# summary for network NT14

timeperiod chosen: from 2025-03-04-00:00:00 until 2025-03-04-23:59:59

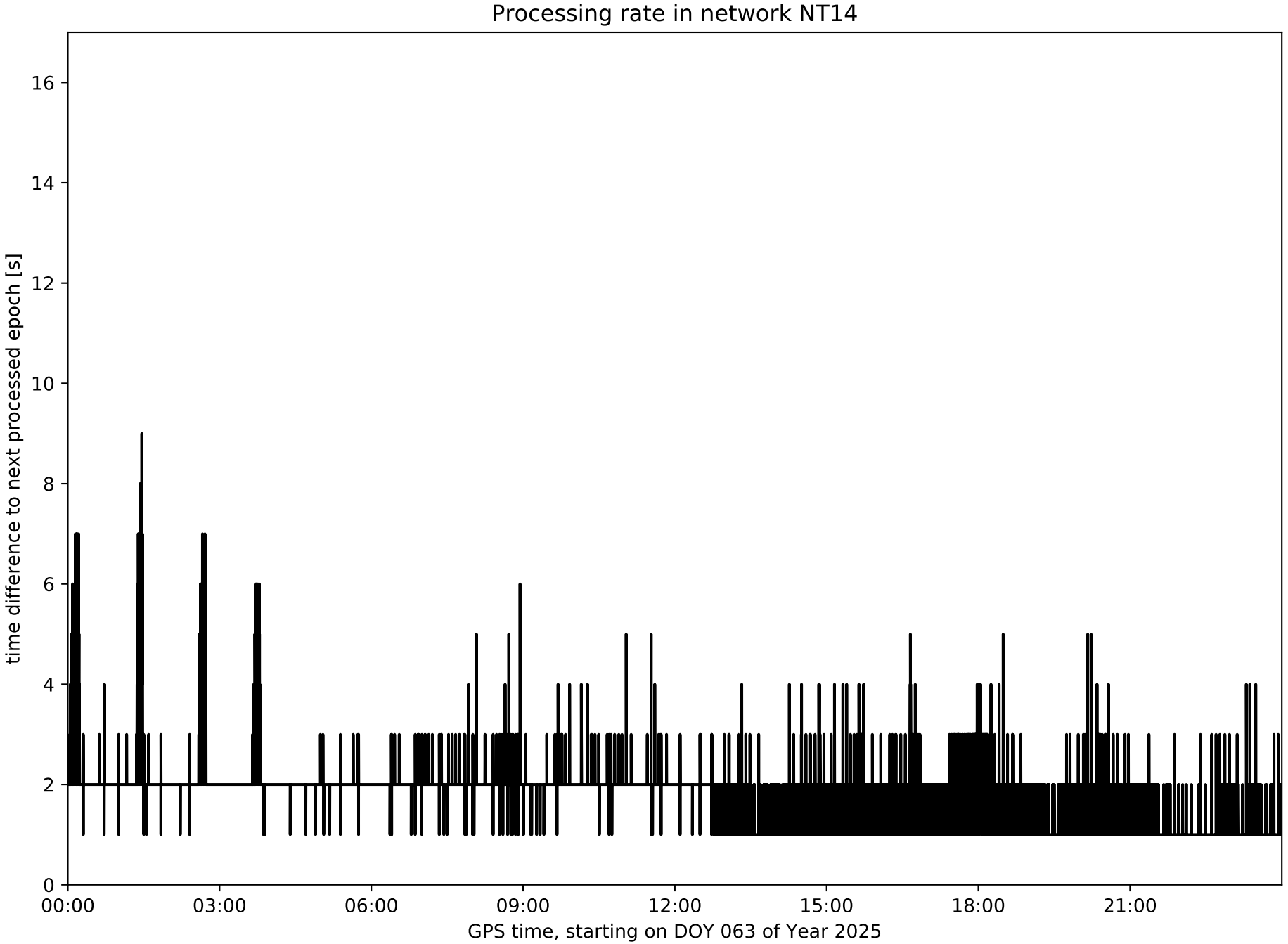
average update rate (durations larger than 15 seconds considered as observation gap): 1.5 seconds

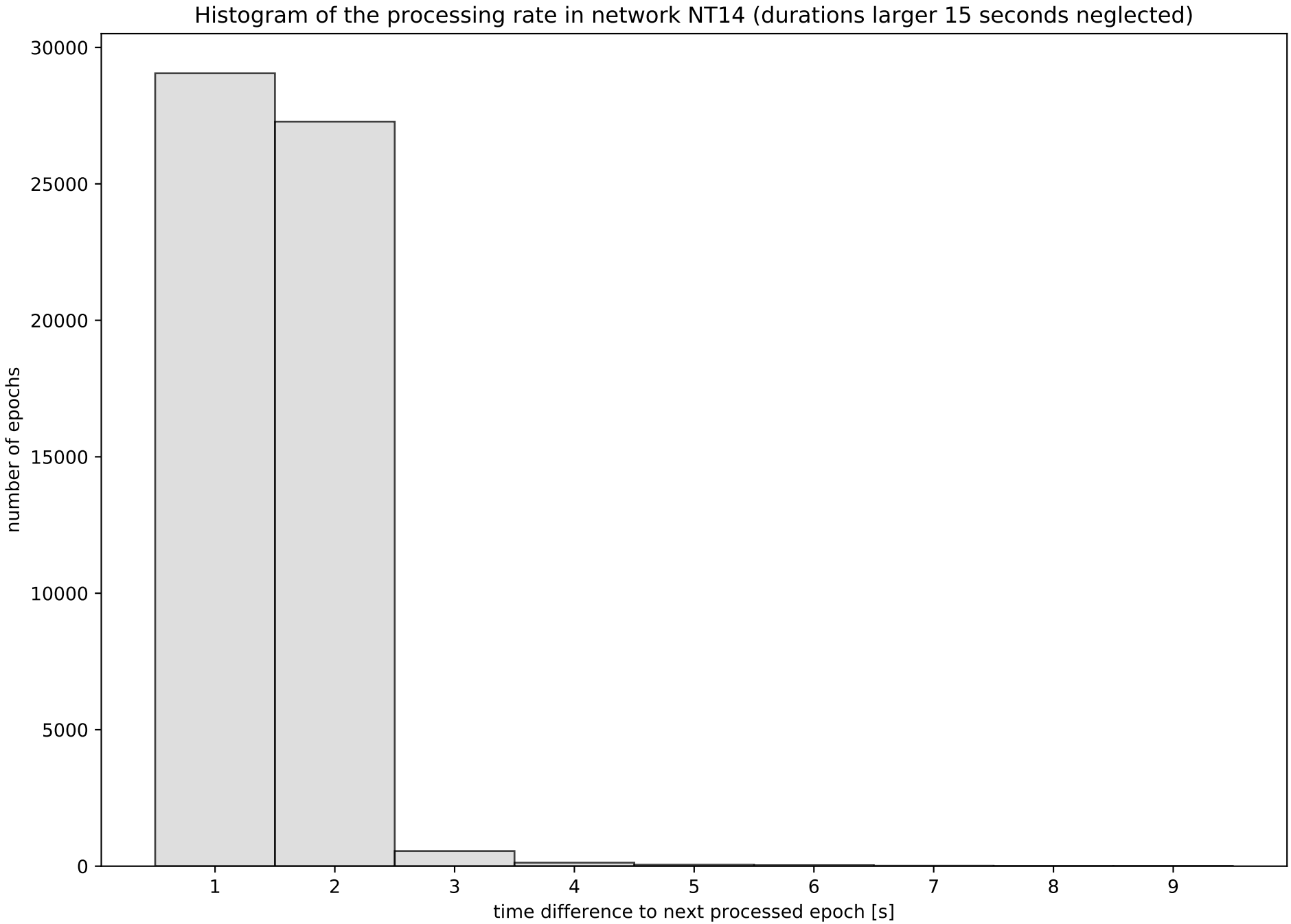
average fixing percentage with threshold set to 0.3: 91.0 percent

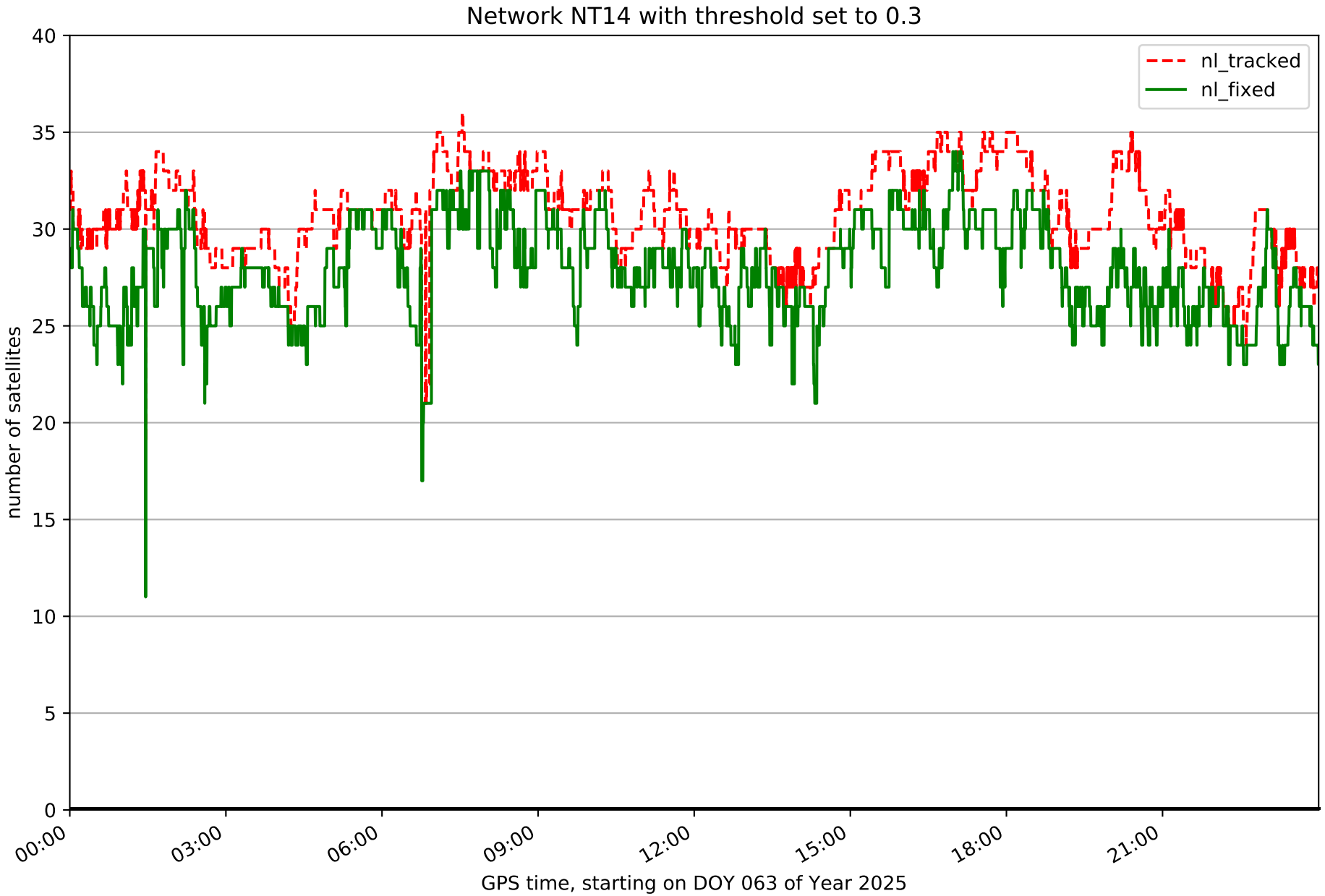
stations available: 13 of 13

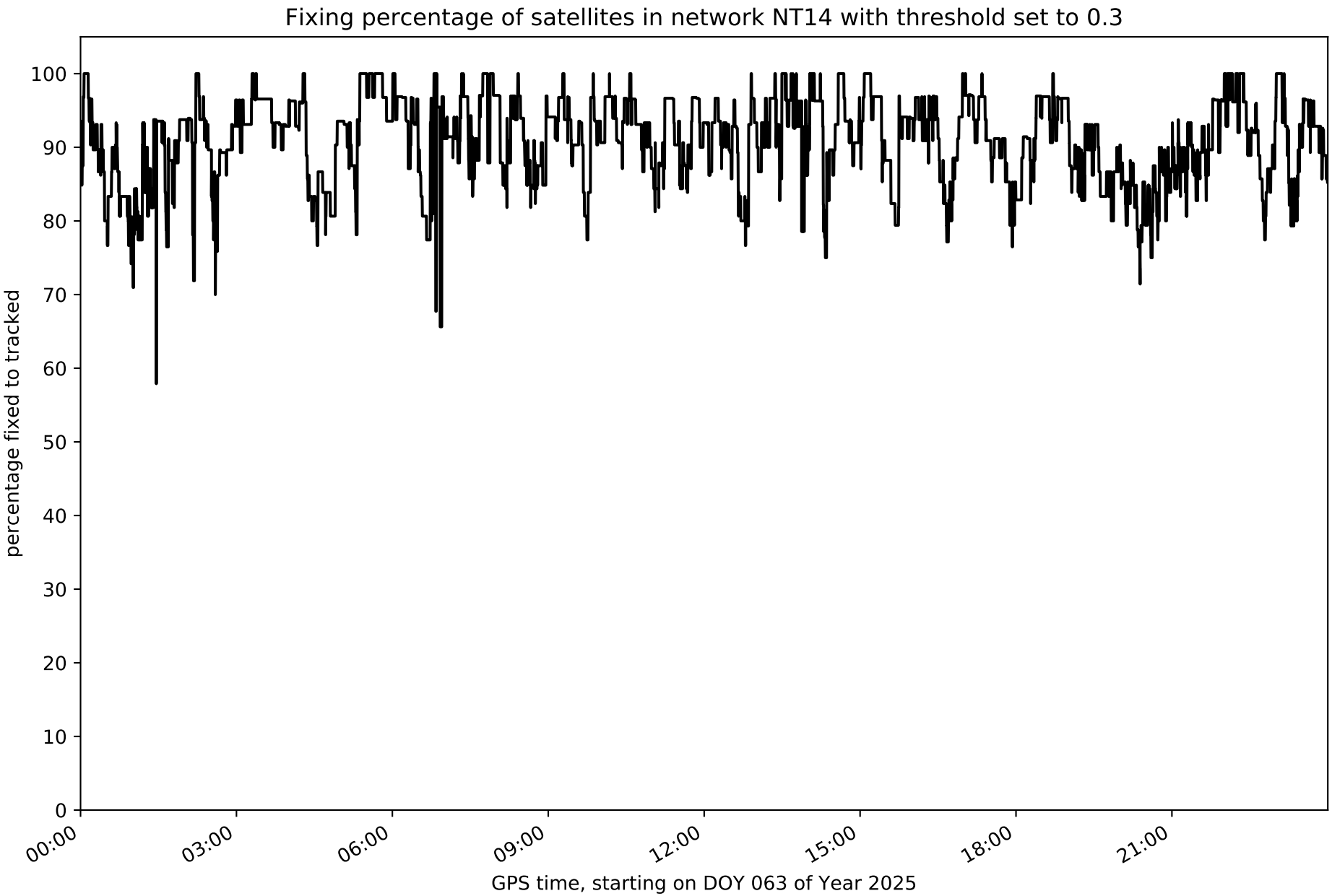
station information:

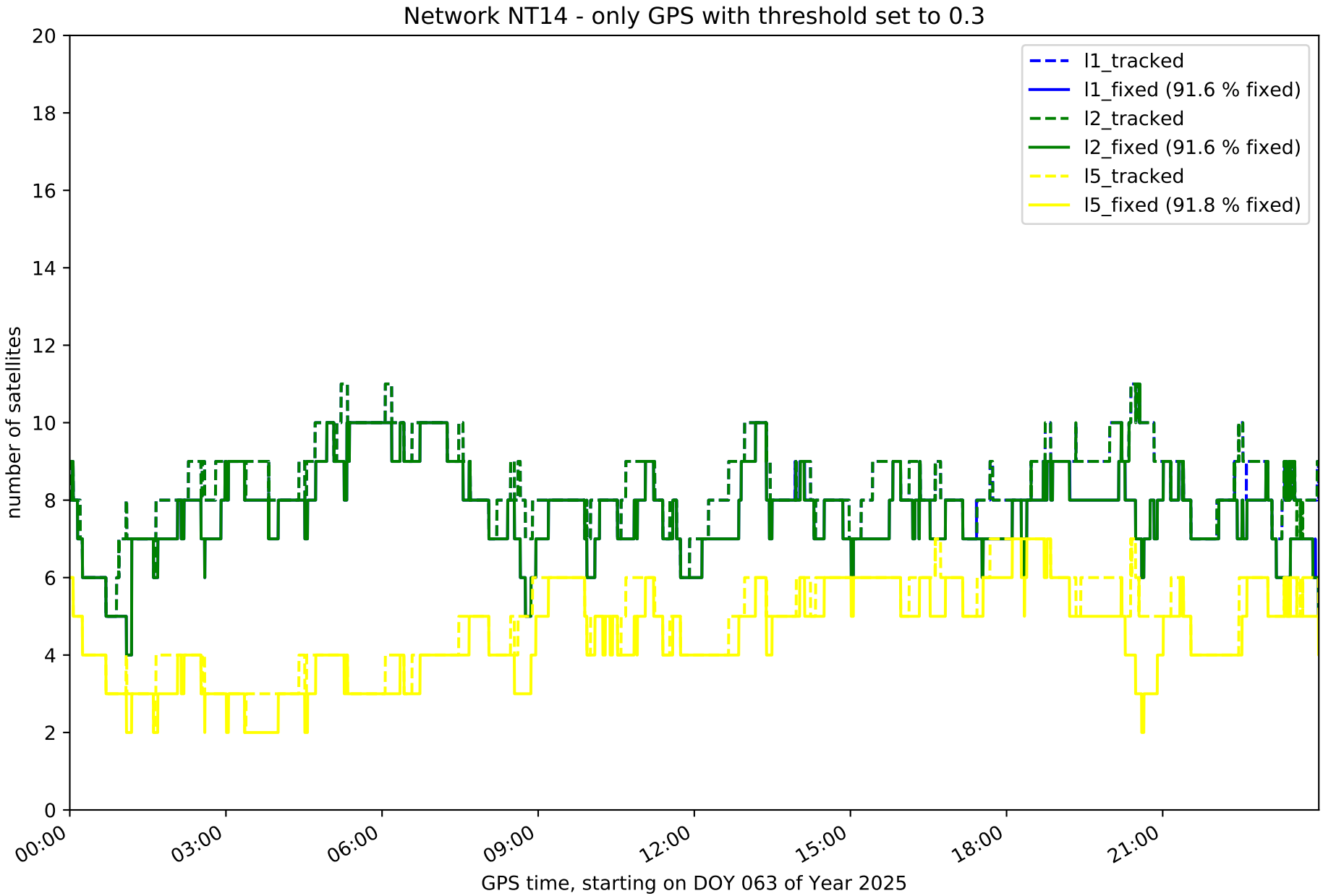
| | | | |
|---|---|---|---|
| station ABAN: | antenna: LEIAR25 LEIT | receiver: LEICA GR30 | height: 207.768 |
| station AIO2: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR50 | height: 662.859 |
| station ALAC: | antenna: LEIAR25.R3 LEIT | receiver: LEICA GR50 | height: 63.367 |
| station ALCO: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR30 | height: 640.121 |
| station BORR: | antenna: GPPNULLANTENNA NONE | receiver: TRIMBLE NETR9 | height: 73.019 |
| station DENI: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR10 | height: 69.735 |
| station IEJA: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR50 | height: 1358.249 |
| station PENI: | antenna: LEIAR25.R4 LEIT | receiver: LEICA GR25 | height: 108.648 |
| station SARR: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR50 | height: 1041.631 |
| station TOR0: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR30 | height: 64.679 |
| station UTIE: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GRX1200GGPRO | height: 799.741 |
| station VALE: | antenna: LEIAR25.R3 LEIT | receiver: LEICA GR50 | height: 80.598 |
| station VJOI: | antenna: GPPNULLANTENNA NONE | receiver: TRIMBLE NETR9 | height: 117.157 |

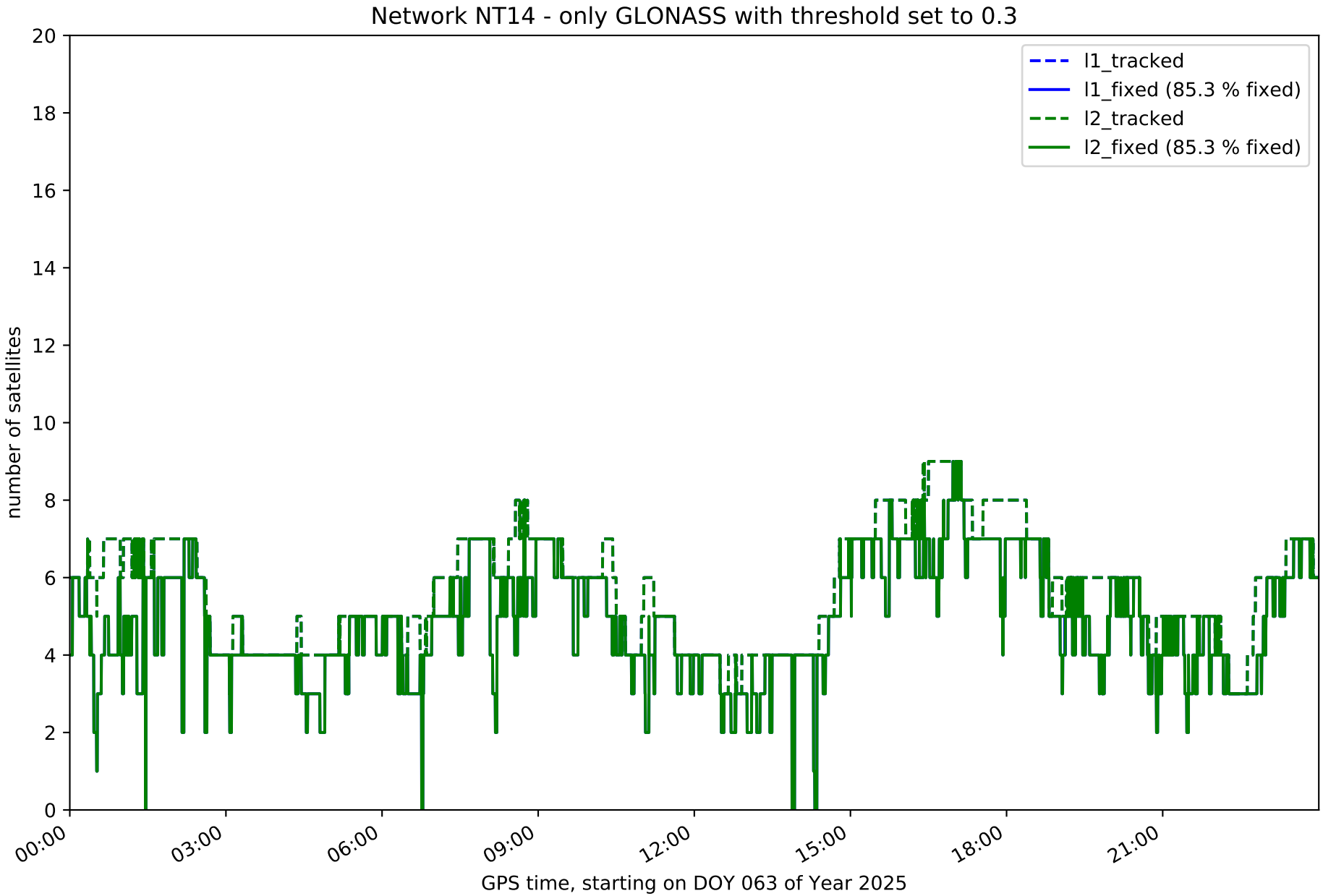

Processing rate in network NT14
time difference to next processed epoch [s]
0
2
4
6
8
10
12
14
16
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

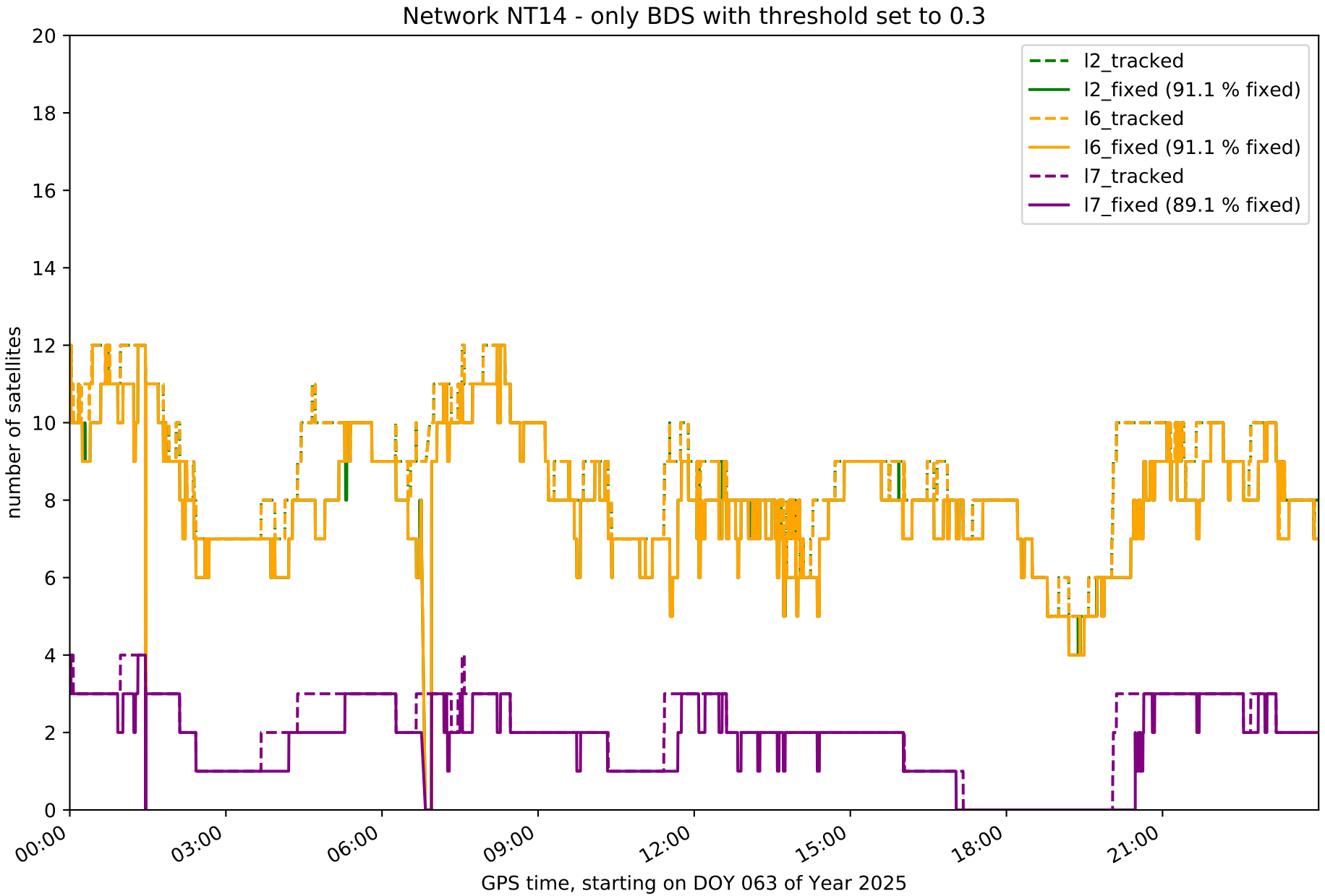

Histogram of the processing rate in network NT14 (durations larger 15 seconds neglected)
number of epochs
30000
25000
20000
15000
10000
5000
0
1
2
3
4
5
6
7
8
9
time difference to next processed epoch [s]

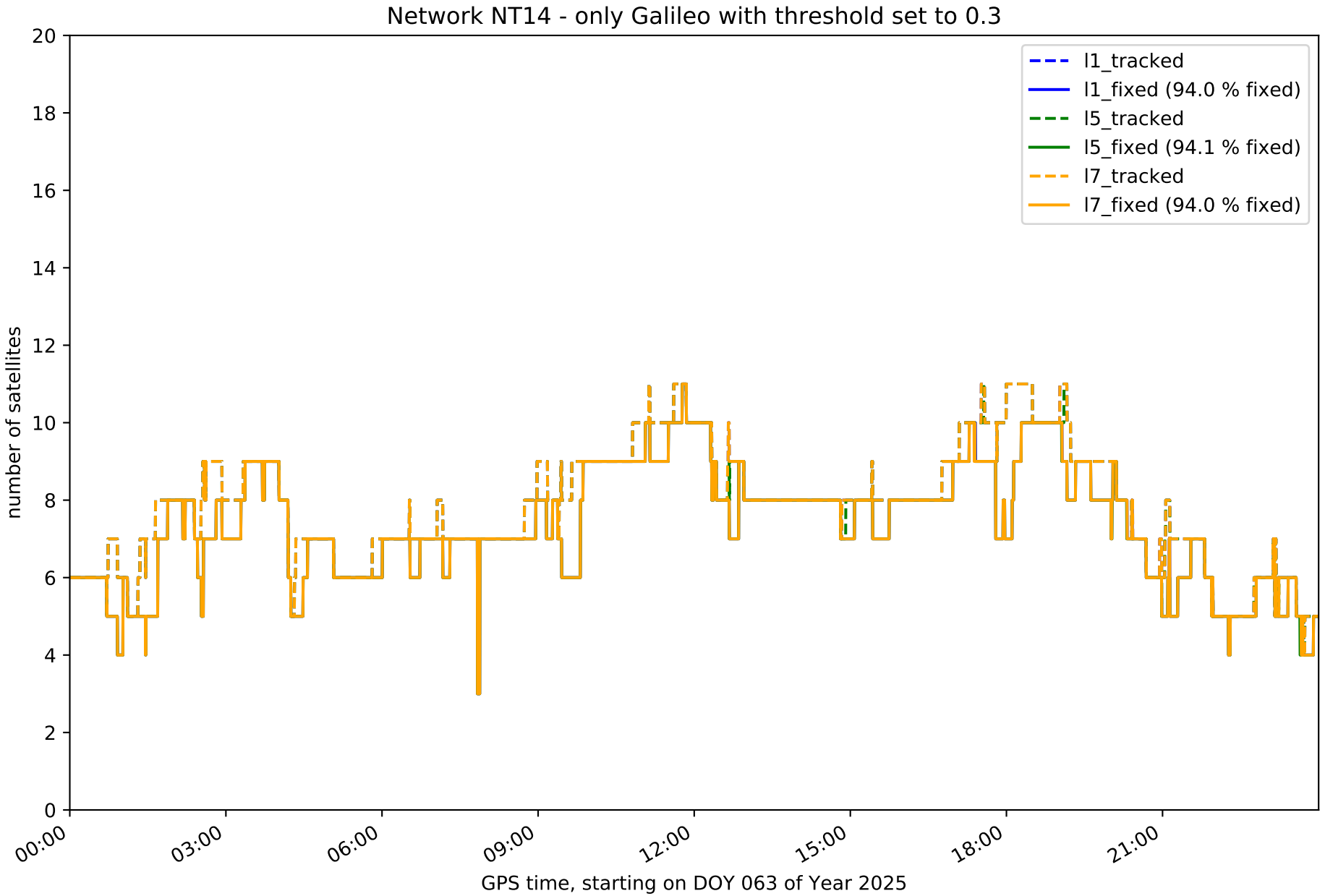

Network NT14 with threshold set to 0.3
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
40
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

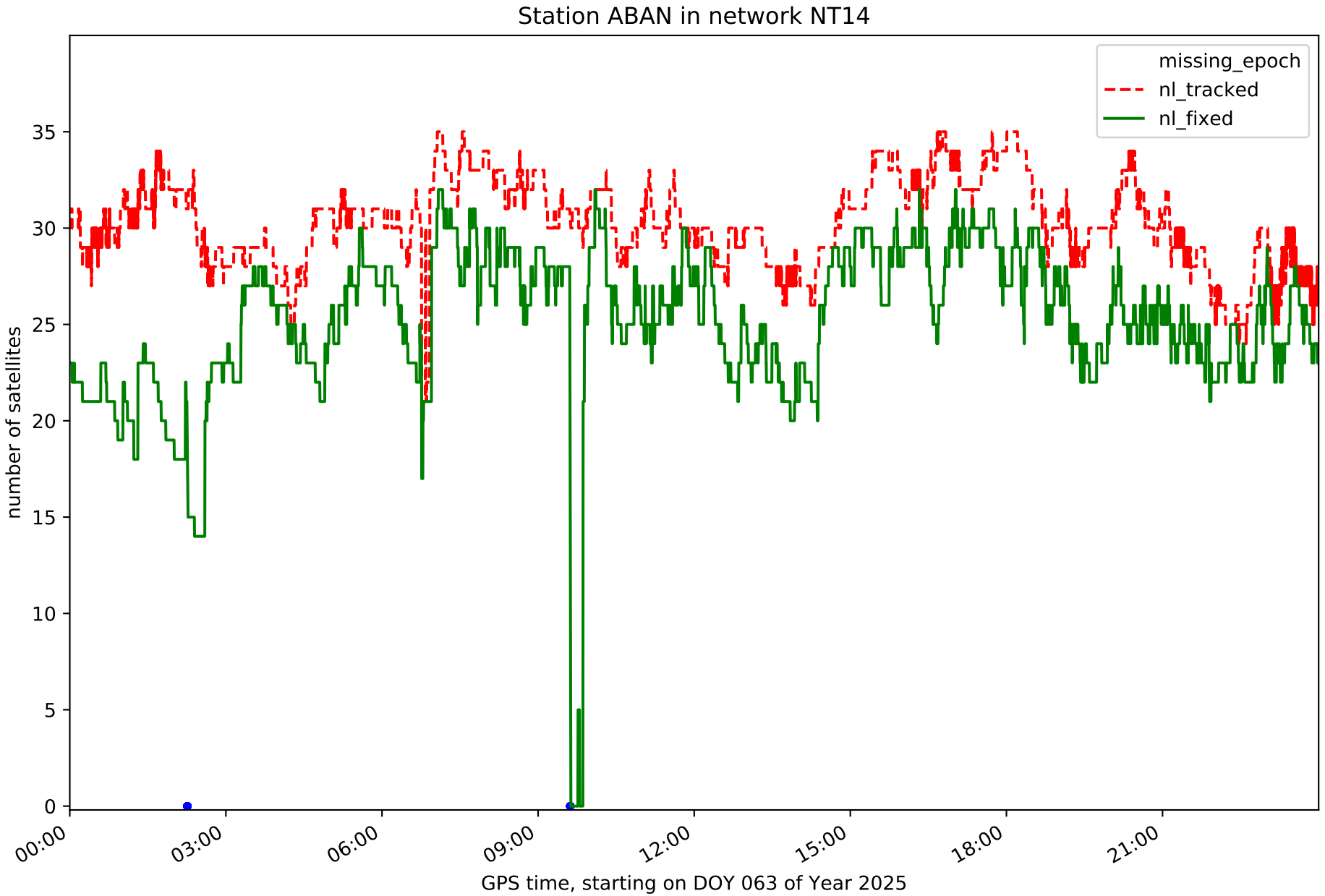

Fixing percentage of satellites in network NT14 with threshold set to 0.3
percentage fixed to tracked
100
90
80
70
60
50
40
30
20
10
0
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

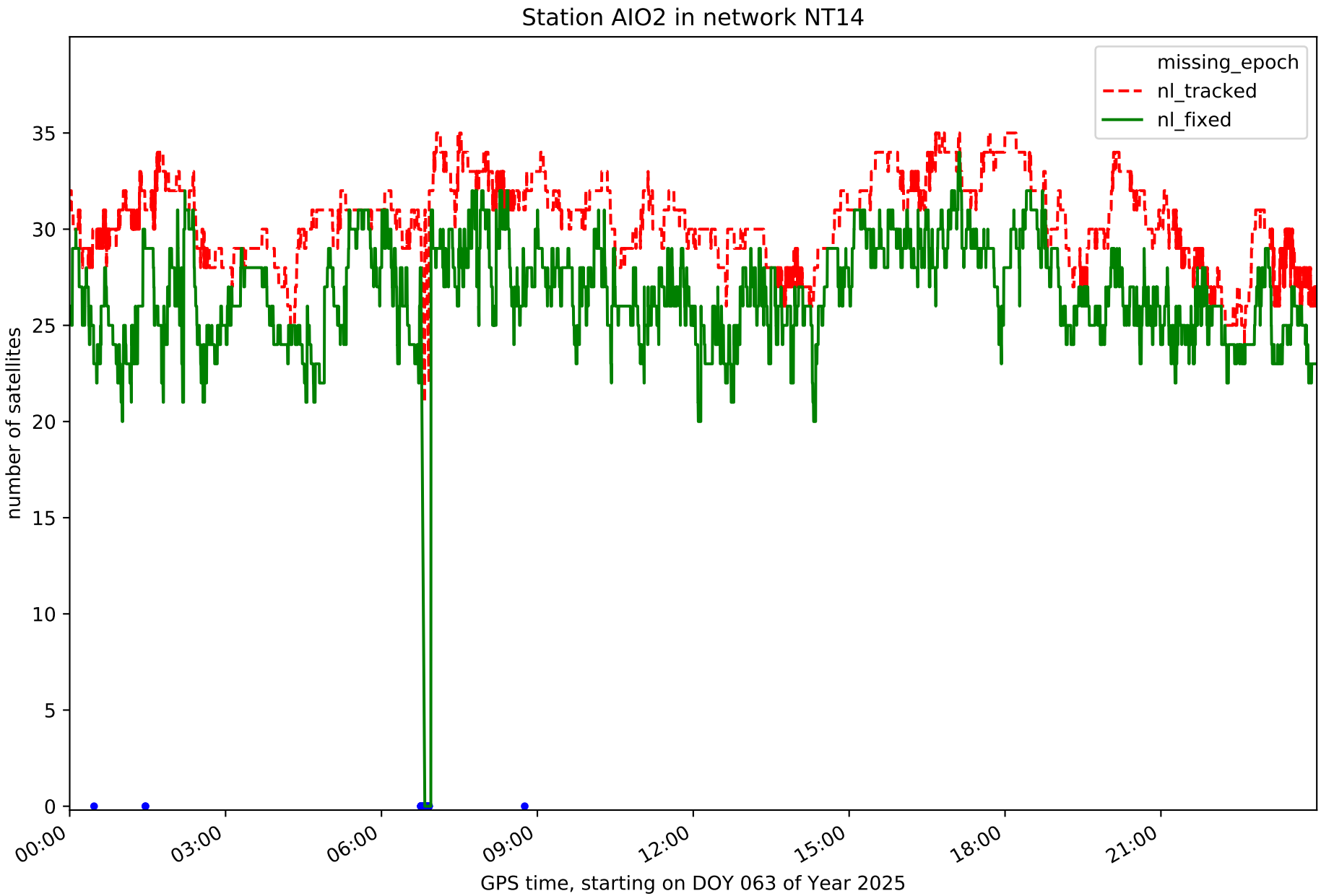

Network NT14 - only GPS with threshold set to 0.3
number of satellites
GPS time, starting on DOY 063 of Year 2025
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
0
2
4
6
8
10
12
14
16
18
20
l1_tracked
l1_fixed (91.6 % fixed)
l2_tracked
l2_fixed (91.6 % fixed)
l5_tracked
l5_fixed (91.8 % fixed)

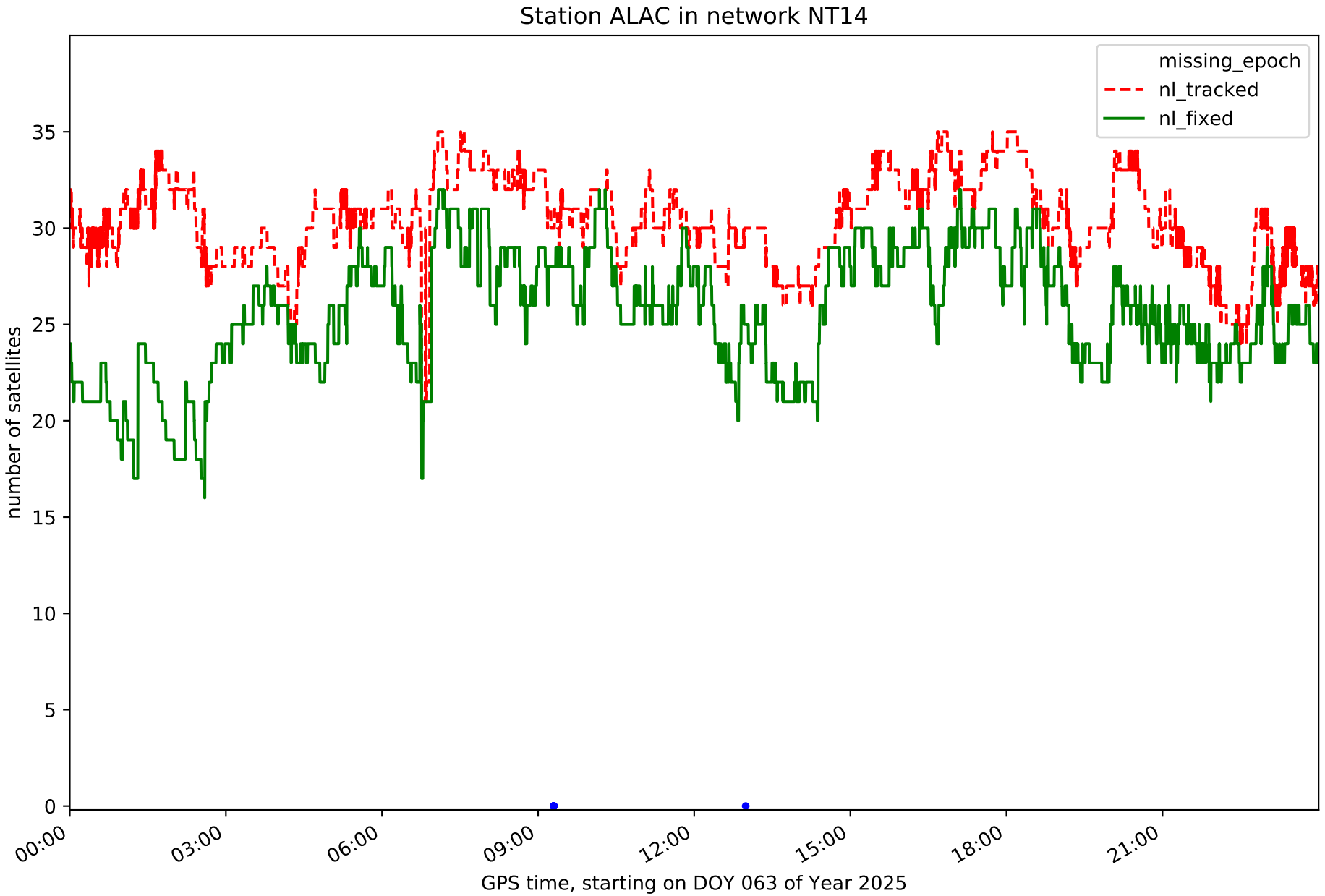

Network NT14 - only GLONASS with threshold set to 0.3
l1_tracked
l1_fixed (85.3 % fixed)
l2_tracked
l2_fixed (85.3 % fixed)
number of satellites
0
2
4
6
8
10
12
14
16
18
20
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

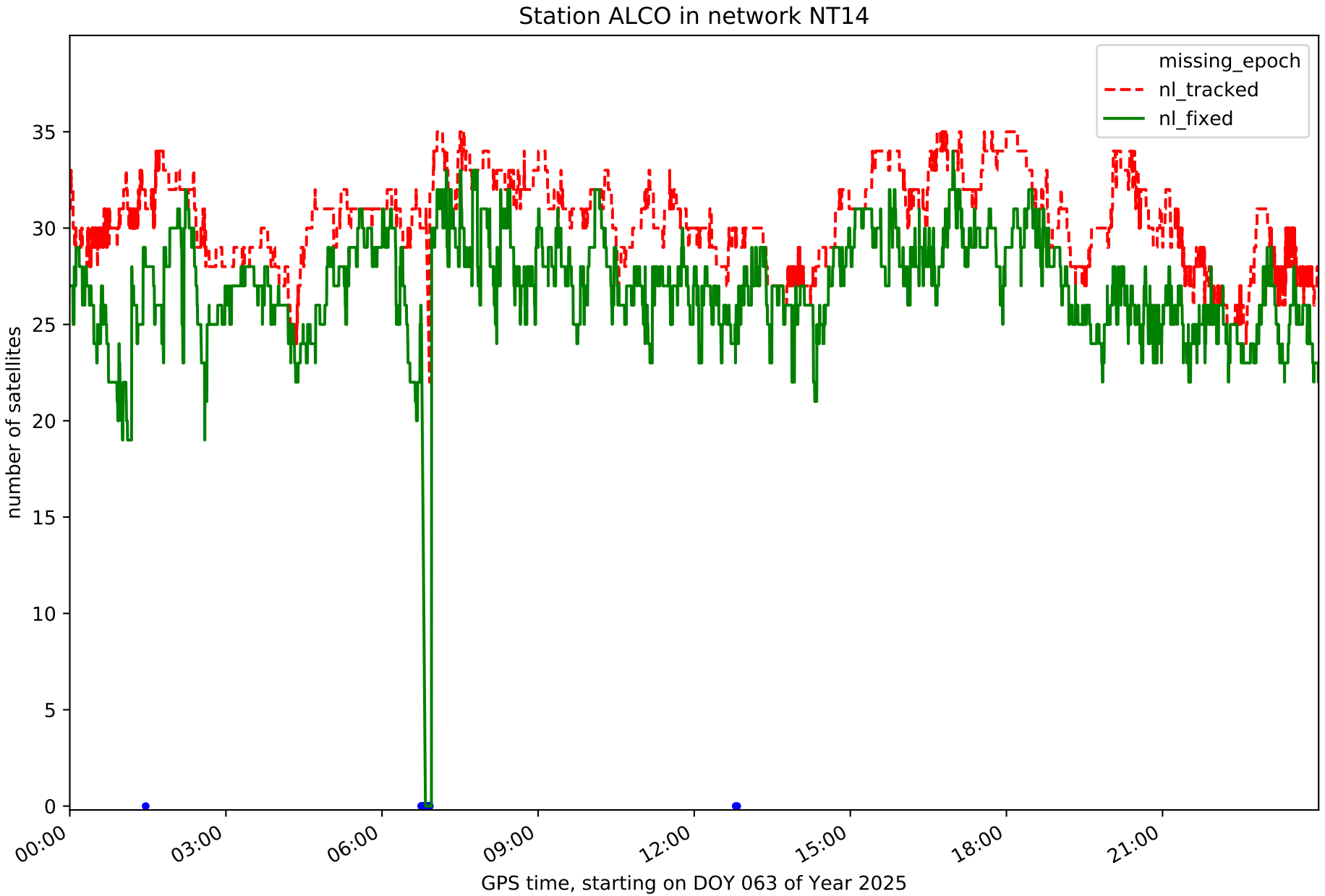

Network NT14 - only BDS with threshold set to 0.3
number of satellites
GPS time, starting on DOY 063 of Year 2025
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
0
2
4
6
8
10
12
14
16
18
20
I2_tracked
I2_fixed (91.1 % fixed)
I6_tracked
I6_fixed (91.1 % fixed)
I7_tracked
I7_fixed (89.1 % fixed)

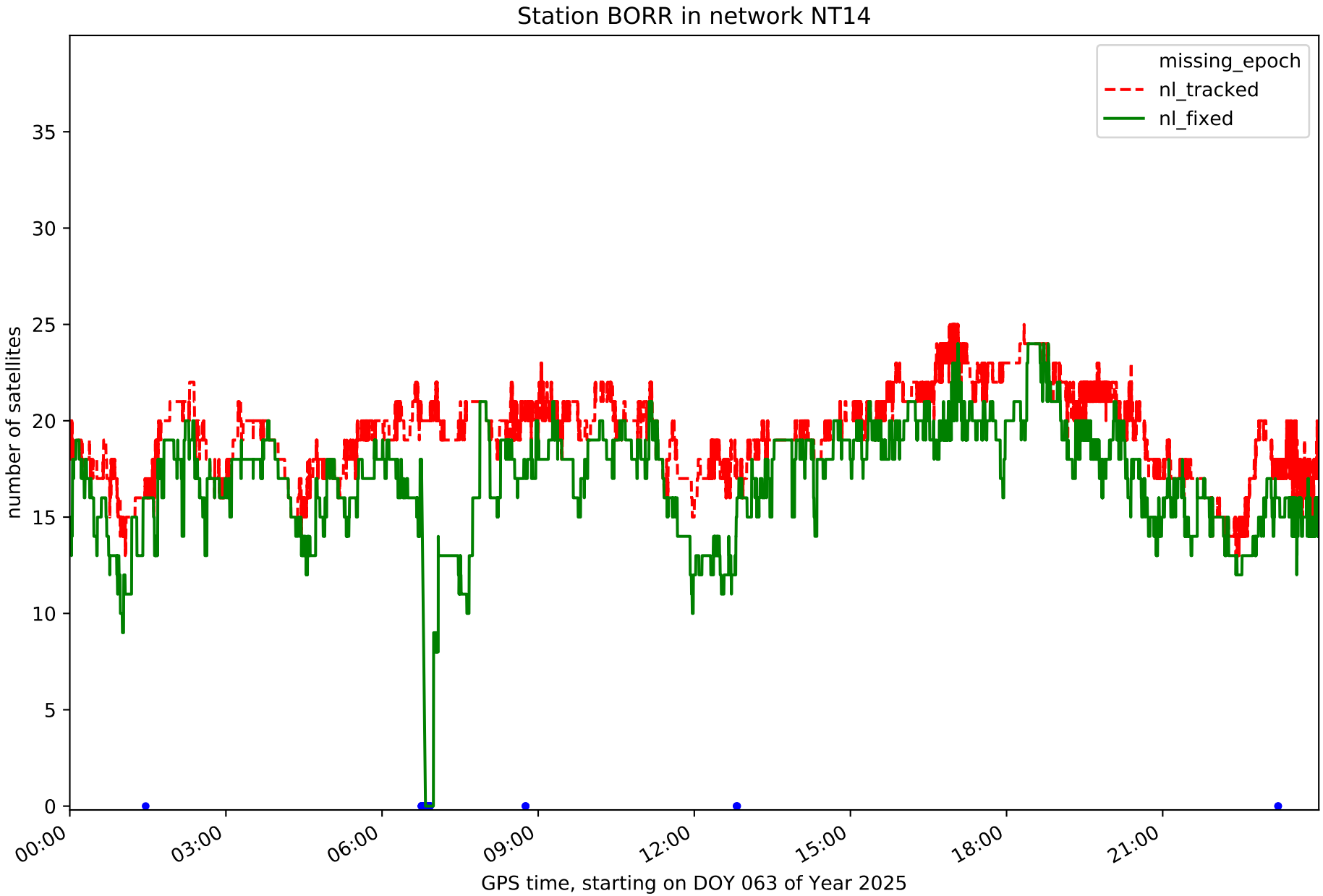

Network NT14 - only Galileo with threshold set to 0.3
number of satellites
GPS time, starting on DOY 063 of Year 2025
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
0
2
4
6
8
10
12
14
16
18
20
l1_tracked
l1_fixed (94.0 % fixed)
l5_tracked
l5_fixed (94.1 % fixed)
l7_tracked
l7_fixed (94.0 % fixed)

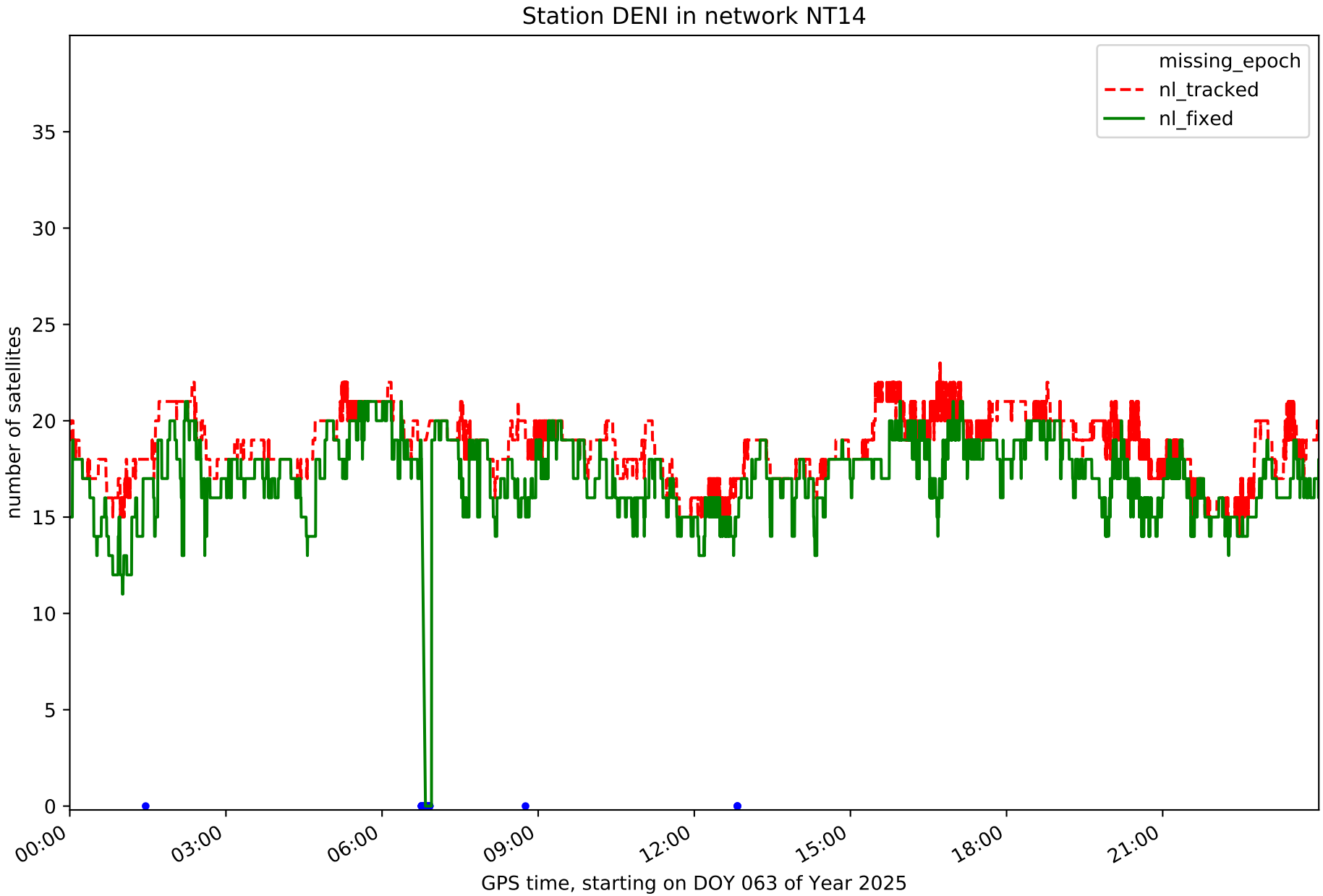

Station ABAN in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

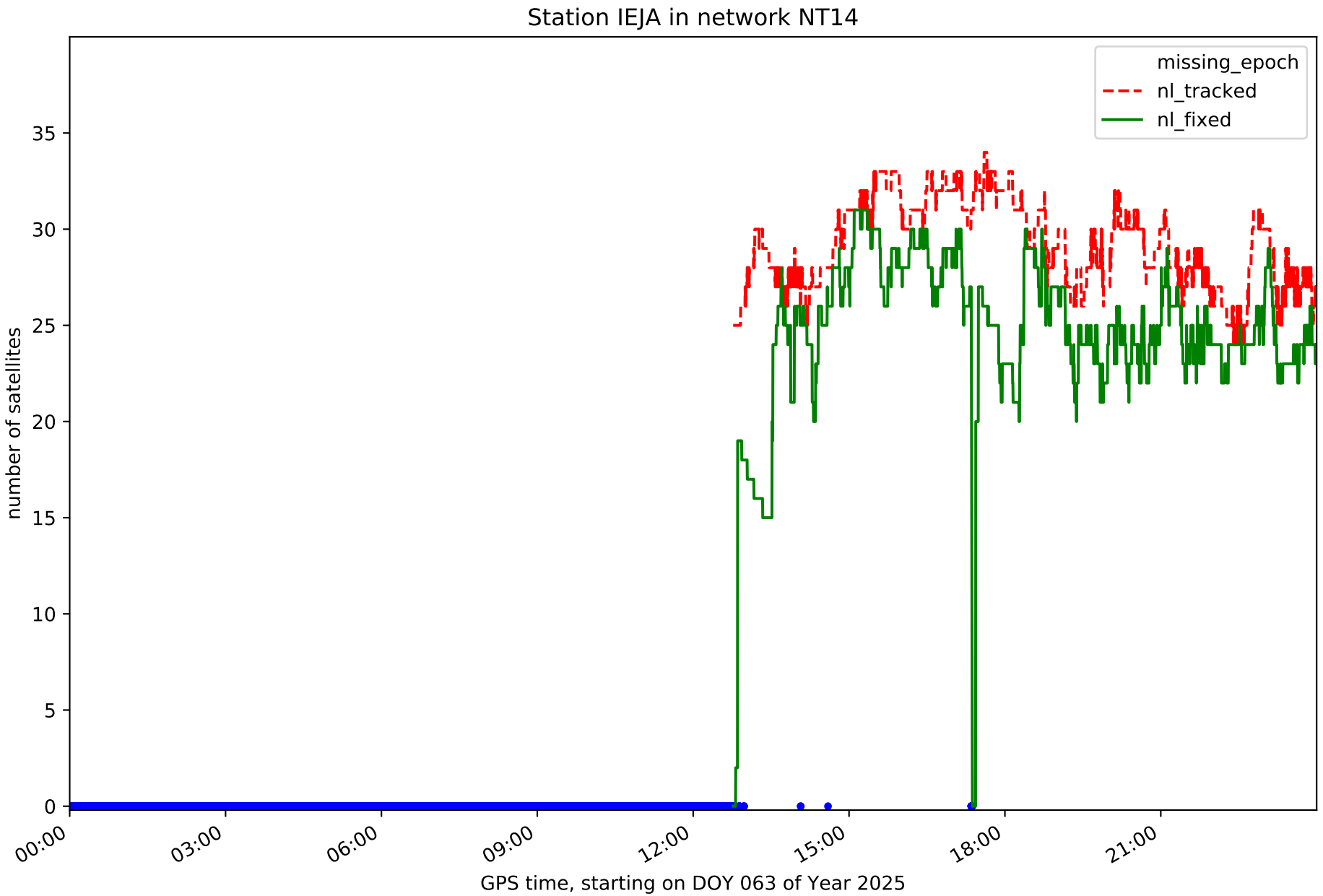

Station AIO2 in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

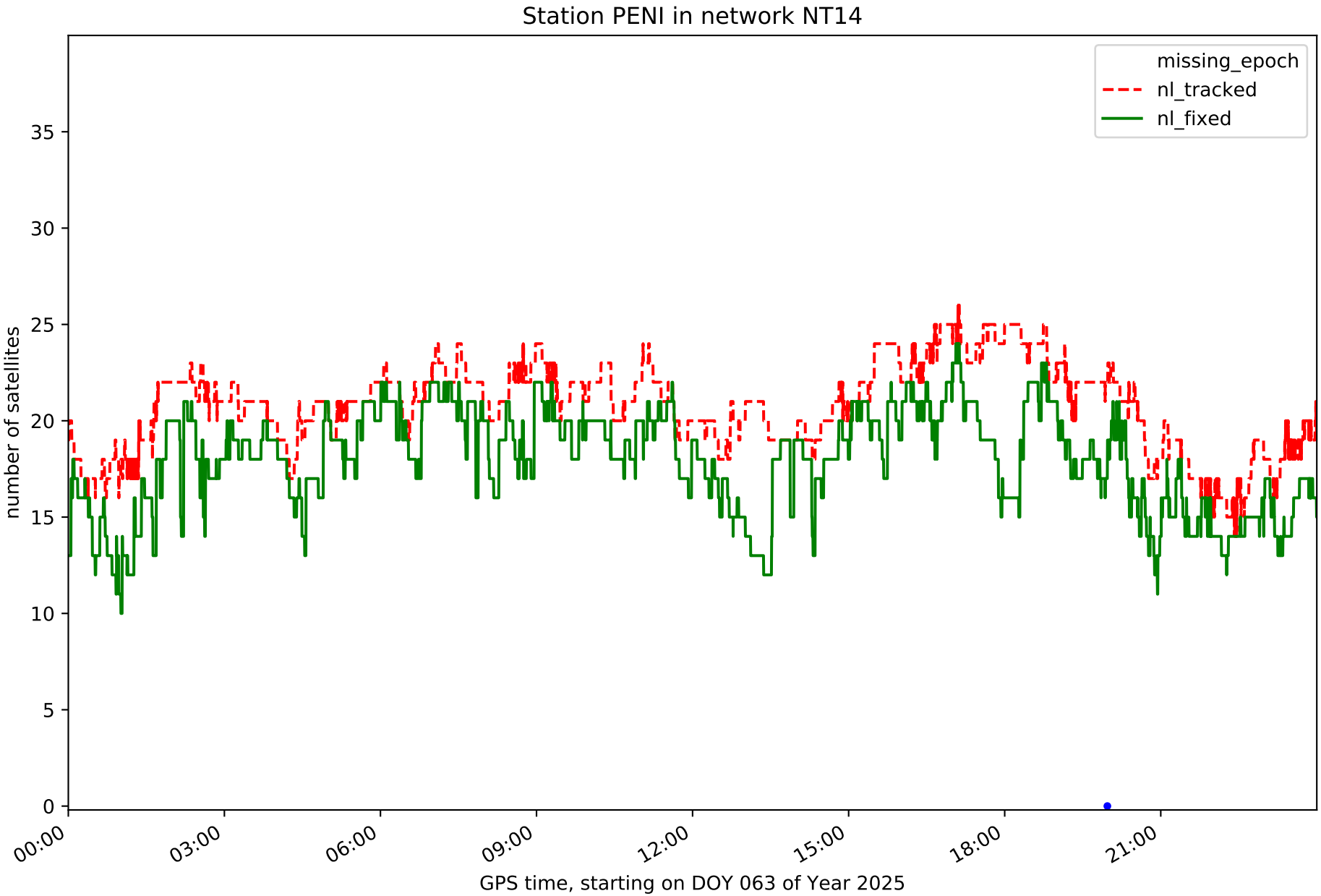

Station ALAC in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

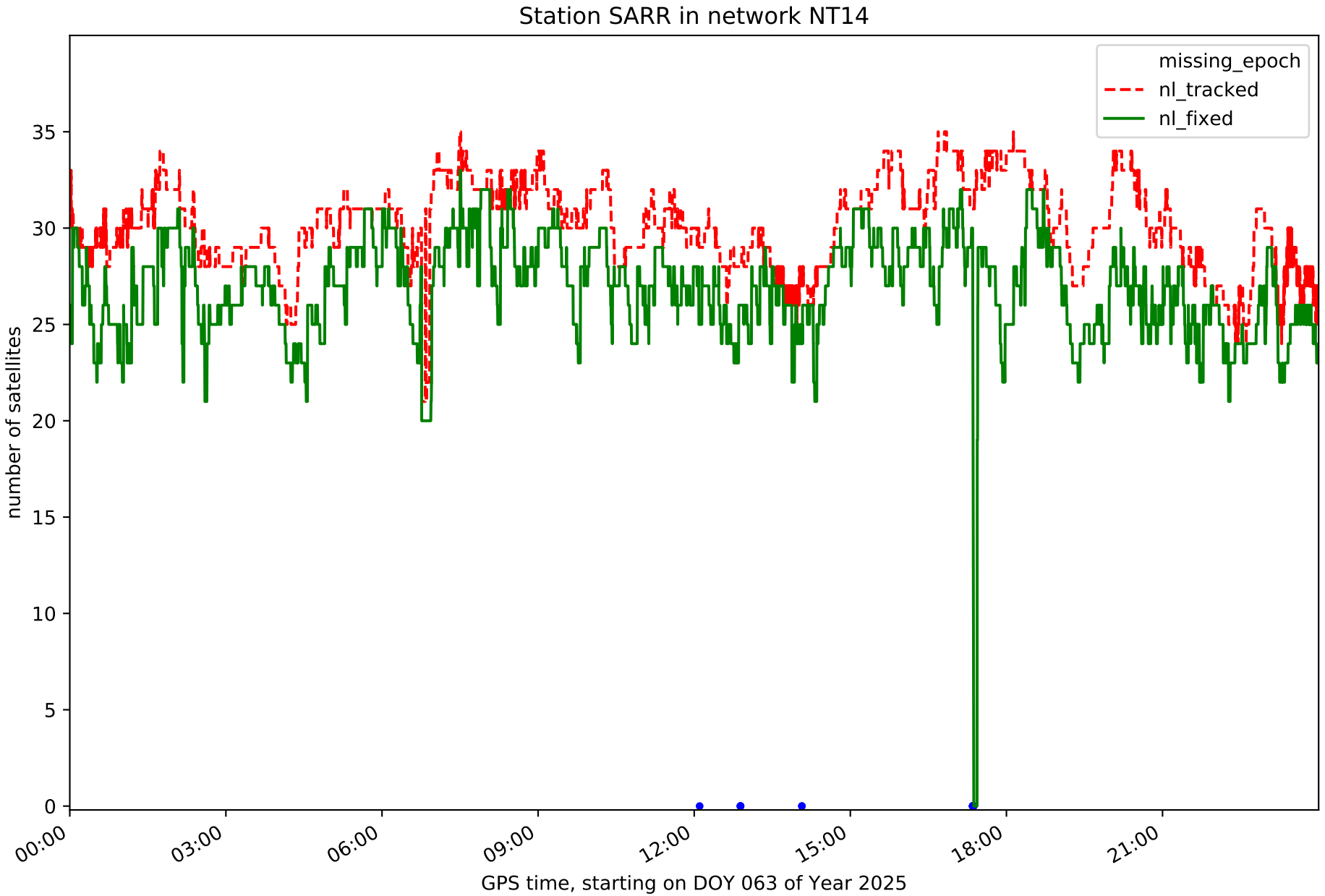

Station ALCO in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

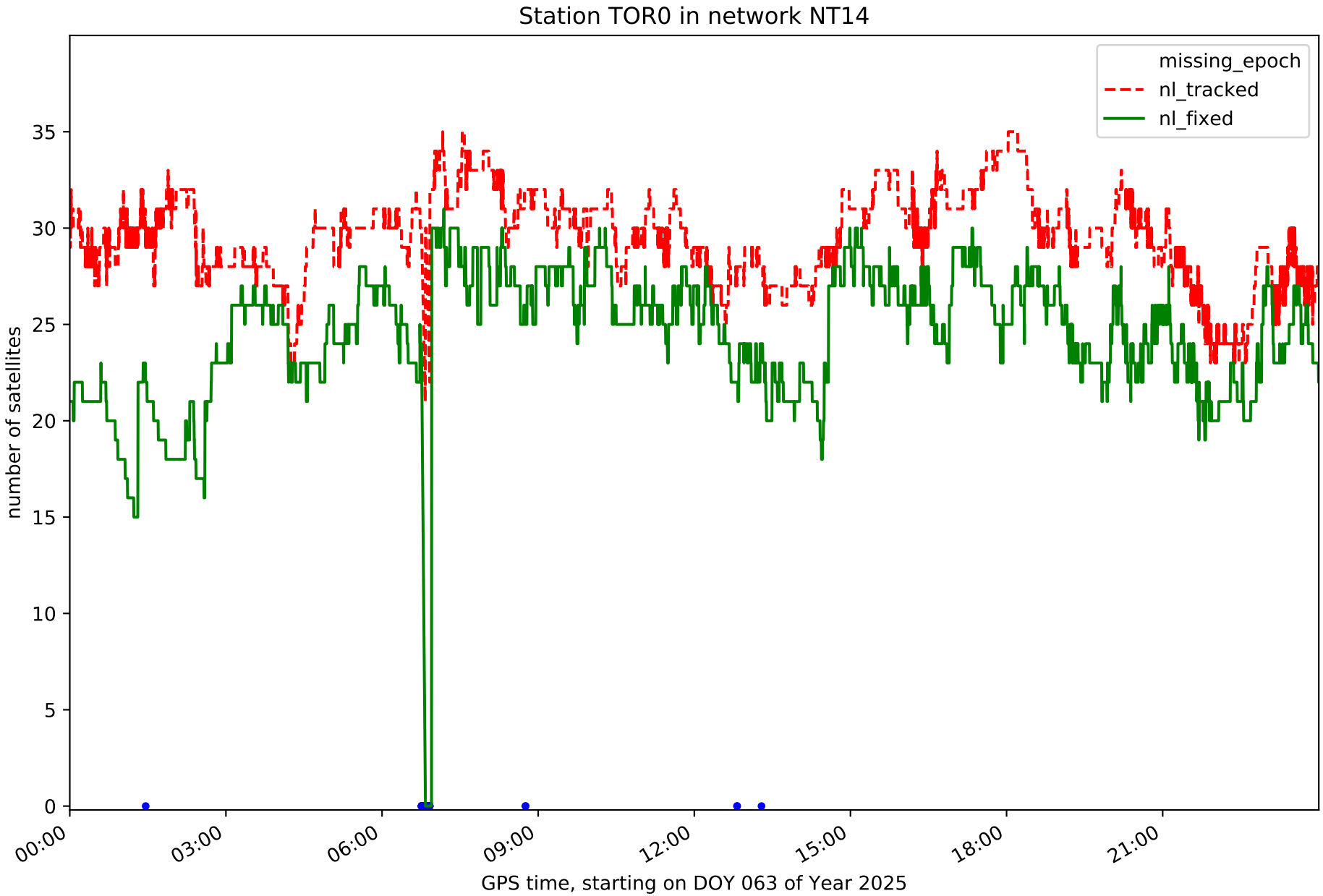

Station BORR in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

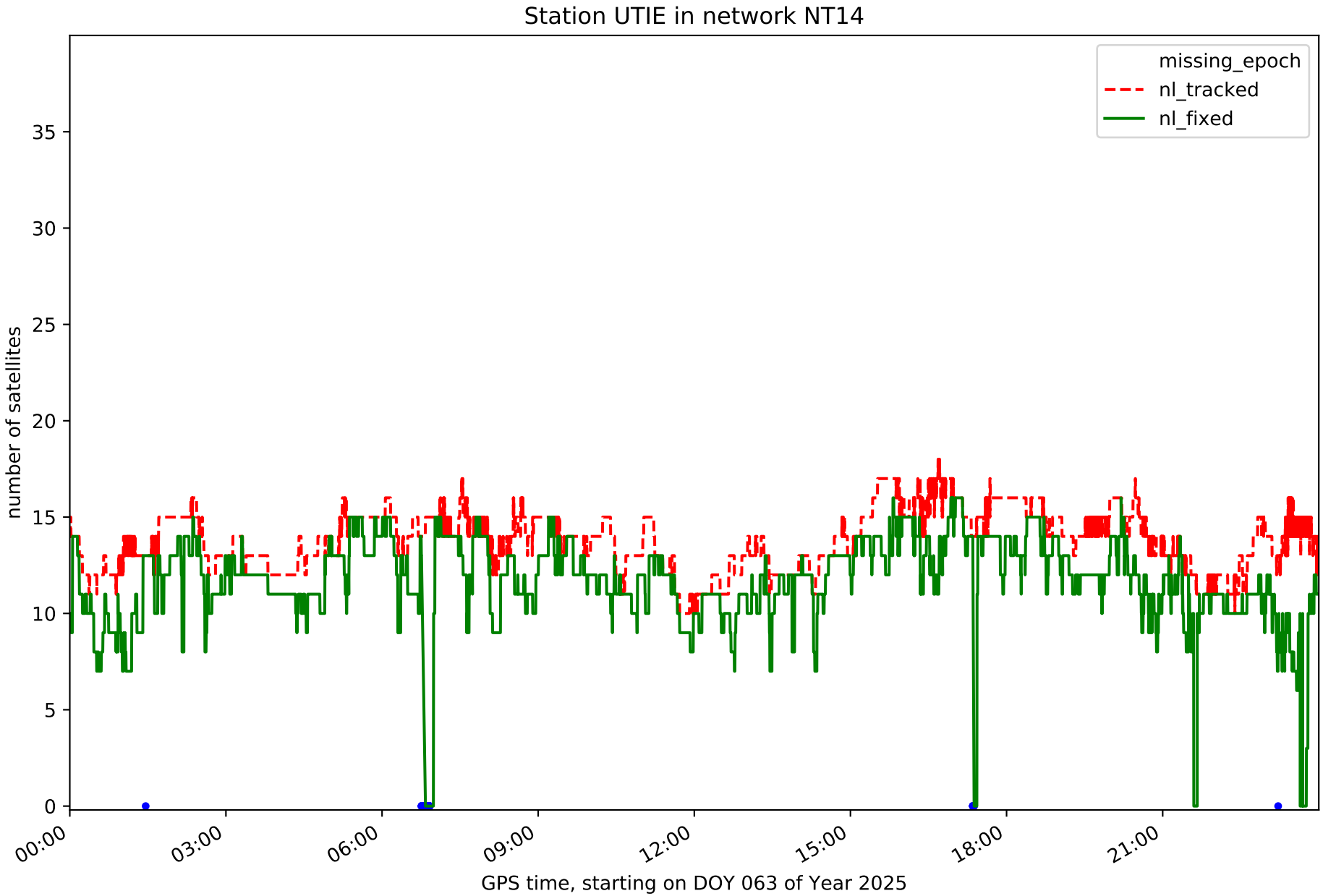

Station DENI in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

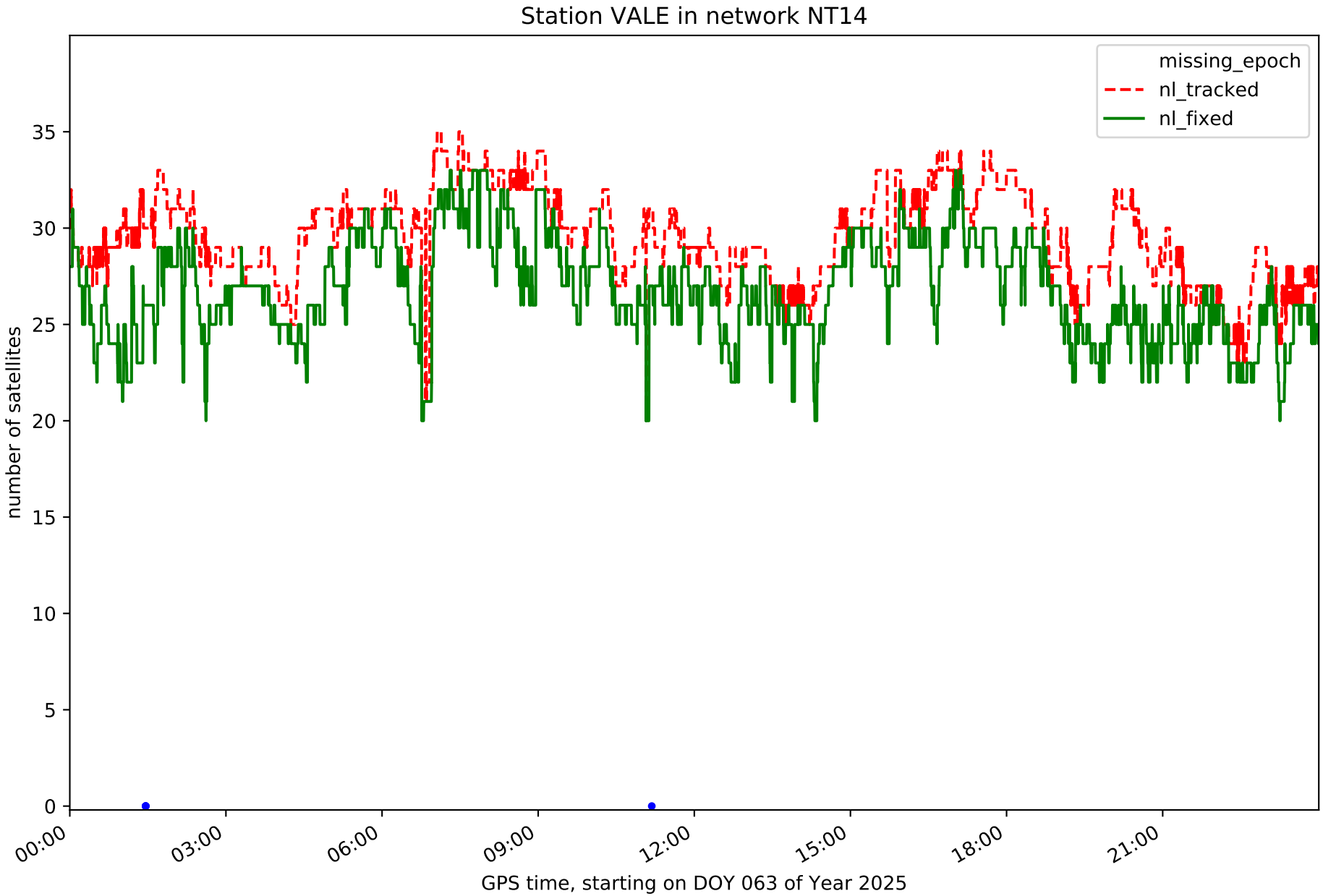

Station IEJA in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

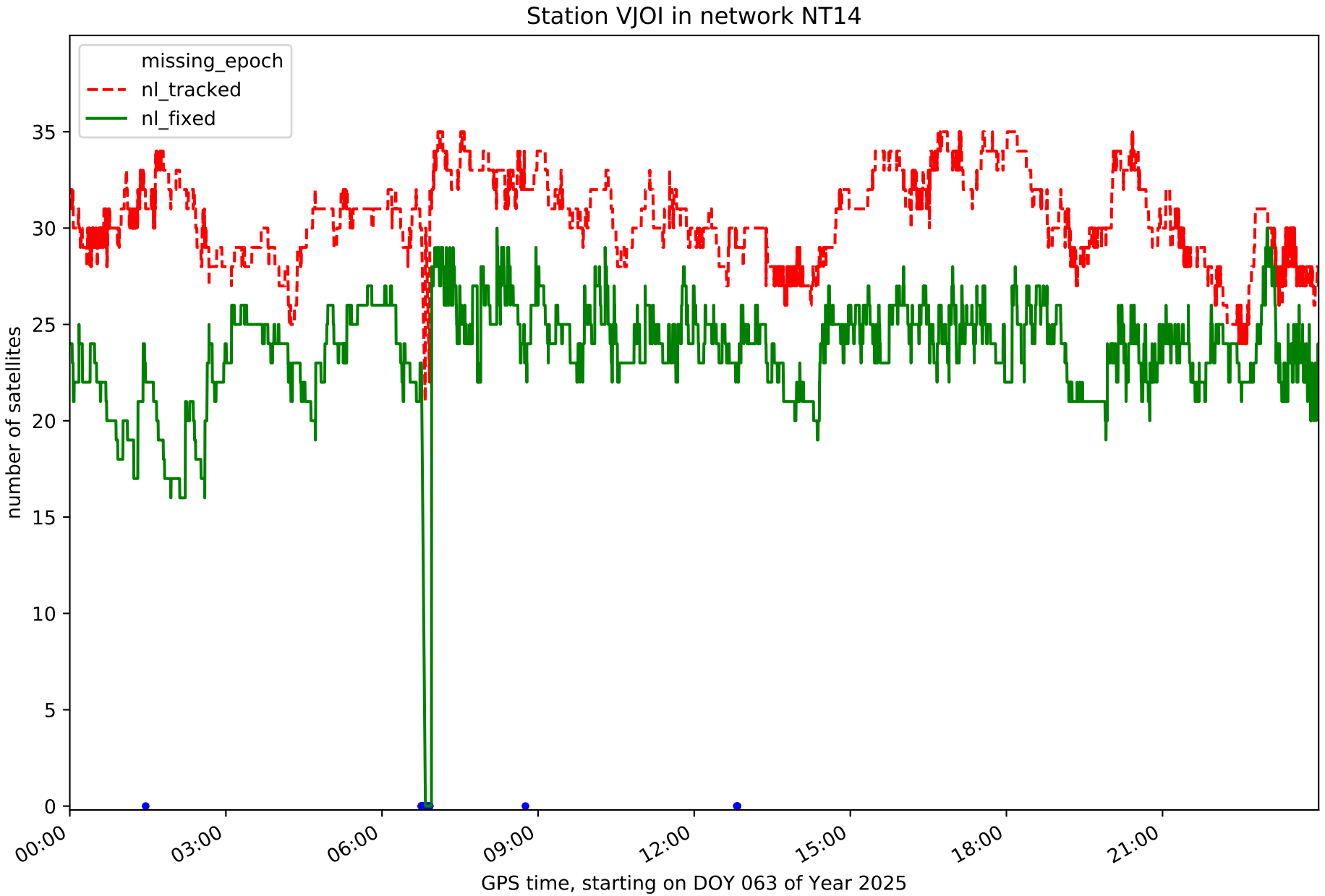

Station PENI in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

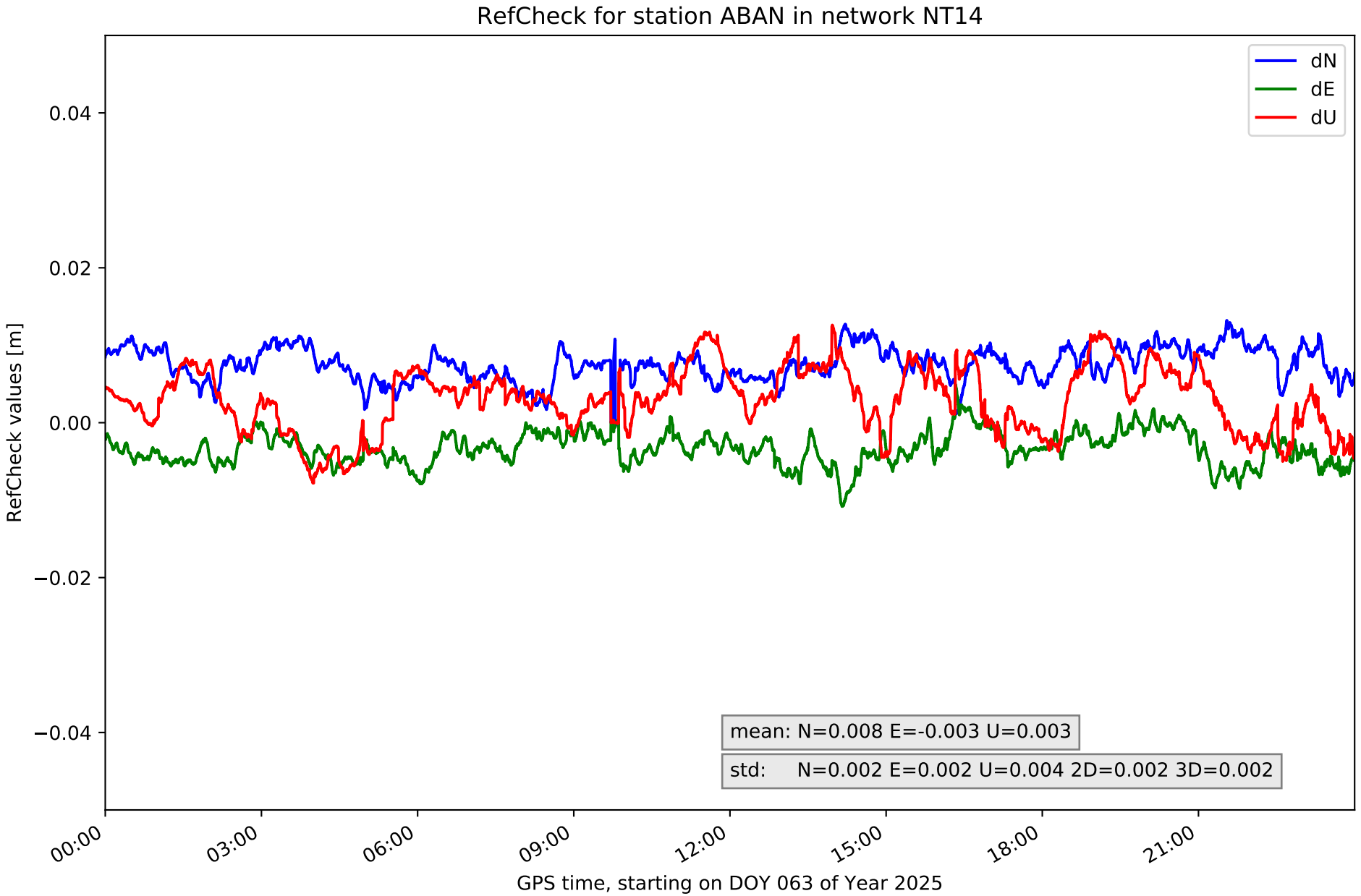

Station SARR in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

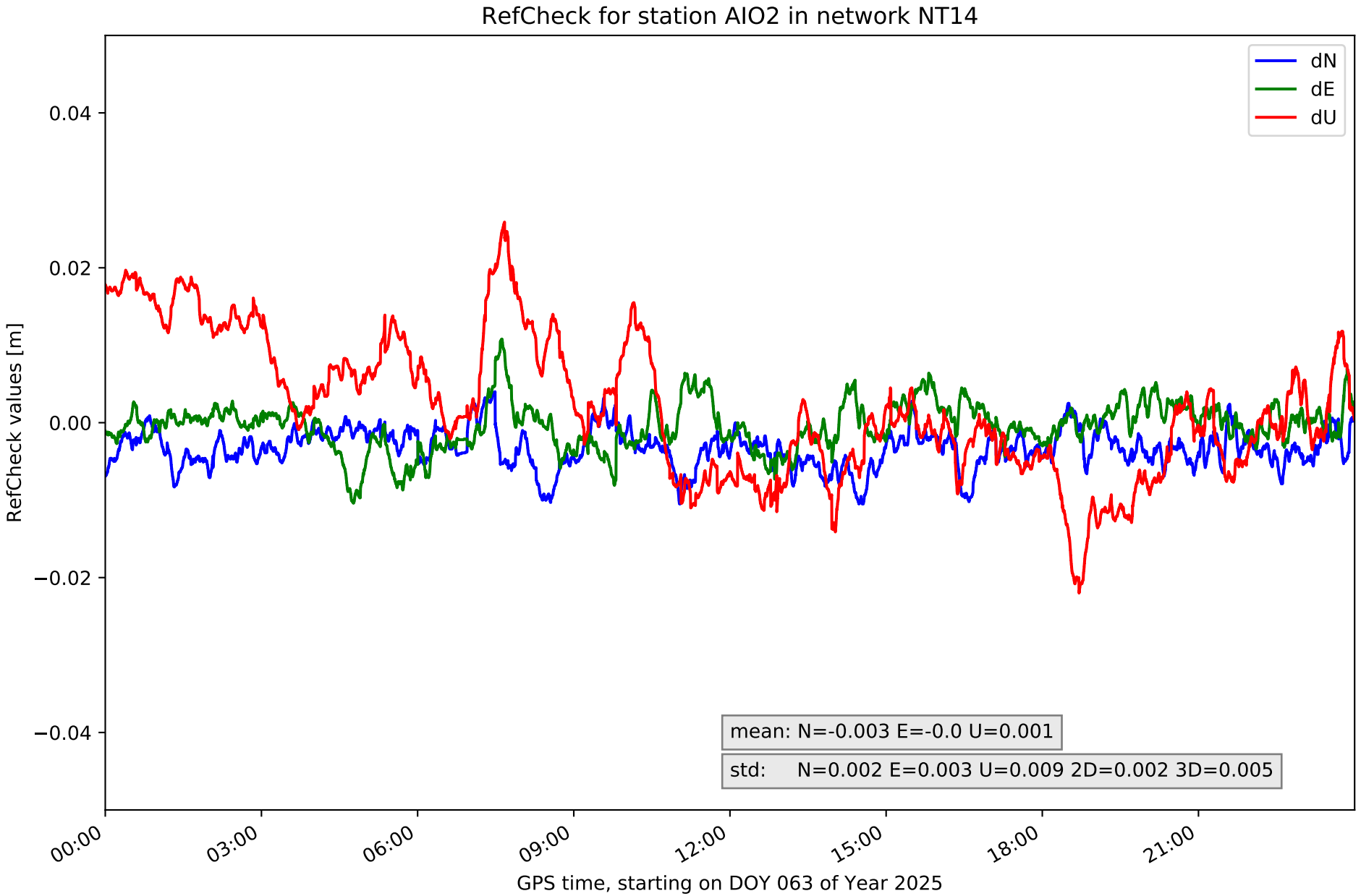

Station TOR0 in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

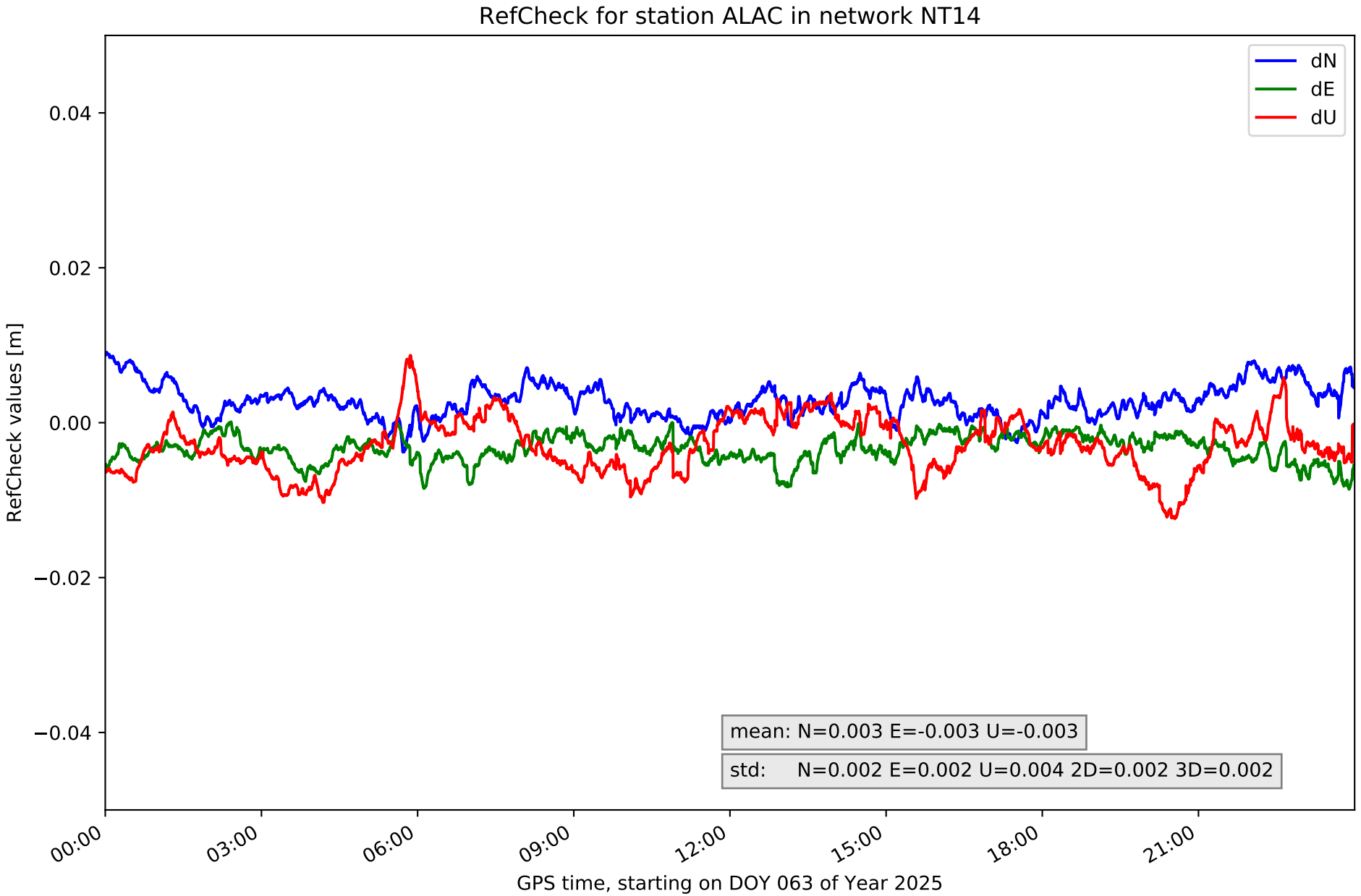

Station UTIE in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

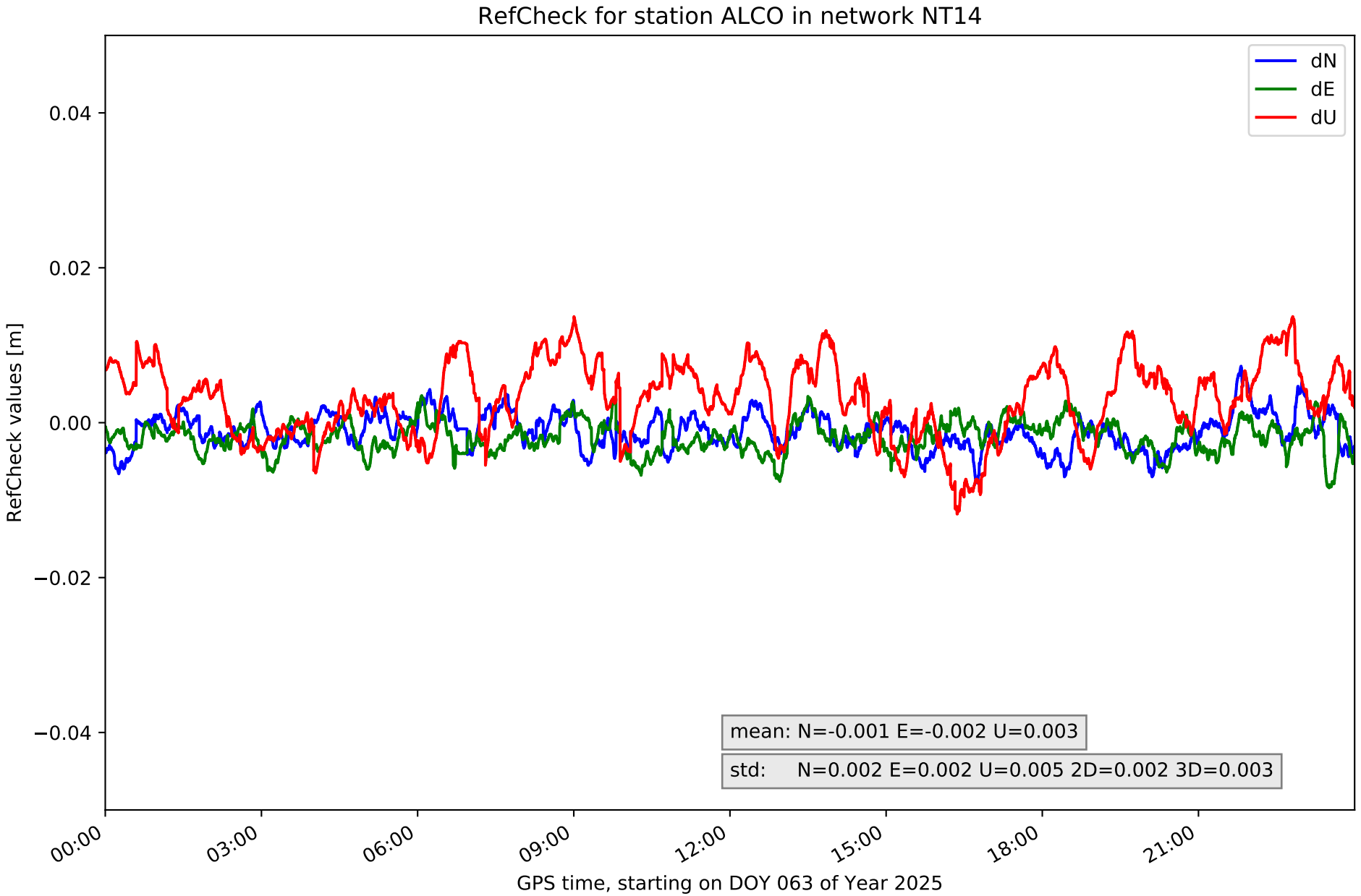

Station VALE in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

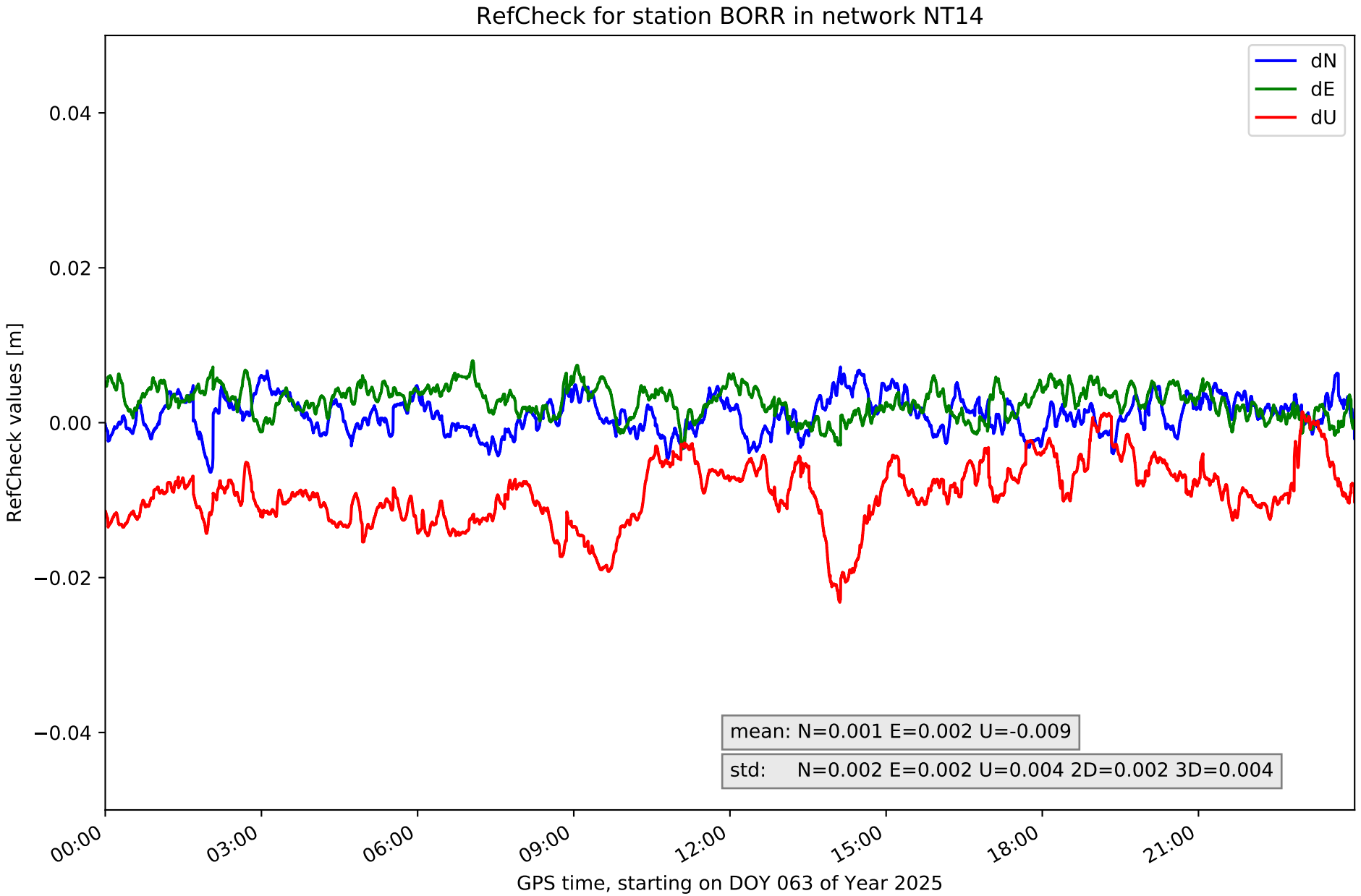

Station VJOI in network NT14
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

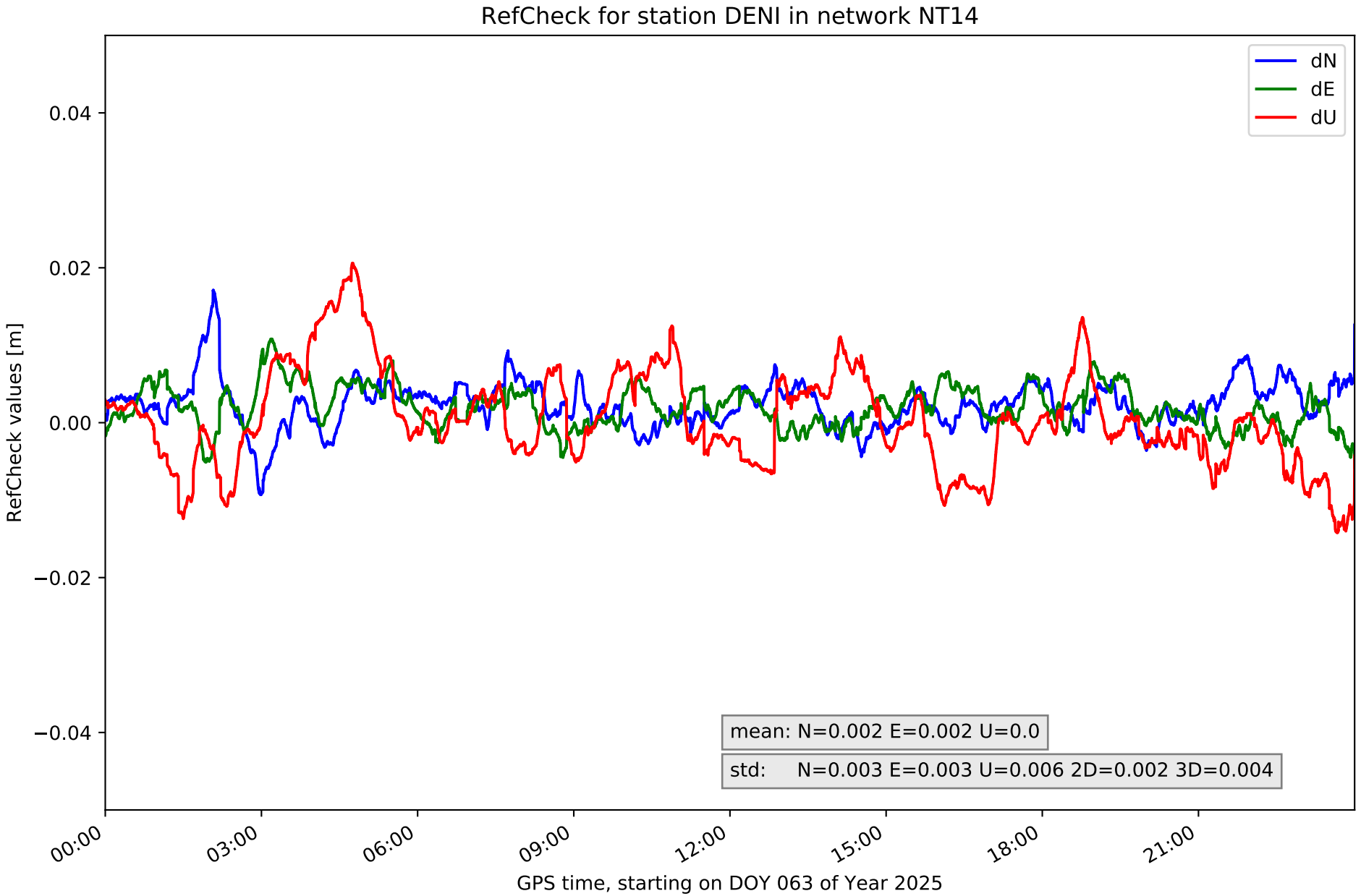

RefCheck for station ABAN in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.008 E=-0.003 U=0.003
std: N=0.002 E=0.002 U=0.004 2D=0.002 3D=0.002
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

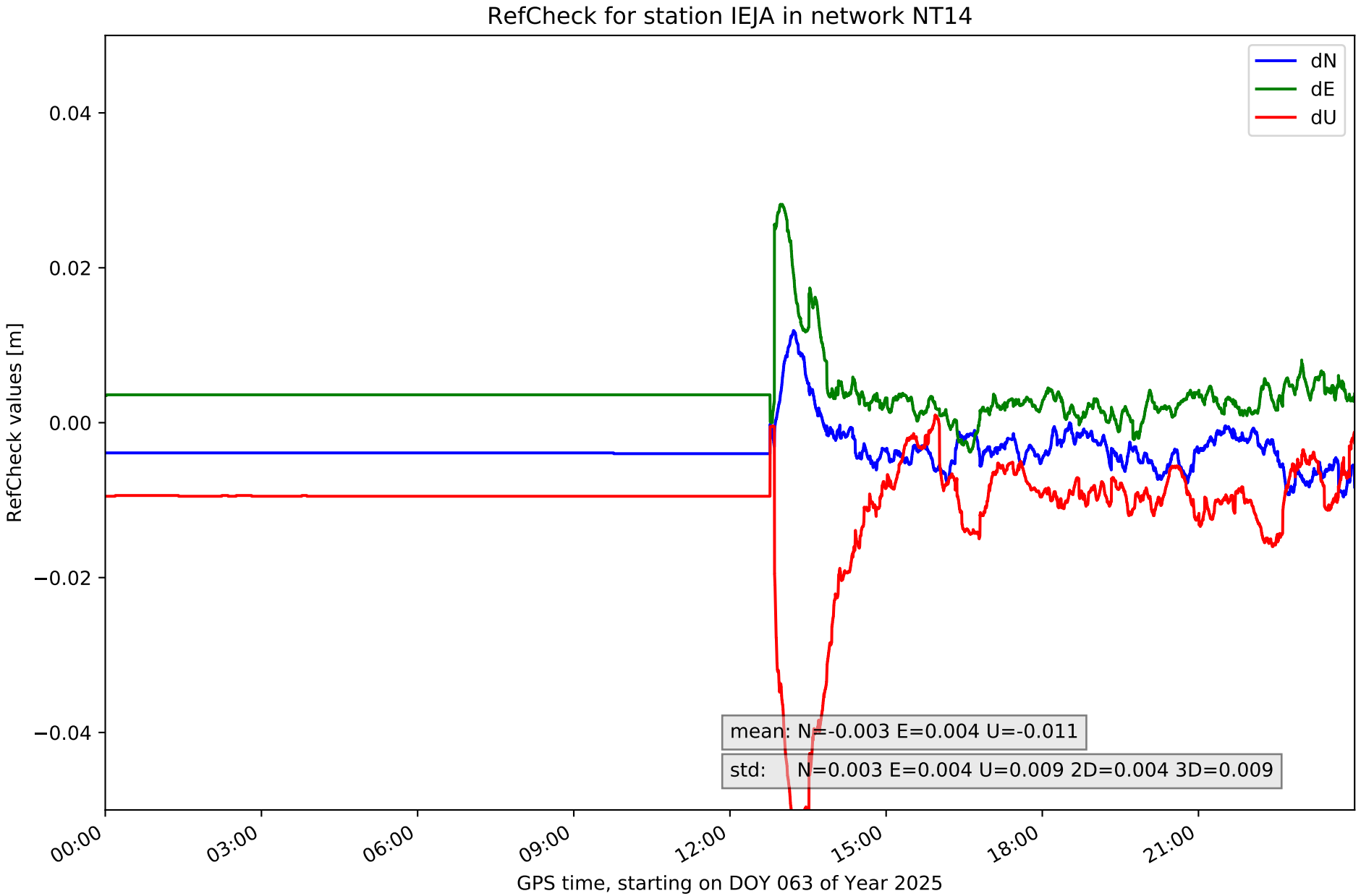

RefCheck for station AIO2 in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.003 E=-0.0 U=0.001
std: N=0.002 E=0.003 U=0.009 2D=0.002 3D=0.005
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

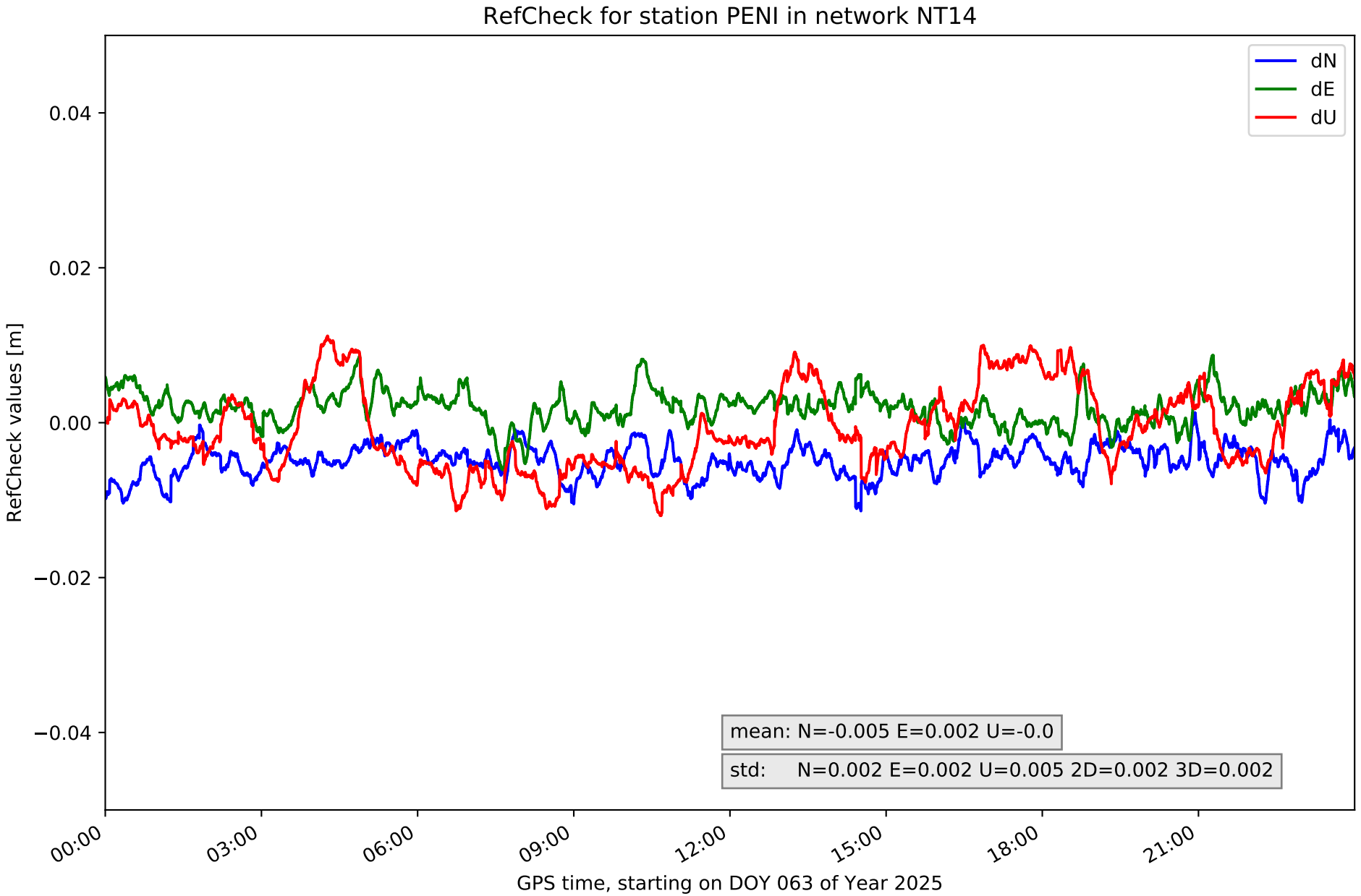

RefCheck for station ALAC in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.003 E=-0.003 U=-0.003
std: N=0.002 E=0.002 U=0.004 2D=0.002 3D=0.002
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

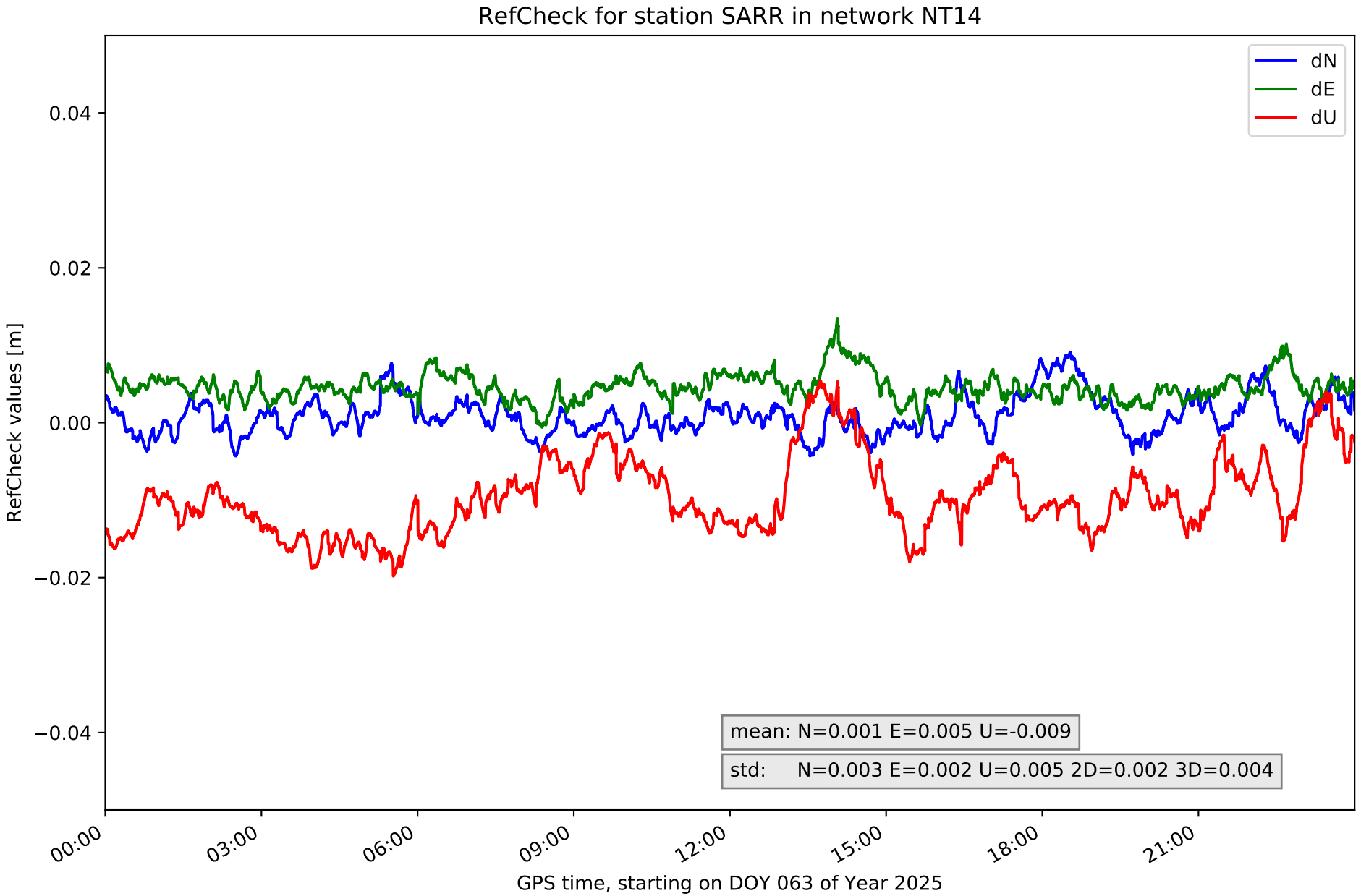

RefCheck for station ALCO in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.001 E=-0.002 U=0.003
std: N=0.002 E=0.002 U=0.005 2D=0.002 3D=0.003
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

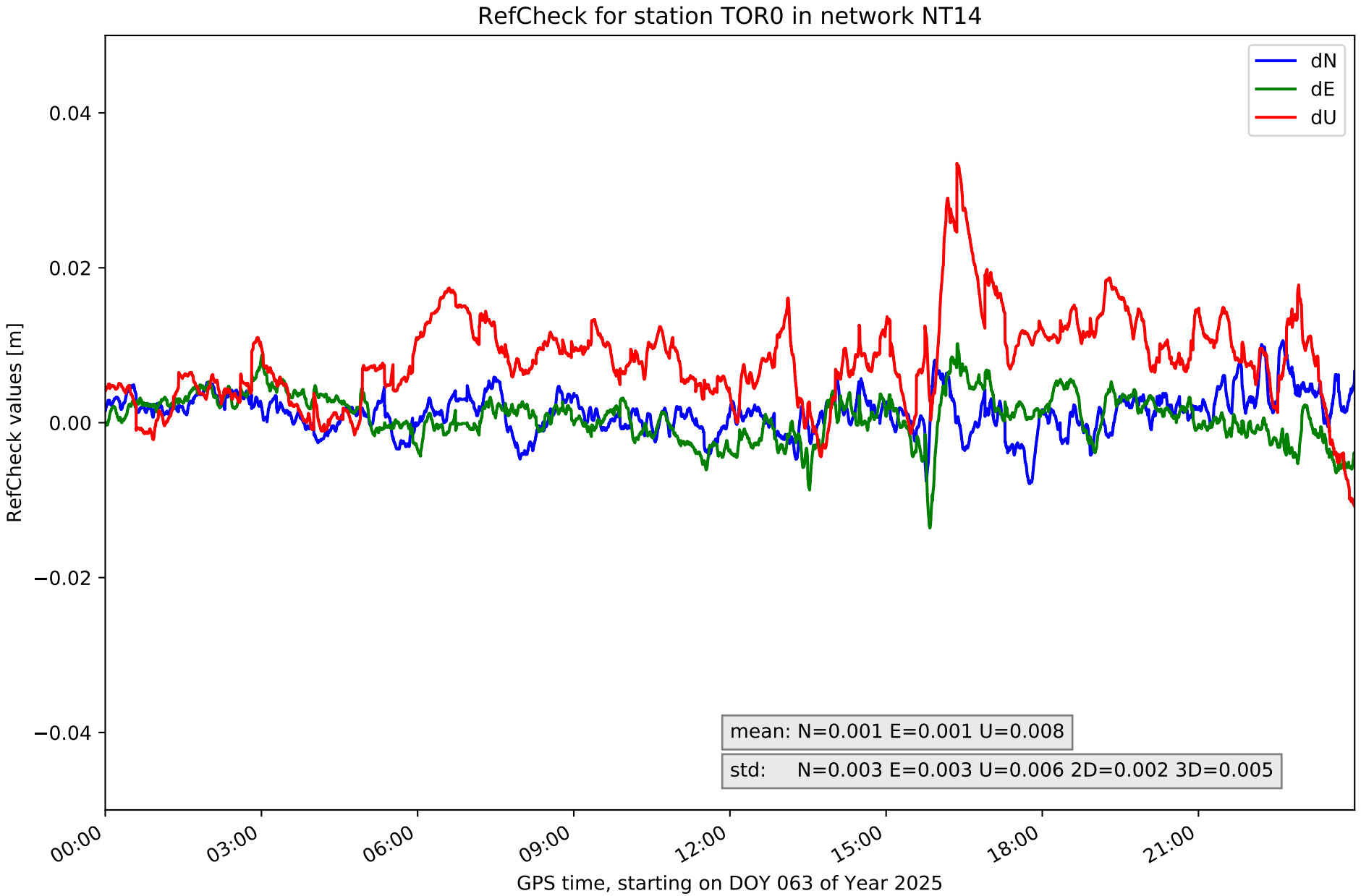

RefCheck for station BORR in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.001 E=0.002 U=-0.009
std: N=0.002 E=0.002 U=0.004 2D=0.002 3D=0.004
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

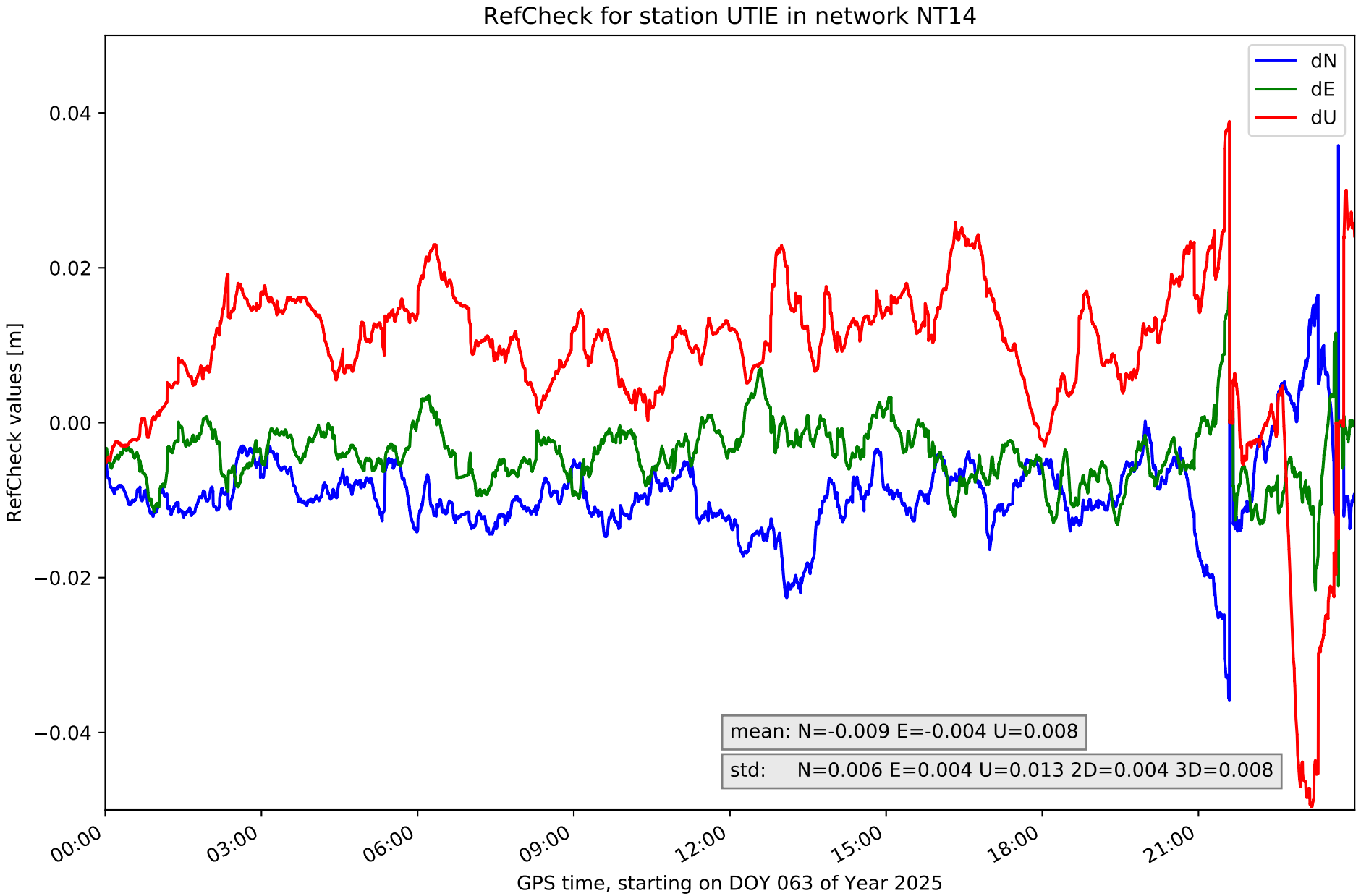

RefCheck for station DENI in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.002 E=0.002 U=0.0
std: N=0.003 E=0.003 U=0.006 2D=0.002 3D=0.004
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

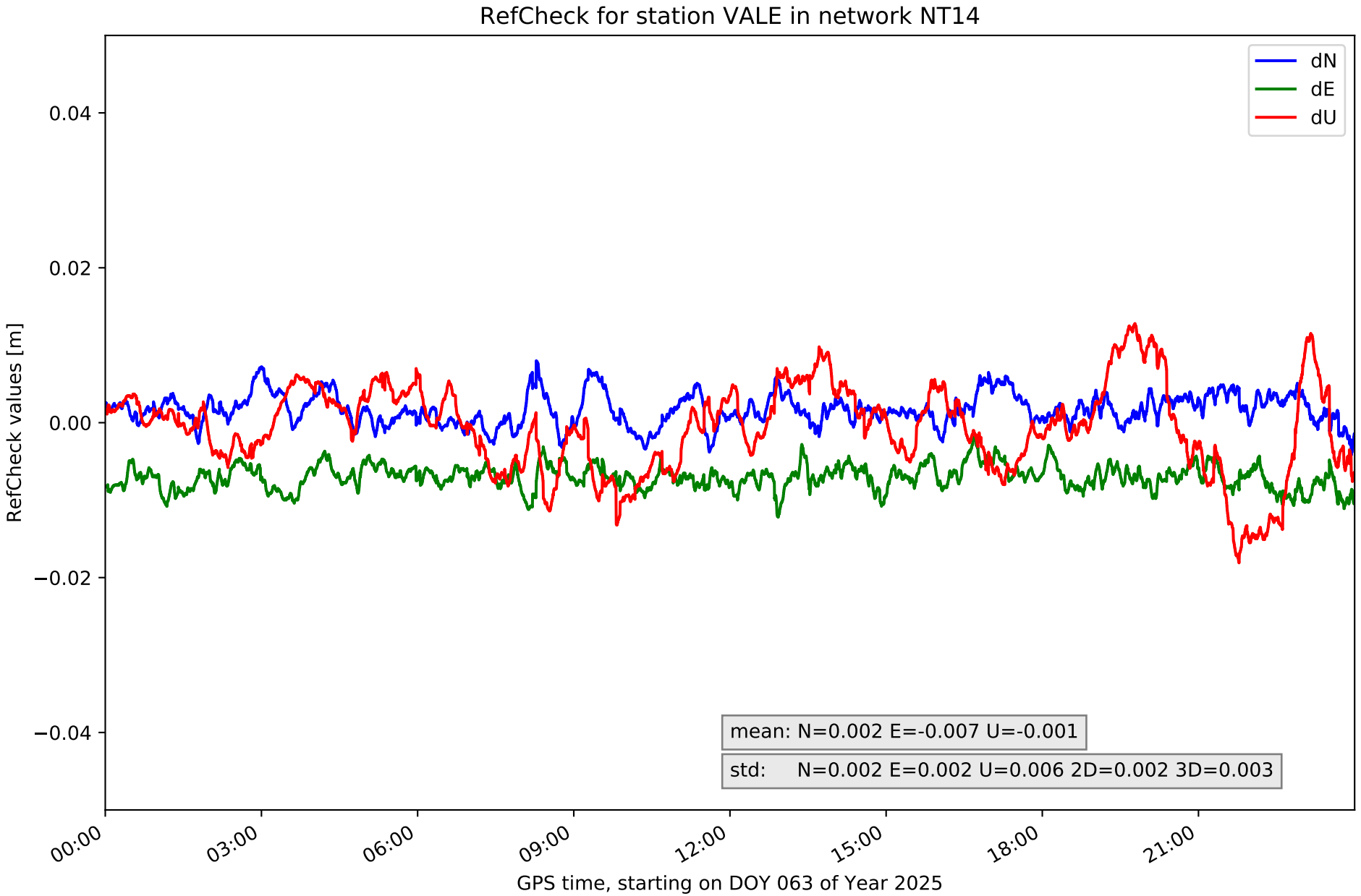

RefCheck for station IEJA in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.003 E=0.004 U=-0.011
std: N=0.003 E=0.004 U=0.009 2D=0.004 3D=0.009
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

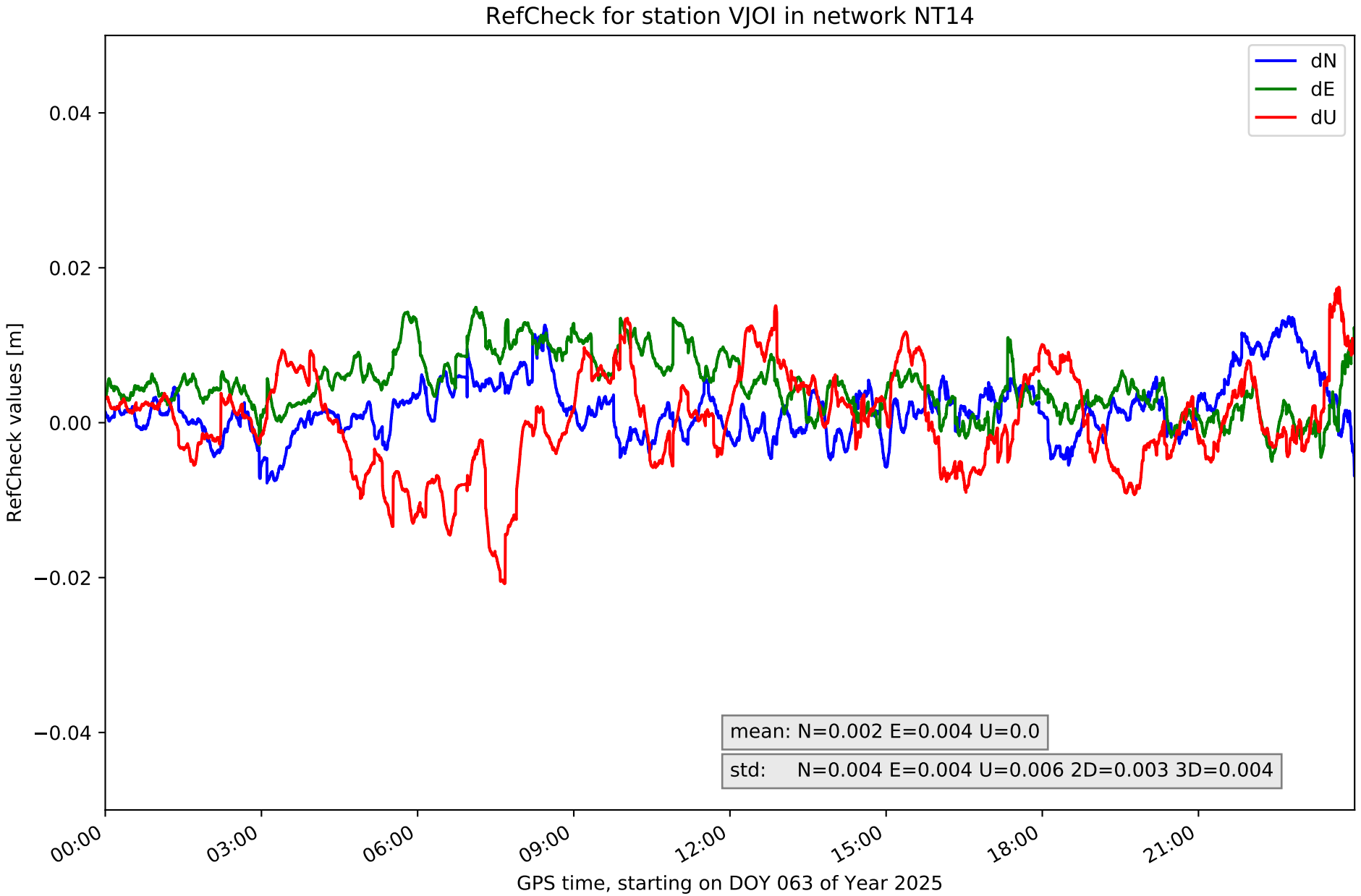

RefCheck for station PENI in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.005 E=0.002 U=-0.0
std: N=0.002 E=0.002 U=0.005 2D=0.002 3D=0.002
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025


RefCheck for station SARR in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.001 E=0.005 U=-0.009
std: N=0.003 E=0.002 U=0.005 2D=0.002 3D=0.004
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025


RefCheck for station TOR0 in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.001 E=0.001 U=0.008
std: N=0.003 E=0.003 U=0.006 2D=0.002 3D=0.005
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025


RefCheck for station UTIE in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.009 E=-0.004 U=0.008
std: N=0.006 E=0.004 U=0.013 2D=0.004 3D=0.008
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025


RefCheck for station VALE in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.002 E=-0.007 U=-0.001
std: N=0.002 E=0.002 U=0.006 2D=0.002 3D=0.003
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025


RefCheck for station VJOI in network NT14
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.002 E=0.004 U=0.0
std: N=0.004 E=0.004 U=0.006 2D=0.003 3D=0.004
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 063 of Year 2025

# RefCheck values for network NT14

| Station | Nmin | Nmax | Nstd | Emin | Emax | Estd | Umin | Umax | Ustd | std2D | std3D | #2D > 0.01 | % 2D > 0.01 | #3D > 0.02 | % 3D > 0.02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ABAN | -0.0 | 0.013 | 0.002 | -0.011 | 0.005 | 0.002 | -0.008 | 0.013 | 0.004 | 0.002 | 0.002 | 15196 | 26.6 | 0 | 0.0 |
| AIO2 | -0.011 | 0.004 | 0.002 | -0.01 | 0.011 | 0.003 | -0.022 | 0.026 | 0.009 | 0.002 | 0.005 | 1400 | 2.5 | 1389 | 2.4 |
| ALAC | -0.004 | 0.009 | 0.002 | -0.009 | 0.0 | 0.002 | -0.012 | 0.009 | 0.004 | 0.002 | 0.002 | 709 | 1.2 | 0 | 0.0 |
| ALCO | -0.008 | 0.007 | 0.002 | -0.008 | 0.004 | 0.002 | -0.012 | 0.014 | 0.005 | 0.002 | 0.003 | 0 | 0.0 | 0 | 0.0 |
| BORR | -0.006 | 0.007 | 0.002 | -0.003 | 0.008 | 0.002 | -0.023 | 0.001 | 0.004 | 0.002 | 0.004 | 0 | 0.0 | 1212 | 2.1 |
| DENI | -0.009 | 0.017 | 0.003 | -0.006 | 0.011 | 0.003 | -0.014 | 0.021 | 0.006 | 0.002 | 0.004 | 1272 | 2.2 | 263 | 0.5 |
| IEJA | -0.01 | 0.012 | 0.003 | -0.004 | **0.028** | **0.004** | **-0.055** | 0.001 | 0.009 | **0.004** | **0.009** | 3965 | 6.9 | 4325 | 7.6 |
| PENI | -0.011 | 0.001 | 0.002 | -0.006 | 0.009 | 0.002 | -0.012 | 0.011 | 0.005 | 0.002 | 0.002 | 2186 | 3.8 | 0 | 0.0 |
| SARR | -0.004 | 0.009 | 0.003 | -0.001 | 0.013 | 0.002 | -0.02 | 0.005 | 0.005 | 0.002 | 0.004 | 1016 | 1.8 | 102 | 0.2 |
| TOR0 | -0.008 | 0.011 | 0.003 | -0.014 | 0.01 | 0.003 | -0.011 | 0.034 | 0.006 | 0.002 | 0.005 | 852 | 1.5 | 1984 | 3.5 |
| UTIE | **-0.036** | **0.036** | **0.006** | **-0.022** | 0.018 | **0.004** | -0.05 | **0.039** | **0.013** | **0.004** | 0.008 | **35447** | **62.1** | **14823** | **25.9** |
| VALE | -0.004 | 0.008 | 0.002 | -0.012 | -0.001 | 0.002 | -0.018 | 0.013 | 0.006 | 0.002 | 0.003 | 4238 | 7.4 | 45 | 0.1 |
| VJOI | -0.008 | 0.014 | 0.004 | -0.005 | 0.015 | **0.004** | -0.021 | 0.018 | 0.006 | 0.003 | 0.004 | 10411 | 18.2 | 398 | 0.7 |
| **Mean** | **-0.009** | **0.011** | **0.003** | **-0.009** | **0.01** | **0.003** | **-0.021** | **0.016** | **0.006** | **0.002** | **0.004** | **5899.4** | **10.3** | **1887.8** | **3.3** |
| **Min/Max** | **-0.036** | **0.036** | **0.006** | **-0.022** | **0.028** | **0.004** | **-0.055** | **0.039** | **0.013** | **0.004** | **0.009** | **35447** | **62.1** | **14823** | **25.9** |

# fixing statistic for network NT14

| fixing percentage of | all GNSS | G | R | E | C |
|---|---|---|---|---|---|
| using threshold 0.3 | 91.0 | 91.6 | 85.3 | 94.0 | 91.1 |
| considering satellites with dual-frequency fixed | 86.0 | 89.0 | 71.9 | 91.6 | 88.8 |
| considering all signals separately | 86.9 | 89.1 | 71.9 | 91.8 | 88.5 |