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? WHY THE WEATHER ?

Dr. Charles F. Brooks,
Secretary, American Meteorological Society,
discusses:

MOUNTAIN TOP WEATHER

The mountain top has its own weather, very different from that of the surrounding country. In the first place, it is cooler on the mountain, especially by day. Sometimes by night, however, it is warmer, even though the loss of heat from the ground is often greatest at the higher altitude, for the air cooled by contact with the cooled ground slides into the valleys, leaving the slopes and summit warmer than the valleys 1,000 feet or more below.

The wind blows harder on the mountain. By night local winds tend to blow down the slope, by day, up. The forced rising of warm air often forms clouds, which envelope ridge and peak, while it is clear in the lowlands, and for the same reason rainfall is greater, and thunderstorms very severe. The barometer is much lower, for it falls one inch for approximately each 900 feet of altitude, and with decreased air pressure the boiling point of water is lowered, which may be observed from the longer time required to boil food. Spectacularly, a part of mountain top weather is the radiation fog which forms in the valleys below, oftentimes to dominate the landscape of the late night and early morning, appearing as an ocean of clouds, in which the mountain tops are islands.

(Tomorrow: Heat on Mountain Slopes.)

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