

A NEW COSMIC RAY MODULATION MODEL FOR THE 11-YEAR AND 22-YEAR CYCLES

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A heliospheric cosmic ray modulation model based on the numerical solution of Parker's transport equation will be presented. The model is developed to simulate time-dependent modulation for cosmic ray protons and electrons for full 11-year and 22-year cosmic ray cycles. The details of the model will be discussed and the results of the simulation will be compared to the observed 11-year and 22-year cycles and to the observed charge-sign dependence along the Ulysses trajectory.