

Interactive comment on “Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2 °C global warming is highly dangerous” by J. Hansen et al.

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It is interesting that although Swedan has shown to lack creditability as a legitimate reviewer by his uninformed and grossly incorrect application of the Second Law of Thermodynamics relative to the greenhouse effect, he continues to provide frivolous review of a seminal paper. One must obviously question the motive. It certainly is not in the spirit of true scientific discourse.

In his latest attempt, he makes claims that what happens on the surface of the ocean

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cannot effect the thermohaline circulation when it is well known that the cause of deep ocean currents are the gradients in density between the deeps and the surface due to the variations in temperature and salinity that result in vertical movement of the water.

He also makes claims that temperature differences between the water and ice are so insignificant to prevent enough heat transfer to result in melting when this is patently false. This melting of glaciers has been observed. Multiple studies have been completed and papers have been written on the subject. A recent one: Rebecca H. Jackson, Fiammetta Straneo, & David A. Sutherland; “Externally forced fluctuations in ocean temperature at Greenland glaciers in non-summer months”, *Nature Geoscience* 7, 503–508 (2014) doi:10.1038/ngeo2186 Received 17 March 2014 Accepted 16 May 2014 Published online 22 June 2014. This paper references many more.

Sadly, Swedan is so wrong and obviously has no expertise in the subjects for which he is commenting that he is generally not worth anyone’s time to bother to refute him.

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 20059, 2015.