

## THE STATIC PERMITTIVITY AND SNOW CLASSIFICATION

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The complex dielectric constant of Alpine snow samples with different stages of metamorphism and liquid water content has been measured in the frequency range of up to 100 MHz. Both the static dielectric constant and the high-frequency loss factor depend strongly on the snow texture. The shape of the snow grains was found to be an important texture parameter; it is particularly suited for snow classification. On the condition of a low dc conductivity, shape factors to classify Alpine snow samples can be derived from the static permittivity.