

# National Agromet Advisory Service Bulletin

**Wednesday 16<sup>th</sup> April 2014**  
**(For the period 16<sup>th</sup> to 19<sup>th</sup> April 2014)**



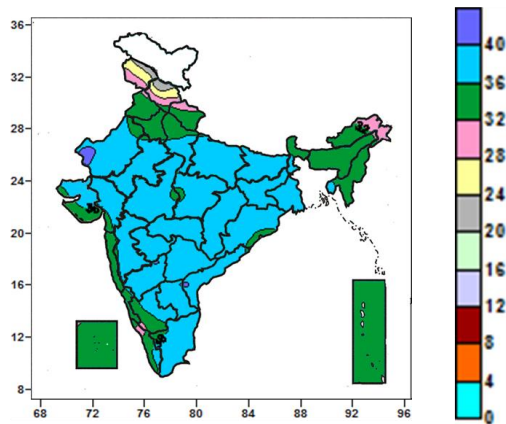
**Issued by**

**National Agrometeorological Advisory Service Centre,  
Agricultural Meteorology Division,  
India Meteorological Department, Shivajinagar, Pune.**



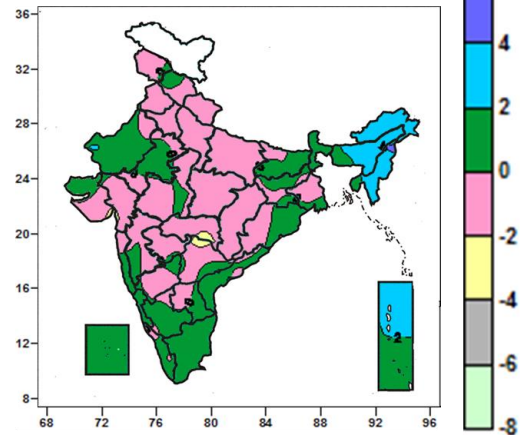
## Contour maps for Mean Maximum and Minimum Temperature and their anomaly for the week ending on 15.04.2014

**Actual Mean Maximum Temperature ( $^{\circ}\text{C}$ ) in India for the week ending 15.04.2014**



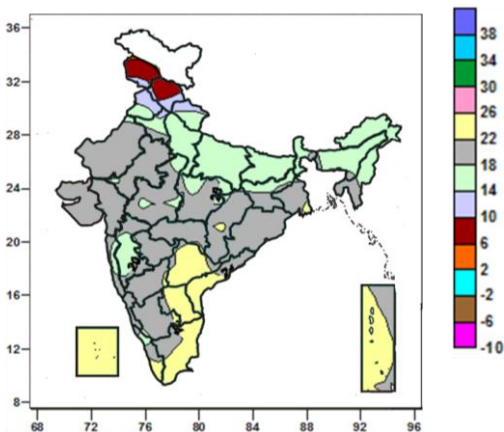
- 40 to 44 $^{\circ}\text{C}$  over some parts of West Rajasthan.
- 32 to 40 $^{\circ}\text{C}$  over all parts of country except many parts of Jammu & Kashmir, Himachal Pradesh, some parts of Uttarakhand, Arunachal Pradesh, South Interior Karnataka, Kerala, West Rajasthan.
- 24 to 32 $^{\circ}\text{C}$  over many parts of Jammu & Kashmir, Himachal Pradesh, some parts of Uttarakhand, Arunachal Pradesh, South Interior Karnataka, Kerala.
- 20 to 24 $^{\circ}\text{C}$  over some parts of Jammu & Kashmir, Himachal Pradesh.

**Mean Maximum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 15.04.2014**



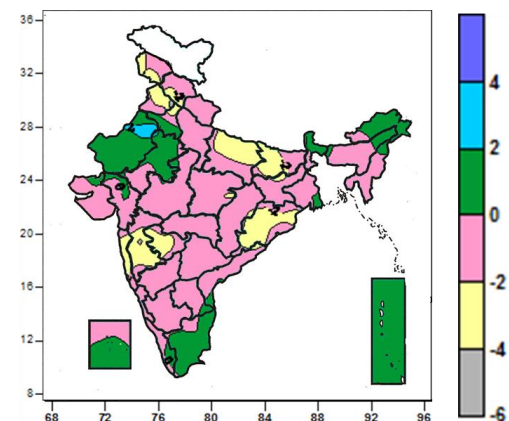
- 4 to 6 $^{\circ}\text{C}$  over some parts of Nagaland.
- 2 to 4 $^{\circ}\text{C}$  over many parts of North East India, some parts of West Rajasthan, Andaman & Nicobar Islands.
- -2 to 2 $^{\circ}\text{C}$  over all parts of country except many parts of North East India, some parts of West Rajasthan, Vidarbha, Telangana, Andaman & Nicobar Islands.
- -4 to -2 $^{\circ}\text{C}$  over some parts of Vidarbha, Telangana.

**Actual Mean Minimum Temperature ( $^{\circ}\text{C}$ ) in India for the week ending 15.04.2014**



- 6 to 10 $^{\circ}\text{C}$  over many parts of Jammu & Kashmir, Himachal Pradesh.
- 10 to 14 $^{\circ}\text{C}$  over many parts of Punjab, some parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand.
- 14 to 22 $^{\circ}\text{C}$  over all parts of country except many parts of Jammu & Kashmir, Himachal Pradesh, Punjab, Andhra Pradesh, Tamil Nadu, Kerala, Lakshadweep, Andaman & Nicobar Islands, some parts of Uttarakhand, Gangetic West Bengal, Chhattisgarh, Madhya Maharashtra, Interior Karnataka.
- 22 to 26 $^{\circ}\text{C}$  over many parts of Andhra Pradesh, Tamil Nadu, Kerala, Lakshadweep, Andaman & Nicobar Islands, some parts of Gangetic West Bengal, Chhattisgarh, Madhya Maharashtra, Interior Karnataka.

**Mean Minimum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 15.04.2014**

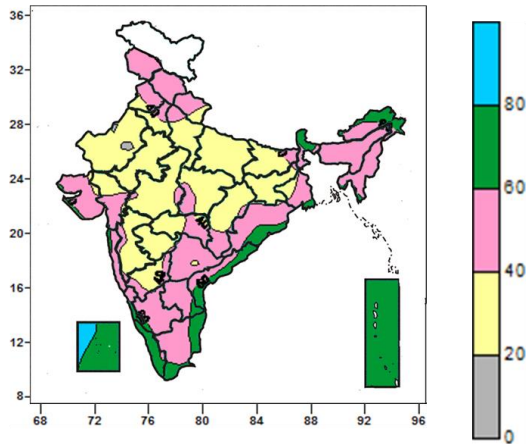


- -4 to -2 $^{\circ}\text{C}$  over many parts of Punjab, East Uttar Pradesh, Bihar, Odisha, Konkan & Goa, Madhya Maharashtra, Marathwada, some parts of Jammu & Kashmir, Himachal Pradesh, Haryana, Jharkhand, Chhattisgarh, East Madhya Pradesh, West Rajasthan.
- -2 to 2 $^{\circ}\text{C}$  over all parts of country except Punjab, East Uttar Pradesh, Bihar, Odisha, Konkan & Goa, Madhya Maharashtra, Marathwada, some parts of Jammu & Kashmir, Himachal Pradesh, Haryana, Jharkhand, Chhattisgarh, East Madhya Pradesh, West Rajasthan.
- 2 to 4 $^{\circ}\text{C}$  over some parts of West Rajasthan.

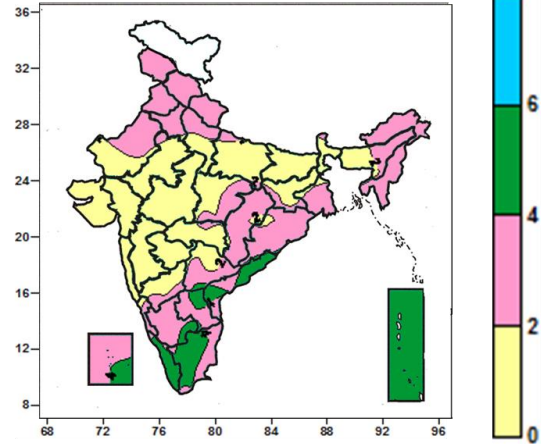


## Contour maps for Relative Humidity, Cloud amount and Wind speed for the week ending on 15.04.2014

**Relative Humidity (%) over India for the week ending 15.04.2014**



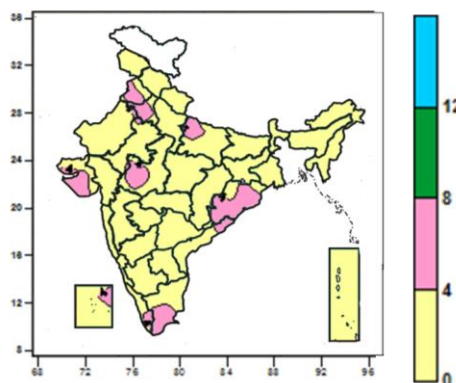
**Cloud amount (okta) over India for the week ending 15.04.2014**



- 80 to 100% over some parts of Lakshadweep Islands.
- 60 to 80% over many parts of Sub-Himalayan West Bengal & Sikkim, Kerala, Lakshadweep, Andaman & Nicobar Islands, Some parts of Gangetic West Bengal, Arunachal Pradesh, Coastal Odisha, Coastal Andhra Pradesh, Rayalaseema, Coastal Tamil Nadu, Coastal & South Interior Karnataka.
- 40 to 60% over many parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Gangetic West Bengal, North East India, Odisha, Telangana, Rayalaseema, Tamil Nadu, South Interior Karnataka, Konkan & Goa, Saurashtra & Kutch, Gujarat, some parts of Haryana, West Uttar Pradesh, Bihar, Sub-Himalayan West Bengal, West Bengal, Central India, Madhya Maharashtra, Vidarbha, North Interior Karnataka.
- 0 to 40% over many parts of Haryana, Delhi, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Central India, Vidarbha, Madhya Maharashtra, Marathwada, North Interior Karnataka, some parts of Punjab, Uttarkhand, Gangetic West Bengal, Telangana, Gujarat, Saurashtra & Kutch.

- 4 to 6 okta over many parts of, Tamil Nadu, Kerala, Andaman & Nicobar Islands, some parts of Andhra Pradesh, South Interior Karnataka, Lakshadweep Islands.
- 0 to 4 okta over entire country except many parts of, Tamil Nadu, Kerala, Andaman & Nicobar Islands, some parts of Andhr Pradesh, South Interior Karnataka, Lakshadweep Islands.

**Wind speed (knots) over India for the week ending 15.04.2014**



- 4 to 8 knots over many parts of Punjab, Haryana, Delhi, Odisha, Saurashtra & Kutch, some parts of East Uttar Pradesh, Rajasthan, West Madhya Pradesh, Coastal Andhra Pradesh, Kerala, Tamil Nadu and Lakshadweep Islands.
- 0 to 4 knots over entire country except many parts of Punjab, Haryana, Delhi, Odisha, Saurashtra & Kutch, some parts of East Uttar Pradesh, Rajasthan, West Madhya Pradesh, Coastal Andhra Pradesh, Kerala, Tamil Nadu and Lakshadweep Islands.

## Weather Forecast

### Weather Forecast for next 3 days (upto 0830 hours IST of 19<sup>th</sup> April, 2014)

- Rain/thundershowers would occur at many places over Jammu & Kashmir and Himachal Pradesh during next 3 days.
- Rain/thundershowers would occur at isolated places over Uttarakhand and Punjab during next 24 hours, over Haryana & Delhi during next 48 hours and at a few places thereafter.
- Rain/thundershowers would occur at isolated places over northeastern states on 16<sup>th</sup>, 18<sup>th</sup> and at a few places on 17<sup>th</sup> April.
- Rain/thundershowers would occur at isolated places over West Bengal, Odisha, Chhattisgarh, west Rajasthan, Tamil Nadu, Lakshadweep and Andaman & Nicobar Island during the period.
- Mainly dry/dry weather would prevail over west Uttar Pradesh, east Rajasthan, west Madhya Pradesh and Jharkhand during next 24 hours, over east Uttar Pradesh during next 48 hours and rain/thundershowers would occur at isolated places thereafter.
- Mainly dry/dry weather would prevail over Bihar, east Madhya Pradesh, Gujarat, Coastal Karnataka, North Interior Karnataka, coastal Andhra Pradesh, Telangana, Rayalaseema, Maharashtra and Lakshadweep during the period.
- Rain/thundershowers would occur at a few places over South Interior Karnataka and Kerala during next 24 hours and at isolated places thereafter.
- The maximum temperatures would fall by 2-3°C over northwest and adjoining central India from 17th onwards.

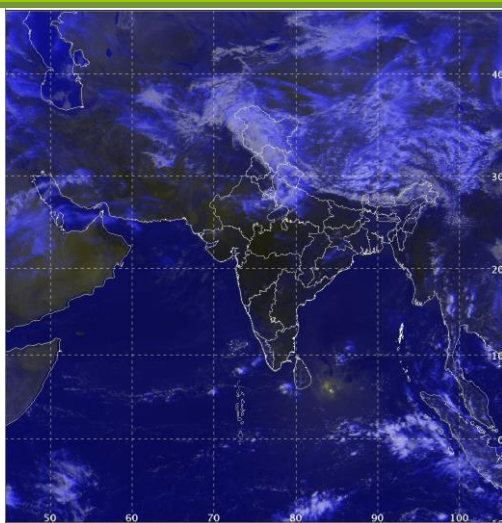
### Weather Warning during next 3 days

- **16 April (Day 1):** Moderate thundersquall would occur at isolated places over Jammu division of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana & Delhi, west Uttar Pradesh and north Rajasthan.
- **17 April (Day 2):** Moderate thundersquall would occur at isolated places over Jammu division of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana & Delhi, west Uttar Pradesh, north Rajasthan, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- **18 April (Day 3):** Moderate thundersquall would occur at isolated places over Jammu division of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana & Delhi, west Uttar Pradesh, north Rajasthan.

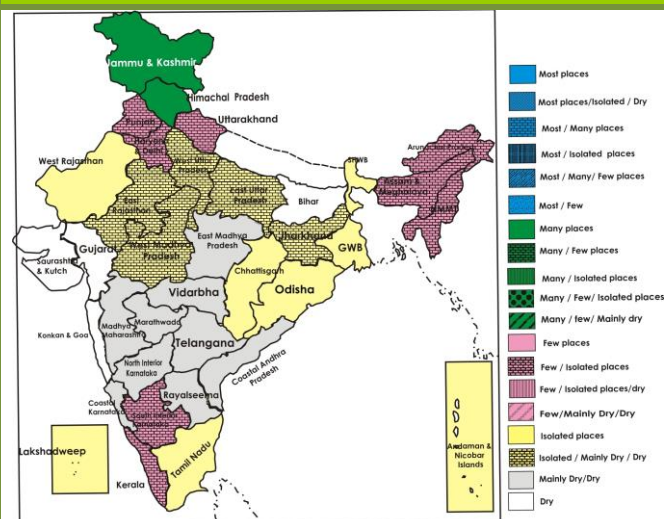
### Weather Outlook for subsequent 4 days from 19<sup>th</sup> April to 23<sup>rd</sup> April, 2014.

- Rain/thundershowers would occur at many places over western Himalayan region and at a few places over adjoining northwest India on 19<sup>th</sup> and decrease thereafter.
- Rain/thundershowers would occur at isolated places over northeastern states, Odisha, Chhattisgarh and south peninsular India.
- Weather would be mainly dry over rest of the country.

### Satellite image dated 16.04.2014, 0600 UTC



### Weather Forecast Map (Valid upto 0830 hours of 19<sup>th</sup> April, 2014)



## Salient Advisories

- As rain/ thundershowers would occur at many places over **Jammu & Kashmir** and **Himachal Pradesh** during the period, postpone irrigation, application of fertilizers and plant protection measures in standing crops. Postpone harvesting of crops and keep harvested produce at safe places.
- As moderate thunder squall would occur at isolated places over Jammu division of **Jammu & Kashmir, Himachal Pradesh, west Uttar Pradesh, Punjab, Haryana & Delhi** and **north Rajasthan** during the period, provide mechanical support to young fruit plants, vegetables and propping up in sugarcane.
- As moderate thunder squall would occur at isolated places over **Assam, Meghalaya, Nagaland, Manipur, Mizoram** and **Tripura** on 17<sup>th</sup> April, provide mechanical support to banana, young fruit plants and vegetables.
- As mainly dry weather is prevailing in Marathwada in **Maharashtra**, apply irrigation to summer groundnut, sugarcane, orchard crops like banana, pomegranate, fig and vegetable crops. In **Madhya Maharashtra** and **Marathwada**, as prevailing day temperature is around 38- 40<sup>o</sup>C, apply mulch of crop residues and other plant waste products in the orchards and sugarcane trash in sugarcane. Cover banana bunch with dried banana leaves or paper/ gunny bags to protect from scorching sun.
- As no significant rainfall is expected, provide irrigation to late sown maize to avoid water stress at flowering stage in Kurnool district in Scarce Rainfall Zone of **Andhra Pradesh**.

## Detailed Zonewise Agromet Advisories

### NORTH INDIA [Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Delhi, Uttar Pradesh & Rajasthan]



**Wheat**



**Sugarcane**



**Peas**



**Onion**

- **Realised Rainfall:** Significant rainfall occurred in Badgam, Ganderbal, Kupwara and Srinagar districts of Jammu & Kashmir and Kinnaur district of Himachal Pradesh. Weather remained mainly dry/dry over rest parts of the region.
- **Weather Forecast:** Rain/thundershowers would occur at many places over Jammu & Kashmir and Himachal Pradesh during next 3 days. Rain/thundershowers would occur at isolated places over Uttarakhand and Punjab during next 24 hours, over Haryana & Delhi during next 48 hours and at a few places thereafter. Rain/thundershowers would occur at isolated places over west Rajasthan during the period. Mainly dry/dry weather would prevail over west Uttar Pradesh, east Rajasthan during next 24 hours, over east Uttar Pradesh during next 48 hours and at isolated places thereafter.  
The maximum temperatures would fall by 2-3<sup>o</sup>C over northwest India from 17<sup>th</sup> onwards.
- **Weather Warning:** Moderate thundersquall would occur at isolated places over Jammu division of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana & Delhi, west Uttar Pradesh and north Rajasthan on 16<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> April.
- **Weather Outlook:** Rain/thundershowers would occur at many places over western Himalayan region and at a few places over adjoining northwest India on 19<sup>th</sup> April and decrease thereafter.
- **Advisories:**
  - **Jammu & Kashmir:**
    - As rain/ thundershowers would occur at many places over Jammu & Kashmir during the period, postpone irrigation, application of fertilizers and plant protection measures in standing crops. Postpone harvesting of crops and keep harvested produce at safe places.
    - As moderate thunder squall would occur at isolated places over Jammu division of Jammu & Kashmir during the period, provide mechanical support to young fruit plants and vegetables.
    - Taking advantage of likely occurrence of rainfall, undertake nursery bed preparation of rice in Valley Temperate Zone of Jammu & Kashmir.
    - Due to cloudy and humid weather, there is chance of attack of thrips and pod borer in gram and lentil in Sub-Tropical Zone of Jammu & Kashmir; spray Mancozeb @ 2 g/litre of water after current spells of rain.



- Taking advantage of expected rain, undertake sowing of beans, bottle gourd, bitter gourd, bhindi, radish and planting of potato and turmeric in Intermediate zone of Jammu & Kashmir.
- **Himachal Pradesh:**
  - As rain / thundershowers would occur at many places over Himachal Pradesh during the period, postpone irrigation, application of fertilizers and plant protection measures in standing crops. Postpone harvesting of crops and keep harvested produce at safe places.
  - As moderate thunder squall would occur at isolated places over Himachal Pradesh during the period, provide mechanical support to young fruit plants and vegetables.
  - Continue seedbed preparation for nursery sowing of vegetables like *capsicum* and tomato in Mid-Hills Sub-Humid Zone of Himachal Pradesh utilising the expected rainfall.
  - Due to humid conditions, there may be attack of leaf miner in peas at pod formation stage in Mid-Hills Sub-Humid Zone and Sub-Montane & Low Hills Sub-Tropical Zone of Himachal Pradesh. To manage, spray 100 ml Methyl Demeton per 100 litres of water after current spells of rain.
  - Due to humid weather conditions, there is chance of infestation of Apple Scab at bud stage in apple in Mid-Hills sub-Humid Zone and Sub-Montane & Low Hills Sub-Tropical Zone of Himachal Pradesh. For control, spray Doden @ 200 g per 200 litres of water or Captan @ 600 g per 200 litres of water and at pink bud stage, apply Mancozeb / Entracol @ 600 g per 200 litres of water or Difenconazol @ 30 ml per 200 litres of water after current spells of rain.
  - Due to hot and humid conditions, there are chances of attack of mango hopper in mango. To control the attack, spray Chlorpyrifos 20 EC @ 2 ml per litre of water or Monochrotophos 40 EC @ 15 ml per litre of water after current spells of rain.
- **Uttarakhand:**
  - In Uttarakhand, continue intercultural operation and application of plant protection measures and fertilizers in the standing crops on a non-rainy day. Also undertake harvesting of matured wheat, barley, lentil and French bean in clear weather.
  - Due to increased temperature, there are chances of fruit dropping in litchi trees in Bhabar and Tarai Zone of Uttarakhand. To control, spray Naphthalene Acetic Acid (NAA) 40 PPM on the trees. Also, there are chances of incidence of fruit borer in brinjal, rajmah etc. If incidence is more than 5%, spray Sevin @ 0.2 %.
  - Due to increased temperature conditions there is chance of mango hooper in mango in Sub-tropical Sub-Humid Zone of Uttarakhand. To control Mango hopper (*Amritodus atkinsoni*), spray Dimethoate @ 2 ml /litre of water or Imidacloprid @ 0.3 ml/ litre of water.
- **Punjab, Haryana and Delhi:**
  - As moderate thunder squall would occur at isolated places over Punjab, Haryana & Delhi during the period, provide mechanical support to young fruit plants and vegetables and undertake propping up in sugarcane.
  - Taking advantage of prevailing weather, continue sowing of cucurbits namely round gourd, sponge gourd and other summer vegetables *viz.* okra and cluster bean in Western Zone of Punjab.
  - Continue harvesting of linseed, lentil and gram under clear weather in Sub Montane Undulating Zone of Punjab.
  - In Central Plain Zone of Punjab it is advised to protect fruit trees from strong wind and sun injury. White wash the trunk, provide shelter to young trees and give light and frequent irrigation to young as well as fruit bearing trees.
  - As thundersqualls are expected, keep already harvested crops in safe places properly tied to avoid being carried away by winds in Western Zone of Haryana.
- **Uttar Pradesh:**
  - As moderate thunder squall would occur at isolated places over West Uttar Pradesh during the period, provide mechanical support to young fruit plants, vegetables and undertake propping up in sugarcane.
  - As mainly dry weather is prevailing, apply irrigation in wheat, in late sown barley crop at milk stage, in onion and other vegetable crops in East Uttar Pradesh. Also undertake harvesting of matured mustard, pea and timely sown wheat in Central Plain Zone of Uttar Pradesh.
  - Due to rise in temperature, there are chances of fruit dropping in mango in Central Plain Zone of Uttar Pradesh. For control, spray Nephthalin Acetic Acid @ 20 ml per litre of water or Plenofix @ 5 ml per 10 litres of water. Also due to prevailing hot weather, there are chances of attack of mango hopper in mango. To control the attack, spray Chlorpyrifos 20 E.C. @ 2 ml per litre of water or Monochrotophos 40 E.C. @15 ml per litre of water.
- **Rajasthan:**
  - As moderate thunder squall would occur at isolated places over north Rajasthan during the period, provide mechanical support to young fruit plants and vegetables.
  - As dry weather is prevailing, apply irrigation in the early sown summer cucurbits like bottle gourd, ridge gourd, pumpkin, bitter gourd, tinda etc. in Semi Arid Eastern Plain Zone and also in late sown wheat at milk stage in Sub-Humid and Southern Plain and Aravali Hill Zone of Rajasthan.

- Due to rise in temperature, fruit fly may attack summer vegetables like bitter gourd, ridge gourd, muskmelon and watermelon in Semi Arid Eastern Plain Zone. To control fruit fly, pick up the affected fruits and bury them in soil. Spray Malathion 50 EC or Dimethoate 30 EC @ 1 ml per litre water.
- In view of rise in temperature, leaf curl and mosaic diseases may affect papaya crop in Semi-Arid Eastern Plain Zone of Rajasthan. At the initial appearance of these diseases uproot and burn the affected plants and to check further spread of disease, spray Dimethoate 30 EC or Methyldemeton 25 EC @ 1 ml per litre of water.
- **Animal Husbandry**
  - In Jammu division, Himachal Pradesh, Punjab, Haryana & Delhi, West Uttar Pradesh and north Rajasthan, keep cattle/goats indoors during thundersquall period.
  - Due to prevailing hot weather, give salt and minerals in addition to dry/green fodder to the cattle in Central Plain Zone and Western Plain Zone of Uttar Pradesh.
  - In Punjab, feed intake of cattle will be reduced due to effect of high temperature. Hence, protein level in the feed need to be increased by increasing oilseed cakes by 5-7 per cent.
- **Poultry**
  - Due to prevailing hot weather conditions, give balanced feed to the poultry birds in Central Plain Zone of Uttar Pradesh. Make proper ventilation in poultry sheds and keep the sheds clean. White wash the poultry shed from outside especially the roof. This will help to reflect the sun rays.
- **Floriculture**
  - Undertake nursery preparation for summer flowers and sowing of the seeds of chrysanthemum in Mid-Hills Sub-Humid Zone of Himachal Pradesh utilizing the realized rainfall.

### CENTRAL INDIA [M.P., CHHATTISGARH]



*Wheat*



*Sugarcane*



*Chilli*



*Green Gram*

- **Realised Rainfall:** No significant rainfall occurred over the region.
- **Weather forecast:** Rain/thundershowers would occur at isolated places over Chhattisgarh. Weather would be mainly dry over west Madhya Pradesh during next 24 hours and rain/thundershowers would occur at isolated places thereafter. Weather would be mainly dry over east Madhya Pradesh. The maximum temperatures would fall by 2-3°C over central India adjoining to northwest India from 17<sup>th</sup> onwards.
- **Weather Warning:** Nil.
- **Weather Outlook:** Rain/thundershowers would occur at isolated places over Chhattisgarh. Weather would be mainly dry over rest of the region.
- **Advisories:**
  - **Madhya Pradesh:**
    - As mainly dry weather would prevail, continue harvesting of wheat in Malwa Plateau Zone, Kymore Plateau Zone and Vindhya Plateau Zone and maize in Jhabua Hill Zone of Madhya Pradesh.
    - As mainly dry weather would prevail, harvest wheat and lentil crops in Bundelkhand Zone of Madhya Pradesh.
    - As mainly dry weather would prevail, irrigate summer moong and urad in Kymore Plateau Zone and Jhabua Hill Zone of Madhya Pradesh. Also apply irrigation in mango and guava orchards in Grid Zone of Madhya Pradesh. To stop fruit dropping in mango, spray Planofix solution in Kymore Plateau Zone and Vindhya Plateau Zone of Madhya Pradesh.
    - As mainly dry weather would prevail, apply irrigation in sugarcane and maize in Central Narmada Valley Zone of Madhya Pradesh.
    - Due to prevailing hot weather, there is possibility of attack of red pumpkin beetle and fruit fly in cucurbitaceous crops in Bundelkhand Zone of Madhya Pradesh. Spray Trizophos 40 E.C. @ 2 ml per litre of water.
    - Due to prevailing hot weather, there is possibility of attack of sucking pests in moong & urad in Kymore Plateau Zone of Madhya Pradesh; spray Thiomithaxim @ 0.3 g/litre of water for control.
  - **Chhattisgarh:**

- As mainly dry weather would prevail complete harvesting of matured gram and continue harvesting of wheat, pea and rajma in North Hill Zone of Chhattisgarh. Also dig out tubers like potato, onion and garlic.
- As mainly dry weather would prevail, continue harvesting of wheat, potato and pea in Bastar Plateau Zone of Chhattisgarh.
- As mainly dry weather would prevail, apply irrigation to summer rice, maize, sugarcane, summer vegetables and mango and litchi orchards in North Hill Zone of Chhattisgarh.
- Due to prevailing hot weather, there is possibility of attack of stem borer in summer rice in North Hill Zone of Chhattisgarh; spray Carbofuran @ 33 kg/ha for control.
- **Animal Husbandry**
  - Vaccinate cattle for Anthrax and for foot and mouth disease in Kymore Plateau Zone of Madhya Pradesh during the period.
  - Vaccinate poultry birds with F-1 or Lasota strain vaccine against Ranikhet disease and cattles against FMD disease during the season in Jhabua Hill Zone of Madhya Pradesh.
  - Due to prevailing high temperature, special attention should be given to milch animals with regard to feed and water in North Hill Zone of Chhattisgarh. Provide lots of clean water to the animals and keep them in the shaded place.

### EAST INDIA [JHARKHAND, BIHAR, ODISHA, WEST BENGAL & SIKKIM]



*Wheat*



*Sugarcane*



*Green Gram*



*Onion*

- **Realised Rainfall:** Significant rainfall occurred in East Sikkim and North Sikkim districts of Sikkim; in Gajapati district of Odisha. Weather remained mainly dry/dry over rest parts of the region.
- **Weather Forecast:** Rain/thundershowers would occur at isolated places over West Bengal and Odisha during the period. Dry weather would prevail over Jharkhand during next 24 hours and rain/thundershowers would occur at isolated places thereafter. Dry weather would prevail over Bihar during the period.
- **Weather Warning:** Nil.
- **Weather Outlook:** Rain/thundershowers would occur at isolated places over Odisha. Weather would be mainly dry over rest parts of the region.
- **Advisories:**
  - **Odisha:**
    - Taking the advantage of mainly dry weather, continue harvesting green gram, black gram and groundnut in Western Undulating Zone of Odisha.
    - In the prevailing temperature conditions, there is a possibility of increased attack of anthracnose leading to black spot in mango in Eastern Ghat High Land Zone of Odisha. To control, spray Mancozeb @ 2.5 g or Copper Oxi Chloride @ 4g per litre of water.
    - Prevailing dry weather is conducive for occurrence of white grub and termite in groundnut in Mid Central Table Land Zone of Odisha. For control, apply Chloripyriphos @ 2 ml/litre of water.
    - Current temperature conditions are favourable for thrips infestation in groundnut in North Eastern Ghat Zone of Odisha. Spray Dimethoate @ 400 ml or Imidachloprid @ 50 ml in 200 litres of water per acre.
    - High temperature condition may favour egg laying of stem borer in rice in the main fields in Mid Central Table Land and in North Eastern Plateau Zone of Odisha. To attract the butterflies, place 4 Pheromone Traps per acre, collect the adults and destroy them by burning them or by burying.
  - **West Bengal:**
    - Prevailing hot and humid weather condition is favourable for outbreak of blast disease in *boro* rice at tillering / panicle initiation stages in Laterite and Red Soil Zone and New Alluvial Zone of West Bengal. To control, apply Tricyclazole @ 7g/ 10 litre of water.
    - Due to increase in temperature, red spider mite attack may occur in brinjal and okra in Coastal Saline Zone of West Bengal; spray Properzta @ 0.5 ml / liter of water along with sticker like tipol or soap solution.
    - In the prevailing hot and humid weather conditions, there is possibility of increased attack of Anthracnose leading to black spot in mango in Laterite and Red Soil Zone and in New Alluvial Zone of West Bengal. Spray Carbendazim @ 1 ml per litre of water for control.



▪ **Bihar:**

- As dry weather would prevail in North West Alluvial Plain Zone of Bihar, continue harvesting of wheat, lentil and pea and apply irrigation in sugarcane, summer vegetables, mango and litchi.
- As dry weather is prevailing, apply regular light irrigation in sugarcane and onion in North East Alluvial Plain Zone of Bihar. Also undertake harvesting of wheat.

▪ **Jharkhand:**

- As dry weather would prevail, apply irrigation in moong, in mango and litchi orchards in Western Plateau Zone of Jharkhand.
- As dry weather would prevail, apply irrigation to moong and summer rice in South Eastern Plateau Zone of Jharkhand.
- High difference in day and night temperature favours occurrence of blast disease in rice in South Eastern Plateau Zone of Jharkhand; for control, spray Tricyclazole @ 0.5 g per litre of water.

• **Animal Husbandry**

- Prevailing high temperature may adversely affect the milk production of milch animals in North West Alluvial Plain Zone of Bihar. Provide plenty of clean water to animals and keep them in the shade during noon hours.
- In Western Plateau Zone of Jharkhand, rise in day temperature may cause heat stroke in animals. Hence, keep them in the shade during noon hours.

**NORTHEAST INDIA [ARUNACHAL PRADESH, NMM&T, ASSAM, MEGHALAYA]**



*Green Gram*

*Rice*

*Okra*

*Sugarcane*

- **Realised Rainfall:** Significant rainfall occurred in East Siang, Lohit, Tawang, Upper Siang, Upper Subansari districts of Arunachal Pradesh, in Hailakandi district of Assam and in Saiha district of Mizoram. Weather remained mainly dry / dry over rest parts of the region.
- **Weather Forecast:** Rain / thundershowers would occur at isolated places over northeastern states on 16<sup>th</sup>, 18<sup>th</sup> and at a few places on 17<sup>th</sup> April.
- **Weather Warning:** Moderate thundersquall would occur at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 17<sup>th</sup> April.
- **Weather Outlook:** Rain/thundershowers would occur at isolated places over northeastern states.
- **Advisories:**
  - **Assam & Meghalaya, Arunachal Pradesh:**
    - As moderate thundersquall would occur at isolated places over Assam and Meghalaya on 17<sup>th</sup> April, provide mechanical support to banana, young fruit plants and vegetables.
    - In Temperate Sub Alpine Zone of Meghalaya, continue sowing of direct seeded *ahu* rice, maize, cucurbits and okra utilising available soil moisture. Undertake land preparation for planting of ginger and turmeric and transplanting of brinjal.
    - In Sub Tropical Hill Zone of Arunachal Pradesh, continue sowing of *jhum* rice, summer vegetables, maize, soybean, black gram, green gram and planting of banana utilising available soil moisture.
    - Under prevailing weather conditions, continue sowing of jute, early *ahu*, summer sesame and planting of ginger and turmeric in Lower Bramhaputra Valley Zone of Assam.
    - In Upper Bramhaputra Valley Zone of Assam, continue sowing of different summer vegetable like ridge gourd, sponge gourd, ash gourd, pumpkin, okra, bitter gourd and cucumber and planting of sugarcane, ginger and turmeric, banana utilising available soil moisture.
    - In Central Bramhaputra Valley Zone of Assam, complete harvesting of matured wheat crop during clear weather. Under prevailing weather condition, continue sowing of summer vegetables, *capsularis* jute and *baorice* and planting of spring sugarcane, papaya, ginger and turmeric. Complete sowing early *ahu* rice and summer green gram and black gram.
    - In North Bank Plain Zone of Assam, undertake sowing of maize and transplanting of normal *ahu* utilising available soil moisture.
  - **Nagaland, Manipur, Mizoram and Tripura:**
    - As moderate thundersquall would occur at isolated places over Nagaland, Manipur, Mizoram and Tripura on

- 17<sup>th</sup> April, provide mechanical support to banana, young fruit plants and vegetables.
- In Manipur, complete transplanting of early *kharif* rice and okra and undertake land preparation for sowing of soybean, groundnut and black gram utilising available soil moisture.
- As mainly dry weather is prevailing in Mid Tropical Hill Zone of Mizoram, provide banana shading and irrigation to transplanted seedling of brinjal, okra, French bean and pumpkin .
- In Mild Tropical Hill Zone of Nagaland, continue sowing of *jhum* rice, summer vegetables like okra, cucurbitaceous crops like pumpkin, ridge gourd, ash gourd etc. utilizing available soil moisture. Complete sowing of summer maize.
- In Mild Tropical Plain Zone of Tripura, continue land preparation and sowing of *jhum* rice with the help of pre-monsoon rain.
- In the prevailing temperature conditions, there may be chance of attack of yellow stem borer in *boro* rice in Mild Tropical Plain Zone of Tripura. Apply Chloropyriphos @ 10 kg per ha twice or Fipronil @ 2 g per litre of water to manage the yellow stem borer attack.
- **Animal Husbandry**
  - In northeastern States, keep animals indoors during thundersquall period.
  - In Assam, Mizoram, Manipur and Tripura, vaccinate to control swine fever in pigs, FMD in cattle and ranikhet disease in poultry during this period.

### WEST INDIA [GOA, MAHARASHTRA, GUJARAT]



*Rice*

*Groundnut*

*Green Gram*

*Grape vine*

- **Realised Rainfall:** Weather remained mainly dry/dry over the region.
- **Weather Forecast:** Mainly dry/dry weather would prevail over Gujarat and Maharashtra during the period.
- **Weather Warning:** Nil.
- **Weather Outlook:** Weather would be mainly dry over the region.
- **Advisories:**
  - **Maharashtra:**
    - In Konkan, as mainly dry weather is expected, undertake intercultural operations and application of fertilizer in summer vegetables, rice, finger millet and orchards. Apply irrigation to groundnut, coconut, cashew orchards, vegetable crops and pulses. Mango is at fruit formation stage. Considering the crop canopy, apply 150-200 litres of water per tree at 15 days interval to avoid fruit dropping due to increase in temperature. If mango fruits are at maturity stage (80-85 % maturity), harvest the fruits early in the morning and in the evening. Some rice varieties are at maturity stage, drain out water from fields at least 8-10 days before harvesting. New graft and newly planted fruit crops may be protected from sun burn by erecting temporary shed.
    - In Madhya Maharashtra, in view of prevailing mainly dry weather, apply irrigation to summer groundnut, bajra, sugarcane and vegetable crops. As day temperature is prevailing above normal, apply mulch of crop residues and other plant waste product in the orchards and sugarcane trash in sugarcane. Apply irrigation to sugarcane by alternate furrow method in water stress condition. Apply 20 litres water to each banana plant/day (flood irrigation) or 9-10 litres water/dripper. Cover banana bunch with white plastic (100 gauge and 6% porous) or dried banana leaves to protect from scorching sun.
    - As mainly dry weather is prevailing in Marathwada, apply irrigation to summer groundnut, sugarcane, orchard crops like banana, pomegranate, fig and vegetable crops. As day temperature is around 38- 40<sup>o</sup>C, apply mulch of crop residues and other plant waste product in the orchards and sugarcane trash in sugarcane. Cover banana bunch with dried banana leaves or paper/ gunny bags to protect from scorching sun. Continue intercultural operations and application of fertilizer in orchards (banana, fig, pomegranate, sweet lime, guava), sugarcane, summer groundnut and vegetables.
    - In Vidarbha, as no significant rain is expected, apply irrigation to water melon, summer vegetables, summer groundnut and summer green gram. Maintain upto 10 cm water level in already transplanted rice field in Gondia, Bhandara, Chandrapur and Gadchiroli districts. Considering the prevailing high temperature (above 40<sup>o</sup>C), reduce the duration between two irrigations. Apply mulch of plant waste products in orange and sweet lime orchards. Newly planted fruit crops may be protected from sun burn by erecting temporary shed.

- Continue intercultural operations and application of fertilizers in orchards and summer green gram.
- As partly cloudy weather is expected , there may be attack of jassids and thrips in mango fruits in Pune; spray Qunalphos 25% @ 20 ml / 10 litres of water.
- As warm and partly cloudy weather conditions prevailed during last 3 days in Kolhapur region, there may be incidence of brown rust and tikka in summer groundnut; spray Dithane M 45 @ 25 g per 10 litres of water.
- **Gujarat:**
  - As dry weather is prevailing, apply irrigation in green gram at pod formation stage and in vegetable crops during morning hours in South Gujarat Heavy Rainfall Zone.
  - As dry weather would prevail, irrigate summer vegetable crops at an interval of 10 to 12 days in South Gujarat Zone.
  - As dry weather condition is prevailing, apply irrigation in groundnut at peg initiation stage, green gram at flowering stage, bajra, castor, vegetables, cluster bean and in orchards (pomegranate, sapota, lemon and papaya) in North Gujarat Zone. Carry out weeding and intercultural operations in bajra and cluster bean to conserve soil moisture. Continue harvesting of matured spikes of castor. As temperature would be around 35-36<sup>0</sup>C, cover papaya fruits with gunny bags.
  - In view of prevailing dry weather, apply irrigation in bajra and green gram during morning hours in Bhal and Coastal Zone. Carry out hand weeding and intercultural operations to conserve soil moisture.
  - As dry weather is prevailing, apply irrigation in summer groundnut at flowering stage in North Saurashtra Zone.
  - Due to rise in temperature infestation of thrips and whitefly are observed in sesame in North Saurashtra Zone which is likely to increase. Spray Acetamiprid 20 % SP @ 5.0 g and Emamectin Benzoate 7 g/10 liter of water to control.
- **Animal Husbandry**
  - Keep animals under shade during noon hours and provide clean drinking water. Put curtains on south-west side of poultry house and sprinkle water on curtains during noon time in South Gujarat Heavy Rainfall Zone.

#### SOUTH INDIA [TN, AP, KERALA, KARNATAKA, LAKSHADWEEP, ANDAMAN & NICOBAR ISLANDS]



*Rice*

*Sugarcane( cane maturity)*

*Onion (bulb development)*

*Okra*

- **Realised Rainfall:** Significant rainfall occurred in all districts of Kerala except Kannur, Idukki, Kasaragod, Malappuram, Palakkad and Thrissur and in Tirunelveli district of Tamil Nadu. No significant rainfall occurred over remaining parts of the region.
- **Weather Forecast:** Rain/thundershowers would occur at isolated places over Tamil Nadu during the period. Rain/thundershowers would occur at a few places over South Interior Karnataka and Kerala during next 24 hours and at isolated places thereafter. Mainly dry weather would prevail over Coastal Karnataka, North Interior Karnataka, coastal Andhra Pradesh, Telangana and Rayalaseema during the period.
- **Weather Warning:** Nil.
- **Weather Outlook:** Rain/thundershowers would occur at isolated places over South peninsular India.
- **Advisories:**
  - **Karnataka:**
    - As no significant rainfall is expected, apply irrigation in arecanut, coconut and black pepper either by furrow or drip irrigation in the Hill Zone of Karnataka and also apply irrigation to groundnut which is at flowering stage.
    - As mainly dry weather would prevail, undertake harvesting of grapes and making of raisin in the North Dry Zone of Karnataka.
  - **Andhra Pradesh:**
    - As no significant rainfall is expected, provide irrigation to late sown maize to avoid water stress at flowering stage in Kurnool district in Scarce Rainfall Zone of Andhra Pradesh and apply urea @ 40-50 kg and MOP @ 18 kg per acre as top dressing.
    - As mainly dry weather would prevail, undertake harvesting of groundnut in Anantpur in the Scarce Rainfall



Zone of Andhra Pradesh.

▪ **Tamil Nadu:**

- As no significant rainfall is expected, provide irrigation to sesame, sugarcane, banana, groundnut, summer cotton and rice fallow cotton, undertake planting of sugarcane and sowing of summer season black gram in Cauvery Delta Zone of Tamil Nadu.
- As mainly dry weather is prevailing, provide irrigation to coconut and banana in Western Zone of Tamil Nadu.
- Prevailing dry weather situation is congenial for incidence of white fly in tapioca and sucking pests in sesame in the Western Zone of Tamil Nadu. Monitor the crops and keep yellow sticky trap in 5 to 6 places / acre or spray Profenophos @ 2 ml or Acephate @ 2 g / liter of water to manage white fly attack. Spray Monocrotophos or Dimethoate @ 500 ml /ha for managing sucking pests .
- As mainly dry weather would prevail, apply irrigation in cotton, sorghum and maize at flowering stage in the South Zone of Tamil Nadu.
- The expected hot weather is congenial for the incidence of pod borer in pulses in the South Zone of Tamil Nadu. Spray Chlorpyriphos 2.5 ml / litre or Monocrotophos 2 ml/ litre of water to control the attack.

▪ **Kerala:**

- Prevailing hot and humid conditions are favourable for attack of rice leaf folder rice in Southern Zone of Kerala; apply Quinalphos (Ekalux 25EC) @ 750 ml per ha on a non rainy day. Present humid weather is congenial for the incidence of mosaic disease in cucurbits; rougue out the affected plants to prevent further spread of the disease.
- Due to increase in temperature, there is chance of root wilt disease in coconut in the Central Zone of Kerala. Severely affected palms may be cut and replaced by high yielding resistant varieties. Undertake mulching in the coconut basins with green/dry leaves and burying of fresh or dried coconut husk around the palm in order to add organic matter to the soil and reduce the soil temperature.

• **Animal Husbandry**

- Prevailing high day time temperature (around 39°C) will induce heat stress and heat stroke in poultry in North Western Zone of Tamil Nadu. Increase amino acid level in feed and supplementation of vitamin C and avoid feeding the birds between 10 am to 6 pm and provide cool drinking water throughout the day. Vaccinate sheep and goats before monsoon to prevent Enterotoxemia. Allow the animals to graze one hour after the sunrise.
- Due to increase in day temperature (around 39°C-40°C) there is a probability of drop in feed intake in poultry in the North East Transition Zone of Karnataka. Maintain optimum temperature by applying 4-6 inch thick hay thatch as a roofing material. Cool water should be made available to the birds. Addition of electrolytes is highly recommended in the feed as well as in water.

**Districtwise realised rainfall and % departure for past three weeks is given below in Annexure I**

### Week by week Rainfall Distribution

State/Districts	02.04.14		09.04.14		16.04.14	
	Actual (mm)	% dep.	Actual (mm)	% dep.	Actual (mm)	% dep.
<b>Arunachal Pradesh</b>						
Anjaw	**	**	**	**	**	**
Changlang	31.1	-67	24.5	-85	2.8	-97
Dibang Valley	24.0	-79	7.0	-93	6.0	-88
East Kameng	0.0	-100	4.5	-87	2.3	-94
East Siang	13.0	-63	13.8	-69	29.7	-24
Kurung Kumey	**	**	**	**	**	**
Lohit	60.4	2	13.8	-88	32.7	-56
Lower Dibang Valley	66.6	-42	3.1	-97	16.1	-68
Lower Subansari	**	**	**	**	**	**
Papumpara	7.0	-69	6.2	-86	2.4	-93
Tawang	75.0	259	47.0	267	22.0	-26
Tirap	22.0	-62	28.2	-59	1.0	-99
Upper Siang	33.2	-58	8.5	-93	104.6	73
Upper Subansari	29.4	20	1.8	-91	24.3	34
West Kameng	0.0	-100	2.4	-81	0.0	-100
West Siang	50.5	47	13.5	-61	15.2	-76
<b>Assam</b>						
Baksa	5.0	-84	20.9	-14	1.8	-94
Barpeta	0.6	-98	28.3	16	3.3	-89
Bongaigaon	0.0	-100	16.6	-34	3.2	-89
Cachar	38.1	-44	66.7	24	9.6	-83
Chirang	0.5	-98	14.5	-42	7.3	-75
Darrang	3.0	-85	23.0	-16	1.0	-98
Dhemaji	13.0	-53	0.0	-100	1.0	-97
Dhubri	1.3	-95	24.9	107	0.7	-97
Dibrugarh	13.4	-67	24.5	-44	13.3	-74
Goalpara	3.6	-86	19.2	-27	3.1	-92
Golghat	27.7	-8	30.8	27	0.0	-100
Hailakandi	10.9	-79	53.2	29	37.0	-24
Jorhat	41.1	12	18.4	-55	0.0	-100
Kamrup(Rural)	0.6	-97	60.4	211	7.0	-79
Kamrup(Metro)	1.9	-91	11.4	-41	0.5	-98
Karbi Anglong	0.7	-97	11.3	-23	0.0	-100
Karimganj	6.4	-92	25.4	-66	3.2	-95
Kokrajhar	2.4	-94	12.6	-30	0.0	-100
Lakhimpur	12.1	-56	5.1	-84	8.1	-75
Morigaon	0.3	-99	10.6	-27	0.4	-98
N.C.Hills	0.0	-100	23.4	-38	3.3	-95
Nowgong	0.4	-98	37.0	99	6.5	-77
Nalbari	1.4	-96	14.7	-53	2.1	-94
Sonitpur	3.4	-84	3.3	-88	4.4	-87
Sibsagar	26.9	22	27.8	20	1.4	-95
Tinsukia	29.5	-32	13.5	-74	12.5	-67

Udalgiri	7.4	-62	7.1	-74	6.6	-86
<b>Meghalaya</b>						
East Garo Hills	0.0	-100	4.3	-89	0.0	-100
East Khasi Hills	1.3	-97	105.3	106	8.0	-89
Jaintia Hills	2.0	-95	6.0	-90	0.0	-100
Ribhoi	1.6	-92	25.1	49	0.0	-100
South Garo Hills	0.0	-100	0.0	-100	0.0	-100
West Garo Hills	0.0	-100	20.8	-14	0.0	-100
West Khasi Hills	0.0	-100	31.0	96	2.0	-93
<b>Mizoram</b>						
Aizwal	2.4	-95	19.1	-16	17.3	-48
Champhai	0.0	-100	6.0	-57	2.0	-93
Kolasib	0.0	-100	0.0	-100	0.0	-100
Lawngtlai	**	**	**	**	**	**
Lunglei	0.0	-100	5.0	-64	0.0	-100
Mamit	0.0	-100	18.0	-21	6.0	-82
Saiha	0.0	-100	1.0	-92	37.0	123
Serchhip	0.0	-100	6.0	-69	7.0	-84
<b>Manipur</b>						
Bishnupur	3.0	-93	2.0	-93	0.0	-100
Chandel	7.0	-46	12.0	-48	0.0	-100
Churachandpur	21.0	-17	44.0	-8	2.0	-95
Imphal east	8.7	-68	12.0	-70	0.8	-98
Imphal west	44.6	134	41.5	40	7.2	-72
Senapati	2.0	-91	11.0	-68	1.0	-97
Tamenglong	**	**	**	**	**	**
Thoubal	3.0	-75	16.0	-25	1.0	-97
Ukhrul	0.0	-100	0.0	-100	0.0	-100
<b>Nagaland</b>						
Dimapur	3.5	-79	18.5	-14	0.0	-100
Kephire	0.0	-100	36.0	-14	0.0	-100
Kohima	0.0	-100	24.3	74	12.2	-34
Longleng	**	**	**	**	**	**
Mokokchung	19.0	-13	52.0	215	0.0	-100
Mon	**	**	**	**	**	**
Paran	**	**	**	**	**	**
Phek	0.0	-100	15.0	7	15.0	-19
Tuensang	**	**	**	**	**	**
Wokha	2.0	-95	8.0	-71	0.0	-100
Zunheboto	**	**	**	**	**	**
<b>Tripura</b>						
Dhalai	0.0	-100	71.4	55	5.7	-87
North tripura	0.0	-100	68.2	32	12.4	-82
South tripura	0.0	-100	22.5	-6	0.0	-100
West tripura	0.0	-100	40.5	45	10.2	-75
<b>Himachal Pradesh</b>						
Bilaspur	3.6	-69	5.3	-11	2.1	-61
Chamba	47.5	296	36.4	160	2.7	-62
Hamirpur	3.1	-58	5.4	-23	2.2	-72



Kangra	8.7	-12	11.4	-10	0.8	-92
Kinnaur	32.6	72	42.6	73	29.5	56
Kullu	30.7	49	36.4	48	8.9	-45
Lahaul and Spiti	3.0	-90	16.9	-38	1.0	-96
Mandi	5.4	-53	13.0	0	5.4	-59
Shimla	13.6	24	40.2	237	14.5	8
Sirmaur	1.0	-85	19.6	461	4.2	-13
Solan	12.1	69	31.8	368	4.4	-39
Una	0.0	-99	0.6	-88	1.4	-76
<b>Punjab</b>						
Amritsar	1.1	-68	2.2	-66	0.6	-90
Barnala	0.0	-100	4.9	172	0.0	-100
Bhatinda	1.0	-23	5.0	117	4.0	48
Faridkot	0.5	-62	0.0	-100	0.0	-100
Fatehgarh Sahib	0.0	-100	0.0	-100	0.0	-100
Ferozpur	0.0	-100	0.5	-84	0.0	-100
Gurdaspur	4.4	-11	10.5	90	0.0	-100
Hoshiarpur	0.0	-100	2.5	-49	0.0	-100
Jalandhar	0.0	-100	0.0	-100	0.2	-96
Kapurthala	0.2	-88	0.7	-72	1.0	-74
Ludhiana	1.3	-53	1.7	-31	0.0	-99
Mansa	0.0	-100	7.0	268	0.0	-100
Moga	2.0	54	0.0	-100	0.0	-100
Muktesar	0.0	-100	1.0	-52	0.0	-100
Nawashahar	1.6	-66	0.4	-88	0.5	-90
Patiala	3.5	105	3.9	225	0.5	-88
Ropar	0.4	-78	1.9	-54	0.2	-96
Sangrur	2.4	57	1.8	-8	0.0	-100
Mohali	3.0	87	6.0	140	1.0	-80
TarnTaran	0.3	-81	0.8	-70	0.5	-86
<b>Haryana</b>						
Ambala	0.7	-64	2.6	53	0.7	-71
Bhiwani	4.4	390	1.3	-7	0.1	-94
Chandigarh	5.2	135	6.1	89	0.7	-86
Faridabad	18.0	1285	0.0	-100	0.0	-100
Fatehabad	1.3	-22	2.2	20	0.8	-68
Gurgaon	6.6	1000	0.0	-100	0.0	-100
Hissar	0.0	-100	3.0	57	1.8	-37
Jhajar	3.7	106	0.0	-100	0.0	-100
Jind	2.9	614	1.0	-55	0.0	-100
Katihah	0.2	-86	2.4	500	0.0	-100
Karnal	0.0	-100	1.1	-50	0.3	-91
Kurukshetra	0.0	-100	0.0	-100	0.0	-100
Mahendragarh	3.1	124	0.0	-100	0.0	-100
Mewat	0.4	-52	0.0	-100	0.0	-100
Palwal	0.0	-100	0.0	-100	0.0	-100
Panchkkula	2.3	-10	4.5	150	0.0	-100
Panipat	5.0	197	3.4	13	0.1	-96
Rewari	15.4	2100	0.0	-100	0.0	-100

Rohtak	0.4	-85	2.0	54	1.4	-48
Sirsa	0.0	-100	3.8	322	0.2	-86
Sonepat	2.4	87	3.0	26	0.5	-86
Yamunanagar	0.0	-100	1.4	-62	1.7	-60
<b>Delhi</b>						
Central Delhi	5.0	138	0.0	-100	2.0	-69
East Delhi	3.0	43	0.0	-100	2.0	-69
New Delhi	4.0	88	0.1	-95	2.5	-61
North Delhi	7.6	262	4.0	111	3.8	-41
North East Delhi	0.0	-100	0.0	-100	0.0	-100
North West Delhi	0.0	-100	0.0	-100	0.0	-100
South Delhi	6.4	205	1.2	-37	1.2	-81
South West Delhi	1.9	-10	0.0	-100	1.2	-81
West Delhi	4.0	90	0.0	-100	1.0	-84
<b>Jammu &amp; Kashmir</b>						
Anantnag	42.2	77	93.2	194	17.5	-34
Badgam	22.9	73	56.7	226	20.7	17
Bandipore	**	**	**	**	**	**
Baramula	24.7	-20	54.7	35	7.1	-78
Doda	26.8	0	87.4	229	10.2	-63
Ganderbal	90.4	511	58.6	192	23.2	22
Jammu	1.0	-86	8.9	5	2.5	-71
Kargil	0.0	-100	0.0	-100	0.0	-100
Kathua	9.6	66	21.2	94	0.0	-100
Kistwar	**	**	**	**	**	**
Kulgam	44.0	84	63.8	101	6.7	-75
Kupwara	68.3	82	81.3	97	21.5	-35
Ladakh(Leh)	0.2	-91	0.0	-100	0.0	-100
Poonch	0.0	-100	0.0	-100	0.0	-100
Pulwama	19.9	46	58.1	162	14.5	-19
Rajouri	5.3	-54	26.5	128	1.2	-82
Ramban	34.7	30	93.7	252	6.2	-78
Reasi	7.3	-53	62.2	294	2.8	-85
Samba	0.9	-87	12.9	52	0.0	-100
Shopian	25.0	84	66.0	197	10.0	-44
Srinagar	30.0	103	66.4	230	20.3	7
Udhampur	5.8	-63	14.5	-8	15.5	-14
<b>East Madhya Pradesh</b>						
Anuppur	0.0	-100	0.0	-100	0.0	-100
Balaghat	0.0	-100	0.0	-100	5.1	464
Chhatarpur	0.0	-100	0.0	-100	0.0	-100
Chindwara	0.0	-100	0.0	-100	0.0	-100
Damoh	0.0	-100	0.0	-100	0.0	-100
Dindori	0.0	-100	0.0	-100	6.5	3150
Jabalpur	0.0	-100	0.0	-100	0.0	-100
Katni	0.0	-100	0.0	-100	0.4	0
Mandla	0.0	-100	0.0	-100	0.0	-100
Narsingpur	0.0	-100	0.0	-100	0.0	-100
Panna	0.0	-100	0.0	-100	0.0	-100

Rewa	0.0	-100	0.0	-100	0.0	-100
Sagar	0.0	-100	0.0	-100	0.0	-100
Satna	0.0	-100	0.0	-100	0.0	-100
Seoni	0.0	-100	0.0	-100	3.4	36
Shahdol	0.0	-100	0.0	-100	7.2	1340
Sidhi	0.0	-100	0.0	-100	0.0	-100
Singrauli	0.0	-100	0.0	-100	0.0	-100
Tikamgarh	0.0	-100	0.0	-100	0.0	-100
Umaria	0.0	-100	0.0	-100	0.0	-100
<b>West Madhya Pradesh</b>						
Alirajpur	0.0	-100	0.0	-100	0.0	-100
Asoknagar	0.0	-100	0.0	-100	0.0	-100
Badwani	0.0	-100	0.0	-100	0.0	-100
Betul	0.0	-100	0.0	-100	0.0	-100
Bhind	0.0	-100	0.0	-100	0.0	-100
Bhopal	0.0	-100	0.0	-100	0.0	-100
Burhanpur	0.0	-100	0.0	-100	0.0	-100
Datia	0.0	-100	0.0	-100	0.0	-100
Dewas	0.0	-100	0.0	-100	0.0	-100
Dhar	0.0	-100	0.0	-100	0.0	-100
Guna	0.0	-100	0.0	-100	0.0	-100
Gwalior	0.0	-100	0.0	-100	0.0	-100
Harda	0.0	-100	0.0	-100	0.0	-100
Hosangabad	0.0	-100	0.0	-100	0.0	-100
Indore	0.0	-100	0.0	-100	0.0	-100
Jhabua	0.0	-100	0.0	-100	0.0	-100
Khandwa	0.0	-100	0.0	-100	0.0	-100
Khargone	0.0	-100	0.0	-100	0.0	-100
Mandsaur	0.0	-100	0.0	-100	0.0	-100
Morena	0.0	-100	0.0	-100	0.0	-100
Neemuch	0.0	-100	0.0	-100	0.0	-100
Raisen	0.0	-100	0.0	-100	0.0	-100
Rajgarh	0.0	-100	0.0	-100	0.0	-100
Ratlam	0.0	-100	0.0	-100	0.0	-100
Sehore	0.0	-100	0.0	-100	0.0	-100
Shajapur	0.0	-100	0.0	-100	0.0	-100
Sheopur Kalani	0.0	-100	0.0	-100	0.0	-100
Shivpuri	0.0	-100	0.0	-100	0.0	-100
Ujjain	0.0	-100	0.0	-100	0.0	-100
Vidisha	0.0	-100	0.0	-100	0.0	-100
<b>Chhattisgarh</b>						
Bastar	0.0	-100	0.6	-95	19.1	267
Bijapur	0.0	-100	0.0	-100	**	**
Bilaspur	0.0	-100	0.0	-100	26.5	1295
Dantewara	0.0	-100	0.0	-100	**	**
Dhamtari	0.0	-100	0.0	-100	11.4	533
Durg	0.0	-100	0.0	-100	3.6	260
Janjgir	0.0	-100	0.0	-100	**	**
Jashpurnagar	0.0	-100	0.0	-100	**	**



Kanker	0.0	-100	0.0	-100	23.0	576
Korba	0.0	-100	0.0	-100	5.0	52
Koriya	0.0	-100	0.0	-100	18.5	200
Kawardha	0.0	-100	0.0	-100	**	**
Mahasumund	0.0	-100	0.0	-100	**	**
Narayanpur	0.0	-100	0.0	-100	**	**
Raigarh	0.0	-100	0.0	-100	**	**
Raipur	0.0	-100	0.0	-100	2.4	33
Rajandgaon	0.0	-100	0.0	-100	3.8	138
Surguja	0.0	-100	0.0	-100	1.4	75
<b>Uttarakhand</b>						
Almora	0.0	-100	14.1	88	9.2	119
Bageshwar	0.0	-100	17.9	139	8.6	105
Chamoli	0.0	-100	25.1	137	14.4	30
Champawat	1.5	-72	5.0	35	1.5	-77
Dehradun	2.0	-78	15.1	148	7.0	45
Garhwal Pauri	0.0	-100	10.6	324	4.0	11
Garhwal Tehri	0.2	-99	16.6	118	4.1	-45
Haridwar	0.0	-100	1.3	-55	1.0	-76
Nainital	0.0	-100	4.3	14	3.5	-21
Pithorgarh	0.0	-100	19.9	192	13.1	22
Rudraprayag	0.0	-100	14.7	47	5.0	-60
Udham Sing Nagar	0.0	-100	1.3	18	0.2	-88
Uttarkashi	0.0	-100	16.8	53	13.7	10
<b>Bihar</b>						
Araria	0.0	-100	0.6	-54	0.0	-100
Arwal	0.0	-100	0.0	-100	0.0	-100
Aurangabad	0.0	-100	0.0	-100	0.0	-100
Banka	0.0	-100	0.0	-100	0.0	-100
Begusarai	0.0	-100	0.0	-100	0.0	-100
Bhabua	0.0	-100	0.0	-100	0.0	-100
Bhagalpur	0.0	-100	0.0	-100	0.0	-100
Bhojpur	0.0	-100	0.0	-100	0.0	-100
Buxar	0.0	-100	0.0	-100	0.0	-100
Darbhanga	0.0	-100	0.0	-100	0.0	-100
East Champaran	0.0	-100	0.0	-100	0.0	-100
Gaya	0.0	-100	0.0	-100	0.0	-100
Gopalganj	0.0	-100	0.0	-100	0.0	-100
Jahanabad	0.0	-100	0.0	-100	0.0	-100
Jamui	0.0	-100	0.0	-100	0.0	-100
Kathihar	0.0	-100	0.0	-100	0.0	-100
Khagadia	0.0	-100	0.0	-100	0.0	-100
Kishanganj	0.0	-100	0.0	-100	0.0	-100
Lakhisarai	0.0	-100	0.0	-100	0.0	-100
Madhepura	0.0	-100	0.0	-100	0.0	-100
Madhubani	0.0	-100	0.0	-100	0.0	-100
Monghyar	0.0	-100	0.0	-100	0.0	-100
Muzaffarpur	0.0	-100	0.0	-100	0.0	-100
Nalanda	0.0	-100	0.0	-100	0.0	-100

Nawada	0.0	-100	0.0	-100	0.0	-100
Patna	0.0	-100	0.0	-100	0.0	-100
Purnea	0.0	-100	0.4	-84	5.2	8
Rohtas	0.0	-100	0.0	-100	0.0	-100
Saharsha	0.0	-100	0.0	-100	0.0	-100
Samstipur	0.0	-100	0.0	-100	0.0	-100
Saran	0.0	-100	0.0	-100	0.0	-100
Sheikpura	0.0	-100	0.0	-100	0.0	-100
Sheohar	0.0	-100	0.0	-100	0.0	-100
Sitamarhi	0.0	-100	0.0	-100	0.0	-100
Siwan	0.0	-100	0.0	-100	0.0	-100
Supaul	0.0	-100	0.0	-100	0.4	-87
Vaishali	0.0	-100	0.0	-100	0.0	-100
West Champaran	0.0	-100	0.0	-100	0.0	-100
<b>Jharkhand</b>						
Bokaro	0.0	-100	0.0	-100	2.0	11
Chatra	0.0	-100	0.0	-100	0.0	-100
Deoghar	0.0	-100	0.0	-100	0.0	-100
Dhanbad	0.0	-100	0.0	-100	2.0	18
Dumka	0.0	-100	0.0	-100	0.0	-100
East Singbhum	0.3	-94	0.0	-100	0.0	-100
Garhwa	0.0	-100	0.0	-100	0.0	-100
Giridih	0.0	-100	0.0	-100	0.7	-76
Godda	0.0	-100	0.0	-100	0.0	-100
Gumla	0.0	-100	**	**	0.0	-100
Hazaribagh	0.0	-100	0.0	-100	0.0	-100
Jamtara	0.0	-100	0.0	-100	9.3	748
Khunti	0.0	-100	0.0	-100	0.0	-100
Koderrna	0.0	-100	0.0	-100	0.0	-100
Latehar	0.0	-100	0.0	-100	0.0	-100
Lohardagga	0.0	-100	0.0	-100	17.2	310
Pakur	0.0	-100	0.0	-100	0.0	-100
Palamau	0.0	-100	0.0	-100	0.0	-100
Ramgarh	0.0	-100	0.0	-100	3.6	-27
Ranchi	0.0	-100	0.0	-100	0.2	-93
Sahebganj	0.0	-100	0.0	-100	0.0	-100
Saraikela	0.0	-100	0.0	-100	0.0	-100
Simdega	0.0	-100	0.0	-100	0.0	-100
West Singbhum	0.0	-100	0.0	-100	0.0	-100
<b>East Rajasthan</b>						
Ajmer	0.0	-100	0.0	-100	0.0	-100
Alwar	0.0	-100	0.0	-100	0.0	-100
Banswara	0.0	-100	0.0	-100	0.0	-100
Baran	0.0	-100	0.0	-100	0.0	-100
Bharatpur	0.0	-100	0.0	-100	0.0	-100
Bhilwara	0.0	-100	0.0	-100	0.0	-100
Bundi	0.0	-100	0.0	-100	0.0	-100
Chittorgarh	0.0	-100	0.0	-100	0.0	-100
Dausa	0.0	-100	0.0	-100	0.0	-100

Dholpur	0.0	-100	0.0	-100	0.0	-100
Dungarpur	0.0	-100	0.0	-100	0.0	-100
Jaipur	0.0	-100	0.0	-100	0.0	-100
Jhalawar	0.0	-100	0.0	-100	0.0	-100
Jhunjhunu	2.9	167	0.1	-91	0.0	-98
Karauli	0.0	-100	0.0	-100	0.0	-100
Kota	0.0	-100	0.0	-100	0.0	-100
Pratapgarh	0.0	-100	0.0	-100	0.0	-100
Rajsamand	0.0	-100	0.0	-100	0.0	-100
Sawai Madhopur	0.0	-100	0.0	-100	0.0	-100
Sikar	0.0	-100	0.0	-100	0.0	-100
Sirohi	0.0	-100	0.0	-100	0.0	-100
Tonk	0.0	-100	0.0	-100	0.0	-100
Udaipur	0.0	-100	0.0	-100	0.0	-100
<b>West Rajasthan</b>						
Barmer	0.0	-100	0.0	-100	0.0	-100
Bikaner	0.0	-100	0.6	20	0.4	-67
Churu	1.3	84	2.1	131	0.1	-95
Hanumangarh	0.0	-100	6.0	445	1.7	1
Jaisalmer	0.0	-100	0.0	-100	0.0	-100
Jalore	0.0	-100	0.0	-100	0.0	-100
Jodhpur	0.0	-100	0.0	-100	0.0	-100
Nagaur	0.0	-100	0.0	-100	0.0	-100
Pali	0.0	-100	0.0	-100	0.0	-100
Sri Ganganagar	0.0	-100	0.0	-99	2.2	4
<b>Gujarat Region</b>						
Ahmedabad	0.0	-100	0.0	-100	0.0	-100
Anand	0.0	-100	0.0	-100	0.0	-100
Banaskantha	0.0	-100	0.0	-100	0.0	-100
Baroda	0.0	-100	0.0	-100	0.0	-100
Broach	0.0	-100	0.0	-100	0.0	-100
DNH	**	**	**	**	**	**
Dahod	0.0	-100	0.0	-100	0.0	-100
Daman	**	**	**	**	**	**
Dangs	0.0	-100	0.0	-100	0.0	-100
Gandhinagar	0.0	-100	0.0	-100	0.0	-100
Kheda	0.0	-100	0.0	-100	0.0	-100
Mehsana	0.0	-100	0.0	-100	0.0	-100
Narmada	0.0	-100	0.0	-100	0.0	-100
Navsari	0.0	-100	0.0	-100	0.0	-100
Panchmahal	0.0	-100	0.0	-100	0.0	-100
Patan	0.0	-100	0.0	-100	0.0	-100
Sabarkantha	0.0	-100	0.0	-100	0.0	-100
Surat	0.0	-100	0.0	-100	0.0	-100
Tapi	0.0	-100	0.0	-100	0.0	-100
Valsad	0.0	-100	0.0	-100	0.0	-100
<b>S K &amp; Diu region</b>						
Amreli	0.0	-100	0.0	-100	0.0	-100
Bhavnagar	0.0	-100	0.0	-100	0.0	-100

Diu	0.0	-100	0.0	-100	0.0	-100
Jamnagar	0.0	-100	0.0	-100	0.0	-100
Junagarh	0.0	-100	0.0	-100	0.0	-100
Kutch	0.0	-100	0.0	-100	0.0	-100
Porbandar	0.0	-100	0.0	-100	0.0	-100
Rajkot	0.0	-100	0.0	-100	0.0	-100
Surendranagar	0.0	-100	0.0	-100	0.0	-100
<b>Maharashtra</b>						
<b>Konkan &amp; Goa</b>						
Goa	0.0	-100	1.4	12	0.0	-100
Mumbai	0.0	-100	0.0	-100	0.0	-100
Raigad	0.0	-100	0.0	-100	0.0	-100
Ratnagiri	0.0	-100	0.0	-100	0.0	-100
Sindhudurg	0.0	-100	0.0	-100	0.0	-100
Thane	0.0	-100	0.0	-100	0.0	-100
<b>Madhya Maharashtra</b>						
Ahmednagar	0.0	-100	0.0	-100	0.0	-100
Dhule	0.0	-100	**	**	0.0	-100
Jalgaon	0.0	-100	0.0	-100	0.0	-100
Kolhapur	0.0	-100	0.7	-86	0.0	-100
Nandurbar	0.0	-100	**	**	0.0	-100
Nasik	0.0	-100	0.0	-100	0.0	-100
Pune	0.0	-100	0.0	-100	0.0	-100
Sangli	0.0	-100	7.7	75	6.9	40
Satara	0.0	-100	0.8	-60	0.0	-100
Solapur	0.0	-100	0.0	-100	0.4	-84
<b>Marathwada</b>						
Aurangabad	0.0	-100	0.0	-100	0.0	-100
Beed	0.0	-100	0.0	-100	1.1	-41
Hingoli	0.0	-100	**	**	0.0	-100
Jalna	0.0	-100	**	**	0.0	-100
Latur	0.0	-100	0.0	-100	0.0	-100
Nanded	0.0	-100	0.0	-100	1.0	-70
Usmanabad	0.0	-100	0.9	-50	2.0	-20
Parbhani	0.0	-100	0.0	-100	1.0	-57
<b>Vidarbha</b>						
Akola	0.0	-100	0.0	-100	0.0	-100
Amraoti	0.0	-100	0.0	-100	0.0	-100
Bhandara	0.0	-100	0.0	-100	5.8	205
Buldhana	0.0	-100	0.0	-100	0.0	-100
Chandrapur	0.0	-100	0.0	-100	0.1	-95
Gadchiroli	0.0	-100	0.0	-100	0.4	-85
Gondia	0.0	-100	0.0	-100	6.0	141
Nagpur	0.0	-100	0.0	-100	2.7	27
Wardha	0.0	-100	0.0	-100	0.3	-83
Washim	0.0	-100	0.0	-100	0.0	-100
Yeotmal	0.0	-100	0.0	-100	0.0	-100
<b>Odisha</b>						
Angul	0.2	-96	0.0	-100	2.2	-66



Balasore	0.5	-96	0.0	-100	1.5	-86
Bargarh	0.0	-100	0.0	-100	0.0	-100
Bhadrak	1.3	-85	0.0	-100	7.8	-39
Bolangir	0.0	-100	0.0	-100	1.6	-63
Boudh	0.0	-100	0.0	-100	0.0	-100
Cuttack	0.0	-100	0.0	-100	3.2	-33
Deogarh	0.0	-100	0.0	-100	0.0	-100
Dhenkanal	0.3	-96	0.0	-100	6.3	-13
Gajapati	0.0	-100	0.7	-95	22.0	107
Ganjam	1.4	-82	0.7	-91	4.4	-51
Jagatsingpur	0.0	-100	0.0	-100	8.3	145
Jajpur	0.3	-95	0.0	-100	0.4	-95
Jharsuguda	0.0	-100	0.0	-100	0.0	-100
Kalahandi	0.0	-100	0.0	-100	0.0	-100
Kandhamal	0.0	-100	0.0	-100	7.3	66
Kendrapara	0.0	-100	0.0	-100	0.3	-94
Keonjhar	0.1	-98	0.0	-100	6.8	-23
Khurda	0.1	-99	0.0	-100	0.0	-100
Koraput	0.0	-100	0.0	-100	1.5	-82
Malkangiri	0.0	-100	0.0	-100	0.0	-100
Mayurbhanj	0.1	-99	0.0	-100	11.7	27
Nawapara	0.0	-100	0.6	-91	0.0	-100
Nawarangpur	0.1	-97	0.1	-99	0.8	-80
Nayagarh	1.0	-84	0.0	-100	0.0	-100
Puri	0.2	-93	0.0	-100	0.3	-87
Rayagada	0.0	-100	0.1	-99	3.9	-72
Sambalpur	0.0	-100	0.0	-100	0.0	-100
Sonepur	0.0	-100	0.0	-100	1.8	-13
Sundargarh	0.0	-100	0.0	-100	0.0	-99
<b>West Bengal</b>						
<b>GWB</b>						
Bankura	0.0	-100	0.0	-100	0.1	-97
Birbhum	0.0	-100	0.0	-100	0.1	-98
Burdwan	0.0	-100	0.0	-100	1.0	-84
East Midnapore	0.0	-100	0.0	-100	0.0	-100
Hooghly	0.0	-100	0.0	-100	0.0	-100
Howrah	0.0	-100	0.0	-100	0.0	-100
Kolkata	0.0	-100	0.0	-100	0.0	-100
Murshidabad	0.0	-100	0.0	-100	0.0	-100
Nadia	0.0	-100	0.0	-100	0.0	-100
24 Pargana (N)	0.0	-100	0.0	-100	0.0	-100
Purulia	0.0	-100	0.0	-100	0.1	-96
24 Pargana (S)	0.0	-100	0.0	-100	0.0	-100
West Midnapore	0.0	-100	0.9	-92	0.0	-100
<b>SHWB</b>						
Cooch Behar	0.0	-100	2.7	-80	0.0	-100
Darjeeling	0.0	-100	1.3	-93	0.1	-99
East Sikkim	8.9	-51	25.7	-21	28.6	-39
Jalpaiguri	0.1	-99	16.8	43	0.0	-100

Malda	0.0	-100	1.3	-34	1.0	-85
North Dinajpur	0.0	-100	0.0	-100	4.0	264
North Sikkim	28.4	-28	17.7	-76	51.5	8
South Dinajpur	0.0	-100	17.8	157	0.0	-100
South Sikkim	0.0	-100	1.1	-97	0.0	-100
West Sikkim	3.0	-92	12.8	-82	12.7	-74
<b>Karnataka</b>						
<b>Coastal Karnataka</b>						
Dakshin Kannada	2.0	-34	10.4	39	15.5	71
Udupi	0.0	-100	5.0	7	0.0	-100
Uttar Kannada	0.0	-100	0.9	-76	2.4	-49
<b>N I Karnataka</b>						
Bagalkote	0.3	-90	0.0	-100	3.4	-36
Belgaum	0.0	-100	2.8	-59	3.1	-47
Bidar	2.9	-38	0.0	-100	2.1	-63
Bijapur	0.0	-100	0.0	-100	4.9	-5
Dharwad	0.0	-100	8.1	47	7.3	-35
Gadag	4.2	48	0.7	-81	5.4	-36
Gulbarga	0.5	-88	0.6	-87	6.0	24
Haveri	3.1	17	5.1	-20	13.8	69
Koppal	2.8	253	0.3	-88	9.7	98
Raichur	0.8	-72	0.0	-100	4.4	14
Yadgir	0.5	-87	0.0	-100	3.1	3
<b>S I Karnataka</b>						
Bangalore Rural	0.0	-100	0.0	-100	11.7	59
Bangalore Urban	0.0	-100	0.0	-100	7.8	-12
Bellary	1.3	-7	3.7	10	13.1	135
Chamarajnagar	0.0	-100	9.6	11	17.7	13
Chichballapur	0.0	-100	0.0	-100	9.5	41
Chickmagalur	2.3	-52	13.1	20	22.3	81
Chitradurga	0.6	-71	0.3	-93	20.6	329
Davangere	16.4	556	2.4	-54	11.6	59
Hassan	1.5	-64	2.9	-66	20.4	82
Kodagu	8.8	3	3.5	-78	38.3	97
Kolar	0.0	-100	0.0	-100	0.0	-100
Mandya	0.0	-100	7.5	18	24.4	130
Mysore	0.0	-100	13.5	96	18.2	36
Ramnagara	0.0	-100	1.6	-68	20.2	119
Shimoga	1.0	-72	5.7	-6	6.3	-15
Tumkur	0.0	-100	0.9	-75	9.1	6
<b>Kerala</b>						
Alappuzha	0.0	-100	37.8	29	32.2	7
Kannur	0.0	-100	5.6	-21	2.1	-87
Ernakulam	0.0	-100	30.6	72	21.7	-22
Idukki	0.0	-100	17.1	-43	31.2	-2
Kasaragod	0.0	-100	14.5	245	0.1	-99
Kollam	0.0	-100	20.1	-36	41.9	20
Kottayam	0.0	-100	40.5	22	38.6	7
Kozhikode	0.5	-88	33.5	182	16.8	-21

Malappuram	0.0	-100	7.0	-56	31.1	46
Palakkad	0.0	-100	5.3	-71	23.5	-5
Pathanamthitta	0.0	-100	110.9	190	85.1	100
Thiruvananthapuram	0.0	-100	20.3	-18	40.0	46
Thrissur	0.0	-100	14.9	-8	24.1	22
Wayanad	2.9	-65	25.2	71	50.2	176
<b>Tamil Nadu</b>						
Ariyalur	0.0	-100	0.0	-100	0.0	-100
Chennai	0.0	-100	0.0	-100	0.0	-100
Coimbatore	0.0	-100	7.4	4	8.2	-24
Cuddalore	0.0	-100	0.0	-100	0.0	-100
Dharmapuri	0.0	-100	0.0	-100	14.4	45
Dindigul	0.0	-100	4.4	-60	8.8	-30
Erode	0.0	-100	0.0	-100	2.6	-73
Kanchipuram	0.0	-100	0.0	-100	0.0	-100
Kanyakumari	0.0	-100	10.5	-61	9.5	-61
Karikal	0.0	-100	0.0	-100	0.0	-100
Karur	0.0	-100	0.4	-93	0.0	-100
Krishnagiri	0.0	-100	0.0	-100	3.7	-56
Madurai	0.0	-100	0.0	-100	0.0	-100
Nagapattinam	0.0	-100	0.0	-100	0.0	-100
Namakkal	0.0	-100	0.0	-100	18.7	89
Nilgiris	0.0	-100	1.2	-93	13.8	-26
Perambalur	0.0	-100	0.0	-100	0.0	-100
Puducherry	0.0	-100	0.0	-100	0.0	-100
Pudukottai	0.0	-100	0.0	-100	0.0	-100
Ramanathapuram	0.0	-100	6.3	-37	0.0	-100
Salem	0.0	-100	0.0	-100	3.6	-71
Sivaganga	0.0	-100	0.0	-100	0.0	-100
Thanjavur	0.0	-100	0.0	-100	0.0	-99
Theni	0.0	-100	8.7	-52	11.6	-10
Tirunelveli	0.0	-100	21.7	8	3.9	-76
Tirupur	0.0	-100	0.0	-100	0.0	-100
Tiruvallur	0.0	-100	0.0	-100	0.0	-100
Tiruvannamalai	0.0	-100	0.0	-100	0.0	-100
Tiruvarur	0.0	-100	0.3	-94	0.0	-100
Toothukudi	0.0	-100	2.1	-86	0.5	-96
Trichy	0.0	-100	0.0	-100	1.2	-86
Vellore	0.0	-100	0.0	-100	0.5	-83
Villupuram	0.0	-100	0.0	-100	0.0	-100
Virudhunagar	0.0	-100	0.7	-96	3.4	-78
<b>Andhra Pradesh</b>						
<b>Coastal Andhra Pradesh</b>						
East Godavari	0.0	-100	0.0	-100	0.0	-100
Guntur	0.0	-100	0.0	-100	0.3	-87
Krishna	0.0	-100	0.0	-100	0.0	-100
Nellore	0.0	-100	0.0	-100	9.3	749
Prakasam	0.0	-100	0.0	-100	7.8	359
Sirkakulam	0.0	-100	3.6	-45	4.5	-19

Visakhapatnam	0.0	-100	0.0	-100	6.6	-13
Vizianagram	0.0	-100	0.0	-100	7.1	17
West Godavari	0.0	-100	0.0	-100	0.0	-100
<b>Telangana</b>						
Adilabad	0.0	-100	0.0	-100	1.0	-66
Hyderabad	0.0	-100	1.2	-70	5.1	21
Karimnagar	0.0	-100	0.4	-89	0.0	-100
Khammam	0.0	-100	0.0	-100	1.2	-68
Mehabubnagar	0.9	-37	1.1	-62	10.1	188
Medak	3.5	52	0.0	-100	0.1	-97
Nalgonda	1.4	-30	1.7	-30	4.4	62
Nizamabad	0.3	-90	0.0	-100	1.6	-54
Rangareddy	0.9	-74	0.5	-78	3.1	-42
Warangal	0.0	-100	4.1	52	0.0	-100
<b>Rayalaseema</b>						
Anantapur	0.0	-100	0.0	-100	12.2	212
Chittoor	0.0	-100	0.0	-100	2.4	-29
Cuddapah	0.0	-100	0.0	-100	6.5	171
Kurnool	0.1	-92	0.0	-100	6.6	74

#### Legends

	(20% or more) excess rainfall		(-60 to -99 %) scanty rainfall
	(-19 to +19%) normal rainfall		(-100%) no rainfall
	(-20 to -59%) deficient rainfall	**	Data not available