



Influence of Sea Surface Temperature on Sea Ice and Polar Climate Change

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Message from the Guest Editors

Dear Colleagues,

One of the manifestations of global warming is the increase in sea surface temperature (SST), which serves as a prominent indicator of climate change and the presence of sea ice. The climatic maximum of SST occurs at low latitudes, where the Earth receives the most solar radiation. The tropic areas of ocean also absorb the bulk of the additional heat flux due to the anthropogenic heating of the planet. Intensification of the ocean circulation under global warming contributes to the transport of warm ocean water from the tropics to the poles, thereby leading to the formation of positive anomalies in SST at high latitudes. The results of research in these areas will constitute the main content of this Special Issue. We welcome too studies that address gaps in our current knowledge, including those that are related to the ability of global climate models to reproduce anomalies of SST and their impact on high-latitude climates. We also welcome studies on the influence of SST climatic phenomena on sea ice in the Arctic and Antarctic and on the difference between them, and the development of methods for predicting the state of sea ice with adjustment for SST.





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Message from the Editor-in-Chief

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