# summary for network NET7

timeperiod chosen: from 2026-11-14-00:00:00 until 2026-11-14-23:59:59

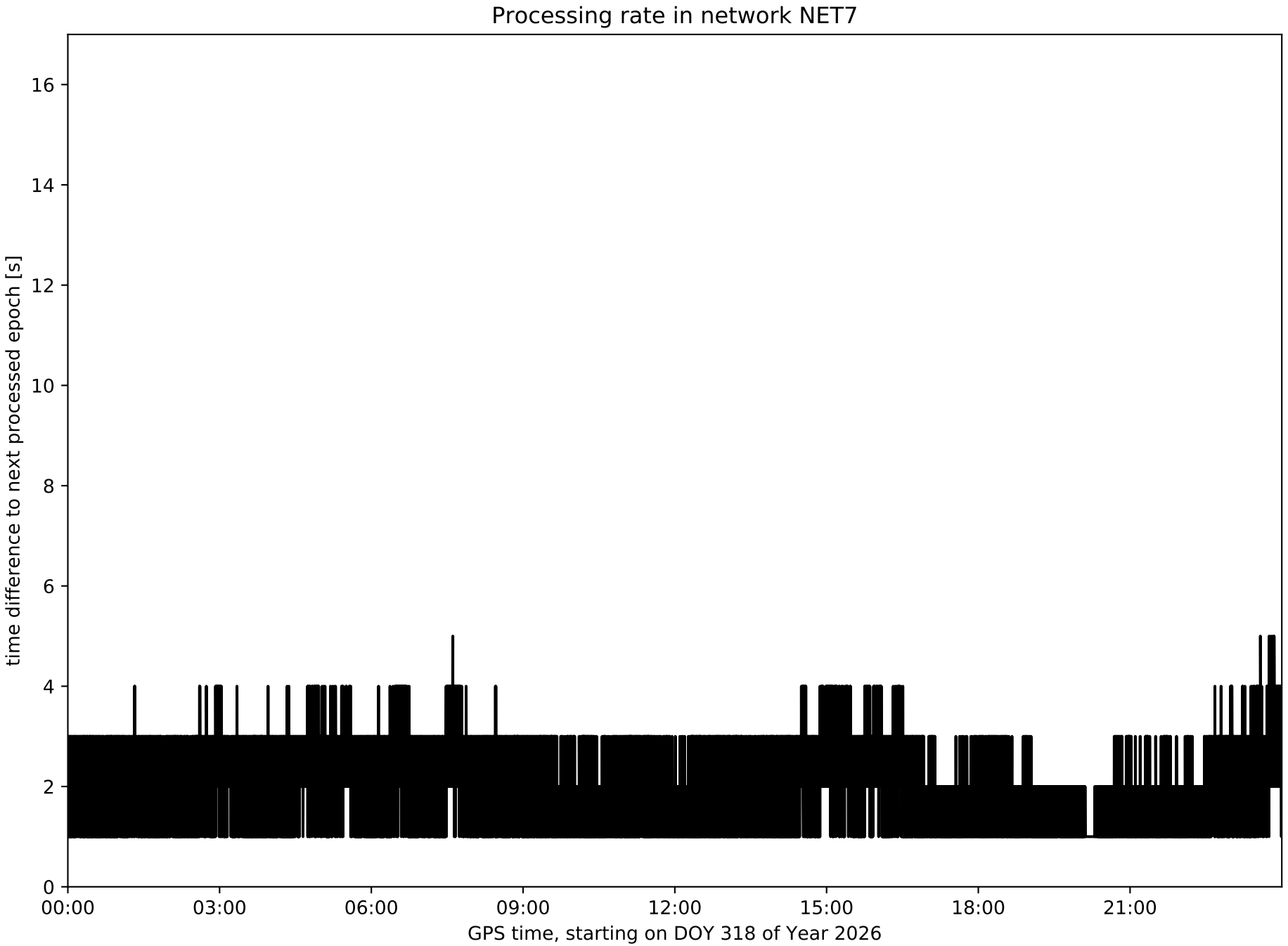
average update rate (durations larger than 15 seconds considered as observation gap): 1.8 seconds

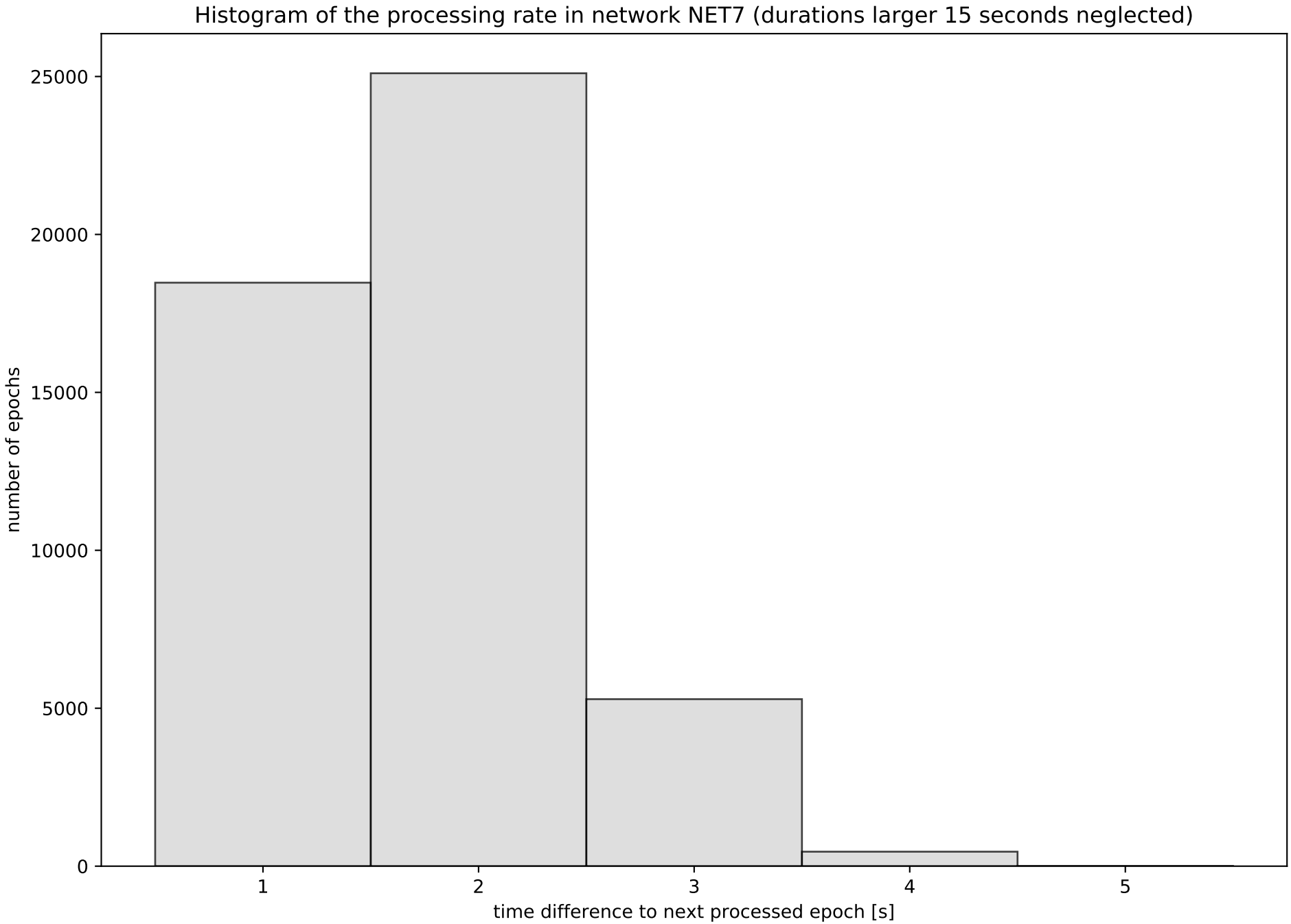
average fixing percentage with threshold set to 0.3: 95.4 percent

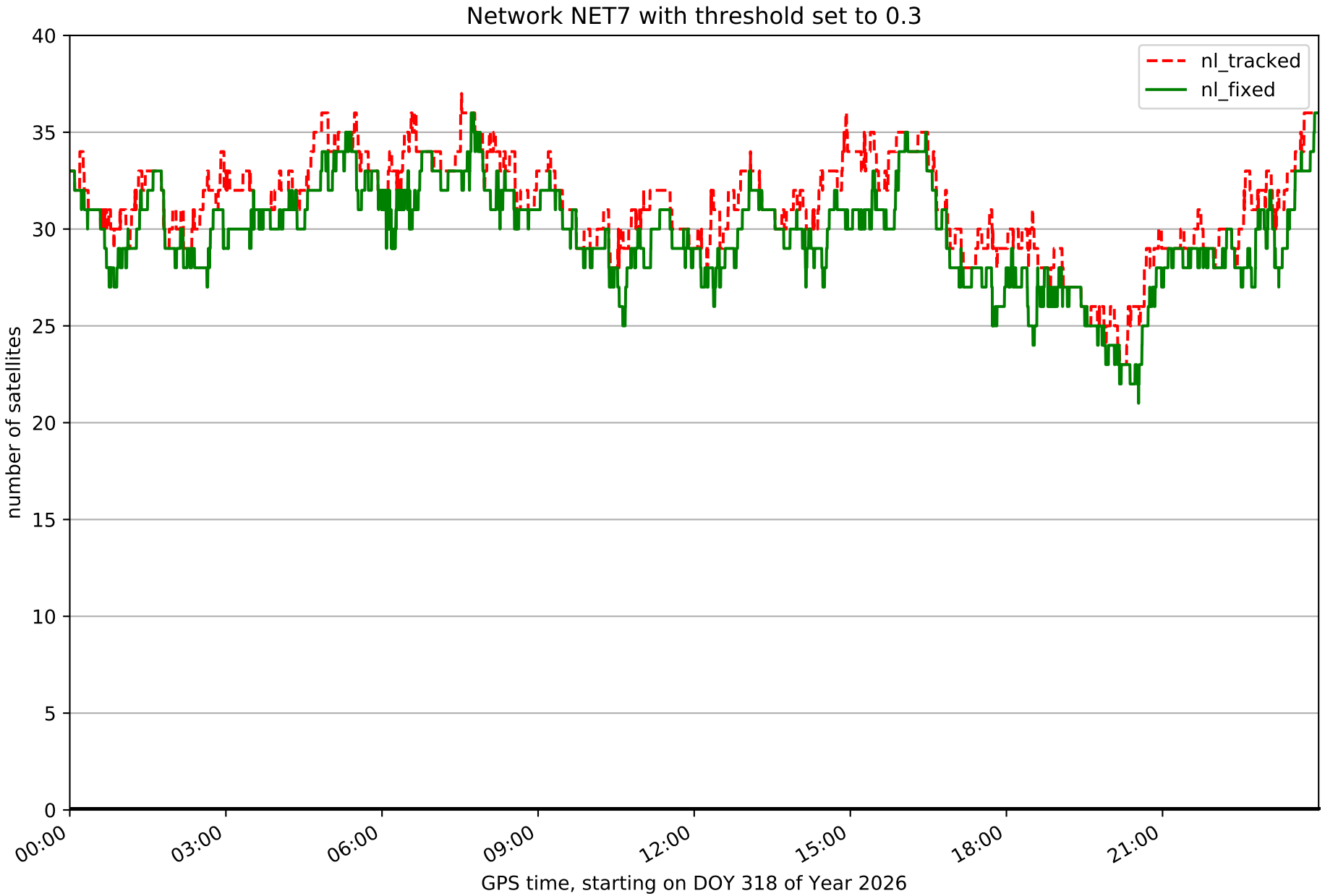
stations available: 19 of 19

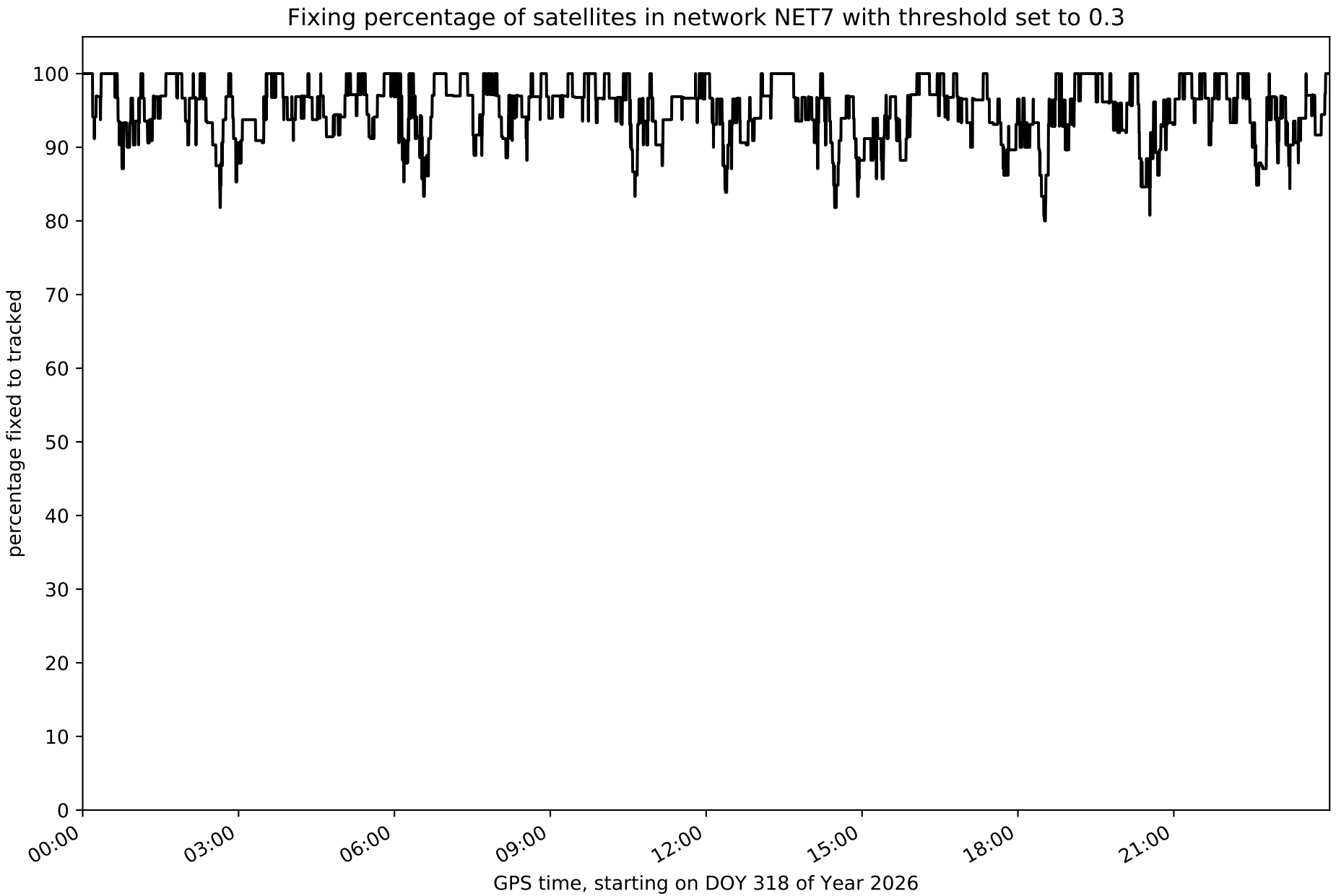
station information:

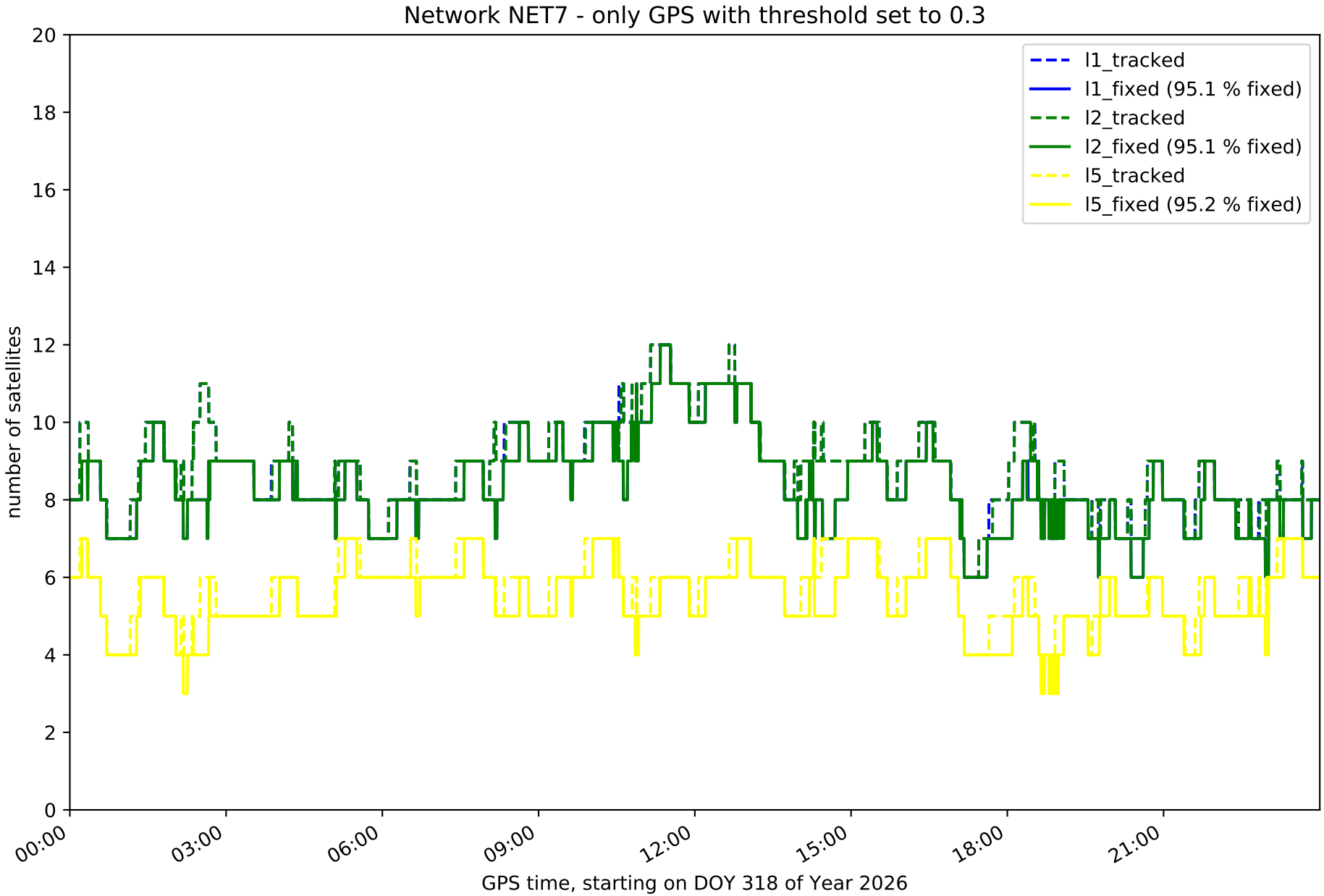
| | | | |
|---|---|---|---|
| station AVL1: | antenna: LEIAR20 LEIM | receiver: LEICA GR50 | height: 78.434 |
| station CANT: | antenna: LEIAR25.R4 LEIT | receiver: LEICA GR50 | height: 102.291 |
| station CASO: | antenna: LEIAR20 LEIM | receiver: LEICA GR50 | height: 651.931 |
| station CBRN: | antenna: TPSCR.G5 TPSH | receiver: TPS NET-G5 | height: 321.79 |
| station FUDE: | antenna: TRM59900.00 SCIS | receiver: TRIMBLE NETR9 | height: 1903.207 |
| station LANT: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR30 | height: 532.457 |
| station LARE: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR50 | height: 65.065 |
| station LENA: | antenna: TPSCR.G5C TPSH | receiver: TPS NET-G5 | height: 382.163 |
| station LEON: | antenna: LEIAR25 NONE | receiver: LEICA GR50 | height: 970.283 |
| station MDPM: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR50 | height: 658.903 |
| station RENS: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR50 | height: 908.675 |
| station RIAN: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR50 | height: 1209.259 |
| station RIBE: | antenna: LEIAR20 LEIM | receiver: LEICA GR50 | height: 69.645 |
| station RNAN: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR50 | height: 587.144 |
| station SIRO: | antenna: LEIAR10 NONE | receiver: LEICA GR10 | height: 226.113 |
| station TRLV: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR30 | height: 79.801 |
| station VCRD: | antenna: GPPNULLANTENNA NONE | receiver: LEICA GR50 | height: 256.932 |
| station VDGO: | antenna: LEIAR20 LEIM | receiver: LEICA GR50 | height: 906.145 |
| station XIXO: | antenna: LEIAR20 LEIM | receiver: LEICA GR50 | height: 156.563 |

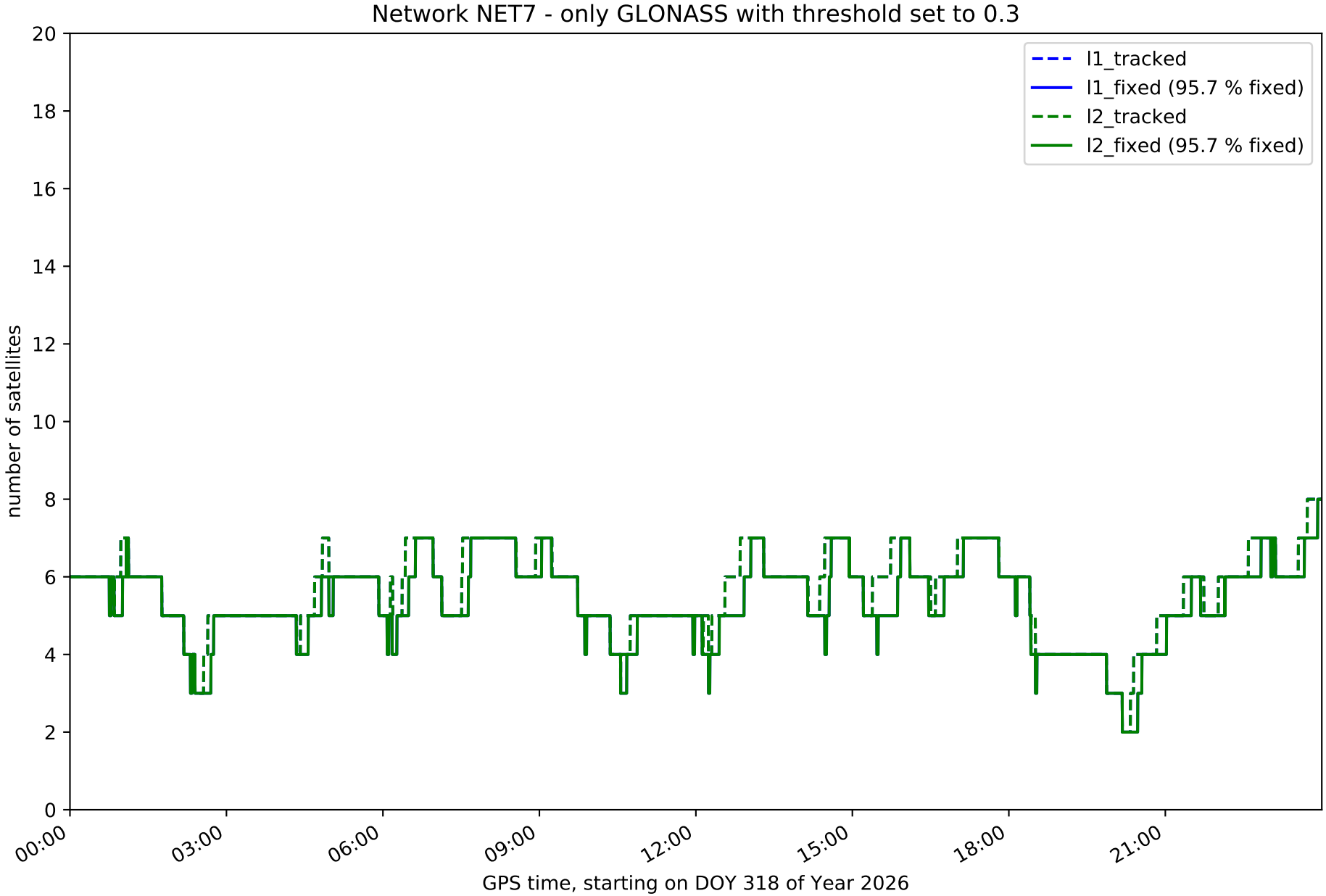

Processing rate in network NET7
time difference to next processed epoch [s]
0
2
4
6
8
10
12
14
16
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

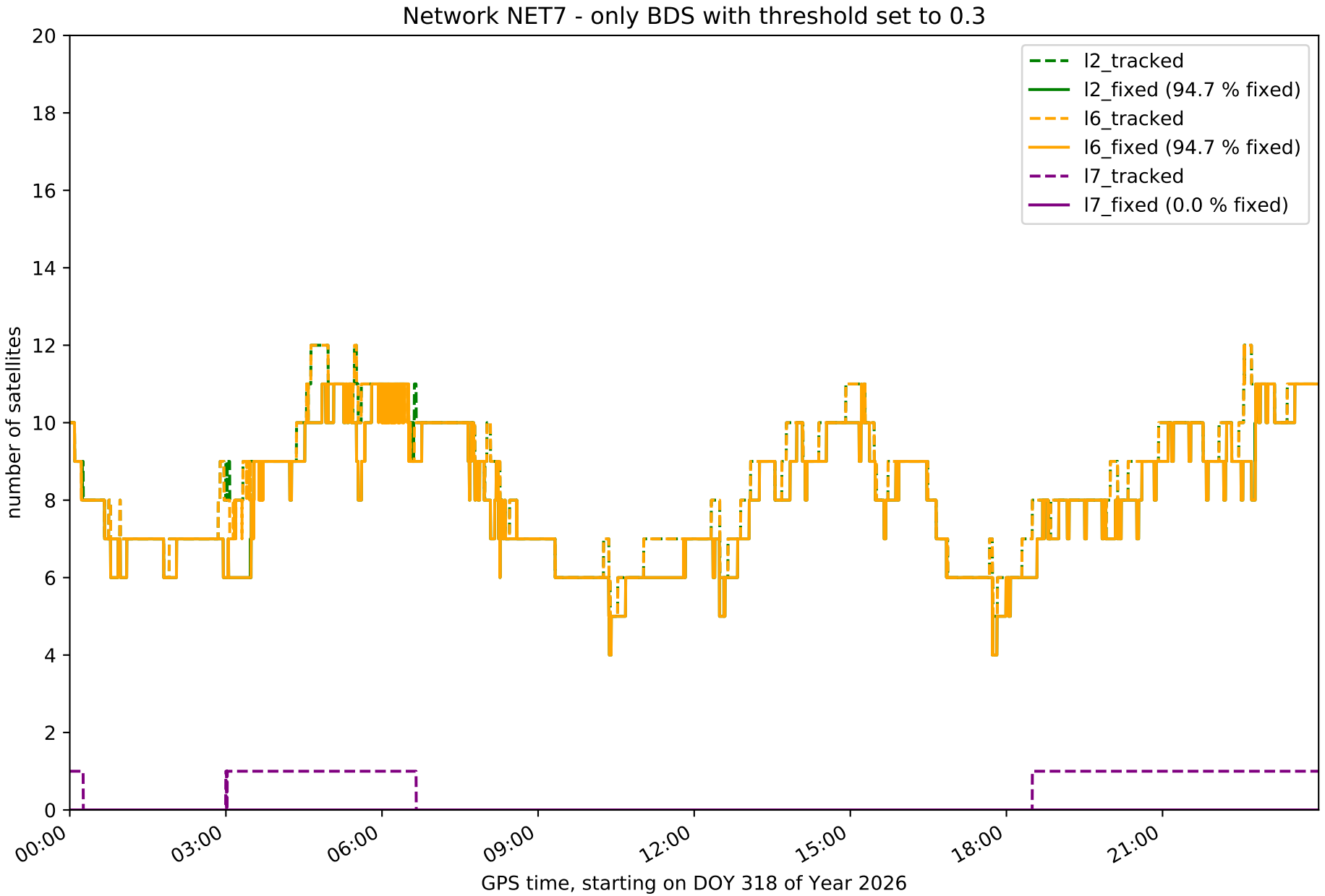

Histogram of the processing rate in network NET7 (durations larger 15 seconds neglected)
number of epochs
25000
20000
15000
10000
5000
0
1
2
3
4
5
time difference to next processed epoch [s]

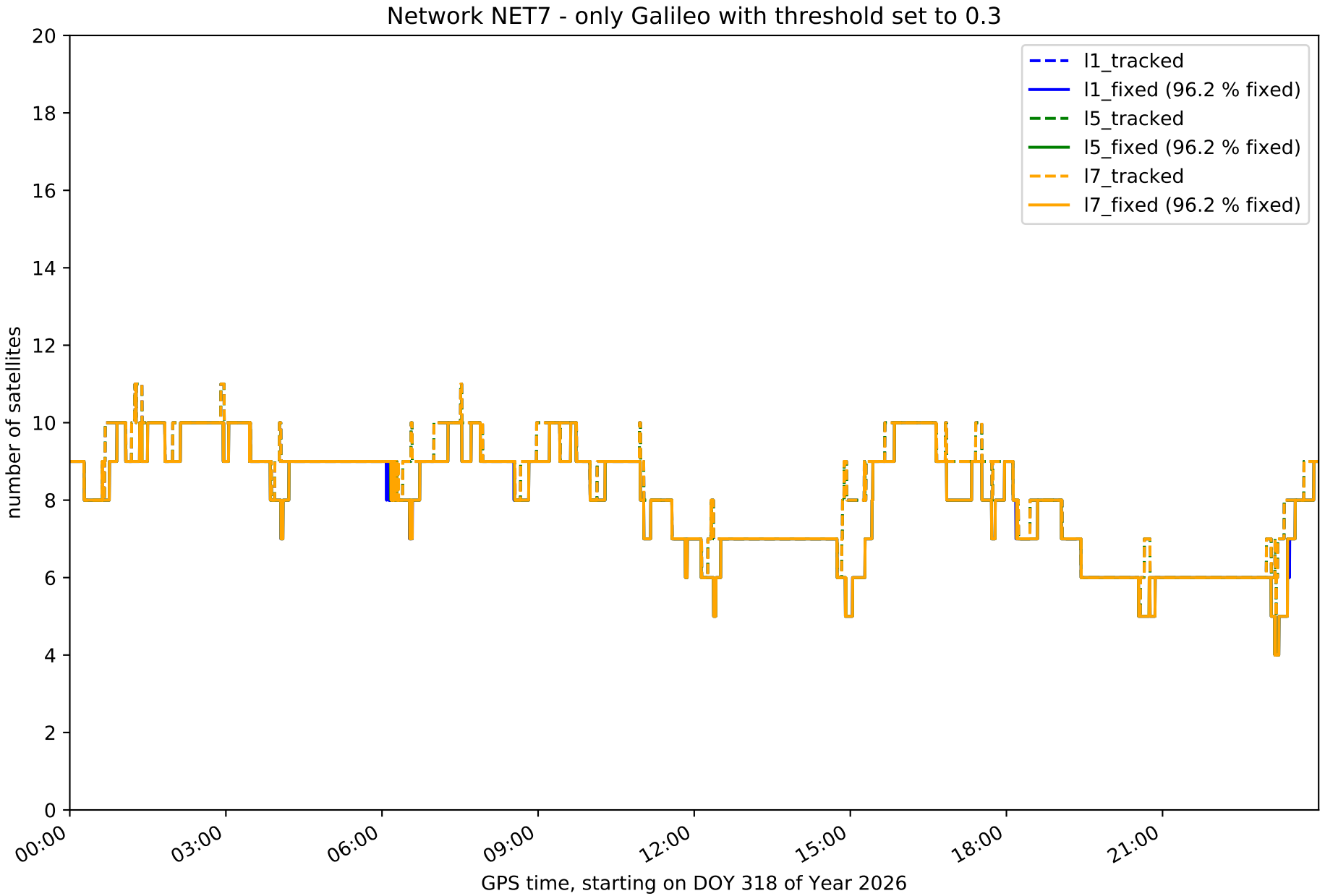

Network NET7 with threshold set to 0.3
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
40
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

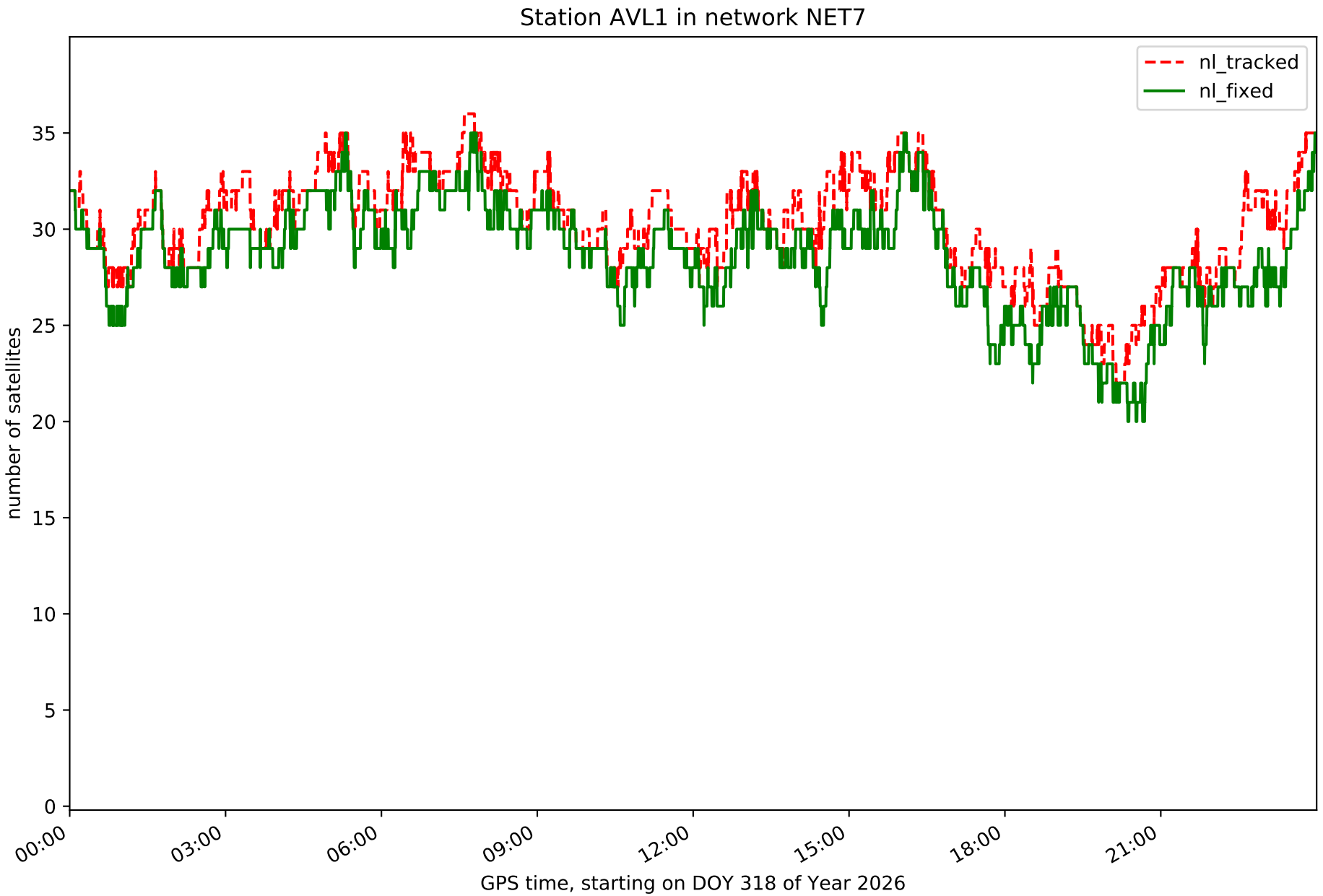

Fixing percentage of satellites in network NET7 with threshold set to 0.3
percentage fixed to tracked
100
90
80
70
60
50
40
30
20
10
0
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

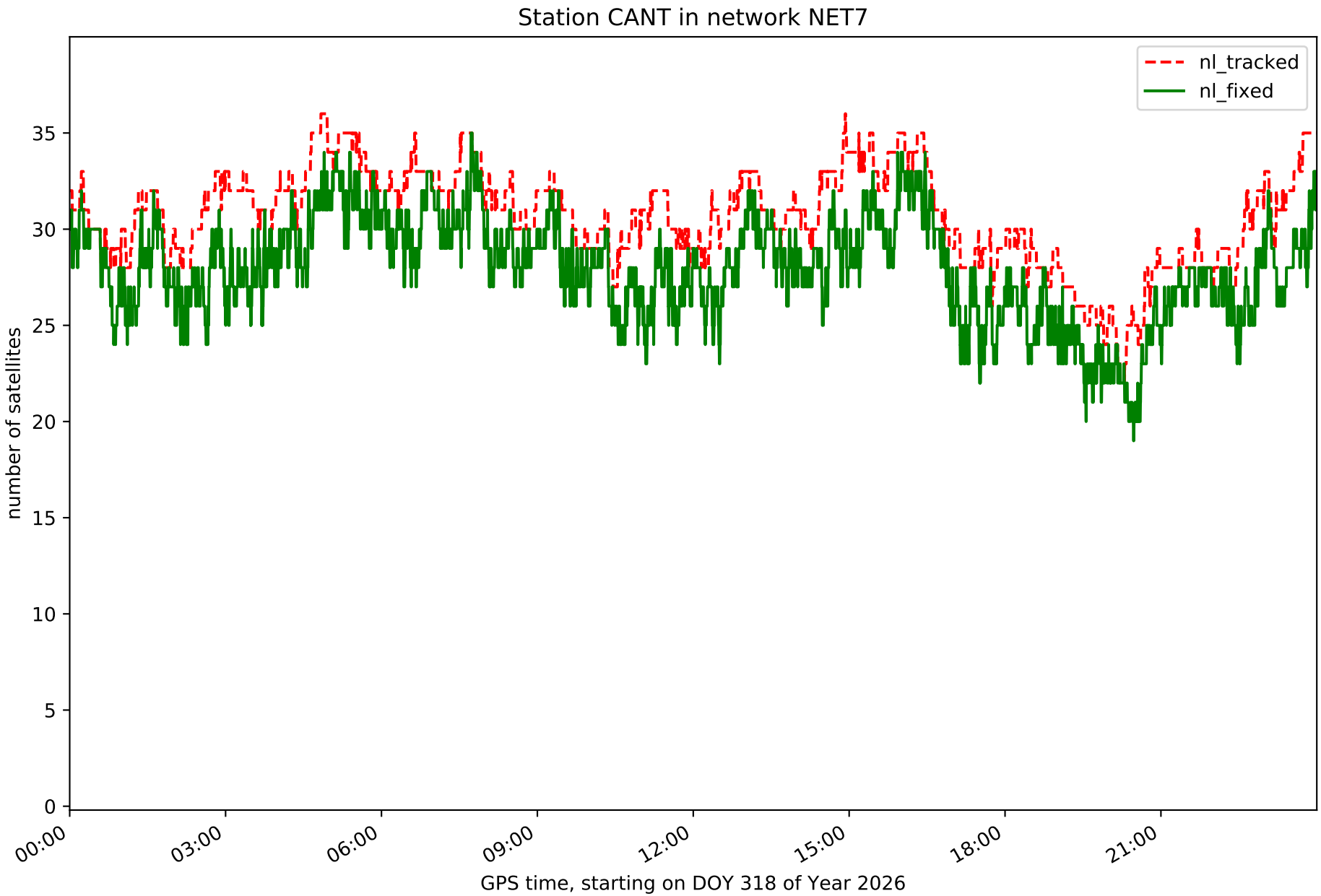

Network NET7 - only GPS with threshold set to 0.3
number of satellites
GPS time, starting on DOY 318 of Year 2026
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
0
2
4
6
8
10
12
14
16
18
20
l1_tracked
l1_fixed (95.1 % fixed)
l2_tracked
l2_fixed (95.1 % fixed)
l5_tracked
l5_fixed (95.2 % fixed)

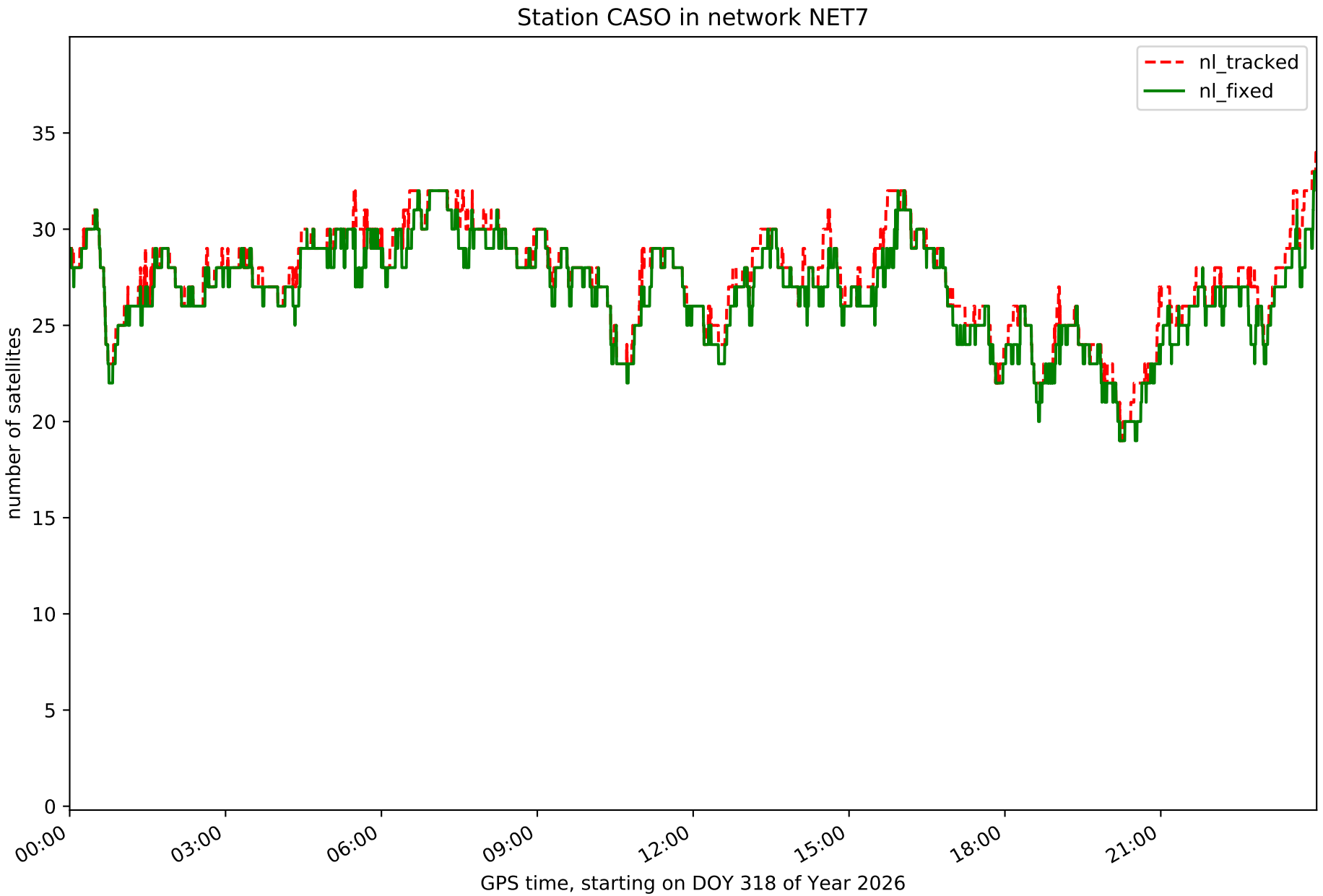

Network NET7 - only GLONASS with threshold set to 0.3
l1_tracked
l1_fixed (95.7 % fixed)
l2_tracked
l2_fixed (95.7 % fixed)
number of satellites
0
2
4
6
8
10
12
14
16
18
20
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

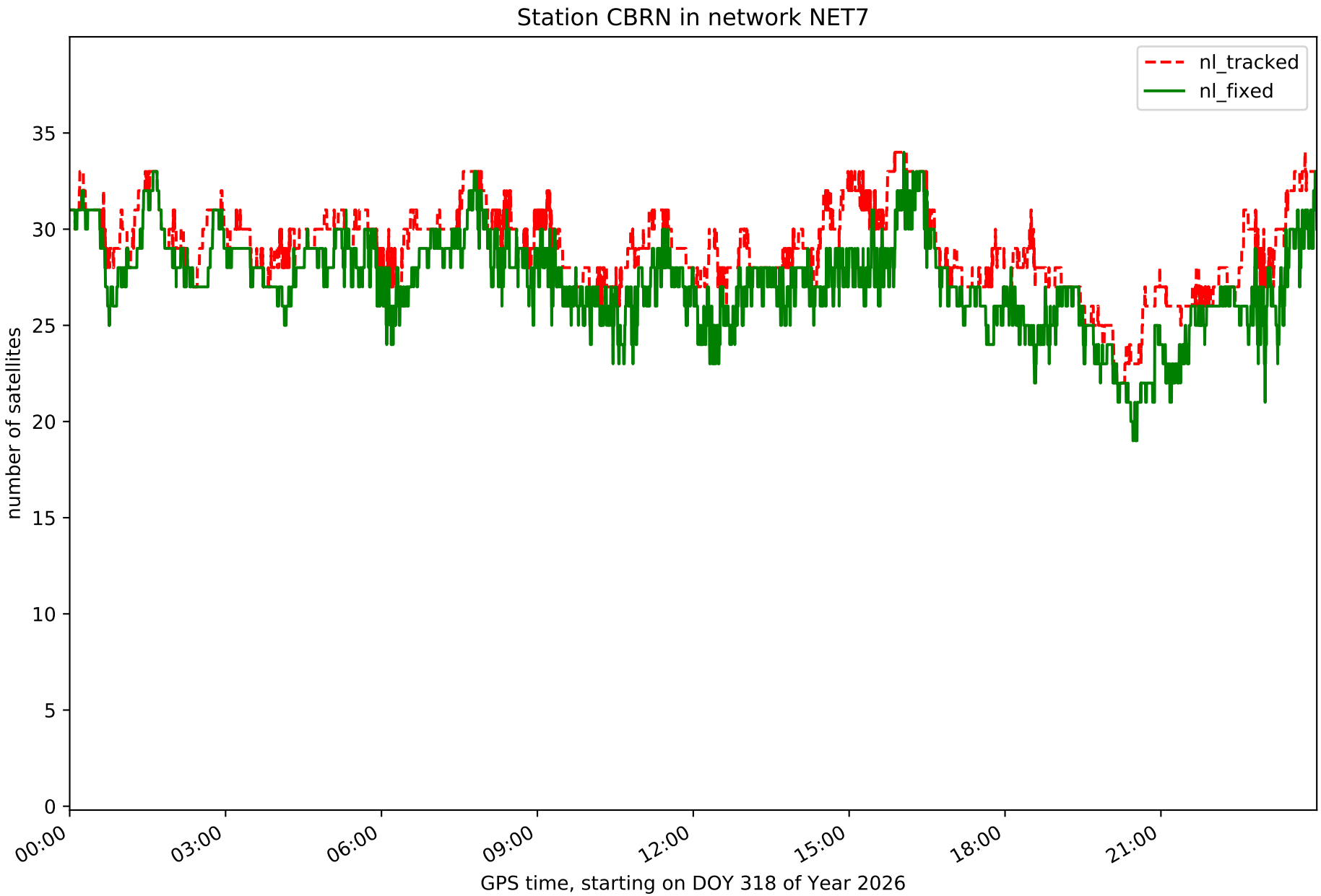

Network NET7 - only BDS with threshold set to 0.3
number of satellites
GPS time, starting on DOY 318 of Year 2026
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
0
2
4
6
8
10
12
14
16
18
20
I2_tracked
I2_fixed (94.7 % fixed)
I6_tracked
I6_fixed (94.7 % fixed)
I7_tracked
I7_fixed (0.0 % fixed)

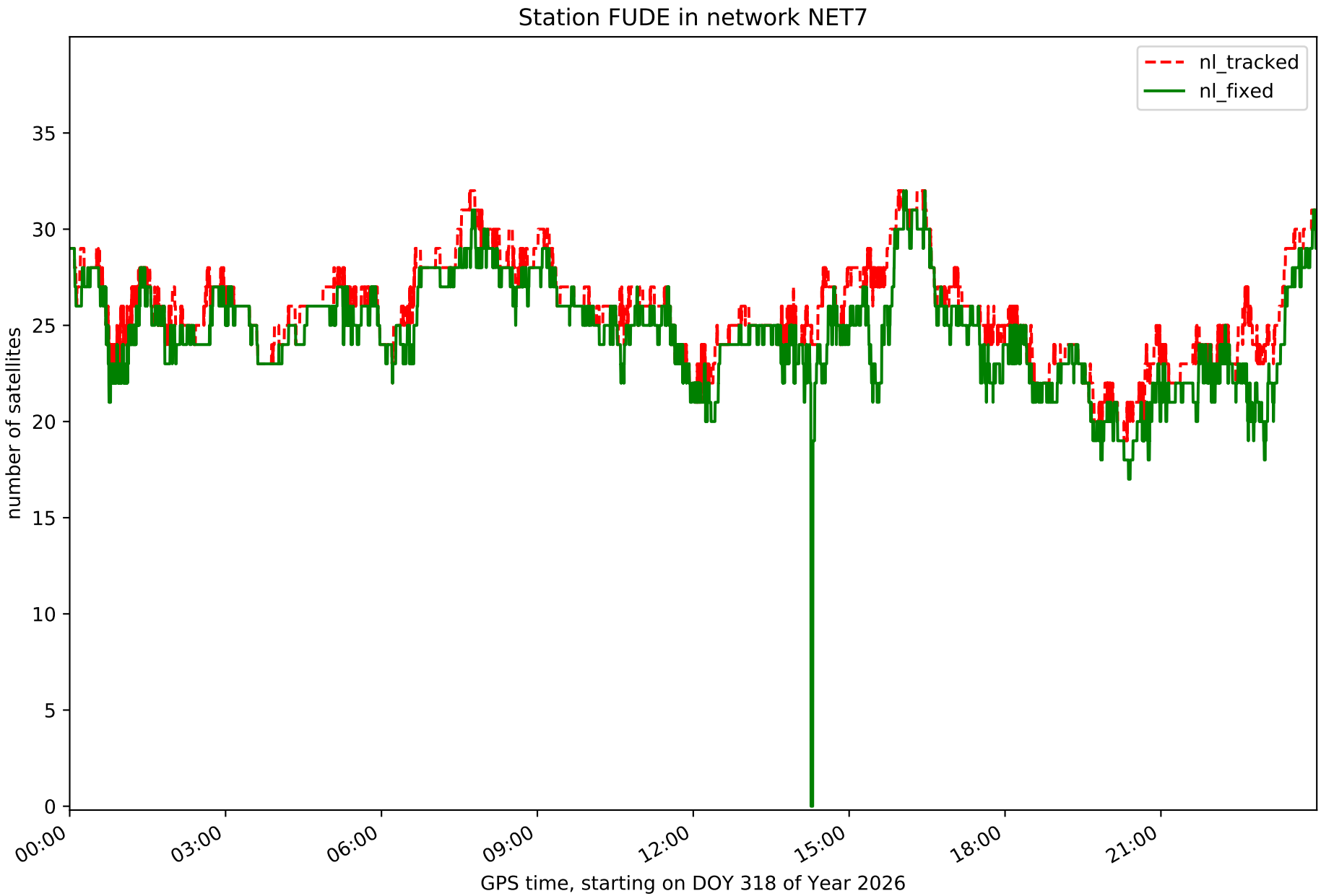

Network NET7 - only Galileo with threshold set to 0.3
number of satellites
GPS time, starting on DOY 318 of Year 2026
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
0
2
4
6
8
10
12
14
16
18
20
l1_tracked
l1_fixed (96.2 % fixed)
l5_tracked
l5_fixed (96.2 % fixed)
l7_tracked
l7_fixed (96.2 % fixed)

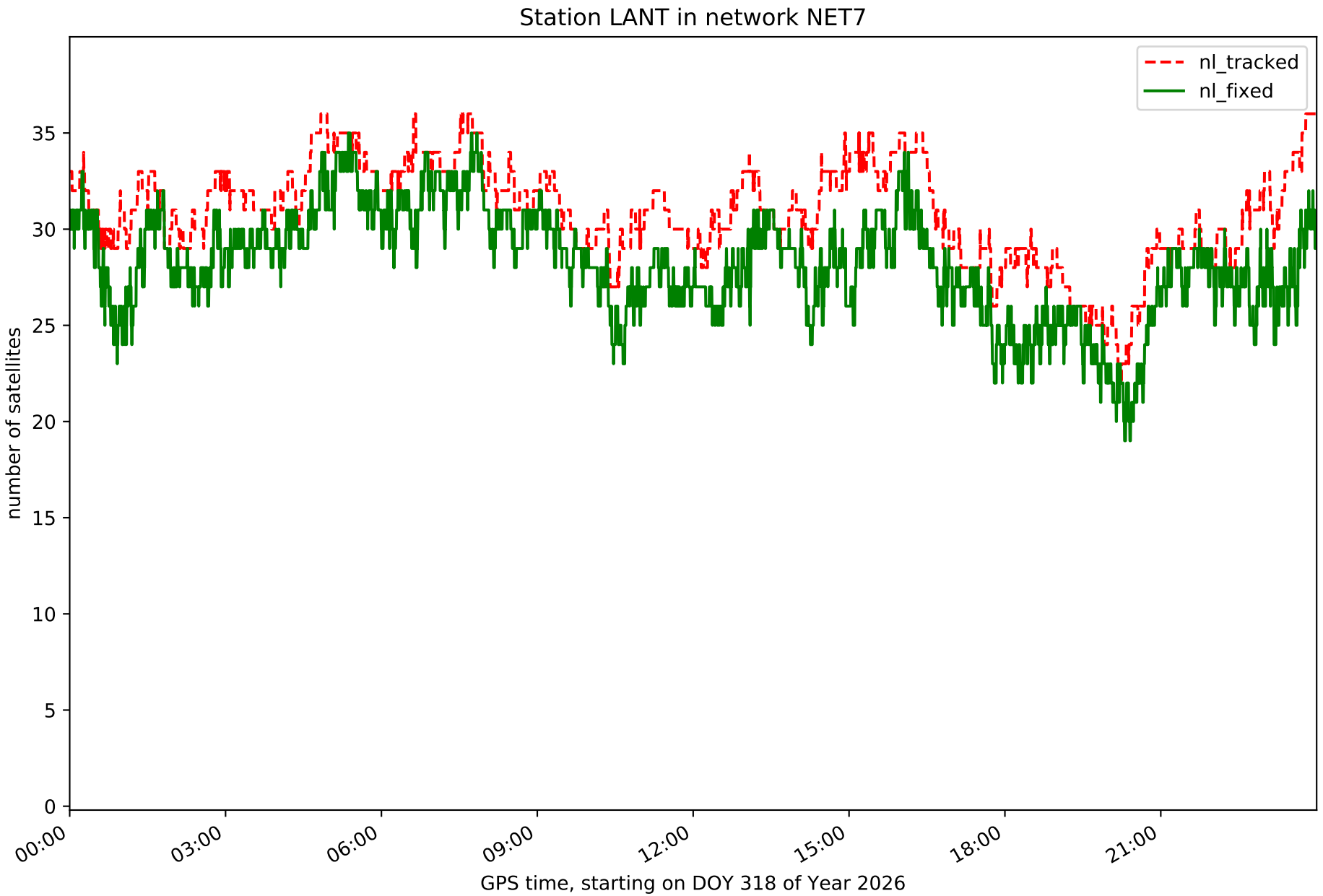

Station AVL1 in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

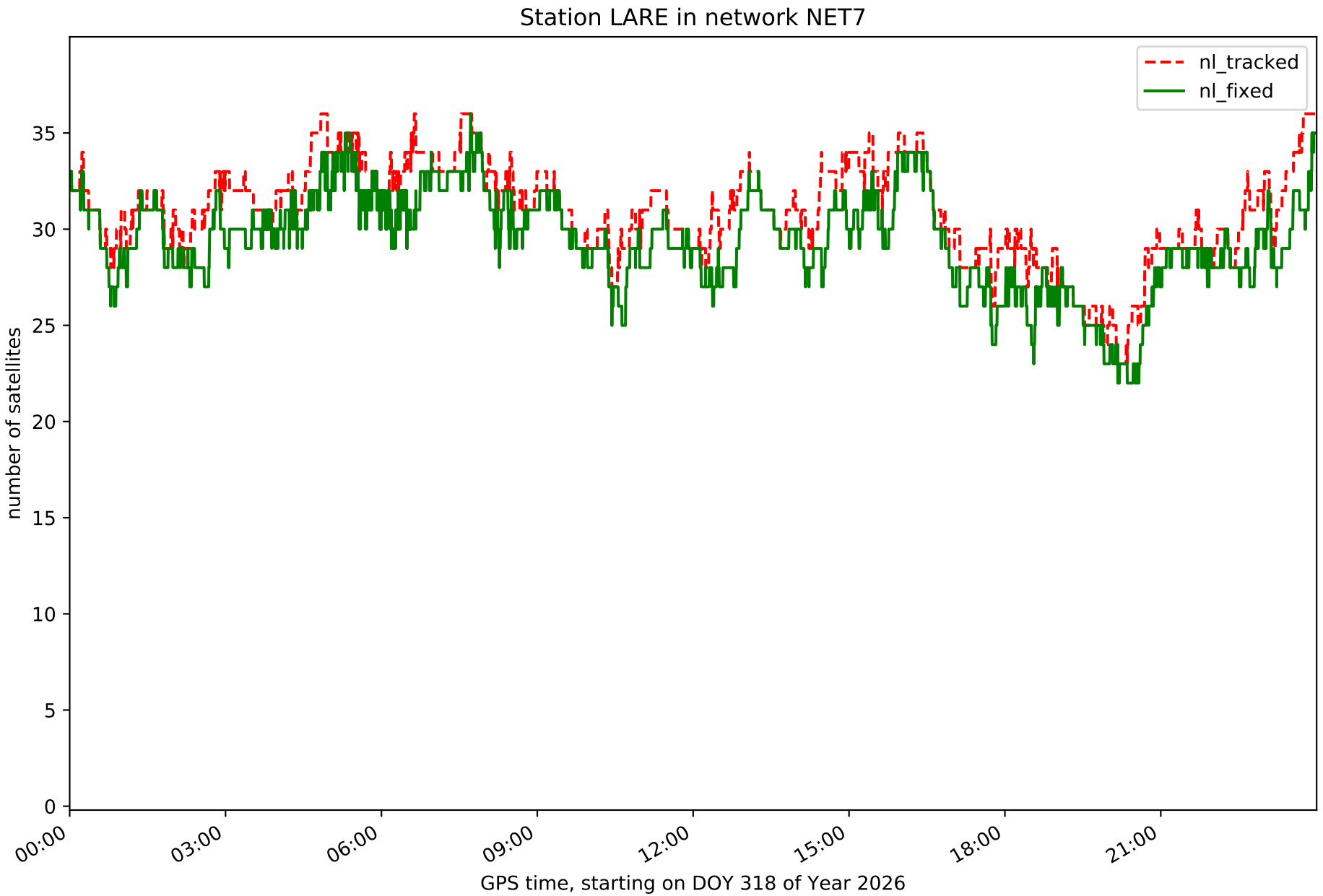

Station CANT in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

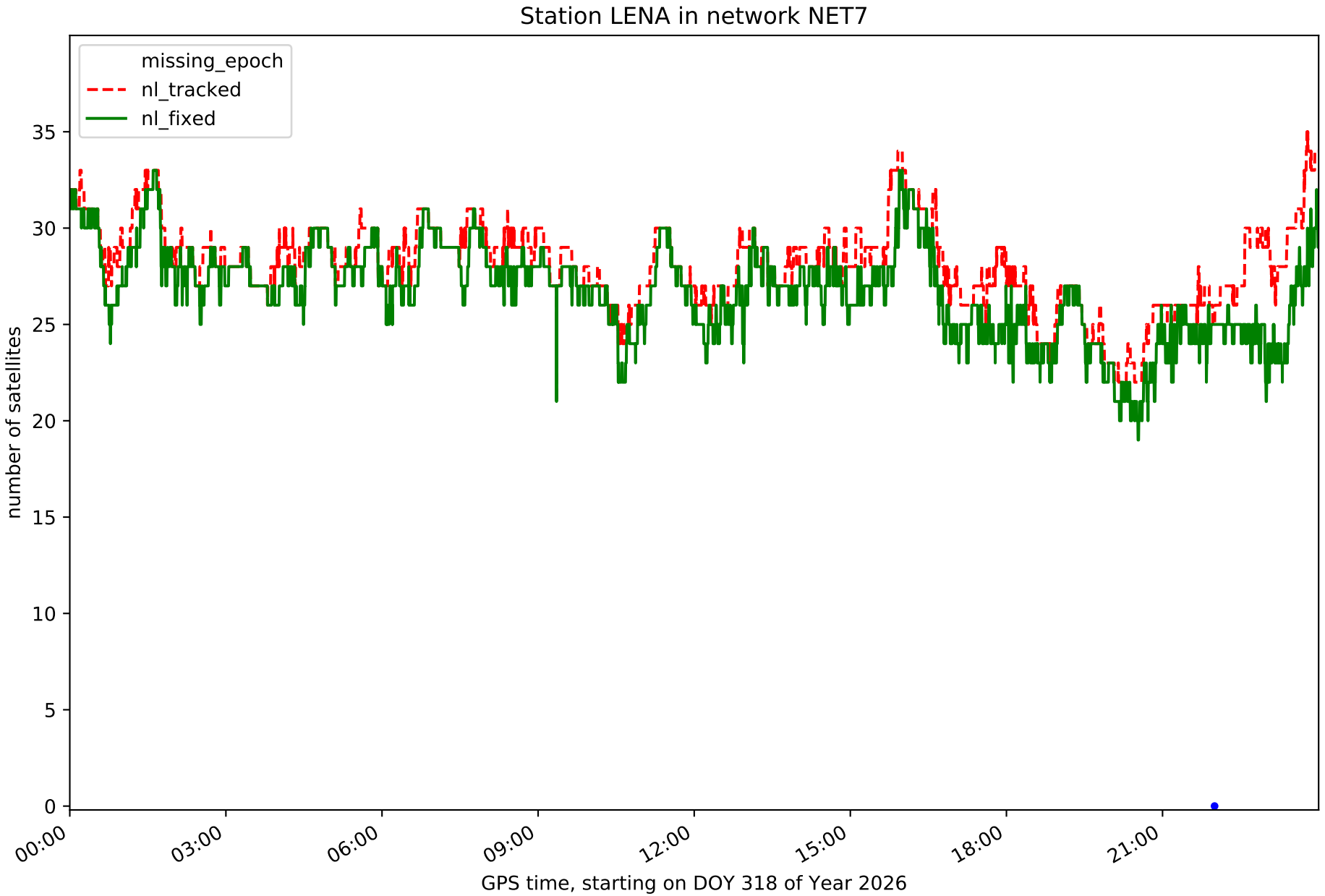

Station CASO in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

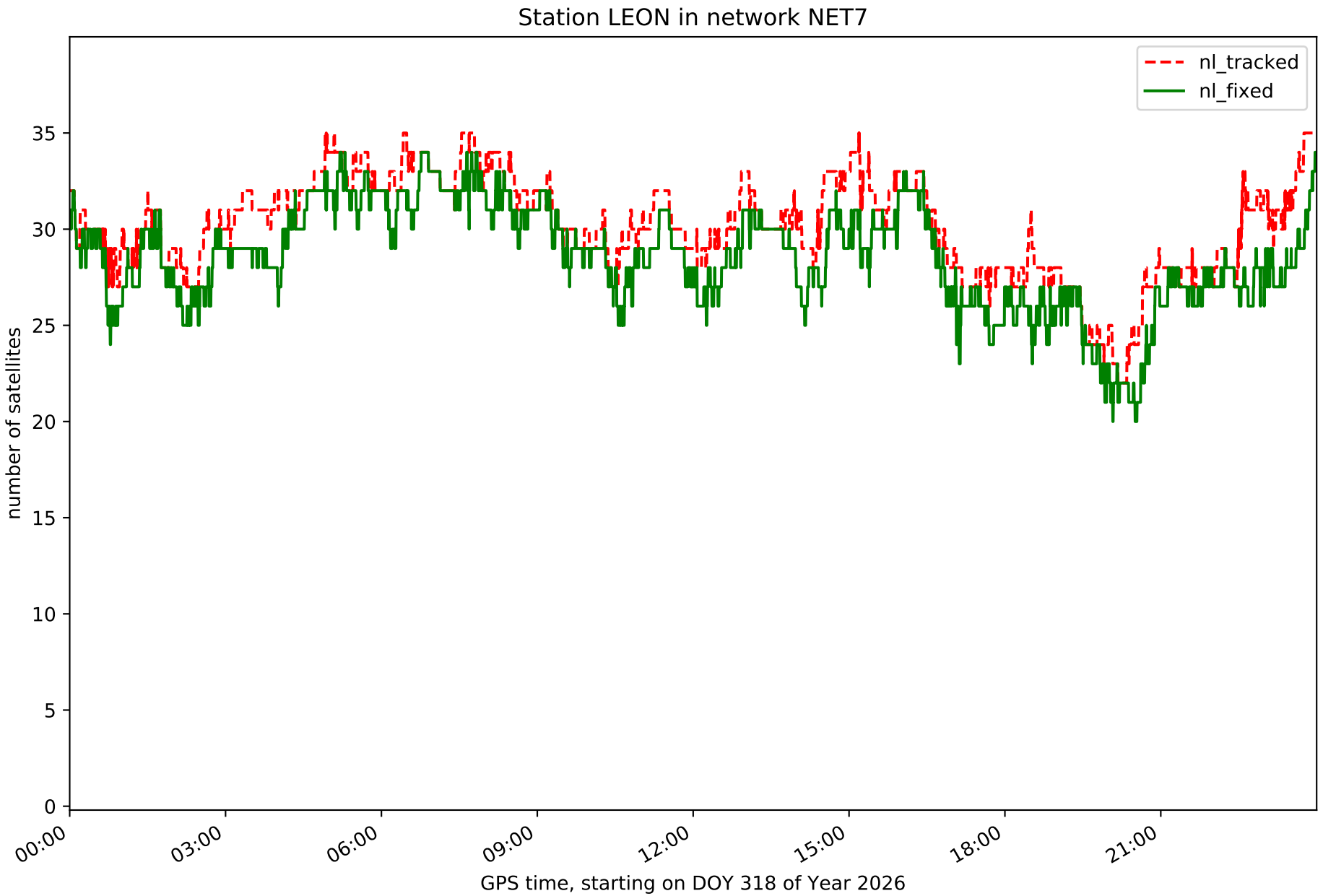

Station CBRN in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

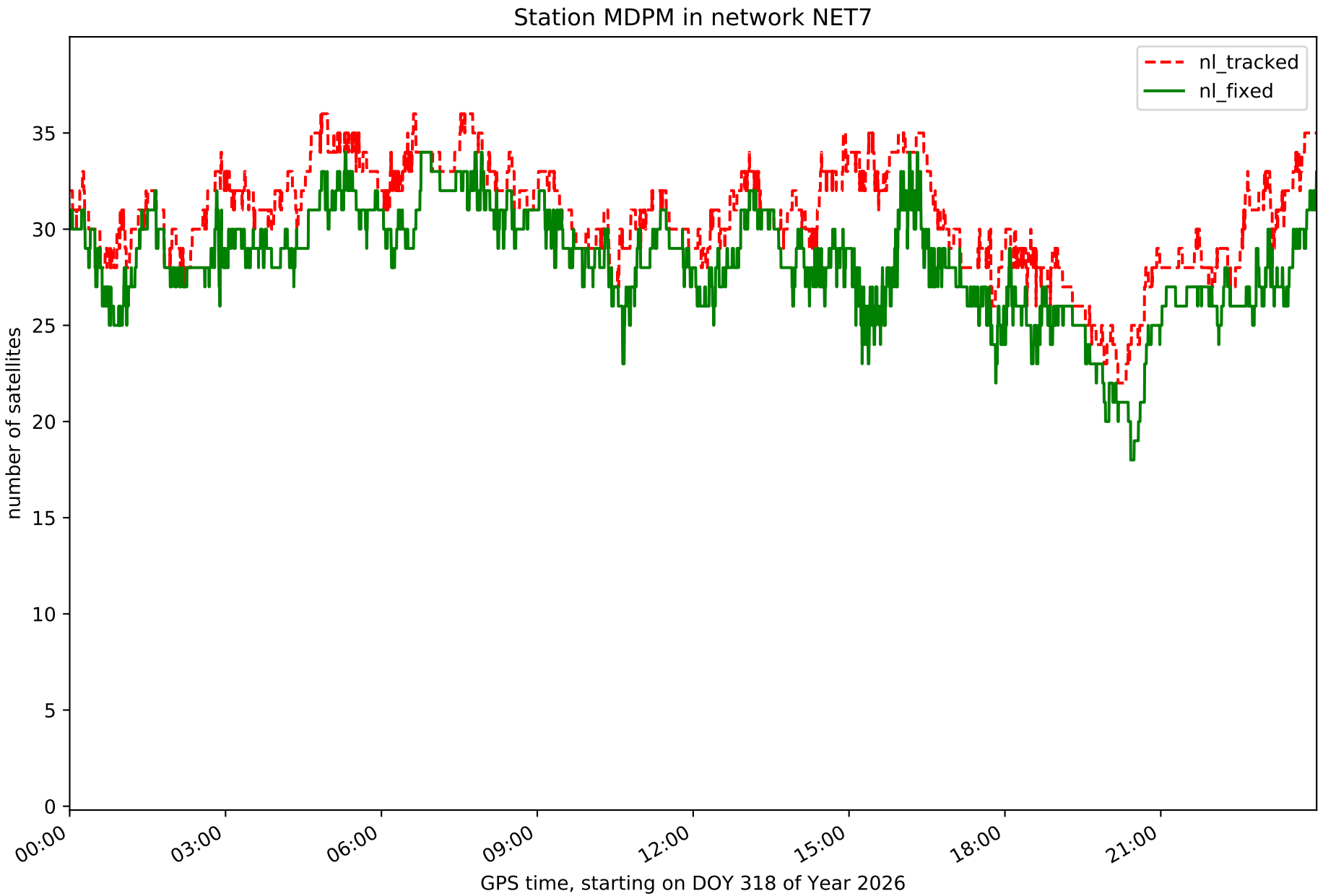

Station FUDE in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

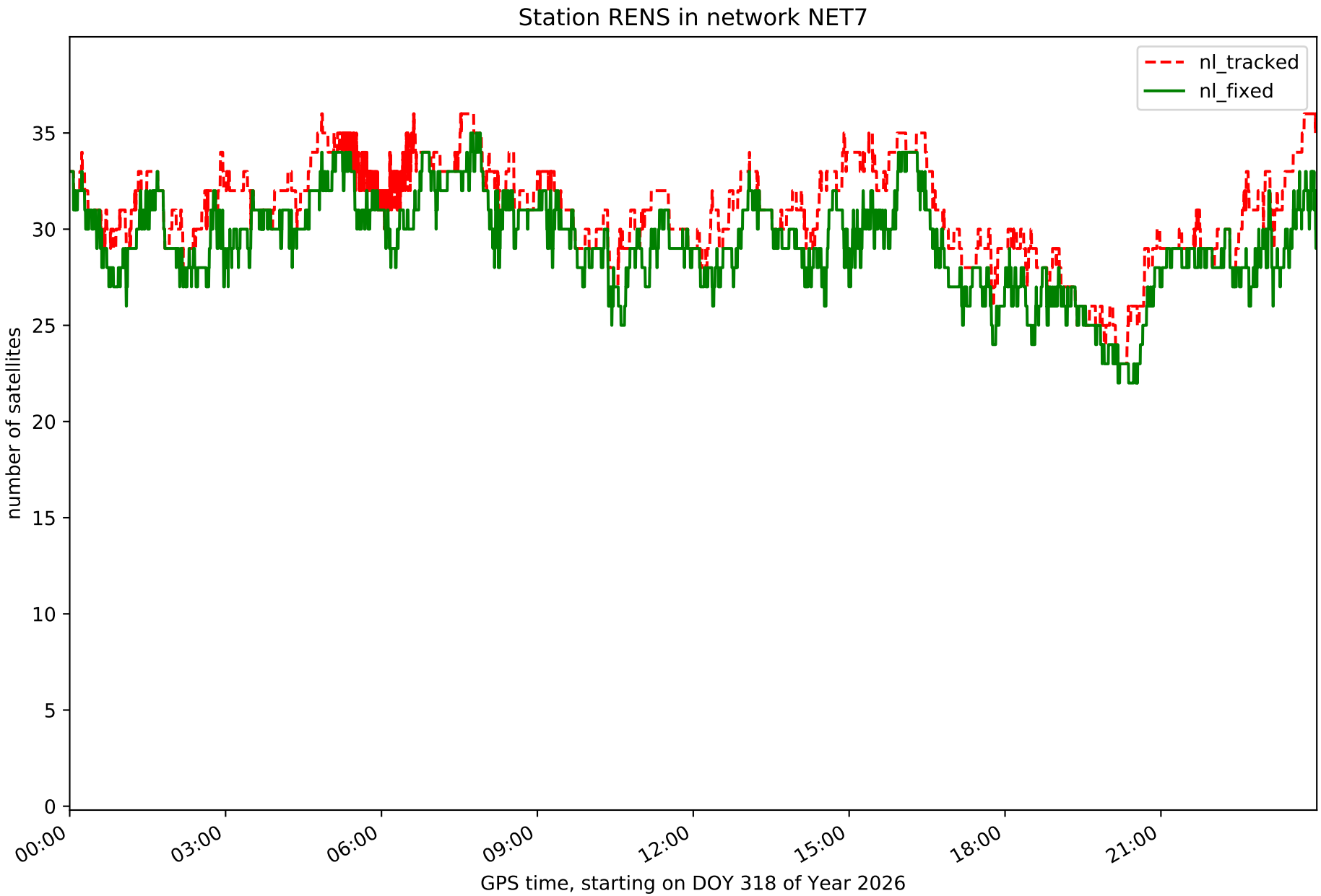

Station LANT in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

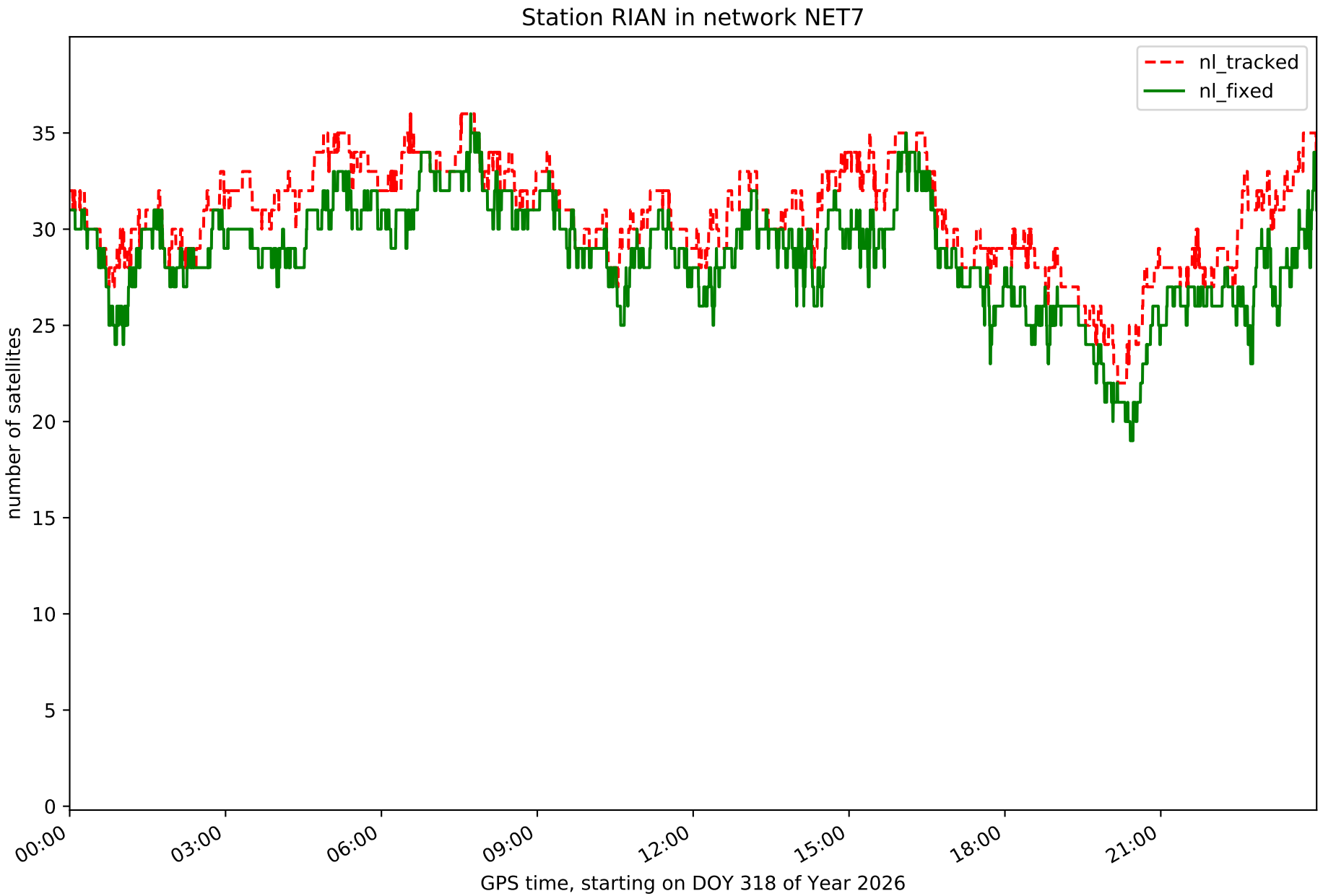

Station LARE in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

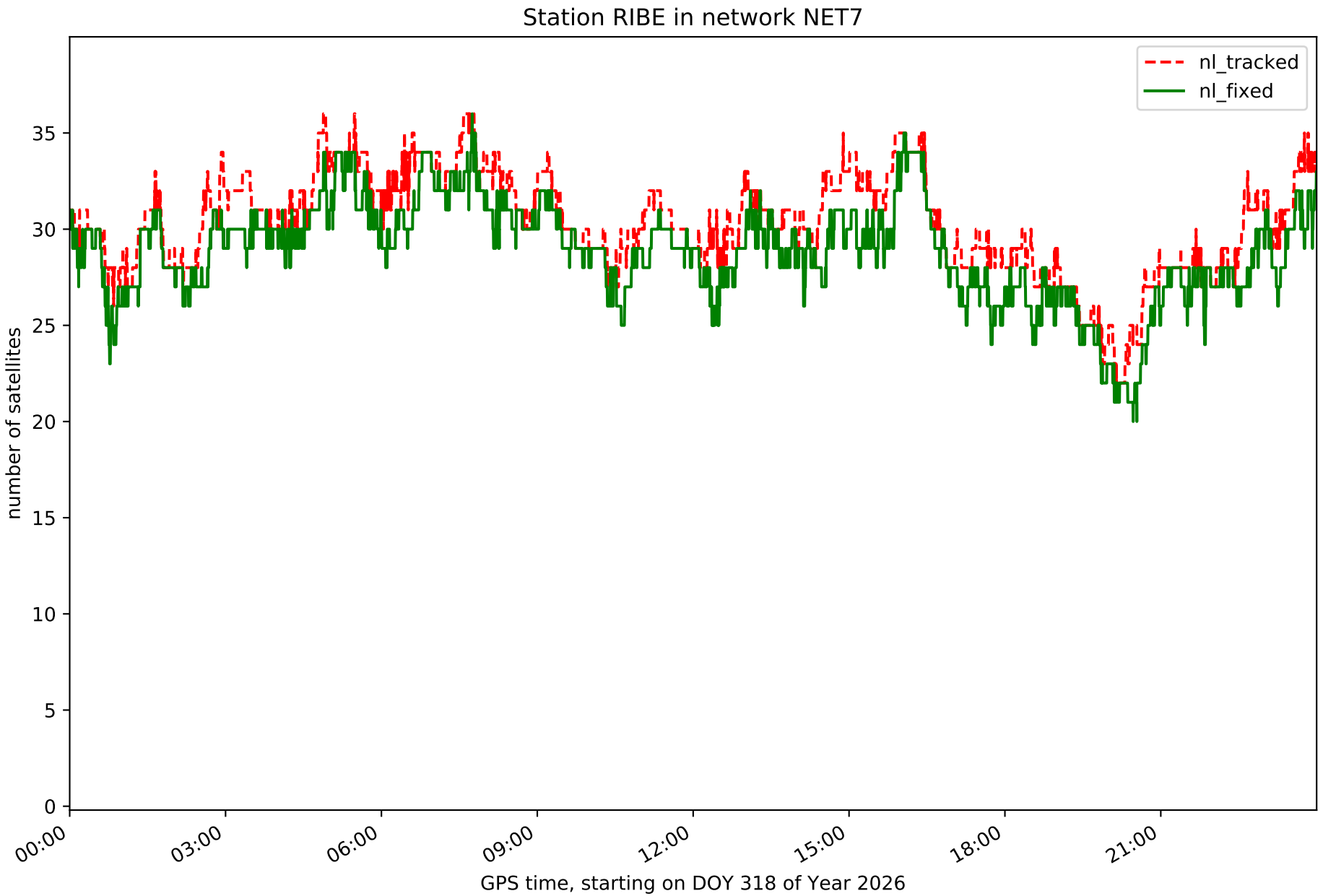

Station LENA in network NET7
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

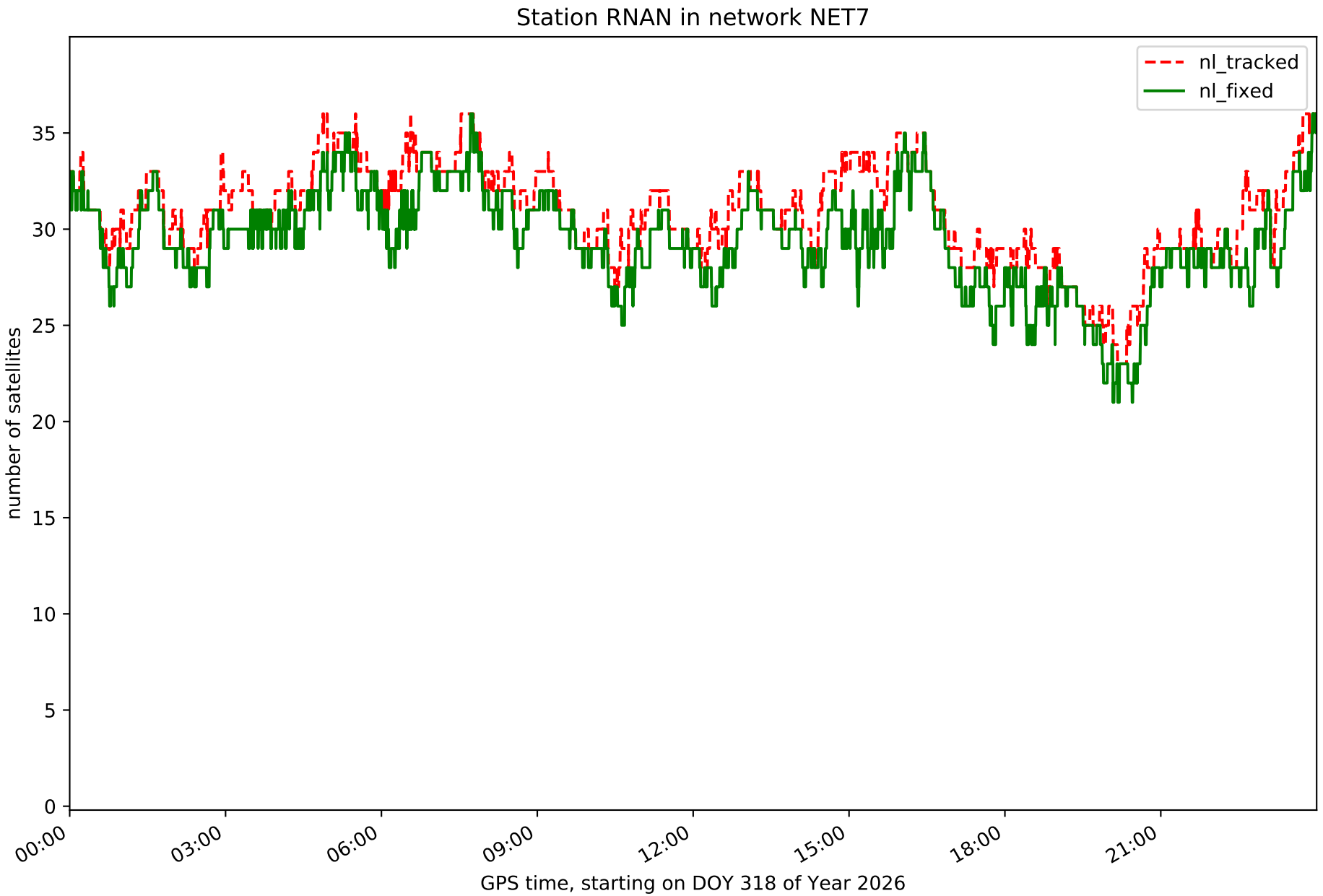

Station LEON in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

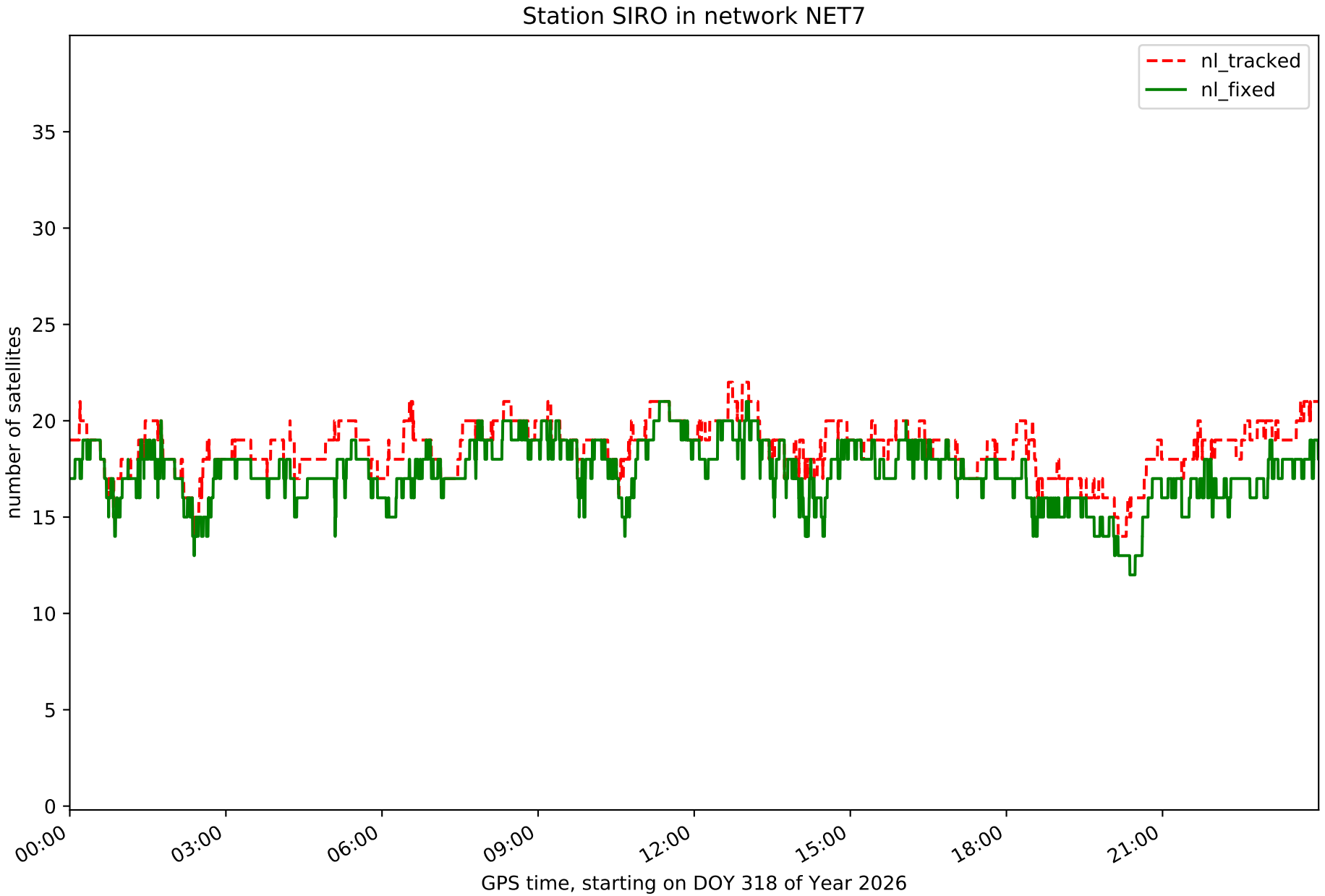

Station MDPM in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

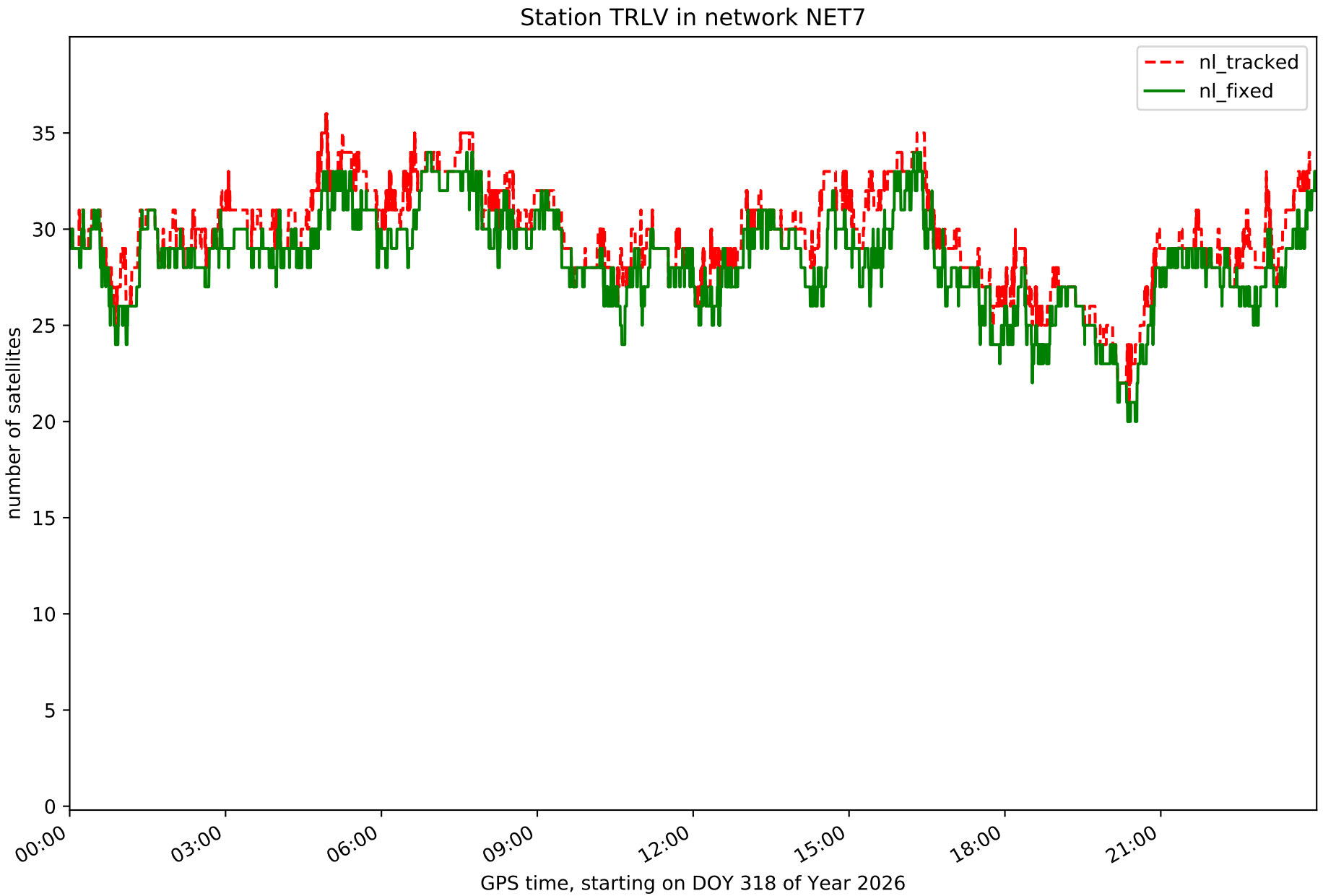

Station RENS in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

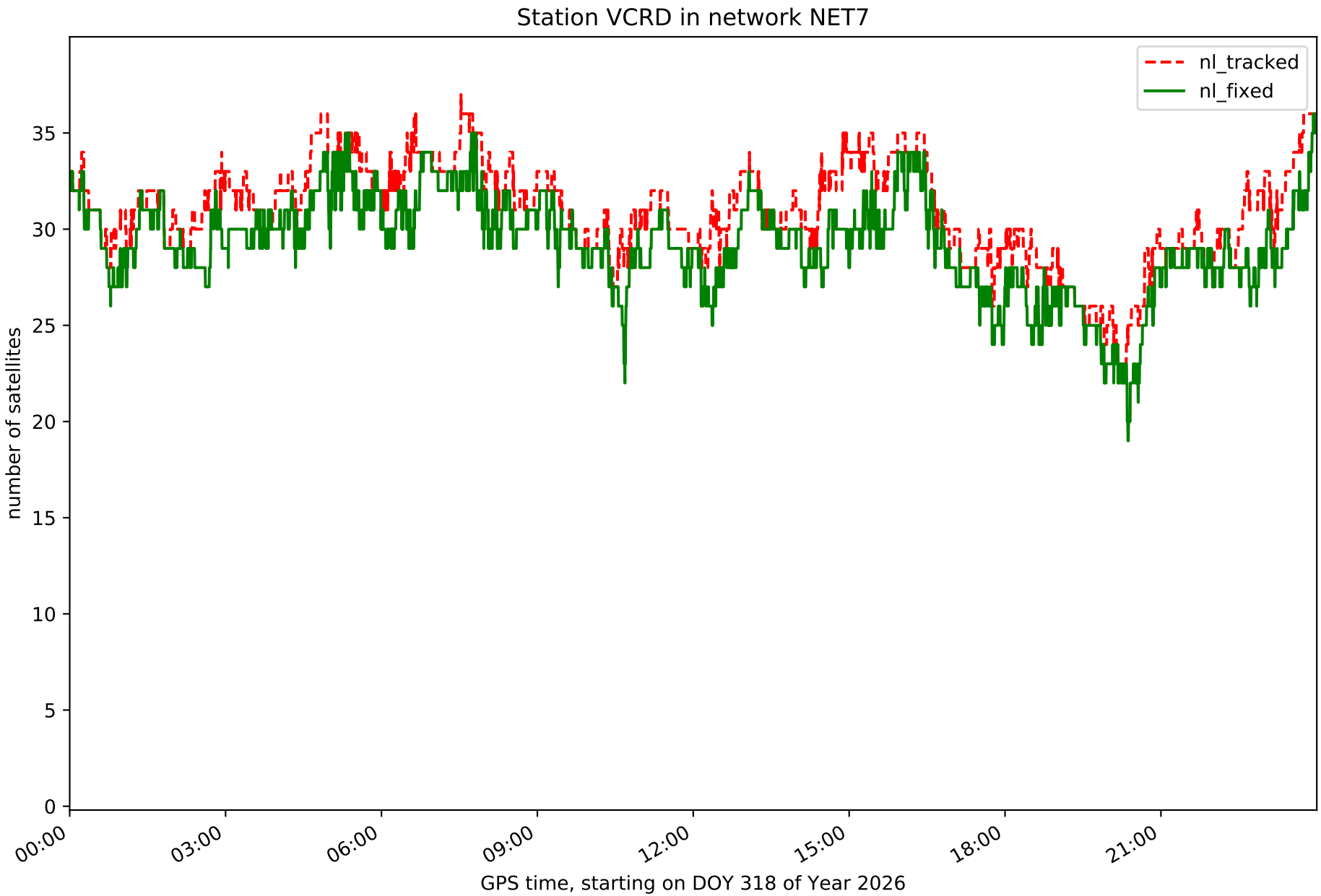

Station RIAN in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

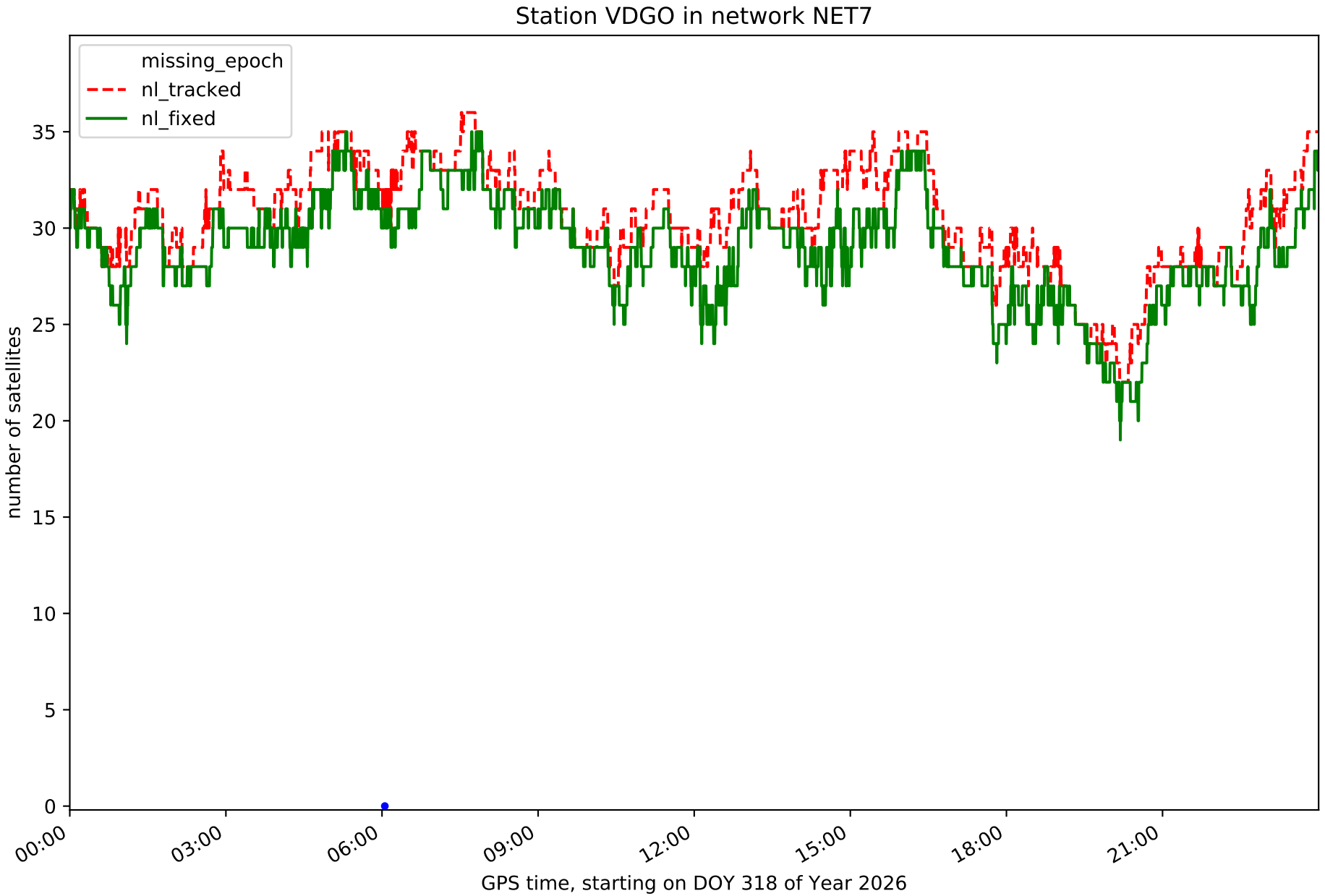

Station RIBE in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

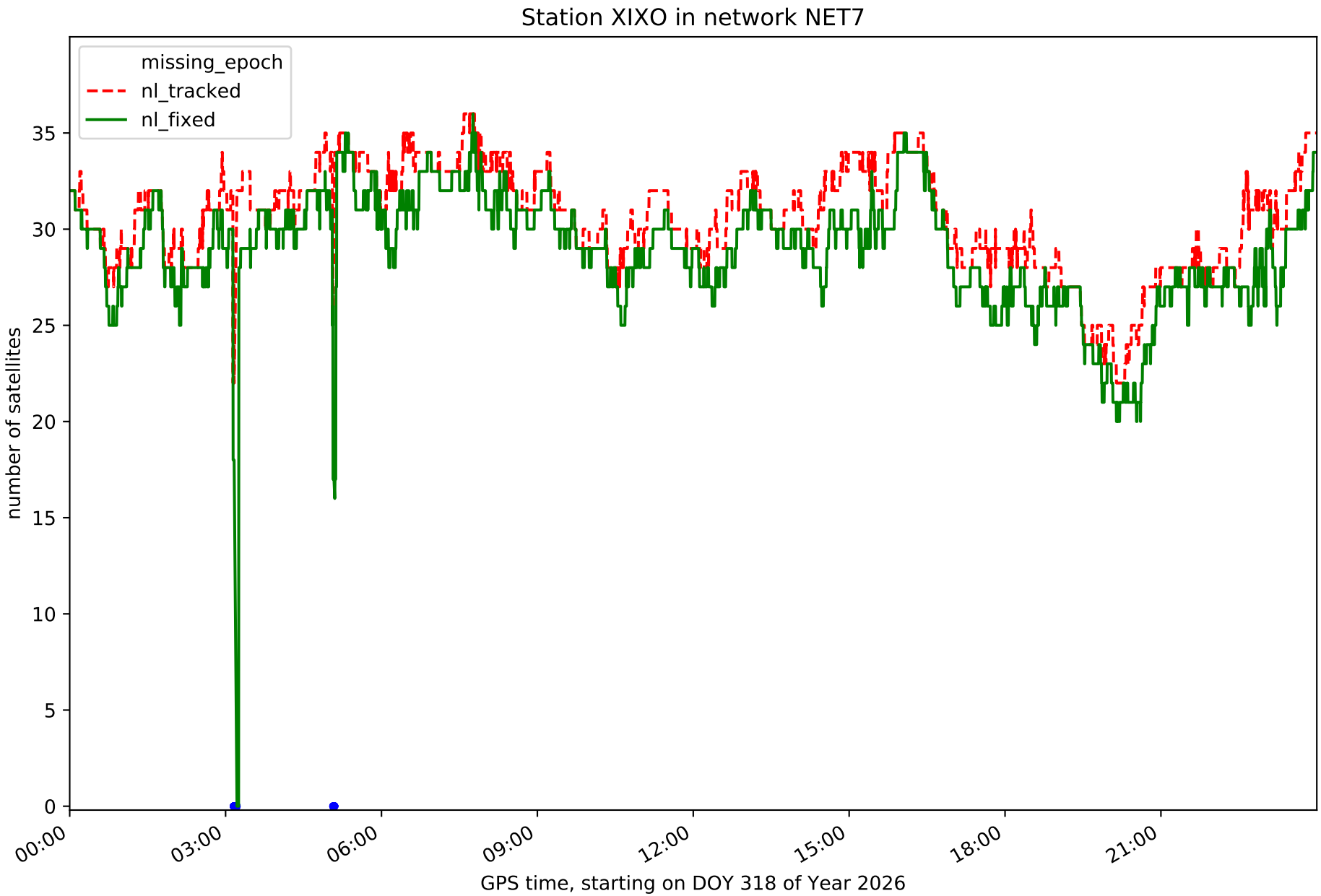

Station RNAN in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

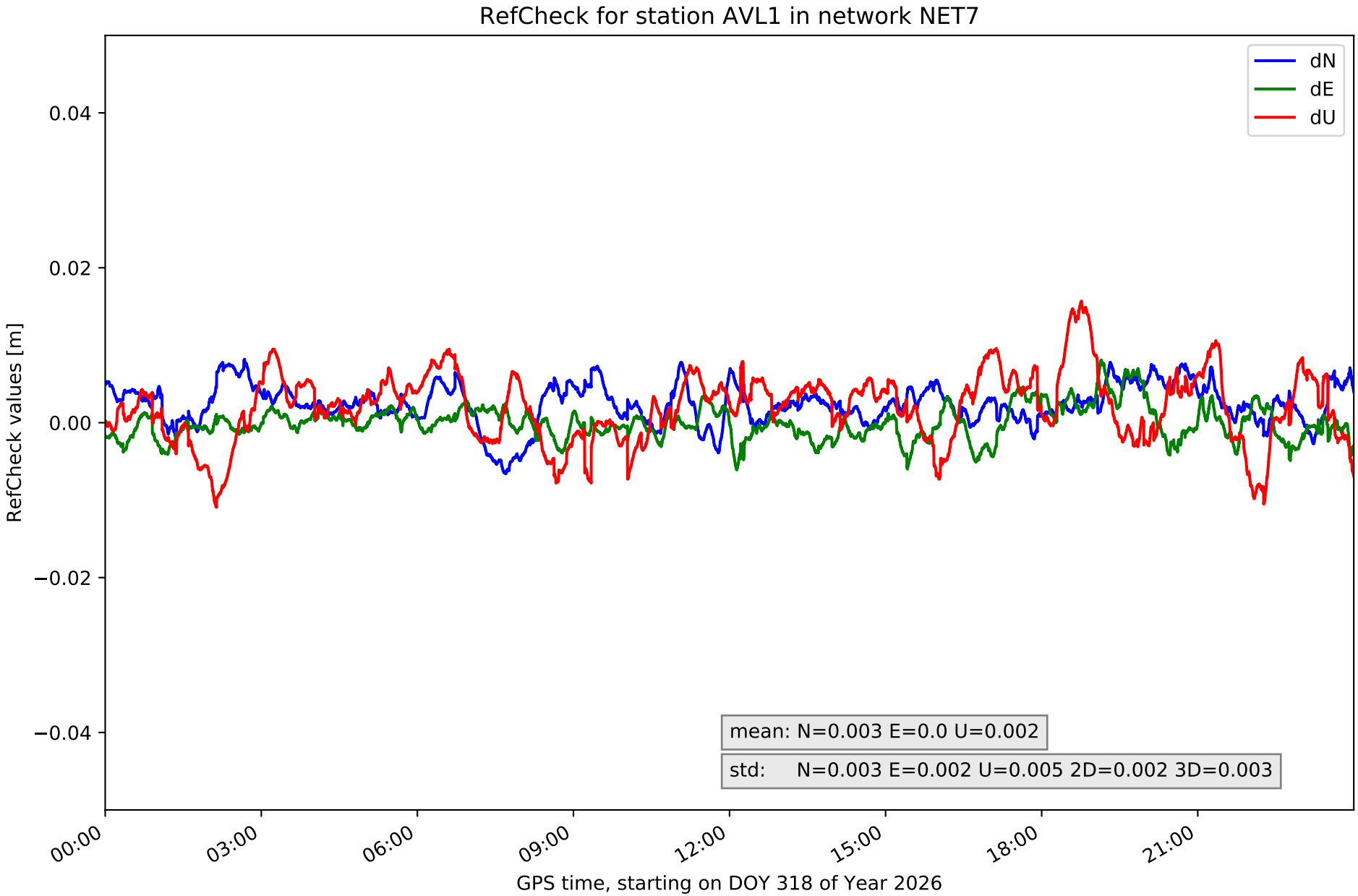

Station SIRO in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

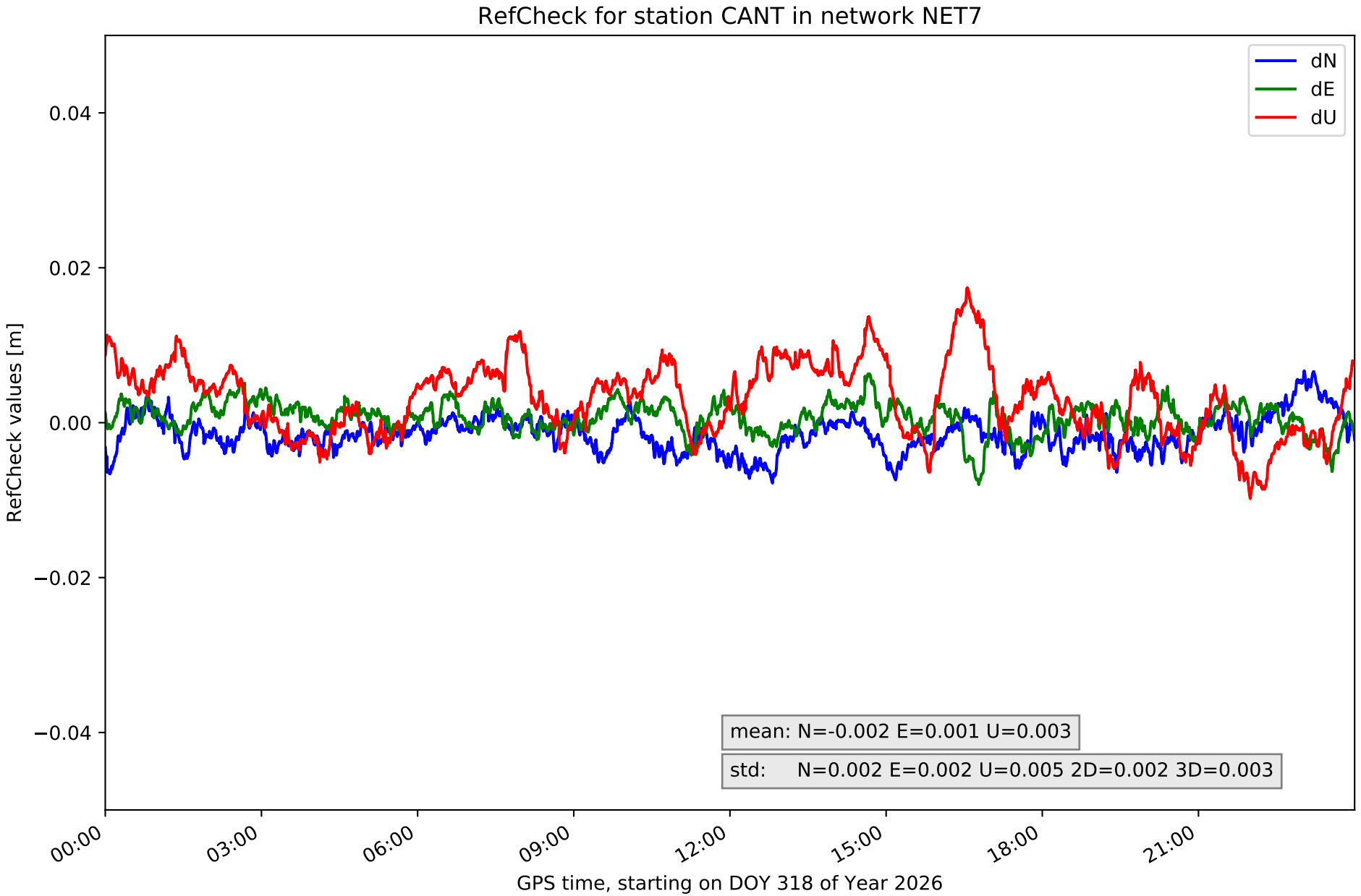

Station TRLV in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

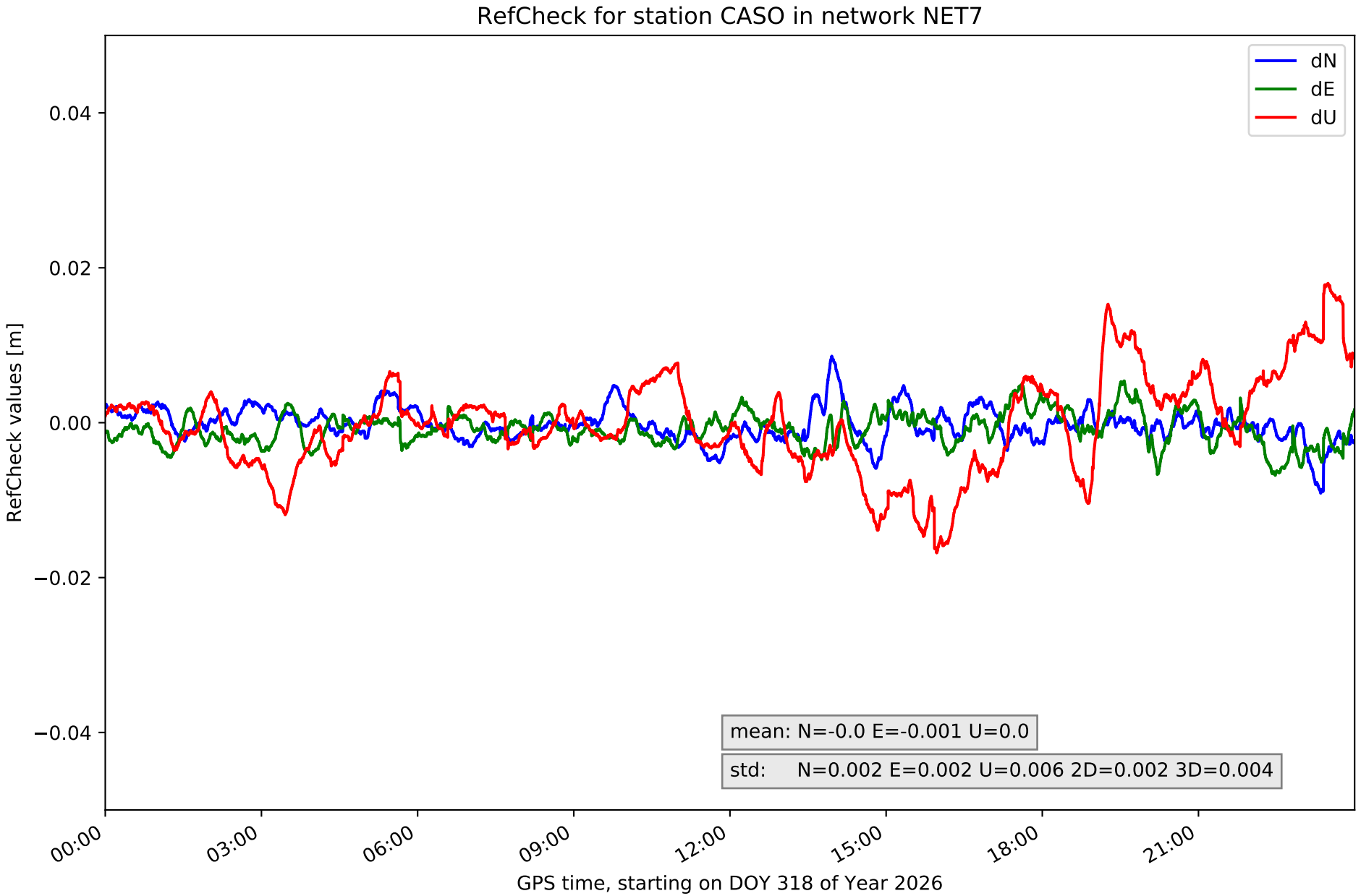

Station VCRD in network NET7
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

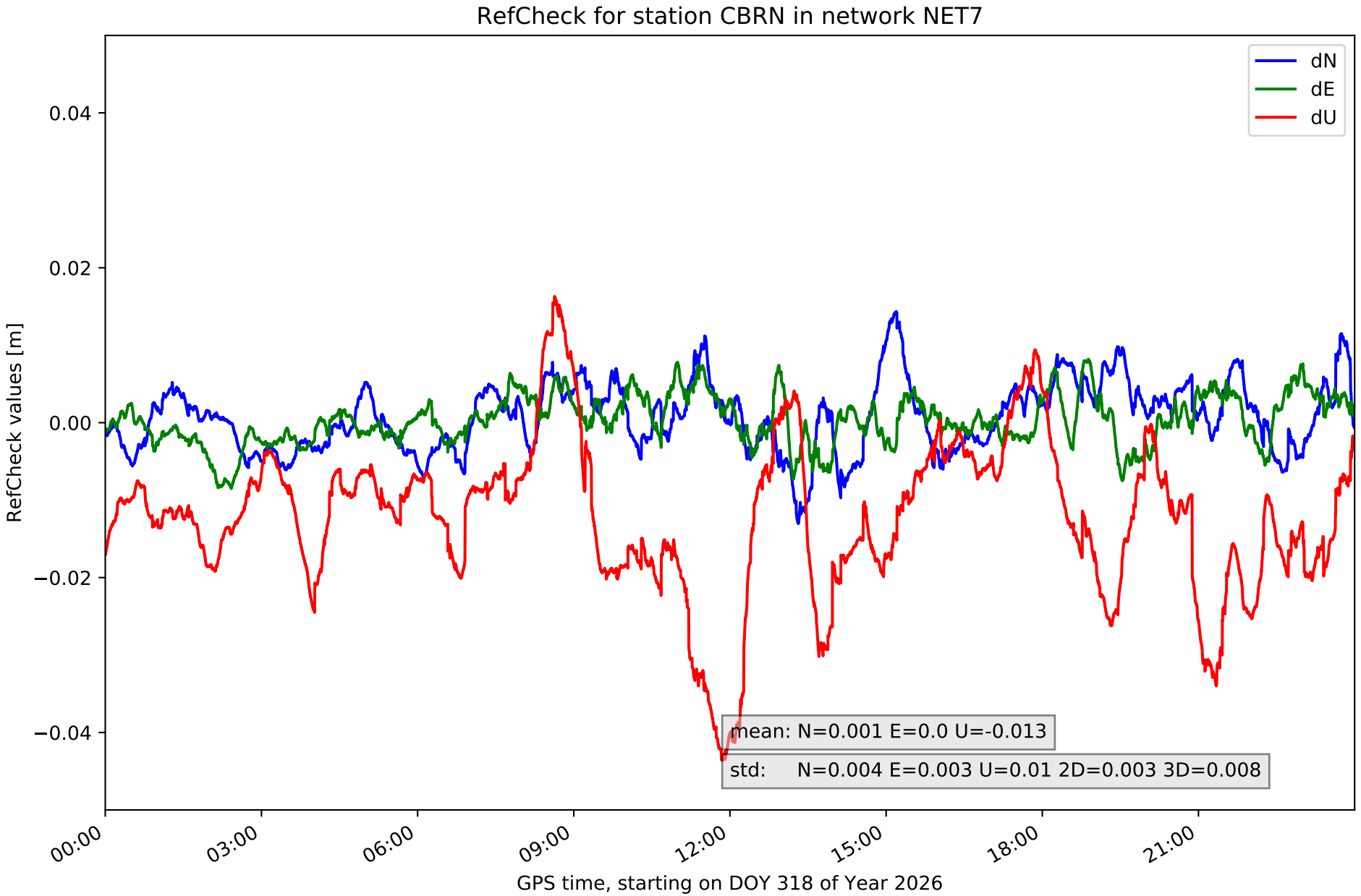

Station VDGO in network NET7
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

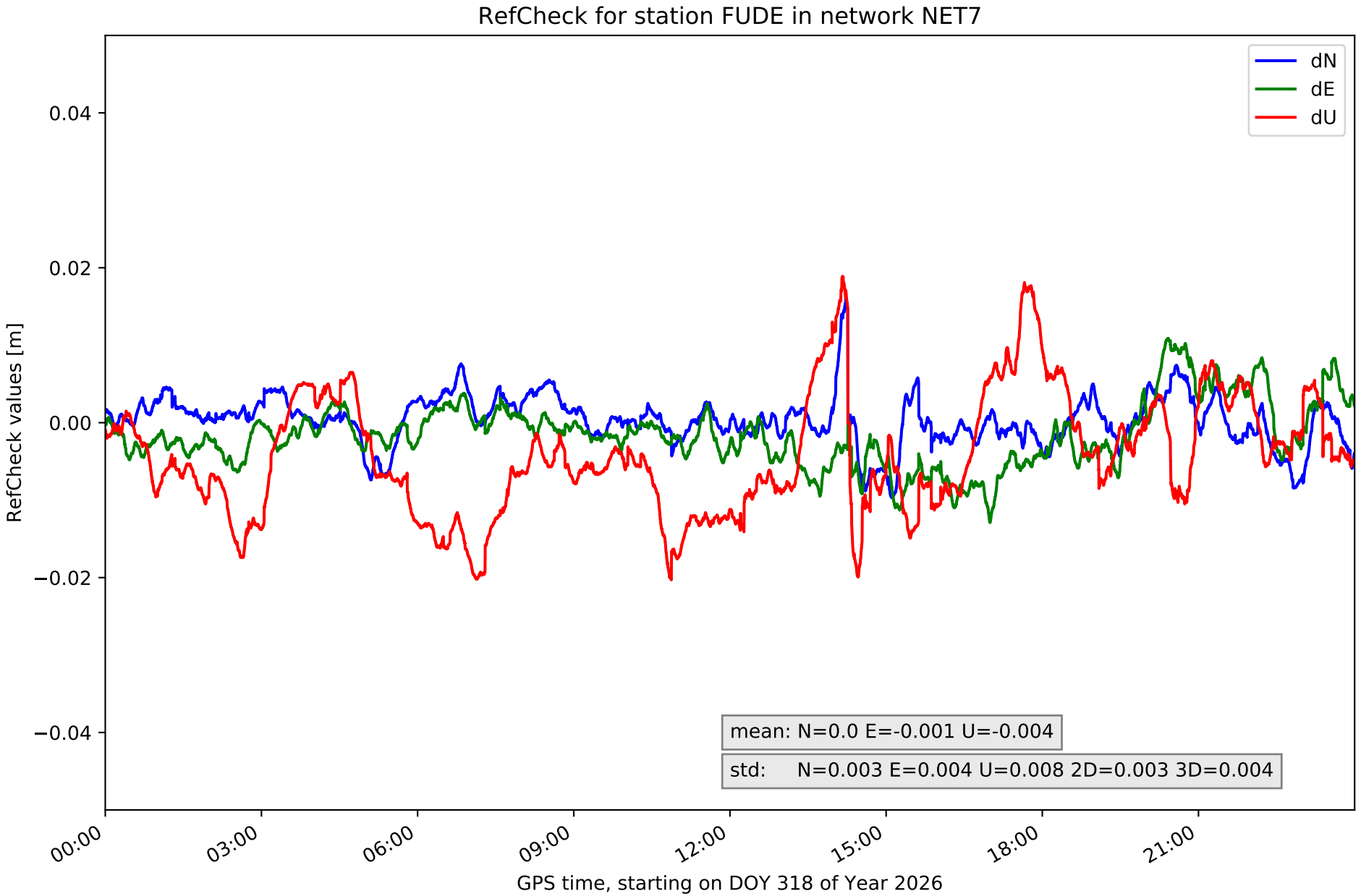

Station XIXO in network NET7
missing_epoch
nl_tracked
nl_fixed
number of satellites
0
5
10
15
20
25
30
35
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

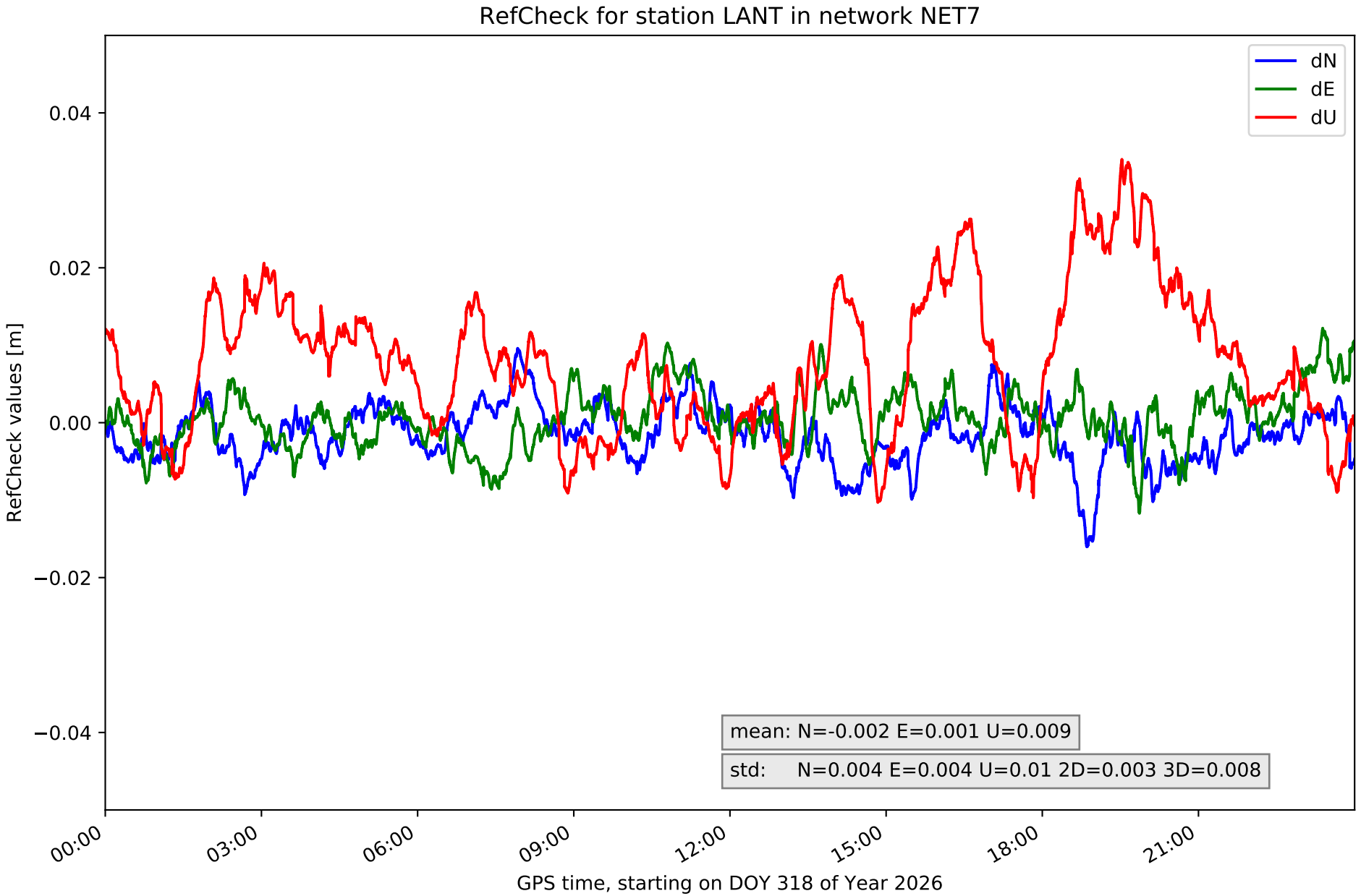

RefCheck for station AVL1 in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.003 E=0.0 U=0.002
std: N=0.003 E=0.002 U=0.005 2D=0.002 3D=0.003
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

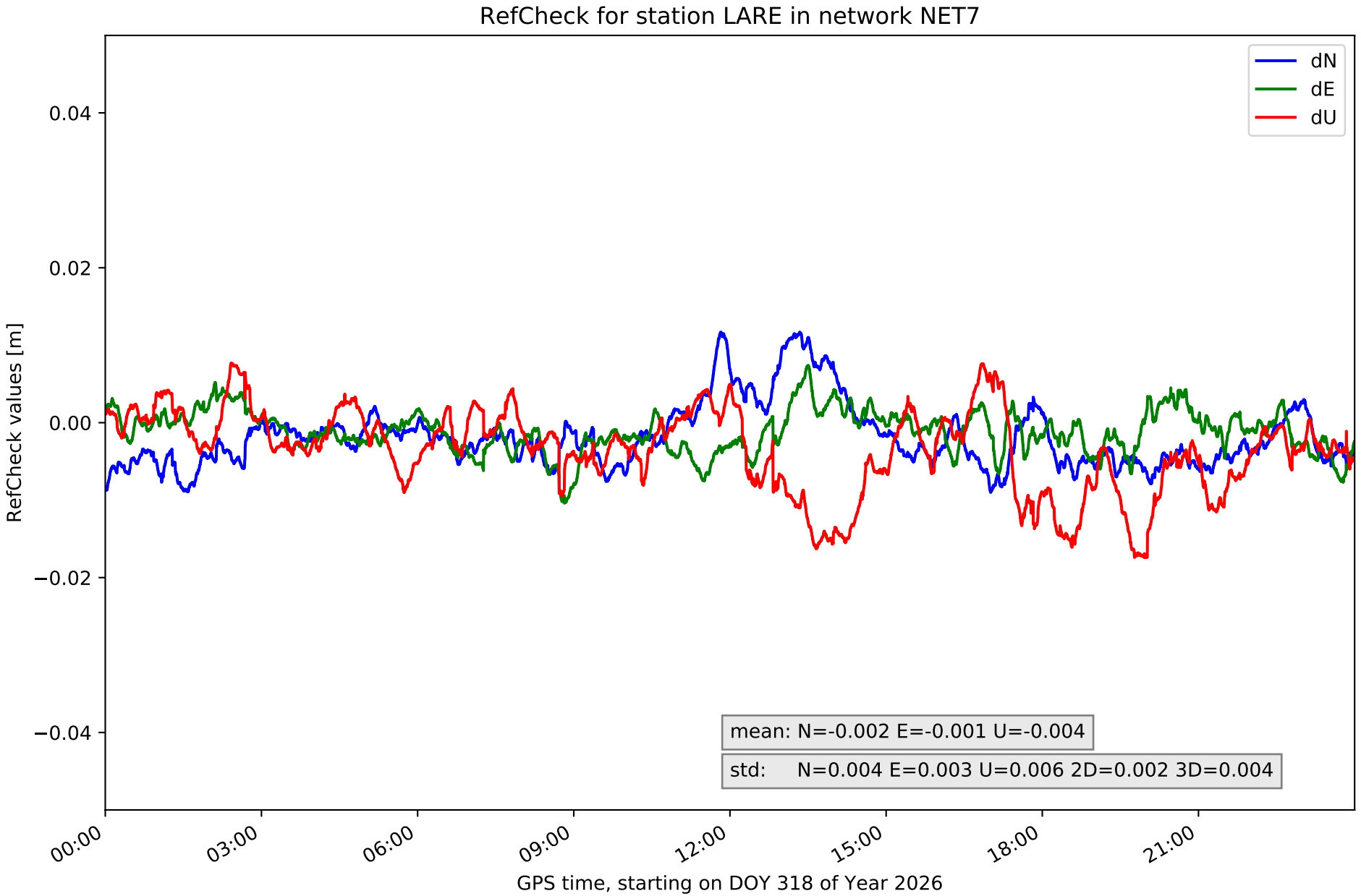

RefCheck for station CANT in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.002 E=0.001 U=0.003
std: N=0.002 E=0.002 U=0.005 2D=0.002 3D=0.003
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

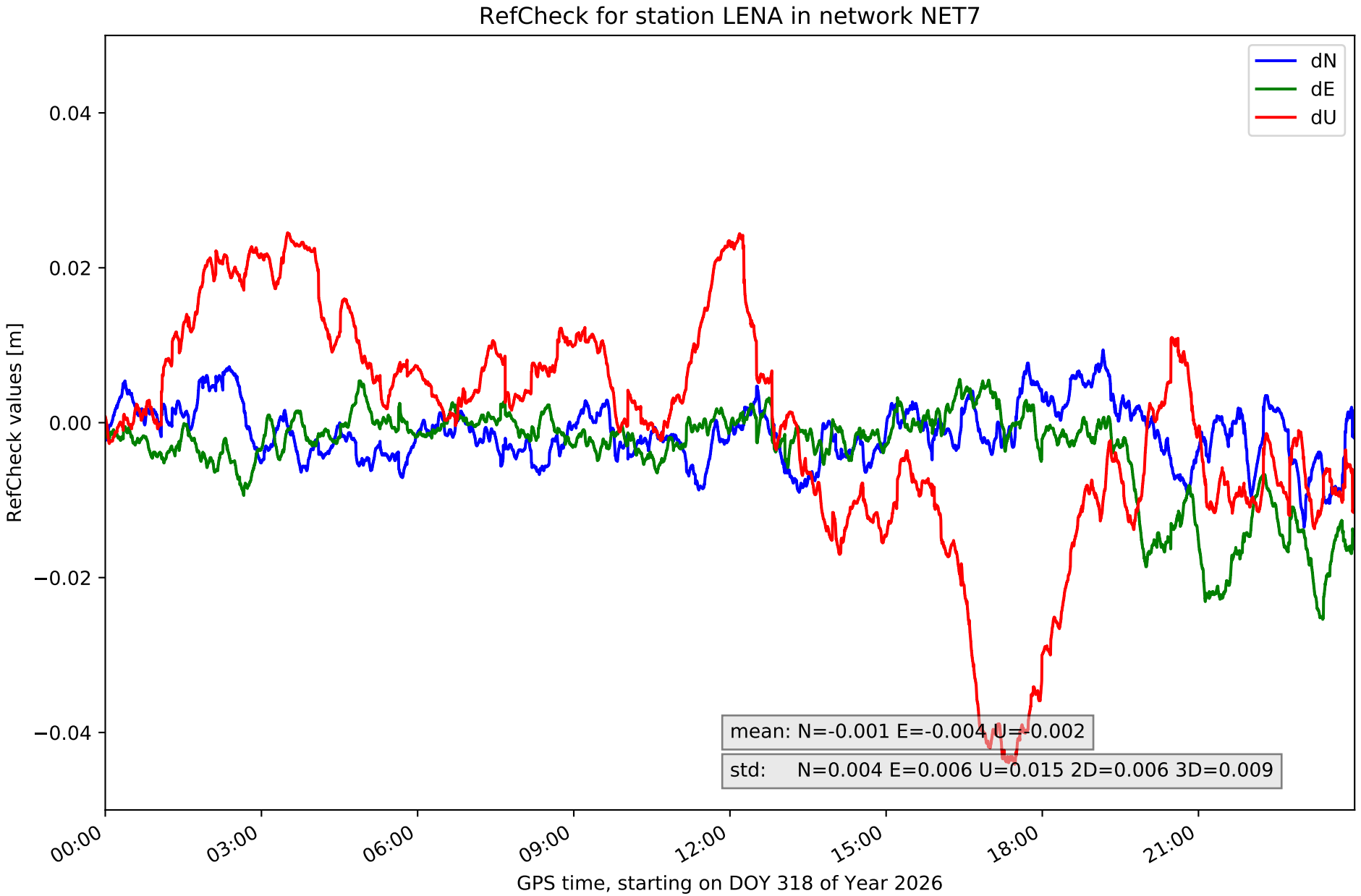

RefCheck for station CASO in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.0 E=-0.001 U=0.0
std: N=0.002 E=0.002 U=0.006 2D=0.002 3D=0.004
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

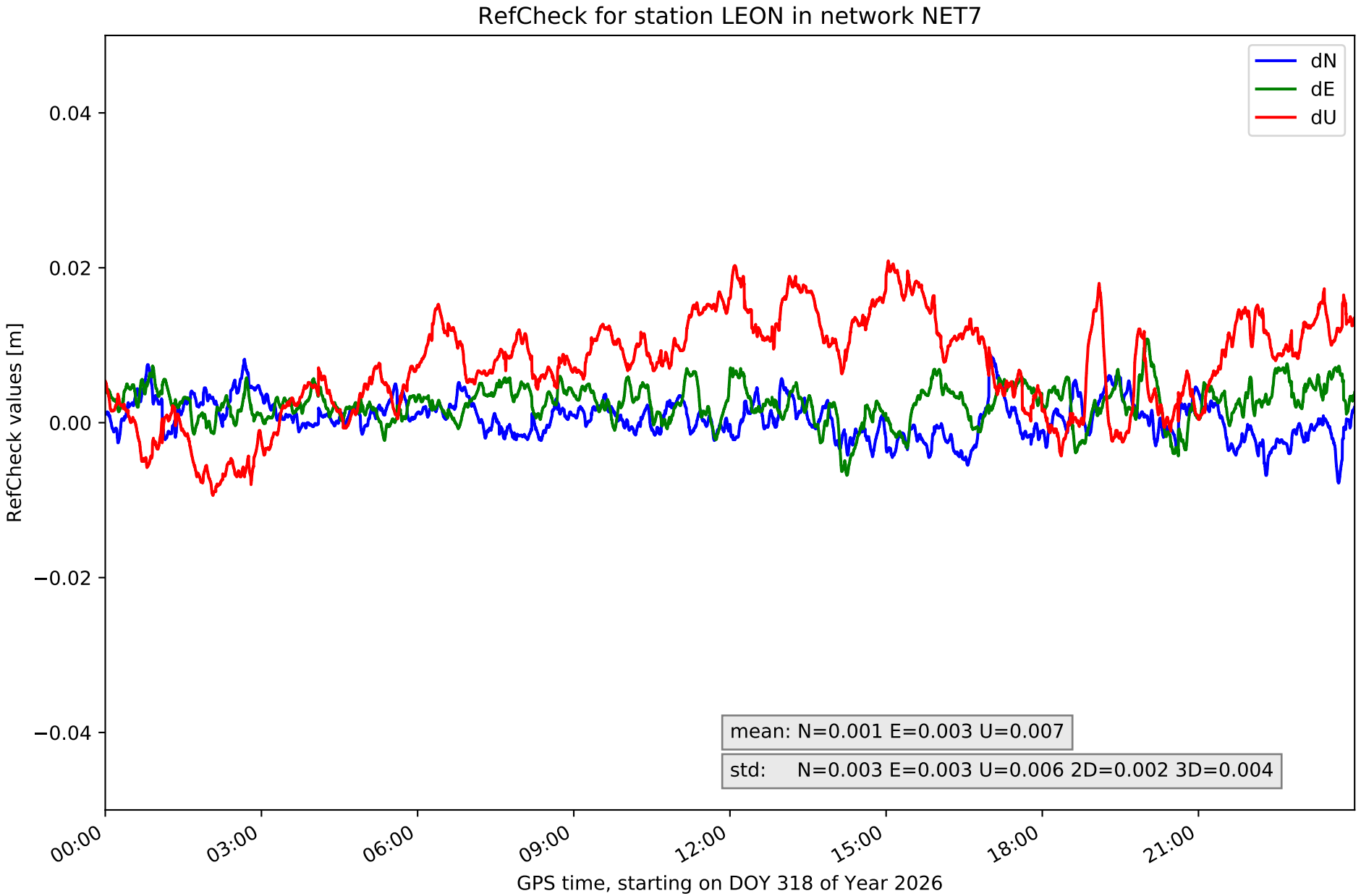

RefCheck for station CBRN in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.001 E=0.0 U=-0.013
std: N=0.004 E=0.003 U=0.01 2D=0.003 3D=0.008
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

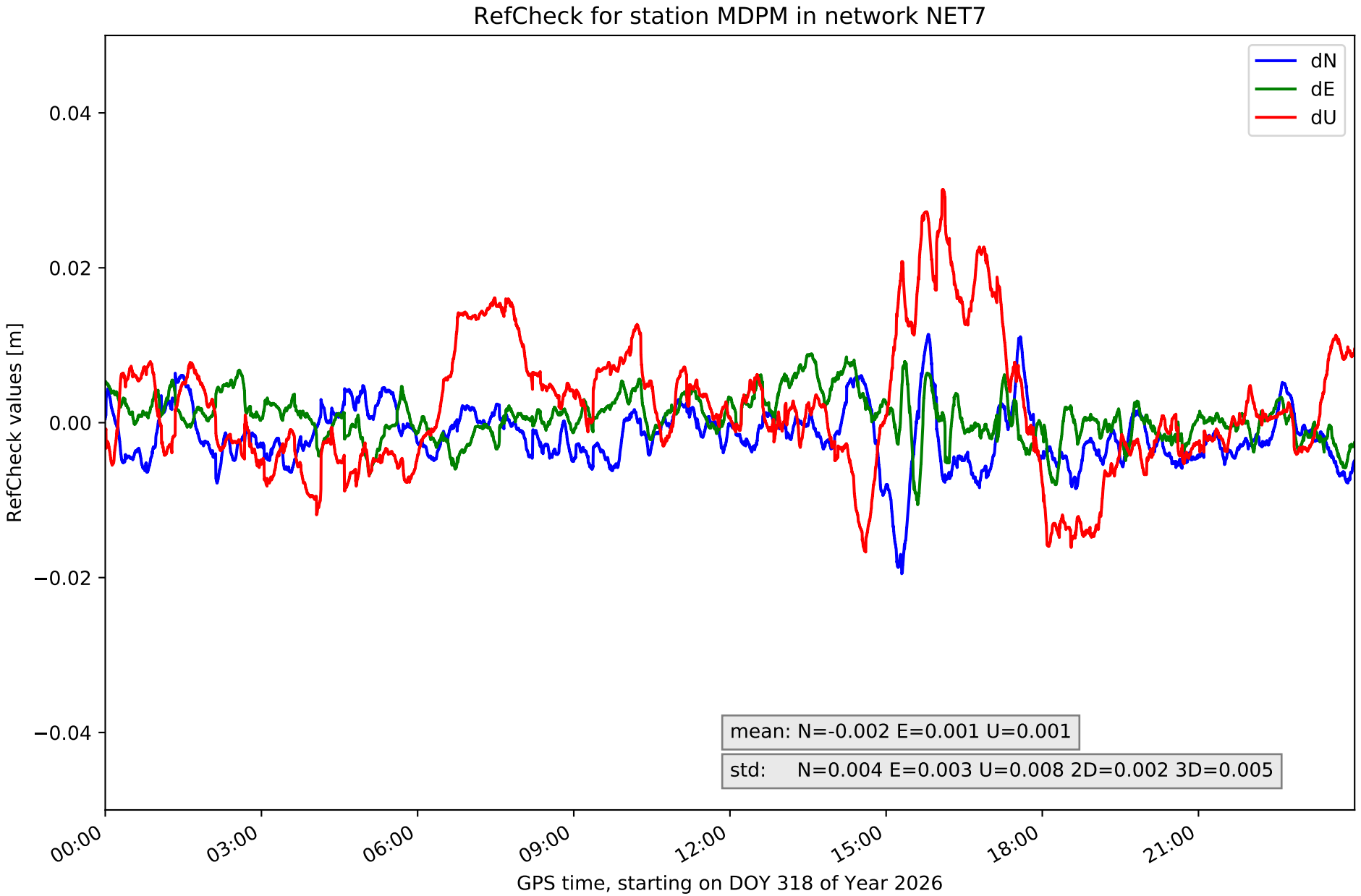

RefCheck for station FUDE in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.0 E=-0.001 U=-0.004
std: N=0.003 E=0.004 U=0.008 2D=0.003 3D=0.004
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

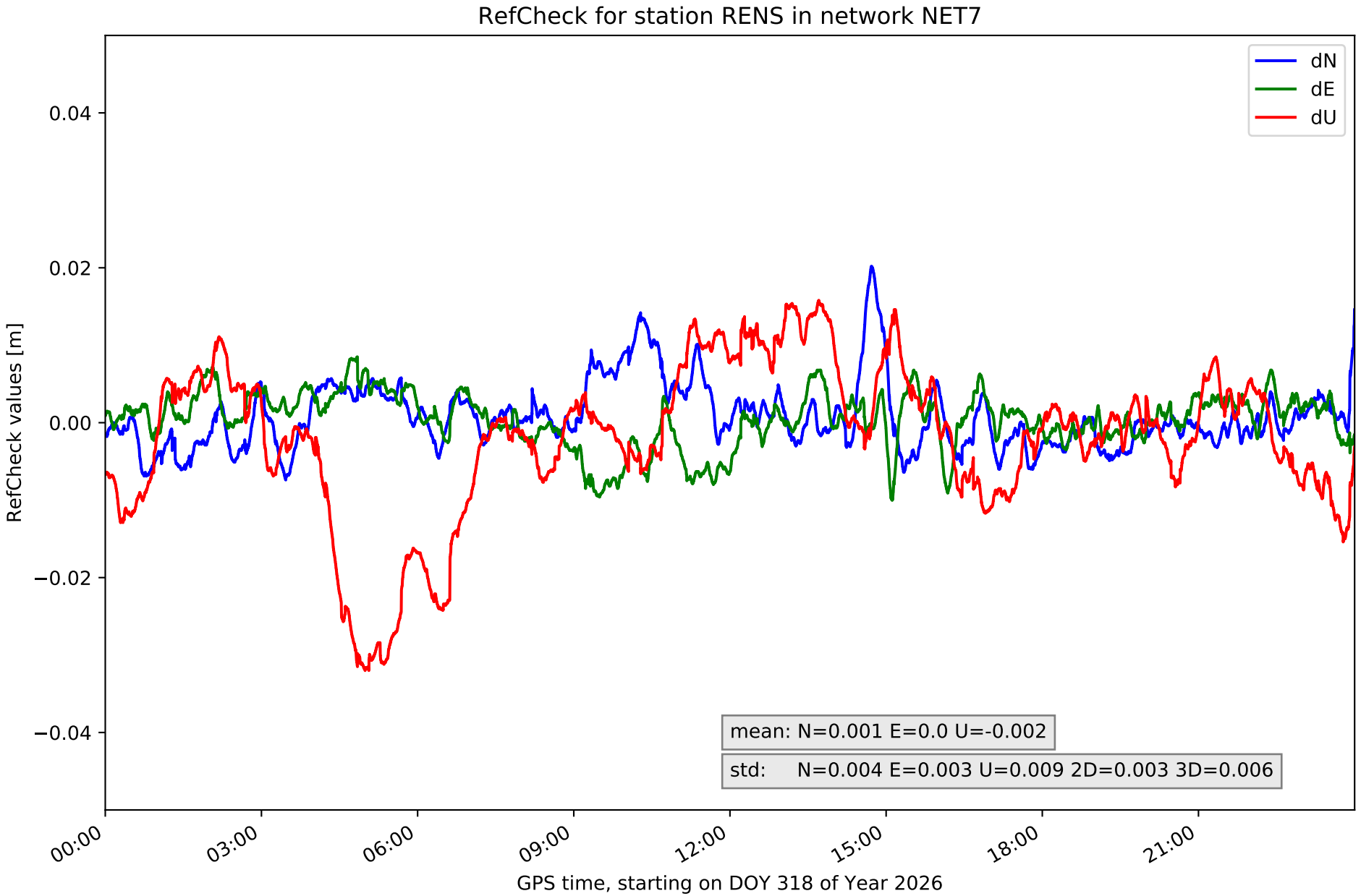

RefCheck for station LANT in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.002 E=0.001 U=0.009
std: N=0.004 E=0.004 U=0.01 2D=0.003 3D=0.008
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

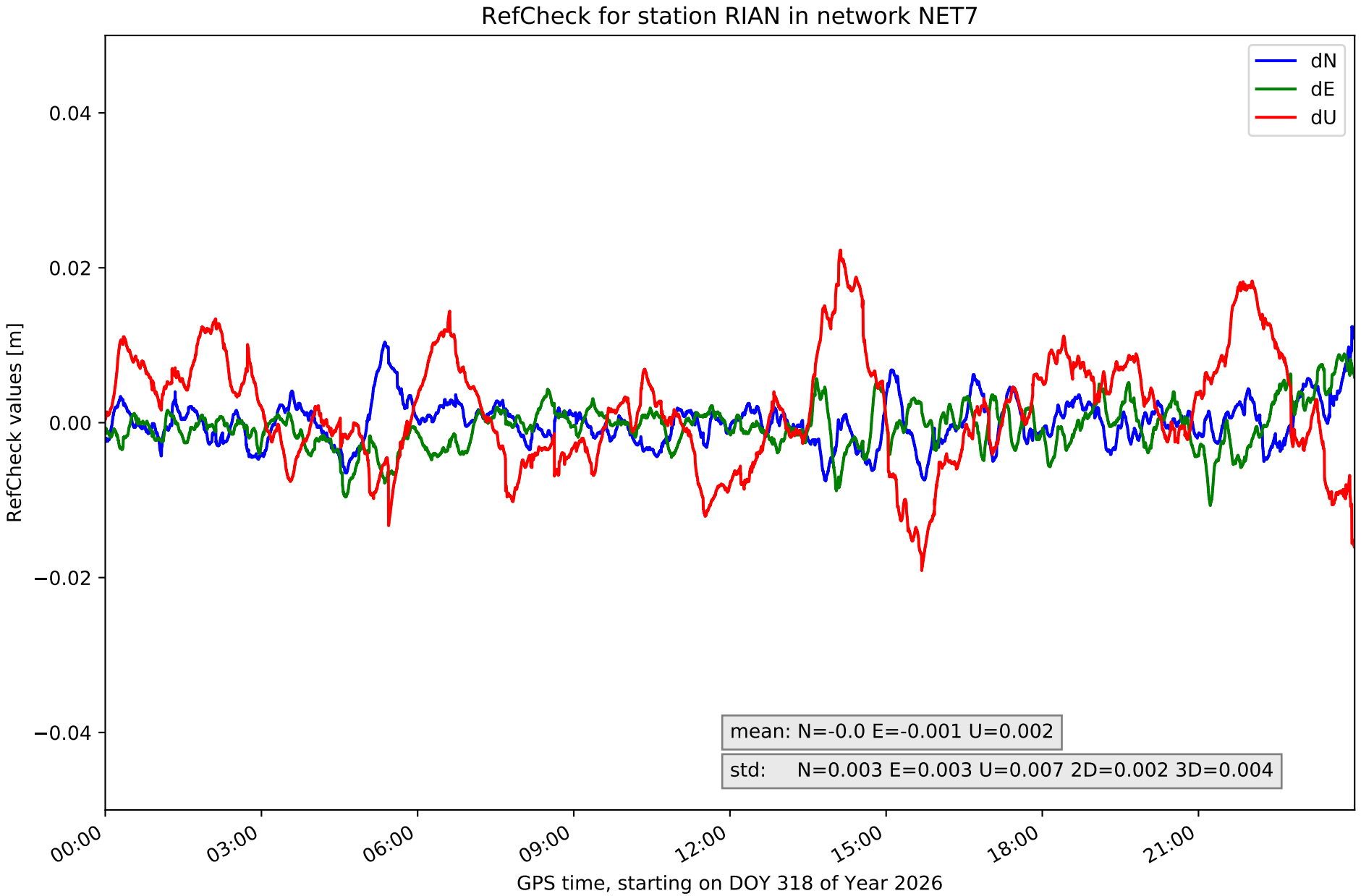

RefCheck for station LARE in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.002 E=-0.001 U=-0.004
std: N=0.004 E=0.003 U=0.006 2D=0.002 3D=0.004
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

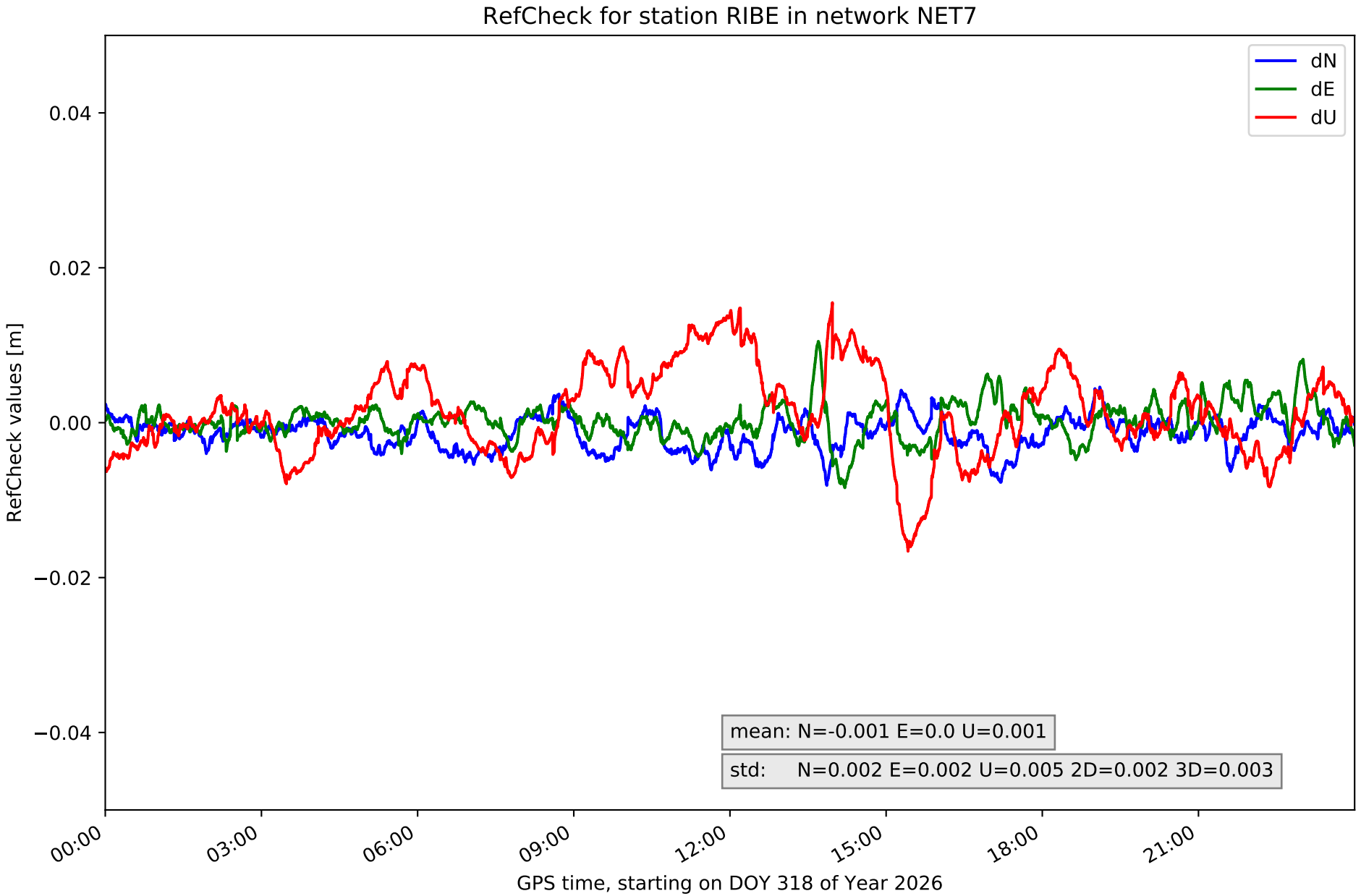

RefCheck for station LENA in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.001 E=-0.004 U=-0.002
std: N=0.004 E=0.006 U=0.015 2D=0.006 3D=0.009
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

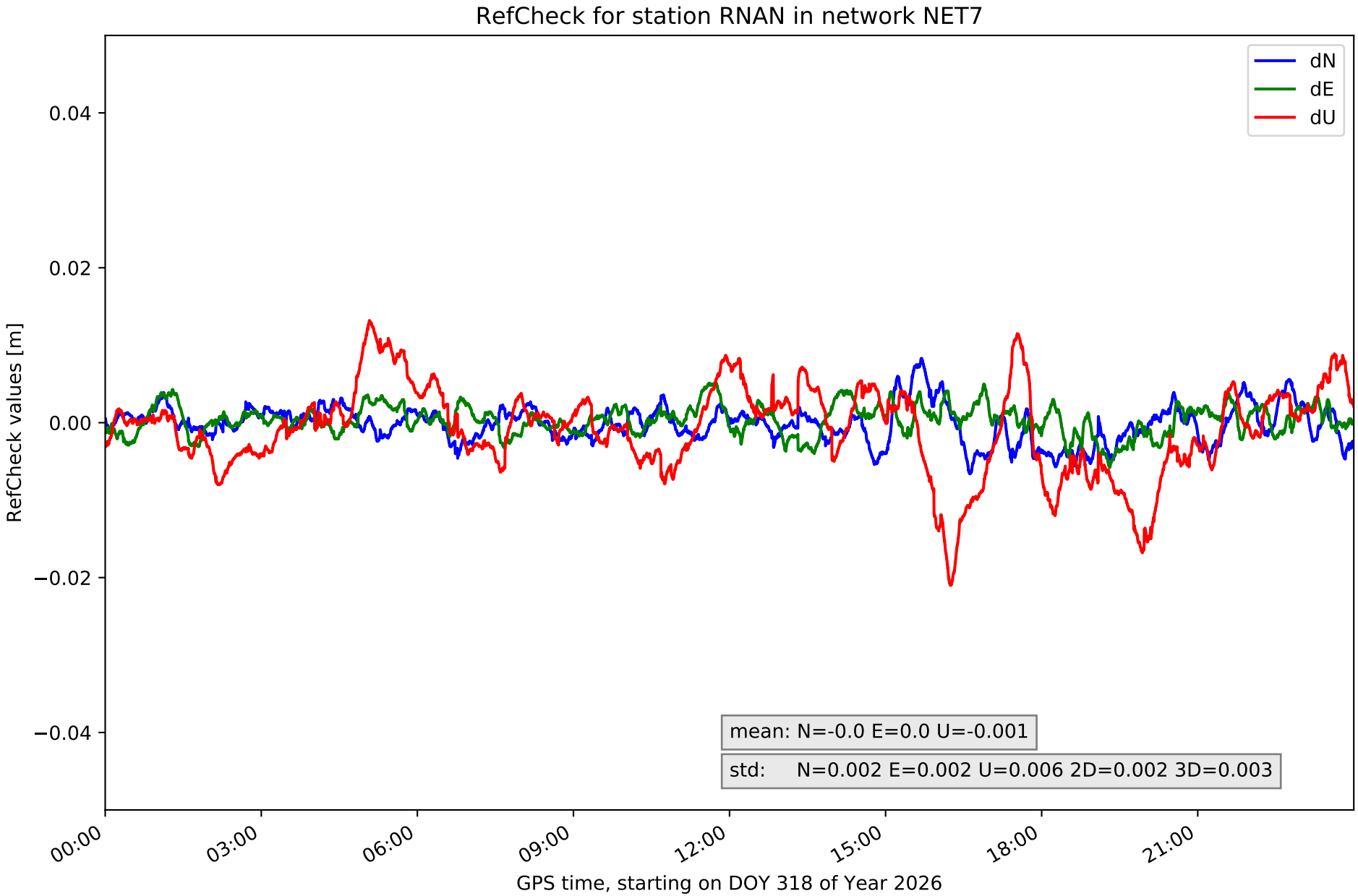

RefCheck for station LEON in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.001 E=0.003 U=0.007
std: N=0.003 E=0.003 U=0.006 2D=0.002 3D=0.004
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

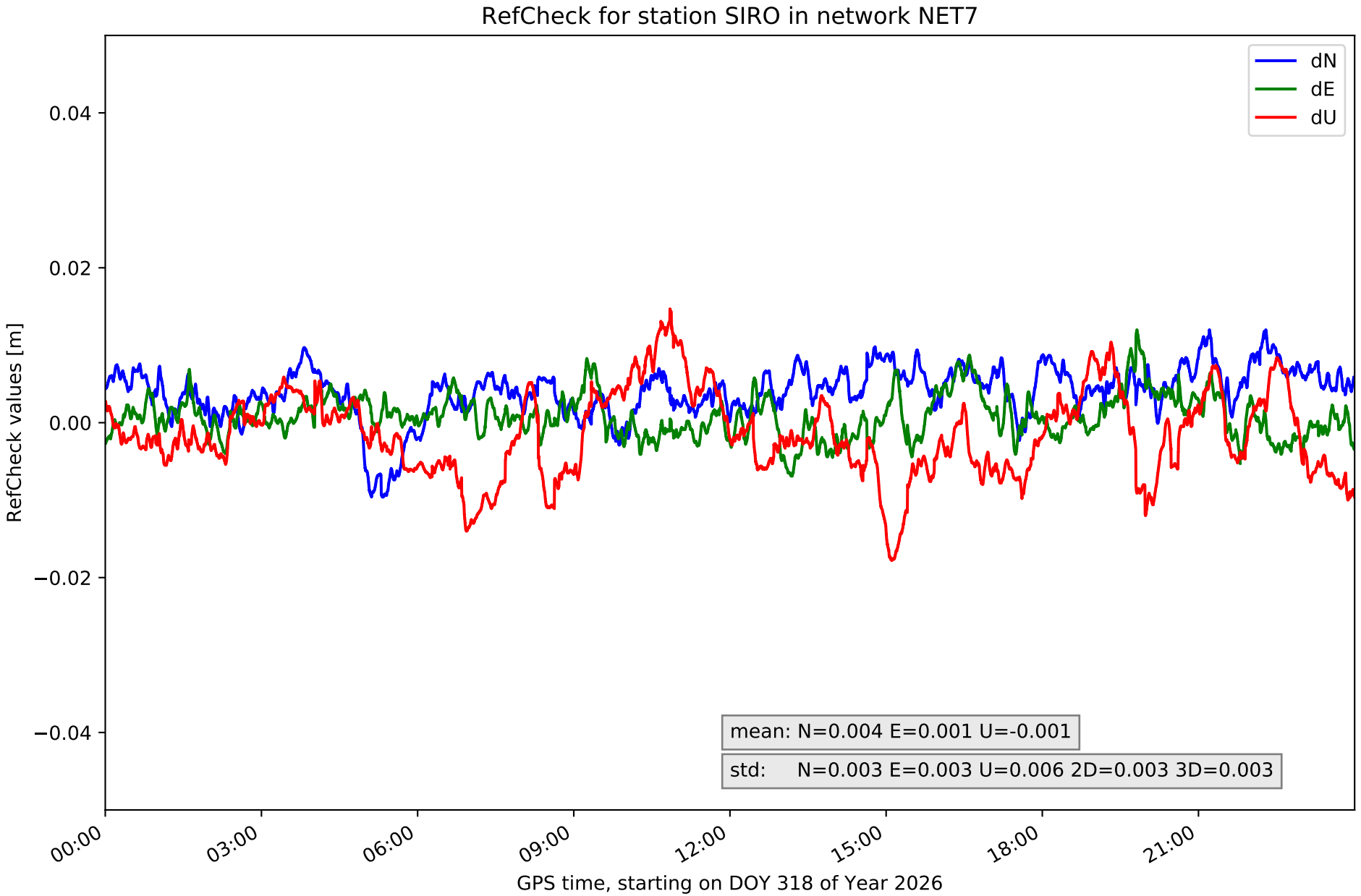

RefCheck for station MDPM in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.002 E=0.001 U=0.001
std: N=0.004 E=0.003 U=0.008 2D=0.002 3D=0.005
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

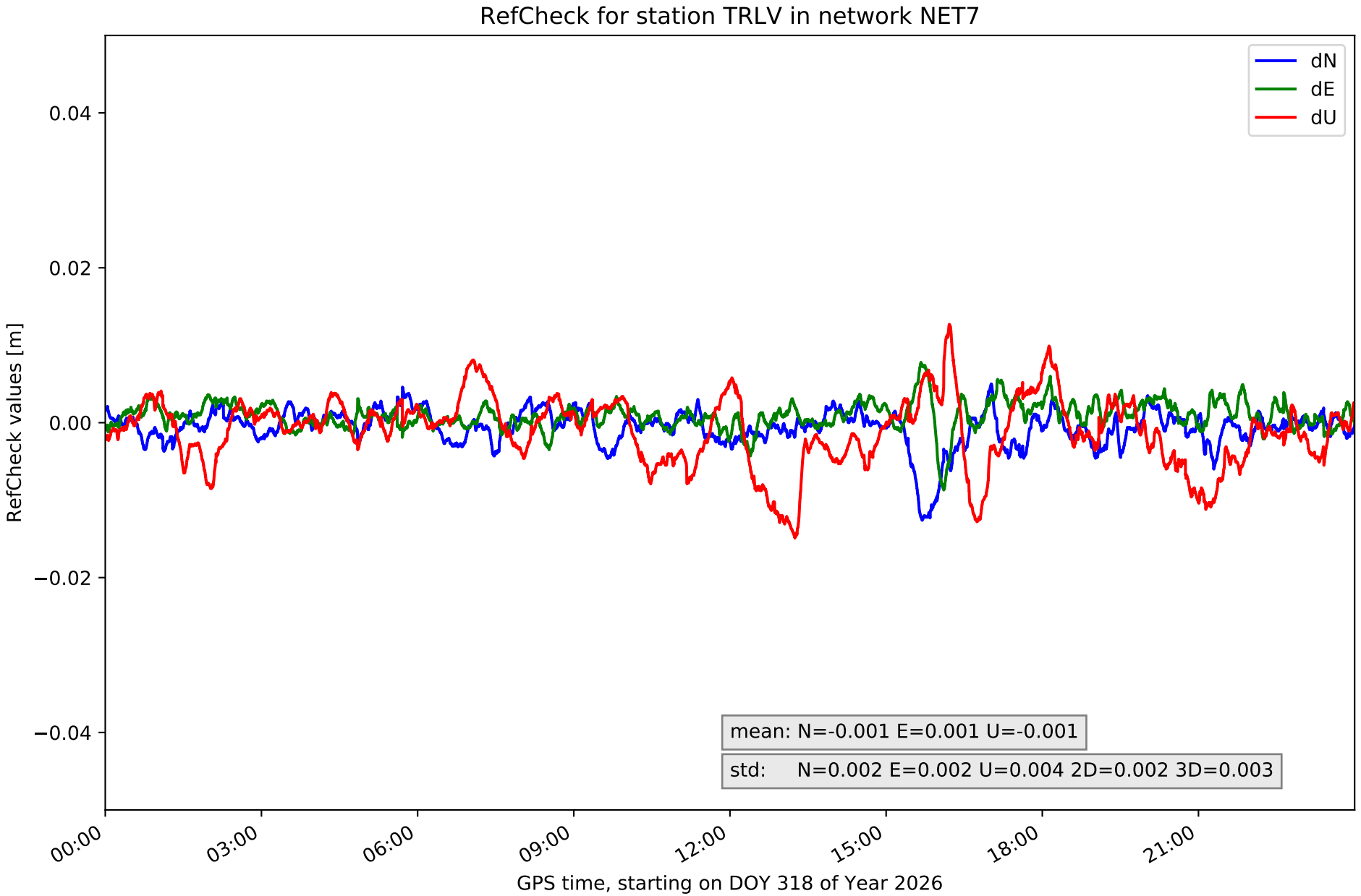

RefCheck for station RENS in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.001 E=0.0 U=-0.002
std: N=0.004 E=0.003 U=0.009 2D=0.003 3D=0.006
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

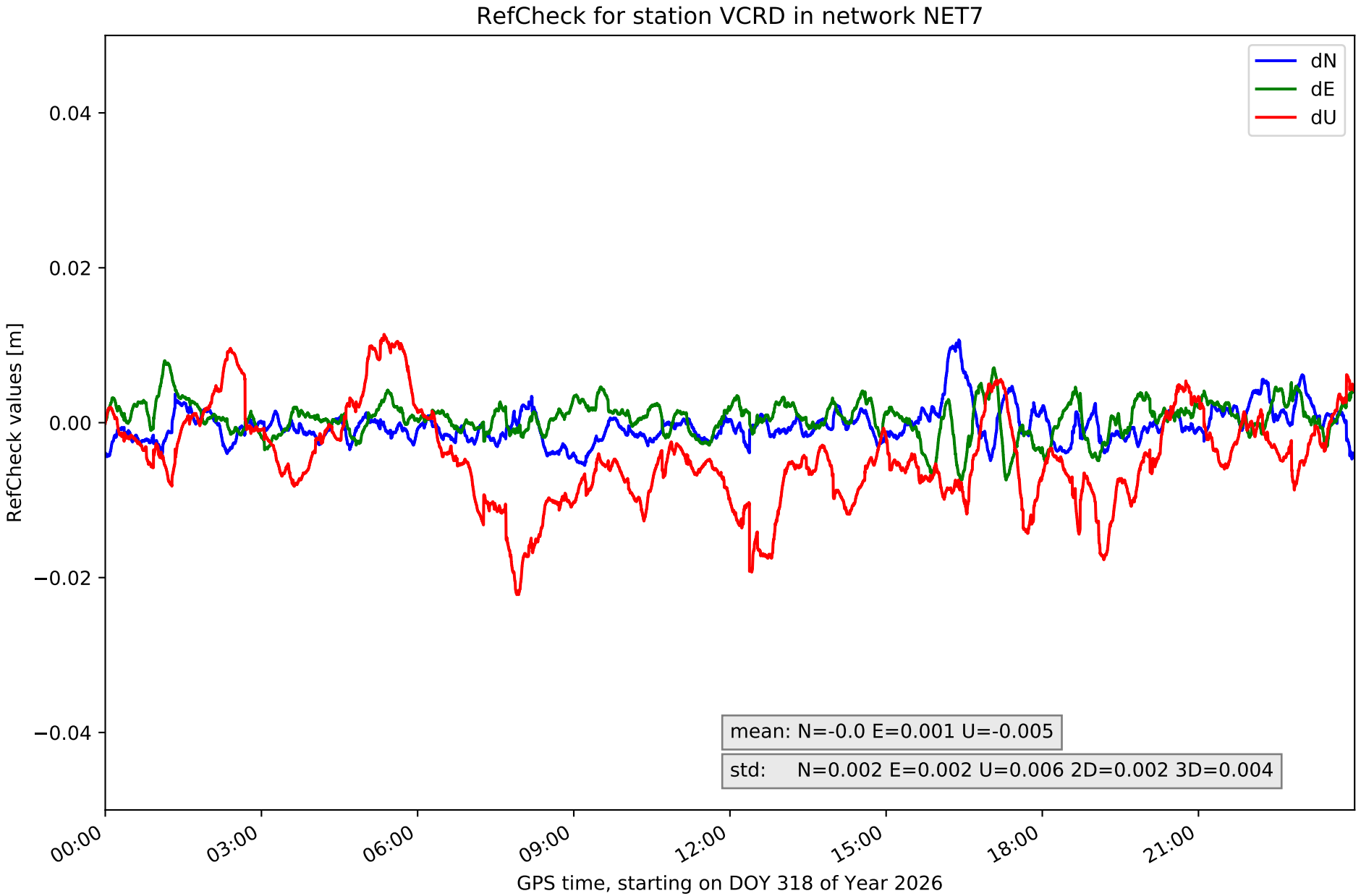

RefCheck for station RIAN in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.0 E=-0.001 U=0.002
std: N=0.003 E=0.003 U=0.007 2D=0.002 3D=0.004
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

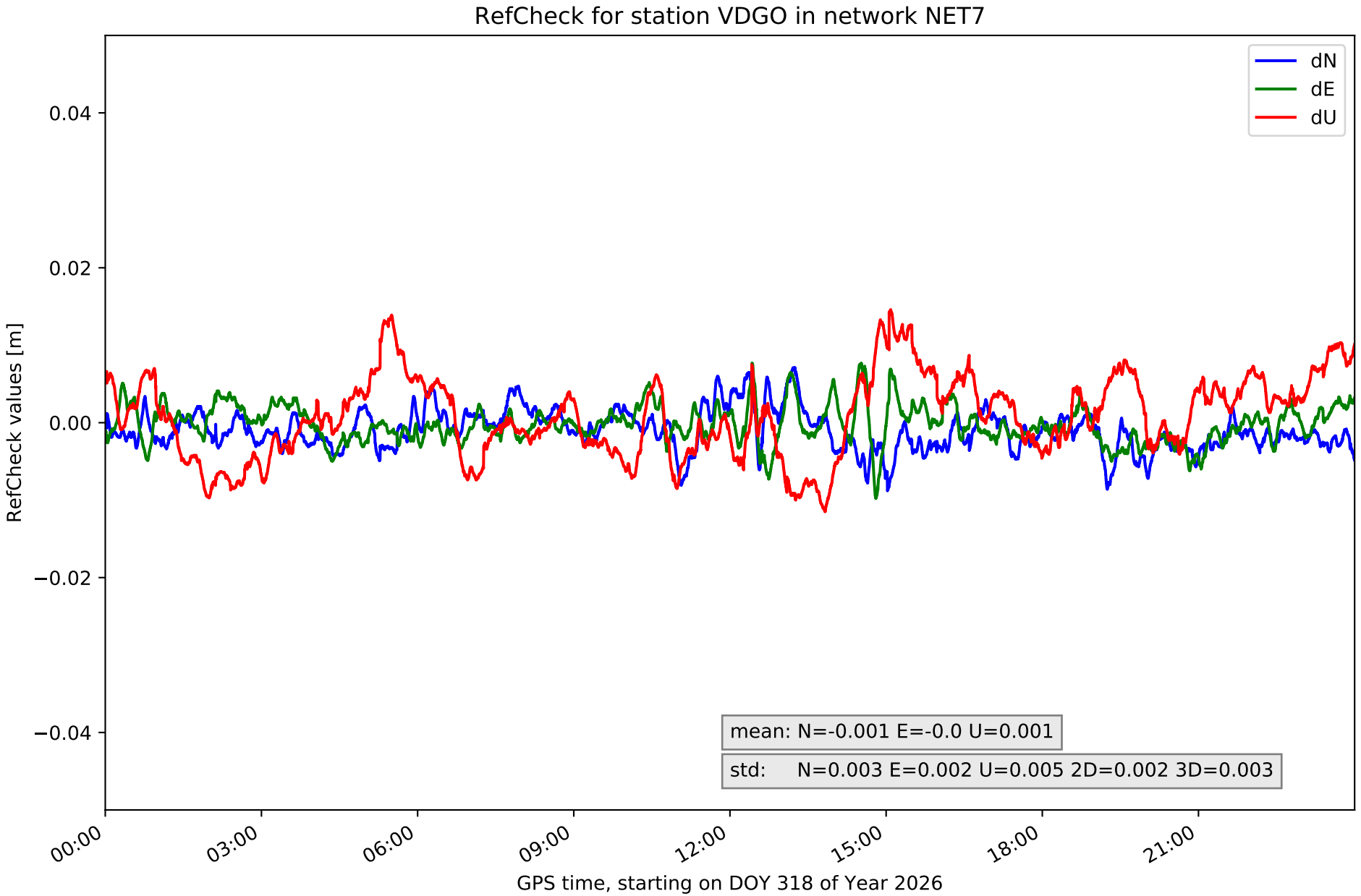

RefCheck for station RIBE in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.001 E=0.0 U=0.001
std: N=0.002 E=0.002 U=0.005 2D=0.002 3D=0.003
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026

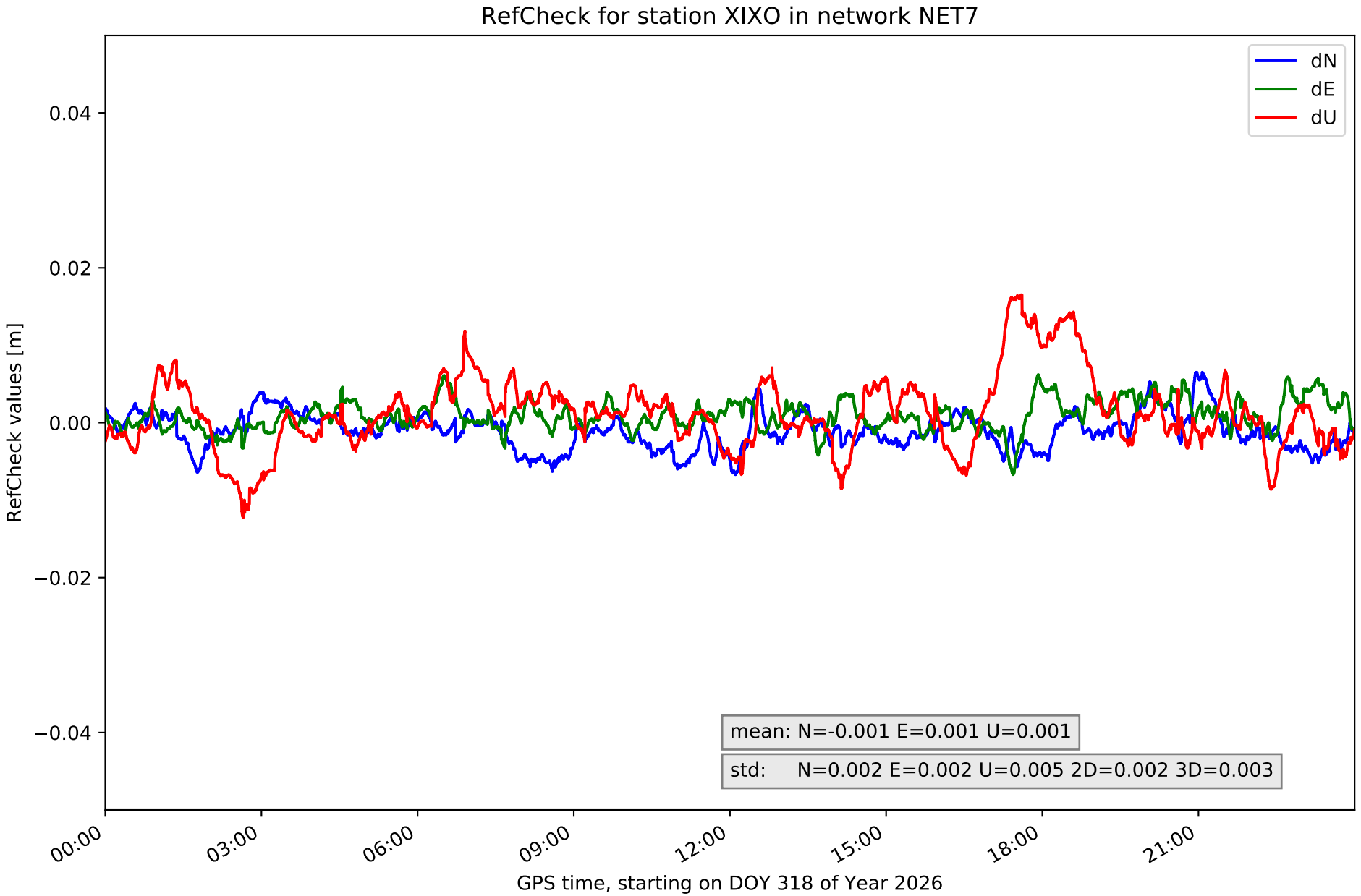

RefCheck for station RNAN in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.0 E=0.0 U=-0.001
std: N=0.002 E=0.002 U=0.006 2D=0.002 3D=0.003
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026


RefCheck for station SIRO in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=0.004 E=0.001 U=-0.001
std: N=0.003 E=0.003 U=0.006 2D=0.003 3D=0.003
00:00
03:00
06:00
09:00
12:00
15:00
18:00
21:00
GPS time, starting on DOY 318 of Year 2026


RefCheck for station TRLV in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.001 E=0.001 U=-0.001
std: N=0.002 E=0.002 U=0.004 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 318 of Year 2026


RefCheck for station VCRD in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.0 E=0.001 U=-0.005
std: N=0.002 E=0.002 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 318 of Year 2026


RefCheck for station VDGO in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.001 E=-0.0 U=0.001
std: N=0.003 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 318 of Year 2026


RefCheck for station XIXO in network NET7
dN
dE
dU
0.04
0.02
0.00
−0.02
−0.04
RefCheck values [m]
mean: N=-0.001 E=0.001 U=0.001
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 318 of Year 2026

# RefCheck values for network NET7

| Station | Nmin | Nmax | Nstd | Emin | Emax | Estd | Umin | Umax | Ustd | std2D | std3D | #2D > 0.01 | % 2D > 0.01 | #3D > 0.02 | % 3D > 0.02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AVL1 | -0.007 | 0.008 | 0.003 | -0.006 | 0.008 | 0.002 | -0.011 | 0.016 | 0.005 | 0.002 | 0.003 | 0 | 0.0 | 0 | 0.0 |
| CANT | -0.008 | 0.007 | 0.002 | -0.008 | 0.006 | 0.002 | -0.01 | 0.017 | 0.005 | 0.002 | 0.003 | 0 | 0.0 | 0 | 0.0 |
| CASO | -0.009 | 0.009 | 0.002 | -0.007 | 0.005 | 0.002 | -0.017 | 0.018 | 0.006 | 0.002 | 0.004 | 58 | 0.1 | 0 | 0.0 |
| CBRN | -0.013 | 0.014 | **0.004** | -0.009 | 0.008 | 0.003 | **-0.044** | 0.016 | 0.01 | 0.003 | 0.008 | 2439 | 4.9 | 11032 | 22.4 |
| FUDE | -0.01 | 0.016 | 0.003 | -0.013 | 0.011 | 0.004 | -0.02 | 0.019 | 0.008 | 0.003 | 0.004 | 2775 | 5.6 | 560 | 1.1 |
| LANT | -0.016 | 0.01 | **0.004** | -0.012 | **0.012** | 0.004 | -0.01 | **0.034** | 0.01 | 0.003 | 0.008 | 2385 | 4.8 | 7231 | 14.7 |
| LARE | -0.009 | 0.012 | **0.004** | -0.01 | 0.007 | 0.003 | -0.017 | 0.008 | 0.006 | 0.002 | 0.004 | 1749 | 3.5 | 0 | 0.0 |
| LENA | -0.013 | 0.009 | **0.004** | **-0.025** | 0.006 | **0.006** | **-0.044** | 0.025 | **0.015** | **0.006** | **0.009** | **9418** | **19.1** | **12660** | **25.7** |
| LEON | -0.008 | 0.009 | 0.003 | -0.007 | 0.011 | 0.003 | -0.009 | 0.021 | 0.006 | 0.002 | 0.004 | 278 | 0.6 | 454 | 0.9 |
| MDPM | **-0.019** | 0.011 | **0.004** | -0.011 | 0.009 | 0.003 | -0.017 | 0.03 | 0.008 | 0.002 | 0.005 | 985 | 2.0 | 1889 | 3.8 |
| RENS | -0.007 | **0.02** | **0.004** | -0.01 | 0.009 | 0.003 | -0.032 | 0.016 | 0.009 | 0.003 | 0.006 | 3509 | 7.1 | 2869 | 5.8 |
| RIAN | -0.007 | 0.012 | 0.003 | -0.011 | 0.009 | 0.003 | -0.019 | 0.022 | 0.007 | 0.002 | 0.004 | 911 | 1.8 | 377 | 0.8 |
| RIBE | -0.008 | 0.005 | 0.002 | -0.008 | 0.011 | 0.002 | -0.017 | 0.015 | 0.005 | 0.002 | 0.003 | 140 | 0.3 | 0 | 0.0 |
| RNAN | -0.007 | 0.008 | 0.002 | -0.006 | 0.005 | 0.002 | -0.021 | 0.013 | 0.006 | 0.002 | 0.003 | 0 | 0.0 | 148 | 0.3 |
| SIRO | -0.01 | 0.012 | 0.003 | -0.007 | **0.012** | 0.003 | -0.018 | 0.015 | 0.006 | 0.003 | 0.003 | 2365 | 4.8 | 93 | 0.2 |
| TRLV | -0.013 | 0.005 | 0.002 | -0.009 | 0.008 | 0.002 | -0.015 | 0.013 | 0.004 | 0.002 | 0.003 | 778 | 1.6 | 0 | 0.0 |
| VCRD | -0.005 | 0.011 | 0.002 | -0.007 | 0.008 | 0.002 | -0.022 | 0.011 | 0.006 | 0.002 | 0.004 | 233 | 0.5 | 236 | 0.5 |
| VDGO | -0.009 | 0.007 | 0.003 | -0.01 | 0.008 | 0.002 | -0.011 | 0.015 | 0.005 | 0.002 | 0.003 | 83 | 0.2 | 0 | 0.0 |
| XIXO | -0.007 | 0.006 | 0.002 | -0.007 | 0.006 | 0.002 | -0.012 | 0.017 | 0.005 | 0.002 | 0.003 | 0 | 0.0 | 0 | 0.0 |
| **Mean** | **-0.01** | **0.01** | **0.003** | **-0.01** | **0.008** | **0.003** | **-0.019** | **0.018** | **0.007** | **0.002** | **0.004** | **1479.3** | **3.0** | **1976.3** | **4.0** |
| **Min/Max** | **-0.019** | **0.02** | **0.004** | **-0.025** | **0.012** | **0.006** | **-0.044** | **0.034** | **0.015** | **0.006** | **0.009** | **9418** | **19.1** | **12660** | **25.7** |

# fixing statistic for network NET7

| fixing percentage of | all GNSS | G | R | E | C |
|---|---|---|---|---|---|
| using threshold 0.3 | 95.4 | 95.1 | 95.7 | 96.2 | 94.6 |
| considering satellites with dual-frequency fixed | 94.2 | 94.3 | 94.5 | 95.3 | 92.5 |
| considering all signals separately | 93.9 | 94.3 | 94.6 | 95.4 | 90.8 |