Figure 1. Map of general area and five study locations.

Figure 2. Typical landscape of the Røldal study area.
Figure 3. Solute sampling locations at Snøskar (note some seepages and streams are too small to be shown at this scale).

Figure 4. Conductivity depth profile for one snowpatch (all snow above dashed line is from last winter).
Narrow fracture with rounded edges. Probably associated with granular disintegration.

V-shaped fracture enlargement produced by break off and removal of rock fragments which often contribute to infilling.

Overhanging fracture walls relating to rock structure (e.g., gneissose banding, schistocity).

Tightly closed incipient fracture. May be regarded as 'potential weathering line' (Whalley et al. 1982).

Open, parallel-sided fracture usually due to shallow spalling of fracture walls.

Multiple parallel fractures with wide (often >25cm), lowered central area.

**Figure 5.** Observed cross profiles of enlarged fractures.

**Figure 6.** Box plots comparing weathering rind thickness for exposed surfaces and fracture walls.
$y = 0.6x + 34.4$

$R^2 = 0.83$

$n = 40$

**Figure 7.** Correlation between mean $R_1$ and $R_2$ site values.

**Figure 8.** Shallow surface spalling in quartzitic schist.
Figure 9. Fracturing and downslope movement of loose blocks. Stepped spalling (see text) associated with foliation in granitic schist.
Figure 10(a). Typical shallow weathering pit in actinolite amphibolite.

Figure 10(b). Honeycomb weathering pits in chlorite mica-schist.
Figure 10(c). An isolated pseudokarren in actinolite amphibolite.

Figure 10(d). Crenulated and undercut edges of pseudokarren ‘solution’ forms in amphibolite.