ORGANISATION MÉTÉOROLOGIQUE MONDIALE

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WORLD METEOROLOGICAL ORGANIZATION

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SECRETARIAT **GENÈVE - Suisse**

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W/OIS

Annexes: 4

GENEVA, 30 November 1990

Subject	:	Monthly letter on the operation of the World Weather Watch (WWW) and Marine Meteorological Services (MMS) November 1990

Action required : To be noted and brought to the attention of appropriate operational units

Dear Sir/Madam,

As you are aware, all the information on changes to the operation of the World Weather Watch (WWW) and Marine Meteorological Services (MMS) is being assembled and distributed by the Secretariat on a monthly basis to facilitate updating and follow-up action.

In this connection, please find attached the annexes providing the latest operational information on WWW and MMS. Those items and sub-items for which information is provided are listed below:

Annex I - Global Observing System

- Information on operational status of elements of the **C**. surface-based sub-system
 - 1. Publication No. 9, Volume A Stations
 - 1.1 New stations
 - 1.2 Deleted stations
 - 1.3 Changes to existing stations

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (PR-4568) Directors of Meteorological Services of non-Member countries (MC-2438) Presidents and Vice-Presidents of Regional Associations (P.RA-1263) Presidents and Vice-Presidents of Technical Commissions (P.TC-1381) Chairmen of CBS Working Groups Secretary-General of ICAO Director-General of IATA Secretary of IOC Director-General of ASECNA Director of ECMWF

- 4. Automatic marine stations
- 5. ARGOS
 - 5.1 ARGOS monthly status report
- 6. Feed-back from Members to the Secretariat on any changes in the observing network

Annex II - Global Data-processing System

A. GDPS regulatory or guidance material

Annex III - Global Telecommunication System

- C. Information on the operation of the GTS
 - 2. Transmission schedules (Publication No. 9, Volume C, Chapter II)
 - 2.3 Changes in schedules/technical specifications
 - 6. Coastal radio stations (Publication No. 9, Volume D, Part B)
 - 6.1 New stations
 - 8. Bulletins relating to the state of the Ozone Layer over Antarctica
- E. Status report on WWW implementation

Annex V - Marine Meteorological Services (MMS) and related oceanographic activities

- C. Information on the operation of Marine Meteorological Services
 - 2. Marine meteorological services available for main ports (Publication No. 9, Volume D,Part C)

The CBS Advisory Working Group recommended that a special table should be added to the monthly letter to report changes of the present status of implementation of observing programmes of SYNOP, TEMP and PILOT reporting stations. You will note, therefore, that a new item, number 6, "Feed-back from Members to the Secretariat on any changes in the observing network" has been added to Annex I - Global Observing System.

Your co-operation in ensuring that the above information reaches the appropriate operational units of your service is greatly appreciated. If you wish to receive additional copies of the monthly circular letter, please inform the Secretariat accordingly.

Yours faithfully,

(G.O.P. Obasi) Secretary-General

Annex I - Global Observing System

Date: November 1990

C. Information on operational status of elements of the surface-based sub-system

1. Publication No. 9. Volume A - Stations

1.1 New stations

03011	NORTH RONA	5907N	0549W	-	98	XXXXXXXXX	H00-24			. AUT/
07075	CHARLEVILLE	4947N	0438E	150	149	x	H00-24			. /
07540	MONTAUBAN	4402N	0123E	108	107	X X X X X X X X X	H00-24			./
78458	PUERTO PLATA	1945N	7034W	5	-		H11-21			. /
78479	PUNTA CANA	1834N	6822W	12	20	<i>.</i> X X X .	H12-20,H23			./
93188	PONGAKAWA	3749S	17628E	75	-	X X				. /
93196	HICKS BAY AWS	3733S	17818E	50	-	X X X X X X X X X				./
93286	MOTU AWS	3817S	17731E	-	485	XX X X X X X X				. AUT/
93393	MAHIA AWS	3907S	17757E	120	-	X X X X X X X X X				./
93410	LEVIN AWS	4039S	17516E	46	-	X X X X X X X X X			•	. /
93410	LEVIN AWS	4039S	17516E	46	-	X X X X X X X X X		• •	•	./

1.2 Deleted stations

03020	ST. KILDA
03090	WINDY HEAD
03093	FRASERBURGH
03147	GLENLEE
03493	CROMER LIGHTHOUSE
06023	GORM
06116	ST. JYNDEVAD
78457	PUERTO PLATA
78478	CABO ENGANO

1.3 Changes to existing stations

03038	FORT WILLIAM			•	Х		Х					•		•	1
03118	CORSEWALL POINT	Х	Х	Х	Х			•	Х		•		•	•	/
03215	ASPATRIA			Х	Х	Х	Х	Χ	Х	H08-12	-				- 1
										H15-18					
03712	TIVINGTON	Х	Х	Х	X	Х	Х	Х	Х	H06-18	•				- 1
07024	CHERBOURG	Х	Х	Х	Х	Х	Х	Х	Х	H03-24				•	- 1
07061	SAINT-QUENTIN	Х	Х	Х	Х	Х	Х	Х	Х	H00-24			•		
07070	REIMS	Х	Х	Х	Х	Х	Х	Х	х	H00-24	•	•	•		- 1
07125	DINARD	Х	Х	Х	Х	Х	Х	Х	Х	H00-24	•	•	•		
07139	ALENCON	Х	Х	Х	Х	Х	Х	Х	Х	H00-24	•	•	•	•	
07140	CHATEAUDUN	Х	Х	Х	Х	Х	Х	Х	Х	H00-24	•	•	•		
07179	TOUL/ROSIERES	Х	Х	Х	Х	Х	Х	Х	Х	H00-24	•	•	•	•	
07197	COLMAR	Х	Х	Х	Х	Х	Х	Х	Х	H00-24	•		•	•	
07205	LANN BIHOUE	Х	Х	Х	Х	Х	Х	Х	Х	H00-24	•	•		•	
07222	NANTES	Х	Х	Х	Х	Х	Х	Х	Х	H00-24	•			•	- /
07247	ROMORANTIN	Х	Х	Х	Х	Х	Х	Х	Х	H00-24	•	•	•	•	- /
07257	AVORD	Х	Х	Х	Х	Х	Х	Х	Х	H00-24	•	•		•	
07265	AUXERRE	Х	х	Х	Х	Х	Х	Х	Х	H00-24	-	•	•	•	

1.3 Changes to existing stations (continued)

07379	ST-YAN	х	х	х	х	х	х	х	х	H00-24					1
07412	COGNAC			Х	Х	Х	Х	Х		H00-24	-	Ρ			1
07480	LYON/BRON	Х	Х	Х	Х	Х	Х	Х	Х	H00-24					1
07486	GRENOBLE/ST. GEOIRS	Х	Х	Х	Х	Х	Х	Х	Х	H00-24				•	1
07602	BIARRITZ	Х	Х	Х	Х	Х	Х	Х	Х	H00-24					1
07646	NIMES/GARONS	Х	Х	Х	Х	Х	Х	Х	Х	H00-24	•		•		1
07649	AIX LES MILLES	Х	Х	Х	Х	Х	Х	Х	Х	H00-24					1
07660	TOULON	Х	Х	Х	Х	Х	Х	Х	Х	H00-24			· .		1
07667	HYERES	Х	Х	Х	Х	Х	Х	Х	Х	H00-24					1
07690	NICE	Х	Х	Х	Х	Х	Х	Х	Х	H00-24					1
07747	PERPIGNAN	Х	Х	Х	Х	Х	Х	Х	Х	H00-24					. /
71121	EDMONTON/NAMAO, ALTA	x	•	х	•	х	•	X	•		•	Ρ	.•	Ρ	/
71722	MANIWAKI, QUE.	Х		Х		Χ.		Х		H00-24	RW		RW	•	1
78484	HERRERA	•	•	•	•	X	X	Х	• '	H12-19	-	•	••	•	Ì

4. Automatic marine stations

Canada

Data from moored and drifting buoys are collected via geostationery and polar orbiting satellites respectively. Meteorological reports from moored buoys using FM 13-IX SHIP code are distributed on the GTS from the Direct Readout Station located in Vancouver, B.C. Reports from drifting buoys are received at the Argos Local User Terminal in Edmonton and distributed on the GTS using the FM 14-VIII DRIBU code.

Legend

<u>Column</u>	Observed or technical parameters
1	Wind direction and speed
2	Air temperature
3	Air pressure
4	Pressure tendency
5	Sea-surface temperature
6	Wave period and height
7	Wave spectra
8	Peak wind gust

Moored Buoys (North-east Pacific Ocean):

WMO buoy	Position	Observed or technical parameters
Identifier	9 October 1990	<u>1 2 3 4 5 6 7 8</u>
46004	50°56'N 135°52'W	x x x x ·x x x x
46036	48°18'N 133°51'W	X X X X X X X X X X X X X X X X X X X
46181	53°49'N 128°51'W	X X X X X X X X X
46182	49°29'N 123°18'W	x x x x x x x x x x
46184	53°56'N 138°48'W	x x x x x x x x x
46185	52°25'N 129°48'W	x x x x x x x x x
46204	51°14'N 128°27'W	x x x x x x x x x
46205	54°10'N 134°20'W	X X X X X X X X X

Moored Buoys (North-east Pacific Ocean) (continued):

WMO buoy	Position	Observed or technical parameters
Identifier	9 October 1990	<u>1 2 3 4 5 6 7 8</u>
46206	48°50'N 126°00'W	x x x x x x x x x x
46207	50°31'N 129°33'W	X X X X X X X X X
46208	52°18'N 132°25'W	x x x x x x x x x x

Moored Buoys (North-west Atlantic Ocean):

WMO buoy	Argos	Po	Observed or technical parameter									
Identifier	Identifier	<u>12 Oct</u>	1	2	3	4	5	6	.7	8		
41012	01602	36°18'N	070°00'W	x	х	х	х	х	•			
44016	01605	38°00'N	072°54'W	Х	Х	Х	Х	Х				
44017	01604	40°06'N	072°12'W	Х	Х	Х	Х					
44018	01603	37°42'N	074°42'W	X	Х	Х	Х	•	•	•	•	
44137	03449	41°12'N	061°08'W		х	х	х	х	х	х	х	
44138	03434	44°13'N	053°36'W	Х	Х	X	Χ	Х	Х	Х	X	
44139	03448	44°19'N	057°22'W	. X	Х	Х	Х	Х	Х	Х	X	
44140	05576	42°44'N	050°36'W	х	Х	Х	Х	Х	Х	Х	Х	
44141	05579	42°07'N	056°07'W	х	х	х	х	х	х	х	х	
44142	05578	42°30'N	064°12'W	Х	Х	Х	Х	Х	Х	Х	Х	

Moored Buoys (Great Lakes):

WMO buoy	Position	Observed or technical parameters								
Identifier	18 October 1990	<u>1 2 3 4 5 6 7 8</u>								
45132	42°28'N 081°13'W	x x x x x x x x x x								
45135	43°51'N 078°20'W	x x x x x x x x x								
45136	48°32'N 086°57'W	X X X X X X X X X X X X X X X X X X X								
45137	45°33'N 081°01'W	x x x x x x x x x								

Drifting Buoys (North-east Pacific Ocean):

WMO buoy	Argos	Pos	Observed or technical parameters										
Identifier	Identifier	<u>21 Octo</u>	1	2	3	4	5	6	7	8			
46632	12511	44°26'N	146°61'W	*	х	х		х			*		
46681	07135	48°83'N	168°00'W		Х	Х		Х		•			
46687	07138	39°74'N	142°03'W	•	Х	Х	•	Х					
46693	07140	34°16'N	144°25'W	•	Х	Х	•	Х	•	•	•		
46694	07141	26°12'N	145°32'W		х	х	•	х					
46695	07142	30°19'N	150°21'W		Х	Х		Х		•			
46697	07144	28°01'N	151°21'W	*	X	Х		Х			*		
46704	07128	47°59'N	155°21'W		Х	Х	Х	Х					

* Sensor/system failure

Annex I, p. 4

Drifting Buoys (North-east Pacific Ocean):

WMO buoy	Argos	Position	Observed or technical parameters										
Identifier	Identifier	21 October 1990	<u>1_2_3</u>	_4	5	6	_7_	8					
46705	07129	48°33'N 149°10'W	. x x	x	x								
46706	07130	42°00'N 137°96'W	. X X	Х	Х								
46707	07131	30°32'N 129°00'W	. X X	Х	Х	•	•	•					

Drifting Buoys (Arctic Icepack):

WMO buoy Argos		Position	Observed or technical parameters
Identifier	Identifier	21 October 1990	<u>1 2 3 4 5 6 7 8</u>
48544	07412	84°10'N 082°87'W	x

Drifting Buoys (North-west Atlantic Ocean):

WMO buoy	Argos	Position	O	bserv	ed or	tech	nical	para	amet	ers
Identifier	<u>Identifier</u>	21 October 1990	L	2	3	_4	5	6	_7_	8
44663	09234	48°31'N 048°26'W		X	x		х	•	•	
44664	09235	50°49'N 051°11'W	•	X	Х	•	X	•	•	•

United States of America

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List of U.S.A. Ocean Data Acquisition System (ODAS) included in the November 1990 Data Platform Status Report of the Data Buoy Centre of the National Oceanic and Atmospheric Administration (NOAA). 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 DRIBU code.

Leg	end
<u>Column</u>	Observed or technical parameters
1	Wind direction and speed
2	Air temperature
3	Pressure
4	Pressure tendency
5	Sea-surface temperature
6	Wave period and height
7	Wave spectra
8	Drogued

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Moored Buoys:

WMO buoy	Pos	ition	Obs	erve	l or te	chnic	al da	rame	ters
Identifier	9 Octo	ber 1990	1	2	3	4	5	6	7
20200	100000	05006737	*	*	*	*	*	*	*
52302	18-005	83°UO W	+ V	v	v	v	v	v	v
41001++	34°34'N	75°00'W	A W	A V	A V	A V	A V	Ŷ	
41002**	32°18'N	75°12'W	X	X	X	X	X		
41006**	29°18'N	77°24'W	X	X	Х	Х	Х	х	Х
41008	30°42'N	81°06'W	x	X	х	х	х	Х	Х
41009	28°30'N	80°12'W	Х	Х	Х	Х	*	Х	X
41010	28°54'N	78°30'W	Х	Х	Х	Х	Х	Х	X
42001**	25°54'N	89°42'W	х	X	Х	Х	Х	Х	Х
42002**	25°54'N	93°36'W	x	x	х	x	х	х	х
42003**	25°54'N	85°54'W	x	X	x	X	x	X	X
42007	30°06'N	88°48'W	x	x	x	x	x		
42019	27°54'N	95°00'W	x	x	x	x	x	x	x
42020	27º00'N	06°30'W	v	Y	Y	x	x	Y	Y
42020	27 00 1	72026111	N N	v	v	v	v	Ŷ	Ŷ
44001	JO 24 IN 2002011	75 50 W 70926NU		v	v	v	v	v	$\hat{\mathbf{v}}$
44004**	28°3U N	/U° 30 W		A V	Ň	Ň	A V	A V	_∧ v
44005**	42°42'N	68°36'W	X	X	X	X	X	X	X
44007**	43°30'N	70°06'W	x	X	X	X	X	X	X
44008**	40°30'N	69°24'W	Х	Х	X	X	X	X	X
44009**	38°24'N	74°42'₩	X	Х	Х	Х	Х	Х	X
44011**	41°06'N	66°36'W	x	X	X	X	Х	X	Х
44012**	38°48'N	74°36'W	х	х	х	х	х	х	Х
44013**	42°24'N	70°48'W	Х	Х	Х	Х	Х	Х	X
44014	36°36'N	74°48'W	Х	Х	Х	Х	Х	Х	Х
44015	37°06'N	73°36'W	x	Х	Х	Х	Х	X	X
45001**	48°00'N	87°42'W	x	х	х	х	х	х	х
45002**	45°18'N	86°24'W	*	X	X	X	X	Х	Х
45003**	45°18'N	82°42'W	х	X	X	X	X	X	X
45004**	47°30'N	86°30'W	*	X	X	X	X	X	X
45005**	41°42'N	82°24'W	X	X	X	X	X	X	X
45006**	47°18'N	89°54'W	X	X	X	X	X	X	X
45007**	42°42'N	87°06'W	X	X	X	X	X	X	X
45008**	44°18'N	82°24'W	X	X	X	Х	Х	X	Х
46001**	56°18'N	148°18"W	X	х	х	Х	X	x	Х
46002**	42°30'N	130°24'W	*	Х	X	Х	Х	Х	X
46003**	51°54"N	155°54'W	Х	Х	Х	Х	Х	Х	Х
46005**	46°06'N	131°00'W	•	*	٠	*	*	*	*
46006**	40°48'N	137°42'W	X	х	х	х	х	х	Х
46010**	46°12'N	124°12'W	X	Х	Х	Х	Х	Х	Х
46011	34°54'N	120°54'W	x	X	X	X	X	X	X
46012	37°74'N	122°42'W	x	x	X	X	x	x	X
10010	57 2713		~*		••				

• Sensor system failure.

** Primarily for National Weather Service (NWS) support; however, all stations report data to NWS.

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Moored Buoys(continued):

WMO buoy	Pos	ition		Obs	erved	l or te	chnic	al pa	rame	ters	
Identifier	<u>5 Nover</u>	<u>nber 1990</u>		1	_2_	3	4		6	_7	
46013	38°12'N	123°18'W		х	х	х	х	х	х	х	
46014	39°12'N	124°00'W		Х	Х	Х	Х	Х	Х	Х	
46022	40°48'N	124°30'W		Х	Х	Х	Х	Х	Х	Х	
46023	34°18'N	120°42'W		Х	X	X	X	X	X	х	
46025	33°42'N	119°06'W		х	х	х	Х	x	х	х	
46026**	37°42'N	122°42'W		Х	Х	Х	Х	Х	Х	Х	
46027**	41°48'N	124°24'W		Χ	Х	X	Х	Х	X	X	
46028	35°48'N	121°54'W	•	Х	X	Х	X	*	Χ.	Х	
46030	40°24'N	124°30'W		х	х	х	х	*	х	х	
46035	57°00'N	177°42'W		Х	Х	Х	Х	Х	X	Х	
46040	44°48'N	124°18'W	•	X	Х	Х	Х	Х	Х	· X	
46041	47°24'N	124°30'W	· •	Х	Х	Х	X	X	X	X	
46042	36°48'N	122°24'W		x	х	х	Х	х	• X •	х	
46046	46°18'N	124°12'W		X	Х	Х	Х	Х	X	· X	
51001**	23°24'N	162°18'W		Х	Х	Х	X	Х	X	X	
51002**	17°12'N	157°48'W		Х	Х	X	X	X	X	Х	
51003**	19°12'N	160°48'W	:	x	х	х	х	Х	х	х	
51004**	17°30'N	152°36'E		X	Х	Х	Х	Х	Χ	X	
52009**	13°12'N	144°30E		٠	Х	Х	Х	X	Χ.	X	
-			· • •						• .	• •	,

Drifting Buoys:

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WMO buoy	Argos	Po	sition		Ot	serv	ed or	tech	nical	para	me	ters
Identifier	Identifier	5 Nove	mber 1990		1	2	3	4	5	6	7	8
14803	08844	22°S	052°E		•	х	х		х			
14804	08845	25°S	053°E		•	Х	Х		Х			•
17803	05571	41°S	090°E		· X	*	Х		Х	•		Х
17804	12300	40°S	050°E		•	*	Х	•	X	•	••	•
17805	12304	41°S	066°E				х		·X			
17806	12306	41°S	015°W	,	-	Х	X		Х	•		
32814	07491	18°S	085°W		-	Х	Х		х		÷	
33824	08966	41°S	034°E		•	x	X	•	X	•	•	•
33826	12296	56°S	005°E			х	х		х			
33827	12297	50°S	016°E	•	-	X	X		X		• •	
33828	12298	46°S	025°E		-	X	X	_	X		· [
33830	12305	45°S	016°W		•	x	X	•	X	•	•	•
54829	06762	35°S	1 57°W	•		*	х		х			
54830	06763	51°S	134°W			Х	Х		X			
54831	06764	50°S	131°W		-	X	X	-	X	-	-	· .
54832	06585	43°S	166°W	•	X	X	X	•	X	•	•	X

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* Sensor /system failure

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** Primarily for National Weather Service (NWS) support; however, all stations report data to NWS

Drifting Buoys (continued):

WMO buoy	Argos	Position		Ob	serv	ed or	tech	nical	para	ime	ters
Identifier	Identifier	5 Nove	mber 1990	1	2	3	4	5	6	7	8
54833	06586	47°S	143°W	x	х	x		x			х
54834	06583	36°S	159°W	Х	Х	Χ		Х			Х
54835	06731	33°S	157°W		Х	Х		Х	•		
55802	08843	18°S	055°E	•	X	Х	•	Х	•	•	•
56829	09222	27°S	046°E	-	х	х		х			•
56831	09217	10°S	113°E	•	Х	Х	•	Х	•	•	•

5. ARGOS service

5.1 ARGOS monthly status report

As at 2 November 1990, the Argos service was handling reports from 617 drifting buoys, 138 moored buoys, 2 balloons, 33 ships, 96 animal trackings, 408 fixed stations, 361 boats and 33 miscellaneous platforms. DRIBU reports from 68 drifting buoys, SHIP reports from 25 selected ships and BATHY reports from 20 selected ships were transmitted to the RTH Paris and DRIBU reports from 226 drifting buoys were transmitted to the WMC Washington for insertion into the GTS. The list of platforms reporting through Argos and distributed over the GTS follows:

Operating country	WMO Identifier/call sign	Argos Identifier
Australia	56001	04873
	56501	02934
	56544	02935
	56546	02951
	56547	04870
	56548	04871
	56549	04872
	S6FK*	
	VMAP*	
	ZCSL*	
France	44609	05799
	62503	05790
	62513	05829
	62515+	05832
	62516	05833
	62551+	00200
	62552+	00201
	62553+	00205
	62554+	00213
	62555+	00219
	62557+	00232
	62558+	00237

* PTT's transmitting at irregular intervals.

+ PTT's which were removed during the month.

Operating country	WMO Identifier/call sign	Argos Identifier
France (continued)	62559+	00239
	62561+	00242
	62563+	00323
	62565+	00329
	62566+	00333
	62567+	00340
	62568+	00341
	62569+	00344
	62570+	00346
	62571+	00348
	62572+	00351
	62573+	00362
	62575+	00323
	62576+	00325
	62579+	00352
	62580+	00356
	62582+	00363
	62583+	00364
	64516	05796
	64527	05822
	A3BZ*	
	C6HL*	
	ELEH*	
	FNCZ*	
	FNGB*	
	FNJT*	
	FNOM'	
	FNZO*	
	FNZP*	
	FNZO*	
	FPYO*	
	FWQP*	
	GQEK*	
	GTIA*	
	HPEW'	
	VJBQ*	
	VJDP+	
	بد	
Germany	71524	03315
	71529	08057
	71530	08058
	71531	08059

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* PTT's transmitting at irregular intervals.

+ PTT's which were removed during the month

Operating country	WMO Identifier/call sign	Argos Identifier
Germany (continued)	71532	08060
	71536	08064
	71537	08065
	71540	08068
Iceland	44616	04183
Japan	52060	08718
•	52064	08724
Netherlands	44615	03037
	64564	03036
New Zealand	55578+	06437
	55579	06435
	55580+	06439
	55582	07175
	55583	07179
	55584	07178
	55585	07177
	55586+	0/1/6
Norway	17001	01591
•	17003	01758
	44624	03722
	44743	01298
	62524	01299
	63002	09407
	63004	09403
	63512	01792
	64504	03674
	71001	01757
	74001	09405
Portugal	62692	01078
	62693	01079

+ PTT's which were removed during the month

Operating country	WMO Identifier/call sign	Argos Identifier
South Africa**	17512	09096
•	17513	09092
	17514	08263
	17517	08268
	17520	09097
	17522	09095
	17523	09086
	17524	09099
	17525	09098
	17526	09089
	17527	09087
	17528	08260
	17529	09088
	17530	09093
	17531	08262
United Kingdom	44728	04039
	44729+	06305
	44730	06298
	62606	03916
	62803	06299
United States of America	12847	11191
United States of America	13515	12446
	14803	08844
	14804	08845
	17804	12300
	17805	12304
	17806	12306
	23508+	12475
	23509	12476
	23510+	12485
	25536	12780
	25537	12789
	31502	09844
	32512	11914
	32514	10836
	32515	11898
	32518	11167
	32519	11905
	32520	11577
	32521	11909

** The Government of the Republic of South Africa has been suspended by Resolution 38 (Cg-VII) from exercising its rights and enjoying its privileges as a Member of WMO. · · ·

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+ PTT's which were removed during the month.

Operating country	WMO Identifier/call sign	Argos Identifier
United States of America (continued	i) <u>32522</u>	10808
	32523	10809
	32524	10842
	32525	11192
	32526	11193
	32527+	12485
	32528	10820
	32529	11194
	32530	11546
	32531	10812
	32532	11897
	32534	11196
	32535	11907
	32537	10839
	32538	11172
	32539	11875
	32540	11904
	32541	11656
	32544	11908
	32545	10849
	22546	11160
	36340	11100
	32347	11163
	22547	11894
	<i>JEJJ</i> V	11674
	32552	11195
	32553	10841
	32554	10840
	32559	11900
	32560	11572
	32814	07491
	33823	08965
	33824	08966
	66767	
	33826	12296
	33827	12297
	33828	12298
	33830	12305
	41012	01602
	41014	01606
	41510	09845
	41511	09846
	41512	09857
	41513	09853
	43502	11168
	43503	11874

+ PTT's which were removed during the month.

Operating country	WMO Identifier/call sign	Argos Identifier
United States of America (continued	l) 43504	11198
	43508	11171
	43509	10847
	43510	11628
	43511	03078
	43801	06898
	43805	10817
	44016	01605
	44017	01604
	44018	01603
	44020	01609
	44021 [′]	01608
	44022	01607
	44502	04570
	44504	04561
	44505	09878
	44 506	04542
	44510	04530
	44518	09841
	44519 [;]	09851
	44520	09856
	44521	12753
	44522	12754
	44523	12755
	44524	12756
	44528'	12737
	44529	12746
	44530	12740
	44532**	12739
	44534	12745
	44535	12749
	44536 -	12744
	44537	12747
	44538	12748
	44539	12751
	44540	12752
	47601	12785
	48518	12782
	48519	12783
	51502	12642
	51511	06883
	51512	06884
	51515	11663
	21212	11678

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Operating country	WMO Identifier/call sign	Argos Identifier		
United States of America (continue	d) 51516	11632		
	51518	15077		
	51519	11646		
	51520	11653		
	51801	11197		
	51802	11650		
	51804	11660		
	51805	11622		
	51806	11625		
	51808	11651		
	51809	11199		
	51810	15087		
	51811	11644		
	51812	11657		
	51813	11569		
	51814	11682		
	51815	11571		
	51816	11620		
	51817	11655		
	51818	11630		
	51819	11645		
	51822	11870		
	51823	11648		
	51824	11685		
	51825	11686		
	51826	11871		
	51827	11688		
	51829	11202		
	51830	15088		
	51831	11689		
	51832	11691		
	51833	11872		
	51834	11170		
	51835	11638		
	51837	11642		
	51838+	11177		
	51840	11536		
	51841	15098		
	51844	11542		
	51845	11548		
,	51846	11692		
	51849	11539		
	51851	11547		
	51853	11694		

+ PTT's which were removed during the month.

Operating country	WMO Identifier/call sign	Argos Identifier
United States of America (continue	cd) 51855	11705
	51856	11559
	51859	11581
	51860+	11673
	51861	11558
	51863	11564
	51865	11623
	52005	01350
	52502	11761
	52512	10593
	52521	11736
	52523	11290
	52525	11729
	52526	11730
	52527	11731
	52802	10822
	52806	06880
	52807	10824
	52813	10835
	52827	10823
	52852	11629
	52853	11624
	52854	11626
	52855	11631
	52857	11640
	52858	11649
	52860	11659
	52861	11637
	52862	11560
	52865	11567
	52866	11887
	52867	11893
	52868	11876
	52871	11889
	52872	11890
	52873	11892
	52875	11896
	52876	11881
	52877	11883
	52878	11885
	53807	11877
	53809	11886
	54829	06762
	54830	06763

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+ PTT's which were removed during the month.

Operating country	WMO Identifier/call sign	Argos Identifier		
United States of America (continued) 54831	06764		
	54832+	06585		
	54833+	06586		
	54835	06731		
	52802	08843		
	56829	09222		
	56830	12290		
	56831	09217		
	62671	09847		
	62672	09859		
	64533	12786		
	64539	12787		
	64543+	04126		
	64544+	04834		
	64545+	11720		
	64546+	12444		
	64547+	12486		
	64548+	12447		
	64549+	12456		
	64551+	12458		
	64577	04126		
	64578	04834		
	64579	11720		
	64580	12444		
	64581	12486		
	64582	12447		
	64583	12456		
	64584	12458		
	65505	04632		
	65506	12455		

+ PTT's which were removed during the month.

ATLAS buoys

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Due to a change in the electronics (message format) of the ATLAS buoys, it was not possible to disseminate the data of the following buoys over the GTS:

WMO Identifier/call sign	Argos Identifier
51011	06516
51013	06476
51006	06798
51007	06796

ATLAS buoys (continued):

WMO Identifier/call sign	Argos Identifier		
51008	06797		
51009	06514		
51012	06515		
52001	06799		
52003	12522		
52004	12523		
52006	12525		

Whereas the data of the following ones (old-style electronics) have been distributed (some on an irregular basis):

WMO Identifier/call sign	Argos Identifier		
51010	06319		
32315	06379		
52302	06460		
52002	06471		
31317	06478		
32318	06795		
32316	06520		
52301	06381		

The new GTS software able to handle all the ATLAS buoys should be operational by the end of the year.

<u>Note</u>

Members operating Argos Local Users Terminals (LUTs) are invited to submit to the Secretariat by telex, the list of platforms entering reports into the GTS through their LUTs, effective on or around the 20th of each month.

6. Feed-back from Members to the Secretariat on any changes in the observing network

In view of the difficulties experienced at present in identifying non-implemented observing stations or implemented stations which are closed or suspended for a certain period, or stations making observations but not reaching their NMCs, the ninth session of the CBS Advisory Working Group recommended that a special table be added to the WWW monthly operational letter to 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.

The special table, accompanied by explanatory notes overleaf, is attached as an appendix to this annex. Members are urged to fill in this appendix, as and when appropriate, and to return it to the Secretariat before the 1st of each month to enable changes to be included in the next monthly letter.

Feed-back from Members to the Secretariat on any changes in the observing network (explanatory notes overleaf)

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lobal Exchange/Regional Exchange (delete as appropriate)				Country:							
Station index	Bulletin			Impl	emen	tati	on o	f		 Alternate	
number	TTAAii CCCC	00	03	06	09	12	15	18	21	station	Remarks

1. SYNOP

2. TEMP

3. PILOT

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Explanatory notes for Feed-back from Members to the Secretariat

on any changes in the observing network

- 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 given in Attachment I-4 of the Manual on the GTS, Volume I for global exchange and, as applicable, Attachments AF-I, AI-1, SA-1, NA-1, PS-1 and EU-1 of the Manual on the GTS, Volume II for regional exchange.
- 2. For entries in these tables, the following should be taken into account:
 - (a) In the column "Station index number", the index number (IIiii) of each station should be entered in case of any changes in the observing programmes of the stations;
 - (b) In the column "Bulletin identification", the TTAAii CCCC of the abbreviated heading of the meteorological bulletins which contains reports from the station should be inserted;
 - (c) In the column "Implementation of observing programme", "X" for implementation and "-" for non-implementation should be inserted as appropriate. In order to easily identify changes in the programme, this should be marked in red;
 - (d) In the column "Alternate observing station", the index number (IIiii) of an alternate observing station should be inserted in case another station is available with a view to filling gaps which are caused by suspension of observing programmes of the original station;
 - (e) The required information concerning the observing programme of the alternate station should be inserted in the next horizontal line of the original station;
 - (f) In the column "Remarks", reasons of 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.
- 3. These tables should be sent to the Secretariat before the 1st of the month for inclusion of the changes in the monthly operational letter, as appropriate.

Annex II - Global Data-processing System

Date: November 1990

A. GDPS regulatory or guidance material

Generation and Exchange of Status Messages (see also Annex III)

In its first session (5-9 March 1990, Geneva) the CBS Working Group on Data Management continued to develop the Distributed Data Bases Concept. In the frame work of this concept the working group decided to initiate the generation and exchange of status information of NWP centres <u>on a trial basis</u>. It should also be investigated which data representation form should best be used for this information exchange. Although a "plain-language-message" form was seen necessary for non- or less automated centres, it is quite ill-suited for computer processing and could create problems with language barriers. In this respect the use of BUFR or BTAB might be a promising approach.

The working group agreed to concentrate, for the purpose of a practical demonstration, on status messages containing information about delays or non-availability of products from NWP centres. There are a variety of circumstances which might trigger status messages, e.g.:

- (a) A delay in the NWP production process caused by a serious data deficiency or a system failure in the data processing component;
- (b) An emergency such as failure of environmental control, fire, flood etc.;
- (c) A planned outage.

Again, for the purpose of a practical demonstration, the working group considered it best to focus on one aspect, namely (a), delays to the NWP process, and to include (b) and (c) to the extent possible. It was also decided that the delay be at least one hour in order to trigger a status message.

It is not feasible to issue a message in respect of each and every product in a set from a particular NWP run. Experience suggests that one product in the set should be selected as representative of the whole, or alternatively a statement concerning the delay of a model that produces the product. It would then be up to recipients to infer the delay to other products in the same set. The transmissions out of sequence of delayed products across the GTS may also add further delays at intermediate nodes; the originating NWP centre can only indicate the delay at the source. The expected length of the delay should also be contained in the status message.

The abbreviated bulletin heading NPXX10 CCCC YYGGgg should be used, with YYGGgg giving date/time of the origin of the message. For a BTAB message this will be followed by the BTAB identifier.

Example of a BTAB message:

NPXX10 EGRR 100115 BTAB A020 TYEA TM T T A AI I CCCC TD T1 T2 XT TIPD2 1990 12 XXXXXX EGRR 10 02 15 04 // 150 7777

Meaning:

The product XXXXXX, normally disseminated by EGRR on the 10th of December at 0215 UTC, will be delayed by 2 hours and 30 minutes.

Annex II, p. 2

Where:

A020	reference to FM 94-BUFR table A
TYEA	defines the year;
ТМ	defines the month:
TTAAII	defines a representative product;
CCCC	defines the 4-letter indicator of the originating centre;
TD	defines days) of the schedules
T1	defines hours) time of the
T2	defines minutes) dissemination;
ХТ	defines time significance (derived from BUFR table B and associated code table 08 021 with 04 being selected to indicate an estimated delay in time);
TIPD2	defines estimated displacement in time in minutes (selected for this example);
	TIPDD defining displacement in time in days;
	TIPD1 defining displacement in time in hours;

Example of a plain-language message:

NPXX10 CCCC YYGGgg The [name of centre] is experiencing problems in the production of the [name of model] model. The problem is believed to be [......].

The [name of the model], which is normally scheduled to run at [time] UTC, is now delayed until [time] UTC.

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Annex III - Global Telecommunication System

Date: November 1990

C. Information on the operation of the GTS

2. Transmission schedules (Publication No. 9. Volume C. Chapter II)

2.3 Changes in schedules/technical specifications

III-iii Buenos Aires radio-facsimile broadcast effective 22 October 1990 changes.

6. Coastal radio stations (Publication No. 9. Volume D, Part B)

6.1 New stations

INMARSAT Coast Earth Stations in Australia

Notification from Australia that the Indian Ocean satellite Coast Earth Station (CES) is now operational at Perth, Western Australia and accepts ships' weather reports free of charge to ships from the area in the Indian and Pacific Ocean south of the equator between longitudes 60° E and 140°E.

Since both the Indian Ocean and pacific Ocean CESs are now operational at Perth the Australian Weather Bureau will accept ships' weather reports from all Indian and Pacific Ocean areas south of the Equator between 60° E and 120° W.

Reports are routed by automatic service code (41). BATHY/TESAC reports are also accepted.

8. Bulletins relating to the state of the Ozone Layer over Antarctica

Following the request of WMO Members, short bulletins prepared by the Secretariat containing information on the state of the ozone layer over Antarctica in plain language were included, as available, into the METNO messages during August-November 1990.

Bulletins numbered 1,2 and 3 were issued on 30 August, 12 and 20 September; numbers 4 and 5 were issued on 4 and 18 October and numbers 6 and 7 were issued on 8 and 22 November 1990 respectively.

The Bulletins on the state of the ozone layer over Antarctica issued by WMO were based on ozone data provided by the WMO global ozone observing system stations in the antarctic operated by Argentina in cooperation with Finland (Marambio), Japan (Syowa), New Zealand (arrival heights) and the USA (South Pole) and the NASA Total Ozone Mapping Spectrophotometer (TOMS). If quoted due credit should be given accordingly.

The above-mentioned four stations and TOMS indicated that in the 1990 spring season the ozone depletion was one of the strongest, i.e. very close to the record low of 1987 and 1988. The ozone declined unusually fast during the first half of September reaching extremely low values of less than 180 M ATM CM. The total ozone amount during the first half of October in the centre of the vortex fell as low as 130 M ATM CM and in the layer between 16 and 19 km the ozone was completely eliminated for over a week. During the last decade of October and beginning of November the total ozone amount in the centre of the vortex slightly increased to 160-175 M ATM CM and the overall surface covered by the vortex decreased, thus leaving most of the coastal area of Antarctica with close to normal ozone amount. The ozone hole event for this season completely terminated late in November 1990.

The collaboration of Members indicated in the bulletin who have provided the information is greatly appreciated.

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D. Monitoring of the operation of the WWW

RAVI specific monitoring on the exchange of TEMP bulletins on the GTS

A RAVI specific monitoring on the exchange of TEMO bulletins on the GTS will be carried out from 1 to 5 March 1991. RAVI Member countries were invited to participate in this specific monitoring by WMO letter W/EU/T.9 (EUR-548) dated 17 August 1990. Participating countries are requested to send their monitoring results on magnetic tape (with a copy of any correspondence on this matter to the WMO Secretariat) to the following address:

Mr. J.K. Gibson ECMWF Shinfield Park Reading Berkshire RG2 9AX England

E. Status Report on WWW implementation

Exchange of Status Messages (see also Annex II)

Some GDPS centres have agreed to issue status messages relating to delays to their numerical weather prediction process <u>on a trial basis</u>, starting on 1 December 1990. The abbreviated headings are as follows:

Originating centre:

Abbreviated heading:

RSMC Bracknell	NPXX10 EGRR YYGGgg
WMC Moscow	NPXX10 RUMS YYGGgg
WMC Washington	NPXX10 KWBC YYGGgg
RTH Prague	NPXX10 OKPR YYGGgg
NMC Hong Kong	NPXX10 VHHH YYGGgg
RSMC ECMWF	NPXX10 ECMF YYGGgg
RTH Nairobi will retransmit the status	s messages received.

Annex V - Marine Meteorological Services (MMS) and related oceanographic activities

Date: November 1990

C. Information on the operation of Marine Meteorological Services

2. Marine meteorological services available for main ports (Publication No. 9, Volume D. Part C1)

Changes (page: D-C1-VI-3):

Denmark - Danemark (11.X.1990)

(1)	(2)	(3)
Copenhagen	John Røssel Danish Meteorological Institute Observations Department Lyngbyvej 100 DK 2100 Copenhagen Ø	31292100
Changes (page: D-C1-VI-10	/11):	
Station at Galway is now clo Station at Cork Airport no l	osed. onger issues forecasts	

Ireland - Ireland (15.X.1990)

(1) (2) (4)	3)
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- (021)965974 Cork Meteorological Office, Cork Airport, Cork
- (4) Forecasts available from PMO on request. / Sur demande, prévisions disponibles auprès de l'AMP.
- For forecasts and other weather information contact CAFO, Meteorological Service, Glasnevin Hill, Dublin 9, (6) Tel. (01)424655, Telex 25239, 33128. / Pour les prévisions et autres renseignements météorologiques contacter CAFO, Meteorological Service, Glasnevin Hill, Dublin 9, Tél. (01)424655, Télex 25239, 33128.
 - (1) (2) (3)

Dublin

- Meteorological Service, Glasnevin Hill, Dublin 9 (01)424411
- (4) Warnings and forecasts for coastal waters supplied daily to Port Authority for distribution. Local and route forecasts supplied to shipping organizations by arrangement. / Avis et prévisions pour les eaux côtières fournis quotidiennement aux Autorités portuaires aux fins de distribution. Prévisions locales et de routes maritimes fournies aux organismes maritimes suivant entente préalable.
- (5) Routine forecasts for local coastal waters supplied to yachting organizations during sailing season. / Prévisions régulières pour les eaux côtières locales fournies aux organisations de yachting pendant la saison de la navigation à voile.

Annex V, p. 2

(6) For warnings, forecasts and other weather information contact CAFO, Meteorological Service, Glasnevin Hill, Dublin 9, Tel. (01)424655, Telex 91444, 33128, DOCFAX (01) 375780. /
 Pour les prévisions, les avis et autres renseignements météorologiques contacter CAFO, Meteorological Service, Glasnevin Hill, Dublin 9, Tél. (01)424655, Télex 91444, 33128, DOCFAX (01) 375780.

(1)	(2)	(3)

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Rosslare	Meteorological office, Rosslare Harbour, Co. Wexford	(053)33113

- (4) Forecasts available from PMO on request. Prévisions disponibles auprès de l'AMP sur demande.
- (6) For forecasts and other weather information contact CAFO, Meteorological Service, Glasnevin Hill, Dublin 9, Tel. (01)424655, Telex 25239, 33128. /
 Pour les prévisions et autres renseignements météorologiques contacter CAFO, Meteorological Service, Glasnevin Hill, Dublin 9, Tél. (01)424655, Télex 25239, 33128.