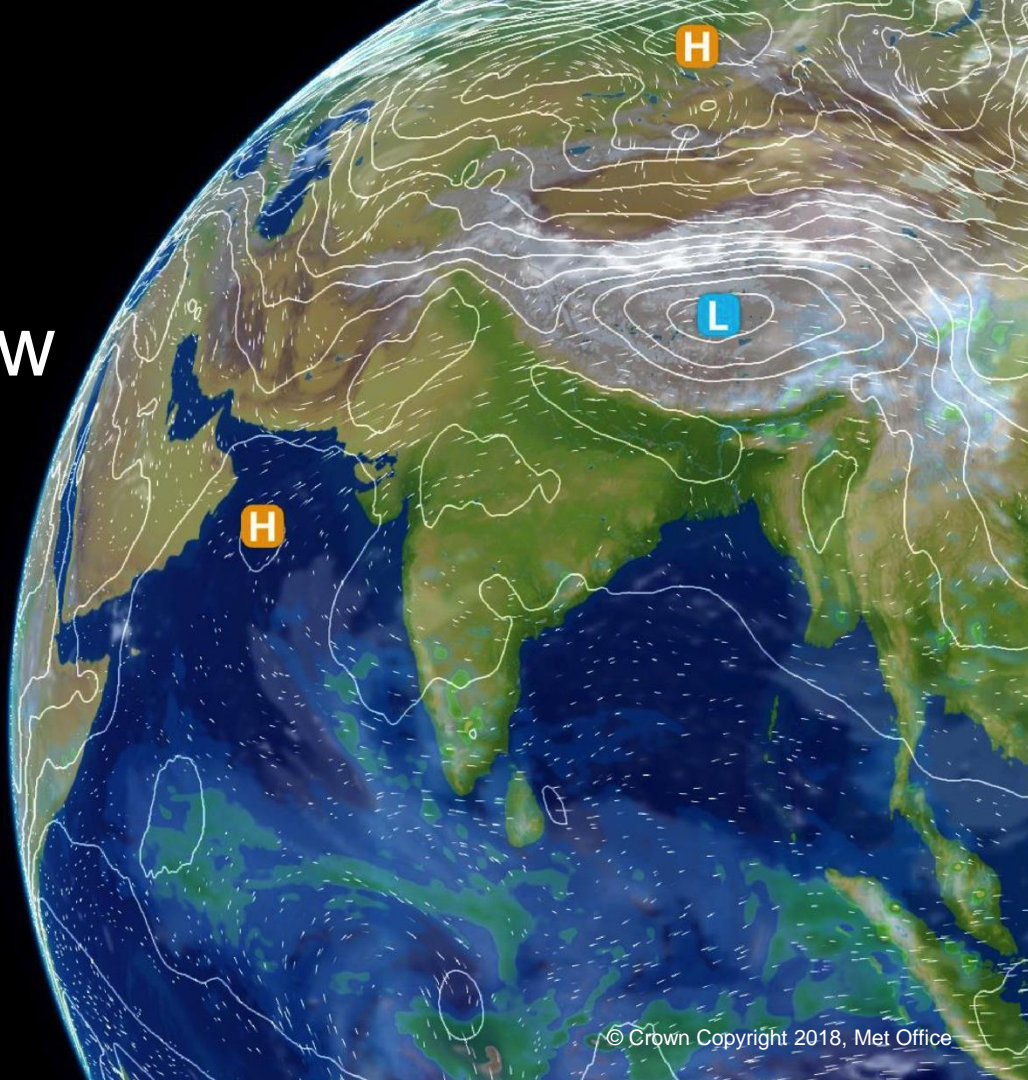


WCSSP India Overview



Developing the science needed to build improved risk based **weather, sub-seasonal & seasonal forecast** services to predict hazards and support-resilient economic development and social welfare

Extreme precipitation & Floods



Orographic Precipitation & Landslides



Cyclones & Depressions



Heatwave, Drought, Coldwave



Thunderstorms, Lightning, Hail



Storm Surge & Extreme Waves



Fog (Air Quality)



 **Met Office**

 **Newton-Bhabha
Fund**

Partners



सत्यमेव जयते

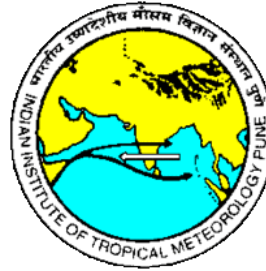
**Ministry of
Earth Sciences**

**Secretary:
M. Rajeevan**



**Indian Meteorological
Department (IMD)**

Dir: Dr. M. Mohapatra



**Indian Institute of Tropical
Meteorology (IITM)**

Dir: Prof. R.V. Nandujah



**National Centre for
Medium Range
Weather Forecasting**

Dir: Dr. E.N. Rajagopal



**Indian National Centre
for Ocean Information
Services**

Dir: Dr. S.S.C. Chenoi



**National Centre for
Coastal Research**

Dir: Dr. M.V. Ramana Murthy



**National Centre for Polar and
Oceans Research (NCPOR)**

Dir: Dr. M. Ravichandran

Partnership: current UK Grant Awardees

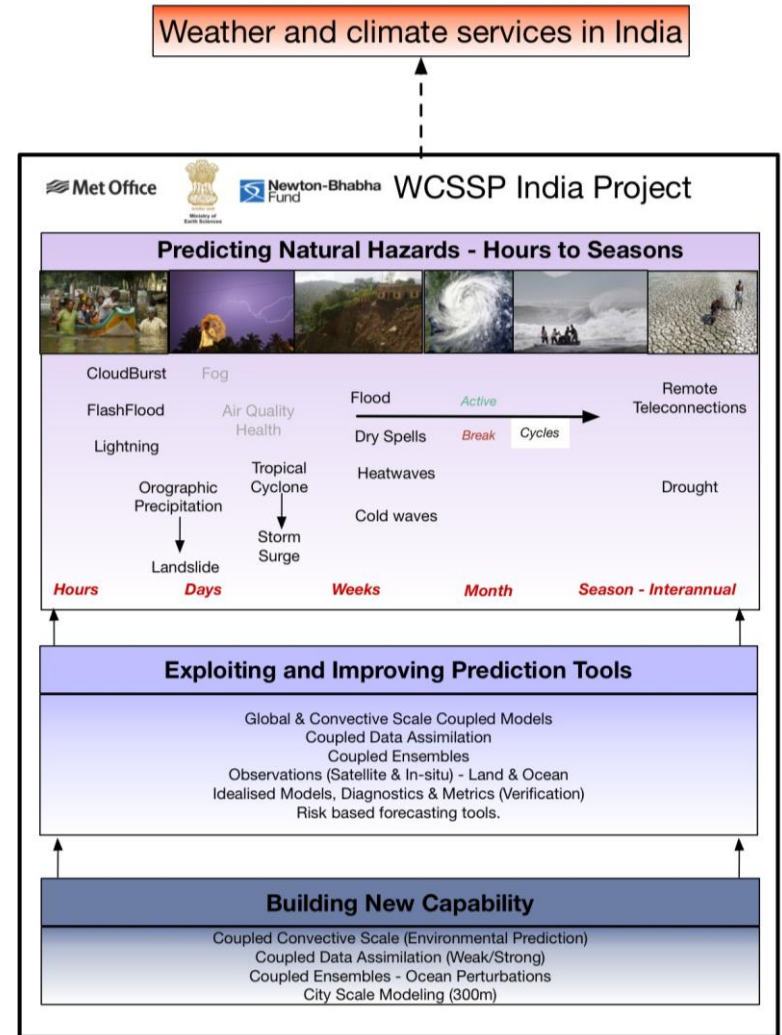


Work Packages:

WP1 – Seamless **coupled** system development across scales

WP2 – Model & observations evaluation of monsoon processes & hazards

WP3 – Risk based forecasting & high impact weather/seasonal events

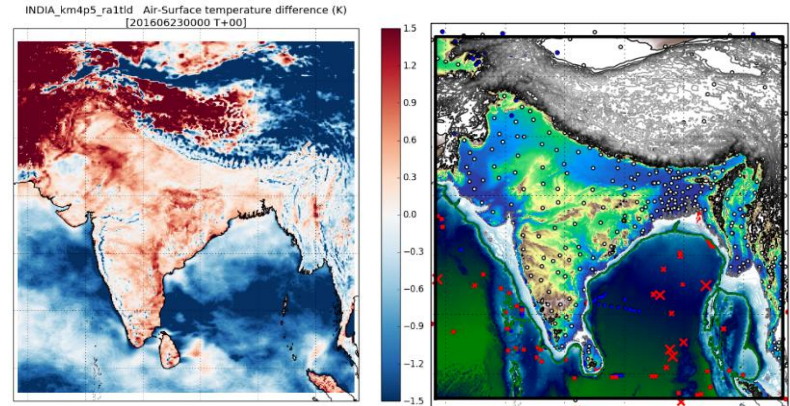


WP1 Seamless coupled system development across scales

1.1: Developing coupled ensemble data assimilation prediction systems

1.2: Convective scale coupled environmental prediction model for India

1.3: Sub-km scale modelling



WP2 Model & Observation Evaluation of Monsoon Processes and Hazards

2.1 Coupled model evaluation, inter-comparisons and process studies

2.2 Component Model Process studies (Ocean, Atmosphere, Land)

2.3 Use of satellite data (Evaluation & Data Assimilation)

2.4 Lightning

2.5 Fog





WP3 Risk-Based Forecasting & High-Impact Weather/Seasonal Events

- 3.1: Verification and post-processing of high-impact weather forecasts
- 3.2: High-impact weather and multi-hazard warning methods
- 3.3: Impact-based forecasting techniques
- 3.4: Extended-range outlooks
- 3.5: Translating forecasts for improved decision-making

