

0200

a Characteristic of pressure tendency during the three hours preceding the time of observation

Code
figure

0	Increasing, then decreasing; atmospheric pressure the same or higher than three hours ago	
1	Increasing, then steady; or increasing, then increasing more slowly	} Atmospheric pressure now higher than three hours ago
2	Increasing (steadily or unsteadily)*	
3	Decreasing or steady, then increasing; or increasing, then increasing more rapidly	
4	Steady; atmospheric pressure the same as three hours ago*	
5	Decreasing, then increasing; atmospheric pressure the same or lower than three hours ago	
6	Decreasing, then steady; or decreasing, then decreasing more slowly	} Atmospheric pressure now lower than three hours ago
7	Decreasing (steadily or unsteadily)*	
8	Steady or increasing, then decreasing; or decreasing, then decreasing more rapidly	

* For reports from automatic stations, see Regulation 12.2.3.5.3.

0439

b_i Ice of land origin

Code
figure

0	No ice of land origin
1	1–5 icebergs, no growlers or bergy bits
2	6–10 icebergs, no growlers or bergy bits
3	11–20 icebergs, no growlers or bergy bits
4	Up to and including 10 growlers and bergy bits — no icebergs
5	More than 10 growlers and bergy bits — no icebergs
6	1–5 icebergs, with growlers and bergy bits
7	6–10 icebergs, with growlers and bergy bits
8	11–20 icebergs, with growlers and bergy bits
9	More than 20 icebergs, with growlers and bergy bits — a major hazard to navigation
/	Unable to report, because of darkness, lack of visibility or because only sea ice is visible

0509

C_H Clouds of the genera Cirrus, Cirrocumulus and Cirrostratus

Code figure	Technical specifications	Code figure	Non-technical specifications
0	No C _H clouds	0	No Cirrus, Cirrocumulus or Cirrostratus
1	Cirrus fibratus, sometimes uncinus, not progressively invading the sky	1	Cirrus in the form of filaments, strands or hooks, not progressively invading the sky
2	Cirrus spissatus, in patches or entangled sheaves, which usually do not increase and sometimes seem to be the remains of the upper part of a Cumulonimbus; or Cirrus castellanus or floccus	2	Dense Cirrus, in patches or entangled sheaves, which usually do not increase and sometimes seem to be the remains of the upper part of a Cumulonimbus; or Cirrus with sproutings in the form of small turrets or battlements, or Cirrus having the appearance of cumuliform tufts
3	Cirrus spissatus cumulonimbogenitus	3	Dense Cirrus, often in the form of an anvil, being the remains of the upper parts of Cumulonimbus
4	Cirrus uncinus or fibratus, or both, progressively invading the sky; they generally thicken as a whole	4	Cirrus in the form of hooks or of filaments, or both, progressively invading the sky; they generally become denser as a whole
5	Cirrus (often in bands) and Cirrostratus, or Cirrostratus alone, progressively invading the sky; they generally thicken as a whole, but the continuous veil does not reach 45 degrees above the horizon	5	Cirrus (often in bands converging towards one point or two opposite points of the horizon) and Cirrostratus, or Cirrostratus alone; in either case, they are progressively invading the sky, and generally growing denser as a whole, but the continuous veil does not reach 45 degrees above the horizon
6	Cirrus (often in bands) and Cirrostratus, or Cirrostratus alone, progressively invading the sky; they generally thicken as a whole; the continuous veil extends more than 45 degrees above the horizon, without the sky being totally covered	6	Cirrus (often in bands converging towards one point or two opposite points of the horizon) and Cirrostratus, or Cirrostratus alone; in either case, they are progressively invading the sky, and generally growing denser as a whole; the continuous veil extends more than 45 degrees above the horizon, without the sky being totally covered
7	Cirrostratus covering the whole sky	7	Veil of Cirrostratus covering the celestial dome
8	Cirrostratus not progressively invading the sky and not entirely covering it	8	Cirrostratus not progressively invading the sky and not completely covering the celestial dome
9	Cirrocumulus alone, or Cirrocumulus predominant among the C _H clouds	9	Cirrocumulus alone, or Cirrocumulus accompanied by Cirrus or Cirrostratus, or both, but Cirrocumulus is predominant
/	C _H clouds invisible owing to darkness, fog, blowing dust or sand, or other similar phenomena, or because of a continuous layer of lower clouds	/	Cirrus, Cirrocumulus and Cirrostratus invisible owing to darkness, fog, blowing dust or sand, or other similar phenomena, or more often because of the presence of a continuous layer of lower clouds

C_L Clouds of the genera Stratocumulus, Stratus, Cumulus and Cumulonimbus

Code figure	Technical specifications	Code figure	Non-technical specifications
0	No C _L clouds	0	No Stratocumulus, Stratus, Cumulus or Cumulonimbus
1	Cumulus humilis or Cumulus fractus other than of bad weather,* or both	1	Cumulus with little vertical extent and seemingly flattened, or ragged Cumulus other than of bad weather,* or both
2	Cumulus mediocris or congestus, with or without Cumulus of species fractus or humilis or Stratocumulus, all having their bases at the same level	2	Cumulus of moderate or strong vertical extent, generally with protuberances in the form of domes or towers, either accompanied or not by other Cumulus or by Stratocumulus, all having their bases at the same level
3	Cumulonimbus calvus, with or without Cumulus, Stratocumulus or Stratus	3	Cumulonimbus the summits of which, at least partially, lack sharp outlines, but are neither clearly fibrous (cirriform) nor in the form of an anvil; Cumulus, Stratocumulus or Stratus may also be present
4	Stratocumulus cumulogenitus	4	Stratocumulus formed by the spreading out of Cumulus; Cumulus may also be present
5	Stratocumulus other than Stratocumulus cumulogenitus	5	Stratocumulus not resulting from the spreading out of Cumulus
6	Stratus nebulosus or Stratus fractus other than of bad weather,* or both	6	Stratus in a more or less continuous sheet or layer, or in ragged shreds, or both, but no Stratus fractus of bad weather*
7	Stratus fractus or Cumulus fractus of bad weather,* or both (pannus), usually below Altostratus or Nimbostratus	7	Stratus fractus of bad weather* or Cumulus fractus of bad weather*, or both (pannus), usually below Altostratus or Nimbostratus
8	Cumulus and Stratocumulus other than Stratocumulus cumulogenitus, with bases at different levels	8	Cumulus and Stratocumulus other than that formed from the spreading out of Cumulus; the base of the Cumulus is at a different level from that of the Stratocumulus
9	Cumulonimbus capillatus (often with an anvil), with or without Cumulonimbus calvus, Cumulus, Stratocumulus, Stratus or pannus	9	Cumulonimbus, the upper part of which is clearly fibrous (cirriform), often in the form of an anvil; either accompanied or not by Cumulonimbus without anvil or fibrous upper part, by Cumulus, Stratocumulus, Stratus or pannus
/	C _L clouds invisible owing to darkness, fog, blowing dust or sand, or other similar phenomena	/	Stratocumulus, Stratus, Cumulus and Cumulonimbus invisible owing to darkness, fog, blowing dust or sand, or other similar phenomena

* "Bad weather" denotes the conditions which generally exist during precipitation and a short time before and after.

C_M Clouds of the genera *Alto*cumulus, *Alto*stratus and *Nimbo*stratus

Code figure	Technical specifications	Code figure	Non-technical specifications
0	No C _M clouds	0	No <i>Alto</i> cumulus, <i>Alto</i> stratus or <i>Nimbo</i> stratus
1	<i>Alto</i> stratus translucidus	1	<i>Alto</i> stratus, the greater part of which is semitransparent; through this part the sun or moon may be weakly visible, as through ground glass
2	<i>Alto</i> stratus opacus or <i>Nimbo</i> stratus	2	<i>Alto</i> stratus, the greater part of which is sufficiently dense to hide the sun or moon, or <i>Nimbo</i> stratus
3	<i>Alto</i> cumulus translucidus at a single level	3	<i>Alto</i> cumulus, the greater part of which is semitransparent; the various elements of the cloud change only slowly and are all at a single level
4	Patches (often lenticular) of <i>Alto</i> cumulus translucidus, continually changing and occurring at one or more levels	4	Patches (often in the form of almonds or fish) of <i>Alto</i> cumulus, the greater part of which is semi-transparent; the clouds occur at one or more levels and the elements are continually changing in appearance
5	<i>Alto</i> cumulus translucidus in bands, or one or more layers of <i>Alto</i> cumulus translucidus or opacus, progressively invading the sky; these <i>Alto</i> cumulus clouds generally thicken as a whole	5	Semi-transparent <i>Alto</i> cumulus in bands, or <i>Alto</i> cumulus, in one or more fairly continuous layer (semi-transparent or opaque), progressively invading the sky; these <i>Alto</i> cumulus clouds generally thicken as a whole
6	<i>Alto</i> cumulus cumulogenitus (or cumulo-nimbogenitus)	6	<i>Alto</i> cumulus resulting from the spreading out of <i>Cumulus</i> (or <i>Cumulonimbus</i>)
7	<i>Alto</i> cumulus translucidus or opacus in two or more layers, or <i>Alto</i> cumulus opacus in a single layer, not progressively invading the sky, or <i>Alto</i> cumulus with <i>Alto</i> stratus or <i>Nimbo</i> stratus	7	<i>Alto</i> cumulus in two or more layers, usually opaque in places, and not progressively invading the sky; or opaque layer of <i>Alto</i> cumulus, not progressively invading the sky; or <i>Alto</i> cumulus together with <i>Alto</i> stratus or <i>Nimbo</i> stratus
8	<i>Alto</i> cumulus castellanus or floccus	8	<i>Alto</i> cumulus with sproutings in the form of small towers or battlements, or <i>Alto</i> cumulus having the appearance of cumuliform tufts
9	<i>Alto</i> cumulus of a chaotic sky, generally at several levels	9	<i>Alto</i> cumulus of a chaotic sky, generally at several levels
/	C _M clouds invisible owing to darkness, fog, blowing dust or sand, or other similar phenomena, or because of continuous layer of lower clouds	/	<i>Alto</i> cumulus, <i>Alto</i> stratus and <i>Nimbo</i> stratus invisible owing to darkness, fog, blowing dust or sand, or other similar phenomena, or more often because of the presence of a continuous layer of lower clouds

c_i Concentration or arrangement of sea ice

Code
figure

0	No sea ice in sight		
1	Ship in open lead more than 1.0 nautical mile wide, or ship in fast ice with boundary beyond limit of visibility		
2	Sea ice present in concentrations less than 3/10 (3/8), open water or very open pack ice	} Sea ice concentration is uniform in the observation area	} Ship in ice or within 0.5 nautical mile of ice edge
3	4/10 to 6/10 (3/8 to less than 6/8), open pack ice		
4	7/10 to 8/10 (6/8 to less than 7/8), close pack ice		
5	9/10 or more, but not 10/10 (7/8 to less than 8/8), very close pack ice	} Sea ice concentration is not uniform in the observation area	
6	Strips and patches of pack ice with open water between		
7	Strips and patches of close or very close pack ice with areas of lesser concentration between		
8	Fast ice with open water, very open or open pack ice to seaward of the ice boundary		
9	Fast ice with close or very close pack ice to seaward of the ice boundary		
/	Unable to report, because of darkness, lack of visibility, or because ship is more than 0.5 nautical mile away from ice edge		

0700
Direction or bearing in one figure

- D True direction from which surface wind is blowing
- D True direction towards which ice has drifted in the past 12 hours
- D_H True direction from which C_H clouds are moving
- D_K True direction from which swell is moving
- D_L True direction from which C_L clouds are moving
- D_M True direction from which C_M clouds are moving
- D_a True direction in which orographic clouds or clouds with vertical development are seen
- D_a True direction in which the phenomenon indicated is observed or in which conditions specified in the same group are reported
- D_e True direction towards which an echo pattern is moving
- D_p True direction from which the phenomenon indicated is coming
- D_s True direction of resultant displacement of the ship during the three hours preceding the time of observation
- D₁ True direction of the point position from the station

Code
figure

- 0 Calm (in D, D_K), or stationary (in D_S), or at the station (in D_a, D₁), or stationary or no clouds (in D_H, D_L, D_M)
- 1 NE
- 2 E
- 3 SE
- 4 S
- 5 SW
- 6 W
- 7 NW
- 8 N
- 9 All directions (in D_a, D₁), or confused (in D_K), or variable (in D_(wind)), or unknown (in D_S), or unknown or clouds invisible (in D_H, D_L, D_M)
- / Report from a coastal land station or displacement of ship not reported (in D_S only — see Regulation 12.3.1.2 (b))

D_i True bearing of principal ice edge

Code
figure

0	Ship in shore or flaw lead
1	Principal ice edge towards NE
2	Principal ice edge towards E
3	Principal ice edge towards SE
4	Principal ice edge towards S
5	Principal ice edge towards SW
6	Principal ice edge towards W
7	Principal ice edge towards NW
8	Principal ice edge towards N
9	Not determined (ship in ice)
/	Unable to report, because of darkness, lack of visibility or because only ice of land origin is visible

0877

Direction in two figures

dd	True direction, in tens of degrees, from which wind is blowing (or will blow)
dd	Forecast true direction, in tens of degrees, from which wind will blow at the relevant grid point
dd	True direction, in tens of degrees, from which wind is blowing, derived from movement of cloud elements
d _h d _h	True direction, in tens of degrees, from which wind will blow at the height indicated by h _x h _x h _x
d _j d _j	True direction, in tens of degrees, from which jet-stream wind is blowing (or will blow)
d _m d _m	True direction, in tens of degrees, from which maximum wind will blow at the flight level given by n _m n _m n _m
d _m d _m	True direction, in tens of degrees, from which maximum wind will blow at the height given by h _m h _m h _m
d _s d _s	True direction, in tens of degrees, towards which the system or front is moving
d _s d _s	True direction, in tens of degrees, towards which the tropical cyclone or system is moving
d _w d _w	True direction, in tens of degrees, from which waves are coming
d _{w1} d _{w1} d _{w2} d _{w2}	} True direction, in tens of degrees, from which swell waves are coming
d ₀ d ₀	True direction, in tens of degrees, towards which sea-surface current is moving
d ₀ d ₀ d ₁ d ₁ ... d _n d _n	} True direction, in tens of degrees, towards which sea current at selected and/or significant depths starting with the sea surface is moving
d ₁ d ₁ d ₂ d ₂ ... d _n d _n	} True direction, in tens of degrees, from which wind is blowing at the specified levels

(Code table 0877 — continued)

Code figure		Code figure	
00	Calm (no motion for $d_S d_S$, or no waves)	19	185° – 194°
01	5° – 14°	20	195° – 204°
02	15° – 24°	21	205° – 214°
03	25° – 34°	22	215° – 224°
04	35° – 44°	23	225° – 234°
05	45° – 54°	24	235° – 244°
06	55° – 64°	25	245° – 254°
07	65° – 74°	26	255° – 264°
08	75° – 84°	27	265° – 274°
09	85° – 94°	28	275° – 284°
10	95° – 104°	29	285° – 294°
11	105° – 114°	30	295° – 304°
12	115° – 124°	31	305° – 314°
13	125° – 134°	32	315° – 324°
14	135° – 144°	33	325° – 334°
15	145° – 154°	34	335° – 344°
16	155° – 164°	35	345° – 354°
17	165° – 174°	36	355° – 4°
18	175° – 184°	99	Variable, or all directions, or unknown (for $d_S d_S$), or waves confused, direction indeterminate

1600**h** Height above surface of the base of the lowest cloud seenCode
figure

0	0 to	50 m
1	50 to	100 m
2	100 to	200 m
3	200 to	300 m
4	300 to	600 m
5	600 to	1 000 m
6	1 000 to	1 500 m
7	1 500 to	2 000 m
8	2 000 to	2 500 m
9	2 500 m or more, or no clouds	
/	Height of base of cloud not known or base of clouds at a level lower and tops at a level higher than that of the station	

Notes:

- (1) A height exactly equal to one of the values at the ends of the ranges shall be coded in the higher range, e.g. a height of 600 m shall be reported by code figure 5.
- (2) Due to the limitation in range of the cloud-sensing equipment used by an automatic station, the code figures reported for h could have one of the three following meanings:
 - (a) The actual height of the base of the cloud is within the range indicated by the code figure; or
 - (b) The height of the base of the cloud is greater than the range indicated by the code figure but cannot be determined due to instrumental limitations; or
 - (c) There are no clouds vertically above the station.

1751**I_s** Ice accretion on shipsCode
figure

1	Icing from ocean spray
2	Icing from fog
3	Icing from spray and fog
4	Icing from rain
5	Icing from spray and rain

1819

i_R Indicator for inclusion or omission of precipitation data

Code figure	Precipitation data are reported:	Group 6RRRt _R is:
0	In Sections 1 and 3	Included in both sections
1	In Section 1	Included
2	In Section 3	Included
3	In none of the two Sections 1 and 3	Omitted (precipitation amount = 0)
4	In none of the two Sections 1 and 3	Omitted (precipitation amount not available)

1855

i_W Indicator for source and units of wind speed

Code figure			
0	Wind speed estimated	}	Wind speed in metres per second
1	Wind speed obtained from anemometer		
3	Wind speed estimated	}	Wind speed in knots
4	Wind speed obtained from anemometer		

2700

N Total cloud cover

N_h Amount of all the C_L cloud present or, if no C_L cloud is present, the amount of all the C_M cloud present

N_s Amount of individual cloud layer or mass whose genus is indicated by C

N Amount of cloud whose base is below the level of the station

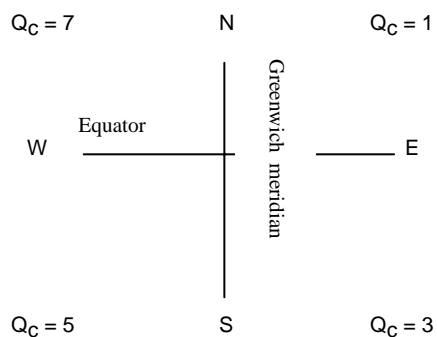
Code figure		
0	0	0
1	1 oktas or less, but not zero	1/10 or less, but not zero
2	2 oktas	2/10 – 3/10
3	3 oktas	4/10
4	4 oktas	5/10
5	5 oktas	6/10
6	6 oktas	7/10 – 8/10
7	7 oktas or more, but not 8 oktas	9/10 or more, but not 10/10
8	8 oktas	10/10
9	Sky obscured by fog and/or other meteorological phenomena	
/	Cloud cover is indiscernible for reasons other than fog or other meteorological phenomena, or observation is not made	

Note: For use of (/), see Regulation 12.1.4.

3333

Q_C Quadrant of the globe

Code figure	Latitude	Longitude
1	North	East
3	South	East
5	South	West
7	North	West



Note: The choice is left to the observer in the following cases:

- When the ship is on the Greenwich meridian or the 180th meridian ($L_0L_0L_0L_0 = 0000$ or 1800 respectively):
 Q_C = 1 or 7 (northern hemisphere) or
 Q_C = 3 or 5 (southern hemisphere);
- When the ship is on the Equator ($L_aL_aL_a = 000$):
 Q_C = 1 or 3 (eastern longitude) or
 Q_C = 5 or 7 (western longitude).

3551

R_S Rate of ice accretion on ships

Code figure	Description
0	Ice not building up
1	Ice building up slowly
2	Ice building up rapidly
3	Ice melting or breaking up slowly
4	Ice melting or breaking up rapidly

3590

RRR Amount of precipitation which has fallen during the period preceding the time of observation, as indicated by t_R

Code figure		Code figure	
000	Not used	990	Trace
001	1 mm	991	0.1 mm
002	2 mm	992	0.2 mm
etc.	etc.	993	0.3 mm
988	988 mm	994	0.4 mm
989	989 mm or more	995	0.5 mm
		996	0.6 mm
		997	0.7 mm
		998	0.8 mm
		999	0.9 mm

Note: See Regulations 22.5.2.1 and 22.5.2.2.

3739

S_i Stage of development

Code figure	
0	New ice only (frazil ice, grease ice, slush, shuga)
1	Nilas or ice rind, less than 10 cm thick
2	Young ice (grey ice, grey-white ice), 10–30 cm thick
3	Predominantly new and/or young ice with some first-year ice
4	Predominantly thin first-year ice with some new and/or young ice
5	All thin first-year ice (30–70 cm thick)
6	Predominantly medium first-year ice (70–120 cm thick) and thick first-year ice (>120 cm thick) with some thinner (younger) first-year ice
7	All medium and thick first-year ice
8	Predominantly medium and thick first-year ice with some old ice (usually more than 2 metres thick)
9	Predominantly old ice
/	Unable to report, because of darkness, lack of visibility or because only ice of land origin is visible or because ship is more than 0.5 nautical mile away from ice edge

3845

s_n Sign of the data, and relative humidity indicator

s_n Sign of the exponent

s_n Sign of the reference value indicated by rrrrrr

Code
figure

- | | |
|---|---------------------------|
| 0 | Positive or zero |
| 1 | Negative |
| 9 | Relative humidity follows |

Notes:

- (1) Code figures 2 to 8 are not used.
- (2) See Regulation 12.2.3.3.1 for the use of code figure 9.

4019

t_R Duration of period of reference for amount of precipitation, ending at the time of the report

Code
figure

- | | | | |
|---|--------------------------------|----|---------------------------------|
| 1 | Total precipitation during the | 6 | hours preceding the observation |
| 2 | Total precipitation during the | 12 | hours preceding the observation |
| 3 | Total precipitation during the | 18 | hours preceding the observation |
| 4 | Total precipitation during the | 24 | hours preceding the observation |
| 5 | Total precipitation during the | 1 | hour preceding the observation |
| 6 | Total precipitation during the | 2 | hours preceding the observation |
| 7 | Total precipitation during the | 3 | hours preceding the observation |
| 8 | Total precipitation during the | 9 | hours preceding the observation |
| 9 | Total precipitation during the | 15 | hours preceding the observation |

Notes:

- (1) If the duration of the period of reference is not covered by Code table 4019 or the period does not end at the time of the report, t_R shall be coded 0.
- (2) Members are recommended to avoid any deviations from international practices which require the use of code figure 0. The specification of code figure 0 should be indicated in Volume II of the *Manual on Codes* under national coding procedures.

VV Horizontal visibility at surface

V_SV_S Visibility towards the sea

Code figure	km	Code figure	km	Code figure	km
00	< 0.1	34	3.4	68	18
01	0.1	35	3.5	69	19
02	0.2	36	3.6	70	20
03	0.3	37	3.7	71	21
04	0.4	38	3.8	72	22
05	0.5	39	3.9	73	23
06	0.6	40	4	74	24
07	0.7	41	4.1	75	25
08	0.8	42	4.2	76	26
09	0.9	43	4.3	77	27
10	1	44	4.4	78	28
11	1.1	45	4.5	79	29
12	1.2	46	4.6	80	30
13	1.3	47	4.7	81	35
14	1.4	48	4.8	82	40
15	1.5	49	4.9	83	45
16	1.6	50	5	84	50
17	1.7	51	} Not used	85	55
18	1.8	52		86	60
19	1.9	53		87	65
20	2	54		88	70
21	2.1	55	89	> 70	
22	2.2	56	6	90	< 0.05
23	2.3	57	7	91	0.05
24	2.4	58	8	92	0.2
25	2.5	59	9	93	0.5
26	2.6	60	10	94	1
27	2.7	61	11	95	2
28	2.8	62	12	96	4
29	2.9	63	13	97	10
30	3	64	14	98	20
31	3.1	65	15	99	>=50
32	3.2	66	16		
33	3.3	67	17		

4451

v_s Ship's average speed made good during the three hours preceding the time of observation

Code figure

0	0 knot	0 km h ⁻¹
1	1– 5 knots	1–10 km h ⁻¹
2	6–10 knots	11–19 km h ⁻¹
3	11–15 knots	20–28 km h ⁻¹
4	16–20 knots	29–37 km h ⁻¹
5	21–25 knots	38–47 km h ⁻¹
6	26–30 knots	48–56 km h ⁻¹
7	31–35 knots	57–65 km h ⁻¹
8	36–40 knots	66–75 km h ⁻¹
9	Over 40 knots	Over 75 km h ⁻¹
/	Not applicable (report from a coastal land station) or not reported (see Regulation 12.3.1.2 (b)).	

4531

W_{a1} } Past weather reported from an automatic weather station
 W_{a2} }

Code figure

0	No significant weather observed
1	VISIBILITY REDUCED
2	Blowing phenomena, visibility reduced
3	FOG
4	PRECIPITATION
5	Drizzle
6	Rain
7	Snow or ice pellets
8	Showers or intermittent precipitation
9	Thunderstorm

Note: The weather descriptions in this table are progressively complex, to accommodate the different levels of weather discrimination capability of various automatic stations. Stations having only basic sensing capability may use the lower code figures and basic generic descriptions (shown in capital letters). Stations with progressively higher discrimination capability shall use the more detailed descriptions (higher codes).

4561

W Weather during past hour

W₁ } Past weather
W₂ }

Code
figure

- 0 Cloud covering $\frac{1}{2}$ or less of the sky throughout the appropriate period
- 1 Cloud covering more than $\frac{1}{2}$ of the sky during part of the appropriate period and covering $\frac{1}{2}$ or less during part of the period
- 2 Cloud covering more than $\frac{1}{2}$ of the sky throughout the appropriate period
- 3 Sandstorm, duststorm or blowing snow
- 4 Fog or ice fog or thick haze
- 5 Drizzle
- 6 Rain
- 7 Snow, or rain and snow mixed
- 8 Shower(s)
- 9 Thunderstorm(s) with or without precipitation

ww Present weather reported from a manned weather station

ww = 00–49 No precipitation at the station at the time of observation

ww = 00–19 No precipitation, fog, ice fog (except for 11 and 12), duststorm, sandstorm, drifting or blowing snow at the station* at the time of observation or, except for 09 and 17, during the preceding hour

Code
figure

00	Cloud development not observed or not observable	}	Characteristic change of the state of sky during the past hour
01	Clouds generally dissolving or becoming less developed		
02	State of sky on the whole unchanged		
03	Clouds generally forming or developing		
04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes		
05	Haze		
06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation		
07	Dust or sand raised by wind at or near the station at the time of observation, but no well-developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen; or, in the case of ships, blowing spray at the station		
08	Well-developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no duststorm or sandstorm		
09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour		
10	Mist		
11	Patches	}	shallow fog or ice fog at the station, whether on land or sea, not deeper than about 2 metres on land or 10 metres at sea
12	More or less continuous		
13	Lightning visible, no thunder heard		
14	Precipitation within sight, not reaching the ground or the surface of the sea		
15	Precipitation within sight, reaching the ground or the surface of the sea, but distant, i.e. estimated to be more than 5 km from the station		
16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station		
17	Thunderstorm, but no precipitation at the time of observation		
18	Squalls	}	at or within sight of the station during the preceding hour or at the time of observation
19	Funnel cloud(s)**		

ww = 20–29 Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation

20	Drizzle (not freezing) or snow grains	}	not falling as shower(s)
21	Rain (not freezing)		
22	Snow		
23	Rain and snow or ice pellets		
24	Freezing drizzle or freezing rain		

* The expression "at the station" refers to a land station or a ship.

** Tornado cloud or water-spout.

(Code table 4677 — continued)

Code figure

- 25 Shower(s) of rain
- 26 Shower(s) of snow, or of rain and snow
- 27 Shower(s) of hail*, or of rain and hail*
- 28 Fog or ice fog
- 29 Thunderstorm (with or without precipitation)

ww = 30–39 Duststorm, sandstorm, drifting or blowing snow

- | | | | |
|----|---|---|--|
| 30 | } Slight or moderate duststorm or sandstorm | } | - has decreased during the preceding hour |
| 31 | | | - no appreciable change during the preceding hour |
| 32 | | | - has begun or has increased during the preceding hour |
| 33 | } Severe duststorm or sandstorm | } | - has decreased during the preceding hour |
| 34 | | | - no appreciable change during the preceding hour |
| 35 | | | - has begun or has increased during the preceding hour |
| 36 | Slight or moderate drifting snow | } | generally low (below eye level) |
| 37 | Heavy drifting snow | | |
| 38 | Slight or moderate blowing snow | } | generally high (above eye level) |
| 39 | Heavy blowing snow | | |

ww = 40–49 Fog or ice fog at the time of observation

- 40 Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer
 - 41 Fog or ice fog in patches
 - 42 Fog or ice fog, sky visible
 - 43 Fog or ice fog, sky invisible
 - 44 Fog of ice fog, sky visible
 - 45 Fog or ice fog, sky invisible
 - 46 Fog or ice fog, sky visible
 - 47 Fog or ice fog, sky invisible
 - 48 Fog, depositing rime, sky visible
 - 49 Fog, depositing rime, sky invisible
- | | | |
|----|---|---|
| 42 | } | has become thinner during the preceding hour |
| 43 | } | |
| 44 | } | no appreciable change during the preceding hour |
| 45 | } | |
| 46 | } | has begun or has become thicker during the preceding hour |
| 47 | } | |

ww = 50–99 Precipitation at the station at the time of observation

ww = 50–59 Drizzle

- | | | | |
|----|-------------------------------------|---|--------------------------------------|
| 50 | Drizzle, not freezing, intermittent | } | slight at time of observation |
| 51 | Drizzle, not freezing, continuous | | |
| 52 | Drizzle, not freezing, intermittent | } | moderate at time of observation |
| 53 | Drizzle, not freezing, continuous | | |
| 54 | Drizzle, not freezing, intermittent | } | heavy (dense) at time of observation |
| 55 | Drizzle, not freezing, continuous | | |

* Hail, small hail, snow pellets. French: grêle, grésil ou neige roulée.

(continued)

(Code table 4677 — continued)

code

figure

- 56 Drizzle, freezing, slight
- 57 Drizzle, freezing, moderate or heavy (dense)
- 58 Drizzle and rain, slight
- 59 Drizzle and rain, moderate or heavy

ww = 60–69 Rain

- 60 Rain, not freezing, intermittent } slight at time of observation
- 61 Rain, not freezing, continuous } }
- 62 Rain, not freezing, intermittent } moderate at time of observation
- 63 Rain, not freezing, continuous } }
- 64 Rain, not freezing, intermittent } heavy at time of observation
- 65 Rain, not freezing, continuous } }
- 66 Rain, freezing, slight
- 67 Rain, freezing, moderate or heavy
- 68 Rain or drizzle and snow, slight
- 69 Rain or drizzle and snow, moderate or heavy

ww = 70–79 Solid precipitation not in showers

- 70 Intermittent fall of snowflakes } slight at time of observation
- 71 Continuous fall of snowflakes } }
- 72 Intermittent fall of snowflakes } moderate at time of observation
- 73 Continuous fall of snowflakes } }
- 74 Intermittent fall of snowflakes } heavy at time of observation
- 75 Continuous fall of snowflakes } }
- 76 Diamond dust (with or without fog)
- 77 Snow grains (with or without fog)
- 78 Isolated star-like snow crystals (with or without fog)
- 79 Ice pellets

ww = 80–99 Showery precipitation, or precipitation with current or recent thunderstorm

- 80 Rain shower(s), slight
- 81 Rain shower(s), moderate or heavy
- 82 Rain shower(s), violent
- 83 Shower(s) of rain and snow mixed, slight
- 84 Shower(s) of rain and snow mixed, moderate or heavy
- 85 Snow shower(s), slight
- 86 Snow shower(s), moderate or heavy
- 87 } Shower(s) of snow pellets or small hail, with or } – slight
- 88 } without rain or rain and snow mixed } – moderate or heavy
- 89 } Shower(s) of hail*, with or without rain or rain } – slight
- 90 } and snow mixed, not associated with thunder } – moderate or heavy

* French: grêle.

(Code table 4677 — continued)

Code
figure

91	Slight rain at time of observation	}	Thunderstorm during the preceding hour but not at time of observation
92	Moderate or heavy rain at time of observation		
93	Slight snow, or rain and snow mixed or hail* at time of observation		
94	Moderate or heavy snow, or rain and snow mixed or hail* at time of observation		
95	Thunderstorm, slight or moderate, without hail*, but with rain and/or snow at time of observation	}	Thunderstorm at time of observation
96	Thunderstorm, slight or moderate, with hail* at time of observation		
97	Thunderstorm, heavy, without hail*, but with rain and/or snow at time of observation		
98	Thunderstorm combined with duststorm or sandstorm at time of observation		
99	Thunderstorm, heavy, with hail* at time of observation		

* Hail, small hail, snow pellets. French: grêle, grésil ou neige roulée.

4680

w_aw_a Present weather reported from an automatic weather station

Code
figure

- 00 No significant weather observed
- 01 Clouds generally dissolving or becoming less developed during the past hour
- 02 State of sky on the whole unchanged during the past hour
- 03 Clouds generally forming or developing during the past hour
- 04 Haze or smoke, or dust in suspension in the air, visibility equal to, or greater than, 1 km
- 05 Haze or smoke, or dust in suspension in the air, visibility less than 1 km
- 06–09 Reserved
- 10 Mist
- 11 Diamond dust
- 12 Distant lightning
- 13–17 Reserved
- 18 Squalls
- 19 Reserved

Code figures 20–26 are used to report precipitation, fog (or ice fog) or thunderstorm at the station during the preceding hour but not at the time of observation

- 20 Fog
- 21 PRECIPITATION
- 22 Drizzle (not freezing) or snow grains
- 23 Rain (not freezing)

z_i Present ice situation and trend of conditions over preceding three hours

Code
figure

0	Ship in open water with floating ice in sight	
1	Ship in easily penetrable ice; conditions improving	
2	Ship in easily penetrable ice; conditions not changing	
3	Ship in easily penetrable ice; conditions worsening	
4	Ship in ice difficult to penetrate; conditions improving	
5	Ship in ice difficult to penetrate; conditions not changing	Ship in ice
6	Ice forming and floes freezing together	Ship in ice difficult to penetrate
7	Ice under slight pressure	and conditions
8	Ice under moderate or severe pressure	worsening
9	Ship beset	
/	Unable to report, because of darkness or lack of visibility	