Review of »OpenMindat v1.0.0 R package: A machine interface to Mindat open data to facilitate data-intensive geoscience discoveries«

by Que+

reviewer: Dominik Hezel ms received: 05.02.2025

review completed: 04.03.2025

The authors greatly improved their manuscript compared to its first version, and I find this an exciting, highly important, and interesting read – but even more so, a fantastic R package. I only have some minor comments below, and am now looking forward to finally see this paper published.

Detailed comments

- 1. 59: I was excited to read there might also be a python package, but this is only mentioned here. So either delete or make some more statement here or later that there is also a python package in the works, and provide some hint to when this might be released.
- 2. Table 1: Why is the meteoritics volume number in red?
- 3. 84: I find the term >address< confusing. Could this be simply replaced by e.g., >hierarchy<? A hierarchy can have levels, so this might be more descriptive than >address<.
- 4. 87: >tectonic plate⟨?
- 5. 88ff: The bracket starting with >(Studies of ...)
 is confusing. Maybe this could be made as a proper sentence that has a better connection to its previous sentence.
- 6. 114: Delete >above<
- 7. 115: Delete >us∢
- 8. 119: Delete extra space before >it supports<
- 9. 173: >This function category ...<? cf. your Table 6
- 10. 184: ... few lines of code ... would be more idiomatic
- 11. 224: >... code are shared ...∢
- 12. 231: \dagger section, is also shared ... \land
- 13. 233: Delete >those<
- 14. 235: I don't think the tool is reproducible, but it allows for reproducible data query. Rephrase accordingly.
- 15. 239: >interactions< instead of >interventions<
- 16. 239 > webpages or rather > webpage <?
- 17. 242: ... programming skills, but require large datasets ... <

- 18. 250: The FAIR principles and open science are two different things. An e.g., database can be FAIR but not open, i.e., there is e.g., a paywall. This is not overly important in this context, but regarding these principles and concepts are still new to many, I would suggest to make it clear that these are different things.
- 19. 251: ... is increasingly demanded in the ... <