

## Geographic distance, water circulation and environmental conditions shape the biodiversity of Mediterranean rocky coasts

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Table S1. Summary of parameter estimates for distance-decay models of  $\beta$  diversity at two depths (littoral 0-0.2m, and sublittoral 5-7m) with respect to the two study regions (East, West). Parameters were obtained from between site Jaccard similarities adjusted for the effects of species richness (null model) and from regression residuals taking into account the effects of site protection status (Protection). Distance is defined as least-cost paths distances between pairs of sites (distance by sea).  $S_0$  = similarity at zero distance;  $D_h$  = estimate of halving distance (km). Standard errors (SE) were obtained from 9999 bootstrap resamples.

Depth	Region	$\beta$ ( $\pm$ SE)	$S_0$ ( $\pm$ SE)	$D_h$ ( $\pm$ SE)
<i>Null Model</i>				
Sublittoral	East	0.0012 (0.0003)	0.161 (0.015)	639.2 (157.1)
	West	0.00499 (0.0003)	0.120 (0.012)	138.8 (10.5)
Littoral	East	0.00052 (0.0002)	0.239 (0.028)	1344.5 (592.8)
	West	0.00147 (0.0003)	0.293 (0.029)	475.0 (168.9)
<i>Protection</i>				
Sublittoral	East	0.00098 (0.0007)	0.212 (0.006)	852.6 (213.5)
	West	0.00420 (0.0002)	0.136 (0.007)	97.2 (48.9)
Littoral	East	0.00065 (0.0003)	0.156 (0.020)	971.6 (322.7)
	West	0.00231 (0.0003)	0.20 (0.023)	598.3 (256.8)

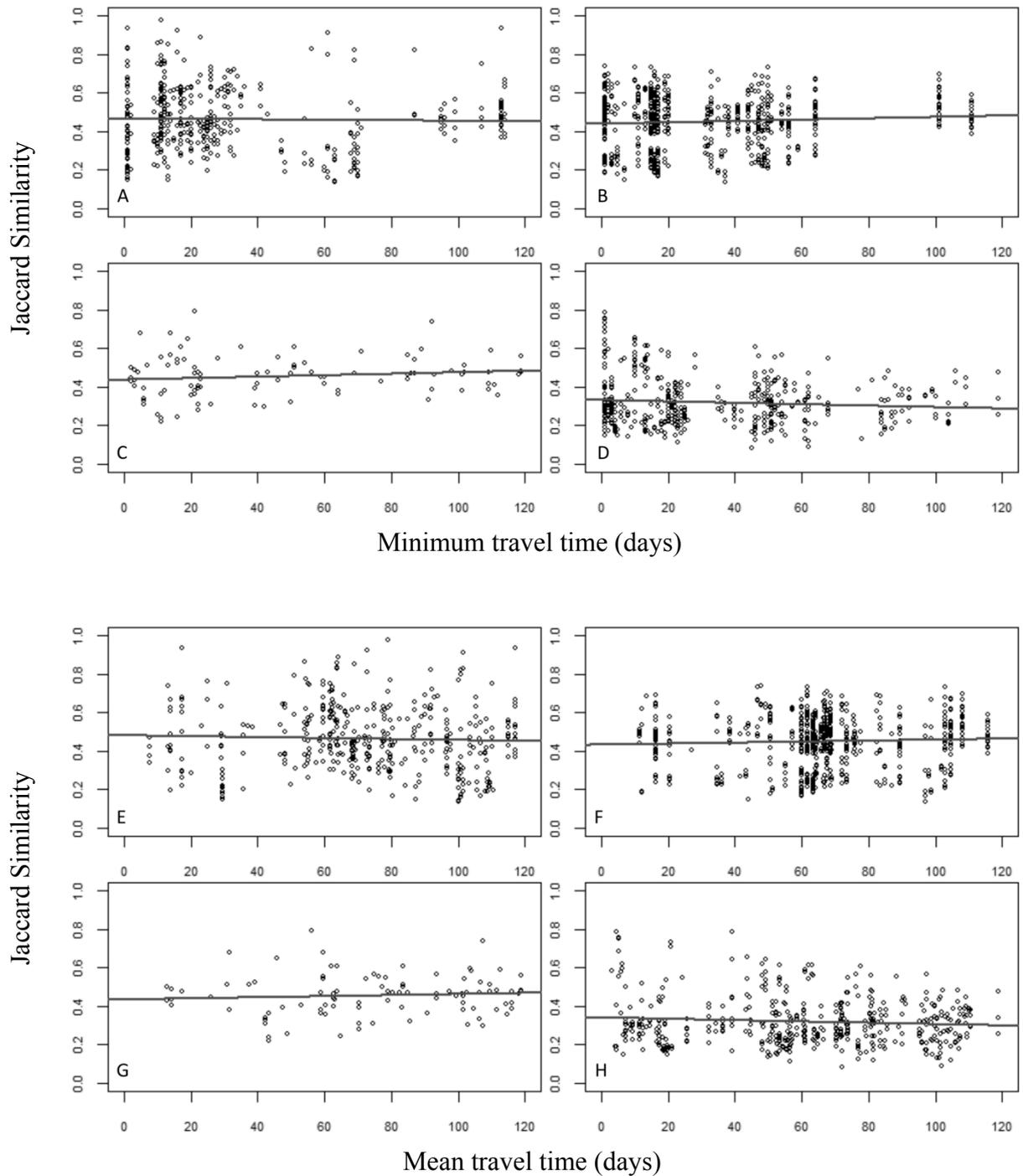


Figure S1. Decay in between site similarities (Jaccard) of benthic communities with increasing minimum and mean travel times (days) estimated from Lagrangian particle simulations in littoral (A and E) and sublittoral (B and F) sites in the western region; and littoral (C and G) and sublittoral (D and H) sampling sites in the eastern region. Distance decay relationships were estimated by generalised linear models (GLMs) with binomial observation error and a log-link function.