Phytoplankton community in Utö, northern Baltic proper 1.8.2018

Kaisa Kraft, SYKE Marine Research Centre

Phytoplankton community in Utö is by number dominated by nanoplankton. Large single phytoplankton group is Cryptomonadales. Cyanobacteria, especially Oscillatoriales sp. are still very abundant, also including *Aphanizomenon flos-aquae* and *Dolichospermum* sp. and in small quantities *Nodularia spumigena*. Dinoflagellates like *Heterocapsa triquetra* and *Gonyaulax verior* are at present. Warm water diatom specie cf. *Nitzschia paleacea* is also relatively numerous. (Fig. 1).

Surface temperature is 20 °C and chl *a* concentration 3,7 µg/l, based on Alg@line FerryBox data collected near Utö from the route of Silja Serenade and Finnish meteorological institutions data from Utö Atmospheric and Marine Research Station.

Data sources

Phytoplankton community is observed daily using the Imaging FlowCytoBot (IFCB) owned by the SYKE Marine Research Centre. IFCB is situated in the Utö Atmospheric and Marine Research Station of the Finnish Meteorological Institute. Utö Island (59º 46'50N, 21º 22'23E) is located at the outermost edge of the Archipelago Sea, facing the Baltic proper (Fig. 2).

IFCB, Utö Atmospheric and Marine Research Station, and the Alg@line FerryBox network are parts of the Finnish Marine Research Infrastructure FINMARI (https://www.finmari-infrastructure.fi/).

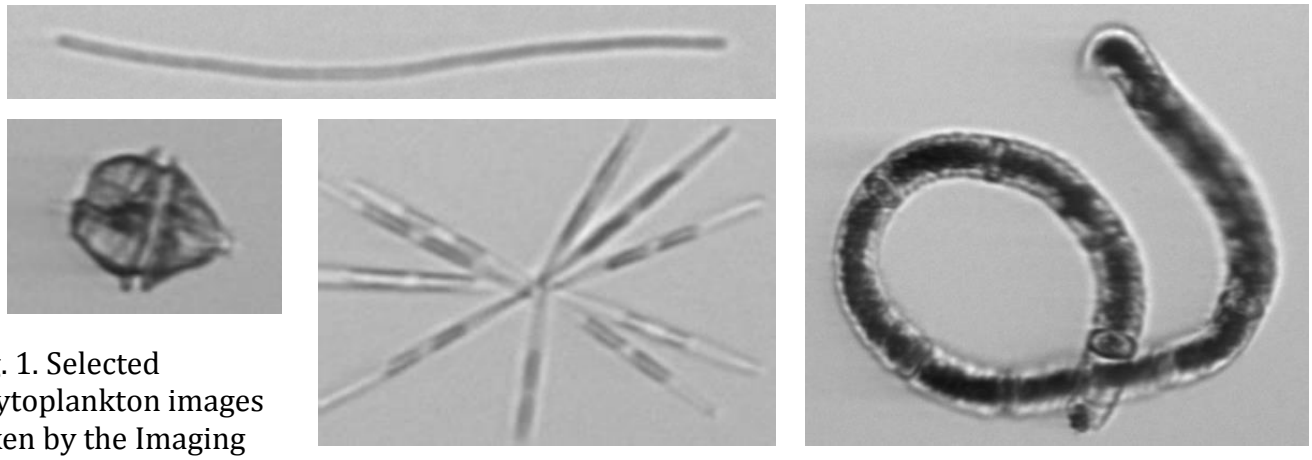

Fig. 1. Selected phytoplankton images taken by the Imaging FlowCytoBot (IFCB) between 29.7.-1.8.2018. Images from left to right: top row: *Oscillatoriales* sp.*, Nodularia spumigena*,; bottom row: *Gonyaulax verior* and *Nitzschia paleacea.*

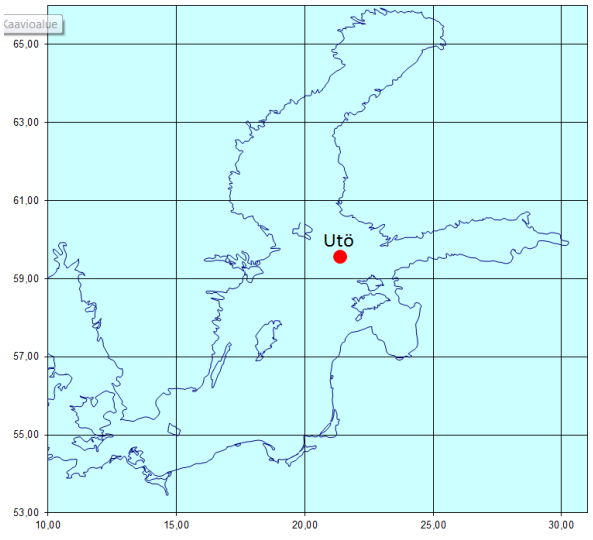

Fig. 2. SYKE's Imaging FlowCytoBot (IFCB) is situated in the Utö Atmospheric and Marine Research Station of the Finnish Meteorological Institute (left). Utö is located at the outermost edge of the Archipelago Sea, facing the Baltic proper (right).