ESSL Newsletter 2020-1

March 2020

ESSL Testbed 2020

In **June** and **July**, the ninth edition of the on-site phase of the **ESSL Testbed** will take place at the Research and Training Centre in Wiener Neustadt. During four weeks participants will have an opportunity to learn how to forecast severe convective storms using state-of-the-art forecasting tools. This year, for the second time, one week is reserved for experts in the field (22 – 26 June).

This year's Testbed will feature:

- Konrad3D cell-tracking algorithm (DWD)
- Convective Initiation product (NWC-SAF)
- ICON-D2-EPS 20 member 2.2 km ensemble prediction system (DWD)
- Rapid Developing Thunderstorm product (NWC-SAF)
- STEPS ensemble nowcasting system for rain (DWD)
- Convective Rain Rate (CRR) estimation product (NWC-SAF)
- Instability indices and precipitable water (iSHAI) (NWC-SAF)

Forecasters and researchers or developers who want to participate in the ESSL Testbed are asked to register as early as possible in order to get a place in the desired week.

Information on upcoming activities can be found on our website: www.essl.org

For more information, feel free to contact us at events@essl.org

Notice: ESSL is monitoring the dynamically evolving situation with the corona virus that causes COVID-19 closely. In case an event needs to be rescheduled or changed to an online event due to force majeure, ESSL will contact the registered participants of the respective event by email. Please see the www.essl.org website for up-to-date information. At the time of writing, ESSL has decided to cancel the course on Aviation Forecasting of Severe Convection that was due to start on 30 March. Participants are offered to instead take part in another ESSL course.

ESWD summary of 2019

ESSL has posted annual overviews of the European Severe Weather Database (ESWD) reports on large hail, tornadoes, heavy rain and severe wind via Twitter- @essl_ecss and Facebook. Here comes a summary of the year 2019.
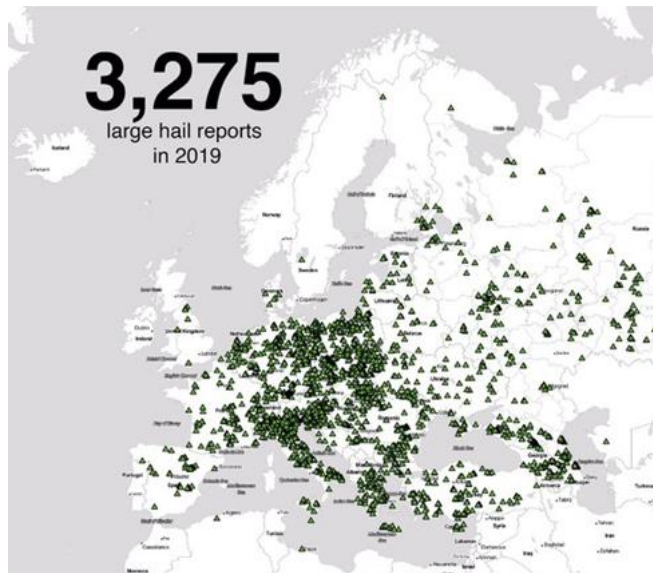
In 2019, 254 severe weather events resulted in 394 fatalities and 353 severe weather events resulted in 1,112 injuries according to the ESWD. Here are some details:

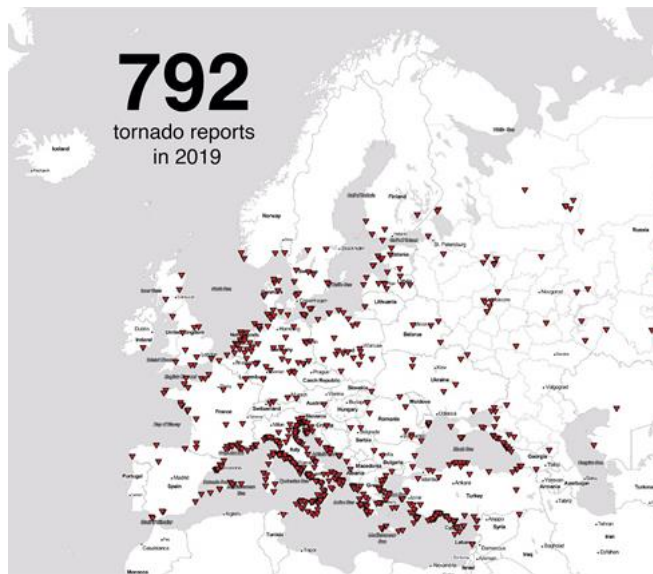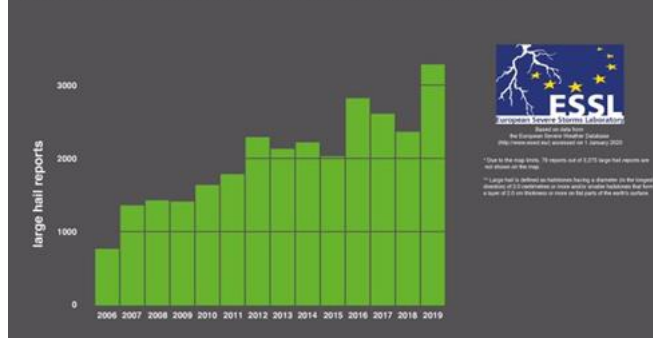**Large hail** was associated with 96 injuries in 2019.

Tornadoes were associated with 91 injuries and 3 fatalities.

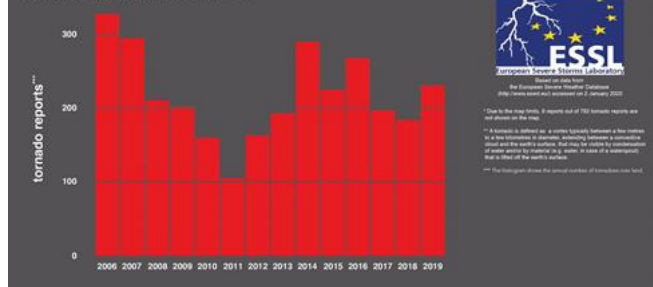**Heavy rain** was associated with 77 injuries and 145 fatalities in 2019.

Severe wind events were associated with 414 injuries and 66 fatalities in 2019.
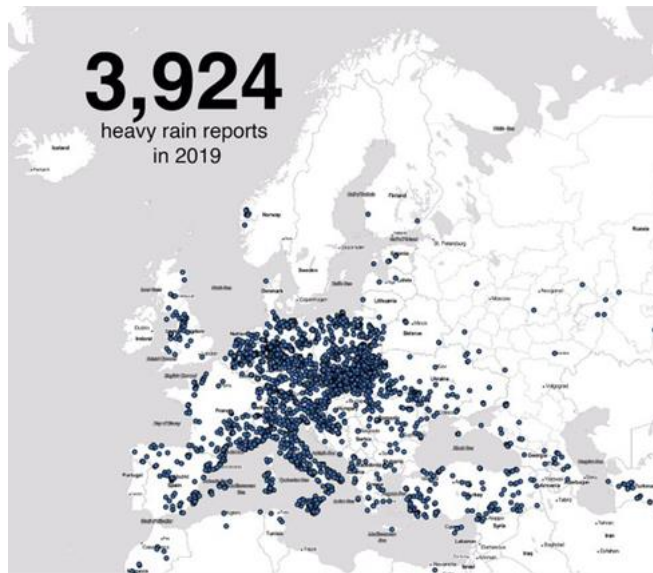
3,275
large hail reports
in 2019

In 2019, **3,275** **large hail** events were reported in Europe. This is the largest number of hail events recorded in one year since 2006. Large hail was associated with **96 injuries** in 2019.
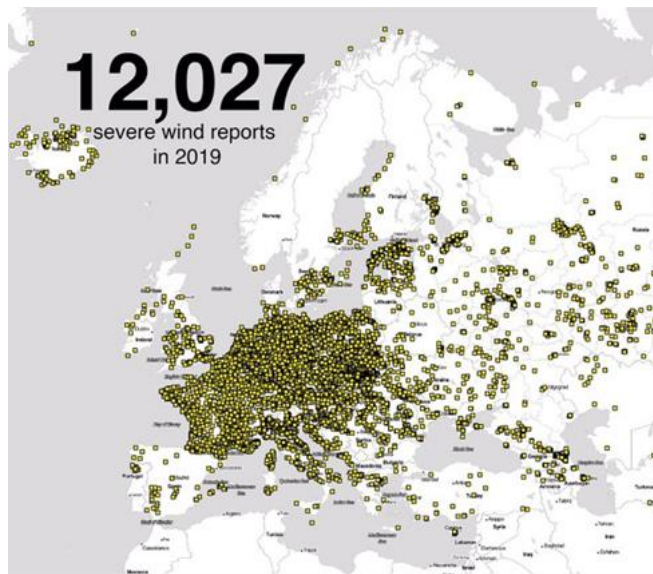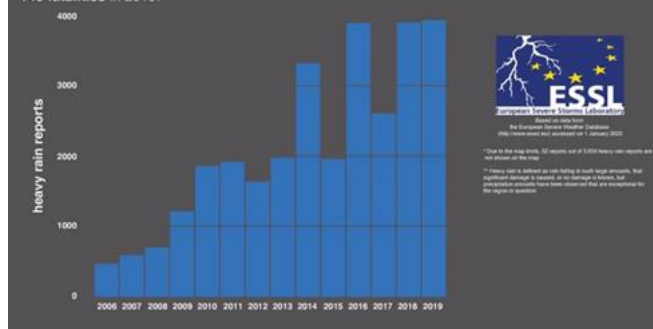

792
tornado reports
in 2019

In 2019, **792** **tornadoes** were reported in Europe. 230 reports were for tornadoes over land (29% of all reports), 531 (67%) for waterspouts, and 31 (4%) were not classified because the initial location was unknown. Of the 230 tornadoes, 76 were F0 (33% all tornadoes), 78 F1 (34%), 27 F2 (12%), 1 F3 (0.5%), and 48 (20.5%) were not classified. Tornadoes were associated with **91 injuries** and **3 fatalities** in 2019.
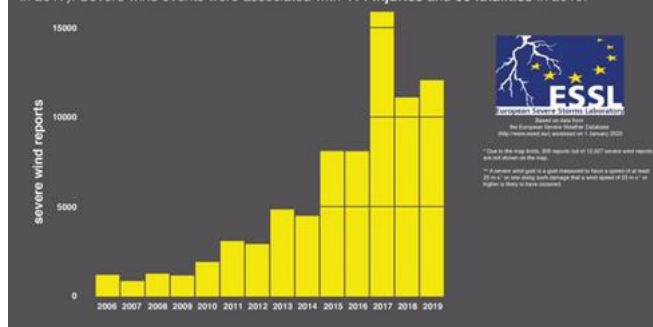
3,924 heavy rain reports in 2019

In 2019, **3,924*** **heavy rain** events were reported in Europe. This is the largest number of heavy rain events recorded in one year since 2006. Heavy rain was associated with **77 injuries** and **145 fatalities** in 2019.

ESSL
European Severe Storms Laboratory

12,027 severe wind reports in 2019

In 2019, **12,027*** **severe wind** events were reported in Europe. This is the second-largest number of severe wind events recorded in one year since 2006 (15,484 severe wind events were reported in 2017). Severe wind events were associated with **414 injuries** and **66 fatalities** in 2019.

ESSL
European Severe Storms Laboratory

When an umbrella is not enough – discussing severe storms with Tomáš Púčik

Our researcher and Senior trainer **Tomáš Púčik** was interviewed by **EUMETSAT**.

Tomáš described his role in the ESSL, his day-to-day tasks and motivation to become a meteorologist, researcher and trainer. He gives some clarification on what a 'severe storm' is, and how ESSL work affect society.

Big part of the interview is dedicated to explain how satellite data is used in ESSL and how EUMETSAT's next-generation satellites (MTG) and new instruments, for example Infrared Sounder (IRS), will help with the severe storms forecast.

Interview can be found on https://scienceblog.eumetsat.int/2020/02/when-an-umbrella-is-not-enough-discussing-severe-storms-with-tomas-pucik/

New Executive Board member

Due to resign of one Executive Board member, a new deputy Director is temporarily appointed. Tanja Renko joined the team and took up office as deputy Director form 1 January 2020.

The Executive Board will propose to the General Assembly to elect Tanja Renko for a full four-year term when it convenes in Bratislava in September 2020.

Tanja Renko is from Zagreb, Croatia and 40 years old. She is senior forecaster at DHMZ as well as Head of Division for weather warnings. She is involved in several international projects and working groups as EMMA-Meteoalarm, EUMeTrain, WGET etc. In 2018 she received her PhD in the subject 'Waterspouts in Adriatic – frequency, characteristics, conditions in which they occur and forecast possibilities'. She also works as weather presenter at Croatian National Television and Radio.

Her main role within the ESSL EB will be to strengthen ties to the National Hydro-Meteorological Services in Europe.