**CALCULATING THE NET RADIATION POTENTIAL OF AN ALPINE DRAINAGE BASIN**

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Because net radiation is usually the dominant form of surface energy exchange in alpine regions, different snow characteristics and rates of snowmelt are strongly related to variations in this every parameter. While it is difficult to estimate spatial variations of alpine snowcover characteristics, the spatial distribution of net radiation can be modeled. A technique is presented which estimates the net radiation potential over an alpine drainage basin represented by a digital terrain grid. A value of net radiation is calculated for each grid point from models of terrain characteristics, solar and thermal radiation transfer, atmospheric characteristics, and snow surface reflectance and emission. Values are grouped into categories which can be mapped over the basin, showing spatial variations in the radiant energy exchange under typical snow season conditions. These maps can be used as an index to variations in snowcover characteristics which are closely related to radiant energy flux.