

1st International Workshop on Extreme Wildfire Events



23–25 September 2025, Nicosia, Cyprus

Organizing Committee:

- Georgios Boustras, Cleo Varianou Mikellidou, Pierantonios Papazoglou, Klelia Vasiliou (Workshop Host and Local Organizer – European University of Cyprus)
- Theodore M. Giannaros (Action Chair), Akli Benali (Action Vice Chair), Nieves Fernandez Anez (WG1 Leader), Roman Bercak (WG1 Co-Leader), Georgios Papavasileiou (WG2 Leader), Giacomo Sbaragli (WG2 Co-Leader), Fabio Silva (WG3 Leader), Nuria Prat-Guitart (WG3 Co-Leader), Ljiljana Seric (WG4 Leader & Science Communication Coordinator), Renata Martins-Pacheco (WG4 Co-Leader), Valentina Bacciu (Grant Awarding Coordinator)

To learn more about NERO visit <https://nero-network.eu/>.

To learn more about X-Fire 2025 visit <https://nero-network.eu/conferences/x-fire-2025/>

Date last modified: 19 September 2025

TUESDAY 23 SEPTEMBER 2025	
Time Slot	
08:30 – 09:30	Registration & Welcome Coffee
09:30 – 09:40	Welcome Address <i>G. Boustras</i>
09:40 – 09:50	Workshop & NERO Overview <i>T.M. Giannaros</i>
09:50 – 10:35	The promised revolution of ML to anticipate extreme fire behavior: Hype or reality? <i>F. Di Giuseppe</i>
10:35 – 11:00	Coffee Break
SESSION 1: Numerical Modeling of Extreme Wildfire Events Chair: Nieves Fernandez Anez (WG1 Leader)	
11:00 – 11:15	Wildfire modeling by an advection-dispersion-reaction (ADR) approach enriched with empirical knowledge <i>K. Vogiatzoglou</i>
11:15 – 11:30	ForestSphere: A digital twin approach for monitoring and managing forests and wildfire risk <i>C. Viegas</i>
11:30 – 11:45	iFire AI: AI-powered wildfire simulation and 3D immersive visualization <i>R. Huang</i>
11:45 – 12:00	Path to extreme wildfire modeling via highly resolved vegetation structures <i>F. Brännström</i>
12:00 – 13:30	Lunch Break (self-paid)

SESSION 2: Observing Extreme Wildfire Events	
Chair: Theodore M. Giannaros (Action Chair)	
13:30 – 13:45	Mapping wildfire progressions and measuring rate of spread from “line scans” in Australia <i>M. Storey</i>
13:45 – 14:00	Pyroconvection analysis and data gathering from extreme wildfire events <i>Z. Ntasiou</i>
14:00 – 14:15	Estimating the probability of pyrocumulus formation in extreme wildfire scenarios: A preliminary approach <i>C. Carillo</i>
14:15 – 14:30	Evolution of extreme WUI wildfire incidents: Forensic chrono-spatial reconstruction methodology – Varnavas/Greece 2024 application <i>N. Kamakiotis</i>
14:30 – 14:45	Integrated multi-source dataset for spatiotemporal analysis of the 2024 Skradin wildfire, Croatia <i>A. Bartulovic</i>
Lightning Talks	
14:45 – 14:50	Calibration of a thermal tunnel to analyze the effect of atmospheric structure on fire spread <i>D.X. Viegas</i>
14:50 – 14:55	Wildfire recurrence in the Morrone Massif: Insights from 2017 and 2021 events <i>L. Di Giammatteo</i>
14:55 – 15:00	Modeling the largest wildfire using FARSITE in the Czech Republic: National Park Bohemian Switzerland 2022 <i>Lucie Kudláčková</i>

15:00 – 15:30	Coffee Break
15:30 – 17:30	Action Core Group Meeting <i>Core Group Members Only</i>

WEDNESDAY 24 SEPTEMBER 2025	
08:30 – 09:30	Registration & Welcome Coffee
09:30 – 10:15	Oscillatory fire behavior in wildfire propagation <i>D.X. Viegas</i>
10:15 – 10:45	Coffee Break
SESSION 3: Drivers, Trends, and Future Projections of Extreme Wildfire Events Chair: Ljiljana Seric (WG4 Leader)	
10:45 – 11:00	Hydroclimatic drivers of the 2025 Los Angeles fires and California wildfires <i>J. McNorton</i>
11:00 – 11:15	Cross-country correlations in fire weather enhance the danger of extremely widespread fires in Europe <i>E. Gauthier</i>
11:15 – 11:30	European fire synchronicity more likely due to overlapping fire seasonality and atmospheric blocking <i>X. Li</i>
11:30 – 11:45	Increasing likelihood of fire-conducive conditions in a warming Europe <i>J. Miller</i>
11:45 – 12:00	Eruptive fire early warning system <i>D. Stipanicev</i>

12:00 – 13:30	Lunch Break (self-paid)
13:30 – 15:00	From Research to Practice (Panel Discussion) <i>Translating scientific advancements to operational fire management and policies.</i> Moderator: Fábio Silva (WG3 Leader) Panelists: Zisoula Ntasiou (Hellenic Fire Corps), Mario Miguel Valero (Universitat Politècnica de Catalunya), Darko Stipanicev (University of Split), Gavriil Xanthopoulos (Institute of Mediterranean Forest Ecosystems) Rapporteur: Renata Martins Pacheco (WG4 Co-leader)
15:00 – 15:30	Coffee Break
15:30 – 16:30	Action Core Group Meeting <i>Core Group Members Only</i>
Exact time to be announced!	 Social Dinner Zanettos Cypriot Tavern (https://share.google/g1ArMR7eqasNXlycO) Self-paid: ~25-30€ per person (estimated)

THURSDAY 25 SEPTEMBER 2025	
08:30 – 09:30	Registration & Welcome Coffee
09:30 – 10:15	The need to measure extreme fire behavior: remote sensing advances, challenges, and opportunities <i>M.M. Valero</i>
10:15 – 10:45	Coffee Break
SESSION 4: Managing Extreme Wildfire Events Chair: Fábio Silva (WG3 Leader)	

10:45 – 11:15	Fighting extreme fires from the air: Emerging risks for flight safety <i>I. Kamperos</i>
11:15 – 11:45	Fire weather research and modeling in Croatia: What we’ve learned from extreme events <i>I. Tomasevic</i>
11:45 – 12:15	The wildfire data portal as a strategic tool for more efficient decision-making: Case study in Northern Europe <i>O. Stokkeland</i>
12:15 – 12:30	Workshop Wrap-Up & Closing <i>T.M. Giannaros & G. Boustras</i>
12:30 – 14:00	Lunch Break (self-paid)
14:00 – 15:30	Action MC3 Meeting <i>Action MC Members Only</i>
15:30 – 16:00	Coffee Break
16:00 – 17:00	Action MC3 Meeting <i>Action MC Members Only</i>