Behaviour of vertical winds in E-layer near aurora

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The behaviour of a vertical wind at heights of 100-130 km in zenith of obs. Tumanny (65.24, 116.7) is investigated in the period November 2002 - January 2003. The velocity of a wind was determined on the Fabry-Perrot interferometer data, and the auroral situation was supervised on the data of scanning photometer and TV-camera. For the specified period 9 nights were selected, when the observations were possible on weather conditions and auroras were observed in zenith of the station.

Is shown, that at occurrence of aurora in zenith of station the vertical wind is directed upwards, and its velocity makes 20 - 40 m/s. Unfortunately yet it was not possible to establish dependence between of a wind velocity value and intensity of aurora. Frequently before occurrence of aurora in zenith of station the neutral wind velocity is directed downwards.