



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

Press Release: Dated: 29th Aug, 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (29th Aug-11th Sept, 2024)

1. Salient Observed Features for week ending 28th August, 2024

- Prolonged spell of heavy to very heavy rainfall reported in many places over Gujarat during most dates in the week. Extremely heavy rainfall spell was also observed with isolated Exceptionally heavy rainfall over many districts of Gujrat region and Saurashtra & Kutch during 24th to 28th August 2024. Exceptionally heavy rainfall observed over Saurashtra & Kutch on 28 Aug (Khambhalia 43cm, (dist Devbhoomi Dwarka), Jamnagar 38cm) (dist Jamnagar))
- Extrmely heavy rainfall over Tripura on 22nd August with exceptionally heavy rainfall on 22 Aug; Bagafa (dist South Tripura) 49cm.
- Monsoon was active to vigorous in most dates in western and central India during most dates in the week.
- Active monsoon conditions prevailed over East India during 1st half of the week.
- Weak monsoon conditions prevailed over south peninsular India on most days of the week.
- Main reasons are: 1) Movement of last week's low-pressure area from northern parts of West Bengal to Saurashtra & Kutch and adjoining north Gujarat region along the monsoon trough during the week, with its intensification into a depression on 25th Aug over northwest Madhya Pradesh and neighbourhood and then into a deep depression

over East Rajasthan on 26th Aug. It moved across north Jharkhand, north Madhya Pradesh and South Rajasthan during the period. Extremely heavy rainfall spell over Gujarat state during 2nd half of the week was mainly caused by its slow movement during 26th -28th August over east Rajasthan and Gujarat state, when it was remained as a deep depression.

2) The western end of monsoon trough remained south of its normal position and eastern end remained near its normal position through the week; 3) A low-pressure area over eastcentral Arabian sea off Karnataka-Goa coasts formed on 22nd August & moved northward off Goa-Maharashtra coasts on 23rd August. The offshore trough remained active over the west coast through the week;

- Extreme Heavy Rainfall over Chhattisgarh during 27th to 28th; East Rajasthan & Madhya Maharashtra on 26th August; Konkan & Goa on 24th August; West Madhya Pradesh on 25th August.

Analysis of weekly overall rainfall distribution during the week ending on 14th August and monsoon Season’s Rainfall Scenario (01st June - 28th Aug, 2024): The country as a whole, the weekly cumulative All India Rainfall (for 12th to 28th Aug 2024) in % departure from its long period average (LPA) is +44%. All India Seasonal cumulative rainfall % departure during this year’s monsoon Season’s Rainfall (01st June to 28th Aug 2024) is +7%. 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 Annexure I & II respectively.

Table 1: Rainfall status (Week and season)

Region	WEEK			SEASON		
	12.08.2024 TO 28.08.2024			01.06.2024 TO 28.08.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
East & northeast India	68.7	75.5	-9%	936.9	1057.4	-11%
Northwest India	48.0	39.7	+21%	480.5	472.0	+2%
Central India	129.5	59.6	+117%	902.2	771.5	+17%
South Peninsula	29.2	40.0	-27%	635.7	540.3	+18%
Country as a whole	75.0	52.1	+44%	725.7	679.5	+7%

2. Large scale features

- Currently, neutral El Nino-Southern Oscillation (ENSO) conditions are prevailing in the equatorial Pacific region. The latest forecasts from the Monsoon Mission Climate Forecasting System (MMCFS) and other climate models suggest that neutral ENSO conditions likely to continue until the end of the monsoon season.
- Presently, neutral Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. The climate models forecast indicates that these neutral IOD conditions are likely to continue until the end of the monsoon season.
- The Madden Julian Oscillation (MJO) index currently situating in phase 4 (Maritime continent). Most of the models suggest It is likely to propagate eastwards and is likely to enter into phase 5 during the first half of the week with an amplitude greater than 1. The ensemble members of GEFS indicate large spread and incoherency in their eastward propagation of MJO. Therefore, the MJO index is likely to enhance the convective activity over the Bay of Bengal (BoB) during the week 1. The MJO is likely to continue its support to convective activity over North and Central BoB during second week.

3. Forecast for next two week

Weather systems & associated Precipitation during Week 1 (29th August to 04th September, 2024) and Week 2 (05th to 11th September, 2024)

Weather systems & associated Precipitation during Week 1 (29th August to 04th September, 2024)

Weather Systems:

- ✓ The **deep depression** over Saurashtra & Kachchh moved slowly westwards with a speed of 3 kmph during past 6 hours and lay centered at 1130 hours IST of today, the 29th August, 2024 over the same region near latitude 23.7°N and longitude 69.3 °E, 70 km northwest of Bhuj (Gujarat), 60 km northeast of Naliya (Gujarat) and 250 km east-southeast of Karachi (Pakistan). It is likely to move west-southwestwards, emerge into northeast Arabian Sea off Kachchh and adjoining Saurashtra & Pakistan coasts and intensify into a Cyclonic Storm on 30th August. Thereafter, it would continue to move nearly west-southwestwards over northeast Arabian Sea away from Indian coast during subsequent 2 days.

- ✓ The **low pressure** area over central and adjoining north Bay of Bengal persists over the same region at 1130 hours IST of today, the 29th August, 2024. It is likely to move west-northwestwards and become more marked over westcentral and adjoining northwest Bay of Bengal by 30th August. Thereafter, while moving towards north Andhra Pradesh and adjoining south Odisha coasts, it is likely to intensify into a depression over westcentral and adjoining northwest Bay of Bengal during subsequent 2 days.
- ✓ The **Monsoon trough** at mean sea level lies to the south of its normal position.

Forecast & Warnings:

❖ Northwest India

- ✓ Scattered to Fairly widespread light/moderate rainfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Uttarakhand, East Rajasthan; isolated to scattered rainfall over Uttar Pradesh, Haryana-Chandigarh-Delhi, Punjab, West Rajasthan during the week.
- ✓ Isolated **very heavy rainfall** also very likely over East Rajasthan on 02nd September.
- ✓ Isolated **heavy rainfall** very likely over Punjab on 29th August; Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Haryana-Chandigarh-Delhi on 29th August & 02nd September; Uttarakhand during 29th August-02nd September; East Uttar Pradesh on 01st & 02nd September; West Uttar Pradesh on 02nd September; West Rajasthan on 02nd & 03rd September; East Rajasthan on 01st, 03rd & 04th September.

❖ West & Central India

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over West & Central India during the week.
- ✓ Isolated **extremely heavy rainfall also very likely** over Saurashtra & Kutch on 29th August.
- ✓ Isolated **very heavy rainfall** also very likely over Saurashtra & Kutch on 30th August; Chhattisgarh on 31st August; Vidarbha on 31st August & 01st September; Gujarat Region on

02nd & 03rd September; ghat areas of Madhya Maharashtra and Konkan & Goa during 02nd-04th September.

- ✓ Isolated **Heavy rainfall** very likely over Konkan & Goa during 29th August- 01st September; Chhattisgarh on 29th, 30th, August & 01st September; Vidarbha on 30th August & 02nd September; East Madhya Pradesh during 31st August-04th September; Madhya Maharashtra on 31st August & 01st September; Gujarat Region on 31st August, 01st & 04th September West Madhya Pradesh during 01st-04th September; Marathwada during 01st-03rd September; Saurashtra & Kutch on 02nd & 03rd September.

❖ **East & Northeast India:**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands, Odisha and Scattered to Fairly widespread light/moderate rainfall very likely over Arunachal Pradesh, West Bengal & Sikkim, Bihar and Jharkhand during the week.
- ✓ Isolated extremely heavy rainfall also very likely over Odisha on 30th August.
- ✓ Isolated very heavy rainfall also very likely over Odisha on 29th & 31st August.
- ✓ Isolated heavy rainfall very likely over Assam & Meghalaya on 29th August & during 01st-04th September; Nagaland, Manipur, Mizoram & Tripura during next 7 days; Arunachal Pradesh during 02nd-04th September; Andaman & Nicobar Islands on 29th & 30th August; Odisha on 01st September.

❖ **South Peninsular India:**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Coastal Karnataka, Coastal Andhra Pradesh & Yanam, Lakshadweep, Kerala & Mahe; Scattered to Fairly widespread light/moderate rainfall very likely Telangana and Interior Karnataka; isolated to scattered rainfall over Rayalaseema and Tamil Nadu, Puducherry & Karaikal during the week.
- ✓ Isolated extremely heavy rainfall also very likely over Coastal Karnataka on 30th August.
- ✓ Isolated very heavy rainfall also very likely over Kerala & Mahe and South Interior Karnataka on 29th & 30th August; Coastal Karnataka on 29th & 31st August; Coastal Andhra Pradesh & Yanam on 30th & 31st August; North Interior Karnataka on 31st August; Telangana during 30th August-01st September.

- ✓ Isolated heavy rainfall very likely over North Interior Karnataka on 29th, 30th August & 01st September; Coastal Andhra Pradesh & Yanam on 29th August & 01st September; Telangana on 29th August & 02nd September; Kerala & Mahe during 31st August-02nd September; South Interior Karnataka on 31st August & 01st September; Coastal Karnataka during 01st-04th September.
- ❖ Overall, rainfall is likely to be above normal over most parts of central & adjoining northwest India, east India during most days of the week; normal to above normal over some parts of south Peninsular India and below normal over remaining parts of south Peninsular India, Western Himalayan region and some parts of northeastern states during the week.

Rainfall for Week 2 (05th to 11th September, 2024)

- ❖ Moderate probability of formation of a low pressure area over north Bay of Bengal during the week.
- ❖ Monsoon trough is likely to be active and near or south its normal position during the week.
- ❖ Off-shore trough along the west coast is likely to prevail during most days of the week.
- ❖ Due to above meteorological features, fairly widespread to widespread rainfall with heavy to very heavy falls are likely over most parts of central India and adjoining areas of western and northwest India and north Peninsular India (specially over south Madhya Pradesh, south Rajasthan, Gujarat and ghats areas of Maharashtra), whereas isolated extremely heavy rainfall may also occur on some days over these area with isolated heavy to very heavy rainfall over remaining parts of coastal states (Coastal Karnataka, Konkan & Goa, ghat areas of Karnataka & Maharashtra and in some areas of Gujarat state), east & northeast India and remaining parts of south Peninsular India during most days of the week. Isolated heavy to very heavy also likely over Odisha, Chhattisgarh and north Madhya Pradesh during most days in the week.
- ❖ Overall, rainfall is likely to be above normal over most parts of central India, west coast of India, plains of north west India, and Uttarakhand; and normal to the rest of the India; except below normal over many parts of north East India, Sub-Himalayan West Bengal & Sikkim, southern parts of Peninsular India including interior Karnataka, and Rayalaseema.

Week 1 (29th - 04th Sept, 2024): Impact likely and suggested action due to likely heavy rainfall

Impact due to

- ❖ Isolated extremely heavy rainfall also very likely over Saurashtra & Kutch on 29th August and Odisha & Coastal Karnataka on 30th August.
- ❖ Very heavy rainfall at isolated over Odisha, Coastal Karnataka on 29th & 31st August; Kerala & Mahe and South Interior Karnataka on 29th & 30th August; Saurashtra & Kutch on 30th August; Chhattisgarh, North Interior Karnataka on 31st August; Vidarbha on 31st August & 01st September; Gujarat Region on 02nd & 03rd September; ghat areas of Madhya Maharashtra and Konkan & Goa during 02nd -04th September; Coastal Andhra Pradesh & Yanam on 30th & 31st August; Telangana during 30th August-01st September; East Rajasthan on 02nd September.
- ❖ Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Himachal Pradesh, Uttarakhand and Moderate flash flood risk very likely over few watersheds & neighbourhoods of Saurashtra & Kutch on 29th & 30th August.

Impact Expected

- ✓ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ✓ Occasional reduction in visibility due to heavy rainfall.
- ✓ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ✓ Minor damage to kutcha roads.
- ✓ Possibilities of damage to vulnerable structure.
- ✓ Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- ✓ Damage to horticulture and standing crops in some areas due to inundation.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

Action Suggested

- ✓ Check for traffic congestion on your route before leaving for your destination.

- ✓ Follow any traffic advisories that are issued in this regard.
- ✓ Avoid going to areas that face the water logging problems often.
- ✓ Avoid staying in vulnerable structure.

Agromet advisories for Heavy Rainfall likely over various parts of the country

- ✓ Drain out excess water from field crops and horticultural crops in Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Uttarakhand, East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Gujrat region, Odisha, Jharkhand, Bihar, Coastal Andhra Pradesh and Telangana.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in West Bengal, Coastal and North Interior Karnataka, Konkan & Goa, Madhya Maharashtra, Saurashtra & Kutch.
- ✓ Postpone sowing of black gram and green gram in Assam.
- ✓ Due to continuous heavy rain transplanted rice and vegetables are submerged in low lying areas, recovery of young rice seedlings is unlikely, farmers are advised to collect short duration rice varieties after cessation of rain otherwise can wait a bit and prepare in advance for winter vegetables in Tripura.
- ✓ Drain out excess water from kharif rice, groundnut, sesame, soyabean, ginger, turmeric and vegetables to prevent the water logging in Mizoram.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables

Week 2 (5th -11th Sept 2024): Impact likely and suggested action due to likely heavy rainfall

Impact due to

- ❖ Heavy to very heavy falls are likely over most parts of northwest & central India and north Peninsular India (specially over Gujarat and Ghats areas of Maharashtra, where isolated extremely heavy rainfall may also occur on some days) with isolated heavy falls over remaining parts of coastal states (Kerala, Coastal Karnataka, Konkan & Goa, Ghat areas of Karnataka & Maharashtra

and Gujarat), east & northeast India and rest parts of south Peninsular India during most days of the week.

Impact Expected

- ✓ **Moderate flash flood risk** likely over some of these areas
- ✓ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ✓ Occasional reduction in visibility due to heavy rainfall.
- ✓ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ✓ Minor damage to kutcha roads.
- ✓ Possibilities of damage to vulnerable structure.
- ✓ Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- ✓ Damage to horticulture and standing crops in some areas due to inundation.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

Action Suggested

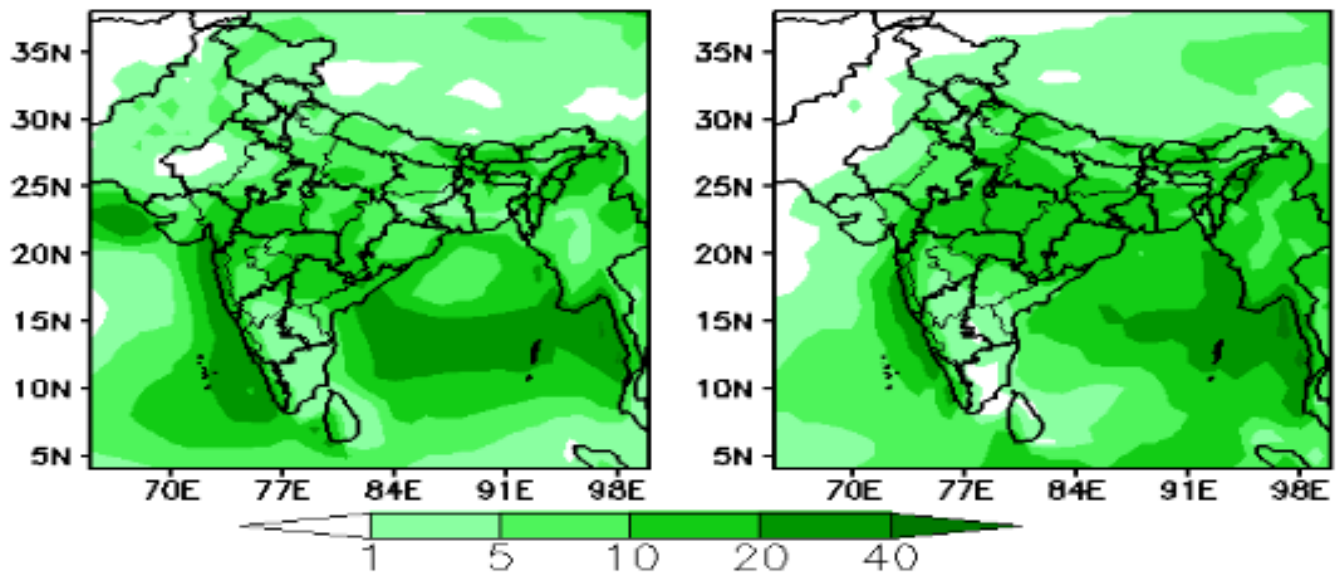
- ✓ Check for traffic congestion on your route before leaving for your destination.
- ✓ Follow any traffic advisories that are issued in this regard.
- ✓ Avoid going to areas that face the water logging problems often.
- ✓ Avoid staying in vulnerable structure.

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

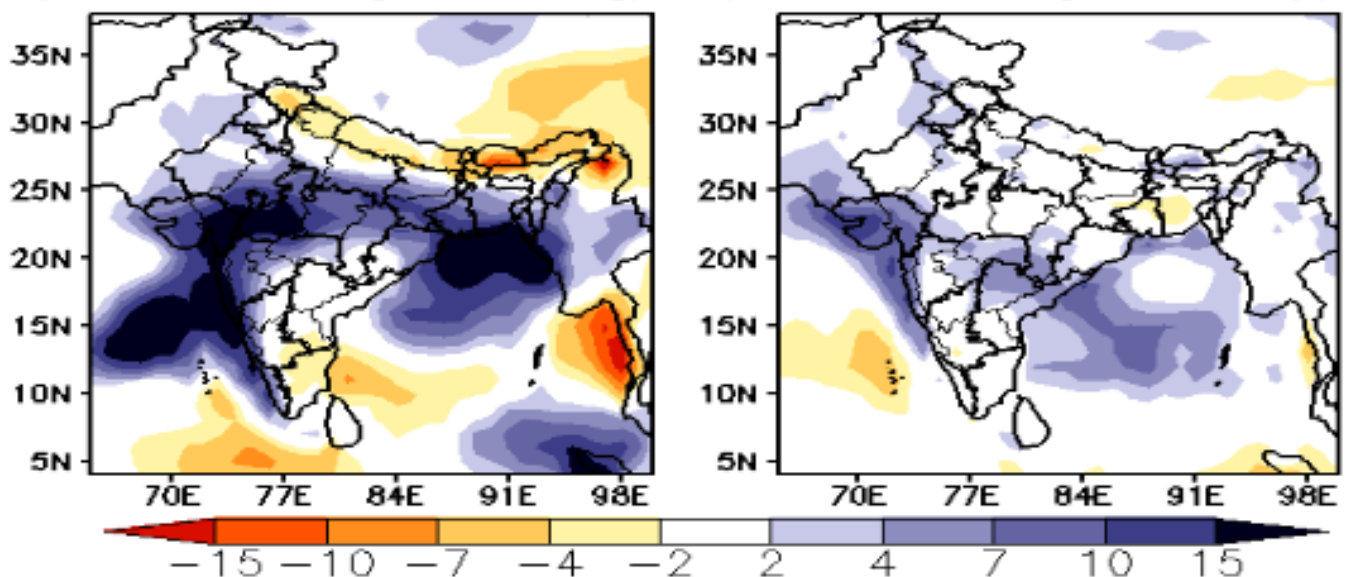




Forecast Rainfall (mm/day) (00Z=0530 hrs IST)
(Week1:00Z29Aug-00Z05Sep) (Week2:00Z05Sep-00Z12Sep)



Forecast Rainfall Anomaly (mm/day) (00Z=0530 hrs IST)
(Week1:00Z22Aug-00Z29Aug) (Week2:00Z29Aug-00Z05Sep)



Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies(lower panesl) from IMD MME