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## Abstract

This paper presents a discussion on the validation or not of a likely paradigm about the melting of polar glaciers and their direct impact on increasing ocean levels. Physico-chemical properties of ocean waters, as well as anomalies in the thermal behavior of water are used as providers of this discussion using fjords of Greenland as study area. This text seeks to infer the relationship between the most recent developments in global warming, specifically dealing with the melting of glaciers located in fjords in the eastern part of Greenland, increasing the water temperature in ocean currents and changes in sea levels. We emphasize the importance of the correlation of the water physico-chemical characteristics in these changes perceived in the studied environment. Greenland is defined by convention as the widest oceanic island in the world. In its fjords formed in the last glaciation of the Quaternary period, basically made of ice mountains with entries to the sea, there has been melts that are discussed in this work. At first, global warming and the melting of glaciers with a consequent rise in sea levels are presented almost as an axiom. This paper seeks to address the conclusions arising from this type of research according the basic laws of physics and chemistry, related to the behavior of water in their states (typically solid and liquid). The ultimate goal of this work glimpsed through some inferences and validation of water behavior in the ice condition and in its liquid state, a broader view with regard to the findings applied to the relationship between global warming and ice melting processes. Will be observed some water anomalies in the variation between its liquid and solid states to attempt a better understanding of the phenomena occurring in this area of

interest as well as their possible impacts. It is noteworthy the fact that the water does not behave thermally as most liquids, with very specific consequences in relation to the variation between its liquid and solid states because of the temperature variation. We infer, therefore, that the increased amount of water in the sea because of the melts, will not necessarily increase the volume or the level of the oceans.

Keywords: Melting Glaciers. Levels of Ocean Waters. Global Warming.