# Open water

- 0 no openings
- 1 small cracks
- 2 Very narrow breaks < 50 m
- 3 Narrow breaks, 50 200 m
- 4 Wide breaks, 200 500 m
- 5 Very wide breaks, > 500 m
- 6 Leads
- 7 Polynya
- 8 Water broken only by scattered floes
- 9 Stripes and patches

#### Ice Type

- 10 Frazil
- 11 Shuga
- 12 Grease
- 20 Nilas
- 30 Pancakes
- 40 Young grey ice 0.1 1.15m
- 50 Young grey-white ice 0.1 0.3 m
- 60 First year Ice < 0.7 m
- 70 First year ice 0.7-1.2 m
- 80 First year ice > 1.2 m
- 75 Second year ice
- 85 Multi-year ice
- 90 Brash ice
- 95 Fast ice

### Floe size

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

### Snow type

- 00 no snow observation
- 01 no snow, no ice or brash
- 02 cold new snow, < 1 day old
- 03 cold old snow
- 04 cold wind-packed snow
- 05 New melting snow ( wet new snow)
- 06 Old melting snow
- 07 Glaze
- 08 Melt slush
- 09 Melt puddies
- 10 Saturated snow
- 11 Sastrugi

# Algae/ Sediment fraction

- 0 0%
- 1 < 30%
- 2 < 60 %
- 3 > 60 %

# Melt ponds

# Depth

- 1 0-10 cm
- 2 10-30 cm
- 3 30-50 cm
- 4 > 50 cm

#### Pattern

- 1 Linked
- 2 Discrete

#### Surface Type

- 1 Frozen (dry snow, wet snow)
- 2 Open
- 3 Bottom up

#### Topography

- 100 Level ice
- 200 Rafted pancakes
- 300 Cemented Pancakes
- 400 Finger Rafting
- 500 Ridges

# Ridges

Old RidgesTrue/ falseConsolidated RidgesTrue/ falseSnow covered RidgesTrue/ false

Codes based on ASSIST (Arctic Ship-based Sea Ice Standardization Tool) protocol http://iceobs.beta.gina.alaska.edu