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## The Polish Polar Station in Svalbard

The Polish Polar Station Hornsund ( $77^{\circ}00'N$ ,  $15^{\circ}33'E$ ) is situated in the south-western part of Spitsbergen. It is a modern interdisciplinary scientific station performing research to better understand the functioning of the arctic climate and ecosystem changes.

The station conducts year-round scientific observations and is the northern-most permanent Polish scientific station. The meteorological station no. 01003 has been working continuously under WMO since 1978. The station is managed by the Institute of Geophysics, Polish Academy of Sciences. Data are collected in a number of scientific disciplines: Meteorology, hydrology, oceanography, glaciology, seismology, earth magnetism, ionospheric research, atmospheric physics and optics. And other environmental research. The data are collected over many years and contribute to many international networks. The Hornsund station is member of the Svalbard Integrated Arctic Earth Observing system (<https://sios-svalbard.org/>)



Figure 1. Map of Svalbard with location of Hornsund station

Inter-seasonal weather fluctuations are determined by the changing Arctic climate system and atmospheric circulation. Weather conditions are crucial factors that have local feedback on many environmental components. Meteorological variables collected at Hornsund help to characterise the climate variability in this part of the Arctic and for a long time have been the background for multiple studies conducted in the Southern Spitsbergen. Long-term in situ measurements in the Arctic are rare. Therefore, data from the Hornsund station are very valuable for weather forecasting and climate monitoring.

Link to the station  
<https://hornsund.igf.edu.pl/en/>



Figure 2. Photos of the Hornsund station in winter (upper picture) and summer (lower picture)