



# Update of WDS activities

Mamoru Ishii

The member of WDS-SC

# WDS (World Data System)



## Missions

- The mission of the World Data System is to enhance the capabilities, impact and sustainability of our member data repositories and data services by:
  - creating trusted communities of scientific data repositories
  - strengthening the scientific enterprise throughout the entire lifecycle of data and all related components creating first-class data that feeds first-class research output
  - advocating for accessible data and transparent and reproducible science

## Objectives

- The overall objectives of the WDS are to:
  - Enable universal and equitable access to quality-assured scientific data, data services, products, and information
  - Promote long-term data stewardship
  - Foster compliance to agreed-upon data standards and conventions
  - Provide mechanisms to facilitate and improve data access

# World Data System Repository Sustainability Summit

- Dates and Venue: July 20-21, 2023 @ Univ. Tennessee
- As a Pre-event, WDC-SC meeting and grand-tour of Univ. Tennessee (Neutron Accelerator, Supercomputer)
- Greetings from WDS-IPO, WDFS-SC and ISC
- Keynote Speech, Dr. Ana Peršić (Program Specialist, Open Science at UNESCO)
- Based on the report from OECD, “BUSINESS MODELS FOR SUSTAINABLE RESEARCH DATA REPOSITORIES”, participants had some training to prepare a sustainable plan of their repositories practically.
- In the panel session in second day, panelists from NSF, NASA, and Carnegie Corporation present their expectation for open science as funding agencies.



# International Symposium on Data Science (DSWS-2023)

- Building an Open Data Collaborative Network  
in the Asia-Oceania Area -

4 – 8 December 2023

Science Council of Japan (provisional)  
Research Organization of Information and Systems  
Tokyo, Japan





# Update of ISES activities

Mamoru Ishii  
The Director of International Space  
Environment Services



**ISES**  
International Space  
Environment Service



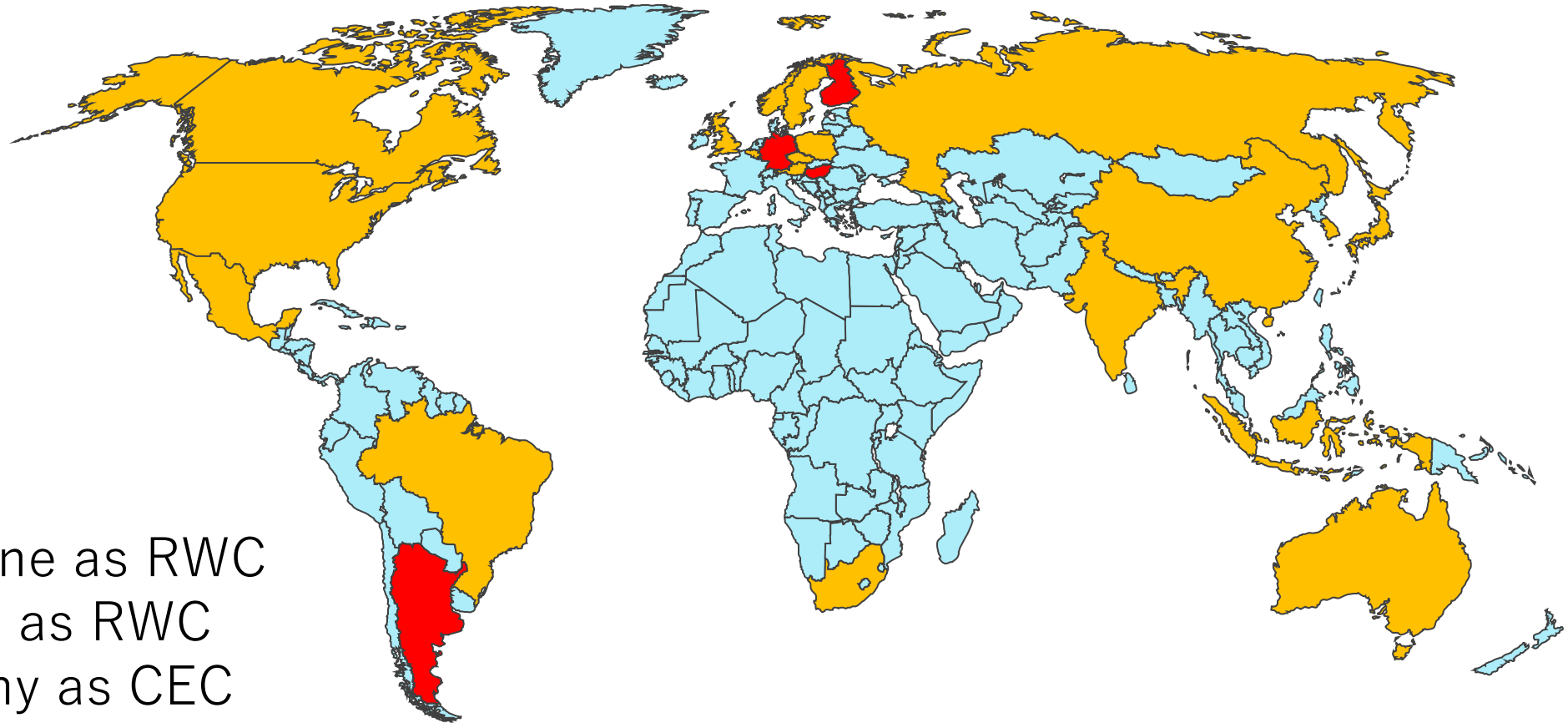
## Executive summary of the ISES

The International Space Environment Service (ISES) has been the primary organization engaged in the coordination of space weather services since 1962. Space weather is not new, but space weather services are becoming increasingly important as our technologies and national/international infrastructures become more vulnerable to storms in space. The growing demand for space weather services to protect our space-based and ground-based assets requires the worldwide coordination of strong partners.

The ISES network of Members, Associate Warning Centers, and Collaborative Expert Centers provides space weather forecasts, warning, alerts, and environmental data to government and private-industry users around the globe.

## Update of ISES member states

- 21 Regional Warning Centers
- 3 Collaborative Expert Centers



- 2020 Argentina as RWC
- 2021 Finland as RWC
- 2023 Germany as CEC
- 2023 Hungary as CEC



## Major on-going activities of ISES

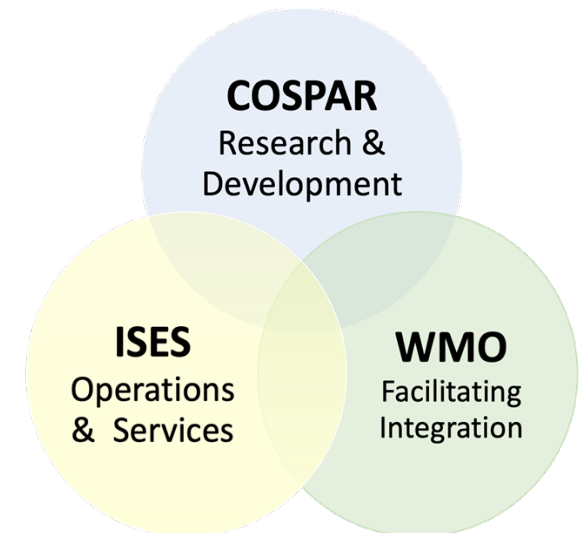
- Review the information gathered on probabilistic forecast methods used by ISES centers and make recommendation on possible standardization of probabilistic flare forecasts.
- Update of product catalogue of ISES members as yearly action item
- Survey and discussion for utility of WMO/GMAS
- Work out consequences of changes to GOES calibration, to probabilistic flare forecasts.
- Review of UN/DRR-ISC Hazard Definition & Classification Review – technical report
- Preparation of the prediction model catalogue used in ISES members
- Coordination Team and Pilot Project for WMO-SES-COSPAR collaboration (later in detail)



# WMO-ISES-COSPAR collaboration



- UN/COPUOS STSC to issue recommendations on space weather services in February 2022
- COSPAR-ISES-WMO is required to lead space weather related activities, and has begun to consider
- September 2022, two representatives from each institution participated in the study at the University of Coimbra, Portugal.
- A draft of the "Coimbra Declaration" has been prepared and is currently being discussed by various organizations.
  - Confirmation of the direction of the three institutions
  - Agree on framework, consider MoU
  - Pilot projects, regular meetings, round tables, etc.
- **The first International Space Weather Coordination Forum (ISWCF (former round table)) was held in Geneva on Nov. 17, 2023**



## International Space Weather Coordination Forum

- Date and Venue: Nov. 17, 2023, WMO Headquarter Geneve
- Agenda
  - Landscape
  - Space Agencies
  - Ground-based Assets
  - End-User Engagements
  - Cross cutting themes
    - Measurement requirements
    - Standards and interoperability
    - Top-down/bottom-up coordination
  - Summary



ISWCF Meeting Photo (Nov. 17, 2023, WMO, Geneve)



ISWCF Group Photo (Nov. 17, 2023, WMO, Geneve)