

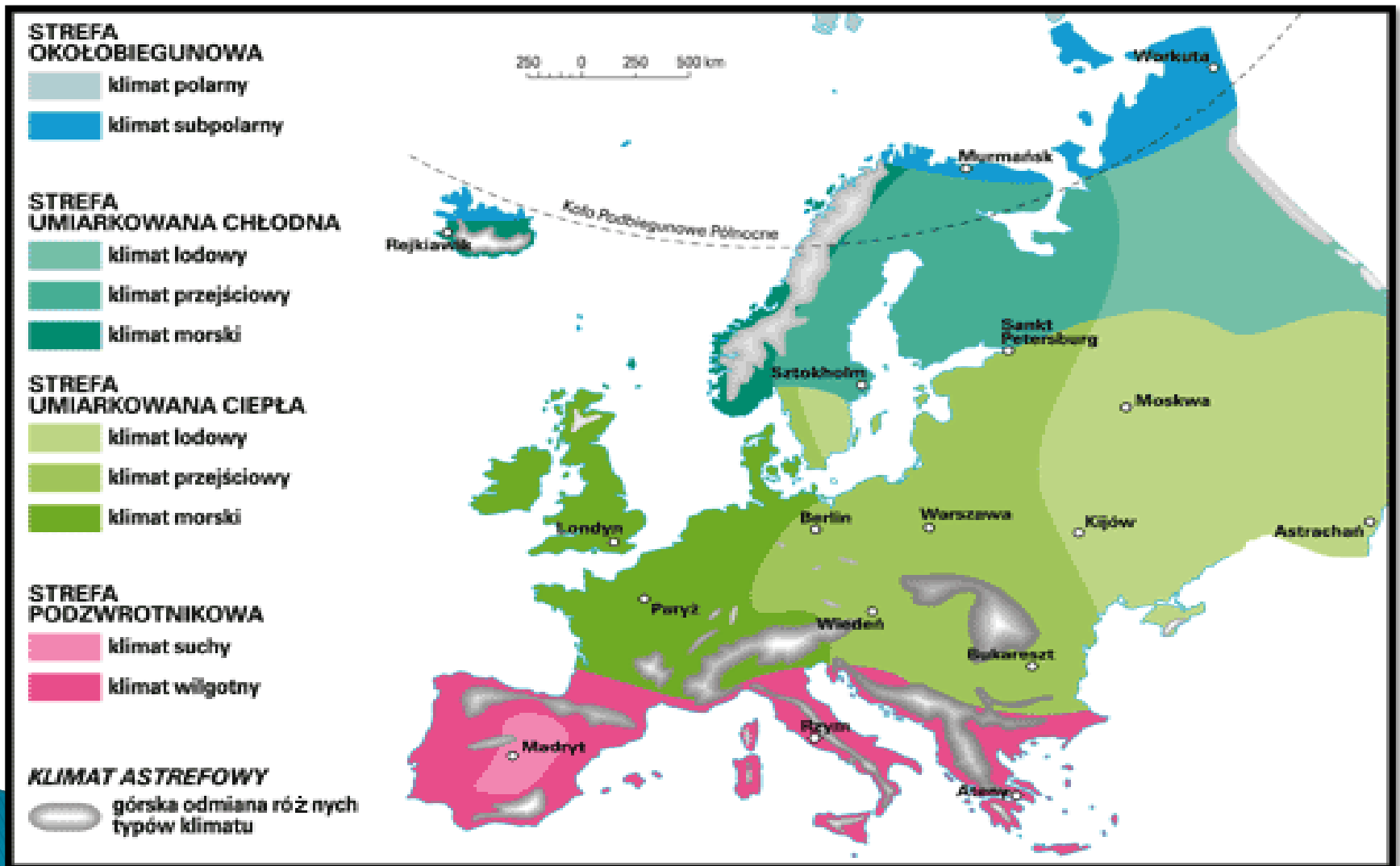
Climate zones in Europe



CIRCUMPOLAR ZONE

TEMPERATE ZONE

SUB-TROPICAL ZONE



Sub-tropical zone

It is divided into several climatic variations. Among them the Mediterranean climate is most favorable. The average annual temperature in this climate is several degrees Celsius. Precipitation occurs mainly in the winter months, and the summer is usually sunny, dry and warm. Average air temperature values in summer time exceed 20 degrees Celsius.



Temperate zone

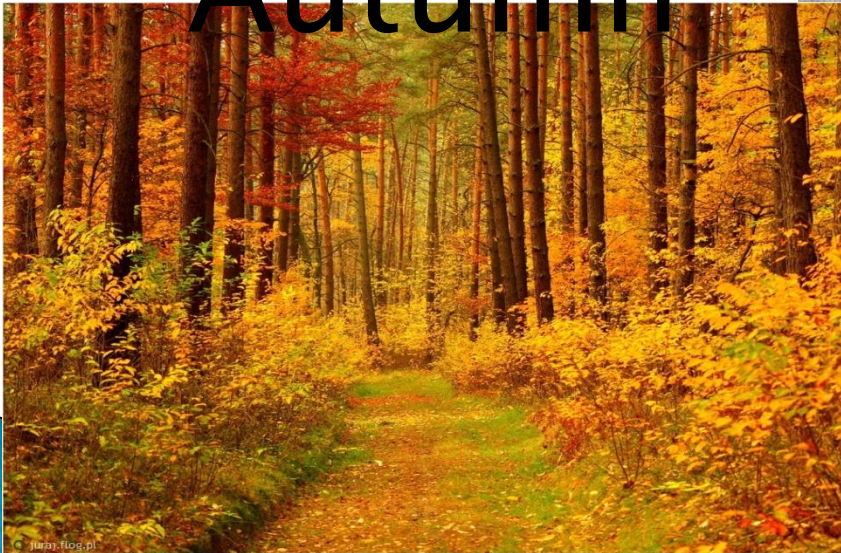
This zone is characterized by the occurrence of distinct seasons. Summer is usually warm and winter is cool. The annual precipitation totals range from over 600 mm in the marine variety to less than 200 mm in the continental variety. The lowest annual amplitudes of air temperature are found on the coast, and the highest exceeding 60 degrees Celsius in the interior of the continents. In areas where the influence of both the ocean and large land areas is observed, there is a transient variation of climate, characterized by high variability in weather.

Summer



Spring

Autumn



Winter

Circumpolar zone

The polar zone is characterized by long and frosty winters. The lowest air temperatures are observed here in land areas. In this area, there is light rainfall, mainly in the form of snow, and very strong winds. There are two seasons here: during the polar night – a very cold winter, and during the polar day – cool and short summer.



Arctic

- Temperature rise much larger than global average
- Decrease in Arctic sea ice coverage
- Decrease in Greenland ice sheet
- Decrease in permafrost areas
- Increasing risk of biodiversity loss
- Intensified shipping and exploitation of oil and gas resources

Coastal zones and regional seas

- Sea-level rise
- Increase in sea surface temperatures
- Increase in ocean acidity
- Northward expansion of fish and plankton species
- Changes in phytoplankton communities
- Increasing risk for fish stocks

North-western Europe

- Increase in winter precipitation
- Increase in river flow
- Northward movement of species
- Decrease in energy demand for heating
- Increasing risk of river and coastal flooding

Mediterranean region

- Temperature rise larger than European average
- Decrease in annual precipitation
- Decrease in annual river flow
- Increasing risk of biodiversity loss
- Increasing risk of desertification
- Increasing water demand for agriculture
- Decrease in crop yields
- Increasing risk of forest fire
- Increase in mortality from heat waves
- Expansion of habitats for southern disease vectors
- Decrease in hydropower potential
- Decrease in summer tourism and potential increase in other seasons

Northern Europe

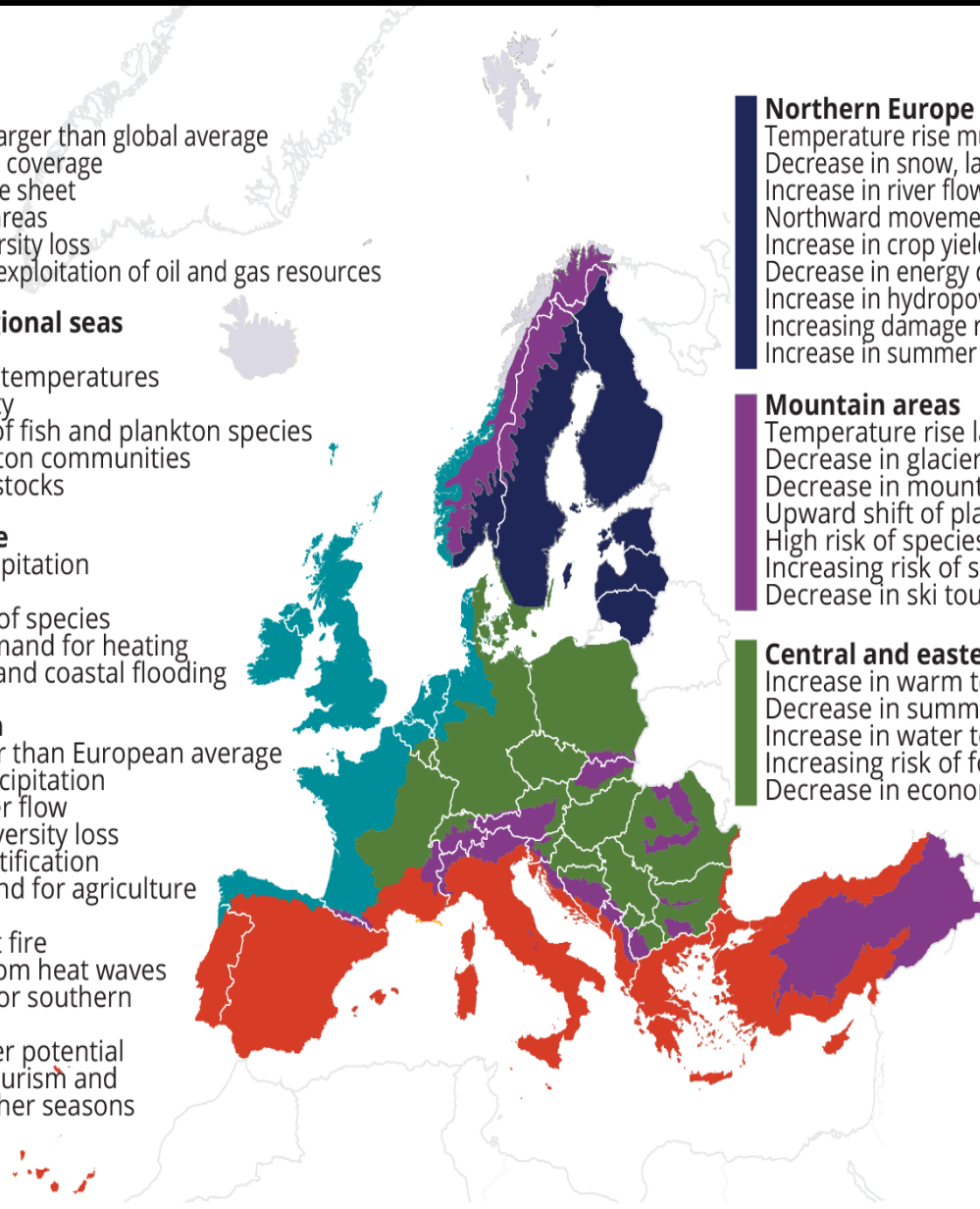
- Temperature rise much larger than global average
- Decrease in snow, lake and river ice cover
- Increase in river flows
- Northward movement of species
- Increase in crop yields
- Decrease in energy demand for heating
- Increase in hydropower potential
- Increasing damage risk from winter storms
- Increase in summer tourism

Mountain areas

- Temperature rise larger than European average
- Decrease in glacier extent and volume
- Decrease in mountain permafrost areas
- Upward shift of plant and animal species
- High risk of species extinction in Alpine regions
- Increasing risk of soil erosion
- Decrease in ski tourism

Central and eastern Europe

- Increase in warm temperature extremes
- Decrease in summer precipitation
- Increase in water temperature
- Increasing risk of forest fire
- Decrease in economic value of forests



Thank you for your attention

