



RAINMAN Project CE 968
Integrated Heavy Rain Risk Management
cooperation in Central Europe as an example of
adaptation to climate change



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Comhairle Contae
Fhine Gall
Fingal County
Council



RAINMAN PP9/Institute of Meteorology and Water Management, Poland



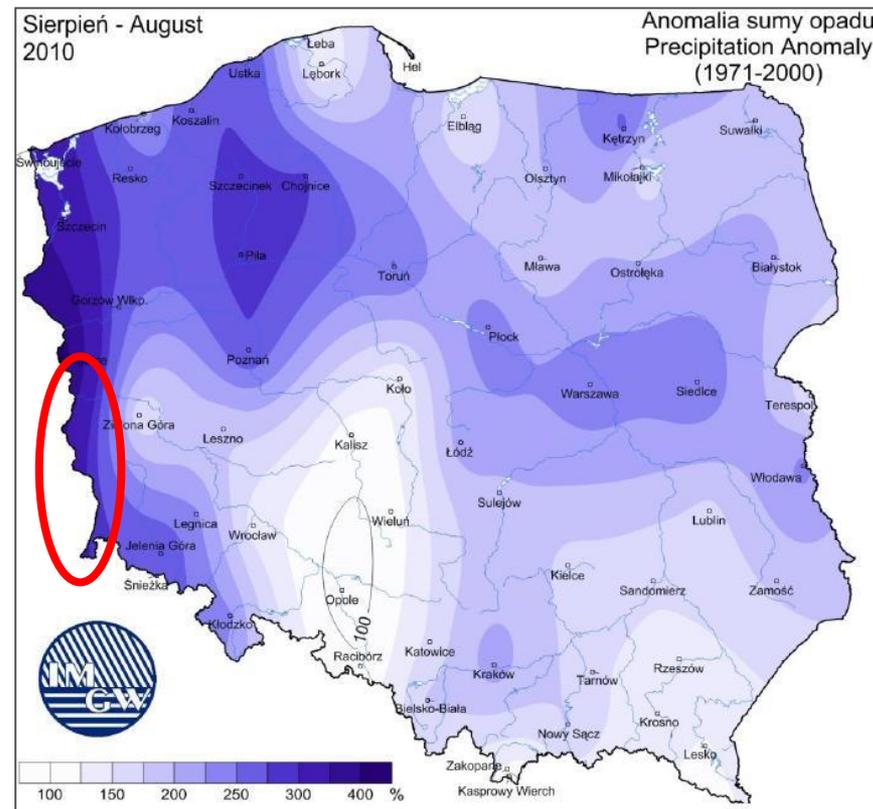
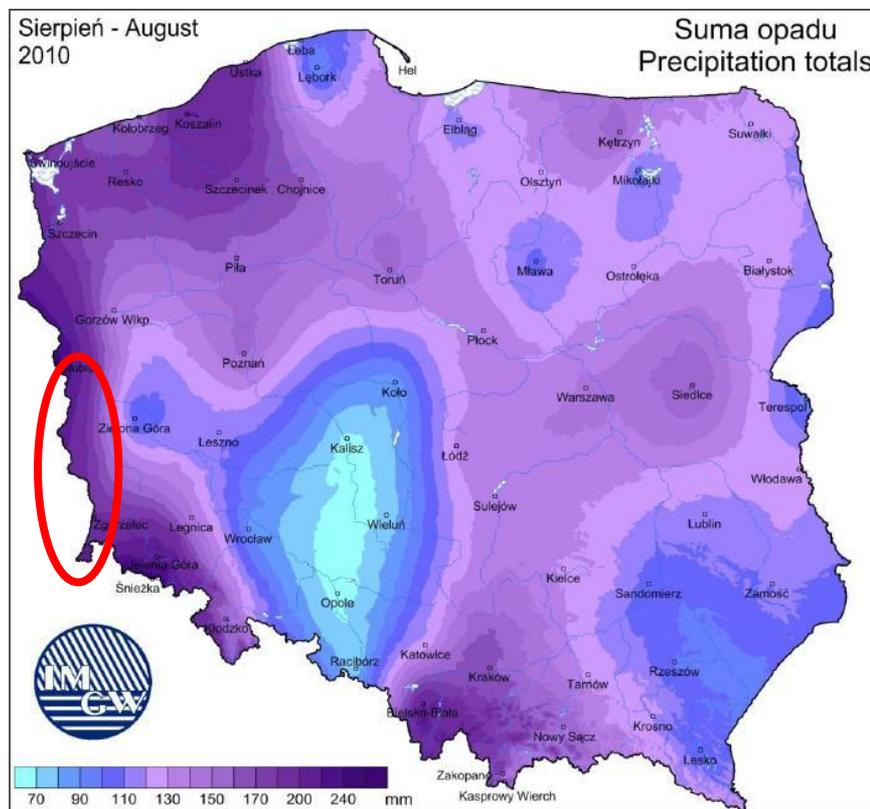
RAINMAN PROJECT - INTEGRATED HEAVY RAIN RISK MANAGEMENT - COOPERATION IN CENTRAL EUROPE AS AN EXAMPLE OF ADAPTATION TO CLIMATE CHANGE

- Risks of heavy rain events are increasing all over Central Europe. They can hit any location with only very short warning time. Every year people die, thousands lose their homes, and environmental damages like water pollution occur. In 2015 economic loss amounted to 1.2 billion Euros (GDV, 2016).
- The devastating impact of extreme rainfall is the most significant natural risk in Central Europe. Only in May/June 2016 20 people died in CE in heavy rain events. Damages were estimated for more than 3 billion Euros in only 4 weeks.



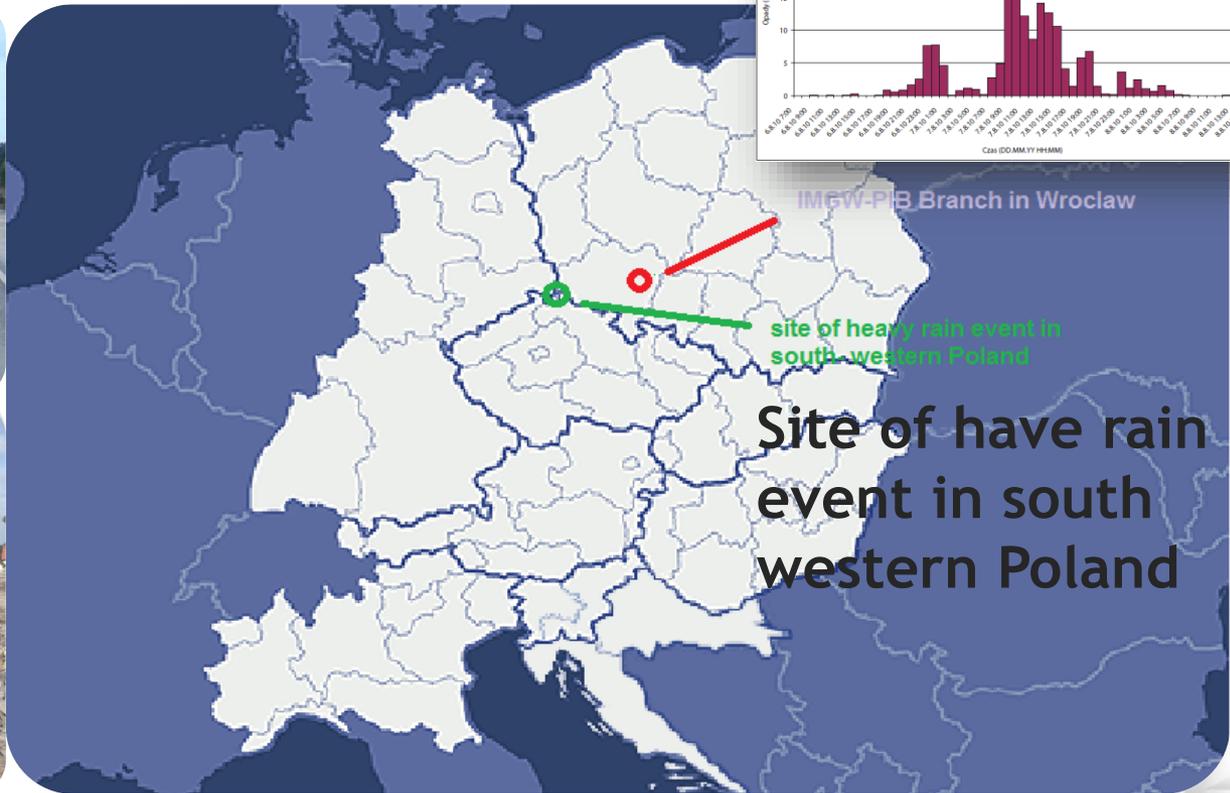
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One of the most disastrous flood events caused by precipitations took place on 7th August 2010 in the region of Lusatian Neisse basin (Polish-Czech-German border area). Heavy precipitation noticed in the Western Sudetes region on 7th August 2010. The maximum daily precipitation value was 180 mm.



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In Poland one of the most affected areas during the flood was Bogatynia town located in the Bogatynia Valley. The value of material losses in whole Bogatynia county exceeded 225 mln PLN (ca. 55 mln €).



DAMAGES IN BOGATYNIA CAUSED BY HEAVY RAIN EVENT (2010)



The main objective of RAINMAN project is to improve integrated management capacities of public authorities to mitigate heavy rain risks.

10 Partners from 6 countries jointly develop practice oriented innovative methods and new tools to reduce fatalities and damages.

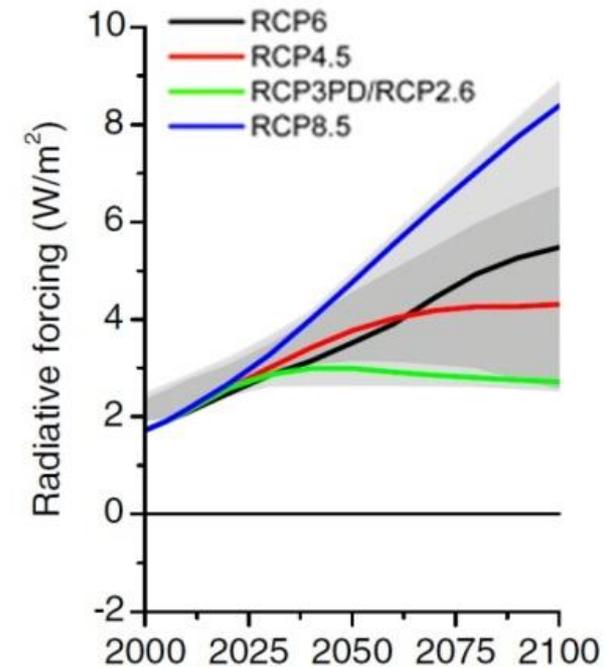


Project Partners

- Institute of Meteorology and Water Management
- Saxon State Office for Environment, Agriculture and Geology
- Saxon State Ministry for the Interior
- Leibniz Institute of Ecological Urban and Regional Development
- T. G. Masaryk Water Research Institute
- Region of South Bohemia
- Middle Tisza District Water Directorate
- Environment Agency Austria
- Office of the Styrian Government
- Croatian Waters

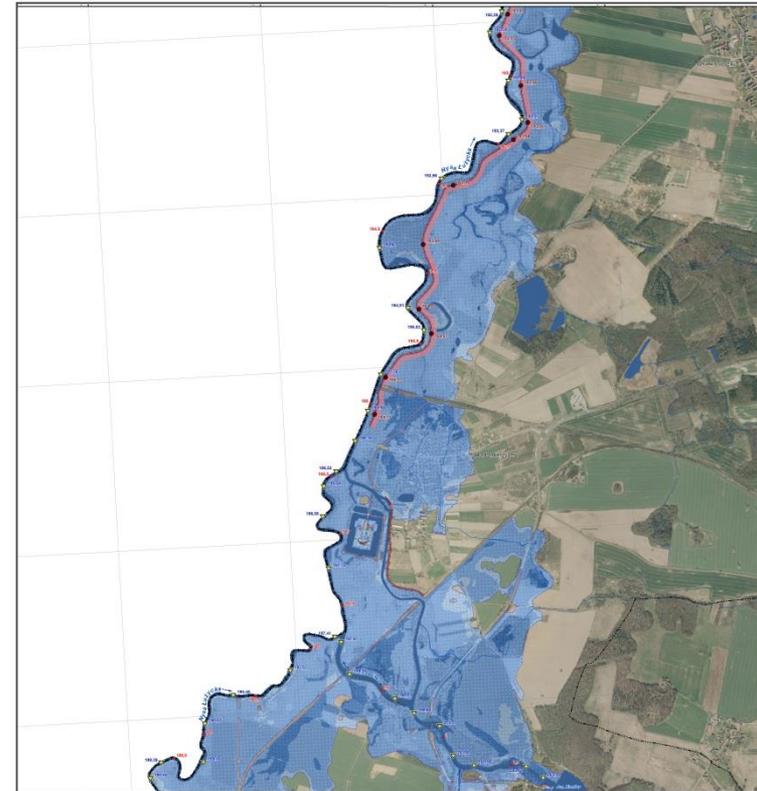
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- Heavy rain doesn't stop at borders. Damages occur all over Europe. Climate change increases the intensity and frequency. Individual solutions exist in some regions but an integrated, long-term transnational strategic solution does not exist.
- On national level the project contributes to numerous policies, that call for safer, climate change adapted territorial development (e.g. in Poland): The Lower Silesia Region Development Strategy 2020 (CCA-objectives), Polish State Water Policy 2030 (Reduce negative impacts of floods), New Polish Water Law 2017 and Strategic Urban Adaptation Plans 2013
- EU adaptation strategy (adopted 2013) highlights the risk of heavy rain as one most important focus of CC-impacts and adaptation measures. This project contributes significantly to the implementation of respective measures



- Flood risk management planning and respective tools focus on river flooding and do not consider heavy rain risks in practise until today. In theory different types of flood should be part of risk mapping and flood risk management plans.
- RAINMAN project is to contribute to the improvement of the EU Flood Directive as such (policy recommendations and tools for implementation) and of the directive's implementation in the 2nd/3rd implementation cycle in all member states by involving EU-representatives and further experts.

Flood hazard map Nysa Łużycka river



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The main joint outputs are:

1. A transferable toolbox with new tools and methods to assess, map and reduce heavy rain risks.
2. Implemented innovative forecast and smart warning tools for short warning time.
3. Implemented measures to reduce health and environmental damages and to improve emergency response.



CONTACT DETAILS

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Thank you for your attention

