***Evolution of coseismic and post-seismic landsliding after the 2015 Mw 7.8 Gorkha earthquake, Nepal***

Description:

Landslide area density grid used in the analysis of the spatial evolution of landsliding following the 2015 Mw 7.8 Gorkha earthquake in Nepal. The data include 11 epochs of landslide area density, including bi-annual assessments between 2014 and 2018 (pre- and post-monsoon), and an additional coseismic assessment from 2015.

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Data files:

**LS\_AreaDensity.shp**

Vector polygon shapefile of the 1 x 1 km landslide area density grid used in the analysis of the spatial evolution of landsliding following the 2015 Mw 7.8 Gorkha earthquake in Nepal. The data include 11 epochs of landslide area density, including bi-annual assessments between 2014 and 2018 (pre- and post-monsoon), and an additional coseismic assessment from 2015. Spatial reference: UTM Zone 45N.

Tabular attributes:

|  |  |
| --- | --- |
| **Field Name** | **Description** |
| FID | Unique ID field generated within ArcGIS |
| Shape | Vector type (Polygon) |
| SeenGrd\_m2 | Area of seen ground within each 1 km2 grid cell (in m2) |
| AD\_E1 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 1 (Pre-Monsoon 2014). |
| AD\_E2 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 2 (Post-Monsoon 2014). |
| AD\_E3 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 3 (Pre-Earthquake 2015). |
| AD\_E4 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 4 (Coseismic 2015). |
| AD\_E5 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 5 (Post-Monsoon 2015). |
| AD\_E6 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 6 (Pre-Monsoon 2016). |
| AD\_E7 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 7 (Post-Monsoon 2016). |
| AD\_E8 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 8 (Pre-Monsoon 2017). |
| AD\_E9 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 9 (Post-Monsoon 2017). |
| AD\_E10 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 10 (Pre-Monsoon 2018). |
| AD\_E11 | Landslide area density expressed as a percentage of each 1 km2 grid cell for mapping epoch 11 (Post-Monsoon 2018). |
| E1E2Diff | Change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 1 and 2. |
| E2E3Diff | Change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 2 and 3. |
| E3E4Diff | Change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 3 and 4. |
| E4E5Diff | Change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 4 and 5. |
| E5E6Diff | Change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 5 and 6. |
| E6E7Diff | Change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 6 and 7. |
| E7E8Diff | Change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 7 and 8. |
| E8E9Diff | Change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 8 and 9. |
| E9E10Diff | Change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 9 and 10. |
| E10E11Diff | Change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 10 and 11. |
| E3E11Diff | Longer term change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 3 and 11. |
| E4E11Diff | Longer term change in landslide area density as a percentage of each 1 km2 grid cell for mapping epochs 4 and 11. |

**MappingExtent.shp**

Vector polygon shapefile defining the overall area of interest for the landslide mapping and analysis. Spatial reference: UTM Zone 45N. Mapping focused on an area of 25,575 km2 covering the 14 administrative districts that were most intensively affected by the 2015 Gorkha earthquake.