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## A new whistler inversion model

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A new model has been developed to obtain plasmaspheric electron densities and propagation paths deduced from measured whistler data ('inversion'). It is based on UWB solution for whistlers and recent experimental density distribution models:

- 1. A longitudinal whistler-wave propagation model
- 2. Empirical equatorial electron density model
- 3. Empirical electron-density distributions along field lines based on Polar data
- 4. Dipole and IGRF approximation of Earth's magnetic field.

Beside that the model is capable to provide equatorial electron densities at individual locations, analysis of multiple-path propagation whistlers yields electron density profiles for the plasmasphere.