# Article information:

Ultraviolet radiation rather than inorganic nitrogen increases dissolved organic carbon biodegradability in a typical thermo-erosion gully on the Tibetan Plateau | Elsevier Enhanced Reader
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# Article summary:

1. Permafrost thaw and subsequent carbon release with climate warming is potentially the largest C-climate feedback from terrestrial ecosystems.

2. UV radiation and inorganic nitrogen addition may increase biodegradable DOC, resulting in more C loss.

3. The Tibetan Plateau is an important permafrost C stock, and thermokarst initiation due to climate warming is widespread in this region.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article provides a comprehensive overview of the potential effects of ultraviolet radiation and inorganic nitrogen addition on biodegradable dissolved organic carbon (BDOC) released from thermokarst regions on the Tibetan Plateau. The article presents evidence from previous studies that suggest that both UV radiation and N addition can increase BDOC, thus contributing to the positive C-climate feedback from permafrost thawing. However, there are some potential biases and missing points of consideration that should be noted when evaluating the trustworthiness and reliability of this article.

First, the article does not provide any evidence for its claims regarding how UV radiation affects DOM composition or how N addition impacts BDOC seasonally. While it cites previous studies that have suggested these relationships, it does not provide any additional evidence to support these claims or explore counterarguments to them. Additionally, while the article mentions that increased N concentration could relieve microbial N limitation and increase DOC decomposition, it does not discuss any possible risks associated with this process or present both sides of this argument equally.

Second, the article does not explore any other factors that could affect BDOC beyond UV radiation and N addition. For example, it does not consider how temperature or other environmental conditions might influence BDOC levels or how different types of DOM might respond differently to UV radiation or N addition. Furthermore, while it mentions that thermokarst initiation due to climate warming is widespread on the Tibetan Plateau, it does not discuss any potential implications of this phenomenon for local ecosystems or communities living in these areas.

In conclusion, while this article provides a comprehensive overview of how ultraviolet radiation and inorganic nitrogen addition can affect biodegradable dissolved organic carbon released from thermokarst regions on the Tibetan Plateau, there are some potential biases and missing points of consideration that should be noted when evaluating its trustworthiness and reliability.

# Topics for further research:

* Effects of temperature on DOM composition
* Impacts of N addition on DOM decomposition
* Risks associated with increased N concentration
* Different types of DOM response to UV radiation
* Thermokarst initiation implications for local ecosystems
* Climate warming impacts on Tibetan Plateau communities

# Report location:

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