

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 3716 - L2 Version 3  
Chandra X-Ray Center

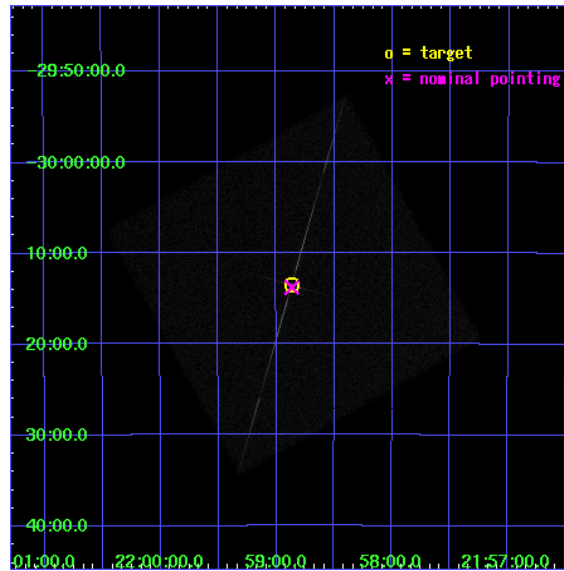
L2 Processing Date : Nov 21 2007

## 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>3</b>	<b>Gratings</b>	<b>17</b>
3.1	LETG Arm . . . . .	17
<b>A</b>	<b>Summary</b>	<b>19</b>
A.1	Status . . . . .	19
A.2	Comments . . . . .	19

# 1 Front

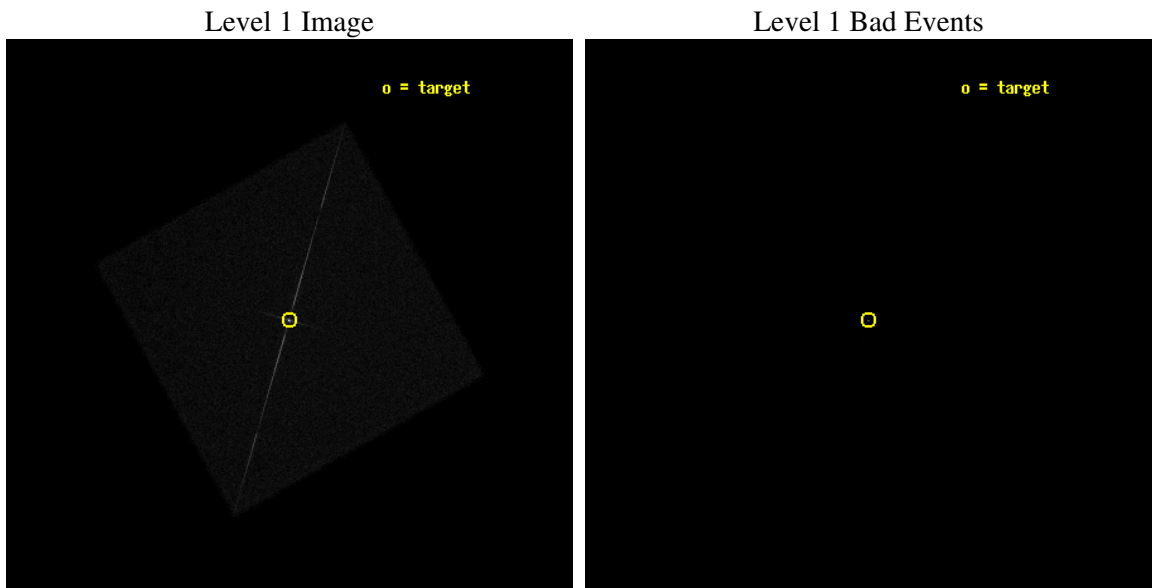
seq_num	290249
obs_id	3716
title	AO4 CALIBRATION OBSERVATIONS TO MONITOR THE HRC LOW ENERGY QE
observer	Dr. CXC Calibration
object	PKS2155-304
ra_targ	329.716667
dec_targ	-30.225556
ra_nom	329.71610242427
dec_nom	-30.229757296559
roll_nom	285.88242897816
revision	3
ontime	7393.5815582275
liveltime	7352.3247047824
l2events	222090



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	1
ascdsver	7.6.11.2
caldbver	3.4.1
date	2007-11-22T00:33:41
revision	3

sched_exp_time	7500.000000
ontime	7393.5815582275
l1events	338664

### 2.1.3 Events

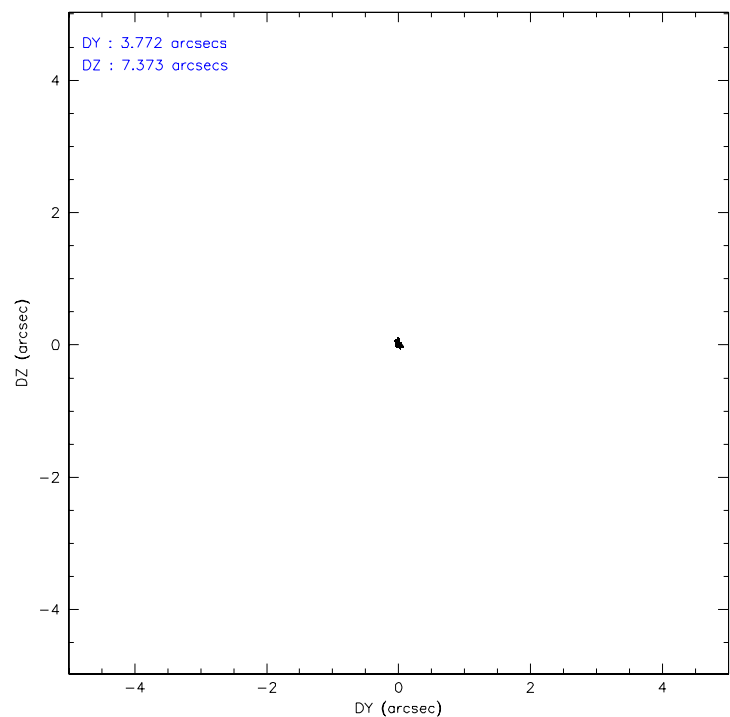
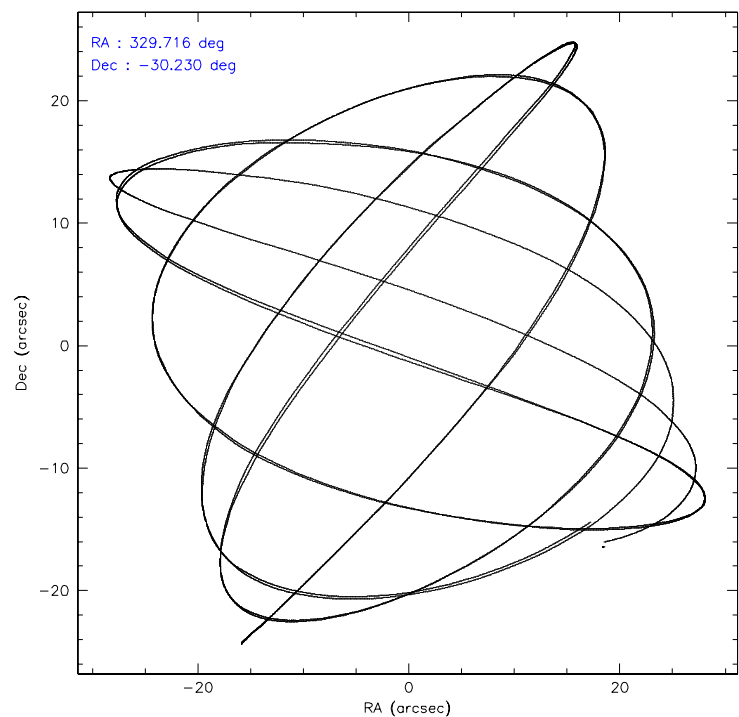
#### Level 1 Events

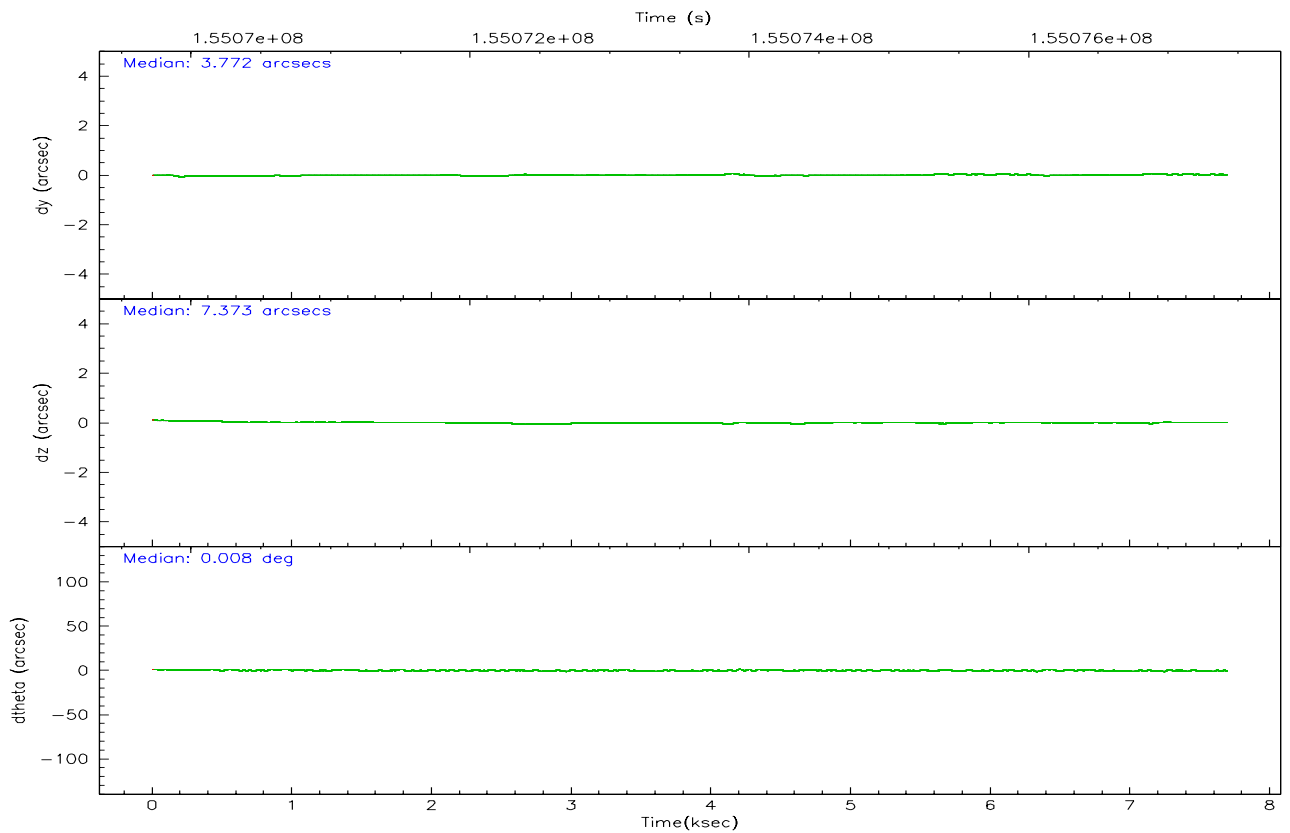
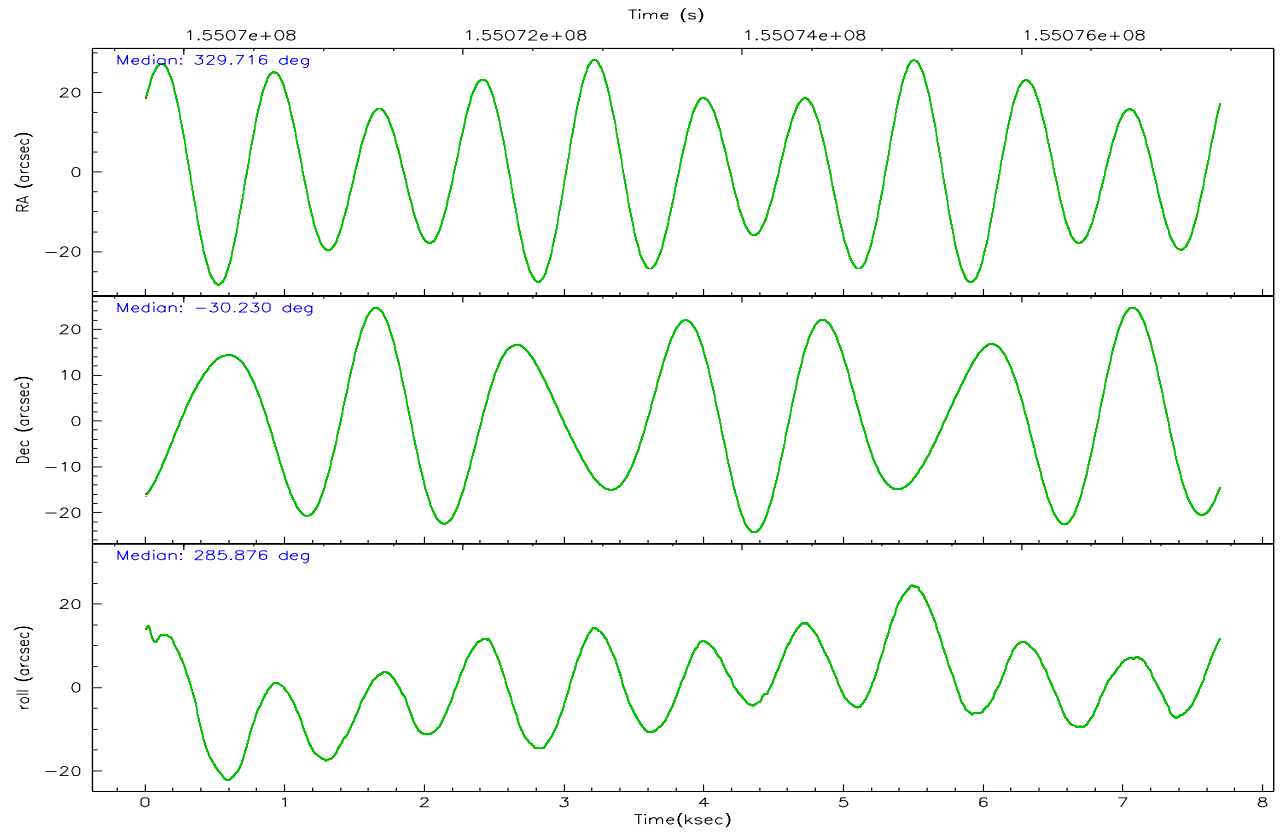
	<b>segment 0</b>
level 1 events	338664
rejected events	17519
rejected %	5%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	6	6
Detector	HRC-I	HRC-I	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
Pointing RA	329.693082	329.7161024242689			
Pointing Dec	-30.211277	-30.22975729655867			
Pointing Roll	285.966333	285.882428978158			
SIM focus pos (mm)	-1.040293	-1.038866356238299			
SIM defocus (mm)	0	0.001426264420575141			
SIM translation stage pos (mm)	126.985494	126.9854943052878			
SIM translation stage offset (mm)	0	-5.413686238853188e-06			
Observation start time	155069926.184000	155069513.81722			
Observation start date	2002-11-30T18:57:42	2002-11-30T18:51:53			
Observation end time	155077426.184000	155077565.19255			
Observation end date	2002-11-30T21:02:42	2002-11-30T21:06:05			

## 2.3 Aspect





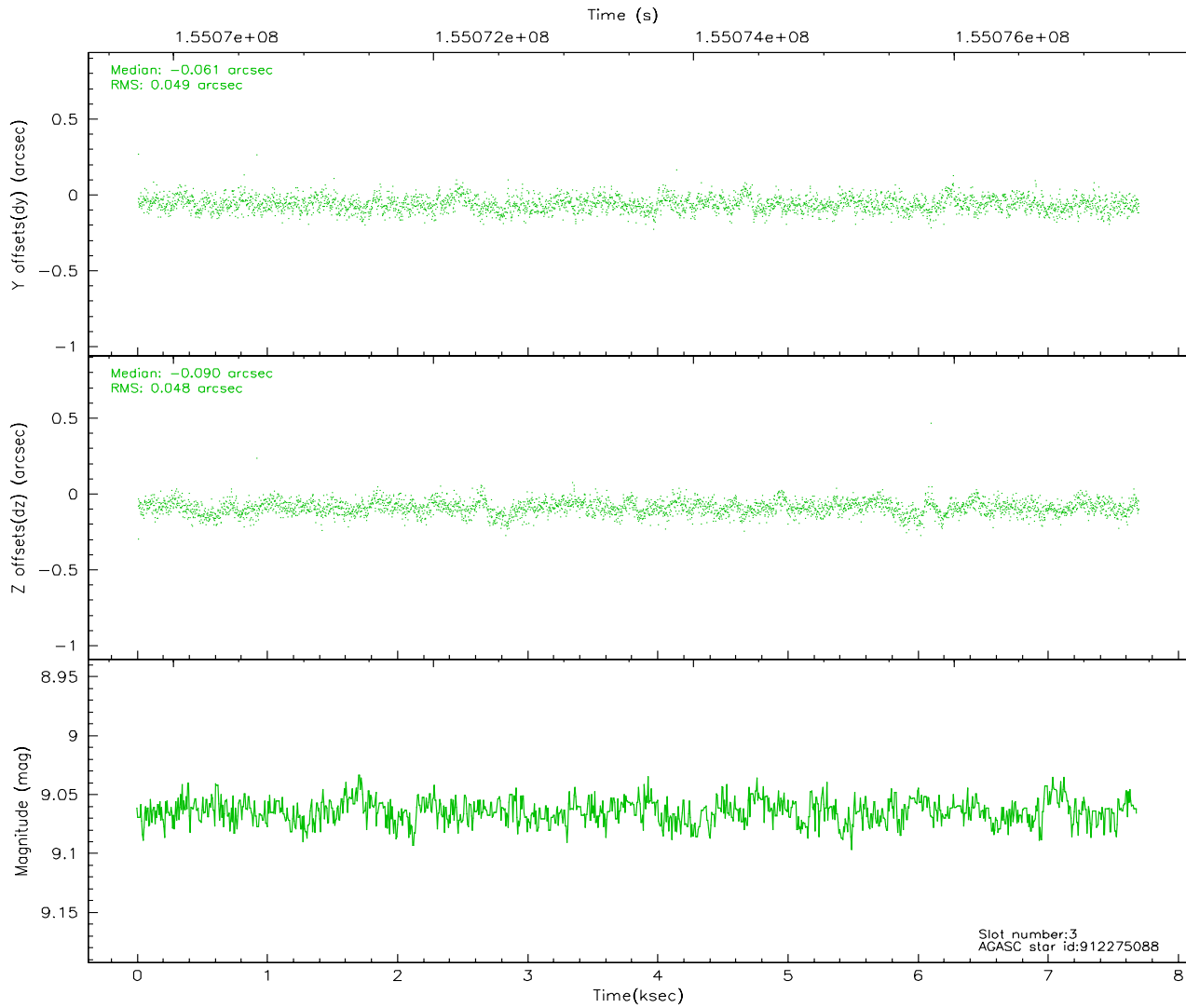
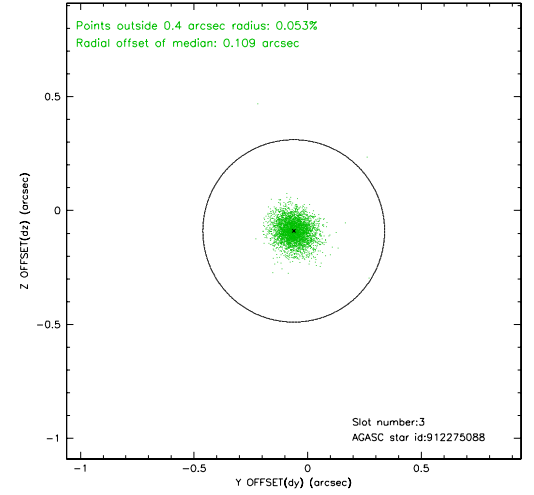
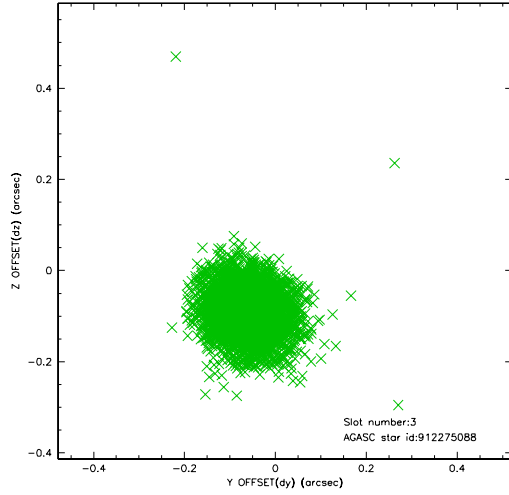
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	7.00	1876	0.015	0.023	0.007	0.011	0.000000	0.000000	-759.24	-1295.27
1	FID	HRC-I-2	7.03	1876	0.116	-0.100	0.006	0.010	0.000000	0.000000	853.09	-1297.64
2	FID	HRC-I-3	7.09	1875	-0.012	-0.013	0.006	0.011	0.000000	0.000000	-1187.32	1008.56
3	GUIDE	912275088	9.06	3749	-0.061	-0.090	0.072	0.119	329.619228	-29.738698	-1698.52	246.29
4	GUIDE	912276032	9.61	3748	-0.033	0.266	0.088	0.146	329.395967	-29.803466	-1665.41	-488.14
5	GUIDE	981468016	9.00	3745	-0.002	-0.154	0.113	0.178	328.842457	-30.034984	-1329.48	-2376.81
6	GUIDE	981468128	9.37	3751	0.017	-0.006	0.090	0.152	329.756350	-30.158334	-128.67	241.71
7	GUIDE	981469488	9.61	3750	0.079	-0.016	0.094	0.152	329.261199	-30.045155	-941.90	-1129.62

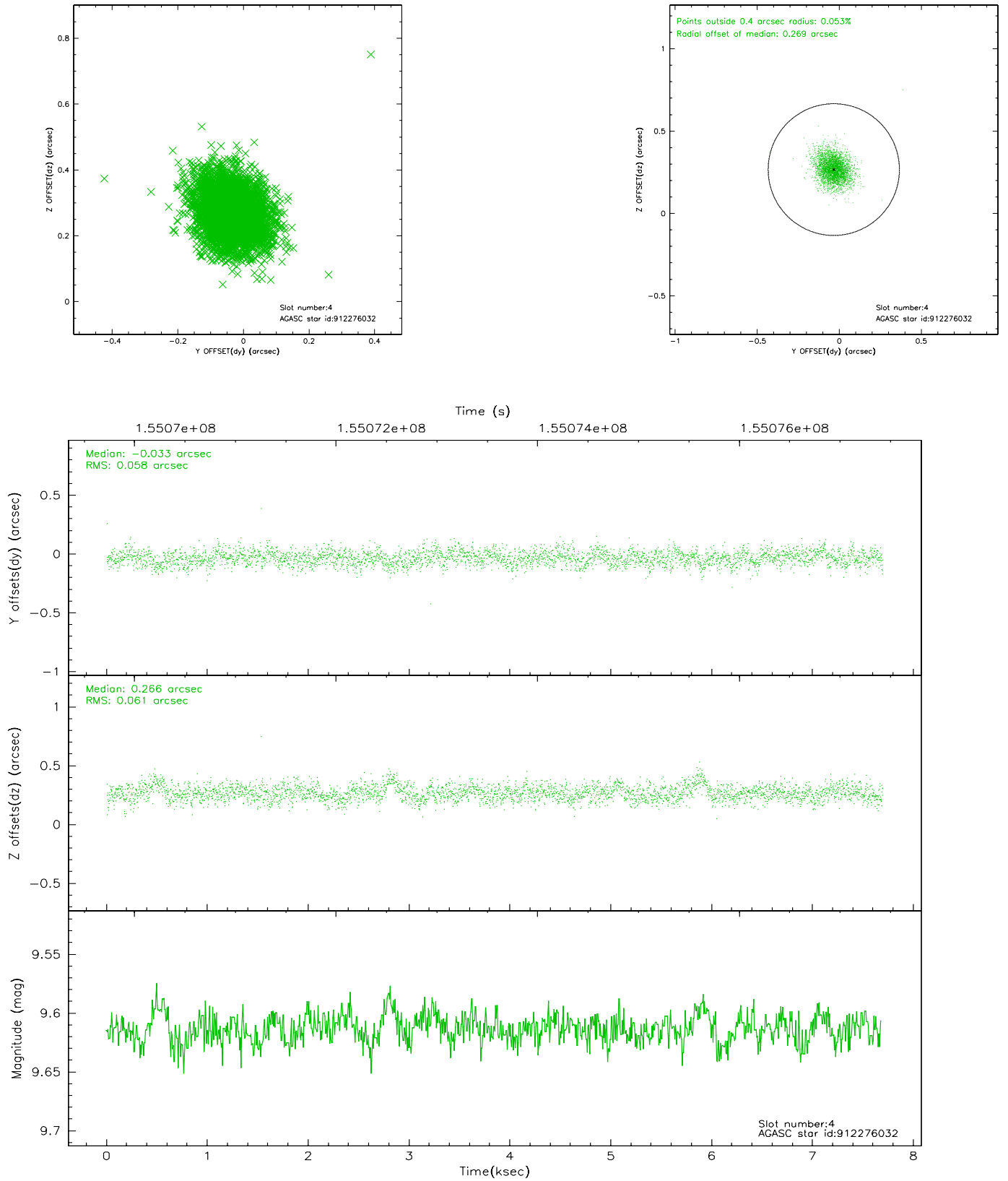


## 2.4 Star Slots

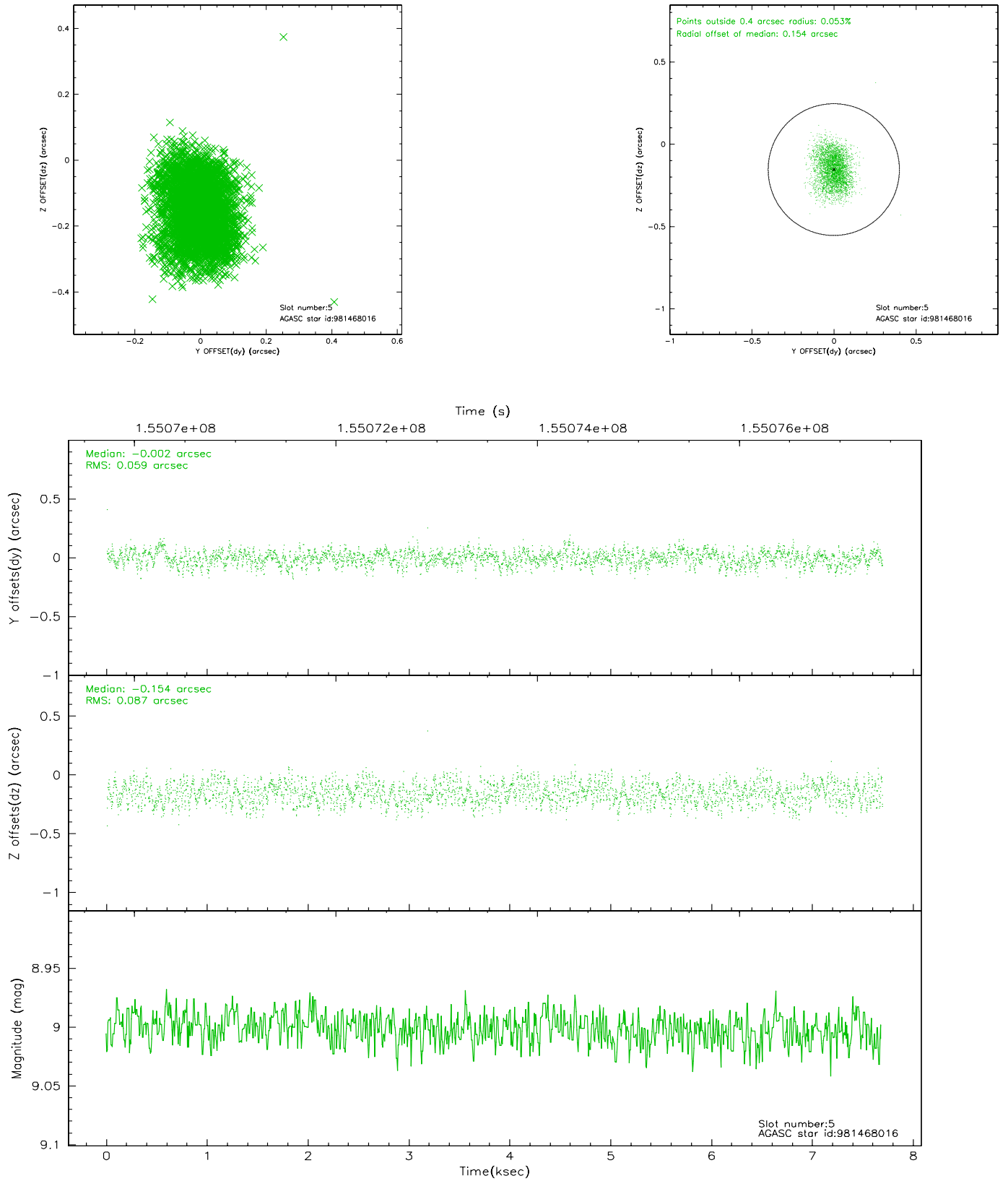
### 2.4.1 Slot 3



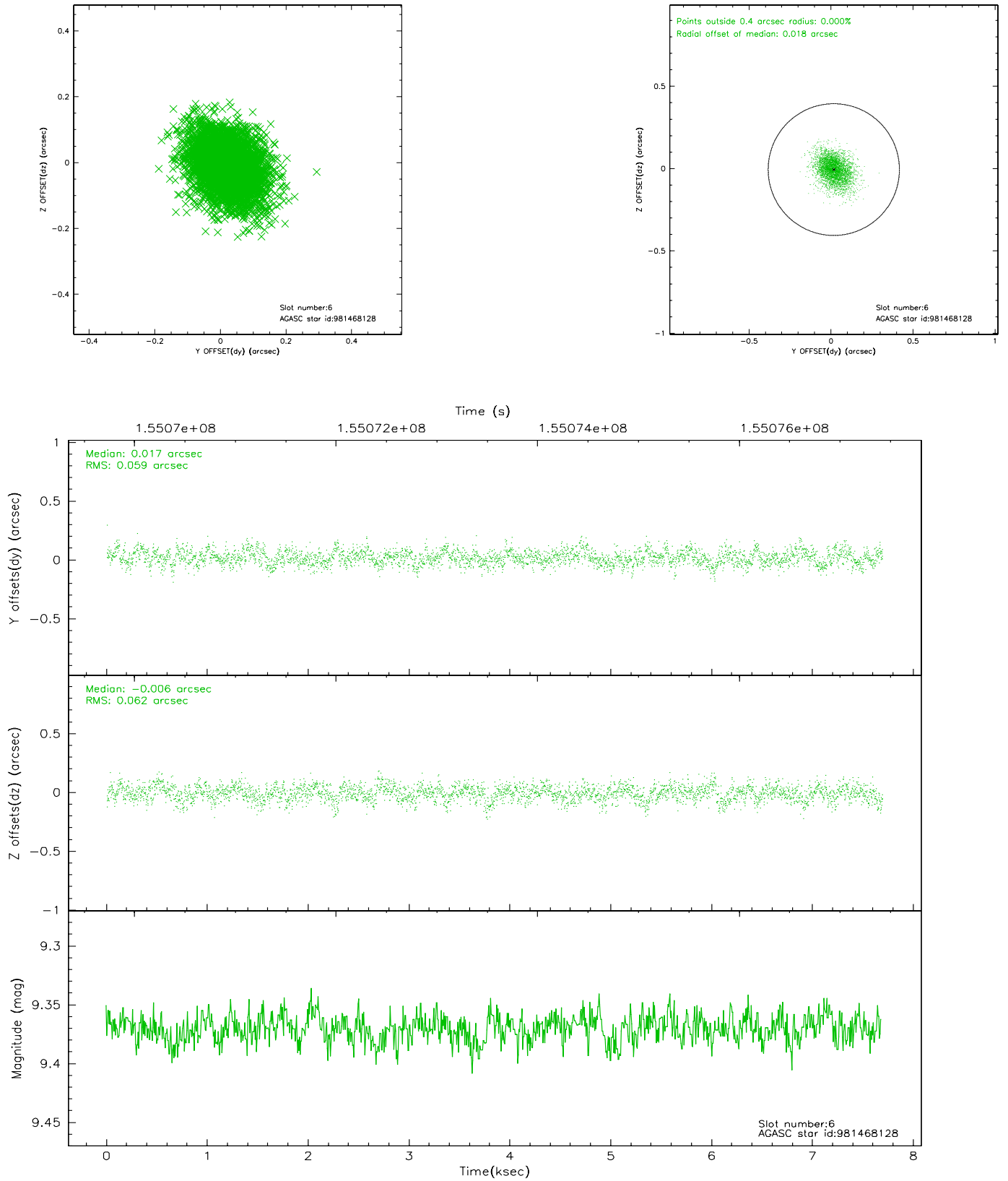
## 2.4.2 Slot 4



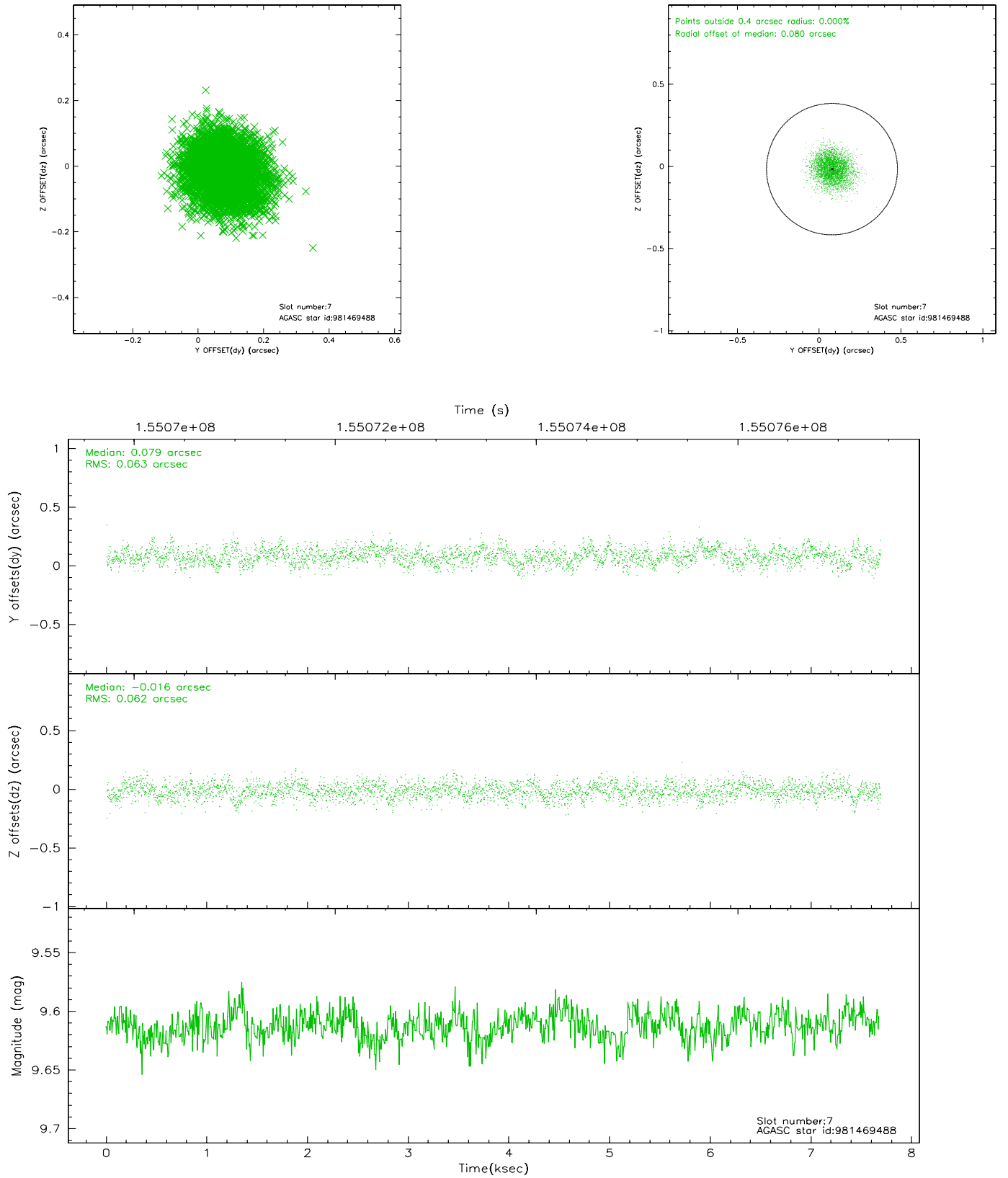
### 2.4.3 Slot 5



## 2.4.4 Slot 6

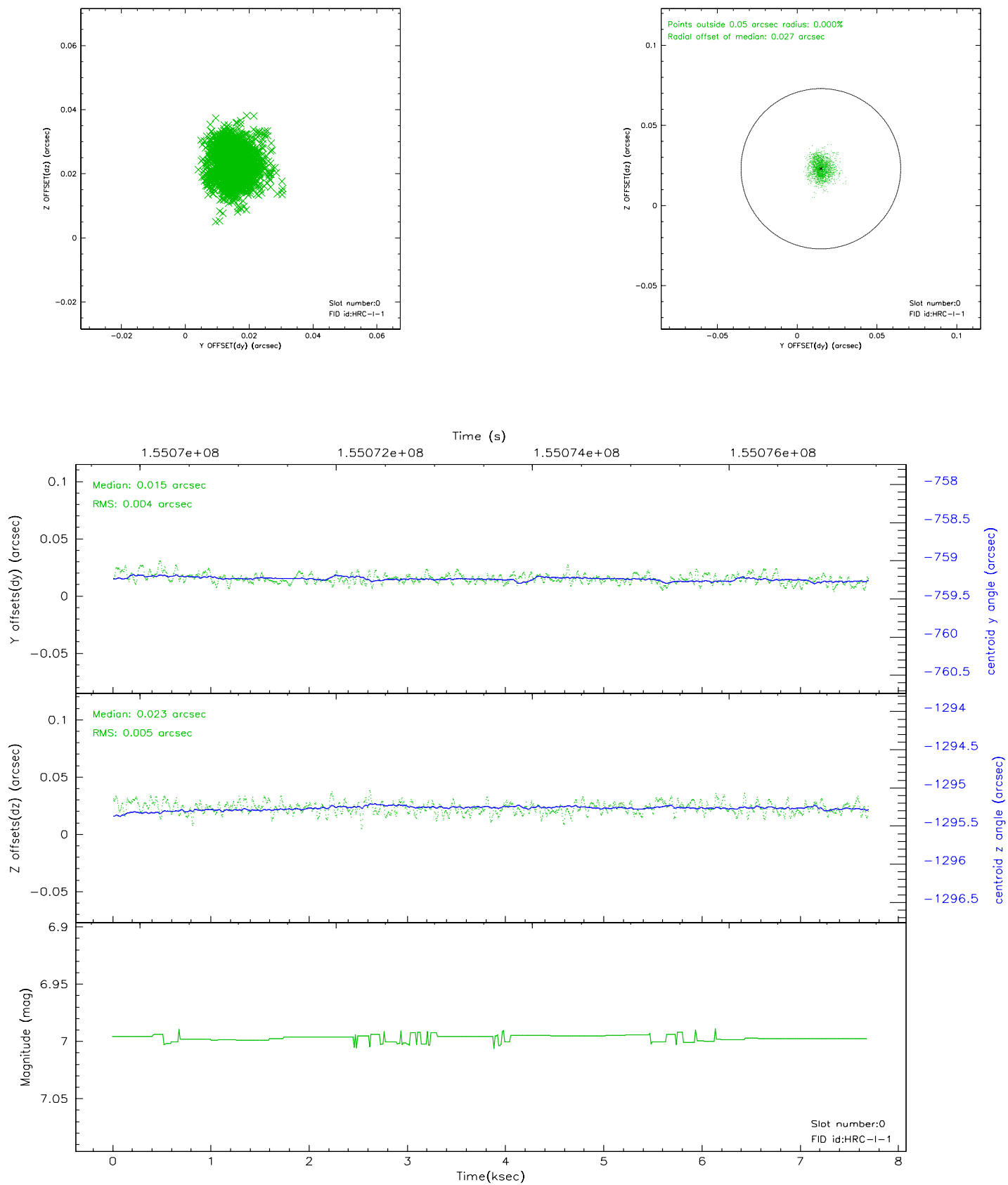


## 2.4.5 Slot 7

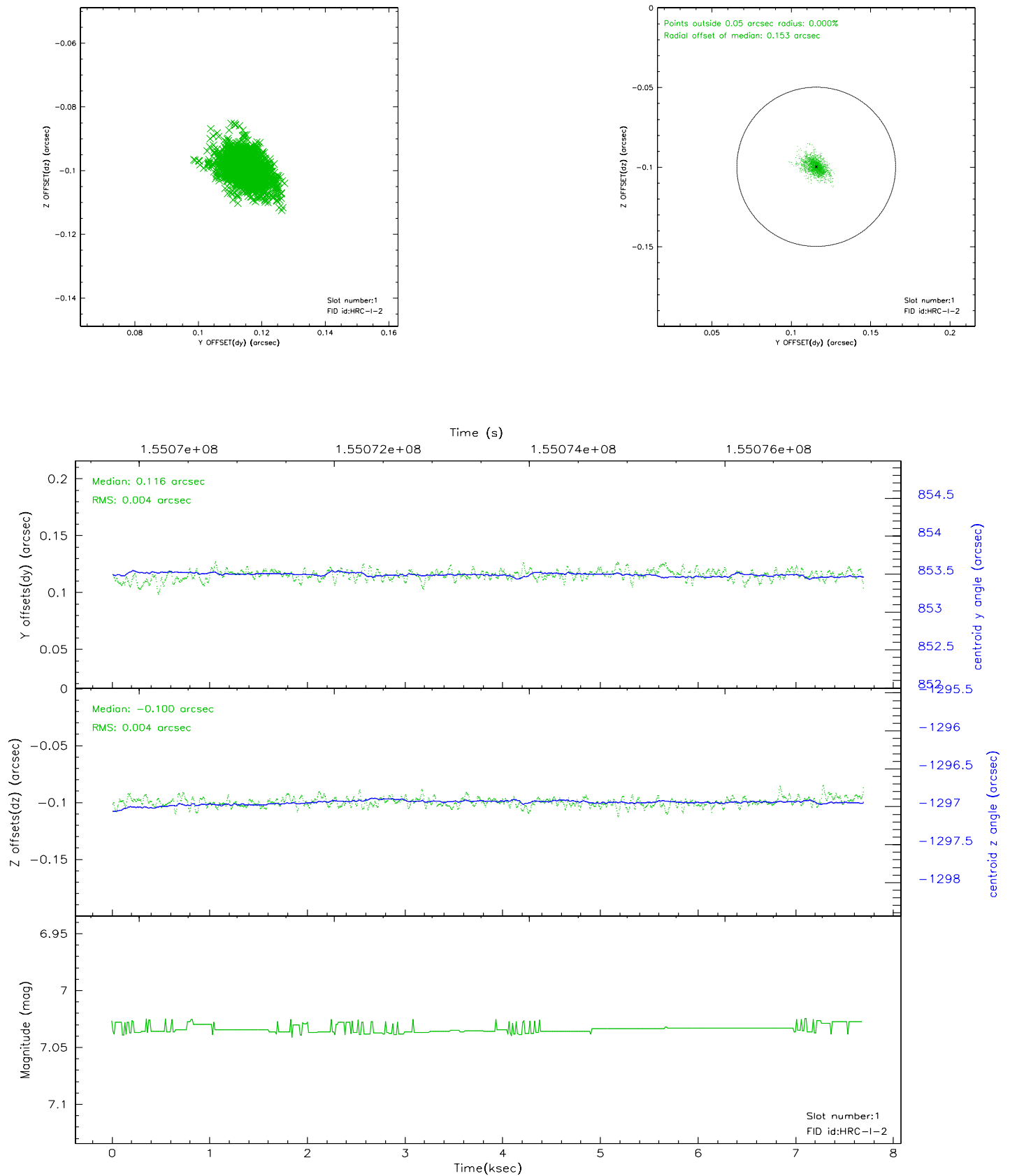


## 2.5 FID Slots

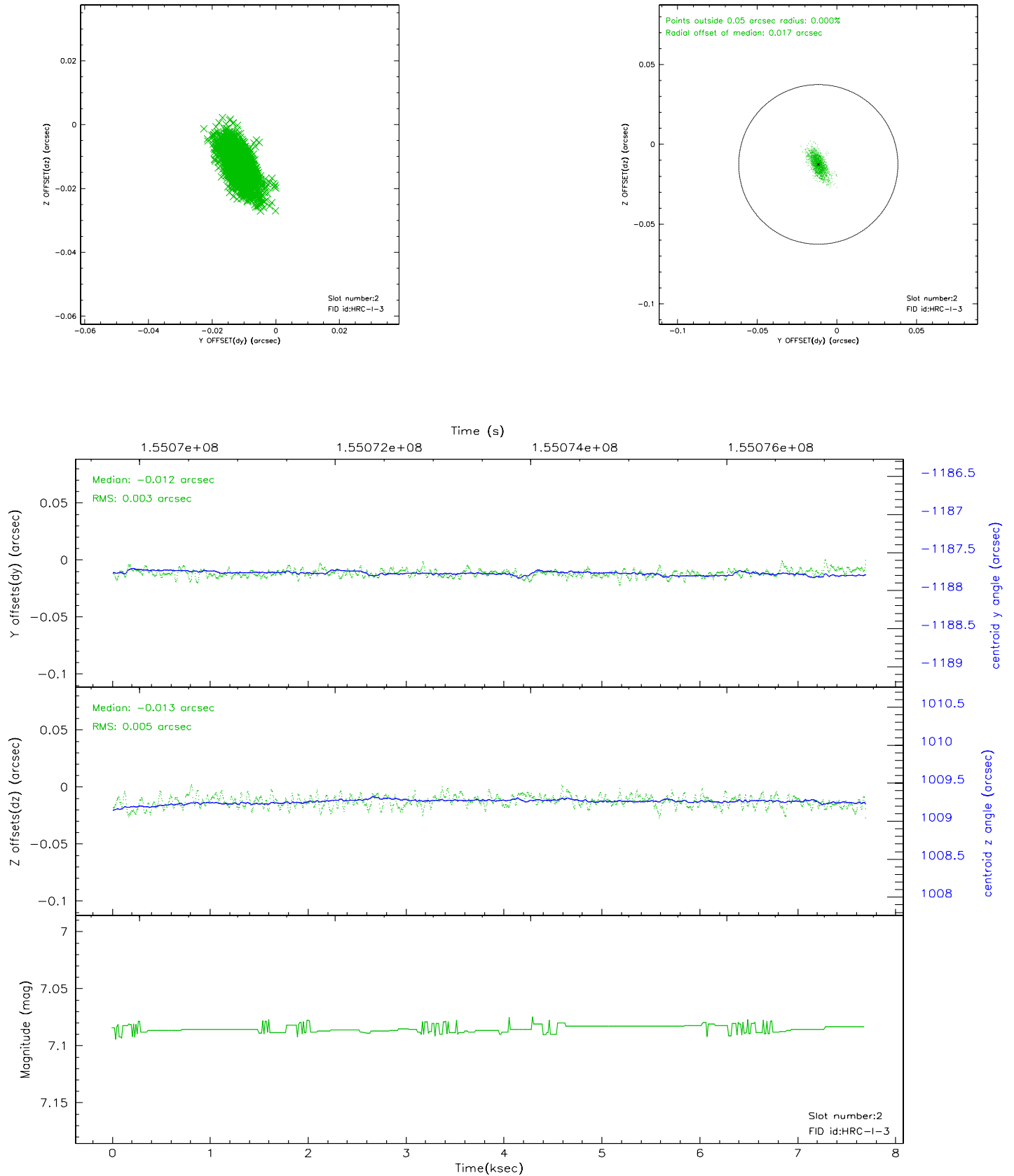
### 2.5.1 Slot 0



## 2.5.2 Slot 1



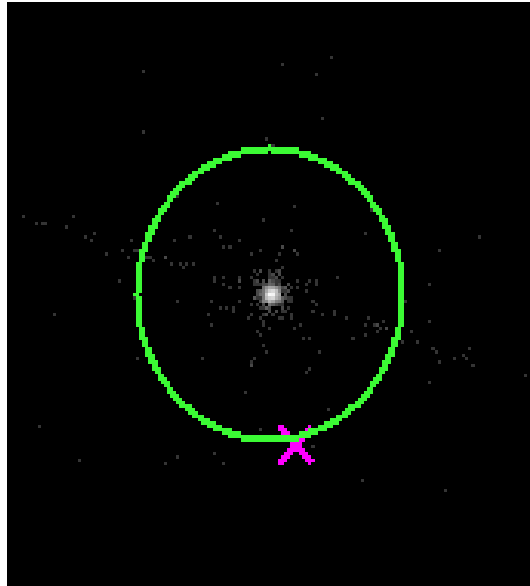
### 2.5.3 Slot 2





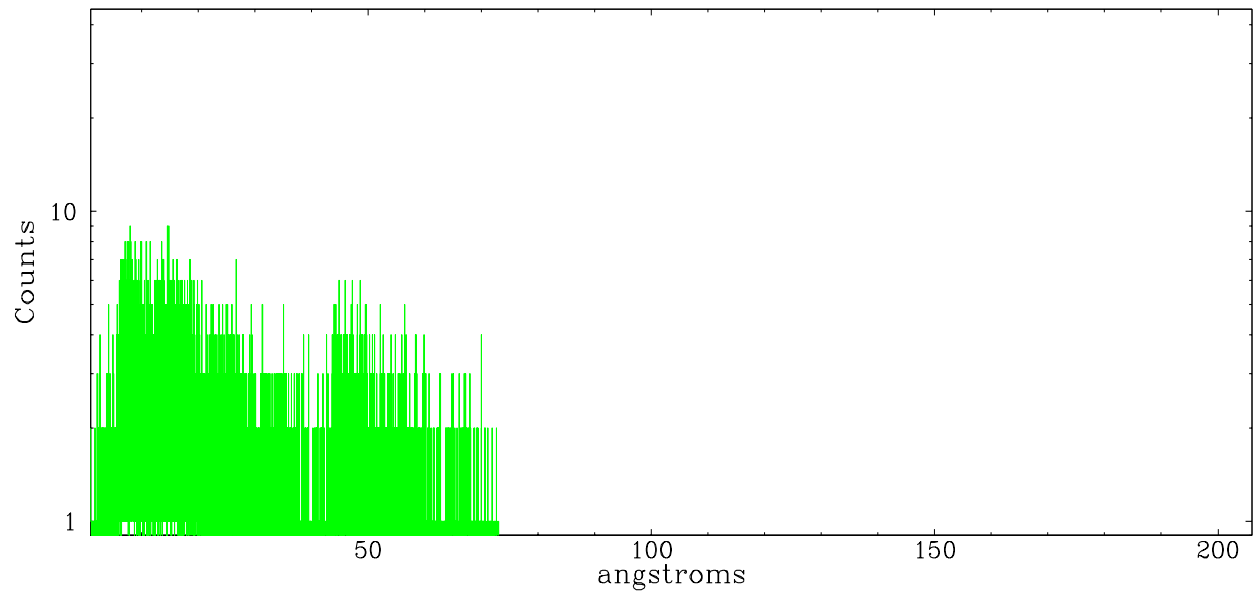
## 3 Gratings

### 3.1 LETG Arm

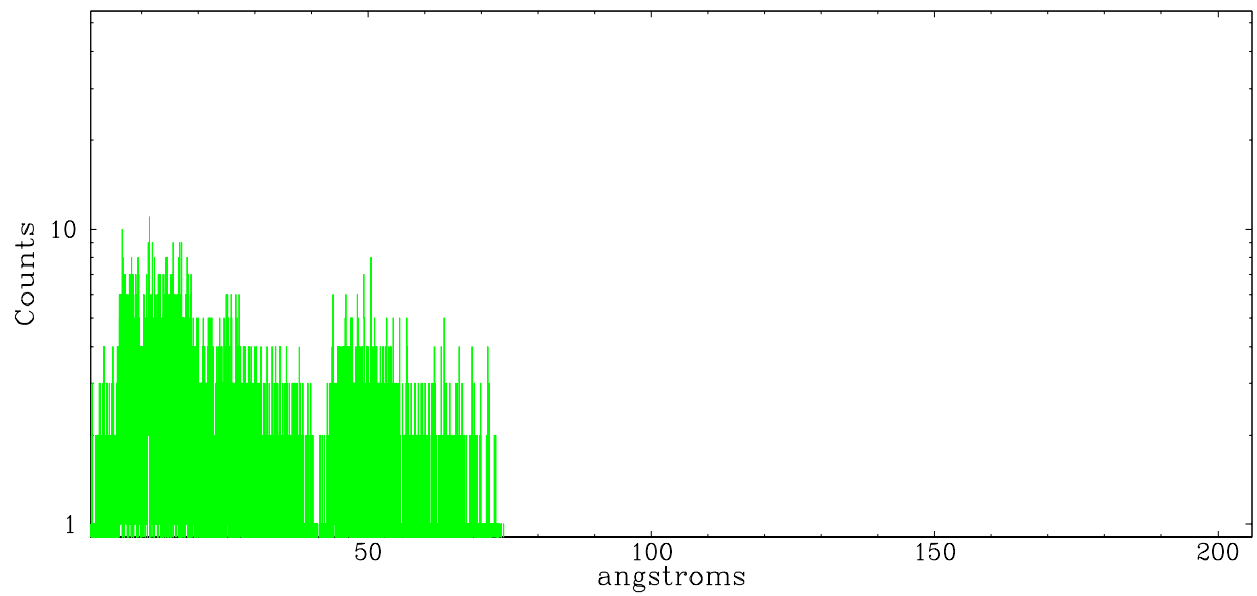


LETG Zero Order

leg order -1



leg order +1



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.393

## A.2 Comments

The current observation has been reprocessed as part of Repro III ('C' supplement)

the purpose of which is to update all HRC-I ObsIDs since Jan 2000 to the

latest calibrations available for that configuration. Specifically, we are updating the DEGAP solution and the Gain Maps applied. For more information see the Repro IIIC web page

at

<http://asc.harvard.edu/cda/repro3.html#IIIC>

and the associated links