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We study the impact of state-of-the-art top-quark data collected at the Large Hadron Collider (LHC) on proton parton distribution functions (PDFs) using the ABMP16 methodology. The gluon PDF at large x and the top-quark mass value derived from these data are well compatible with the previous ABMP16 results, but with significantly reduced uncertainties by up to a factor of two. We discuss the compatibility of different datasets and the compatibility of the fitted PDFs with other modern global PDF sets. Th new PDF set is used to compute cross sections for benchmark processes at the LHC, such as Higgs production. Also we discuss the availability of the tools used in our work within the open-source xFitter project. In addition, we present preliminary results considering the QCD+QED evolution.

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