



**National Agromet Advisory Service Bulletin**  
**Based on**  
**Extended Range Weather Forecast (ERFS)**

**Validity: (03<sup>rd</sup> January to 16<sup>th</sup> January 2020)**

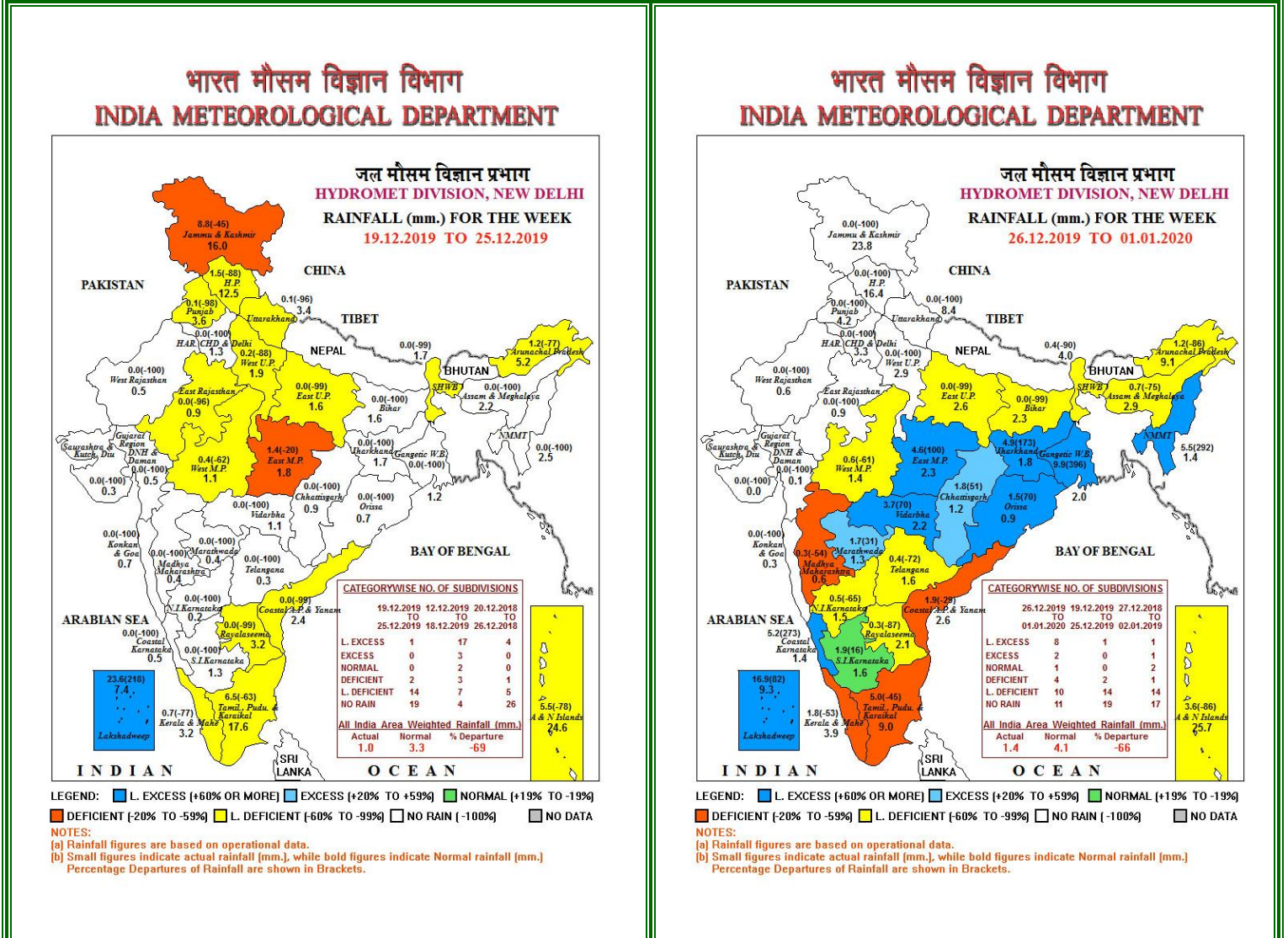
**Date of issue: 03<sup>rd</sup> January 2020**

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**Indian Council of Agricultural Research (ICAR)**  
**All India Coordinated Research Project on Agro meteorology (AICRPAM),**  
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**&**  
**Earth System Science Organization**  
**India Meteorological Department**

## Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

### Realized Rainfall

(19<sup>th</sup> December 2019 to 1<sup>st</sup> January, 2020)



- Above normal rainfall occurred in both the weeks in Lakshadweep.
- Normal or above normal rainfall occurred in either of the two weeks Nagaland, Manipur, Mizoram & Tripura (NMMT), Jharkhand, Gangetic West Bengal, Odisha, East Madhya Pradesh, Chhattisgarh, Marathwada, Vidarbha, Coastal Karnataka and South Interior Karnataka.
- Below normal rainfall/no rain occurred over rest of the country.

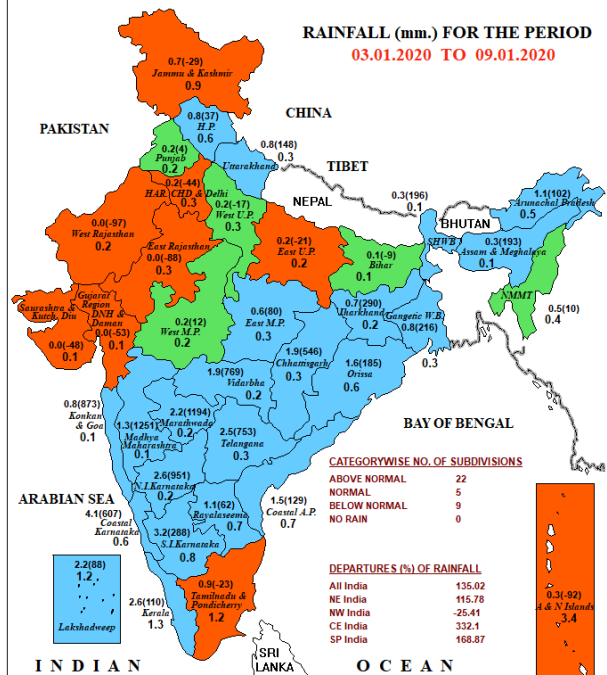
# Extended Range Forecast System

## Rainfall forecast maps for the next 2 weeks (IC – 01 January)

(3<sup>rd</sup> Jan. to 16<sup>th</sup> Jan. 2020)

### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

#### Rainfall Forecast Map - Normal RF Based Categories

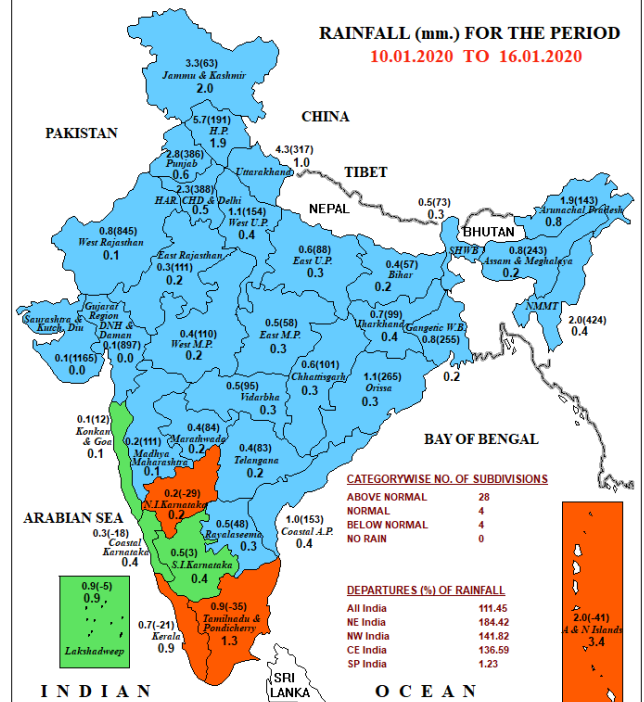


LEGEND: ■ ABOVE NORMAL [+20% OR MORE] ■ NORMAL [+19% TO -19%]  
■ BELOW NORMAL [-20% TO -99%] ■ NO RAIN [-100%] ■ NO DATA

NOTES:  
 (a) Rainfall figures are based on MME Forecast data.  
 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.).  
 Percentage Departures of Rainfall are shown in Brackets.

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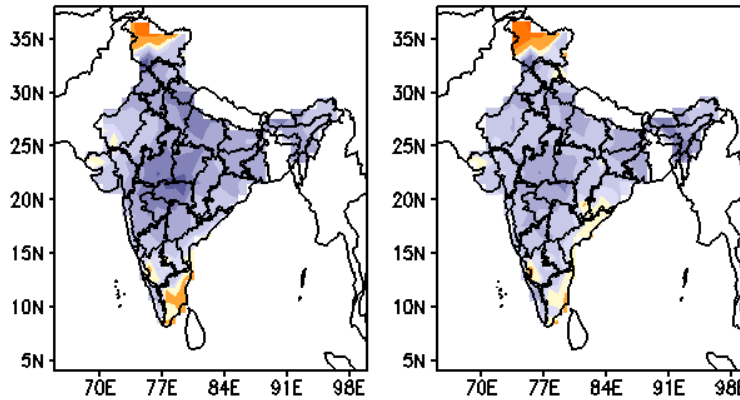
- **Week 1 (03.01.2020 to 09.01.2020):** North India, Indo-Gangetic Plain, eastern states and Northeastern states will get rainfall under the influence of Western Disturbance during week 1.
- **Week 2 (10.01.2020 to 16.01.2020):** Mainly normal weather condition.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 01 January)  
(3<sup>rd</sup> Jan. to 16<sup>th</sup> Jan. 2020)**

**MME forecast Tmax anomaly (Deg C)**

(Week1: 03Jan–09Jan)

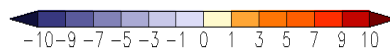
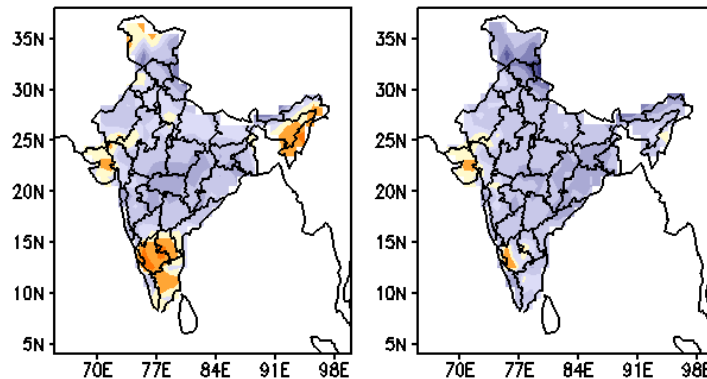
(Week2: 10Jan–16Jan)



**MME forecast Tmin anomaly (Deg C)**

(Week1: 03Jan–09Jan)

(Week2: 10Jan–16Jan)



**Maximum Temperature (Tmax)**

- **Week 1 (03.01.2020 to 09.01.2020) and Week 2 (10.01.2020 to 16.01.2020):** Tmax anomaly is mostly negative over most parts of India except extreme north India and some parts of eastern coastal regions.

**Minimum Temperature (Tmin)**

- **Week 1 (03.01.2020 to 09.01.2020):** Below normal Tmin over North, Central and East India during week 1. Over some parts of south peninsula and Northeast India it will be above normal.
- **Week 2 (10.01.2020 to 16.01.2020):** Below normal Tmin over most of India during week 2.

## **Strategic Agricultural Planning based on rainfall during next two weeks till 16<sup>th</sup> January 2020**

### **Agromet Advisories**

#### **Kerala**

Amount of rainfall received over Kerala is 625.0 mm (27% excess) during the period of 01 Oct.- 31 Dec. 2019. The extended range weather forecast for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) is above normal for week-1 and below normal for week-2.

- There is a chance of white fly attack in chilli. Apply 2% Neem oil garlic emulsion or spray 20 g Lecanicillium lecanii per one litre of water in ten days intervals.
- To control sigatoka disease in banana, cut and remove the severely affected leaves and apply Propiconazole 1ml/ litre of water.

#### **Tamil Nadu**

Amount of rainfall received over Tamil Nadu is 453.2 mm (1% normal) during the period of 01 Oct.- 31 Dec. 2019. The extended range weather forecast for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) is below normal for week-1 and week-2.

- Prevailing weather conditions are favorable for sucking pest and leaf hopper incidence in pulses. Spray Emamectin benzoate 5% SG 220 g/ha for the control of sucking pest and Methyl-o-demeton 750 ml in 700-1000 litre of water/ha for the control of leaf hopper.
- Farmers are advised to monitor fall army worm incidence in maize. If symptoms are noticed, spray any one of the following insecticide to control. (Azardirachtin 1 EC @ 2 ml/litre (or) Thiodicarb 75 WP @ 2 g/l (or) Emamectin benzoate 5 SG @ 0.4 g/litre (or) Spinetoram 12 SP @ 0.5 ml/litre)

#### **Maharashtra**

Rainfall received over Madhya Maharashtra is 228.6 mm (122% large excess), over Marathwada is 257.3 mm (157% large excess), Vidharbha is 66.7 mm (-18% deficit) and Konkan region 281.5 mm (102% large excess) during 01 Oct.- 31 Dec. 2019. The extended range weather forecast for next two weeks (03 Jan. - 09 Jan. 2020 and 10 Jan. - 16 Jan. 2020) over Madhya Maharashtra, Konkan, Marathwada and Vidharbha are above normal for week-1 and over Madhya Maharashtra, Marathwada and Vidharbha are above normal and normal over Konkan for week-2.

##### *Madhya Maharashtra*

- Spray of 2 % urea is advised at the time of dry period during flowering and pod formation stages of chickpea crop.
- Weather is congenial to aphid infestation in safflower crop. For control, spray Dimethoate 20 EC @15 ml/10 litre of water.

##### *Konkan*

- There is a possibility of incidence of flea beetle on okra. For control, Dimethoate 30%EC @ 10

ml/10 liter of water.

- Weather is congenial for the incidence of aphids in lablab. To control, spray Dimethoate 30% EC @ 12 ml per 10 litre of water.
- Due to forecast of decrease in temperature flower induction may take place in mango. To protect the inflorescence from hoppers and powdery mildew diseases, spray Lambda cyhalothrin 5%EC @ 6 ml + Hexaconazole @ 5 ml/10 litre in water at the time of flower bud initiation.

#### *Vidharbha*

- For control of initial infestation of pod borer (*Helicoverpa*) in pigeonpea, spray of 5% neem seed kernel extract is advised. Above ETL levels spray of Emamectin benzoate 5% SG @ 3 g in 10 liters of water.
- Due to prevailing rainy/cloudy weather, spray of Aliette 2.5 g + Carbendazim 1 g/litre of water, to avoid fruit drop and phytophthora fruit rot (brown rot) in mriga bahar in orange.
- *Marathwada*
- To control rhizome fly, earthing up is advised in turmeric crop along with drenching of Chloropyriphos 50 % @500 ml/acre in water.
- For management of sugarcane pyrilla and stem borer in sugarcane, spray of Chloropyriphos 20 % EC @ 30 ml/10 litre of water during clear weather condition.

#### **Rajasthan**

Rainfall received during 01 Oct.- 31 Dec. 2019 over East Rajasthan is 37.8 mm (47% excess). The extended range weather forecast for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) over East Rajasthan is below normal for week-1 and above normal for week-2.

- Due to possibility of cold wave, farmers are advised to protect nurseries, orchard of new fruit crop and other high value crop by cold barrier or covering by crop residues.
- Due to sudden dip in minimum temperature, suitable protection measures may be taken to protect poultry birds and livestock.
- To control aphid in mustard, dusting of Methyl parathion 2% or Malathion 5% dust@ 20-25 kg /ha.

#### **Jammu**

Rainfall received during 01 Oct.- 31 Dec. 2019 in Jammu is 253.3 mm (88% large excess). The extended range weather forecast for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) is below normal for week-1 and above normal for week-2.

- Weather is favourable for the attack of leaf webber. Spray Carbaryl (Sevin) @ 1 g/litre of water to control.
- Due to the decrease in minimum temperature, farmers are advised to go for very late sown wheat variety such as Raj 3077, HD-2285, Raj-3765 and HD-2402.
- Due to congenial weather for collar rot and root rot in gram, rogue out affected plants and drench the

affected patches of the field with Thiram or Captan @ 2g/litre of water.

### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 121.4 mm (33% excess) during 01 Oct.- 31 Dec. 2019. The extended range weather forecast provided for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) on rainfall over Himachal Pradesh is above normal for week-1 and for week-2.

- Dingri mushroom can be sown in closed room, with temperature at 25-28°C and relative humidity of 80-85 % for good crop.
- It is advised to cover the small horticulture plants with grass to avoid cold paralysis.
- Training, skiffing and cleaning work can be completed in the tea.

### **Hisar**

Amount of rainfall received over Hisar is 28.3 mm (40% excess) during 01 Oct.- 31 Dec. 2019. The extended range weather forecast provided for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) on rainfall over Hisar is below normal for week-1 and above normal for week-2.

- Apply requirement based irrigation and recommended doses of fertilizers in existing vegetable crops and monitor for insect-pests and diseases. Go for effective weed management measures.
- Farmers are advised to keep on vigilance for insect/pests in sugarcane crop. Apply need based irrigation to the crop.
- Due to fall in night temperature and cloudy weather, keep the animals under shed. Provide 50 g iodized salt and 50 to 100 g mineral mixture daily with animal feed/fodder to keep them healthy.

### **Jharkhand**

Amount of rainfall received over Jharkhand is 141.3 mm (56% excess) during 01 Oct.- 31 Dec. 2019. The extended range weather forecast provided for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) on rainfall over Jharkhand is above normal for weeks-1 and week-2.

- Inter culture operations are advised in pulse and oilseed crops. Spray the insecticide Dematon (Rogor)@ 1 ml/litre of water in different crops or vegetables against aphids.
- There is chances of powdery mildew disease in table pea crop. Hence, spray Karathen @ 1 ml/litre of water or Sulfex @ 3 g/litre of water to control the disease.

### **Gujarat**

Amount of rainfall received over Gujarat is 83.8 mm (181% large excess) during 01 Oct.- 31 Dec. 2019. The extended range weather forecast provided for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) on rainfall over Gujarat is below normal for week-1 and above normal for week-2.

- For the management of mango hopper, spray Deltamethrin 2.8 EC, 3 ml or Cypermethrin 25 EC, 2 ml in 10 litre water, in case of severe incidence spray Imidacloprid 17.8 SL, 3ml or Fenobucarb 50 EC, 20 ml or Buprofezin 25EC, 10ml in 10 litre water.

- Due to cold and dry weather condition, light irrigation in evening time is recommended in wheat crop to minimize cold effect.

### **West Bengal**

Amount of rainfall received over West Bengal is 244.1 mm (56% excess) during 01 Oct.- 31 Dec. 2019. The extended range weather forecast provided for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) on rainfall over West Bengal is above normal for week-1 and week-2.

- In present weather condition, there are chances of mite/thrips. To control, apply Acephate-75%WP @ 0.75 g/litre of water.
- Irrigate the mustard field at the time of flowering for late sown crop or pod initiation for early sown crop. Continuous monitoring of aphid attack is advised. To control, apply 1.5 ml Metasystox or Rogor per litre of water is advised.
- To protect the seedlings of rice crop from cold, cover the nursery bed with polythene or keep 2 to 3 cm stagnant water in the nursery bed especially during the night-time.

### **Karnataka**

Rainfall received during 01 Oct.- 31 Dec. 2019 over South Interior Karnataka is 307.7 mm (51% excess) and North Interior Karnataka is 245.1 mm (77% large excess). The extended range weather forecast for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) over South Interior Karnataka is above normal for week-1 and normal for week-2 and for North Interior Karnataka above normal for week-1 and below normal for week-2.

#### *South Interior Karnataka*

- Due to low temperature during night followed by morning dew the pod borer incidence was noticed in the red gram crop. Spray of Indoxycarb 14.5 SC @ 0.5 ml/litre or Spynosad 45 SC @ 0.15 ml/litre or Chloropyrifos 20 EC @ 2ml/litre are advised.
- Manage the humidity in the silk worm rearing house by providing good cross-ventilation. Dust dry slaked lime powder when silkworms settle for moult.
- If symptoms of sulphur deficiency noticed in wheat crop, broadcast one quintal gypsum/acre followed by a light irrigation or if the soil is in proper moisture condition is advised.

### **Chhattisgarh**

Amount of rainfall received over Chhattisgarh is 106.2 mm (39% excess) during 01 Oct.- 31 Dec. 2019. The extended range weather forecast provided for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) on rainfall over Chhattisgarh is above normal for weeks-1 and for week-2.

- Because of continuous cloudy weather there is chance of aphid attack in oilseed, pulses and vegetables. It is advised to continuous monitor and spray Neem based pesticides when initial outbreak is observed.
- Pruning of the old and disease infected branches of the mango plant is advised.



- Light irrigation should be given at an interval of 20-25 days in Berseem. Care should be taken that the fields do not go dry.

## **Odisha**

Amount of rainfall received over Odisha is 188.6 mm (44% excess) during 01 Oct.- 31 Dec. 2019. The extended range weather forecast provided for next two weeks (03 - 09 Jan. and 10 - 16 Jan. 2020) on rainfall over Odisha is above normal for weeks-1 and for week-2.

- Because of cold condition, there is a possibility of “EUS” (Epizootic vicerative syndrome) in fishes. Farmers are advised to apply “Citax” @ 400 ml/40 litre of water in one acre pond area.
- Weather is favourable for coriander sowing. Recommended high yielding varieties are CO-1, CO-2, CO-3, Swati, Sadhana, Ram Selection and Udi.

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