

The Agroclimatic Atlas of Croatia for the Periods 1981-2010 and 1991-2020

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Abstract : The Agroclimatic Atlas of Croatia (Atlas) for the periods 1981–2010 and 1991–2020 is monograph of six chapters in digital form. Detailed descriptions of particular agroclimatological data are given in separate chapters as follows: agroclimatic indices based on air temperature (degree days, Hugin heliothermal index), soil temperature, water balance components (precipitation, potential evapotranspiration, actual evapotranspiration, soil moisture content, runoff, recharge and soil moisture loss) and fire weather indices. The last chapter is a description of the digital methods for the spatial interpolations (R and GIS). The Atlas comprises textual description of the relevant climate characteristic, maps of the spatial distribution of climatological elements at 109 stations (26 stations for soil temperature) and tables of the 30-year mean monthly, seasonal and annual values of climatological parameters at 24 stations. The Atlas was published in 2021, on the seventieth anniversary of the agrometeorology development at the Meteorological and Hydrological Service of Croatia. It is intended to support improvement of sustainable system of agricultural production and forest protection from fire and as a rich source of information for agronomic and forestry experts, but also for the decision-making bodies to use it for the development of strategic plans.

Keywords : agrometeorology, agroclimatic indices, soil temperature, water balance components, fire weather index, meteorological and hydrological service of Croatia

Conference Title : ICAAEFC 2022 : International Conference on Advanced Agricultural Engineering, Fertilizers and Chemicals

Conference Location : Paris, France

Conference Dates : September 20-21, 2022