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The GEWEX Regional Hydroclimate Projects Linking the High Mountain Regions of the World

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Within the World Climate Research Programme, the Global Energy and Water Exchanges (GEWEX) core project is dedicated to understanding the Earth's water cycle and energy fluxes at the surface and in the atmosphere. We are a network of scientists gathering information on and researching the global water and energy cycles, which will help to predict changes in the world's weather and climate. Within our community the Regional Hydroclimate Projects (RHPs) represent a focused regional effort that tackle regional problems related to climate and water. Currently we have several of the RHP's active and/or in development in the high mountainous regions of the world. This presentation will give an overview of the activities and how the Third Pole Environment activities help shape those in other regions such as the Andes and the Rocky Mountains and vice versa. A special emphasis will be put on convection-permitting modeling and its benefits and challenges in these complex terrain environments.