

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 5302 - L2 Version 4  
Chandra X-Ray Center

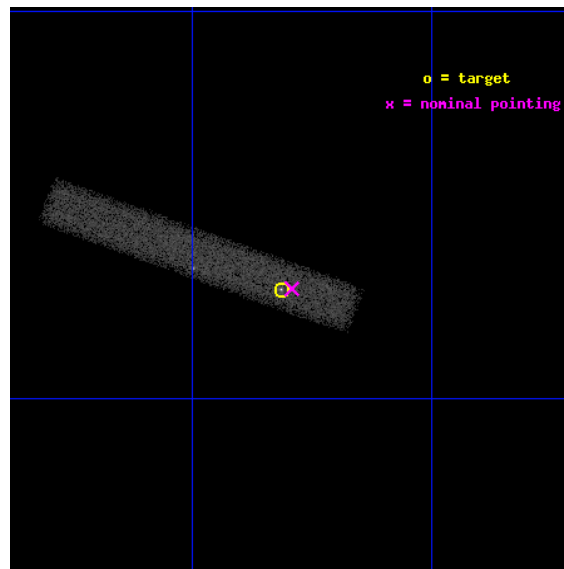
L2 Processing Date : Nov 30 2012

## 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

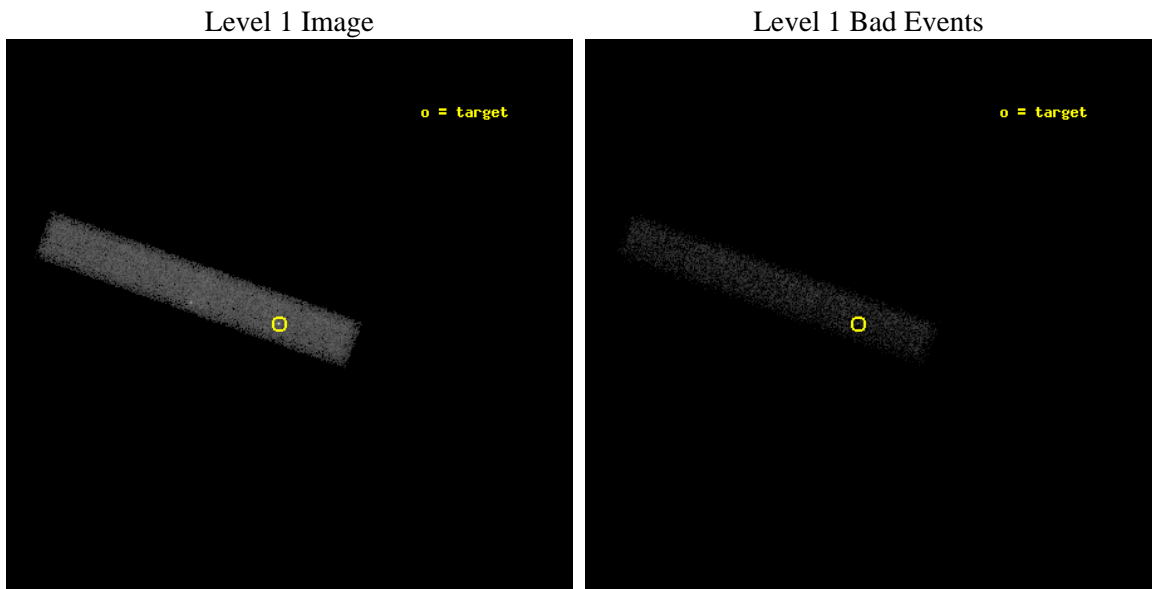
seq_num	701014	Sequence number
obs_id	5302	Observation id
title	Multiwavelength Reverberation Mapping of NGC 4395, the Least Luminous Seyfert 1 Galaxy	Proposal title
observer	Dr. Edward Moran	Principal investigator
object	NGC 4395	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.453333	Observer's specified target RA [deg]
dec_targ	33.546944	Observer's specified target Dec [deg]
ra_nom	186.44809903205	Nominal RA [deg]
dec_nom	33.547177988105	Nominal Dec [deg]
roll_nom	199.46924810174	Nominal Roll [deg]
revision	4	Processing version of data
ontime	31121.600463718	Sum of GTIs [s]
liveltime	28225.648887827	Livetime [s]
ontime7	31121.600463718	Sum of GTIs [s]
l2events	25032	Number of level 2 events



## 2 OBI

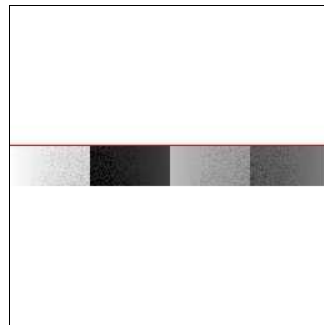
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30987.553000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	31121.600463718	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime7	31121.600463718	Sum of GTIs [s]
date	2012-11-30T15:12:47	Date and time of file creation	l1events	48939	Number of level 1 events
revision	4	Processing version of data			

### 2.1.4 Events

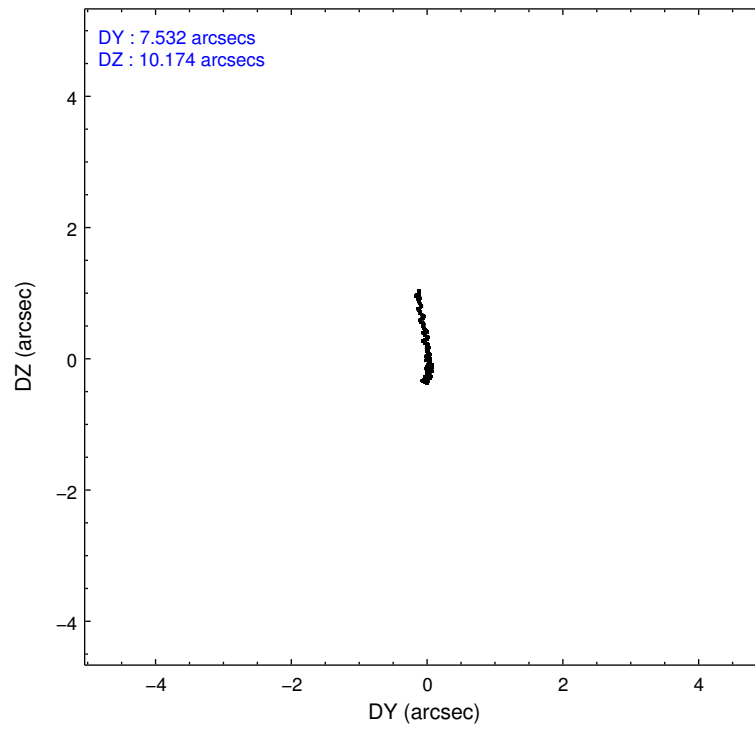
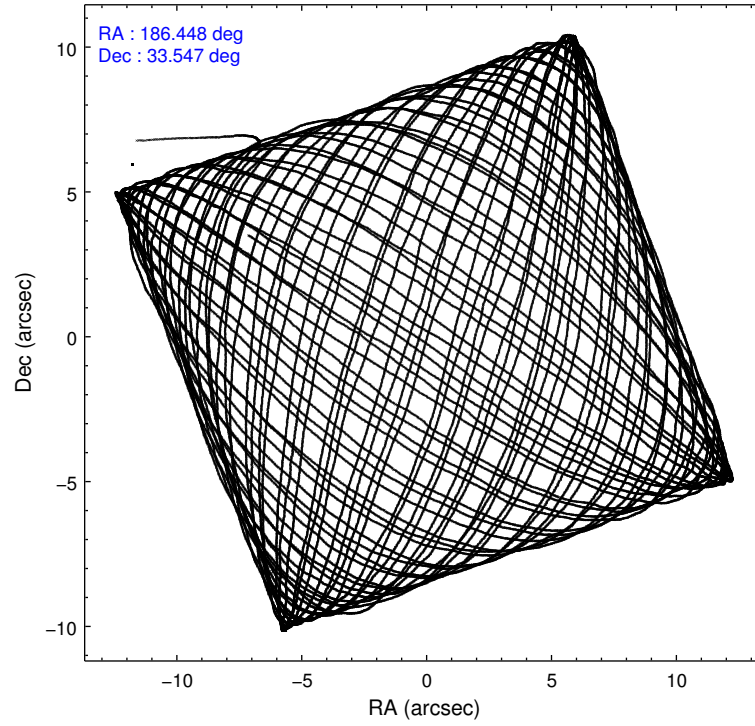
	<b>ccd 7</b>
level 1 events	48939
rejected events	23083
rejected %	47%

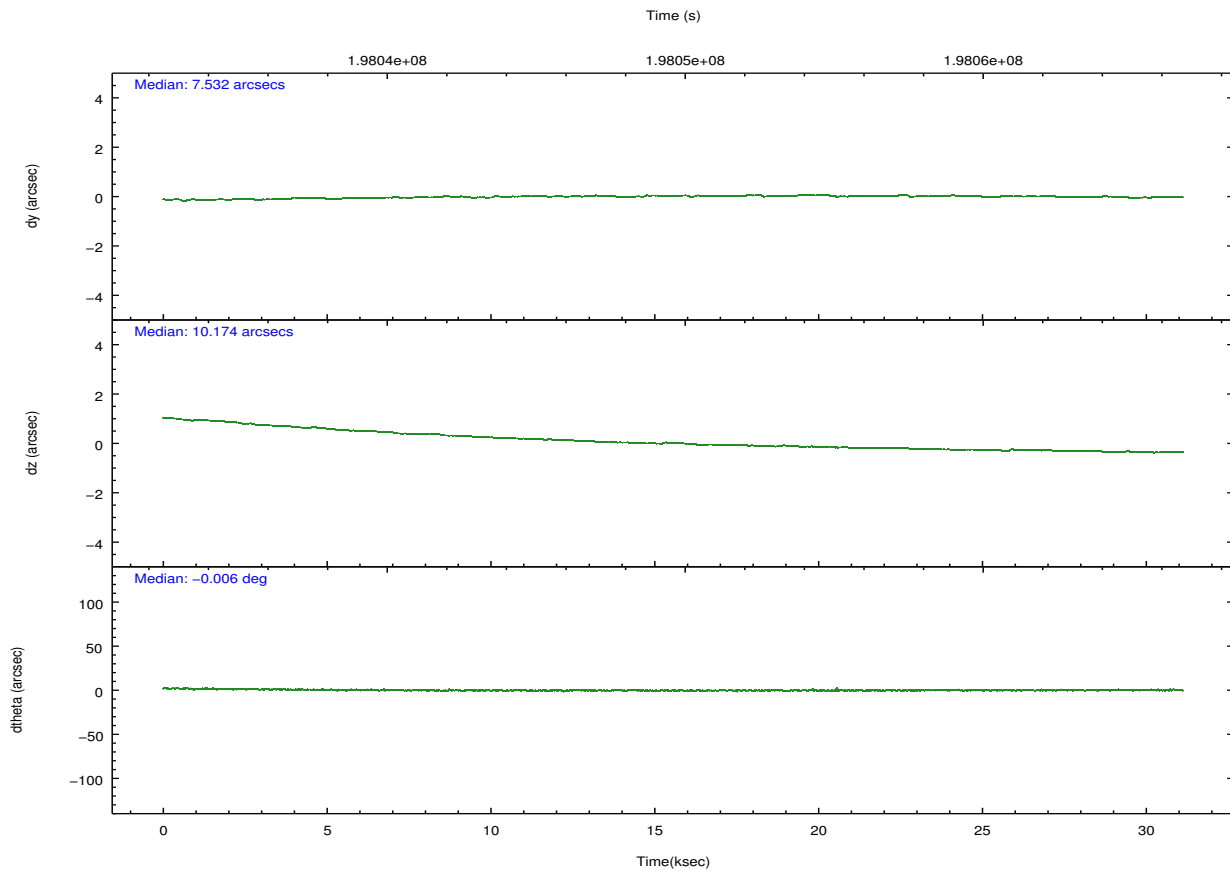
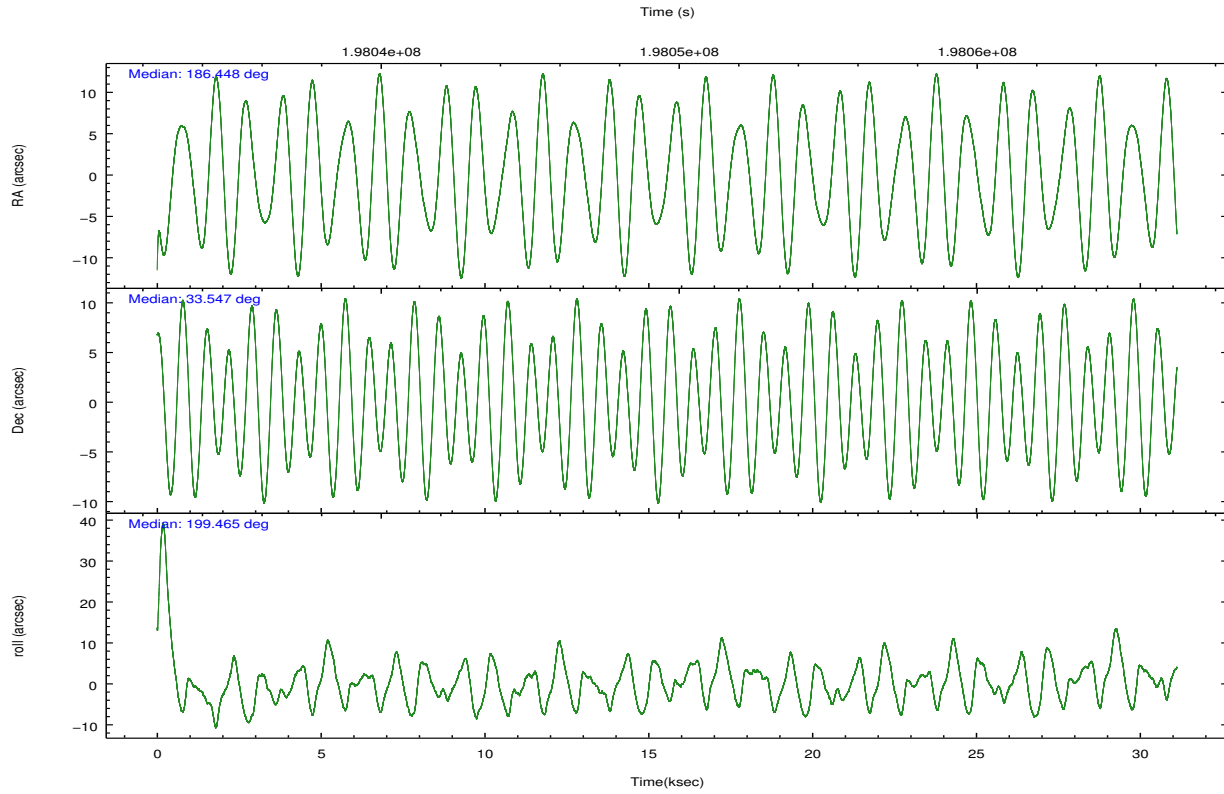
	<b>ccd 7</b>
grade 0 events	3375
	6%
grade 1 events	39
	0%
grade 2 events	5201
	10%
grade 3 events	3185
	6%
grade 4 events	3009
	6%
grade 5 events	3928
	8%
grade 6 events	11928
	24%
grade 7 events	18274
	37%

## 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	186.469017	186.4480990320504	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	33.568119	33.54717798810456	Subarray start row	449	449
[deg] Pointing Roll	199.301065	199.4692481017436	Subarray row count	128	128
[s] Window start time (MET)	198031264.184000	198031264.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	198082084.184000	198082084.184000	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	198034161.184000	198032702.76753			
Observation start date	2004-04-11T01:28:17	2004-04-11T01:05:02			
[s] Observation end time (MET)	198065148.184000	198065463.30648			
Observation end date	2004-04-11T10:04:44	2004-04-11T10:11:03			
Read mode	TIMED	TIMED			

## 2.3 Aspect



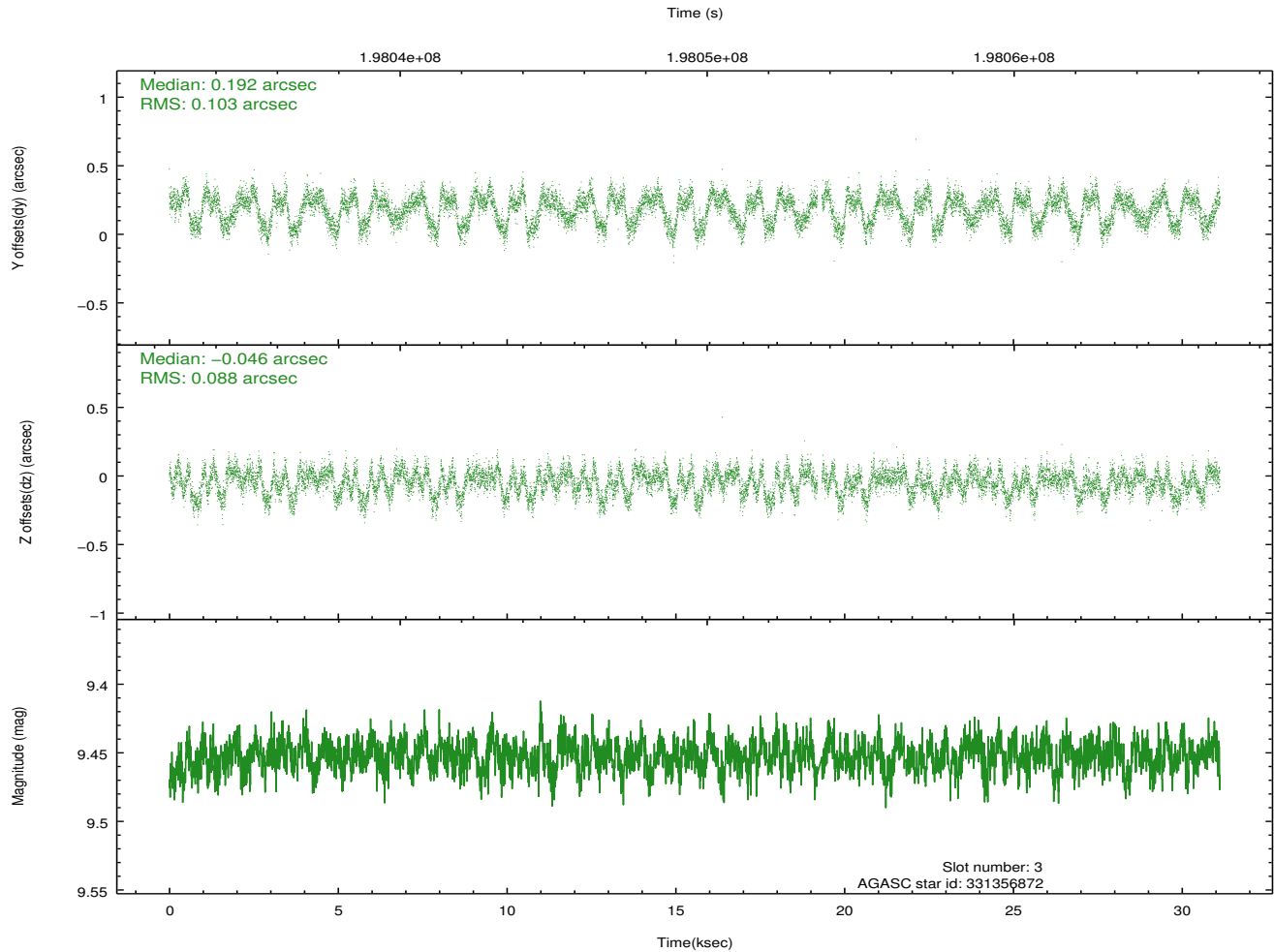
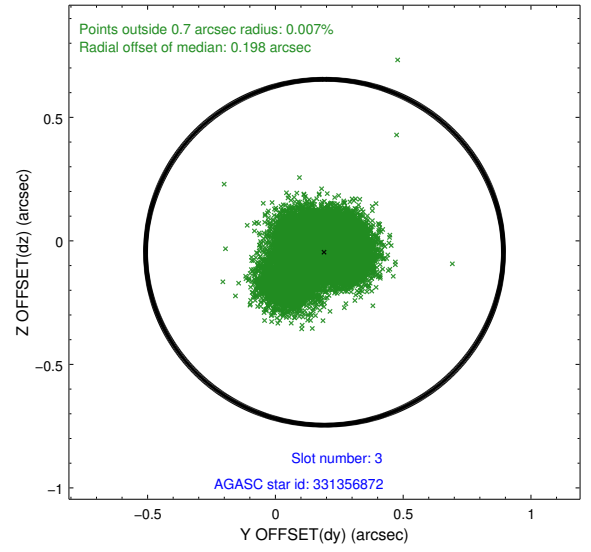
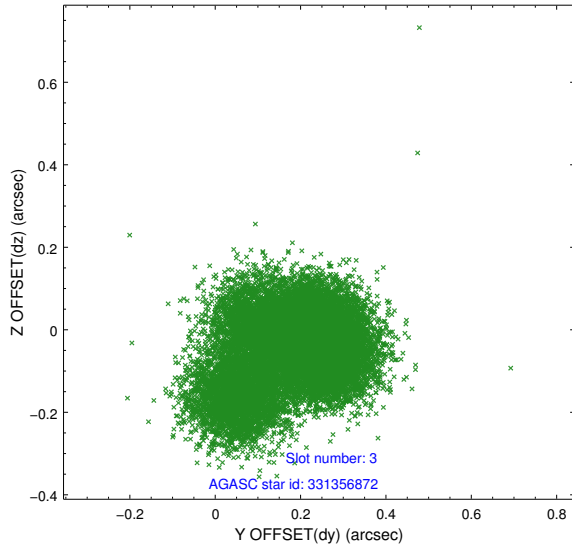


### Slot Statistics

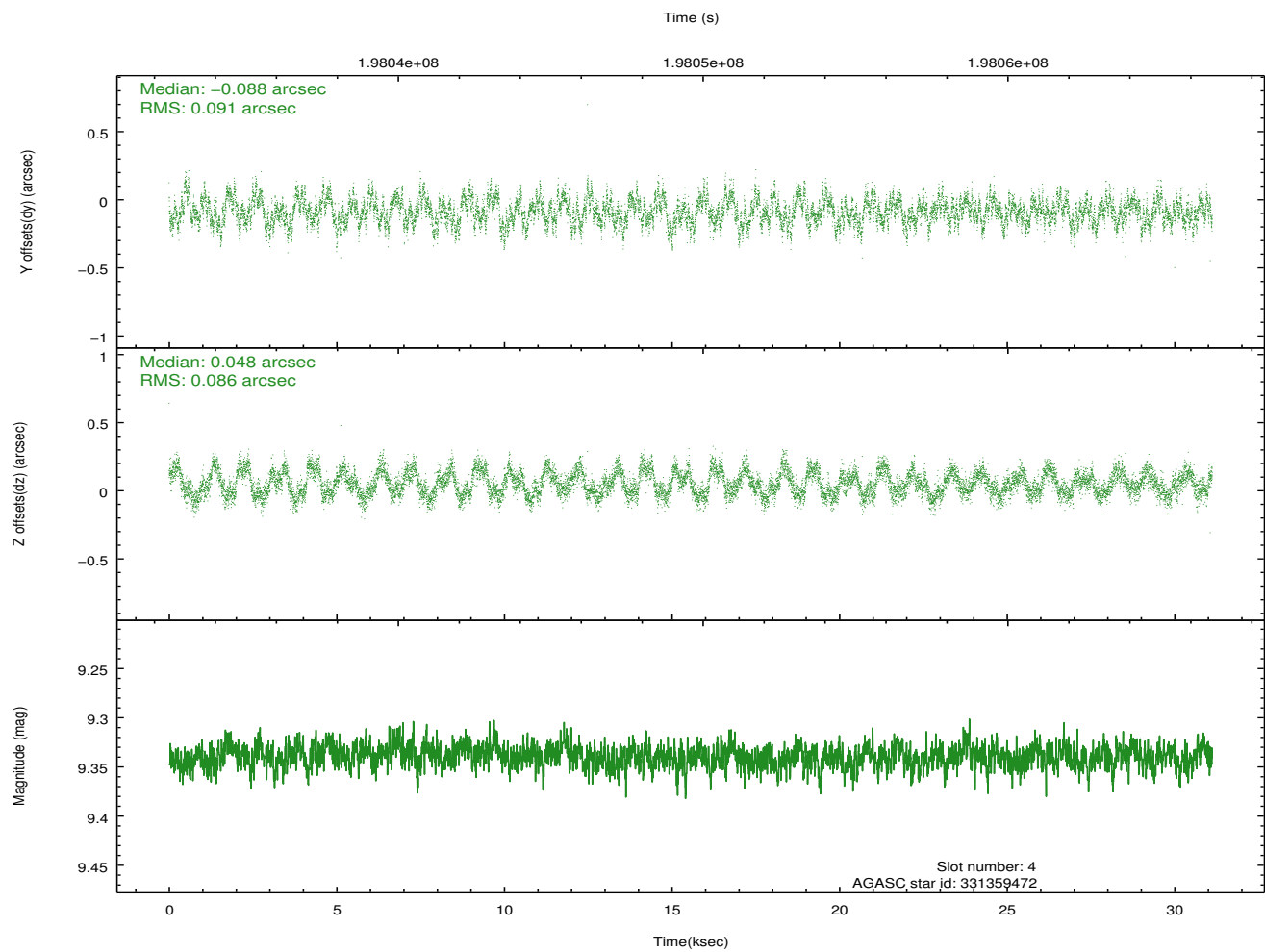
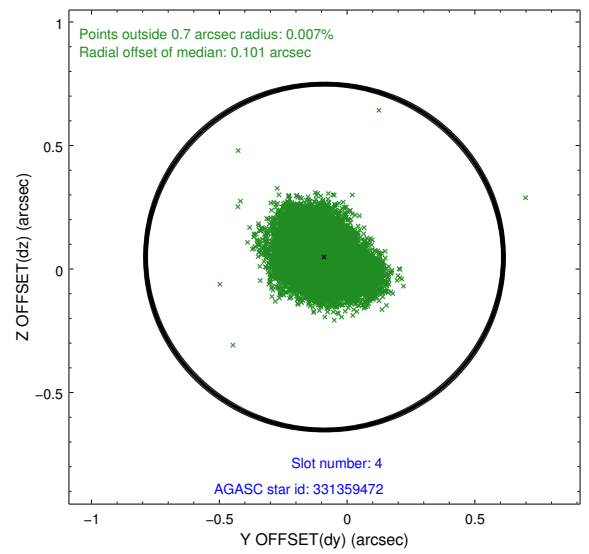
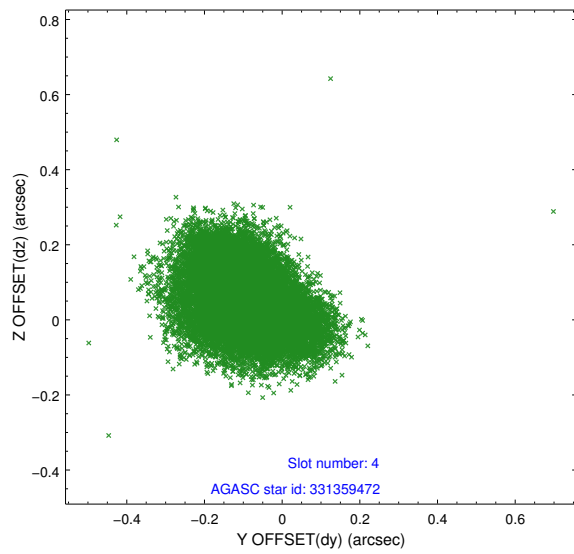
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	7591	0.011	-0.035	0.015	0.037	0.000000	0.000000	935.77	-1727.15
1	FID	ACIS-S-4	7.21	7591	0.059	0.023	0.012	0.028	0.000000	0.000000	2153.24	177.02
2	FID	ACIS-S-5	7.23	7592	-0.097	0.025	0.010	0.018	0.000000	0.000000	-1813.14	170.65
3	GUIDE	331356872	9.45	15110	0.192	-0.046	0.144	0.236	186.232000	33.528992	718.09	-102.64
4	GUIDE	331359472	9.34	15174	-0.088	0.048	0.135	0.208	187.224794	33.172746	-1681.54	2088.66
5	GUIDE	331361424	10.44	15129	-0.105	-0.028	0.184	0.299	187.160339	33.746695	-2167.83	71.05
6	GUIDE	331361712	10.86	15121	0.137	0.122	0.237	0.388	185.925565	32.976353	2251.97	1464.75
7	GUIDE	331359824	9.90	15165	-0.113	-0.104	0.144	0.234	185.748520	33.293976	2370.39	208.30

## 2.4 Star Slots

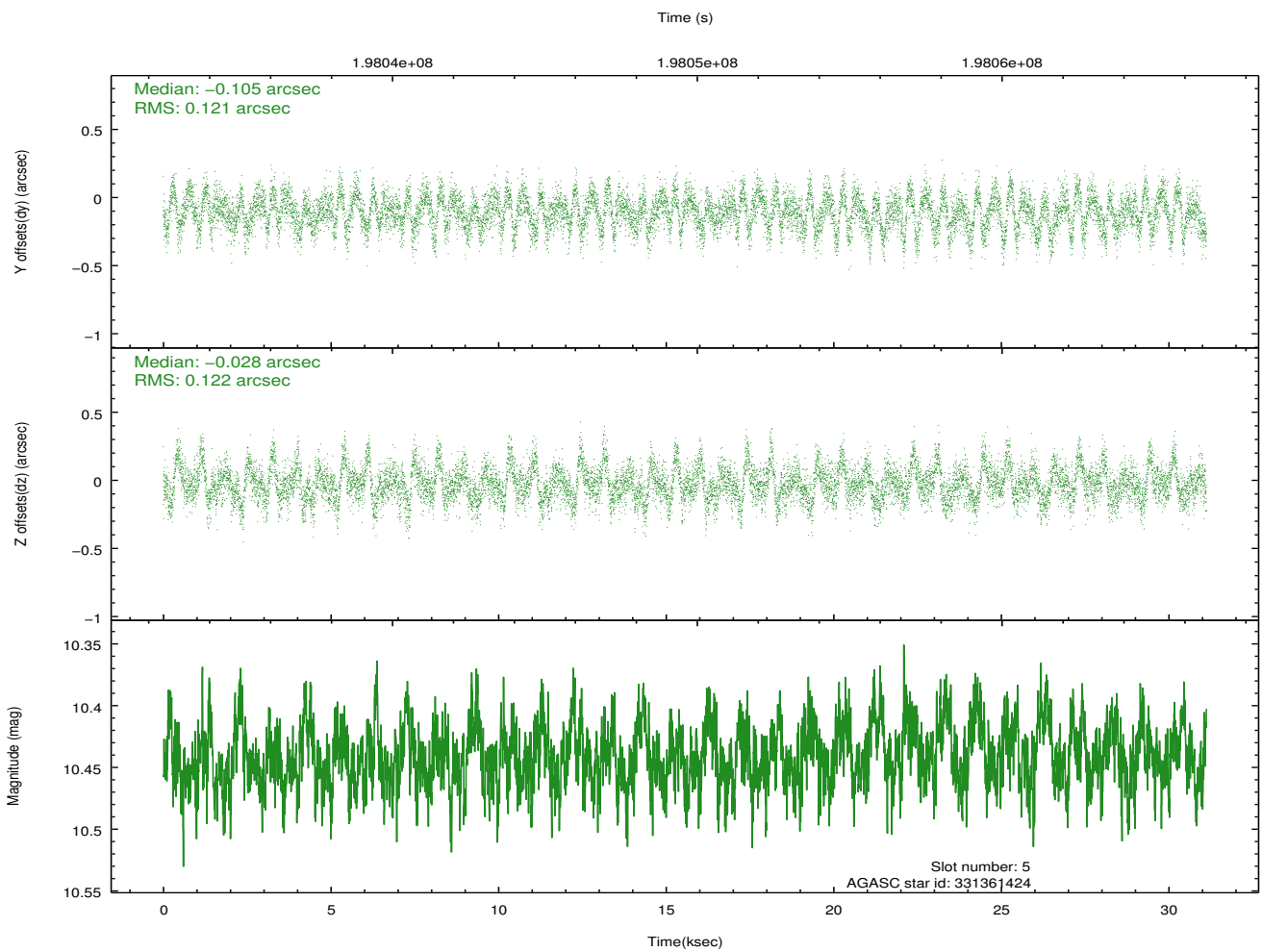
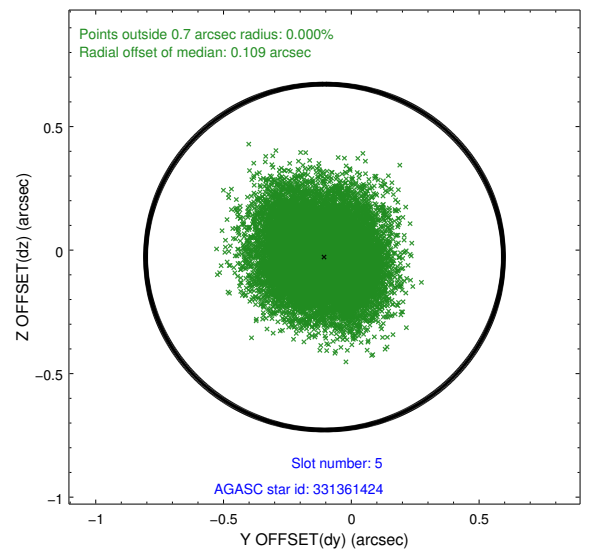
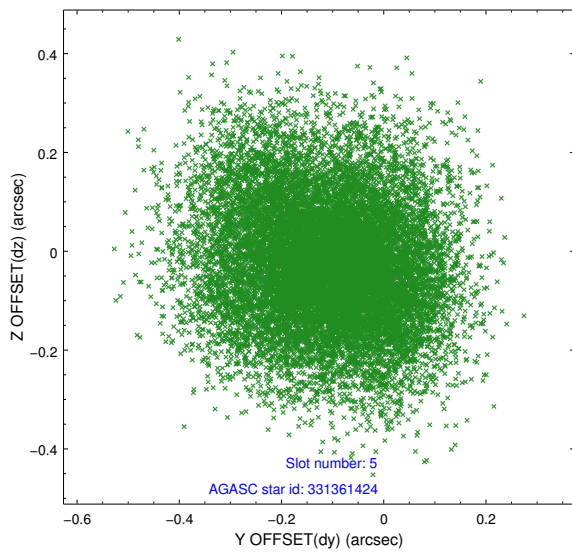
### 2.4.1 Slot 3



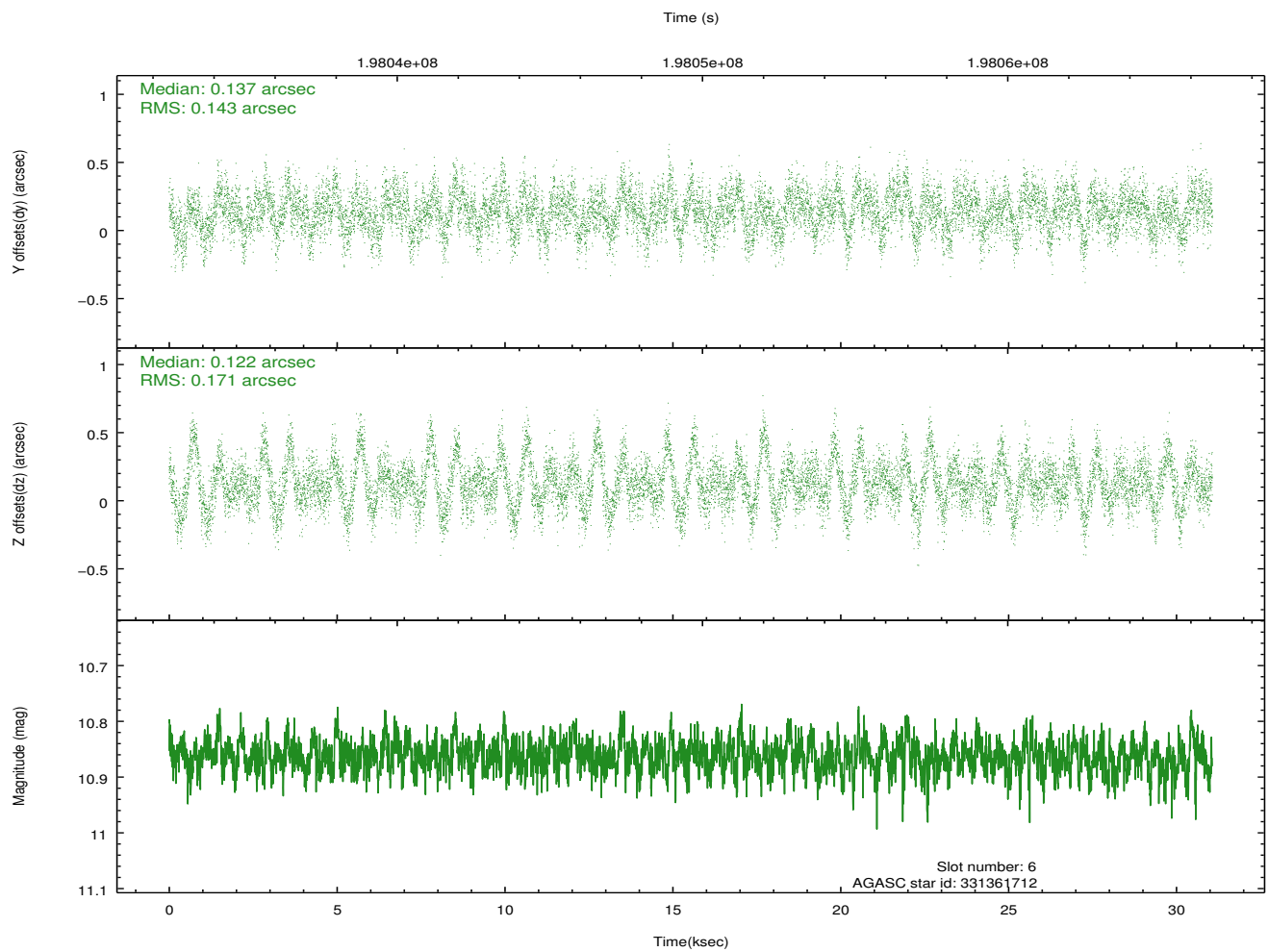
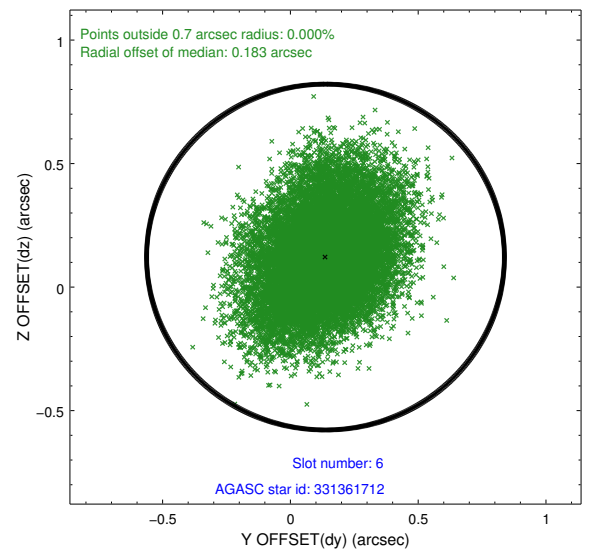
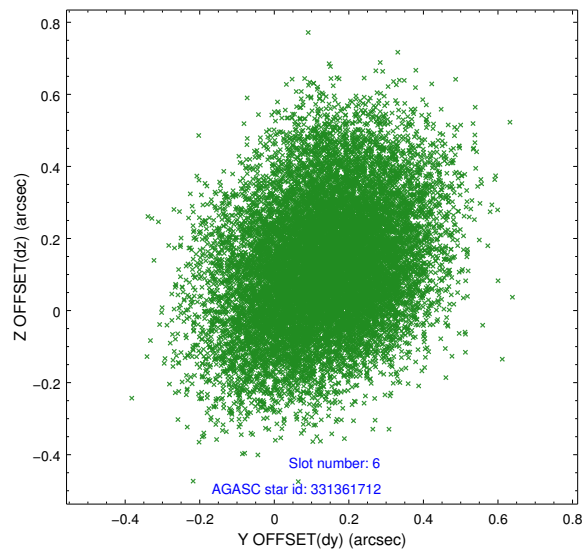
## 2.4.2 Slot 4



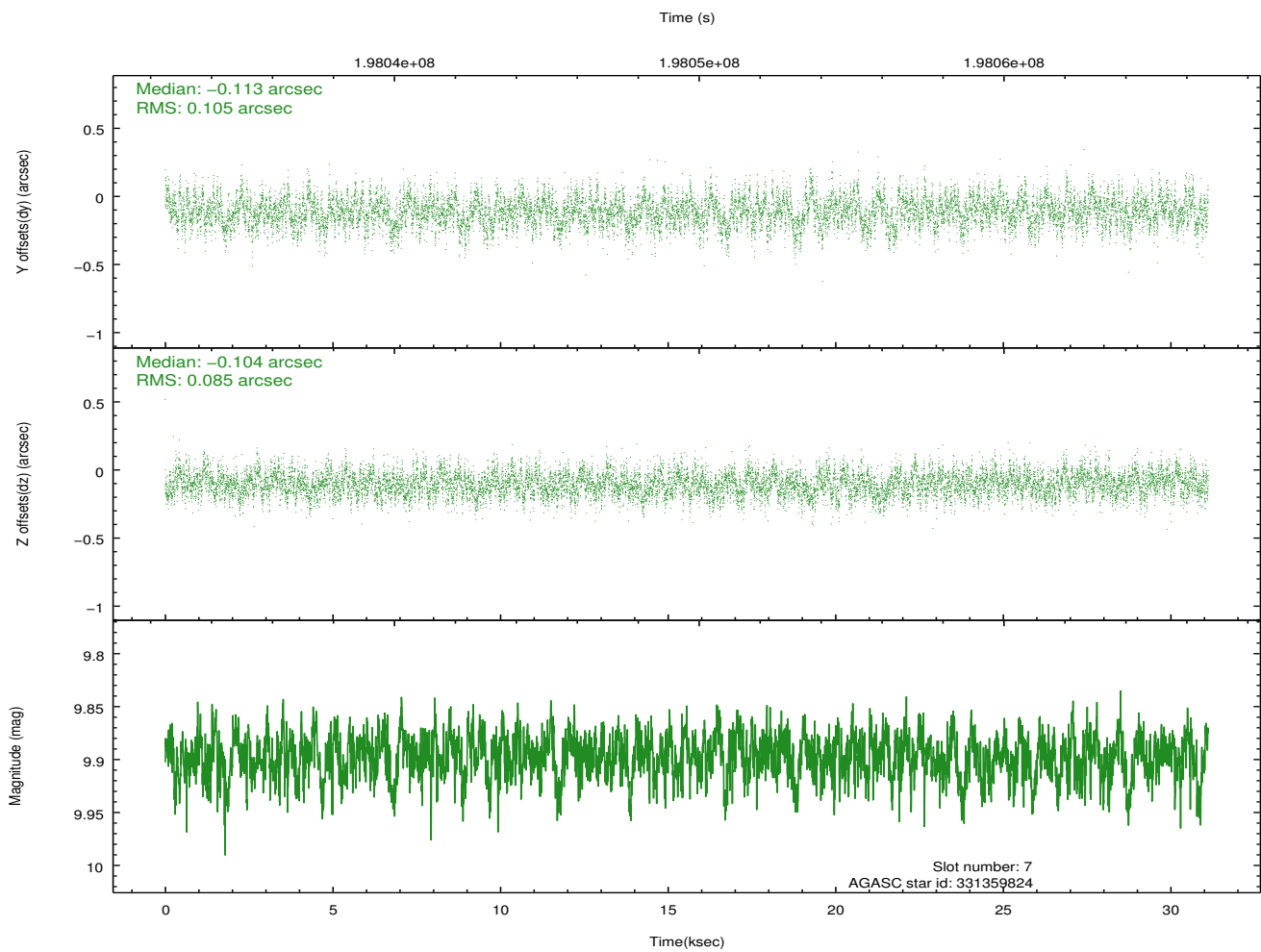
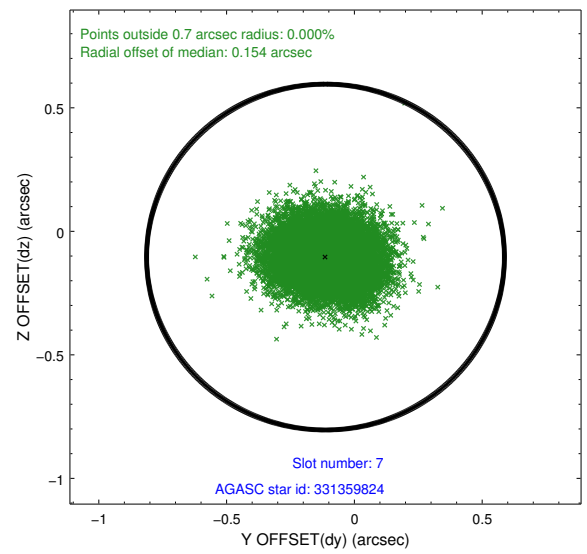
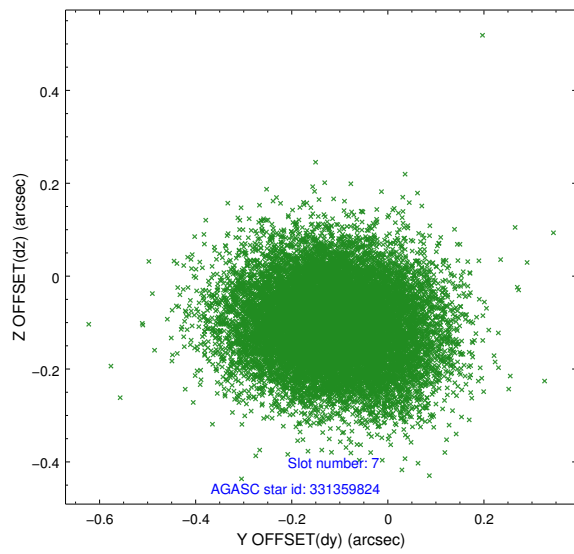
### 2.4.3 Slot 5



## 2.4.4 Slot 6

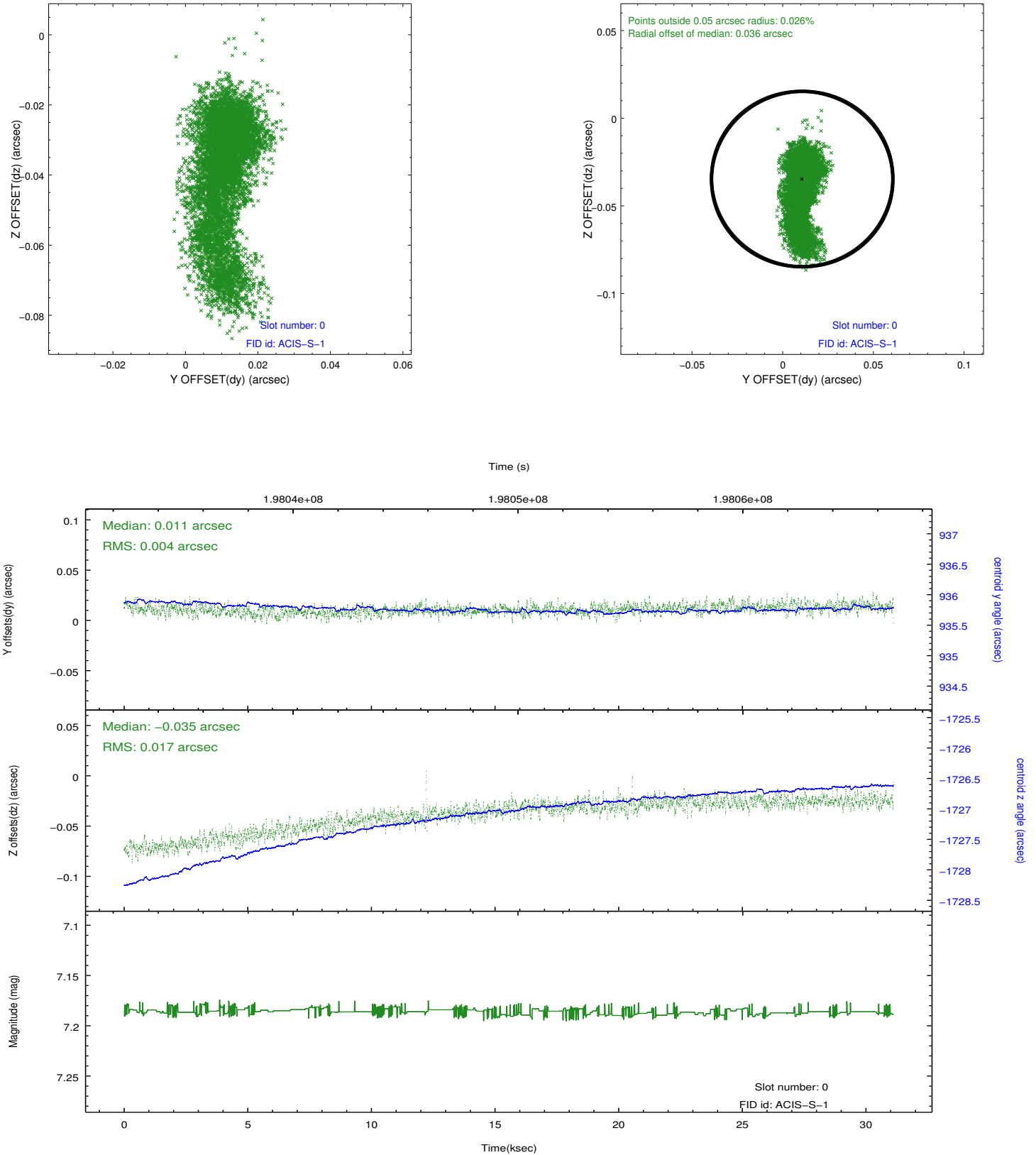


## 2.4.5 Slot 7

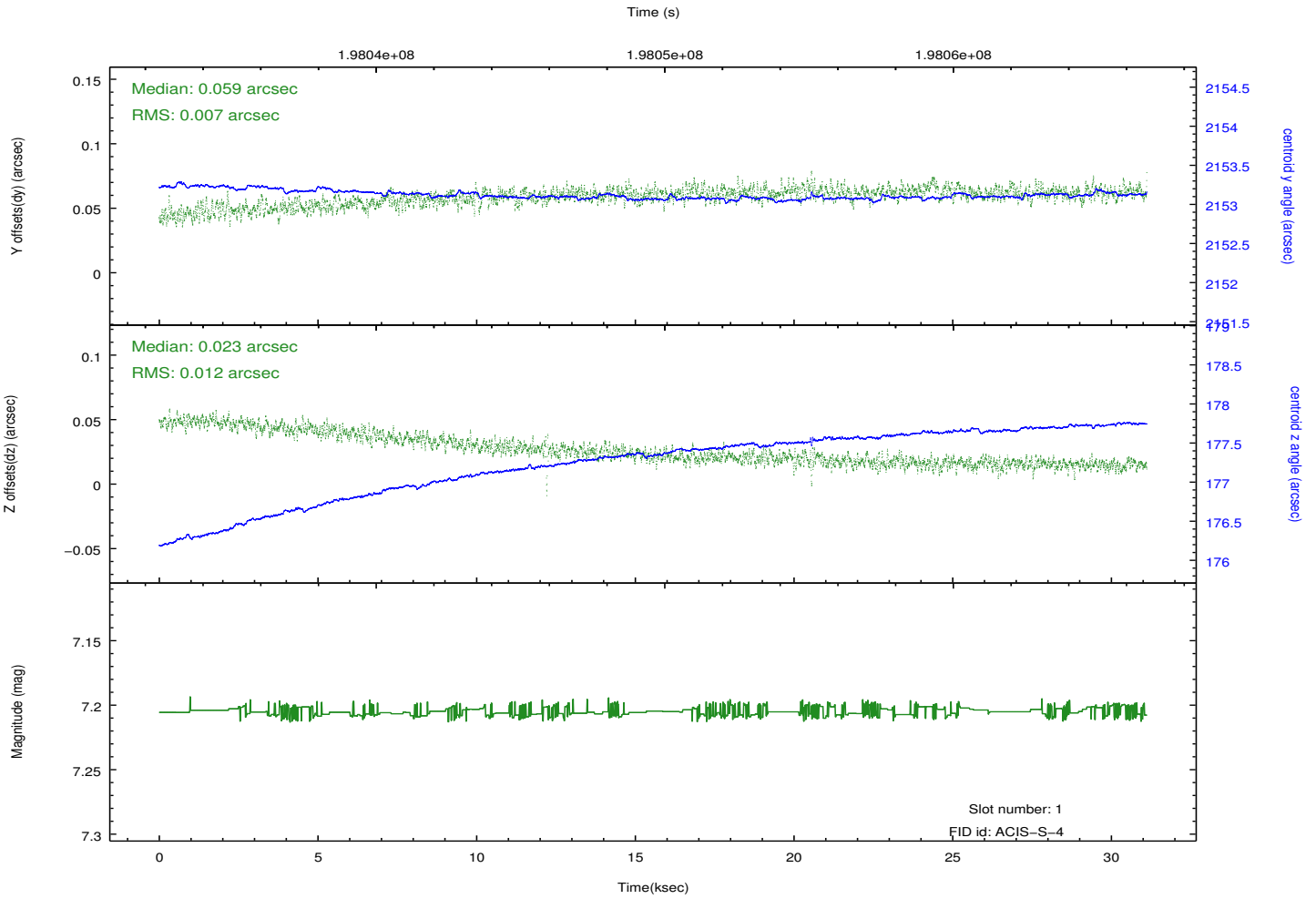
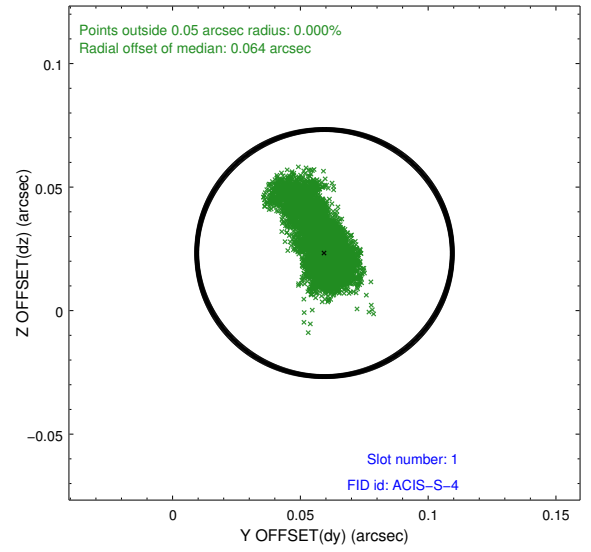
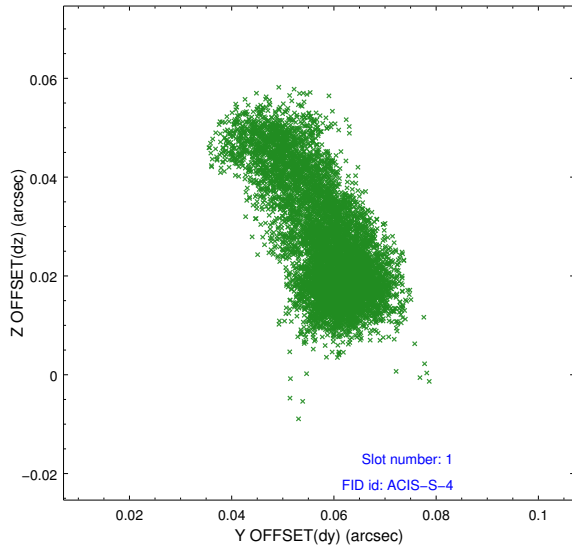


## 2.5 FID Slots

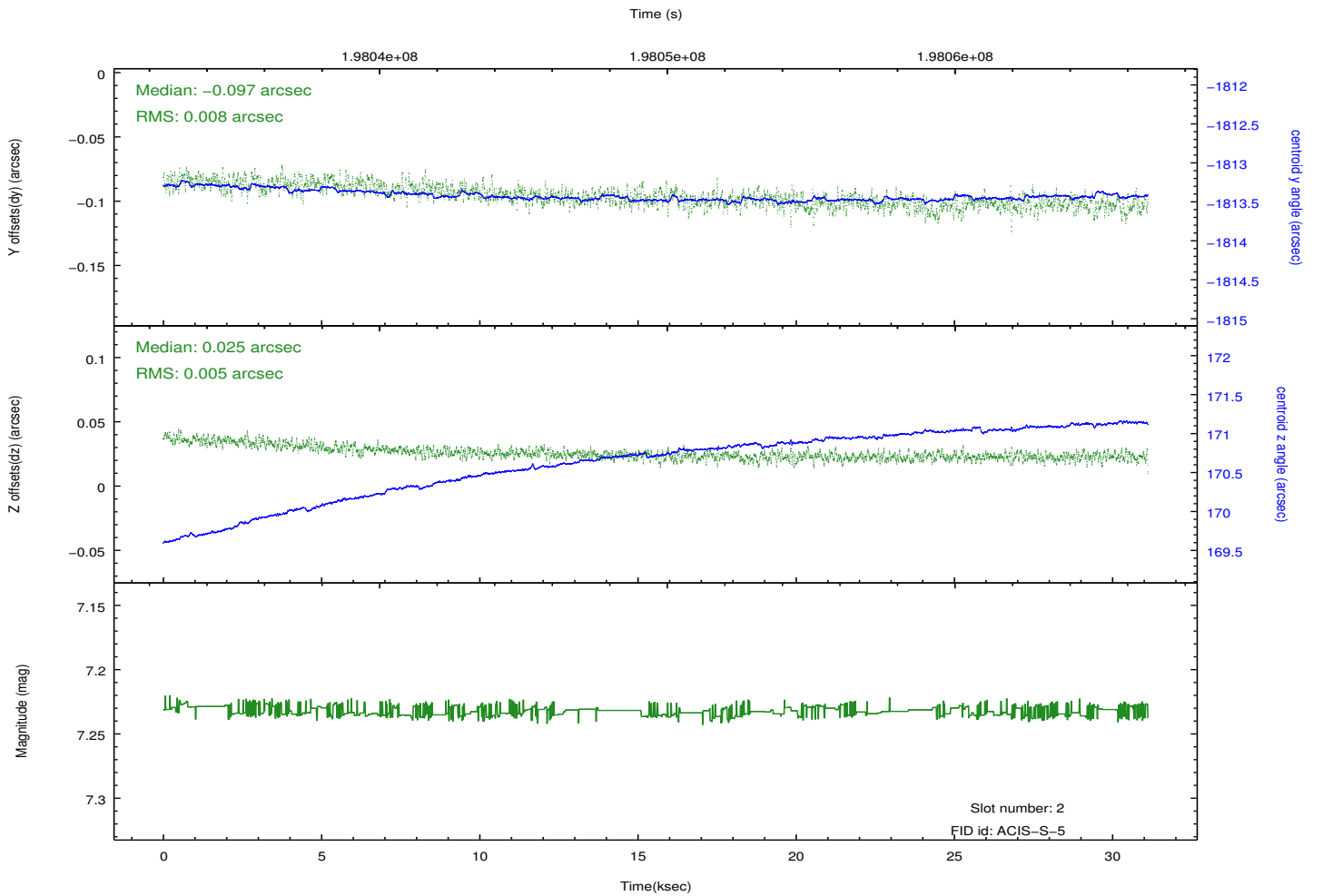
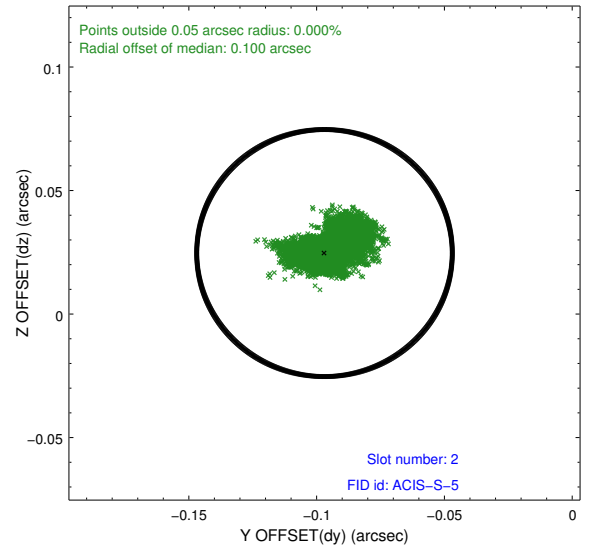
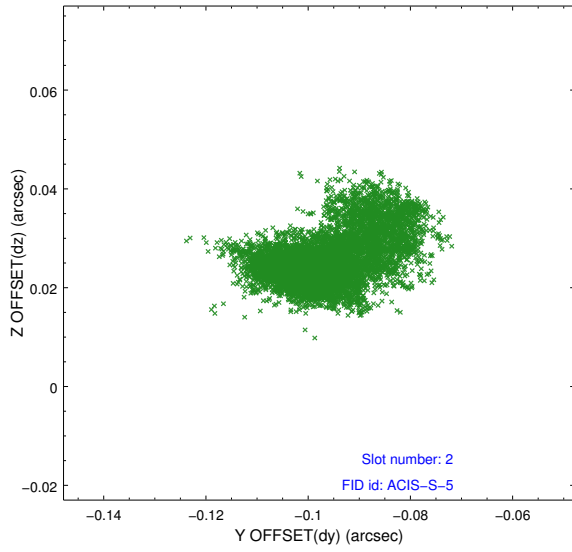
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	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	31.121

## A.2 Comments

Window constraint satisfied.