



## A Paradox of Polar Icemelting Caused by Global Climate Change

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A paradox is introduced for what have been found and reported on the bases of the satellite monitoring and of remote sensing of the polar ice melting processes. This ice melting has been taken to be caused by a global climate change or by a global warming. This should be discussed for each case of the Arctic zone and the Antarctic zone. As for the Arctic zone, a natural process is a thermal flow intruding through the Bering Strait from the northern Pacific. Nevertheless, this has been taken to be a minor process. It should be noted here what is another process. A man-made process must be possible because the human activity off the Siberian frozen coasts has had been route of the ice breakers for transfer and transport. The ice breakers have had spent to make repeated ice crack for maintain their route as an open sea surface in the Arctic sea. The Arctic ice sheet may be a thermal isolator for the sea water against the freezing atmosphere, yet the open sea can be a cooling source of the Arctic water. It could be possible to consider a model for this cooling and thermal flow at the Bering Strait and salt fingers squeezed out of the natural sea ice in the Arctic sea under a condition of thermohaline potential. It is yet left to be reviewed the past long history of the sea ice formation process in the Arctic sea. As for the Antarctic zone, recent biological report notices us that a coastal part of the Antarctic glaciers is covered by many kinds of algae in the hot season. Now, it should be reminded what has been well known is that the specific zone of the glaciers at a specific altitude is covered by many kinds of algae. The glacier surface has been looked as if those were colored by a natural ice containing several coloring materials, so that it looked not white but red, yellow, green, black or the other complicated color. There must be a long years

history to appear the colored surface of the glaciers. This process might be hard to see what is correct at understanding of the glacier evolution process. There are ice melt just under the colored surface of the glaciers. It should be considered what time scale of a modeling

it for our proper modeling of the Antarctic ice melting and what application should be in need at satellite monitoring and remote sensing in relation to the global process.