



GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCE  
INDIA METEOROLOGICAL DEPARTMENT

**METEOROLOGICAL CENTRE, RANCHI**

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For

## JHARKHAND

**Bulletin No. 75**

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Issued by  
Meteorological Centre, Ranchi  
INDIA METEOROLOGICAL DEPARTMENT

*In collaboration with*  
Birsa Agricultural University, Kanke, Ranchi  
&  
Department of Agriculture Animal Husbandry & Co-operative  
Govt. of Jharkhand

## Meteorological Sub-Division of the state

*As per IMD classification Jharkhand State consisting of twenty four districts is considered as one meteorological subdivision.*

### Agro Climatic Zones for the State of Jharkhand

S.No.	Agro climatic Zone	Districts	Agromet Field Unit(AMFU)
1	<b>Central &amp; Western Plateau Zone</b>	Ranchi, Khunti, Bokaro, Hazaribag, Ramgarh, Chatara, Garhwa, Palamu, Latehar, Lohardaga, Gumla, Simdega	Ranchi
2	<b>Central and North Eastern Plateau Zone</b>	Dumka, Sahebganj, Godda, Pakur, Deoghar, Giridih, Dhanbad, Jamtara, Koderma	Dumka
3	<b>South Eastern Plateau Zone</b>	West Singhbhum, East Singhbhum, Saraikela	Darisai



## DISTRICT LEVEL WEATHER FORECAST

ISSUED ON: 19.09.2017

VALID FOR THE NEXT 5 DAYS

Summary of observations recorded at Ranchi, Jamshedpur, Daltonganj, Bokaro & Chaibasa during 15.09.2017 to 19.09.2017

PARAMETERS		Ranchi	Jamshedpur	Daltonganj	Bokaro	Chaibasa
Total rainfall (mm)		31.8	63.2	3.1	3.9	47.3
Max Temp range (°C)		29-33	30-35	34-35	30-34	28-35
Min Temp range (°C)		21-22	25-26	26-27	25-26	22-24
Cloud Coverage (octa)		6	6	6	6	3
Relative Humidity (%)		64-100	62-97	62-97	78-97	NA
Wind Direction/ Speed (kmph)	Morning	NE	CALM	CALM	E	CALM
		6	0	0	4	0
	Evening	SE	CALM	CALM	N/A	CALM
		6	0	0	N/A	0

- **Monsoon Watch:** SW Monsoon remained **ACTIVE** over Jharkhand during last 24 hrs.
- **Realized Weather (during past 24 hrs.):** Heavy rain at isolated places & Light to moderate rain and Thundershowers occurred at most places over Jharkhand.
- **Rainfall in cm (during past 24 hrs):** Maheshpur -- 7; Pakuria -- 6; Hazaribag, Palkot, Gumla, Dumka – 4 each; Kurdeg, Amrapara, Raidih, Jamshedpur MO, Ghatsila, Topchanchi – 3 each; Chakradharpur, Lohardaga, Kuru, Balumath, Torpa, Messenjar, Tilaiya, Barkisuraiya – 2 each; Chaibasa, Ranchi, Jamtara, Rajdhanwar, Dumri Jamshedpur, Khusiyari, Tenughat, Koner -- 1 each.
- **Synoptic feature:**
  - Under the influence of the cyclonic circulation over northwest Bay of Bengal and adjoining coastal areas of Odisha & Gangetic West Bengal a low pressure area has formed over northwest Bay of Bengal & neighbourhood. Associated cyclonic circulation extends upto 5.8 km above mean sea level tilting southwestwards with height.
  - The axis of monsoon trough at mean sea level now passes through Amritsar, Karnal, Mainpuri, Siddhi, Ambikapur, Chaibasa, centre of the above low pressure area and thence east southeastwards to east central Bay of Bengal.
  - A cyclonic circulation lies over Bangladesh & neighbourhood between 5.8 & 7.6 km above mean sea level.

➤ **Sector wise Forecast for the state of Jharkhand (till noon of 26<sup>th</sup> September, 2017):**

Day	Central (Bokaro, Gumla, Hazaribag, Khunti, Ramgarh & Ranchi)	South (Chaibasa, Jamshedpur, Simdega & Saraikela)	NW (Chatara, Garhwa, Koderma, Latehar, Lohardaga & Palamu)	NE (Deoghar, Dhanbad, Dumka, Giridih, Godda, Jamtara, Pakur & Sahebganj)
19.09.17	<b>WS RA/TS very likely.</b>	<b>WS RA/TS very likely.</b>	<b>WS RA/TS very likely.</b>	<b>WS RA/TS very likely.</b>
20.09.17				
21.09.17	<b>FWS RA/TS very likely.</b>	<b>FWS RA/TS very likely.</b>	<b>FWS RA/TS very likely.</b>	<b>FWS RA/TS very likely.</b>
22.09.17				
23.09.17	<b>SCT RA/TS likely.</b>	<b>SCT RA/TS likely.</b>	<b>SCT RA/TS likely.</b>	<b>SCT RA/TS likely.</b>
Outlook for subsequent Two days			<b>No large change.</b>	

➤ **Sector wise Warning for the state of Jharkhand (for next five days):**

Day	Central (Bokaro, Gumla, Hazaribag, Khunti, Ramgarh & Ranchi)	South (Chaibasa, Jamshedpur, Simdega & Saraikela)	NW (Chatara, Garhwa, Koderma, Latehar, Lohardaga & Palamu)	NE (Deoghar, Dhanbad, Dumka, Giridih, Godda, Jamtara, Pakur & Sahebganj)
19.09.17	<b>ISOL heavy Rain likely, especially in Southern &amp; Central Jharkhand.</b>			
20.09.17	<b>ISOL heavy Rain likely, especially in Central &amp; Northern Jharkhand.</b>			
21.09.17	<b>NIL</b>			
22.09.17				
23.09.17				

## WEATHER FORECAST

**AMFU: RANCHI (Districts: Ranchi, Khunti, Bokaro, Hazaribag, Ramgarh, Chatara, Garhwa, Palamu, Latehar, Lohardaga, Gumla, Simdega)**

DISTRICTS	PARAMETERS	FORECAST				
		DAY-1	DAY-2	DAY-3	DAY-4	DAY-5
		20.09.17	21.09.17	22.09.17	23.09.17	24.09.17
BOKARO	Rainfall (mm)	15	10	12	8	4
	Max Temperature (°C)	30	32	32	33	33
	Min Temperature(°C)	24	24	24	24	24
	Total cloud cover (octa)	7	8	7	7	7
	Max Relative Humidity (%)	94	91	92	91	87
	Min Relative Humidity (%)	71	67	66	66	60
	Wind speed (kmph)	6	7	7	4	3
	Wind direction (deg)	150	150	170	205	205
HAZARIBAGH	Rainfall (mm)	15	10	12	8	4
	Max Temperature (°C)	30	32	32	33	33
	Min Temperature(°C)	24	24	24	24	24
	Total cloud cover (octa)	7	8	8	7	7
	Max Relative Humidity (%)	94	91	91	90	87
	Min Relative Humidity (%)	74	73	70	67	60
	Wind speed (kmph)	8	8	8	4	4
	Wind direction (deg)	125	140	155	190	185
RAMGARH	Rainfall (mm)	15	10	12	8	4
	Max Temperature (°C)	30	32	32	33	33
	Min Temperature(°C)	24	24	24	24	24
	Total cloud cover (octa)	7	8	8	7	7
	Max Relative Humidity (%)	95	92	93	91	87
	Min Relative Humidity (%)	74	71	71	68	61
	Wind speed (kmph)	6	8	7	4	3
	Wind direction (deg)	150	155	170	205	210
CHATRA	Rainfall (mm)	12	16	9	5	4
	Max Temperature (°C)	30	31	30	31	33
	Min Temperature(°C)	23	23	23	23	23
	Total cloud cover (octa)	7	8	8	7	7
	Max Relative Humidity (%)	95	93	92	91	88
	Min Relative Humidity (%)	75	73	74	66	61
	Wind speed (kmph)	8	8	8	4	4
	Wind direction (deg)	125	135	150	180	190
RANCHI	Rainfall (mm)	20	12	10	5	2
	Max Temperature (°C)	28	30	31	31	31
	Min Temperature(°C)	22	22	22	22	22
	Total cloud cover (octa)	8	8	8	7	7
	Max Relative Humidity (%)	96	93	94	92	88
	Min Relative Humidity (%)	73	71	72	69	63
	Wind speed (kmph)	5	7	6	2	3
	Wind direction (deg)	170	170	175	225	215
KHUNTI	Rainfall (mm)	20	12	10	5	2
	Max Temperature (°C)	28	30	31	31	31
	Min Temperature(°C)	22	22	22	22	22
	Total cloud cover (octa)	8	8	7	7	7
	Max Relative Humidity (%)	95	94	94	91	88
	Min Relative Humidity (%)	73	70	70	67	62
	Wind speed (kmph)	4	6	5	2	2
	Wind direction (deg)	175	175	180	210	195

DISTRICTS	PARAMETERS	FORECAST				
		DAY-1	DAY-2	DAY-3	DAY-4	DAY-5
		20.09.17	21.09.17	22.09.17	23.09.17	24.09.17
GUMLA	Rainfall (mm)	22	16	12	3	3
	Max Temperature (°C)	29	30	30	31	32
	Min Temperature(°C)	22	22	23	23	23
	Total cloud cover (octa)	8	8	8	7	7
	Max Relative Humidity (%)	97	96	96	94	91
	Min Relative Humidity (%)	76	74	77	71	64
	Wind speed (kmph)	5	6	6	2	3
	Wind direction (deg)	155	165	175	220	240
SIMDEGA	Rainfall (mm)	19	12	8	8	4
	Max Temperature (°C)	29	31	31	33	33
	Min Temperature(°C)	23	23	23	23	23
	Total cloud cover (octa)	8	8	7	7	7
	Max Relative Humidity (%)	97	96	95	93	89
	Min Relative Humidity (%)	76	72	73	69	62
	Wind speed (kmph)	5	6	5	2	2
	Wind direction (deg)	160	170	185	215	240
LOHARDEGA	Rainfall (mm)	22	16	12	3	3
	Max Temperature (°C)	29	30	30	31	32
	Min Temperature(°C)	22	22	23	23	23
	Total cloud cover (octa)	8	8	8	7	7
	Max Relative Humidity (%)	97	95	95	94	90
	Min Relative Humidity (%)	75	73	77	69	63
	Wind speed (kmph)	6	7	6	2	4
	Wind direction (deg)	150	155	165	205	235
PALAMU	Rainfall (mm)	15	12	8	5	5
	Max Temperature (°C)	31	33	34	34	34
	Min Temperature(°C)	25	25	25	25	25
	Total cloud cover (octa)	7	8	8	8	7
	Max Relative Humidity (%)	94	92	91	90	88
	Min Relative Humidity (%)	71	69	73	63	60
	Wind speed (kmph)	6	7	6	4	4
	Wind direction (deg)	125	125	140	175	210
GARHWA	Rainfall (mm)	15	12	8	5	5
	Max Temperature (°C)	31	33	34	34	34
	Min Temperature(°C)	25	25	25	25	25
	Total cloud cover (octa)	7	8	8	8	7
	Max Relative Humidity (%)	94	92	92	91	87
	Min Relative Humidity (%)	69	67	72	63	61
	Wind speed (kmph)	3	6	6	4	4
	Wind direction (deg)	130	125	145	175	230
LATEHAR	Rainfall (mm)	15	12	8	5	5
	Max Temperature (°C)	31	33	34	34	34
	Min Temperature(°C)	25	25	25	25	25
	Total cloud cover (octa)	7	8	8	7	7
	Max Relative Humidity (%)	96	94	94	93	89
	Min Relative Humidity (%)	73	70	77	66	62
	Wind speed (kmph)	5	6	6	3	4
	Wind direction (deg)	140	140	150	185	235

**AMFU :DUMKA (Districts: Dumka, Sahebganj, Godda, Pakur, Deoghar, Giridih, Dhanbad, Jamtara, Koderma)**

DISTRICTS	PARAMETERS	FORECAST				
		DAY-1	DAY-2	DAY-3	DAY-4	DAY-5
		20.09.17	21.09.17	22.09.17	23.09.17	24.09.17
SAHEBGANJ	Rainfall (mm)	31	12	15	8	5
	Max Temperature (°C)	32	32	33	33	34
	Min Temperature(°C)	24	24	24	25	25
	Total cloud cover (octa)	8	8	8	7	7
	Max Relative Humidity (%)	91	92	93	90	85
	Min Relative Humidity (%)	67	69	66	63	62
	Wind speed (kmph)	12	10	9	7	5
	Wind direction (deg)	155	150	140	155	130
GODDA	Rainfall (mm)	24	12	10	8	3
	Max Temperature (°C)	32	32	33	34	34
	Min Temperature(°C)	24	24	24	24	25
	Total cloud cover (octa)	8	8	7	7	7
	Max Relative Humidity (%)	91	93	94	90	86
	Min Relative Humidity (%)	66	69	65	62	60
	Wind speed (kmph)	10	9	9	7	6
	Wind direction (deg)	145	150	145	160	140
PAKAUR	Rainfall (mm)	20	15	12	10	8
	Max Temperature (°C)	32	32	33	34	35
	Min Temperature(°C)	24	24	24	25	25
	Total cloud cover (octa)	8	8	7	7	6
	Max Relative Humidity (%)	92	93	93	92	88
	Min Relative Humidity (%)	65	67	64	62	59
	Wind speed (kmph)	10	9	9	7	6
	Wind direction (deg)	145	150	150	160	155
DUMKA	Rainfall (mm)	20	15	12	10	8
	Max Temperature (°C)	30	31	31	33	33
	Min Temperature(°C)	25	25	25	25	25
	Total cloud cover (octa)	7	8	7	7	6
	Max Relative Humidity (%)	93	94	95	94	89
	Min Relative Humidity (%)	65	69	65	62	59
	Wind speed (kmph)	8	8	9	7	6
	Wind direction (deg)	123	134	149	153	167
DEVGHAR	Rainfall (mm)	20	15	12	10	8
	Max Temperature (°C)	30	31	31	33	33
	Min Temperature(°C)	25	25	25	25	25
	Total cloud cover (octa)	7	8	7	7	7
	Max Relative Humidity (%)	93	93	94	91	87
	Min Relative Humidity (%)	66	72	66	63	59
	Wind speed (kmph)	7	7	9	7	6
	Wind direction (deg)	115	135	150	160	160
GIRIDH	Rainfall (mm)	20	15	12	10	8
	Max Temperature (°C)	30	31	31	33	33
	Min Temperature(°C)	25	25	25	25	25
	Total cloud cover (octa)	7	8	8	7	7
	Max Relative Humidity (%)	93	91	91	88	86
	Min Relative Humidity (%)	69	73	65	64	59
	Wind speed (kmph)	8	7	7	5	4
	Wind direction (deg)	110	135	155	185	160



**AMFU : DUMKA continued ...**

DISTRICTS	PARAMETERS	FORECAST				
		DAY-1	DAY-2	DAY-3	DAY-4	DAY-5
		20.09.17	21.09.17	22.09.17	23.09.17	24.09.17
DHANBAD	Rainfall (mm)	25	12	7	12	8
	Max Temperature (°C)	33	32	34	34	35
	Min Temperature(°C)	23	23	23	23	24
	Total cloud cover (octa)	7	8	7	7	6
	Max Relative Humidity (%)	93	94	95	95	91
	Min Relative Humidity (%)	65	68	64	63	59
	Wind speed (kmph)	7	8	9	7	7
	Wind direction (deg)	120	135	150	155	180
JAMTARA	Rainfall (mm)	15	10	12	8	4
	Max Temperature (°C)	30	32	32	33	33
	Min Temperature(°C)	24	24	24	24	24
	Total cloud cover (octa)	7	8	7	7	6
	Max Relative Humidity (%)	94	93	94	95	90
	Min Relative Humidity (%)	66	69	65	64	59
	Wind speed (kmph)	7	7	8	6	6
	Wind direction (deg)	115	130	155	160	185
KODERMA	Rainfall (mm)	15	10	12	8	4
	Max Temperature (°C)	30	32	32	33	33
	Min Temperature(°C)	24	24	24	24	24
	Total cloud cover (octa)	7	8	8	8	7
	Max Relative Humidity (%)	93	90	90	87	86
	Min Relative Humidity (%)	71	75	67	63	59
	Wind speed (kmph)	8	7	7	4	4
	Wind direction (deg)	100	130	150	185	150

**AMFU :DARISAI( Districts: West Singbhum, East Singbhum, Saraikela)**

DISTRICTS	PARAMETERS	FORECAST				
		DAY-1	DAY-2	DAY-3	DAY-4	DAY-5
		20.09.17	21.09.17	22.09.17	23.09.17	24.09.17
WEST-SINGBHUM	Rainfall (mm)	19	12	8	8	4
	Max Temperature (°C)	28	31	31	33	33
	Min Temperature(°C)	23	23	23	23	23
	Total cloud cover (octa)	8	8	7	7	7
	Max Relative Humidity (%)	92	92	94	89	87
	Min Relative Humidity (%)	69	64	63	62	58
	Wind speed (kmph)	4	6	5	2	3
	Wind direction (deg)	175	170	175	160	175
EAST-SINGBHUM	Rainfall (mm)	19	12	8	8	4
	Max Temperature (°C)	29	31	31	33	33
	Min Temperature(°C)	23	23	23	23	23
	Total cloud cover (octa)	8	8	7	7	7
	Max Relative Humidity (%)	91	91	93	91	87
	Min Relative Humidity (%)	67	61	62	62	59
	Wind speed (kmph)	6	8	7	4	5
	Wind direction (deg)	180	180	175	185	200
SARAIKELA	Rainfall (mm)	19	12	8	8	4
	Max Temperature (°C)	29	31	31	33	33
	Min Temperature(°C)	23	23	23	23	23
	Total cloud cover (octa)	8	8	7	7	7
	Max Relative Humidity (%)	92	92	94	90	85
	Min Relative Humidity (%)	68	65	65	64	60
	Wind speed (kmph)	4	6	6	2	3
	Wind direction (deg)	190	180	185	205	210

## **B. AGRO-ADVISORIES (Based on the weather forecast):-**

**AMFU : Ranchi, Dumka & Darisai (i.e. for all Districts of Jharkhand)**

**Present Status** : There is a chance of light rain during next few days. Farmers may proceed for interculture operations in the field to conserve soil moisture for a longer period. To keep the rice field submerged, maintain the bunds of the field. In upland, most of the timely sown crops like mung, urd, maize, rice, groundnut, finger millet etc. are at maturity stage. Harvesting of these crops may be done during clear weather condition and store them at a safer place. At present, sufficient moisture is available in the soil. Hence, farmers are advised to plough the land immediately after harvesting of different crops and farmers may sow rabi crops like toria, green pea, mustard, potato, rainfed wheat etc. if having assured irrigation facility. Farmers may arrange recommended variety of seeds along with fertilizer/manure for timely sowing of rabi crops. Those farmers having 4 - 5 irrigation facility, may proceed for cultivation of potato, green pea or rainfed wheat. And those who have only 2-3 irrigation facility may proceed for toria or mustard cultivation.

**Mung & Urd**: These crops bear flowers phase wise. The siliqua developed from first phase of flowering are now turned into golden colour. Pluck them immediately and left the green pod as such to mature. Crops sown during first week of July, are at approaching the maturity stage. Harvest the crops when the siliqua turns into golden colour.

**Rice (direct seeded)** : Late sown crops are at post flowering / milking stage and at this stage attack of the insects Gandhi bug is common. To control the insects, dusting of Chlorpyrifos/ Quinolphos/ Methyl parathion dust @ 10 kg per acre is recommended. The alternative method (in case, unavailability of the insecticides), is dusting of coal / wood ash mixed with kerosin oil.

**Rice (transplanted)**: In some pockets, crops are attacked either by stem borer or leaf eating insects. Broadcast granular insecticides like Carbofuran 3G (@12 kg per acre) or Phorate 10 G (@ 4 kg per acre) to control them. However, stagnate water is essential during broadcasting of these insecticides.

**Maize**: In some areas, crops are affected by the insect, Fruit borer. Spray neem based insecticide @ 2-3 ml. per liter of water on upper part of the plant to control these insects.

**Potato & Green Pea**: Farmers, having assured irrigation facility and wish to cultivate early potato and green peas are suggested to go for seeding. Recommended variety of potato for this region is Kufri Ashoka, Kufri Pukhraj, Kufri Lalima, Kufri Pushkar and Kufri Kanchan. 12 quintal seeds, 100 kg urea, 70 kg D.A.P., 80 kg Muriate of Potash and 10 kg Lindane dust is required for cultivation in one acre. Start the sowing of pea with recommended variety Arkel, Kashi Nandini, P.E.-6, Birsa Matar. The seed rate is 30-35 kg per acre. Sow the seed at the distance of 30 cm (between rows) and 15 cm (between plants). Before seeding the seeds must be treated with Rhizobium culture.

**Green Fodder**: At present farmers may sow the seed of green fodder like Maize (variety- African tall or J-1006), Lobia (variety- UPC-4200).

**Vegetables**: At present, farmers may raise the seedlings of winter vegetables like cauliflower, cabbage, chilli, tomato, brinjal etc. Seed should be treated with fungicide before sowing. Spray Bio-insecticides like Halt or Delphin in cauliflower and cabbage to control different types of insects.

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Forwarded to: Director Agriculture, Ranchi, Jharkhand /Director AIR/Director D.D, Ranchi/State Manager, IKSL Jharkhand/ Secretary Disaster Management, Jharkhand.

M.C.RANCHI UOI No. RNC - DAAS/II/

Dated 19.09.2017