

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 1900 - L2 Version 2  
Chandra X-Ray Center

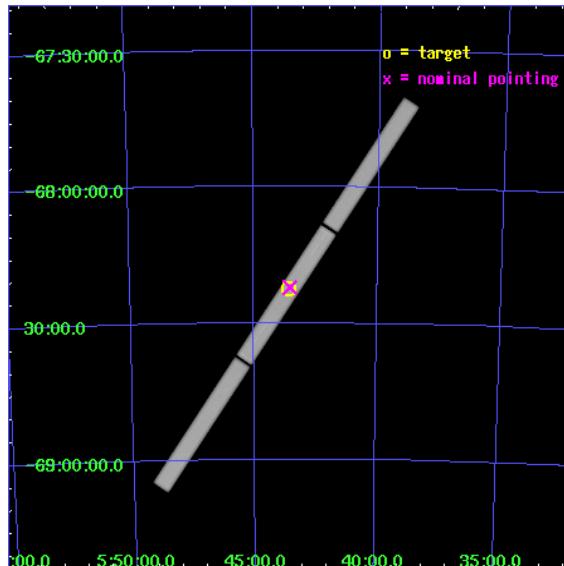
L2 Processing Date : Aug 29 2007

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# 1 Front

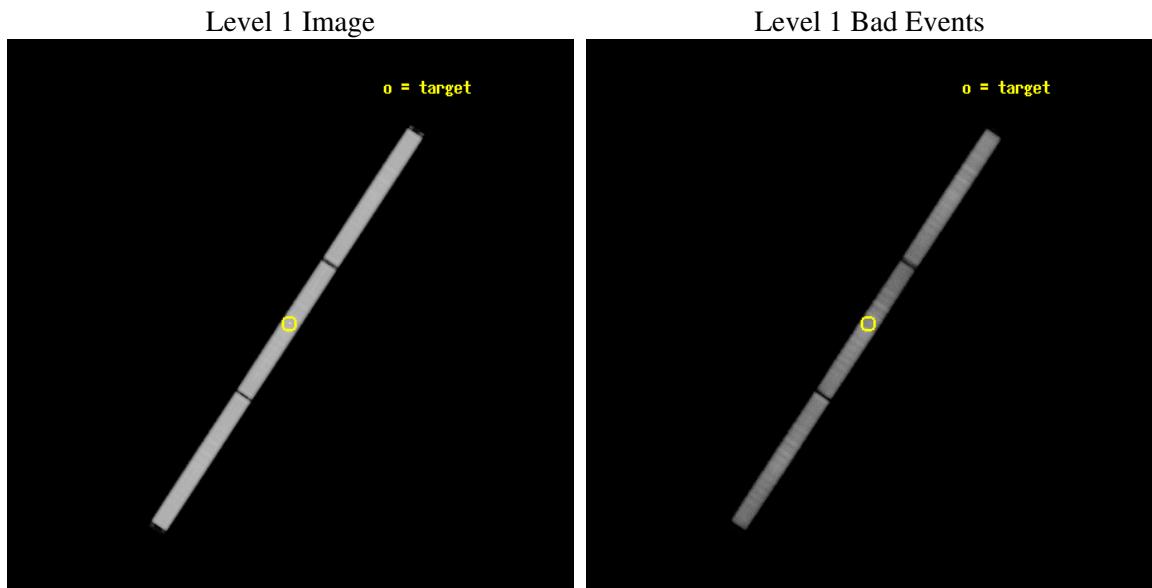
seq_num	300048
obs_id	1900
title	A HIGH RESOLUTION SPECTROSCOPIC OBSERVATION OF CAL 83
observer	Prof. FREDERIK PAERELS
object	CAL 83
ra_targ	85.892083
dec_targ	-68.372944
ra_nom	85.885447525366
dec_nom	-68.368911592098
roll_nom	123.40480447136
revision	2
ontime	35421.951395601
livetime	35159.192739869
l2events	1863287



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



## 2.1.2 Parameters

obi_num	0
ascdsver	7.6.10
caldbver	3.3.0
date	2007-01-29T22:34:07
revision	2

sched_exp_time	93800.000000
ontime	35421.951395601
l1events	2848568

## 2.1.3 Events

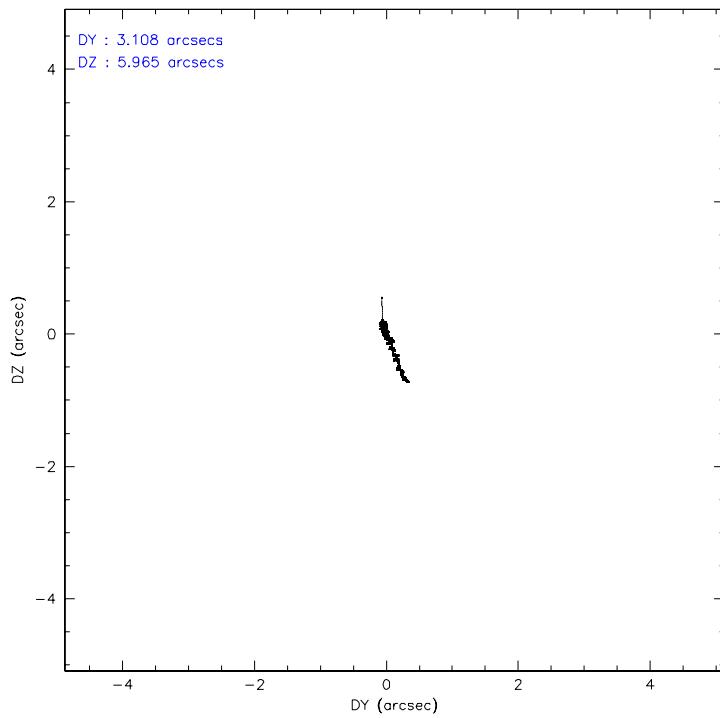
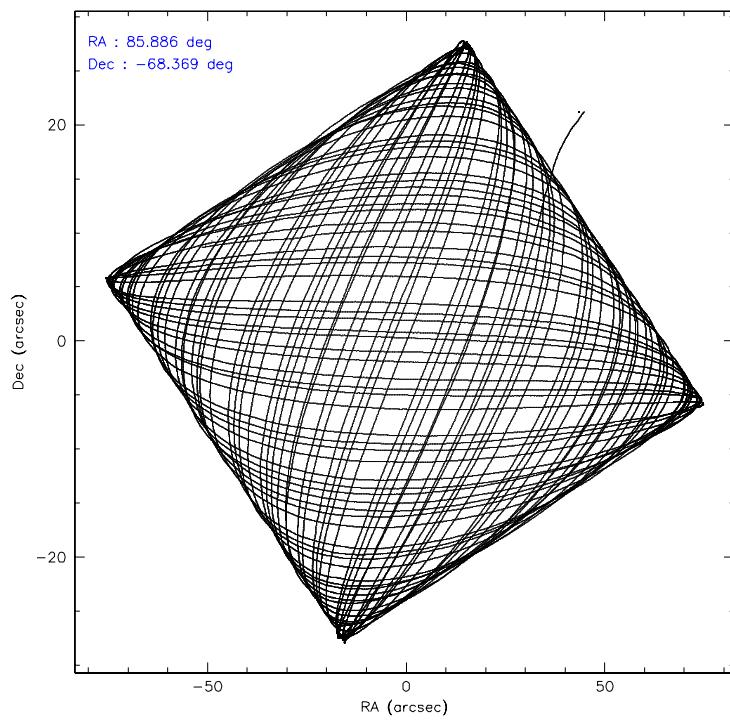
Level 1 Events

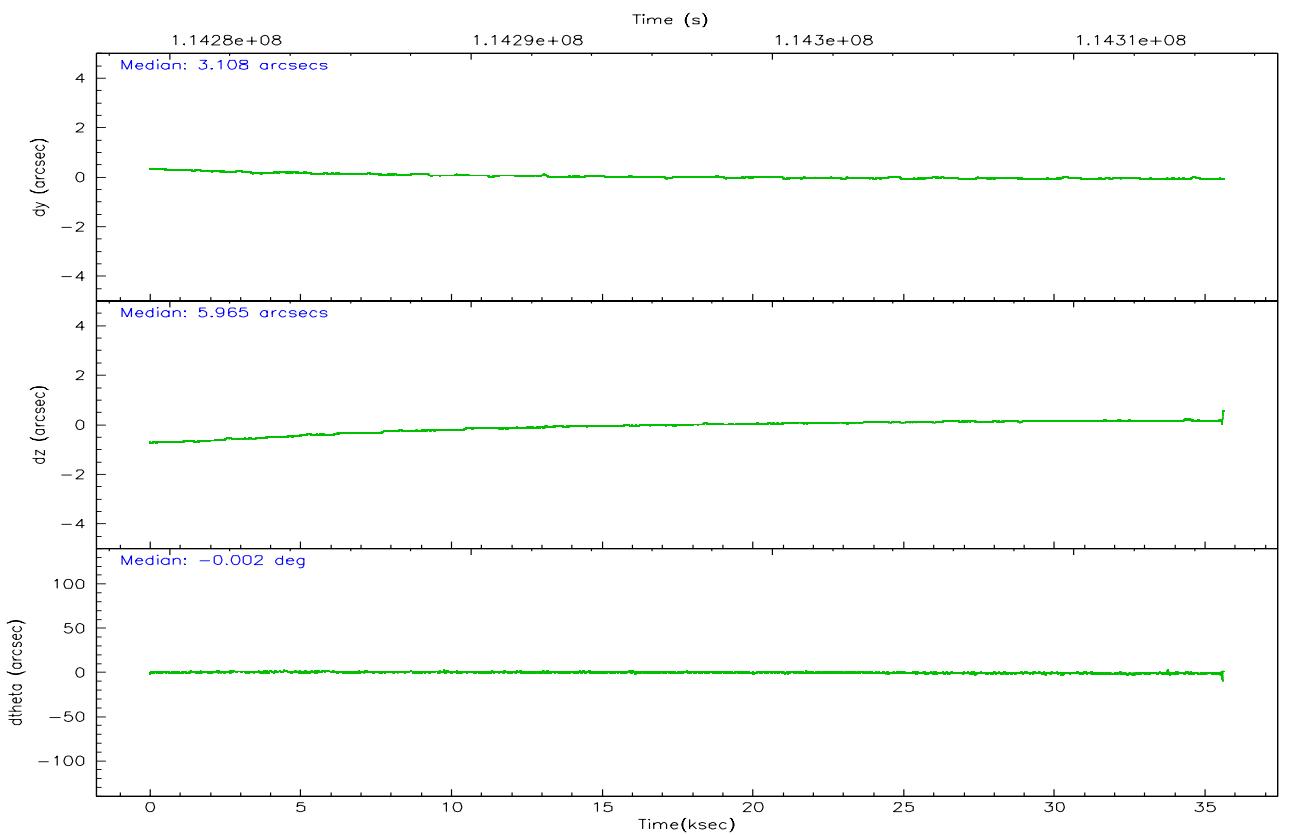
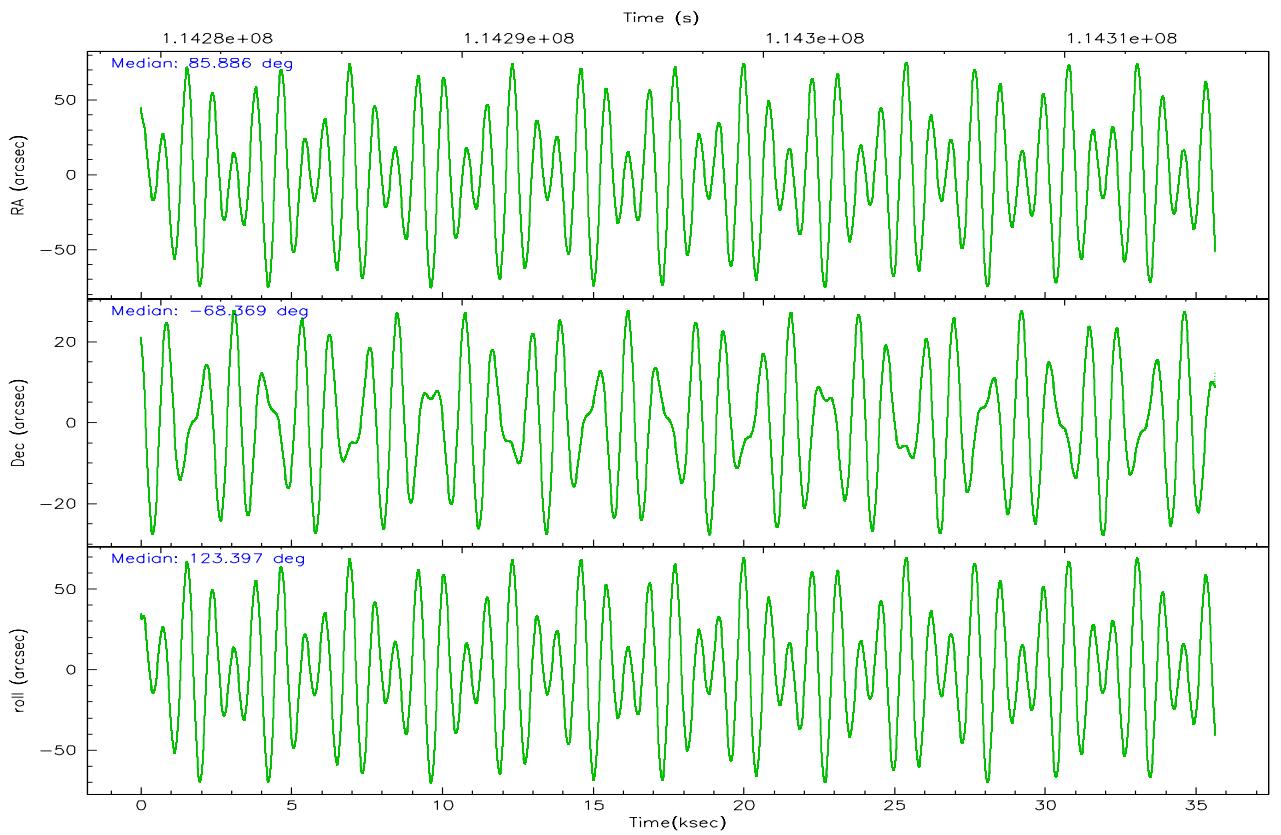
	segment 1	segment 2	segment 3
level 1 events	968190	939284	941094
rejected events	215282	230048	262710
rejected %	22%	24%	27%

## 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	85.956451	85.88544752536633			
Pointing Dec	-68.380466	-68.36891159209834			
Pointing Roll	123.403472	123.4048044713554			
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	114279535.184000	114278600.88647			
Observation start date	2001-08-15T16:17:51	2001-08-15T16:03:20			
Observation end time	114373335.184000	114315002.7379			
Observation end date	2001-08-16T18:21:11	2001-08-16T02:10:02			

## 2.3 Aspect



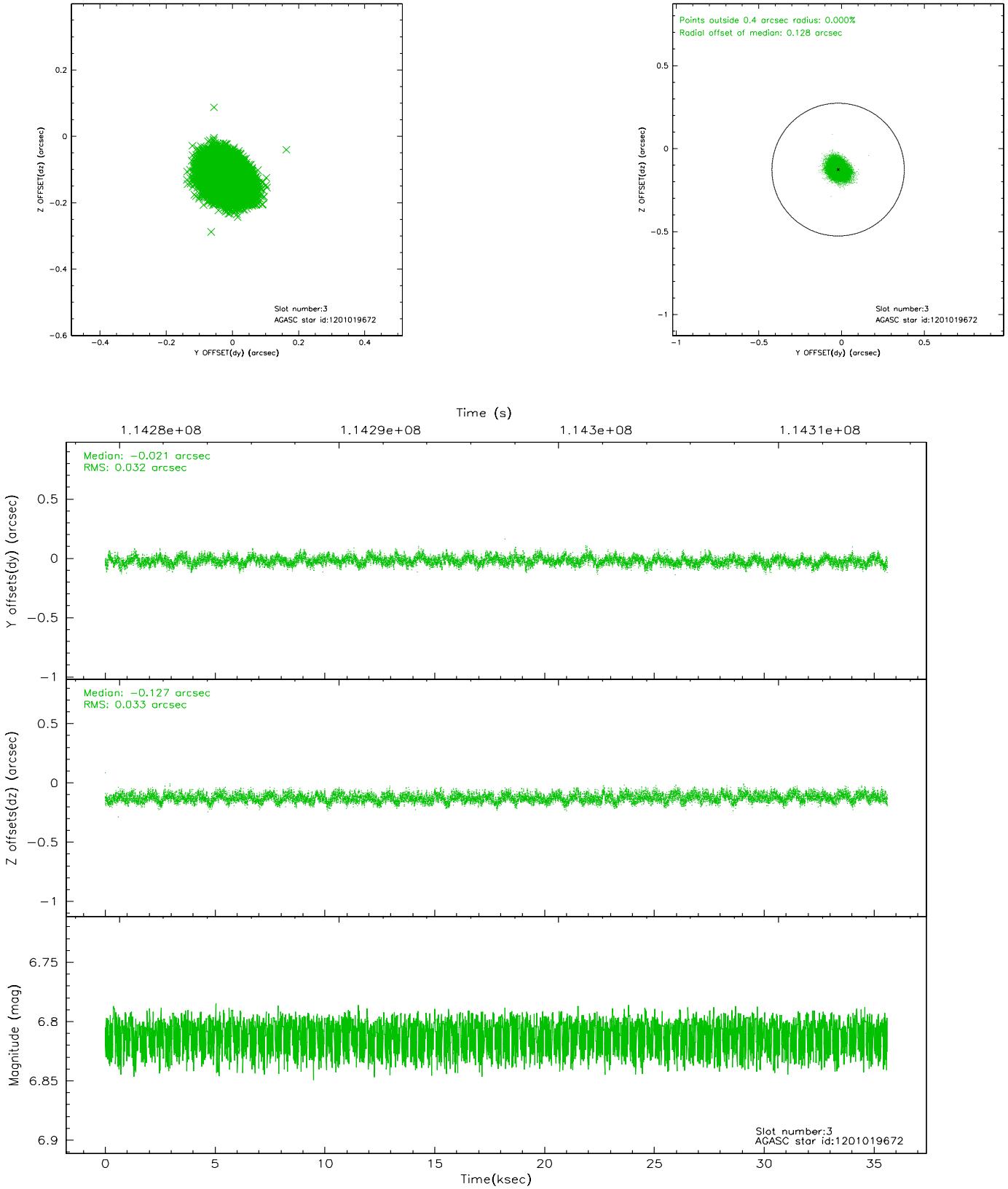


### Slot Statistics

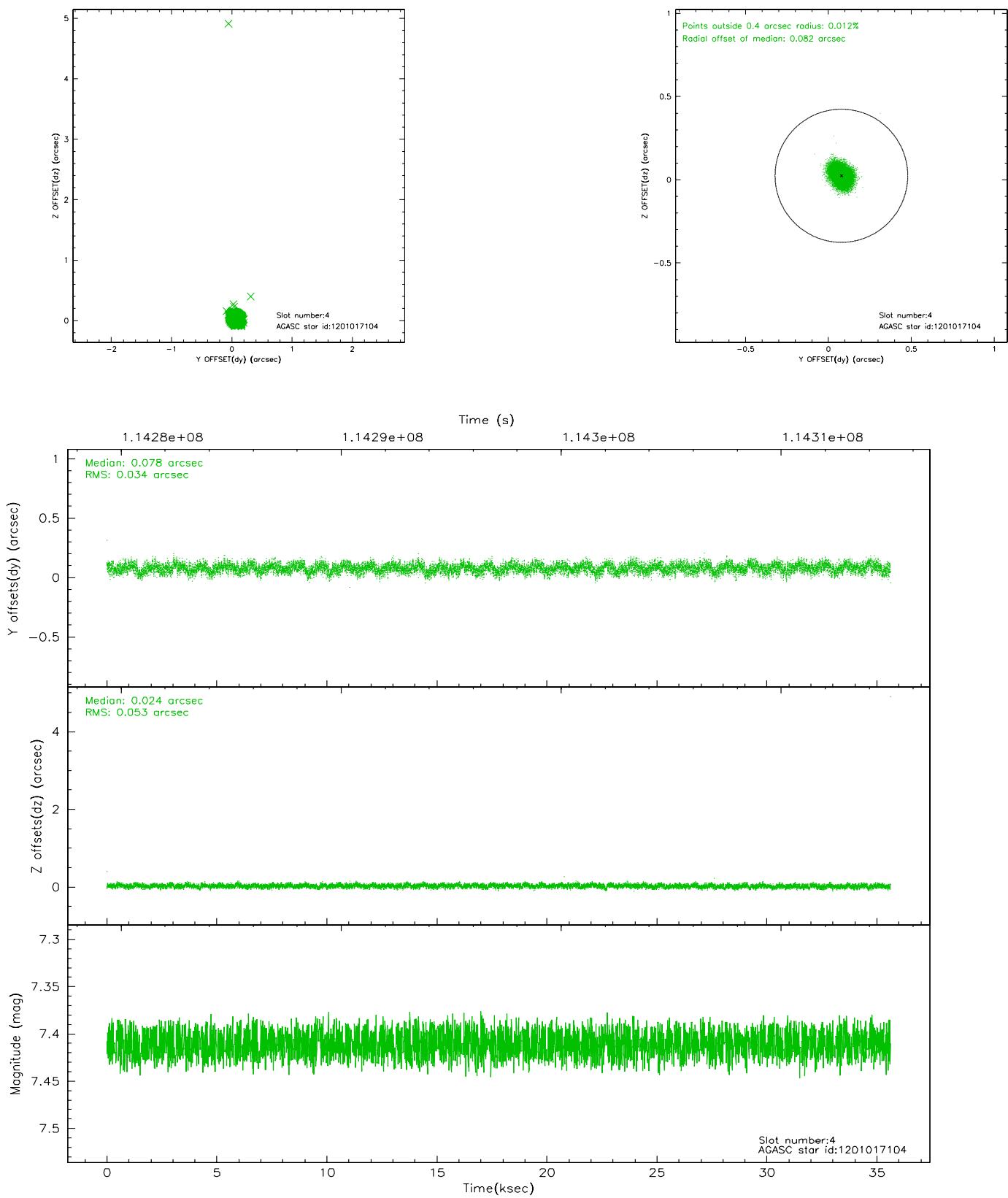
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	6.98	8678	0.154	-0.143	0.014	0.022	0.000000	0.000000	-1157.19	-454.39
1	FID	HRC-S-2	6.98	8681	0.093	-0.095	0.013	0.025	0.000000	0.000000	1242.31	-447.08
2	FID	HRC-S-3	7.00	8680	0.142	-0.063	0.011	0.017	0.000000	0.000000	-1159.75	575.17
3	GUIDE	1201019672	6.81	17376	-0.021	-0.127	0.050	0.079	85.312192	-68.770187	-713.07	1476.49
4	GUIDE	1201017104	7.41	17367	0.078	0.024	0.055	0.087	85.906081	-68.081291	936.26	-535.40
5	GUIDE	1200882176	7.67	17362	0.053	-0.037	0.052	0.085	83.665480	-68.205126	2164.50	2240.68
6	GUIDE	1201018736	7.04	17366	-0.127	0.206	0.050	0.080	86.842587	-67.758053	1198.65	-2235.56
7	GUIDE	1201020040	8.58	17369	0.015	-0.068	0.065	0.107	85.379163	-68.879396	-1090.56	1616.38

## 2.4 Star Slots

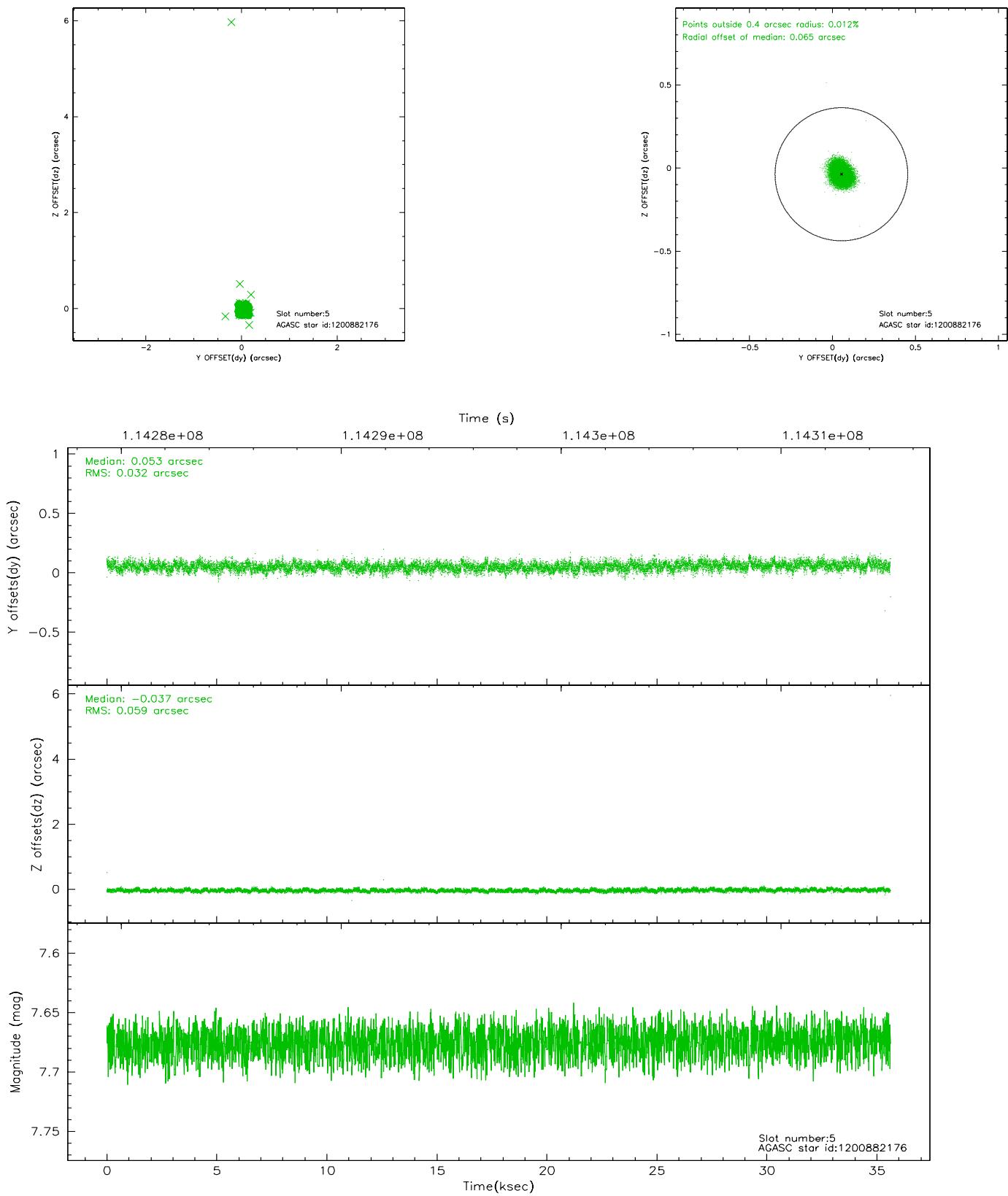
### 2.4.1 Slot 3



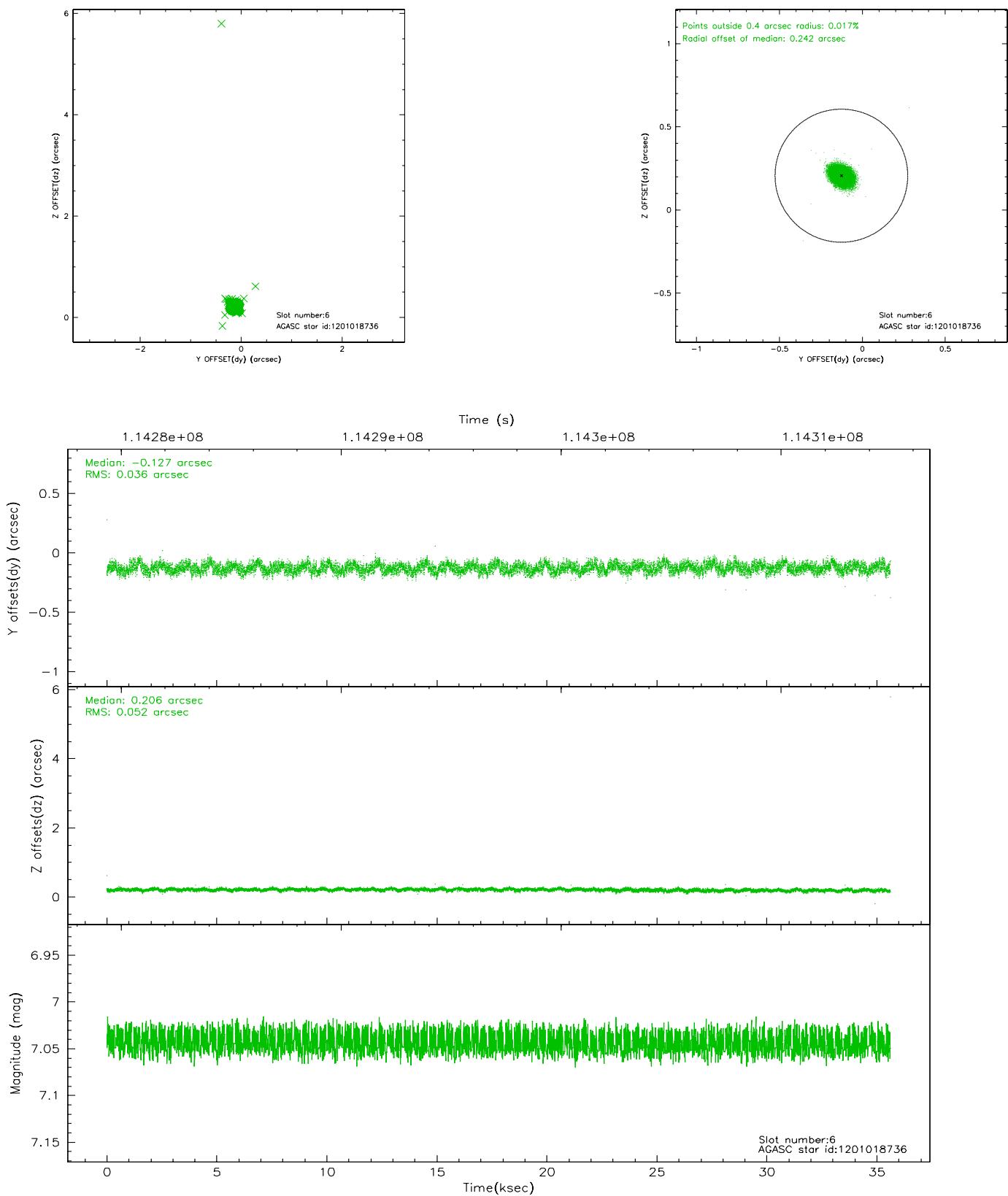
## 2.4.2 Slot 4



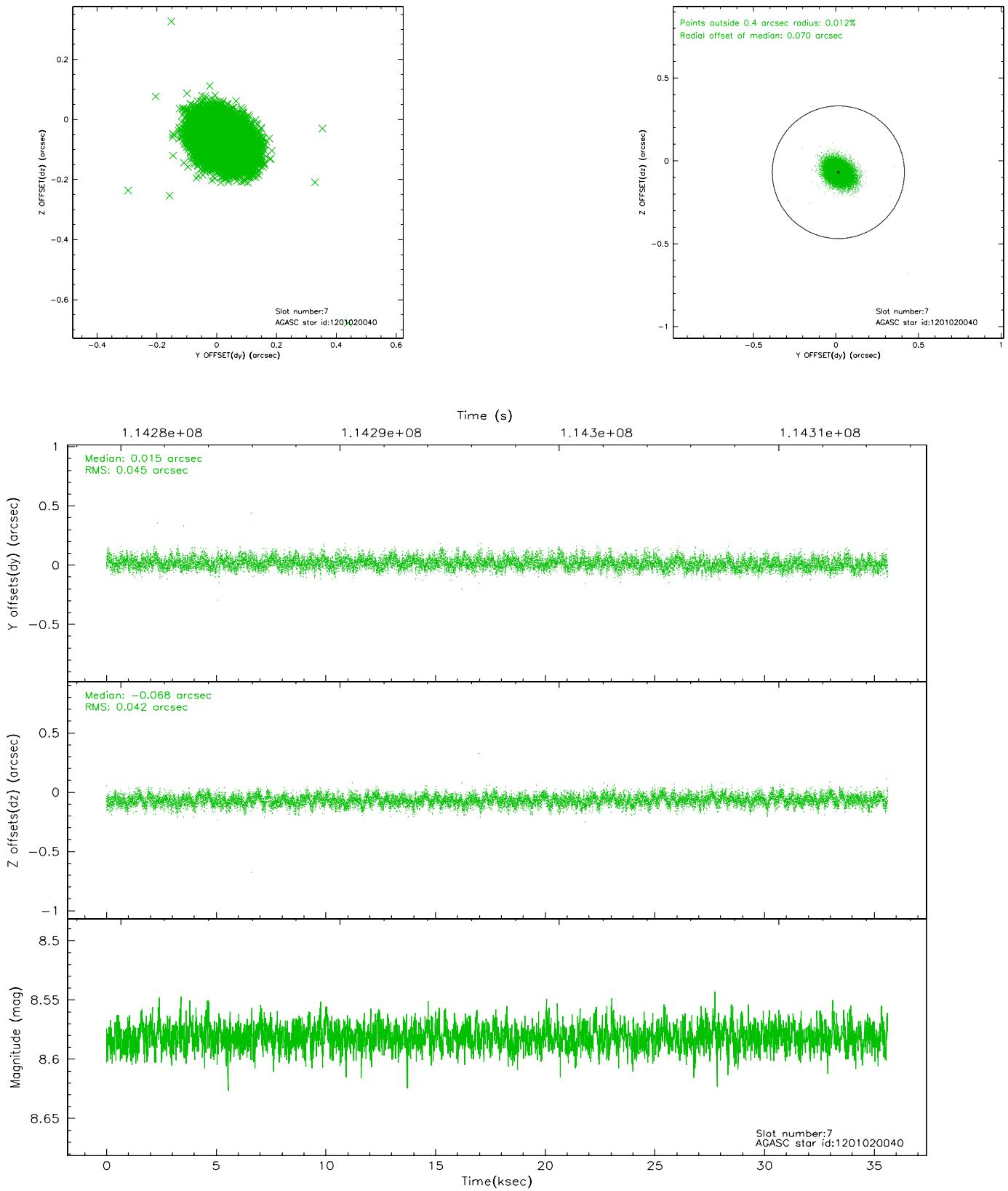
### 2.4.3 Slot 5



## 2.4.4 Slot 6

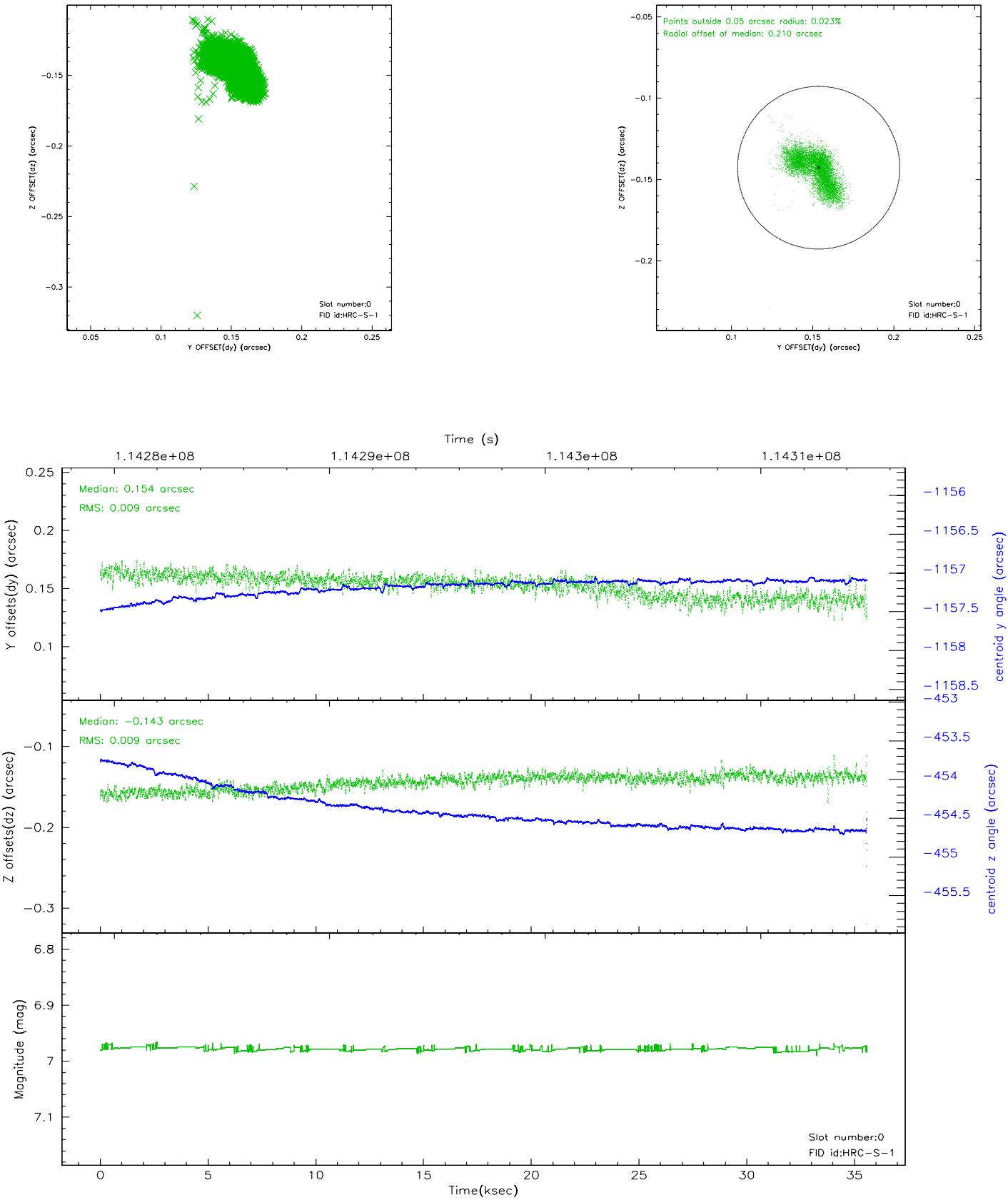


## 2.4.5 Slot 7

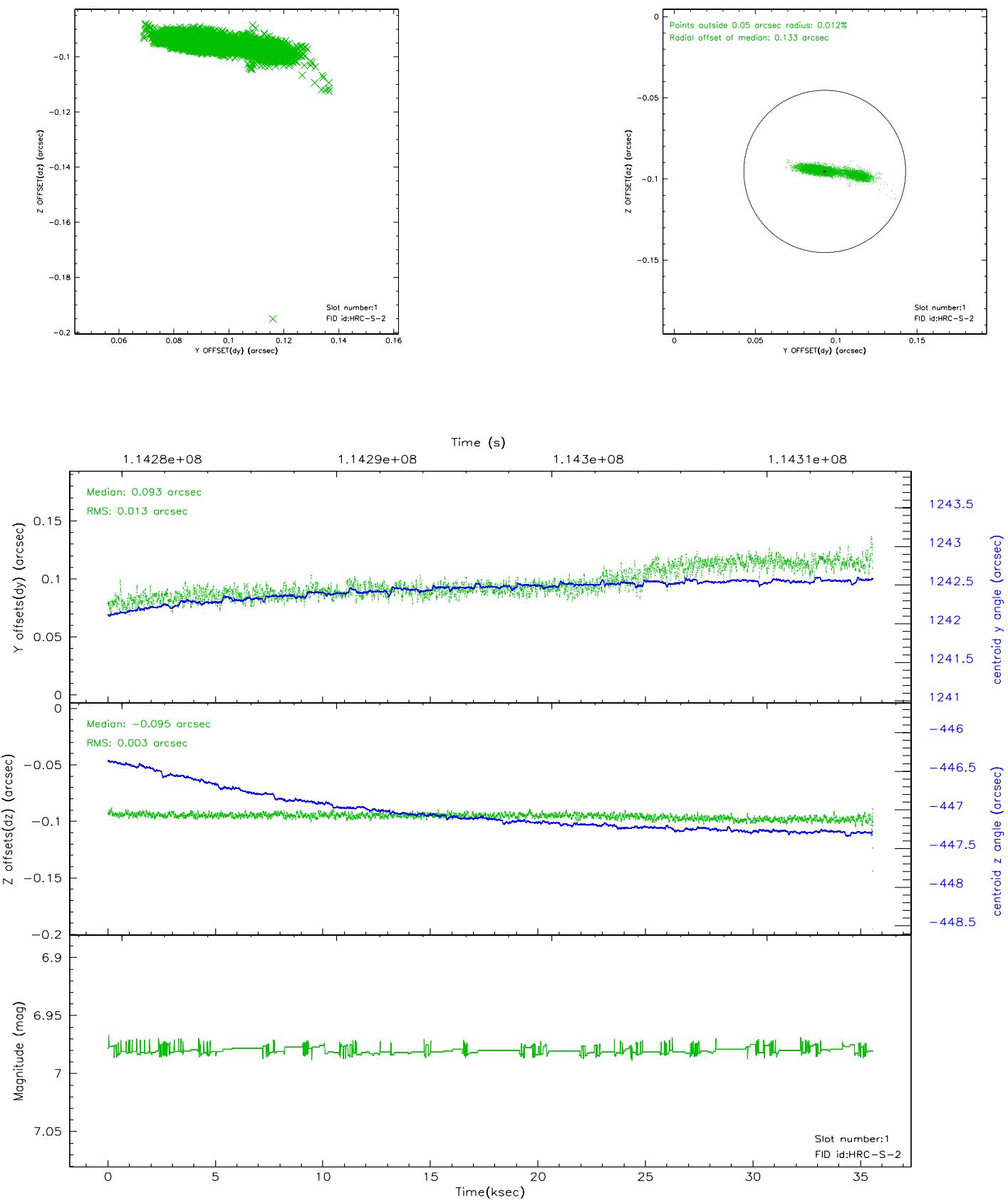


## 2.5 FID Slots

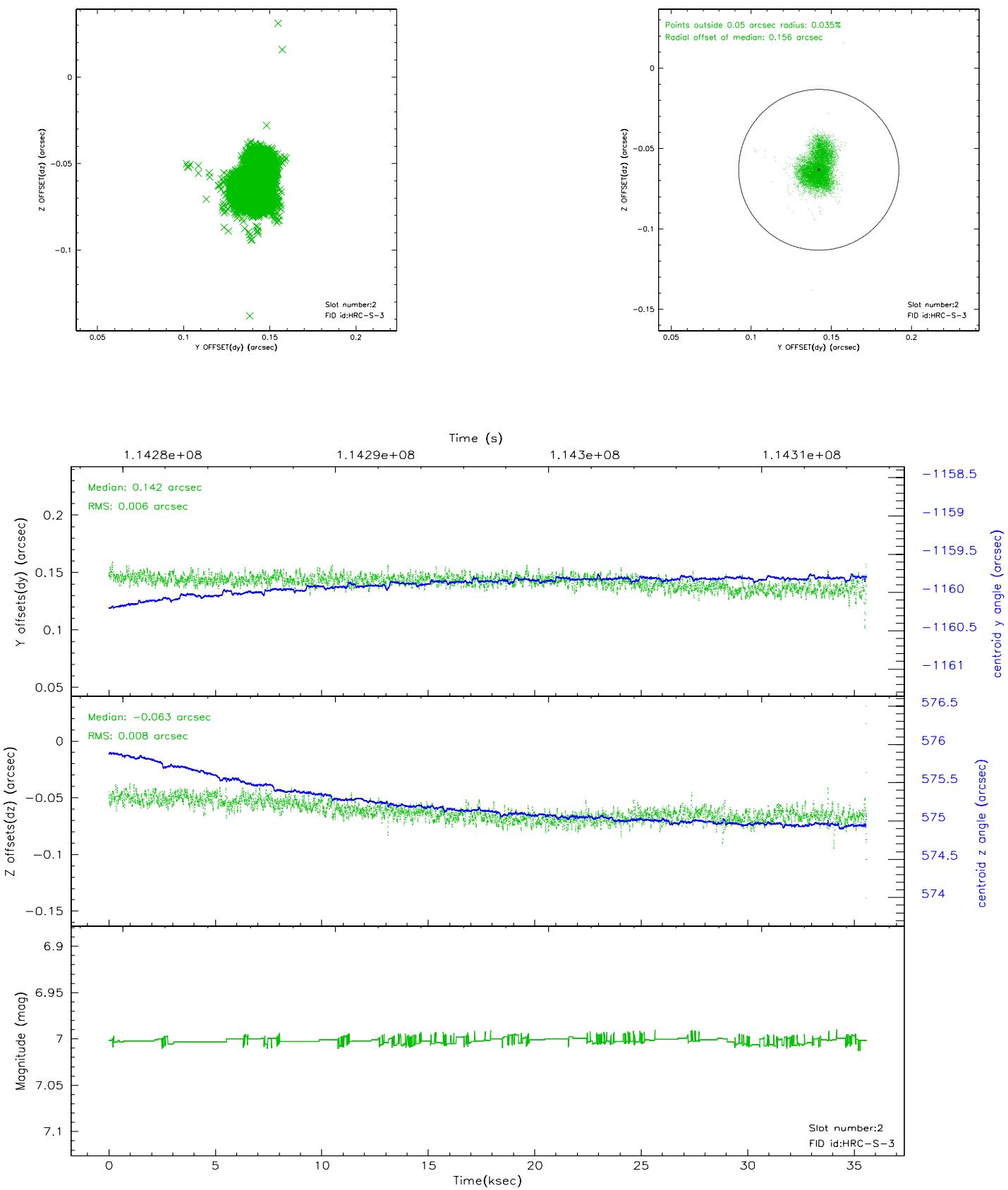
### 2.5.1 Slot 0



## 2.5.2 Slot 1

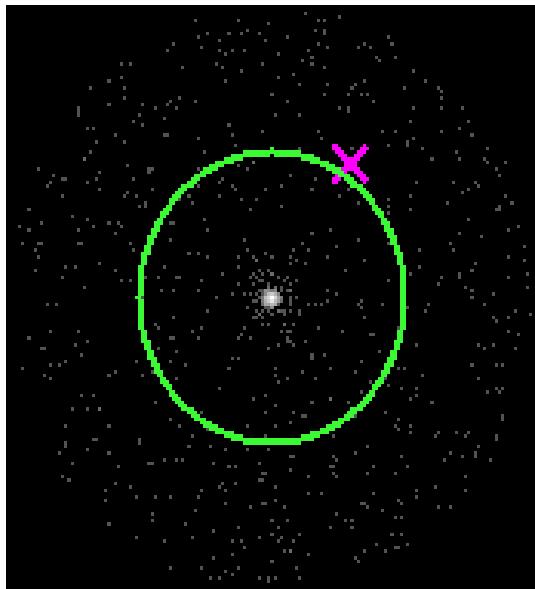


### 2.5.3 Slot 2



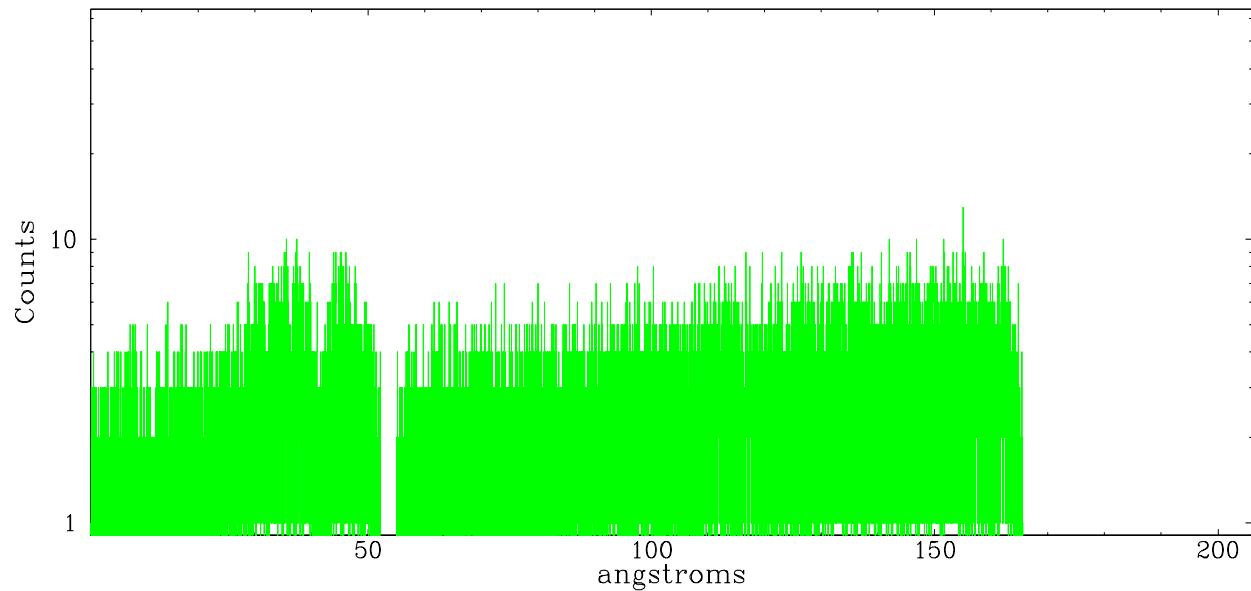
### 3 Gratings

#### 3.1 LETG Arm

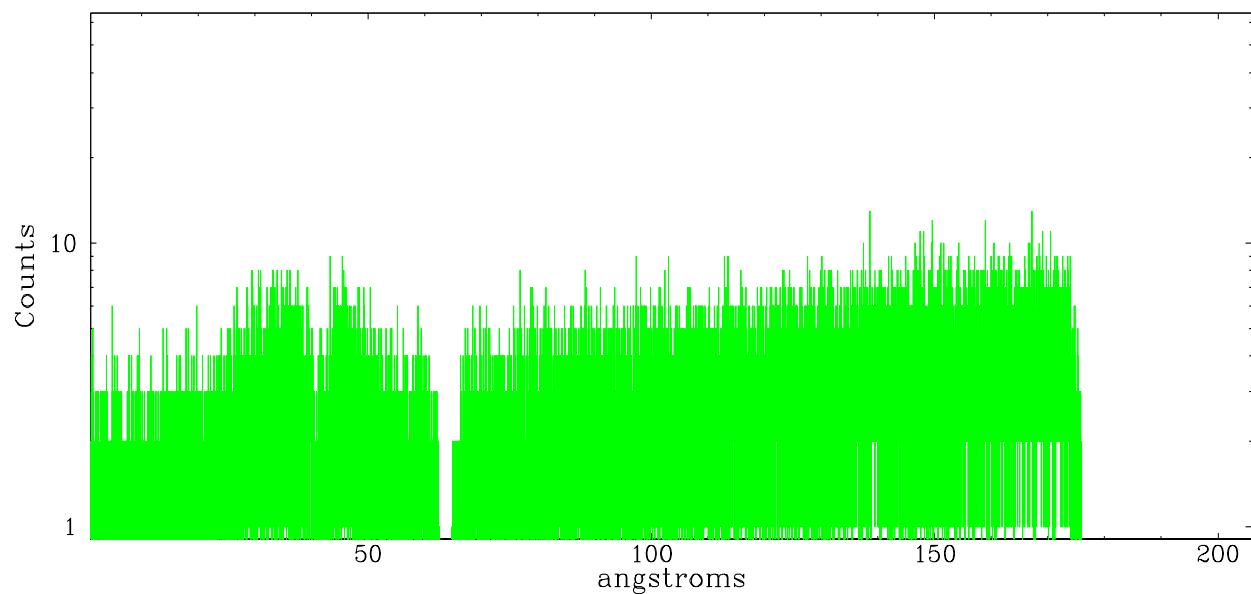


LETG Zero Order

leg order -1



leg order +1



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.08.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.422

## A.2 Comments

Obsid 1900 has 2 obi's. This is obi=0. It was truncated by a radiation

safing of the instrument, but there is some science data. Obi=2 is not included because it was terminated by a radiation safing while still

in the maneuver to the target. There is no science data in obi=1.

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The last 1.3-1.4 ksec of this observation is severely affected by the high radiation environment. The total count rate is extremely high and the DTF reflects the radiation environment.