

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 1012 - L2 Version 001  
Chandra X-Ray Center

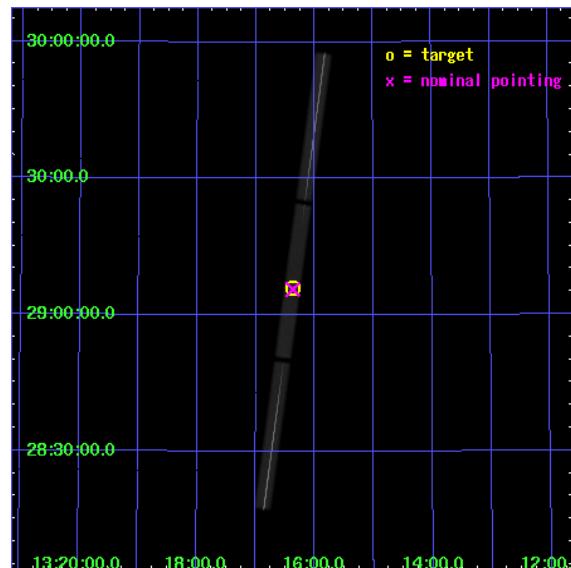
L2 Processing Date : Dec 21 2006

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# 1 Front

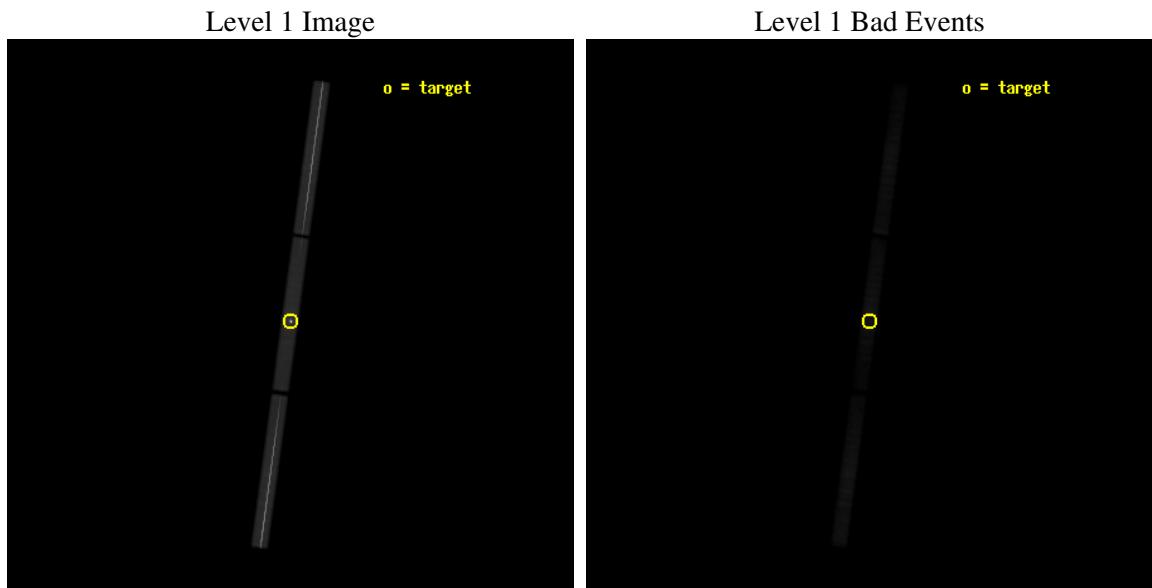
seq_num	390004
obs_id	1012
title	GRATINGS CALIBRATION OBSERVATIONS OF HZ43 AND CAPELLA
observer	Dr. CXC Calibration
object	HZ43
ra_targ	199.092083
dec_targ	29.099
ra_nom	199.0926064614
dec_nom	29.094327815363
roll_nom	277.67895117387
revision	2
ontime	20158.932044581
livetime	19939.758166333
l2events	1909028



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



## 2.1.2 Parameters

obi_num	1
ascdsver	7.6.9
caldbver	3.2.4
date	2006-12-21T15:19:27
revision	2

sched_exp_time	20000.000000
ontime	20159.700794622
l1events	2577305

## 2.1.3 Events

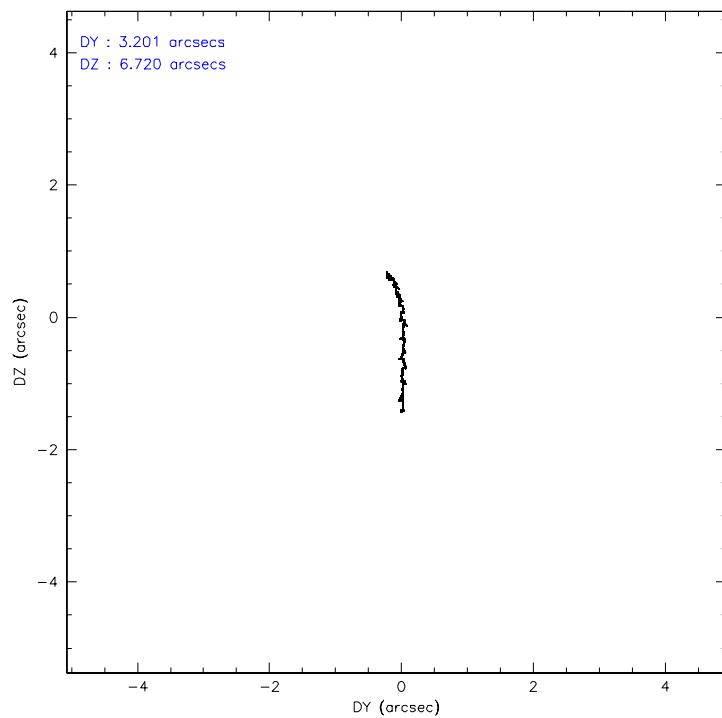
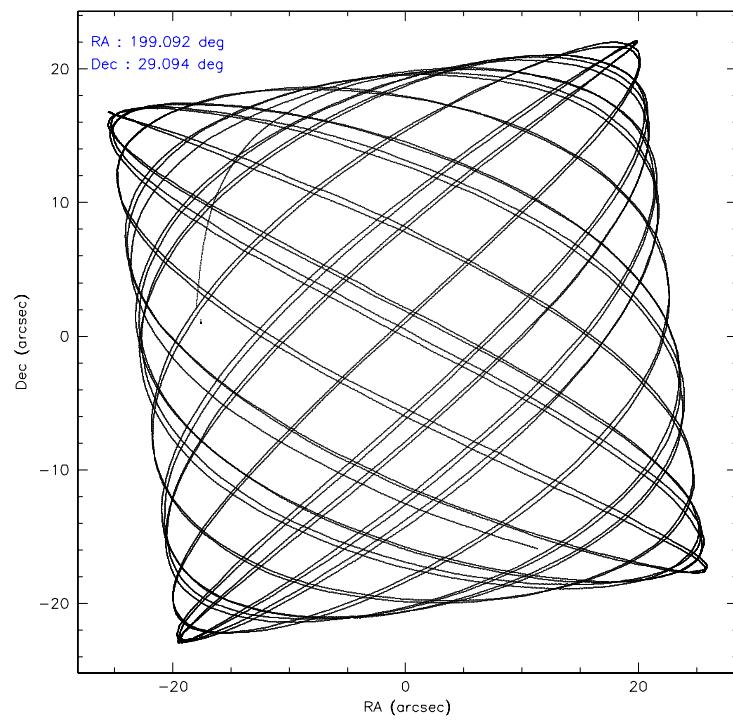
Level 1 Events

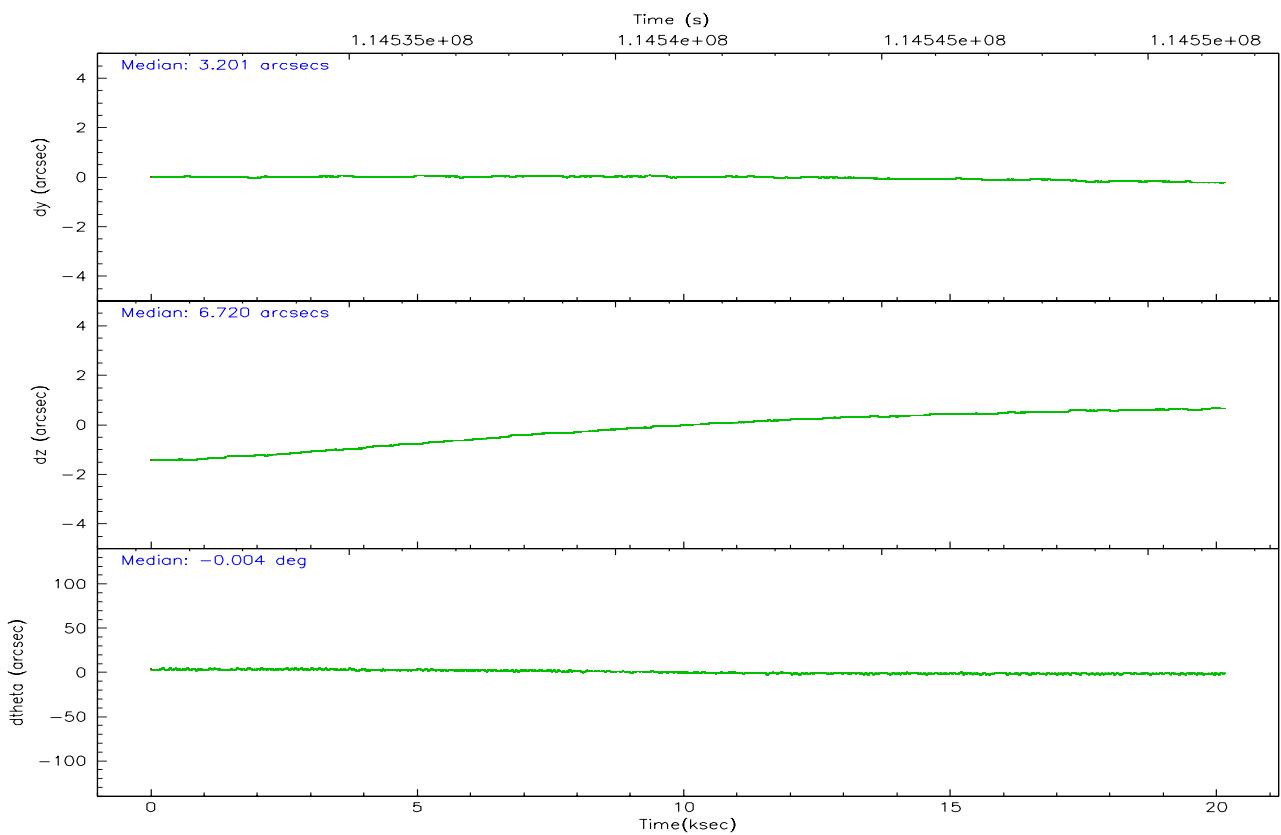
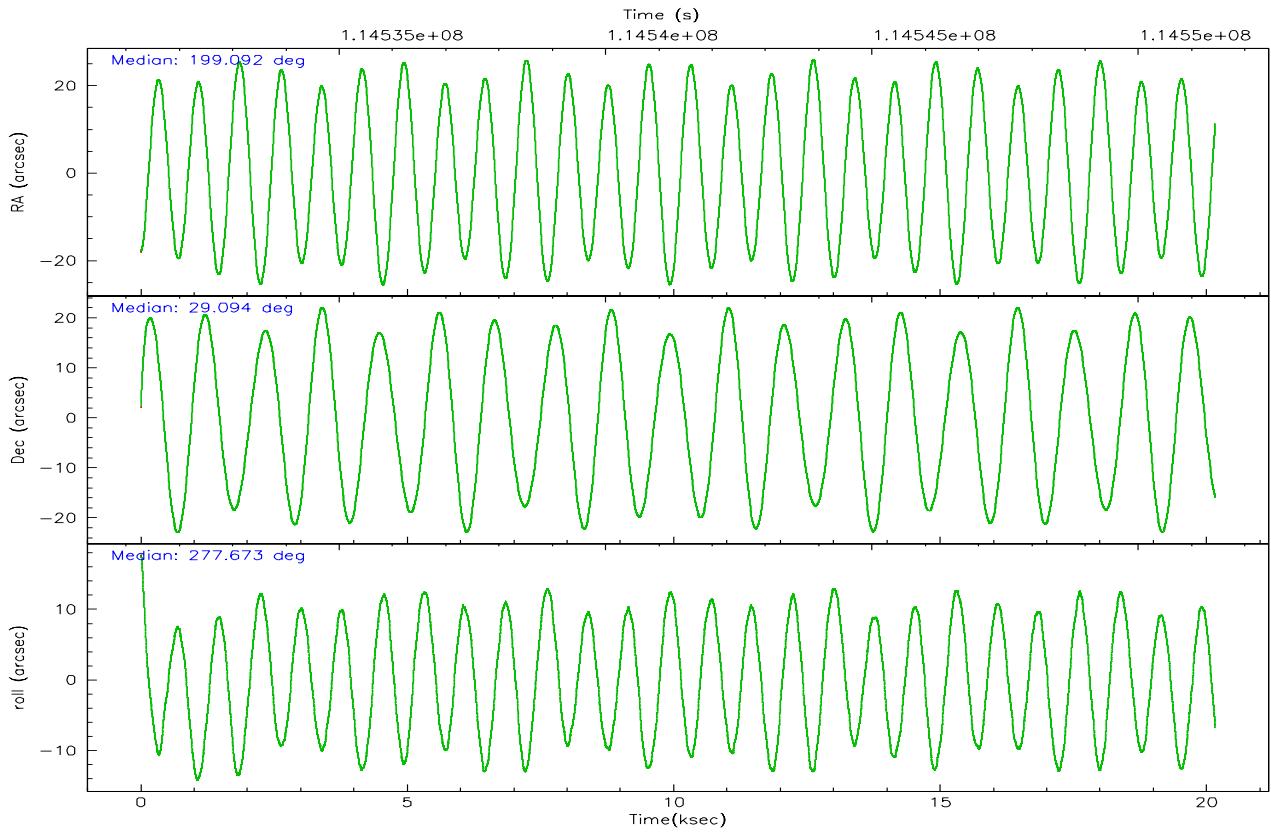
	segment 1	segment 2	segment 3
level 1 events	896754	776979	903572
rejected events	145149	151910	173389
rejected %	16%	19%	19%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	6	6
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
Pointing RA	199.071376	199.0926064613976			
Pointing Dec	29.116085	29.09432781536291			
Pointing Roll	277.621943	277.6789511738708			
Window start time	113011264.184000	113011264.184000			
Window stop time	115516864.184000	115516864.184000			
SIM focus pos (mm)	-1.429586	-1.428180813131781			
SIM defocus (mm)	0.1037507710433287	0.1051558262725154			
SIM translation stage pos (mm)	250.455976	250.4685473955025			
SIM translation stage offset (mm)	0	-0.01256900194783839			
Observation start time	114531443.184000	114530243.52138			
Observation start date	2001-08-18T14:16:19	2001-08-18T13:57:23			
Observation end time	114551443.184000	114552336.37225			
Observation end date	2001-08-18T19:49:39	2001-08-18T20:05:36			

## 2.3 Aspect





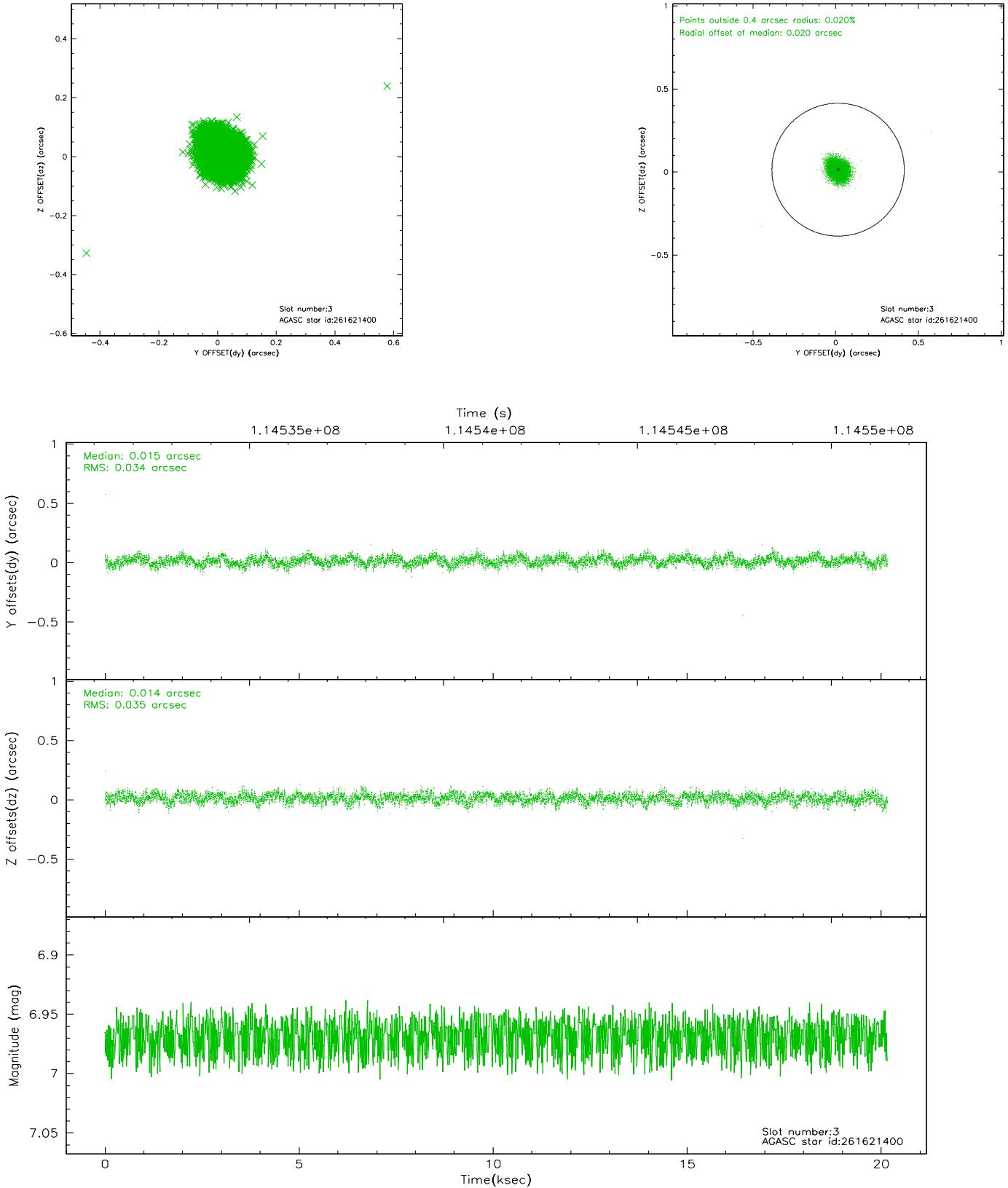
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	6.97	4918	0.143	-0.096	0.029	0.054	0.000000	0.000000	-1157.20	-455.12
1	FID	HRC-S-2	6.97	4918	0.096	-0.092	0.010	0.016	0.000000	0.000000	1242.19	-447.83
2	FID	HRC-S-3	6.99	4917	0.150	-0.114	0.028	0.054	0.000000	0.000000	-1159.67	574.32
3	GUIDE	261621400	6.97	9831	0.015	0.014	0.051	0.083	198.901600	28.741982	1263.83	-708.57
4	GUIDE	261624456	7.31	9835	0.060	0.078	0.055	0.090	199.758056	28.567828	2238.19	1892.29
5	GUIDE	261629720	8.09	9835	-0.001	-0.067	0.054	0.088	199.236176	29.044452	324.55	481.18
6	GUIDE	261619776	8.80	9832	-0.076	-0.021	0.077	0.123	198.654383	29.401174	-1192.53	-1158.80
7	GUIDE	261619992	9.32	9831	-0.000	-0.001	0.100	0.161	198.395553	28.647634	1382.83	-2338.06

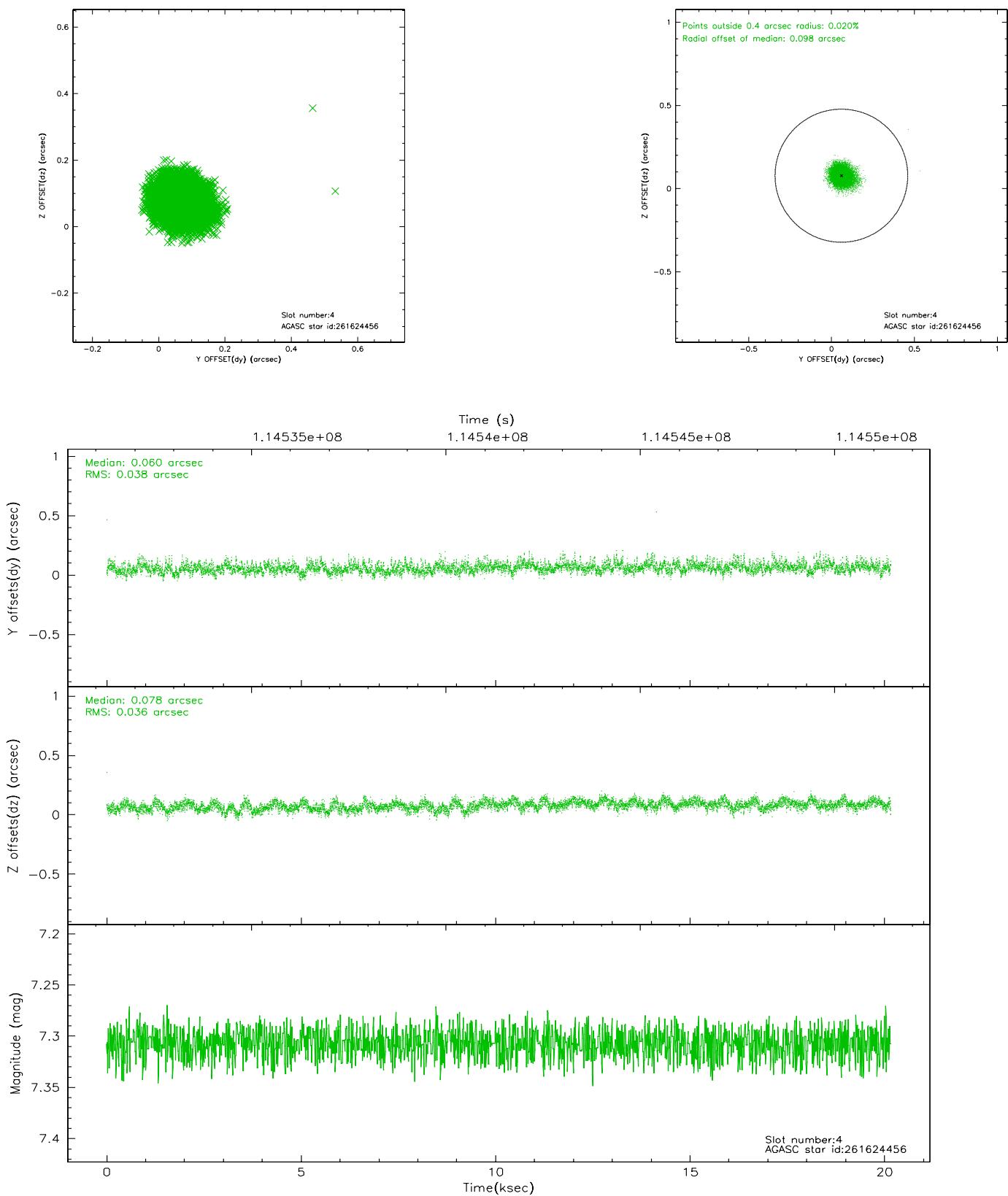
∞

## 2.4 Star Slots

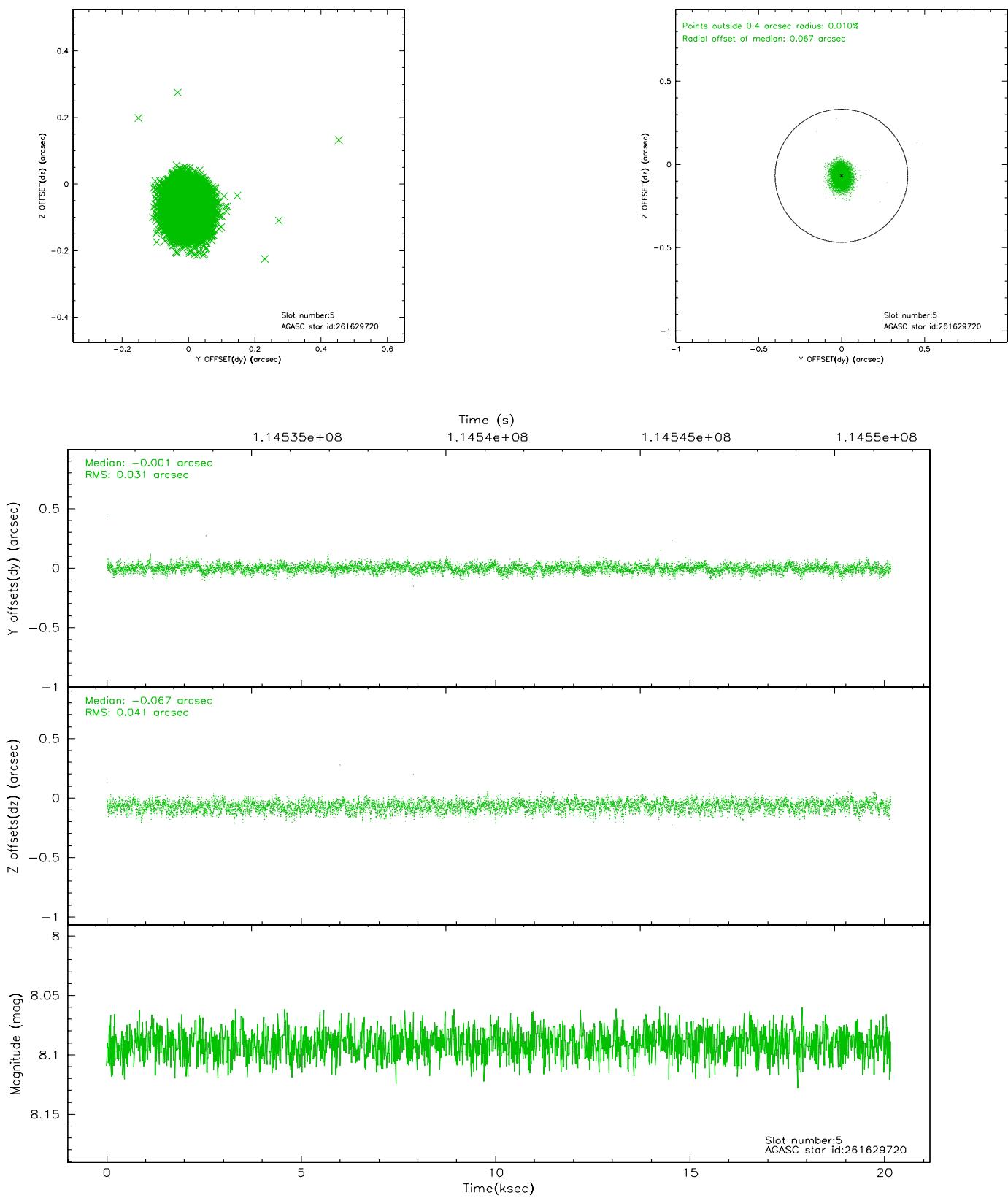
### 2.4.1 Slot 3



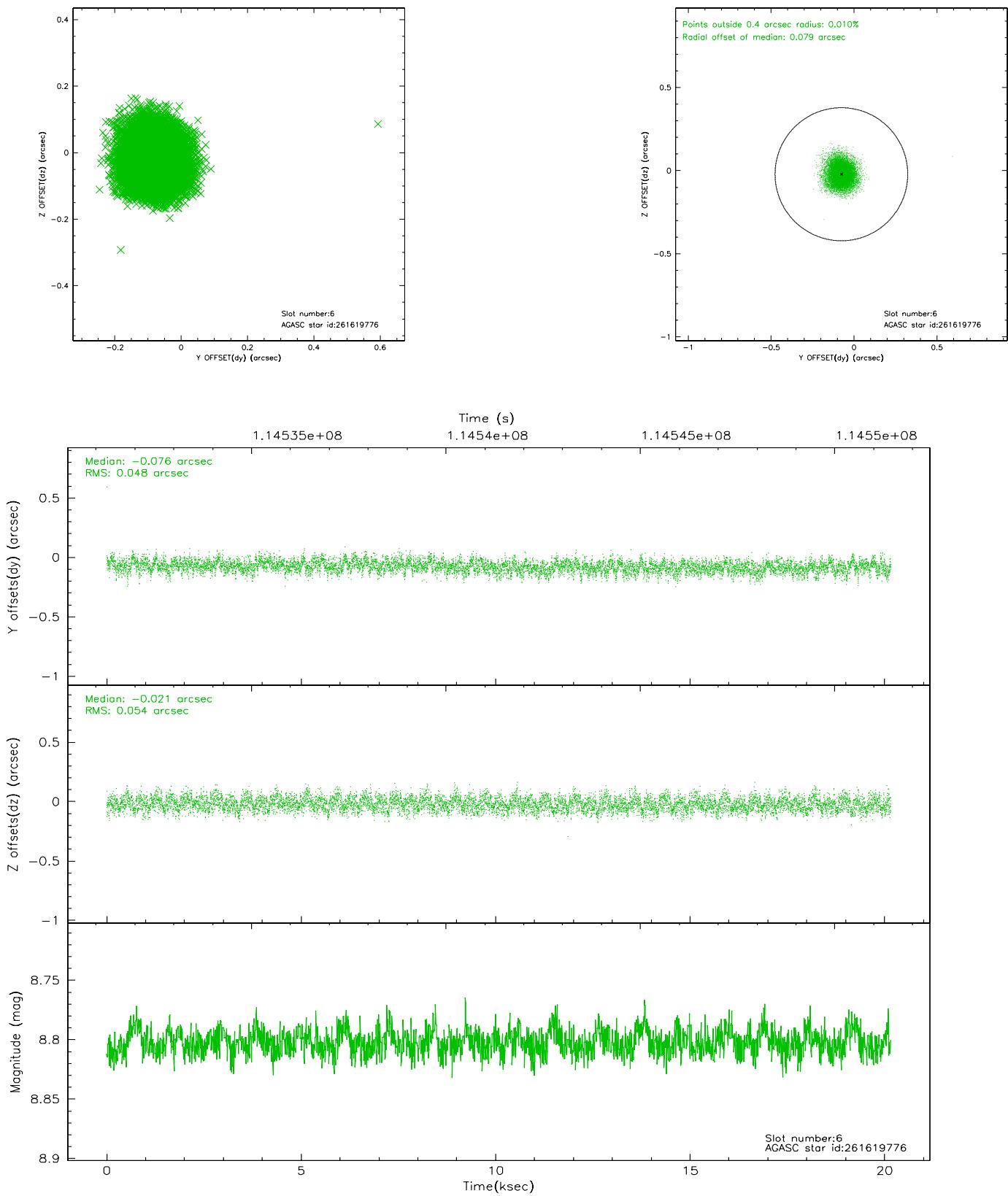
## 2.4.2 Slot 4



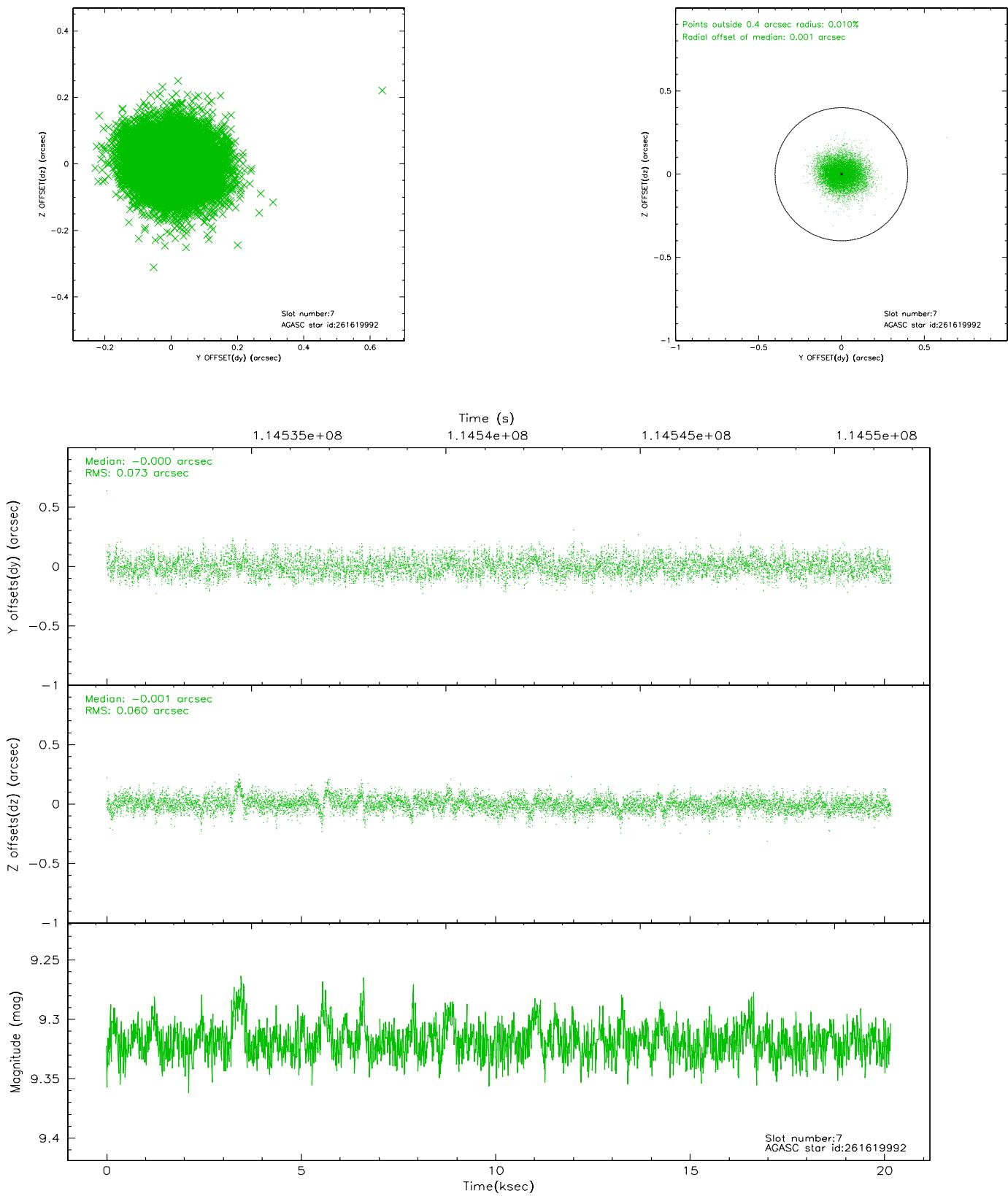
### 2.4.3 Slot 5



## 2.4.4 Slot 6

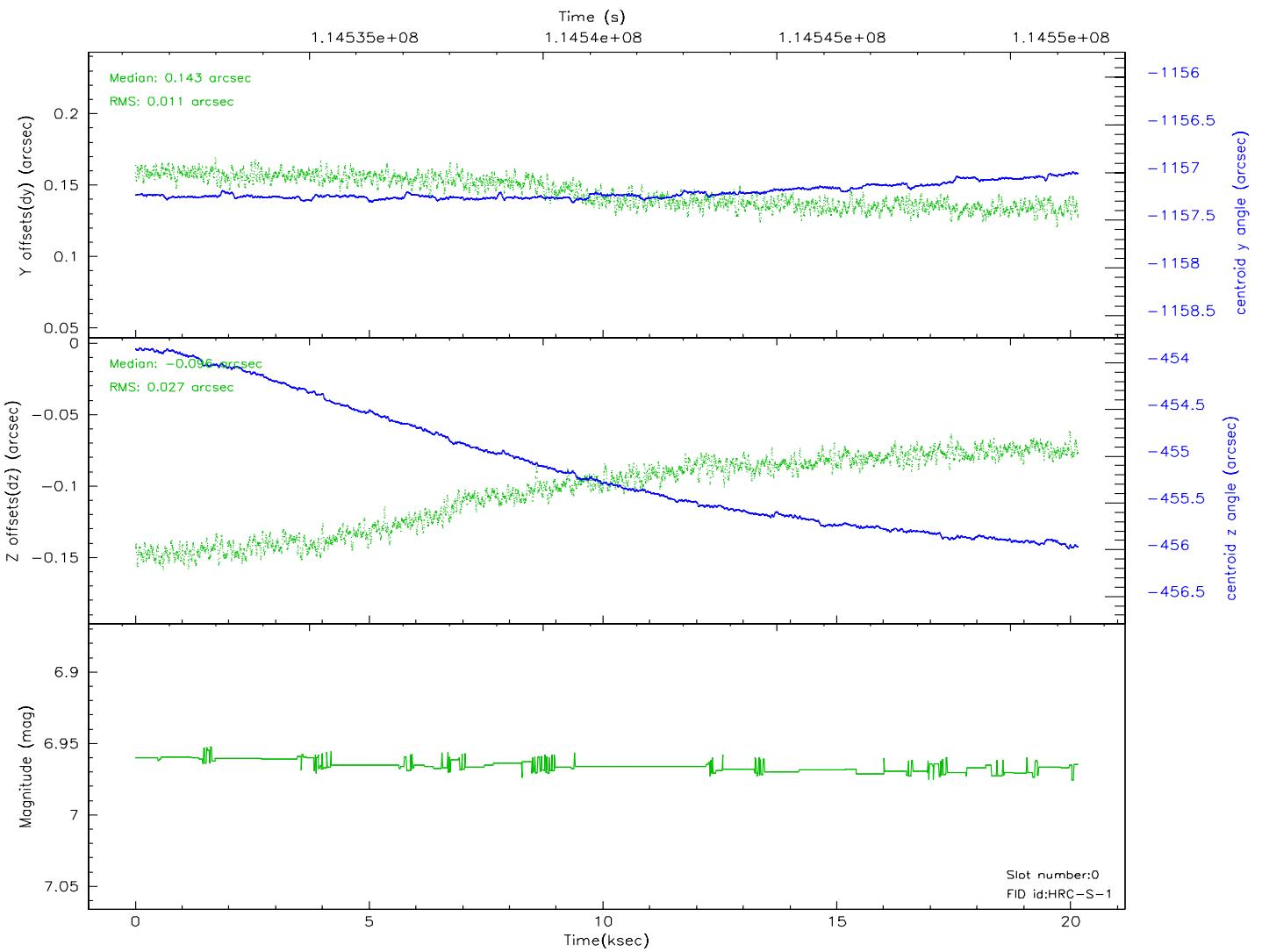
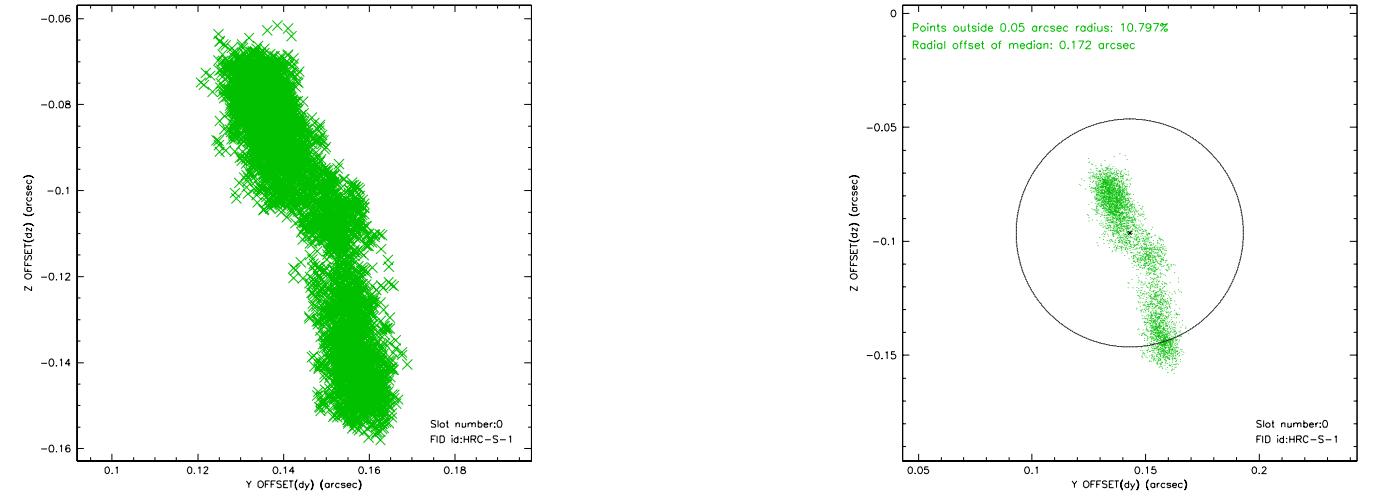


## 2.4.5 Slot 7

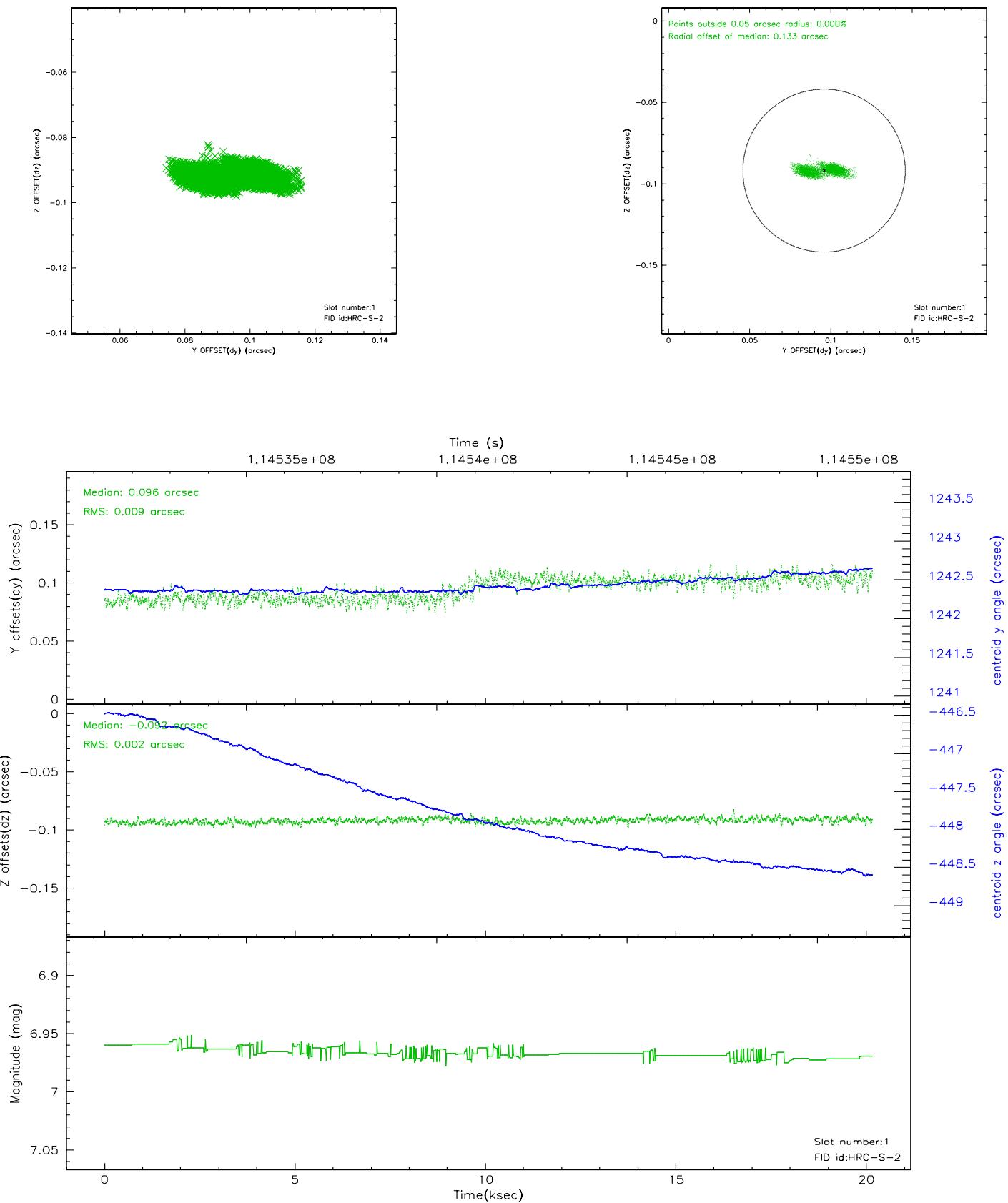


## 2.5 FID Slots

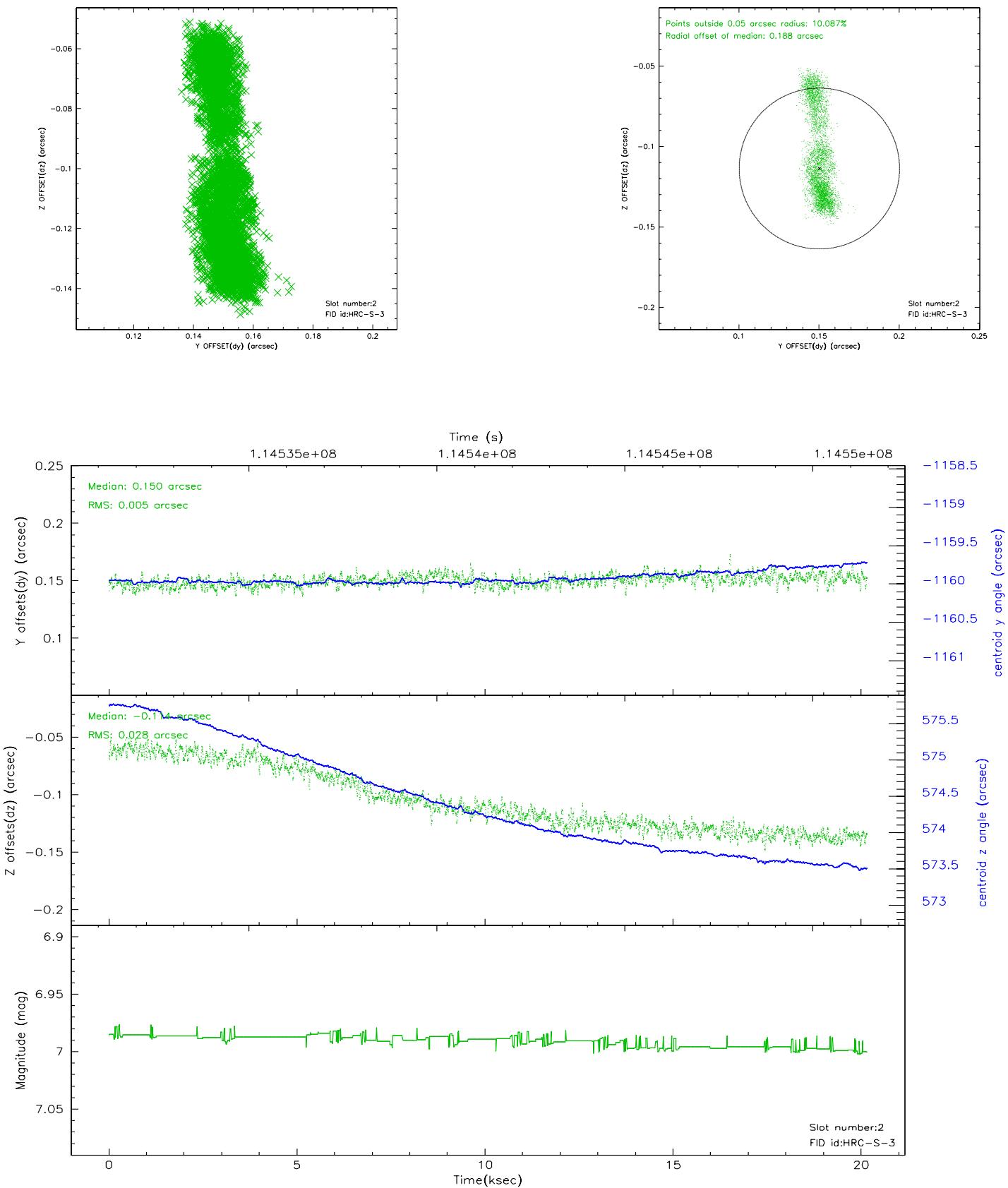
### 2.5.1 Slot 0



## 2.5.2 Slot 1

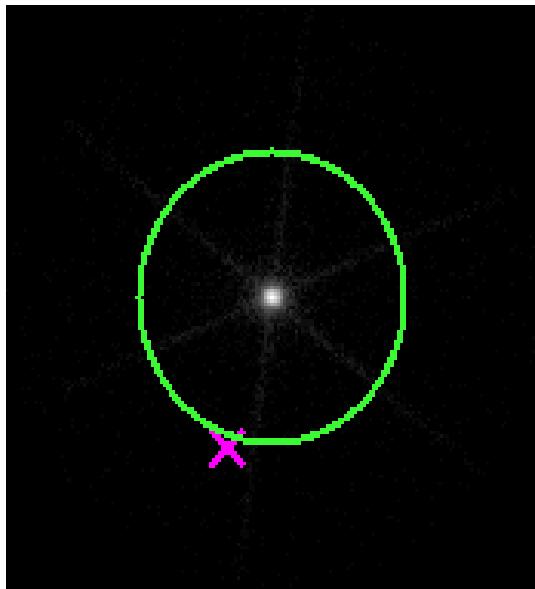


### 2.5.3 Slot 2



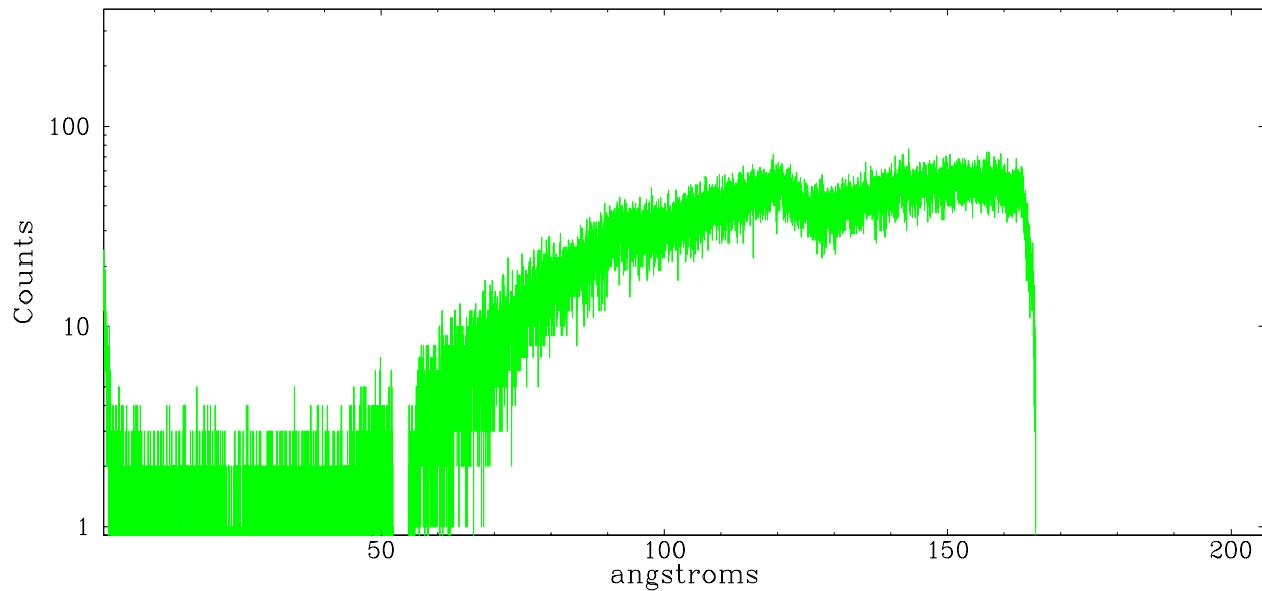
### 3 Gratings

#### 3.1 LETG Arm

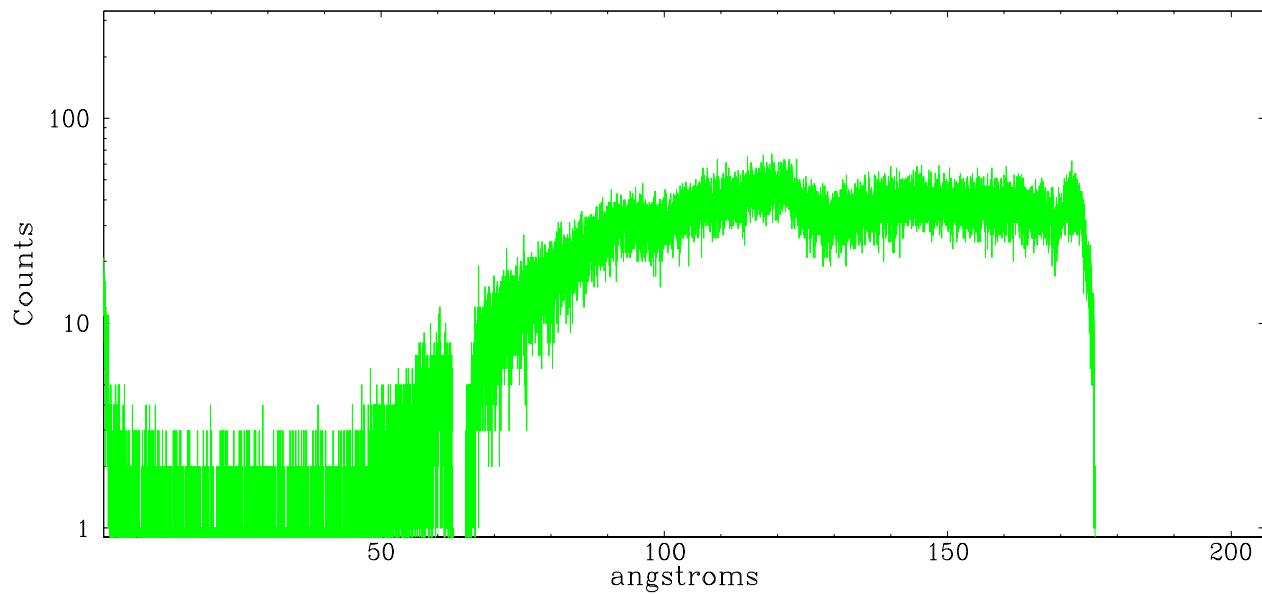


LETG Zero Order

leg order -1



leg order +1



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.12.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.152

## A.2 Comments

Window constraint met.