

Abstract

Searches for mass resonances in the b-tagged dijets invariant mass spectrum below 1.2 TeV have been performed with the ATLAS detector at the LHC. The dijet mass distribution from 0.57 TeV to 1.2 TeV is studied. The sensitivity was optimized considering a 750 GeV narrow resonance and the search was initially performed blinded in the 700-800 GeV mass region. The 2015 proton-proton collision data at $\sqrt{s} = 13$ TeV is used, corresponding to an integrated luminosity of 3.2 fb^{-1} . No significant deviations from the Standard Model expectation have been observed and upper limits have been set on the two b tagged dijet masses at 95% confident level.