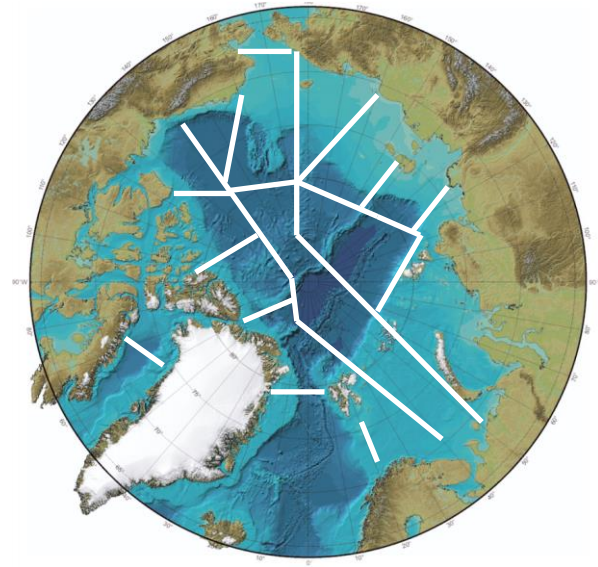


# STATUS on Danish contribution to SAS

## Rafael (Rafa) Gonçalves-Araujo

Tenure Track Researcher  
Section for Oceans and Arctic  
National Institute of Aquatic Resources  
Technical University of Denmark  
DTU Aqua

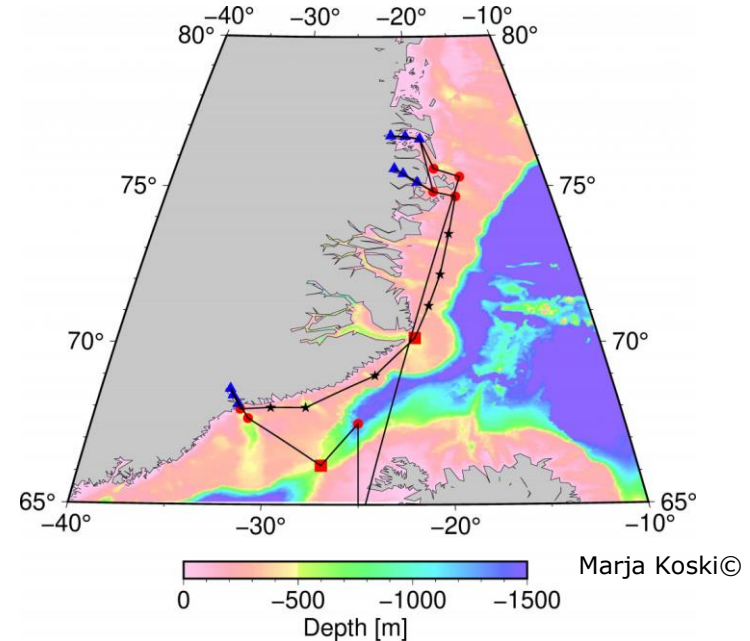


## East Greenland Shelf and Fjords

- R/V Maria S. Merian
- August 2022
- Helmholtz-Zentrum Hereon (Helmut Thomas)
- DTU contact: Marja Koski, Sigrún Jónasdóttir

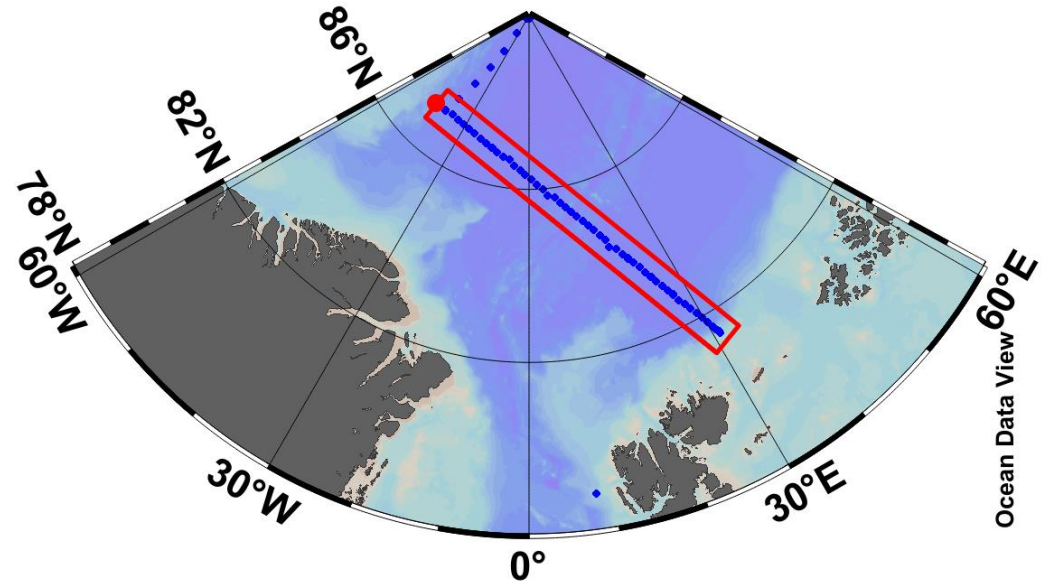
### Envisaged papers

- Lipid content of Calanoids copepods
- Copepod contribution to carbon fluxes
- Zooplankton biodiversity along physical-chemical gradients



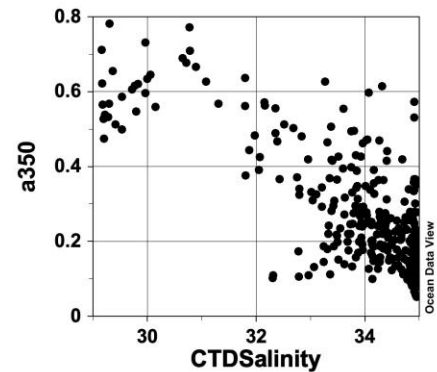
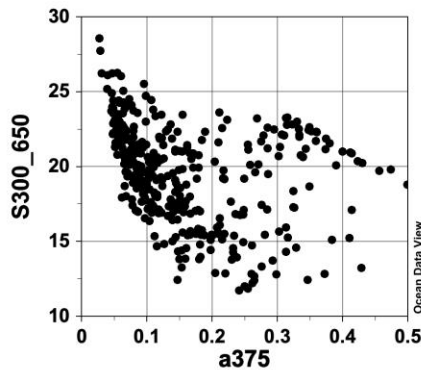
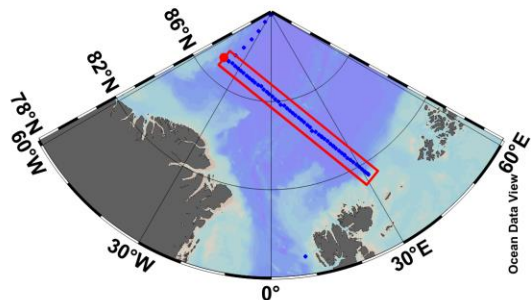
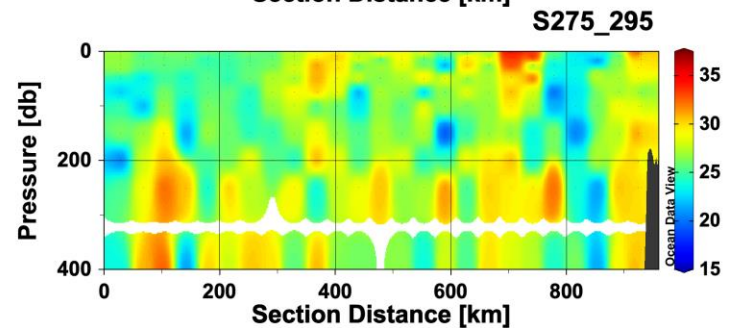
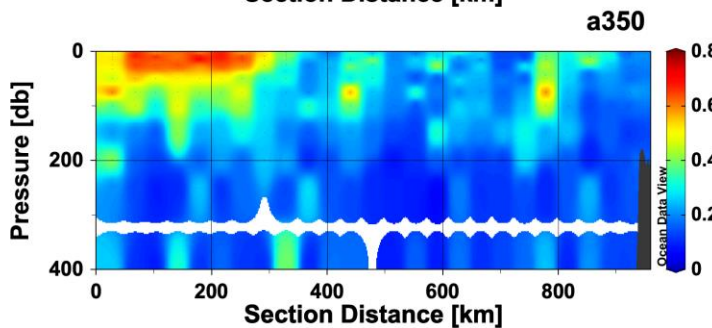
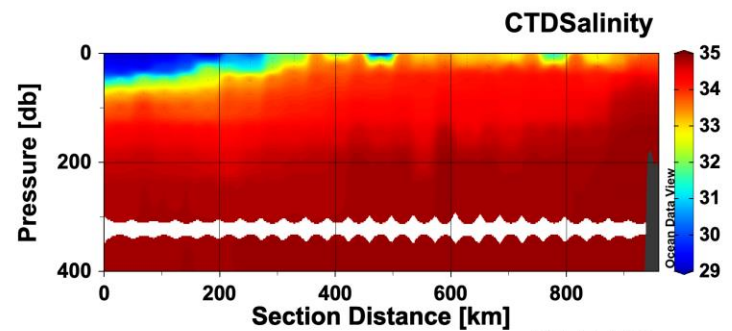
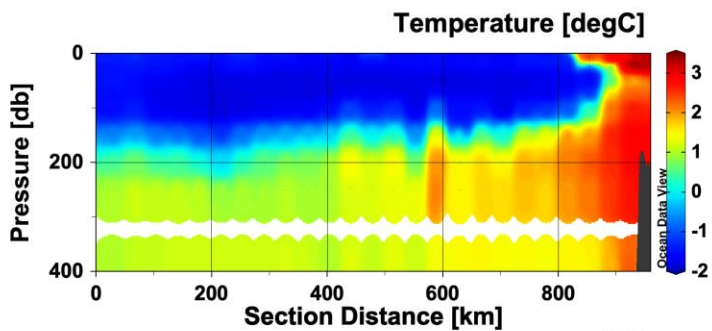
# East Greenland Shelf and Fjords

- R/V Kronprins Haakon
- July-August 2022
- Norwegian Polar Institute (Paul Dodd)
- DTU contact: Colin Stedmon, Rafa Gonçalves-Araujo



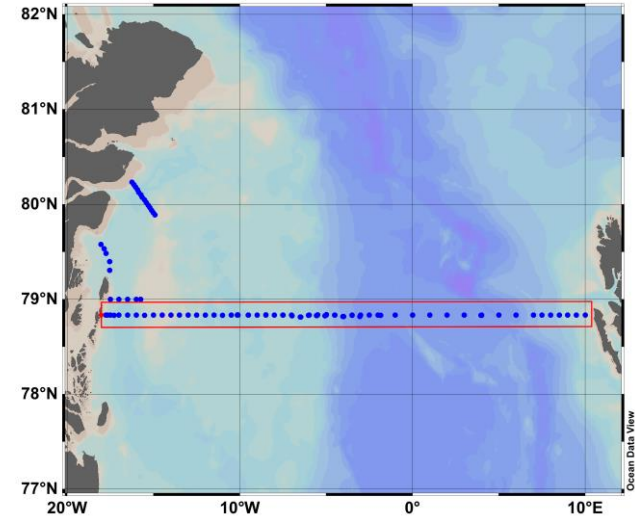
East

- R/V
- Jul
- No
- DT



# Fram Strait 2021

- R/V Kronprins Haakon
- July-August 2021
- Norwegian Polar Institute (Laura de Steur)
- DTU contact: Rafa Gonçalves-Araujo
- ARICE funded project NoTAC





# Fram Strait 2021

- R/V Kronprins Haakon
- July-August 2021
- Norwegian Polar Institute (Laura de Steur)
- DTU contact: Rafa Gonçalves-Araujo
- ARICE funded project NoTAC



## Envisaged papers

- Lin et al: Tracing Atlantic water exiting the Arctic Ocean: coupling reprocessing-derived 236U and colored dissolved organic matter (submitted)
- Bruhn et al: Lignin across the Fram Strait: Towards in-situ measurements from fluorescence (writing)
- Wünsch et al: Photosensitivity of fluorescent dissolved organic matter across the Arctic Ocean (writing)
- Zander et al: Nitrogen fixation and diazotroph community composition across environmental gradients in the Arctic Fram Strait (envisioned)
- Gonçalves-Araujo, Haraguchi et al: Microbial turnover of organic matter in the Arctic Gateway (envisioned)
- Deary et al: **Synthesis paper** on biological processes in Fram Strait (envisioned)

## Synthesis paper idea

- Colin Stedmon (DTU Aqua)
- Calibrated FDOM data → in situ fluorometers
- Various Arctic cruises + ITPs

## JGR Oceans

### RESEARCH ARTICLE

10.1029/2021JC017407

#### Special Section:

Uncovering the hidden links between dynamics, chemical, biogeochemical and biological processes under the changing Arctic

## Insights Into Water Mass Origins in the Central Arctic Ocean From In-Situ Dissolved Organic Matter Fluorescence

Colin A. Stedmon<sup>1</sup> , Rainer M. W. Amon<sup>2,3</sup> , Dorothea Bauch<sup>4,5</sup> , Astrid Bracher<sup>6,7</sup> ,  
Rafael Gonçalves-Araujo<sup>1</sup> , Mario Hoppmann<sup>6</sup> , Richard Krishfield<sup>8</sup> ,  
Samuel Laney<sup>8</sup> , Benjamin Rabe<sup>6</sup> , Heather Reader<sup>9</sup> , and Mats A. Granskog<sup>10</sup> 