

Continentality

- In this lesson you will:
 - 2.5.1 Define the term temperature range. (k)
 - 2.5.2 Analyze the relationship between range in temperature and distance from the ocean. (a)
 - 2.5.5 Describe the relationship between seasonal level of precipitation and distance from the ocean. (k)

Continentality

- **Temperature range:** the difference between the highest and the lowest average monthly temperatures of a region.
 - **Large or high** temperature range: extremes of temperature...hot summer, cold winter.
 - **Small or low** temperature range: moderated temperature...warm summer, cool winter

Continental Climates

- As distance from the ocean increases, annual temperature range increases.
- **Continental climates** experience higher temperature ranges than coastal climates at the same latitude.
- **EXAMPLE: Ottawa, Ontario**
 - Has hot summers
 - Has cold winters

Maritime Climates

- **Example: St. John's, Newfoundland** would experience a **Maritime climate**:
 - The **winter temperatures** would be **milder**.
 - The **summer temperatures** would be **warm but not hot**.

Areas Circled...Ottawa and St. John's

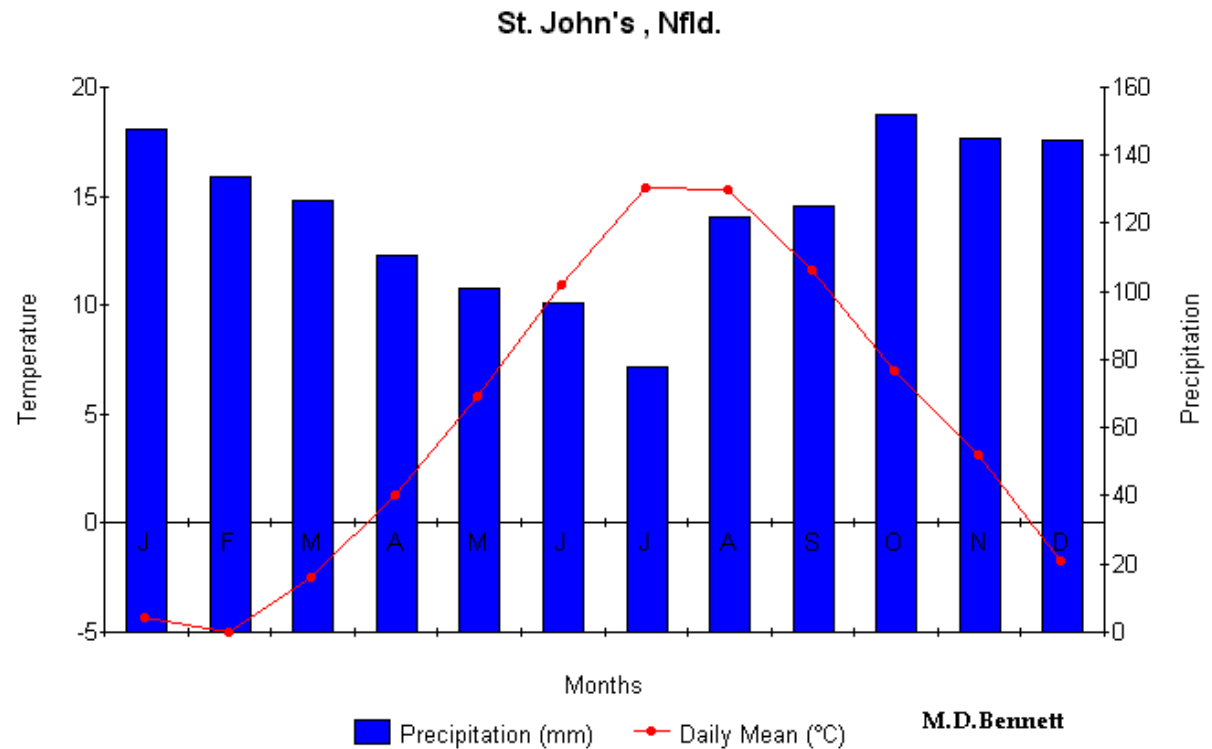


Climate Graphs

- The left scale indicates the **temperature** and it is **graphed as a line**, blue/red is common.
- The right scale is for **precipitation** and is **graphed as a bar graph**, blue/red is common.

Comparing Climates

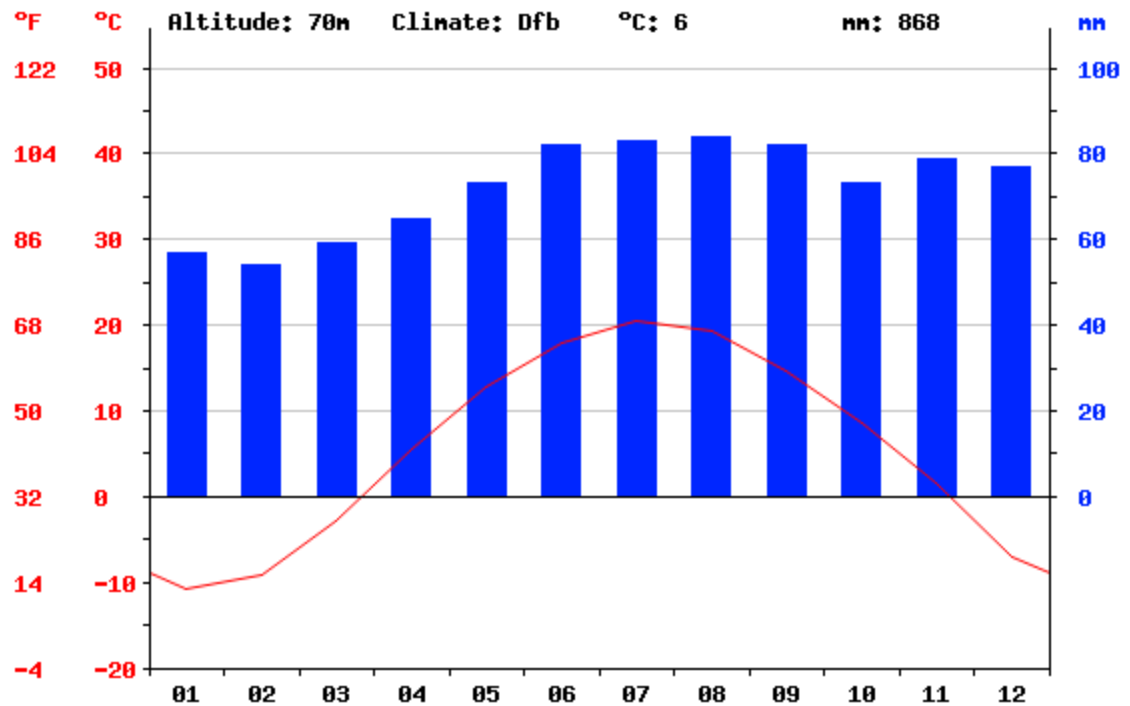
High
temperature:
 15°C
Low
temperature:
 -5°C
RANGE:
 20°C



Comparing Climates

High
temperature:
 20°C
Low
temperature:
 -10°C
RANGE:
 30°C

Ottawa, ON



Monsoons

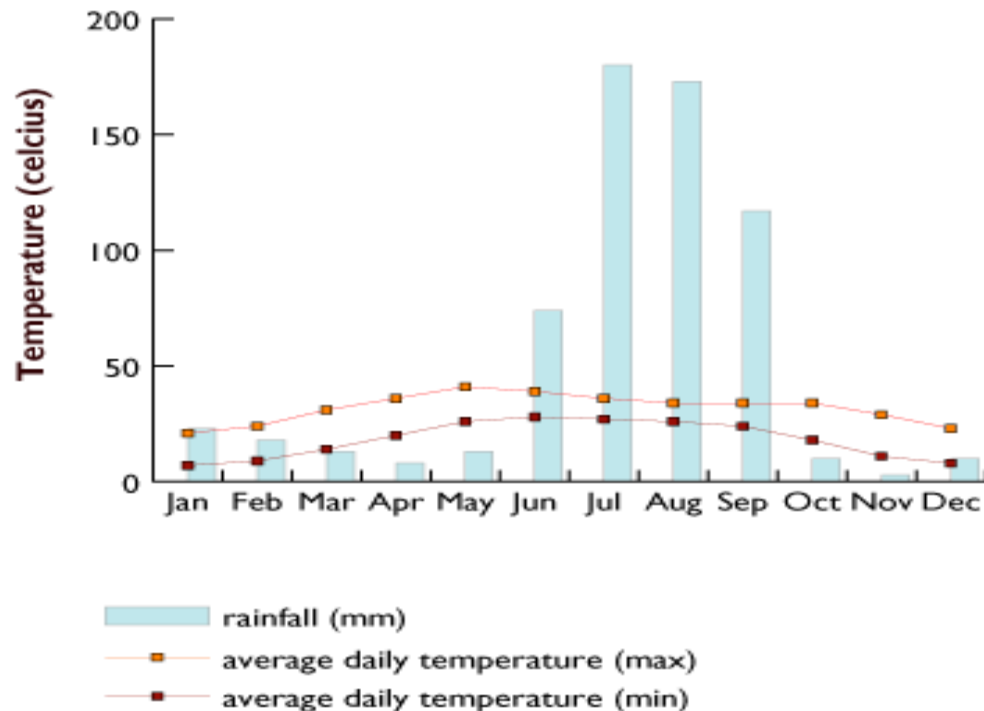
- In this lesson you will learn to...
 - 2.5.3 Define the term monsoon. (k)

Monsoons

- From Arabic for 'seasonal wind'
- **DEFINITION:** a sudden wet season in the tropics.
- For part of the year, places like India get months with very little rain.
- For the rest of the year, they get heavy rain almost every day.
- VIDEO: [Indian Monsoon](#)



- Statistics: Bombay/Colaba, India - The Weather Network



Elevation & Climate

- In this lesson you will:
 - 2.6.1 Define the term elevation. (k)
 - 2.6.2 Describe the relationship between the elevation of a point and its temperature and precipitation. (k)

ELEVATION & TEMPERATURE

- **Elevation:** the height of a region above sea level
- **Air temperature decreases 2°C for every 300 m increase in elevation.**
- The higher up we go the colder it gets...hence snow on mountain tops

Elevation & Climate...Comparing Locations

- **La Paz, Bolivia:**
 - Elevation...3600m.
 - coldest month...average temperature of 9°C.
 - [Bolivia Climate and Weather](#)
- **Rio de Janeiro, Brazil:**
 - Elevation...61m.
 - coldest month has...average temperature of 25°C.
 - [Rio de Janeiro climate and weather Brazil](#)
- Both locations have a **similar distance from ocean and similar latitude.**
- However, La Paz is much colder because of higher elevation.



Continentality Lab

- **By this time you should have a fairly good idea how continentality affects climate and weather. You also know how oceans, latitude and wind affect weather and climate.**
- **Do ACTIVITY**