



## **Historical sources on climate and extreme events before XX century in Calabria (Italy)**

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Damaging Hydrogeological Events (DHEs) are defined as the occurrence of destructive phenomena, such as landslides and floods, triggered by extreme rain events. Due to the huge damage that they can cause to people and properties, DHEs are often described in a wide series of historical sources.

The historical series of DHEs that affected a study region can supply useful information about the climatic trend of the area. Moreover, it can reveal temporal and spatial increases in vulnerability affecting sectors where urbanization increased throughout the time. On the other side, it can highlight further vulnerability variations occurred throughout the decades and related to specific defensive measures undertaken (or abandoned) in order to prevent damage caused by either landslides or floods.

We present the historical series of catastrophic DHEs which affected a Mediterranean region named Calabria that is located in southern Italy. Data presented came from the database named ASICal (the Italian acronym of historically flooded areas in Calabria) that has been built at the beginning of 2000 at CNR-IRPI of Cosenza and that has been continuously updated since then. Currently, this database includes more than 11,000 records about floods and landslides which have been occurred in Calabria since the XVI century. These data came from different information sources as newspapers, archives of regional and national agencies, scientific and technical reports, on-site surveys reports and so on. ASICal is constantly updated. The updating concerns both current DHEs that every year affect the region, and the results of specific historical research that we regularly perform in order to fill data gaps for older epochs.

In this work we present the result of a recent survey carried out in some regional public libraries focusing on the early-mid XIX century. The type of data sources available for the regional framework are described and a sketch of the DHEs trend during the last three centuries is presented. Moreover, a panoramic view of both proxy data and irregularly measured parameters concerning climatic trend of the region obtained from the analyzed historical sources is also shown.