



ICA&D: Climate services without borders

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The ICA&D (International Climate Assessment & Dataset) climate services concept aims to provide access to station data, climate assessments and climate monitoring capabilities for regions in developed and developing countries. ICA&D builds on the software developed for the European Climate Assessment & Dataset (ECA&D), a web portal for daily station data and derived climatic indices – many based on the work of WMO's Expert Team on Climate Change Detection and Indices (ETCCDI) - brought together in regional cooperation, and combines this climate services initiative with data rescue (DARE) activities.

This concept has proven itself in Europe where ECA&D was initiated in 1998 and is now combined with the MEDARE initiative. The ICA&D concept is already applied in three climate vulnerable developing regions in the world. The Southeast Asian Climate Assessment & Dataset (SACA&D) in WMO Region V has been active for two years now and the Latin American Climate Assessment & Dataset (LACA&D) for WMO Region III and the West African Climate Assessment & Dataset (WACA&D) are under development.

The historical perspective on climate variability, the monitoring of current climate and assessing climatic changes are integrated in the ICA&D concept through regular updates of records from weather stations and post-processing of these records to provide information via dedicated climatic indices, often targeted on extreme events. Web users are able to access these climatic indices and quantify trends or deviations from climatology in these indices.

Similar to ECA&D, gridded data sets of daily data are calculated, supplemented with an estimate of the uncertainty, provided the station density is high enough. E-OBS is the European gridded dataset which is developed as part of the ENSEMBLES project (EU-FP6) and is popular among regional climate modellers.