V&V Reference Report
L2 ASCDS Version : 7.6.9

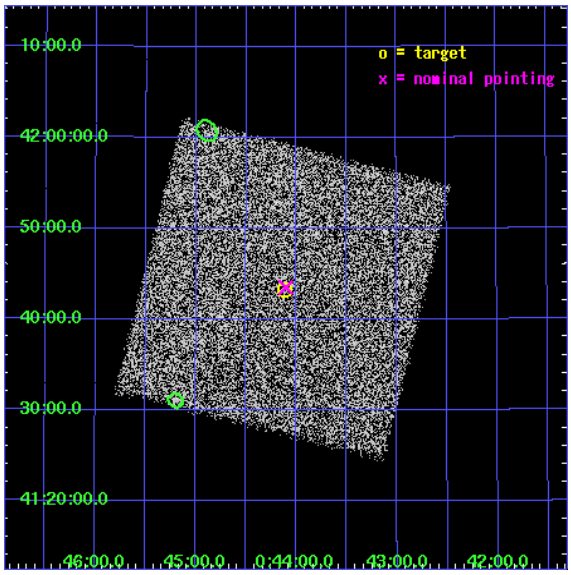
Observation 2907 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Nov 20 2007

Contents

1 Front

seq_num	600244
obs_id	2907
title	SEARCHING FOR X-RAY TRANSIENTS IN M31 WITH CHANDRA AND HST
observer	Dr. MICHAEL GARCIA
object	M31-N1
ra_targ	11.029167
dec_targ	41.721
ra_nom	11.025914462687
dec_nom	41.725417933082
roll_nom	149.00744482894
revision	3
ontime	1186.181296885
livetime	1179.7106958064
l2events	35603

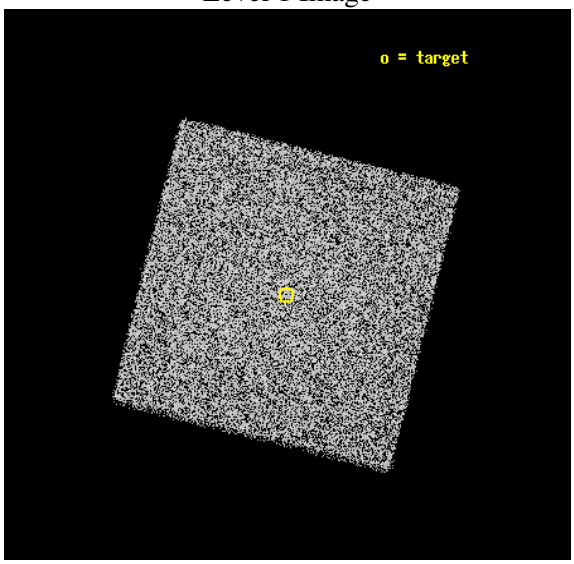


2 OBI

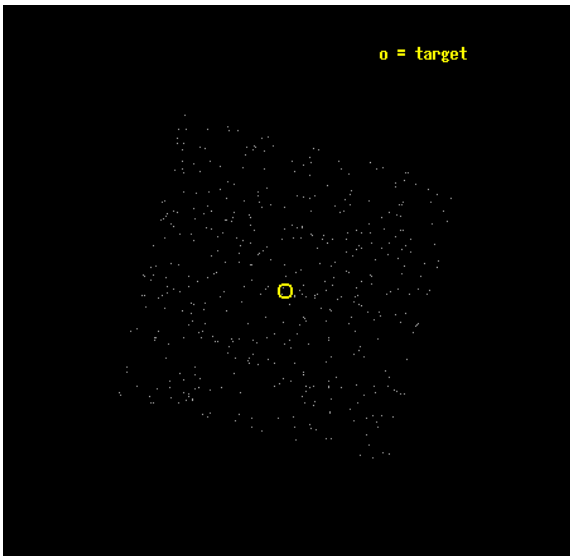
2.1 OBI

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	2007-11-20T19:21:03
revision	3

sched_exp_time	1000.000000
ontime	1186.181296885
l1events	66894

2.1.3 Events

Level 1 Events

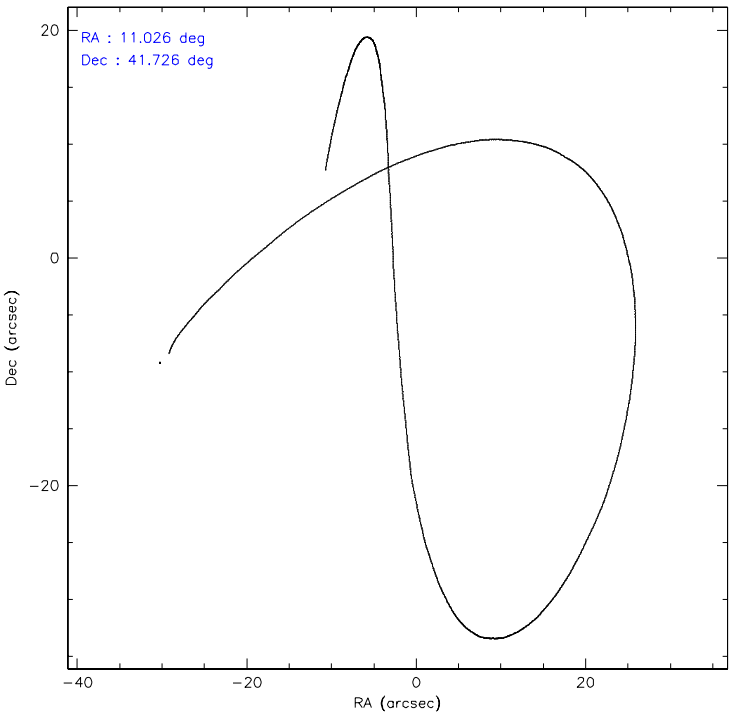
	segment 0
level 1 events	66894
rejected events	14663
rejected %	21%

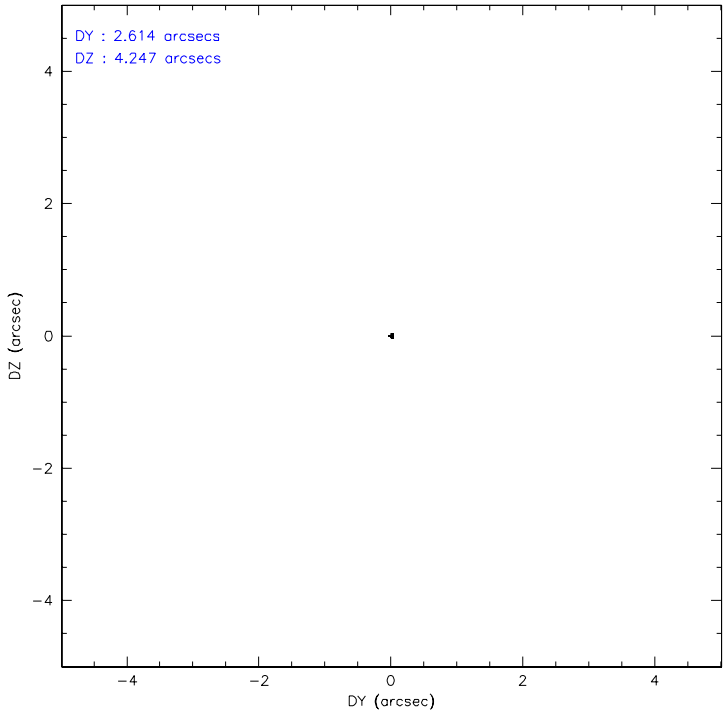
2.2 Compared Parameters

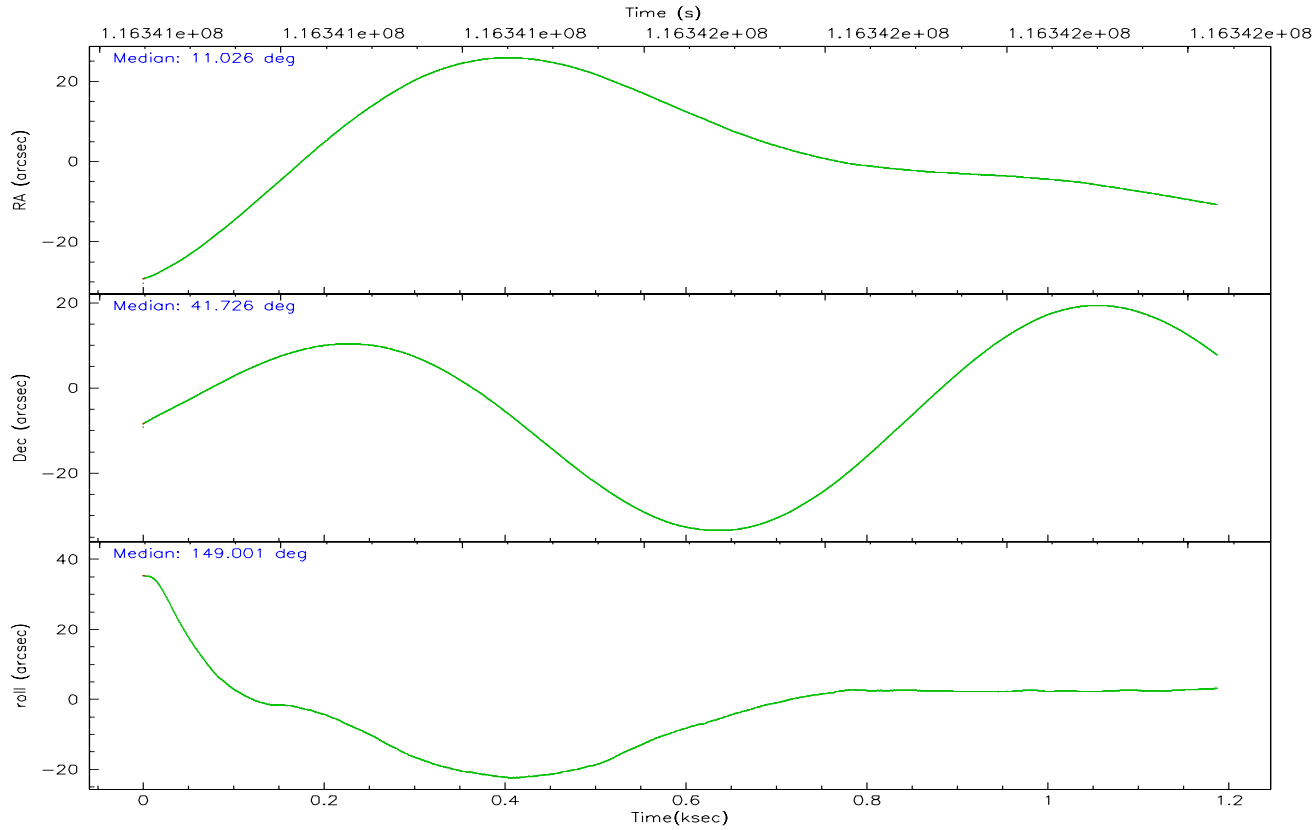
Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
Pointing RA	11.062178	11.02591446268731
Pointing Dec	41.724505	41.72541793308211
Pointing Roll	149.078522	149.0074448289448
Window start time	117072064.184000	117072064.184000
Window stop time	117676864.184000	117676864.184000
SIM focus pos (mm)	-1.040293	-1.038866356238299
SIM defocus (mm)	0	0.00142626442057514 1
SIM translation stage pos (mm)	126.985494	126.9854943052878
SIM translation stage offset (mm)	0	-5.413686238853188e-06
Observation start time	116341235.184000	116340859.96788
Observation start date	2001-09-08T12:59:31	2001-09-08T12:54:19
Observation end time	116342235.184000	116342369.28044
Observation end date	2001-09-08T13:16:11	2001-09-08T13:19:29

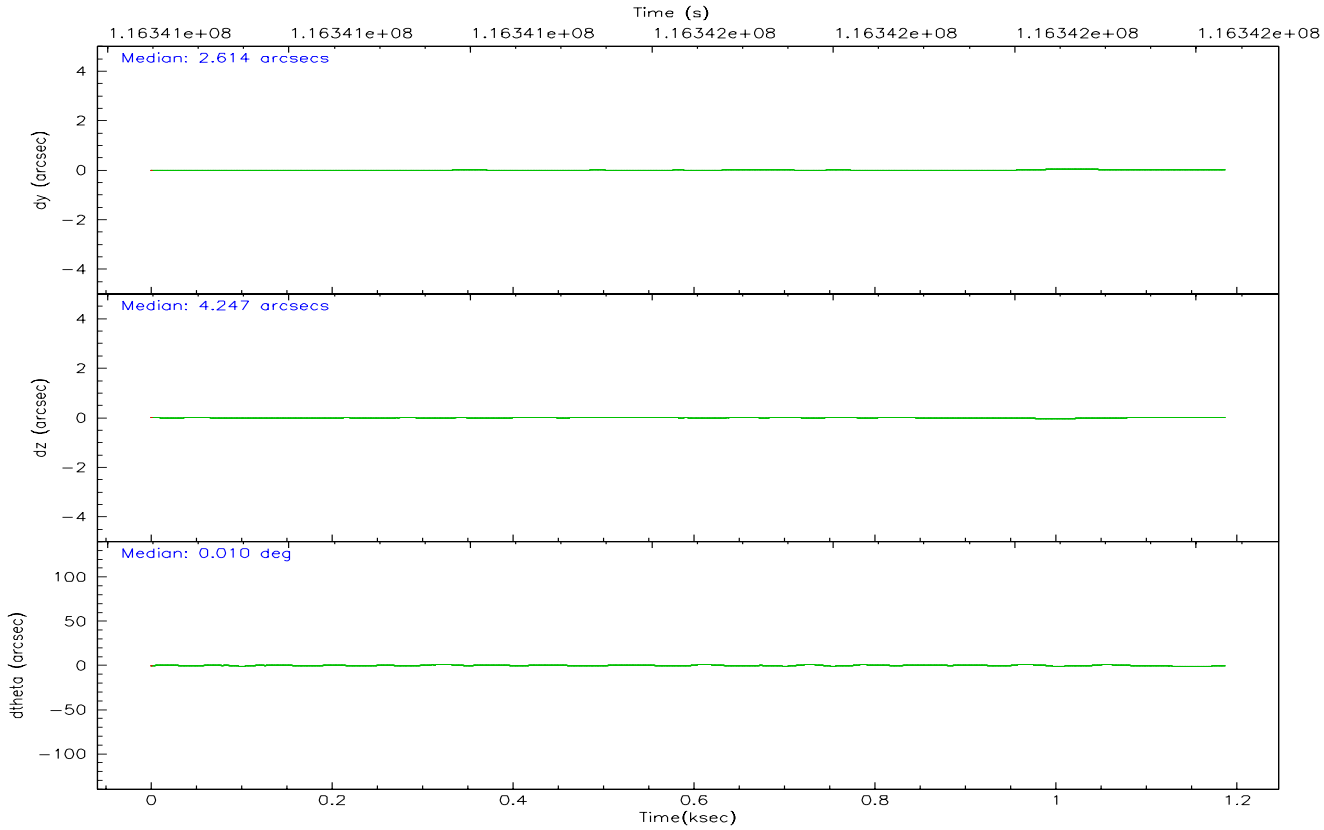
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect


RA : 11.026 deg
Dec : 41.726 deg
Dec (arcsec)
RA (arcsec)
20
0
−20
−40
−20
0
20


DY : 2.614 arcsecs
DZ : 4.247 arcsecs
DZ (arcsec)
DY (arcsec)
4
2
0
−2
−4
−4
−2
0
2
4


Time (s)
1.16341e+08
1.16341e+08
1.16341e+08
1.16342e+08
1.16342e+08
1.16342e+08
1.16342e+08
Median: 11.026 deg
RA (arcsec)
Median: 41.726 deg
Dec (arcsec)
Median: 149.001 deg
roll (arcsec)
Time(ksec)

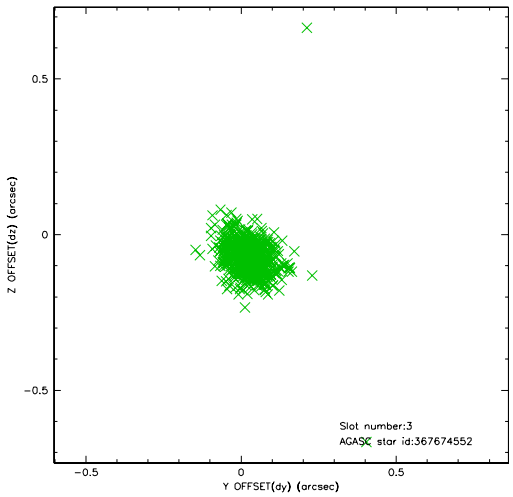

Time (s)
1.16341e+08
1.16341e+08
1.16341e+08
1.16342e+08
1.16342e+08
1.16342e+08
1.16342e+08
Median: 2.614 arcsecs
dy (arcsec)
Median: 4.247 arcsecs
dz (arcsec)
Median: 0.010 deg
dtheta (arcsec)
Time(ksec)

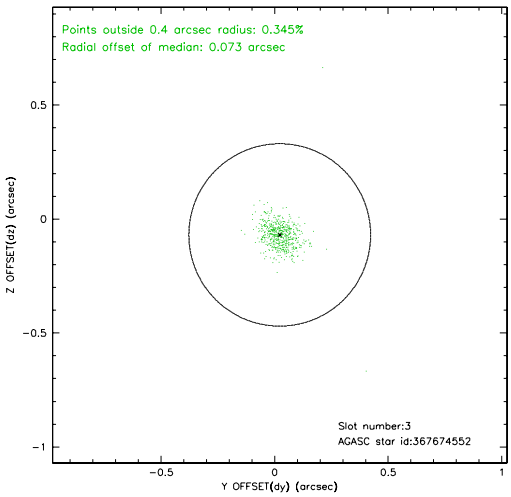
Slot Statistics

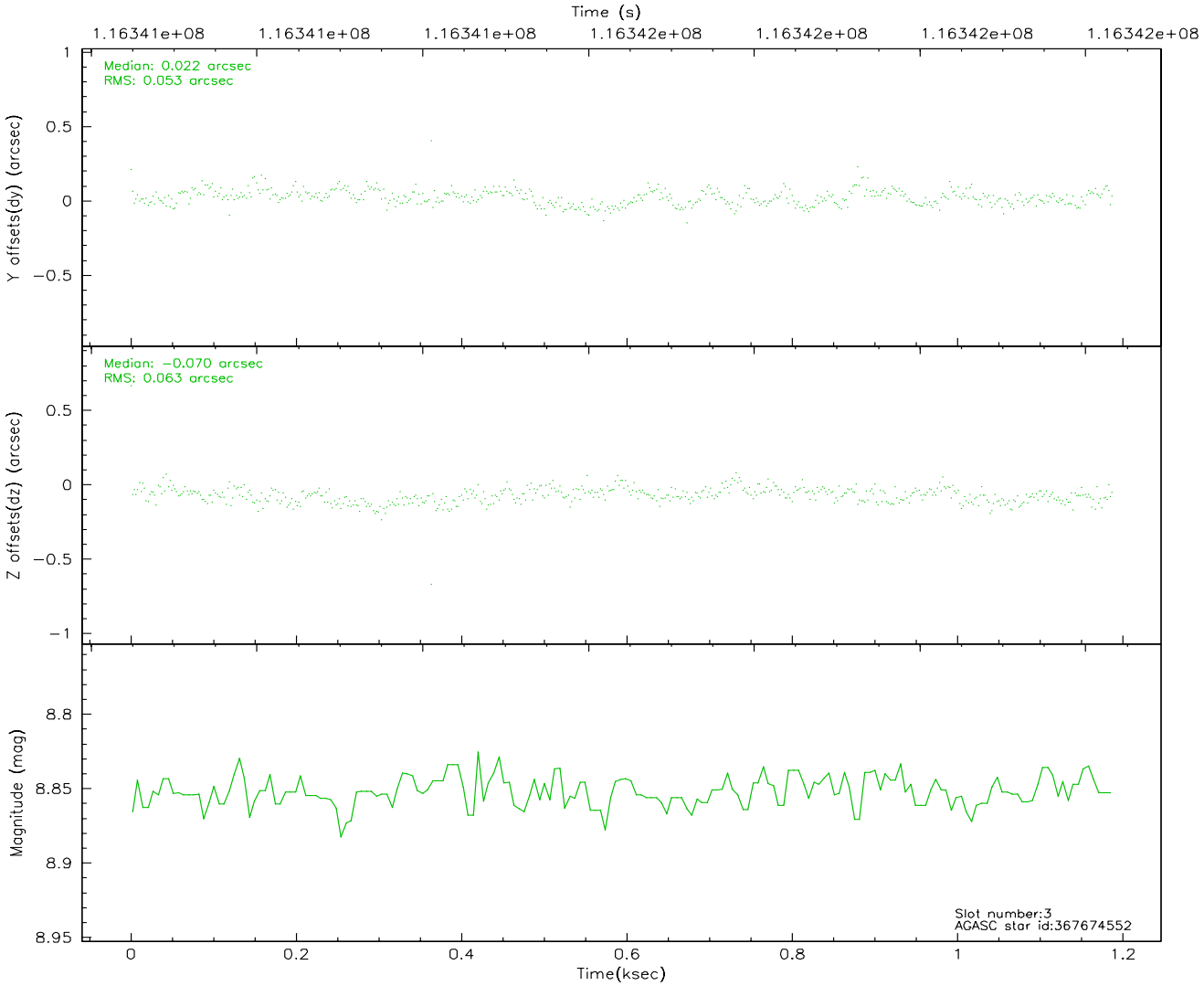
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.98	290	0.035	0.020	0.005	0.009	0.000000	0.000000	-758.09	-1292.02
1	FID	HRC-I-2	7.01	290	0.084	-0.062	0.006	0.009	0.000000	0.000000	851.97	-1298.18
2	FID	HRC-I-4	6.99	290	-0.003	-0.050	0.005	0.010	0.000000	0.000000	1287.68	1005.54
3	GUIDE	367674552	8.85	580	0.022	-0.070	0.075	0.123	11.016238	41.570845	-178.11	541.72
4	GUIDE	367146616	8.86	580	0.123	-0.114	0.074	0.123	11.418645	41.190163	-1816.20	1156.62
5	GUIDE	367657896	9.02	579	0.057	-0.102	0.085	0.138	11.197765	41.313576	-1077.70	1085.91
6	GUIDE	367670520	9.26	580	-0.123	0.220	0.098	0.151	11.265516	42.371946	732.43	-2272.08
7	GUIDE	367666680	9.47	579	-0.080	0.076	0.112	0.191	10.696106	42.572173	2403.36	-2120.92

2.4 Star Slots

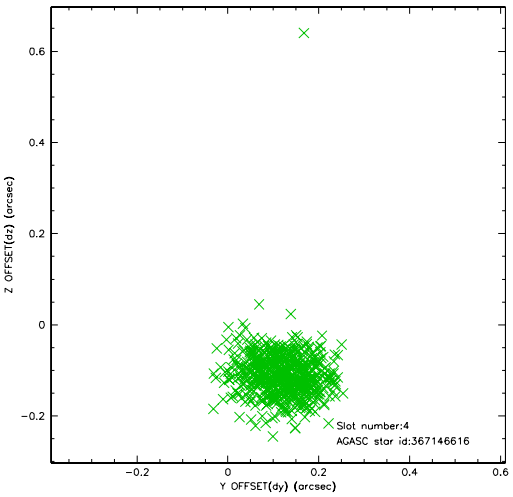
2.4.1 Slot 3

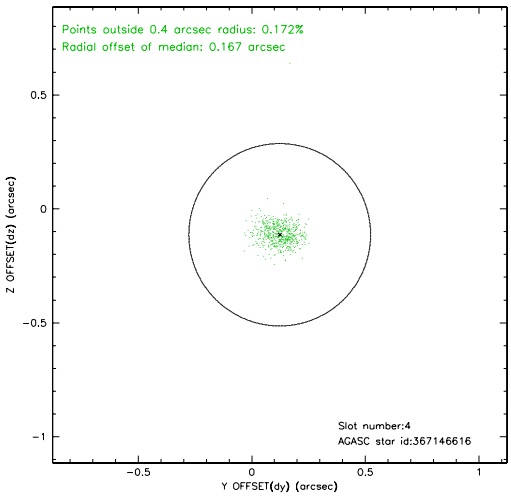


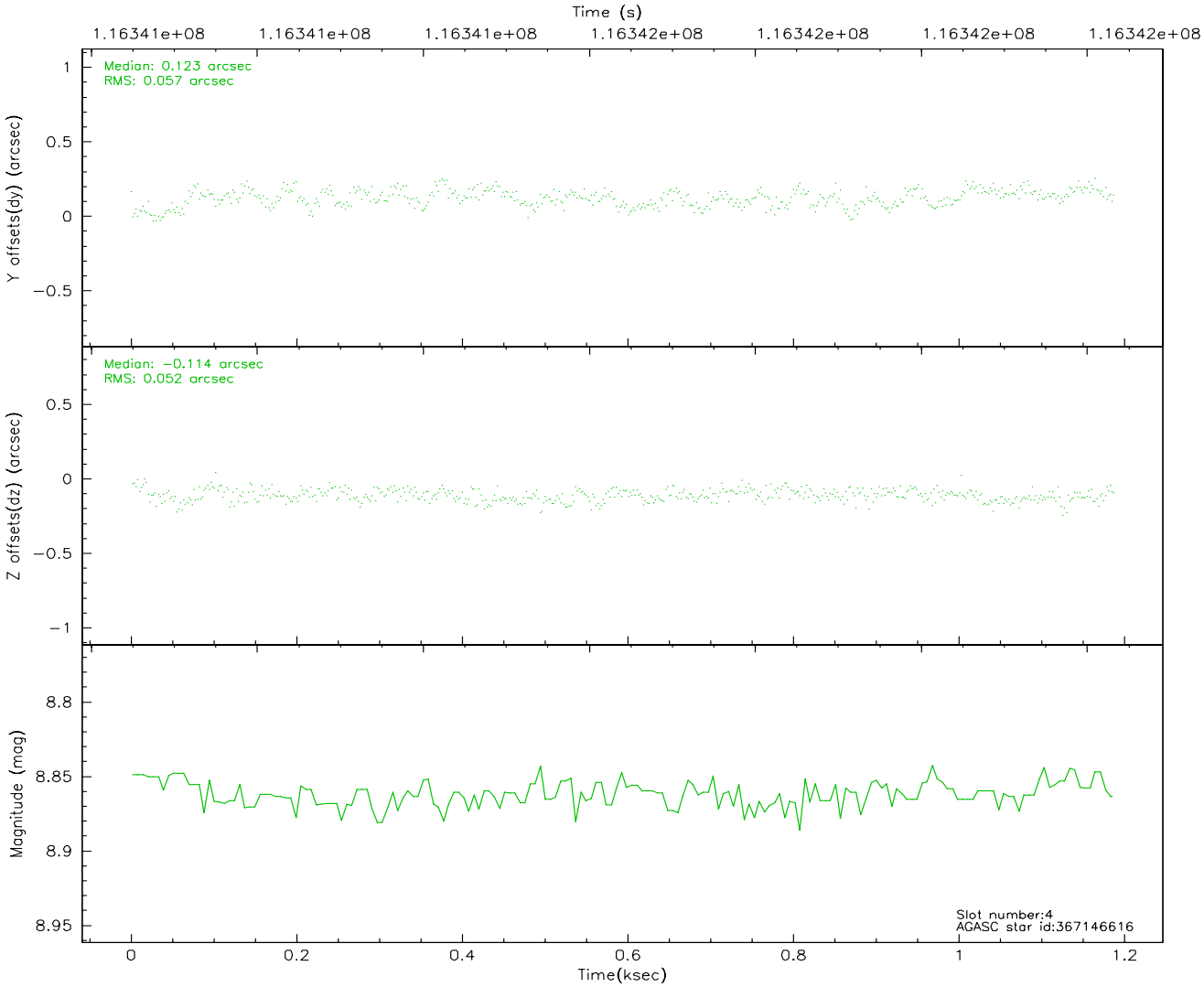




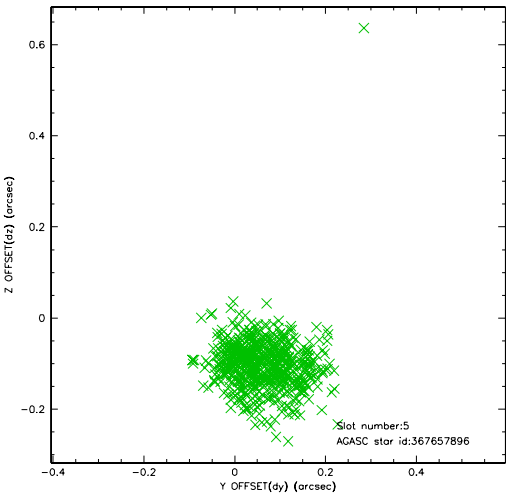
2.4.2 Slot 4

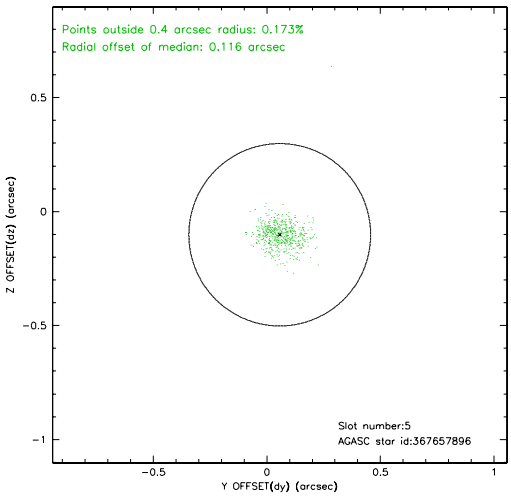

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:367146616

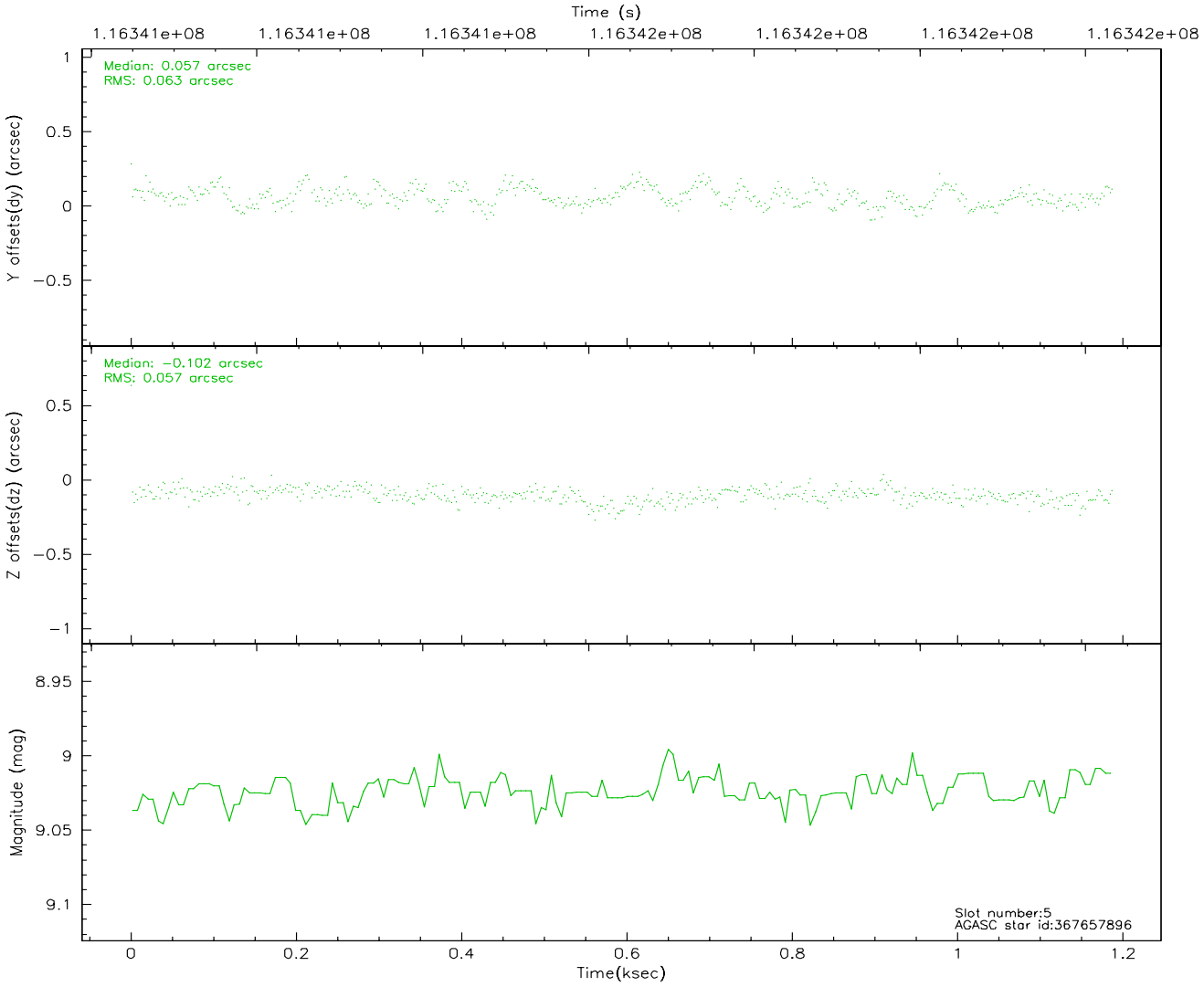

Points outside 0.4 arcsec radius: 0.172%
Radial offset of median: 0.167 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:367146616


Time (s)
Median: 0.123 arcsec
RMS: 0.057 arcsec
Y offsets(dy) (arcsec)
Median: −0.114 arcsec
RMS: 0.052 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:367146616
Time(ksec)

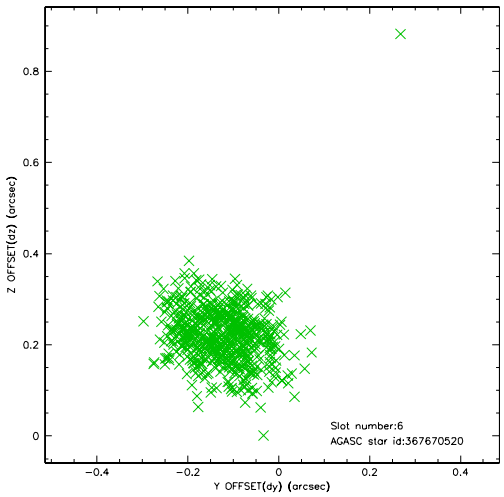
2.4.3 Slot 5

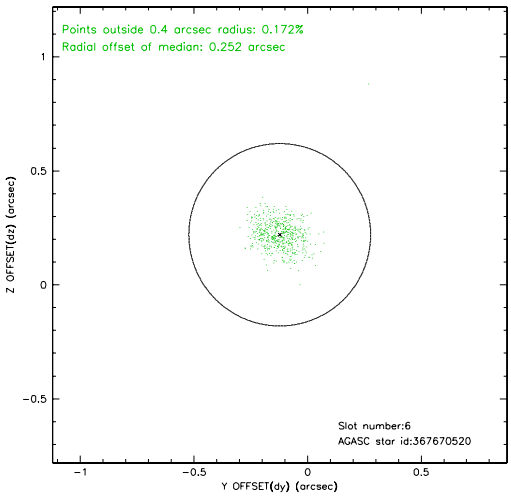

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:367657896

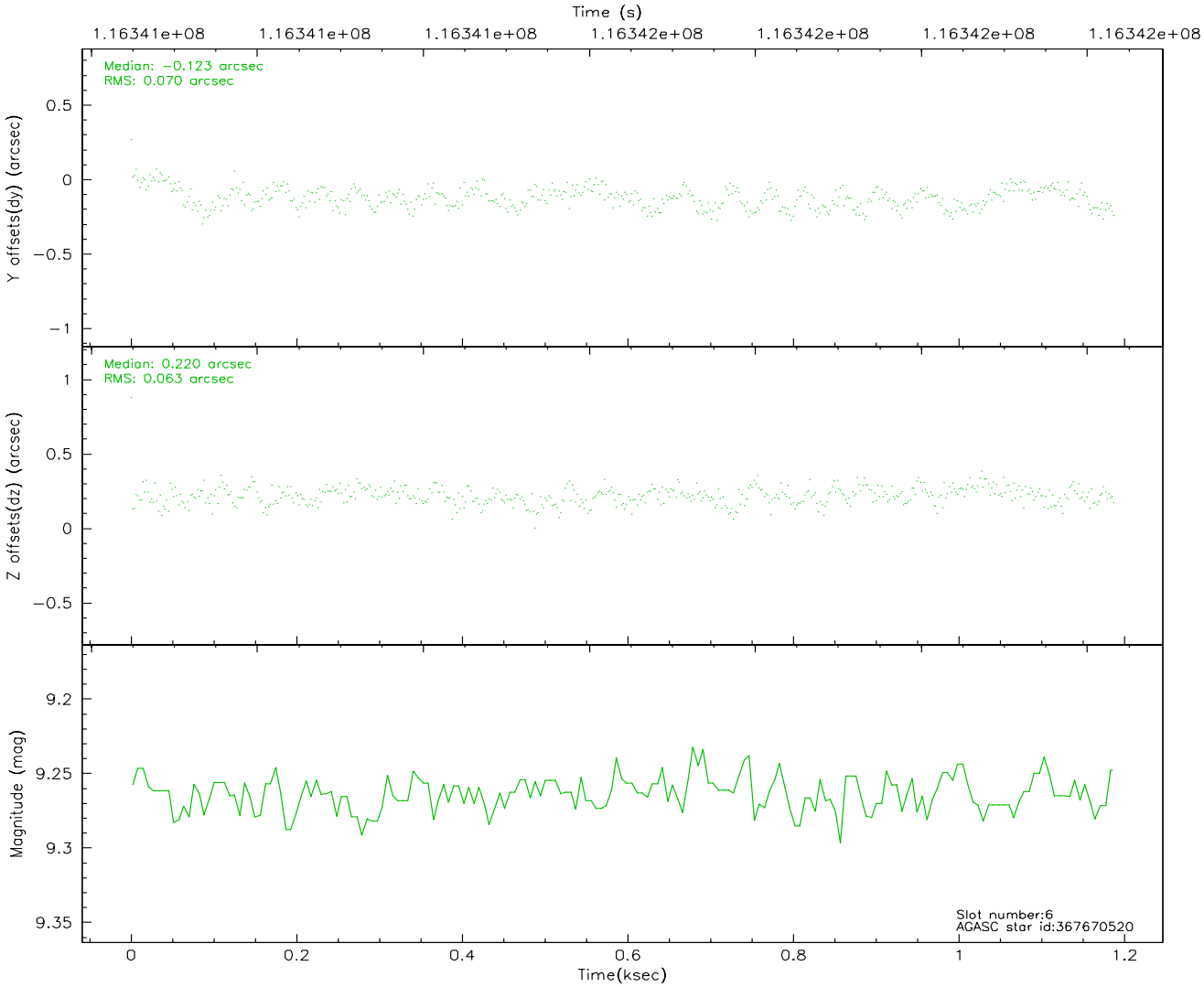

Points outside 0.4 arcsec radius: 0.173%
Radial offset of median: 0.116 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:367657896


Time (s)
1.16341e+08
1.16341e+08
1.16341e+08
1.16342e+08
1.16342e+08
1.16342e+08
1.16342e+08
Median: 0.057 arcsec
RMS: 0.063 arcsec
Y offsets(dy) (arcsec)
Median: −0.102 arcsec
RMS: 0.057 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:367657896
Time(ksec)

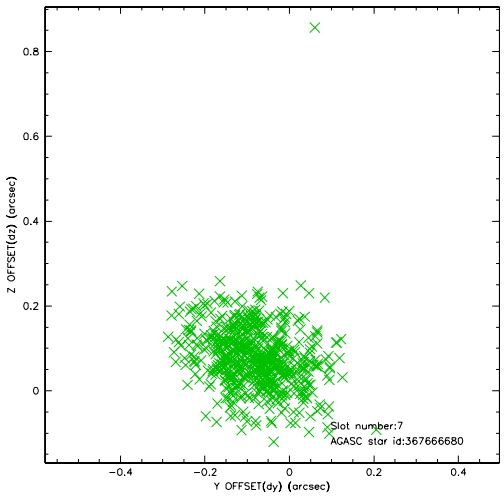
2.4.4 Slot 6

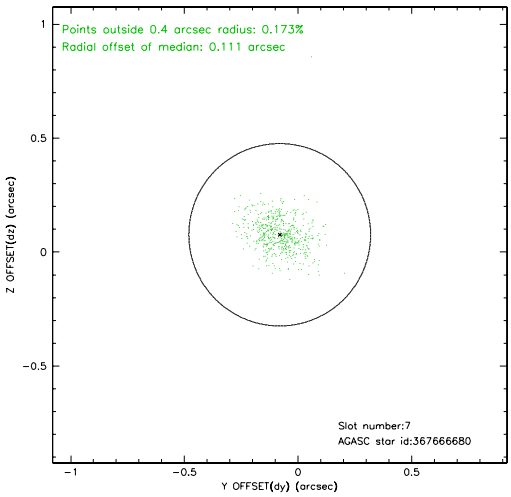

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:367670520

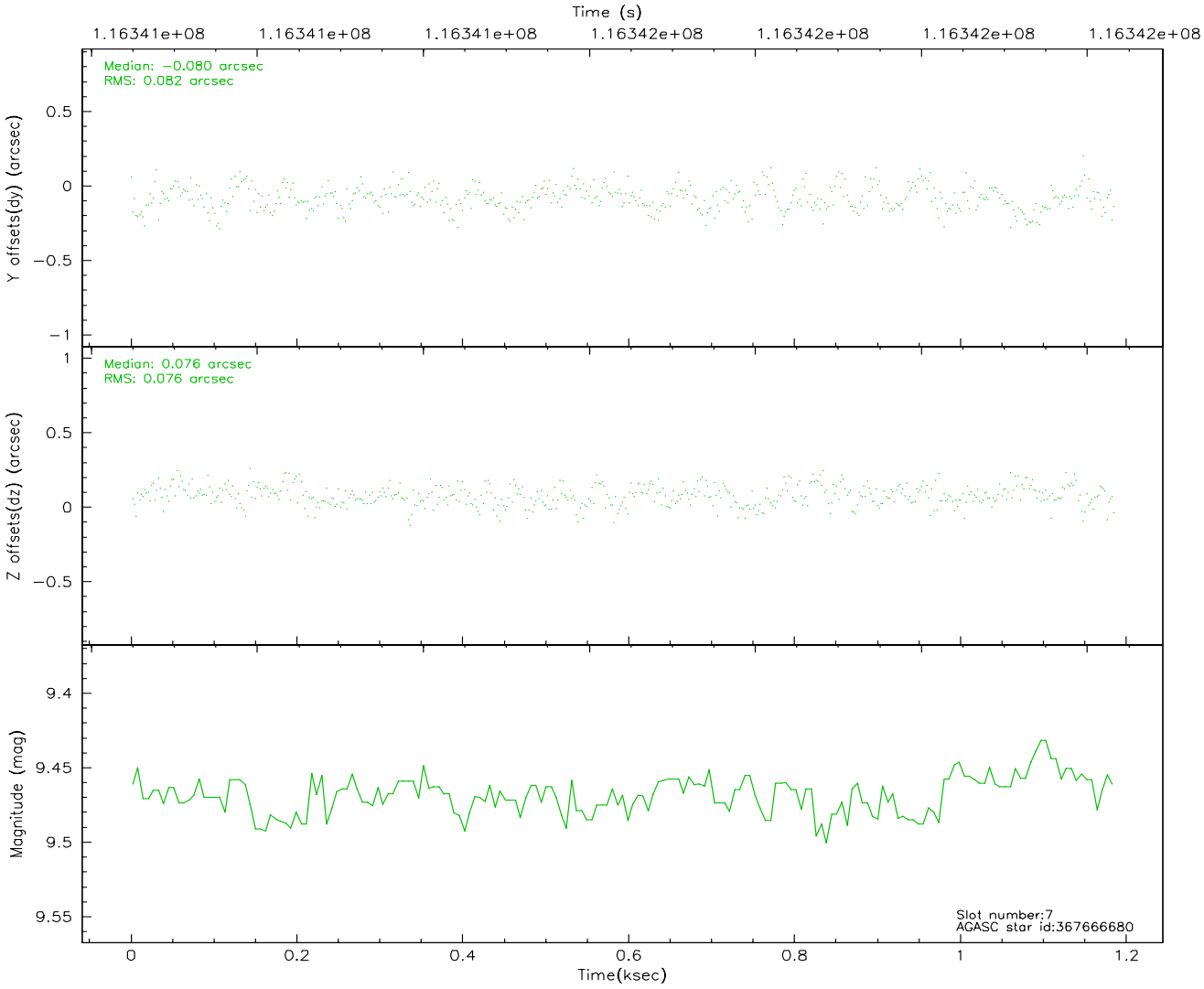

Points outside 0.4 arcsec radius: 0.172%
Radial offset of median: 0.252 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:367670520


Time (s)
Median: −0.123 arcsec
RMS: 0.070 arcsec
Y offsets(dy) (arcsec)
Median: 0.220 arcsec
RMS: 0.063 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:367670520
Time(ksec)

2.4.5 Slot 7

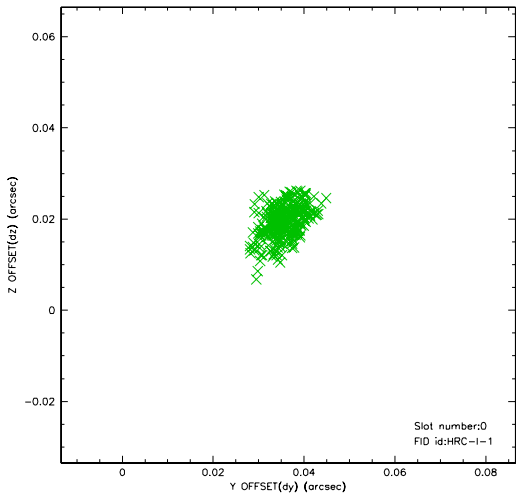

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:367666680

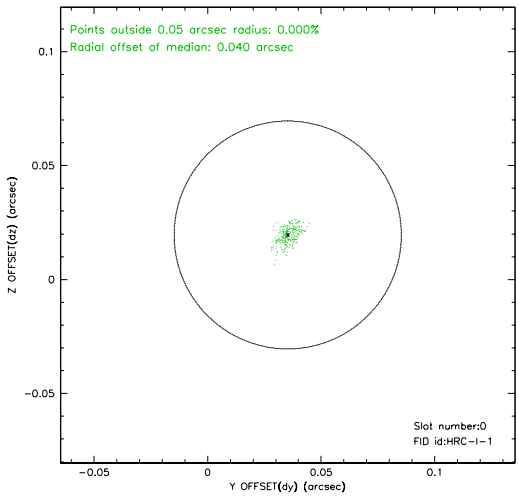

Points outside 0.4 arcsec radius: 0.173%
Radial offset of median: 0.111 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:367666680

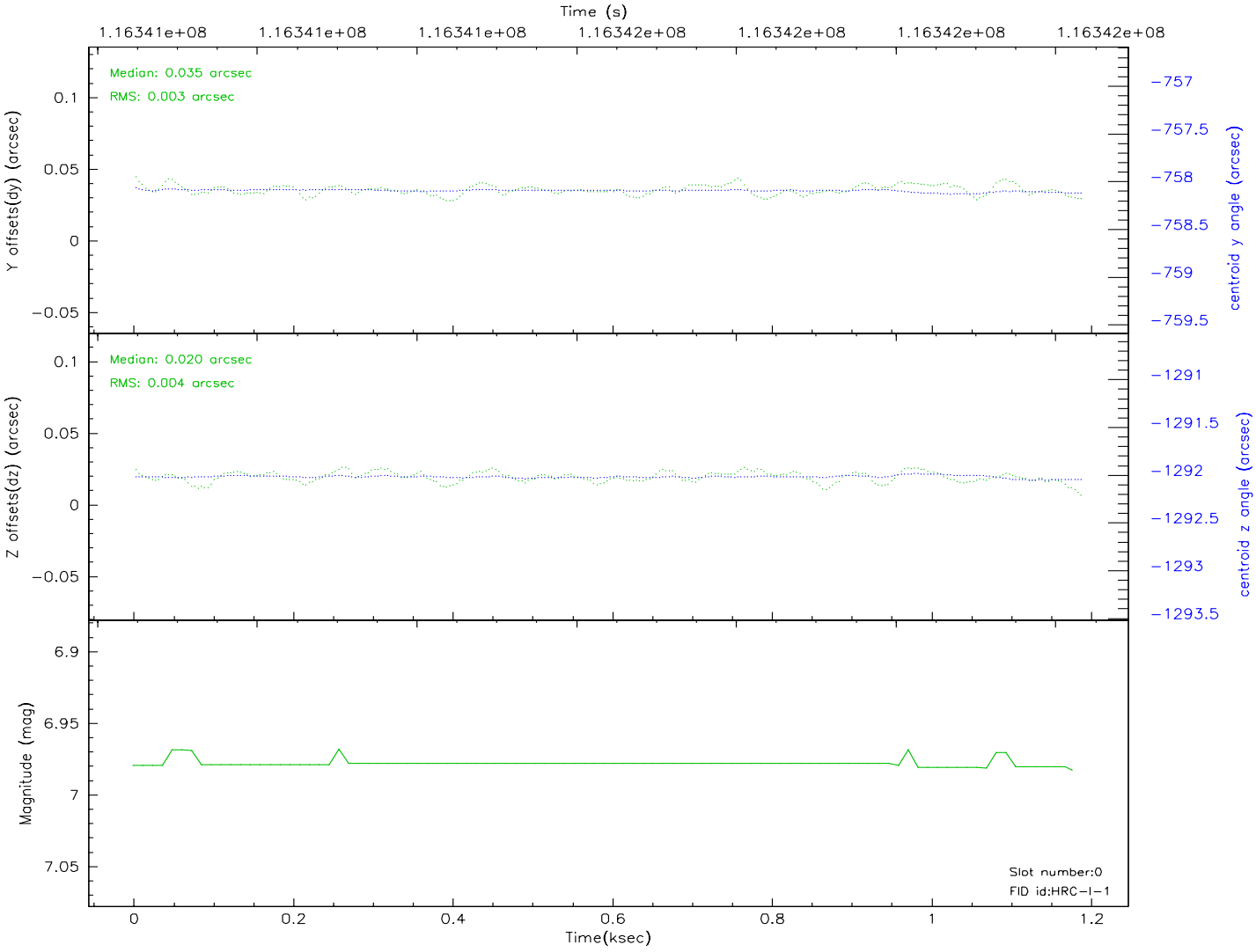

Time (s)
Median: −0.080 arcsec
RMS: 0.082 arcsec
Y offsets(dy) (arcsec)
Median: 0.076 arcsec
RMS: 0.076 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:367666680
Time(ksec)

2.5 FID Slots

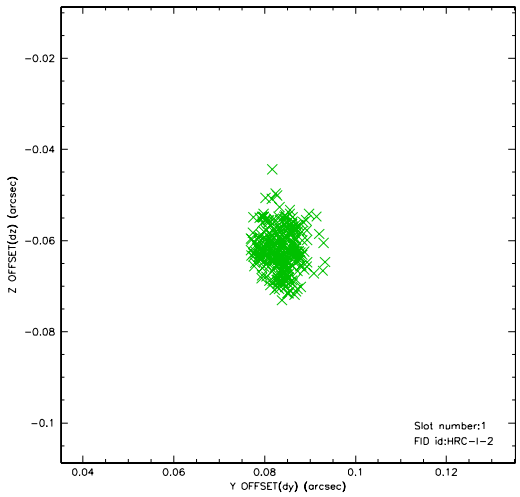
2.5.1 Slot 0

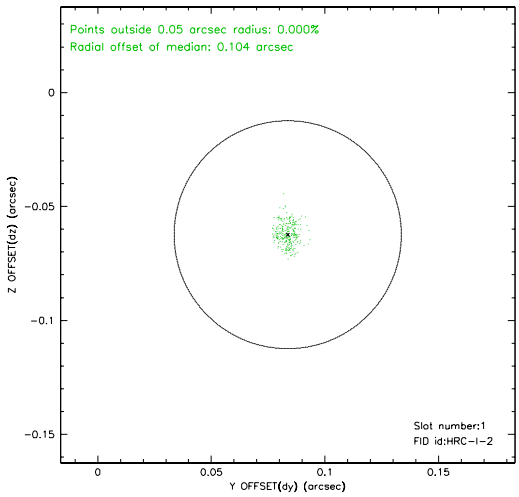


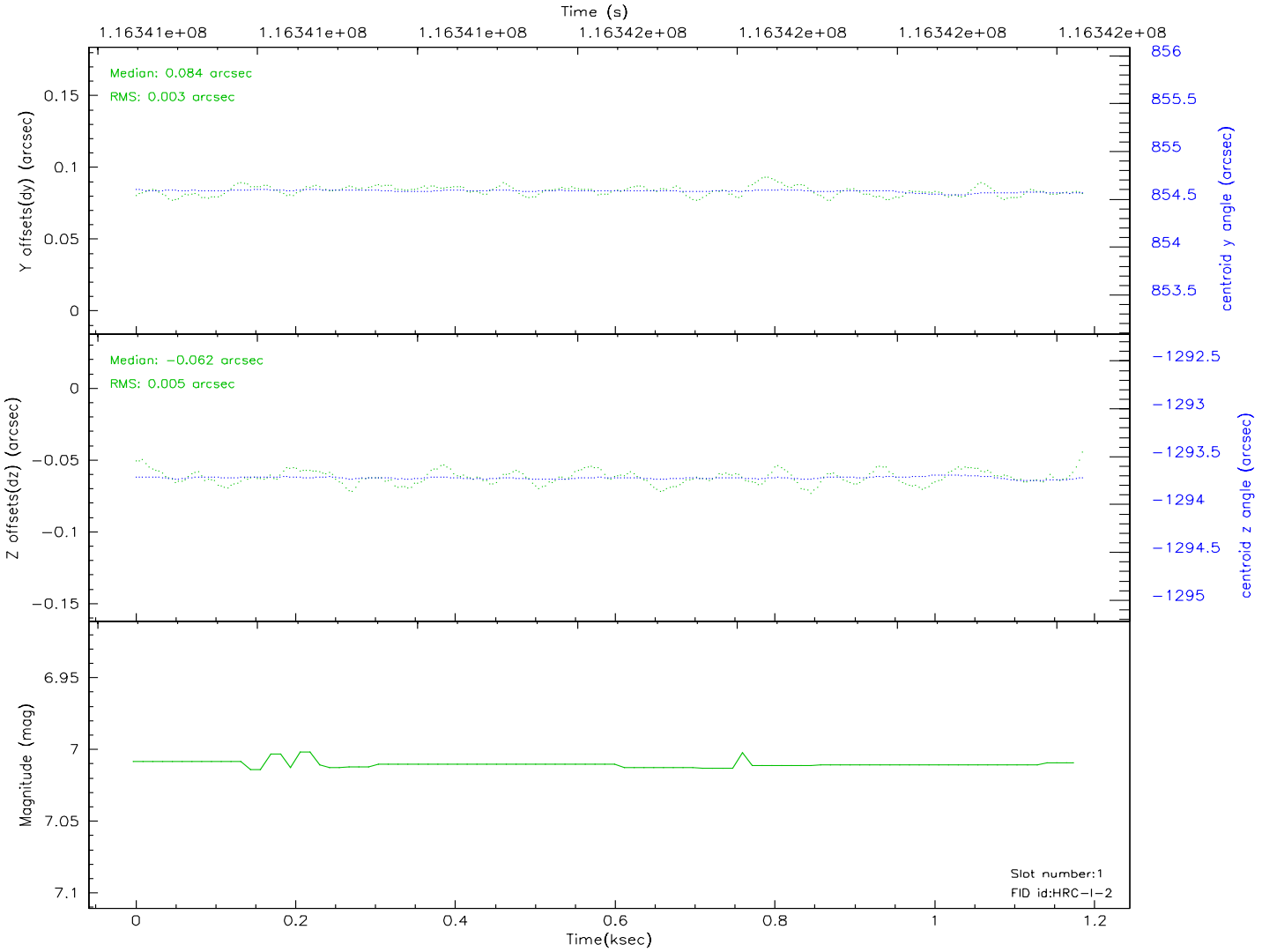




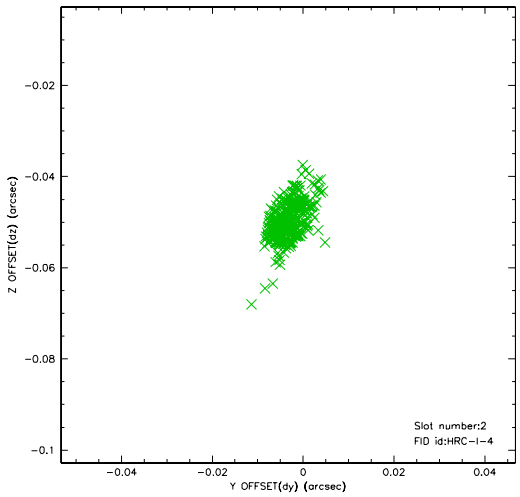
2.5.2 Slot 1

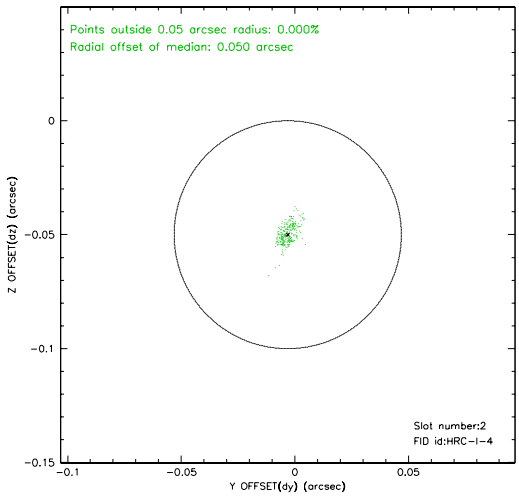

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-I-2

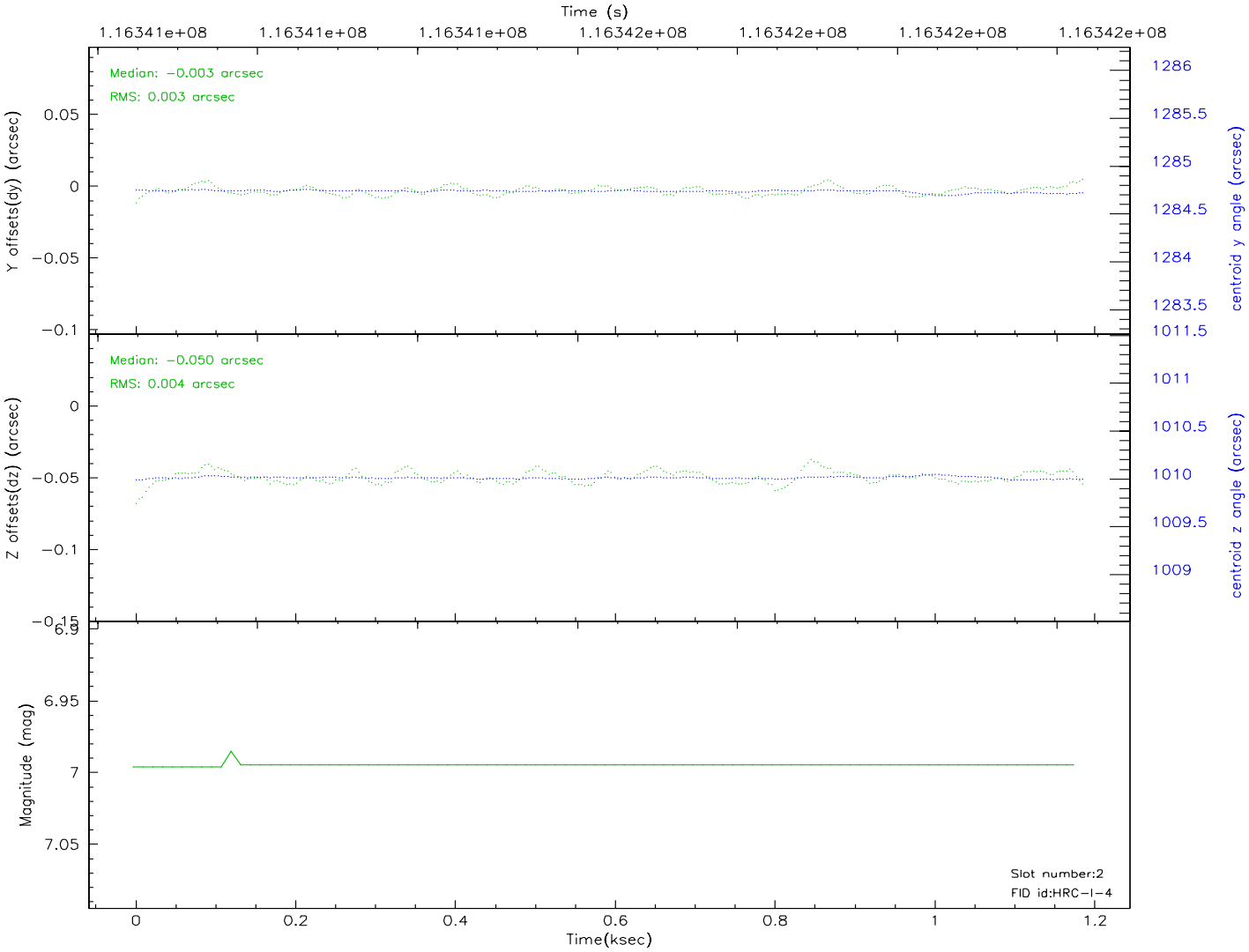

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.104 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-I-2


Time (s)
Median: 0.084 arcsec
RMS: 0.003 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.062 arcsec
RMS: 0.005 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:HRC-I-2
Time(ksec)

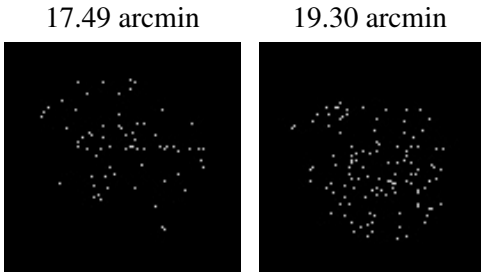
2.5.3 Slot 2


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


Time (s)
Median: −0.003 arcsec
RMS: 0.003 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.050 arcsec
RMS: 0.004 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:2
FID id:HRC-I-4
Time(ksec)

3 Point Sources



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	1.19

A.2 Comments

```
Window constraint not 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.
```