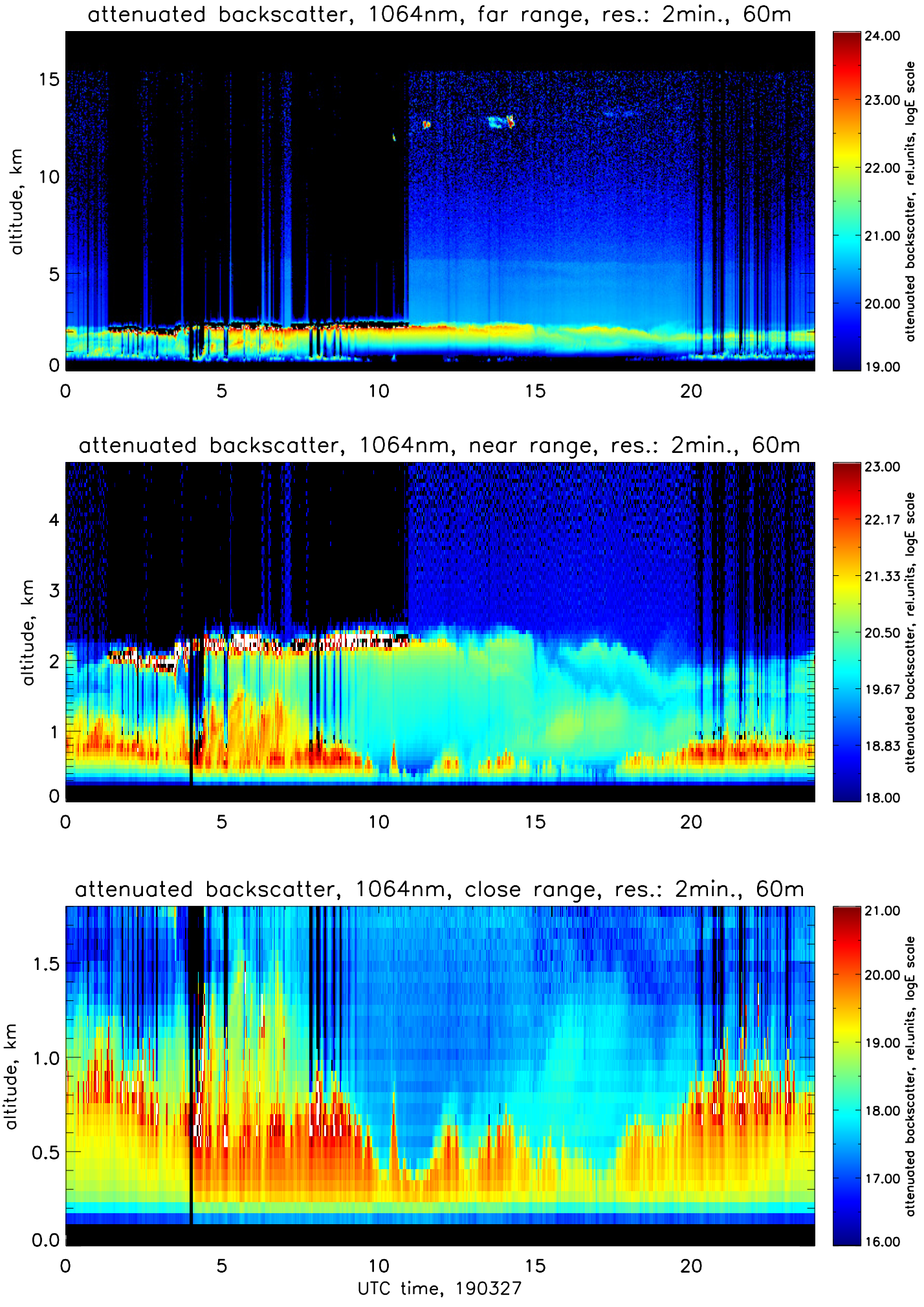
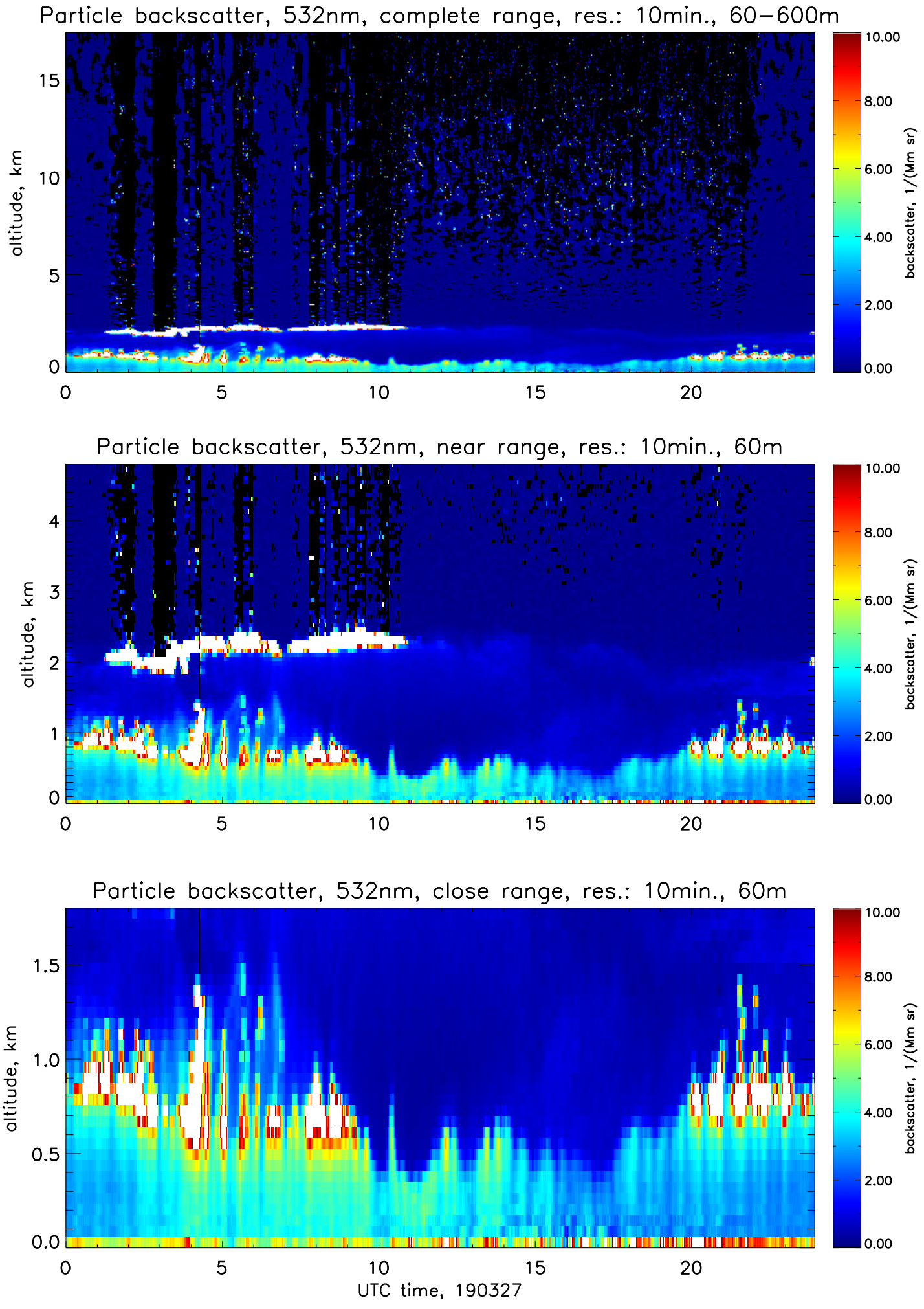
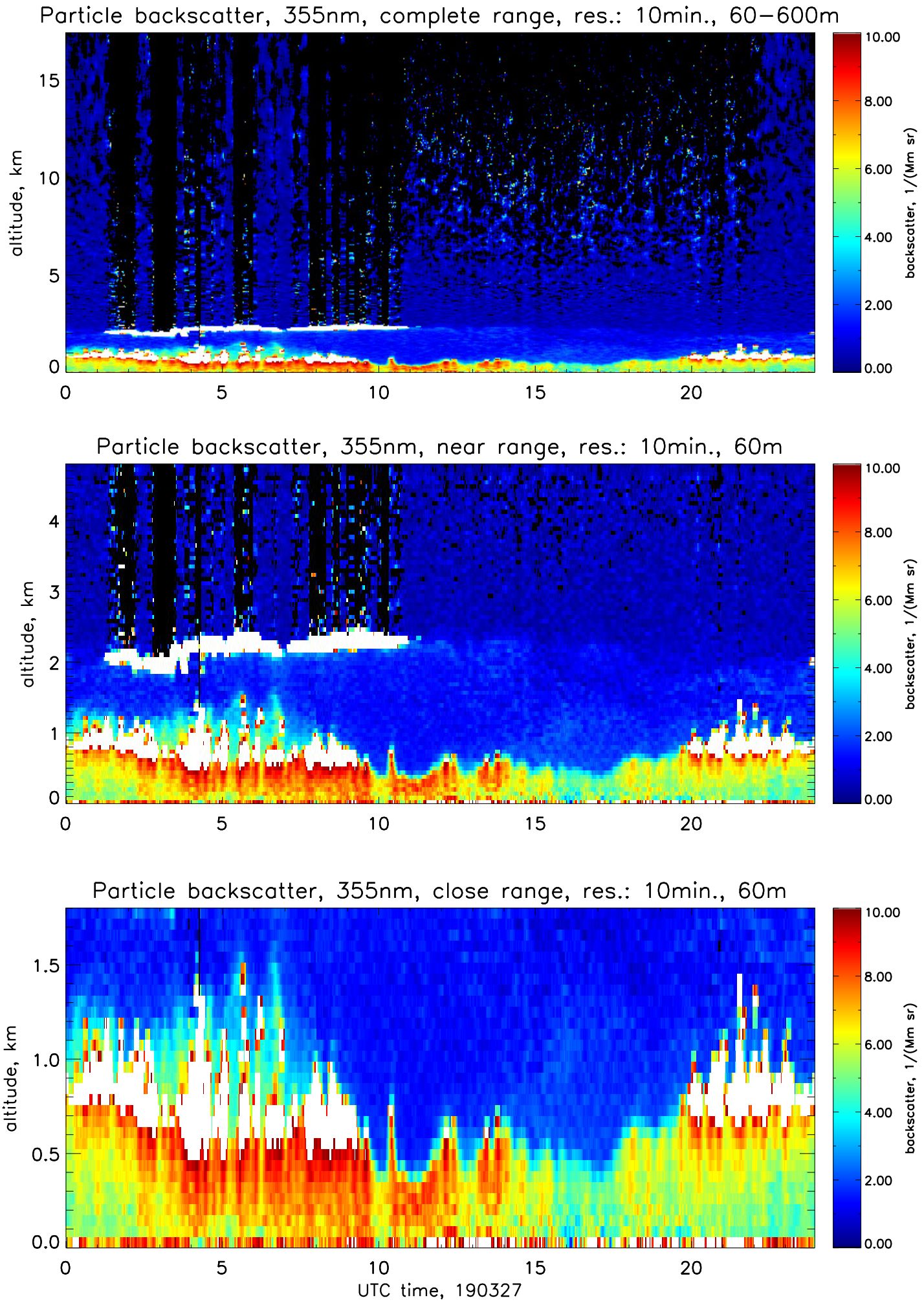
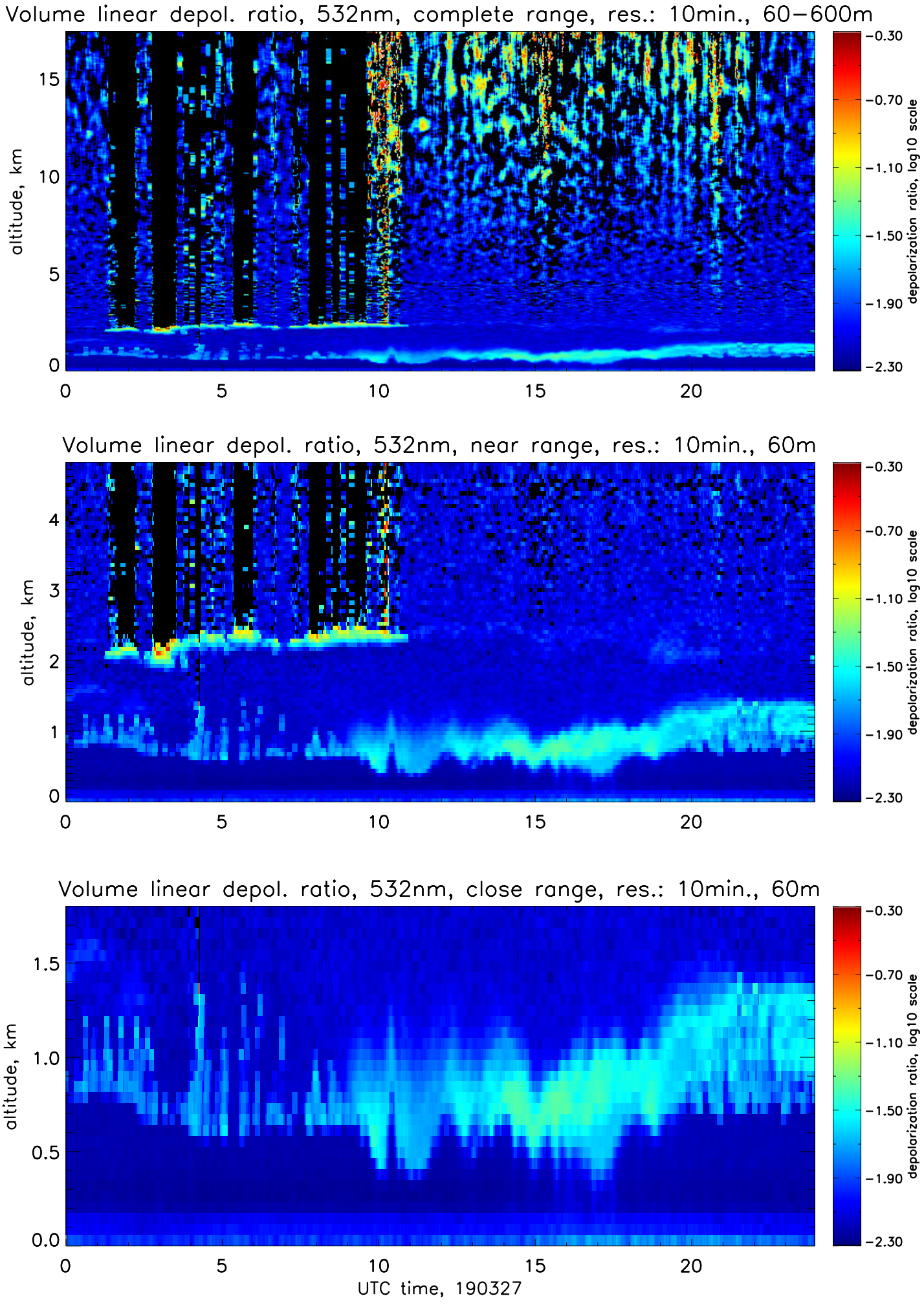
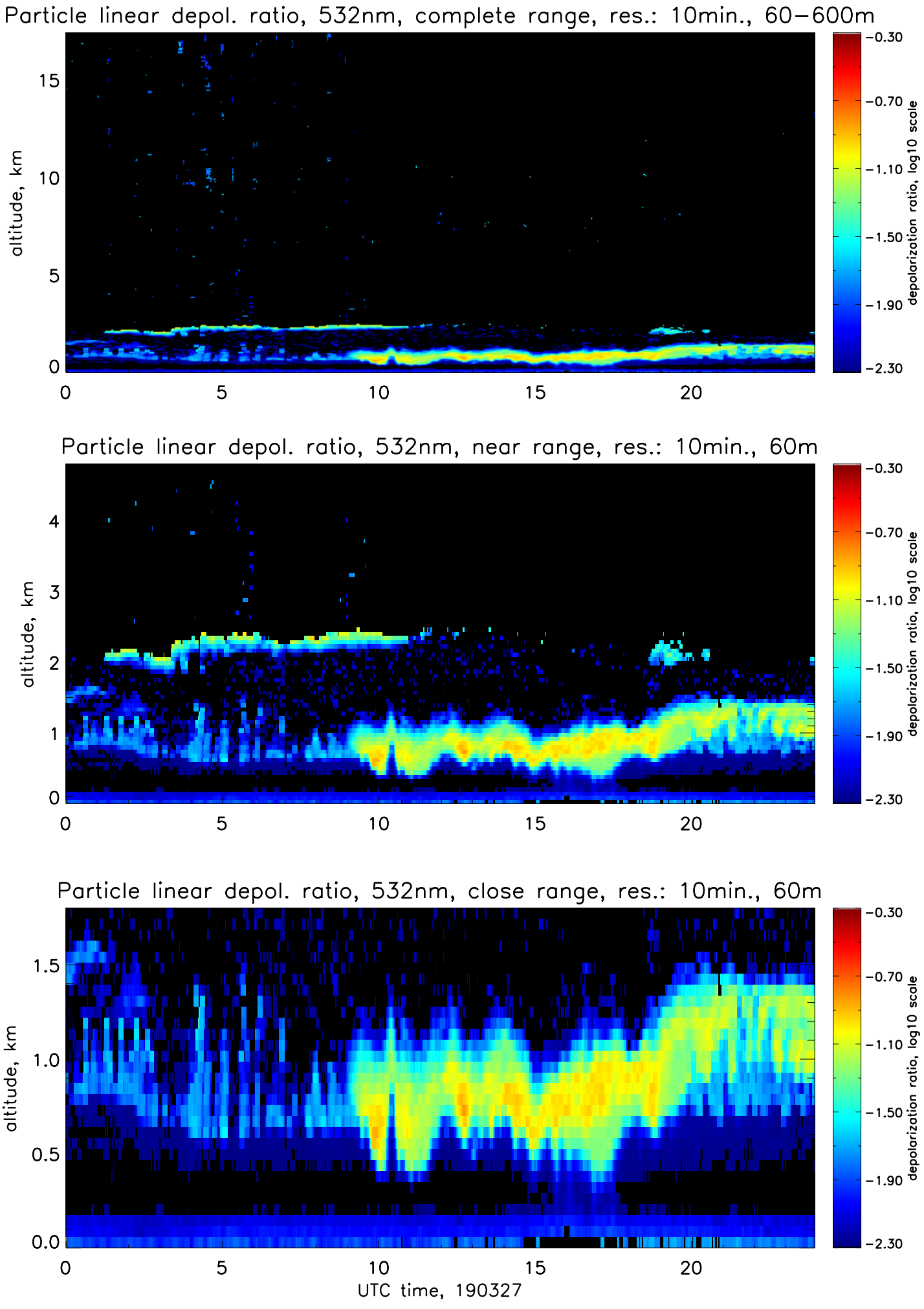
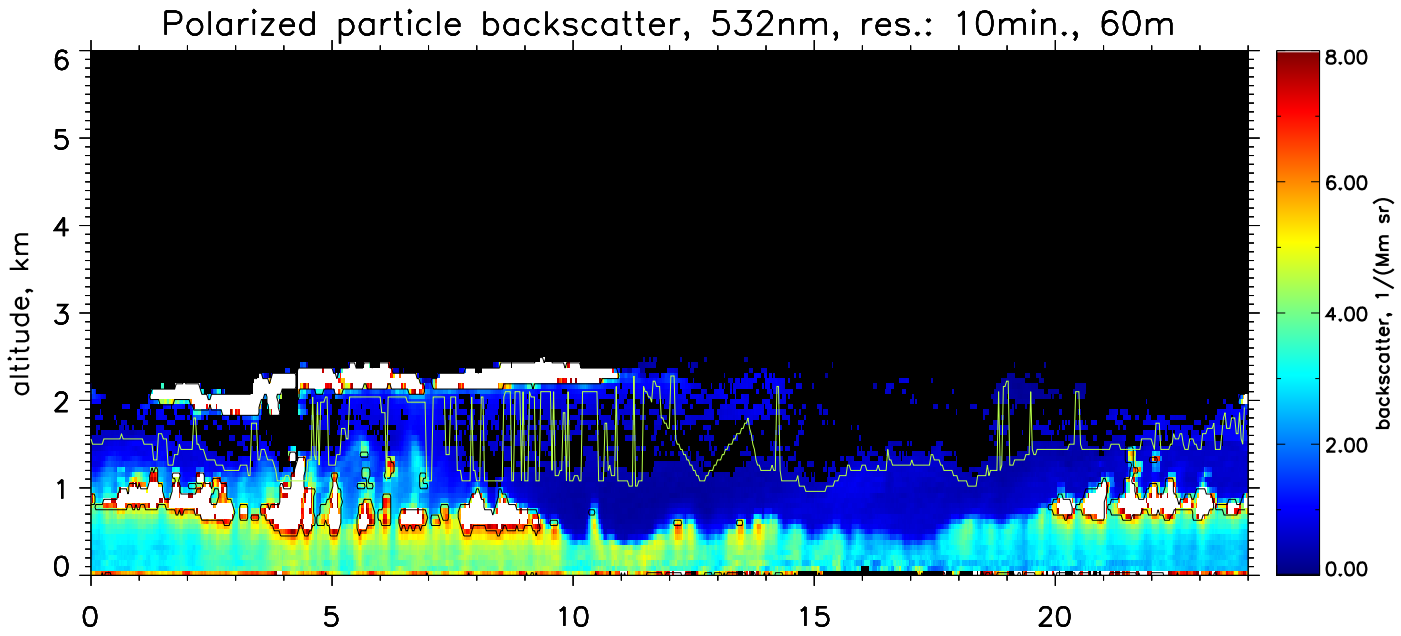

attenuated backscatter, 1064nm, far range, res.: 2min., 60m
altitude, km
0
5
10
15
0
5
10
15
20
attenuated backscatter, rel.units, logE scale
24.00
23.00
22.00
21.00
20.00
19.00
attenuated backscatter, 1064nm, near range, res.: 2min., 60m
altitude, km
0
1
2
3
4
0
5
10
15
20
attenuated backscatter, rel.units, logE scale
23.00
22.17
21.33
20.50
19.67
18.83
18.00
attenuated backscatter, 1064nm, close range, res.: 2min., 60m
altitude, km
0.0
0.5
1.0
1.5
0
5
10
15
20
UTC time, 190327
attenuated backscatter, rel.units, logE scale
21.00
20.00
19.00
18.00
17.00
16.00

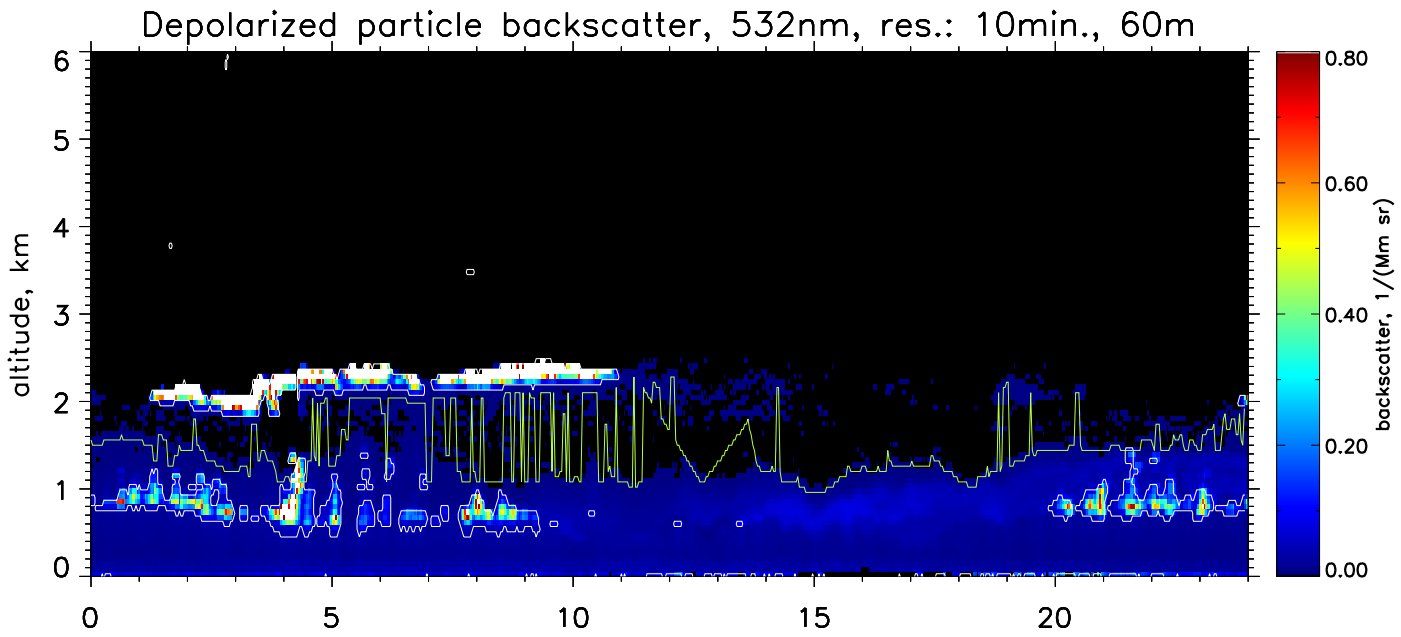

Particle backscatter, 532nm, complete range, res.: 10min., 60–600m
altitude, km
0
5
10
15
0
5
10
15
20
backscatter, 1/(Mm sr)
0.00
2.00
4.00
6.00
8.00
10.00
Particle backscatter, 532nm, near range, res.: 10min., 60m
altitude, km
0
1
2
3
4
0
5
10
15
20
backscatter, 1/(Mm sr)
0.00
2.00
4.00
6.00
8.00
10.00
Particle backscatter, 532nm, close range, res.: 10min., 60m
altitude, km
0.0
0.5
1.0
1.5
0
5
10
15
20
UTC time, 190327
backscatter, 1/(Mm sr)
0.00
2.00
4.00
6.00
8.00
10.00

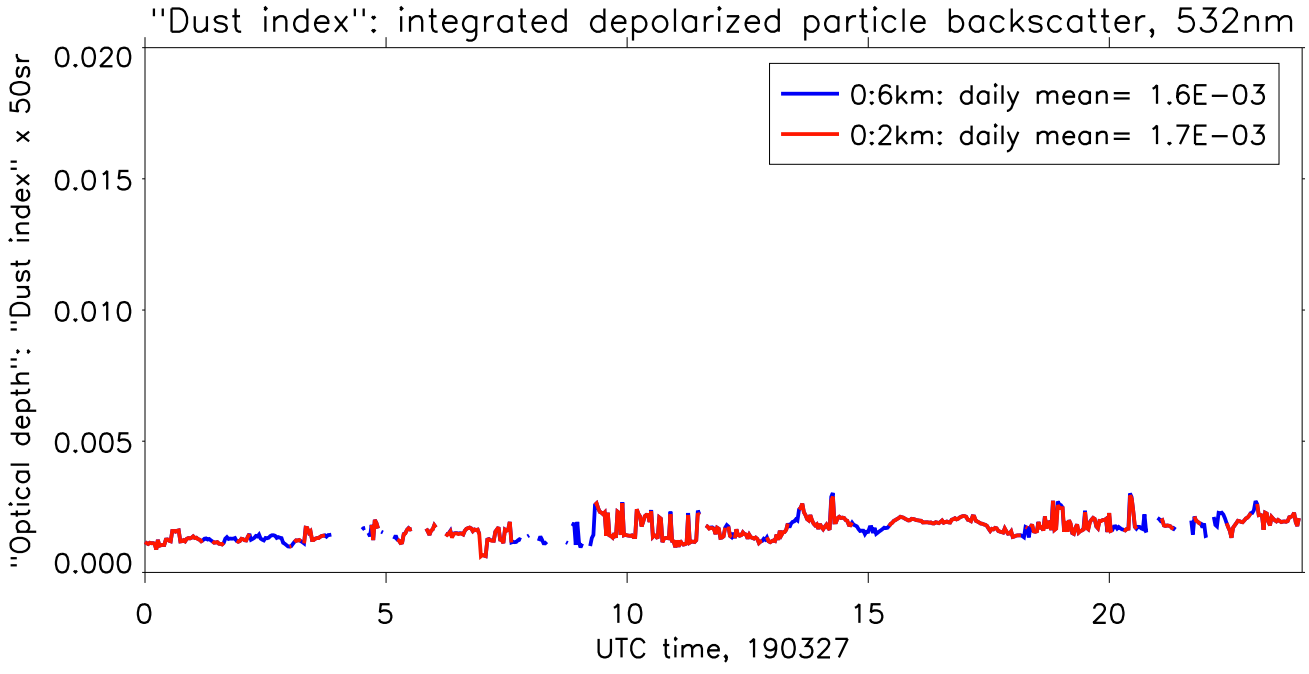

Particle backscatter, 355nm, complete range, res.: 10min., 60–600m
altitude, km
0
5
10
15
0
5
10
15
20
backscatter, 1/(Mm sr)
0.00
2.00
4.00
6.00
8.00
10.00
Particle backscatter, 355nm, near range, res.: 10min., 60m
altitude, km
0
1
2
3
4
0
5
10
15
20
backscatter, 1/(Mm sr)
0.00
2.00
4.00
6.00
8.00
10.00
Particle backscatter, 355nm, close range, res.: 10min., 60m
altitude, km
0.0
0.5
1.0
1.5
0
5
10
15
20
UTC time, 190327
backscatter, 1/(Mm sr)
0.00
2.00
4.00
6.00
8.00
10.00

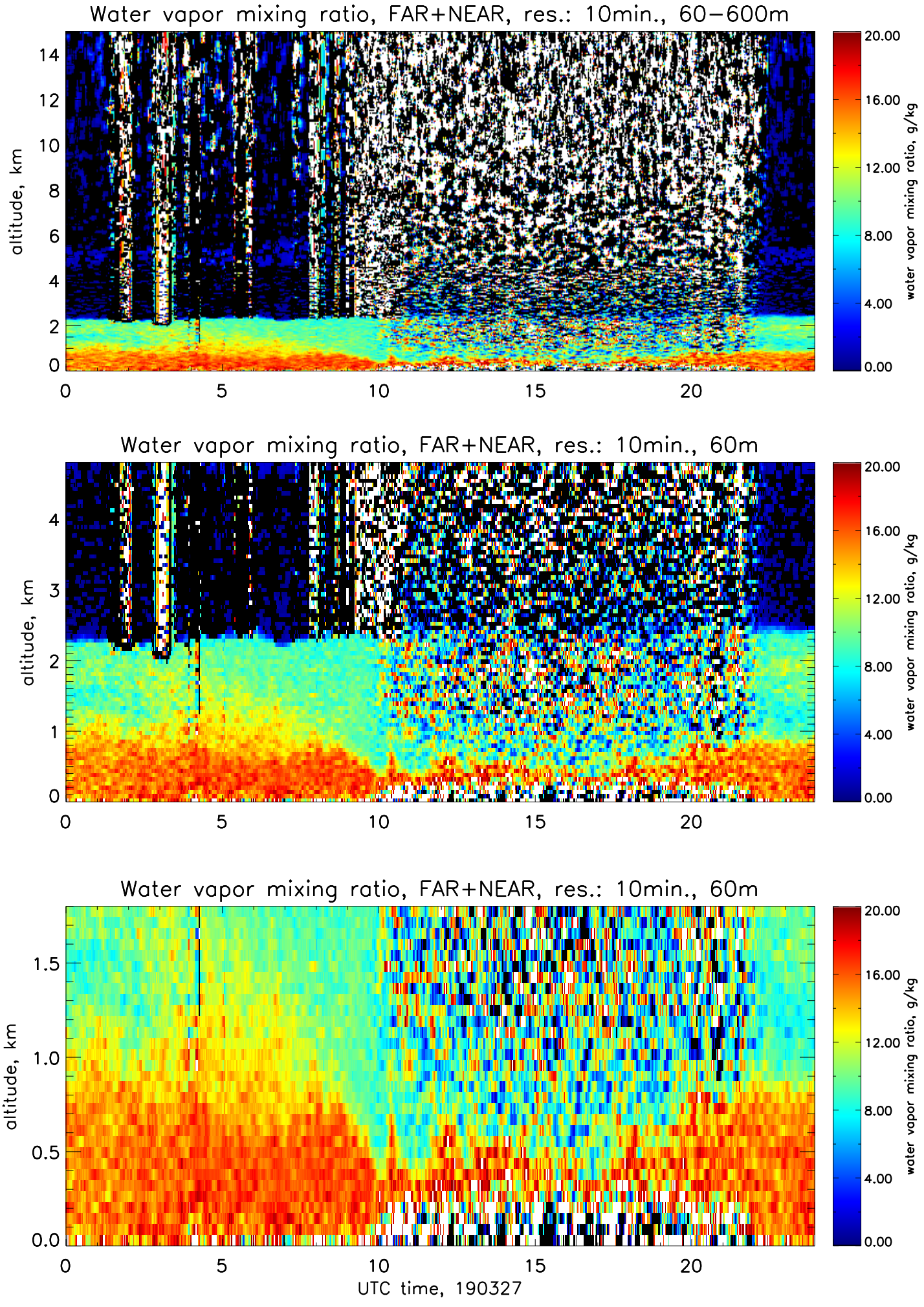

Volume linear depol. ratio, 532nm, complete range, res.: 10min., 60−600m
altitude, km
0
5
10
15
0
5
10
15
20
−0.30
−0.70
−1.10
−1.50
−1.90
−2.30
depolarization ratio, log10 scale
Volume linear depol. ratio, 532nm, near range, res.: 10min., 60m
altitude, km
0
1
2
3
4
0
5
10
15
20
−0.30
−0.70
−1.10
−1.50
−1.90
−2.30
depolarization ratio, log10 scale
Volume linear depol. ratio, 532nm, close range, res.: 10min., 60m
altitude, km
0.0
0.5
1.0
1.5
0
5
10
15
20
UTC time, 190327
−0.30
−0.70
−1.10
−1.50
−1.90
−2.30
depolarization ratio, log10 scale

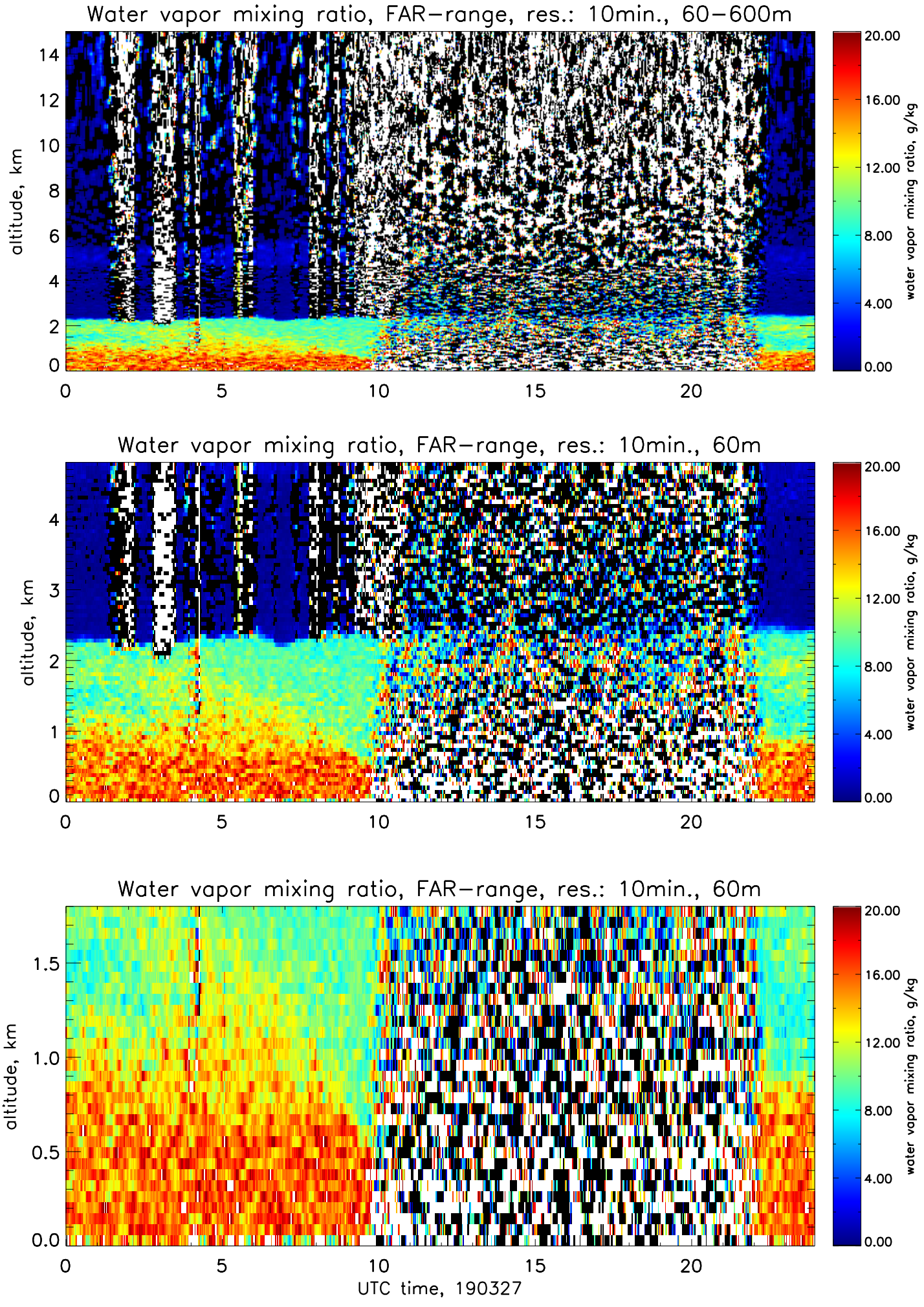

Particle linear depol. ratio, 532nm, complete range, res.: 10min., 60–600m
altitude, km
0
5
10
15
0
5
10
15
20
−0.30
−0.70
−1.10
−1.50
−1.90
−2.30
depolarization ratio, log10 scale
Particle linear depol. ratio, 532nm, near range, res.: 10min., 60m
altitude, km
0
1
2
3
4
0
5
10
15
20
−0.30
−0.70
−1.10
−1.50
−1.90
−2.30
depolarization ratio, log10 scale
Particle linear depol. ratio, 532nm, close range, res.: 10min., 60m
altitude, km
0.0
0.5
1.0
1.5
0
5
10
15
20
UTC time, 190327
−0.30
−0.70
−1.10
−1.50
−1.90
−2.30
depolarization ratio, log10 scale

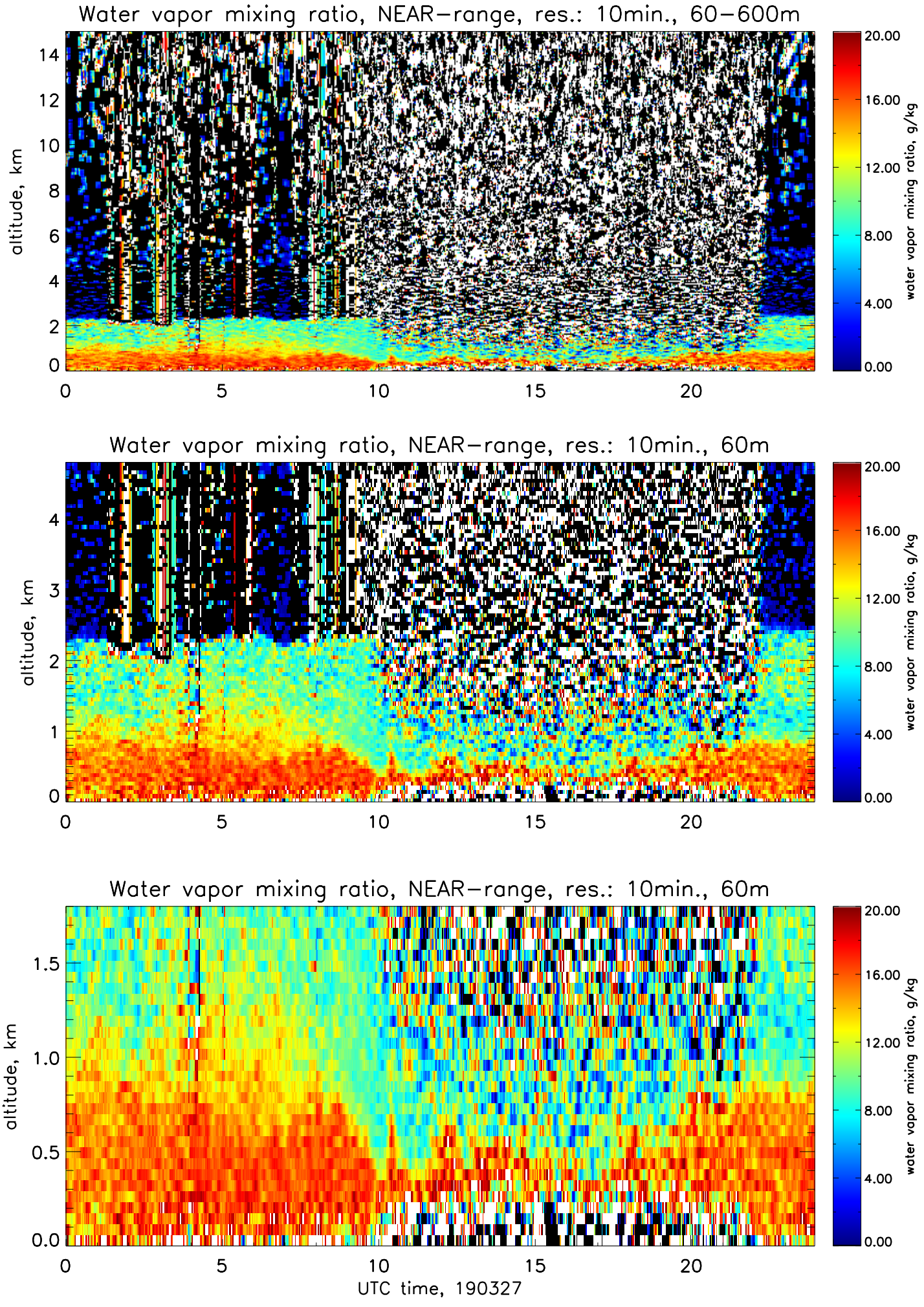

Polarized particle backscatter, 532nm, res.: 10min., 60m
altitude, km
backscatter, 1/(Mm sr)
0
1
2
3
4
5
6
0.00
2.00
4.00
6.00
8.00
0
5
10
15
20

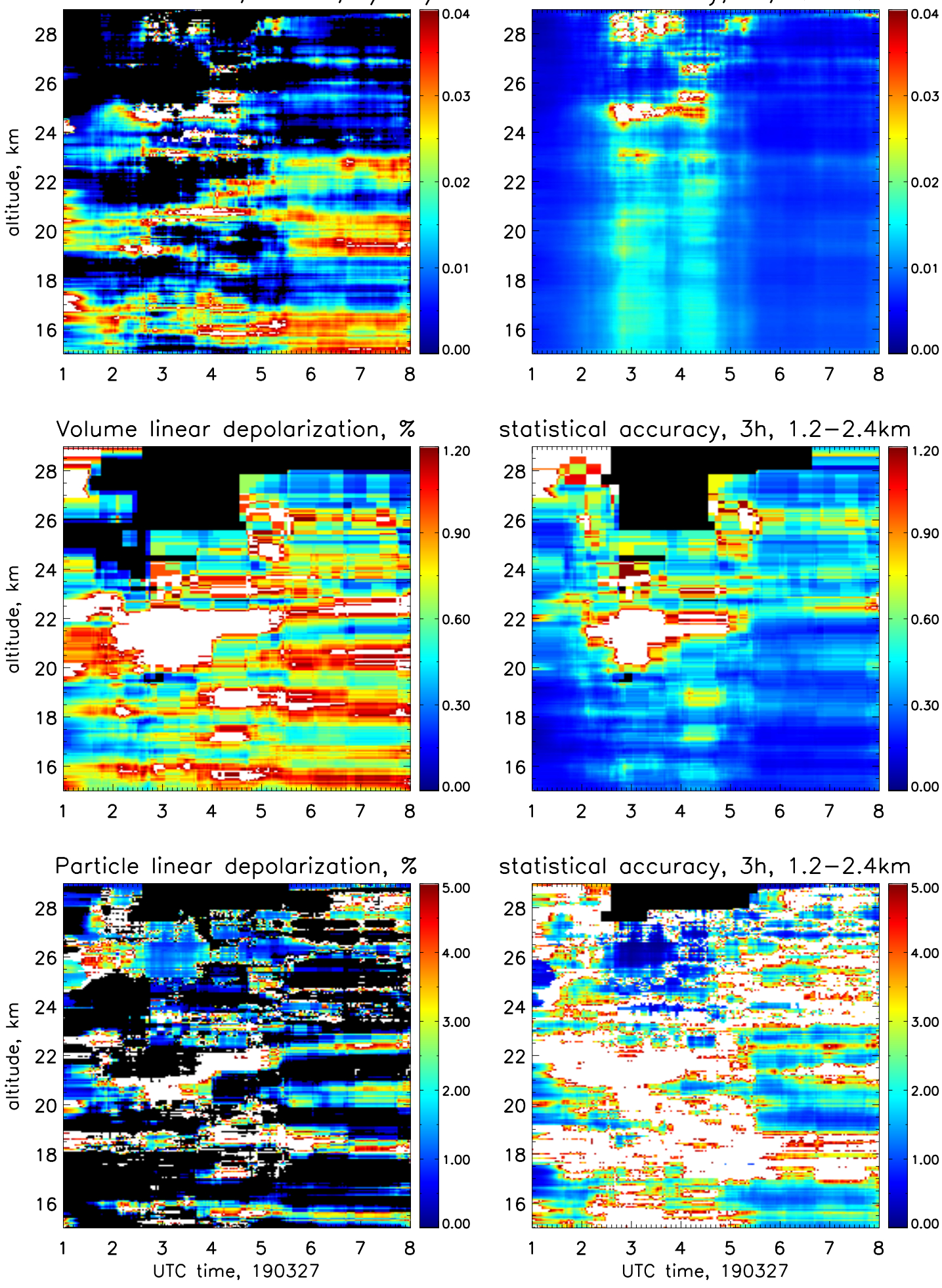

Depolarized particle backscatter, 532nm, res.: 10min., 60m
altitude, km
backscatter, 1/(Mm sr)
0
1
2
3
4
5
6
0.00
0.20
0.40
0.60
0.80
0
5
10
15
20

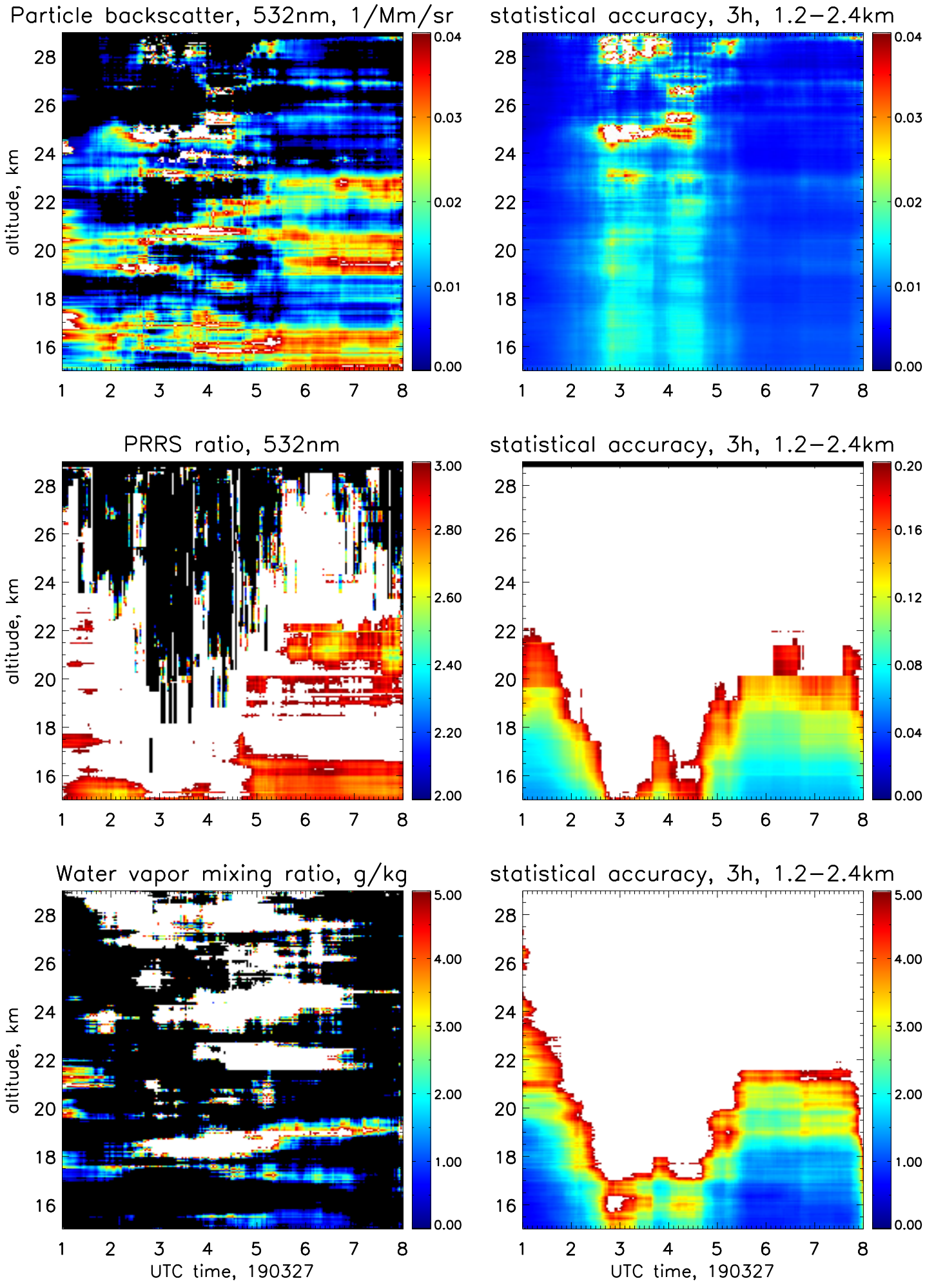

"Dust index": integrated depolarized particle backscatter, 532nm
"Optical depth": "Dust index" x 50sr
0.000
0.005
0.010
0.015
0.020
0:6km: daily mean= 1.6E-03
0:2km: daily mean= 1.7E-03
0
5
10
15
20
UTC time, 190327

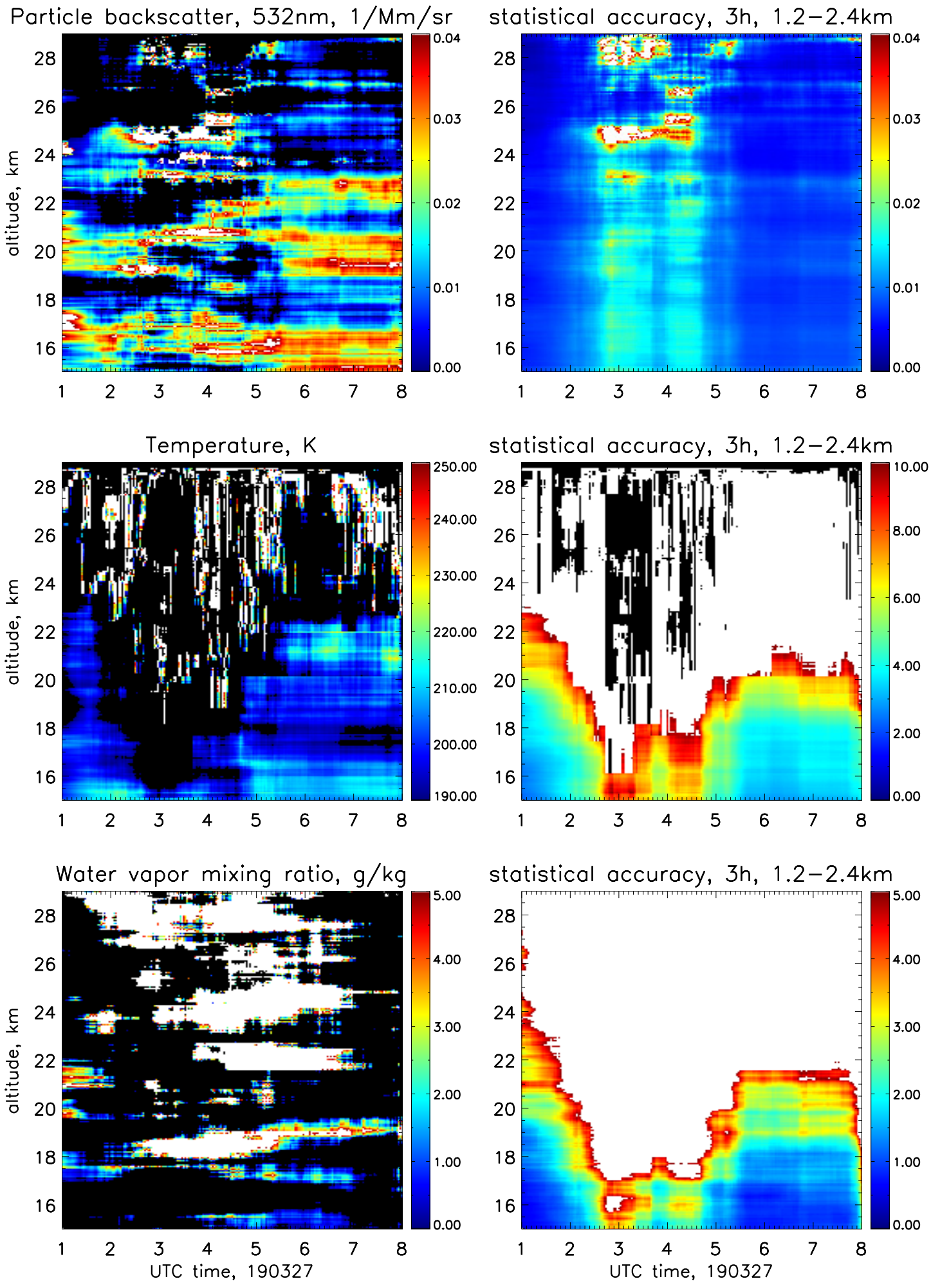

Water vapor mixing ratio, FAR+NEAR, res.: 10min., 60−600m
altitude, km
0
2
4
6
8
10
12
14
0
5
10
15
20
water vapor mixing ratio, g/kg
0.00
4.00
8.00
12.00
16.00
20.00
Water vapor mixing ratio, FAR+NEAR, res.: 10min., 60m
altitude, km
0
1
2
3
4
0
5
10
15
20
water vapor mixing ratio, g/kg
0.00
4.00
8.00
12.00
16.00
20.00
Water vapor mixing ratio, FAR+NEAR, res.: 10min., 60m
altitude, km
0.0
0.5
1.0
1.5
0
5
10
15
20
UTC time, 190327
water vapor mixing ratio, g/kg
0.00
4.00
8.00
12.00
16.00
20.00


Water vapor mixing ratio, FAR−range, res.: 10min., 60−600m
altitude, km
0
2
4
6
8
10
12
14
0
5
10
15
20
water vapor mixing ratio, g/kg
0.00
4.00
8.00
12.00
16.00
20.00
Water vapor mixing ratio, FAR−range, res.: 10min., 60m
altitude, km
0
1
2
3
4
0
5
10
15
20
water vapor mixing ratio, g/kg
0.00
4.00
8.00
12.00
16.00
20.00
Water vapor mixing ratio, FAR−range, res.: 10min., 60m
altitude, km
0.0
0.5
1.0
1.5
0
5
10
15
20
UTC time, 190327
water vapor mixing ratio, g/kg
0.00
4.00
8.00
12.00
16.00
20.00


Water vapor mixing ratio, NEAR−range, res.: 10min., 60−600m
altitude, km
0
2
4
6
8
10
12
14
0
5
10
15
20
water vapor mixing ratio, g/kg
0.00
4.00
8.00
12.00
16.00
20.00
Water vapor mixing ratio, NEAR−range, res.: 10min., 60m
altitude, km
0
1
2
3
4
0
5
10
15
20
water vapor mixing ratio, g/kg
0.00
4.00
8.00
12.00
16.00
20.00
Water vapor mixing ratio, NEAR−range, res.: 10min., 60m
altitude, km
0.0
0.5
1.0
1.5
0
5
10
15
20
UTC time, 190327
water vapor mixing ratio, g/kg
0.00
4.00
8.00
12.00
16.00
20.00


Particle backscatter, 532nm, 1/Mm/sr
statistical accuracy, 3h, 1.2−2.4km
Volume linear depolarization, %
statistical accuracy, 3h, 1.2−2.4km
Particle linear depolarization, %
statistical accuracy, 3h, 1.2−2.4km
altitude, km
UTC time, 190327
0.04
0.03
0.02
0.01
0.00
1.20
0.90
0.60
0.30
5.00
4.00
3.00
2.00
1.00
16
18
20
22
24
26
28
1
2
3
4
5
6
7
8


Particle backscatter, 532nm, 1/Mm/sr
statistical accuracy, 3h, 1.2–2.4km
PRRS ratio, 532nm
statistical accuracy, 3h, 1.2–2.4km
Water vapor mixing ratio, g/kg
statistical accuracy, 3h, 1.2–2.4km
altitude, km
UTC time, 190327
0.04
0.03
0.02
0.01
0.00
3.00
2.80
2.60
2.40
2.20
2.00
0.20
0.16
0.12
0.08
0.04
0.00
5.00
4.00
3.00
2.00
1.00
0.00
16
18
20
22
24
26
28
1
2
3
4
5
6
7
8


Particle backscatter, 532nm, 1/Mm/sr
statistical accuracy, 3h, 1.2–2.4km
Temperature, K
statistical accuracy, 3h, 1.2–2.4km
Water vapor mixing ratio, g/kg
statistical accuracy, 3h, 1.2–2.4km
altitude, km
UTC time, 190327
0.04
0.03
0.02
0.01
0.00
250.00
240.00
230.00
220.00
210.00
200.00
190.00
10.00
8.00
6.00
4.00
2.00
5.00
3.00
1.00
16
18
20
22
24
26
28
1
2
3
4
5
6
7
8