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European Severe Storms Laboratory Newsletter 2017-3

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ESSL Testbed 2017

The 6th ESSL Testbed took place from 5 June to 7 July at or Research and Training Centre in Wiener Neustadt, Austria. The four individual Testbed weeks were fully booked with 47 participants and experts from 15 European countries and the United States.

Furthermore, this year's Testbed was visited by an expert from the NSSL Testbed: NOAA <u>Hazardous Weather Testbed</u> Forecast Program Operations Coordinator Adam Clark presented their state of affairs at our testbed.

As mentioned in the <u>previous newsletter</u>, a number of satellite based-products were added to the <u>Testbed standard tools</u>. Cooperation with the Nowcasting Satellite Application Facility (NWC SAF) was established this year. The full range of NWC SAF products can be found here: http://www.nwcsaf.org/.

The preparations for the next Testbed edition have already started. In 2018, it will take place from 11 June to 13 July.



Dr. Adam Clark

Project RAIN finished and climate change study published

The project <u>RAIN – Risk Analysis of Infrastructure</u> <u>Networks in Response to Extreme Weather</u>, funded by the European Commission within its 7th Framework Programme. has successfully finished. ESSL



researchers Tomáš Púčik and Pieter Groenemeijer coordinated the project's work package on 'Hazard Identification'. Together with the project partners Technical University Delft, Freie Universität Berlin and Finnish Meteorological Institute, probabilities of occurrence of extreme weather hazards were calculated.

Among other results, ESSL has found that severe storms will become more likely as a result of climate change. These results form the basis* of a related study by ESSL that was recently published in the *Journal of Climate*:

Tomáš Púčik, Pieter Groenemeijer, Anja T. Rädler, Lars Tijssen, Grigory Nikulin, Andreas F. Prein, Erik van Meijgaard, Rowan Fealy, Daniela Jacob, and Claas Teichmann, 2017: Future Changes in European Severe Convection Environments in a Regional Climate Model Ensemble, *Journal of Climate*, **30**, 6771–6794. doi: 10.1175/JCLI-D-16-0777.1

The RAIN project started in May 2014. Pieter Groenemeijer presented the final report on Hazard Identification during the final project meeting at the Trinity College in Dublin on 23 and 24 March 2017. More information can be found on ESSL's web site: https://www.essl.org/cms/research-projects/new-eu-project-rain/

* The study was carried out partly in the RAIN and partly in the ARCS project.



Next ECSS starts soon

The 9th European Conference on Severe Storms - ECSS2017 starts soon in Pula, Croatia. ESSL in cooperation with the Meteorological and Hydrological Service of Croatia, DHMZ, welcome everybody interested in severe convective storms during 18-22 September 2017. Detailed information including the programme can be found on our webpage. Online registration for the ECSS is possible via Copernicus here:

https://meetings.copernicus.org/ecss2017/registration.html

The ECSS 2017 is organized in cooperation with the Meteorological and Hydrological Service of Croatia, DHMZ, and is sponsored by Munich Re.





New ESSL members

The European Severe Storm Laboratory e.V. welcomes its new members. New institutional full members are the Croatia Control, Croatian Air Navigation services, the Cyprus Department of Meteorology (CYMET) and the Republic Hydrometeorological Service of Serbia (RHMSS). Dr. Darrel Kingfield joined ESSL e.V. as an individual full member.

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Successful Dissertation Defence of ESSL Senior Trainer Tomáš Púčik

We cordially congratulate Tomáš Púčik to his successfull PhD defence in May 2017.

Dr. Tomáš Púčik wrote his dissertation on 'Severe convective storm environments in the present and future' at the Masaryk University, Brno in Czech Republic. He is as passionate about forecasting severe convective storms as one can be and works as an active researcher in severe storm environments at the ESSL. Furthermore, Dr. Tomáš Púčik is a member of ESTOFEX and worked at the CHMI and at the SHMU.



During 2-6 October 2017 Dr. Tomáš Púčik will give the Seminar: <u>'Forecasting Severe Convection I'</u> at the ESSL Research and Training Centre in Wiener Neustadt, Austria.

Introduction of: ESWD Quality Control Manager - Thilo Kühne

We want to give you a view behind the scenes by introducing our ESSL employees. We started with our new Assistant to the Board, Katja Dorninger, in the previous newsletter. In this issue, we would like to introduce our ESWD Quality Control Manager, Thilo Kühne.



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

TK: I got in contact with Nikolai Dotzek in 2004, who collected and analysed severe weather reports from Germany for his TorDACH data base. Since many reports were missing from the North and Northeast, I sent him news articles and descriptions from my own archive research. At the same time, Nikolai recommended the new ESWD data base to me and that there I could enter my reports directly.

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

TK: At the most, I am fascinated that ESSL is a pan-European association, which incorporates not only the variety of severe weather events but also the variety of Europe. After decades of political separation of Europe into two camps and long martial history, it is my daily pleasure working in an institution, which understands itself as European.

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

TK: Due to the initiative of my former supporter Nikolai Dotzek, ESSL offered me a 'minijob' for severe weather data entry in 2008 and later, in 2009, a contract as scientific employee and ESWD Quality Control Manager.

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

TK: The previous years showed a continuous increase in European severe weather reports. The more voluntary people are engaged from individual countries, the larger the amount of reports, that I have to examine. On some severe weather days, one clearly reaches the performance limit. It is a further challenge to question the ESWD and its reporting criteria consistently and if necessary to adapt to new findings we gain from the data.

ESSL: Thank you, Thilo, for the interview!

Tornadoes and Waterspouts in Europe - A Coffee Table Book

ESSLs Deputy Director Bogdan Antonescu started a kickstarter project publishing a coffee table book on historical events of 'Tornadoes and Waterspouts in Europe'.

Bogdan Antonescu summarizes: 'Tornadoes and Waterspouts in Europe is a coffee table book showing the evolution of our understanding about tornadoes and waterspouts in Europe from 1555 to 1910'. The project can be supported until 14 September 2017.



Foto by B. Antonescu

Upcoming Activity Calendar

Date	Event	Additional information	Registration
18 - 22 Sep 2017	9 th European Conference on Severe Storms ECSS 2017	in Pula, Croatia	
23 Sep 2017	Introduction Seminar Forecasting of Severe Convective Storms	by Dr. Charles A. Doswell III, in Pula, Croatia	Until fully booked.
2 - 6 Oct 2017	Seminar Forecasting Severe Convection I	by Tomas Pucik (ESSL/ESTOFEX)	Until fully booked.
20 Nov - 1 Dec 2017	Training Courses: Forecasting Severe Convection at ARPAL in Genoa, Italy	by Tomas Pucik (ESSL/ESTOFEX)	Closed event by ARPAL
4 - 8 Jun 2018	Seminar: Forecasting Severe Convection II Dynamics and Prediction of Severe Thunderstorms	by Prof. Paul Markowski, PennState Univ., USA	Until fully booked.
11 - 15 Jun 2018 18 - 22 Jun 2018 2 - 6 Jul 2018 9 - 13 Jul 2018	ESSL Testbed	by ESSL staff and expert guests.	Early bird fees until 15 February 2018.
3 - 7 Sep 2018	EMS Annual Meeting: European Conference for Applied Meteorology and Climatology	co-sponsored by ESSL, in Budapest, Hungary	
4 - 7 Sep 2018	International Tornado Standard Working Group Meeting and 3rd ESSL Workshop on Tornado and Windstorm Damage Assessment	by ESSL staff and expert guests.	Until fully booked.
10 – 14 Sep 2018	Seminar on Forecasting Convective Precipitation and Flash floods NEW!	by Prof. Russ Schumacher, Colorado State University, USA	Until fully booked.

The current calendar can always be found on the website: www.essl.org. For more information, feel free to contact us at events@essl.org.

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