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The CARPATCLIM project: creation a gridded Climate Atlas of the Carpathian Region for 1961-2010 and its use in the European Drought Observatory of JRC

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Central-Eastern Europe is one of the most vulnerable region of Europe, together with the neighboring South-European region. Many countries are located in a relative small area, and despite having national databases, the different monitoring and data managing methods make the common use of national datasets difficult. Therefore, a project was launched with the support of the European Parliament and supervising by JRC-IES (Ispra) to create a gridded database for the Carpathian region. The project is called CARPATCLIM project, members are from nine countries (Austria, Czech Republic, Croatia, Romania, Hungary, Ukraine, Slovakia, Poland, and Serbia). The main goals of the project are to collect, quality-check, complete, homogenize, harmonize climatic variables as temperature, precipitation, wind speed, atmospheric pressure, sunshine duration, etc. Such a new dataset have been interpolated to a 1961-2010 daily gridded dataset for the Carpathian Region (longitude between 16?E-30?E, latitude between 43.33?N-50?N) with a horizontal resolution of 10 km. Climate Atlas of the region will be presented also on a dedicated website. The advantage of the project is the harmonization process: common, harmonized gridded database has been established keeping all national data policies. No one large database has been created, all data remain at their owners, and each country has produced the requested grids for their territory. This is possible thanks to the use of common quality assurance and interpolation methods and the fitting of national datasets are via near border data exchange on a strict equal basis. The application of daily and monthly datasets is manifold from climate modeling till drought monitoring. The daily and monthly grids will be published at the project [U+FFFD] s homepage and will be part of the digital maps and long term trends in the EDO [U+FFFD]s website provided by the DESERT Action of JRC-IES.