



Extreme Wildfire Events Data Hub for Improved Decision Making

Union Civil Protection Mechanism (UCPM) call KNOWLEDGE FOR ACTION IN PREVENTION AND PREPAREDNESS, UCPM-2023-KAPP-PREP, Project number: 101140363

Deliverable title	D2.1 Training Events
Contributing WP	WP2 – Knowledge Exchange
Dissemination level	Public
Contractual delivery date	30 November 2025
Actual delivery date	28 November 2025
Editor	NIPV
Contributors	Brian Verhoeven (NIPV), Jonathan Troncho (PCF), Lucía de la Riva (PCF), Chiel van Heerwaarden (WU)

Document history			
Version	Date	Modifications	Source
D_v.1	16/11/2025	First Draft	NIPV
R_v.1	25/11/2025	Review	PCF
F	27/11/2025	Processed feedback. Final version	NIPV

Table of Contents

List of Acronyms	5
Executive Summary	7
1. Introduction	8
2. EWED Training Event & Hackaton	9
2.1. General information	9
2.2. Structure and learning goals of the training	9
2.2.1. Day 1 (21 st of October)	10
2.2.2. Day 2 (22 nd of October)	10
2.2.3. Day 3 (23 rd of October)	11
2.3. Reflection on the training	12
3. EWED Online Training Event for Scandinavian countries	14
3.1. General information	14
3.2. Structure and learning goals of the training	14
3.2.1. Session 1 (11 th of November)	14
3.2.2. Session 2 (18 th of November)	15
3.2.3. Session 3 (25 th of November)	16
3.3. Reflection on the training	16
4. References	18

List of Figures

Figure 1 A researcher from Wageningen University explains 3D simulations of a fire plume in the atmosphere to the participants of the training event.....	10
Figure 2 Participants from Greece collaborate during an exercise using the CLASS model, supported by a member from the team of Wageningen University.	11

List of Tables

Table 1 Topics per day of the Training Event & Hackaton.	9
Table 2 Answers to the questions in the feedback form regarding the Training Event as provided by the respondents.	12
Table 3 Topics per session of the Online Training Event for Scandinavian countries.	14
Table 4 Answers to the questions in the feedback form regarding the Online Training Event as provided by the respondents.	17

List of Acronyms

ABL	Atmospheric Boundary Layer
CBL	Convective Boundary Layer
CFRS	Catalan Fire & Rescue Service
CLASS	Chemistry-Land-Atmosphere-Soil-Lab
EWE	Extreme Wildfire Event
EWED	Extreme Wildfire Events Data Hub for Improved Decision Making
GFRS	Grenland Fire & Rescue Service
NIPV	Netherlands Institute for Public Safety
PCF	Pau Costa Foundation
WDP	Wildfire Data Portal
WU	Wageningen University

Intentionally blank

Executive Summary

The EWED project organised two training events in 2025 to strengthen European wildfire preparedness by improving the participants' understanding of Extreme Wildfire Events (EWEs), how to best forecast them and how to manage them when they occur. With the diverse backgrounds and geographical spread of the participants, the training events also enhanced the interoperability between the different fire practitioners.

The first event – a three-day in-person Training Event & Hackaton in The Netherlands – brought together 49 participants from 10 countries. Through lectures, hands-on exercises, for example through the Wildfire Data Portal (WDP) and a real-time EWE scenario, participants extensively learned about atmospheric processes, plume dynamics, EWED tools such as the plume model that is incorporated in the CLASS model and decision-making under uncertainty. Feedback from 18 participants was generally highly positive: participants reported significant knowledge gains and a good overall satisfaction, with some suggestions for improvement that were mainly focused on allowing more time for practical exercises and offering preparatory materials.

The second event – a series of three online training sessions for Scandinavian countries – reached approximately 50 to 60 participants per session. The sessions introduced EWE concepts, atmospheric fundamentals and briefly introduced participants to the Wildfire Data Portal, the CLASS model and approaches to managing uncertainty during EWE scenarios. Feedback from 15 participants was again very positive. Suggestions for improvement including more region-specific examples and additional training opportunities to deepen the participants' understanding of the complex topics that are relevant with EWEs.

Overall, both training events successfully transferred key EWED knowledge, supported the learning process for various fire practitioners and highlighted the relevance of and need for capacity building and institutional support to better manage future EWEs.

1. Introduction

EWED's objectives include improving Disaster Risk Management through learning and improving the understanding of EWEs and as a result, improve the response capacity of European countries by improving strategic thinking, planning and operations. In order to achieve this, a transfer of knowledge and lessons learned during the project to key (fire) personnel that are involved in wildfire management from different perspectives and geographical contexts is essential, as it adds robustness to the project outcomes as well as improves the interoperability between different fire practitioners from different countries and working in different landscapes.

Hence, EWED organised two different training events. The first training event was a multi-day in-person event in The Netherlands and included a Hackaton on the final day. The second training event was an online training for fire practitioners from the Scandinavian countries, which was spread out over three 1,5-hour sessions over the period of three weeks. This report explains more on the contents of the trainings and reflects on the experiences from the participants from both training events.

2. EWED Training Event & Hackaton

2.1. General information

The EWED Training Event & Hackaton was a 3-day in-person event From the 21st to the 23rd of October 2025, bringing both researchers and fire practitioners such as fire analysts, incident commanders and other wildfire specialists together. There was a wide interest in the training event, with in total 81 people having registered. However, there were limited spots available. Hence, the event was attended by 49 people, coming from the following 10 European and Latin-American countries: Chile, Mexico, Spain, Italy, Portugal, Germany, The Netherlands, Norway, Sweden and Finland.

The event was organised by the Netherlands Institute for Public Safety (NIPV) and Wageningen University (WU), with support by the Pau Costa Foundation (PCF) and located on the campus of Wageningen University in The Netherlands, in the Impulse building.

2.2. Structure and learning goals of the training

The general goal of the Training Event & Hackaton was to allow a collaboration between scientists and practitioners to better understand, forecast and manage Extreme Wildfire Events (EWEs). Over the course of the three days, the participants explored the complex interactions between wildfires and the atmosphere – a key driver of EWEs – and used and tested EWED's prototype tools such as a plume model with real-world scenarios while also exploring and using the new and at the time still in development Wildfire Data Portal (WDP).

The topics per day of the Training Event & Hackaton were as follows:

Table 1 Topics per day of the Training Event & Hackaton.

Day 1	<ul style="list-style-type: none"> • Introduction to the concepts of the Atmospheric Boundary Layer • The vertical structure of the Atmospheric Boundary Layer • The fireless Atmospheric Boundary Layer: ABL Height, Lifting Condensation Level, and the main drivers of the interplay
Day 2	<ul style="list-style-type: none"> • Conceptual fire plumes: <ul style="list-style-type: none"> ○ How to turn a fire into a plume? ○ How high will the plume become? ○ Will the plume create condensation? • Fire analysis during EWEs: <ul style="list-style-type: none"> ○ Uncertainty in fire operations during EWEs ○ Taking into account and managing uncertainty during EWEs
Day 3	<ul style="list-style-type: none"> • Introduction to the Wildfire Data Portal • Using the Wildfire Data Portal and CLASS model • Scenario-exercise using a realistic and real-life EWE scenario

2.2.1. Day 1 (21st of October)

On the first day, all participants were welcomed by EWED members when entering the training room and received a EWED welcome bag, containing a drinking bottle, a patch, a notebook, a pen and an umbrella. The event started at 09:00 in the Morning with a welcome talk by PCF and NIPV, giving an introduction into what EWED is and has been doing, as well as introducing the programme for the next three days.

After the opening of the training event, the participants started diving into the basics of the Atmospheric Boundary Layer (ABL), building an essential foundation for the next two days of the training event. While doing so, practical examples of the ABL and fires within it were shown. Participants also started, for the first time, playing around with the CLASS model, which would be used more in the coming days.

In the afternoon, the session was briefly interrupted for a short welcome talk by André van Lammeren, director of the Environmental Sciences group at Wageningen University.

Once the first day was finished, around 17:15, the participants moved to another building on the campus in Wageningen, where there were welcome drinks with some small bites arranged for them. This allowed the participants to interact and get to know each other more.

2.2.2. Day 2 (22nd of October)

On the second day, the participants quickly continued, using the foundation that was built on the first day. In the morning, the participants started applying the knowledge of the first day by learning about what happens once a fire's plume starts interacting with the ABL. This was done by both theory and practical exercises using CLASS. At the end of the morning, participants were given exercises to explore interactions between wildfires and the ABL themselves. To finalise these exercises, the participants were asked to present their findings in front of the group. To allow interactive learning, different groups were given different exercises, allowing them to learn from each other's cases.



Figure 1 A researcher from Wageningen University explains 3D simulations of a fire plume in the atmosphere to the participants of the training event.

In the afternoon, the participants were taken along in the concept of fire analysis during EWEs, using real-life cases. The participants were taken along with strategic and tactical decisions that were made during EWEs and the lessons that were learned from that. Finally, the participants were provided with tools that could assist their strategic thinking when experiencing EWEs, for example by getting introduced to and making use of the uncertainty matrix [1], which allows participants to analyse the (un)certainly of the fire scenario and the capacity that is available during wildfires. By using this matrix, they could determine whether they can continue their operations, whether the strategy or tactics had to be changed or whether there was a need to retreat, re-evaluate the situation and make a new plan in order to assure the effectiveness of the operations, as well as the safety of the firefighters that are working at or near the fire.

After the second day, the participants were invited to a Social Dinner at Restaurant H41 in the center of Wageningen. Here, a buffet of various foods further allowed the participants to network and connect with each other.

2.2.3. Day 3 (23rd of October)

On the third day, the participants were mostly given room to practice. First, they received an introduction to the WDP and introduced to the scientific data and knowledge that is made available on the WDP. They also were informed of the knowledge clips, created by WU and NIPV, that are available on the WDP and allows them to refresh some of lessons they got during the training event. After this introduction to the WDP, the participants were given exercises, using different cases that were uploaded to the WDP and by applying the CLASS model to these cases. These exercises finished with presentations by each group of their fire case and the findings of the sensitivity analyses they performed using the CLASS model.



Figure 2 Participants from Greece collaborate during an exercise using the CLASS model, supported by a member from the team of Wageningen University.

In the afternoon of the third day, the participants got to live through a real-life EWE in real-time. The selected case of this fire was the 2025 Guissona wildfire in Catalunya, which was well-documented and exhibited extreme fire behaviour with a rate of spread of more than 20 km/h and a burning rate of more than 6000 ha/h.

Over a period of approximately two hours, the participants were continuously provided with new information and data such as photos and videos of the fire behaviour and the plume, radar data, isochrones and radiosonde observations from inside the plume. The participants had to analyse all the information and data, as well as explore the surroundings of the fire and through that define their strategy in dealing with the wildfire. The goal of the scenario was for the participants to experience uncertainty during a wildfire, where the fire accelerates and changes spread direction multiple times. During the scenario, participants could seek certainty by interpreting data from radiosonde measurements at different moments throughout the scenario using the knowledge they have gained throughout the training events and adapting their strategies accordingly if needed.

At the end of the scenario, the participants were given an explanation by the Catalan Fire & Rescue Service (CFRS) members about the decision-making when the fire was occurring and how they reacted to the uncertainty came along with the fire.

Finally, once the scenario was finished, the participants were given closing remarks by members from WU, NIPV and PCF and received their certificates of attendance.

2.3. Reflection on the training

At the end of the training event, participants were asked to fill in a form in order to provide feedback on the training event. In total, 18 participants have done so. These questions that were asked to the participants, are as follows:

1. Are you satisfied with the oral presentations?
2. Are you satisfied with the practical exercises?
3. Was the level of discussion satisfactory?
4. Did the course increase your knowledge?
5. Will the participation on the training help you in your work?
6. What is your overall rating of the Training Event?

The table below shows how often a participant has answered each of the above-mentioned questions with Poor, Fair, Good, Very Good or Excellent.

Table 2 Answers to the questions in the feedback form regarding the Training Event as provided by the respondents.

	Number of answers per rating					
Rating	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6
Poor	0	1	0	0	1	0
Fair	0	0	0	1	1	0
Good	4	7	5	4	3	5
Very Good	5	6	6	2	4	4
Excellent	9	4	7	11	9	9

Analysing the responses to the questions in the table above, shows that the participants were generally positive about the contents and outcomes of the Training Event. For almost all the questions, the vast majority of the respondents answered with Good, Very Good or Excellent. Based on these scores, the participants were most positive about how much their participation to the training increased their knowledge (Question 4), which could be considered a positive direct result of the training. However, though the scores were still generally positive, some improvements would be possible within the practical exercises (Question 2). A few respondents gave suggestions to improve the practical exercises by being able to take more time to do them with a gradual increase in difficulty over time. Based on that, it seems that the transition from the theory of the training to putting them to practice might have been too fast. Hence, should a training event like this be repeated in the future, our main suggestion is to increase the amount of training days to four days instead of three, allowing more time for a gradual buildup in difficulty and doing more (collaborative) exercises. Next to this, some respondents highlighted in their comments that although they deem the topics covered as relevant, they do not always foresee a direct impact on their day-to-day work, for example because of the difficulty of the topic or due to a lack of resources with their agency that could be needed to retrieve and use the correct information.

Another suggestion for an improvement was to provide the participants with preparation materials in order to give them more time to become familiar with the new topics that get covered during the training. Although this was not the case for the EWED Training Event & Hackaton yet, a future event could make use of the Knowledge Clips that are available on the WDP.

Nevertheless, as mentioned, the general feedback on the training is to be considered positive, as precisely 50% (9/18) of the respondents graded the overall training with Excellent. 22% (4/18) of the respondents graded it with Very Good, and 28% (5/18) of the respondents graded it with Good.

Next to this, some respondents left some positive comments, e.g.:

- “Great place, great organization, and really engaging lessons! All this make us want to continue studying, understanding and starting collecting this kind of data in the field, to better understand ewe dynamics. Thank you for inviting and see you next!”
- “Compliments to everybody. I hope you launch soon some ballons in Italy.”

3. EWED Online Training Event for Scandinavian countries

3.1. General information

The EWED Online Training Event for Scandinavian countries was a series of three online sessions, spread out over a period of three weeks. On the 11th, 18th and 25th of November, from 14:00 to 15:30 CET, online sessions were organised. In total, 94 people registered for the online training event. Over the course of the three sessions, approximately 50 to 60 people were attending each session, with participants mainly coming from Norway, Sweden, Finland and Denmark and having various professional backgrounds such as incident commanders and fire analysts.

The event was organised by NIPV, with support by the Grenland Fire and Rescue Service (GFRS) the PCF. For the sessions, the online platform Microsoft Teams was used.

3.2. Structure and learning goals of the training

The general goal of the Online Training Event for Scandinavian countries was to exchange knowledge and experiences with the participants of the current developments surrounding the topic of EWEs by, in an easy and short version, summarising the outcomes of the EWED project. This was done by dividing the three days into three different topics, which are summarised on the next page.

Table 3 Topics per session of the Online Training Event for Scandinavian countries.

Session 1 (11th of November)	<ul style="list-style-type: none">• Introduction to EWEs and their challenges, using examples from Catalonia (Spain), The Netherlands and Norway.• Identifying challenges with EWEs for the Scandinavian countries
Session 2 (18th of November)	<ul style="list-style-type: none">• Introduction to the concepts of the Atmospheric Boundary Layer• The vertical structure of the Atmospheric Boundary Layer
Session 3 (25th of November)	<ul style="list-style-type: none">• Introduction to the Wildfire Data Portal• Using the Wildfire Data Portal and CLASS model• Managing uncertainty during EWEs in the decision-making process

Below, each session is further elaborated.

3.2.1. Session 1 (11th of November)

During the first session, all participants were welcomed by the representatives from NIPV and PCF, after which PCF briefly introduced the EWED-project. Directly after, NIPV presented an introduction to EWEs and the challenges they pose by showing examples from the Martorell (2021) and Guissona (2025) wildfires in Catalonia (Spain). Examples from the Netherlands were also shown in order to create awareness that extreme fire behaviour is not only happening in Mediterranean countries.

After these introductory presentations, two representatives from Finland and Norway briefly presented their experiences with EWEs in their countries, as well as certain challenges and developments that they identify as relevant for their respective countries.

Finally, the sessions closed with a Mentimeter in order to gain insight into the participants' background knowledge and which challenges and needs they identify in order to better prepare for EWEs. First, three main (closed) questions were asked, after which one open question was asked. The answers to the closed questions are shown in the tables below.

Are you familiar with the concept of Fire Analysis? (Total answers: 35)		
Yes	Yes, but limited	No
15	18	2

Do you think we need to implement fire analysis to better prepare for EWEs? (Total answers: 33)		
Yes	Yes, but limited	No
33	0	0

Who would need to have the knowledge about EWEs and integrate this in decision-making? (Total answers: 34)			
Dedicated fire analyst	(Fire) meteorologist	IC Support unit	Somebody else (please specify in chat)
19	2	13	0

The final question, which was an open question, was: "What do you think is needed to take the steps such as implementing fire analysis and the methodology of launching weather balloons in your country?". From all the answers, a few common answers or trends were identifiable and are summarised below:

- Financial means that are made available by the government or EU
- Political engagement or awareness on the topic of EWEs, also within high-ranking decision-makers
- In-person training, mainly on a national level
- Analysis tools and pre-defined guidelines and protocols
- Initiative, possibly through legislation, from national authorities instead of depending on local or regional fire services.

3.2.2. Session 2 (18th of November)

The second session of the online training event focussed on covering a basic level of meteorological knowledge surrounding the ABL and vertical profiles within mainly the daytime ABL, also known as the Convective Boundary Layer (CBL). This was done by the partners from WU.

Concluding this session, the participants were already very briefly introduced to the CLASS model, and given voluntary homework to become more familiar with the model in preparation to the third session.

3.2.3. Session 3 (25th of November)

The third and final session of the online training event was split into two parts. The first part of the session continued on the topics that were covered in the second session. The participants got a brief introduction to the WDP and practiced their newly acquired knowledge from the second session by doing practical exercises, using the CLASS model that is made available on the WDP. This part was once again done by a representative from Wageningen University.

The second part of the third session involved giving the participants insights into how the uncertainty that comes with EWEs can be taken into account and managed within the decision-making process. This was explained using practical examples and the uncertainty matrix. This part of the third session was done by a representative from the CFRS.

Finishing the final session of the online training event, a representative from the NIPV shared some concluding words and thanked the participants for attending and finishing the training event. After the session ended, participants that requested so, received their certificates of attendance through email, provided that they minimally attended two out of three sessions, which was kept track of by PCF.

3.3. Reflection on the training

At the end of the online training event, participants were asked to fill in a form in order to provide feedback on the training event. In total, 15 participants have done so. These questions that were asked to the participants, are as follows:

1. **Are you satisfied with the oral presentations?**
2. **Was the level of discussion satisfactory?**
3. **Are you satisfied with the organisation?**
4. **Did the course increase your knowledge?**
5. **Will the participation on the training help you in your work?**
6. **What is your overall rating of the Training Event?**

The table on the next page shows how often a participant has answered each of the above-mentioned questions with Poor, Fair, Good, Very Good or Excellent.

Table 4 Answers to the questions in the feedback form regarding the Online Training Event as provided by the respondents.

	Number of answers per rating					
Rating	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6
Poor	0	0	0	0	0	0
Fair	0	0	0	0	2	0
Good	2	5	2	3	4	2
Very Good	9	6	5	8	6	7
Excellent	4	4	8	4	3	6

Analysing the responses to the questionnaire by some of the participants of the online training event, shows that the respondents were generally very positive about the event, with more than half of the respondents answering with Very Good or Excellent for every question. All questions but question 5 did not receive any Poor or Fair ratings. For the question whether the training event would help in the respondent's work, there were two answers with a Fair rating. However, considering the positive responses to the other questions, it is most likely that this is for example due to organisational matters such as not having the financial means or capacity to apply the knowledge gained through the training event.

From the comments that some respondents left, two participants touched on suggestions for improvement. The first suggestion was that the scenarios of EWEs that were discussed throughout the training were far from how the respondent viewed EWE risks in their country and thus how the knowledge shared would be applied in such a scenario. However, the respondent also realised the increasing risk of changing EWE scenarios due to climate change. Nevertheless, some improvement to the training could be made by showing more practical examples of EWEs in Scandinavian countries. The second suggestion for improvement was that the respondent recognised a need for more (online) sessions or training opportunities in order to better understand the complex processes and tools that are relevant in the context of EWEs and how to manage them.

The general feedback on the online training event is to be considered positive, as 40% (6/15) of the respondents graded the overall training with Excellent. 47% (7/15) of the respondents graded it with Very Good, and 13% (2/15) of the respondents graded it with Good.

Next to this, some respondents left some positive comments, e.g.:

- "This course was very interesting and gave new knowledge and preparedness for the future!"
- "In recent years, numerous forest fires have occurred around the world. Considering global warming, these fires will continue to increase. Therefore, different approaches are stimulating for our profession. I thank all the organizers."
- "The training provided useful additional information for analyzing wildfires. Some topics were a bit difficult to understand because I hadn't studied them before. Fortunately, it's possible to explore the subject further through the website."
- "Thank you for the presentations and setting up the data portal! I'm convinced this portal should become known across disciplines."
- "Thank you for the sharing of knowledge, I will highly recommend you and your company."

4. References

- [1] Castellnou, M., Prat-Guitart, N., Arilla, E., Larrañaga, A., Nebot, E., Castellarnau, X., Vendrell, J., Pallàs, J., Herrera, J., Monturiol, M., Cespedes, J., Pagès, J., Gallardo, C., & Miralles, M. (2019). *Empowering strategic decision-making for wildfire management: Avoiding the fear trap and creating a resilient landscape*. Fire Ecology, 15(1), 31.

Annex – Concept notes of the training events

On the next pages, the concept notes for both the in-person training event & hackaton and the online training event for Scandinavian countries are added. These concept notes were shared with the public once the registration for both events opened, informing them about the events and for example the logistics that come with them.



**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

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 ([Droeendaalsesteeg 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	<ul style="list-style-type: none"> • Basic meteorological parameters • The Atmospheric Boundary Layer (ABL)
Afternoon	Applied meteorology – Part 2	<ul style="list-style-type: none"> • Skew-T diagrams • Conserved variables in meteorology
Training event, day 2 – 22 October		
Morning	Applied meteorology - Part 3	<ul style="list-style-type: none"> • Essential atmospheric parameters and their heights • Input of heat and moisture into the atmosphere by wildfires

Afternoon	Fire Analysis during Extreme Wildfire Events (EWEs)	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Analysing wildfire cases from the Wildfire Data Portal • Assessing EWEs with real-life wildfire data
Afternoon	Realistic scenario exercise	<ul style="list-style-type: none"> • 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](https://twitter.com/EWEDproject)

LinkedIn: [@EWED project](https://www.linkedin.com/company/ewed-project)



**Extreme Wildfire Events Data Hub
for Improved Decision Making**

EWED Online Training Event for Scandinavian Countries

11, 18 and 25 November 2025

Concept note

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. One region of interest of this is Northern-Europe, where EWEs are expected to become an increasing challenge. Hence, EWED will organise an online training event for the Scandinavian countries, consisting of three online sessions over the course of three weeks.

Main objective

Reach an understanding of relevant meteorological processes and their interaction with wildfires, which plays a key role in the occurrence of EWEs.

Specific objectives

- ➔ Understand what EWEs are and what risks they pose.
- ➔ Gain a common understanding of the meteorological processes behind EWEs.
- ➔ Become familiar with the Wildfire Data Portal and be able to make use of the information and tools that are available.

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

Format

The Online Training Event will consist of three online sessions of 1,5 hours over the course of three weeks.

Preliminary agenda

Online Training day 1 – 11 November		
14:00 – 15:30	Increasing risk of extreme wildfires	<ul style="list-style-type: none"> • Examples of EWEs and their operational risks, discussed by various countries
Online Training day 2 – 18 November		
14:00 – 15:30	Applied meteorology in extreme wildfires	<ul style="list-style-type: none"> • Meteorological processes behind EWEs on a fundamental level • Reading warning signs for the chance of EWEs
Online Training day 3 – 25 November		
14:00 – 15:30	Using the Wildfire Data Portal (WDP) and analysing the risk of EWEs	<ul style="list-style-type: none"> • Analysing extreme wildfires and their operational decision-making through the WDP • Assessing EWE potential through the operational tool on the WDP

Additional information

- ➔ Participation in EWED Online Training Event is free of charge.
- ➔ Participants can be from the following countries:
 - ➔ Denmark
 - ➔ Norway
 - ➔ Sweden
 - ➔ Finland
- ➔ Resources required: laptop or tablet with MS Teams. Further details on how to join the online sessions will be provided in due course.

Registration

Please register by completing [this form](#). Registration closes on **26 October 2025**.

Contact

For questions or more information about the registration or the Online Training Event, please contact: **Brian Verhoeven**, wildfire researcher and coordinating Dutch fire analyst, Netherlands Institute for Public Safety: brian.verhoeven@nipv.nl

More information on EWED

Website: bit.ly/47UeQhz

X: [@EWEDproject](https://twitter.com/EWEDproject)

LinkedIn: [@EWED project](https://www.linkedin.com/company/ewed-project/)