

The Monsoon in the News, 2019-2026: Seasonality, Geography and Tone of Global Monsoon Coverage, and How It Compares with Research

Fliar BI · Prism Research Layer · Working paper, October 2026 · Dataset and code: github.com/fliarbi/prism-news-api · Licence CC BY-NC 4.0

Abstract

We measure how the monsoon was covered in a global news index from January 2019 to July 2026, using 74,107 de-duplicated monsoon articles, and set that coverage beside 10,352 research papers (2015-2025) on the monsoon. Six results stand out:

1. **Seasonality.** On average 72.11% of each year's monsoon coverage appears between June and September, and 45.64% in June and July alone.
2. **Attention, not rainfall.** The monsoon took a 39.1% smaller share of news in 2020 than in 2019. Its share peaked in July 2024, at 19.99 articles per 10,000.
3. **Geography.** India holds 79.53% of located monsoon news, 6.02 times its share of all news. Nepal (11.21) is the most over-represented country, ahead of India, the Philippines (5), Pakistan (4.76) and Bangladesh (4.12). Within India, Himachal Pradesh (5.34), Kerala (2.42) and Goa (1.96) lead; within the United States, Arizona (38.35) and New Mexico (16.03), the core of the North American monsoon.
4. **Tone and urgency.** 54.2% of monsoon articles are negative in tone (all news: 33.6%), and 67.6% are rated critical priority (all news: 42.6%). Yet 37.2% are positive, because a good monsoon is good news.
5. **Measurement.** 13.6% of raw matches for monsoon vocabulary were removed as stories about the Monsoon Session of India's legislatures or a retailer of the same name. Counting them would inflate coverage with politics.
6. **Research.** Papers with monsoon in the title held a flat share of the literature, 1.37 per 10,000 papers in 2015 and 1.44 in 2025. Patenting on the monsoon is negligible (58 families, 2015-2024).

Findings stated for citation

- **F1.** Between 2019 and 2025, an average of 72.11% of each year's monsoon news appeared in June-September, and 45.64% in June and July.
- **F2.** The monsoon took a 39.1% smaller share of news in 2020 than in 2019 (3.23 vs 5.3 per 10,000 articles).
- **F3.** July 2024 was the peak month for monsoon news, at 19.99 articles per 10,000.
- **F4.** India's share of located monsoon news (79.53%) was 6.02 times its share of all news. The United States' (5.2%) was 0.11 times.
- **F5.** Nepal (11.21) was the most over-represented country in monsoon news, ahead of India (6.02), the Philippines (5), Pakistan (4.76) and Bangladesh (4.12).
- **F6.** 54.2% of monsoon articles were negative in tone, 1.61 times the all-news share.

- **F7.** 67.6% of monsoon articles were rated critical priority, 1.59 times the all-news share.
- **F8.** El Niño and La Niña effects appeared in 4.8% of themed monsoon articles, 99.13 times their frequency in all news.
- **F9.** 13.6% of raw monsoon-vocabulary matches were removed by patterns for legislative sessions and a retailer.
- **F10.** Monsoon papers changed 1.05-fold as a share of all papers between 2015 and 2025.
- **F11.** Agricultural weather impacts appeared in 3.67% of themed monsoon articles, 82.79 times their frequency in all news.
- **F12.** Within India, Himachal Pradesh (5.34), Kerala (2.42) and Goa (1.96) had the most over-represented monsoon coverage.
- **F13.** Within the United States, Arizona (38.35) and New Mexico (16.03) had the most over-represented monsoon coverage among states with at least 50 articles.
- **F14.** Monsoon coverage reached 148.11 articles per 10,000 of Pakistan's news in 2022, against 17.74 in 2021.
- **F15.** Relative to each country's own news, monsoon coverage was most disproportionately negative in the Philippines (67.4% against 39.4%) and the United States (49.9% against 33.1%).

1. Introduction

The monsoon is the seasonal reversal of winds that brings most of the year's rain to South Asia, and large parts of Southeast Asia, Africa, Australia and the Americas. In India it sets the farming calendar, moves food prices and fills reservoirs. Its onset, its breaks and its failures are national news. Its floods and landslides are often the first public record of a disaster.

Yet monsoon coverage is rarely measured as data. Rain-gauge networks record the monsoon. Bibliometric studies record research on it. Few sources record attention, meaning how much of the news the monsoon takes, and when, where and in what tone.

This paper and its dataset do that. They combine three records for one topic: a global news index, research papers and patents. Each comparison uses a denominator, so that growth in the index or in publishing is not mistaken for growth in interest. The companion dataset publishes an article-level sample (18,327 rows) and full coverage tables, so every figure here can be re-derived. The [Prism News API](#) serves the full history.

2. Data and methods

News. The Prism news index holds articles from outlets worldwide; non-English articles are indexed in English translation. Each article carries its opening text (the first few sentences), a primary location, a graded tone label, an editorial priority rating (1–9), themes, keywords and named organisations. We count unique article identifiers; repeated rows for the same article are removed. When this release was built, 92.88% of the index was readable, so all counts are lower bounds.

Matching. An article is about the monsoon when its opening text contains *monsoon*, *monsoons* or *monsoonal* as whole words. Hyphenated forms such as *pre-monsoon* and *post-monsoon* match too. Two families of matches are excluded:

- the Monsoon Session of India's Parliament and of state assemblies, which takes its name from the season but is political news;
- a British fashion retailer that shares the name.

Together these removed 11,675 of 85,782 raw matches (13.6%). One reviewer read 40 randomly drawn matched openings. 37 used monsoon in its meteorological or seasonal sense (precision 92.5%), and in 23 (57.5%) the monsoon or its rains were the main subject. The false positives were a film title and two openings in which the seasonal sense could not be confirmed from the visible text; those were counted as errors. Many relevant matches are not weather reports. They are recipes, health advice, travel and market stories that use the season as their frame.

Measures. Coverage over time is expressed per 10,000 articles in the index that month or year, because the index grew from 11,807,177 articles in 2019 to 26,990,006 in 2025. Seasonality uses each year's within-year month shares, averaged over the complete years 2019–2025. Geography, tone, priority and themes use January 2023 – July 2026. Geography is expressed as lift: a country's share of monsoon articles divided by its share of all located articles. State lift uses the same rule within India and the United States. Place tags derived from ordinary words (714 words such as "Congress", "Earth", "Winter" and "Cloud") were treated as unlocated in every location field, which removed 15.3% of city-tagged articles.

Research and patents. Research papers are de-duplicated articles and reviews (2000–2025) with a monsoon term in the title. Repository deposits are excluded. Patent families (2005–2024) use the same title rule and are counted once per filing office.

3. Results

3.1 How much and when

The index holds 74,107 monsoon articles from January 2019 to July 2026. Raw counts rose from 6,260 in 2019 to 15,817 in 2025, but the share of all news rose far less: 5.3 per 10,000 in 2019, 6.13 in 2024 and 5.86 in 2025 (Table 1), so the 2025 share is 1.11 times the 2019 share. The low point was 2020, at 3.23 per 10,000. That is 39.1% below 2019. The whole index grew by 37% in the same year, and this paper does not test what displaced monsoon coverage. The 2024 share was 1.9 times the 2020 share. The highest monthly share was July 2024, at 19.99 per 10,000, followed by July 2023 (18.12) and June 2025 (17.52) (Figure 1).

Year	Monsoon articles	All articles in index	Per 10,000
2019	6,260	11,807,177	5.3
2020	5,236	16,230,014	3.23
2021	7,542	17,281,220	4.36
2022	10,253	19,115,515	5.36
2023	10,632	20,484,506	5.19
2024	14,289	23,311,896	6.13
2025	15,817	26,990,006	5.86

Table 1. Monsoon articles per year and as a share of the index. 2026 (January–July) is partial and omitted.

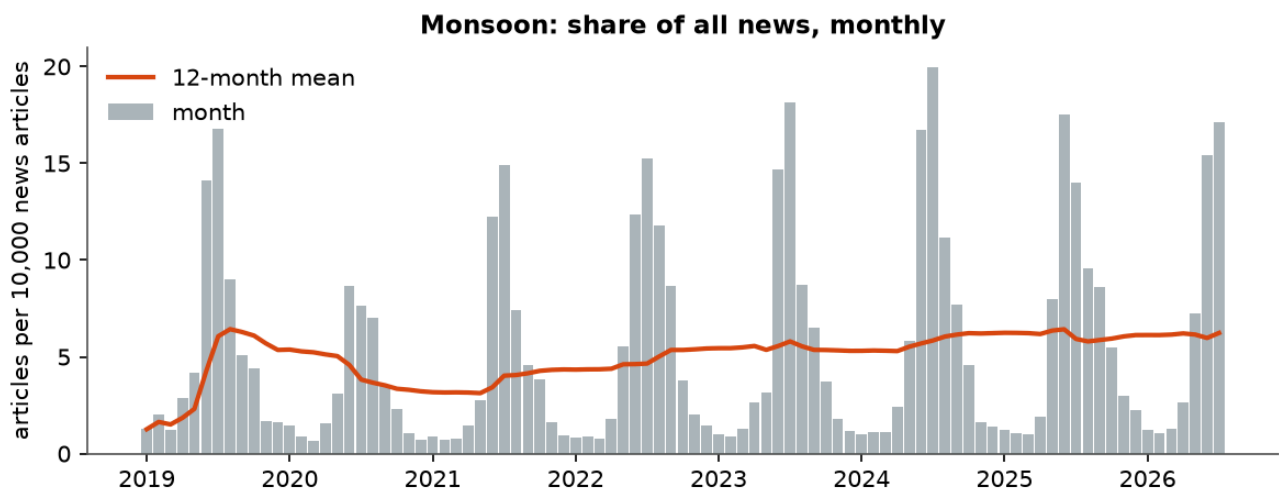


Figure 1. Monsoon coverage as articles per 10,000 news articles, monthly, January 2019 – July 2026. Bars are months; the line is the 12-month mean.

Coverage is sharply seasonal (Figure 2). June (21.02%), July (24.62%), August (15.59%) and September (10.88%) together hold 72.11% of a typical year's monsoon articles. Coverage starts to build in May (7.57%), when onset forecasts appear, and falls away in October (6.54%) as the southwest monsoon withdraws. March is the quietest month (1.66%). A small autumn shoulder is consistent with the northeast monsoon over south-eastern India and Sri Lanka.

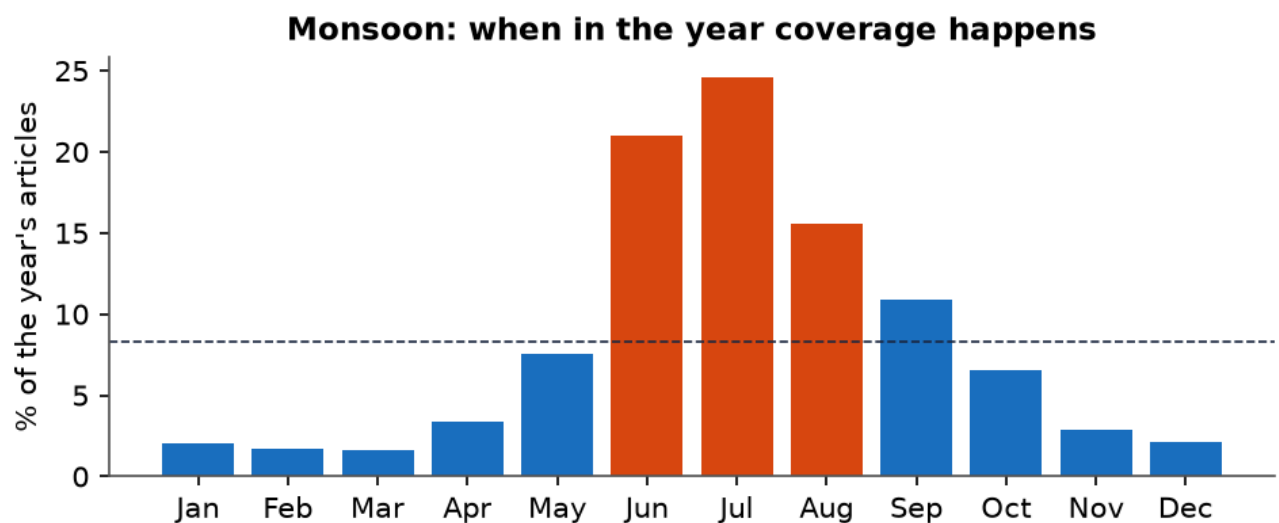


Figure 2. Share of each year's monsoon articles published in each month, averaged over 2019–2025. The dashed line shows an even spread.

3.2 Where

Between January 2023 and July 2026, 25,765 monsoon articles carried a primary location. India holds 79.53% of them, with a lift of 6.02. The United States holds 5.2% but with a lift of 0.11: the monsoon takes a far smaller share of American news than of news overall. Every country with a lift above 1 is in South or Southeast Asia among the 14 listed (Table 2, Figure 3).

Country	Located monsoon articles	Share %	Lift vs all news
India	20,491	79.53	6.02
United States	1,341	5.2	0.11
Pakistan	556	2.16	4.76
Nepal	521	2.02	11.21
Philippines	406	1.58	5.0
Bangladesh	275	1.07	4.12
Indonesia	183	0.71	2.55
China	170	0.66	0.25
Sri Lanka	147	0.57	3.6
United Kingdom	142	0.55	0.09
Malaysia	135	0.52	2.91
Australia	115	0.45	0.21
South Korea	111	0.43	0.72
Singapore	109	0.42	0.47

Table 2. The 14 countries with at least 100 located monsoon articles, January 2023 – July 2026, with lift against all located news.

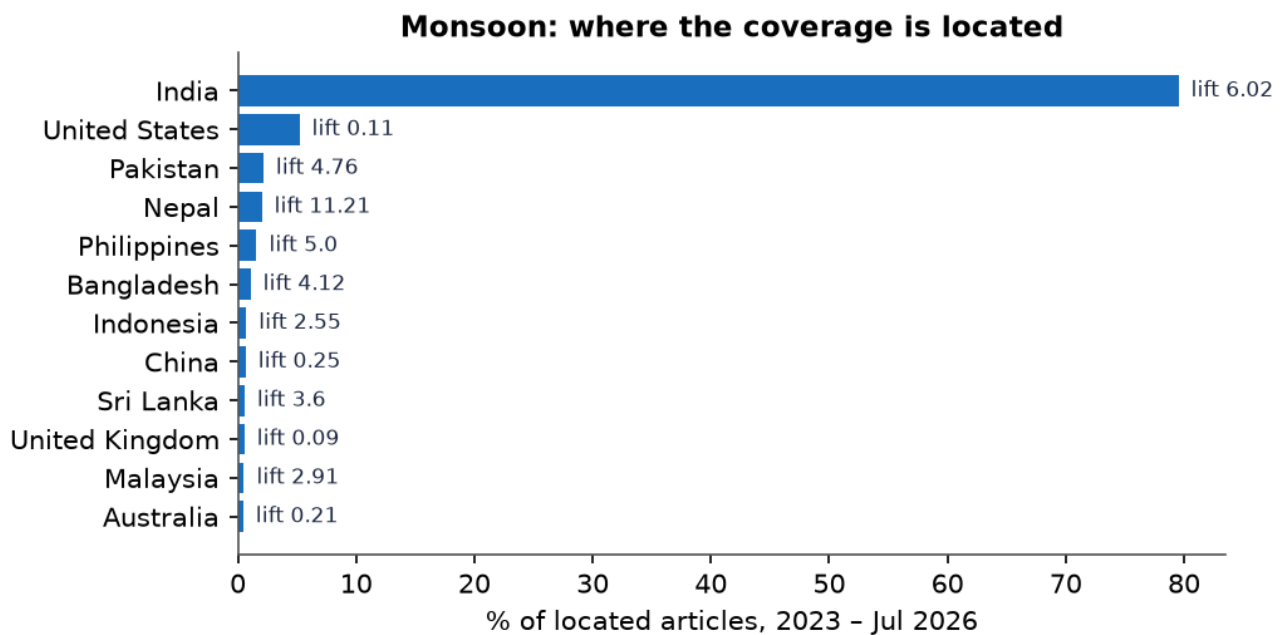


Figure 3. Leading countries by share of located monsoon articles, 2023 – Jul 2026, labelled with lift against all located news.

3.3 Geo intelligence: continents, states and shifting attention

The world map (Figure 4) shows how narrowly the topic is placed. The monsoon is over-represented in the news of India and its neighbours, and of the Philippines, Indonesia and Malaysia. It is under-represented in the United States, the United Kingdom, China and Australia, even though China and Australia have monsoon climates of their own. By continent, only Asia is over-represented (lift 3.73, with 91.67% of located articles). Oceania (0.21), Africa (0.18), North America (0.1), Europe (0.1) and South America (0.07) are all far below their weight in the index (Figure 7, left).

Monsoon: which countries over- and under-cover the topic

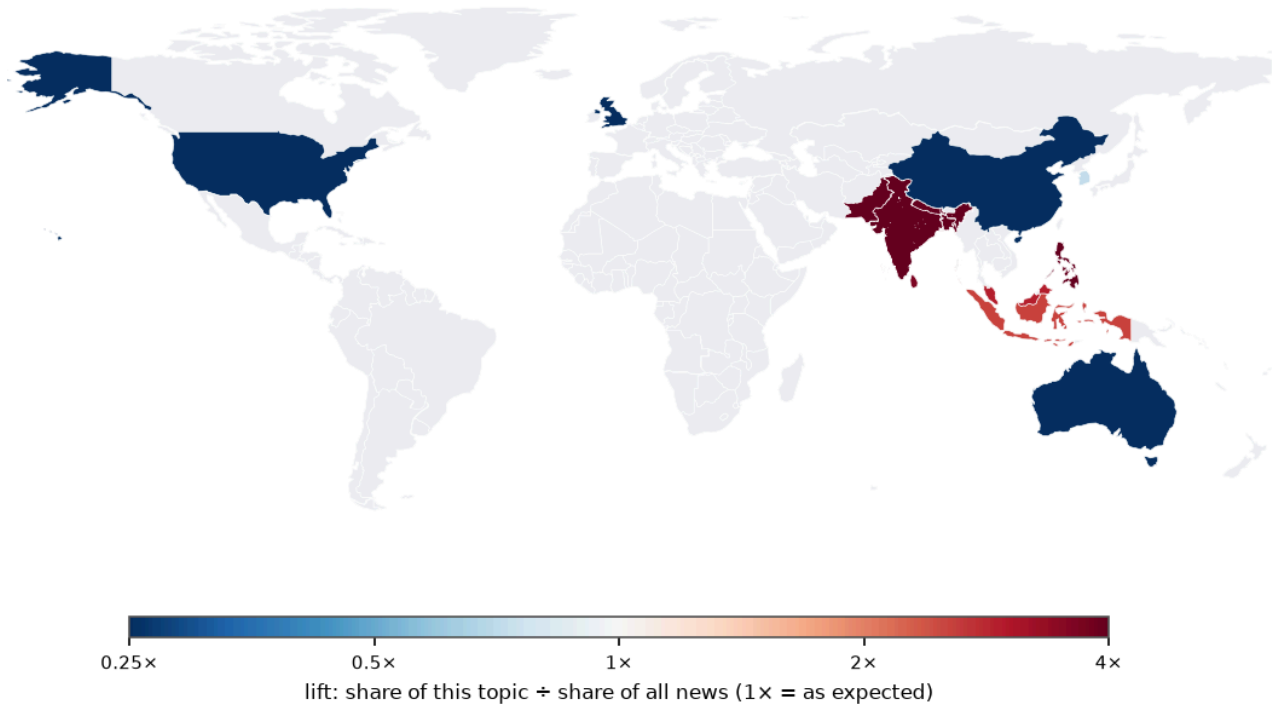


Figure 4. Lift of each country's share of located monsoon articles, January 2023 – July 2026 (red = over-represented, blue = under-represented, grey = fewer than 100 articles). India is drawn with its official outline.

Within countries, the picture is sharper (Table 3). In India, monsoon coverage concentrates in two Himalayan states and on the south-western coast. Measured against each state's share of Indian news, Himachal Pradesh (5.34), Kerala (2.42), Goa (1.96) and Uttarakhand (1.88) are the most over-represented. Kerala is where the southwest monsoon first reaches the mainland. Puducherry (96 articles, lift 6.05) is left out: most of its tags in the article sample come from the names Yanam and Karaikal in nationwide weather bulletins that list forecast subdivisions, not from stories about the territory. Jammu and Kashmir (0.43), West Bengal (0.45) and Uttar Pradesh (0.52) are under-represented. Maharashtra holds the most articles (3,236), but its lift is close to 1 (1.11) (Figure 5).

In the United States the located count is small (1,031 articles). Among states with at least 50 articles, Arizona (38.35) and New Mexico (16.03) lead by a wide margin, the two states at the core of the North American monsoon. Arizona alone holds 22.99% of located US monsoon articles. Washington (2.78) and Illinois (2.02) follow, on 75 and 55 articles. California (0.99) and Florida (1.01) sit near their weight, and New York (0.53) is under-represented (Figure 6). Wisconsin and Kentucky, which led the US list before ordinary-word place tags were removed, now hold 11 and 5 articles.

India: state	Articles	Lift	United States: state	Articles	Lift
Himachal Pradesh	1,322	5.34	Arizona	237	38.35
Kerala	1,084	2.42	New Mexico	58	16.03
Goa	198	1.96	Washington	75	2.78
Uttarakhand	774	1.88	Illinois	55	2.02
Rajasthan	959	1.51	Florida	56	1.01
Madhya Pradesh	820	1.51	California	102	0.99
Chhattisgarh	372	1.5			
<i>Lowest: Jammu and Kashmir</i>	184	0.43	<i>Lowest: New York</i>	64	0.53
West Bengal	287	0.45			
Uttar Pradesh	1,222	0.52			

Table 3. States with the highest and lowest lift in monsoon coverage, January 2023 – July 2026 (states with at least 50 articles). Lift = the state's share of the country's located monsoon articles ÷ its share of all located news from that country. Only seven US states reach 50 articles. Puducherry (96 articles, 6.05) is omitted because most of its tags come from forecast-subdivision names in nationwide bulletins.

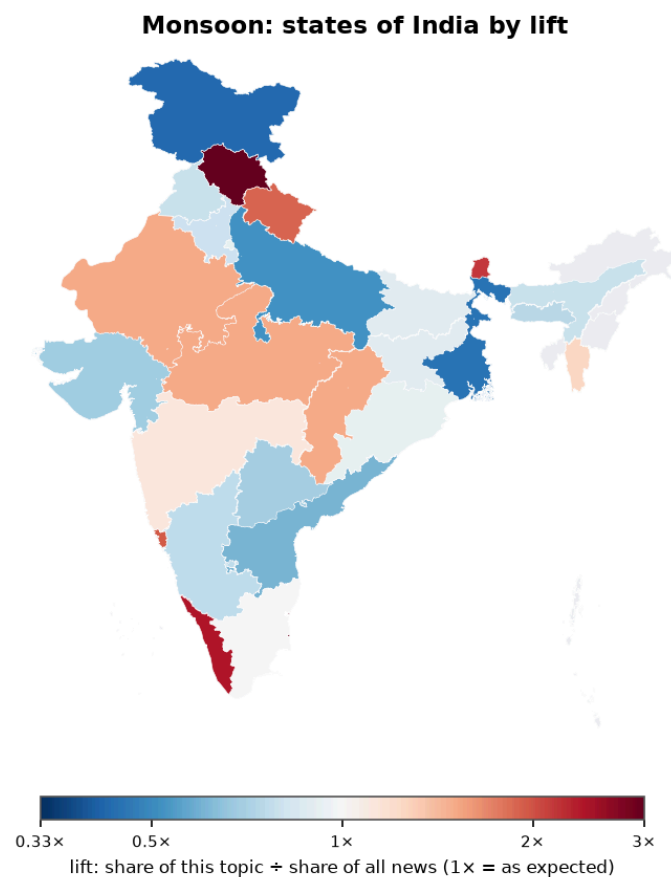


Figure 5. Lift of each Indian state's share of located monsoon articles against its share of all located Indian news, January 2023 – July 2026. Official outline; Ladakh is drawn within Jammu and Kashmir in the boundary file used.

Monsoon: states of United States by lift

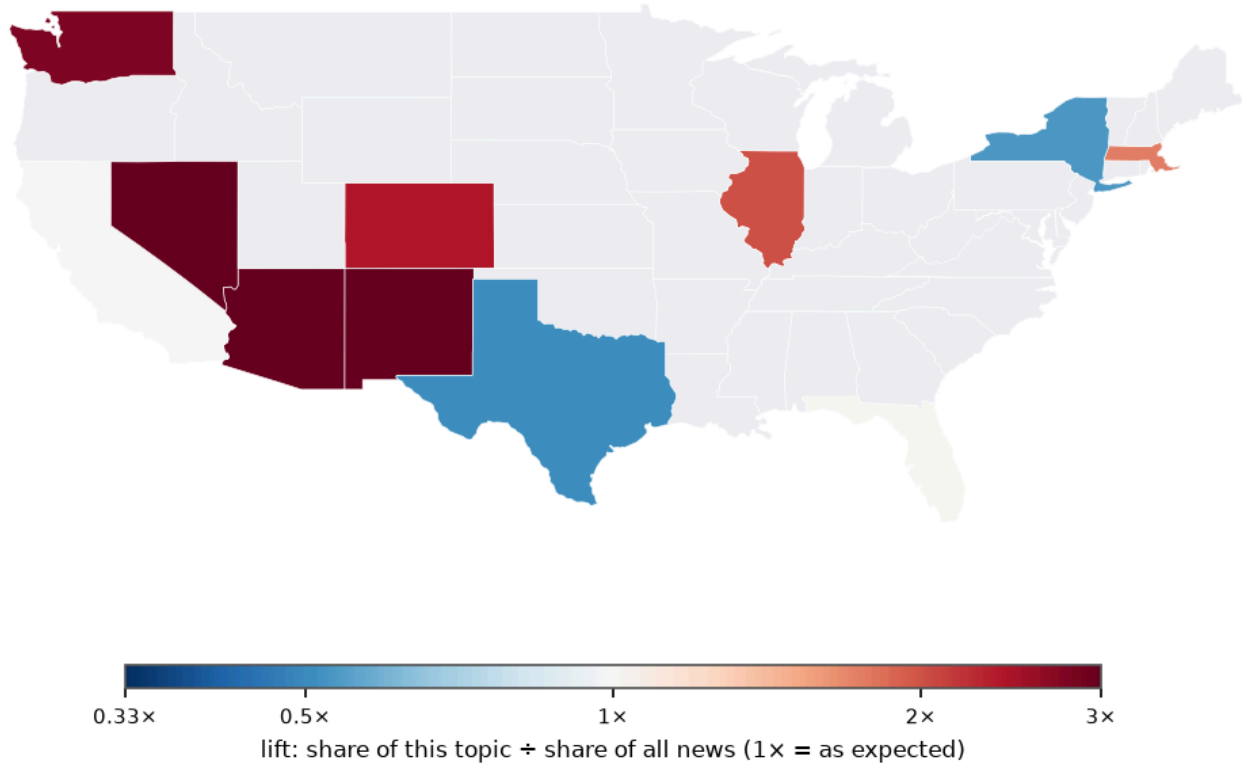


Figure 6. Lift of each US state's share of located monsoon articles against its share of all located US news, January 2023 – July 2026.

Attention also moves between countries from year to year (Figure 7, right; Table 4). Measured as monsoon articles per 10,000 of each country's located news, Pakistan stands out. Its share was 17.74 in 2021, 148.11 in 2022, the year of the 2022 Pakistan floods, and 22.03 in 2023. It rose again to 57.23 in 2025, 2.6 times its 2023 level, the largest rise between 2023 and 2025 among the five countries with the most located monsoon articles. Nepal peaked in 2024 (113.24). India's share is steady by comparison, between 36.87 and 47.54 in every year except 2020 (27.74). Between 2023 and 2025, Indonesia rose 12.43-fold from a small base, Sri Lanka rose from 23.41 to 30.58 and the Philippines from 30.01 to 36.52, while Bangladesh fell from 36.46 to 24.12 and the United States stayed near 0.8.

Country	2021	2022	2023	2024	2025
India	38.75	36.87	43.7	42.1	47.54
Pakistan	17.74	148.11	22.03	26.16	57.23
Nepal	44.8	53.01	52.58	113.24	73.7
Philippines	18.45	10.14	30.01	49.25	36.52
Bangladesh	30.31	56.73	36.46	31.98	24.12
Sri Lanka	6.14	5.9	23.41	27.43	30.58
United States	0.66	1.06	0.8	0.76	0.75

Table 4. Monsoon articles per 10,000 of each country's located news, 2021–2025.

Monsoon coverage is more negative than each country's own news in all six countries with enough tone-labelled articles, but by different margins. In the Philippines 67.4% of monsoon articles are negative against 39.4% of all Philippine news (1.71 times). In the United States the figures are 49.9% against 33.1% (1.51 times), in Nepal 70.2% against 47.8%, and in Pakistan 86.7% against 59.5%, the highest negative share of any country. India's ratio is smaller (57.0% against 41.2%, 1.38 times), consistent with Indian coverage that also reports

good rains and sowing. Bangladesh has the smallest ratio (73.8% against 56.8%, 1.3 times), because its news overall is already strongly negative.

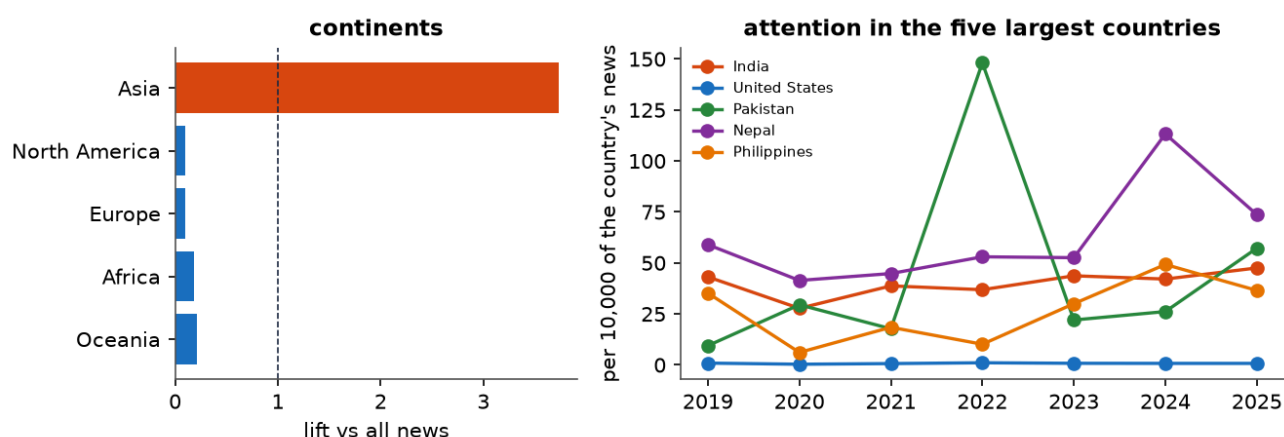


Figure 7. Left: lift by continent, January 2023 – July 2026. Right: monsoon articles per 10,000 of each country's located news, 2019–2025, for the five countries with the most articles.

3.4 Tone, urgency and themes

Monsoon coverage is more negative and more urgent than news in general (Figure 8). Among articles with a tone label, 54.2% are negative, against 33.6% across the index (1.61 times), and 37.2% are positive. Machine-assigned editorial priority puts 67.6% of monsoon articles at critical level (7 or higher), against 42.6% of all news (1.59 times).

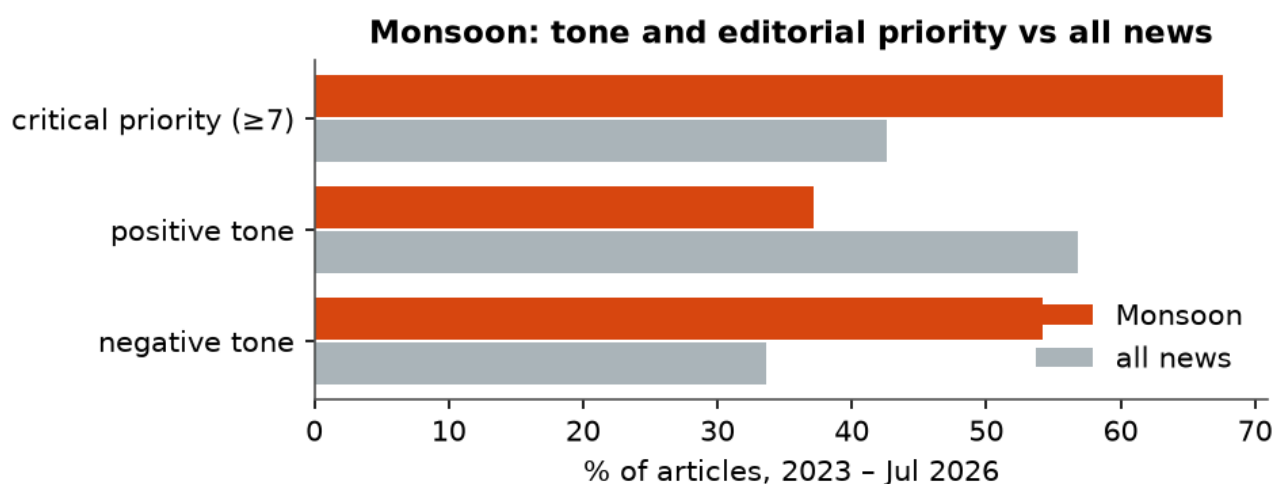


Figure 8. Tone and the share rated critical priority, monsoon articles vs all news, 2023 – Jul 2026.

Themes show what monsoon stories are about (Table 5). Rainfall statistics (39.33% of themed articles) and season updates (34.26%) dominate. El Niño and La Niña effects appear in 4.8%, 99.13 times their rate in all news, consistent with seasonal forecasts that are framed by conditions in the Pacific. Agricultural weather impacts (82.79), seed germination (84.14) and drought-tolerant crops (76.12) show the farming side.

Theme	Articles	Share %	Lift
monsoon season updates	8,978	34.26	440.93
rainfall and precipitation statistics	10,309	39.33	136.19
el niño and la niña effects	1,258	4.8	99.13
climate impact on seed germination	154	0.59	84.14
agricultural weather impacts	962	3.67	82.79
regional weather patterns	2,678	10.22	78.04
drought-tolerant crop varieties	170	0.65	76.12
thunderstorm and lightning alerts	3,649	13.92	65.98
drought conditions monitoring	521	1.99	58.78
flood risk assessments	2,537	9.68	32.65

Table 5. Themes most specific to monsoon coverage (lift against all themed news), January 2023 – July 2026.

The organisation named most often is India's meteorological department: 6,107 articles name it by its abbreviation and 3,770 by its full name. Municipal bodies such as Mumbai's civic corporation (561) follow. The rest of the organisation list mixes publishers and weather terms that the tagger reads as names, so it is not analysed further.

3.5 Research attention and invention

Research on the monsoon kept pace with the scientific literature but did not outgrow it. Papers with a monsoon term in the title were 1.37 per 10,000 papers in 2015 and 1.44 in 2025, a 1.05-fold change, with a high of 1.71 in 2022. Between 2015 and 2025, 10,352 such papers were published (18,581 since 2000). The most-cited include palaeoclimate records of the Asian monsoon [1, 2], work on aerosols and the weakening of the South Asian summer monsoon [3, 6], the role of the Tibetan Plateau [4, 5], and studies of active and break spells and groundwater in India [7, 8]. A review of global monsoon dynamics frames the field [9].

News attention does not track research attention (Figure 9). Research share is nearly flat, while news share fell in 2020 and moves with each season's events.

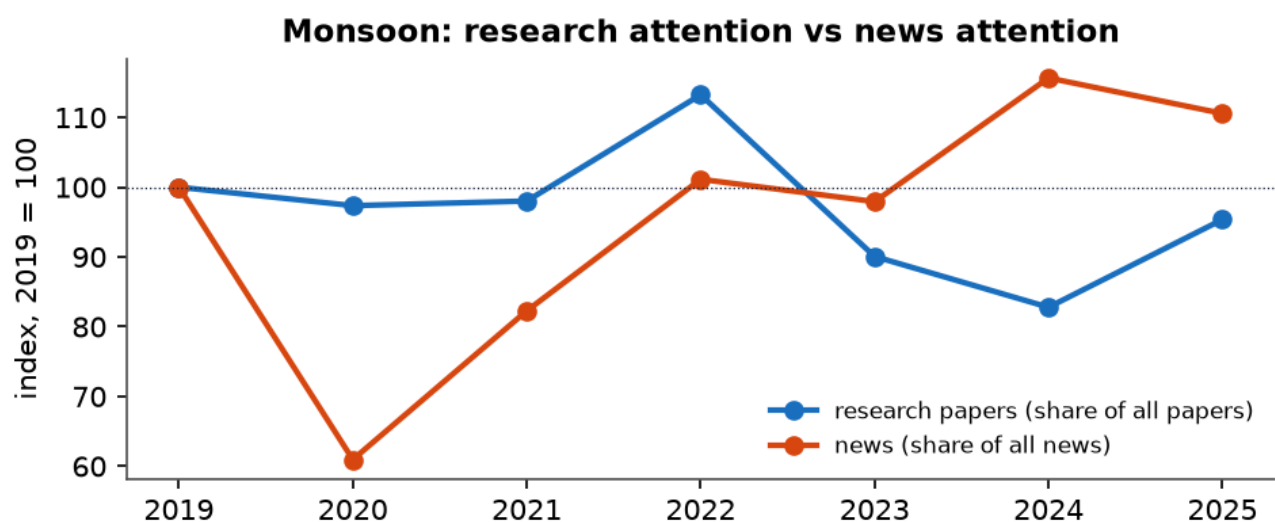


Figure 9. Research papers with monsoon in the title (share of all papers) and monsoon news (share of all news), each indexed to 2019.

Patenting on the monsoon is negligible. Only 58 patent families with monsoon in the title were published between 2015 and 2024, between 2 and 11 a year, and 88.9% of them in China (Figure 10).

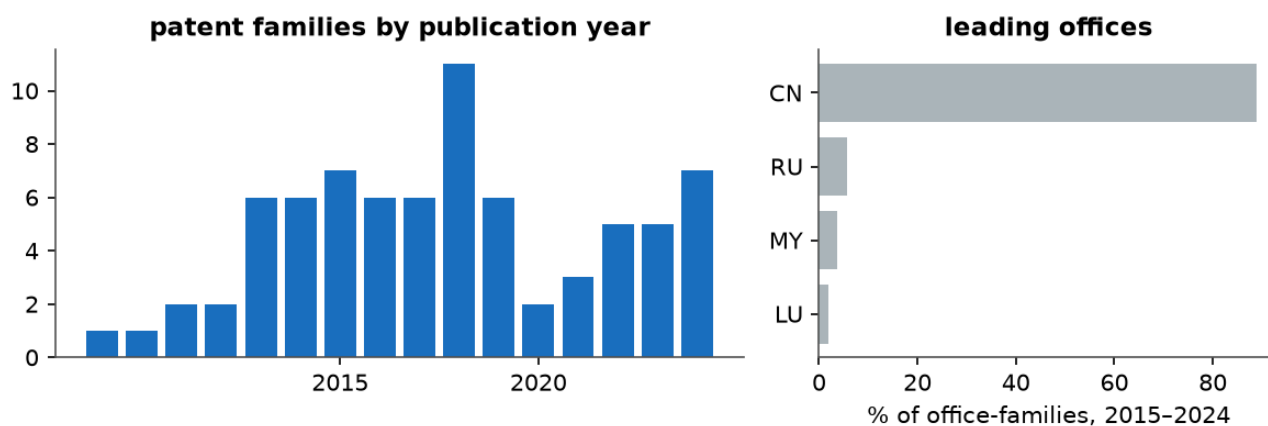


Figure 10. Monsoon-related patent families by publication year (left) and the leading filing offices, 2015-2024 (right).

4. Discussion

Three points matter for anyone who uses news as a record of the monsoon. First, coverage measures attention. The 2020 trough and the July 2024 peak are measures of news attention, which depends on what else is in the news and where the press is dense; they are not measures of rainfall. Second, the topic is local. Four in five located monsoon articles are about India, and every country with a lift above 1 is in South or Southeast Asia. Monsoon systems in China, Australia, Africa and the Americas take little of the attention, with the partial exception of the American Southwest, where Arizona and New Mexico stand far above other US states. Third, a word search is not a topic. Over one in eight raw matches were removed as stories about India's legislative Monsoon Session or a retailer of the same name, and many relevant matches use the season only as a frame for food, health or markets.

The geography also shows where coverage reacts to events. Pakistan's share of monsoon news multiplied in 2022, the year of its floods, fell back the next year and rose again in 2025. Nepal's peaked in 2024. India's share moves far less, which fits a monsoon that is reported there every year whether it is good or bad. Research, by contrast, holds a steady share of the literature. The dataset lets researchers link these records, for example to test whether seasons with heavy coverage in a country are followed by research on that country's monsoon.

5. Limitations

- **Index availability.** 92.88% of the index was readable at build time, so counts are lower bounds. Shares and lifts are less affected, because the missing part is spread across topics.
- **Coverage after May 2026.** The index thins after May 2026, so 2026 is partial and is excluded from year comparisons.
- **Matching.** Matching uses the article opening. Articles that mention the monsoon only later are missed, and 7.5% of checked matches were not confirmed as about the season.
- **Location tags.** Location, tone, priority and themes are machine-labelled. The city field is noisy and is not analysed. Place tags derived from ordinary words were treated as unlocated, which removed 15.3% of city-tagged articles; this lowers located counts, and some wrong place tags remain. Small states, such as Puducherry (96 articles,

mostly tags from forecast-subdivision names in nationwide bulletins, so left out of the state findings) and the US states, are the most sensitive to them.

- **Outlet mix.** The index over-represents English-language and Indian outlets. This shapes both seasonality and geography; the northeast monsoon and the monsoons of the Southern Hemisphere are under-weighted.
- **Research and patent counts.** These match titles only. The patent count is too small for analysis.

Data availability

The dataset (article sample, monthly and country tables, state tables, research and patent tables, all metrics) is released under CC BY-NC 4.0 with this paper. The sample holds 18,327 of 74,094 matched articles to 31 July 2026. Full article text, headlines, publishers, later articles and other topics are served by the Prism News API: <https://github.com/fliarbi/prism-news-api> (base URL <https://radar-api.fliarbi.com/news>). A worked query: `prism-news trends "monsoon" --since 2019-01-01 --until 2026-07-31 --granularity monthly`.

References

1. Hai Cheng et al. (2016). The Asian monsoon over the past 640,000 years and ice age terminations. *Nature*. <https://doi.org/10.1038/nature18591>
2. Edward R. Cook et al. (2010). Asian Monsoon Failure and Megadrought During the Last Millennium. *Science*. <https://doi.org/10.1126/science.1185188>
3. Massimo Bollasina et al. (2011). Anthropogenic Aerosols and the Weakening of the South Asian Summer Monsoon. *Science*. <https://doi.org/10.1126/science.1204994>
4. Guoxiong Wu et al. (2012). Thermal Controls on the Asian Summer Monsoon. *Scientific Reports*. <https://doi.org/10.1038/srep00404>
5. William R. Boos et al. (2010). Dominant control of the South Asian monsoon by orographic insulation versus plateau heating. *Nature*. <https://doi.org/10.1038/nature08707>
6. Zhanqing Li et al. (2016). Aerosol and monsoon climate interactions over Asia. *Reviews of Geophysics*. <https://doi.org/10.1002/2015rg000500>
7. M. Rajeevan et al. (2010). Active and break spells of the Indian summer monsoon. *Journal of Earth System Science*. <https://doi.org/10.1007/s12040-010-0019-4>
8. Akarsh Asoka et al. (2017). Relative contribution of monsoon precipitation and pumping to changes in groundwater storage in India. *Nature Geoscience*. <https://doi.org/10.1038/ngeo2869>
9. Zhisheng An et al. (2014). Global Monsoon Dynamics and Climate Change. *Annual Review of Earth and Planetary Sciences*. <https://doi.org/10.1146/annurev-earth-060313-054623>
10. Fliar BI (2026). *The Monsoon in the News 2019–2026: article-level dataset and coverage tables*. Prism News API. <https://github.com/fliarbi/prism-news-api>