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## **The November 2021 floods in British Columbia, Canada: observations, mechanisms and probabilities**

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In this presentation, some insights into the various contributing factors of the floods in southwestern British Columbia, Canada, will be shared. These floods followed a large atmospheric river event, combined with high antecedent soil moisture and rain on snow mechanisms. In some locations, including some that were affected by extensive wildfires in the preceding summer, estimated return periods of river flows during this event exceeded 2000 years. Various alternative estimations of this return period will be presented, conditional on various assumptions and side information. Due to the large scale disruption of infrastructure, this event is expected to be (one of) the costliest natural disaster in history for Canada. This presentation is informed both by probabilistic analysis of the various factors and anecdotal evidence based on an aerial reconnaissance of the flood affected area.