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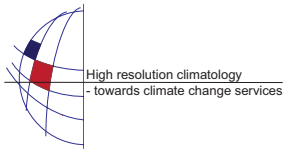

Extreme storm activity in North Atlantic and European region

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The extreme storm activity study over North Atlantic and Europe includes the analyses of extreme cyclone (track number, integral cyclonic intensity) and extreme storm (track number) during winter and summer seasons in the regions: 1) 55°N-80N, 50°W-70°E; 2) 30°N-55°N, 50°W-70°E. Extreme cyclones were selected based on cyclone centre pressure (P<=970 mbar). Extreme storms were selected from extreme cyclones based on wind velocity on 925 mbar. The Bofort scala was used for this goal. Integral cyclonic intensity (for region) includes the calculation cyclone centers number and sum of MSLP anomalies in cyclone centers.
The analyses based on automated cyclone tracking algorithm, 6-hourly MSLP and wind data (u and v on 925 gPa) from the NCEP/NCAR reanalyses from January 1948 to March 2010.
The comparision of mean, calculated for every ten years, had shown, that in polar region extreme cyclone and storm track number, and integral cyclonic intensity gradually increases and have maximum during last years (as for summer, as for winter season). Every ten years means for summer season are more then for winter season, as for polar, as for tropical region. Means (ten years) for tropical region are significance less then for polar region.