

PUTTING GEOGRAPHY INTO PHYCOLOGY: RECENT ADVANCES

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In the last decade, ecological and biogeographical studies (mainly terrestrial) have greatly benefited from recent developments in geographical techniques, and numerous test cases have been published. However, very few phycological studies emphasizing ecology and biogeography have incorporated these techniques, using traditional, non-spatially explicit descriptive and multivariate statistics instead. Here, we show a satellite-based seasonal mapping study of macroalgal communities in the Arabian Sea, and a global species' distribution modelling effort of a cryptic green algal complex forming worldwide blooms on physically damaged coral reefs. We demonstrate how spatially explicit information contributes to more efficient work and new insights in marine ecology and biogeography, and comment on why previous studies did not include geographical techniques. Lastly, we briefly discuss future perspectives of spatially explicit phycological studies.