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The completeness of global loss databases for earthquakes: the case of 2018

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- Since 2013, the Earthquake Impact Database in association with Earthquake-Report (SOS Earthquakes) and CATDAT has been published in real-time online (24/7/365 earthquake hunting) with humanitarian socioeconomic loss parameters such as fatalities, injuries, displaced and buildings damaged and destroyed.

The year 2018 brought over 250 damaging earthquakes (a below average year) with over 4000 fatalities and around 500,000 damaged or destroyed houses.

With around 300 damaging earthquake events per year under much the same base criteria as EM-DAT, an analysis is made as to the completeness of the database vs. global databases such as EM-DAT.

In addition, the economic loss information for 2018 as well is compared to financial loss databases such as AON and reinsurance databases. It also shows the differences in definitions and translation issues with respect to the definition of loss parameters such as a "destroyed house" but also in terms of the translation and updating of numbers.

The link to intensity footprints as well as updates of numbers during the temporal evolution of a disaster, shows the importance of this unique database but also the need for such an independent database which uses local and non-insurance sources. It also shows however the need for insurance loss databases on the small event financial loss side (for insured properties).