



**Government of India
Earth System Science Organization
Ministry of Earth Sciences
India Meteorological Department**

Press: Dated: 6 Jan, 2022

**Subject: Current Weather Status and Extended range Forecast for next two weeks
(6-19 Jan 2022)**

1. Salient Features for week ending on 5 2021

- **Movement of an active Western Disturbance (WD) across north India has caused wet spell over many parts of northwest India during 4-6 Jan 2022.**
- Chennai and Suburban Districts of north coastal Tamil Nadu has experienced heavy to very heavy with isolated extremely heavy rains during afternoon and evening of 30 Dec, 2021 mainly during 1600 hrs till 2330 hours IST. Strong northeasterly winds convergence over north Tamil Nadu coast in the lower levels and influence of upper level divergence from high amplitude trough in mid and upper tropospheric westerly from remnant of last week's WD, were the reason.
- **Fog: Dense to very dense fog:** Dense to very dense fog in isolated pockets over east Uttar Pradesh during 30 Dec -5 Jan, Madhya Pradesh 30 Dec-3 Jan and 5 Jan, Bihar during 4 to 6 Jan and over Sub-Himalayan West Bengal & Sikkim 5 and 6 Jan; over Odisha 2 Jan, over Punjab, Haryana on 1 Jan and Dense Fog over Gangetic West Bengal and Odisha on 5 and 6 Jan
- **Temperature Scenario:**
 - **Cold Day**
 - ◆ **Cold day to Severe Cold day conditions at isolated places** had occurred over Punjab and Himachal Pradesh on one day each during the week.
 - ◆ **Cold day conditions at a few places with severe cold day conditions isolated places** had occurred over East and West Madhya Pradesh on one day each during the week.
 - ◆ **Cold day conditions at isolated places** had occurred over Chhattisgarh on one day during the week.

- **Cold Wave:**

- ◆ **Cold wave to severe cold wave conditions at a few places** had occurred over Punjab on two days during the week.

- ◆ **Cold wave to severe cold wave conditions at isolated places** had occurred over Haryana, Chandigarh & Delhi on three days; over East Rajasthan on two days; over Punjab on one day during the week.

- ◆ **Cold wave conditions at isolated places** had occurred over West Rajasthan on three days; over Himachal Pradesh on two days; over East Rajasthan, East & West Uttar Pradesh, East & West Madhya Pradesh, Jammu Kashmir & Ladakh and Haryana, Chandigarh & Delhi on one day each during the week.

- ◆ The lowest minimum temperature of **1.6°C** had been recorded at **Hissar (Haryana)** on **2nd January 2022** over the plains of the country during the week.

➤ **Weekly overall Rainfall distribution during the current week of 30 Dec 2021 to 5 Jan 2022 and Post-monsoon Rainfall Scenario (01 Oct to 31 Dec, 2021):** During the week ending on 5 Jan 2022, for the country as a whole, the weekly cumulative All India Rainfall departure from its long period average (LPA) during the week was **+83%** with weekly cumulative over south Peninsular India reported above normal of **+278%**, while all India cumulative rainfall during this year’s post-monsoon season till 31 Dec, 2021 is above LPA by **+44%** and over south Peninsular India, it is above LPA by **+60%**. Details of the rainfall distribution over the four broad geographical regions of India are given in **Table 1** and Meteorological sub-division-wise rainfall both for week and season are given in Annex I and II respectively.

Table 1: Rainfall status (Week and season)

| Region | WEEK | | | SEASON | | |
|-------------------------|--------------------------|--------|-------|--------------------------|--------|-------|
| | 30.12.2021 TO 05.01.2022 | | | 01.10.2021 TO 31.12.2021 | | |
| | Actual | Normal | % Dep | Actual | Normal | % Dep |
| EAST & NORTH-EAST INDIA | 3.4 | 2.3 | +47 | 186.3 | 166.7 | +12 |
| NORTH-WEST INDIA | 6.3 | 5.3 | +19 | 80.5 | 55.9 | +44 |
| CENTRAL INDIA | 3.1 | 1.1 | +184 | 106.4 | 76.0 | +40 |

| | | | | | | |
|---------------------------|------------|------------|-------------|--------------|--------------|------------|
| SOUTH PENINSULA | 9.1 | 2.4 | +278 | 444.6 | 277.1 | +60 |
| country as a whole | 5.3 | 2.9 | +83 | 177.7 | 123.8 | +44 |

2. Large scale features

- Currently La Niña conditions are prevailing over the Equatorial Pacific Ocean and neutral Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The latest global model forecasts indicate that the La Niña conditions are likely to prevail until March 2022 and neutral IOD conditions are likely to continue during the upcoming seasons.
- The Madden Julian Oscillation (MJO) index currently lies in Phase 7 (West Pacific) with amplitude more than 1. It is likely to continue in same phase during next 2 weeks.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (06 to 12 January, 2022) and Week 2 (13 to 19 January, 2022)

Rainfall for week 1 (06 to 12 January, 2022):

- A Western Disturbance lies as a cyclonic circulation over western parts of Afghanistan & neighbourhood at lower tropospheric levels with a trough aloft in middle & upper tropospheric levels along Long. 56°E to the north of Lat. 24°N. Under its influence, an induced cyclonic circulation is very likely to form over southwest Rajasthan & neighbourhood on 07th January, 2022.
- This Western Disturbance is likely to move eastwards, deepen further into the Arabian Sea and reach North Pakistan region during next 24 hours. It is likely to persist over North Pakistan region for subsequent 3-4 days.
- Another Western Disturbance seen as a cyclonic circulation over north Pakistan & adjoining Punjab and an induced cyclonic circulation lies over southeast Rajasthan & neighbourhood at lower tropospheric levels.
- Under the influence of above systems:

- ✓ Isolated to scattered light rainfall/snowfall very likely over Western Himalayan Region and light isolated to scattered rainfall over northwest India, Madhya Pradesh and Gujarat on today.
- ✓ It is very likely to increase from tomorrow, the 07 January, 2022 with fairly widespread to widespread light/moderate rainfall/snowfall over Western Himalayan Region till 09th and decrease significantly thereafter.
- ✓ **Isolated heavy rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 07th and isolated Heavy to Very Heavy falls on 08th. Isolated heavy rainfall/snowfall very likely over Himachal Pradesh on 08th & 09th and over Uttarakhand on 08th January.**
- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan, West Uttar Pradesh during 07th-09th and decrease significantly thereafter. **Isolated heavy rainfall very likely over Punjab on 07th & 08th and over Haryana, Chandigarh & Northwest Uttar Pradesh on 08th January.** Light to moderate rainfall likely over Delhi on 08th January.
- ✓ Light/moderate isolated to scattered rainfall/thundershower is also very likely over Bihar, Jharkhand, Chhattisgarh, Vidharbha, Odisha, West Bengal & Sikkim and northeastern states during 2nd half of the week.
- ✓ Isolated thunderstorms with lightning/Hail very likely over Uttarakhand, West Uttar Pradesh, Rajasthan, Punjab, Haryana, Chandigarh & Delhi during 07th–08th; over West Madhya Pradesh during 06th–08th and over East Madhya Pradesh, Vidarbha & Chhattisgarh during 08th–10th January.
 - Rainfall activity over Tamilnadu & adjoining Andhra Pradesh is likely to increase from 10th January with scattered rainfall/thundershower. **Isolated heavy rainfall likely over Tamilnadu on 10th January.**
 - Dry weather very likely over remaining parts of the country during most days of the week.

Rainfall for week 2 (13 to 19 January, 2022):

- **Light/moderate isolated to scattered rainfall/thundershower is likely over east & northeast India during 1st half of the week**

- **Under the influence of intense Western Disturbance during 2nd half of the week, Light/moderate fairly widespread to widespread rainfall/snowfall likely over Western Himalayan Region and Light/moderate isolated to scattered rainfall over plains of northwest & adjoining central India.**
- **Overall precipitation activity is likely to be normal to above normal over northwest, central, east & northeast India.**

Minimum Temperatures for week 1(06 to 12 January, 2022) and week 2(13 to 19 January, 2022)

Minimum Temperatures, cold wave and fog for Week 1(06 to 12 January, 2022):

- Minimum temperatures are above normal by 3-6°C over most parts of Northwest & central India and Gujarat and near normal over rest parts of North India. .
- No significant change in minimum temperatures very likely over most parts of Northwest India & Madhya Pradesh during next 3 days and fall by 3-5°C thereafter.
- No significant change in minimum temperatures very likely over Gujarat State during next 2 days and fall by 3-5°C thereafter.
- Gradual rise in minimum temperatures very likely by 2-4°C and no significant change over East India thereafter.
- **No Cold Wave Conditions likely over North India during 1st half of the week, however it is likely to occur in isolated pockets of northwest India during 2nd half of the week.**
- Dense Fog in isolated pockets in night/morning hours very likely over Bihar, West Bengal & Sikkim during next 2 days and over Odisha, Gangetic West Bengal, west Assam & Meghalaya, Manipur, Mizoram and Tripura during next 24 hours.
- **Dense Fog in isolated pockets in night/morning hours also likely over plains of northwest India during 2nd half of the week.**

Minimum Temperatures for week 2 (13 to 19 January, 2022):

- **Minimum temperatures likely to be near normal or slightly above normal over most parts northwest, central, east & northeast India and near normal or slightly below normal over north Peninsular India.**

○ **No significant cold wave is likely over any parts of the country.** (Refer Annex IV)

3. Cyclogenesis forecast for North Indian Ocean during next 2 weeks

Various broad scale features and model guidance indicate that no cyclogenesis is likely over the North Indian Ocean during the ensuing 2 weeks

Next weekly update will be issued on next Thursday i.e. 13 Jan 2022

Legends: Heavy Rain: 64.5 to 115.5 mm **Very Heavy Rain:** 115.6 to 204.4 mm, **Extremely Heavy Rain** > 204.4 mm

| SPATIAL DISTRIBUTION (% of Stations reporting) | | | |
|---|-------------------------------------|------------|-------------------------------|
| % Stations | Category | % Stations | Category |
| 76-100 | Widespread (WS/ Most Places) | 26-50 | Scattered (SCT/ A Few Places) |
| 51-75 | Fairly Widespred (FWS/ Many Places) | 1-25 | Isolated (ISOL) |

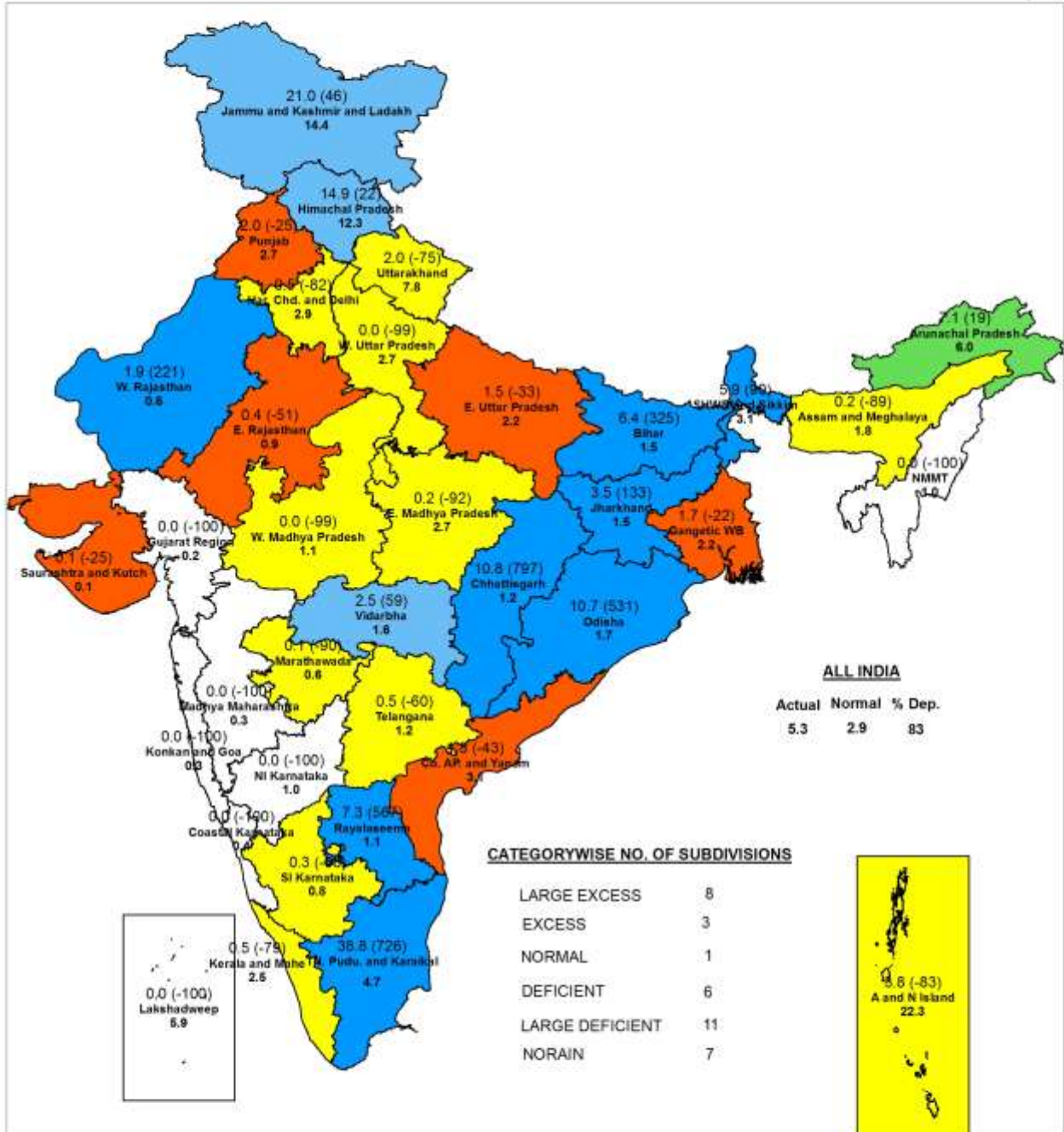
| Probabilistic Forecast | |
|-------------------------------|-------------------------------|
| Terms | Probability of Occurrence (%) |
| Unlikely | < 25 |
| Likely | 25 - 50 |
| Very Likely | 50 - 75 |
| Most Likely | > 75 |

Annex I



SUBDIVISION RAINFALL MAP

Week : 30-12-2021 To 05-01-2022

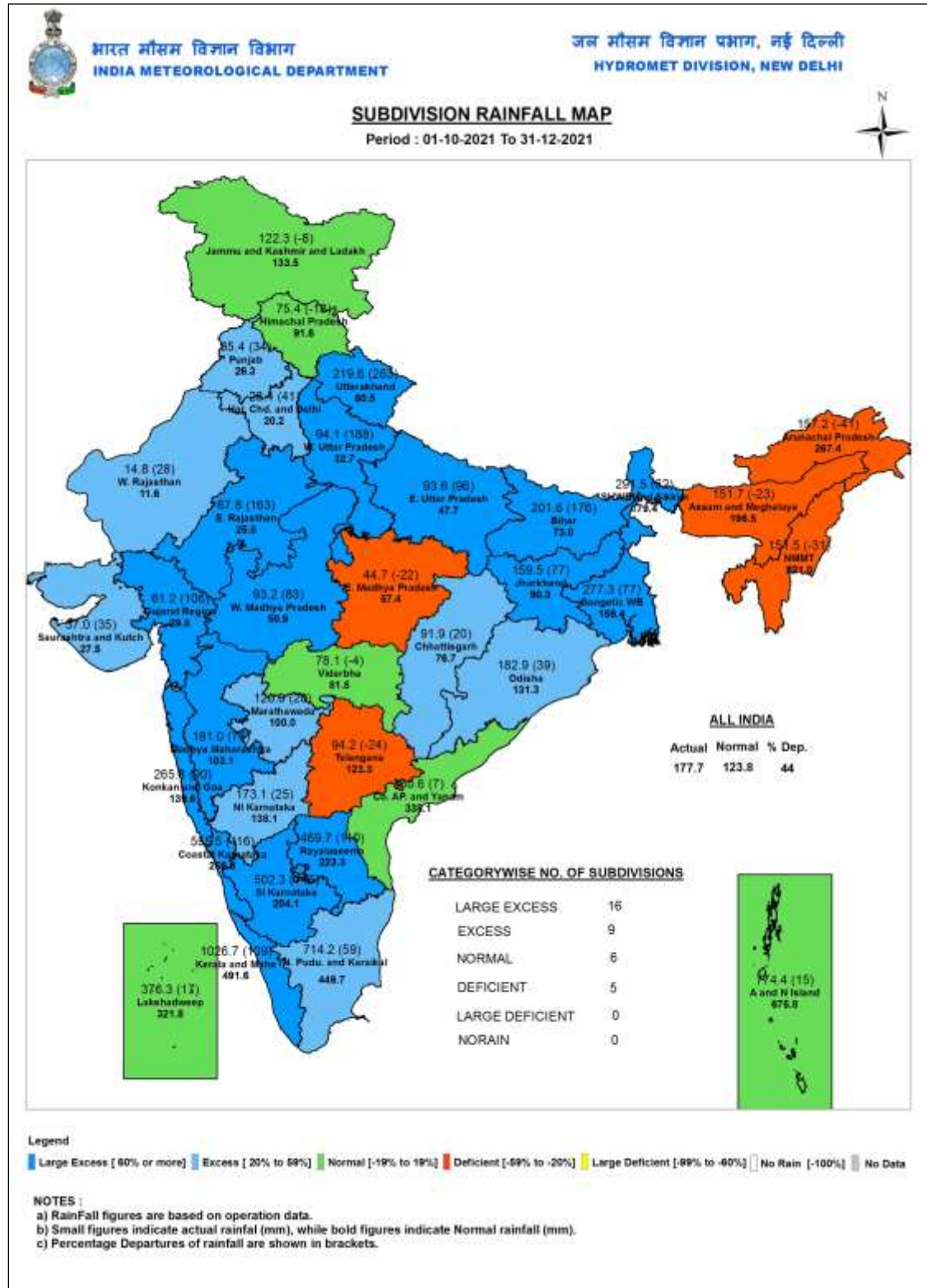


Legend

Large Excess [60% or more] Excess [20% to 59%] Normal [-19% to 19%] Deficient [-59% to -20%] Large Deficient [-89% to -60%] No Rain [-100%] No Data

NOTES :

- a) RainFall figures are based on operation data.
- b) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm).
- c) Percentage Departures of rainfall are shown in brackets.



NCMRWF CNCUM Extended Range Forecasts-20220106
Precipitation (mm/day)

