Supplement of

A 30-meter terrace mapping in China using Landsat 8 imagery and digital elevation model based on the Google Earth Engine

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Table S1: Explanation of variables in Fig. 10 of Section 3.5.

Variable	Explanation
Blue_25th	The 25th percentile of surface reflectance of Blue band.
Blue_50th	The 50th percentile of surface reflectance of Blue band.
Blue_75th	The 75th percentile of surface reflectance of Blue band.
Green_25th	The 25th percentile of surface reflectance of Green band.
Green_50th	The 50th percentile of surface reflectance of Green band.
Green_75th	The 75th percentile of surface reflectance of Green band.
Red_25th	The 25th percentile of surface reflectance of Red band.
Red_50th	The 50th percentile of surface reflectance of Red band.
Red_75th	The 75th percentile of surface reflectance of Red band.
NIR_25th	The 25th percentile of surface reflectance of NIR band.
NIR_50th	The 50th percentile of surface reflectance of NIR band.
NIR_75th	The 75th percentile of surface reflectance of NIR band.
SWIR1_25th	The 25th percentile of surface reflectance of SWIR1 band.
SWIR1_50th	The 50th percentile of surface reflectance of SWIR1 band.
SWIR1_75th	The 75th percentile of surface reflectance of SWIR1 band.
SWIR2_25th	The 25th percentile of surface reflectance of SWIR2 band.
SWIR2_50th	The 50th percentile of surface reflectance of SWIR2 band.
SWIR2_75th	The 75th percentile of surface reflectance of SWIR2 band.
TIRS2_25th	The 25th percentile of surface reflectance of TIRS2 band.
TIRS2_50th	The 50th percentile of surface reflectance of TIRS2 band.
TIRS2_75th	The 75th percentile of surface reflectance of TIRS2 band.
NDVI_p25	The 25th percentile of Normalized Difference Vegetation Index.
NDVI_p50	The 50th percentile of Normalized Difference Vegetation Index.
NDVI_p75	The 75th percentile of Normalized Difference Vegetation Index.
MNDWI_p25	The 25th percentile of Modified Normalized Difference Water Index.
MNDWI_p50	The 50th percentile of Modified Normalized Difference Water Index.
MNDWI_p75	The 75th percentile of Modified Normalized Difference Water Index.
NDBI_p25	The 25th percentile of Normalized Difference Building Index.
NDBI_p50	The 50th percentile of Normalized Difference Building Index.
NDBI_p75	The 75th percentile of Normalized Difference Building Index.
BSI_p25	The 25th percentile of Bold Soil Index.
BSI_p50	The 50th percentile of Bold Soil Index.
BSI_p75	The 75th percentile of Bold Soil Index.
Elevation	Elevation.
Slope	Slope.
SOS	Slope of slope.
R	Roughness.
P	Slope shape.
RF	Relief.

Table S2: Detailed information of data used in this study.

	Landsat 8 surface reflectance (SR) imagery	Shuttle Radar Topography Mission digital elevation model (SRTM DEM) data	GlobeLand30	Google Earth images
Title	USGS Landsat 8 Surface Reflectance Tier 1	NASA SRTM Digital Elevation 30m	GlobeLand30	/
Version	/	Version 3	V2010	/
Acquisition time	2018	2000	2010	Most images were accessed in 2018-2019
URL	https://developers.google.com/earth-engine/datasets/catalog/LANDSAT_LC08_C01_T1_SR	https://developers.google.com/earth-engine/datasets/catalog/USGS_SRTMGL1_003	http://www.globallandcover.com	/
Description	This dataset is the surface reflectance from the Landsat 8 OLI/TIRS sensors. It has been atmospherically corrected and includes a cloud, shadow, water, and snow mask, as well as a per-pixel saturation mask.	This dataset is an international research effort that obtained DEM on a near-global scale. It has undergone a void-filling process using open-source data (ASTER GDEM2, GMTED2010, and NED).	This dataset is a 30-meter resolution global land cover data product. It is generated by integration of pixel-based and objected-based methods with knowledge (POK) using multi-source data.	This dataset is a composited product combining multiple sets of satellite imagery. The satellite images are provided by different commercial image providers or government agencies at different zoom level.
Image sources	/	/	/	CNES / Airbus, Maxar Technologies, Landsat / Copernicus