Buoy Deployment Report

seaiceportal.de

Buoy information

Buoy name: 2021S115
IMEI: 300534061350010
WMO number: 7101593
Buoy type: Snow Buoy
Buoy owner: Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research

Deployment information

Date and Time (UTC): 06.03.2021 10:51
Position (Lat/Lon): -77.18451/-36.14963
Region: Weddell Sea
Contact:
Christian Haas (AWI)
Stefanie Arndt (AWI)
Expedition name: PS124
Means of deployment: Helicopter

Snow and ice conditions

Snow depth: 0.19 m
Ice thickness: 1.65 m
Ice freeboard: 0.07 m
Ice types:
FYI (First Year Ice)
Rafted ice

Buoy-specific parameters

Sensor gps stop: 2021-03-18 03:00 UTC
Sensor temp stop: 2021-03-18 03:00 UTC
Sensor press stop: 2021-03-18 03:00 UTC
Sensor sh4 stop: 2021-03-18 03:00 UTC
Sensor sh3 stop: 2021-03-18 03:00 UTC
Sensor sh2 stop: 2021-03-18 03:00 UTC
Sensor sh1 stop: 2021-03-18 03:00 UTC
Initial sh1: 0.27 m
Initial sh2: 0.21 m
Initial sh3: 0.14 m
Initial sh4: 0.12 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_20210306_14, doing snow pit work, SMP transect, snow depth and sea ice thickness transects (MagnaProbe and GEM), ice coring.

Ice conditions:
floe size: 9*12km (easy recognizable in TerraSAR-X image of the area), ridge density: 30-40%, ridge height: 0.5-1.5m; snow layer rather soft (also on top) with low density and loose depth hoar layers; probably superimposed ice at the snow/ice interface

Weather conditions:
clouds: 8/8 , T = -7.9°C, calm; slight fall of snow grains; buoy deployment just right before a new low pressure system approaching the area