

Review of: "Why Should Urbanites be Earth/Geosciences Literate?"

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Potential competing interests: No potential competing interests to declare.

Background

The paper "Why Should Urbanites be Earth/Geosciences Literate?"^[1] highlights the importance of Earth/Geosciences literacy for people living in urban environments, commonly referred to as urbanites. It emphasizes that urban areas are intricate social-ecological systems on a global scale, where human activities interact with the geosphere through construction, mining, and transportation, leading to significant fluxes of energy, water, and materials. Earth/Geosciences knowledge combined with engineering expertise is crucial for understanding and managing these interactions.

The paper argues that urban environments often shelter people from direct exposure to natural geospheric phenomena like weather events and various disasters, such as floods, storms, and heatwaves. As a result, urbanites may not fully comprehend the extent to which their lifestyles depend on the functioning of the geosphere. This lack of awareness is considered a systemic risk for modern societies^[2].

The authors suggest that Earth/Geosciences professionals, similar to meteorologists' practices, should actively engage the public to increase awareness about geoscientific information and its impacts on economic and social activities. By combining weather forecasts with explanations of meteorological phenomena and their effects, meteorologists demonstrate the value of Earth/Geosciences knowledge in influencing people's daily lives, work, and decision-making.

The paper concludes by posing a question: How can other Earth/Geosciences professionals adopt a similar approach to increase public understanding and appreciation of the geosphere's significance in urban life?

Review

The paper presents a compelling argument for the importance of Earth/Geosciences literacy among urban populations. The authors effectively convey the interconnectedness of urban environments with the geosphere and the consequential impact on energy, water, and material flows. They rightly point out that Earth/Geosciences knowledge, when combined with engineering expertise, is essential for designing and managing urban areas.

The observation that many urbanites are shielded from direct exposure to natural geospheric phenomena, leading to a lack of appreciation for the geosphere's role in their daily lives, is an important insight. The paper emphasizes the need for Earth/Geosciences professionals to bridge this knowledge gap to mitigate potential systemic risks faced by modern

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societies.

The comparison with meteorologists and their communication practices is apt, as it demonstrates a successful approach to engage the public with geoscientific information. Encouraging other Earth/Geosciences professionals to adopt similar public outreach strategies is a valuable suggestion.

However, one aspect that could be further explored is providing specific examples or case studies of how Earth/Geosciences literacy has been beneficial in urban planning, disaster preparedness, or sustainable development. This would reinforce the paper's argument and encourage policymakers and urban planners to prioritize Earth/Geosciences expertise in their decision-making processes^{[3][4]}.

Overall, the paper effectively highlights the significance of Earth/Geosciences literacy for urbanites and society at large. By shedding light on the knowledge gap and proposing strategies to enhance public understanding, the paper makes a valuable contribution to the field of Earth/Geosciences education and its relevance in urban contexts.

References

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