# Supplementary Materials

**Table S1.** EDI classification standard and description.

| Types | Dividing criteria | Describe |
|---|---|---|
| Significantly improved | $< \bar{x} - 1.5S$ | The natural environment is mostly unaltered; vegetation cover and growth are excellent; temperature and humidity conditions are appropriate, and there is almost minimal interference from human activity. |
| Generally improved | $\bar{x} - 1.5S \sim \bar{x} - 0.5S$ | The natural environment is well maintained; vegetation cover and growth are great; the land is covered by a small amount of cropland and bare soil; the human activities have minor influences. |
| Unchanged | $\bar{x} - 0.5S \sim \bar{x} + 0.5S$ | The natural environment has slightly harmed; vegetation cover is medium, there is more cropland; the human activities have portion influences, and the urban heat island effect has begun to appear. |
| Generally degraded | $\bar{x} + 0.5S \sim \bar{x} + 1.5S$ | The natural environment has degraded; the land is covered by cropland and bare soil; the human activities influence is more visible, and the urban heat island effect is obvious. |
| Seriously degraded | $> \bar{x} + 1.5S$ | The natural environment has been severely harmed; vegetation cover has completely removed; the land is fully covered by impervious surfaces and bare soil, and the urban heat island effect is serious. |

*Note*: *$\bar{x}$ is the average value of EDI; S is the standard deviation of EDI.