

Analysis of a Rain Event on January 2-3, 2022 at Syowa Station, Antarctica

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At Syowa Station, rainfall occurred on January 2-3, 2022, for the first time since December 24, 2017. Rainfall at Syowa Station is a rare event, occurring only about once every five years. This time, we had conducted enhanced observations of precipitation using a radar, a disdrometer, a PMPL, and a ceilometer during March 2021-November 2022. This study aims to discuss the precipitation formation process of the January 2022 rainfall event using these observations, and furthermore, to characterize the synoptic-scale atmospheric circulation that produces rainfall, taking into account past rainfall events. In this presentation, we will present the observations of the January 2022 rainfall event and the synoptic-scale atmospheric circulation.