



INCA-CE project: status and results

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Every year, Central Europe (CE) is affected by weather extremes challenging civil protection authorities, hydrologists and road maintenance services to timely warnings. Within the INCA-CE project (Integrated Nowcasting through Comprehensive Analysis in Central Europe; <http://www.inca-ce.eu>) which is supported by the European Regional Development Fund a deepened transnational cooperation between meteorological/hydrological services and three application areas is established. This guarantees for both enhancements of meteorological products in the sense of end-user friendliness, and standardized information exchange across borders.

At present, INCA-CE is the only project throughout the world which connects cooperation to such an extent with respect to its transnational and multidisciplinary framework (in the meanwhile it has been chosen as World Weather Research Programme/Forecast Demonstration Project by the World Meteorological Organization). Key partners from eight countries (from national meteorological/hydrological services and the three different application areas) accept the challenge to work on standardization and harmonization tools.

Therefore, the INCA nowcasting system - developed at the Austrian weather service (ZAMG) in the 1990ies - has been implemented at all CE meteorological/hydrological services and is advanced and refined to the specific user needs to (i) provide high quality nowcasting products which are standardized and harmonized across borders, (ii) improve information chains from models to warnings and protection measures in case of disaster, and (iii) make the public and stakeholders more familiar with meteorological products. However, the potential to achieve these listed improvements is only possible through the intense transnational and multidisciplinary cooperation, because for one institution and one country alone it would be impossible to cope with all the necessary tasks.

In this presentation the status and results of the INCA-CE project (duration: April 2010 - September 2013) will be shown with special focus on the elaborated requirements concerning nowcasting information in the three application areas, brief overview of recent model developments and enhancements considering these requirements, and the user-friendly visualization which is available through the world wide web.