



Swedish centre for impacts of climate extremes

interdisciplinary

# SUMMER SCHOOL

on impacts of climate extremes



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FUNDED BY:  
Vetenskapsrådet

## SCHEDULE

	<b>Monday 17th</b>	<b>Tuesday 18th</b>	<b>Wednesday 19th</b>	<b>Thursday 20th</b>
<b>09.00- 10.15</b>	Lecture Climate Extremes (R. F. Franco)	Lecture Disproportionate Impacts (E. Boyd)	Lecture Population Health (E. Raffetti)	Soft Skills III (E. Boyd)
<b>10.15- 10.45</b>	Break	Break	Break	Break
<b>10.45- 12.00</b>	Lecture Climate Impacts (G. Messori)	Exercise Session (T. Carvalho)	Exercise Session (T. Carvalho)	Lecture AI (J. Nivre/ O. Mogren)
<b>12.00- 13.15</b>	Lunch	Lunch	Lunch	Lunch
<b>13.15- 14.30</b>	Exercise Session (T. Carvalho)	Soft Skills I (A. M. Vargas)	Soft Skills II (M. P. Manrique)	Exercise Session (T. Carvalho)
<b>14.30- 15.00</b>	Break	Break	Break	Break
<b>15.00- 16.15</b>	Exercise Session (T. Carvalho)	Soft Skills I (A. M. Vargas)	Social Event	Exercise Presentation

School dinner

## Lectures

### **1. Extreme events in the climate system, a historical background and the current context of climate models simulating extreme events**

Ramón Fuentes Franco, Swedish Meteorological and Hydrological Institute

This lecture will cover the historical observation and modeling of extreme events, the definition of extreme events, how models reproduce observed trends, and the importance of high-resolution climate modeling for regional information.

### **2. Challenges and Opportunities for Studying Impacts of Climate Extremes**

Gabriele Messori, Uppsala Universitet

This lecture will highlight the importance of studying the impacts of climate extremes, the practical hindrances to doing this, and promising new approaches that may help advance this field of research.

### **3. Disproportionate Impacts of Climate Extremes**

Emily Boyd, Lund University

This talk covers both theory and methods of studying the disproportionate impacts of climate extremes and presents examples of loss and damage from across different empirical contexts.

### **4. Impacts of Climate Extremes on Population Health: Methods and Insights**

Elena Raffetti, Karolinska Institutet

This lecture will explore the methods used to assess the impacts of climate extremes on population health and provide insights from recent research on the topic.

### **5. AI for Climate Impacts**

Joakim Nivre and Olof Mogren, RISE Research Institute of Sweden

A short introduction to recent advances in AI in general, followed by two half-hour blocks focusing on AI applications related to climate within areas of deep learning and NLP.

## Soft Skills Presentations

### **1. Patient and Public Involvement and Engagement in Research**

Monica Persson Manrique, The Swedish Rheumatism Association

This session will cover what patient and public involvement and engagement (PPIE) is, its benefits, specific examples of how it can be implemented in your research, and things to keep in mind when getting started with PPIE.

### **2. Engagement with Local Actors**

Ana-Maria Vargas, Lund University

This session will focus on who local actors are and how engaging with local actors matters in the context of climate change adaptation research, action, and democracy.

### **3. Communicating Scientific Results to Different Actors/Policy Briefs and Communication**

Emily Boyd, Lund University

This session will focus on the importance of professional impact and having a strategy that builds and goes beyond scientific publications.

## Practical Exercise

The practical exercise combines the topics covered in the different lectures. You will work in small groups and have the occasion to test tools for the automated extraction of information on impacts of climate extremes from textual data. You will next work on validating and interpreting the data, with a focus on understanding the potentialities and limitations of the tools you have been using. A detailed set of instructions for the exercise will be provided prior to the start of the school.