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CD - Cloud density

Code:	Description:
-9	no clouds or CD not reported (only in 90-formats, otherwise blanc)
0	straticulate clouds
1	middling cloud density
2	high cloud density

This field is not reported of all stations since 1986

DK - Wind direction (wind rose, 32 sections)

Code:	Description:
-9	no observation of wind (in 90-formats, otherwise blanc)
0	calm
2	NNE *
4	NE
6	ENE *
8	E
10	ESE
12	SE
14	SSE *
16	S
18	SSW *
20	SW
22	WSW *
24	W
26	WNW *
28	NW
30	NNW *
32	N

*** Only till 1970 wind rose (16 sections), then wind rose (8 sections)**

EK - Soil condition

Code:	Description:
-9	no soil condition reported (only in 90-formats, otherwise blanc)
0	dry
1	moist
2	wet (formation of puddle)
3	flood
4	frozen, solid, dry
5	glaze, black ice

6	not less than 50% of the soil is covered with fallen, solid precipitation (graupel, hail) without snow
7	not less than 10% of the soil (marks and more) is covered with solid or wet snow
8	not less than 10% of the soil (marks and more) is covered with loose or dry snow
9	closed snow cover with not less than 50 cm high snow drifts

EK = 0 - 5

the rest of the cover can remain of

- solid precipitation (< 10%) with snow or patches

- solid precipitation (>=10% but < 50%) without snow

EK = 6

the cover of solid precipitation may not content snow

EK = 7 - 9

the snow cover must content snow

until 31.12.1985 the following Code is valid:

0	dry
1	moist
2	wet, flood, (formation of puddle)
3	frozen, solid and dry
4	covered partial with snow, graupel and/or hail
5	covered with ice or glaze
6	covered with melting snow cover
7	not frozen soil but covered with snow, less than 15 cm high
8	frozen soil and covered with snow, less than 15 cm high
9	covered with snow, more than 15 cm high

EK = 0,1,2,3

rest of snow present

Q - Quality bytes

Code:

Discription:

blanc	no quality control
0	no quality control
1	field professional correct (after check without correction)
2	field corrected (automatic or after check and correction)
3	field confirmed (after check and complaint aware no correction)
4	field added/evaluated (field is missing in raw data)
5	field complained (no correction or confirmation)
6	field in form true (but not professional checked)
7	field in form false (professional check is not possible)
8	field missed but must not be missed
9	field missed (no measurement or engaged identifier for no data)

RF - Type of precipitation

Code:

Discription:

0	no precipitation (only in 90-formats, before blanc)
1	only precipitation (only in 90-formats, before blanc)
4	Type of precipitation not known, though precipitation is reported
7	only snow
8	precipitation and snow and/or sleet
9	identifier for no data

Remark: **till 12/1985 hail, snow grains and graupel assessed as precipitation, from 01/1986 assessed as snow**

SA - Type of snow cover

Code:

Discription:

1	closed snow cover (only in 90-formats, before blanc)
D	snow cover <100% and >=50% (broken)
F	snow cover < 50% and >=10% (patches)
R	snow cover < 10% and > 0% and no measured snow high (rests)
0	no snow (only in 90-formats, before blanc)
9	identifier for no data (only in 90-formats, before blanc)

VAK - Identification of type of fallen precipitation

Information, if in the time 00-24 h rain, snow, graupel, hail or frozen precipitation is fallen.

VAK can be used in 5 numbers:

number = 0: event not occurred

number = 1: event occurred

number = 9: VAK= -9

number	event
1.	rain
2.	frozen rain
3.	snow
4.	graupel
5.	hail

VAK	1.	2.	3.	4.	5.
1	1	0	0	0	0
2	0	0	1	0	0
3	0	0	0	1	0
4	0	0	0	0	1
5	1	0	1	0	0
6	1	0	0	1	0
7	1	0	0	0	1
8	0	0	1	1	0
9	0	0	0	1	1
10	1	0	1	1	0
11	1	0	0	1	1
12	0	0	1	0	1
13	1	0	1	0	1
14	0	0	1	1	1
15	1	0	1	1	1
21	1	1	0	0	0

VAK = 21 - 35: reported first from 01.01.1986, before rain and frozen rain indistinguishable

VBK - Identification of type of precipitation at the ground

Information, if in the time 00-24 h one or more of the following event occurred:

dew, rime, sediments of frozen fog, glaze / black ice, closed snow cover

VBK can be used in 6 numbers:

number = 0: event not occurred

number = 1: event occurred

number = 9: VAK= -9

number:	event:
1.	dew
2.	rime

3. hoarfrost
4. glazed frost, clear ice
5. glaze, black ice
6. closed or broken cover of solid precipitation

VBK	1.	2.	3.	4.	5.	6.
1	1	0	0	0	0	0
2	0	0	0	0	1	0
3	0	1	0	0	0	0
4	0	0	1	0	0	0
5	1	0	0	0	1	0
6	0	1	0	1	1	0
7	0	0	1	0	1	0
8	0	1	1	0	0	0
9	0	1	1	0	1	0
10	1	1	0	0	0	0
11	1	0	0	1	1	0
12	1	0	1	0	0	0
13	1	0	1	0	1	0
14	1	1	1	0	0	0
15	1	1	1	0	1	0
24	0	0	1	1	0	0
25	1	0	1	1	1	0
26	0	1	1	1	1	0
27	0	0	1	1	1	0
28	0	1	1	1	0	0
29	0	1	1	1	1	0
30	1	1	1	1	0	0
31	1	1	1	1	1	0
32	1	0	1	1	0	0
33	1	0	1	1	1	0
34	1	1	1	1	0	0
35	1	1	1	1	1	0
40	0	0	0	0	0	1
41	1	0	0	0	0	1
42	0	0	0	0	1	1
43	0	1	0	0	0	1
44	0	0	1	0	0	1
45	1	0	1	0	1	1
46	0	1	0	0	1	1
47	0	0	1	0	1	1
48	0	1	1	0	0	1
49	0	1	1	0	1	1
50	1	1	0	0	0	1
51	1	1	0	0	1	1
52	1	0	1	0	0	1
53	1	0	1	0	1	1
54	1	1	1	0	0	1
55	1	1	1	0	1	1
64	0	0	1	1	0	1
65	1	0	1	1	1	1
66	0	1	1	1	1	1
67	0	0	1	1	1	1
68	0	1	1	1	0	1
69	0	1	1	1	1	1
70	1	1	1	1	0	1

71	1	1	1	1	1	1
72	1	0	1	1	0	1
73	1	0	1	1	1	1
74	1	1	1	1	0	1
75	1	1	1	1	1	1

VBK = 40 - 64: reported first from 01.01.1966, before no information about cover of solid precipitation. Sediments of frozen fog are often not distinguished from glazed frost and/or clear ice.

VCK - Identification of significant weather phenomena

Information, if in the time 00-24 h fog, thunder storm, heavy and/or stormier wind occurred.

VCK can be used in 4 numbers:

number = 0: event not occurred

number = 1: event occurred

number = 9: VAK= -9

number:	event:
1.	fog
2.	thunder storm
3.	wind ≥ 6 Bft aber < 8 Bft
4.	wind ≥ 8 Bft

VCK	1.	2.	3.	4.
1	1	0	0	0
2	0	1	0	0
3	0	0	1	0
4	0	0	0	1
5	1	1	0	0
6	1	0	1	0
7	1	0	0	1
8	0	1	1	0
9	0	1	0	0
10	1	1	1	0
11	1	1	0	1

VK - Visibility

Code:	Discription:
-9	VK not assess (only in 90-formats, otherwise blanc)
0	visibility < 50 m
1	$50 \text{ m} \leq \text{visibility} < 200 \text{ m}$
2	$200 \text{ m} \leq \text{visibility} < 500 \text{ m}$
3	$500 \text{ m} \leq \text{visibility} < 1 \text{ km}$
4	$1 \text{ km} \leq \text{visibility} < 2 \text{ km}$
5	$2 \text{ km} \leq \text{visibility} < 4 \text{ km}$
6	$4 \text{ km} \leq \text{visibility} < 10 \text{ km}$
7	$10 \text{ km} \leq \text{visibility} < 20 \text{ km}$
8	$20 \text{ km} \leq \text{visibility} < 50 \text{ km}$
9	visibility $\geq 50 \text{ km}$

WK - Weather phenomena

Code	Discription
-9	WK not reported (in 90-formats, otherwise blanc)
0	no significant weather (in 90-formats, otherwise blanc)
4	fog
5	drizzle
6	rain
7	snow
8	shower
9	thunder storm
45	drizzle and fog
46	rain and fog
47	snow and fog
48	shower and fog
49	thunder storm and fog
WK	not reported since 1971