

Two decades of examples and cases of long-term natural hazards GBInSAR monitoring under climate change

Carlo Rivolta ^{1*}

¹ Ellegi srl, Italy

*Corresponding author: e-mail address: carlo.rivolta@lisalab.com

***Abstract:** Since 2003, Ellegi srl has been conducting GBInSAR monitoring campaigns of landslides, particularly in the Alpine region, and some of these have been monitored consecutively for very long periods, up to 20 years. Furthermore, over the past five years, monitoring activities in the Alpine region have highlighted a new and interesting trend: the increased demand for GBInSAR measurement campaigns at sites above 3,000 m above sea level.*

In addition to being particularly challenging logistically, these sites are particularly interesting due to the simultaneous presence of areas characterized by activity typical of periglacial structures, with very rapid dynamics, coupled with slower gravitational movements. For some of these phenomena, the evolution of the movements detected by the GBInSAR radar will be presented, attempting to relate them to multiannual variations in rainfall and temperature.