ICE TYPE (ty)

10 Frazil
11 Shuga
12 Grease

20 Nilas
30 Pancakes
40 Young grey ice, 0.1-0.15 m
50 Young grey-white ice, 0.15-0.3 m
60 First year, 0.3-0.7 m
70 First year, 0.7-1.2 m
80 First year, >1.2 m
85 Multiyear floes
90 Brash
95 Fast ice

FLOE SIZE (f)

100 Pancakes
200 New sheet ice
300 Brash/broken ice
400 Cake ice, <20 m
500 Small floes, 20-100 m
600 Medium floes, 100-500 m
700 Large floes, 500-2000 m
800 Vast floes, >2000 m

TOPOGRAPHY (t)

100 Level ice
200 Rafted pancakes
300 Cemented pancakes
400 Finger rafting
5xy New, unconsolidated ridges (no snow)
6xy New ridges filled with snow or a snow cover
7xy Consolidated ridges (no weathering)
8xy Older, weathered ridges

x values:
0 0-10% areal coverage
1 10-20%
2 20-30%
3 30-40%
4 40-50%
5 50-60%
6 60-70%
7 70-80%
8 80-90%
9 90-100%

y values:
1 0.5 m av. sail height
2 1.0 m
3 1.5 m
4 2.0 m
5 3.0 m
6 4.0 m
7 5.0 m

SNOW TYPE (s)

0 No snow observation
1 No snow, no ice or brash
2 Cold new snow, <1 day old
3 Cold old snow
4 Cold wind-packed snow
5 New melting snow (wet new snow)
6 Old melting snow
7 Glaze
8 Melt slush
9 Melt puddles
10 Saturated snow (waves)
11 Sastrugi

OPEN WATER

0 No openings
1 Small cracks
2 Very narrow breaks, <50m
3 Narrow breaks, 50-200 m
4 Wide breaks, 200-500 m
5 Very wide breaks, >500 m
6 Lead/coastal lead
7 Polynya/coastal polynya
8 Water broken only by small scattered floes
9 Open sea

ICE CONCn (c)
to be expressed in tenths

SEA ICE (z) AND SNOW THICKNESS (sz)
to be expressed in centimetres

Codes follow the ASPeCt (Antarctic Sea ice Processes & Climate) protocol.
http://aspect.antarctica.gov.au/home/conducting-sea-ice-observations/ice-observation-forms