



## **Applying the Global Energy and Water Cycle Experiment (GEWEX) Hydroclimatology Panel's (GHP's) Regional Hydroclimate Projects (RHPs) framework to improve understanding of Hydrology of the Third Pole Environment (TPE).**

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Better in-situ and remote sensing observations from TPE and analysis of these phenomena, and improving our ability to model and predict them will contribute to increasing information needed by society and decision makers for future planning. We believe TPE could benefit from becoming an element of the The Regional Hydroclimate Projects (RHPs) that are part of the GEWEX Hydroclimatology Panel (GHP). These Projects are a source of hydrologic science and modeling within GEWEX. GHP, through its network of Regional Projects, provides flux site data sets for different regions, seasons and variables, that can be used to evaluate remote sensing products with energy, water and carbon budget components. In turn, the scope of the contribution made by the RHPs through the application of in-situ and remote sensing data includes advances in seasonal forecasting, the detection and attribution of change and the development and analysis of climate projections. Challenges also remain for GHP in defining a cooperative framework in which to deal with monsoons and to help coordinate the multitude of national and region. By entraining TPE in this framework and in the cross cutting work underway in the High Elevations and water and energy budget study components of GHP there would be a mutual benefit to be gained. The TPE would provide the regional level science and implementation that yields results/tools that would contribute to GEWEX Imperatives and Grand Challenges, while GHP would provide the forum for fostering cross-collaboration between TPE and the existing RHPs in terms of expertise, instrumentation development, modeling exercises, observational data exchange etc. Additionally TPE would benefit from visibility at the programmatic level with the World Climate Research Program (WCRP) and its international sponsors, its presence on the web, newsletters, mailing lists, etc. We will report on how the existing TPE science and data scheme can be incorporated in an international framework that will improve its contribution to the observation and modeling of hydrometeorological processes on all scales.