

GLOBAL WARMING AND ACCOMPANYING CHANGES – ANALOGES FROM THE PAST

Summary

The comparison of present-day global warming, its effects and accompanying increase in frequency of extreme hydrometeorological events with eventual analoges in the past shows that actual situation is inrepeatable.

Only once at the beginning of the Holocene about 11500 years ago it was recorded a similar rapid rise in the temperature during several decades but it happened at the start of warm stage (not after climatic optimum) and was not accompanied by so distinct rise in CO_2 and CH_4 content in the atmosphere as at present.

The rise in frequency of extreme events with their clusterings are frequent in the Holocene histo-

ry of the Earth, but there were not connected with warming and progressing degradation of water and biotic resources extorting an acceleration in the circulation of matter. It was just opposite. Clusters of extremes were mainly characteristic for several wetter and cooler phases which rather quarantied relative stability of geoecosystems.

Therefore the peculiarity of present-day global warming so different from situations recorded in the past seems to be connected with disorder in the stability of the global system caused by overexploitation of natural resources by man.