Altogether 2857 eddy patterns were detected in satellite SAR data in summer 2007.
The range of eddy diameters is within 1–50 km, while about 65% of all eddies have diameters of 3–5 km, i.e. they are submesoscale.

**STUDY SITE**
The Fram Strait is a major gateway for exchanges between the Atlantic and Arctic Oceans. Warm and salty Atlantic Water (AW), originating from the Gulf Stream/North Atlantic Current, flows northward along the eastern rim of the Nordic Seas toward the Fram Strait where it meets colder and fresher water masses of Arctic origin (Hattermann et al., 2016).

**Meteorological conditions over the study site in summer 2007** were characterized by two main zones of high pressure – over the eastern Greenland and the Beaufort Sea resulting in domination of northerly winds. Maximum wind speed in Ny-Ålesund and Barentsburg was up to 14 m/s with wind gusts over the open water up to 18 m/s. Atmospheric pressure field over the study site averaged for warm period of 2007

**DATA**
Our SAR-based survey of eddies and their properties in the Fram Strait and around Svalbard is based on analysis of ENVISAT ASAR images taken in Wide Swath Mode and Image Mode Precise with spatial resolution of 150 and 30 m, correspondingly, acquired between June-September 2007. The data were available from the European Space Agency (ESA) rolling archive. Ice masking is done using daily AMSR-E sea ice maps produced by University of Bremen.

**MAIN FINDINGS**
1. Altogether 2857 eddy patterns were detected in satellite SAR data in summer 2007.
2. 65% of detected eddies are observed over the depth < 500 m.
3. The range of eddy diameters is within 1-50 km, while about 65% of all eddies have diameters of 3-5 km, i.e. they are submesoscale.
4. Larger mesoscale eddies with diameters of 10-20 km are observed in the Fram Strait, while submesoscale eddies with about 5 km dominate near Svalbard.
5. 64% of eddies were cyclonic, 36% - anticyclonic.
6. Most frequently eddies were observed north of Spitsbergen Is. and east from Barents Is.

**ACKNOWLEDGEMENT**
This work is supported by RFBR grant 16-29-02106 mol_a_dk and the Federal Agency for Scientific Organizations Project No. 0827.2014.001. ENVISAT ASAR data used in this study were provided by the European Space Agency (ESA) through Cat-1 Project C11-29721.

**REFERENCES**