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Multivariate analysis of 630-nm airglow observations from Mawson Station, Antarctica

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An extensive set of airglow observations of red line emissions, from a height of approximately 240km, have been made with a Fabry-Perot Spectrometer. The observations were made between 1992 and 1999 at Mawson Station (67.6° S. 62.9°E). The results of multivariate analysis will be presented and discussed in relation to the relative correlation between the observed thermospheric winds, temperatures and airglow intensities, and possible influences such as sunspots, magnetic variation, solar declination and zenith angle, and lunar phase and zenith angle. A chronology of the data set will be illustrated.