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High-impact weather events in Greece: Analysis of the period 2000-2020

Katerina Papagiannaki, Vassiliki Kotroni, Konstantinos Lagouvardos, and Antonis Bezes
Special Account Division (ELKE) National Observatory of Athens, Institute for Environmental Research & Sustainable Development, Athens, Greece (katpap@noa.gr)

The subject of this presentation is the assessment of the occurrence, intensity, and impact severity of weather-related events with socio-economic implications during the period 2000-2020 in Greece. The aim is to draw critical conclusions through the distribution of events at the temporal and spatial level and in relation to their societal impact as measured by a qualitative impact-severity index. The data derived from the High Impact Weather Events (HIWE) database that has been developed by the METEO Unit at the National Observatory of Athens (NOA), is systematically updated and publicly available. The analysis includes events related to floods, lightning activity, hail, snow/frost, windstorms, and tornados having caused impacts on life (injury or death) and/or infrastructure. The presentation provides an overview of the data used and methodology applied for assessing weather-related hazards, and the results of their analysis that include the evolution of events, the most damaging phenomena, and the areas most exposed to each phenomenon. This work was conducted in the frame of CLIMPACT – National Network on Climate Change and its Impacts, a flagship initiative on climate change to coordinate a Pan-Hellenic network of institutions.