ForeSight 180 Day Outlook

February to July 2025

Issued by Senior Forecaster Roar Teigen
Issued: 28 January 2025
Next forecast: Mid to late February 2025

Note:
An explanation of all the elements and the indices are found on the last pages of the report.

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Executive Summary:

This winter, the ENSO (El Niño/La Niña) and QBO systems are in opposite phases compared to 2023/2024. Alongside an Atlantic Tripole is positive at least first half of the Winter which also is in contrast to last Winter. So we could defenitly not compare with that one.

Models cleary indicate a wet and mild through the whole Winter over the Nordic. While dry and mild over Central Europe. Polar vortex development is very important for how the weather pattern evolve during the Winter and at leas its likely that it will normalize from January, and also fair chance that it could be weaker than normal some periods for the rest of the Winter. Positive tripole support drier and colder than normal over the Nordic and so do the weak La Niña conditions. My conclusion is that its likely will not be as mild and wet anomalies that we will have for December for the rest of the Winter, but still slightly wet and mild is the most likely outcome of January with February possibly could become more normal. For Central Europe normal to slightly dry and slightly mild

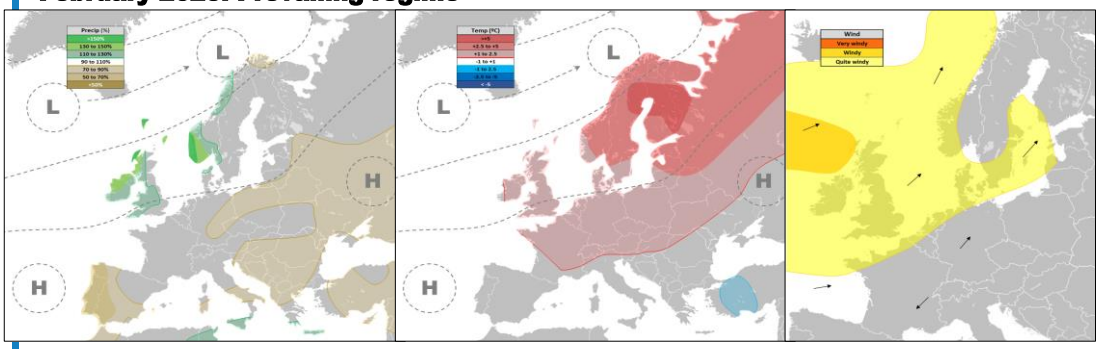
Prevailing weather regime

Region	Temperature					Precipitation				
	F	M	A	M	J	F	M	A	M	J
Nordic										
Continent										
Norway NO1 (SE)										
Norway NO2 (SW)										
Norway NO3 (C)										
Norway NO4 (O)										
Norway NO5 (W)										
Sweden SE1										
Sweden SE2										
Sweden SE3										
Sweden SE4										
NC Norway										
NC Sweden										
NC Finland										
NC Denmark										
CE Germany										
CE France										
CE Switzerland										
CE Austria										

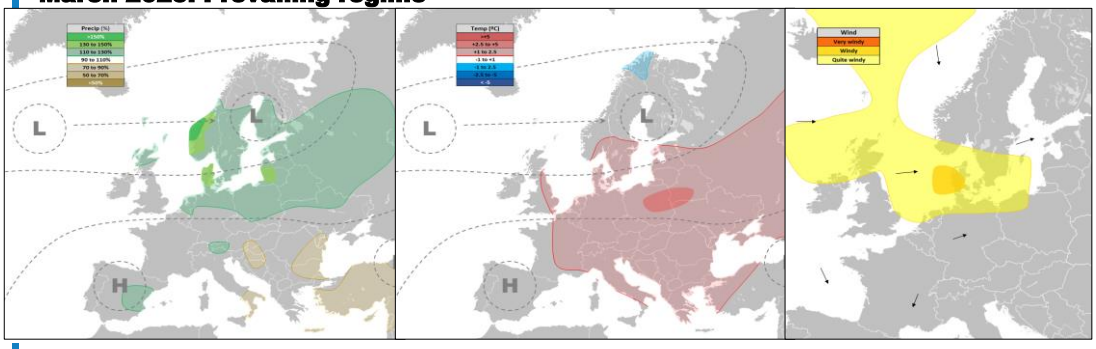
2nd most prevailing regime

Region	Temperature					Precipitation				
	F	M	A	M	J	F	M	A	M	J
Nordic										
Continent										
Norway NO1 (SE)										
Norway NO2 (SW)										
Norway NO3 (C)										
Norway NO4 (O)										
Norway NO5 (W)										
Sweden SE1										
Sweden SE2										
Sweden SE3										
Sweden SE4										
NC Norway										
NC Sweden										
NC Finland										
NC Denmark										
CE Germany										
CE France										
CE Switzerland										
CE Austria										

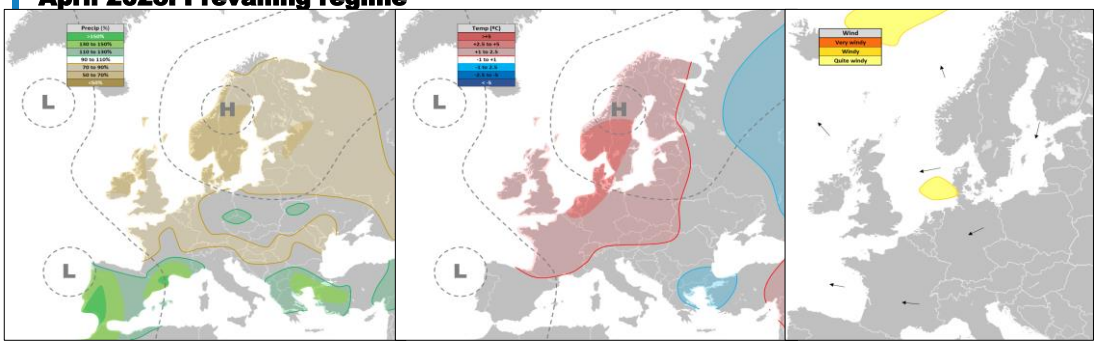
February 2025: Prevailing regime



March 2025: Prevailing regime

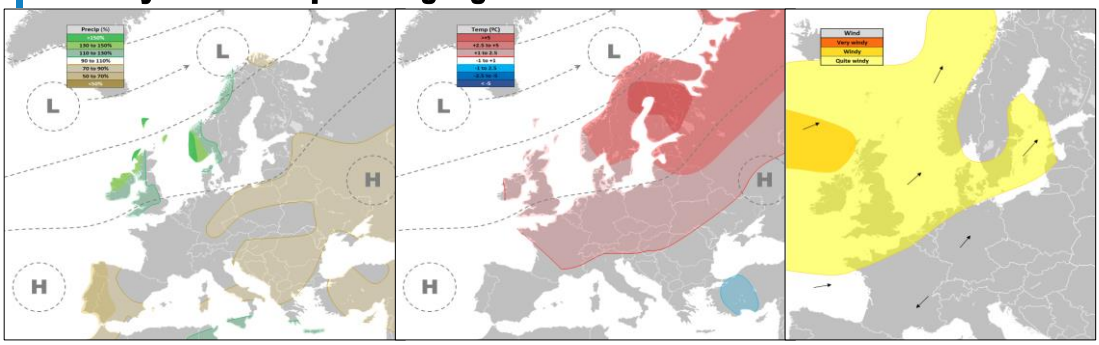


April 2025: Prevailing regime



February 2025: Most prevailing regime

Frequency: 45%



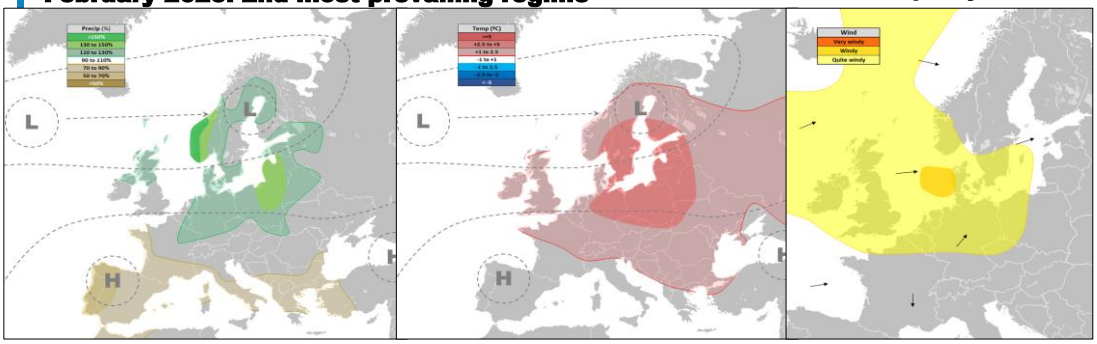
Mean values	NC	CE
Precipitation	SA	N
Temperature	A	SA
Windy days		41%

Previous occurrences of this scenario	
Occurrences since 2010	29%
Occurrences 2000-2009	12%
Occurrences 1979-1999	19%

Occurrences for teleconnections			
QBO	30%	OSCE	34%
Atl. Tripole	31%	AO	33%
ONI	23%	Analog	27%
Solar cycle	31%		

February 2025: 2nd most prevailing regime

Frequency: 35%



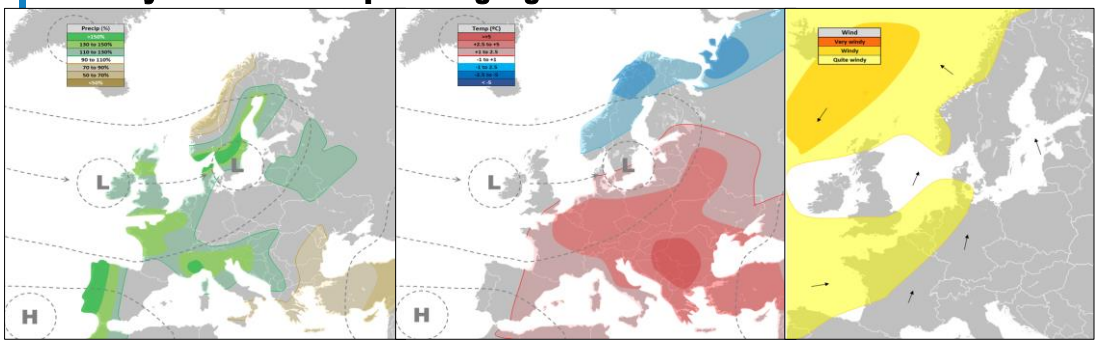
Mean values	NC	CE
Precipitation	A	N
Temperature	A	A
Windy days		68%

Previous occurrences of this scenario	
Occurrences since 2010	23%
Occurrences 2000-2009	38%
Occurrences 1979-1999	24%

Occurrences for teleconnections			
QBO	27%	OSCE	32%
Atl. Tripole	28%	AO	27%
ONI	22%	Analog	32%
Solar cycle	36%		

February 2025: 3rd most prevailing regime

Frequency: 15%



Mean values	NC	CE
Precipitation	SA	A
Temperature	N	A
Windy days		52%

Previous occurrences of this scenario	
Occurrences since 2010	2%
Occurrences 2000-2009	4%
Occurrences 1979-1999	3%

Occurrences for teleconnections			
QBO	10%	OSCE	7%
Atl. Tripole	8%	AO	9%
ONI	9%	Analog	5%
Solar cycle	7%		

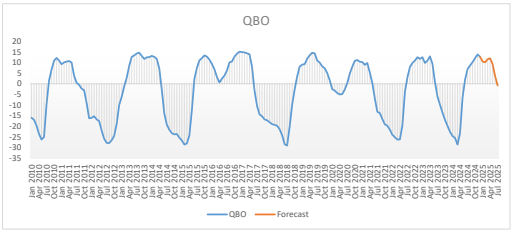
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes								
		T	P	T	P	W	1	2	3	4	5	6	L	N	H
Normal conditions		N	N	N	N	16%	29%	10%	30%	1%	20%	9%	39%	31%	29%
Quasi-Biennial Oscillation	westerly winds	SB	SB	N	N	16%	27%	10%	30%	0%	22%	10%	37%	30%	33%
Atlantic Tripole	positive	B	N	SA	SA	12%	28%	8%	31%	0%	19%	14%	36%	31%	33%
Ocean Niño Index (ONI)	neutral	B	B	B	N	10%	22%	9%	23%	2%	33%	10%	31%	24%	43%
Solar cycle	maximum period	SA	SA	A	A	22%	36%	7%	31%	0%	21%	5%	42%	31%	26%
Oct snow cover extent	low snow cover	SB	B	SB	SB	0%	30%	2%	30%	0%	29%	8%	32%	30%	37%
AO persistence	neutral	SA	SA	SA	N	19%	27%	9%	33%	3%	23%	4%	36%	36%	27%
Analog years	1997,2009	SB	SA	N	SA	22%	32%	5%	27%	0%	18%	18%	38%	27%	36%

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

Photo Voltaics Germany in % of normal	98%

Wind in Germany in % of normal	105%

MODEL	NORDIC		CONTINENT	
	T	P	T	P
ECMWF	A	A	A	B
CFSv2	A	SA	A	SB
Met Office	A	A	A	N
DWD	N	N	A	N
Meteo-France	A	SA	A	N
ECCC	A	A	A	SB
C3S	A	A	A	SB
NMME	A	SA	A	SB
Forecaster	A	A	SA	SB



The observed and forecasted Quasi Biennial Oscillation

February 2025 – Discussion

MODELS
All seasonal models align of really mild across Europe and wet over Nordic, most of them slighty dry over Central Europe.

TELECONNECTIONS
The **QBO** is currently in its westerly phase giving a weak dry and cold signal over Nordic, neutral signal for the Conti.

Atlantic Tripole is expected positive and give a cold signal over Nordic and weak wet and mild signal over the Conti.

ENSO is neutral negative or marginally within La Niña state and give a dry and cold signal over Nordic and cold signal over the Conti.

The **solar cycle** is currently in its maximum phase and give a weak wet and mild signal over Nordic and stronger wet and mild signal over the Conti.

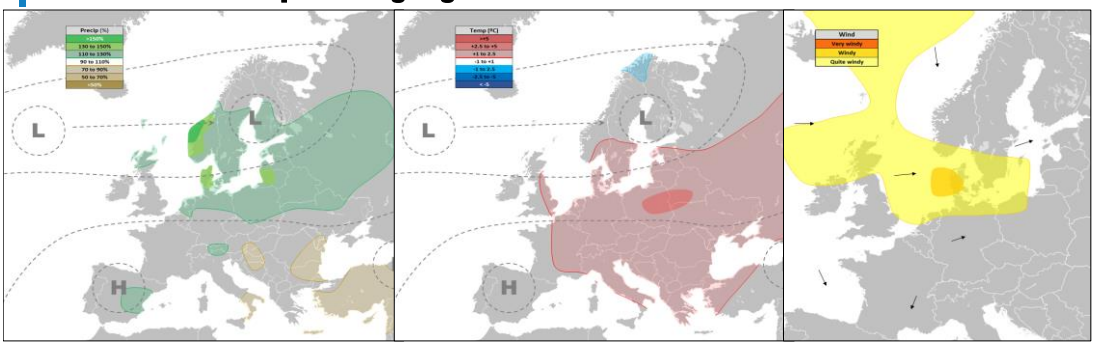
The dry and weak cold signal given by the low Siberian snow cover is related to the extreme cold and dry year 1987 and not seen in other years with low snow cover.

Analog year 1997 was wet and mild over Nordic while 2009 dry and cold. Over Central Europe 1997 was slightly dry and mild while 2009 slightly wet and cold.

CONCLUSION
EC, Met Office and Meteo-France agree of a strong Polar Vortex to continue for most of February. Based on this its likely that February will be wet and mild over Nordic and normal to slightly dry over the Conti and slightly mild to mild here. Lows in a northerly path is most likely to dominate while most of them into Central Scandinavia as the alternative.

March 2025: Most prevailing regime

Frequency: 40%



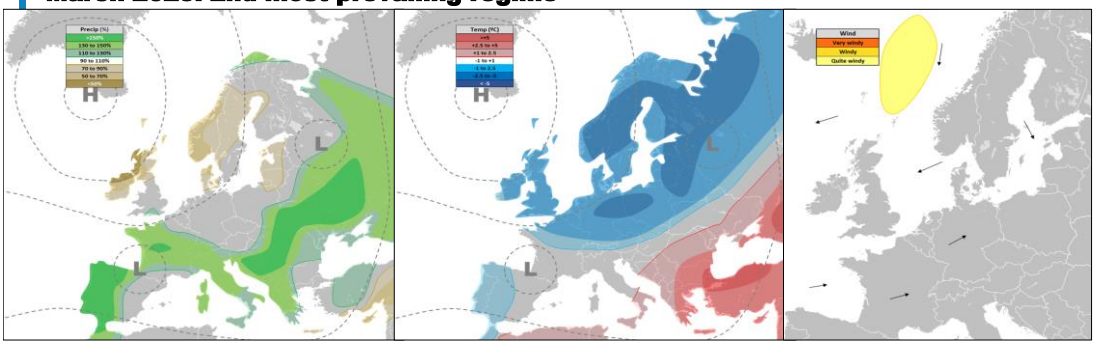
Mean values	NC	CE
Precipitation	SA	N
Temperature	SA	SA
Windy days		69%

Previous occurrences of this scenario	
Occurrences since 2010	23%
Occurrences 2000-2009	38%
Occurrences 1979-1999	24%

Occurrences for teleconnections			
QBO	27%	OSCE	-
Atl. Tripole	25%	AO	25%
ONI	19%	Analog	22%
Solar cycle	27%		

March 2025: 2nd most prevailing regime

Frequency: 25%



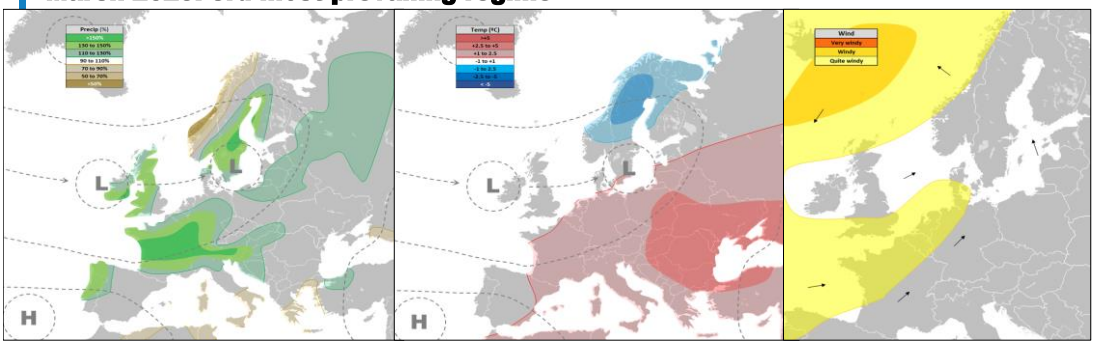
Mean values	NC	CE
Precipitation	SB	A
Temperature	B	B
Windy days		50%

Previous occurrences of this scenario	
Occurrences since 2010	11%
Occurrences 2000-2009	8%
Occurrences 1979-1999	9%

Occurrences for teleconnections			
QBO	11%	OSCE	-
Atl. Tripole	17%	AO	8%
ONI	14%	Analog	27%
Solar cycle	11%		

March 2025: 3rd most prevailing regime

Frequency: 15%



Mean values	NC	CE
Precipitation	SA	WA
Temperature	N	SA
Windy days		69%

Previous occurrences of this scenario	
Occurrences since 2010	2%
Occurrences 2000-2009	4%
Occurrences 1979-1999	3%

Occurrences for teleconnections			
QBO	13%	OSCE	-
Atl. Tripole	11%	AO	10%
ONI	15%	Analog	6%
Solar cycle	15%		

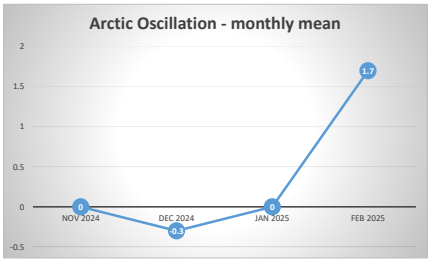
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes								
		T	P	T	P	W	1	2	3	4	5	6	L	N	H
Normal conditions		N	N	N	N	10%	27%	10%	31%	2%	20%	8%	37%	33%	28%
Quasi-Biennial Oscillation	westerly winds	N	N	N	SA	10%	27%	13%	25%	2%	18%	11%	40%	27%	29%
Atlantic Tripole	positive	SB	SB	N	SA	8%	25%	11%	22%	22%	3%	17%	36%	44%	20%
Ocean Niño Index (ONI)	neutral	SB	SB	N	SA	6%	19%	15%	24%	25%	0%	14%	34%	49%	14%
Solar cycle	maximum period	SA	A	A	A	13%	27%	15%	28%	0%	13%	11%	43%	28%	24%
Oct snow cover extent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AO persistence	neutral	SB	SA	SA	A	5%	25%	10%	24%	6%	25%	8%	35%	31%	33%
Analog years	97,01,02,13	B	SB	SB	A	2%	22%	6%	27%	0%	17%	27%	28%	27%	44%

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

Photo Voltaics Germany in % of normal	79%

Wind in Germany in % of normal	68%

MODEL	NORDIC		CONTINENT	
	T	P	T	P
ECMWF	A	SA	A	SB
CFSv2	A	A	A	B
Met Office	A	SA	A	N
DWD	A	SA	SA	N
Meteo-France	A	SA	A	N
ECCC	SA	SA	SA	SB
C3S	A	SA	A	SB
NMME	A	SA	A	SB
Forecaster	SA	N	SA	N



Monthly mean values of the Arctic Oscillation (AO)

March 2025 – Discussion

MODELS
All models shows a strong mild signal across Europe and slightly wet signal over Nordic while most of them a weak dry signal over Central Europe.

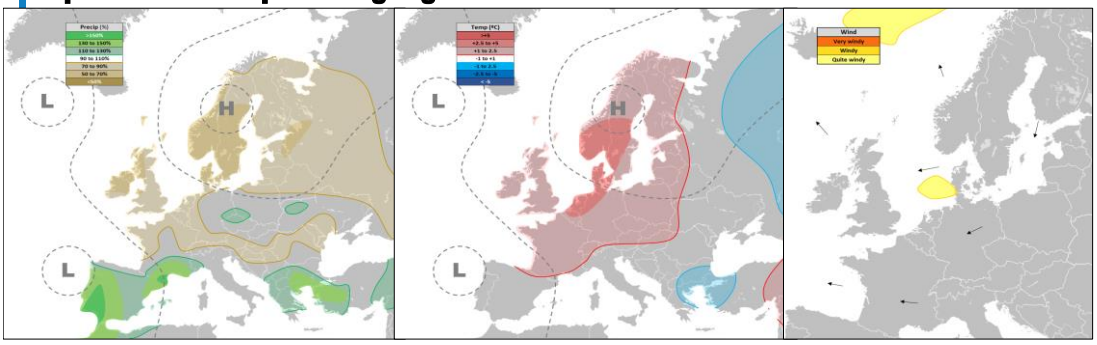
TELECONNECTIONS
QBO in westerly phase give a weak wet signal over the Conti.
Some uncertainty for the **Tripole** but most likely remaining positive this month which give a weak support for drier and colder than normal over Nordic (support positive NAO conditions) and weak wet signal over the Conti.
Neutral negative **ENSO** conditions give an average of weak dry and cold signal over Nordic and weak wet signal over Central Europe.
Solar cycle in maximum phase give a quite solid wet and mild signal over Central Europe and wet and mild signal over Central Europe as well.

Analog year 2013 had and extreme cold and dry March over Nordic and very cold over Central Europe as well. 1997 was very wet and mild over Nordic and dry and mild over the Conti.

CONCLUSION
The weather tendency to repeat itself and continue with the same dominating regimes together with many wet and mild March in years with strong solar activity are supporting the models. But if we get a more normal or even slightly weak Polar Vortex in March which has a fair chance to happen it could be drier and at least more normal temperatures over Nordic and quite normal conditions over the Conti.

April 2025: Most prevailing regime

Frequency: 35%



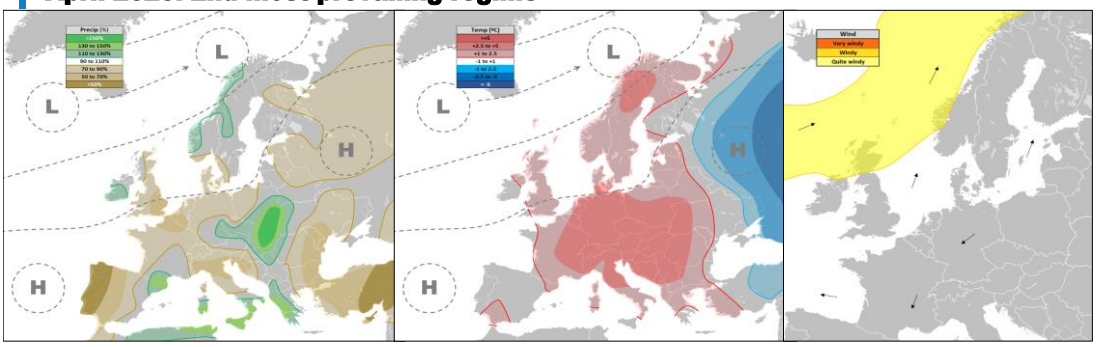
Mean values	NC	CE
Precipitation	B	SB
Temperature	A	SA
Windy days		28%

Previous occurrences of this scenario	
Occurrences since 2010	29%
Occurrences 2000-2009	12%
Occurrences 1979-1999	19%

Occurrences for teleconnections			
QBO	17%	OSCE	-
Atl. Tripole	25%	AO	15%
ONI	21%	Analog	21%
Solar cycle	17%		

April 2025: 2nd most prevailing regime

Frequency: 30%



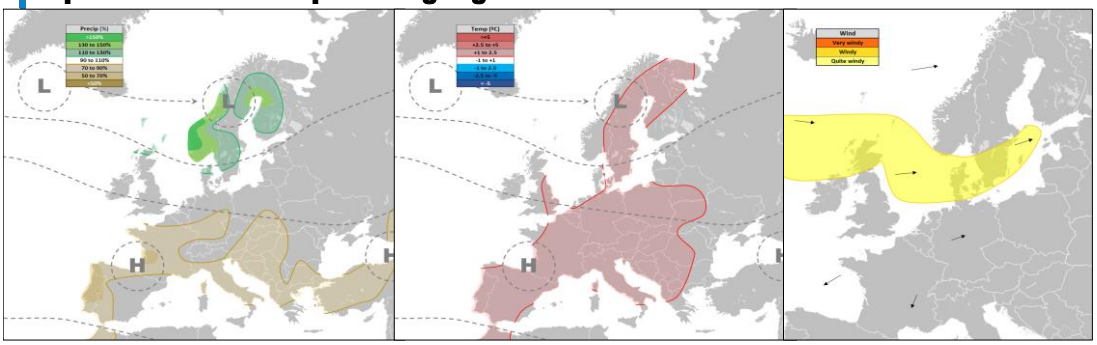
Mean values	NC	CE
Precipitation	N	N
Temperature	SA	A
Windy days		18%

Previous occurrences of this scenario	
Occurrences since 2010	29%
Occurrences 2000-2009	12%
Occurrences 1979-1999	19%

Occurrences for teleconnections			
QBO	17%	OSCE	-
Atl. Tripole	25%	AO	15%
ONI	21%	Analog	21%
Solar cycle	17%		

April 2025: 3rd most prevailing regime

Frequency: 15%



Mean values	NC	CE
Precipitation	A	N
Temperature	SA	SA
Windy days		39%

Previous occurrences of this scenario	
Occurrences since 2010	23%
Occurrences 2000-2009	38%
Occurrences 1979-1999	24%

Occurrences for teleconnections			
QBO	27%	OSCE	-
Atl. Tripole	17%	AO	37%
ONI	30%	Analog	29%
Solar cycle	25%		

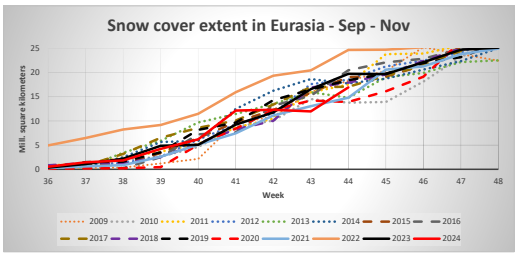
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes								
		T	P	T	P	W	1	2	3	4	5	6	L	N	H
Normal conditions		N	N	N	N	6%	30%	8%	18%	4%	28%	11%	39%	22%	39%
Quasi-Biennial Oscillation	westerly winds	N	SB	N	N	7%	27%	7%	17%	6%	30%	12%	34%	23%	42%
Atlantic Tripole	neutral	SA	SB	N	SA	4%	17%	10%	25%	6%	33%	9%	27%	31%	41%
Ocean Niño Index (ONI)	neutral	SB	N	N	N	3%	30%	10%	21%	2%	26%	10%	39%	23%	36%
Solar cycle	maximum period	SA	SA	SB	A	6%	25%	10%	17%	7%	30%	9%	35%	24%	39%
Oct snow cover extent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AO persistence	neutral	N	SA	SA	SA	5%	37%	11%	15%	3%	22%	12%	49%	18%	34%
Analog years	1995,2002.2011	SA	N	SA	B	9%	29%	6%	21%	0%	36%	9%	34%	21%	44%

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

Photo Voltaics Germany in % of normal	99%

Wind in Germany in % of normal	96%

MODEL	NORDIC		CONTINENT	
	T	P	T	P
ECMWF	A	N	A	SA
CFSv2	A	A	SA	SB
Met Office	A	SA	A	SB
DWD	A	A	A	SB
Meteo-France	A	SA	A	N
ECCC	SA	SA	A	N
C3S	A	SA	A	SB
NMME	A	SA	A	N
Forecaster	SA	SB	SA	SB



April 2025 – Discussion

MODELS

Models remain mild across Central and Northern Europe and still a wet signal over Nordic and most of them has a weak dry signal over Central Europe.

TELECONNECTIONS

QBO in westerly phase give a weak dry signal over Nordic

Tripole phase is uncertain, perhaps becoming neutral this month and in case a weak dry and mild signal over Nordic and weak wet signal over Central Europe.

ENSO is probably neutral and give in general weak signals, slightly cold over Northern Europe.

Solar Cycle in maximum phase give a wet signal across Central and Northern Europe and weak mild signal over Nordic while weak cold signal over Central Europe.

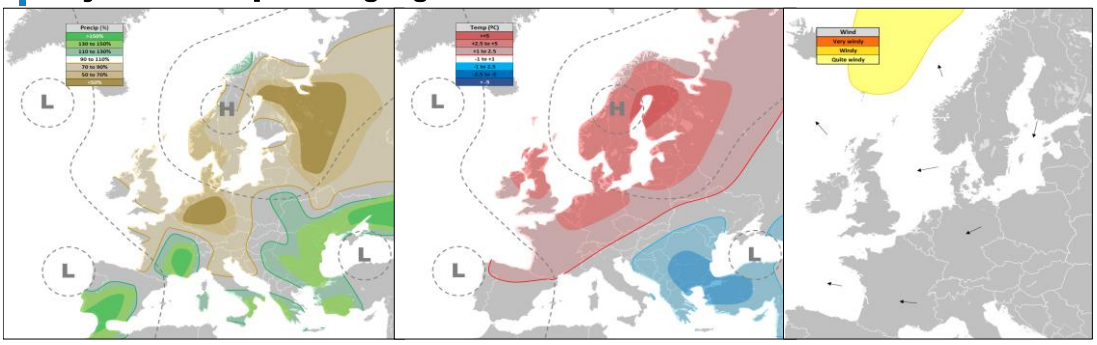
Analog year 1995 was wet and slightly cold over Nordic while the other years slightly dry and slightly mild to mild. Over the Conti 2011 was very dry and mild.

CONCLUSION

Very hard to predict how April will behave this year, but at least its not that obvious that it will be wet and mild over Nordic as the the models indicate. Based on two lates analog years slightly dry and mild over Nordic is more likely and drier and milder than normal over the Conti as well.

May 2025: Most prevailing regime

Frequency: 35%



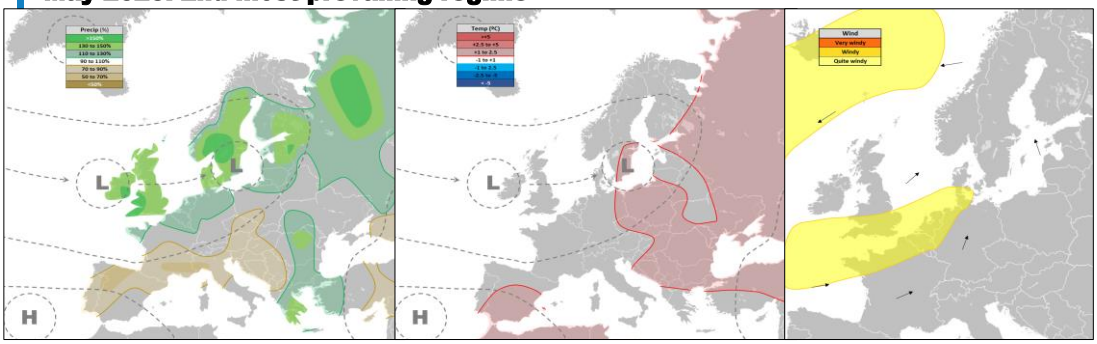
Mean values	NC	CE
Precipitation	B	SA
Temperature	A	A
Windy days		21%

Previous occurrences of this scenario	
Occurrences since 2010	29%
Occurrences 2000-2009	12%
Occurrences 1979-1999	19%

Occurrences for teleconnections			
QBO	13%	OSCE	-
Atl. Tripole	20%	AO	15%
ONI	13%	Analog	9%
Solar cycle	19%		

May 2025: 2nd most prevailing regime

Frequency: 25%



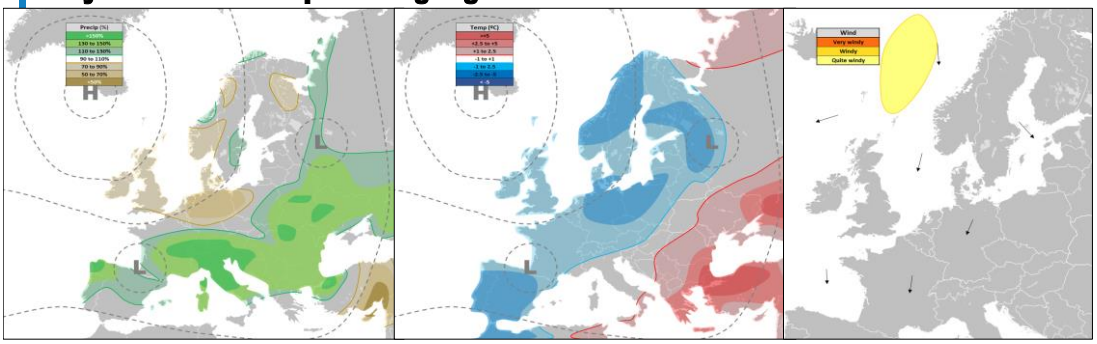
Mean values	NC	CE
Precipitation	A	SB
Temperature	N	SA
Windy days		42%

Previous occurrences of this scenario	
Occurrences since 2010	2%
Occurrences 2000-2009	4%
Occurrences 1979-1999	3%

Occurrences for teleconnections			
QBO	12%	OSCE	-
Atl. Tripole	9%	AO	6%
ONI	13%	Analog	8%
Solar cycle	4%		

May 2025: 3rd most prevailing regime

Frequency: 15%



Mean values	NC	CE
Precipitation	SB	WA
Temperature	B	B
Windy days		29%

Previous occurrences of this scenario	
Occurrences since 2010	11%
Occurrences 2000-2009	8%
Occurrences 1979-1999	9%

Occurrences for teleconnections			
QBO	13%	OSCE	-
Atl. Tripole	12%	AO	15%
ONI	11%	Analog	12%
Solar cycle	7%		

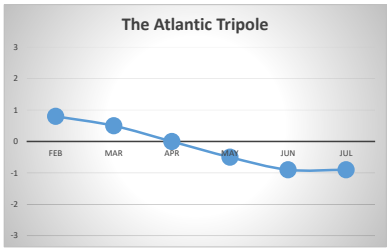
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes								
		T	P	T	P	W	1	2	3	4	5	6	L	N	H
Normal conditions		N	N	N	N	16%	28%	12%	17%	3%	28%	12%	40%	20%	40%
Quasi-Biennial Oscillation	westerly winds	SA	N	N	SA	15%	20%	12%	13%	7%	34%	13%	32%	20%	47%
Atlantic Tripole	negative	SA	N	SA	B	19%	28%	9%	20%	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	A	B	SA	SA	10%	33%	4%	19%	6%	31%	7%	37%	25%	38%
Oct snow cover extent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AO persistence	positive	SB	SA	N	SB	0%	28%	6%	15%	7%	28%	15%	35%	22%	43%
Analog years	91,02,06,09,12	SB	N	SB	N	12%	32%	8%	9%	9%	27%	12%	40%	18%	39%

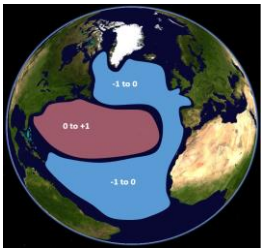
Explanation of each index and the legend are found on the last page.

Photo Voltaics Germany in % of normal	106%

Wind in Germany in % of normal	96%

MODEL	NORDIC		CONTINENT	
	T	P	T	P
ECMWF	SA	A	A	N
CFSv2	SA	A	A	SA
Met Office	SA	SA	SA	SB
DWD	SA	N	SA	N
Meteo-France	A	N	A	SA
ECCC	SA	A	A	SB
C3S	A	SA	SA	SA
NMME	A	N	A	N
Forecaster	SA	SB	SA	SA





May 2025 – Discussion

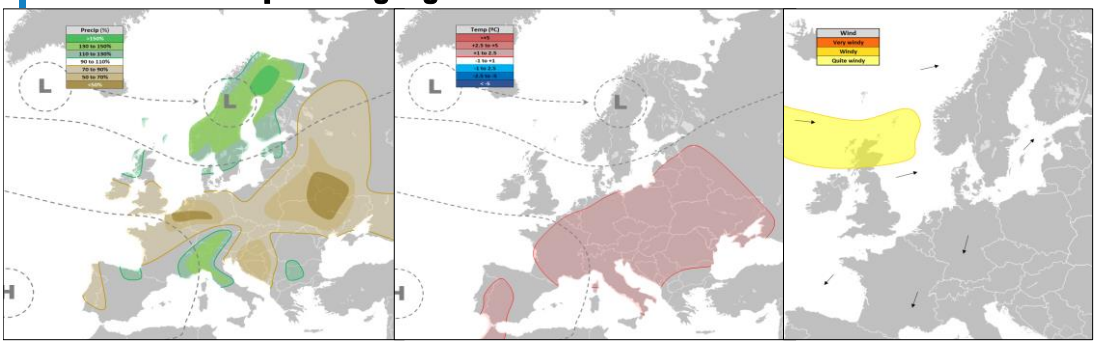
MODELS
The models hold on to mild weather across Europe, wet signal dominates over Nordic and mixed precipitation signal for Central Europe.

TELECONNECTIONS
QBO is likely still in westerly phase and give a weak mild signal over Nordic and weak wet signal over Central Europe.
Phase and strenght of the **Tripole** is very uncertain, possibly slightly negative and in case a weak mild signal across Europe and dry signal over Central Europe.
ENSO is probably neutral and giving a weak wet signal over Nordic.
Solar Cycle remain in maximum period with a dry and mild signal over Nordic and weak wet and mild signal over the Conti.
Analog years have mostly been quite normal over Nordic while over the Conti slightly cold with normal precipitation.

CONCLUSION
Based on analog years I find near normal conditions most likely both over Central and Northern Europe.

June 2025: Most prevailing regime

Frequency: 35%



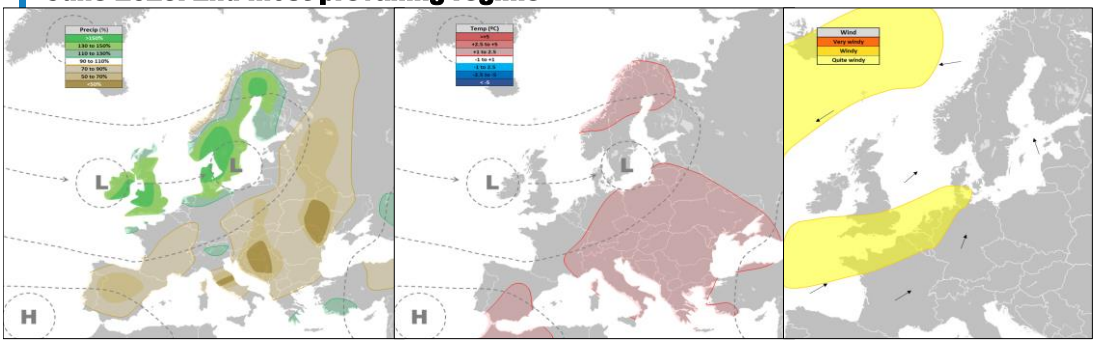
Mean values	NC	CE
Precipitation	A	N
Temperature	N	SA
Windy days		39%

Previous occurrences of this scenario	
Occurrences since 2010	23%
Occurrences 2000-2009	38%
Occurrences 1979-1999	24%

Occurrences for teleconnections			
QBO	33%	OSCE	-
Atl. Tripole	26%		
ONI	30%	Analog	31%
Solar cycle	41%		

June 2025: 2nd most prevailing regime

Frequency: 30%



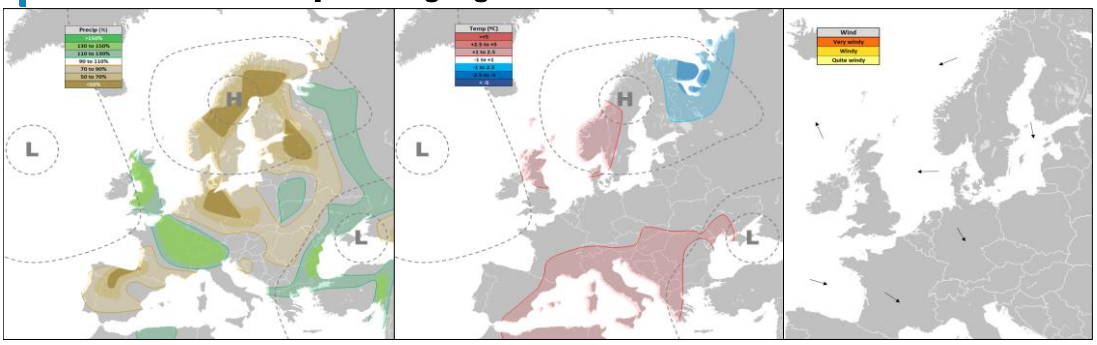
Mean values	NC	CE
Precipitation	A	N
Temperature	N	SA
Windy days		48%

Previous occurrences of this scenario	
Occurrences since 2010	2%
Occurrences 2000-2009	4%
Occurrences 1979-1999	3%

Occurrences for teleconnections			
QBO	22%	OSCE	-
Atl. Tripole	24%	Analog	37%
ONI	23%		
Solar cycle	22%		

June 2025: 3rd most prevailing regime

Frequency: 20%



Mean values	NC	CE
Precipitation	B	SA
Temperature	SA	N
Windy days		10%

Previous occurrences of this scenario	
Occurrences since 2010	25%
Occurrences 2000-2009	10%
Occurrences 1979-1999	24%

Occurrences for teleconnections			
QBO	17%	OSCE	-
Atl. Tripole	12%		
ONI	17%	Analog	11%
Solar cycle	10%		

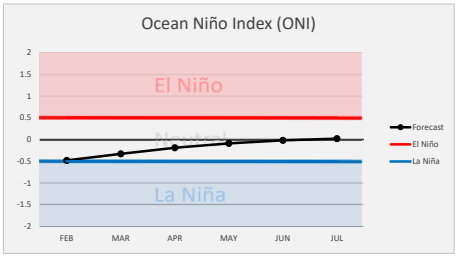
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes								
		T	P	T	P	W	1	2	3	4	5	6	L	N	H
Normal conditions		N	N	N	N	4%	31%	19%	17%	2%	23%	8%	49%	19%	31%
Quasi-Biennial Oscillation	transition phase	SA	N	N	N	5%	33%	22%	17%	1%	20%	7%	55%	18%	27%
Atlantic Tripole	negative	N	N	SB	SA	5%	26%	24%	12%	0%	23%	14%	51%	12%	37%
Ocean Niño Index (ONI)	neutral	N	N	N	N	4%	30%	23%	18%	2%	19%	8%	53%	20%	27%
Solar cycle	maximum period	N	A	SB	N	4%	41%	22%	10%	0%	17%	9%	64%	10%	26%
Oct snow cover extent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analog years	91,11,13,20	N	A	B	SA	7%	31%	37%	11%	0%	13%	9%	68%	11%	22%

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

Photo Voltaics Germany in % of normal	76%

Wind in Germany in % of normal	75%

MODEL	NORDIC		CONTINENT	
	T	P	T	P
ECMWF	SA	SA	SA	SB
CFSv2	A	A	SA	A
Met Office	SA	SA	SA	SB
DWD	N	SA	SA	SB
Meteo-France	SA	SA	A	N
ECCC	A	N	A	SB
C3S	SA	SA	A	SB
NMME	A	N	SA	N
Forecaster	N	SA	N	N



The ENSO system - Pacific equatorial sea surface temperature anomaly

June 2025 – Discussion

MODELS
The models are still mild, but slightly weaker warm signal. A weak wet signal dominates over Nordic and a weak dry signal over Central Europe.

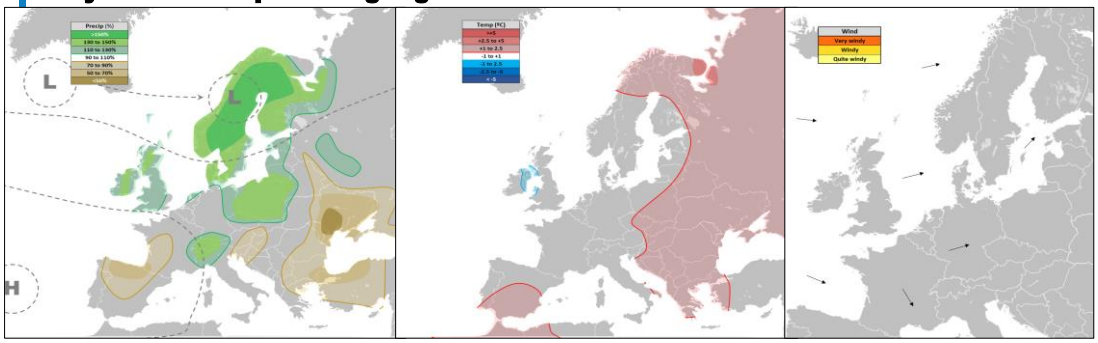
TELECONNECTIONS
Teleconnection signals are quite uncertain both regarding phase and strength. **Solar cycle** still likely in maximum phase and give a wet signal over Nordic an weak cool signal over Central Europe.

Analog years have mainly been wet over Nordic with variable temperatures. Over the Conti mainly normal to slightly wet and most of them normal to cool.

CONCLUSION
Signals are pointing toward a wet and normal to slightly warm June over Nordic and quite normal June over Central Europe.

July 2025: Most prevailing regime

Frequency: 35%



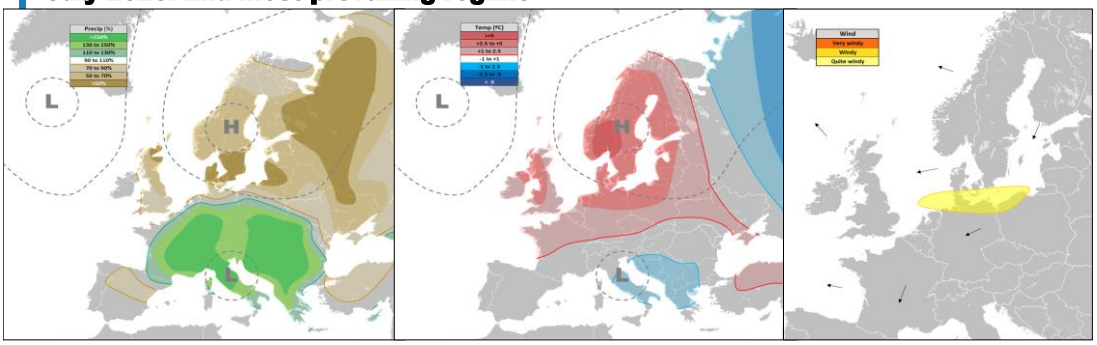
Mean values	NC	CE
Precipitation	WA	SA
Temperature	N	N
Windy days		38%

Previous occurrences of this scenario	
Occurrences since 2010	23%
Occurrences 2000-2009	38%
Occurrences 1979-1999	24%

Occurrences for teleconnections			
QBO	50%	Solar cycle	43%
Atl. Tripole	44%		
ONI	40%	Analog	60%

July 2025: 2nd most prevailing regime

Frequency: 30%



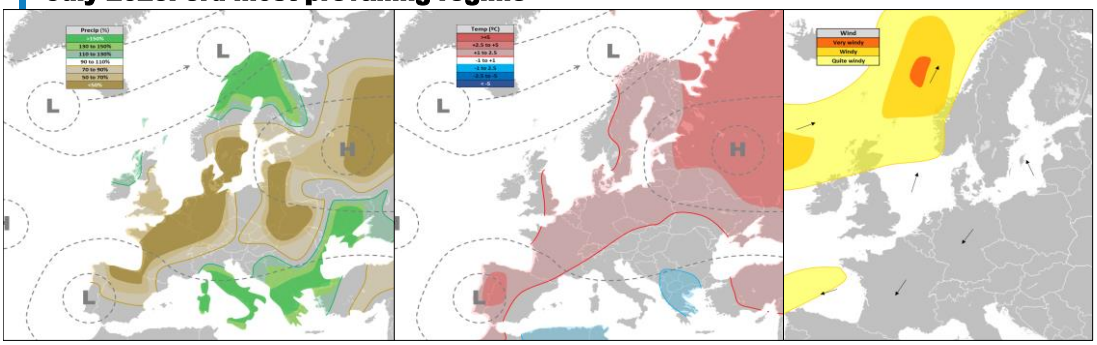
Mean values	NC	CE
Precipitation	B	WA
Temperature	A	SA
Windy days		6%

Previous occurrences of this scenario	
Occurrences since 2010	29%
Occurrences 2000-2009	12%
Occurrences 1979-1999	19%

Occurrences for teleconnections			
QBO	12%	Solar cycle	13%
Atl. Tripole	15%		
ONI	17%	Analog	16%

July 2025: 3rd most prevailing regime

Frequency: 15%



Mean values	NC	CE
Precipitation	N	SB
Temperature	SA	A
Windy days		6%

Previous occurrences of this scenario	
Occurrences since 2010	29%
Occurrences 2000-2009	12%
Occurrences 1979-1999	19%

Occurrences for teleconnections			
QBO	12%	Solar cycle	13%
Atl. Tripole	15%		
ONI	17%	Analog	16%

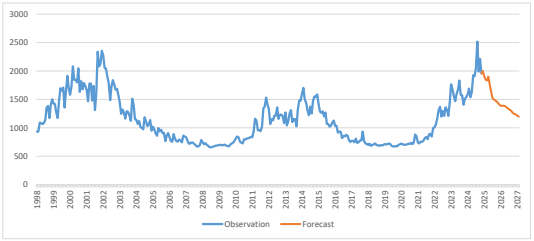
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes								
		T	P	T	P	W	1	2	3	4	5	6	L	N	H
Normal conditions		N	N	N	N	5%	41%	17%	12%	3%	25%	2%	58%	15%	27%
Quasi-Biennial Oscillation	transition phase	N	SA	N	N	6%	50%	16%	12%	2%	19%	1%	66%	14%	20%
Atlantic Tripole	negative	N	N	N	N	5%	44%	12%	15%	2%	25%	2%	55%	18%	27%
Ocean Niño Index (ONI)	neutral	SA	SB	SA	SB	2%	40%	11%	17%	3%	26%	4%	51%	20%	29%
Solar cycle	maximum period	N	N	SB	SA	6%	43%	20%	13%	0%	24%	0%	63%	13%	24%
Oct. snow cover extent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analog years	1991,1993,2016	B	SA	SB	SA	4%	60%	0%	16%	0%	24%	0%	60%	16%	24%

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

Photo Voltaics Germany in % of normal	59%

Wind in Germany in % of normal	60%

MODEL	NORDIC		CONTINENT	
	T	P	T	P
ECMWF	SA	SA	A	SB
CFSv2	SA	A	SA	SA
Meteo-France	-	-	-	-
ECCC	-	-	-	-
NMME	A	N	A	N
Forecaster	SA	SA	SA	SB



The solar cycle

July 2025 – Discussion

MODELS

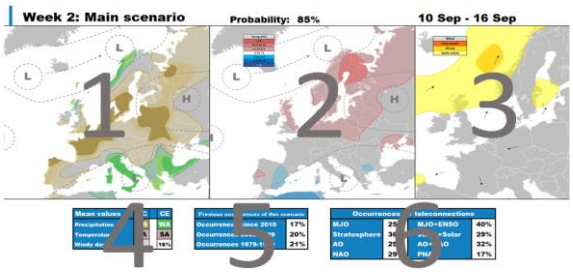
With few models available for this period, there is limited guidance, but a warm signal across Europe still excist and some support for wetter than normal over Nordic.

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. These analogs suggest wetter than normal and at least slightly cool over Nordic and no clear signals for the Conti.

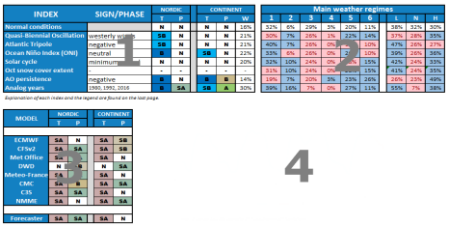
CONCLUSION

Highly uncertain outlook so many months ahead. But as it looks now slighty more likely with wetter than normal over Nordic and at least slightly warm across Europe.



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.
2. Shows what weather scenario that occurs most often for the given teleconnection, and how often this occurs.
3. 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.

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.

Solar cycle
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.

Analog years
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 we are looking at. This will be marked by a dash (-).