35.8 fb<sup>-1</sup> (13 TeV) 2016 Events JES\_PileupDataMC<sub>16</sub> (central) CMS 12000  $(sys + 1\sigma)$ Simulation (sys -1σ) single top V+jets 10000 8000 6000  $|\Delta_y| < 1.0$  $|\Delta_y| > 1.0$ 4000 2000 rel unc tī 0.005 0 -0.005310-340 340-380 320-360 460-560 230-250 250-270 270-290 290-310 380-440 440-3000 100-280 280-320 360-400 400-460 100-210 210-230 560-3000

 $M_{bl}$  [GeV/c<sup>2</sup>]