

Title	Mapping marine biomes of the world
Abstract	There is no global map of marine biomes, i.e., areas characterized with similar habitat forming plant life forms. We defined five marine biomes; seagrass, kelp, mangroves, zooxanthellate corals and saltmarshes. We mapped seagrass and kelp biomes using species distribution modelling (MaxEnt) of species occurrence records from the Global Biodiversity Information Facility (GBIF) and the United Nations Environment Programme-World Conservation Monitoring Centre (UNEP-WCMC) Ocean Data Viewer. Environmental data layers were extracted from Global Marine Environment Datasets (GMED) and interpolated into 30 arc seconds resolution. The resulting MaxEnt model predicted a similar geographical distribution to the occurrence records. In addition it mapped areas where previous maps lacked data, and predicted seagrass occupies 1,646,788 km ² . This map will be combined with maps of kelp, coral, and mangrove biomes to show the spatial extent of marine biomes for use in global carbon budgets and design Marine Protected Area networks.
Key words	Global, Marine, Biome, MaxEnt
Short description	We mapped the global distribution of seagrass and kelp biomes using primary distribution records and environmental variables in Maxent models.
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