



Climate change: Believing and Seeing Implies Adapting

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Two perspectives

**General structural
model predicts:**

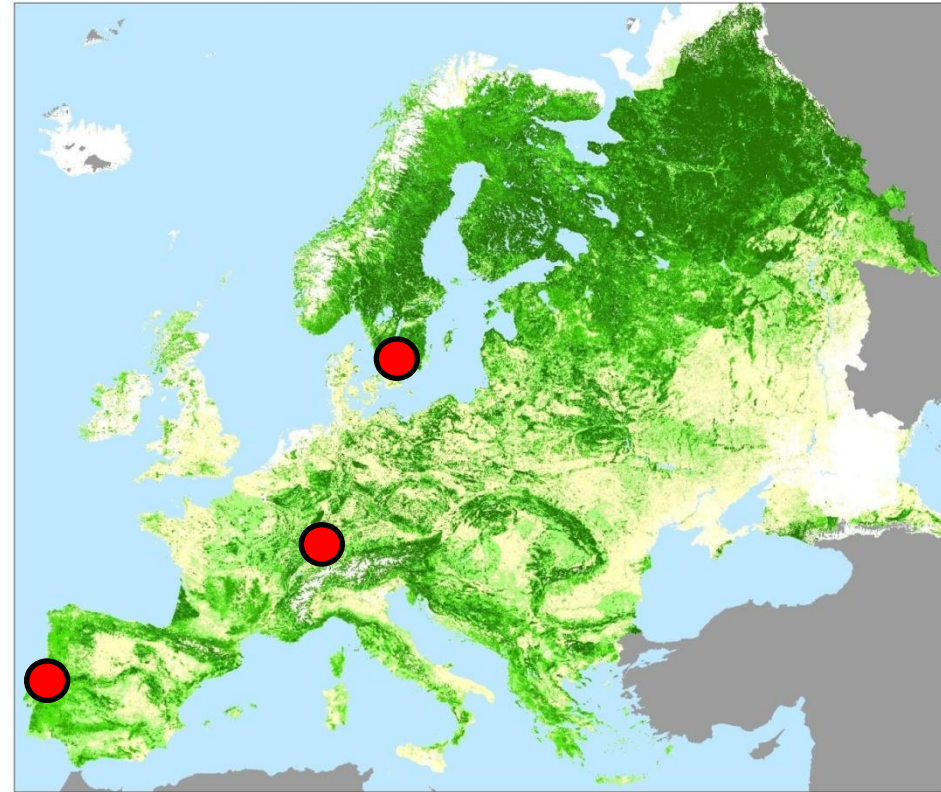
Adaptive capacity larger in
northern Europe than in
southern Europe

Data collection – mail surveys

Testing the
explanatory powers of

Model based on
structural variables

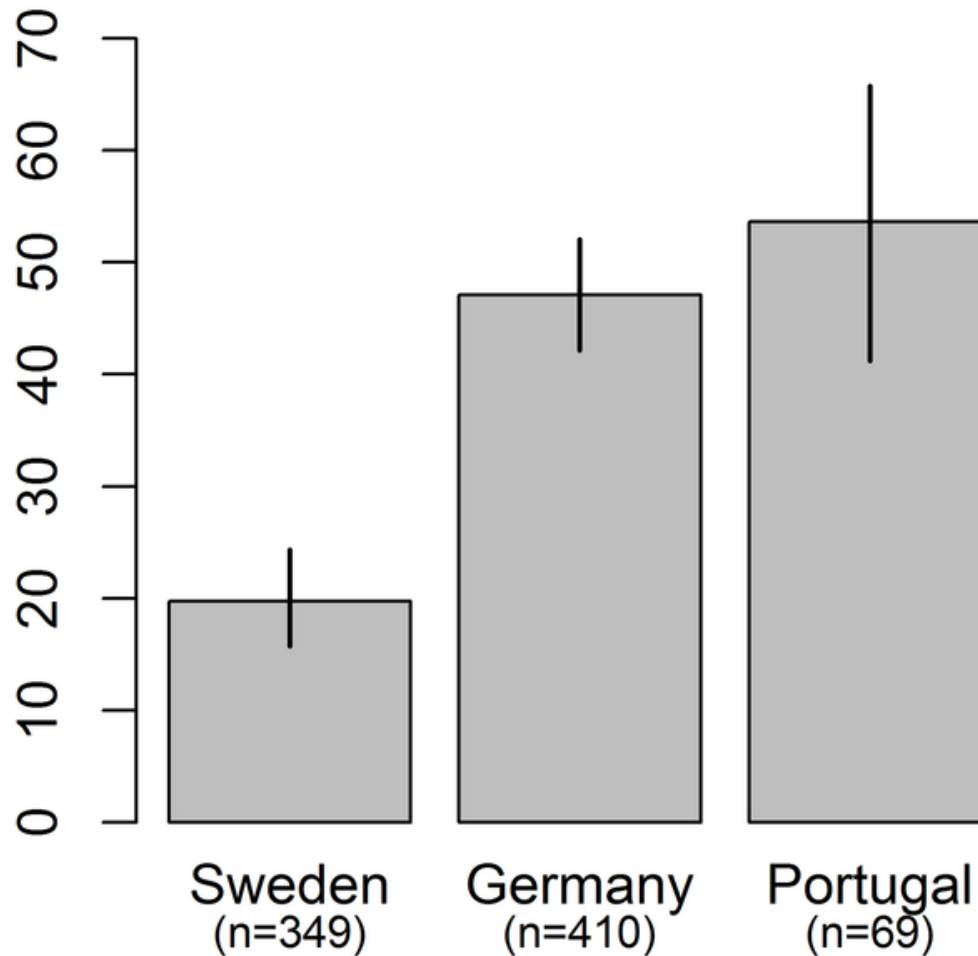
Model based on
cognitive variables



MOTIVE case study areas

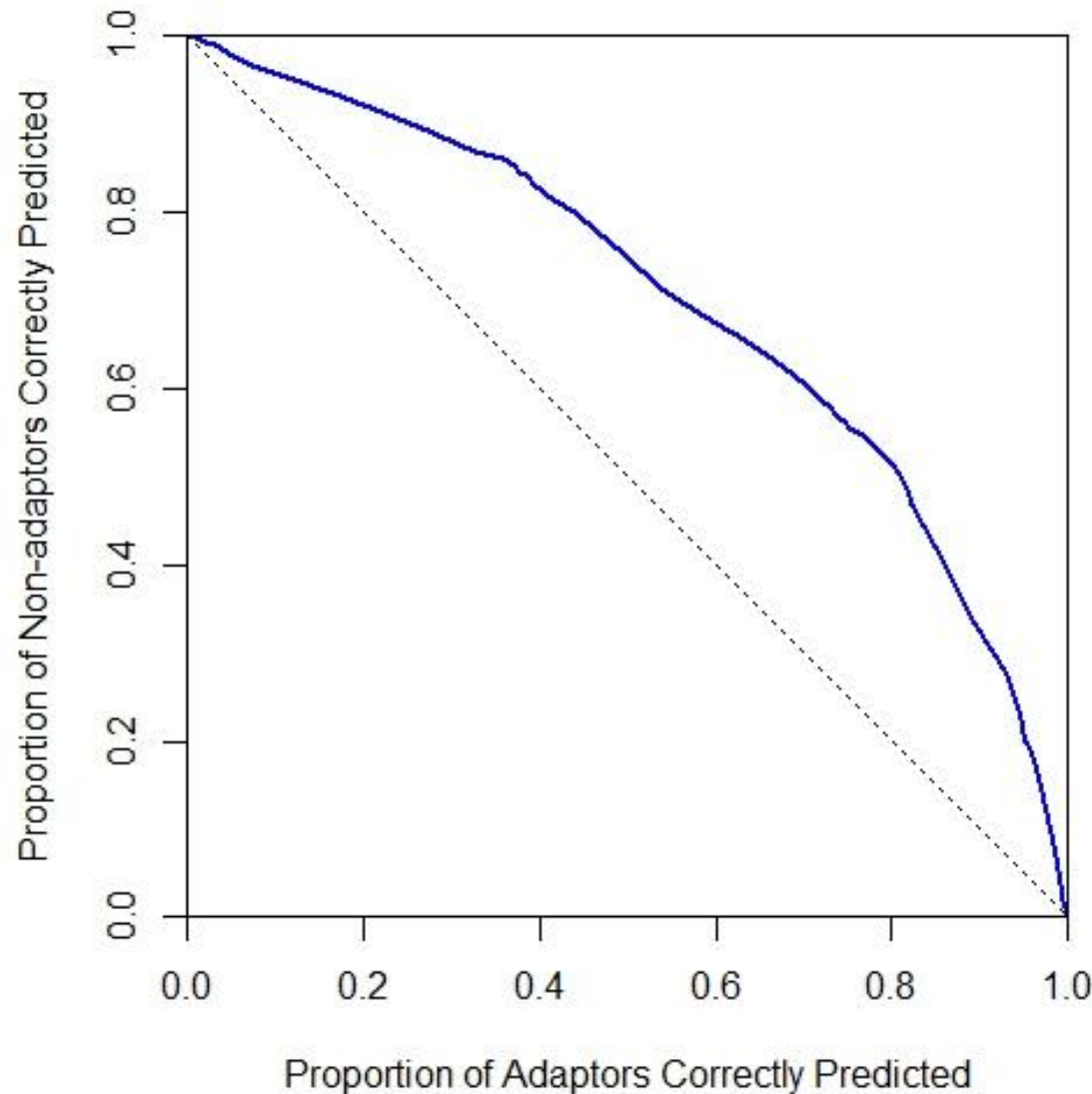
- Sweden, Kronobergs län
- Germany, Schwarzwald
- Portugal, Chamusca

Adaptation of forest management to climate change by country



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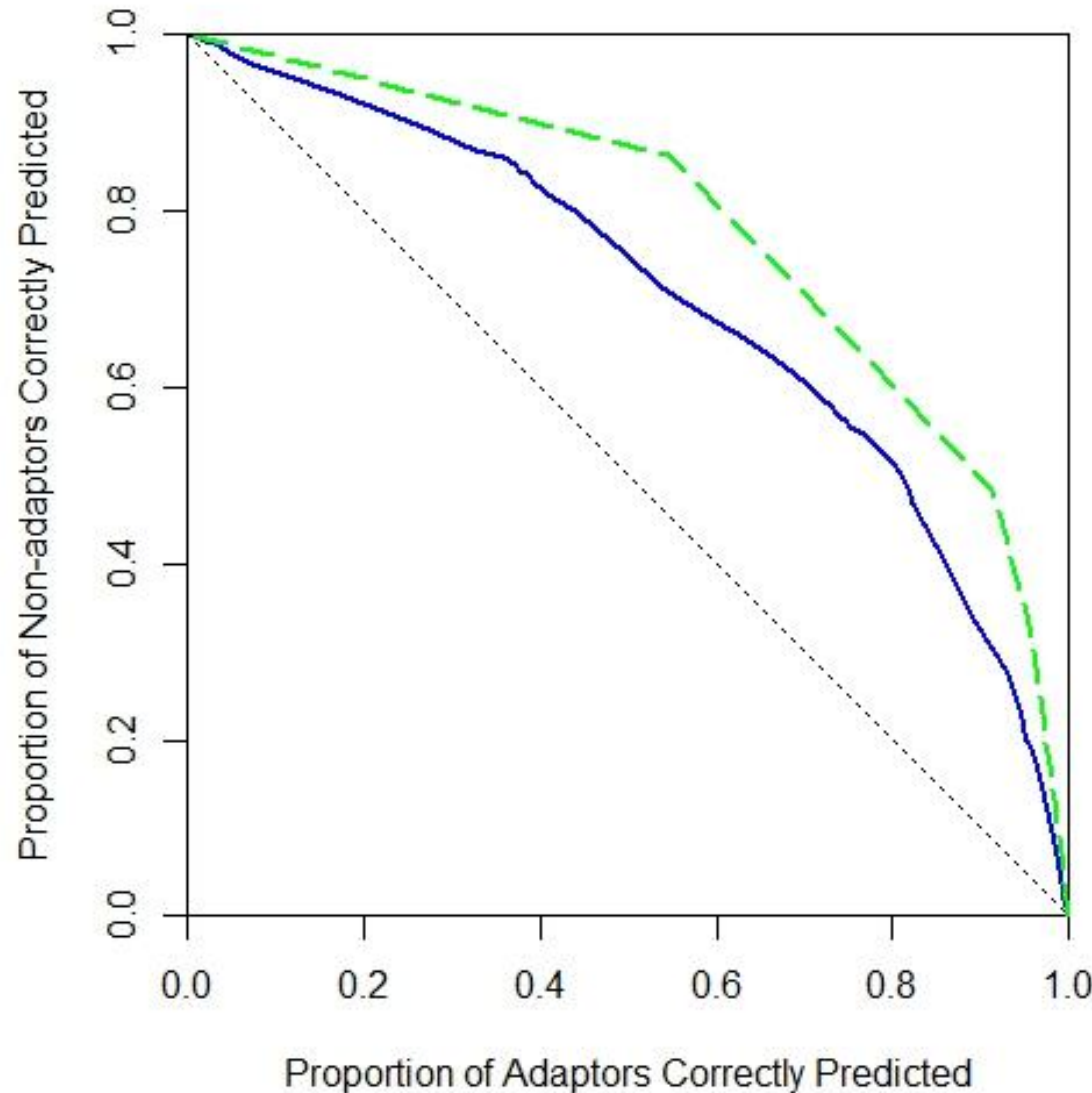
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Structural model based on

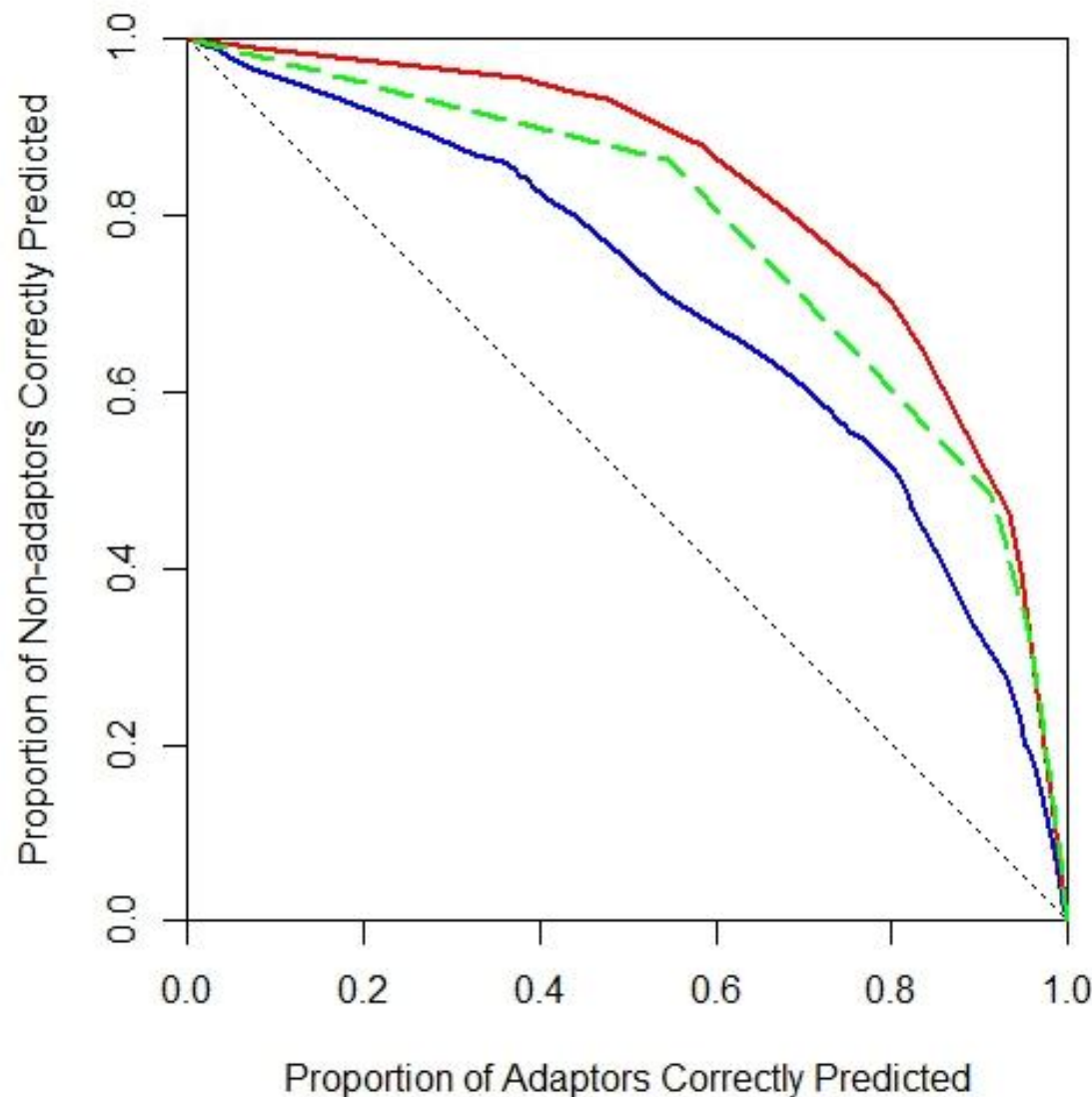
- gender
- year of birth
- level of education ***
- fraction of household income from forestry ***
- size of holding
- case study area ***

Structural model



Do you think that the climate is changing to such an extent that it will substantially affect your forest? ***

Structural model

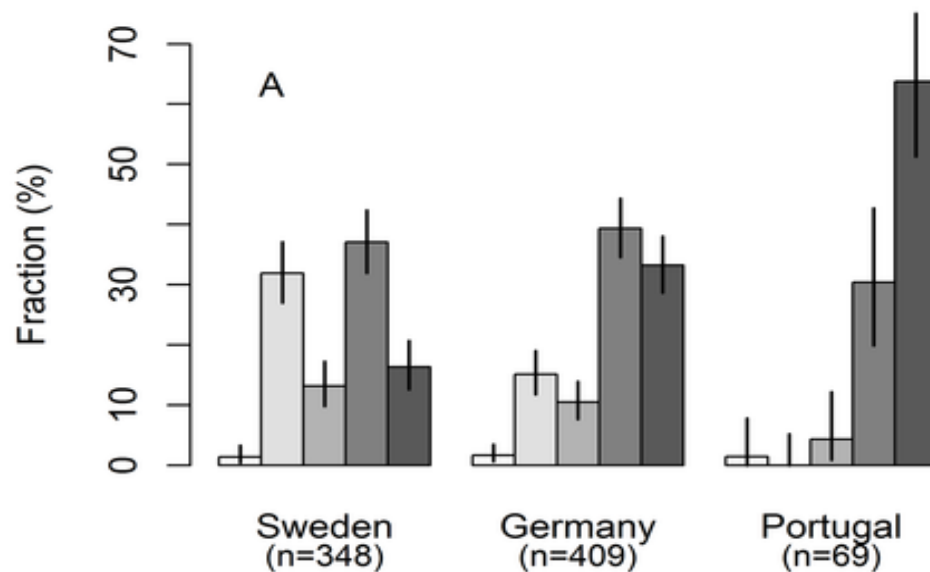


Model based on

- Strength of belief in local effects of climate change***

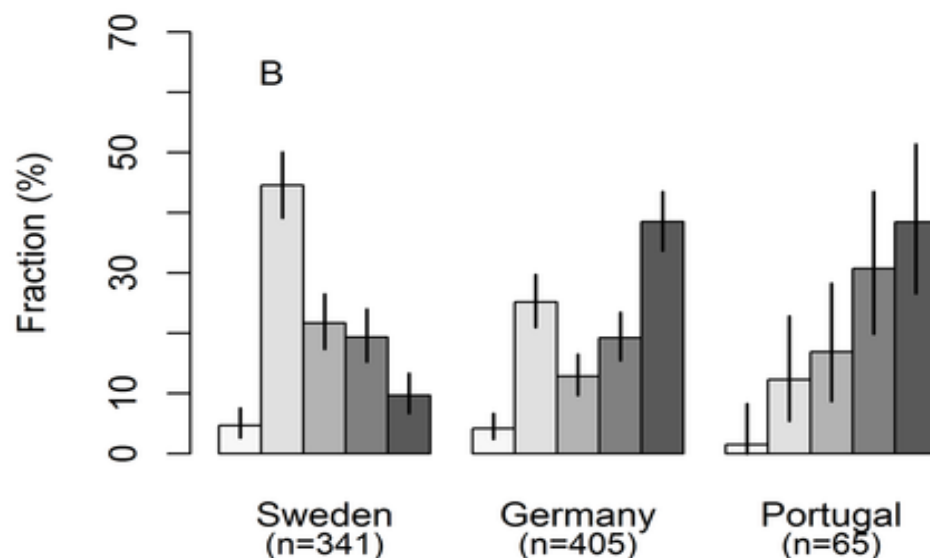
Model based on

- Strength of belief in local effects of climate change***
- Have you experienced any extreme weather conditions that you interpret as caused by long-term, global climate change? ***



Strength of belief in local effects of climate change

- No, definitely not
- Probably not
- Do not know
- Yes, probably
- Yes, definitely



Strength of belief in having experienced effects of climate change***

Structural model

Model based on

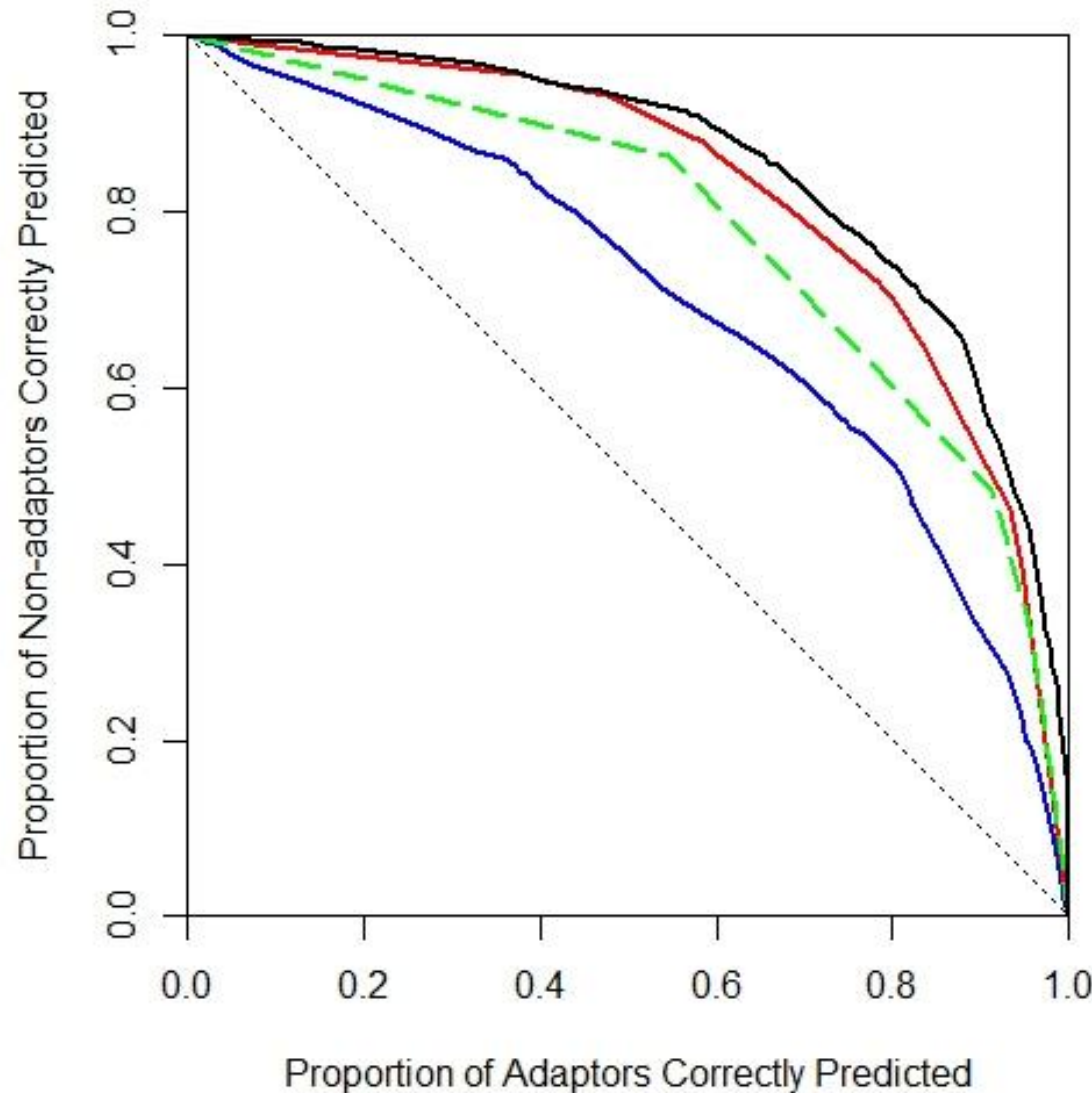
- 1 cognitive variable

Model based on

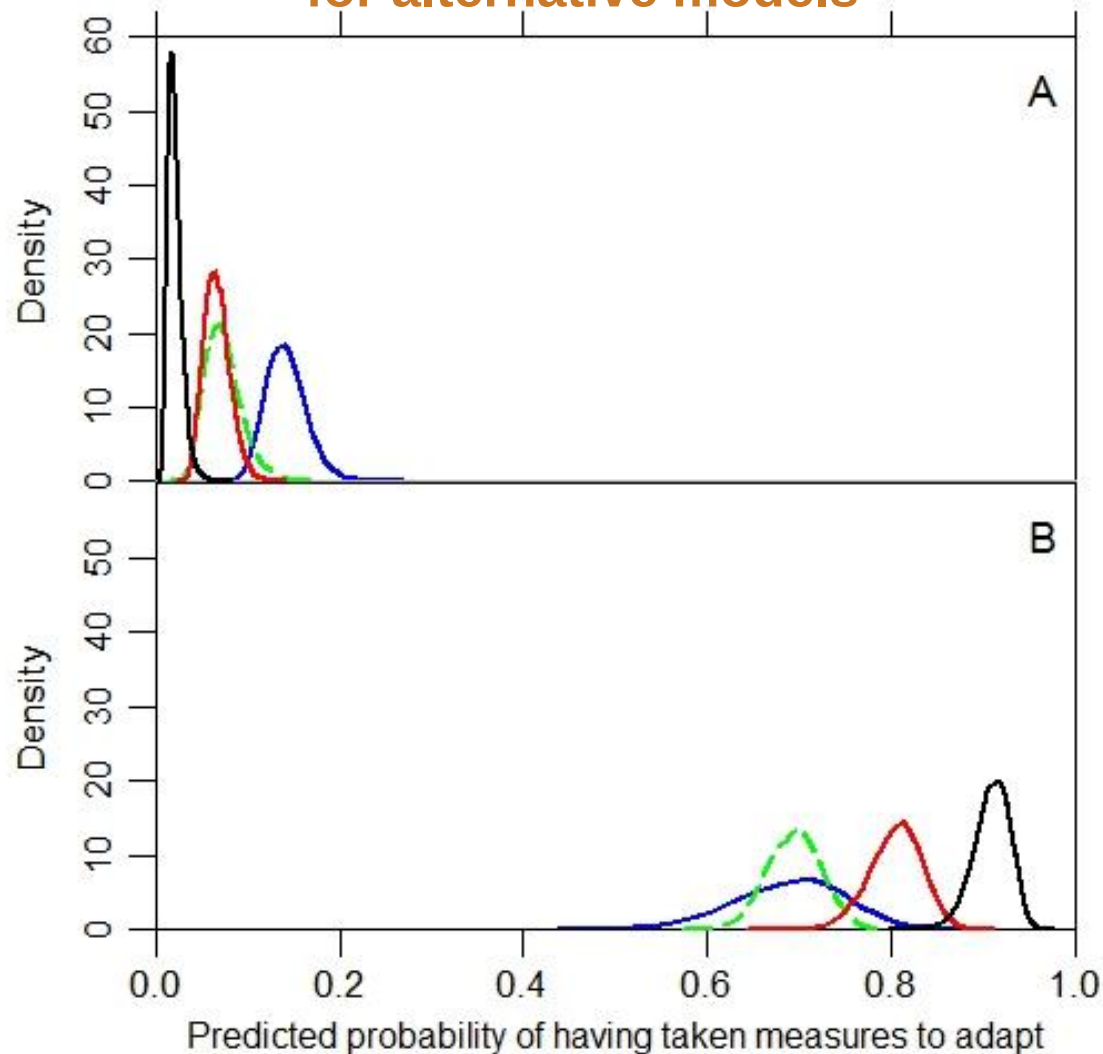
- 2 cognitive variables

Combination model

- 2 cognitive variables
- level of education
- % household income from forestry



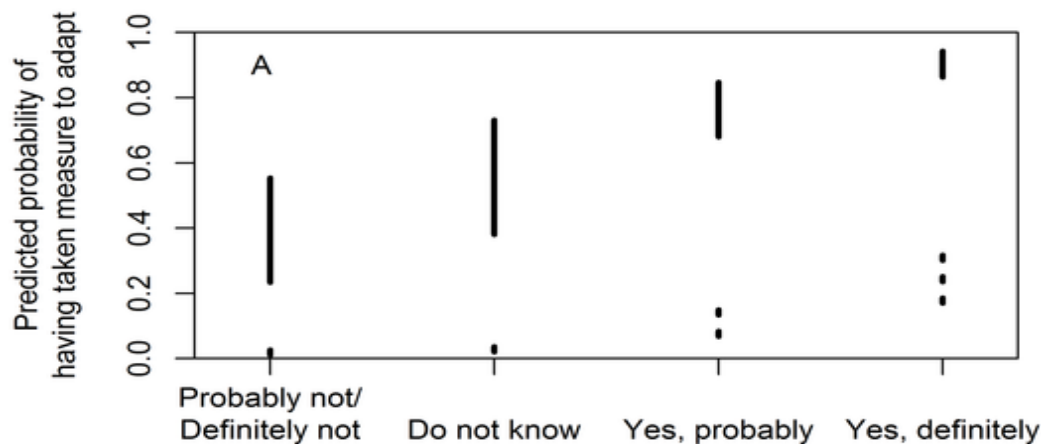
Simulated predicted probabilities of having taken measures to adapt for alternative models



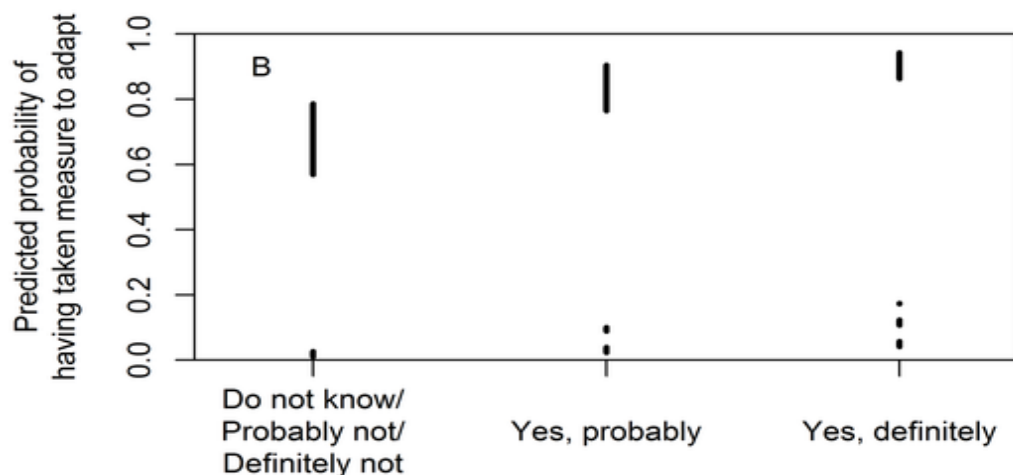
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Sensitivity of the predicted probability of having taken measures to adapt to personal belief variables



Do you think that the climate is changing to such an extent that it will substantially affect your forest?



Have you experienced any extreme weather conditions that you interpret as caused by long-term, global climate change?



To explain and predict adaptation to climate change, the combination of personal experience and belief must be considered



Why understand human beliefs and perceptions of climate change?

- 50% of the forest area in Europe privately owned¹
- support effective communication
- support decision- making and policy-making