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High Resolution Satellite Study Of Multiple Stressors In Arctic Marine Systems & Correlation Of Ocean-Atmosphere-Cryosphere Interactions With Climate Variability To Develop Arctic-Ocean Climate Predicting Models (AOCPM)

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The impacts of multiple stressors on the ocean and the associated risks of abrupt state shifts can be explored through ocean system interactions, risks, instabilities, synergies and Arctic Ocean climate predicting models. The draining of pools underneath the glacier and glacier retreat is attributed to increased carbon dioxide and green house gases.

Hence, efforts are made on the co-evolution of climate and marine life in the Arctic Sea through the correlation of ocean-atmosphere-cryosphere interactions with climate variability i.e. to evaluate the correlation between the impacts of multiple stressors on the ocean and the associated risks of abrupt state shift, rising of sea levels, melting of the glaciers, vis-à-vis climate variability.

The kinematic features of the mesoscale convective systems over the Arctic Ocean regions would be correlated with ocean-atmosphere-cryosphere variability on time and space scales and at local, regional and global levels through the extracted sea surface temperature (SSTs) over the grid box, attributing the regional change to natural and anthropogenic radiative forcing agents and bringing out a few optimum values of these to develop ocean systems interactions, risks, instabilities, and synergies and Arctic Ocean climate predicting models by using high resolution satellite imageries, data access, assimilation, HPC and cloud computing for real-time analysis.

Promotional text

Let us put efforts into the Co-evolution of climate and marine life in the Arctic-Sea through the Correlation of Ocean-atmosphere-cryosphere interactions with Climate Variability and save mother Earth from Environmental Pollution for the present and future generations.

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