① Continuous approach
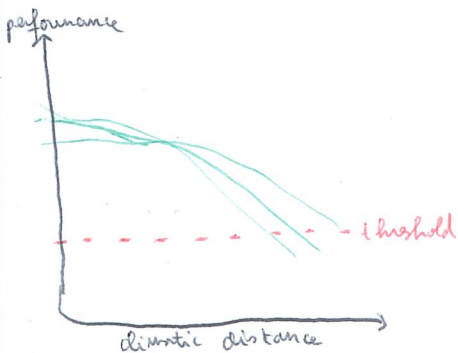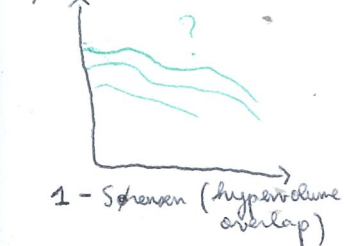

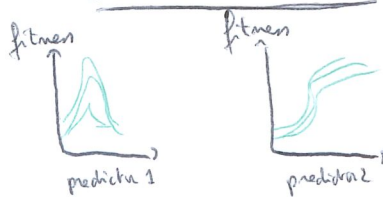performance — climatic distance (with threshold line)

→ Link with approach ③ ?

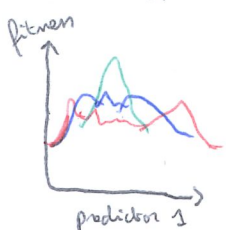How model performance evolves according to the similarity between paleoclimate and calibration climate ?
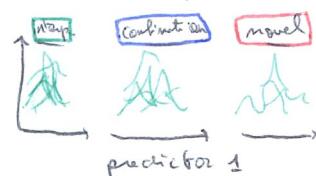
Sørensen (model performance)

1 - Sørensen (hypervolume overlap)

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② "Observed" response curves across millenia

fitness — predictor 1 / fitness — predictor 2

→ Link with approach ③ ?

fitness — predictor 1

↳ more likely:

today / combination / novel — predictor 1

Do we observe different patterns across models ?

↳ Overlapping between modeled "niches" ?

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③ Categorical approach

pred 1 (max, min) — pred 2 (min, max)

calibration range — ("novel-combination" sensu Qiao et al.)

calibration domain (hypervolume) ("interpolation")

full extrapolation ("novel")

performance — calibration domain / calibration range / full extrapolation
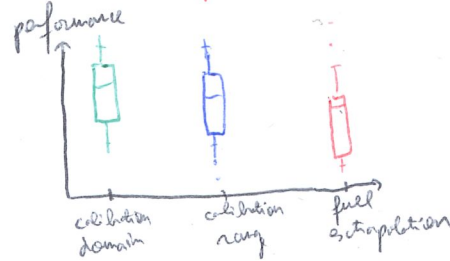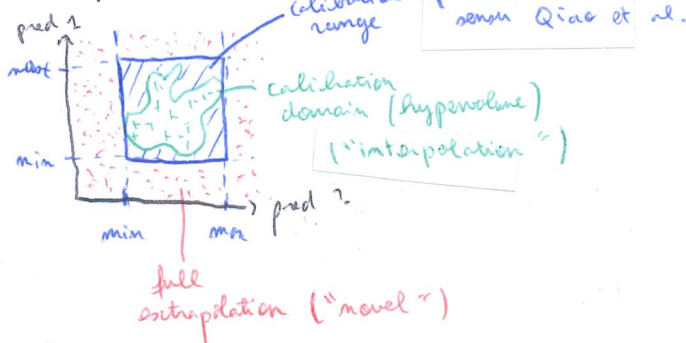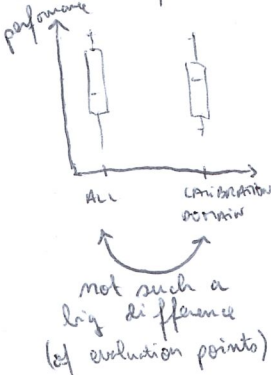
⚠ We may not have enough pollen records in each category to finely assess model performances

→ the vast majority of occurrence pertains to the calibration domain ...

what is feasible:

performance — ALL / CALIBRATION DOMAIN

↳ not such a big difference (of evaluation points)

→ What does this imply ?

Across > 400 presences / (pseudo)-absences, > 95% points belong to the calibration hypervolume. Yet, model performance drops significantly.

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④