

# Thermodynamic Equation of State of Seawater - 2010

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Originated from Val Schmidt (UNH) on Thu, 23 Dec 2010

Hello Everyone!

I just ran across something that seems important for everyone, but of which I was completely unaware. There is a new standard for units of salinity (and other parameters) in seawater. This has all been defined in a new standard - Thermodynamic Equation of Seawater-2010 (TEOS-10, [www.teos-10.org](http://www.teos-10.org))

In short, the new units for salinity are called "absolute salinity units" (Sa) and are defined as the mass-fraction of salt in seawater (rather than "practical salinity units (PSU) which is essentially the seawater's conductivity).

There is no change in how seawater is measured in the field (PSU are to be archived). There is a new toolbox for calculations, conversions and caveats. There is a document that's worth a read What every oceanographer needs to know about TEOS-10 (the "TEOS-Primer" for short)

Here's an excerpt:

intimidating arcana. How should one deal with this? The first piece of advice to keep in mind is

**DON'T PANIC**

-Val

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