Background
Most societal and environmental processes are influenced by weather and climate. In order to understand these effects there is often a need for a “simple” characterization of the current weather situation. This need has increased considerably due to the recognition of importance of global warming and the challenges to study the impact of a climate change on society and environment.

Classifications of weather and circulation patterns are simple, discrete characterisations of the current atmospheric conditions. There exists a wide collection of classification methods, developed for different regions and for different purposes. Many of them are based on automatic, objective, and consistent methods. In recent years, many new classification methods have been introduced; unfortunately, their abundance has not been accompanied by a corresponding thorough verification and intercomparison. It is COST Action 733 “Harmonisation and applications of weather type classifications for European regions” that has made a considerable step in this, so far undervalued direction.

Course description
The objective of the course is to give the students an introduction to classification methods, with emphasis on classifications of tropospheric circulation patterns, and their applications in the atmospheric sciences, and to provide a basis to understand the various classification methods applied to describe atmospheric circulation.

The course will include lectures given by recognized experts in classifications, climatology and hydrology. The lectures will be supported by exercises applying software developed at the University of Augsburg within the frame of the COST 733 action.

Course content
- classifications of circulation and weather patterns
- classification principles and methods
- principles and methods for evaluation and validation of classification methods
- application of circulation classifications in
  o meteorology
  o climatology and climate modelling
  o hydrology
  o air pollution and health
  o forest fires and hazards
seasonal forecasting, predictability and teleconnections.
- climate change scenarios

Organizing committee:
Andreas Philipp, University of Augsburg, Augsburg, Germany
Christoph Beck, University of Augsburg, Augsburg, Germany
Radan Huth, Institute of Atmospheric Physics, Prague, Czech Republic
Christel Prudhomme, Centre for Ecology and Hydrology, Wallingford, UK
Ole Einar Tveito, Norwegian Meteorological Institute, Oslo, Norway
Stefan Stückrad / Chandrasa Sjamsudin, COST Office, Brussels, Belgium

Lecturers:
Dr. Christoph Beck,
University of Augsburg, Augsburg, Germany

Dr. Rasmus Benestad,
Norwegian Meteorological Institute, Norway

Dr. Radan Huth,
Institute of Atmospheric Physics, Prague, Czech Republic

Prof. Jucundus Jacobit,
University of Augsburg, Augsburg, Germany

Mr. Thomas Krennert,
Zentralanstalt für Meteorologie und Geodynamik, Vienna, Austria

Dr. Jan Kyselý,
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Dr. Andreas Philipp,
University of Augsburg, Augsburg, Germany

Dr. Christel Prudhomme,
Centre for Ecology and Hydrology, Wallingford, UK

Prof. Pavos Kassomenos,
University of Ioannina, Greece

Applications & Qualifications
The course directs to young researchers (PhD-student, Post-doc-level and graduates with several years of experience) within geo-sciences, preferably meteorology, climatology, and hydrology.

The candidate student should submit a short CV, scientific motivation and recommendations from their supervisor/employee.

The students are expected to present a poster describing their relevant research (or research ideas). The presentation should include a short oral presentation and plenum discussion.

Financial support for attending the training school will be possible. Students should indicate their need for financial support in their application.

Applications should be sent by e-mail to: school@cost733.org

Deadline for application:
28 February 2010.

Practical information
Venue.
The course will be given at the “Lehrstuhl für Physische Geographie und Quantitative Methoden” at the University of Augsburg. Augsburg is Bavaria’s third largest city with about 265,000 inhabitants. Augsburg is ideally located in southern Germany and provides a famous historic city centre and attractive surroundings.

Accommodation
Augsburg offers a wide selection of accommodation at all price levels. See http://www.regio-augsburg.de/ for online information and booking of accommodation in Augsburg

Transport
By train and car: Augsburg is easy to reach by train and by car.
By plane: Munich is the next airport and only 60 km from Augsburg. There are regular trains between Augsburg and Munich airport every 20 minutes.

Contact.
For further information contact: school@cost733.org