tainty components (in the third column, the numbering of the sources corresponds to the one nirces

| used in Table 1, second column). |  |             |  |  |  |
|----------------------------------|--|-------------|--|--|--|
| Enumerator                       | Description  | List of sou |  |  |  |
| Total                            | Default uncertainty applicable for most CMS analyses               | 1–25, 20    |  |  |  |
| TotalNoFlavor                    | Default uncertainty without FlavorQCD, as basis for other mixtures | 1–25        |  |  |  |
| TotalNoTime                      | Uncertainty for unprescaled analyses with full 8 TeV data set      | 1–17, 19–24 |  |  |  |

Table 2: List of JEC uncertainty source combinations with a short description and list of uncer-

| Litalificiator      | Description  | List of sources  |
|---------------------|--|------------------|
| Total               | Default uncertainty applicable for most CMS analyses               | 1–25, 26a        |
| TotalNoFlavor       | Default uncertainty without FlavorQCD, as basis for other mixtures | 1–25             |
| TotalNoTime         | Uncertainty for unprescaled analyses with full 8 TeV data set      | 1–17, 19–24, 26a |
| TotalNoFlavorNoTime | Same as above without FlavorQCD, as basis for other mixtures       | 1–17, 19–24      |
| SubTotalPileUp      | Combination of pileup offset uncertainties                         | 1–6              |

|     | 2 ciacult direct willing up plicable for intest civis direct, see  | 1 -0, -00      |
|-----|--|----------------|
|     | Default uncertainty without FlavorQCD, as basis for other mixtures | 1–25           |
|     | Uncertainty for unprescaled analyses with full 8 TeV data set      | 1–17, 19–24, 2 |
| ime | Same as above without FlavorQCD, as basis for other mixtures       | 1–17, 19–24    |
| )   | Combination of pileup offset uncertainties                         | 1–6            |
| e   | Combination of relative $\eta$ correction uncertainties            | 7–17           |
| to. | Combination of absolute scale uncontainties                        | 7 17           |

1,7-25,26a

| SubTotalRelative | Combination of relative $\eta$ correction uncertainties                 | 7–17  |
|------------------|---|-------|
| SubTotalAbsolute | Combination of absolute scale uncertainties                             | 7–17  |
| SubTotalScale    | Scale uncertainties independent of $p_T$ , plus statistical uncertainty | 19–21 |
| SubTotalPt       | Combination of absolute scale $p_T$ dependence uncertainties            | 22–24 |

Default uncertainty without PileUpPt sources

SubTotalMC