



A Semi-Automatic method to periodically detect and update active landslides from Sentinel-1 data

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The potentialities of Sentinel-1 in geohazard detection and monitoring, at a regional-to-local scale, have been demonstrated in the last two years. Nevertheless, the interpretation of the DInSAR derived products (like the deformation velocity maps) can be complex and misleading, mostly for a final user who is not familiar with the DInSAR technology. For this reason, the DInSAR is still not integrated in the existing risk management and monitoring structures as a constant and periodical complementary input. In this work, we present a semi-automatic methodology, developed in the framework of the European Project SAFETY, to simplify the interpretation and the practical use of the DInSAR derived results in the risk management at a regional scale. The methodology extracts and resumes the main information of the most significant detected Active Deformation Areas (ADA). In this work, the methodology is explained and its application to landslides detection and monitoring is presented by showing some cases of study in Italy and Spain.