

| $H_T > 1500 \text{ GeV}$ |                       |   |   |  |   |      |
|--------------------------|-----------------------|---|---|--|---|------|
| $N_j, N_b$               | $M_{T2} [\text{GeV}]$ | $Z \rightarrow \nu\bar{\nu}$                                | Lost lepton   | Multijet   | Total background  | Data |
| 2 – 3j, 0b               | 400 – 600             | $31^{+7}_{-6}(\text{stat}) \pm 7(\text{syst})$              | $7.0^{+0.8}_{-0.5}(\text{stat}) \pm 1.5(\text{syst})$ | $0.3 \pm 0.0(\text{stat}) \pm 0.2(\text{syst})$                  | $39^{+7}_{-6}(\text{stat}) \pm 8(\text{syst})$              | 35   |
|                          | 600 – 800             | $12^{+2}_{-2}(\text{stat}) \pm 3(\text{syst})$              | $2.2^{+0.3}_{-0.2}(\text{stat}) \pm 0.8(\text{syst})$ | $0.02 \pm 0.01(\text{stat}) \pm 0.01(\text{syst})$               | $14^{+3}_{-2}(\text{stat}) \pm 3(\text{syst})$              | 8    |
|                          | 800 – 1000            | $5.1^{+1.1}_{-0.9}(\text{stat}) \pm 1.5(\text{syst})$       | $0.6 \pm 0.1(\text{stat}) \pm 0.4(\text{syst})$       | $< 0.01$   | $5.7^{+1.7}_{-0.9}(\text{stat}) \pm 1.5(\text{syst})$       | 4    |
|                          | 1000 – 1400           | $4.0^{+0.9}_{-0.7}(\text{stat}) \pm 1.5(\text{syst})$       | $1.2 \pm 0.1(\text{stat}) \pm 0.6(\text{syst})$       | $< 0.01$   | $5.2^{+0.9}_{-0.8}(\text{stat}) \pm 1.6(\text{syst})$       | 3    |
|                          | > 1400                | $1.0 \pm 0.2(\text{stat}) \pm 0.5(\text{syst})$             | $0.4 \pm 0.0(\text{stat}) \pm 0.3(\text{syst})$       | $< 0.01$   | $1.4 \pm 0.2(\text{stat}) \pm 0.6(\text{syst})$             | 2    |
| 2 – 3j, 1b               | 400 – 600             | $8.2^{+4.1}_{-2.8}(\text{stat}) \pm 2.9(\text{syst})$       | $1.8^{+0.5}_{-0.4}(\text{stat}) \pm 0.8(\text{syst})$ | $0.1 \pm 0.0(\text{stat}) \pm 0.1(\text{syst})$                  | $10^{+4}_{-3}(\text{stat}) \pm 3(\text{syst})$              | 2    |
|                          | 600 – 800             | $3.1^{+1.5}_{-1.1}(\text{stat}) \pm 1.0(\text{syst})$       | $0.3 \pm 0.1(\text{stat}) \pm 0.3(\text{syst})$       | $< 0.01$   | $3.4^{+1.5}_{-1.1}(\text{stat}) \pm 1.1(\text{syst})$       | 2    |
|                          | 800 – 1000            | $1.3^{+0.7}_{-0.5}(\text{stat}) \pm 0.5(\text{syst})$       | $0.2 \pm 0.1(\text{stat}) \pm 0.2(\text{syst})$       | $< 0.01$   | $1.6^{+0.7}_{-0.5}(\text{stat}) \pm 0.6(\text{syst})$       | 0    |
|                          | > 1000                | $1.4^{+0.7}_{-0.5}(\text{stat}) \pm 0.7(\text{syst})$       | $0.2^{+0.1}_{-0.5}(\text{stat}) \pm 0.2(\text{syst})$ | $< 0.01$   | $1.6^{+0.7}_{-0.5}(\text{stat}) \pm 0.7(\text{syst})$       | 2    |
| 2 – 3j, 2b               | > 400                 | $0.0^{+2.0}_{-0.0}(\text{stat}) \pm 0.0(\text{syst})$       | $0.0^{+0.7}_{-0.0}(\text{stat}) \pm 0.0(\text{syst})$ | $0.02 \pm 0.00(\text{stat}) \pm 0.01(\text{syst})$               | $0.0^{+2.1}_{-0.0}(\text{stat}) \pm 0.0(\text{syst})$       | 1    |
| 4 – 6j, 0b               | 400 – 600             | $32^{+7}_{-6}(\text{stat}) \pm 7(\text{syst})$              | $7.2^{+1.8}_{-1.5}(\text{stat}) \pm 1.9(\text{syst})$ | $2.9^{+0.4}_{-0.3}(\text{stat}) \pm 1.2(\text{syst})$            | $42^{+7}_{-6}(\text{stat}) \pm 8(\text{syst})$              | 47   |
|                          | 600 – 800             | $12^{+3}_{-2}(\text{stat}) \pm 3(\text{syst})$              | $1.2^{+0.3}_{-0.2}(\text{stat}) \pm 0.4(\text{syst})$ | $0.2 \pm 0.1(\text{stat}) \pm 0.1(\text{syst})$                  | $13^{+3}_{-2}(\text{stat}) \pm 3(\text{syst})$              | 17   |
|                          | 800 – 1000            | $5.2^{+1.1}_{-1.0}(\text{stat}) \pm 1.5(\text{syst})$       | $1.2^{+0.3}_{-0.2}(\text{stat}) \pm 0.5(\text{syst})$ | $0.02^{+0.02}_{-0.01}(\text{stat})^{+0.03}_{-0.02}(\text{syst})$ | $6.4^{+1.2}_{-1.0}(\text{stat}) \pm 1.5(\text{syst})$       | 6    |
|                          | 1000 – 1400           | $4.1^{+0.9}_{-0.7}(\text{stat}) \pm 1.5(\text{syst})$       | $0.2^{+0.1}_{-0.0}(\text{stat}) \pm 0.2(\text{syst})$ | $0.01^{+0.02}_{-0.01}(\text{stat})^{+0.02}_{-0.01}(\text{syst})$ | $4.4^{+0.9}_{-0.7}(\text{stat}) \pm 1.5(\text{syst})$       | 8    |
|                          | > 1400                | $1.0 \pm 0.2(\text{stat}) \pm 0.5(\text{syst})$             | $0.1 \pm 0.0(\text{stat}) \pm 0.1(\text{syst})$       | $< 0.01$   | $1.2 \pm 0.2(\text{stat}) \pm 0.5(\text{syst})$             | 1    |
| 4 – 6j, 1b               | 400 – 600             | $16^{+5}_{-5}(\text{stat}) \pm 4(\text{syst})$              | $4.5^{+0.6}_{-0.5}(\text{stat}) \pm 1.1(\text{syst})$ | $1.5 \pm 0.2(\text{stat}) \pm 0.7(\text{syst})$                  | $22^{+5}_{-4}(\text{stat}) \pm 4(\text{syst})$              | 18   |
|                          | 600 – 800             | $6.0^{+2.1}_{-1.6}(\text{stat}) \pm 1.5(\text{syst})$       | $1.0 \pm 0.1(\text{stat}) \pm 0.4(\text{syst})$       | $0.1 \pm 0.0(\text{stat}) \pm 0.1(\text{syst})$                  | $7.1^{+2.4}_{-1.6}(\text{stat}) \pm 1.6(\text{syst})$       | 8    |
|                          | 800 – 1000            | $2.6^{+0.9}_{-0.7}(\text{stat}) \pm 0.8(\text{syst})$       | $0.2 \pm 0.0(\text{stat}) \pm 0.2(\text{syst})$       | $0.01^{+0.01}_{-0.00}(\text{stat}) \pm 0.01(\text{syst})$        | $2.8^{+0.9}_{-0.7}(\text{stat}) \pm 0.8(\text{syst})$       | 3    |
|                          | 1000 – 1400           | $2.0^{+0.7}_{-0.5}(\text{stat}) \pm 0.8(\text{syst})$       | $0.2 \pm 0.0(\text{stat}) \pm 0.2(\text{syst})$       | $0.01^{+0.01}_{-0.00}(\text{stat}) \pm 0.01(\text{syst})$        | $2.3^{+0.7}_{-0.5}(\text{stat}) \pm 0.8(\text{syst})$       | 0    |
|                          | > 1400                | $0.5^{+0.2}_{-0.1}(\text{stat}) \pm 0.2(\text{syst})$       | $< 0.01$  | $< 0.01$   | $0.5^{+0.2}_{-0.1}(\text{stat}) \pm 0.2(\text{syst})$       | 1    |
| 4 – 6j, 2b               | 400 – 600             | $3.4^{+2.7}_{-2.0}(\text{stat}) \pm 1.8(\text{syst})$       | $2.4 \pm 0.4(\text{stat}) \pm 0.8(\text{syst})$       | $0.4^{+0.1}_{-0.0}(\text{stat}) \pm 0.2(\text{syst})$            | $6.3^{+2.8}_{-2}(\text{stat}) \pm 1.9(\text{syst})$         | 5    |
|                          | 600 – 800             | $1.3^{+1.0}_{-0.6}(\text{stat}) \pm 0.7(\text{syst})$       | $0.5 \pm 0.1(\text{stat}) \pm 0.3(\text{syst})$       | $0.03 \pm 0.01(\text{stat}) \pm 0.02(\text{syst})$               | $1.8^{+1.0}_{-0.6}(\text{stat}) \pm 0.7(\text{syst})$       | 1    |
|                          | > 800                 | $1.1^{+0.9}_{-0.5}(\text{stat}) \pm 0.7(\text{syst})$       | $0.6 \pm 0.1(\text{stat}) \pm 0.5(\text{syst})$       | $< 0.01$   | $1.8^{+0.9}_{-0.5}(\text{stat}) \pm 0.8(\text{syst})$       | 0    |
| $\geq 7j, 0b$            | 400 – 600             | $5.4^{+3.7}_{-2.3}(\text{stat}) \pm 2.4(\text{syst})$       | $4.8^{+0.8}_{-0.7}(\text{stat}) \pm 1.3(\text{syst})$ | $1.2^{+0.2}_{-0.1}(\text{stat}) \pm 0.5(\text{syst})$            | $11^{+4}_{-2}(\text{stat}) \pm 3(\text{syst})$              | 4    |
|                          | 600 – 800             | $2.0^{+1.4}_{-0.9}(\text{stat}) \pm 0.9(\text{syst})$       | $1.4 \pm 0.2(\text{stat}) \pm 0.6(\text{syst})$       | $0.1 \pm 0.0(\text{stat}) \pm 0.1(\text{syst})$                  | $3.5^{+1.4}_{-0.9}(\text{stat}) \pm 1.1(\text{syst})$       | 3    |
|                          | 800 – 1000            | $0.9^{+0.6}_{-0.4}(\text{stat}) \pm 0.4(\text{syst})$       | $0.03 \pm 0.00(\text{stat}) \pm 0.01(\text{syst})$    | $0.01^{+0.01}_{-0.00}(\text{stat}) \pm 0.01(\text{syst})$        | $0.9^{+0.6}_{-0.4}(\text{stat}) \pm 0.4(\text{syst})$       | 1    |
|                          | > 1000                | $0.9^{+0.6}_{-0.4}(\text{stat}) \pm 0.5(\text{syst})$       | $0.01 \pm 0.00(\text{stat}) \pm 0.01(\text{syst})$    | $< 0.01$   | $0.9^{+0.6}_{-0.4}(\text{stat}) \pm 0.5(\text{syst})$       | 2    |
| $\geq 7j, 1b$            | 400 – 600             | $1.8^{+1.7}_{-1.0}(\text{stat}) \pm 1.2(\text{syst})$       | $3.6 \pm 0.4(\text{stat}) \pm 0.9(\text{syst})$       | $0.8 \pm 0.1(\text{stat}) \pm 0.4(\text{syst})$                  | $6.1^{+1.8}_{-1.0}(\text{stat}) \pm 1.6(\text{syst})$       | 7    |
|                          | 600 – 800             | $0.7^{+0.6}_{-0.4}(\text{stat}) \pm 0.4(\text{syst})$       | $1.0 \pm 0.1(\text{stat}) \pm 0.5(\text{syst})$       | $0.1 \pm 0.0(\text{stat}) \pm 0.0(\text{syst})$                  | $1.7^{+0.7}_{-0.4}(\text{stat}) \pm 0.7(\text{syst})$       | 4    |
|                          | > 800                 | $0.6^{+0.6}_{-0.3}(\text{stat}) \pm 0.4(\text{syst})$       | $0.6 \pm 0.1(\text{stat}) \pm 0.4(\text{syst})$       | $< 0.01$   | $1.2^{+0.6}_{-0.3}(\text{stat}) \pm 0.6(\text{syst})$       | 2    |
| $\geq 7j, 2b$            | 400 – 600             | $0.5^{+0.5}_{-0.3}(\text{stat}) \pm 0.3(\text{syst})$       | $2.1^{+0.3}_{-0.2}(\text{stat}) \pm 0.5(\text{syst})$ | $0.3 \pm 0.0(\text{stat}) \pm 0.2(\text{syst})$                  | $2.9^{+0.5}_{-0.4}(\text{stat}) \pm 0.7(\text{syst})$       | 8    |
|                          | 600 – 800             | $0.2^{+0.2}_{-0.1}(\text{stat}) \pm 0.1(\text{syst})$       | $0.8 \pm 0.1(\text{stat}) \pm 0.4(\text{syst})$       | $0.02 \pm 0.01(\text{stat}) \pm 0.02(\text{syst})$               | $1.0^{+0.2}_{-0.1}(\text{stat}) \pm 0.4(\text{syst})$       | 2    |
|                          | > 800                 | $0.2^{+0.2}_{-0.1}(\text{stat}) \pm 0.1(\text{syst})$       | $0.01 \pm 0.00(\text{stat}) \pm 0.01(\text{syst})$    | $< 0.01$   | $0.2^{+0.2}_{-0.1}(\text{stat}) \pm 0.1(\text{syst})$       | 0    |
| 2 – 6j, $\geq 3b$        | 400 – 600             | $1.3^{+3.1}_{-1.1}(\text{stat})^{+1.5}_{-1.3}(\text{syst})$ | $0.3^{+0.2}_{-0.1}(\text{stat}) \pm 0.2(\text{syst})$ | $0.1 \pm 0.0(\text{stat}) \pm 0.1(\text{syst})$                  | $1.7^{+3.1}_{-1.1}(\text{stat}) \pm 1.5(\text{syst})$       | 2    |
|                          | > 600                 | $0.9^{+2.2}_{-0.8}(\text{stat})^{+1.1}_{-0.9}(\text{syst})$ | $0.01 \pm 0.01(\text{stat}) \pm 0.01(\text{syst})$    | $< 0.01$   | $1.0^{+2.2}_{-0.8}(\text{stat})^{+1.1}_{-1.0}(\text{syst})$ | 1    |
| $\geq 7j, \geq 3b$       | > 400                 | $0.2^{+0.2}_{-0.1}(\text{stat}) \pm 0.2(\text{syst})$       | $0.7 \pm 0.1(\text{stat}) \pm 0.4(\text{syst})$       | $0.1 \pm 0.0(\text{stat}) \pm 0.1(\text{syst})$                  | $1.0^{+0.2}_{-0.1}(\text{stat}) \pm 0.4(\text{syst})$       | 1    |