



## Description of (new) Weather Types used at MeteoSwiss

<a href="#">GWT10_MSL</a>	<a href="#">GWT10_Z500</a>	<a href="#">GWT18_MSL</a>	<a href="#">GWT18_Z500</a>	<a href="#">GWT26_MSL</a>
<a href="#">GWT26_Z500</a>	<a href="#">GWTWS</a>	<a href="#">CAP9</a>	<a href="#">CAP18</a>	<a href="#">CAP27</a>

### **GWT10\_MSL (wkwtp1d0)**

(classification with 8 wind directions and low / high pressure based on **mean sea level pressure**)

Type	Description (EN)
1	West
2	SouthWest
3	NorthWest
4	North
5	NorthEast
6	East
7	SouthEast
8	South
9	Low Pressure
10	High Pressure

[back to top](#)

### **GWT10\_Z500 (wkwtg1d0)**

(classification with 8 wind directions and low / high pressure based on **geopotential height at 500 hPa**)

Type	Description (EN)
1	West
2	SouthWest
3	NorthWest
4	North
5	NorthEast
6	East
7	SouthEast
8	South
9	Low Pressure
10	High Pressure

[back to top](#)

**GWT18\_MSL (wkwtp2d0)**

(classification with 2x8 wind directions (cyclonic and anticyclonic) and low / high pressure based on **mean sea level pressure**)

Type	Description (EN)
1	West, cyclonic
2	SouthWest, cyclonic
3	NorthWest, cyclonic
4	North, cyclonic
5	NorthEast, cyclonic
6	East, cyclonic
7	SouthEast, cyclonic
8	South, cyclonic
9	West, anticyclonic
10	SouthWest, anticyclonic
11	NorthWest, anticyclonic
12	North, anticyclonic
13	NorthEast, anticyclonic
14	East, anticyclonic
15	SouthEast, anticyclonic
16	South, anticyclonic
17	Low Pressure
18	High Pressure

[back to top](#)

**GWT18\_Z500(wkwtg2d0)**

(classification with 2x8 wind directions (cyclonic and anticyclonic) and low / high pressure based on **geopotential height in 500 hPa**)

Type	Description (EN)
1	West, cyclonic
2	SouthWest, cyclonic
3	NorthWest, cyclonic
4	North, cyclonic
5	NorthEast, cyclonic
6	East, cyclonic
7	SouthEast, cyclonic
8	South, cyclonic
9	West, anticyclonic
10	SouthWest, anticyclonic
11	NorthWest, anticyclonic
12	North, anticyclonic
13	NorthEast, anticyclonic
14	East, anticyclonic
15	SouthEast, anticyclonic
16	South, anticyclonic
17	Low Pressure
18	High Pressure

[back to top](#)

**GWT26\_MSL (wkwtp3d0)**

(classification with 3x8 wind directions (cyclonic, anticyclonic and indifferent) and low / high pressure based on mean sea level pressure)

Type	Description (EN)
1	West, cyclonic
2	SouthWest, cyclonic
3	NorthWest, cyclonic
4	North, cyclonic
5	NorthEast, cyclonic
6	East, cyclonic
7	SouthEast, cyclonic
8	South, cyclonic
9	West, anticyclonic
10	SouthWest, anticyclonic
11	NorthWest, anticyclonic
12	North, anticyclonic
13	NorthEast, anticyclonic
14	East, anticyclonic
15	SouthEast, anticyclonic
16	South, anticyclonic
17	West, indifferent
18	SouthWest, indifferent
19	NorthWest, indifferent
20	North, indifferent
21	NorthEast, indifferent
22	East, indifferent
23	SouthEast, indifferent
24	South, indifferent
25	Low Pressure
26	High Pressure

[back to top](#)

**GWT26\_Z500 (wkwgt3d0)**

(classification with 3x8 wind directions (cyclonic, anticyclonic and indifferent) and low / high pressure based on **geopotential height in 500 hPa**)

Type	Description (EN)
1	West, cyclonic
2	SouthWest, cyclonic
3	NorthWest, cyclonic
4	North, cyclonic
5	NorthEast, cyclonic
6	East, cyclonic
7	SouthEast, cyclonic
8	South, cyclonic
9	West, anticyclonic
10	SouthWest, anticyclonic
11	NorthWest, anticyclonic
12	North, anticyclonic
13	NorthEast, anticyclonic
14	East, anticyclonic
15	SouthEast, anticyclonic
16	South, anticyclonic
17	West, indifferent
18	SouthWest, indifferent
19	NorthWest, indifferent
20	North, indifferent
21	NorthEast, indifferent
22	East, indifferent
23	SouthEast, indifferent
24	South, indifferent
25	Low Pressure
26	High Pressure

[back to top](#)

**GWTWS (wkmowkd0)**

(classification with 8 wind directions and low / high /flat pressure based on **geopotential height in 500 hPa, mean wind in 500 hPa and mean sea level pressure**)

Type	Description (EN)
1	West
2	SouthWest
3	NorthWest
4	North
5	NorthEast
6	East
7	SouthEast
8	South
9	Low Pressure
10	High Pressure
11	Flat pressure

**CAP9 (wkcap1d0)**

(classification with 9 classes derived by a principal component analysis and subsequent clustering for the reference period of ERA40 reanalysis, based on **mean sea level pressure**)

Type	Description (DE)	Description (EN)
1	Indifferente Nordostlage	NorthEast, indifferent
2	Zyklonale West-Südwestlage, strömungsschwach	West-SouthWest, cyclonic, flat pressure
3	Nördliche Westlage	Westerly flow over Northern Europe
4	Indifferente Ostlage	East, indifferent
5	Hoch über den Alpen	High Pressure over the Alps
6	Zyklonale Nordlage	North, cyclonic
7	Zyklonale West-Südwestlage	West-SouthWest, cyclonic
8	Hoch über Mitteleuropa	High Pressure over Central Europe
9	Südliche Zyklonale Westlage	Westerly flow over Southern Europe, cyclonic

[back to top](#)**CAP18 (wkcap2d0)**

(classification with 18 classes derived by a principal component analysis and subsequent clustering for the reference period of ERA40 reanalysis, based on **mean sea level pressure**)

Type	Description (DE)	Description (EN)
1	Indifferente West-Nordwestlage, strömungsschwach	West-NorthWest, indifferent, flat pressure
2	Antizyklonale West-Nordwestlage, strömungsschwach	West-NorthWest, anticyclonic, flat pressure
3	Indifferente Ostlage	East, indifferent
4	Zyklonale West-Südwestlage, strömungsschwach	West-SouthWest, cyclonic, flat pressure
5	Antizyklonale Südlage	South, anticyclonic
6	Indifferente Südostlage	SouthEast, indifferent
7	Zyklonale Südlage, strömungsschwach	South, cyclonic, flat pressure
8	Zyklonale Nordwestlage	NorthWest, cyclonic
9	Zyklonale Nordostlage	NorthEast, cyclonic
10	Hoch über den Alpen	High pressure over the Alps
11	Zyklonale Westlage	West, cyclonic
12	Antizyklonale Ost-Südostlage	East-SouthEast, anticyclonic
13	Zyklonale Ostlage	East, cyclonic
14	Zyklonale West-Südwestlage	West-SouthWest, cyclonic
15	Nördliche Westlage	Westerly flow over northern Europe
16	Tief über den Alpen	Low pressure over the Alps
17	Hoch über dem östlichen Mitteleuropa	High pressure over Eastern Europe
18	Südliche zyklonale Westlage	Westerly Flow over Southern Europe, cyclonic

[back to top](#)

## CAP27(wkcap3d0)

(classification with 27 classes derived by a principal component analysis and subsequent clustering for the reference period of ERA40 reanalysis, based on **mean sea level pressure**)

Type	Description (DE)	Description (EN)
1	Indifferente Westlage, strömungsschwach	West, indifferent, flat pressure
2	Hochdruck über Osteuropa	High pressure over Eastern Europe
3	Antizyklonale Nordwestlage, strömungsschwach	NorthWest, anticyclonic, flat pressure
4	Zyklonale West-Südwestlage, strömungsschwach	West-SouthWest, cyclonic, flat pressure
5	Indifferente Nordwestlage	NorthWest, indifferent
6	Troglage über Mitteleuropa	Trough over Central Europe
7	Indifferente Ost-Südostlage	East-SouthEast, indifferent
8	Antizyklonale Süd-Südostlage	South-SouthEast, anticyclonic
9	Indifferente Ostlage	East, indifferent
10	Zyklonale Nordwestlage	NorthWest, cyclonic
11	Antizyklonale West-Nordwestlage	West-NorthWest, anticyclonic
12	Hochdruck über den Alpen	High pressure over the Alps
13	Nördliche Westlage	Westerly Flow over Northern Europe
14	Zyklonale Süd-Südostlage	South-SouthEast, cyclonic
15	Zyklonale West-Nordwestlage	West-NorthWest, cyclonic
16	Antizyklonale bis indifferente Ostlage	East, anticyclonic / indifferent
17	Zyklonale Süd-Südwestlage	South-SouthWest, cyclonic
18	Antizyklonale Ost-Südostlage	East-SouthEast, anticyclonic
19	Zyklonale Südwestlage	SouthWest, cyclonic
20	Indifferente Westlage	West, indifferent
21	Zyklonale Westlage	West, cyclonic
22	Zyklonale Nordostlage	NorthEast, cyclonic
23	Zyklonale Ostlage	East, cyclonic
24	Zyklonale West-Südwestlage	West-SouthWest, cyclonic
25	Tiefdruck über den Alpen	Low pressure over the Alps
26	Hochdruck über Mitteleuropa	High pressure over Central Europe
27	Südliche Zyklonale Westlage	Westerly Flow over Southern Europe, cyclonic

[back to top](#)