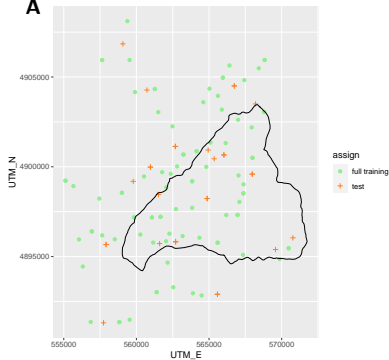


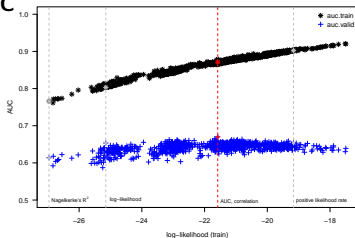
A

B₂

Regularization			DNN-specific		
Environmental α_e, λ_e	Spatial α_s, λ_s	Biotic covariance α_b, λ_b^*	Hidden layers	Dropout rate	Learning rate
0 to 1, step 0.2	0 to 1, step 0.25	0 to 1, step 0.1	50, 50, 10 25, 25, 10	0.1, 0.2	0.001, 0.002

* α_b, λ_b were set randomly for each run

C



Data split	Full Training (75%)				Test (25%)
	B ₁	training		validation	
Tuning		training		validation	
		training		validation	training
		training	validation		training
		training	validation		training
Final fit		validation		training	
		validation		training	
full training					test