

The unique acceptance coverage of the LHCb experiment allows the study of electroweak processes in the forward region which is sensitive to the parton density functions of the proton. This talk presents results on the production of  $Z \rightarrow \mu\mu$  and  $W \rightarrow \mu\nu$  and their ratios. The analysis is based on an integrated luminosity of  $37.1 \text{ pb}^{-1}$ . The results are compared to NNLO perturbative QCD calculations. A preliminary study of  $Z$  plus jets in LHCb is shown.