INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

WORLD METEOROLOGICAL ORGANIZATION

JOINT WMO-IOC TECHNICAL COMMISSION FOR OCEANOGRAPHY AND MARINE METEOROLOGY

and

WORLD WEATHER WATCH (of WMO)

INFORMATION SERVICE BULLETIN ON NON-DRIFTING OCEAN DATA ACQUISITION SYSTEMS (ODAS)

February 20, 2002

(SC-2002/WS/22)

INTRODUCTION

A. Background information

Recommendation 4 (IPLAN-III) - *Protection from loss and wilful disablement of buoys supporting IGOSS and WWW*, which was subsequently endorsed by the WMO Executive Committee at its Twenty-eighth Session (Res. 6 (EC-XXVIII)) and the IOC Executive Council at its Seventh Session (Res. EC-VII.19), requested the two Secretariats to initiate a regular service for obtaining information from Member States on their ocean data buoys and providing wide dissemination of the information collected. The purpose of such a service is not only to ensure the safety of navigation and the protection of buoys against collision, but also to inform the maritime community of the great scientific value of, and the immediate benefits to be derived from, ocean data buoys.

Relevant information was therefore requested from Member States of IOC and Permanent Representatives of Members of WMO through the joint IOC-WMO Circular Letter No. 76026 dated 20 December 1976. On the basis of the information received, the First Issue of a dedicated Bulletin was compiled in June 1977.

Since its fourth issue (March 1981), the Bulletin also contains information relating to ODAS other than ocean data buoys. These are lighthouses and light vessels, observing towers and platforms, oil rigs, land-based automatic stations which have been allocated international ocean data buoy identifier numbers, ice drift buoys, buoys mounted on ships. All of these are suitably instrumented for marine meteorological and oceanographic observation and transmission of data.

At its Third Session (Paris, February - March 1983), the joint IOC-WMO Working Committee for IGOSS recognized that, due to the increasing use of ODAS in the IGOSS and the WWW programmes, the volume of the Bulletin had become very large because of the format being used. The Committee therefore decided that the Bulletin be issued in a simplified form retaining essential elements of the existing Bulletin.

At its second session (Geneva, October 1986), the DBCP "*suggested that, in future, this publication could be restricted to non-drifting ODAS and requested the secretariats to present this suggestion to the Joint IOC-WMO Working Committee for IGOSS at its next session. On the other hand, the panel welcomed the proposal by CLS/Service Argos to issue on a quarterly basis all relevant information with regard to drifting buoys, at no cost to the panel*."

As a result of that suggestion, an inquiry was made among the Bulletin's addressees to decide whether the Bulletin should, or not, be restricted to non-drifting ODAS, in view of the rapid changes in status of drifting buoys. The unanimous answer was that it should. A new format for presentation of the relevant information was therefore prepared and adopted by the Joint IOC-WMO Working Committee for IGOSS at its fifth session (Paris, November 1988). The agreed format of presentation is given herewith in the four working languages, under "Format", together with related explanations ("Notes").

In May-July 1999, WMO Congress and the IOC Assembly decided to merge IGOSS and the WMO/CMM into JCOMM. The Bulletin became therefore a joint JCOMM/WWW publication.

At its fifteenth session (Wellington, October 1999), the DBCP "*requested the IOC Secretariat to arrange for the existing Non-Drifting ODAS Catalogue, previously developed under IGOSS, to be made available in*

electronic form, and provided to the technical coordinator and MEDS to be placed on the appropriate web servers. The Secretariats and the technical coordinator should then ensure that the catalogue was regularly and frequently updated."

MEDS kindly agreed to establish an electronic version of the Bulletin, on the basis of an Excel format which had been developed by a Swedish colleague to transmit his data to the Secretariats.

B. Procedures

Since meteorological and oceanographic reports which originate from many ODAS are routinely exchanged over the Global Telecommunication System of WMO, the particulars of these ODAS are published herewith, country by country, in a consolidated form, for reference purposes.

All those countries deploying non-drifting ODAS at sea are kindly requested to fill in a consolidated form (available in Excel for download, in English, French, Russian and Spanish) describing the particulars of their ODAS, according to the instructions detailed in the Notes (available in RTF/Word for download, in English, French, Russian and Spanish). If they are quoted under the list of countries having already provided such information, they can make use of their downloadable filled forms to introduce such modifications as are necessary.

All countries are strongly encouraged to do so "in near-real-time", viz every time there is a change in the status of their deployed ODAS. In any case, they are urged to check at least once a year (ideally during the month of January) their ODAS lists and to submit any required modification.

Once the forms have been properly modified, those Member States/Members are kindly requested to send them by e-mail as attached files to the Secretariats, attention Mr Yves Tréglos, for publication on the web.

C. Acronyms

CLS	Collecte Localisation Satellite
CMM	Commission for Marine Meteorology *[superseded by JCOMM]*
DBCP	Data Buoy Co-operation Panel (of WMO and IOC)
IGOSS	Integrated Global Ocean Services System (of IOC and WMO) *[superseded by JCOMM]*
IOC	Intergovernmental Oceanographic Commission (of UNESCO)
IPLAN	Joint IOC-WMO Planning Group for IGOSS *[no longer in existence]*
JCOMM	Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology
MEDS	Marine Environmental Data Service (of Canada)
ODAS	Ocean Data Acquisition Systems, Aids and Devices
UNESCO	United Nations Educational, Scientific and Cultural Organization
WMO	World Meteorological Organization
WWW	World Weather Watch (of WMO)

INFORMATION ON NON-DRIFTING ODAS Country: Date:

IDENTIFIER ODAS				LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	Code Form	Data Availability	Status	COMMENTS

NOTES

Identifier

In column "WMO", enter the WMO identifier allocated to the ODAS, if any (WMO code:$A_1b_wn_bn_bn_b$).

In column "Other", enter any other national or international identifier or call sign (and specify which it is).

ODAS

In column "Type",enter:

M	for a moored data buoy
P	for a platform
C	for a coastal or island station
O	for any other station (then specify in column "Comments")

in column "Hull":

If "Type" is M, enter:

xxD	For a discus buoy, xx meters diameter
xxS	For a spar buoy, xx meters high above sea surface
xxB	For a boat-shaped buoy, xx meters long
O	For any other kind of buoy (then specify in column "Comments")

- otherwise, enter 0 and specify in column "Comments".

Location

Enter the actual or planned position ($L_aL_a.L_aL_a$ N or S / $L_oL_oL_o.L_oL_o$ E or W) and date (DD/MM/YY) of deployment.

Variables Measured

Enter in the appropriate column the number of observations reported per day and (if relevant) the number of observational levels for sub-surface measurements. If salinity and/or current are measured at (or close to) the sea surface, enter the letter S in the appropriate column. Enter the letter R if the data are recorded on-board the ODAS. Specify in column "Comments" if the column "Other" is used.

Transmission Means

Enter:

H	for HF
V	for VHF
A	for Argos system
M	for meteorological/environmental satellite
I	for INMARSAT
O	for any other means of transmission (then specify in column "Comments")

Code Form

Enter:

S	for SHIP (FM 13-IX)
D	for DRIBU (FM 14-VIII)
B	for BATHY (FM 63-IX)
W	for WAVEOB (FM 65-IX)
U	for BUFR (Binary Universal Form for Representation of meteorological data)(FM 94-IX)
O	for any other code form used (then specify in column "Comments")

Data Availability

Enter:

G	If data are circulated over the GTS
M	If data are available on micro-computer-compatible carrier
C	If data are available on computer (other than micro-computer-compatible carrier)
L	If data are available on listings (or equivalent media, such as punched paper tape, etc.)
R	If data availability is restricted
O	In other cases (then specify in column "Comments")

Status

Enter:

O	for operational
E	for experimental
P	for planned
F	for failed (during the last 6 months)
A	for adrift or off station

Use more than one letter if necessary.

Comments

Enter any relevant comment in plain language.

RENSEIGNEMENTS CONCERNANT LES SADO NON DERIVANTS Pays: Date:

IDENTIFICATIF		SADO		LOCALISATION		PARAMETRES MESURES															
OMM	DIVERS (préciser)	Type	Corps	POSITION	DATE	Temp. de l'air	Press. atmosphérique	Tend. barométrique	Humidité	Vents (DD, FF)	Vagues (PP, HH)	Spectres vagues	Temp. surf. Mer	Temp. subsuperf.	Salinité	Courant	Divers (préciser)	Mode de transmission	Code	Disponib. des données	Situation	OBSERVATIONS

NOTES

Indicatif

Dans la colonne "OMM", porter, le cas échéant, l'indicatif attribué au SADO par l'OMM (code OMM: $A_1b_wn_bn_bn_b$).

Dans la colonne "Divers", porter éventuellement tout autre indicatif au numéro national ou international (préciser lequel).

SADO

Dans la colonne "Type", inscrire:

M	pour une bouée mouillée
P	pour une plate-forme
C	pour une station côtière ou insulaire
O	pour toute autre station (préciser alors dans la colonne "Observations")

Dans la colonne "Corps":

Si le "Type" est M, inscrire:

xxD	pour une bouée-disque de xx mètres de diamètre
xxS	pour une bouée-perche, xx mètres au-dessus de la surface de la mer
xxB	pour une bouée en forme de bateau, de xx mètres de long
O	pour toute autre type de bouée (préciser alors dans la colonne "Observations")

- Si non, mettre 0 et préciser dans la colonne "Observations".

Localisation

Indiquer la position (($L_aL_a.L_aL_a$ N ou S / $L_oL_oL_o.L_oL_o$ E ou W) et la date (DD/MM/YY) de mise à l'eau réelles ou prévues.

Parametres Mesures

Inscrire dans la colonne appropriée le nombre d'observations transmises par jour et (le cas échéant) le nombre de niveaux de relèvement pour les mesures subsuperficielles. Si la salinité et/ou le courant sont mesurés à la surface de la mer (ou à proximité), porter la lettre S dans la colonne correspondante. Porter la lettre R si les données sont enregistrées à bord du SADO. Si la colonne "Divers" est utilisée, préciser dans la colonne "Observations".

Mode de Transmission

Inscrire:

- H pour HF
- V pour VHF
- A pour système Argos
- M pour satellite météorologique/d'observations de l'environnement
- I pour INMARSAT
- O pour tout autre mode de transmission (préciser alors lequel dans la colonne "Observations")

Code

Inscrire:

- S pour SHIP (FM 13-IX)
- D pour DRIBU (FM 14-VIII)
- B pour BATHY (FM 63-IX)
- W pour WAVEOB (FM 65-IX)
- U pour BUFR (Forme universelle de représentation binaire des données météorologiques) (FM 94-IX)
- O pour tout autre code utilisé (préciser alors lequel dans la colonne "Observations")

Disponibilite des Données

Inscrire:

- G si les données sont diffusées par l'intermédiaire du SMT
- M si les données sont disponibles sur un support utilisable sur des micro-ordinateurs différents
- C si les données sont disponibles sur un support utilisable sur des ordinateurs différents (autre que des micro-ordinateurs)
- L si les données sont disponibles sur listages (ou support quivalent, tel que bande perforée etc.)
- R si l'accès aux données est réservé
- O dans les autres cas (préciser alors dans la colonne "Observations")

Situation

Inscrire:

- O pour "opérationnel"
- E pour "expérimental"
- P pour "prévu"
- F pour "fonctionnement défectueux" (au cours des six derniers mois)
- A pour "à la dérive" ou "au large de la station"

Utiliser plus d'une lettre si besoin est.

Observations

Porter ici en clair toute observation utile.

INFORMACION SOBRE LOS ODAS QUE NO VAN A LA DERIVA Pais: Fecha:

IDENTIFICADOR		ODAS		LOCALIZACION		PARAMETROS MEDIDOS															
OMM	VARIOS (espec.)	Typo	Casco	POSICION	FECHA	Temp. aire	Press. aire	Tend. presion	Humedad	Viento (DD, FF)	Olas(PP, HH)	Espectro olas	SST	Temp. superf. mar	Salinidad	Corrientes	Varios (espec.)	Medios Trans.	Forma codigo	Disponib. de datos	Condiciones	COMENTARIOS

NOTAS

Identificador

En la columna "OMM" se anotará el identificador de la OMM asignado a los ODAS, cuando lo haya (Código OMM: $A_1b_wn_bn_bn_b$).

ODAS

En la columna "Tipo" se anotará:

M	Para los datos obtenidos gracias a las boyas ancladas
P	Para una plataforma
C	Para una estación situada en las costas o en una isla
O	Para cualquier otra estación (se especificará entonces en la columna "Comentarios")

En la columna "Casco":

Si el "Tipo" es M, se anotará:

xxD	Para una boya en forma de disco de xx metros de diámetro
xxS	Para una boya en forma de pértiga de xx metros de altitud sobre el nivel del mar
xxB	Para una boya en forma de buque de xx metros de longitud
O	Para cualquier otro tipo de boya (se especificará entonces en la columna "Comentarios")

- Si se trata de otro tipo, se anotará O y se especificará en la columna "Comentarios".

Localizacion

Se anotará la posición actual o prevista ($L_aL_a.L_aL_a$ N o S / $L_oL_oL_o.L_oL_o$ E o W) y la fecha (DD/MM/YY) del despliegue.

Parametros Medidos

Se anotará en la columna adecuada el número de observaciones realizadas al dia y, cuando proceda, el de los niveles observacionales para las mediciones subsuperficiales. Cuando se mida la salinidad y/o la corriente en la superficie del mar (o cerca de ella), se anotará la letra S en la columna adecuada. Se anotará la letra R cuando los datos se registren a bordo de los ODAS. Si se utiliza la columna "Varios", se especificará en la columna "Comentarios".

Medios De Transmision

Se anotará:

H	Para HF
V	Para VHF
A	Para el sistema Argos
M	Para los satélites meteorológicos o ambientales
I	Para INMARSAT
O	Para cualquier otro medio de transmision (se especificará entonces en la columna "Comentarios")

Forma Del Codigo

Se anotará:

S	Para SHIP (FM 13-IX)
D	ParaDRIBU (FM 14-VIII)
B	Para BATHY (FM 63-IX)
W	Para WAVEOB (FM 65-IX)
U	Para BUFR (Forma Binaria Universal para la Representación de Datos Meteorológicos) (FM 94-IX)
O	Para cualquier otra forma de código usada (se especificará entonces en la columna "Comentarios")

Disponibilidad De Los Datos

Se anotará:

G	cuando los datos circulan a través del SMD
M	cuando los datos se obtengan mediante un transmisor compatible con las microcomputadoras
C	cuando los datos se obtengan mediante un transmisor compatible con las computadoras (además de las microcomputadoras)
L	cuando los datos se obtengan mediante cintas de papel (u otro medio equivalente, como cintas de papel perforadas, etc.)
R	cuando la disponibilidad de los datos sea limitada
O	en otros casos (se especificará entonces en la columna "Comentarios")

Posicion

Se anotará:

O	Operacional
E	Experimental
P	Planificado
F	Fallido (durante los seis últimos meses)
A	las boyas a la deriva o situadas fuera de una estación

Utilicese mas de una letra cuando sea necesario.

Comentarios

Anótese cualquier comentario pertinente en languaje sencillo.

СВЕДЕНИЯ О НЕДРЕЙФУЮЩИХ ССОД СТРАНА: ДАТА:

Обозначение		ССОД		Местоположение		Изменяемые параметры																
ВМО	Прочее указать	Тип	Корпус	Положение	Дата	Температура воздуха	Давление воздуха	Тенденция давления	Влажность	Ветер (DD, FF)	Волны (PP, HH)	Спектр волн	ТПО	Температура подповерхност	Соленость	Течение	Прочее (указать)	Средства передачи	Форма кода	Наличие данных	Статус	Замечания

ПРИМЕЧАНИЯ

Обозначение

В колонку «ВМО» вносится обозначение ВМО, закрепленное за ССОД, если таковое имеется (код ВМО : $A_1\ b_w\ n_b\ n_b\ n_b$).

В колонку «ПРОЧЕЕ» вносится любое другое национальное международное обозначение или опознавательный знак (или указывается его вид).

ССОД

В колонку «Тип» вносятся :

M	для заякоренных буев для сбора данных
P	для платформ
C	для береговой или островной станции
O	для любой другой станции (в этом случае уточняется в колонке «ЗАМЕЧАНИЯ»)

В колонке «Корпус» :

- если «Тип» обозначен как M, вносится :

xxD	для дискового буя : xx метров в диаметре
xxS	для мачтового буя : xx метров высоты над поверхностью моря
xxB	для буев в форме лодки : xx метров в длину
O	для любого другого типа буев (в этом случае уточняется в колонке «ЗАМЕЧАНИЯ»)

- во всех других случаях указывается O и уточняется в колонке «ЗАМЕЧАНИЯ»)

Местоположение

Указывается фактическое и запланированное положение ($L_a\ L_a\ .\ L_a\ L_a\ N$ или S / $L_a\ L_a\ L_a\ .\ L_a\ L_a\ E$ или W) и данные (DD / MM / YY) о размещении.

Изменяемые параметры

В соответствующей колонке указывается количество произведенных за день наблюдений и (в надлежащих случаях) количество уровней наблюдений для поверхностных измерений. В случае измерения солености и/или течения на уровне поверхности моря (или близком к ней) в соответствующую колонку вносится буква S. Если данные фиксируются непосредственно на ССОД, то вносится буква R. В том случае, если используется колонка «ПРОЧЕЕ», необходимо внести уточнение в колонке «ЗАМЕЧАНИЯ».

Средства передачи

Указывается :

H	для передачи ВЧ
V	для передачи ОВЧ
A	для системы Аргос
M	для метеорологических/экологических спутников
I	для ИНМАРСАТ
O	для любых других средств передачи (в этом случае уточняется в колонке «ЗАМЕЧАНИЯ»)

Форма кода

Указывается :

S	для ШИП (FM 13 – IX)
D	для ДРИБУ (FM 14 – VIII)
B	для БАТИ (FM 63 – IX)
W	для ВАВЕОБ (FM 65 – IX)
U	для БУФР (Универсальная двоичная форма для представления метеорологических данных) (FM 94 – IX)
O	для любой другой используемой формы кода (в этом случае уточняется в колонке «ЗАМЕЧАНИЯ»)

Наличие данных

Указывается :

G	если данные распространяются через ГСТ
M	если данные имеются на носителе, совместном с микро-ЭВМ
C	если данные имеются на носителе, совместном с ЭВМ (кроме микро-ЭВМ)
L	если данные имеются в перечнях (или на эквивалентных Средствах, таких как перфорированные бумажные ленты и т.п.)
R	если ограничен доступ к данным
O	во всех иных случаях (указать в колонке «ЗАМЕЧАНИЯ»)

Статус

Указывается :

O	для действующего
E	для экспериментального
P	для планируемого
F	для прекратившего функционирование (за последние шесть месяцев)
A	для дрейфующего или находящегося вне станции
B	случае необходимости используется несколько букв

Замечания

Указываются любые соответствующие замечания обычным текстом

INFORMATION ON NON-DRIFTING ODAS **Country: Argentina*** **Date: May 1993**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
USHUAIA		C		54º47'S 68º20'W	May 13,1991	240	240			24							240	M	O	M	O	Sea level GOES
MAR DEL PLATA		C		38º03'S 57º30'W	Feb 4,1992	240	240			24							240	M	O	M	O	Sea level GOES
ESPERANZA		C		63º18'S 56º55'W	Feb 28,1993	240	240			24				240			240	M	O	M	O	Sea level GOES

* No report received since 1993

INFORMATION ON NON-DRIFTING ODAS **Country: Australia** **Date: 1 June 1999**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
55014		M	0	35.72ºS 150.34ºE	Dec 11,1992						X								D	G	O	Wave rider buoys
55017		M	0	28.70ºS 153.75ºE	Dec 11,1992						X								D	G	O	Wave rider buoys
55018		M	0	30.35ºS 153.27ºE	Dec 11,1992						X								D	G	O	Wave rider buoys
55019		M	0	31.82ºS 152.86ºE	Dec 11,1992						X								D	G	O	Wave rider buoys
55020		M	0	37.29ºS 150.18ºE	Dec 11,1992						X								D	G	O	Wave rider buoys
55022		M	0	34.48ºS 151.02ºE	Dec 11,1992						X								D	G	O	Wave rider buoys
55024		M	0	33.78ºS 151.39ºE	Dec 11,1992						X								D	G	O	Wave rider buoys
56002		F	0	19.58ºS 116.14ºE	Sep 10,1990	X	X			X	X								D	G	O	North Rankin oil platform
55025		M	0	35.18ºS 138.30ºE	Aug 28,1997	X	X			X	X								D	G	O	Wave rider buoys
55038	Argos 2946	M	02S	33.9ºS 151.3ºE	Mar 22,1999	X	X	X		X		X							D	G	O	

INFORMATION ON NON-DRIFTING ODAS **Country: Canada** **Date: 1 January 199**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	air temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
44137		M	06B	41 50'N 060 56'W	Sep-88	24	24	24		24	24	24	24					M	S	G	O	
44138		M	06B	44 16'N 053 37'W	Oct-88	24	24	24		24	24	24	24					M	S	G	O	
44139		M	06B	44 11'N 057 33'W	Sep-88	24	24	24		24	24	24	24					M	S	G	O	
44140		M	06B	43 50'N 051 30'W	Jul-91	24	24	24		24	24	24	24					M	S	G	O	
44141		M	06B	42 07'N 056 11'W	Apr-91	24	24	24		24	24	24	24					M	S	G	O	
44142		M	06B	42 30'N 064 01' W	Aug-90	24	24	24		24	24	24	24					M	S	G	O	
44251		M	06B	46 26'N 053 23'W	Mar-98	24	24	24		24	24	24	24					M	S	G	O	
44255		M	06B	47 17'N 057 21'W	Mar-98	24	24	24		24	24	24	24					M	S	G	O	
45132		M	03D	42 28'N 081 13'W	Apr-86	24	24	24		24	24	24	24					M	S	G	O	Seasonal
45135		M	12D	43 47'N 076 52'W	May-91	24	24	24		24	24	24	24				24	M	S	G	O	
45136		M	03D	48 32'N 086 57'W	Aug-88	24	24	24		24	24	24	24					M	S	G	O	Seasonal
45137		M	03D	45 33'N 081 01'W	Jun-89	24	24	24		24	24	24	24					M	S	G	O	Seasonal
45138		M	03D	49 33'N 065 46'W	Apr-91	24	24	24		24	24	24	24					M	S	G	O	Seasonal
45139		M	12D	43 26'N 079 23'W	Jul-91	24	24	24		24	24	24	24					M	S	G	O	
45140		M	*	50 29'N 096 26'W	May-98	*	*	*		*	*	*	*					A	S	G	O	Toga Hull/Random Reporting/Seasonal
45141		M	03D	61 07'N 115 11'W	Jul-92	24	24	24		24	24	24	24					M	S	G	O	Seasonal
45142		M	03D	42 44'N 079 17'W	May-94	24	24	24		24	24	24	24					M	S	G	O	Seasonal
45143		M	03D	44 55'N 080 38'W	Jun-96	24	24	24		24	24	24	24					M	S	G	O	Seasonal
45150		M	*	61 55'N 113 45'W	Jul-98	*	*	*		*			*					A	S	G	O	Hexoid Hull/Random Reprting/Seasonal
46004		M	06B	50 58'N 135 48'W	Feb-85	24	24	24		24	24	24	24					M	S	G	O	
46036		M	06B	48 21'N 133 55'W	May-86	24	24	24		24	24	24	24					M	S	G	O	
46131		M	03D	49 54'N 124 59'W	Oct-92	24	24	24		24	24	24	24					M	S	G	O	
46132		M	03D	49 44'N 127 55'W	Oct-93	24	24	24		24	24	24	24					M	S	G	O	
46134		M	03D	48 39'N 123 27'W	Nov-98	24	24	24		24	24	24	24				24	M	S	G	E	Optical Sensors/Ocean Colour
46145		M	03D	54 23'N 132 26'W	Apr-91	24	24	24		24	24	24	24					M	S	G	O	
46146		M	03D	49 20'N 123 44'W	Mar-92	24	24	24		24	24	24	24				24	M	S	G	O	Optical Sensors/Ocean Colour
46147		M	03D	51 49'N 131 12'W	May-93	24	24	24		24	24	24	24					M	S	G	O	
46181		M	03D	53 50'N 128 50'W	May-86	24	24	24		24	24	24	24					M	S	G	O	
46183		M	03D	53 37'N 131 06'W	Apr-91	24	24	24		24	24	24	24					M	S	G	O	
46184		M	06B	53 54'N 138 52'W	Sep-87	24	24	24		24	24	24	24					M	S	G	O	
46185		M	03D	52 24'N 129 47'W	Sep-90	24	24	24		24	24	24	24					M	S	G	O	

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
WMO#	OTHER	Type	Hull	POSITION	DATE	air temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others				
46204		M	03D	51 22'N 128 45'W	Jul-89	24	24	24		24	24	24	24					M	S	G	O	
46205		M	03D	54 10'N 134 20'W	Nov-88	24	24	24		24	24	24	24					M	S	G	O	
46206		M	03D	48 50'N 126 00'W	Nov-88	24	24	24		24	24	24	24					M	S	G	O	
46207		M	03D	50 52'N 129 55'W	Jul-89	24	24	24		24	24	24	24					M	S	G	O	
46208		M	03D	52 30'N 132 42'W	Jul-89	24	24	24		24	24	24	24					M	S	G	O	

INFORMATION ON NON-DRIFTING ODAS **Country: China *** **Date: 15 March 1992**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others				
	B	M	10D	38º 00'N 123º28'E	SEP 7 1991	4	4			4	4			4				HF	S	M	O	Buoy No.15
	F	M	10D	29º31'05"N 124º00'05"E	Jul 14 1991	4	4			4	4			4				HF	S	M	O	Buoy No.17
	I	M	03D	20º30'N 113º 54'E	Feb 29 1992	4	4			4	4			4				A	S	M	O	Buoy No.1
	L	M	10D	18º03'12"N 116º30'30"E	Jun 1 1991	4	4			4	4			4				HF	S	M	O	Buoy No.20

* No report received since 1992

INFORMATION ON NON-DRIFTING ODAS **Country: Ecuador** **Date: 2 March 1999**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
				01º17.7'N 79º50.5'W																		
SAN LORENZO		C			Jan 01,1975	7	7		7	7			3					O		L	O	Transmitted by e-mail
ESMERALDAS		C		00º59.7'N 79º38.7'W	Jan 01,1975	7	7		7	7	7		3		1			O		L	O	Transmitted by fax
MANTA		C		00º56.3'S 80º44.2'W	Jan 01,1975	7	7		7	7	7		3		1			O		L	O	
LA LIBERTAD		C		02º12'S 80º54.2'W	May 7, 1988	7	7		7	7	7		3		1			O		L	O	
GUAYA-QUIL		C		02º16.1'S 79º54.3'W	Oct 3,1974	7	7		7	7												
PUNA		C		02º44.2'S 79º54.5'W	Jan 01,1977	7	7		7	7			3					O		L	O	
PTO. BOLIVAR		C		03º15.4'S 80º00'W	Jan 01,1977	7	7		7	7			3		1			O		L	O	

INFORMATION ON NON-DRIFTING ODAS **Country: Finland *** **Date: December 1992**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
				65.44 N 24.31 E																		
02862	Ajos	C			1990/10/01	8	8	8	8	8								O	O	G	O	1. Telephone line (TL) 2. SYNOP (S)
02979	Bogskar	P		59.30 N 20.21 E	1982/01/01	8	8	8	8	8				8				O	O	G	O	1.Nordic Mobile Telephone (NMT) 2. S
02561	Bredskaret	C		62.55 N 21.11 E	1991/05/29	8	8	8	8	8								O	O	C	O	1. TL 2. S
02991	Emasalo	C		60.13 N 25.38 E	1991/04/03	8				8								O	O	G	O	1. TL 2. S
05950	Fagerholm	C		60.07 N 21.42 E	1989/05/24	8	8	8	8	8								O	O	C	O	1. TL 2. S
02967	Haapasaari	C		60.17 N 27.11 E	1985/06/01	8	8	8	8	8								O	O	G	O	1. TL 2. S
05387	Hanko	C		59.48 N 22.54 E	1990/06/01	8	8	8	8	8								O	O	C	O	1. TL 2. S
05795	Harmaja	C		60.06 N 24.59 E	1989/06/21	8	8	8	8	8				8				O	O	C	O	1. TL 2. S
05396	Jussaro	C		59.50 N 23.35 E	1990/06/01	8	8	8	8	8								O	O	C	O	1 .TL 2. S
02987	Kalbadagrund	P		59.59 N 25.36 E	1977/11/10	8	8	8	8	8								O	O	G	O	1. NMT 2. S
02863	Kemi I	P		65.23 N 24.06 E	1978/01/01	8	8	8	8	8								O	O	G	O	1. NMT 2. S
02932	Kristiinan-Kaupunki	C		62.15 N 21.19 E	1984/01/01	8	8		8	8								O	O	G	O	1. TL 2. S
05562	Kylmapihlaja	C		61.09 N 21.18 E	1990/06/06	8	8	8	8	8								O	O	C	O	1. TL 2. S
02993	Market	P		60.18 N 19.08 E	1977/11/10	8	8	8	8	8				8				O	O	G	O	1. NMT 2. S
02980	Nyhamn	C		59.58 N 19.58 E	1990/05/01	8	8	8	8	8								O	O	G	O	1. NMT 2. S
02992	Orrengrund	C		60.16 N 26.27 E	1991/04/04	8				8								O	O	G	O	1. TL 2. S
05872	Raahe	C		64.41 N 24.28 E	1990/10/01	8	8	8	8	8								O	O	C	O	1. TL 2. S
05295	Rajakari	P		60.23 N 22.01 E	1991/06/05	8	8	8	8	8				8				O	O	C	O	1. TL 2. S
02907	Ulkokalla	C		64.20 N 23.27 E	1977/11/10	8	8	8	8	8				8				O	O	G	O	1. NMT 2. S
05382	Vano	C		59.52 N 22.12 E	1990/06/01	8	8	8	8	8								O	O	C	O	1. TL 2. S

* No report received since 1992

INFORMATION ON NON-DRIFTING ODAS **Country: France** **Date: December 1992**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															DP - Dew Point MG - Max Gust D - FM18 BUOY
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
41097	Martinique 1	M	0	14º54'N 61º09'W	Apr 1995						48	48	48					HA	D	GM	O	Datawell directional waverider Oceantilles programme
41098	Martinique 2	M	0	14º39'N 60º49'W	Jul 1997						48	48	48					HA	D	GM	O	Datawell directional waverider Oceantilles programme
41100	ODAS Antilles 1	M	4S	15º56'N 57º55'W	Feb 1999	24	24	24	24	24	24	24	24				DP MG	M	SW	GC	O	Oceantilles programme
41101	ODAS Antilles 2	M	4S	14º37'N 56º15'W	Feb 1999	24	24	24	24	24	24	24	24				DP MG	M	SW	GC	O	Oceantilles programme
61001	ODAS Nice	M	4S	43º23'N 07º50'E	Mar 1999	24	24	24	24	24	24	24	24				DP MG	M	SW	GC	O	Oceantilles programme
62001	ODAS Gascogne	M	4S	45º14'N 05º00'W	Jul 1998	24	24	24	24	24	24		24				DP MG	M	S	GC	O	Co-operative project between Meteo-France and the UK Met. Office
62051	Le Havre	M	11D	49º30'N 00º12'W	Mar 1998	24				24			24					V	S	G	O	Aid-to-Navigation buoy
62163	ODAS Brittany	M	4S	47º32'N 08º30'W	Apr 1995	24	24	24	24	24	24		24				DP MG	M	S	GC	O	Co-operative project between Meteo-France and the UK Met. Office
13010	SOUL	M	0	0º00'N 0º00'E	Feb 1998	24				24			24	24				A	D	GC	F	Toroidal ATLAS buoy Pirata Project
15001	GAVOTTE	M	0	10º00'S 10º00'W	Sep 1997	24				24			24	24				A	D	GC	O	Toroidal ATLAS buoy Pirata Project
15002	JAVA	M	0	0º00'N 10º00'W	Sep 1997	24				24			24	24				A	D	GC	O	Toroidal ATLAS buoy Pirata Project
15003	VALSE	M	0	6º00'N 10º00'W	Jan 1999	24				24			24	24				A	D	GC	O	Toroidal ATLAS buoy Pirata Project
	RYTHM	M	0	2º00'N 10º00'W	Sep 1999	24				24			24	24				A	D	GC	P	Toroidal ATLAS buoy Pirata Project

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															DP - Dew Point MG - Max Gust D - FM18 BUOY
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
	BLUES	M	0	2º00'N 10º00'W	Sep 1999	24				24			24	24				A	D	GC	P	Toroidal ATLAS buoy Pirata Project

INFORMATION ON NON-DRIFTING ODAS **Country: Germany** **Date: August 1999**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAIL.	STATUS	COMMENTS
	DHI 1			54º 30'N									24		24		se					O_2, 24/1 lighthouse
	SXVF 41	P	0	10º 16'E	1971	24							5	24	2		e	M	O	C	O	radioactivity 24
	DHI 2			54º 36'N									24		24	24						O_2, 24/2 lighthouse
	SXVF 42	O	10 D	11º 09'E	1984	24	24			24			4	24	2	2	"	M	O	C	O	radioactivity 24/2
	DHI 3			55º 00'N									24		24	24						O_2, 24/2 stabilized buoy
	SXVF 43	M	04 D	06º 20' E	1984	24	24			24			6	24	2	2	"	M	O	C	O	radioactivity 24
	DHI 4																					
	SXVF 44			54º 41'N																		O_2, 24/2, stabilized buoy
	EESA	M	06D	06º 45'E		24	24			24			24	24	24	24	"	M	O	C	P	water level 24
	DHI 5			54º 10'N									24		24	24						O_2, 24/2, unmanned lightship
	SXVF 45	O	26 B	07º 27'E	1989								5	24	2	2	"	M	O	C	O	Water level 24
	DHI 6			54º 00'N									24		24	24						O_2, 24/2, unmanned lightship
	SXVF 46	O	26 B	08º 06,5'E	1988								3	24	2	2	"	M	O	C	O	radioactivity 24
	DHI 7			54º 10'N									24		24	24						O_2, 24/2, unmanned lightship
	SXVF 47	O	26 B	06º 20,8'E	1989								5	24	2	2	"	M	O	C	O	radioactivity 24
														24	24		24	M/	T			
	BSH IOW			54º41,9' N										X	X		X	GS	X			Mast DARSS Sill
	DS FMHA1	M	10S	12º 41,9' E	15/10/93	24	24		24	24				6	4		2	M	T	C	O	M/GSM =METEOSAT/GSM
														24	24		24	M/	T			
	BSH IOW			54º 4,6' N										X	X		X	GS	X			Discus Buoy ODER-BANK
	OB FMHA3	M	10D	14º 9,6' E	30/05/96	24	24		24	24				2	2		2	M	T	C	O	M/GSM =METEOSAT/GSM
				53º 34' N																		Gamm-Spectrum Telephone MODEM
		C		006º 45' E	01.08.89												8	O	O	C	O	Transmission
				54º 45' N																		
		C		008º 18' E	01.08.89												8	O	O	C	O	Radioactivity
				54º 09' N																		

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAIl.	STATUS	COMMENTS
		C		11º 44' E	01.07.90												24	O	O	C		Radioactivity
		M	0	54º 59,8' N	1905							8					A		M	O		Wave rider Sphere,
				54º 00' N													2)					1) Bulletin Number
10005		O[7)]		08º 07' E	1988	24	24	8	24	24				24			3)	M	O[6)]	G	O	2) Relative Humidity
																	2)					
				54º10' N													3)					
10007		O[7)]		07º 27' E	1986	24	24	8	24	24				24			5)	M	O[6)]	G	O	
10004		O[7)]		54º 10' N	1988	24	24	8	24	24				24			2)	M	O[6)]	G	O	
																	2)					
																	3)					
				54º 30' N													4)					
10044		O[8)]		10º 16' E	1970	24	24	8	24	24				24			5)	M	O[6)]	G	O	
																	2)					
																	3)					
				53º 52' N													4)					
10124		O[8)]		08º 08' E	1970	24	24	8	24	24				24			5)	M	O[6)]	G	O	
				54º 41,8' N																		
	IFM Wa	M	0	12º 42,4' E	Jun-77											4				L	O	Sub-surface mooring
				54º 41,8' N																		
		M	10S	12º 42,4' E	Sep-91					X			X		X					R	EP	Mast mooring
	META-2			km 669	1.91								R	R	R	1)						Moored measuring platform (pontoon) "META-2"
				River Elbe																		1) Turbidity;
	META-1			km 698	1.91	X				X				X	X	X						seston concentration
				73º 38' S																		
	AW1 213/2	M	0	26º 07' W	06.02.91										X	X	X			C	O	sub-surface moorings
				57º 38' S																		
	AW1 400	M	0	04º 03' E	21.03.91										X	X	X			C	O	sub-surface moorings

INFORMATION ON NON-DRIFTING ODAS **Country: Greece *** **Date: 4 May 1989**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
16732		C	0	25º32E 37º06N	1955	8	8	8	8	8				3				O	O	G	O	Island Station (NAXOS)
16717		C	0	23º38E 37º56N	1956	6	6	6	6	6				3				O	O	L	O	Coastal Station (PIREAS) Transmission by telex or telephone in SYNOP code form

INFORMATION ON NON-DRIFTING ODAS **Country: India** **Date: 31.07.1999**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
	SW 1	M	02S	N 20.885 E 71.493	29-Jun-99	8	8			8	8	8	8		8	8		1	U	O	O	
	SW 2	M	02S	N 18.593 E 71.031	29-Jan-98	8	8			8	8	8	8		8	8		1	U	O	F	
	SW 3	M	02S	N 15.367 E 73.750	26-Jan-98	8	8			8	8	8	8		8	8		1	U	O	A	A- UNDER MAINTENANCE
	DS1	M	03D	N 15.492 E 69.281	01-Feb-98	8	8			8	8	8	8		8	8		1	U	O	O	
	DS2	M	03D	N 10.672 E 72.510	23-Nov-98	8	8			8	8	8	8		8	8		1	U	O	F	DATA WOULD BE CIRCULATED OVER GTS BY END OF 1999.
	SW 5	M	02S	N 08.699 E 78.339	16-Sep-97	8	8			8	8	8	8		8	8		1	U	O	O	
	SW 6	M	02S	N 13.096 E 80.321	21-Aug-97	8	8			8	8	8	8		8	8		1	U	O	O	
	DS3	M	03D	N 13.034 E 86.934	19-Jul-99	8	8			8	8	8	8		8	8		1	U	O	O	
	DS4	M	03D	N 17.990 E 88.090	07-Jun-98	8	8			8	8	8	8		8	8		1	U	O	O	

INFORMATION ON NON-DRIFTING ODAS **Country: Iran *** **Date: June 1998**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others					
	30136 - 50			29º45'N 55º44'E	29 01 95						X		X								O	Bushehr Port - wave recorders
	30110			25º16'N 60º39'E	26 01 95						X		X								O	Chabahar Port - wave recorders
(serial numbers)																						

* No report received since 1999

INFORMATION ON NON-DRIFTING ODAS **Country: Israel *** **Date: 30 May 1995**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Waves (PP,HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
		M		32 30 N 34 50 E	Aug-89	24				24	8		24							L	O	buoy DATAWELL near coastal station Hadera
		M		31 50 N 34 38 E	May-92	24	24	8	24	24	8	8								L	O	buoy DATAWELL near coastal station Ashdod
		M		34 56 N 32 50 E	Apr-94	24	24	8	24	24	8	8								L	O	buoy DATAWELL near coastal station Haifa

* No report received since 1995

INFORMATION ON NON-DRIFTING ODAS **Country: Japan** **Date: 1 April 1999**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
21002	ODAS -J7	M	10D	37º55' N 134º33' E	10 Nov 1976	8	8	8	8	8	8		8	2			8	M	S B	G	O	Solar radiation
21004	ODAS-J6	M	10D	29º00' N 135º00' E	09 Jun 1982	8	8	8	8	8	8		8	2			8	M	S B	G	O	Solar radiation
22001	ODAS-J8	M	10D	28º10' N 126º20' E	05 Sep 1974	8	8	8	8	8	8		8	2			8	M	S B	G	O	Solar radiation
52071		M	2.4D	7º58' N 156º02' E	25 Feb 1999	8	8		8	8			8	12	12	1		A	O	G	O	FM18
52072		M	2.4D	5º01' N 155º58' E	27 Feb 1999	8	8		8	8			8	12	12	1		A	O	G	O	FM18
52073		M	2.4D	1º55' N 156º00' E	01 Mar 1999	8	8		8	8			8	12	12	1		A	O	G	O	FM18
52075		M	2.4D	2º01' S 155º57' E	05 Mar 1999	8	8		8	8			8	12	12	1		A	O	G	O	FM18
52076		M	2.4D	5º03' S 156º03' E	07 Mar 1999	8	8		8	8			8	12	12	1		A	O	G	O	FM18
52077		M	2.4D	4º52' N 146º58' E	16 Feb 1999	8	8		8	8			8	12	12	1		A	O	G	O	FM18
52078		M	2.4D	2º04' N 146º57' E	18 Feb 1999	8	8		8	8			8	12	12	1		A	O	G	O	FM18
52079		M	2.4D	0º05' N 146º51' E	20 Feb 1999	8	8		8	8			8	12	12	1		A	O	G	O	FM18

INFORMATION ON NON-DRIFTING ODAS **Country: Kuwait * (Arabian Gulf)** **Date: 27 March 1989**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others					
not yet assigned	not yet assigned	M	0	29º 10' N 48º 10' E	July/1989					14	8							V	O	M	P	Hull: Sperical data buoy with 1 m diameter

* No report received since 1989

INFORMATION ON NON-DRIFTING ODAS **Countri: Madagascar *** **Date: 25 May 1989**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
		M	D			6 R	6 R	6 R	6 R	6 R	6 R	6 R	6 R	6 R	6 R S	6 R S			U	R	P	

* No report received since 1989

INFORMATION ON NON-DRIFTING ODAS **Country: Malaysia *** **Date: 6 January 1997**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED														
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
	Tapis-A	P		5.5N 105.0E	1.10.85	2	2		2	2	2							O	O	G	O	
	Duyong	P		5.0N 105.2E	1.6.89	2	2		2	2	2		2					O	O	G	O	
	E-11	P		4.3N 112.6E	5.5.82	2	2			2	2							O	O	G	O	
	M3PQ	P		5.2N 111.8E	23.9.95	2	2			2	2							O	O	R	O	
	Baronia South	P		4.7N 113.7E	N/A	2	2			2	2							O	O	R	O	TransMeans= all observed variables are received by fax from platforms
	Furious	P		6.7N 116.2E	N/A	2	2			2	2							O	O	R	O	Code Form= data are received in local format

* No report received for 1998 and 1999

INFORMATION ON NON-DRIFTING ODAS **Country: Mauritius *** **Date: May 1998**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
		0.7 D		20º 20'S 57º 42'E	1998/02/04						8			8				V[1]	O[2]	O[3]		Wave-rider buoy 1. To coastal receiving station 2. Plain language

* No report received for 1999

INFORMATION ON NON-DRIFTING ODAS **Country: Mexico *** **Date: January 1996**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
				19º24'.4N 092º12'.7W																		
	IXTOC-A	P				X	X	X	X	X	X							O	S	O		
	CAYO																					
	ARCAS	P		20º09'.8N 091º57'.8W		X	X	X	X	X	X							O	S	O		
	ECO-1	P		19º01'.8N 092º01.1W		X	X	X	X	X	X							O	S	O		COMPRESSED FORMAT

* No report received since 1996

INFORMATION ON NON-DRIFTING ODAS **Country: The Netherlands * Date: 1 June 1996**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
6320	GOEREE LE	P		51º56'N 3º40'E		24	24	24	24	24	24	24	24				24	H	O*	GCL	O	Windgust, mean max. wind, visibility
06253	AUK-ALFA	P		56º24'N 2º04'E		24	24	24		24	24	24					24	H	O*	RCL	O	Windgust, mean max. wind, NB wave spectra not transmitted
06252	K-13-A	P		53º13'N 3º13'E		24	24	24		24	24	24					24	H	O*	GCL	O	Windgust, mean max. wind
06254	Meetpost Noordwijk	P		52º16'N 4º18'E		24	24	24	24	24	24	24	24				24	H	O*	GCL	O	Windgust, mean max. wind
06321	EURO Platform	P		52º00'N 3º17'E		24	24	24	24	24	24	24	24				24	H	O*	GCL	O	Windgust, mean max. wind, visibility
06255	Noorde-lijke Zeeraaf	P		61º14'N 1º09'E		24	24		24	24	24	24						M	O*	RCL	O	
06239	F3	P		54º51'N 4º44'E		24	24	24	24	24							24	M	O*	GCL	O	Spectra not windgust, mean max. wind, cloud base, visibility

* No report received since 1996

INFORMATION ON NON-DRIFTING ODAS **Country: Oman *** **Date: 04/01/1993**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others				
23051	Mina Qaboos	M	xxD	23.7N 58,E	30348	8			8	8	8		8					O	S	G M	A	Original positon has been changed more than once but within a degree of the position indicated here.
23052	Sur	M	xxD	22-35.33N 59-32.6E	Feb-83	8			8	8	8		8					O	S	G M	A	Transmission is by means of UHF radio. Mina Qaboos buoy is CODE FORM: Fm 18-IX Extn.
23053	Mina Raysut	M	xxD	54-01.45E 16-56.10N	Apr-92						8		8									

* No report received since 1993

INFORMATION ON NON-DRIFTING ODAS **Country: Peru** **Date:**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
	EL SALTO	C		03º25' S 80º18' W	Jan-77	4	4		4	4				4				O	O	M		MONTHLY SYNOP BY MAIL
	PAITA	C		05º05' S 81º06' W	Jun-78	4	4	4	4	4				4				O	O	M		MONTHLY SYNOP BY MAIL
	ISLA LOBOS A.	C		06º36' S 80º42' W	Jun-79	4	4	4	4	4				4				O	O	M		MONTHLY SYNOP BY MAIL
	SALAVE-RRY	C		08º13' S 68º58' W	Jun-78	4	4	4	4	4				4				O	O	M		SYNOP MESSAGE BY MAIL
	CHIM-BOTE	C		09º04' S 68º36' W	Jun-78	4	4	4	4	4				4				O	O	M		SYNOP MESSAGE BY MAIL
	CHICUI-TO	C		12º03' S 77º09' W	Apr-77	20	8	8	20	20				8				O	O	M		SYNOP MESSAGE BY MAIL
	PISCO	C		13º42' S W	Jun-80	4	4	4	4	4				4				O	O	M		SYNOP MESSAGE BY MAIL
	SAN JUAN	C		15º21' S 75º09' W	Oct-78	4	4	4	4	4				4				O	O	M		SYNOP MESSAGE BY MAIL
	ATICO	C		16º13' S 73º37' W	Jul-80	4	4	4	4	4				4				O	O	M		SYNOP MESSAGE BY MAIL
	MOLLEN-DO	C		16º59' S 72º06' W	Jul-78	4	4	4	4	4				4				0	O	M		SYNOP MESSAGE BY MAIL
	ILO	C		17º37' S 77º21' W	Jul-78	4	4	4	4	4				4				O	O	M		SYNOP MESSAGE BY MAIL
	MALA-BRIGO	C		07º42' S 79º26' W	Jul-95	4	4	4	4	4				4				O	O	M		SYNOP MESSAGE BY MAIL

* No report received for 1998 and 1999

INFORMATION ON NON-DRIFTING ODAS **Country: Portugal * (Hydrographic Institute (IH))** **Date: 14 December 1992**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others				
																					figueira da Fuz
				41º1.1' N															M		Wave directional buoy
	CSA91D	M	0	009º87.7' W	Jul-90							8						H		C L	O	2.5 m ~~o~~	Sines/DW6 Wave
				37º56.1' N															M		directional buoy
	CSA83/6D	M	0	008º 53.6' W	May-89							8						H		C L	O	2.5 m ~~o~~	Sines/DW1 Wave
				37º55.3' N															M		directional buoy
	CSA83/1D	M	0	008º55.7' W	May-88							8						H		C L	O	2.5 m ~~o~~	Sines/DW7
				37º54.2' N															M		Waverider 0.7
	CSA83/5	M	0	008º48.3' W	Feb-89							8						H		C L	O	m ~~o~~	Faro Wave
				36º54.3' N															M		directional buoy
	CSA82	M	0	007º53.9' W	Sep-86							8						H		C L	O	2.5 m ~~o~~	Mad/Funchal
				32º37.1' N															M		Waverider 0.7
	CSA94	M	0	016º56.5' W	Aug-89							8						H		C L	O R	m ~~o~~	
				22º08.0' N															M		Macau Waverider
	CSA80	M	0	113º36.0' E	May-84							8						H		C L	O R	0.7 m ~~o~~	Acores/P.del
				37º43.5' N															M		Waverider 0.7
	CSA97	M	0	025º43.5' W	Mar-89							8						H		C L	O R	m ~~o~~	Acores/St. Maria
				36º55.5' N															M		Waverider 0.7
	CSA96	M	0	025º10.5' W	Apr-90							8						H		C L	O R	m ~~o~~	
				40º39.3'N															M		Aveiro Waverider
	CSA92	M	0	008º48.7' W	Apr-91							8						H		C L	OR	0.7 m ~~o~~	

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others				
	CSA92/D	M	0	40º38.5' N 009º07.5' W	Apr-92							8						H		M C L	O	Aveiro Wave directional buoy 2.5 m ~~o~~ Acores/Flores
	CSA98	M	0	39º22.3' N 031º09.5' W	Aug-88							8						H		M C L	O R	Waverider 0.7 m ~~o~~

* No report received since 1992

INFORMATION ON NON-DRIFTING ODAS **Country: South Africa *** **Date: June 1998**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others				
		M	3S	34º09'53" S 24º53'20" E	Jun-91								X			X				M	O

* No report received for 1999

INFORMATION ON NON-DRIFTING ODAS **Country: Sweden** **Date: 23 June 1999**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others					
02499		P		N5909 E1908	04-06-70	24			24	24	24	24	24	24/1		24/10x		O	O	R	O	Telecommunication
02685		P		N5606 E1641	06-10-78						24	24						O	O	R	O	Telecommunication
02970		P		N5713 E1150	08-02-88					24	24	24	24	24/2		24/10x		O	O	R	O	Telecommunication
02517		P		N5736 E1138	12-07-78	24				24	24	24	24	24/4		24/5x		O	O	R	O	Sea level Telecommunication
02501		P		N5833 E1102	01-02-81	24				24			24	24/1				O	O	R	O	Telecommunication

Data available on request in different forms after special agreement x ADCP measurements

INFORMATION ON NON-DRIFTING ODAS **Country: Thailand *** **Date: 10 May 1995**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others				
48459		C		13º 22' N 100º 59' E	01-Nov-43	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48460		C		13º 10' N 100º48' E	01-Aug-58	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48465		C		13º 09' N 100º 04' E	01-Sep-75	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
49475		C		12º 35' N 99º 57' E	01-Jun-40	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48500		C		11º 50' N 99º 50' E	11-Feb-37	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48501		C		11º 46' N 102º 53' E	01-Apr-44	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48550		C		09º 28' N 100º 03' E	01-Jan-67	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48561		C		08º 51' N 98º 16' E	16-Jun-75	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48565		C		08º 07' N 98º 19' E	01-Jan-52	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48566		C		07º 32' N 99º 03' E	01-Jan-82	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48568		C		07º 12' N 100º 36' E	01-Aug-36	5	5	5	5	5	5							V	O	G	O	0 - for SYNOP (FM 12- VII)
48583		C		06º 25' N 101º 49' E	01-Aug-43	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48460		C		13º 10' N 100º 48' E	11-Aug-58	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
48478		C		12º 38' N 101º 21' E	15-Apr-80	8	8	8	8	8	8							V	O	G	O	0 - for SYNOP (FM 12- VII)
				13º 22' 38 N																	
48457		C		100º 35' 58 E	01-Nov-93	5	5	5	5	5	5							V	O	G	O	0 - for SYNOP (FM 12- VII)
				15º 04' 37 N																	
48463		C		100º 52' 33 E	01-Nov-93	5	5	5	5	5	5							V	O	G	O	0 - for SYNOP (FM 12- VII)
				09º 14.352' N																	
48553		C		099º 51.671' E	01-Nov-93	5	5	5	5	5	5							V	O		O	0 - for SYNOP (FM 12- VII)
				08º 03.745' N																	
48563		C		098º 54.395' E	01-Nov-93	5	5	5	5	5	5							V	O	G	O	0 - for SYNOP (FM 12- VII)
				13º 42' 25.09" N																	
48454		C		100º 34' 5.13" E	01-Nov-93	5	5	5	5	5	5							V	O	G	O	0 - for SYNOP (FM 12- VII)
		M		11.9 N 102.2 E														A				Name of buoy: KOCHANG*
		M		12.5N 101.2 E														A				Name of buoy: RAYONG*
		M		13.0 N 100.8 E														A				Name of buoy: KOSICHANG*
		M		12.5 N 100.1 E														A				Name of buoy: HUAHIN*
		M		10.2 N 099.9 E														A				Name of buoy: KOTOA*
		M		09.7 N 101.4 E														A				Name of buoy: PLATONG*
		M		07.2 N 101.1 E														A				Name of buoy: SONGHLA*

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
																						* These buoys have been deployed since December 1991 under THAI SEAWATCH Project.

* No report received since 1995

INFORMATION ON NON-DRIFTING ODAS **Country: United Kingdom** **Date: August 1999**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED											TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS S - FM13 Ship Code L -FM12 Land Code DP - Dew Point TS - Tropo Scatter M - Mietosat. MG - Max Gust V - VHF MW - Microwave
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others				
62103	LV Channel	O		49º55'N 02º53'W	June 1989	24	24	24	24	24	24		24				DP MG VIS	M	S	CG	O	Light Vessel
62305	LV Greenwich	O		50º25'N 00º00'W	May 1994	24	24	24	24	24	24		24				DP MG VIS	M	S	CG	O	Light Vessel
62304	LV Sandettie	O		51º09'N 01º47'E	May 1993	24	24	24	24	24	24		24				DP MG VIS	M	S	CG	O	Light Vessel
62107	LV Seven Stones	O		50º04'N 06º04'W	Nov 1994	24	24	24	24	24	24		24				DP MG VIS	M	S	CG	O	Light Vessel
63111	Beryl'A'	P		59º33'N 01º32'W	1979	24	24	24	24	24	24						DP	TS	S MG	GC	O	As above. To be removed by 31/12/99
03007	Muckle Holm	C		60º35'N 01º16'W	1980	24			24	24							DP	V	L MG	GC	O	Data obtained via VHF + PSTN
03010	Sule Skerry	C		59º05'N 04º24'W	1981	24	24	24	24	24							DP	M	L MG	GC	O	Visibility availability from May 1995

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS
03011	North Rona	C		59º08'N 05º50'W	August 1990	24	24	24	24	24							DP	M	L MG	GC	O
03014	Foula	C		60º07'N 02º04'W	June 1983	24	24	24	24	24							DP	V	L MG	GC	O
62118	BPForties	P		57º45'N 00º55'E	Dec 1983	24	24	24	24	24							DP	M	S MG	GC	O
62165	Raven-spurn	P		54º02'N 01º07'E	Dec 1995	24	24	24	24	24							DP	M	S	GC	O
63103	North Cormorant	P		61º14'N 01º09'E	1984	24	24	24	24	24							DP	MW	S	G	O
62126	More-cambe Bay	P		58º51'N 03º35'W	1987	24	24	24	24	24							DP	V	S	G	O
62112	Brae'A'	P		58º42'N 01º17'E	1987	24	24	24	24	24								V	S	G	O
62101	Lyme Bay	M	D	50º37'N 02º44'W	1981	24	24	24	24	24	24		24				DP	V	S	G	O
62110	Luce Bay	M	D	54º45'N 04º46'W	Nov 1997	24	24	24	24	24	24		24				DP	V	S	CG	O
62301	Aberporth	M	D	52º17'N 04º30'W	April 1991	24	24	24	24	24	24		24				DP	V	S	CG	O
62163	ODAS Brittany	M	4S	47º32'N 08º30'W	May 1995	24	24	24	24	24	24		24				DP MG	M	S	CG	O

COMMENTS S - FM13 Ship Code
L -FM12 Land Code DP - Dew Point
TS - Tropo Scatter
M - Mietosat.
MG - Max Gust
V - VHF
MW - Microwave

COMMENTS
Operational
VHF + PSTN
Visibility and weather added manually. To be removed by 31/12/99
As above
MW + PSTN To be removed by 31/12/99
VHF + PSTN
VHF + PSTN
Operational 2.5m toroidal hull The Eskmeals buoy was relocated in Luce Bay on 12 November 1997
Operational 2.5 m toroidal hull to be removed by 31/12/99
Operational 2.5 m toroidal hull
Operational from May 1995. A co-operative project between Meteo France & the UK Met Office

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																COMMENTS S - FM13 Ship Code L -FM12 Land Code DP - Dew Point TS - Tropo Scatter M - Mietosat. MG - Max Gust V - VHF MW - Microwave
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	
62029	ODAS K1	M	4S	48º43'N 12º26'W	Dec 1991	24	24	24	24	24	24		24				DP MG	M	S	CG	O	Operational Operational
62081	ODAS K2	M	4S	51º00'N 13º20'W	Dec 1991	24	24	24	24	24	24		24				DP MG	M	S	CG	O	The buoy was moved to the new location on 13 April 1997
62108	ODAS K3	M	4S	53º30'N 19º29'W	April 1997	24	24	24	24	24	24		24				DP MG	M	S	CG	O	Operational
62105	ODAS K4	M	4S	55º25'N 12º34'W	October 1989	24	24	24	24	24	24		24				DP MG	M	S	CG	O	Operational
64045	ODAS K5	M	4S	59º04'N 11º24'W	July 1994	24	24	24	24	24	24		24				DP MG	M	S	CG	O	Operational
64046	K7			60º30'N 5º00'W	May 1999	24	24	24	24	24	24		24				DP MG	M	S	CG	O	Deployed May 1999 for a year in the first instance
62106	RARH	M	4S	56º59'N 09º53'E	May 1994	24	24	24	24	24	24		24				DP MG	M	S	CG	O	Operational
62100	ODAS K16	M	4S	57º00'N 00º00'	July 1995	24	24	24	24	24	24		24				DP MG	M	S	CG	O	Operational
62029	ODAS K17	M	4S	55º25'N 01º10'E	April 1998	24	24	24	24	24	24		24				DP MG	M	S	CG	O	The buoy was moved to a new location on 27 April 1998
62303	Turbot Bank	M	4S	51º37'N 05º09'W	May 1998	24	24	24	24	24	24		24				DP MG	M	S	CG	O	The St. Gowan bouy was relocated to the Turbot Bank in May 1998

Variables Measured represent the number of observations per day.

INFORMATION ON NON-DRIFTING ODAS **Country: United States of America** **Date: May 1999**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
41001		M	6B	34.7N/72.6W	06/76	24	24	24		24	24	24	24					M	SW	G	O	
41002		M	6B	32.3N/75.2W	12/73	24	24	24		24	24	24	24					M	SW	G	O	
41004		M	3D	32.5N/79.1W	06/78	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
41008		M	3D	31.4N/80.9W	05/97	24	24	24		24	24	24	24					M	SW	G	O	
41009		M	6B	28.5N/80.2W	08/88	48	48	48		48	48	48	48					M	SW	G	O	
41010		M	6B	28.9N/78.5W	11/88	48	48	48		48	48	48	48					M	SW	G	O	
42001		M	10D	25.9N/89.7W	08/75	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
42002		M	10D	25.9N/93.6W	06/73	24	24	24	24	24	24	24	24				24	M	SW	G	O	Directional Waves
42003		M	10D	25.9N/85.9W	11/76	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
42007		M	3D	30.1N/88.8W	01/81	24	24	24	24	24	24	24	24				24	M	SW	G	O	Directional Waves
42019		M	3D	27.9N/95.4W	05/90	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
42020		M	3D	26.9N/96.7W	05/90	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
42035		M	3D	29.2N/94.4W	05/93	24	24	24	24	24	24	24	24					M	SW	G	O	
42036		M	3D	28.5N/84.5W	05/94	24	24	24	24	24	24	24	24				24	M	SW	G	O	Directional Waves
42039		M	3D	28.8N/86.0W	12/95	24	24	24	24	24	24	24	24					M	SW	G	O	
42040		M	3D	29.2N/88.3W	12/95	24	24	24	24	24	24	24	24					M	SW	G	O	
44004		M	6B	38.5N/70.7W	09/77	24	24	24		24	24	24	24					M	SW	G	O	
44005		M	6B	42.9N/68.9W	12/78	24	24	24		24	24	24	24					M	SW	G	O	
44007		M	3D	43.5N/70.1W	02/82	24	24	24		24	24	24	24					M	SW	G	O	
44008		M	3D	40.5N/69.4W	08/82	24	24	24		24	24	24	24					M	SW	G	O	
44009		M	3D	38.5N/74.7W	01/84	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
44011		M	6B	41.1N/66.6W	05/84	24	24	24		24	24	24	24					M	SW	G	O	
44013		M	3D	42.4N/70.7W	08/84	24	24	24		24	24	24	24					M	SW	G	O	
44014		M	3D	36.6N/74.8W	10/90	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
44025		M	3D	40.3N/73.2W	10/75	24	24	24	24	24	24	24	24				24	M	SW	G	O	Directional Waves
45001		M	3D	48.0N/87.8W	05/79	24	24	24		24	24	24	24					M	SW	G	O	45001-45008 retrieved during winter season
45002		M	3D	45.3N/86.4W	09/79	24	24	24		24	24	24	24					M	SW	G	O	
45003		M	3D	45.3N/82.8W	05/80	24	24	24		24	24	24	24					M	SW	G	O	
45004		M	3D	47.6N/86.6W	04/80	24	24	24		24	24	24	24					M	SW	G	O	
45005		M	3D	41.7N/82.4W	06/80	24	24	24		24	24	24	24					M	SW	G	O	

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
45006		M	6B	47.3N/89.9N	06/81	24	24	24		24	24	24	24					M	SW	G	O	
45007		M	3D	42.7N/87.0W	07/81	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
45008		M	2.4D	44.3N/82.4W	09/81	24	24	24		24	24	24	24					M	SW	G	O	
46001		M	6B	56.3N/148.2W	10/72	24	24	24		24	24	24	24					M	SW	G	O	
46002		M	6B	42.5N/130.3W	07/75	24	24	24		24	24	24	24					M	SW	G	O	
46003		M	6B	51.9N/155.9W	07/76	24	24	24		24	24	24	24					M	SW	G	O	
46005		M	6B	46.1N/131.0W	09/76	24	24	24		24	24	24	24					M	SW	G	O	
46006		M	6B	40.9N/137.5W	04/77	24	24	24		24	24	24	24					M	SW	G	O	
46011		M	3D	34.9N/120.9W	10/80	24	24	24		24	24	24	24					M	SW	G	O	
46012		M	3D	37.4N/122.7W	11/80	24	24	24		24	24	24	24					M	SW	G	O	
46013		M	3D	38.2N/123.3W	04/81	24	24	24		24	24	24	24					M	SW	G	O	
46014		M	3D	39.2N/124.0W	04/81	24	24	24		24	24	24	24					M	SW	G	O	
46022		M	3D	40.8N/124.5W	01/82	24	24	24		24	24	24	24					M	SW	G	O	
46023		M	10D	34.7N/121.0W	04/82	24	24	24	24	24	24	24	24			24	24	M	SW	G	O	Ocean current
46025		M	3D	33.8N/119.1W	04/82	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
46026		M	3D	37.8N/122.8W	07/82	24	24	24	24	24	24	24	24					M	SW	G	O	
46027		M	3D	41.9N/124.4W	09/83	24	24	24		24	24	24	24					M	SW	G	O	
46028		M	3D	35.7N/121.9W	12/83	24	24	24		24	24	24	24					M	SW	G	O	
46029		M	3D	46.2N/124.2W	03/84	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
46030		M	3D	40.4N/124.5W	10/84	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
46035		M	12D	56.9N/177.8W	09/85	24	24	24		24	24	24	24					M	SW	G	O	
46041		M	3D	47.4N/124.5W	06/87	24	24	24		24	24	24	24					M	SW	G	O	
46042		M	3D	36.8N/122.4W	06/87	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
46045		M	3D	33.8N/118.4W	01/91	24	24	24		24	24	24	24					M	SW	G	O	
46050		M	3D	44.6N/124.5W	11/91	24	24	24		24	24	24	24					M	SW	G	O	
46053		M	3D	34.2N/119.8W	08/93	24	24	24		24	24	24	24					M	SW	G	O	
46054		M	10D	34.3N/120.4W	08/93	24	24	24	24	24	24	24	24			24	24	M	SW	G	O	Ocean current
46059		M	6B	38.0N/130.0W	10/94	24	24	24		24	24	24	24					M	SW	G	O	
46060		M	3D	60.6N/146.8W	05/95	24	24	24		24	24	24	24					M	SW	G	O	
46061		M	6B	60.2N/146.8W	05/95	24	24	24		24	24	24	24					M	SW	G	O	
46062		M	10D	35.1N/121.0W	06/97	24	24	24	24	24	24	24	24			24	24	M	SW	G	O	Ocean current
46063		M	6B	34.3N/120.7W	04/98	24	24	24		24	24	24	24					M	SW	G	O	
51001		M	6B	23.4N/162.3W	02/81	24	24	24		24	24	24	24					M	SW	G	O	

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
51002		M	6B	17.2N/157.8W	09/84	24	24	24		24	24	24	24					M	SW	G	O	
51003		M	6B	19.1N/160.8W	11/84	24	24	24		24	24	24	24					M	SW	G	O	
51004		M	6B	17.4N/152.5W	11/84	24	24	24		24	24	24	24					M	SW	G	O	
51028		M	3D	0.0N/153.9W	10/97	24	24	24		24	24	24	24				24	M	SW	G	O	Directional Waves
	ABAN6	C		44.3N/75.9W	07/92	24	24	24	24	24			24				24	M	O*	G	O	Visibility
	ALSN6	P		40.5N/73.8W	11/84	24	24	24		24	24	24						M	O*W	G	O	*C-MAN Station reporting
	AUGA2	C		59.4N/153.4W	08/99	48	48	48	48	48								M	O*	G	P	
	BLIA2	P		60.8N/146.9W	05/95	48	48	48		48								M	O*	G	O	C-Man Code (similar FM-12 SYNOP)
	BURL1	P		28.9N/89.4W	02/84	24	24	24	24	24								M	O*	G	O	
	BUZM3	P		41.4N/71.0W	07/85	24	24	24	24	24	24	24	24					M	O*W	G	O	
	CARO3	C		43.3N/124.4W	08/84	24	24	24	24	24								M	O*	G	O	
	CDRF1	C		29.1N/83.0W	03/95	24	24	24		24								M	O*	G	O	
	CHLV2	P		36.9N/75.7W	01/85	24	24	24		24	24	24	24					M	O*W	G	O	
	CLKN7	C		34.6N/76.5W	11/84	24	24	24		24								M	O*	G	O	
	CSBF1	C		29.7N/85.4W	03/83	24	24	24	24	24								M	O*	G	O	
	DBLN6	C		42.5N/79.4W	04/83	24	24	24		24								M	O*	G	O	
	DESW1	C		47.7N/124.5W	08/84	24	24	24		24								M	O*	G	O	
	DISW3	C		47.1N/90.7W	10/83	24	24	24	24	24								M	O*	G	O	
	DPIA1	P		30.3N/88.1W	01/87	24	24	24	24	24			24				24	M	O*	G	P	Water level
	DRFA2	C		60.6N/152.1W	08/99	48	48	48	48	48								M	O*	G	O	
	DRYF1	C		24.6N/82.9W	12/92	24	24	24		24			24					M	O*	G	O	
	DSLN7	P		35.2N/75.3W	11/84	24	24	24	24	24	24	24	24					M	O*W	G	O	
	DUCN7	C		36.2N/75.8W	05/96	24	24	24		24	24	24	24					M	O*W	G	O	
	FBIS1	C		32.7N/79.9W	05/84	24	24	24		24								M	O*	G	O	
	FFIA2	C		57.3N/133.6W	07/84	24	24	24		24								M	O*	G	O	
	FPSN7	P		33.5N/77.6W	11/84	24	24	24		24	24	24						M	O*W	G	O	
	FWYF1	P		25.6N/80.1W	06/91	24	24	24		24			24					M	O*	G	O	
	GDIL1	C		29.3N/90.0W	12/84	24	24	24	24	24			24				24	M	O*	G	O	Water level
	GLLN6	C		43.9N/76.4W	09/83	24	24	24		24								M	O*	G	O	
	IOSN3	C		43.0N/70.6W	09/84	24	24	24		24								M	O*	G	O	

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
	KTNF1	C		29.8N/83.6W	05/95	24	24	24	24	24								M	O*	G	O	
	LKWF1	C		26.6N/80.0W	07/84	24	24	24		24			24				24	M	O*	G	O	Water level
	LONF1	P		24.8N/80.9W	11/92	24	24	24		24			24					M	O*	G	O	
	LPOI1	P		48.1N/116.5W	06/93	24	24	24	24	24			24					M	O*	G	O	
	MDRM1	C		44.0N/68.1W	09/84	24	24	24	24	24								M	O*	G	O	
	MISM1	C		43.8N/68.9W	10/84	24	24	24	24	24								M	O*	G	O	
	MLRF1	P		25.0N/80.4W	12/87	24	24	24		24			24					M	O*	G	O	
	MRKA2	C		61.1N/146.7W	09/97	48	48	48		48								M	O*	G	O	
	NWPO3	C		44.6N/124.1W	01/85	24	24	24	24	24								M	O*	G	O	
	PILA2	C		59.7N/149.5W	08/99	48	48	48	48	48								M	O*	G	P	
	PILM4	C		48.2N/88.4W	05/84	24	24	24		24								M	O*	G	O	
	POTA2	C		61.1N/146.7W	05/95	48	48	48		48								M	O*	G	O	
	PTAC1	C		39.0N/123.7W	10/84	24	24	24		24								M	O*	G	O	
	PTAT2	C		27.8N/97.1W	03/84	24	24	24	24	24			24				24	M	O*	G	O	Water level
	PTGC1	C		34.6N/120.6W	04/84	24	24	24	24	24								M	O*	G	O	
	ROAM4	C		47.9N/89.3W	10/83	24	24	24		24			24					M	O*	G	O	
	SANF1	C		24.5N/81.9W	01/91	24	24	24		24			24					M	O*	G	O	
	SAUF1	C		29.9N/81.3W	09/86	24	24	24		24			24				24	M	O*	G	O	Water level
	SBIO1	C		41.6N/82.8W	09/83	24	24	24		24								M	O*	G	O	
	SGNW3	C		43.7N/87.7W	10/83	24	24	24	24	24			24					M	O*	G	O	
	SISW1	C		48.3N/122.8W	01/84	24	24	24		24								M	O*	G	O	
	SMKF1	P		24.6N/81.1W	02/88	24	24	24	24	24			24					M	O*	G	O	
	SPGF1	C		26.7N/79.0W	10/85	24	24	24	24	24								M	O*	G	O	
	SRST2	C		29.7N/94.1W	02/84	24	24	24	24	24							24	M	O*	G	O	Water level
	STDM4	C		47.2N/87.2W	07/84	24	24	24	24	24								M	O*	G	O	
	SUPN6	C		44.5N/75.8W	08/92	24	24	24		24			24				24	M	O*	G	O	Visibility
	THIN6	C		44.3N/76.0W	08/92	24			24								24	M	O*	G	O	Visibility
	TPLM2	P		38.9N/76.4W	10/85	24	24	24		24			24					M	O*	G	O	
	TTIW1	C		48.4N/124.7W	08/84	24	24	24		24								M	O*	G	O	
	VENF1	C		27.1N/82.4W	05/86	24	24	24		24			24				24	M	O*	G	O	Water level
	WPOW1	C		47.7N/122.4W	01/84	24	24	24		24								M	O*	G	O	

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																	
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
15001		M	0	9.94S /9.96W	09/97	3			3	3			3	1,10	S,1,4		1	A	D	G	O	Ra,Rad
15002		M	0	0.00S/9.87W	09/97	3			3	3			3	1,10	S,1,4		1	A	D	G	O	Ra,Rad
15003		M	0	5.11S/9.95W	01/99	3			3	3			3	1,10	S,1,4		1	A	D	G	O	Ra,Rad
15004		M	0	0.00S/23.00W	03/99	3			3	3			3	1,10	S,1,4		1	A	D	G	O	Ra,Rad
13009		M	0	7.95N/38.01W	01/98	3			3	3			3	1,10	S,1,4		1	A	D	G	O	Ra,Rad
13008		M	0	14.99/38.01W	01/98	3			3	3			3	1,10	S,1,4		1	A	D	G	O	Ra,Rad
41026		M	0	11.50N/38.01W	02/99	3			3	3			3	1,10	S,1,4		1	A	D	G	O	Ra,Rad
43301		M	0	8.05N/94.9W	08/94	3			3	3			3	1,10				A	D	G	O	
32303		M	0	5.03N/94.95W	04/94	3			3	3			3	1,10				A	D	G	O	
32304		M	0	5.01S/95.06W	04/94	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra
32305		M	0	8.03S/95.09W	08/94	3			3	3			3	1,10				A	D	G	O	
32315		M	0	4.95N/109.99W	11/85	3			3	3			3	1,10				A	D	G	O	
32316		M	0	2.07N/110.12W	12/84	3			3	3			3	1,10				A	D	G	O	
32317		M	0	2.01S/109.98W	11/84	3			3	3			3	1,10				A	D	G	O	
32318		M	0	5.00S/109.99W	06/85	3			3	3			3	1,10				A	D	G	O	
32319		M	0	8.06S/109.93W	11/85	3			3	3			3	1,10				A	D	G	O	
32320		M	0	1.98N/95.00W	11/92	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra
32321		M	0	0.00N/95.00W	11/92	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra,Rad
32322		M	0	1.99S/95.01W	11/92	3			3	3			3	1,10				A	D	G	O	
32323		M	0	0.03N/109.94W	02/95	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra,Rad,Cu
31001		M	0	0.04N/34.97W	01/98	3			3	3			3	1,10	S,1,4			A	D	G	O	Ra,Rad
31002		M	0	3.98N/38.03W	02/99	3			3	3			3	1,10	S,1,4			A	D	G	O	Ra,Rad
51006		M	0	8.99N/140.28W	06/88	3			3	3			3	1,10				A	D	G	O	
51007		M	0	4.93N/139.88W	05/88	3			3	3			3	1,10				A	D	G	O	
51008		M	0	2.00N/140.0W	10/86	3			3	3			3	1,10	S,1			A	D	G	O	
51009		M	0	2.01S/139.94W	06/86	3			3	3			3	1,10				A	D	G	O	
51010		M	0	0.03S/170.02W	05/88	3			3	3			3	1,10				A	D	G	O	
51011		M	0	0.19S/124.36W	05/87	3			3	3			3	1,10				A	D	G	F	
51014		M	0	5.01S/139.90W	10/90	3			3	3			3	1,10				A	D	G	O	
51015		M	0	5.10N/124.88W	12/91	3			3	3			3	1,10				A	D	G	O	

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
51016		M	0	1.97N/125.07W	12/91	3			3	3			3	1,10				A	D	G	O	
51017		M	0	2.03S/124.90W	11/91	3			3	3			3	1,10				A	D	G	O	
51018		M	0	5.02S/124.94W	11/91	3			3	3			3	1,10				A	D	G	O	
51019		M	0	4.99S/154.97W	07/91	3			3	3			3	1,10				A	D	G	O	
51020		M	0	4.99N/154.94W	07/91	3			3	3			3	1,10				A	D	G	O	
51021		M	0	1.99N/154.95W	07/91	3			3	3			3	1,10				A	D	G	O	
51022		M	0	2.00S/154.98W	07/91	3			3	3			3	1,10				A	D	G	F	
51023		M	0	0.04N/155.02W	07/91	3			3	3			3	1,10				A	D	G	O	
51301		M	0	7.97N/155.00W	08/92	3			3	3			3	1,10				A	D	G	O	
51302		M	0	8.27S/155.01W	03/92	3			3	3			3	1,10				A	D	G	O	
51303		M	0	4.98N/169.96W	03/92	3			3	3			3	1,10				A	D	G	O	
51304		M	0	4.99S/169.99W	03/92	3			3	3			3	1,10				A	D	G	O	
51305		M	0	1.99N/170.02W	03/92	3			3	3			3	1,10				A	D	G	O	
51306		M	0	2.17S/170.00W	03/92	3			3	3			3	1,10				A	D	G	O	
51307		M	0	8.03N/125.01W	10/92	3			3	3			3	1,10				A	D	G	O	
51308		M	0	7.96N/125.00W	09/92	3			3	3			3	1,10				A	D	G	O	
51309		M	0	8.01N/170.01W	08/92	3			3	3			3	1,10				A	D	G	O	
51310		M	0	7.99S/170.0W	08/92	3			3	3			3	1,10				A	D	G	O	
51311		M	0	0.05N/139.88W	03/95	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra,Rad,Cu
52001		M	0	2.00N/164.97E	07/85	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra,Rad
52002		M	0	1.91S/164.41E	07/85	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra,Rad
52003		M	0	5.02N/165.01E	02/88	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra,Rad
52004		M	0	5.00S/165.20E	01/87	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra,Rad
52006		M	0	8.01N/165.07E	07/89	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra,Rad
52007		M	0	8.03S/164.80E	08/91	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra,Rad
52008		M	0	4.99N/156.06E	08/91	3			3	3			3	1,10				A	D	G	O	
52010		M	0	5.00S/155.99E	08/91	3			3	3			3	1,10				A	D	G	O	
52011		M	0	2.00N/156.02E	08/91	3			3	3			3	1,10				A	D	G	O	
52012		M	0	2.00S/156.02E	08/91	3			3	3			3	1,10				A	D	G	O	

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED																
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
52301		M	0	2.00N/146.99W	02/90	3			3	3			3	1,10				A	D	G	O	
52302		M	0	4.98N/147.01E	02/90	3			3	3			3	1,10				A	D	G	O	
52307		M	0	2.43N/137.43E	04/92	3			3	3			3	1,10				A	D	G	O	
52309		M	0	4.99N/179.92W	03/93	3			3	3			3	1,10				A	D	G	O	
52310		M	0	2.02N/179.81W	03/93	3			3	3			3	1,10				A	D	G	O	
52311		M	0	0.01N/179.90W	03/93	3			3	3			3	1,10				A	D	G	O	
52312		M	0	1.99S/179.88W	03/93	3			3	3			3	1,10				A	D	G	O	
52313		M	0	4.97S/179.89W	03/93	3			3	3			3	1,10				A	D	G	O	
52315		M	0	7.99N/179.87W	11/93	3			3	3			3	1,10				A	D	G	O	
52316		M	0	7.98S/179.82W	11/93	3			3	3			3	1,10				A	D	G	O	
52317		M	0	0.01S/156.16E	07/95	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra.Rad
52318		M	0	0.00S/146.97E	04/94	3			3	3			3	1,10				A	D	G	F	
52319		M	0	8.09N/156.01E	12/94	3			3	3			3	1,10				A	D	G	F	
52321		M	0	0.01N/165.01E	05/95	3			3	3			3	1,10	S,1		1	A	D	G	O	Ra,Rad,Cu

All data available via WWW. Salinity data available WWW only. Rain=RA(available WWW only). Radiation=Rad (available WWW only). Currents=Cu (delayed mode only). Internally recorded data are available in delayed mode either 24 (hourly) or 144 (10 min.) times/day. Hull type is 2.3m toroid

INFORMATION ON NON-DRIFTING ODAS **Country: Vietnam *** **Date: May 1994**

IDENTIFIER		ODAS		LOCATION		VARIABLES MEASURED															
WMO#	OTHER	Type	Hull	POSITION	DATE	Air Temp.	Air Press.	Press. Tend.	Humidity	Wind (DD FF)	Wave (PP HH)	Wave Spectra	SST	S/Surf. Temp.	Salinity	Current	Others	TRANS Means	CODE FORM	DATA AVAILABILITY	STATUS	COMMENTS
																						Transmission by means of UHF radio in FM12
	48834	C		2058 N 10746 E	1959	4	4	4	4	4	3			4	4			O	O	L	O	SYNOP
48839		C		2008 N 10743 E	1958	8	8	8	8	8	3							O	O	L	O	
	48836	C		2101 N 10722 E	1961	4	4	4	4	4	3							O	O	L	O	
	48828	C		2040 N 10649 E	1954*	4	4	4	4	4	3			4	4			O	O	L	O	* = ?
	48/81	C		1848 N 10546 E	1961	4	4	4	4	4	3			4	4			O	O	L	O	
	48/89	C		1710 N 10722 E	1974	4	4	4	4	4	3			4	4			O	O	L	O	
	48889	C		1032 N 10856 E	1979	4	4	4	4	4	3			4	4			O	O	L	O	
48855		C		1607 N 10813 E	1977*	8	8	8	8	8	3			4	4			O	O	G	O	
48870		C		1345 N 10913 E	1976	8	8	8	8	8	3			4				O	O	G	O	
	48903	C		1020 N 10704 E	1979*	4	4	4	4	4	3			4	4			O	O	L	O	
48917		C		1013 N 10358 E	1976*	8	8	8	8	8	3			4	4			O	O	G	O	
48918		C		0841 N 10636 E	1979*	8	8	8	8	8	3			4	4			O	O	G	O	
48920		C		0838 N 11155 E	1977*	8	8	8	8	8	3			4				O	O	G	O	
48892		C		1125 N 11420 E	1977	8	8	8	8	8	3							O	O	G	O	
48860		C		1633 N 11137 E	1977*													O	O	G	O	

* No report received since 1994