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## DInSAR monitoring of glacier dynamics in Cordillera Blanca and Vilcabamba

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The effects of climate change are causing atypical changes dynamics of tropical glaciers. Conventional methods and optical images were ineffective in measuring these changes periodically due to the complexity of remote mountainous regions and cloud cover. In this research, a Differential Interferometric Synthetic Aperture Radar (DInSAR) analysis has gone performed with Sentinel-1 data from February 2019 to March 2020 in the Cordillera Blanca and Vilcabamba for Mapping displacement and subsidence. The measurements were compared with surface temperature and precipitation, providing zonal statistics to identify and assess regions associated with Glacial Lake Outburst Floods (GLOFs) hazards and enhanced understanding of the glacier dynamics in response to changing climatic conditions.