

## ***Interactive comment on “Green Edge ice camp campaigns: understanding the processes controlling the under-ice Arctic phytoplankton spring bloom” by Philippe Massicotte et al.***

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First, thank you for reviewing this data paper, it is much appreciated.

We have decided to use the "new" TEOS salinity definition. In the next paragraph, I am citing this website that defines it.

<http://www.teos-10.org/>

"A significant change compared with past practice is that TEOS-10 uses Absolute Salinity SA (mass fraction of salt in seawater) as opposed to Practical Salinity SP (which is essentially a measure of the conductivity of seawater) to describe the salt

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content of seawater. Ocean salinities now have units of g/kg.

Absolute Salinity (g/kg) is an SI unit of concentration. The thermodynamic properties of seawater, such as density and enthalpy, are now correctly expressed as functions of Absolute Salinity rather than being functions of the conductivity of seawater. Spatial variations of the composition of seawater mean that Absolute Salinity is not simply proportional to Practical Salinity; TEOS-10 contains procedures to correct for these effects.

Importantly, while Absolute Salinity (g/kg) is the salinity variable that is needed in order to calculate density and other seawater properties, the salinity which should be archived in national data bases continues to be the measured salinity variable, Practical Salinity (PSS-78)."

With regards, Philippe

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