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## Tools for supporting Sentinel-1 data interpretation: the coast of Granada (Spain)

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In the last few years, satellite interferometry (InSAR) has become a consolidated technique for the detection and monitoring of ground movements. InSAR based techniques allows to process large areas providing a high number of displacement measurements with low cost. However, the outputs provided by such techniques are usually not easy, hampering the interpretation and time-consuming. This is critical for users who are not familiar with radar data. European Ground Motion Service (Copernicus) is a new public service that will bring a step forward in this context. However, the capability of exploiting it will still rely on the user experience. In this context, the development of methodologies and tools to automatize the information retrieval and to ease the results interpretation is a need to improve its operational use. Here we propose a set of tools and methodologies to detect and classify Active Deformation Areas, and to map the potential damages to anthropic elements, based on differential displacements. We present the results achieved in the coast of Granada, which is strongly affected by slope instabilities. The methodology is applied at a regional scale and allows to go to a detailed local scale of analysis. The presented results have been achieved within the framework of the Riskcoast Project (financed by the Interreg Sudoe Program through the European Regional Development Fund (ERDF)).