



14.06.2011

Danish Meteorological Institute, Copenhagen



1st, and most important



From the ice season 2010/11 the products of the

German Ice Service are free of charge and are available in Internet under

http://www.bsh.de/en/Marine_data/Observations/Ice or

http://bsis.eisdienst.de/products.shtml or

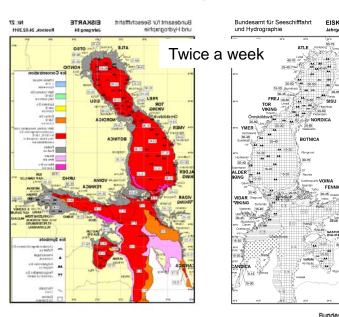
ftp://ftp.bsh.de/outgoing/Eisbericht or

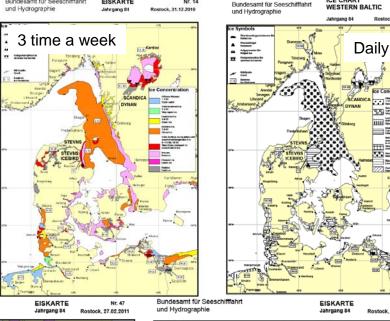
http://www.bsis-ice.de/lcePortal/BalticSea.html

Rostock, 24.02,2011

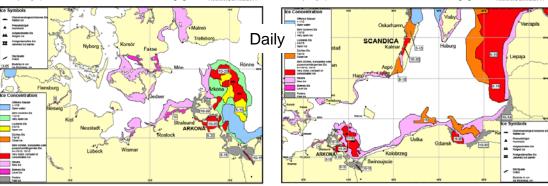
BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

2nd, and very important





Operational ice charts drawn by German Ice Service in the winter of 2010/11



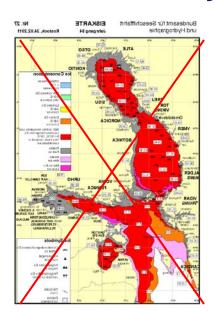


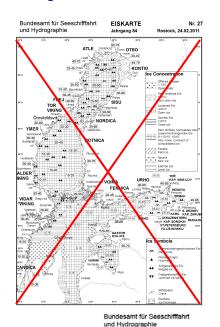


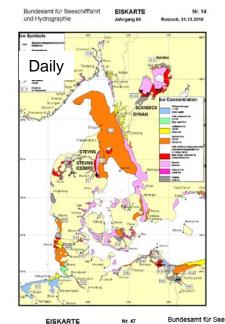
User's

- navigation, shipping companies, off-shore companies, etc.
- **Ice Services**
- Sea state (waves) forecast model of DWD
- Different weather forecast models of DWD
- Ice forecast model of BSH

2nd, and very important





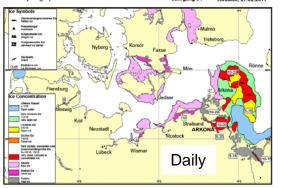


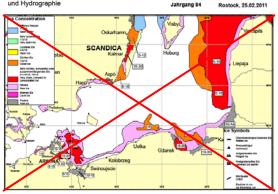


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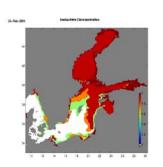
HYDROGRAPHIE

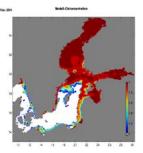
Operational ice charts which will be drawn by German Ice Service from the winter of 2011/12

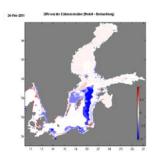






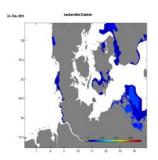


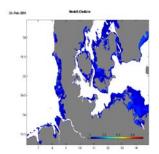


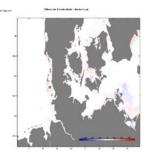


User's

- Navigation, shipping companies, off-shore companies, etc. ---> (daily Swedish and Finnish ice charts, daily German ice charts for the Western Baltic)
- Ice Services ---> daily German ice charts for the Western Baltic
- Sea state (waves) forecast model of DWD ---> Western Baltic is o.k. Northern part ?
- Different weather forecast models of DWD ---> Western Baltic is o.k. Northern part ?
- Ice forecast model of BSH ---> Western Baltic is o.k. Northern part ?





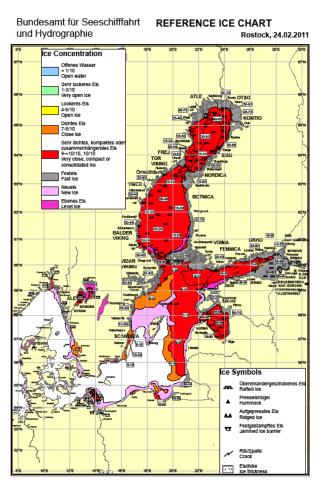


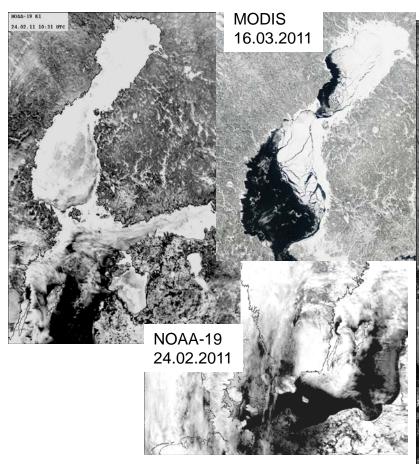


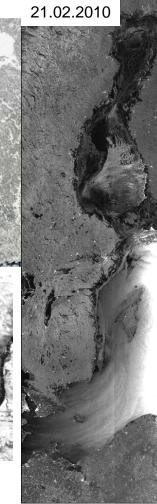
BUNDESAMT FÜR SEESCHIFFFAHRT UND

HYDROGRAPHIE

3rd, and may be important







SAR



SEESCHIFFFAHRT UND HYDROGRAPHIE

Ice chart/Attribute table	IOC	Description
AB / AB		Concentration
1	01	< 1/10
2	13	1-3/10
3	46	4-6/10
4	78	7-8/10
5	91	9-10/10
6	50	5-10
7	92	10/10
8	92	10/10
Symbols / RN		Topographie
1	1	Rafted ice
2	2	Hummock
3	3	Ridged ice
4	4	Jammed brash ice barrier
5		Rafted and ridged ice
6	1—	Cracks / Fractures
/ ICEFLZ	_	Ice floe size
1		Brash ice, < 2 m
2		Ice cake, < 20 m
3	03	Small ice floes, 20-100 m
4		Medium ice floes, 100 - 500 m
5		Big ice floes, 500 m - 2 km
6		Vast ice floes, 2 - 10 km
7		Giant ice floes, > 10 km
8		Fast ice
9 / ICERCN	09	Ice floebit Ice ridge concentration
1 01		Single ridges
3	03	
<u>3</u>	05	Approximately equal parts of level and ridged ice
7	07	Predominantly ridged ice, partly level ice
9	09	Almost exclusively ridged ice
/ ICEFCN	03	Ice rafting concentration
1	01	Single rafted ice
3		Predominantly level ice, partly rafted ice
5		Approximately equal parts of level and rafted ice
7	07	Predominantly level ice, partly rafted ice
9		Almost exclusively rafted ice
/ ICEFTY	٢	Openings in ice
1	01	Crack, up to 1 m wide
2		Very small fracture, > 1 - 50 m wide
3		Small fracture, > 50 - 200 m wide
4		Medium fracture, > 200 - 500 m wide
5		Large fracture, > 500 m wide
/ ICEMLT		Melting forms
1	01	Few puddles
2	02	Many puddles
3	03	Flooded ice
4	04	Few thaw holes
5	05	Many thaw holes
6	06	Dried ice
7	07	Rotten ice

Tmin, Tmax in cm

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	27 Polygon	0	5	10	20	0	0	0	0	0	0	SCAL TA
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	29 Polygon	0	4	5	20	0	0	0	0	0	0	
	30 Polygon	0	5	5	20	1	0	0	3	0	0	
1	31 Polygon	0	2	5	20	0	0	0	0	0	0	5
1	32 Polygon	0	0	0	0	0	0	0	0	0	0	
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Attribute table with parameters of Ice Area coded according to the Ice Objects Catalogue



BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

