



World Meteorological Organization

Weather • Climate • Water

WMO, WIGOS and the Global Observing System

GEO-UN Roundtable
Geneva, March 7 2016

Dr. Lars Peter Riishøjgaard,
WIGOS Project Manager, WMO Secretariat

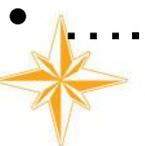
Working together for monitoring, understanding and predicting weather, climate and water

- Established 1950, UN specialized agency 1951
- Coordinates the activities of the National Meteorological and Hydrological Services (NMHSs) of its 191 Member States
 - The WMO Members have exchanged weather data 24 hours/day 365 days/year, in times of peace and war, since 1951
- United Nations system's authoritative voice on weather, climate and water



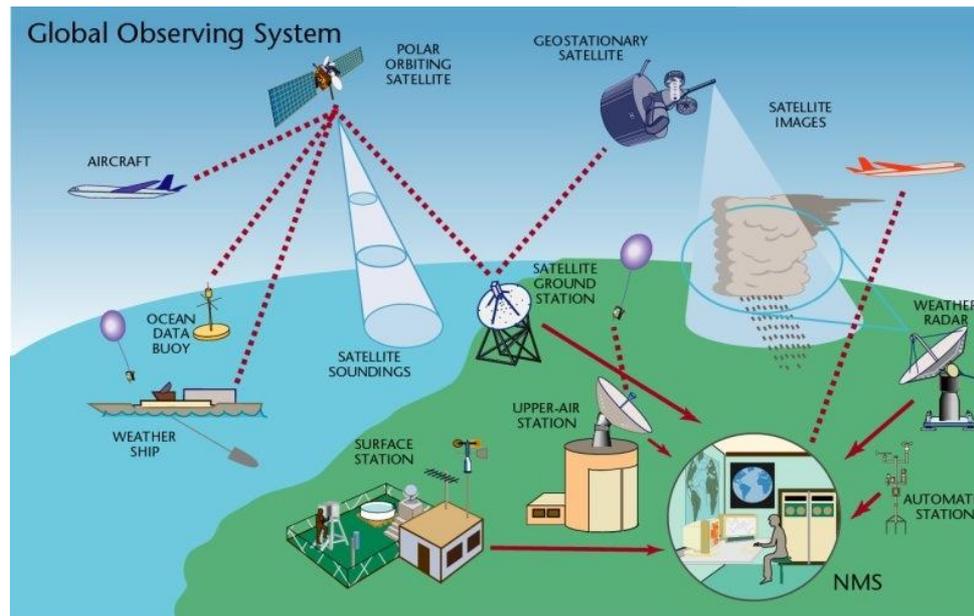
Some key WMO activities

- World Weather Watch (the “original WWW”)
 - **Global Observing System (GOS)**
 - Global Telecommunications System (GTS)
- Inter-governmental Panel on Climate Change (IPCC)
- **Global Atmosphere Watch Programme (GAW)**
- World Weather Research Programme (WWRP)
- **Hydrology and Water Resources Programme (HWRP)**
- World Climate Research Programme
- World Climate Research Programme (WCRP)
- **WMO Space Programme**
- **Global Cryosphere Watch(GCW)**
- Education and Training Programme



WMO observational activity: The Global Observing System of the World Weather Watch

- Tens of thousands of surface stations, radars, lidars, weather balloons, aircraft, ships, buoys, satellites etc. providing weather observations all over the planet that are distributed to all WMO Member States world-wide in real time, typically within hours (increasingly minutes) of the observation time



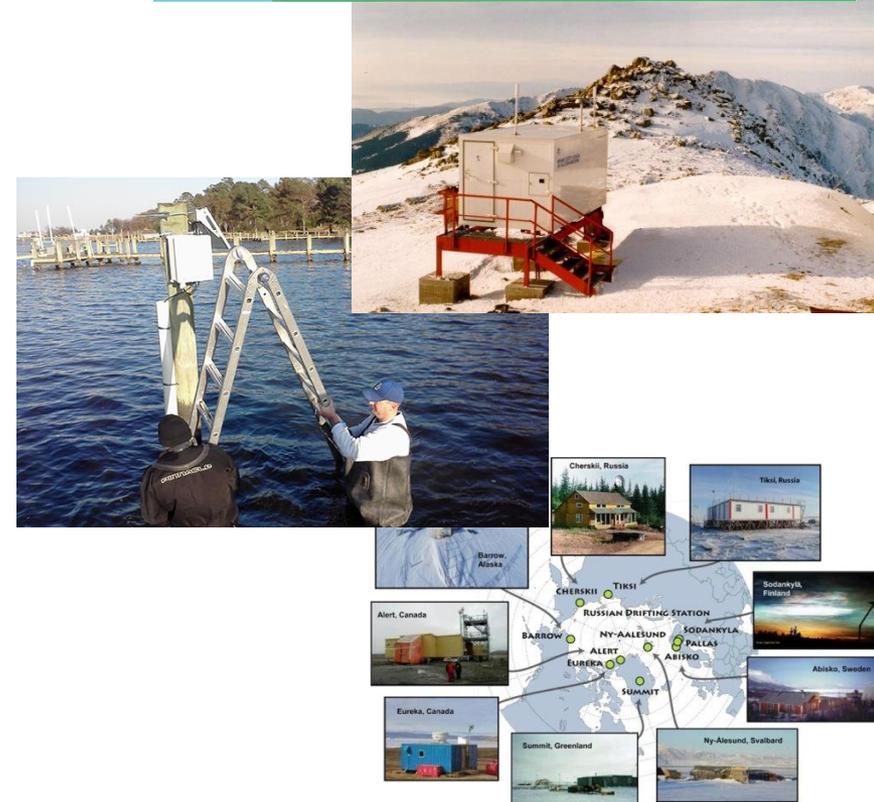
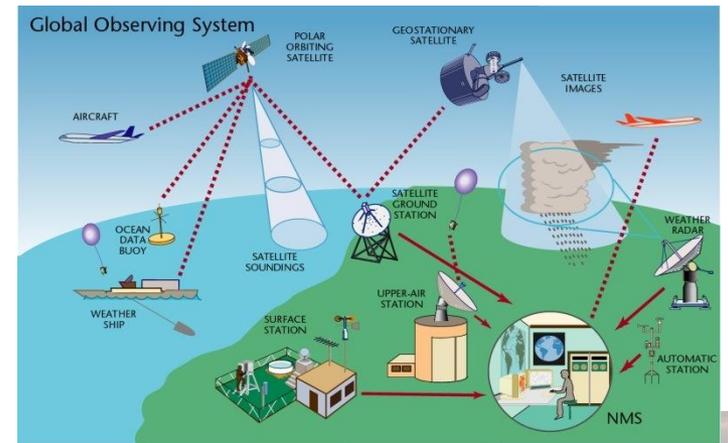
What is WMO's role in this?

- Observations themselves are taken by a heterogeneous mix of organisations
 - National weather services in 191 WMO Members, other national government agencies, marine services, research labs, space agencies, ...
- WMO regulates - via its convention and Congress resolutions - what is being measured, where and how often, and how it is being exchanged internationally
- WMO coordinates the exchange; protocols, formats, software and hardware
- WMO evaluates performance and provides guidance on further evolution of the GOS



WMO Integrated Global Observing System (WIGOS)

- Global Observing System (WWW/**GOS**)
- Observing component of Global Atmospheric Watch (**GAW**)
- WMO Hydrological Observations (**WHOS; WHYCOS**)
- Observing component of Global Cryosphere Watch (**GCW**)



What is WIGOS?

- WMO foundational activity addressing all observational needs of the weather, climate, water and environmental services of its Members
- Integrator of all WMO observing systems and WMO contributions to co-sponsored systems under common regulatory and management framework
- **Together with the WMO Information System (WIS), WIGOS is a WMO contribution to GEOSS**
 - (WMO Secretariat working actively with the GEO Secretariat to specify more precisely what this means)

