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Role of Geological Surveys of Europe in landslide monitoring

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This work was developed by the Earth Observation and Geohazards Expert Group from EGS and provides an overview of landslide monitoring techniques from 2005 to 2021. Based on the questionnaire, the following objectives were set: (1) to identify the type of monitored landslides, (2) to identify the landslide monitoring techniques, (3) to identify the spatial resolution, temporal resolution, and status of the technique (operational, non-operational), time of using (before the event, during the event, after the event), and applicability of the technique to the early warning system. The main contribution of this paper is to show the involvement of EGS in landslide monitoring and discuss the importance of geological data, which is often underestimated because of the use of relatively traditional, time-consuming methods. The collaborative work of 17 Geological Survey members of the Earth Observation and Geohazards Expert Group (EOEG) provided the landslide monitoring information and made this review possible. This review builds on landslide monitoring techniques at Geological Surveys, not only providing the review of the most often used techniques but also serving to highlight the importance of geological data in

landslide monitoring. In addition, it provides new insights into the role of Geological Surveys in landslide monitoring.

Reference: Jemec Auflič, M., Herrera, G., Mateos, R.M. et al. Landslide monitoring techniques in the Geological Surveys of Europe. *Landslides* (2023). <https://doi.org/10.1007/s10346-022-02007-1>