TEMPERATURE GRADIENT WEAKENING NEAR CRUSTS IN A MARITIME SNOWPACK

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Given certain meteorological conditions, temperature gradient weakening of a maritime snowpack may be an important, although infrequent, contributing factor in slab avalanche releases in the Washington Cascades. Observations indicate that such temperature gradient weakening, when it occurs, is concentrated around or within rain crusts in the upper layers of the snowpack. Although well developed temperature gradient crystals are rarely found within maritime snowpacks, observations indicate they are not required for significant mechanical weakening of the snowpack in the vicinity of crusts.