Mapping combined wildfire and heat stress hazards to improve evidence-based decision making

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Heatwaves and forest fires are considered highly correlated hazards as extreme temperatures play a key role in both occurrences. This commonality influences how civil protection and local responders deploy resources on the ground and could lead to an underestimation of potential impacts as people are likely to be less resilient when exposed to multiple hazards. We would like to present a simple methodology to identify areas prone to concurrent hazards, exemplified with, but not limited to, heat stress and fire danger. We use the combined heatwave and forest fire event that affected Europe in June 2017 to demonstrate that the methodology can be used for analysing past events as well as making predictions, by using reanalysis and medium-range weather forecasts, respectively. We will show new spatial layers that map the combined danger and suggest how to use them in the context of a Multi-Hazard Early Warning System. These products could be particularly valuable in disaster risk reduction and emergency response management, particularly for civil protection, humanitarian agencies and other first responders whose role is to identify priorities during pre-interventions and emergencies.