

## VOS and VOSCLim Report for 2008

(JAPAN)

a. Programme description:		
Category	No. of ships at 31 Dec 2008	Comments
<i>Selected</i>	389	
<i>Supplementary</i>	53	
<i>Auxiliary</i>		
<i>Other (specify)</i>	6	Ships make surface synoptic observations and transmit reports same as selected ships mainly in the western North Pacific(the equator-65N,100E-160W)
<b>Total National VOS Fleet</b>	448	

b. VOS:	
<i>Number of VOS vessels recruited in 2008</i>	-
<i>Number of VOS vessels de-recruited in 2008</i>	-
<i>Target number of ships in the national VOS Fleet</i>	-

c. VOSCLim:	
<i>Number of VOSCLim vessels at 31 December 2008</i>	5
<i>Number of VOSCLim vessels recruited in 2008</i>	-
<i>Number of VOSCLim de-recruitments in 2008</i>	-
<i>Number of VOSCLim recruitments planned for 2009</i>	-
<i>Target number of ships to participate in VOSCLim</i>	-

<b>d. Automated observing systems:</b>				
<b>Type</b>	<b>No. of ships at 31 Dec 2008</b>	<b>Manual Input Yes / No</b>	<b>Method of Comms</b>	<b>2009 Planned installations</b>
Integrated System for Marine Meteorological Observation* <sup>1</sup>	9	Yes(7) No(1) Unknown(1)	DCP via the MTSAT(5) Inmarsat-C(4)	
Meteorological and Oceanographic Observation System* <sup>2</sup>	1	No	Inmarsat-C	It will be changed the systems in 2009.
Weather Observation System* <sup>3</sup>	5	Yes(3) No(2)	Inmarsat-C	
SOAR* <sup>4</sup> (Shipboard Oceanographic and Atmospheric Radiation)	1	Yes	Inmarsat-C	
Meteorological Observation Equipment * <sup>5</sup>	1	No	Inmarsat-F	

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<i>Total number of ship observations (BBXX) distributed on the GTS in 2008</i>		43096
<i>Frequency of VOS data submitted for the GCC in 2008</i>		4

<b>f. Electronic logbooks:</b>		
<b>Software &amp; version</b>	<b>No. of ships at 31 Dec 2008</b>	<b>Implementation plans</b>
OBSJMA1.01	95	OBSJMA 2.00 will be released in March 2009

**g. Major challenges and difficulties:**

JMA will release the new electronic logbook software "OBSJMA ver. 2.00". OBSJMA ver. 2.00 can be operated in windows VISTA OS and calculate more accurately the sea level pressure by using in-situ air temperature and the height of barometer in ballast or at full load. Furthermore, the new OBSJMA provides more information on screen to aid in the selection of correct code figures for Visibility (VV) and Height base of lowest cloud (h) when the ranges and heights are at the boundaries on the level.

**h. Research / development / testing:****i. Other comments:**

On 12 December 2007, JMA started trial call sign masking of SHIP reports in order to protect the identity of VOS and assist in resolving real-time monitoring and climate analysis problems in accordance with World Meteorological Organization (WMO) Resolution 7(EC-LVIII) and 7.7/1 (EC-LIX). The status of Japanese trial call sign masking scheme is as follows:

**1. Call sign masking**

JMA replaces call signs included in incoming SHIP reports via the Inmarsat Yamaguchi Land Earth Station (LES) with a generic call sign "SHIP" before distribution on the Global Telecommunication System in order to ensure the security of VOS fleets.

As of December 2007, the number of SHIP reports with original call sign is increasing. The total number of 2008 becomes 43096 and 1.3 times as many as that of 2007.

In December 2008, 417 of Japanese VOS fleets, 27 of US VOS fleets, 26 of Hong Kong VOS fleets and 27 of Malaysia VOS fleets are participating in the Japanese call sign masking scheme. In December 2008, about more than 90% of SHIP reports via the Yamaguchi LES used original call signs and two thirds of them were masked by JMA.

**2. Provision of Non-masked Data**

For the purpose of real-time monitoring and climate analysis by National Meteorological and Hydrological Services (NMHSs) and monitoring centres, JMA provides Non-masked Data with real call signs to registered users only. This information has been available through JMA's Ship Data Website secured with ID and password authentication.