Permafrost Knowledge Path

1 Permafrost and temperature – the global perspective

Solutions:

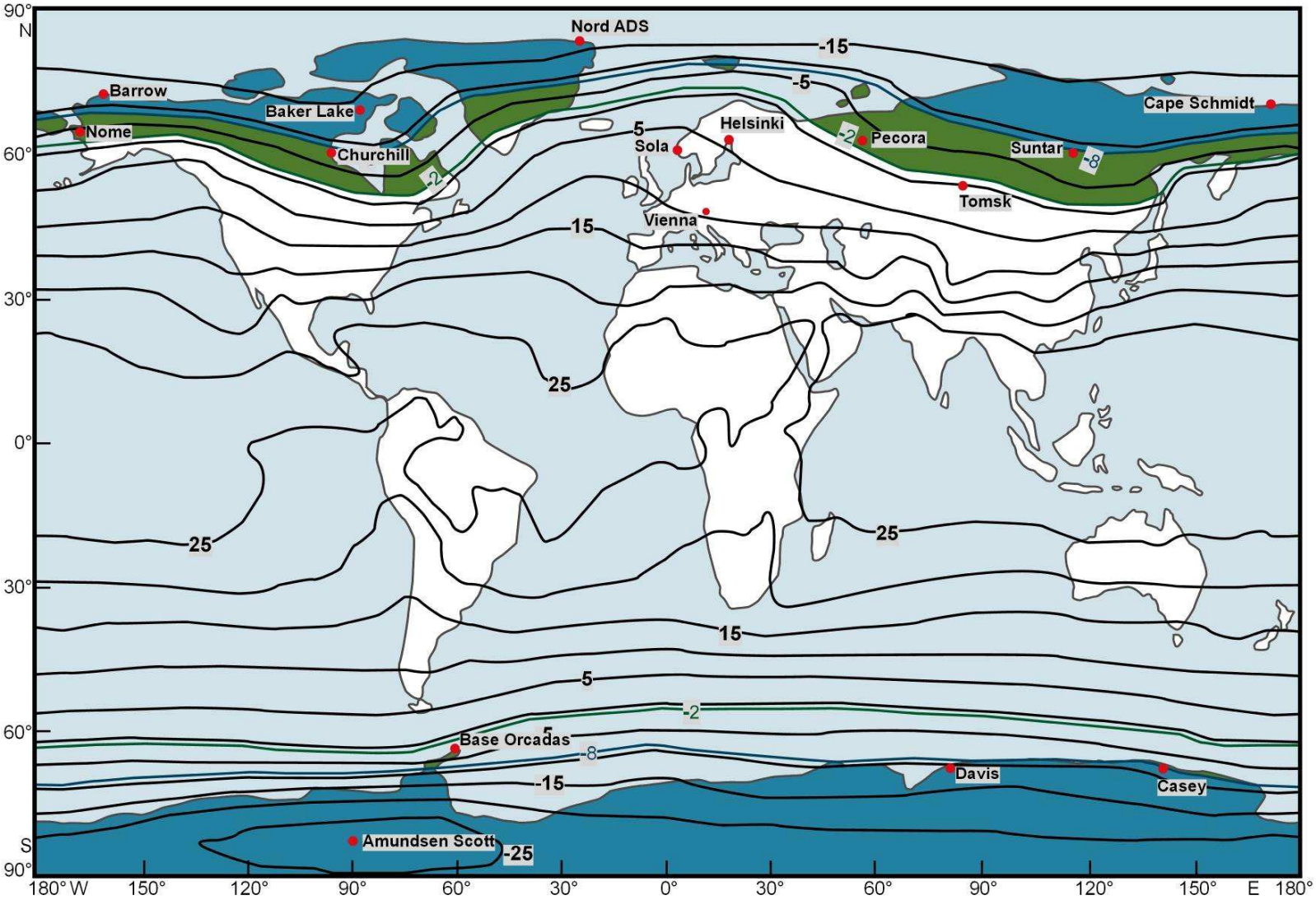
1. Alaska: Barrow: -12.5℃, Nome: -3.2℃
   Canada: Baker Lake: -12.2℃, Churchill: -7.1℃
   Greenland: North ADS: -16.8℃
   Norway: Sola: 7.4℃
   Finland: Helsinki: 4.5℃
   Austria: Vienna: 9.9℃
   Russia: Pecora: -2.4℃, Tomsk: 0.1℃, Suntar: -7.6℃, Cape Schmidt: -11.9℃
   Antarctica: Davis: -10.4℃, Base Orcadas: -3.4℃, Amundsen Scott: -49.3℃, Casey: -9.1℃

2. See map

3. The largest areas of permafrost on earth are situated in northern North America (Canada, Alaska), in northern Eurasia (Sibiria) und in Antarctica.

4. Special question: The western coasts of the continents are warmed up by relatively warm marine currents. Furthermore these coasts are influenced by maritime climates, which are characterized by warmer winter temperatures than in the middle of the continents. Thus soil does not cool down so much, prohibiting the development of permafrost.

PERMAFROSTDISTRIBUTION on Earth



Source: edited after Schönwiese 1994

discontinuous Permafrost

continuous Permafrost