Buoy Deployment Report

seaiceportal.de

Buoy information

Buoy name: 2021S112
IMEI: 300534061251920
WMO number: 7101590
Buoy type: Snow Buoy
Buoy owner: Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research

Deployment information

Date and Time (UTC): 11.03.2021 12:46
Position (Lat/Lon): -74.46261/-29.61355
Region: Weddell Sea
Contact:
Christian Haas (AWI)
Stefanie Arndt (AWI)
Expedition name: PS124
Means of deployment: Helicopter

Snow and ice conditions

Snow depth: 0.29 m
Ice thickness: 1.25 m
Ice freeboard: -0.03 m
Ice types:
FYI (First Year Ice)

Buoy-specific parameters

Initial sh1: 0.28 m
Initial sh2: 0.35 m
Initial sh3: 0.27 m
Initial sh4: 0.25 m
Temp correction: off



Photo credits: Stefanie Arndt

Additional information *(comments, weather, topography, ice floe size, etc.)*

Ice floe of buoy deployment was sampled on same day as ice station PS124_20210311_16, doing snow pit work, SMP transect, snow depth and sea ice thickness transects (MagnaProbe and GEM), ice coring. Next to the SnowBuoy a “Southern Hemisphere Antarctic Research Collaborative Buoy” (SHARC) was installed on the ice (collaboration with University of Cape Town/South Africa, Marcello Vichi).

Ice conditions:
floe size: >5 km, ridge density: 10%, ridge height: 0.5-1.5m; the ice floe is in the close vicinity of a huge iceberg (easy recognizable in Sentinel- and TerraSAR-X images of the region).

Weather conditions:
clouds: 6/8 , T = -2.8°C, calm; slight fall of snow grains; buoy deployment just between two low pressure systems crossing the area