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A new version of the Neutron Monitor Based Anisotropic GLE Model : Application to GLE60

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We present a cosmic ray model that couples primary solar cosmic rays at the top of the Earth's atmosphere with the secondary ones detected at ground level by neutron monitors during Ground Level Enhancements (GLEs). The Neutron Monitor Based Anisotropic GLE Pure Power Law (NMBANGLE PPOLA) Model constitutes a new version of the already existing NMBANGLE Model, differing in the solar cosmic ray spectrum assumed. The total output of the model is a multi-dimensional GLE picture that reveals part of the characteristics of the big solar proton events recorded at ground level. We apply both versions of the model to the GLE of 15 April 2001 (GLE60) and compare the results.