

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 4311 - L2 Version 001  
Chandra X-Ray Center

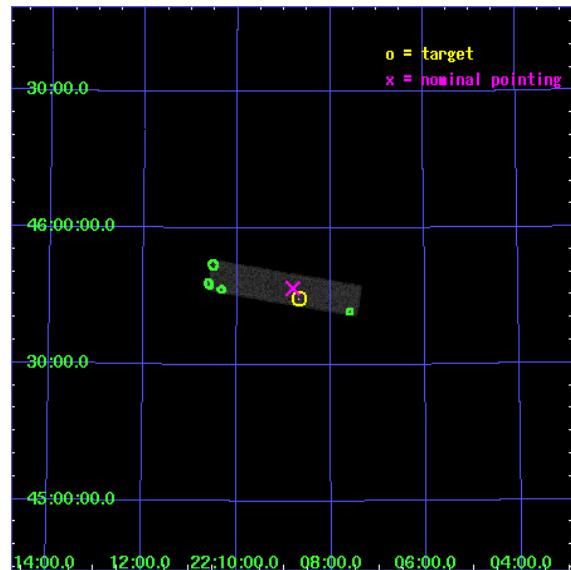
L2 Processing Date : Jul 7 2006

## 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>Point Sources</b>	<b>17</b>
<b>A</b>	<b>Summary</b>	<b>18</b>
A.1	Status . . . . .	18
A.2	Comments . . . . .	18

# 1 Front

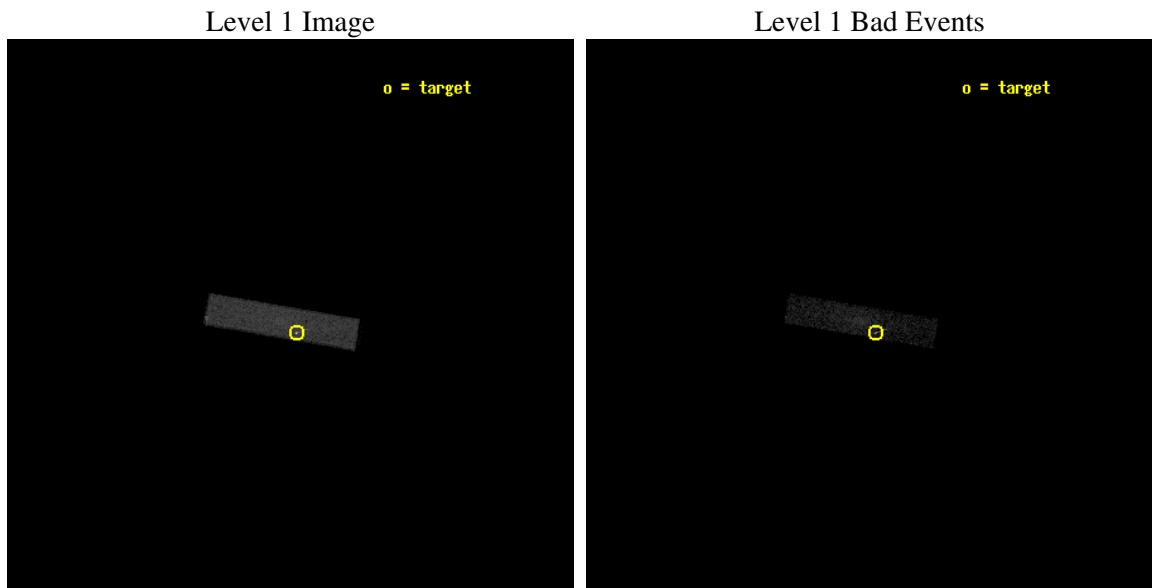
seq_num	290271
obs_id	4311
title	AO4B CALIBRATION OBSERVATIONS TO MONITOR SPATIAL VARIATIONS IN THE HRC-S GAIN
observer	Dr. CXC Calibration
object	ARLAC
ra_targ	332.17
dec_targ	45.742306
ra_nom	332.2023186542
dec_nom	45.780548389531
roll_nom	189.63970028384
revision	2
ontime	820.25628513098
livetime	816.22001954883
l2events	25992



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0
ascdsver	7.6.8
caldbver	3.2.2
date	2006-07-07T20:08:33
revision	2

sched_exp_time	1000.000000
ontime	1087.781296581
l1events	41573

### 2.1.3 Events

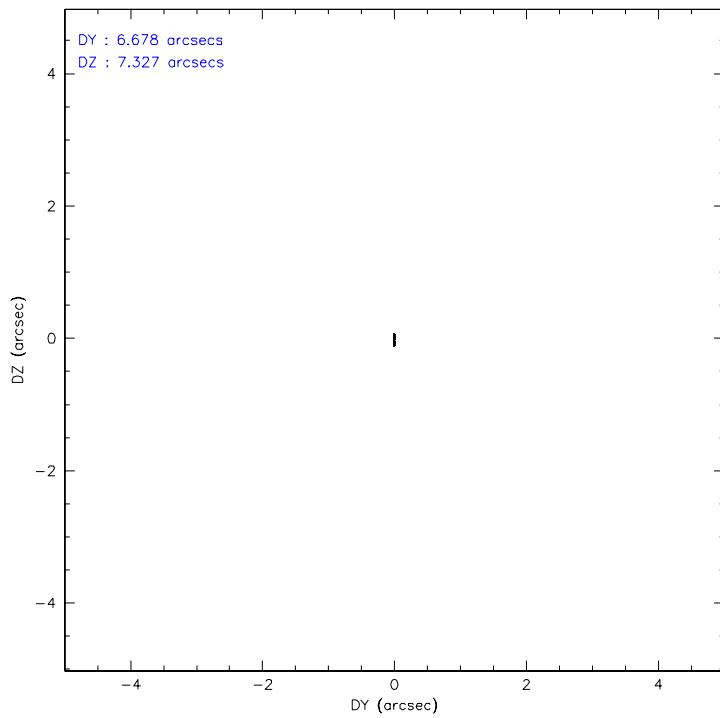
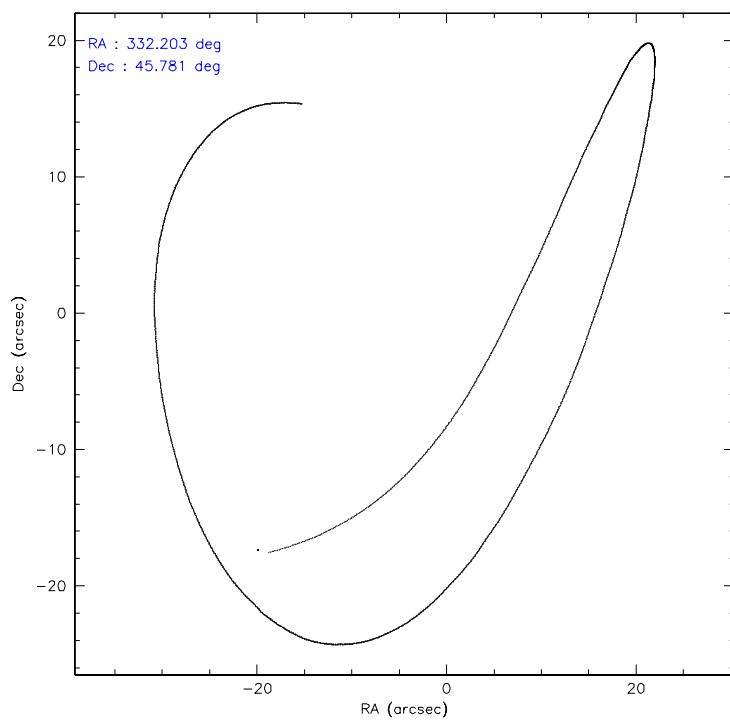
Level 1 Events

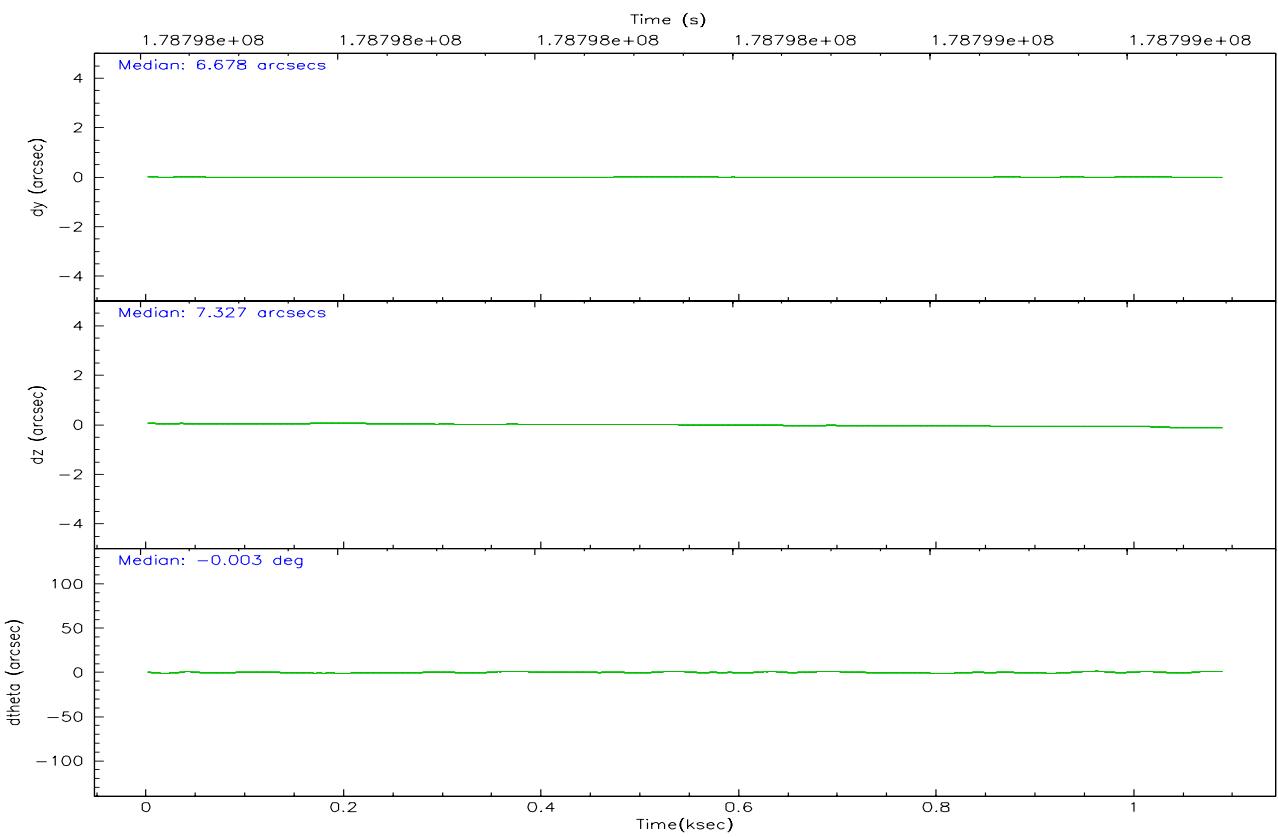
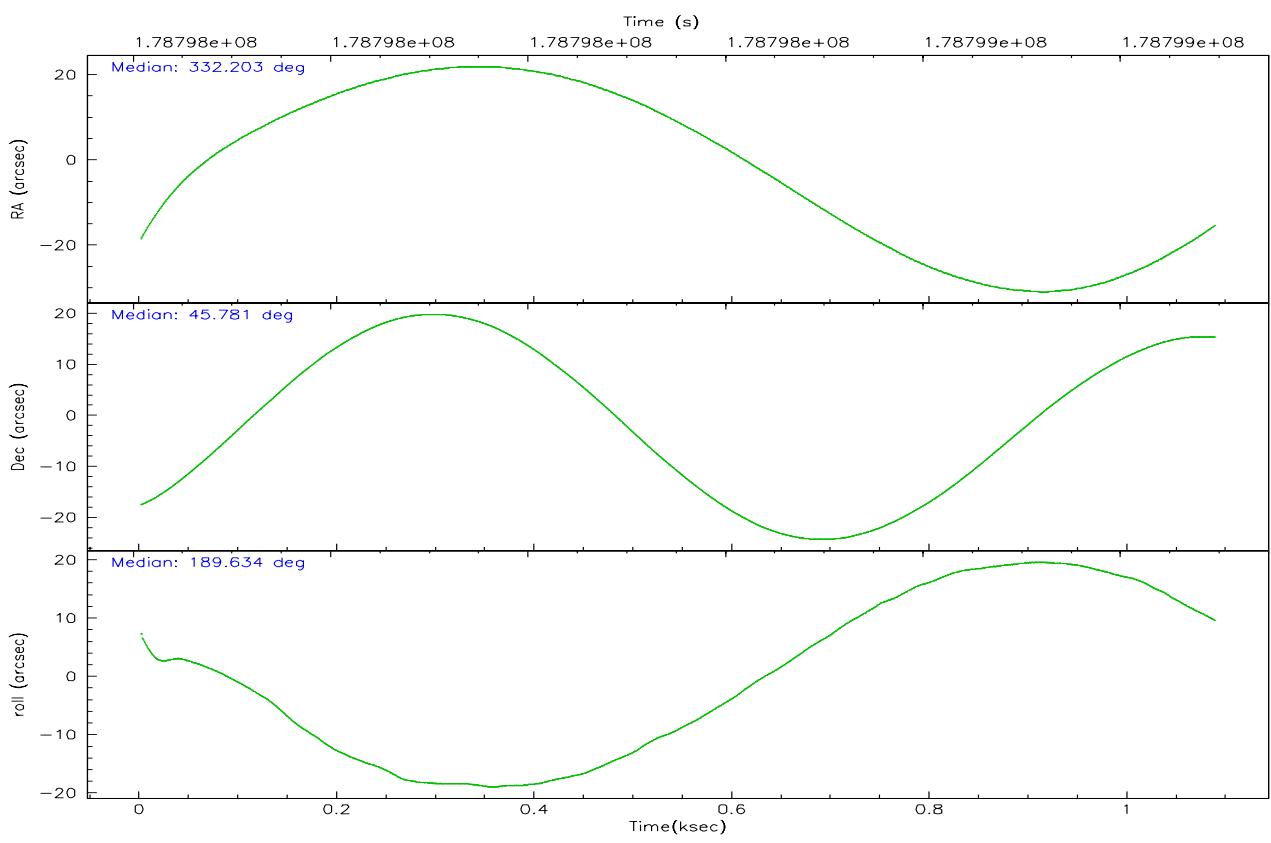
	segment 1	segment 2	segment 3
level 1 events	0	41573	0
rejected events	0	13589	0
rejected %	0%	32%	0%

## 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	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
Pointing RA	332.232772	332.2023186541957			
Pointing Dec	45.799388	45.78054838953113			
Pointing Roll	189.550617	189.6397002838442			
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	178797898.184000	178796571.00699			
Observation start date	2003-09-01T10:03:54	2003-09-01T09:42:51			
Observation end time	178798898.184000	178799032.54459			
Observation end date	2003-09-01T10:20:34	2003-09-01T10:23:52			

## 2.3 Aspect





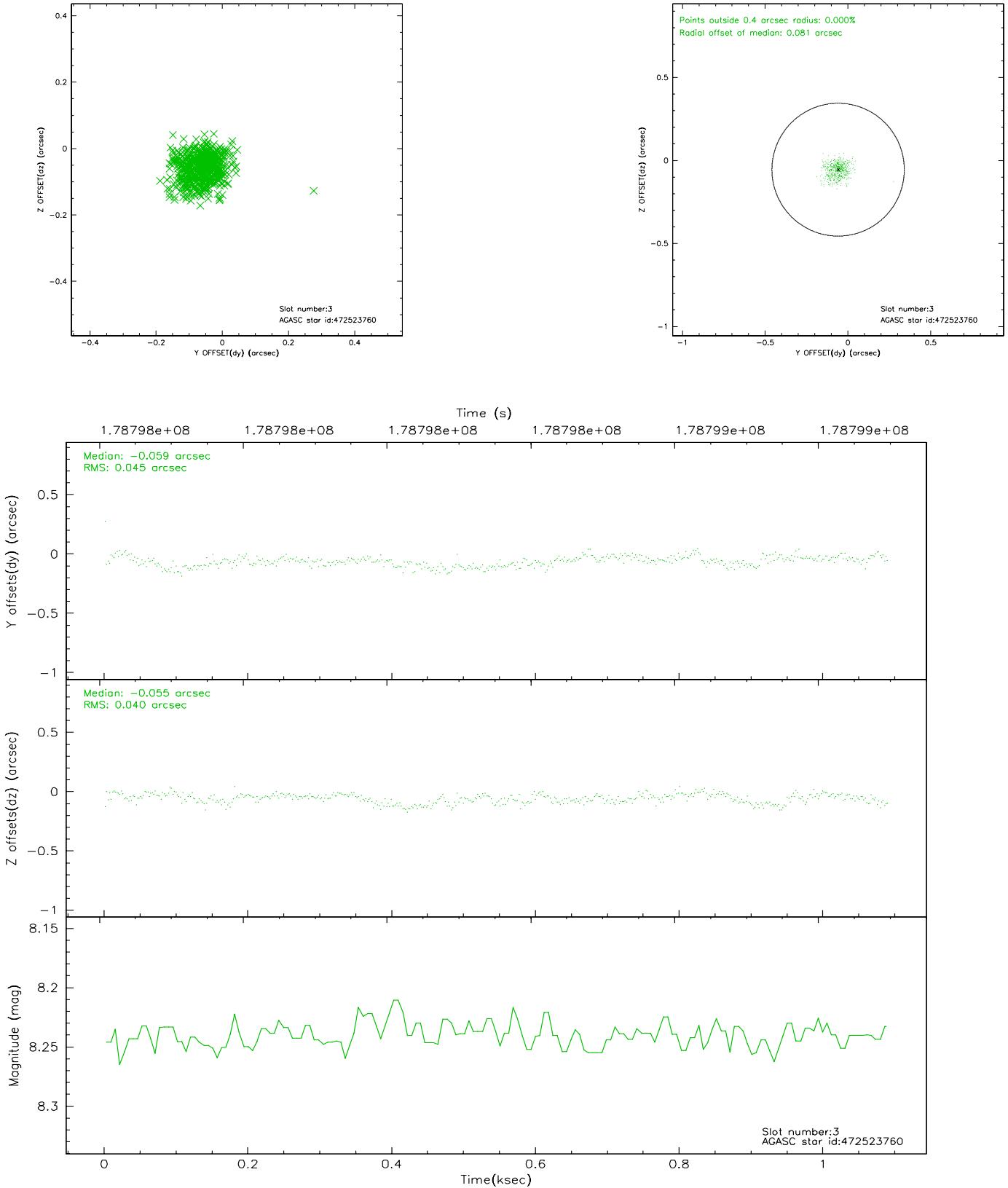
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.04	266	0.109	-0.116	0.006	0.011	0.000000	0.000000	-1160.84	-455.88
1	FID	HRC-S-2	7.04	266	0.156	-0.103	0.005	0.009	0.000000	0.000000	1234.52	-450.22
2	FID	HRC-S-3	7.05	266	0.124	-0.083	0.006	0.011	0.000000	0.000000	-1158.91	571.99
3	GUIDE	472523760	8.24	532	-0.059	-0.055	0.063	0.102	331.645363	45.403260	1699.69	1156.63
4	GUIDE	472533912	9.16	512	-0.051	0.036	0.109	0.173	331.791136	46.368695	745.15	-2201.41
5	GUIDE	472655152	9.44	531	0.099	0.054	0.101	0.161	332.504239	45.862991	-707.89	-116.29
6	GUIDE	472659832	9.47	532	0.084	0.022	0.163	0.305	332.780399	46.098139	-1528.51	-836.89
7	GUIDE	472527720	7.00	531	-0.107	-0.040	0.071	0.148	331.460205	45.112509	2341.15	2104.08

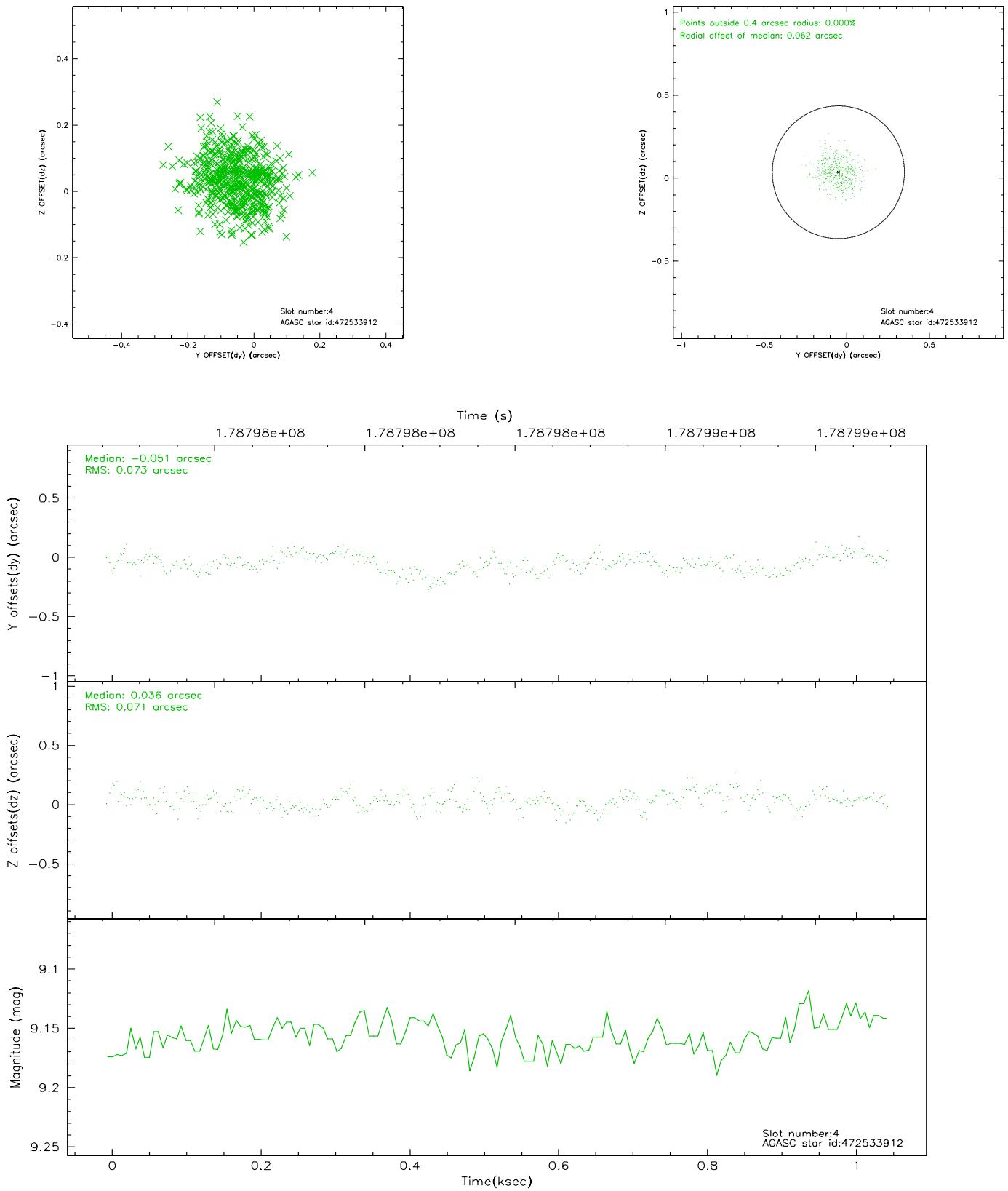
∞

## 2.4 Star Slots

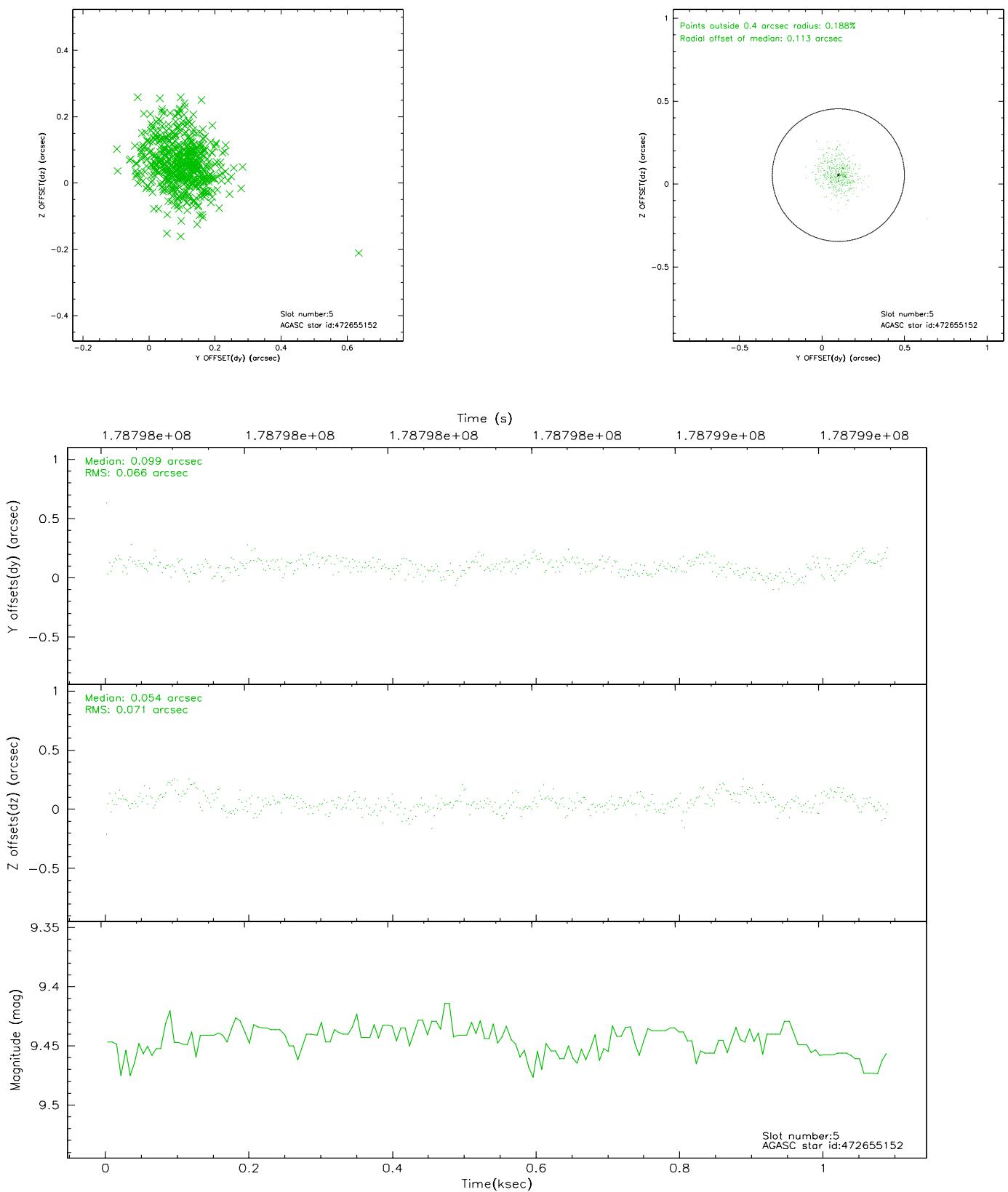
### 2.4.1 Slot 3



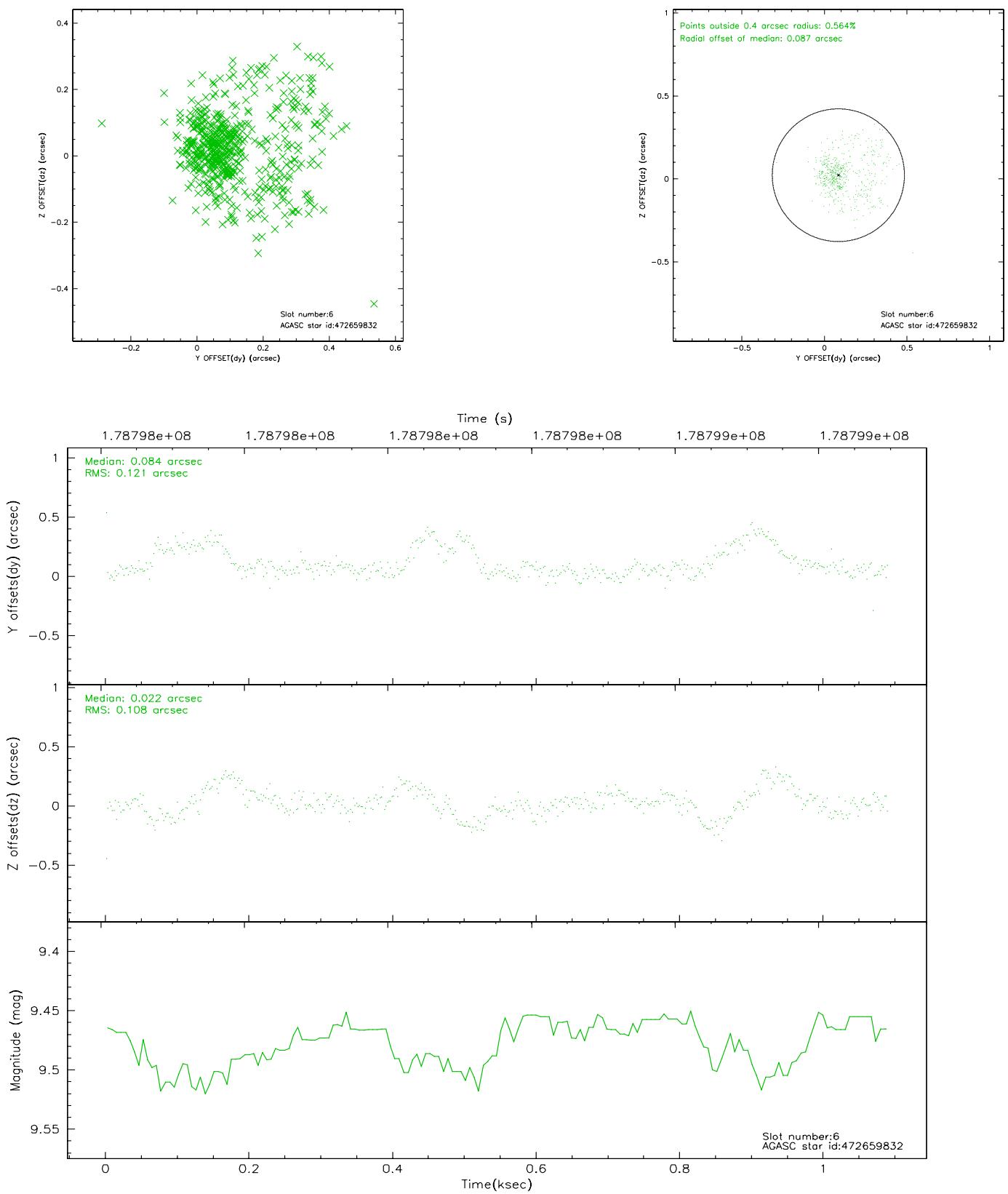
## 2.4.2 Slot 4



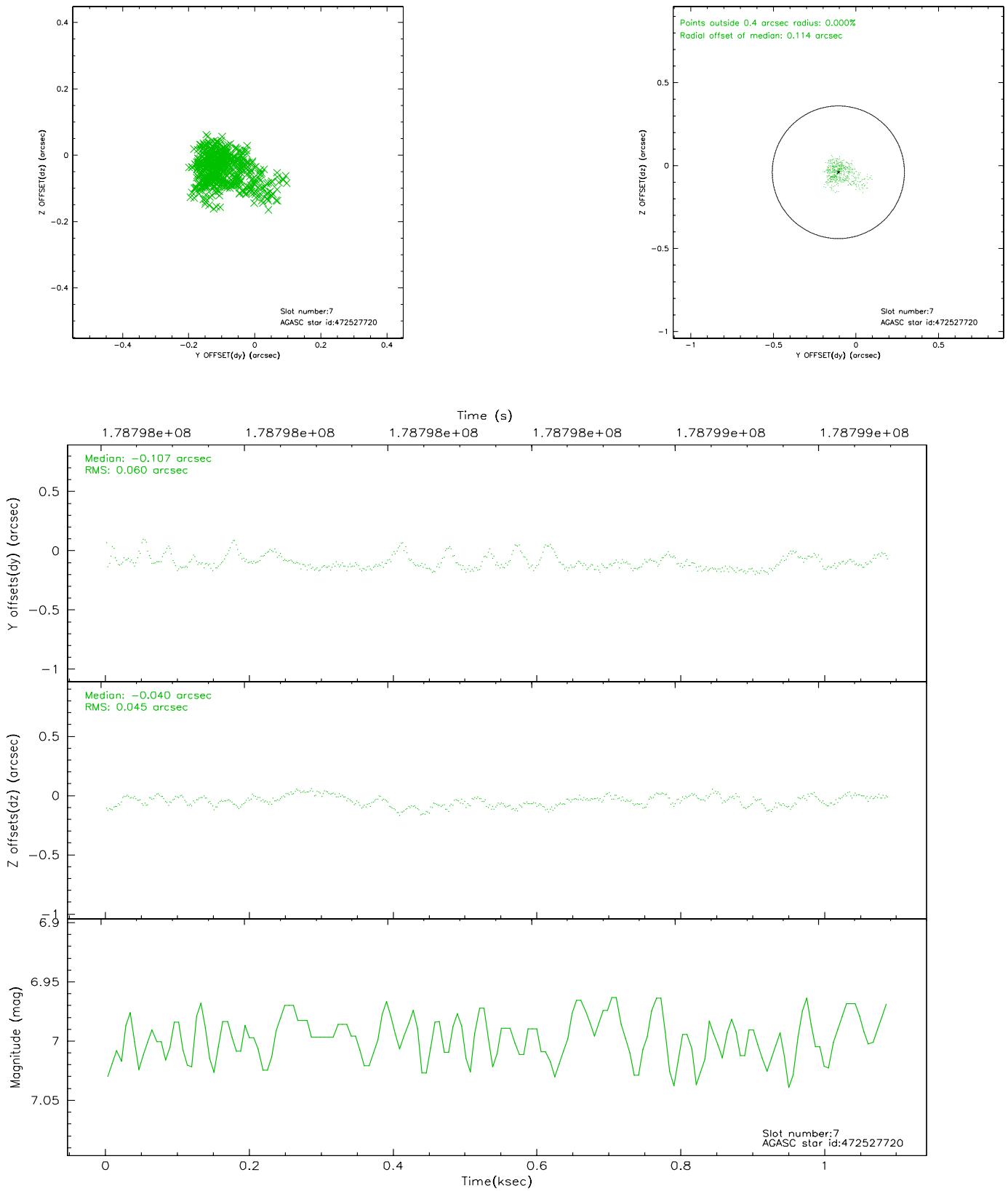
### 2.4.3 Slot 5



## 2.4.4 Slot 6

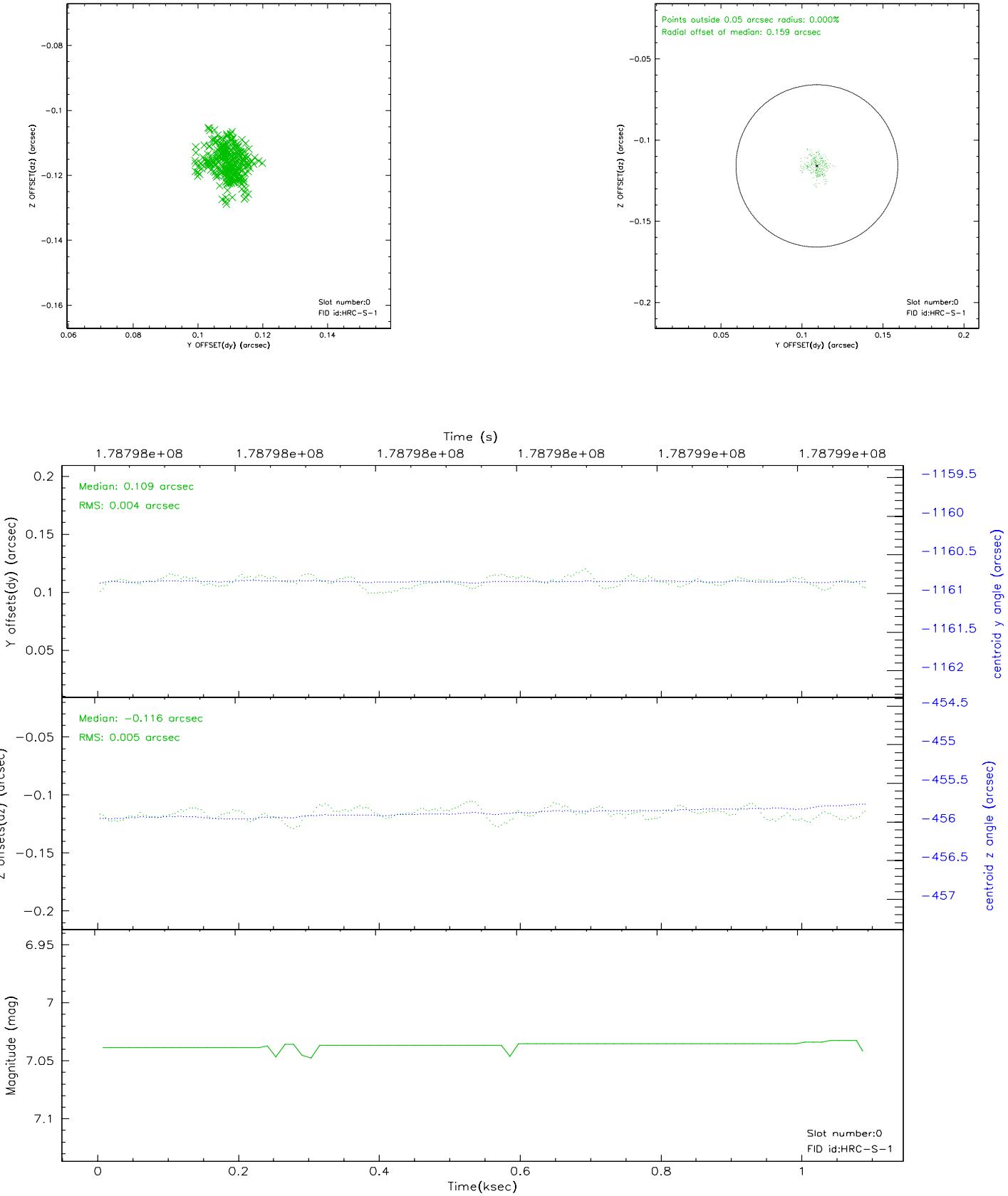


## 2.4.5 Slot 7

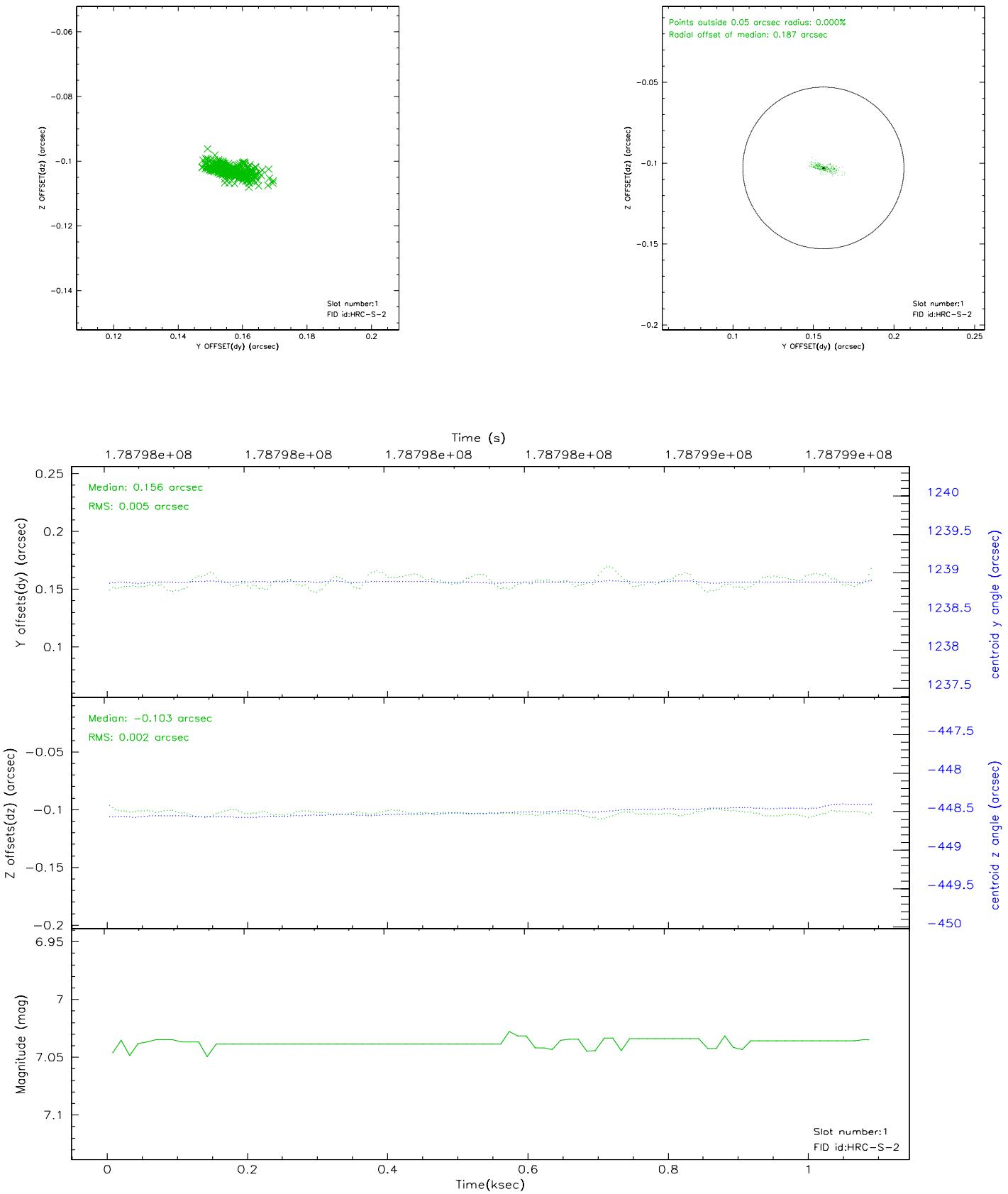


## 2.5 FID Slots

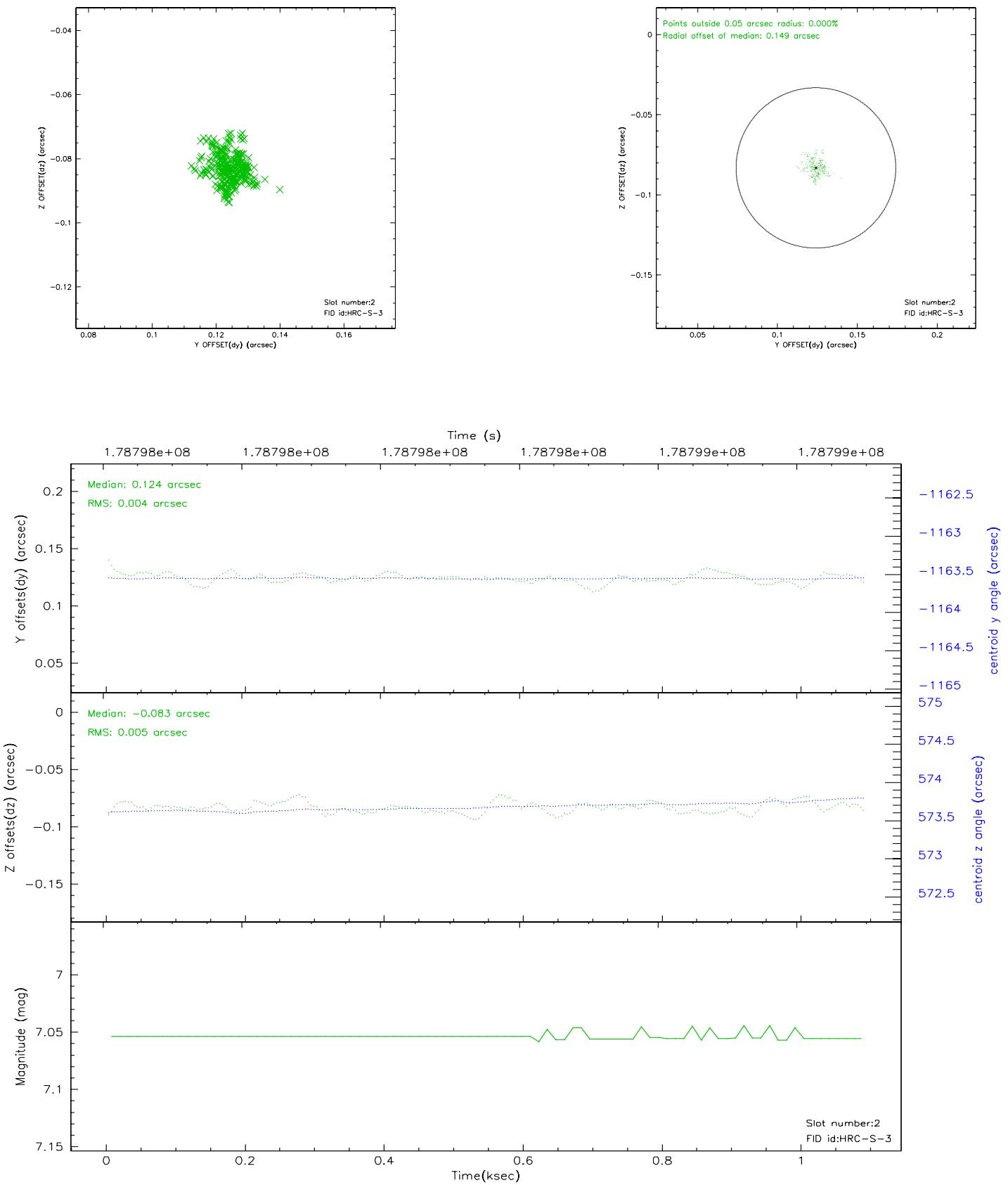
### 2.5.1 Slot 0



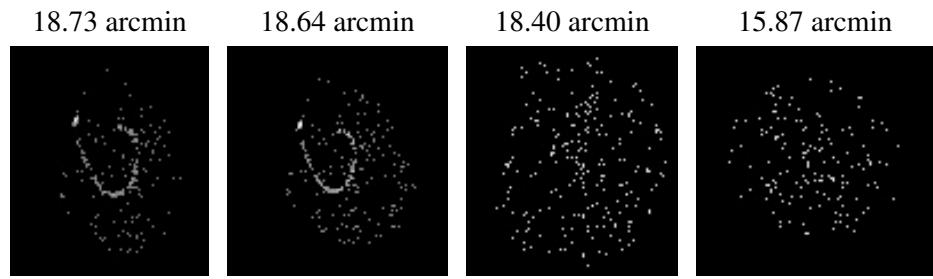
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.07.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	0.82

## A.2 Comments

Charge time is less than predicted due to expected set-up time for the appropriate read-back values of the high voltage levels for HRC-S.