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Dijet Cross Section and Longitudinal Double Spin Asymmetry in Polarized Proton-Proton Collisions at 200 GeV at STAR MATTHEW WALKER, MIT, STAR COLLABORATION — The polarized gluon distribution function of the proton, $\Delta g(x,Q^2)$, has been constrained by inclusive measurements from polarized proton-proton collisions at RHIC. Correlation measurements, such as the dijet measurement, provide, at leading order, access to parton kinematics and are thus sensitive to the shape of $\Delta g(x,Q^2)$. STAR's large acceptance electromagnetic calorimetry and tracking make it well suited for this measurement. The statuses of the dijet cross-section analysis from the 2005 and 2006 RHIC data sets and the longitudinal double spin asymmetry analysis from the 2006 and 2009 data sets, all at mid-rapidity, will be presented.

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