First Campaign Results of LODEWAVE (LOng-Duration balloon Experiment of gravity WAVE over Antarctica)

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In order to clarify the roles of atmospheric gravity waves in the Antarctic region in driving the general circulation, we planned a super pressure balloon (SPB) observation of atmospheric gravity waves over Antarctica, which is called LODEWAVE (LOng-Duration balloon Experiment of gravity WAVE over Antarctica). The first campaign observation was carried out at Syowa Station in Antarctica from January to February 2022 (during JARE63 summer period). In this presentation, we report on the purpose of this project, outline of the observation at Syowa Station, the results of data analysis, and its future plan.

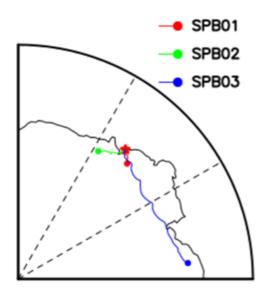


Figure 1. Trajectories of 3 SPBs. A red star denotes Syowa Station (69S, 40E).