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**MeteoSwiss on the Jungfrauoch observation site:
a world reference for the monitoring of climate change**

The Jungfrauoch station is iconic because of its location for observing stars, the earth's atmosphere, the glaciers and mountains that surround it, and has a prominent place on the bucket list of many a tourist. At MeteoSwiss we are the proud custodians of weather measurements made over the past 100 years. With the support of the GAW programme, our Office has engaged in a game changer, and this as early as 1994. The observation of the atmospheric column, as continuously carried out and improved by our Belgian colleagues since 1950, is a treasure. With the combination of in situ and remote sensing meteorological and atmospheric observations, with our national and international partners, the Jungfrauoch today forms a world reference point for the monitoring of climate change. The specific example of water vapour and its evolution in this alpine environment, extracted from high-precision solar radiation measurements and time series of temperature measurements at the Jungfrauoch, represents an essential complement for the FTIR observations. Switzerland is pleased to be the direct partner of University of Liège in Belgium in our common challenge to provide sustainable and high quality observations for the benefit of understanding the global climate. The presentation will address some of the contributions of physical meteorology in support of interpreting the atmospheric composition observations.