

Article

The Socio-Economic and Environmental Variables Associated with Hotspots of Infrastructure Expansion in South America

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Supplementary information for The socio-economic and environmental variables associated with hotspots of infrastructure expansion in South America

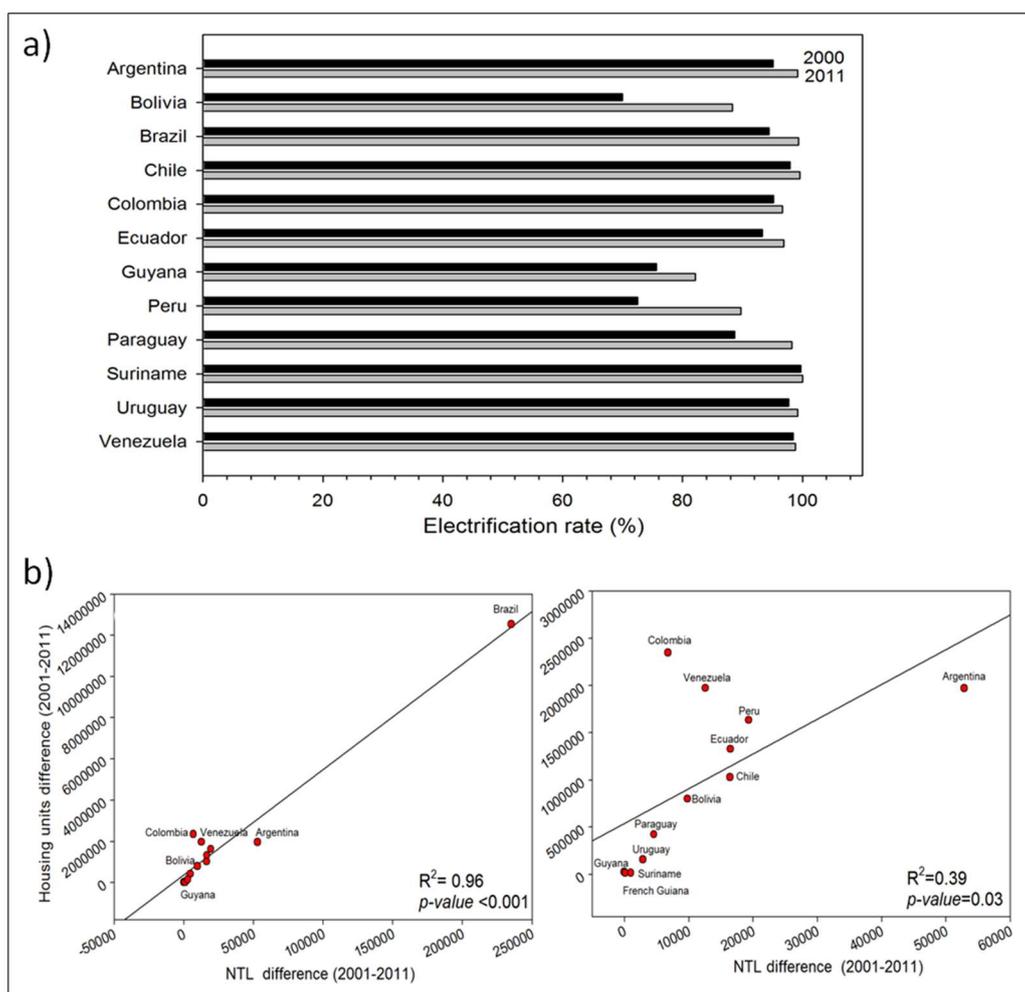


Figure S1. The use of night-time light (NTL) data as a proxy for infrastructure in South America. a) Electrification rate (%) (defined as the percentage of population with access to electricity) in 2000 and 2011 for 12 countries in South America. b) Relationship between the difference in housing units and NTL data between 2001 and 2011 in South America countries: including Brazil (left), and excluding Brazil, due to its extreme value (right). Figures were extracted from Andrade-Núñez and Aide 2018.

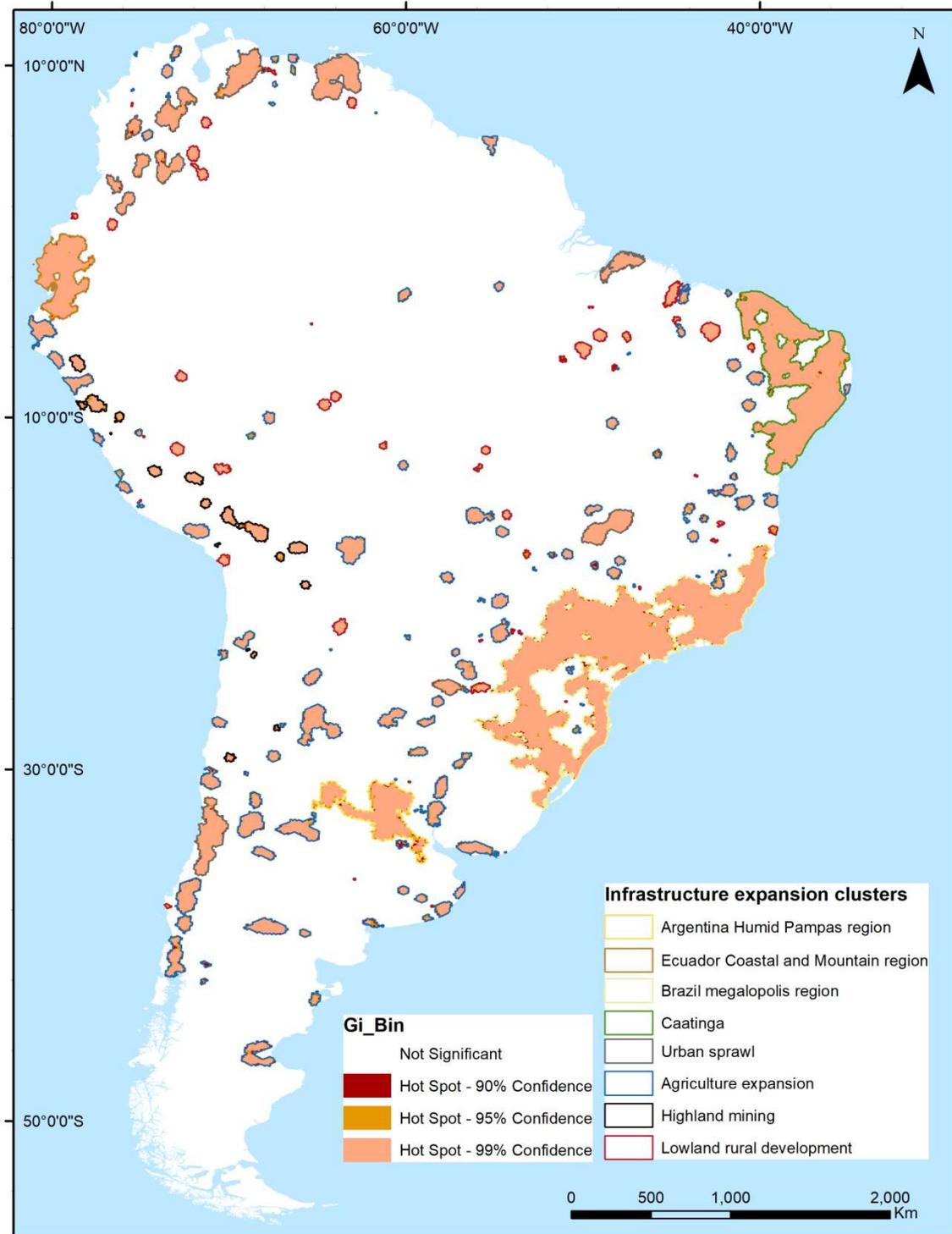


Figure S2. Hotspot areas of infrastructure expansion between 2001 and 2011 in South America. Optimized hotspot analysis results are showed as following: Gi_Bin scores of: +3 (statistically significant at the 99 percent confidence level); + 2 (statistically significant at the 95 percent confidence level); + 1 (statistically significant at the 90 percent confidence level); and 0 (not statistically significant). Infrastructure expansion clusters are depicted.

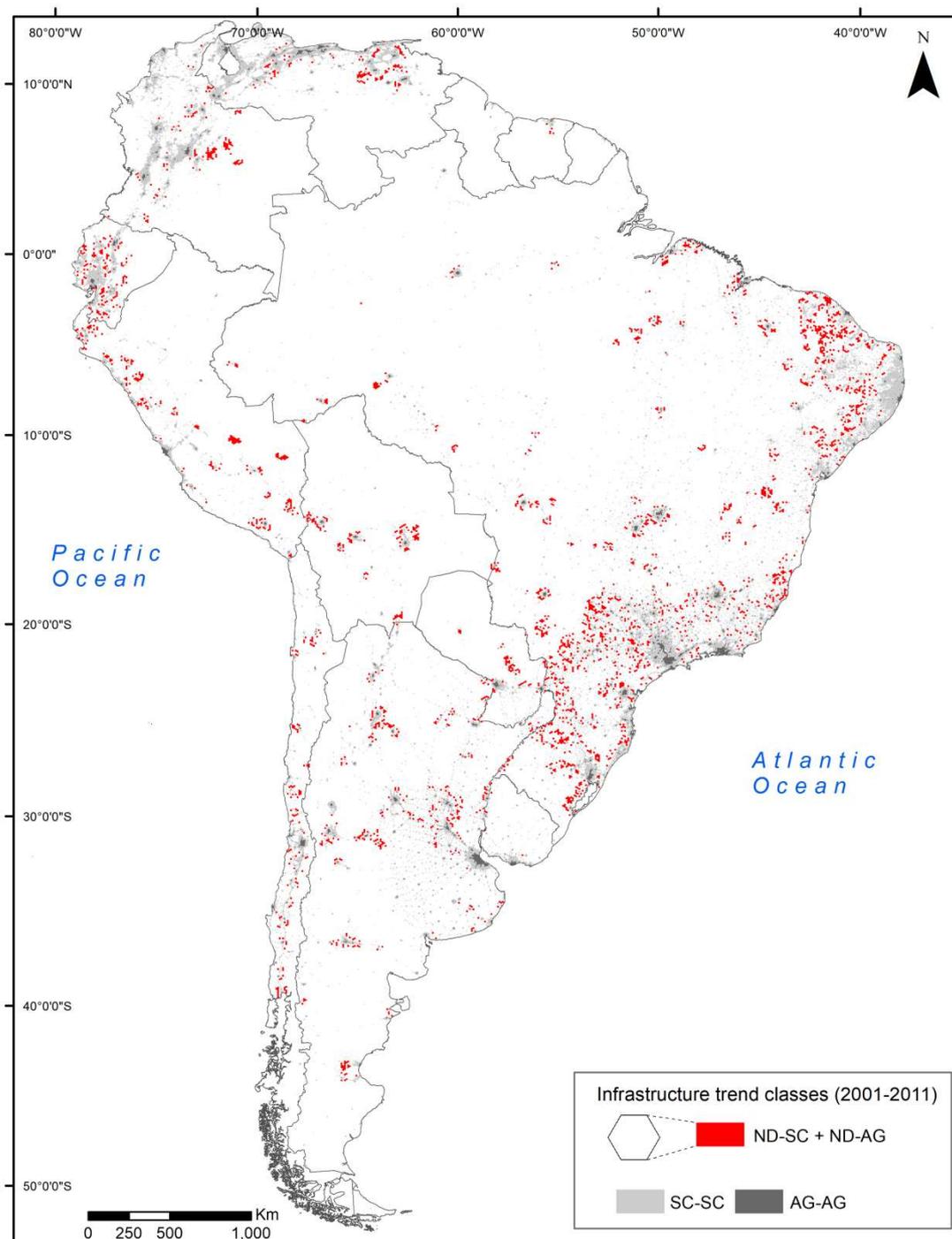


Figure S3. New infrastructure areas within hotspots of infrastructure expansion between 2001 and 2011 in South America. The red areas depict those hexagons (115 km²) that showed new infrastructure expansion (defined as the increase of infrastructure from no development to scattered (ND-SC), and from no-development to aggregated (ND-AG)), and had no scattered to scattered (SC-SC) or aggregated to aggregated (AG-AG) transition classes between 2001 and 2011.