



## WARMING AND HUMAN ACTIVITY

Warming can be seen on tens of thousands of individual observation stations.

The analysis of a long and homogeneous (due to the location not subject to "foreign" influences) series of observations at the weather station in Potsdam shows that the rate of increase in the average annual temperature during the last 25 years (0.55 degrees Celsius per decade) was five times stronger than during last 100 years (0.11 degree Celsius per decade).

The natural greenhouse effect causes the average global air temperature to be around +15 degrees Celsius, which allows life to exist on Earth. If there were no suitable gases in the atmosphere, the temperature would be about 33 degrees Celsius lower, i.e. 18 degrees Celsius and life on Earth could not exist.

As a result of global warming and the associated rise in ocean level (a rise of nearly 20 cm in the last century), Tuvalu may be largely under water. According to UN research, this is expected to happen by 2050.

A slight change in global temperature produces serious effects that can already be seen and felt.

### **In Poland, the sectors exposed to climate change are:**

- water management
- coastal protection
- agriculture
- health protection

### **W Polsce obszary zagrożone przez zmiany klimatu to:**

- Wybrzeże Bałtyku
- Wielkopolska
- Obszary górskie
- Gminy na terenach zalewowych
- Metropolie



Stabilizing climate change requires stopping the temperature rise at 2 degrees Celsius, which means stopping the increase in emissions by 2015 at the latest, and then reducing it to 22 Gton CO<sub>2</sub> in 2035, i.e. by 1/4 compared to 2008.