Continental VS Maritime Climate

**Continental Climate**

Regions with a continental climate usually experience hot summers and colder winters, being far away from the moderating influence of the ocean. The ocean, or other large bodies of water keep climates milder in winter and cooler in summer. Therefore, if the region is located far away from the ocean or other large body of water, you get very hot summers and very cold winters. This is because soil and rock have a much lower heat capacity than water. This means that soil and rock gain and lose heat much more quickly than water. Continental climates are often found to be relatively dry. Most of the moisture carried by air masses originating over ocean regions far away is lost as rainfall earlier in its journey. Regions of the Earth that have continental climates include Siberia and central Russia, and much of North America. Siberia, Canada and the northern states of the US in particular can exhibit very large differences between summertime and wintertime average temperatures. This difference can be upwards of up to 40°C! Air masses that originate from continental interiors, (regions found in the middle of continents) sometimes influence continental fringes (areas found on the outside of continents) that usually experience maritime climates.

**Maritime Climate**

In contrast to [continental climates](http://www.ecoca.ro/meteo/tutorial/Climate/Older/Continental_Climate.html), maritime climates experience generally cool summers and mild winters, with a much smaller annual temperature range. This is because water has a much higher heat capacity than soil and rock. Seawater takes a long time to warm up in summer, but once heated it retains its energy long after the surrounding land has cooled down, helping to moderate the climate. Maritime climates generally are fairly humid, accompanied by considerable amounts of precipitation,(snow, rain, sleet, and hail) since the main moisture source (the ocean or other large body of water) is not very far away.

Think about our winters here in New Brunswick. While we get a lot of snow, the record low temperature is -34˚C. Compare this with the lowest temperature ever recorded in Saskatoon, Saskatchewan which was -50˚C! What about the summer? The record high temperature for New Brunswick was 32˚C, while the highest temperature in Saskatoon was 41˚C!