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of Representative and Experimental Basins**

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HYDROLOGICAL EXTREMES IN SMALL BASINS

18–20 September 2008, Cracow, Poland

BOOK OF ABSTRACTS

**Edited by
Wojciech Chelmski and Janusz Siwek**



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FROM THE EDITORS

Hydrological extremes are drawing more and more attention due to the growing number of severe floods and low-flow events observed each year in different regions of the world. Crossing the threshold values of meteorological characteristics results in extreme intensity processes not only on slopes and river channels, but also in subsurface (soil moisture and groundwater) environment. Extreme precipitation, droughts and floods are of special interest in head-water areas (small drainage basins) due to extreme intensity of the processes in spite of their local scale. Such extreme episodes create different patterns of hydrological and hydro-chemical response depending on the pre-event state of the basin environment. Improving monitoring, modelling and predicting hydrological extremes are important tasks for the scientific community, with repercussions for engineering practice.

The conference focuses on the following themes:

- Prediction of hydrological response based on different quality measurement data;
- Hydrological model calibration for extreme conditions;
- Hydro-chemical and geomorphological response to hydrological extremes;
- Surface water - groundwater interaction under extreme conditions;
- Extreme value statistics;
- Extreme streamflow prediction in ungauged basins;
- Model data-time-step dependency on basin size, landuse and modelling approach;
- New ideas, monitoring and model developments, experiences in small basin research.

The conference sessions are accompanied by a short excursion to the research catchment of Stara Rzeka and Field Research Centre in Łazy, which is a part of the Institute of Geography and Spatial Management (Jagiellonian University).

The proceedings of the oral presentations will be published after the conference in the series of IHP/Unesco Technical Documents in Hydrology. The authors of posters are invited to submit their papers to the journal of *Folia Geographica*, series *Geographica-Physica*.

The editors of this volume and members of the local organizing committee wish to thank Piet Warmerdam, ERB coordinator, the members of the International Scientific Committee and ERB national correspondents for their help during the organization of the Conference. We also thank the invited speakers: Ian Littlewood, Zbigniew Kundzewicz and Maciej Zalewski for their valuable input to the Conference. Their papers based on the conference lectures will be published in late 2008 in *Folia Geographica* journal. Thanks are also directed to the IHP/UNESCO for the financial support given to some of the conference participants.

Finally we would like to thank all participants and contributors for their interest in the conference and wish fruitful and inspiring discussions and a pleasant stay in beautiful city of Cracow - academic and cultural capital of Poland.

Editors

