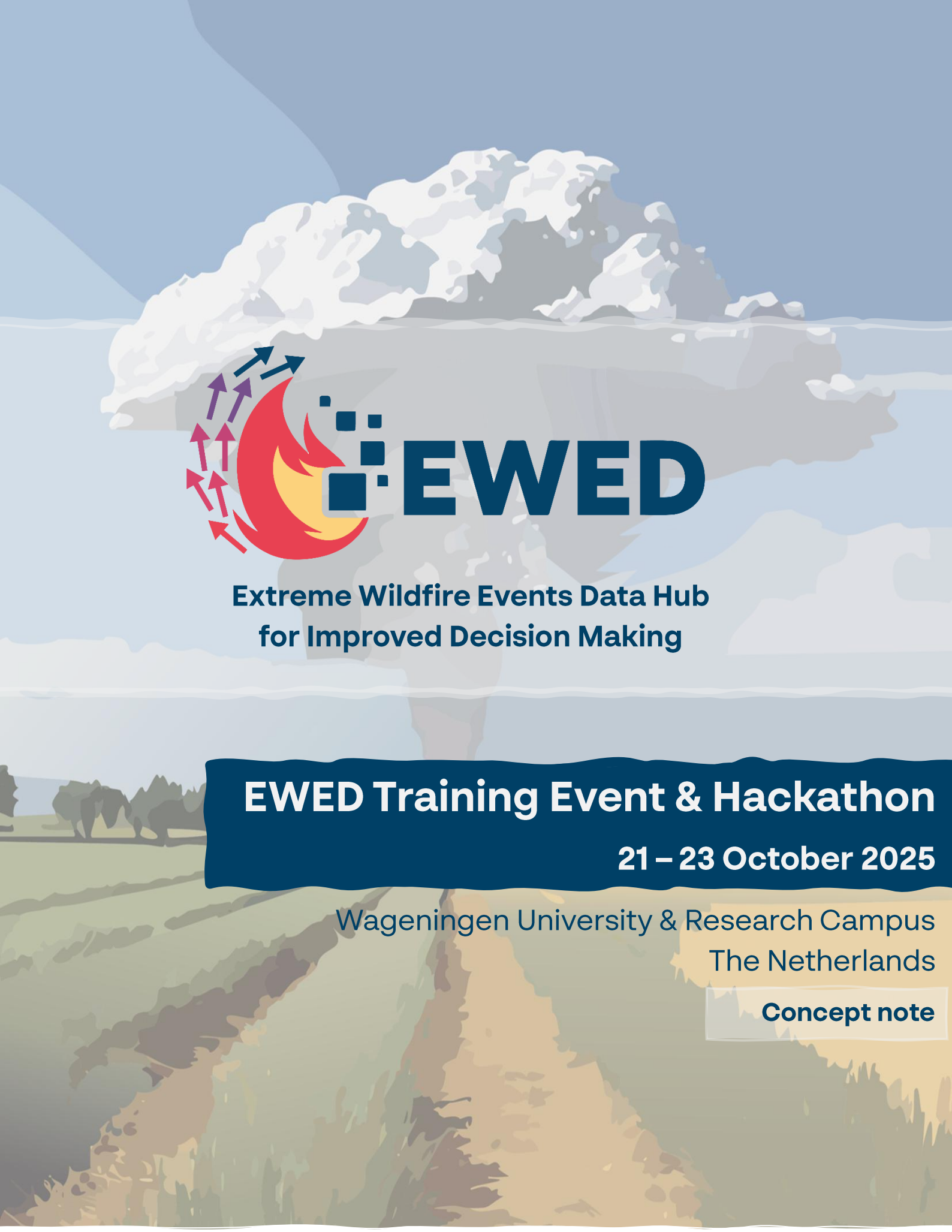

EWED

Extreme Wildfire Events Data Hub for Improved Decision Making

EWED Training Event & Hackathon

21 – 23 October 2025

Wageningen University & Research Campus
The Netherlands

Concept note

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the granting authority can be held responsible for them.

Context

EWED - 'Extreme Wildfire Events Data Hub for Improved Decision Making' is a project funded by the European Union, through the Union Civil Protection Mechanism (UCPM) and under the Knowledge for Action in Prevention and Preparedness (KAPP) 2023 call. It aims to generate new knowledge and understanding on extreme fire behaviour, and to enhance the capacity to manage extreme events through a collaboration between fire services and academia. EWED achieves this by (1) developing the Wildfire Data Portal, an open online portal with data on fire behaviour and atmosphere characteristics collected during real wildfires, behaviour models and wildfire simulations created with these data, and (2) training emergency managers on using the portal to aid their decision-making during wildfires with extreme behaviour.

After two years of work by scientists and practitioners to improve our understanding of Extreme Wildfire Events (EWEs), the next step is to share this newly gained knowledge with the relevant practitioners that can make use of this in their operations. Inspired by the non-profit orientated and open-source focused hackathons in the early 2000s, EWED is organising a 3-day knowledge-sharing event taking place from 21 to 23 October 2025 on the campus of Wageningen University & Research (WUR). The EWED Training Event & Hackathon are framed within the project's knowledge-exchange, communication and dissemination activities.

Objective

Reach an understanding of relevant meteorological processes and their interaction with wildfires, which plays a key role in the occurrence of EWEs. Specifically, the Training Event & Hackathon aim to:

- Know about basic meteorological parameters and understand what they mean.
- Understand what the Atmospheric Boundary Layer (ABL) is, which types of ABLs can be identified and how the diurnal cycle affects the ABL.
- Analyse vertical profiles of the atmosphere through skew-T diagrams and the use of conserved variables in meteorology.
- Identify heights of essential meteorological parameters.
- Estimate the effect of emitted extra heat and moisture by a wildfire on the state of the atmosphere.
- Be able to take EWEs and their uncertainty into account in fire analysis in order to build a strategy and tactics during a wildfire.
- Become familiar with the Wildfire Data Portal and be able to make use of the information and tools that are available there.

Participants

Suggested backgrounds of the participants are:

- Wildfire analysts and tactical advisors
- Forest engineers involved in wildfires operationally
- (Fire) meteorologists
- Incident commanders (ICs)
- Support teams of ICs that are involved in analysis
- Other (operational) personnel to whom knowledge about forecasting and managing EWEs is relevant

It is important that participants have some background knowledge before starting the training in October. Hence, previous knowledge on basic meteorology (temperature, humidity, wind, etc.) and basic wildfire behaviour is required.

Additional knowledge will be provided to the participants through some basic reading material and a series of short videos to further build a basic level of knowledge before the training event starts.

Format

The Training Event & Hackathon will mainly be in a classroom setting and contains various smaller and larger exercises, including on the third day with the Hackathon.

Preliminary agenda

All three days of the Training Event & Hackathon will be located on the campus of WUR (Droevendaalsesteeg 4, 6708 PB, Wageningen, The Netherlands). The sessions will be facilitated by personnel from WUR's Meteorology and Air Quality Group, the Netherlands Institute for Public Safety (NIPV) and the Catalan Fire and Rescue Service (CFRS).

Training Event, day 1 - 21 October		
Morning	Applied meteorology – Part 1	• Basic meteorological parameters • The Atmospheric Boundary Layer (ABL)
Afternoon	Applied meteorology – Part 2	• Skew-T diagrams • Conserved variables in meteorology
Training event, day 2 – 22 October		
Morning	Applied meteorology - Part 3	• Essential atmospheric parameters and their heights • Input of heat and moisture into the atmosphere by wildfires

Afternoon	Fire Analysis during Extreme Wildfire Events (EWEs)	• Uncertainty in fire operations during EWEs • The polygon method in fire analysis • Assessing (un)certainty in different wildfire scenarios
Hackathon – 23 October		
Morning	Analysing wildfire plume data	• Analysing wildfire cases from the Wildfire Data Portal • Assessing EWEs with real-life wildfire data
Afternoon	Realistic scenario exercise	• Simulating a realistic EWE-scenario by using the knowledge and tools provided in the previous days

Additional information

- Participation in the sessions of the EWED Training Event & Hackathon is free of charge.
- Coffee breaks and lunches during the event are provided.
- Places are limited. You will receive an email confirming yours.
- Participation in the Training Event on 21 and 22 October is required to take part in the Hackathon on 23 October.
- EWED recommends participants to arrive on 20 and depart on 24 October.
- Resources required: a laptop.
- A certificate of attendance can be provided on demand.

Registration

Please register by completing this form. Registration closes on **4 July**.

Contact

For questions or more information about the registration, the Training Event & Hackathon or other (e.g. logistical matters), please contact:

- **Brian Verhoeven**, wildfire researcher and coordinating Dutch fire analyst, Netherlands Institute for Public Safety: brian.verhoeven@nipv.nl
- **Lucía de la Riva**, Communications Area, Pau Costa Foundation: ldelariva@paucostafoundation.org

More information on EWED

Website: bit.ly/47UeQhz

X: @EWEDproject

LinkedIn: @EWED project

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