**Data dictionary for landslide identification dataset**

***1. CELLID***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 6 | 11 | 16 | 21 |
| 2 | 7 | 12 | 17 | 22 |
| 3 | 8 | 13 | 18 | 23 |
| 4 | 9 | 14 | 19 | 24 |
| 5 | 10 | 15 | 20 | 25 |

Each sample is composed of data from 25 cells, covering an area of 625 m2. Each cell represents an area of 5 x 5 m2 and has nine features (as introduced in section 2). For a landslide sample, cell 13 is the location of landslide, and other cells are the neighboring areas. For a non-landslide sample, there is no recorded landslide occurrence within the sample area.

***2. Feature dictionary***

|  |  |  |
| --- | --- | --- |
| Feature name | Data type | Description |
| CELLID\_elevation | Continuous | Digital elevation of the terrain surface in meter |
| CELLID\_slope | Continuous | Angle of the slope inclination in degree |
| CELLID\_aspect | Continuous | Exposition of the slope in degree |
| CELLID\_placurv | Continuous | Planform curvature, curvature perpendicular to the direction of the maximum slope |
| CELLID\_procurv | Continuous | Profile curvature, curvature parallel to the slope, indicating the direction of maximum slope |
| CELLID\_lsfactor | Continuous | Length-slope factor that accounts for the effects of topography on erosion |
| CELLID\_twi | Continuous | Topographic wetness index, an index to quantify the topographic control on hydrological process |
| CELLID\_geology | Categorical | Lithology of the surface material  1: Weathered Cretaceous granitic rocks  2: Weathered Jurassic granite rocks  3: Weathered Jurassic tuff and lava  4: Weathered Cretaceous tuff and lava  5: Quaternary deposits  6: Fill  7: Weathered Jurassic sandstone, siltstone and mudstone |
| CELLID\_sdoif | Continuous | Step duration orographic intensification factor: an index to quantify the amplification of orography on rainfall |
| Label | Categorical | 1: Landslide  0: Non-landslide |