V&V Reference Report
L2 ASCDS Version : 7.6.10

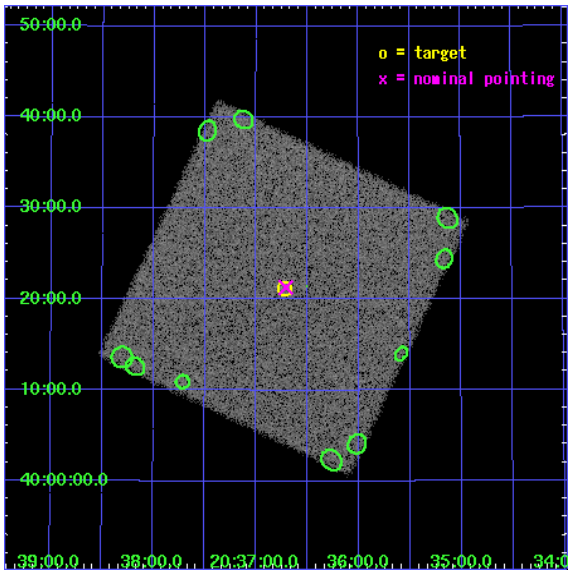
Observation 607 - L2 Version 5
Chandra X-Ray Center

L2 Processing Date : Nov 20 2007

Contents

1 Front

seq_num	200032
obs_id	607
title	DIRECT HRC-I IMAGING OF THE COLLIDING WINDS SHOCK IN WR 147
observer	Dr Julian Pittard
object	WR 147
ra_targ	309.18125
dec_targ	40.352222
ra_nom	309.17739580374
dec_nom	40.35535502453
roll_nom	160.31978780572
revision	5
ontime	4893.6064304113
livetime	4870.2291969326
l2events	117425

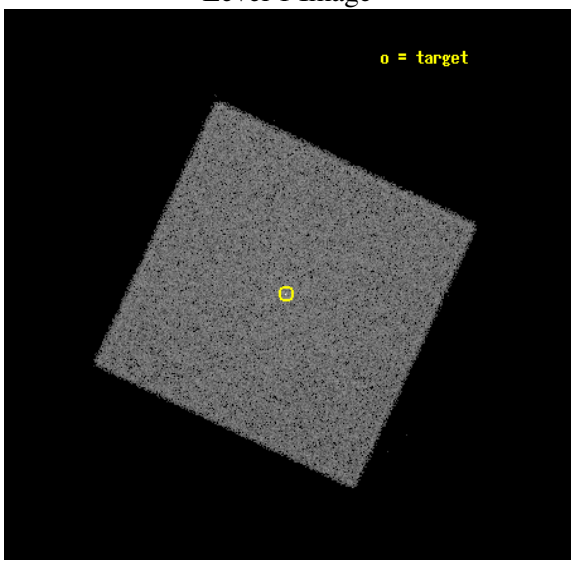


2 OBI

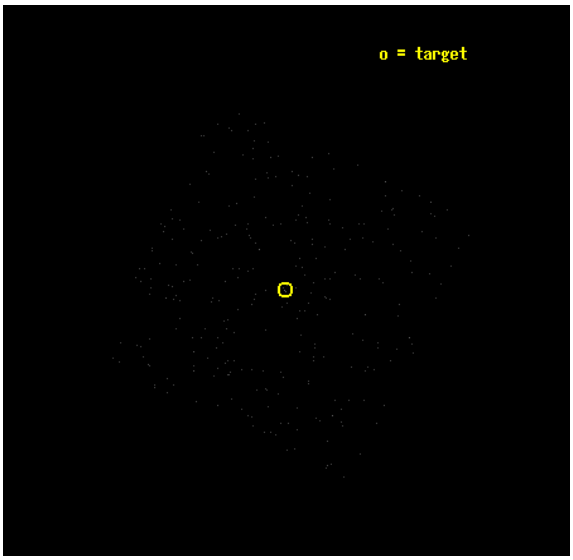
2.1 OBI

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	2007-11-20T12:51:08
revision	5

sched_exp_time	5000.000000
ontime	4893.6064304113
l1events	183007

2.1.3 Events

Level 1 Events

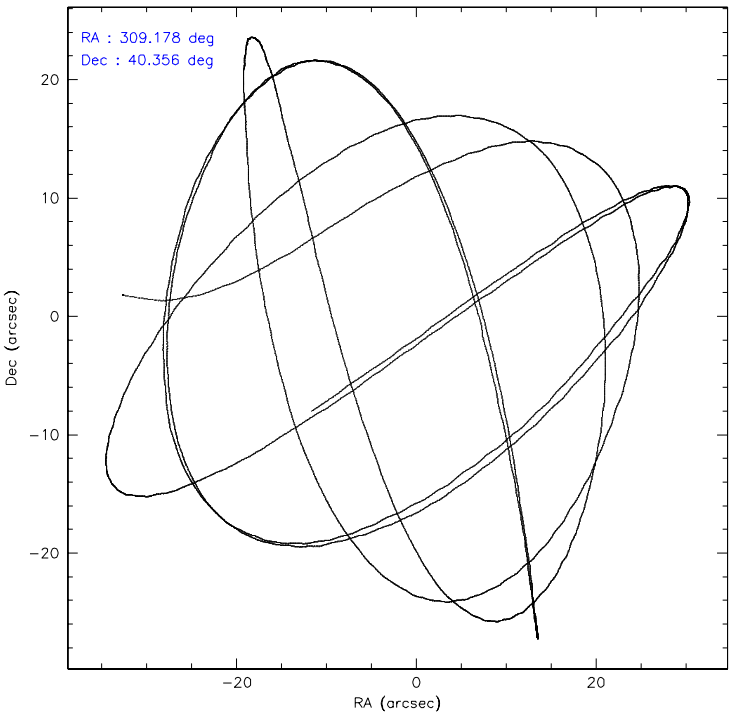
	segment 0
level 1 events	183007
rejected events	5648
rejected %	3%

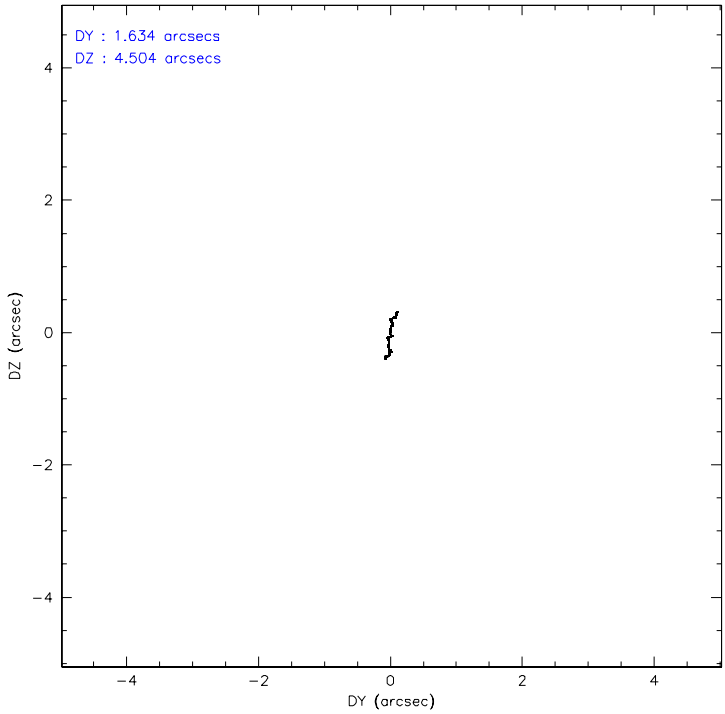
2.2 Compared Parameters

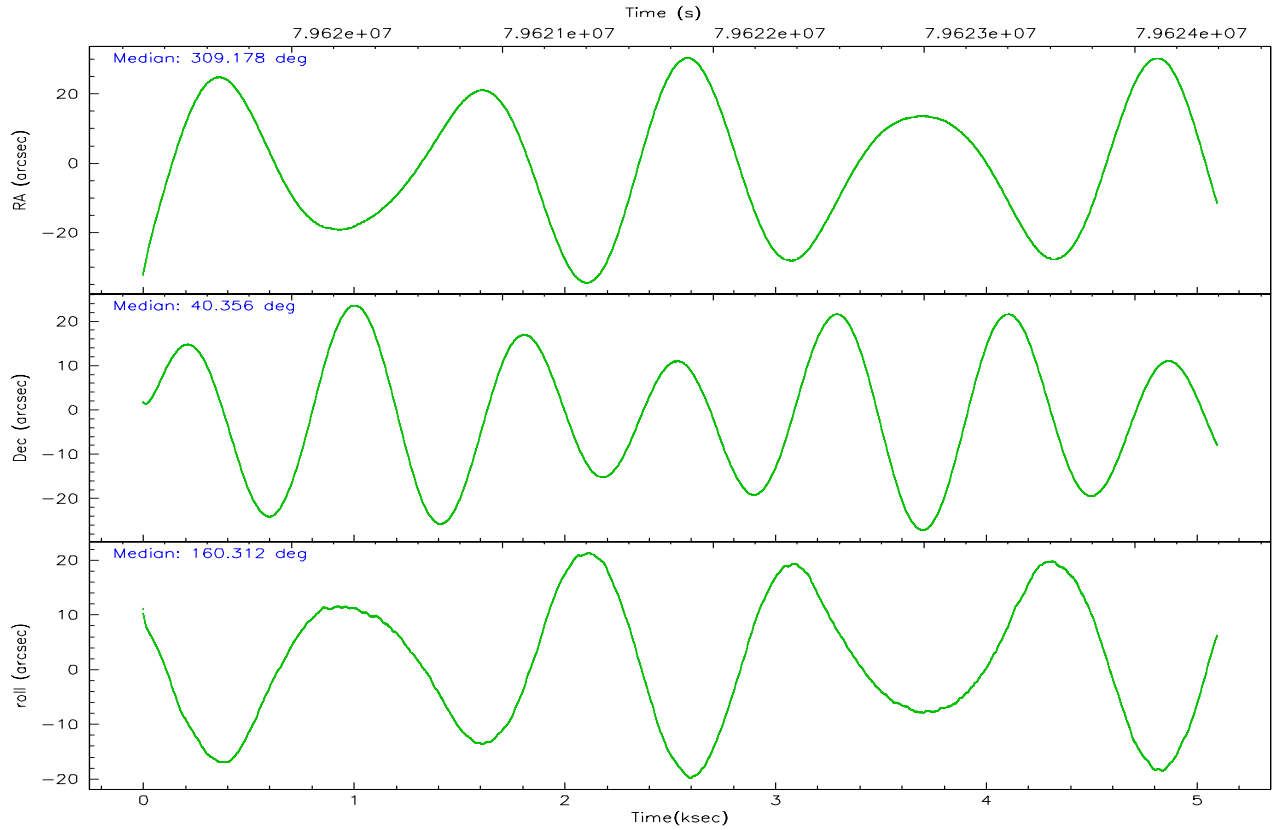
Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
Pointing RA	309.212037	309.1773958037414
Pointing Dec	40.360494	40.35535502453038
Pointing Roll	160.392848	160.3197878057171
SIM focus pos (mm)	-1.040293	-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	79619391.184000	79618275.80752
Observation start date	2000-07-10T12:28:47	2000-07-10T12:11:15
Observation end time	79624391.184000	79625358.557781
Observation end date	2000-07-10T13:52:07	2000-07-10T14:09:18

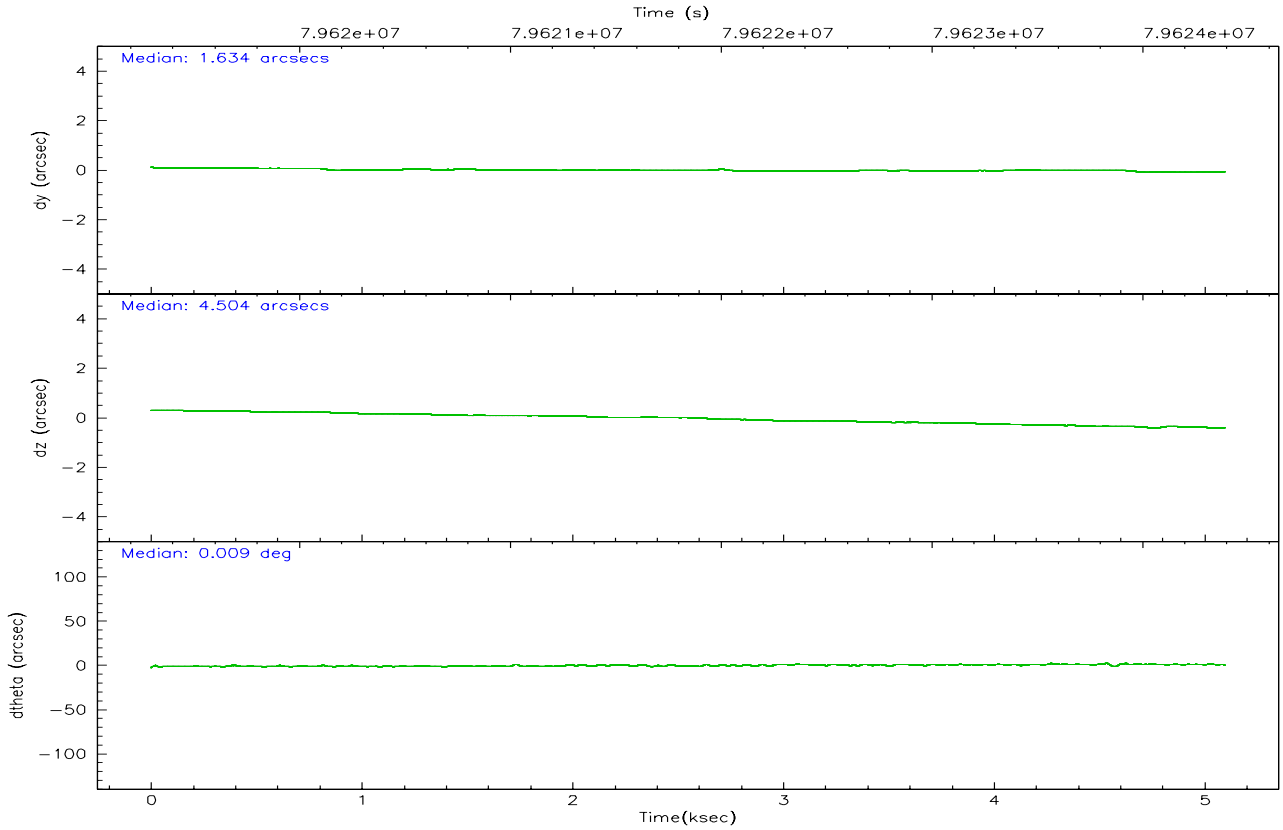
Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect


RA : 309.178 deg
Dec : 40.356 deg
20
10
0
−10
−20
Dec (arcsec)
−20
0
20
RA (arcsec)


DY : 1.634 arcsecs
DZ : 4.504 arcsecs
4
2
0
−2
−4
DZ (arcsec)
−4
−2
0
2
4
DY (arcsec)


Time (s)
7.962e+07
7.9621e+07
7.9622e+07
7.9623e+07
7.9624e+07
Median: 309.178 deg
RA (arcsec)
Median: 40.356 deg
Dec (arcsec)
Median: 160.312 deg
roll (arcsec)
Time(ksec)

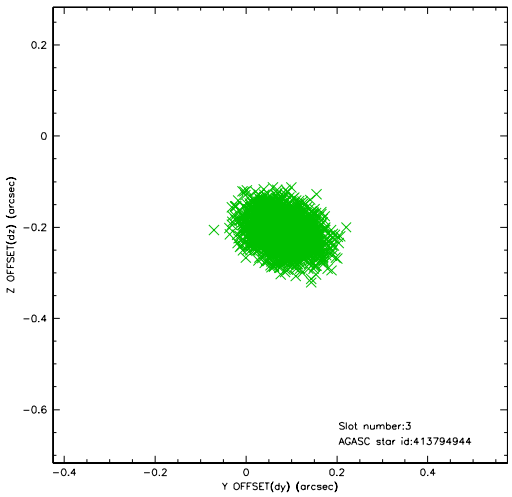

Time (s)
7.962e+07
7.9621e+07
7.9622e+07
7.9623e+07
7.9624e+07
Median: 1.634 arcsecs
dy (arcsec)
Median: 4.504 arcsecs
dz (arcsec)
Median: 0.009 deg
dtheta (arcsec)
Time(ksec)

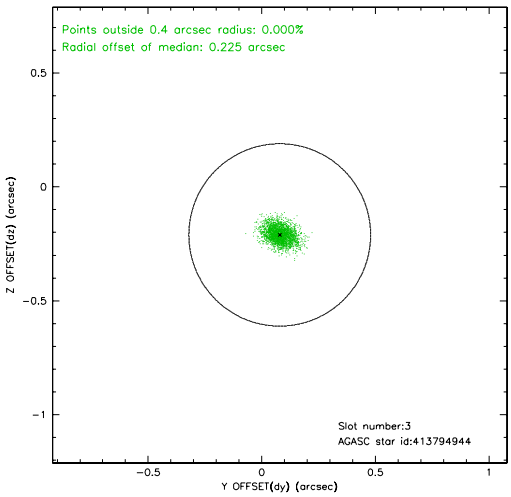
Slot Statistics

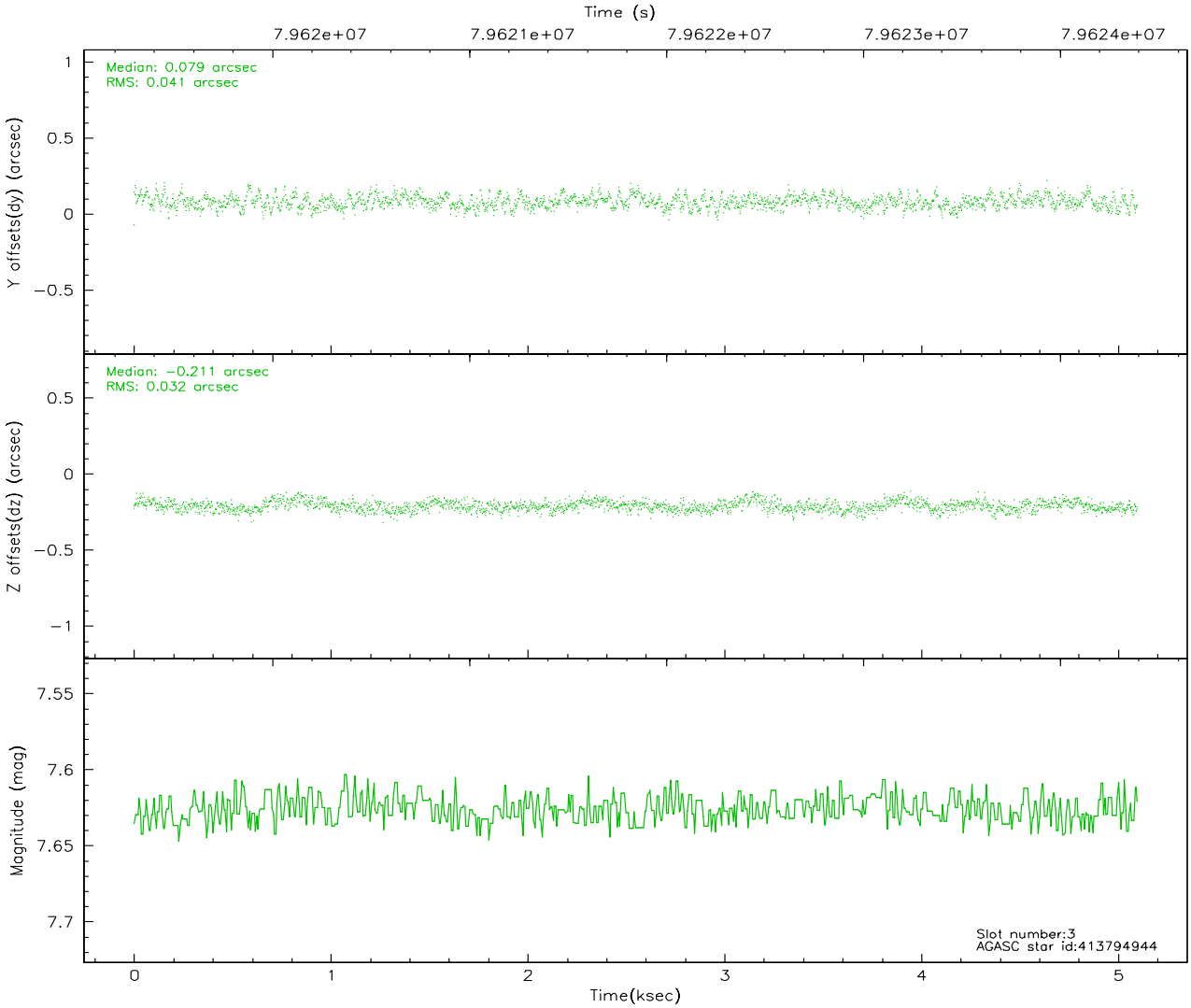
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.97	1244	0.035	0.048	0.010	0.015	0.000000	0.000000	-757.04	-1292.19
1	FID	HRC-I-3	7.06	1244	0.045	-0.096	0.008	0.014	0.000000	0.000000	-1186.13	1011.19
2	FID	HRC-I-4	7.01	1244	0.034	-0.042	0.009	0.016	0.000000	0.000000	1284.80	1010.70
3	GUIDE	413794944	7.63	2488	0.079	-0.211	0.056	0.092	309.554319	39.690543	-1701.41	1952.81
4	GUIDE	413798232	8.30	2488	-0.056	0.195	0.080	0.129	309.116117	41.044272	1071.81	-2229.34
5	GUIDE	413799472	8.63	2488	-0.094	-0.115	0.092	0.140	308.718205	39.893476	722.85	2038.16
6	GUIDE	415508568	9.00	2487	0.068	0.213	0.072	0.116	310.015866	40.581838	-1798.25	-1495.66
7	GUIDE	413800112	9.64	2486	0.008	-0.080	0.119	0.192	308.445400	39.942770	1491.53	2118.76

2.4 Star Slots

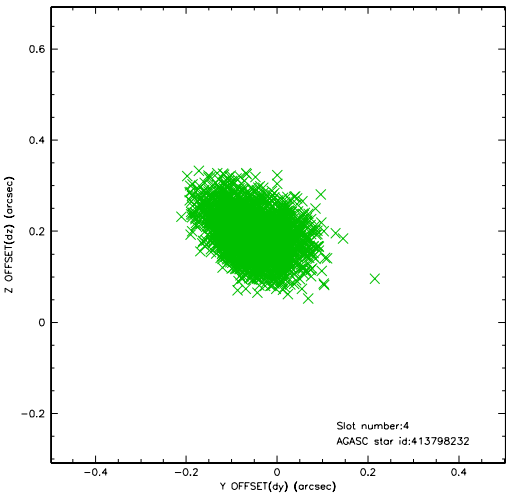
2.4.1 Slot 3

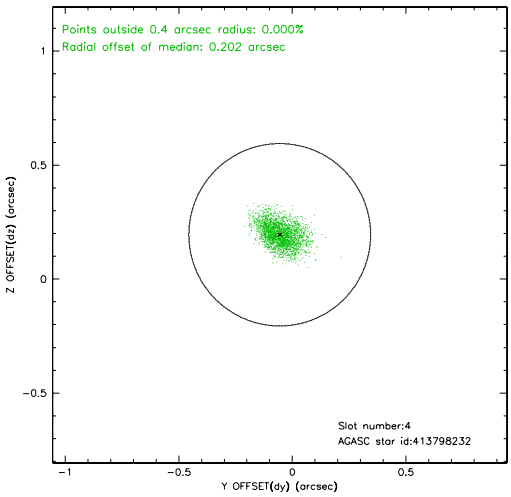


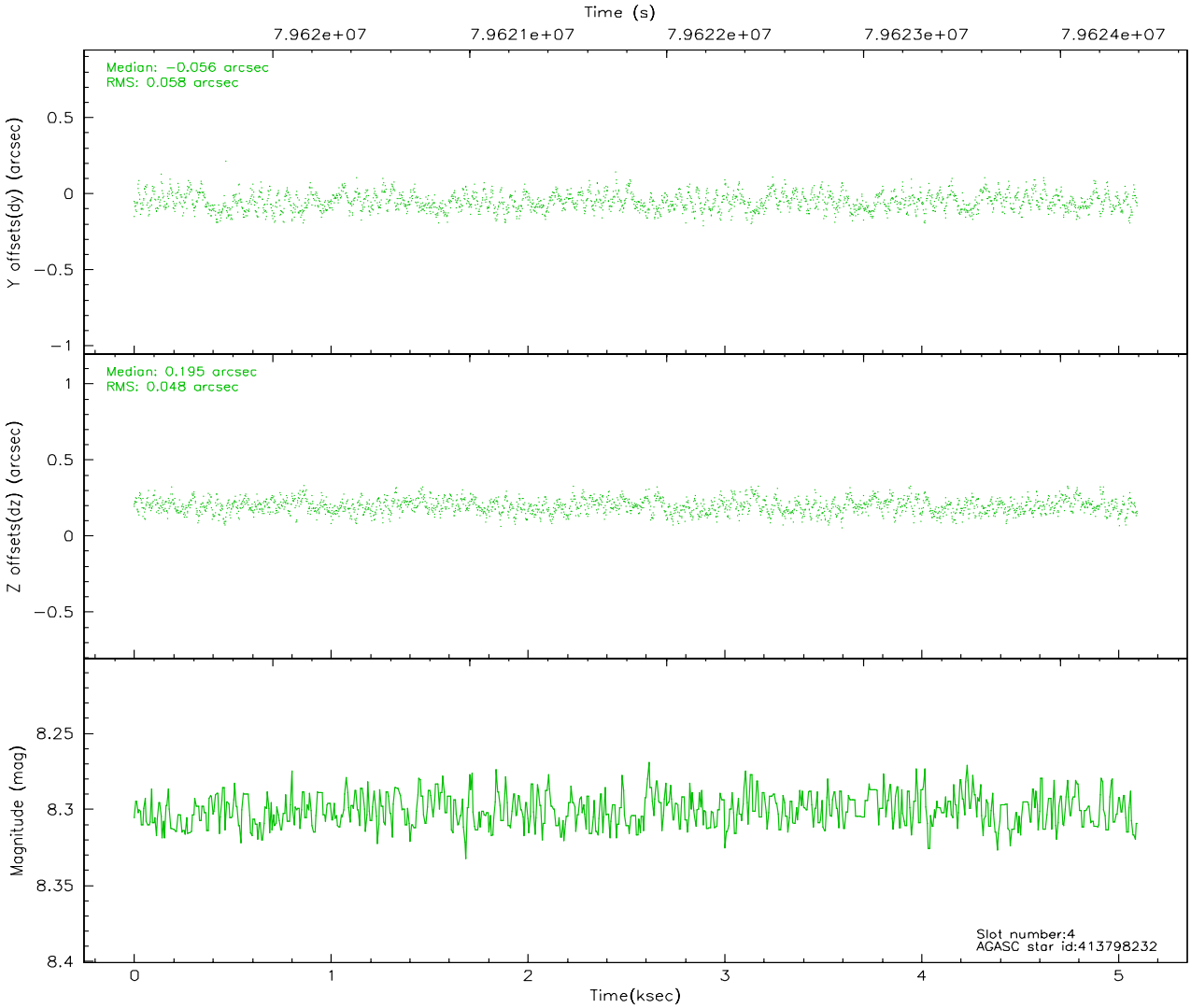




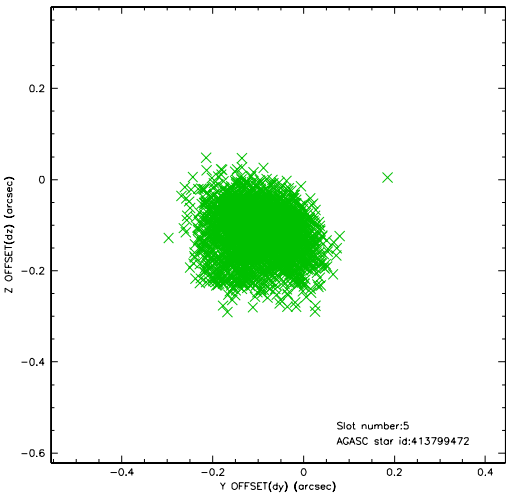
2.4.2 Slot 4

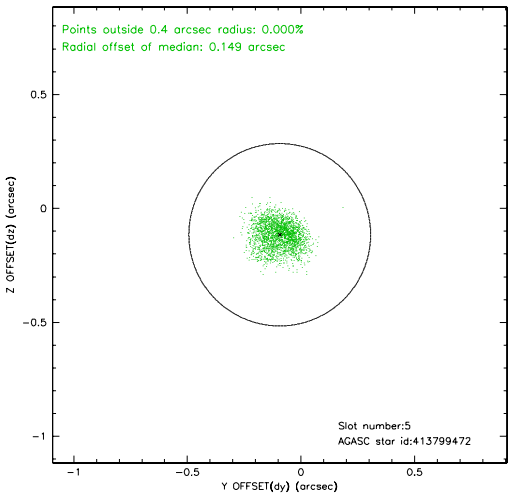

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:413798232

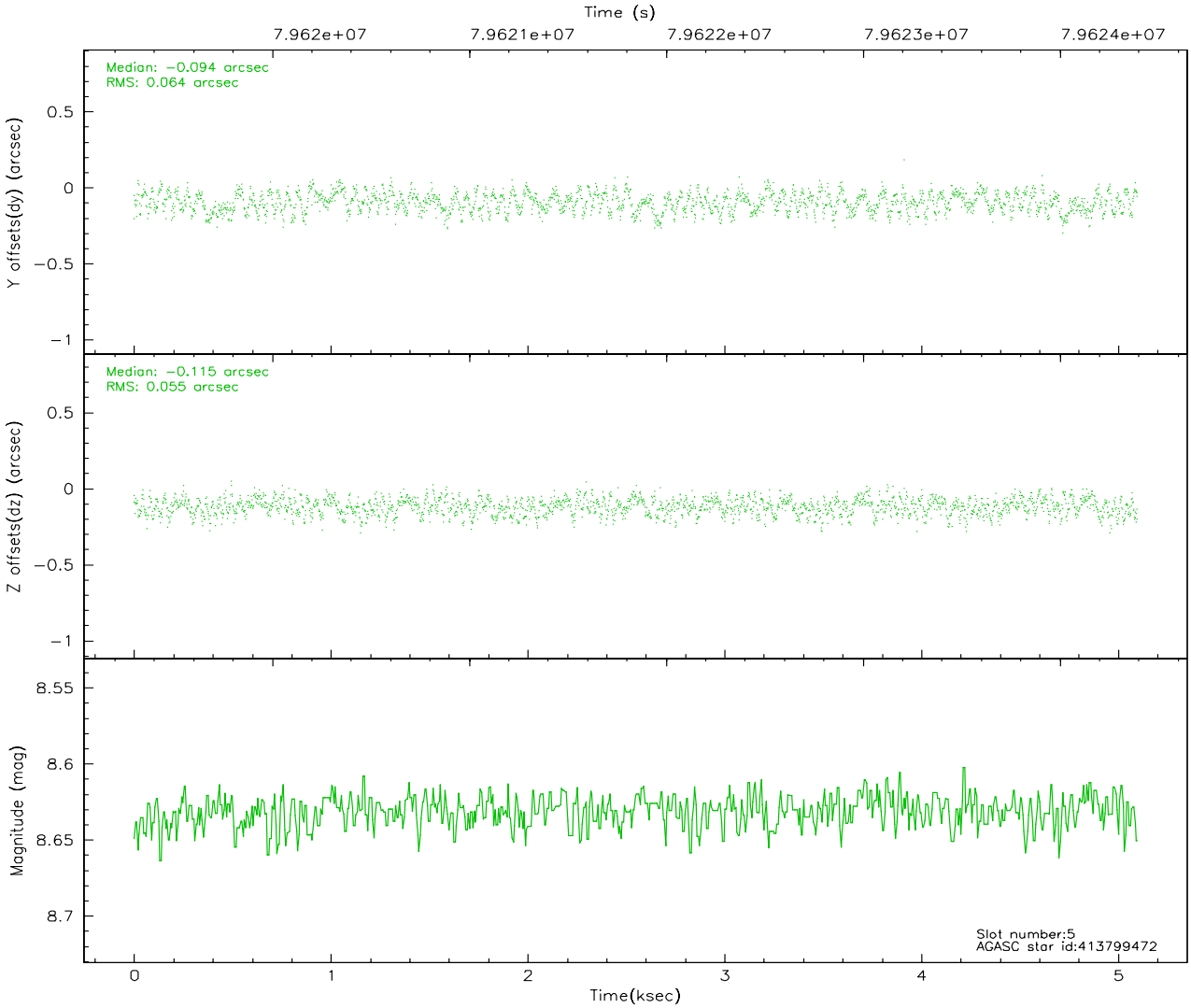

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.202 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:4
AGASC star id:413798232


Time (s)
7.962e+07
7.9621e+07
7.9622e+07
7.9623e+07
7.9624e+07
Median: −0.056 arcsec
RMS: 0.058 arcsec
Y offsets(dy) (arcsec)
Median: 0.195 arcsec
RMS: 0.048 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:4
AGASC star id:413798232
Time(ksec)

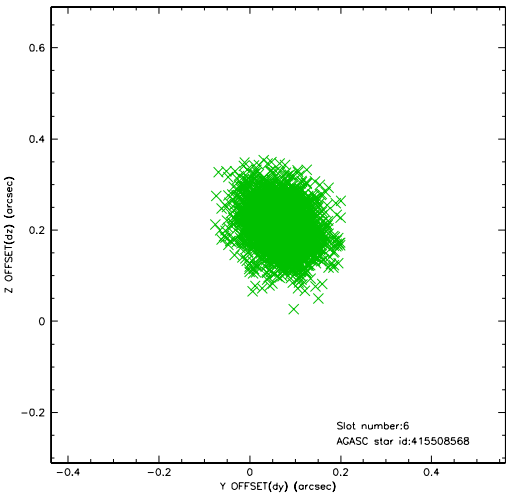
2.4.3 Slot 5

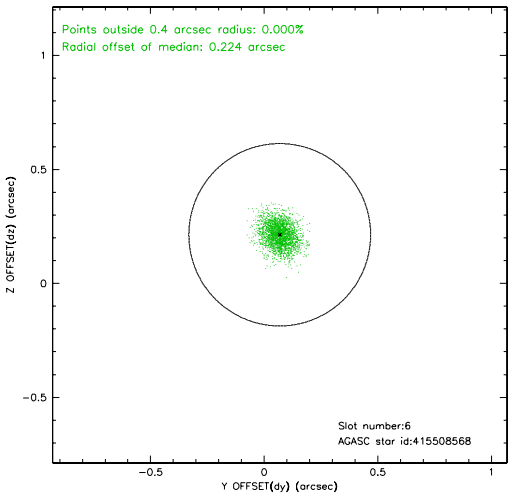

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:413799472

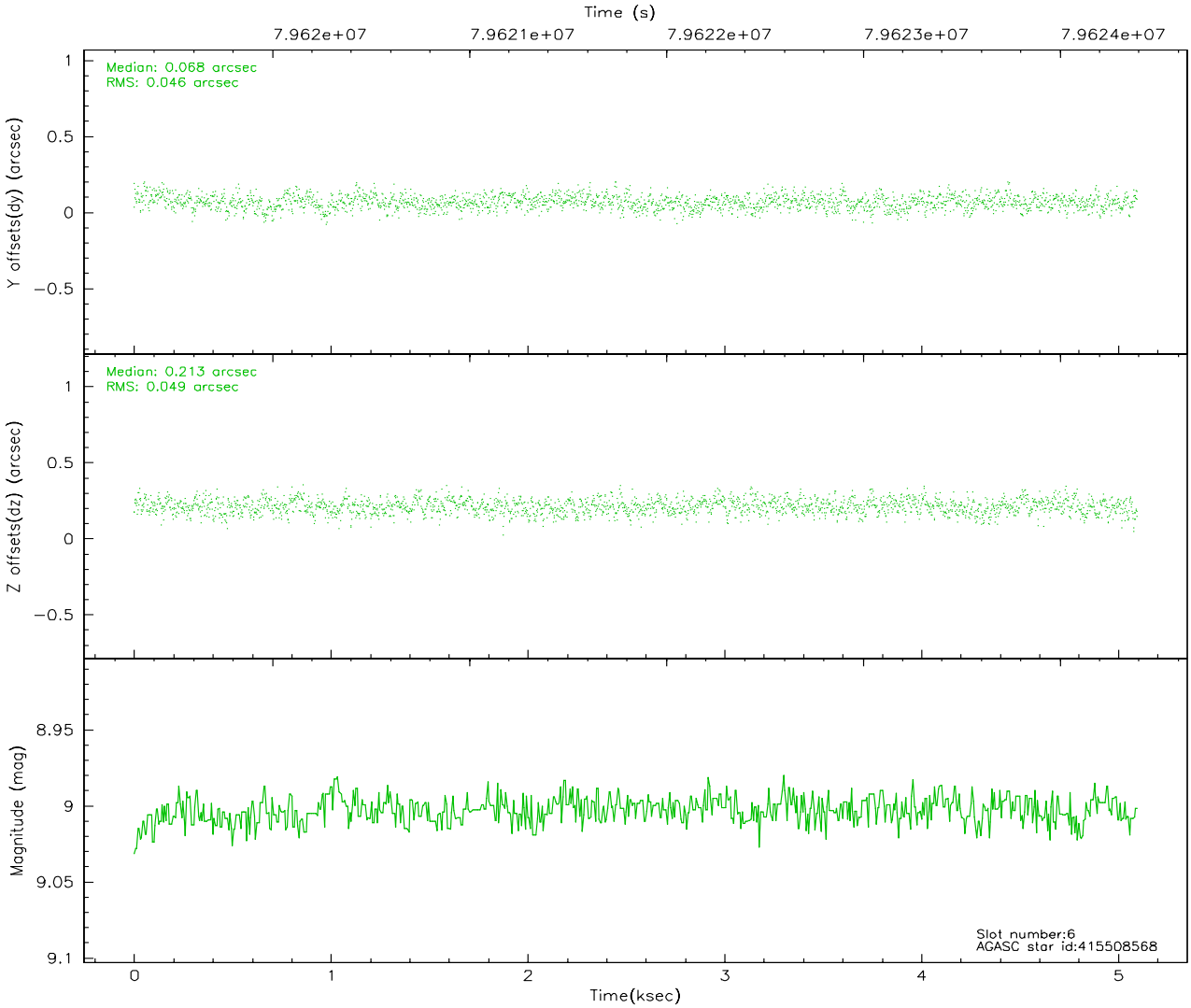

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.149 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:5
AGASC star id:413799472


Time (s)
7.962e+07
7.9621e+07
7.9622e+07
7.9623e+07
7.9624e+07
Median: −0.094 arcsec
RMS: 0.064 arcsec
Y offsets(dy) (arcsec)
Median: −0.115 arcsec
RMS: 0.055 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:5
AGASC star id:413799472
Time(ksec)

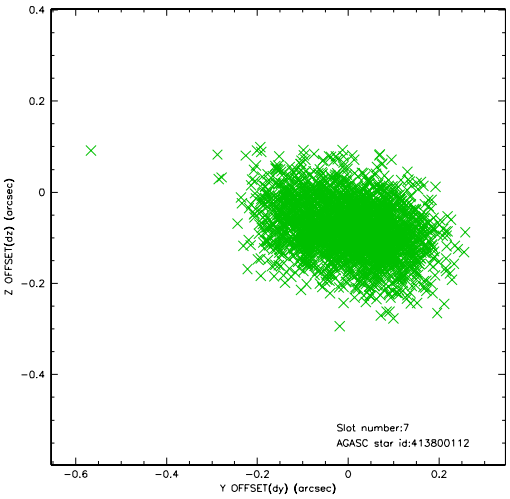
2.4.4 Slot 6

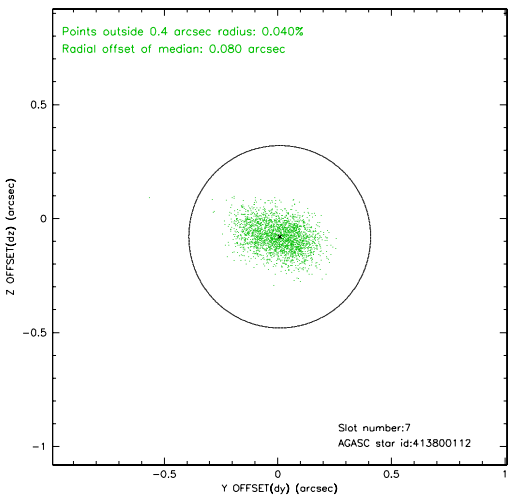

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:415508568

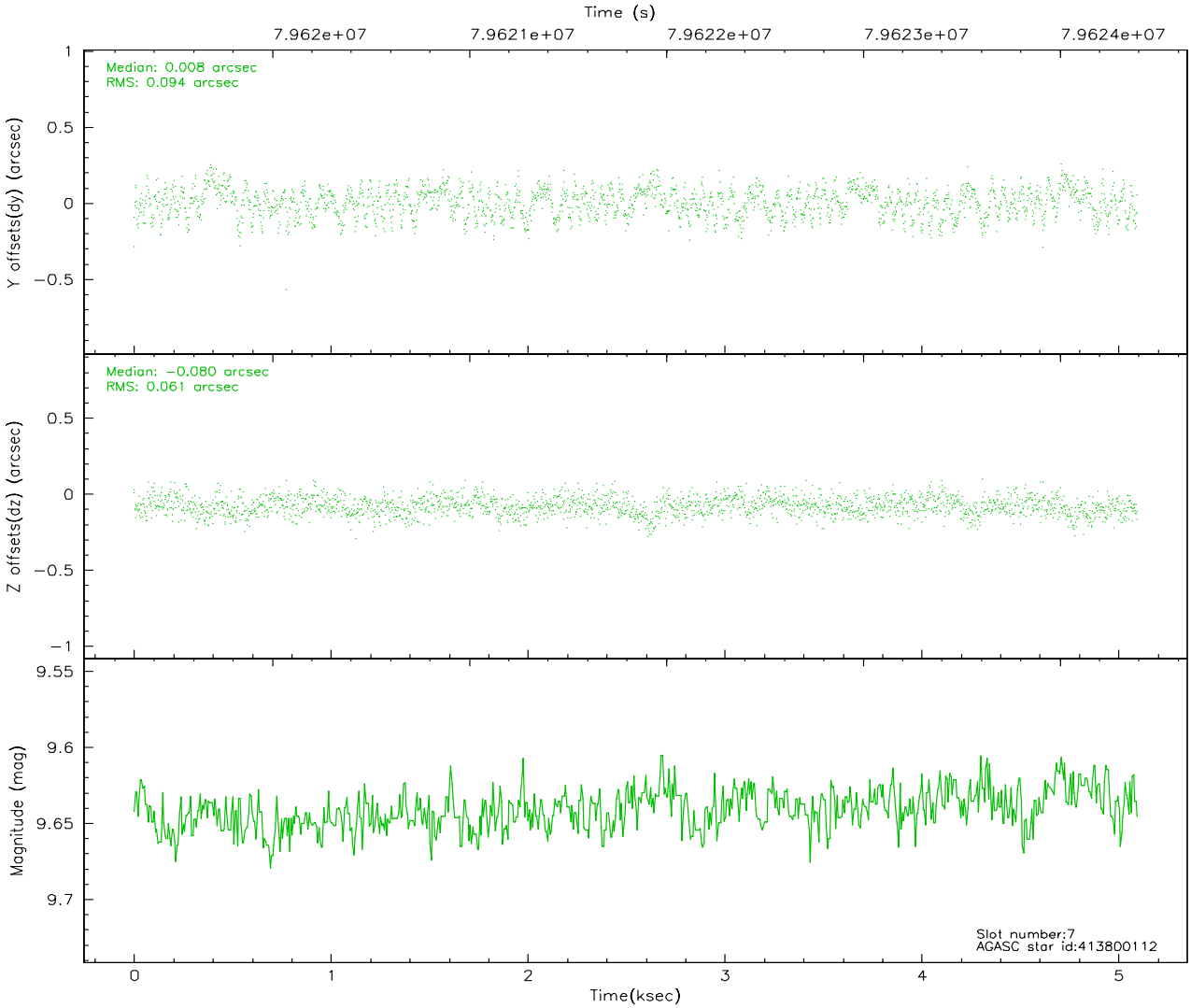

Points outside 0.4 arcsec radius: 0.000%
Radial offset of median: 0.224 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:6
AGASC star id:415508568


Time (s)
7.962e+07
7.9621e+07
7.9622e+07
7.9623e+07
7.9624e+07
Median: 0.068 arcsec
RMS: 0.046 arcsec
Y offsets(dy) (arcsec)
Median: 0.213 arcsec
RMS: 0.049 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:6
AGASC star id:415508568
Time(ksec)

2.4.5 Slot 7

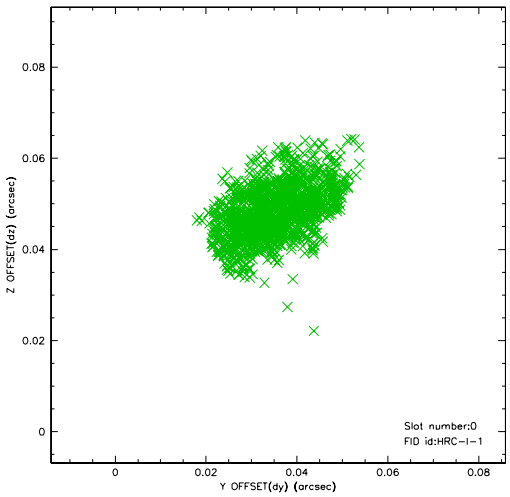

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:413800112

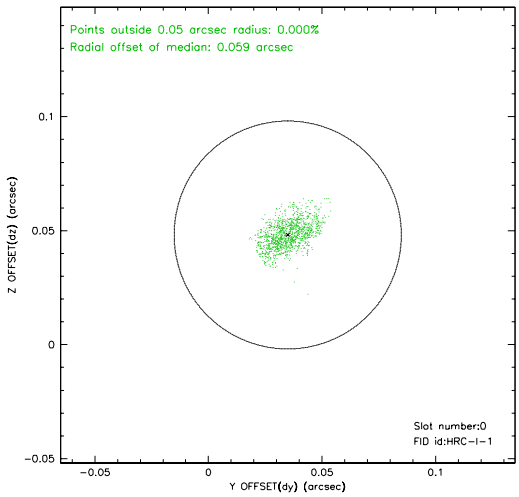

Points outside 0.4 arcsec radius: 0.040%
Radial offset of median: 0.080 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:7
AGASC star id:413800112

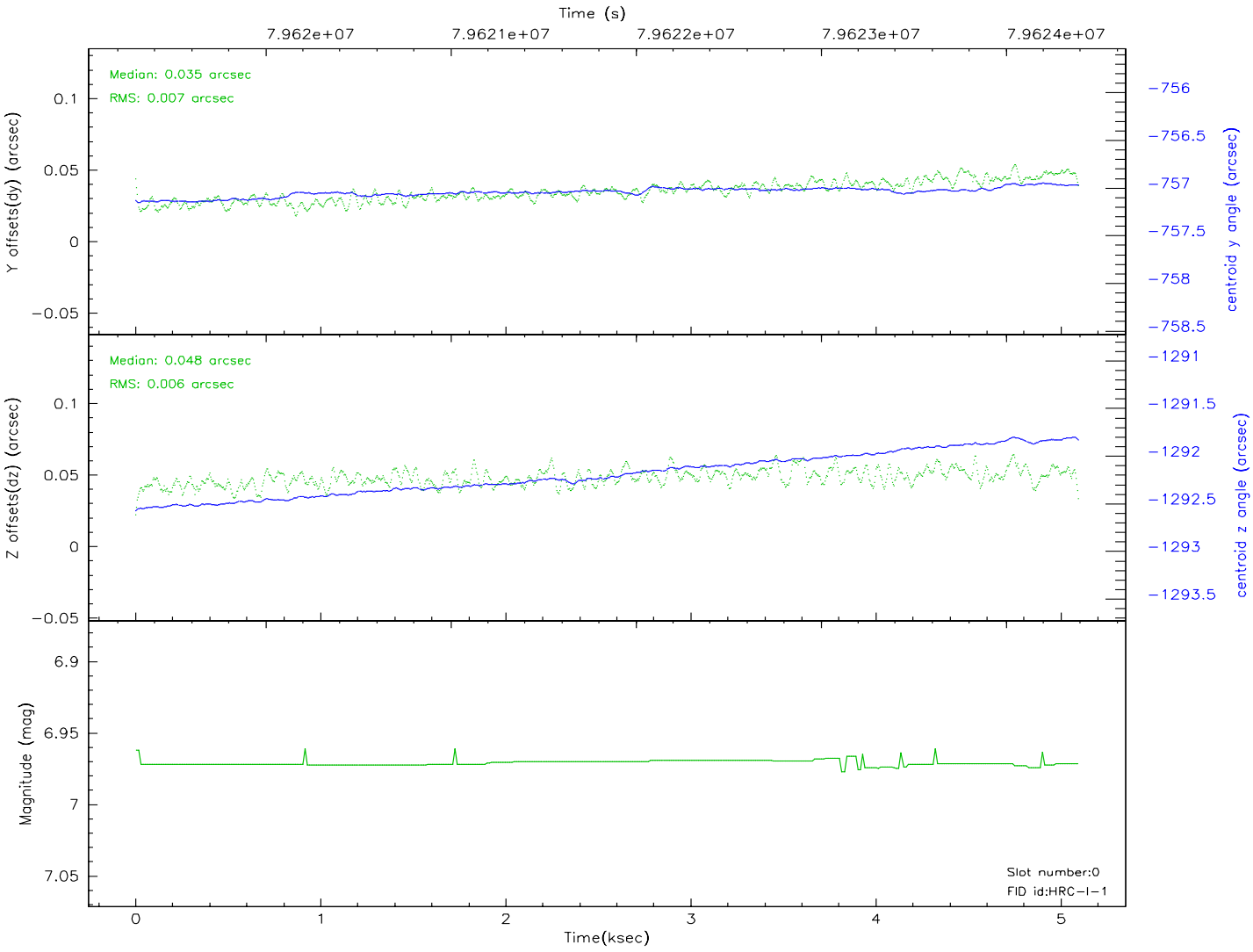

Time (s)
7.962e+07
7.9621e+07
7.9622e+07
7.9623e+07
7.9624e+07
Median: 0.008 arcsec
RMS: 0.094 arcsec
Y offsets(dy) (arcsec)
Median: −0.080 arcsec
RMS: 0.061 arcsec
Z offsets(dz) (arcsec)
Magnitude (mag)
Slot number:7
AGASC star id:413800112
Time(ksec)

2.5 FID Slots

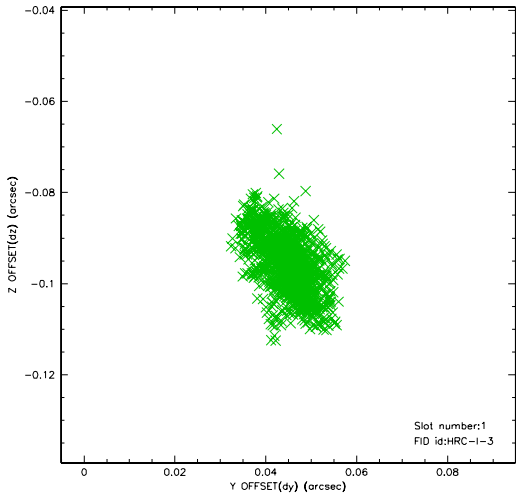
2.5.1 Slot 0

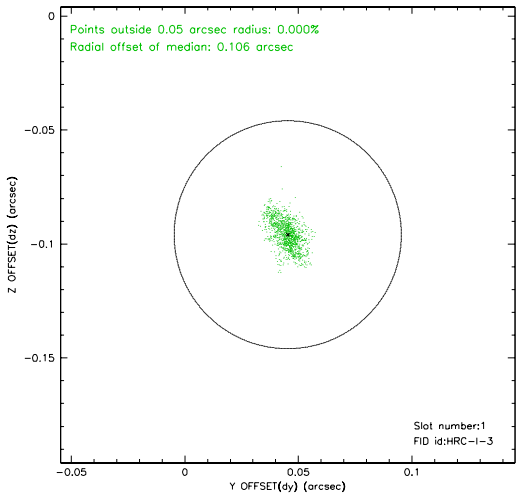


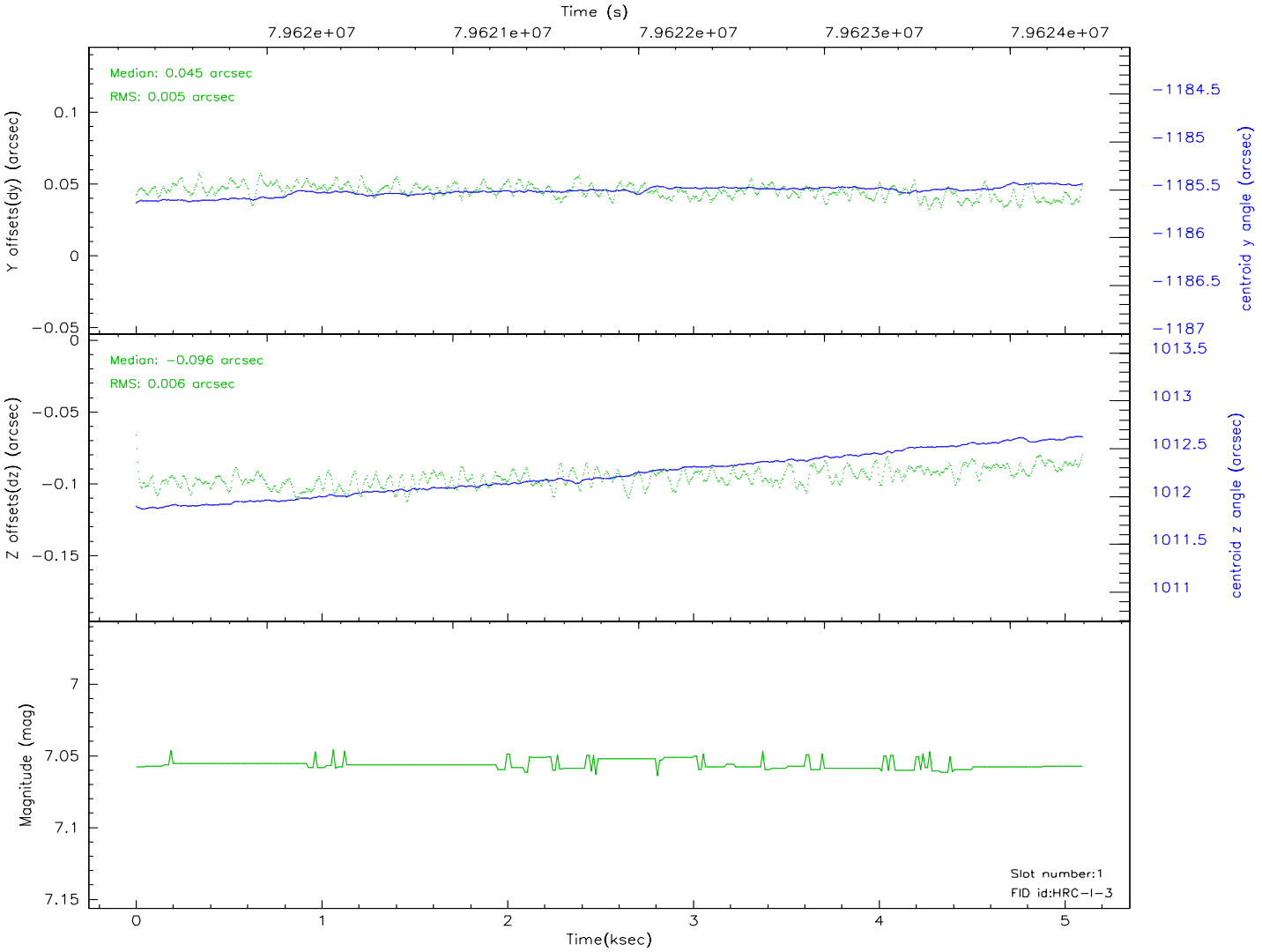




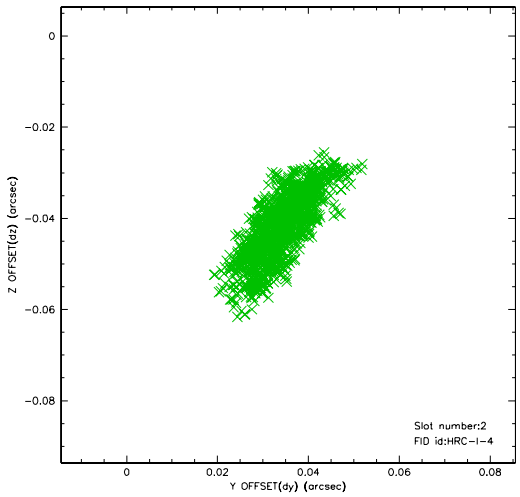
2.5.2 Slot 1

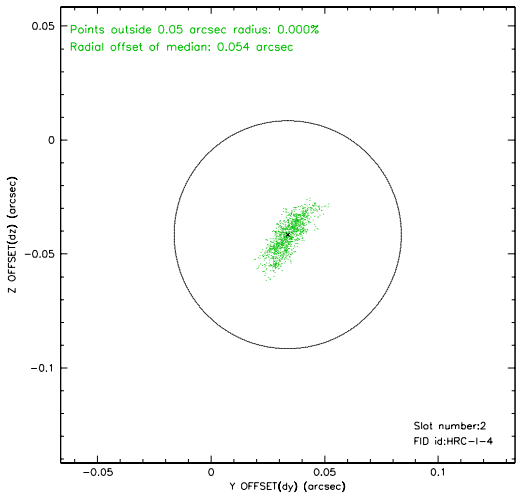

Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-I-3

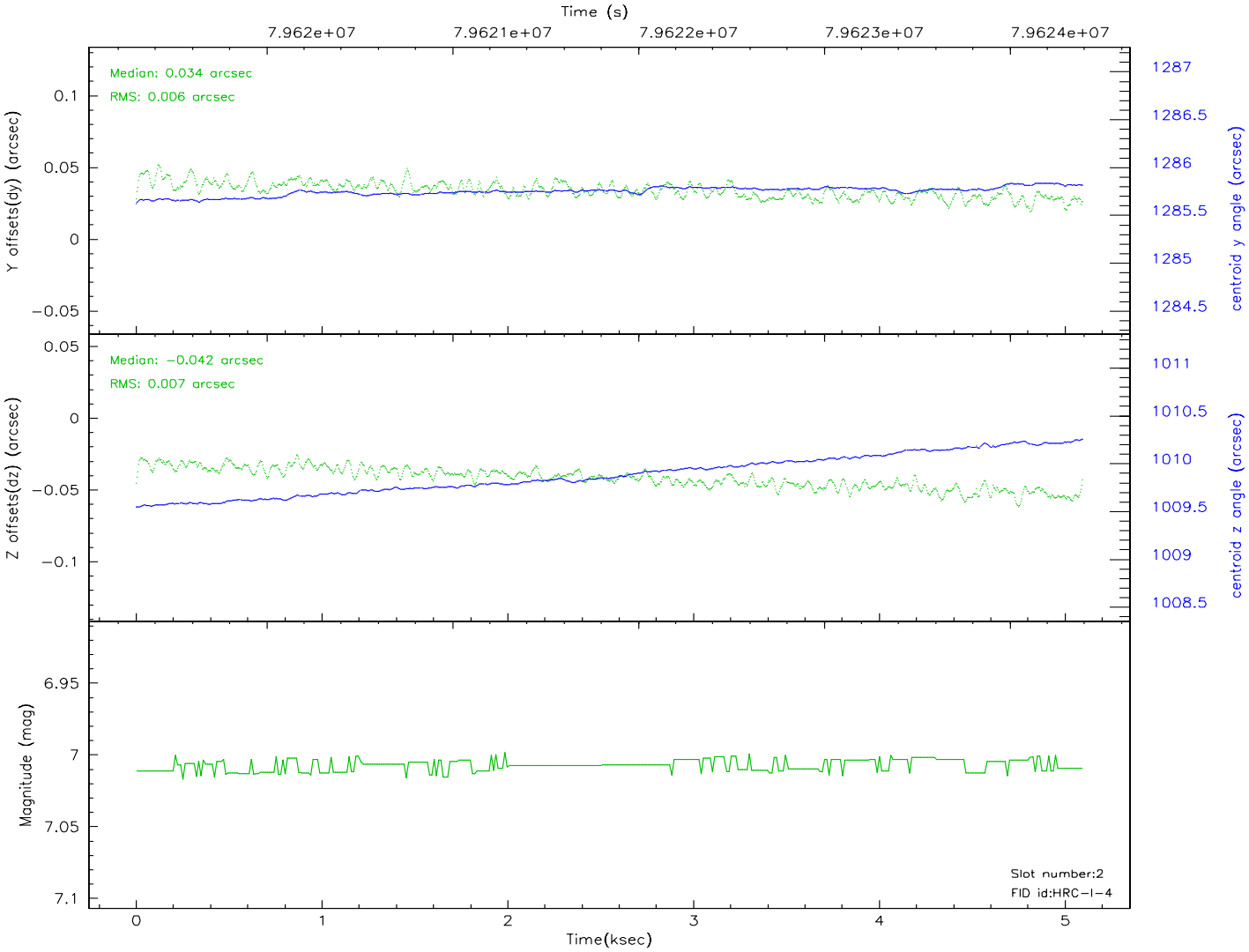

Points outside 0.05 arcsec radius: 0.000%
Radial offset of median: 0.106 arcsec
Z OFFSET(dz) (arcsec)
Y OFFSET(dy) (arcsec)
Slot number:1
FID id:HRC-I-3


Time (s)
7.962e+07
7.9621e+07
7.9622e+07
7.9623e+07
7.9624e+07
Median: 0.045 arcsec
RMS: 0.005 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.096 arcsec
RMS: 0.006 arcsec
Z offsets(dz) (arcsec)
centroid z angle (arcsec)
Magnitude (mag)
Slot number:1
FID id:HRC-I-3
Time(ksec)

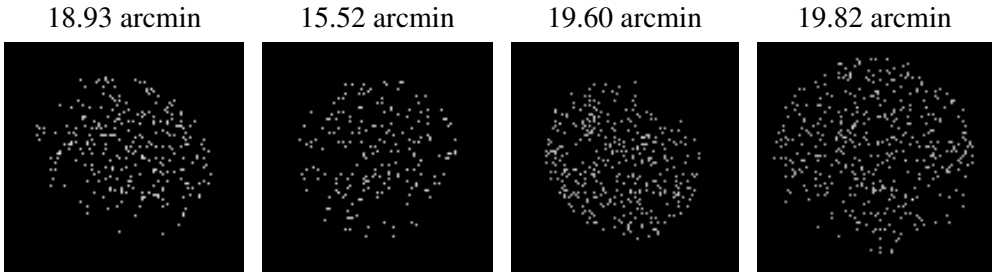
2.5.3 Slot 2


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


Time (s)
7.962e+07
7.9621e+07
7.9622e+07
7.9623e+07
7.9624e+07
Median: 0.034 arcsec
RMS: 0.006 arcsec
Y offsets(dy) (arcsec)
centroid y angle (arcsec)
Median: −0.042 arcsec
RMS: 0.007 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	Beth Sundheim
V&V Date (YYYY-MM-DD)	2007.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.891

A.2 Comments

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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.
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