



Climate and time zones

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Climate

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Climate depends primarily on radiative exchanges between the sun, the atmosphere and the surface of the earth. In addition, the regional climates of Canada are controlled by the geography of North America and by the general movement of air from west to east across the continent. The climate of the Pacific Coast is cool and fairly dry in summer but mild, cloudy and wet in winter. Interior British Columbia has climates varying more with altitude than latitude: wet windward mountain slopes with heavy snows in winter; dry "rainshadow" valleys, very hot in summer; and high plateaus with marked day to night temperature contrasts. A vast area of interior Canada, from the Rocky Mountains to the Great Lakes, has a continental-type climate — bitterly cold winters, short but warm summers and scanty precipitation. The southern portions of Ontario and Quebec have a humid climate with cold winters, hot summers and generally ample precipitation throughout the year. The four Atlantic provinces have a humid continental-type climate although in the immediate coastal areas there is a marked maritime effect. On the northern islands, along the Arctic Coast and around Hudson Bay arctic conditions persist, with long frigid winters and only a few months each year with temperatures averaging above freezing. The precipitation is light in the tundra area north of the treeline. Between the arctic and southern climates a vast band of Boreal Canada has a transitional type climate with bitter long winters but appreciable summer periods. Precipitation is light in the west, but heavier falls occur in the Ungava Peninsula.