CLIMATE MODELLING

Hands-on Training Program

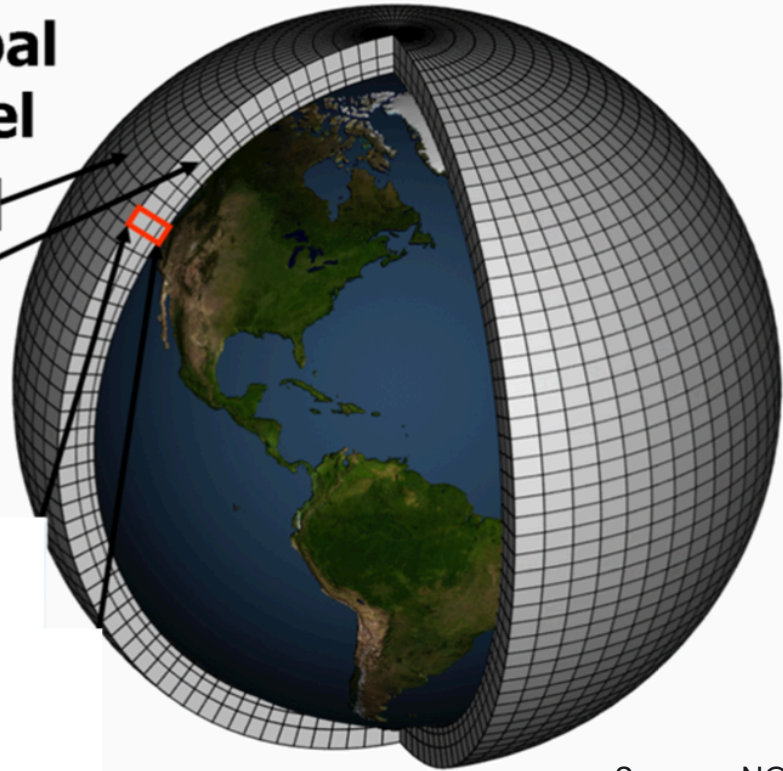Decode climate change through models
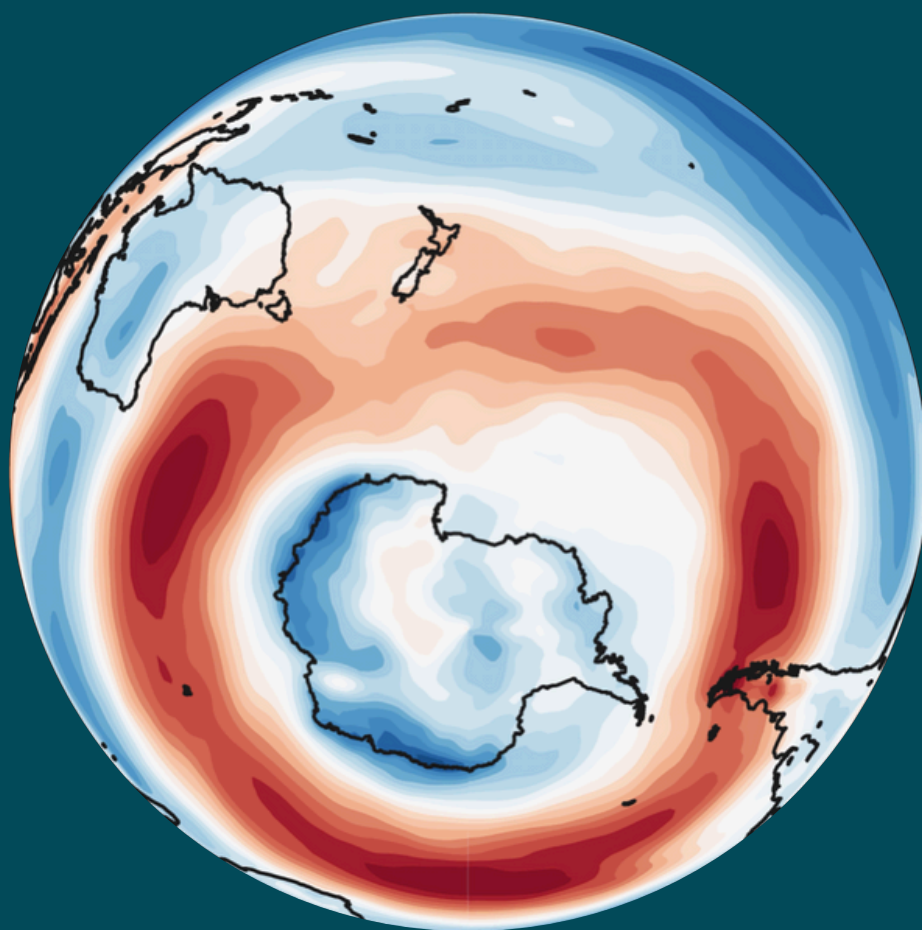
Schematic for Global Atmospheric Model

Horizontal Grid (Latitude-Longitude)

Vertical Grid (Height or Pressure)

Source: NOAA

ABOUT PROGRAM

This course offers a strong, beginner-friendly foundation in climate modelling, combining theory with hands-on practice. It is designed for students, researchers, and professionals who want to understand how climate projections are developed and how climate model outputs can be used for climate change, climate risk and climate variability (uncertainty) analysis.

Academic Launchpad
Your path to success...

PROGRAM HIGHLIGHTS

- **4-5 Months**
- **Hands on python training**
- **Two 1-1 doubt sessions***
- **Advanced climate data analysis**
- **Certificate on completion**

*30 minutes each for 2 one-to-one sessions

PROGRAM OUTLINE:

Basics of climate modelling

From 1-D models to GCMs/RCMs

CMIP5 & CMIP6

Emissions scenarios & how they are developed

Climate models

Inputs, initial & boundary conditions

Statistics

How to read maps & results

Climate variability vs climate change

Ensembles

Generation & usage for risk analysis

Hands on Python

Model data & Data analysis(climate risk analysis)

WHY CHOOSE US?

Designed for Absolute Beginners

Learn by Doing, Not Just Listening

From Basics to Applications

Industry-Relevant, Future-Ready Skills

Confidence to Work Independently

Expert-Led Instruction

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COURSE DETAILS

Interactive sessions

Start Date: Early January (Tentative: January 10)

Schedule: Saturdays only
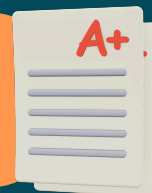
Session Length: 1-1.5 hours

Course Duration: 4-5 months

Prerequisites: No prior python or climate modelling knowledge required

Short assignment on course completion