

Supplementary Material 1

Environmental and demographic covariates used in the model-based geostatistical analysis

This supplementary material accompanies the article “Geostatistical Analysis of Baseline Prevalence and Treatment History Drastically Reduces the Cost of Soil-Transmitted Helminth Impact Assessment Survey” by Fronterre C, Johnson O, Giorgi E, Montresor A, Diggle PJ.

Environmental and demographic covariates used in the model-based geostatistical (MBG) analysis were obtained from publicly available global Earth observation datasets. For covariates with temporal variability, raster layers corresponding to the year of the survey were extracted and averaged over that year. All covariate layers were resampled to a common spatial resolution of 1 km to ensure consistency across datasets.

Table S1: Environmental and demographic covariates used in the model-based geostatistical analysis, including dataset source, native spatial resolution, and temporal coverage.

Variable	Dataset	Source	Spatial resolution	Temporal coverage
Enhanced Vegetation Index (EVI)	MOD13A3	NASA MODIS	1 km	2000–present
Land Surface Temperature (day)	MOD11A2	NASA MODIS	1 km	2000–present
Land Surface Temperature (night)	MOD11A2	NASA MODIS	1 km	2000–present
Soil pH (soil acidity)	SoilGrids	ISRIC	250 m	Static layer
Soil sand fraction	SoilGrids	ISRIC	250 m	Static layer
Soil moisture	GLDAS	NASA	~0.25°	2000–present
Night Light Emission (NLE)	VIIRS DNB	NOAA	500 m	2012–present