

Dear Editor,

I have had the opportunity to review the manuscript detailing the assessment of Groundwater Dependent Ecosystems (GDEs) using remote sensing data and hydrogeological surveys in the Langxi River Basin. This study provides an insightful exploration of the methods used for identifying and characterizing GDEs, a topic of great environmental importance due to the critical role these ecosystems play in biodiversity conservation and water resource management. The findings are robust and contribute meaningfully to the field, especially in terms of methodological innovations. However, I have several comments that I believe could further refine and enhance the value of the work presented.

1. The manuscript offers a detailed account of the combined use of GIS and hydrogeological data. However, it would benefit from a more explicit explanation of the choice and configuration of the remote sensing technologies and the rationale behind the specific indices selected for analysis. Providing this information would help in replicating the study in other regions or contexts, enhancing its utility for broader application.
2. The results section effectively illustrates the application of NDWI and NDVI indices in identifying GDEs. However, ensuring that all figures and tables consistently reflect the descriptions provided in the text would improve the manuscript's readability and professional appearance. Specifically, ensuring that legends and captions are clear and that graphical representations directly correspond to the described findings is crucial.
3. While the study discusses the settings used within the numerical models and their boundary conditions, linking these directly to either field conditions or the parameters set during laboratory tests could strengthen the study. A detailed comparison would not only validate the model further but also provide clarity on its applicability in real-world scenarios.
4. The conclusion successfully outlines the study's contributions to understanding GDEs. However, integrating specific recommendations for policymakers on managing groundwater extraction in coastal areas could significantly enhance the

manuscript's impact. Practical guidelines based on the study's findings would be invaluable for regional planning and conservation efforts.

5. The manuscript exhibits a commendable level of detail and scientific rigor. However, to elevate the manuscript's clarity and professional presentation, a comprehensive review of typographical errors, figure consistency, and data presentation is essential. For example, some figures and diagrams exhibit inconsistent use of color schemes and font sizes, which could potentially confuse the reader or detract from the data's visual impact. Additionally, inconsistencies in symbol usage and abbreviation definitions across the text and figures were noted. Ensuring that all graphical representations adhere to a uniform style guide would significantly enhance readability and the visual appeal of the manuscript. It is also recommended to verify the accuracy of all legends and captions to ensure they precisely describe the corresponding figures and tables. Addressing these issues will not only refine the presentation but also bolster the manuscript's overall credibility and ease of understanding.

In summary, this manuscript provides important insights into the assessment and management of GDEs using advanced remote sensing and hydrogeological methods. Addressing the points listed above could strengthen the manuscript's impact, making it a significant contribution to environmental science research. I look forward to seeing these enhancements in the revised manuscript.