

OUTLOOK

16 June 2020

with

Sub-seasonal forecasts

for the weeks of
15 - 21 June, 22 - 28 June,
29 June - 5 July, and 6 - 12 July 2020

&

Seasonal forecasts

for the months of
July, August and September 2020

The S2S4E Decision Support Tool (DST) v1.4.0 is an operational climate service that integrates, for the first time, sub-seasonal to seasonal climate predictions with renewable energy production and electricity demand.

Find examples of how the DST forecasts can inform the energy sector in the

[Case Studies](#) [Factsheets](#)

available at:

www.S2S4E.eu

This outlook presents forecasts available on the DST on the 16th of June 2020 for the coming four weeks and next three months. These S2S4E forecasts were made by postprocessing the climate prediction systems ECMWF-Ext-ENS (sub-seasonal) and ECMWF SEAS5 (seasonal), following the methodology described in the [advanced help](#) of the DST.



SUMMARY

Hot June in northern and eastern Europe

Hot, dry and sunny conditions are expected in northern and eastern Europe until the end of June. There is a risk of exceptionally high temperatures, particularly in Scandinavia, the Baltic countries and the UK.

Cool June and hot August in eastern Mediterranean

Temperatures below the normal conditions for the season are expected in the last two weeks of June in eastern Mediterranean, whereas high temperatures are likely to occur in August and September. Increased solar radiation is also predicted for July and August in some regions, particularly in Greece, Romania and Ukraine.

Low wind speeds in June

Unusually low wind speeds are expected across most of Europe at the end of June, particularly in the week 15-21 June.

Hot summer for Finland

Finland is expected to experience unusually high temperatures throughout the summer season, from July to September.

Warm September in Europe

Warmer than usual temperatures are expected across Europe in September, as indicated by the widespread strong signals. In addition, precipitation and solar radiation anomalies are predicted for some parts of Europe.

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If you have queries or feedback you can contact us at:

s2s4e@bsc.es



The DST outlooks are released once per month and are available at:

s2s4e.eu/climate-services/outlooks



Subscribe to the outlooks and register to the DST at:

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This project has received funding from the Horizon 2020 programme under grant agreement n°776787. The content of this report reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.



Temperature forecasts

Predicted tercile

- Above
- Normal
- Below

Probability range

- 50% to 100%
- 34% to 49%

Extremes

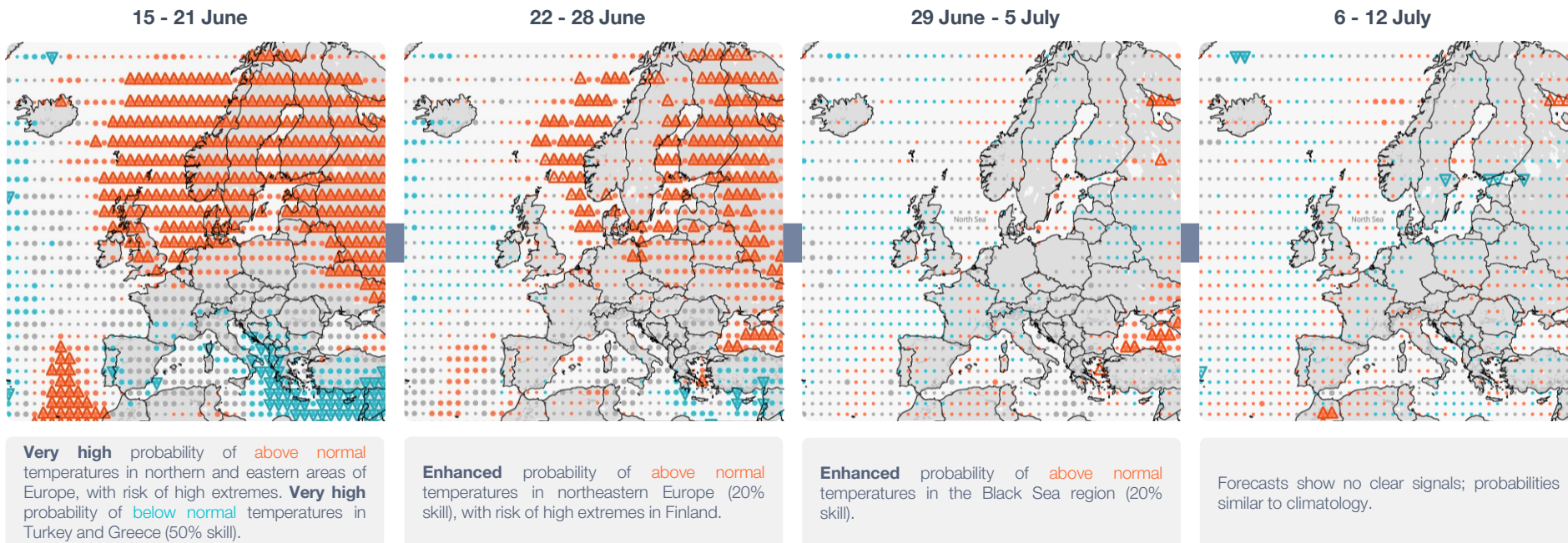
- ▲ Max (p90)
- ▼ Min (p10)

Legend

SUB-SEASONAL

Prediction system used:
ECMWF-Ext-ENS

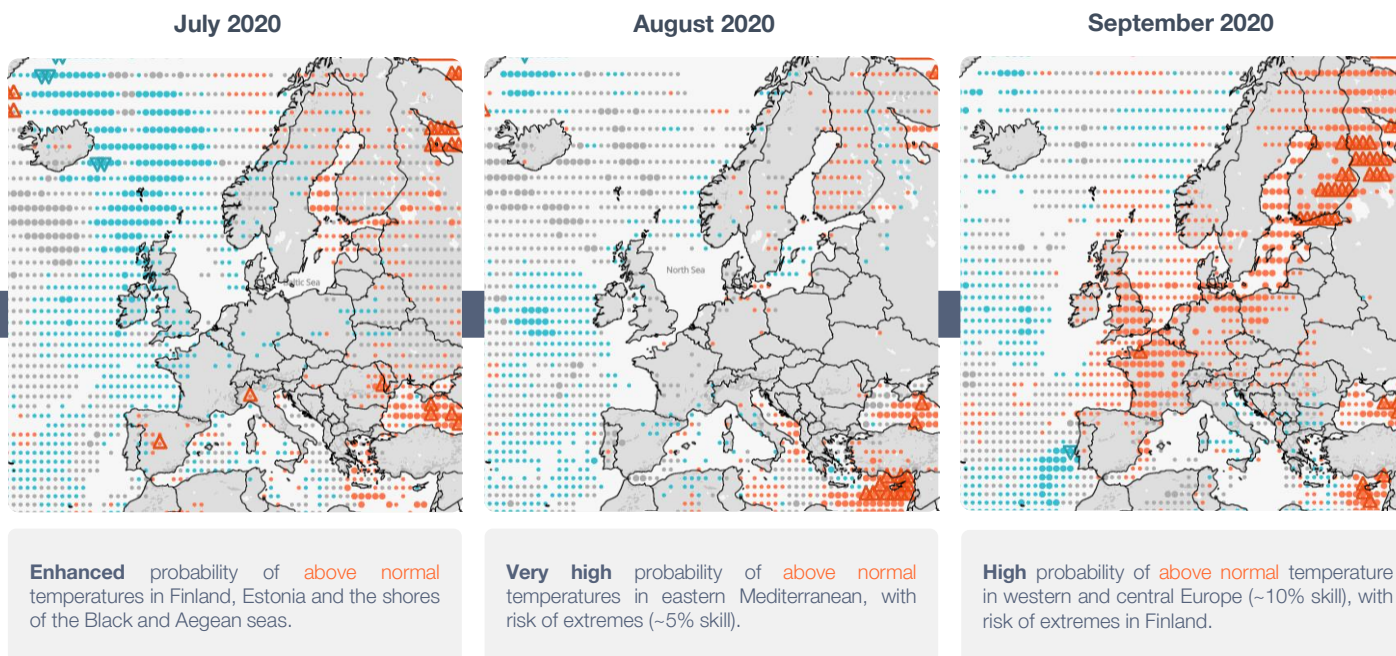
Maps show areas where
skill (FRPSS) > 0



SEASONAL

Prediction system used:
ECMWF SEAS5

Maps show areas where
skill (FRPSS) > 0



**Browse the global
forecasts in the DST:**

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Probability terms

Enhanced : 34% - 49%

High: 50% - 70%:

Very High: Greater than 70%



Wind speed forecasts

Predicted tercile

● Above

● Normal

● Below

Probability range

● 50% to 100%

● 34% to 49%

Extremes

▲ Max (p90)

▼ Min (p10)

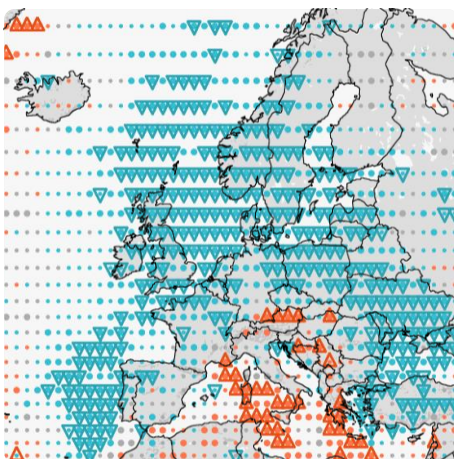
Legend

SUB-SEASONAL

Prediction system used:
ECMWF-Ext-ENS

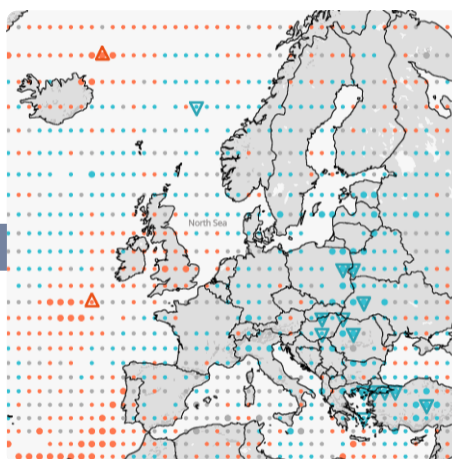
Maps show areas where
skill (FRPSS) > 0

15 - 21 June



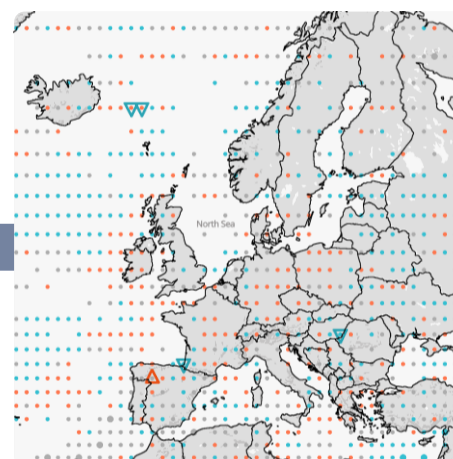
High probability of **below normal** wind speed in most of Europe, and **very high** probability in the North Sea region, with risk of low extremes (20% skill).

22 - 28 June



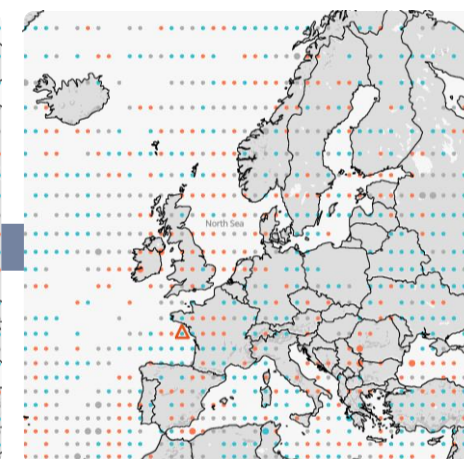
Enhanced probability of **below normal** wind speed in central and eastern Europe (<10% skill).

29 June - 5 July



Enhanced probability of **below normal** wind speed in eastern Europe (<5% skill).

6 - 12 July



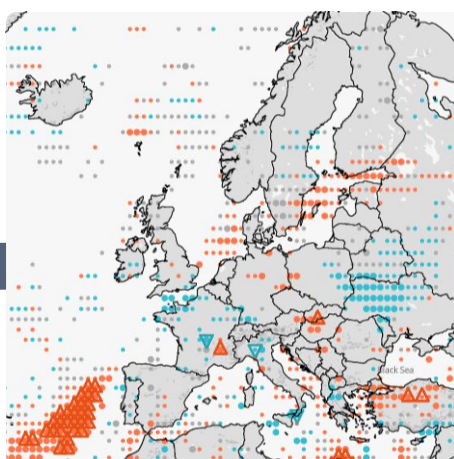
Forecasts show no clear signals; probabilities similar to climatology.

SEASONAL

Prediction system used:
ECMWF SEAS5

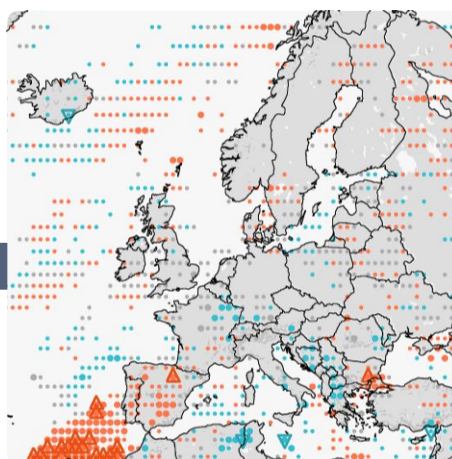
Maps show areas where
skill (FRPSS) > 0

July 2020



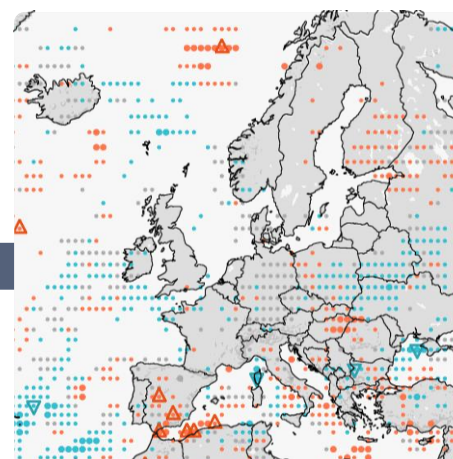
High probability of **above normal** winds in parts of the Baltic shore (>10% skill).

August 2020



High probability of **above normal** winds in parts of the Iberian peninsula (>10% skill).

September 2020



Enhanced probability of **above normal** winds in southern Finland (~5% skill).

**Browse the global
forecasts in the DST:**

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Probability terms

Enhanced : 34% - 49%

High: 50% - 70%:

Very High: Greater than 70%



Precipitation forecasts

Predicted tercile

● Above

● Normal

● Below

Probability range

● 50% to 100%

● 34% to 49%

Extremes

▲ Max (p90)

▼ Min (p10)

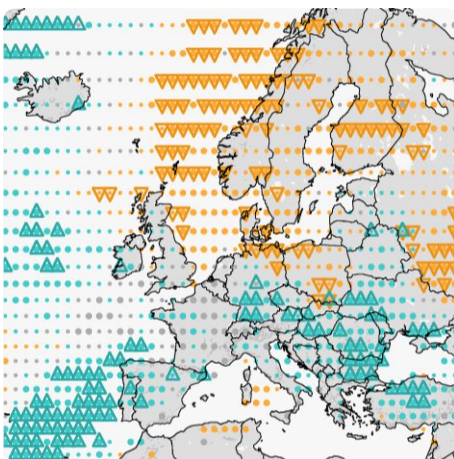
Legend

SUB-SEASONAL

Prediction system used:
ECMWF-Ext-ENS

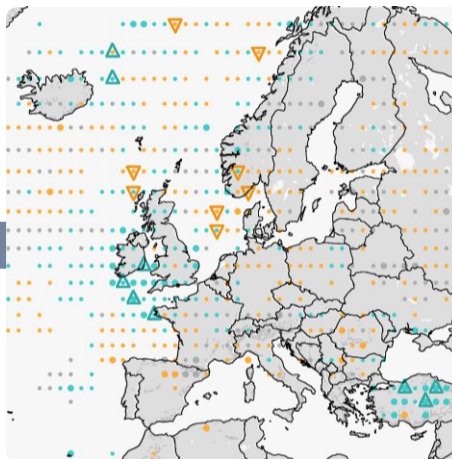
Maps show areas where
skill (FRPSS) > 0

15 - 21 June



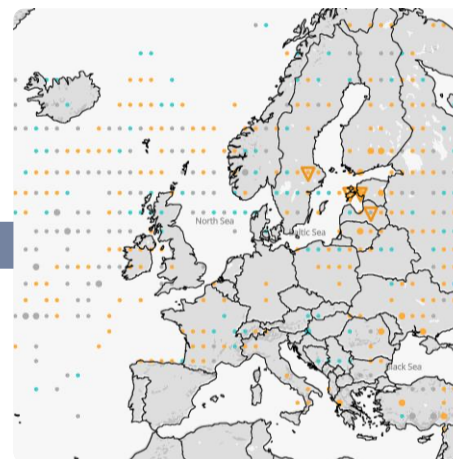
High probability of **below normal** precipitation in the north of Europe (20% skill), with risk of low extremes. **Very high** probability of **above normal** precipitation in the southwest of Europe (20% skill), with risk of extremes.

22 - 28 June



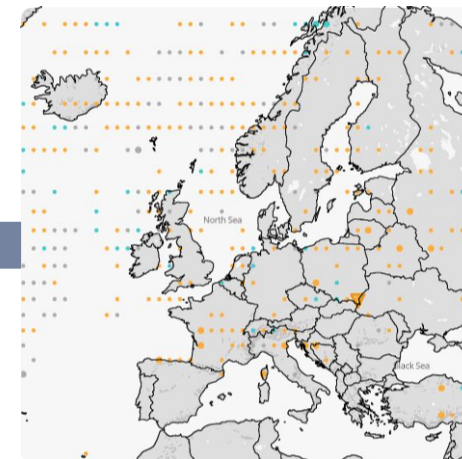
High probability of **above normal** precipitation in Turkey (<20% skill), with some risk of extremes.

29 June - 5 July



Forecasts show no clear signals; probabilities similar to climatology.

6 - 12 July



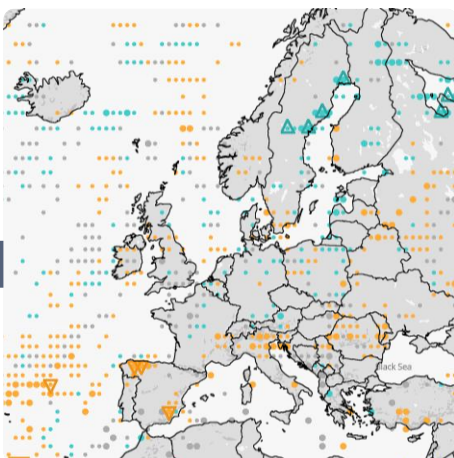
Forecasts show no clear signals; probabilities similar to climatology.

SEASONAL

Prediction system used:
ECMWF SEAS5

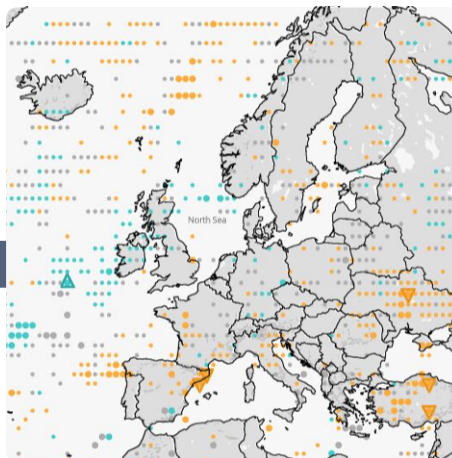
Maps show areas where
skill (FRPSS) > 0

July 2020



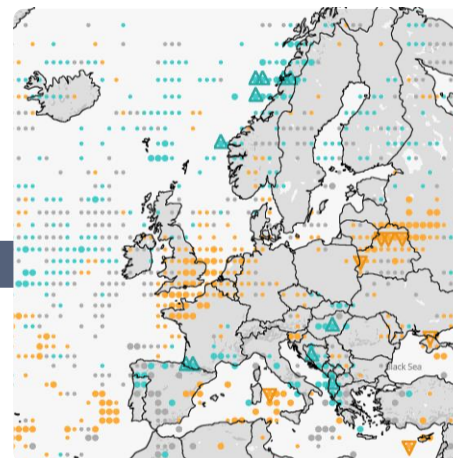
High probability of **below normal** precipitation south of the Alps (~5% skill).

August 2020



Enhanced probability of **below normal** precipitation in parts of Spain, France, Italy, Turkey and Ukraine (~5% skill).

September 2020



High probability of **below normal** precipitation around the English channel (skill~10%).

**Browse the global
forecasts in the DST:**

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Solar radiation forecasts

Predicted tercile

- Above
- Normal
- Below

Probability range

- 50% to 100%
- 34% to 49%

Extremes

- ▲ Max (p90)
- ▼ Min (p10)

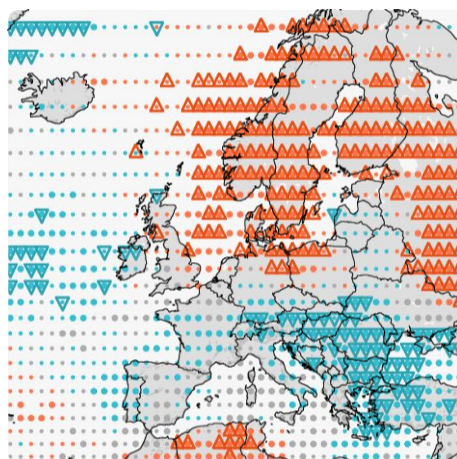
Legend

SUB-SEASONAL

Prediction system used:
ECMWF-Ext-ENS

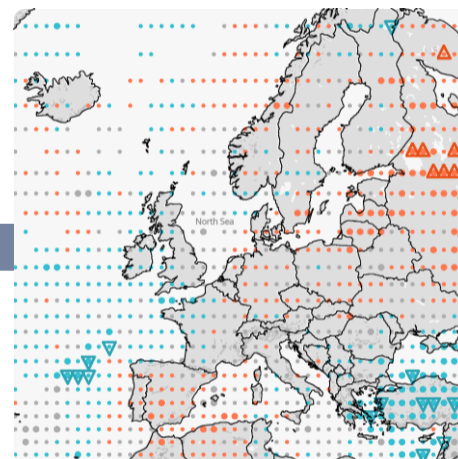
Maps show areas where
skill (FRPSS) > 0

15 - 21 June



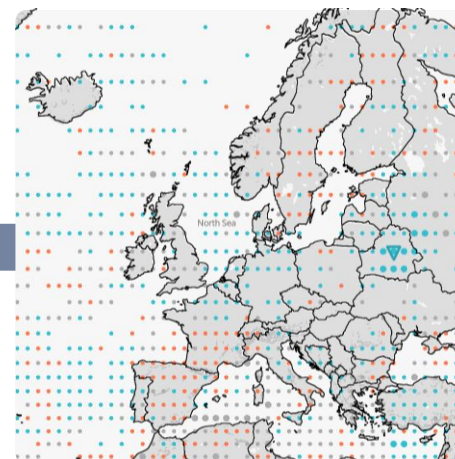
High probability of **above normal** solar radiation in northern Europe, and **very high** probability in Scandinavia, with risk of high extremes. **Very high** probability of **below normal** solar radiation in the Balkans, with risk of low extremes (<20% skill).

22 - 28 June



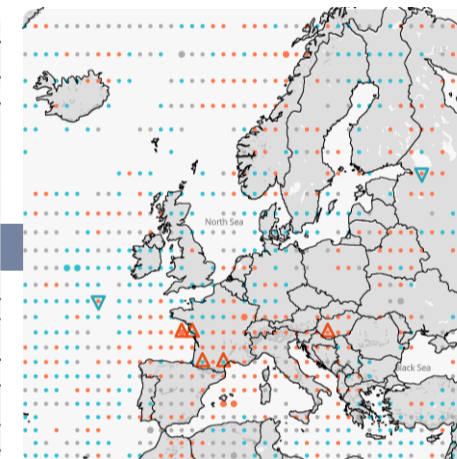
High probability of **below normal** solar radiation in Turkey (<20% skill).

29 June - 5 July



Forecasts show no clear signals; probabilities similar to climatology.

6 - 12 July



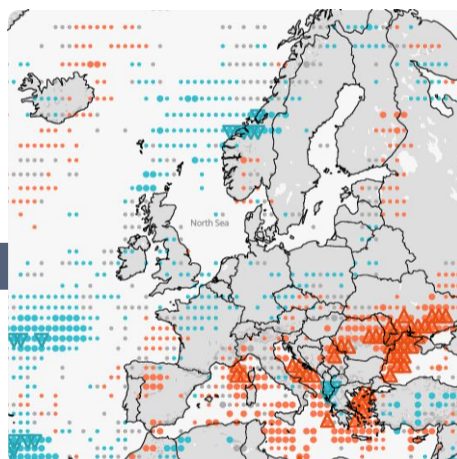
Forecasts show no clear signals; probabilities similar to climatology.

SEASONAL

Prediction system used:
ECMWF SEAS5

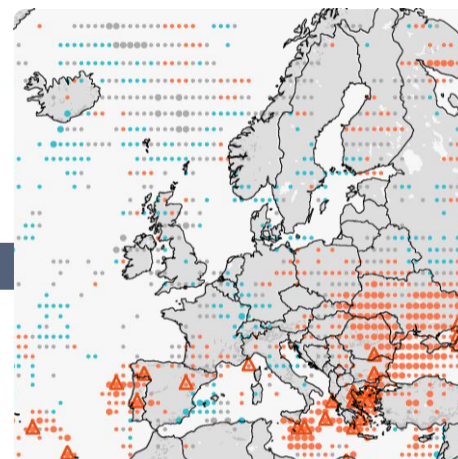
Maps show areas where
skill (FRPSS) > 0

July 2020



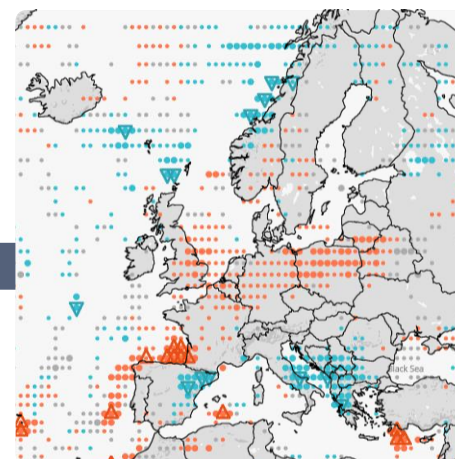
High probability of **above normal** solar radiation in Romania and parts of the Mediterranean region, with localized risk of extremes (~10% skill).

August 2020



High probability of **above normal** solar radiation in Greece, Romania and Ukraine (~10% skill), with risk of extremes in Greece.

September 2020



High probability of **above normal** radiation in central Europe, and **high** probability of **below normal** radiation in the Balkans and Italy (~10% skill).

Browse the global
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USER GUIDE

PREDICTED TERCILE

- Above
- Normal
- Below

The forecast information provided is probabilistic. Instead of one single model realisation, several realisations are considered (ensemble members), providing a set of several possible outcomes (51 for both ECMWF-Ext-ENS and ECMWF SEAS5). This information is summarised and transmitted in the form of probabilities. Three equiprobable categories (terciles) have been used: below normal, normal and above normal. Each one of these tercile categories contains one third (33.3%) of the events over the reference period. The forecasted probability corresponds to the percentage of ensemble members predicting below normal, normal or above normal conditions, based on the past climatology.

PROBABILITY RANGE

- 50% to 100%
- 34% to 49%

As seen in the DST, regions where the predicted probability of the most likely tercile equals or is higher than 50% are represented with a bigger symbol, to highlight areas of larger probability. Users can customise the exact percentage of predicted probability (from 0 to 100%) in the DST.

EXTREMES

- ▲ Max (p90)
- ▼ Min (p10)

To provide information about the probability of having very high or very low climate conditions, the DST displays the percentage of members under the 10th percentile and the percentage of members exceeding the 90th percentile. These 10th and 90th percentiles have been computed from the climatological period. Extreme events are shown with a triangle symbol when the probability of an extreme event occurring is over 25%.

SKILL SCORES

- Fair** >0% to <15%
- Good** 15-30%
- Very good** >30%

In the maps presented in this outlook, only regions with positive skill are shown. Skill scores below 0 are defined as unskilful, those equal to 0 are equal to the climatology forecast, and anything above 0 is an improvement upon climatology, up to 1, which indicates a “perfect” forecast. In the DST, these values have been expressed as percentages, where a skill of 1 would equal to 100% skill. FairRPSS for terciles and Brier Skill Scores for extremes are used.



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