Fluctuation of atmospheric mercury concentration observed at Syowa station, Antarctica during January 2022

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In order to clarify the dynamics of atmospheric mercury concentration in Antarctica, we have installed the atmospheric mercury monitor (AM-5, Nippon Instruments, Co. Ltd) to the Syowa station during January to early February, 2022. Syowa station is located at coastal area. The average concentration of Hg (0) were 1.01 ± 0.21 ng/m³ during our observation period. Highest concentration (1.99 ng/m³) were observed when the low presser system approaches to the Syowa station.

The atmospheric mercury concentration increases during the noon and decreased at night time. In this presentation, we will discuss the fluctuation factor of atmospheric mercury in this period.

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