



# IV ROSS SEA CONFERENCE 2023

*Università degli Studi di Napoli "Parthenope"*

*Via Amm. F. Acton, 38 - 80133 Napoli, ITALY*

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PHYSICAL OCEANOGRAPHY

## ANNUNZIATA PIRRO

**ABSTRACT Subject :**

Glider measurements in the Ross Sea during January 2020

**Abstract** 15/02/2023 10:36:16

During the 2020 austral summer a glider field campaign was carried out in the eastern sector of the Ross Sea from 18 to 26 January, as part of the ESTRO (Effect of the eaSTern inflow of water on the ROSS Sea salinity field variability) project. The OGS seaglider was deployed at 77.16S, 162.47W, and recovered at 78.11S, 164.98W. During the glider mission, the physical and biogeochemical properties of the water column were sampled in the upper 500 m of depth along an approximately 130 km transect. Glider data were analyzed in conjunction with the hydrological measurements collected along the Ross Ice Shelf (RIS), and water mass characteristics and dynamical features were investigated. Considering that the area sampled by the autonomous vehicle was inaccessible to the ship due to the sea conditions, the use of the glider represented a significant improvement in the observation capabilities during the oceanographic cruise and made it possible to extend the measurements between the RIS and the open sea.

