

Illustration 1.3 - Observing weather and climate

How we observe weather and climate

Scientists collect data from land, sea, sky and space to understand what is happening now and how the climate is changing.

WEATHER STATIONS ON LAND

Measure temperature, rainfall, wind, humidity and other conditions.

WEATHER BALLOONS

Rise high into the atmosphere, carrying instruments that measure temperature, pressure, humidity and wind.

SATELLITES

Watch clouds, storms, temperatures and whole weather systems from space.

SHIPS & BUOYS

Collect and send data from the ocean surface, including temperature, waves and currents.

ARGO FLOATS

Thousands of robotic floats drift with the currents and dive deep down, measuring temperature and other properties below the surface.

TOGETHER THEY SHOW US:



How clouds, rain and storms are developing



How temperatures are changing on land, in the sea and in the atmosphere



How the whole climate system is changing over time