

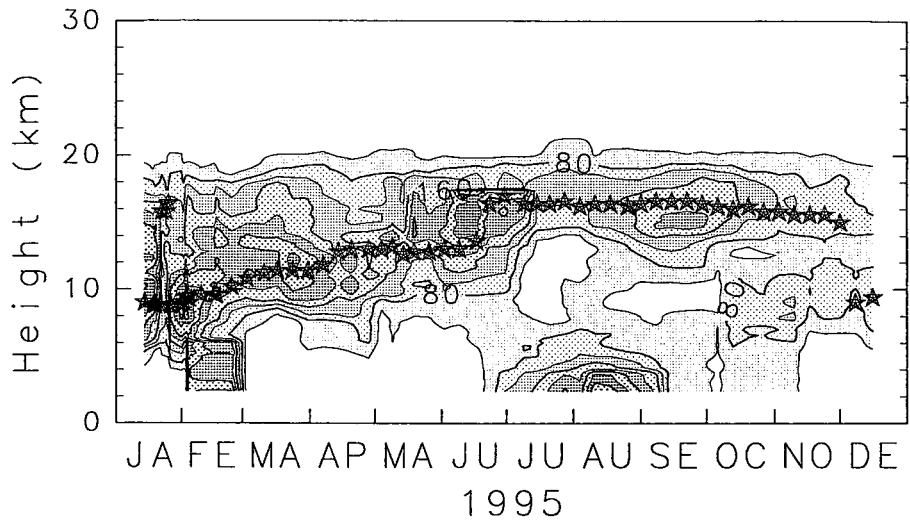
An analysis on lamina structure of ozone in the middle atmosphere

Kaoru Sato [1], Yoshinori Aoki [1]

[1] Dept. of Geophys., Kyoto Univ.

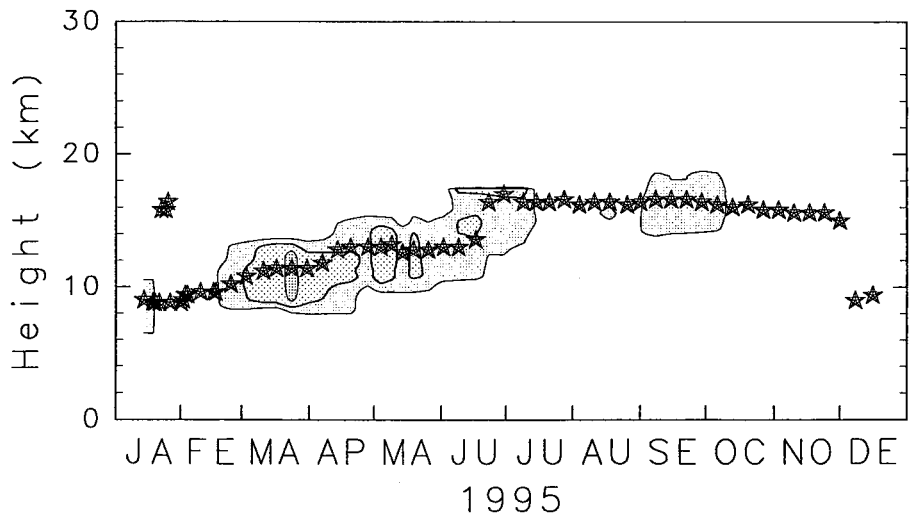
<http://www-mete.kugi.kyoto-u.ac.jp/sato>

Based on ozonesonde observation data by JMA, an analysis was made on laminae structure with vertical scales of 1-2km observed in ozone mixing ratio. While the top of dominant region of laminae is 19km independent of season, the bottom coincides with tropopause which is lower in winter and spring. The relative importance to the laminae formation of the horizontal advection associated with Rossby waves and the vertical advection associated with gravity waves is considered. Several problems on the method of analysis are discussed. It is safely concluded that the gravity wave contribution is large around the tropopause in the spring.



CONTOUR INTERVAL = 4.000E+01

☒ 1



CONTOUR INTERVAL = 4.000E+01

☒ 2