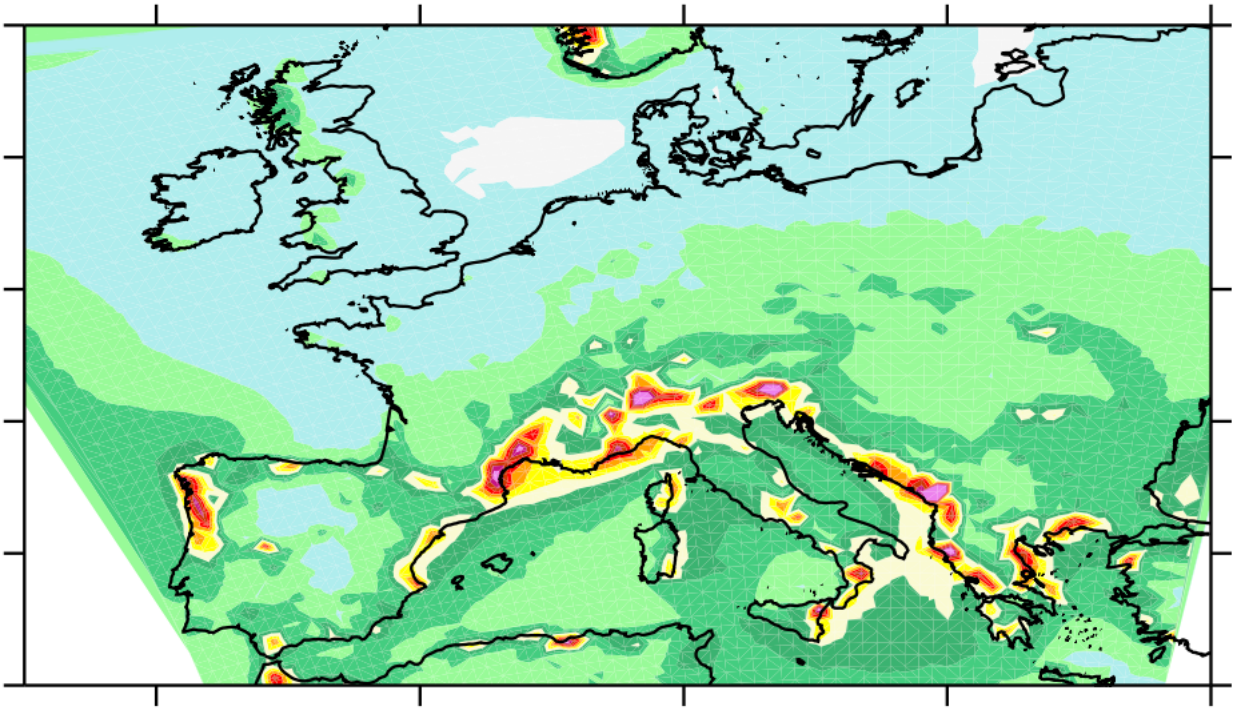
Serving climate services:
advanced statistical methods made accessible

(Proposer: Francesco Marra)

This project aims at **making advanced statistical methods accessible and useful for climate services**. In recent years, new approaches for projection of extreme events in future climate scenarios have been developed. Making those accessible to the climate services community would foster our ability to cope with the impacts of climate change.

Awareness of climate change impacts on social, economic, and environmental levels is growing. As a result, the demand for climate services, such as climate data analysis tools and reliable models able to assist decision-making, is quickly increasing. A major challenge is the quantification of future changes in extreme weather evens. Because extremes are rare by definition, their statistical analysis is accompanied by great uncertainties which challenges the reliability of our predictions. Advanced statistical methods have been recently developed and advanced climate model simulations allow us to reach the scale of individual storms with enhanced accuracy.



This doctoral project aims at making these advances accessible and useful for climate services. To do so, the PhD candidate will establish collaborations with climate services from public and private entities interested in dealing with climate change impacts. The primary needs will be identified, and tools able to efficiently deliver the needed information will be devised. The project will bridge the gap between research and practice of climate change adaptation.

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