

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4870 - L2 Version 3  
Chandra X-Ray Center

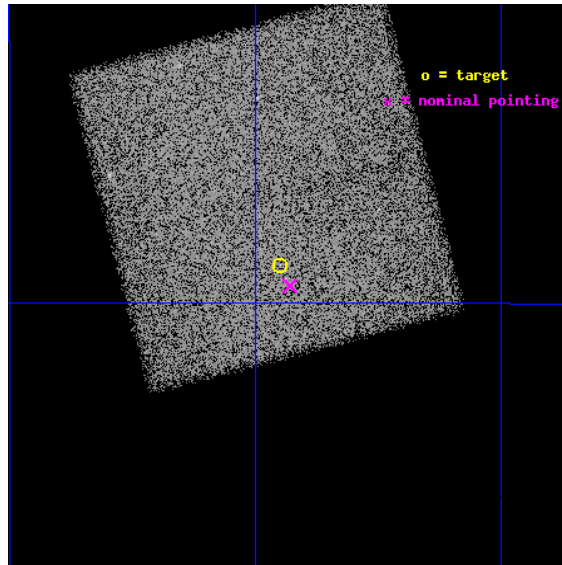
L2 Processing Date : Nov 12 2012

## 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

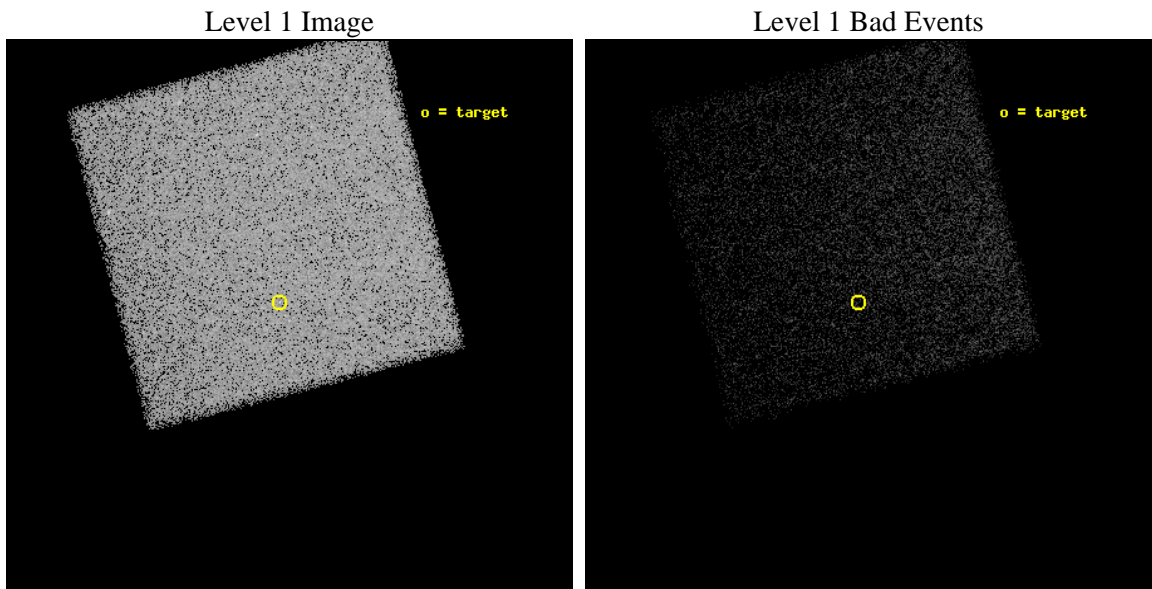
seq_num	700952	Sequence number
obs_id	4870	Observation id
title	UNCOVERING THE HIDDEN POPULATION OF BL LACS	Proposal title
observer	Dr Nicola Loaring	Principal investigator
object	2QZ J031056.9-305901	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	47.737083	Observer's specified target RA [deg]
dec_targ	-30.983694	Observer's specified target Dec [deg]
ra_nom	47.732351575474	Nominal RA [deg]
dec_nom	-30.992458693582	Nominal Dec [deg]
roll_nom	255.36770217471	Nominal Roll [deg]
revision	3	Processing version of data
ontime	15423.0	Sum of GTIs [s]
liveltime	15214.860705548	Livetime [s]
ontime7	15423.0	Sum of GTIs [s]
l2events	89064	Number of level 2 events



## 2 OBI

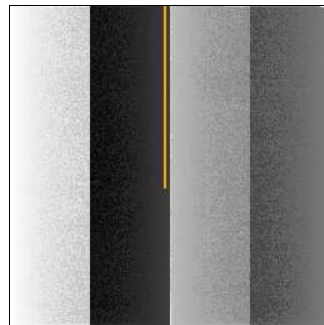
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	15423.0	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime7	15423.0	Sum of GTIs [s]
date	2012-11-12T17:32:30	Date and time of file creation	l1events	173130	Number of level 1 events
revision	3	Processing version of data			

### 2.1.4 Events

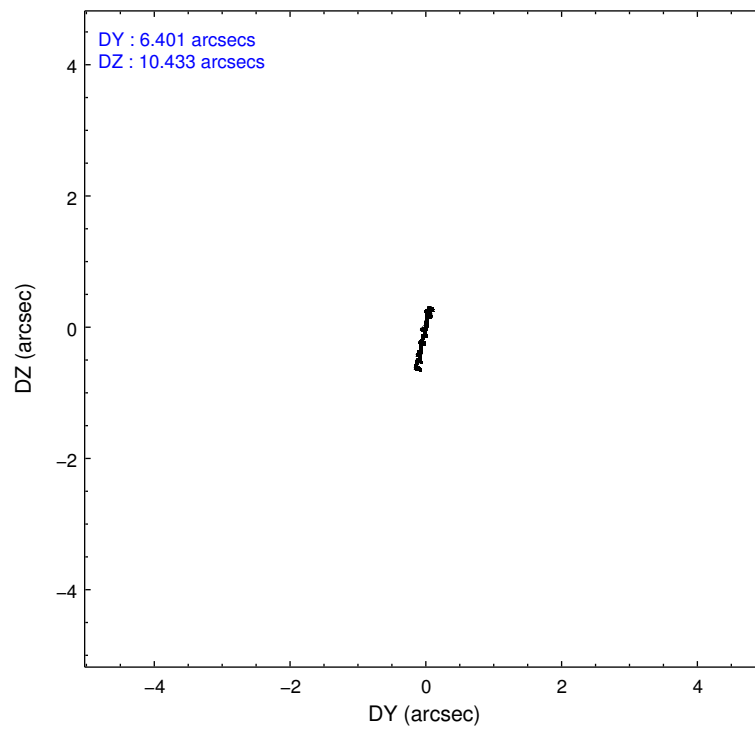
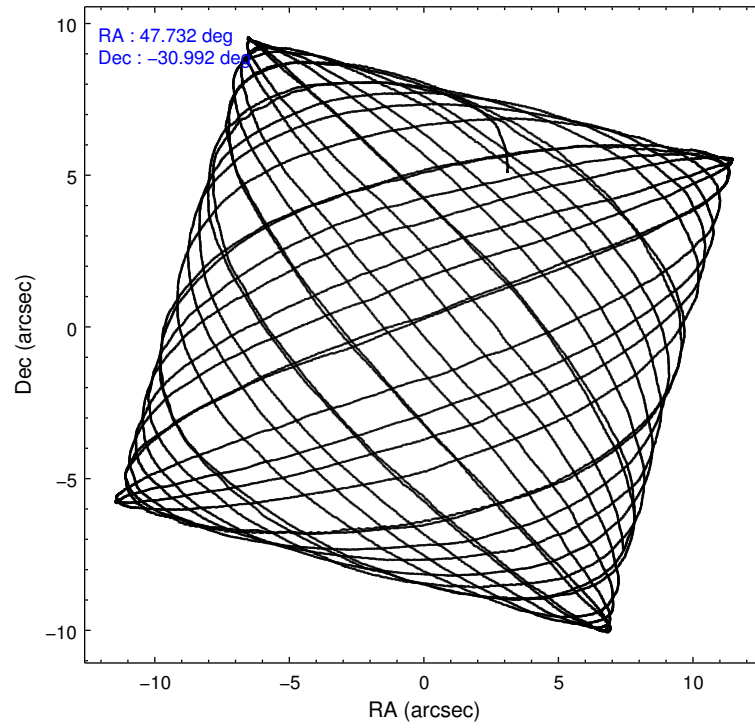
	<b>ccd 7</b>
level 1 events	173130
rejected events	82523
rejected %	47%

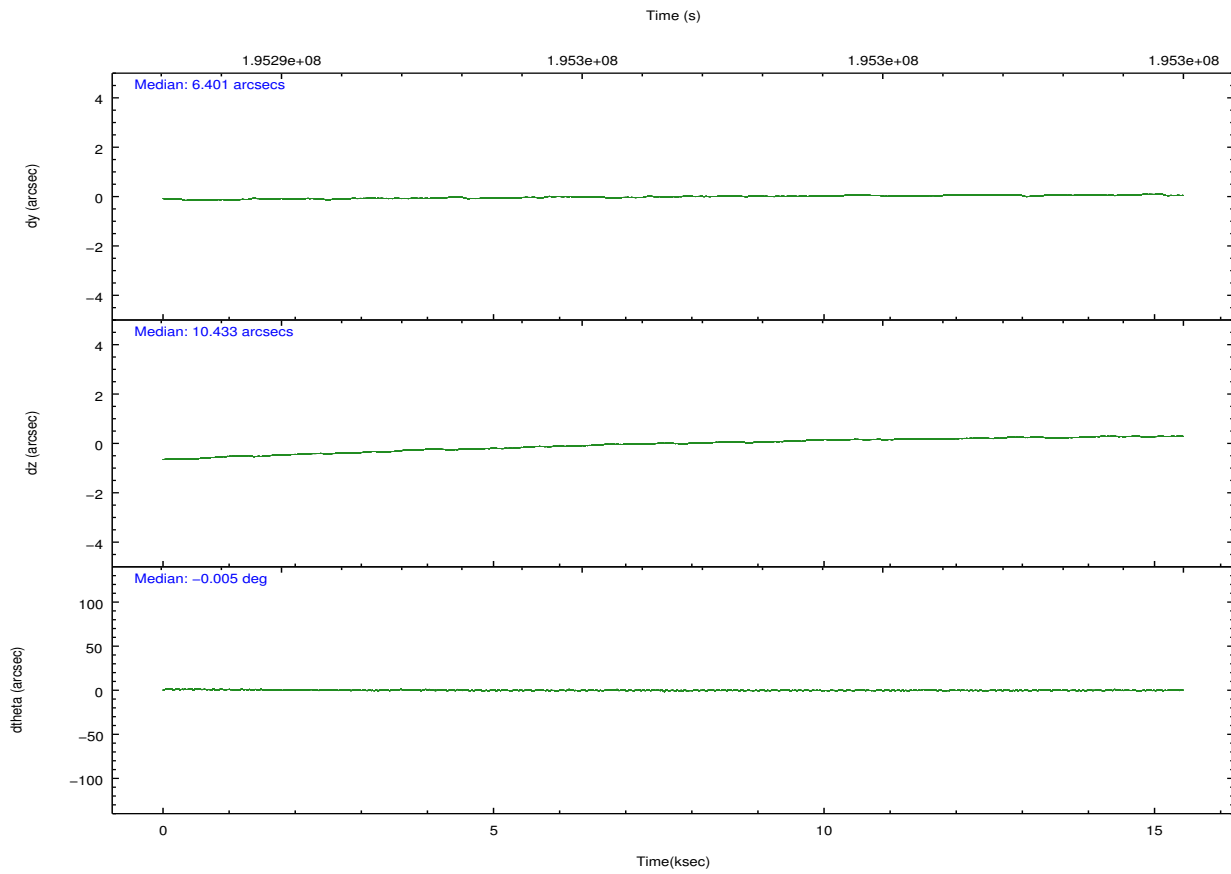
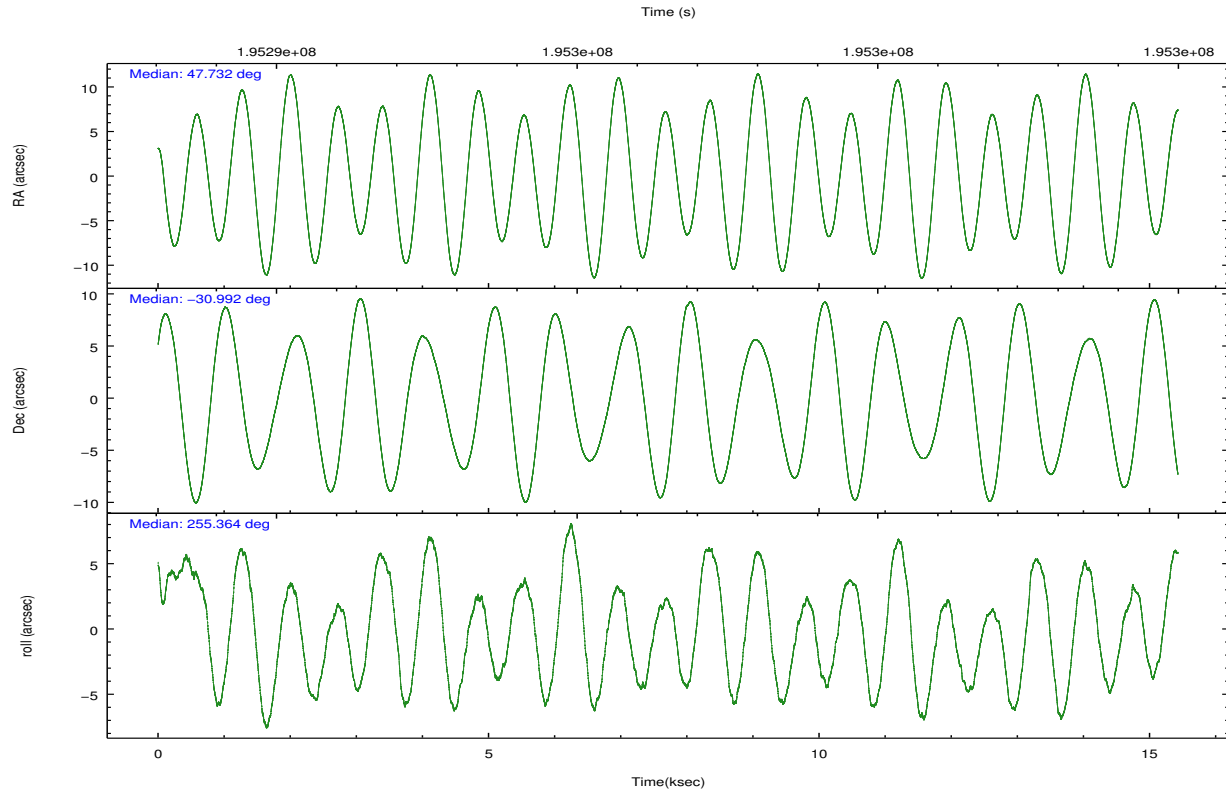
	<b>ccd 7</b>
grade 0 events	9434
	5%
grade 1 events	123
	0%
grade 2 events	17122
	9%
grade 3 events	7668
	4%
grade 4 events	7570
	4%
grade 5 events	13421
	7%
grade 6 events	49713
	28%
grade 7 events	68079
	39%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	47.723533	47.73235157547436	Subarray requested	NONE	NONE
[deg] Pointing Dec	-30.966320	-30.99245869358218	Alternating exposures requested	N	N
[deg] Pointing Roll	255.206538	255.367702174709	[s] Primary exposure time	0.000000	3
[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)	195289230.184000	195288148.29698			
Observation start date	2004-03-10T06:59:26	2004-03-10T06:42:28			
[s] Observation end time (MET)	195304230.184000	195304758.42271			
Observation end date	2004-03-10T11:09:26	2004-03-10T11:19:18			
Read mode	TIMED	TIMED			

## 2.3 Aspect



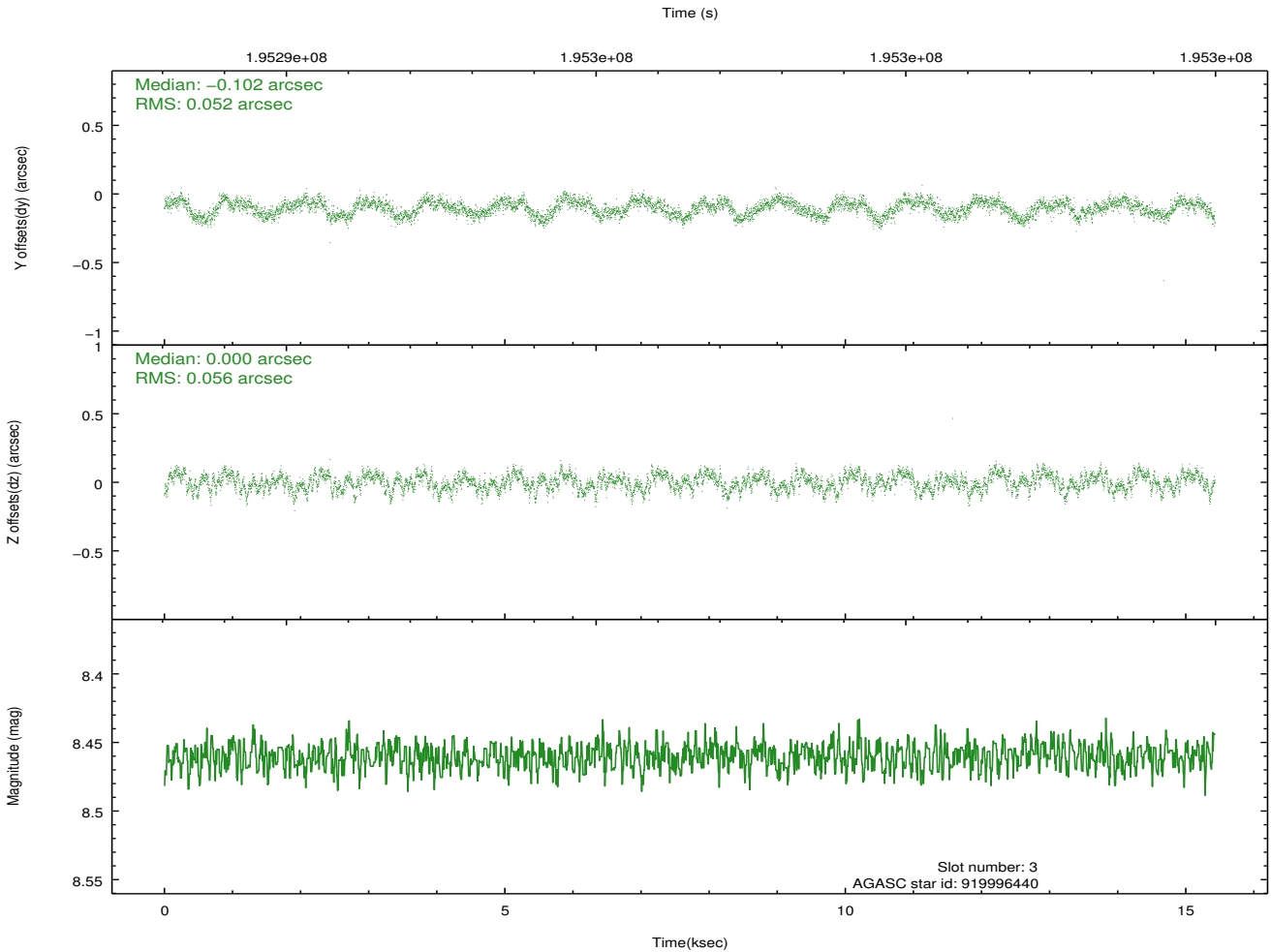
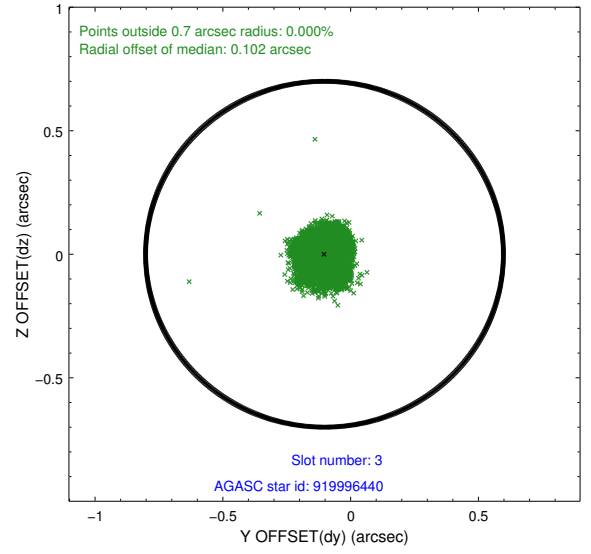
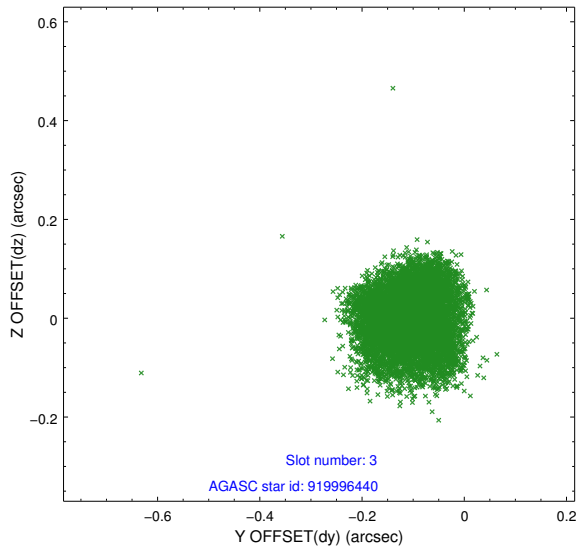


### Slot Statistics

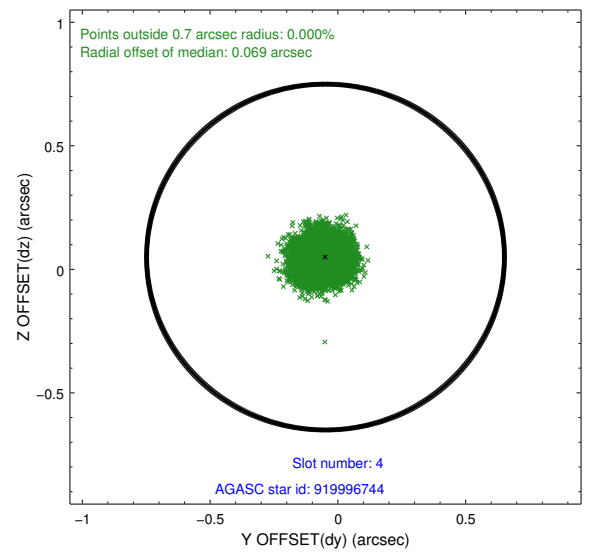
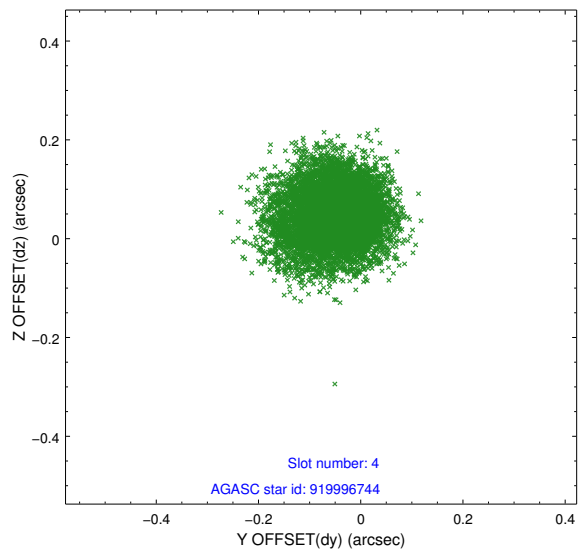
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	3763	-0.063	-0.022	0.008	0.014	0.000000	0.000000	-759.15	-1731.61
1	FID	ACIS-S-4	7.21	3763	0.083	0.036	0.007	0.012	0.000000	0.000000	2154.11	176.68
2	FID	ACIS-S-5	7.23	3763	-0.051	-0.006	0.009	0.016	0.000000	0.000000	-1811.64	170.57
3	GUIDE	919996440	8.46	7525	-0.102	0.000	0.083	0.125	47.692410	-30.544296	-1443.83	-481.00
4	GUIDE	919996744	9.19	7521	-0.048	0.050	0.079	0.130	47.799849	-30.501488	-1677.76	-198.25
5	GUIDE	920000504	9.21	7517	-0.034	-0.052	0.075	0.120	47.982704	-30.776523	-864.18	601.01
6	GUIDE	920000640	9.47	7519	0.111	0.024	0.088	0.142	47.594279	-31.126603	660.23	-237.19
7	GUIDE	919995320	8.04	7526	0.077	-0.017	0.058	0.091	47.390903	-31.253325	1262.42	-725.19

## 2.4 Star Slots

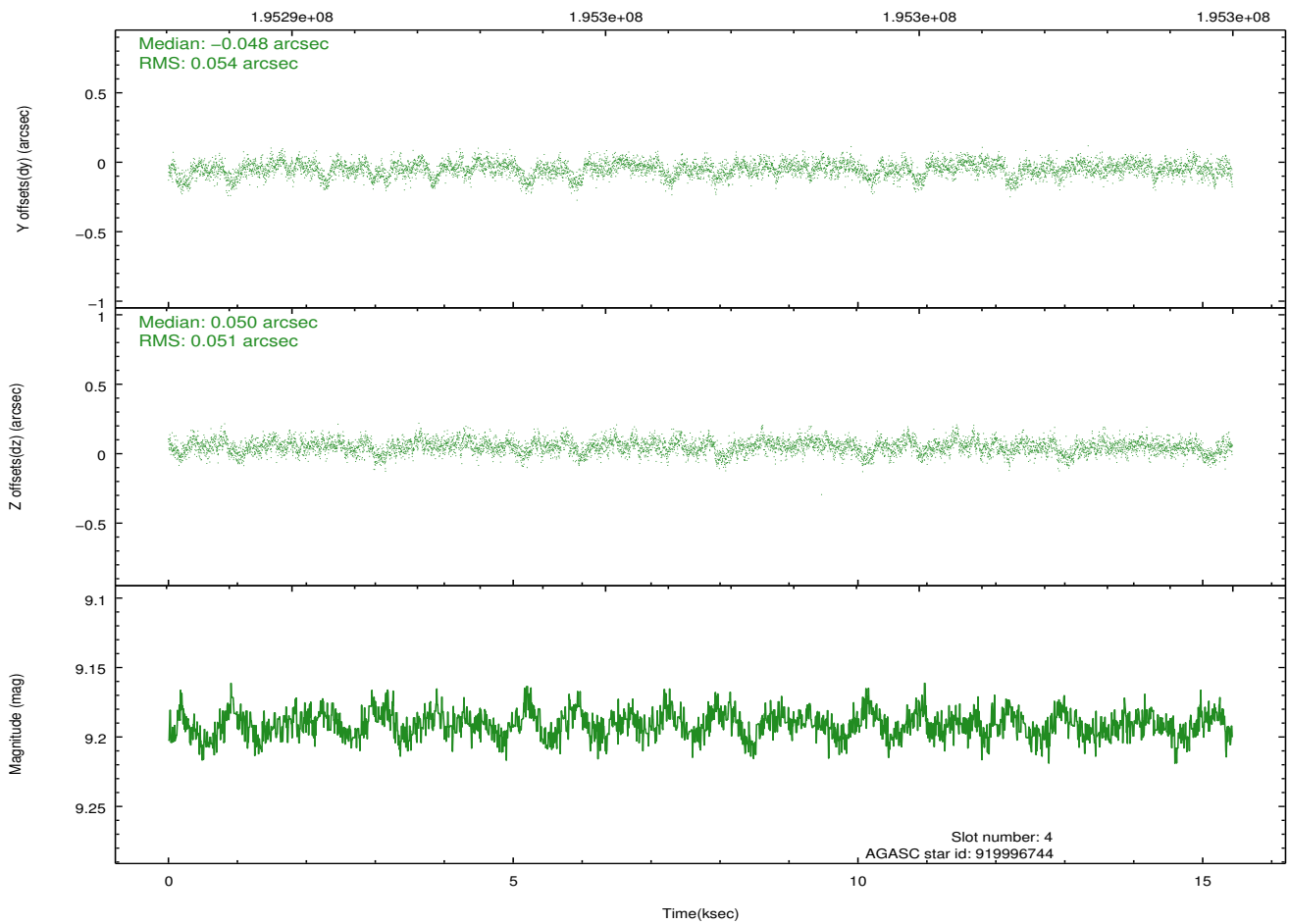
### 2.4.1 Slot 3



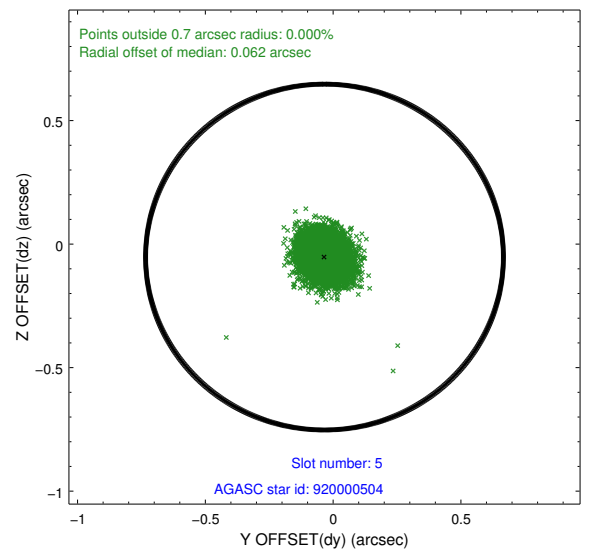
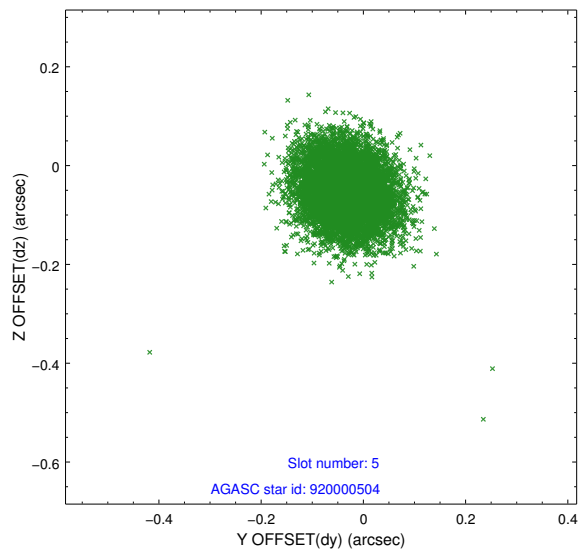
## 2.4.2 Slot 4



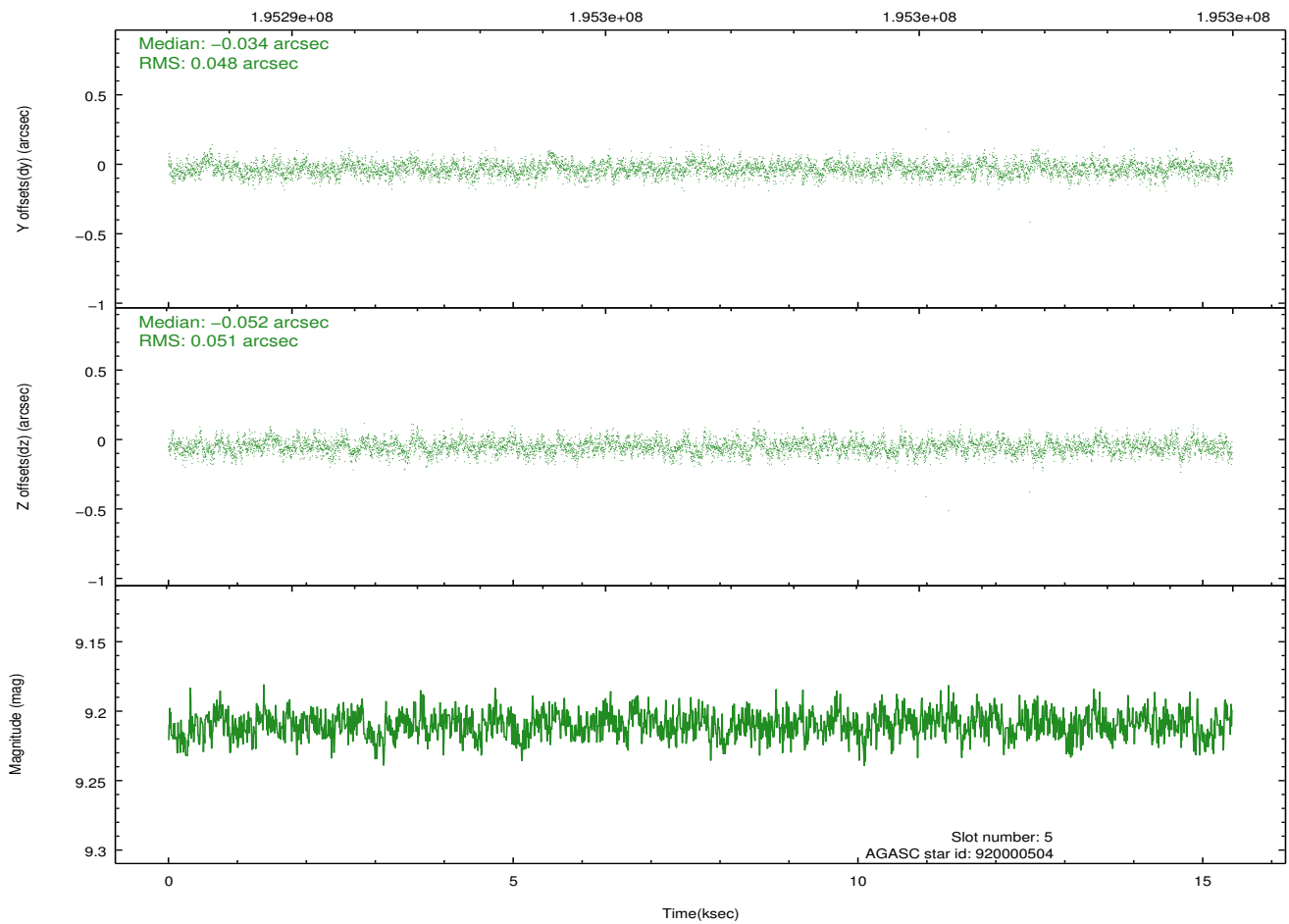
Time (s)



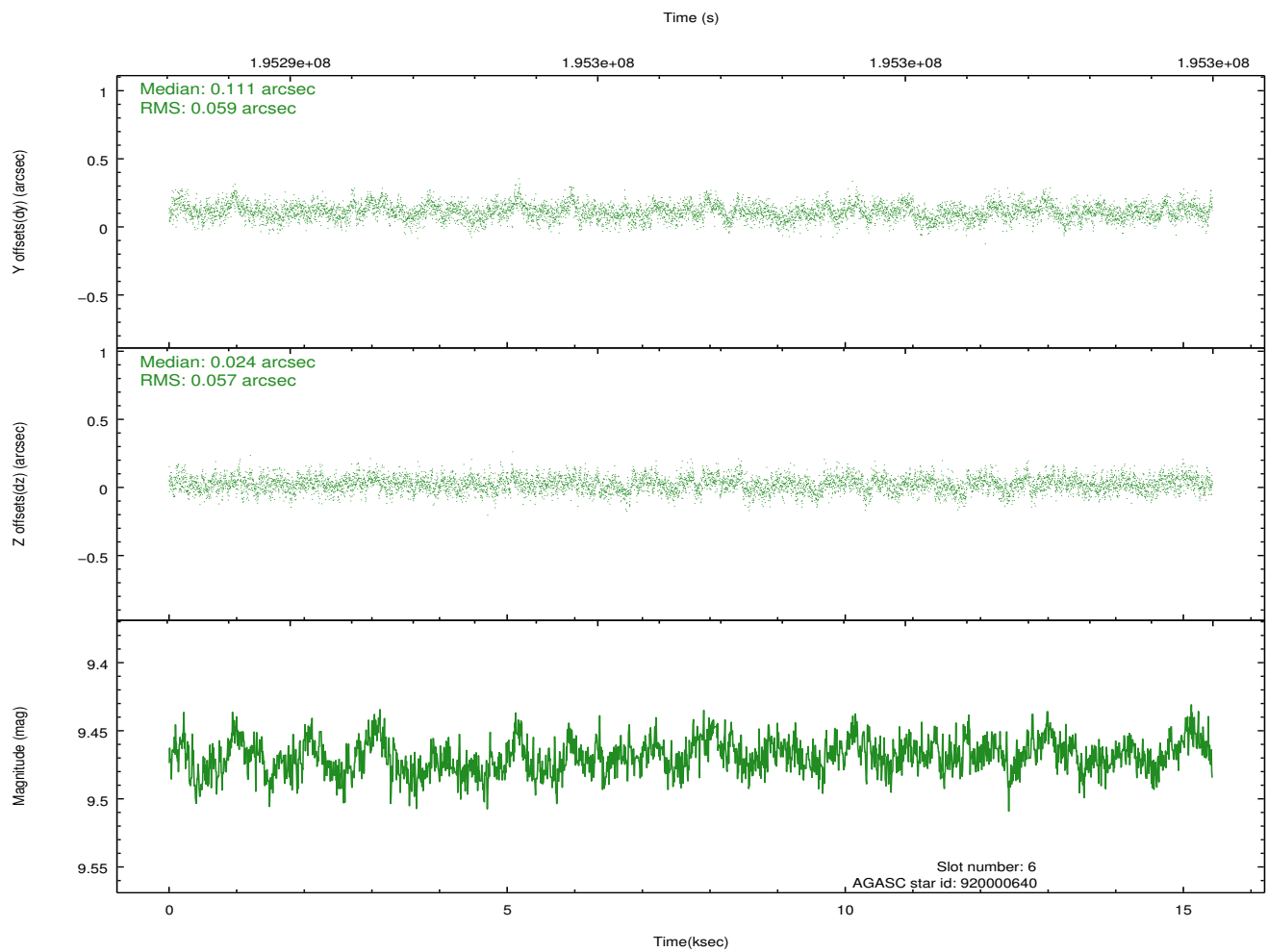
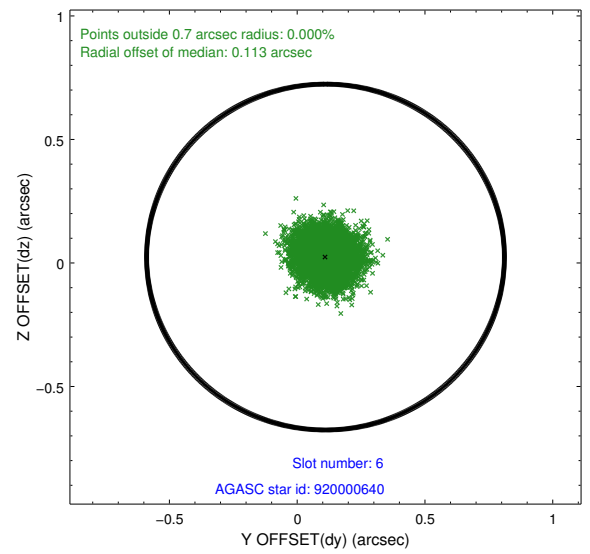
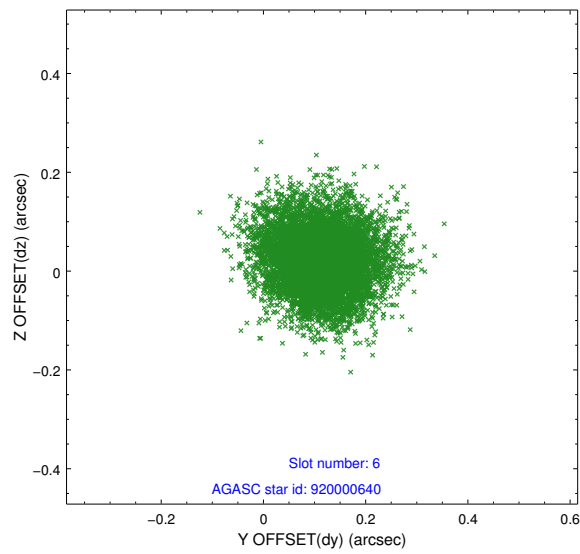
### 2.4.3 Slot 5



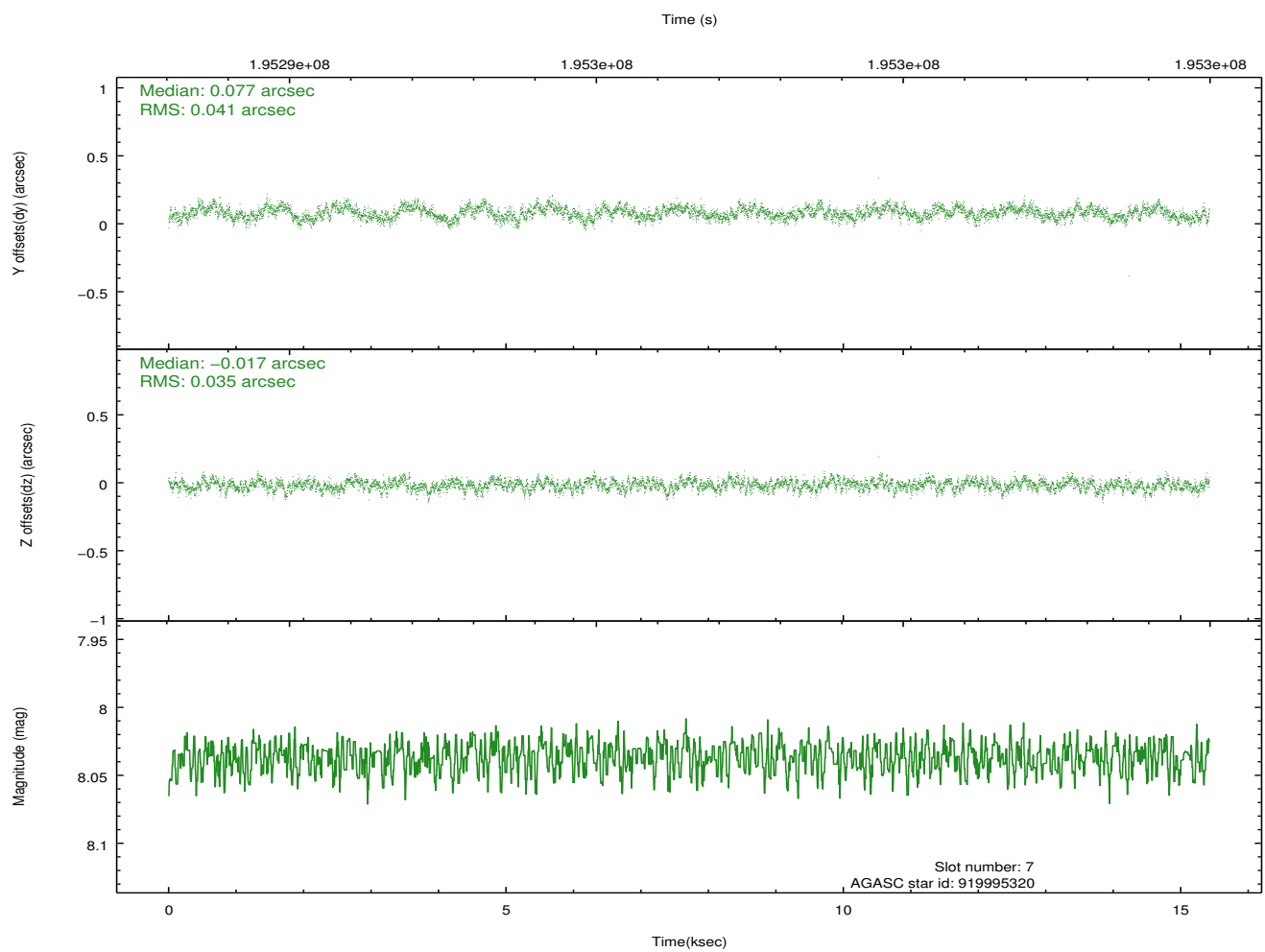
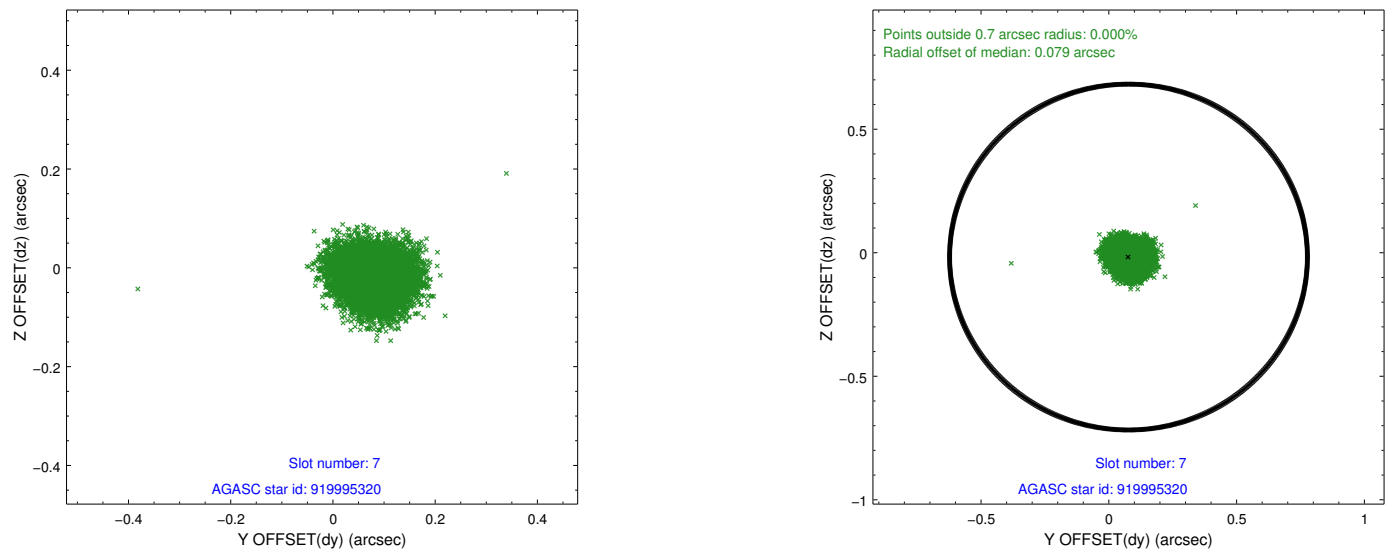
Time (s)



## 2.4.4 Slot 6

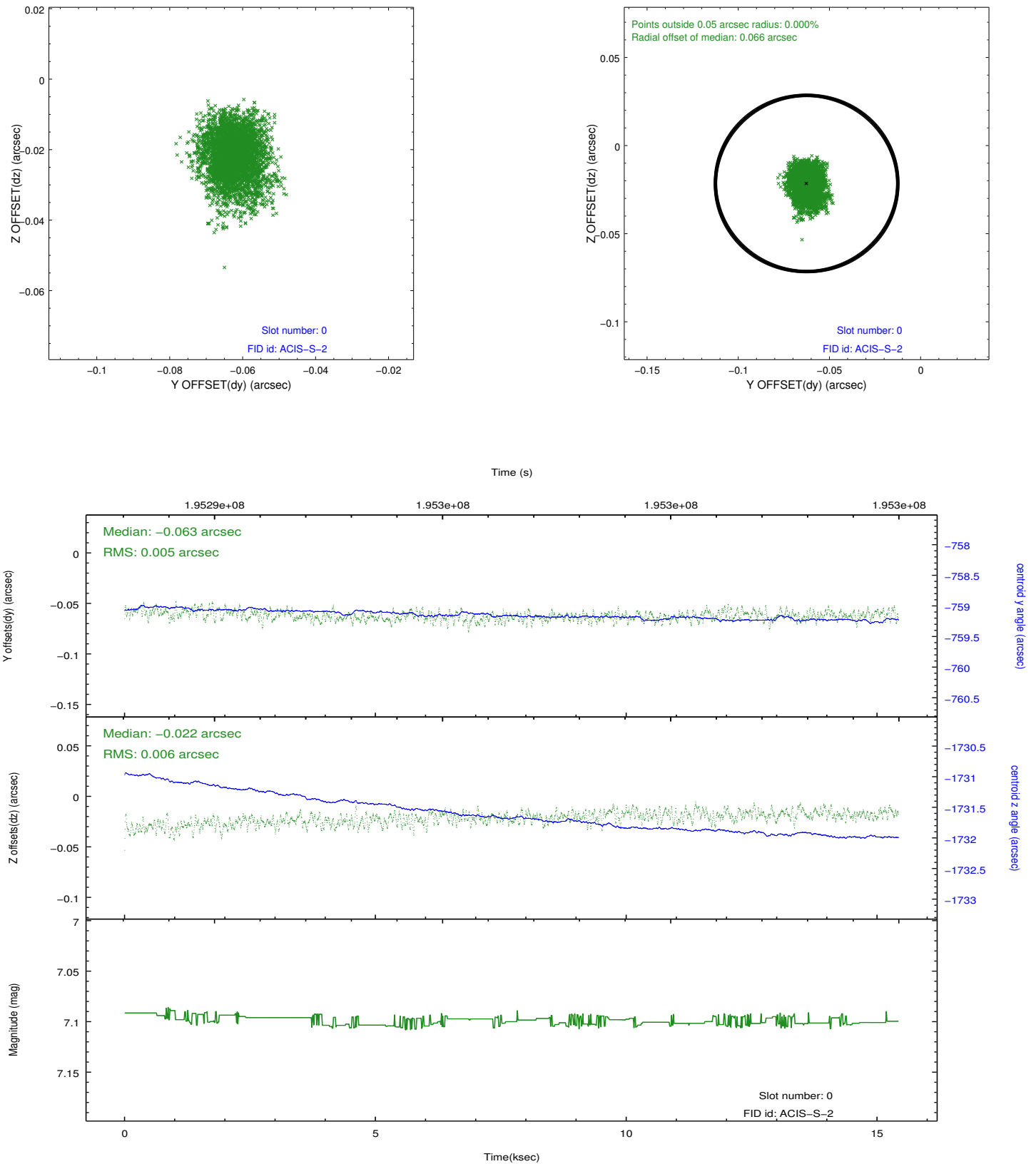


## 2.4.5 Slot 7

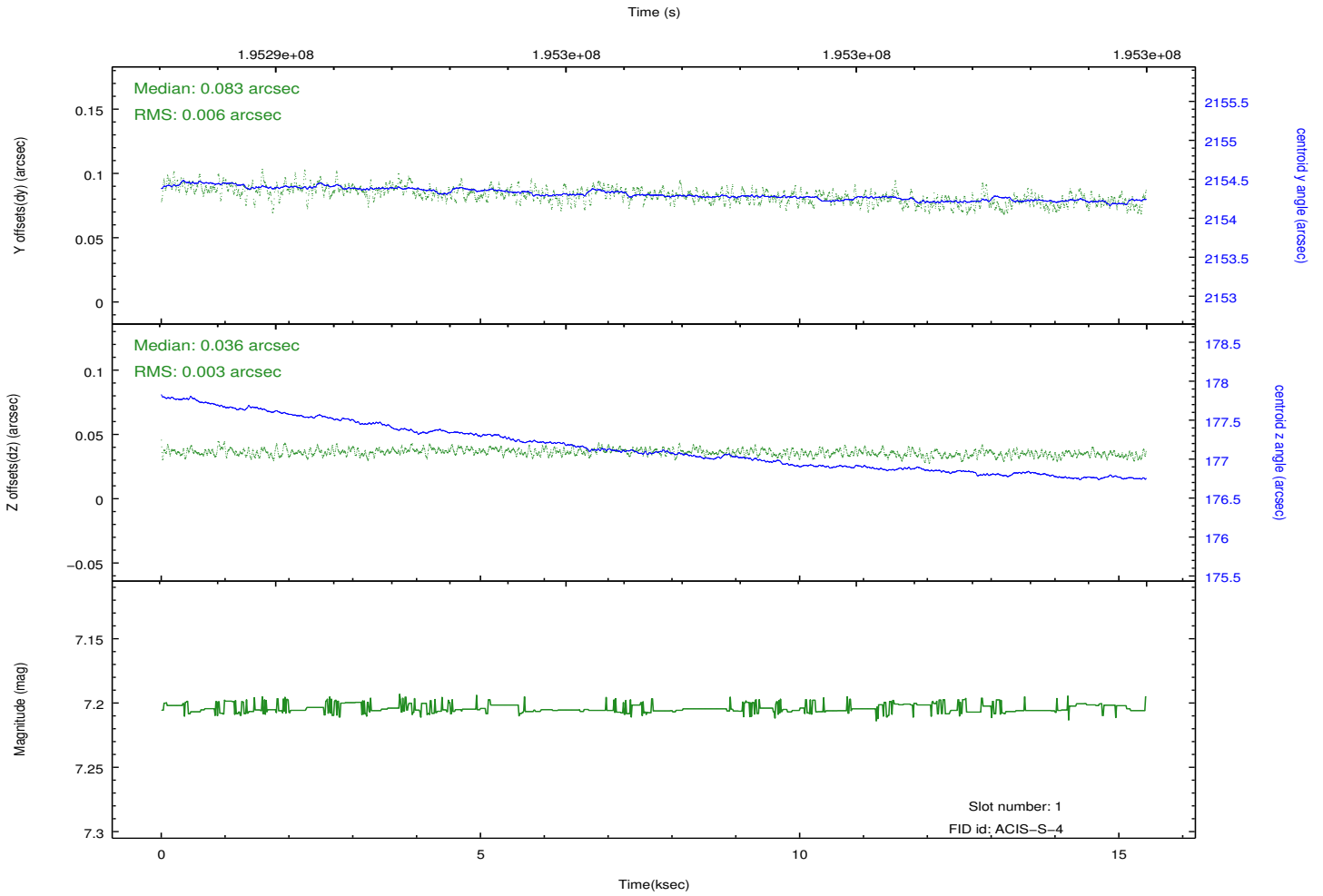
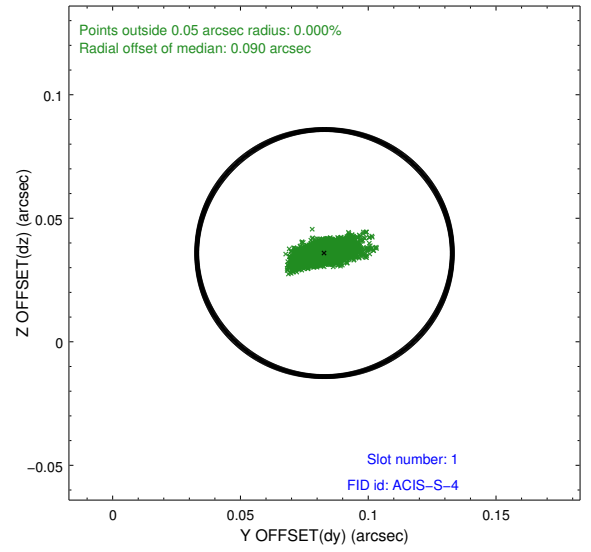
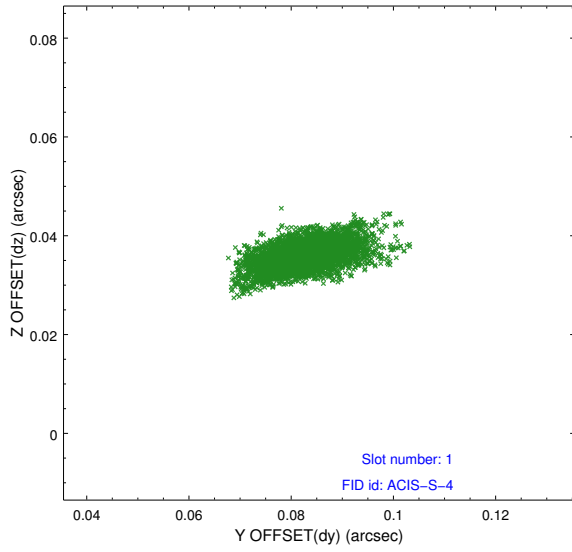


## 2.5 FID Slots

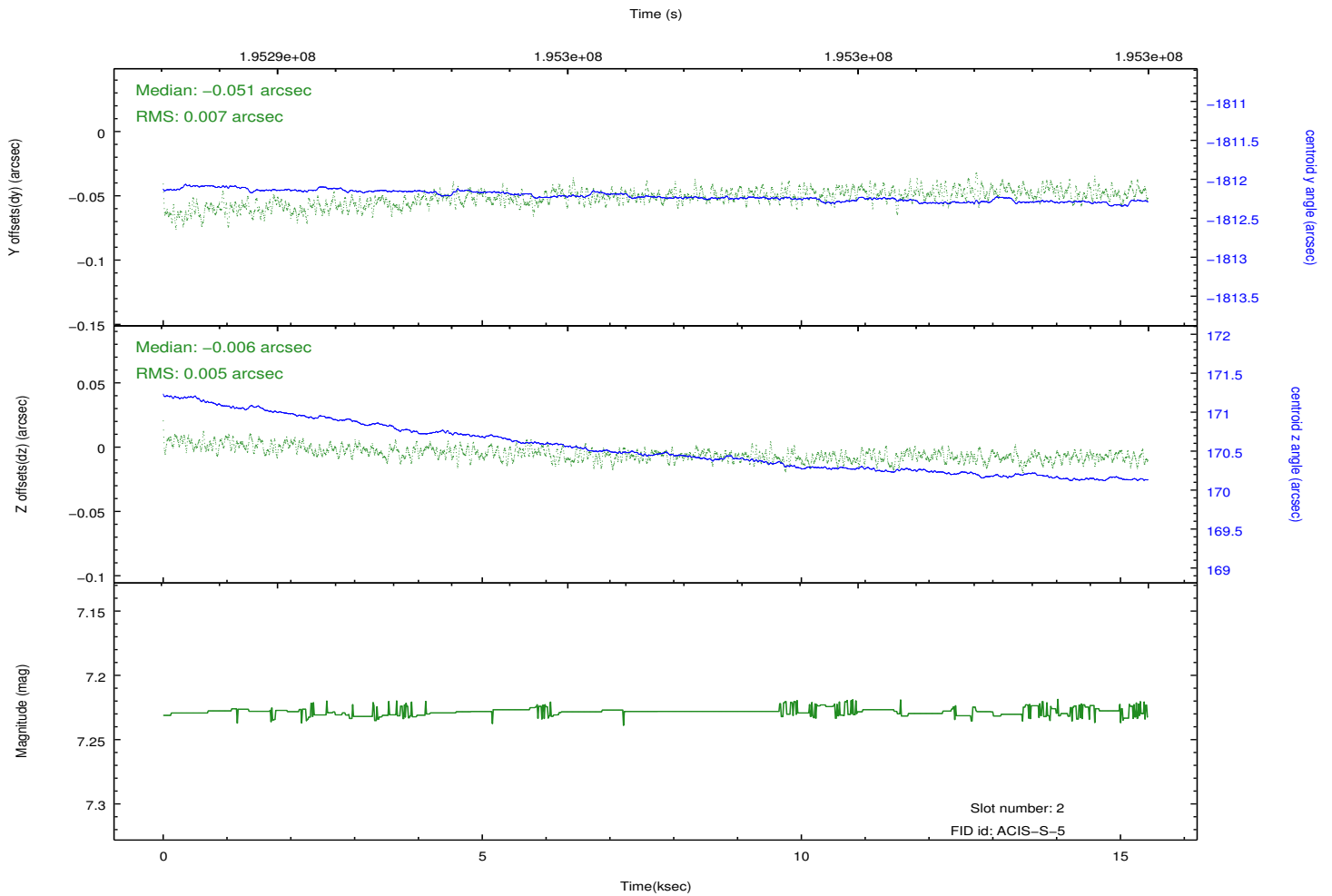
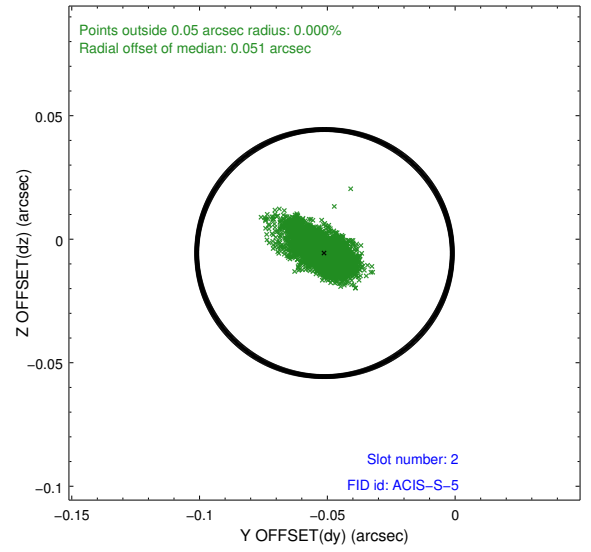
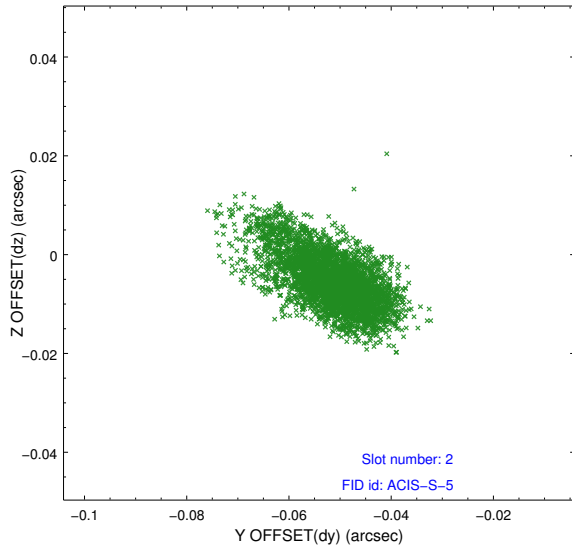
### 2.5.1 Slot 0



## 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)	2012.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.423

## A.2 Comments