

## The new OBSJMA

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### 1. Introduction

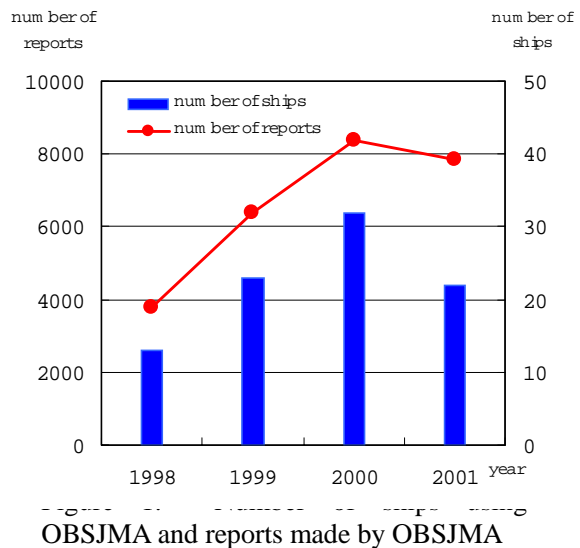
The Japan Meteorological Agency (JMA) developed a software package on meteorological report compilation for voluntary observing ships (VOSs) named "OBSJMA" in 1997. JMA is now upgrading the OBSJMA and plans to distribute it among Japanese VOSs. In this report, the present status and future plans on OBSJMA are introduced.

### 2. Current OBSJMA

JMA developed OBSJMA in 1997 for easy and accurate compilation of weather reports and marine meteorological logbooks recording by using a personal computer. After trial use by several ships, JMA has distributed OBSJMA and its operating manuals to about 500 ships. At every opportunity, JMA has been making efforts to appeal to VOSs for using OBSJMA: e.g. an article introducing OBSJMA in a JMA's magazine "The Ship and Marine Meteorology".

However, the current OBSJMA has become to be rather old-fashioned because the software was developed on MS-DOS base. For example, keyboard is the only device for data input (i.e. mouse pointer is not available), and it was designed to work on only floppy disk so that relevant visual images, such as types of clouds and sea condition, could not sufficiently be included.

Under these circumstances, the current OBSJMA is not popular among Japanese VOSs. Only 30 or less VOSs have regularly been using the OBSJMA for submitting the meteorological logbooks (Figure 1).



### 3. The OBSJMA for WIN

The JMA is now upgrading the OBSJMA to Windows edition. The new OBSJMA is called "OBSJMA for WIN". One of the major characteristics of the software is that the main screen is designed to be similar to the "Sheet for Marine Weather Observations" regularly distributed to VOSs by JMA. Observers on board can easily enter weather data on the screen using the mouse pointer. Figure 2 shows examples of screens of the OBSJMA for WIN.

The system requirements, functions and the way of distribution of the OBSJMA for WIN are as follows.

### **(1) System requirements**

- a) Operating System: Windows 95, Windows 98, Windows Me, Windows 2000 and Windows NT 4.0 for Japanese.
- b) Memory: 64 MB RAM
- c) Hard disk: 50 MB
- d) Distributing media: CD-ROM

### **(2) Functions**

The operation of the OBSJMA for WIN is in principle based on that of the current OBSJMA for MS-DOS. The following functions are added.

- a) Mouse pointer is available.
- b) Many color images, such as cloud types, are prepared in the "help" screen.
- c) All the screens are alternative of Japanese or English and are changeable by clicking.
- d) Data are archived in IMMT-2 format.
- e) Meta-data for VOSclim could be input.

### **(3) Distribution of OBSJMA for WIN**

The OBSJMA for WIN will be completed in March 2002, and JMA will distribute it to Japanese VOSs. JMA is to write an article to introduce the software package on the magazine "The Ship and Maritime Meteorology" and the JMA's web page for VOSs. In addition, Port Meteorological Officers are to demonstrate the OBSJMA for WIN when they visit VOSs.

## **4. Future Plan**

Unfortunately the number of submitted meteorological logbooks are decreasing in Japan. The difficulty of weather observation and the decrease of officers/crews are considered to be a major reason for the decreasing of meteorological reports. JMA expects that the OBSJMA for WIN will contribute to reduce the officers/crews' works of making meteorological reports. JMA will constantly keep on revising the OBSJMA for WIN duly reflecting user's comments as much as possible.

Recently almost all the shipping companies and many of ships can use internet. JMA plans to make VOSs available to download the OBSJMA for WIN and relevant documents on meteorological observation/reports via internet.

In connection with the near future use of the Table Driven Codes CREX/BUFR, JMA is considering to add a function to migrate the SHIP messages to CREX/BUFR in the future OBSJMA without any modification of data entry procedure by officers/crews.

Figure 2. Screens of the OBSJMA for WIN

Data entry screen

The screenshot shows the 'Creating of Ship's Weather Reports' window. It contains various input fields for meteorological data. At the top, there are fields for 'observation item' (set to '0000'), 'Date' (17/08/2008), 'Latitude', and 'Longitude'. Below these are sections for 'WindWave' (Period, Height, Direction), 'Visibility', 'PresentAW' (W1, W2), and 'PassWind' (W1, W2). There are also fields for 'Air pressure' (read, during 3 hours, Type, Amount), 'SeaSurface Temp' (Geo, Shear), and 'True wind' (Direct, Speed, ShipDirect, ShipSpeed, Shear). The bottom section is for 'Weather Telegram' with fields for 'TRANSMIT', 'CALLSIGN', 'YYGG', 'Lala', 'LalaLala', 'BBVV', 'Nddd', and 'OOrr'. The window title is 'Creating of Ship's Weather Reports'.

Help screen for cloud type

The screenshot shows a help screen titled 'Type of High Cloud: Ci, Co: Cirrocumulus, Cs: Cirrostratus'. It displays nine cloud types with corresponding photographs and descriptions:
 

- CH 1: Ci in filaments or hooks more than other Ci.
- CH 2: Dense Ci + Turreted Ci + Ci in tuftal more than other Ci.
- CH 3: Dense Ci originating from Cb, present.
- CH 4: Ci invading the sky.
- CH 5: Cs not exceeding 45 degrees.
- CH 6: Cs exceeding 45 degrees.
- CH 7: Cs covering the whole sky.
- CH 8: Cs not invading the sky.
- CH 9: Cs alone, or Cs more than Ci + Co.

 On the right side, there are radio buttons for 'No CH Clouds' and 'CH Unknown'. At the bottom right, there are 'OK', 'Cancel', and 'Help' buttons. The window title is 'Type of High Cloud: Ci, Co: Cirrocumulus, Cs: Cirrostratus'.