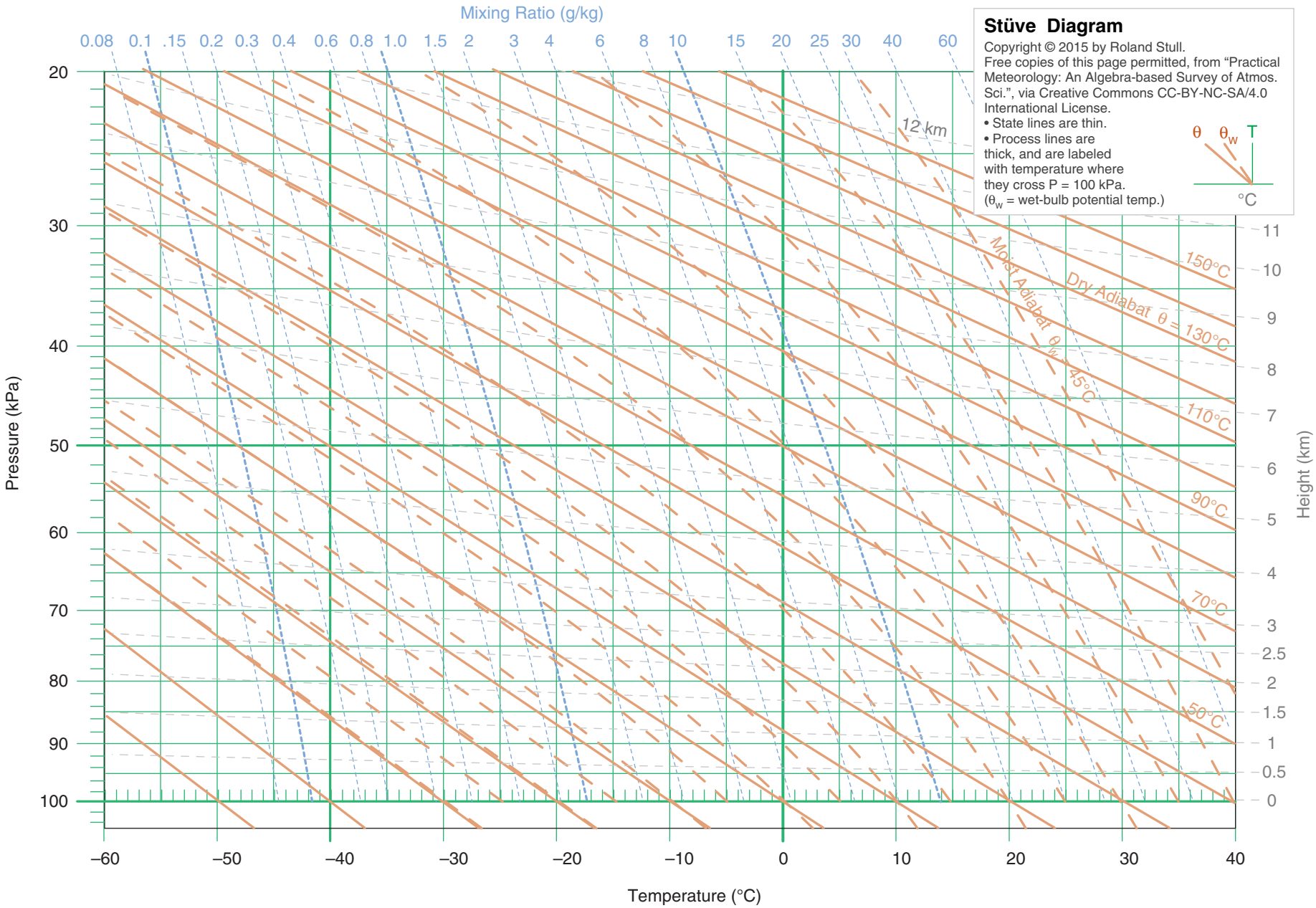
Stüve Diagram
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• State lines are thin.
• Process lines are thick, and are labeled with temperature where they cross P = 100 kPa.
(θ_w = wet-bulb potential temp.)
θ θw T
°C
Mixing Ratio (g/kg)
0.08 0.1 .15 0.2 0.3 0.4 0.6 0.8 1.0 1.5 2 3 4 6 8 10 15 20 25 30 40 60
Pressure (kPa)
20 30 40 50 60 70 80 90 100
Height (km)
11 10 9 8 7 6 5 4 3 2.5 2 1.5 1 0.5 0
12 km
150°C
130°C
110°C
90°C
70°C
50°C
Dry Adiabat θ
Moist Adiabat θw = 45°C
–60 –50 –40 –30 –20 –10 0 10 20 30 40
Temperature (°C)