V&V Reference Report
L2 ASCDS Version : 7.6.9

Observation 591 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Nov 20 2007

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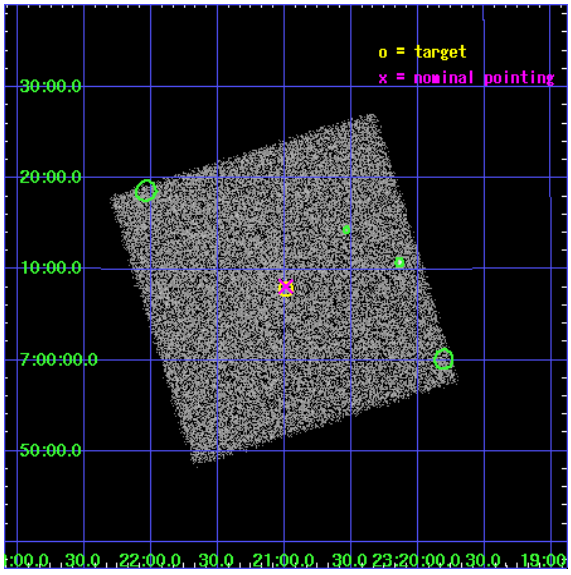
1 Front

seq_num	100009
obs_id	591
title	SOLVING THE PUZZLE OF COMETARY X-RAY ORIGIN: OBSERVATIONS OF COMET 10P/TEMPEL 2
observer	DR W. THOMAS VESTRAND
object	LINEAR 2001 A2
ra_targ	350.247788
dec_targ	7.13089
ra_nom	350.24730183951
dec_nom	7.1351276625077
roll_nom	117.57584671087
revision	3
ontime	2131.2313333601
livetime	2120.2666771173
l2events	55685

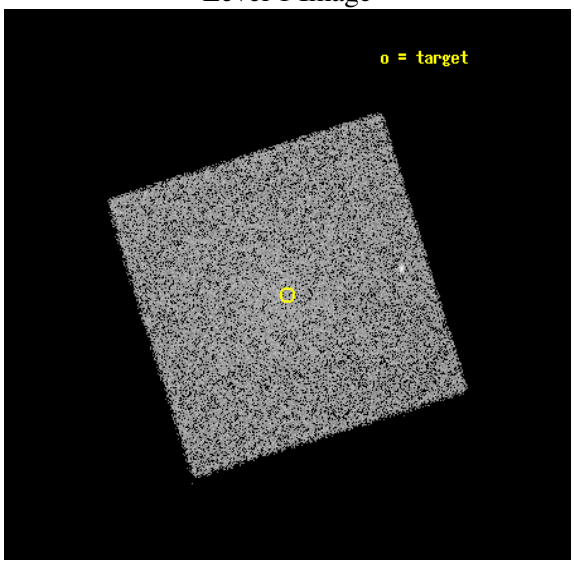


2 OBI

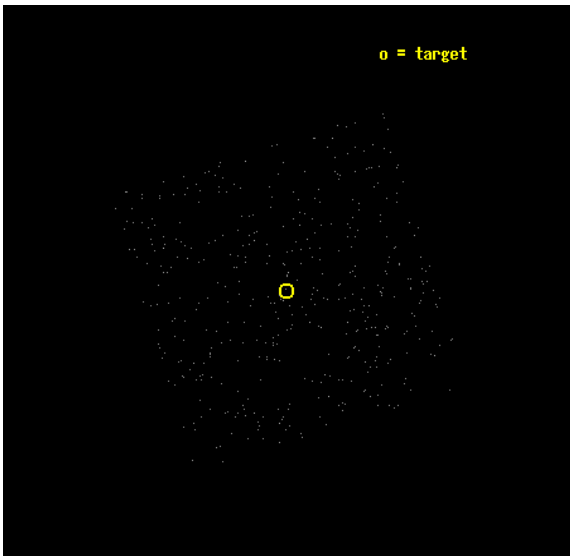
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

obi_num	0
ascdsver	7.6.11.2
caldbver	3.4.1
date	2007-11-20T16:08:23
revision	3

sched_exp_time	2150.000000
ontime	2131.2313333601
l1events	89879

2.1.3 Events

Level 1 Events

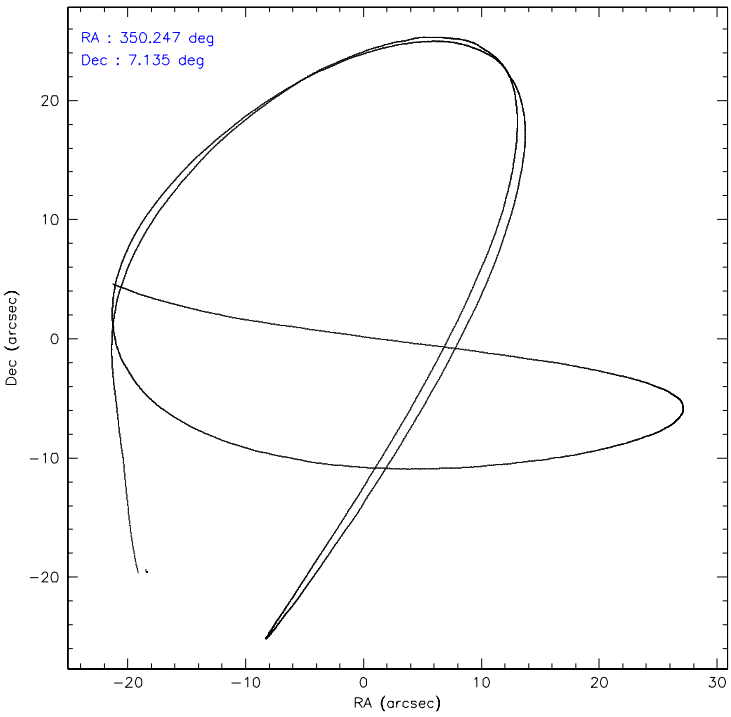
	segment 0
level 1 events	89879
rejected events	6849
rejected %	7%

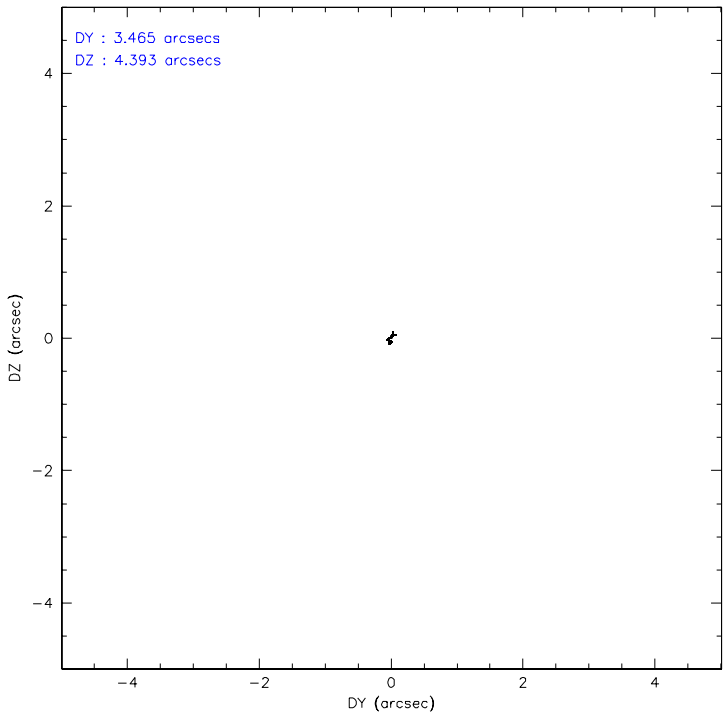
2.2 Compared Parameters

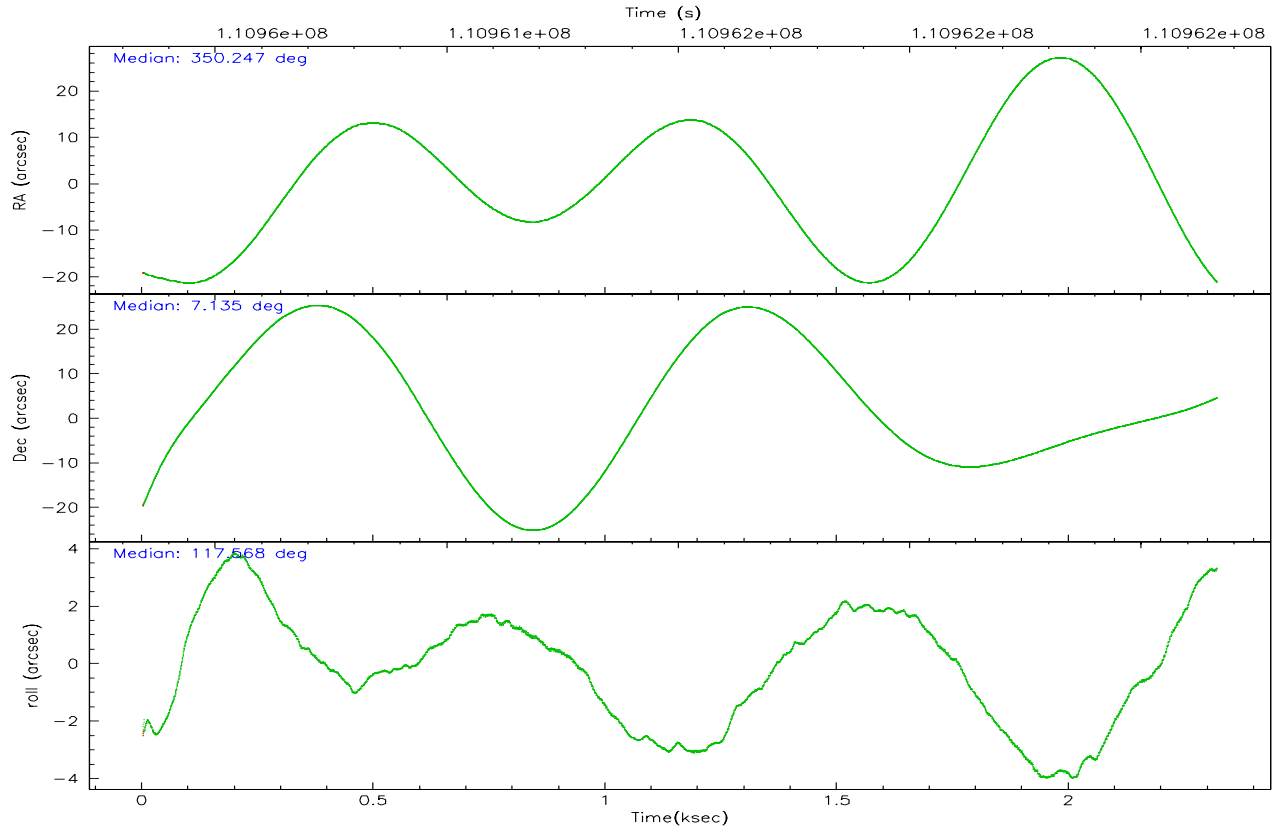
Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
Pointing RA	350.270819	350.2473018395139
Pointing Dec	7.121047	7.135127662507692
Pointing Roll	117.668427	117.5758467108748
Window start time	110419264.184000	110419264.184000
Window stop time	111024064.184000	111024064.184000
SIM focus pos (mm)	-1.040293	-1.038866356238299
SIM defocus (mm)	0	0.001426264420575141
SIM translation stage pos (mm)	126.985494	126.9829799899862
SIM translation stage offset (mm)	0	0.002508901615314585
Observation start time	110960517.184000	110959563.11867
Observation start date	2001-07-08T06:20:53	2001-07-08T06:06:03
Observation end time	110962667.184000	110962800.58129
Observation end date	2001-07-08T06:56:43	2001-07-08T07:00:00

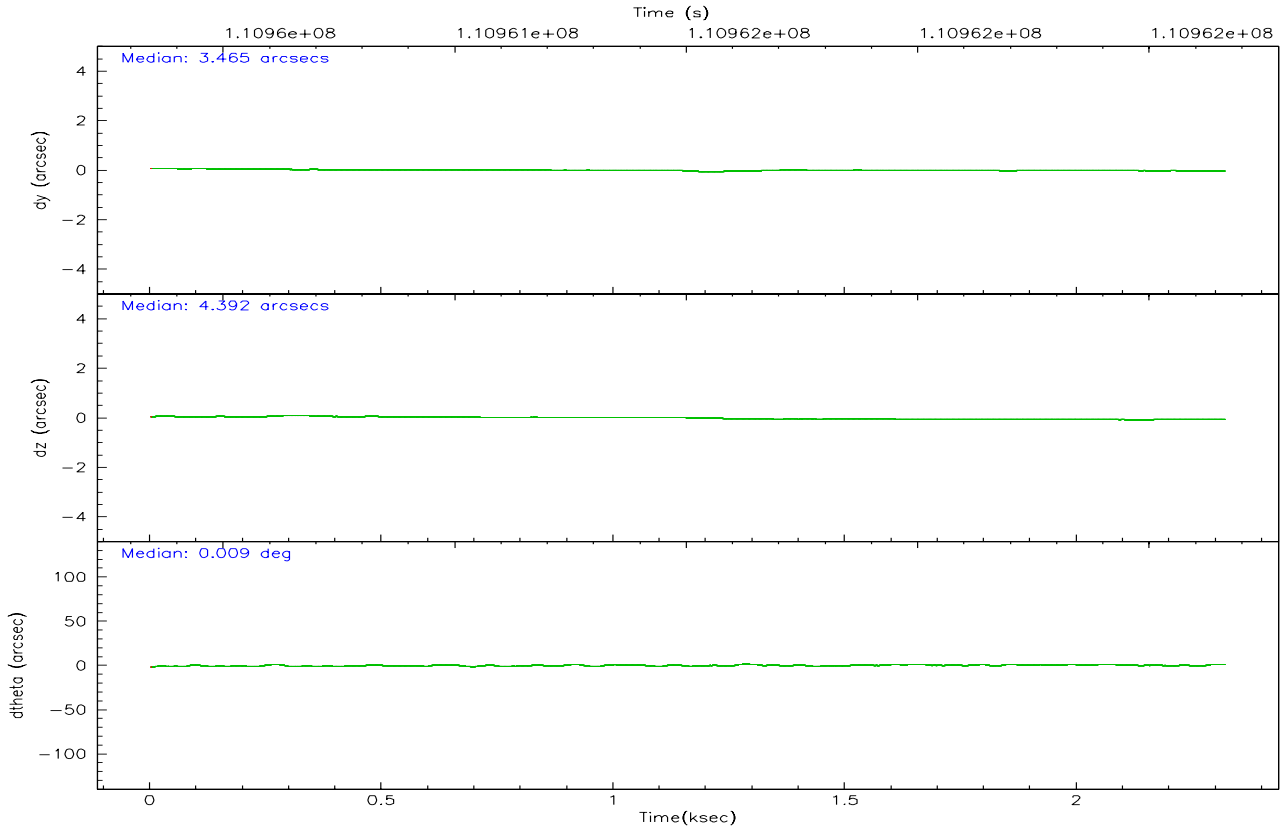
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect


RA : 350.247 deg
Dec : 7.135 deg
Dec (arcsec)
RA (arcsec)
20
10
0
−10
−20
−20
−10
0
10
20
30


DY : 3.465 arcsecs
DZ : 4.393 arcsecs
DZ (arcsec)
DY (arcsec)
4
2
0
−2
−4
−4
−2
0
2
4


Time (s)
1.1096e+08
1.10961e+08
1.10962e+08
1.10962e+08
1.10962e+08
Median: 350.247 deg
RA (arcsec)
Median: 7.135 deg
Dec (arcsec)
Median: 117.568 deg
roll (arcsec)
Time(ksec)

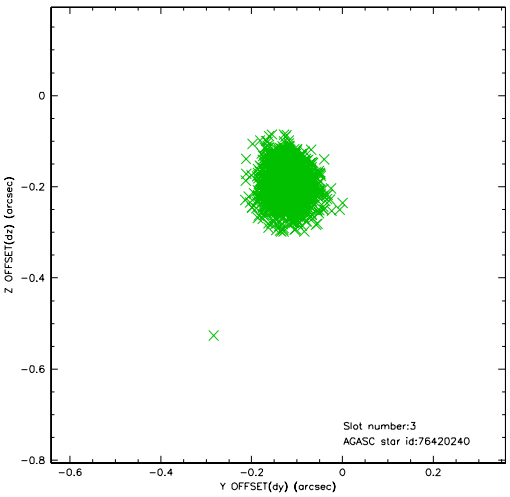

Time (s)
1.1096e+08
1.10961e+08
1.10962e+08
1.10962e+08
1.10962e+08
Median: 3.465 arcsecs
dy (arcsec)
Median: 4.392 arcsecs
dz (arcsec)
Median: 0.009 deg
dtheta (arcsec)
Time(ksec)

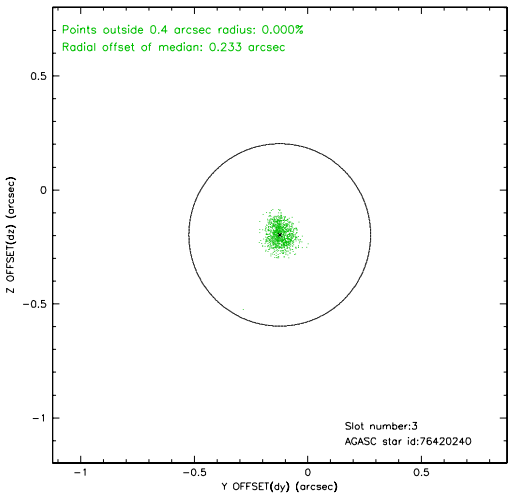
Slot Statistics

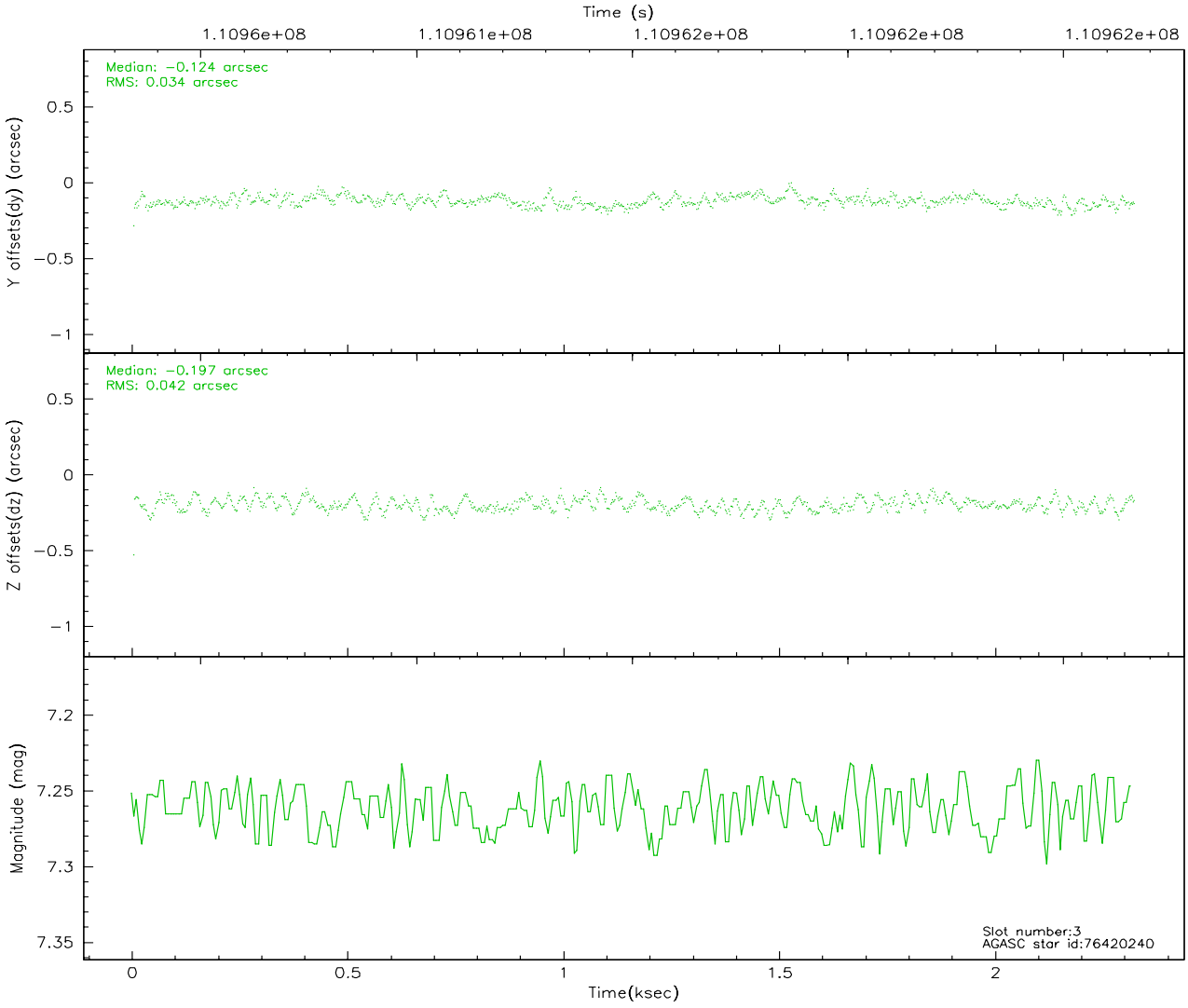
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	7.00	566	0.054	0.059	0.007	0.011	0.000000	0.000000	-758.92	-1292.08
1	FID	HRC-I-3	7.09	566	-0.001	-0.086	0.007	0.012	0.000000	0.000000	-1188.77	1010.06
2	FID	HRC-I-4	7.02	566	0.060	-0.062	0.006	0.009	0.000000	0.000000	1281.81	1011.72
3	GUIDE	76420240	7.26	1132	-0.124	-0.197	0.058	0.089	349.834746	7.214951	1022.47	1221.60
4	GUIDE	76546104	7.91	1132	-0.026	0.138	0.058	0.091	350.637569	7.487255	560.87	-1770.80
5	GUIDE	76551232	8.01	1132	0.045	-0.167	0.056	0.088	350.076046	6.872411	-469.30	1030.10
6	GUIDE	76547376	8.36	1132	0.179	0.060	0.052	0.086	350.586866	6.650509	-2025.33	-214.09
7	GUIDE	152314144	8.26	1131	-0.087	0.170	0.056	0.092	350.482166	7.593054	1152.76	-1457.21

2.4 Star Slots

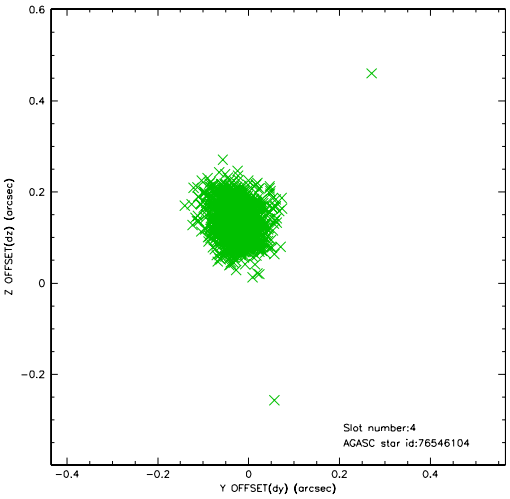
2.4.1 Slot 3

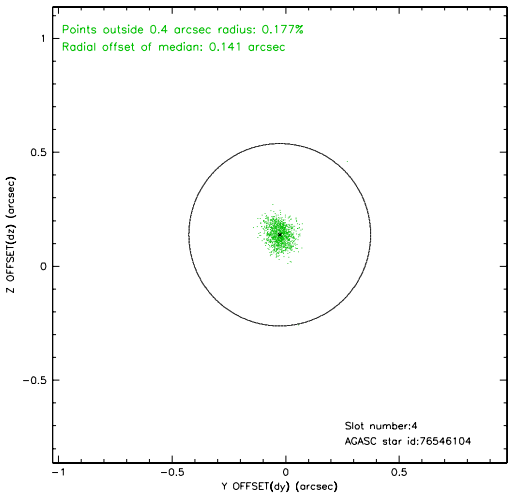


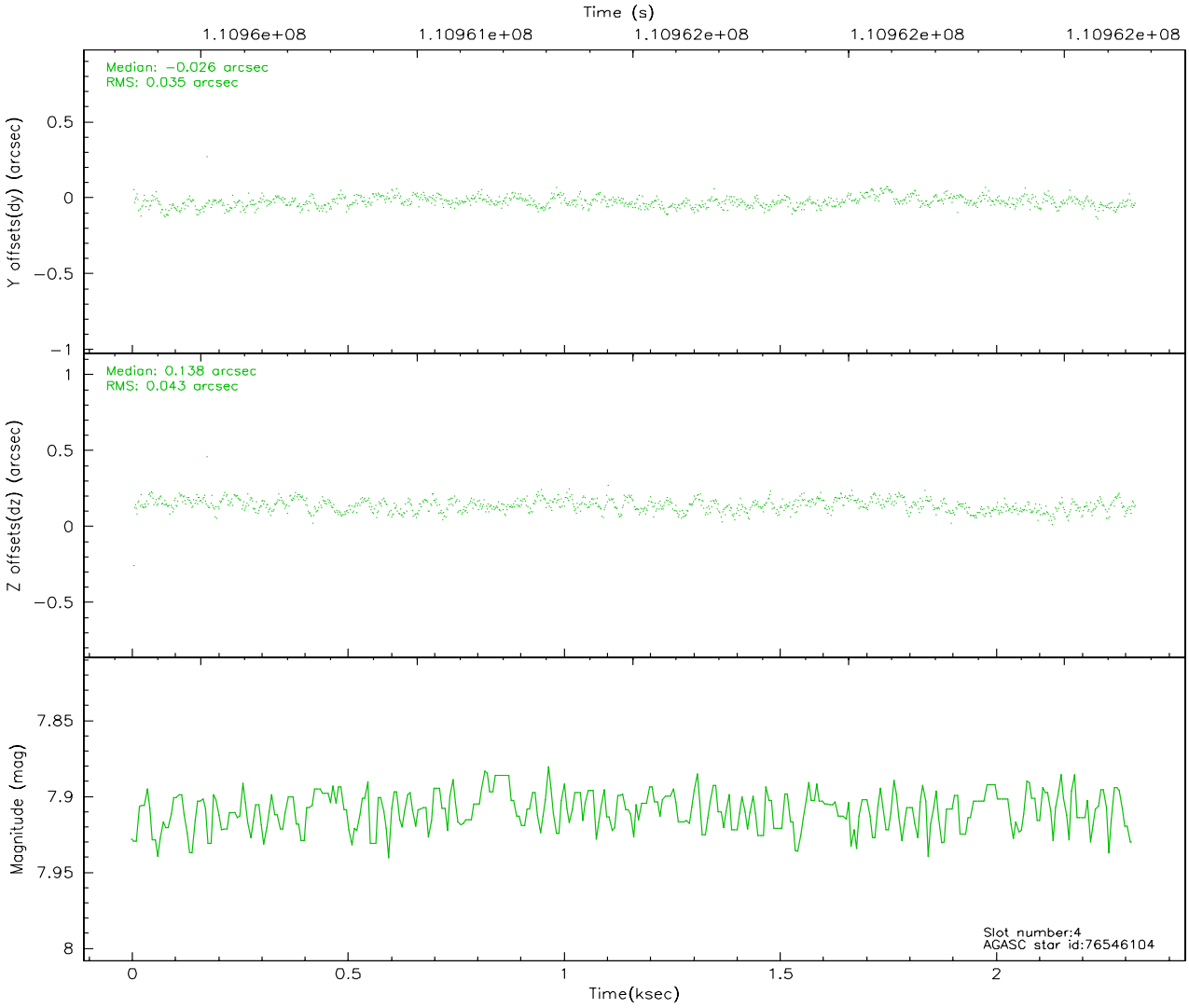




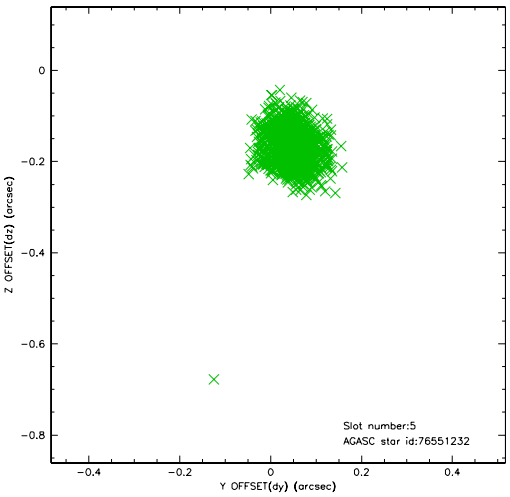
2.4.2 Slot 4

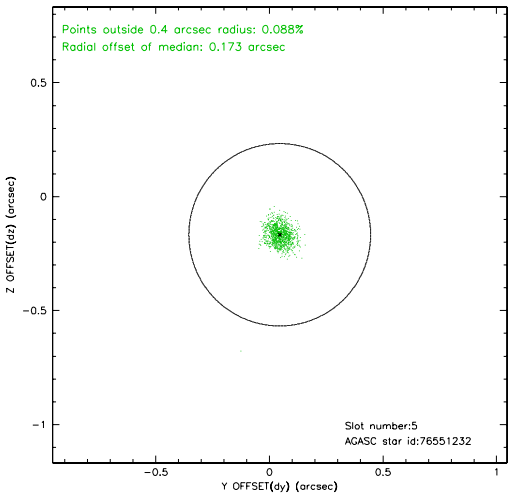

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:76546104

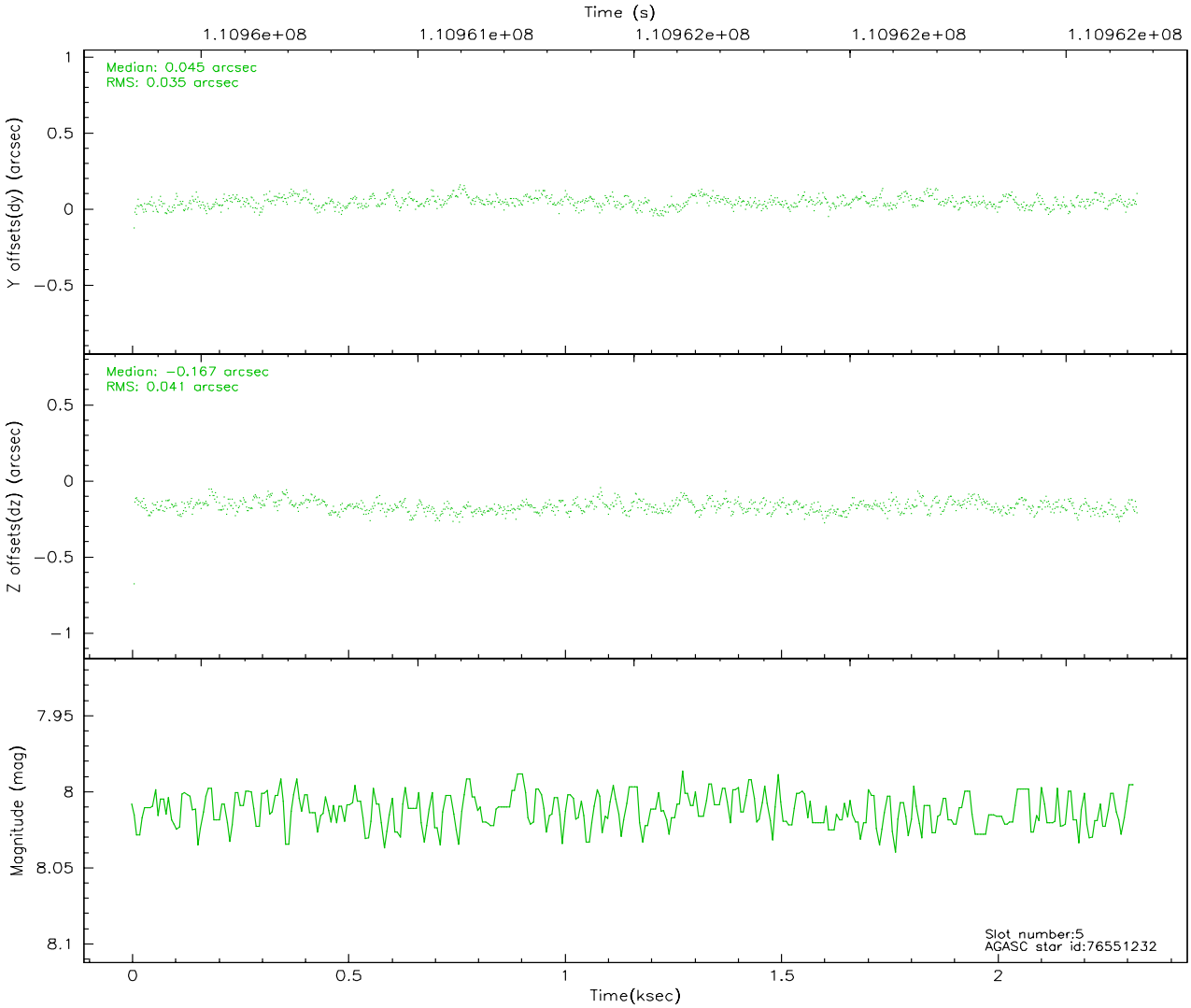

Points outside 0.4 arcsec radius: 0.177%
Radial offset of median: 0.141 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:76546104


Time (s)
1.1096e+08
1.10961e+08
1.10962e+08
1.10962e+08
1.10962e+08
Median: −0.026 arcsec
RMS: 0.035 arcsec
Y offsets(dy) (arcsec)
Median: 0.138 arcsec
RMS: 0.043 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:76546104
Time(ksec)

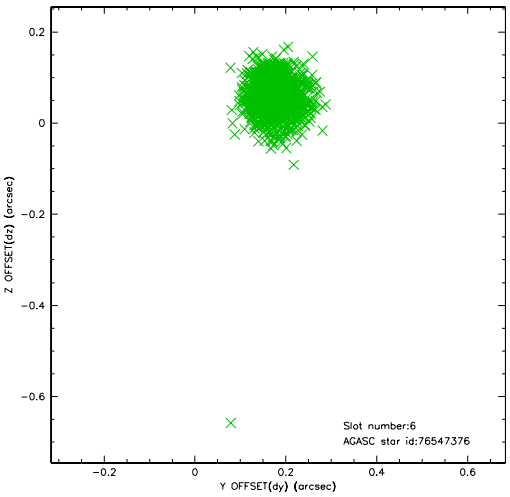
2.4.3 Slot 5

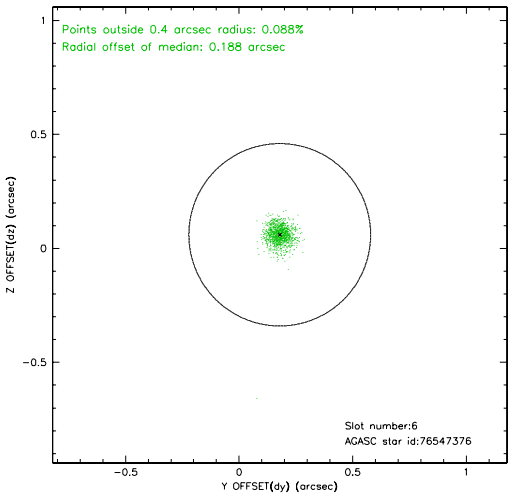

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:76551232

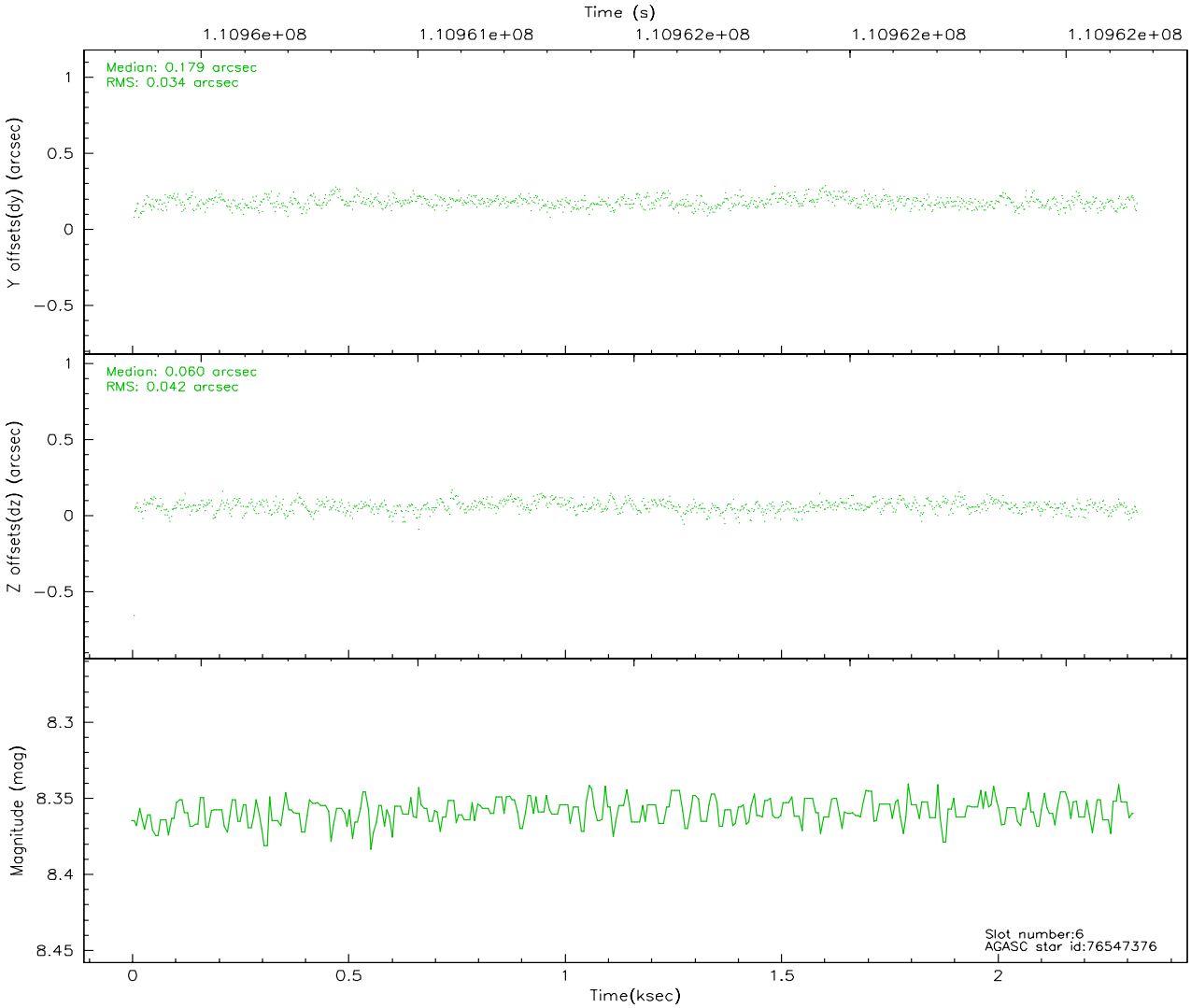

Points outside 0.4 arcsec radius: 0.088%
Radial offset of median: 0.173 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:76551232


Time (s)
1.1096e+08
1.10961e+08
1.10962e+08
1.10962e+08
1.10962e+08
Median: 0.045 arcsec
RMS: 0.035 arcsec
Y offsets(dy) (arcsec)
Median: −0.167 arcsec
RMS: 0.041 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:76551232
Time(ksec)

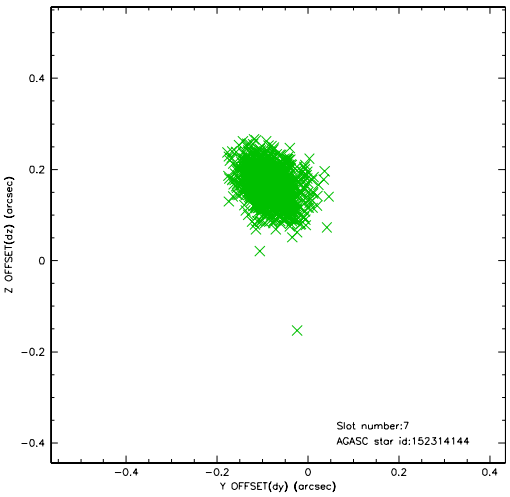
2.4.4 Slot 6

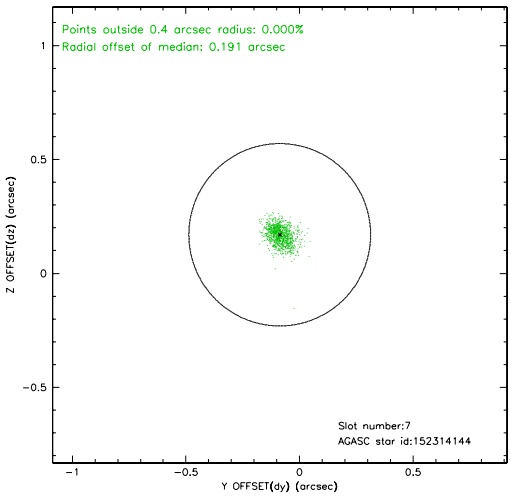

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:76547376

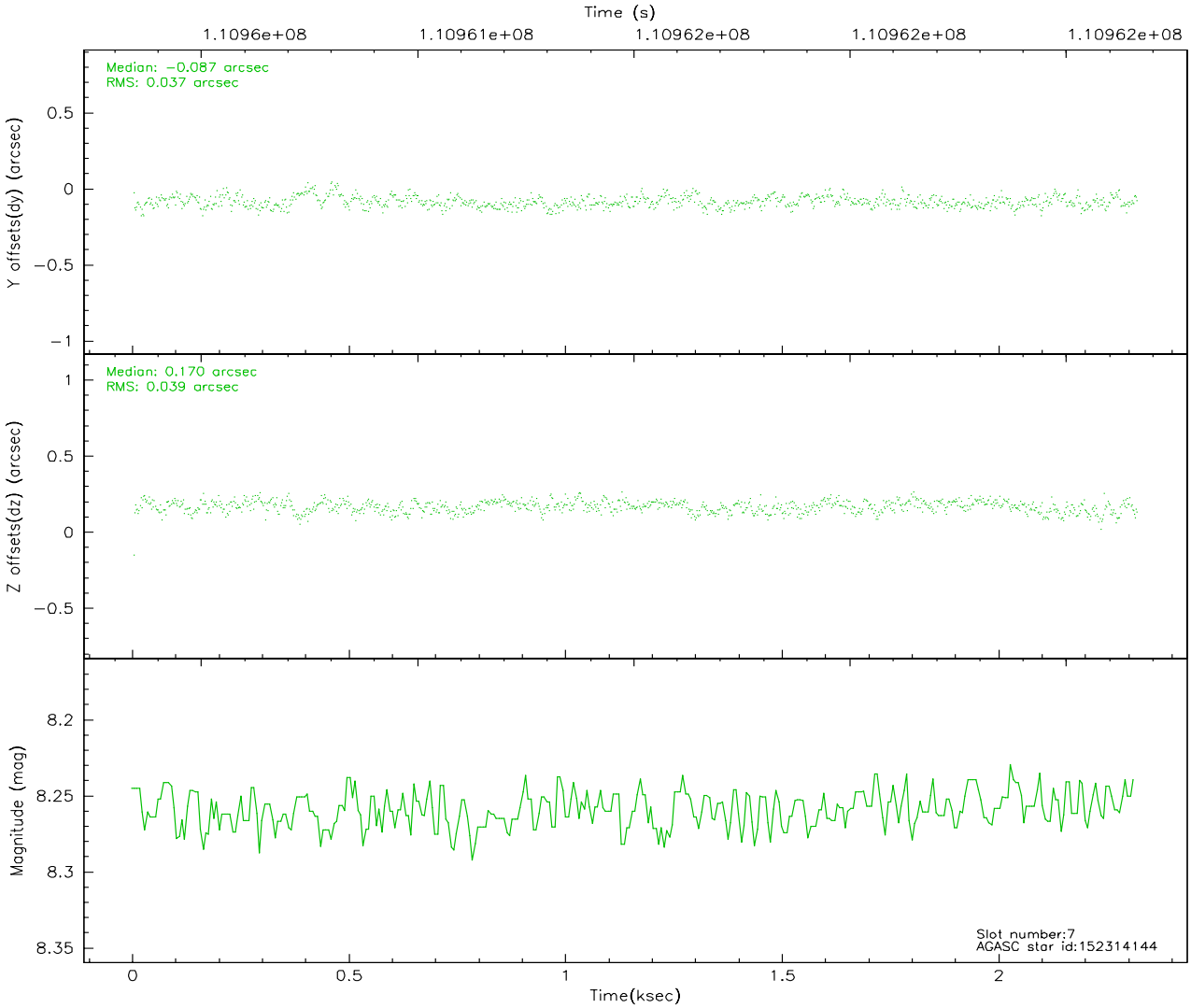

Points outside 0.4 arcsec radius: 0.088%
Radial offset of median: 0.188 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:76547376


Time (s)
1.1096e+08
1.10961e+08
1.10962e+08
1.10962e+08
1.10962e+08
Median: 0.179 arcsec
RMS: 0.034 arcsec
Y offsets(dy) (arcsec)
Median: 0.060 arcsec
RMS: 0.042 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:76547376
Time(ksec)

2.4.5 Slot 7

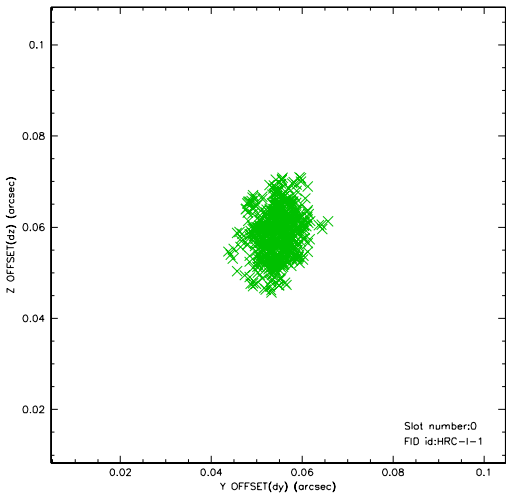

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:152314144

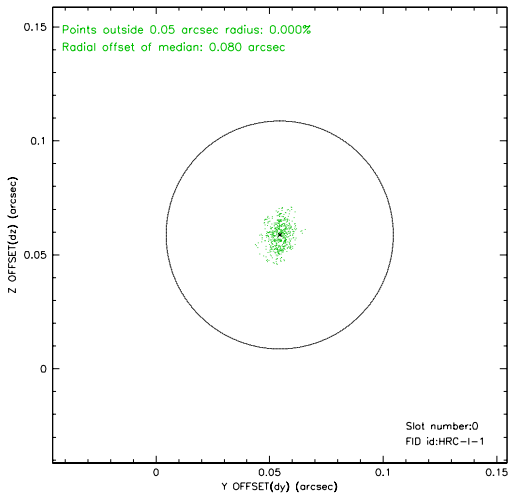

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.191 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:152314144

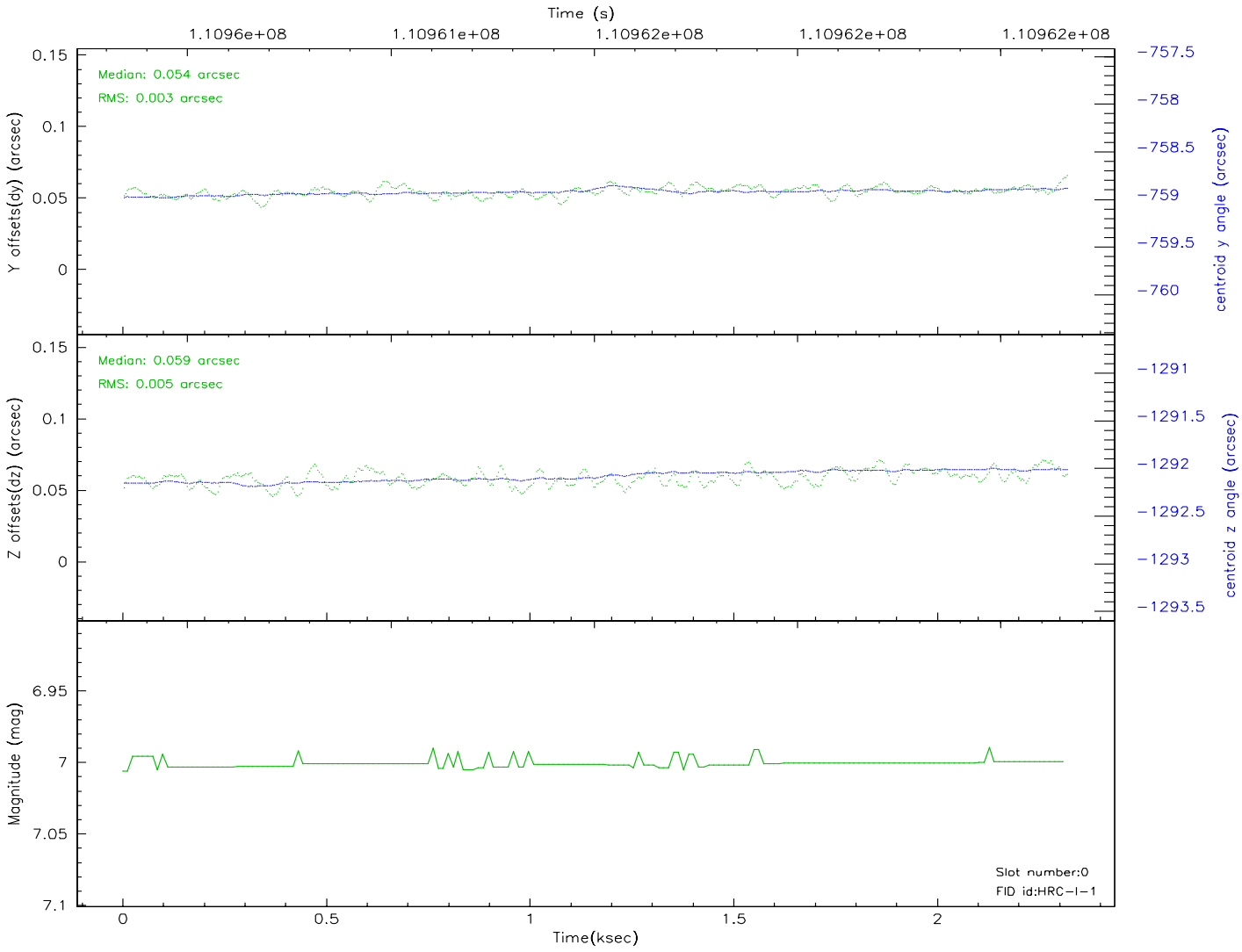

Time (s)
1.1096e+08
1.10961e+08
1.10962e+08
1.10962e+08
1.10962e+08
Median: −0.087 arcsec
RMS: 0.037 arcsec
Y offsets(dy) (arcsec)
Median: 0.170 arcsec
RMS: 0.039 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:152314144
Time(ksec)

2.5 FID Slots

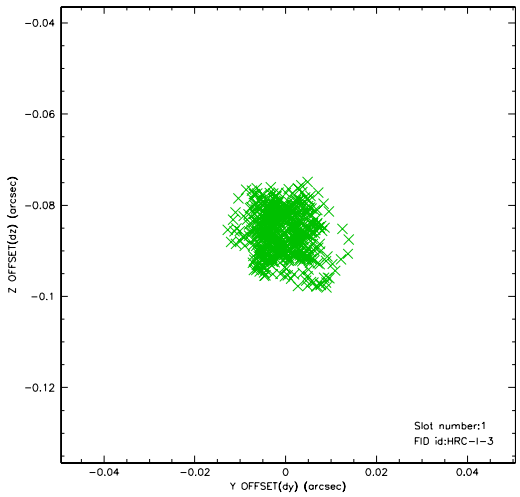
2.5.1 Slot 0

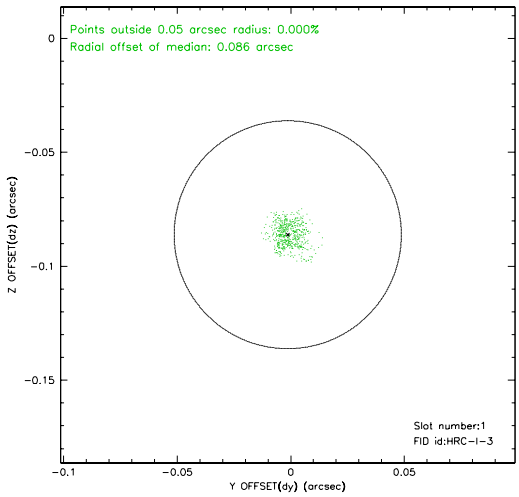


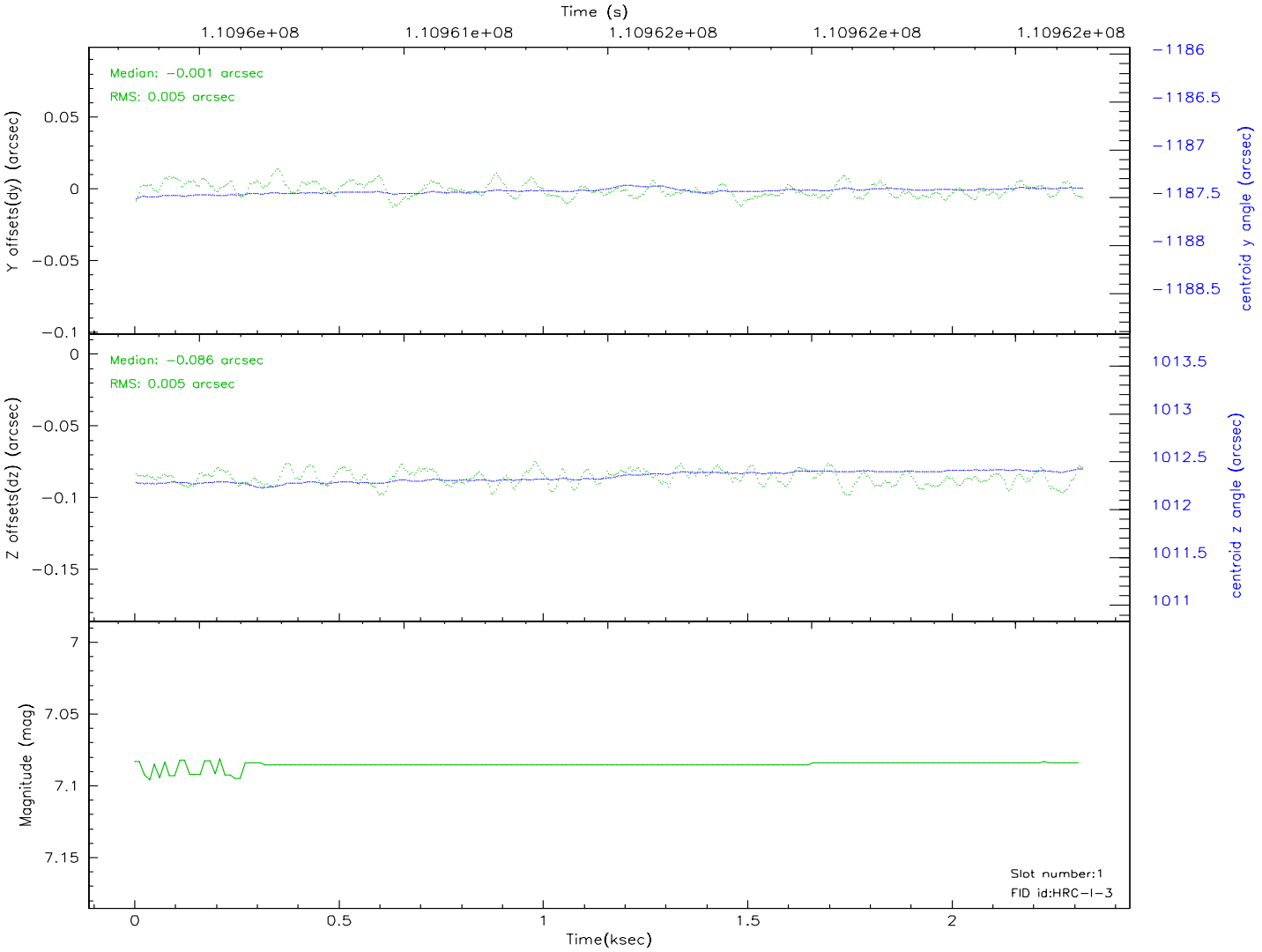




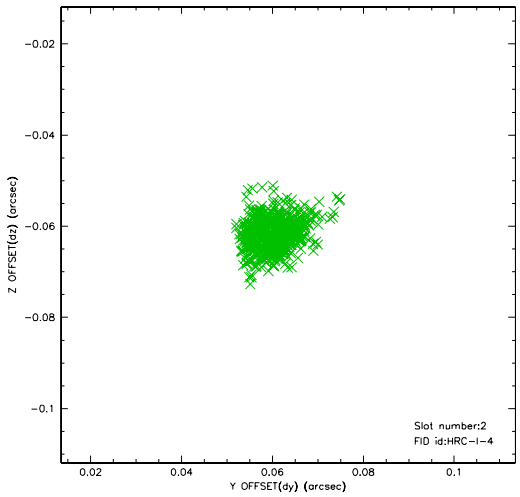
2.5.2 Slot 1

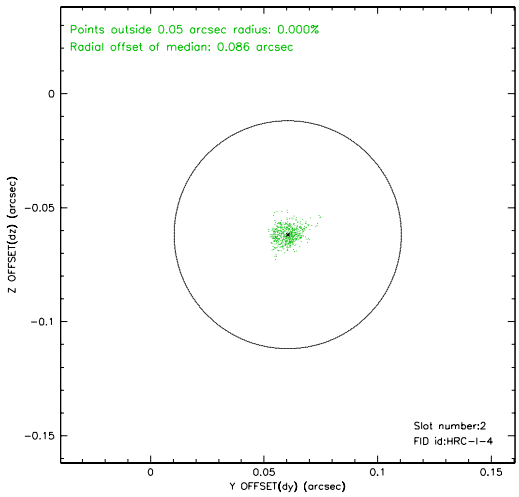

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-I-3

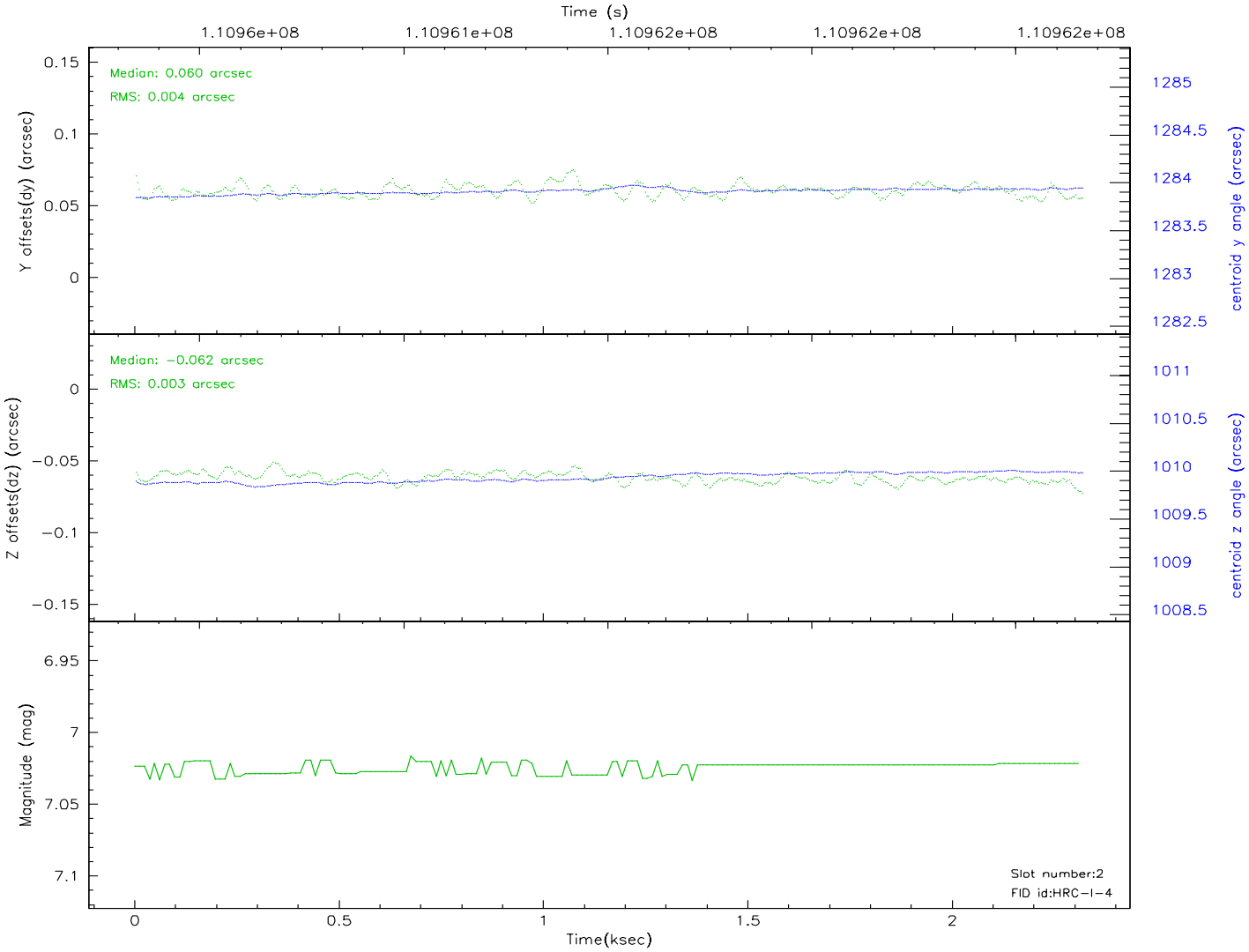

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.086 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-I-3


Time (s)
Median: −0.001 arcsec
RMS: 0.005 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.086 arcsec
RMS: 0.005 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:HRC-I-3
Time(ksec)

2.5.3 Slot 2


Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:HRC-I-4

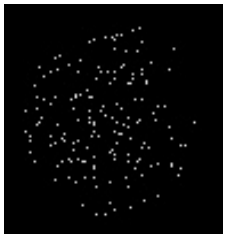

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.086 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:HRC-I-4


Time (s)
Median: 0.060 arcsec
RMS: 0.004 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.062 arcsec
RMS: 0.003 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:2
FID id:HRC-I-4
Time(ksec)

3 Point Sources

12.98 arcmin

19.39 arcmin



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2007.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.131

A.2 Comments

```
Window constraint met.

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.
```