V&V Reference Report
L2 ASCDS Version : 7.6.10

Observation 288 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Nov 20 2007

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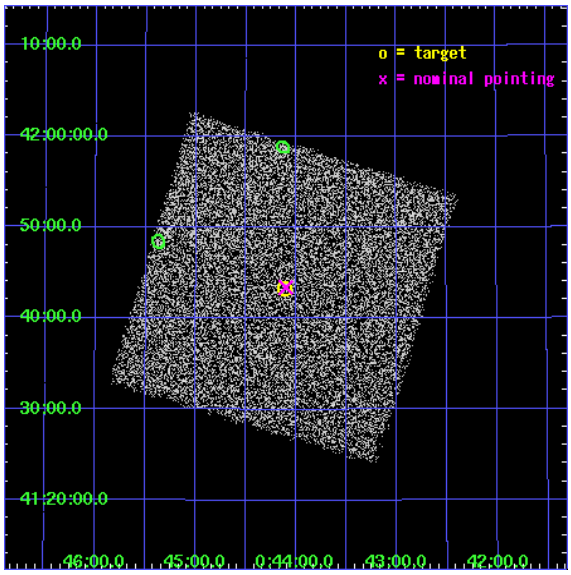
1 Front

seq_num	600048
obs_id	288
title	MONITORING M31
observer	Dr. Stephen Murray
object	M31 - North 1
ra_targ	11.029167
dec_targ	41.721111
ra_nom	11.025482925694
dec_nom	41.723833950031
roll_nom	152.15960590614
revision	4
ontime	1198.4812950194
livetime	1193.2152998527
l2events	26165

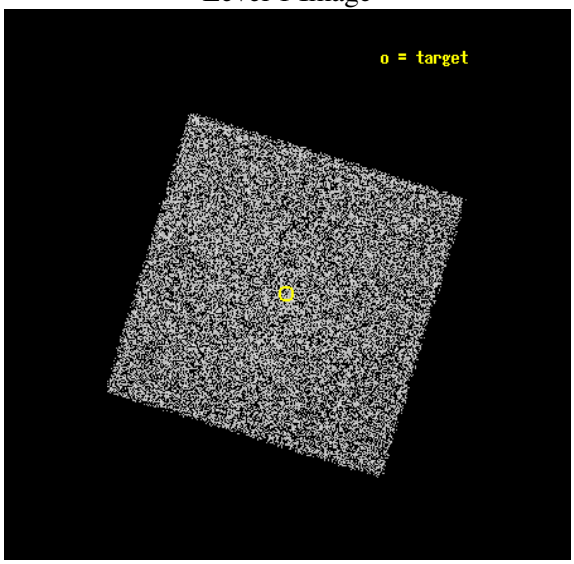


2 OBI

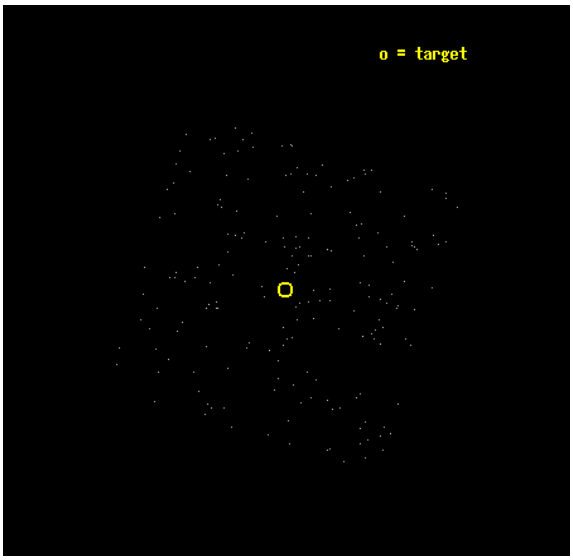
2.1 OBI

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	2007-11-21T01:06:03
revision	4

sched_exp_time	1000.000000
ontime	1198.4812950194
l1events	49596

2.1.3 Events

Level 1 Events

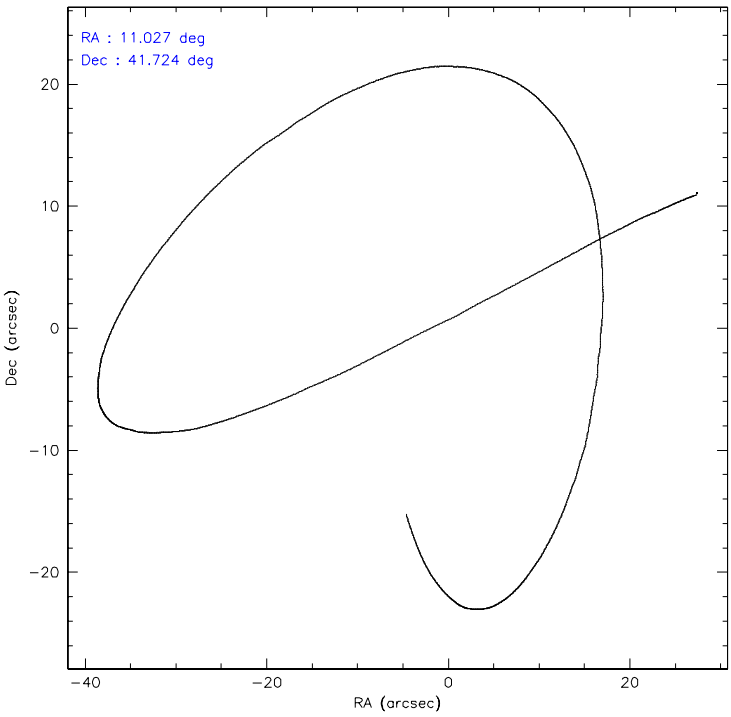
	segment 0
level 1 events	49596
rejected events	10331
rejected %	20%

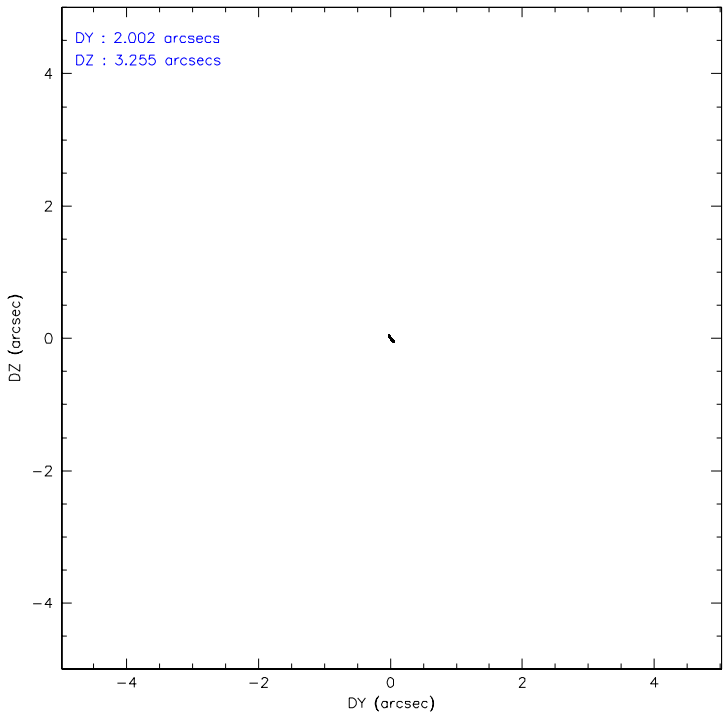
2.2 Compared Parameters

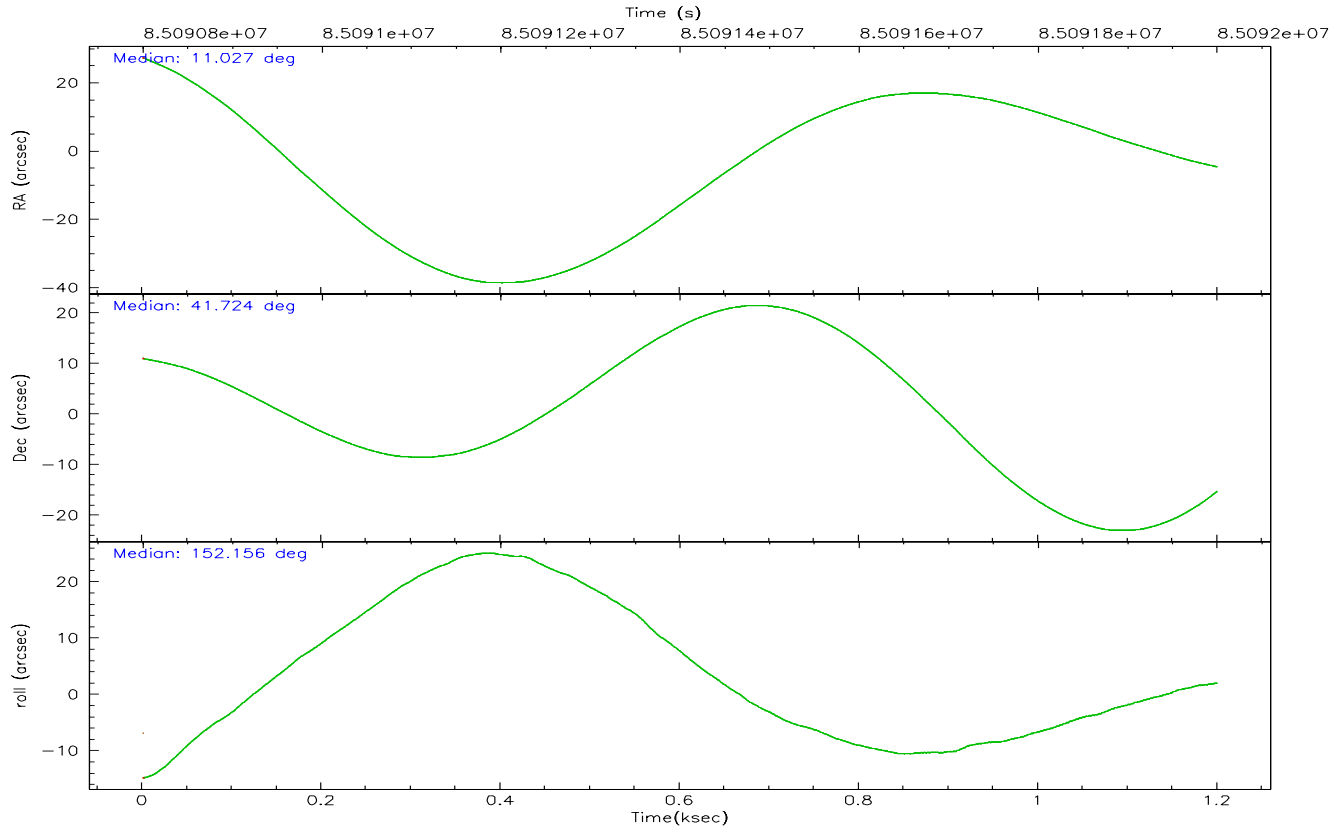
Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
Pointing RA	11.061861	11.02548292569424
Pointing Dec	41.725979	41.72383395003087
Pointing Roll	152.230846	152.1596059061431
SIM focus pos (mm)	-1.040293	-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	85091000.184000	85090624.42428599
Observation start date	2000-09-11T20:22:16	2000-09-11T20:17:04
Observation end time	85092000.184000	85092134.761843
Observation end date	2000-09-11T20:38:56	2000-09-11T20:42:14

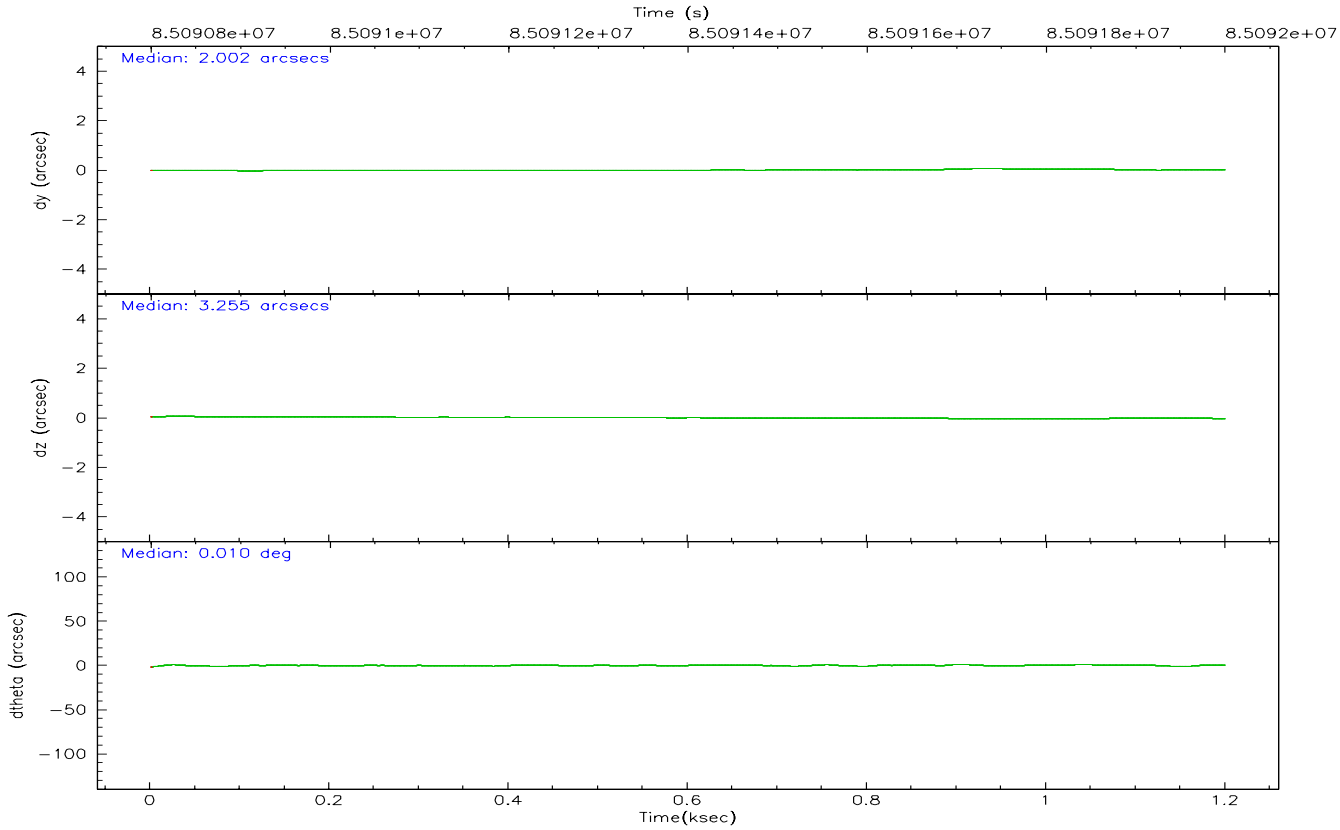
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect


RA : 11.027 deg
Dec : 41.724 deg
20
10
0
−10
−20
Dec (arcsec)
−40
−20
0
20
RA (arcsec)


DY : 2.002 arcsecs
DZ : 3.255 arcsecs
4
2
0
−2
−4
DZ (arcsec)
−4
−2
0
2
4
DY (arcsec)


Time (s)
8.50908e+07
8.5091e+07
8.50912e+07
8.50914e+07
8.50916e+07
8.50918e+07
8.5092e+07
Median: 11.027 deg
RA (arcsec)
Median: 41.724 deg
Dec (arcsec)
Median: 152.156 deg
roll (arcsec)
Time(ksec)

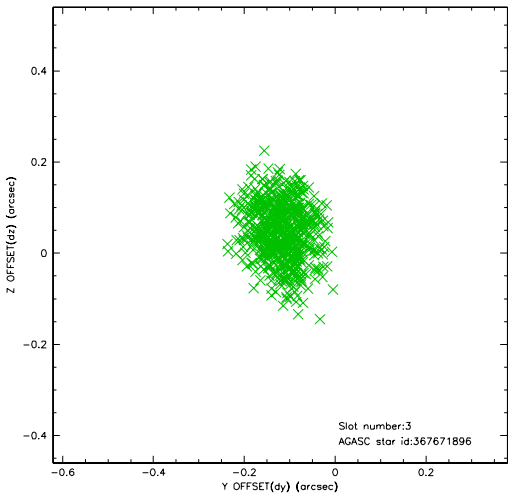

Time (s)
8.50908e+07
8.5091e+07
8.50912e+07
8.50914e+07
8.50916e+07
8.50918e+07
8.5092e+07
Median: 2.002 arcsecs
dy (arcsec)
Median: 3.255 arcsecs
dz (arcsec)
Median: 0.010 deg
dtheta (arcsec)
Time(ksec)

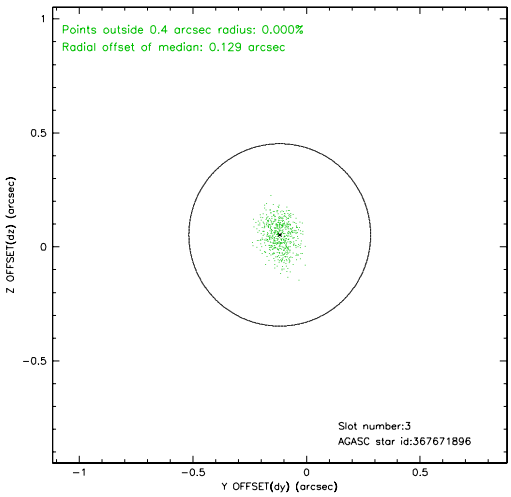
Slot Statistics

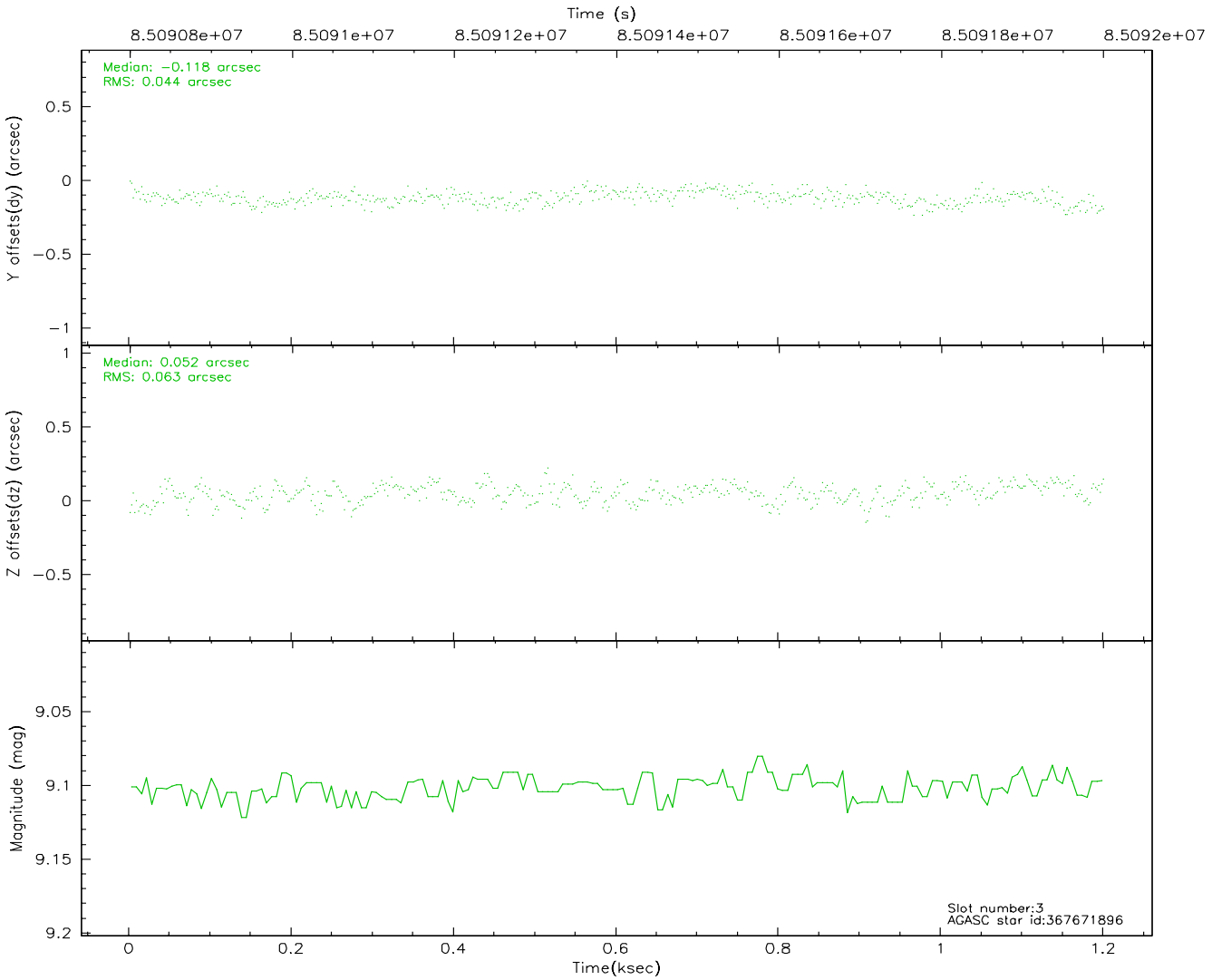
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.96	293	0.077	0.037	0.006	0.012	0.000000	0.000000	-757.42	-1290.94
1	FID	HRC-I-3	7.04	293	0.030	-0.048	0.007	0.012	0.000000	0.000000	-1188.47	1009.15
2	FID	HRC-I-4	7.00	293	0.007	-0.079	0.005	0.009	0.000000	0.000000	1281.32	1014.50
3	GUIDE	367671896	9.10	585	-0.118	0.052	0.083	0.127	11.763473	41.964845	-1255.78	-1644.26
4	GUIDE	367664016	9.36	586	0.231	0.140	0.093	0.199	12.105776	41.954692	-2081.50	-2050.11
5	GUIDE	367663272	9.29	586	0.031	-0.058	0.071	0.115	10.656279	41.699429	919.57	585.18
6	GUIDE	367658664	9.60	586	-0.108	-0.165	0.106	0.169	10.374070	41.369746	1053.30	1993.25
7	GUIDE	367665472	9.50	585	-0.033	0.031	0.092	0.141	10.241611	41.730843	1966.44	1003.93

2.4 Star Slots

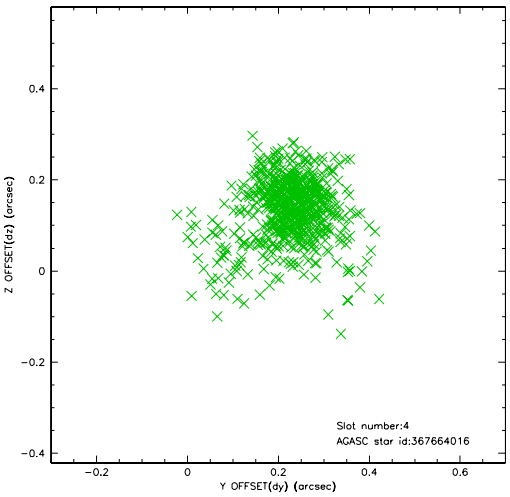
2.4.1 Slot 3

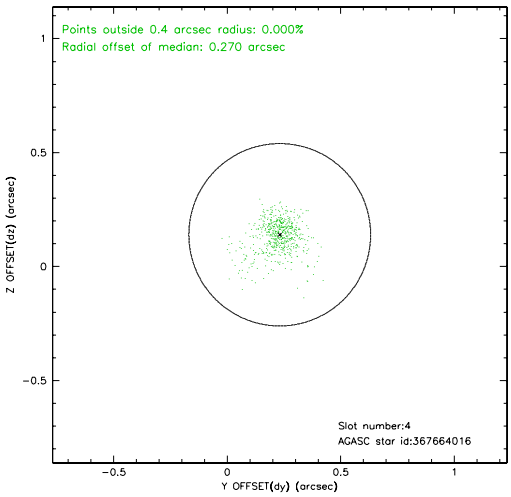


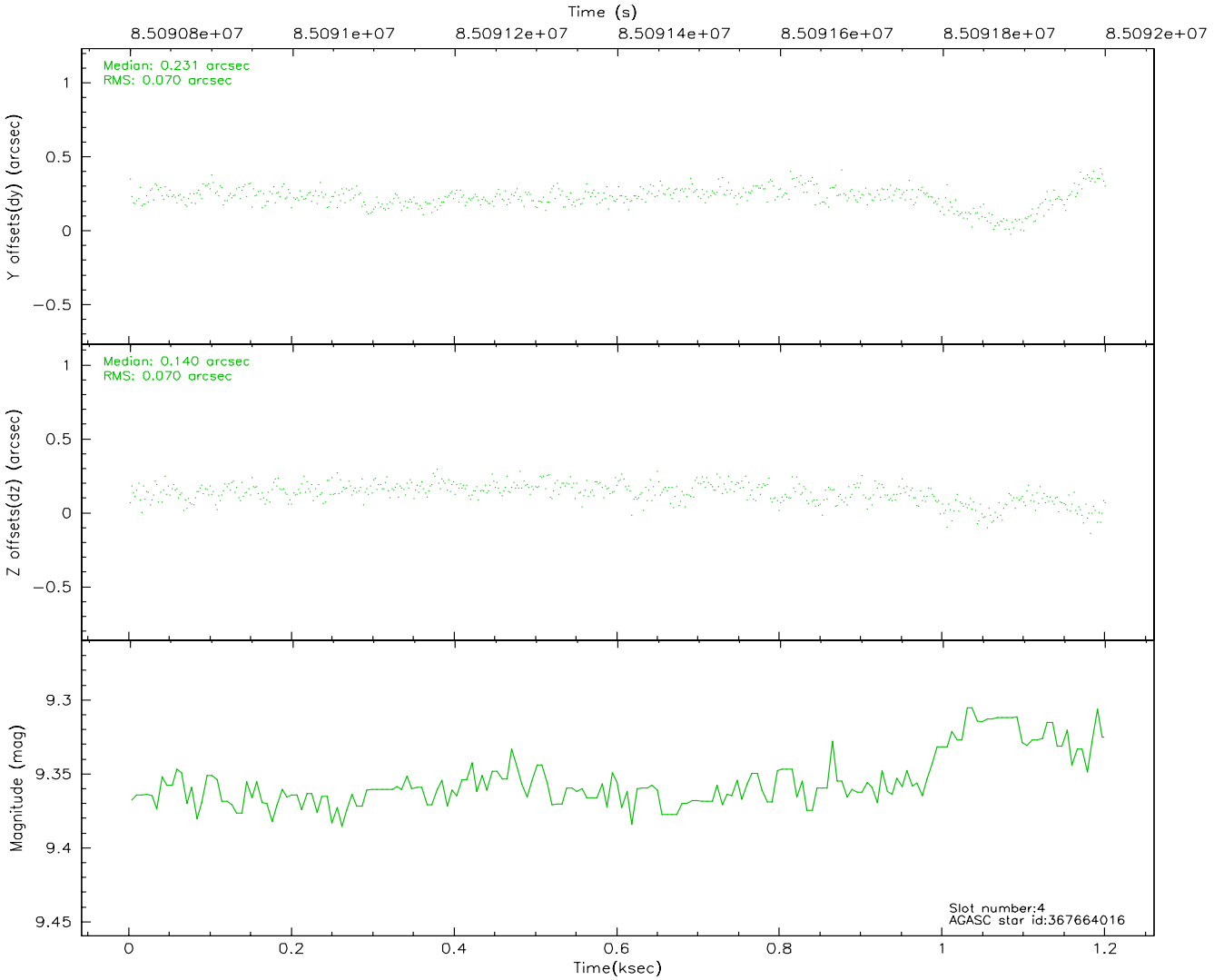




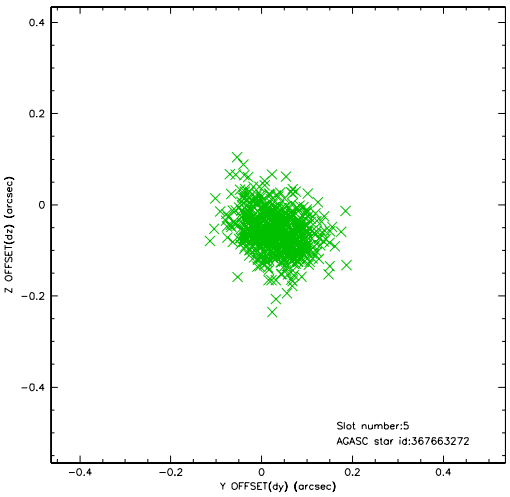
2.4.2 Slot 4

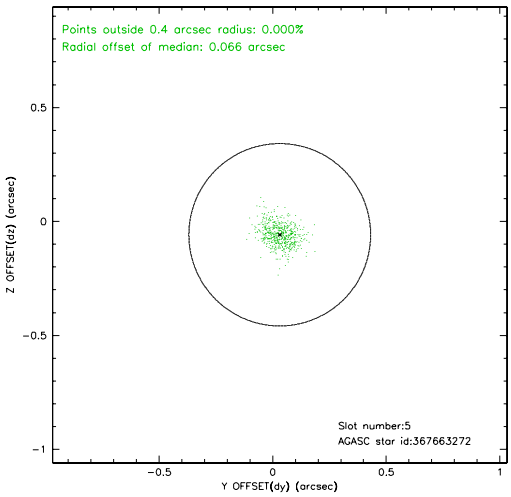

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:367664016

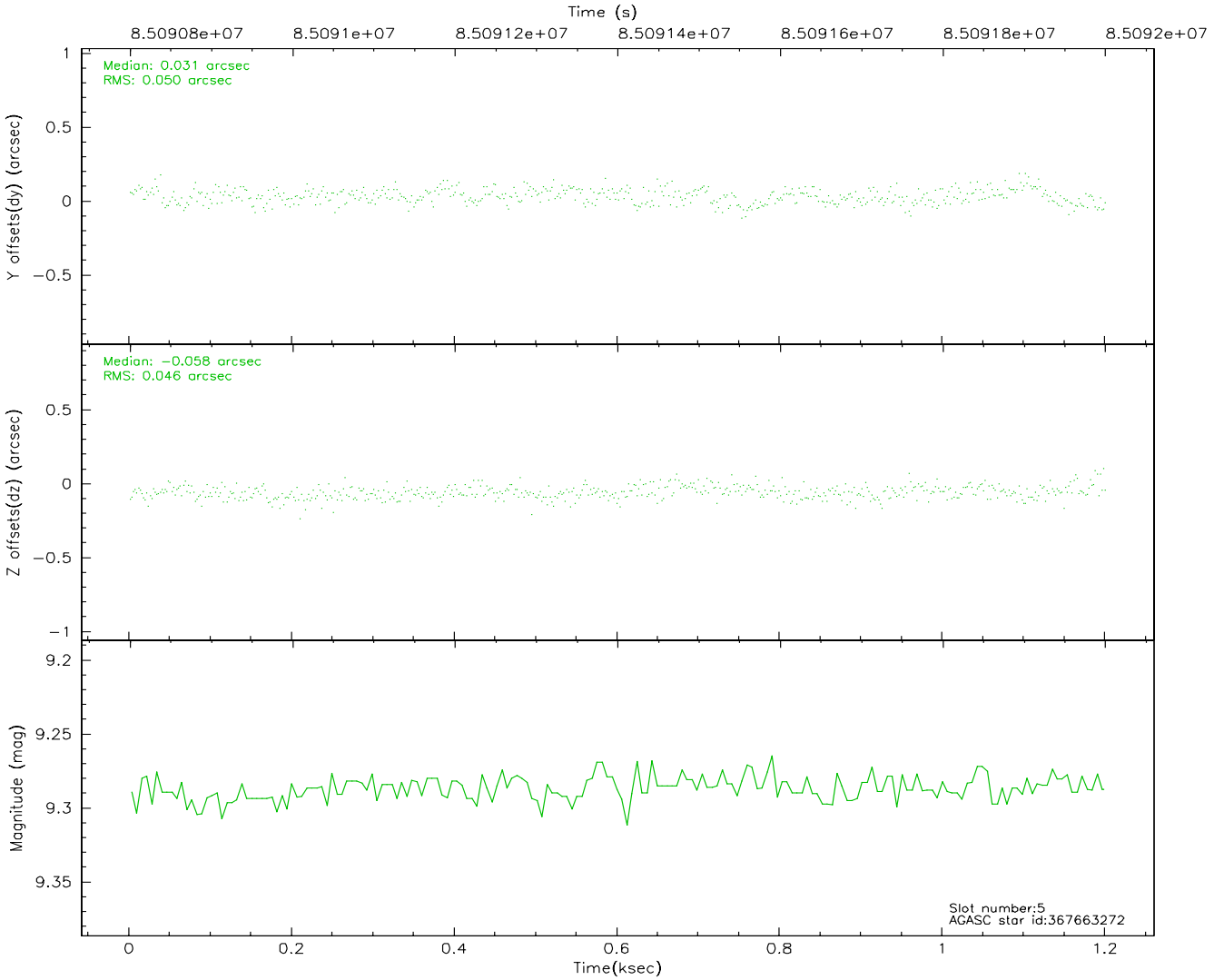

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.270 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:367664016


Time (s)
8.50908e+07
8.5091e+07
8.50912e+07
8.50914e+07
8.50916e+07
8.50918e+07
8.5092e+07
Median: 0.231 arcsec
RMS: 0.070 arcsec
Y offsets(dy) (arcsec)
Median: 0.140 arcsec
RMS: 0.070 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:367664016
Time(ksec)

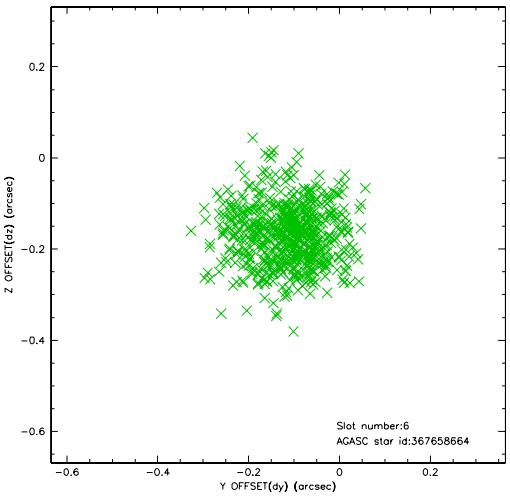
2.4.3 Slot 5

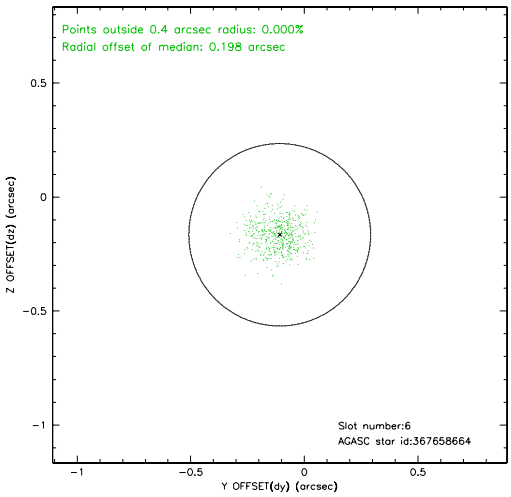

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:367663272

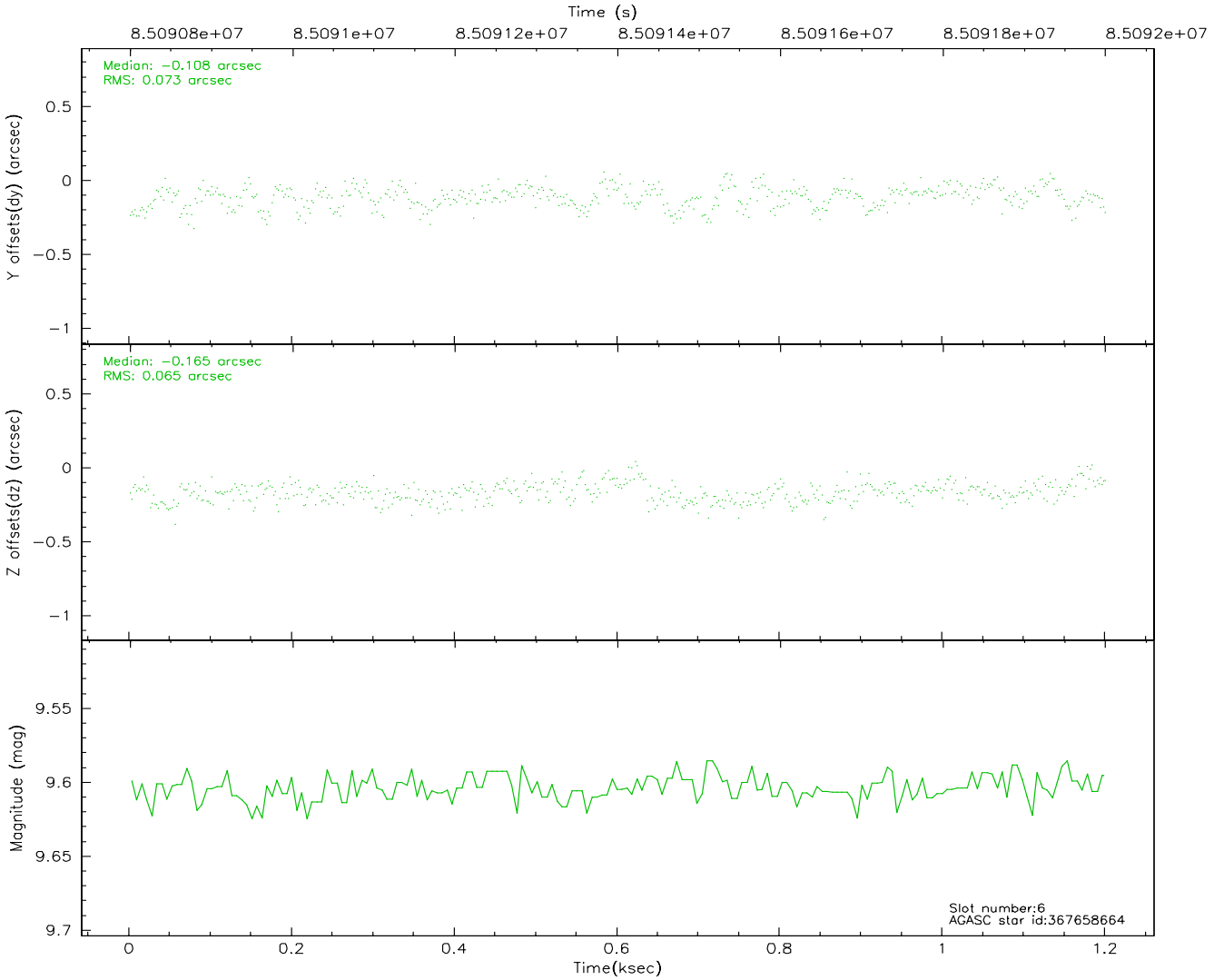

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.066 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:367663272


Time (s)
Median: 0.031 arcsec
RMS: 0.050 arcsec
Y offsets(dy) (arcsec)
Median: −0.058 arcsec
RMS: 0.046 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:367663272
Time(ksec)

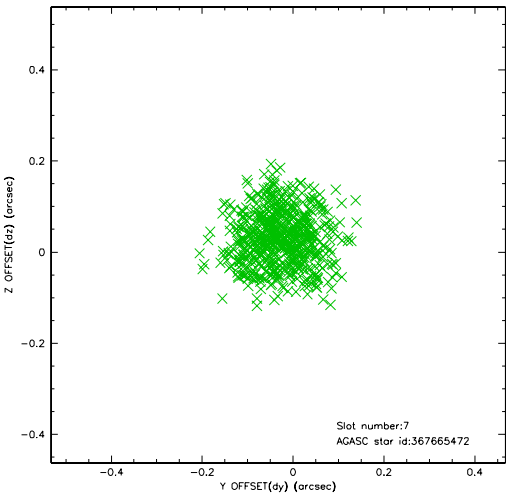
2.4.4 Slot 6

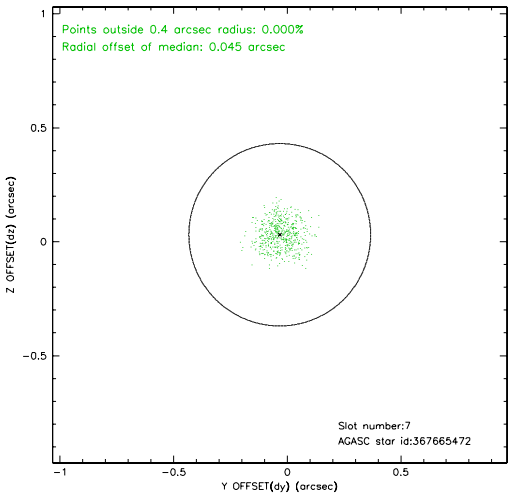

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:367658664

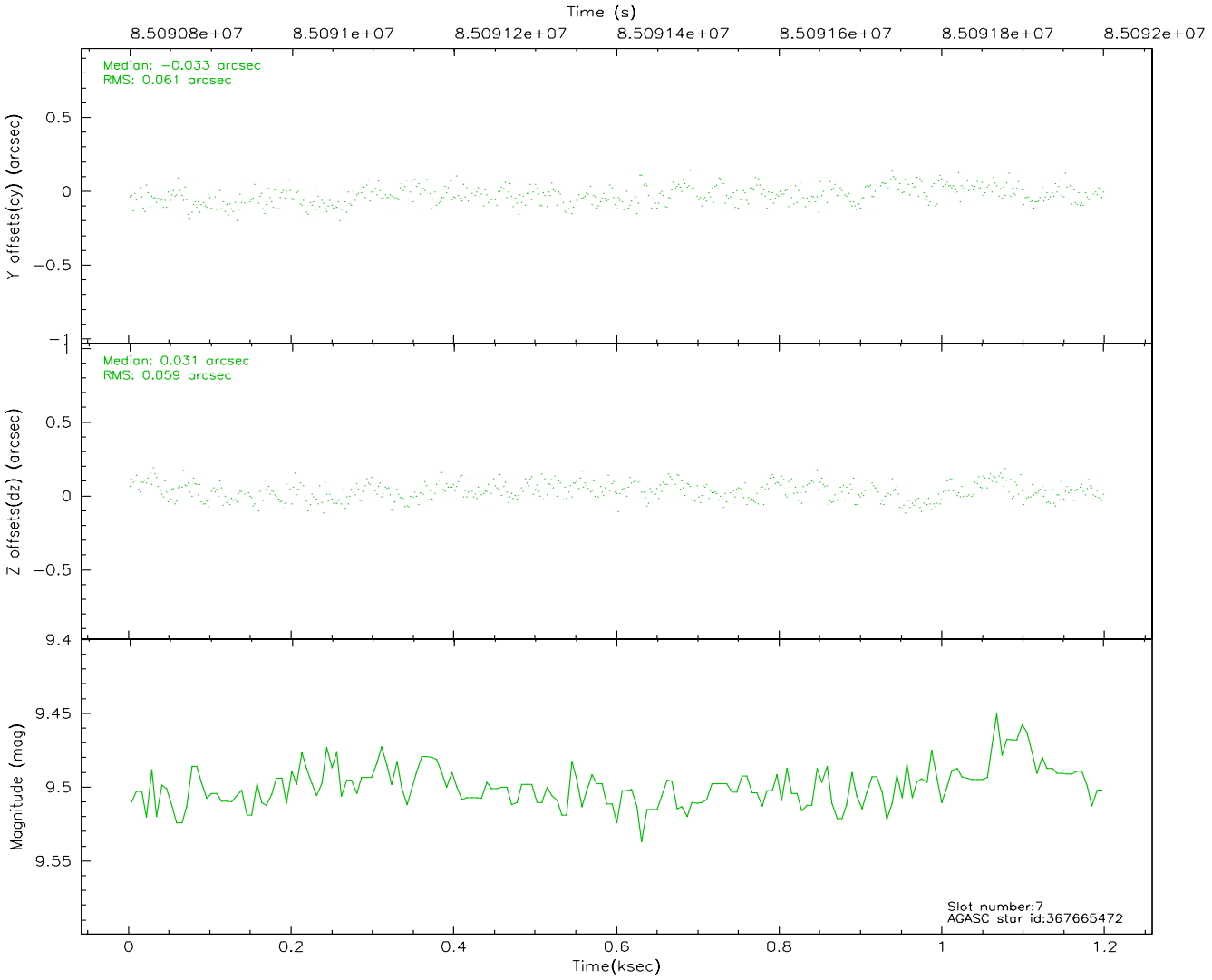

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.198 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:367658664


Time (s)
Median: −0.108 arcsec
RMS: 0.073 arcsec
Y offsets(dy) (arcsec)
Median: −0.165 arcsec
RMS: 0.065 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:367658664
Time(ksec)

2.4.5 Slot 7

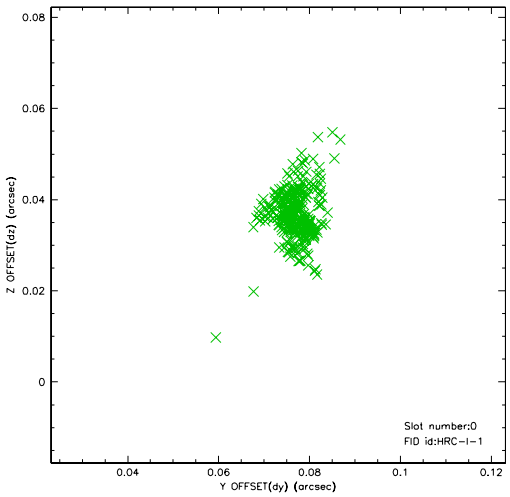

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:367665472

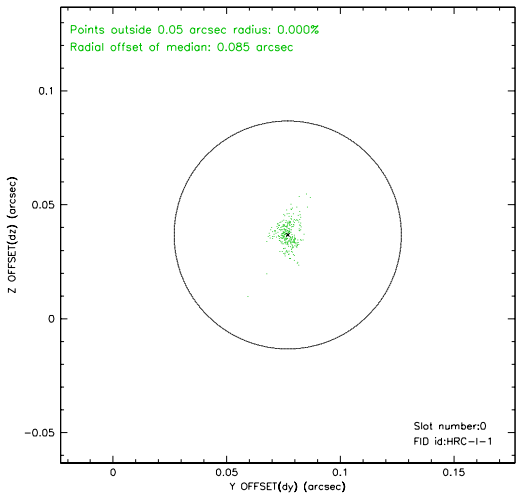

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.045 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:367665472

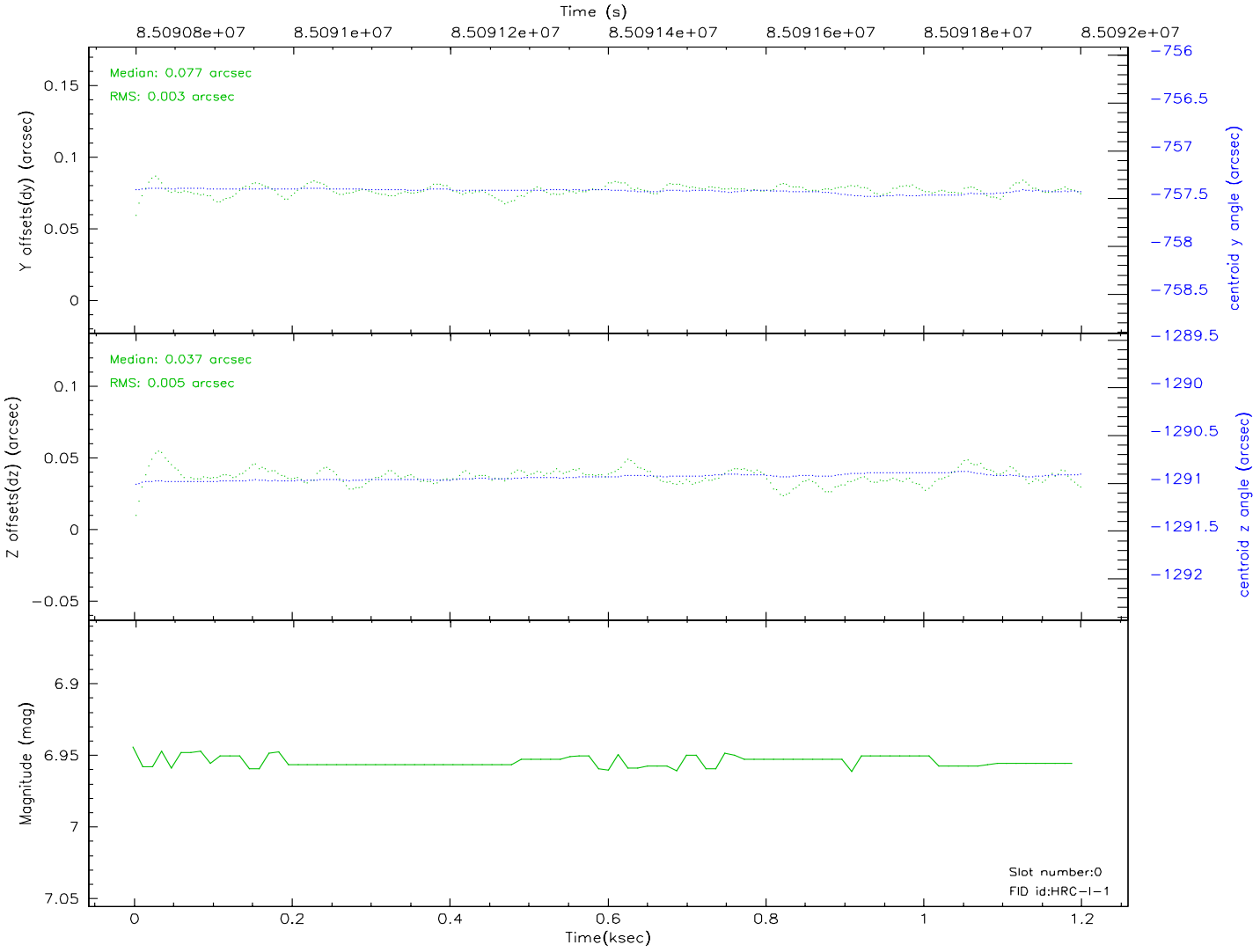

Time (s)
8.50908e+07
8.5091e+07
8.50912e+07
8.50914e+07
8.50916e+07
8.50918e+07
8.5092e+07
Median: −0.033 arcsec
RMS: 0.061 arcsec
Y offsets(dy) (arcsec)
Median: 0.031 arcsec
RMS: 0.059 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:367665472
Time(ksec)

2.5 FID Slots

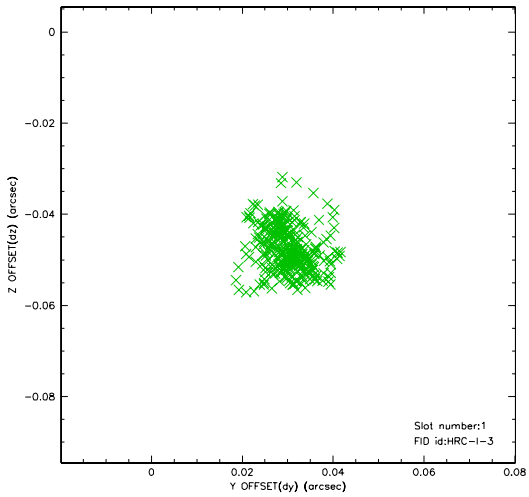
2.5.1 Slot 0

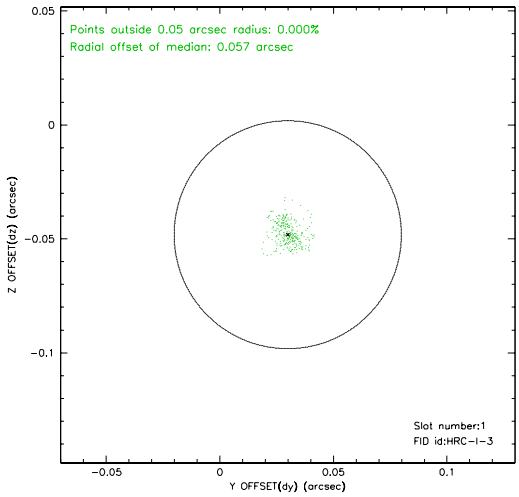


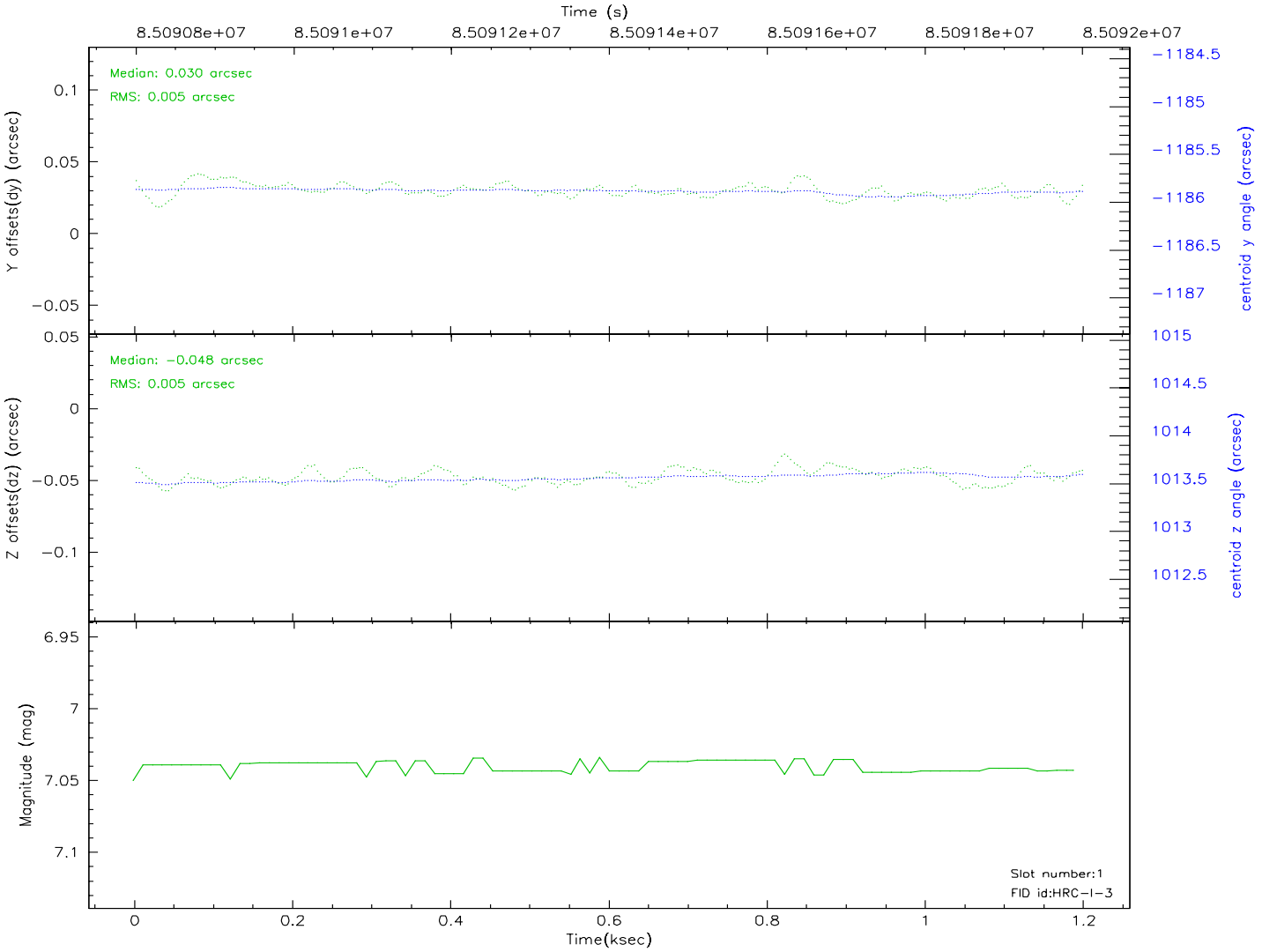




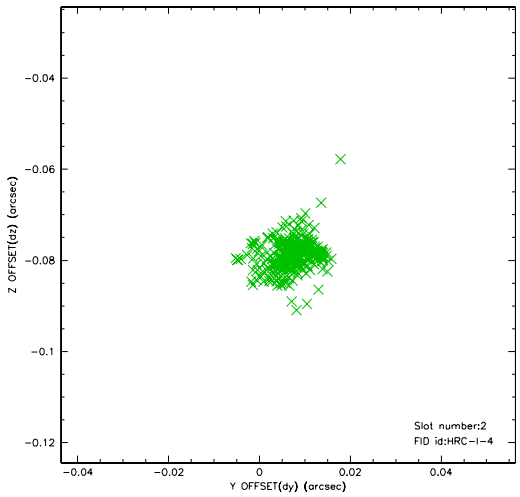
2.5.2 Slot 1

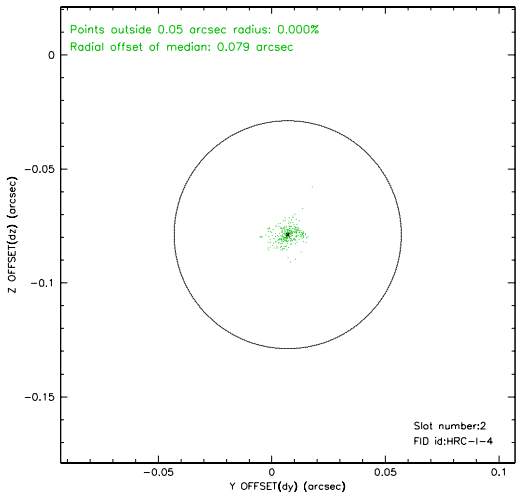

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-I-3

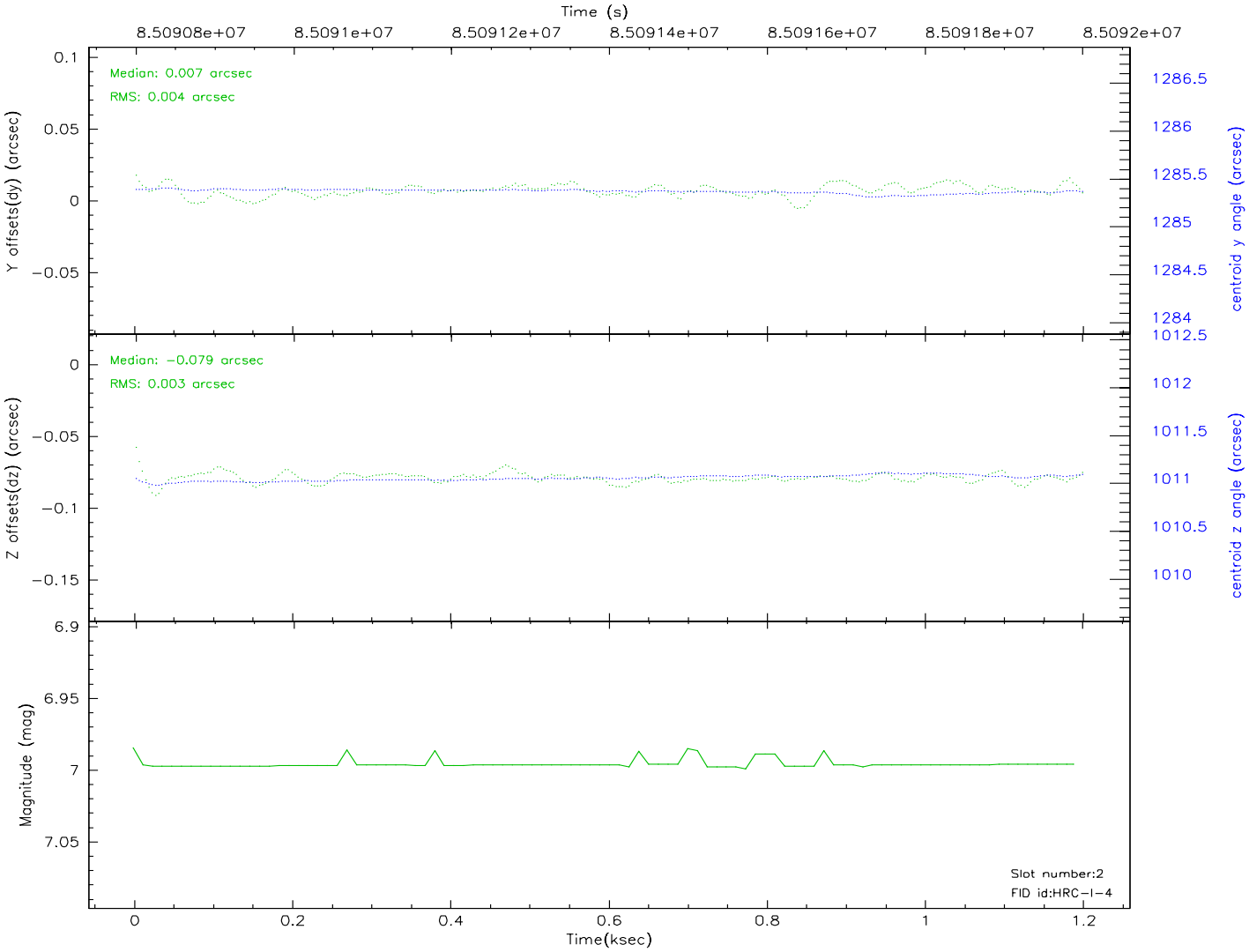

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.057 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-I-3


Time (s)
Median: 0.030 arcsec
RMS: 0.005 arcsec
Y offsets(dy) (arcsec)
Median: −0.048 arcsec
RMS: 0.005 arcsec
Z offsets(dz) (arcsec)
centroid y angle (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:HRC-I-3
Time(ksec)

2.5.3 Slot 2

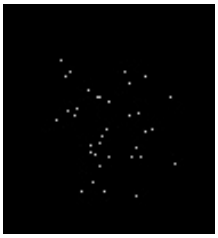

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:HRC-I-4


Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.079 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:2
FID id:HRC-I-4

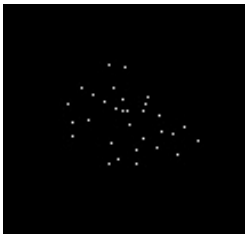

Time (s)
Median: 0.007 arcsec
RMS: 0.004 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.079 arcsec
RMS: 0.003 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:2
FID id:HRC-I-4
Time(ksec)

3 Point Sources

15.06 arcmin



15.40 arcmin



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2007.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.198

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.
```