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Calculation of injection of solar energetic particles of Easter 2001 Solar Particle Event

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Acceleration of solar energetic particles by the shock generated by the coronal mass ejection is calculated. The external boundary of coronal mass ejection and the shock front are specified as the segments of spherical surfaces with the different radii moving in coordination. Nonstationarity of process, spherical symmetry and adiabatic losses of particle energy in the extending environment are considered in the calculation. It is supposed that near the Sun there is the abrupt change region of the particle diffusion coefficient from coronal to the interplanetary. The calculation results are compared with the SEP injection of the Easter 2001 Solar Particle Event (April 15). From the comparison the particle diffusion coefficients before and behind the shock front and location of the abrupt change region are determined.

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