



**Government of India
Earth System Science Organization
Ministry of Earth Sciences
India Meteorological Department**

Press Release: Dated: 5^h Sept, 2024

Subject: Current Weather Status and Extended range Forecast for next two weeks (5-18 Sept, 2024)

1. Salient Observed Features for week ending 4th Sept, 2024

- **Last week's Extremely Heavy Rainfall** spell continued over Saurashtra & Kutch during 28th - 30th August; Gujarat Region on 28th August which caused further deterioration of flood conditions over the state and impacted the state severely. This was due to very slow movement of last week's **Deep Depression** from Saurashtra & Kachchh which lay 80 km northeast of Naliya (Gujarat) to the areas over Kachchh coast and adjoining areas of Pakistan & Northeast Arabian Sea, during 28-30 August, and its further intensification into a **Cyclonic Storm "ASNA"** (pronounced as As-Na).
- **Another Extremely Heavy to very heavy rainfall** spell also reported over Coastal Andhra Pradesh & Yanam on 1st Sept; Telangana on 1st and 2nd Sept. **Exceptionally Heavy Rainfall** reported over Telangana (Malyal (dist Mahabubabad)40, Mahabubabad (dist Mahabubabad) 37, Kodada (dist Suryapet) 35, Manuguru (dist B. Kothagudem) 32, Kusumanchi (dist Khammam) 32, Chilkur (dist Suryapet) 31, Mattampally (dist Suryapet) 30, Huzur Nagar (dist Suryapet) 30) (all in cm)on 1st Sept. This has caused severe floods over parts of Andhra Pradesh. This was mainly due to formation of another **Low Pressure Area** over central and adjoining north Bay of Bengal on 29th August, its west-northwestwards movement and intensification into a depression during 29th Aug till 2 Sept 2024. It moved from central and adjoining north Bay of Bengal to Vidarbha during 29th Aug till 2 Sept.

- The **Monsoon trough** at mean sea level also remained south of its normal position during the week.
- **Analysis of weekly overall rainfall distribution during the week ending on 4 Sept and monsoon Season’s Rainfall Scenario (01st June – 4th Sept, 2024):** The country as a whole, the weekly cumulative All India Rainfall (for 29th Aug to 04 Sept 2024) in % departure from its long period average (LPA) is +25%. All India Seasonal cumulative rainfall % departure during this year’s monsoon Season’s Rainfall (**01st June to 4th Sept 2024**) is +8%. Details of the rainfall distribution over the four broad geographical regions of India are given in Table 1 and Meteorological sub-division-wise rainfall both for week and season are given in Annexure I & II respectively.

Table 1: Rainfall status (Week and season)

Region	WEEK			SEASON		
	29.08.2024 TO 04.09.2024			01.06.2024 TO 04.09.2024		
	Actual	Normal	% Dep	Actual	Normal	% Dep
East & northeast India	37.0	65.4	-43%	973.9	1122.8	-13%
Northwest India	42.4	33.4	+27%	522.9	505.4	+3%
Central India	70.5	60.8	+16%	972.8	832.3	+17%
South Peninsula	90.1	36.6	+146%	725.6	576.9	+26%
Country as a whole	60.4	48.4	+25%	786.1	727.9	+8%

2. Large scale features

- Currently, Currently, El Nino-Southern Oscillation (ENSO) neutral conditions are observed over the equatorial Pacific. The latest MMCFS forecast indicates higher likelihood of La Niña conditions are likely to develop during end of monsoon season. At present, neutral Indian Ocean Dipole (IOD) conditions are prevailing over the Indian Ocean. Most global climate models suggest that neutral IOD conditions are likely to continue during the remaining period of the monsoon season
- The Madden Julian Oscillation (MJO) index currently situating in phase 4 (Maritime continent) with magnitude less than 1. Most of the models suggest It is likely to propagate eastwards through phase 4 and is likely to enter into phase 5 during the second half of the week with an amplitude greater than 1. The ensemble members of

GEFS indicate large spread and incoherency in their eastward propagation of MJO. Therefore, the MJO index is likely to enhance the convective activity over the Bay of Bengal (BoB) during the week 1 . The MJO is likely to move into phase 6, western pacific with magnitude greater than 1.

3. Forecast for next two week

Forecast for next two week

Weather systems & associated Precipitation during Week 1 (05 to 11 September, 2024) and Week 2 (12 to 18 September, 2024)

Weather systems & associated Precipitation during Week 1 (05 to 11 September, 2024)

Weather Systems:

- ✓ The western end is near its normal position and eastern end is south of its normal position at mean sea level. It is likely to continue so during 1st half of the week.
- ✓ A low pressure area lay over westcentral and adjoining northwest Bay of Bengal off north Andhra Pradesh-south Odisha coasts and associated cyclonic circulation extends upto 7.6 km above mean sea level tilting southwestwards with height. It is likely to move slowly northwards and intensify into Depression over northwest Bay of Bengal adjoining Gangetic West Bengal - north Odisha coasts during next 2-3 days.
- ✓ A cyclonic circulation lies over northwest Uttar Pradesh & adjoining Haryana tilting southwestwards with height upto mid tropospheric level.

Forecast & Warnings (upto 7 days) (Annexure II&III):

❖ **West & Central India:**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over West India & Chhattisgarh; Scattered to Fairly widespread light/moderate rainfall very likely over Central India during the week.
- ✓ Isolated **very heavy rainfall** very likely over Madhya Maharashtra, Gujarat Region and Konkan & Goa on 05th September.
- ✓ Isolated **heavy rainfall** very likely over Chhattisgarh during next 7 days; Madhya Maharashtra during 06th -10th, Konkan & Goa during 05th -10th; Saurashtra & Kutch on 05th & 06th; Gujarat Region during 05th -08th; Madhya Pradesh during 06th-08th; East Madhya Pradesh on 05th; Vidarbha during 08th -11th September.

❖ **South Peninsular India:**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Coastal Karnataka; Scattered to Fairly widespread light/moderate rainfall over Lakshadweep, Rayalaseema, Telangana; isolated to scattered rainfall over Tamil Nadu, Puducherry & Karaikal, Interior Karnataka during the week.
- ✓ Isolated **very heavy rainfall** very likely over Coastal Andhra Pradesh & Yanam on 05th September.
- ✓ Isolated **heavy rainfall** very likely over Kerala & Mahe during 08th -11th; Coastal Andhra Pradesh & Yanam during 06th -08th; Telangana during 05th -08th; Coastal Karnataka during 05th-09thSeptember.

❖ **East & Northeast India**

- ✓ Fairly widespread to widespread light/moderate rainfall very likely over Northeast India, Andaman & Nicobar Islands, Odisha, Sub-Himalayan West Bengal & Sikkim; Scattered to Fairly widespread light/moderate rainfall very likely over Gangetic West Bengal, Bihar & Jharkhand during the week.
- ✓ Isolated **very heavy rainfall** very likely over Arunachal Pradesh on 05th; Nagaland, Manipur, Mizoram & Tripura on 11th; Assam & Meghalaya on 07th; Odisha on 07th& 08thSeptember.
- ✓ Isolated **heavy rainfall** very likely over Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura during next 7 days; Sub-Himalayan West Bengal & Sikkim on 05th; Bihar on 05th & 06th; Jharkhand during 07th -09th; Odisha during 05th -09th; Arunachal Pradesh on 05th, 06th, 10th & 11thSeptember .

❖ **Northwest India**

- ✓ Scattered to Fairly widespread light/moderate rainfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Uttar Pradesh, East Rajasthan; isolated to scattered rainfall over Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi & West Rajasthan during the week.
- ✓ Isolated **very heavy rainfall** very likely over Uttarakhand on 05th& 06th; East Rajasthan during 05th -07thSeptember.
- ✓ Isolated **heavy rainfall** very likely over Uttarakhand during 05th -07th, West Uttar Pradesh on 05th; East Uttar Pradesh on 05th& 06th; West Rajasthan during 05th -07th; East Rajasthan during 05th -09thSeptember.

❖ **Overall, rainfall is likely to be normal to above normal over most parts of central, east & northeast India; below normal over most parts of northwest and south Peninsular India during the week.**

Rainfall for week 1 (05th to 11th September, 2024):

- ❖ Monsoon trough is likely to be active and near or south its normal position due to low pressure area over east & adjoining central India mainly during the 1st half of the week.
- ❖ Off-shore trough along the west coast is likely to prevail during many days of the week.
- ❖ Due to above meteorological features, fairly widespread to widespread rainfall with heavy to very heavy falls are likely over most parts of northwest & central India (specially over Haryana, Uttarakhand, Uttar Pradesh and Madhya Pradesh), with isolated heavy falls over most parts of east & northeast India during most days of the week.
- ❖ Overall, rainfall is likely to be normal to above normal over northwest & central India; near normal over east & northeast India and below normal over south Peninsular India.

Impact due to

- ❖ Very heavy rainfall at isolated over Coastal Andhra Pradesh & Yanam, Arunachal Pradesh, Konkan & Goa, Madhya Maharashtra & Gujarat Region on 05th; Odisha on 07th & 08th ; Assam & Meghalaya on 07th ; Nagaland, Manipur, Mizoram & Tripura on 11th ; Uttarakhand on 05th & 06th ; East Rajasthan during 05th -07th September.
- ❖ Low to Moderate flash flood risk likely over few watersheds & neighbourhoods of Coastal Andhra Pradesh & Yanam, Telangana, Chhattisgarh & Uttarakhand on 05th & 06th September.

Impact Expected

- ✓ Low to Moderate flash flood risk likely over some of these areas
- ✓ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ✓ Occasional reduction in visibility due to heavy rainfall.
- ✓ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ✓ Minor damage to kutchha roads.
- ✓ Possibilities of damage to vulnerable structure.
- ✓ Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- ✓ Damage to horticulture and standing crops in some areas due to inundation.

- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

Action Suggested

- ✓ Judicious regulation of offshore/onshore Operations
- ✓ Judicious regulation of surface transports including railways and roadways.
- ✓ Check for traffic congestion on your route before leaving for your destination.
- ✓ Follow any traffic advisories that are issued in this regard.
- ✓ Avoid going to areas that face the water logging problems often.
- ✓ Avoid staying in vulnerable structure.

Agromet advisories for Heavy Rainfall likely over various parts of the country

- ✓ Drain out excess water from field crops and horticultural crops in Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Uttarakhand, East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Gujrat region, Odisha, Jharkhand, Bihar, Coastal Andhra Pradesh and Telangana.
- ✓ Make provision for draining out excess water from standing crop fields and fruit orchards to avoid water stagnation in West Bengal, Coastal and North Interior Karnataka, Konkan & Goa, Madhya Maharashtra, Saurashtra & Kutch.
- ✓ Postpone sowing of black gram and green gram in Assam.
- ✓ Due to continuous heavy rain transplanted rice and vegetables are submerged in low lying areas, recovery of young rice seedlings is unlikely, farmers are advised to collect short duration rice varieties after cessation of rain otherwise can wait a bit and prepare in advance for winter vegetables in Tripura.
- ✓ Drain out excess water from kharif rice, groundnut, sesame, soyabean, ginger, turmeric and vegetables to prevent the water logging in Mizoram.
- ✓ Provide mechanical support to horticultural crops & staking to vegetables

Week 2 (12th -18th Sept 2024): Impact likely and suggested action due to likely heavy rainfall

Impact due to

- ❖ Heavy to very heavy falls are likely over most parts of northwest & central India and north Peninsular India (specially over Gujarat and Ghats areas of Maharashtra, where isolated extremely heavy rainfall may also occur on some days) with isolated heavy falls over remaining parts of coastal states (Kerala, Coastal Karnataka, Konkan & Goa, Ghat areas of Karnataka & Maharashtra and Gujarat), east & northeast India and rest parts of south Peninsular India during most days of the week.

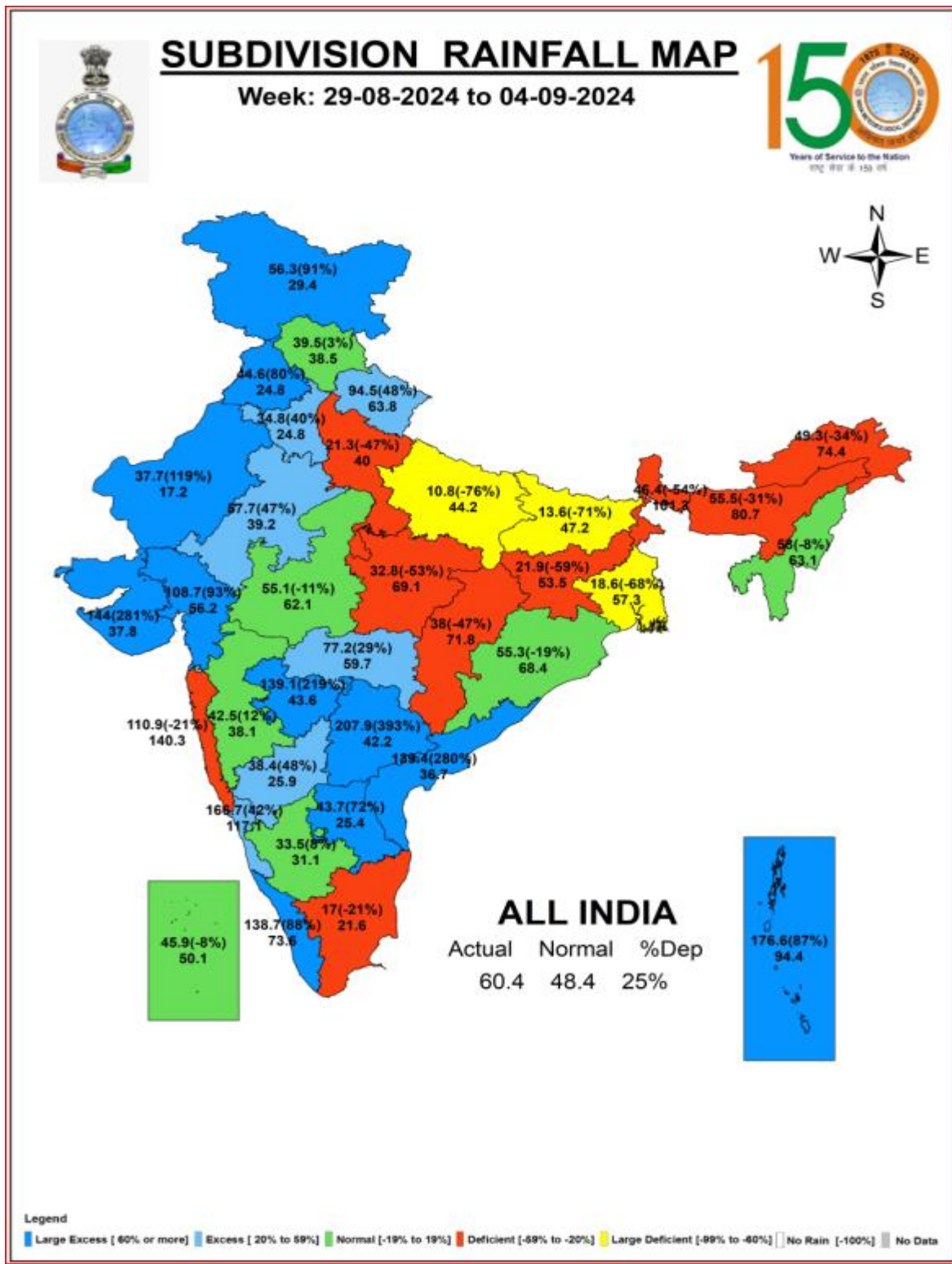
Impact Expected

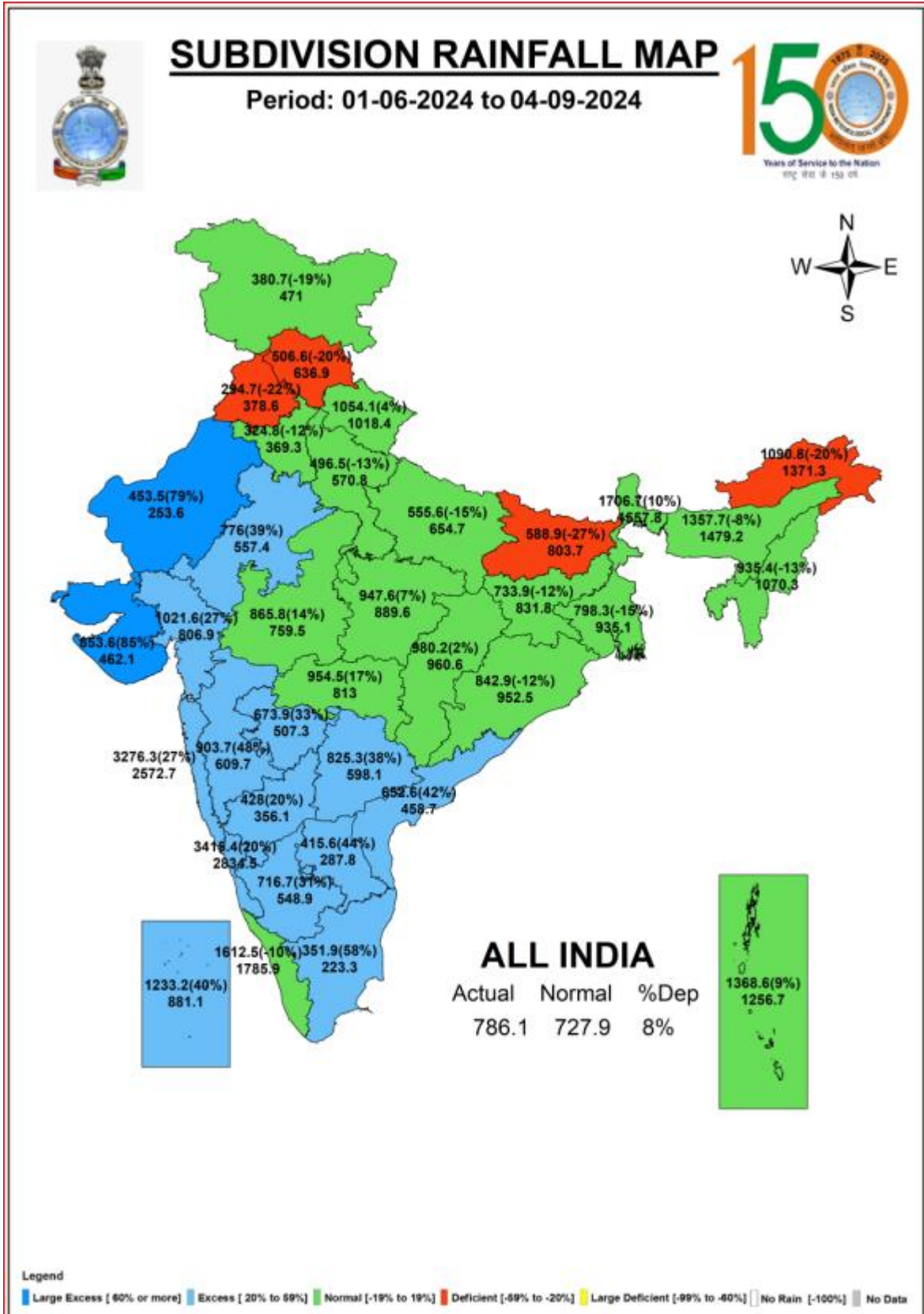
- ✓ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ✓ Occasional reduction in visibility due to heavy rainfall.
- ✓ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ✓ Minor damage to kutchha roads.
- ✓ Possibilities of damage to vulnerable structure.
- ✓ Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- ✓ Damage to horticulture and standing crops in some areas due to inundation.
- ✓ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

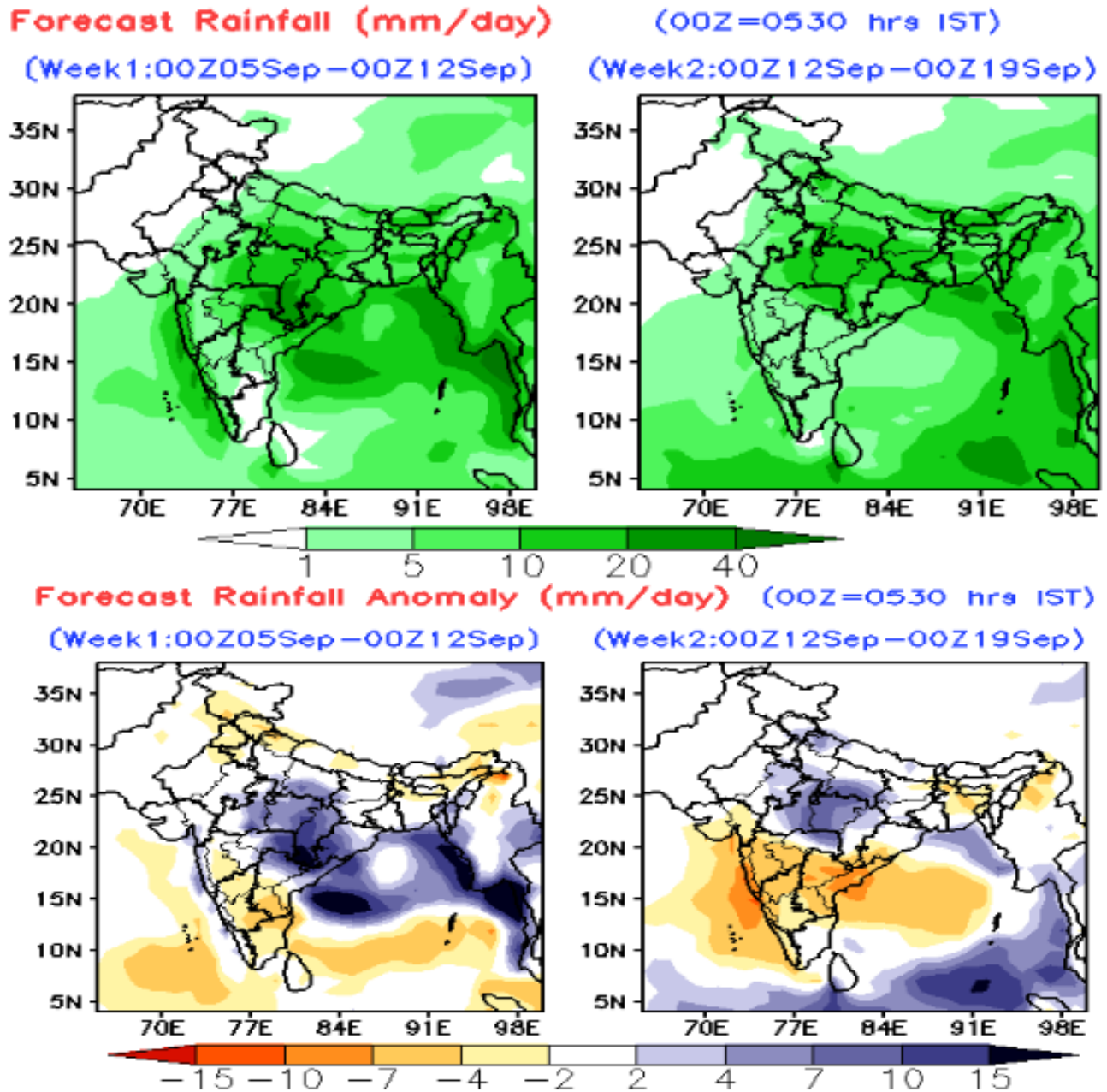
Action Suggested

- ✓ Check for traffic congestion on your route before leaving for your destination.
- ✓ Follow any traffic advisories that are issued in this regard.
- ✓ Avoid going to areas that face the water logging problems often.
- ✓ Avoid staying in vulnerable structure.

Legends: Heavy Rain: 64.5 to 115.5 mm **Very Heavy Rain:** 115.6 to 204.4 mm,
Extremely Heavy Rain> 204.4 mm







Extended range forecast of weekly distribution of rainfall in mm per day (top panel) and anomalies(lower panesl) from IMD MME