

## Long-term geomagnetic field observation at Syowa Station in Antarctica since 1966

SATO, Natsuo<sup>1\*</sup>, KADOKURA, Akira<sup>1</sup>

<sup>1</sup>National Institute of Polar Research

Syowa Station was established in January 1957 during the International Geophysical Year (IGY) at 69 deg.00'S and 39 deg.35'E on East Ongul Island, Lutzow-Holm Bay, East Antarctica. Geomagnetic field observation at Syowa Station using fluxgate magnetometer (H, D, Z components) and absolute value observation using proton magnetometer has been continuously operating since 1966. The geomagnetic field observation at Syowa Station is important for the study on geomagnetic disturbances associated with auroral activity and many other related phenomena. One of the interesting features using long-term observation is that the absolute geomagnetic field intensity is decreasing year by year. During the long history of geomagnetic observation at Syowa Station, the KAKIOKA Geomagnetic Observatory has been contributing to keep quality of magnetometer and to operate of the system. The KAKIOKA Geomagnetic Observatory is also contributing training of magnetometer for Antarctic expedition member at the site Kakioka observatory before leave for Antarctica.

Keywords: magnetic field, magnetometer, Syowa Station, Antarctica, aurora, magnetic storm