



Development of web-system for processing and visualization of meteorological and climatic data

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Development of an online system for visualization and statistical analysis of meteorological and climatic data is presented. This system represents a dedicated web-interface based on the web-portal ATMOS engine [1]. It allows to perform basic mathematical and statistical computations on various observational and model (reanalysis, global and regional models outputs) data with consequent graphical representation of results. At the moment NCEP/NCAR Reanalysis, NCEP/DOE AMIP II Reanalysis, ECMWF ERA-40 and JMA/CRIEPI JRA-25 data are accessible for processing. Recently, possibilities of the system [2, 3] were extended by new functions for determining statistical properties of relevant characteristics and calculation of several WMO-approved climate change indices. Calculation results of those functions are presented. Improvement and enhancement of system functionality are possible thanks to its flexible internal organization which allows to add datasets and functions to satisfy diverse scientific demands. Further extension of processing possibilities and addition of other meteorological data, particularly, observational data from satellite-borne instruments, are our current tasks. Such online system is supposed to find application in meteorological and climatological investigations. It will help researchers to save time during performing the same repetitive analytical tasks, to increase reliability of results obtained, and to save personal computer storage space due to implemented in the system centralized access to datasets stored on the server. This work is partially supported by APN project ARCP2008-14NMY.

References.

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