



**ESSL**  
c/o DLR, Institut für Physik der Atmosphäre  
Münchener Str. 20, Geb. 120  
82234 Wessling  
Germany

Phone: (+49) 151 59031839  
(+49) 8153 281845  
Fax: (+49) 8151 96599911  
E-mail: [eb@essl.org](mailto:eb@essl.org)  
Internet: [www.essl.org](http://www.essl.org)

---

## European Severe Storms Laboratory

### Newsletter 2018-3

No. 18

December 2018

### ESSL spring seminars: early bird rates until 31 December

We would like to advertise the following seminars that can still be booked for reduced rates until the end of this month:

Our cornerstone seminar “**Forecasting Severe Convection I**” by Dr. Tomáš Púčik from 25 to 29 March 2019, which combines lectures with practical forecasting exercises. When this seminar was last held in October, it received a very high mean participant grade of 9.9 (on a scale from 0 to 10). Join and boost your ability in forecasting severe convection!

Our specialized seminar “**Aviation Forecasting of Severe Convection**” by Dr. Tomáš Púčik from 8 to 12 April 2019. In the past years a growing demand for this forecasting course tailored to aviation forecasters, evolved. At this moment, there are only 3 places left for this course. For autumn 2019 there is another such seminar planned.

Our high-level seminar “**Dynamics and Prediction of Severe Convection**” (Forecasting Severe Convection II) combines lectures from leading tornado and severe weather researcher **Prof. Yvette Richardson** from Penn State University in the USA, which practical forecasting exercises. This seminar is especially suited for advanced European forecasters, such as shift leaders, warning meteorologists, and to advanced students of meteorology and academic researchers with an interest in forecasting.

The full and current activities calendar can always be found on our website: [www.essl.org](http://www.essl.org)

For those of you who are unsure which seminar to attend we designed a self-assessment Quiz. Try it out!

For more information, feel free to contact us at [events@essl.org](mailto:events@essl.org)



## ESWD Upgrade of severe weather database ESWD

Based on feedback from ESWD users collected at meetings in November 2017 and the ESWD User Forum in March 2018, the [European Severe Weather Database](#) has been updated to **Version 4.4**. A number of changes have been made, particularly to the **submission form**. The most important changes are:

1. **Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan** were added, so it is possible to enter reports for these countries. ESSL aims to learn more about storms in Central Asia.
2. **The submission form** has been **simplified** substantially.
3. Place and time **accuracy** have become **required** fields.

The screenshot shows the ESWD submission form with several fields highlighted in red boxes to indicate required changes:

- TYPE OF EVENT:** A dropdown menu set to "large hail".
- DATE AND TIME:** Fields for "hours:minutes" (10:00) and "Date (dd-mm-yyyy)". A new "Time accuracy" dropdown menu is highlighted in red.
- LOCATION:** Fields for "Country" (Slovak Republic), "Province, state, or district code" (Prešovský kraj), and "Name of nearest town, place, or village" (Poprad). A new "Place accuracy" dropdown menu is highlighted in red. A "More Details" link is also present.
- INTENSITY AND OTHER CHARACTERISTICS:** Fields for "Maximum hailstone diameter" and "Hailstone cover thickness".
- IMPACTS:** Fields for "How many persons were injured?" and "How many persons were killed?". A "More Details" link is also present.
- DESCRIPTION:** A text area for "A brief description of the event and relevant details".

An updated version of the submission form. Time and place accuracy (in red boxes) are now required fields. Dropdown menu can be accessed by clicking at "More Details".

4. **Funnel clouds** cannot be submitted into ESWD anymore.
5. The **country** can now be changed in the submission form.
6. **Impacts** of the event can now be **indicated** by **ticking** checkboxes. Each type of severe weather has a different set of impacts that can be selected. This step streamlines the reporting of impacts into the ESWD, and makes it easier to compile statistics of severe weather impacts of the storms across Europe.

## IMPACTS

[Less Details](#)

How many persons were injured?

How many persons were killed?

Which impacts occurred?

### Transport infrastructure

- Road(s) impassable or closed
- Rail-/tram-/subway(s) unusable or closed
- Rail-/tram-/subway infrastructure damaged
- Rail-/tram-/subway vehicle(s) damaged or destroyed
- Airport(s) closed (for more than an hour)
- Aircraft damaged or destroyed
- Ship(s) damaged or destroyed
- Inhabited place(s) cut off from transport infrastructure

### Other infrastructure

- Power transmission damaged or destroyed
- Telecommunication infrastructure damaged or destroyed

### Damage to homes / buildings

- Damage to roof or chimney
- Damage to window(s) or insulation layer(s)
- Roof(s) destroyed

### Damage to road vehicles

- Car(s) damaged (unspecified)
- Car(s) dented
- Car window(s) or windshield(s) broken
- Car(s) damaged beyond repair

### Damage to agriculture

- Crops/farmland damaged or flooded
- Greenhouses(s) damaged or destroyed
- Animals(s) killed

*An example of impact choices for a large hail event type.*

## New Executive Board elected

At the recent General Assembly in November, the ESSL Members elected a new Executive Board (EB) to take office on 1 January 2019. While Director Pieter Groenemeijer, Treasurer Alois Holzer and Deputy-Directors Kathrin Riemann-Campe and Bogdan Antonescu were re-elected for another period of 3 years, Michou Baart de la Faille was elected as a new Deputy Director.

Baart de la Faille is from Utrecht in the Netherlands and 32 years old. She is a general aviation forecaster and KNMI chair of general aviation position. She contributes to the KNMI project for the improvement of its weather warning system and also participates in the ARISTOTLE project with the goal of delivering global hazardous weather information to the European Commission's Emergency Response Coordination Center.

At ESSL she already worked for the Testbed in 2018. Her main role within the ESSL EB will be to strengthen ties to the National Hydro-Meteorological Services in Europe.



*New ESSL Deputy Director  
Michou Baart de la Faille*

## Introduction of: ESWD database programmer - Zhongjian Liang

We want to give you a view behind the scenes by introducing our ESSL employees. In this issue, we would like to introduce our ESWD database programmer, Zhongjian Liang.



Zhongjian Liang

**ESSL:** Zhongjian, what was your first impression about ESSL and its activities, when you first got in touch with us?

**ZL:** That was many years ago, something like 2007. I got to know Pieter when we all lived around Karlsruhe. I was very impressed by the idea and first implementation of ESWD. Pieter himself implemented the first versions of ESWD, without deep knowledge of software engineering, and it served the purpose very well. I always wonder, if I were at Pieter's position, I probably would not have had the courage/enthusiasm to implement such a software from scratch all by myself.

**ESSL:** What do you think is the most fascinating part of ESSL?

**ZL:** The ESSL has a small but versatile and very enthusiastic team around Europe, that was quite new to me as one from China at that time. Later, I met Nikolai, Alois, Thilo, Thomas, Kathrin and others, it is a wonder that all these people can come together from different places, for the passion of meteorology, to form this organization. I think such a thing can only happen, because we are in Europe, and meteorology is by its nature without borders. In ESSL, it feels like a small EU.

**ESSL:** Why did you want to start working for ESSL?

**ZL:** As mentioned, I started working with the ESWD first. When I discussed with Pieter about the ESWD, I realized immediately that I can improve some parts of it. As a student I was very happy to use my programming skills in a real project, learn some new technologies and it feels very good and accomplished when other people are using your work actively. One of the most active one is Thilo :-). And I like the environment of ESSL, open, international, and very European. The development and maintenance of ESWD became one of my major tasks in ESSL.

**ESSL:** What are the main challenges you see within your area of responsibility within the coming year?

**ZL:** In the realm of software, we now have a new ESWD version online, and we will constantly expand/expose interfaces to other partners. It can be challenging to maintain all the data flows between ESWD and EWOB, interfaces of ESWD and EWOB to all the partners. We have continuously the need to improve the data structure, both from meteorology and software perspective, at the same time keep everything running and in sync. All these works are of course also constrained by our financial resources and time.

**ESSL:** Zhongjian, thank you for the interview!