

A new MF radar at Syowa Station, Antarctica

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An MF radar was installed at Syowa Station in March, 1999 and started continuous operation in April. Since then, it has been observing wind field with fairly a good quality. At times, echo returns from lower altitude down to 50km region are detected. These wind data reveal the behaviors of atmospheric gravity wave and tides at polar latitudes. It is also possible to observe meteor trail echoes and wind fields above 100 km are also given. Comparison of wind values from two methods suggests that some discrepancy still remains to be resolved. It must be added that global collaboration with longitudinal chain in the Antarctic and with TIMED satellite and conjugate observation between two hemispheres are expected to work well in clarifying the wave dynamics in the polar upper atmosphere.

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