

# National Agromet Advisory Service Bulletin

**Friday 21<sup>st</sup> February 2014**

**(For the period 21<sup>st</sup> to 25<sup>th</sup> February 2014)**



**Issued by**

**National Agrometeorological Advisory Service Centre,**

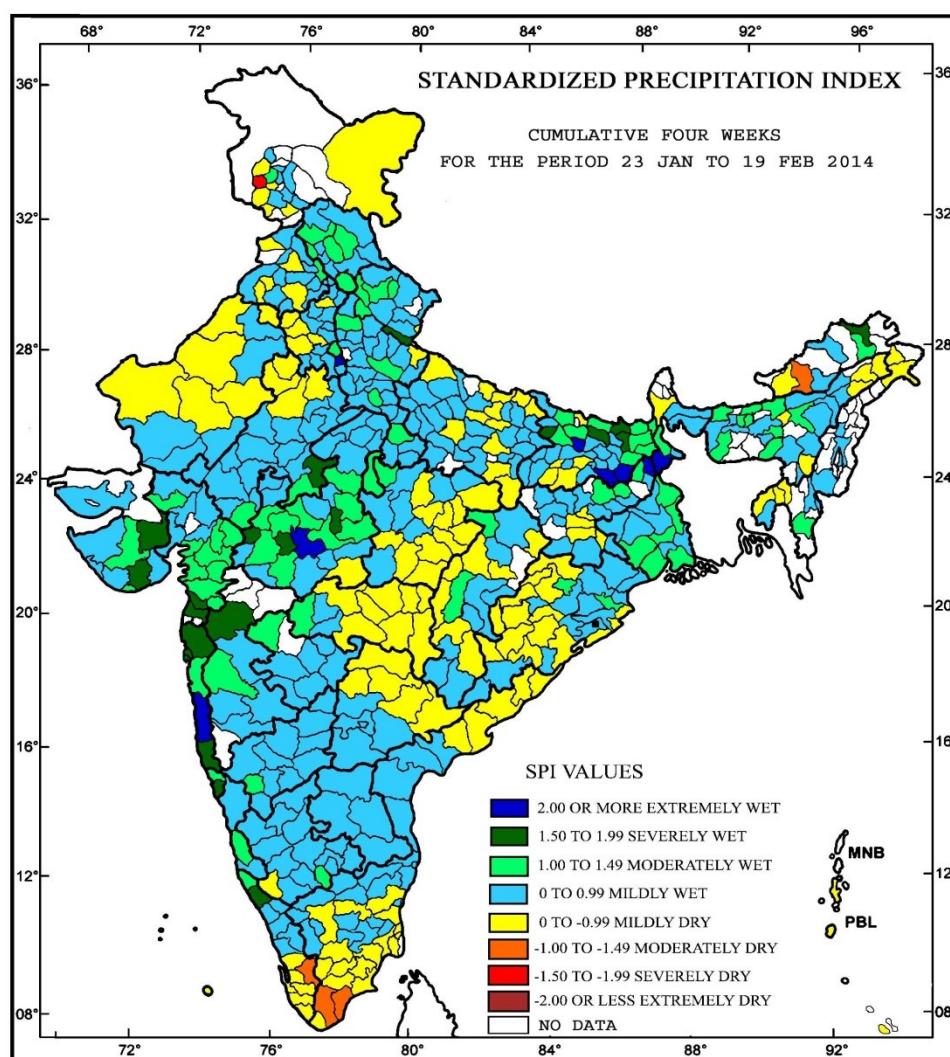
**Agricultural Meteorology Division,**

**India Meteorological Department, Shivajinagar, Pune.**



**Standardised Precipitation Index  
Four Weekly  
for the Period 23<sup>rd</sup> January to 19<sup>th</sup> February 2014**

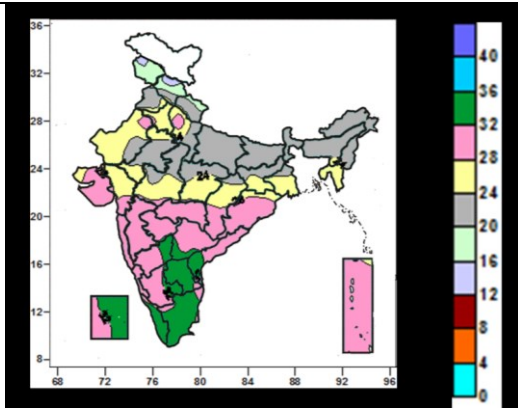
**MINISTRY OF EARTH SCIENCES  
INDIA METEOROLOGICAL DEPARTMENT  
HYDROMET SECTION, PUNE**



- Extremely wet/severely wet conditions experienced over some parts of West Madhya Pradesh, Bihar, Gujarat, Konkan and Goa and Nasik district of Maharashtra, Baran district of Rajasthan, Malda district of West Bengal, Sahibganj district of Jharkhand, Upper Siang district of Arunachal Pradesh, Udham Singh Nagar district of Uttarakhand, Palwal district of Haryana and Kannur district of Kerala.
- Moderately dry/ severely dry conditions experienced over Poonch district of Jammu & Kashmir, East Kameng district of Arunachal Pradesh, Idukki district of Kerala and Tirunelveli and Thoothukudi districts of Tamil Nadu.
- Rest of the country experienced mild wet/dry conditions.

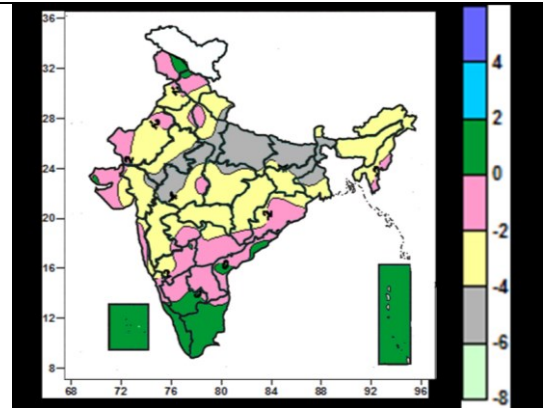
**Contour maps for Mean Maximum and Minimum Temperature and their anomaly for the week ending on 19.02.2014**

**Actual Mean Maximum Temperature (°C) in India for the week ending 19.02.2014**



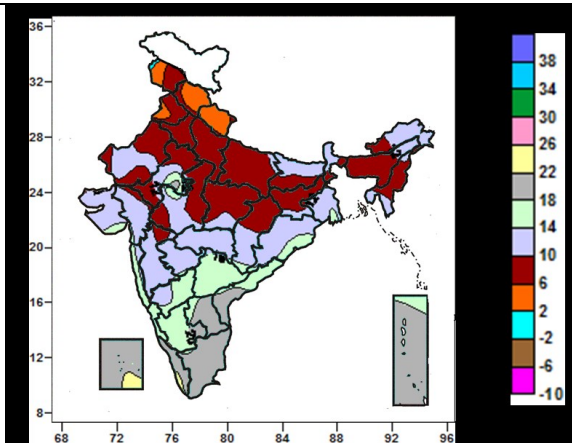
- 32 to 36°C over many parts of Raylaseema, Tamil Nadu, Kerala, Lakshadweep Islands, some parts of Coastal Andhra Pradesh, Telangana and Interior Karnataka.
- 28 to 32°C over many parts of Saurashtra & Kutch, Maharashtra, Karnataka Telanagana, Coastal Andhra Pradesh, Odisha, Chhattisgarh, Andaman & Nicobar Islands, some parts of Haryana, East Uttar Pradesh, West Rajasthan, Gujarat, Kerala, Tamil Nadu and Lakshadweep Islands.
- 20 to 28°C over many parts of Uttarakhand, Punjab, Haryana, Delhi, Uttar Pradesh, Rajasthan, East India except Odisha & Northeast India, Gujarat, Madhya Pradesh, some parts of Kutch and Himachal Pradesh.
- 12 to 20°C over many parts of Jammu & Kashmir and Himachal Pradesh.

**Mean Maximum Temperature (°C) Anomaly in India for the week ending 19.02.2014**



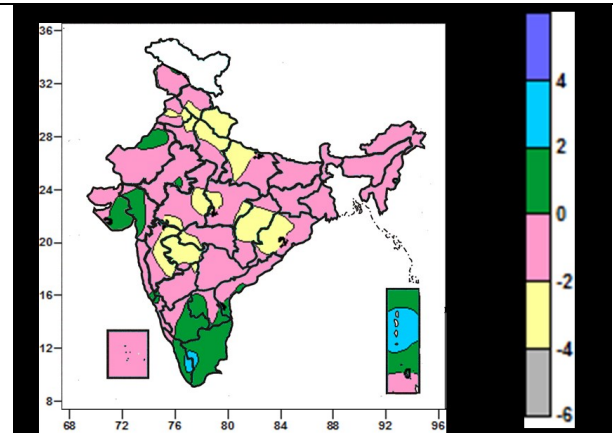
- 0 to 2°C over many parts of Kerala, Tamil Nadu, South Interior Karnataka, Lakshadweep, Andaman & Nicobar Islands, some parts of Jammu & Kashmir, Himachal Pradesh and Coastal Andhra Pradesh.
- -4 to 0°C over all over country (except many parts of East Uttar Pradesh, Bihar, West Bengal, Kerala, Tamil Nadu, South Interior Karnataka, Lakshadweep, Andaman & Nicobar Islands, some parts of Jammu & Kashmir, Himachal Pradesh, Coastal Andhra Pradesh, Uttarakhand, West Uttar Pradesh, East Rajasthan, Madhya Pradesh, Jharkhand and Gujarat).
- -6 to -4°C over many parts of East Uttar Pradesh, Bihar, West Bengal, some parts of Uttarakhand, West Uttar Pradesh, East Rajasthan, Madhya Pradesh, Jharkhand and Gujarat region.

**Actual Mean Minimum Temperature (°C) in India for the week ending 19.02.2014**



- -2 to 2°C over some parts of Jammu & Kashmir.
- 2 to 6°C over many parts of Himachal Pradesh, some parts of Uttarakhand, Jammu & Kashmir, Punjab.
- 6 to 10°C over many parts of Jammu & Kashmir, Haryana, Punjab, Delhi, Uttar Pradesh, Rajasthan, Jharkhand, Manipur, Mizoram, Assam & Meghalaya, Madhya Pradesh, some parts of Bihar, Sub-Himalayan West Bengal, Arunachal Pradesh, Nagaland, Gujarat, Chhattisgarh and Madhya Maharashtra.
- 10 to 18°C over many parts of West India, Bihar, West Bengal, Arunachal Pradesh, Chhattisgarh, Orissa, Tripura, Karnataka, Telangana, some parts of East Uttar Pradesh,

**Mean Minimum Temperature (°C) Anomaly in India for the week ending 19.02.2014**



- -4 to -2°C over many parts of Uttarakhand, Uttar Pradesh, Chhattisgarh, Odisha, Marathwada, some parts of Himachal Pradesh, Haryana, Punjab, Madhya Pradesh, Madhya Maharashtra and Vidarbha.
- -2 to 2°C over all parts of country except many parts of Uttarakhand, Uttar Pradesh, Chhattisgarh, Odisha, Marathwada, some parts of Himachal Pradesh, Haryana, Punjab, Madhya Pradesh, Madhya Maharashtra, Vidarbha, Tamil Nadu, Kerala and Andaman & Nicobar Islands.
- 2 to 4°C over some parts of Tamil Nadu, Kerala and

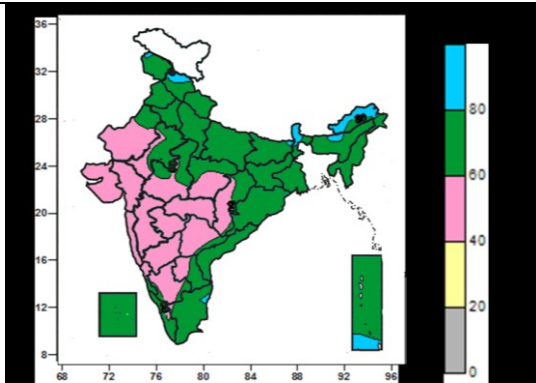
East Rajasthan, West Madhya Pradesh, Bihar, Jharkhand, Assam, Coastal Odisha, Coastal Andhra Pradesh and Andaman & Nicobar Islands.

- 18 to 26°C many parts of Rayalaseema, Coastal Andhra Pradesh, Tamil Nadu, Kerala, Lakshadweep, Andaman & Nicobar Islands, some parts of Chhattisgarh, East Rajasthan, West Madhya Pradesh, Gujarat, Coastal Odisha and Gangetic West Bengal.

Andaman & Nicobar Islands.

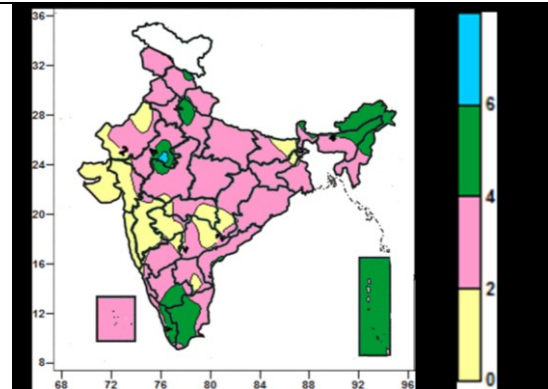
**Contour maps for Relative Humidity, Cloud amount and Wind speed for the week ending on 19.02.2014**

**Relative Humidity (%) over India for the week ending 19.02.2014**



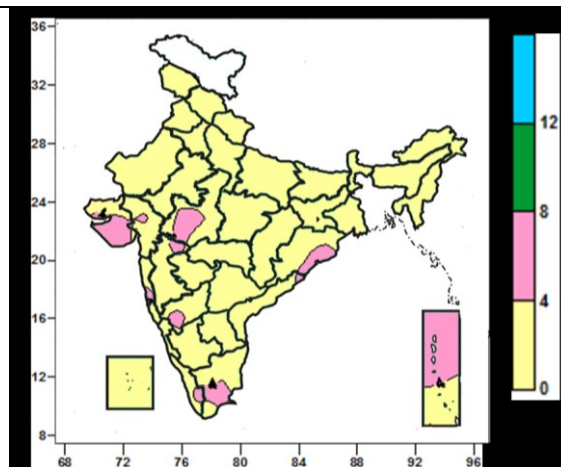
- 80 to 100% over many parts of Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, some parts of Jammu & Kashmir, Himachal Pradesh, Assam and Andaman & Nicobar Islands.
- 40 to 80% over entire country except many parts of Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, some parts of Jammu & Kashmir, Himachal Pradesh, Assam, Andaman & Nicobar Islands.

**Cloud amount (okta) over India for the week ending 19.02.2014**



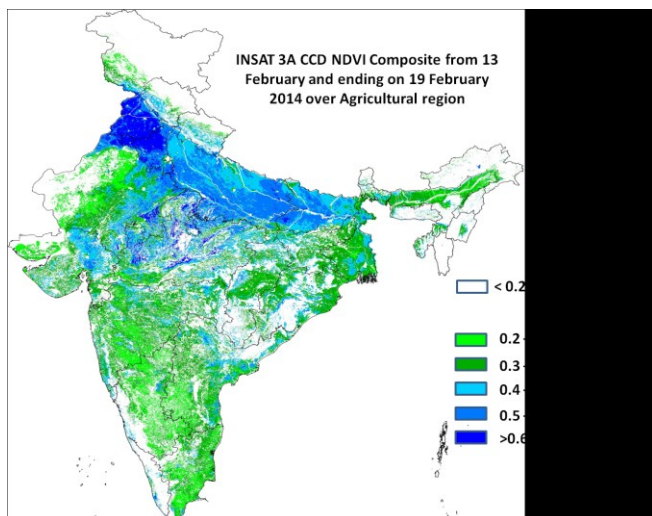
- 6 to 8 okta over some parts of East Rajasthan.
- 4 to 6 okta over many parts of Arunachal Pradesh, Nagaland, Tamil Nadu, Kerala, some parts Himachal Pradesh, West Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Manipur and South Interior Karnataka.
- 0 to 4 okta over entire country (except many parts of Arunachal Pradesh, Nagaland, Tamil Nadu, Kerala, some parts Himachal Pradesh, West Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Manipur and South Interior Karnataka).

**Wind speed (knots) over India for the week ending 19.02.2014**



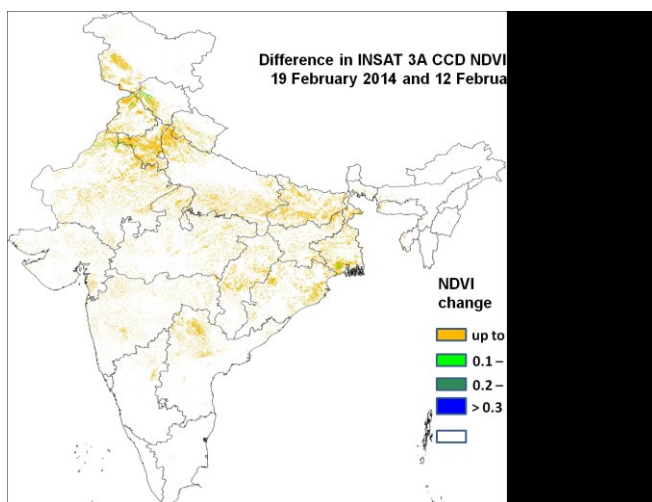
- 4 to 8 knots over many parts of Saurashtra & Kutch, some parts of West Madhya Pradesh, Konkan, Madhya Maharashtra, Coastal Odisha, Coastal Andhra Pradesh, North Interior Karnataka, Tamil Nadu and Kerala.
- 0 to 4 knots over entire country except many parts of Saurashtra & Kutch, some parts of West Madhya Pradesh, Konkan, Madhya Maharashtra, Coastal Odisha, Coastal Andhra Pradesh, North Interior Karnataka, Tamil Nadu and Kerala.

## INSAT 3A CCD NDVI COMPOSITE OVER AGRICULTURAL REGION 13<sup>th</sup> February 2014 – 19<sup>th</sup> February 2014



**Source: SAC, Ahmedabad**

Agricultural vigour is in general very good over whole Punjab and Haryana, major part of UP, pockets of major part of western and pockets of eastern Bihar, central and north MP and Central Gujarat, few pockets of eastern Rajasthan as NDVI exceeds 0.5. Agricultural vigour is moderate in few part of UP and few pockets of MP, central West Bengal, pockets of eastern Maharashtra, parts of eastern AP and Odisha, coastal belt of Tamil Nadu where NDVI is in the range of 0.4 to 0.5 upto 19<sup>th</sup> February 2014. The NDVI remains low within the range of 0.2 to 0.3 over rest of India.



**Source: SAC, Ahmedabad**

Agricultural progress was found to be good over central parts of Haryana, north Punjab and north Rajasthan, pockets of central West Bengal, pockets of eastern UP, where NDVI showed positive change from previous week of the order of 0.1 to 0.2. Rest of India shows moderate progress.

## Weather Forecast

### Weather Forecast for next 3 days (upto 0830 hours IST of 24<sup>th</sup> February, 2014)

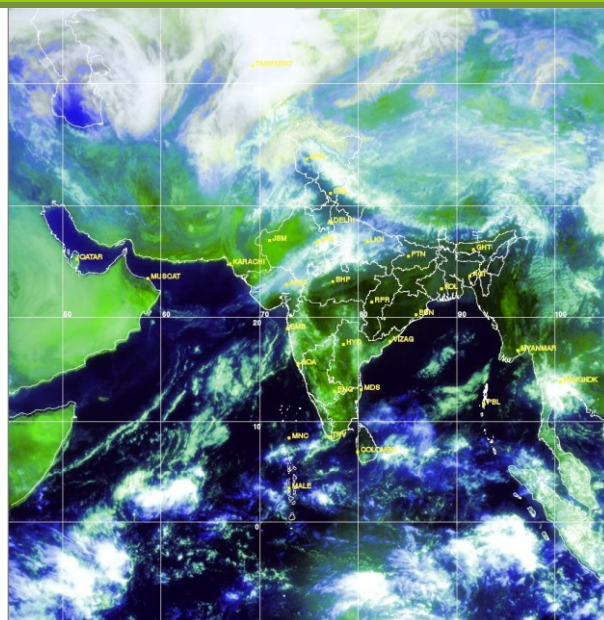
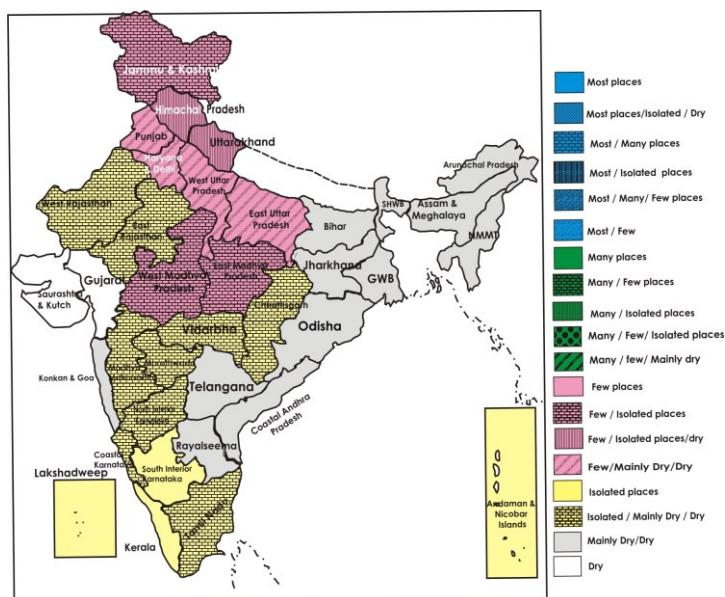
- Rain/snow would occur at a few places over Jammu & Kashmir during next 48 hours and isolated thereafter.
- Rain/snow would occur at a few places over Himachal Pradesh and Uttarakhand on 22nd and isolated places on 23rd.
- Rain/thundershowers would occur at a few places over Uttar Pradesh, Haryana & Delhi and Punjab and at isolated places over north Rajasthan on 22nd.
- Rain/thundershowers would occur at isolated places over Madhya Pradesh on 21st & 23rd and at a few places on 22nd.
- Rain/thundershowers would occur at isolated places over Vidarbha and Chhattisgarh on 22nd and 23rd.
- Rain/thundershowers would occur at isolated places over south interior Karnataka, Lakshadweep, Kerala and Nicobar Islands.
- Rain/thundershowers would occur at isolated places over coastal & north interior Karnataka and Tamilnadu & Puducherry during next 48 hours.
- Rain/thundershowers would occur at isolated places over south Madhya Maharashtra and Marathwada during next 48 hours.
- Weather would be mainly dry/dry over rest parts of the country.
- Rise in minimum temperatures by 2-4°C likely over northwest, central and east India during next 48 hours.

### Weather Warning during next 3 days

- **21 February (Day 1):** No weather warning.
- **22 February (Day 2):** No weather warning.
- **23 February (Day 3):** No weather warning.
- **Weather Outlook for subsequent 4 days from 24<sup>th</sup> to 28<sup>th</sup> February, 2014:**
- Rain/snow at isolated places would occur over Jammu & Kashmir.
- Rain/snow at isolated places would occur over Himachal Pradesh & Uttarakhand from 26<sup>th</sup> onwards.
- Rain/thundershowers would occur at isolated places over central India on 24<sup>th</sup> and increase thereafter.
- Rain/thundershowers would occur at isolated places over extreme south peninsular India.
- Generally dry/mainly dry weather would prevail over rest parts of the country.

### Weather Forecast Map (Valid upto 0830 hours of 24<sup>th</sup> February, 2014)

### Satellite image dated 21.02.2014, 0600 UTC



## Salient Advisories

- In North Eastern Coastal Plain Zone of **Odisha**, severe attack of *Spodoptera litura* has been widely noticed in mustard crop due to abrupt rise and fall in temperature and likely to continue; prepare poison bait with 1 kg rice bran+200g jaggery / gur+10g Methomyl+Water and keep the bait at 20-25 different places in the affected fields. Spray Methomyl in bunds @ 1.5 g / litre of water or apply Chloropyriphos dust @ 10 kg / acre in bunds. Spray Emamethrin benzoate @ 3 g / 10 litres of water in mustard crops those are in flowering stage. It is advised not to undertake sowing of any crop until the *Spodoptera litura* population reaches below ETL.
- In Mid Hills Sub-Humid Zone of **Himachal Pradesh** and Hill Zone of **Uttarakhand**, apply light and frequent irrigation in standing crops to protect from cold injury.
- In view of high humidity in **Punjab** and **Haryana**, it is advised to monitor wheat crop for incidence of yellow rust; apply Tilt or Shine or Bumper @ 200 ml in 200 litres of water or Bayleton @ 200 gram in 200 litres of water on a non rainy day.
- In Central Plain Zone of **Uttar Pradesh**, due to high humidity, there are chances of attack of powdery mildew in mango. For control, spray Sulphex 0.2%, 2g per litre of water on a non rainy day and Carothin or Calixin 1ml per litre of water after a fortnight.

## Detailed Zonewise Agromet Advisories

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



**Wheat**

**Sugarcane**

**Late blight on potato**

**Mustard**

- **Realised Rainfall:** Significant rainfall occurred in all the districts in Himachal Pradesh except Lahaul and Spiti, all the districts in Uttarakhand, Gurdaspur, Hoshiarpur and Mohali districts in Punjab, Ambala, Chandigarh, Faridabad, Karnal, Palwal, Panchkula and Yamunanagar districts in Haryana, Doda, Kathua and Reasi districts in Jammu and Kashmir, Allahabad, Bahraich, Ballia, Gazipur and Gonda districts in East Uttar Pradesh, Bijnor, Meerut, Moradabad, Muzzaffarnagar, Rampur and Saharanpur districts in West Uttar Pradesh and in Central Delhi, East Delhi, New Delhi, North Delhi, South Delhi and West Delhi districts of Delhi. Weather remained mainly dry/ dry over rest of the region.
- **Weather Forecast:** Rain/snow would occur at a few places over Jammu & Kashmir during next 48 hours and isolated thereafter. Rain/snow would occur at a few places over Himachal Pradesh and Uttarakhand on 22<sup>nd</sup> and isolated places on 23<sup>rd</sup>. Rain/thundershowers would occur at a few places over Uttar Pradesh, Haryana & Delhi and Punjab and at isolated places over north Rajasthan on 22<sup>nd</sup>. Weather would be mainly dry/dry over rest parts of the region.  
Rise in minimum temperatures by 2-4°C likely over northwest India during next 48 hours.
- **Weather Warning:** Nil.
- **Weather Outlook:** Rain/snow at isolated places would occur over Jammu & Kashmir. Rain/snow at isolated places would occur over Himachal Pradesh & Uttarakhand from 26th onwards.
- **Advisories:**
  - **Jammu & Kashmir:**
    - In Valley Temperate Zone of Jammu and Kashmir, undertake smudging to increase the temperature around the crop fields and orchards.
    - In Sub Tropical Zone of Jammu & Kashmir, due to high humidity there are chances of infestation of yellow rust in wheat. For control, apply Propaconazole @ 25 ml in 25 litres of water on a non rainy day.
  - **Himachal Pradesh:**
    - As significant rainfall occurred in all the districts of Himachal Pradesh except Lahaul and Spiti during last week, postpone irrigation in wheat crops. Undertake intercultural operations and application of urea on a non-rainy day.
    - In Mid Hills Sub-Humid Zone of Himachal Pradesh, apply light and frequent irrigation in standing crops to

protect from cold injury.

- In Mid-Hills Sub-Humid Zone and & Low Hills Sub-Tropical Zone of Himachal Pradesh, due to increase in humidity, there are chances of occurrence of yellow rust in wheat. For control, spray Tilt @ 1 ml per liter of water on a non rainy day.
- **Uttarakhand:**
  - As significant rainfall occurred in all the districts of Uttarakhand during last week, postpone irrigation to standing crops. Undertake intercultural operations and application of fertilisers in standing crops on a non-rainy day.
  - In Hill Zone of Uttarakhand, apply light and frequent irrigation in standing crops to protect from cold injury.
  - In Bhabar and Tarai Zone of Uttarakhand, undertake planting of potato, transplanting of brinjal & capsicum utilizing the recent rainfall. As temperature conditions are favourable, undertake sowing of sunflower and planting of sugarcane during this week.
- **Punjab, Haryana and Delhi:**
  - In view of high humidity in Punjab and Haryana, it is advised to monitor wheat for incidence of yellow rust; apply Tilt or Shine or Bumper @ 200 ml in 200 litres of water or Bayleton @ 200 gram in 200 litres of water on a non rainy day.
  - In Western Plain Zone of Punjab, taking advantage of prevailing weather, undertake planting of sugarcane and transplanting of the seedlings of chilli in the fields.
  - In Undulating Plain Zone of Punjab, high humid weather with intermittent rain is conducive for incidence of late blight on potato and tomato; spray Indofil M-45 @ 500 g / acre on a non rainy day.
  - In Delhi, present humid weather condition is favourable for rust in wheat crop. If symptoms of black, brown or yellow rust appear, spray Dithane M 45 @ 2.5 g per litre of water on a non rainy day.
  - In Western Zone of Haryana, due to high humidity, there is a possibility of white rust in the mustard crop; spray 0.2% Redomil M Z or Mancozeb on a non rainy day.
- **Uttar Pradesh:**
  - In Central Plain Zone of Uttar Pradesh, due to high humidity, there are chances of attack of powdery mildew in mango. For control, spray Sulphex 0.2% @ 2 g per litre of water on a non rainy day and Carothin or Calixin 1 ml per litre of water after a fortnight.
  - In Western Plain Zone of Uttar Pradesh, due to high humidity, there are chances of attack of yellow rust in wheat. For control, spray Propiconazole 25 EC @ 1 ml per litre of water on a non rainy day.
- **Rajasthan:**
  - As dry weather is prevailing, apply 3<sup>rd</sup> irrigation at jointing stage in late sown and 4<sup>th</sup> irrigation at flowering stage in timely sown wheat in West Rajasthan. Also apply irrigation to the early sown summer cucurbit like bottle gourd, ridge gourd, pumpkin, bitter gourd, tinda etc.
  - Due to continuous cool and humid weather in Western Plain Zone and Flood Prone Eastern Plain Zone of Rajasthan, *Alternaria* blight (black spot) disease may attack mustard crop in some pockets; destroy the infested plants; spray Iprodione or Mancozeb @ 2 kg / 800 litres of water. Repeat the spray in 15 days interval.
  - Due to dry weather and rise in temperature wheat and barley crops may be attacked by termite in Semi Arid Eastern Plain Zone. Apply Chlorpyrifos 20 EC @ 4 litre @ 2.5 litre per hectare with irrigation for control.
- **Animal Husbandry**
  - In Sub-Tropical Zone of Jammu & Kashmir, protect the pregnant and milch animal from cold and feed them with mineral mixture regularly. Keep the animals inside the sheds/ shelters during night hours and take them out during sunshine hours in the day time. Cover the poultry shed with gunny bags in order to protect the birds from cold weather.
  - In Himachal Pradesh, due to prevailing low temperatures, protect the newly born calves and animals and the birds from cold and increase the feed by 10%.
  - In Western Plain Zone of Punjab new born calves need special care in cold weather. Keep them warm by providing clean and dry bedding. Give them vitamin A concentrate @ 1 ml daily in milk for three days to be repeated after a month.

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





**Wheat****Sugarcane****Chilli****Mustard**

- **Realised Weather:** Significant rain occurred in Rewa district of Madhya Pradesh and in Koriya district of Chhattisgarh. Weather remained mainly dry / dry over remaining parts of the region.
- **Weather forecast:** Rain / thundershowers would occur at isolated places over Madhya Pradesh on 21<sup>st</sup> & 23<sup>rd</sup> and at a few places on 22<sup>nd</sup>. Rain / thundershowers would occur at isolated places over Chhattisgarh on 22<sup>nd</sup> and 23<sup>rd</sup>. Rise in minimum temperatures by 2-4° C likely over central India during next 48 hours.
- **Weather Warning:** Nil.
- **Weather Outlook:** Rain/thundershowers would occur at a isolated places over central India on 24<sup>th</sup> and increase thereafter.
- **Advisories:**
  - **Madhya Pradesh:**
    - In Satpura Plateau Zone of Madhya Pradesh, as dry weather is prevailing and no significant rain is expected, apply irrigation in wheat and cotton. In Central Narmada Valley Zone, apply irrigation to wheat, sugarcane and maize crop.
    - In Jhabua Hill Zone of Madhya Pradesh, harvest matured gram and mustard on bright sunny days. Irrigate wheat and maize crop.
    - In Bundelkhand Zone of Madhya Pradesh, continue weeding and hoeing in onion and garlic crops on a non-rainy day.
    - In Nimar Valley Zone of Madhya Pradesh, due to humid weather during last week, there is possibility of attack of stem borer in maize. Apply Methyl- o-Demeton 25 EC @ 10 ml or Carbaryl 50% WP @ 40 g in 10 litres of water on a non rainy day.
  - **Chhattisgarh:**
    - In Chhattisgarh North Hill Zone, as mainly dry weather is prevailing, apply irrigation in wheat. Harvest matured arhar and potato.
    - In Chhattisgarh Plain Zone, as temperature conditions are favourable, continue planting of sugarcane and transplanting of summer rice.
- **Animal Husbandry**
  - In Malwa Plateau Zone of Madhya Pradesh, protect the cattle from cold and keep them in warm environment.

**EAST INDIA [JHARKHAND, BIHAR, ODISHA, WEST BENGAL & SIKKIM]****Mustard****Sugarcane****Cole crops****Onion**

- **Realised Weather:** Significant rainfall occurred in Araria, Banka, Bhagalpur, Darbhanga, East Champaran, Jamui, Katihar, Kishanganj, Madhepura, Madhubani, Muzaffarpur, Purnea, Saran, Siwan, Supaul, Vaishali and West Champaran districts of Bihar, in Deoghar, East Singbhum, Giridh, Godda, Hazaribaug, Jamtara, Latehar, Lohardaga, Palamau, Sahibganj and West Singbhum districts of Jharkhand, in Balasore, Bhadrak, Cuttack, Deogarh, Jajpur, Khurda, Mayurbhanj and Sonepur districts of Odisha and in all districts of West Bengal except Bankura, Purulia, Cooch Bihar, Darjiling and South Dinajpur. Weather remained mainly dry / dry over rest parts of the region.
- **Weather forecast:** Weather would be mainly dry / dry over the region. Rise in minimum temperatures by 2-4°C likely over east India during next 48 hours.
- **Weather Warning:** Nil
- **Weather Outlook:** Generally dry/mainly dry weather would prevail over the region.
- **Advisories:**
  - **Odisha:**
    - In East and South Eastern Coastal Plain Zone of Odisha, increasing day temperature may aggravate the infestation of stem borer on rice crop. To control it, spray Tryozophos @ 1.5 ml/litre water.
    - In East and South Eastern Coastal Plain Zone of Odisha, maximum and minimum temperature conditions are

congenial for occurrence of termites, thrips and aphids in groundnut. For termites, treat the soil with Sevidol granules @ 20 kg or Methyl parathion 2% D dust @ 25 kg/ha and maintain moisture in the field. For thrips, apply Imidacloprid 17.8 SL @ 125 ml in 500 litres of water per hectare. For aphids, spray Dimethoate @ 1 litre / ha in 500 litres of water.

- In North Eastern Plateau Zone Odisha, as dry weather would prevail, harvest matured mustard crop and undertake earthing up in groundnut at vegetative stage.
- In North Eastern Coastal Plain Zone of Odisha, severe attack of *Spodoptera litura* has been widely noticed in mustard crop due to abrupt rise and fall in temperature and likely to continue; prepare poison bait with 1 kg rice bran+200g jaggery / gur+10g Methomyl+Water and keep the bait at 20-25 different places in the affected fields. Spray Methomyl in bunds @ 1.5 g / litre of water or apply Chloropyriphos dust @ 10 kg / acre in bunds. Spray Emamectrin benzoate @ 3 g / 10 litres of water in mustard crops those are in flowering stage. It is also advised not to undertake sowing of any crop until the *Spodoptera litura* population reaches below ETL.

▪ **West Bengal:**

- In Laterite and Red soil Zone of West Bengal, wet and humid weather is conducive for outbreak of late t blight in potato; To protect the crop, apply Cymoxanil 8% + Mancozeb 64% @ 2-2.5 g per litre of water.
- In New Alluvial Zone of West Bengal, humid weather is conducive for root rot disease in sunflower; for control, apply Brassicol @ 1 g per litre of water.
- In Terai Zone of West Bengal, as temperature is increasing, there is a possibility of aphid attack in mustard. To control aphids, spray Imidacloprid 17.8 SL @ 1 ml / 4 litres of water or Dimethoate @ 2 ml / litres of water.

▪ **Bihar:**

- In Bihar, as significant rainfall occurred in Araria, Banka, Bhagalpur, Darbhanga, East Champaran, Jamui, Katihar, Kishanganj, Madhepura, Madhubani, Muzaffarpur, Purnea, Saran, Siwan, Supaul, Vaishali and West Champaran districts, postpone irrigation to wheat, maize and vegetables in these districts.
- In North West Alluvial Plain Zone of Bihar, as present temperature condition is favourable, undertake planting of spring sugarcane and sowing of sweet potato, summer vegetables and summer maize crop. As dry weather is prevailing, continue harvesting of matured tobacco crop.
- In South Bihar Alluvial Zone, as dry weather is prevailing, undertake harvesting of potato crop.
- In North East Alluvial Plain Zone of Bihar, as present temperature condition is favourable, complete planting of spring sugarcane, transplanting of *boro* rice and nursery sowing of *garma* rice and continue transplanting of onion and undertake harvesting of potato crop.

▪ **Jharkhand:**

- In Jharkhand, as significant rainfall occurred in Deoghar, East Singhbhum, Giridih, Godda, Hazaribaug, Jamtara, Latehar, Lohardaga, Palamau, Sahibganj and West Singhbhum districts, postpone irrigation to wheat in these districts.
- In Western Plateau Zone of Jharkhand, farmers are advised to apply urea in late sown wheat crops and in vegetable crop utilizing the realized rainfall. As weather condition is now favourable, continue harvesting of rapeseed and undertake harvesting of potato crop.
- In Central & North Eastern Plateau Zone of Jharkhand, as weather is favourable undertake harvesting of toria and potato.

• **Animal Husbandry**

- In Bihar, Jharkhand and interior Odisha, keep the animals inside the sheds and provide dry bedding inside cattle sheds to protect them from cold. Increase protein level and minerals in the feed concentrate to keep the animals healthy to cope up with the situation. Keep the chicks warm by providing artificial light in the poultry sheds.

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



*Chilli*



*Transplanting of rice*



*cole crops*



*Late blight in Potato*

- **Realised Rainfall:** Significant rainfall occurred in most of the districts in Arunachal Pradesh except East Kameng and Tirap, in most of the districts in Assam except Cachar, Dhubri, Dibrugarh, Haikandi, Morigaon, N. C. Hills and Sibsagar, in most of the districts in Meghalaya except East Garo Hills, Ri-Bhoi and South Garo Hills, in Churachandpur, Imphal East and Senapati districts of Manipur, in Champai, Lawngtlai, Lunglei and Saiha districts of Mizoram, in Kephire, Kohima, Mokokchung, Phek and Wokha districts of Nagaland. Weather would be mainly

dry over remaining parts of the region.

- **Weather Forecast:** Weather would be mainly dry / dry over the region.
- **Weather Warning:** Nil.
- **Weather Outlook:** Generally dry / mainly dry weather would prevail over the region.
- **Advisories:**
  - **Assam & Meghalaya:**
    - As significant rainfall occurred in most of the districts in Assam except Cachar, Dhubri, Dibrugarh, Hailkandi, Morigaon, N. C. Hills and Sibsagar, postpone irrigation to standing crops in the districts where significant rainfall occurred and apply irrigation in standing crops in Cachar, Dhubri, Dibrugarh, Hailkandi, Morigaon, N. C. Hills and Sibsagar districts.
    - In Upper Brahmaputra Valley Zone and North Bank Plain Zone of Assam, due to high relative humidity, there is possibility of occurrence of late blight in late planted potato. Closely monitor the leaves of the plant and for control, apply 0.25% solution of Mancozeb 75 WP (2 g / litre of water).
    - In Hill Zone and North Bank Plain Zone of Assam, cloudy and high humid weather conditions are congenial for appearance of blast disease in *boro* rice. If blast spots are noticed, spray Mancozeb 0.2% @ 2 g / litre or Ediphenphos 0.1% @ 1 g / litre of water for control.
    - In Hill Zone of Assam, prevailing temperature conditions are suitable for sowing of cucurbits and okra.
  - **Nagaland, Manipur, Mizoram and Tripura:**
    - In Mild Tropical Hill Zone of Nagaland, as dry weather is likely to prevail, undertake harvesting of mustard and matured tomato and carrot.
    - In Sub Tropical Plain Zone of Manipur, due to high humid condition, there may be chances of attack of pod borer and hairy caterpillar in rapeseed and mustard. For control of pod borer spray Imidachloprid @ 0.25 ml / litre of water and for hairy caterpillar, spray Quinalphos or Chloropyriphos @ 2 ml / litre of water.
    - In Mild Tropical Hill Zone of Mizoram, humid weather conditions are congenial for incidence of painted bug in cole crops. To control, spray Malathion 50 EC @ 1.25 litre/ha or Dimecron 100 EC @ 0.250 litre/ha.
    - In Mild Tropical Plain Zone of Tripura, due to humid weather conditions, there may be attack of hopper in mango plant. Spray Malathion @ 2 ml per litre of water to control the attack.
- **Animal Husbandry**
  - In North Bank Plain Zone, Central Brahmaputra Valley and Upper Brahmaputra Valley Zone of Assam protect poultry birds from cold by using electric bulbs (300 Watt for 100 sq. ft.) to prevent Coryza disease.
  - In Assam, Manipur and Tripura, undertake vaccination to control ranikhet disease in poultry during this period.

## WEST INDIA [GOA, MAHARASHTRA, GUJARAT]



*Transplanting of rice*

*Groundnut*

*Cotton*

*Grape vine*

- **Realised Rainfall:** Mainly dry weather prevailed over the region during last week.
- **Weather Forecast:** Rain / thundershowers would occur at isolated places over Vidarbha on 22<sup>nd</sup> and 23<sup>rd</sup> February. Rain/thundershowers would occur at isolated places over south Madhya Maharashtra and Marathwada during next 48 hours. Weather would be mainly dry / dry over rest of the region.
- **Weather Warning:** Nil.
- **Weather Outlook:** Generally dry / mainly dry weather would prevail over the region.
- **Advisories:**
  - **Maharashtra:**
    - As no significant rain occurred during last week and mainly dry weather would prevail in Konkan, complete the inter-cultural operations like weeding and fertilizer application in groundnut at vegetative stage. Also undertake inter-cultural operations like weeding and fertilizer application in pulses, vegetables, rice, finger millet and orchards. Apply irrigation to groundnut, orchards, vegetable crops and pulses. As mango is at fruit formation stage (pea size), considering the crop canopy, apply 150-200 litres of water per tree at 15 days interval.
    - In Madhya Maharashtra, as no significant rain occurred during last few weeks and only isolated rain is likely to occur in south Madhya Maharashtra, continue inter-cultural operations like weeding and fertilizer application in

sugarcane, summer groundnut and vegetables. Apply irrigation to wheat, sugarcane, vegetable crops and maize. Also complete harvesting of already matured gram and jowar during morning hours.

- In Marathwada, as dry weather prevailed during last few weeks and only isolated rain is likely to occur, apply irrigation to wheat, sugarcane, vegetable crops and maize. Continue harvesting of already matured gram and jowar during morning hours in clear weather.
- As prevailing temperature is favourable (minimum temperature is around 16-18<sup>0</sup>C), continue sowing of summer groundnut in Central Vidarbha Zone and planting of water melon and musk melon in East Vidarbha on raised beds.
- Due to cloudy weather in Western Ghat region, there may be incidence of powdery mildew in mango; spray Sulphur (WP 0.1 %).
- **Gujarat:**
  - Under prevailing mainly dry / dry weather conditions, continue harvesting of already matured mustard, potato and castor in North Gujarat Zone.
  - In view of prevailing mainly dry / dry weather in Middle Gujarat Zone, apply irrigation in groundnut at flowering stage and wheat at dough stage.
  - As mainly dry / dry weather is prevailing, apply irrigation in wheat at milk stage in Saurashtra Zone and Bhal and Coastal Zone, North West Zone and North Gujarat Zone.
  - In present weather conditions (increasing temperature), severe attack of thrips in chilli has been reported which is likely to increase in North Saurashtra Zone. Spray 20 ml Profenofos in 10 litres of water to manage the pest.

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



*Transplanting of rice*

*Sugarcane( cane maturity)*

*Onion (bulb development)*

*Sucking pest on Groundnut*

- **Realized Weather:** Significant rainfall occurred over Nilgiris district in Tamil Nadu. Weather remained mainly dry/dry over remaining parts of the region.
- **Weather Forecast:** Rain/thundershowers would occur at isolated places over south interior Karnataka, Lakshadweep, Kerala and Nicobar Islands. Rain/thundershowers would occur at isolated places over coastal & north interior Karnataka and Tamilnadu & Puducherry during next 48 hours. Weather would be mainly dry/dry over rest parts of the region.
- **Weather Warning:** Nil
- **Weather Outlook:** Rain/thundershowers would occur at isolated places over extreme south peninsular India.
- **Advisory:**
  - **Karnataka:**
    - Undertake harvesting of chickpea, safflower and *rabi* sorghum in the North Dry Zone, undertake harvesting of wheat and Bengal gram in the North East Transition Zone and undertake harvesting of wheat and chickpea in the North Transition Zone of Karnataka.
  - **Andhra Pradesh:**
    - Prevailing dry weather conditions are congenial for incidence of sucking pest and tikka leaf spot in groundnut in the Southern Zone of Andhra Pradesh. Spray Monochrotophos@1.6ml/litre of water to manage sucking pest and Hexaconozol@2ml/litre of water to manage tikka leaf spot.
    - Undertake harvesting of green gram and black gram in the North Coastal Zone of Andhra Pradesh, since dry weather is going to prevail in the coming days.
    - Incidences of leaf folder, blast and sheath rot was observed in rice in the Scarce Rainfall Zone of Andhra Pradesh. As prevailing weather conditions (increasing day temperatures) are congenial for spread of the diseases, spray Profenophos @2.0 ml or Chlorpyriphos@2.5 ml or Monocrotophos@1.6 ml per litre of water to manage leaf folder, Tricyclazole @ 0.6 gm or Isoprotholone @1.5 ml per litre of water to manage blast and Carbendazim @1.0 gm per litre of water to manage sheath rot..
  - **Tamil Nadu:**
    - Undertake harvesting of matured samba rice and cultivation of summer rice in the Cauvery Delta Zone of Tamil Nadu. In rice fallow black gram, powdery mildew disease would be more pronounced due to dew in morning time. For the management of powdery mildew disease, spray Carbendazim 100 g/ac or wettable Sulphur 1

kg/ac.

- In the Western Zone of Tamil Nadu, due to prevailing hot and humid weather, bacterial heart rot disease is seen and likely to continue in 5 months old banana plantations. Monitor the crop and drench with bleaching powder @ 20g/liter of water to manage the disease.
- **Kerala:**
- Undertake harvesting of black pepper and early fruit setting varieties of cashew in the Northern Zone of Kerala on bright sunny days. Undertake mulching of soil in banana to prevent evaporation loss due to rise in day temperatures.
- As dry weather is prevailing, in the Southern Zone of Kerala, undertake mulching in coconut fields to retain water in the fields. Provide irrigation to banana and shade to small rubber plants. Prevailing dry conditions are congenial for multiplication of white flies and jassids which act as vectors for spreading crinkling in cucurbits especially in bitter gourd. Spray neem oil + castor oil – garlic emulsion to manage white flies and spray tobacco leaf emulsion to manage aphids.
- There are chances of nut dropping in coconut due to water stress in the Problem Area Zone of Kerala. Undertake mulching in coconut basin to retain soil moisture. Present dry weather is most favourable for the incidence of leaf eating caterpillar, mealy bugs, rhinoceros beetle and red palm weevil in coconut. Undertake plant protection measures.
- **Animal Husbandry:**
- Prevailing dry weather condition is congenial for Ranikhet disease in poultry especially backyard poultry in the Western Zone of Tamil Nadu. Give suitable vaccination for poultry to prevent the disease.

## Annexure I

## Week by week Rainfall Distribution

State/Districts	05.02.14		12.02.14		19.02.14	
	Actual (mm)	% dep.	Actual (mm)	% dep.	Actual (mm)	% dep.
<b>Arunachal Pradesh</b>						
Anjaw	**	**	**	**	**	**
Changlang	0.0	-100	8.0	-79	22.3	-33
Dibang Valley	0.0	-100	80.0	140	108.0	350
East Kameng	0.0	-100	0.0	-100	3.2	-86
East Siang	0.0	-100	48.7	141	89.5	505
Kurung Kumey	**	**	**	**	**	**
Lohit	0.0	-100	30.8	157	32.4	32
Lower Dibang Valley	0.0	-100	19.2	-42	94.2	293
Lower Subansari	**	**	**	**	**	**
Papumpara	0.0	-100	11.6	36	56.4	111
Tawang	0.0	-100	12.0	5	27.0	155
Tirap	0.0	-100	2.5	-75	15.5	-33
Upper Siang	0.0	-100	87.1	137	66.6	69
Upper Subansari	0.0	-100	43.4	578	39.8	130
West Kameng	0.0	-100	0.0	-100	30.8	191
West Siang	0.0	-100	50.8	218	65.0	412
<b>Assam</b>						
Baksa	0.0	-100	0.4	-85	34.1	231
Barpeta	0.0	-100	0.1	-97	34.8	238
Bongaigaon	0.0	-100	0.0	-100	23.1	57
Cachar	0.0	-100	1.1	-79	16.4	-17
Chirang	0.0	-100	0.0	-100	40.2	173
Darrang	0.0	-100	0.0	-100	27.0	350
Dhemaji	0.0	-100	14.0	63	42.0	211
Dhubri	0.0	-100	0.0	-100	16.3	989
Dibrugarh	0.0	-100	6.9	-23	19.5	38
Goalpara	0.0	-100	0.0	-100	21.2	266
Golghat	0.0	-100	1.0	-87	30.2	211
Hailakandi	0.0	-100	9.9	219	14.7	5
Jorhat	0.0	-100	1.2	-86	30.8	202
Kamrup(Rural)	0.0	-100	0.0	-100	26.2	280
Kamrup(Metro)	0.0	-100	0.0	-100	25.4	268
Karbi Anglong	0.0	-100	0.0	-100	20.1	139
Karimganj	0.0	-100	1.0	-86	21.6	110
Kokrajhar	0.0	-100	0.0	-100	52.8	294
Lakhimpur	0.0	-100	15.0	74	35.6	164
Morigaon	0.0	-100	0.0	-100	14.8	135
N.C.Hills	0.0	-100	0.0	-100	18.2	104
Nowgong	0.0	-100	0.0	-100	31.8	623
Nalbari	0.0	-100	1.2	-73	36.5	368
Sonitpur	0.0	-100	0.1	-98	29.4	309
Sibsagar	0.0	-100	0.0	-100	18.7	143

Tinsukia	0.0	-100	13.0	30	22.0	32
Udalgiri	0.0	-100	4.6	-23	42.8	613
<b>Meghalaya</b>						
East Garo Hills	0.0	-100	0.0	-100	16.3	288
East Khasi Hills	0.0	-100	0.0	-100	49.9	668
Jaintia Hills	0.0	-100	0.0	-100	33.0	120
Ribhoi	0.0	-100	0.0	-100	9.8	343
South Garo Hills	0.0	-100	0.0	-100	11.0	340
West Garo Hills	0.0	-100	0.0	-100	22.8	812
West Khasi Hills	0.0	-100	0.0	-100	29.0	140
<b>Mizoram</b>						
Aizwal	0.0	-100	3.5	86	13.5	57
Champhai	0.0	-100	0.0	-100	33.0	469
Kolasib	0.0	-100	4.0	82	3.0	-77
Lawngtlai	0.0	-100	0.0	-100	52.0	175
Lunglei	0.0	-100	0.0	-100	46.0	265
Mamit	0.0	-100	6.0	216	10.0	16
Saiha	0.0	-100	0.0	-100	53.0	539
Serchhip	0.0	-100	0.0	-100	3.0	-66
<b>Manipur</b>						
Bishnupur	0.0	-100	2.0	-89	19.0	476
Chandel	0.0	-100	0.0	-100	**	**
Churachandpur	0.0	-100	0.0	-100	21.0	304
Imphal east	0.0	-100	1.0	-88	22.0	165
Imphal west	0.0	-100	0.0	-100	9.4	327
Senapati	0.0	-100	0.0	-100	25.0	762
Tamenglong	**	**	**	**	**	**
Thoubal	0.0	-100	0.0	-100	14.0	338
Ukhrul	0.0	-100	0.0	-100	0.0	-100
<b>Nagaland</b>						
Dimapur	0.0	-100	2.0	150	18.6	1333
Kephire	0.0	-100	0.0	-100	29.0	241
Kohima	0.0	-100	0.3	-93	23.0	304
Longleng	**	**	**	**	**	**
Mokokchung	0.0	-100	5.0	25	29.0	179
Mon	**	**	**	**	**	**
Paren	**	**	**	**	**	**
Phek	0.0	-100	0.0	-100	28.0	391
Tuensang	**	**	**	**	**	**
Wokha	0.0	-100	0.0	-100	24.0	208
Zunheboto	**	**	**	**	**	**
<b>Tripura</b>						
Dhalai	0.0	-100	0.0	-100	9.0	2
North tripura	0.0	-100	3.5	-53	8.4	33
South tripura	0.0	-100	0.0	-100	9.3	32
West tripura	0.0	-100	0.0	-100	7.9	-2
<b>Himachal Pradesh</b>						
Bilaspur	0.4	-98	30.5	194	40.1	86
Chamba	19.9	-45	49.1	126	61.8	150

Hamirpur	0.5	-98	45.3	254	40.0	95
Kangra	3.7	-82	37.5	123	61.6	185
Kinnaur	8.1	-74	36.3	48	69.2	133
Kullu	15.3	-24	61.7	226	61.5	124
Lahaul and Spiti	19.2	-42	55.9	83	18.0	-48
Mandi	2.4	-87	53.2	329	52.8	125
Shimla	4.5	-74	35.0	138	62.3	200
Sirmaur	0.7	-96	25.5	114	75.9	430
Solan	1.3	-94	27.0	179	60.3	182
Una	0.2	-99	34.4	377	27.7	101
<b>Punjab</b>						
Amritsar	0.1	-99	3.5	-40	1.1	-88
Barnala	0.0	-100	0.0	-100	0.0	-100
Bhatinda	0.0	-100	2.0	-17	0.0	-100
Faridkot	1.0	-67	5.0	43	0.0	-100
Fatehgarh Sahib	0.0	-100	**	**	6.0	-19
Ferozpur	1.0	-71	7.0	192	0.0	-100
Gurdaspur	1.0	-94	21.2	143	34.3	156
Hoshiarpur	0.3	-97	16.0	107	20.9	79
Jalandhar	0.3	-96	2.5	-52	5.6	-39
Kapurthala	0.4	-95	13.8	159	16.0	125
Ludhiana	0.2	-98	2.5	-29	6.5	-27
Mansa	0.0	-100	2.4	-17	0.0	-100
Moga	0.0	-100	9.0	500	9.1	122
Muktesar	0.0	-100	6.2	210	0.0	-100
Nawashahar	0.0	-100	7.5	14	14.4	9
Patiala	0.7	-92	6.0	40	18.4	152
Ropar	0.0	-100	9.1	23	19.8	22
Sangrur	0.5	-92	1.7	-48	1.4	-74
Mohali	0.0	-100	9.5	48	31.0	343
TarnTaran	0.0	-100	5.4	126	0.0	-100
<b>Haryana</b>						
Ambala	1.0	-93	7.9	27	31.4	355
Bhiwani	0.0	-100	0.7	-39	1.8	-43
Chandigarh	0.2	-99	6.8	58	22.8	58
Faridabad	0.0	-100	0.0	-100	40.0	1150
Fatehabad	0.0	-100	0.2	-92	0.5	-84
Gurgaon	0.0	-100	0.0	-100	9.0	120
Hissar	0.1	-97	1.6	23	0.4	-91
Jhajar	0.0	-100	0.0	-100	11.6	213
Jind	0.0	-100	0.0	-100	0.3	-92
Katihah	0.0	-100	0.0	-100	1.4	-63
Karnal	0.0	-100	4.4	7	20.6	228
Kurukshetra	0.0	-100	0.0	-100	9.8	77
Mahendragarh	0.0	-100	0.0	-100	10.5	139
Mewat	0.0	-100	0.0	-100	9.4	223
Palwal	0.0	-100	0.0	-100	21.8	988
Panchkkula	0.5	-97	7.7	28	25.7	135
Panipat	0.0	-100	0.7	-78	18.8	595



Rewari	0.0	-100	0.0	-100	9.2	300
Rohtak	0.0	-100	1.0	-50	2.8	-26
Sirsa	0.0	-100	0.0	-100	0.0	-100
Sonepat	0.3	-95	0.8	-67	13.0	210
Yamunanagar	0.1	-99	8.5	-11	21.3	160
Delhi	0.1	-96	0.3	-86	21.8	226
<b>Jammu &amp; Kashmir</b>						
Anantnag	13.4	-47	35.6	141	7.0	-73
Badgam	6.1	-51	16.0	5	4.3	-77
Bandipore	**	**	**	**	**	**
Baramula	29.3	-15	45.7	-19	0.7	-98
Doda	31.4	-18	35.6	34	41.4	-17
Ganderwal	25.8	50	21.0	64	15.8	-19
Jammu	6.0	-56	4.4	-39	6.5	-67
Kargil	0.0	-100	0.0	-100	0.0	-100
Kathua	5.8	-70	23.6	195	52.6	295
Kistwar	0.0	-100	0.0	-100	0.0	-100
Kulgam	20.5	-18	23.8	61	4.3	-83
Kupwara	74.5	185	52.0	141	0.0	-100
Ladakh(Leh)	0.0	-100	1.1	-49	0.9	-61
Poonch	0.0	-100	3.0	-92	0.0	-100
Pulwama	4.2	-61	22.1	108	4.4	-73
Rajouri	12.6	-44	44.1	549	6.9	-58
Ramban	37.7	-2	63.9	140	15.2	-70
Reasi	8.8	-71	48.4	159	23.1	-16
Samba	2.9	-79	10.2	40	7.2	-63
Shopian	12.0	10	13.0	23	1.5	-91
Srinagar	6.1	-64	21.8	70	9.1	-53
Udhampur	6.5	-78	12.5	-33	15.3	-44
<b>East Madhya Pradesh</b>						
Anuppur	0.0	-100	0.0	-100	0.0	-100
Balaghat	0.0	-100	0.0	-100	0.4	-89
Chhatarpur	0.0	-100	0.0	-100	7.6	110
Chindwara	0.0	-100	0.0	-100	0.0	-100
Damoh	0.0	-100	0.0	-100	3.4	-33
Dindori	0.0	-100	0.0	-100	0.0	-100
Jabalpur	0.0	-100	0.0	-100	6.2	138
Katni	0.0	-100	0.0	-100	0.0	-100
Mandla	0.0	-100	0.0	-100	5.1	-30
Narsingpur	0.0	-100	0.0	-100	1.0	-44
Panna	0.0	-100	0.0	-100	0.0	-100
Rewa	0.0	-100	0.0	-100	24.0	300
Sagar	0.0	-100	0.0	-100	1.3	-49
Satna	0.0	-100	0.0	-100	6.7	39
Seoni	0.0	-100	0.0	-100	0.0	-100
Shahdol	0.0	-100	0.0	-100	5.6	-34
Sidhi	0.0	-100	0.0	-100	11.6	164
Singrauli	0.0	-100	0.0	-100	0.0	-100
Tikamgarh	0.0	-100	0.0	-100	1.5	-38

Umaria	0.0	-100	0.0	-100	6.2	-22
<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	0.7	-50
Burhanpur	0.0	-100	0.0	-100	0.0	-100
Datia	0.0	-100	0.0	-100	6.9	93
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	1.4	-26
Gwalior	0.0	-100	0.0	-100	4.7	74
Harda	0.0	-100	0.0	-100	0.0	-100
Hosangabad	0.0	-100	0.0	-100	1.1	-37
Indore	0.0	-100	0.0	-100	0.6	200
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	0.3	-85
Neemuch	0.0	-100	0.0	-100	0.0	-100
Raisen	0.0	-100	0.0	-100	0.7	-56
Rajgarh	0.0	-100	0.0	-100	0.4	-64
Ratlam	0.0	-100	0.0	-100	1.1	278
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	2.8	84
<b>Chattisgarh</b>						
Bastar	0.0	-100	0.0	-100	0.0	-100
Bijapur	0.0	-100	0.0	-100	0.0	-100
Bilaspur	0.0	-100	0.0	-100	8.2	111
Dantewara	0.0	-100	0.0	-100	0.0	-100
Dhamtari	0.0	-100	0.0	-100	12.2	542
Durg	0.0	-100	0.0	-100	17.1	2348
Janjgir	0.0	-100	0.0	-100	3.2	146
Jashpurnagar	0.0	-100	0.0	-100	0.0	-100
Kanker	0.0	-100	0.0	-100	0.0	-100
Korba	0.0	-100	0.0	-100	3.0	-27
Koriya	0.0	-100	0.0	-100	34.9	2079
Kawardha	0.0	-100	0.0	-100	0.0	-100
Mahasumund	0.0	-100	0.0	-100	3.5	133
Narayanpur	0.0	-100	0.0	-100	0.0	-100
Raigarh	0.0	-100	0.0	-100	**	**
Raipur	0.0	-100	0.0	-100	13.4	856

Rajandgaon	0.0	-100	0.0	-100	0.8	-61
Surguja	0.0	-100	0.0	-100	11.4	244
<b>East Uttar Pradesh</b>						
Allahabad	0.0	-100	0.0	-100	21.5	642
Ambedkar Nagar	0.0	-100	0.0	-100	4.5	32
Azamgarh	0.0	-100	0.0	-100	13.1	525
Bahraich	0.0	-100	1.8	-70	21.1	454
Ballia	0.0	-100	0.0	-100	23.7	810
Balrampur	0.0	-100	0.0	-100	12.3	308
Banda	0.0	-100	0.0	-100	6.0	68
Barabanki	0.0	-100	0.8	-82	14.3	233
Basti	0.0	-100	0.0	-100	5.8	49
Chandauli	0.0	-100	0.0	-100	14.0	186
Deoria	0.0	-100	0.0	-100	12.7	242
Faizabad	0.0	-100	0.0	-100	1.8	-51
Farrukhabad	0.0	-100	4.7	52	4.1	45
Fatehpur	0.0	-100	0.0	-100	3.2	-4
Gazipur	0.0	-100	0.0	-100	26.8	1118
Gonda	0.0	-100	0.0	-100	20.3	682
Gorakhpur	0.0	-100	0.0	-100	9.9	241
Hardoi	0.0	-100	6.4	83	6.5	116
Jaunpur	0.0	-100	0.0	-100	7.5	108
Kannauj	0.0	-100	4.0	8	7.7	185
Kanpur City	0.0	-100	0.2	-88	8.4	147
Kanpur Dehat	0.0	-100	0.0	-100	8.8	215
Kaushambi	0.0	-100	0.0	-100	6.0	139
Kheri	0.0	-100	1.5	-71	2.9	-18
Kushi nagar	0.0	-100	0.0	-100	5.7	127
Lucknow	0.0	-100	0.5	-79	12.6	232
Maharajganj	0.0	-100	0.0	-100	5.3	56
Mau	0.0	-100	0.0	-100	8.0	281
Mirzapur	0.0	-100	0.0	-100	8.7	128
Pratapgarh	0.0	-100	0.0	-100	12.5	381
RaiBareilly	0.0	-100	0.0	-100	2.4	-3
Sahuji Maharajnagar	0.0	-100	0.0	-100	9.1	194
Sant Kabirnnagar	0.0	-100	0.0	-100	12.0	167
Sant Ravidas Nagar	0.0	-100	0.0	-100	14.2	190
Shrawasti	0.0	-100	**	**	0.0	-100
Sidharthnagar	0.0	-100	0.0	-100	5.0	85
Sitapur	0.0	-100	9.5	197	6.9	121
Sonbhadra	0.0	-100	0.0	-100	7.4	75
Sultanpur	0.0	-100	0.0	-100	8.0	261
Unnao	0.0	-100	0.0	-100	10.8	163
Varanasi	0.0	-100	0.0	-100	11.5	101
<b>West Uttar Pradesh</b>						
Agra	0.0	-100	0.1	-98	6.1	119
Aligarh	0.0	-100	1.2	-25	9.4	135
Auraiya	0.0	-100	0.0	-100	3.5	-49
Badaun	0.0	-100	5.6	65	16.5	267

Baghpat	0.0	-100	0.0	-100	17.1	223
Bareilly	0.0	-100	2.8	-50	17.4	229
Bijnor	0.0	-100	5.4	4	26.5	254
Bulandsahar	0.0	-100	0.0	-100	13.5	141
Etah	0.0	-100	1.8	-27	2.1	-29
Etawah	0.0	-100	0.0	-100	2.0	-52
Firozabad	0.0	-100	8.7	293	2.7	-26
GBNagar	0.0	-100	0.0	-100	16.5	871
Ghaziabad	0.0	-100	14.7	819	13.4	173
Hamirpur	0.0	-100	0.0	-100	3.2	43
Jalaun	0.0	-100	0.0	-100	7.8	99
Jhansi	0.0	-100	0.0	-100	4.7	14
Jotirba Phule Nagar	0.0	-100	1.5	-35	11.3	92
Kanshiramnagar	0.0	-100	4.0	208	5.5	77
Lalitpur	0.0	-100	0.0	-100	0.0	-100
Mahamaya Nagar	0.0	-100	1.5	36	4.7	26
Mahoba	0.0	-100	0.0	-100	1.0	-58
Mainpuri	0.0	-100	1.5	-32	1.3	-47
Mathura	0.0	-100	9.0	592	4.5	50
Meerut	0.0	-100	0.0	-100	22.7	394
Moradabad	0.0	-100	4.5	-34	23.5	319
Muzaffarnagar	0.0	-100	6.7	109	33.0	500
Pilibhit	0.0	-100	1.3	-71	7.2	63
Rampur	0.0	-100	4.5	-12	22.1	157
Saharanpur	0.0	-100	13.0	103	23.4	230
Shahjahanpur	0.0	-100	3.1	-27	12.2	148
<b>Uttarakhand</b>						
Almora	0.0	-100	10.8	24	43.5	182
Bageshwar	0.0	-100	13.9	60	49.0	218
Chamoli	1.0	-95	37.1	165	42.4	80
Champawat	0.0	-100	7.5	-15	24.5	102
Dehradun	0.2	-99	32.6	279	78.8	405
Garhwal Pauri	0.0	-100	15.5	168	40.8	359
Garhwal Tehri	0.0	-100	39.5	299	79.7	375
Haridwar	0.0	-100	3.0	-68	57.8	564
Nainital	0.0	-100	13.8	97	41.5	219
Pithorgarh	1.8	-88	30.2	259	50.2	179
Rudraprayag	0.0	-100	48.4	204	54.9	148
Udham Sing Nagar	0.0	-100	1.1	-79	91.8	1483
Uttarkashi	0.5	-97	41.3	187	57.3	106
<b>Bihar</b>						
Araria	0.0	-100	0.0	-100	25.2	1996
Arwal	0.0	-100	0.0	-100	16.2	1700
Aurangabad	0.0	-100	0.0	-100	5.7	53
Banka	0.0	-100	0.0	-100	102.8	7243
Begusarai	0.0	-100	0.0	-100	11.1	553
Bhabua	0.0	-100	0.0	-100	10.0	27
Bhagalpur	0.0	-100	0.0	-100	31.5	1160
Bhojpur	0.0	-100	0.0	-100	16.0	208

Buxar	0.0	-100	0.0	-100	10.6	361
Darbhanga	0.0	-100	0.0	-100	36.3	807
East Champaran	0.0	-100	0.0	-100	30.9	1243
Gaya	0.0	-100	0.0	-100	6.4	94
Gopalganj	0.0	-100	0.0	-100	16.6	515
Jahanabad	0.0	-100	0.0	-100	4.0	344
Jamui	0.0	-100	0.0	-100	76.9	3560
Kathihar	0.0	-100	0.0	-100	26.8	3729
Khagadia	0.0	-100	0.0	-100	7.9	772
Kishanganj	0.0	-100	0.0	-100	23.0	1050
Lakhisarai	0.0	-100	0.0	-100	5.0	178
Madhepura	0.0	-100	0.0	-100	22.1	688
Madhubani	0.0	-100	0.0	-100	22.7	1317
Monghyar	0.0	-100	0.0	-100	14.6	711
Muzaffarpur	0.0	-100	0.0	-100	25.4	957
Nalanda	0.0	-100	0.0	-100	2.3	-27
Nawada	0.0	-100	0.0	-100	17.4	727
Patna	0.0	-100	0.0	-100	15.3	408
Purnea	0.0	-100	0.0	-100	25.6	1406
Rohtas	0.0	-100	0.0	-100	18.6	377
Saharsha	0.0	-100	0.0	-100	7.4	722
Samstipur	0.0	-100	0.0	-100	18.0	847
Saran	0.0	-100	0.0	-100	38.2	1094
Sheikpura	0.0	-100	0.0	-100	5.4	143
Sheohar	0.0	-100	0.0	-100	**	**
Sitamarhi	0.0	-100	0.0	-100	4.0	46
Siwan	0.0	-100	0.0	-100	40.1	1440
Supaul	0.0	-100	0.0	-100	37.0	2367
Vaishali	0.0	-100	0.0	-100	40.8	1411
West Champaran	0.0	-100	0.0	-100	20.4	1175
<b>Jharkhand</b>						
Bokaro	0.0	-100	0.0	-100	12.3	484
Chatra	0.0	-100	0.0	-100	12.8	237
Deoghar	0.0	-100	0.0	-100	34.8	1413
Dhanbad	0.0	-100	0.0	-100	18.6	388
Dumka	**	**	**	**	**	**
East Singbhum	0.0	-100	0.0	-100	27.1	833
Garhwa	0.0	-100	0.0	-100	**	**
Giridih	0.0	-100	0.0	-100	25.9	826
Godda	0.0	-100	0.0	-100	22.6	1313
Gumla	**	**	**	**	**	**
Hazaribagh	0.0	-100	0.0	-100	31.6	953
Jamtara	0.0	-100	0.0	-100	23.2	544
Khunti	0.0	-100	0.0	-100	2.5	-52
Koderma	0.0	-100	0.0	-100	**	**
Latehar	0.0	-100	0.0	-100	34.5	808
Lohardagga	0.0	-100	0.0	-100	20.0	545
Pakur	0.0	-100	0.0	-100	11.8	1870
Palamau	0.0	-100	0.0	-100	24.4	597

Ramgarh	0.0	-100	0.0	-100	9.6	357
Ranchi	0.0	-100	0.0	-100	10.6	44
Sahebganj	0.0	-100	0.0	-100	57.4	11380
Saraikela	0.0	-100	0.0	-100	8.2	105
Simdega	0.0	-100	0.0	-100	18.4	411
West Singhbhum	0.0	-100	0.0	-100	25.2	394
<b>East Rajasthan</b>						
Ajmer	0.0	-100	0.0	-100	0.0	-100
Alwar	0.0	-100	0.1	-87	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	1.4	17	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	-92
Dausa	0.0	-100	2.2	267	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	0.3	-31	0.0	-100
Jhalawar	0.0	-100	0.0	-100	0.0	-100
Jhunjhunu	0.0	-100	0.0	-96	0.7	-84
Karauli	0.0	-100	0.0	-100	0.0	-100
Kota	0.0	-100	0.0	-100	0.1	-85
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	0.4	-77
Sikar	0.0	-100	0.3	-74	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	0.0	-100	0.0	-100
Churu	0.1	-92	0.2	-74	0.1	-98
Hanumangarh	0.0	-100	2.0	54	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	0.0	-100	1.5	-7	0.0	-100
<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	0.1	200
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	2.0	567
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	0.4	260
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	0.0	-100	0.0	-100
Mumbai	0.0	-100	0.0	-100	7.8	7700
Raigad	0.0	-100	0.0	-100	0.6	200
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	2.8	200
<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	**	**
Kolhapur	0.0	-100	0.0	-100	0.0	-100
Nandurbar	0.0	-100	**	**	1.0	200
Nasik	0.0	-100	0.0	-100	0.6	450
Pune	0.0	-100	0.0	-100	0.0	-100
Sangli	0.0	-100	0.0	-100	0.0	-100
Satara	0.0	-100	0.0	-100	0.0	-100
Solapur	0.0	-100	0.0	-100	0.0	-100
<b>Marathwada</b>						
Aurangabad	0.0	-100	0.0	-100	0.0	-100
Beed	0.0	-100	0.0	-100	0.0	-100
Hingoli	0.0	-100	0.0	-100	**	**
Jalna	**	**	**	**	**	**
Latur	0.0	-100	0.0	-100	0.0	-100
Nanded	0.0	-100	0.0	-100	0.0	-100

Usmanabad	0.0	-100	0.0	-100	0.0	-100
Parbhani	0.0	-100	0.0	-100	0.0	-100
<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	0.0	-100
Buldhana	0.0	-100	0.0	-100	0.0	-100
Chandrapur	0.0	-100	0.0	-100	0.0	-100
Gadchiroli	0.0	-100	0.0	-100	0.0	-100
Gondia	0.0	-100	0.0	-100	0.0	-100
Nagpur	0.0	-100	0.0	-100	0.0	-100
Wardha	0.0	-100	0.0	-100	0.0	-100
Washim	0.0	-100	0.0	-100	0.0	-100
Yeotmal	0.0	-100	0.0	-100	0.0	-100
<b>Odisha</b>						
Angul	0.0	-100	0.0	-100	13.7	185
Balasore	0.0	-100	0.0	-100	33.9	171
Bargarh	0.0	-100	0.0	-100	2.6	-30
Bhadrak	0.0	-100	0.0	-100	34.1	216
Bolangir	0.0	-100	0.0	-100	3.3	-29
Boudh	0.0	-100	0.0	-100	0.0	-100
Cuttack	0.0	-100	0.0	-100	23.7	130
Deogarh	0.0	-100	0.0	-100	35.5	726
Dhenkanal	0.0	-100	0.5	-69	16.0	108
Gajapati	0.0	-100	0.0	-100	10.7	-44
Ganjam	0.0	-100	0.0	-100	3.5	-59
Jagatsingpur	0.0	-100	0.1	-98	4.0	-61
Jajpur	0.0	-100	1.0	-84	48.4	420
Jharsuguda	0.0	-100	0.0	-100	1.5	-43
Kalahandi	0.0	-100	0.0	-100	0.0	-100
Kandhamal	0.0	-100	0.0	-100	0.7	-92
Kendrapara	0.0	-100	0.0	-100	0.0	-100
Keonjhar	0.0	-100	0.3	-94	19.2	91
Khurda	0.0	-100	0.0	-100	24.4	168
Koraput	0.0	-100	0.0	-100	6.1	91
Malkangiri	0.0	-100	0.0	-100	2.6	-10
Mayurbhanj	0.0	-100	0.0	-100	38.2	470
Nawapara	0.0	-100	0.0	-100	0.0	-100
Nawarangpur	0.0	-100	0.0	-100	0.0	-100
Nayagarh	0.0	-100	0.0	-100	8.6	21
Puri	0.0	-100	0.0	-100	1.2	-89
Rayagada	0.0	-100	0.0	-100	5.4	-46
Sambalpur	0.0	-100	0.0	-100	3.3	-23
Sonepur	0.0	-100	0.0	-100	20.8	408
Sundargarh	0.0	-100	0.0	-100	3.9	64
<b>West Bengal</b>						
<b>GWB</b>						
Bankura	0.0	-100	0.0	-100	16.8	408
Birbhum	0.0	-100	0.0	-100	25.5	963



Burdwan	0.0	-100	0.0	-100	21.4	613
East Midnapore	0.0	-100	0.0	-100	40.3	795
Hooghly	0.0	-100	0.0	-100	52.8	914
Howrah	0.0	-100	0.0	-100	53.7	701
Kolkata	0.0	-100	0.0	-100	41.5	592
Murshidabad	0.0	-100	0.0	-100	32.0	1900
Nadia	0.0	-100	0.0	-100	43.8	2091
24 Pargana (N)	0.0	-100	0.0	-100	27.5	685
Purulia	0.0	-100	0.0	-100	16.6	326
24 Pargana (S)	0.0	-100	0.0	-100	53.6	496
West Midnapore	0.0	-100	0.0	-100	53.5	736
<b>SHWB</b>						
Cooch Behar	0.0	-100	0.0	-100	18.7	247
Darjeeling	0.0	-100	0.0	-100	7.9	-42
East Sikkim	0.0	-100	0.2	-99	4.1	-71
Jalpaiguri	0.0	-100	0.0	-100	26.6	392
Malda	0.0	-100	0.0	-100	46.4	3763
North Dinajpur	0.0	-100	0.0	-100	40.0	200
North Sikkim	0.0	-100	9.4	-60	6.3	-72
South Dinajpur	0.0	-100	0.0	-100	12.7	115
South Sikkim	0.0	-100	0.0	-100	5.6	-61
West Sikkim	0.0	-100	0.0	-100	1.3	-94
<b>Karnataka</b>						
<b>Coastal Karnataka</b>						
Dakshin Kannada	0.0	-100	0.0	-100	0.0	-100
Udupi	0.0	-100	0.0	-100	0.0	-100
Uttar Kannada	0.0	-100	0.0	-100	0.0	-100
<b>N I Karnataka</b>						
Bagalkote	0.0	-100	0.0	-100	0.0	-100
Belgaum	0.0	-100	0.0	-100	0.0	-100
Bidar	0.0	-100	0.0	-100	0.0	-100
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	0.0	-100
Gulbarga	0.0	-100	0.0	-100	0.0	-100
Haveri	0.0	-100	0.0	-100	0.0	-100
Koppal	0.0	-100	0.0	-100	0.0	-100
Raichur	0.0	-100	0.0	-100	0.0	-100
Yadgir	0.0	-100	0.0	-100	0.0	-100
<b>S I Karnataka</b>						
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	0.0	-100
Chamarajnagar	0.0	-100	0.0	-100	0.0	-100
Chichballapur	0.0	-100	0.0	-100	0.0	-100
Chickmagalur	0.0	-100	0.0	-100	0.0	-100
Chitradurga	0.0	-100	0.0	-100	0.0	-100
Davangere	0.0	-100	0.0	-100	0.0	-100
Hassan	0.0	-100	0.0	-100	0.0	-100

Kodagu	0.0	-100	0.1	-93	0.0	-100
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	0.2	-67
Shimoga	0.0	-100	0.0	-100	0.0	-100
Tumkur	0.0	-100	0.0	-100	0.1	-88
<b>Kerala</b>						
Alappuzha	0.0	-100	0.0	-100	5.4	0
Kannur	0.0	-100	3.5	100	4.9	4800
Ernakulam	0.0	-100	0.0	-100	0.7	-77
Idukki	0.0	-100	0.0	-100	0.0	-100
Kasaragod	0.0	-100	0.0	-100	0.0	-100
Kollam	0.0	-100	0.0	-100	0.0	-100
Kottayam	0.0	-100	0.4	-93	2.1	-76
Kozhikode	0.0	-100	0.0	-100	0.0	-100
Malappuram	0.0	-100	0.0	-100	0.0	-100
Palakkad	0.0	-100	0.0	-100	0.0	-100
Pathanamthitta	0.0	-100	0.0	-100	0.0	-100
Thiruvananthapuram	0.0	-100	0.0	-100	2.3	-39
Thrissur	0.0	-100	0.0	-100	1.9	58
Wyanad	0.0	-100	0.0	-100	0.0	-100
<b>Tamil Nadu</b>						
Ariyalur	0.0	-100	0.0	-100	0.0	-100
Chennai	0.0	-100	0.0	-100	7.0	-27
Coimbatore	0.0	-100	0.0	-100	3.7	-7
Cuddalore	0.0	-100	0.0	-100	1.2	-75
Dharmapuri	0.0	-100	0.0	-100	0.0	-100
Dindigul	0.0	-100	0.0	-100	0.0	-100
Erode	0.0	-100	0.0	-100	0.0	-100
Kanchipuram	0.0	-100	0.0	-100	3.4	-41
Kanyakumari	0.0	-100	0.0	-100	8.0	41
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	0.0	-100	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	0.0	-100	27.0	429
Perambalur	0.0	-100	0.0	-100	0.3	-89
Puducherry	0.0	-100	0.0	-100	1.9	-83
Pudukottai	0.0	-100	0.0	-100	0.0	-100
Ramanathapuram	3.7	1	0.0	-100	0.0	-99
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	0.0	-100	3.6	-7
Tirunelveli	0.0	-100	0.0	-100	0.5	-95
Tirupur	0.0	-100	0.0	-100	0.0	-100

Tiruvallur	0.0	-100	0.0	-100	0.8	-89
Tiruvannamalai	0.0	-100	0.0	-100	3.5	-10
Tiruvallur	0.0	-100	0.0	-100	0.0	-100
Toothukudi	0.0	-100	0.0	-100	0.1	-95
Trichy	0.0	-100	0.0	-100	0.4	-80
Vellore	0.0	-100	0.0	-100	4.4	53
Villupuram	0.0	-100	0.0	-100	0.5	-83
Virudhunagar	0.0	-100	0.0	-100	0.5	-89
<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	2.4	5
Krishna	0.0	-100	0.0	-100	3.0	37
Nellore	0.0	-100	0.1	-95	2.3	-59
Prakasam	0.0	-100	0.0	-100	0.9	-55
Sirkakulam	0.0	-100	0.0	-100	0.0	-100
Visakhapatnam	0.0	-100	0.0	-100	0.0	-100
Vizianagram	0.0	-100	0.0	-100	1.2	-68
West Godavari	0.0	-100	0.0	-100	0.7	-69
<b>Telangana</b>						
Adilabad	0.0	-100	0.0	-100	0.0	-100
Hyderabad	0.0	-100	0.0	-100	0.6	-55
Karimnagar	0.0	-100	0.0	-100	0.0	-100
Khammam	0.0	-100	0.0	-100	0.0	-100
Mehabubnagar	0.0	-100	0.0	-100	0.0	-100
Medak	0.0	-100	0.0	-100	0.0	-100
Nalgonda	0.0	-100	0.0	-100	0.0	-100
Nizamabad	0.0	-100	0.0	-100	0.0	-100
Rangareddy	0.0	-100	0.0	-100	0.1	-78
Warangal	0.0	-100	0.0	-100	0.0	-100
<b>Rayalaseema</b>						
Anantapur	0.0	-100	0.0	-100	0.0	-100
Chittoor	0.0	-100	0.0	-100	1.0	-71
Cuddapah	0.0	-100	0.0	-100	0.0	-100
Kurnool	0.0	-100	0.0	-100	1.1	450

	(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