

Climate scenarios for weather extremes as simulated by high resolution RegCM over Romania

C. Boroneant, M. Caian, A. Enculescu, and M. Matei

National Meteorological Administration, Climate Research Group, Bucharest, Romania (boroneant@meteoromania.ro)

Changes of 10 core indices selected from a comprehensive set of extreme indices calculated in the framework of the EC-FP6 Project CECILIA is analyzed. These indices are relevant for assessing different aspects of both precipitation (intensity, frequency) and temperature (magnitude and frequency) extremes in the simulations performed with RegCM at 10 km resolution over Romania. The simulations were driven by a RegCM version at 25 km for the time slices 1961-1990 (control run) and 2021-2050 and 2071-2100 (A1B scenario).

The control run represents the reference for comparison with future predictions. Using available daily RegCM output, we calculate the extreme indices and examine the statistical changes in weather extremes.

The corresponding indices calculated from observations at 160 stations from Romania for the period 1961-1990 will be presented as plots for comparison of the spatial distribution of the projected changes.