

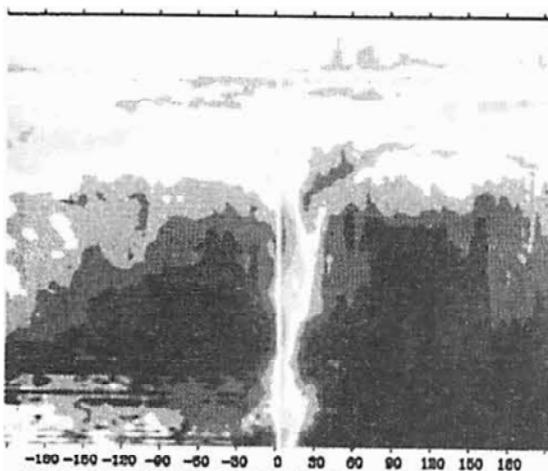
CAUGHT THE TYPHOON-EYE (Kyoto Univ. Group)
Yomiuri Newspaper, Tuesday Evening, Dec. 13, 1994.

Kyoto Univ. Prof. Fukao's group succeeded in making cross-section figures of the inside of "Typhoon-eye," for the first time in the world, by observation using the MU radar. The observation was made on Typhoon No. 26 on Sept. 29, 1994. The typhoon passed above the MU radar, and it caught the wind direction and speed, from the ground level to 20 km height.

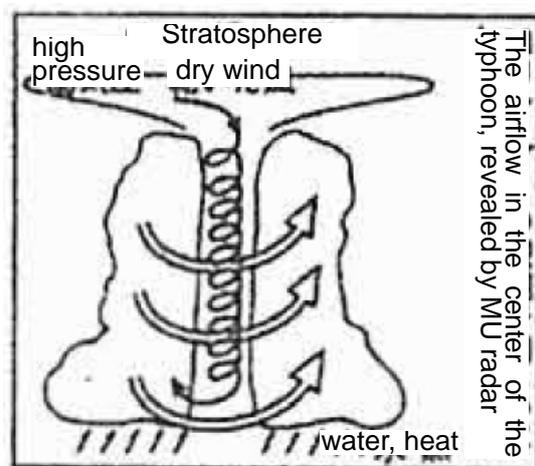
They released the computer graphics on Dec. 13. The observation was possible because the typhoon path coincided with the MU radar location. The group verified that the pressure inside the typhoon-eye is high, and the wind flows inside the eye are counter-clockwise, that is opposite to the clockwise flow of the outside.

The eye is about 18km high. The group found out that the eye serves as a reverse chimney that brings the dry air above to downward. The group predicted from the observation that the dry air that the eye sends from the above to inside functions as a vessel that absorbs water and heat from the sea, resulting in developing the typhoon. This is a great contribution for clarifying the typhoon development mechanism.

The typhoon-eye had been observed using airplanes or dropping sensors with parachutes. They observed the temperature, etc, but could not capture a precise cross-section of the eye, nor the air flow. The MU radar can capture subtle atmospheric movement using radio-wave, whereas other radars need water-drop (cloud) to observe. The typhoon-eye is dry without cloud, so the MU radar contributes greatly to its observation.



The observed graphic of the typhoon-eye



The airflow in the center of the typhoon, revealed by MU radar

The airflow inside the typhoon