



**CLIMATE RESEARCH & SERVICES, PUNE**  
**India Meteorological Department**  
**Ministry of Earth Sciences**  
**Government of India**

**Date: 28<sup>th</sup> April, 2023**

**Subject: Release of state-wise annual climate statement**

The Office of the Climate Research and Services (CRS), India Meteorological Department (IMD) Pune has brought out the "State-wise annual climate statement for the year 2022" in line with the annual climate statement prepared for the country. This work is output of the collaboration between IMD and state governments. The statement of climate is attempting to capture the regional climate variability of the state especially with reference to weather parameters like; temperature and rainfall which has huge impact on various sectors like agriculture, health, power, water Management and many other critical domains. This statement on climate of 2022 also includes the inputs like loss and damage data due to severe weather and other weather-related factors which are received from the respective state governments. This yearly update with climatological perspectives, will create more awareness among all the stakeholders in the state. In addition to extreme weather event data is very important to disaster management for future course of planning. The annual statements for all the states are available in the following link.

[https://www.imdpune.gov.in/Reports/Statewise%20annual%20climate/statewise\\_annual\\_climate.html](https://www.imdpune.gov.in/Reports/Statewise%20annual%20climate/statewise_annual_climate.html)

**Highlights of State-wise annual climate statement for the year 2022**

- The Warmest annual mean temperature in terms of anomaly with respect to long term mean was observed over Uttarakhand (1.17<sup>0</sup>C), followed by Himachal Pradesh (1.16<sup>0</sup> C) and Punjab (1.05<sup>0</sup> C) while the lowest annual mean temperature anomaly was

observed over Telangana ( $-0.11^{\circ}\text{C}$ ) followed by Andhra Pradesh ( $-0.03^{\circ}\text{C}$ ) and Karnataka ( $-0.01^{\circ}\text{C}$ ).

- In terms of long-term trend for the period 1901-2022, most of the states showed significant increasing temperature trend. Himachal Pradesh showed highest increase in mean temperature trend with values  $1.5^{\circ}\text{C} / 100$  years followed by Goa  $1.44^{\circ}\text{C} / 100$  years and Kerala  $1.05^{\circ}\text{C} / 100$  years. Bihar showed lowest increasing trend of  $0.02^{\circ}\text{C} / 100$  years, followed by Haryana  $0.06^{\circ}\text{C} / 100$  years and Uttar Pradesh  $0.13^{\circ}\text{C} / 100$  years.
- The highest annual rainfall anomaly was observed for the year 2022 was over Karnataka state (138% of Long Period Average (LPA)) followed by Rajasthan (136% of LPA) and Telangana (135% of LPA). The highest rainfall deficiency was observed over Mizoram (74% of LPA) followed by Manipur (75% of LPA) and Bihar (77% of LPA).
- In terms of long-term time series, Goa showed the highest increasing trend of annual rainfall ( $21.0\text{ mm} / 100$  years). followed by Gujarat ( $15.1\text{mm} / 100$  years) and Tripura ( $10.3\text{ mm} / 100$  years). At the same period, the highest decreasing trend was seen over Arunachal Pradesh ( $83\text{ mm} / 100$  years), Nagaland ( $62\text{ mm} / 100$  years) and Manipur ( $22\text{ mm} / 100$  years).
- There was about 2770 loss of human lives was reported for the country as a whole due to various extreme weather events. Of these, about 1580 deaths were reported due to lightning and thunderstorms, about 1050 deaths due to flood and heavy rains and remaining deaths were due to other events like heatwave, hailstorm, dust storm and Gale.
- The most affected states in terms of loss of human lives were Uttar Pradesh (589 casualties), Bihar (about 418 casualties), Assam (258 casualties), Maharashtra (240 casualties) and Odisha (194 casualties), The least affected states were Tripura, Goa, Punjab, Nagaland and Sikkim.