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Analysis of a long term ionospheric activity

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Variation of the ionospheric activity of five solar cycles was analyzed. Monthly median value of electron density (foF2) at local noon in Kokubunji, Tokyo (35.7.N, 139.5.E) shows small decrease during every solar maximum year. Similar decrease appeared in the noon time foF2 at Syowa Station (69.0.S, 39.6.E), Antarctica. There is no such decrease in solar activity such as sun spot number and F10.7. There seems to be some atmospheric process that decreases the electron density of F layer in solar maximum period.

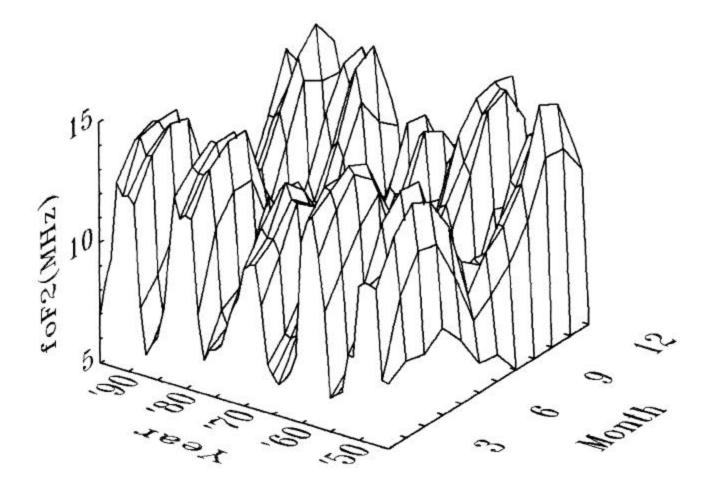


Fig.1 国分寺正午の foF2 の 3 次元表示('45~'95) X 軸に月、Y 軸に年、Z 軸に foF2 とし、XZ 平面の 視点からは季節変化、YZ 平面の視点からは年変化が、 明瞭に見て取れる。