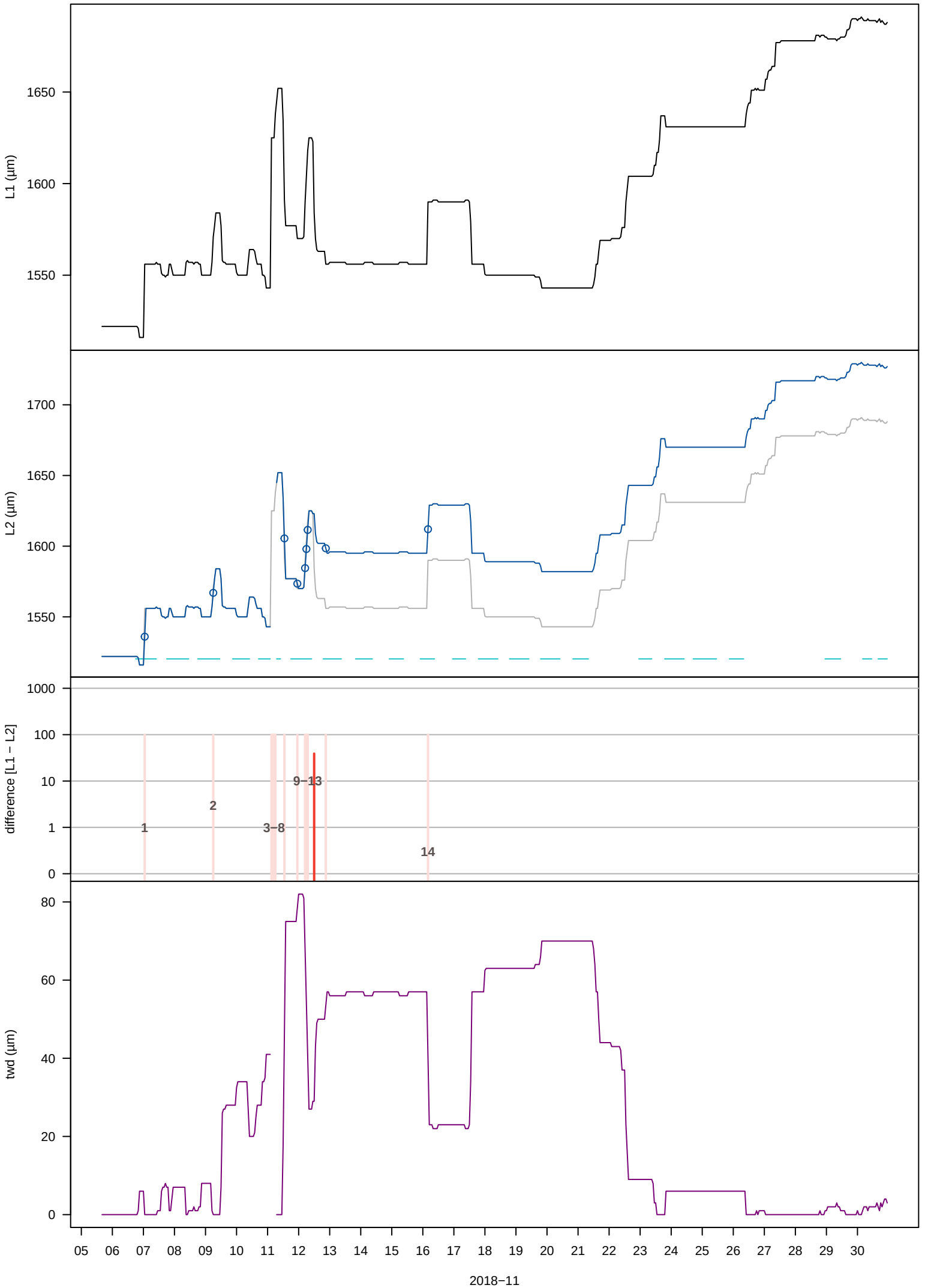
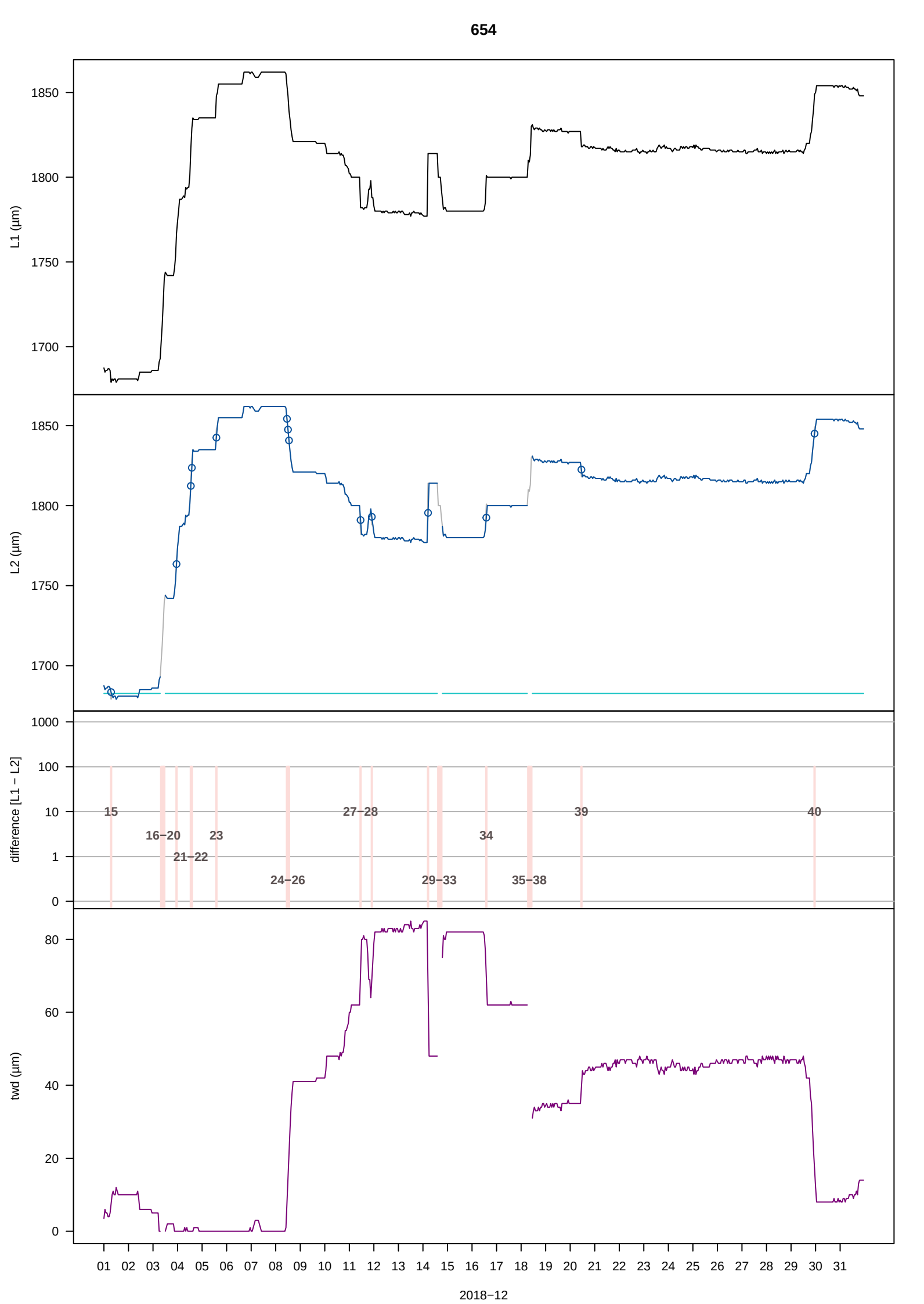
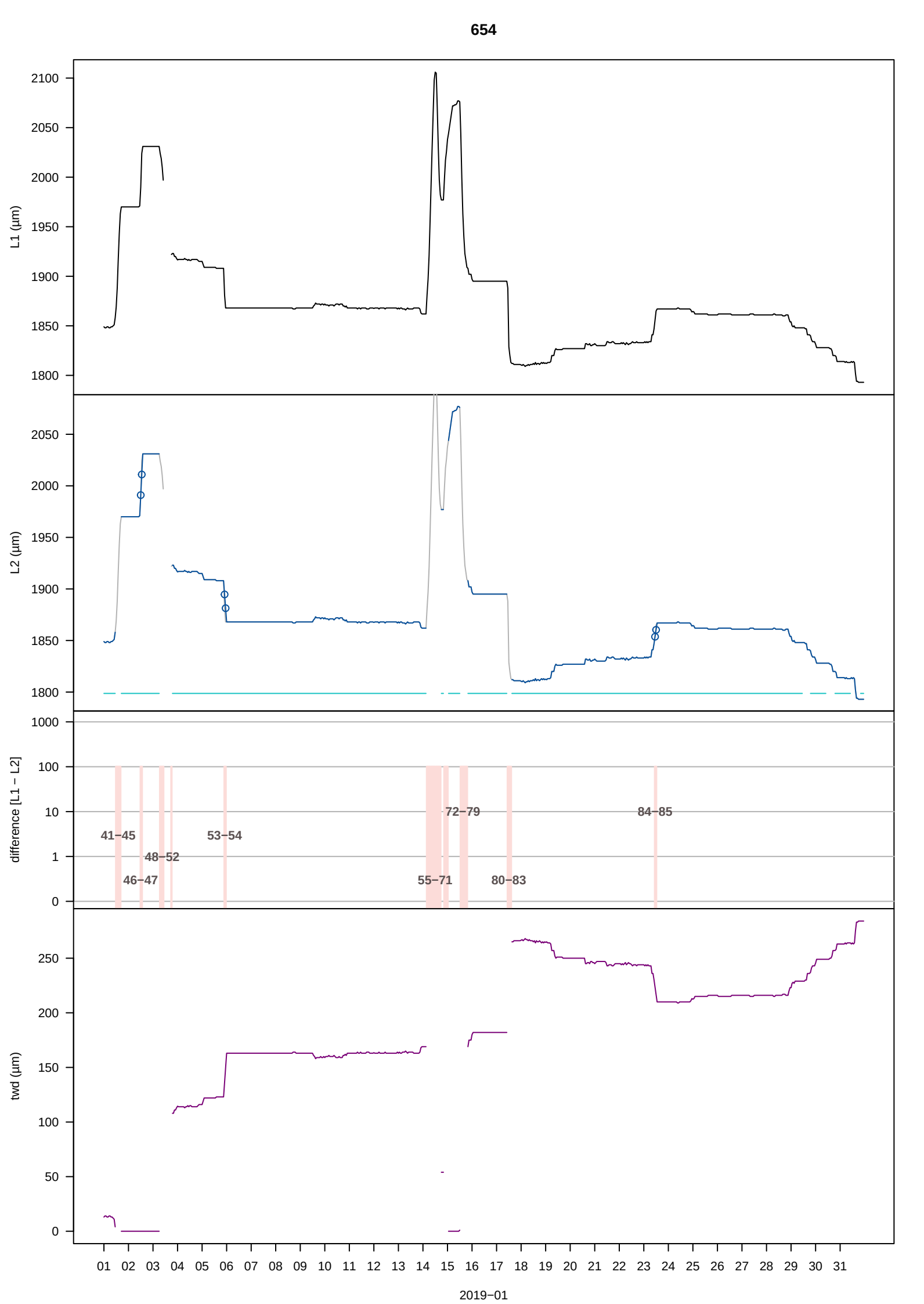
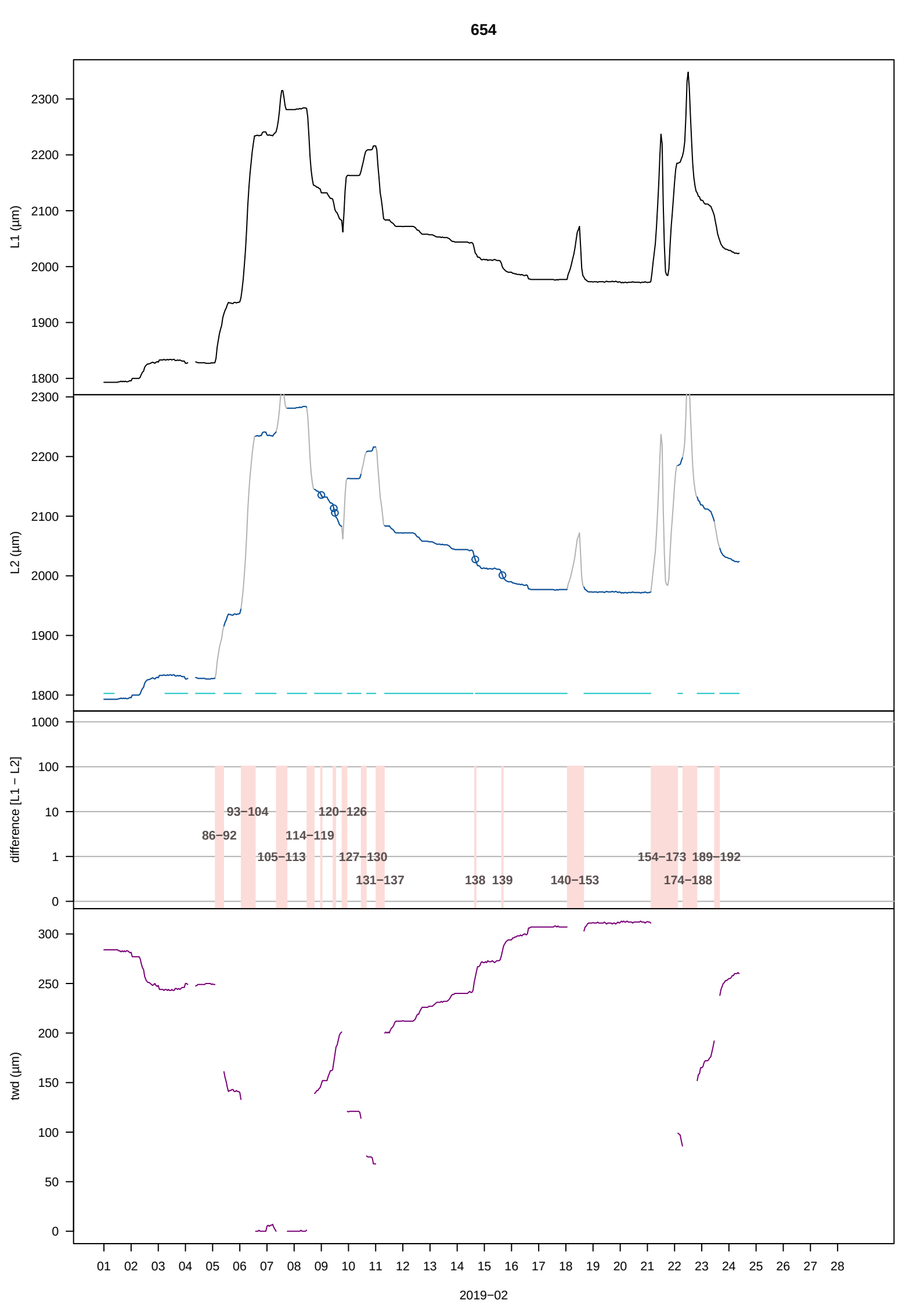
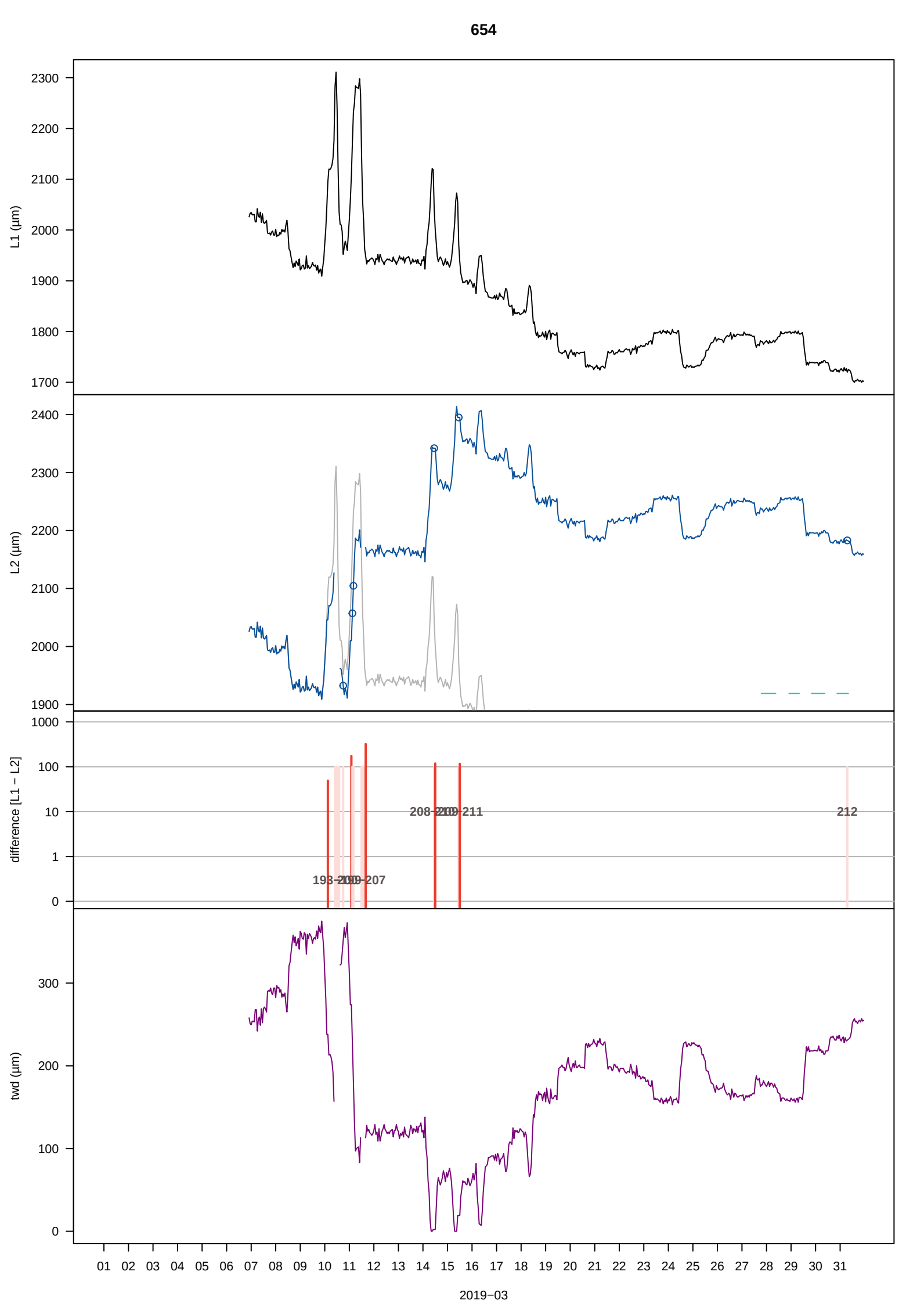
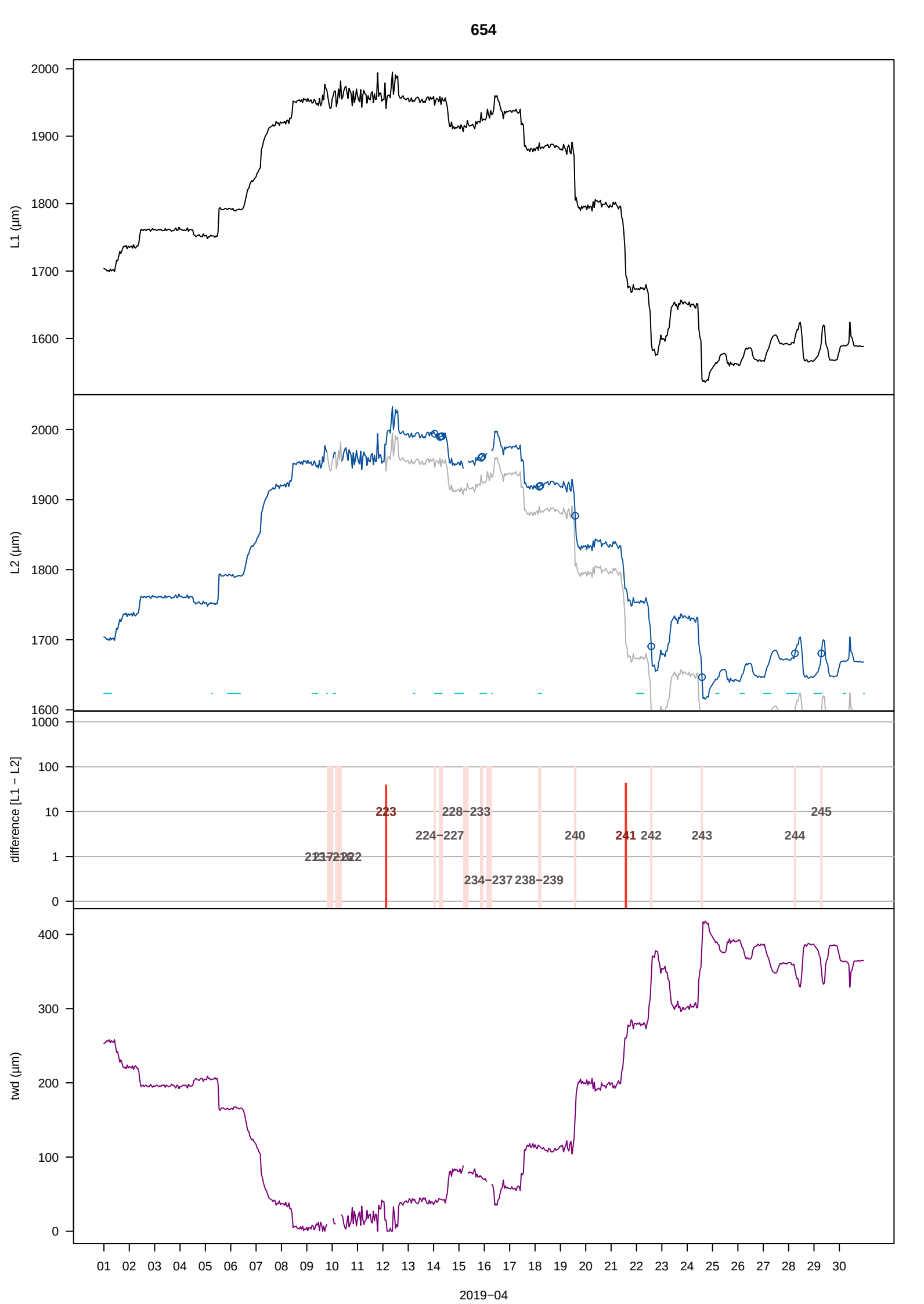

L1 (µm)
1650
1600
1550
L2 (µm)
1700
1650
1600
1550
difference [L1 − L2]
1000
100
10
1
0
1
2
3−8
9−13
14
twd (µm)
80
60
40
20
0
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
2018−11

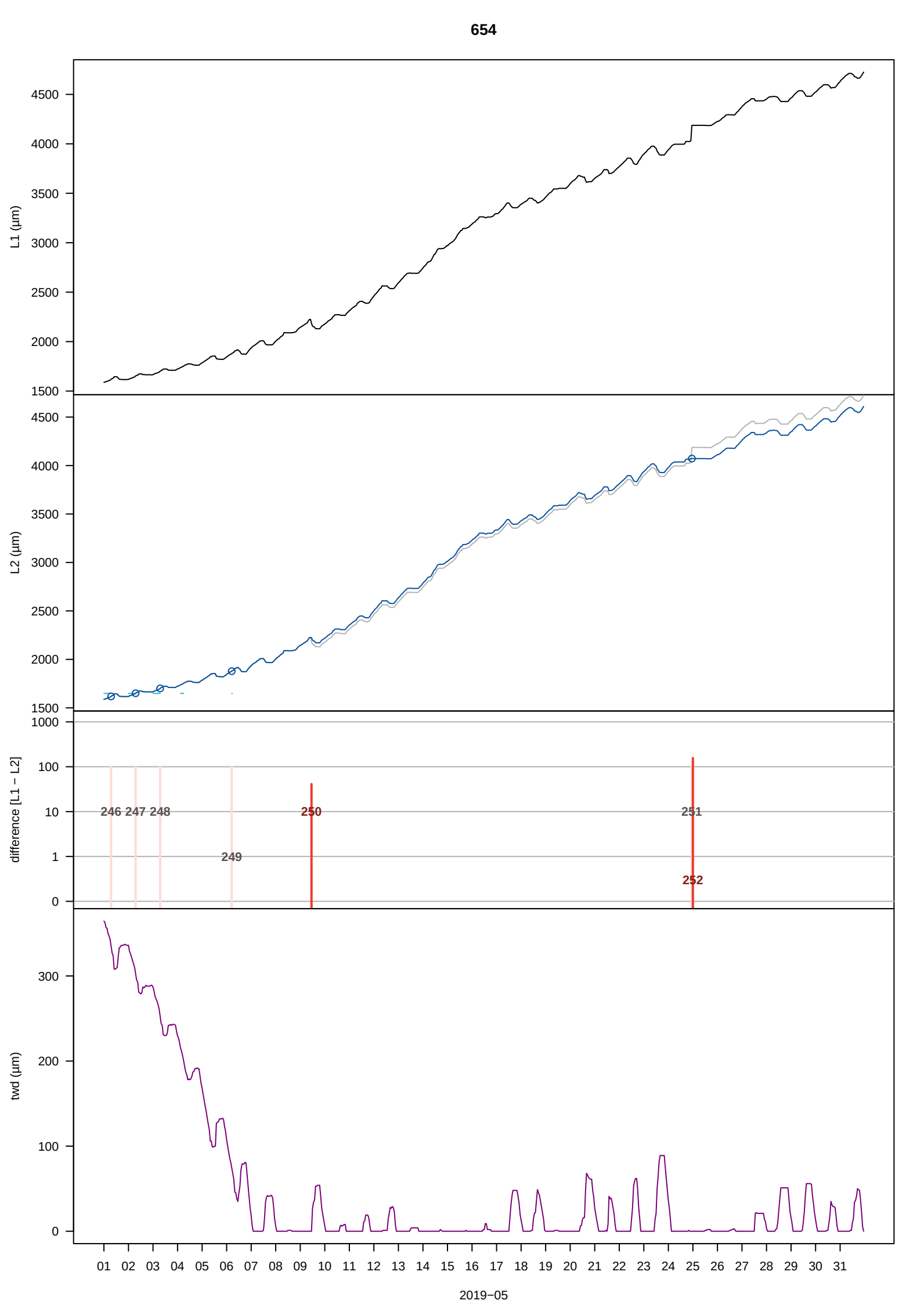

654
L1 (µm)
1850
1800
1750
1700
L2 (µm)
1850
1800
1750
1700
difference [L1 − L2]
1000
100
10
1
0
15
16−20
21−22
23
24−26
27−28
29−33
34
35−38
39
40
twd (µm)
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2018−12

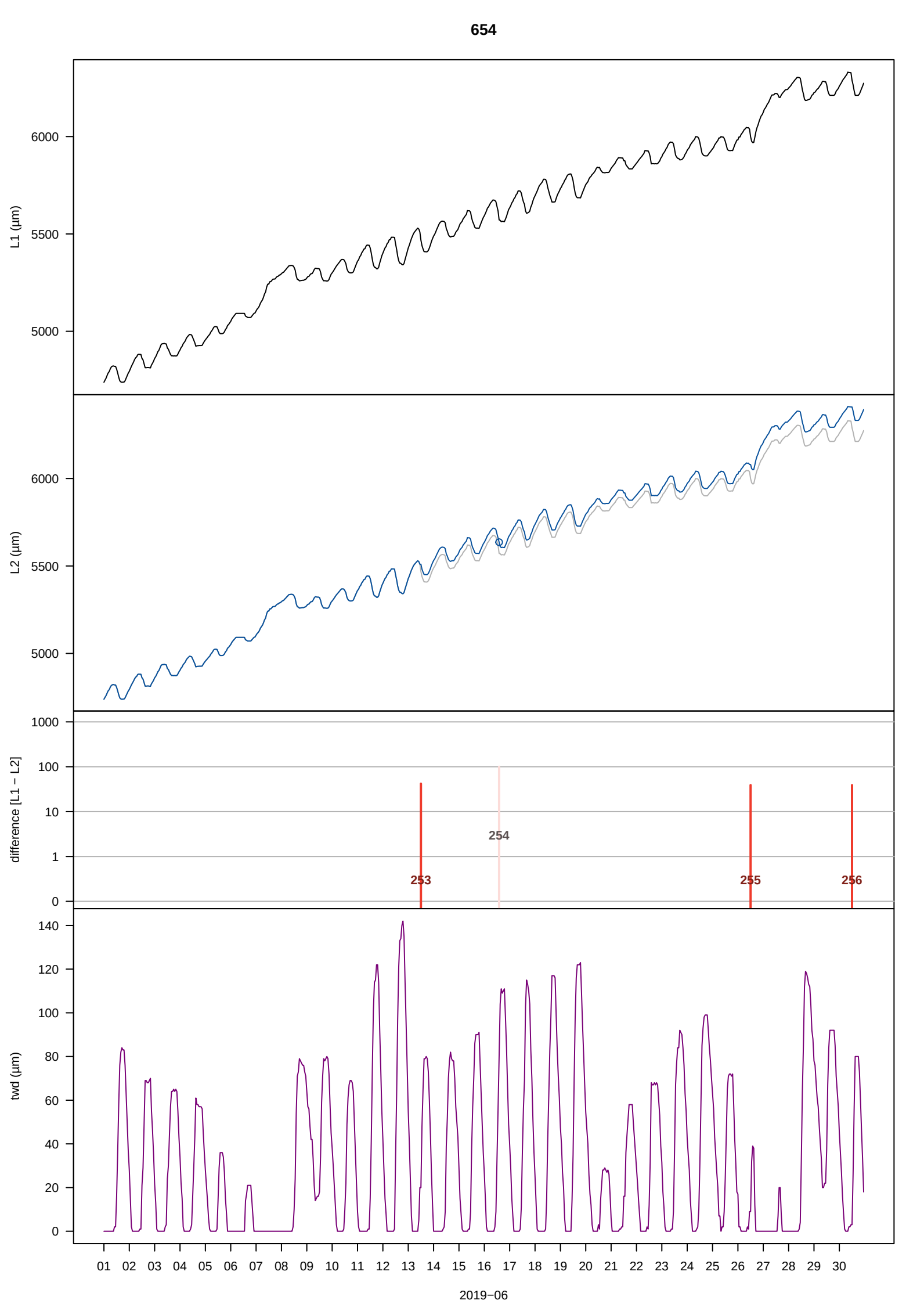

654
L1 (µm)
2100
2050
2000
1950
1900
1850
1800
L2 (µm)
2050
2000
1950
1900
1850
1800
difference [L1 − L2]
1000
100
10
1
0
41−45
46−47
48−52
53−54
55−71
72−79
80−83
84−85
twd (µm)
250
200
150
100
50
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
2019−01

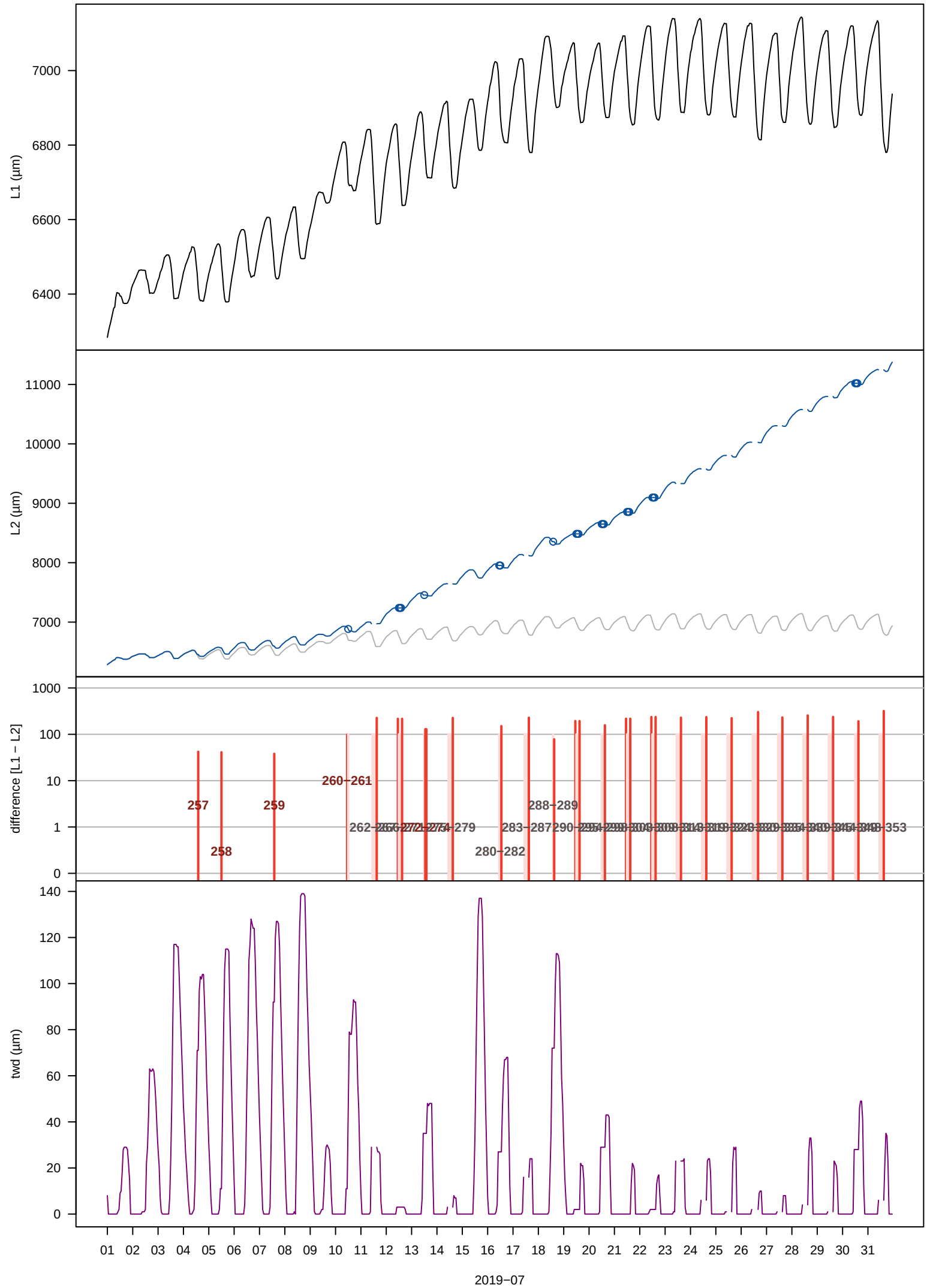

654
L1 (µm)
2300
2200
2100
2000
1900
1800
L2 (µm)
2300
2200
2100
2000
1900
1800
difference [L1 − L2]
1000
100
10
1
0
86−92
93−104
105−113
114−119
120−126
127−130
131−137
138
139
140−153
154−173
174−188
189−192
twd (µm)
300
250
200
150
100
50
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
2019−02

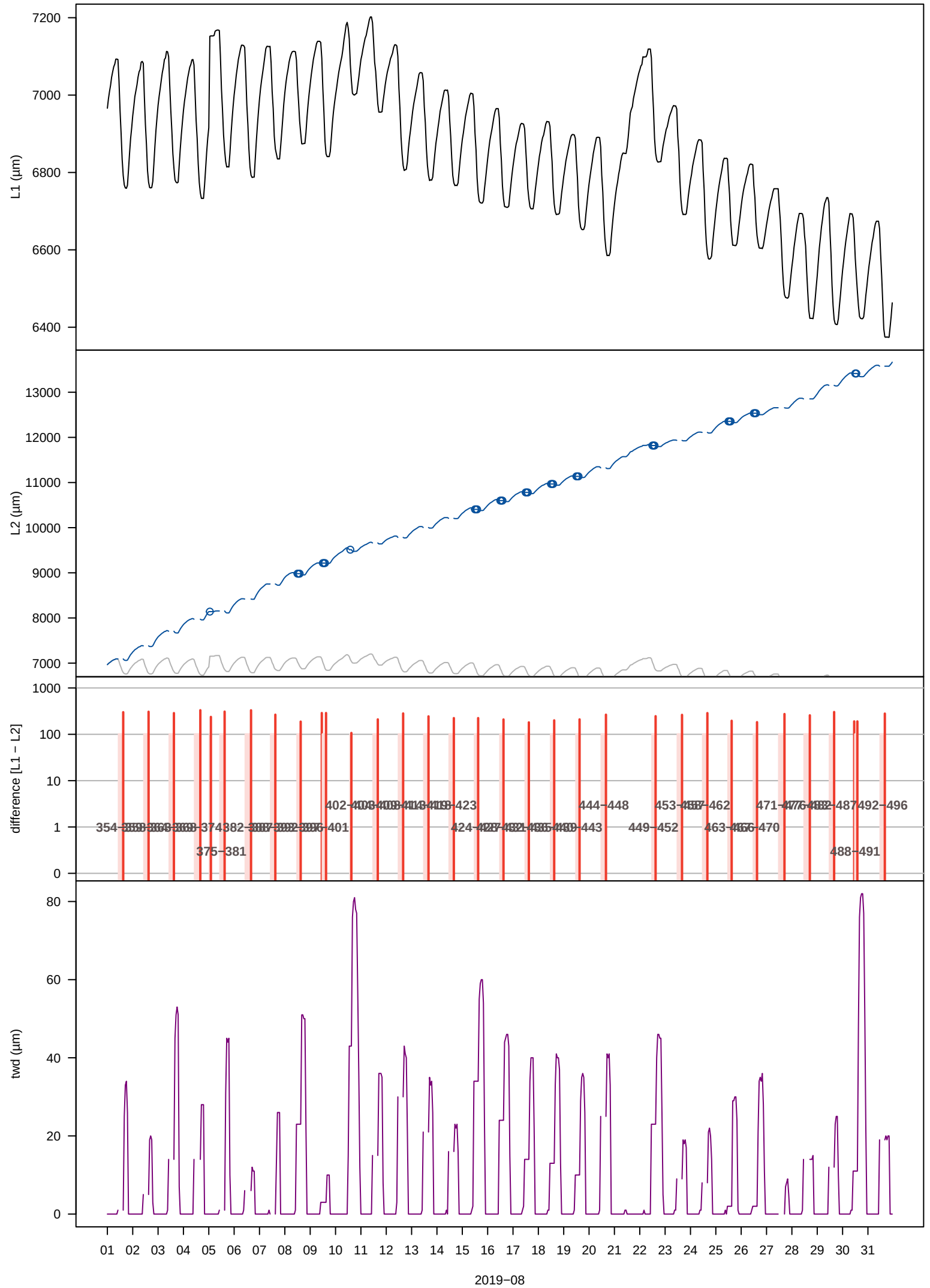

654
L1 (µm)
2300
2200
2100
2000
1900
1800
1700
L2 (µm)
2400
2300
2200
2100
2000
1900
difference [L1 − L2]
1000
100
10
1
0
193–207
208–211
212
twd (µm)
300
200
100
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2019−03

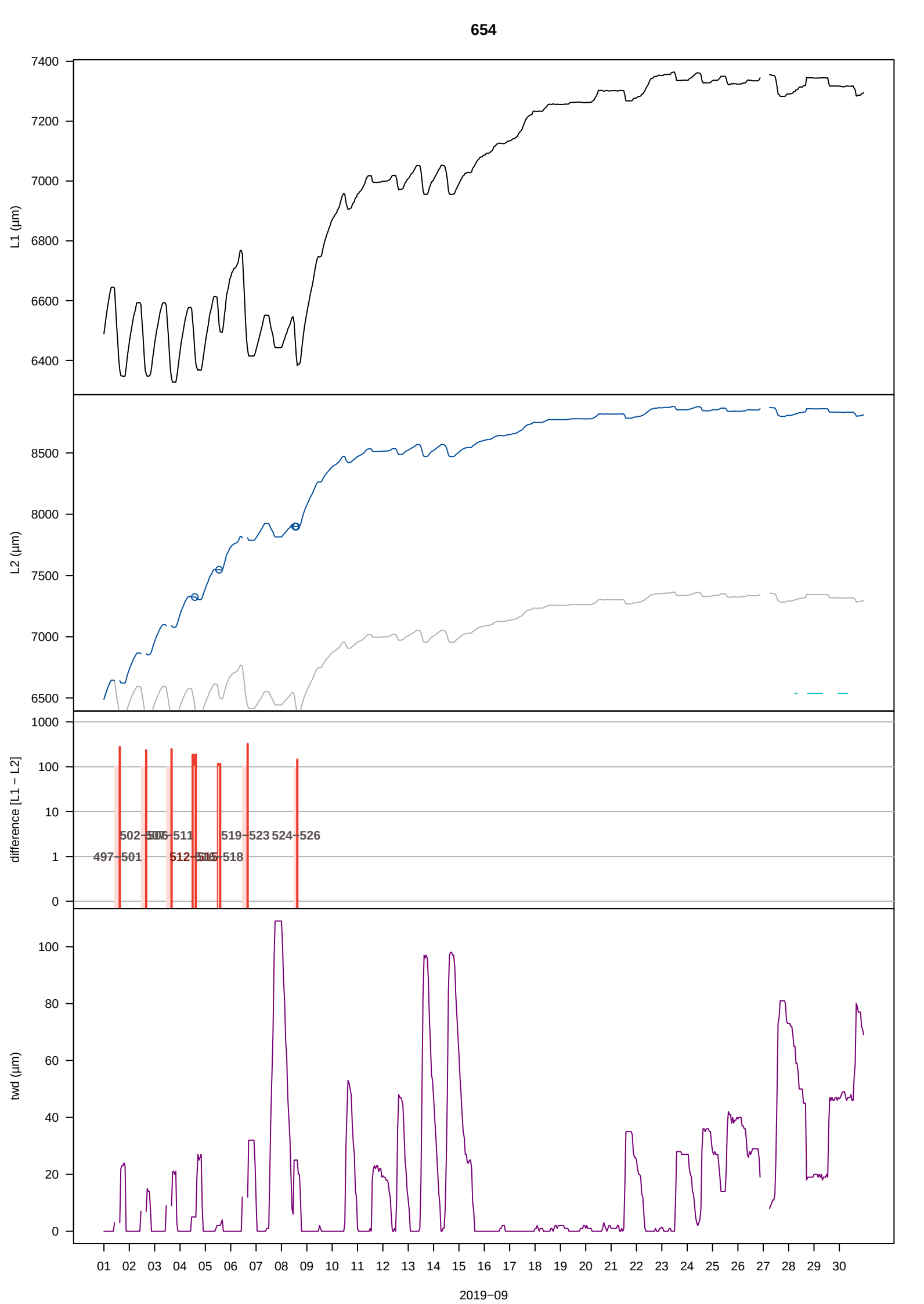

654
L1 (µm)
2000
1900
1800
1700
1600
L2 (µm)
2000
1900
1800
1700
1600
difference [L1 − L2]
1000
100
10
1
0
223
228−233
224−227
240
241
242
243
244
245
234−237
238−239
twd (µm)
400
300
200
100
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
2019−04

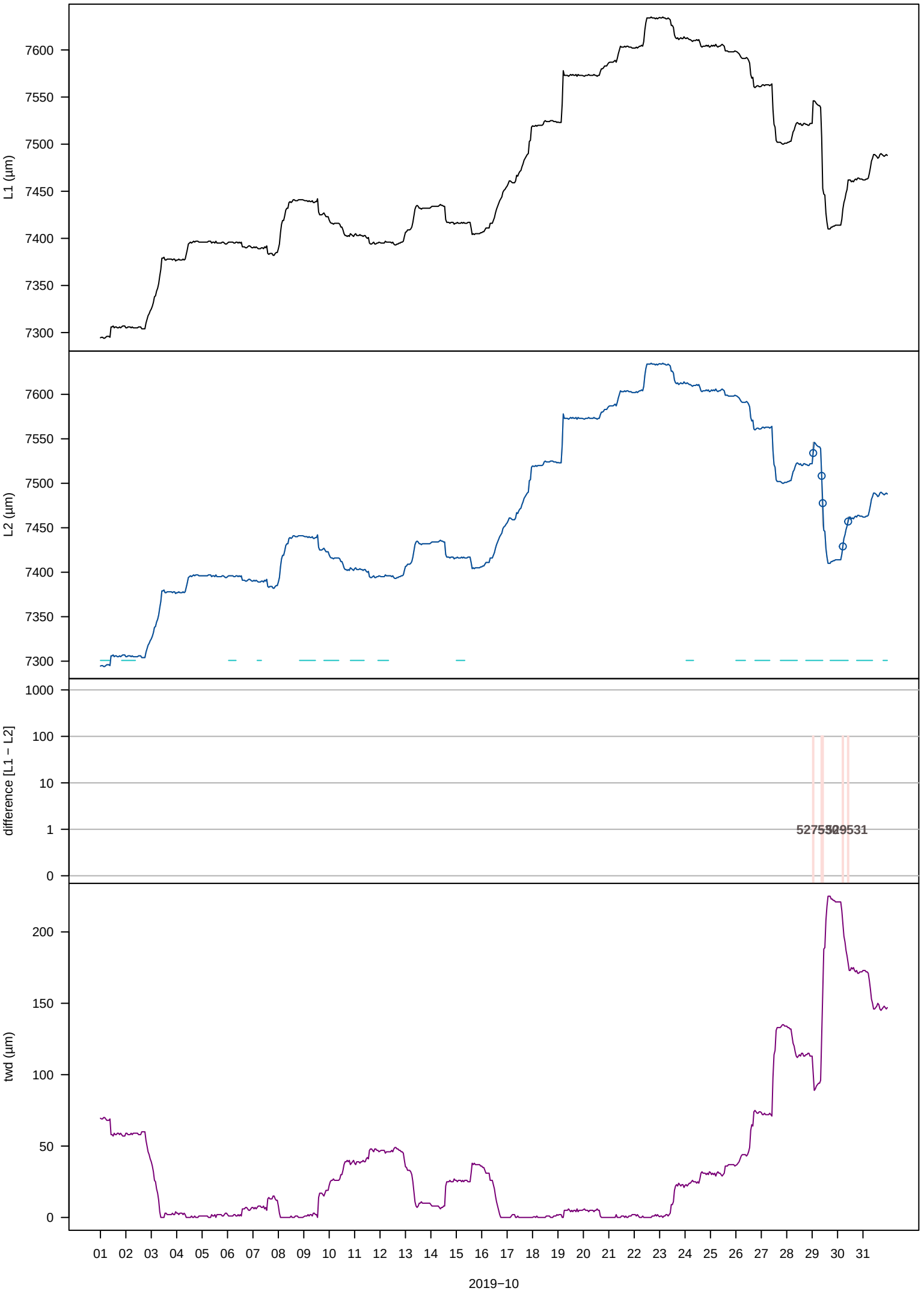

654
L1 (µm)
4500
4000
3500
3000
2500
2000
1500
L2 (µm)
4500
4000
3500
3000
2500
2000
1500
difference [L1 − L2]
1000
100
10
1
0
246 247 248
249
250
251
252
twd (µm)
300
200
100
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2019−05

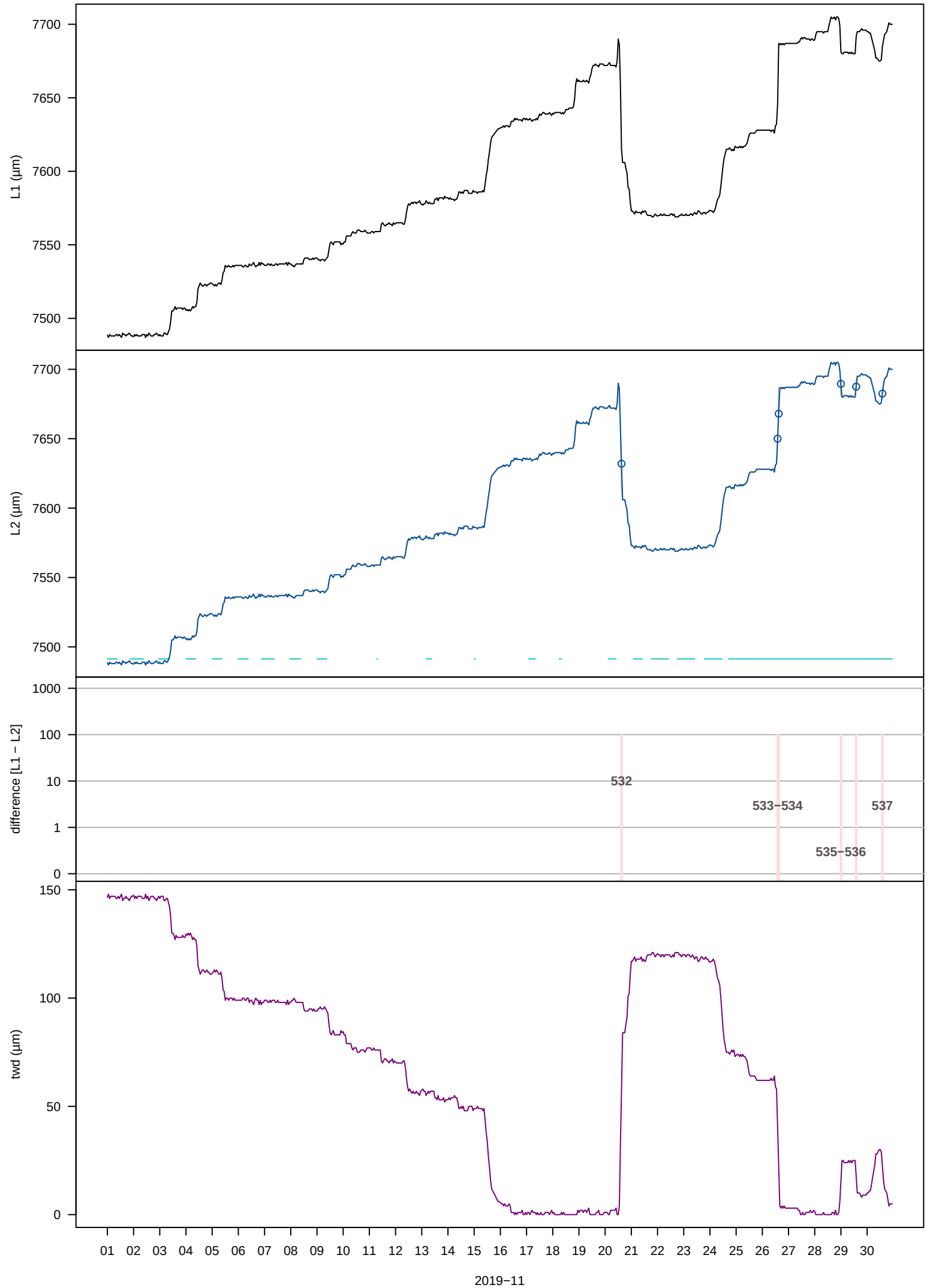

654
L1 (µm)
6000
5500
5000
L2 (µm)
6000
5500
5000
difference [L1 − L2]
1000
100
10
1
0
253
254
255
256
twd (µm)
140
120
100
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2019−06

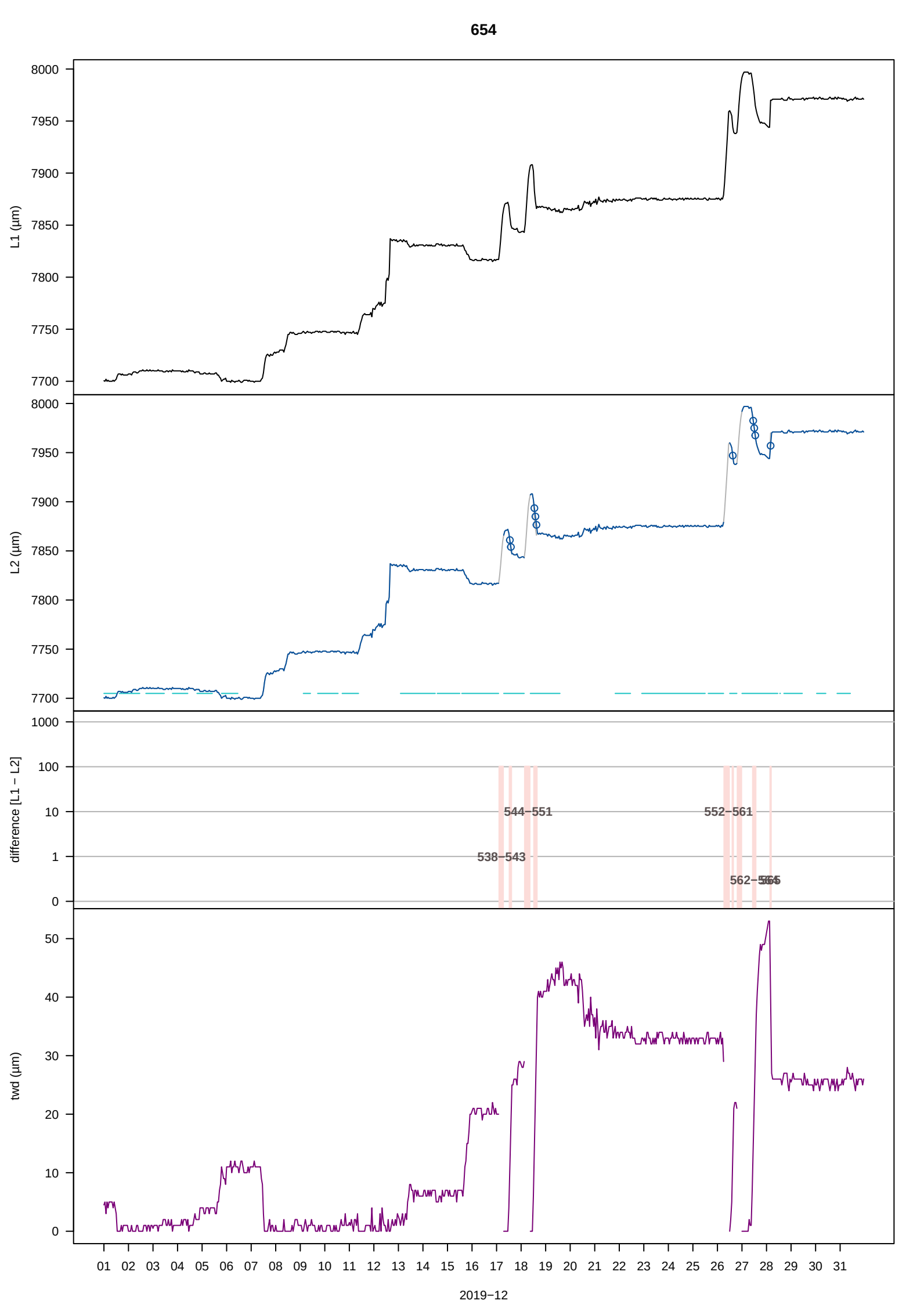

L1 (µm)
7000
6800
6600
6400
L2 (µm)
11000
10000
9000
8000
7000
difference [L1 − L2]
1000
100
10
1
0
257
258
259
260−261
262−279
280−282
283−287
288−289
290−353
twd (µm)
140
120
100
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2019−07

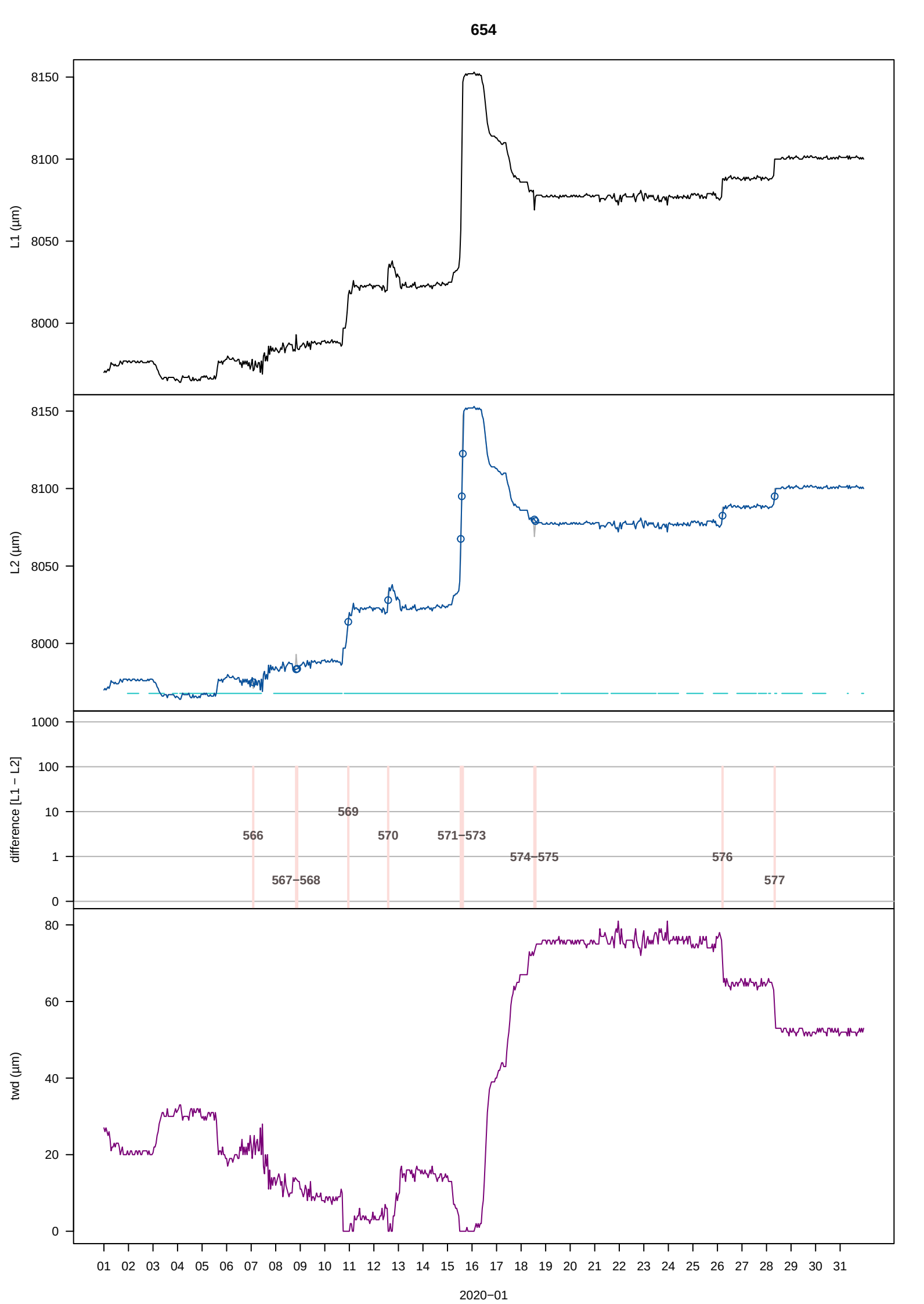

L1 (µm)
7200
7000
6800
6600
6400
L2 (µm)
13000
12000
11000
10000
9000
8000
7000
difference [L1 − L2]
1000
100
10
1
0
354–374
375–381
382–401
402–423
424–443
444–448
449–452
453–462
463–470
471–487
488–491
492–496
twd (µm)
80
60
40
20
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
2019−08

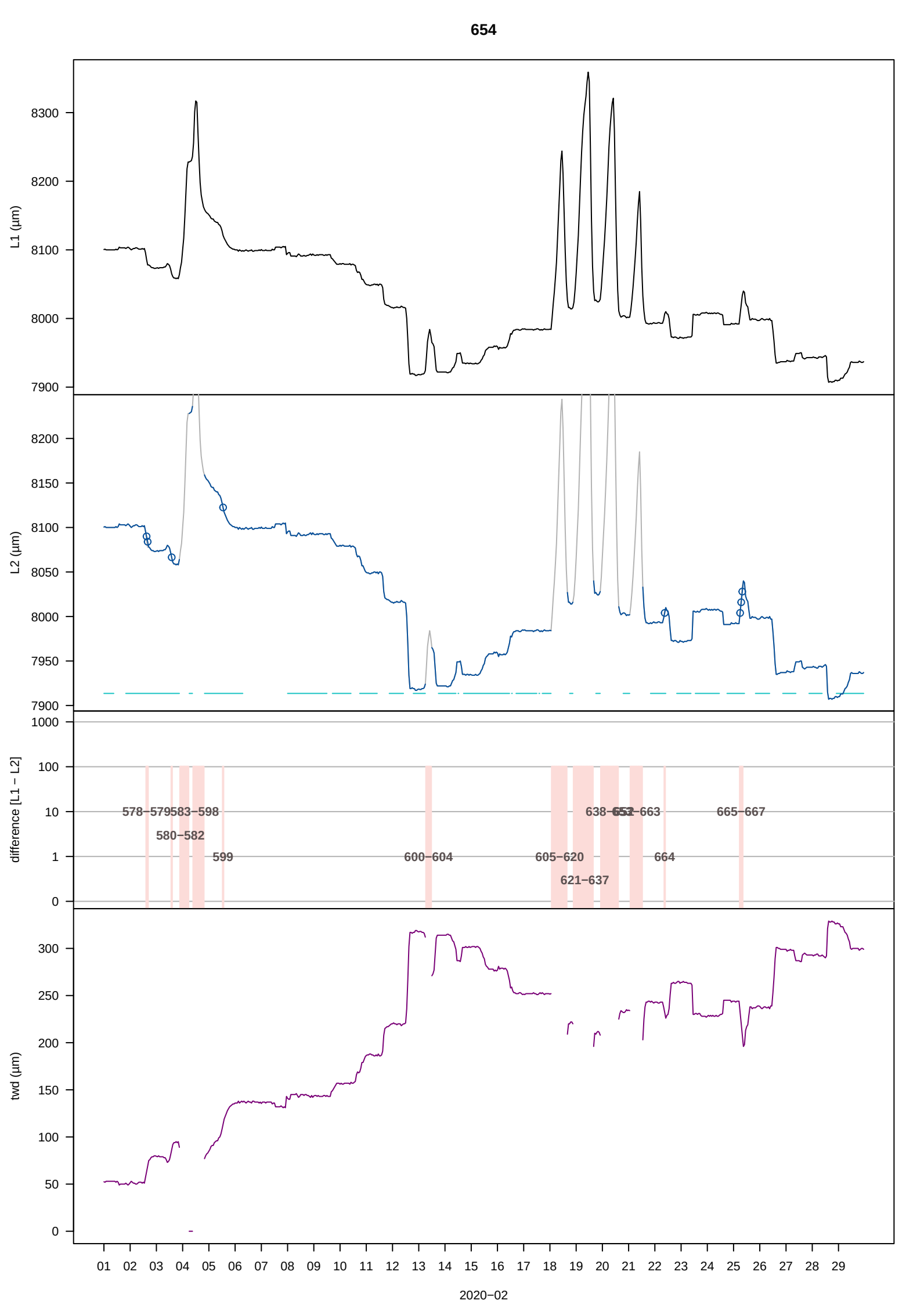

654
L1 (µm)
7400
7200
7000
6800
6600
6400
L2 (µm)
8500
8000
7500
7000
6500
difference [L1 − L2]
1000
100
10
1
0
497−501
502−506
507−511
512−515
516−518
519−523
524−526
twd (µm)
100
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2019−09

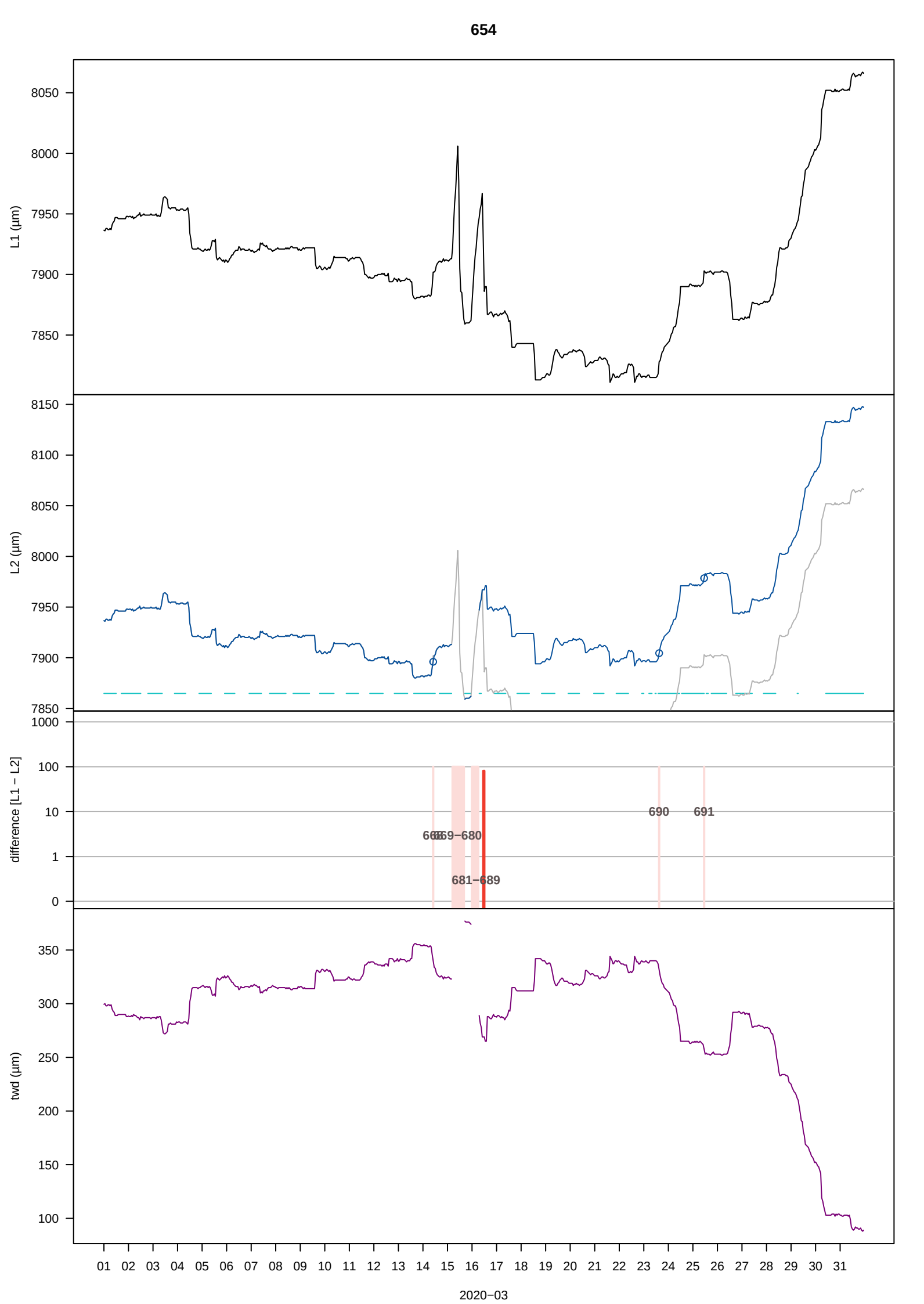

L1 (µm)
7600
7550
7500
7450
7400
7350
7300
L2 (µm)
7600
7550
7500
7450
7400
7350
7300
difference [L1 − L2]
1000
100
10
1
0
twd (µm)
200
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2019−10

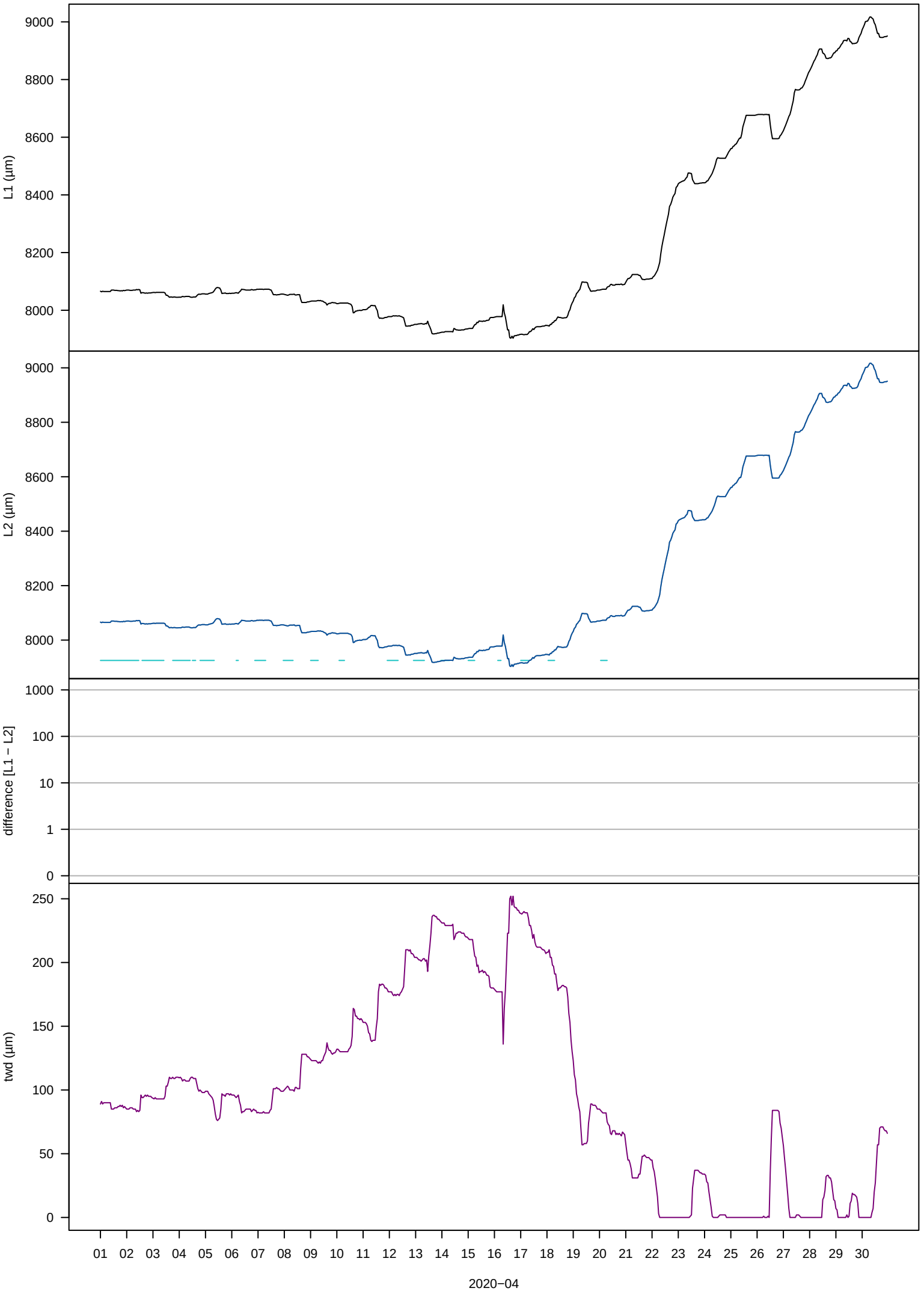

L1 (µm)
7700
7650
7600
7550
7500
L2 (µm)
7700
7650
7600
7550
7500
difference [L1 − L2]
1000
100
10
1
0
532
533−534
535−536
537
twd (µm)
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2019−11

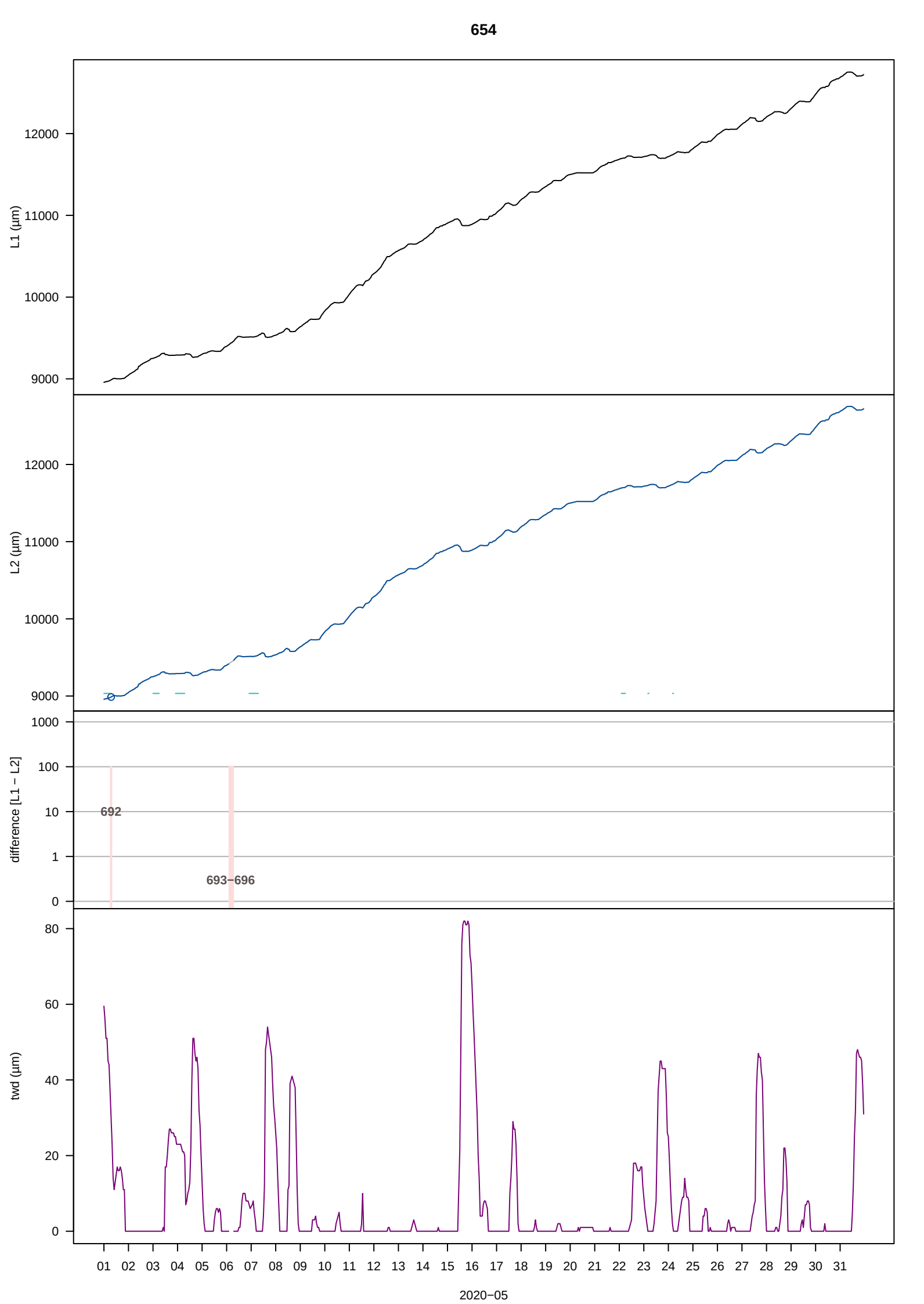

654
L1 (µm)
8000
7950
7900
7850
7800
7750
7700
L2 (µm)
8000
7950
7900
7850
7800
7750
7700
difference [L1 − L2]
1000
100
10
1
0
544−551
538−543
552−561
562−565
twd (µm)
50
40
30
20
10
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2019−12


654
L1 (µm)
8150
8100
8050
8000
L2 (µm)
8150
8100
8050
8000
difference [L1 − L2]
1000
100
10
1
0
566
567−568
569
570
571−573
574−575
576
577
twd (µm)
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2020−01

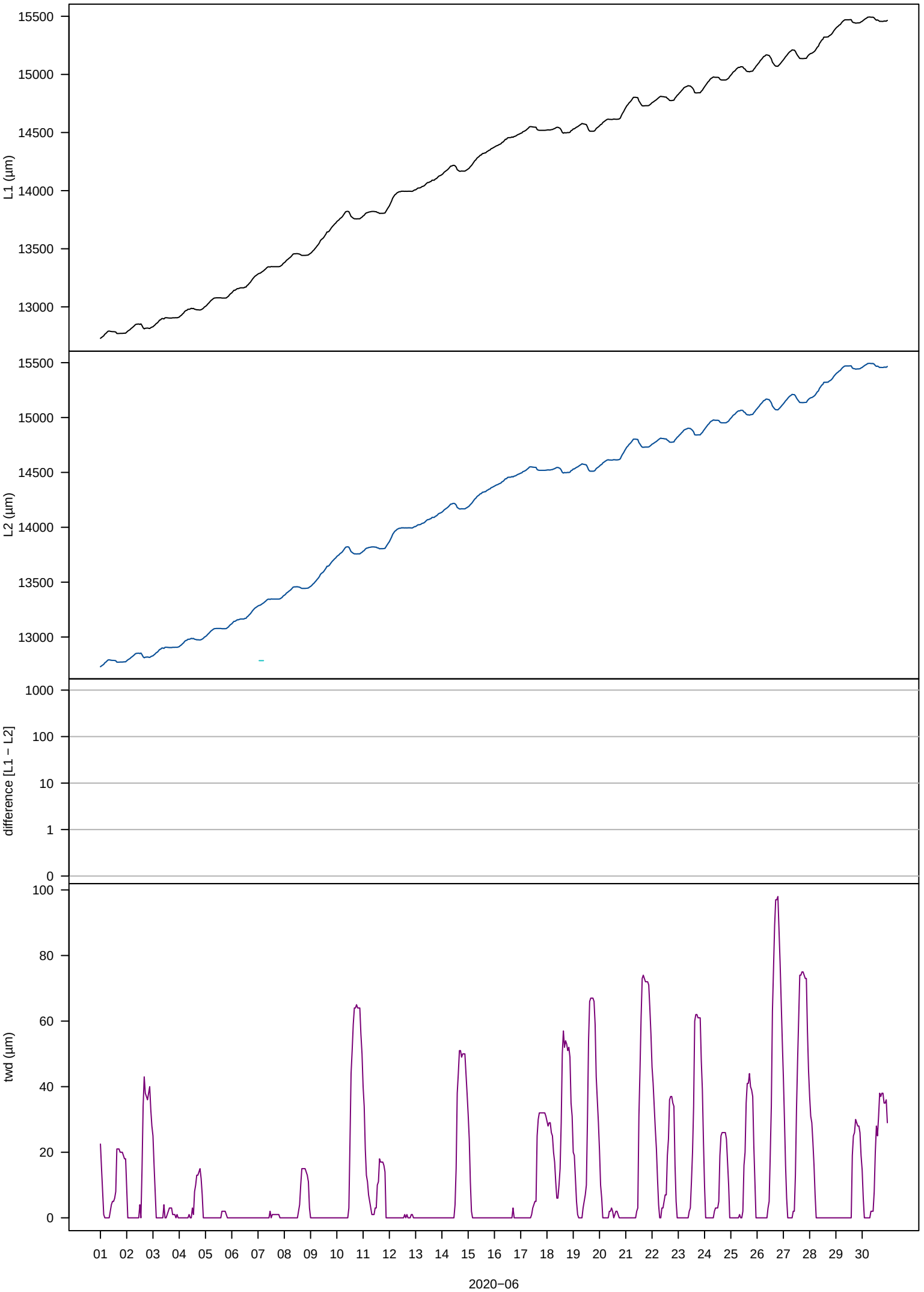

654
L1 (µm)
8300
8200
8100
8000
7900
L2 (µm)
8200
8150
8100
8050
8000
7950
7900
difference [L1 − L2]
1000
100
10
1
0
578−579
583−598
580−582
599
600−604
605−620
621−637
638−652
653−663
664
665−667
twd (µm)
300
250
200
150
100
50
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
2020−02

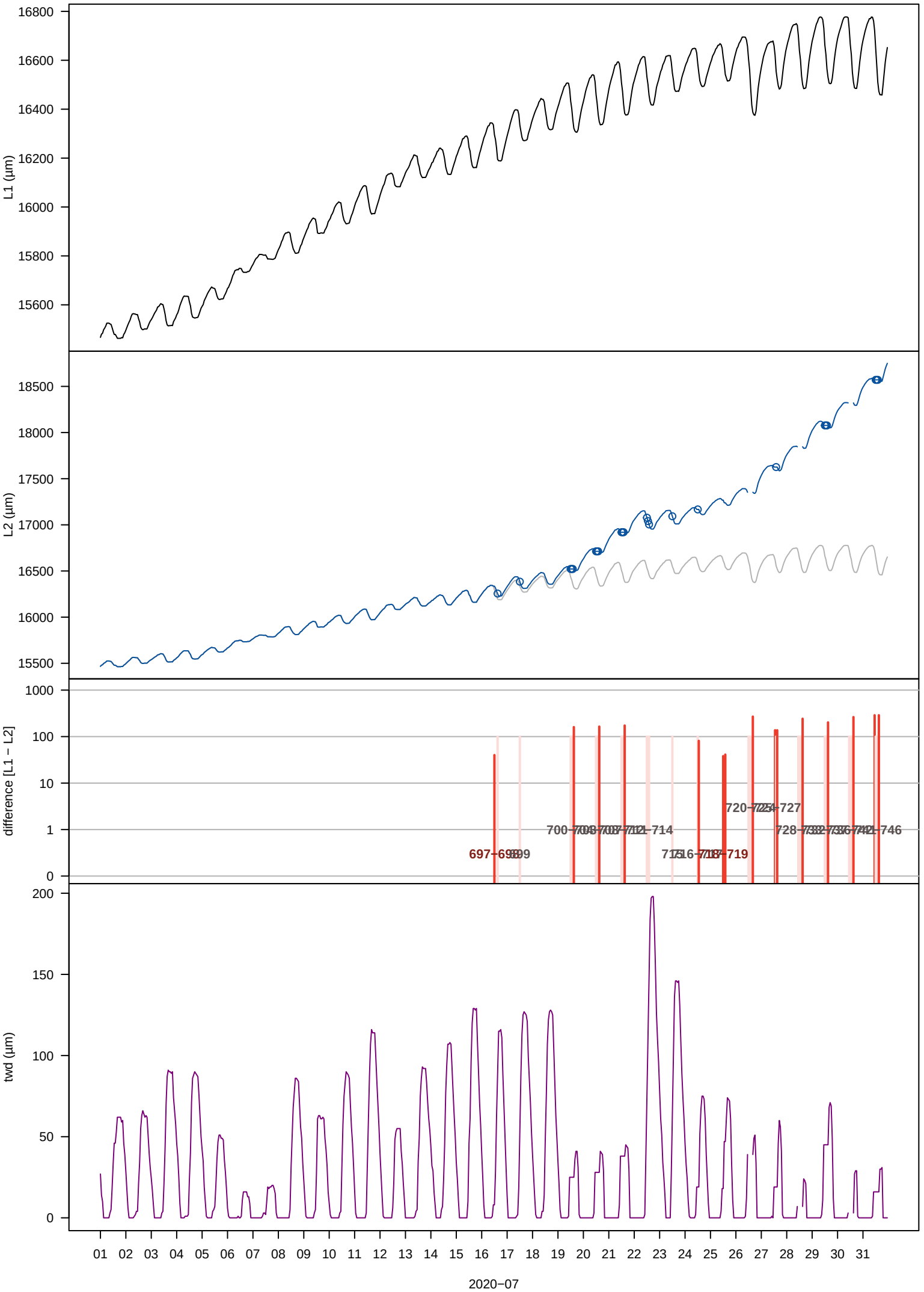

654
L1 (µm)
8050
8000
7950
7900
7850
L2 (µm)
8150
8100
8050
8000
7950
7900
7850
difference [L1 − L2]
1000
100
10
1
0
669–680
681–689
690
691
twd (µm)
350
300
250
200
150
100
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2020−03

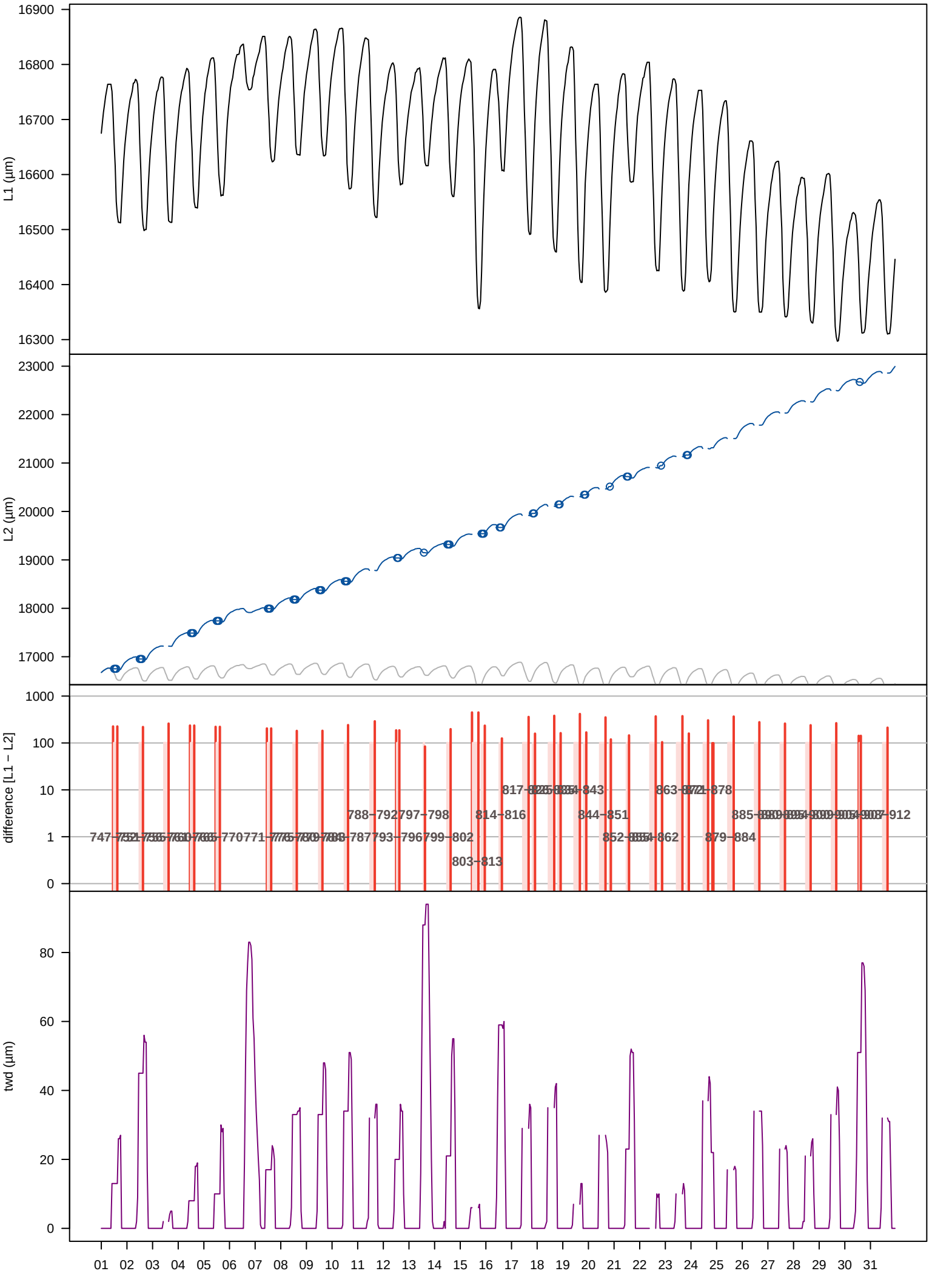

L1 (µm)
9000
8800
8600
8400
8200
8000
L2 (µm)
9000
8800
8600
8400
8200
8000
difference [L1 − L2]
1000
100
10
1
0
twd (µm)
250
200
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2020−04

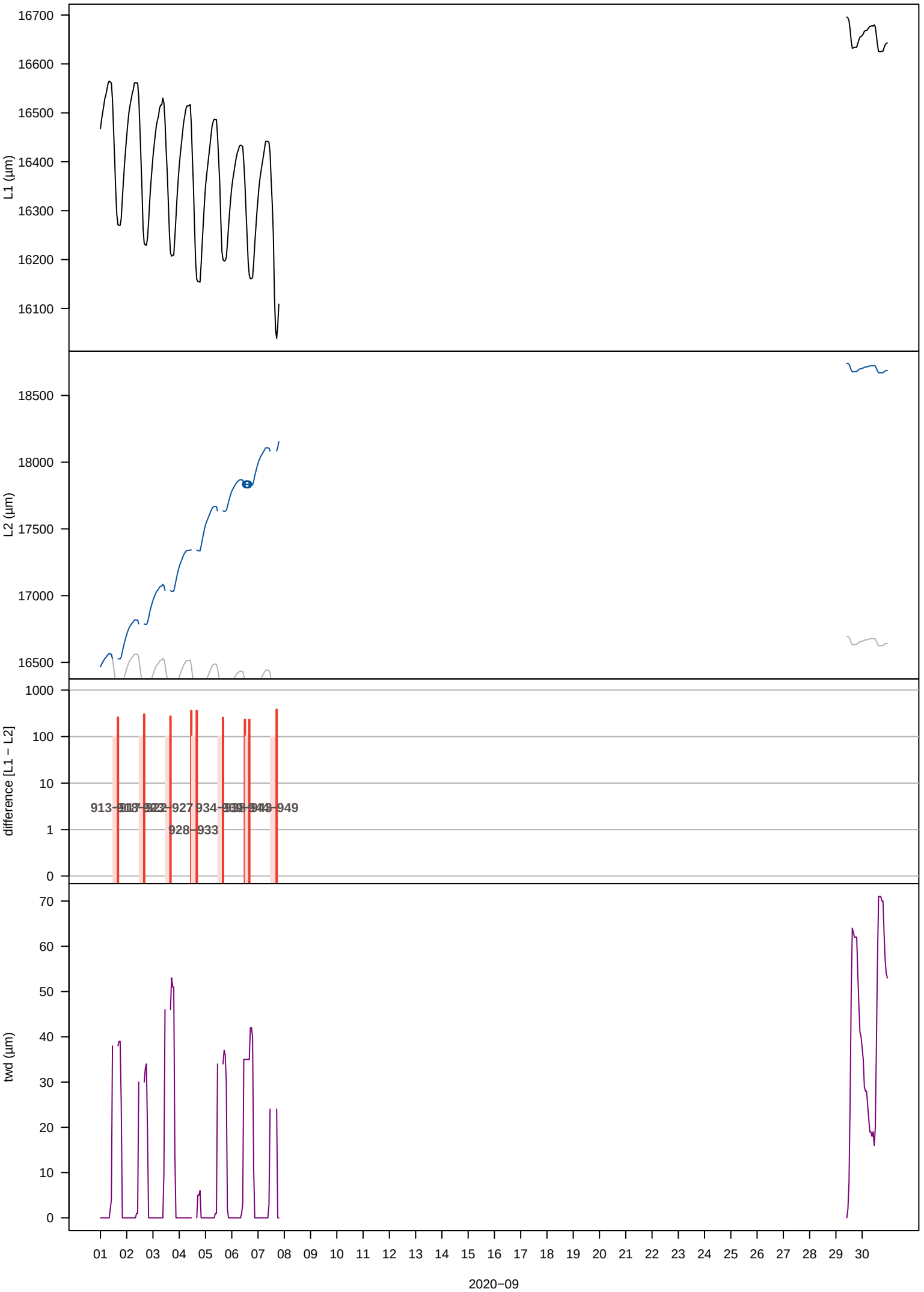

654
L1 (µm)
12000
11000
10000
9000
L2 (µm)
12000
11000
10000
9000
difference [L1 − L2]
1000
100
10
1
0
692
693−696
twd (µm)
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2020−05

654

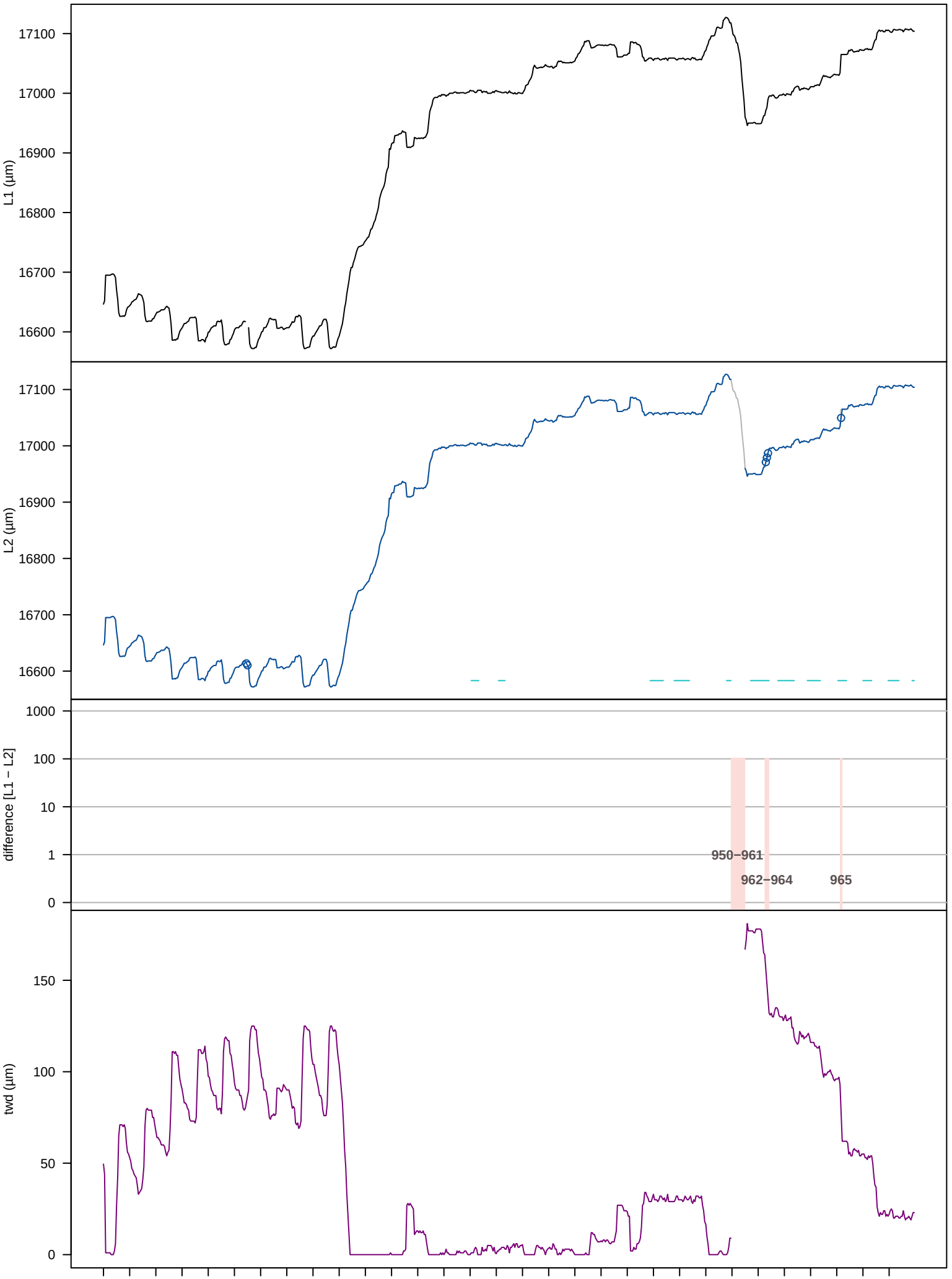

L1 (µm)
15500
15000
14500
14000
13500
13000
L2 (µm)
15500
15000
14500
14000
13500
13000
difference [L1 − L2]
1000
100
10
1
0
twd (µm)
100
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2020−06

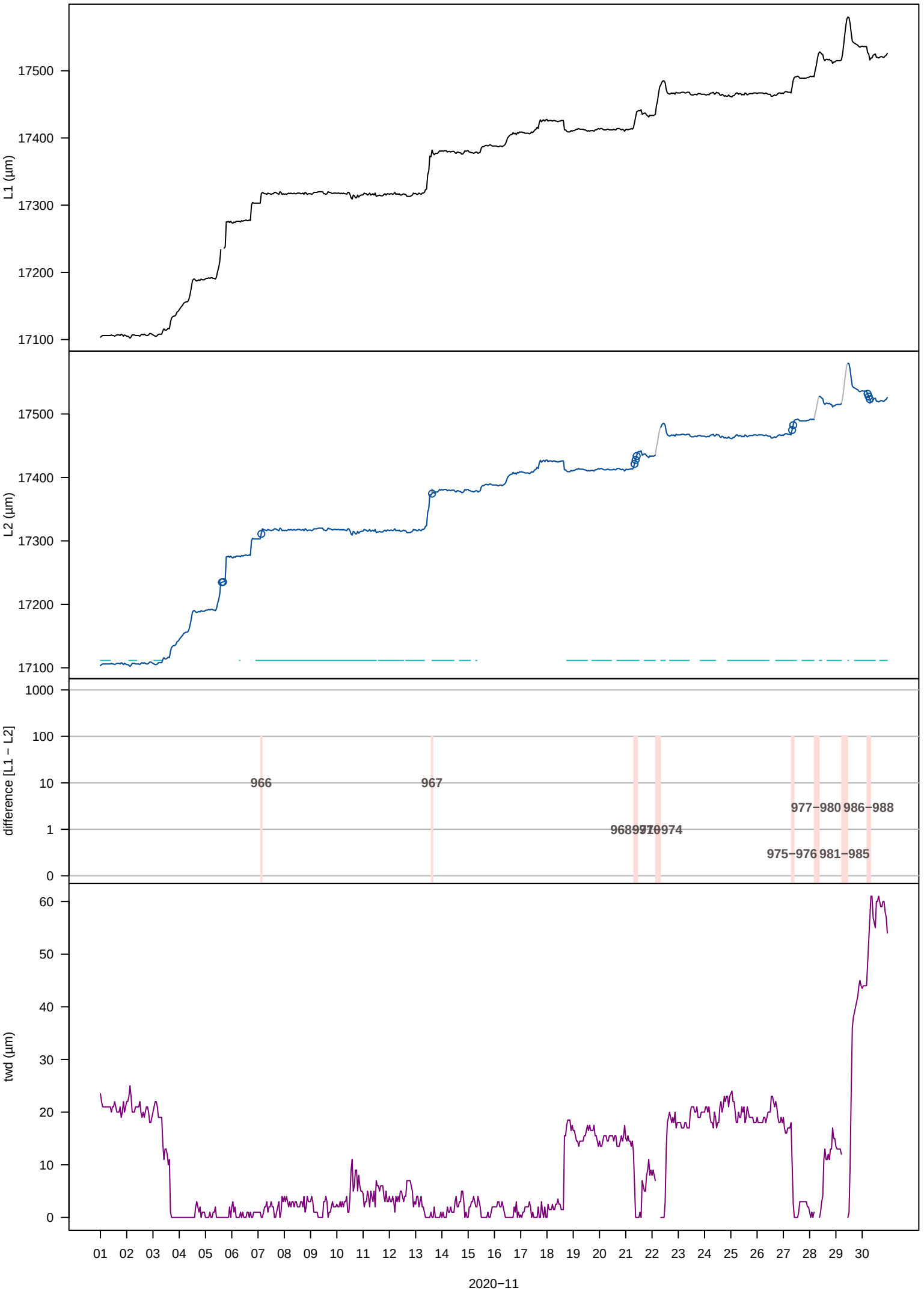

L1 (µm)
16800
16600
16400
16200
16000
15800
15600
L2 (µm)
18500
18000
17500
17000
16500
16000
15500
difference [L1 − L2]
1000
100
10
1
0
697–699
700–714
720–727
728–746
twd (µm)
200
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2020−07

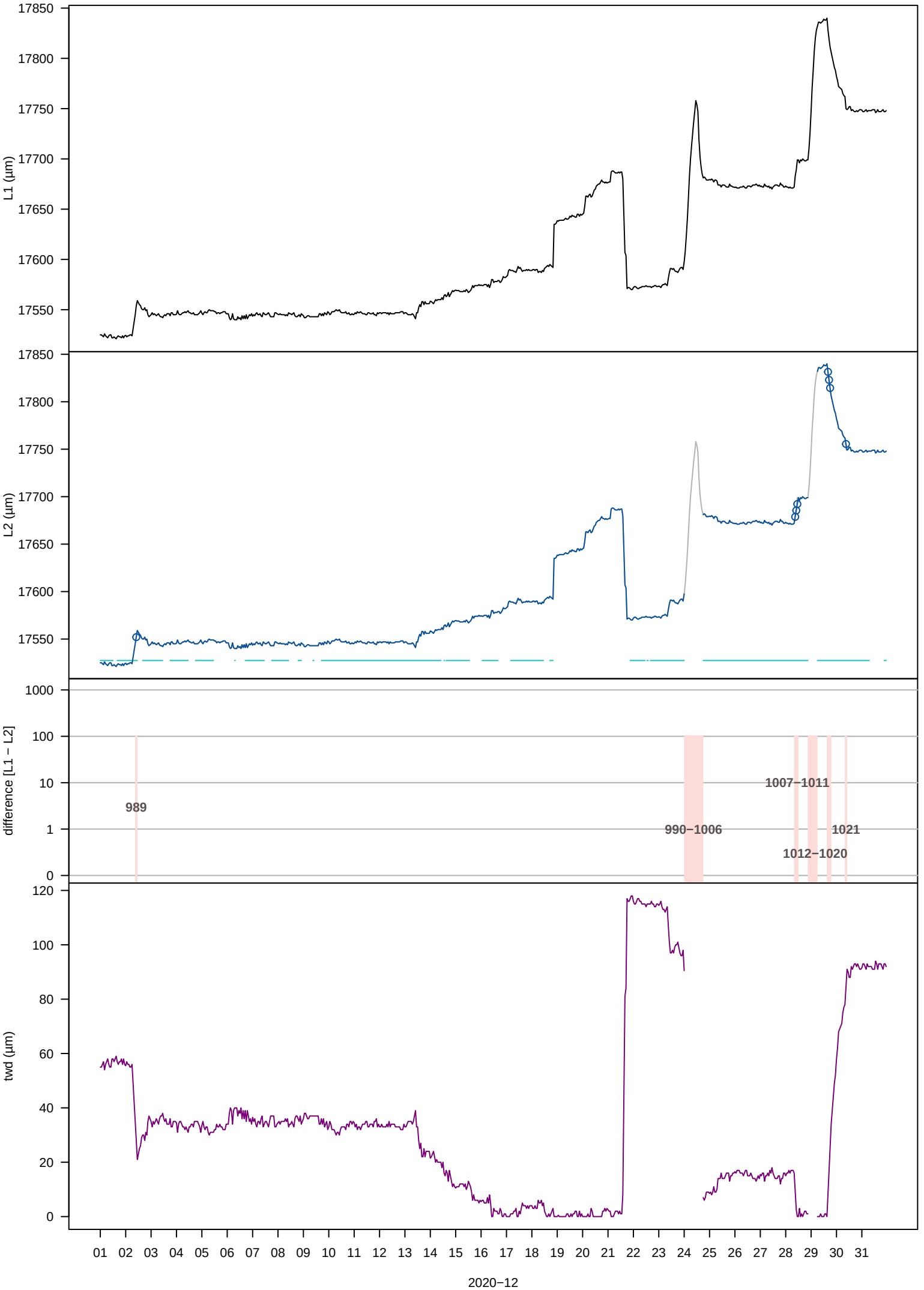

L1 (µm)
16900
16800
16700
16600
16500
16400
16300
L2 (µm)
23000
22000
21000
20000
19000
18000
17000
difference [L1 − L2]
1000
100
10
1
0
788−792
797−798
814−816
803−813
799−802
793−796
787
770
771
817−843
863−878
344−851
852−862
879−884
885−912
twd (µm)
80
60
40
20
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
2020−08

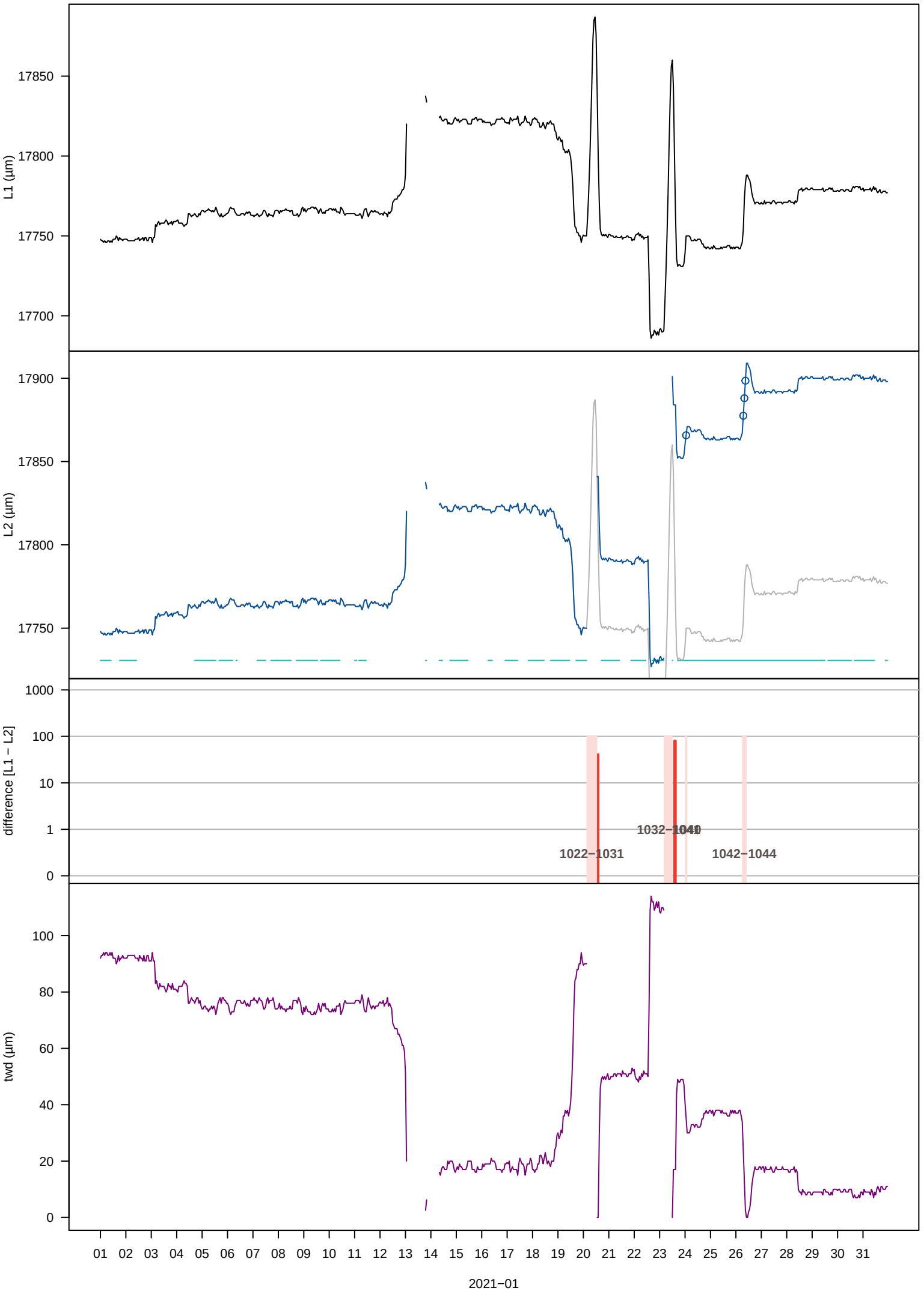

L1 (µm)
16700
16600
16500
16400
16300
16200
16100
L2 (µm)
18500
18000
17500
17000
16500
difference [L1 − L2]
1000
100
10
1
0
913–917 918–922 923–927 934–938 939–943 944–949
928–933
twd (µm)
70
60
50
40
30
20
10
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2020−09

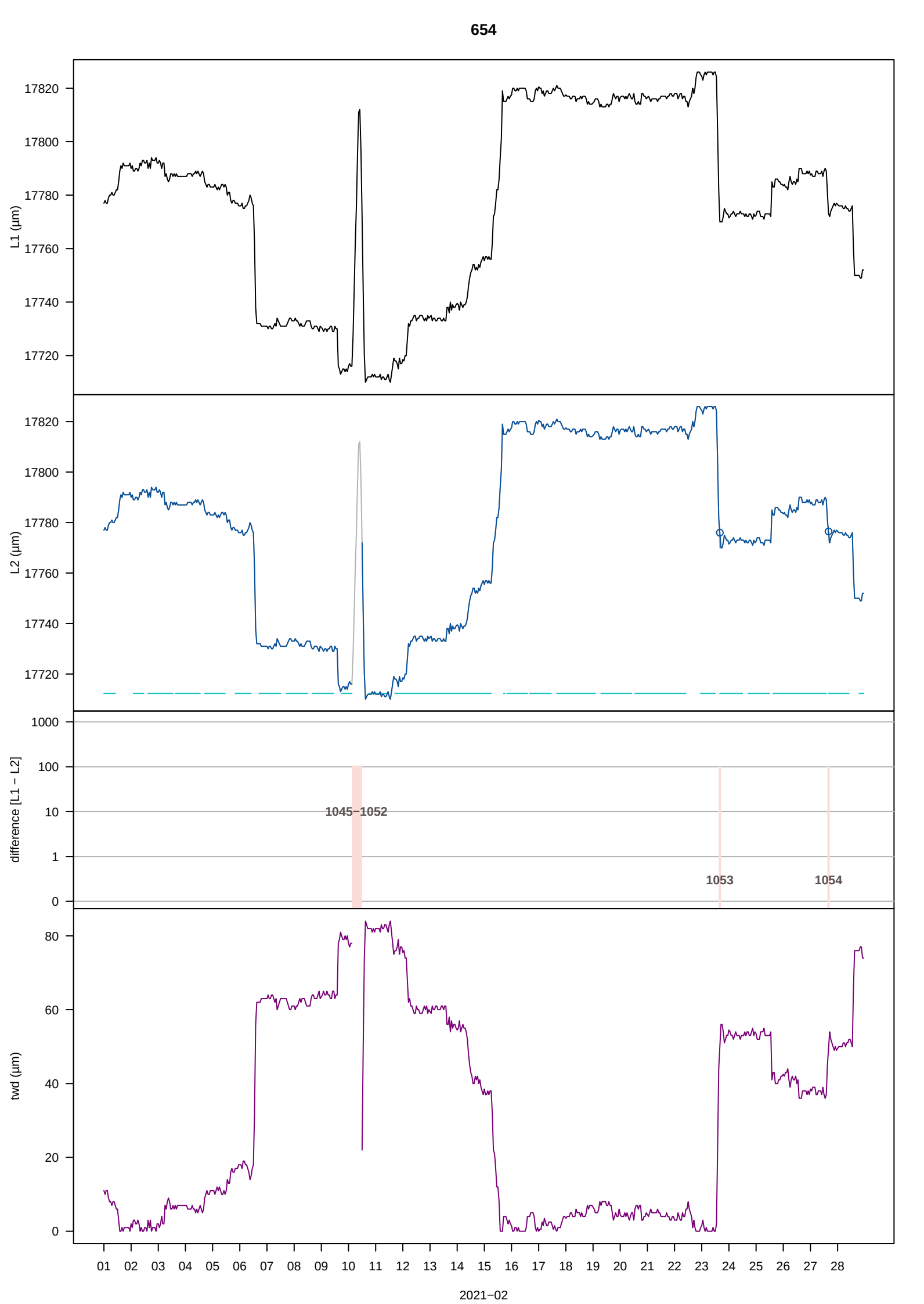
654

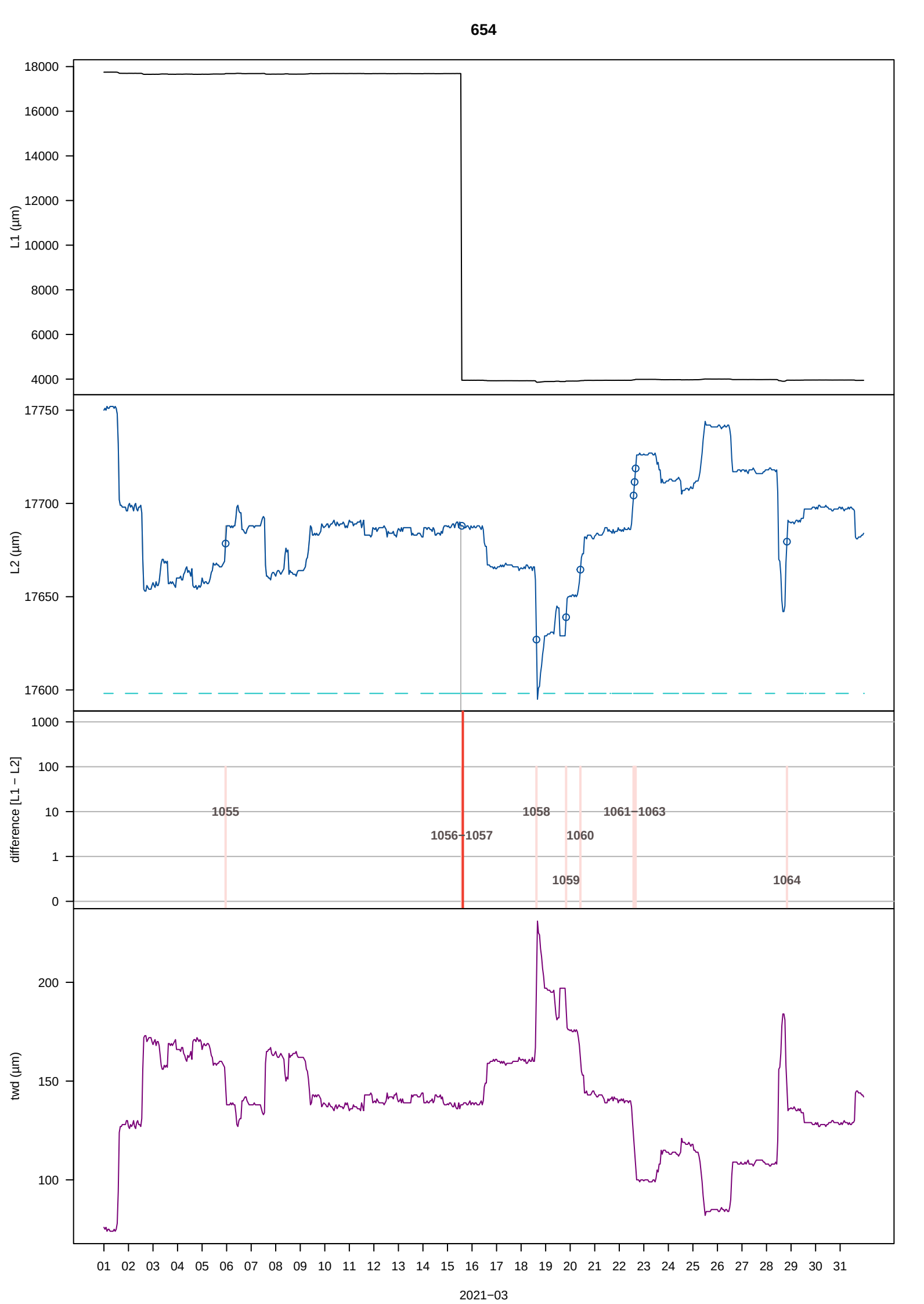

L1 (µm)
17100
17000
16900
16800
16700
16600
L2 (µm)
17100
17000
16900
16800
16700
16600
difference [L1 − L2]
1000
100
10
1
0
950−961
962−964
965
twd (µm)
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2020−10


L1 (µm)
17500
17400
17300
17200
17100
L2 (µm)
17500
17400
17300
17200
17100
difference [L1 − L2]
1000
100
10
1
0
966
967
968
969
970
974
977−980
986−988
975−976
981−985
twd (µm)
60
50
40
30
20
10
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2020−11

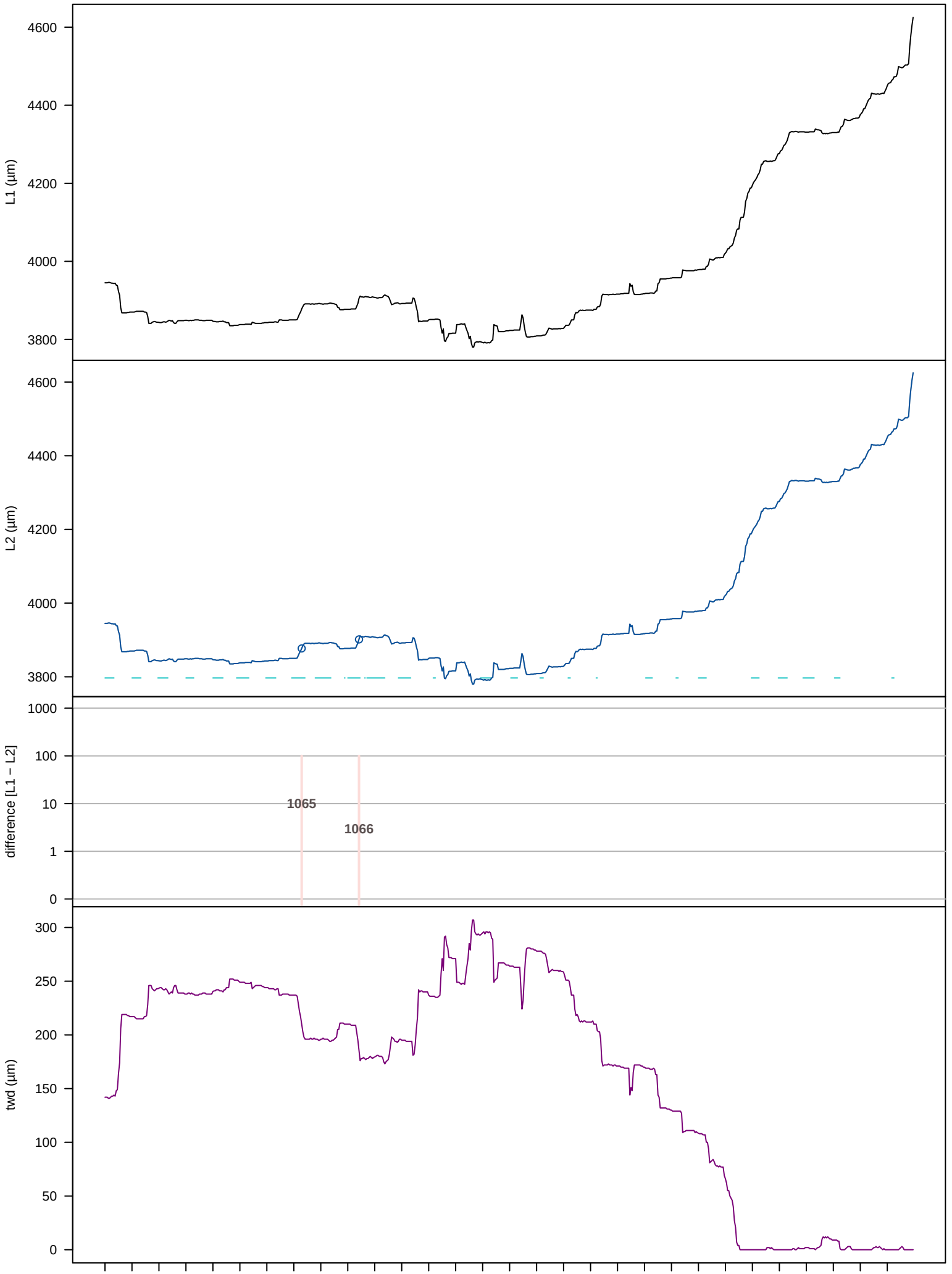

L1 (µm)
17850
17800
17750
17700
17650
17600
17550
L2 (µm)
17850
17800
17750
17700
17650
17600
17550
difference [L1 − L2]
1000
100
10
1
0
989
990−1006
1007−1011
1012−1020
1021
twd (µm)
120
100
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2020−12

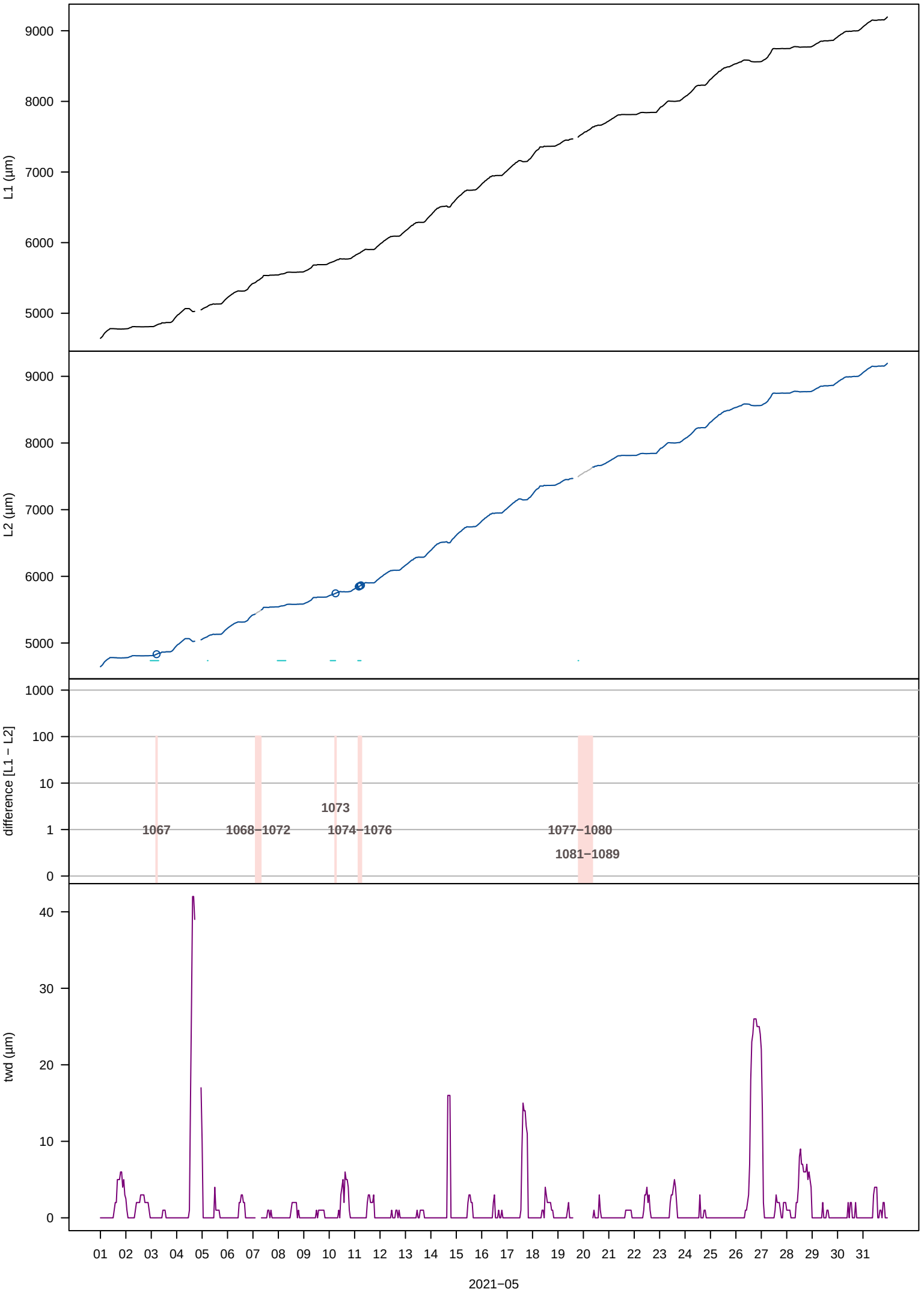

L1 (µm)
17850
17800
17750
17700
L2 (µm)
17900
17850
17800
17750
difference [L1 − L2]
1000
100
10
1
0
1022−1031
1032−1041
1042−1044
twd (µm)
100
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2021−01


654
L1 (µm)
17820
17800
17780
17760
17740
17720
L2 (µm)
17820
17800
17780
17760
17740
17720
difference [L1 − L2]
1000
100
10
1
0
1045–1052
1053
1054
twd (µm)
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
2021−02

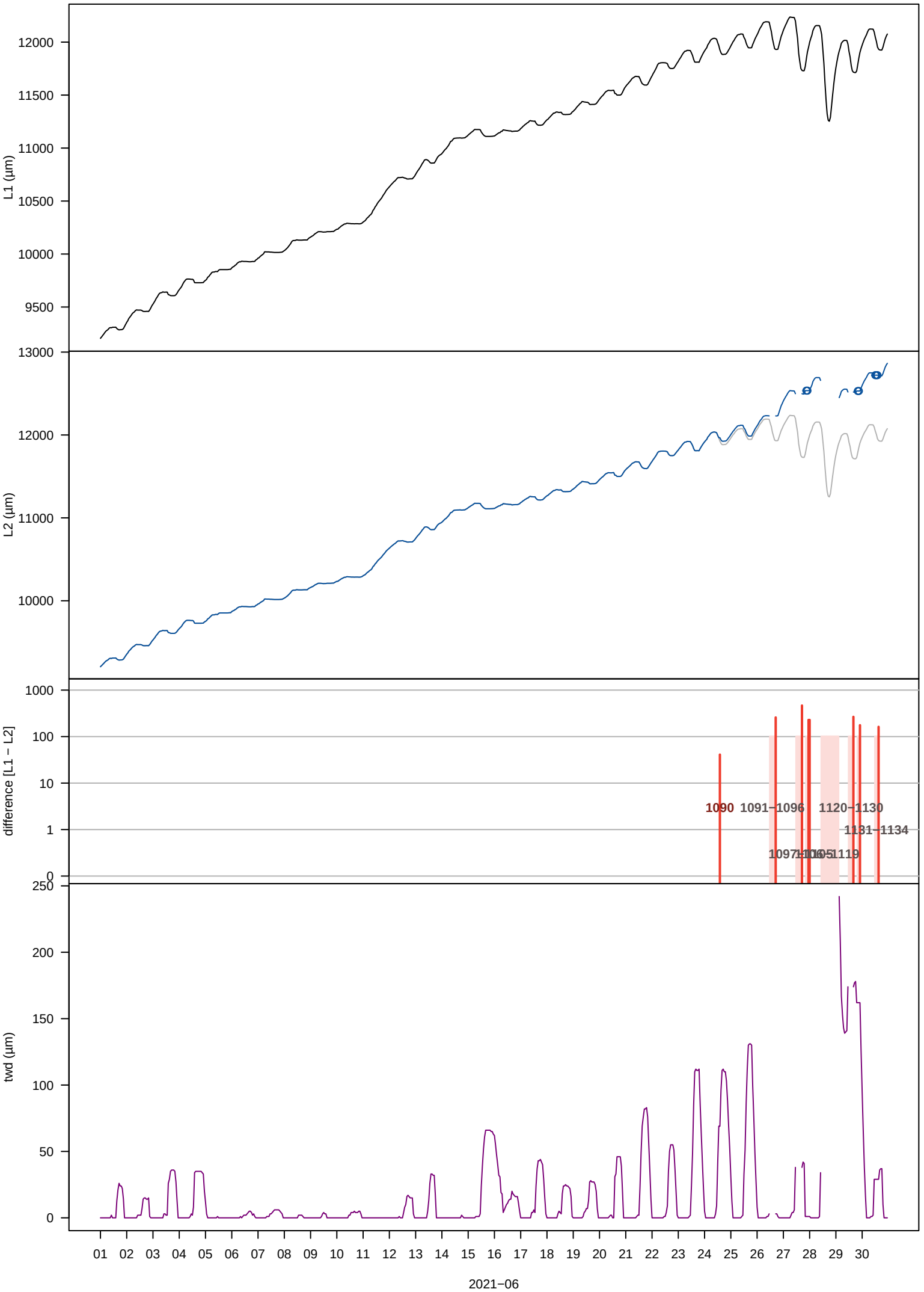

654
L1 (µm)
18000
16000
14000
12000
10000
8000
6000
4000
L2 (µm)
17750
17700
17650
17600
difference [L1 − L2]
1000
100
10
1
0
1055
1056−1057
1058
1059
1060
1061−1063
1064
twd (µm)
200
150
100
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2021−03

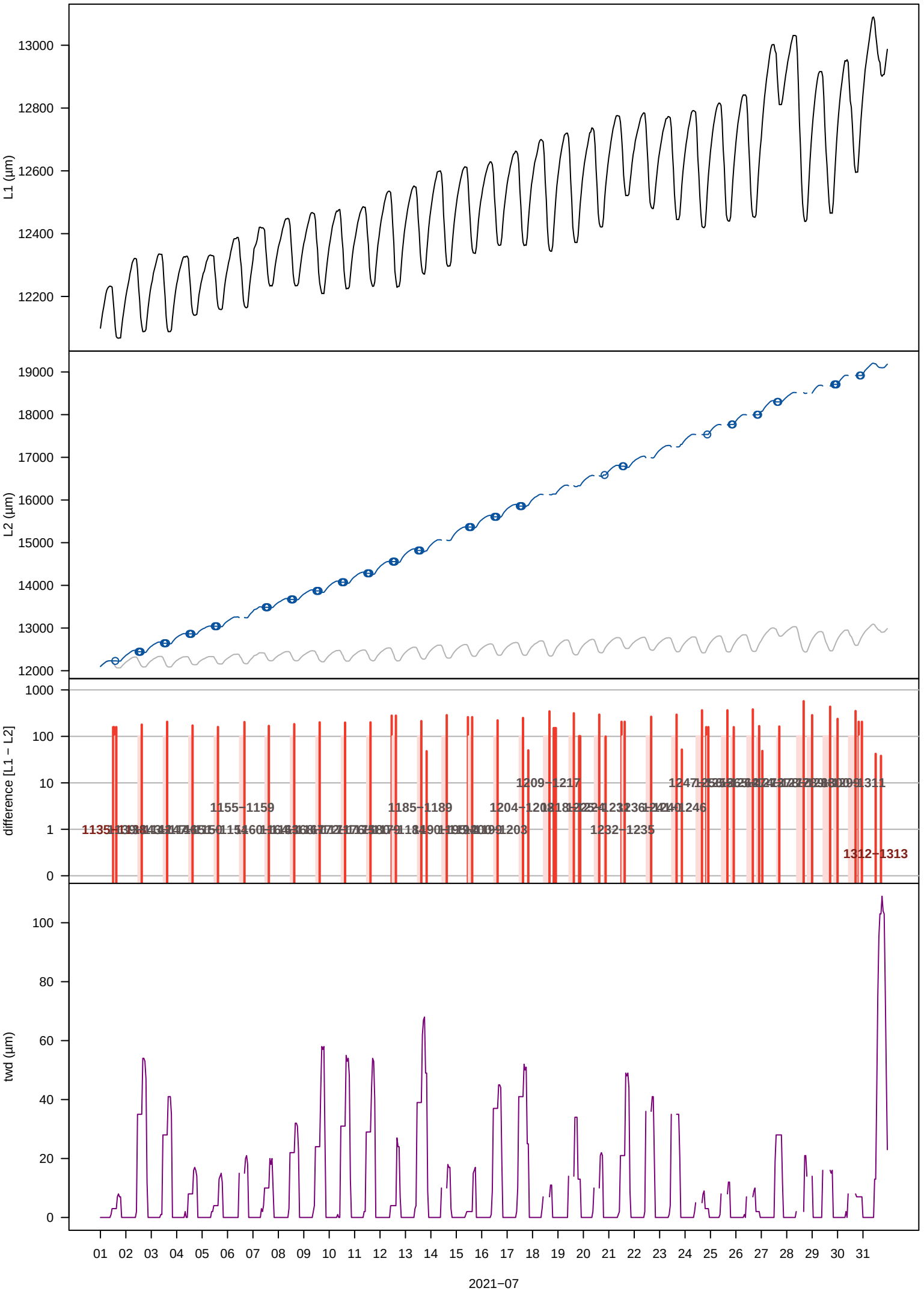
654

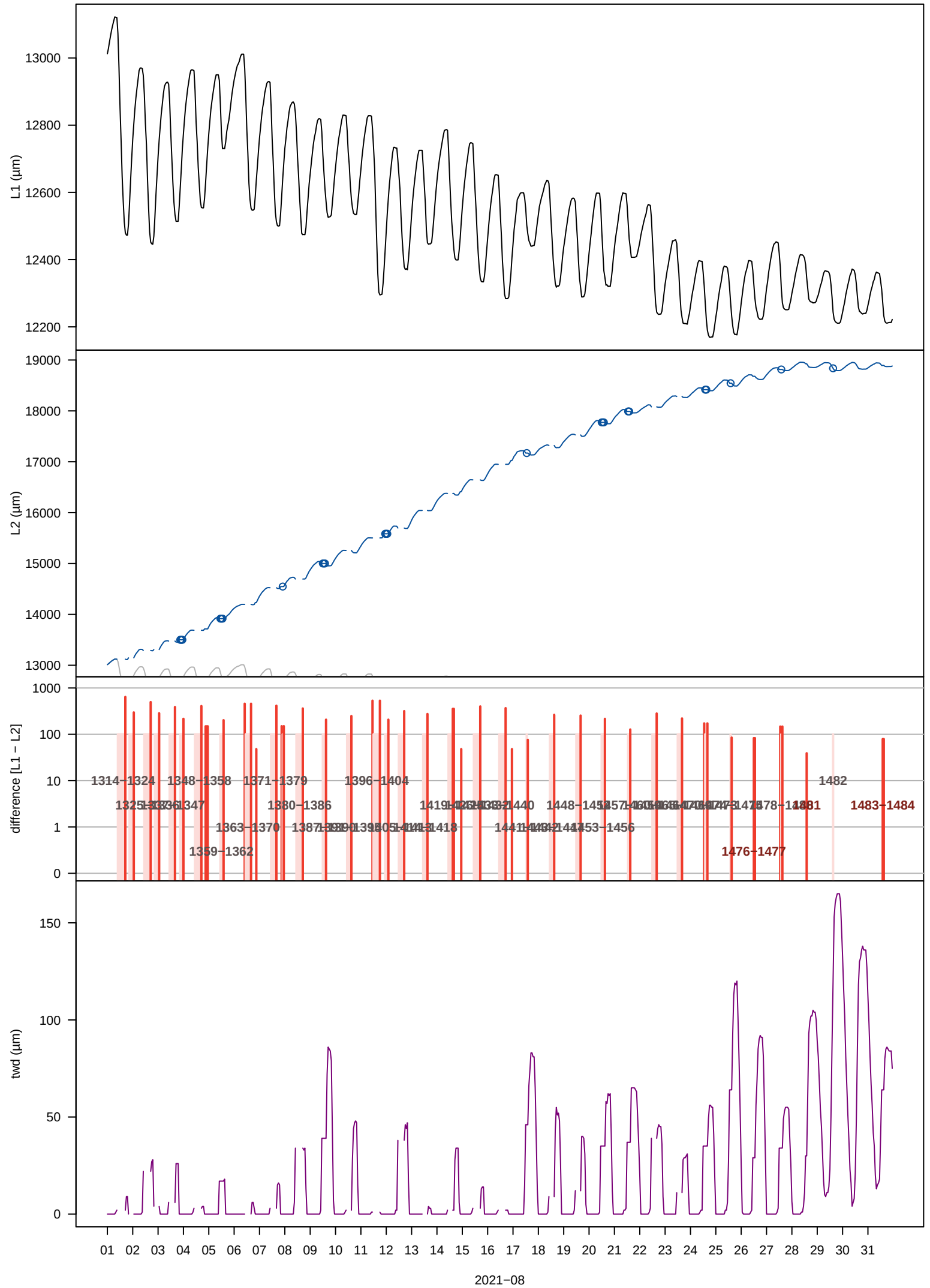

L1 (µm)
4600
4400
4200
4000
3800
L2 (µm)
4600
4400
4200
4000
3800
difference [L1 − L2]
1000
100
10
1
0
1065
1066
twd (µm)
300
250
200
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2021−04

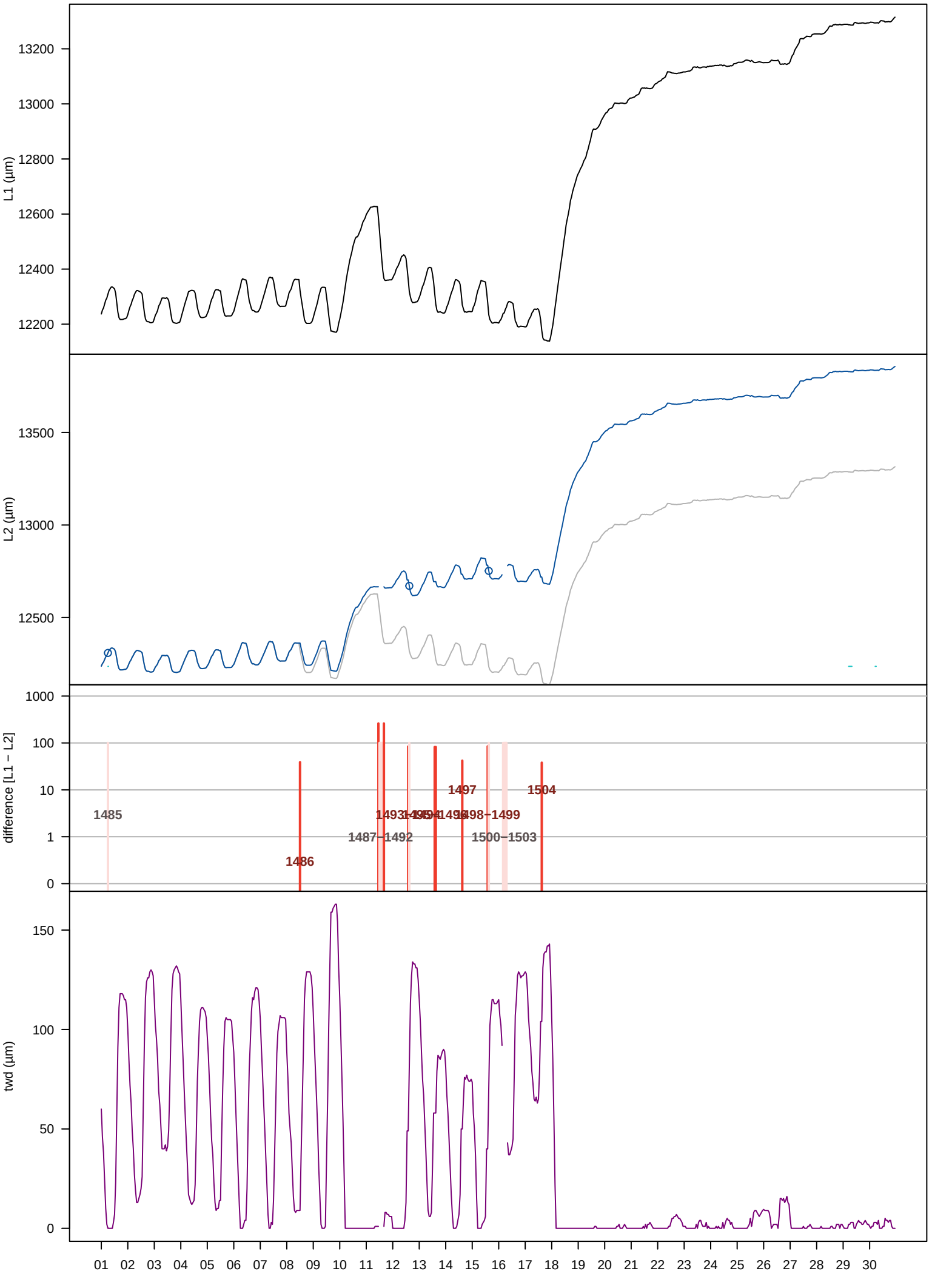

L1 (µm)
9000
8000
7000
6000
5000
L2 (µm)
9000
8000
7000
6000
5000
difference [L1 − L2]
1000
100
10
1
0
1067
1068–1072
1073
1074–1076
1077–1080
1081–1089
twd (µm)
40
30
20
10
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2021−05

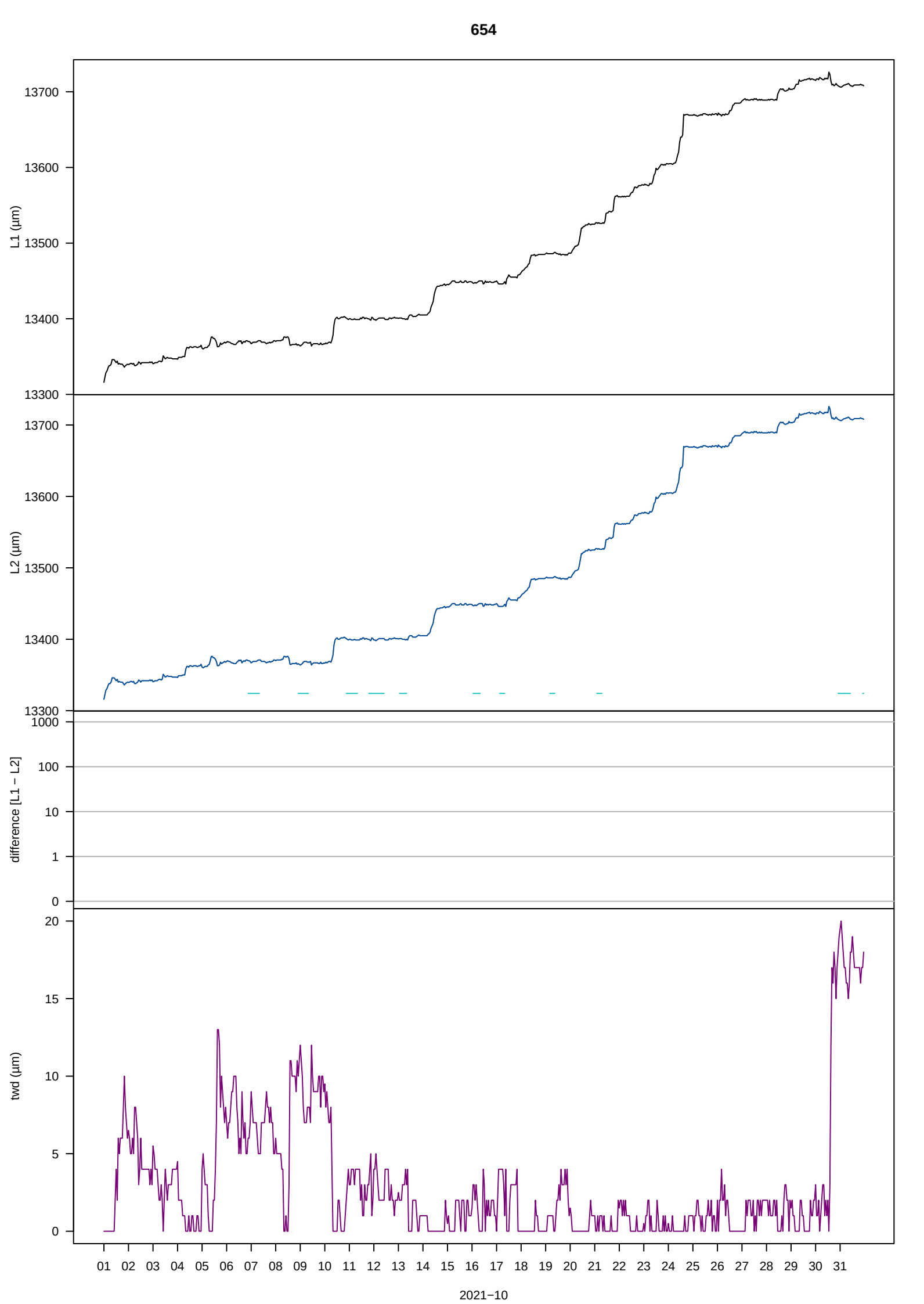
654

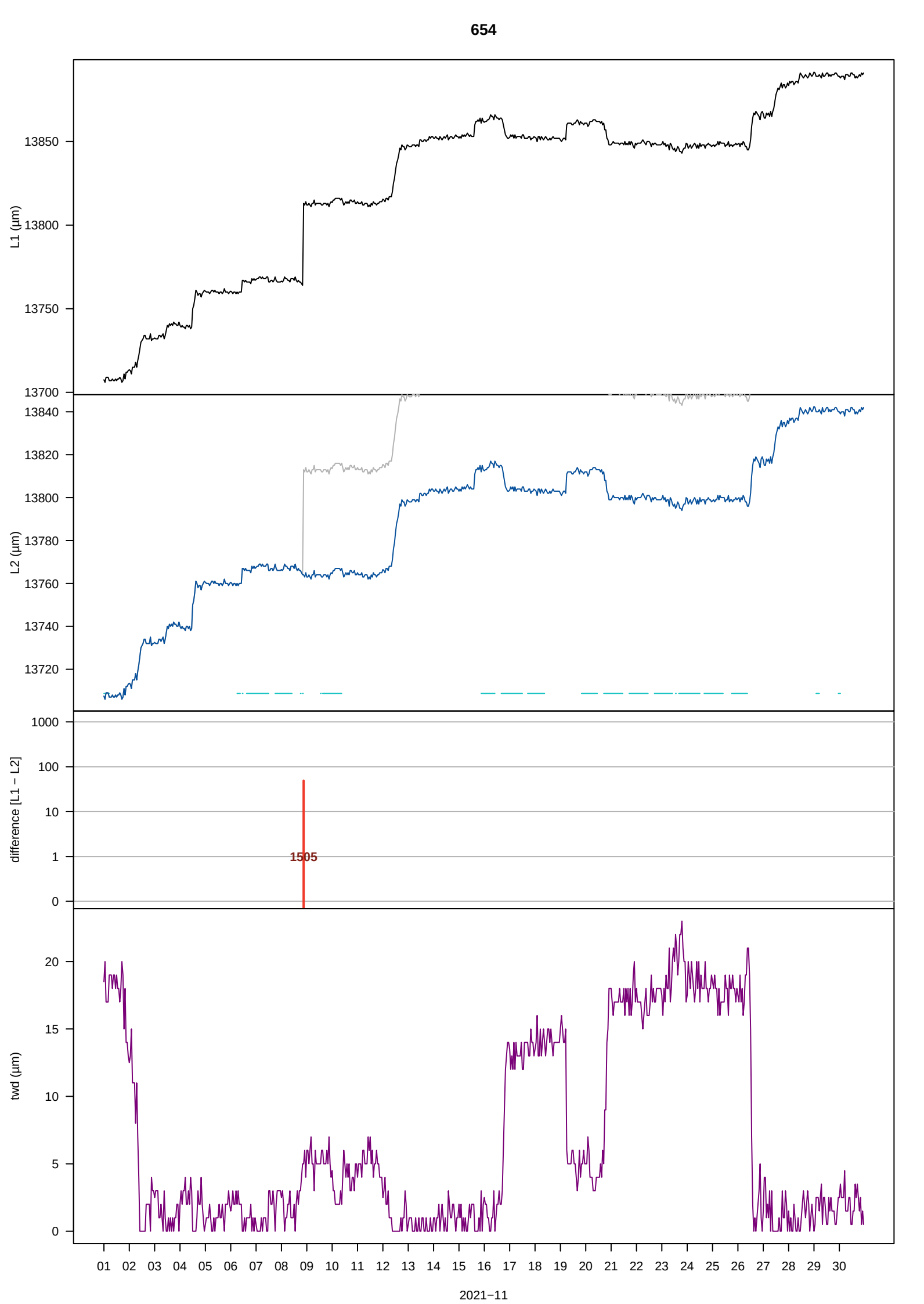

L1 (µm)
12000
11500
11000
10500
10000
9500
13000
L2 (µm)
12000
11000
10000
difference [L1 − L2]
1000
100
10
1
0
1090
1091−1096
1120−1130
1131−1134
1097
1105
1119
250
twd (µm)
200
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2021−06

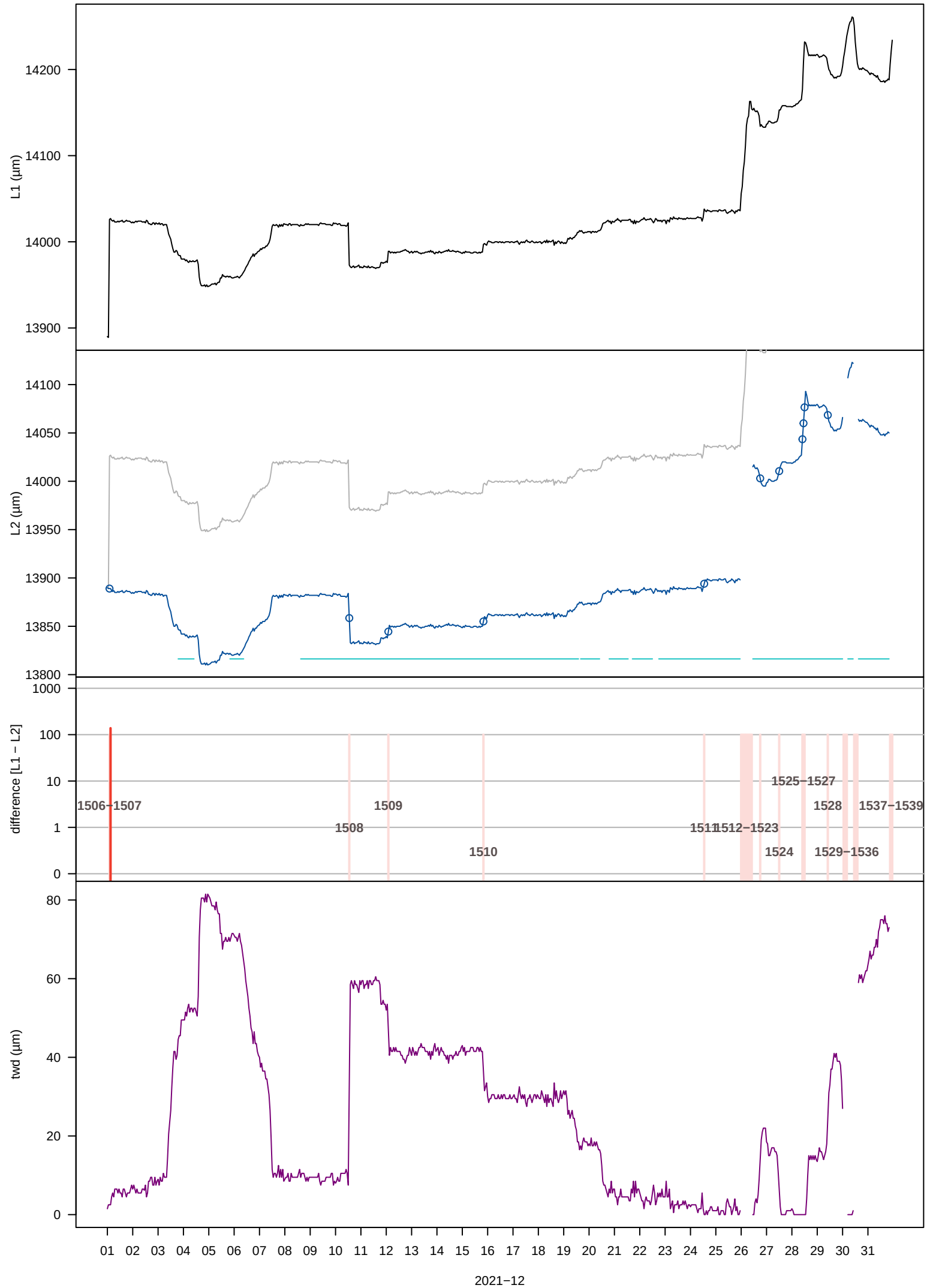

L1 (µm)
13000
12800
12600
12400
12200
L2 (µm)
19000
18000
17000
16000
15000
14000
13000
12000
difference [L1 − L2]
1000
100
10
1
0
1155−1159
1185−1189
1209−1217
1232−1235
1312−1313
twd (µm)
100
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2021−07

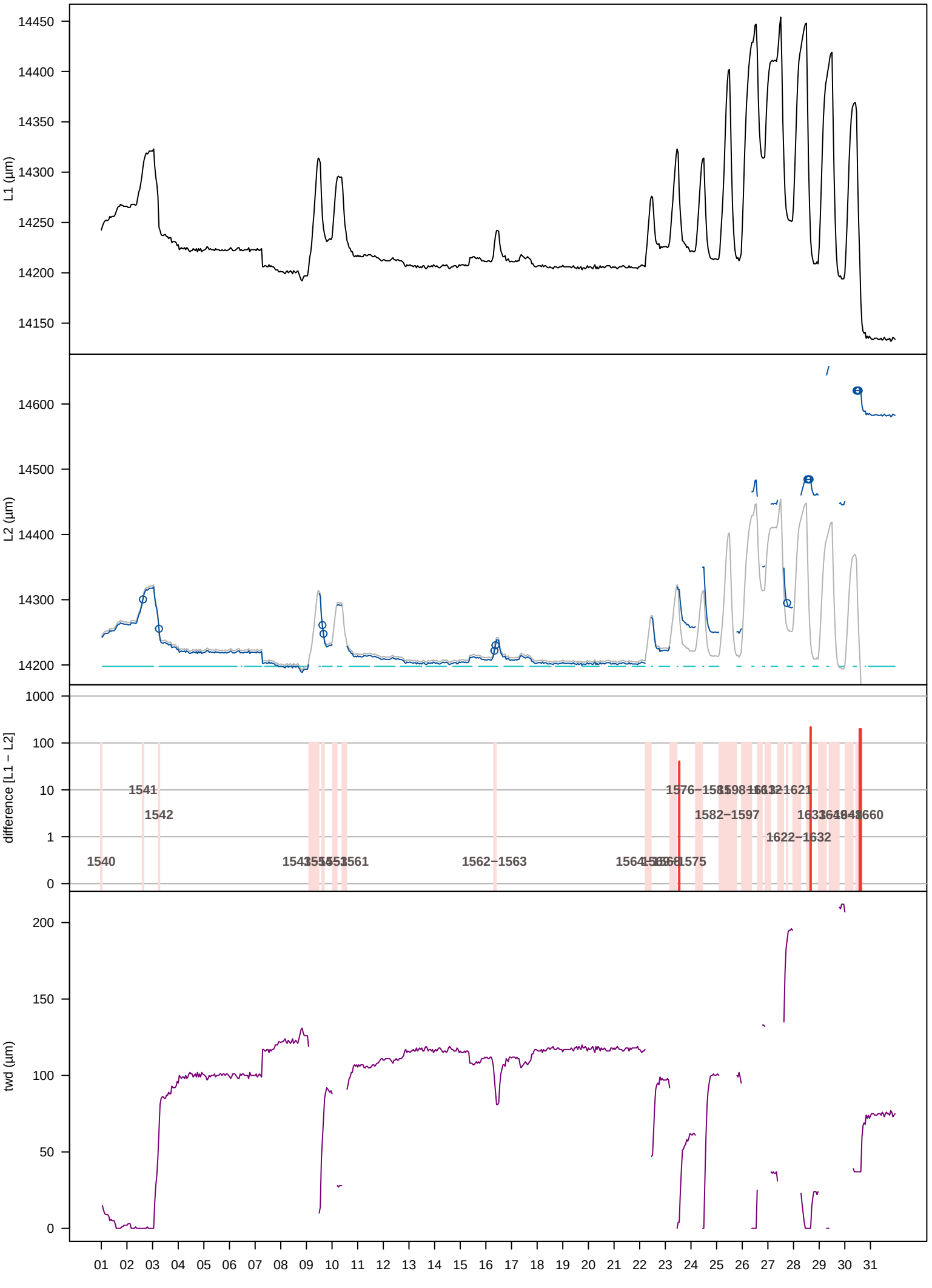

L1 (µm)
13000
12800
12600
12400
12200
L2 (µm)
19000
18000
17000
16000
15000
14000
13000
difference [L1 − L2]
1000
100
10
1
0
1314−1324
1348−1358
1371−1379
1396−1404
1482
1325
1347
1380−1386
1440
1448−1452
1483−1484
1363−1370
1359−1362
1476−1477
twd (µm)
150
100
50
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
2021−08


L1 (µm)
13200
13000
12800
12600
12400
12200
L2 (µm)
13500
13000
12500
difference [L1 − L2]
1000
100
10
1
0
1485
1486
1487–1492
1497
1498–1499
1500–1503
1504
twd (µm)
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2021−09

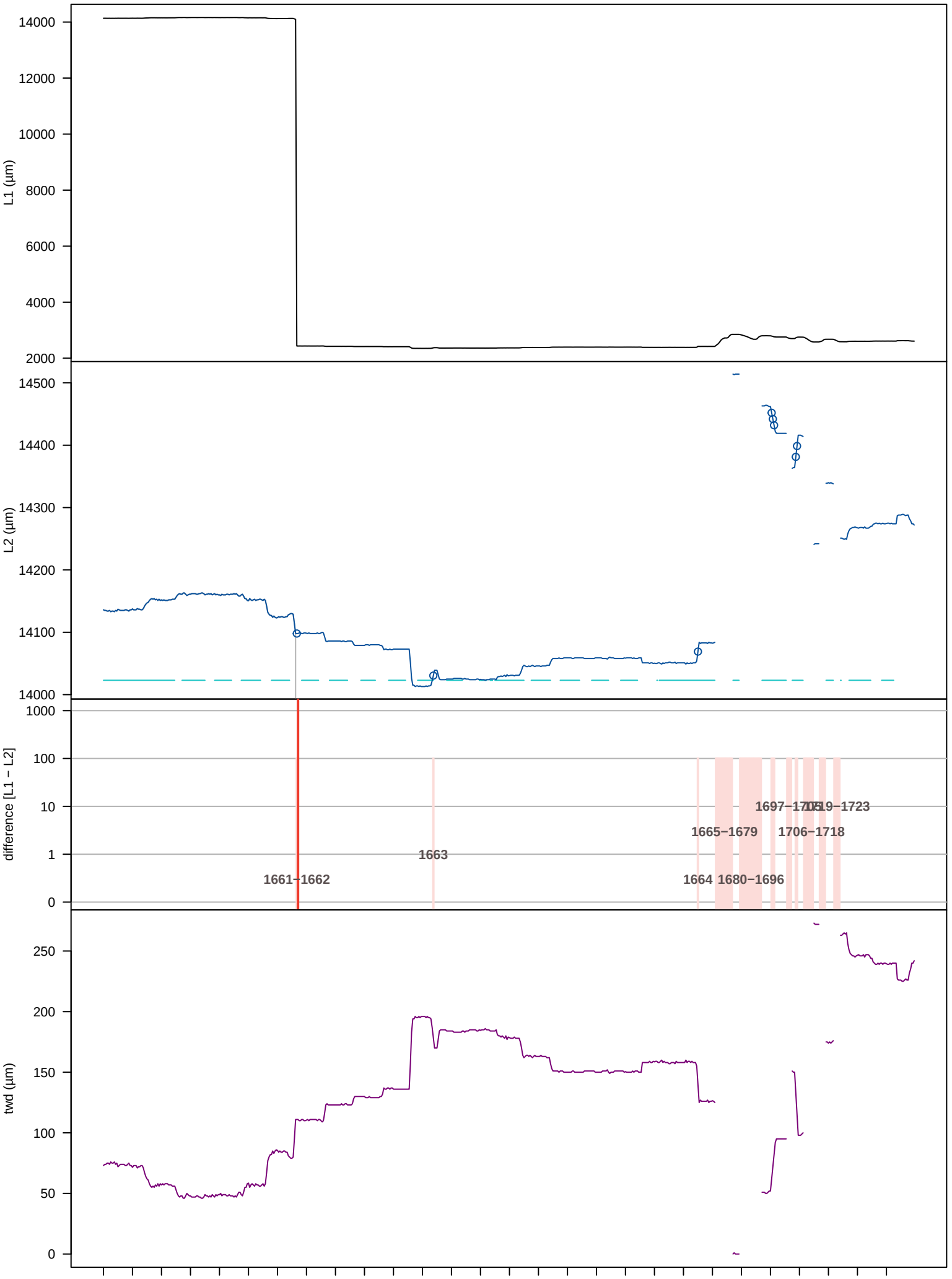

654
L1 (µm)
13700
13600
13500
13400
13300
L2 (µm)
13700
13600
13500
13400
13300
difference [L1 − L2]
1000
100
10
1
0
twd (µm)
20
15
10
5
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2021−10


654
L1 (µm)
13850
13800
13750
13700
L2 (µm)
13840
13820
13800
13780
13760
13740
13720
difference [L1 − L2]
1000
100
10
1
0
1505
twd (µm)
20
15
10
5
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2021−11

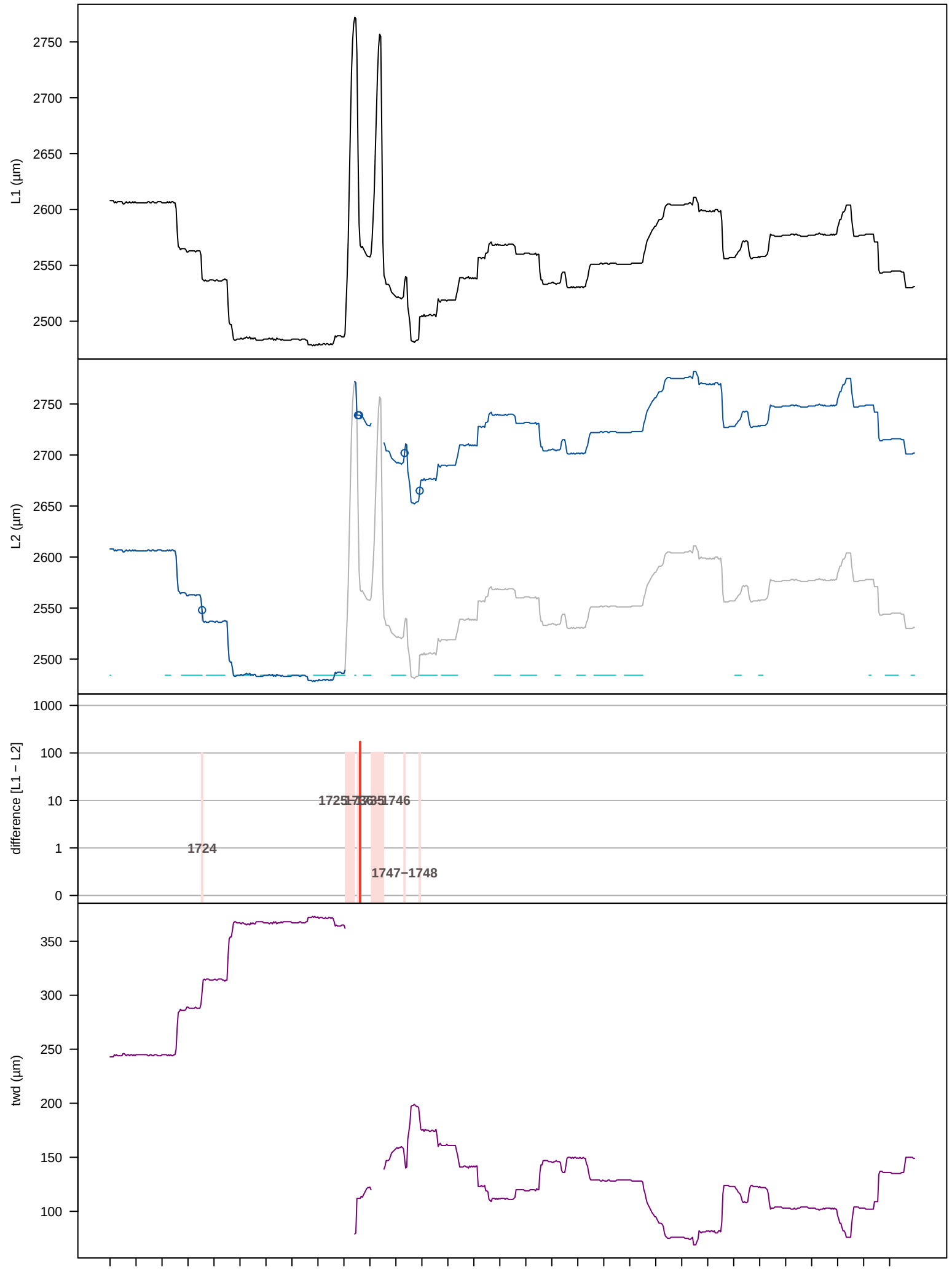

L1 (µm)
14200
14100
14000
13900
L2 (µm)
14100
14050
14000
13950
13900
13850
13800
difference [L1 − L2]
1000
100
10
1
0
1506−1507
1508
1509
1510
1511
1512−1523
1524
1525−1527
1528
1529−1536
1537−1539
twd (µm)
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2021−12


L1 (µm)
14450
14400
14350
14300
14250
14200
14150
L2 (µm)
14600
14500
14400
14300
14200
difference [L1 − L2]
1000
100
10
1
0
1540
1541
1542
1562−1563
1582−1597
1622−1632
1575
1621
twd (µm)
200
150
100
50
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
2022−01

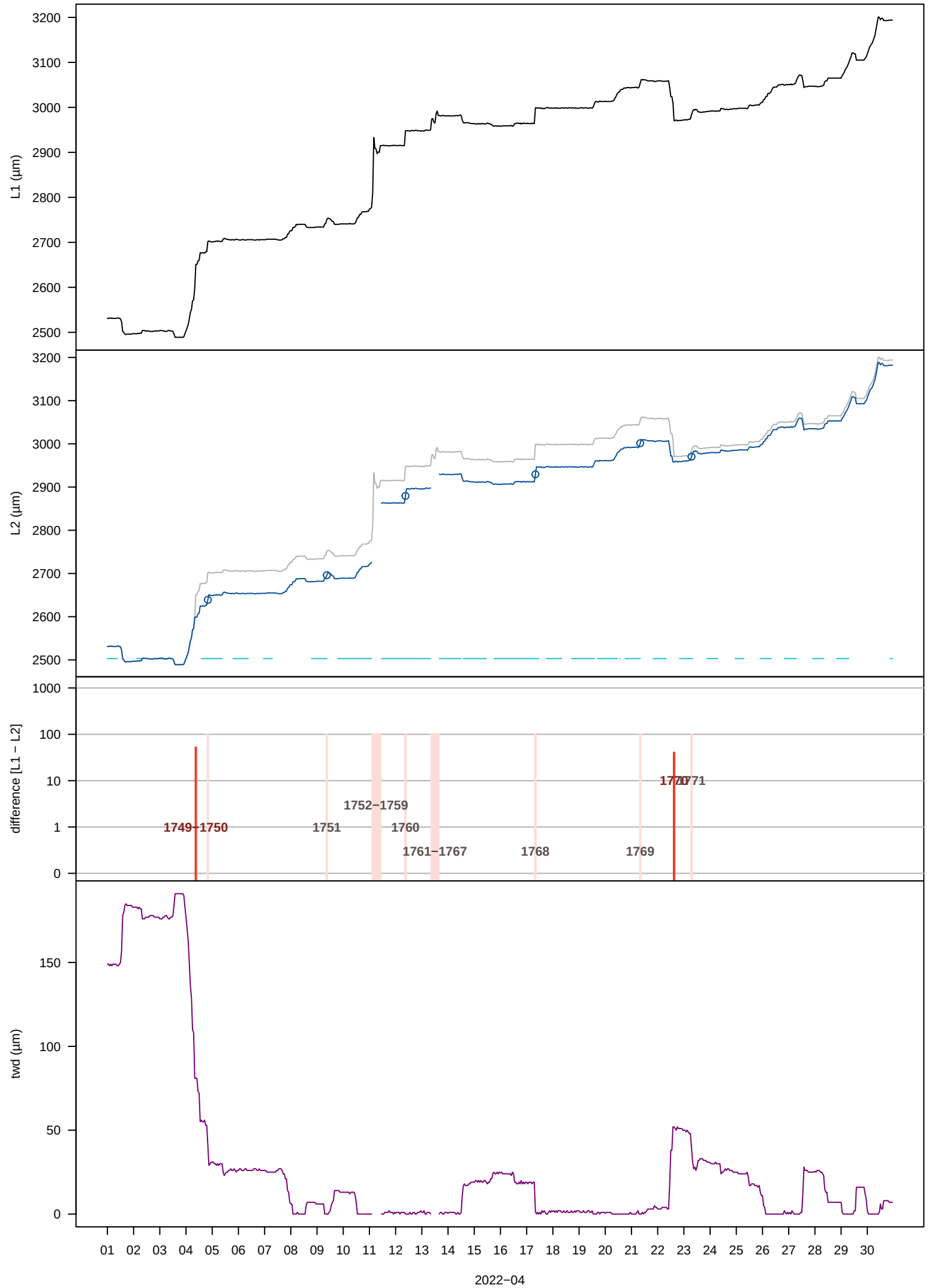
654


L1 (µm)
14000
12000
10000
8000
6000
4000
2000
L2 (µm)
14500
14400
14300
14200
14100
14000
difference [L1 − L2]
1000
100
10
1
0
1661−1662
1663
1665−1679
1664
1680−1696
1706−1718
twd (µm)
250
200
150
100
50
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
2022−02

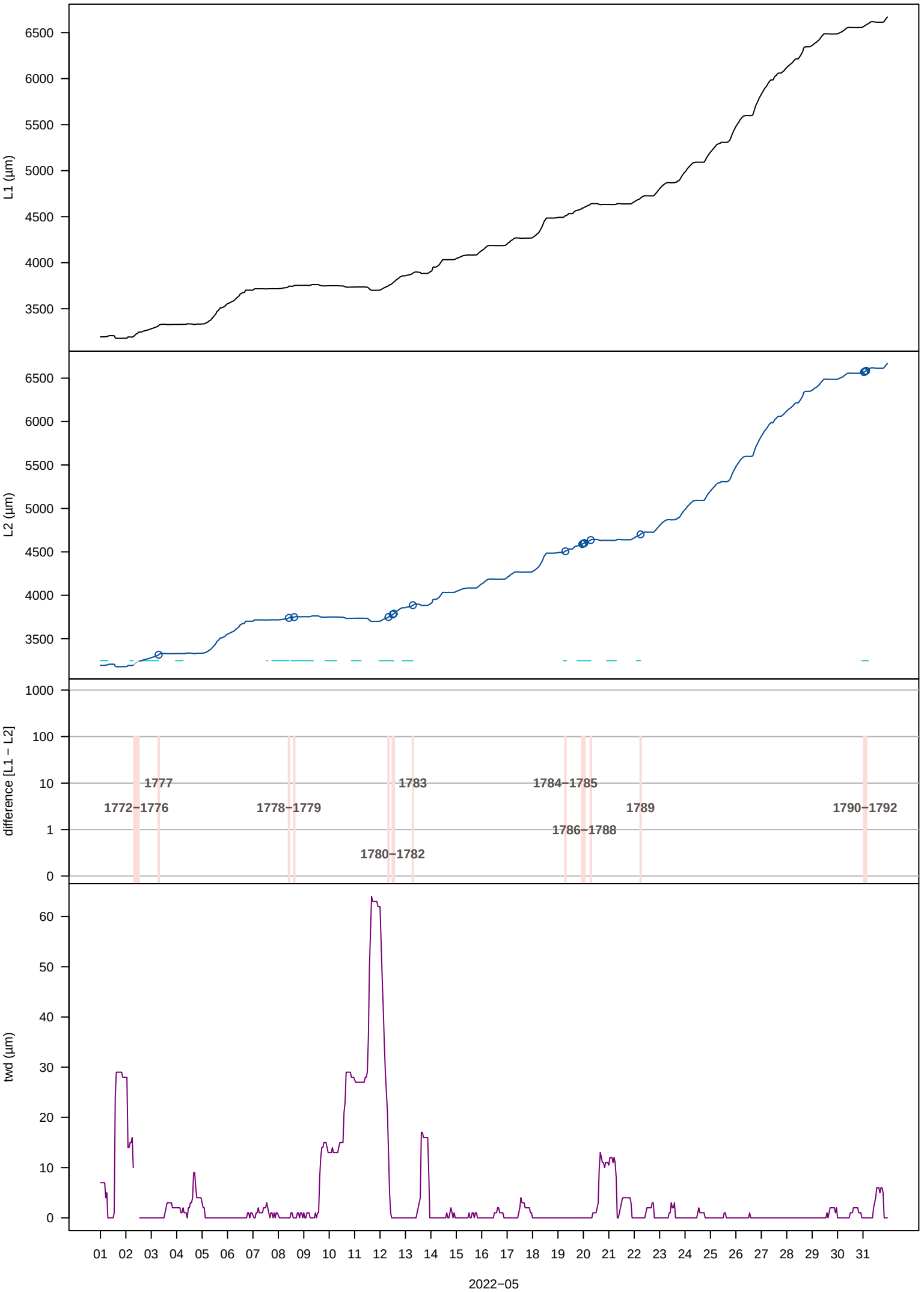
654


L1 (µm)
2750
2700
2650
2600
2550
2500
L2 (µm)
2750
2700
2650
2600
2550
2500
difference [L1 − L2]
1000
100
10
1
0
1724
1747−1748
twd (µm)
350
300
250
200
150
100
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2022−03

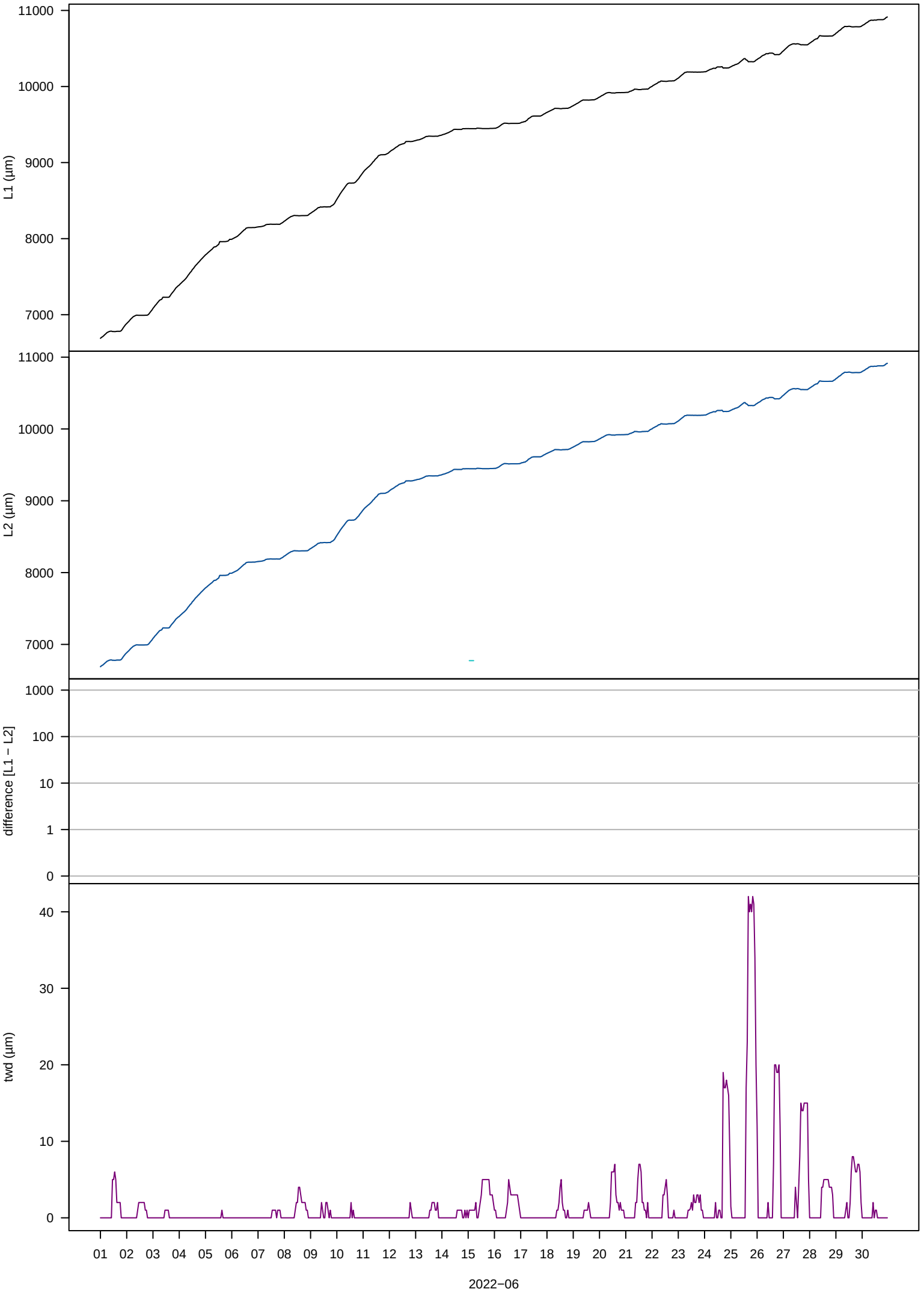
654

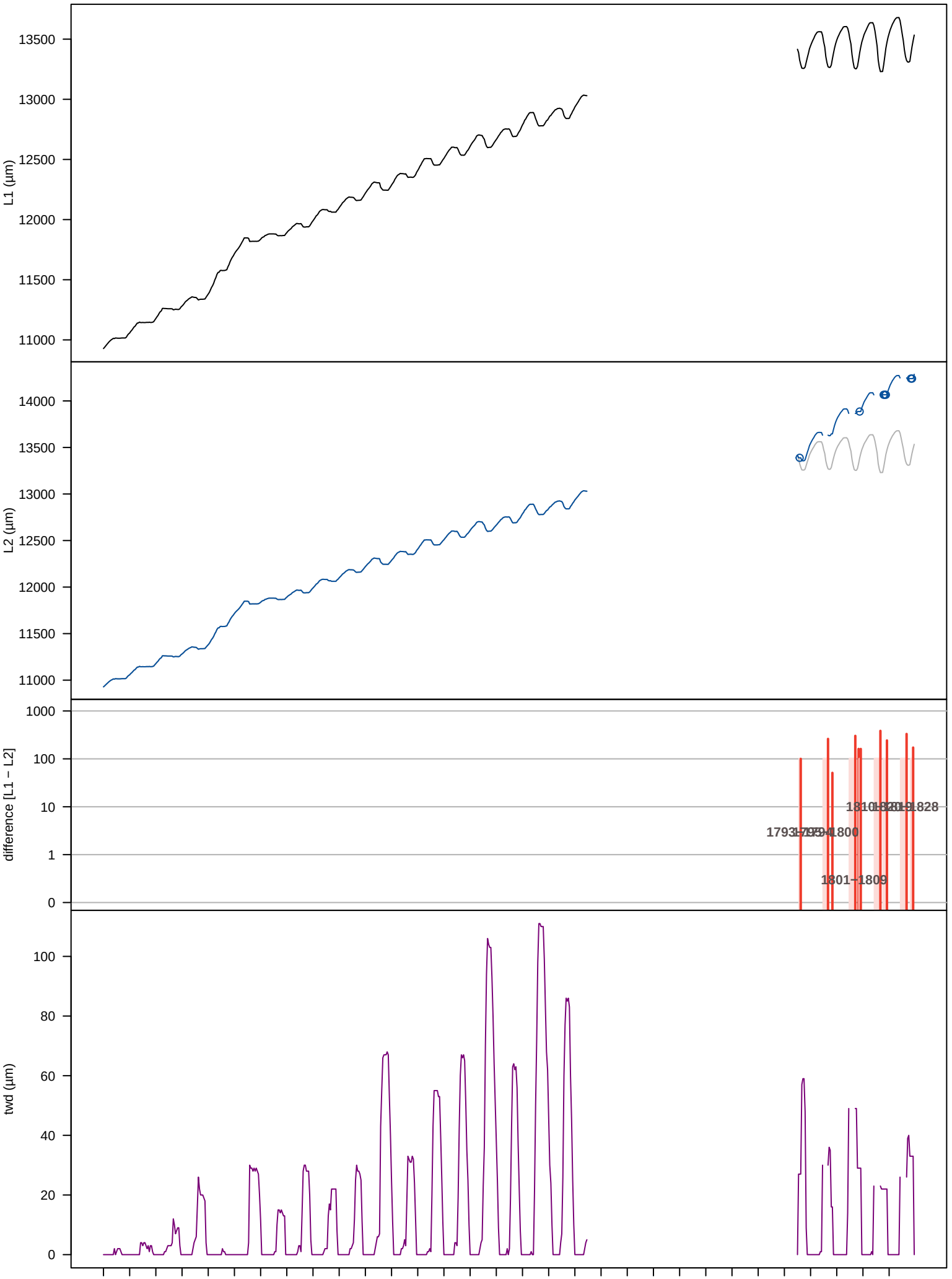

L1 (µm)
3200
3100
3000
2900
2800
2700
2600
2500
L2 (µm)
difference [L1 − L2]
1000
100
10
1
0
1749–1750
1751
1752–1759
1760
1761–1767
1768
1769
1770
1771
twd (µm)
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2022–04

654

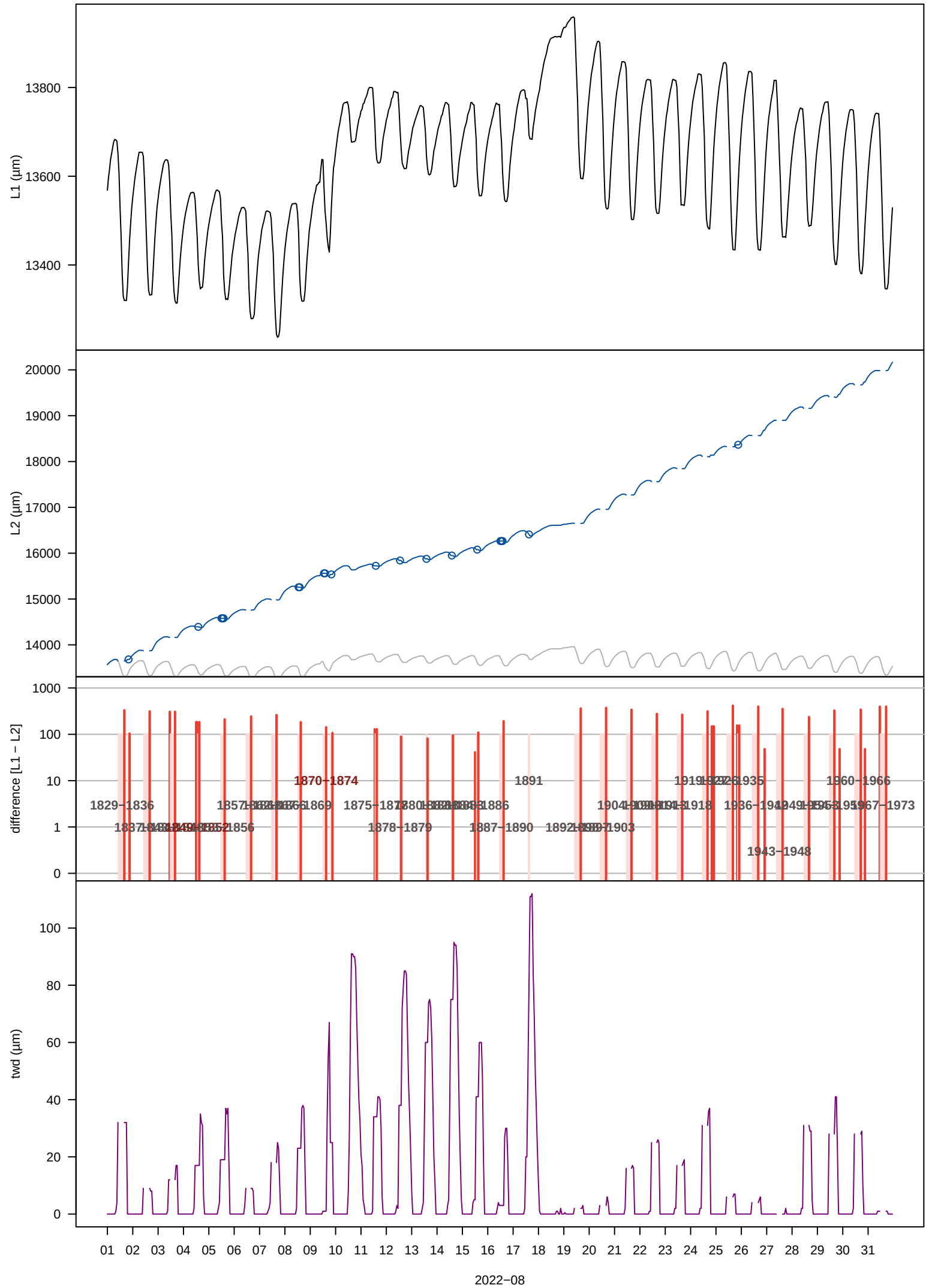

L1 (µm)
6500
6000
5500
5000
4500
4000
3500
L2 (µm)
6500
6000
5500
5000
4500
4000
3500
difference [L1 − L2]
1000
100
10
1
0
1777
1772–1776
1778–1779
1783
1780–1782
1784–1785
1786–1788
1789
1790–1792
twd (µm)
60
50
40
30
20
10
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
2022–05

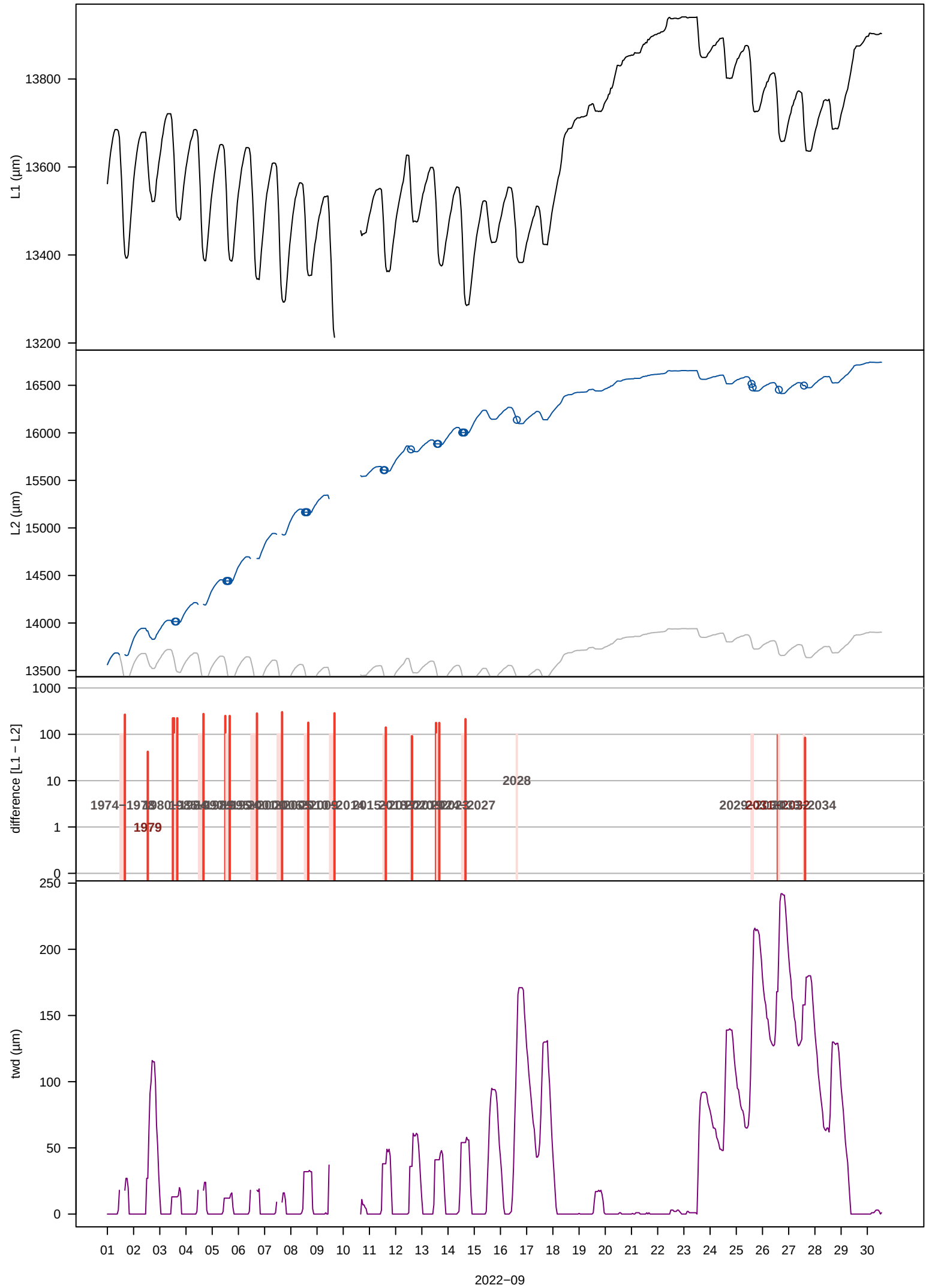
654

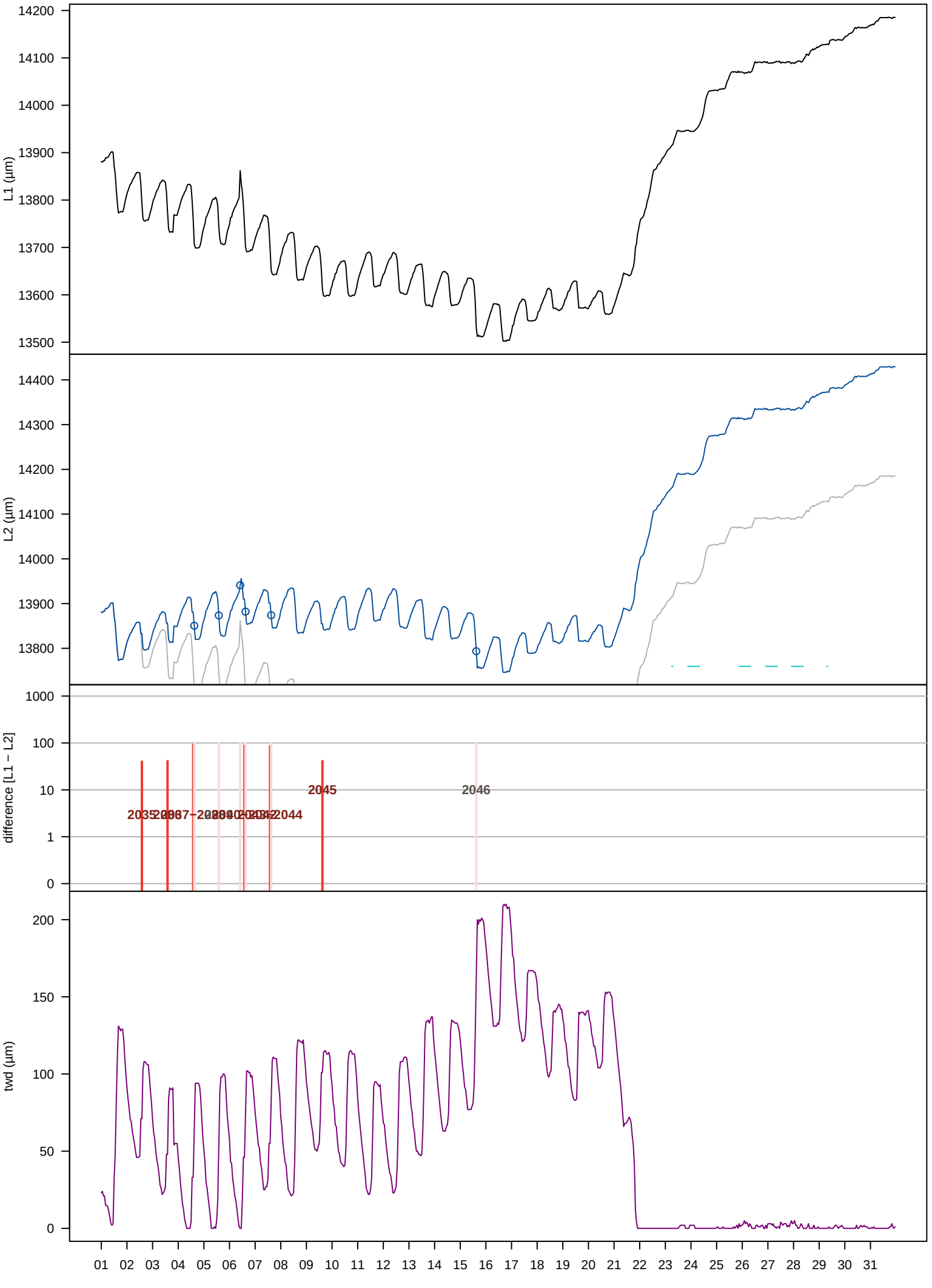

L1 (µm)
11000
10000
9000
8000
7000
L2 (µm)
11000
10000
9000
8000
7000
difference [L1 − L2]
1000
100
10
1
0
twd (µm)
40
30
20
10
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2022−06

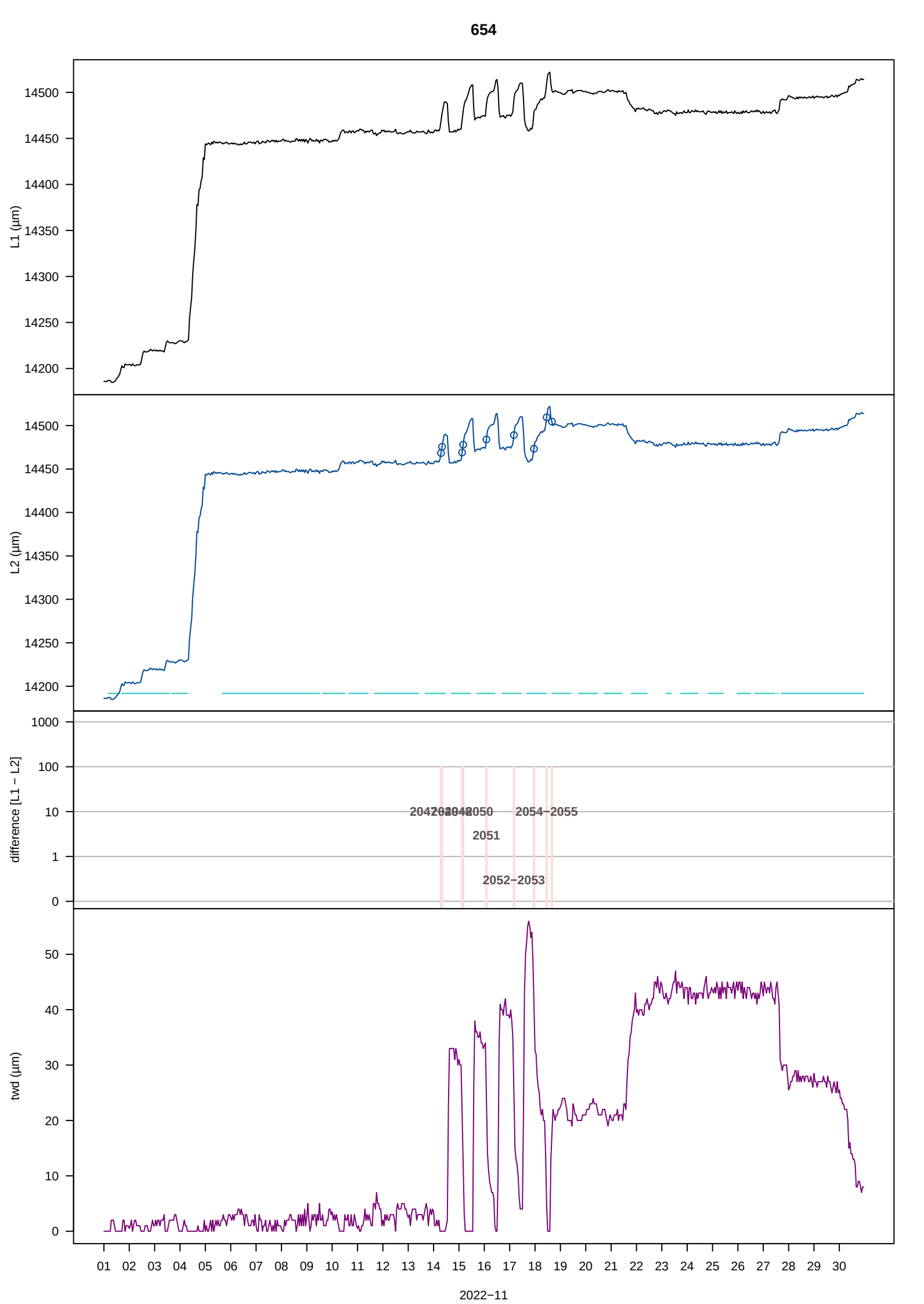

L1 (µm)
13500
13000
12500
12000
11500
11000
L2 (µm)
14000
13500
13000
12500
12000
11500
11000
difference [L1 − L2]
1000
100
10
1
0
1793–1800
1801–1809
1828
twd (µm)
100
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2022−07

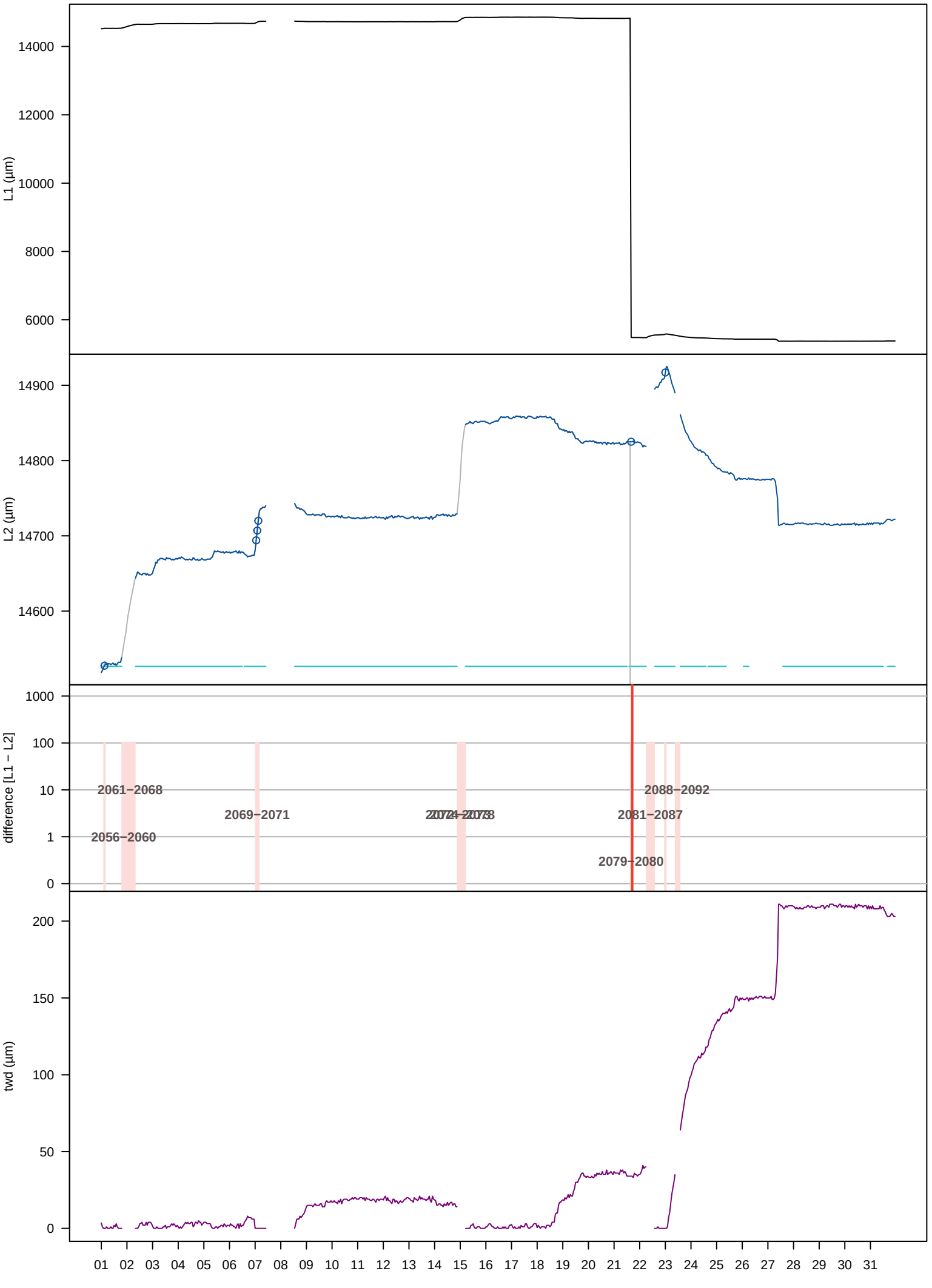
654


L1 (µm)
13800
13600
13400
L2 (µm)
20000
19000
18000
17000
16000
15000
14000
difference [L1 − L2]
1000
100
10
1
0
1829–1836
1856
1870–1874
1869
1875–1879
1886
1887–1890
1891
1903
1918
1935
1936–1942
1943–1948
1960–1966
1967–1973
twd (µm)
100
80
60
40
20
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
2022−08

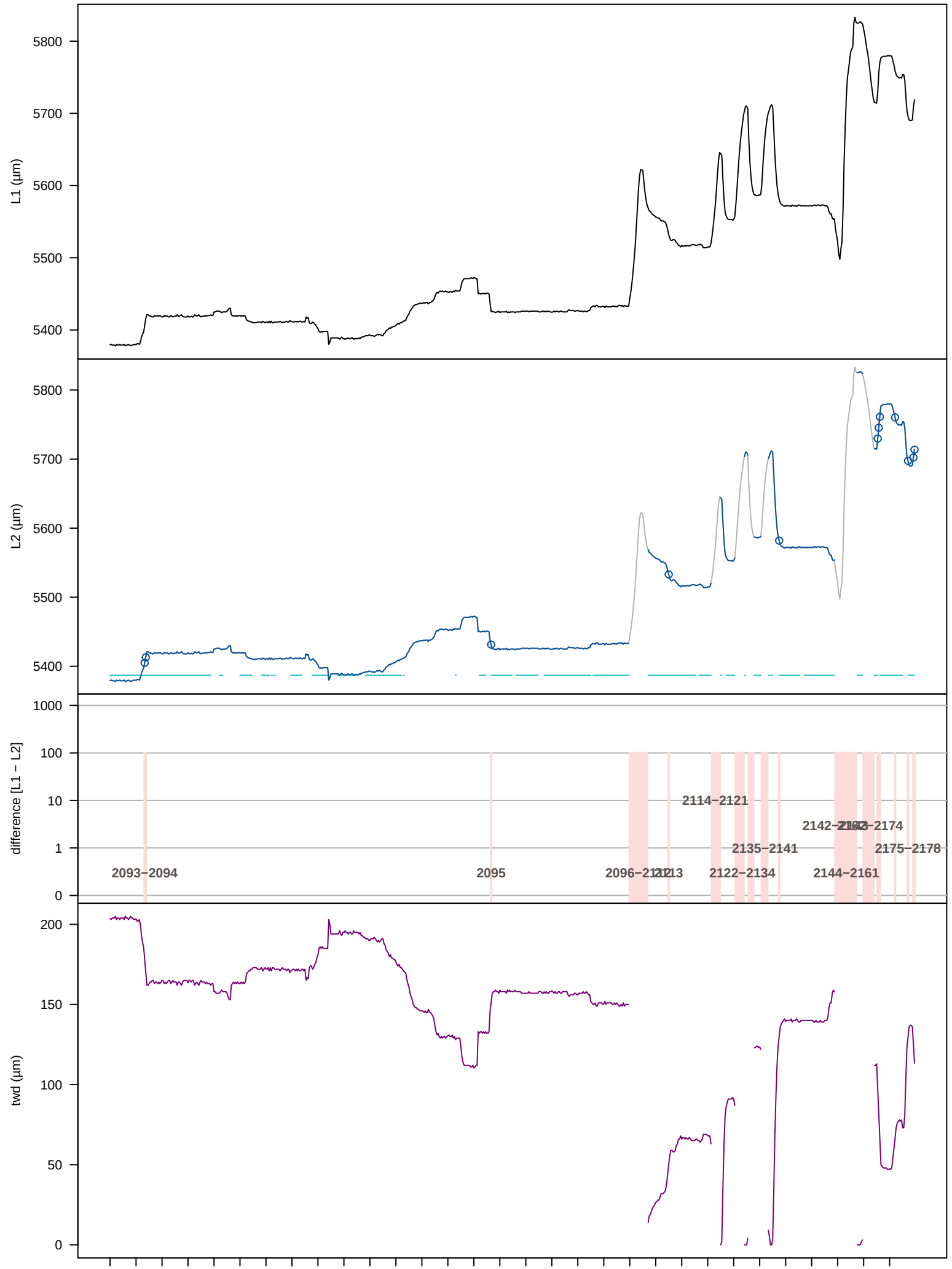

L1 (µm)
13800
13600
13400
13200
L2 (µm)
16500
16000
15500
15000
14500
14000
13500
difference [L1 − L2]
1000
100
10
1
0
1974
1979
2028
2027
2034
twd (µm)
250
200
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2022−09

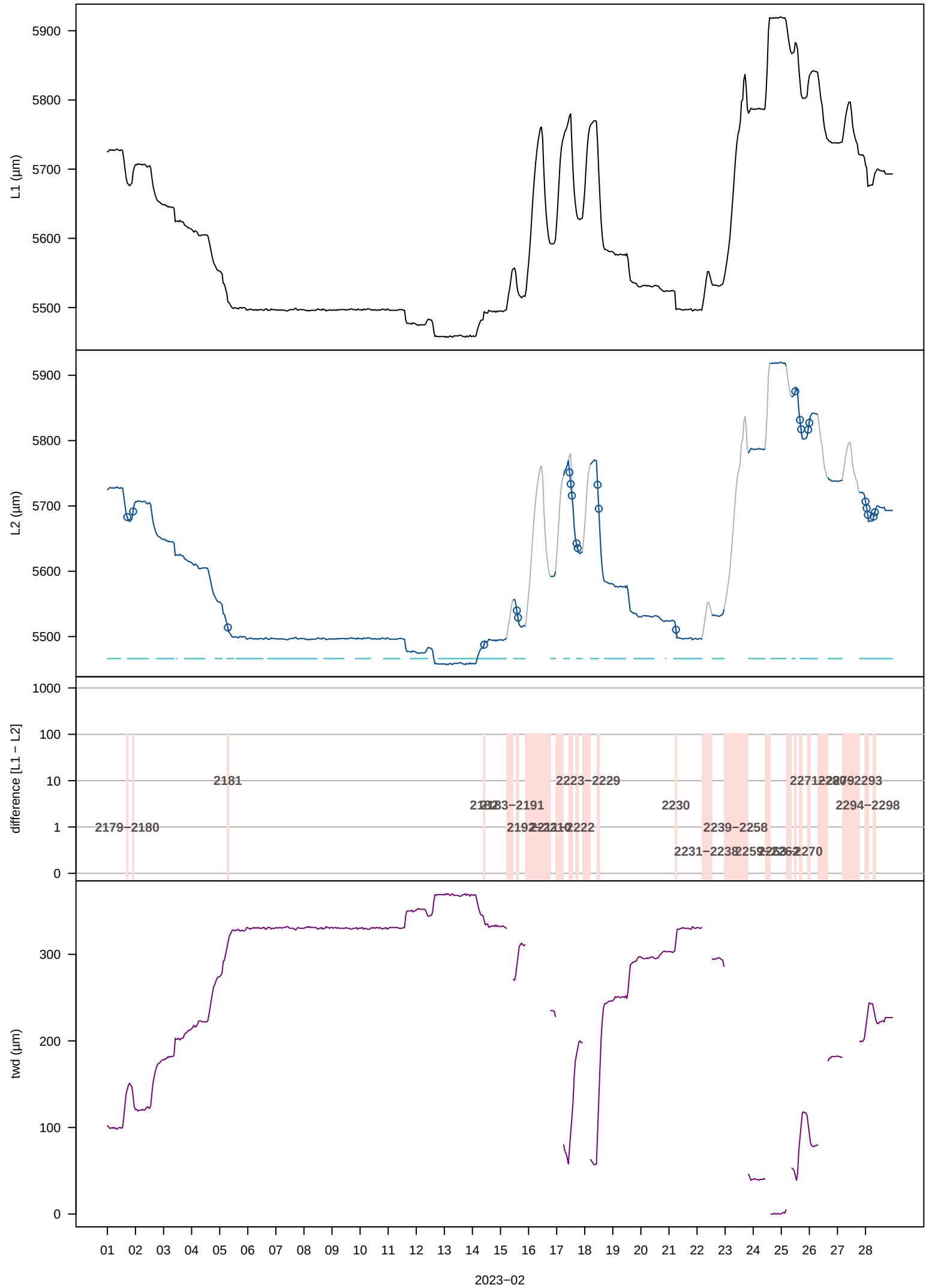

L1 (µm)
14200
14100
14000
13900
13800
13700
13600
13500
L2 (µm)
14400
14300
14200
14100
14000
13900
13800
difference [L1 − L2]
1000
100
10
1
0
2045
2046
twd (µm)
200
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2022−10

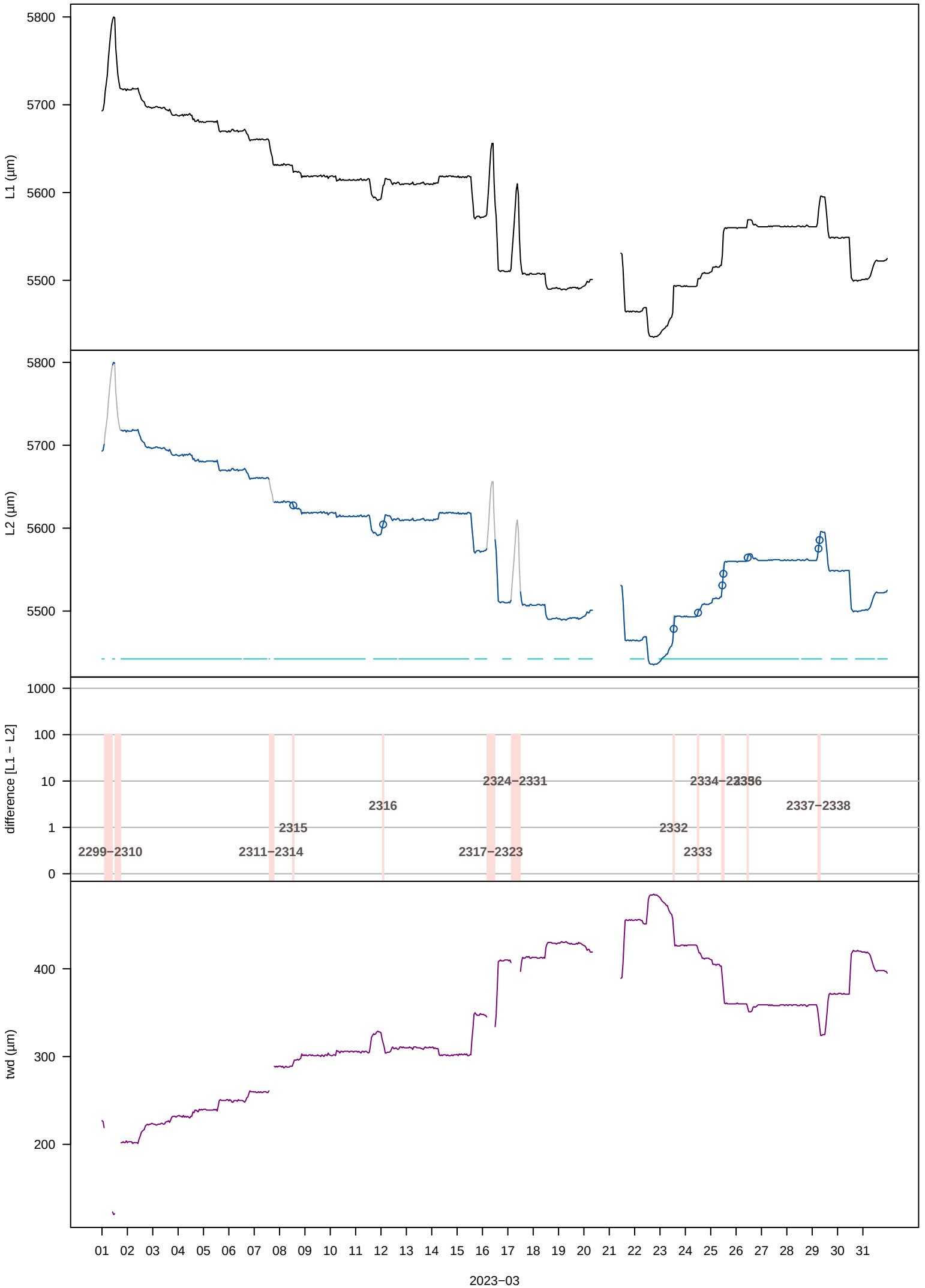

654
L1 (µm)
14500
14450
14400
14350
14300
14250
14200
L2 (µm)
14500
14450
14400
14350
14300
14250
14200
difference [L1 − L2]
1000
100
10
1
0
2051
2052−2053
2054−2055
twd (µm)
50
40
30
20
10
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2022−11

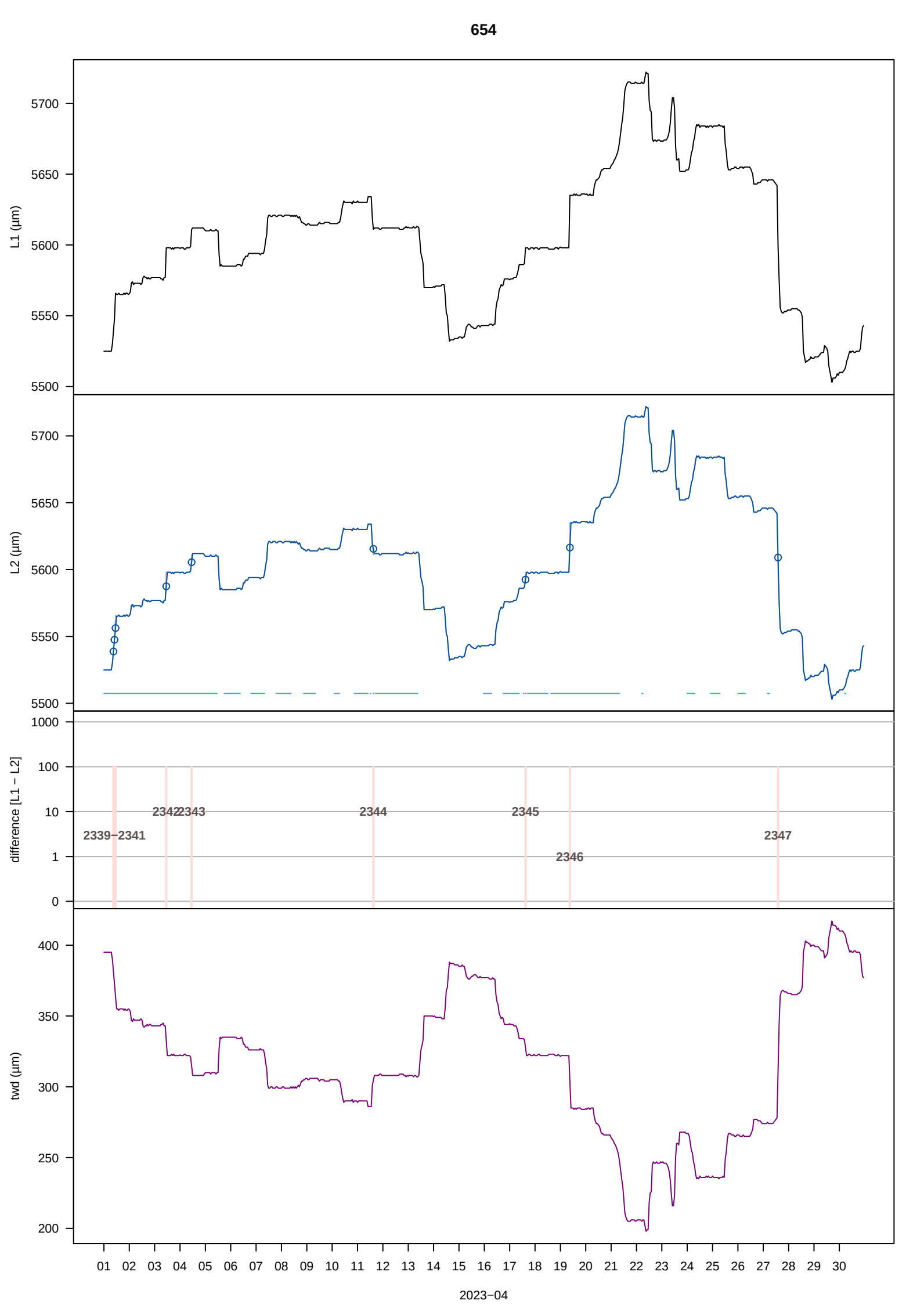

L1 (µm)
14000
12000
10000
8000
6000
L2 (µm)
14900
14800
14700
14600
difference [L1 − L2]
1000
100
10
1
0
2061−2068
2056−2060
2069−2071
2088−2092
2081−2087
2079−2080
twd (µm)
200
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2022−12

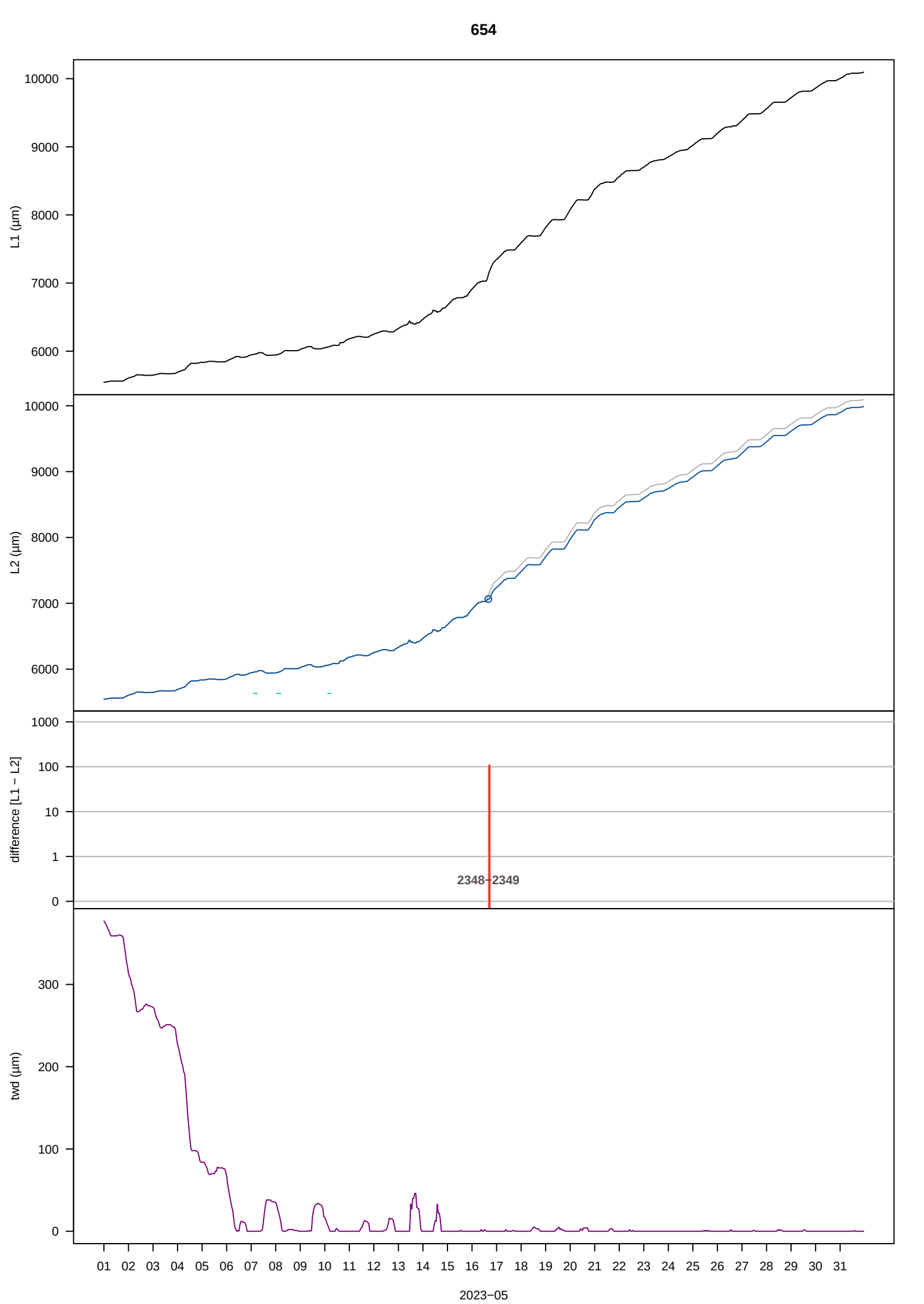
654

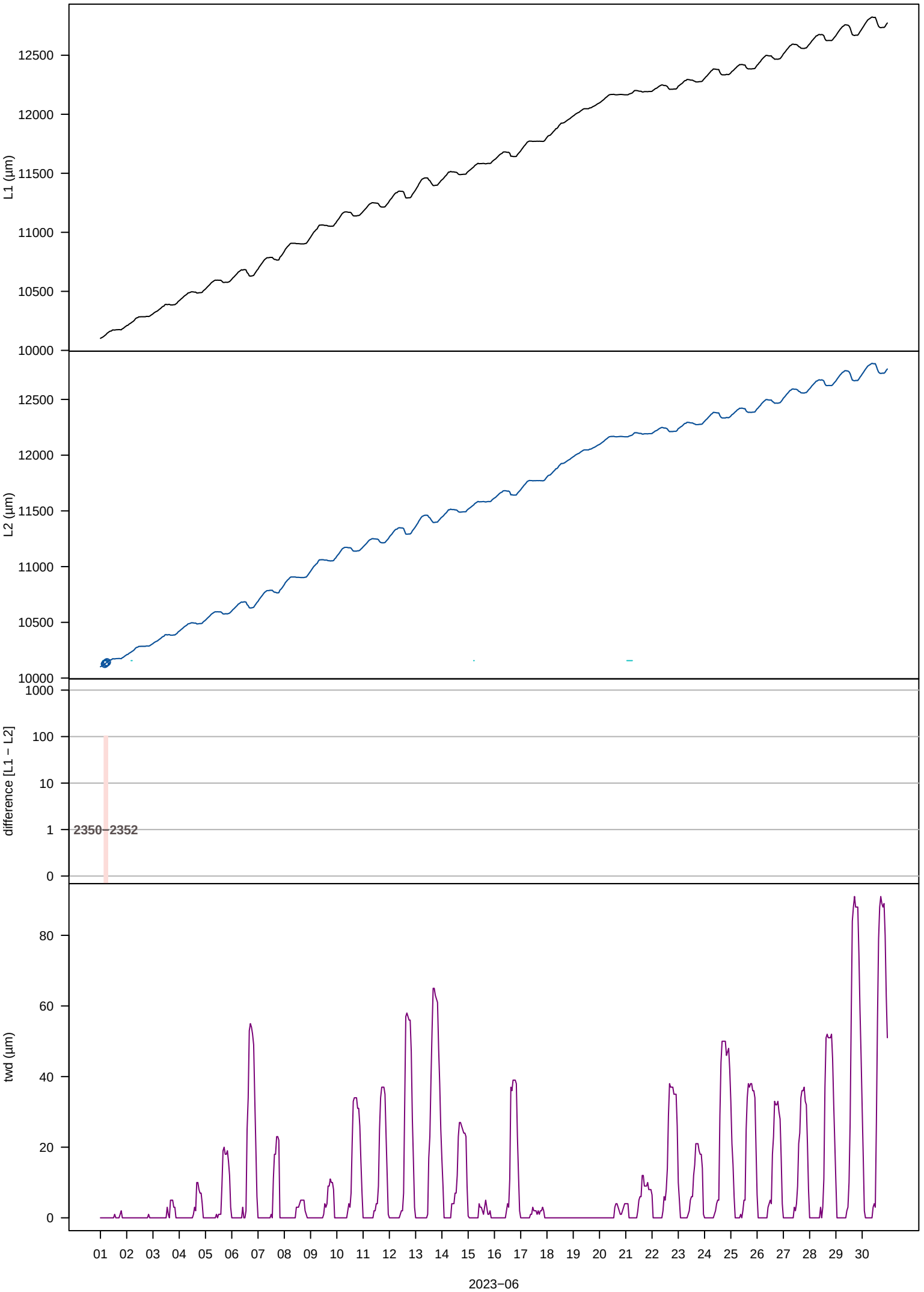

L1 (µm)
5800
5700
5600
5500
5400
L2 (µm)
5800
5700
5600
5500
5400
difference [L1 − L2]
1000
100
10
1
0
2093−2094
2095
2114−2121
2135−2141
2122−2134
2144−2161
2175−2178
twd (µm)
200
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2023−01

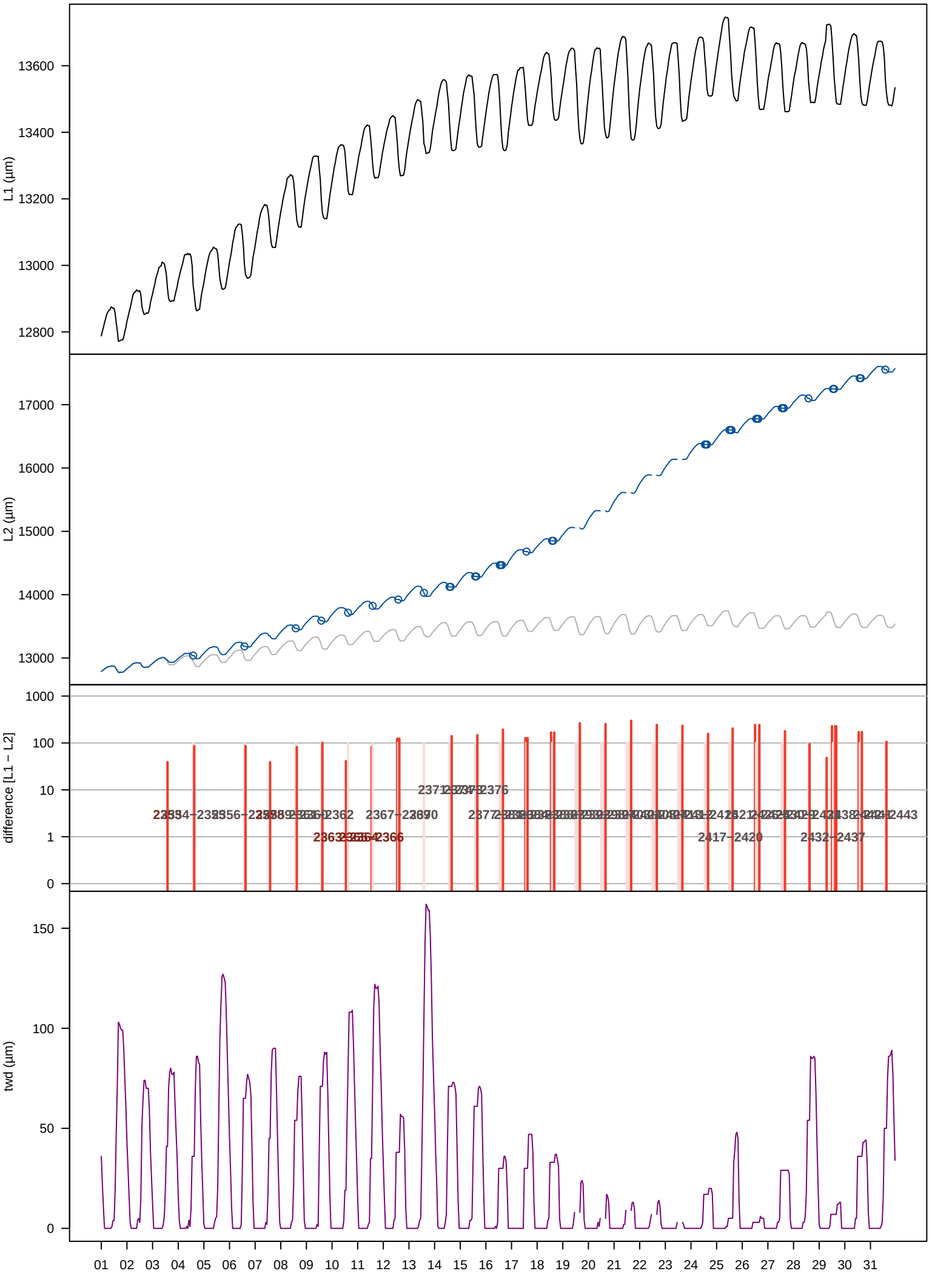

L1 (µm)
5900
5800
5700
5600
5500
L2 (µm)
5900
5800
5700
5600
5500
difference [L1 − L2]
1000
100
10
1
0
2179−2180
2181
2223−2229
2230
2239−2258
2294−2298
twd (µm)
300
200
100
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
2023−02

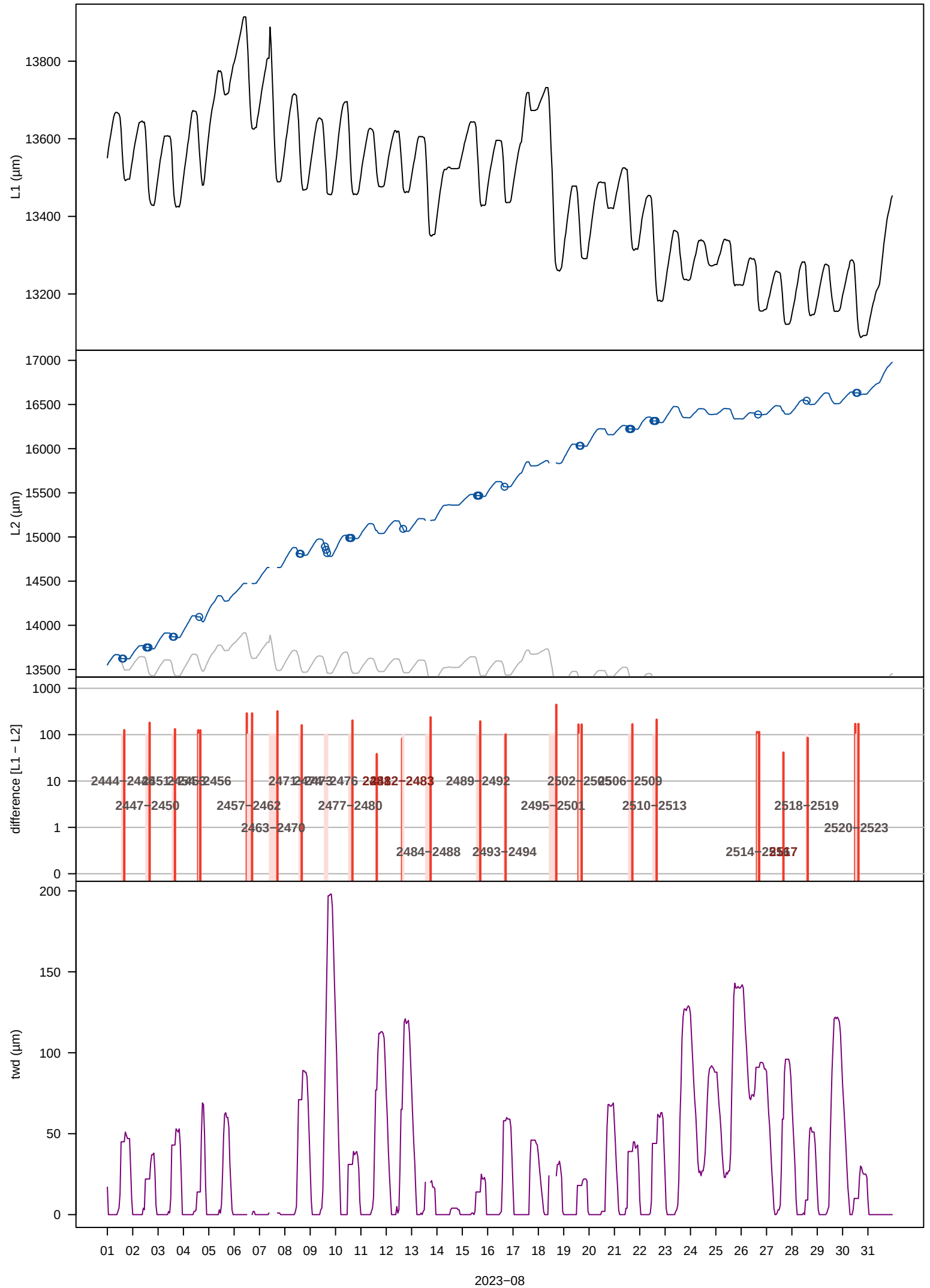

L1 (µm)
5800
5700
5600
5500
L2 (µm)
5800
5700
5600
5500
difference [L1 − L2]
1000
100
10
1
0
2299−2310
2311−2314
2315
2316
2317−2323
2324−2331
2332
2333
2334−2336
2337−2338
twd (µm)
400
300
200
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2023−03

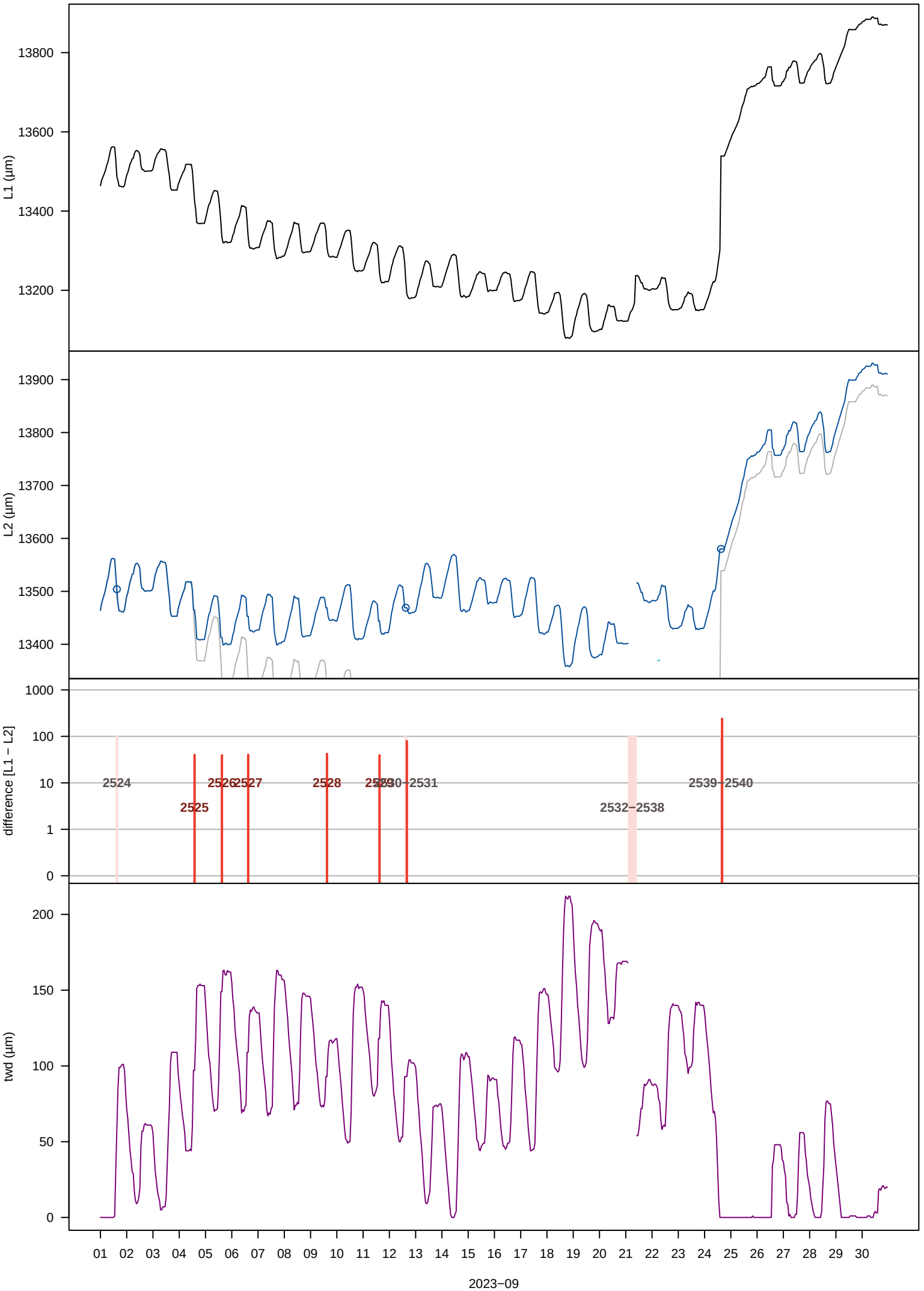

654
L1 (µm)
5700
5650
5600
5550
5500
L2 (µm)
5700
5650
5600
5550
5500
difference [L1 − L2]
1000
100
10
1
0
2339−2341
2342
2343
2344
2345
2346
2347
twd (µm)
400
350
300
250
200
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2023−04


654
L1 (µm)
10000
9000
8000
7000
6000
L2 (µm)
10000
9000
8000
7000
6000
difference [L1 − L2]
1000
100
10
1
0
2348−2349
twd (µm)
300
200
100
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2023−05

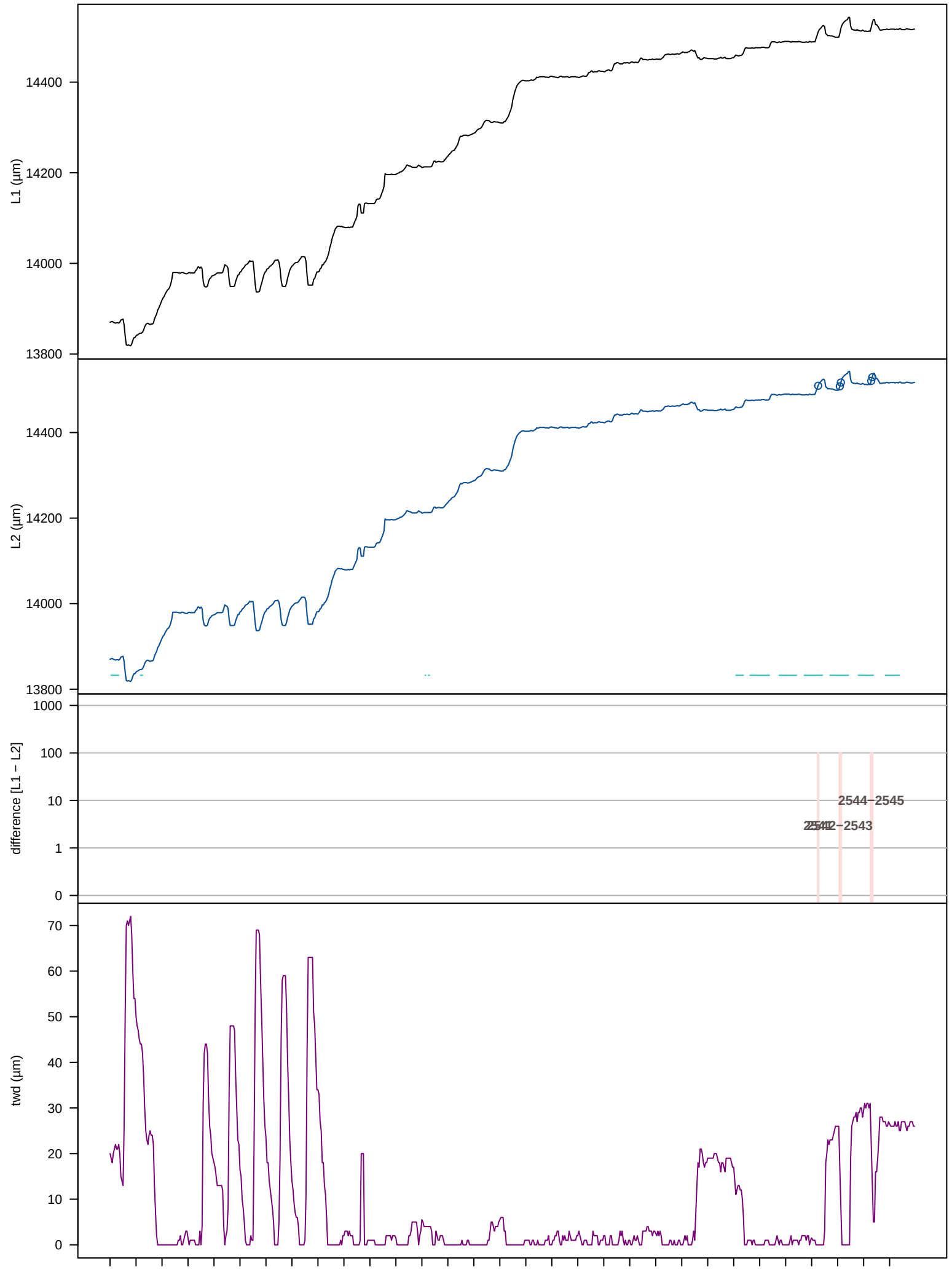

L1 (µm)
12500
12000
11500
11000
10500
10000
L2 (µm)
12500
12000
11500
11000
10500
10000
difference [L1 − L2]
1000
100
10
1
0
2350–2352
twd (µm)
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2023–06

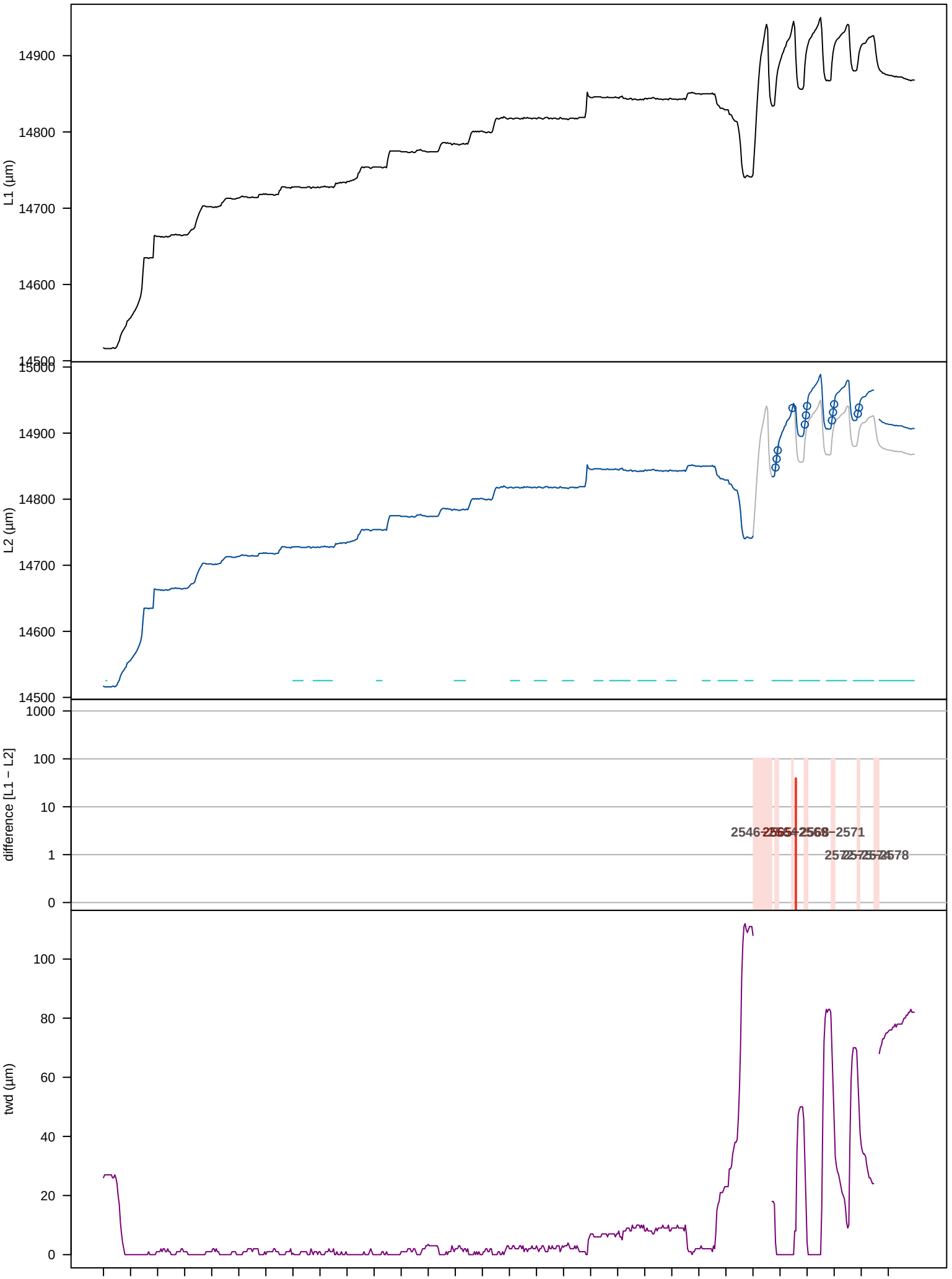

L1 (µm)
13600
13400
13200
13000
12800
L2 (µm)
17000
16000
15000
14000
13000
difference [L1 − L2]
1000
100
10
1
0
2417−2420
2432−2437
2443
twd (µm)
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2023−07


L1 (µm)
13800
13600
13400
13200
L2 (µm)
17000
16500
16000
15500
15000
14500
14000
13500
difference [L1 − L2]
1000
100
10
1
0
2444–2446
2447–2450
2456
2457–2462
2463–2470
2476
2477–2480
2483
2484–2488
2489–2492
2493–2494
2495–2501
2502–2505
2506–2509
2510–2513
2518–2519
2520–2523
twd (µm)
200
150
100
50
0
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
2023–08

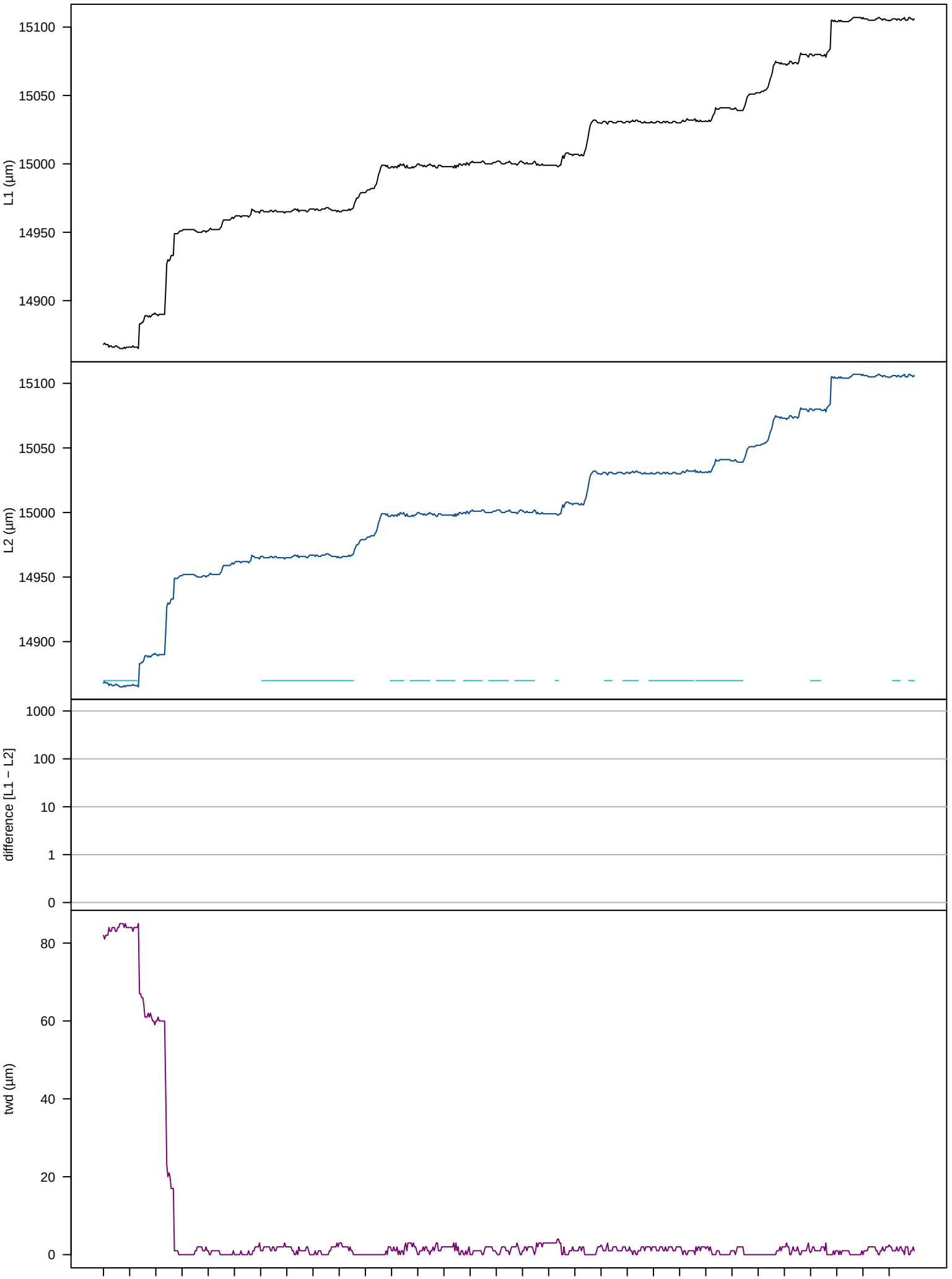

L1 (µm)
13800
13600
13400
13200
L2 (µm)
13900
13800
13700
13600
13500
13400
difference [L1 − L2]
1000
100
10
1
0
2524
2525
2526
2527
2528
2532−2538
2539−2540
twd (µm)
200
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2023−09

654

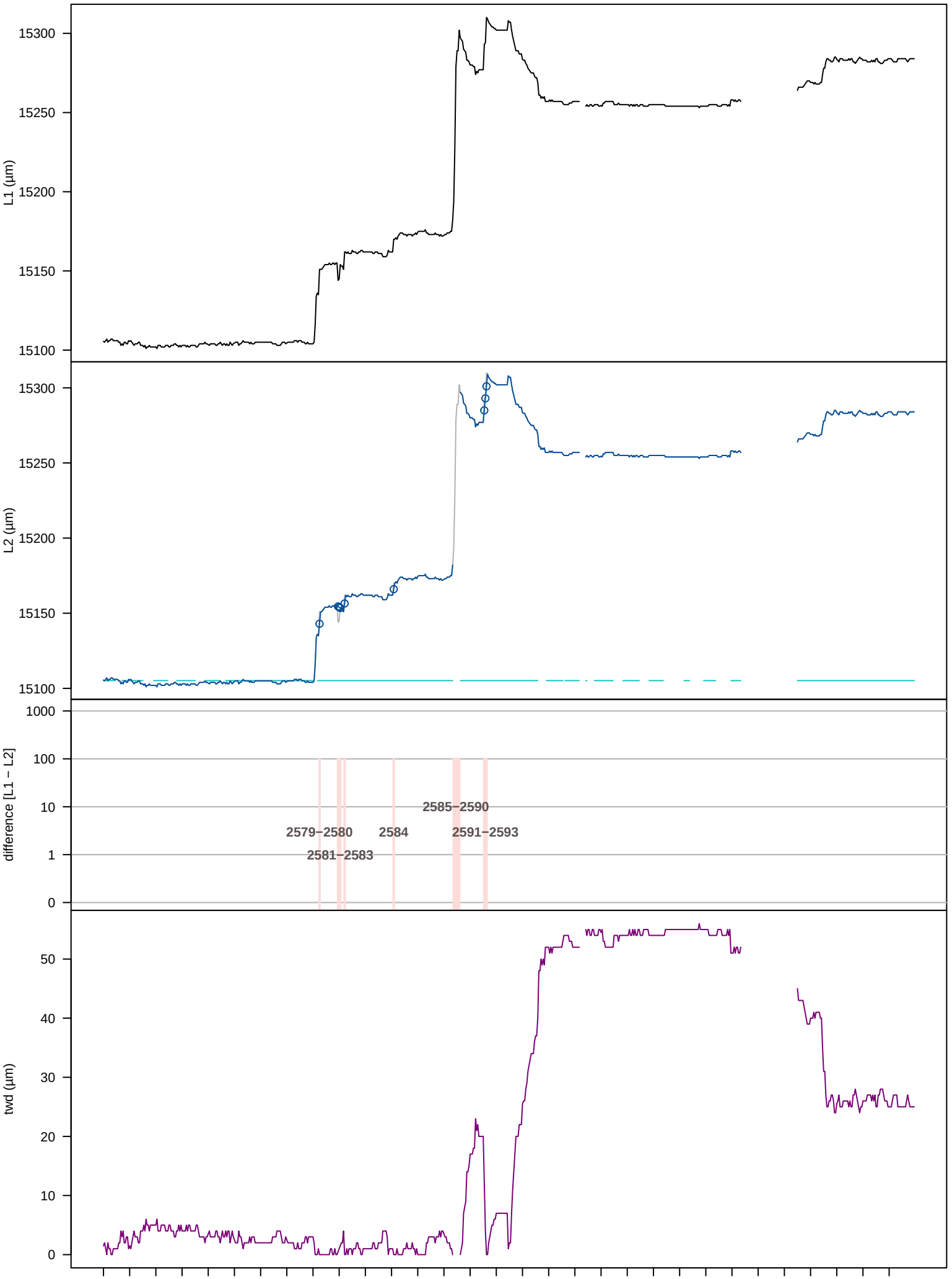

L1 (µm)
14400
14200
14000
13800
L2 (µm)
14400
14200
14000
13800
difference [L1 − L2]
1000
100
10
1
0
2544−2545
2542−2543
twd (µm)
70
60
50
40
30
20
10
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2023−10

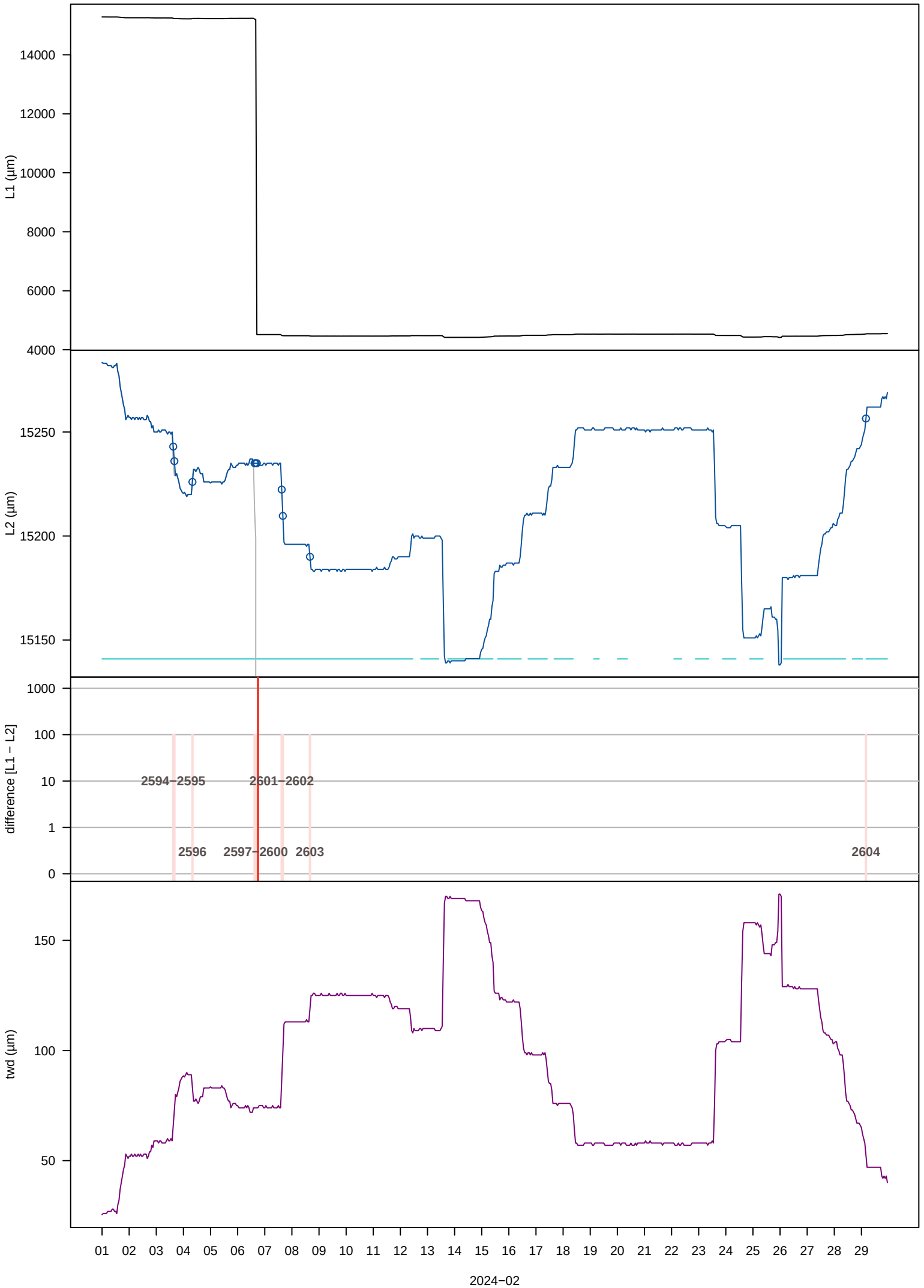

L1 (µm)
14900
14800
14700
14600
14500
L2 (µm)
15000
14900
14800
14700
14600
14500
difference [L1 − L2]
1000
100
10
1
0
2546
2554
2568
2571
2572
2578
twd (µm)
100
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2023−11

654

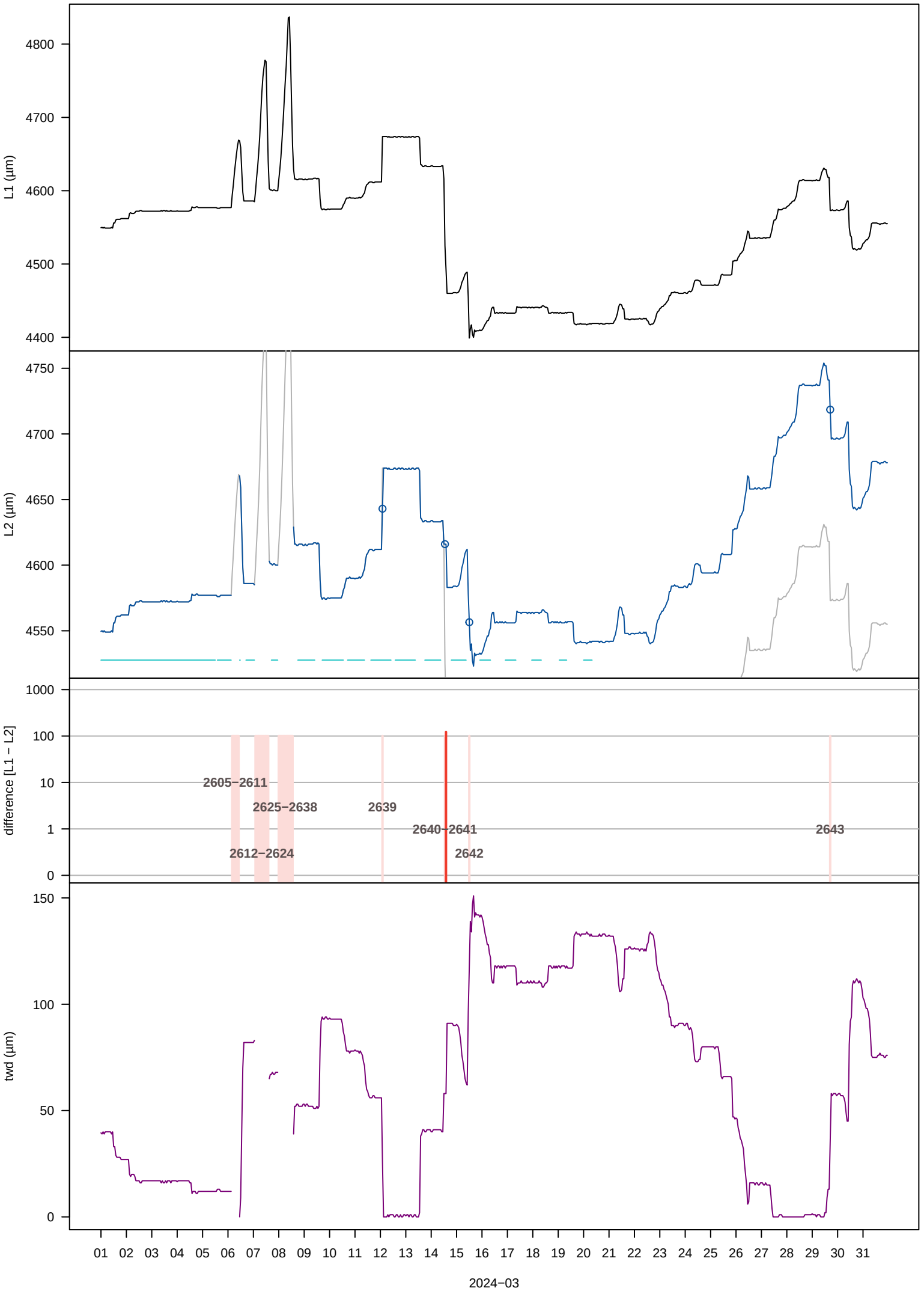

L1 (µm)
15100
15050
15000
14950
14900
L2 (µm)
15100
15050
15000
14950
14900
difference [L1 − L2]
1000
100
10
1
0
twd (µm)
80
60
40
20
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2023−12

654

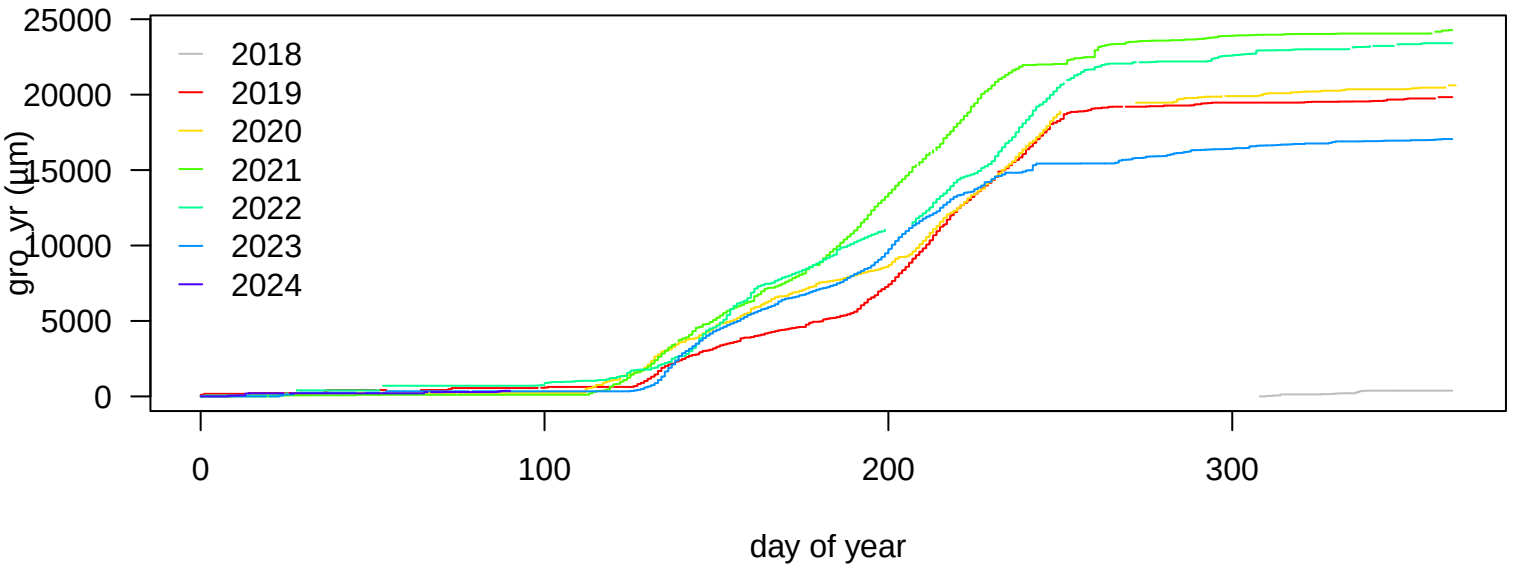

L1 (µm)
15300
15250
15200
15150
15100
L2 (µm)
15300
15250
15200
15150
15100
difference [L1 − L2]
1000
100
10
1
0
2579−2580
2581−2583
2584
2585−2590
2591−2593
twd (µm)
50
40
30
20
10
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2024−01


L1 (µm)
14000
12000
10000
8000
6000
4000
L2 (µm)
15250
15200
15150
difference [L1 − L2]
1000
100
10
1
0
2594–2595
2601–2602
2596
2597–2600
2603
2604
twd (µm)
150
100
50
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
2024–02

654


L1 (µm)
4800
4700
4600
4500
4400
L2 (µm)
4750
4700
4650
4600
4550
difference [L1 − L2]
1000
100
10
1
0
2605–2611
2625–2638
2639
2640–2641
2643
2612–2624
2642
twd (µm)
150
100
50
0
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
2024–03

654



input variables
tol_jump = 3
tol_out = 2
frost_thr = 1
lowtemp = 5
interpol = 210
frag_len = 2.1
tz = GMT

applied thresholds (µm)
tol_jump = −37.58 / 47.58
tol_out = −42.55 / 52.55
tol_jump_frost = −37.58 / 47.58
tol_out_frost = −42.55 / 52.55

changes in data
interpolated: 1.43%
deleted: 4.65%
missing: 2.45%

growth statistics (µm): median (min / max)
month: 462 (2 / 7129)
week: 274 (0.5 / 1879)
day: 85 (0.5 / 456)
hour: 9 (0.5 / 47)