



Supplement of

Patterns of nitrogen and phosphorus pools in terrestrial ecosystems in China

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1 Supplement

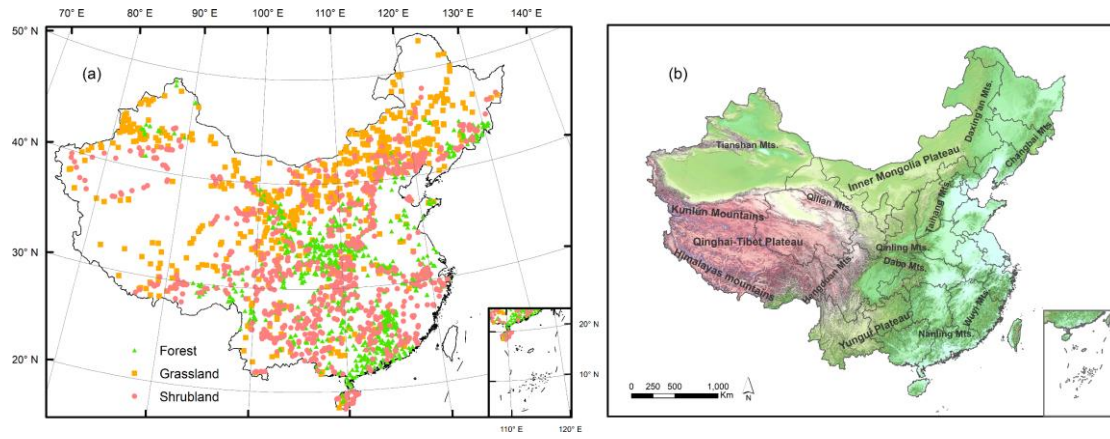
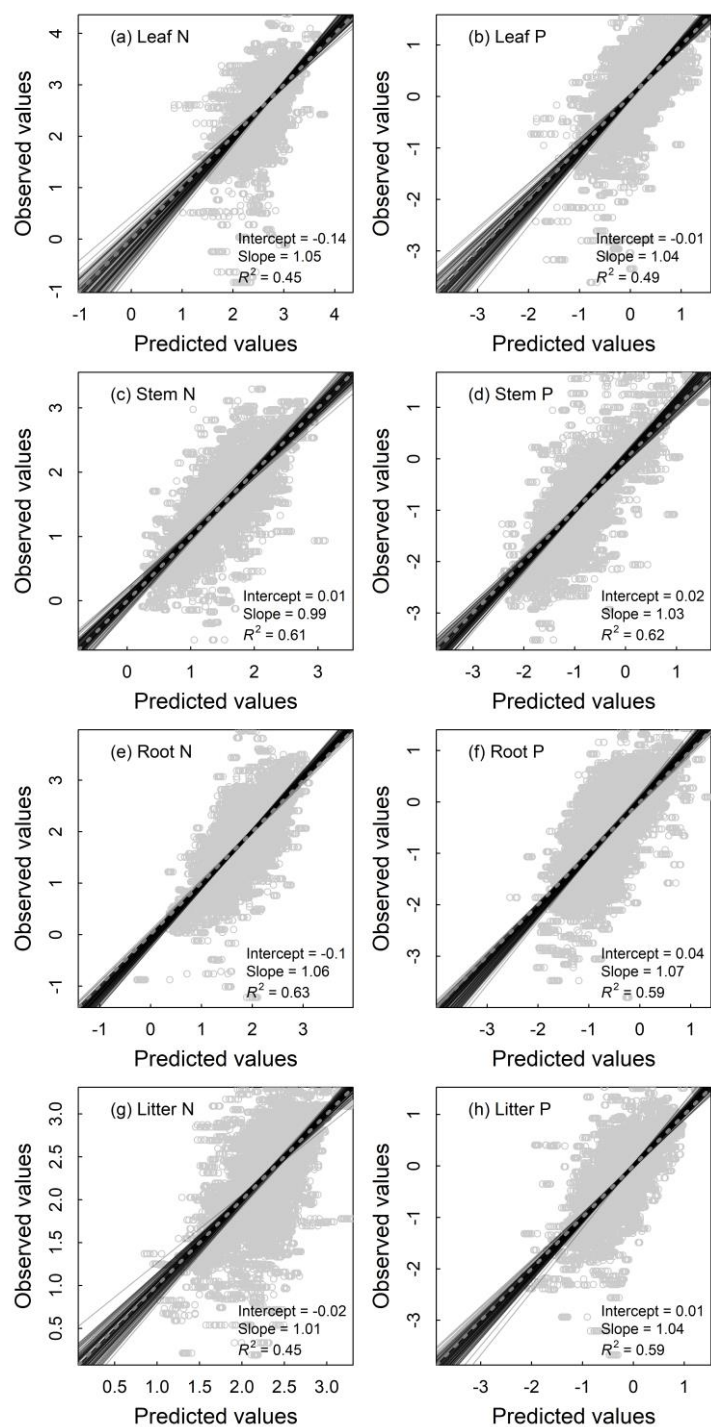


Fig. S1. The spatial distribution of sampling sites (a) and the topographic map of China (b).



6 **Fig. S2.** Fitting performance of random forest models for nutrient concentrations of leaves (a
7 & b), woody stems (c & d), roots (e & f) and litter (g & h) of terrestrial ecosystems in China
8 based on 100 times of replications with the 10% validation data. Solid lines represent all the
9 fitting lines, and the displayed parameters stand for the average conditions. The dashed line
10 denotes the 1:1 line.

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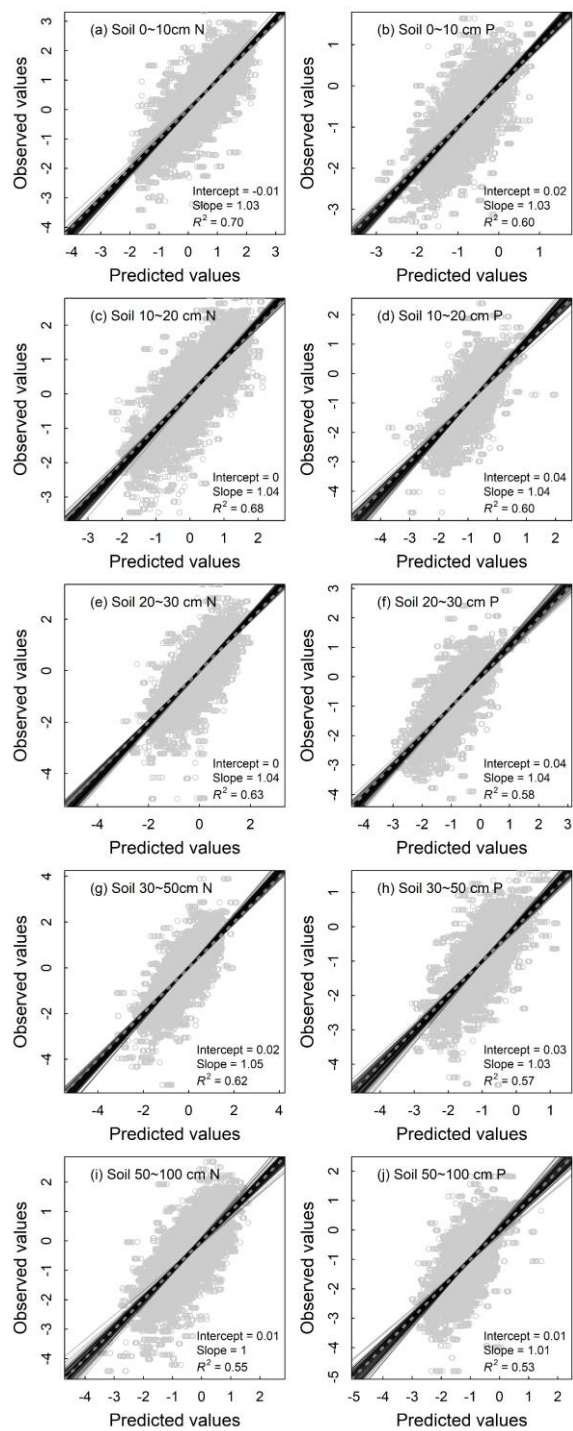


Fig. S3. Fitting performance of random forest models for nutrient concentrations of 0–10 cm (a & b), 10–20 cm (c & d), 20–30 cm (e & f), 30–50 cm (g & h) and 50–100 cm (i & j) soil layers of terrestrial ecosystems in China based on 100 times of replications with the 10% validation data. Solid lines represent all the fitting lines, and the displayed parameters stand for the average conditions. The dashed line denotes the 1:1 line.

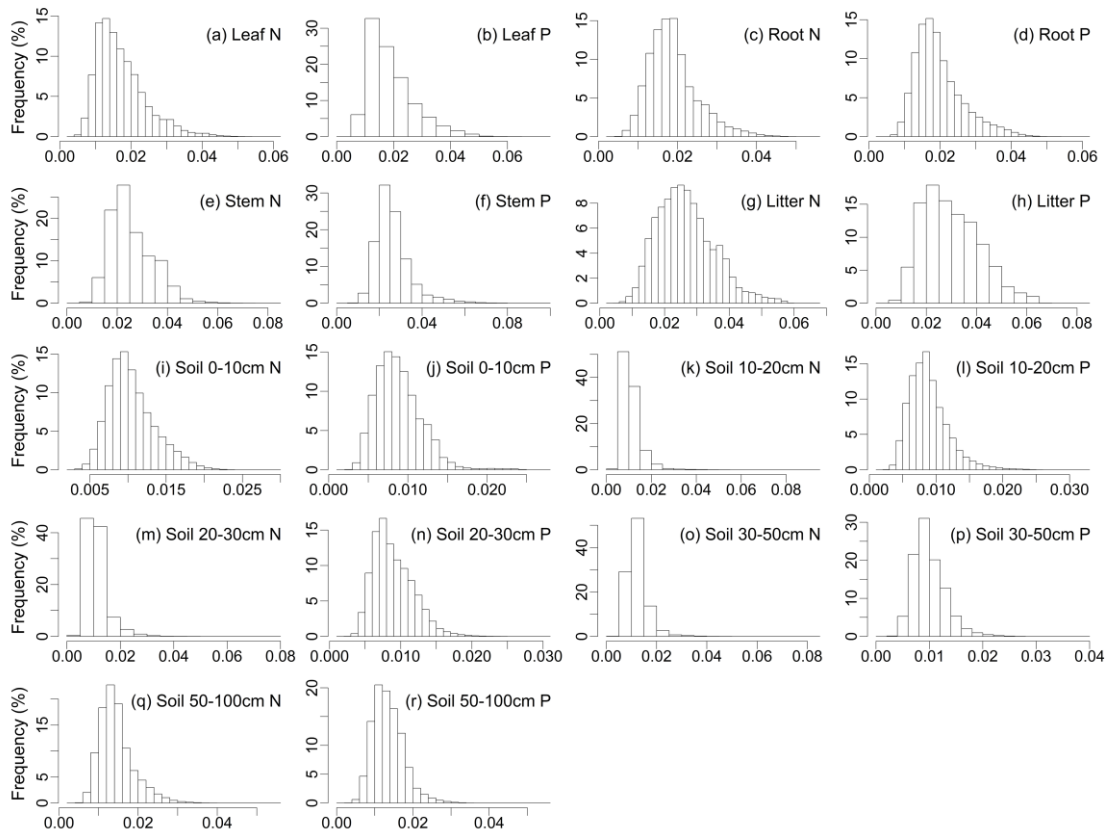


Fig. S4. Frequency distributions of standard deviations of the predictions in models for N and P densities in different components.

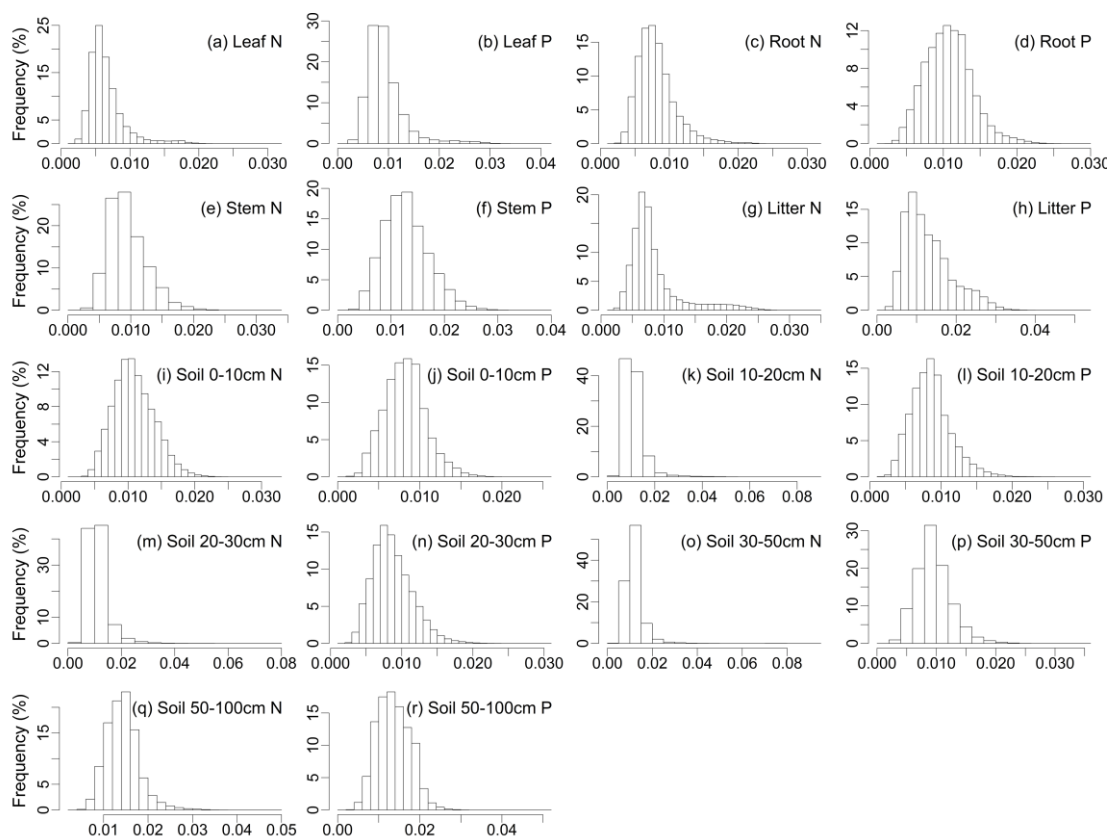
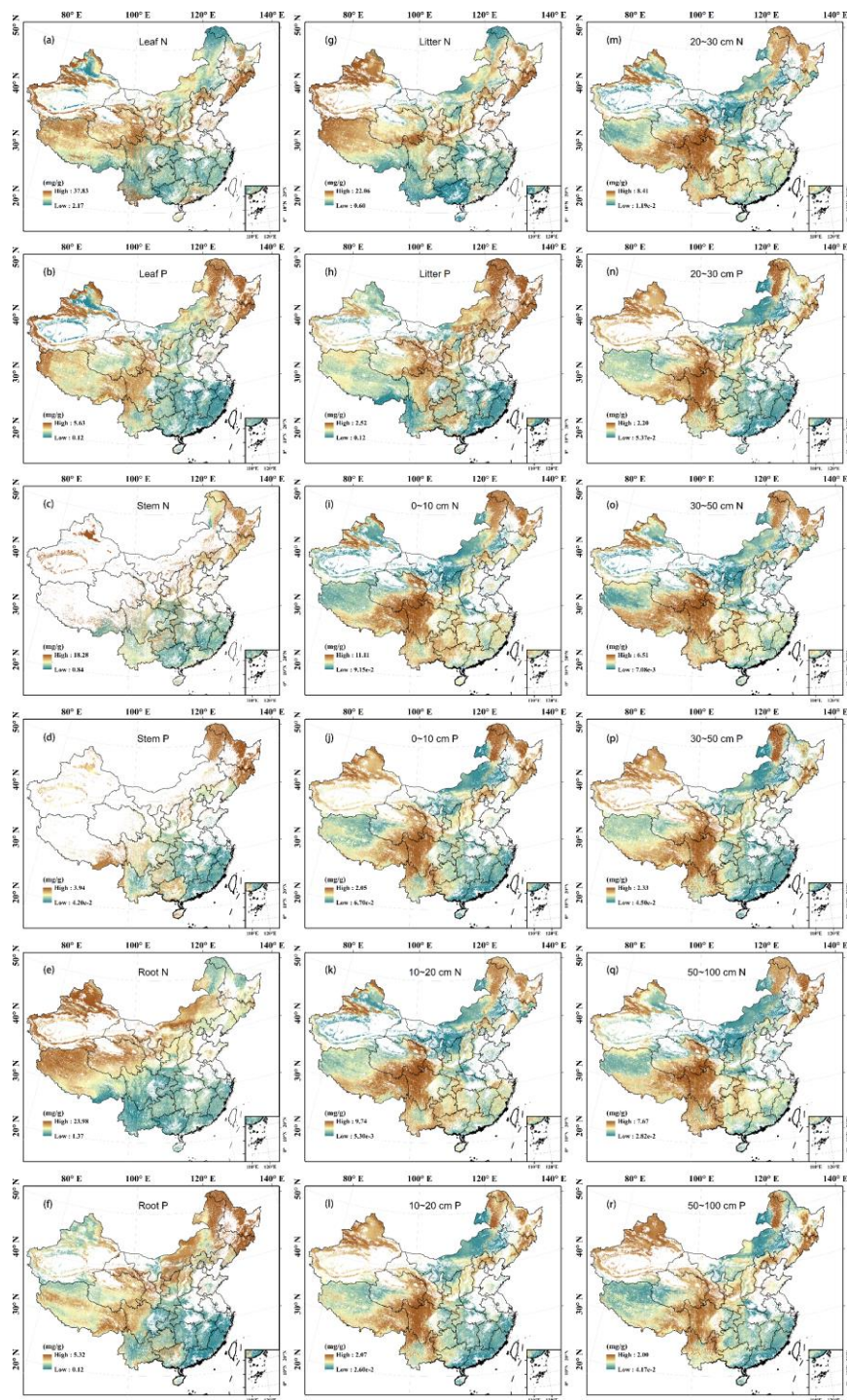


Fig. S5. Frequency distributions of standard deviations of the predictions in models for N and P concentrations in different components.



29 **Fig. S6.** Predicted spatial patterns of N and P concentrations with a resolution of 1 km in plant
30 organs (a–f), litter (g & h), and soil layers (i–r) of terrestrial ecosystems in China.
31

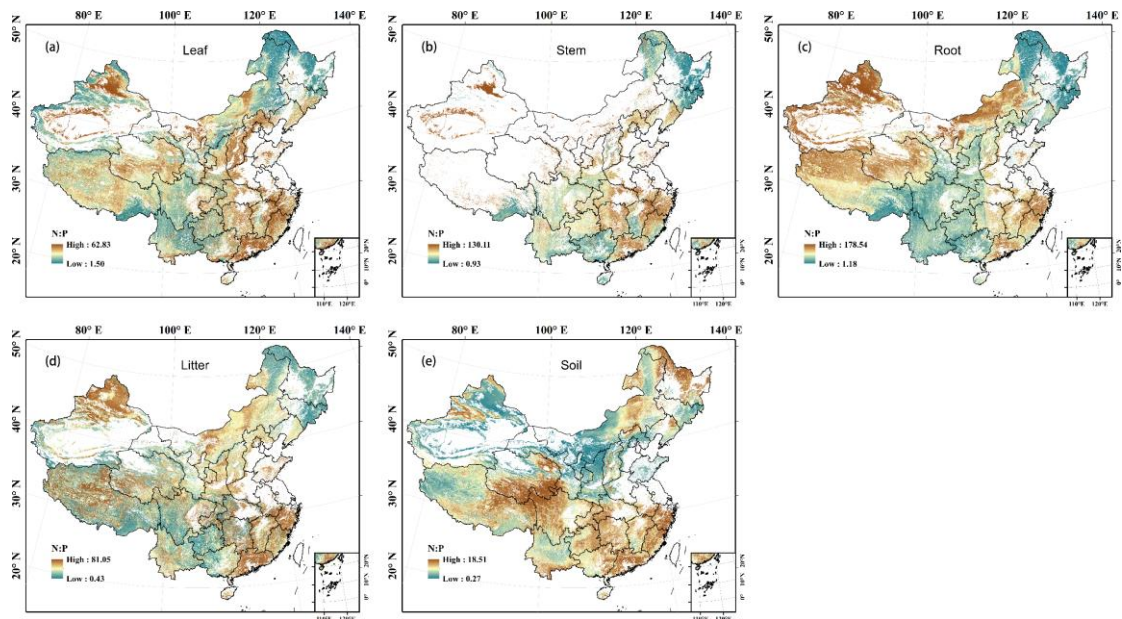
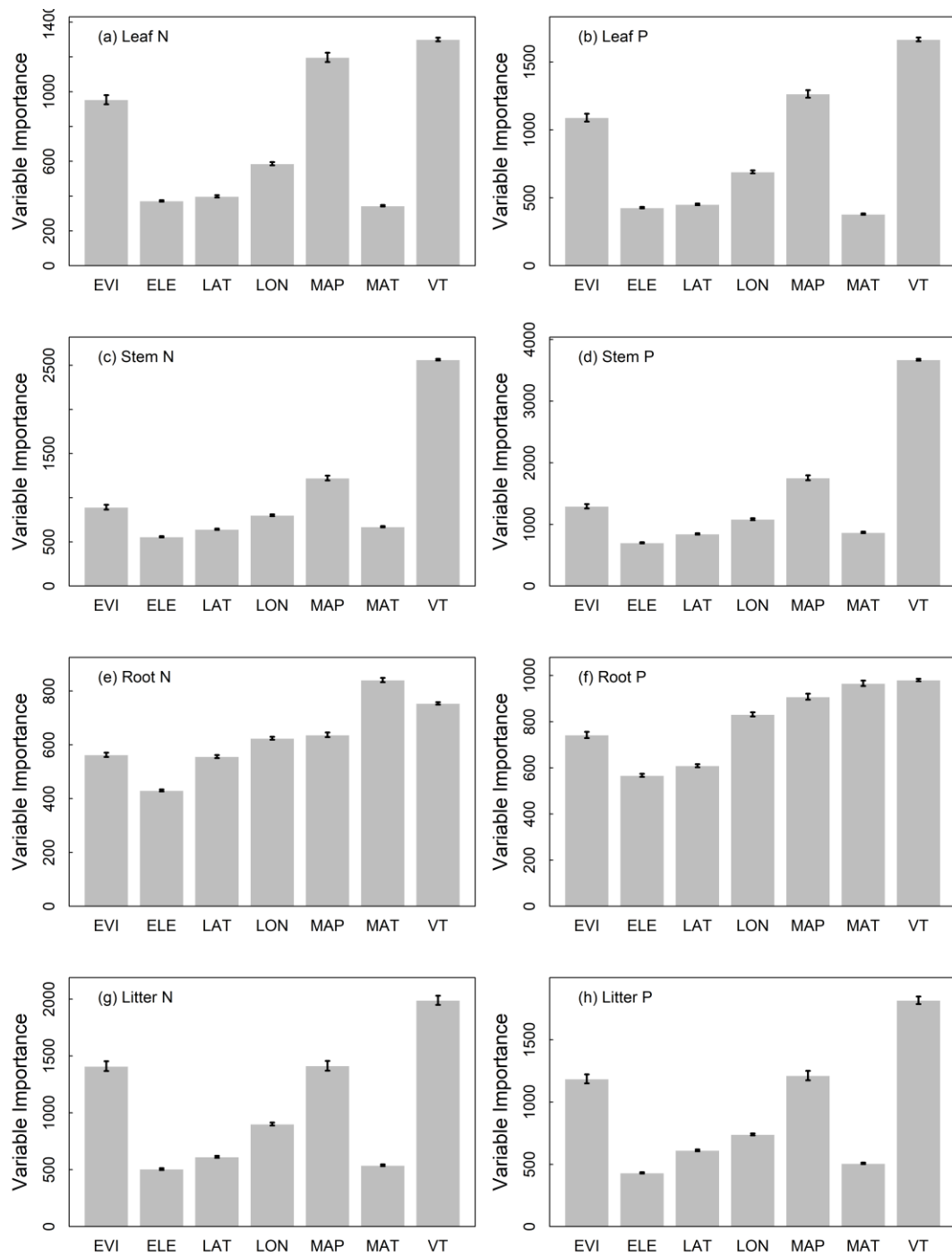
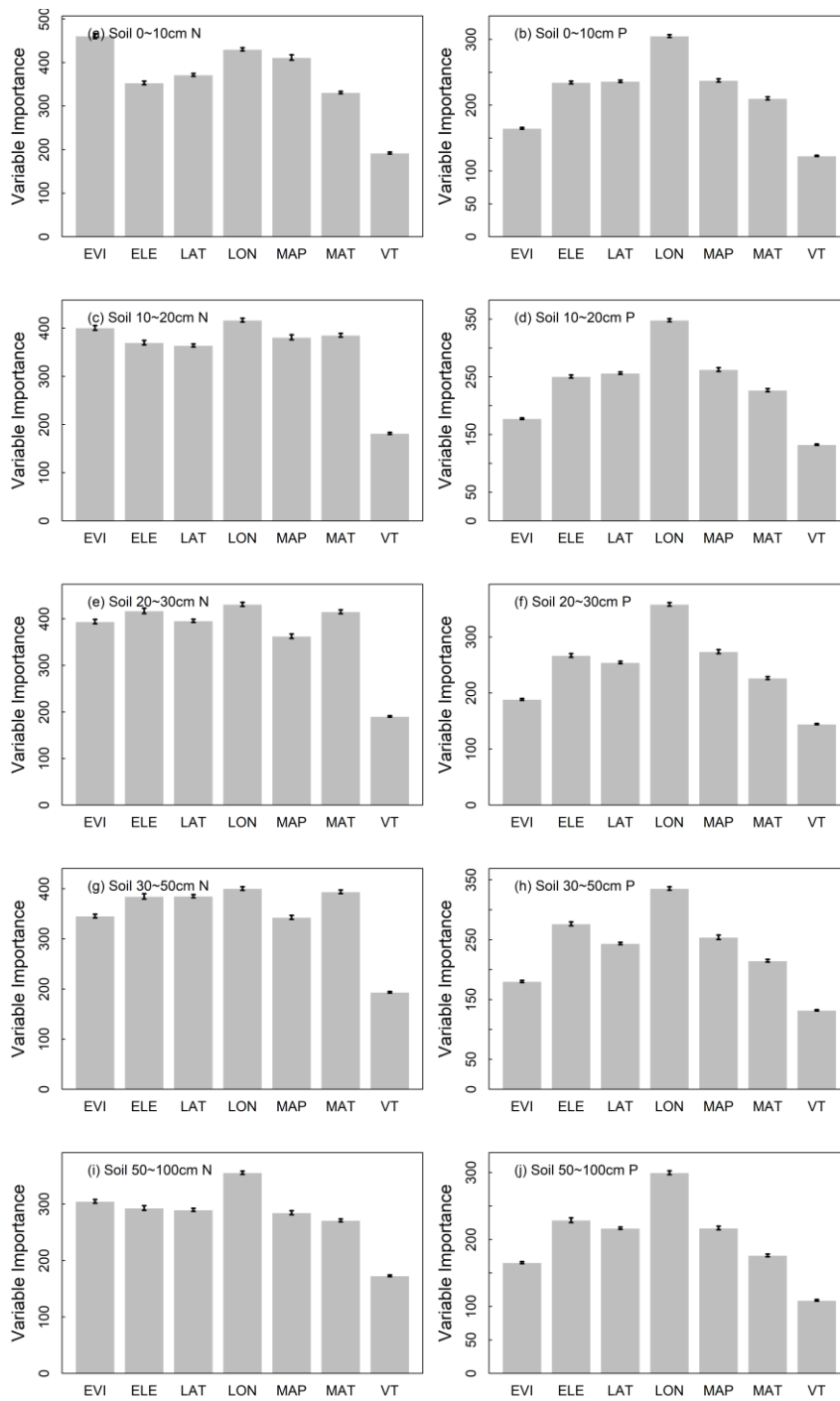


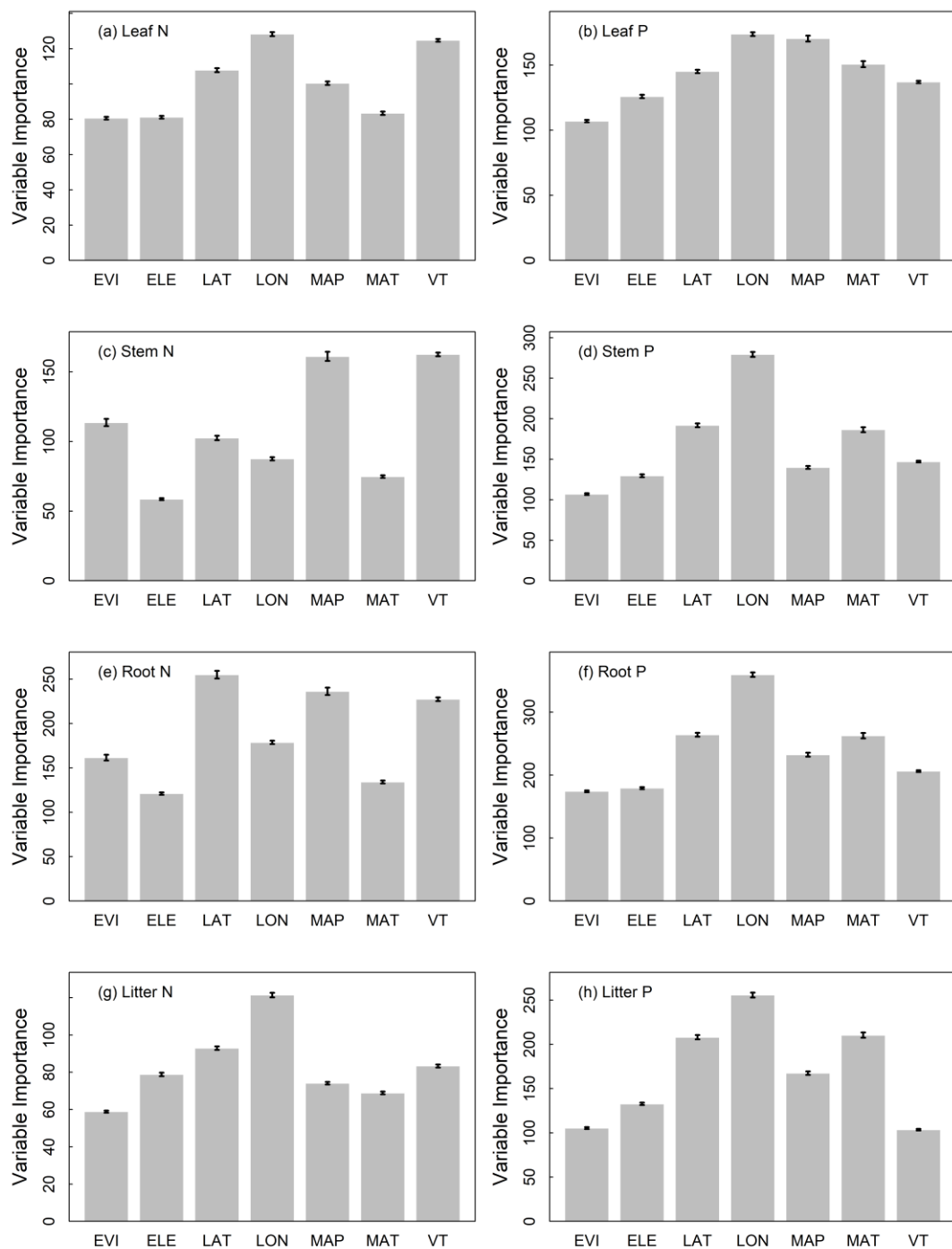
Fig. S7. Predicted spatial patterns of N:P ratios with a resolution of 1 km in leaves (a), woody stems (b), roots (c), litter (d) and soil (e) of terrestrial ecosystems in China.



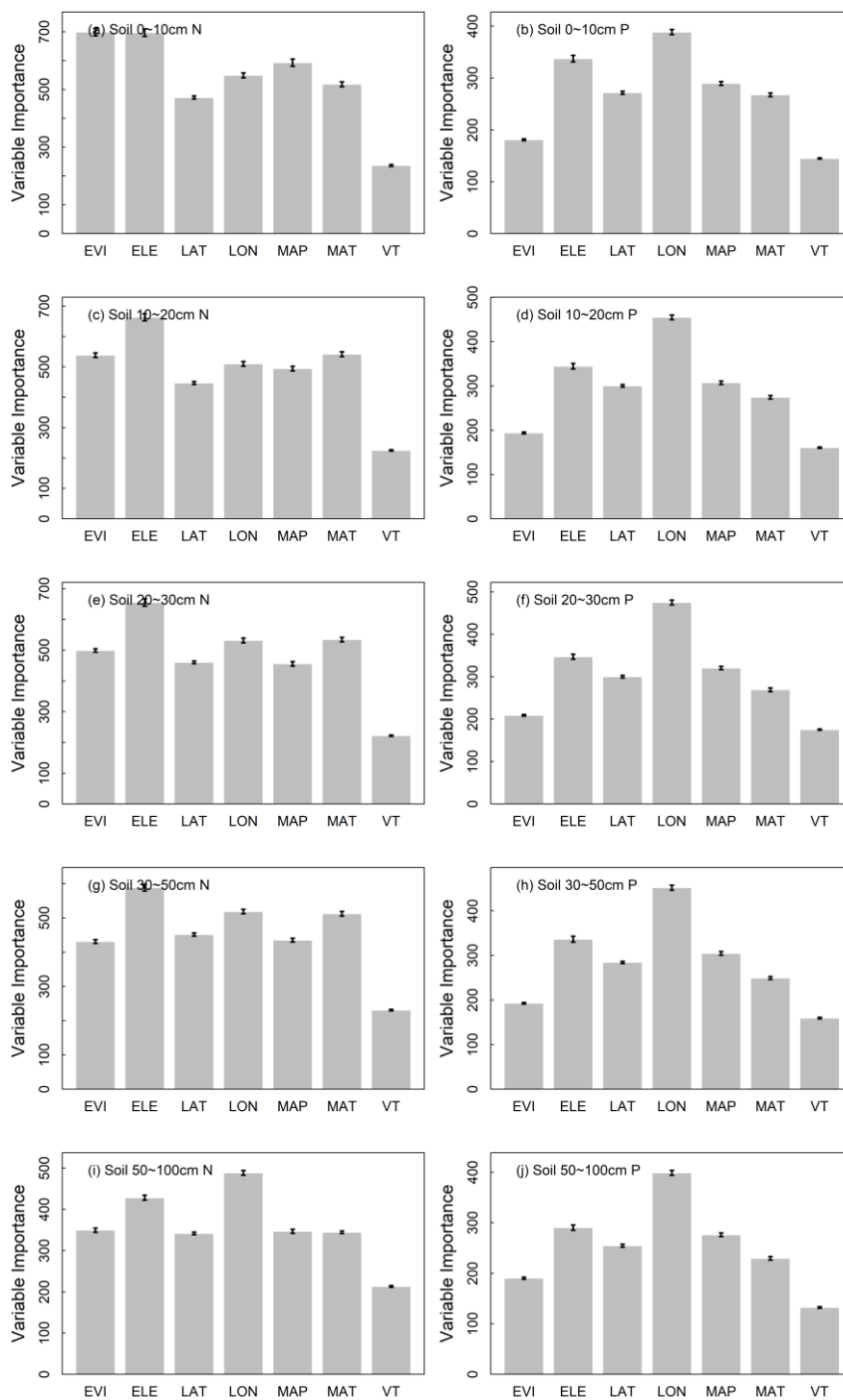
37 **Fig. S8.** The relative importance of variables in random forest models of N and P densities for
38 leaf (a & b), stem (c & d), root (e & f) and litter (g & h).
39



41 **Fig. S9.** The relative importance of variables in random forest models of N and P densities for
42 0-10 cm (a & b), 10-20 cm (c & d), 20-30 cm (e & f) 30-50 cm (g & h) and 50-100 cm (i & j)
43 soil layers.
44



46 **Fig. S10.** The relative importance of variables in random forest models of N and P
47 concentrations for leaf (a & b), stem (c & d), root (e & f) and litter (g & h).
48



50 **Fig. S11.** The relative importance of variables in random forest models of N and P
51 concentrations for 0-10 cm (a & b), 10-20 cm (c & d), 20-30 cm (e & f) 30-50 cm (g & h) and
52 50-100 cm (i & j) soil layers.
53