

OBSERVATIONS OF STRATOSPHERIC OZONE MIXING RATIO BY GROUND-BASED MILLIMETERWAVE MEASUREMENTS AT SOOKMYUNG WOMEN'S UNIVERSITY

INHEE PARK, JUNG EUN LEE, JUNG JIN OH^a, *Department of Chemistry, SookMyung Women's University, Seoul, Korea*; KWANG DONG KIM, HYO RYUNG KIM, SEOG TAE HAN, *Taeduk Radio Astronomy Observatory, Taejon, Korea*.

The $J = 6_{1,5} - 6_{0,6}$ rotational transition of stratospheric ozone at 110.8359 GHz has been observed using a Schottky diode mixer receiver at Sookmyung Women's University in Seoul during 8-26 March 2000 by the load switching method.

The instrument consists of a millimeter wave receiver, a multi-channel spectrometer and a computer. The mixer block is cooled to a temperature of 20 K by a closed cycle refrigerator of liquid He and the system temperature was determined to be about 850 K.

The observed spectrum has been analyzed to determine variations in the ozone mixing ratio at various altitudes above Seoul. The retrieval algorithm used to obtain the data will be discussed and the variations of the altitude profiles will be compared.

^aJ.J. OH (email address : jjinoh@sookmyung.ac.kr) express sincere thanks to Prof. de Zafra for his help on the data reduction.