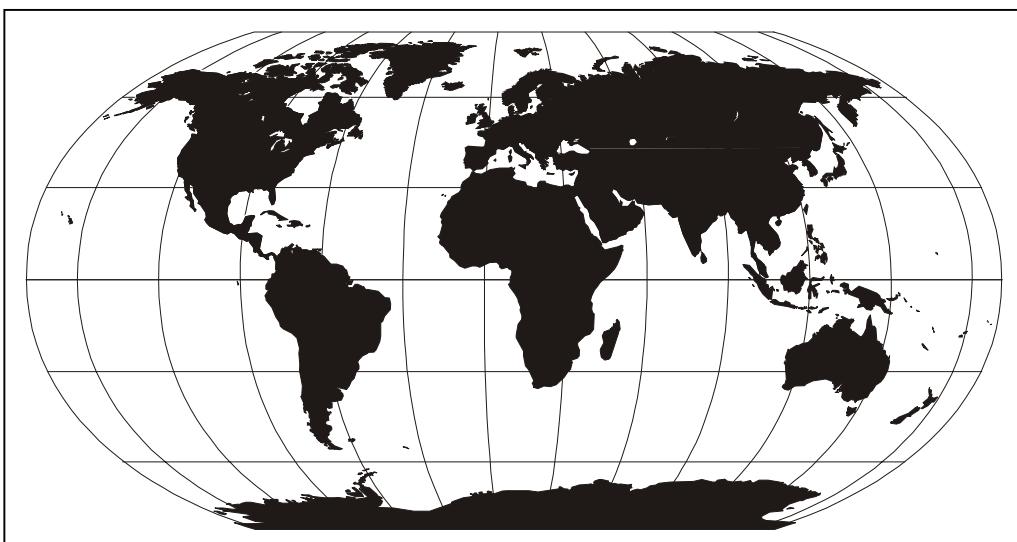




# OPERATIONAL NEWSLETTER

*World Weather Watch and Marine Meteorological Services*



WORLD METEOROLOGICAL ORGANIZATION  
GENEVE  
SWITZERLAND

No. 1/2 - 1999

# OPERATIONAL NEWSLETTER

*World Weather Watch and Marine Meteorological  
Services*

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## EDITORIAL

The *Operational Newsletter* provides information on the World Weather Watch and Marine Meteorological Services and has been issued since 1982 at the request of the Commission for Basic Systems. It is distributed by the World Meteorological Secretariat and is aimed at providing World Weather Watch Centres with a summary of the latest operational information on:

- The Global Observing System
- The Global Telecommunication System
- The Global Data-Processing System
- Data Management
- Codes
- Marine Meteorological Services

A feedback form is included in the Newsletter to assist WMO Members in reporting changes in the present status of implementation of observing programmes of SYNOP, TEMP and PILOT reporting stations.

Your co-operation in ensuring that the above information reaches the appropriate operational units of your service is greatly appreciated.

Should you have any difficulties downloading, viewing or printing the Newsletter please do not hesitate to contact us.

*We look forward to hearing from you*

### Acknowledgements:

The WMO Secretariat would like to express its appreciation to all those who have contributed material to the "Operational Newsletter".

### Operational Newsletter:

#### 6 issues per year:

January/February

March/April

May/June

July/August

September/October

November/December

PLEASE check our World Weather Watch home page for the most recent edition. Alternatively send us your email address and we will contact you when the Newsletter is available.

### Internet:

Rising costs demand that we scale down the distribution of the Newsletter by letter mail, so we strongly encourage our readers to help us become more cost-effective by using our on-line service which is available over the internet at the following url:

#### For access via http:

<http://www.wmo.ch/web/ddbs/jen/>  
Newsletters/index.html

#### For access via ftp:

<ftp://www.wmo.ch/wmo-ddbs/>  
OperationalInfo/Newsletters/

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<http://www.adobe.com/prodindex/Acrobat/readstep.html> full instructions on installation and use are provided.

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## 1999 MEETINGS

### *Related to: The Commission for Basic Systems and Marine Meteorological Services*

Date	Place	Title of the Meeting
1-2 March 1999	World Meteorological Organization Secretariat, Geneva	Commission for Basic Systems Steering Group on Radio Frequency Coordination - 5 <sup>th</sup> Session
2-8 March 1999	Malé, Maldives	World Meteorological Organization/Economic and Social Commission for Asia and the Pacific (WMO/ESCAP) Panel on Tropical Cyclones - 26 <sup>th</sup> Session
8-12 March 1999	Athens, Greece	Commission for Marine Meteorology (CMM) Sub-Group on the Voluntary Observing Ships - 1 <sup>st</sup> Session
15-19 March 1999	Washington, USA	Third Interprogramme Data Management Coordination Meeting
26 March 1999- 2 April 1999	Orlando, USA	Regional Association IV (North and Central America) Hurricane Committee - 21 <sup>st</sup> Session
19-23 April 1999	De Bilt, Netherlands	Expert Meeting on Requirements and Representation of Data from Automatic Weather Stations
12-27 April 1999	Miami, USA	Regional Association IV (North and Central America) Workshop on Hurricane Forecasting and Warning, and Public Weather Services
26-29 April 1999	Beijing, China	Global Ocean Observing System (GOOS) Steering Committee - 2 <sup>nd</sup> Session
April 1999 (date to be decided)	Western & Central Africa (place to be decided)	Expert Meeting on Global Telecommunication Systems upgrade (Satellite-based Systems) in Africa
23-25 June 1999	Paris, France	Intergovernmental Committee for Global Ocean Observing System (GOOS) - 4 <sup>th</sup> Session
23-25 June 1999	Madison, Wisconsin, USA	Expert Team on Observational Data Requirements and Redesign of the Global Observing System
19-23 July 1999	San José, Costa Rica	Regional Training Seminar on the use of GDPS Products with Statistical Adaptations
19-23 July 1999	St. Petersburg, Russian Federation	Commission for Marine Meteorology (CMM) Advisory Working Group - 9 <sup>th</sup> Session and World Meteorological Organization/Intergovernmental Oceanographic Commission (WMO/IOC) Transition Planning Meeting for Joint Technical Commission for Oceanography and Marine Meteorology (JCOMM)
19-23 July 1999	San José, Costa Rica	Regional Training Seminar on Operational Post-processing Techniques for Application of Numerical Weather Prediction Products (for Regional Association III (South America) and Regional Association IV (North and Central America))
September 1999 (date to be decided)	Place to be decided	Expert Meeting on Long Range Verification Systems

8-15 September 1999	Vancouver, Canada	Workshop on Advances in Marine Climatology (CLIMAR 99) (co-sponsored by WMO)
September 1999 (Date to be decided)	Maputo, Mozambique (tentative)	Regional Association I (Africa) Tropical Cyclone Committee for the South-West Indian Ocean - 14 <sup>th</sup> Session
29 September - 1 October 1999	Norkopping, Sweden	Automated Shipboard Aerological Programme (ASAP) Coordinating Committee, 11 <sup>th</sup> Session
October 1999 (Date to be decided)	Monterey, CA, USA (tentative)	Expert Meeting on the evolution of Data Formats
26 October - 3 November 1999	Wellington, New Zealand	Data Buoy Cooperation Panel - 15 <sup>th</sup> Session and ARGOS Joint tariff Agreement - 19 <sup>th</sup> Meeting
5-11 November 1999 (tentative)	St. Denis, La Réunion (tentative)	Third Tropical Cyclone Regional Specialized Meteorological Centres (RSMCs) Technical Coordination Meeting
8-12 November 1999	Melbourne, Australia	Training Workshop for Port Meteorological Officers in Regions II (Asia) and V (South-West Pacific)
8-19 November 1999	St. Denis, La Réunion (tentative)	Regional Association I (Africa) Training course on Tropical Cyclones (co-sponsored by the World Meteorological Organization (WMO))
23-29 November 1999	Seoul, Korea	Economic and Social Commission for Asia and the Pacific/World Meteorological Organization (ESCAP/WMO) Typhoon Committee - 32 <sup>nd</sup> Session
November 1999	Pretoria, South Africa	Implementation Coordination Meeting on Data Processing and Forecasting Systems
1999 (Date to be decided)	China (Place to be decided)	Regional Workshop on Doppler Tropical Cyclone Radars organized by the Typhoon Committee and Panel on Tropical Cyclones in cooperation with the World Meteorological Organization
1999 (date to be decided)	Beijing, China (tentative)	Regional Training Seminar on Operational Post-processing Techniques for Application of Numerical Weather Prediction (NWP) Products (for Regional Association II (Asia) and V (South-West Pacific))
1999 (Date to be decided)	Place to be decided	Expert meeting on Environmental Emergency Response
1999 (Date to be decided)	Place to be decided	Working Group on planning and implementation of the WWW in Region II - 3 <sup>rd</sup> Session

*Meeting Scheduled in 2000*

October 2000 (Date to be decided)	Place to be decided	Commission for Basic Systems - 12 <sup>th</sup> Session
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# GLOBAL OBSERVING SYSTEM

## Aerodrome meteorological stations

### Notification from the Czech Republic

Based on national requirements in accordance with Annex 5 to the Convention on International Civil Aviation. Aerodrome meteorological stations of the Czech Republic have been reporting wind speed in knots in all aeronautical messages since 28 January 1999, 00 UTC.

the data file will be made available in the near future in a fixed-width version, which will include abbreviated country names using the international 3-letter ISO codes.

Zipped versions of both formats will also be available at the same time.

## Radiosoundings

### Notification from Portugal

Radiosoundings have been resumed in Lisbon since 22 January 1999 and in Funchal since 19 January 1999. At present soundings are only being carried out at 12 UTC in both stations.

### Volume C1 - Catalogue of Meteorological Bulletins

Is currently available on-line at the following locations: <http://www.wmo.ch/web/ddbs/jen/volc/index.html> and <ftp://www.wmo.ch/wmo-ddbs/OperationalInfo/VolumeC1/>

The site currently offers three different versions of the "Master data file":

1. Zipped version, approximately 137 KB
2. Zipped executable version, approximately 153 KB
3. Normal (ie unzipped) version (978 KB)

## WMO Publication No. 9

### Volume A - Observing Stations

The web site: <http://www.wmo.ch/web/ddbs/publicat.html> currently offers a tab-delimited version of the basic data file. In response to requests from some Centres

Should you have any problems using these data files, please do not hesitate to get in touch with us.

## AUTOMATIC MARINE STATIONS

KEY: Observed or Technical Parameters

Column	Parameters	Column	Parameters
1	Wind direction, speed and peak wind	12	Battery Voltage (BV)
2	Air temperature		
3	Air pressure	-	Parameter not observed
4	Pressure tendency	X	Buoy observes this parameter
5	Sea-surface temperature	.	Data under evaluation, not reported
6	Wave period and height		
7	Wave spectra	B	Buoy beached, sensor reporting
8	Drogued	N	No sensor installed
9	Subsurface temperatures	Q	Data questionable, but reported
10	Relative humidity	R	Buoy Retrieved
11	Visibility	S	Sensor/system failure

## CANADA

## Moored Buoys

North-east Pacific Ocean (SNVD17 &amp; SXCN50 CWVR, SNVD04 CWEG)

WMO Buoy Id	ARGOS Id	Position: 02 February 1999		Observed or Technical Parameters										
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11
46004	7180	50 58' N	135 48' W	X	X	X	X	X	X	X	N/A	.	.	.
46036	7195	48 21' N	133 55' W	X	X	X	X	X	X	X	N/A	.	.	.
46131	N/A	49 54' N	124 59' W	X	X	X	X	X	X	X	N/A	.	.	.
46132	7196	49 44' N	127 55' W	X	X	X	X	X	X	X	N/A	.	.	.
46145	7197	54 23' N	132 26' W	X	X	X	X	X	X	X	N/A	.	.	.
46146	N/A	49 20' N	123 44' W	S	S	S	S	S	S	S	N/A	.	.	.
46147	4485	51 49' N	131 12' W	X	X	X	X	X	X	X	N/A	.	.	.
46181	N/A	53 50' N	128 50' W	X	X	X	X	X	X	X	N/A	.	.	.
46183	7186	53 37' N	131 06' W	X	X	X	X	X	X	X	N/A	.	.	.
46184	7182	53 54' N	138 52' W	S	X	X	X	X	X	X	N/A	.	.	.
46185	7194	52 24' N	129 47' W	X	X	X	X	X	X	X	N/A	.	.	.
46204	4484	51 22' N	128 45' W	X	X	X	X	X	X	X	N/A	.	.	.
46205	7183	54 10' N	134 20' W	X	X	X	X	X	X	X	N/A	.	.	.
46206	7187	48 50' N	126 00' W	X	X	X	X	X	X	X	N/A	.	.	.
46207	7193	50 52' N	129 55' W	X	X	X	X	X	X	X	N/A	.	.	.
46208	7184	52 30' N	132 42' W	S	S	S	S	S	S	S	N/A	.	.	.

## Moored Buoys

North-west Atlantic Ocean

WMO Buoy Id	ARGOS Id	Position: 02 February 1999		Observed or Technical Parameters										
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11
44137	5579	41 50' N	060 56' W	X	X	X	X	X	X	X	N/A	.	.	.
44138	5577	44 16' N	053 37' W	S	S	S	S	S	S	S	N/A	.	.	.
44139	3448	44 11' N	057 33' W	S	S	S	S	S	S	S	N/A	.	.	.
44140	5576	43 50' N	051 29' W	X	X	X	X	X	X	X	N/A	.	.	.
44141	3449	42 07' N	056 11' W	S	X	X	X	X	X	X	N/A	.	.	.
44142	5578	42 30' N	064 01' W	X	X	X	X	X	X	X	N/A	.	.	.
44251	9234	46 26' N	053 23' W	X	X	X	X	X	X	X	N/A	.	.	.
44255	9233	47 17' N	057 21' W	X	X	X	X	X	X	X	N/A	.	.	.

## Moored Buoys

Gt Slave Lk., Lk. Winnipeg, Great Lks., Gulf of St. Lawrence

WMO Buoy Id	ARGOS Id	Position: 02 February 1999		Observed or Technical Parameters										
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11
45132	N/A	42 48' N	081 13' W	.	.	.	.	.	.	.	N/A	.	.	.
45135	N/A	43 47' N	076 52' W	X	X	X	X	X	X	X	N/A	.	.	.
45136	N/A	48 32' N	086 57' W	.	.	.	.	.	.	.	N/A	.	.	.

45137	N/A	45 33' N	081 01' W	.	.	.	.	.	.	.	N/A	.	.	.
45138	3436	49 33' N	065 46' W	.	.	.	.	.	.	.	N/A	.	.	.
45139	N/A	43 26' N	079 23' W	S	S	S	S	S	S	S	N/A	.	.	.
45140	8671	50 47' N	096 44' W	.	.	.	.	.	.	.	N/A	.	.	.
45141	N/A	61 07' N	115 11' W	.	.	.	.	.	.	.	N/A	.	.	.
45142	N/A	42 44' N	079 17' W	.	.	.	.	.	.	.	N/A	.	.	.
45143	N/A	44 55' N	080 38' W	.	.	.	.	.	.	.	N/A	.	.	.
45150	3439	61 55' N	113 45' W	.	.	.	.	.	.	.	N/A	.	.	.

## Drifting Buoys

### Pacific Ocean

WMO Buoy Id	ARGOS Id	Position: 02 February 1999		Observed or Technical Parameters										
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11
46632	12517	59 24' N	142 30' W	X	X	X	X	X	.	.	X	.	.	.
46661	12521	46 18' N	149 24' W	X	*	X	X	X	.	.	X	.	.	.
46692	12513	42 36' N	136 36' W	*	X	X	X	X	.	.	X	.	.	.
46698	12515	48 06' N	146 00' W	X	*	X	X	X	.	.	X	.	.	.

#### **Remarks:**

44141 - Winds u/s Sept 03/98.  
 45132 - Removed for the Winter Nov. 23.  
 45136 - Removed for the Winter.  
 45137 - Removed for the Winter Nov. 02.  
 45138 - Removed for the Winter Nov. 25.  
 45140 - Removed for the Winter Oct. 23.  
 45141 - Removed for the Winter Oct. 14.  
 45142 - Removed for the Winter Nov. 24.  
 45143 - Removed for the Winter Nov. 18. Failed Nov. 06.  
 45144 - No deployment in 1998.  
 45150 - Removed for the Winter Sept. 23  
 46132 - DBE from Nov. 27 until Jan. 22.  
 46184 - Wind #1 u/s Jan. 03. Compass #2 u/s. Wind speed #2 available

46661 - Air temp failed Sept. 06.

46692 - Wind failed Nov.20.

46698 - Air temp. failed Oct 05

#### **Failed:**

44138 - Last transmission Dec.14/98  
 44139 - Transmpter failure  
 45139 - Failed Jan 15. Xmtg DBE  
 46146 - Failed Jan 28. Xmtg DBE  
 46208 - Failed Dec 19. Xmtg DBE.

## UNITED STATES OF AMERICA

List of U.S.A. Ocean Data Acquisition Systems (ODAS) included in the Data Platform Status Report of the Data Buoy Centre of the National Oceanic and Atmospheric Administration (NOAA) on 19 February 1999. Data from moored buoys and platforms are collected by geostationary meteorological satellites and reports are distributed on the GTS in SHIP code. Data from drifting buoys are collected by the ARGOS system and distributed on the GTS in DRIFTER CODE.

## Moored Buoys

WMO Buoy Id	ARGOS Id	Position: 11-18 February 1999		Observed or Technical Parameters										
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11
41001*		34.68N	72.64W	X	X	X	-	X	X	X	-	-	-	-
41002*		32.28N	75.20W	X	X	X	-	X	X	X	-	-	-	-
41004*		32.51N	79.10W	X	X	X	-	X	X	X	-	-	-	-
41008*		31.40N	80.87W	X	X	X	-	X	X	X	-	-	-	-
41009		28.50N	80.18W	X	X	X	-	X	X	X	-	-	-	-
41010		28.89N	78.55W	X	X	X	-	X	X	X	-	-	-	-
42001*		25.93N	89.65W	X	S	X	-	S	X	X	-	-	-	-
42002*		25.89N	93.57W	S	S	S	-	S	S	S	-	-	-	-
42003*		25.94N	85.91W	X	X	X	-	X	X	X	-	-	-	-
42007*		30.10N	88.77W	X	X	X	-	X	X	X	-	-	-	-
42019*		27.92N	95.35W	X	X	X	-	X	X	X	-	-	-	-
42020*		26.92N	96.70W	X	X	X	-	X	S	S	-	-	-	-
42035*		29.25N	94.41W	X	X	X	-	X	X	X	-	-	-	-
42036*		28.51N	84.51W	X	X	X	-	X	X	X	-	-	-	-
42039		28.78N	86.04W	X	X	X	-	X	X	X	-	-	-	-
42040		29.20N	88.25W	X	X	X	-	X	X	X	-	-	-	-
44004*		38.46N	70.69W	X	X	X	-	X	X	X	-	-	-	-
44005*		42.90N	68.89W	X	X	X	-	X	X	X	-	-	-	-
44007*		43.53N	70.14W	X	X	X	-	S	X	X	-	-	-	-
44008*		40.50N	69.43W	X	X	X	-	X	X	X	-	-	-	-
44009*		38.46N	74.70W	X	X	X	-	X	X	X	-	-	-	-
44011*		41.08N	66.58W	X	X	X	-	X	X	X	-	-	-	-
44013		42.35N	70.69W	X	X	X	-	X	X	X	-	-	-	-
44014		36.58N	74.83W	X	X	X	-	X	X	X	-	-	-	-
44025*		40.25N	73.17W	X	X	X	-	X	X	X	-	-	-	-
45001*		48.06N	87.78W	R	R	R	-	R	R	R	-	-	-	-
45002*		45.30N	86.42W	R	R	R	-	R	R	R	-	-	-	-
45003*		45.33N	82.77W	R	R	R	-	R	R	R	-	-	-	-
45004*		47.56N	86.55W	R	R	R	-	R	R	R	-	-	-	-
45005*		41.67N	82.39W	R	R	R	-	R	R	R	-	-	-	-
45006*		47.32N	89.87W	R	R	R	-	R	R	R	-	-	-	-
45007*		42.67N	87.02W	R	R	R	-	R	R	R	-	-	-	-
45008*		44.28N	82.42W	R	R	R	-	R	R	R	-	-	-	-
46001*		56.30N	148.17W	S	X	X	-	X	X	X	-	-	-	-
46002*		42.53N	130.26W	R	R	R	-	R	R	R	-	-	-	-
46003*		49.59N	154.81W	X	X	X	-	X	X	X	-	-	-	-
46005*		46.08N	131.00W	X	X	X	-	X	X	X	-	-	-	-
46006*		40.84N	137.49W	X	X	X	-	X	X	X	-	-	-	-
46011*		34.88N	120.87W	X	X	X	-	X	X	X	-	-	-	-
46012*		37.39N	122.72W	S	X	X	-	X	X	X	-	-	-	-
46013*		38.23N	123.33W	X	X	X	-	X	X	X	-	-	-	-
46014*		39.22N	123.97W	X	X	X	-	S	X	X	-	-	-	-
46022*		40.74N	124.51W	X	X	X	-	X	X	X	-	-	-	-
46023		34.71N	120.97W	X	X	X	-	X	X	X	-	-	-	-
46025*		33.75N	119.08W	X	X	X	-	X	X	X	-	-	-	-
46026*		37.76N	122.83W	S	S	S	-	S	S	S	-	-	-	-
46027*		41.85N	124.38W	X	X	X	-	X	X	X	-	-	-	-
46028*		35.74N	121.89W	X	X	X	-	X	X	X	-	-	-	-
46029*		46.12N	124.50W	X	X	X	-	X	X	X	-	-	-	-
46030*		40.42N	124.53W	X	X	X	-	X	S	S	-	-	-	-

46035*		56.91N	177.81W	X	X	X	-	X	X	X	-	-	-	-
46041*		47.42N	124.53W	S	S	S	-	S	S	S	-	-	-	-
46042*		36.75N	122.42W	X	X	X	-	X	X	X	-	-	-	-
46045*		33.84N	118.45W	S	S	S	-	S	S	S	-	-	-	-
46050*		44.62N	124.53W	X	X	X	-	X	X	X	-	-	-	-
46053*		34.24N	119.85W	X	X	X	-	X	X	X	-	-	-	-
46054		34.27N	120.45W	X	X	X	-	X	X	X	-	-	-	-
46059*		37.98N	130.00W	X	S	S	-	X	X	X	-	-	-	-
46060*		60.58N	146.83W	X	X	X	-	X	X	X	-	-	-	-
46061*		60.22N	146.83W	X	X	X	-	X	X	X	-	-	-	-
46062		35.10N	121.01W	X	X	X	-	X	X	X	-	-	-	-
46063*		34.25N	120.66W	X	X	X	-	X	X	X	-	-	-	-
51001*		23.40N	162.27W	X	X	X	-	X	X	X	-	-	-	-
51002*		17.19N	157.83W	X	X	X	-	X	X	X	-	-	-	-
51003*		19.17N	160.73W	X	X	X	-	X	X	X	-	-	-	-
51004*		17.44N	152.52W	X	X	X	-	X	X	X	-	-	-	-
51028		.00N	153.88W	X	X	X	-	X	X	X	-	-	-	-

\* Base funded station of National Weather Service (NWS); however, all stations report data to NWS.

Total Base Funded Buoys: 57

Total Other Buoys 10

Total Moored Buoys 67

#### REMARKS:

41008 - Water temp data failed 8/11/98, restored 2/13/99.  
 42001 - Water temp data failed 4/6/98, air temp data failed 9/10/98.  
 42002 - Station failed 12/24/98.  
 42020 - Wave data failed 11/10/98, service scheduled week of 2/22/99.  
 44007 - Water temp data failed 8/14/98.  
 44011 - Station in test for service 2/14/99 - 2/16/99.  
 45001 - Buoy recovered for winter season 10/21/98, redeployment scheduled week of 3/29/99.  
 45002 - Buoy recovered for winter season 11/5/98, redeployment scheduled week of 3/8/99.  
 45003 - Buoy recovered for winter season 11/6/98.  
 45004 - Buoy recovered for winter season 10/21/98, redeployment scheduled week of 3/29/99.  
 45005 - Buoy recovered for winter season 12/7/98, redeployment scheduled week of 4/12/99.  
 45006 - Buoy recovered for winter season 10/21/98, redeployment scheduled week of 3/29/99.

45007 - Buoy recovered for winter season 12/10/98, redeployment scheduled week of 3/8/99.  
 45008 - Buoy recovered for winter season 11/16/98, redeployment scheduled week of 4/19/99.  
 46001 - Wind data failed 11/13/98.  
 46002 - Buoy confirmed adrift 9/24/98, recovered 12/4/98.  
 46003 - Buoy confirmed adrift 12/5/98, service scheduled week of 2/22/99.  
 46005 - Wind data failed 2/12/99.  
 46006 - Parity errors in data.  
 46012 - Wind data failed 2/4/99.  
 46014 - Water temp data failed 11/22/98.  
 46026 - Station failed 1/20/99.  
 46030 - Wave data failed 1/14/99.  
 46041 - Station failed 12/1/98, service scheduled week of 2/22/99, weather dependent.  
 46045 - Buoy confirmed adrift 2/10/99.  
 46059 - Air temp and pressure data failed 12/10/97.

# AUSTRALIA

## Drifting Buoys (Drogued/Undrogued)

WMO Buoy Id	ARGOS Id	Position: 31 December 1998		Observed or Technical Parameters										
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11
52624	2942	-13.776	138.275	X	X	X	X	X	-	-	-	-	-	-
53551	8097	-14.283	118.21	-	-	X	X	X	-	-	-	-	-	-
55525	2948	-43.124	152.013	-	X	X	X	X	-	-	-	-	-	-
56521	2934	-23.26	-82.585	-	-	S	-	X	-	-	-	-	-	-
56529	4873	-29.919	73.426	-	-	X	-	X	-	-	-	-	-	-
56531	4872	-16.417	58.927	-	-	S	-	X	-	-	-	-	-	-
56535	2939	-55.232	-92.235	-	X	X	X	X	-	-	-	-	-	-
56536	4876	-44.078	-167.215	-	-	S	-	X	-	-	-	-	-	-
56537	2930	-19.525	86.436	X	X	X	X	S	-	-	-	-	-	-
56539	8035	-45.126	137.671	-	X	X	X	X	-	-	-	-	-	-
56540	4877	-31.032	109.966	-	-	X	X	X	-	-	-	-	-	-
56541	8037	-61.668	123.302	-	X	X	X	X	-	-	-	-	-	-
56542	8038	-50.243	145.963	-	X	X	X	X	-	-	-	-	-	-
56544	8039	-19.657	101.4	X	X	X	X	X	-	-	-	-	-	-
56545	2693	-40.867	112.289	-	X	X	X	X	-	-	-	-	-	-
56546	2489	-47.607	120.011	-	X	X	X	X	-	-	-	-	-	-
56547	2937	-40.694	86.963	-	X	S	S	S	-	-	-	-	-	-

# FRANCE

## Moored Buoys

WMO Buoy Id	ARGOS Id	Position: 17 February 1999		Observed or Technical Parameters										
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11
15001*	-	10.0S	10.0W	X	X	-	-	X	-	-	-	X	-	-
15002*	-	0	10.0W	X	X	-	-	X	-	-	-	X	-	-
15003*	-	6.0S	10.0W	X	X	-	-	X	-	-	-	X	-	-
41097	5832	14.9N	61.1W	-	-	-	-	X	X	.	-	-	-	-
41098	5834	14.6N	60.8W	-	-	-	-	X	X	.	-	-	-	-
62001**	-	45.2N	5.0W	X	X	X	X	X	X	-	-	-	X	-
62163**	-	47.5N	8.5W	X	X	X	X	S	X	-	-	-	X	-

\* Pirata project

\*\* Cooperation UK Met.Office/Meteo-France

## Drifting Buoys

### Indian and Pacific Oceans

WMO Buoy Id	ARGOS Id	Position: 17 February 1999		Observed or Technical Parameters										
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11
14537	29755	13.0S	62.3E	-	-	X	X	X	-	-	X	-	-	-
23584	6574	6.2S	42.8E	-	-	X	X	X	-	-	X	-	-	-

23585	5882	12.3S	44.5E	S	-	X	-	X	-	-	X	-	-	-
23586	6152	4.4S	101.8E	-	-	X	X	S	-	-	X	-	-	-
23588	29753	3.3S	98.2E	-	-	S	S	X	-	-	X	-	-	-
23589	29754	3.5S	82.9E	-	-	X	X	X	-	-	X	-	-	-
51683	5246	13.3S	153.2W	-	-	X	X	X	-	-	X	-	-	-
51684	5247	23.3S	155.9W	-	-	X	X	X	-	-	X	-	-	-
51685	5248	13.6S	154.3W	-	-	X	X	X	-	-	X	-	-	-
51686	5249	13.5S	159.9W	-	-	X	X	X	-	-	X	-	-	-

**Drifting Buoys  
Tropical Atlantic Ocean**

WMO Buoy Id	ARGOS Id	Position: 17 February 1999		Observed or Technical Parameters										
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11
41598	8259	26.7N	44.9W	S	-	X	-	X	-	-	X	-	-	-
41599	8260	26.2N	36.5W	S	-	X	-	X	-	-	X	-	-	-
41636	8717	19.7N	60.4W	X	-	X	-	X	-	-	X	-	-	-
41637	8718	24.4N	48.6W	X	-	X	-	X	-	-	X	-	-	-
41638	8719	23.3N	61.8W	X	-	X	-	X	-	-	X	-	-	-

**Drifting Buoys  
North Atlantic Ocean**

WMO Buoy Id	ARGOS Id	Position: 17 February 1999		Observed or Technical Parameters										
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	10	11
44601	5878	54.0N	28.4W	X	-	X	-	X	-	-	X	-	-	-
44607	6216	51.4N	46.4W	X	-	X	-	X	-	-	X	-	-	-
44608	14540	49.0N	47.3W	-	-	X	X	X	-	-	X	-	-	-
44610	12734	54.2N	43.0W	-	-	X	X	X	-	-	X	-	-	-
62511	12729	45.0N	18.3W	-	-	X	X	X	-	-	X	-	-	-
62512	12730	46.4N	17.9W	-	-	X	X	X	-	-	X	-	-	-
62513	12731	47.7N	10.4W	-	-	X	X	X	-	-	X	-	-	-
62515	6569	62.3N	9.8W	-	-	X	X	X	-	-	X	-	-	-
62517	5823	46.5N	8.6W	X	S	S	S	X	-	-	-	-	-	-
62518	6149	42.3N	14.5W	-	-	S	S	X	-	-	X	-	-	-
62519	6570	37.3N	20.6W	-	-	X	X	S	-	-	X	-	-	-
62520	14431	42.5N	20.4W	-	-	X	X	X	-	-	-	-	-	-
62554	14430	45.4N	14.7W	-	-	X	X	X	-	-	-	-	-	-
62758	15516	40.0N	12.0W	S	-	X	-	X	-	-	-	X	-	-
64517	14178	64.2N	30.0W	-	-	X	X	X	-	-	X	-	-	-
64518	14180	64.4N	26.8W	-	-	X	X	X	-	-	X	-	-	-
64520	14198	64.2N	32.4W	-	-	X	X	X	-	-	X	-	-	-

## ARGOS SERVICE

### ARGOS monthly status report

Date of Statistics computation: 4 January 1999

#### Reports handled by ARGOS Service

List of monthly collected ARGOSS platforms sorted by type of platform

DRIFTING BUOY	1047
MARINE STATION	120
MOORED BUOY	301
TERRESTRIAL ANIMALS	99
MARINE ANIMALS	180
BIRDS	129
BALLOONS	8
RAFOS FLOATS	129
FIXED STATION	614
TOTAL	2627

#### Reports inserted into the GTS

(List of monthly collected ARGOS platforms on indicated GTS sites sorted by type of platform)

#### INSERTED BY RTH TOULOUSE

DRIFTING BUOY	140
FIXED STATION	18
MOORED BUOYS	9

#### INSERTED BY RTH/WMC WASHINGTON

DRIFTING BUOY	478
FIXED STATIONS	27
GPS MOBILE	5
MOORED BUOY	68

#### CODING STATISTICS OF PLATFORMS

Reporting through ARGOS and distributed over the GTS

BATHY	466
BUOY	224777
SHIP	2403
SIMPLE	282
SYNOP	30681
TOTAL	258609

Date of Statistics computation: 1 February 1999

#### Reports handled by ARGOS Service

List of monthly collected ARGOSS platforms sorted by type of platform

DRIFTING BUOY	1038
MARINE STATION	122
MOORED BUOY	292
TERRESTRIAL ANIMALS	94
MARINE ANIMALS	189
BIRDS	155
BALLOONS	9
RAFOS FLOATS	118
FIXED STATION	614
TOTAL	2631

#### Reports inserted into the GTS

(List of monthly collected ARGOS platforms on indicated GTS sites sorted by type of platform)

#### INSERTED BY RTH TOULOUSE

DRIFTING BUOY	134
FIXED STATION	21
MOORED BUOYS	7

#### INSERTED BY RTH/WMC WASHINGTON

DRIFTING BUOY	479
FIXED STATIONS	31
GPS MOBILE	5
MOORED BUOY	66

#### CODING STATISTICS OF PLATFORMS

Reporting through ARGOS and distributed over the GTS

BATHY	516
BUOY	222175
SHIP	1951
SIMPLE	133
SYNOP	30728
TOTAL	255503

## Feed-back from Members to the Secretariat on any Changes in the Observing Network

In view of the difficulties experienced in identifying non-implemented observing stations, implemented stations which are closed or suspended for a certain period, or stations making observations that do not reach their NMCs, a special table accompanied by explanatory notes is included in this Newsletter. The table will serve as feed-back from Members to the Secretariat on any changes of the present state of implementation of observing programmes of SYNOP, TEMP and PILOT reporting stations.

Members are urged to fill in the table attached as and when appropriate, and to return it to the Secretariat before the 20th of every other month, i.e. February, April, June, August, October, December, to enable changes to be included in the next "Newsletter".

### Explanatory Notes

Separate tables should be prepared for global exchange and regional exchange respectively. These tables should contain information concerning any changes of the present state of implementation of observing programmes of SYNOP, TEMP and PILOT reporting stations for Volume A and the Catalogue of Meteorological Bulletins.

For entries in these tables, the following should be taken into account:

#### Column A:

The station index number (IIii) and station name;

#### Column B:

Latitude and Longitude in degrees and minutes with the appropriate letters (N, S, E and W);

#### Column C:

The TTAii CCCC of the abbreviated headings of the meteorological bulletins which contain reports from the station should be inserted;

#### Column D:

"X" for implementation and "-" for non-implementation should be inserted as appropriate. In

order to easily identify changes in the programme, these should be marked in red;

#### Column E:

HP = Elevation of the station in metres (the datum level to which barometric pressure reports at the station refer);

H = Elevation of the ground, in metres, (average level of terrain in immediate vicinity of station), for stations not located on aerodromes;

HA= Official altitude of the aerodrome given for stations located on aerodromes is indicated by the letter "A" in the column "Other observations and Remarks" of Volume A;

#### Column F:

For those stations not indicating pressure reduced to mean sea level (group 4PPPP) in their synoptic reports, the entry in this column shows which information is reported in lieu of group 4PPPP:

Station	Pressure at station level reported using group 3P <sub>o</sub> P <sub>o</sub> P <sub>o</sub> P <sub>o</sub>
1000 hPa	
850 hPa	Geopotential of the given standard isobaric surface reported using group 4a3hhh
700 hPa	
500 hPa	

#### Column G:

Reasons for temporary suspension of observing programmes and an expected date of resumption of the programmes should be given as far as possible. Non-standard collection and/or distribution times should also be included, and also possible alternate observing stations, as appropriate.

These tables should be sent to:

World Meteorological Organization  
Public Weather and Operational  
Information Unit  
41, avenue Giuseppe-Motta  
Case postale No. 2300  
CH-1211 GENEVA 2

**BEFORE the 15th of the month**

for inclusion in the  
***"OPERATIONAL NEWSLETTER"***





Publication No. 9  
Volume A "Observing Stations"

Index No.	Name	Lat.	Long.	Elevation		Pressure Level	Surface Observations								OBS. H	Upper-air				Other Observations and remarks
				HP	H/HA		00	03	06	09	12	15	18	21	OBS.S	00	06	12	18	

## REGION II - NEPAL: amendment

44477	DHANKUTA	26 98N	87 35E	1210	1445	850 HPA	X	X	X	X	.	.	.	.	.	.	.	.	.	AGRIMET;EVAP;SOILTEMP; SUNDUR
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## REGION II - THAILAND: New weather observation surface stations:

48437	BURI-RAM	15 13N	103 14E	184	182															
48372	SUKHOTHAI	17 06N	99 48E	50	48															
48307	TUNG CHANG	19 24N	100 53E	335	333															
48440	SRAKAEW	13 47N	100 23E	43	41															
48574	SA-DAO	06 47N	100 23E	26	24															

## REGION V - AUSTRALIA: new

94100	KALUMBURU	14 18S	126 38E	24	23		01	04	07	10	13	16	19	22		.	.	.	.	AUT
94130	BRADSHAW	14 57S	130 48E	76	75		23	.	05	.	11	.	17	.		.	.	.	.	AUT
94176	INJINOO AIRPORT	10 57S	142 27E	17	15		23	.	05	.	.	.	.	.		.	.	.	.	A
94206	FITZROY CROSSING AERO	18 11S	125 34E	115	112		01	04	07	10	13	16	19	22		.	.	.	.	A;AUT
94230	KIDMAN SPRINGS	16 07S	130 57E		100		23	.	05	.	.	.	.	.		.	.	.	.	EVAP:
94231	LAJAMANU	18 20S	130 38E	317	318		23	.	.	.	.	.	.	.		.	.	.	.	A
94334	BEDOURIE POLICE STATION	24 22S	139 28E	102	100		23	.	05	.	.	.	.	.	20		.	.	.	
94341	RICHMOND AIRPORT	20 42S	143 07E	207	206		23	02	05	08	11	14	17	20	H00-24	.	.	.	.	A;AUT;EVAP
94457	WARBURTON AIRFIELD	26 08S	126 35E	460	457		01	04	07	10	13	16	19	22		.	.	.	.	A;AUT
94474	PUKATJA	26 16S	132 11E	704	707		23	02	05	08	11	14	17	20		.	.	.	.	A;AUT
94498	LIGHTNING RIDGE CENTRAL SCHOOL	29 26S	147 59E		158		23	.	05	.	.	.	.	.		.	.	.	.	Remaks: Station without a Barometer
94517	ST GEORGE AIRPORT	28 03S	148 36E	199	200		23	02	05	08	11	14	17	20		.	.	.	.	A;AUT
94544	PINDARI DAM	29 24S	151 14E		472		23	.	.	.	.	.	.	.		.	.	.	.	EVAP: Remaks: Station without a Barometer
94548	BAROON POCKET DAM	26 43S	152 52E		230		23	.	05	.	.	.	.	.		.	.	.	.	EVAP: Remaks: Station without a Barometer
94558	TOOLARA (KELLY)	25 58S	152 52E		80		23	02	05	08	11	14	17	20	H00-24	.	.	.	.	AUT: Remaks: Station without a Barometer
94598	EVANS HEAD RAAF BOMBING RANGE	29 11S	153 24E	63	63		23	02	05	08	11	14	17	20	S00-24	.	.	.	.	AUT
94640	WINDY HARBOUR	34 50S	116 02E	3	5		01	.	07	.	.	.	.	22		.	.	.	.	

Index No.	Name	Lat.	Long.	Elevation		Pressure Level	Surface Observations									OBS. H	Upper-air				Other Observations and remarks
				HP	H/HA		00	03	06	09	12	15	18	21	OBS.S	00	06	12	18		
94683	KUITPO FOREST RESERVE	35 10S	138 40E		365		23	02	05	08	11	14	17	20	H00-24	.	.	.	.	AUT: Remaks: Station without a Barometer	
94724	WELLINGTON RESEARCH CENTRE	32 30S	148 58E		390		23	.	.	.	.	.	.	.		.	.	.	.	EVAP;SOILTEMP;SUNDUR: Remaks: Station without a Barometer	
94725	GRENFELL (QUONDONG RD)	33 54S	148 10E		410		23	.	05	.	.	.	.	.		.	.	.	.	Remaks: Station without a Barometer	
94738	SCONE SCS	32 04S	150 56E		216		23	.	05	.	.	.	.	.		.	.	.	.	EVAP;SOILTEMP;SUNDUR: Remaks: Station without a Barometer	
94740	GUNNEDAH SCS	31 02S	150 16E		307		23	.	.	.	.	.	.	.		.	.	.	.	EVAP;SOILTEMP: Remaks: Station without a Barometer	
94755	CAMDEN AIRPORT	34 02S	150 41E	75	70		23	02	05	08	11	14	17	20	S00-24	.	.	.	.	A;AUT	
94760	HORSLEY PARK EQUESTRIAN CENTRE	33 51S	150 51E		100		23	02	05	08	11	14	17	20		.	.	.	.	AUT: Remaks: Station without a Barometer	
94762	HOLSWORTHY CONTROL RANGE	33 59S	150 55E		40		23	02	05	08	11	14	17	20	S00-24	.	.	.	.	AUT: Remaks: Station without a Barometer	
94781	NEWCASTLE UNIVERSITY	32 54S	151 42E		21		23	.	05	.	.	.	.	.		.	.	.	.	SOILTEMP: Remaks: Station without a Barometer	
94837	WARRNAMBOOL AIRPORT NDB	38 17S	142 27E	71	74		23	02	05	08	11	14	17	20	H00-24	.	.	.	.	A;AUT	
94879	CRANBOURNE BOTANIC GARDENS	38 08S	145 16E		50		23	.	.	.	.	.	.	.		.	.	.	.	EVAP;SOILTEMP;SUNDUR: Remaks: Station without a Barometer	
94883	PHILLIP ISLAND PENGUIN RESERVE	38 30S	145 09E		7		23	.	05	.	.	.	.	.		.	.	.	.	Remaks: Station without a Barometer	
94888	DARTMOUTH RESERVOIR	36 32S	147 30E		350		23	.	.	.	.	.	.	.		.	.	.	.	EVAP: Remaks: Station without a Barometer	
94909	BURRINJUCK DAM	35 00S	148 36E		390		23	.	.	.	.	.	.	.		.	.	.	.	EVAP: Remaks: Station without a Barometer	
94927	BRAIDWOOD RACECOURSE	35 26S	149 47E	666	665		23	02	05	08	11	14	17	20		.	.	.	.	AUT	
94957	OUSE FIRE STATION	42 29S	146 43E	91	90		23	02	05	08	11	14	17	20		.	.	.	.	AUT	
94960	TUNNACK FIRE STATION	42 27S	147 28E	462	462		23	02	05	08	11	14	17	20		.	.	.	.	AUT	
95111	PORT KEATS AERO	14 15S	129 32E	29	28		23	02	05	08	11	14	17	20	H00-24	.	.	.	.	AUT	
95293	WOOLSHEDE	19 25S	146 33E	559	559		23	02	05	08	11	14	17	20	H00-24	.	.	.	.	AUT	
95305	ONSLOW AIRPORT	21 40S	115 07E	4	7		01	04	07	10	13	16	19	22	H00-24	.	.	.	.	A;AUT	
95316	TOM PRICE	22 42S	117 46E		746		01	.	07	.	.	.	.	.		.	.	.	.	Remaks: Station without a Barometer	

Index No.	Name	Lat.	Long.	Elevation		Pressure Level	Surface Observations									OBS. H	Upper-air				Other Observations and remarks
				HP	H/HA		00	03	06	09	12	15	18	21	OBS.S	00	06	12	18		
95322	RABBIT FLAT	20 11S	130 01E	339	340		23	02	05	08	11	14	17	20		.	.	.	.	AUT;EVAP;SOILTEMP;SUNDUR	
95366	TE KOWAI EXP STN	21 10S	149 07E		14		23	.	.	.	.	.	.	.		.	.	.	.	EVAP: Remaks: Station without a Barometer	
95462	ULURU RANGERS	25 22S	131 01E		530		23	.	05	.	.	.	.	.		.	.	.	.	EVAP;SOILTEMP: Remaks: Station without a Barometer	
95480	MARREE AERO	29 40S	138 04E	51	50		23	02	05	08	11	14	17	20		.	.	.	.	A;AUT	
95485	TIBOOBURRA AIRPORT	29 27S	142 03E	177	178		23	02	05	08	11	14	17	20	H00-24	.	.	.	.	A;AUT	
95529	MILES CONSTANCE STREET	26 39S	150 11E	305	305		23	02	05	08	11	14	17	20		.	.	.	.	AUT	
95602	BUSSELTON JETTY	33 38S	115 20E		3		01	04	07	10	13	16	19	22		.	.	.	.	AUT; Remarks: Wind only station	
95632	BRIDGETOWN	33 59S	116 08E	179	179		01	04	07	10	13	16	19	22	H00-24	.	.	.	.	AUT	
95637	LAKE GRACE	33 06S	118 28E	287	286		01	04	07	10	13	16	19	22		.	.	.	.	AUT	
95639	SALMON GUMS RES.STN.	32 59S	121 37E		249		01	04	07	10	13	16	19	22	H00-24	.	.	.	.	AUT: Remaks: Station without a Barometer	
95640	WANDERING	32 40S	116 40E	275	275		01	04	07	10	13	16	19	22	H00-24	.	.	.	.	AUT	
95656	GUM VIEW	33 31S	135 17E		37		23	.	05	.	.	.	.	.		.	.	.	.	EVAP: Remaks: Station without a Barometer	
95658	OLYMPIC DAM AERODROME	30 29S	136 53E	100	105		23	02	05	08	11	14	17	20	H00-24	.	.	.	.	A;AUT	
95669	CHEETHAM SALT WORKS	34 18S	137 59E		7		23	.	05	.	.	.	.	.		.	.	.	.	EVAP: Remaks: Station without a Barometer	
95670	RAYVILLE PARK	33 47S	138 13E	109			23	02	05	08	11	14	17	20	H00-24	.	.	.	.	AUT	
95671	ROSEWORTHY AG COLLEGE	34 31S	138 41E		65		23	02	05	08	11	14	17	20		.	.	.	.	AUT;EVAP: Remaks: Station without a Barometer	
95710	TRANGIE RESEARCH STATION	31 59S	147 57E	216	215		23	02	05	08	11	14	17	20		.	.	.	.	AUT;EVAP;SOILTEMP	
95713	BARADINE FORESTRY	30 57S	149 04E		302		23	.	05	.	.	.	.	.		.	.	.	.	Remaks: Station without a Barometer	
95717	PARKES AIRPORT	33 08S	148 14E	324	326		23	02	05	08	11	14	17	20	H00-24	.	.	.	.	A;AUT	
95718	COONAMBIE AIRPORT	30 59S	148 23E	182	184		23	02	05	08	11	14	17	20		.	.	.	.	AUT	
95720	COWRA RESEARCH STN	33 49S	148 42E	386	381		23	.	.	.	.	.	.	.		.	.	.	.	EVAP;SOILTEMP;SUNDUR	
95725	ORANGE AGRICULTURAL INSTITUTE	33 19S	149 05E		922		23	.	.	.	.	.	.	.		.	.	.	.	EVAP;SOILTEMP: Remaks: Station without a Barometer	
95775	MAITLAND VISITORS CENTRE	32 45S	151 34E		5		23	.	05	.	.	.	.	.		.	.	.	.	Remaks: Station without a Barometer	
95784	TAREE AIRPORT	31 53S	152 31E	9	12		23	02	05	08	11	14	17	20		.	.	.	.	A;AUT	
95816	STRUAN	37 06S	140 47E		65		23	.	05	.	.	.	.	.		.	.	.	.	EVAP: Remaks: Station without a Barometer	

Index No.	Name	Lat.	Long.	Elevation		Pressure Level	Surface Observations								OBS. H	Upper-air				Other Observations and remarks
				HP	H/HA		00	03	06	09	12	15	18	21	OBS.S	00	06	12	18	
95831	WALPEUP RESEARCH	35 07S	142 00E		105		23	.	05	.	.	.	.	.		.	.	.	.	EVAP;SOILTEMP: Remaks: Station without a Barometer
95839	HORSHAM AERODROME	36 40S	142 10E	134	136		23	02	05	08	11	14	17	20		.	.	.	.	A;AUT
95869	DENILIQUIN AIRPORT	35 34S	144 57E	95	96		23	02	05	08	11	14	17	20		.	.	.	.	A;AUT
95873	LATROBE UNIVERSITY	37 43S	145 03E		90		23	.	.	.	.	.	.	.		.	.	.	.	EVAP: Remaks: Station without a Barometer
95895	COROWA AIRPORT	35 59S	146 21E		143		23	.	05	.	.	.	.	.		.	.	.	.	Remarks: Station without a Barometer
95901	MT BAW BAW	37 50S	146 16E		1520		23	02	.	.	.	.	.	.		.	.	.	.	Remarks: Station without a Barometer
95911	WAGGA WAGGA SCS	35 08S	147 18E	213	222		23	.	.	.	.	.	.	.		.	.	.	.	EVAP;SOILTEMP;SUNDUR
95929	MERIMBULA AIRPORT	36 55S	149 54E	2	2		23	02	05	08	11	14	17	20	H00-24	.	.	.	.	A;AUT
95964	LOW HEAD	41 03S	146 47E	4	3		23	02	05	08	11	14	17	20		.	.	.	.	AUT
95967	CAPE BRUNY (CAPE BRUNY)	43 29S	147 09E	60	60		23	.	05	.	.	.	.	.		.	.	.	.	
95971	GROVE RESEARCH STATION	42 59S	147 04E		60		23	.	05	.	.	.	.	.		.	.	.	.	EVAP;SOILTEMP;SUNDUR: Remarks: Station without a Barometer
REGION V - AUSTRALIA: deleted																				
94105	SCOTT REEF AWS	14 02S	121 45E																	
94123	GUNN POINT	12 15S	131 02E																	
94124	MIDDLE POINT (RESEARCH STATION)	12 35S	131 19E																	
94185	COEN (POST OFFICE)	13 57S	143 12E																	
94205	DERBY	17 18S	123 37E																	
94445	LAVERTON (YAMARNA)	28 09S	123 39E																	
94446	MENZIES	29 42S	121 02E																	
94516	ST GEORGE	28 02S	148 35E																	
94527	MOREE MO	29 28S	149 51E																	
94527	MOREE MO	29 29S	149 51E																	
94551	TOOWOOMBA COMPOSITE	27 35S	151 56E																	
94560	SAMFORD CSIRO	27 22S	152 53E																	
94649	COOK HOSPITAL	30 37S	130 24E																	
94666	PORT AUGUSTA POWER STATION	32 32S	137 47E																	
94713	FORBES CAMP STREET	33 23S	148 00E																	
94833	STAWEELL COMPOSITE	37 04S	142 47E																	

Index No.	Name	Lat.	Long.	Elevation		Pressure Level	Surface Observations								OBS. H	Upper-air				Other Observations and remarks
				HP	H/HA		00	03	06	09	12	15	18	21	OBS.S	00	06	12	18	
94851	KING ISLAND CURRIE	39 56S	143 51E																	
94856	GEELONG	38 05S	144 20E																	
94952	SMITHTON GRANT STREET	40 51S	145 07E																	
94965	LOW HEAD	41 03S	146 48E																	
95314	NEWMAN	23 21S	119 43E																	
95659	ROXBY DOWNS OLYMPIC DAM	30 27S	136 52E																	
95704	GRIFFITH AERO	34 16S	146 04E																	
95876	TARRAWARRA	37 39S	145 26E																	
95884	OLSENS BRIDGE	38 29S	146 19E																	
95930	MERIMBULA AIRPORT	36 54S	149 54E																	
95965	DEAL ISLAND	39 28S	147 18E																	
95978	FLINDERS IS. LADY BARRON AERO	40 12S	148 14E																	
95982	STORYS CREEK ROAD	41 38S	147 44E																	
REGION VI - FRANCE: amendment																				
76690	NICE	43 39N	07 12E	28	4		X	X	X	X	X	X	X	X	H00-24	.	.	.	.	A;AUT;EVAP;ETAR;SOILTEMP;SUNDUR
REGION VI - GREENLAND: new																				
04224	AASIAAT MITTARFIA (EGEDESMINDE LUFTHAVN)	6843N	5248W	27	23		.	.	.	.	.	.	.	.	H00-24*	.	.	.	.	A;C,METAR/SPECI;A/R*
REGION VI - NORWAY: amendments																				
01006	EDGEOYA	78 15N	22 50E	14			X	X	X	X	X	X	X	X		.	.	.	.	AUT
01009	PHIPPSOYA	80 40N	20 51E		4		X	X	X	X	X	X	X	X		.	.	.	.	AUT
01011	KVITOYA	80 05N	31 23E		16		X	X	X	X	X	X	X	X		.	.	.	.	AUT
01015	HEKKINGEN FYR	69 36N	17 50E		14		X	X	X	X	X	X	X	X		.	.	.	.	AUT;C;MAN;SEA
01046	SORKJOSEN	69 47N	20 58E	6	6		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A
01052	HAMMERFEST	70 40N	23 40E		81		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01068	HONNINGSVAG/VALAN	71 01N	25 59E	14	14		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01074	MEHAMN	71 02N	27 50E	13	13		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01083	BERLEVAG	70 52N	29 02E	13	13		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01088	VADSØ	70 04N	29 51E	39	39		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A

Index No.	Name	Lat.	Long.	Elevation		Pressure Level	Surface Observations								OBS. H	Upper-air				Other Observations and remarks
				HP	H/HA		00	03	06	09	12	15	18	21	OBS.S	00	06	12	18	
01092	MAKKUR FYR	70 42N	30 05E		9		X	X	X	X	X	X	X			.	.	.	.	AUT;C;MAN;SEA;SEATEMP
01107	ROST FLYPLASS	67 31N	12 06E	4	4		.	.	.	.	.	.	.	.		.	.	.	.	A
01108	VEGA-VALLSJO	65 42N	11 51E	9	2		X	X	X	X	X	X	X	X		.	.	.	.	
01112	BRONNOYSUND/ BRONNOY	65 28N	12 13E	9	9		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01116	SANDNESSJOEN/STOKKA	65 58N	12 28E	17	17		.	.	.	.	.	.	.	.	H/R	.	.	.	.	A;C
01121	SOLVAER-SLENESET	66 22N	12 37E		27		.	X	X	X	X	X	X	X		.	.	.	.	C
01122	MOSJOEN KJAERSTAD	65 47N	13 13E	73	73		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A
01134	FIPLINGSVATN	65 18N	13 32E	383	370		.	.	X	.	X	.	X	.		.	.	.	.	
01141	LEKNES	68 09N	13 37E	26	26		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01151	MO I RANA/ROSSVOLL	66 22N	14 18E	70	70		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A
01161	SVOLVAER/HELLE	68 15N	14 40E	9	9		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01162	STORKMARKNES/SKAGEN	68 35N	15 01E	3	3		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01193	NARVIK/FRAMNES	68 26N	17 24E	30	30		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A
01194	NARVIK III	68 28N	17 30E	23	17		.	.	X	.	X	.	X	.		.	.	.	.	
01196	TENNEVOLL	68 45N	17 48E		21		.	.	X	.	X	.	X	.		.	.	.	.	
01209	ORSTA/VOLDA	62 11N	06 04E	74	74		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A
01217	MOLDE/ARO	62 45N	07 16E	3	3		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A
01223	KRISTIANSUND/ VERNBERGET	63 07N	07 50E	62	62		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01228	SULA	63 51N	08 28E	6	4		X	X	X	X	X	X	X	X		.	.	.	.	AUT;C;MAN;SEA;SEATEMP
01257	VOLL I TRONDHEIM	63 25N	10 27E	127			X	X	X	X	X	X	X	X		.	.	.	.	AUT
01265	TYNSTET II	62 17N	10 47E	482			X	X	X	X	X	X	X	X		.	.	.	.	AUT
01290	NAMSOS LUFTHAVN	64 28N	11 35E	2	2		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A
01310	FLORO	61 35N	05 02E	9	9		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01320	SANDANE/ANDA	61 50N	06 07E	60	60		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A
01321	STRYN	61 55N	06 34E	208			X	X	X	X	X	X	X	X		.	.	.	.	AUT
01323	FORDE/ BRINGELANDSASEN	61 24N	05 46E	319	319		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A
01338	VANGSNES	61 10N	06 39E	50			X	X	X	X	X	X	X	X		.	.	.	.	AUT
01347	SOGN DAL	61 09N	07 08E	497	497		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A
01360	BRATA-SLETTOM	61 54N	07 54E		664		.	X	X	X	X	X	X	X		.	.	.	.	
01366	SOgnefjell	61 34N	08 00E		1417		X	X	X	X	X	X	X	X		.	.	.	.	AUT
01378	LILLEHAMMER- SAETHERENGEN	61 06N	10 29E		239		X	X	X	X	X	X	X	X		.	.	.	.	AUT
01408	HAUGESUND/KARMOY	59 21N	05 13E	24	24		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C

Index No.	Name	Lat.	Long.	Elevation		Pressure Level	Surface Observations								OBS. H	Upper-air				Other Observations and remarks
				HP	H/HA		00	03	06	09	12	15	18	21	OBS.S	00	06	12	18	

01412	OBRESTAD FYR	58 39N	05 34E	26			X	X	X	X	X	X	X	X		.	.	.	.	AUT
01428	LISTA FLYPLASS	58 06N	06 38E	10	10		.	.	.	.	.	.	.	.	H A/R	.	.	.	.	A;C
01459	NELAUG	58 40N	08 38E		142		.	.	X	.	X	.	X	.		.	.	.	.	
01470	GVARV	59 23N	09 13E	93	93		X	X	X	X	X	X	X	X		.	.	.	.	AUT
01476	JOMFRULAND	58 51N	09 33E	5			X	X	X	X	X	X	X	X		.	.	.	.	AUT
01483	TORP	59 12N	10 16E	88	88		.	.	.	.	.	.	.	.	S A/R	.	.	.	.	A

## REGION VI - NORWAY: new

01106	ROST III	67 31N	12 06E	2	4		X	X	X	X	X	X	X	X		.	.	.	.	AUT
01295	HOYLANDET-DRAGEIDET	64 33N	12 10E	27	29		.	.	X	X	X	.	X	.		.	.	.	.	

## REGION VI - NORWAY: deleted

01103	LEKA	65 06N	11 42E		47		.	X	X	.	X	.	X	.		.	.	.	.	C;SEA
01237	FOKSTUA II	62 09N	09 17E	974			X	X	X	X	X	X	X	X		.	.	.	.	AUT
01344	REIMEGREND	60 41N	06 45E		590		.	.	X	.	X	.	X	.		.	.	.	.	
01357	FORTUN	61 30N	07 42E	35	35		.	.	X	.	X	.	X	.		.	.	.	.	
01365	FILEFJELL-GROVSTOLEN	61 11N	08 14E		910		.	.	X	.	X	.	X	.		.	.	.	.	
01379	SOR-NESSET	61 53N	10 09E		739		.	.	X	.	X	.	X	.		.	.	.	.	
01417	NEDRE VATS	59 29N	05 45E	65	64		.	.	X	.	X	.	X	.		.	.	.	.	
01488	OSLO/FORNEBU	59 54N	10 38E	17	17#		X	X	X	X	X	X	X	X	S00-24	.	.	.	.	A

## STATIONS OPERATED BY AUSTRALIA IN THE ANTARCTIC: new

89586	PRINCESS ELIZABETH LAND (MT BROWN)	69 08 S	86 60E		2078		X	X	X	X	X	X	X	X		.	.	.	.	AUT;IRREG; VIA ARGOS
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## STATIONS OPERATED BY AUSTRALIA IN THE ANTARCTIC: deleted

89567	DOVERS																			
89577	DAVIS																			
89803	CASEY (GF 08 AWS)																			
89807	CASEY (SNYDER ROCKS AWS)																			
89810	CASEY (CASEY AIRSTRIP)																			
89811	CASEY (LAW DOME SUMMIT)																			
89814	CASEY (BALAENA IS. AWS)																			
89815	CASEY (HAUPT NUNATAK)																			

**GLOBAL TELECOMMUNICATION SYSTEM**  
**Publication No. 9**  
**Volume C1 "Catalogue of Meteorological Bulletins"**

TTAA (ii)	CCCC	Code Form Used	Time Group (GG)	Cotent of Bulletin and Remarks
Name of Country:	AUSTRALIA			Date: 19/02/1999
Compiling or Editing Centre:	MELBOURNE			
Amendments				
AXAU01	APRF	PLAIN LANGUAGE	AS REQUIRED	TROPICAL CYCLONE BULLETIN
AXAU21	ABRF	PLAIN LANGUAGE	AS REQUIRED	TROPICAL CYCLONE BULLETIN
UEAU02	AMMC	FM 35-X EXT.	12	94430 94610 94637 94638 94672 94802
UEAU03	AMMC	FM 35-X EXT.	12	94170 94332 94510 94578
UKAU02	AMMC	FM 35-X EXT.	12	94430 94610 94637 94638 94672 94802
UKAU03	AMMC	FM 35-X EXT.	12	94170 94332 94510 94578
ULAU02	AMMC	FM 35-X EXT.	12	94430 94610 94637 94638 94672 94802
ULAU03	AMMC	FM 35-X EXT.	12	94170 94332 94510 94578
USAU02	AMMC	FM 35-X EXT.	12	94430 94610 94637 94638 94672 94802
USAU03	AMMC	FM 35-X EXT.	12	94170 94332 94510 94578
SNAU41	AMMC	FM 12-XI	01,04,07,10,13,16,19,22	94416 94417 94422 94429 94439 94440 94444 94457 94600 94602 94603 94604 94605 94606 94608 94609 94611 94612 94614 94615 94616 94617 94618 94619 94620 94621 94622 94623 94641 • NOTE: AS AVAILABLE
SNAU42	AMMC	FM 12-XI	01,04,07,10,13,16,19,22	94449 94624 94625 94626 94627 94628 94629 94630 94631 94632 94633 94636 94639 94640 94641 94644 94645 95204 95305 95312 95315 95316 95400 95448 95600 95606 95611 95612 95613 95614 95618 95624 • NOTE: AS AVAILABLE
SNAU43	AMMC	FM 12-XI	01,04,07,10,13,16,19,22	95307 95308 95309 95602 95605 95608 95610 95617 95625 95626 95627 95628 95629 95633 95634 95635 95636 95637 95638 95639 95640 95645 • NOTE: AS AVAILABLE
SNAU48	AMMC	FM 12-XI	02,05,08,11,14,17,20,23	94369 94370 94373 94374 94375 94376 94377 94378 94380 94381 94384 94386 94387 94390 94494 94513 94514 94517 94521 94525 94529 94530 94543 94548 94549 94550 94552 94553 94555 94558 94566 94577 • NOTE: AS AVAILABLE
SNAU50	AMMC	FM 12-XI	02,05,08,11,14,17,20,23	94520 94541 94544 94556 94571 94573 94574 94582 94583 94585 94586 94587 94588 94589 94595 94596 94598 94692 94694 94695 94696 94697 94698 94699 94701 94703 94704 94705 94706 94707 94708 94709 94714 • NOTE: AS AVAILABLE
SNAU53	AMMC	FM 12-XI	02,05,08,11,14,17,20,23	94497 94498 94710 94733 94937 94939 94941 94942 95485 95512 95520 95541 95706 95707 95708 95709 95710 95716 95717 95718 95719 95720 95723 95726 95727 95735 95746 95750 95758 95764 95765 95771 95772 95773 95774 95775 95784 95869 95895 95896 95908 95909 95911 95912 95916 95931 95935 95936 • NOTE: AS AVAILABLE
SNAU54	AMMC	FM 12-XI	02,05,08,11,14,17,20,23	94824 94825 94826 94828 94829 94830 94831 94832 94834 94835 94836 94837 94840 94841 94843 94844 94845 94846 94847 94849 94852 94853 94854 94855 94857 94860 94862 94863 94864 94866 94868 94870 94871 94872 94874 94879 94880 94883 • NOTE: AS AVAILABLE
SNAU55	AMMC	FM 12-XI	02,05,08,11,14,17,20,23	94859 94881 94882 94889 94891 94892 94894 94895 94898 94899 94903 94906 94911 94912 94913 94914 94917 94930 94932 94935 95829 95831 95833 95834 95835 95836 95837 95838 95839 95843 95853 95854 95855 95867 95871 95873 95881 95901 95904 95913 • NOTE: AS AVAILABLE
SNAU57	AMMC	FM 12-XI	02,05,08,11,14,17,20,23	94963 94973 95950 95951 95952 95953 95955 95956 95957 95964 95967 95968 95970 95971 95972 95973 95974 95975 95979 95980 95984 95989 • NOTE: AS AVAILABLE

Deleted: AXAU02 APRF

TTAA (ii)	CCCC	Code Form Used	Time Group (GG)	Cotent of Bulletin and Remarks
Name of Country:	DENMARK AND FAROE ISLANDS			Date: 01/01/1999
Compiling or Editing Centre:	COPENHAGEN			
Complete List				
CSDN01	EKMI	FM 71-XI		06030 06180 06190
CSFA01	EKMI	FM 71-XI		06011
CSGL01	EKMI	FM 71-XI		04209 04220 04250 04312 04320 04339 04360 04390
CUDN01	EKMI	FM 75-X		06181
CUFA01	EKMI	FM 75-X		06011
SEDN01	EKMI	SPECIAL CODE	AS AVAILABLE	SEISMIC DATA
SMDN01	EKMI	FM 12-XI	00,06,12,18	06030 06060 06070 06120 06180 06193
SMFA01	EKMI	FM 12-XI	00,06,12,18	06011
SMVF01	EKMI	FM 13-XI	00,06,12,18	SHIP
UEDN01	EKMI	FM 35-X EXT.	00,12	06181
UEFA01	EKMI	FM 35-X EXT.	00,12	06011
UEVF01	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
UEVF02	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
UEVF05	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
UKDN01	EKMI	FM 35-X EXT.	00,12	06181
UKFA01	EKMI	FM 35-X EXT.	00,12	06011
UKVF01	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
UKVF02	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
UKVF05	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
ULDN01	EKMI	FM 35-X EXT.	00,12	06181
ULFA01	EKMI	FM 35-X EXT.	00,12	06011
ULVF01	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
ULVF02	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
ULVF05	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
USDN01	EKMI	FM 35-X EXT.	00,12	06181
USFA01	EKMI	FM 35-X EXT.	00,12	06011
USVF01	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
USVF02	EKMI	FM 36-X EXT.	00,12	TEMP SHIP

TTAA (ii)	CCCC	Code Form Used	Time Group (GG)	Cotent of Bulletin and Remarks
USVF05	EKMI	FM 36-X EXT.	00,12	TEMP SHIP
FCDN31	EKCH	FM 51-X EXT.	02,05,08,11,14,17,20,23	EKAH EKBI EKCH EKEB EKRK EKRN EKYT
FCDN32	EKCH	FM 51-X EXT.	(03),06,09,12,15,18,(21)	EKMB EKOD EKSB EKSN EKSV EKTS EKVJ
FCDN33	EKCH	FM 51-X EXT.	02,05,08,11,14,17,20,23	EKKA EKSP EKVA EKVL
FCDN34	EKCH	FM 51-X EXT.	04,06,09,12,15	EKGF
FCFA31	EKCH	FM 51-X EXT.	06,09,12,15,(18)	EKVG
FQDN45	EKMI	PLAIN LANGUAGE	AS AVAILABLE	SHIPPING FORECASTS
FTDN31	EKCH	FM 51-X EXT.	04,10,16,22	EKAH EKBI EKCH
FTDN32	EKCH	FM 51-X EXT.	05,11,17,23	EKYT
NQDN43	EKMI	PLAIN LANGUAGE	AS REQUIRED	MISCELLANEOUS
SADN31	EKCH	FM 15-X EXT.	HALF-HOURLY	EKAH EKBI EKCH EKEB EKRK EKRN EKYT
SADN32	EKCH	FM 15-X EXT.	HOURLY*	EKMB EKOD EKSB EKSN EKSV EKTS EKVD EKVJ• *HALF-HOURLY WHEN VIS AND/OR HEIGHT OF BASE OF CLOUD (MORE THAN 4/8) OR VER VIS LESS THAN 5000 M/1000 FT RESPECTIVELY
SADN33	EKCH	FM 15-X EXT.	HALF-HOURLY	EKKA EKSP EKVA EKVL
SADN34	EKCH	FM 15-X EXT.	HOURLY	EKGF
SAFA31	EKCH	FM 15-X EXT.	HOURLY	EKVG
SIDN21	EKMI	FM 12-XI	03,09,15,21	06030 06060 06070 06120 06180 06193
SIDN40	EKMI	FM 12-XI	03,09,15,21	06041 06043 06052 06058 06069 06071 06081 06096 06104 06110 06119 06142 06159 06160 06168 06169 06170 06179 06190
SIFA21	EKMI	FM 12-XI	03,09,15,21	06011
SIFA40	EKMI	FM 12-XI	03,09,15,21	06010
SIVF21	EKMI	FM 13-XI	03,09,15,21	SHIP
SMDN40	EKMI	FM 12-XI	00,06,12,18	06041 06043 06052 06058 06069 06071 06081 06096 06104 06110 06119 06142 06159 06160 06168 06169 06170 06179 06190
SMFA40	EKMI	FM 12-XI	00,06,12,18	06010
UEDN40	EKMI	FM 35-X EXT.	IRREGULAR	06060
UKDN40	EKMI	FM 35-X EXT.	IRREGULAR	06060
ULDN40	EKMI	FM 35-X EXT.	IRREGULAR	06060
USDN40	EKMI	FM 35-X EXT.	IRREGULAR	06060
WODN46	EKMI	PLAIN LANGUAGE	AS AVAILABLE	GALE WARNING

TTAA (ii)	CCCC	Code Form Used	Time Group (GG)	Cotent of Bulletin and Remarks
Name of Country: Compiling or Editing Centre: Amendments	GERMANY OFFENBACH			Date: 01/01/1999
CSDL02	EDZW	FM 71-XI		10400 10438 10469 10488 10506 10548 10637 10685 10738 10763 10788 10852 10946 10962
CSDL45	EDZW	FM 71-XI		10776 10803 10815 10838 10870 10895 10929 10948 10961
Name of Country: Compiling or Editing Centre: Complete List	NORWAY OSLO			Date: 14/01/1999
CSNO11	ENMI	FM 71-XI		01001 01008 01025 01028 01098 01152 01241 01317 01384 01415 01492
CUNO11	ENMI	FM 75-X		01001 01028 01152 01241 01384 01400 01415 LDWR
SMNO01	ENMI	FM 12-XI	00,06,12,18	01001 01007 01008 01010 01025 01028 01047 01055 01062 01078 01098 01102 01115 01152 01160 01205 01218 01238 01241 01271 01300 01311 01367 01384 01389 01400 01401 01415 01448 01482
SMNO01	ENMI	FM 12-XI	06,12,18	01049 01355
SMVF11	ENMI	FM 13-XI	00,06,12,18	SHIP
SMVF12	ENMI	FM 13-XI	00,06,12,18	SHIP
SMVF13	ENMI	FM 13-XI	00,06,12,18	SHIP
SMVF14	ENMI	FM 13-XI	00,06,12,18	SHIP
SMVF15	ENMI	FM 13-XI	00,06,12,18	SHIP
SMVF16	ENMI	FM 13-XI	00,06,12,18	SHIP
SMWF01	ENMI	FM 13-XI	00,06,12,18	FORMER MIKE (LDWR)
SOVF01	ENMI	FM 64-IX		FORMER MIKE: WEATHER SHIP POLARFRONT + OTHER SHIPS
SOWF01	ENMI	FM 64-IX		FORMER MIKE: WEATHER SHIP POLARFRONT + OTHER SHIPS
SSVX01	ENMI	FM 18-XI		DRIFTING BUOY DATA (NORTH ATLANTIC)
UANT11	ENMI	PLAIN LANGUAGE	AS AVAILABLE	AIREP
UENO11	ENGM	FM 35-X EXT.	06	01384
UENO11	ENMI	FM 35-X EXT.	00,12	01415
UENO12	ENMI	FM 35-X EXT.	00,12	01001 01028
UENO13	ENMI	FM 35-X EXT.	00,12	01152 01241
UENO14	ENMI	FM 35-X EXT.	00,12	01400
UESZ11	ENMI	FM 35-X EXT.	12	01004
UEWF01	ENMI	FM 36-X EXT.	00,06,12,18	FORMER MIKE (LDWR)

TTAA (ii)	CCCC	Code Form Used	Time Group (GG)	Cotent of Bulletin and Remarks
UKNO11	ENGM	FM 35-X EXT.	06	01384
UKNO11	ENMI	FM 35-X EXT.	00,12	01415
UKNO12	ENMI	FM 35-X EXT.	00,12	01001 01028
UKNO13	ENMI	FM 35-X EXT.	00,12	01152 01241
UKNO14	ENMI	FM 35-X EXT.	00,12	01400
UKSZ11	ENMI	FM 35-X EXT.	12	01004
UKWF01	ENMI	FM 36-X EXT.	00,06,12,18	FORMER MIKE (LDWR)
ULNO11	ENGM	FM 35-X EXT.	06	01384
ULNO11	ENMI	FM 35-X EXT.	00,12	01415
ULNO12	ENMI	FM 35-X EXT.	00,12	01001 01028
ULNO13	ENMI	FM 35-X EXT.	00,12	01152 01241
ULNO14	ENMI	FM 35-X EXT.	00,12	01400
ULSZ11	ENMI	FM 35-X EXT.	12	01004
ULWF01	ENMI	FM 36-X EXT.	00,06,12,18	FORMER MIKE (LDWR)
USNO11	ENGM	FM 35-X EXT.	06	01384
USNO11	ENMI	FM 35-X EXT.	00,12	01415
USNO12	ENMI	FM 35-X EXT.	00,12	01001 01028
USNO13	ENMI	FM 35-X EXT.	00,12	01152 01241
USNO14	ENMI	FM 35-X EXT.	00,12	01400
USSZ11	ENMI	FM 35-X EXT.	12	01004
USWF01	ENMI	FM 36-X EXT.	00,06,12,18	FORMER MIKE (LDWR)
FCNO31	ENMI	FM 51-X EXT.	02,05,08,11,14,17,20,23	ENAN ENBO ENBR ENFB ENGM ENOL ENVA ENZV
FCNO32	ENMI	FM 51-X EXT.	02,05,08,11,14,17,20,23	ENAL ENCN ENHD ENRO ENRY ENSB ENT C ENTO
FCNO33	ENMI	FM 51-X EXT.	02,05,08,11,14,17,20,23	ENAT ENDU ENEV ENFL ENKR ENML ENNA
FCNO34	ENMI	FM 51-X EXT.	02,05,08,11,14,17,20,23	ENBN ENBV ENDI ENEK ENFG ENHF ENRA ENSH
FCNO35	ENMI	FM 51-X EXT.	02,05,08,11,14,17,20,23	ENBL ENGC ENKB ENLI ENMS ENOA
FCNO36	ENMI	FM 51-X EXT.	02,05,08,11,14,17,20,23	ENRM ENRS ENSK ENSO ENST ENVD
FTNO31	ENMI	FM 51-X EXT.	05,11,17,23	ENAN ENBO ENBR ENFB ENGM ENOL ENVA ENZV
SANO31	ENMI	FM 15-X EXT.	H+20, H+50	ENAN ENBO ENBR ENFB ENGM ENOL ENVA ENZV
SANO32	ENMI	FM 15-X EXT.	H+20, H+50	ENAL ENCN ENHD ENRO ENRY ENSB ENT C ENTO

TTAA (ii)	CCCC	Code Form Used	Time Group (GG)	Cotent of Bulletin and Remarks
SANO33	ENMI	FM 15-X EXT.	H+20, H+50	ENAT ENDU ENEV ENFL ENKR ENML ENNA
SANO34	ENMI	FM 15-X EXT.	H+20, H+50	ENBN ENBV ENDI ENEK ENFG ENHF ENRA ENSH
SANO35	ENMI	FM 15-X EXT.	H+20, H+50	ENBL ENGC ENKB ENLI ENMS ENOA
SANO36	ENMI	FM 15-X EXT.	H+20, H+50	ENRM ENRS ENSK ENSO ENST ENVD
SANO37	ENMI	FM 15-X EXT.	H + 20	ENBS ENFR ENHK ENHV ENLK ENMH ENNK ENNM
SANO38	ENMI	FM 15-X EXT.	H + 20	ENNO ENOV ENSD ENSG ENSN ENSR ENSS
SINO20	ENMI	FM 12-XI	03	01389
SINO20	ENMI	FM 12-XI	03,09,15	01062 01367
SINO20	ENMI	FM 12-XI	03,09,15,21	01001 01007 01008 01010 01025 01028 01055 01078 01098 01102 01115 01152 01160 01205 01238 01241 01271 01300 01311 01384 01400 01401 01415 01448 01482
SINO20	ENMI	FM 12-XI	09,15	01047
SINO20	ENMI	FM 12-XI	09,15,21	01049
SINO43	ENMI	FM 12-XI	03,09	01304
SINO43	ENMI	FM 12-XI	03,09,15	01442 01465 01467
SINO43	ENMI	FM 12-XI	03,09,15,21	01015 01023 01033 01089 01167 01228 01317 01360 01403 01406 01425 01427 01452 01488 01492 01494
SINO43	ENMI	FM 12-XI	09,15	01288
SINO43	ENMI	FM 12-XI	09,15,21	01212 01477
SINO44	ENMI	FM 12-XI	03	01034 01075 01227 01424
SINO44	ENMI	FM 12-XI	03,09	01224 01240
SINO44	ENMI	FM 12-XI	03,09,15,21	01092
SINO44	ENMI	FM 12-XI	03,21	01455
SINO44	ENMI	FM 12-XI	09	01295
SINO44	ENMI	FM 12-XI	09,15	01003 01059 01210 01474
SINO45	ENMI	FM 12-XI	03	01035 01110 01154 01199 01252 01336
SINO45	ENMI	FM 12-XI	03,09	01138 01262
SINO45	ENMI	FM 12-XI	03,09,15	01121
SINO45	ENMI	FM 12-XI	09	01274 01278 01341 01380 01436
SINO45	ENMI	FM 12-XI	15	01372 01374
SINO45	ENMI	FM 12-XI	21	01432
SIVF21	ENMI	FM 13-XI	03,09,15,21	SHIP
SIVF22	ENMI	FM 13-XI	03,09,15,21	SHIP

TTAA (ii)	CCCC	Code Form Used	Time Group (GG)	Cotent of Bulletin and Remarks
SIVF23	ENMI	FM 13-XI	03,09,15,21	SHIP
SIVF24	ENMI	FM 13-XI	03,09,15,21	SHIP
SIVF25	ENMI	FM 13-XI	03,09,15,21	SHIP
SIVF26	ENMI	FM 13-XI	03,09,15,21	SHIP
SIWF21	ENMI	FM 13-XI	03,09,15,21	FORMER MIKE (LDWR)
SMNO43	ENMI	FM 12-XI	00,06,12,18	01015 01023 01033 01089 01167 01228 01288 01317 01403 01406 01425 01427 01452 01467 01477 01488 01492 01494
SMNO43	ENMI	FM 12-XI	06,12,18	01212 01304 01360 01442 01465
SMNO44	ENMI	FM 12-XI	00,06,12,18	01092
SMNO44	ENMI	FM 12-XI	06,12,18	01003 01026 01034 01043 01059 01065 01075 01210 01224 01227 01240 01280 01292 01295 01424 01455 01474
SMNO45	ENMI	FM 12-XI	00,06,12,18	01110 01149 01325 01364
SMNO45	ENMI	FM 12-XI	06,12,18	01035 01121 01134 01138 01154 01194 01199 01245 01252 01262 01274 01278 01322 01330 01336 01341 01360 01372 01374 01380 01391 01393 01432 01436 01446 01496 01498
SNWF21	ENMI	FM 13-XI	01,02,04,05,07,08,10,11,13,14,16, 17,19,20,22,23	FORMER MIKE (LDWR)
STAC21	ENMI			ICE REPORTS
STNO21	ENMI			ICE REPORTS(SPECIAL CODE)
WONO22	ENMI	PLAIN LANGUAGE	AS REQUIRED	STORM/GALE WARNINGS (IN ENGLISH)
WONO42	ENMI	PLAIN LANGUAGE	AS REQUIRED	STORM/GALE WARNINGS (IN NORWEGIAN)

Name of Country: CROATIA

Date: 23/12/1998

Compiling or Editing Centre: ZAGREB

Amendments

SMRH10	LDZM	FM 12-XI	00,06,12,18	14240 14258 14279 14307 14330 14445 14474
SMRH21	LDZM	FM 12-XI	00,06,12,18	14240 14241 14258 14279 14307 14330 14431 14444 14445 14474

ANTARCTIC

Date: 12/02/1999

Compiling or Editing Centre: IN REGION VI: ROME, TOULOUSE

Amendments

SIAA17	LFPW	FM 12-XI	03,09,15,21	89568 89586 89757 89758 89762 89774 89805 89810 89811 89813 89815
SMAA17	LFPW	FM 12-XI	00,06,12,18	89568 89586 89757 89758 89762 89774 89805 89810 89811 89813 89815
SNA17	LFPW	FM 12-XI	01,02,04,05,07,08,10,11,13,14,16, 17,19,20,22,23	89568 89586 89757 89758 89762 89774 89805 89810 89811 89813 89815

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# CODES

WMO Publication No. 306 "Manual on  
Codes"

## National Practices

*National coding procedures with regard  
to international code form*

### Volume I

#### Notification from Denmark

- Denmark now uses knots as "Unit used in all codes"
- Volume I.1, Appendix concerning Denmark: page I.1-App.A-4, amend text to read as follows:

"Denmark: At manually operated stations if the horizontal visibility is not the same in different directions, the shorter distance is given for VV. However, if local phenomena reduce the visibility in a sector covering less than 1/4 of the horizon, this sector is disregarded provided that the visibility in it is 1 km or more.

At automatic stations the visibility is given as a short distance - or a point - measurement."

### Volume II

#### Page II-6-D-2/3 concerning DENMARK:

Under "7w<sub>a</sub>w<sub>a</sub>W<sub>a1</sub>W<sub>a2</sub>"

Delete: "77 Snow grains" (this is now already included in Code table 4680)

Under "3E<sub>s</sub>nT<sub>g</sub>T<sub>g</sub> - - -" there is a misprint:

Change : " - - - and include then" to " - - - and include them"

Add the following text to "Notes: (2)":

"Neither can they stand up to the rules mentioned in Regulation 12.4.10, but will report up to four layers of clouds in ascending order and with summation amounts. "N" is reported equal to "N<sub>s</sub>" of the highest of these layers, - and no genus of cloud is reported."

# MARINE METEOROLOGICAL SERVICES

## Cessation of Morse High Seas Weather Broadcast

#### Notification from Australia

Telstra Australia LTD., the broadcaster of the Australian Bureau of Meteorology's Marine Radio Services, has advised that it will no longer provide facilities for the broadcast of Australian high seas weather forecasts and warnings in morse code as from 0000UTC on 1 February 1999. Accordingly, the Bureau advises that from that date the morse transmissions of the Bureau's marine weather service to shipping on the high seas will also therefore cease.

It is anticipated that all Australian vessels covered by the implementation of the Global Maritime Distress and Safety System (GMDSS) on 1 February 1999 are now obtaining their high seas weather information via on-board INMARSAT-C satellite receivers. The situation regarding ships of other flags operating in areas serviced by the Bureau's high seas marine weather broadcasts is unclear. The MF/HF radio broadcasts of Australian high seas weather bulletins will continue to be broadcast by voice (radiotelephony) on existing schedules and frequencies until further notice. This service will continue to provide an alternative source of broadcast weather information for these vessels.

Further information about these changes and developments in the Bureau's marine services more generally can be obtained from the Bureau's World Wide Web site at:

<HTTP://WWW.BOM.GOV.AU/MARINE/>