

## All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500059

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

#### Weekly Crop Weather Information during 16 APRIL – 22 APRIL, 2024

##### ***Anand (Gujarat)***

The actual maximum temperature was 0.3 °C and minimum temperature was 4.5 °C higher as compared to their normals. Agricultural operations in progress are need-based plant protection measures in summer crops. Irrigate crops as and when required. Picking of brinjal, tomato, summer vine vegetable crops, etc. Brinjal, tomato summer vine vegetable crops, etc. are in the flowering/fruitlet stage. Summer maize is in the tasseling stage. Summer cowpea and summer mungbean crops are in the vegetative stage. Optimum-maintain by irrigation.

##### ***Anantapur (Andhra Pradesh)***

The prevailing temperature is hot and dry. All crops have been harvested. Contingency measures provide lifesaving irrigation and shade to transplanted seedlings using palm leaves to avoid moisture loss and drying of seedlings.

##### ***Bangalore (South Karnataka)***

State actual rainfall during 1st March 2024 to 18th April 2024 was 9.0 mm as against the normal of 26.0 mm with (-) 66 % deviation. Whereas, SIK 1.0 mm of rainfall as against the normal of 31.0 mm leading to (-) 95 % deviation. Agricultural operations in progress are Post-harvest technology like drying, cleaning, and winnowing is under progress. Phenological stages Summer crops are under vegetative stage and flowering stage. Moisture status is dry soil moisture condition observed in crop fields. Unfavorable weather conditions observed Prolonged dry spell resulted in severe water stress observed in agriculture and horticulture crops. Contingency measures are recommended for frequent irrigation for standing horticultural crop due to increasing temperature day by day. Mulching (residual crop residue after harvesting of rabi and other crops) and one or two protective irrigation is recommended for mango and other horticultural crops to conserve the soil moisture due to high temperature and dry weather persisting in long period of time.

##### ***Bhubaneswar (Odisha)***

Heat waves and warm night conditions is prevailing in many districts of Odisha. Agricultural operations in progress are weed management of summer paddy. Sowing of non-paddy crops like pulses, oilseeds, and vegetables. Plant protection of sugarcane. Plant protection of *rabi* vegetables. Harvesting and planting of sugarcane. Intercultural operation and plant protection of *rabi* maize, pulses, oil seeds and spices. Plant protection of cole crops, brinjal, chilli and tomato. Plant protection of marigold, chrysanthemum and rose. Harvesting of potato.

The phenological stages of different crops are tillering to panicle initiation stage of *rabi* rice. Maturity stage of green gram and black gram. Vegetative to flowering stage of maize. Vegetative stage of sugarcane. Pod formation to maturity stage of groundnut. Fruiting to harvesting stage of brinjal, okra and cucurbits. Fruiting to harvesting stage of cauliflower, cabbage, tomato and chilli. Moisture status is optimum moisture for growth of non-paddy and vegetable crops in most of the districts of Odisha.

### ***Chatha (Jammu)***

Mainly clear to cloudy weather prevailed during this week with 62.0 mm rainfall in three rainy days. Both maximum and minimum temperatures remained below normal by 2 to 5 °C and ranged from 27.6 to 33.6 °C and 14.0 to 20.5 °C. Agricultural operations in progress are Sowing summer pulses like moong and mash crop is in progress. Sowing of summer fodder is in progress. Harvesting and threshing of mustard and chickpea crop is in progress. Transplanting of *kharif* cucurbits and sowing of Okra. Plant protection measures in field pea. Uprooting of off type plant from wheat crop grown for seed purpose. The phenological stages of different crops are Emergence in summer pulses and summer fodder. Establishment/germination in vegetable crops. Physiological maturity in mustard, chickpea. Physiological maturity in early sown wheat. Normal sown wheat is at hard dough. Very late sown wheat is at milking stage. Moisture status is adequate.

### ***Dapoli (Konkan region)***

During last week 0.0 mm rainfall was recorded at Dapoli center. The maximum and minimum temperature ranged from 34.2 to 36.7 and 10.4 to 14.5°C respectively. Agricultural operations in progress are protective spray at inflorescence to fruit setting stages in mango and cashewnut. Irrigation to coconut, arecanut & new fruit crop orchard. Fertilizer application to arecanut, vegetable crop, sapota. Harvesting of black pepper, turmeric in ongoing. Phenological stages of different crops are *rabi* vegetable crops in flowering to fruiting. Mango and cashewnut inflorescence to fruit setting. *Rabi* pulses in to pod filling stage flowering. Moisture status is medium.

### ***Faizabad (Eastern Uttar Pradesh)***

Dry weather in all the region. Average temperate is above the normal. Agricultural operations in progress are harvesting and threshing of wheat, chickpea, pigeon pea and other *rabi* crops. Irrigation in sugarcane, maize, onion and zaid vegetables. Phenological stages of different crops are wheat, lentil, chickpea and pigeon pea just harvested. Sugarcane, mung, urd are in vegetative stage. Soil moisture is below the normal. Surface mulching, intercultural operations are advised as a contingency measure.

### ***Hisar (Haryana)***

Variable weather condition was observed, rainfall 0.0 mm, wind direction north easterly to westerly and maximum (daytime) temperature variation from 34.0 to 38.2 °C and subsequence three days (18 to 20 April 2024) cloudy weather condition was observed.

Agricultural operations in progress are land preparation for the cotton crop in the region, wheat crop prepared for harvesting and threshing and marketing the grain in the grain market. harvested crop making the bundle at field level for prevent from the wind. Phenological stages of different crops are *rabi* crops on physiological maturity. Moisture status is deficit condition. Pre-sowing irrigation application in the cotton field for the cotton sowing preparation are advised as a contingency measure.

### ***Jorhat (Assam)***

The weather during the last week was cloudy. The daily average maximum temperature was 31.2 °C which was 4.1 °C below normal and the average daily minimum temperature was 17.6 °C which was 0.2 °C above normal for the week. Agricultural operations in progress are: nursey sowing of *ahu* rice, land preparation of maize, intercultural operations in boro paddy, weeding in summer pulses viz. green gram and black gram, weeding in colocasia crop field, sowing of corms of ginger and turmeric. Phenological stages of different crops are: boro paddy: booting stage, *Ahu* paddy: nursery bed preparation/vegetative stage, sugarcane: maturity stage, green gram and black gram: vegetative stage, maize: land preparation, Chilly: fruiting stage. Moisture status is sufficient for healthy crop growth as light to moderate level of rainfall received during the past week. However, need based irrigation may be applied depending upon the current crop status.

### ***Kanpur (Western Uttar Pradesh)***

No rainfall was observed. Maximum and minimum temperatures may be expected near to its normal. Agricultural operations in progress are in Wheat: Harvesting and threshing. Barley: harvesting and threshing. *Zaid* maize: weeding. Pigeon pea: harvesting and threshing. *Zaid* urd: weeding and irrigation. *Zaid* moong: weeding. Brinjal/chilies: plucking, marketing and spray insecticide. Leafy vegetable: cutting, marketing and irrigation. Animal: fresh water used for drinking 4 or 5 time and bathing should be taken up at morning and protect from common diseases. Phenological stages of different crops are wheat: maturity, barley: maturity, pigeon pea: maturity, *zaid* maize: knee high, *zaid* urd and moong: vegetative, vegetables: flowering and fruiting. moisture status is dry.

### ***Kovilpatti (Tamil Nadu)***

Appreciable rise in maximum and minimum temperature (2.1 °C to 4.0 °C) in isolated places over Tamil Nadu. Agricultural operations in progress are Spraying of pesticide and fertilizer application, irrigating the crops are in progress. Phenological stages of different crops are chillies are Paddy is in vegetative to panicle initiation stage. Banana is in vegetative to bunch development stage. Pulses is in vegetative stage. Soil moisture is below field capacity. Farmers are requested to practice propping to avoid lodging. Farmers are requested to practice summer ploughing by utilizing previous week rainfall. Avoid excessive use of nitrogen and control irrigation by alternate wetting and drying to control Brown plant leafhopper. To avoid heat stress, foliar spray of 1% KCl to be practiced based on local weather condition.

### ***Ludhiana (Punjab)***

The maximum temperature during the week ranged between 32.8-35.8°C and minimum temperature ranged between 16.6-25.6 °C. Agricultural operations in progress are harvesting of wheat is in progress. Phenological stages of different crops are wheat at harvest maturity stage. Moisture status is normal.

### ***Mohanpur (West Bengal)***

Weather conditions during the 16th week at Mohanpur, West Bengal are maximum temperature: 39.0 to 41.7 °C, minimum temperature: 24.8 to 27.5 °C and total weekly rainfall: 0.0 mm. Agricultural operations in progress are irrigation in vegetables and green gram. Green gram-early vegetative stage, tomato and chili- fruiting stage. Phenological stages of different crops are green gram-early vegetative stage, tomato and chili- fruiting stage. Minimum temperature of the past meteorological week was +2.25 °C above normal while maximum temperature was found +4.2 °C above normal indicating severe heat wave prevailing in this region. Frequent irrigation in vegetables is advised as a contingency measure.

### ***Parbhani (Marathwada region)***

At Parbhani centre, during this 16 week no rainfall was recorded. The Maximum temperature was range from 39.8 to 41.0 °C and minimum temperature range from 23.6 to 26.0 °C. Agricultural operations in progress are plant protection measures are being undertaken in summer crops based on need or attack of pests. Intercultural operation carried out in summer crops. Ploughing in harvested fields underway. Phenological stages of different crops are turmeric is at harvesting stage to processing. Summer groundnut is at pegging to pod development. Vegetable crops are at fruiting stage and fruit crops are in development stage. sugarcane crop is in grand growth stage. Citrus is at harvesting stage. Summer sesame is at capsule development stage. Moisture status is adequate moisture. Contingency measure: Mechanical support should be given to newly planted citrus plants. For moisture conservation and maintenance of soil temperature mulching should be done in newly planted citrus orchard. Give shed to newly planted horticultural crops using shed net to protect them from the intensity of sunlight.

### ***Ranchi (Jharkhand)***

The sky is Cloudy and the maximum temperature increased and minimum temperature decreased from the normal. Daily maximum and minimum temperature ranged from 34.5 to 39.5°C and 16.8 to 22.6 °C respectively. Weekly maximum and minimum temperature were 37.4 and 20.1°C against their normal value of 35.9 and 19.9 °C, respectively. Agricultural operations in progress are irrigation in groundnut and sugarcane, sowing of vegetables like pumpkin, cucumber, bottle gourd, bitter gourd, ridge gourd, etc, in the summer, sowing and intercultural operation in green gram, cowpea and maize, repair bunds and maintain water in the rice field to stagnate water, weeding operation is in progress. The phenological stages of different crops are rice is in panicle initiation to the flowering stage, maize is in sowing to

cobbing, green gram and cowpea vegetative to podding stage and summer vegetables are in vegetative to fruiting stage. Moisture status is sufficient.

### ***Samastipur (Bihar)***

Mainly dry weather prevailed in all over Bihar. Maximum temperature ranged from 36.4 to 40.0°C and the minimum from 18.5 to 22.5°C. Agricultural operations in progress are sowing of summer moong and urd crops in the terminal phase. Harvesting of Rabi Maize, Gram, Wheat and Pigeon pea. Phenological stages of different crops are Summer green gram, black gram, onion, sunflower, Maize, sugarcane and summer vegetables at their vegetative stage some early sown vegetable like lady's finger, pumpkin, etc. comes to market as fresh harvest. Moisture status is below normal. Heat wave like condition prevailed during 3 to 4 days of week. Irrigation in vegetables and other standing were suggested. Farmers have been advised to provide plenty of fresh water to the animals and keep the animals in shaded places. spraying of water in the litchi and mango orchards are suggested to maintain the humidity under dry spell condition.

### ***Vijaya Pura (North Interior Karnataka)***

Cloudy condition with light rainfall prevailed during last week in the North Interior Karnataka. Agricultural operations in progress are summer ploughing. Harvesting of all rabi crops. Moisture status is low. Heat wave is running, provide irrigation to crops and practice mulching.

## **Weather during 11 April – 17 April, 2024**

### **Significant Weather Features**

- Heat wave conditions (2nd spell of Heat wave during this season) with day maximum temperature range of 40-44°C prevailed in isolated pockets of Odisha during 15th-17th; Gangetic West Bengal, Saurashtra & Kutch & north Konkan on 16th & 17th April, 2024. Many parts of Gujarat and Maharashtra states, states in east coast of India and parts of Southeast Peninsular India including Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana and interior Tamil Nadu also experienced higher day maximum temperature towards 2nd half of the week at the range of 40-43°C with above normal by 1-4°C.
- Due to movement of an active Western Disturbance (WD) across north India and formation of an Induced Low-pressure area over Rajasthan during 13-15 April, light to moderate rainfall/snowfall with isolated thunderstorm & lightning observed at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand. Isolated light to moderate rainfall and thunderstorms activities also reported over adjoining plains of northwest India during the same period. Due to supporting wind convergence at lower which was seen from south Peninsular India to central India during most dates in the week, light to moderate rainfall with isolated thunderstorm & lightning observed over Madhya Pradesh, North Interior Karnataka and Vidarbha and Chhattisgarh during some dates in the week.
- Thunder squall/gusty winds also reported at isolated places over Madhya Pradesh during 11th-15th April, over Vidarbha on 12th & 13th; over Chhattisgarh on 11th & 12th; over Marathwada on 13th April. Hailstorm reported at isolated places over Madhya Pradesh during 11th-15th April, over Vidarbha on 11th, 12th, 16th & 17th; over Chhattisgarh on 11th & 12th; over Marathwada on 13th; over West Uttar Pradesh 14th; Himachal Pradesh on 17th April.
- Temperature Scenario: The highest maximum temperature of 44.0°C had been recorded at Amreli (Saurashtra & Kutch) on 17th April 2024 and the lowest minimum temperature of 15.5°C had been recorded at Sagar (East Madhya Pradesh) on 12th April 2024 over the plains of the country during the week

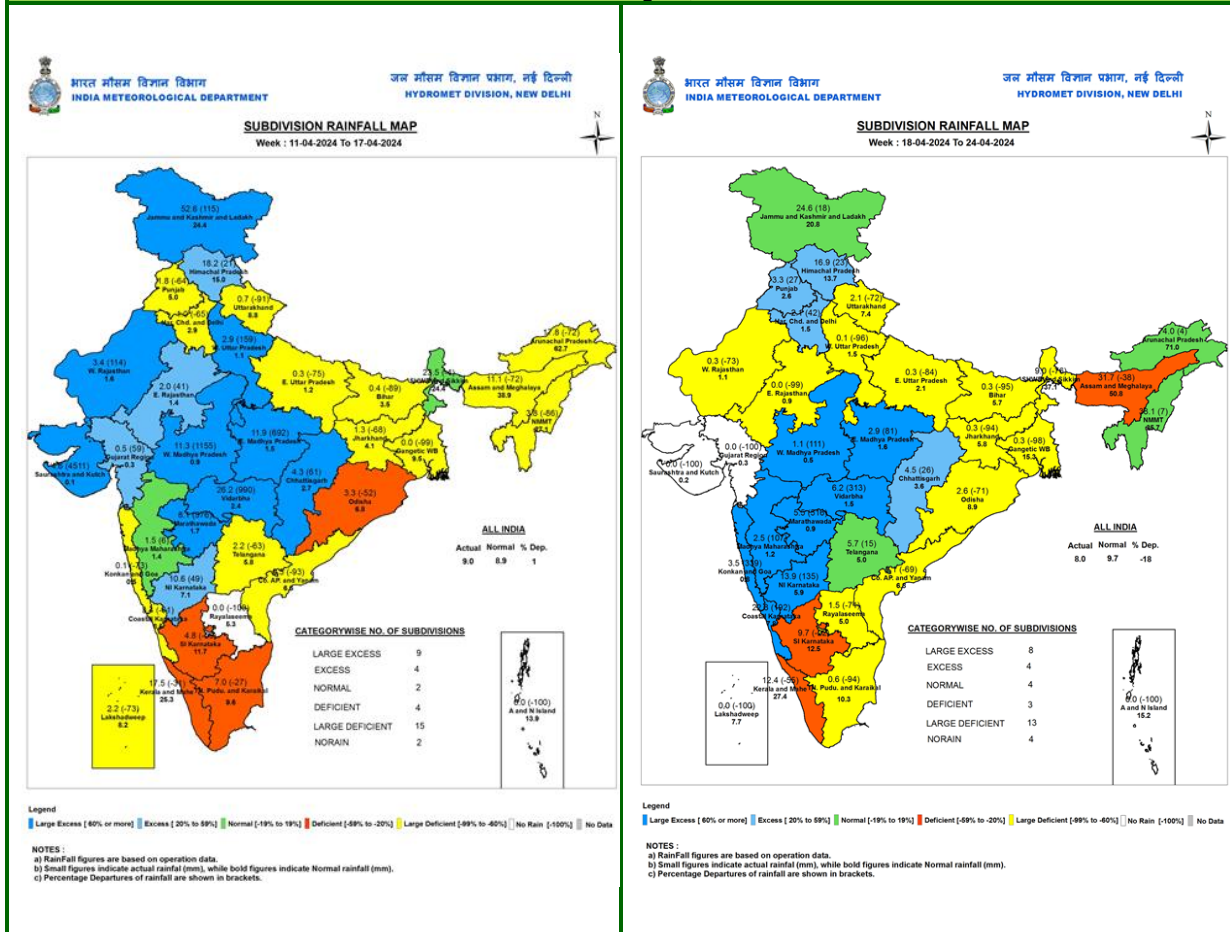
**METEOROLOGICAL SUB-DIVISION WISE REALISED MAXIMUM TEMPERATURE-2024**

<b>S. N o.</b>	<b>MET.SUB-DIVISIONS</b>	<b>11 APR</b>	<b>12 APR</b>	<b>13 APR</b>	<b>14 APR</b>	<b>15 APR</b>	<b>16 APR</b>	<b>17 APR</b>
1	ANDAMAN & NICO. ISLANDS	N	N	N	N	N	N	N
2	ARUNACHAL PRADESH	N	N	N	ABN	N	N	N
3	ASSAM & MEGHALAYA	N	N	N	N	AN	N	N
4	NAGA.MANLMI ZO.& TRIPURA	AN	N	N	N	AN	N	N
5	SUB-HIM.W. BENGAL & SIKKIM	N	N	N	N	N	N	N
6	GANGETIC WEST BENGAL	N	N	N	N	N	AAN	AAN
7	ODISHA	MBN	N	N	N	N	AN	N
8	JHARKHAND	N	N	N	N	N	N	N
9	BIHAR	N	N	N	N	N	AN	N
10	EAST UTTAR PRADESH	N	N	N	N	N	N	N
11	WEST UTTAR PRADESH	N	N	N	N	N	N	N
12	UTTARAKHAN D	N	N	N	N	N	N	N
13	HARYANA, CHANDIGARH & DELHI	N	AN	N	ABN	N	N	N
14	PUNJAB	N	AN	N	ABN	N	N	N
15	HIMACHAL PRADESH	N	AN	N	MBN	N	N	N
16	JAMMU & KASHMIR AND LADAKH	N	AN	N	N	N	N	N
17	WEST RAJASTHAN	N	N	N	N	N	N	N
18	EAST RAJASTHAN	N	N	N	N	N	N	N
19	WEST MADHYA PRADESH	N	BN	N	BN	N	N	N
20	EAST MADHYA PRADESH	N	N	N	BN	N	N	N
21	GUJARAT REGION	N	N	N	N	N	N	N
22	SAURASTRA & KUTCH	N	N	N	N	N	N	N
23	KONKAN & GOA	N	N	N	N	AN	AN	AN
24	MADHYA MAHARASHTR A	N	N	N	N	N	AN	AN
25	MARATHAWAD A	N	BN	N	N	N	N	N
26	VIDARBHA	MBN	MBN	MBN	N	N	N	N
27	CHHATTISGAR H	MBN	N	N	N	N	N	N
28	COASTAL ANDHRA PR. & YANAM	N	N	N	N	N	N	N
29	TELANGANA	N	N	N	N	N	N	N
30	RAYALASEEMA	N	N	N	N	N	N	N
31	TAMIL. PUDU. & KARAIKAL	N	N	N	N	N	N	N
32	COASTAL KARNATAKA	N	N	N	N	N	N	N

33	NORTH INTERIOR KARNATAKA	N	N	N	N	N	AN	N
34	SOUTH INTERIOR KARNATAKA	N	N	N	N	AN	AN	N
35	KERALA & MAHE	N	N	N	N	N	N	N
36	LAKSHADWEEP	N	N	N	N	N	N	N
<b>Highest Maximum Temperature (°C)</b>		<b>42.2</b>	<b>42.2</b>	<b>41.0</b>	<b>41.3</b>	<b>43.0</b>	<b>43.6</b>	<b>44.0</b>
Station(s) observed LMT		BAR MER	BARMER	MALEGAON	KURNOOL	NANDYAL	BARIPADA	AMRELI
Station(s) lies in Met-Subdivision(s)		WEST RAJ.	WEST RAJ.	MADHYA MAHA	RAYALASE EMA	RAYALASE EMA	ODISHA	SAURASTRA & KUTCH
<b>Lowest Minimum Temperature (°C)</b>		<b>16.4</b>	<b>15.5</b>	<b>17.3</b>	<b>17.4</b>	<b>19.0</b>	<b>16.0</b>	<b>17.2</b>
Station(s) observed HMT		MEERUT	SAGAR	SIKAR	AMRITSAR	BULANDSH AHR	AMRITSAR	KARNAL
Station(s) lies in Met-Subdivision(s)		WEST U.P.	EAST M.P.	EAST RAJ.	PUNJAB	WEST U.P.	PUNJAB	HARYANA
LEGENDS:								
N- NORMAL LONG PERIOD AVERAGE $\pm 1^{\circ}\text{C}$		BN - BELOW NORMAL (N-2) $^{\circ}\text{C}$		AN -ABOVE NORMAL (N+2) $^{\circ}\text{C}$				
ABN- APPRECIABLY BELOW NORMAL (3.1 to 4.9) $^{\circ}\text{C}$ BELOW NORMAL				AAN- APPRECIABLY ABOVE NORMAL (3.1 to 4.9) $^{\circ}\text{C}$ ABOVE NORMAL				
MBN MARKEDLY BELOW NORMAL 5 $^{\circ}\text{C}$ OR MORE BELOW NORMAL				MAN- MARKEDLY ABOVE NORMAL 5 $^{\circ}\text{C}$ OR MORE ABOVE NORMAL				
$\hat{\delta}^+$ Heat Wave (Maximum temperature departure from Normal +4.5 $^{\circ}\text{C}$ to +6.4 $^{\circ}\text{C}$ )				$\hat{\delta}^{++}$ Severe Heat Wave (Maximum temperature departure from Normal $\geq$ +6.5 $^{\circ}\text{C}$ )				



## Realized Rainfall (11<sup>th</sup> to 24<sup>th</sup> April, 2024)



- Normal or above normal rainfall occurred in both the weeks over Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Madhya Pradesh, Chhattisgarh, Madhya Maharashtra, Marathwada, Vidarbha and North Interior Karnataka.
- Normal or above normal rainfall occurred in either of the two weeks over Punjab, Haryana Chandigarh & Delhi, Rajasthan, West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland Manipur Mizoram & Tripura (NMMT), Gujarat State, Konkan & Goa, Telangana and Coastal Karnataka.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the States & UTs.

### Weekly rainfall departure (%) at different IMD subdivisions (2024)

During the week 16 sub-divisions, out of 36 meteorological sub-divisions, rainfall was large excess, excess, normal, deficient and large deficient in 06, 05, 10, 09, and 06 sub-division(s), respectively. (Table 1).

S NO.	MET. SUBDIVISION	Week End 6-3- 2024	Week End 13-3- 2024	Week End 20-3- 2024	Week End 27-3- 2024	Week End 3-4- 2024	Week End 10-4- 2024	Week End 17-4- 2024	Week End 24-4- 2024
1	A & N ISLAND	-92	-97	-99	-99	-93	-94	-95	-96
2	ARUNACHAL PRADESH	-45	-61	-62	-29	-20	-22	-32	-25
3	ASSAM & MEGHALAYA	-86	-93	-78	-26	-20	-33	-42	-41
4	N M M T	-98	-99	-93	-46	-37	-48	-55	-42
5	SHWB & SIKKIM	-72	-77	-38	77	36	11	9	-12
6	GANGETIC WEST BENGAL	37	-52	96	98	70	30	4	-20
7	ODISHA	-72	-61	212	186	121	91	65	38
8	JHARKHAND	172	19	135	151	120	88	60	30
9	BIHAR	62	-19	41	379	259	186	119	59
10	EAST UTTAR PRADESH	463	181	119	98	77	55	39	17
11	WEST UTTAR PRADESH	439	169	121	93	73	51	60	45
12	UTTARAKHAND	321	123	68	36	25	5	-6	-12
13	HAR. CHD & DELHI	192	55	27	10	2	-12	-19	-15
14	PUNJAB	147	27	-8	-26	-5	-18	-25	-21
15	HIMACHAL PRADESH	288	95	40	6	20	5	7	8
16	JAMMU & KASHMIR AND LADAKH	134	12	-17	-35	-21	-30	-14	-11
17	WEST RAJASTHAN	-13	-48	-61	-67	-70	-68	-31	-36
18	EAST RAJASTHAN	211	84	28	5	-13	-22	-9	-19
19	WEST MADHYA PRADESH	430	145	64	46	38	50	208	201
20	EAST MADHYA PRADESH	175	25	81	66	61	78	145	138
21	GUJARAT REGION	3726	1813	1813	1175	856	665	438	291
22	SAURASHTRA & KUTCH	2850	1375	1375	1375	883	883	1790	1160
23	KONKAN & GOA	-98	-98	-98	-97	-95	-95	-91	2
24	MADHYA MAHARASHTRA	-57	-74	-81	-87	-88	-90	-69	-42
25	MARATHWADA	-99	-99	-88	-87	-80	-68	4	44
26	VIDARBHA	-87	-94	38	21	21	93	212	222
27	CHHATTISGARH	-46	-65	289	258	199	200	175	146
28	COASTAL AP and YANAM	-99	-75	-41	-37	-47	-57	-67	-67
29	TELANGANA	-98	-99	-41	-63	-69	-69	-67	-54
30	RAYALASEEMA	-100	-100	-100	-99	-99	-99	-99	-94
31	TN PUDU and KARAICAL	-100	-100	-99	-95	-93	-94	-78	-81

32	COASTAL KARNATAKA	-100	-100	-100	-76	-81	-87	-78	-12
33	N. I. KARNATAKA	-100	-100	-87	-86	-89	-91	-44	-4
34	S. I. KARNATAKA	-100	-100	-100	-98	-98	-97	-84	-67
35	KERALA & MAHE	-99	-95	-92	-80	-64	-71	-59	-58
36	LAKSHADWEEP	-100	-100	-100	-99	-57	-66	-68	-74

**LEGEND:**

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