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Numerical solution of the steady state transport equation at arbitrary pitch angle

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On the basis of numerical solution of the steady state transport equation at arbitrary pitch angle in the Earth's magnetosphere, characteristics of trapped proton pitch angle distributions in the Earth's radiation belts for 1 < L < 6.6 and 1 keV < E < 750 keV are calculated. The effect of the magnetospheric convection on the flux anisotropy is examined. A comparison between calculated proton pitch angle distributions and available experimental data is made.