

# Summer 2021: mix of heatwaves, drought and downpours, severe thunderstorms

Zsolt Pátkai  
Unit of General  
Weather  
Forecasting



WGCEF Annual Meeting  
Online, 11-12 November,  
2021.

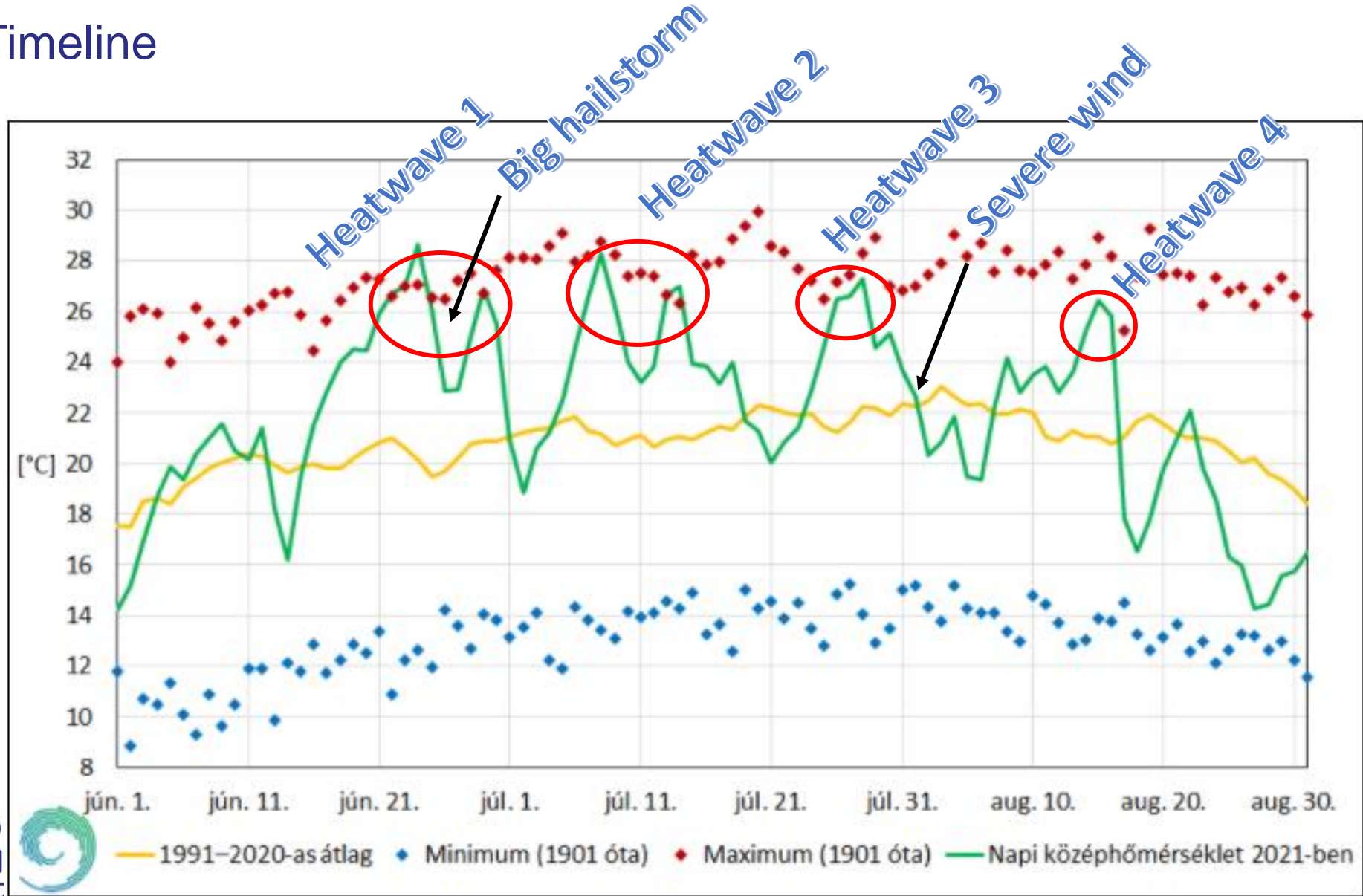


# Outline

Extreme...

1. ...Heatwaves
2. ...Thunderstorms with hailstorms (red warning, 25. 06. 2021.)
3. ...Thunderstorms with widespread wind damage (red warning 01. 08. 2021.)

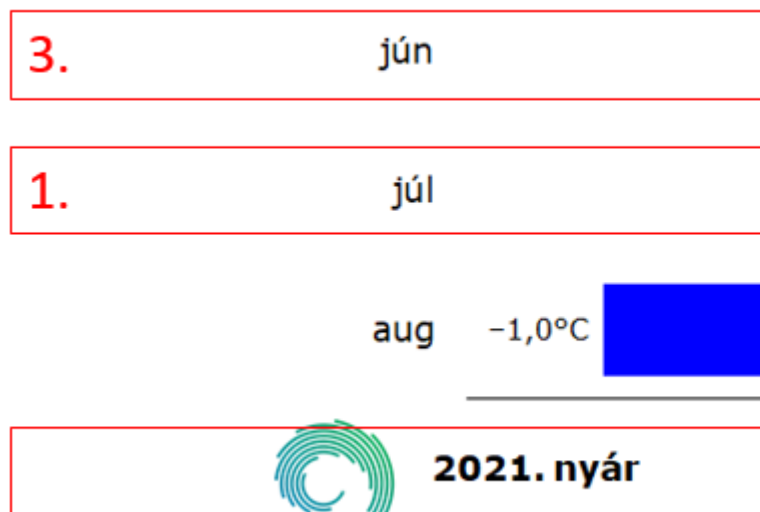
# Timeline



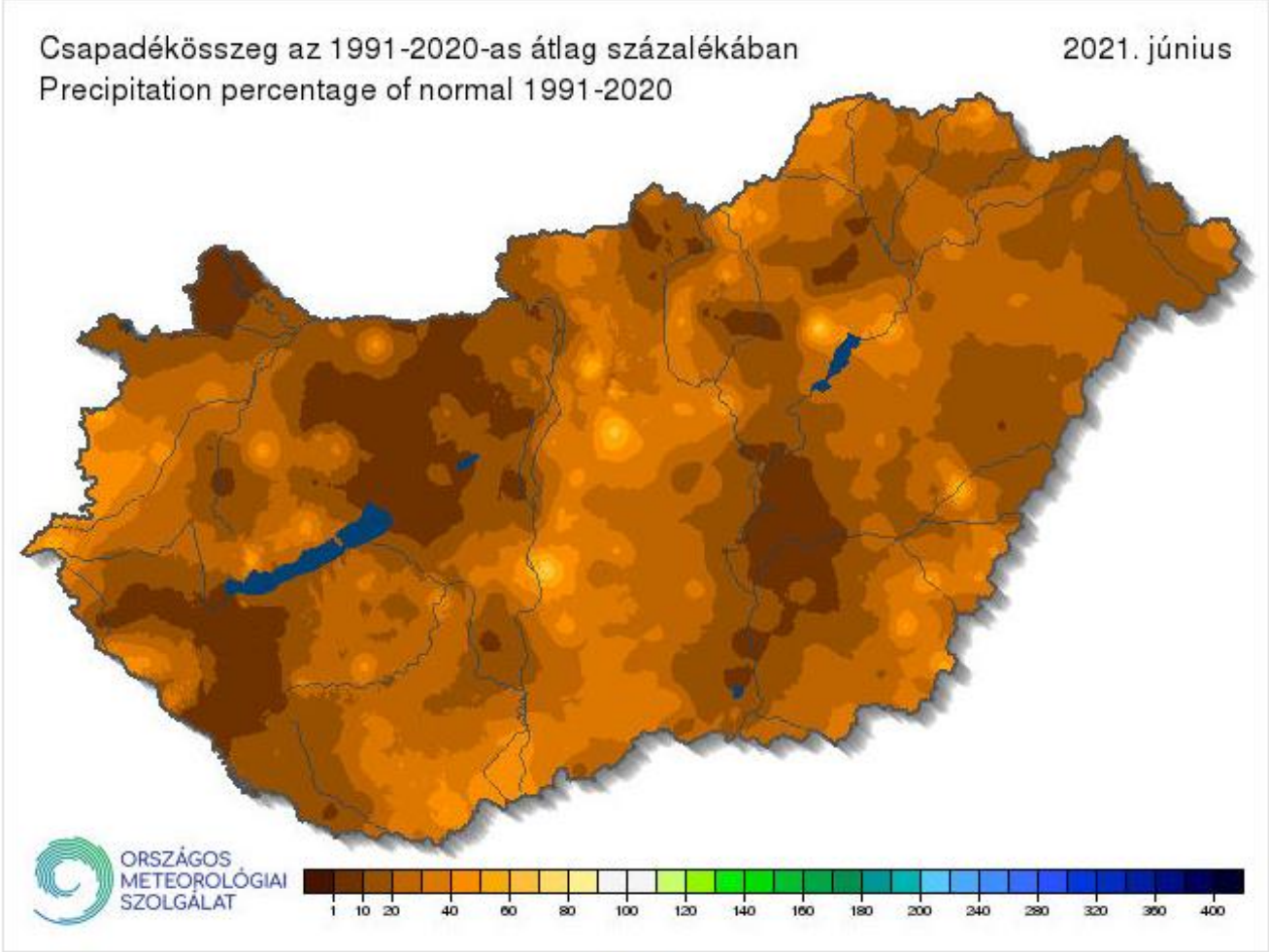
OMSZ

## Heatwaves during 2021

# Statistical informations about summer 2021

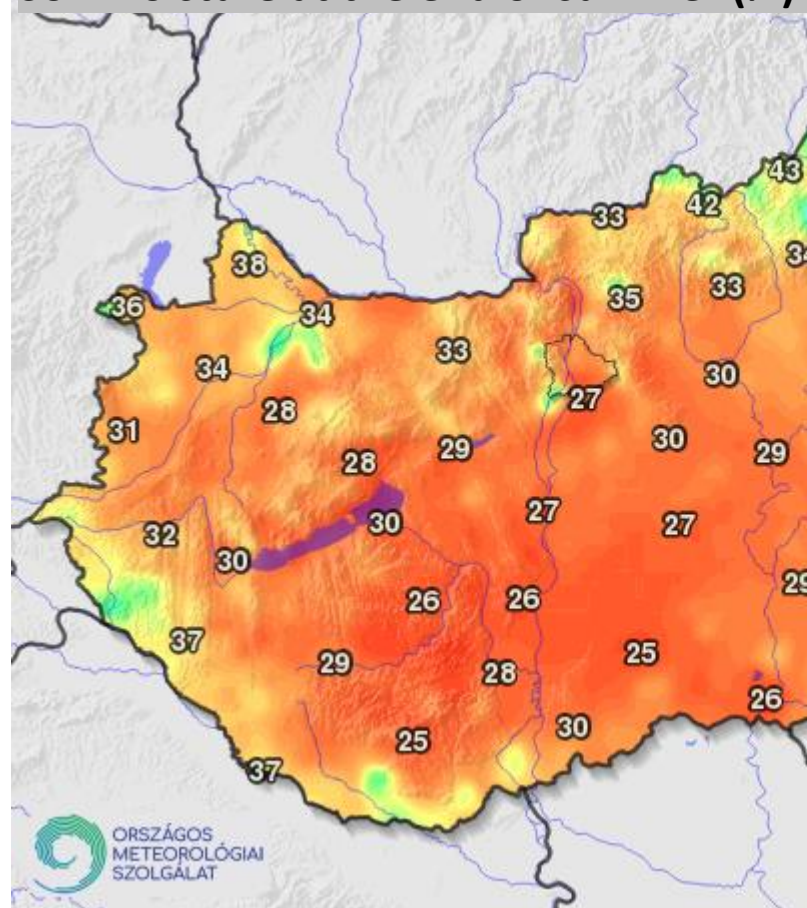


# Extreme drought (especially) in June (3<sup>rd</sup> driest since 1901)

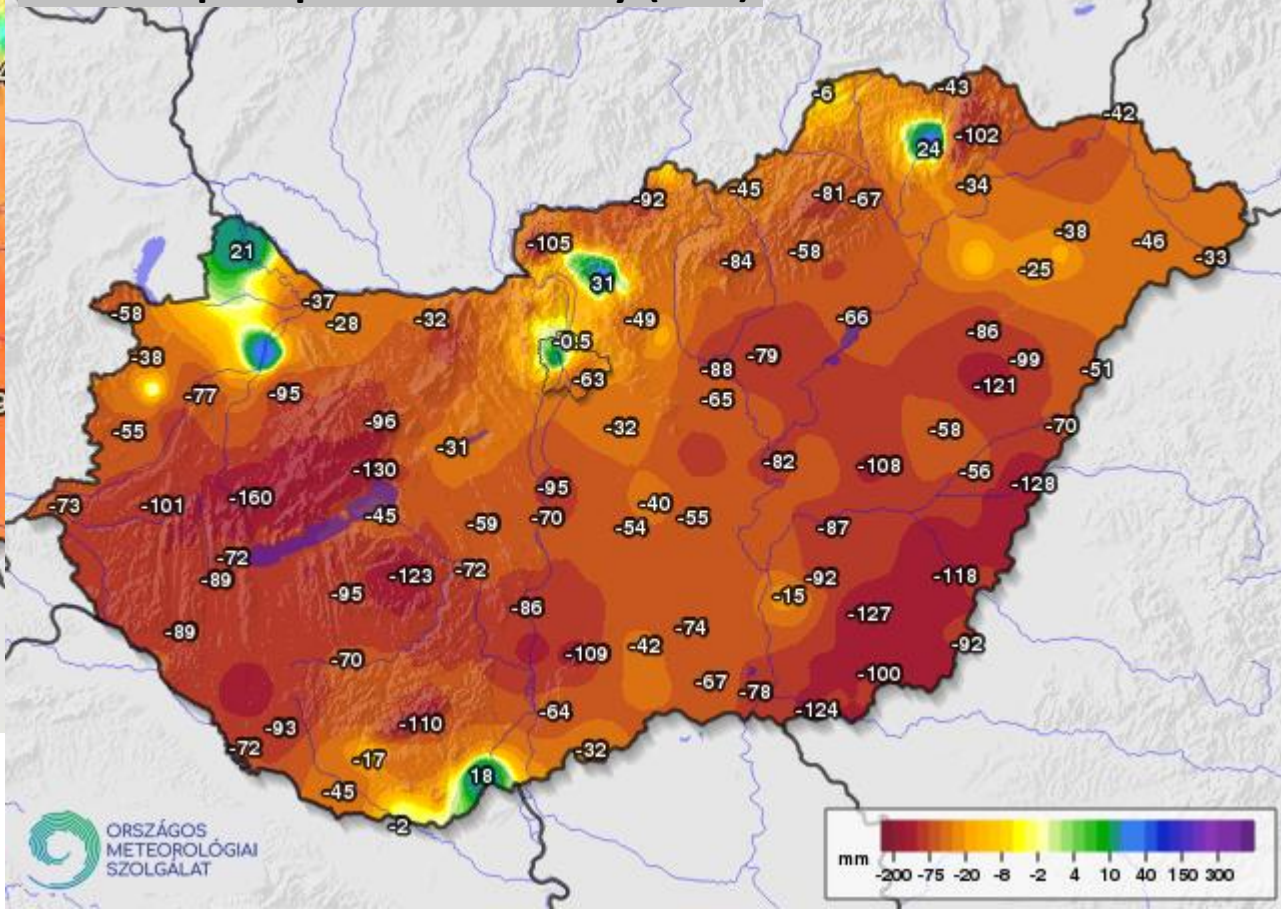


# Statistical informations about summer 2021

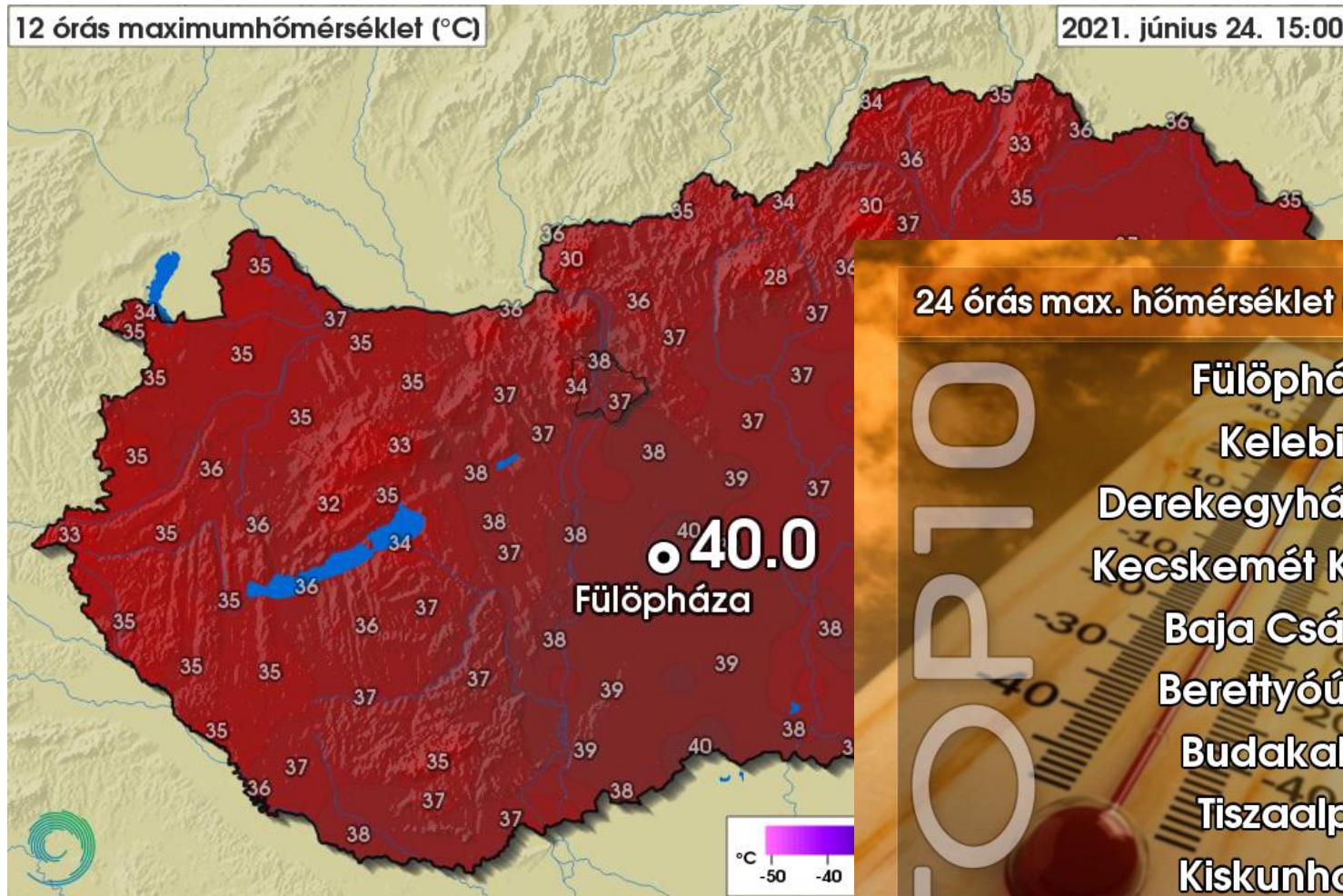
Soil moisture at the end of summer (%) 1-es rétegben [%] 2021. szeptember 01.



Summer precipitation anomaly (mm) 2021-08-31 02:00 (00:00 UTC)



## 24. June 2021. – Hottest summer day



24 órás max. hőmérséklet (°C)

2021. június 24. 15:00

Fülöpháza

40.0 °C

Kelebia

39.7 °C

Derekegyház Kéktó

39.6 °C

Kecskemét K-puszta

39.5 °C

Baja Csávoly

39.2 °C

Berettyóújfalu

39.2 °C

Budakalász

39.2 °C

Tiszaalpár

39.1 °C

Kiskunhalas

39.1 °C

Pitvaros

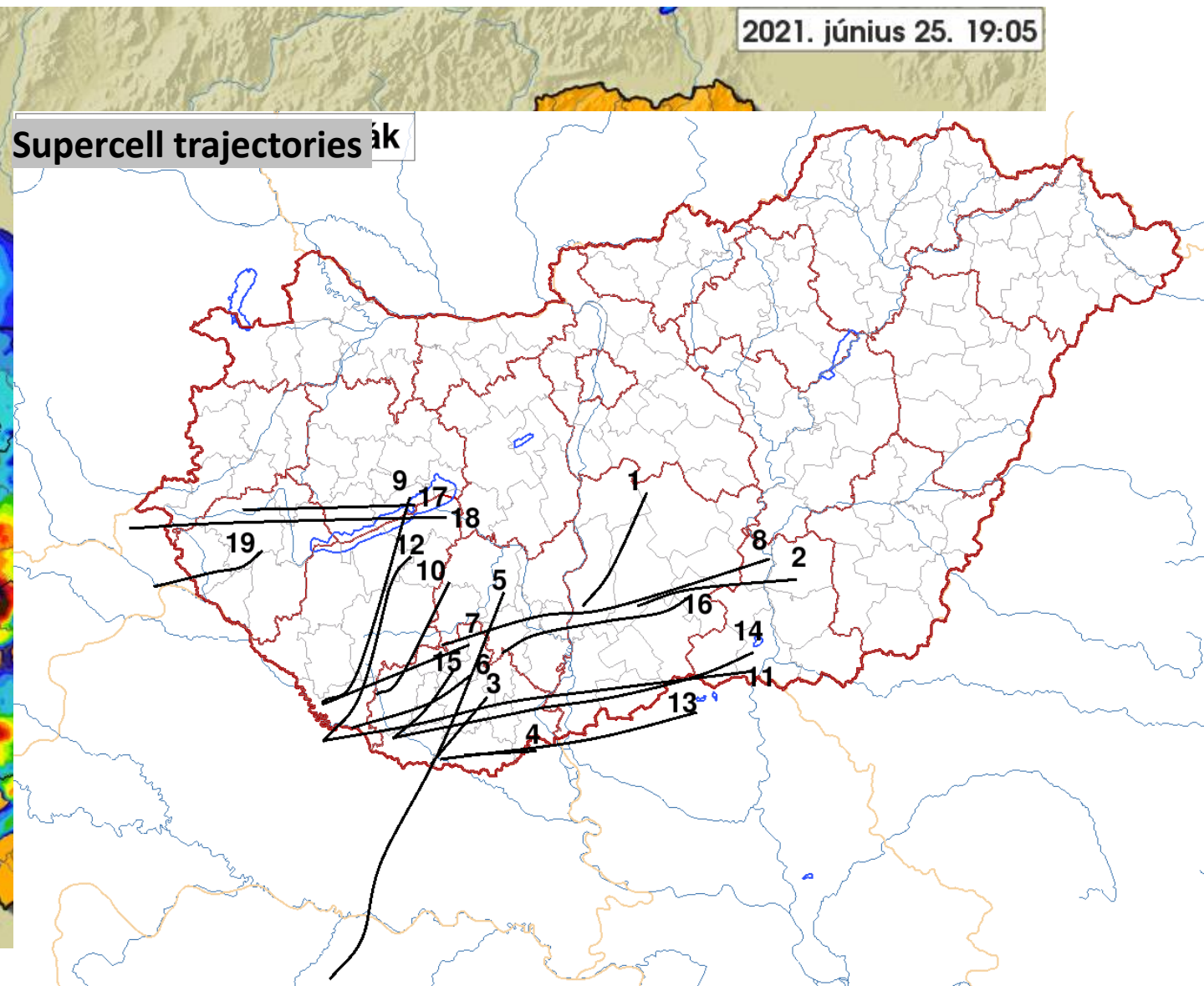
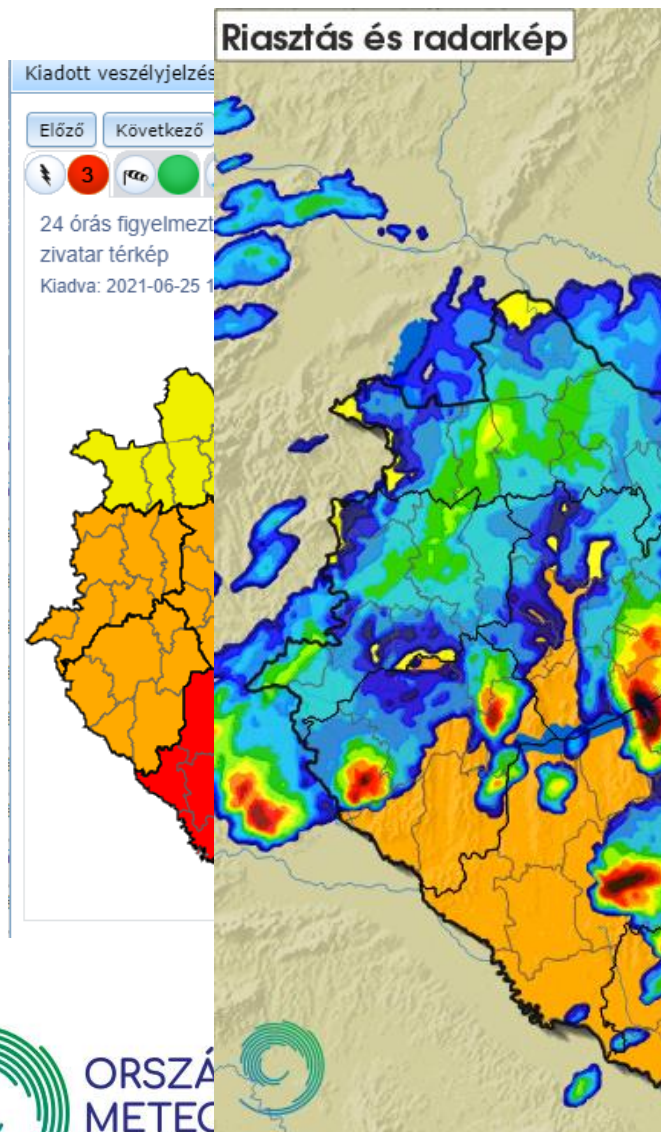
39.0 °C



# Severe thunderstorms with hailstorms

25. 06. 2021.

# Severe thunderstorms with hailstorms 25. 06. 2021.

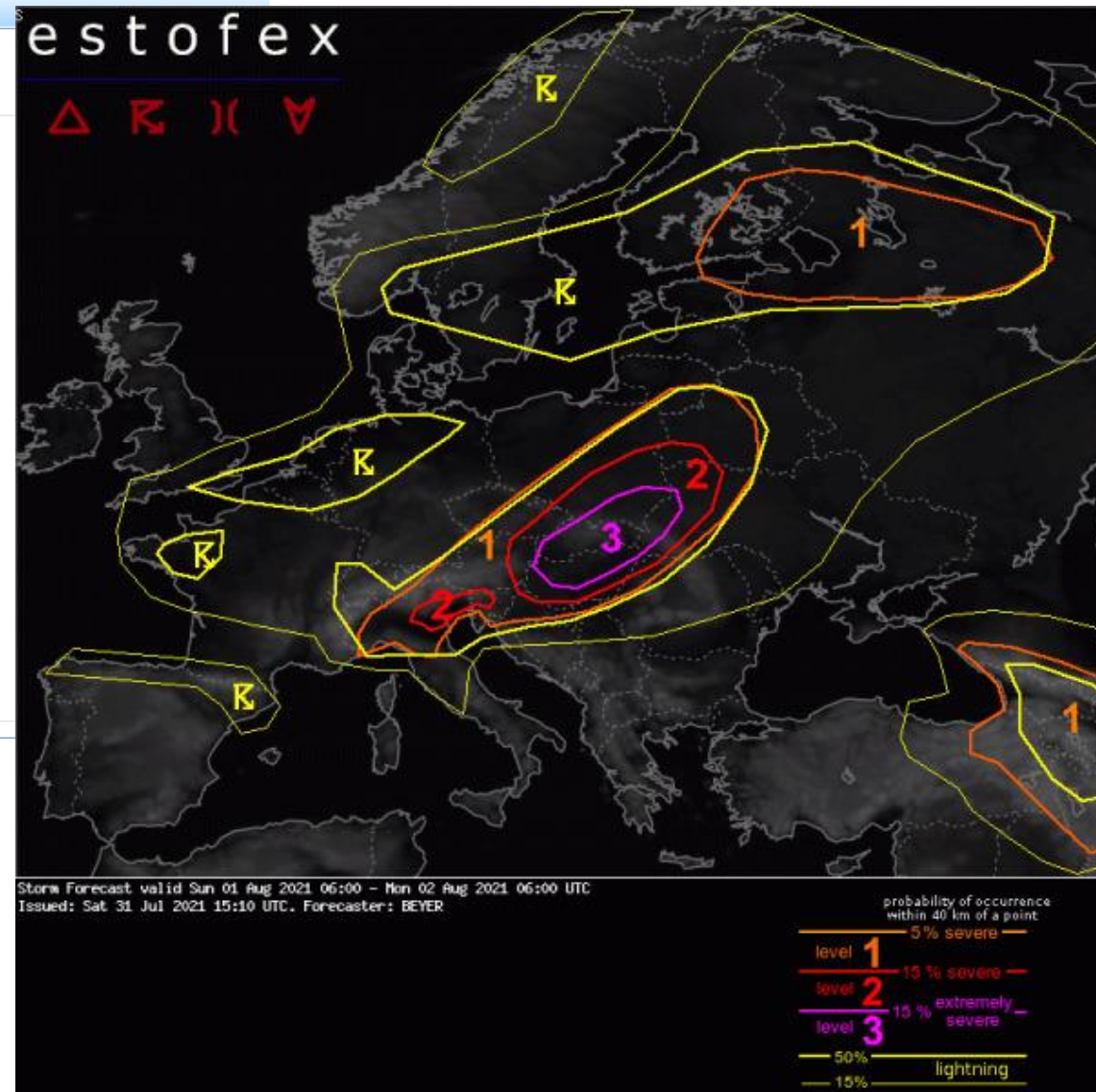
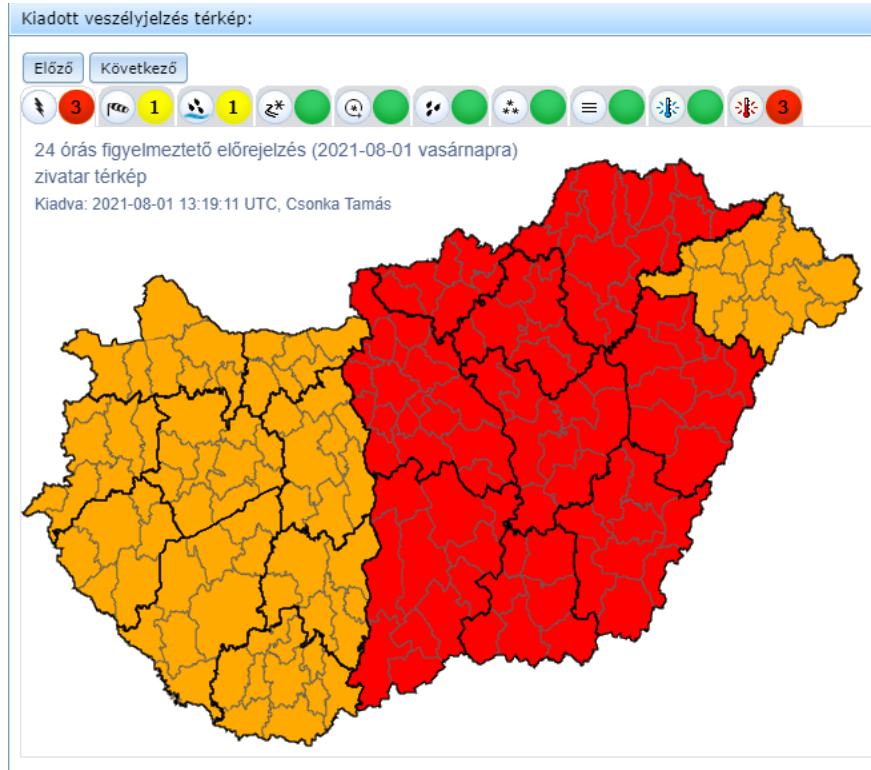


# Severe thunderstorms with hailstorms 25. 06. 2021.



Severe thunderstorms with widespread wind  
damages 01. 08. 2021.

# Severe thunderstorms with widespread wind damages 01. 08. 2021.



# Severe thunderstorms with widespread wind damages 01. 08.

2021

24-hour Lightning density

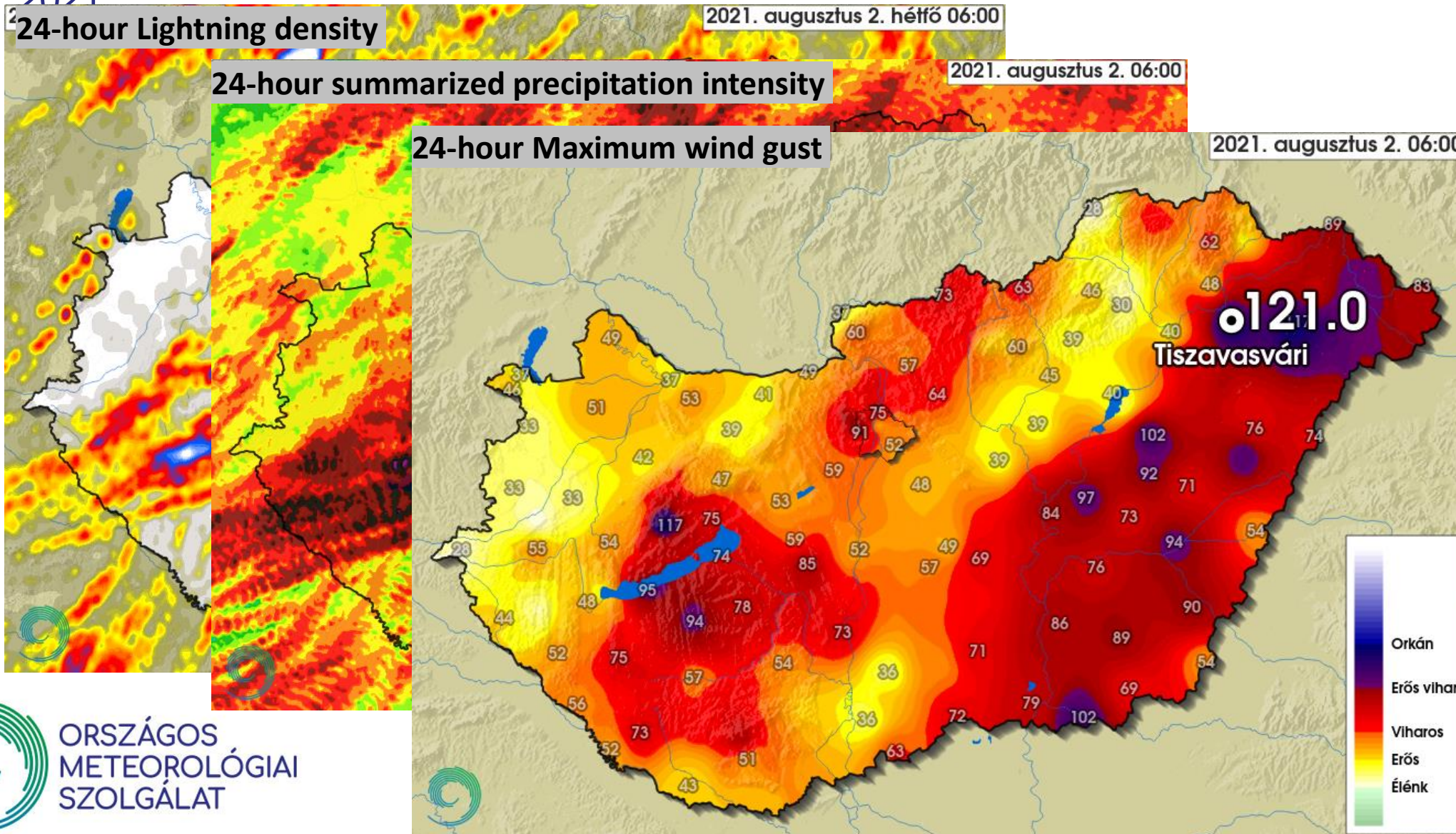
2021. augusztus 2. hétfő 06:00

24-hour summarized precipitation intensity

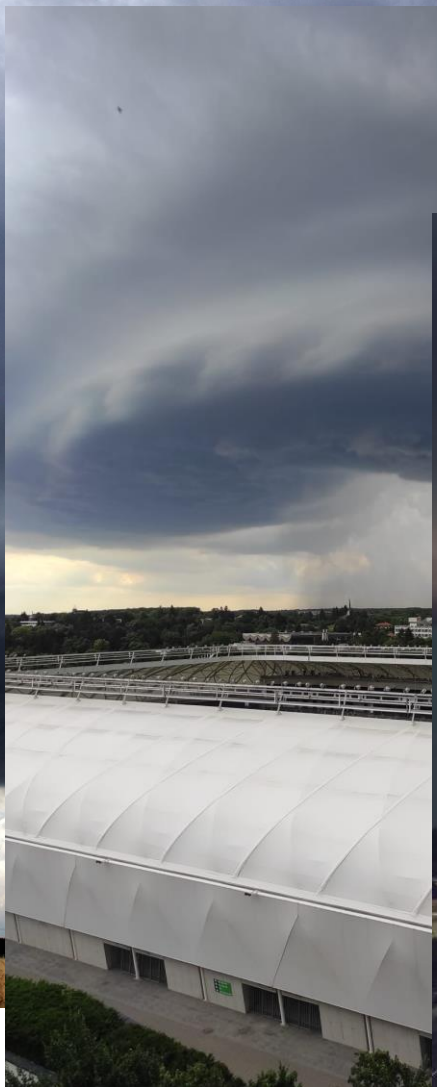
2021. augusztus 2. 06:00

24-hour Maximum wind gust

2021. augusztus 2. 06:00



# Severe thunderstorms with widespread wind damages 01. 08. 2021



Summer storms caused at least 22.000.000 Euro damage – based on insurance companies data. Highest value since 2010.

- 25% of homes are not covered by insurance
- Damages in agriculture, industry, public buildings are not included





Thank you for your attention!

