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Disaster prevention, mitigation and management

A Database Of Severe Impacts Triggered By Extreme Events In The Coast

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Information on the temporal frequency and magnitude of relevant hazardous processes is essential to prevent disasters. Notwithstanding, Brazil does not have a common, comprehensive and reliable database of disasters triggered by atmospheric events, and although some individual effort for compiling data exists, information is not connected and standardized. Therefore, the aim of this study is to collect and catalogue known incidences of landslides, floods and strong winds in the coast of Southeastern Brazil, area which concentrates population and economic activities but also presents low stability threshold, which has been aggravated by pollution, acid rain, increase of impermeable surfaces and occupation of the unstable hill slopes of the Serra do Mar Escarpment and mangrove areas. These aspects put under permanent threat population, apparatus and the rich biodiversity of the area, which includes coral reefs, mangrove ecosystems, estuarine wet-lands, and marine mammals and birds. Partial results show an impressive increase of hazards during the last three decades, especially during Austral summer which, however, is not connected to any precipitation change, although some studies have demonstrated that intense episodes have been more common in the area. It also points out to the localized nature of hazards, which poses difficulties for extrapolating local results to wider areas.