



Currents in the Kara Sea based on measurements in 2007

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We present a scheme of currents in the Kara Sea based on field measurements in 2007. This scheme partly correlates with previous observations and at the same time has features that differ from the previous data. The water transported from the Barents Sea to the Kara sea through the Kara Strait (0.3 Sv) is transported further by the Yamal Current (0.2 Sv) along the western coast of the Yamal Peninsula. The geostrophic velocities exceed 10 cm/s. The northeasterly alongshore current south of Novaya Zemlya transports 0.1 Sv of water with maximal velocities reaching 50 cm/s. The flow north of Novaya Zemlya turns to the south along the coast of the island and then merges with the flow south of Novaya Zemlya and turns back influenced by the bottom topography (an isthmus between the St. Anna and Novaya Zemlya trenches). The currents south of Novaya Zemlya are strongly influenced by variable wind stress, which is subjected to seasonal changes in direction.