

EDITORIAL

In its second year, the Margarida Penteado Journal of Geomorphology (MPRG) provides us with topics that establish dialogues between the understanding and management of natural and human-altered geomorphological landscapes. The articles cover regional contexts in Brazil, concerning the Southeast and Northeast, as well as the northern coast of Colombia. The contributions gathered in this issue discuss different aspects of geomorphological and environmental dynamics, emphasizing the interactions between natural processes and human actions in coastal, urban, and watershed environments.

One of the highlights is the study on the coastal processes of Colombia's northern coast, which analyzes the unidirectional sediment transport driven by trade winds and the negative impacts of human intervention, such as the construction of jetties, on downstream coastal erosion. Following this, the relationship between conservation practices and geomorphology is also addressed through the integration of geomorphological knowledge and management actions aimed at promoting greater effectiveness in mitigating erosive impacts and environmental degradation, using the watershed as the spatial unit of analysis.

The effects of urbanization and anthropization on surface systems are highlighted in different morphoclimatic contexts. In Rio Claro (RJ), the formation of gullies in roadside slopes underscores the impact of inappropriate land use styles on soils vulnerable to intensified linear erosion processes. Meanwhile, in Natal (RN), a micro-scale analysis of geomorphological risks in urbanized sand dunes shows how urban expansion in fragile areas increases susceptibility to disasters, pointing to the role of geomorphological analysis as an essential tool for risk planning and management.

The perception of socio-environmental impacts is also explored through the application of questionnaires to basic education students in Petrópolis (RJ). The investigation revealed facets generally overlooked by geomorphological studies, such as the suffering experienced by affected populations and the lack of discussion in school environments about the risks affecting urban areas in the municipality. This contribution holds unique relevance in light of the catastrophic events that occurred in 2022, reinforcing the importance of environmental education as a tool for building environmental resilience among learners.

Back in the Northeast, the watersheds of the Trancoso River (BA) and the Santo Antônio River (MA) are analyzed based on land use forms and their relationship with surface runoff. In Trancoso, pressure on fragile ecosystems due to advancing urbanization and livestock farming was observed, indicating increasing risks to sediment dynamics and water quality along the river channel. In Maranhão, the surface runoff study based on the Curve Number (CN) technique and infiltration tests revealed that urban areas and exposed soils concentrate the highest runoff rates, which can intensify the risk of flooding and erosion.

Finally, the assessment of coastal geopatrimony on the Island of Maranhão discusses the scientific value of geoforms for conservation purposes, focusing on coastal geomorphological formations in light of still incipient tourism and visitation infrastructures. The authors also discuss the relevance of geoconservation in the face of growing urbanization and threats to natural resources, highlighting the value of geo-environmental services provided by coastal geomorphological units.

The studies mentioned above demonstrate the importance of integrating geomorphological knowledge, urban planning, and environmental education in territorial management. Whether analyzing the impacts of coastal interventions, monitoring erosive processes, valuing geopatrimony, or perceiving risks by local populations, all the works contribute to the construction of more sustainable and resilient strategies in the face of current



environmental and climatic transformations. Furthermore, the plurality of sections in the current volume of MPRG offers reviews of books focused on geodiversity and the geomorphology of Piauí, in addition to geomorphological maps at various scales, one showcasing the municipality of Natal (RN) and another of Brazil, in this case applying the new nomenclature of relief units proposed by the SBCR of IBGE. The section on geomorphological flashes addresses Geoparks in Brazil, while the photo section presents selected snapshots of the landscapes of Ceará and Rio Grande do Sul. We also draw attention to the new cover photo of the magazine, which depicts the iconic inselberg of Pedra da Galinha Choca in Quixadá (CE).

Given such thematic diversity, as well as the excellent quality of the texts and other geomorphological products, I invite everyone to explore the current issue of MPRG in the best way possible. Enjoy!

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