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Measurement of inclusive jet yields in polarized $p+p$ collisions at $\sqrt{s}$ =200 GeV. MICHAEL MILLER, MIT, STAR COLLABORATION — At RHIC, the STAR detector is uniquely capable of full jet reconstruction in $p+p$ collisions. The calibration of the jet energy scale and transverse energy resolution are critical to many physics analyses including, but not limited to, extraction of the gluon polarization (ΔG) via measurement of jet production in *polarized* $p+p$ collisions (see J. Kiryluk, this meeting). Measurement of *unpolarized* jet cross sections at RHIC may provide significant additional constraints to previously measured large-x parton distributions. We present preliminary measurements of inclusive jet yields in the transverse energy region 5< E_T <25 GeV from ∼1 pb^{-1} of data at $\sqrt{s}$=200 GeV. Final state hadron energies were measured using charged particle tracking in the time projection chamber and energy deposition in the electromagnetic calorimeter. Hadrons were clustered using both the k_T and midpoint-cone algorithms. The data were corrected for detector inefficiency and resolution using PYTHIA events processed through a full GEANT simulation. The measured jet yields are compared to simulation and NLO pQCD calculations. These measurements pave the way for ongoing analyses of the higher statistics (∼5-10 pb^{-1}) data sample from the 2005 RHIC run.

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