| Variable | Description | 0-lepton | 1-lepton | 2-lepton |
| :--- | :--- | :---: | :---: | :---: |
| $p_{\mathrm{T}}(\mathrm{V})$ | vector boson transverse momentum | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\Delta R(\ell, \ell)$ | angular separation between the two leptons | - | - | $\checkmark$ |
| $p_{\mathrm{T}}\left(\mathrm{H}_{\text {cand }}\right)$ | $\mathrm{H}_{\text {cand }}$ transverse momentum | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\left\|\eta\left(\mathrm{H}_{\text {cand }}\right)\right\|$ | absolute value of the $\mathrm{H}_{\text {cand }}$ pseudorapidity | $\checkmark$ | - | - |
| $\Delta \phi\left(\mathrm{V}, \mathrm{H}_{\text {cand }}\right)$ | azimuthal angle between vector boson and $\mathrm{H}_{\text {cand }}$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $p_{\mathrm{T}}^{\text {miss }}$ | missing transverse momentum | - | $\checkmark$ | - |
| $\Delta \eta\left(\mathrm{H}_{\text {cand }}, \ell\right)$ | difference in pseudorapidity between $\mathrm{H}_{\text {cand }}$ and the lepton | - | $\checkmark$ | - |
| $\Delta \eta\left(\mathrm{H}_{\text {cand }}, \mathrm{V}\right)$ | difference in pseudorapidity between $\mathrm{H}_{\text {cand }}$ and vector boson | - | - | $\checkmark$ |
| $\Delta \eta\left(\mathrm{H}_{\text {cand }}, \mathrm{j}\right)$ | min. difference in pseudorapidity between $\mathrm{H}_{\text {cand }}$ and small- $R$ jets | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\Delta \eta(\ell, \mathrm{j})$ | min. difference in pseudorapidity between the lepton and small- $R$ jets | - | $\checkmark$ | - |
| $\Delta \eta(\mathrm{V}, \mathrm{j})$ | min. difference in pseudorapidity between vector boson and small- $R$ jets | - | - | $\checkmark$ |
| $\Delta \phi\left(\vec{p}_{\mathrm{T}}^{\text {miss }}, \mathrm{j}\right)$ | azimuthal angle between $\vec{p}_{\mathrm{T}}^{\text {miss }}$ and closest small- $R$ jet | $\checkmark$ | - | - |
| $\Delta \phi\left(\vec{p}_{\mathrm{T}}^{\text {miss }}, \ell\right)$ | azimuthal angle between $\vec{p}_{\mathrm{T}}^{\text {miss }}$ and lepton | - | $\checkmark$ | - |
| $m_{\mathrm{T}}$ | transverse mass of lepton $\vec{p}_{\mathrm{T}}+\vec{p}_{\mathrm{T}}^{\text {miss }}$ | - | $\checkmark$ | - |
| $N_{\text {small }}^{\text {aj }}$ | number of additional small- $R$ jets | $\checkmark$ | $\checkmark$ | $\checkmark$ |

