Heat waves experienced by many regions across the Planet in the 21st century (2-5 degrees Celsius above normal summer temperatures in Europe, Canada, USA, Hawaii, Australia, China, Russia, even Alaska) along with extended drought periods have driven catastrophic forest fires from southern to northern Europe (in Portugal, Spain, France, Italy, Greece, Slovenia, Croatia, Bosnia, Germany, Poland, even Sweden), in California, Russia and southern Australia. As Europe, Asia and the Americas are drowning in devastating floods and hurricanes in the last years, there seems to be a gradually growing concern among scientists that global climate change is sooner than predicted upon us with extreme weather events and climatic catastrophes of increasing frequency and severity.

All in all, natural disasters have swept Europe from the Iberian Peninsula to the Balkans and Scandinavia destroying millions of hectares of invaluable natural ecosystems, causing loss of precious human lives and inflicting property damages. Difficulties in confronting such natural phenomena in the region include not only an assessment of their biophysical causes, territorial distribution and damage inflicted in time, but also their dependence on human socio-economic activities. Nowadays, regional civil protection agencies must resort to necessary actions that aim to the harmonization of interdisciplinary research, technology and development (RTD) for systematic risk, hazard and vulnerability assessment, along with prompt and reliable forecasting and management systems.

Following such principles, the Geography of Natural Disasters and Forest Fires (GoNDaFF) Laboratory is a research unit that has comprised senior and young researchers from multidisciplinary backgrounds in the Department of Geography, University of the Aegean, Mytilene, Greece. Its mission has been to i) run interdisciplinary research programs on natural disasters and civil protection; ii) provide relative education curricula for undergraduate, graduate and continuing education students; and iii) disseminate information to the profession, the public and the community through service and outreach. There have been a number of research projects competitively funded by the European Union, Greece and Microsoft dealing with wildfires, floods, information systems analysis, and humanenvironment relations. The GoNDaFF Lab performs its academic activities in collaboration with the Geo-Informatics and the Physical Geography Laboratories of the Department of Geography; all labs jointly support research and educational activities in the fields of Geographic Information Systems (GIS), satellite remote sensing and applied geo-informatics on environmental hazards management-including wildland fires. Laboratories are equipped with latest technology hardware and software infrastructure, including specialized apparatus and remote automatic weather stations.