



## **Available databases on the impact of Damaging Hydrogeological Events in Mediterranean regions**

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Damaging Hydrogeological Events (DHEs) can be defined as episodes of severe weather conditions, during which meteorological phenomena -such as rainfall, wind and hail- trigger damaging landslides, floods, and sea storms. During storms, these phenomena can be triggered almost simultaneously, and may amplify economic damage and harms to people, often delaying emergency management actions.

Data on current DHE impact can be obtained by the systematic review of regional daily newspapers and using a series of daily Google alerts concerning rainfall-related phenomena. Moreover, data about the impact of historical DHE can be obtained by performing specific historical research in local archives, in order to fill data gaps affecting older epochs.

This work presents a series of databases concerning the impact of DHE in Calabria (Italy) and in study areas located in the Mediterranean basin. Specifically, the databases presented are the following:

- 1) ASICAL. It concerns DHE that occurred in Calabria in the past century, and contains about 5000 records freely available.
- 2) NEW ASICAL. It is similar to ASICAL in terms of contents but the study period covers the time span between 1800 and 2018, and it is available on request.
- 3) FLOODHYMEX. Is the database of catastrophic floods that occurred in five Mediterranean regions: Calabria, Catalonia, Balearic Islands, South France and Greece, between 1980 and 2014. It is in English and is available at the Hymex website.
- 4) PEOPLE. It is the database of the effects of DHE on people in Calabria between 1980 and 2016. It is in English and published on the Mendeley website. Damage severity is sorted in three levels. Fatalities, who are people killed, injured, who are people harmed, and involved people, that are people facing the accident and not killed neither hurt.
- 5) SLIDE-CAL. It is the database of rain-triggered landslides in Calabria. It covers the period 1921-2010, is in Italian and available on request.
- 6) SEA STORM CAL contains data about damage related to storm surges and it is available on request.
- 7) BRIDGECAL. It is the database concerning the damage caused by damaging hydrogeological events to bridges in Calabria between 1900 and nowadays.

The presentation will describe the main characteristics of the listed databases and presents some published results highlighting the usefulness of collected data in the study of the impact of damaging hydrogeological events in Mediterranean countries.