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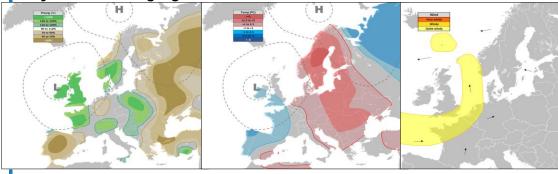
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### Executive Summary:

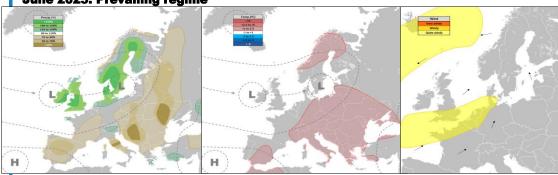
Models and analog years mainly point in a wet direction for Scandinavia for the rest of the Spring and through the Summer. Models clearly indicate warm weather, but it could be only slightly warm or near normal. For the Conti also a strong warm signal in the models and dry signal for July and August. Analog years are in general quite mixed over the Conti, and it could develop less warm than the models predict.

		Te	mp	erat	ure			Pre	cip	itat	ion	
Region	м	ı	J	Α	s	0	м	1	ı	А	s	o
Nordic	г											Т
Continent	г											Г
												_
NO1 (SE)												
NO2 (SW)												
NO3 (C)												
NO4 (O)												П
NO5 (W)												
SE1												
SE2												
SE2 SE3	L											
SE4												
Norway												
Sweden	ш											
Finland												
Denmark	ш											
Germany	L											
France							_		_			
Switzerland												
Austria					ı							

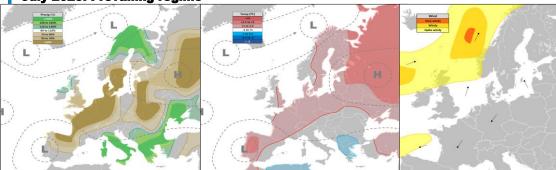
May 2025: Prevailing regime

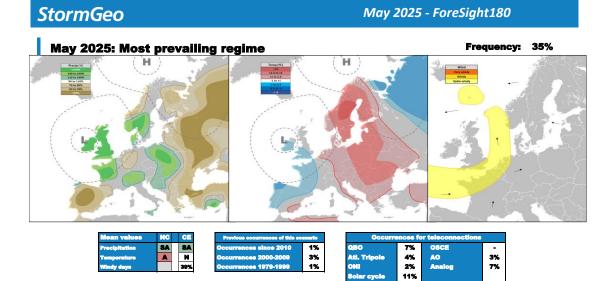


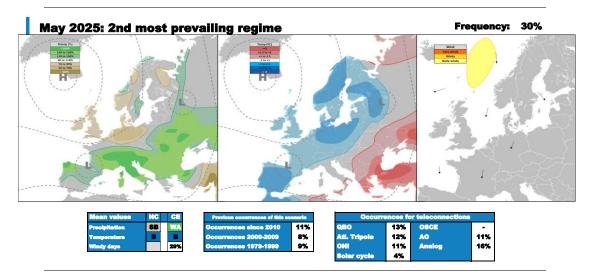
June 2025: Prevailing regime

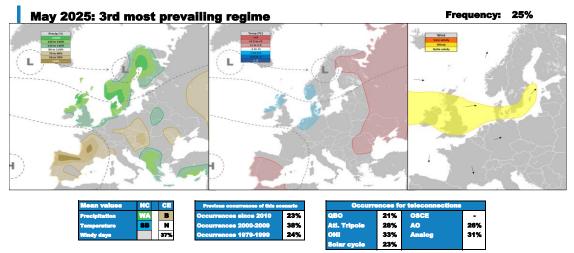


July 2025: Prevailing regime





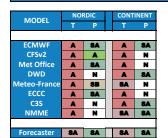


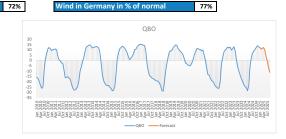


INDEX	SIGN/PHASE	NO	RDIC		C	ONTINE	NT	П			N	/lain v	veathe	r regin	ne	S		
INDEX	SIGN/PHASE	T	P	1	T	P	W		1	2	3	4	5	6		L	N	Н
Normal conditions		N	N		N	N	16%		28%	12%	17%	3%	28%	12%		40%	20%	40%
<b>Quasi-Biennial Oscillation</b>	transition phase	SA	N		N	SA	15%		21%	12%	15%	7%	32%	13%		33%	22%	45%
Atlantic Tripole	negative	SA	N		SA	В	19%		28%	9%	20%	4%	27%	12%		37%	24%	39%
Ocean Niño Index (ONI)	neutral	N	SA		N	N	10%		33%	13%	13%	2%	26%	11%		46%	16%	37%
Solar cycle	maximum period	N	N		SA	N	14%		23%	14%	26%	11%	22%	4%		37%	37%	26%
Oct snow cover extent	-			1	-		-		-	-	-	-	-	-		-	-	-
AO persistence	neutral	SA	SB		N	N	14%		26%	15%	11%	3%	33%	11%		41%	14%	44%
Analog years	02,04,06,11	N	SA		SB	N	11%		31%	15%	3%	7%	27%	16%		46%	10%	44%

Explanation of each index and the legend are found on the last page.

Photo Voltaics Germany in % of normal





The observed and forecasted Quasi Biennial Oscillation

## May 2025 - Discussion

#### MODELS

All seasonal models align of really warm conditions across Europe and some support for wetter than normal over Nordic and Central Europe.

#### TELECONNECTIONS

The **QBO** is probably in a transition phase this month and giving a weak mild signal over Nordic and weak wet signal over Central Europe. **Atlantic Tripole** has switched to negative phase lately and give a weak warm signal and a dry signal over Central Europe.

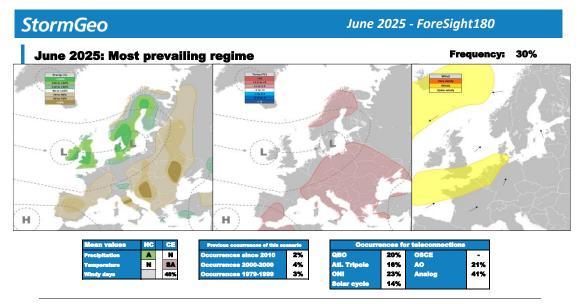
**ENSO** is neutral and gives a weak wet signal over Nordic.

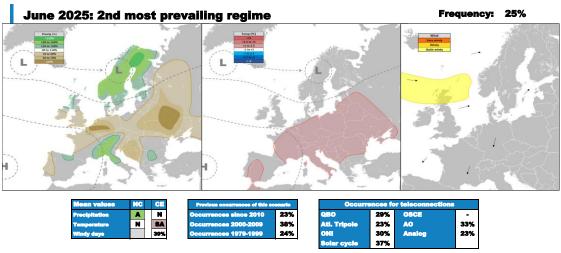
The **solar cycle** is still in its maximum phase and give a weak warm signal over Central Europe.

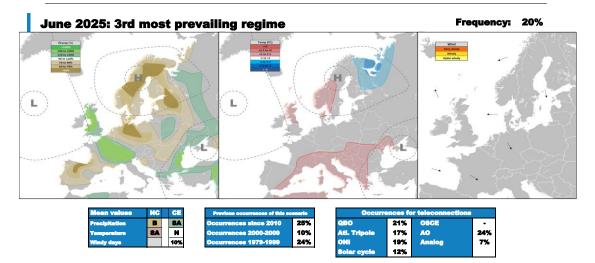
Analog years have mostly been normal to relatively wet over Nordic with temperatures near normal and slightly dry to slightly wet over Central Europe with temperatures near to slightly above normal.

### CONCLUSION

Based on latest model runs and MJO teleconnection week 9 may become quite dry, but later in May most likely normal to wet and therefore accumulated slightly wet at least is the most likely outcome. Also for the Conti low pressures and fronts are likely to be more frequent than normal and lead to wetter than normal over Central Europe. Milder than normal is also likely, but not necessarily much.







69%

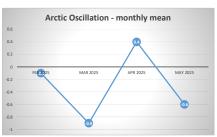
INDEX	SIGN/PHASE	NO	RDIC	C	ONTINE	NT			
INDEX	SIGN/PHASE	T	P	Т	P	W	1	2	3
Normal conditions		N	М	N	N	4%	31%	19%	17%
<b>Quasi-Biennial Oscillation</b>	easterly winds	SA	N	N	N	5%	29%	20%	21%
Atlantic Tripole	negative	N	SB	SB	SA	6%	23%	16%	17%
Ocean Niño Index (ONI)	neutral	N	N	N	SB	4%	30%	23%	18%
Solar cycle	maximum period	SA	N	N	N	3%	37%	14%	12%
Oct snow cover extent	-	-	-	-		-	-	-	-
AO persistence	negative	SA	N	N	N	2%	33%	21%	24%
Analog years	1991.2011.2020	N	A	В	SA	9%	23%	41%	7%

		N	1ain w	reathe	r regir	ne	S		
1	2	3	4	5	6		L	N	Η
31%	19%	17%	2%	23%	8%		49%	19%	31%
29%	20%	21%	0%	21%	7%		50%	22%	29%
23%	16%	17%	28%	0%	17%		38%	45%	17%
30%	23%	18%	19%	1%	9%		53%	37%	10%
37%	14%	12%	4%	26%	7%		51%	16%	33%
-	-	-	-	-	-		-	-	-
33%	21%	24%	0%	9%	13%		55%	24%	21%
23%	41%	7%	0%	17%	12%		64%	7%	29%

Explanation of each index and the legend are found on the last page.



MODEL	NO	RDIC	CONT	INENT
WIODEL	T	Р	T	P
ECMWF	A	A	A	N
CFSv2	A	SB	A	SA
Met Office	SA	SA	<b>A</b>	SB
DWD	A	SA	A	SB
<b>Meteo-France</b>	A	SB	<b>A</b>	N
ECCC	A	SA	A	N
C3S	A	SA	<b>A</b>	N
NMME	A	SA	A	SB
•				
Forecaster	SA	SA	SA	SA



Monthly mean values of the Arctic Oscillation (AO)

### June 2025 - Discussion

#### MODELS

Models shows a very strong warm signal over Nordic and Central Europe. Wet signal dominates over Nordic and weak preciptation signals over the Conti.

### TELECONNECTIONS

 ${\bf QBO}$  has probably switched to a easterly phase now and give a weak warm signal over Nordic.

Tripole is probably neutral or slightly negative and give a weak dry signal over Nordic and weak cold and wet signal over Central Europe. Neutral ENSO conditions give a weak dry signal over Central Europe.

 $\textbf{Solar cycle} \ \text{in maximum phase give a weak warm signal over Nordic}.$ 

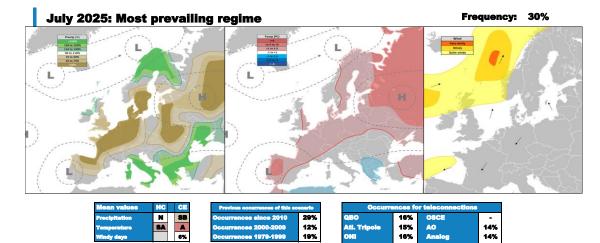
Analog years 1991 and 2011 were both wet over Nordic and 1991 was cool, while 2020 slightly dry and warm. All years normal to slightly wet over the Conti and 1991 was cool while the other years had normal temperatures.

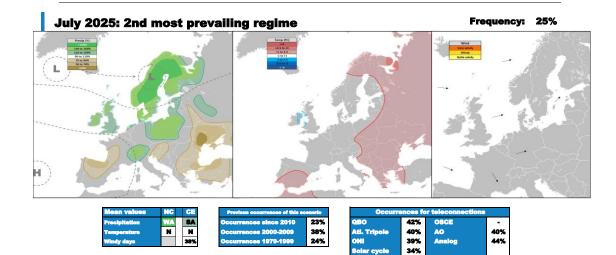
### CONCLUSION

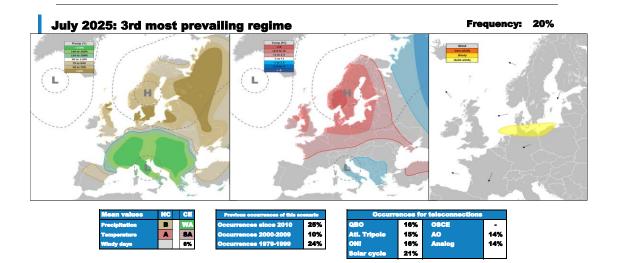
Two out of three analog years have been wet over Nordic and I find at least slightly wet as the most likely outcome. Based on analog years also most likely slightly wet over Central Europe. Temperatures slightly above to above normal.



## July 2025 - ForeSight180







## July 2025 - ForeSight180

INDEX	SIGN/PHASE	NO	RDIC		C	ONTINE	NT	П			N	/lain w	veathe	r regin	ne:	S	
INDEX	SIGN/PHASE	T	P	i	T	P	W	1	1	2	3	4	5	6		L	I
Normal conditions		N	N		N	N	5%		41%	17%	12%	3%	25%	2%		58%	15
<b>Quasi-Biennial Oscillation</b>	easterly winds	N	N		N	SA	5%		42%	16%	16%	3%	21%	1%	ı	59%	19
Atlantic Tripole	negative	N	N		SB	N	5%		40%	17%	15%	0%	26%	2%		57%	15
Ocean Niño Index (ONI)	neutral	SA	SB		N	N	1%		39%	13%	16%	3%	25%	4%	l	52%	19
Solar cycle	maximum period	N	SA	l	N	N	6%		34%	17%	21%	4%	21%	2%		51%	26
Oct snow cover extent	-	-	-			-	-		-	-	-	-	-	-		-	-
AO persistence	neutral	SA	SB		SA	N	2%		40%	14%	14%	0%	31%	1%		53%	14
Analog years	90,91,02,11,16	SB	N		В	N	3%		44%	11%	14%	0%	28%	3%	l	55%	14

Explanation of each index and the legend are found on the last page.

Photo Voltaics Germany in % of normal 101%

MODEL	NO	RDIC	CONT	INENT
INIODEL	T	P	Т	P
ECMWF	SA	A		SB
CFSv2	SA	SB	A	N
Met Office	A	SA	A	SB
DWD	A	N	A	SB
Meteo-France	A	N	A	SB
ECCC	A	Z	A	SB
C3S	A	SA	A	SB
NMME	A	SA	A	N
Forecaster	A	SA	SA	SB





### July 2025 - Discussion

### MODELS

Models are warm across Europe, weak support for wetter than normal over Nordic and slightly stronger support for drier than normal over Central Furope.

### TELECONNECTIONS

**QBO** is likely in an easterly phase and give a weak wet signal over Central Europe.

Tripole is probably weak negative and give a weak cool signal over Central Europe.

**ENSO** is probably neutral and give a weak warm and dry signal over Nordic.

 $\textbf{Solar Cycle} \ \text{in maximum phase give a weak wet signal over Nordic}.$ 

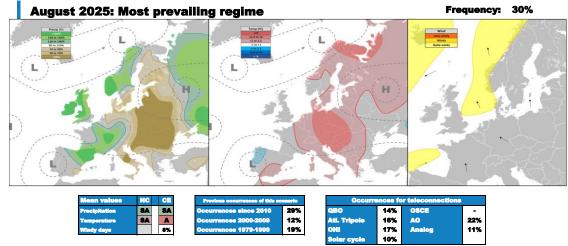
Analog years have mostly been slightly wet over Nordic and all the latest ones, but 1991 was very dry. Temperatures near normal most of the years. Over the Conti no clear precipitation signal from these years, and latest years normal to slightly cool.

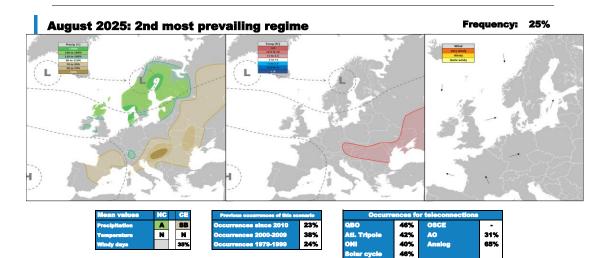
### CONCLUSION

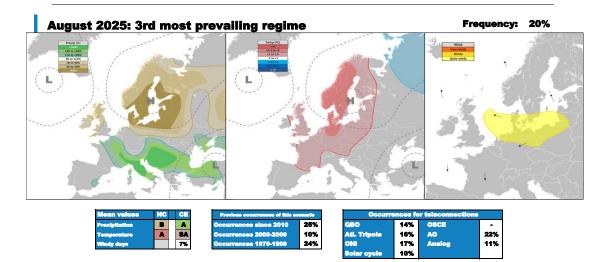
Based on analog years and the models wetter than normal comes out as the most likely for Nordic with temperatures slightly above normal, while possibly slightly dry and not as warm as indicated by the models.



### August 2025 - ForeSight180





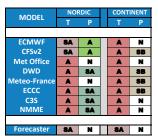


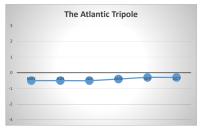
### August 2025 - ForeSight180

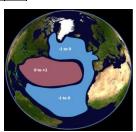
INDEX	SIGN/PHASE	NO	RDIC	Т	C	ONTINE	NT				V	/lain w	reathe	r regin	ne	S		
INDEX	SIGN/PHASE	Т	Р	Ī.	Т	Р	W	ı	1	2	3	4	- 5	6		L	N	Н
Normal conditions		N	N	T	N	N	15%	ſ	40%	19%	13%	1%	23%	3%		59%	15%	26%
<b>Quasi-Biennial Oscillation</b>	strong easterly winds	SB	N	Г	N	N	20%	ı	46%	14%	14%	0%	22%	3%		61%	14%	25%
Atlantic Tripole	negative	N	N	1	SB	N	19%	ı	42%	15%	16%	0%	25%	3%		56%	16%	28%
Ocean Niño Index (ONI)	neutral	N	N	1	N	N	16%	ı	40%	13%	17%	1%	25%	4%		53%	18%	29%
Solar cycle	maximum period	N	SA		N	SA	15%	ı	46%	23%	10%	0%	19%	2%		69%	10%	21%
Oct snow cover extent	-			1	-	-	-	ı	-	-	-	-	-	-		-	-	-
AO persistence	negative	SA	N	1	SB	A	0%	ı	31%	15%	22%	3%	28%	1%		46%	25%	29%
Analog years	88,01,17,18	SB	SA		N	N	21%	ı	65%	10%	11%	0%	14%	0%		75%	11%	14%

Explanation of each index and the legend are found on the last page.

Photo Voltaics Germany in % of normal 91% Wind in Germany in % of normal 104%







### **August 2025 - Discussion**

### MODELS

The models hold on to warm weather across Europe, dry signal over Central Europe and no clear precipitation signal over Nordic.

#### TELECONNECTIONS

 ${\bf QBO}$  is probably in a transition phase and give a weak dry signal over Central Europe.

Phase and strenght of the **Tripole** is uncertain, possibly negative and in case a weak cool signal over Central Europe. **ENSO** is probably neutral and give a weak dry and warm signal over Nordic.

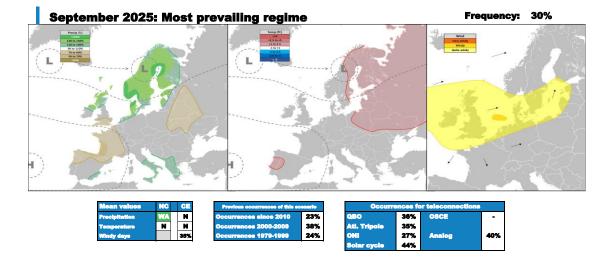
Solar Cycle remain in maximum period showing a weak wet signal across Central and Northern Europe and weak cool signal over the Conti.

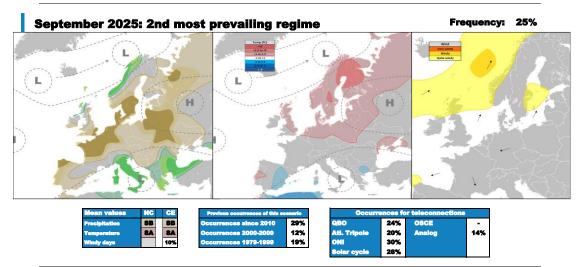
Analog years have all been slightly wet to wet over Nordic and normal to slightly cool. All years except 88 has been slightly dry over Central Europe and normal to slightly warm.

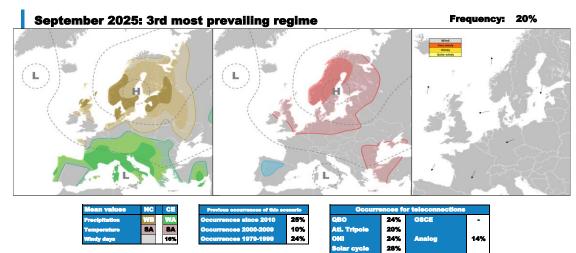
### CONCLUSION

Signals point in a wet direction for Nordic and more in a dry direction for the Conti. Normal to slightly warm over Nordic and slightly warm to warm

### September 2025 - ForeSight180





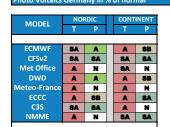


### September 2025 - ForeSight180

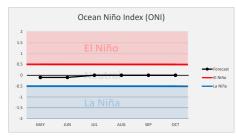
INDEX	SIGN/PHASE	NO	NORDIC		C	ONTINE	NT				V	/lain v	veathe	r regin	ne	S		
INDEX	SIGN/PHASE	T	P	Ī	T	P	W		1	2	3	4	5	6		_	N	Ξ
Normal conditions		N	N		N	N	9%	ı	37%	8%	25%	2%	24%	4%		46%	27%	28%
<b>Quasi-Biennial Oscillation</b>	strong easterly winds	N	N		SA	SA	11%	ı	36%	15%	24%	2%	18%	6%		51%	26%	24%
Atlantic Tripole	negative	×	SA		N	N	14%		35%	13%	20%	1%	23%	8%		48%	21%	31%
Ocean Niño Index (ONI)	neutral	N	SB		SB	SA	10%		27%	12%	30%	2%	26%	3%		38%	32%	30%
Solar cycle	maximum period	SA	SA		SA	SB	11%		44%	5%	28%	5%	15%	3%		49%	33%	18%
Oct snow cover extent	-			1	-	-	-	l	-	-	-	-	-	-		-	-	-
Analog years	2014,2017,2018	N	N		SB	В	17%		40%	13%	14%	0%	26%	7%		53%	14%	32%

105%

Explanation of each index and the legend are found on the last page.



Wind in Germany in % of normal 102%



The ENSO system - Pacific equatorial sea surface temperature anomaly

### September 2025 - Discussion

SA N SA SB

#### MODELS

The models continue to show warmer than normal across Europe, and a weak wet tendency over Nordic while no precipitation signal over Central Europe.

### TELECONNECTIONS

Teleconnection signals are quite uncertain both regarding phase and strength. But **QBO** likely in easterly phase which give a weak wet and mild signal over Central Europe and **ENSO** likely neutral with a weak dry signal over nordic and weak wet and cool signal over Central Europe.

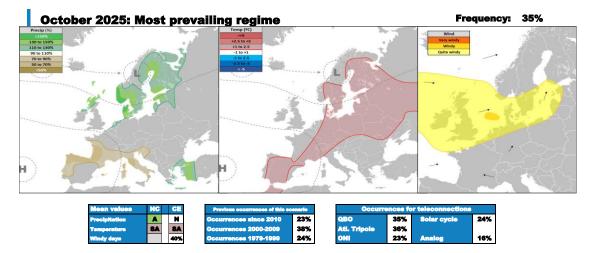
Analog years have both been wet and dry over Nordic with temperatures mostly near normal and dry over Central Europe with variable temperatures.

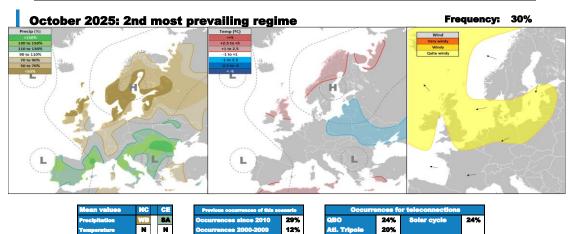
### CONCLUSION

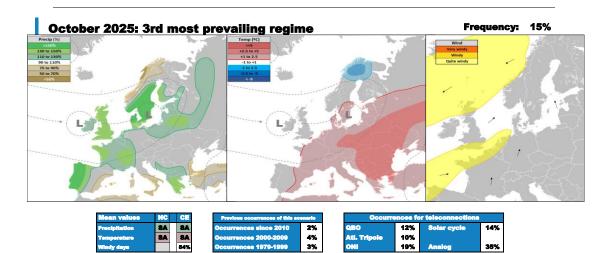
 $\label{thm:wide open how August weather will behave, but at least slightly warm across \ Europe \ is \ likely.$ 



## October 2025 - ForeSight180







### October 2025 - ForeSight180

INDEX	SIGN/PHASE	NO	RDIC		C	ONTINE	NT	Main weather regimes									
INDEX	SIGN/PHASE	T	P	Ī	T	P	W	1	2	3	4	5	6		L	N	Н
Normal conditions		N	N		N	N	8%	31%	13%	22%	4%	22%	8%		44%	26%	29%
Quasi-Biennial Oscillation	strong easterly winds	N	SA	Г	N	N	9%	35%	12%	24%	2%	22%	4%	lli	47%	26%	27%
Atlantic Tripole	negative	8A	SA		N	N	13%	36%	10%	20%	3%	23%	7%	H	47%	23%	30%
Ocean Niño Index (ONI)	neutral	N	N	1	SA	A	8%	23%	19%	24%	3%	21%	10%	li	42%	27%	31%
Solar cycle	maximum period	N	N		N	A	7%	24%	14%	24%	5%	23%	9%	ll	38%	29%	32%
Oct. snow cover extent	-			1			-	-	-	-	-	-	-	li	-	-	-
Analog years	2014	A	WA		A	SB	0%	16%	35%	39%	0%	10%	0%		52%	39%	10%

Explanation of each index and the legend are found on the last page.



### October 2025 - Discussion

### MODELS

With few models available for this period, there is limited guidance, but warmer than normal across Europe continue to dominate, no clear signals for precipitation.

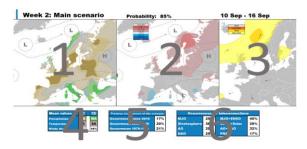
### TELECONNECTIONS

While teleconnection data exists for this month, it should be taken with caution given the extended range with uncertain phase and strenght. Similarly, analog years provide some hints but are not highly reliable.

Analog year 2018 was very wet over Nordic (after a very dry Spring, June and July) and very dry over the Conti and slightly warm.

### CONCLUSION

Highly uncertain outlook so many months ahead and I go for neutral conditions.



For each month, the forecaster pick three weather regimes that the forecaster think is going to be the most prevailing that month. How likely each of these are, or how often we anticipate these to occur that week, is given by the "Frequency" above the charts. All the charts are based on the average conditions for a typical weather situation of the chosen weather regime

- 1. Precipitation anomaly chart. Shows areas of above and below normal precipitation for the given scenario, and where the most common low pressure track or low pressure/high pressure systems are positioned.
- 2. Temperature anomaly chart.
- 3. Wind anomaly chart. This is a rough estimate of areas that often see windy conditions and the general wind direction for the given weather scenario.
- 4. The average precipitation and temperature for the Nordic Countries (NC) and Continental Europe (CE). "Windy days" shows how many days the average wind in Germany is higher than 1 standard deviation above the normal.
- 5. A table that shows how often this particular weather scenario has occurred in that particular month.
- 6. A table that shows how often this particular weather scenario has occurred before for the given phase or value of each teleconnection index in that week.



- 1. A table for each teleconnection index, the sign/phase they have for that week, and the average temperature, precipitation and wind for the Nordic and the continent based on previous occurrences of these indices for the same time of the year.
- Shows what weather scenario that occurs most often for the given teleconnection, and how often this occurs.
   A table for several available weather models and their average conditions in the Nordic and the Continent. The last row shows the forecaster's expectation.
- 4. For each month this shows different charts and graphs for different teleconnections.

### A description of the weather regimes used.

- 1 A general western low pressure regime. Lows into Scandinavia. Often a high over Southern Europe and/ or the continent.
- 2 A southern low pressure track via UK and into South Scandinavia and/or the continent. Also includes the quite rare situation where lows move from E-Europe and into Scandinavia from the SE.
- 3 A northern low pressure scenario where lows move via Iceland and into the Barents Sea/N-Nordic. Often a high in the continent and/or into South Scandinavia. Often a mild scenario. It may be wet at times, especially in Northern Norway, but often it is quite dry for the Nordic in general.
- 4 Lows stops west of Scandinavia or over UK due to a high pressure to the east, often over NW or W Russia.
- 5 High pressure over Northern Europe. Includes high pressure situation over the Nordic, the Norwegian Sea or the North Sea. There may be lows into the continent, but it could also just be a ridge, or the high itself may stretch into the continent. The main point is that the high is centered to the north.
- 6 High over or just south of Iceland. Usually there will be a low over the Nordic. The continent is more mixed, whether there is a low there or not, but for most of Europe this means a cold scenario.

StormGeo **Explanations** 

### Quasi-Biennial Oscillation (QBO)

The QBO (Quasi-Biennial Oscillation) is a large-scale wind system over the Equator. The wind blows in a broad belt over the Equator in a Westerly or Easterly direction, and the direction changes approximately every second year.

A negative phase indicates Easterly winds, and a positive phase Westerly winds. It usually have stronger signals in the winter season and typically it tend to be cooler and drier types of weather in winters with a negative QBO phase. It may occasionally give signals in other seasons as well.

#### Atlantic Tripole

The Atlantic Tripole is a sea surface temperature pattern in the Northern Atlantic. The temperature anomalies in the Northern Atlantic often follow a three-way pattern, or three poles (a Tripole), where the tropical parts and the areas south of Greenland/Iceland often have the same sign, while the area in the middle, especially off the coast of the United States, have the opposite sign. In a negative Atlantic Tripole, the areas south of Greenland/Iceland, and in the tropics, are generally cooler than normal, with a warm anomaly between them. A positive Tripole has a warm anomaly south of Greenland/Iceland and in the tropics, and cooler off the coast of North America.

The tripole may have signals all year around. A negative tripole is typically associated with increased low pressure activity in the Nordic.

#### Ocean Niño Index (ONI) or ENSO

The ONI is used to define the ENSO system. It measures the sea surface temperatures (SST) in the tropical Pacific. Temperatures higher than 0.5 deg above normal SSTs are regarded as El Niño conditions, while temperatures lower than 0.5 deg below normal SST are regarded as La Niña. The ENSO system typically has stronger deviations from the normal in the Winter season, and thus the impact on the weather is also often stronger in the Winter, although it may have signals all year around.

The amount of solar radiation that Sun emits and the Earth absorbs, oscillates in an approximate 11-year cycle, thus changes very little from month to month. The forecasts are based on predictions from NASA, although the main trends are relatively predictable The impact on the weather is generally quite low, but there are tendencies that varies through the year depending on where in the cycle we are

#### October snow cover extent (OCE)

The October snow cover extent in Siberia has shown to have possible impacts on the Winter weather. Thus, this is only applicable for the Winter season. Years of high snow cover in Siberia has a tendency of increasing the chance of a colder weather development in January/February, where complicated processes leads to changes in the stratosphere and the result is often a weaker polar vortex or a sudden stratospheric warming (SSW). Years of low snow cover in Siberia has the opposite effect, often resulting in a stronger polar vortex and milder/wetter conditions near the surface.

### AO persistence

The Arctic Oscillation (AO) is a pressure index related to the pressure difference between higher and lower latitudes across the Northern Hemisphere, and could be seen as a more general version of the NAO. Or the NAO could be seen as a local variant of the AO. The negative and positive AO has similar signals as the NAO. There tend to be a certain persistence in this signals, especially when the amplitude has been large. So this index basically shows how the weather typically is 3 months after a particular AO. It is based on the actual observed AO for the first three months, then partly observations and forecast for the 4th month, and only forecast for the 5th month.

These are years with similar teleconnections as we expect to see the next 6 months. Ideally, there would be years where all the teleconnections are similar, but that is rarely the case. It is rarely more than 4 of 5 teleconnections that are similar, if we are lucky, but often only 3 of 5 teleconnections, and the signal from the analog years must be used with caution

### MISSING DATA

Note that occasionally we get situations where certain combinations of the indices above have not occurred before for the period