

OBSERVATION FORM



OBS BLANK FORM

Day/Date (Z):

		POSITION		SEA ICE OBSERVATIONS																						
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY					SECONDARY					TERTIARY					O/W	hr (Z)						
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		

A blank sea ice observation form (obs form) looks like this. There are Observation forms that you can print in the Support Material on this CD.

BACK

OBSERVATION FORM



OBS

TIME, DATE AND POSITION

Day/Date (Z): 20/9/98

	POSITION		SEA ICE OBSERVATIONS																						
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY					SECONDARY					TERTIARY					O/W	hr (Z)					
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	
01	66°27'S	75°04'E																							01

Record the hour:

hr (Z)

01

and the latitude:

Lat (°S) dd mm

66°27'S

and the longitude:

Long (°E/W) ddd mm

75°04'E

The date is also recorded at the top of the page.

BACK

OBSERVATION FORM



ICE

TOTAL CONCENTRATION (conc)

Day/Date (Z): 20/9/98

	POSITION			SEA ICE OBSERVATIONS																						
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY							O/W	hr (Z)
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9																							01

In this example the total ice concentration is estimated to be 9/10.

9

BACK

OBSERVATION FORM



ICE

CATEGORIES & CONCENTRATIONS (c)

Day/Date (Z): 20/9/98

	POSITION		SEA ICE OBSERVATIONS																							
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY							O/W	hr (Z)
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9	4							3							2								01

The concentrations of each ice category in the example are: –

PRIMARY: 4/10 **4**

SECONDARY: 3/10 **3**

TERTIARY: 2/10 **2**

BACK

OBSERVATION FORM



ICE
TYPE (ty)

Day/Date (Z): 20/9/98

	POSITION		SEA ICE OBSERVATIONS																							
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY							O/W	hr (Z)
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9	4	60						3	20						2	12							01

The three ice types in the example are: –

PRIMARY: First year ice 0.3–0.7 m

60

SECONDARY: Nilas

20

TERTIARY: Grease

12

BACK

OBSERVATION FORM



ICE THICKNESS (z)

Day/Date (Z): 20/9/98

	POSITION		SEA ICE OBSERVATIONS																							
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY							O/W	hr (Z)
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9	4	60	30					3	20	10					2	12	2						01

The three ice thicknesses in the example are: –

PRIMARY: 30 cm **30**

SECONDARY: 10 cm **10**

TERTIARY: 2 cm **2**

BACK

OBSERVATION FORM



ICE FLOE SIZE (f)

Day/Date (Z): 20/9/98

	POSITION			SEA ICE OBSERVATIONS																						
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY							O/W	hr (Z)
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9	4	60	30	600				3	20	10	500				2	12	2	200					01

The floe sizes in the example are: –

PRIMARY: medium floes (100–500 m) **600**

SECONDARY: small floes (20–100 m) **500**

TERTIARY: new ice sheet **200**

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OBSERVATION FORM

ICE TOPOGRAPHY (t)



Day/Date (Z): 20/9/98

	POSITION			SEA ICE OBSERVATIONS																						
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY							O/W	hr (Z)
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9	4	60	30	600	6	_	_	3	20	10	500	100			2	12	2	200	100				01

The topography codes for the example image are: –

PRIMARY: new ridges with snow cover **6xy**

(x and y are described next in the tutorial)

SECONDARY: level ice **100**

TERTIARY: level ice **100**

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OBSERVATION FORM

ICE TOPOGRAPHY (t)



Day/Date (Z): 20/9/98

	POSITION			SEA ICE OBSERVATIONS																						
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY							O/W	hr (Z)
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9	4	60	30	600	61			3	20	10	500	100			2	12	2	200	100				01

The areal coverage (x) for the Primary ice category in the example image is: –

0 – 10%: 1

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OBSERVATION FORM

ICE TOPOGRAPHY (t)



Day/Date (Z): 20/9/98

	POSITION			SEA ICE OBSERVATIONS																						
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY							O/W	hr (Z)
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9	4	60	30	600	61			3	20	10	500	100			2	12	2	200	100				01

The average sail height for the Primary ice category in the example image is: –

0.5 m: 1

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OBSERVATION FORM



SNOW TYPE (S)

Day/Date (Z): 20/9/98

	POSITION			SEA ICE OBSERVATIONS																						
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY							O/W	hr (Z)
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9	4	60	30	600	611	3		3	20	10	500	100	1		2	12	2	200	100	1			01

The snow cover types for each ice category in the example are: –

PRIMARY: cold old snow **3**

SECONDARY: no snow, no ice or brash **1**

TERTIARY: no snow, no ice or brash **1**

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OBSERVATION FORM



SNOW THICKNESS (sz)

Day/Date (Z): 20/9/98

	POSITION			SEA ICE OBSERVATIONS																						
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY							O/W	hr (Z)
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9	4	60	30	600	611	3	10	3	20	10	500	100	1	0	2	12	2	200	100	1	0		01

The snow thickness values for each ice category in the example are: –

PRIMARY: 10 cm **10**

SECONDARY: 0 cm **0**

TERTIARY: 0 cm **0**

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OBSERVATION FORM



**OPEN
WATER (O/W)**

Day/Date (Z): 20/9/98

	POSITION		SEA ICE OBSERVATIONS																							
hr (Z)	Lat (°S) dd mm	Long (°E/W) ddd mm	Conc (tenths)	PRIMARY							SECONDARY							TERTIARY						O/W	hr (Z)	
				c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz	c	ty	z	f	t	s	sz		
01	66°27'S	75°04'E	9	4	60	30	600	611	3	10	3	20	10	500	100	1	0	2	12	2	200	100	1	0	1	01

The open water in the example image is in the form of very small cracks, hence the value assigned is: –

1

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