

Introduction



Dear Readers and Colleagues,

It's a great delight and honour to introduce the 26th edition of our newsletter 'The European Forecaster'. The success of a publication on a regular yearly basis is only possible because of the excellent work of many colleagues. Therefore we would like to say thank you to Mr. Bruno Gillet-Chaulet and his colleagues at Meteo France for printing the newsletter. Many thanks go to Mr. Nicholas Roe for reviewing the incoming articles. We kindly address our warmest gratitude to all the authors for writing articles about new ideas, recent developments and interesting case studies in the field of weather forecasting. Last but not least, we want to thank Mr. Andre-Charles Letestu for updating our WGCEF website www.euroforecaster.org continuously.

Within the last few decades significant alterations in the actual weather and typical weather patterns have been observed world-wide which is mainly caused by climate change. Temperatures are rising steadily and therefore air masses have higher water vapour content. The increase in temperature is different depending on the geographical location: in polar regions this process is going faster than in subtropical or tropical regions. Thus the horizontal temperature gradient is reduced with the negative effect that the polar jet stream is weakening. Weather patterns are more stable and staying for longer in the same place, e.g. floods, droughts or heat waves are occurring more often in mid latitude regions. The impacts of climate change can be manifold: for example, rising sea levels with catastrophic effects on coastal regions, melting glaciers changing Alpine environments, more extreme weather phenomena like severe windstorms, heavy precipitation or long lasting heat waves. It's not a single specific weather situation that can be related to climate change, but the increasing number of severe weather events showing that climate change has drastic consequences on the actual weather.

Severe weather hazards have a strong impact on humans, infrastructure, vegetation and the ground. Therefore, severe weather warnings with precise time, location and intensity can minimize or even prevent damage, save lives and reduce financial losses. This is one of the major, even the most important, mission of weather forecasters. With their expertise, knowledge and experience forecasters are able to provide excellent advice to the public, stakeholders and all kinds of weather dependent users by issuing impact-oriented weather and warning information. Various requirements are necessary to be able to do this job accurately: regular training, good IT-infrastructure, intelligent tools, sufficient meteorological and non-meteorological data sources, scientific exchange and cooperation. To keep or even improve the high quality of forecasts cooperation and scientific exchange between the different NMSs is essential, which is one important goal of our working group, the WGCEF.

We hope that you will find this newsletter interesting, enjoyable and informative.

Best regards,

Christian Csekits and Jos Diepeveen,
Chairpersons, WGCEF