**A briefly annotated bibliography for all things solifluctuitious (is that a word?)**

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Ballantyne, C. K. 1978. The hydrologic significance of nivation features in permafrost areas. *Geografiska Annaler, Series A, Physical Geography*, 60:51-54.

A look at snowpack-generated runoff in the Canadian high arctic reveals that the water is actually coming from the active (i.e., freezing/thawing) layer of soil, and not necessarily the snow itself. The rising of permafrosted soil to the surface of the ground underneath perennial snowpatches also contributed to run-off and rillwash. So snowmelt just isn't that important, eh? A concise little paper but methods seemed pretty "quick-and-dirty."

Matsuoka, N. 2005. Temporal and spatial variations in periglacial soil movements on alpine crest slopes. *Earth Surface Processes and Landforms*, 30:41-58.

Ok, so diurnal freeze-thaw activity does influence soil creep, but only on well-drained slopes with no vegetation mat. Otherwise, seasonal freeze-thaw seems to play a greater role – although, this varies widely with depth-to-bedrock, soil texture and moisture, etc. Oh, and it varies from Japan to Switzerland. A long, long paper, with many, many figures, and NO MAP. Sort of interesting but I fell asleep each time I tried to read it.

Jahn, A. 1967. Some features of mass movement on Spitsbergen Slopes. *Geografiska Annaler, Series A, Physical Geography*, 49:213-225.

This was a rambling descriptive paper – good information in here, but I'm pretty sure this was an excuse to get out hiking in a nifty place. Nuthin wrong with that.

Yamada, S; H. Matsumoto, K. Hirakawa. 2000. Seasonal variation in creep and temperature in a solifluction lobe: continuous monitoring in the Daisetsu Mountains, Northern Japan. *Permafrost and Periglacial Processes*, 11:125-135.

Guess what? Seasonal freeze-thaw cycles are more important in generating soil creep than diurnal freeze-thaw cycles are. At least, this is the cause on alpine slopes in Japan. Great diagrams, photographs, figures, and yes, a good map, too!