

Public-Private Engagement in Japan

- Activities based on the Meteorological Service Act -

OBUYASHI Masanori
Director-General, Atmosphere and Ocean Department,
Japan Meteorological Agency (JMA)

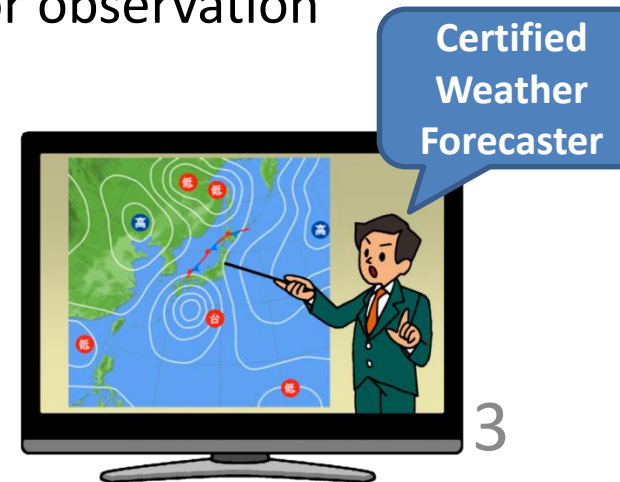
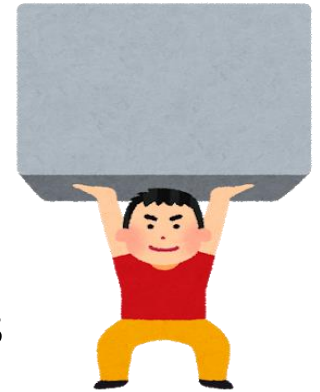
Outline

- **Meteorological Service Act**
 - From a viewpoint of PPE
- **Implementation Examples**
 - Data Provision to the Private Sector
 - Weather Business Consortium (WXBC)
- **Recent JMA Collaborations**
- **Future**



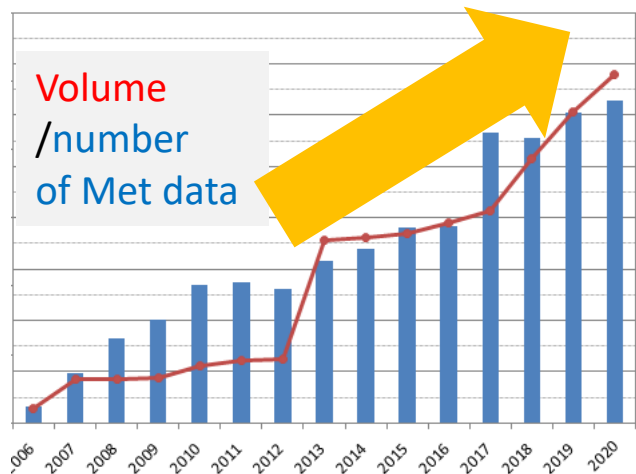
“Meteorological Service Act” of Japan

- Aims to develop **meteorological services as a whole, including private services.**
- JMA roles
 - Infrastructure (obs. & info. networks)
 - DRR (Issue warnings as the **Single Authoritative Voice**)
 - Promote data utilization in economic and social activities
- Basis for reliable private activities;
 - Technical standards and verification system for observation
 - Licensing for private forecasting services
 - Ensure Quality of Data & Services
(Preventing “Bad money drives out good”)

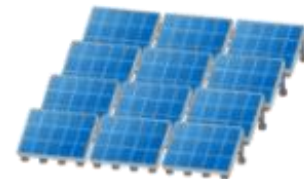


Data Provision to the Private Sector

- Approx. 80 commercial entities are **licensed to provide forecasts**.
- JMA provides most of its data/information to the private sector.
 - **Free** (without charge for data itself) **and unrestricted** usage
- More and more **non-licensed entities** use the data provision services for their internal activities.



variety of private service customers



Weather Business Consortium (WXBC)

- Established in 2017,
- Aims to **enhance socio-economic productivity by further utilizing meteorological data** with technologies including IoT and AI
- Involving **public/ private** sectors, **academia**, and **potential meteorological data users (>1000)**, having **continuous dialogues**
- Sharing **knowledge and experience**, conducting **demonstration projects**.
- **JMA** roles as the **secretariat** as well as a **data and technical support provider**.

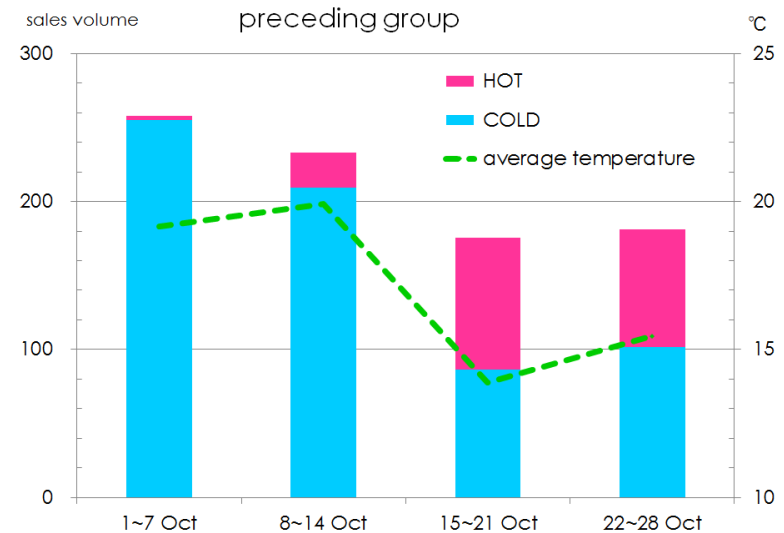
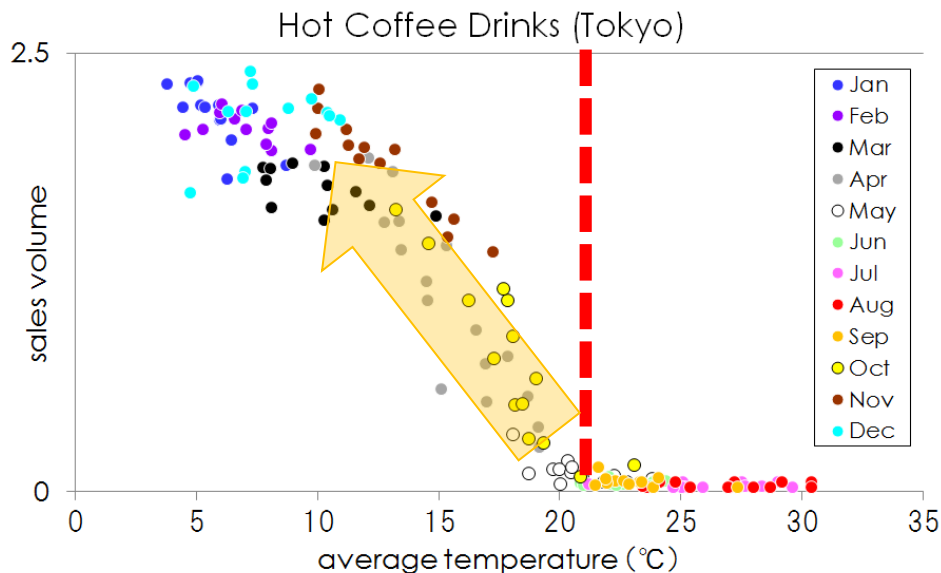


Contribution to Economic productivity



- A **joint demonstration experiment** with the Soft Drink Association
- Survey : Relation between sales and temperature
 - Increased hot drink sales when $T < 22^{\circ}\text{C}$
- Experiment : Vending machine operators switched hot/cold drinks based on **two-week predictions**.

➔ **Increased sales** from restocking of drinks in advance



Recent JMA collaborations

“Utilization of AI technologies in observation and forecasting”

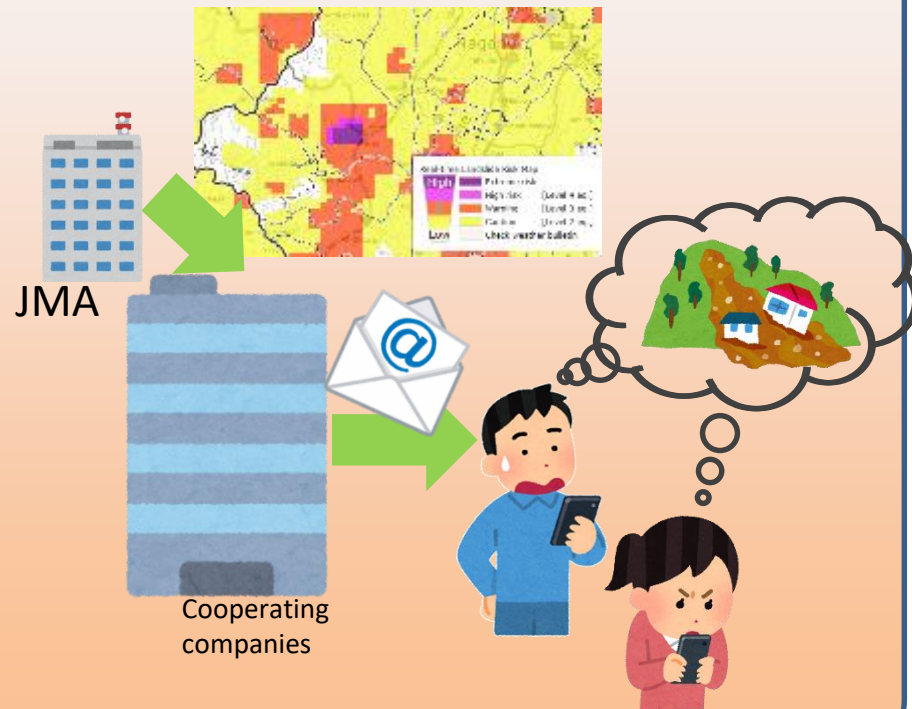
JMA and Japan’s RIKEN, a science research institute, are developing new methods in

- ✓ QC of observation data,
- ✓ Interpreting enormous NWP output, using **state-of-the-art AI technologies**



“Risk notification via PUSH-type communication”

Telecommunication companies dispatch **JMA’s disaster risk information to people** at high risk area via email and apps.



Future

- Deliberation by JMA's Advisory Body (2020)
 - More comprehensive engagement is needed toward the development of meteorological services,
 - Continued dialogue among stakeholders involved in meteorological services is needed to bring positive synergies based on mutual understanding,
 - JMA should oversee and coordinate whole activities while promoting infrastructural services such as obs. and NWP.



Key messages

- Meteorological services in Japan have been developed, underpinned by the **Meteorological Service Act**, with **JMA having responsibility, not only for its operations, but for the whole system** nationwide.
- JMA facilitates **further use of meteorological data and services in economic and social activities**, through initiatives such as WXBC, while working to **improve its own public services in collaboration with private and academic sectors**.
- For versatile response to rapidly changing social environments and scientific technologies, **it is of vital importance to promote engagement of stakeholders** through continuous dialogues and mutual understanding.

Thank you for your attention!



iao-jma@met.kishou.go.jp