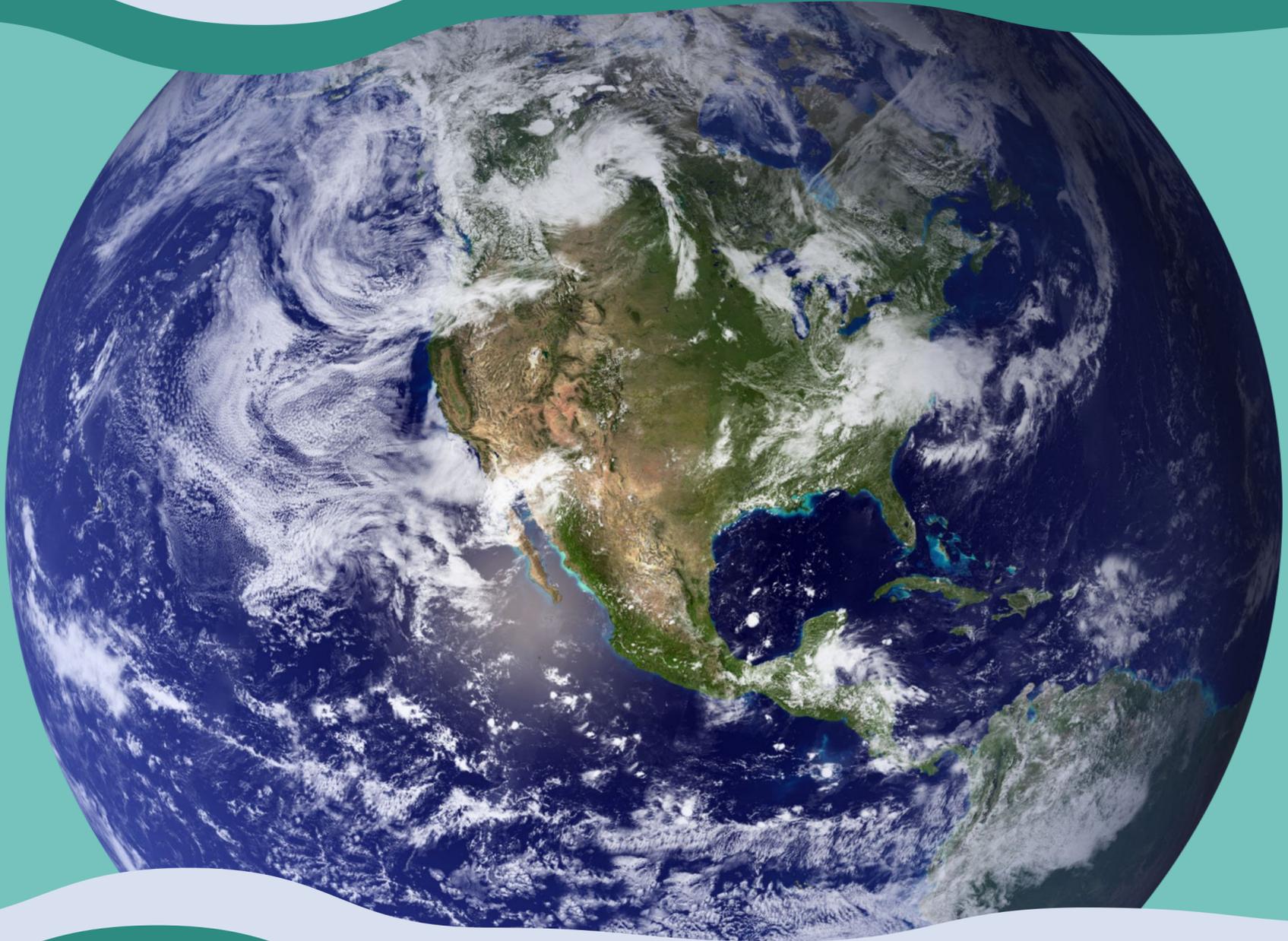


Short course on Climate Analysis and Climate Change

**SUS
TEC**

Associate
Laboratory for
Sustainability and
Technology in
Mountain Regions



21-22 October, 2022

**Auditório Cave
Escola Superior Agrária
Instituto Politécnico de Bragança**

Climate Analysis and Climate Change

Scope

This course covers a wide range of topics related to climate systems, climate processes and climate analysis, with a focus on research on climate change. Throughout this course, participants will be able to acquire knowledge and expand their understanding on atmospheric processes, their interrelationships and the laws governing them, the influence of climatic phenomena on land systems and on the environment, atmospheric physics and its application in environmental models. Participants will improve their ability to apply the knowledge acquired, evaluate data sets, interpret measured data, maps and model outputs, establish relationships of weather conditions and effects on land systems and the environment, and understand basic application models for the analysis of phenomena influenced by climatic conditions. This course will also improve autonomy of judgement and the ability to distinguish, evaluate and interpret processes related to climate and climate change. Finally, this course will contribute to the development of communication skills regarding the principles and dynamics governing climate and to the ability to conduct collaborative research.

Target audience

Graduate and undergraduate students, postdoctoral fellows, research assistants, researchers and technicians in environmental sciences, forestry, agriculture, engineering, technology, and any other fields where climate and climate analysis is relevant.

Contents

1. Introduction to atmospheric physics: an introduction to the elements of atmospheric physics in order to understand the laws governing the climate system
2. Atmospheric and oceanic circulation: brief digression on atmospheric and oceanic circulation
3. Climate Parameters: understanding and analysis of climatic parameters and their measurement methods, based on the requirements of the World Meteorological Organisation
4. Procedures for climate analysis: description of the procedures required to perform climate analysis
5. Overview of climate research in the world and central Italy: assessment of climate change in the world and especially in Central Italy, difficulties in correctly counting rainfall in mountainous environments

Instructor: Matteo Gentilucci, University of Camerino, Italy

Schedule: 21 and 22 of October, 9h00 to 12h00 and 14h00 to 17h00

Seats available: 30

Registration mandatory

Free of charge!

Register at:



<https://qr.net/naFzYA>