

75 cm were recorded. An exception to the latter occurred on the lower beach slope in late September at Radstock Bay where depths of up to 1.2 m were found; however, the increased depth is actually less because of the occurrence of buried lenses of frozen material less than 15.0 cm from the beach surface. An attempt to correlate frost-table depths with beach sediment size, and with aspect, was unsuccessful due to the considerable local variations in these controls at each site. Investigations of the changes in frost-table depths over short time intervals gave the following results: at the site on northern Somerset Island the frost table increased, across the whole foreshore, by 2.4 cm in the 10 day period, 3–13 July 1972; at the site on Hooker Bay the frost-table depth increased, across the whole foreshore, by 3.8 cm in the 8 day period 2–10 August 1972.

*Geological Survey of Canada,
601 Booth Street, Ottawa,
Ontario K1A 0E8, Canada*

R. B. TAYLOR

*Geography Department,
McMaster University,
Hamilton, Ontario,
Canada
10 December 1973*

S. B. McCANN

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SIR,

Microstriated ground in the Andes

The observations of Schubert (1973) in the Venezuelan Andes take me back 20 years ago, when I observed the same features in the Andes near Santiago. Although at that time I was aware of Troll's work, I had no doubt that the wind had nothing to do with it. It was a consequence of the formation of *micropenitentes* (very minute *penitentes*) in frozen soil, covered with pipkrakes at sunrise. *Penitentes* (Lliboutry, 1954, 1956, 1964–65, tom. 1) are the consequence of an instability in the ablation process by the Sun's rays in a cold atmosphere, and follow the direction of the Sun's path, i.e. an east–west direction (which may be altered on steep slopes facing east or west).

Nothing in Schubert's article compels me to change my opinion. Even if the correlation with the direction of the wind was very good (and it is not at all the case), a simple correlation is by no means a proof. Troll's confusion came from the fact that microstriae are also seen on bare soil after gusts of wind. But they have quite different features (cf. figure in Lliboutry, 1964–65, tom. 1, plate 29).

*Laboratoire de l'Aiguille du Midi,
2 rue Très-Cloîtres,
38 Grenoble,
France*

L. LLIBOUTRY

14 November 1973

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