

Department of Meteorology Sri Lanka

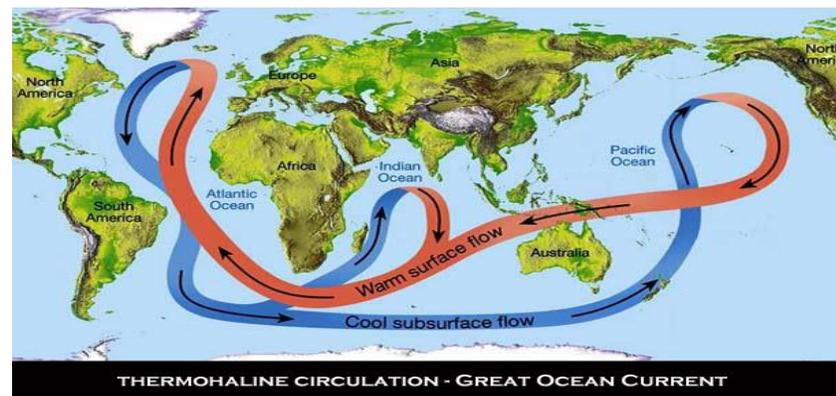
The AWCI Session prior to the AOGEOSymposium 2021 Online , on 26 February 2021

We face risk



Climate of Sri Lanka and Extreme Weather Events

Changing risks



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OBJECTIVES

To Provide weather services to the general public , the agricultural and energy sectors fisheries, shipping and other interested parties.

To Provide weather Services to national and International aviation in accordance with the technical Regulation Stipulated by WMO and ICAO .

To Provide Climatological , Agro meteorological and limited astronomical, magnetic and time Services

To encourage study and research in Meteorology, Climatology. Climate change and allied subjects

To receive Tsunami information and issue warnings to the general public.

Responsibility of the Department



Early Warning of Extreme Weather Events-2020



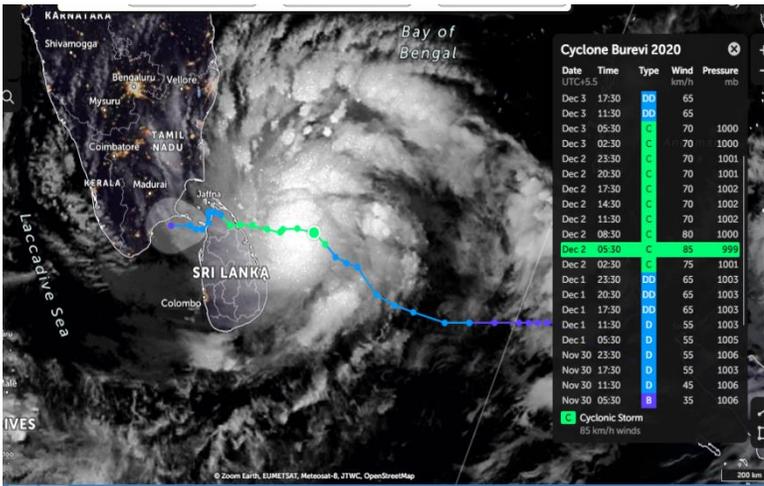
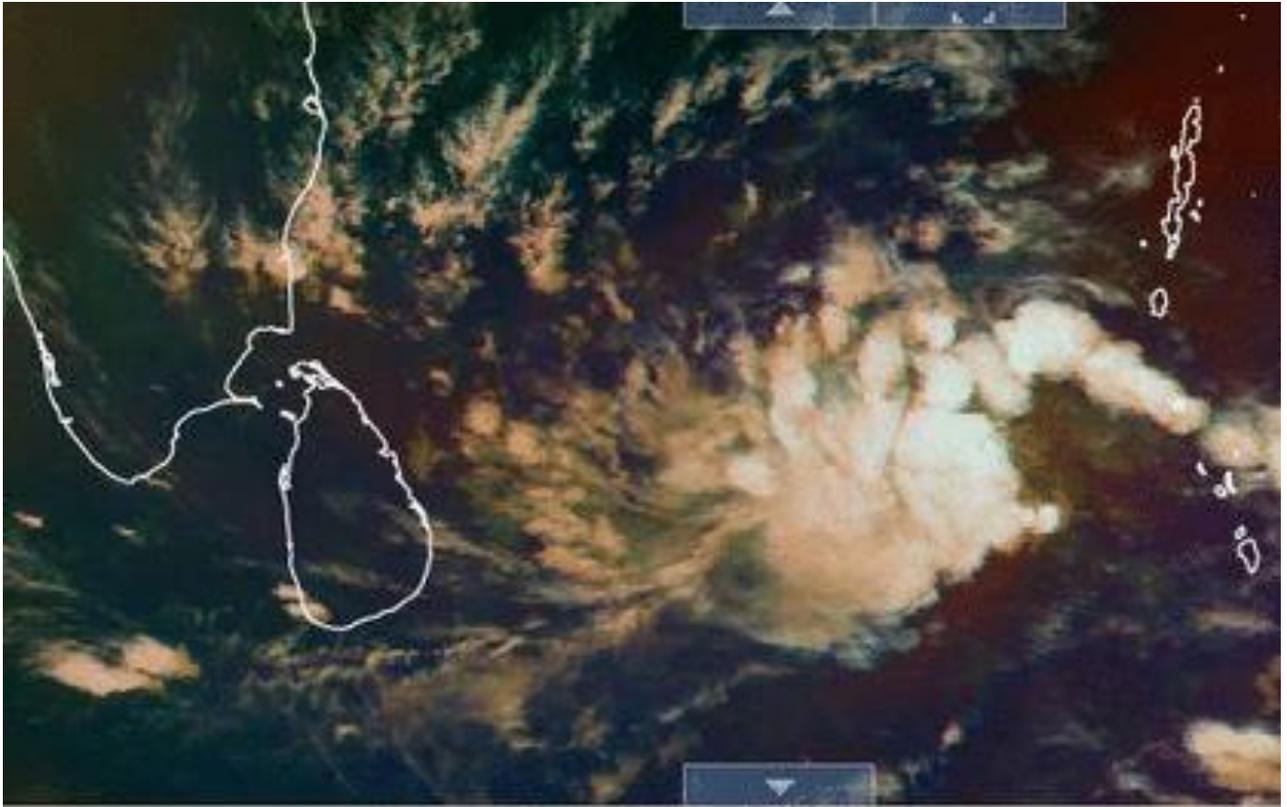
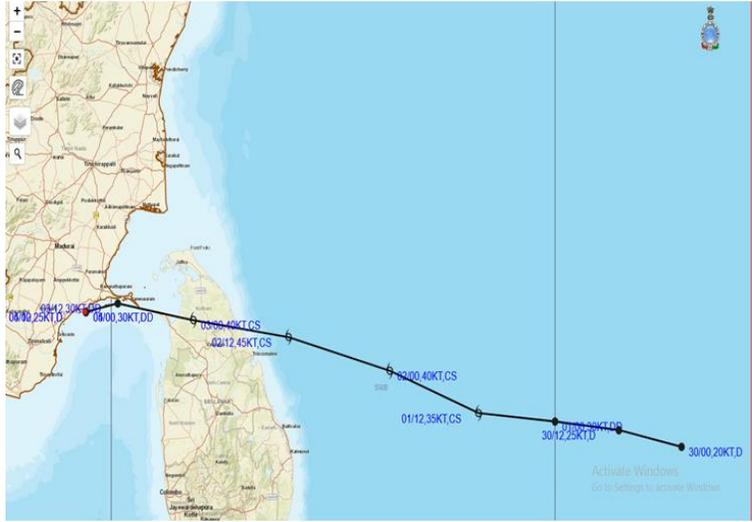
Successfully Prediction and Early warning of

- ✓ **Super Cyclonic Storm “Amphan”** (Bay of Bengal (13 –21 May,2020)- extreme weather conditions with strong winds, lightning and very heavy rainfall exceeding 150mm over southwestern parts of Sri Lanka on 15th , 18th and 19th)
- ✓ **Severe cyclonic storm “Nivar”** (Nov 22-27) South west Bay of Bengal) Move closer to Northern coast of Sri Lanka-Strong winds and heavy rainfall over Northern province from 24-26 Nov)
- ✓ **Cyclonic Storm “Burevi” (Nov 28-Dec 05) Crossed Northeast coast of Sri Lanka on 02nd evening)**
strong winds, storm surge and very heavy rainfall exceeding 200mm over Northern part)
- ✓ **Extreme weather conditions during Southwest/Northeast Monsoon seasons**

Department of Meteorology Responsible for Cyclone- warning

Observed Track From 30 November to 05 December Cloud Animation

from 30 November 0000UTC to 04 December 2100UTC, 2020



Seasonal forecasting/drought monitoring activities

- **Provided more reliable weather and climate information(Seasonal, Monthly, weekly rainfall and temperature outlooks with historical climate impacts, drought monitoring) on monthly basis to stakeholders (particularly for agriculture, Water, Irrigation, Power, Disaster management etc) to manage their anticipatory decision-making and to reduce the risks**
- **Started Monthly online briefing for Agriculture water and Irrigation sectors**
- ✓ **Conducted two Monsoon(SW and NE Monsoons) forums for stakeholder agencies via online in 2020**
- ✓ **Actively participated two South Asian Climate Outlook forums (SASCOF) via online**
- ✓ **Conducted research activities regarding La Nina/El Nino/WRF/climate change impacts /case studies on Heavy rainfall**

Department of Meteorology- Action plan 2021-2025

Foreign Funds & Grant

❖ Start to Implementation of Modernization Project of the DOM

(CRIP project with the assistance of the World Bank)

Signed date: April 04, 2019

(Around US\$ 35 million)

❖ Start to Implementation of Doppler Radar Project(JICA)

(Grant Aid Project by Japanese Government)

Government of Japan: Two Billion Five Hundred and Three Million Japanese Yen (JPY 2,503,000,000)

Government of Sri Lanka: 486,650,000 Rupee

Signed date: June 30, 2017

Future Development through the Department Modernization project

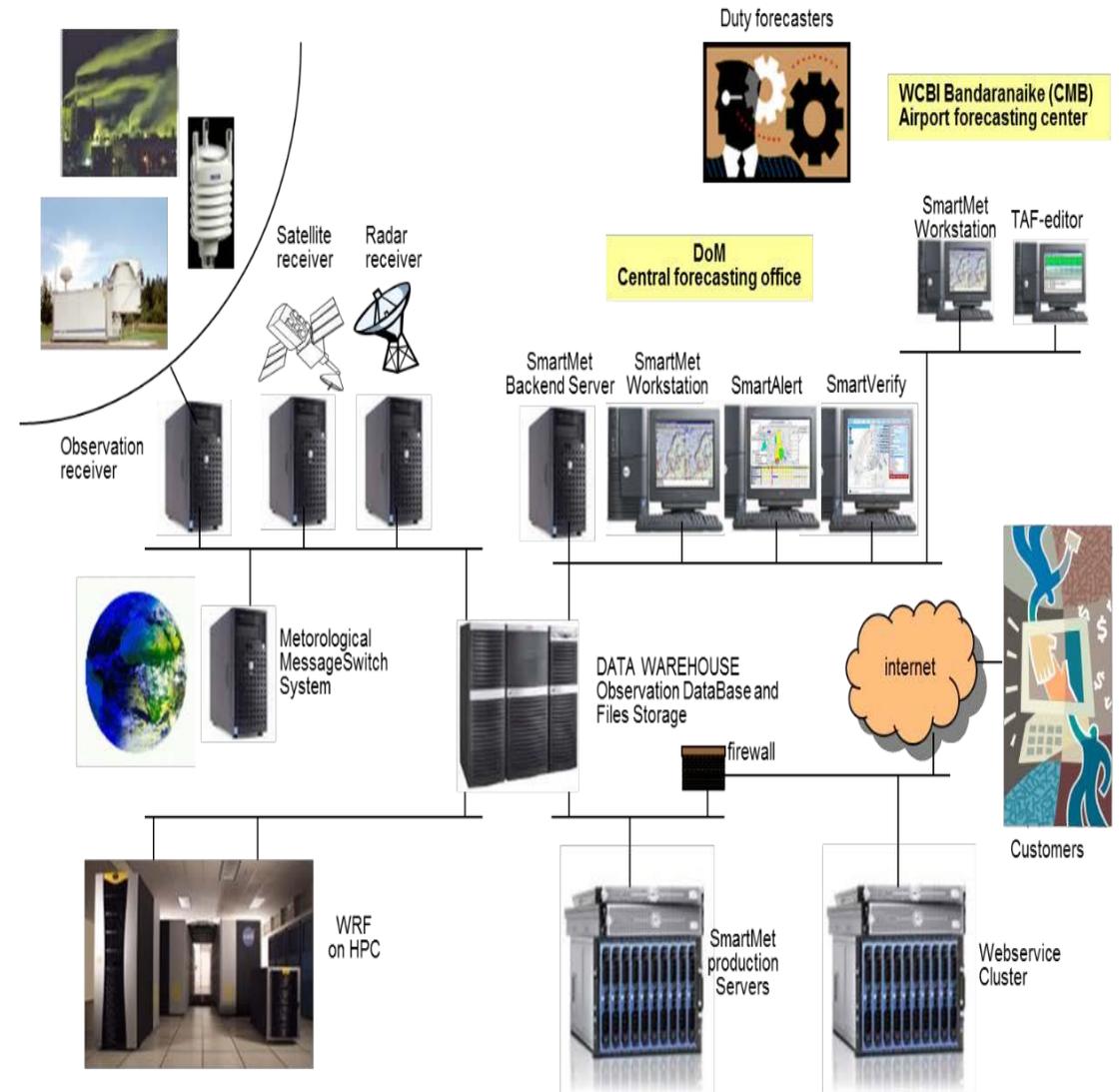
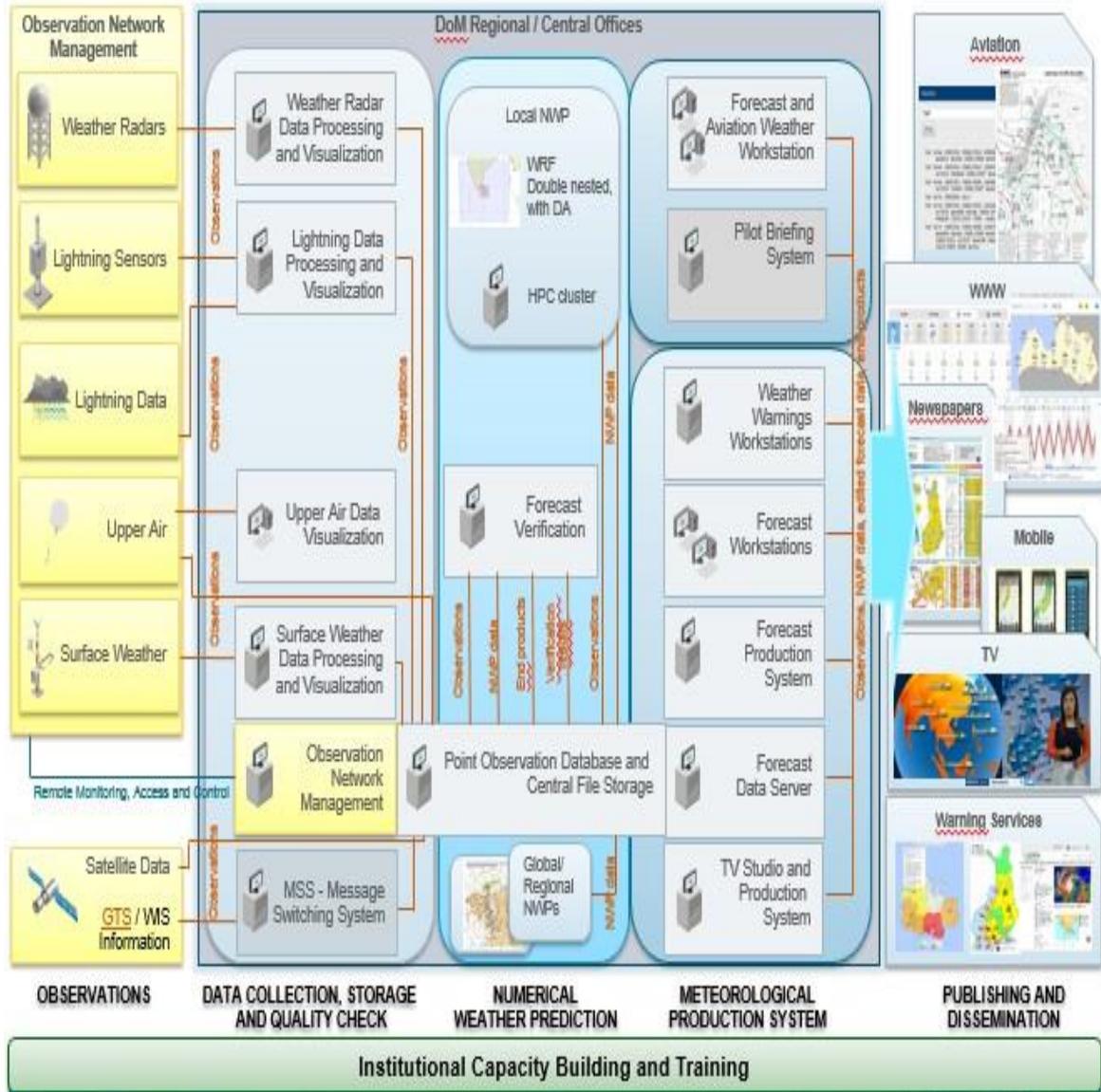
**New Weather
Forecasting
Building**

Improve Observation and
Communication system

Capacity Building

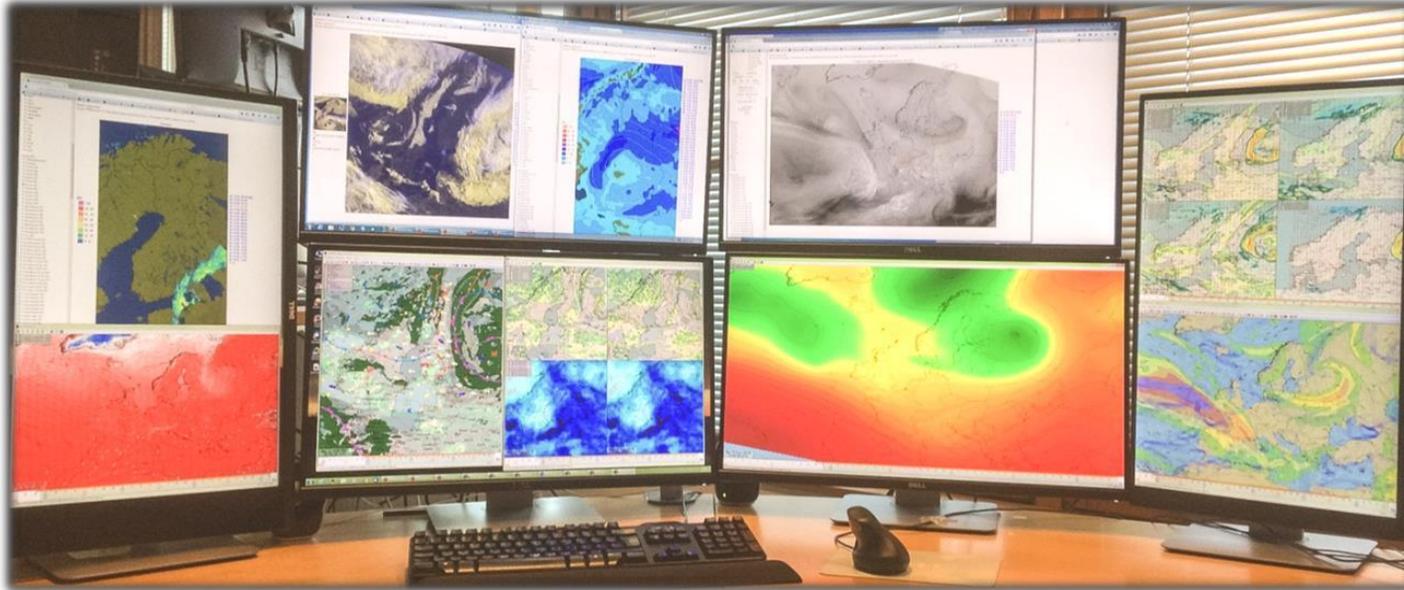
Improve forecasting
capabilities/Numerical
Weather Prediction

Overview of DoM Meteorological Network Integration



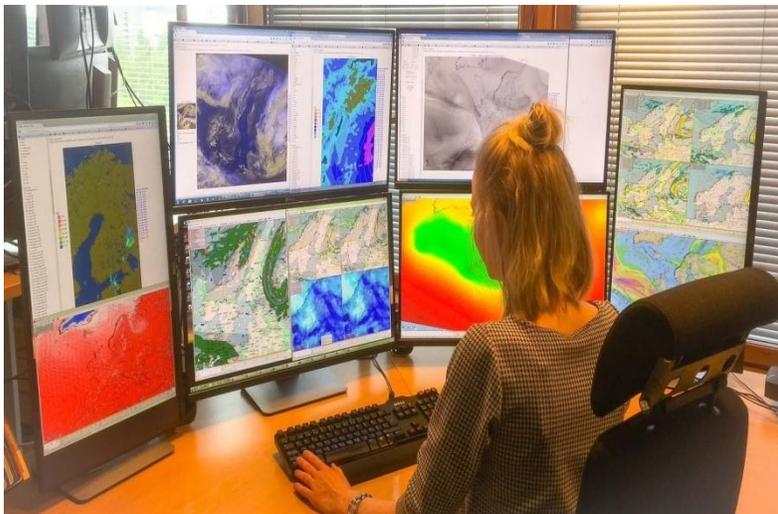
Weather Information and Forecast Production System

Software Tool for Visualizing and Editing Meteorological Data



Smart Met Workstation includes following features:

- Time series editing
- Data modifying with brush tool
- Time-shifting and Smoothing
- Control point editing
- Combination of data from different sources
- Scripting feature
- Possibility to create your own parameters and fields
- Harmonization
- Trajectories
- Sounding visualization
- Vertical cross sections
- Observation and forecast table view
- Create isolines from the observation data



mobile weather application, data produced with SmartMet and warning information with SmartAlert



Gaps and Challenges

Provide more USER oriented services to support economy of the country

Fishery/Navel industry



Aviation sector



Climate Smart agriculture



Power sector



Transport sector



Tourism sector



Water/Irrigation sectors





Thank you