ESSL Newsletter 2022-2

European Severe Storms Laboratory

June 2022

Testbed 2022

After two years of online Testbeds, the ESSL team was happy to welcome participants at the ***ESSL Research and Training Centre in Wiener Neustadt***. The premises in the Bräunlichgasse have been expanded and upgraded, so that a large number of participants of up to 18 persons can now take part simultaneously.

This year there are five Testbed weeks, three of which are organized together with **EUMETSAT** as part of the collaboration in preparation for the Meteosat Third Generation (MTG) satellites. At the Testbed, we are evaluating a number of proxy products for MTG as well as a range of nowcasting and numerical weather prediction (NWP) products from the **German Weather Service DWD**. NWP products include the convection-permitting models ICON-RUC from DWD and C-LAEF from the **Austrian weather**

service ZAMG.

*For more information about the ESSL Testbed, visit essl.org/testbed*

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ESSL at UEF2022

At the recent **UEF2022** held at ECMWF in Reading (UK), ESSL researcher **Francesco Battaglioli** has presented results from the joint ***ECMWF-ESSL project*** on the development/application of convective hazard models to medium-range forecasting.

A four-dimensional additive logistic regression model for large hail model (trained using hail reports, lightning observations and convective parameters from the ERA5 reanalysis) was applied to reforecasts of the European Centre for Medium-range Weather Forecasts (ECMWF) Ensemble Prediction System (EPS). The model was shown to provide useful guidance in hail forecasting beyond a week ahead of time and to outperform currently used composite parameters such as the product of CAPESHEAR and the Significant Hail Parameter

(SHP).

In conclusion, it was demonstrated that combining an additive logistic regression model trained with observation data can create highly skillful medium-range forecasts of large hail when used in combination with an ensemble numerical weather prediction model. Future work will involve the development of a very large hail (≥ 5 cm) model and a convective wind model.
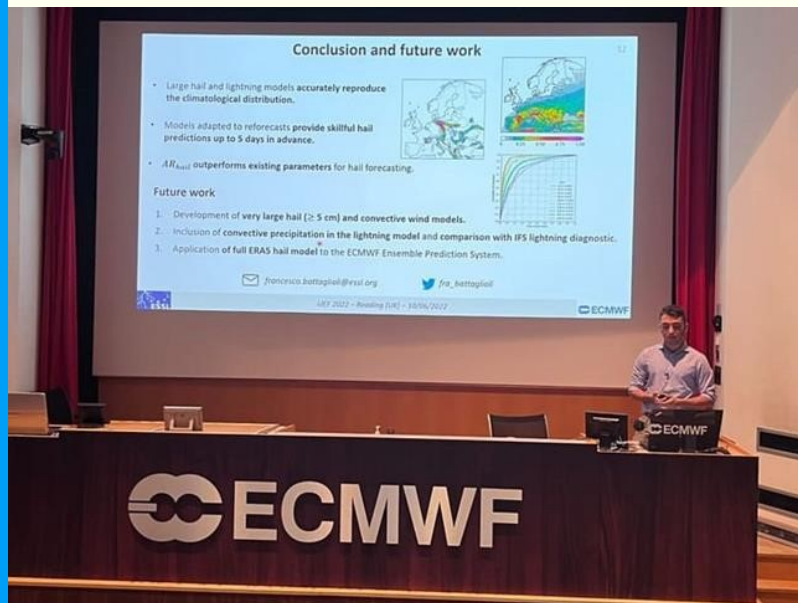
Francesco Battaglioli at UEF2022

Mini-European Conference on Severe Storms (mini ECSS) and ECSS 2023

The pandemic situation over the past years has led to the postponement of the European Severe Storms Conference for May 2023.

But in order to have the opportunity to hear the latest research and achievements on severe storms, ESSL is organizing a 2 day online event in September. Registrations are open (link) and the deadline for abstract submission is 31 August.

This event offers an opportunity for PhD students and early-career scientists to present their latest research.

Also, ESSL is very happy that can already announce some of the invited speakers and their talks: ***Makenzie Krocak, John Peters, Victor Gensini and Natalia Pilguj***.

11th European Conference on Severe Storms will be held in Bucharest, Romania in the week 8.-12. May 2023 – and is supported by **Meteo Romania**.

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ESSL event calendar

Date(s)	Event (click on the respective link for more information)	Remarks
27 June–1 July 2022	**ESSL-EUMETSAT Testbed on Severe Convective Storms**	in Wiener Neustadt Application and support through EUMETSAT (closed)
4–8 July 2022	**ESSL Testbed 2022**	in Wiener Neustadt or online
11–15 July 2022	**ESSL-EUMETSAT Testbed on Severe Convective Storms**	in Wiener Neustadt Application and support through EUMETSAT (closed)
29 August – 1 September 2022	**Tornado and Wind Damage Workshop**	in Wiener Neustadt with limited online participation)
27–28 September 2022	**Online Mini-Conference on Severe Storms**	
rescheduled! 4–6 October 2022	**Workshop: Severe Weather Warnings**	in Wiener Neustadt or online
10–14 October 2022	**ESSL-EUMETSAT Testbed on Severe Convective Storms**	in Wiener Neustadt or online Application and support through EUMETSAT (closed)

27-31 March 2023	Course: **Aviation Forecasting of Severe Convection**	ESSL Research and Training Centre Wiener Neustadt. *Early fees until 30 Nov. 2022.*
24-28 April 2023	Course: **Forecasting Severe Convective Storms** (FSC1)	ESSL Research and Training Centre Wiener Neustadt. *Early fees until 30 Nov. 2022.*
Spring 2023	**ECSS – 11th European Conference on Severe Storms**	in Bucharest, Romania – supported by Meteo Romania
5-9 and 12-16 June 2023	**ESSL-EUMETSAT Testbed on Severe Convective Storms**	in Wiener Neustadt or online
26-30 June 2023	**ESSL Testbed 2023**	in Wiener Neustadt or online
3-7 July 2023	**ESSL Testbed 2023 expert week**	in Wiener Neustadt or online
3–8 September 2023	EMS Annual Meeting, co-sponsored by ESSL	in Bratislava, Slovakia
25-29 Sept. and 9-13 Oct. 2023	**ESSL-EUMETSAT Testbed on Severe Convective Storms**	in Wiener Neustadt or online
2-6 September 2024	EMS Annual Meeting, co-sponsored by ESSL	in Barcelona, Spain
Autumn 2025	**ECSS – 12th European Conference on Severe Storms**	open for proposals

* In case events are carried out online or as hybrid events because of COVID-19, we will inform registered participants 2 months in advance.

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ESSL General Asembly 2022

Members will soon receive their formal invitation to the upcoming General Assembly (GA) of ESSL. The GA which is usually planned as a side event during the EMS annual meeting, will be held online on 18 October at 15:00.

ESSL training activities

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.

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