

MODELING AND STATISTICAL TOOLS TO STUDY PAST, PRESENT AND FUTURE CLIMATE VARIABILITY

14 hours Course

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COURSE AIMS:

The course provides, firstly, a brief introduction to climate modeling theory and climate modeling tools available for producing projections on global and regional scale. The potentiality and limits of this approach will be reviewed. Then, it focuses on the available datasets for studying the past variability of the climate with particular attention on reanalysis datasets (ERA5). In both cases it will be also shown how to download and manage these data (for example cdo tools). After, some statistical techniques to analyze climate data will be discussed. Finally, it will be shown the results based on the use of both tools for the Mediterranean region.

Topics covered

- Climate modeling on global and regional scale (4 hours)
- Climate Reanalysis and Observational datasets (2 hours)
- Statistical techniques for studying the climate (4 hours)
- How to download and manage these data (1 hours)
- The climate in the Mediterranean region: past, present and future variability (3 hours)

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PhD Course

16th March 2022, via Garzetta 48, Brescia
9:30-13:30 - Aula 27
14:30-16:30 - Aula 26

23rd March 2022, via Garzetta 48, Brescia
9:30-12:30 - Aula 27
14:30-16:30 - Aula 26

25th March 2022, 9:30-12:30 online
([click here to join on Teams](#))



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