

National Agromet Advisory Service Bulletin

Friday 7th March 2014
(For the period 7th to 11th March 2014)



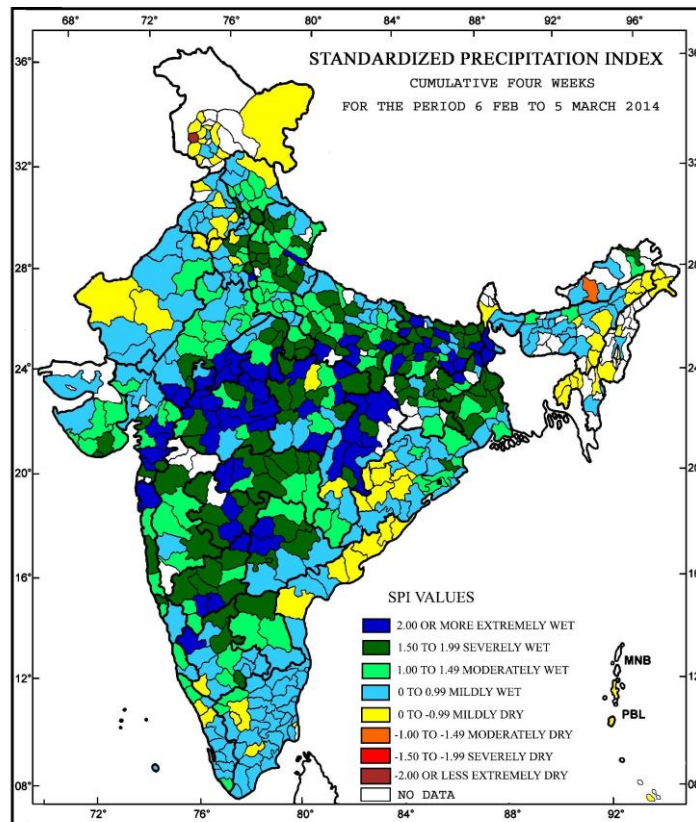
Issued by

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



**Standardised Precipitation Index
Four Weekly
for the Period 6th February to 5th March 2014**

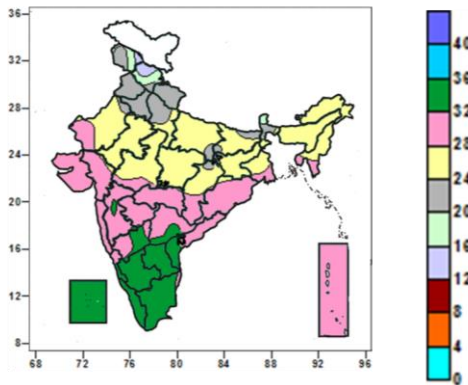
MINISTRY OF EARTH SCIENCES
INDIA METEOROLOGICAL DEPARTMENT
HYDROMET SECTION, PUNE



- Extremely wet/severely wet conditions experienced over most parts of Bihar, Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Maharashtra, many parts of West Bengal, Jharkhand, some parts of Gujarat, Karnataka and Andhra Pradesh, Mohali district of Punjab, Sirmaur district of Himachal Pradesh, Jind and Karnal districts of Haryana, Champawat, Dehradun and Almora districts of Uttarakhand, Jajpur district of Odisha and Upper Siang district of Arunachal Pradesh.
- Moderately dry condition experienced over East Kameng district of Arunachal Pradesh.
- Extremely dry conditions experienced over Poonch district of Jammu & Kashmir.
- Rest of the country experienced mild wet/dry conditions.

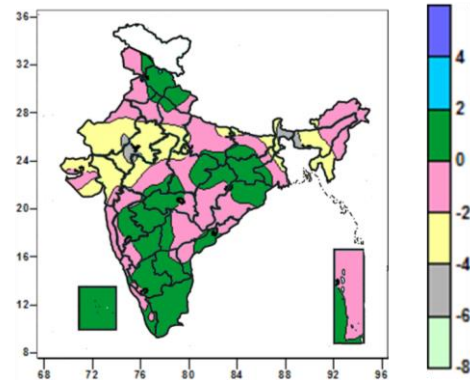
Contour maps for Mean Maximum and Minimum Temperature and their anomaly for the week ending on 05.03.2014

Actual Mean Maximum Temperature ($^{\circ}\text{C}$) in India for the week ending 05.03.2014



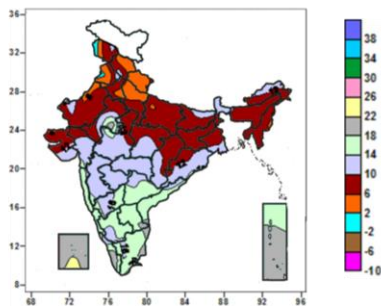
- 32 to 36 $^{\circ}\text{C}$ over many parts of Rayalaseema, Tamil Nadu, Kerala, Karnataka and Lakshadweep Islands, some parts of Telanagana, Coastal Andhra Pradesh and Madhya Maharashtra.
- 24 to 32 $^{\circ}\text{C}$ over many parts of East Uttar Pradesh, Rajasthan, East India (except Sub-Himalayan West Bengal & Sikkim), North East India, Central India, West India, Rayalaseema, Coastal Andhra Pradesh, Andaman & Nicobar Islands, some parts of Coastal & North Interior, Karnataka.
- 16 to 24 $^{\circ}\text{C}$ over many parts of Jammu & Kashmir, Uttarakhand, Punjab, Haryana, Delhi, West Uttar Pradesh some parts of Himachal Pradesh.
- 12 to 16 $^{\circ}\text{C}$ over many parts of Himachal Pradesh, some parts of Jammu & Kashmir.

Mean Maximum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 05.03.2014



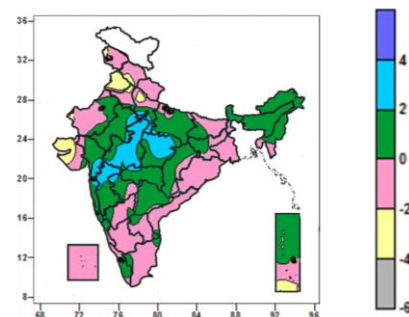
- 0 to 2 $^{\circ}\text{C}$ over many parts of Himachal Pradesh, North Uttarakhand, Jharkhand, North Odisha, Vidarbha, Madhya Maharashtra, Marathwada, Interior Karnataka, Rayalaseema, Tamil Nadu, Kerala, Lakshadweep Islands, some parts of Jammu & Kashmir, Punjab, Haryana, Uttar Pradesh, Bihar, Gangetic West Bengal, Central India, Coastal Andhra Pradesh, Telanagana and Andaman & Nicobar.
- -4 to 0 $^{\circ}\text{C}$ over all over country except Himachal Pradesh, North Uttarakhand, Jharkhand, Sub-Himalayan West Bengal, North Odisha, Vidarbha, Madhya Maharashtra, Marathwada, Interior Karnataka, Rayalaseema, Tamil Nadu, Kerala, Lakshadweep Islands, some parts of Jammu & Kashmir, Punjab, Haryana, Uttar Pradesh, Assam, Rajasthan Bihar, Gangetic West Bengal, Central India, Coastal Andhra Pradesh, Telanagana and Andaman & Nicobar.
- -6 to -4 $^{\circ}\text{C}$ over many places in Sub-Himalayan West Bengal, some parts of Assam, Rajasthan and West Madhya Pradesh.

Actual Mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 05.03.2014



- 2 to 6 $^{\circ}\text{C}$ over many parts of Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Punjab, some parts of Jammu & Kashmir, West Rajasthan, Haryana and East Uttar Pradesh.
- 6 to 10 $^{\circ}\text{C}$ over many parts of East Uttar Pradesh, East India, North East India, Rajasthan, Saurashtra & Kutch, some parts of Jammu & Kashmir, Himachal Pradesh, Haryana, Delhi, Uttar Pradesh, some parts of Punjab, Gujarat,

Mean Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 05.03.2014



- -4 to -2 $^{\circ}\text{C}$ over many parts of Haryana, Saurashtra & Kutch, some parts of Jammu & Kashmir, Himachal Pradesh, Haryana, West Uttar Pradesh and Andaman & Nicobar Islands.
- -2 to 2 $^{\circ}\text{C}$ over all parts of country except many parts of Haryana, Saurashtra & Kutch, Madhya Pradesh, Madhya Maharashtra, some parts of Jammu & Kashmir,

Madhya Pradesh and Chhattisgarh.

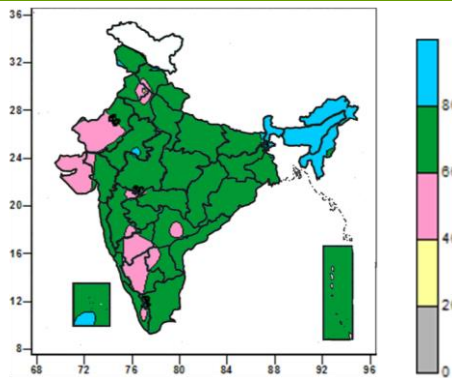
- 10 to 18°C over many parts of South India(except Kerala), West India(except Saurashtra & Kutch), Madhya Pradesh, some parts of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, West Rajasthan, Bihar, West Bengal, Arunachal Pradesh, Odisha, Chhattisgarh, Saurashtra & Kutch, Kerala and Andaman & Nicobar Islands.
- 18 to 26°C many parts of Kerala, Lakshadweep, Andaman & Nicobar Islands, some parts of Rayalaseema and Coastal Tamil Nadu.

Himachal Pradesh, Haryana, West Rajasthan, Uttar Pradesh, Gujarat, Konkan, Marathwada, Vidarbha and Andaman & Nicobar Islands.

- 2 to 4°C over many parts of Madhya Pradesh, Madhya Maharashtra, some parts of West Rajasthan, Uttar Pradesh, Gujarat, Konkan, Marathwada and Vidarbha.

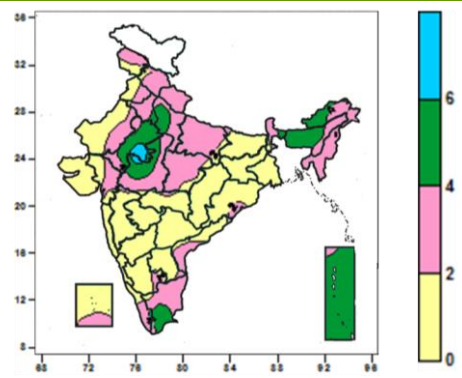
Contour maps for Relative Humidity, Cloud amount and Wind speed for the week ending on 05.03.2014

Relative Humidity (%) over India for the week ending 05.03.2014



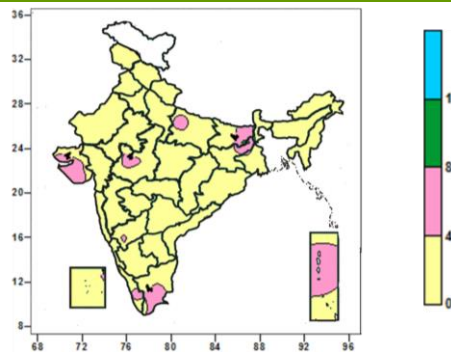
- 80 to 100% over many parts of Sub-Himalayan West Bengal & Sikkim, North East India, some parts of East Rajasthan and Lakshadweep Islands.
- 40 to 80% over entire country except many parts of Sub-Himalayan West Bengal & Sikkim, North East India, some parts of East Rajasthan and Lakshadweep Islands.

Cloud amount (okta) over India for the week ending 05.03.2014



- 6 to 8 okta over some parts of East Rajasthan, West Madhya Pradesh.
- 4 to 6 okta over many parts of West Uttar Pradesh, East Rajasthan, Assam, West Madhya Pradesh, Andaman & Nicobar Islands, some parts of Haryana, Sub-Himalayan West Bengal, Arunachal Pradesh and Tamil Nadu.
- 0 to 4 okta over entire country except many parts of West Uttar Pradesh, East Rajasthan, Assam, West Madhya Pradesh, Andaman & Nicobar Islands, some parts of Haryana, Sub-Himalayan West Bengal, Arunachal Pradesh and Tamil Nadu.

Wind speed (knots) over India for the week ending 05.03.2014



- 4 to 8 knots over many parts of Saurashtra & Kutch, some parts of East Uttar Pradesh, Bihar, Jharkhand, Gangetic West Bengal, West Madhya Pradesh, North Interior Karnataka, Tamil Nadu and Kerala.
- 0 to 4 knots over entire country except many parts of Saurashtra & Kutch, some parts of East Uttar Pradesh, Bihar, Jharkhand, Gangetic West Bengal, West Madhya Pradesh, North Interior Karnataka, Tamil Nadu and Kerala.

Weather Forecast

Weather Forecast for next 3 days (upto 0830 hours IST of 10th March, 2014)

- Rain/snow would occur at isolated places over Jammu & Kashmir on 8th and few places on 9th.
- Rain/thundershowers would occur at a few places over Marathwada, Vidarbha and Madhya Maharashtra during next 48 hours and at isolated places thereafter.
- Rain/thundershowers would occur at a few places over Telangana and interior Karnataka during next 48 hours and at isolated places thereafter.
- Rain/thundershowers would occur at isolated places over Tamilnadu & Pondicherry and Kerala during next 24 hours and mainly dry thereafter.
- Rain/thundershowers would occur at isolated places over Madhya Pradesh and Odisha.
- Rain/thundershowers would occur at isolated places over Chhattisgarh, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, coastal Andhra Pradesh and Rayalaseema during next 48 hours and mainly dry thereafter.
- Mainly dry/dry weather would prevail over rest of the country.

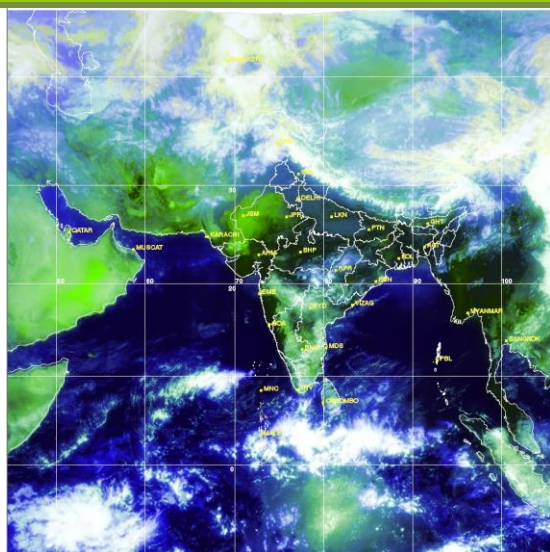
Weather Warning during next 3 days

- **07 March (Day 1):** Hail storm would occur at isolated places over Marathwada, Vidarbha, Telangana and north Madhya Maharashtra.
- **08 March (Day 2):** Hail storm would occur at isolated places over Marathwada and north Madhya Maharashtra.
- **09 March (Day 3):** No weather warning.

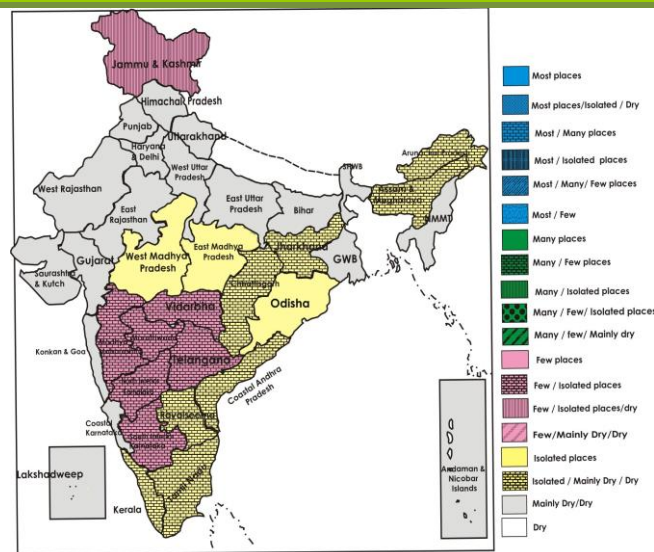
Weather Outlook for subsequent 4 days from 10th to 14th March, 2014

- A fresh western disturbance would affect western Himalayan region and adjoining plains of northeast India from 10th onwards.
- Rain/thundershowers would occur at a few places over Madhya Pradesh, Maharashtra and north interior Karnataka and at isolated places over north Andhra Pradesh, south Madhya Pradesh and Chhattisgarh.
- Weather would be mainly dry over rest of the country.

Satellite image dated 07.03.2014, 0600 UTC



Weather Forecast Map (Valid upto 0830 hours of 10th March, 2014)



Crop damage due to unseasonal rainfall and hailstorm

Madhya Pradesh

- Unseasonal rains and hailstorms in large areas of Madhya Pradesh in the last few days have caused damage to standing crops of wheat, chickpea and mustard. According to reports crop damage had been more severe in gram and lentil (70 %) followed by mustard and linseed (50%), vegetables (40%) and wheat (20-30%). Lodging of wheat is noticed in many parts of the state and this may affect grain development and may decrease yield. As gram and lentil crops were at pod filling/maturity stage, pods have broken and seeds have been moistened due to which the quality of seed will be affected. Germination of seeds in lentil crop has been noticed. In linseed and mustard crop siliqua has broken from the plant may cause possible reduction in yield.

Maharashtra

- As there was untimely rain accompanied with isolated hailstorms in Sangli and Kolhapur districts of **Madhya Maharashtra** as well as in **Marathwada during last two weeks**, damage in mango (Kolhapur & Marathwada region), grape orchards (Sangli), pomegranate (Marathwada) and vegetables were reported. Also in **Vidarbha** orchard crops like orange and sweet lime were damaged by hailstorm and gusty winds. Also the rain and hailstorms damaged crops like gram, wheat, sorghum maize, grapes, vegetables and other fruit orchids in some parts of the districts of Ahmednagar, Beed, Bhandhara, Chandrapur, Dhule, Gadchiroli, Gondia, Jalgoan, Jalna, Kolhapur, Nasik, Pune, Satara, Sangli and Solapur. Maximum damage was noticed in gram, maize and sorghum (30-40%) followed by grapes and other fruit crops (20-25%) and in vegetables (10-12%).

Salient Advisories

- Untimely rains and hailstorms in large areas in **Madhya Pradesh** in the last few days have caused damage to mustard and chickpea, it is advised to undertake harvesting of matured mustard and chickpea to avoid further damage. Do not keep harvested produce in the open, keep it in safe places.
- In **Madhya Maharashtra, Marathwada** and **Vidarbha**, collect and destroy the dropped fruits and leaves in the orchards affected by hail storm to avoid spread of pest and diseases. Complete the harvesting of already matured gram, jowar and wheat in clear weather to avoid further damage. Do not keep harvested produce in the open, keep it in safe places.
- As isolated hail storm would occur over north **Madhya Maharashtra** and **Marathwada** on 7th and 8th March and over **Vidarbha** on 7th March, use hail net to orchard crops to protect from mechanical damage. Provide mechanical support to the vegetables and young fruit plants.
- As isolated hail storm would occur over **Telangana** on 7th March, it is advised to use hail net for orchard crops to protect from mechanical damage. Provide mechanical support to vegetables and young fruit plants.
- In Western Zone of Haryana, in the prevailing humid weather condition, there is possibility of white rust in the mustard crop, spray 0.2% Redomil M Z or Mancozeb.
- In Sub Tropical Zone of Intermediate Zone of **Jammu & Kashmir**, avoid water stagnation in wheat fields, as high humidity favours infestation of yellow rust. For control, apply Propaconazole @ 25 ml in 25 liters of water/kanal.

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 Central, East, North West, New Delhi and South West delhi districts of Delhi; Nawanshahar, Ropar, Sangrur and Sas Nagar Mohali districts of Punjab; Karnal, Panchkula, Panipat districts of Haryana; in all districts of Himachal Pradesh except Lahul and Spiti; in Doda, Ganderwal, Rajouri and Ramban districts of Jammu & Kashmir; in Baran district of East Rajasthan; in all districts of Uttarakhand; in Allhabad, Banda, Barabanki, Chandauli, Fatehpur, Gazipur, Jaunpur, Kaushambi, Mau, Mirzapur, Pratapgarh, Sahuji Maharajnagar, Sonbhadra and Varanasi districts of East Uttar Pradesh; in Badaun, Bagpat, Bareilly, Bijnore, Gautam Budh Nagar, Gaziabad, Jhansi, Jyotiba Phule Nagar, Kanshiram Nagar, Lalitpur, Meerut, Moradabad, Rampur, Pilibhit, Saharanpur and Mahoba districts of West Uttar Pradesh.
- **Weather Forecast:** Rain/snow would occur at isolated places over Jammu & Kashmir on 8th and few places on 9th March. Weather would be mainly dry over rest of the region.
- **Weather Warning:** Nil
- **Weather Outlook:** A fresh western disturbance would affect western Himalayan region from 10th onwards. Weather would be mainly dry over rest of the region.
- **Advisories:**
 - **Jammu & Kashmir:**
 - In Valley Temperate Zone of Jammu & Kashmir, apply light and frequent irrigation in standing crops to protect from cold injury.
 - In Sub Tropical Zone and Intermediate Zone of Jammu & Kashmir, avoid water stagnation in wheat fields, as high humidity favours infestation of yellow rust. For control, apply Propaconazole @ 25 ml in 25 liters of water/kanal.
 - **Himachal Pradesh:**
 - In Mid-Hills Sub-Humid Zone of Himachal Pradesh, as prevailing temperatures are low, apply light and frequent irrigation in standing crops to protect from cold injury. Also arrange for smoking around the fields during night.
 - 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 litre of water. Also there are chances of downy mildew in cole crops, spray Redomil M-Z 25 g per litre of water.
 - **Uttarakhand:**
 - In Uttarakhand, apply light and frequent irrigation in standing crops to protect from cold injury. Also arrange for smoking around the fields during night.
 - In Sub-Humid Sub-Tropic Zone of Uttarakhand, due to high relative humidity there is chance of rust infestation in wheat. If brown or yellow strip/patches appear on leaf surface, spray Propiconazole 25% EC with 500-600 litre water for effective control.
 - **Punjab, Haryana and Delhi:**
 - As prevailing temperatures are low in parts of Punjab, apply light and frequent irrigation in standing crops to protect from cold injury.
 - In Delhi, undertake sowing of French bean, cluster bean, summer radish as present temperature is suitable for germination of seeds. Undertake transplanting of tomato, chilli and cole.
 - In Central Plain Zone of Punjab, due to increase in humidity, infestation of aphid may reach above ETL in sarson/ raya, spray 40 g Actara 25 WG or 400 ml of Rogor 30 EC/Ekalux 25 EC or 600 ml of Dursban 20 EC per acre using 80-125 litres of water for control.
 - In Western Zone of Haryana, in the prevailing humid weather condition , there is possibility of white rust in the mustard crop, spray 0.2% Redomil M Z or Mancozeb.
 - **Uttar Pradesh:**
 - In Uttar Pradesh, apply light and frequent irrigation in standing crops to protect from cold injury. Also arrange

for smoking around the fields during night.

- In Central Plain zone of Uttar Pradesh, due to high humidity there are chances of aphid infestation in mustard. For control, spray Methyl Demeton 25 EC or Dimethoate 30 EC @ 2.0 ml per litre of water.
- In Western Plain Zone of Uttar Pradesh, due to high humidity, there is chance of attack of yellow rust in wheat. For control, spray Propiconazole 25 EC @ 1 ml per litre of water.
- **Rajasthan:**
- As dry weather is prevailing, apply irrigation to the early sown summer cucurbits like bottle gourd, ridge gourd, pumpkin, bitter melon, tindora etc, and also second dose of Nitrogen through urea top dressing in wheat and barley crop may be done.
- In Sub Humid Southern Plain and Aravali Hill Zone of Rajasthan, as dry weather would prevail, apply irrigation in wheat at milking and grain stage.
- In Semi Arid Eastern Plain Zone of Rajasthan, due to prevailing mainly dry weather, wheat and barley crop may be attacked by termite. Control, apply Chlorpyrifos 20 EC @ 4 litre per hectare with irrigation. Also onion and garlic crop is likely to be affected by thrips insect. To control, spray Methyl Demeton 25 EC or Malathion 50 EC @ 1.0 ml per litre water.
- **Animal Husbandry**
- 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 Rainfall:** Significant rainfall occurred in Anuppur, Balaghat, Chhatarpur, Damoh, Jabalpur, Katni, Narsingpur, Rewa, Sagar, Satna, Shahdol, Siddhi, Singrauli, Tikamgarh and Umaria districts of east Madhya Pradesh; in Ashoknagar, Guna, Gwalior, Raisen and Vidisha districts of west Madhya Pradesh and in Bilaspur, Durg, Janjgir, Jashpur, Korba, Koriya, Raipur and Surguja districts 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. Rain/thundershowers would occur at isolated places over Chhattisgarh during next 48 hours and mainly dry thereafter.
- **Weather Warning:** Nil.
- **Weather Outlook:** Rain/thundershowers would occur at a few places over Madhya Pradesh and at isolated places over south Madhya Pradesh and Chhattisgarh.
- **Advisories:**
 - **Madhya Pradesh:**
 - Untimely rains and hailstorms in large areas in Madhya Pradesh in the last few days have caused damage to mustard and chickpea, it is advised to undertake harvesting of matured mustard and chickpea to avoid further damage. Do not keep harvested produce in the open, keep it in safe places.
 - In Grid Zone of Madhya Pradesh, undertake harvesting of matured mustard crop and potato in clear weather conditions.
 - In Jhabua Hill Zone of Madhya Pradesh harvest matured crops gram, mustard and maize in clear weather.
 - In Bundelkhand Zone of Madhya Pradesh harvest matured crops of mustard and potato, also undertake intercultural operations in onion and ginger.
 - In Nimar Valley Zone of Madhya Pradesh due to the prevailing humid weather, there is possibility of attack of stem borer in maize. Apply Methyl- o-Demeton 25 EC 10 ml or Carbaryl 50% W.P. 40 g in 10 litre of water.
 - In Bundelkhand Zone of Madhya Pradesh due to cloudy weather there are chances of aphid attack in vegetables like cabbage and coriander. Spray of Methyl Demeton 25E.C. @ 2.0 ml. per litre of water.
 - In Jhabua Hill Zone of Madhya Pradesh due to cloudy weather in past week there is possibility of attack of mango hopper, aphid and powdery mildew in mango plants, spray 2.0 gm of Carboril dust and 3.0 gm of Sulphex per litre of water solution.
- **Chhattisgarh:**

- In Plain Zone of Chhattisgarh harvesting of matured gram , black gram and linseed.
- In North Hill Zone of Chhattisgarh, undertake sowing of maize crop utilizing realized rainfall.
- North Hill Zone of Chhattisgarh, due to cloudy weather there is possibility of attack of white rust in mustard spray Dhanoxyl @ 3-4 g per liter of water.
- **Animal Husbandry**
- In Malwa Plateau Zone of Madhya Pradesh provide clean water, balanced and nutrients rich food etc to the animals. De-worm the cattle. Protect the cattle from cold, keep them in warm environment.

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



Mustard



Sugarcane



Cole crops



Onion

- **Realised Rainfall:** Significant rainfall occurred in Aurangabad, Bhabua, Bhojpur, Buxar, Monghyar, Nalanda, Nawada, Patna and Rohtas districts of Bihar; in Bokaro, East Singhbhum, Garhwa, Lohardaga, Ramgarh, Ranchi and West Singhbhum districts of Jharkhand; Angul, Balasore, Bhadrak, Cuttak, Dhenkanal, Jajpur, Kendrapara, Keonjhar, Khurda, Mayurbhanj, Nayagarh, Sambalpur and Sundergarh districts of Odisha; in Birbhum, Bankura, Burdwan and Purulia districts of Gangetic West Bengal; in North Sikkim district of Sikkim. Mainly dry/dry weather would prevail over rest of the region.
- **Weather forecast:** Rain/thundershowers would occur at isolated places over Odisha. Rain/thundershowers would occur at isolated places over Jharkhand during next 48 hours and mainly dry thereafter. Mainly dry/dry weather would prevail over rest of the region.
- **Weather Warning:** Nil.
- **Weather Outlook:** Weather would be mainly dry over the region.
- **Advisories:**
 - **Odisha:**
 - In North Central Plateau 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.
 - In East and South Eastern Coastal Plain Zone of Odisha, increased difference between daily maximum and minimum temperature favours infestation of blast in rice in the main fields. Spray 1 g Beam / litre water.
 - In Western Undulating Zone of Odisha, keep watch on powdery mildew disease in sunflower, green gram and black gram as weather condition is conducive for its spread. Spray wettable Sulphur @3g/litre of water
 - In Western Undulating Zone of Odisha, powdery mildew has been reported on green gram and black gram in sporadic patches and likely to spread due to warm day and cool nights are. Spray wettable Sulphur @ 3g/litre of water for its control. Repeat the spray after 10-15days depending on the severity.
 - In North Eastern Plateau Zone, continue sowing sesamum after harvesting of potato utilizing the realized rainfall.
 - **West Bengal:**
 - In New Alluvial Zone and Laterite and Red Soil Zone of West Bengal, wet and humid weather is conducive for outbreak of late blight in late planted potato. To protect the crop, apply Cymoxanil 8% + Mancozeb 64% @ 3.0 g per litre of water.
 - In Laterite and Red Soil Zone of West Bengal, hot and humid weather may cause attack of hopper in mango at flowering stage. To protect, apply Carbaryl@2g/litre of water+Diethane M-45@2.5g/litre of water. As present temperature condition is favourable, undertake sowing of groundnut.
 - In New Alluvial Zone of West Bengal, humid weather is conducive for root rot disease in sunflower; for control root rot, apply Brassicol @ 1 g per litre of water.
 - In Terai Zone of West Bengal, warm and humid conditions are congenial for foliar blight complex disease in wheat at flowering stage. To control, spray Tebuconazole or Propiconazole 1.5 ml/ lt of water. Also as present temperature

condition is favourable, undertake land preparation for sowing of maize and groundnut in upland fields.

▪ **Bihar:**

- In North West Alluvial Plain Zone of Bihar, as mainly dry weather would prevail, continue harvesting of tobacco, potato and mustard crop and as present temperature condition is favourable continue sowing of summer vegetables crop and undertake sowing of green gram, black gram and planting of sugarcane and papaya.
- In South Bihar Alluvial Zone, as mainly dry weather would prevail, continue harvesting of mustard and potato crop. As present temperature condition is favourable, continue sowing of sweet potato, summer vegetables, summer maize and green gram crop.
- In North East Alluvial Plain Zone of Bihar, as present temperature condition is favourable complete planting of spring sugarcane, continue transplanting of onion and undertake transplanting of *garma* rice, sowing of maize and moong.

▪ **Jharkhand:**

- In Western Plateau Zone of Jharkhand, as mainly dry weather would prevail, continue harvesting of rapeseed and potato crop and sowing of summer mung and apply urea in late sown wheat crops and in vegetable crop.
- In Central & North Eastern Plateau Zone of Jharkhand, as mainly dry weather would prevail, continue harvesting of toria, potato and pigeon pea. As present temperature is favourable undertake sowing of summer maize and moong.
- In South Eastern Plateau Zone of Jharkhand, as present temperature condition is favourable, undertake sowing of summer vegetables and summer moong.
- In South Eastern Plateau Zone of Jharkhand, in late sown mustard (at flowering stage), there are chances of more infestation of white rust because of favourable weather condition (cloudy and high night temperature); spray Bordeaux mixture or Copper Oxychloride @ 0.25 per cent or Blitox 50 @ 0.30 percent solution.

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



Chilli



Rice



cole crops



Late blight in Potato

- **Realised Rainfall:** Significant rainfall occurred in Dibang Valley, East Siang, Upper Siang, Upper Subansari and West Siang districts of Arunachal Pradesh. Mainly dry weather prevailed over rest of the region.
- **Weather Forecast:** Rain/thundershowers would occur at isolated places over Arunachal Pradesh, Assam & Meghalaya during next 48 hours and mainly dry thereafter. Mainly dry/dry weather would prevail over rest of the region.
- **Weather Warning:** Nil.
- **Weather Outlook:** A fresh western disturbance would affect plains of northeast India adjoining to western Himalayan region from 10th onwards. Weather would be mainly dry over the region.
- **Advisories:**
 - **Assam & Meghalaya:**
 - 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 Lower Bramhaputra Valley Zone of Assam, cloudy weather conditions are favourable for attack of blast and sheath blight in *boro* rice. Spray Ediphenphos(0.1%/Mancozeb(0.2%)/Cu-oxychloride(0.4%)/Thiophanate Methyl(0.1%)/Carbendazim(0.1%) against blast and Carbendazim(0.05%)/Hexaconazole(0.2%) against the sheath blight.
 - In Hill Zone of Assam, prevailing temperature conditions are suitable for sowing of summer green gram and black gram, cucurbits and bhindi.
 - In Upper Bramhaputra Valley Zone of Assam, as mainly dry weather would prevail, undertake harvesting of matured mustard and potato crops.
 - In Central Bramhaputra Valley Zone of Assam, as mainly dry weather would prevail, undertake harvesting of matured mustard crop. Also present temperature condition is favourable, for sowing of *capsularis* jute, summer green gram, black gram and summer vegetables.
 - In Temperate Sub-alpine Zone of Meghalaya, in the prevailing temperature conditions continue sowing of

maize, cucurbits, bhindi and direct seeded *ahu* rice.

▪ **Nagaland, Manipur, Mizoram and Tripura:**

- In Mild Tropical Hill Zone of Nagaland, as dry weather is likely to prevail, undertake sowing of summer vegetables like ladies finger, cucurbitaceous crops like gourd, pumpkin, ridge gourd, ash gourd, spine gourd etc.
 - In Sub Tropical Plain Zone of Manipur, continue harvesting of matured pea, lentil, rapeseed and mustard taking advantage of dry weather conditions.
 - In Mild Tropical Plain Zone of Tripura, as mainly dry weather is prevailing, apply irrigation in banana and remove extra suckers in upland condition.
 - In Mild Tropical Hill Zone of Mizoram, apply irrigation in regular intervals in vegetable crops, as mainly dry weather is prevailing.
 - In Mild Tropical Plain Zone of Tripura, in the prevailing temperature conditions, there may be chances of attack of yellow stem borer in rice. Apply Fipronil @ 2g per liter of water to manage the yellow stem borer attack.
- **Animal Husbandry**
- In Assam, Manipur and Tripura, undertake vaccination to control ranikhet disease in poultry during this period.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]



Rice

Groundnut

Cotton

Grape vine

- **Realised Rainfall:** Significant rainfall occurred in Hingoli, Latur, Nanded, Osmanabad and Parbhani districts of Marathwada and in all districts of Vidarbha except Washim District. No significant rainfall occurred in Gujarat State during last week.
- **Weather Forecast:** Rain/thundershowers would occur at a few places over Marathwada, Vidarbha and Madhya Maharashtra during next 48 hours and at isolated places thereafter. Mainly dry/dry weather would prevail over rest of the region.
- **Weather Warning:** Hail storm would occur at isolated places over Marathwada, Vidarbha and north Madhya Maharashtra on 7th and over Marathwada and north Madhya Maharashtra on 8th March.
- **Weather Outlook:** Rain/thundershowers would occur at a few places over Maharashtra. Weather would be mainly dry over rest of the region.
- **Advisories:**
 - **Maharashtra:**
 - As isolated hail storm would occur over north Madhya Maharashtra and Marathwada on 7th and 8th March and over Vidarbha on 7th March, use hail net to orchard crops to protect from mechanical damage. Provide mechanical support to the vegetables and young fruit plants.
 - In Madhya Maharashtra, Marathwada and Vidarbha, collect and destroy the dropped fruits and leaves in the orchards affected by hail storm to avoid spread of pest and diseases. Complete the harvesting of already matured gram, jowar and wheat in clear weather to avoid further damage. Do not keep harvested produce in the open, keep it in safe places.
 - Unseasonal rains and hail during last week also damaged the standing crops of wheat and gram in Madhya Maharashtra and Marathwada. Undertake harvesting of already matured crops to avoid further damage.
 - In Marathwada, continue intercultural operations and fertilizer application in orchards (banana, fig, pomegranate, sweet lime, guava), sugarcane, summer groundnut and vegetables. Due to gusty winds and untimely rain, there is premature mango fruit dropping, to avoid further fruit dropping, spray Miknel 32. Provide mechanical support to brinjal, tomato and fruit plants.
 - As dry weather prevailed during last few weeks in Konkan and mainly 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 (pea/marble size), considering the crop canopy, apply 150-200 litres of water per tree at 15 days interval to avoid fruit dropping. Apply irrigation to maintain around 8-10 cm water level in transplanted rice field before and after 10 days of panicle initiation stage.
 - Due to cloudy weather, there may be attack of hoppers in mango in Konkan; spray Dimethoate 30 % @ 10 ml per 10 litres of water on whole tree.

- Considering cloudy weather and rain in Nasik district there may be incidence of powdery mildew in grapes; spray Sulphur (WP 80%) @ 20 g/10 litres water.
- Prevailing cloudy and rainy weather in Pune region is congenial for incidence of powdery mildew and hoppers in mango; spray Hexaconazole @ 10 ml & Imidacloprid @ 4 ml / 10 litres water.
- **Gujarat:**
- As mainly dry weather conditions would prevail, carry out weeding and intercultural operations in timely sown groundnut in North West Zone of Gujarat.
- Under prevailing mainly dry/dry weather and expected clear sky conditions, continue harvesting of already matured mustard and potato in North Gujarat Zone, harvesting of mustard in North West Zone and castor in Bhal and Coastal Zone of Gujarat.
- As mainly dry/dry weather is prevailing, apply irrigation in wheat at dough stage in Middle Gujarat Zone and North Gujarat Zone, at milk / dough stage in North West Zone.
- Due to prevailing maximum temperature (30-32 degree C), there are chances of aphid infestation in mustard in Middle Gujarat Zone. Apply Dimethoate 0.03% in addition to Imidacloprid 90 mg 0.014% (2g in 10 litre of water).

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



Rice

Sugarcane(cane maturity)

Onion (bulb development)

Sucking pest on Groundnut

- **Realized Rainfall:** Significant rainfall occurred in Adilabad, Hyderabad, Karimnagar, Medak, Nizambad, Rangareddy and Warangal districts of Andhra Pradesh; in Kollam and Thiruvananthapuram districts of Kerala; in Bidar, Bijapur, Gadag, Gulbarga and Ramnagara districts of Karnataka, Theni and Tirunelveli district of Tamilnadu. Weather remained mainly dry/dry over remaining parts of the region.
- **Weather Forecast:** Rain/thundershowers would occur at a few places over Telangana and interior Karnataka during next 48 hours and at isolated places thereafter. Rain/thundershowers would occur at isolated places over Tamilnadu & Pondicherry and Kerala during next 24 hours and mainly dry thereafter. Rain/thundershowers would occur at isolated places over coastal Andhra Pradesh and Rayalaseema during next 48 hours and mainly dry thereafter. Mainly dry/dry weather would prevail over rest of the region.
- **Weather Warning:** Hail storm would occur at isolated places over Telangana.
- **Weather Outlook:** Rain/thundershowers would occur at a few places over north interior Karnataka and at isolated places over north Andhra Pradesh. Weather would be mainly dry over rest of the region.
- **Advisory:**
 - **Karnataka:**
 - Continue harvesting of chickpea, safflower and *rabi* sorghum in the North Dry Zone and wheat and chickpea in the North Transition zone of Karnataka in clear weather.
 - Prevailing humidity conditions (40-60%) are congenial for cob borer infestation in maize at cob formation stage in the Eastern Dry zone of Karnataka. Spray Spinosad @ 1.0ml/litre of water or Indoxycarb @ 1.5 ml/litre of water for control on a non rainy day.
 - In North East Transition zone, in the prevailing temperature, mango hoppers are noticed in mango crop, for control spray 4 g Carbaryl 50WP or 2 ml Malathion 50EC or 1.5 ml Monocrotophos 36SL or 0.5 ml Phosphamidon 40EC in one litre of water on a non rainy day.
 - **Andhra Pradesh**
 - As isolated hail storm would occur over Telangana on 7th March, it is advised to use hail net for orchard crops to protect from mechanical damage. Provide mechanical support to vegetables and young fruit plants.
 - As significant rainfall occurred over most of the districts of Telangana, postpone irrigation in standing crops.
 - Incidence of leaf blast is observed on rice in Nalgonda, Mahabubnagar, Medak, Nizamabad and Karimnagar districts and likely to continue due to prevailing hot and humid weather. Severe incidence was observed on Tellahamsa rice variety. To control spray Isoprothiolane @ 1.5 ml per litre of water or Kasugamycin @ 2.5 ml per litre of on a non rainy day water twice at 10 days interval.
 - Humid weather and mean temperature < 28°C during last week is congenial for occurrence of stem borer on rice in North Telangana zone. Spray Monocrotophos 36 SL @ 1.6 ml / lit (or) Chlorpyriphos 20EC @ 2.5 ml /litre or Acephate 1.5 g/litre of water on a non rainy day.

▪ **Tamil Nadu:**

- As mainly dry weather would prevail, continue harvesting of matured *samba* rice, undertake harvesting of matured *thaladi* rice in the Cauvery Delta Zone of Tamil Nadu. Incidence of yellow mosaic disease is noticed in black gram due to prevailing dry weather condition. To control the vectors, spray Methyl Demeton or Dimethoate 200ml/acre.
- Prevailing high temperature is favourable for the sucking pest incidence in sesame in Western Zone, spray Methyl-demeton @ 2ml/litre of water.
- As light rainfall expected in the coming days undertake summer ploughing in dry lands to conserve soil moisture for summer sowing in South zone.
- Due to prevailing dry weather and high relative humidity woolly aphid infestation is observed on sugarcane at 4 to 6 months in North Western zone. Control this pest by spraying Acephate 2 g or Monocrotophos 2 ml per litre of water, two times at 15 days interval

▪ **Kerala:**

- There is a chance of Sigatoka disease on banana in Central Zone of Kerala due to hot and humid weather. Spray Pseudomonas 10- 15 g per 1 litre of water. In case of severe attack apply SAAF @ 2 g per 1 litre of water.

• **Animal Husbandry:**

- In Telangana, keep cattle / goats indoor during hailstorm period. Ensure periodic vaccination of animals against FMD, Brucellosis, Haemorrhagic Septicaemia, Anthrax and small ruminants against PPR and Sheep and Goat Pox during the season.
- As day temperatures are raising, it may cause stress in poultry in Western zone of Tamilnadu, hang wet gunny bags in the side walls of the poultry shed.

Annexure I

Week by week Rainfall Distribution

State/Districts	19.02.14		26.02.14		05.03.14	
	Actual (mm)	% dep.	Actual (mm)	% dep.	Actual (mm)	% dep.
Arunachal Pradesh						
Anjaw	**	**	**	**	**	**
Changlang	22.3	-33	0.0	-100	2.0	-96
Dibang Valley	108.0	350	12.0	-82	47.0	4
East Kameng	3.2	-86	0.0	-100	0.0	-100
East Siang	89.5	505	0.0	-100	22.4	14
Kurung Kumey	**	**	**	**	**	**
Lohit	32.4	32	0.0	-100	1.3	-95
Lower Dibang Valley	94.2	293	3.7	-94	10.4	-77
Lower Subansari	**	**	**	**	**	**
Papumpara	56.4	111	0.0	-100	0.0	-100
Tawang	27.0	155	0.0	-100	0.0	-100
Tirap	15.5	-33	0.0	-100	0.5	-97
Upper Siang	66.6	69	14.5	-74	103.2	58
Upper Subansari	39.8	130	3.0	-79	28.0	133
West Kameng	30.8	191	0.0	-100	0.2	-97
West Siang	65.0	412	0.5	-98	22.5	33
Assam						
Baksa	34.1	231	0.0	-100	1.0	-80
Barpeta	34.8	238	0.0	-100	0.0	-100
Bongaigaon	23.1	57	0.0	-100	0.0	-100
Cachar	16.4	-17	0.0	-100	0.0	-100
Chirang	40.2	173	0.0	-100	0.5	-90
Darrang	27.0	350	0.0	-100	0.0	-100
Dhemaji	42.0	211	0.0	-100	10.0	-19
Dhubri	16.3	989	0.0	-100	0.6	-90
Dibrugarh	19.5	38	0.0	-100	0.6	-96
Goalpara	21.2	266	0.0	-100	0.0	-100
Golghat	30.2	211	0.0	-100	0.0	-100
Hailakandi	14.7	5	0.0	-100	0.0	-100
Jorhat	30.8	202	0.0	-100	0.0	-100
Kamrup(Rural)	26.2	280	0.0	-100	0.0	-100
Kamrup(Metro)	25.4	268	0.0	-100	0.0	-100
Karbi Anglong	20.1	139	0.0	-100	0.0	-100
Karimganj	21.6	110	0.0	-100	0.0	-100
Kokrajhar	52.8	294	0.0	-100	0.3	-90
Lakhimpur	35.6	164	0.0	-100	0.0	-100
Morigaon	14.8	135	0.0	-100	1.8	-50
N.C.Hills	18.2	104	0.0	-100	0.0	-100
Nowgong	31.8	623	0.0	-100	1.3	-70
Nalbari	36.5	368	0.0	-100	0.5	-90
Sonitpur	29.4	309	0.0	-100	0.0	-100
Sibsagar	18.7	143	0.0	-100	0.0	-100

Tinsukia	22.0	32	0.0	-100	3.1	-80
Udalgiri	42.8	613	0.0	-100	0.0	-100
Meghalaya						
East Garo Hills	16.3	288	0.0	-100	2.8	-85
East Khasi Hills	49.9	668	0.0	-100	0.3	-97
Jaintia Hills	33.0	120	0.0	-100	0.0	-100
Ribhoi	9.8	343	0.0	-100	0.7	-77
South Garo Hills	11.0	340	0.0	-100	0.0	-100
West Garo Hills	22.8	812	0.0	-100	0.4	-96
West Khasi Hills	29.0	140	0.0	-100	2.0	-67
Mizoram						
Aizwal	13.5	57	0.0	-100	0.0	-100
Champhai	33.0	469	0.0	-100	0.0	-100
Kolasib	3.0	-77	1.0	-94	0.0	-100
Lawngtlai	52.0	175	0.0	-100	0.0	-100
Lunglei	46.0	265	0.0	-100	0.0	-100
Mamit	10.0	16	0.0	-100	0.0	-100
Saiha	53.0	539	0.0	-100	0.0	-100
Serchhip	3.0	-66	0.0	-100	0.0	-100
Manipur						
Bishnupur	19.0	476	0.0	-100	0.0	-100
Chandel	**	**	0.0	-100	0.0	-100
Churachandpur	21.0	304	0.0	-100	0.0	-100
Imphal east	22.0	165	0.0	-100	0.0	-100
Imphal west	9.4	327	0.0	-100	0.0	-100
Senapati	25.0	762	0.0	-100	0.0	-100
Tamenglong	**	**	**	**	**	**
Thoubal	14.0	338	0.0	-100	0.0	-100
Ukhrul	0.0	-100	0.0	-100	0.0	-100
Nagaland						
Dimapur	18.6	1333	1.0	25	0.0	-100
Kephire	29.0	241	0.0	-100	0.0	-100
Kohima	23.0	304	0.0	-100	0.0	-100
Longleng	**	**	**	**	**	**
Mokokchung	29.0	179	0.0	-100	0.0	-100
Mon	**	**	**	**	**	**
Paren	**	**	**	**	**	**
Phek	28.0	391	0.0	-100	0.0	-100
Tuensang	**	**	**	**	**	**
Wokha	24.0	208	0.0	-100	0.0	-100
Zunheboto	**	**	**	**	**	**
Tripura						
Dhalai	9.0	2	0.0	-100	0.0	-100
North tripura	8.4	33	0.0	-100	0.0	-100
South tripura	9.3	32	0.0	-100	0.0	-100
West tripura	7.9	-2	0.0	-100	0.0	-100
Himachal Pradesh						
Bilaspur	40.1	86	4.8	-73	41.1	169
Chamba	61.8	150	18.2	-31	50.7	9

Hamirpur	40.0	95	4.9	-59	61.5	246
Kangra	61.6	185	18.6	-16	25.4	25
Kinnaur	69.2	133	10.5	-55	30.1	31
Kullu	61.5	124	7.1	-73	30.0	12
Lahaul and Spiti	18.0	-48	12.0	-67	12.6	-67
Mandi	52.8	125	2.5	-83	32.3	84
Shimla	62.3	200	5.6	-68	29.8	73
Sirmaur	75.9	430	13.6	22	33.8	213
Solan	60.3	182	1.7	-89	51.1	195
Una	27.7	101	8.0	-32	26.3	158
Punjab						
Amritsar	1.1	-88	1.5	-82	0.8	-89
Barnala	0.0	-100	1.0	-84	4.5	61
Bhatinda	0.0	-100	10.0	100	13.6	312
Faridkot	0.0	-100	2.0	-35	9.0	246
Fatehgarh Sahib	6.0	-19	0.0	-100	0.0	-100
Ferozpur	0.0	-100	1.0	-72	3.7	-1
Gurdaspur	34.3	156	14.0	-1	7.6	-50
Hoshiarpur	20.9	79	7.1	-33	2.9	-71
Jalandhar	5.6	-39	10.0	16	1.0	-88
Kapurthala	16.0	125	11.0	224	0.2	-97
Ludhiana	6.5	-27	5.8	-14	7.4	-10
Mansa	0.0	-100	1.0	-80	6.2	77
Moga	9.1	122	2.0	-53	1.5	-32
Muktesar	0.0	-100	0.0	-100	1.0	-69
Nawashahar	14.4	9	3.8	-61	20.4	124
Patiala	18.4	152	0.3	-96	10.8	69
Ropar	19.8	22	5.0	-41	23.2	183
Sangrur	1.4	-74	0.2	-96	20.6	338
Mohali	31.0	343	0.5	-92	27.0	238
TarnTaran	0.0	-100	1.0	-86	0.0	-100
Haryana						
Ambala	31.4	355	1.6	-77	16.1	102
Bhiwani	1.8	-43	0.0	-100	7.9	242
Chandigarh	22.8	58	1.4	-81	40.8	334
Faridabad	40.0	1150	0.0	-100	8.8	99
Fatehabad	0.5	-84	2.0	-41	0.0	-100
Gurgaon	9.0	120	0.0	-100	4.0	18
Hissar	0.4	-91	7.7	114	1.6	-41
Jhajar	11.6	213	0.0	-100	9.7	137
Jind	0.3	-92	0.2	-94	15.3	89
Katihah	1.4	-63	0.4	-91	1.0	-72
Karnal	20.6	228	7.8	29	27.7	530
Kurukshetra	9.8	77	6.0	25	7.5	53
Mahendragarh	10.5	139	0.0	-100	2.6	-24
Mewat	9.4	223	0.0	-100	0.0	-100
Palwal	21.8	988	0.0	-100	5.0	61
Panchkkula	25.7	135	1.7	-82	23.5	147
Panipat	18.8	595	0.0	-100	21.0	338

Rewari	9.2	300	0.0	-100	0.0	-100
Rohtak	2.8	-26	0.0	-100	4.0	-41
Sirsa	0.0	-100	0.0	-100	0.3	-85
Sonepat	13.0	210	0.0	-100	17.6	251
Yamunanagar	21.3	160	16.0	82	19.7	134
Delhi						
Central Delhi	**	**	**	**	28.0	409
East Delhi	**	**	**	**	26.0	373
New Delhi	**	**	**	**	20.2	267
North Delhi	**	**	**	**	17.7	222
North East Delhi	**	**	**	**	0.0	-100
North West Delhi	**	**	**	**	23.5	327
South Delhi	**	**	**	**	7.9	44
South West Delhi	**	**	**	**	24.4	344
West Delhi	**	**	**	**	15.0	173
Jammu & Kashmir						
Anantnag	7.0	-73	22.7	-26	9.4	-71
Badgam	4.3	-77	4.5	-79	7.7	-60
Bandipore	**	**	**	**	**	**
Baramula	0.7	-98	5.0	-92	17.0	-62
Doda	41.4	-17	17.1	-66	29.6	-44
Ganderwal	15.8	-19	6.4	-63	21.0	9
Jammu	6.5	-67	1.4	-93	4.2	-75
Kargil	0.0	-100	0.0	-100	0.0	-100
Kathua	52.6	295	26.8	40	11.2	138
Kistwar	0.0	-100	**	**	**	**
Kulgam	4.3	-83	22.8	-26	12.9	-45
Kupwara	0.0	-100	2.6	-92	19.4	-50
Ladakh(Leh)	0.9	-61	0.0	-100	0.3	-73
Poonch	0.0	-100	0.0	-100	0.0	-100
Pulwama	4.4	-73	7.5	-49	5.5	-62
Rajouri	6.9	-58	6.4	-61	24.8	179
Ramban	15.2	-70	28.6	-44	30.9	-38
Reasi	23.1	-16	7.8	-77	17.6	-13
Samba	7.2	-63	1.8	-91	1.3	-92
Shopian	1.5	-91	10.0	-32	5.0	-76
Srinagar	9.1	-53	3.9	-77	4.7	-76
Udhampur	15.3	-44	32.0	-7	12.2	-64
East Madhya Pradesh						
Anuppur	0.0	-100	48.0	2298	40.3	423
Balaghat	0.4	-89	20.8	992	34.3	909
Chhatarpur	7.6	110	7.6	281	51.8	2778
Chindwara	0.0	-100	0.0	-100	11.7	125
Damoh	3.4	-33	25.6	1319	35.2	1114
Dindori	0.0	-100	0.0	-100	11.5	62
Jabalpur	6.2	138	22.2	1377	50.1	1374
Katni	0.0	-100	14.7	674	46.4	1189
Mandla	5.1	-30	33.1	1476	17.5	178
Narsingpur	1.0	-44	10.3	832	32.2	939

Panna	0.0	-100	0.0	-100	0.0	-100
Rewa	24.0	300	16.4	993	43.0	1493
Sagar	1.3	-49	18.5	610	39.1	1348
Satna	6.7	39	3.2	37	28.5	996
Seoni	0.0	-100	28.0	804	7.0	27
Shahdol	5.6	-34	48.0	2724	66.0	1304
Sidhi	11.6	164	16.4	720	69.2	2463
Singrauli	0.0	-100	0.0	-100	43.6	1182
Tikamgarh	1.5	-38	19.0	1627	26.0	1900
Umaria	6.2	-22	4.4	110	42.7	600
West Madhya Pradesh						
Alirajpur	0.0	-100	0.0	-100	0.0	-100
Asoknagar	0.0	-100	18.8	1467	52.8	8700
Badwani	0.0	-100	4.5	1017	3.3	725
Betul	0.0	-100	36.3	1350	10.0	213
Bhind	0.0	-100	21.6	1247	15.4	756
Bhopal	0.7	-50	39.6	2375	7.0	367
Burhanpur	0.0	-100	0.0	-100	0.0	-100
Datia	6.9	93	33.7	2708	9.2	667
Dewas	0.0	-100	46.3	9167	0.3	-67
Dhar	0.0	-100	0.0	-100	8.5	4150
Guna	1.4	-26	22.2	1750	20.2	1583
Gwalior	4.7	74	2.9	38	36.8	2065
Harda	0.0	-100	28.2	13975	0.0	-100
Hosangabad	1.1	-37	44.6	3613	17.0	507
Indore	0.6	200	40.4	40300	2.4	700
Jhabua	0.0	-100	15.0	14900	0.0	-100
Khandwa	0.0	-100	34.0	4757	0.7	-65
Khargone	0.0	-100	18.2	4438	0.4	-33
Mandsaur	0.0	-100	4.1	1250	12.2	1933
Morena	0.3	-85	0.0	-100	15.3	467
Neemuch	0.0	-100	0.0	-100	0.0	-100
Raisen	0.7	-56	33.0	4025	28.0	1374
Rajgarh	0.4	-64	7.0	900	17.9	1527
Ratlam	1.1	278	16.3	3160	2.0	300
Sehore	0.0	-100	48.0	4700	7.8	388
Shajapur	0.0	-100	11.0	3567	5.8	480
Sheopur Kalani	0.0	-100	2.5	317	4.0	344
Shivpuri	0.0	-100	8.5	673	8.5	431
Ujjain	0.0	-100	22.6	22500	1.2	20
Vidisha	2.8	84	25.5	1721	38.7	3418
Chhattisgarh						
Bastar	0.0	-100	0.0	-100	3.4	-3
Bijapur	0.0	-100	0.0	-100	19.3	3760
Bilaspur	8.2	111	20.8	844	56.9	898
Dantewara	0.0	-100	0.0	-100	4.7	488
Dhamtari	12.2	542	10.4	593	19.4	619
Durg	17.1	2348	18.0	1700	45.4	1095
Janjgir	3.2	146	6.7	158	58.1	1903

Jashpurnagar	0.0	-100	**	**	36.0	471
Kanker	0.0	-100	0.0	-100	0.0	-100
Korba	3.0	-27	24.0	1400	40.5	553
Koriya	34.9	2079	48.3	2741	40.8	3609
Kawardha	0.0	-100	0.0	-100	17.0	315
Mahasumund	3.5	133	7.0	141	1.0	-64
Narayanpur	0.0	-100	0.0	-100	0.2	-95
Raigarh	**	**	**	**	0.0	-100
Raipur	13.4	856	16.4	761	52.3	1276
Rajandgaon	0.8	-61	5.1	143	19.0	476
Surguja	11.4	244	21.0	709	42.2	955
East Uttar Pradesh						
Allahabad	21.5	642	7.8	334	45.3	1518
Ambedkar Nagar	4.5	32	12.3	310	18.0	592
Azamgarh	13.1	525	3.2	19	17.5	400
Bahraich	21.1	454	10.4	225	0.3	-90
Ballia	23.7	810	3.1	107	17.7	1262
Balrampur	12.3	308	7.6	12	0.0	-100
Banda	6.0	68	4.9	75	66.5	2791
Barabanki	14.3	233	17.6	487	21.9	852
Basti	5.8	49	6.7	319	4.5	87
Chandauli	14.0	186	4.4	193	27.2	988
Deoria	12.7	242	14.0	43	8.8	418
Faizabad	1.8	-51	9.5	313	5.5	129
Farrukhabad	4.1	45	4.3	88	17.5	629
Fatehpur	3.2	-4	19.0	492	32.2	1510
Gazipur	26.8	1118	9.5	459	47.4	2157
Gonda	20.3	682	19.5	926	0.0	-100
Gorakhpur	9.9	241	10.4	395	16.2	604
Hardoi	6.5	116	13.2	324	11.3	253
Jaunpur	7.5	108	4.0	100	33.7	1432
Kannauj	7.7	185	11.0	244	12.0	344
Kanpur City	8.4	147	19.0	442	13.3	600
Kanpur Dehat	8.8	215	8.0	176	10.0	456
Kaushambi	6.0	139	5.5	62	48.6	2013
Kheri	2.9	-18	4.3	29	11.0	224
Kushi nagar	5.7	127	1.9	73	3.0	30
Lucknow	12.6	232	18.4	458	5.5	162
Maharajganj	5.3	56	2.4	74	1.3	-35
Mau	8.0	281	10.5	250	20.8	700
Mirzapur	8.7	128	8.5	347	25.0	468
Pratapgarh	12.5	381	1.0	-58	62.7	2312
RaiBareilly	2.4	-3	8.6	310	7.9	427
Sahuji Maharajnagar	9.1	194	7.3	127	28.8	1340
Sant Kabirnnagar	12.0	167	2.5	47	6.5	242
Sant Ravidas Nagar	14.2	190	14.0	833	15.0	500
Shrawasti	0.0	-100	**	**	**	**
Sidharthnagar	5.0	85	0.3	-84	0.0	-100
Sitapur	6.9	121	13.5	365	15.8	285

Sonbhadra	7.4	75	7.2	156	35.7	1131
Sultanpur	8.0	261	13.9	829	16.3	676
Unnao	10.8	163	10.0	122	16.0	662
Varanasi	11.5	101	12.0	362	25.9	685
West Uttar Pradesh						
Agra	6.1	119	15.2	531	11.2	387
Aligarh	9.4	135	0.1	-98	15.9	563
Auraiya	3.5	-49	8.0	135	0.0	-100
Badaun	16.5	267	1.2	-59	26.8	688
Baghpat	17.1	223	0.0	-100	30.6	955
Bareilly	17.4	229	0.5	-84	37.3	908
Bijnor	26.5	254	0.0	-100	33.7	316
Bulandsahar	13.5	141	0.0	-100	15.3	394
Etah	2.1	-29	2.3	-27	16.3	394
Etawah	2.0	-52	13.0	491	1.0	-57
Firozabad	2.7	-26	9.1	435	2.7	80
GBNagar	16.5	871	0.0	-100	27.0	391
Ghaziabad	13.4	173	0.0	-100	29.7	440
Hamirpur	3.2	43	9.0	190	16.7	626
Jalaun	7.8	99	10.3	158	4.7	236
Jhansi	4.7	14	12.5	524	25.7	1613
Jotiba Phule Nagar	11.3	92	1.0	-71	68.0	1559
Kanshiramnagar	5.5	77	0.0	-100	21.5	727
Lalitpur	0.0	-100	19.0	1483	48.0	2900
Mahamaya Nagar	4.7	26	0.0	-100	18.5	671
Mahoba	1.0	-58	0.0	-100	42.6	2030
Mainpuri	1.3	-47	7.8	255	11.5	448
Mathura	4.5	50	0.0	-100	17.0	486
Meerut	22.7	394	0.0	-100	34.3	453
Moradabad	23.5	319	0.4	-91	63.5	1280
Muzzaffarnagar	33.0	500	0.0	-100	17.8	394
Pilibhit	7.2	63	1.3	-66	20.6	506
Rampur	22.1	157	0.0	-100	41.6	420
Saharanpur	23.4	230	0.0	-100	30.3	719
Shahjahanpur	12.2	148	3.0	-3	13.2	326
Uttarakhand						
Almora	43.5	182	0.0	-100	53.7	310
Bageshwar	49.0	218	0.0	-100	52.4	300
Chamoli	42.4	80	0.6	-97	33.9	71
Champawat	24.5	102	0.0	-100	73.5	682
Dehradun	78.8	405	5.6	-51	66.8	549
Garhwal Pauri	40.8	359	0.0	-100	20.8	151
Garhwal Tehri	79.7	375	0.2	-98	36.3	134
Haridwar	57.8	564	0.0	-100	38.0	249
Nainital	41.5	219	0.0	-100	49.3	408
Pithorgarh	50.2	179	2.5	-84	55.8	329
Rudraprayag	54.9	148	0.0	-100	23.9	19
Udham Sing Nagar	91.8	1483	0.0	-100	75.9	2517
Uttarkashi	57.3	106	0.0	-100	33.5	99

Bihar						
Araria	25.2	1996	0.0	-100	1.0	-47
Arwal	16.2	1700	2.8	20	14.2	1191
Aurangabad	5.7	53	9.8	600	28.5	956
Banka	102.8	7243	3.5	46	9.1	355
Begusarai	11.1	553	3.0	-17	1.3	-59
Bhabua	10.0	27	10.5	425	21.5	532
Bhagalpur	31.5	1160	2.1	-18	8.3	277
Bhojpur	16.0	208	3.1	-9	22.9	1105
Buxar	10.6	361	6.2	933	21.2	715
Darbhanga	36.3	807	1.3	-21	6.2	226
East Champaran	30.9	1243	5.2	108	10.9	990
Gaya	6.4	94	8.1	287	15.2	744
Gopalganj	16.6	515	1.5	-17	12.6	800
Jahanabad	4.0	344	5.9	103	17.0	1208
Jamui	76.9	3560	7.8	187	13.3	478
Kathihar	26.8	3729	0.8	-68	5.3	212
Khagadia	7.9	772	0.9	0	1.4	133
Kishanganj	23.0	1050	0.0	-100	0.5	-81
Lakhisarai	5.0	178	6.0	150	9.3	221
Madhepura	22.1	688	1.9	-12	2.7	80
Madhubani	22.7	1317	0.1	-98	4.4	144
Monghyar	14.6	711	4.2	75	41.4	1328
Muzaffarpur	25.4	957	0.7	-64	10.3	636
Nalanda	2.3	-27	7.3	506	21.7	486
Nawada	17.4	727	6.8	260	20.7	696
Patna	15.3	408	7.2	140	36.0	1700
Purnea	25.6	1406	0.4	-88	9.7	506
Rohtas	18.6	377	10.0	270	54.2	1104
Saharsha	7.4	722	0.0	-100	0.0	-100
Samstipur	18.0	847	13.0	348	0.0	-100
Saran	38.2	1094	4.2	91	7.7	267
Sheikpura	5.4	143	2.9	7	14.5	383
Sheohar	**	**	**	**	2.0	122
Sitamarhi	4.0	46	1.2	-48	4.5	400
Siwan	40.1	1440	4.2	83	14.0	483
Supaul	37.0	2367	0.3	-89	3.1	82
Vaishali	40.8	1411	2.2	16	5.6	331
West Champaran	20.4	1175	9.0	200	10.0	456
Jharkhand						
Bokaro	12.3	484	2.7	-35	25.0	1090
Chatra	12.8	237	5.7	59	8.1	326
Deoghar	34.8	1413	0.0	-100	15.2	1069
Dhanbad	18.6	388	0.7	-80	15.8	285
Dumka	**	**	**	**	**	**
East Singbhum	27.1	833	0.0	-100	48.1	791
Garhwa	**	**	15.5	1007	25.0	1463
Giridih	25.9	826	1.2	-44	15.8	464
Godda	22.6	1313	3.2	-1	6.3	186

Gumla	**	**	**	**	**	**
Hazaribagh	31.6	953	10.0	233	19.1	416
Jamtara	23.2	544	0.8	-64	17.6	780
Khunti	2.5	-52	2.5	-56	15.5	128
Koderna	**	**	6.2	19	8.0	344
Latehar	34.5	808	16.1	324	19.1	366
Lohardagga	20.0	545	15.0	369	37.4	648
Pakur	11.8	1870	0.0	-100	7.8	202
Palamau	24.4	597	20.7	697	14.2	468
Ramgarh	9.6	357	7.8	169	35.0	821
Ranchi	10.6	44	7.0	18	35.0	430
Sahebganj	57.4	11380	0.0	-100	5.4	575
Saraikela	8.2	105	0.0	-100	**	**
Simdega	18.4	411	3.5	-46	**	**
West Singbhum	25.2	394	0.0	-100	29.2	295
East Rajasthan						
Ajmer	0.0	-100	0.8	41	3.9	875
Alwar	0.0	-100	0.0	-100	12.1	348
Banswara	0.0	-100	4.1	200	1.9	850
Baran	0.0	-100	3.6	418	23.6	4620
Bharatpur	0.0	-100	0.0	-100	16.6	538
Bhilwara	0.0	-100	8.3	931	1.6	100
Bundi	0.0	-100	4.8	2317	4.3	617
Chittorgarh	0.0	-92	0.5	52	9.6	3100
Dausa	0.0	-100	5.4	200	13.0	665
Dholpur	0.0	-100	1.2	-47	9.2	268
Dungarpur	0.0	-100	0.0	-100	6.8	6700
Jaipur	0.0	-100	2.6	31	13.2	1000
Jhalawar	0.0	-100	11.3	2718	18.6	2557
Jhunjhunu	0.7	-84	0.0	-100	17.0	710
Karauli	0.0	-100	1.2	-35	13.7	706
Kota	0.1	-85	8.3	1283	13.8	1433
Pratapgarh	0.0	-100	0.0	-100	7.4	1750
Rajsamand	0.0	-100	0.0	-100	2.0	400
Sawai Madhopur	0.4	-77	0.1	-90	6.2	288
Sikar	0.0	-100	0.0	-100	15.3	750
Sirohi	0.0	-100	0.0	-100	0.0	-100
Tonk	0.0	-100	2.0	125	11.2	762
Udaipur	0.0	-100	0.0	-100	1.8	800
West Rajasthan						
Barmer	0.0	-100	0.0	-100	0.0	-100
Bikaner	0.0	-100	0.0	-100	4.5	137
Churu	0.1	-98	0.0	-100	19.9	1006
Hanumangarh	0.0	-100	0.0	-100	5.1	219
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	8.4	664
Pali	0.0	-100	0.0	-100	0.0	-100

Sri Ganganagar	0.0	-100	1.8	-6	4.7	147
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	1.9	200	0.0	-100
Broach	0.0	-100	0.0	-100	0.0	-100
DNH	**	**	**	**	**	**
Dahod	0.0	-100	0.4	200	0.0	-100
Daman	**	**	**	**	**	**
Dangs	0.0	-100	0.5	-38	2.5	200
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	0.4	200	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	0.1	200	0.0	-100	0.0	-100
Tapi	0.0	-100	0.0	-100	2.4	200
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	2.0	567	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	0.4	260	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	7.8	7700	0.0	-100	0.0	-100
Raigad	0.6	200	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	2.8	200	0.0	-100	0.0	-100
Madhya Maharashtra						
Ahmednagar	0.0	-100	0.0	-100	6.3	950
Dhule	0.0	-100	6.5	2067	0.0	-100
Jalgaon	**	**	24.2	2320	9.5	956
Kolhapur	0.0	-100	0.0	-100	1.8	500
Nandurbar	1.0	200	1.6	200	**	**
Nasik	0.6	450	5.2	1194	0.4	0
Pune	0.0	-100	1.0	200	0.1	0
Sangli	0.0	-100	0.0	-100	3.1	3000

Satara	0.0	-100	0.0	-100	0.6	200
Solapur	0.0	-100	0.0	-100	16.0	2567
Marathwada						
Aurangabad	0.0	-100	0.0	-100	14.3	1489
Beed	0.0	-100	0.0	-100	14.2	1478
Hingoli	**	**	3.9	177	27.1	1406
Jalna	**	**	**	**	19.1	2288
Latur	0.0	-100	2.7	21	41.8	1990
Nanded	0.0	-100	0.9	-56	29.6	3189
Usmanabad	0.0	-100	0.0	-100	29.8	2383
Parbhani	0.0	-100	14.7	2350	27.0	1488
Vidarbha						
Akola	0.0	-100	13.6	491	40.2	2771
Amraoti	0.0	-100	6.9	284	29.7	1550
Bhandara	0.0	-100	18.8	549	46.7	1359
Buldhana	0.0	-100	11.7	960	24.8	1967
Chandrapur	0.0	-100	0.0	-100	32.8	681
Gadchiroli	0.0	-100	0.0	-100	21.3	788
Gondia	0.0	-100	29.9	1257	38.7	868
Nagpur	0.0	-100	14.2	470	39.6	1177
Wardha	0.0	-100	5.7	149	45.3	1194
Washim	0.0	-100	1.7	-25	13.5	694
Yeotmal	0.0	-100	0.0	-99	32.1	1589
Odisha						
Angul	13.7	185	2.2	-50	27.9	213
Balasore	33.9	171	0.3	-95	27.7	152
Bargarh	2.6	-30	0.0	-100	3.7	-31
Bhadrak	34.1	216	0.0	-100	36.3	332
Bolangir	3.3	-29	0.5	-76	0.5	-91
Boudh	0.0	-100	0.0	-100	0.0	-100
Cuttack	23.7	130	0.0	-100	47.2	497
Deogarh	35.5	726	4.2	14	2.0	-63
Dhenkanal	16.0	108	0.0	-100	22.3	175
Gajapati	10.7	-44	0.0	-100	15.6	123
Ganjam	3.5	-59	0.0	-100	17.3	170
Jagatsingpur	4.0	-61	0.0	-100	18.7	192
Jajpur	48.4	420	0.0	-100	54.8	249
Jharsuguda	1.5	-43	6.5	28	8.5	33
Kalahandi	0.0	-100	0.0	-100	1.2	-59
Kandhamal	0.7	-92	0.0	-100	0.5	-95
Kendrapara	0.0	-100	0.0	-100	66.1	382
Keonjhar	19.2	91	0.3	-97	20.8	25
Khurda	24.4	168	0.0	-100	51.8	482
Koraput	6.1	91	0.0	-100	3.5	-8
Malkangiri	2.6	-10	0.0	-100	9.0	543
Mayurbhanj	38.2	470	0.0	-100	36.4	178
Nawapara	0.0	-100	0.0	-100	0.0	-100
Nawarangpur	0.0	-100	0.0	-100	0.0	-100
Nayagarh	8.6	21	0.0	-100	57.6	555

Puri	1.2	-89	0.0	-100	10.9	153
Rayagada	5.4	-46	0.0	-100	11.5	121
Sambalpur	3.3	-23	6.7	82	21.5	298
Sonepur	20.8	408	1.1	-43	0.2	-96
Sundargarh	3.9	64	1.4	-69	20.1	247
West Bengal						
GWB						
Bankura	16.8	408	0.0	-100	26.5	464
Birbhum	25.5	963	0.3	-92	25.8	892
Burdwan	21.4	613	0.0	-100	31.4	614
East Midnapore	40.3	795	0.0	-100	4.5	-34
Hooghly	52.8	914	0.0	-100	0.5	-85
Howrah	53.7	701	0.0	-100	0.0	-100
Kolkata	41.5	592	0.0	-100	0.0	-100
Murshidabad	32.0	1900	0.0	-100	14.0	338
Nadia	43.8	2091	0.0	-100	2.7	-7
24 Pargana (N)	27.5	685	0.0	-100	0.1	-97
Purulia	16.6	326	0.0	-100	38.5	655
24 Pargana (S)	53.6	496	0.0	-100	0.9	-92
West Midnapore	53.5	736	0.0	-100	9.7	43
SHWB						
Cooch Behar	18.7	247	0.0	-100	0.8	-74
Darjeeling	7.9	-42	0.0	-100	0.1	-99
East Sikkim	4.1	-71	0.0	-99	6.1	-53
Jalpaiguri	26.6	392	0.0	-100	0.4	-91
Malda	46.4	3763	0.1	-99	6.2	210
North Dinajpur	40.0	200	0.0	-100	3.0	76
North Sikkim	6.3	-72	7.0	-76	32.2	42
South Dinajpur	12.7	115	0.0	-100	10.2	292
South Sikkim	5.6	-61	0.0	-100	0.5	-96
West Sikkim	1.3	-94	0.0	-100	0.7	-97
Karnataka						
Coastal Karnataka						
Dakshin Kannada	0.0	-100	0.0	-100	0.6	-14
Udupi	0.0	-100	0.0	-100	0.0	-100
Uttar Kannada	0.0	-100	0.0	-100	0.0	-100
N I Karnataka						
Bagalkote	0.0	-100	0.0	-100	10.4	1200
Belgaum	0.0	-100	0.0	-100	5.9	1867
Bidar	0.0	-100	0.0	-100	41.6	5843
Bijapur	0.0	-100	0.0	-100	21.6	1562
Dharwad	0.0	-100	2.1	95	3.8	322
Gadag	0.0	-100	0.0	-100	19.9	4875
Gulbarga	0.0	-100	0.0	-100	19.5	4775
Haveri	0.0	-100	0.0	-100	2.1	600
Koppal	0.0	-100	0.0	-100	14.4	3500
Raichur	0.0	-100	0.0	-100	10.6	1414
Yadgir	0.0	-100	0.0	-100	2.7	238
S I Karnataka						

Bangalore Rural	0.0	-100	0.1	-95	0.9	-61
Bangalore Urban	0.0	-100	0.2	-95	3.2	68
Bellary	0.0	-100	0.0	-100	11.2	3633
Chamarajnagar	0.0	-100	1.9	-48	12.3	547
Chichballapur	0.0	-100	0.0	-100	4.7	161
Chickmagalur	0.0	-100	2.0	67	0.6	-54
Chitradurga	0.0	-100	0.0	-100	7.8	1014
Davangere	0.0	-100	0.0	-100	0.6	20
Hassan	0.0	-100	0.3	-83	4.9	172
Kodagu	0.0	-100	0.0	-100	0.7	-22
Kolar	0.0	-100	0.0	-100	1.8	0
Mandya	0.0	-100	0.1	-93	9.1	658
Mysore	0.0	-100	2.3	44	5.9	556
Ramnagara	0.2	-67	0.2	-95	30.4	2071
Shimoga	0.0	-100	6.7	2121	2.2	450
Tumkur	0.1	-88	0.5	-58	7.5	341
Kerala						
Alappuzha	5.4	0	17.9	88	2.4	-61
Kannur	4.9	4800	0.0	-100	0.0	-100
Ernakulam	0.7	-77	10.4	27	2.6	-16
Idukki	0.0	-100	13.5	36	12.4	46
Kasaragod	0.0	-100	0.0	-100	0.0	-100
Kollam	0.0	-100	15.7	32	21.6	96
Kottayam	2.1	-76	16.3	120	1.9	-49
Kozhikode	0.0	-100	0.0	-100	0.0	-100
Malappuram	0.0	-100	0.5	-83	0.0	-100
Palakkad	0.0	-100	2.7	-34	0.4	-64
Pathanamthitta	0.0	-100	35.8	70	0.0	-100
Thiruvananthapuram	2.3	-39	10.8	48	28.9	502
Thrissur	1.9	58	4.4	-6	0.5	-64
Wayanad	0.0	-100	4.2	-11	0.0	-100
Tamil Nadu						
Ariyalur	0.0	-100	1.0	-69	0.0	-100
Chennai	7.0	-27	0.1	-98	0.0	-100
Coimbatore	3.7	-7	0.2	-96	1.6	-41
Cuddalore	1.2	-75	12.5	178	0.0	-100
Dharmapuri	0.0	-100	5.2	8	0.4	-84
Dindigul	0.0	-100	4.1	-23	5.2	21
Erode	0.0	-100	0.0	-100	2.0	-17
Kanchipuram	3.4	-41	0.1	-98	0.0	-100
Kanyakumari	8.0	41	8.1	11	4.9	-20
Karikal	0.0	-100	1.0	-91	0.0	-100
Karur	0.0	-100	0.0	-100	0.0	-100
Krishnagiri	0.0	-100	1.7	-37	2.4	33
Madurai	0.0	-100	0.0	-100	0.0	-100
Nagapattinam	0.0	-100	8.0	10	0.0	-100
Namakkal	0.0	-100	0.6	-85	0.0	-100
Nilgiris	27.0	429	12.8	-13	13.5	93
Perambalur	0.3	-89	0.0	-100	0.0	-100

Puducherry	1.9	-83	25.6	200	0.0	-100
Pudukottai	0.0	-100	4.6	31	0.0	-100
Ramanathapuram	0.0	-99	9.8	76	2.3	-68
Salem	0.0	-100	1.1	-64	1.5	-55
Sivaganga	0.0	-100	2.3	-46	1.8	-65
Thanjavur	0.0	-100	10.5	155	0.0	-100
Theni	3.6	-7	4.8	-52	21.0	208
Tirunelveli	0.5	-95	6.8	-21	48.7	283
Tirupur	0.0	-100	0.0	-100	0.0	-100
Tiruvallur	0.8	-89	0.0	-100	0.0	-100
Tiruvannamalai	3.5	-10	6.5	97	0.0	-100
Tiruvarur	0.0	-100	13.2	175	0.0	-100
Toothukudi	0.1	-95	3.9	-45	13.3	55
Trichy	0.4	-80	3.5	41	0.1	-98
Vellore	4.4	53	0.2	-85	5.6	276
Villupuram	0.5	-83	13.5	611	0.0	-100
Virudhunagar	0.5	-89	1.2	-90	13.7	180
Andhra Pradesh						
Coastal Andhra Pradesh						
East Godavari	0.0	-100	0.0	-100	0.0	-100
Guntur	2.4	5	0.0	-100	0.3	-82
Krishna	3.0	37	0.0	-100	0.0	-100
Nellore	2.3	-59	0.0	-100	0.0	-100
Prakasam	0.9	-55	0.0	-100	0.8	-53
Sirkakulam	0.0	-100	0.0	-100	9.2	129
Visakhapatnam	0.0	-100	0.0	-100	0.6	-75
Vizianagram	1.2	-68	0.0	-100	2.1	-49
West Godavari	0.7	-69	0.0	-100	1.1	-50
Telangana						
Adilabad	0.0	-100	0.3	-86	27.0	771
Hyderabad	0.6	-55	0.0	-100	53.3	5227
Karimnagar	0.0	-100	0.0	-100	34.3	1613
Khammam	0.0	-100	0.0	-100	15.1	621
Mehabubnagar	0.0	-100	0.0	-100	3.8	375
Medak	0.0	-100	0.0	-100	51.3	3106
Nalgonda	0.0	-100	0.0	-100	6.2	343
Nizamabad	0.0	-100	0.0	-100	57.4	4685
Rangareddy	0.1	-78	0.0	-100	24.5	12157
Warangal	0.0	-100	0.0	-100	40.8	3975
Rayalaseema						
Anantapur	0.0	-100	0.0	-100	5.8	221
Chittoor	1.0	-71	0.0	-100	11.2	434
Cuddapah	0.0	-100	0.0	-100	7.3	635
Kurnool	1.1	450	0.0	-100	12.3	1021

	(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