

About JMBSC

The Japan Meteorological Business Support Center (JMBSC) is a general incorporated foundation* inaugurated in 1994, in accordance with **the Meteorological Service Act of Japan**, under the supervision of the Japan Meteorological Agency (JMA), National Meteorological Service of Japan.

*A 'general incorporated foundation' is an organ officially registered with the government to ensure a variety of services on a non-profit basis. JMBSC aims at supporting the sound development of meteorological services in the private sector and the efforts by the authorities concerned towards the promotion of public welfare such as prevention/mitigation of natural hazards and prosperity of socio-economic activities, and offering research and international cooperation.

JMBSC Services

Since its inauguration, JMBSC has provided a wide-range of services, particularly in the following five major fields:

- 1. Dissemination of meteorological data, products and information generated by JMA on both real-time and non-real-time bases to user communities;
- 2. National examination for Certified Weather Forecasters;
- 3. Official verification of the meteorological instruments;
- 4. International cooperation to support Official Development Assistance (ODA) and other relevant activities;
- 5. Promotion of meteorological researches (ex., climate change and severe weather); and
- 6. Other services relevant to promotion of meteorological services in the private sector and the authorities concerned (ex., education and training, and consultancy).

Dissemination of Meteorological Data, Products and Information

In 1993, JMA established a policy to widely open a variety of meteorological information prepared by JMA to the private sector, the mass media and other parties with the amendment of the Metrological Service Act. JMBSC has been officially designated as a unique authorized organization to disseminate the meteorological data, products and information to various users at marginal cost. The dissemination is carried out on a real-time basis through the network server system operated by JMBSC and in the form of recording media such as HD/DVD/CD-ROM.

1. Real-time Dissemination

The following meteorological information by JMA are disseminated to <u>hundreds of national/international</u> users under contract with JMBSC on a real-time basis through a dedicated line, the Virtual Private Network (VPN), and others:

- a. Meteorological observation and analysis data, including those of the Automated Meteorological Data Acquisition System (AMeDAS) and weather radars;
- b. **Grid Point Value (GPV)** data of numerical weather prediction (NWP) models including objective analysis and climate prediction;

- c. **Imagery data** by the Geostationary Meteorological Satellite "Himawari-8/9" operated by JMA;
- d. Weather forecasts, advisories and warnings;
- e. Short-range forecasts, nowcast and maps of hazard risks;
- f. Seismic monitoring data and tsunami warnings, and Earthquake early warnings;
- g. Volcanic monitoring data and warnings: and
- h. Marine meteorological, oceanographic, and environmental monitoring and prediction.

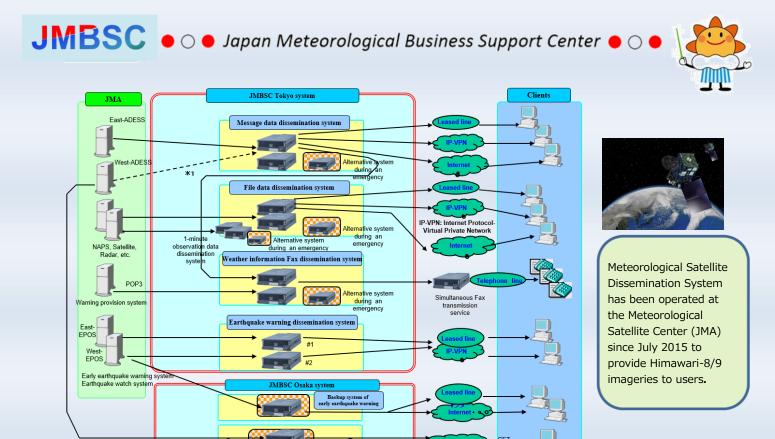


Real-time Data Dissemination Operation

2. Non-real-time Dissemination

- a. Observation data and meteorological satellite imagery, and statistical reports, and
- b. Objective analysis products including reanalysis with the numerical models of JMA.

The non-real-time dissemination service is available upon request in the form of HD, DVD and CD-ROM by surface mail.



JMBSC Data Dissemination Diagram operated at JMA HQ (Tokyo) and Osaka Regional HQ

Backup system of message/file system

National Examination for Certified Weather Forecasters

Further to weather forecasting services for the general public, JMA is in a position to exclusively issue the warnings as a single authoritative voice of the nation. On the other hand, private weather companies and parties other than JMA are obliged to be authorized by the Director-General of JMA so as to conduct their own forecasting services, where the weather forecasts must be prepared by Certified Weather Forecasters qualified by JMA. Such a certification system allows the private weather forecasting companies to provide the public and private sectors and industries with more user-oriented and individually tailored weather forecasts.

With the designation of the Director-General of JMA, JMBSC is responsible for the national examination for Certified Weather Forecasters. The examination of basic meteorological knowledge and forecasting techniques is executed twice a year to present the official qualification of the Government of Japan. In 2019, around 300 people passed the examination.

Today, a number of Certified Weather Forecasters are actively involved in the weather forecasting in private weather companies separately from JMA, such as the

weather casters on TV/radio/web, consultants on application of meteorological information, and promulgation of weather information and knowledge.



Verification of the Meteorological Instruments

1 During East-ADESS system failures, JMBSC system

connected to West-ADESS starts backup service (disseminate data received from West-ADESS via JMBSC Osaka system)



Verification of a Wind Vane/Anemometer

| Insp | ection Certificate |
|--|---|
| | Japan Meteorological Business Support Center (Official inspection erginization registered by Japan Meneorological Agency for meteorological instruments) |
| | |
| Certificate No. 15-0601 | 7 Date Jun.24.2015 |
| and calibrated pursuant to Artic | TIFY that the following instrument was examined tie 28 of the Meteorological Service Law and wes sions as described in Article 28, Paragraph 1. r <u>5</u> years henceforth. |
| Name of Instrument | : Ancroid Barometer (Marine Use) |
| Manufacturer | : SANOH CO. LTD. |
| Type of Instrument | : TYPE SEIL |
| Date of Manufacture | : Jun.2015 |
| Serial Number | : 003230 |
| | <u></u> |
| | authority of the Government of Japan. I certify the original in Japanese is correct. |
| 050 | (Segueure) |
| Japan Meteorological Business Supp Address: 3-17 Kandanishikicho, Ch Phone: +81-3-5281-0440 Fax: + | iyada-ku, Tokyo Japan |
| | |
| | |

Inspection Certificate

JMBSC • • • Japan Meteorological Business Support Center • •



In order to maintain the meteorological observation accurate, consistent and valid, the verification of meteorological instruments is indispensable. In Japan, it is regulated that official meteorological observations shall be performed with the officially verified instruments in compliance with the Meteorological Service Act of Japan. While JMA has the responsibility for the verification of meteorological instruments as the national authority, the individual verification tests and issuance of certificates of instruments for surface and upper-air observations are carried out by JMBSC, with the authorization by JMA, in accordance with the procedures and guidelines established by JMA.

For each qualified instrument, a verification/inspection certificate is issued in Japanese, with English translation if necessary, at marginal cost. Every year, JMBSC issues around 11,000 to 14,000 certificates of instruments.

International Cooperation

International cooperation is conducted through the international development cooperation projects by the Japan International Cooperation Agency (JICA) and others in more than 20 countries.



Development Cooperation Projects (funded by JICA and others)

In collaboration with JMA, JMBSC provides support for Official Development Assistance (ODA) activities of the Government of Japan for the enhancement of National Meteorological and Hydrological Services (NMHSs) and the relevant authorities related to earthquake and tsunami monitoring in the world.



JICA Training in JMA Instrument Center (RIC/Tukuba)

(Raingauge Calibration)



JICA Training on cyclone monitoring and forecast in Mozambique

Promotion of Meteorological Researches

JMBSC carries out two projects to promote meteorological researches, and to tackle scientific understanding and prediction of climate change and severe weather, in cooperation with research groups of the Meteorological Research Institute (MRI)/JMA, universities and research institutes in Japan, and with overseas researchers and institutes.



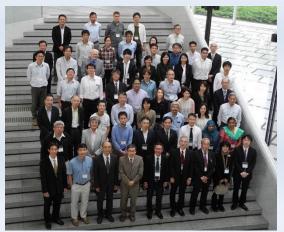
The 1st project is "Integrated Climate Change Projection" as one of components in the "Integrated Climate Model

Advanced Research Program (TOUGOU)", under the grant of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) for FY 2017-2021.

The 2nd project is "Large Ensemble Atmospheric and Environmental Prediction" for severe weather under the Program for Promoting Researches on the Supercomputer "FUGAKU" by MEXT for FY 2020-2022.



Himawari-8 Imagery



International Workshop on Climate Downscaling Studies, Tsukuba on 2-4 October 2017



Other services

1. Education and Training

JMBSC provides basic and practical training courses on weather/climate monitoring and forecast. Several spot seminars are organized to transfer forecast techniques newly developed by JMA to the private weather forecasting industry.



Seminar on Latest Forecast Techniques

2. Publication Services

JMBSC carries out reprint services of JMA's publications and issuance of JMBSC original publications (e.g., Japan Meteorological Yearbook).

3. Consulting Services

JMBSC conducts the following consulting services for the enhancement of meteorological and environmental services of the private sector and the relevant authorities:

- Consultancy for the contents and utilizations of distributing data and information provided through JMBSC; and
- Weather-related practical research and development with the relevant authorities concerned to the promotion of public welfare.



Observation on Heat Illness Prevention

Contact

Your inquiry and order are to be addressed by e-mail in English to: JMBSC International Service Officer.

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- Fax: +81-3-5281-0445
- URL: http://www.jmbsc.or.jp/en/index-e.html (in English)
- URL: http://www.jmbsc.or.jp (in Japanese)







JMA introduced a character mascot nicknamed "Harerun" (which means expectation of fine weather and clear sky in Japanese) to promote public awareness on meteorological services of JMA.

JMBSC sells official goods with this mascot, such as dolls, cups and straps.