



## **Seasonal light field changes along the sea ice edge in the Arctic Ocean from animal-borne instruments**

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The projected shifts in the spatio-temporal distribution of sea ice in the Arctic Ocean will modify mixing and light in the surface layer of the ocean. How do these changes affect the timing and the development of primary production. 8 animal-borne instruments were deployed on young harp seals in April 2017 and provided more than 1200 temperature-light profiles. 2 animal-borne instruments were deployed in early July 2018 and so far delivered >650 Fluorescence profiles (>70% of them with associated CTD profiles). Data spanned open and ice-covered waters of the Nordic Seas from East Greenland to the Barents Sea from April to January. Here we present the first results of the deployments with a focus on the quality control and analyses of the data collected by the optical sensors. These instruments are continuously improving and a more systematic quality control procedures needs to be developed.