

3rd Workshop on Cloud Organisation and Precipitation Extremes - WCO3



4 - 8 September 2023
An ICTP Hybrid Meeting
Trieste, Italy

Further information:
<http://indico.ictp.it/event/10204/>
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Organized convective systems are often responsible for high impact precipitation extremes, and changes in convective organization have the potential to amplify or dampen future climate change. This workshop will examine our present knowledge of convective organization in models and observations.

Description:

Convective organization is of special relevance to both weather and climate. Despite representing only 20% of cloud systems, mesoscale organized convective systems have been shown to provide over 80% of surface precipitation in the West Africa monsoon.

Convective organized systems are also frequently associated with precipitation extremes. Changes in convective organization and clustering in future may represent a feedback on climate that is poorly represented, or even absent, in current generation models.

Present efforts to improve our understanding include observational studies, highly idealized models, limited-area convective permitting models, and global models which use parameterizations or are operating at convective permitting resolutions in state-of-the-art projects such as Nextgems.

Following on from the 2nd cloud organisation workshop (WCO2) that took place in Utrecht in 2022, this workshop aims to bring together all these tools to assess our present understanding of convective organization.

Topics:

- Convective self-aggregation in idealized experiments
- Precipitation extremes associated with organized convection
- Using idealized models to improve our understanding of aggregation
- How can we better use observations?
- Impact of aggregation and organization changing on climate sensitivity
- Aggregation in global cloud resolving model experiments

How to apply:

Online application:
<http://indico.ictp.it/event/10204/>

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

Directors:

S. BOEING, University of Leeds, UK
L. DENBY, University of Leeds, UK
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J. O. M. HÄRTER, NBI/ Leibniz Centre for Tropical Marine Research/Jacobs University Bremen, Denmark
B. HERNANDEZ, TU DELFT, Netherlands
I. L. KRUSE, NBI/ Leibniz Centre for Tropical Marine Research, Denmark

Local Organiser:

A. TOMPKINS, ICTP

Speakers:

S. BONY, Laboratoire de Meteorologie Dynamique (LMD), France
A. FINK, Karlsruhe Institute of Technology (KIT), Germany
I. KOREN, Weizmann Institute of Science, Rehovot, Israel
K. NUNEZ OCASIO, National Center for Atmospheric Research, USA
J. RADTKE, University of Hamburg/MPI-M, Germany
A. SEMIE, Addis Ababa University, Ethiopia
P. SIEBESMA, Delft University of Technology, Netherlands
A. STIRLING, Met Office, UK
J. WINDMILLER, Max Planck Institute for Meteorology, Germany

Deadline:

29 May 2023
for applicants requesting financial and/or visa support
12 June 2023
for all other applicants

