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The analysis of number of storms in the Laptev Sea, East Siberian and Chukchi Seas according to modeling data from 1979 to 2021, taking into account the ice situation, is presented. The number of storm events is calculated based on the Peak Over Threshold method. The significant wave height of 2-5 m was taken as the threshold values. The number of storms with a wave height of more than 2 m in the Laptev Sea averages about 20 times a year, more than 3 m – about 8 times. In the East Siberian Sea, cases with a wave height of more than 2 m are observed on average about 23 times a year. In 1990, a local maximum of 28 storms with a height of more than 3 m was observed. Cases with a wave height of more than 2 m in the Chukchi Sea are observed on average about 39 times a year, more than 3 m – about 24 times. The trends in number of storms for all the seas under consideration are positive and significant.

Keywords: Laptev Sea, Chukchi Sea, East Siberian Sea, wave modeling, wind wave, number of storms, WAVEWATCH III

Fig. 6. Ref. 27.