

O VI PROFILES OF SOLAR QUIET AND ACTIVE AREAS
RECORDED BY OSO-8 L.P.S.P. EXPERIMENT

By

P. Lemaire, P. McWhirter⁽⁺⁾, G. Artzner, J. C. Vial,⁽⁺⁺⁾
R.M. Bonnet, P. Gouttebroze, A. Jouchoux, J. Leibacher⁽⁺⁺⁾,
A. Skumanich⁽⁺⁺⁺⁾, A. Vidal-Madjar.

L.P.S.P., Verrieres le Buisson, 91370 France.

+ Culham Laboratory, Abingdon, Oxon, England.

++ Lockheed Research Laboratory, Palo Alto, Ca., U.S.A.

+++ High Altitude Observatory, National Center for Atmospheric
Research, Boulder, Co., U.S.A.

O VI resonance line ($2s^2S - 2p^2P^o$, 103.19 nm) is formed in the chromosphere-corona transition zone with a temperature of maximum ionization of $350\,000^{\circ}\text{C}$ (Jordan, 1969). The OSO-8/LPSP experiment has observed this line with a 0.006 nm resolution, few arcseconds angular resolution and a time resolution up to few seconds. We present the shape of the line in different areas on the sun (quiet and active). As transition lines are used to determine propagation of wave from chromosphere to corona, we compare width of the O VI line with other measurements obtained with lines of lower ionization temperature. From successive profiles we consider the possibility of direct measurements of wave propagating.