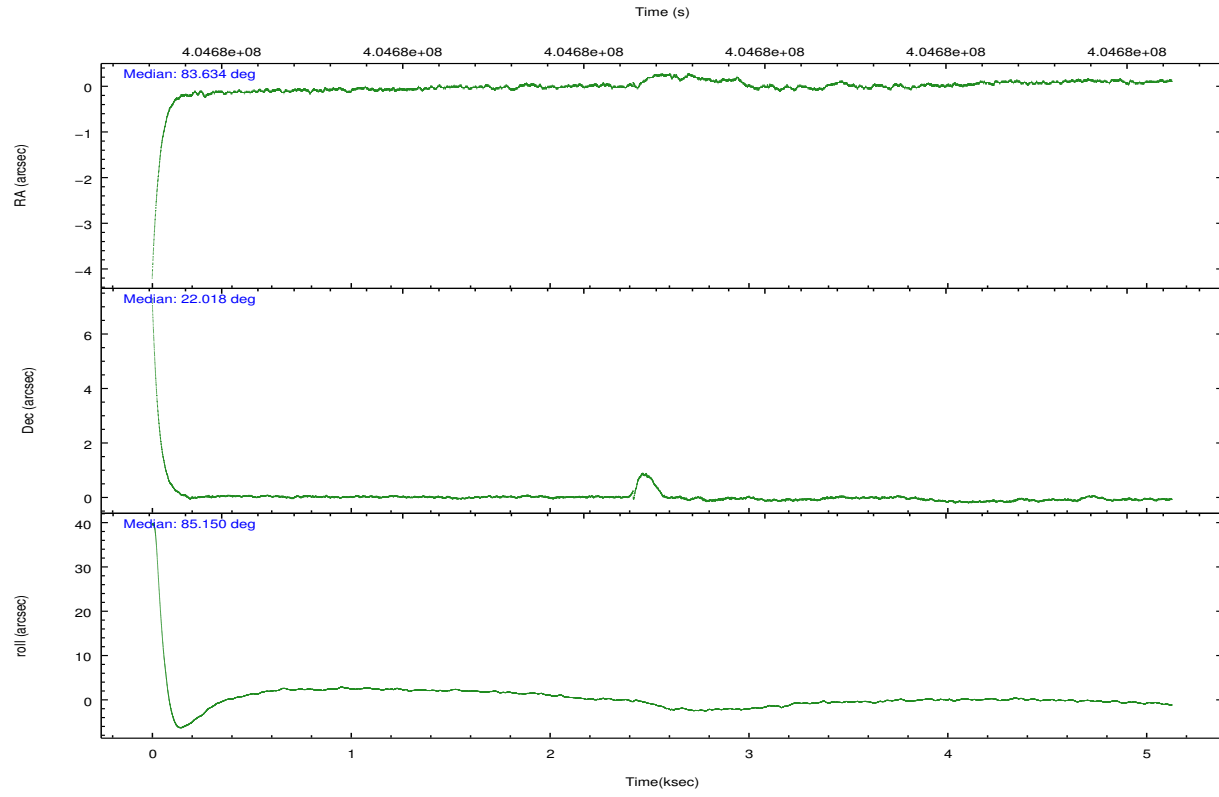


## 2.2 Compared Parameters

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	GRADED	GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	83.646557	83.63361888547965	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	21.993718	22.01831717388615	Subarray start row	29	29
[deg] Pointing Roll	84.994419	85.15601718948919	Subarray row count	300	300
[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	0.2
[mm] SIM translation stage pos	-182.132523	-182.1370004450064			
[mm] SIM translation stage offset	-8	-7.995522138001405			
[s] Observation start time (MET)	404675998.184000	404674800.87383			
Observation start date	2010-10-28T17:58:52	2010-10-28T17:40:00			
[s] Observation end time (MET)	404680998.184000	404682103.99921			
Observation end date	2010-10-28T19:22:12	2010-10-28T19:41:43			
Read mode	TIMED	TIMED			

## 2.3 Aspect



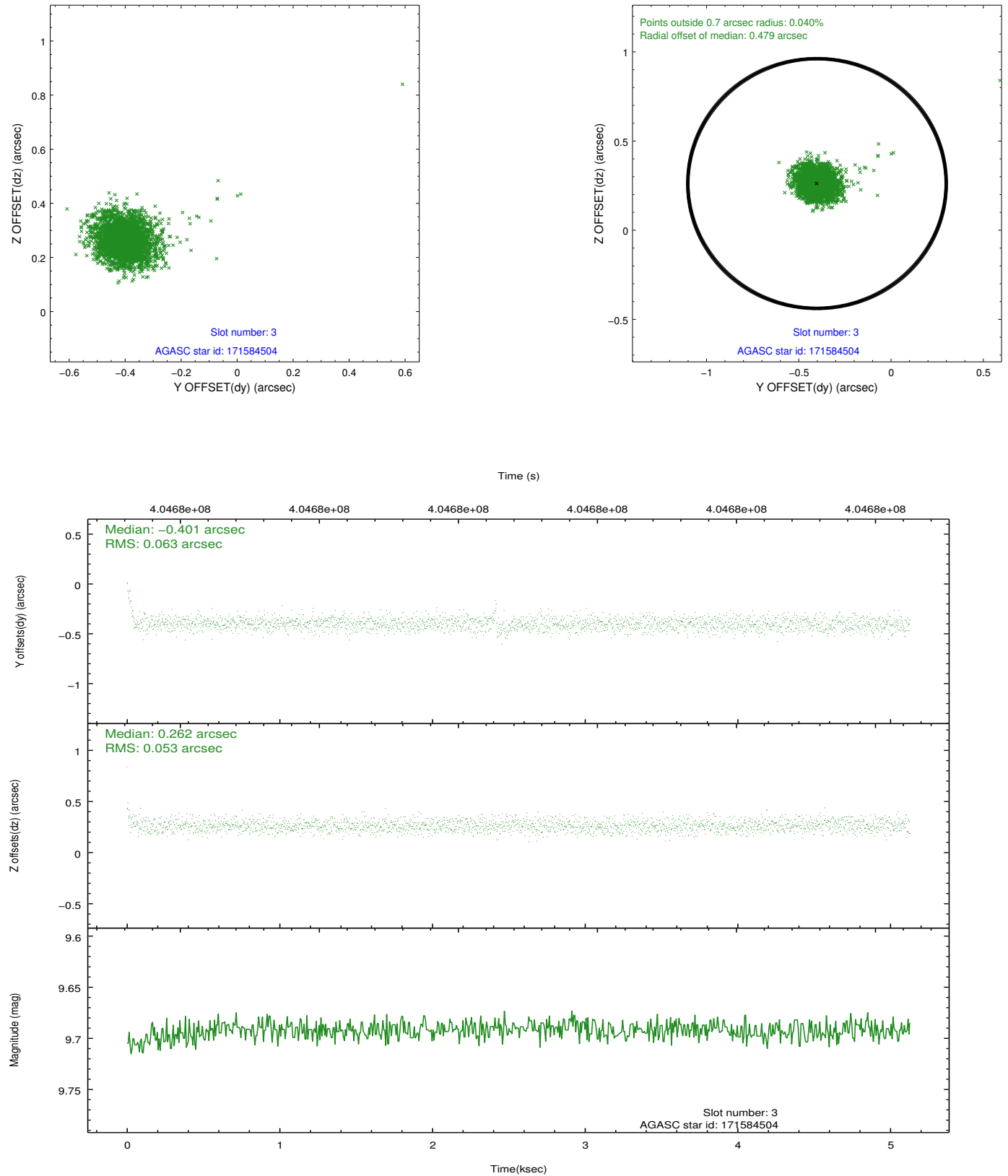


### Slot Statistics

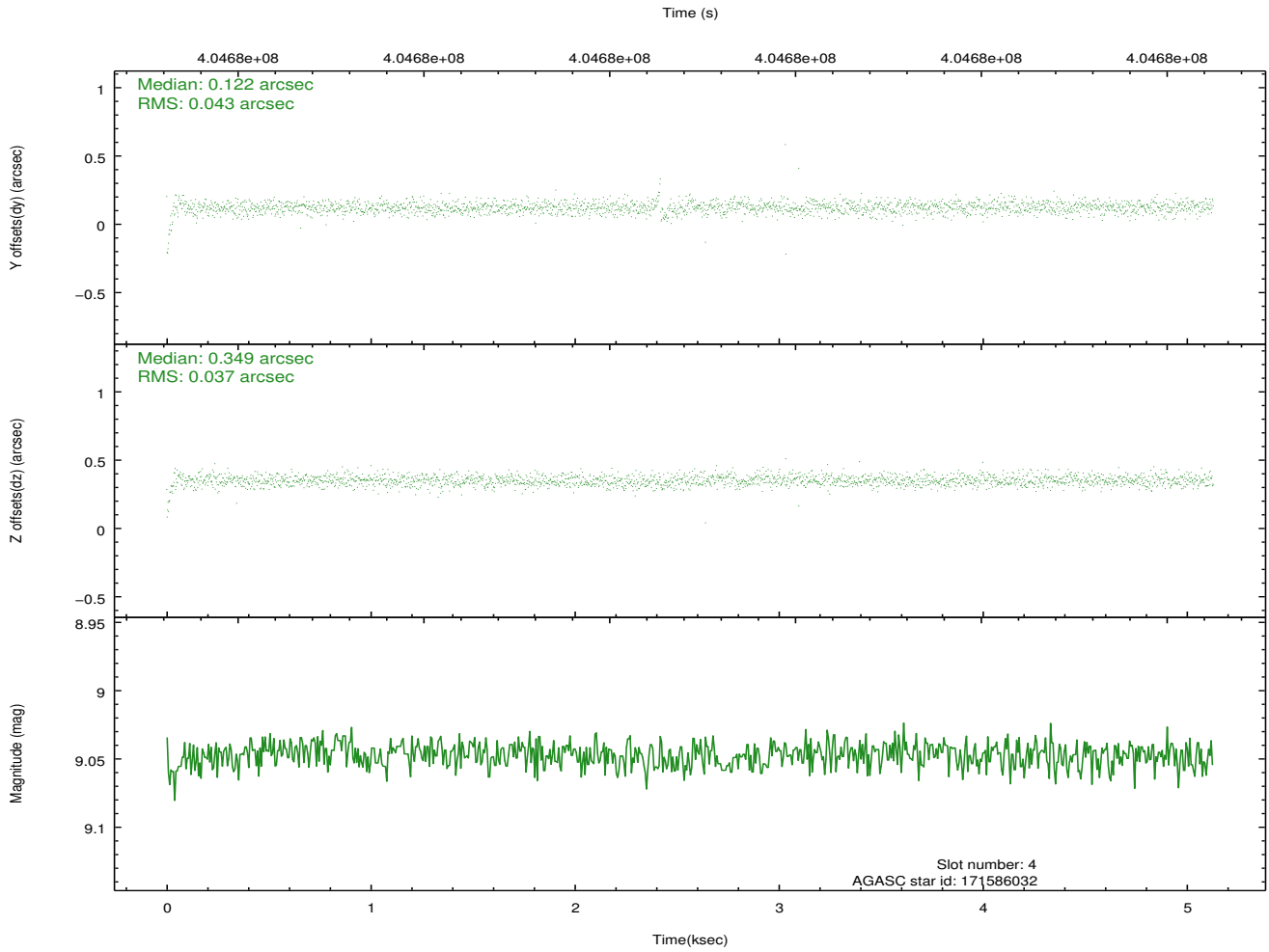
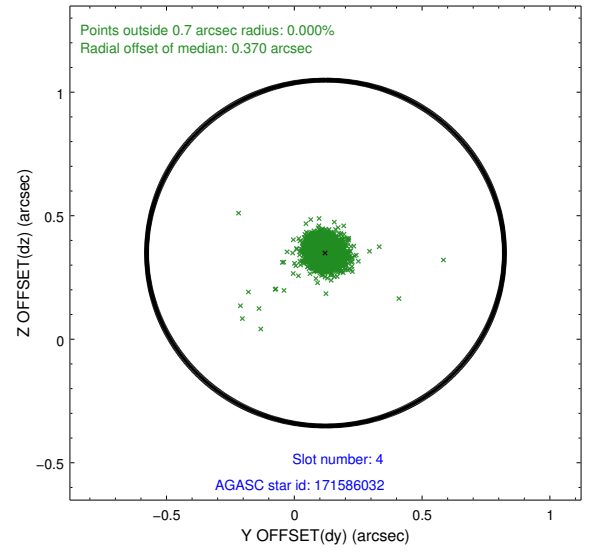
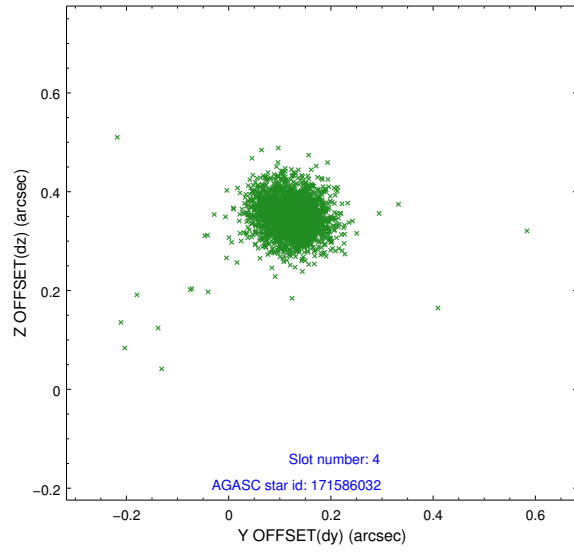
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.01	1251	0.083	0.150	0.006	0.010	0.000000	0.000000	926.80	-1897.00
1	FID	ACIS-S-2	6.91	1251	-0.172	-0.100	0.006	0.009	0.000000	0.000000	-768.70	-1903.15
2	FID	ACIS-S-6	7.21	1251	0.069	-0.046	0.006	0.010	0.000000	0.000000	391.91	642.77
3	GUIDE	171584504	9.69	2501	-0.401	0.262	0.081	0.134	83.695976	21.812227	-636.47	-221.24
4	GUIDE	171586032	9.05	2503	0.122	0.349	0.054	0.091	83.950197	22.083225	410.69	-980.44
5	GUIDE	171721904	9.16	2499	0.045	-0.395	0.068	0.113	84.272676	22.116922	629.09	-2041.75
6	GUIDE	243941560	8.32	2503	-0.058	0.135	0.042	0.073	83.733264	22.568598	2087.26	-106.80
7	GUIDE	171600224	9.65	2501	0.292	-0.353	0.078	0.130	82.941815	21.636094	-1481.74	2237.07

## 2.4 Star Slots

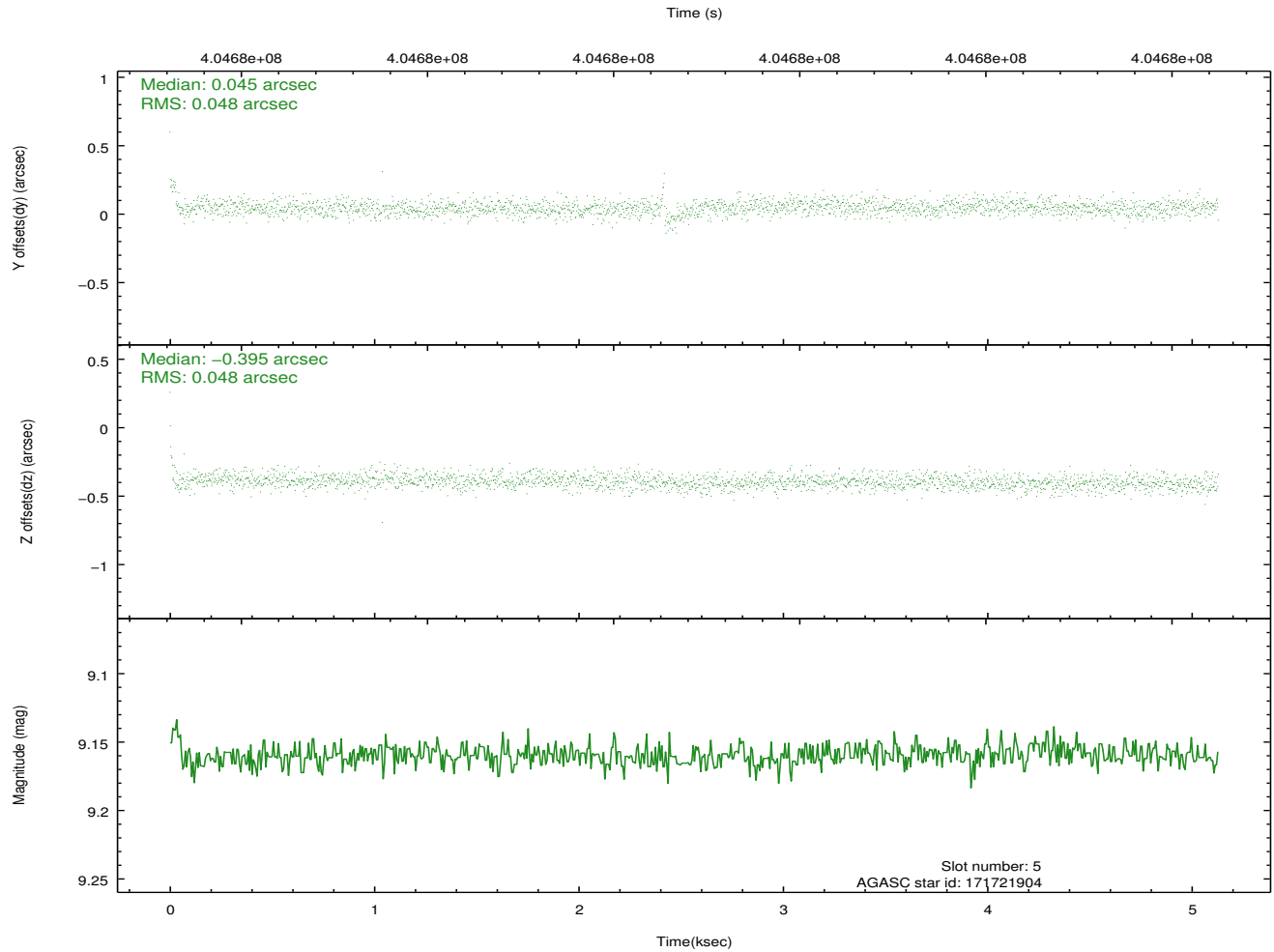
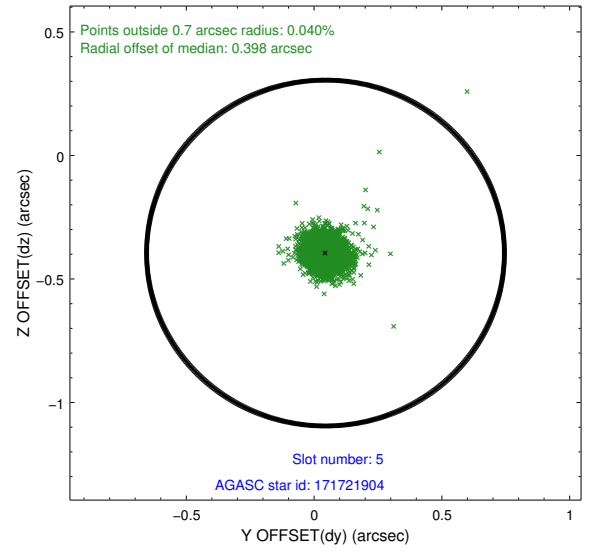
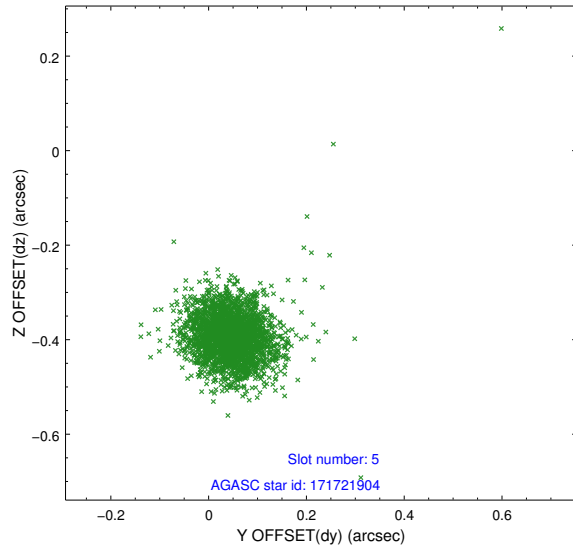
### 2.4.1 Slot 3



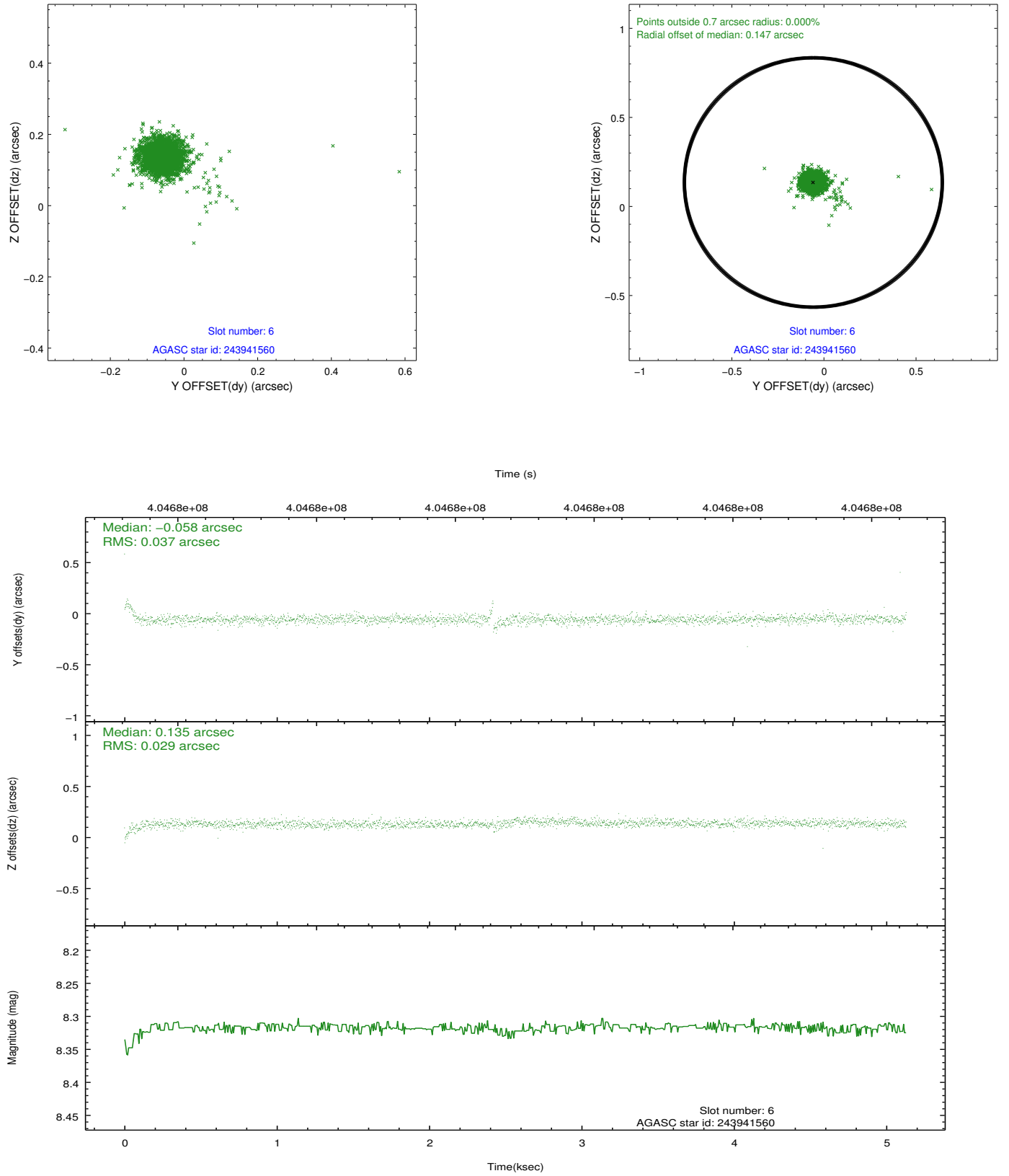
## 2.4.2 Slot 4



### 2.4.3 Slot 5

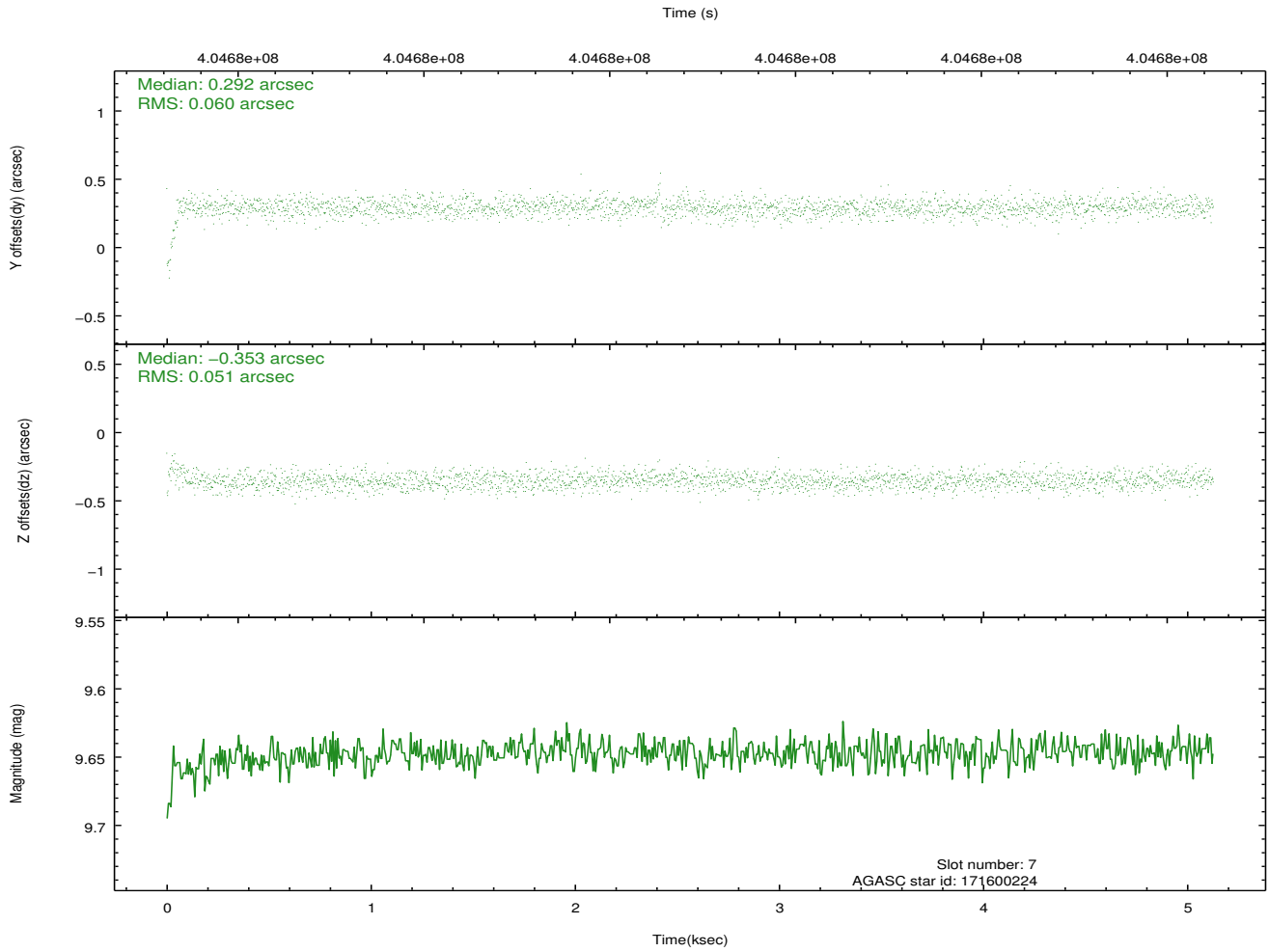
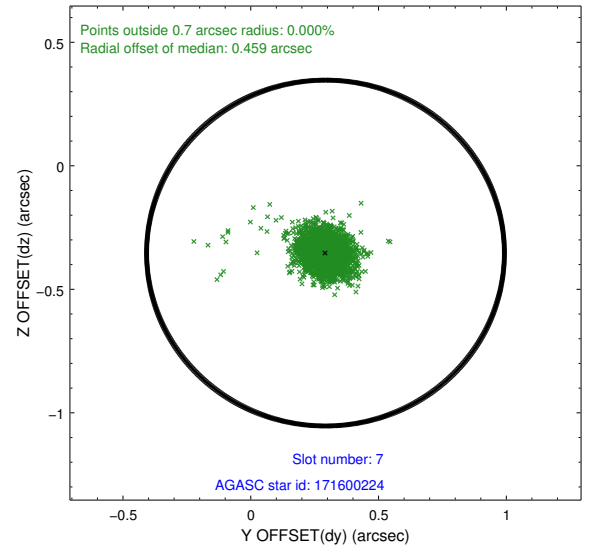
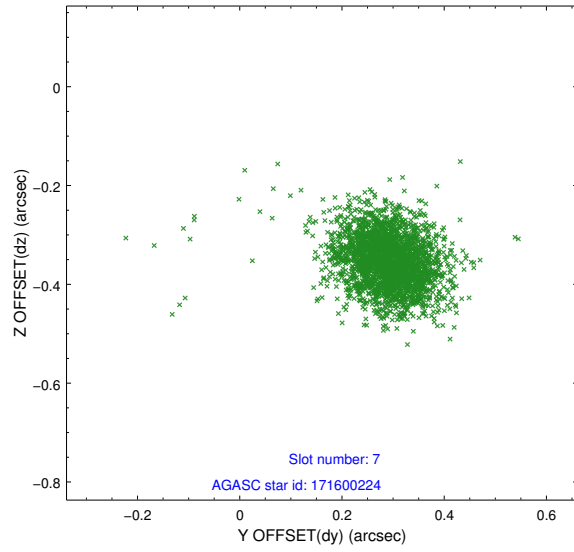


## 2.4.4 Slot 6



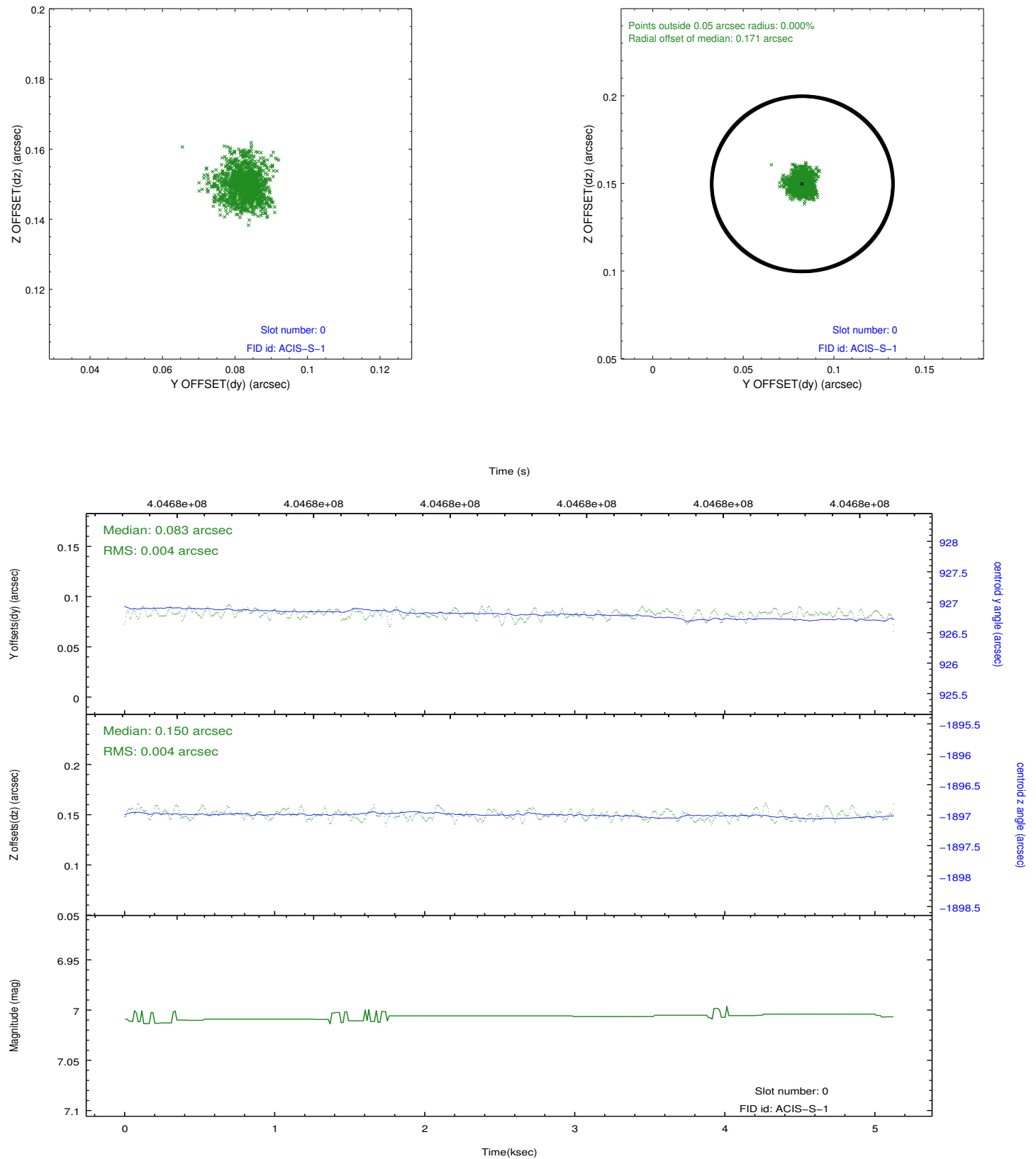


## 2.4.5 Slot 7

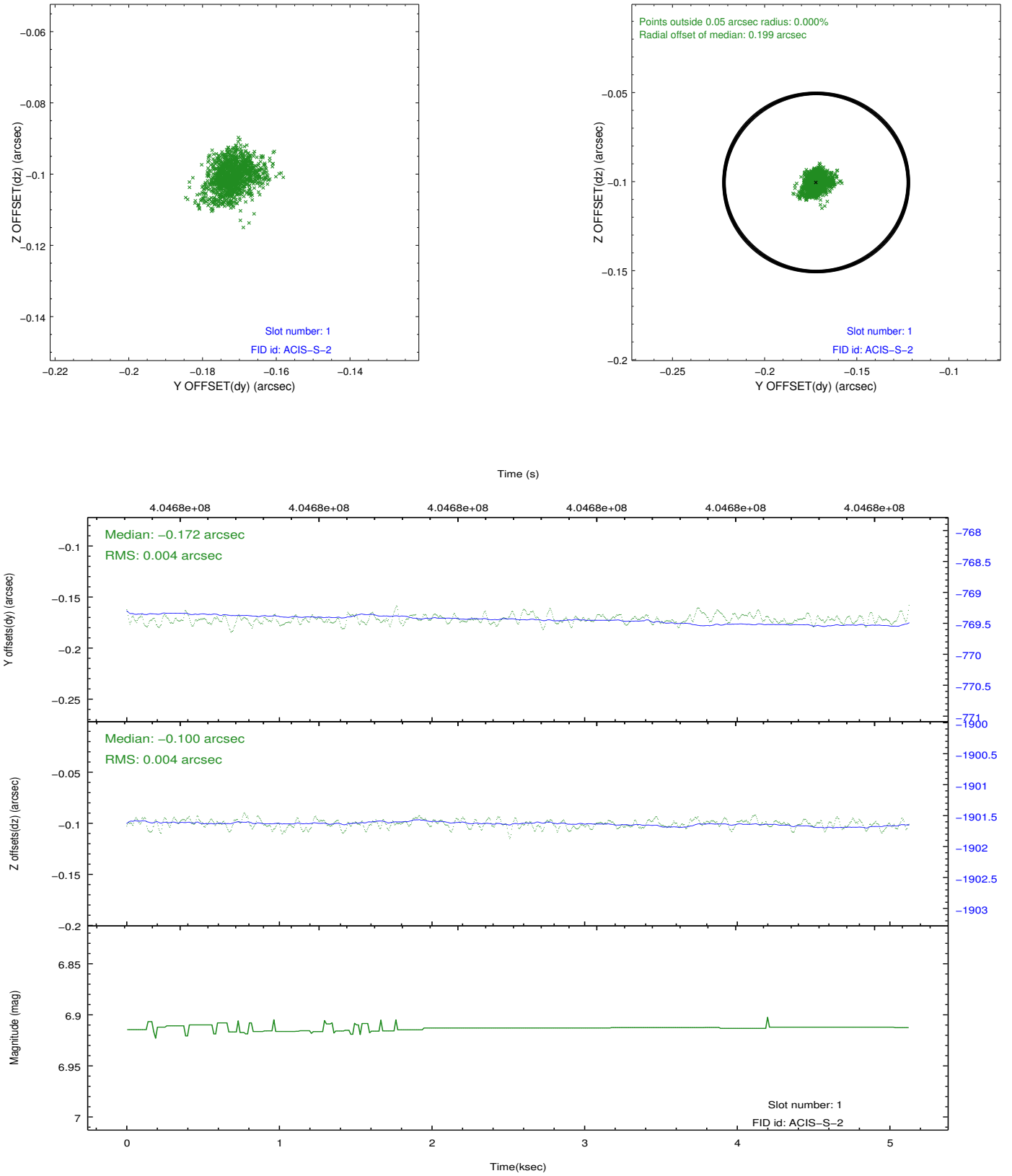


## 2.5 FID Slots

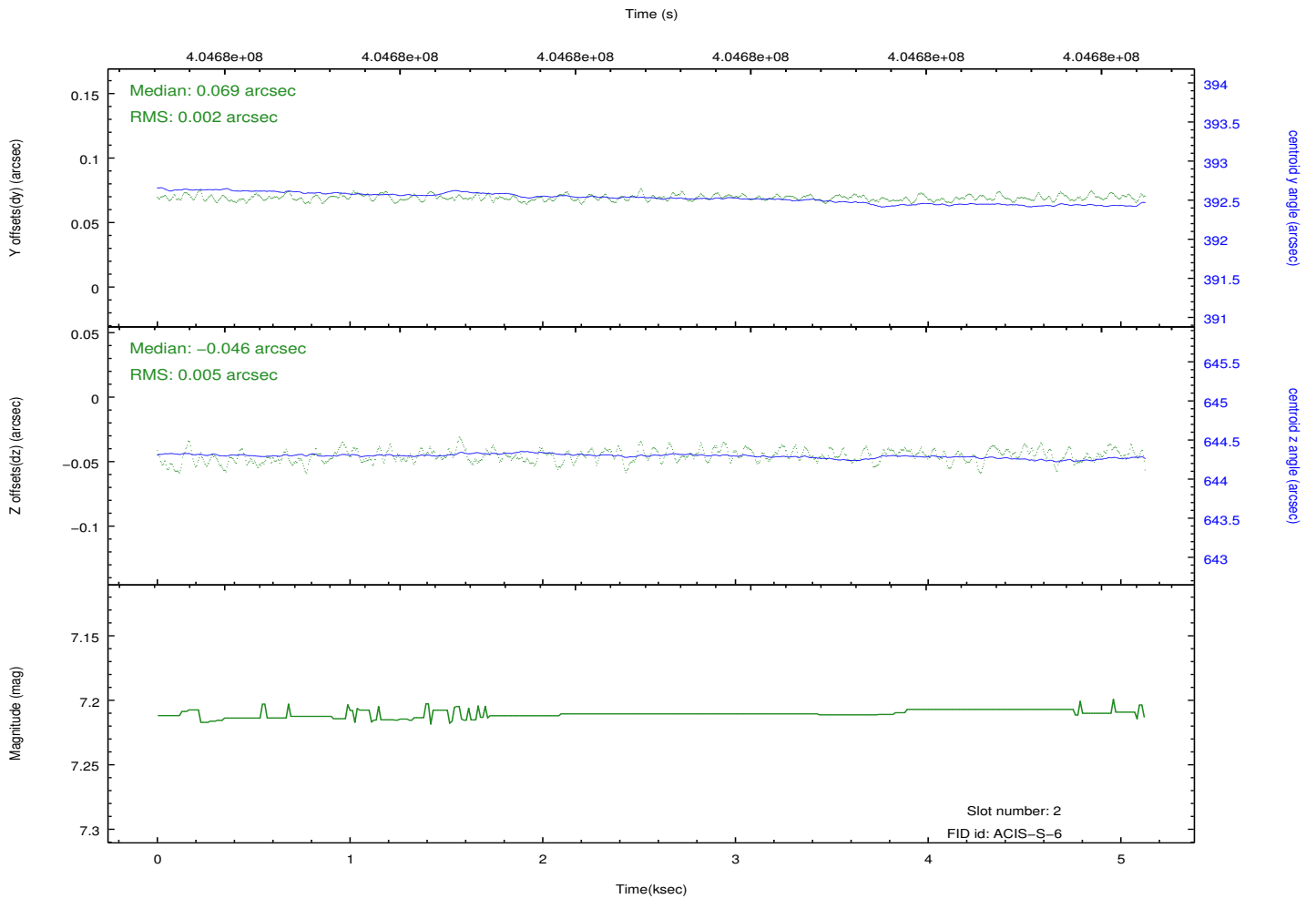
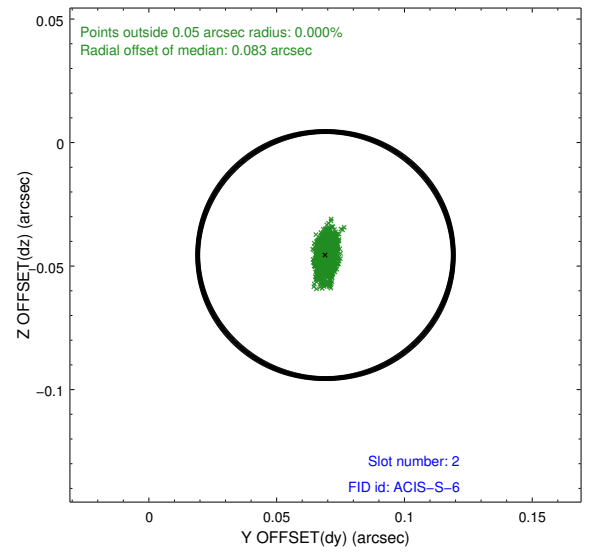
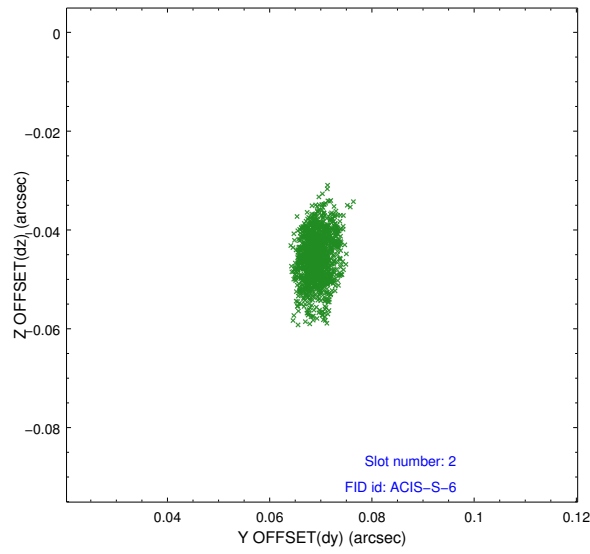
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.07.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5

### A.2 Comments

Charge time is set to the scheduled time for this observation, although the ontime is significantly less due to telemetry saturation.