

## ForeSight 180 Day Outlook

July to December 2025

Issued by Senior Forecaster Roar Teigen

Issued: 11 June 2025

Next forecast: late July 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:

Models indicate a warm Summer across Europe and dry over the Continent while mixed precipitation signals over Nordic. Based on teleconnections and analog years the most likely outcome for July is slightly dry to normal over Nordic and warm from my point of view, also over the Conti dry and warm is the most likely.

August more spread in the signals over Nordic and at least normal precipitation becomes most likely still warm over the Conti and most likely quite dry.

Outlook for the Autumn is wide open, but for now normal to wetter than normal over Nordic is marginally most likely and mild with near normal precipitation over Central Europe.

### Prevailing weather regime

Region	Temperature					Precipitation					
	J	A	S	O	N	D	J	A	S	O	N
Nordic											
Continent											

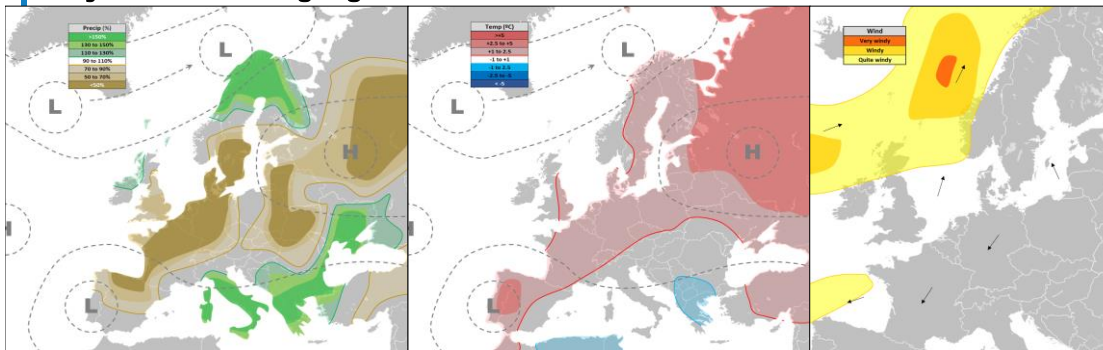
NO1 (SE)												
NO2 (SW)												
NO3 (C)												
NO4 (O)												
NO5 (W)												
SE1												
SE2												
SE3												
SE4												
Norway												
Sweden												
Finland												
Denmark												
Germany												
France												
Switzerland												
Austria												

### 2nd most prevailing regime

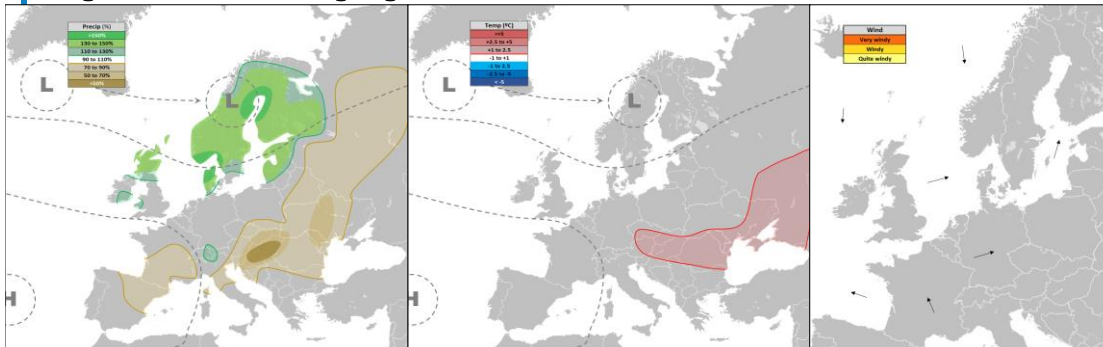
Region	Temperature					Precipitation						
	J	A	S	O	N	D	J	A	S	O	N	D
Nordic												
Continent												

NO1 (SE)												
NO2 (SW)												
NO3 (C)												
NO4 (O)												
NO5 (W)												
SE1												
SE2												
SE3												
SE4												
Norway												
Sweden												
Finland												
Denmark												
Germany												
France												
Switzerland												
Austria												

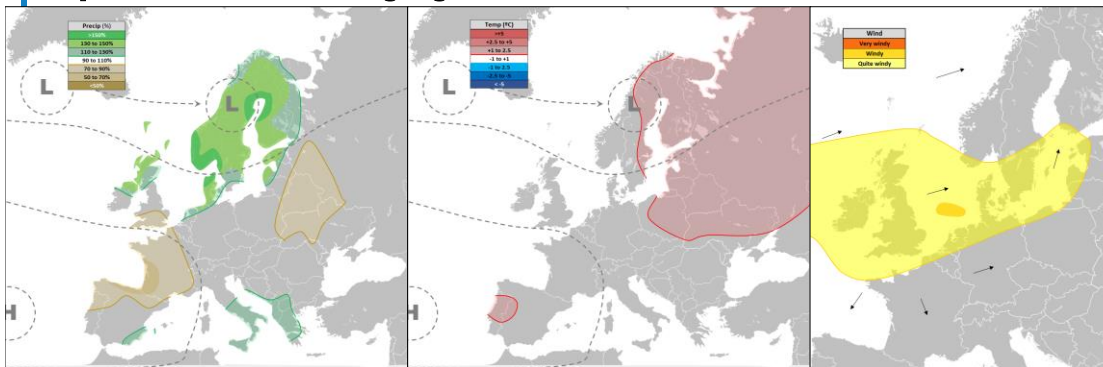
### July 2025: Prevailing regime



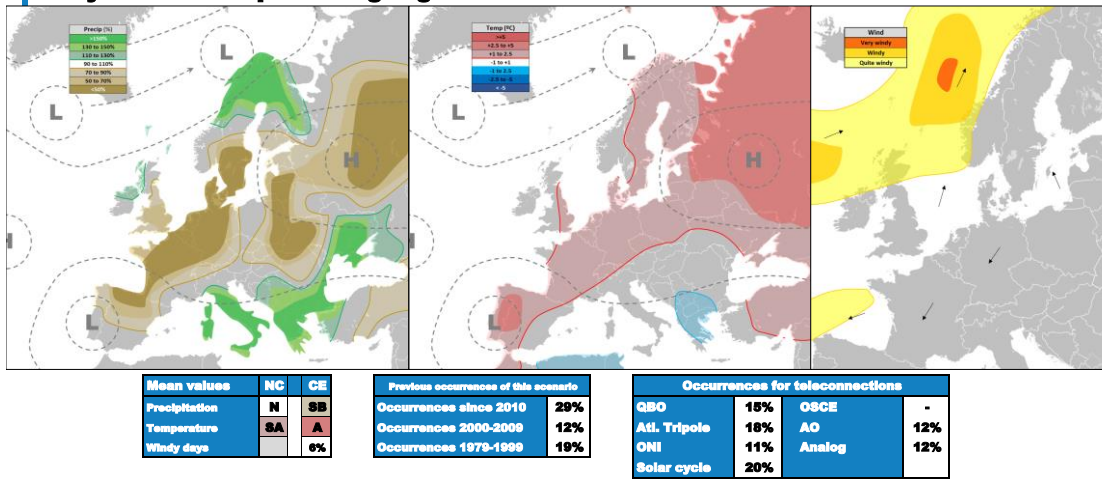
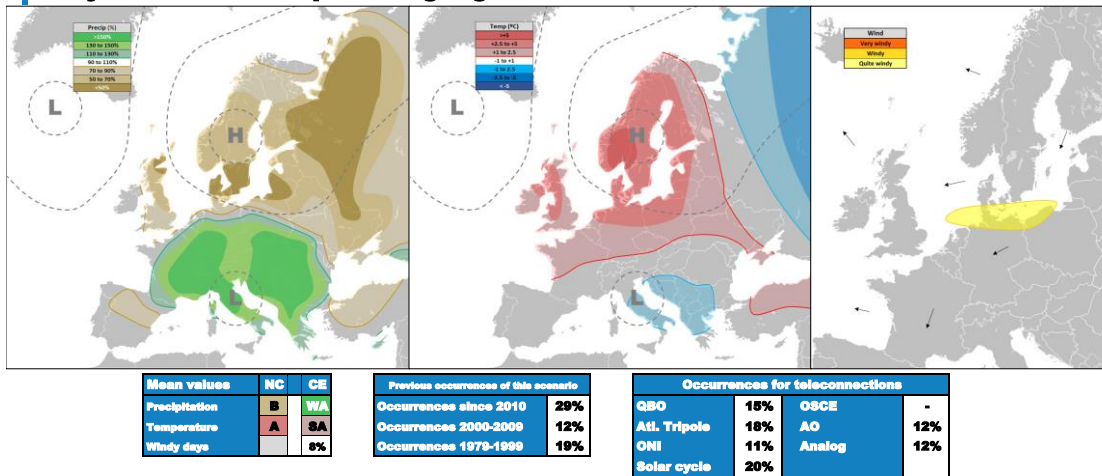
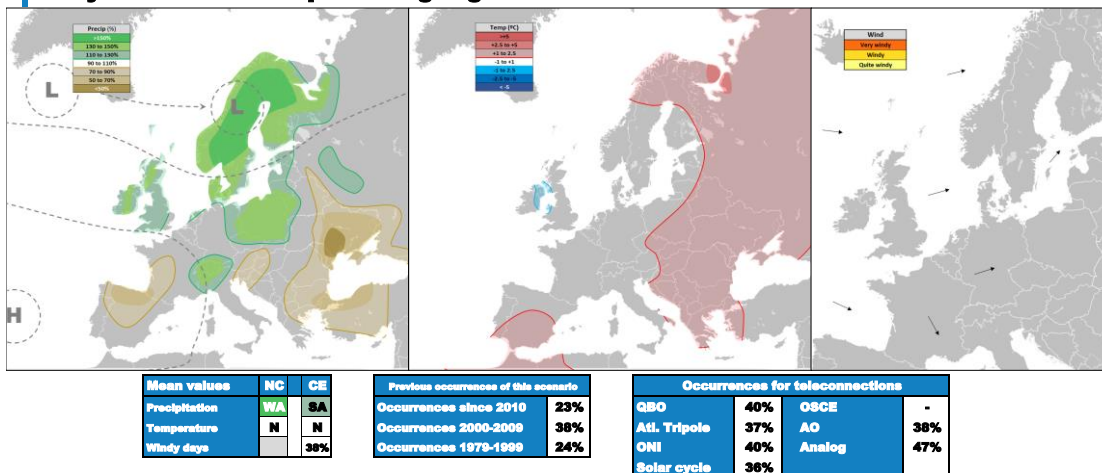
### August 2025: Prevailing regime



### September 2025: Prevailing regime





**July 2025: Most prevailing regime****Frequency: 40%****July 2025: 2nd most prevailing regime****Frequency: 30%****July 2025: 3rd most prevailing regime****Frequency: 25%**

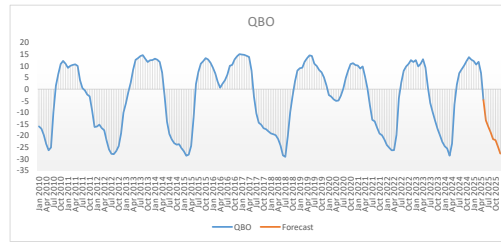
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes								
		T	P	T	P	W	1	2	3	4	5	6	L	N	H
Normal conditions		N	N	N	N	5%	41%	17%	12%	3%	25%	2%	58%	15%	27%
Quasi-Biennial Oscillation	strong easterly winds	N	N	N	SA	4%	40%	17%	15%	6%	21%	2%	56%	21%	23%
Atlantic Tripole	negative	N	SB	N	N	5%	37%	13%	18%	1%	29%	2%	50%	18%	31%
Ocean Niño Index (ONI)	neutral	SA	SB	SA	SB	3%	40%	12%	11%	3%	32%	3%	51%	14%	35%
Solar cycle	maximum period	SA	SA	N	SA	2%	36%	12%	20%	4%	25%	2%	48%	24%	28%
Oct snow cover extent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AO persistence	neutral	SA	SB	SA	N	3%	38%	18%	12%	1%	28%	2%	57%	13%	30%
Analog years	86,12,14,16,17	SB	N	SB	SA	5%	47%	13%	12%	0%	26%	2%	60%	12%	28%

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 80%

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



The observed and forecasted Quasi Biennial Oscillation

## July 2025 – Discussion

### MODELS

Models shows a strong warm signal across Europe, dry signal dominates over Central Europe, while neutral to a weak dry signal dominates over Nordic.

### TELECONNECTIONS

The negative **QBO** is giving a neutral signal over Nordic, but looking at years from 2000 few have been wet and most normal to slightly dry with variable temperatures. Over Central Europe also normal to slightly dry with normal to slightly cool.

**Atlantic Tripole** is likely negative and give a weak dry signal over Nordic.

**ENSO** is neutral and give a weak dry and warm signal both over Nordic and Central Europe.

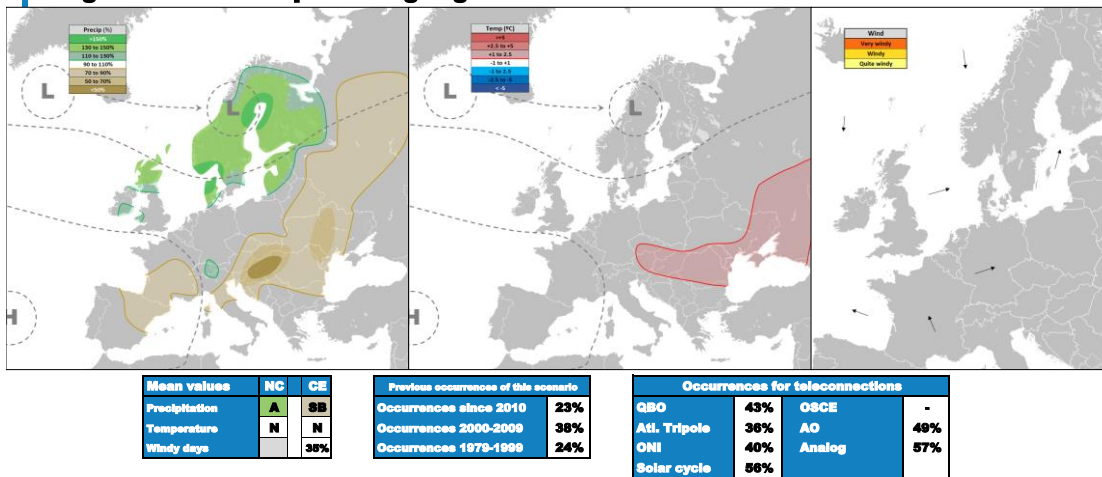
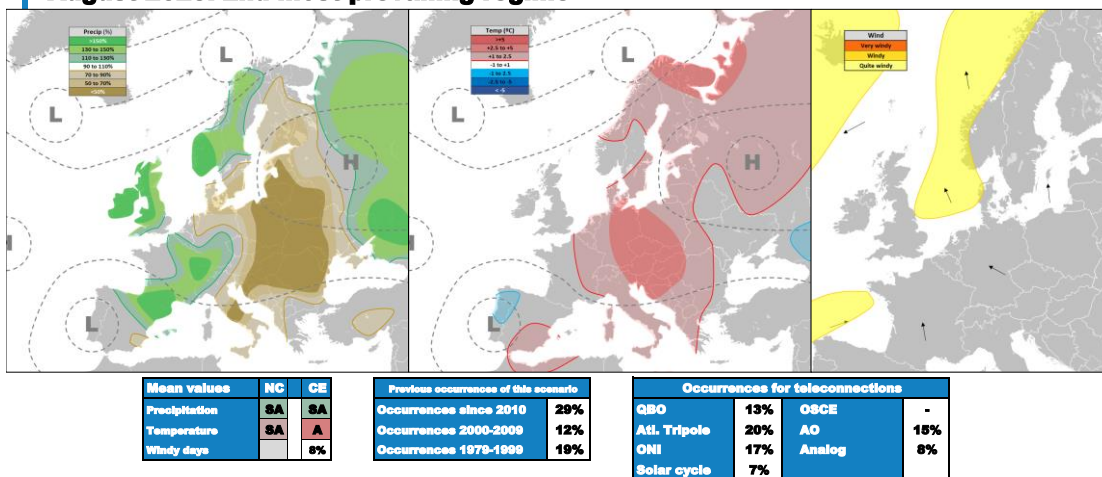
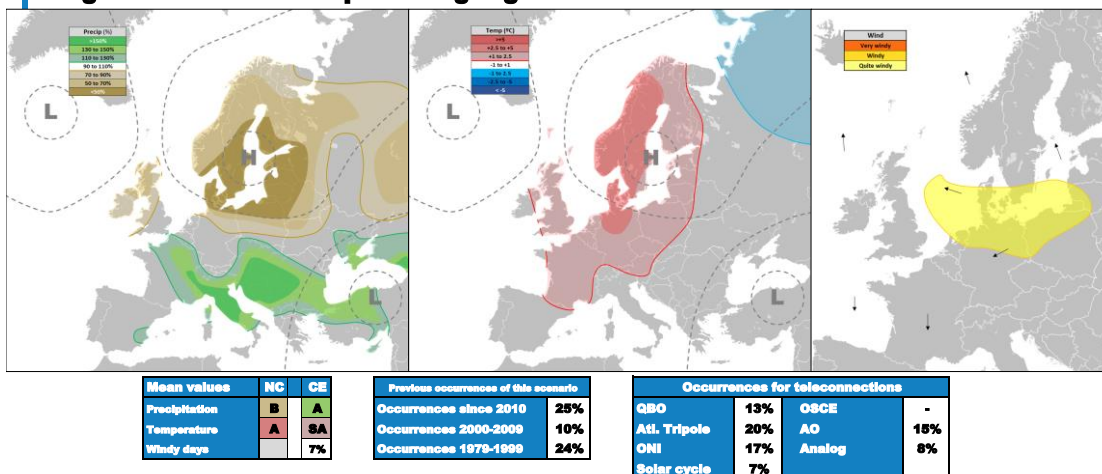
The **solar cycle** is still in its maximum phase, but weaker solar activity than earlier this year. It give a weak wet signal both over Nordic and Central Europe and weak warm signal over Nordic.

**Analog years** have been slightly dry to slightly wet over Nordic with normal to slightly cool most of the years. Over the Conti 2014 was very wet but the two latest analog years have been slightly dry and most of the years near normal temperatures.

### CONCLUSION

There is actually no indication that July this year should end up significant wetter than normal over Nordic. Models, teleconnections and analog years indicate normal to slightly dry and warmer than normal dominates. A warm and slightly dry July is my choice.

Over Central Europe more mixed signals, but normal to slightly dry is most likely based on models and a few teleconnections and I think a warm July is likely this year.

**August 2025: Most prevailing regime****Frequency: 35%****August 2025: 2nd most prevailing regime****Frequency: 25%****August 2025: 3rd most prevailing regime****Frequency: 20%**

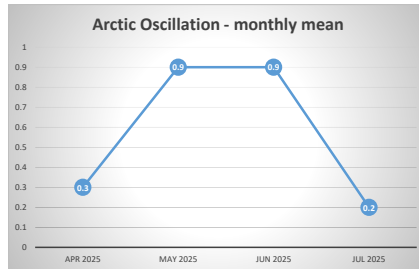
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes								
		T	P	T	P	W	1	2	3	4	5	6	L	N	H
Normal conditions		N	N	N	N	15%	40%	19%	13%	1%	23%	3%	59%	15%	26%
Quasi-Biennial Oscillation	strong easterly winds	N	N	N	N	15%	43%	11%	13%	1%	25%	6%	54%	15%	31%
Atlantic Tripole	negative	N	N	N	N	16%	36%	17%	20%	25%	0%	1%	53%	45%	1%
Ocean Niño Index (ONI)	neutral	N	N	N	N	16%	40%	13%	25%	17%	1%	4%	53%	41%	6%
Solar cycle	maximum period	N	SA	N	SA	17%	56%	16%	7%	0%	17%	4%	72%	7%	21%
Oct snow cover extent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AO persistence	positive	N	N	SA	SB	5%	49%	16%	15%	1%	14%	5%	65%	16%	19%
Analog years	98,00,01,03,05	B	SA	N	N	5%	57%	3%	8%	1%	19%	12%	60%	9%	31%

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

Photo Voltaics Germany in % of normal 75%

Wind in Germany in % of normal 84%

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



Monthly mean values of the Arctic Oscillation (AO)

## August 2025 – Discussion

### MODELS

Models shows a very strong warm signal over Central Europe and a solid warm signal also over Nordic. Weak dry signal dominates over Central Europe and some models shows a weak dry signal over Nordic as well.

### TELECONNECTIONS

QBO in easterly phase give no signals across Europe this month.

Tripole is probably negative and neither give any signals over Europe.

Neutral ENSO is also giving neutral signals.

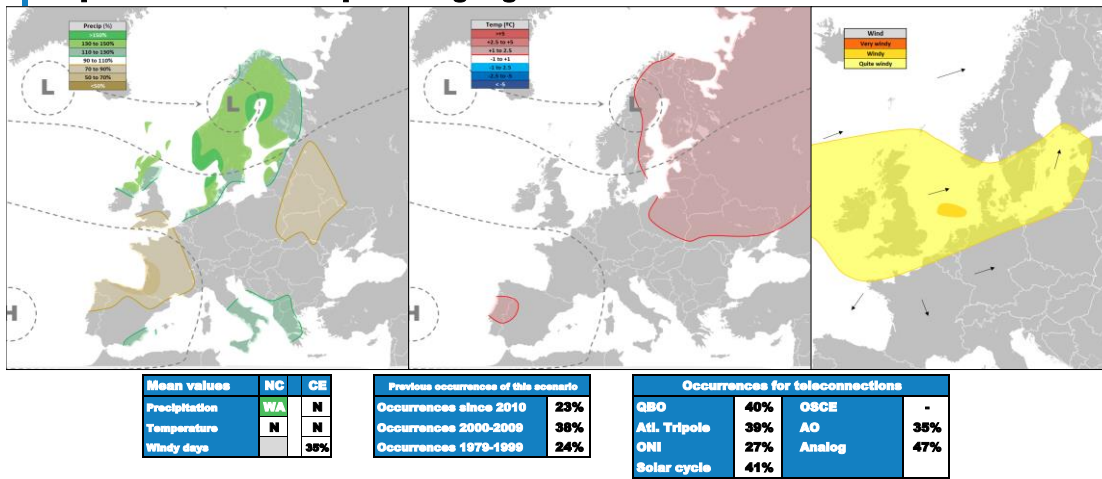
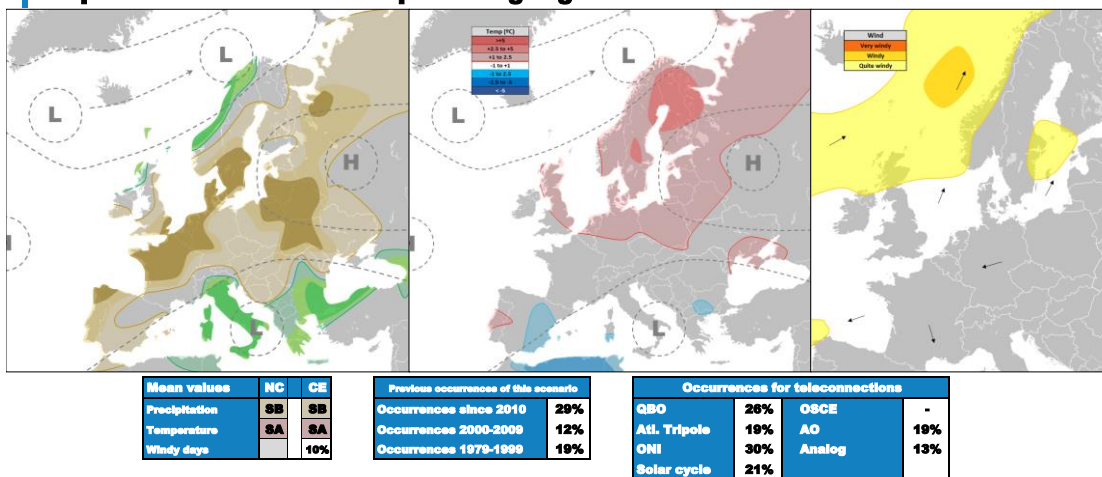
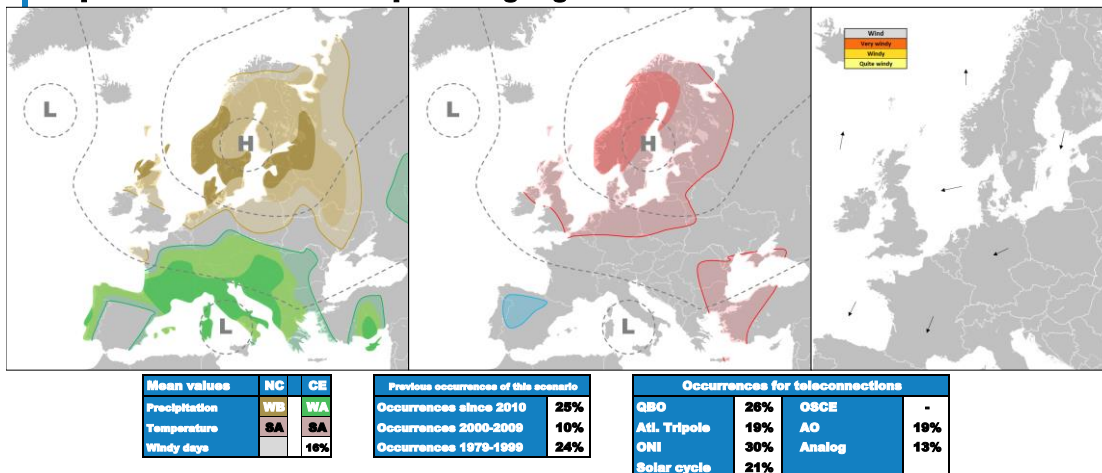
Solar cycle in maximum phase give a weak wet signal over Nordic and Central Europe.

Analog years have mostly been slightly wet over Nordic and normal to cool and very mixed over the Conti.

### CONCLUSION

No clear trend in the signals for August and very uncertain how it will develop. Near normal precipitation at least over Nordic is my choice as there is no signal (unless a few models) for drier than normal and slightly dry and warm over Central Europe.



**September 2025: Most prevailing regime****Frequency: 30%****September 2025: 2nd most prevailing regime****Frequency: 25%****September 2025: 3rd most prevailing regime****Frequency: 20%**

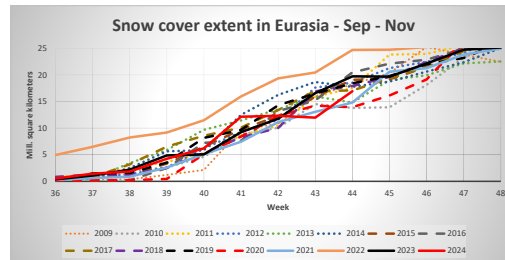
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes									
		T	P	T	P	W	1	2	3	4	5	6	L	N	H	
Normal conditions		N	N	N	N	9%	37%	8%	25%	2%	24%	4%	46%	27%	28%	
Quasi-Biennial Oscillation	strong easterly winds	N	N	N	N	9%	40%	12%	26%	0%	18%	5%	51%	26%	23%	
Atlantic Tripole	negative	N	SA	SA	N	15%	39%	12%	19%	3%	22%	6%	51%	21%	27%	
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	A	N	11%	41%	5%	21%	8%	23%	2%	46%	29%	26%	
Oct snow cover extent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AO persistence	positive	N	SB	SA	N	5%	35%	4%	19%	8%	25%	9%	39%	27%	35%	
Analog years	11,13,14,18,21	N	SA	SA	B	10%	47%	9%	13%	0%	26%	5%	56%	13%	31%	

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

Photo Voltaics Germany in % of normal 81%

Wind in Germany in % of normal 77%

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



## September 2025 – Discussion

### MODELS

Models still shows a strong warm signal over the Conti, while slightly weaker warm signal over Nordic this month. Weak dry signal dominates over Central Europe while mixed precipitation signals over Nordic.

### TELECONNECTIONS

**QBO** in easterly phase give no signals.

**Tripole** is probably still negative and give a weak wet signal over Nordic and weak warm signal over Central Europe.

**ENSO** is likely neutral and give a weak dry signal over Nordic and weak cool and wet signal over Central Europe.

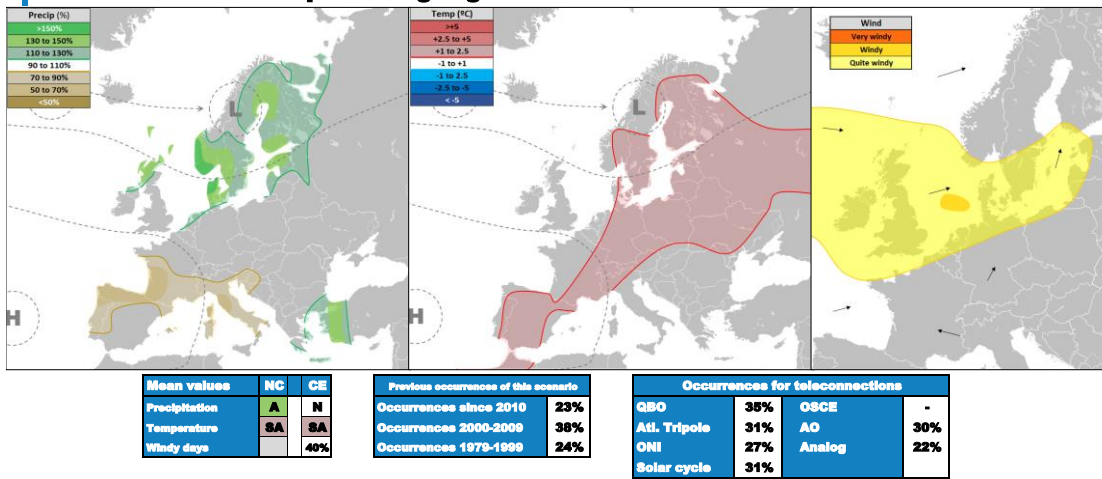
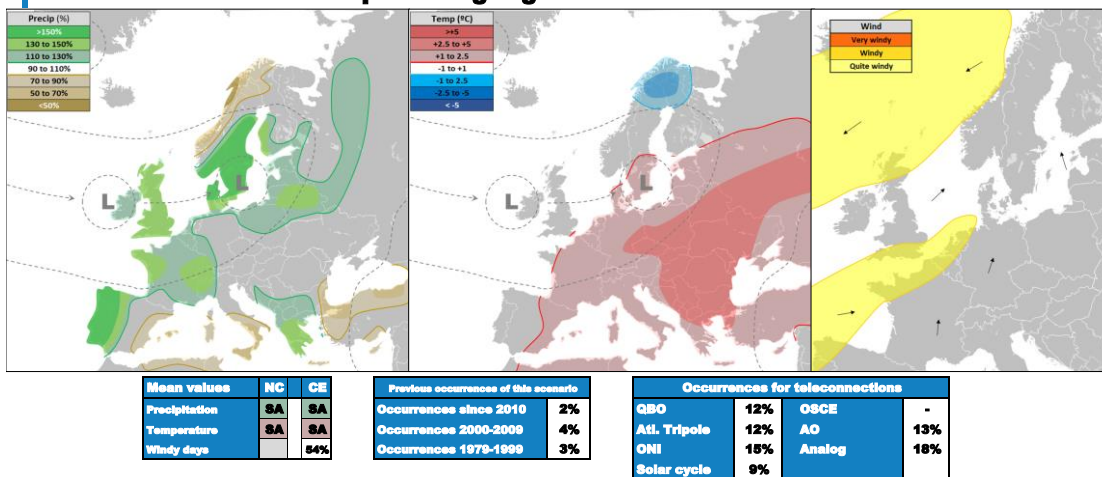
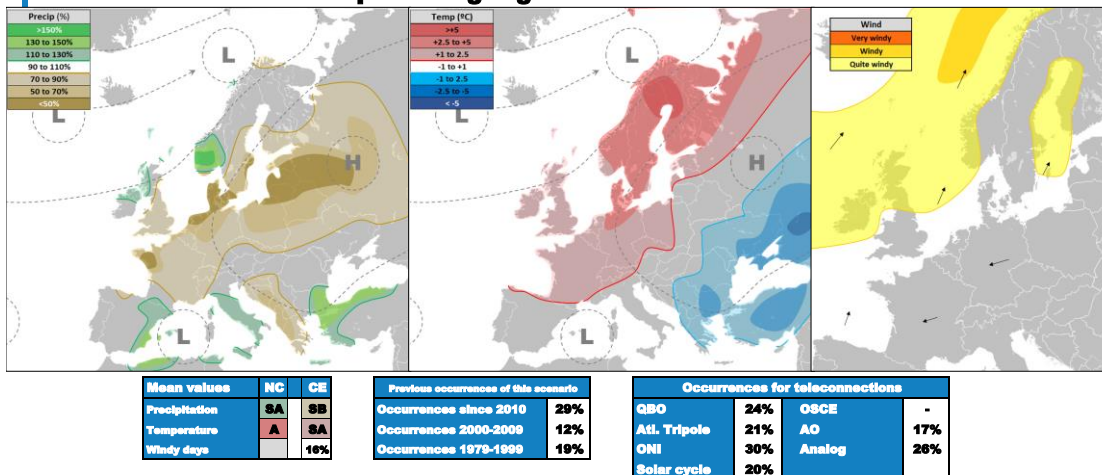
**Solar Cycle** in maximum phase give a weak wet and mild signal over Nordic and warm signal over Central Europe.

**Analog years** have been both really wet and dry these years with temperatures mostly near normal. Over Central Europe dry to maximum normal precipitation and mostly slightly warm.

### CONCLUSION

Dry signal dominates over Central Europe with very mixed precipitation signals over Nordic, but if high pressure dominated over Central Europe likely low pressure activity into Nordic. I go for slightly mild and wet over Nordic and dry and warm over the Conti.



**October 2025: Most prevailing regime****Frequency: 30%****October 2025: 2nd most prevailing regime****Frequency: 25%****October 2025: 3rd most prevailing regime****Frequency: 20%**

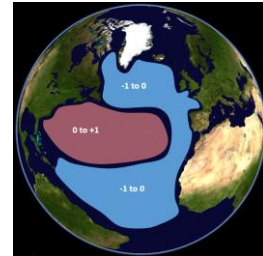
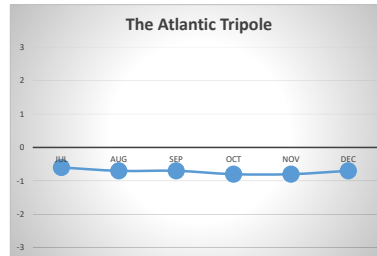
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes								
		T	P	T	P	W	1	2	3	4	5	6	L	N	H
Normal conditions		N	N	N	N	8%	31%	13%	22%	4%	22%	8%	44%	26%	29%
Quasi-Biennial Oscillation	strong easterly winds	N	SA	N	N	9%	35%	12%	24%	2%	22%	4%	47%	26%	27%
Atlantic Tripole	negative	N	N	SB	SA	7%	31%	12%	21%	2%	27%	5%	44%	23%	32%
Ocean Niño Index (ONI)	neutral	N	N	N	SA	6%	27%	15%	30%	2%	17%	9%	42%	32%	26%
Solar cycle	maximum period	SB	SB	N	A	7%	31%	9%	20%	7%	23%	9%	40%	27%	33%
Oct snow cover extent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AO persistence	neutral	N	N	N	N	0%	30%	13%	17%	6%	24%	9%	43%	23%	33%
Analog years	92,05,12,13,14	SB	N	N	A	2%	22%	18%	26%	0%	23%	12%	40%	26%	34%

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

Photo Voltaics Germany in % of normal 97%

Wind in Germany in % of normal 95%

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



## October 2025 – Discussion

### MODELS

The models shows a strong wet signal over Nordic and weak dry signal over Central Europe with temperatures slightly above to above normal across Europe.

### TELECONNECTIONS

**QBO** is likely strong in easterly phase, giving a weak wet signal over Nordic.

Most likely negative **Tripole** which give neutral signals over Nordic and weak wet and cool signal over Central Europe.

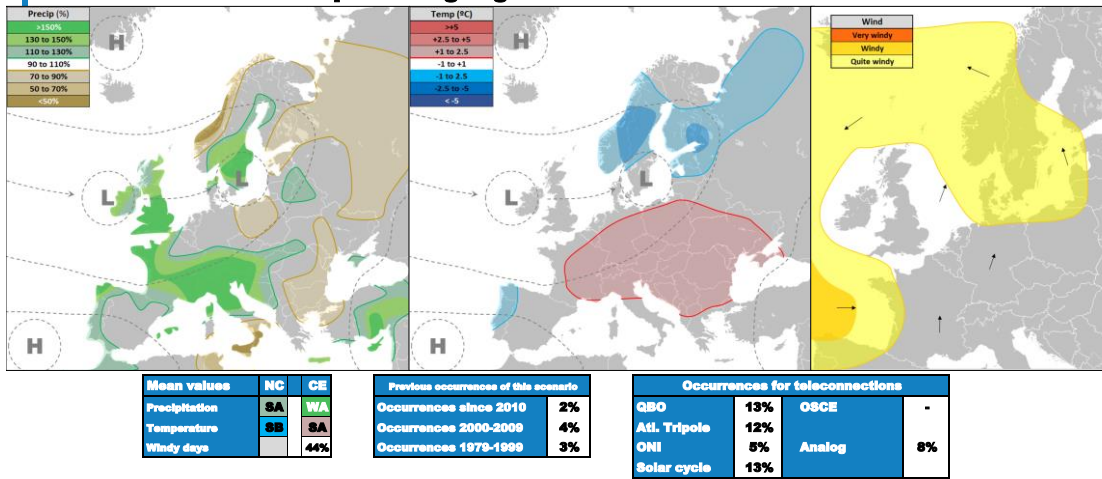
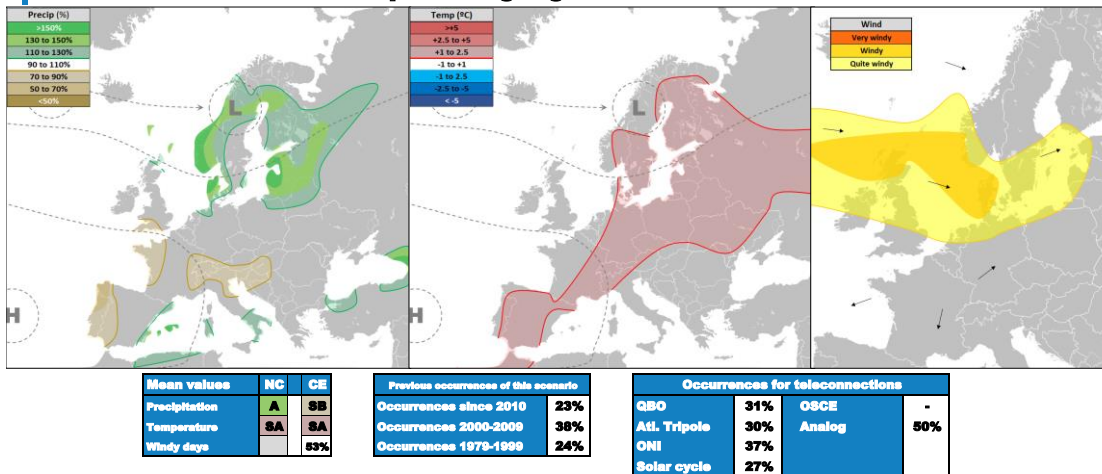
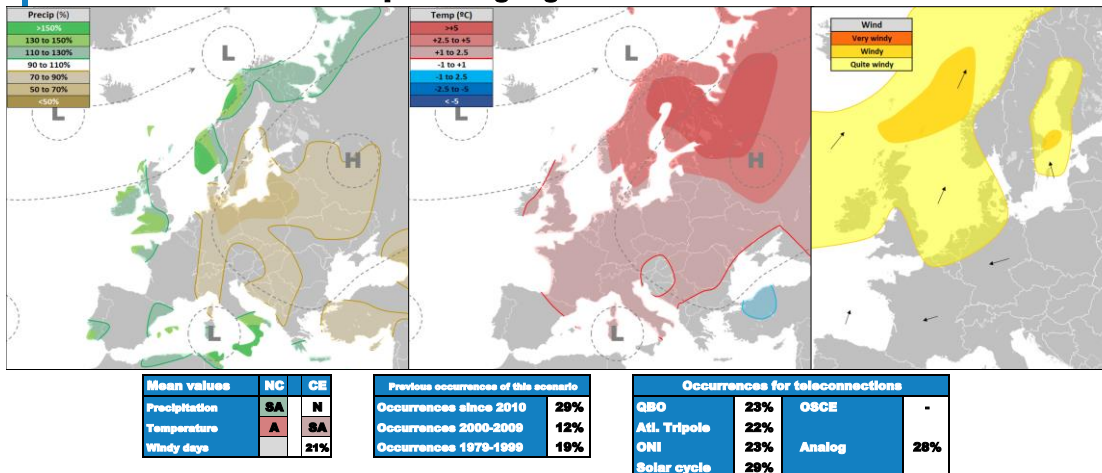
**ENSO** is probably neutral and give a weak wet signal over Central Europe.

**Solar Cycle** in maximum phase give a wet signal over the Conti and weak dry and cool signal over Nordic.

Latest **analog years** have all been wetter than normal over Nordic and slightly mild to slightly cool. Over the Conti 1992 was extremely wet, but the other years mixed and changeable temperatures these years.

### CONCLUSION

Signals point toward wetter than normal over Nordic and slightly mild, while over Central Europe normal to slightly wet and slightly mild.

**November 2025: Most prevailing regime****Frequency: 30%****November 2025: 2nd most prevailing regime****Frequency: 25%****November 2025: 3rd most prevailing regime****Frequency: 20%**

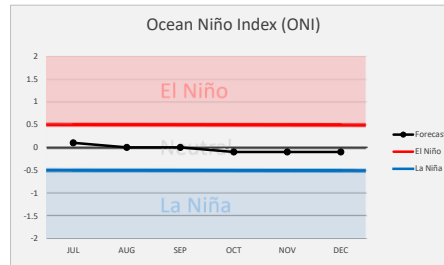
INDEX		SIGN/PHASE		NORDIC		CONTINENT			Main weather regimes									
		T	P	T	P	W	1	2	3	4	5	6	L	N	H			
Normal conditions		N	N	N	N	N	15%	29%	9%	29%	4%	19%	10%	38%	33%	29%		
Quasi-Biennial Oscillation	strong easterly winds	SA	N	N	SA	16%	31%	13%	23%	4%	18%	10%	44%	27%	28%			
Atlantic Tripole	negative	N	N	N	SB	19%	30%	12%	22%	4%	21%	11%	42%	26%	32%			
Ocean Niño Index (ONI)	neutral	SB	N	SB	SB	17%	37%	5%	24%	0%	19%	13%	42%	24%	32%			
Solar cycle	maximum period	SB	SB	SA	A	16%	27%	13%	29%	0%	26%	4%	40%	29%	31%			
Oct snow cover extent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Analog years	1992,2013	SB	A	N	A	25%	50%	8%	28%	0%	13%	0%	58%	28%	13%			

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

Photo Voltaics Germany in % of normal 86%

Wind in Germany in % of normal 103%

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



## November 2025 – Discussion

### MODELS

The models are slightly mild to mild across Europe and wet over Nordic while almost no precipitation signals 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 signal over Central Europe and weak mild signal over Nordic.

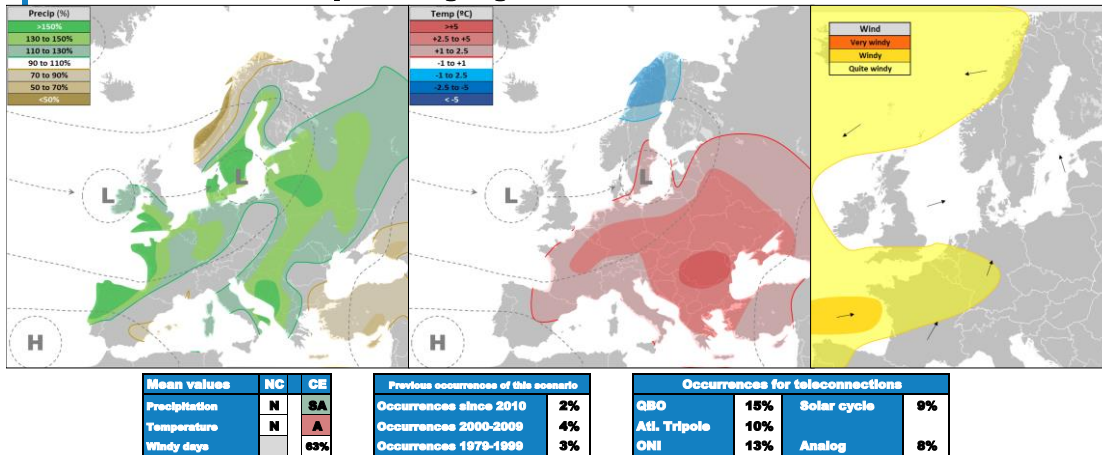
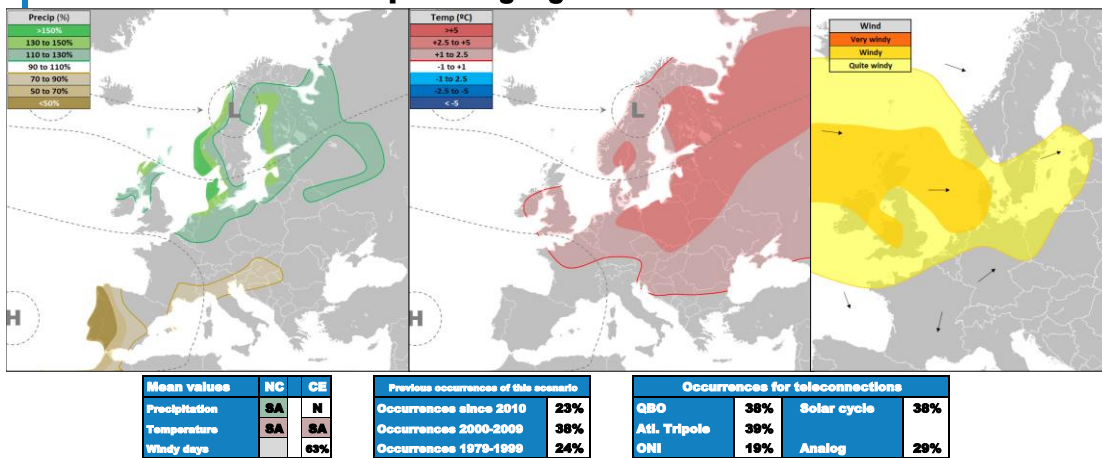
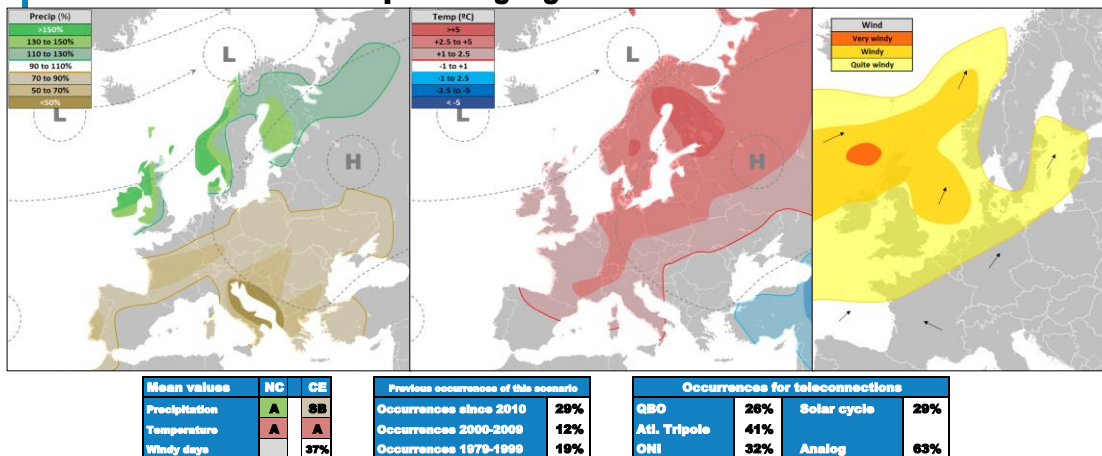
Neutral **ENSO** give a weak cold signal over Nordic and Central Europe and a weak dry signal over Central Europe.

**Analog years** were normal to wet and slightly cold over Nordic and wet with variable temperatures over Central Europe.

### CONCLUSION

Wide open, but based on models and analog years slightly wet over Central and Northern Europe and slightly mild is my choice.



**December 2025: Most prevailing regime****Frequency: 30%****December 2025: 2nd most prevailing regime****Frequency: 25%****December 2025: 3rd most prevailing regime****Frequency: 15%**

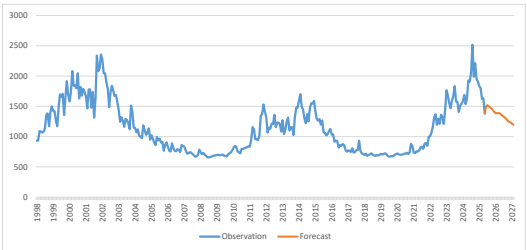
INDEX	SIGN/PHASE	NORDIC		CONTINENT			Main weather regimes								
		T	P	T	P	W	1	2	3	4	5	6	L	N	H
Normal conditions		N	N	N	N	10%	29%	11%	33%	1%	14%	11%	40%	34%	25%
Quasi-Biennial Oscillation	strong easterly winds	SB	N	SB	SA	15%	38%	15%	26%	3%	12%	6%	53%	29%	18%
Atlantic Tripole	negative	A	A	N	SB	13%	39%	10%	41%	0%	5%	5%	48%	42%	10%
Ocean Niño Index (ONI)	neutral	B	N	SA	SA	8%	19%	13%	32%	0%	12%	24%	32%	32%	35%
Solar cycle	maximum period	SB	SA	SA	SA	15%	38%	9%	29%	0%	13%	10%	46%	30%	24%
Oct. snow cover extent	NA	SA	N	SB	SA	14%	0%	-	0%	0%	0%	0%	-	0%	-
Analog years	1992,2013	A	WA	N	SB	10%	29%	8%	63%	0%	0%	0%	37%	63%	0%

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

Photo Voltaics Germany in % of normal	44%
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Wind in Germany in % of normal	46%
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MODEL	NORDIC		CONTINENT	
	T	P	T	P
ECMWF	A	N	A	A
CFSv2	SA	N	A	A
Meteo-France	-	-	-	-
ECCC	-	-	-	-
NMME	A	SA	SA	SB
Forecaster	SA	SA	A	A



The solar cycle

## December 2025 – Discussion

### MODELS

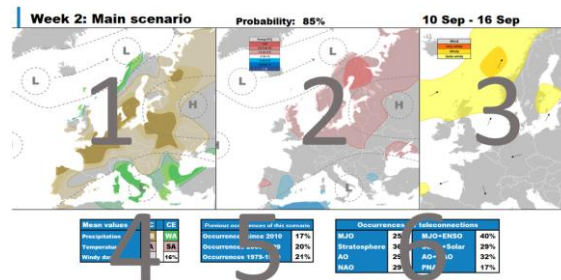
With few models available for this month, but milder than normal dominates across Europe.

### 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.

### CONCLUSION

Highly uncertain outlook so many months ahead we might get a southerly low pressure path in the start of the Winter with wet over Central Europe and slightly wet over Nordic with temperatures slightly above normal over Nordic and mild over the Conti.



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.

INDEX	SIGNS/PHASE	NORDIC	CONTINENT	Main weather regimes
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
13	13	13	13	13
14	14	14	14	14
15	15	15	15	15
16	16	16	16	16
17	17	17	17	17
18	18	18	18	18
19	19	19	19	19
20	20	20	20	20
21	21	21	21	21
22	22	22	22	22
23	23	23	23	23
24	24	24	24	24
25	25	25	25	25
26	26	26	26	26
27	27	27	27	27
28	28	28	28	28
29	29	29	29	29
30	30	30	30	30
31	31	31	31	31
32	32	32	32	32
33	33	33	33	33
34	34	34	34	34
35	35	35	35	35
36	36	36	36	36
37	37	37	37	37
38	38	38	38	38
39	39	39	39	39
40	40	40	40	40
41	41	41	41	41
42	42	42	42	42
43	43	43	43	43
44	44	44	44	44
45	45	45	45	45
46	46	46	46	46
47	47	47	47	47
48	48	48	48	48
49	49	49	49	49
50	50	50	50	50
51	51	51	51	51
52	52	52	52	52
53	53	53	53	53
54	54	54	54	54
55	55	55	55	55
56	56	56	56	56
57	57	57	57	57
58	58	58	58	58
59	59	59	59	59
60	60	60	60	60
61	61	61	61	61
62	62	62	62	62
63	63	63	63	63
64	64	64	64	64
65	65	65	65	65
66	66	66	66	66
67	67	67	67	67
68	68	68	68	68
69	69	69	69	69
70	70	70	70	70
71	71	71	71	71
72	72	72	72	72
73	73	73	73	73
74	74	74	74	74
75	75	75	75	75
76	76	76	76	76
77	77	77	77	77
78	78	78	78	78
79	79	79	79	79
80	80	80	80	80
81	81	81	81	81
82	82	82	82	82
83	83	83	83	83
84	84	84	84	84
85	85	85	85	85
86	86	86	86	86
87	87	87	87	87
88	88	88	88	88
89	89	89	89	89
90	90	90	90	90
91	91	91	91	91
92	92	92	92	92
93	93	93	93	93
94	94	94	94	94
95	95	95	95	95
96	96	96	96	96
97	97	97	97	97
98	98	98	98	98
99	99	99	99	99
100	100	100	100	100

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 (-).