The shape of watersheds

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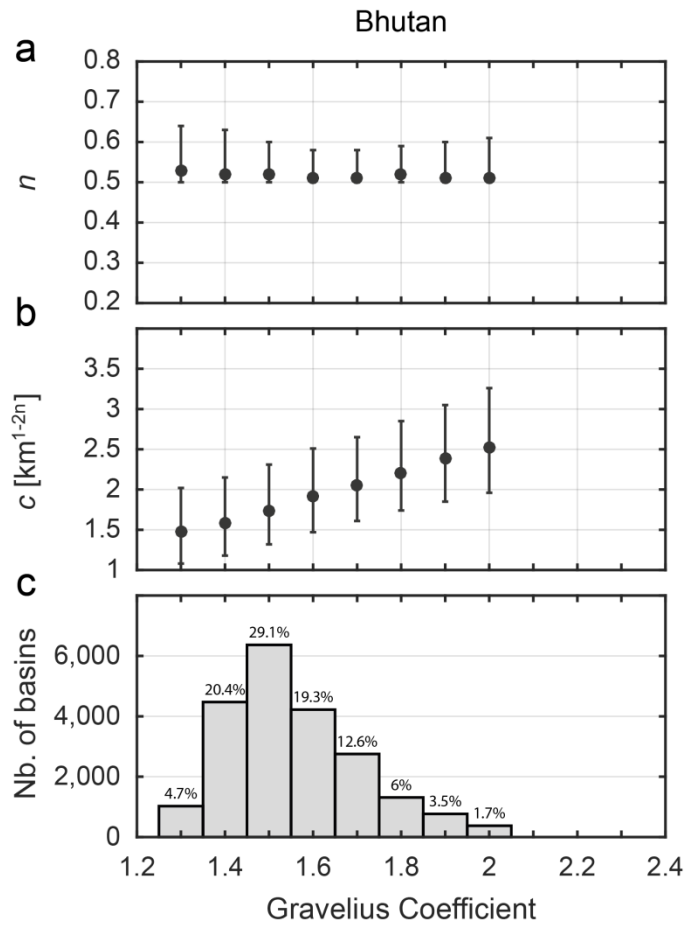
# Supplementary Information

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Introduction
This supporting information contains inversion results for n and c associated with basins in Bhutan, Southeast Africa, Iowa, Coastal Oregon and Pyrenees ; the location of elongated and compact basins in Bhutan Himalaya ; and the effect of DEM resolution.
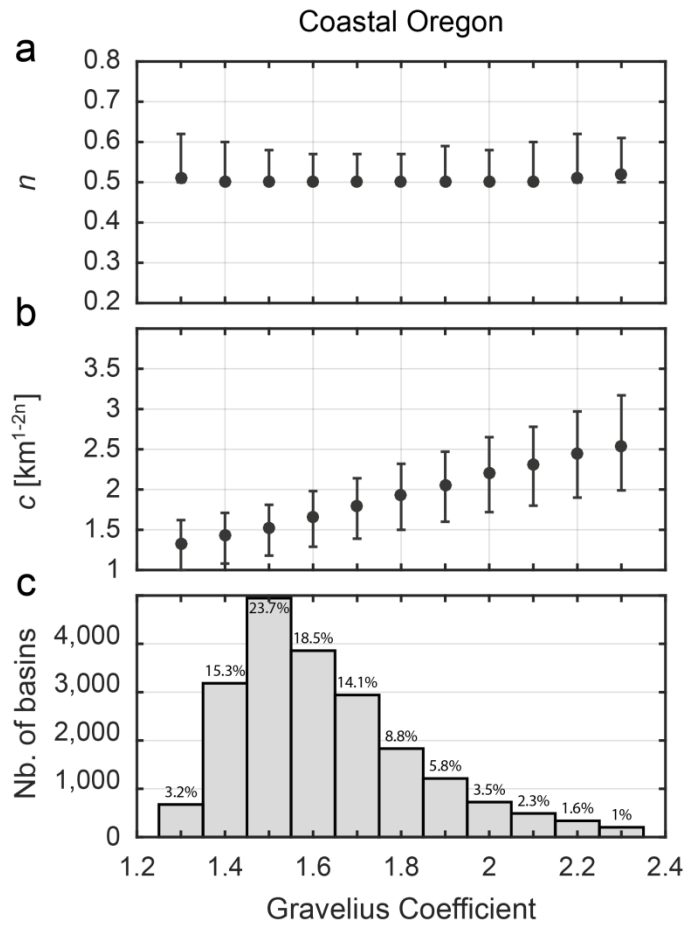
Supplementary Figure 1 | Hack's Law parameters vs. Gravelius coefficient in Bhutan Himalaya. Exponent and coefficient for each class of GC. Error bars are defined considering 95% of likelihood. **c,** Number of basins for each class of GC and its associated proportion.
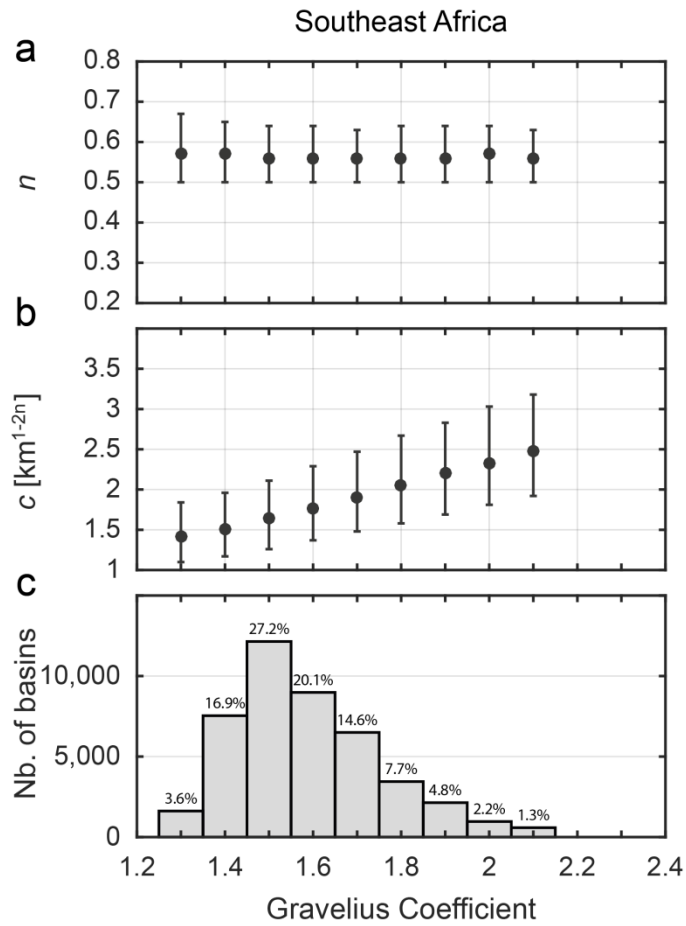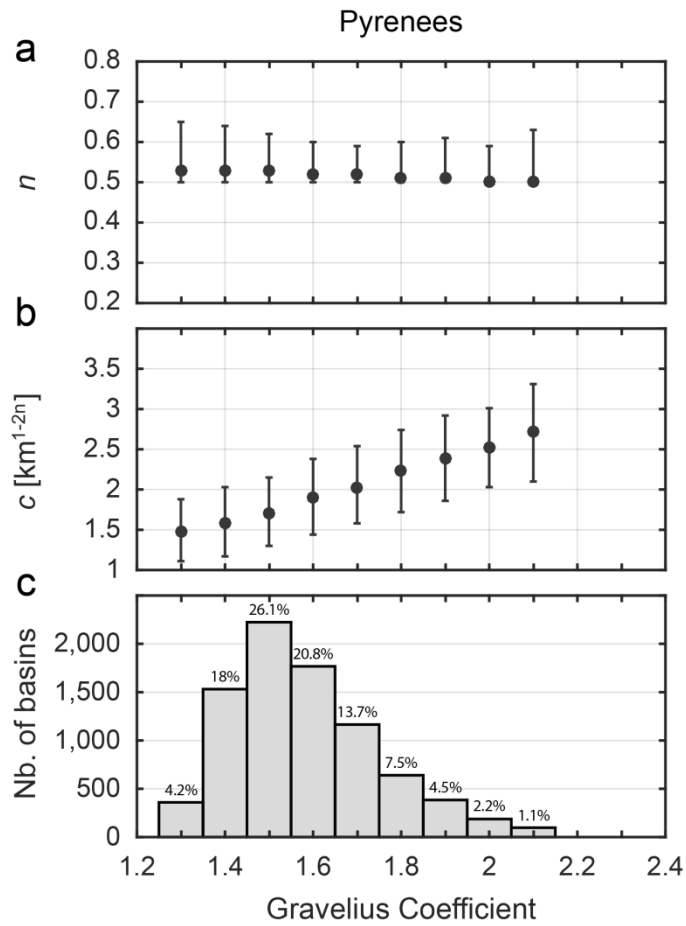
Supplementary Figure 2 | Hack's Law parameters vs. Gravelius coefficient in south-east Africa. Same as supplementary Figure 2, for south-east Africa.
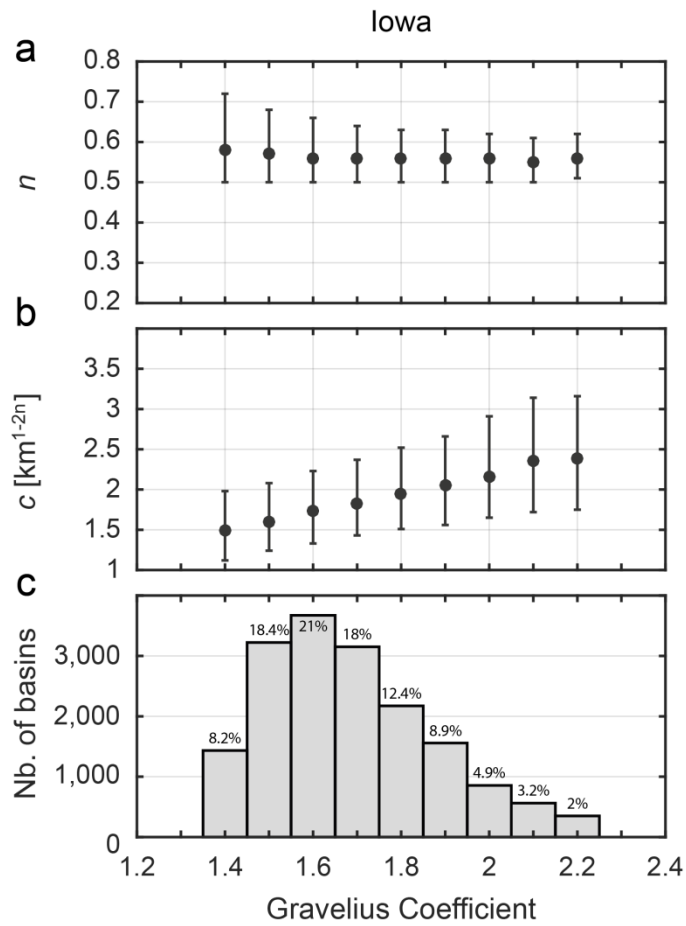
Supplementary Figure 3 | Hack's Law parameters vs. Gravelius coefficient in Central Iowa. Same as supplementary Figure 2, for Central Iowa.
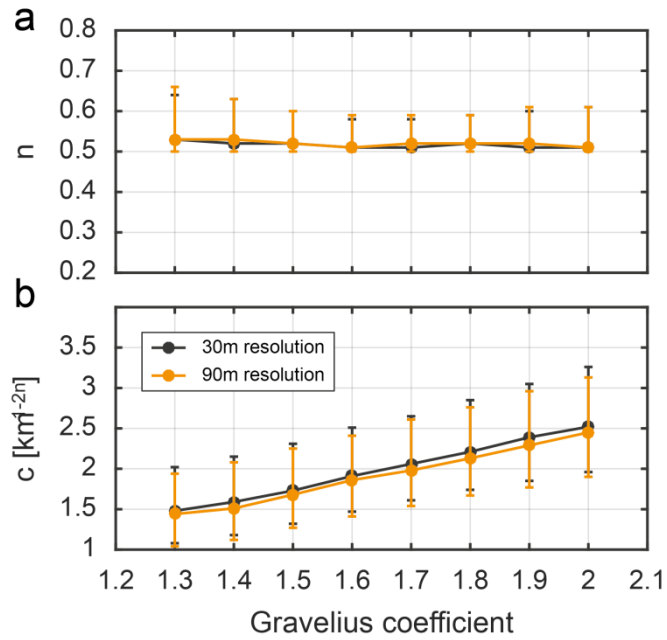
Supplementary Figure 4 | Hack's Law parameters vs. Gravelius coefficient in Coastal Oregon. Same as supplementary Figure 2, for Coastal Oregon.

Supplementary Figure 5 | Hack's Law parameters vs. Gravelius coefficient in Pyrenees. Same as supplementary Figure 2, for the Pyrenees.
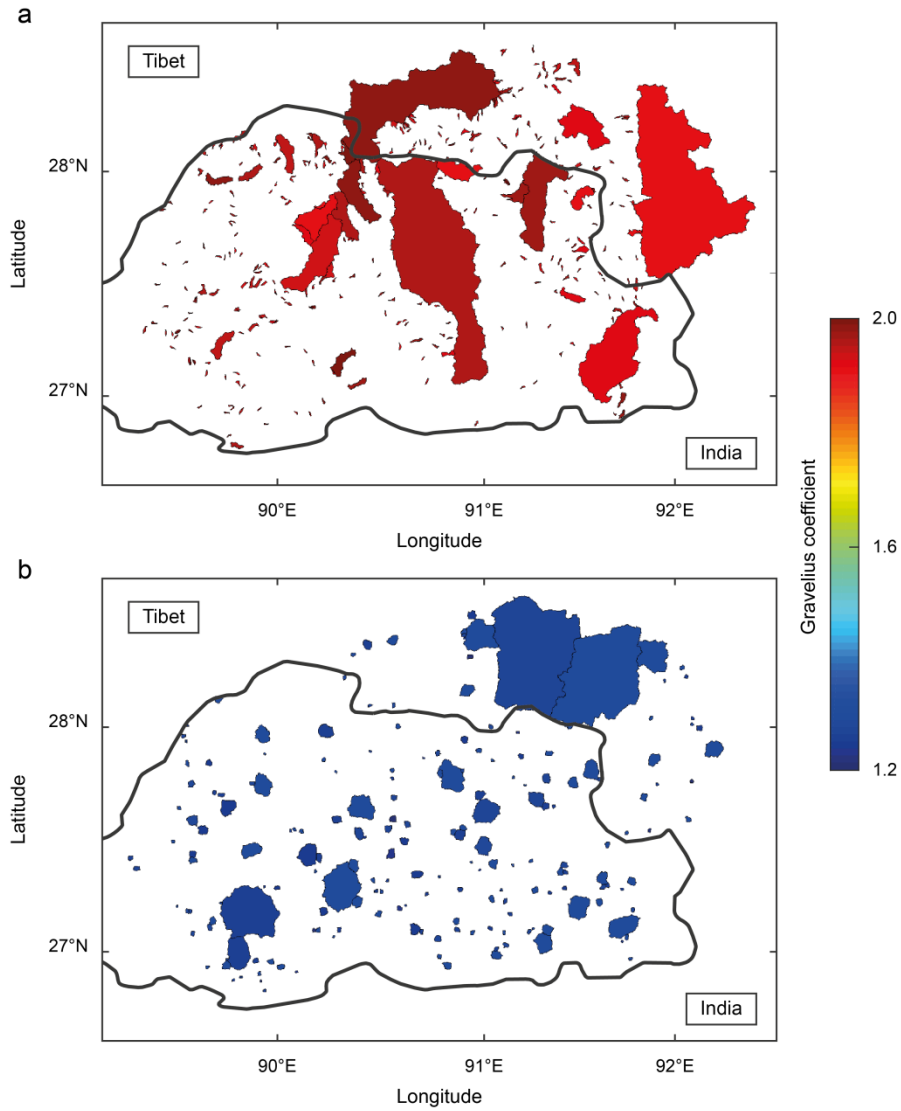
Supplementary Figure 6 | Spatial distribution of drainage basins in Bhutan with respect to their shapes. a, Location of elongated basins with GC ranging between 1.9 and 2.0. **b,** Location of compact basins with GC between 1.2 and 1.3.

Supplementary Figure 7 | Effect of DEM resolution on Hack's parameters. a and b, Hack's exponent and coefficient obtained in Bhutan Himalaya for 30 m resolution DEM (grey) and 90 m resolution DEM (orange).