

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 13712 - L2 Version 2  
Chandra X-Ray Center

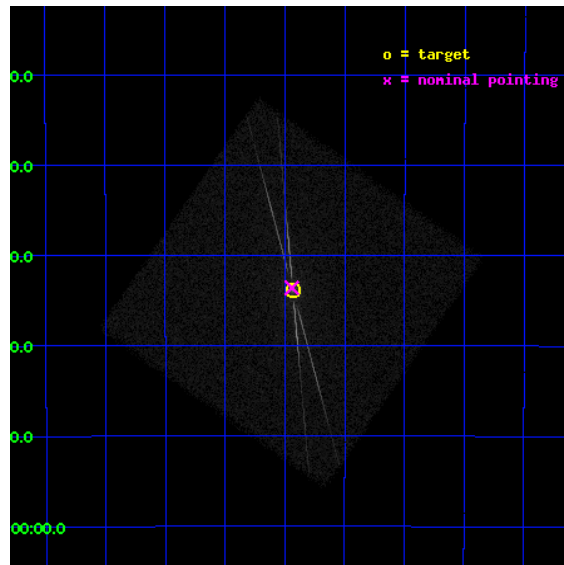
L2 Processing Date : Jul 28 2012

## 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

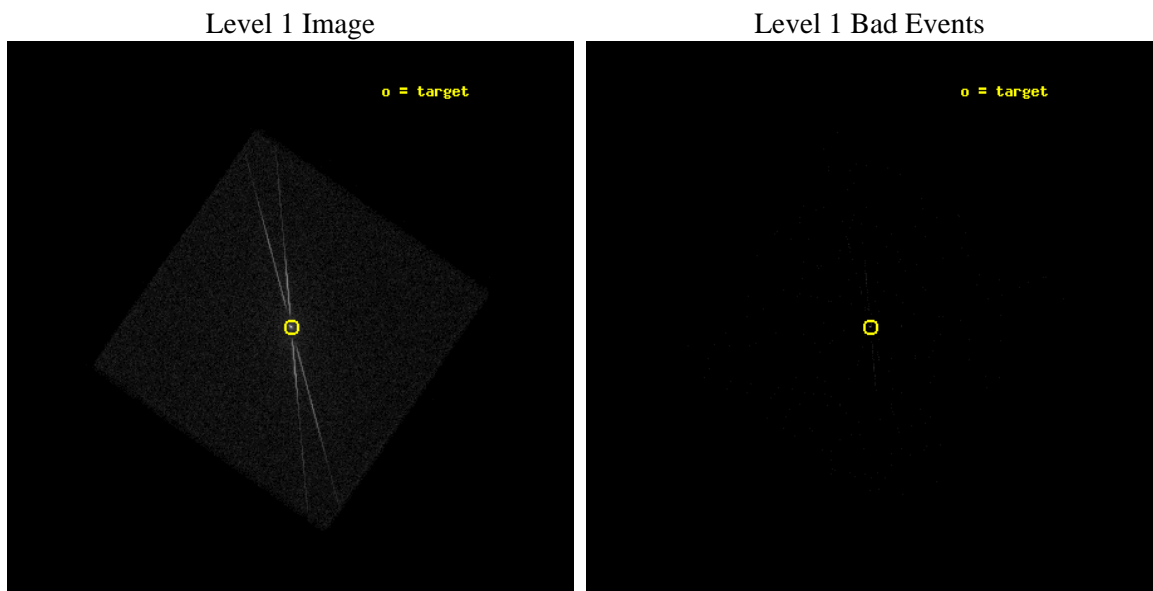
seq_num	401398	Sequence number
obs_id	13712	Observation id
title	An accurate X-ray position of the neutron-star low-mass X-ray binary GX 3+1	Proposal title
observer	Dr. Jeroen Homan	Principal investigator
object	GX 3+1	Source name
ra_targ	266.98375	Observer's specified target RA [deg]
dec_targ	-26.563556	Observer's specified target Dec [deg]
ra_nom	266.98537706688	Nominal RA [deg]
dec_nom	-26.559786043827	Nominal Dec [deg]
roll_nom	79.905172994198	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1124.4250596762	[s]
livetime	1110.1275833657	Ontime multiplied by DTCOR
l2events	129372	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	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1124.4250596762	[s]
caldsver	4.5.1	&#160	l1events	280041	Number of level 1 events
date	2012-07-28T08:58:50	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

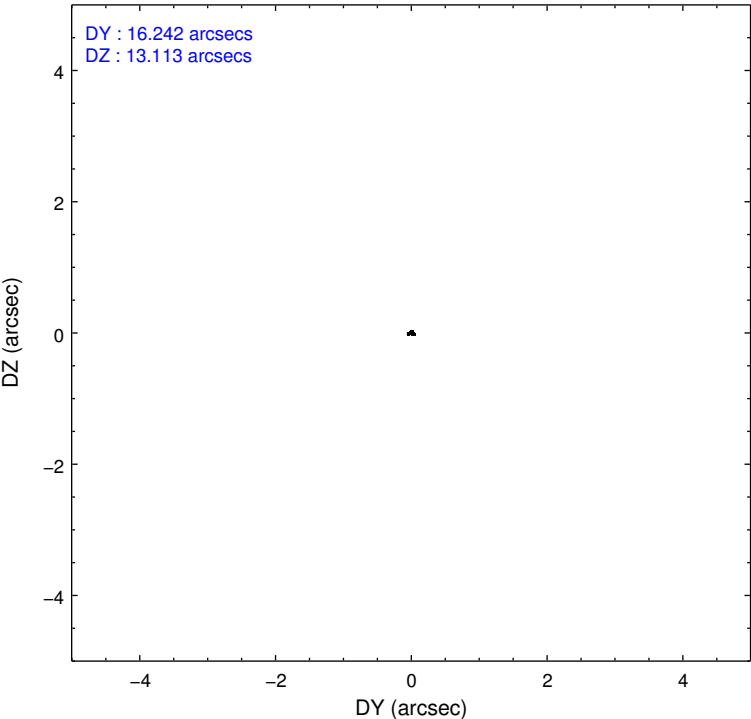
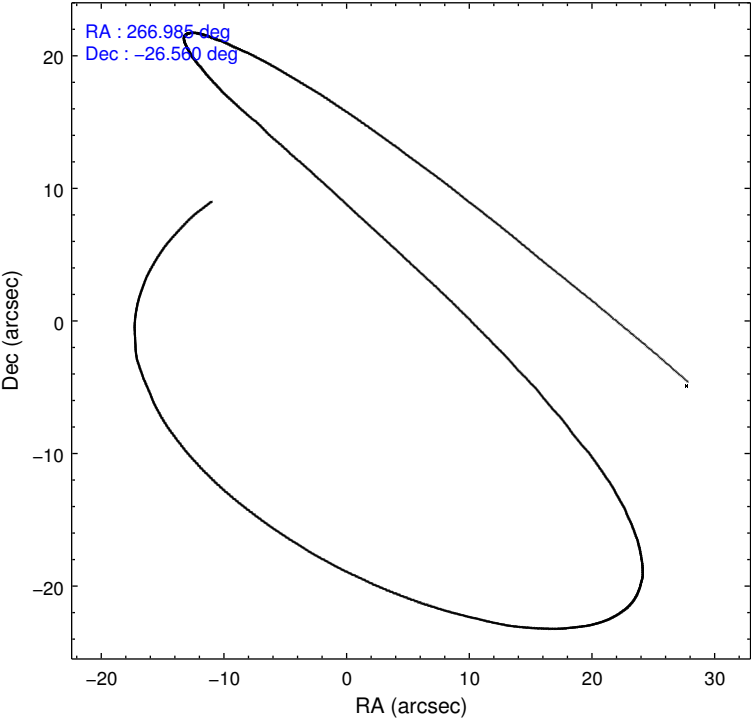
#### Level 1 Events

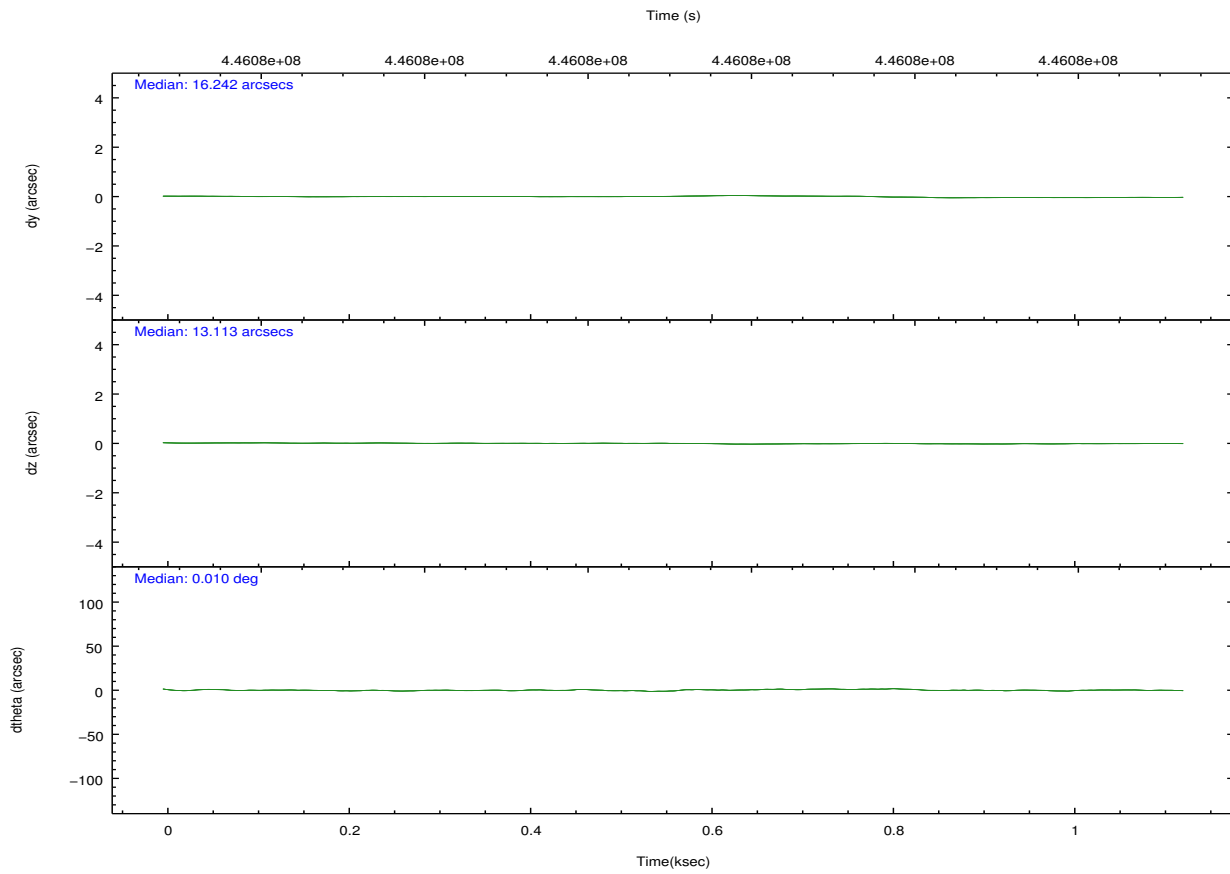
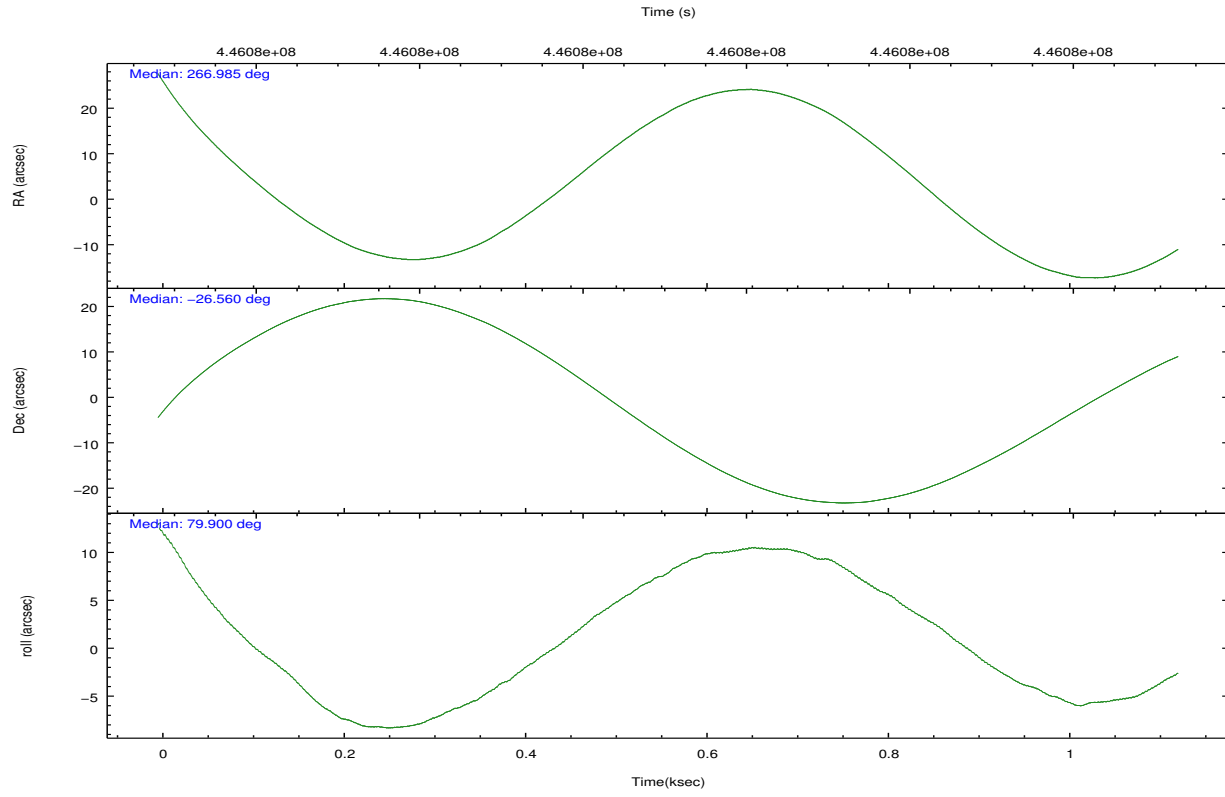
	<b>segment 0</b>
level 1 events	280041
rejected events	119929
rejected %	42%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-I	HRC-I	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	266.997246	266.9853770668779			
[deg] Pointing Dec	-26.585314	-26.55978604382731			
[deg] Pointing Roll	80.006038	79.90517299419825			
[mm] SIM focus pos	-1.040293	-1.038866356238299			
[mm] SIM defocus	0	0.001426264420575141			
[mm] SIM translation stage pos	126.985494	126.98297998999862			
[mm] SIM translation stage offset	0	0.002508901615314585			
[s] Observation start time (MET)	446079863.184000	446078588.38662			
Observation start date	2012-02-19T23:03:17	2012-02-19T22:43:08			
[s] Observation end time (MET)	446080863.184000	446081912.46179			
Observation end date	2012-02-19T23:19:57	2012-02-19T23:38:32			

### 2.3 Aspect





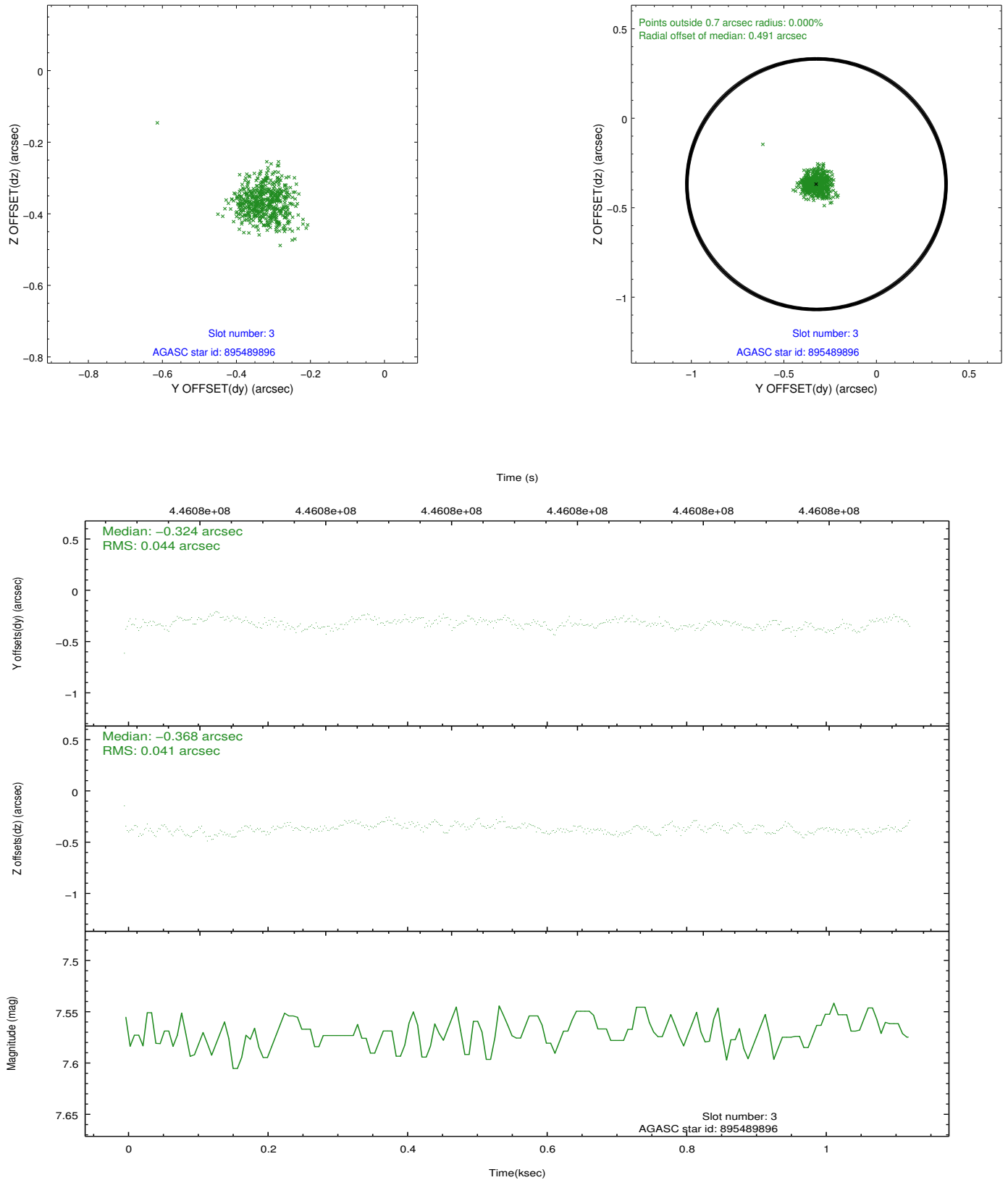
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.96	275	-0.084	0.028	0.008	0.013	0.000000	0.000000	-772.19	-1301.09
1	FID	HRC-I-2	6.99	275	0.240	-0.129	0.006	0.010	0.000000	0.000000	837.95	-1307.59
2	FID	HRC-I-3	7.04	275	-0.037	0.012	0.007	0.017	0.000000	0.000000	-1197.53	998.71
3	GUIDE	895489896	7.57	550	-0.324	-0.368	0.064	0.098	266.605795	-26.200300	1143.30	1482.53
4	GUIDE	896009152	7.32	550	0.243	0.327	0.079	0.134	267.588100	-27.061669	-1362.52	-2163.53
5	GUIDE	896013040	7.35	550	0.152	-0.189	0.089	0.153	266.506589	-26.972299	-1650.61	1301.14
6	GUIDE	896015112	9.17	546	-0.256	-0.279	0.114	0.180	266.684847	-26.286161	881.08	1179.37
7	GUIDE	896008536	8.61	549	0.187	0.495	0.097	0.172	267.569332	-27.063788	-1380.16	-2105.99

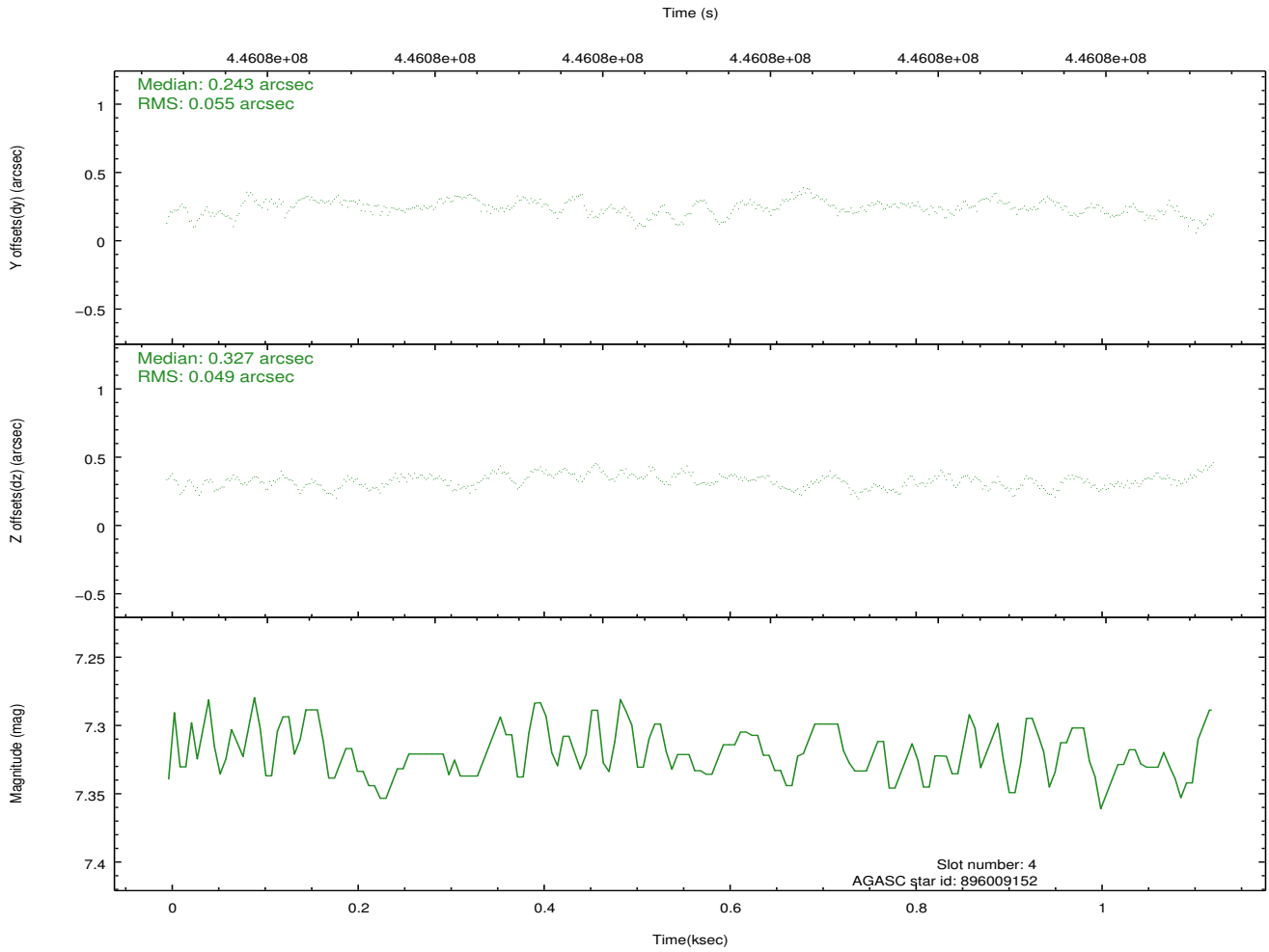
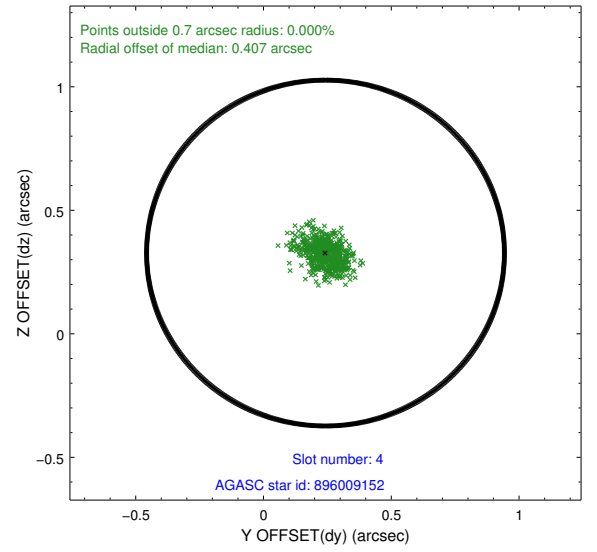
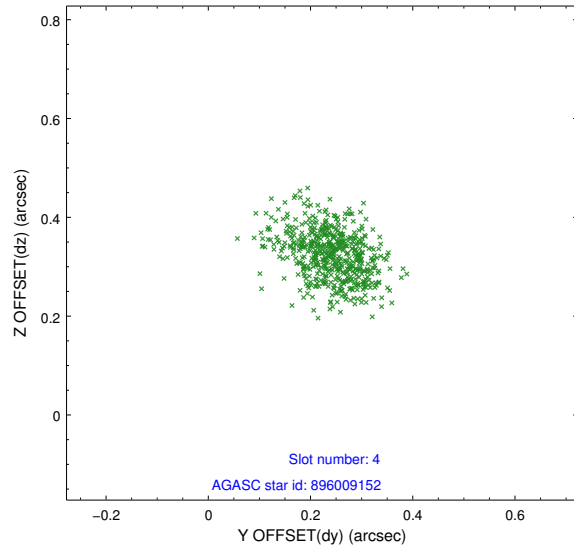


## 2.4 Star Slots

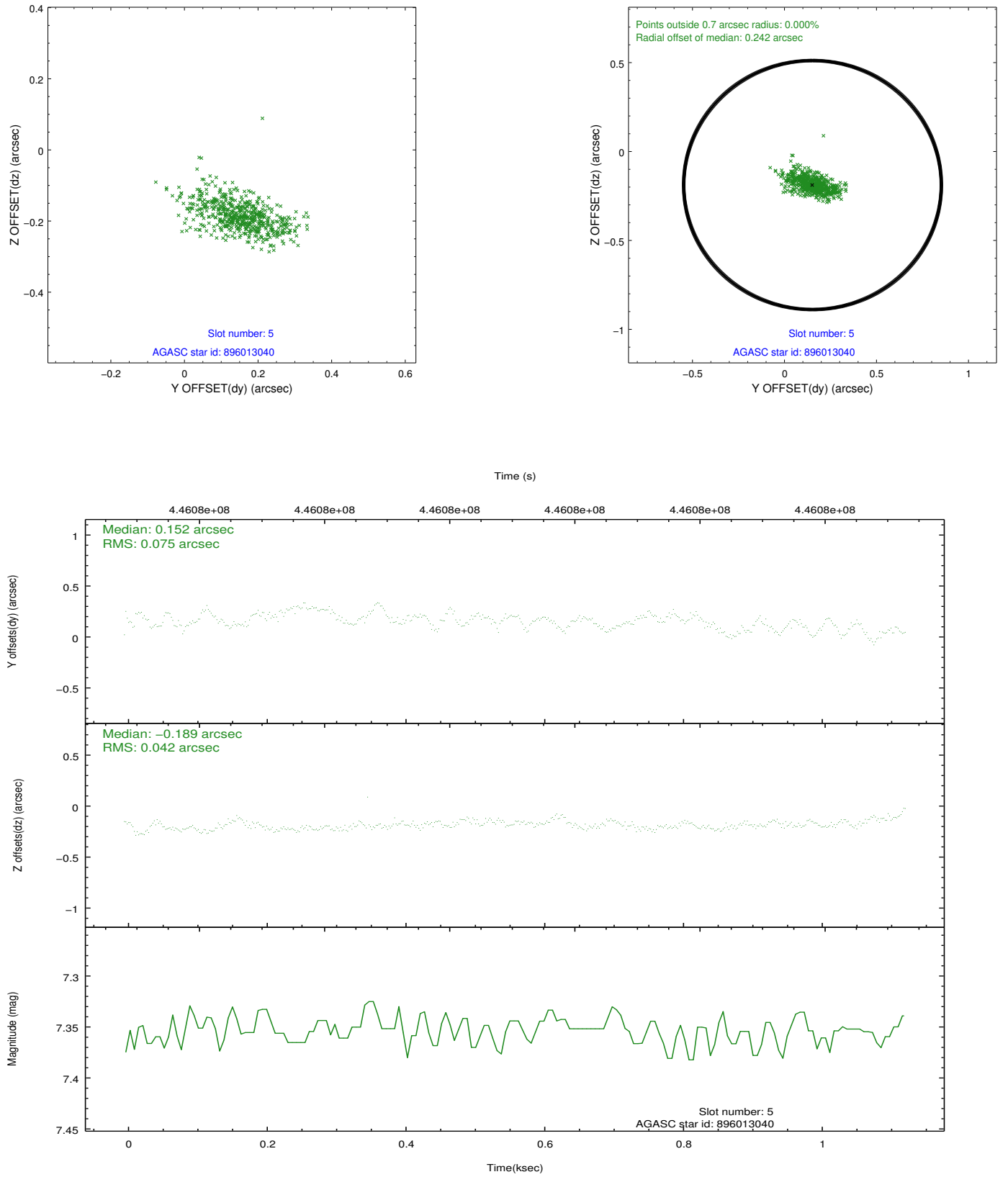
### 2.4.1 Slot 3



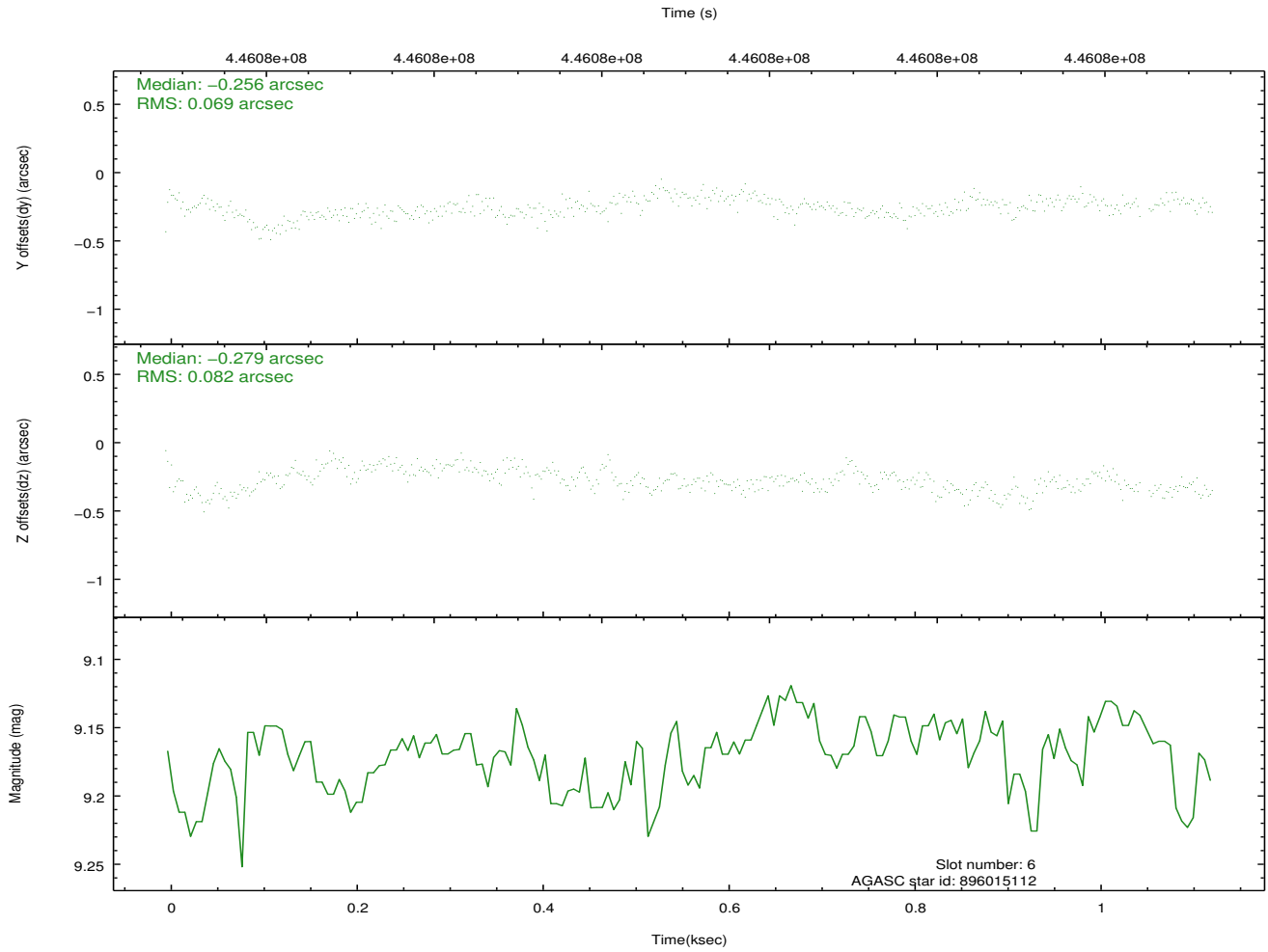
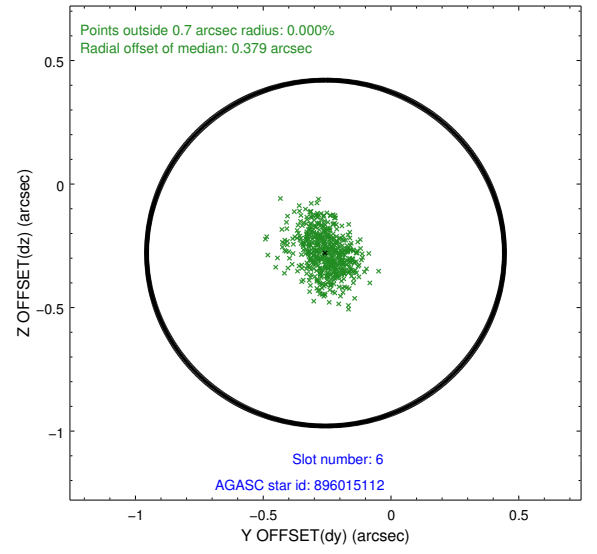
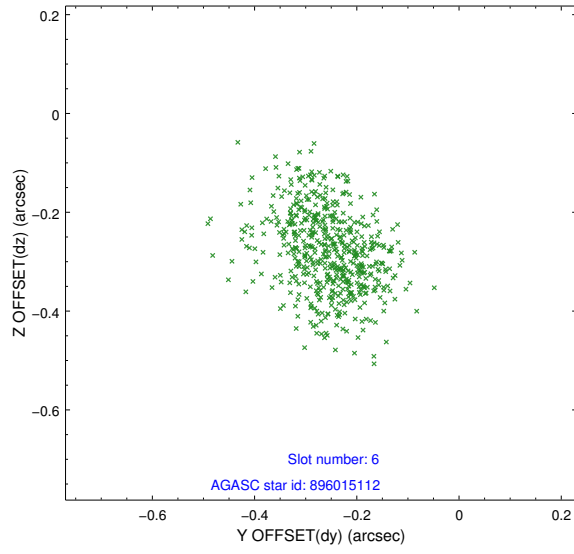
## 2.4.2 Slot 4



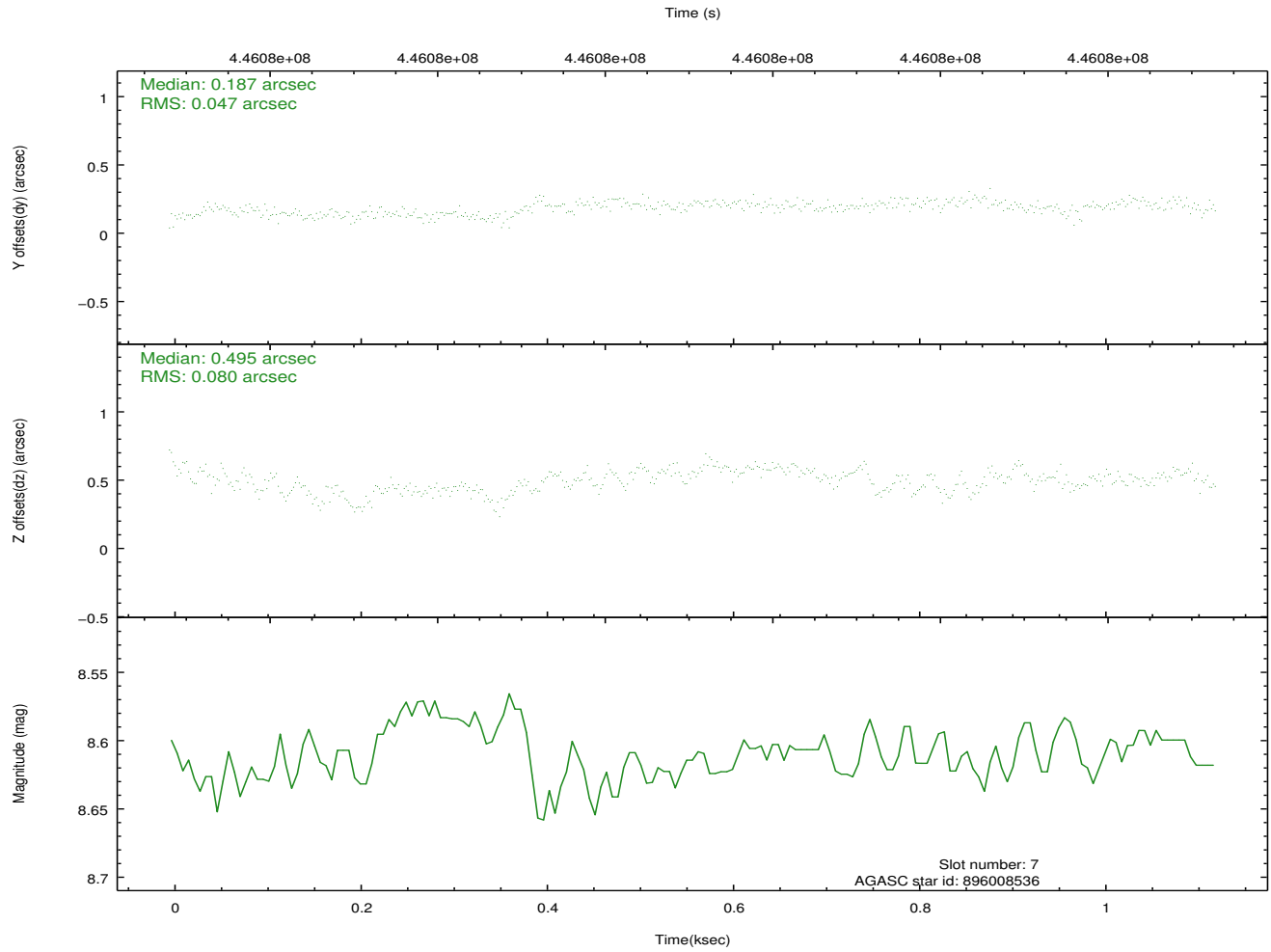
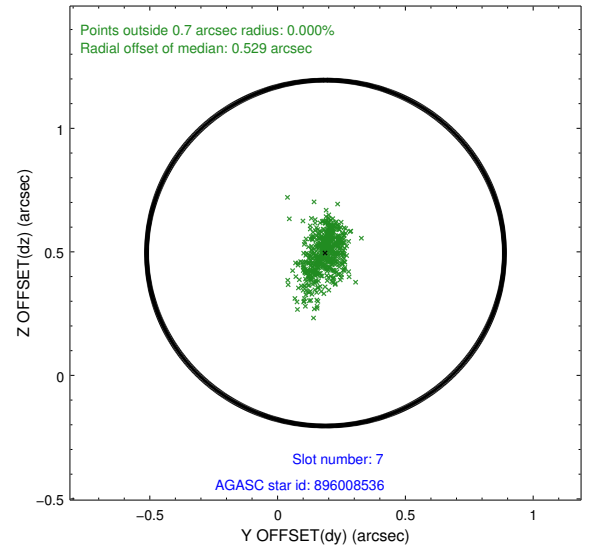
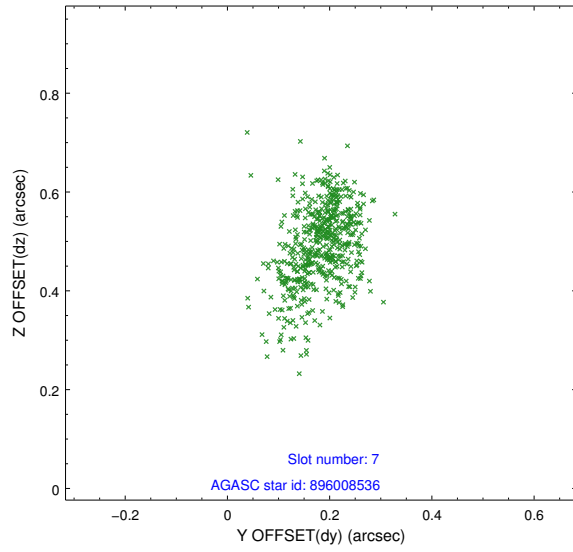
### 2.4.3 Slot 5



## 2.4.4 Slot 6

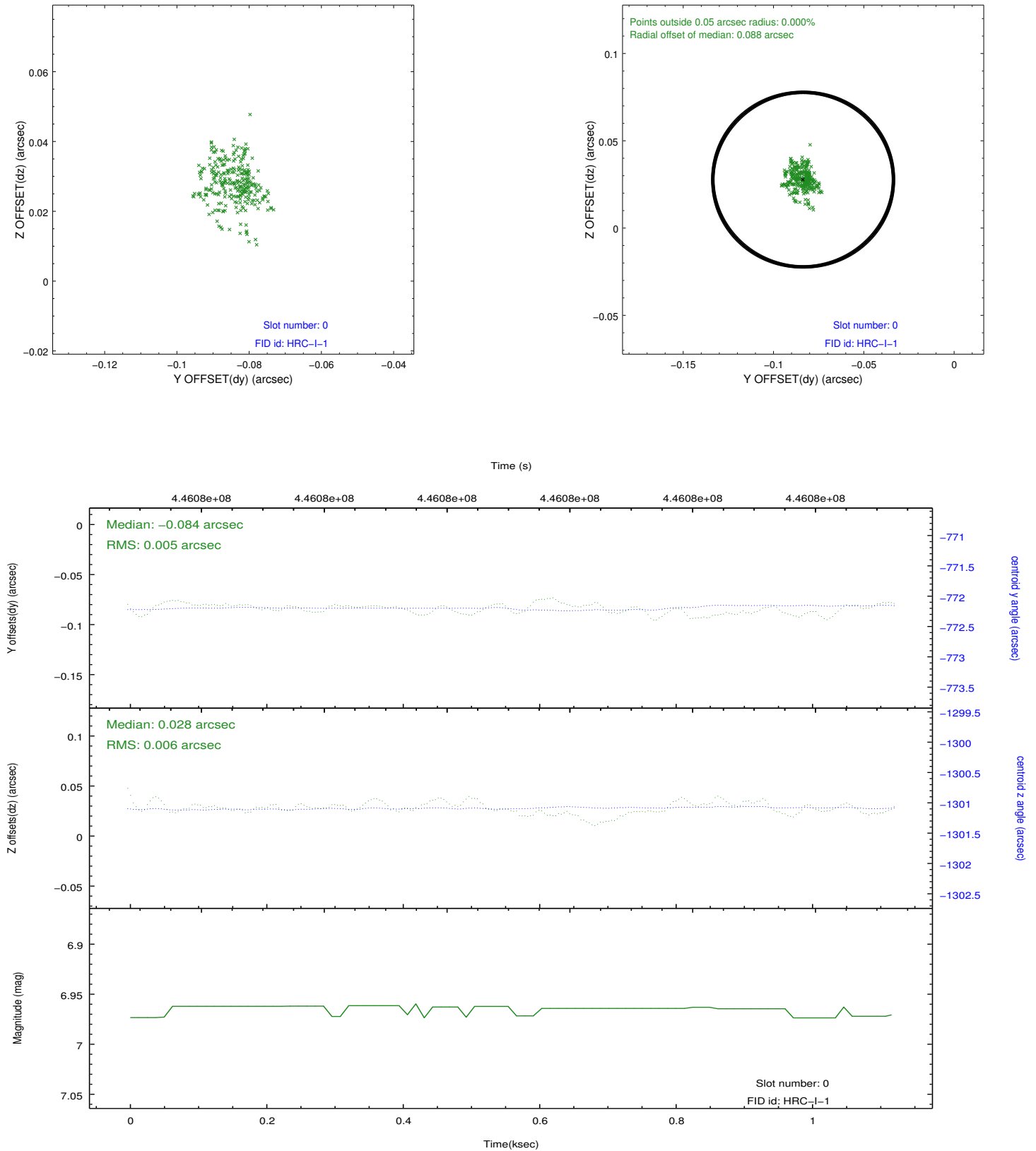


## 2.4.5 Slot 7

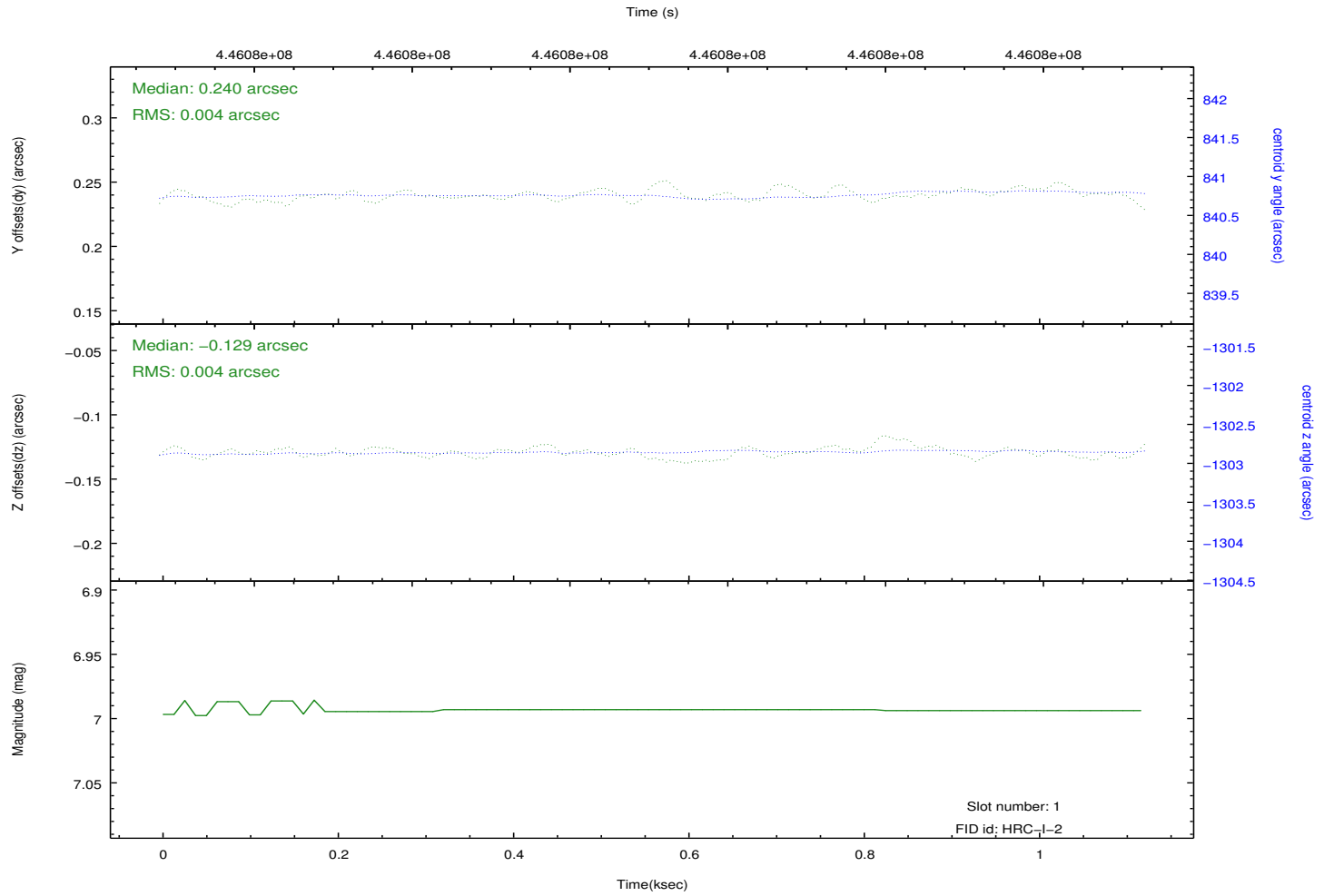
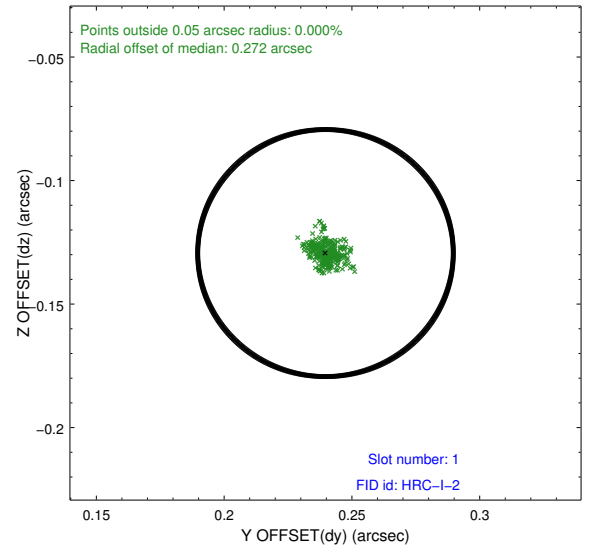
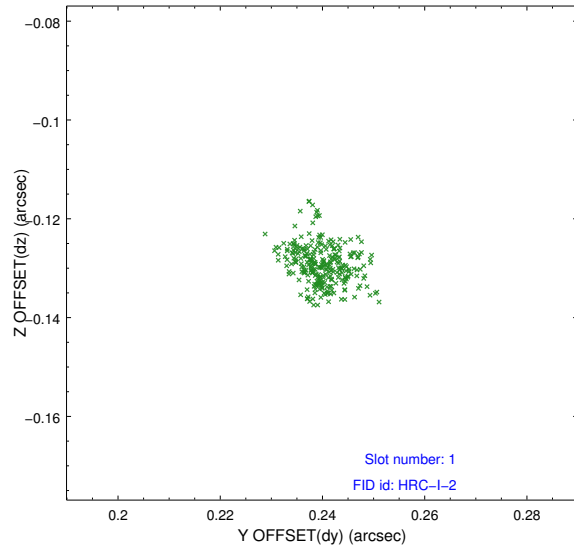


## 2.5 FID Slots

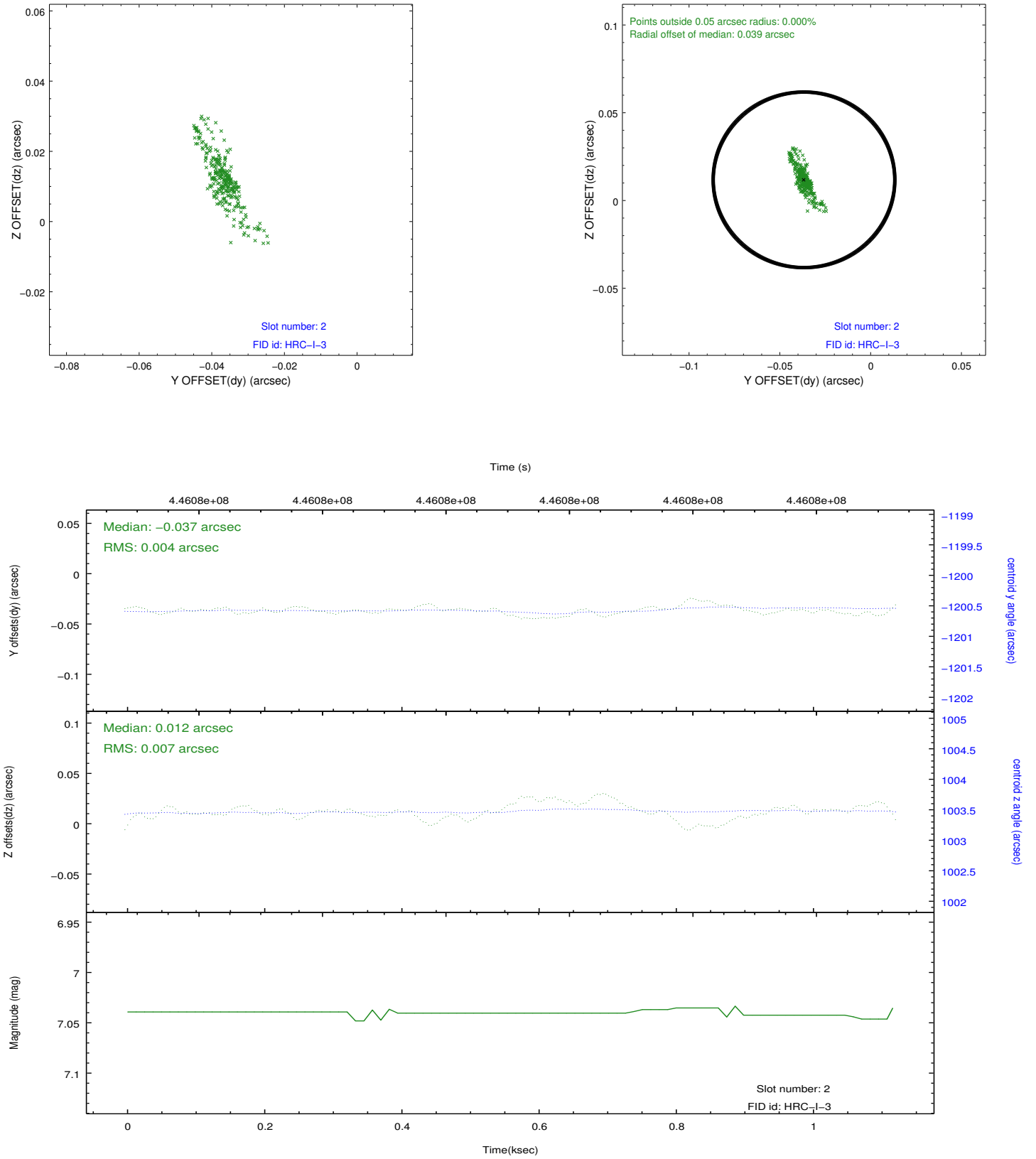
### 2.5.1 Slot 0



## 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)	2012.08.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1244250596762

## A.2 Comments

The combination of HRC-I detector and HETG gratings has not been used before on the Chandra mission. Users should be alert to possible issues due to this mode. ===== The software module celldetect normally computes the zeroth order image size using a guess of the cell size provided by calibration files. There is no cell size available for the combination HTC-I HETG to make this calculation. The user can probably insert the information manually in CIAO. The PSF and off-axis region determination are not supported for this configuration. === The zeroth order has been located correctly.