

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 6364 - L2 Version 002  
Chandra X-Ray Center

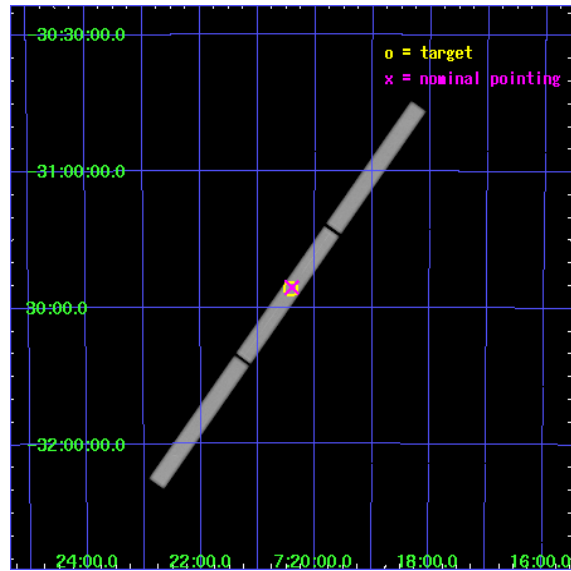
L2 Processing Date : Mar 20 2006

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# 1 Front

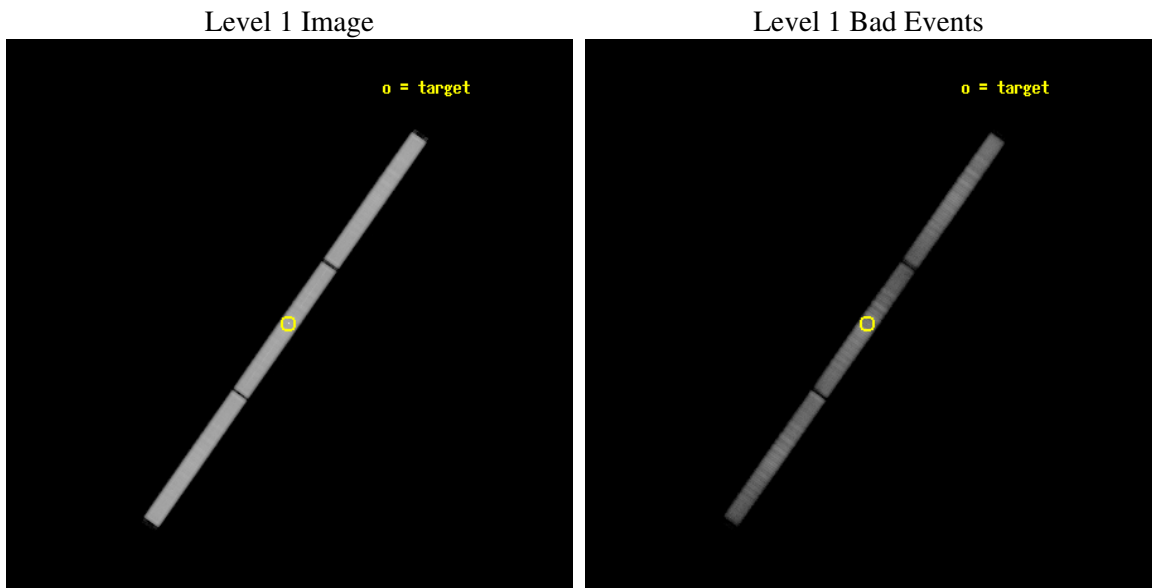
seq_num	500572
obs_id	6364
title	Spectra of Neutron Stars with Strongly Magnetized Hydrogen Atmospheres
observer	Prof. Marten van Kerkwijk
object	RX J0720.4-3125
ra_targ	110.104167
dec_targ	-31.430611
ra_nom	110.10116459643
dec_nom	-31.426753008423
roll_nom	125.13606664094
revision	2
ontime	38871.333033562
livetime	38608.979950668
l2events	2238624



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	2
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-03-20T17:25:21
revision	2

sched_exp_time	38710.000000
ontime	38872.358033597
l1events	3233457

### 2.1.3 Events

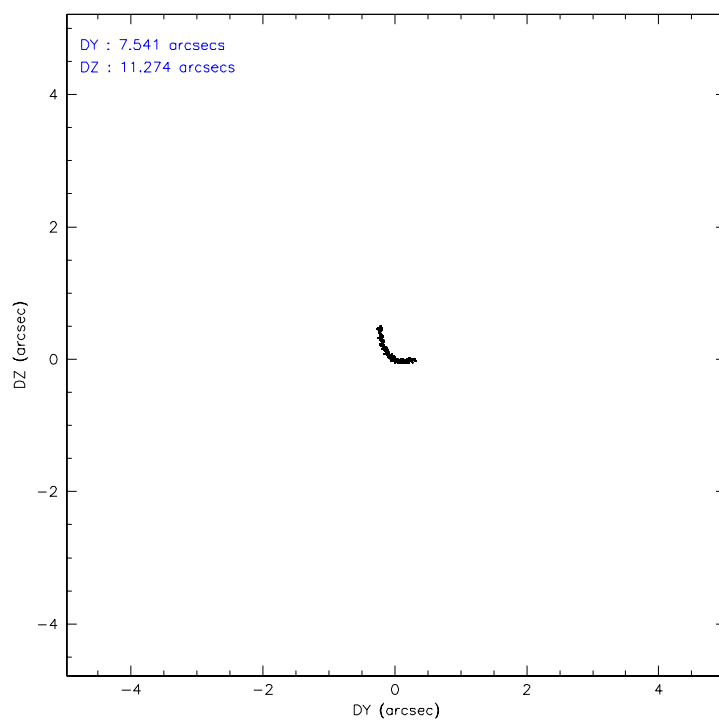
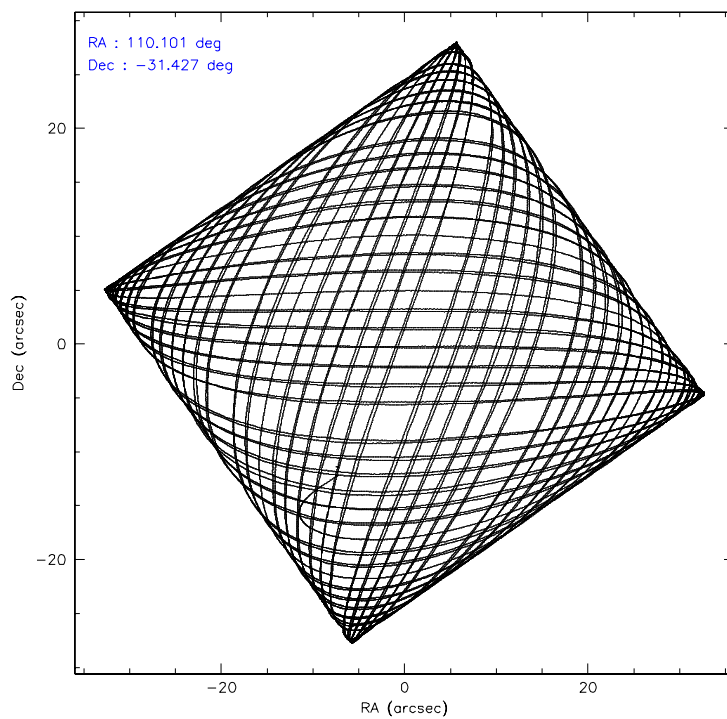
Level 1 Events

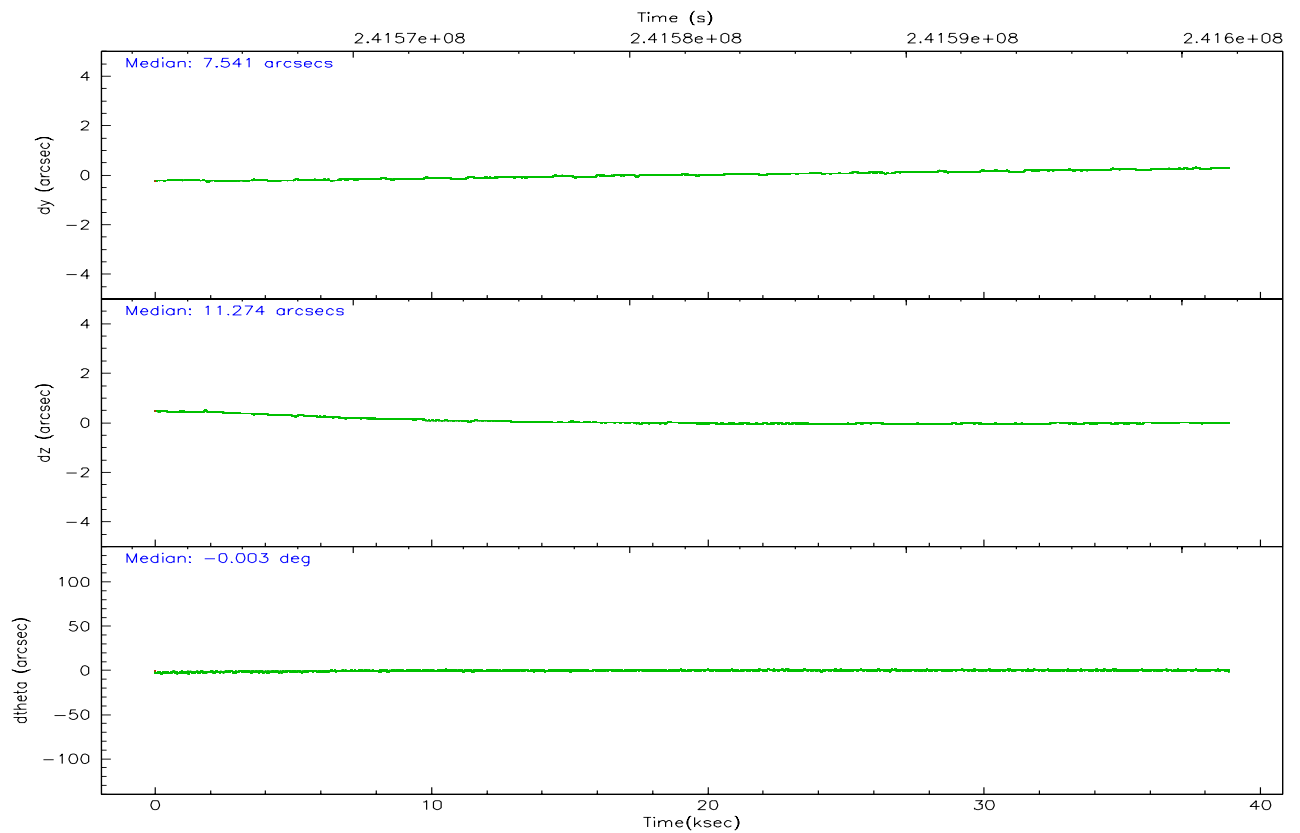
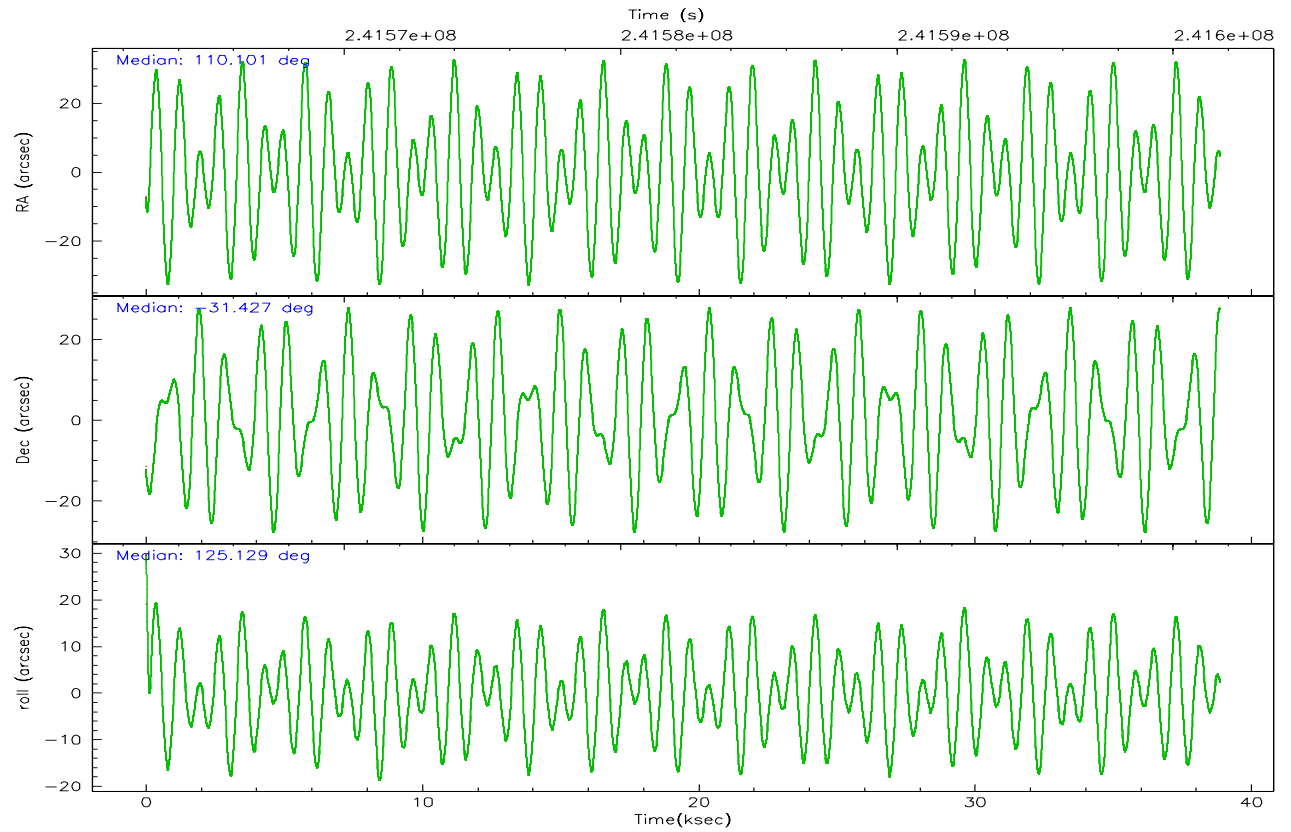
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	1095973	1052821	1084663
rejected events	212535	232421	256911
rejected %	19%	22%	23%

## 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	110.132222	110.1011645964281			
Pointing Dec	-31.437428	-31.42675300842336			
Pointing Roll	125.084921	125.1360666409398			
SIM focus pos (mm)	-1.429586	-1.428180813131781			
SIM defocus (mm)	0.1037507710433287	0.1051558262725154			
SIM translation stage pos (mm)	250.455976	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	241562989.184000	241562121.31343			
Observation start date	2005-08-27T20:48:45	2005-08-27T20:35:21			
Observation end time	241601699.184000	241602632.39029			
Observation end date	2005-08-28T07:33:55	2005-08-28T07:50:32			

## 2.3 Aspect





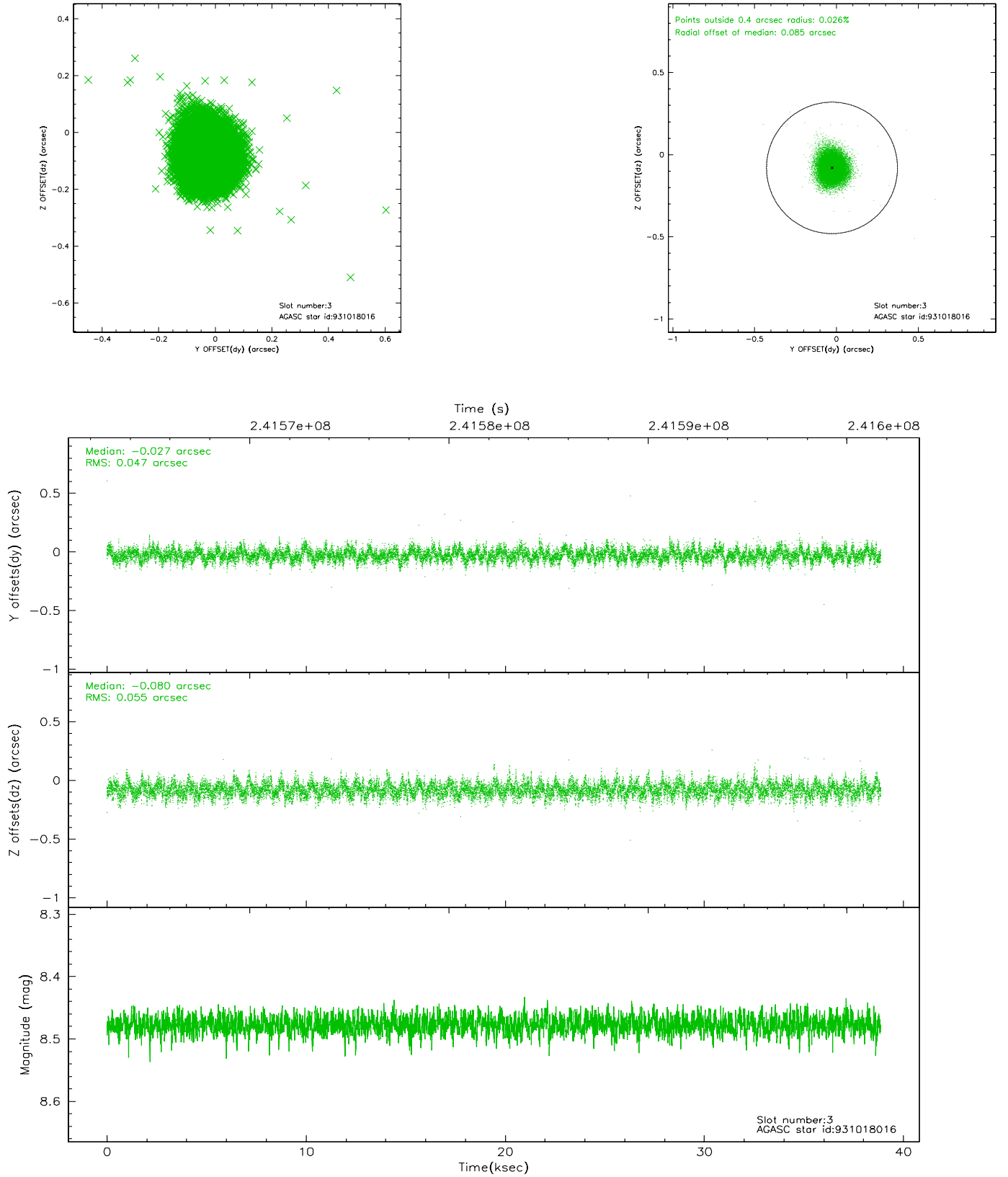
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.01	9481	0.123	-0.138	0.010	0.028	0.000000	0.000000	-1161.71	-460.05
1	FID	HRC-S-2	7.01	9481	0.168	-0.114	0.006	0.010	0.000000	0.000000	1237.89	-452.71
2	FID	HRC-S-3	7.02	9482	0.099	-0.050	0.010	0.031	0.000000	0.000000	-1164.33	569.51
3	GUIDE	931018016	8.48	18961	-0.027	-0.080	0.076	0.123	109.684535	-31.226562	1411.21	693.33
4	GUIDE	931022960	8.95	18950	0.004	-0.210	0.087	0.144	109.733092	-31.864448	-558.21	1883.39
5	GUIDE	931160352	8.64	18958	0.003	0.123	0.074	0.122	110.268138	-30.864891	1445.61	-1527.76
6	GUIDE	931163512	8.45	18876	0.004	0.044	0.087	0.141	110.894384	-31.299941	-948.63	-2198.38
7	GUIDE	931146200	8.97	18955	0.020	0.121	0.079	0.127	110.586199	-31.643611	-1409.15	-710.27

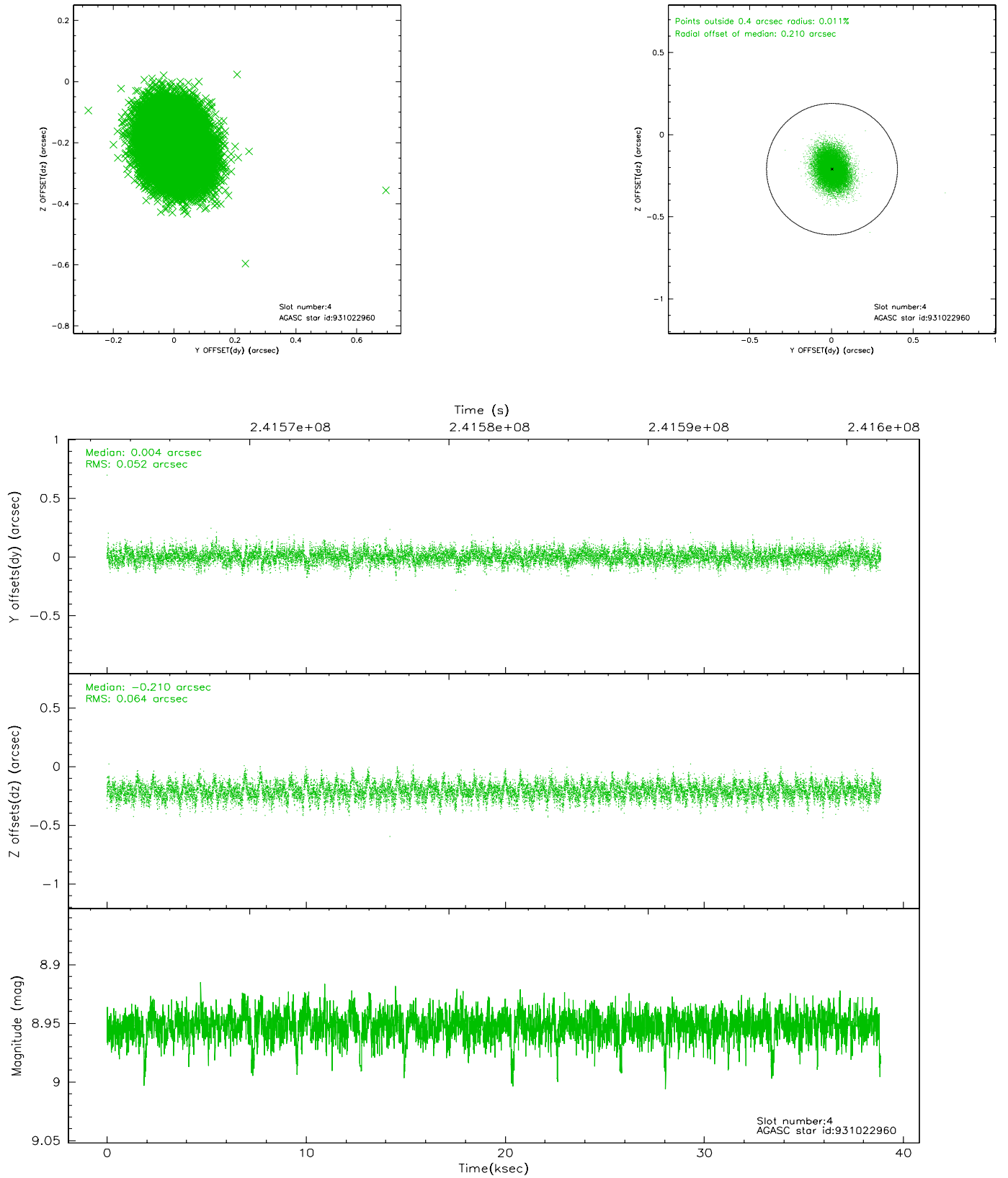


## 2.4 Star Slots

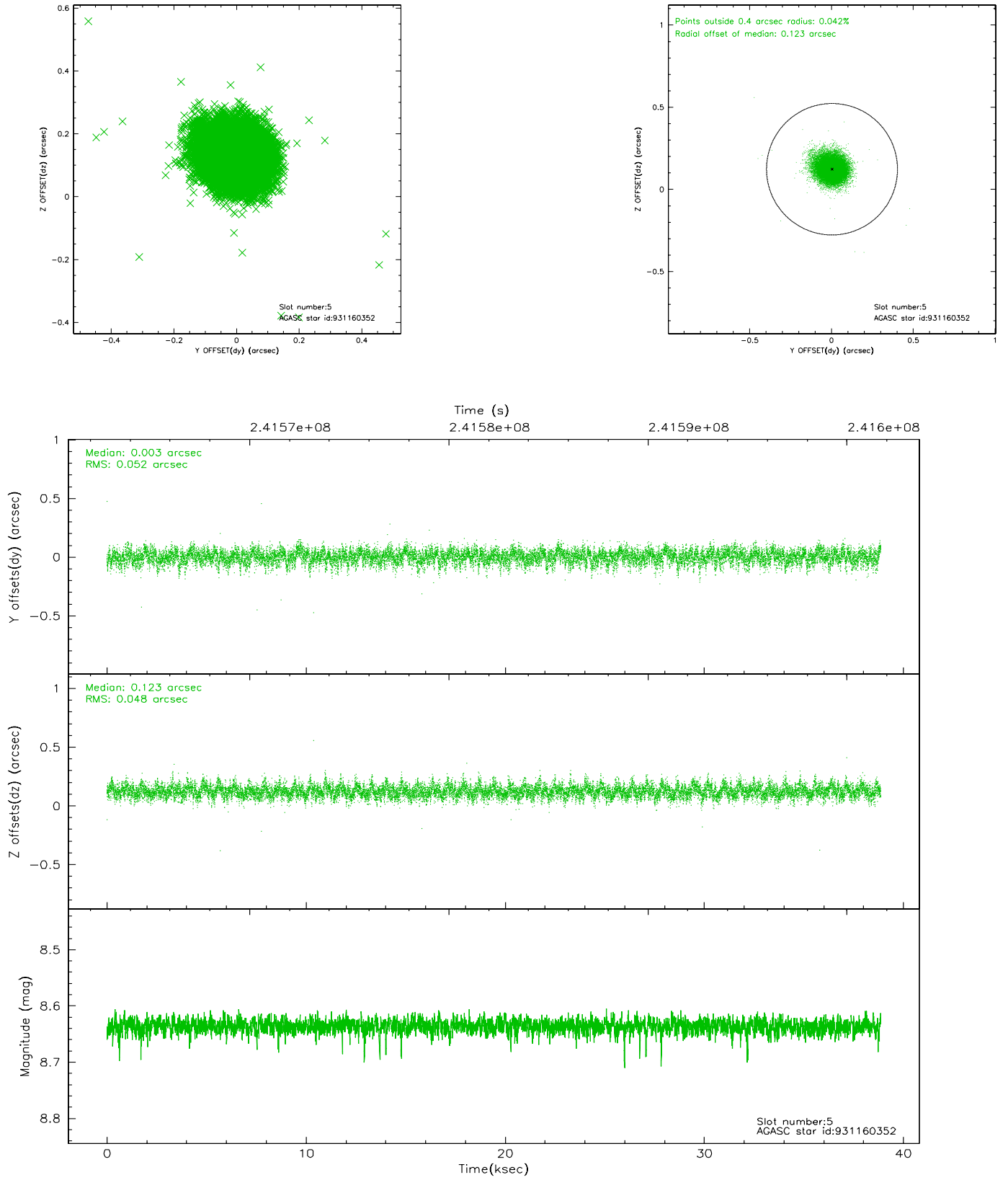
### 2.4.1 Slot 3



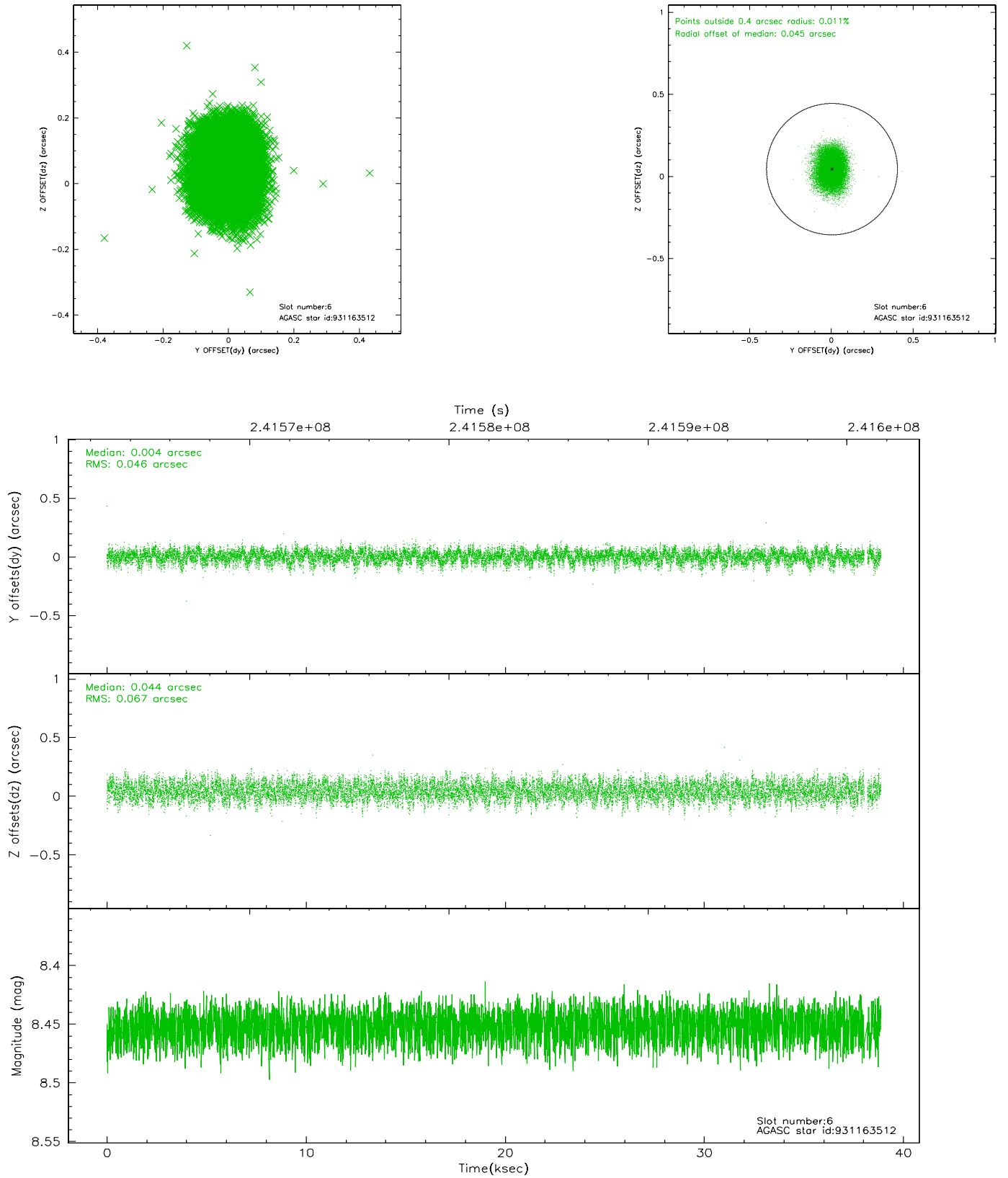
## 2.4.2 Slot 4



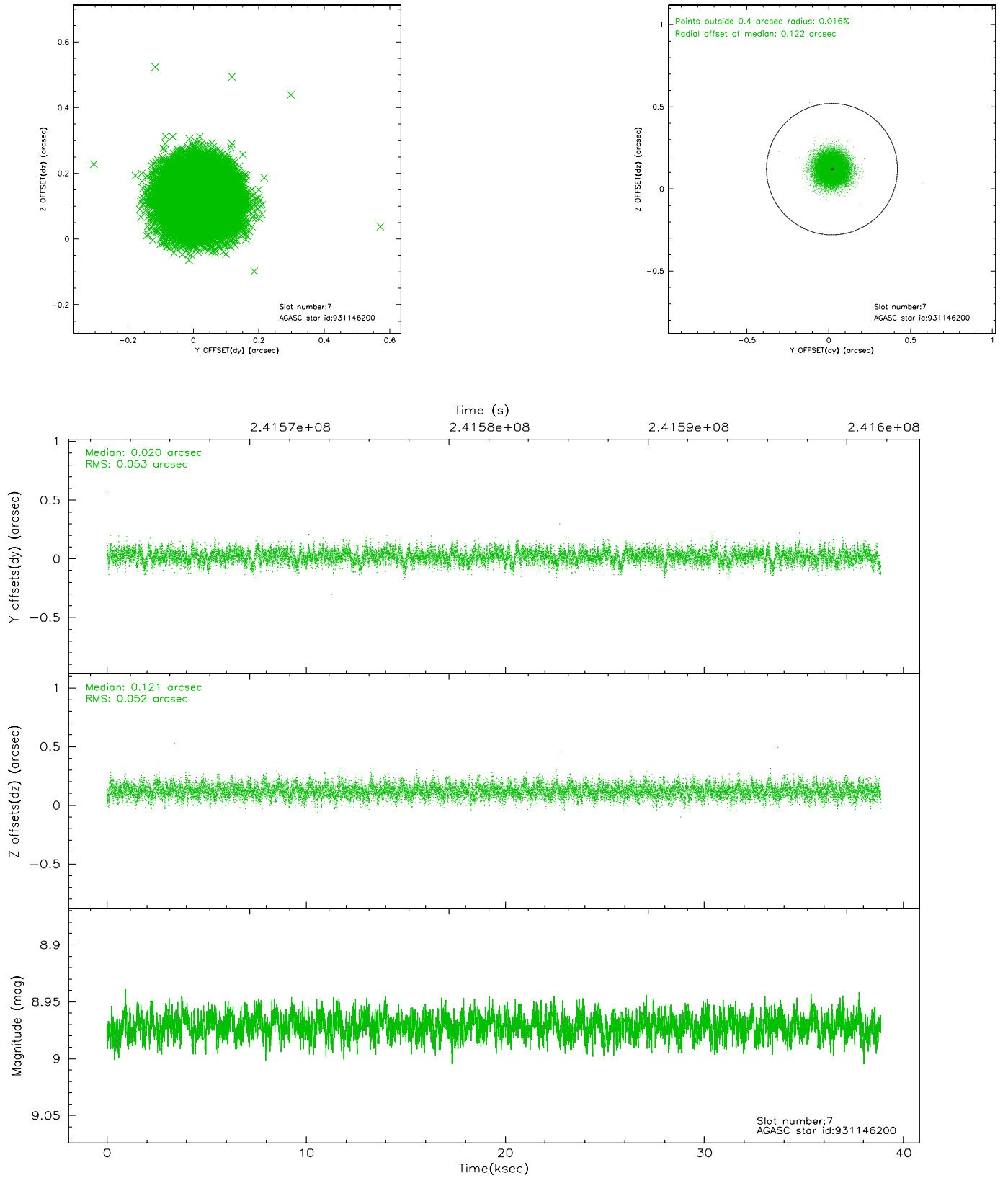
### 2.4.3 Slot 5



## 2.4.4 Slot 6

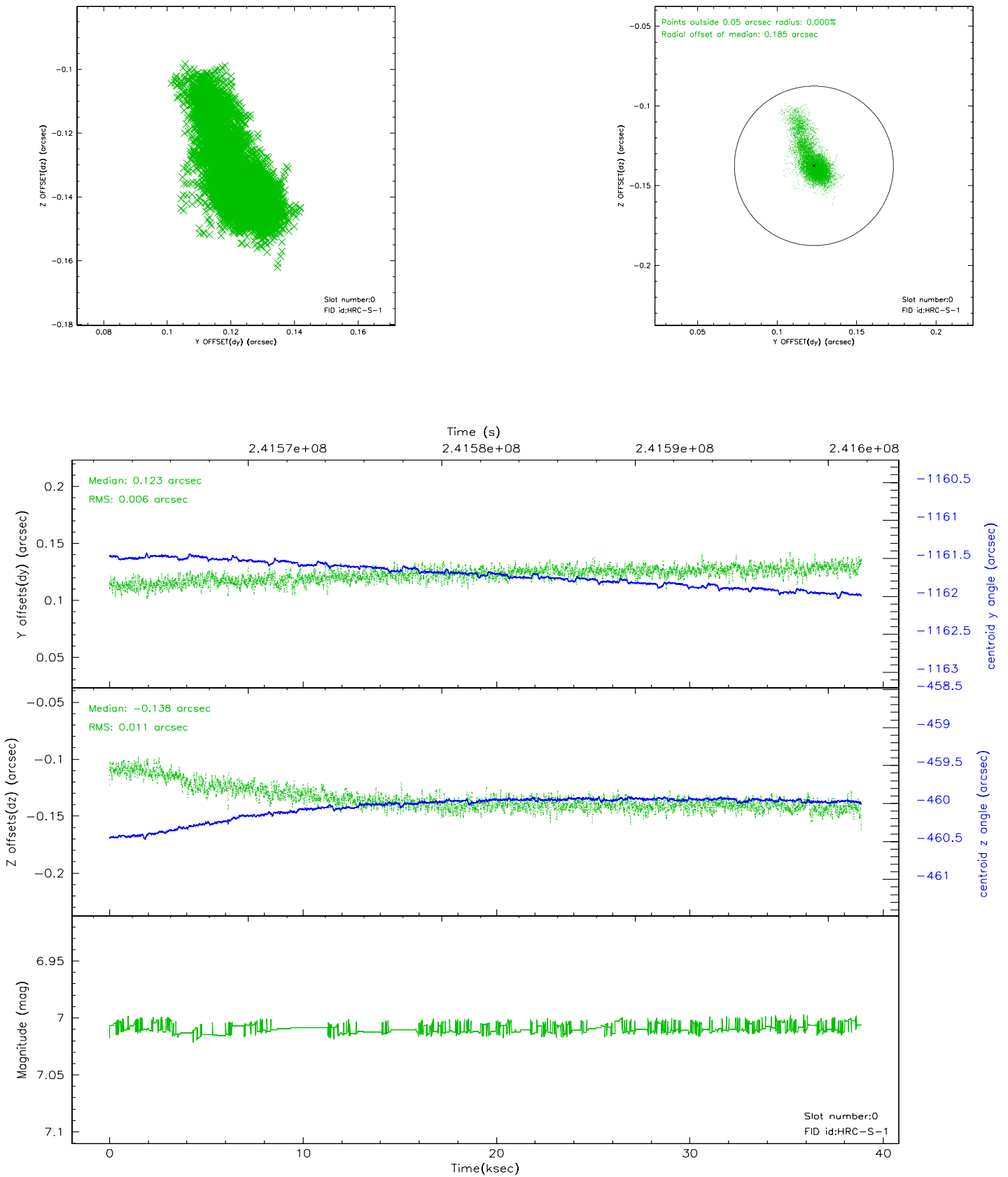


## 2.4.5 Slot 7

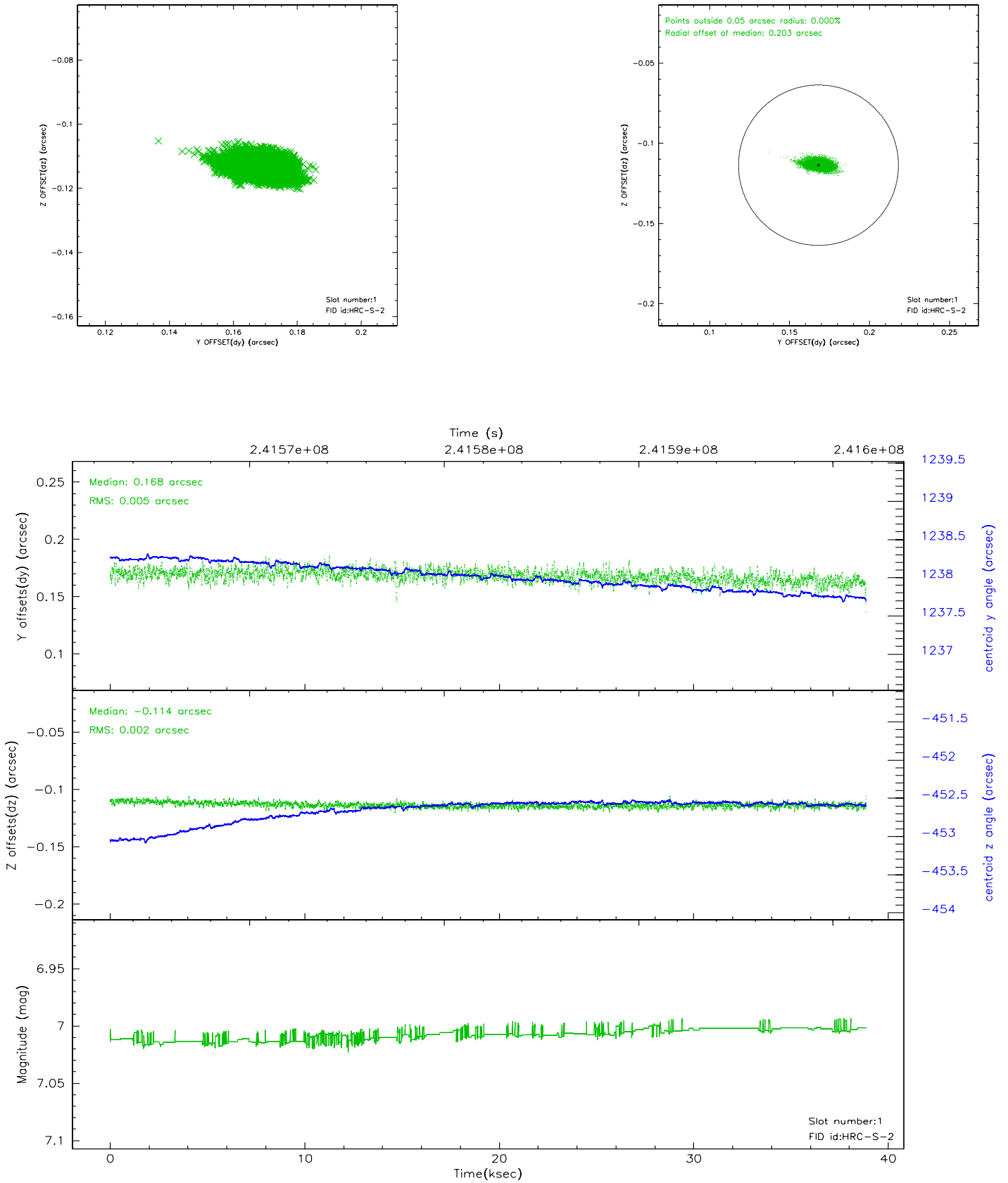


## 2.5 FID Slots

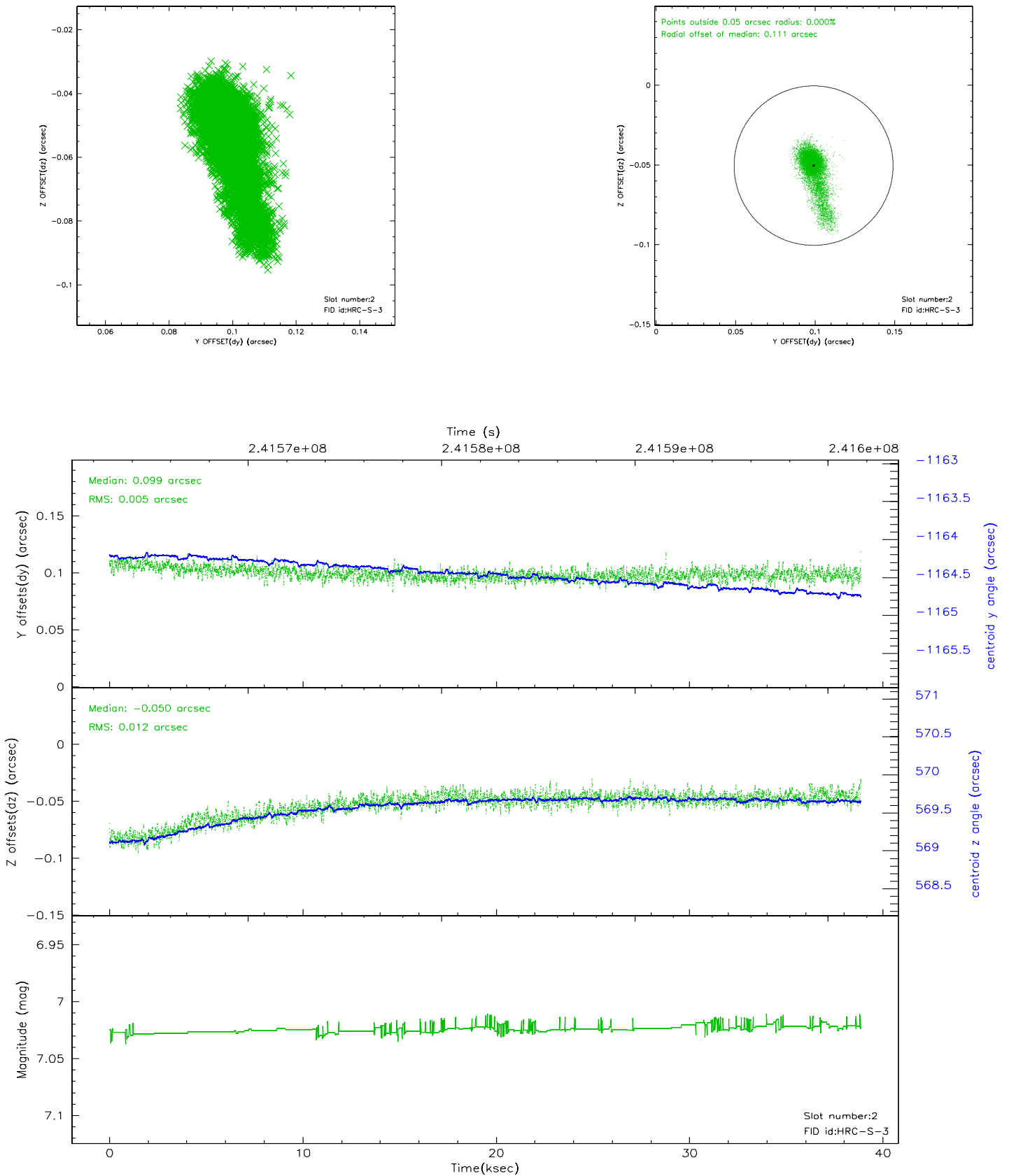
### 2.5.1 Slot 0



## 2.5.2 Slot 1



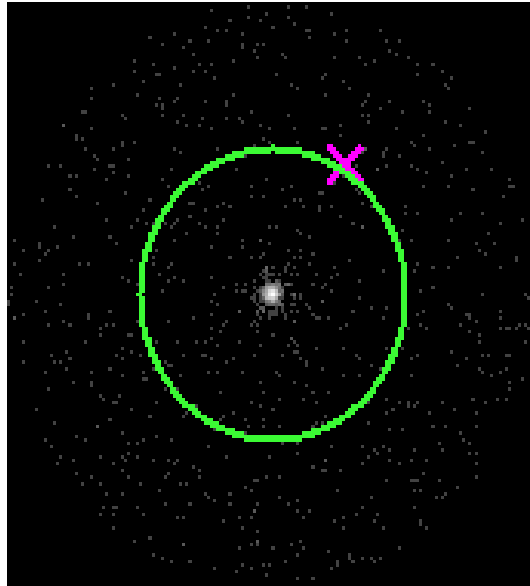
### 2.5.3 Slot 2





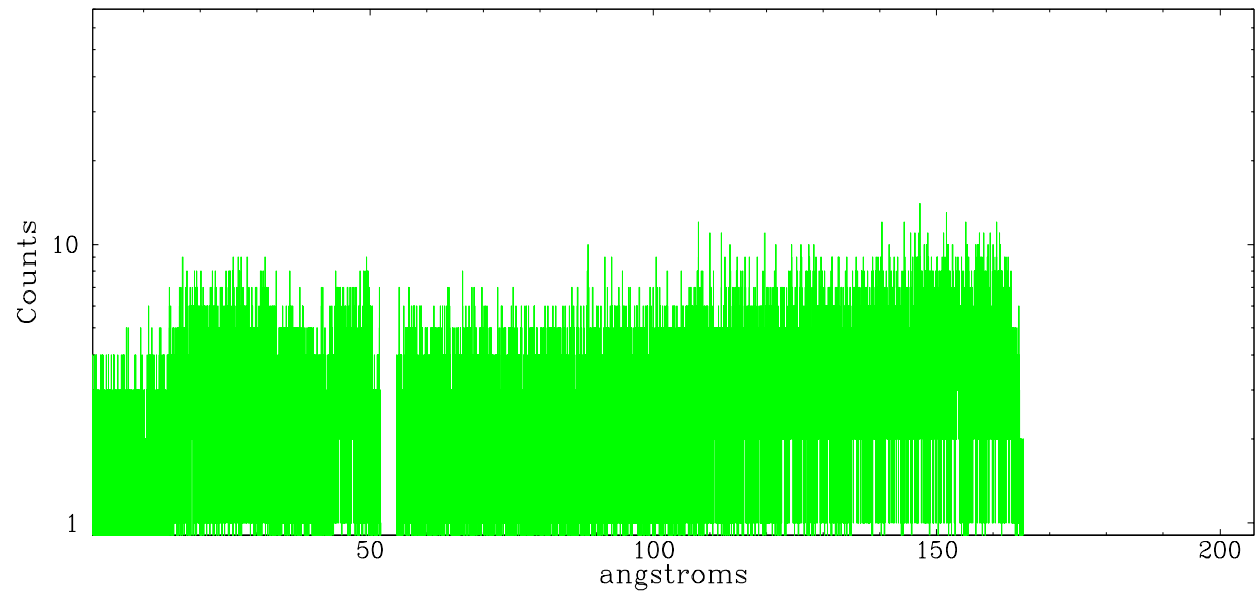
## 3 Gratings

### 3.1 LETG Arm

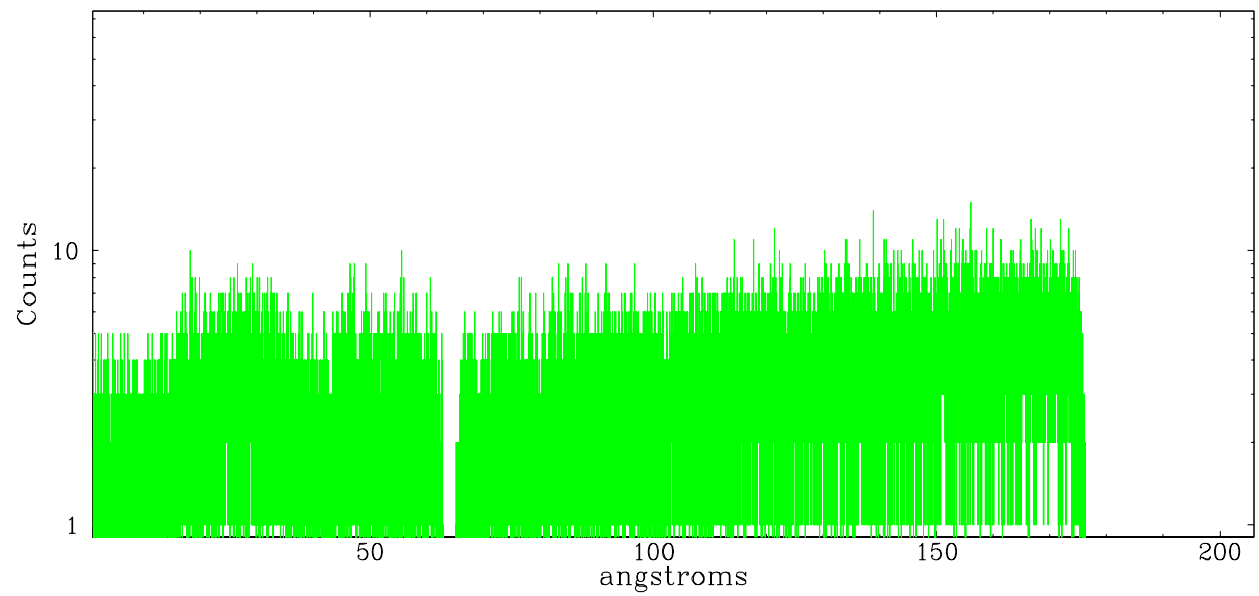


LETG Zero Order

leg order  $-1$



leg order  $+1$



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.03.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.87133

## A.2 Comments

Monitor constraint met.

There are several periods of high count rate during the exposure, presumed to be due to a high and variable radiation environment at the time of the observation.