Buoy Deployment Report

seaiceportal.de

Buoy information

Buoy name: 2021S114
IMEI: 300534061254970
WMO number: 7101592
Buoy type: Snow Buoy
Buoy owner: Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research

Deployment information

Date and Time (UTC): 19.02.2021 10:35
Position (Lat/Lon): -75.08600/32.16670
Region: Weddell Sea
Contact:
Christian Haas (AWI)
Stefanie Arndt (AWI)
Expedition name: PS124
Means of deployment: Helicopter

Snow and ice conditions

Snow depth: 0.44 m
Ice thickness: 1.4 m
Ice freeboard: -0.09 m
Ice types:
FYI (First Year Ice)

Buoy-specific parameters

Initial sh1: 0.47 m
Initial sh2: 0.45 m
Initial sh3: 0.41 m
Initial sh4: 0.43 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 Feb 18, 2021 as ice station PS124_20210218_6, doing snow pit work, SMP transect, snow depth transect (MagnaProbe), ice coring and deployment/recovery of sediment trap.

Ice conditions:
floe size: 10*13km (easy recognizable in TerraSAR-X image of the area), ridge density: 20%, ridge height: 2-3m; new snow layer on top of old snow layer, but both rather compacted; snowpack in whole area rather homogenous; many seals on the floe.

Weather conditions:
clouds: 8/8 , T = -5°C, calm, moderate contrasts, good visibility; snowfall event between ice station on Feb 18 and buoy deployment on Feb 19.