LONG-TERM CUTOFF CHANGES AND L PARAMETER AT LARC NEUTRON MONITOR LOCATION

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Storini et al. [1] found a significant change of the effective, lower and upper cutoff rigidities at LARC station (62° 12' 09" S, -58° 57' 42" W) over the past 40 years. Being the vertical cutoff rigidities well approached by the L parameter [2], we computed the L values using the Galperin and Zinin code [3]. Results show relatively strong variation, from 2.107 in 1965 to 2.240 in 1995. Moreover, the comparison between predicted cutoffs, as derived from [2], and the long term L evolution at LARC position is made. The cutoffs are well organized according to L and are indicating a dependence even steeper than L^(-2).

1. Storini, M., M.A. Shea, D.F. Smart, and E.G. Cordaro, Proc. 26th ICRC, 7, 402-405, 1999

2. Shea, M.A., D.F. Smart, and L.C. Gentile, Phys. Earth and Planet. Interiors, 48, 200-205, 1987

3. Galperin and Zinin, personnal communication, 2000