

Dear Colleague

As part of an initiative started during a biodiversity break out session in the International Ocean Colour Symposium (IOCS) in 2023, continued during the BIOSPACE25 conference and in preparation for the discussions in the upcoming biodiversity breakout session in IOCS2025 [<https://iocs.ioccg.org/wp-content/uploads/2025/05/bw-description-biodiversity.pdf>], we are conducting a community survey to collect the views of the community **on measures of marine biodiversity derived from ocean colour radiometry** as a first step to compile a comprehensive, prioritized list of remote sensing biodiversity products for the marine environment. The data collected will be presented and discussed in the biodiversity breakout session in IOCS2025 and compiled in the form of a perspective paper. Please indicate if you would like to participate in the manuscript preparation by filling in the appropriate response in the survey.

This survey is aligned with Essential Ocean Variables framework (EOV), developed by GOOS (<https://goosocean.org/what-we-do/framework/essential-ocean-variables/>). The methodology will closely follow the work from Skidmore et al. (2021) (APPENDIX I).

The questionnaire will focus on Phytoplankton biomass and diversity EOV, on habitat related EOV as a whole (macroalgae, seagrass, mangrove, saltmarsh, corals) and on bio-regionalisation of the pelagic ecosystems.

Hope you will be able to spend a few minutes to complete the web-based survey by **27-November-2025**.

[Priority list of marine biodiversity metrics to observe from space – Fill out form](#)

Thanking you,

Yours sincerely,

Victor Martinez Vicente on behalf of the Co-chairs of the Biodiversity Breakout Sessions in IOCS



Registered Office:
Prospect Place
The Hoe, Plymouth
PL1 3DH, UK

+44 (0)1752 633100
forinfo@pml.ac.uk
www.pml.ac.uk

Patron: James Cameron
Registered charity number 1091222
PML is a company limited by guarantee,
registered in England & Wales,
company number 4168503

APPENDIX I: Criteria definition to construct a priority list

Feasibility- The science community knows how to measure the remote sensing biodiversity product at such scales that measurements can realistically be made and/or observations already exist. This criterion considers the availability of remote sensing data, the ease of access to such data, the completeness of remote sensing in space and time and the ease and affordability of data integration and analysis (Score 1 = TRL 7 - 9; 2 = TRL 5- 6; 3 = TRL 3-4; 4 = TRL1-2)

Accuracy: A measure of the current activity for the accurate observation of a given remote sensing biodiversity product. (Score: 1-A fully operational network or service is in place, generating remote sensing biodiversity products that are accurate for the purpose, including validation.)

Maturity: Institutions/organizations with hopes to generate remote sensing biodiversity products can be identified and/or proposed to a funding body.(Score 1 : Operationally implemented with satellite remote sensing.)

Relevance: It is known who wants the remote sensing biodiversity product, what they will do with it and how it will be used. Relevance in terms of use for SDG, CBD, IPBES, management/monitoring regional-national directives. (Score 1 - Use and user fully identified.)

Reference:

Skidmore, A. K., et al. (2021).: Priority list of biodiversity metrics to observe from space, Nat Ecol Evol, 5, 896–906, <https://doi.org/10.1038/s41559-021-01451-x>, 2021.