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PO42 - THE INFLUENCE OF EXTREME FIRE EXPERIENCE ON COMPANIES' PREPAREDNESS IN PORTUGAL

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In 2017, the most tragic wildfire season in Portugal so far beyond the high casualties toll, more than five hundred companies' buildings were affected with different impacts on business continuity. In 2022 companies' buildings were again affected by fires. Most of the affected companies were in the industrial-forestry interface zone. For this work, a research question was created, "is experience an important factor in the adoption of prevention and preparedness measures by companies?" with the aim of understanding if the companies that experienced extreme fires in 2017 and 2022 implement measures to improve preparedness for future events. Two research hypotheses were created: i) Direct experience with extreme fires has significantly increased the adoption of preparedness measures, and ii) The experience factor is diluted in time. A survey was prepared to be implemented in companies in Arouca, Castelo de Paiva, Oliveira de Frades and Oliveira do Hospital affected by the 2017 fires and in Oliveira de Azeméis and Albergaria à Velha affected in 2022. The questionnaire is composed of close-ended questions where the Likert scale was used to assess the adoption of preparedness measures before 2017 and 2022, assess whether the events of 2017 have indirectly influenced the adoption of preparedness measures by companies affected in 2022, and assess how direct experience influences preparedness for fires in the future. The data collection is being carried out, but testimonies show that different experiences directly affect the adoption of prevention and preparedness measures. The reasons that explain different attitudes are identified.

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PP68 - WILDFIRE HAZARD MAPPING IN THE MEDITERRANEAN: A HARMONIZED APPROACH.

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Wildfires are a natural hazard which is growing in intensity and spreading in range across all planet's ecosystems with impacts on the environment, human population, and infrastructures. To strengthen prevention activities, land use planning and resource allocation, a thorough understanding of territorial features determining hazardous wildfires is crucial in fire management and Civil Protection activities. The proposed approach learns from wildfire synoptic data in order to obtain susceptibility, intensity and hazard static maps. A Machine Learning approach is adopted to construct susceptibility maps, crossing the wildfire database with the predisposing factors (geographical, climatic and anthropic features). Potential intensity of wildfire, in turn, is built using the vegetation type as a proxy. Hazard is built via an expert-based contingency matrix crossing susceptibility and potential wildfire intensity classes for each analyzed pixel. This mapping approach leads to the detection of the areas which are more likely to experience hazardous and impactful wildfires. The case study is applied to sixteen countries of the Mediterranean Basin, producing output maps at 500m resolution, relying on open data as input layers. The susceptibility assessment allows for Explainable AI procedures, identifying the main drivers of wildfire occurrence at continental level. The results will be compared to the ones obtained in the previous studies at national level.