

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 5301 - L2 Version 3  
Chandra X-Ray Center

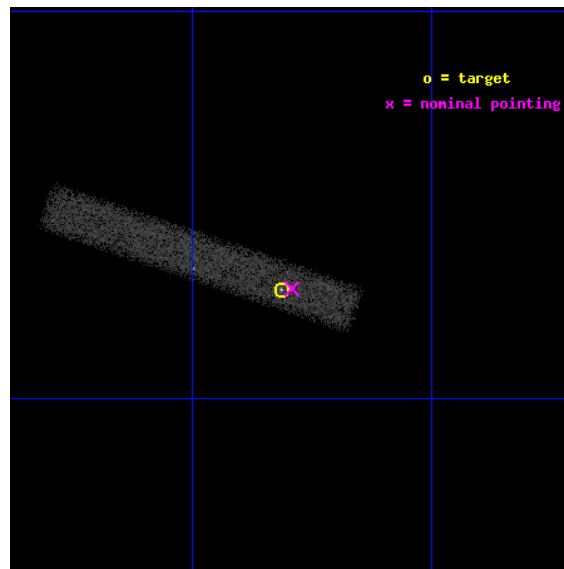
L2 Processing Date : Nov 30 2012

## 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

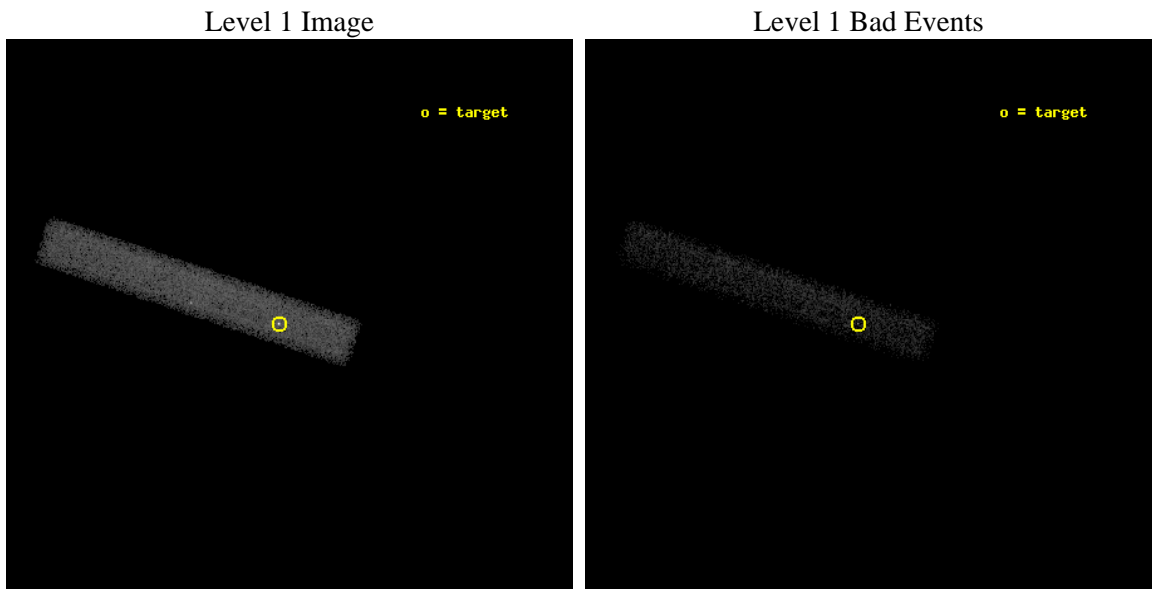
seq_num	701013	Sequence number
obs_id	5301	Observation id
title	Multiwavelength Reverberation Mapping of NGC 4395, the Least Luminous Seyfert 1 Galaxy	Proposal title
observer	Dr. Edward Moran	Principal investigator
object	NGC 4395	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.453333	Observer's specified target RA [deg]
dec_targ	33.546944	Observer's specified target Dec [deg]
ra_nom	186.44810744554	Nominal RA [deg]
dec_nom	33.547259753966	Nominal Dec [deg]
roll_nom	198.39210129271	Nominal Roll [deg]
revision	3	Processing version of data
ontime	29730.400442988	Sum of GTIs [s]
livetime	26963.903902583	Livetime [s]
ontime7	29730.400442988	Sum of GTIs [s]
l2events	20856	Number of level 2 events



## 2 OBI

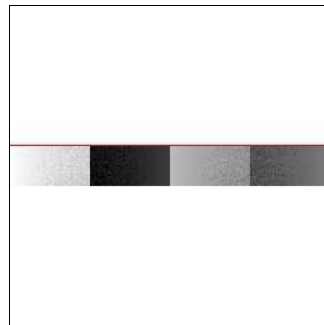
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29570.491000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	29730.400442988	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime7	29730.400442988	Sum of GTIs [s]
date	2012-11-30T16:04:00	Date and time of file creation	l1events	43397	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

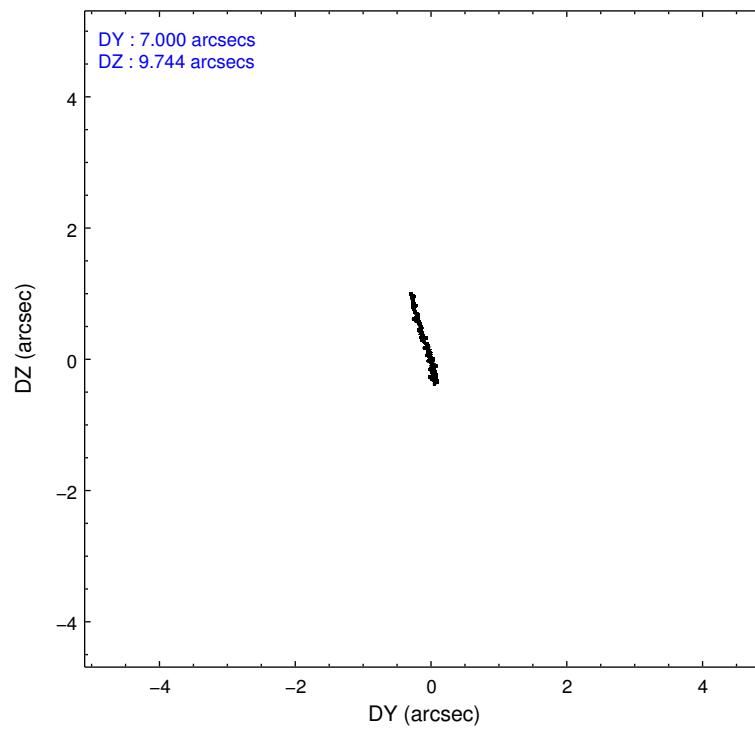
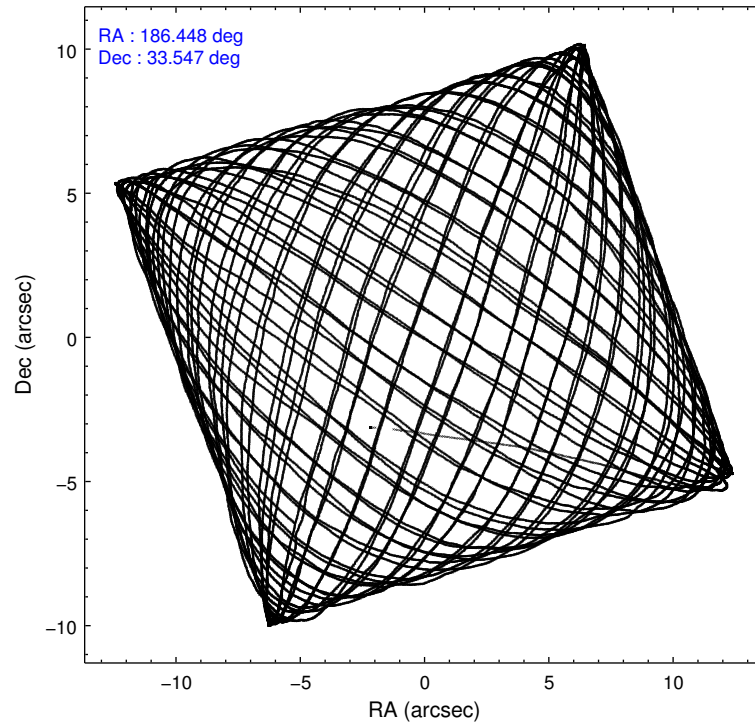
	<b>ccd 7</b>
level 1 events	43397
rejected events	21838
rejected %	50%

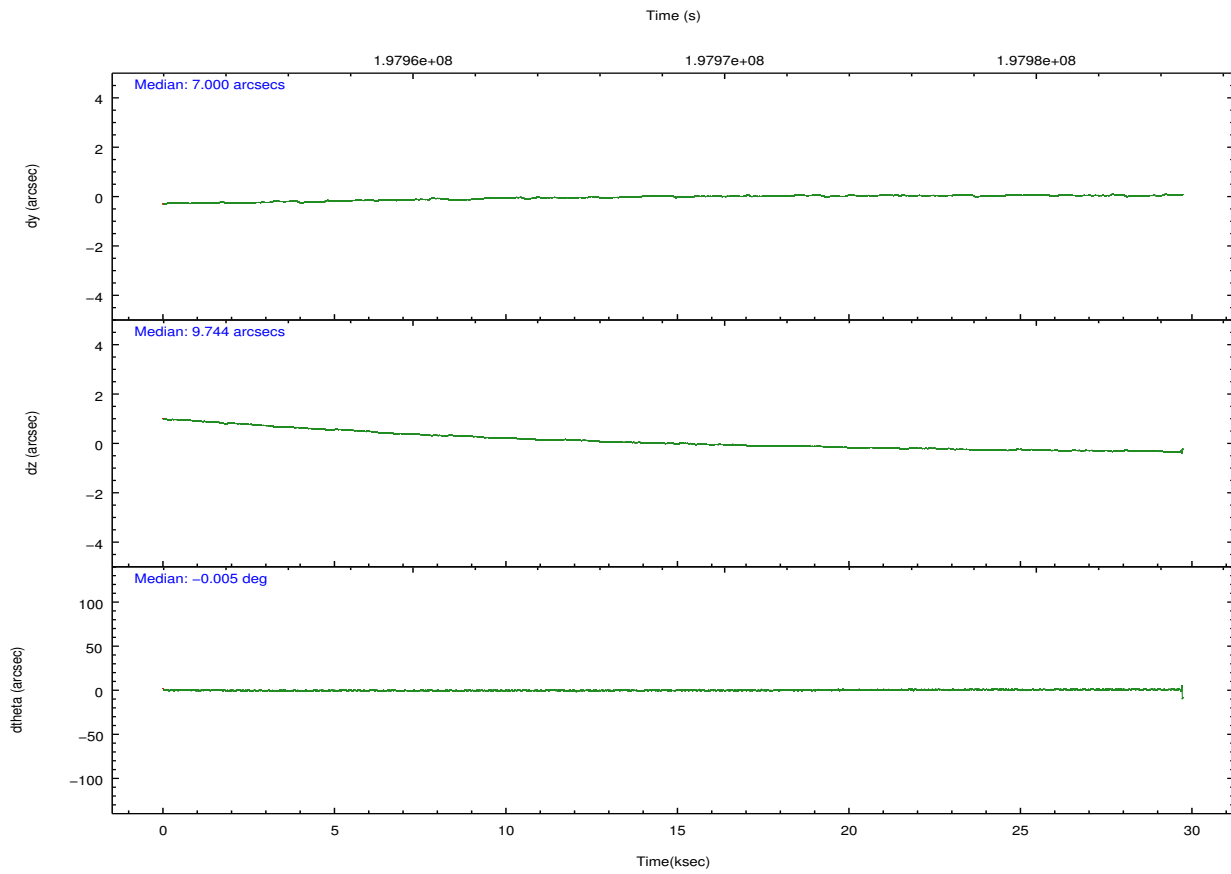
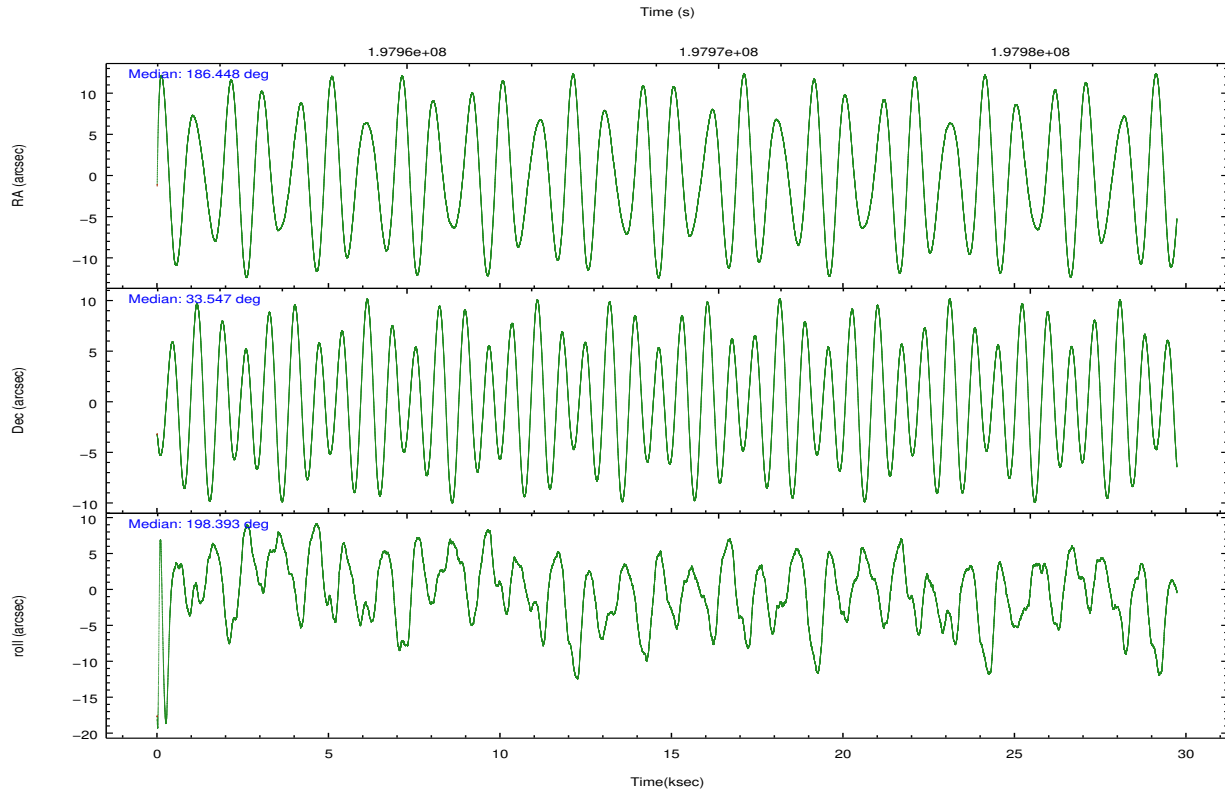
	<b>ccd 7</b>
grade 0 events	2890
	6%
grade 1 events	41
	0%
grade 2 events	4433
	10%
grade 3 events	2893
	6%
grade 4 events	2659
	6%
grade 5 events	3685
	8%
grade 6 events	9444
	21%
grade 7 events	17352
	39%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	186.469494	186.4481074455432	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	33.567871	33.54725975396645	Subarray start row	449	449
[deg] Pointing Roll	198.223663	198.3921012927065	Subarray row count	128	128
[s] Window start time (MET)	197939164.184000	197939164.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	197995684.184000	197995684.184000	[s] Primary exposure time	0.000000	0.4
[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)	197953639.184000	197952169.53899			
Observation start date	2004-04-10T03:06:15	2004-04-10T02:42:49			
[s] Observation end time (MET)	197983210.184000	197984329.42791			
Observation end date	2004-04-10T11:19:06	2004-04-10T11:38:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect





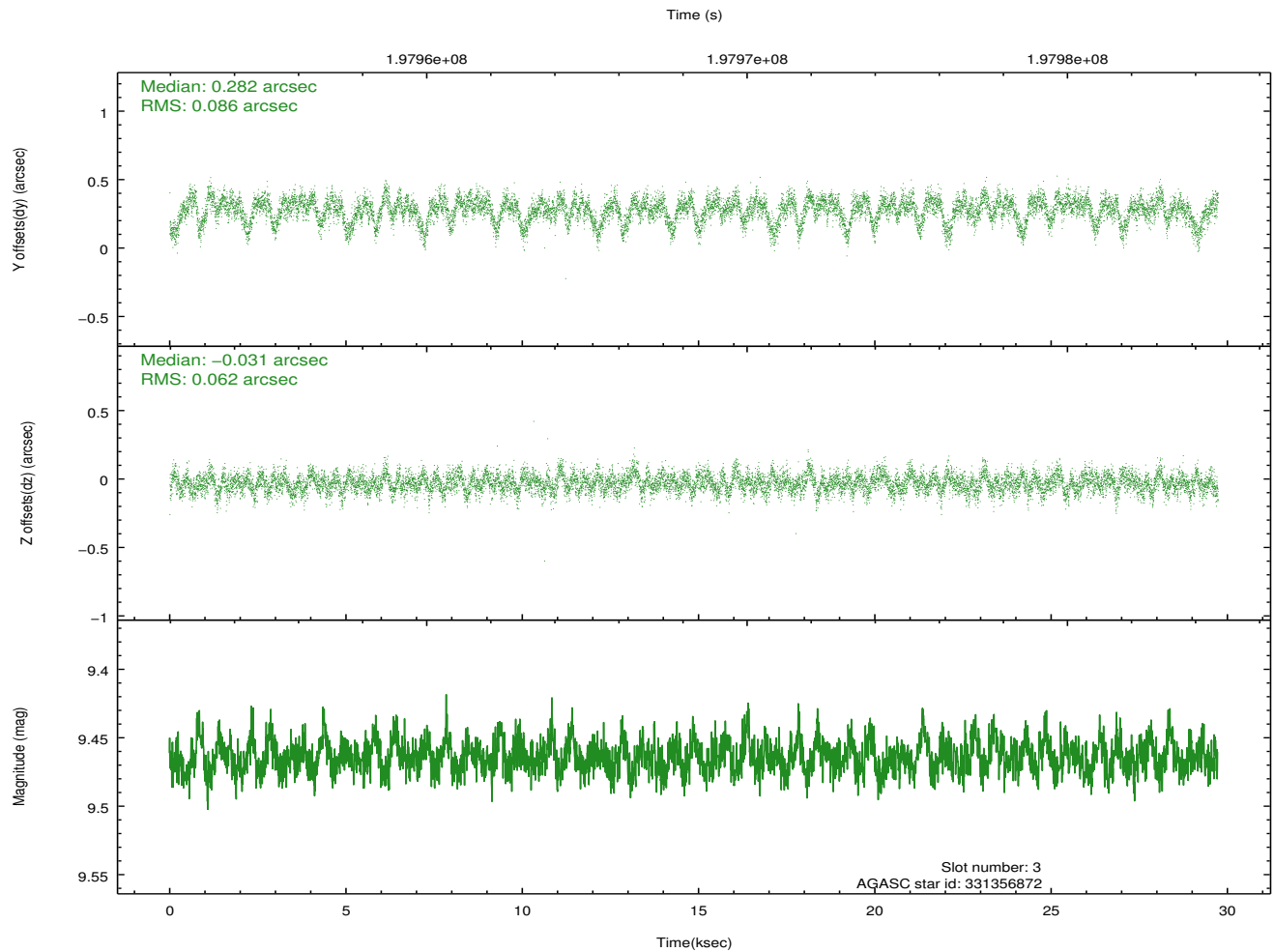
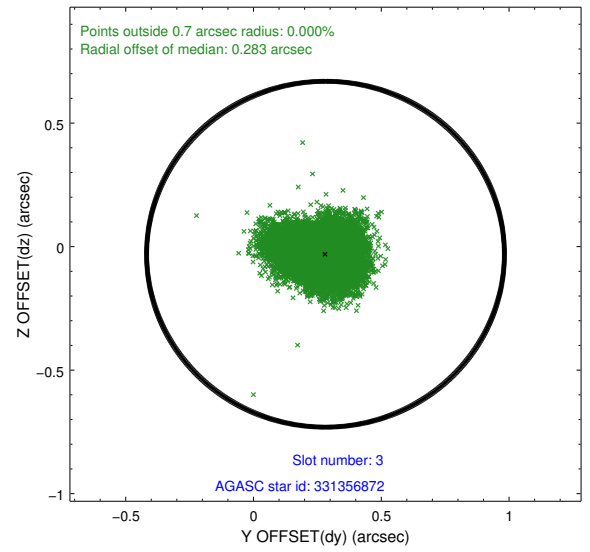
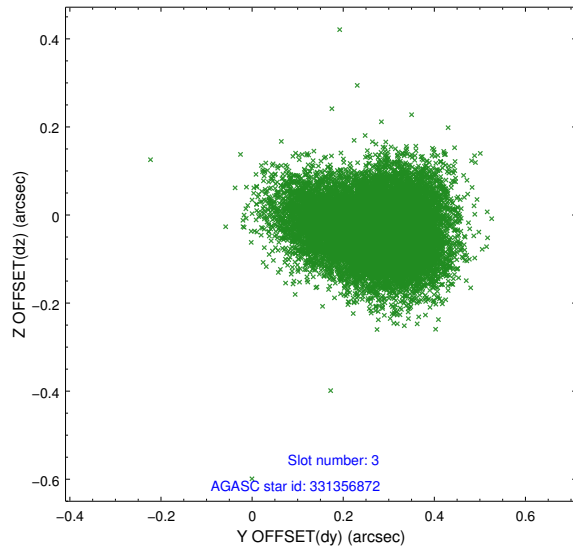
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	7252	0.007	-0.011	0.012	0.047	0.000000	0.000000	936.34	-1726.74
1	FID	ACIS-S-4	7.21	7252	0.043	0.007	0.010	0.041	0.000000	0.000000	2153.82	177.38
2	FID	ACIS-S-5	7.24	7248	-0.079	0.016	0.011	0.019	0.000000	0.000000	-1812.53	171.04
3	GUIDE	331356872	9.46	14489	0.282	-0.031	0.110	0.188	186.232000	33.528992	720.76	-90.66
4	GUIDE	331359472	9.34	14494	0.092	0.095	0.106	0.175	187.224794	33.172746	-1719.33	2055.34
5	GUIDE	331361424	10.42	14490	0.135	0.054	0.184	0.330	187.160339	33.746695	-2167.71	29.03
6	BAD	331361712	10.84	13405	-0.589	-0.024	0.253	0.391	185.925565	32.976353	2225.33	1505.53
7	GUIDE	331359824	9.90	14494	0.053	-0.097	0.130	0.214	185.748520	33.293976	2367.06	251.12

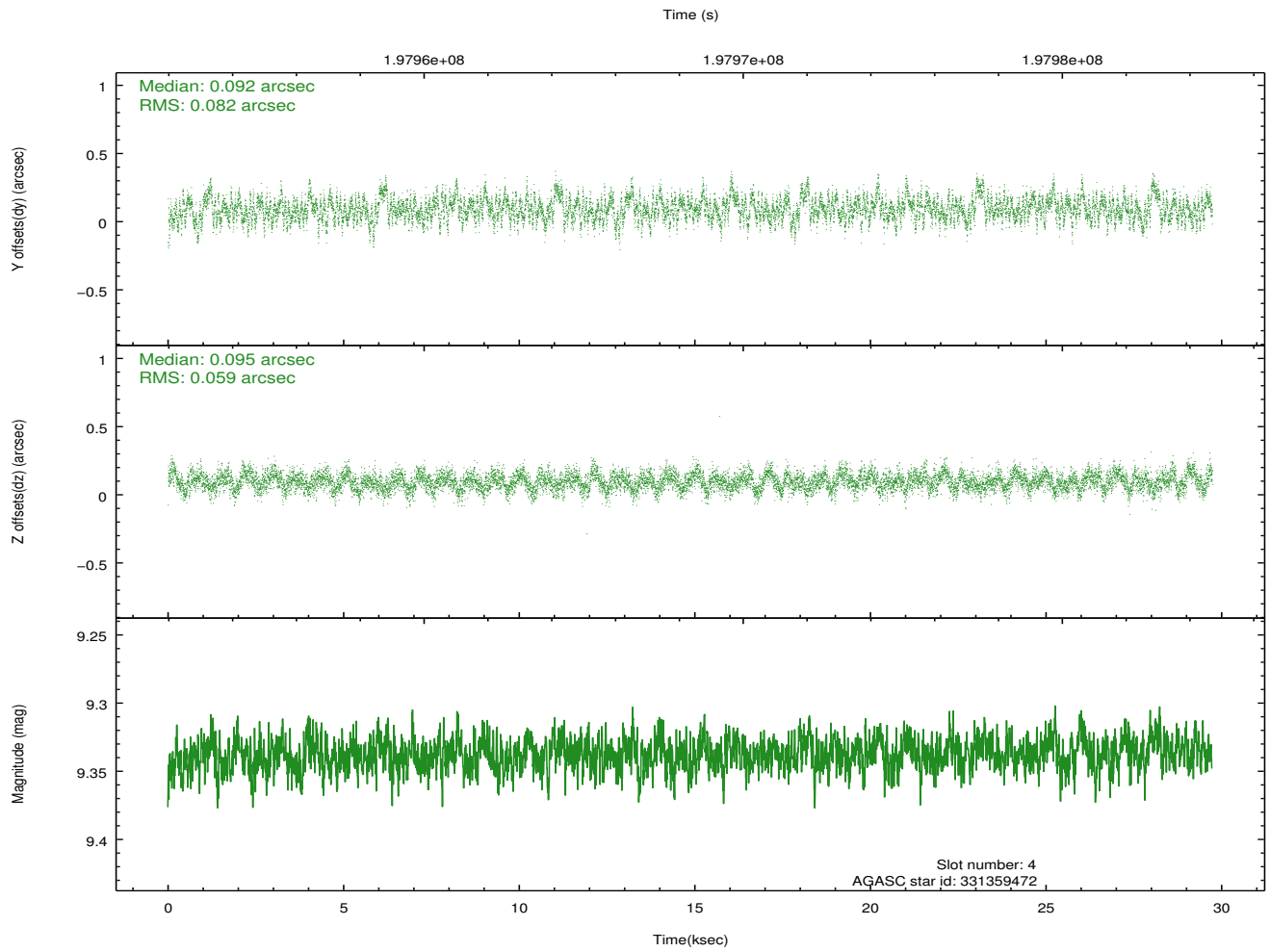
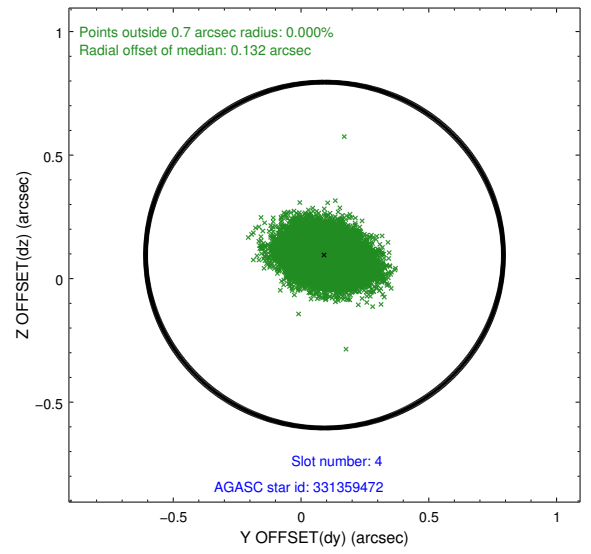
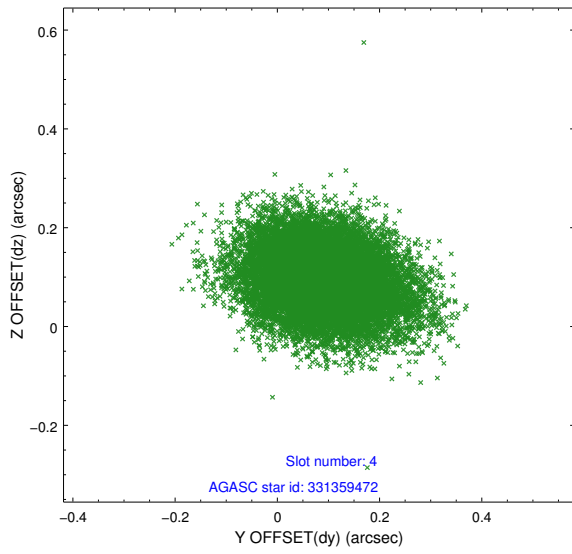
∞

## 2.4 Star Slots

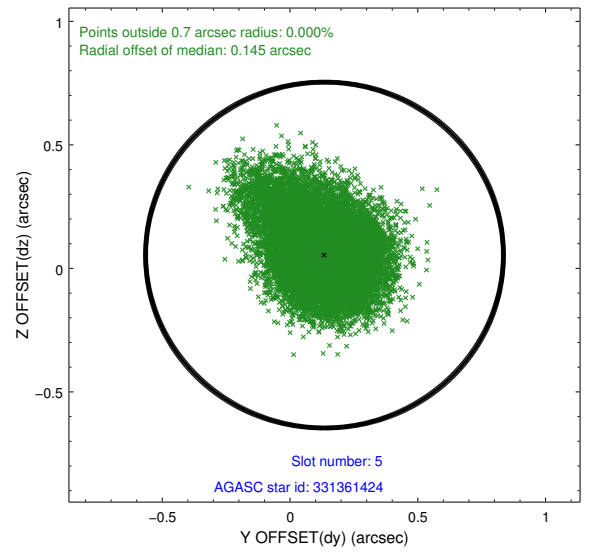
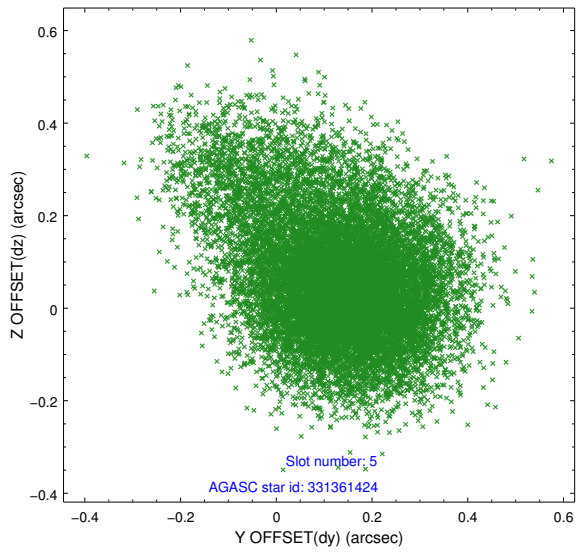
### 2.4.1 Slot 3



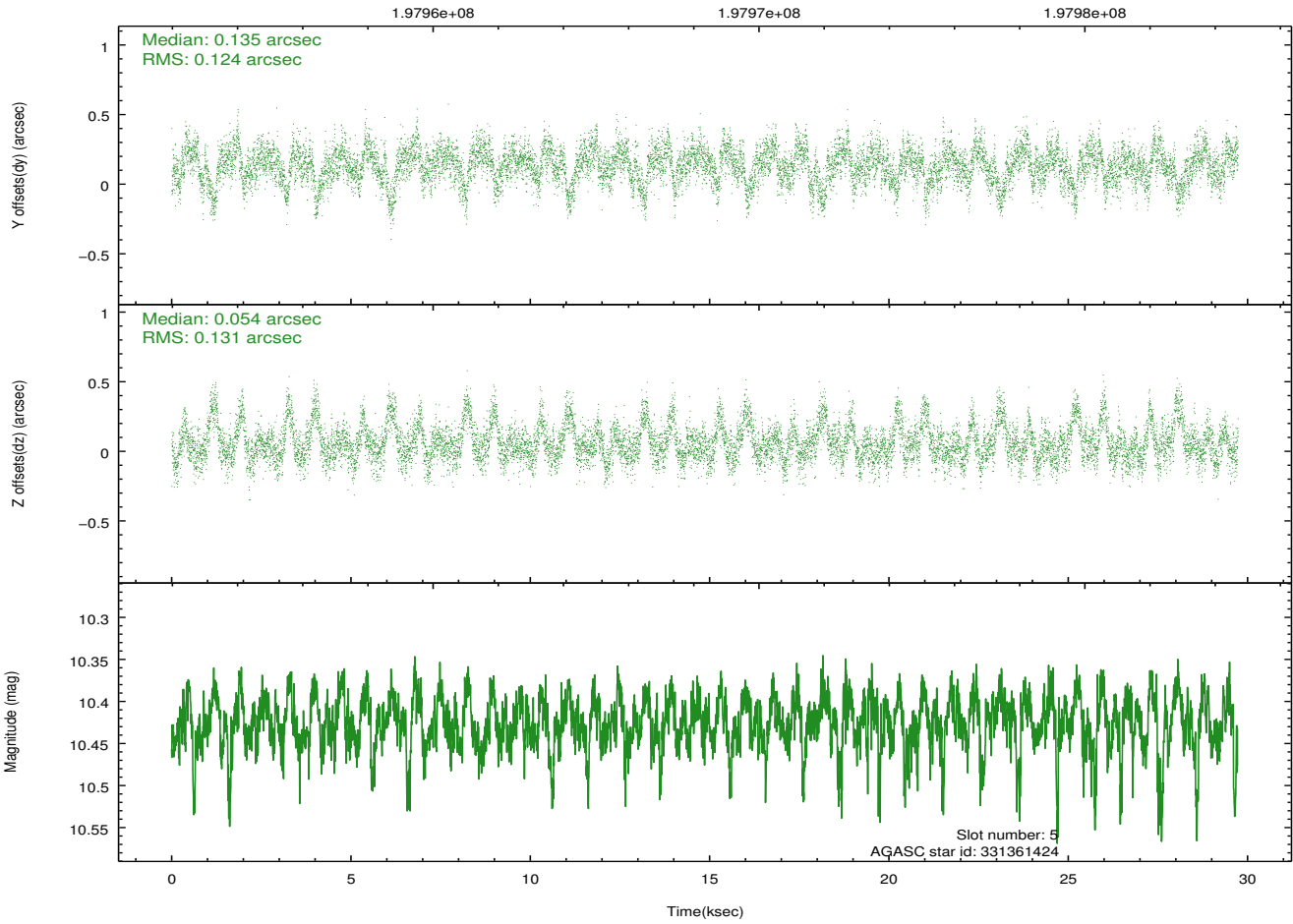
## 2.4.2 Slot 4



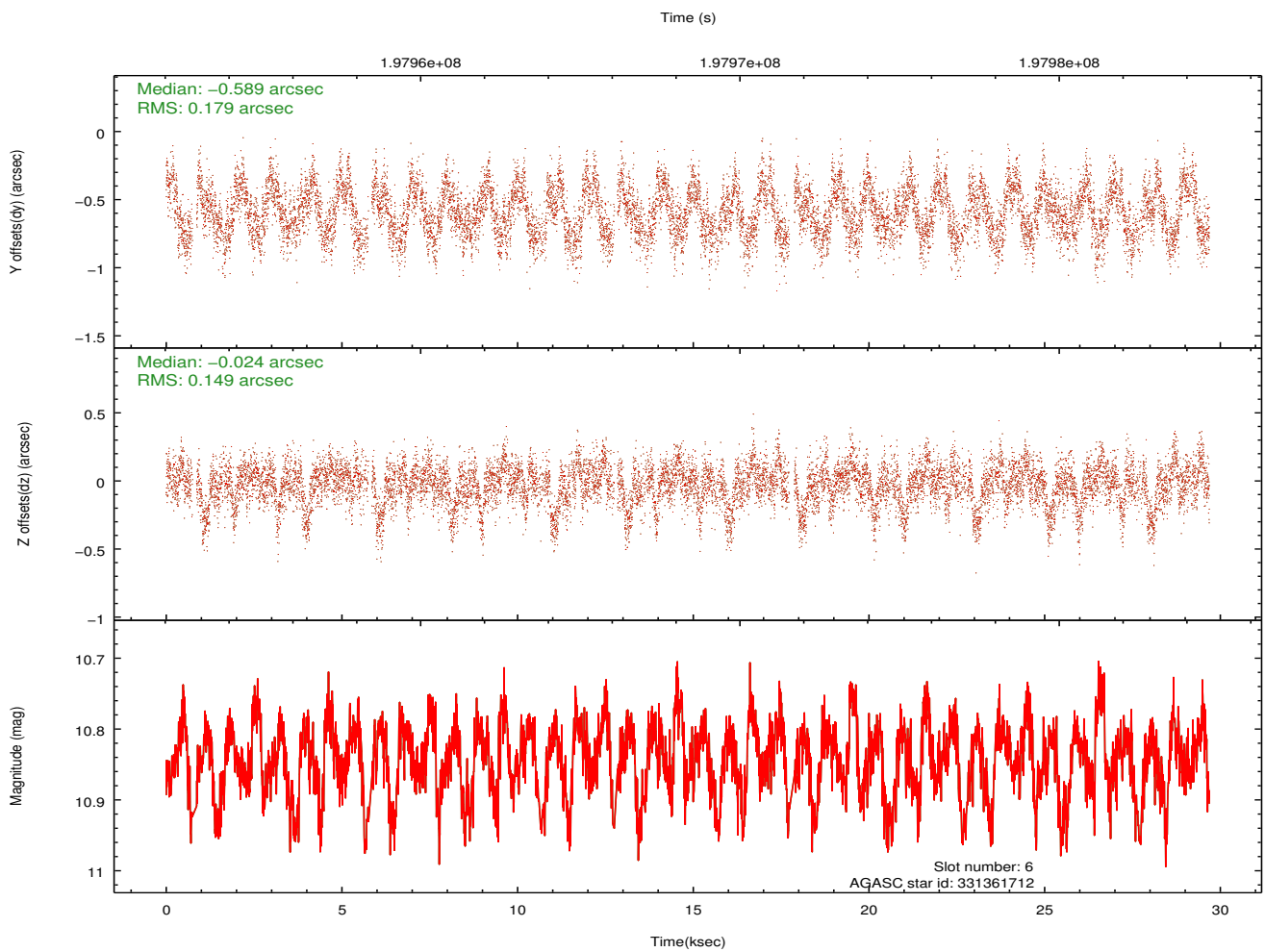
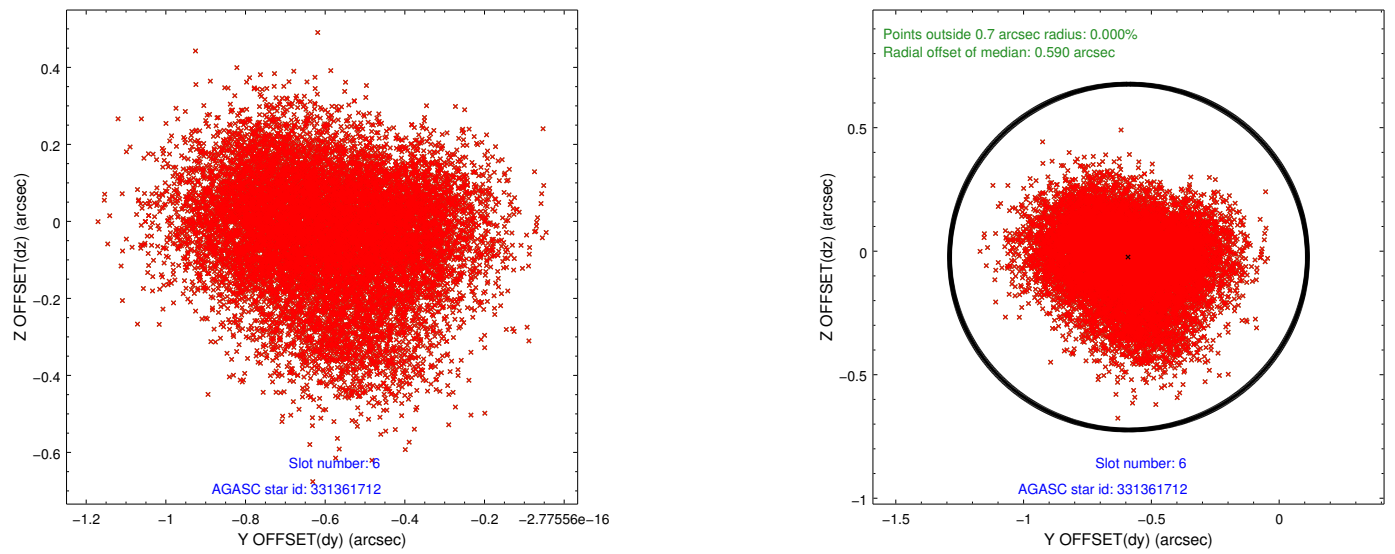
### 2.4.3 Slot 5



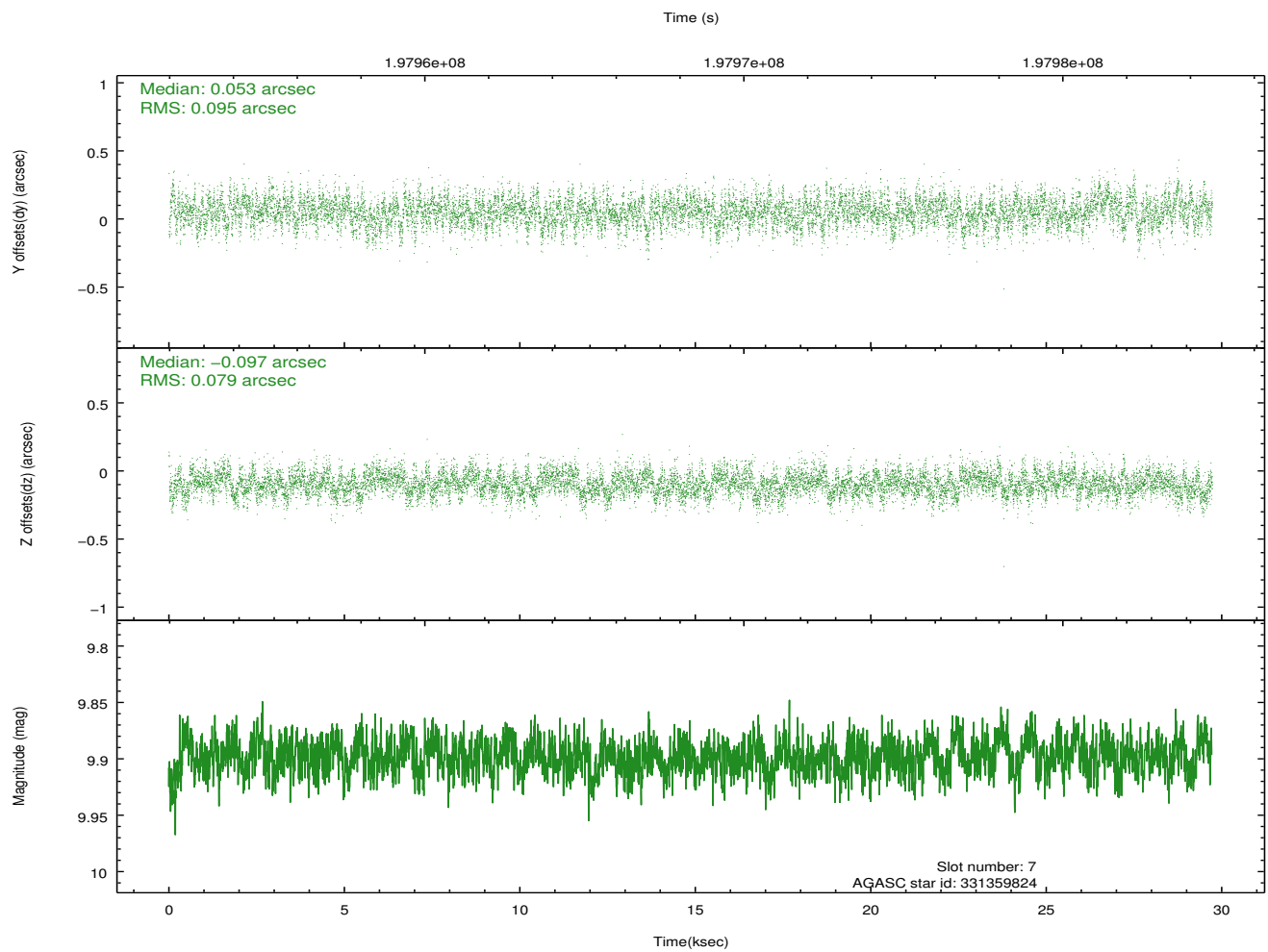
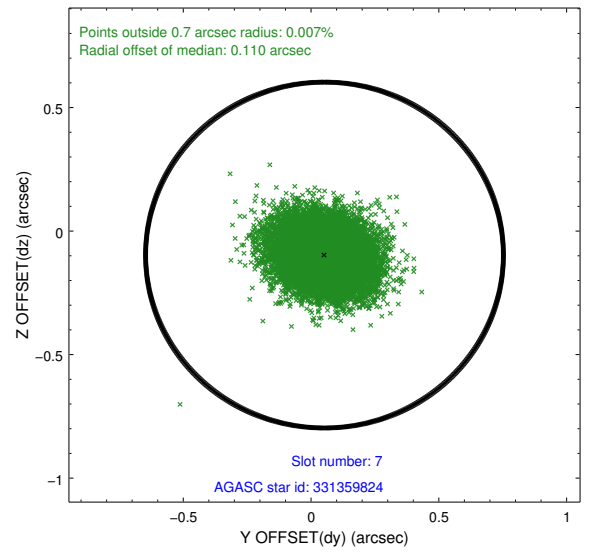
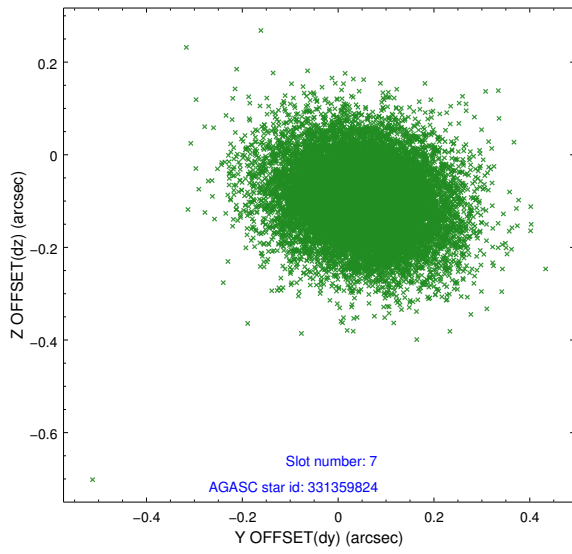
Time (s)



## 2.4.4 Slot 6

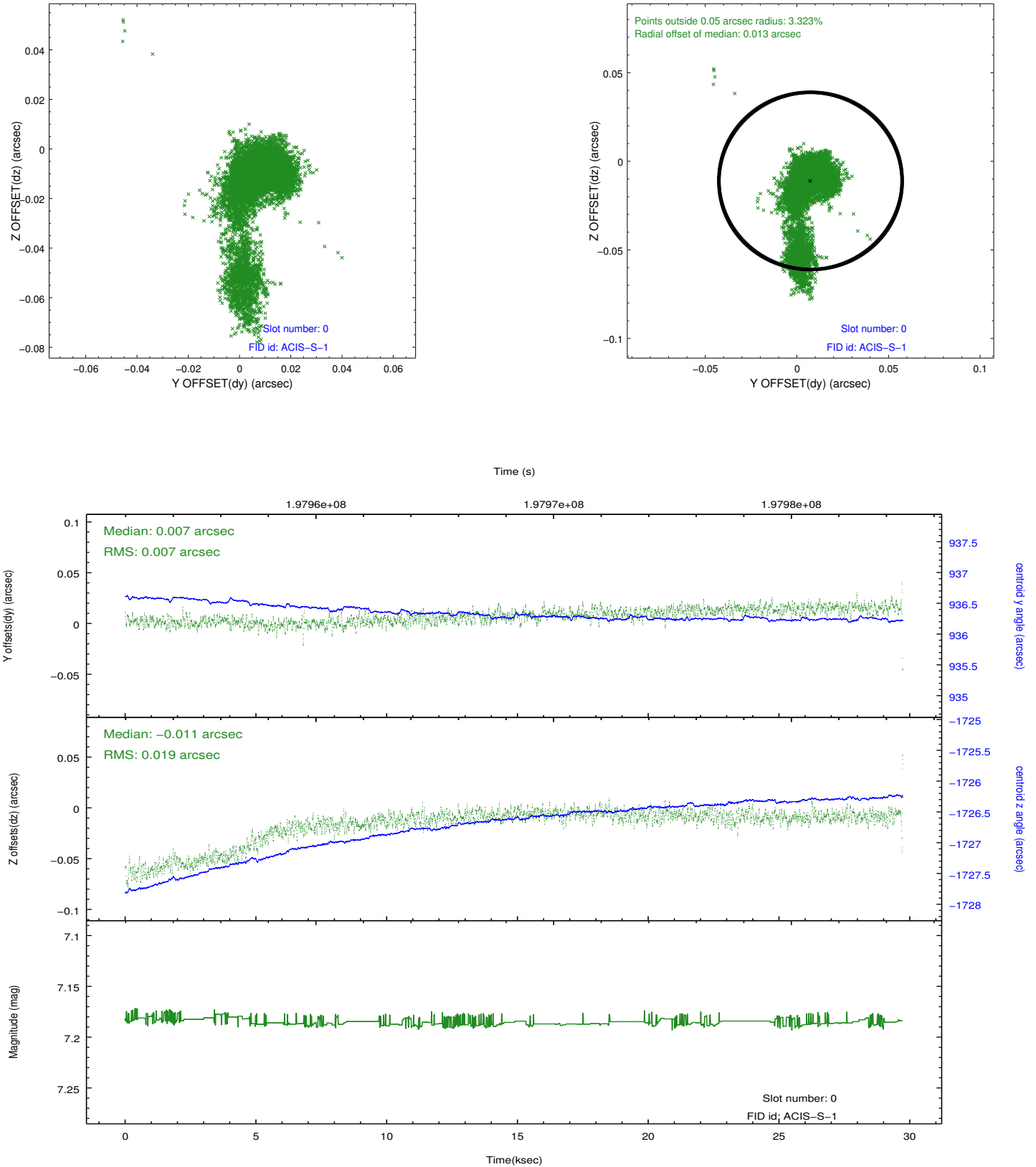


## 2.4.5 Slot 7

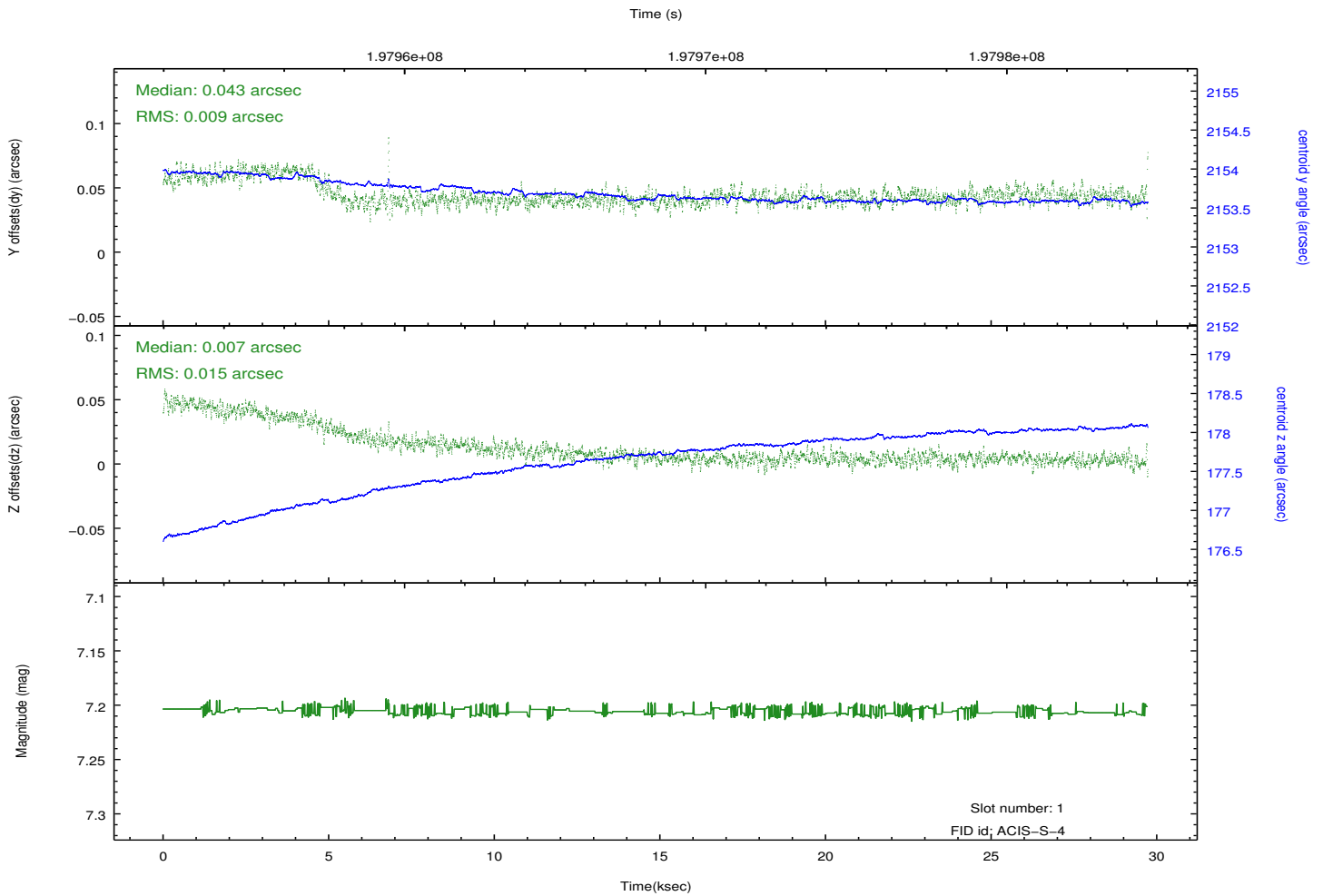
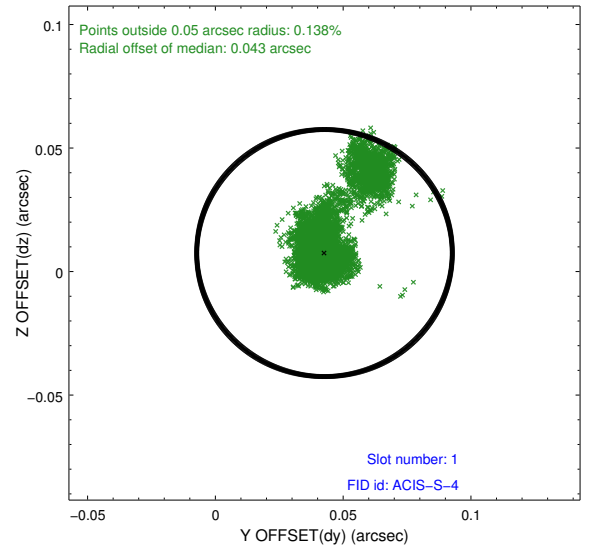
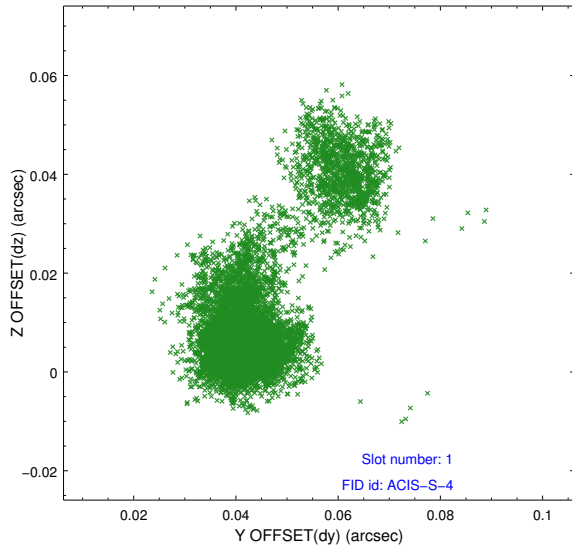


## 2.5 FID Slots

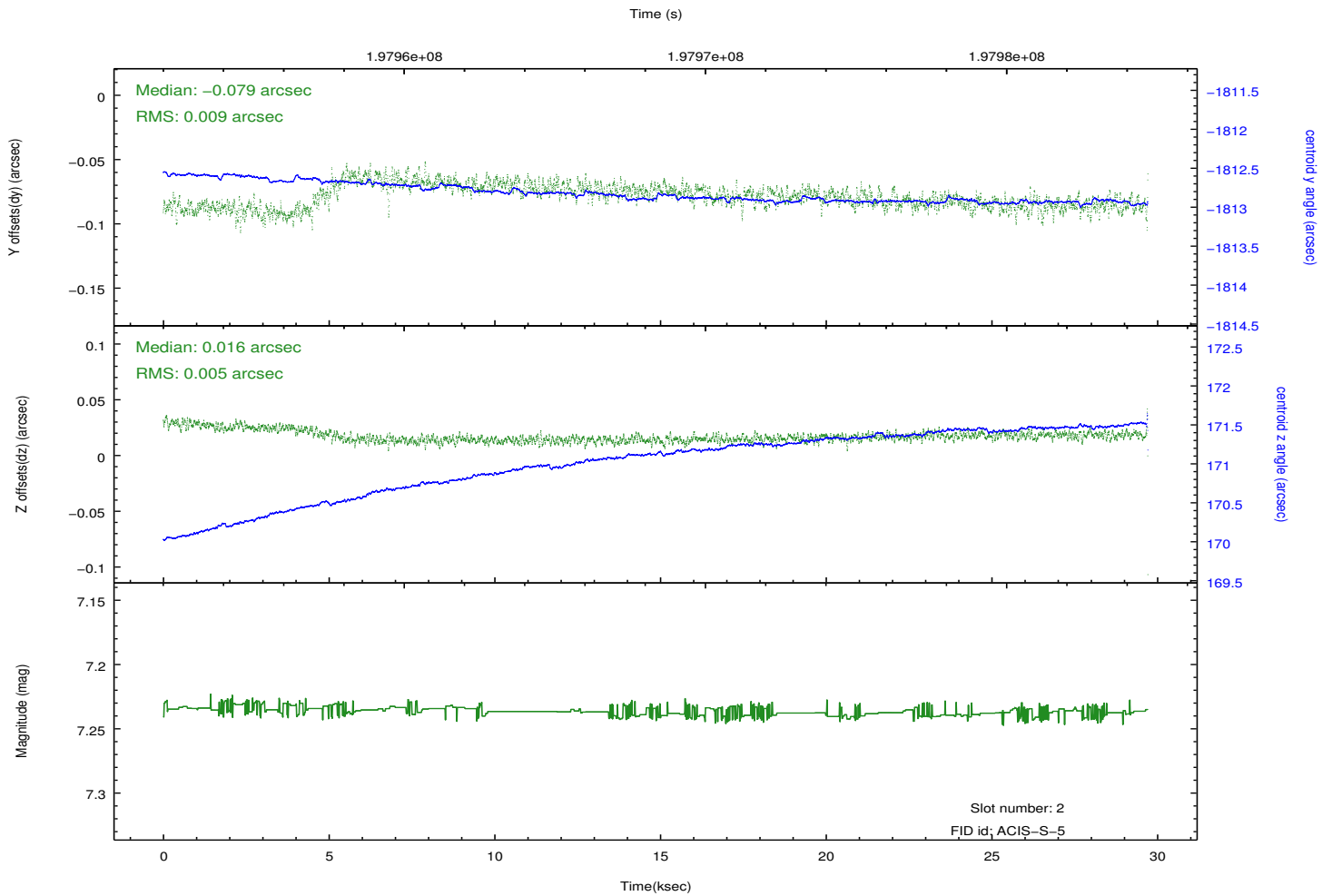
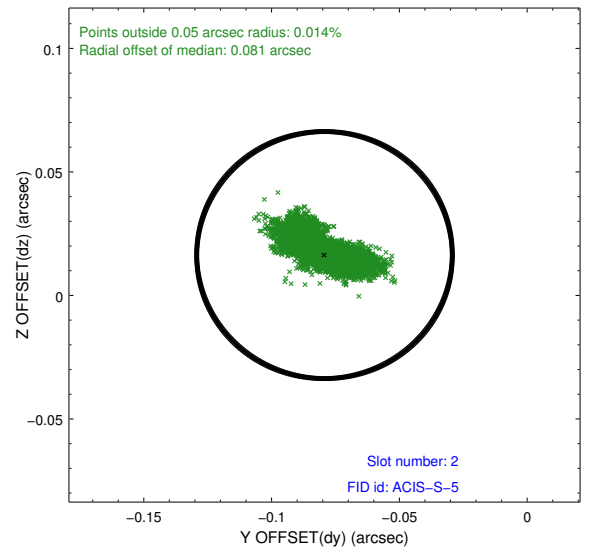
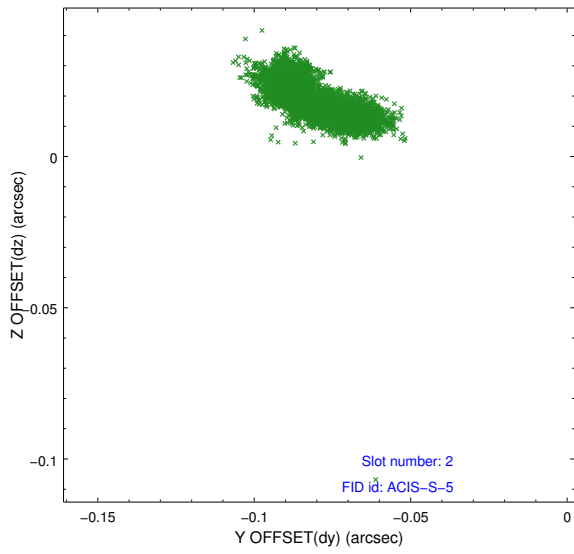
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.12.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.73

## A.2 Comments

Window constraint satisfied.