



**VERB-4D simulations of Earth's inner magnetosphere:
Ring-current-to-radiation-belt electrons including adiabatic effects in a
realistic magnetic field**

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The Versatile Electron Radiation Belt 4D (VERB-4D) code models the dynamics of ring-current to radiation-belt electrons in Earth's magnetosphere. The code has been developed further to include a realistic magnetic field model, which allows one to model MLT-dependent adiabatic effects, in addition to other processes. Initial results are presented for storm- and non-storm time periods, demonstrating the role which adiabatic variations play on the observed electron dynamics.