



SAHF IBF WG IMPLEMENTATION PLAN PROJECT

REGIONAL WORKSHOP ON IMPACT-BASED FORECASTING (IBF)

Heat Season Review & Cold Season Planning

29 September - 01 October 2026 | Bangkok, Thailand



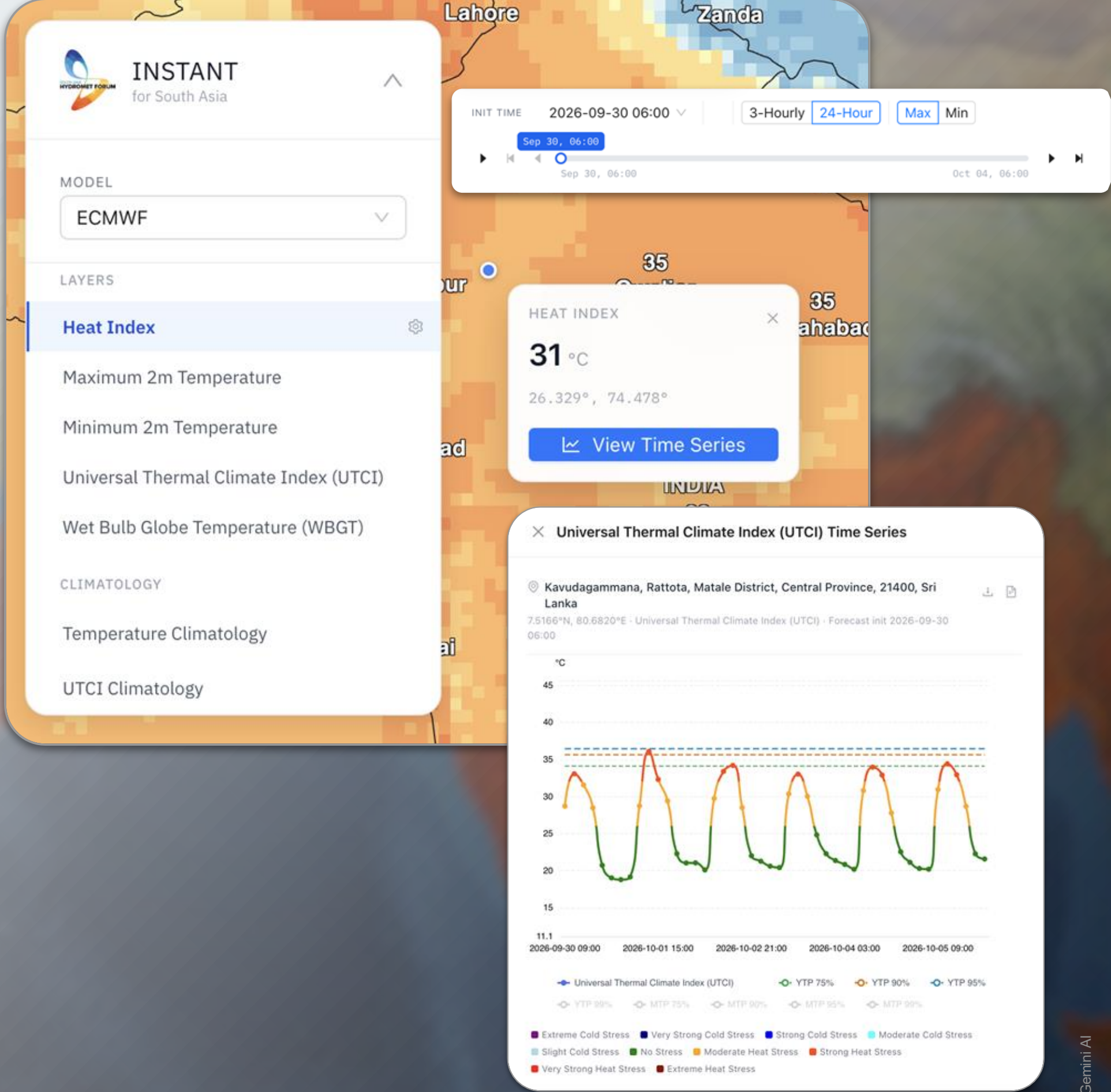
Instant for South Asia

Raihanul Haque Khan
RIMES

Heat Indices

Forecast layers using ECMWF and Met Office forecast data integrated for spatial maps and as time series for any location.

- Heat Index
- Maximum and minimum 2m temperature
- Universal Thermal Climate Index (UTCI)
- Wet Bulb Globe Temperature (WBGT)
- Temperature and UTCI climatology



Exposure and Impact

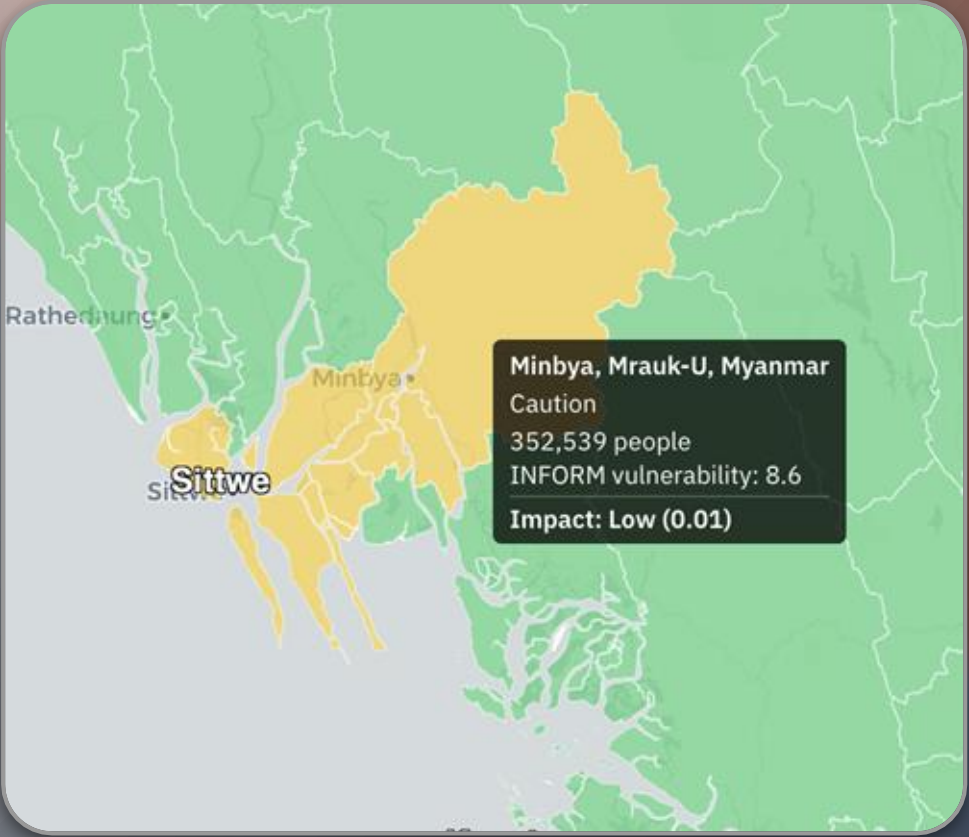
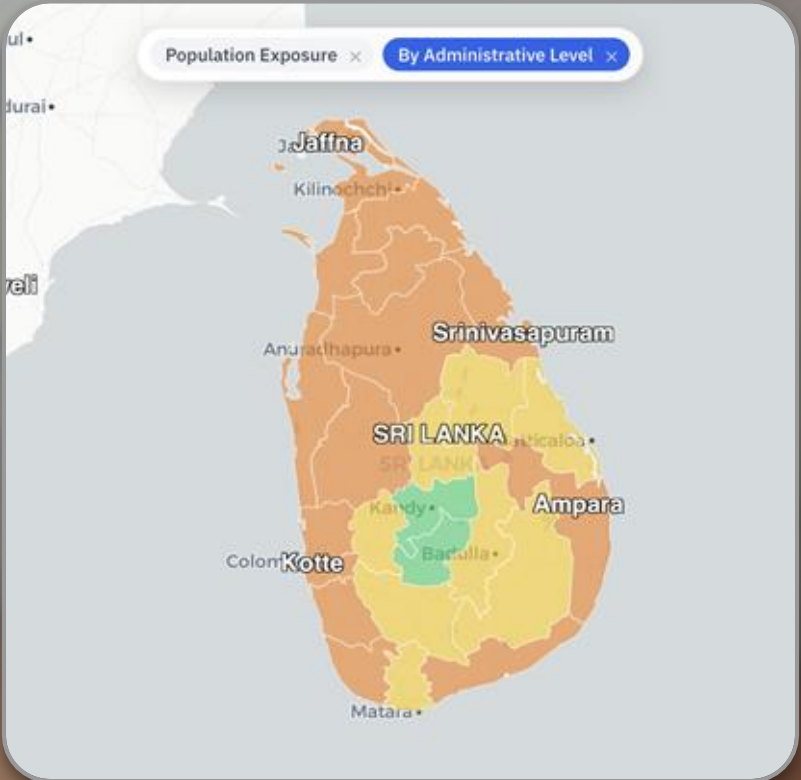
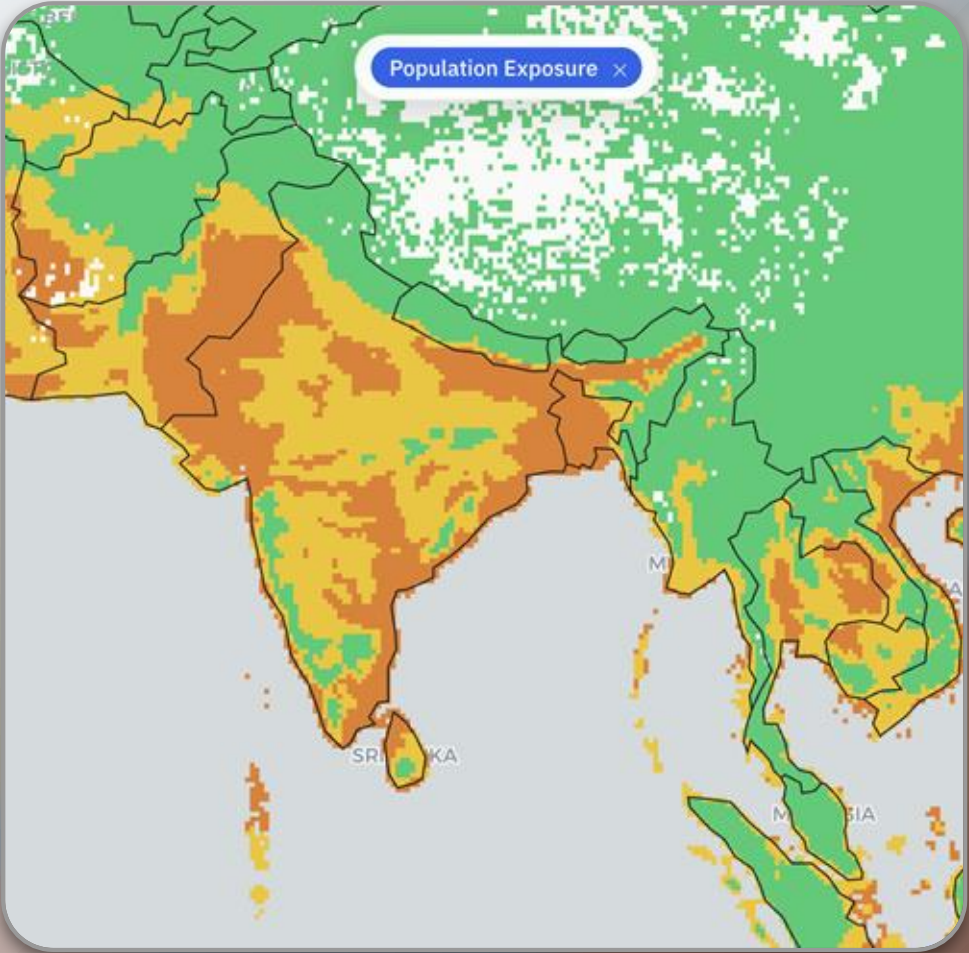
Gridded Population exposure calculates people under each heat category

Exposure by administrative level - Calculates exposure summed per administrative unit

Impact level for every administrative unit is calculated by overlaying exposure and vulnerability information (Bangladesh & Myanmar)

Data Sources

- Inform Subnational vulnerability Index
- WorldPop



Plans for Winter Season

Forecast Parameters

Wind Chill Temperature

Using T2m + 10 m wind

Excess Cold Factor

UTCI cold-stress bands

Fog and visibility

Climatological Analysis

Cold Spell Duration, Cold Days
 ≥ 3 days Tmin below 10th percentile

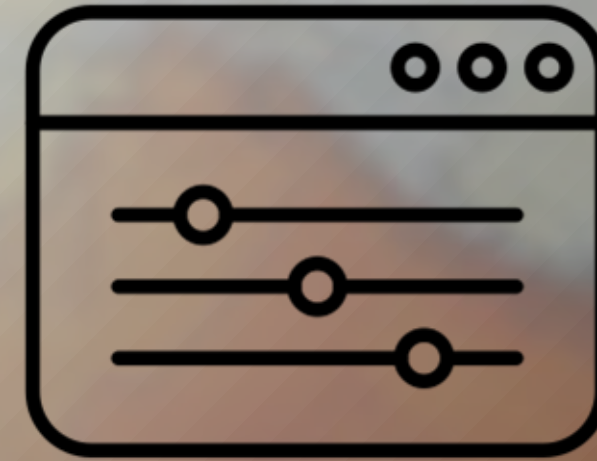
Tmin anomaly
against 1991-2020 baseline

Spell onset and persistence
duration tracking across the region

Future Development



- Gridwise impact estimation
- Heatwave days and heatwave spell identification from forecast



- An explainable ai assistant(bot) to assist in understanding of heat and cold related stress forecast



THANK YOU

FOR YOUR ATTENTION