



WEEKLY WEATHER REPORT साप्ताहिक मौसम विवरण

for the week ending on 13th June 2018 (23rd Jyaishta 1940 Saka)

CHIEF FEATURES: 1). The first Depression of the current monsoon season formed over northeast Bay of Bengal and adjoining Bangla Desh coast on 10th June.

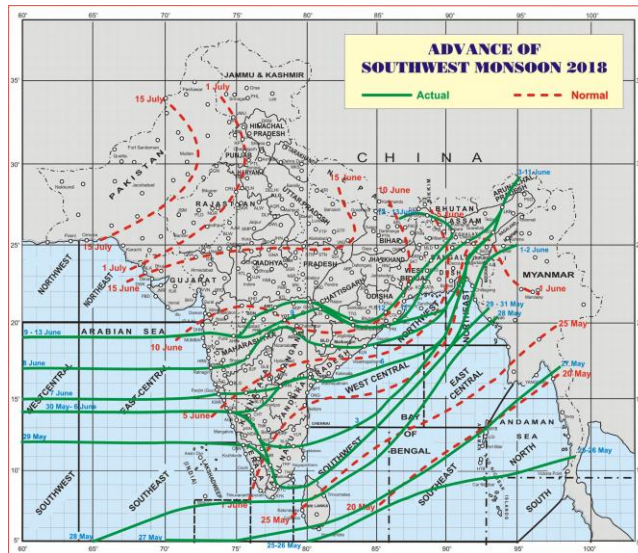


Fig (a) shows the isochrones of advance of southwest monsoon

During the week, monsoon further advanced over some more parts of peninsular India, Central India and NE region. Position of the NLM on different dates during the week are given below:

7th June- Lat. 15°N / Long. 60°E, Lat. 15°N / Long. 70°E, Mormugao, Gadag, Kurnool, Narsapur, Machlipatnam, Lat. 17°N / Long. 85°E, Lat. 19°N / Long. 90°E, Agartala, Lumding, north Lakhimpur and Lat. 29°N / Long. 95°E.

8th June- Lat. 17°N / Long. 60°E, Lat. 17°N / Long. 70°E, Ratnagiri, Solapur, Nanded, Adilabad, Bailadila, Malkangiri, Kalingapatnam, Lat. 21°N / Long. 90°E, Agartala, Lumding, north Lakhimpur and Lat. 29°N / Long. 95°E,

9th-10th June- Lat. 19°N / Long. 60°E, Lat. 19°N / Long. 70°E, Thane (including Mumbai), Ahmednagar, Parbhani, Yeotmal, Brahmapuri, Rajnandgaon, Bhavanipatna, Puri, Lat. 21°N / Long. 90°E, Agartala, Lumding, North Lakhimpur and Lat. 29°N / Long. 95°E.

11th June- Lat. 19°N / Long. 60°E, Lat. 19°N / Long. 70°E, Thane (including Mumbai), Ahmednagar, Buldhana, Amraoti, Gondia, Bhavanipatna, Puri, Kolkata, Lat. 24°N / Long. 90°E, Sohra, North Lakhimpur and Lat. 29°N / Long. 95°E

12th-13th June- Lat. 19°N / Long. 60°E, Lat. 19°N / Long. 70°E, Thane (including Mumbai), Ahmednagar, Buldhana, Amraoti, Gondia, Titlagarh, Cuttack, Midnapore, Lat. 24°N / Long. 89°E, Goalpara, Baghdogra and Lat. 27°N / Long. 87°E.

Monsoon Activity:

10th June- **Vigorous** over Konkan & Goa and south interior Karnataka. and **active** over Telangana, coastal and north interior Karnataka and Kerala.

12th June- **Vigorous** over Nagaland-Manipur-Mizoram-Tripura **active** over West Bengal & Sikkim, Vidarbha, Chhattisgarh, Telangana, south interior Karnataka and Kerala.

SEMI-PERMANENT FEATURES:

- Heat Trough (HT):** During the week, it remained south of its normal position in first half of the week and north of its normal position in second half of the week.
- Heat Low (HL):** During the week, the lowest isobaric value varied between 990 & 998 hPa.
- Tibetan Anticyclone (TA):** It was seen southeast of its normal position.
- Tropical Easterly Jet (TEJ):** The highest wind speed of 90 kts was recorded over Thiruvananthapuram at 117 hpa on 13th June.
- Mascarene High (MH):** During the week, it was to the east of its normal position, except on 13th when it lay slightly west of normal. Its intensity varied between 1020 and 1032 hPa.
- Lower Level Jet (LLJ):** During the week, the wind speeds observed ranged between 20-25 kts.

MAXIMUM TEMPERATURES:

The highest maximum temperature recorded over the plains was 47.0°C at Churu (west Rajasthan) on 7th.

Weather events: A Squall reported at New Delhi (SFD) at 17: 15 to 17: 17 hrs IST on 09. 06. 2018 from Westerly direction with maximum wind speed 96.3 kmph on 10th.

WEATHER AND ASSOCIATED SYNOPTIC FEATURES:

- Last week's cyclonic circulation over northern parts of central Bay of Bengal and adjoining north Bay of Bengal lay over westcentral and adjoining northwest Bay of Bengal and extended between 2.1 & 4.5 kms a.s.l. on 7th, north Bay of Bengal & neighbourhood and extended between 1.5 & 7.6 kms a.s.l. on 8th, Under the influence of the cyclonic circulation over north Bay of Bengal & neighbourhood, a low Pressure area has formed over northeast Bay of Bengal & adjoining Bangla Desh coast on 9th, associated cyclonic circulation extended upto mid tropospheric levels on 9th, lay as a well marked low pressure area over the same region on 10th, associated cyclonic circulation extended upto 7.6 Kms a.s.l. on 10th, concentrated into a **Depression** and lay centered at 1730 hrs IST of the 10th over the same region near Lat. 22.5°N / Long. 91.5°E, about 55 km south of FENI (Bangladesh) and 55 km south-southeast of Maijdicocart (Bangladesh) on 11th. It crossed Bangla Desh coast close to south of FENI around 2030 hrs IST of the 10th and lay as a well marked low pressure area over Tripura and neighbourhood on 11th. Associated cyclonic circulation extended upto 7.6 Kms a.s.l. on 11th, weakened into low pressure area over the same region at 1430 hrs IST of 11th, It became less marked at 0830 hrs IST of 12th, However, the associated cyclonic circulation extending upto 7.6 kms a.s.l. lay over south Assam & Meghalaya and neighbourhood on 12th-13th, and extended upto 4.5 kms a.s.l. on 13th.
- Last week's east - west trough extending upto 1.5 kms a.s.l. from Punjab to north Chhattisgarh ran from northwest Rajasthan to Bihar across northeast Rajasthan, north Madhya Pradesh and southeast Uttar Pradesh on 7th, from northwest Rajasthan to Bangla Desh across south Haryana, south Uttar Pradesh, Jharkhand and Gangetic West Bengal and extended upto 1.5 kms a. s. l. on 8th, from Punjab to center of low pressure area over northeast Bay of Bengal & adjoining Bangla Desh coast across south Haryana, northeast Rajasthan, south Uttar Pradesh, Jharkhand and Gangetic West Bengal on 9th, Punjab to centre of well marked low pressure area over northeast Bay of Bengal & adjoining Bangla Desh coast across Haryana, Uttar Pradesh, Jharkhand and Gangetic West Bengal on 10th, became less marked on 11th.
- Last week's cyclonic circulation over northwest Madhya Pradesh and neighbourhood persisted at 1.5 kms a.s.l. and embedded in the Punjab to north Chhattisgarh trough on 7th, over north Madhya Pradesh and adjoining south Uttar Pradesh and extended upto 1.5 kms a.s.l. embedded in the trough on 8th, merged with the trough over NW Rajasthan to Bangla Desh on 9th.
- A cyclonic circulation at 3.1 kms a.s.l. lay over northwest Uttar Pradesh and neighbourhood on 7th, became less marked on 8th.
- A cyclonic circulation lay over Assam and neighbourhood and extended between 1.5 & 3.1 kms a.s.l. on 7th, became less marked on 8th.
- Last week's cyclonic circulation over south Madhya Maharashtra and adjoining south Konkan lay over Marathwada and neighbourhood at 3.1 kms a.s.l. on 7th, became less marked on 8th.
- Last week's cyclonic circulation over east Uttar Pradesh and neighbourhood persisted and extended between 3.1 & 4.5 kms a.s.l. on 7th, became less marked on 8th.
- Last week's off shore trough at mean sea level from south Maharashtra coast to north Kerala coast persisted on 7th, ran from south Maharashtra coast to Kerala coast on 8th, from north Maharashtra coast to Kerala coast on 9th-10th, Goa coast to Kerala coast on 11th, coastal Karnataka - Kerala coasts on 12th, became less marked on 13th.
- Last week's east-west shear zone ran roughly along Lat. 15°N across south peninsular India between 3.1 & 7.6 kms a.s.l. on 7th-8th, and ran between 5.8 & 7.6 kms a.s.l. on 8th, became less marked on 9th.
- Last week's cyclonic circulations (1) over Punjab and neighbourhood and (2) over Jharkhand and neighbourhood have become less marked on 7th.
- Last week's trough in westerlies roughly along Long. 77°E became less marked on 7th.
- A cyclonic circulation lay over Haryana and neighbourhood at 1.5 kms a.s.l. on 8th-10th, became less marked on 11th.
- A cyclonic circulation lay over Jammu & Kashmir and adjoining Himachal Pradesh at 3.1 kms a.s.l. on 8th, over Himachal Pradesh and neighbourhood on 9th- 10th, became less marked on 11th.
- A cyclonic circulation lay over east central Arabian Sea off Karnataka coast and extended between 3.1 & 7.6 kms a.s.l. on 8th, became less marked on 9th.
- A cyclonic circulation extending upto 1.5 Kms. s. l. lay over central Uttar Pradesh and neighbourhood on 10th, lay over Bihar and neighbourhood and extended between 1.5 & 3.1 kms a.s.l. on 11th, became less marked on 12th.
- A cyclonic circulation at 5.8 kms a.s.l. lay over east Madhya Pradesh and neighbourhood on 10th, became less marked on 11th.
- A western disturbance as an upper air cyclonic circulation at 3.1 kms a.s.l. lay over north Pakistan and adjoining Jammu & Kashmir on 11th lay over Jammu & Kashmir and neighbourhood and extended between 5.8 & 7.6 kms a.s.l. on 12th, moved away northeastwards on 13th.
- A trough at 7.6 kms a.s.l. ran from the cyclonic circulation over south Assam & Meghalaya to north coastal Andhra Pradesh across Bangla Desh, Gangetic West Bengal and Odisha on 12th, became less marked on 13th.
- A cyclonic circulation lay over north Haryana and neighbourhood at 1.5 kms a.s.l. on 12th, became less marked on 13th.
- A cyclonic circulation extending upto 0.9 km a.s.l. lay over Sub-Himalayan West Bengal & Sikkim and neighbourhood on 13th.
- A trough at 0.9 km a.s.l. ran from the Sub-Himalayan West Bengal & Sikkim cyclonic circulation to Nagaland across Assam & Meghalaya on 13th.
- A trough in westerlies extending between 3.6 & 5.8 kms a.s.l. ran from south Odisha to north coastal Karnataka across south Chhattisgarh, Telangana and north interior Karnataka on 13th.

Details of the rainfall received under the influence of these synoptic systems are given in the subsequent Figures and Tables.

Media Reports: 1) Due to thunderstorm accompanied by rainfall 16 people were killed in U. P. (**Hindustan Times** 9th June). 2) 26 people were killed in dust storms and lightning that struck parts of Uttar Pradesh on Friday, while 2 persons died on Saturday in rain-related incidents in Maharashtra. (**Hindustan Times** 10th June). 4) A person was struck dead by lightning on Saturday in Ramavaram village of Jaggampeta mandal, Andhra Pradesh. (The Hindu 10th June). 5) 9 people were killed in rain related incidents in parts of the state in Kerala. (**Hindustan Times** 11th June).

(Dr. A. K. Srivastava)

13th June 2018
Pune - 5

Head, Climate Monitoring & Analysis Group,
Climate Research Division, Pune

Rainfall % Departure For the week ending

13th June 2018

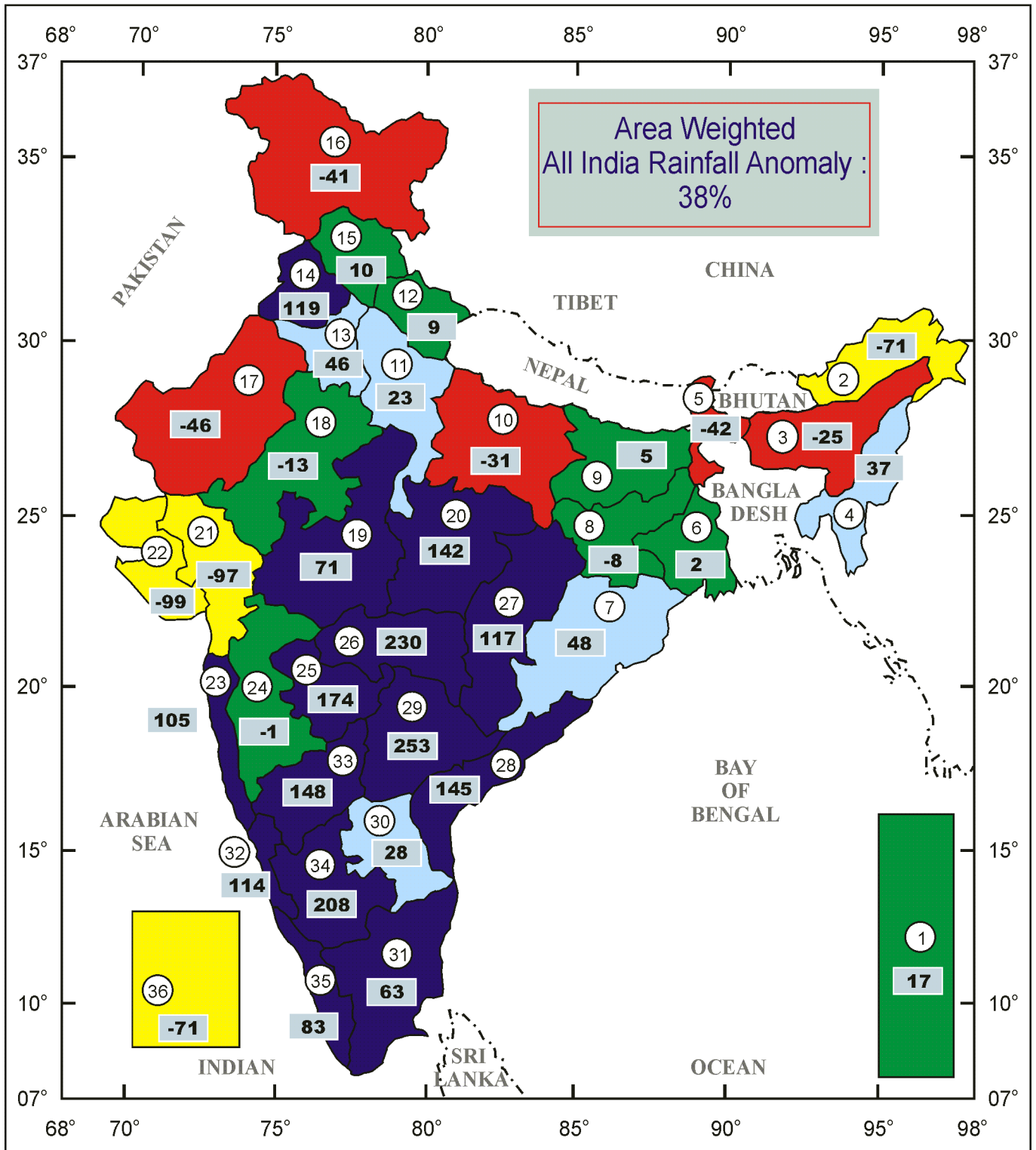


Figure in ○ Indicates sub-division number.

Figure in □ indicates rainfall anomaly.



Rainfall % Departure For the period

1st June to 13th June 2018

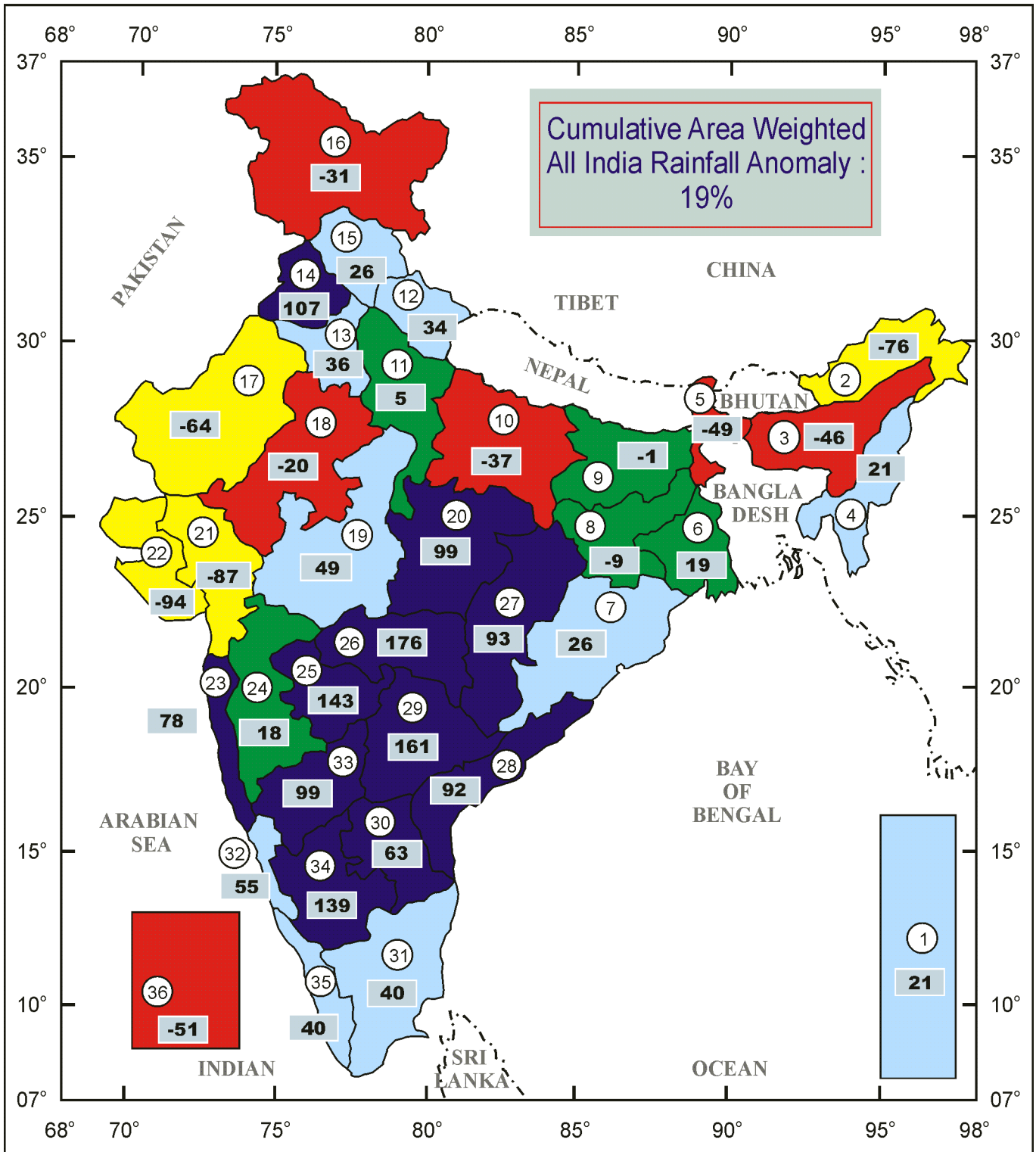


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