All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Weekly Crop Weather Information during 06th to 12th August 2018

The crop weather conditions in different states as reported by the cooperating centres of AICRPAM

Maharashtra

Vidarbha region

Light rainfall received in Vidarbha during past week. Maximum temperature across the week was -0.3 °C below normal and the minimum temperature was 0.9 °C above normal. In Vidarbha subdivision rainfall during June 1- August amounted to 543.5 mm (-5%). Agricultural operations like less rainfall activity prevailed during past week, though, rainless period facilitated intercultural and plant protection benefitting the growing kharif crops. Mostly dry period past week increased pest incidence in soybean and cotton. In areas that received sufficient rains remaining kharif sowings are underway. Planning for tree plantations upon sufficient rains and preparation of pits for new plantation of fruit crops are in progress. Normal sown cotton, sorghum, pearl millet, soybean, and pigeonpea crops are through vegetative stage. Earlier sown (24/25 MW) early soybean variety is at flower initiation stage. Green gram and blackgram at pod initiation stage. Rice at transplanting stage in eastern districts. Acid lime and blueberry (Jamun), gourds are being harvested as per maturity of fruits. Light to moderate intensity of sucking pest, bollworm in cotton and girdle beetle/leaf eating caterpillar/stem fly in soybean crop was noticed.

Madhya Maharashtra region

Moderate cloudy weather prevailed in Madhya Maharashtra region of Maharashtra state during this week. Sowing of completed almost on about 60% of kharif area. Agriculture operations like thinning and interculturing operations like hoeing in kharif crops are in progress. The sown kharif crops viz soybean is at development to flowering stage, sorghum is at panicle initiation stage, bajra, maize and pigeon pea are at development stage, green gram and black gram are in flowering to pod formation stage, irrigated cotton crop is flowering stage, sugarcane crop is in grand growth stage, vegetable crops are at fruiting stage and fruit crops are in development stage. Low intensity of leaf eating caterpillar in kharif crops and vegetables was noticed.

Marathwada region

Light rainfall received in Marathwada region of Maharashtra state during this week. The Maximum temperature was range from 29.0 to 31.3°C and the minimum

temperature was ranges from 20.9 to 23.0 °C. Agriculture operations like plant protection measures are being undertaken in cotton and soybean crops and hoeing and weeding operations are in progress. Earlier sown soybean variety is at flowering stage. Normal sown cotton, sorghum, pearl millet and pigeonpea crops are through vegetative / canopy development stage, blackgram, green gram and cowpea is at flowering stage. Vegetable crops are at vegetative to fruit development stage. Sugarcane is development stage. Low intensity of sucking pest, leaf eating caterpillar in cotton and soybean was noticed.

Konkan region

Light rainfall received in Konkan region of Maharashtra state during this week. The maximum and minimum temperature ranged from 27.5 to 28.5 °C and 23.0 to 24.5 °C respectively. Agriculture operations like transplanting of rice in completed, sapota spraying for control of phytophthora and fingermillet transplanting is in progress. Rice in transplanting stage and fingermillet transplanting stage. Low intensity of phytophthora and sapota blue beetle in rice crop was noticed.

Andhra Pradesh

Light rain received in Andhra Pradesh state during this week. AP state as a whole received normal rainfall (-8%) i.e. 37.7 mm against the normal rainfall of 40.9 mm. The total area sown in the state is 21.34 lakh ha (54%) as against the normal kharif sown area of 39.53 lakh ha and this accounts for 94% of normal sown area of 22.69 lakh ha as on 08.08.18. Agriculture operations like sowing of groundnut and redgram, weeding in early sown redgram and groundnut crops are in progress. Early sown crops like maize, groundnut, sesame, cotton, sugarcane, mesta, greengram, blackgram are at vegetative to flowering and pod formation stage. Low intensity of cutworm in maize, sucking pests in groundnut, cotton and sucking pests, pink boll worm in cotton were noticed.

Assam

Light rainfall received in Assam state during this week. Daily average maximum temperature was 34.7°C which was 1.6°C above normal and the average daily minimum temperature was 26.02°C which was 0.7°C above normal for the week. Agriculture operations like weeding weeding and drainage of waterlogged soil for sali rice, intercultural operations in and ginger and turmeric summer is continuing, earthing up of sugarcane. Sowing of summer sesamum by first fortnight of August are in progress. Sali rice is in tillering stage and sesamum is at sowing/planting stage. No major pests and diseases were noticed.

Bihar

Light rainfall was experienced across many districts of Bihar state during this week. Rainfall deficiency still persists in many districts. Maximum temperature ranged from 29.2 to 34.2 °C and the minimum from 25.0 to 27.5 °C. Agriculture operations like transplanting

of paddy almost complete. Sowing of vegetables like tomato, bhindi and brinjal, owing of chilli, brinjal and cauliflower in raised beds is in progress. planting of onion in field, fruits saplings in the orchards are in progress. Timely transplanted rice is in early vegetative to maximum tillering stage. Zinger and turmeric in germination to early vegetative stage. Arhar is in germination to early vegetative stage. Kharif maize is in knee high stage to tasseling stage. Low intensity of stem borer in maize crop was noticed.

Chhattisgarh

Light rainfall received in Chhattisgarh state during this week. Chhattisgarh State received 690.6mm rainfall against normal of 735.0 mm, (-6 %). The area (in thousand ha) sown under different crops as on 06/08/2018 are as under: Total Cereals 3987.51 (3611.16, 91%), total pulses 386.80 (229.3,59%), total Oilseeds 302.19 (207.6, 69%) and total kharif crops 4820.0 (4151.0, 86%). Agriculture operations like in broadcasting and direct seeded rice crop biasi is going on intensively where adequate standing water available and transplanting of rice in irrigated situation. Weedicide spray in many of the districts and application of nitrogenous fertilizer at some locations in 25-day crop. Irrigation application and intercultural operations in kharif vegetables and cucurbitaceous crops. Need based application of insecticides in vegetables against aphids, thrips, fruit and pod borer and other pests. Kharif maize sowing in Northern Hill region and maize, minor millets in Bastar plateau ACZ. Inter culture operations are going on in soybean crops are in progress. Rice and soybean is in vegetative stage. Sugarcane crop in inter-node elongation stage. Low intensity of fruit borer and white fly leaf curling in solanaceous vegetables crops was noticed.

Uttar Pradesh

East Uttar Pradesh

Light rainfall occurred in Eastern Uttar Pradesh region of Uttar Pradesh state during this week. Agriculture operations like hand weeding in direct seeded and transplanted rice, top dressing of N-fertilizer in rice and maize under suitable moisture condition, earthing and tying of sugarcane and plantation of fruit trees and forest trees are in progress. Rice is in early tillering stage, maize is in tasseling/silking stage, pigeon pea is in vegetative stage, sugarcane is in grand growth stage. Low intensity of fruit borer in brinjal and bhindi crops was noticed.

West Uttar Pradesh

Light rainfall received in West Uttar Pradesh region of Uttar Pradesh state during this week. Maximum temperature and minimum temperatures are above normal by 1.0 to 2.0 °C. Agriculture operations like gap filling, weeding and top dressing with urea in paddy, weeding and top dressing with urea in maze, weeding and thinning in sorghum, sowing and thinning pigeonpea, weeding and thinning in blackgram. sowing of greengram, weeding in groundnut, plucking, marketing and transplanting brinjal /

chillies and cutting, marketing and sowing leafy vegetable crops are in progress. Kharif rice is in tillering stage, maze is at vegetative to knee high stage, sorghum is in vegetative stage, pigeonpea is at sowing to emergence stage, blackgram , greengram are at emergence/ vegetative, groundnut is in vegetative stage, vegetables/ cucurbits are at flowering to fruiting stage. No major pests and diseases were noticed.

Gujarat

Light rainfall received in Gujarat state during this week. The actual maximum temperature is 2.0°C higher and minimum temperature is 0.3°C lower as compared to normal values. Agriculture operations like weeding and interculturing early sown crops, gap filling and thinning, nursery preparation of tobacco. Land preparation/sowing of late kharif crops and irrigation, top dressing of N fertilizer are in progress. Seedling stage of timely sown crops and early sown crops are in vegetative stage. No major pests and diseases were noticed.

Haryana

Light rainfall received in Haryana state during this week. Maximum temperature was below normal after 6th to 10th August above normal, while minimum temperature was oscillating with normal upto 9th August. Agriculture operations like weed management in rice, hoeing, harrowing in cotton, bajra, guar, arhar and thinning in early and late sown bajra crops are in progress. Cotton crop at vegetative growth stage, rice is at tillering stage and bajra is at tillering stage. No major pests and diseases were noticed.

Himachal Pradesh

Light rainfall received in Himachal Pradesh state during this week. The maximum temperature during the week ranged between 21.0 to 27.5°C which was above normal by 0.2 to 1.7°C and minimum temperature ranged between 18.5 to 20.5°C which was below normal by 0.3 to 1.0°C during most of the week. Agricultural operation like hand weeding in maize and soybean crops, arrangement of fodder for their cattle and dairy animals are in progress. Rice is in tillering stage, maize is in knee high stage, vegetables are in picking stage, kharif vegetables are in seedling to vegetative stage and soybean is at leaf development stage. Low intensity of blast in rice crop was noticed.

Jharkhand

Light rainfall received in Jharkhand state during this week. Daily maximum and minimum temperatures are ranged from 25.5 to 29.6°C and 18.6 to 20.7°C, respectively. Weekly maximum and minimum temperature were 27.2 and 19.7 °C against its normal value of 28.8 and 22.8 °C, respectively. Nearly half of the Jharkhand state received normal rainfall whereas half of the state received below normal rainfall and transplanting of rice is not properly completed. Agricultural operation like hoeing in urd, moong, maize ground

nut and arhar crops are in progress. Early vegetative stage of all kharif crops. No major pests and diseases were noticed.

Kerala

Heavy rainfall received in Kerala state during this week. The maximum temperature ranges from 27.9 to 30.2 °C and minimum temperature ranges from 21.5 to 23.3°C. Agricultural operation like draining out of excess water from field crops are in progress. Fruiting stage in vegetables and bunching stage in banana. Low intensity of quick wilt in pepper, bud rot in coconut, rhizoctonia root rot in cowpea, leaf roller in paddy and pseudostem weevil in banana was noticed.

Odisha

Light rainfall received in Odisha state during this week. Agricultural operation like nursery management of kharif paddy, incorporation of green manure crop. Puddling of main rice field for transplanting. Transplanting of rice, ragi. Plant protection and intercultural operation of maize. Intercultural operation of pigeon pea. Intercultural operation of cotton. Gypsum application of groundnut. Intercultural operation and plant protection of jute & sugarcane. Intercultural operation of tuberose. Planting of chrysanthemum, marigold, mango, cashew nut, coconut, papaya, drumstick and land preparation and planting of Kharif vegetables are in progress. Branching stage of green manuring crop. Seedlings stage of rice sown ready for transplanting. Grand growth stage of sugarcane. Tillering stage of ragi. Seedling stage of kharif maize. Branching stage of arhar. Branching stage of groundnut and cotton. Fruiting stage of brinjal, okra and cucurbits, cowpea. Vegetative stage of turmeric, zinger, colocasia and yam. Vegetative stage of jute. Low intensity of bacterial leaf blight, blast, brown plant hopper, foot rot, gulmidge, leaf folder/case worm, sheath blight, sheath rot, swarming caterpillar, yellow stem borer in rice crop was noticed.

Jammu & Kashmir

Mainly clear weather prevailed in Jammu region of Jammu & Kashmir state during this week. The maximum temperature remains normal and ranged from 28.8 to 34.6 °C While minimum temperature remained above normal and ranged 23.7 to 27.5°C. In Kharif season about 92 % for Paddy, 98 % for Maize, 98 % for bajra 77 % for pulses, 110 % of fodder and 100 % of vegetable has been sown. Agricultural operation like application of nitrogenous fertilizer in paddy. Weed control measures in paddy. Plant protection measures in paddy, maize, kharif pulses & oil seed crop. Earthing up in maize. Hoeing and weeding in paddy, maize, kharif pulses & oil seed crop. Drainage of excess water from vegetable & young fruit plants are in progress. Tillering in normal transplanted paddy crop. Jointing in early transplanted rice/paddy. Late transplanted paddy is at establishment stage. Early & Normal maize is at peak vegetative stage. Early & Normal bajra is at peak vegetative stage. Late sown maize is at six leaf stage. Pulses is at vegetative stage. No major pests and diseases were noticed.

Karnataka

North Karnataka

Light scattered rainfall received in North Interior Karnataka during this week. Deficit to scanty rainfall has been received in all the districts except Belagavi, Bagalkote, Haveri and Dharwad districts. Agriculture operations like repeated intercultivation and thinning in pigeon pea, green gram and other crops, plant protection measures are in progress. Cotton/groundnut/red gram are at vegetative stage and green gram is at pod maturity stage. Low intensity of sucking pests in cotton/groundnut/redgram, powdery mildew and pod borer in greengram, downey mildew and anthracnose in grapes, sucking pests and bacterial blight in pomegranate and fruit borer and leaf curl tomato was noticed.

Tamil Nadu

Dry weather prevailed in Tamil Nadu state during the week. The maximum temperature was 0.8°C below normal and the minimum temperature was 1.2 °C above normal across the week. Agricultural operations like plant protection measures for controlling pests and diseases are in progress. Chillies is in flowering to fruiting stage. Paddy is in nursery to harvest stage. Banana is in bunch development to harvest stage. Jasmine is in flowering stage. Tomato and Bhendi are in fruiting to harvest stage. Citrus is in fruiting stage. Cotton is in squaring to boll formation stage. Moderate intensity of bacterial leaf blight, stem borer in paddy, leaf webber, bud worm in jasmine, canker, scab in citrus, sucking pest in chillies and wilt in banana was noticed.

Punjab

Light rainfall received in Punjab state during this week. The maximum temperature during the week ranged between 27.6 to 36.0°C and minimum temperature ranged between 24.0 to 28.6°C. Agricultural operations like irrigation to rice, sugarcane, cotton is being applied and sowing of maize fodder crops are in progress. Basmati rice at tillering stage, groundnut is in needle formation stage and cotton is at boll formation stage. No major pests and diseases were noticed.

Rajasthan

Moderate rainfall was observed in most of the districts in Rajasthan state during this week The maximum temperature ranged from 28.0 to 32.0 °C with mean value of 29.6°C which is above normal by 0.6°C. The minimum temperature ranged from 21.5 to 23.1 °C with mean value of 22.4°C which is 0.8°C below normal value. Agricultural operations like weeding, hoeing in maize, soybean and earthing up in maize and groundnut crops are in progress. Soybean, maize, sorghum, pearlmillet, greengram and cowpea are at vegetative stage. No major pests and diseases were noticed.

West Bengal

Light rainfall received in West Bengal state during the week. Maximum temperature ranges from 30.5 to 34.6 °C and minimum temperature ranges 25.6 to 28.0°C. Agricultural operations like transplanting is continuing in flood prone area for late sown kharif rice, intercultural operation in non flood area, kharif vegetables like brinjal, okra, tomato, chilli, seedbed management and transplanting in low land and intercultural operations in upland paddy crops are in progress. Kharif vegetables like; chilli, tomato, okra are at seedling stage and kharif rice is also at seedling stage. Low intensity of fruit fly in vegetable crop was noticed.

Weather during 2nd to 08th August 2018

Forecast for the second half of the Southwest Monsoon Season:

- Quantitatively, the rainfall for the country as a whole during the second half of the monsoon season (August & September) 2018 is likely to be 95% if the Long Period Average with a model error of +/- 8 %.

- The rainfall during the month of August 2018 is likely to be 96% of the Long Period Average +/- 9% which is higher than that predicted in June.

Significant Synoptic Features:

- Remanants of the low pressure area of the previous week has caused widespread rainfall activity over East India during the earlier part of the week.

- A Low pressure area formed over Northwest Bay of Bengal and neighbourhood in the second half of the week subsequently concentrated into a Depression and crossed north Odisha –West Bengal coasts and moved west Northwestwards and weakened into Well Marked Low Pressure Area and lay over Chhattisgarh & neighbourhood at the end of the week. It has caused fairly widespread to widespread rainfall activity with heavy to very heavy and extremely heavy falls over eastern parts of Central India.

- Formation of the low pressure area has resulted in the strengthening of low level westerlies which caused widespread rainfall activity along the west coast.

- Convergence of easterlies along the foot hills has caused fairly widespread to widespread rainfall with isolated heavy to very heavy falls over Western Himalayan Region and adjoining plains of Northwest India.

Monsoon Activity:

- Southwest monsoon had been vigorous over Gangetic West Bengal on one day during the week.

- It had been active over Bihar four days; over Himachal Pradesh on three day ;over Jammu & Kashmir, Assam & Meghalaya, East Uttar Pradesh, Arunachal Pradesh and Odisha on two days each ; over Uttarakhand, Punjab, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands , East Madhya Pradesh, Chhattisgarh, Coastal & South Interior Karnataka and Kerala on one day each during the week.

Heavy Rainfall Activity:

- Heavy to very heavy rain with extremely heavy falls at one or two places had been reported over Gangetic West Bengal and Odisha on one day each during the week.

- Heavy to very heavy rain had been reported over East Uttar Pradesh on three days; over West Uttar Pradesh, Uttarakhand and Himachal Pradesh on two days each; over Jammu & Kashmir, Haryana & Delhi, East Madhya Pradesh, Assam & Meghalaya, Jharkhand, Bihar, Odisha, Madhya Maharashtra, Chhattisgarh and Kerala on one day each during the week.

Temperature:

- The highest maximum temperature of 40.00C was recorded at Madurai (Tamil Nadu& Puducherry) over the plains of the country during the week..

Meteorological Analysis

- The axis of monsoon trough at mean sea level passed through Amritsar, Karnal, Hardoi, centre of low pressure area over East Uttar Pradesh and neighbourhood, Malda and thence to Northeast of Bay of Bengal across Bangladesh on 2nd August 2018. It passed through Amritsar, Karnal, Bareilly, Balia, Dhanbad, Burdwan and thence to Northeast Bay of Bengal across Bangladesh on 3rd; passed through Kapurthala, Ambala, Pantnagar, Bahraich, Gorakhpur, Muzaffarpur, Malda and thence to Northeast Bay of Bengal across southwest Bangladesh on 4th; passed through Jammu, Chandigarh, Hardoi, Patna, Dumka, Kolkata and southeastwards to Northeast Bay of Bengal on 5th ; passed through Firozepur, Kaithal, Delhi, Hardoi, Gorakhpur, Patna, Burdwan, central of low pressure area over

- Northwest Bay of Bengal and neighbourhood and thence southeastwards to Eastcentral Bay of Bengal on 6th ; passed through Anupgarh, Churu, Gwalior, Siddhi, Daltonganj, centre of Well Marked Low pressure area over Northwest Bay of Bengal & adjoining West Bengal and Odisha and thence southeastwards to East-Central Bay of Bengal on 7th and passed through Bikaner, Churu, Jhansi, Umaria, center of the Well Marked Low pressure area over north Chhattisgarh & neighbourhood, Gopalpur and thence southeastwards to East Central Bay of Bengal on 8th August 2018 .

- Last week's low pressure area lay over East Uttar Pradesh and adjoining Bihar with associated cyclonic circulation extending upto 5.8 km above mean sea level on 2nd August 2018.The low pressure has become less marked, however, the associated cyclonic circulation lay over western parts of Bihar and neighbourhood and extended upto 3.1 km above mean sea level on 3rd August. It has merged with the monsoon trough on 4th August 2018.

- The lower parts of last week's cyclonic circulation over south Bangladesh and adjoining Gangetic West Bengal has merged with the trough from cyclonic circulation over East Uttar Pradesh and adjoining Bihar to eastern parts of Assam whereas its upper part lay over Northwest Bay of Bengal and adjoining areas of Gangetic West Bengal and Odisha between 5.8 km & 7.6 km above mean sea level on 2nd. The cyclonic circulation over Northwest Bay of Bengal and adjoining areas of Gangetic West Bengal & Odisha persisted over the same region and continued to extend between 5.8 and 7.6 km above mean sea level on 3rd

August 2018; It lay over Northwest and adjoining West Central Bay of Bengal off Odisha-north Andhra Pradesh coasts, tilting south-westwards with height on 4th; It lay over south Odisha & neighbourhood between 5.8 and 7.6 km above mean sea level , tilting southwards with height on 5th. It has merged with the Low pressure area over Northwest Bay of Bengal and neighbourhood on 6th August 2018.

- Last week's the eastwest shear zone at 7.6 km above mean sea level ran roughly along Lat. 19° N across Peninsular India on 2nd August 2018 and it has become less marked on 3rd August 2018.

- Last week's the cyclonic circulation at 5.8 km above mean sea level over Jammu & Kashmir and adjoining Himachal Pradesh persisted on 2nd August 2018 and it has become less marked on 3rd August 2018.

- Last week's trough in mid & upper air tropospheric westerlies with its axis at 7.6 km above mean sea level roughly along Long. 72°E to the north of Lat. 32°N persisted on 2nd August 2018. It was seen with its axis at 5.8 km above mean sea level roughly along Long. 77°E to the north of Lat. 30°N on 3rd and it has moved away Northeastwards on 4th August 2018.

- A trough ran from the cyclonic circulation over East Uttar Pradesh and adjoining Bihar to eastern parts of Assam across Sub-Himalayan West Bengal and extended upto 3.6 km above mean sea level on 2nd August 2018. It ran from the cyclonic circulation over western parts of Bihar and neighbourhood to western parts of Assam across Sub-Himalayan West Bengal and extended upto 3.6 km above mean sea level on 3rd August and it has merged with the trough from the cyclonic circulation over southwest Bangladesh & neighbourhood to western parts of Bihar on 4th August 2018.

- A cyclonic circulation extending upto 0.9 km above mean sea level lay over Northwest Uttar Pradesh and neighbourhood on 2nd. It persisted over the same region and continued to extend upto 0.9 km above mean sea level on 3rd August 2018. It has merged with the monsoon trough on 4th August 2018.

- A cyclonic circulation lay over south Rajasthan and adjoining Gujarat between 3.1 km & 5.8 km above mean sea level on 2nd August 2018. It persisted over the same region and was seen between 3.6 km & 5.8 km above mean sea level on 3rd; It lay over south Gujarat Region and adjoining north Konkan & seen between 3.1 km & 5.8 km above mean sea level tilting southwards with height on 4th; lay over north Madhya Maharashtra & neighborhood at 5.8 km above mean sea level on 5th and has become less marked on 6th August 2018.

- A cyclonic circulation at 7.6 km above mean sea level lay over south Konkan and neighbourhood on 3rd August 2018 and it has merged with the shear zone on 4th August 2018.

- A cyclonic circulation lay over southwest Bangladesh & neighbourhood and extended upto 3.1 km above mean sea level on 4th August 2018. It lay over Bangladesh and adjoining West Bengal and extended upto 3.6 km above mean sea level on 5th. Under its influence, a low pressure area has formed over Northwest Bay of Bengal & neighbourhood with the associated cyclonic circulation extending upto 7.6 km above mean sea level, tilting southwestwards with height on 6th . It lay as a Well Marked Low pressure Area over Northwest Bay of Bengal and adjoining West Bengal and Odisha with the associated cyclonic circulation extending upto 7.6 km above mean sea level tilting southwestwards with height on 7th.It has concentrated into a Depression over the same region in the afternoon of the same day and lay centred at 1430 IST of 7th August 2018 near latitude 21.5°N and longitude 87.5°E. It moved west-northwestwards, crossed north Odisha – West Bengal coasts near Balasore during the night of 7th august 2018. Continuing to move west Northwestwards, it has weakened into a Well Marked Low Pressure Area and lay over north Chhattisgarh and neighbourhood in the morning of 8th August 2018.

- A trough extending upto 3.1 km above mean sea level ran from the cyclonic circulation over southwest Bangladesh & neighbourhood to western parts of Bihar on 4th August 2018 ; It ran from Bihar to Nagaland with an embedded cyclonic circulation over Bangladesh & adjoining West Bengal on 5th and it has become less marked on 6th August 2018 .

- A cyclonic circulation between 1.5 km & 3.1 km above mean sea level lay over northern parts of East Uttar Pradesh & neighbourhood on 4th August 2018. It was seen as a trough along Long. 80°E to the north of Lat 26°N between 3.1 & 4.5 km above mean sea level on 5th and it has become less marked on 6th August 2018.

- A cyclonic circulation lay over Punjab & neighbourhood at 5.8 km above mean sea level on 4th August 2018 and it has become less marked on 5th August 2018.

- An east-west shear zone at 7.6 km above mean sea level ran roughly along Lat 16°N across peninsular India on 4th August 2018 and it has become less marked on 5th August 2018.

- A cyclonic circulation extending upto 0.9 km above mean sea level lay over eastern parts of Bihar & neighbourhood on 6th August 2018 and it has become less marked on 7th August 2018.

- Another cyclonic circulation extending upto 0.9 km above mean sea level lay over Northwest Uttar Pradesh & neighbourhood on 6th August 2018 and it has become less marked on 7th August 2018.

- A cyclonic circulation between 3.1 km & 5.8 km above mean sea level lay over eastern parts of Jammu & Kashmir & neighbourhood on 6th August 2018 and it has moved away east-Northeastwards on 7th August 2018.

- A cyclonic circulation lay over north Pakistan and adjoining Jammu & Kashmir between 4.5 km & 7.6 km above mean sea level on 7th August 2018 and it lay over Jammu & neighbourhood and extended between 4.5 and 7.6 km above mean sea level on 8th August 2018.

- A cyclonic circulation lay over Northwest Madhya Pradesh & neighbourhood and extended upto 2.1 km above mean sea level on 7th August 2018 and it lay over southeast Rajasthan and neighbourhood between 1.5 km & 3.6 km above mean sea level on 8th August 2018.

- A cyclonic circulation at 7.6 km above mean sea level lay over South East Arabian Sea and adjoining Lakshadweep area on 8th August 2018.

Average rainfall during the week

The All India area weighted rainfall during the week 43.2 mm was 33% below normal (64.6 mm).

The subdivision-wise weekly rainfall distribution is presented in Fig.1. Rainfall was Large excess in 0, excess in 3, normal in 8, deficit in 13, Large deficit in 12 and no rain in 0 out of 36 meteorological sub-divisions.

Cumulative Seasonal rainfall (1st June to 08thAugust 2018)

The cumulative seasonal rainfall during 1st June to 08th August 2018 over the country as a whole was 474.8 mm which is 10% below normal rainfall of 526.7 mm.

The subdivision-wise seasonal rainfall distribution is presented in Fig. 2. Rainfall was Large excess in 0, excess in 0, normal in 28, deficit in 8 and L. deficit in 0 and no rain in 0 out of 36 meteorological sub-divisions.

State-wise distribution of rainfall in number of districts with large excess, excess, normal, deficient, large deficient and no rainfall during monsoon season (1st June to 08thAugust 2018)

In the country, 2% districts received large excess, 11% districts received excess and 48% districts normal rainfall during monsoon season so far. However, 35% districts received deficient, 4% districts received large deficient rainfall and 0% districts received no rainfall and 0 districts received no data. (Table-1).

Weekly rainfall departure (%) at different IMD subdivisions (2018)

During the week under report no Sub-divisions viz.; received large excess rainfall, 3 Sub-divisions viz.; Jammu & Kashmir, East Uttar Pradesh and Bihar received excess rainfall, 8 Sub-divisions viz.; Himchal Pradesh, Uttarakhand, Assam & Meghalaya, Gangetic West Bengal, Odisha, Coastal Andhra Pradesh, Kerala and Andaman & Nicobar Islands received normal rainfall and remaining 25 Sub-divisions received either deficit / large deficit / no rainfall. (Table-2).

भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT

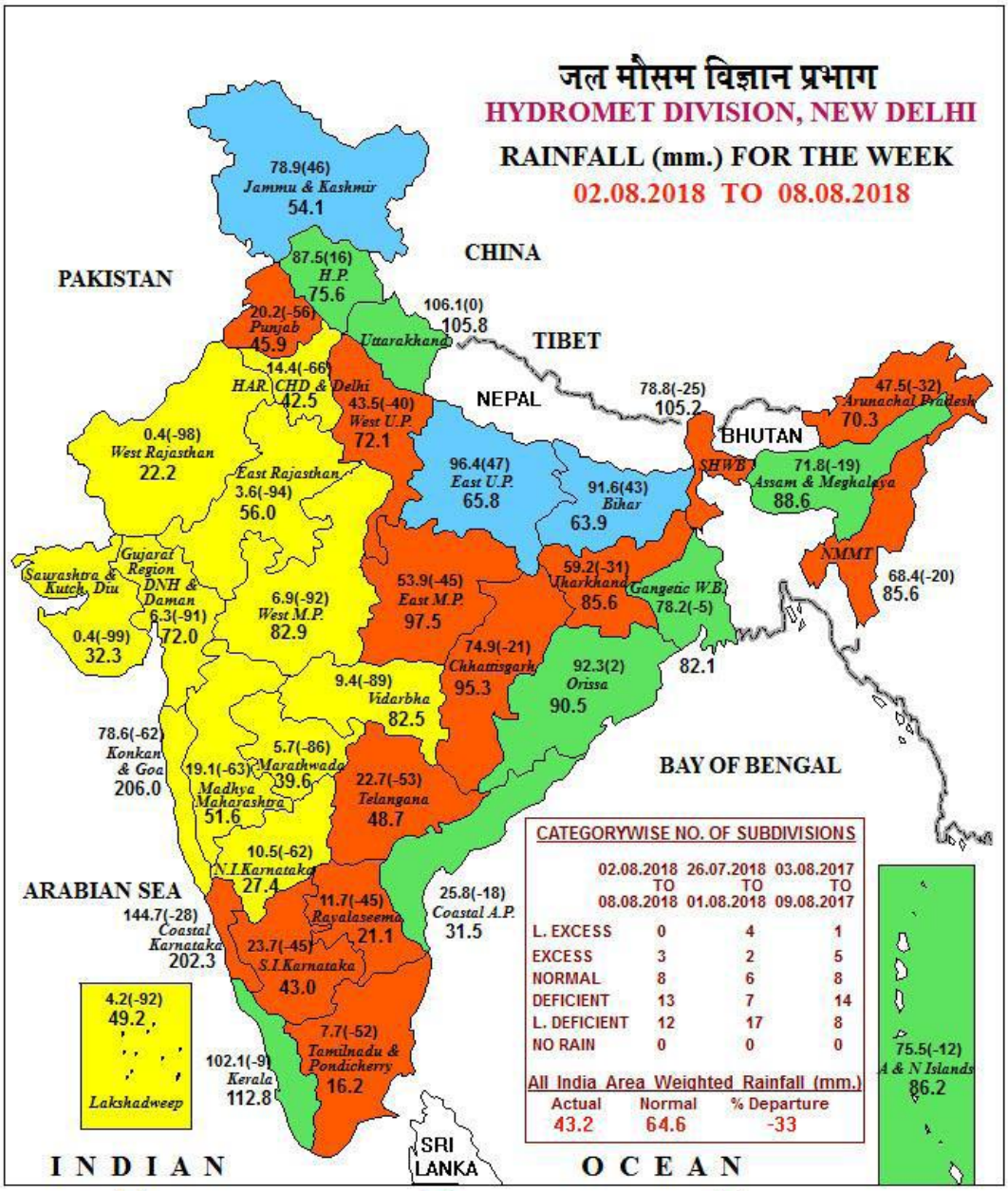
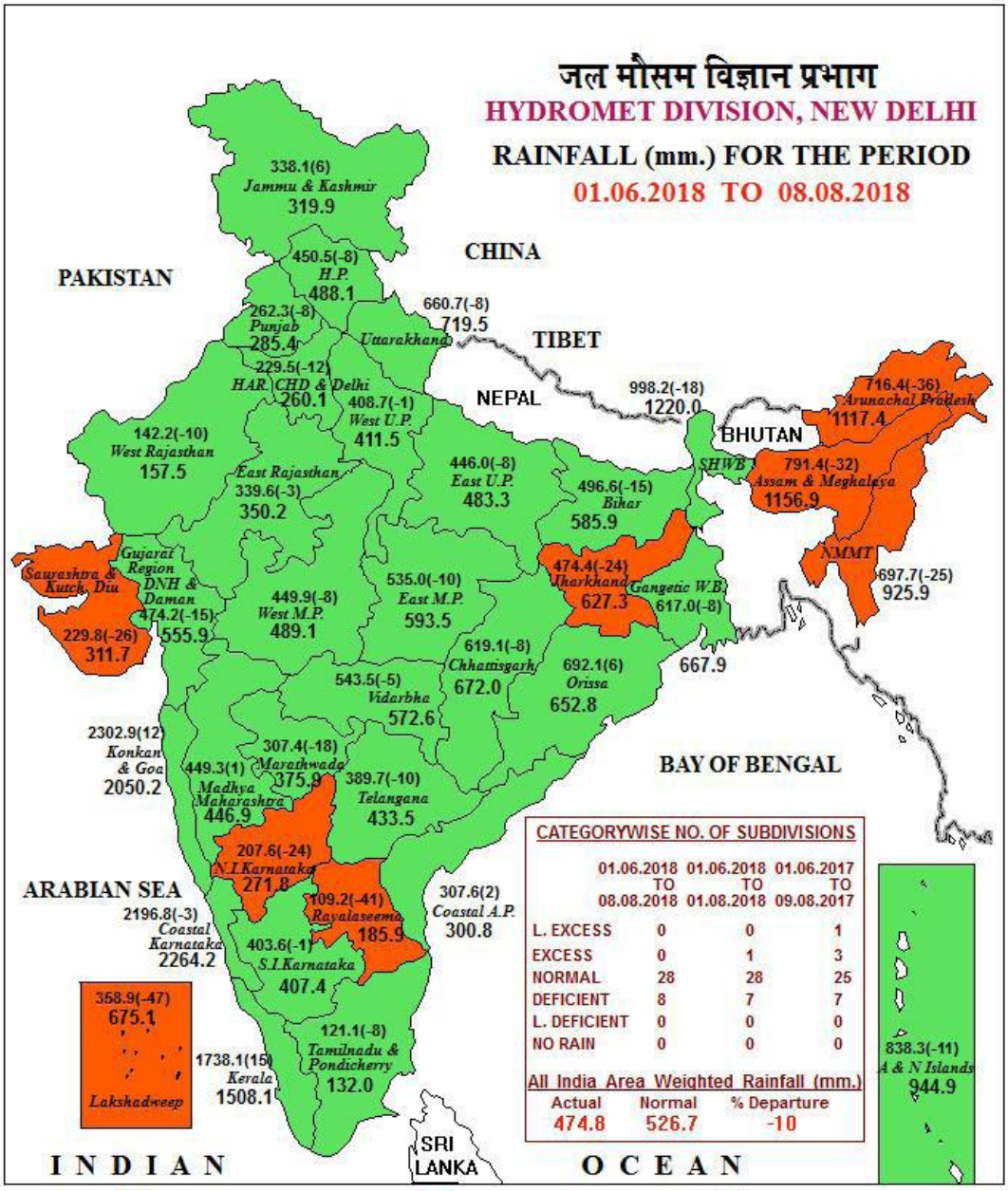


Fig-1

भारत मौसम विज्ञान विभाग
INDIA METEOROLOGICAL DEPARTMENT



NOTES:
(a) Rainfall figures are based on operational data.
(b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
Percentage Departures of Rainfall are shown in Brackets.

Fig-2

Table 1. State wise distribution of number of districts with large excess, excess, normal, deficient, large deficient, no rainfall and data inadequate shown (01.06.2018 to 08.08.2018)

S.NO.	STATES	PERIOD FROM : 01.06.2018 TO 08.08.2018							
		LE	E	N	D	LD	NR	ND	TOTAL
1.	A & N ISLAND (UT)	0	0	2	1	0	0	0	3
2.	ARUNACHAL PRADESH	1	0	1	8	3	0	3	16
3.	ASSAM	0	1	10	14	1	0	1	27
4.	MEGHALAYA	0	0	2	4	0	0	1	7
5.	NAGALAND	0	2	1	2	2	0	4	11
6.	MANIPUR	0	1	0	2	2	0	4	9
7.	MIZORAM	1	0	2	2	0	0	4	9
8.	TRIPURA	0	0	2	2	0	0	0	4
9.	SIKKIM	0	1	3	0	0	0	0	4
10.	WEST BENGAL	0	1	10	8	0	0	0	19
11.	ODISHA	1	5	21	3	0	0	0	30
12.	JHARKHAND	0	1	8	14	1	0	0	24
13.	BIHAR	0	2	18	17	1	0	0	38
14.	UTTAR PRADESH	1	14	31	22	4	0	0	72
15.	UTTARAKHAND	1	1	7	4	0	0	0	13
16.	HARYANA	0	2	10	9	0	0	0	21
17.	CHANDIGARH (UT)	0	0	1	0	0	0	0	1
18.	DELHI	0	0	7	2	0	0	0	9
19.	PUNJAB	0	3	11	4	2	0	0	20
20.	HIMACHAL PRADESH	0	1	8	3	0	0	0	12
21.	JAMMU & KASHMIR	4	7	5	3	0	0	3	22
22.	RAJASTHAN	0	5	20	8	0	0	0	33
23.	MADHYA PRADESH	1	4	34	12	0	0	0	51
24.	GUJARAT	1	5	6	17	4	0	0	33
25.	DADRA & NAGAR HAVELI (UT)	0	1	0	0	0	0	0	1
26.	DAMAN & DIU (UT)	1	0	1	0	0	0	0	2
27.	GOA	0	0	2	0	0	0	0	2
28.	MAHARASHTRA	0	4	22	10	0	0	0	36
29.	CHHATISGARH	0	3	18	6	0	0	0	27
30.	ANDHRA PRADESH	0	2	5	5	1	0	0	13
31.	TELANGANA	0	0	17	14	0	0	0	31
32.	TAMILNADU	2	1	11	15	3	0	0	32
33.	PUDUCHERRY (UT)	0	0	0	2	0	0	2	4
34.	KARNATAKA	0	3	10	16	1	0	0	30
35.	KERALA	0	5	8	1	0	0	0	14
36.	LAKSHADWEEP (UT)	0	0	0	1	0	0	0	1
TOTAL		**14**	**75**	**314**	**231**	**25**	**0**	**22**	**681**
CATEGORYWISE DISTRIBUTION OF DISTRICTS OUT OF THE 659 WHOSE DATA RECEIVED		**2%**	**11%**	**48%**	**35%**	**4%**	**0%**		

Table 2.Weekly Rainfall Departure (%) at different IMD subdivisions (2018)

S.No.	Meteorological Sub Division	20 Jun (25)	27 Jun (26)	04 Jul (27)	11 Jul (28)	18 Jul (29)	25 Jul (30)	01 Aug (31)	8 Aug (32)
1	Andaman & Nicobar Islands								
2	Arunachal Pradesh								
3	Assam & Meghalaya								
4	Nagaland, Manipur, Mizoram, Tripura								
5	Sub-Himalayan West Bengal & Sikkim								
6	Gangetic West Bengal								
7	Orissa								
8	Jharkhand								
9	Bihar								
10	East Uttar Pradesh								
11	West Uttar Pradesh								
12	Uttarakhand								
13	Haryana, Chandigarh & Delhi								
14	Punjab								
15	Himachal Pradesh								
16	Jammu & Kashmir								
17	West Rajasthan								
18	East Rajasthan								
19	West Madhya Pradesh								
20	East Madhya Pradesh								
21	Gujarat Region								
22	Saurashtra, Kutch & Diu								
23	Konkan & Goa								
24	Madhya Maharashtra								
25	Marathwada								
26	Vidarbha								
27	Chhattisgarh								
28	Coastal Andhra Pradesh								
29	Telangana								
30	Rayalaseema								
31	Tamil Nadu & Pondicherry								
32	Coastal Karnataka								
33	North interior Karnataka								
34	South interior Karnataka								
35	Kerala								
36	Lakshadweep								

LEGEND:

L. Excess: (+60 % or more)	
Excess: (+20 % to +59 %)	
Normal: (+19 % to -19 %)	
Deficient: (-20 % to -59 %)	
L. Deficient: (-60 % to -99 %)	
No Rain: (-100 %)	
No Data:	