**Topic: Climate Science**

**Climate science** studies the Earth’s climate system, including the atmosphere, oceans, ice, and land. It examines how natural processes and human activities influence climate.

**Why it’s important:**

* Explains **global warming** caused by greenhouse gases from burning fossil fuels.
* Predicts impacts like **rising temperatures, sea-level rise, extreme weather, and ecosystem changes**.

**Challenges:**

* Climate systems are complex and hard to model precisely.
* Uncertainties exist in predicting local impacts and feedback effects.

**Current state:**

* Extensive research using **climate models and satellite data** guides policy and adaptation strategies worldwide.