

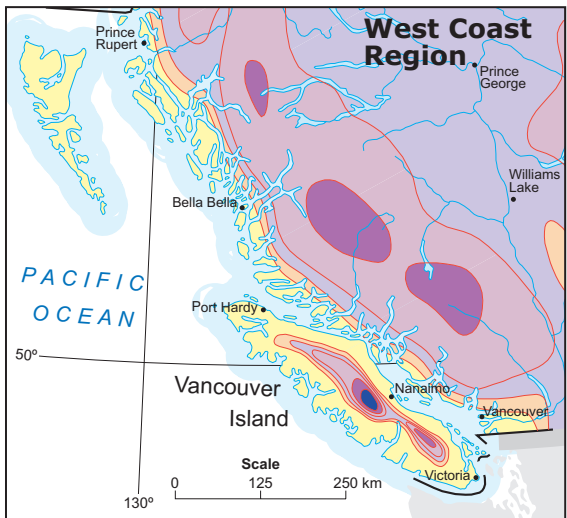


**Over southern Canada maximum snow depth usually occurs in January or February, while the time of maximum accumulation occurs much later in mountain areas and in the Arctic.** The main features of the map are the pronounced maximum in snow accumulation over the western Cordillera (British Columbia and Yukon), where snow depths can exceed several metres, with a secondary maximum over Quebec and Labrador. These maxima are related to their proximity to oceans, which act as sources of moisture and winter storms, and to the orographic effect of the mountains in the case of western Canada. The two maxima are linked by a band of higher snow accumulation that follows the boreal forest zone; this is a preferred track for winter storms. To the north of this zone is the relatively shallow snow cover of the Arctic (low snowfall with extensive wind packing). To the south, the depth of snow is limited by the shorter accumulation season and the substantial sublimation of snow over the Canadian Prairies.

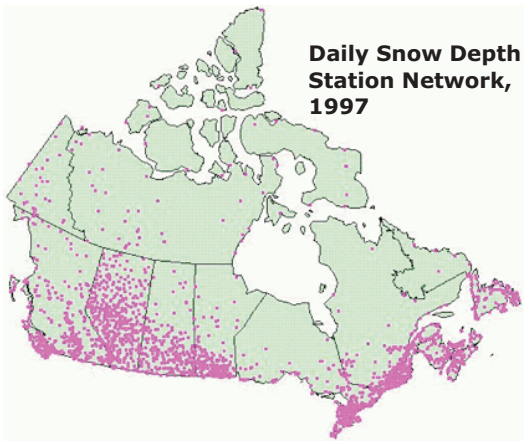
**CANADA**  
**Average Maximum Snow Depth**  
 Average maximum snow depth computed over 18 winter seasons (1979 to 1997)

- Less than 30 cm
- 30 to 49 cm
- 50 to 99 cm
- 100 to 199 cm
- 200 to 299 cm
- 300 cm and greater

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Daily observations of the depth of snow on the ground have been made at most Canadian synoptic stations since the 1950s and at most climate stations since 1980. Unfortunately, the stations in the snow-depth network are mainly located in southern Canada and do not adequately sample mountainous regions or high latitudes.



Snow-depth data are used extensively in applications such as regional climate monitoring, evaluation of climate models, roof snow load calculations for the National Building Code, snow-clearing contracts, winter survival of crops, biological studies and calculation of forest-fire severity.

Source: Environment Canada, Meteorological Service of Canada.

