

## Characteristics of electron density distributions at high latitude

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We made a statistical investigation of electron density distributions at high latitude. The density data obtained by PWS on board the AKEBONO satellite from 1990 to 1994 were averaged for the bins which are divided by every 50 km height and every 1 degree in the invariant latitude. As the result, characteristics of electron density distributions under conditions of magnetic local time, seasons and geomagnetic activities became clear. The density profiles were fitted with a function of altitudes and we succeeded to make an empirical model of the electron density at high latitude. It was confirmed that the model showed good agreement with in-situ data.