



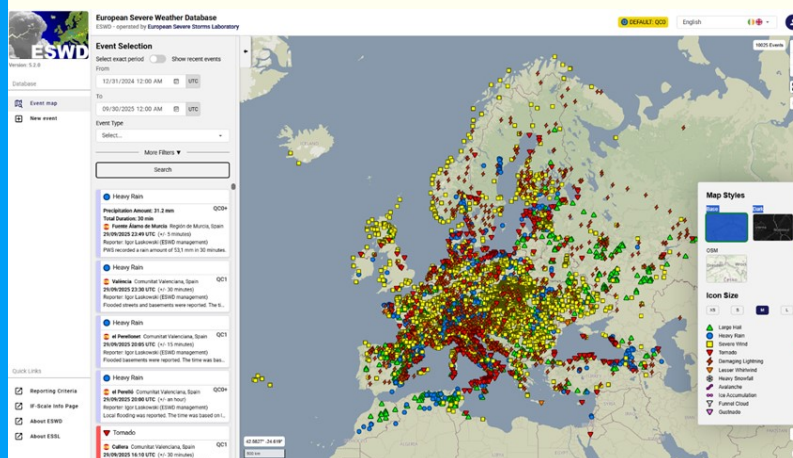
20th anniversary – our jubilee year

New European Severe Weather Database (ESWD)

On 28 September 2006, the ESSL was formally founded.

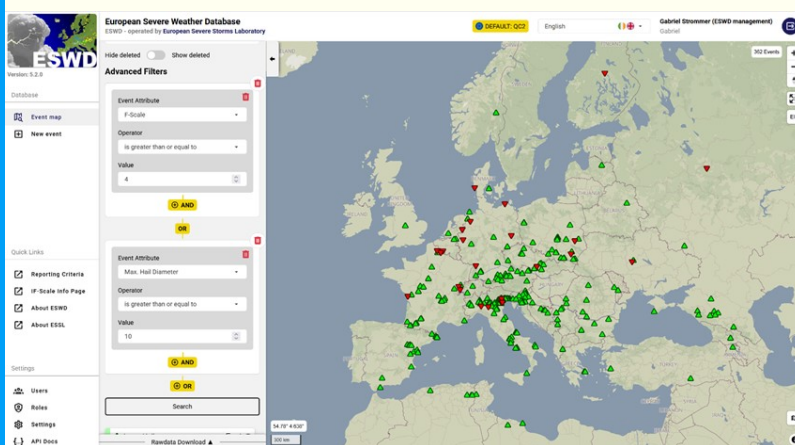
Leading up to ESSL's **20th Anniversary** and continuing throughout the jubilee year, we will each month highlight and explore in depth one important aspect of ESSL.

Making the ESWD fit for the future



The **new ESWD**, featuring a completely redesigned interface, offers many new and powerful ways to explore the data. Here are just a few examples:

- **Advanced filters for event selection** – It is now easy to select reports according to their properties, such as hail size, IF-scale rating, or precipitation amount. Multiple properties can also be combined, for instance, displaying all violent tornadoes and giant hail reports together on the map.
- **Improved reporting tools** – When submitting a report in the new ESWD, the location can be selected not only by searching for a place name but also directly by clicking on the map – a small but useful feature that simplifies reporting.



Violent tornadoes and giant hail report for the past 100 years

Interview with ARSO – New Institutional Full Member of ESSL

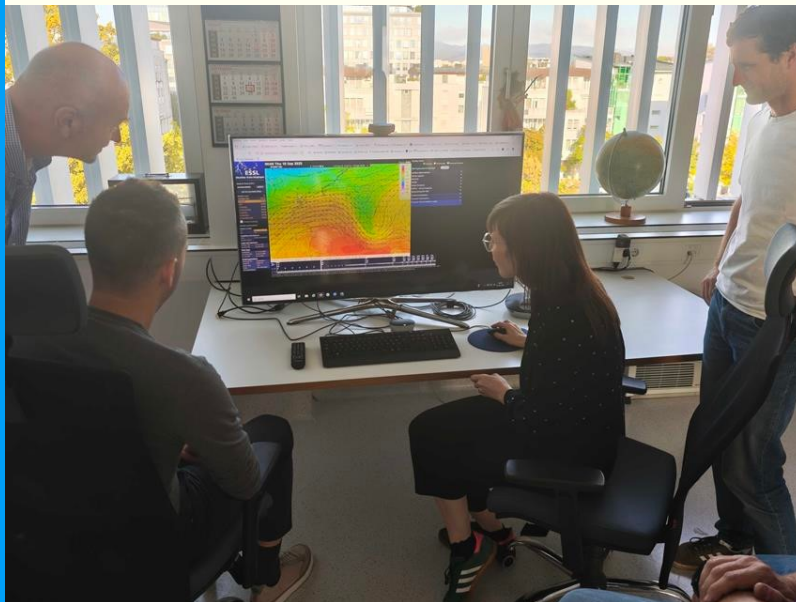
With great pleasure, we announce that **ESSL** has a new *Institutional Full Member*. On this occasion, we bring you an interview with the [Slovenian Environment Agency \(ARSO\)](#), in which they share the background of their decision to join, their first experiences with *ESSL Weather Data Displayer*, and their outlook on future collaboration.

ESSL: What motivated ARSO to become an *Institutional Full Member* of ESSL?

ARSO: Slovenia is located in a region frequently affected by thunderstorms, and in recent years severe convective storms have become more frequent. Our objective is to enhance the quality and accuracy of convective forecasting. Since ESSL is the only institution in Europe bringing together leading expertise in this field, joining as an Institutional Full Member was a natural choice. In addition, the membership provides ARSO with a wide range of valuable opportunities and benefits.

ESSL: What are the main advantages of having access to the ESWD database through your membership?

ARSO: Access to the ESWD database will enable us to perform more precise and systematic verification of our warnings. The data can be useful for monitoring current conditions, conducting post-event analyses, and serving as a reliable archive of severe weather events.



ESSL: What led you to the decision to purchase a license for the Displayer, and how is it used in your daily operations?

ARSO: We were first introduced to the ESSL Weather Data Displayer during the ESSL Testbed workshops. Most users immediately appreciated its fast responsiveness and the ability to probe the atmosphere at any given point. The tool makes it

possible to examine model forecasts of the key ingredients for convection and to analyze probabilistic forecasts of hazardous weather phenomena. Our decision to purchase it was based on the advantage of having, in a single platform, both real-time monitoring of current weather conditions and the ability to examine convective development several hours to several days ahead. The system offers advanced methods for assessing thunderstorm severity. In addition, we expect further development of the system in collaboration with EUMETSAT and other meteorological services.

Each morning during the convective season in the forecasting office, we evaluate the likelihood of thunderstorm initiation, their potential location, and expected severity. With the support of the Displayer, we can forecast and track convective development more effectively and issue timely warnings. The tool is employed both in general weather forecasting and in aviation meteorology.

ESSL: Which Displayer features or tools have proven to be the most useful for ARSO?

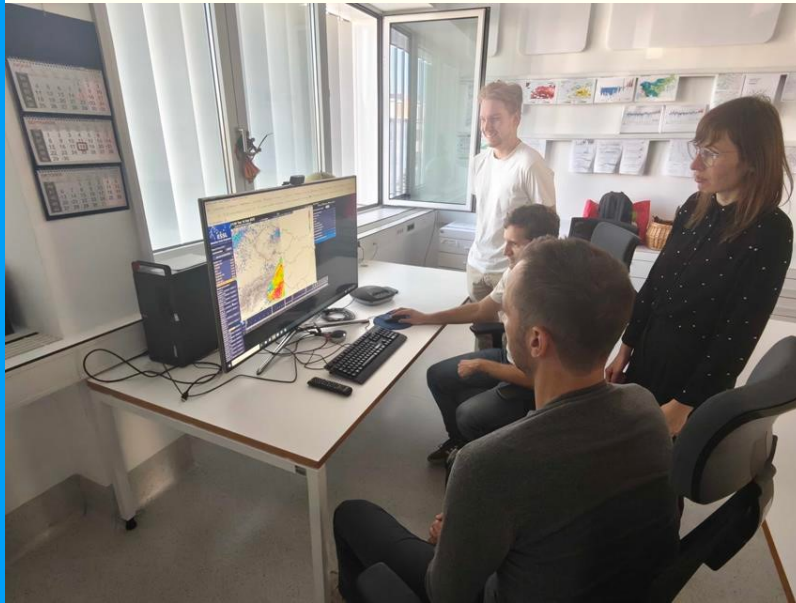
ARSO: The most useful Displayer features for us are: the model sounding tool, outputs from **AR-CHAaMo** and EPS mesoscale models.

Overlaying different fields is also very useful, for example forecasts of CAPE and wind shear with current satellite imagery.

ESSL: Could you share your impressions of the tailored training provided by ESSL for your team in Ljubljana? What key skills or knowledge did your forecasters gain from this training?

ARSO: If you want to gain the most knowledge about convective storms this is the way to go. During the workshop, we consolidated and explored the entire field of convective forecasting. We focused particularly on the practical aspects of

predicting severe thunderstorms. The afternoon session was especially engaging, as we examined case studies of severe thunderstorm events from the Slovenian region.



ESSL: Have you noticed changes in efficiency, methodology, or team collaboration since implementing our tools and completing the training?

ARSO: Ingredient based forecasting has become the gold standard in the weather office. We now use model soundings and hodographs much more frequently. It is also very welcome that we have an additional forecasting tool available in case our internal system fails.

ESSL: What would be your advice to other national meteorological services considering ESSL membership and Displayer use?

ARSO: Membership in ESSL is an excellent way for meteorological services to connect and collaborate more effectively. The Displayer is a powerful tool for visualizing and analyzing severe weather and related data. Together, these resources can significantly enhance your operational capabilities and contribute to better forecasting, preparedness, and collaboration.

ESSL: How do you see the future collaboration between ARSO and ESSL in the coming years?

ARSO: We hope to continue participating in ESSL's training activities and benefit from their research and tools, such as the ESSL Displayer. At the same time, we are open to contributing our own experience and data to support ESSL's mission. Closer cooperation will help improve our understanding and forecasting of severe weather.

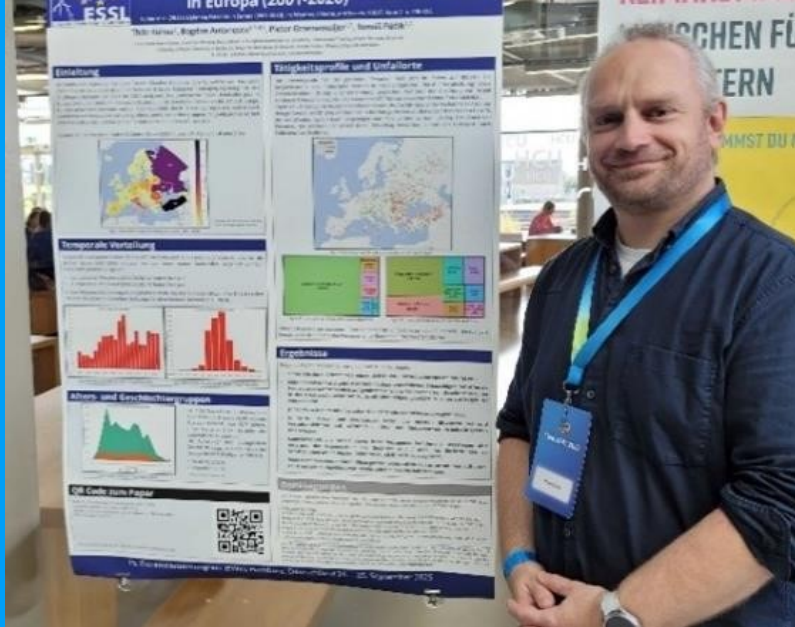
ESSL at international conferences

At the **EUMETSAT Meteorological Satellite Conference** in Lyon, France, Tomas Púčik showcased the results of the ongoing **ESSL–EUMETSAT collaboration**, with a focus on the use of the Lightning Imager data. His talk and demonstration of Testbed activities highlighted how this new satellite capability can improve severe convective storm forecasting and nowcasting.



At the **ExtremeWetterKongress (EWK)** in Hamburg, Germany, **Thilo Kühne** presented new research on lightning fatalities during the poster session and contributed to the panel discussion *“Wie viel Extremwetter können wir uns noch leisten?”*.





Finally, at the **37th International Conference on Alpine Meteorology (ICAM)** in Poreč, Croatia, **Alois Holzer** delivered an invited lecture on *Forecasting severe convective storms close to complex topography – the relevance of the TIM Field Campaign*, underlining the importance of the **TIM project** for improving forecasts in complex terrain.



ECSS news





Last day for the regular registration fees is on the **20th of October 2025**. Start of “late and on-site price” registration phase on 21 October 2025.

Be aware to register in time for the social events and the conference dinner. Due to the different choices being offered, registration for the social events needs to be done separately. Please make sure to reserve your place in time. Some of the events may be booked out soon. For the icebreaker and the conference dinner, for example, there is a strict upper limit of guests. Places are fixed on a “first come - first served” principle.

A PDF programme book will be published about two weeks ahead of the conference on the ECSS webpage. A printed program overview will be handed out at the registration desk on site.

Early career and women at the ECSS

ECSS 2025 will feature two special networking lunches aimed at fostering community and exchange among participants:

Early Career Lunch – Monday, 17 November (13:15–14:30)

A great opportunity for early career scientists to meet peers, share experiences, and build connections.

 Register at earlycareer@essl.org by 10 November 2025.

Women’s Lunch – Tuesday, 18 November (13:15–14:30)

An informal get-together for female scientists, developers, and forecasters to connect and share ideas.

 Register at women@essl.org by 10 November 2025.

The first drink is on us – we look forward to seeing many of you there!

ESSL training calendar

You can find details about all events and registration at

<https://www.events.essl.org/>

Date	Activity
6 – 10 October 2025	Course: Aviation forecasting of severe convective storms (autumn ed.)
13 – 17 October 2025	ESSL-EUMETSAT Forecaster Testbed week
17 – 21 November 2025	12th European Conference on Severe Storms (ECSS2025) Utrecht, The Netherlands
21 November 2025 (afternoon)	ESSL-EUMETSAT Forecaster Workshop on MTG FCI and LI Utrecht, The Netherlands (ECSS venue)
2 – 6 February 2026	Course with closed audience: Aviation nowcasting of severe convection – focus on new satellite products (MTG)
9 – 13 March 2026	NEW Course: Optimal use of radar data in severe storm nowcasting
23 – 27 March 2026	Course: Forecasting Severe Convection (FSC1)
13 – 17 April 2026	Course: Aviation Forecasting of Severe Convection
4 – 8 May and 18 – 22 May 2026	ESSL-EUMETSAT Forecaster Testbed weeks (t.b.c.) – tentative dates
11 – 12 May and 1 – 2 June 2026	NEW 2-day ONLINE refresher on forecasting severe convection (qualification: at least one prior ESSL course or testbed <u>week</u>)
15 – 19 June 2026	ESSL Testbed 2025 – regular week (focus on radar and NWP)
22 – 26 June 2026	ESSL Testbed 2025 – expert week
7 – 11 September 2026	EMS Annual Meeting (co-sponsored by ESSL)
14 – 18 September and 28 Sep – 2 October 2026	ESSL-EUMETSAT Forecaster Testbed weeks (t.b.c.) – tentative dates
13 – 15 October 2026	IF Scale and wind damage assessment workshop (tentative)
10 – 12 November 2026	Second ESSL Workshop on Weather Warnings (tentative)

Unsure which course to attend? Try our [online quiz!](#)

For further information about the registration for these events, please contact us at: events@essl.org .

Or approach us for tailored trainings or forecaster training on-the-job.



ESSL

European Severe Storms Laboratory

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