Figure 6: Distributions of the invariant mass of the Higgs boson candidates $m_h = m_{jj}, m_J$ with two b-tagged jets in the SR for the four E_T^{miss} categories that are used as inputs to the fit. The upper panels show a comparison of data to the SM expectation before (dashed lines) and after the fit (solid histograms) with no signal included. The lower panels display the ratio of data to SM expectations after the background-only fit, with its systematic uncertainty considering correlations between individual contributions indicated by the hatched band. The expected signal from a representative Z'-2HDM model is also shown (long-dashed line), and it is scaled up by a factor of 1000 and 100 for the lowest two E_T^{miss} bins [150 GeV, 200 GeV) and [200 GeV, 350 GeV), respectively.