EDITORIAL

In 2010, the Intergovernmental Oceanographic Commission (IOC; Chairman Javier Valladares), with the endorsement of the Scientific Committee on Oceanic Research (SCOR; President Wolfgang Fennel) and the International Association for the Physical Sciences of the Oceans (IAPSO; President Eugene G. Morozov), adopted the International Thermodynamic Equation Of Seawater—2010 (TEOS-10) as the official description of seawater and ice properties in marine science, to replace the 1980 International Equation of State of Seawater (EOS-80). The commission has urged all oceanographers to use the new TEOS-10 algorithms and variables to report their work. The TEOS-10 computer software, the official TEOS-10 manual, and other background and explanatory documents are available online (http://www.TEOS-10.org). The advantages of TEOS-10 relative to EOS-80 and guidelines on its usage are contained in those documents.

A prominent part of TEOS-10 is the adoption of a quantity referred to in the standard as “Absolute Salinity” (abbreviated in the standard as “$S_A$”) to describe the salinity of seawater. An associated quantity, which replaces potential temperature $\theta$ and accurately describes the heat content per unit mass of seawater, is referred to in the standard as “Conservative Temperature” (“$\Theta$”). The leading uppercase letters in these two terms are a defined and integral part of the printed and approved TEOS-10 standard, as is the roman font for the subscripted A in the Absolute Salinity symbol. To foster proper usage of the TEOS-10 standard and to minimize confusion in the community, the American Meteorological Society (AMS) Publications Department and the field editorial staff of the Journal of Physical Oceanography (JPO) have opted, for these specific terms, to make an exception to the long-practiced AMS scientific-journal style rules that prohibit capitalization of variable names and stipulate that single-character subscripts will be typeset in italic font. This style policy will take effect with the publication in this issue of JPO of the article by Graham and McDougall titled “Quantifying the nonconservative production of Conservative Temperature, potential temperature, and entropy” and will be applied to all AMS journals from that point forward. Prior to now and since its introduction in McDougall’s 2003 JPO paper, Conservative Temperature had been typeset as “conservative temperature” in AMS journals.

It is hoped that these revisions to our editorial style will help to promote usage of the TEOS-10 standard in the scientific community and will encourage continuing publication of state-of-the-art physical oceanographic research in the AMS journals.

Michael A. Spall
Chief Editor

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