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. We foster collaborations and create synergies. We serve as a contact point for everybody.» Christina Schnadt Poberaj, executive director C2SM Confederation suizzera Confederation suizzera Confederaziun svizzera Confederaziun svizza Eidgenössisches Departement des Innern EDI

MeteoSchweiz

Empa



Schweizerische Eidgenossensch Confédération suisse Confederazione Svizzera Confederaziun svizra

Eidgenössisches Departement für Wirtschaft, Bildung und Forschung WBF Agroscope

> «Our aim is to improve the understanding and prediction of Earth's weather and climate.»

Nicolas Gruber, Chair C2SM

Contact

Center for Climate Systems Modeling (C2SM) Dr. Christina Schnadt Poberaj Executive director

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C2SM

Center for Climate Systems Modeling





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

ETH Zurich, D-USYS

- Prof. D. Bresch (Environmental Decisions)
- Prof. N. Buchmann (Grassland Sciences)
- Prof. H. Bugmann (Forest Ecology)
- Prof. N. Gruber (Environmental Physics), Chair *
- Prof. R. Knutti (Climate Physics)
- Prof. U. Lohmann (Atmospheric Physics) *
- Prof. A. Patt (Human-Environment Systems)
- Prof. T. Peter (Atmospheric Chemistry)
- Prof. C. Schär (Climate and Water Cycle)
- Prof. S. I. Seneviratne (Land-Climate Dynamics)
- Prof. H. Wernli (Atmospheric Dynamics)
- Prof. M. Wild (Climate and Radiation)

ETH Zurich, D-BAUG

Prof. P. Burlando (Hydrology and Water Resources) Prof. D. Farinotti (Glaciology) (also affiliated at WSL)

ETH Zurich, D-ARCH

Prof. J. Carmeliet (Building Science and Technology) (also affiliated at Empa)

ETH Zurich, D-MATH Prof. N. Meinshausen (Statistics)

ETH Zurich, D-PHYS Prof. T. Schulthess (Theoretical Physics)

MeteoSwiss

Prof. C. Appenzeller (Head Climate Division)

- Dr. M. Arpagaus (Numerical Predictions)
- Dr. M. Croci-Maspoli (Climate Monitoring), Vice Chair *
- Dr. O. Fuhrer (Numerical Predictions)
- Dr. M. Liniger (Development of Forecasting)
- Dr. C. Schwierz (Climate Monitoring)
- Dr. P. Steiner (Head Numerical Prediction Division)
- Dr. R. Stöckli (Climate fundamentals)

Empa

- Dr. D. Brunner (Atmospheric Modeling) *
- Dr. B. Buchmann (Head Department Mobility, Energy and Environment)
- Dr. L. Emmenegger (Air Pollution/Environmental Technology)

WSL

Prof. M. Lehning (Snow and Permafrost)

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

Agroscope

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

as of April 2017 * members of the Steering Committee