National Agromet Advisory Service Bulletin

Friday 4th April 2014
(For the period 4th to 8th April 2014)

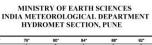


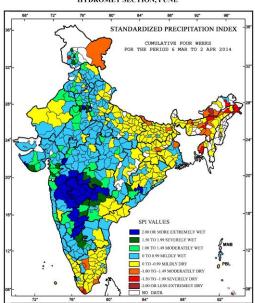
Issued by

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



Standardised Precipitation Index Four Weekly for the Period 6th March to 2nd April 2014



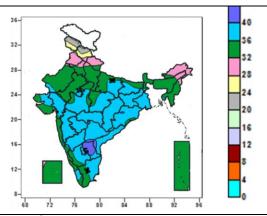


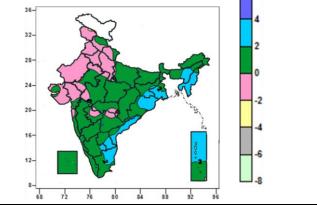
- Extremely wet/severely wet conditions experienced over most parts of Maharashtra, some parts of Karnataka;
 Kalahandi; Nawarangpur districts of Odisha; Gurgaon, Faridabad, Rewari, Mahendragarh districts of Haryana;
 Reasi, Kulgam, Kupwara districts of Jammu & Kashmir; Narmada, Navsari, Junagarh, Porbhandar, Diu districts of Gujarat; Alirajpur district of Madhya Pradesh.
- Moderately/severely dry conditions experienced over most parts of North East India, Kanyakumari, Ramanathapuram, Erode, Tiruppur districts of Tamil Nadu, East Champaram, Purnea, West Champaran districts of Bihar, Bokaro district of Jharkhand, Murshidabad district of West Bengal and Trivandrum district in Kerela,
- Rest of the country experienced mild wet/dry conditions.

Contour maps for Mean Maximum and Minimum Temperature and their anomaly for the week ending on 02.04.2014

Actual Mean Maximum Temperature (°C) in India for the week ending 02.04.2014

Mean Maximum Temperature (°C) Anomaly in India for the week ending 02.04.2014

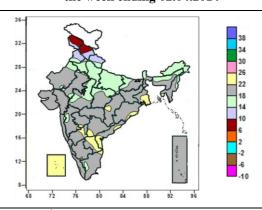


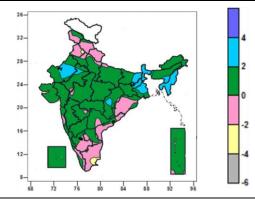


- 40 to 44^oC over many parts of Rayalaseema, some parts of Telanagana, Coastal Andhra Pradesh.
- 32 to 40°C over all parts of country except many parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Arunachal Pradesh, Rayalaseema, some parts of Telanagana, Coastal Andhra Pradesh, Haryana, West Uttar Pradesh, Assam & Meghalaya, Nagaland.
- 28 to 32^oC over many parts of Uttarakhand, Punjab, Arunachal Pradesh, some parts of Himachal Pradesh, Haryana, West Uttar Pradesh, Assam & Meghalaya, Nagaland.
- 16 to 24⁰C over many parts of Jammu & Kashmir, Himachal Pradesh.
- 2 to 4⁰C over many parts of Manipur, Mizoram, Tripura, Gangetic West Bengal, Coastal Andhra Pradesh, Rayalaseema, Andaman & Nicobar Islands, some parts of Assam & Meghalaya, Jharkhand, Odisha, South Interior Karnataka, Tamil Nadu.
- -2 to 2⁰C over all parts of country except Manipur, Mizoram, Tripura, Gangetic West Bengal, Coastal Andhra Pradesh, Rayalaseema, Andaman & Nicobar Islands, some parts of Jammu & Kashmir, Assam & Meghalaya, Jharkhand, Odisha, South Interior Karnataka, Tamil Nadu.
- -4 to -2^oC over some parts of Jammu & Kashmir.

Actual Mean Minimum Temperature ($^{\circ}$ C) in India for the week ending 02.04.2014

Mean Minimum Temperature (°C) Anomaly in India for the week ending 02.04.2014





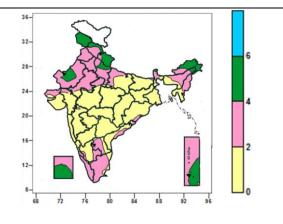
- 6 to 10^oC over many parts of Jammu & Kashmir, Himachal Pradesh.
- 10 to 14^oC many parts of Uttarakhand, Punjab, some parts of Jammu & Kashmir, Himachal Pradesh, Haryana.
- 14 to 22°C over all parts of country except many parts Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Rayalaseema, Lakshadweep Islands, some parts of Haryana, Gangetic West Bengal, Coastal Odisha Chhattisgarh, Coastal Andhra Pradesh, Telanagana, Tamil Nadu, Madhya Maharashtra, Marathwada.
- 22 to 26⁰C over many parts Rayalaseema, Lakshadweep Islands, some parts of Gangetic West Bengal, Coastal Odisha, Chhattisgarh, Coastal Andhra Pradesh, Telanagana, Tamil Nadu, Madhya Maharashtra, Marathwada.

- -4 to -2°C over some parts of Punjab, Tamil Nadu.
- -2 to 2^oC over all parts of country except over many parts of West Bengal & Sikkim, Nagaland, Manipur, Mizoram, Tripura, West Rajasthan some parts of Bihar, Jharkhand, Chhattisgarh, East Rajasthan, Assam & Meghalaya, Punjab, Tamil Nadu.
- 2 to 4°C over many parts of West Bengal & Sikkim, Nagaland, Manipur, Mizoram, Tripura, West Rajasthan some parts of Bihar, Jharkhand, Chhattisgarh, East Rajasthan, Assam & Meghalaya.

Relative Humidity (%) over India for the week ending 02.04.2014

36-32-28-20-16-12-85 72 76 80 84 88 92 96

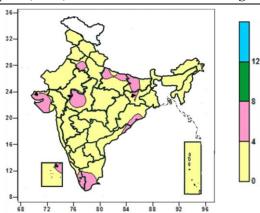
Cloud amount (okta) over India for the week ending 02.04.2014



- 80 to 100% over many parts of Lakshadweep Islands.
- 60 to 80% over many parts of Jammu & Kashmir, Sub-Himalayan West Bengal & Sikkim, North East India (except Nagaland, Manipur), Coastal Karnataka, Andaman & Nicobar Islands, some parts of Himachal Pradesh, Punjab, Saurashtra, Konkan, Kerala, South Interior Karnataka, Coastal Tamil Nadu, Coastal Andhra, Coastal Orissa. Gangetic West Bengal.
- 40 to 60% over many parts of Himachal Pradesh, Uttarakhand, Uttar Pradesh, Punjab, Haryana, Delhi, Gangetic West Bengal, Odisha, Andhra Pradesh, Tamil Nadu, Kerala, South Interior Karnataka, Gujarat, Saurashtra & Kutch, East Madhya Pradesh, some parts of Rajasthan, Bihar, Jharkhand, Chhattisgarh, Maharashtra, Coastal & North Interior Karnataka.
- 20 to 40% over many parts of Rajasthan, Madhya Pradesh, Central India, Bihar, Jharkhand, Madhya Maharashtra, Marathwada, Vidarbha, Gujarat, some parts of East Uttar Pradesh, Gangetic West Bengal, Telanagana, Rayalaseema, Tamil Nadu, North Interior Karnataka.

- 4 to 6 okta over many parts of Jammu & Kashmir, Uttarakhand, Arunachal Pradesh, some parts of Himachal Pradesh, West Rajasthan, West Uttar Pradesh, Sikkim, Assam & Meghalaya, Lakshadweep and Andaman & Nicobar Islands.
- 0 to 4 okta over entire country except many parts of Jammu & Kashmir, Uttarakhand, Arunachal Pradesh, some parts of Himachal Pradesh, West Rajasthan, West Uttar Pradesh, Sikkim, Assam & Meghalaya, Lakshadweep and Andaman & Nicobar Islands.

Wind speed (knots) over India for the week ending 02.04.2014



- 8 to 12 knots in some parts of Kerala.
- 4 to 8 knots over many parts of Kerala, Tamil Nadu, West Madhya Pradesh, Bihar, Haryana, Delhi, Saurashtra & Kutch, some parts of Uttar Pradesh, Coastal Odisha, Coastal Andhra Pradesh and Lakshadweep Islands.
- 0 to 4 knots over entire country except many parts of Kerala, Tamil Nadu, West Madhya Pradesh, Bihar, Haryana, Delhi, Saurashtra & Kutch, some parts of Uttar Pradesh, Coastal Odisha, Coastal Andhra Pradesh and Lakshadweep Islands.

Weather Forecast

Weather Forecast for next 3 days (upto 0830 hours IST of 7th April, 2014)

- Rain/thundershowers would occur at a few places over Jammu & Kashmir during next 48 hours and at many places thereafter.
- Rain/thundershowers would occur at isolated places over Uttarakhand.
- Mainly dry/dry weather would prevail over Rajasthan, east Uttar Pradesh, Haryana, Punjab and Delhi.
- Rain/thundershowers would occur at isolated places over west Uttar Pradesh during next 24 hours. Mainly dry/dry weather would prevail thereafter.
- Rain/thundershowers would occur at isolated places over Himachal Pradesh during next 48 hours and at a few places thereafter.
- Mainly dry/dry weather would prevail over Cenral india.
- Dry weather would prevail over Maharashtra and Gujarat.
- Rain/thundershowers would occur at isolated places over Arunachal Pradesh, Assam & Meghalaya and at a few places over Nagaland, Manipur, Mizoram and Tripura on 4th and at isolated places thereafter.
- Rain/thundershowers would occur at isolated places over Odisha, Sub Himalayan West Bengal and Sikkim during next 48 hours and mainly dry thereafter. Mainly dry/dry weather would prevail over Gangetic West Bengal and Jharkhand.
- Rain/thundershowers would occur at isolated places over South Intereior Karnataka, Kerala and weather would be mainly dry over rest part of south India.

Satellite image dated 04.04.2014, 0600 UTC



Weather Warning during next 3 days

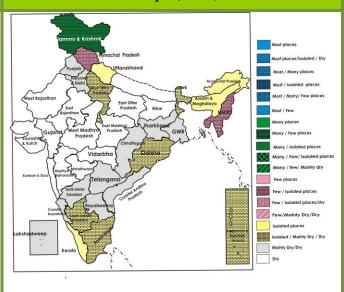
- **4 April (Day1):** Isolated thundersquall would occur over Gangetic West Bengal and Nagaland, Manipur, Mizoram & Tripura.
- **5 April (Day 2):** Isolated thundersquall would occur over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

6 April (Day 3): No weather warning.

Weather Outlook for subsequent 4 days from 7th April to 11th April , 2014

- Rain/thundershowers would occur at many places over Jammu & Kashmir and at a few places over Himachal Pradesh & Uttrakhand.
- Rain/thundershowers would occur at many places over northeastern states from 8th.
- Under the influence of approaching easterly wave rain/thundershowers would occur at many places overTamilnadu and Kerala and at a few places over south Karnataka from 7th
- Weather would be mainly dry over rest of the country.

Weather Forecast Map (Valid upto 0830 hours of 7th April, 2014)



Salient Advisories

- As rain/ thundershower would occur at many places over **Jammu & Kashmir** on 6th April, postpone irrigation to standing crops.
- As isolated thundersquall would occur over **Gangetic West Bengal** on 4th April, provide mechanical support to fruit crops and vegetables and undertake propping up in sugarcane.
- As isolated thunder squall would occur over **Assam and Meghalaya** on 5th April, provide mechanical support to banana, fruit crops and vegetables.
- As isolated thunder squall would occur over **Nagaland, Manipur, Mizoram and Tripura** on 4th and 5th April, provide mechanical support to banana, fruit crops and vegetables.
- As rain/thundershowers would occur at many places from 7th April, postpone irrigation in sesame, sugarcane, banana, groundnut, summer cotton and rice fallow cotton and undertake planting of sugarcane in the Cauvery Delta Zone of Tamil Nadu.
- As rain/thundershowers would occur at many places from 7th, postpone irrigation in coconut palms and banana in the Central Zone of Kerala.
- ➤ Due to prevailing humid conditions, monitor pulse crops for the attack of powdery mildew disease in Sub-Tropical Zone of **Jammu & Kashmir**. For control, spray Carathan @ 50 g in 25 litres of water after current spells of rain.
- Due to moist 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**. For control, spray 100 ml Methyl Damiton per 100 litres of water.
- ➤ Prevailing hot and humid weather condition is favourable for outbreak of blast disease in *boro* rice at panicle initiation stage in Laterite and Red Soil Zone of **West Bengal**. To protect the crop, apply Hinosan@1ml or Hexachonazol (Contaf) 5%@1.5 ml/lt of water.

Detailed Zonewise Agromet Advisories

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







Wheat Sugarcane Mustard

- Realised Rainfall: Significant rainfall occurred in Anantnag, Badgam, Baramula, Doda, Ganderbal, Kulgam, Kupwara, Ramban, Shopian and Srinagar districts in Jammu & Kashmir. Chamba, Kinnaur and Kullu districts in Himachal Pradesh. Mainly dry weather prevailed over rest of the region.
- Weather Forecast: Rain/thundershowers would occur at a few places over Jammu & Kashmir during next 48 hours and at many places thereafter. Mainly dry/dry weather would prevail over Rajasthan, east Uttar Pradesh, Haryana, Chandigarh, Punjab and Delhi. Rain/thundershowers would occur at isolated places over Uttarakhand. Rain/thundershowers would occur at isolated places over West Uttar Pradesh during next 24 hours. Mainly dry/dry weather would prevail thereafter. Rain/thundershowers would occur at isolated places over Himachal Pradesh during next 48 hours and at a few places thereafter.
- Weather Warning: No weather warning.
- Weather Outlook: Rain/thundershowers would occur at many places over Jammu & Kashmir and at a few places over Himachal Pradesh & Uttrakhand. Weather would be mainly dry over rest of the region.
- Advisories:
 - Jammu & Kashmir:
 - As rain/ thundershower would occur at many places over Jammu & Kashmir on 6th April, postpone irrigation

to standing crops. Keep harvested produce at safe place.

➤ Due to prevailing humid conditions, monitor pulse crops for the attack of powdery mildew disease in Sub-Tropical Zone of Jammu & Kashmir. For control, spray Carathan @ 50 g in 25 litres of water after current spells of rain.

■ Himachal Pradesh:

- ➤ Undertake seedbed preparation for sowing of summer vegetables like *capsicum* and tomato in Mid-Hills Sub-Humid Zone of Himachal Pradesh utilising the available soil moisture.
- ➤ Due to moist 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. For control, spray 100 ml Methyl Damiton per 100 litres of water.
- Due to moist conditions, there are chances of occurrence of downey mildew in onion in Mid-Hills Sub-Humid Zone and Sub-Montane & Low Hills Sub-Tropical Zone of Himachal Pradesh. For control, spray Redomil M-Z @ 25g per 10 litres of water after current spells of rain. Dieback disease in onion is also observed in some pockets, for control spary Dithane M-453g.litres+1g Bavistin per litre of water. After 10 days, spray Redomil M-Z 2g per litres of water.
- ➤ Due to high moisture, there are chances of stalk rot in cabbage and cauliflower in Mid-Hills Sub-Humid Zone of Himachal Pradesh. Remove the diseased part (leaf/fruit) and spray Bavistin-50 (50g /100 litres of water) or Dithane M-45 (250 g /100 litres of water).

• Uttarakhand:

- As mainly dry weather would prevail, undertake intercultural operation and application of plant protection measures and fertilizers in the standing crops in Bhabar and Tarai Zone of Uttarakhand. Also undertake harvesting of matured crops like wheat, barley, lentil and French bean.
- ➤ Due to partly cloudy and humid weather, late sown peas are susceptible to attack of powdery mildew in Sub humid Sub Tropic Zone of Uttarakhand, for effective control spray Sulphur fungicide Karathane 40EC @ 0.05%.

■ Punjab, Haryana and Delhi:

- As dry weather is prevailing, apply irrigation to fruit crops, vegetables and sugarcane in Punjab, Haryana and Delhi.
- ➤ Utilising the available moisture, continue transplanting of chilli and sowing of cucurbits namely muskmelon, watermelon, bottle gourd, round gourd, sponge gourd, pumpkin, bitter gourd and other summer vegetables viz. okra, cowpea, cluster bean in Western Zone of Punjab and summer moong and summer mash in Undulating Plain Zone of Punjab.
- ➤ Due to partly cloudy and humid weather, there is chance of attack of pod borer in green gram in Sub-Montane Undulating Zone of Punjab. To control, spray 200 ml Indoxacarb 14.5 SC or 60 ml Spinosad 45 SC in 80-100 litre of water. Repeat the spray after 15 days.
- ➤ Due to partly cloudy and humid weather, there is chance of incidence of powdery mildew disease in wheat crop in Western Zone of Punjab; spray Karathane 40EC @ 0.05% (100 ml in 200 litres of water) or Tilt 25EC @ 200ml in 200 litres of water per acre.
- ➤ Due to humid weather condition, yellow rust may occur in wheat crops, to control spray Tilt@ 200 ml in 200 litres water per acre in Western Zone of Haryana.
- In view of increasing temperature, apply light irrigation in wheat crop in the evening hours at milking and grain filling stage in Delhi.
- As mainly dry weather is prevailing, continue harvesting of the matured mustard crop in Delhi. Undertake sowing of maize, hybrid cluster bean, French bean, amaranths, vegetable lobia, okra, bottle gourd, cucumber, ridge gourd, summer radish, green gram and black gram.
- ➤ Due to humid weather, there may be attack of pod borer in gram in Delhi. If pest population reaches above ETL, to control spray Spinosad 48 EC @ 1 ml. /4 litres of water.

• Uttar Pradesh:

- ➤ Utilizing the available moisture, continue sowing of moong, urad, lobia, bhindi and cucurbits and planting of tomato, brinjal and chilli in Western Plain Zone of Uttar Pradesh.
- As mainly dry weather is prevailing, apply irrigation in wheat, in late sown barley crop at milk stage, in onion and other vegetable crops. 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 Nepthalin Acetic Acid, 20 ml per litre of water or Plenofix 5ml per 10 litres of water.

■ Rajasthan:

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, there is chance of incidence of thrips in onion and garlic in Transitional Plain Zone of Inland Drainage and Semi-Arid Eastern Plain Zone. For control, spray Methyl Demeton 25 EC or Malathion 50 EC @ 1 ml per litre of water.
- ➤ In the prevailing temperature conditions, there is chance of incidence of red pumpkin beetle in cucurbits in Transitional Plain Zone of Inland Drainage of Rajasthan. For control, dusting of Malathion 5% or Methyl Parathion 2% dust @ 25kg.

• Animal Husbandry

Due to prevailing hot weather, give salt and minerals in addition to dry/green fodder to the cattle in Central Plain Zone of Uttar Pradesh.

• 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.

CENTRAL INDIA [M.P., CHHATTISGARH]









Wheat Sugarcane Chilli Mustard

- **Realised Rainfall:** No significant rainfall occurred over the region.
- **Weather Forecast:** Mainly dry/dry weather would prevail over Cenral india. Maximum temperature would rise by 1-2°C over the region.
- Weather Warning: No weather warning.
- Weather Outlook: Weather would be mainly dry over the region.
- Advisories:

Madhva Pradesh:

- As dry weather would prevail, continue harvesting of matured gram and wheat in Malwa Plateau Zone and Vindhya Plateau Zone and gram, mustard and maize in Jhabua Hill Zone of Madhya Pradesh.
- As mainly dry weather would prevail, apply irrigation to mango orchards and vegetables in Bundelkhand Zone of Madhya Pradesh. Also harvest matured mustard and potato in Grid Zone and Bundelkhand Zone of Madhya Pradesh.
- ➤ Due to the prevailing hot weather, there is possibility of attack of stem borer in maize in Nimar Valley Zone of Madhya Pradesh. Apply Methyl- o-Demeton 25 EC @10 ml or Carbaryl 50% W.P. @ 40 g in 10 litre of water.
- ➤ In the prevailing temperature conditions, there is possibility of attack of sucking pest in mango in Bundelkhand Zone of Madhya Pradesh. Spray Dimethoite @ 2ml/ litre of water for control.
- Due to prevailing hot weather there is possibility of attack of mango hopper, aphids and powdery mildew in mango in Jhabua Hill Zone of Madhya Pradesh. For control, spray 2 g of Carboryl dust and 3.0 g of Sulphex per litre of water.

Chhattisgarh:

- As mainly dry weather would prevail, continue harvesting of matured black gram and linseed in Plain Zone of Chhattisgarh.
- As dry weather is prevailing, apply irrigation in vegetables and apply mulch or paddy straw in between the rows of summer moong to reduce evapo-transpiration rate in Plain Zone of Chhattisgarh.
- In North Hill Zone of Chhattisgarh, as mainly dry weather would prevail continue harvesting of matured wheat and arhar crop. As temperature conditions are favourable, continue sowing of vegetables like pumpkin, cucumber, sponge-gourd etc. and planting of spring planted sugarcane and continue sowing of summer maize.
- As mainly dry weather would prevail, apply irrigation to summer rice, maize, sugarcane and summer vegetable crops in North Hill Zone of Chhattisgarh.
- As mainly dry weather would prevail harvest wheat and potato in Bastar Plateau Zone of Chhattisgarh.
- ➤ Due to prevailing hot weather, there is possibility of attack of yellow stem borer in summer rice in Plain Zone of Chhattisgarh. Apply Cartap @ 20 kg/ha for control.

• Animal Husbandry

> 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 lot of clean water to the animals and keep them in the shaded place.

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









Mustard Sugarcane Cole crops Onion

- **Realised Rainfall:** Significant rainfall occured in North Sikkim district of Sikkim. Weather remained mainly dry/dry over rest of the region.
- Weather Forecast: Rain/thundershowers would occur at isolated places over Odhisa, Sub Himalayan West Bengal and Sikkim during next 48 hours and mainly dry thereafter. Mainly dry/dry weather would prevail over Gangetic West Bengal and Jharkhand.
- Weather Warning: Isolated thundersquall would occur over Gangetic West Bengal on 4th April.
- Weather Outlook: Weather would be mainly dry over the region.
- Advisories:

• Odisha:

- As mainly dry weather would prevail, continue harvesting of green gram and black gram and groundnut in Western Undulating Zone of Odisha.
- As weather would be mainly dry, apply irrigation in summer rice and maintain 5 cm of water level in North Eastern Coastal Plain Zone of Odisha.
- ➤ Prevailing dry weather is conducive for occurrence of white grub and termite in groundnut in North Eastern Plateau Zone of Odisha. For control, apply Chloripyriphos @2 ml/litre of water.
- Due to prevailing high temperature and dry conditions, apply light irrigation in onion in North Eastern Plateatu Zone of Odisha.
- ➤ Increased difference between daily maximum and minimum temperature favours incidence of blast in rice in East and South Eastern Coastal Plain Zone of Orissa. For control, spray 1 g Beam/ litre of water.
- Current temperature favours thrips infestation on groundnut crop in East and South Eastern Coastal Plain Zone of Odisha, spray 400 ml Dimethoate in 200 litre of water per acre.

■ West Bengal:

- As isolated thundersquall would occur over Gangetic West Bengal on 4th, provide mechanical support to fruit crops and vegetables and undertake propping up in sugarcane.
- ➤ Prevailing hot and humid weather condition is favourable for outbreak of blast disease in *boro* rice at panicle initiation stage in Laterite and Red Soil Zone of West Bengal. To protect the crop, apply Hinosan@1ml or Hexachonazol (Contaf) 5%@1.5 ml/lilre of water.
- ➤ In the prevailing hot and humid weather conditions, there may be possibility of increased attack of Anthracnose leading to black spot in mango in New Alluvial Zone of West Bengal. Spray 1 ml Carbendazim per lt. of water for control.
- ➤ Warm day and cool night is congenial for incidence of downy mildew in cucumber, pointed gourd and bitter gourd in Terai Zone of West Bengal. To manage the disease, spray Mancozeb @ 2g/litre or Metalaxyl 8% and Mancozeb 64% @1 g/litre of water. Prevailing weather condition is favourable for sowing of marigold for the summer and rainy season flower.

• Bihar:

- ➤ In North West Alluvial Plain Zone of Bihar, as mainly dry weather would prevail, continue harvesting of tobacco and also apply irrigation to wheat and apply irrigation at 15 days interval in mango and litchi orchards. As present temperature condition is favourable, continue sowing of green gram and black gram.
- As mainly dry weather is prevailing, apply irrigation in sugarcane and light irrigation in onion in North East Alluvial Plain Zone of Bihar. Also undertake harvesting of wheat.

• Jharkhand:

In Western Plateau Zone of Jharkhand, as mainly dry weather would prevail, continue harvesting of potato and apply irrigation to wheat crop at milk /dough stage.

- In Central & North Eastern Plateau Zone of Jharkhand, as mainly dry weather would prevail, continue harvesting of potato, pigeon pea and gram and apply irrigation to wheat crop at milk /dough stage.
- As mainly dry weather would prevail, apply irrigation to wheat at grain formation stage and continue harvesting of matured wheat crop in South Eastern Plateau Zone of Jharkhand.

Animal Husbandry

➤ In North West Alluvial Plain Zone of Bihar, provide lot of clean water to animals and keep them in the shade during noon hours.

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







Chilli Rice cole crops

- Realised Rainfall: Significant rainfall occurred in Changlang, Dibang Valley, Lohit, Lower Dibang Valley, Tawang, Tirap, Upper Siang, Upper Subansari and West Siang districts of Arunachal Pradesh, Cachar, Golaghat, Jorhat, Sibsagar and Tinsukia districts of Assam and Churachandpur, Imphal West districts of Manipur. Weather remained mainly dry/dry over rest of the region.
- Weather Forecast: Rain/thundershowers would occur at isolated places over Arunachal Pradesh, Assam & Meghalaya and at a few places over Nagaland, Manipur, Mizoram and Tripura on 4th and at isolated places thereafter.
- **Weather Warning:**): Isolated thundersquall would occur over Nagaland, Manipur, Mizoram & Tripura on 4th and 5th and over Assam & Meghalaya on 5th.
- Weather Outlook: Rain/thundershowers would occur at many places over northeastern states from 8th. Weather would be mainly dry over rest of the region.

• Advisories:

Assam & Meghalaya, Arunachal Pradesh:

- As isolated thunder squall would occur over Assam and Meghalaya on 5th April, provide mechanical support to banana, fruit crops and vegetables.
- In Temperate Sub Alpine Zone of Meghalaya, undertake sowing of direct seeded *ahu* rice, maize, cucurbits and okra utilizing the expected rainfall from 8th April.
- ➤ Under prevailing weather conditions, continue land preparation and sowing of jute, summer sesame, *boro* paddy, pineapple, okra and planting of spring sugarcane in Lower Bramhaputra Valley Zone of Assam.
- In Upper Bramhaputra Valley Zone of Assam, undertake land preparation and sowing of different summer vegetable like ridge gourd, sponge gourd, ash gourd, pumpkin, okra, bitter gourd and cucumber, green gram and black gram and planting of sugarcane, ginger and turmeric utilising the realised rainfall.
- Continue land preparation and sowing of summer green gram and black gram, cucurbits and okra and planting of ginger in the Hill Zone of Assam utilizing the expected rainfall from 8th April.
- ➤ In Central Bramhaputra Valley Zone of Assam, undertake harvesting of matured wheat crop during clear weather. Under prevailing weather condition, continue sowing of summer vegetables, summer green gram and black gram, *capsularis* jute and *bao* paddy and planting of spring sugarcane.

> Nagaland, Manipur, Mizoram and Tripura:

- As isolated thunder squall would occur over Nagaland, Manipur, Mizoram and Tripuraon 4th and 5th April, provide mechanical support to banana, fruit crops and vegetables.
- ➤ In Manipur, continue land preparation for planting of ginger and turmeric utilizing the available moisture. Continue nursery sowing of early *kharif* rice.
- As mainly dry weather is prevailing, provide banana shading and irrigation to transplanted seedling of brinjal, okra, French bean, pumpkin In Mild Tropical Hill Zone of Mizoram.
- In Mild Tropical Hill Zone of Nagaland, continue sowing of *jhum* rice, summer maize, summer vegetables like okra, cucurbitaceous crops like pumpkin, ridge gourd, ash gourd etc. utilizing the the available moisture. Apply mulching to potato during moisture stress period.
- In the prevailing temperature conditions, there may be chances of attack of yellow stem borer in *boro* rice in

Mild Tropical Plain Zone of Tripura. Apply Chlorpyriphos @ 10 kg per ha twice or Fipronil @ 2g per litre of water to manage the yellow stem borer attack. Continue land preparation for sowing of *jhum* rice with the help of pre-monsoon rain.

■ Animal Husbandry

- ➤ In Northeastern States, keep cattle/goats indoors during thunder squall period.
- In Assam, Manipur and Tripura, vaccinate to control swine fever in pigs, FMD in cattle and ranikhet disease in poultry during this period.
- In Mild Tropical Plain Zone of Tripura, due to hot weather condition laying of egg may be hampered in poultry. Provide sufficient amount of energy and protein feed to maintain the egg production.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]









Rice Groundnut Cotton Grape vine

- Realised Rainfall: : Mainly dry weather prevailed over Maharashtra. Weather remained dry over Gujarat State.
- Weather Forecast: Dry weather would prevail over Maharashtra and Gujarat.
- Weather Warning: No weather warning.
- Weather Outlook: Weather would be mainly dry over the region.
- Advisories:

■ Maharashtra:

In Konkan, as dry weather is expected, undertake intercultural operations and fertilizer application in vegetables, rice, finger millet and orchards. Apply irrigation to groundnut, 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. Apply irrigation to maintain around 10 cm water level in transplanted rice field before and after 10 days of panicle initiation stage. New graft and newly planted fruit crops may be protected from sun burn by erecting temporary shed.

- In Madhya Maharashtra, as dry weather is expected, apply irrigation in summer groundnut, bajra, sugarcane and vegetable crops. Continue intercultural operations and fertilizer application in sugarcane, summer groundnut and vegetables. As day temperature is prevailing above normal (evaporation upto 12 mm/day), apply mulch of crop residues and other plant waste product in the orchards and sugarcane trash in sugarcane. Apply 20 litres water to each banana plant/day (flood irrigation) and 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. Considering prevailing high temperature in Western Ghat region, spray 2 % Urea solution to avoid mango dropping.
- In Marathwada, as dry weather is expected, apply irrigation to summer groundnut, sugarcane, orchard crops like banana, pomegranate, fig and vegetable crops. As prevailing day temperature is high, apply mulch of crop residues and other plant waste product in the orchards and sugarcane trash in sugarcane. Cover banana bunch with leaves or paper/curtains to avoid damage from bright sunshine.
- ➤ In Vidarbha, as dry weather is expected, apply irrigation to water melon, summer vegetables, summer groundnut and summer green gram. Maintain up to 8 cm water level in already transplanted rice field in Gondia, Bhandara, Chandrapur and Gadchiroli districts. Continue intercultural operations and fertilizer application in orchards, summer groundnut and summer green gram.
- ➤ Due to rise in day temperature in Pune region there may be infestation of rust caused by white fly in summer okra, spray Imidacloprid@ 4ml per 10 litres water.
- Due to rise in temperature in South Konkan, there may be attack of aphids and leaf miner in vegetables; spray Dimethoate @10 ml per 10 litre water at 15-20 days interval.

■ Gujarat:

- As dry weather is prevailing, irrigate vegetable crops during evening hours in South Gujarat Heavy Rainfall Zone. Carry out hand weeding and intercultural operations in timely sown crops (green gram etc.). Irrigate green gram crop at pod development stage. Undertake harvesting of castor and regularly pluck okra fruits.
- In North Gujarat Zone, as dry weather is prevailing, irrigate groundnut, cluster bean, green gram, castor and orchards at regular intervals; carry out weeding and intercultural operations in groundnut, green gram, bajra

and cluster bean to conserve soil moisture. Undertake harvesting of matured wheat crop, matured spikes of castor and keep for sun drying before threshing.

- As sky condition will remain clear, undertake harvesting of matured wheat crop and cumin crop in Bhal and Coastal Zone of Gujarat.
- As dry weather is prevailing, apply irrigation in summer groundnut at flowering stage. Mango is in fruiting stage in North Saurashtra Zone; apply light irrigation in mango orchard.
- As dry weather is prevailing, apply irrigation in vegetables and fruit crops in South Gujarat Zone.
- Animal Husbandry
- ➤ Shower the animals with cold water two to three times in a day. Provide fresh and cold water for drinking in Gujarat. Do Vaccination for Haemorrhagic septicaemia (H.S.) disease and Blue Quarter (B.Q.) in animals in North Saurashtra Zone.

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









Rice

Sugarcane(cane maturity)

Onion (bulb development)

Sucking pest on Groundnut

- **Realised Rainfall**: No significant rainfall occurred over the region.
- Weather Forecast: Rain/thundershowers would occur at isolated places over South Intereior Karnataka and Kerala. Weather would be mainly dry over rest of the region.
- Weather Warning: No weather warning.
- Weather Outlook: Under the influence of approaching easterly wave rain/thundershowers would occur at many places overTamilnadu and Kerala and at a few places over south Karnataka from 7th. Weather would be mainly dry over rest of the region.
- Advisory:

■ Karnataka:

- As mainly dry weather would prevail, complete the last picking of cotton in the North Transition Zone of Karnataka.
- As there is increase in temperature and mainly dry weather would prevail, apply irrigation in arecanut, coconut and black pepper gardens either by furrow or drip irrigation in the Hill Zone of Karnataka and also apply irrigation to groundnut which is at flowering stage.
- ➤ Due to prevailing high temperature, stem borer/thrips infestation is observed in rice and likely to continue in the Southern Dry Zone of Karnataka. To manage the pests, spray Chlorophyriphas @ 2ml/lt.of water or application of Phorate @ 8kg/lt. of water.

Andhra Pradesh:

- As dry weather is prevailing, provide irrigation to maize in Kurnool district in the Scarce Rainfall Zone of Andhra Pradesh.
- ➤ Prevailing dry weather conditions are congenial for the incidence of thrips, hoppers and anthracnose in mango in Telangana. Spray Fipronil @ 2 ml per litre of water to manage thrips, Monocrotophos @ 1.6 ml + Carbendazim @ 1 g or Hexaconazole @ 2ml to manage hoppers and anthracnose.

■ Tamil Nadu:

- As rain/thundershowers would occur at many places from 7th April, postpone irrigation in sesame, sugarcane, banana, groundnut, summer cotton and rice fallow cotton and undertake planting of sugarcane in the Cauvery Delta Zone of Tamil Nadu.
- As mainly dry weather would prevail, continue harvesting of matured *samba* rice, provide irrigation in sesame, sugarcane, banana, groundnut, summer cotton and rice fallow cotton and undertake planting of sugarcane in the Cauvery Delta Zone of Tamil Nadu.
- ➤ Due to prevailing hot weather, occurrence of aphid, thrips, mite, hoppers and white flies are being noticed in rice fallow cotton in the Cauvery Delta Zone of Tamil Nadu. Spray Azadirachtin 0.03% (3 ml/L) along with sticking agent in the morning or evening using hand sprayer to manage the pests.
- Prevailing hot weather condition is favourable for white fly in tapioca in Western Zone of Tamil Nadu. Monitor the crop and spray Triazophos @ 2 ml or Acephate @ 2 g per litre of water if noticed.

➤ Prevailing dry weather is congenial for incidence of aphids in green gram and fruit borer in okra in the Southern Zone of Tamil Nadu. Spray Methyl Demeton 500 ml/ ha to manage aphids and Bacillus Thuringiensis 2 g/ litre or Carbaryl 2 g / litre to manage fruit borer.

Kerala:

- As rain/thundershowers would occur at many places from 7th, postpone irrigation in coconut palms and banana in the Central Zone of Kerala. Provide shade for small coconut seedlings and spray Rogor (Dimethoate) @ 1.5 ml/litre of water to manage mealy bug attack in coconut.
- ➤ Due to the increase in temperature, there is a chance of mite attack and root wilt disease in coconut in the Central Zone of Kerala. Apply 2% neem oil + garlic emulsion in the crown on young bunches to prevent mite attack and may be replaced severely affected palms by high yielding resistant varietie

• Animal Husbandry

- ➤ Prevailing high day time temperature of around 40°C and night temperature of around 24°C will induce heat stress and heat stroke in poultry in the 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.
- ➤ Due to increase in day temperature (38°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 (KCl, NaCl and Na2CO3) in the feed as well as in water.
- ➤ Vaccinate poultry against Ranikhet disease in the Western Zone of Tamil Nadu.

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

Annexure I

Week by week Rainfall Distribution

	1	<u>weeк каш</u>)3.14	26.03.14		02.04.14	
State/Districts	Actual 0/ don		Actual % dep.		Actual % don	
State/Districts	(mm)	% dep.	(mm)	% uep.	(mm)	% dep.
Arunachal Pradesh						
Anjaw	**	**	**	**	**	**
Changlang	0.7	-99	6.4	-94	31.1	-67
Dibang Valley	7.0	-92	30.0	-46	24.0	-79
East Kameng	0.0	-100	0.5	-98	0.0	-100
East Siang	0.0	-100	19.5	-29	13.0	-63
Kurung Kumey	**	**	**	**	**	**
Lohit	5.5	-88	6.9	-86	60.4	2
Lower Dibang Valley	0.0	-100	34.0	-39	66.6	-42
Lower Subansari	**	**	**	**	**	**
Papumpara	2.0	-95	17.0	-54	7.0	-69
Tawang	37.0	157	42.0	146	75.0	259
Tirap	0.2	-99	1.1	-97	22.0	-62
Upper Siang	13.4	-84	77.0	-5	33.2	-58
Upper Subansari	0.0	-100	20.8	-23	29.4	20
West Kameng	0.0	-100	2.4	-86	0.0	-100
West Siang	5.0	-73	36.0	186	50.5	47
Assam						
Baksa	0.0	-100	15.0	-3	5.0	-84
Barpeta	0.0	-100	13.2	-15	0.6	-98
Bongaigaon	0.0	-100	6.8	-62	0.0	-100
Cachar	0.0	-100	32.7	-38	38.1	-44
Chirang	0.0	-100	13.5	-25	0.5	-98
Darrang	0.0	-100	15.0	-1	3.0	-85
Dhemaji	1.0	-95	40.0	83	13.0	-53
Dhubri	0.0	-100	29.1	169	1.3	-95
Dibrugarh	1.0	-97	7.2	-79	13.4	-67
Goalpara	0.0	-100	41.3	163	3.6	-86
Golghat	0.0	-100	2.9	-85	27.7	-8
Hailakandi	0.0	-100	27.7	-43	10.9	-79
Jorhat	0.0	-100	5.3	-75	41.1	12
Kamrup(Rural)	0.0	-100	15.5	-16	0.6	-97
Kamrup(Metro)	0.0	-100	7.0	-62	1.9	-91
Karbi Anglong	0.0	-100	32.7	149	0.7	-97
Karimganj	0.0	-100	4.0	-91	6.4	-92
Kokrajhar	0.0	-100	7.7	-32	2.4	-94
Lakhimpur	1.0	-95	15.4	-29	12.1	-56
Morigaon	0.0	-100	2.3	-85	0.3	-99
N.C.Hills	0.0	-100	39.6	-45	0.0	-100
Nowgong	0.0	-100	14.5	-4	0.4	-98
Nalbari	0.0	-100	32.7	153	1.4	-96
Sonitpur	0.0	-100	6.0	-62	3.4	-84

Sibsagar	0.0	-100	5.4	-78	26.9	22
Tinsukia	8.4	-76	7.0	-84	29.5	-32
Udalgiri	0.0	-100	5.9	-61	7.4	-62
Meghalaya						
East Garo Hills	0.0	-100	5.0	-36	0.0	-100
East Khasi Hills	1.1	-95	35.5	0	1.3	-97
Jaintia Hills	0.0	-100	19.0	-32	2.0	-95
Ribhoi	0.3	-97	37.2	104	1.6	-92
South Garo Hills	0.0	-100	0.0	-100	0.0	-100
West Garo Hills	0.0	-100	15.0	63	0.0	-100
West Khasi Hills	0.0	-100	56.0	160	0.0	-100
Mizoram						
Aizwal	0.0	-100	27.9	-25	2.4	-95
Champhai	0.0	-100	14.0	-53	0.0	-100
Kolasib	0.0	-100	1.0	-97	0.0	-100
Lawngtlai	0.0	-100	**	**	**	**
Lunglei	0.0	-100	27.0	-23	0.0	-100
Mamit	0.0	-100	35.0	-6	0.0	-100
Saiha	0.0	-100	7.0	-79	0.0	-100
Serchhip	0.0	-100	10.0	-77	0.0	-100
Manipur						
Bishnupur	0.0	-100	23.0	6	3.0	-93
Chandel	0.0	-100	18.0	96	7.0	-46
Churachandpur	0.0	-100	**	**	21.0	-17
Imphal east	0.0	-100	29.4	28	8.7	-68
Imphal west	0.0	-100	11.5	-35	44.6	134
Senapati	0.0	-100	23.0	59	2.0	-91
Tamenglong	**	**	**	**	**	**
Thoubal	0.0	-100	17.0	105	3.0	-75
Ukhrul	0.0	-100	2.0	-79	0.0	-100
Nagaland						
Dimapur	0.0	-100	21.0	64	3.5	-79
Kephire	0.0	-100	15.0	-26	0.0	-100
Kohima	0.0	-100	38.6	166	0.0	-100
Longleng	**	**	**	**	**	**
Mokokchung	0.0	-100	5.0	-81	19.0	-13
Mon	**	**	**	**	**	**
Paren	**	**	**	**	**	**
Phek	0.0	-100	33.0	128	0.0	-100
Tuensang	**	**	**	**	**	**
Wokha	0.0	-100	6.0	-75	2.0	-95
Zunheboto	**	**	**	**	**	**
Tripura						
Dhalai	0.0	-100	40.9	27	0.0	-100
North tripura	0.0	-100	36.8	7	0.0	-100
South tripura	0.0	-100	3.6	-88	0.0	-100
West tripura	0.0	-100	11.9	-47	0.0	-100
Himachal Pradesh						
Bilaspur	13.1	10	8.9	-23	3.6	-69

Chamba	50.3	103	44.9	37	47.5	296
Hamirpur	17.4	40	13.2	-12	3.1	-58
Kangra	18.7	-17	23.9	-1	8.7	-12
Kinnaur	29.0	8	6.9	-80	32.6	72
Kullu	46.8	26	35.6	3	30.7	49
Lahaul and Spiti	18.9	-59	7.4	-84	3.0	-90
Mandi	28.1	27	17.0	-21	5.4	-53
Shimla	19.5	-5	23.6	-1	13.6	24
Sirmaur	20.9	105	9.4	-23	1.0	-85
Solan	21.7	54	16.1	-10	12.1	69
Una	13.6	54	8.0	-24	0.0	-99
Punjab						
Amritsar	7.8	-13	10.0	-11	1.1	-68
Barnala	2.0	-35	10.1	237	0.0	-100
Bhatinda	3.0	0	21.0	377	1.0	-23
Faridkot	0.0	-100	27.5	391	0.5	-62
Fatehgarh Saheb	0.0	-100	0.0	-100	0.0	-100
Ferozpur	5.0	0	17.7	132	0.0	-100
Gurdaspur	8.2	-37	24.2	49	4.4	-11
Hoshiarpur	11.0	18	7.0	-41	0.0	-100
Jalandhar	6.3	-5	4.2	-56	0.0	-100
Kapurthala	6.0	2	16.0	135	0.2	-88
Ludhiana	7.5	67	6.8	-22	1.3	-53
Mansa	0.0	-100	12.4	300	0.0	-100
Moga	10.5	184	12.9	162	2.0	54
Muktesar	0.0	-100	24.8	265	0.0	-100
Nawashahar	11.0	72	8.6	-30	1.6	-66
Patiala	9.7	214	8.9	46	3.5	105
Ropar	9.7	-20	6.4	-59	0.4	-78
Sangrur	1.0	-72	9.9	102	2.4	57
Mohali	6.5	12	6.5	-24	3.0	87
TarnTaran	4.6	0	11.7	79	0.3	-81
Haryana						
Ambala	6.3	-23	7.7	24	0.7	-64
Bhiwani	0.7	-33	6.2	131	4.4	390
Chandigarh	13.8	79	5.4	-49	5.2	135
Faridabad	0.0	-100	5.0	213	18.0	1285
Fatehabad	0.7	-72	2.5	-36	1.3	-22
Gurgaon	0.0	-100	0.8	-56	6.6	1000
Hissar	1.4	24	11.4	225	0.0	-100
Jhajar	0.0	-100	4.3	95	3.7	106
Jind	1.0	-63	10.1	529	2.9	614
Katihal	1.6	-36	8.2	122	0.2	-86
Karnal	1.5	-65	6.3	-8	0.0	-100
Kurukshetra	0.0	-100	3.5	-42	0.0	-100
Mahendragarh	0.0	-100	12.0	380	3.1	124
Mewat	0.0	-100	2.5	76	0.4	-52
Palwal	0.0	-100	0.2	-88	0.0	-100
Panchkkula	4.0	11	3.7	-61	2.3	-10

Panipat	1.0	-47	5.4	55	5.0	197
Rewari	0.6	-50	11.8	973	15.4	2100
Rohtak	0.0	-100	6.2	48	0.4	-85
Sirsa	0.0	-100	6.7	156	0.0	-100
Sonepat	0.4	-84	6.1	105	2.4	87
Yamunanagar	5.8	-38	6.5	-3	0.0	-100
Delhi						
Central Delhi	2.0	-20	2.0	-43	5.0	138
East Delhi	0.0	-100	2.0	-43	3.0	43
New Delhi	0.2	-92	1.8	-49	4.0	88
North Delhi	1.5	-40	2.6	-27	7.6	262
North East Delhi	0.0	-100	0.0	-100	0.0	-100
North West Delhi	0.0	-100	0.5	-86	0.0	-100
South Delhi	1.0	-60	8.4	140	6.4	205
South West Delhi	0.7	-72	2.5	-29	1.9	-10
West Delhi	6.0	140	4.0	14	4.0	90
Jammu & Kashmir						
Anantnag	27.5	-24	26.3	-27	42.2	77
Badgam	53.0	139	10.3	-63	22.9	73
Bandipore	**	**	**	**	**	**
Baramula	33.7	-58	33.6	-70	24.7	-20
Doda	49.2	3	30.4	-46	26.8	0
Ganderbal	63.6	162	72.2	148	90.4	511
Jammu	7.3	-38	16.2	-25	1.0	-86
Kargil	0.0	-100	0.0	-100	0.0	-100
Kathua	12.2	3	30.0	73	9.6	66
Kistwar	**	**	**	**	**	**
Kulgam	26.5	-27	27.1	-25	44.0	84
Kupwara	101.9	95	88.4	75	68.3	82
Ladakh(Leh)	0.1	-92	0.0	-100	0.2	-91
Poonch	0.0	-100	0.0	-100	0.0	-100
Pulwama	46.4	112	15.3	-47	19.9	46
Rajouri	27.2	213	41.4	117	5.3	-54
Ramban	39.3	-18	36.8	-35	34.7	30
Reasi	22.2	-25	51.9	16	7.3	-53
Samba	9.8	-16	15.1	-30	0.9	-87
Shopian	59.0	169	17.0	-41	25.0	84
Srinagar	26.9	11	15.8	-46	30.0	103
Udhampur	34.0	15	24.5	-45	5.8	-63
East Madhya Pradesh						
Anuppur	10.2	293	0.0	-100	0.0	-100
Balaghat	0.8	-65	0.0	-100	0.0	-100
Chhatarpur	0.0	-100	3.6	160	0.0	-100
Chindwara	5.7	49	0.0	-100	0.0	-100
Damoh	0.0	-100	0.0	-100	0.0	-100
Dindori	0.0	-100	0.0	-100	0.0	-100
Jabalpur	0.0	-100	0.0	-100	0.0	-100
Katni	0.0	-100	0.0	-100	0.0	-100
Mandla	5.5	30	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	1.4	-18	0.5	-83	0.0	-100
Sagar	0.0	-100	0.6	-71	0.0	-100
Satna	0.0	-100	0.8	-71	0.0	-100
Seoni	10.4	88	0.0	-100	0.0	-100
Shahdol	10.4	593	0.0	-100	0.0	-100
Sidhi	3.6	64	0.0	-100	0.0	-100
Singrauli	8.0	471	0.0	-100	0.0	-100
Tikamgarh	0.0	-100	0.0	-100	0.0	-100
Umaria	14.4	380	0.0	-100	0.0	-100
West Madhya Pradesh						
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	4.4	192	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	4.0	111	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	0.1	-95	0.0	-100
Gwalior	0.0	-100	4.6	360	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	7.9	621	0.0	-100	0.0	-100
Khargone	1.1	278	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
Chattisgarh						
Bastar	0.1	-97	0.0	-100	0.0	-100
Bijapur	0.0	-100	0.0	-100	0.0	-100
Bilaspur	16.3	339	0.0	-100	0.0	-100
Dantewara	0.0	-100	0.0	-100	0.0	-100
Dhamtari	0.0	-100	0.0	-100	0.0	-100
Durg	2.5	47	0.0	-100	0.0	-100

Janjgir	0.0	-100	0.0	-100	0.0	-100
Jashpurnagar	1.0	-44	0.0	-100	0.0	-100
Kanker	0.0	-100	0.0	-100	0.0	-100
Korba	8.5	400	0.0	-100	0.0	-100
Koriya	9.0	275	0.0	-100	0.0	-100
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	0.0	-100
Rajandgaon	0.0	-100	0.0	-100	0.0	-100
Surguja	3.8	35	0.0	-100	0.0	-100
East Uttar Pradesh		33	0.0	-100	0.0	-100
Allahabad	3.0	275	0.7	-70	0.0	-100
Ambedkar Nagar	0.0	-100	0.0	-100	0.0	-100
Azamgarh	0.0	-100	0.0	-100	0.0	-100
Bahraich	0.0	-100	0.0	-100	0.0	-100
Ballia	0.0	-100	0.0	-100	0.0	-100
Balrampur	0.0	-100	0.0	-100	0.0	-100
Banda	0.0	-100	2.8	10	0.0	-100
Barabanki	2.6	338	0.6	-74	0.0	-100
Basti	0.0	-100	0.0	-100	0.0	-100
Chandauli	1.2	-74	0.7	-68	0.0	-100
Deoria	0.0	-100	0.7	-100	0.0	-100
Faizabad	0.0	-100	0.0	-100	0.0	-100
Farrukhabad	0.0	-100	0.0	-100	0.0	-100
Fatehpur	0.0	-100	3.5	84	0.0	-100
Gazipur	0.0	-100	0.0	-100	0.0	-100
Gonda	0.0	-100	0.0	-100	0.0	-100
Gorakhpur	0.0	-100	0.0	-100	0.0	-100
Hardoi	0.0	-100	0.0	-100	0.0	-100
Jaunpur	0.0	-100	0.0	-100	0.0	-100
Kannauj	0.0	-100	0.0	-100	0.0	-100
Kanpur City	0.0	-100	8.4	425	0.0	-100
Kanpur Dehat	0.0	-100	2.4	41	0.0	-100
Kaushambi	1.1	-5	0.6	-83	0.0	-100
Kheri	0.0	-100	0.0	-100	0.0	-100
Kushi nagar	0.0	-100	0.0	-100	0.0	-100
Lucknow	0.0	-100	1.7	-21	0.0	-100
Maharajganj	0.0	-100	0.0	-100	0.0	-100
Mau	0.0	-100	0.0	-100	0.0	-100
Mirzapur	0.0	-100	0.0	-100	0.0	-100
Pratapgarh	0.0	-100	0.0	-100	0.0	-100
RaiBarelly	0.0	-100	0.0	-100	0.0	-100
Sahuji Maharajnagar	0.0	-100	0.6	-100 -81	0.0	-100
Sant Kabirnnagar	0.0	-100	0.0	-100	0.0	-100
Sant Ravidas Nagar	6.0	30	0.0	-100	0.0	-100
Shrawasti	0.0	-100	**	**	**	**
	+					
Sidharthnagar	0.0	-100	0.0	-100	0.0	-100

Sitapur	0.0	-100	0.0	-100	0.0	-100
Sonbhadra	5.5	358	0.0	-100	0.0	-100
Sultanpur	0.0	-100	0.0	-100	0.0	-100
Unnao	0.0	-100	2.5	47	0.0	-100
Varanasi	1.2	-25	0.0	-100	0.0	-100
West Uttar Pradesh						
Agra	0.0	-100	1.8	-13	0.0	-100
Aligarh	0.0	-100	1.7	-51	0.1	-96
Auraiya	0.0	-100	1.0	-52	0.0	-100
Badaun	0.0	-100	0.0	-100	0.4	-69
Baghpat	0.8	-60	3.7	7	2.7	-7
Bareilly	0.0	-100	0.5	-90	1.0	-44
Bijnor	2.0	-51	0.5	-92	0.0	-100
Bulandsahar	0.0	-100	1.7	-52	2.0	25
Etah	0.0	-100	0.7	-75	0.0	-100
Etawah	0.0	-100	3.0	-3	0.0	-100
Firozabad	0.0	-100	0.7	-69	0.0	-100
GBNagar	0.0	-100	0.0	-100	3.0	2900
Ghaziabad	0.0	-100	0.0	-100	2.6	18
Hamirpur	0.0	-100	1.7	8	0.0	-100
Jalaun	0.0	-100	1.0	-38	0.0	-100
Jhansi	0.0	-100	3.0	114	0.0	-100
Jotiba Phule Nagar	0.0	-100	0.3	-94	0.8	-68
Kanshiramnagar	0.0	-100	2.0	-55	0.0	-100
Lalitpur	0.0	-100	0.0	-100	0.0	-100
Mahamaya Nagar	0.0	-100	0.0	-100	0.0	-100
Mahoba	0.0	-100	3.0	200	0.0	-100
Mainpuri	0.0	-100	2.0	-23	0.0	-100
Mathura	0.0	-100	2.0	-38	6.0	400
Meerut	3.0	3	1.3	-71	5.4	67
Moradabad	0.0	-100	0.3	-93	1.5	-32
Muzzaffarnagar	1.0	-63	3.1	-39	1.9	-37
Pilibhit	0.0	-100	0.0	-100	0.0	-100
Rampur	0.0	-100	0.0	-100	0.0	-100
Saharanpur	0.3	-94	0.7	-92	0.0	-100
Shahjahanpur	0.0	-100	0.0	-100	0.0	-100
Uttarakhand						
Almora	2.4	-64	0.0	-100	0.0	-100
Bageshwar	0.0	-100	0.0	-100	0.0	-100
Chamoli	15.7	-19	12.7	-45	0.0	-100
Champawat	2.0	-67	0.0	-100	1.5	-72
Dehradun	20.4	71	4.3	-69	2.0	-78
Garhwal Pauri	7.4	-3	2.7	-73	0.0	-100
Garhwal Tehri	17.8	73	3.6	-73	0.2	-99
Haridwar	5.0	-2	5.5	-33	0.0	-100
Nainital	2.7	-56	0.1	-99	0.0	-100
Pithorgarh	15.7	57	18.8	-10	0.0	-100
Rudraprayag	20.9	10	6.9	-69	0.0	-100
Udham Sing Nagar	0.0	-100	0.0	-100	0.0	-100

Uttarkashi	22.5	7	8.8	-61	0.0	-100
Bihar						
Araria	0.0	-100	0.0	-100	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	0.0	-100	0.0	-100
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	0.0	-100
Vaishali	0.0	-100	0.0	-100	0.0	-100
West Champaran	0.0	-100	0.0	-100	0.0	-100
Jharkhand						
Bokaro	0.0	-100	0.0	-100	0.0	-100
Chatra	0.0	-100	0.0	-100	0.0	-100
Deoghar	0.0	-100	0.0	-100	0.0	-100
Dhanbad	0.0	-100	1.6	-72	0.0	-100
Dumka	0.0	-100	0.0	-100	0.0	-100
East Singbhum	1.1	-75	1.1	-80	0.3	-94
Garhwa	0.0	-100	0.0	-100	0.0	-100
Giridih	0.4	-90	0.0	-100	0.0	-100

Godda	0.0	-100	0.0	-100	0.0	-100
Gumla	**	**	**	**	0.0	-100
Hazaribagh	0.5	-79	0.0	-100	0.0	-100
Jamtara	**	**	0.0	-100	0.0	-100
Khunti	4.0	-33	0.0	-100	0.0	-100
Koderrna	0.0	-100	0.0	-100	0.0	-100
Latehar	18.7	484	0.0	-100	0.0	-100
Lohardagga	0.0	-100	0.0	-100	0.0	-100
Pakur	0.0	-100	**	**	0.0	-100
Palamau	1.6	13	0.0	-100	0.0	-100
Ramgarh	0.0	-100	0.0	-100	0.0	-100
Ranchi	2.8	-21	0.0	-100	0.0	-100
Sahebganj	0.0	-100	0.0	-100	0.0	-100
Saraikela	1.3	-72	0.0	-100	0.0	-100
Simdega	3.2	146	0.0	-100	0.0	-100
West Singbhum	2.7	-12	0.0	-100	0.0	-100
East Rajasthan				200		200
Ajmer	0.0	-100	0.0	-99	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	3.4	386	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	8.8	778	0.0	-100
Jhalawar	0.0	-100	0.0	-100	0.0	-100
Jhunjhunu	0.0	-100	8.7	314	2.9	167
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	11.5	619	0.0	-100
Sirohi	0.0	-100	0.0	-100	0.0	-100
Tonk	0.0	-100	0.2	-86	0.0	-100
Udaipur	0.0	-100	0.0	-100	0.0	-100
West Rajasthan						
Barmer	0.0	-100	0.0	-100	0.0	-100
Bikaner	0.0	-100	0.0	-100	0.0	-100
Churu	0.3	-66	3.3	44	1.3	84
Hanumangarh	0.0	-100	12.1	331	0.0	-100
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	0.5	-78	20.7	474	0.0	-100
Gujarat Region						
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
S K & Diu region						
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
Maharashtra						
Konkan & Goa						
Goa	0.0	-100	0.0	-100	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	0.7	200	0.0	-100	0.0	-100
Madhya Maharashtra						
Ahmednagar	18.5	3605	0.0	-100	0.0	-100
Dhule	2.3	150	0.0	-100	0.0	-100
Jalgaon	2.7	195	0.0	-100	0.0	-100
Kolhapur	0.7	6	0.0	-100	0.0	-100
Nandurbar	0.0	-100	0.0	-100	0.0	-100
Nasik	3.8	3731	0.0	-100	0.0	-100
Pune	7.1	2250	0.0	-100	0.0	-100

Sangli	0.0	-100	0.0	-100	0.0	-100
Satara	5.8	859	1.5	69	0.0	-100
Solapur	0.1	-92	0.0	-100	0.0	-100
Marathwada						
Aurangabad	10.6	1075	0.0	-100	0.0	-100
Beed	6.5	491	0.0	-100	0.0	-100
Hingoli	6.1	152	0.0	-100	0.0	-100
Jalna	14.7	819	0.0	-100	0.0	-100
Latur	1.1	-43	0.0	-100	0.0	-100
Nanded	2.8	99	0.0	-100	0.0	-100
Usmanabad	1.7	83	0.0	-100	0.0	-100
Parbhani	2.5	37	0.0	-100	0.0	-100
Vidarbha						
Akola	13.7	755	0.0	-100	0.0	-100
Amraoti	11.7	349	0.0	-100	0.0	-100
Bhandara	1.8	-45	0.0	-100	0.0	-100
Buldhana	12.3	921	0.0	-100	0.0	-100
Chandrapur	0.8	-67	0.0	-99	0.0	-100
Gadchiroli	0.0	-100	0.1	-97	0.0	-100
Gondia	0.3	-91	0.0	-100	0.0	-100
Nagpur	6.5	92	1.1	-42	0.0	-100
Wardha	3.9	10	0.0	-100	0.0	-100
Washim	27.1	2359	0.0	-100	0.0	-100
Yeotmal	10.9	303	0.1	-97	0.0	-100
Odisha						
Angul	0.0	-100	0.0	-100	0.2	-96
Balasore	2.0	-39	6.0	-18	0.5	-96
Bargarh	8.4	250	0.0	-100	0.0	-100
Bhadrak	0.0	-100	0.0	-100	1.3	-85
Bolangir	4.1	24	0.0	-100	0.0	-100
Boudh	0.0	-100	0.0	-100	0.0	-100
Cuttack	0.0	-100	0.0	-100	0.0	-100
Deogarh	0.0	-100	0.0	-100	0.0	-100
Dhenkanal	0.0	-100	0.0	-100	0.3	-96
Gajapati	0.9	-93	3.0	-83	0.0	-100
Ganjam	0.0	-100	27.7	576	1.4	-82
Jagatsingpur	0.0	-100	30.0	456	0.0	-100
Jajpur	2.4	-44	0.0	-100	0.3	-95
Jharsuguda	0.4	-81	0.0	-100	0.0	-100
Kalahandi	4.3	39	0.0	-100	0.0	-100
Kandhamal	0.0	-100	0.0	-100	0.0	-100
Kendrapara	0.0	-100	0.0	-100	0.0	-100
Keonjhar	0.0	-100	0.0	-100	0.1	-98
Khurda	0.0	-100	0.0	-100	0.1	-99
Koraput	0.3	-92	0.0	-100	0.0	-100
Malkangiri	0.8	-33	0.0	-100	0.0	-100
Mayurbhanj	4.1	-20	22.8	74	0.1	-99
Nawapara	12.8	433	0.0	-100	0.0	-100
Nawarangpur	7.0	438	16.0	471	0.1	-97

Nayagarh	0.0	-100	0.0	-100	1.0	-84
Puri	0.0	-100	0.0	-100	0.2	-93
Rayagada	7.4	17	117.8	1450	0.0	-100
Sambalpur	0.9	-64	7.5	63	0.0	-100
Sonepur	0.3	-88	0.0	-100	0.0	-100
Sundargarh	1.5	-12	0.0	-100	0.0	-100
West Bengal						
GWB						
Bankura	0.0	-100	2.8	-60	0.0	-100
Birbhum	0.0	-100	14.9	166	0.0	-100
Burdwan	0.0	-100	12.8	120	0.0	-100
East Midnapore	0.2	-95	1.4	-90	0.0	-100
Hooghly	0.0	-100	13.2	6	0.0	-100
Howrah	0.0	-100	20.6	96	0.0	-100
Kolkata	0.0	-100	16.3	44	0.0	-100
Murshidabad	0.0	-100	0.0	-100	0.0	-100
Nadia	0.0	-100	15.4	117	0.0	-100
24 Pargana (N)	0.0	-100	19.4	53	0.0	-100
Purulia	0.6	-86	0.5	-93	0.0	-100
24 Pargana (S)	0.0	-100	25.6	92	0.0	-100
West Midnapore	0.0	-100	12.0	26	0.0	-100
SHWB						
Cooch Behar	0.0	-100	18.5	97	0.0	-100
Darjeeling	2.7	-76	13.9	-6	0.0	-100
East Sikkim	20.0	14	34.2	146	8.9	-51
Jalpaiguri	0.8	-89	12.2	16	0.1	-99
Malda	0.0	-100	0.0	-100	0.0	-100
North Dinajpur	0.0	-100	0.0	-100	0.0	-100
North Sikkim	57.9	-5	73.0	43	28.4	-28
South Dinajpur	0.0	-100	0.0	-100	0.0	-100
South Sikkim	10.1	-43	43.5	213	0.0	-100
West Sikkim	11.3	-81	26.3	-49	3.0	-92
Karnataka						
Coastal Karnataka						
Dakshin Kannada	0.0	-100	0.0	-100	2.0	-34
Udupi	0.0	-100	0.0	-100	0.0	-100
Uttar Kannada	0.0	-100	0.8	-3	0.0	-100
N I Karnataka						
Bagalkote	0.0	-100	0.0	-100	0.3	-90
Belgaum	0.0	-100	0.0	-100	0.0	-100
Bidar	0.7	-65	0.0	-100	2.9	-38
Bijapur	0.0	-100	0.0	-100	0.0	-100
Dharwad	0.0	-100	0.0	-100	0.0	-100
Gadag	0.0	-100	0.0	-100	4.2	48
Gulbarga	0.0	-100	0.0	-100	0.5	-88
Haveri	0.0	-100	0.0	-100	3.1	17
Koppal	0.0	-100	0.0	-100	2.8	253
Raichur	0.0	-100	0.0	-100	0.8	-72
Yadgir	0.0	-100	0.0	-100	0.5	-87

S I Karnataka						
Bangalore Rural	0.0	-100	0.0	-100	0.0	-100
Bangalore Urban	0.0	-100	0.0	-100	0.0	-100
Bellary	0.0	-100	0.0	-100	1.3	-7
Chamarajnagar	0.0	-100	0.0	-100	0.0	-100
Chichballapur	0.0	-100	0.0	-100	0.0	-100
Chickmagalur	0.0	-100	0.7	-68	2.3	-52
Chitradurga	0.0	-100	0.0	-100	0.6	-71
Davangere	0.0	-100	0.0	-100	16.4	556
Hassan	0.0	-100	0.0	-100	1.5	-64
Kodagu	0.0	-100	1.9	-64	8.8	3
Kolar	0.0	-100	0.0	-100	0.0	-100
Mandya	0.0	-100	0.0	-100	0.0	-100
Mysore	0.0	-100	0.0	-100	0.0	-100
Ramnagara	0.0	-100	0.0	-100	0.0	-100
Shimoga	0.0	-100	0.0	-100	1.0	-72
Tumkur	0.0	-100	0.0	-100	0.0	-100
Kerala						
Alappuzha	0.0	-100	30.3	180	0.0	-100
Kannur	0.0	-100	0.0	-100	0.0	-100
Ernakulam	0.0	-100	13.1	47	0.0	-100
Idukki	0.0	-100	10.3	1	0.0	-100
Kasaragod	0.0	-100	0.0	-100	0.0	-100
Kollam	0.9	-94	8.4	-43	0.0	-100
Kottayam	0.0	-100	40.7	311	0.0	-100
Kozhikode	0.0	-100	0.0	-100	0.5	-88
Malappuram	0.0	-100	0.0	-100	0.0	-100
Palakkad	0.0	-100	1.5	-81	0.0	-100
Pathanamthitta	1.0	-93	9.4	-52	0.0	-100
Thiruvanantapuram	0.0	-100	5.3	-47	0.0	-100
Thrissur	0.0	-100	1.1	-78	0.0	-100
Wayanad	0.0	-100	0.0	-100	2.9	-65
Tamil Nadu						
Ariyalur	0.0	-100	0.0	-100	0.0	-100
Chennai	0.0	-100	0.0	-100	0.0	-100
Coimbatore	0.0	-100	0.7	-76	0.0	-100
Cuddalore	0.0	-100	0.0	-100	0.0	-100
Dharmapuri	0.0	-100	0.0	-100	0.0	-100
Dindigul	0.0	-100	2.8	-39	0.0	-100
Erode	0.0	-100	0.0	-100	0.0	-100
Kanchipuram	0.0	-100	0.0	-100	0.0	-100
Kanyakumari	0.0	-100	0.8	-92	0.0	-100
Karikal	0.0	-100	0.0	-100	0.0	-100
Karur	0.0	-100	0.0	-100	0.0	-100
Krishnagiri	0.0	-100	0.0	-100	0.0	-100
Madurai	0.0	-100	0.4	-90	0.0	-100
Nagapattinam	0.0	-100	0.0	-100	0.0	-100
Namakkal	0.0	-100	0.0	-100	0.0	-100
Nilgiris	0.0	-100	1.3	-75	0.0	-100

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	0.0	-100	0.0	-100
Salem	0.0	-100	0.0	-100	0.0	-100
Sivaganga	0.0	-100	0.0	-100	0.0	-100
Thanjavur	0.0	-100	0.0	-100	0.0	-100
Theni	0.0	-100	15.9	130	0.0	-100
Tirunelveli	0.0	-100	7.6	6	0.0	-100
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	0.0	-100	0.0	-100
Toothukudi	0.0	-100	0.0	-100	0.0	-100
Trichy	0.0	-100	0.0	-100	0.0	-100
Vellore	0.0	-100	0.0	-100	0.0	-100
Villupuram	0.0	-100	0.0	-100	0.0	-100
Virudhunagar	0.0	-100	0.6	-91	0.0	-100
Andhra Pradesh						
Coastal Andhra Pradesh	0.0	100	0.0	100		100
East Godavari	0.0	-100	0.0	-100	0.0	-100
Guntur	0.0	-100	0.0	-100	0.0	-100
Krishna	0.0	-100	0.0	-100	0.0	-100
Nellore	0.6	-63	0.0	-100	0.0	-100
Prakasam	3.0	87	0.0	-100	0.0	-100
Sirkakulam	1.0	-66	1.5	-62	0.0	-100
Visakhapatnam	5.3	43	0.3	-93	0.0	-100
Vizianagram	0.0	-100	0.0	-100	0.0	-100
West Godavari	0.0	-100	0.0	-100	0.0	-100
Telangana						
Adilabad	0.0	-100	0.5	-75	0.0	-100
Hyderabad	0.0	-100	0.0	-100	0.0	-100
Karimnagar	0.0	-100	0.0	-100	0.0	-100
Khammam	1.3	-44	0.0	-100	0.0	-100
Mehabubnagar	0.0	-100	0.0	-100	0.9	-37
Medak	0.0	-100	0.0	-100	3.5	52
Nalgonda	0.0	-100	0.0	-100	1.4	-30
Nizamabad	0.0	-98	0.0	-100	0.3	-90
Rangareddy	0.0	-100	0.0	-100	0.9	-74
Warangal	0.0	-100	0.0	-100	0.0	-100
Rayalaseema						
Anantapur	0.0	-100	0.0	-100	0.0	-100
Chittoor	0.0	-100	0.0	-100	0.0	-100
Cuddapah	0.0	-100	0.0	-100	0.0	-100
Kurnool	0.0	-100	0.0	-100	0.1	-92

(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