

EDITORIAL

Meteorology: A science in search of applications

The distinction between “basic” and “applied” sciences has long been debated. According to Feibleman (1961), “pure science” or “basic research” is a method of investigating nature by the experimental method, and theoretical analysis, to satisfy our need to know. Whereas “applied science” is the use of pure science for some practical human purpose. Thus, science serves two human purposes: to know and to do. The former is a matter of understanding, the latter a matter of action.

Then is meteorology a basic or rather an applied science?

The earlier historic development of atmospheric sciences (cf. Teague and Gallicchio 2017) was certainly stimulated by the curiosity of many scientists about a wide variety of atmospheric phenomena. However, in recent times, investigations have been increasingly driven by the need of meeting expectations for improved operational concepts and tools.

In this respect, meteorology is very similar to medicine. Both are concerned with factors that affect people's lives and livelihoods, motivated by the desire to improve people's lives and public systems (transport, infrastructure, recreation). It is interesting to note that terms like *diagnostic* and *prognostic* are common to both medicine and meteorology.

Many areas of medicine have developed following the progress in our understanding of how the human body functions or behaves, what factors can affect and threaten health, and how they can be prevented, diagnosed, or treated. Similarly, the possible applications of meteorology have greatly expanded after technology has increasingly offered new instruments to observe atmospheric phenomena and processes, and the increased computational power to predict them.

We live in a fast-paced world where the expectation is that information should be instantaneously and freely available. Our journal aims to bring information on applications of Meteorology to the world as quickly as possible and to as many people as possible without sacrificing scientific integrity.

1 | OPENING THE DOOR TO A BROADER AUDIENCE

In July 2019, Meteorological Applications became an Open Access as well as an online-only journal. Because we believe in the importance of the application of Meteorology to peoples' lives and livelihoods, the change to Open Access brings Meteorological Applications content free to the whole world. This change will benefit authors in that Open Access will increase visibility of their research, decrease time to publication and the author retains their own copyright.

Worldwide, publishing is moving in the direction of Open Access. However, we realise that Open Access costs may create barriers to publication for some authors. For all Wiley Open Access journals, automatic APC waivers and discounts will be given to authors from countries on the Waivers and Discounts List and it is worth checking with your own institution if they already have special open access arrangements with our publisher. Please see Figure 1, or visit this link to see whether you qualify: <https://authorservices.wiley.com/open-research/open-access/for-authors/waivers-and-discounts.html>

Since we took over as co-Editors-in Chief, we have implemented numerous new initiatives in addition to Open Access. We have streamlined processes and expanded the Editorial Board, which has resulted in a reduction of time in peer-review. By working closely with the publishers, we are on track to reduce turnaround times. Our aim is to speed up production times without sacrificing the rigor of our peer-review process.

2 | EASING THE PATH TO PUBLICATION

To remove any remaining barriers to submission, that potentially inhibit authors from contributing their research, we have worked with the publishers to make submission of a manuscript as easy as possible. A LaTeX template for Meteorological Applications is now available.

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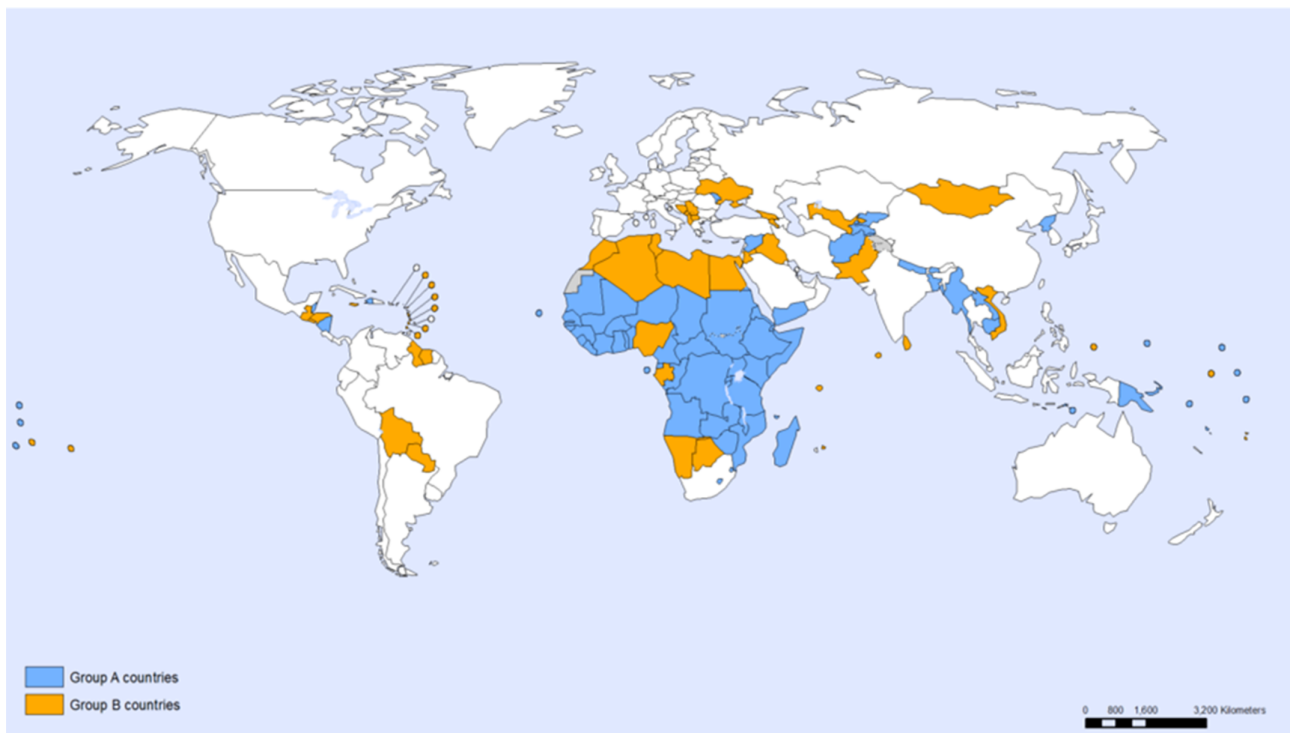


FIGURE 1 Map of countries: Group A (blue) countries are eligible for a waiver of the publication fee, while Group B (orange) countries are eligible for a discount. See <https://authorservices.wiley.com/open-research/open-access/for-authors/waivers-and-discounts.html>

We recommend authors use *Authorea*, which is a platform that allows authors to upload a document in Word or LaTeX formats or start new documents using the journal's template. Authors will be able to invite their co-authors to collaborate on the writing of a document via a user-friendly interface for text and equation editing which also allows LaTeX input. Using *Authorea*, a document can be exported in Meteorological Applications' format, ready for submission. We hope that these changes will support authors and make processes for submission faster and easier.

A healthy and well-balanced editorial board makes the path to publication smoother. We have been able to grow the Editorial Board and have been exceptionally lucky to have found experts in areas of Meteorology that were not previously included such as urban meteorology and wind energy. As a result of our careful expansion of the board, we have nearly achieved gender parity. We are also implementing a new initiative from 2020, where we encourage early career professionals to engage with the editorial process by supporting the Associate Editors in multiple ways.

ACKNOWLEDGEMENTS

The outgoing Editor-in-Chief Professor Peter Burt has been a guiding-light for us as incoming co-Editors-in-

Chief. We thank him not only for his past work at Meteorological Applications in growing the journal, but also for how generous he has been with his time and advice during the transition. The team at Wiley and the Royal Meteorological Society have been exceptionally helpful and supportive during this time and we are deeply grateful. We thank the outgoing Associate Editor Dr. Ashwini Kulkarni for her tireless efforts.

Being an Associate Editor and a member of the Editorial Board is a serious and time-consuming job. We are grateful for the time that the past and present Associate Editors have devoted to Meteorological Applications. They are busy people who find the time to take great care with every manuscript that they handle. Without their expertise and hard work, it would not be possible to publish the breadth and depth of science that Meteorological Applications manages to do.

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