



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release

Date: 30th September, 2021

Time of Issue: 1330 hrs IST

Subject: (i) Withdrawal of southwest monsoon from some parts of northwest India from around 06th October 2021.

ii) Intense spell of rainfall over Bihar till 02nd October and over Jharkhand and Gangetic West Bengal today, the 30th September and decrease thereafter.

iii) Increase in rainfall activity over south Peninsular India from 01st October.

Rainfall Amount recorded (from 0830 hours IST of yesterday to 0830 hours IST of today) (7 cm or more): Given at annexure.

Withdrawal of southwest monsoon 2021:

- With westward movement of the Depression over northeast Arabian Sea, away from Indian Coast, Numerical Weather Prediction models consensus indicate, establishment of westerly & northwesterly winds at lower & middle tropospheric levels over northwest India and development of lower level anti-cyclonic circulation over the region from 5th Oct 2021. Under its influence, drastic reduction in moisture and absence of rainfall over extreme northwestern parts of India is very likely. **Thus conditions are very likely to be favourable for commencement of withdrawal of southwest monsoon from some parts of northwest India from around 6th October 2021.**

Meteorological features:

- The **Depression** over northeast Arabian Sea & adjoining Kutch moved nearly westwards with a speed about 28 kmph during past 03 hours and lay centered at 0830 hours IST of today, the 30th September 2021, over northeast Arabian Sea off Gujarat coast, near Lat. 22.7° N and Long. 68.6° E, about 60 km west-northwest of Devbhoomi Dwarka (Gujarat), 280 km east-southeast of Karachi (Pakistan) and 860 km east-southeast of Chabahar Port (Iran). It is very likely to move west-northwestwards and intensify into **Deep Depression** over northeast Arabian Sea off north Gujarat coast during next 12 hours. Then it is very likely to move further west-northwestwards and intensify into a **Cyclonic Storm** during the subsequent 24 hours. Thereafter, it is likely to continue to move west-northwestwards close to Pakistan- Makran coasts, moving away from the Indian coast.
- The **Well Marked Low Pressure Area** now lies over north Jharkhand & adjoining Bihar and the associated cyclonic circulation extends upto 7.6 km above mean sea level. The system & its remnant is very likely to move over Bihar & adjoining Sub-Himalayan West Bengal Sikkim during next 3-4 days.

- A trough in easterly runs from Southeast Bay of Bengal to south Andhra Pradesh coast at lower tropospheric levels and likely to persist during next 2-3 days.

Under the influence of the above systems:

- ✓ **Under the influence of depression over northeast Arabian Sea off Gujarat coast, heavy to very heavy rainfall** very likely at isolated places over Saurashtra & Kutch on today, the 30th September, 2021 and significant reduction thereafter.
- ✓ **Under the influence of Well Marked Low Pressure Area** over north Jharkhand & adjoining Bihar and its remnant, Fairly widespread to widespread rainfall with isolated heavy falls is very likely over Bihar and Sub-Himalayan West Bengal & Sikkim till 03rd Oct; **very Heavy rainfall** also likely over Gangetic West Bengal on 30th Sept.; over Bihar on 02nd Oct.; Sub-Himalayan West Bengal & Sikkim on 02nd & 03rd Oct; **extremely heavy falls (> 20 cm)** very likely at isolated places over Jharkhand on 30th Sep; over Bihar on 30th Sept. & 01st Oct.
- ✓ Due to easterly trough rainfall activity is very likely to increase over south Peninsular India from 01st October with fairly widespread to widespread rainfall with **heavy falls** over Tamilnadu, Kerala, Coastal & South Interior Karnataka during 01st-04th October. **Isolated very heavy falls** also likely over Tamilnadu during 02nd-04th October.

❖ **Fishermen Warning:**

Fishermen are advised not to venture into north & adjoining central Arabian Sea and along & off Gujarat & north Maharashtra coasts from 30th September till 2nd October 2021.

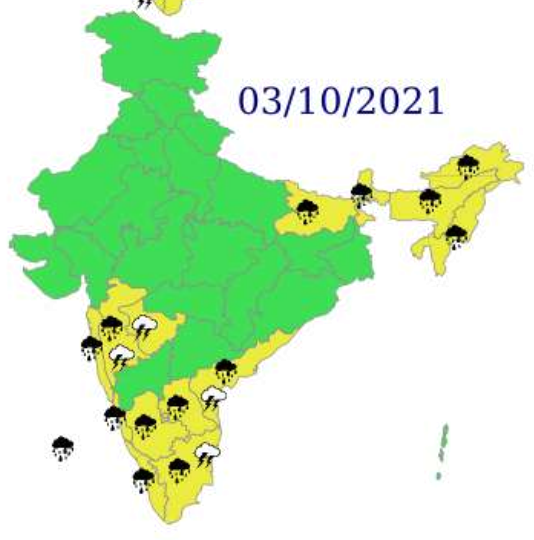
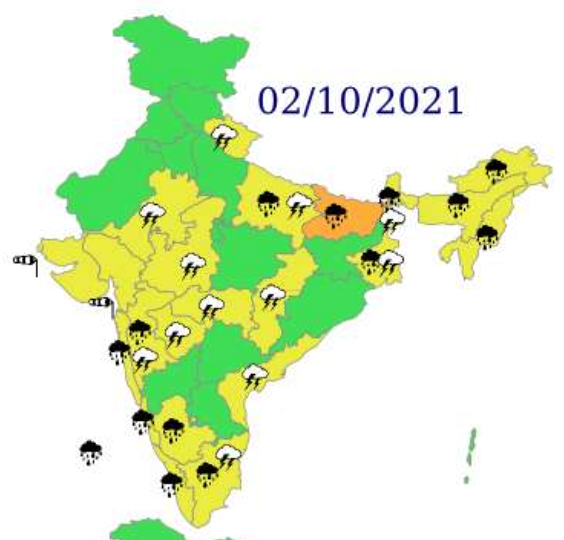
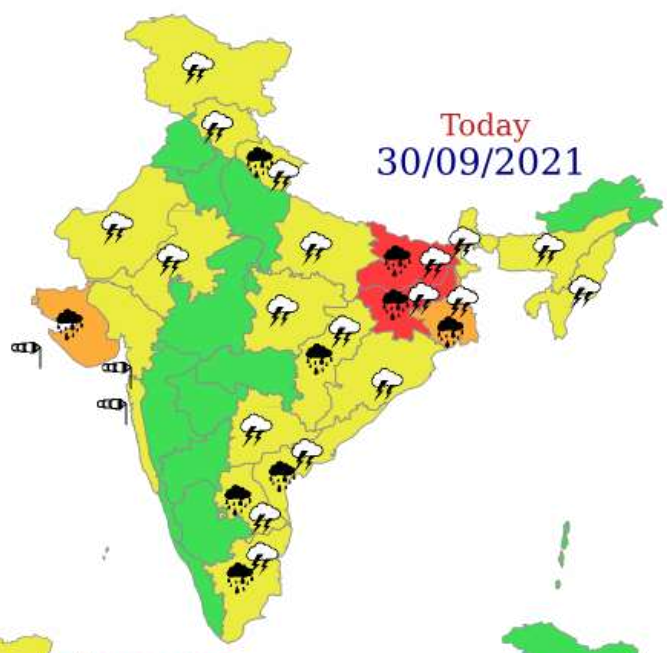
❖ **Wind Warning, Sea Conditions:**

For details of Wind Warning, Sea Conditions refer

https://rsmcnewdelhi.imd.gov.in/uploads/archive/1/1_aa5909_2.%20National_Bulletin_2021_0930_0300UTC.pdf

For detailed forecast and warning refer:

https://mausam.imd.gov.in/imd_latest/contents/all_india_forcast_bulletin.php



EXPECTED IMPACT & ACTION SUGGESTED due to Extremely/Very Heavy Rainfall over Bihar during 30th September-02nd October; Jharkhand, Gangetic West Bengal and Saurashtra & Kutch on 30th September, 2021

A. Impact Expected

- Localized Flooding of roads, inundation and 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 Mudslides
- 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)

B. 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.

Region wise classification of meteorological Sub-Divisions:

- 1) **Northwest India:** Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad; Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
- 2) **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- 3) **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- 4) **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 5) **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
- 6) **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

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 Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)



WARNING
WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

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



24-hour accumulated rainfall (7 cm or more) realised over the country:

Gangetic West Bengal: Luchipur-41; Asansol-40; Bankura-35; Durgapur, Kharidwar-22 each; Tusuma-19; Purulia-18; Simulia, Kansabati-14; Rajnagar, Hetampur, Burnpur, Panagarh-8

Jharkhand: Dhanbad-31; Bokaro-29; Deoghar-28; Jamtara-24; Giridih-15; Dumka-9; Koderma-8; Hazaribagh-7

Saurashtra & Kutch: Junagarh-28; Devbhoomi Dwarka, Amreli-14; Bhaunagar, Jamnagar-12; Veraval, Keshod, Somnath-11; Porbandar-10; Kutch-8; Okha, Rajkot-7 each

Odisha: Mayurbhanj-10; Jagatsinghpur, Puri-8; Chhattisgarh: Kondagaon-7

Gujarat region: Bharuch-10; Anand-7

Tripura: Agartala-7

Rayalaseema: Cuddapah-10

Tamilnadu: Thanjavur-9; Pudukkotai-8.