

On the critical need for mountain observatories to monitor and detect amplified climate change in British Columbia's Mountains.

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Highly sensitive to global environmental changes, the pristine environments of alpine regions are not only significant indicators of climatic change but also important sources of natural resources, most notably freshwater. Mountains are experiencing the impacts of climate change more than any other land surfaces. However, there is a paucity of observatories to monitor and understand hydro-climatological changes in mountain regions. From the perspective of a mountainous region of British Columbia (BC), Canada, we present the importance of climate observatories for better understanding of its changing hydro-climatology. We will discuss how a paucity of observed climate data has limited our understanding on the detection of amplified climate change in BC's mountains. In addition, we will show the significant role The Cariboo Alpine Mesonet (CAMnet stations) has played in better understanding the hydro-climatology of BC's Cariboo mountains in recent decades. The presentation will close with a discussion on the need of observatories for BC' mountains in a global context.