# Klmatische Grundlagen

Klimafaktoren

## Weather and Climate

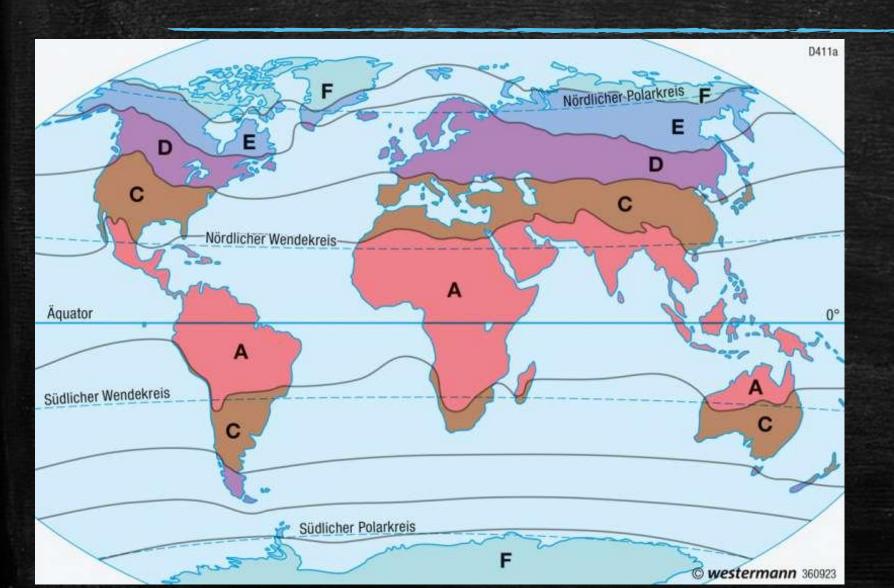
### Weather

- Short term (hours/day)
- Local (city, parts of a city)
- Rapid changes

### Climate

- Long term (years/decades)
- Regional (parts of continents)
- Slow changes

# The World's Climate Zones



- F Polarzone
- E Tundra
- D Gemäßigte Zone
- C Sub-Tropen
- A Tropen

# Factors Affecting Weather and Climate

### **Elements**

- Radiation
- Air Pressure
- Humidity
- Cloud formation
- Precipitation
- Wind

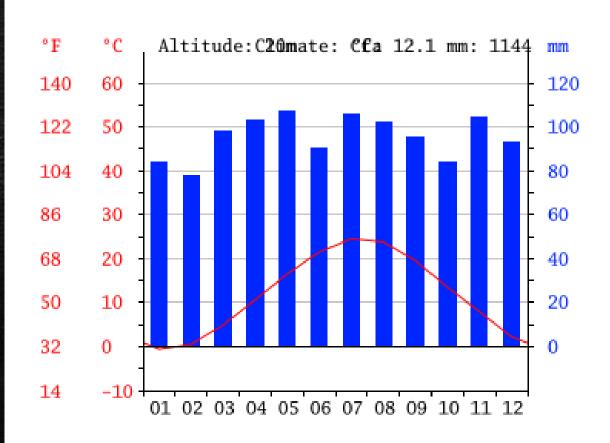
### **Factors**

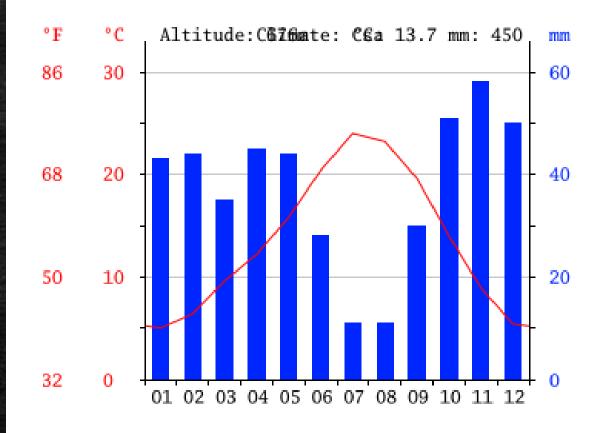
- Geographic Area
- Elevation
- Location (water/land)
- Vegetation
- Exposure

All the elements can be measured

All the factors are naturally given

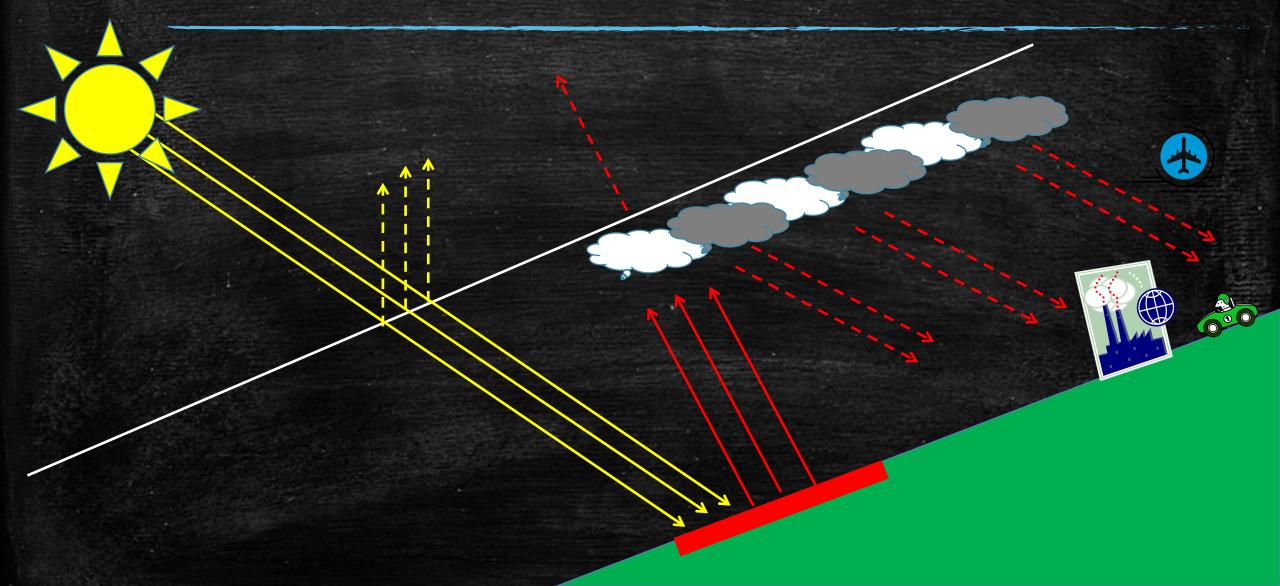
# Climate Charts (Klimadiagramme)





# Greenhouse Effect - man made?

# Greenhouse Effect - man made?



### Sources

- https://diercke.westermann.de/content/erde-thermische-klimazonen-978-3-14-100803-6-244-1-1
- https://de.climate-data.org/nordamerika/vereinigte-staaten-von-amerika/new-york/new-york-1091/
- <a href="https://de.climate-data.org/europa/spanien/autonome-gemeinschaft-madrid/madrid-92/">https://de.climate-data.org/europa/spanien/autonome-gemeinschaft-madrid/madrid-92/</a>