



No. F.2 (E)/2024-NDMA (MW/Weather Advisory)  
**Government of Pakistan**  
**Prime Minister's Office**  
**National Disaster Management Authority (HQ)**  
Main Murree Road Near ITP Office, Islamabad

**MOST IMMEDIATE/ BY FAX**



Dated: 1 January 2024

Subject: **Pakistan Weather Anomalies Outlook - 1 January 2024**

Enclosed are current critical impacting weather and environment hazards including:-

- a. General Outlook. - **Annex A**
- b. Carbon Monoxide Concentration - Pakistan being the worst globally. - **Annex B**
- c. Nitrogen Dioxide Saturation - Northern Pakistan zones. - **Annex C**
- d. Sulfur Dioxide Saturation - Central & Southern zones. - **Annex D**

2. Ongoing monitoring and enforcement of laid guidance and climate safety protocols be implemented at hyped frequency, by all responsive stakeholders and offices, please.

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Chief Secretary, Government of Balochistan, Quetta  
Chief Secretary, Government of Sindh, Karachi  
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Headquarters, Pakistan Coast Guards (PCG), Karachi  
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Director General, PDMA Khyber Pakhtunkhwa, Peshawar  
Director General, PDMA Balochistan, Quetta  
Director General, PDMA Sindh, Karachi  
Director General, GBDMA, Gilgit  
Director General, SDMA, Muzaffarabad  
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**Pakistan Meteorological Department**  
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Date: 28<sup>th</sup> December 2023

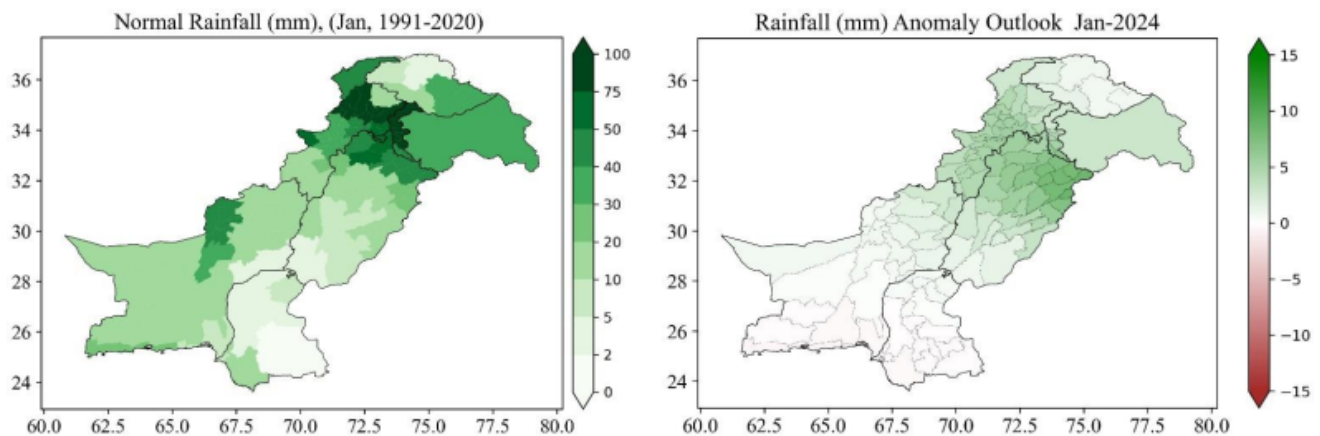
## Outlook for January 2024

### 1. Synoptic Situation:

Considering the positive phase of the El Niño Southern Oscillation (ENSO), which is expected to persist, while the Indian Ocean Dipole (IOD) is anticipated to transition to a neutral state in January 2024, the climatic outlook for Pakistan in the forecast month is as follows:

### 2. Monthly Rainfall Outlook:

Overall a tendency for nearly **normal\*** rainfall is expected in most parts of the country during January 2024.

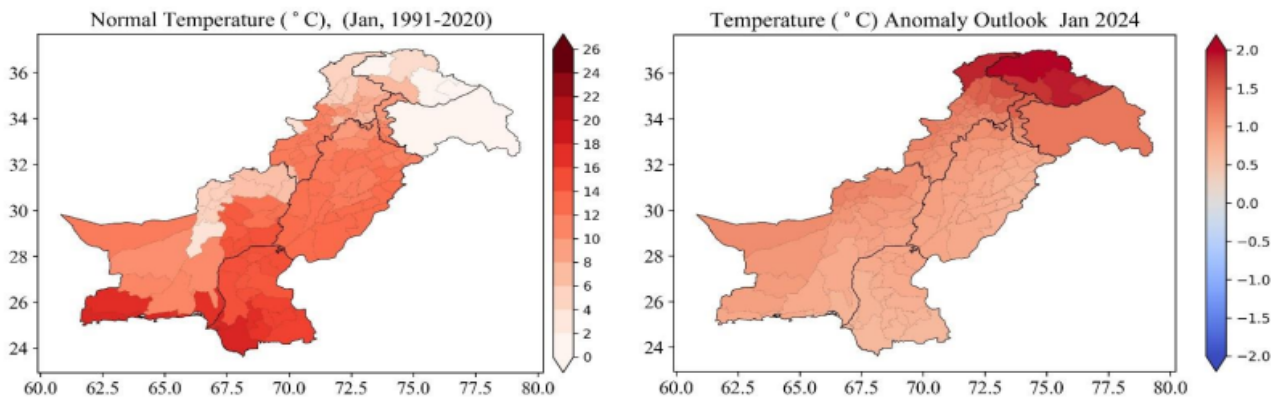


**Figure 1** Normal (1991-2020) rainfall and monthly anomaly outlook for January 2024

### 3. Monthly Temperature Outlook:

Mean temperatures are expected to remain **above normal\*** nationwide, with maximum departure over Gilgit Baltistan, northern Khyber Pakhtunkhwa and adjoining areas of Kashmir.

\*Normal = 30-years (period) average climatology



**Figure 2:** Normal (1991-2020) temperature and monthly anomaly outlook for January 2024

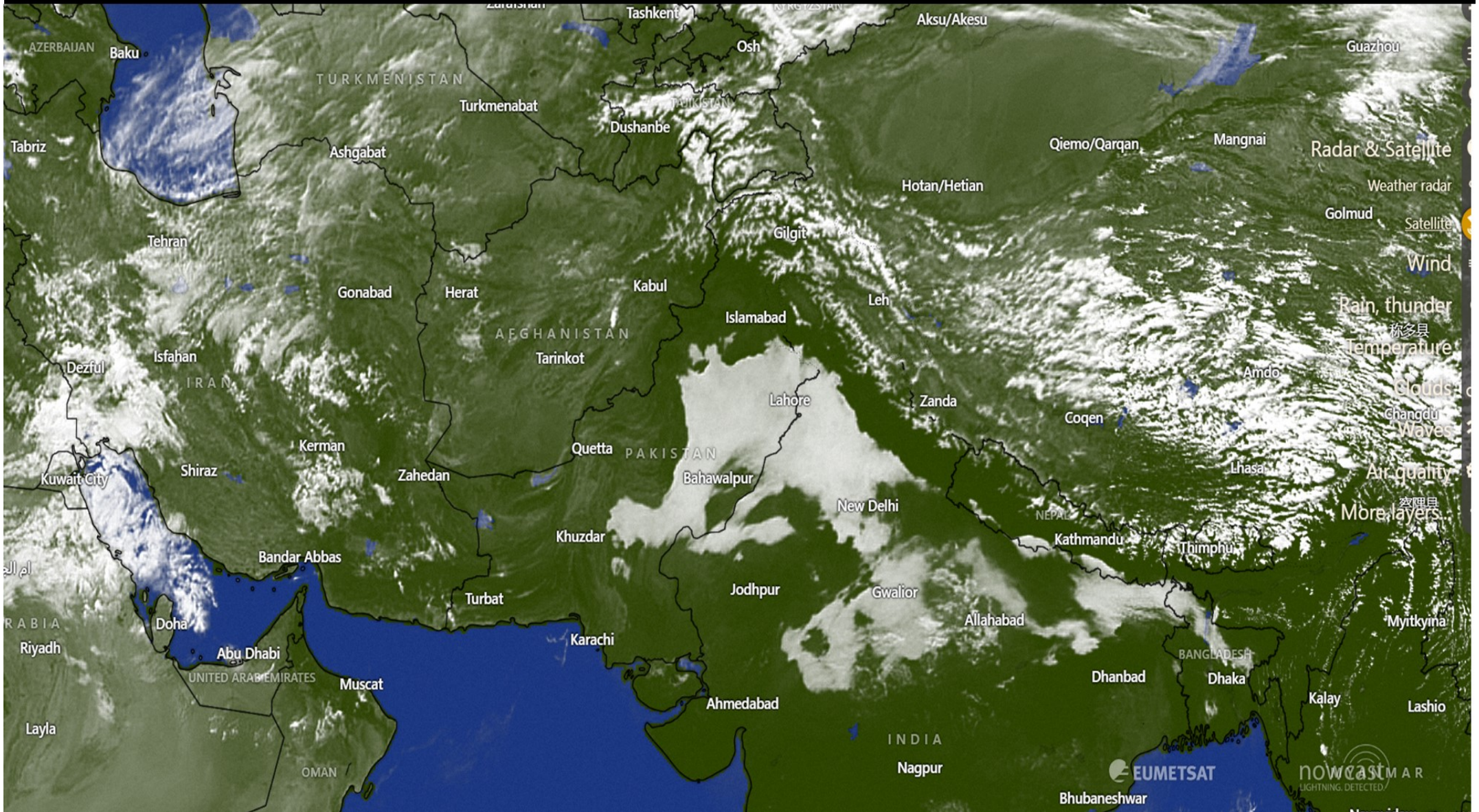
#### 4. Impacts:

- Mainly dry conditions are expected over the country for the forecasted month.
- Warmer daytime temperatures and colder nighttime temperature are expected in Upper Khyber Pakhtunkhwa, Gilgit-Baltistan, adjoining areas of Kashmir and Potohar region.
- Thick Fog is likely to persist in the plains of Punjab and Upper Sindh during the month of January 2024.
- A moderate amount of water would be available for standing crops and vegetables having positive impact on Rabi crops.
- Farmers in Barani areas may plan scheduled watering.
- Seasonal illnesses may prevail due to dry spell.

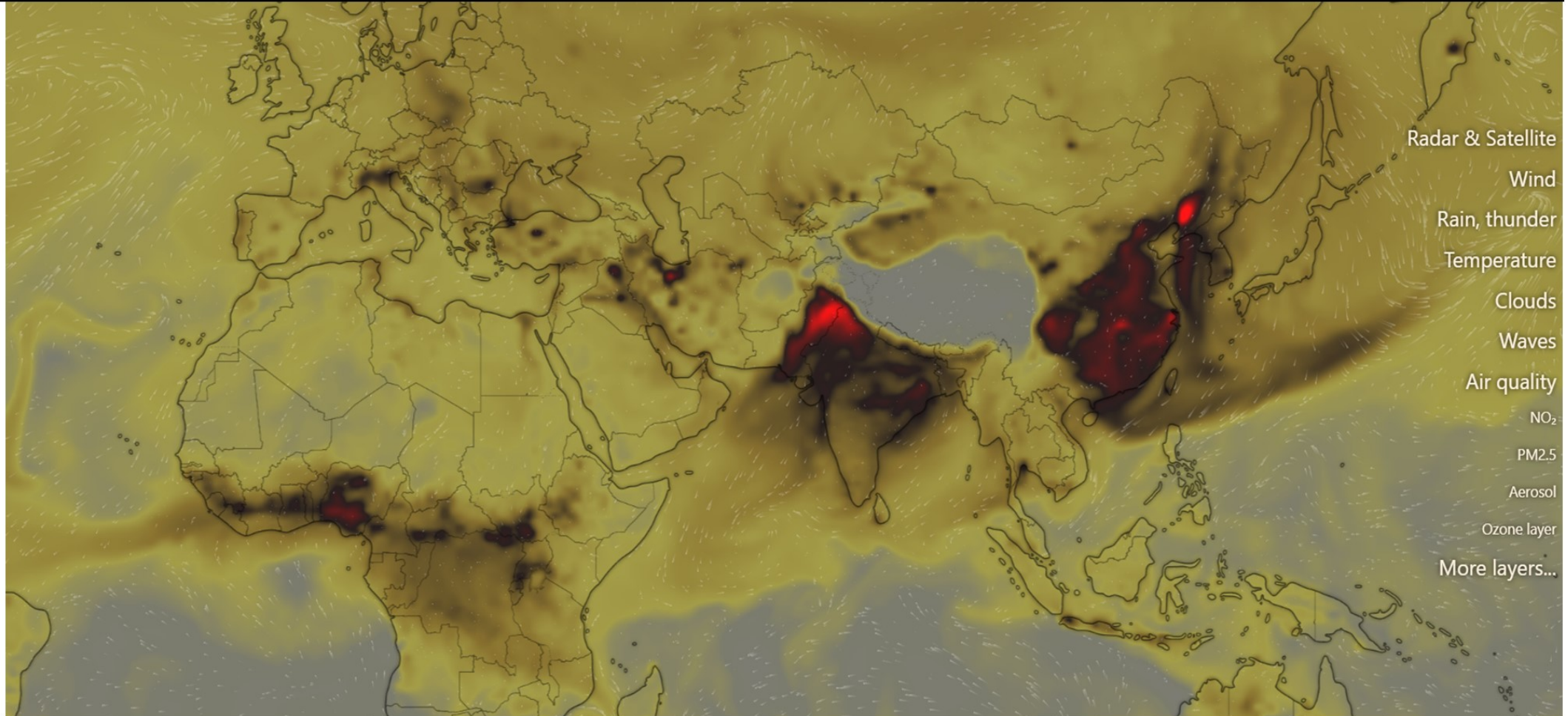
**Note:** Considering the dynamic nature of the climate system the outlook is updated monthly during the last week of each month.

\*Normal = 30-years (period) average climatology

# State of Pakistan's Current Weather - 1 Jan 2024

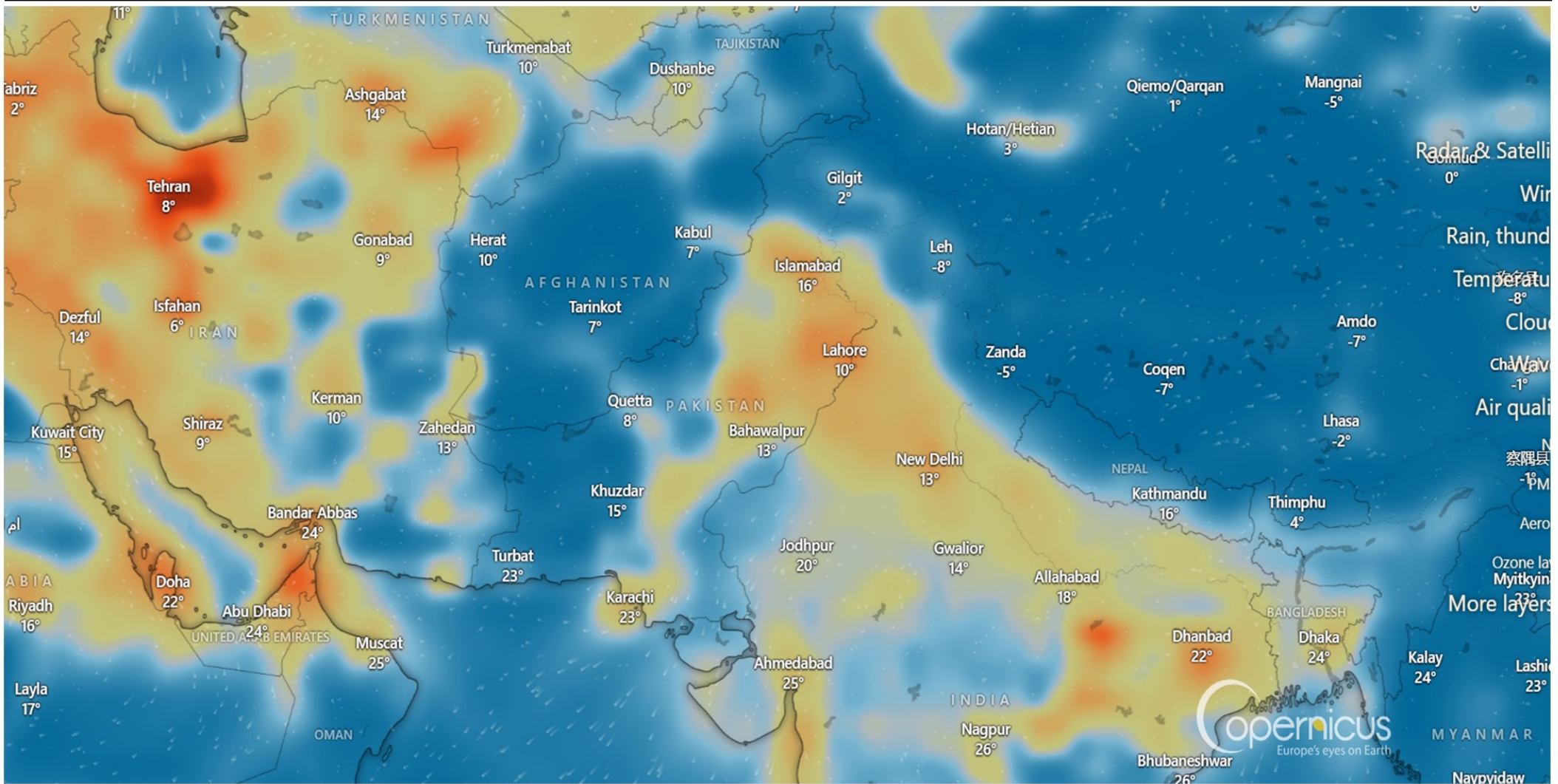


State of Pakistan's **Carbon Monoxide (CO)** Saturation - 1 Jan 2024



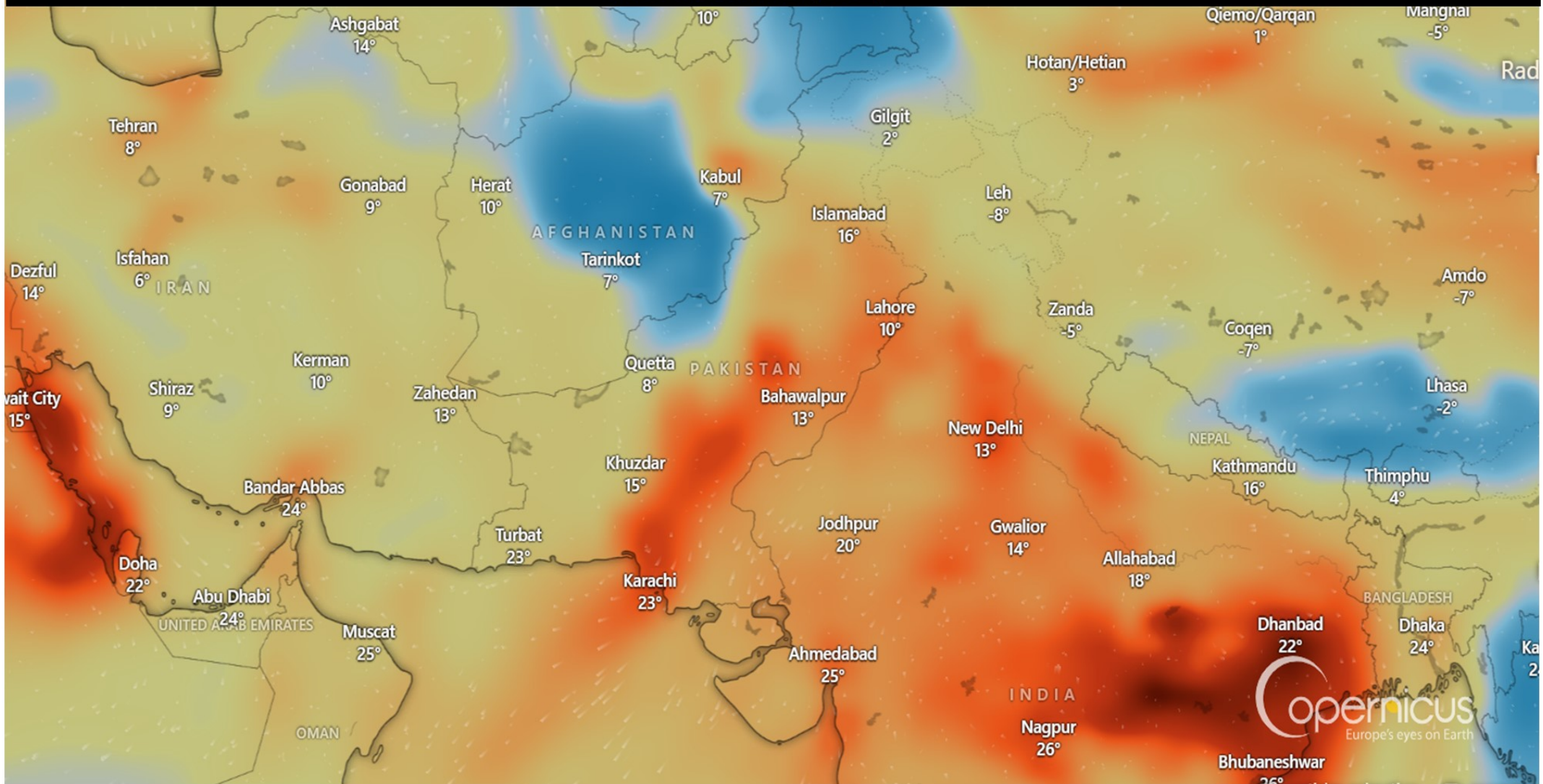
**Air pollution in Lahore is caused by a combination of vehicle and industrial emissions, smoke from brick kilns, the burning of crop residue and general waste, and dust from construction sites. Other factors of air pollution include large scale losses of trees to build new roads and buildings.**

### State of Pakistan's Nitrogen Dioxide (NO2) Saturation - 1 Jan 2024



NO2 forms when fossil fuels such as coal, oil, methane gas (natural gas) or diesel are burned at high temperatures

### State of Pakistan's Sulfur Dioxide (SO<sub>2</sub>) Saturation - 1 Jan 2024



SO<sub>2</sub> forms when sulfur-containing fuel such as coal, petroleum oil, or diesel is burned