

Supplementary Materials: SfM-based method to assess gorgonian forests (*Paramuricea clavata* (Cnidaria, Octocorallia)).

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Table S1. Camera specifications and settings used for the Gopro Hero4 Black Edition (Woodman Labs, Inc., San Mateo, California, US)(GH) and the Sony NEX7 alpha digital (Sony Corporation, Minato, Tokyo, Japan) (SN)cameras used in this study

	Unit	GH	SN
Focal length	mm	2.98	12
Resolution	pixels	4000×3000	1920×1080
Sensor type	–	CMOS	CMOS
Sensor dimension	mm	6.17 × 4.55	23.50 × 15.60
Recording format	–	photo	video
Recording frame rate	frame s ⁻¹	1	50
Housing port	–	flat	dome port

Table S2. Number of images processed for each of the 1 m × 1 m quadrats conforming the Abundance Ground Truth (AGT) data set collected with the Gopro Black Edition (Woodman Labs, Inc., San Mateo, California, US) and the Sony alpha digital (Sony Corporation, Minato, Tokyo, Japan) cameras used in this study.

Colony	1	2	3	4	5	6	7	8	9
Gopro	51	58	71	59	60	66	69	58	60
Sony	49	57	71	63	57	63	73	65	62



Figure S1. The point clouds of the nine dried colonies generated from SfM analysis. A dimensional reference of 10 cm × 1 cm × 1 cm was used to scale the point clouds.

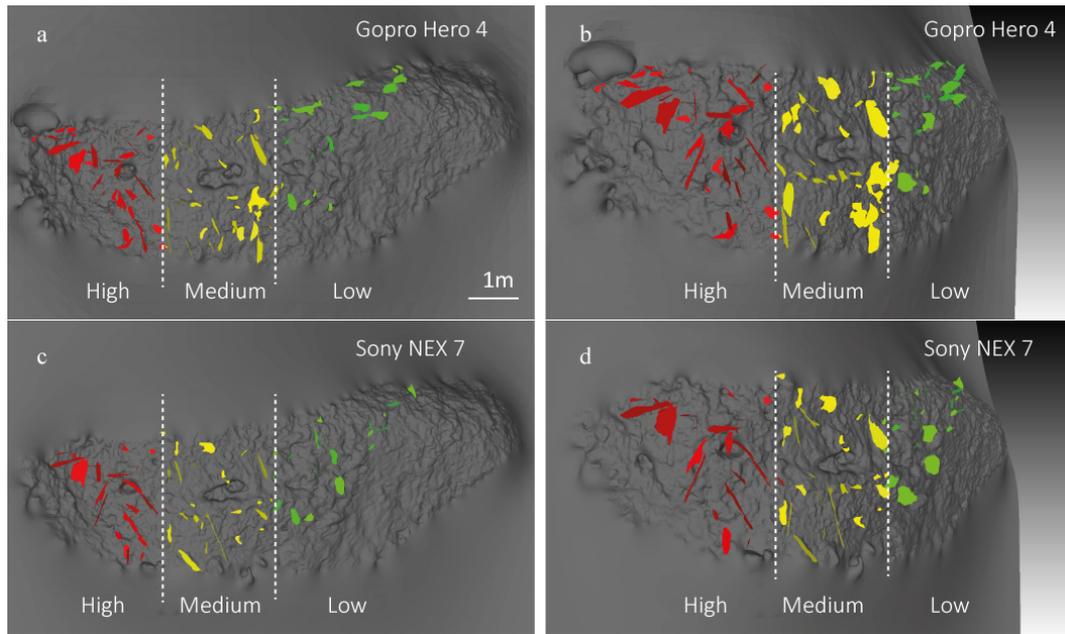


Figure S2. Views over the 3D scene representing the study area with the gorgonians fan surfaces generated within the three strata by using the imagery recorded with the GoPro Hero4 Black Edition (Woodman Labs, Inc., San Mateo, California, US)(GP) (a, b) and the Sony NEX7 alpha digital (Sony Corporation, Minato, Tokyo, Japan) (SN) (c, d) cameras.

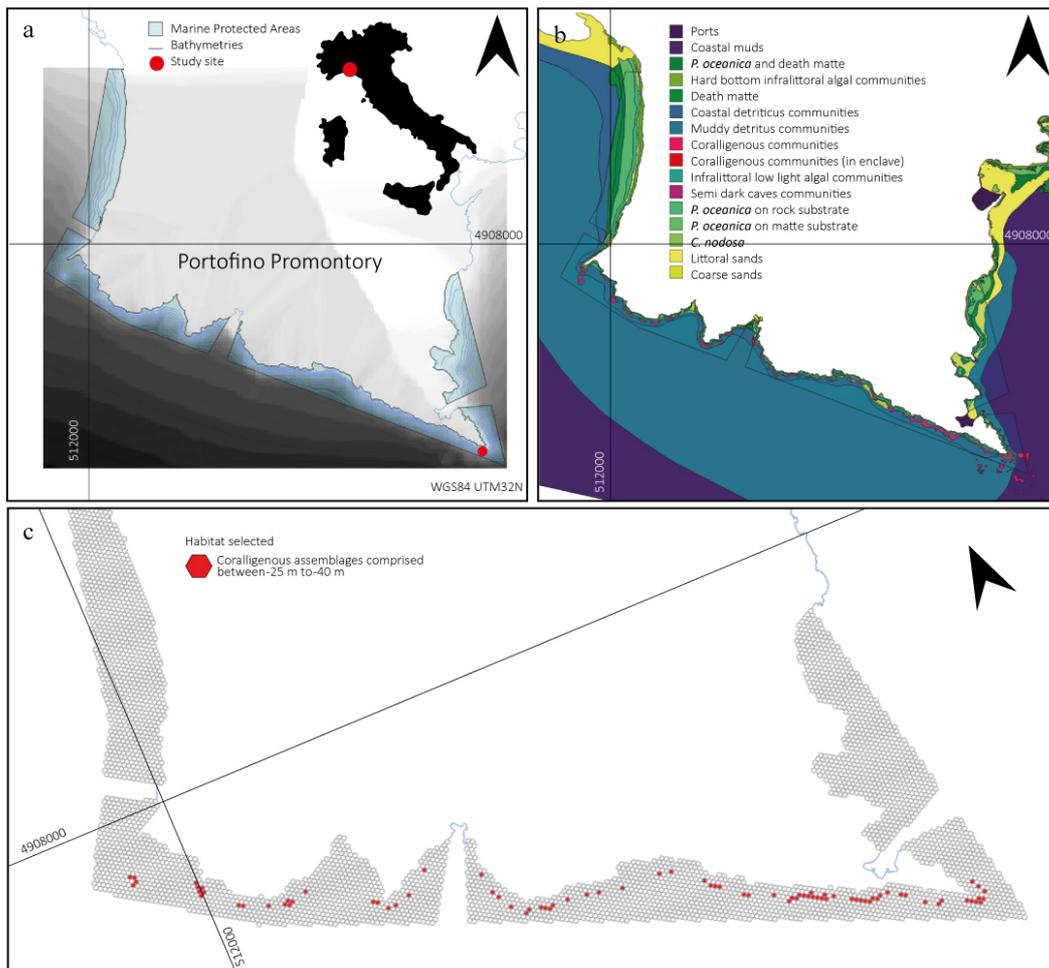


Figure S3. The maps showing border of the Portofino Marine Protected Area (Italy) (a), the bathymetries at 20 m spatial resolution (a), the benthic biocenosis [1] (b), and the selected 8.63 Ha over a total of 22.22 Ha of coralligenous habitats comprised within the depth -25 m to -40 m, considered for the calculation of carbon and Energy contents of the gorgonians' forests living tissues

1

- 2 1. Diviacco, G.; Coppo, S. *Atlante degli habitat marini della Liguria: descrizione e cartografia delle praterie di*
- 3 *Posidonia oceanica e dei principali popolamenti marini costieri*; Regione Liguria. Servizio Parchi e Aree protette.
- 4 *Settore Ecosistema Costiero*, 2006.