

EDITORIAL

 **How *Journal of Climate* Evolved from *Monthly Weather Review***

As part of the 150th volume of *Monthly Weather Review*, we are telling stories from its 150-yr history in a series of editorials. This month's editorial describes how *Monthly Weather Review* helped to found the *Journal of Climate*, which is now one of the leading journals in its field and is celebrating its 35th year.


Climate modeling had its birth in the 1960s within the pages of *Monthly Weather Review* with the seminal work by Joseph Smagorinsky and Nobel Prize–winner Syukuro Manabe (e.g., [Smagorinsky 1963](#); [Smagorinsky et al. 1965](#); [Manabe et al. 1965](#); [Manabe 1969](#)) (see section 5d of [Schultz and Potter 2022](#)). Pioneering studies on observations of climate-scale phenomena were also published in *Monthly Weather Review*—notably, the northeastern U.S. drought of 1962–65 ([Namias 1966](#)), El Niño–Southern Oscillation (e.g., [Bjerknes 1969](#); [Horel and Wallace 1981](#); [Rasmusson and Carpenter 1983](#)), and Northern Hemisphere teleconnections such as the North Atlantic Oscillation, North Pacific Oscillation, and the Pacific–North American pattern (e.g., [Wallace and Gutzler 1981](#)).

In the 1980s, changes were afoot in the American Meteorological Society (AMS) journals, reflecting this growing interest in climate. In 1982, *Monthly Weather Review* discontinued its monthly article “Weather and Circulation” and replaced it with a quarterly seasonal climate summary written by the Climate Analysis Center (now the NOAA/NWS/Climate Prediction Center) ([Pielke 1982](#)). In 1983, the *Journal of Applied Meteorology* (*JAM*; 1962–82) became *Journal of Climate and Applied Meteorology* (*JCAM*; 1983–87). An editorial in *JCAM* described the new journal as one that would publish “papers on both basic and applied aspects of climate research” ([Hecht and Bergman 1983](#)).

Then, the intense El Niño of 1982/83 happened, furthering interest in climate-scale phenomena. *Monthly Weather Review* led with the seasonal climate summary by [Quiroz \(1983\)](#) followed by 21 articles between October 1983 and May 1988. (In contrast, only three articles on El Niño–Southern Oscillation were published in *JCAM* during this period.) Many of these *Monthly Weather Review* articles, as well as others on climate variability, were handled by Editor Kevin Trenberth. Also starting in 1984, funding to climate science was increasing as a result of the formation of the Tropical Ocean and Global Atmosphere Project (TOGA), the first project of the World Climate Research Programme. This funding led to more research, which led to more papers, creating a demand for a new climate-focused journal. As Trenberth notes in his memoirs, he (as well as others) had argued for AMS to create a new journal that would consolidate climate-related articles from *Monthly Weather Review*, *Journal of the Atmospheric Sciences*, and *JCAM* into a single journal, with *JCAM* becoming *JAM* again.

In 1986, Richard Rosen had succeeded Trenberth as the editor handling climate-related manuscript submissions at *Monthly Weather Review* ([Klemp and Rotunno 1986](#)). To help start this new *Journal of Climate*, Rosen agreed to transfer his position to the new journal, serving as the only editor under Chief Editor Alan Hecht, who was previously the co-chief editor of *JCAM* for climate ([Hecht 1988](#)). To build the first issues of *Journal of Climate*, Rosen asked authors if they would transfer their manuscripts from *Monthly Weather Review* to the new journal. The initial manuscripts that Rosen handled for *Journal of Climate* were, “those that had been transferred from *Monthly Weather Review*, and the sort of papers that continued to appear in *Journal of Climate* were in the style of those that had been in *Monthly Weather Review*” (R. Rosen 2022, personal communication). For example, [Kung's \(1988\)](#) spectral energetics of the general circulation became *Journal of Climate*'s first paper, although it had been originally submitted to *Monthly Weather Review*. Rosen also noted “the large number of *Monthly Weather Review* articles that are referenced in papers in the first volume of *Journal of Climate*, although there is an occasional *JCAM* reference as well.”

The story of the formation of *Journal of Climate* in 1988 was one in which *Monthly Weather Review* was crucial. As Rosen (2022, personal communication) wrote, “An important part of *MWR*'s history is the central role it played in serving the climate research community prior to the launch of *Journal of*

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DOI: 10.1175/MWR-D-22-0042.1

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Climate.” This new journal was “the child of *MWR*,” with “a bit of *JCAM* in its genes as well” (R. Rosen 2022, personal communication).

Acknowledgments. I thank Rick Rosen, Joseph Klemp, and Richard Rotunno for helping to tell this story and Kevin Trenberth for sharing relevant sections of his memoirs (to be published by AMS). I thank all four for their comments on an earlier draft of this editorial.

David M. Schultz
Chief Editor

REFERENCES

- Bjerknes, J., 1969: Atmospheric teleconnections from the equatorial Pacific. *Mon. Wea. Rev.*, **97**, 163–172, [https://doi.org/10.1175/1520-0493\(1969\)097<0163:ATFTEP>2.3.CO;2](https://doi.org/10.1175/1520-0493(1969)097<0163:ATFTEP>2.3.CO;2).
- Hecht, A. D., 1988: Editorial. *J. Climate*, **1**, 3, [https://doi.org/10.1175/1520-0442\(1988\)001<0001:>2.0.CO;2](https://doi.org/10.1175/1520-0442(1988)001<0001:>2.0.CO;2).
- , and K. H. Bergman, 1983: Editorial. *J. Climate Appl. Meteor.*, **22**, 2, [https://doi.org/10.1175/1520-0450\(1983\)022<0002:E>2.0.CO;2](https://doi.org/10.1175/1520-0450(1983)022<0002:E>2.0.CO;2).
- Horel, J. D., and J. M. Wallace, 1981: Planetary-scale atmospheric phenomena associated with the Southern Oscillation. *Mon. Wea. Rev.*, **109**, 813–829, [https://doi.org/10.1175/1520-0493\(1981\)109<0813:PSAPAW>2.0.CO;2](https://doi.org/10.1175/1520-0493(1981)109<0813:PSAPAW>2.0.CO;2).
- Klemp, J. B., and R. Rotunno, 1986: New editors for *Monthly Weather Review*. *Mon. Wea. Rev.*, **114**, 654, [https://doi.org/10.1175/1520-0493\(1986\)114<0000:>2.0.CO;2](https://doi.org/10.1175/1520-0493(1986)114<0000:>2.0.CO;2).
- Kung, E. C., 1988: Spectral energetics of the general circulation and time spectra of transient waves during the FGGE year. *J. Climate*, **1**, 5–19, [https://doi.org/10.1175/1520-0442\(1988\)001<0005:SEOTGC>2.0.CO;2](https://doi.org/10.1175/1520-0442(1988)001<0005:SEOTGC>2.0.CO;2).
- Manabe, S., 1969: Climate and the ocean circulation. I. The atmospheric circulation and the hydrology of the Earth’s surface. *Mon. Wea. Rev.*, **97**, 739–774, [https://doi.org/10.1175/1520-0493\(1969\)097<0739:CATOC>2.3.CO;2](https://doi.org/10.1175/1520-0493(1969)097<0739:CATOC>2.3.CO;2).
- , J. Smagorinsky, and R. F. Strickler, 1965: Simulated climatology of a general circulation model with a hydrologic cycle. *Mon. Wea. Rev.*, **93**, 769–798, [https://doi.org/10.1175/1520-0493\(1965\)093<0769:SCOAGC>2.3.CO;2](https://doi.org/10.1175/1520-0493(1965)093<0769:SCOAGC>2.3.CO;2).
- Namias, J., 1966: Nature and possible causes of the northeastern United States drought during 1962–65. *Mon. Wea. Rev.*, **94**, 543–554, [https://doi.org/10.1175/1520-0493\(1966\)094<0543:NAPCOT>2.3.CO;2](https://doi.org/10.1175/1520-0493(1966)094<0543:NAPCOT>2.3.CO;2).
- Pielke, R. A., 1982: New policy on the Weather and Circulation articles in the *Monthly Weather Review*. *Mon. Wea. Rev.*, **110**, 454, [https://doi.org/10.1175/1520-0493\(1982\)110<0454:>2.0.CO;2](https://doi.org/10.1175/1520-0493(1982)110<0454:>2.0.CO;2).
- Quiroz, R. S., 1983: The climate of the “El Niño” winter of 1982–83—A season of extraordinary climatic anomalies. *Mon. Wea. Rev.*, **111**, 1685–1706, [https://doi.org/10.1175/1520-0493\(1983\)111<1685:TCOTNW>2.0.CO;2](https://doi.org/10.1175/1520-0493(1983)111<1685:TCOTNW>2.0.CO;2).
- Rasmusson, E. M., and T. H. Carpenter, 1983: The relationship between eastern equatorial Pacific sea surface temperature and rainfall over India and Sri Lanka. *Mon. Wea. Rev.*, **111**, 517–528, [https://doi.org/10.1175/1520-0493\(1983\)111<0517:TRBEEP>2.0.CO;2](https://doi.org/10.1175/1520-0493(1983)111<0517:TRBEEP>2.0.CO;2).
- Schultz, D. M., and S. Potter, 2022: *Monthly Weather Review* at 150 years: Its history, impact, and legacy. *Mon. Wea. Rev.*, **150**, 3–57, <https://doi.org/10.1175/MWR-D-21-0267.1>.
- Smagorinsky, J., 1963: General circulation experiments with the primitive equations: I. The basic experiment. *Mon. Wea. Rev.*, **91**, 99–164, [https://doi.org/10.1175/1520-0493\(1963\)091<0099:GCEWTP>2.3.CO;2](https://doi.org/10.1175/1520-0493(1963)091<0099:GCEWTP>2.3.CO;2).
- , S. Manabe, and J. L. Holloway Jr., 1965: Numerical results from a nine-level general circulation model of the atmosphere. *Mon. Wea. Rev.*, **93**, 727–768, [https://doi.org/10.1175/1520-0493\(1965\)093<0727:NRFANL>2.3.CO;2](https://doi.org/10.1175/1520-0493(1965)093<0727:NRFANL>2.3.CO;2).
- Wallace, J. M., and D. S. Gutzler, 1981: Teleconnections in the geopotential height field during the Northern Hemisphere winter. *Mon. Wea. Rev.*, **109**, 784–812, [https://doi.org/10.1175/1520-0493\(1981\)109<0784:TITGHF>2.0.CO;2](https://doi.org/10.1175/1520-0493(1981)109<0784:TITGHF>2.0.CO;2).