International Council for the Exploration of the Sea



Catalogue of regularly issued Marine Environmental Data Products for the ICES Area. 1980 Issue

Compiled by ICES Hydrographer

In accordance with an ICES Resolution (C.Res.1971/4:1, (c)) a simple descriptive catalogue of ongoing marine environmental data synopses and services in the ICES area is being compiled on a continuing basis. The 1980 version is presented in this document. In such cases where there has been no response to the request for updating, the information of the 1979 version has been taken to be still valid.

As in the immediately foregoing years the catalogue has been split up into two parts, for real-time and non-real-time products respectively, and the tabular form has been used for presentation of the information received.

A list of specific national addresses from which information concerning the products, or the products themselves, may be obtained is included in the document.

Addresses of Producing Agencies

AEG NOAA/NMFS Atlantic Environmental Group

South Ferry Road

Narragansett, R.I. 02882

U.S.A.

AES Ice Branch

Atmospheric Environment Service

4905 Dufferin Street Downsview, Ontario Canada M3H 5T4

AOL Atlantic Oceanographic Laboratory

Bedford Institute of Oceanography P.O.Box 1006, Dartmouth, N.S. B2Y 4A2

Canada

CFM Canadian Forces Meteorological and Oceano-

graphic Centre (METOC) c/o Fleet Mail Office Halifax, Nova Scotia

Canada B3K 2XO

CHS Hydrography Branch

Canadian Hydrographic Service

615 Booth Street Ottawa, Ontario Canada KlA OE6

COB Centre Ocánologique de Bretagne

B.P. 337

29.273 Brest Cedex

France

DHI Deutsches Hydrographisches Institut

Postfach 220 2000 Hamburg 4

Federal Republic of Germany

DMI Dansk Meteorologisk Institut

Lyngbyvej 100 2100 København Ø

Denmark

DW Deutscher Wetterdienst

Seewetteramt Offenbach

Federal Republic of Germany

FHI Fiskeridirektoratets Havforskningsinstitutt

Nordnesparken 2 P.O.Box 1870-72 5011 Bergen-Nordnes

Norway

FLL Fisheries Laboratory

Lowestoft

Suffolk NR33 OHT

U.K.

HMS Ministry of Fisheries of USSR

Hydrometeorological Service 12 Rozhdestvensky Boulevard

Moscow K-45 U.S.S.R.

HRS Hafrannsoknastofnunin

Skilagata 4 P.O.Box 390 Reykjavik Iceland

IMGW Instytut Meteorologii i Gospodarki Wodnej

Waszyngtona 42 81-342 Gdynia

Poland

IMR Institute of Marine Research

P.O.Box 166

SF-00141 Helsinki 14

Finland

IWB Institut für Wasserwirtschaft

Berlin

German Democratic Republic

KNMI Koninklijk Nederlands Meteorologisch Instituut

Wilhelminalaan 10

P.O.B. 201 3730AE De Bilt Netherlands

MIAS(B) Marine Information and Advisory Service

Institute of Oceanographic Sciences

Bidston Observatory

Birkenhead, Merseyside L43 7RA

U.K.

MN Météorologie Nationale

77, Rue de Sèvres

92106 Boulogne-Billancourt Cédex

France

MO U.K. Meteorological Office

Headquarters Annexe

Eastern Road

Bracknell, Berkshire RG12 2UR

U.K.

NBF National Board of Fisheries

Institute of Hydrographic Research

P.O.Box 2566 S-403 17 G8teborg

Sweden

NEFC NOAA/NMFS Northeast Fisheries Center

Woods Hole MA 02543 U.S.A. NESS NOAA National Environmental Satellite Service

World Weather Building, Rm. 510

Washington, D.C. 20233

U.S.A.

NMC NOAA National Meteorological Center

> World Weather Building Washington, D.C. 20233

U.S.A.

Norsk Meteorologisk Institutt IMN

> Blindern Oslo 3 Norway

NOC Naval Oceanography Command

NSTL Station

Bay St.Louis, MS 39529

U.S.A.

NWS NOAA National Weather Service

Silver Spring, MD 20910

U.S.A.

PSMSL Permanent Service for Mean Sea Level

Institute of Oceanographic Sciences

Bidston Observatory

Birkenhead, Merseyside L43 7RA

U.K.

RWS Rijkswaterstaat

Directorate of Water Management

and Hydraulich Research

Hooftskade 1 2526 KA Den Haag Netherlands

Rijkswaterstaat - North Sea Directorate RWS-NSD

> Nijverheidsstraat 1 2288 BB Rijswijk

Netherlands

SH ICES Service Hydrographique

Palægade 2

DK-1261 Copenhagen K

Denmark

Sveriges Meteorologiska och Hydrologiska Institut SMHI

> Hydrologiska Byrån, HBO S-601 Ol Norrköping

Sweden

UCG University College, Department of Oceanography

> Galway Ireland

USCG U.S. Coast Guard Oceanographic Unit

Building 159-E, Navy Yard Annex

Washington, D.C. 20593

U.S.A.

Wasserwirtschaftsdirektion Küste WKS

Stralsund

German Democratic Republic

Part I

Real-Time Data Products

		Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
	1.	SST	l/week		Chart	FAX Broadcast, Mail	CFM	Seven-day composite, broadcast daily
	2.	Significant wave data	2/day		Chart	FAX Broadcast	CFM	Ů
	3.	Significant wave data (forecasts for 6,12,24 and 36 hrs.)	2/day		Chart	FAX Broadcast	CFM	
Canada	4.	Ice conditions	daily	Gulf of St. Lawrence	Chart	FAX Broadcast	AES	Late December to mid- April or until area clear of ice. May be aerial observation or "current ice conditions"
	5.	Ice conditions	daily	Gulf of St. Lawrence	Report	Marine Radio Broadcast	AES	Late December to mid- April or until area clear of ice. Also available on telex; includes forecast changes. Separate bul- letins for marine navi- gation and for coastal fishing interests.
	6.	Ice conditions	daily	East New- foundland and Southern Labrador	Chart	FAX Broadcast	AES	January to June or un- til clear of ice. May be aerial observation or "current ice conditions"

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	Parameters		Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
Canada (cont.)	7.	Ice conditions	daily	East New- foundland	Report	Marine Radio Broadcast	AES	Jan. to Jun. or until area clear of ice. Also available on telex; includes forecast changes. Sep. bulletin for marine navigation and for coastal fishing interests
Janada	8.	Iceberg limits	daily	Strait of Belle Isle area	Report	Marine Radio Broadcast	AES	Jun. to Oct. or until area free of icebergs
	9.	Ice conditions	daily	Northern Labrador	Chart	FAX Broadcast	AES	July; may be aerial ob- servation or "current ice conditions"
ļ	10.	Ice conditions	daily	Hudson Bay, Hudson Strait, Davis Strait	Chart	FAX Broadcast	AES	Jul. to Nov.; may be aerial obs.or current ice conditions"
j	11.	Ice conditions	daily	Hudson Strait and Approaches	Report	Marine Radio Broadcast	AES	Jul.to Oct. Weekly after major ice clears.Also available on telex
	12.	Ice conditions	daily	Davis Strait and Baffin Bay	Report	Marine Radio Broadcast	AES	Jul. to Oct. Ice edge
Denmark	1.	Ice	daily	Cape Farewell and occasion. W.and E.Green-land waters	Chart .	By FAX	DMI	Aerial reconnaissance, occasionally satellite-based information
Der	2.	Toe	óaily	Greenland	Report	Broadcast	DMI	Obs.from shore stations and latest aerial reconnaissance
	3.	Ice	3/week	Greenland	Report	By mail (in Danish)	DMI	Obs.from shore stations and latest aerial reconnaissance

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	Parameters		Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
	1.	Water level	2/day	9 Finnish harbours	Report	Broadcast (in Finnish) 2/day	IMR	With ref. to MSL
	2.	SST	2/week	N.Baltic, Gulf of Finland Gulf of Bothnia	Chart	By FAX and by mail	IMR	1 Oct-15 May (approx.)
g	3.	Ice conditions	daily	Whole Baltic	Chart	By FAX	IMR	During winter months
nla	3. 4. 5.	Ice conditions	2/week	Whole Baltic	Chart	By mail	IMR	During winter months
Fi	5•	Ice conditions	4 – 5/week	Whole Baltic	Report	By telex (in English) daily. Broadcast (in Finnish and English) daily. By mail (in Finnish, Swedish and English) 4-5/week	IMR	During winter months
	6.	Ice conditions (forecast for 30 hours)	daily	Gulf of Bothmia	Chart	By FAX	IMR	During winter months
	1.	SST at 12 GMT	daily	North Atlantic	Chart	By FAX at 0205 GMT	MN	Model: SST, Method Carstensen
France	2.	State of Sea (forecasts for 12,36,48 hrs.)	daily	North Atlantic	Charts	By FAX at 0205 GMT	MN	Model: DSA 5
	3•	SST at 06 and 18 GMT	daily	Bay of Biscay and adjacent At- lantic region	Charts	Non	СОВ	Model: SSTGASC Method: Carstensen
Rep.	1.	Ice and sailing conditions	daily	Coastal regions of the GDR	Report	Broadcast in German and English 2/day	WKS	During winter period
Germ. Dem.	2.	Ice and sailing conditions	2-3/week	Whole Baltic, Skagerrak and main harbour- fairways of the SE North Sea	Report	By mail	WKS	During winter period

]	Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
p.of	1.	Ice	Monday to Friday	Baltic Skagerrak Coastal areas of North Sea	Report	By mail	DHI	During winter and spring
Fed.Rep	2.	Ice .	on request	Western Baltic	Chart	By FAX 2/day	DHI	During winter
1	3.	Outline of ice distri-bution	2/week	Baltic	Chart	By mail	DHI	During winter and spring
Germany,	4•	Outline of ice edges	2-3/week	Newfound- land Banks region	Chart	By FAX 2/day	DHI	Generally Jan. to July
	5.	SST	weekly	North Sea and adjacent areas	Chart	By mail, and by FAX 2/day	DHI	
	6.	Bottom tem- perature	when suf- ficient data	North Sea	Chart	By mail	DHI	Up to 3 times a year
Netherlands	1.	Waves	daily	North Atlantic	Chart	(Limited)	KNMI	

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		Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
Norway	2.	Sea and swell forecast Ship rout-ing	2/day on request	North Sea (drilling positions) North Atlantic			NMI	For selected ships
Poland	1.	Ice condi- tions Ice condi- tions	3-6/week 2/week	Baltic Sea Baltic Sea	Bulletin Chart	Baltic Sea coun- tries Baltic Sea coun- tries	IMGW IMGW	During winter period During winter period
Sweden	1.	Ice condi- tions and SST	2/week	Baltic Sea Kattegat Skagerrak	Chart	By mail	SMHI	
United Kingdom	i	Mean SST for previous 5 days Ice condi- tions and mean SST for previous 5 days	daily	47°N-70°N 10°E-25°W N.Atlantic 47°N-80°N and Baltic	Chart Chart	By FAX and by mail By FAX and by mail	MO MO	l°C isotherms shown Isotherms at 2°C intervals

		Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
	1.	SST	2/week	East Coast of U.S. to 55°W and 25°N to 45°N	Chart	By mail and FAX	NMC	1°C contours
	2.	Eddies, cur- rents, water masses						
		a.	3/week	Western At- lantic, 35°- 50°N,45°-76°W	Chart	By mail and NAFAX/ DIFAX at 2157 Z	nws/ness	"Oceanographic Analysis"
	!	b.	2/week (Tu,Th)	Western At- lantic, 18°- 36°N,65°-97°W	Chart	By mail and NAFAX/ DIFAX at 2157 Z	nws/ness	"Oceanographic Analysis"
U.S.A.		c.	Weekly	Western At- lantic, 31°- 45°N,55°-76°W	Chart	By mail	AEG	Like 2a but with additional infor- mation on Gulf Stream eddies
	3•	a. Gulf Stream location	. 2/day	Gulf Stream, 27°-44°N, 65°-80°W	Radio message	USCG radio 6506.4 kHz, 8765.4 kHz and 13113.2 kHz	NESS	Position of Gulf Stream western boundary, GS ring centers and dia- meters.Update 3/week "Gulf Stream Wall Bulletin"
		b. Gulf Stream bulletin	4/day	Gulf Stream, 32-40°N, 65-80°W	Radio message	Part of west central N.Atlantic forecasts	nws	Position of Gulf Stræm western boundary.Up- date 3/wk "Rough Gulf Stream Location"
	4•	a. Ice conditions	Weekly	Northern hemi- sphere 95°W east to 105°E	Chart	Mail	NOC/NWS	7-day ice forecast

	Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
U.S.A. (cont.)	4. b. Ice conditions c. Ice conditions	2/month Weekly	Eastern Arctic	Chart Message	Mail Teletype	noc/nws	30-day ice forecast Southern ice limit, smoothed contours of hemispheric sea ice conditions

Part II

Non-Real-Time Data Products

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		Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
	1.	Ice condi- tions	3/week	Eastern Seaboard	Chart	By mail	AES	Mid-December to June.Gulf, East Newfoundland and Grand Banks, Southern Labrador
	2.	Ice condi- tions	weekly	Northern Labrador, Hudson Strait and Davis Strait	Chart	By mail	AES	Mid-June to late November
ıda	3.	Ice condi- tions	annu- ally	Gulf of St. Lawrence, East New- foundland	Report	By mail	AES	Seasonal forecast in early December
Canada	4•	Ice condi- tions	2/month	Gulf of St. Lawrence	Report	By mail	AES	30-day forecast of changes
	, 5 .	Ice condi- tions	annu- ally	Hudson Bay, Hudson Strait, Davis Strait and Appro- aches	Report	By mail	AES	Seasonal forecast in early June
	6.	Ice condi- tions	2/month	Hudson Strait, Davis Strait and Appro- aches	Report	By mail	AES	30-day forecast of changes
	7•	Sea level	annu- ally	Atlantic Coast of Canada	Tables	Year book By mail	CHS	Incl.statistical summaries

		Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
Denmark	1.	Temp.and sal. at a number of levels; surf.cur- rent	annually	Belt Sea Kattegat North Sea	Tables	Yearbook ("Oceanographical observations from Danish light-ves- sels and coastal stations")	DMI	Monthly reprints at request
Deni	2.	SST	annually	Northern North Atlantic	Tables	Yearbook ("Monthly surf.tem- peratures of the N. Atlantic: 50°-80°N, 0°-60°W")	DMI	Monthly values for l°-squares
	3•	Ice condi- tions	annually	Greenland waters	Charts	Yearbook ("The ice conditions in the Greenland waters")	DMI	
	1.	Ice winters (statistics)	at irre- gular in- tervals	Baltic Sea	Tables	Yearbook	IMR	Statistical sum- maries
ıd	2.	Oceanographic parameters	at irre- gular in- tervals	Baltic Sea	Summary Reports	Publ. of IMR	IMR	Observations from oceano- graphic cruises
Finland	3•	Temp.and sal. at a number of levels	at irre- gular in- tervals	Finnish fixed coastal stations	Summary Reports	Publ. of IMR	IMR	
	4•	Sea level	at irre- gular in- tervals	Coast of Finland	Summary Reports	Publ. of IMR	IMR	

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		I	Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
	France	1.	SST -	4/year	Bay of Biscay and adjacent Atlantic region	Charts	In the MET-MAR bul- letin	COB	For every month three 10-day mean charts and one monthly mean chart
	Germ. Dem. Rep.	1.	Temp.,sal., sea level	annually	Some Baltic coastal stations	Tables	Yearbook ("Gewässerkundl. Jahrbuch der DDR")	IWB	
		1.	Temp.,sal., current, state of sea	annually	North Sea Baltic (light- vessels)	Tables	Yearbook ("Meereskundl.Beob- achtungen und Er- gebnisse")	DHI	Time delay approx. 1½ year
	Rep.of	2.	Currents	annually	Mostly changing positions	Tables	Yearbook ("Meereskundl.Beob achtungen und Er- gebnisse")	DHI	Time delay up to some years
rmanv. Fed. B	ermany, Fed. Rep	3.	SST	3/month	Whole nor- thern hemi- sphere	Chart (10-day means with stand. dev.)	By mail and by FAX	D₩	FAX broadcast Tuesday and Friday
	9	4.	SST	weekly	Atlantic N.of 30°N (incl.Medi- terranean and Black Sea)	Chart (7-day means with stand. dev.)	By mail and by FAX	DW	FAX Broadcast Tuesday and Friday

		Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
Iceland	1.	Oceano- graphic para- meters		Stand.sect. around Iceland	Tables		HRS	Worked 4 times/ year (approx.)
	2.	Temp.and sal.		Some coastal stations	Tables		HRS	Weekly observ. (Cont.record- ings of temp. at 1-2 of the stations
and	1.	Temp.and sal.,nutri- ents seri- ally 0 m to bottom	annually	Western coastal waters Ireland	Tables	By mail	UCG	Data report available by request
Ireland	2.	Surface current drifters	period- ically	Coastal waters Ireland	Charts		UCG	Information by request
	3.	Surface water colour	period- ically	Coastal waters Ireland	Tables		UCG	Information by request
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		Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
Netherlands	1.	Oceanogr.and meteorol. parameters	annually	Southern North Sea (light- vessels)	Tables	Yearbook ("Met.en ocean.war- nemingen verricht aan boord van Neder- landse licht-schepen in de Noordzee"	KNMI	
Nethe	2.	Sea level, sea temp.	annually	The Nether- lands coast	Tables	Yearbook ("Jaarboek der Waterhoogten")	RWS	
	3.	Ice condi- tions	annually	The Nether- lands coast		Yearbook ("IJsverslag,bewerkt door de directie Waterhuishouding en Waterbeweging")	RWS	
	4.	Water quality	4/year	Up to 60 km off the Dutch coast and Inland Dutch waters	Report	By mail		RWS-NSD (Att. Librarian
, A	1.	Temp.and sal.	4/year	Norwegian coastal stations	Tables and graphs	Published in "Fiskets Gang"	FHI	10-day mean temp., monthly mean sal., deviations from 30-years normals
Norway	2.	Oceanogr. parameters				Publ. of FHI	FHI	Results of regular cruises
Z	3.	Ice pack boundaries, SST	3/week	Norw.Sea Barents Sea	Chart		NMI	
	4•	Severe ice concentration (forecast)	weekly	Oslofjord Skagerrak (navigable waters and harbours)			NMI	

]	Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
	1.	Temp.,sal., oxygen	monthly	N.Baltic Bothnian Sea			SMHI	
Sweden	2.	Sea level	annually	Swedish coast			SMHI	
SW	3.	Oceanographic parameters	at end of each cruise	Baltic Sea		Reports Charts (oxygen)	NBF	
	4.	Oceanographic parameters	2/year	Baltic Sea Kattegat North Sea	Tables		NBF	
Kingdom	1.	Ice conditions (and mean SST for last 10 days of the month)	monthly	N.hemi- sphere N.of 40°N	Chart		МО	Isotherms at 4°C intervals • About 5 months in arrear
United	2.	Temperature (monthly means)	annually	Engl.and Welsh coastal stations	Tables	Published in "Annales Biolo- ques"	${ m FLL}$,
	3.	10 met.elements incl.SST (monthly summaries)	s annually	N.Atlantic N.of 20°N 20°E-50°W	Tables	UK contrib.to WMO worldwide scheme	MO	Summaries for NAOS and 8 selected sea areas

	Parameters		Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
	4.	Current meter data	annually	Mainly North Sea, English Channel	Inventory	FLL Techn.Rep. Ser.	FLL	Specific data inquiries to FLL
K. (cont.)	5•	Various parameters	at irreg. intervals	The seas around the British Isles	Atlas	FLL Techn.Rep. Ser.	FLL	Inform.relat- ing to, i.a., oceanogr., meteorology, geology, biology, pollution
Ū.	6.	Monthly and annual mean sea levels	periodi- cally	The World	Tables	By mail	PSMSL	FAGS/IAPSO Activity
	7.	Waves	periodi- cally	The World	Inventory	By mail	MIAS(B)	lst issue due autum 1979; RNODC (Waves) Activity
	8.	Current Meter data	on request	Mainly NE Atlantic and adjacent seas	Inventory	By mail	MIAS(B)	Covers UK sources; continually updated by computer

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		Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
	1.	SST marine mammals fish schools	monthly	U.S. conti- nental shelf, Cape Hatteras to Cape Cod	Chart	By mail	USCG	Contoured from air- borne radiation thermometry
	2.	Vertical tem- perature dis- tribution, surface salinity	annually	a. New York to Gulf Stream b. New Orleans through Western Ca-	Atlas Atlas	By mail and "An- nales Biologiques" By mail and "An- nales Biologiques"	AEG AEG	Monthly XBT sections Monthly XBT sections
				ribbean c. Gulf of Maine	Report	By mail and "An- nales Biologiques"	NEFC	Monthly XBT sections
A.	3.	SST, fronts vertical temperature distribution	monthly	Gulf Stream region	Charts Reports	By mail	NWS	"Gulfstream", a book- let combining many sources of informa- tion
U.S.A.	4•	Gulf Stream warm core eddy locations	monthly	U.S.East Coast to 35°N, 65°W	Chart with text	By mail	AEG	Also published by USCG in Atlantic Notice to fisher- men
	5•	Movements of Gulf Stream warm core eddies	annual	Western North Atlantic (36°N,43°N)	Charts tables and text	Mail; published in "Annales Biologiques"	AEG	
	6.	Bottom temperature on the continental shelf and slope	annual	Transect south of New England (vicinity of 71°W long.)	Contoured bottom temperature diagram and vertical sections, tables and text	Mail; published in "Annales Biologiques"	AEG	

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		Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
U.S.S.R.	1.	Temperature, salinity		North Atlantic	Tables	To WDC-B	HMS	
Hydrographique	1.	Temp.and sal. at 10 m and near bottom	monthly	Skagerrak Kattegat	Charts	By mail	SH	l. + 2. also issued as an- nual volumes
drog	2.	Bottom temp. and sal.	monthly	North Sea	Charts	By mail	SH	nuar volumes
Service Hyd	3.	Sea surf. temp. and salinity	annually	North Sea NE. North Atlantic	Tables	By mail	SH	Monthly mean values over areas of loLat. by 2oLong.
ICES Ser	4•	SST (monthly anomalies)	annually	Atlantic N.of 50°N E.coast of Scotland	Tables Graphs	Publ.in: "Annales Biolo- giques"	SH	Anomalies for 15 standard areas
H	5.	SST (monthly means and anomalies)	annually	North Atl. Ocean Weather Stations	Tables	Publ.in: "Annales Biolo- giques"	SH	·

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Addendum. Ireland

Real-Time Data Products

	Parameters	Frequency of Production	Area Covered	Format	Distribution	Produc- ing Agency	Comments
1.	Significant wave height and period Met.data	3-hourly	Kinsale gas platform (51°22'15"N 7°56'43"W)	Table	Transmitted on GTS	Irish Met. Service	Baylor Wave Staff Information by request
2.	Significant wave height and period Met.data	2-4/day (operating season)	West Coast (mobile platforms)	Table		Irish Met. Service	Methods vary Information by request

Non-Real-Time Data Products (in addition to those reported on p.17)

4.	Bottom currents	Perio- dically	Shannon Estuary	Reports	U.C.G.	Information restricted
5•	Meteoro- logical parameters	2/day	South East Ireland	Table	Irish Lights	Information by request
6.	Temperature (sea)	2/day	South East Ireland	Table	Irish Lights	Information by request
7.	Temperature (sea)	2/day	Malin Head	Table	Irish Met. Service	Information by request