

Meteorological features of Syowa station and ice-free areas for bryophyte ecosystem.

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Ice-free areas around Syowa station, Langhovde, Skarvsnes, and Skallen harbor prosperous bryophyte colonies. Bryophyte colonies in Langhovde are known as Antarctic Specially Protected Area (ASP) 147. Meteorological conditions strongly affect the growth and reproduction of bryophyte. Hence, National Institute of Polar Research (NIPR) installed Automatic Weather Station (AWS) in each ice-free area and published the recorded meteorological data until 2018. 63rd Japanese Antarctic Research Expedition (JARE) member retrieved the AWSs' data recorded from August 2019 until January 2022. We analyzed the data recorded by each AWS and the data at Syowa station reported by Japan Meteorological Agency. We will discuss the relationship between meteorological conditions and bryophyte communities in the session.