

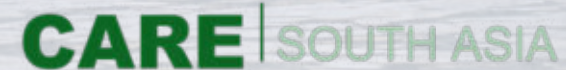
PLANNING WORKSHOP ON Impact-Based Forecasting and Climate Services

21-24 January 2025 | Bangkok, Thailand

NWP Working Group Priorities and Plans

Dr. Anand Kumar Das | IMD

S M Quamrul Hassan | BMD





UPDATE ON LAST EC MEETING AND WAY FORWARD

Update from EC meeting and Way forward

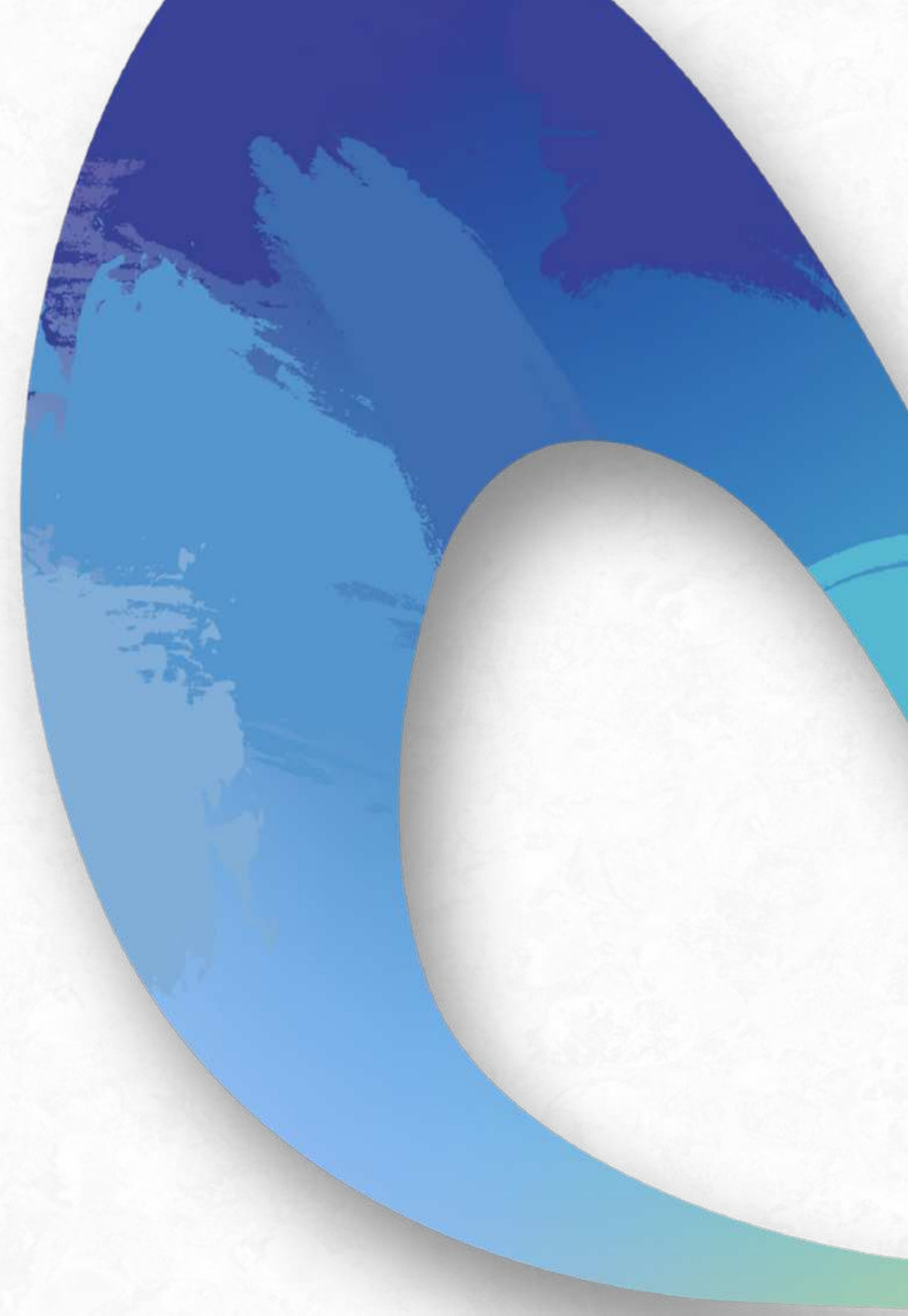
Priorities:

- Assessment of capacity of national weather services
- **Strengthening the DataEx platform**
- **Improving access to a range of ECMWF digital datasets**
- Common platform for model output analysis
- Interpretation of NWP products
- Availability of Ocean Model products.
- Robust verification using non-NMHS and non-GTS data



Update from EC meeting and Way forward

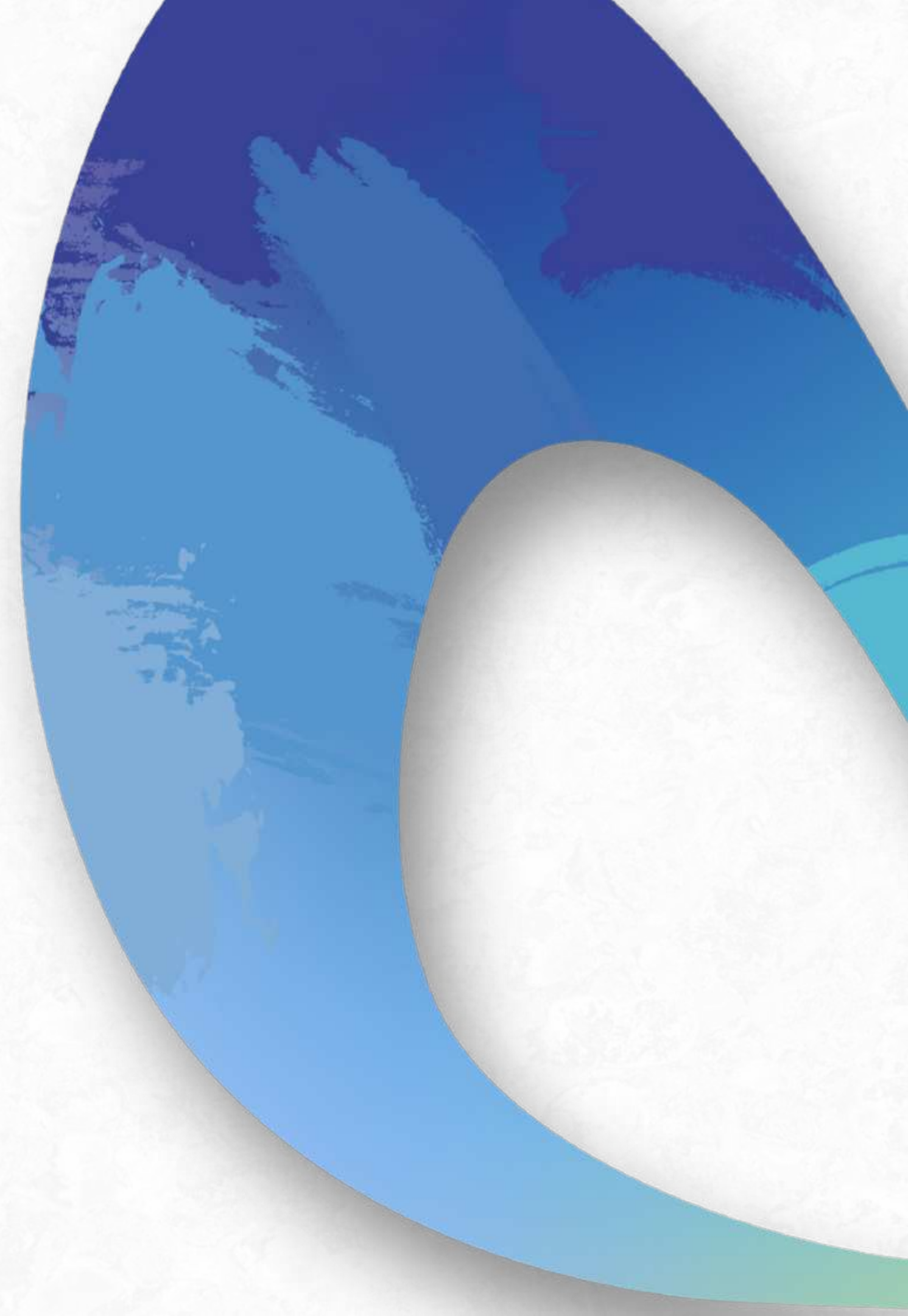
- Enhancing short-range predictions by utilizing global model products from ECMWF, GFS, IMD resources, and INCOIS
- Enforce WRF implementation at the national level using IMD's 3km WRF fields and local data assimilation.
- Collaboration with the IBF WG for IBF development and services improvement
- Generating actionable information from NWP forecasts related to heatwaves, thunderstorms, lightning, heavy rainfall, and cyclones.
- Formation of WG for Hydrology



Update from EC meeting and Way forward

EC Next step:

- IBF in disaster risk knowledge generation
- Identifying and prioritizing specific sectors in each country
- Consultations with NMHS and user sectors to identify priority sectors
- Integrating new NWP products for enhanced capabilities within SAHF framework
- Generation of high-resolution observational gridded data for object-oriented verification techniques.



Next Way forward

What other application must we prioritize?

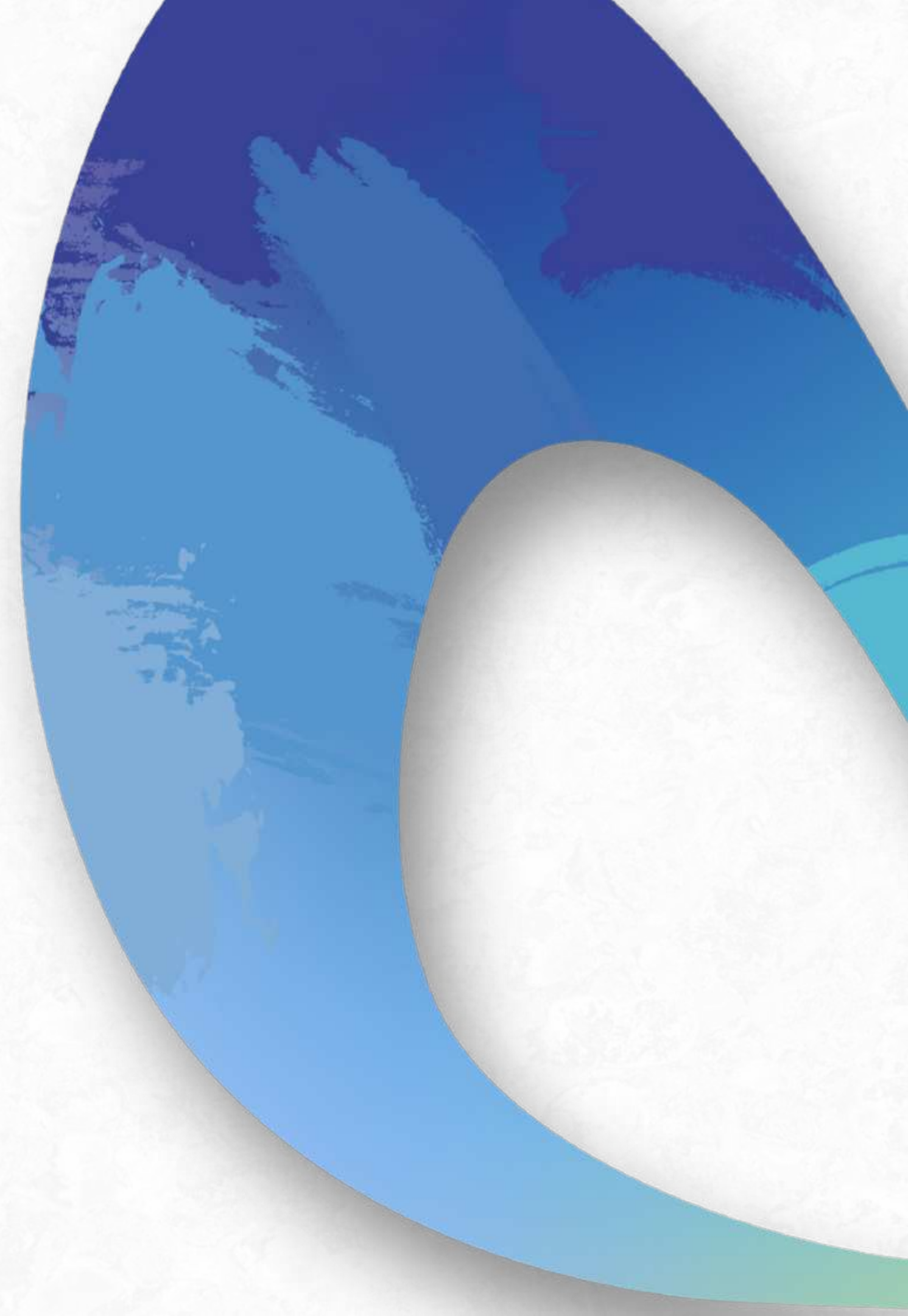
- Landslide Early Warning System (LEWS)
- Lightning Early Warning System
- City Early Warning System (CEWS)
- Highway Early Warning System (HEWS)
- Early Warning for Health Sector



Next Way forward

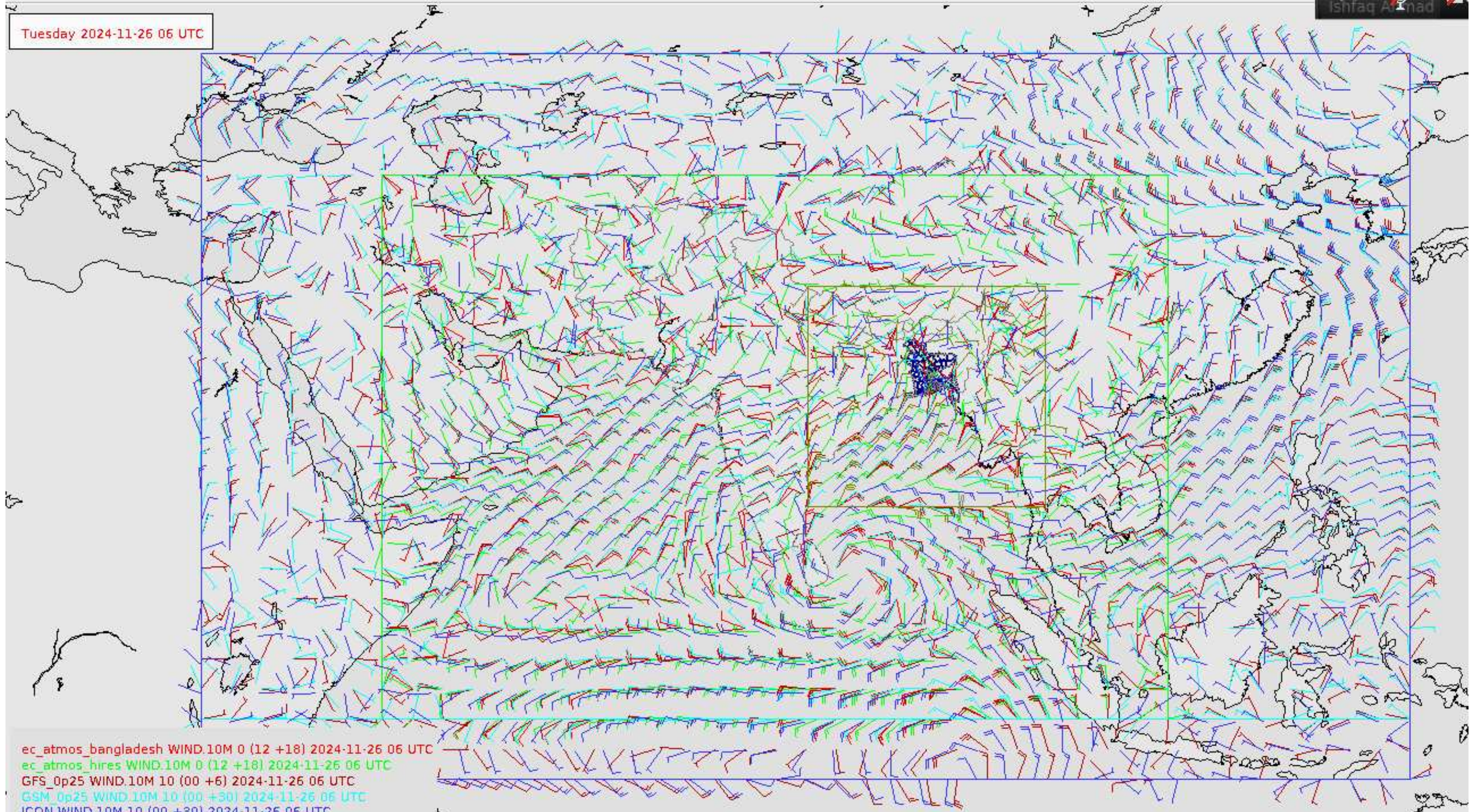
Role of RIMES must built to support those application/EWS for each member country

- Strengthen the SAHF DataEx platform, inclusion of available other NWP data.
- Development of user-oriented decision support systems relevant to national needs and also disaster/sector specific.
- Identify priority sectors, and integrating new NWP products for enhanced capabilities within the SAHF framework.
- Capacity building.
- Sharing the best practices.



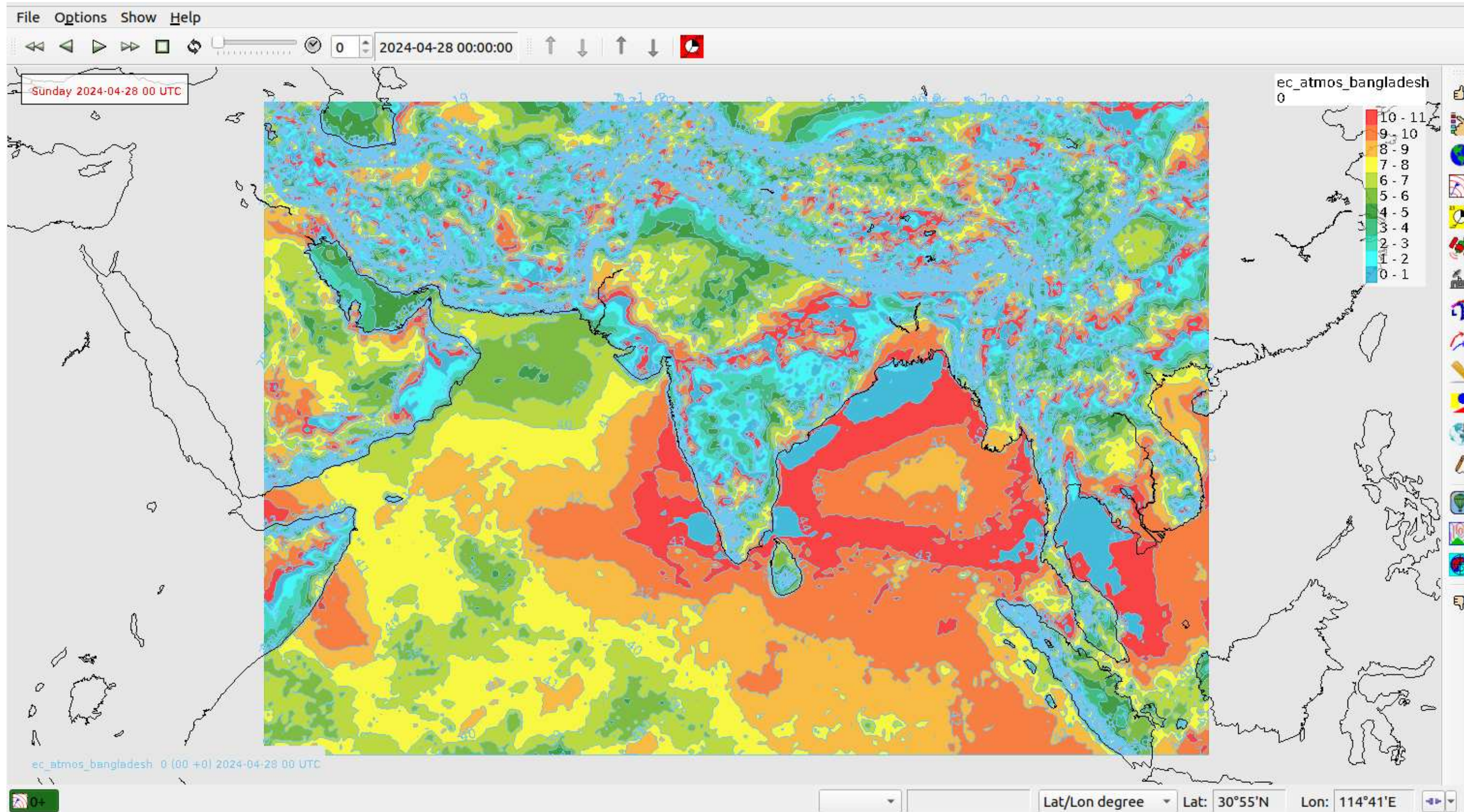
Tuesday 2024-11-26 06 UTC

Shfaq Ahmad

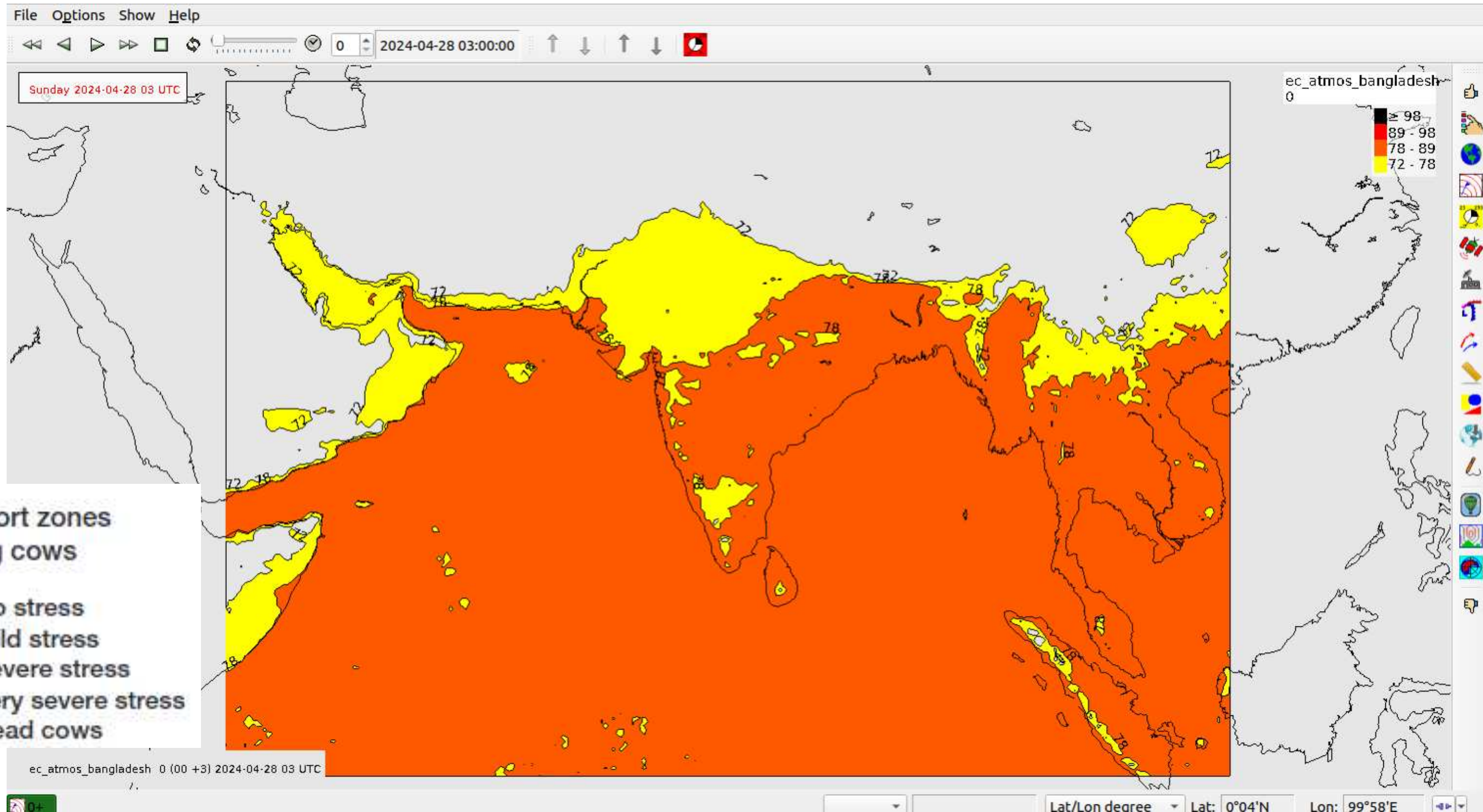


ec_atmos_bangladesh WIND.10M 0 (12 +18) 2024-11-26 06 UTC
 ec_atmos_hires WIND.10M 0 (12 +18) 2024-11-26 06 UTC
 GFS_op25 WIND.10M 10 (00 +6) 2024-11-26 06 UTC
 GSM_op25 WIND.10M 10 (00 +30) 2024-11-26 06 UTC
 ICON WIND.10M 10 (00 +30) 2024-11-26 06 UTC
 WRF_bmd WIND.10M 1000hPa (00+54) 2024-11-26 06 UTC

Humidex (Smoyer)



Temperature Humidity Index (THI)



Five comfort zones
for milking cows

- A <72 No stress
- B 72-78 Mild stress
- C 78-89 Severe stress
- D 89-98 Very severe stress
- E >98 Dead cows

Thanks