



Anne Lawrence-Mathers. *Medieval Meteorology: Forecasting the Weather from Aristotle to the Almanac.* Cambridge: Cambridge University Press, 2020. 296 pp. \$23.00, e-book, ISBN 978-1-108-30750-5.

Reviewed by Jean-Olivier Richard (University of St. Michael's College in the University of Toronto)

Published on H-Sci-Med-Tech (May, 2022)

Commissioned by Penelope K. Hardy (University of Wisconsin-La Crosse)

This book recounts the emergence, success, and “extraordinarily slow demise” of astrometeorology, which Anne Lawrence-Mathers casts as the most important medieval contribution to the problem of weather forecasting (p. 194). The term “astrometeorology” was coined in the seventeenth century to describe what was then in Europe already a five-hundred-year-old genre of astrological writings, the roots of which went back to the eighth century, when Muslim astrologers elaborated on Greco-Roman and Christian ideas about the putative influence of the stars and planets on Earth. Its chief innovation, which Lawrence-Mathers goes so far as to call “a revolutionary breakthrough,” consisted in introducing astrological computations alongside the traditional reliance on weather signs, and thus establishing a plausible, complex causal system of stellar influence by which to explain the irregularity of sublunary phenomena—irregularities that Aristotelian meteorology failed to explain adequately, let alone predict (p. viii). In this account, medieval meteorology transpires as a theoretically sophisticated, mathematically rigorous, and surprisingly empirical predecessor to modern scientific meteorology.

Lawrence-Mathers’s overarching argument is that “medieval astrometeorology fully has a place in histories for meteorology, climate, and weather forecasting” (p. 202). She offers historians of sci-

ence a useful synthesis of specialized scholarship, a hefty amount of primary source exposition, and most importantly, a welcome change of focus, away from judicial, elective, and medical astrology, toward their less controversial, yet ever so popular, mundane cousin. The introduction (“Ancient Meteorology and the Transition to the Middle Ages”) and first two chapters (“Recreating Meteorology in the Early Middle Ages” and “Meteorology, Weather Forecasting and the Early Medieval Renaissance of Astronomy”) are particularly stimulating; as an early modernist, I tend to think of meteorology through the lens of Ptolemy and Aristotle, and knew little about astrometeorological literature prior to these authors’ reintegration into the medieval university curriculum. Those who, like me, need to brush up on their Pliny, Venerable Bede, St. Isidore of Seville, and Alcuin will be grateful for the author’s engaging examination of their work, as well as for her introduction to *computus* (i.e., the tables and techniques used to calculate the date of Easter). I am not in a position to assess the accuracy of her treatment of astrology in the “Islamicate” world, laid out in chapter 3 (“Exploratory Encounters with the Work of Arab Astronomers and Meteorologists”), but I am grateful for the rich documentation and reading suggestions. Chapters 4 to 8, which trace the transmission, diffusion, and reinterpretation of astromet-

eorological treatises in various western European settings—from universities to princely courts to print shops to scientific academies—offer helpful discussions of the contested epistemological and sociopolitical dimensions of this new science. Most enlightening is her observation (and gentle historiographical corrective) that there were, starting as early as the fourteenth century, significant precedents to the better-studied, eighteenth-century practice of weather record keeping. Overall, the book's frequent dives into primary sources contrast nicely with its sweeping scope.

Medieval Meteorology also has its shortcomings. The most obvious is the absence of charts, diagrams, and lexicon that might help grasp the author's explications of technical texts. Readers unfamiliar with medieval cosmology, astrological practices, and the use of astronomical tables and instruments will likely find some of these explications confusing—a pity considering that the book's *longue durée* approach invites perusals by non-specialists. This may be a function of editorial cuts or printing costs, rather than the author's preference.

A more damning feature of the work is its frequent use of anachronisms. While one can appreciate how speaking of “weather forecasting,” “atmosphere,” “meteorology,” and even “astrometeorology” spares readers Latin phrases and circumlocutions, failing to identify anachronisms of convenience as they arise obscures the disciplinary and epistemological shifts that took place over the course of a thousand years. Her use of the term “scientific” is perhaps the most glaring example of this problem, not so much because the term has no place in medieval studies but because the author deploys it rhetorically to reinforce far-fetched parallels between medieval and modern meteorological achievements (see, for instance, pp. 103-4). This problem exposes a tension between the book's case for continuity—which it makes by following the sway of astrometeorological thinking well into the eighteenth century—and

its claim that something “revolutionary” took place in the history of meteorology, at some point in the early Middle Ages (when and where is hard to pinpoint, since the process was plurisecular). Perhaps the author intended a pun on the term *revolutio*, which some medieval writers used to designate the branch of astrological prognostications concerned with the cycle of seasons and, by extension, the weather?

I would also have welcomed a more deliberate discussion of what makes the history of astrometeorology different from that of astrology in general. At times, the author's argument seems overdetermined by larger narratives about the methods, uses, and ultimate fate of astrology as a whole. Lawrence-Mathers is at her strongest when she examines specific manuscripts and the travels and transformations their content underwent across various settings; yet by framing the story around scientific precursors of modern meteorologists, she tends to isolate astrometeorological writings from their immediate textual and disciplinary contexts. Astrometeorologists were astrologers, and by the thirteenth century at least, astrologers often were natural philosophers or physicians, or both. I do not doubt that there was something distinctive about astrometeorology as a genre and that the questions and challenges faced by, say, the writers and printers of almanacs, were distinct from those involved in the erection of horoscopes, but articulating those more explicitly would have helped make a stronger case for the book's unique contribution.

Imperfect though it may be, *Medieval Meteorology* is ambitious in scope. It weaves together an impressive amount of material into a coherent narrative others will certainly want to refine and build on. Given the sparsity of scholarship on astrometeorology, it will surely help to invigorate the field. I recommend reading this book alongside Craig Martin's *Renaissance Meteorology: Pomponazzi to Descartes* (2006) and supplementing it with the technical and theoretical insights

contained in Darrel Rutkin's *Sapientia Astrologica: Astrology, Magic and Natural Knowledge, ca. 1250-1800* (2019).

If there is additional discussion of this review, you may access it through the network, at <https://networks.h-net.org/h-sci-med-tech>

Citation: Jean-Olivier Richard. Review of Lawrence-Mathers, Anne. *Medieval Meteorology: Forecasting the Weather from Aristotle to the Almanac*. H-Sci-Med-Tech, H-Net Reviews. May, 2022.

URL: <https://www.h-net.org/reviews/showrev.php?id=57541>



This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 United States License.