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Abstract = Authors:

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This paper has not already discussed with the Organizer of the Session.

Title:Galactic Cosmic Rays Modulation for the AMS-02 mission

Galactic Cosmic Rays (GCRs) entering the Heliosphere experience diffusion, convection, magnetic drift and adiabatic energy loss to reach the Earth surface (solar modulation). We realized a quasi time-dependent 2D Stochastic Simulation of Heliosphere Modulation to

describe this scenario. The feature of the program take also in account the co-latitudinal Solar Wind dependency. Our model was used to reproduce proton fluxes measured during solar minima, (AMS-01, Caprice, IMAX) in positive periods, and for negative periods BESS 2002 proton flux, measured in a period of solar maxima. We finally present the prediction of our simulation for the proton flux for the AMS-02 period (year 2010-2012), in negative solar polarity and solar maxima