Biogeosciences

Discussions

Open Access

EGU

Interactive comment on "Megafauna community assessment of polymetallic nodule fields with cameras: Platform and methodology comparison" *by* Timm Schoening et al.
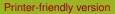
Adrian Glover

a.glover@nhm.ac.uk

Received and published: 30 October 2019

This is an excellent paper adding to the growing body of work on deep-sea faunal surveys conducted using imaging alone.

However, I would urge the authors to consider incorporating a section discussing the obvious need for taxonomic descriptions of the fauna living in these remote and poorly-studied regions.

Almost all of the fauna being observed in the images are either undescribed or lack local taxonomic records linked to vouchered specimens. This means it is not possible

to identify the animals observed to species level. For this reason, image survey cannot replace actual sampling until such time that we have a reasonably good checklist of known species (verified from samples) from the region where the image survey is taking place.

Once that is achieved, image survey will be a valuable tool for conducting biodiversity assessment. At the moment, the use is limited to the abundance of higher taxa. This is not the species-level assessment that the regulator, stakeholders and society should demand.

The authors refer to this in this sentence only:

"To label fauna to species level from imagery requires a certain amount of skill, and an awareness of fauna likely to occur in a particular survey region."

I believe they could easily add to this section the obvious need to undertake taxonomic descriptions to enable identification, and also make the caveat that species-level identification is not possible until this has been done.

Good luck with this excellent work.

Adrian Glover http://www.nhm.ac.uk/deep-sea