

|   | $WZ$<br>control region<br>( $WZCR$ ) | single top<br>quark<br>signal region<br>( $STSR$ ) | top quark<br>pair<br>signal region<br>( $TTSR$ ) | single top<br>quark<br>control region<br>( $STCR$ ) | top quark<br>pair<br>control region<br>( $TTCR$ ) |
|---|--------------------------------------|--|--|---|---|
| Number of jets                                      | $\geq 1, \leq 3$                     | 1  | $\geq 2, \leq 3$                                 | 1   | $\geq 2, \leq 3$                                  |
| Number of b jets                                    | 0                                    | 1  | $\geq 1$   | 1   | $\geq 1$  |
| $ M(Z_{\text{reco}}) - M_Z $<br>$< 7.5 \text{ GeV}$ | Yes                                  | Yes  | Yes  | No  | No  |