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Updates on the neutron F_2 extraction with CJ15 PDFs¹ SHUJIE LI, Lawrence Berkeley National Laboratory, CTEQ-JEFFERSON LAB COLLABORATION — The CJ (CTEQ-Jefferson Lab) Collaboration provides a global fit of parton distribution functions (PDFs) with a special emphasis on the large x region with deuteron nuclear corrections at the parton level. By applying the same nuclear corrections on the world DIS F_2 datasets, we performed a data-driven extraction of neutron F_2 . That dataset has been used for applications such as neutron excess corrections on experimental data and moments calculations. In this work we present an updated F_2^n datasets with detailed uncertainty analysis. Within the same framework, we also provide the neutral-current and charged-current structure functions of proton, deuteron, and neutron that are calculated from PDFs.

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Shujie Li
Lawrence Berkeley National Laboratory

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