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Light Ion Production Improvements in the NUCFRG2 Semiempirical Nuclear Fragmentation Model: Preliminary Results¹ SIRIKUL SRIPRISAN, RYAN NORMAN, LAWRENCE TOWNSEND, University of Tennessee — The nuclear interaction model used in the space radiation transport/shielding codes developed at NASA Langley Research Center is the NUCFRG2 semiempirical model. Previous versions of this model used simple approximations to generate yields of light ion fragments ($Z = 1,2$). In an attempt to improve the accuracy of the light ion yields, a coalescence formalism is incorporated into NUCFRG2. In this work, the modifications to the NUCFRG2 model are described and preliminary results for light ion yields presented.

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