ESSL Newsletter 2025-6

December 2025

20 years of ESSL – monthly jubilee topic

As part of the celebrations of 20 years of ESSL, we are publishing a series of monthly jubilee topics highlighting different aspects of our work and community. This month, we look back at one year of ESSL Services and, in addition, share another ECSS testimonial – this time from a colleague who has been attending the conference since its early days, starting with the 2004 edition in León.

One year of ESSL Services

Just over a year after its launch as a spin-off from ESSL, **ESSL Services GmbH** is already demonstrating growth and impact. Established as a commercial company, ESSL Services is transforming ESSL's research and development into high-value products for its members and other users.

This success is shown by the growing adoption of the Weather Data Displayer and Radar Displayer: seven weather services and related organisations have already subscribed to these tools originally developed for ESSL testbeds and training courses. We are delighted to see this innovation creating benefits for both weather services and ESSL.
Beyond the Displayers, ESSL Services collaborates

with companies in the (re)insurance and risk modelling sectors, delivering hazard and risk modelling solutions. These efforts are often based on the Additive Regression Convective Hazard Models (AR-CHaMo) developed in the past, showcasing the transfer of research work into real-world applications. ESSL Services' growth has directly supported the expansion of the ESSL team, particularly within the Climate **Hazard and Risk Modelling department led by Francesco Battaglioli**.

Reflecting this, ESSL is currently advertising an additional vacancy.

ECSS perspective from Dr. Pao K. Wang

I went to ECSS by the introduction of Martin Setvak as Martin and I have been collaborating on the study of storm top features as observed by meteorological satellites. The first ECSS I attended was the one held in Leon, Spain, in 2004. I presented a talk on my gravity wave breaking theory of jumping cirrus and above anvil cirrus plumes (AACP). The amazing thing was, right after my talk, Willi Schmid from ETH, Switzerland, rose from the very back row of the hall and said that he had a webcam video showing the top of a Bavarian multicellular storm exhibiting features exactly like what I showed. We eventually published this matter together in *Atmospheric Research*. This example shows how constructive collaborations can readily occur in ECSS.

International scientists working on severe storms, especially those from North America and Asia, come to ECSS and find that they can engage in constructive scientific discussions with their European colleagues in a friendly atmosphere. I have had many such fruitful discussions in ECSS that later led to collaborative research and formal scientific publications.

The single session format is very good because we can hear all talks without missing some. I understand that this is not easy as the number of

talks may increase significantly but it is worthwhile to keep if possible.

———

New Course: Optimal use of radar data in severe storm nowcasting

Taking place in early **March 2026 (9–13 March)** at the ESSL Research and Training Centre in Wiener Neustadt (Austria), this new intensive radar meteorology course by **Dr. Tomáš Púčik, Dr. Pieter Groenemeijer, and Bram van 't Veen** focuses on how to use (dual-polarimetric) radar data most effectively for nowcasting convective storms and their hazards – from basic radar variables and common pitfalls to interpreting the signatures of different storm types. We will practise radar data interrogation on real storm cases from different European countries, and possibly even the U.S., using our brand-new in-house developed radar displayer.
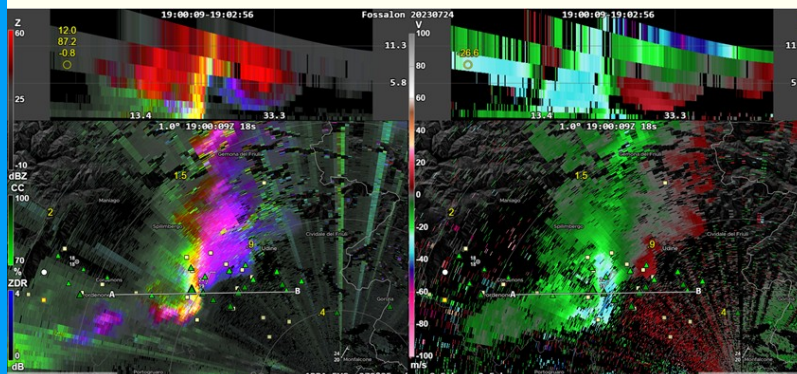

More information and registration: [Optimal use of radar data in severe storm nowcasting – course page](#)

———

New institutional full members

We are pleased to announce that three new institutional full members have recently joined ESSL: **Kosovo Air Navigation Services (KANS)**, **Agencia Estatal de Meteorología (AEMET)**, and the **Lithuanian Hydrometeorological Service (LHMS)**. With them, our community has grown to

31 full members, strengthening international collaboration across Europe. We warmly welcome all new members and look forward to our future cooperation!
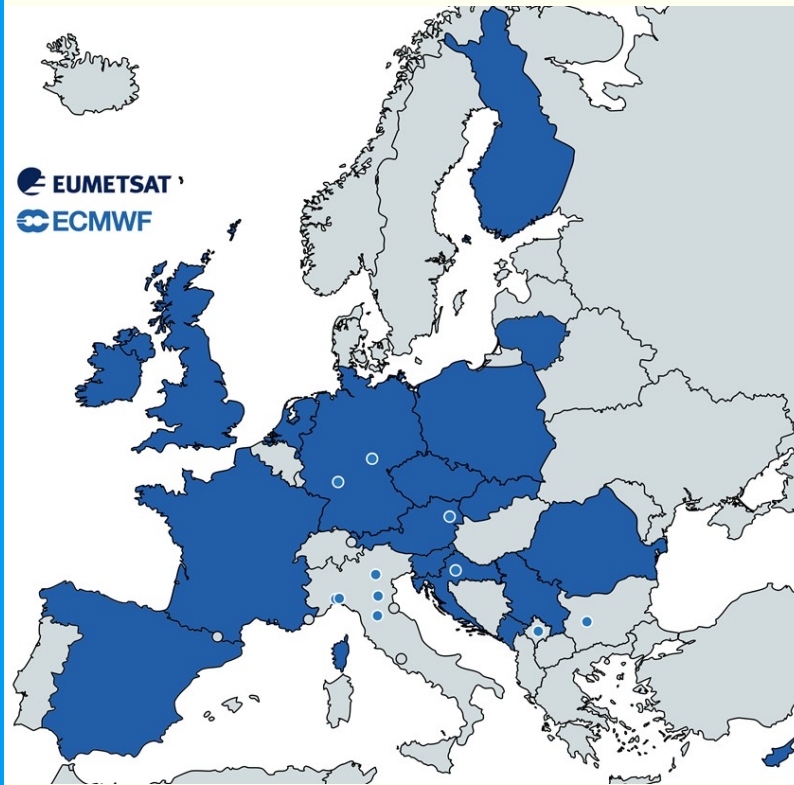
Historical Italian tornadoes upgraded to IF5

Recently, ESSL re-analysed two historical Italian tornadoes – the **1884 Catania tornado** (28 people killed and several hundred injured) and the **1957 Val Scuropasso tornado** (6 people killed and more than 30 injured) – using the International Fujita (IF) scale. On the basis of historical photographs and written accounts, both events have now been rated **IF5**.

Together with the IF5 tornado in Selva del Montello in 1930, this means that three of the eight IF5 tornadoes documented in Europe over the past 300 years occurred in Italy, giving the country the highest known number of IF5 tornadoes on the continent.

Tornado in Catania, Italy - 1884   Tornado in Valle Scuropasso, Italy - 1957

ECSS2025 photo gallery

To relive the atmosphere of our conference, take a look at the ECSS2025 photo gallery prepared by our colleague Igor Laskowski.

Season's greetings and best wishes for 2026 from the entire ESSL team! ⭐

Thank you for your continued support and collaboration – we look forward to many more exciting years together.

20 years

ESSL training calendar and Testbed 2026

You can find details about all events and registration at

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

Date	Activity
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 week)
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 5 – 9 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.