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Estimates of total phosphorus for Amazonia based on an expanded harmonized soil database

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The element phosphorus total (Pt) is considered a basic element for life on earth. It controls key processes of CO₂ absorption from tropical forests to food production. For the Amazon region, estimates of Pt in the soil are scarce. In this study, we developed models through equations of pedotransfer function (PTF's) using data collected in the field (RAINFOR data). Were generated 16 regression models based on the Akaike information criteria (AIC) with R² above 65% was validated with independent RAINFOR data. The results Pt distribution were spatialized using interpolations by geostatistical method of inverse distance weights (IDW) and shown through maps.