

## ELECTRONIC SUPPLEMENTARY MATERIAL

**ESM\_Table\_1:** A list of variables. The variables used as explanatory factors during the major statistical analysis are marked **bold**.

Variables	Description	Data type	References
<b>Impervious surface</b>	Value 0-100 percentage of ‘Impervious surface’ from ‘Global Man-made Impervious Surface (GMIS) Dataset, resolution ~30m	Continuous	Brown et al. 2017
<b>Human population density</b>	Value of average density of populations of the years 2000, 2010, 2020, from ‘Gridded Population of the World Version 4 (GPWv4)’ datasets, resolution ~1km	Continuous	CIESIN 2018
<b>Habitat Shannon metric</b>	Value of ‘Diversity of EVI (Enhanced Vegetation Index)’, from Global Habitat Heterogeneity dataset, resolution ~ 30 arc-second	Continuous	Tuanmu and Jetz 2015
<b>Green area</b>	Total area of green habitat patches at the grid cells (m <sup>2</sup> ). Value considered the area of urban parks, gardens, cemetery, forest, nature-reserves at the grid cells unit. Value is extracted using OpenStreetMap-Shapefiles in ArcMap.	Continuous	OpenStreetMap 2021
<b>Inland waterbody area</b>	Total area with waterbody at the grid cells (m <sup>2</sup> ). Value considered the area of any waterbodies at the grid cells unit. Value is extracted using OpenStreetMap-Shapefiles in ArcMap		OpenStreetMap 2021
<b>Agricultural area</b>	Value of cropland percent. Value ranges between 0 and 1. 0 means zero percent of pixel area under cropland present and 1 means 100% of the pixel area under cropland.	Continuous	Ramankutty et al. 2010
Vegetation	Value 1-100 % describes average annual maximum green vegetation fraction (MGVF), and are based on 12 years (2001-2012) of Collection 5 MOD13A2 normalized difference vegetation index (NDVI) data. Values range from 0 (corresponding to 0% vegetation cover) to 100 (corresponding to 100% vegetation cover).	Continuous	Broxton et al. 2014
<b>Distance to inland waterbody</b>	The value represents the distance (in kilometres) from grid cell centre to the nearest inland waterbody for the year 2000-2012, at a resolution of 3 arc (approximately 100m at the equator).	Continuous	WorldPop 2018a; Lamarche et al. 2017
<b>Distance to green area</b>	Distance (km) from grid cell centroids to the nearest edge of green area. Value	Continuous	OpenStreetMap 2021

Variables	Description	Data type	References
<b>Distance to agricultural area</b>	measured using OpenStreetMap-Shapefiles in ArcMap Distance (km) from grid cell centroids to the nearest edge of agricultural area (i.e., includes cropland, farmland, orchard). Value extracted using OpenStreetMap-Shapefiles in ArcMap	Continuous	OpenStreetMap 2021
Distance to nature reserve and wilderness area	The distance to IUCN strict nature reserve and wilderness area edges. resolution of 3 arc (approximately 100m at the equator). The values of the raster are the distance (in kilometres) from the cell centre to the nearest feature for the year 2010.	Continuous	WorldPop 2018b
Distance to coast	Distance (km) from grid centroids to the Ocean coastline. Value extracted using OpenStreetMap-Shapefiles in ArcMap.	Continuous	Nature Earth 2021
Presence of cropland	Value 20, Mosaic cropland (50-70%) / vegetation (grassland/shrubland/forest) (20-50%), GLOBCOVER dataset, resolution ~300m	Categorical	ESA 2009; Arino et al. 2008
Presence of forest area	Value 110, mosaic forest or shrubland (50-70%) / grassland (20-50%), 'GLOBCOVER' dataset, resolution ~300m	Categorical	ESA 2009; Arino et al. 2008
Human Development Index	Gridded global datasets for Gross Domestic Product and Human Development Index (HDI) over 1990–2015. Gridded HDI, derived from a combination of sub-national and national datasets, at a resolution of approximate 5 arc-min (around 10 km at the equator).	Continuous	Kummu et al. 2017
Purchasing Power Parity	Value of purchasing power parity in constant 2011 International US dollars, at 30 arc-sec resolution, multiplied by gridded population data GHS.	Continuous	Kummu et al. 2017
<b>Temperature</b>	Bio-1: Average annual temperature, WorldClim dataset, resolution ~1km	Continuous	Fick and Hijmans 2017
<b>Precipitation</b>	Bio-12: Average annual precipitation, WorldClim dataset, resolution ~1km	Continuous	Fick and Hijmans 2017
Elevation	The value of each grid cell represents its elevation above the sea level (in meters).	Continuous	de Ferranti 2017; WorldPop 2018c
Slope	The value of each grid cell represents its topographic slope (in degree).	Continuous	de Ferranti 2017; WorldPop 2018d

## References

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