European Conference on Severe Storms 2015
14–18 September 2015, Wiener Neustadt, Austria
ECSS2015-161

The ESSL Testbed: Forecaster training and evaluation of forecast and nowcast tools

Pieter Groenemeijer (1), Alois M. Holzer (1), Tomas Pucik (1), Mateusz Taszarek (1,2)

(1) European Severe Storms Laboratory, Wessling, Germany (pieter.groenemeijer@essl.org), (2) Adam Mickiewicz University, Poznan, Poland

Since 2012, ESSL annually organizes the ESSL Testbed in its Research and Training Centre in Wiener Neustadt, Austria. At the Testbed, forecasters and researchers/developers of Europe's weather services, academics and visitors from overseas jointly work with novel nowcasting and forecasting tools. The aims of the Testbed are to evaluate and demonstrate these tools, to provide training to forecasters and to foster interaction between forecasters and researcher/developers.

Feedback to nowcast tools is given by peers from Europe and beyond, as well as by forecasters and ESSL's own expert staff, who will all work with the system quasi-operationally during the Testbed period. At the end of the Testbed, feedback is collected and synthesized and provided to the developers of the respective products.

With respect to training, lecture sessions are organized which are shared online through teleconferencing software supported by EUMETCAL. In these sessions, forecasting experts present their approaches to forecasting and developers introduce and explain their forecasting and nowcasting tools.

An incomplete list of products that have been used or evaluated at the Testbed includes:

- NowcastMIX (DWD)
- COSMO-DE ensemble prediction system and ICON-EU models (DWD)
- NearCast satellite-derived instability product (U. Wisconsin / EUMETSAT)
- COSMO-1, COSMO-E (MeteoSwiss)
- GLD360 lightning detection system (VAISALA)
- Mesocyclone detection algorithm, VIL- and VII- products (DWD)
- OPERA European radar composite (EUMETNET / ZAMG)

The ESSL Testbed is organized in close collaboration with ZAMG, DWD and MeteoSwiss. It is supported by EUMETSAT, VAISALA, EUMETCAL, EUMETNET and several individuals.