Network

Partner institutions

- ETH Zurich: Swiss Federal Institute of Technology Zurich
- MeteoSwiss: Federal Office of Meteorology and Climatology
- Empa: Swiss Federal Laboratories for Materials Science and Technology
- WSL: Swiss Federal Research Institute WSL
- Agroscope

«C2SM is a networking platform.
The Center strengthens collaborations
and serves as a contact point for everybody.»

Isabelle Bey, executive director C2SM

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Departement des Innern EDI
Bundesamt für Meteorologie und Klimatologie
MeteoSchweiz

EMPA
Materials Science & Technology

WSL

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Departement für
Wirtschaft, Bildung und Forschung WBF
Agroscope

«We aim at improving
our understanding and the prediction of
the Earth's weather and climate.»

Nicolas Gruber, Chair C2SM

Contact

Center for Climate Systems Modeling (C2SM)
Dr. Isabelle Bey
Executive director

ETH Zurich
Universitätstrasse 16
8092 Zurich, Switzerland

+41 44 632 79 15
isabelle.bey@env.ethz.ch
www.c2sm.ethz.ch

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C2SM

Center for Climate Systems Modeling

C2SM
Center for Climate
Systems Modeling

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Welcome to the Center for Climate Systems Modeling (C2SM)

Climate change is one of the most complex scientific challenges and one of the most pressing social and economic issues facing humankind. The Center for Climate Systems Modeling (C2SM) combines the climate modeling and data analysis expertise of ETH Zurich, MeteoSwiss, Empa, WSL, and Agroscope in order to better understand and predict weather and climate as well as their impacts on natural systems and human societies.

Mission

C2SM is a research and networking platform in the areas of weather and climate. The Center provides support to its partner institutions for climate modeling and climate data analysis. It facilitates collaborations and exploits synergies to enable new research avenues and address some of the complex challenges of climate change. C2SM also supports its partners in their education and outreach activities.

Research

Many processes relevant for climate change operate in, and at the interface of the sub-components of the Earth system (including its atmospheric, oceanic, terrestrial, biospheric and cryospheric components). In addition, these processes operate over a wide range of spatial and temporal scales: the processes operating at small scales may strongly influence the phenomena at large scales and vice versa. «Multi-scale, multi-component interactions within the climate system» – C2SM's core research theme is geared towards explicitly addressing these issues.

Activities

Research coordination

- To foster collaborations between research groups
- To coordinate community research projects
- To develop a common climate modeling strategy

Education

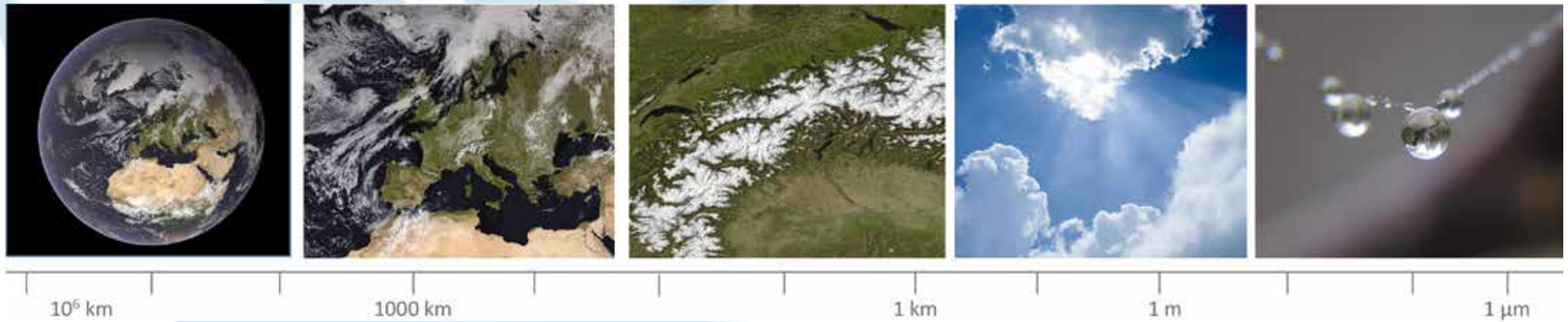
- To train PhD students through projects across research groups, institutions, and disciplines
- To contribute to the organization of the Swiss Climate Summer school and assist in the M.Sc. programs in atmosphere and climate.

Outreach

- To inform the scientific community and a broader audience about climate and climate change
- To facilitate the dialog between the scientific community and the private and public sectors

Support

- To maintain, improve, and provide a hierarchy of state-of-the-art climate and climate-related models to the Center's community
- To exploit and disseminate key national and international climate data including future scenarios
- To prepare for the exploitation of the next generation high-performance computers



Members

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Prof. H. Bugmann (Forest Ecology)
Prof. A. Fischlin (Terrestrial Systems Ecology)
Prof. N. Gruber (Environmental Physics), Chair *
Prof. R. Knutti (Climate Physics)
Prof. U. Lohmann (Atmospheric Physics) *
Prof. T. Peter (Atmospheric Chemistry)
Prof. C. Schär (Climate and Water Cycle) *
Prof. S. I. Seneviratne (Land-Climate Dynamics)
Prof. J. Stähelin (Atmospheric Chemistry)
Prof. H. Wernli (Atmospheric Dynamics)
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Dr. M. Liniger (Climate Prediction)
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Empa
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Dr. B. Buchmann (Head Department Mobility, Energy and Environment) *

WSL
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Prof. K. Steffen (Director WSL, Climate and Cryosphere) *
Dr. N. Zimmermann (Landscape Dynamics)

Agroscope
Prof. J. Fuhrer (Head Air Quality and Climate)

as of July 2013
* members of the Steering Committee