

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 22 September 2018

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Depression over southwest Madhya Pradesh & neighbourhood moved slightly north northwestwards during past three hours and lay centred at 0830 hrs IST of today, the 22nd September, 2018 over southwest Madhya Pradesh & neighborhood near latitude 22.9°N and longitude 76.3°E about 60 km south southeast of Shajapur (Madhya Pradesh). It is very likely to move north northwestwards initially and then recurved north northeastwards and weaken into a well mark low pressure area during next 24 hours.
- Subsequent to the weakening, the system is very likely to reserve northwards and then northeastwards under the influence of an approaching westerly trough during 23rd 25th September. Probable interaction of these two systems is likely to cause widespread rainfall with heavy to very heavy and extremely heavy falls over Himachal Pradesh and Uttarakhand and fairly widespread to widespread rainfall with isolated heavy to very heavy falls over the plains of northwest India during 22nd 24th September. There is also a possibility of occurrence of thunderstorms with hailstorms over Western Himalayan region on 21st and 22nd September.
- Heavy to very heavy rain occurred at isolated places over Vidarbha and heavy rain at isolated places over West Madhya Pradesh, Gangetic West Bengal, Arunachal Pradesh and Telangana from 0830 hrs IST of yesterday to 0830 hrs IST of today.
- The images showing the latest satellite picture in figure. 1.

Main Weather Observations (IMD)

- Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Rain/thundershowers observed at most places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Madhya Pradesh, Chhattisgarh, West Bengal & Sikkim, Odisha, Telangana and Coastal Andhra Pradesh; at many places over East Uttar Pradesh, Bihar and Vidarbha; at a few places over East Rajasthan, Jharkhand, Marathwada and Konkan & Goa; at isolated places over Jammu & Kashmir, West Rajasthan, Madhya Maharashtra, North interior Karnataka, Rayalaseema, Kerala and north Tamilnadu and Andaman & Nicobar Islands.

- Thunderstorm observed at isolated places over Jammu & Kashmir, Haryana, Himachal Pradesh, Chandigarh, West Bengal & Sikkim, Assam & Meghalaya, Odisha, West Madhya Pradesh and Vidarbha from 0830 hours IST yesterday to 0830 hours IST of today.
- Maximum temperature departures as on 21.09.2018: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Assam & Meghalaya and at isolated places over Himachal Pradesh, Uttarakhand, West Rajasthan, Gujarat, Kerala and Tamilnadu & Puducherry; above normal (1.6°C to 3.0°C) at few places over Sub Himalayan West Bengal & Sikkim, Madhya Maharashtra; at isolated places over Haryana, Chandigarh & Delhi and East Rajasthan. They were markedly below normal (5.1°C or less) at most places over Telangana and at few places Gangetic West Bengal, Vidarbha and Odisha; appreciably below normal (3.1° to 5.0°C) at many places over East Madhya Pradesh & Chhattisgarh and isolated places over West Uttar Pradesh & West Madhya Pradesh; below normal (1.6°C to 3.0°C) at a few places over East Uttar Pradesh and North Interior Karnataka and near normal over rest of the country.
- Yesterday, the highest maximum temperature of 41.0 °C was recorded at Barmer (West Rajasthan) over the plains of the country.
- Minimum temperature departures as on 22.09.2018: Minimum temperature are above normal (1.6°C to 3.0°C) at a few places over Jammu & Kashmir, Himachal Pradesh, East Rajasthan, north Konkan & Goa and Madhya Maharashtra; at isolated places over West Rajasthan, West Madhya Pradesh, Gujarat and Assam & Meghalaya. They are below normal (1.6°C to 3.0°C) at most places over Haryana, Chandigarh & Delhi, at a few places over Chhattisgarh & Telangana; at isolated places over north Rajasthan, Madhya Pradesh, Gangetic West Bengal, Coastal Andhra Pradesh, Coastal Karnataka, Vidarbha and Tamilnadu & Puducherry and near normal over rest of the country.

Weather Warning during next 5 days (IMD)

- 22 September (Day 1): Heavy to very rain with extremely heavy falls at isolated places very likely over East Rajasthan; heavy rain at a few places with very heavy at isolated places over Himachal Pradesh; heavy to very heavy rain at isolated places very likely over Uttarakhand, Punjab, West Madhya Pradesh and north Madhya Maharashtra and heavy at isolated places over Jammu & Kashmir, Haryana, Chandigarh & Delhi, West Uttar Pradesh, West Rajasthan, Vidarbha, Sub Himalayan West Bengal & Sikkim, Arunachal Pradesh, Gujarat Region and Konkan & Goa. Thunderstorm accompanied with Lightning & Hail very likely at isolated places over Jammu & Kashmir. Strong surface winds speed reaching 25-35 kmph gusting to 45 kmph very likely over East Rajasthan and West Madhya Pradesh.
- 23 September (Day 2): Heavy to very heavy rain at a few places with extremely heavy rain at isolated places very likely over Himachal Pradesh, Uttarakhand and Punjab; heavy to very heavy rain at isolated places very likely over Jammu & Kashmir, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Rajasthan and heavy rain at isolated places very likely over West Rajasthan, West Madhya Pradesh, Sub Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, South Interior Karnataka, Tamilnadu & Pudducherry and Kerala.

- 24 September (Day 3): Heavy to very heavy at a few places with extremely heavy rain at isolated places very likely over Uttarakhand; heavy at a few places with very heavy rain at isolated places likely over Himachal Pradesh; heavy to very heavy rain at isolated places very likely over Haryana, Chandigarh & Delhi and West Uttar Pradesh; and heavy rain at isolated very likely over Punjab, Jammu & Kashmir, East Rajasthan, Sub Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, South Interior Karnataka, Tamilnadu & Pudducherry and Kerala.
- 25 September (Day 4): Heavy rain at isolated places likely over Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Coastal & South Interior Karnataka and Kerala.
- 26 September (Day 5): Heavy rain at isolated places likely over Arunachal Pradesh, Assam & Meghalaya, Coastal & South Interior Karnataka and Kerala.
- The weather outlook for the period of seven days *i.e* 22 to 28 September 2018 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>*) rain/thundershower may occur over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Rajasthan, Uttar Pradesh, Bihar, Jharkhand, West Bengal & Sikkim, Madhya Pradesh, Chhattisgarh, Odisha, Konkan & Goa, Vidarbha, Marathwada, Madhya Maharashtra, Telangana, Coastal Andhra Pradesh, Rayalaseema, North interior Karnataka, Kerala, north Tamilnadu, Andaman & Nicobar Islands and North Eastern States. (Fig. 2).

Agricultural activities (AICRPAM-CRIDA)

Jammu & Kashmir

Weather condition

Light rainfall in Jammu region of Jammu & Kashmir state during past few days. Both maximum and minimum temperatures remained in normal limits and ranged from 31.4 to 33.8 °C and 20.6 to 25.8 °C, respectively

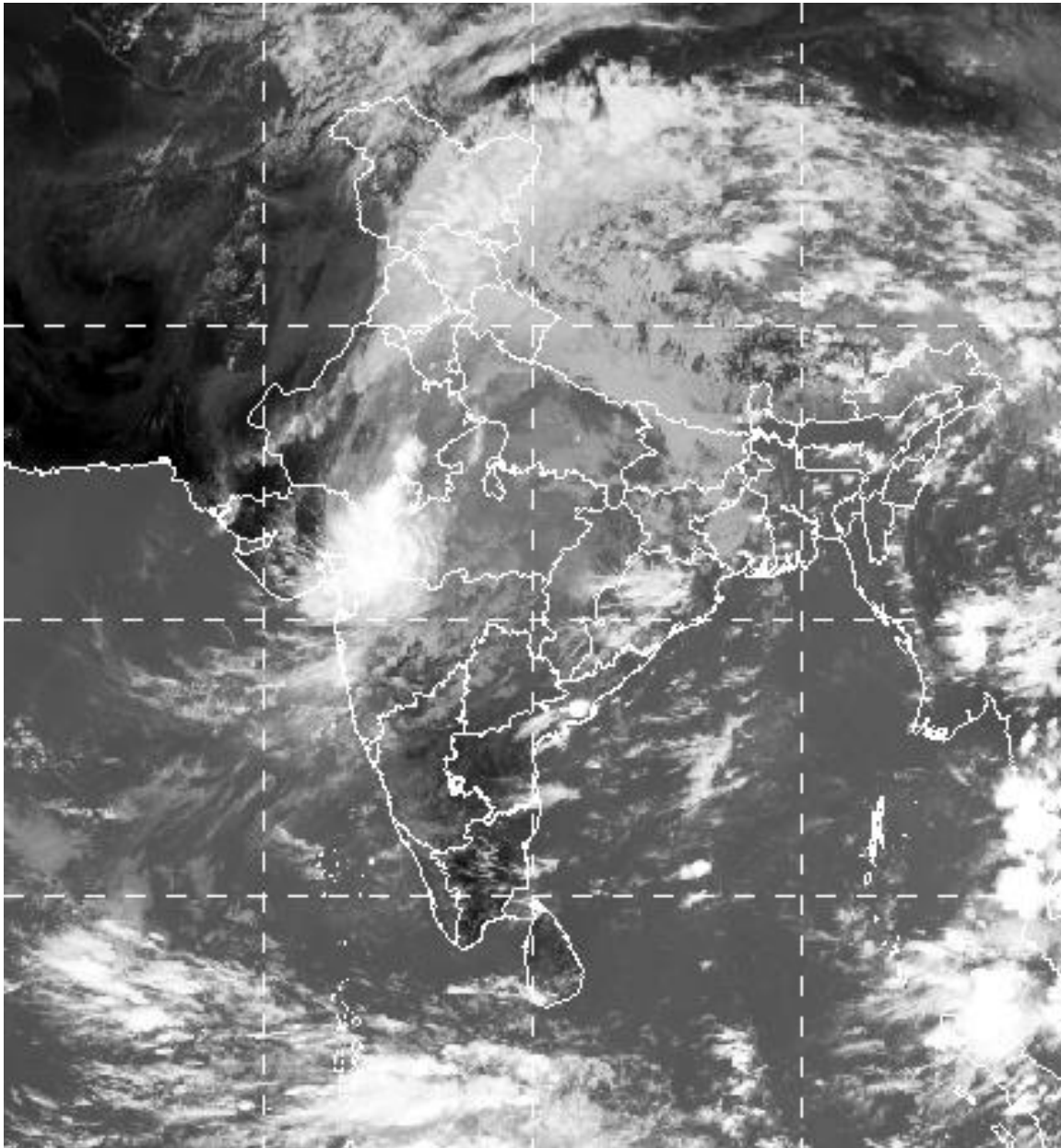
Contingency measure:

- Paddy: To control leaf folder, spray the crop with monocrotophos 36 SL @ 750ml of water/ha To control plant hopper, Install pheromone traps @ 1/kanal or spray Imidacloprid 200SL @ 6.25 ml/Kanal during clear weather . Spray the crop with carbendazim @ 0.1% during clear weather to control the attack of sheath blight. During clear weather, spray tricyclozole @ 0.06% to control blast. Spray mancozeb @ 0.25% to control brown spot. Give 2-3 sprays at 15 days interval. Farmers are advised to spray the crop with a mixture of 3.00 gm of zinc Sulphate, 15 kg Urea and 1 Kg of Zineb per hectare in 500 lt of water during clear weather, if yellowing of leaves from tips is noticed.

- Oilseed: Farmers can go for sowing of toria during clear weather. Treat the seed with Captan/Thiram @3g/kg seed against alternaria blight/seedling rot. Apply half dose of N full dose of P, K & Sulphur and at the time of sowing.
- Maize: Grain formation Weather is congenial for the attack of the following insects and diseases. Spray imidacloprid @0.3ml/lit of water to control jassid and other sucking pests. Spray Dichlorovos 76EC @ 2ml/lit or Carbaryl @ 0.1 % to control blister beetle. Due to chances of dry weather ahead, spray carbofuran/Cartap@ 1kg/kanal or soil application of chloropyriphos 5% dust to control termite.
- Kharif Pulses: Weather is congenial for hairy caterpillar, if observed in moong & mash crop then destroy young larvae in gregarious phase. If population is high, spray Quinalphos @ 0.03% or Dichlorvos @ 0.05% during clear weather .Farmers are advised to manually rogue out yellow leaf plants (mosaic affected) at initial stage of attack. Control vector population by spraying systematic insecticides during clear weather at initial stages of attack. Floriculture: Maintain drainage in field. First pinching of terminal portion and spray Bavistin @ 0.1% during clear weather to control septoria leaf spot. Transplanting of seedlings in the field is recommended. Nursery raising of winter annuals is recommended. Early season planting of bulbs can be during clear weather.
- Vegetables: Start nursery making practices for rabi season crops so that all the nurseries get ready by end of September. Maintain drainage in field. Prepare nursery beds of 1m×3m×0.15m size (L×B×H) for cole crops. For knoll-khol, make 3beds/Kanal); for cauliflower, make 1bed/Kanal; for cabbage, make 1bed/Kanal; for Kale, make 3beds/Kanal. Plough the field and bring it to fine tilth. Sow direct sown vegetables like Methi, Spinach Beet, Coriander, Radish, Carrot, Beet Root and Spinach within first fortnight of September for good germination and crop stand. To control hairy caterpillar spray chloropyriphos20EC or Dichlorovos 36EC /100 EC @ 2ml/lit of water. For fruit borer install pheromone traps. To control mosaic, spray imidacloprid @0.3ml/lit of water.
- Horticulture: Keep the basin area clean. To control fruit fly in fallen fruits, harvest fruit when hard. Layering is recommended. Mushroom: After harvesting of crop, farmers are advised not to dispose bags in field but use them for preparation of vermicompost. Spray less water on mushroom due to sufficient humidity in atmosphere. Put the yellow light traps for the management of mushroom flies. Malathion @ 0.01% and chlorothalonil @ 0.05% can be sprayed at weekly interval, if disease and insect incidence is observed.. Farmers may go for booking of spawn for upcoming crop.
- Sericulture: Avoid water logging in newly transplanted mulberry saplings by digging proper exit channels. Cocoon harvested during April month (if not sold) should be loosely packed in muslin cloth bags. The bags should be kept in wire mesh covered racks to avoid rodent and fungal attack till sale of the crop.
- Apiculture: Migrate bee colonies to safer areas having bee flora. Provide sugar feeding/artificial diet. Protect bee hive from wax moth and ants. Unite weak bee colonies. Give need based sugar feeding. Protect bee hive from ants. Poultry :Use fan in poultry houses due to high humidity. Water supply should be adequate and add vitamin C in water. Proper

ventilation must be maintained at poultry house. Fumigate poultry huts. Maintain hygiene. Birds should not come in direct contact with rain.

- Live stock: Deworming is recommended. Wet bedding should be changed. Provide clean water for drinking to the animals at frequent intervals to save animals from heat stroke. Supplementary mineral mixture with 50 gm iodized salt regularly to the milking and pregnant animals Give vaccination against BQ and HS. Ensure green fodder to the livestock.



**Figure: 1. Latest available satellite picture as on 22 September 2018 at 0230 Hrs (IST).
(Source: IMD).**

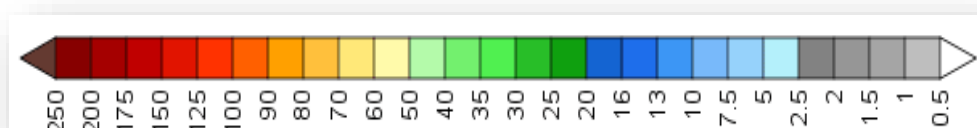
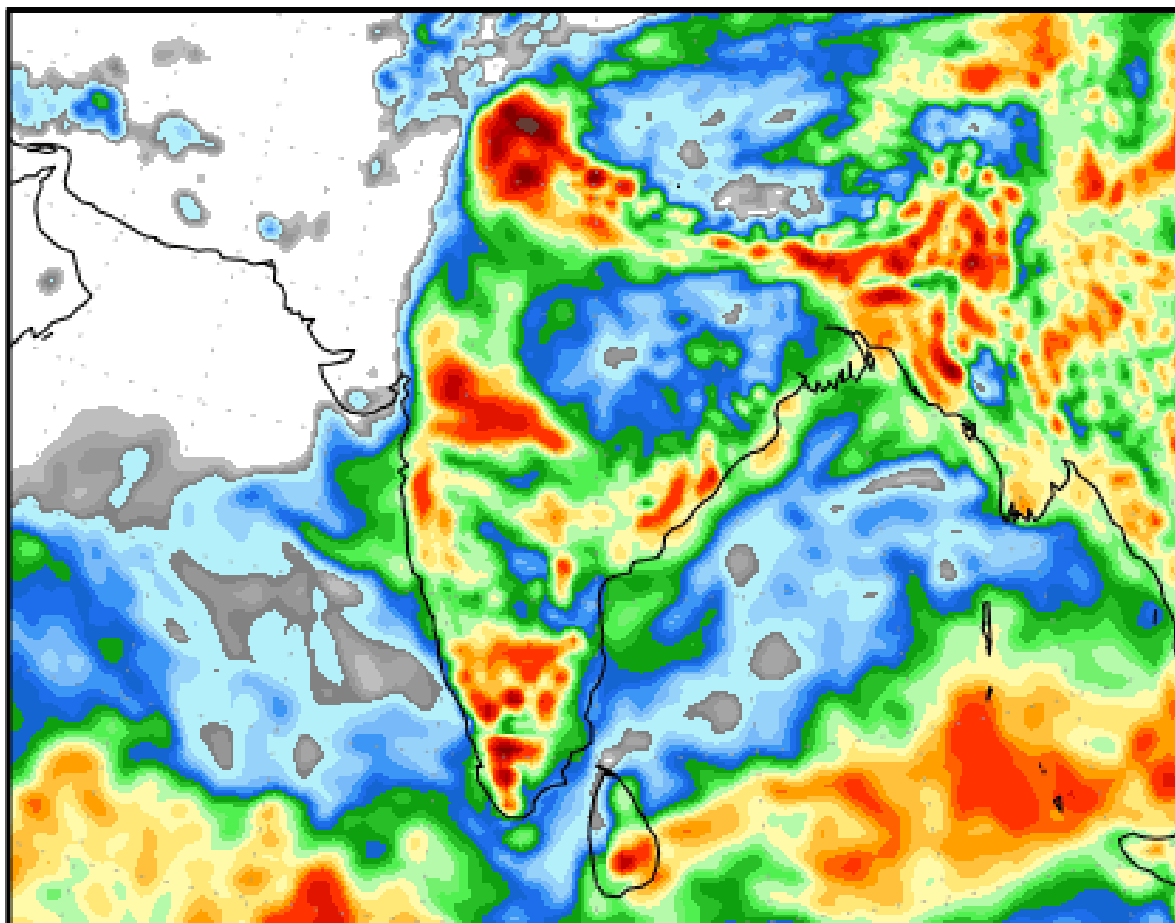


Figure: 2. Precipitation forecast for 22 to 28 September 2018 (Source: NOAA NCEP).