

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 30 April 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A cyclonic circulation lies over northeast Madhya Pradesh & neighbourhood and a trough runs from this circulation to West Bengal at lower levels. A trough in westerlies at runs roughly along longitude 88°E to the north of latitude 22°N in middle levels. The trough is very likely to persist over East India during next 4-5 days. Under its influence, isolated to scattered rainfall/thunderstorm activity likely over east & northeast India on 31 April & 1 May, 2021.
- Thereafter, due to strengthening of southerly/southwesterly from Bay of Bengal to east & northeast India at lower levels. Rain/thundershower activity is very likely to increase over east & northeast India from 2 to 6 May with scattered to widespread rain/thundershower over these regions.
- Isolated heavy rainfall also likely over Assam & Meghalaya during 1-3 May; over Nagaland, Manipur, Mizoram & Tripura on 3 & 4 May; and over Odisha and West Bengal & Sikkim from 3 to 5 May, 2021.
- Intense thunderstorm activity accompanied with strong gusty winds of the order of 40-60 kmph also likely during 30th April to 01st May over parts of east and northeast India.
- Under the influence of a cyclonic circulation over south Tamilnadu & neighbourhood at lower levels and likely formation of a northsouth trough/wind discontinuity from tomorrow, light/moderate isolated to fairly widespread rain/thunder is very likely over south Peninsular India (particularly over Kerala, South & coastal Karnataka) during next 5-6 days. Isolated heavy rainfall is also likely over Kerala & Mahe on 30 April, 1 May and 3 & 4 May, over coastal Andhra Pradesh on 3 May and over South Interior Karnataka on 4 May.
- Due to the rain/thunderstorm expected across the country, no significant heat wave is likely over any part of the country during next 5-6 days except isolated heat wave over north Madhya Pradesh & south Uttar Pradesh and Vidarbha today, the 30 April, 2021.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 IST of yesterday to 0830 hrs IST of today): at most places over Lakshadweep; a few places over Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Karnataka and Kerala & Mahe and at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, East Madhya Pradesh, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm/Hailstorm observed (from 0830 hours IST of yesterday to 0830 hrs IST of today): Thunderstorm at many places over Madhya Maharashtra; at a few places over North Interior Karnataka and at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan, Muzaffarabad, Uttarakhand, Haryana, Rajasthan, Uttar Pradesh, East Madhya Pradesh, Saurashtra, Jharkhand, Telangana, Rayalaseema, Karnataka, Chhattisgarh and Kerala & Mahe. Hailstorm at isolated places over Jharkhand, Odisha, Marathwada and North Interior Karnataka.
- Maximum Temperature Departures as on 29-04-2021: Maximum temperatures were markedly above normal (5.1°C or more) at many places over Assam & Meghalaya and Arunachal Pradesh; at isolated places over Nagaland, Manipur, Mizoram & Tripura; appreciably above normal (3.1°C to 5.0°C) at many places over Sub-Himalayan West Bengal & Sikkim, at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, northwest Rajasthan and Gangetic West Bengal; above normal (1.6°C to 3.0°C) at most places over West Uttar Pradesh and Jharkhand; at many places over Himachal Pradesh, Uttarakhand, East Rajasthan and Madhya Pradesh; at a few places over Bihar and at isolated places over East Uttar Pradesh, Vidarbha, rest Gangetic West Bengal, Gujarat State, Coastal Karnataka and Tamilnadu, Puducherry & Karaikal. They were below normal (-1.6°C to -3.0°C) at isolated places over Coastal Andhra Pradesh & Yanam and Andaman & Nicobar Island and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 44.9°C was reported at Jhansi (West Uttar Pradesh).
- Minimum Temperature Departures as on 30-04-2021: Minimum temperatures are markedly above normal (5.1°C or more) at many places over West Rajasthan; above normal (1.6°C to 3.0°C) at many places over West Bengal & Sikkim, Assam & Meghalaya and Gujarat Region; at a few places over East Rajasthan, Arunachal

Pradesh, Nagaland, Manipur, Mizoram & Tripura, Odisha, Marathwada and Tamil Nadu, Puducherry & Karaikal; at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, East Uttar Pradesh, Madhya Pradesh and Saurashtra & Kutch. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Lakshadweep; below normal (-1.6°C to -3.0°C) at most places over Coastal Karnataka; at a few places over North Interior Karnataka; at isolated places over Haryana, Chandigarh & Delhi, Madhya Maharashtra, Konkan & Goa and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Today, the lowest minimum temperature of 17.0°C is reported at Bulsar (Gujarat Region) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 30 April (Day 1): Thunderstorm with lightning, hail & squall (speed reaching 50-60 kmph) very likely at isolated places over Gangetic West Bengal; with lightning, hail & gusty wind (speed reaching 40-50 kmph) at isolated places over Sub-Himalayan West Bengal & Sikkim; with lightning, hail & gusty wind (speed reaching 30-40 kmph) at isolated places over Bihar, Jharkhand, Odisha, Madhya Maharashtra and Marathwada; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over Assam & Meghalaya; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Gujarat State and Kerala & Mahe and with lightning at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm (speed reaching 40-50 kmph) very likely at isolated places over Rajasthan. Heavy rainfall very likely at isolated places over Kerala & Mahe and south Tamil Nadu. Heat wave conditions very likely in isolated pockets over south Uttar Pradesh, Madhya Pradesh and Vidarbha.
- 01 May (Day 2): Thunderstorm with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Gangetic West Bengal; with lightning, hail & gusty wind (speed reaching 30-40 kmph) at isolated places over Vidarbha, Odisha, Marathwada, Madhya Maharashtra and Telangana; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Gujarat State and Kerala & Mahe and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan &

Muzaffarabad, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Chhattisgarh, Arunachal Pradesh, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Karnataka, Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm/Duststorm (speed reaching 40-50 kmph) very likely at isolated places over Rajasthan. Heavy rainfall very likely at isolated places over Assam & Meghalaya and Kerala & Mahe.

- 02 May (Day 3): Thunderstorm with lightning & squall (speed reaching 50-60 kmph) very likely at isolated places over Gangetic West Bengal; with lightning, hail & gusty wind (speed reaching 30-40 kmph) at isolated places over Marathwada and Madhya Maharashtra; with lightning & gusty wind (speed reaching 40-50 kmph) at isolated places over Jharkhand and Odisha; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat State and Kerala & Mahe and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Karnataka and Lakshadweep. Thunderstorm/Duststorm (speed reaching 40-50 kmph) very likely at isolated places over Rajasthan. Heavy rainfall very likely at isolated places over Assam & Meghalaya.
- 03 May (Day 4): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over East Uttar Pradesh, Jharkhand, Gangetic West Bengal and Odisha; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Uttarakhand, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana and Kerala & Mahe and with lightning at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Madhya Maharashtra, Marathwada, Konkan & Goa, Rayalaseema, Karnataka and Lakshadweep. Heavy rainfall likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, West Bengal & Sikkim, Odisha, Coastal Andhra Pradesh & Yanam and Kerala & Mahe.
- 04 May (Day 5): Thunderstorm with lightning & gusty wind (speed reaching 40-50 kmph) likely at isolated places over Gangetic West Bengal; with lightning & gusty wind (speed reaching 30-40 kmph) at isolated places over Uttarakhand, Bihar, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe and with lightning at isolated places over East Uttar Pradesh, East

Madhya Pradesh, Vidarbha, Chhattisgarh, Arunachal Pradesh, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema, Coastal & North Interior Karnataka and Lakshadweep. Heavy rainfall likely at isolated places over Nagaland, Manipur, Mizoram & Tripura, West Bengal & Sikkim, Odisha, South Interior Karnataka and Kerala & Mahe.

- The weather outlook for seven days i.e., 30 Apr to 08 May 2021 forecasted (Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>) rain/thundershower may occur over Some parts of Extreme northern parts of India. (Fig. 2).

Agricultural activities (AICRPAM-CRIDA)

Maharashtra-Vidarbha

Weather condition:

Weekly average means (17 MW) at AICRPAM Akola centre: T max 41.5°C (normal 42.2°C), T min 24.0°C (normal 25.4°C). RH I 29 % (normal 37 %), RH II 09 % (normal 15 %). Evaporation rate 11.9 mm (normal 14.1 mm), Wind speed 2.9 km/hr (normal 8.8 km/hr) and BSH 8.3 hrs (normal 9.7 hrs). Maximum temperature across the week was 0.7°C below normal with a deviation of -2.0 to +0.4°C from normal. Minimum temperature across the week 1.4°C below normal with a deviation of -4.3 to +1.3°C from normal.

Contingency measure:

- The forecast (IMD) indicates thunderstorm accompanied with lightning and heat wave during 29-30 April and thunderstorm with lightning, hailstorm and gusty wind (speed reaching 30-40 kmph) during 01-03 May very likely to occur at isolated places over Vidarbha. Farmers are advised to strictly follow the health advisory set out by the health officials for self, family and farm laborers during the prevailing health anxiety situation due to corona virus. Adequate personal safety measures as advised to be taken for everyone during farm operations and also at market place. In view of forecasted isolated light to medium rains during 29 April-03 May, take into account the soil moisture conditions and local weather condition in planning irrigation in summer, fruit and vegetable crops. Ensure protection of farm animals during thunderstorm/lightning. Summer deep ploughing of harvested fields is advisable to expose the hibernating insects, larvae/pupa to sun and predator birds.
- For control of tikka disease in groundnut, undertake spray of Chlorothalonil 75%WP @ 20g OR Propiconazole 25% EC 10 ml OR Tebuconazole 25.9% EC @ 10 ml per 10 litres of water. Depending upon the severity of disease if needed

second spray can be undertaken after 15 days alternating the fungicide.

- Flowering and seed development stages are critical periods of sunflower when irrigation is a must, take into account the soil moisture conditions and local weather condition in planning irrigation sunflower crop. Avoid sprinkler irrigation at flowering stage of sunflower. Undertake timely spray for control of jassids / thrips in sunflower by using Imidacloprid 17.8 % @ 2.0 ml in 10 liters of water.
- For control of sesamum phyllody, remove and destroy infected plants. To control vector- jassids, undertake spray of quinalphos 25% @ 20 ml per 10 litres of water.
- Pod formation stage is a critical period in green gram when irrigation is a must, take into account the soil moisture conditions and local weather condition in planning irrigation in green gram. Avoid water stagnation/over irrigation. In summer green gram crop to manage the pod borer & white fly by undertake spray of Indoxacarb 15.8% EC @ 6 to 7 ml per 10 litres of water.
- In summer months mulching around tree trunk up to 5-10 cm is advisable with wheat straw, paddy straw or uprooted weeds to moderate soil thermal regime/evaporation and economize irrigation water which helps in reducing fruit crop and retain succulence. Incidence of aphids, thrips, whitefly and spider mites observed in brinjal crop, for the management spray should be undertaken 2 weeks after planting with Dimethoate 30% EC @10 ml or Quinalphos 25% EC @20 ml or thiometon 25% EC @10 ml per 10 liters of water. For management of top shoot and fruit borer spraying should be taken of cypermethrin 25 % EC@ 30 ml in 10 litre of water. Ensure protection of farm animals during thunderstorm/lightning.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
LIC Mercator

30-04-2021/(0830 to 0857) GMT
30-04-2021/(1400 to 1427) IST

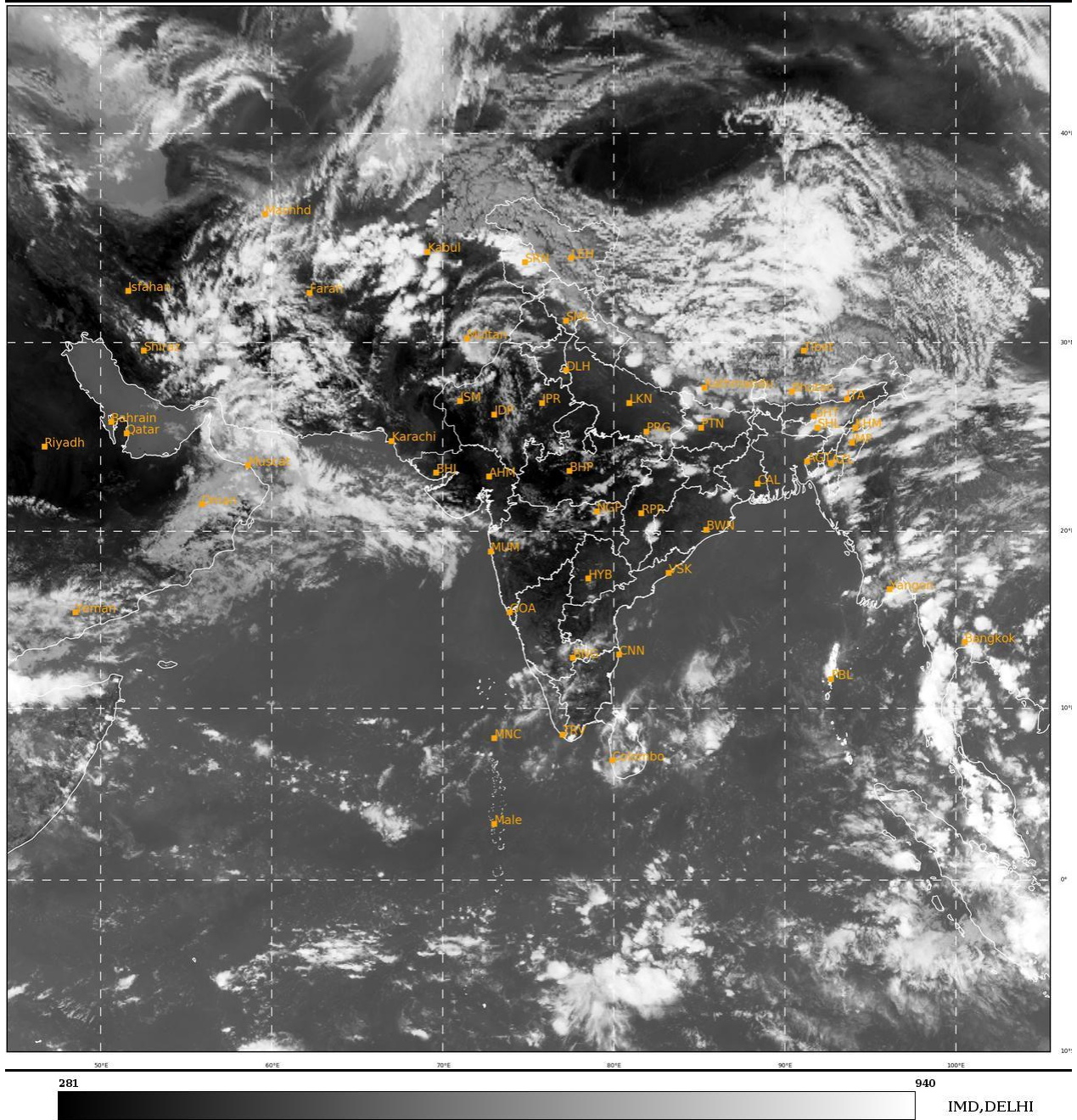


Figure: 1. Latest available satellite picture as on 30 April 2021 at 1427Hrs (IST). (Source: IMD).

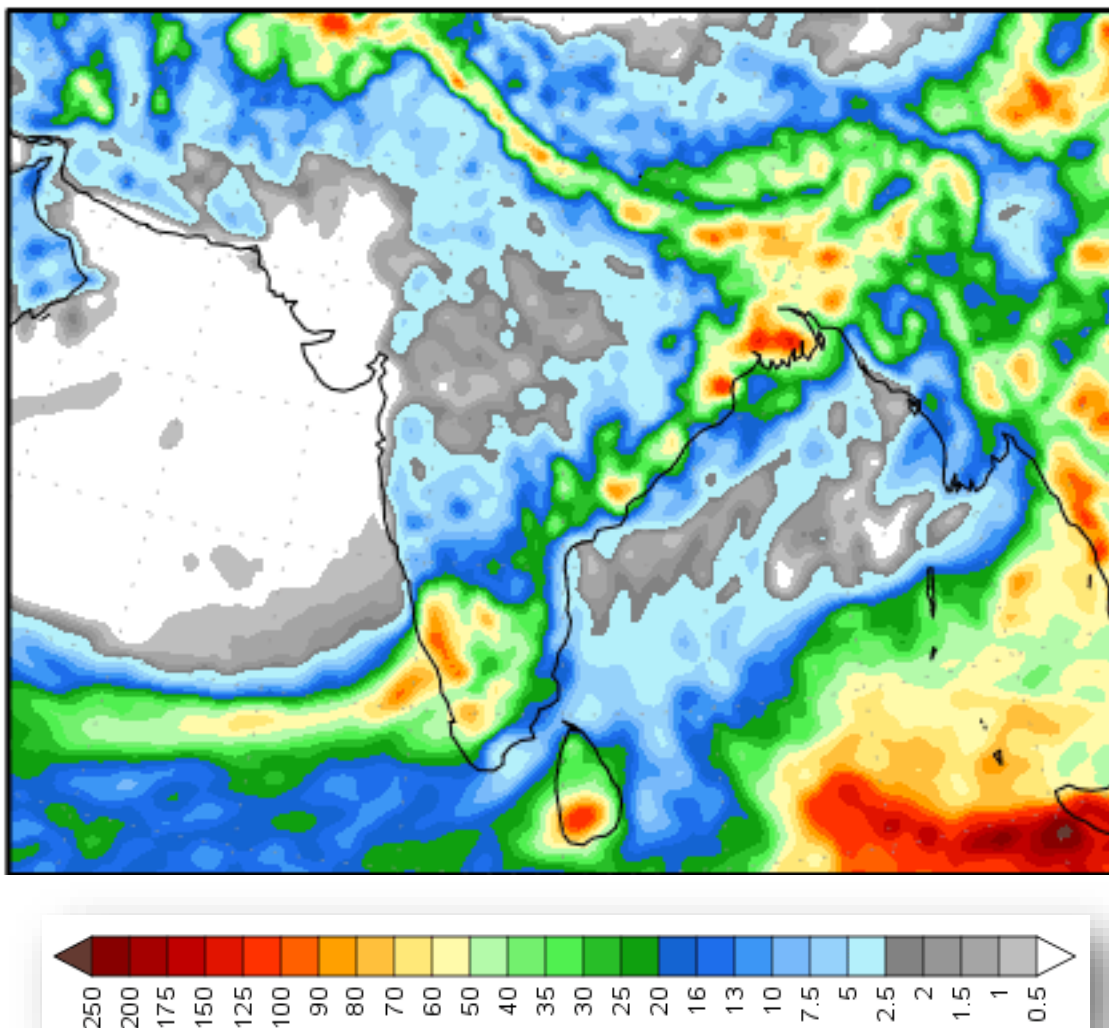


Figure:2. Precipitation forecast for 30 Apr to 08 May 2021 (Source: NOAA NCEP).

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