



## **An introduction to the ECRA High Impact Events Collaborative Programme**

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The European Climate Research Alliance (ECRA) is formed by national research performing organisations. It provides a platform for setting research agendas. Currently, ECRA has four collaborative programmes (CP) that bundle research efforts. One of them is the High Impact Events (HIE) CP: By definition a HIE is an extreme event with significant consequences and we need a better understanding of how we can avoid or mitigate the worst consequences to protect people.

There is growing awareness that climate change cannot solely be considered as a “mean state” modification. Changes in the characteristics, frequency, and severity of extreme events are typically responsible for the most important impacts, and consequently are one of the most significant aspects of climate change to understand and predict.

The CP examines how HIEs work, how long-term records for the past can be constructed, how they can be simulated accurately in fluid-dynamical and statistical models, and how we might be able to project future changes reliably.

The collaborative programme is structured along three questions:

- 1) Will high impact events occur more frequently?
- 2) What are regional impacts of extreme events?
- 3) How could prediction and projection capabilities be enhanced?

Here, we will present examples relating to the above questions and will discuss how to proceed with the CP in the future. More information, including the current implementation plan, is available online at: <http://www.ecra-climate.eu/index.php/collaborative-programmes/hievents>