

The ice tracker made by Oceanetic Measurements Ltd (Canada) was deployed on the floe to monitor the floe drift. The GPS locations were sent via Iridium satellites with a sampling interval of 10 min. The tracker deployed on April 27, 2018, transmitted the data and communicated well until February 27, 2019. Figure ... shows the tracker trajectory from April to November of 2018. One can see that the ice tracker drifted in the region of the Spitsbergen Bank for approximately six months. For the comparison of the characteristics of the ice tracker drift with the characteristic of simulated tide we distinguish time intervals I, II, III, and IV (Table 1) when the tracker drifted within relatively small regions, and its trajectory was close to a set of ellipses and elliptical segments. The ice tracker was on the floe only on time interval I, and according to the ice maps from the web-based resource <https://cryo.met.no> it was floating in the water in ice-free regions of the Spitsbergen Bank on time intervals II, III, and IV. The ice tracker passed all elliptical loops in the clockwise direction, and general circulation of the ice tracker on the Spitsbergen Bank was also clockwise. It corresponds well to the results of numerical simulations of tidal currents (Gjevik et al., 1994).

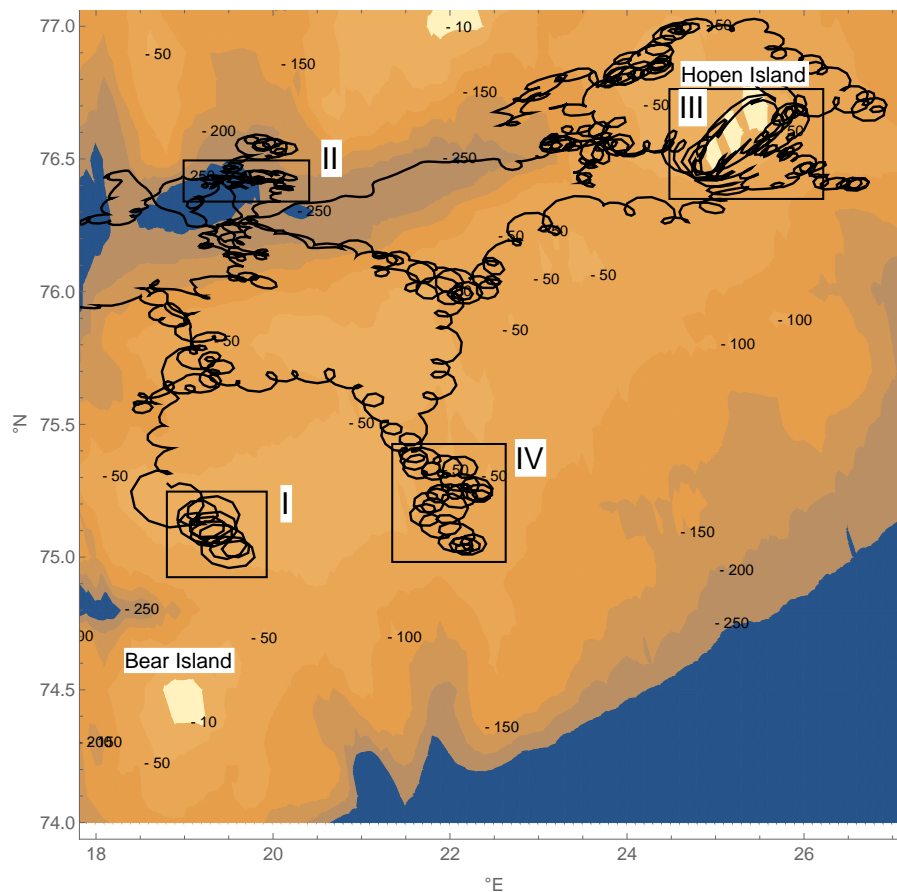


Figure. Trajectories of the ice tracker deployed in April 2018. Black squares I-IV mark the trajectory patterns used for the comparison with simulated tide.