

OUTLOOK

16 March 2020

with

Sub-seasonal forecasts

for the weeks of
16 - 22 March, 23 - 29 March,
30 March - 5 April, and 6 - 12 April 2020

&

Seasonal forecasts

for the months of
April, May and June 2020

The beta version of S2S4E Decision Support Tool (DST) 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 March 2020 for the coming four weeks and next three months. These S2S4E forecasts were made by postprocessing the climate prediction systems NCEP CFSv2 (sub-seasonal) and ECMWF SEAS5 (seasonal), following the methodology described in the [advanced help](#) of the DST.

OUTLOOK 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 (48 for NCEP CFSv2 and 51 for 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

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.



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:

www.s2s4e.eu/dst



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Temperature forecasts

Predicted tercile

- Above
- Normal
- Below

Probability range

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

Extremes

- ▲ Max (p90)
- ▼ Min (p10)

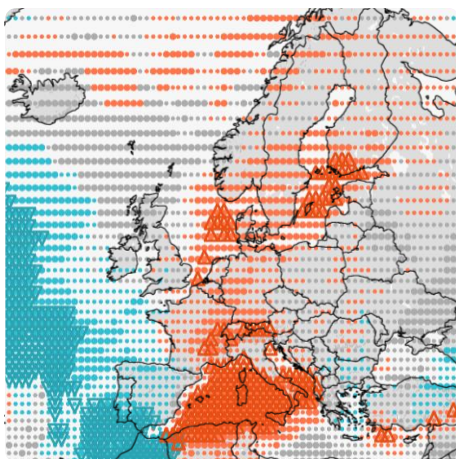
Legend

SUB-SEASONAL

Prediction system used:
NCEP CFSv2

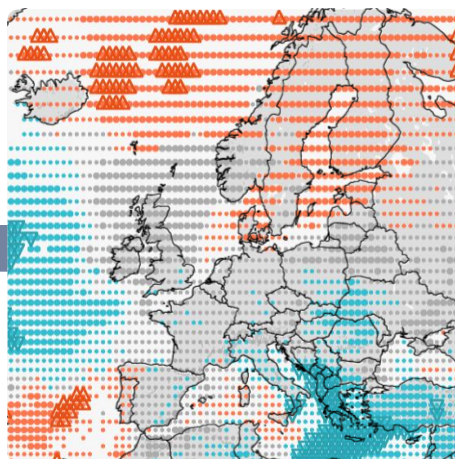
Maps show areas where
skill (FRPSS) > 0

16 - 22 March



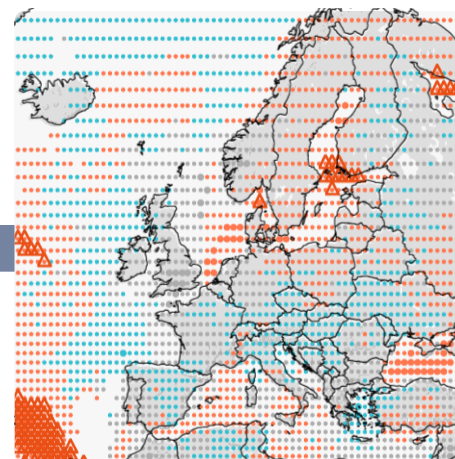
Enhanced probability of **above normal** temperatures in central Europe, with risk of extremes in western Mediterranean. **Enhanced** probability of **below normal** temperatures in the Iberian Peninsula (~40% skill).

23 - 29 March



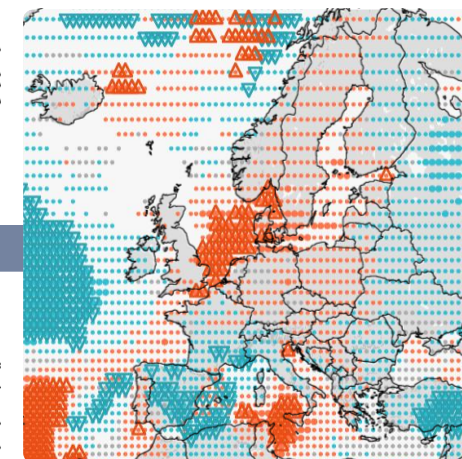
High probability of **above normal** temperatures in the Scandinavian countries. **High** probability of **below normal** temperatures in Turkey and Greece (20-30% skill).

30 March - 5 April



Enhanced probability of **above normal** temperatures in countries around the Baltic Sea (~20% skill).

6 - 12 April



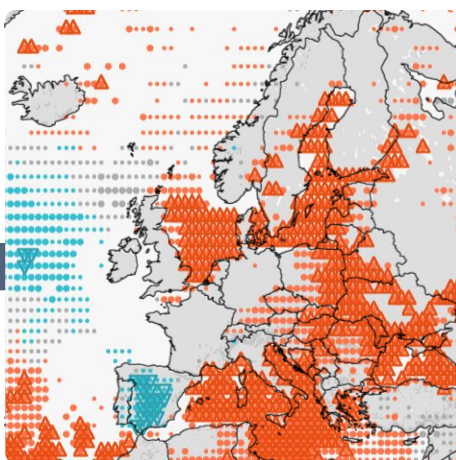
High or enhanced probability of **above normal** temperatures around the North and Baltic Seas (~20% skill). **Enhanced** probability of **below normal** temperatures in the Iberian Peninsula, with risk of extremes.

SEASONAL

Prediction system used:
ECMWF SEAS5

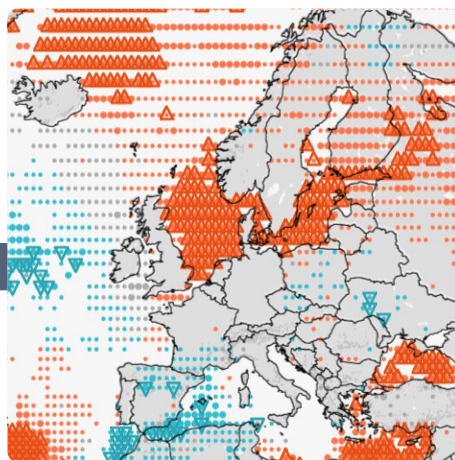
Maps show areas where
skill (FRPSS) > 0

April 2020



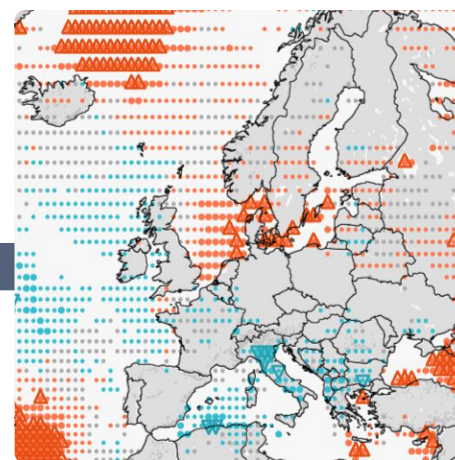
High or very high probability of **above normal** temperatures in eastern Europe, the Mediterranean and North Sea regions. **High** probability of **below normal** temperatures in the Iberian Peninsula.

May 2020



High probability of **above normal** temperatures in Finland, Estonia, and the Baltic and North Sea.

June 2020



High probability of **below normal** temperatures in Italy and the Balkans.

Browse the global
forecasts in the DST:

www.S2S4E.eu/dst



Wind speed forecasts

Predicted tercile

- Above
- Normal
- Below

Probability range

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

Extremes

- ▲ Max (p90)
- ▼ Min (p10)

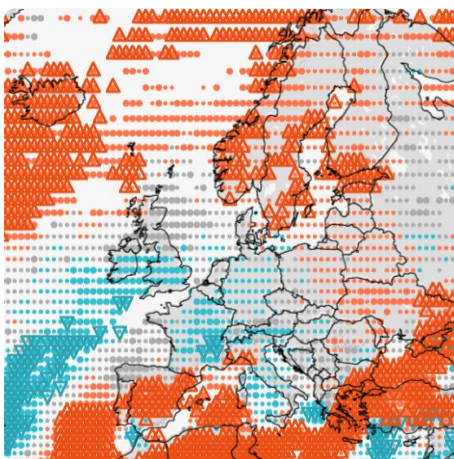
Legend

SUB-SEASONAL

Prediction system used:
NCEP CFSv2

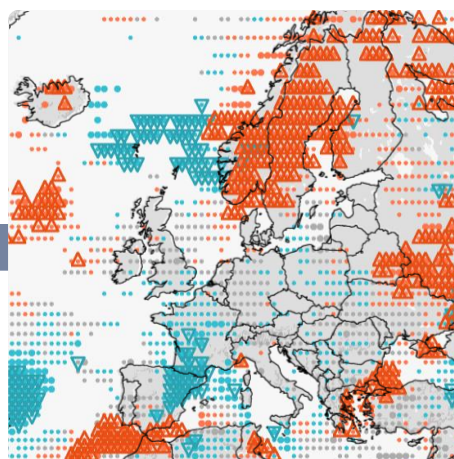
Maps show areas where
skill (FRPSS) > 0

16 - 22 March



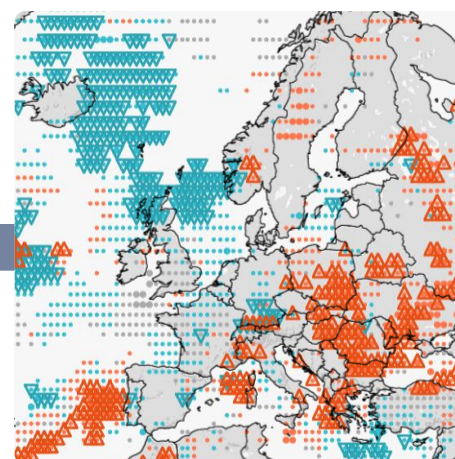
Very high probability of **above normal** wind speeds in Spain, Greece and Turkey, and **high** probability of **above normal** winds in the Scandinavian countries (~20% skill).

23 - 29 March



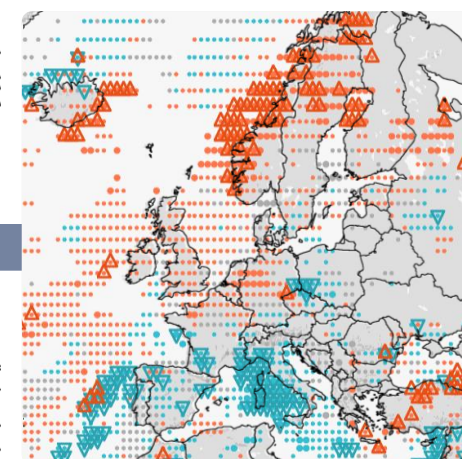
High probability of **above normal** wind speeds persists in the Scandinavian countries and Greece (~10% skill).

30 March - 5 April



High probability of **above normal** wind speeds in Romania, Ukraine and Hungary (~10% skill), and **enhanced** probability of **above normal** wind speeds in Norway and Sweden (<5% skill).

6 - 12 April



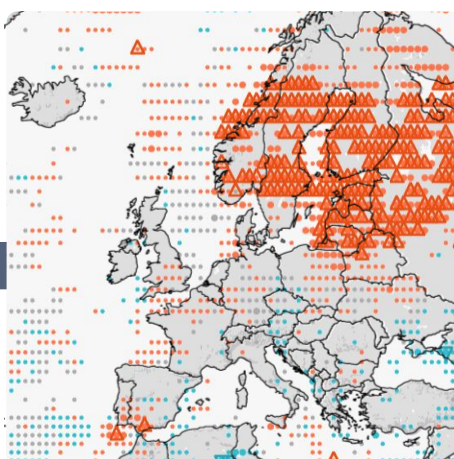
High probability of **above normal** wind speeds in the Scandinavian countries (~10% skill). **High** probability of **below normal** wind speeds in Italy (20% skill).

SEASONAL

Prediction system used:
ECMWF SEAS5

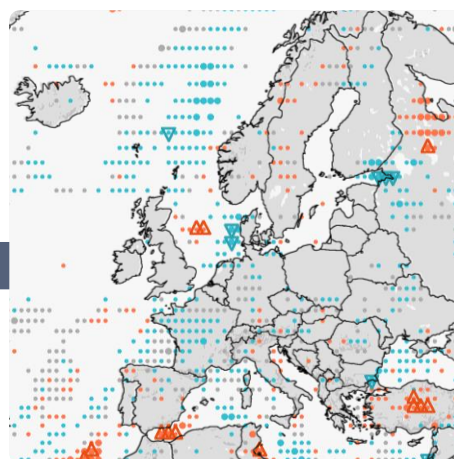
Maps show areas where
skill (FRPSS) > 0

April 2020



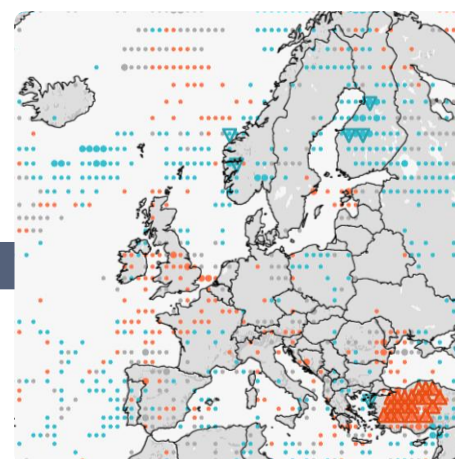
High probability of **above normal** wind speeds in the Baltic and Scandinavian countries, with risk of extremes.

May 2020



Enhanced probability of **below normal** wind speeds in parts of France and Denmark.

June 2020



High probability of **above normal** wind speeds in Turkey, and **high** probability of **below normal** winds in Finland.

Browse the global
forecasts in the DST:

www.S2S4E.eu/dst



Precipitation forecasts

Predicted tercile

- Above
- Normal
- Below

Probability range

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

Extremes

- Max (p90)
- Min (p10)

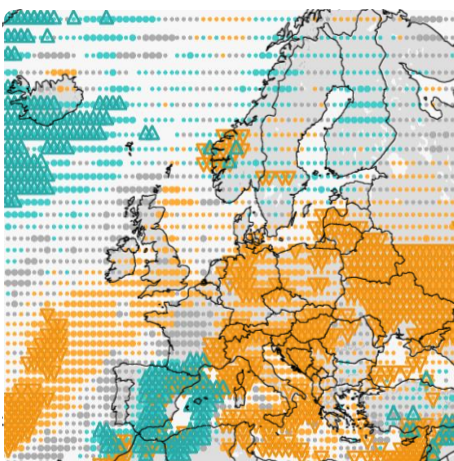
Legend

SUB-SEASONAL

Prediction system used:
NCEP CFSv2

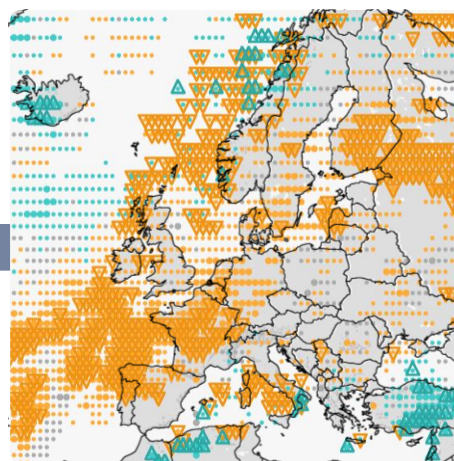
Maps show areas where
skill (FRPSS) > 0

16 - 22 March



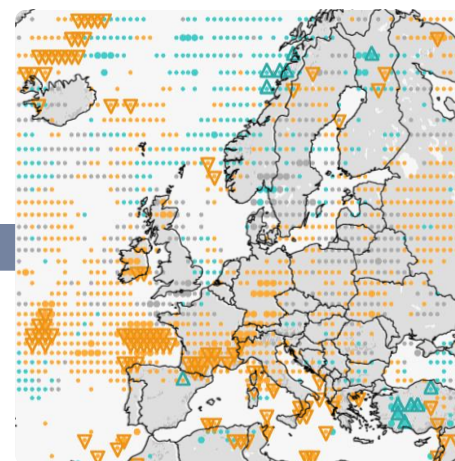
High probability of **below normal** precipitation in central-eastern Europe and the UK (20-30% skill). **Very high** probability of **above normal** precipitation in Spain and Iceland (30% skill).

23 - 29 March



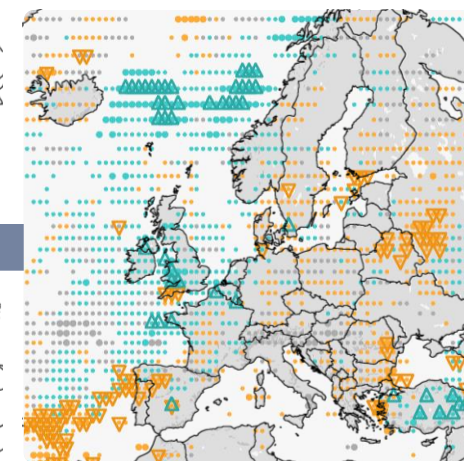
Enhanced probability of **below normal** precipitation in almost all European countries (<20% skill).

30 March - 5 April



High probability of **below normal** precipitation in the Alpine region (<10% skill).

6 - 12 April



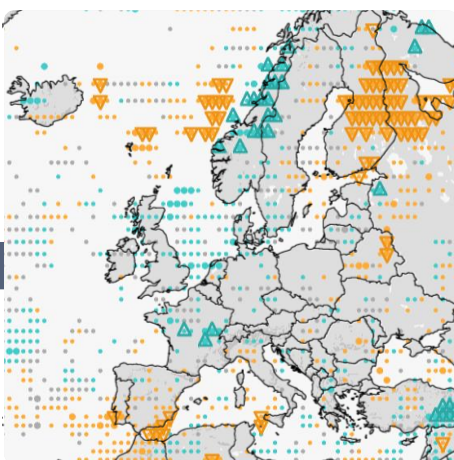
High probability of **above normal** precipitation in the UK (<10% skill).

SEASONAL

Prediction system used:
ECMWF SEAS5

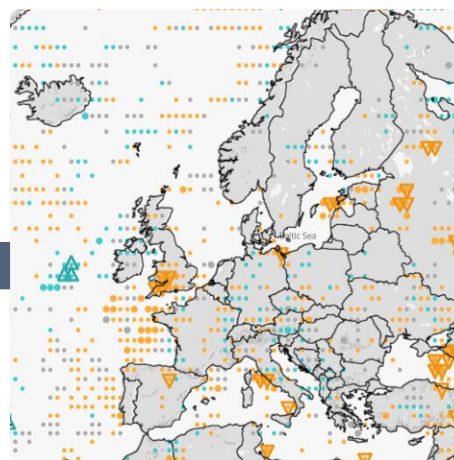
Maps show areas where
skill (FRPSS) > 0

April 2020



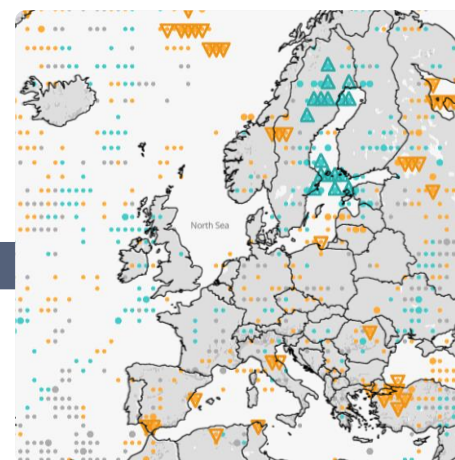
High probability of **above normal** precipitation in Norway, and **high** probability of **below normal** precipitation in Finland.

May 2020



High probability of **below normal** precipitation in southern England, with risk of drought.

June 2020



High probability of **below normal** precipitation in southern Spain, with risk of drought.

Browse the global
forecasts in the DST:

www.S2S4E.eu/dst



Solar radiation forecasts

Predicted tercile

- Above
- Normal
- Below

Probability range

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

Extremes

- ▲ Max (p90)
- ▼ Min (p10)

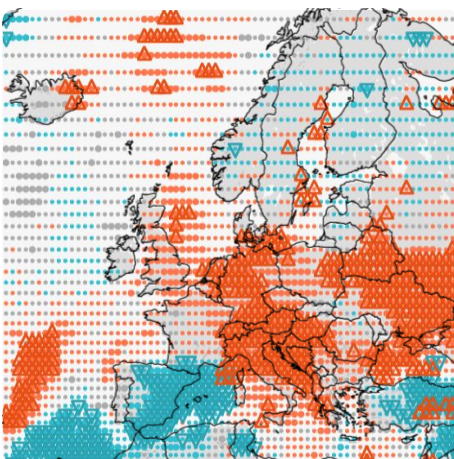
Legend

SUB-SEASONAL

Prediction system used:
NCEP CFSv2

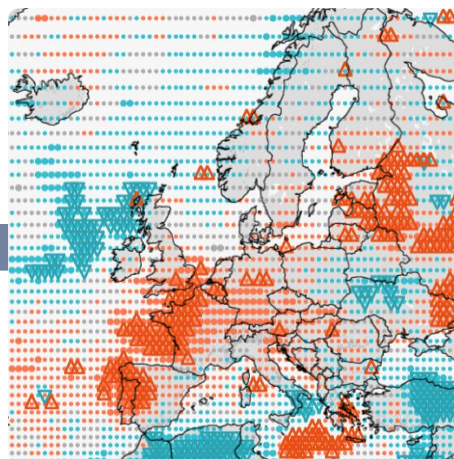
Maps show areas where
skill (FRPSS) > 0

16 - 22 March



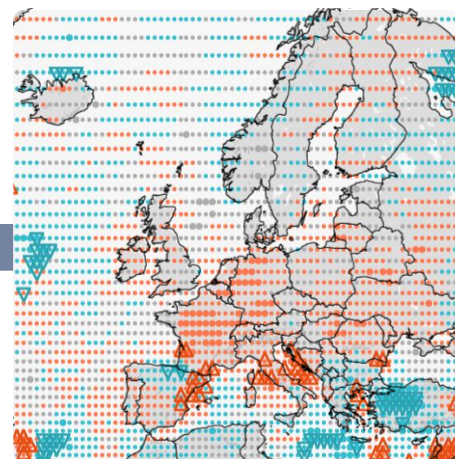
Very high or high probability of **above normal** solar radiation in most European countries (30-50% skill), except for Spain, Scandinavia, and Turkey.

23 - 29 March



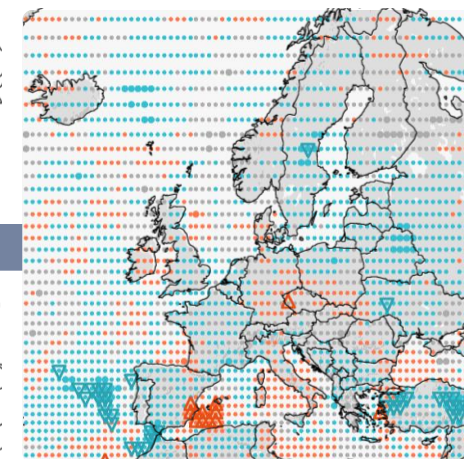
High probability of **above normal** solar radiation in France, Belgium, Germany and Portugal (~20% skill).

30 March - 5 April



High probability of **above normal** solar radiation persists in Belgium and Germany (~20% skill).

6 - 12 April



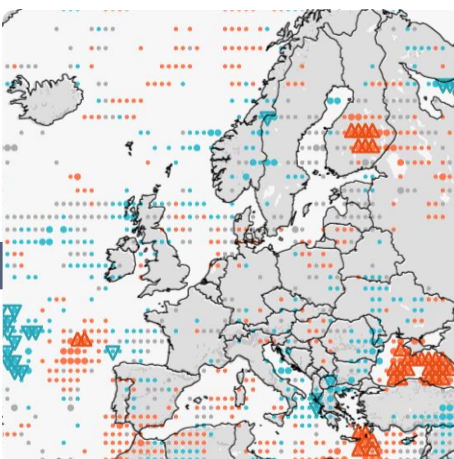
No clear signals.

SEASONAL

Prediction system used:
ECMWF SEAS5

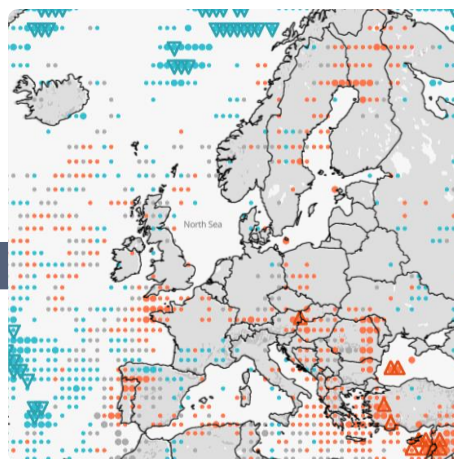
Maps show areas where
skill (FRPSS) > 0

April 2020



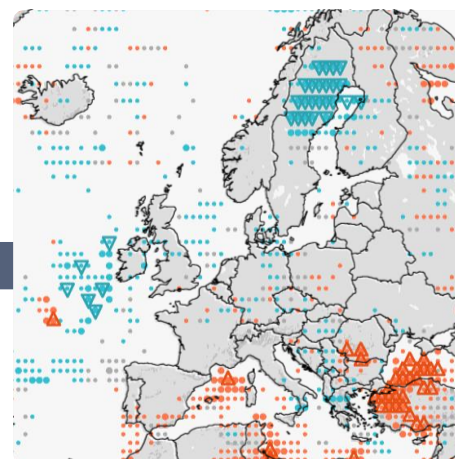
High probability of **below normal** radiation in parts of the Balkans.

May 2020



Enhanced probability of **above normal** radiation in parts of central Europe and the Balkans.

June 2020



High probability of **above normal** radiation in western Turkey, with risk of extremes.

Browse the global
forecasts in the DST:

www.S2S4E.eu/dst