

CLIMATE MAPS OF MONTHLY PRECIPITATION AMOUNTS

MELITA PERČEC TADIĆ and IRENA NIMAC

Croatian Meteorological and Hydrological Service
Grič 3, 10000 Zagreb, Croatia
melita.percec.tadic@cirus.dhz.hr

ABSTRACT

The presented climatic maps of monthly precipitation amounts for each month starting from the year 1981 to present are a part of a new set of spatial data of the Croatian Meteorological and Hydrological Service. A regression kriging method was used to produce monthly precipitation maps, preceded by an analysis of data quality measured at stations. The analysis included a homogeneity analysis and filling of missing monthly data. Spatial features of the precipitation field were discussed regarding the measurements. Statistical measures were used to evaluate the trends of measured and homogenized data, coefficient of determination was used to assess the performance of the regression model, and the leave-one-out cross-validation was applied for the evaluation of the regression kriging model.