

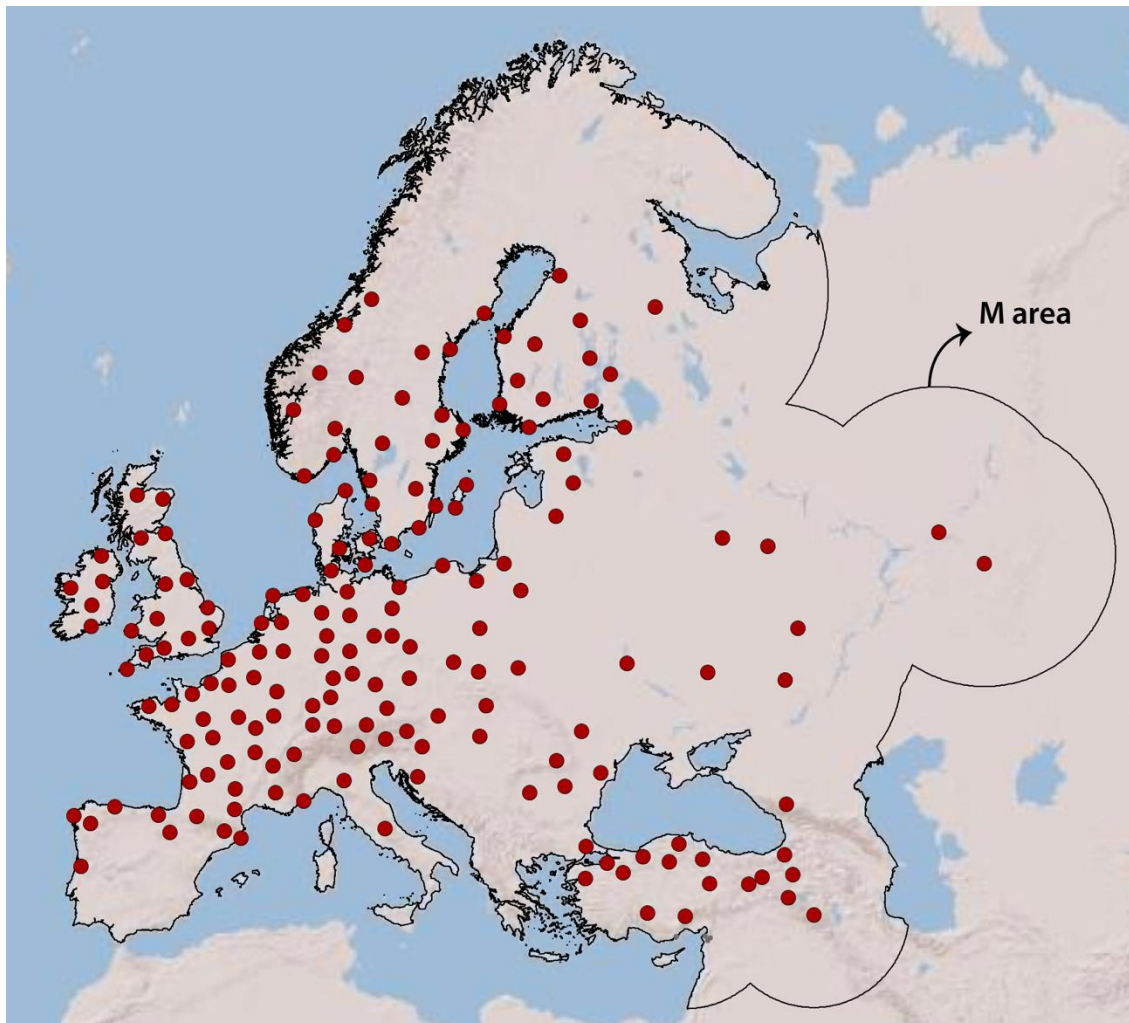
SUPPORTING INFORMATION

Ecological niche modelling of pedunculate oak (*Quercus robur*) supports the 'expansion-contraction' model of Pleistocene biogeography

ELİF DENİZ ÜLKER, ÇAĞATAY TAVŞANOĞLU and UTKU PERKTAŞ

Biological Journal of the Linnean Society, 2018, 123, 338–347.

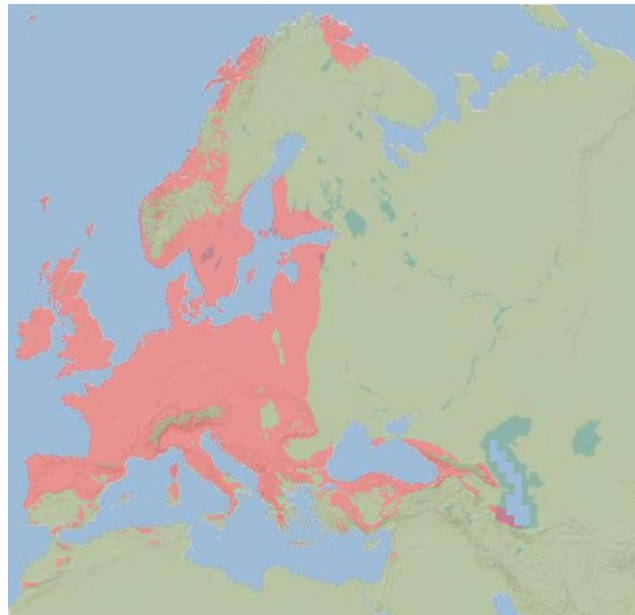
S1. Borders of the M area.



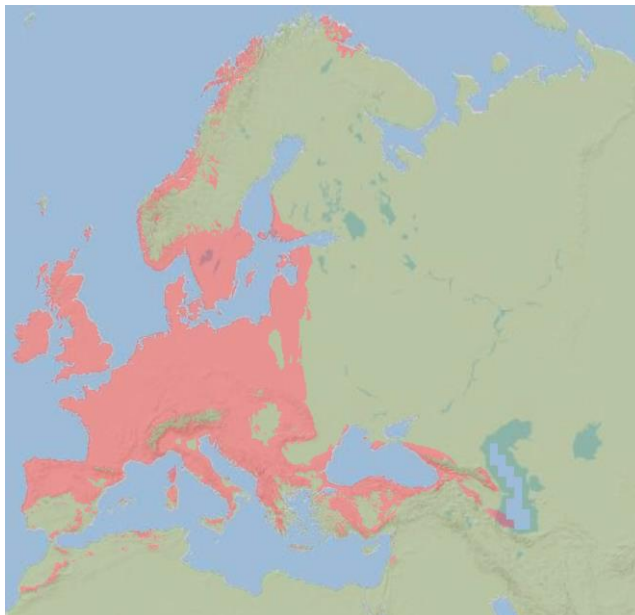
S2. Model comparison based on Akaike Information Criteria (AICc). The best model indicated in bold in the first row.

Feature types	Regularization Multiplier	Log Likelihood	Parameters	Sample Size	AICc score
LQPH	5	-2231.149339	7	171	4476.985795
LQP	2	-2228.617434	10	171	4478.609868
LQ	2	-2232.902818	7	171	4480.492752
LQ	0.2	-2233.44031	7	171	4481.567737
LQP	0.2	-2228.232654	12	171	4482.439992
LQPHT	5	-2229.69614	11	171	4483.052658
LQ	1	-2232.767033	9	171	4484.652078
LQ	5	-2235.090092	7	171	4484.867301
LQP	0.5	-2229.575497	12	171	4485.125677
LQ	0.1	-2233.258961	9	171	4485.635934
LQ	0.5	-2233.31481	9	171	4485.747632
LQP	1	-2228.951475	13	171	4486.221422
LQPHT	2	-2222.890304	18	171	4486.280608
LQP	5	-2232.48597	10	171	4486.346939
LQPH	2	-2225.599418	16	171	4486.731303
LQP	0.1	-2229.574049	14	171	4489.840405
LQPH	10	-2236.974066	8	171	4490.837021
LQ	10	-2239.537985	6	171	4491.588166
LQPHT	10	-2237.151297	9	171	4493.420607
LQP	10	-2236.471934	10	171	4494.318868
LQPHT	1	-2208.276417	35	171	4505.219501
LQPH	1	-2217.512738	32	171	4514.329824
L	1	-2256.804042	6	171	4526.120279
L	0.2	-2256.840703	6	171	4526.193601
L	0.1	-2256.899324	6	171	4526.310844
L	5	-2258.026231	5	171	4526.416098
L	2	-2257.002244	6	171	4526.516684
L	0.5	-2257.305818	6	171	4527.123831
L	10	-2260.240888	5	171	4530.845412
LQPH	0.5	-2212.384328	57	171	4597.281931
LQPH	0.2	-2206.514077	74	171	4676.653153
LQPHT	0.5	-2173.616108	88	171	4714.256605
LQPH	0.1	-2205.137773	100	171	4898.846975
LQPHT	0.2	-2116.765408	144	171	6127.684662
LQPHT	0.1	-2099.208206	151	171	6916.416411

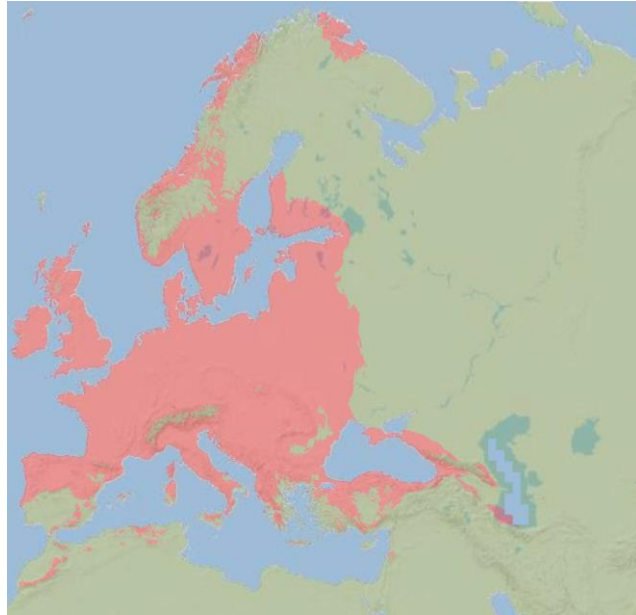
S3. Model outputs of the HOL (BCC-CSM1-1, CCSM4, CNRM-CM5, HadGEM2-ES, HadGEM2-CC, IPSL-CM5A-LR, MPI-ESM-P, MRI-CGCM3, MIROC-ESM) and the LGM (CCSM4, MPI-ESM-P, MIROC-ESM).



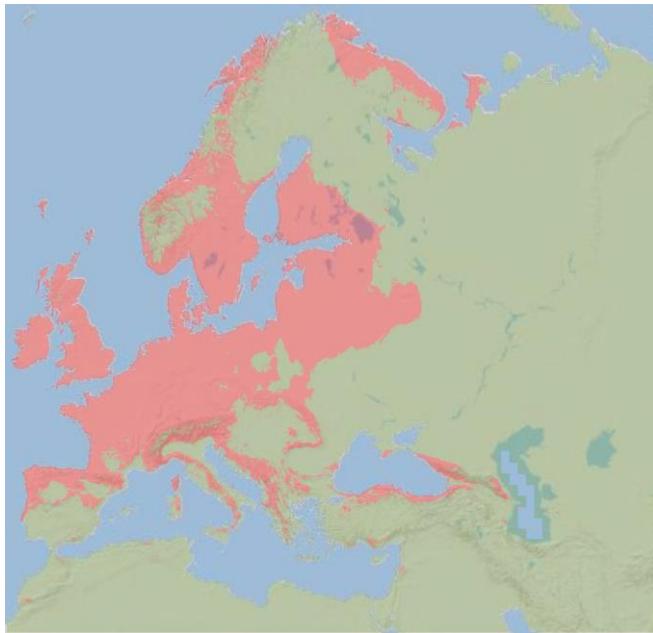
HOL - BCC-CSM1-1



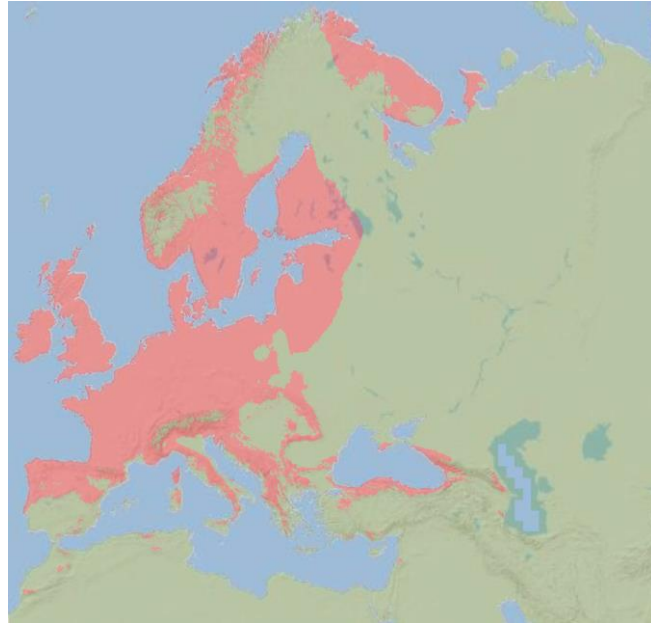
HOL - CCSM4



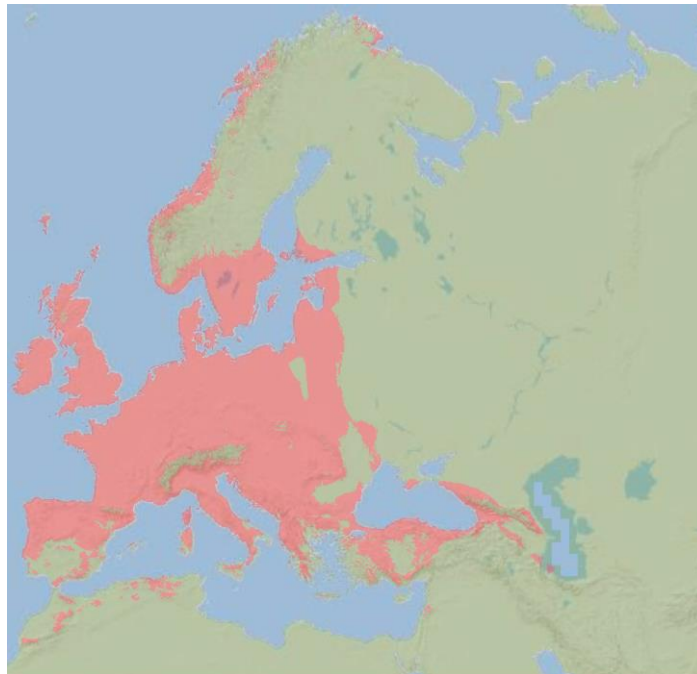
HOL - CNRM-CM5



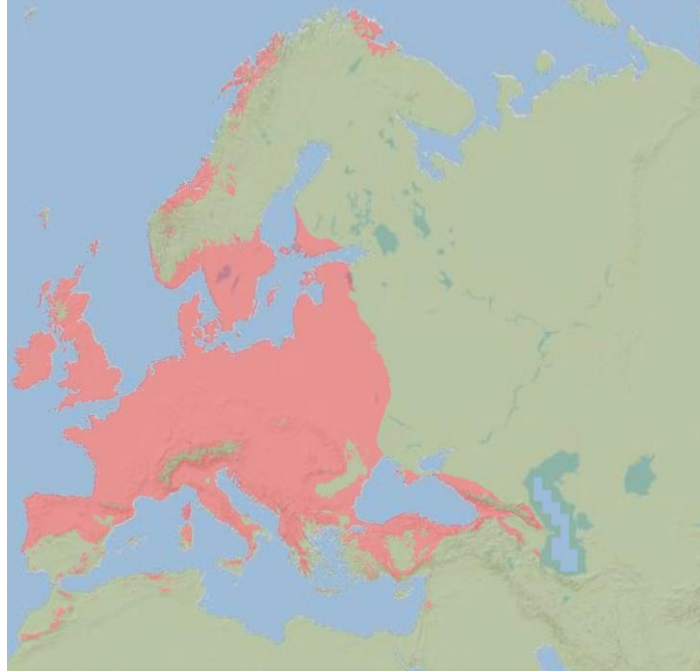
HOL - HadGEM2-ES



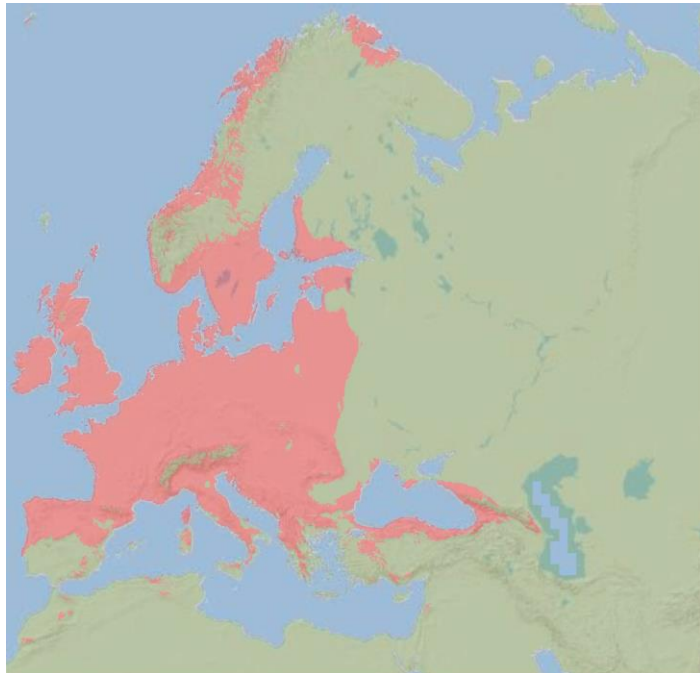
HOL - HadGEM2-CC



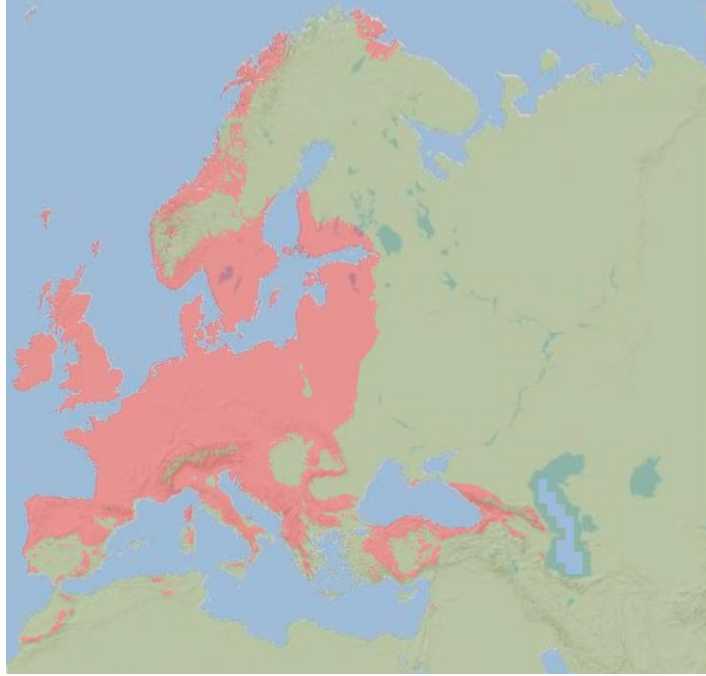
HOL - IPSL-CM5A-LR



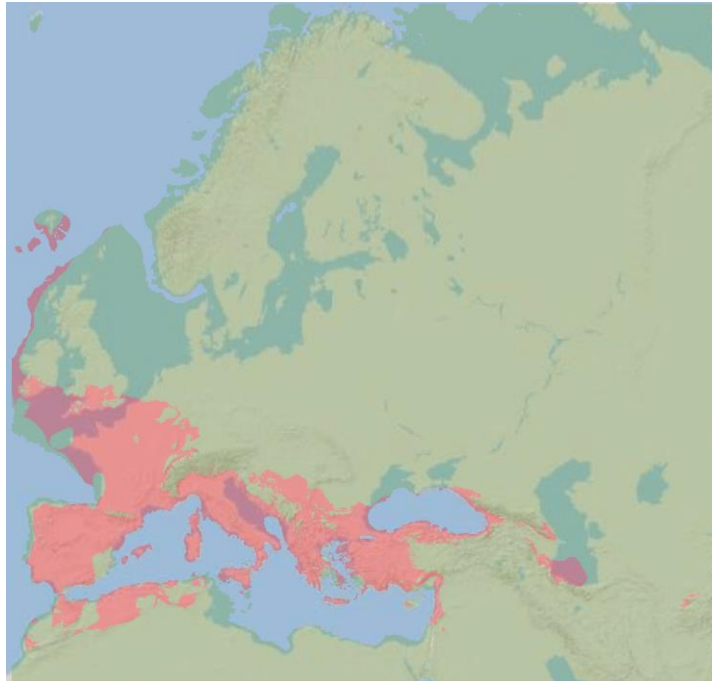
HOL - MPI-ESM-P



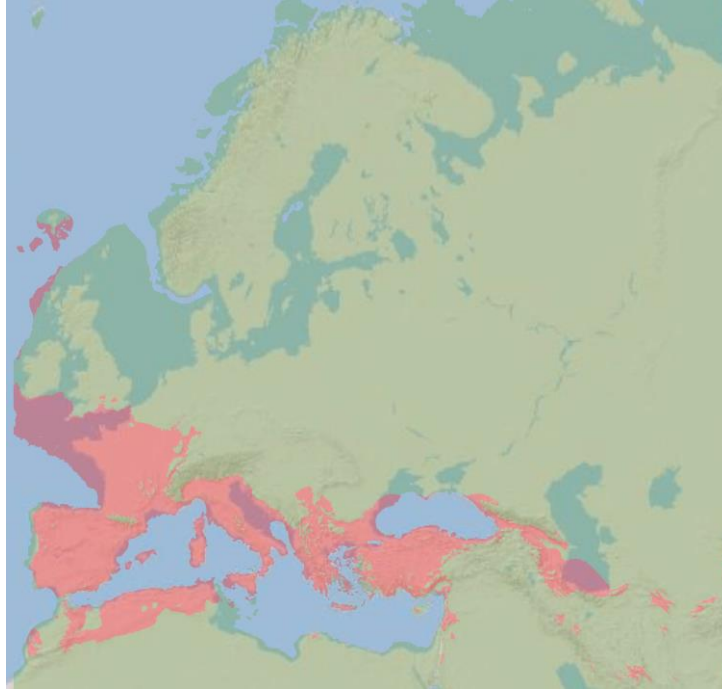
HOL - MRI-CGCM3



HOL - MIROC-ESM



LGM - CCSM4



LGM - MPI-ESM-P



LGM - MIROC-ESM