

Simple multiple linear regression model used to predict seasonal ice condition in the Canadian arctic.

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A simple multiple linear regression model (MLR) is used to predict and improve the skill of the seasonal (3 months lead) sea ice condition of concentration and events in the Canadian arctic. Time series representing dominant modes in northern hemisphere atmospheric and oceanic variability, local climate and sea ice conditions are tested as potential predictor. The measure of forecast skill, a yes/no success criteria, show a percentage of 35% for predicting events as break-up or closing route in a 7 days range, and 60% for predicting ice concentration in a 3 categories bin above-normal-below the climatic 30 years normal.