Hazards relative to glacial lake of Rochemelon (French Alps)

Christian VINCENT Laboratoire de Glaciologie et de Géophysique de l'Environnement 38402 Saint Martin d'Heres Cedex France

email: vincent@lgge.obs.ujf-grenoble.fr

During the last decades, a glacial lake appeared on the upper part of Glacier de Rochemelon (French Alps) and has been continuously growing since. In August 2004, the critical volume of 600 000 m3 was reached which represented a threat for the downstream partly inhabited valley. In order to prevent any overflowing and ensuing flooding, an artificial draining of the lake has been carried out in 2005 so as to empty the lake. During the drainage, fields measurements have been performed in order to measure the ice erosion rate in the artificial channel.