

Electronic Supplementary Material S1

Occurrence probability maps

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RCP 8.5 predictions

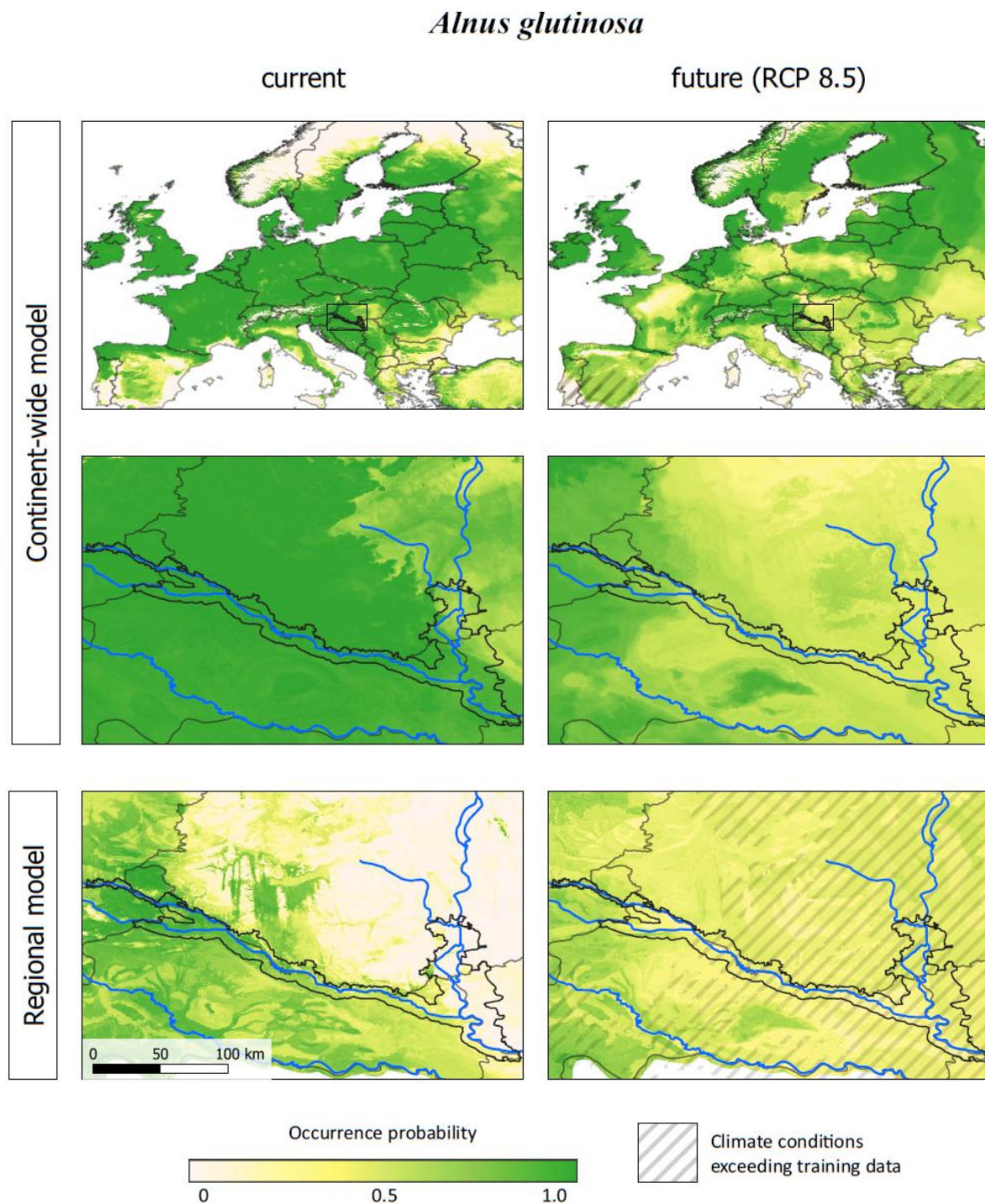


Figure 1

Current and future (RCP 8.5, 2081-2100) prediction maps for *Alnus glutinosa* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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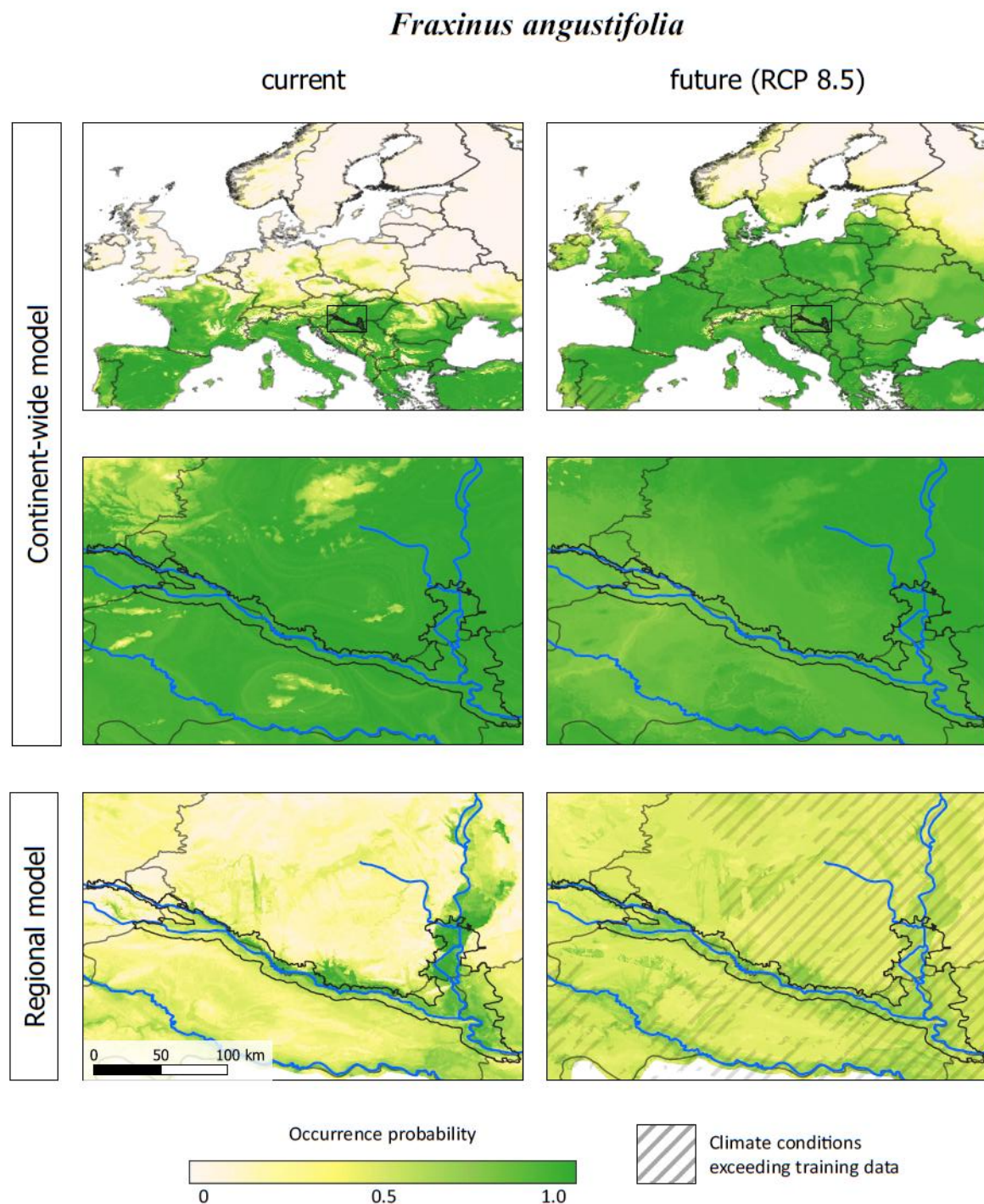


Figure 2

Current and future (RCP 8.5, 2081-2100) prediction maps for *Fraxinus angustifolia* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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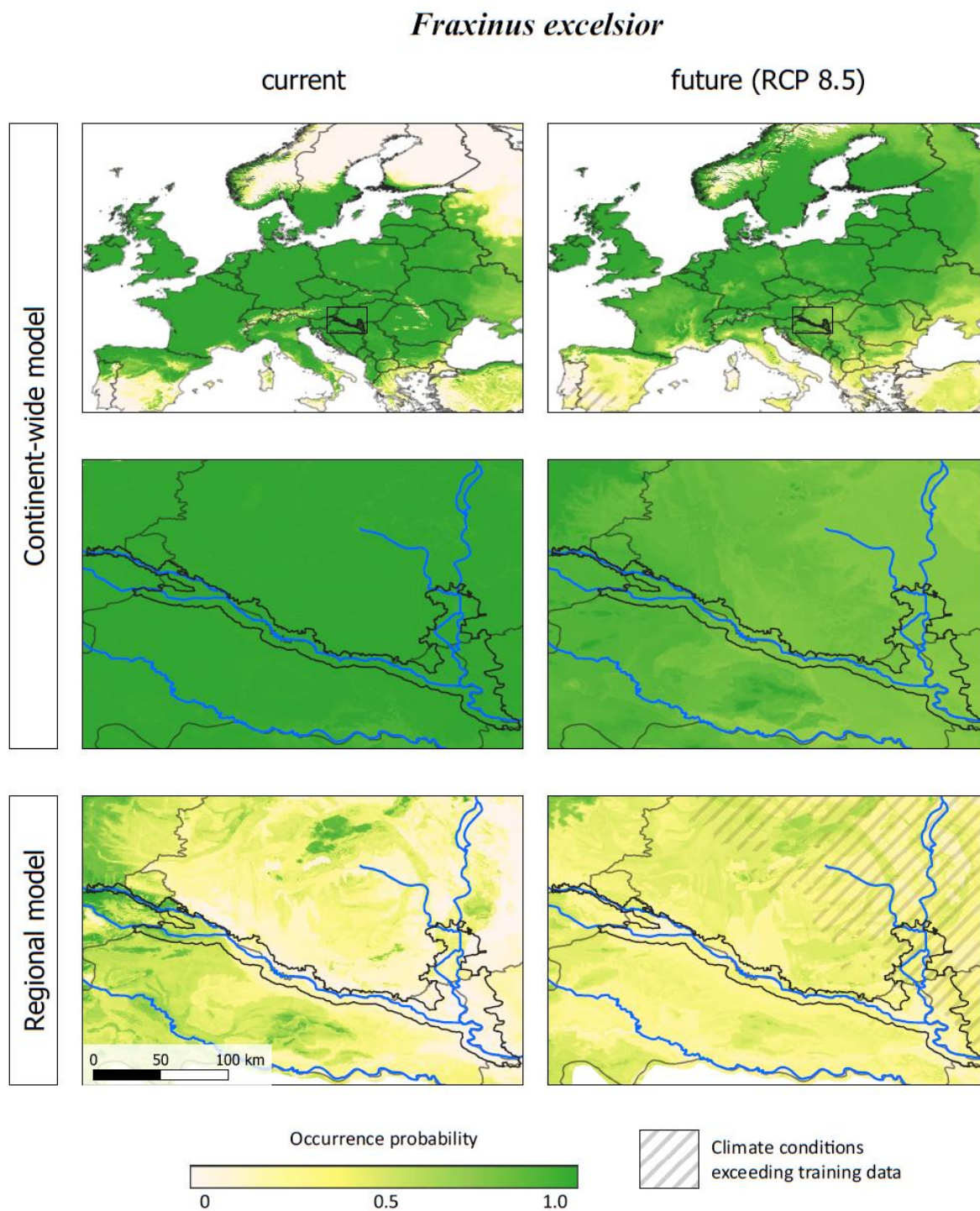


Figure 3

Current and future (RCP 8.5, 2081-2100) prediction maps for *Fraxinus excelsior* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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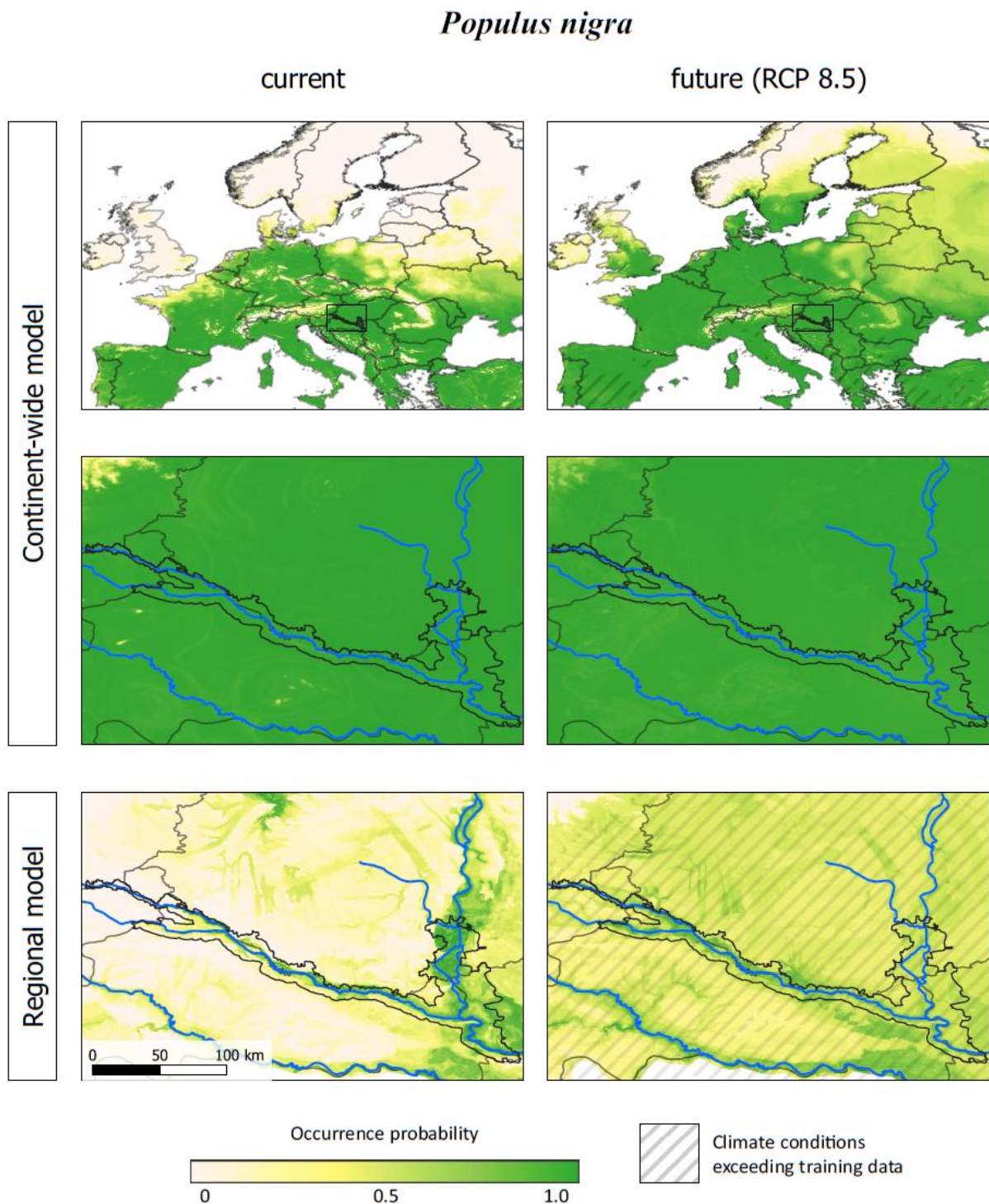


Figure 4

Current and future (RCP 8.5, 2081-2100) prediction maps for *Populus nigra* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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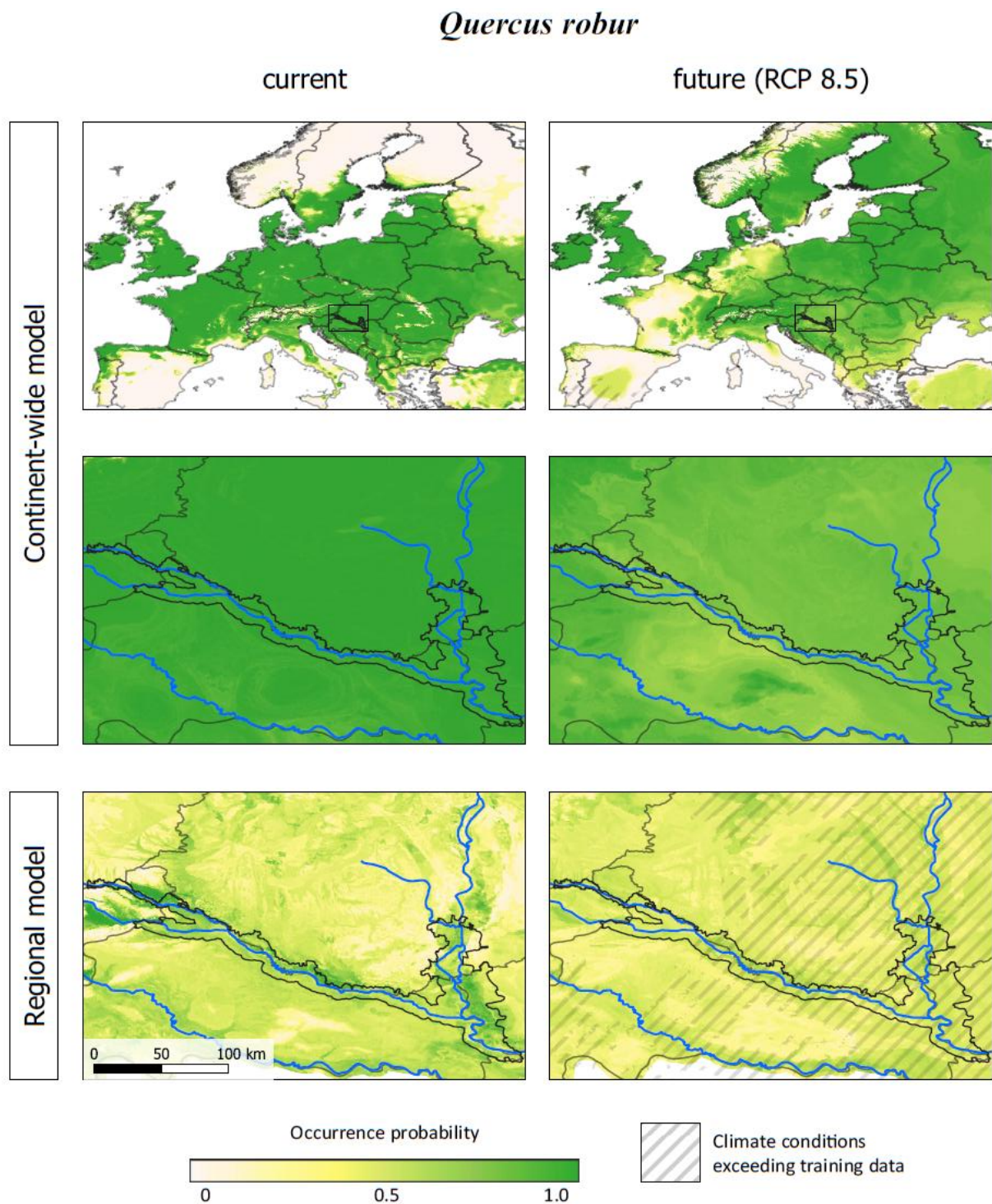


Figure 5

Current and future (RCP 8.5, 2081-2100) prediction maps for *Quercus robur* of the continent-wide model (top and middle) and the regional models (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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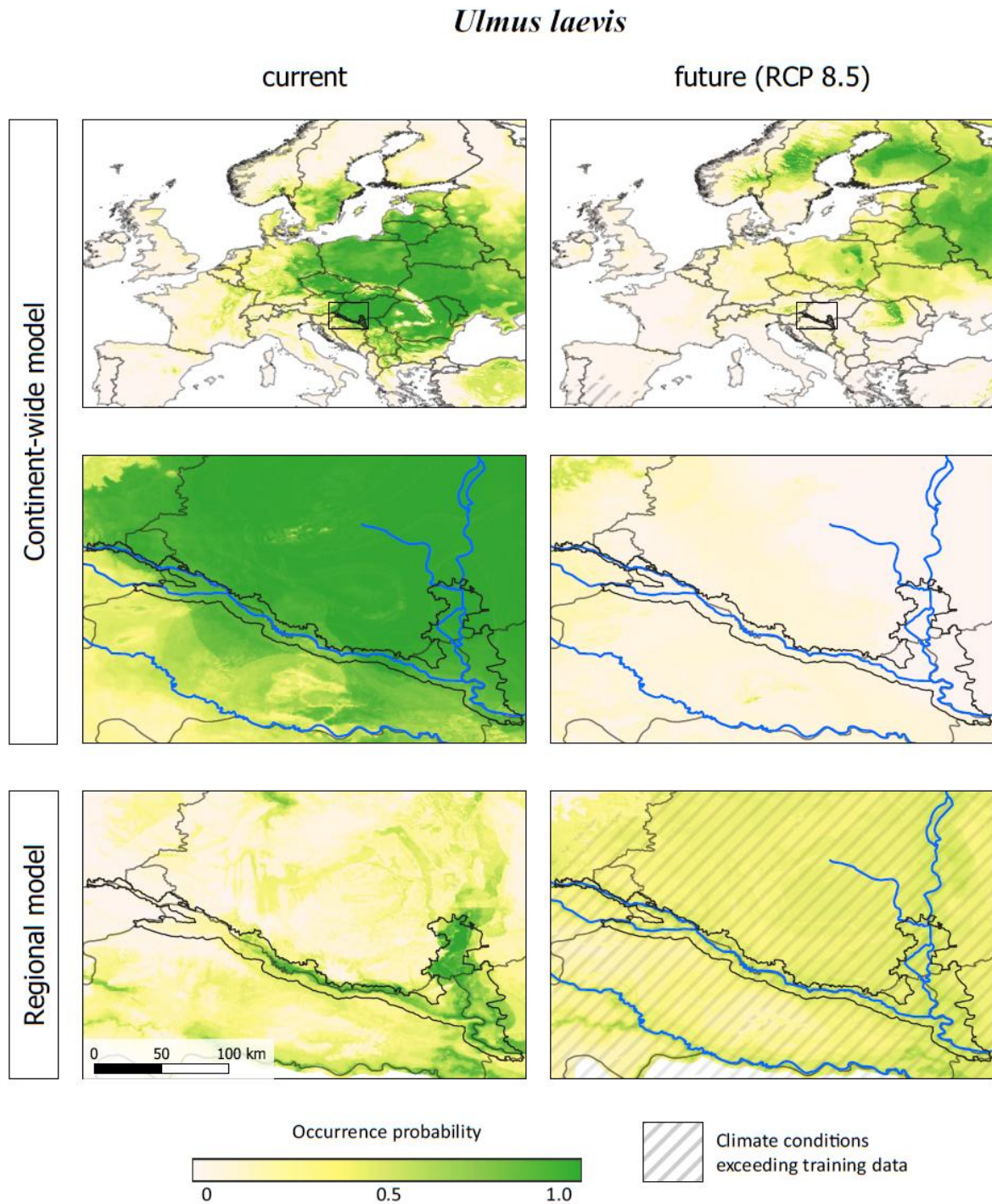


Figure 6

Current and future (RCP 8.5, 2081-2100) prediction maps for *Ulmus laevis* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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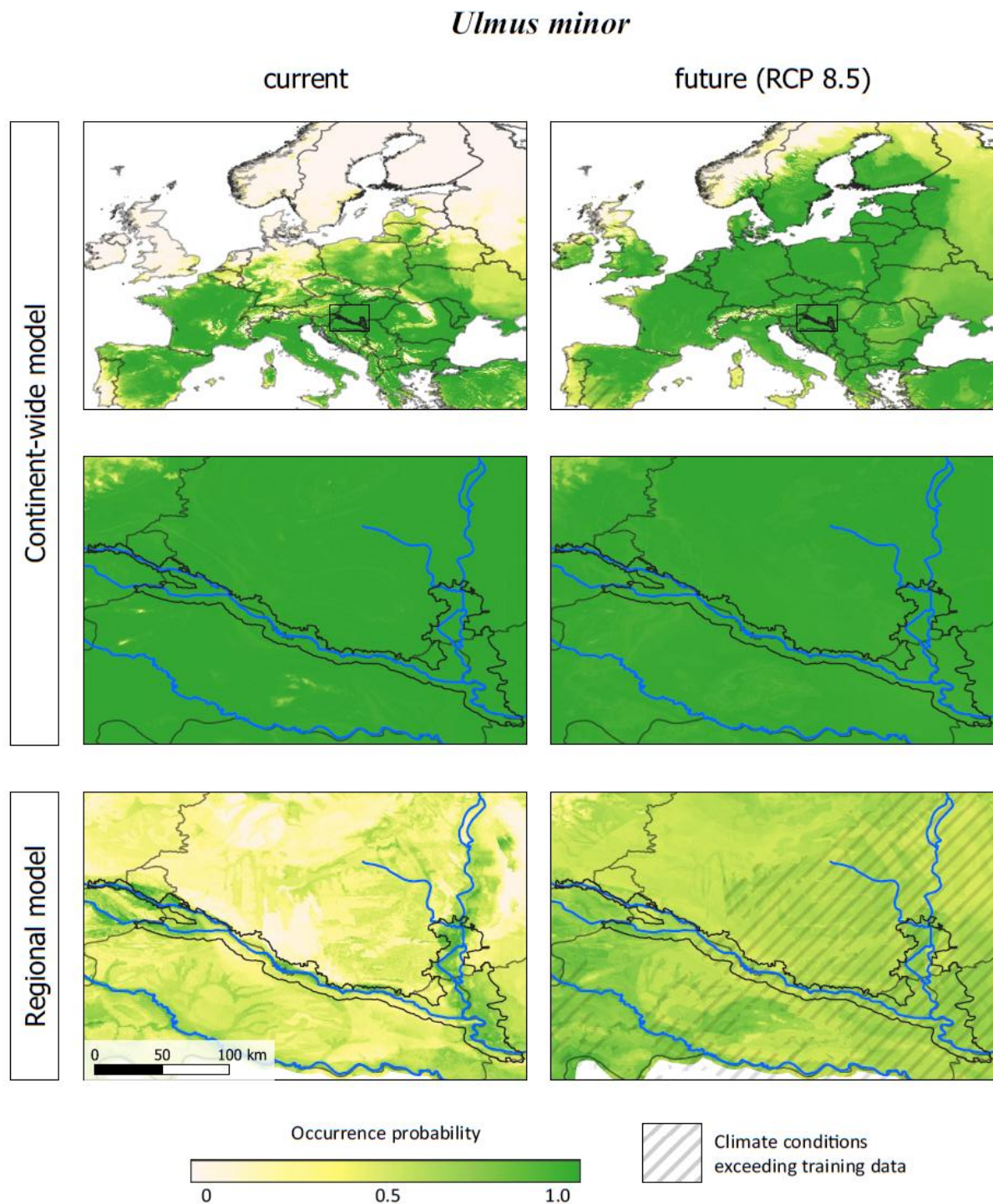


Figure 7

Current and future (RCP 8.5, 2081-2100) prediction maps for *Ulmus minor* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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RCP 4.5 predictions

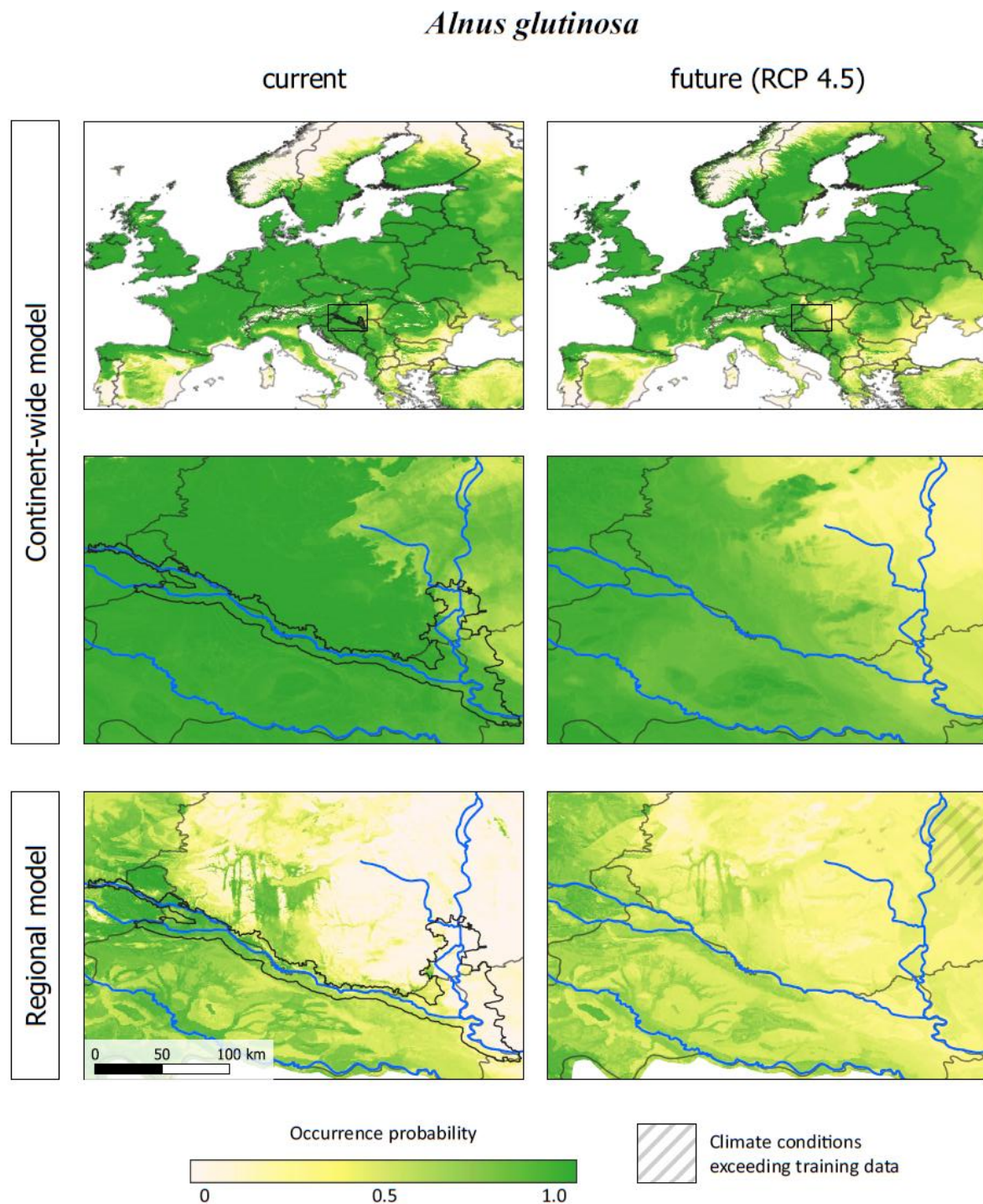


Figure 8

Current and future (RCP 4.5, 2081-2100) prediction maps for *Alnus glutinosa* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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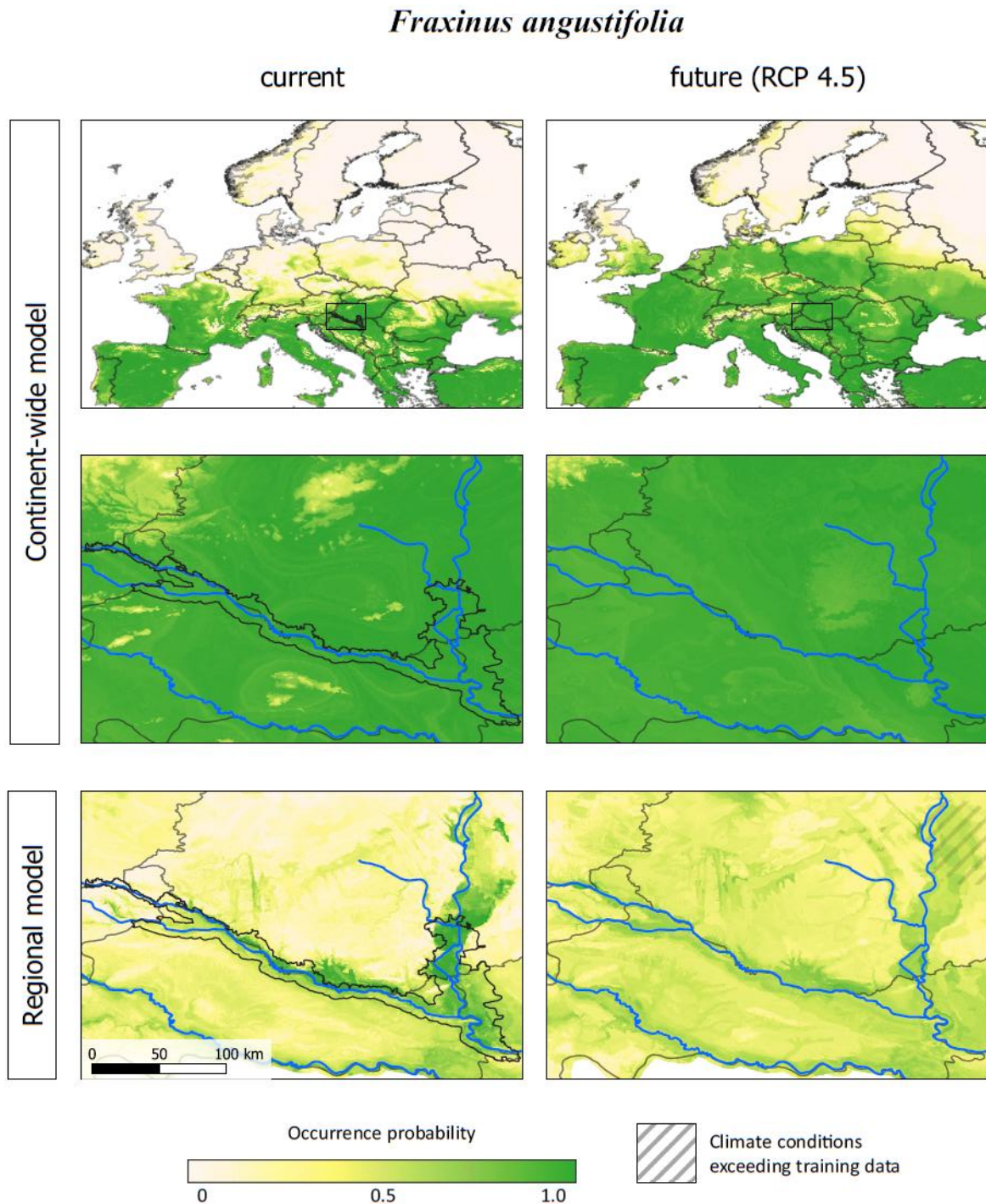


Figure 9

Current and future (RCP 4.5, 2081-2100) prediction maps for *Fraxinus angustifolia* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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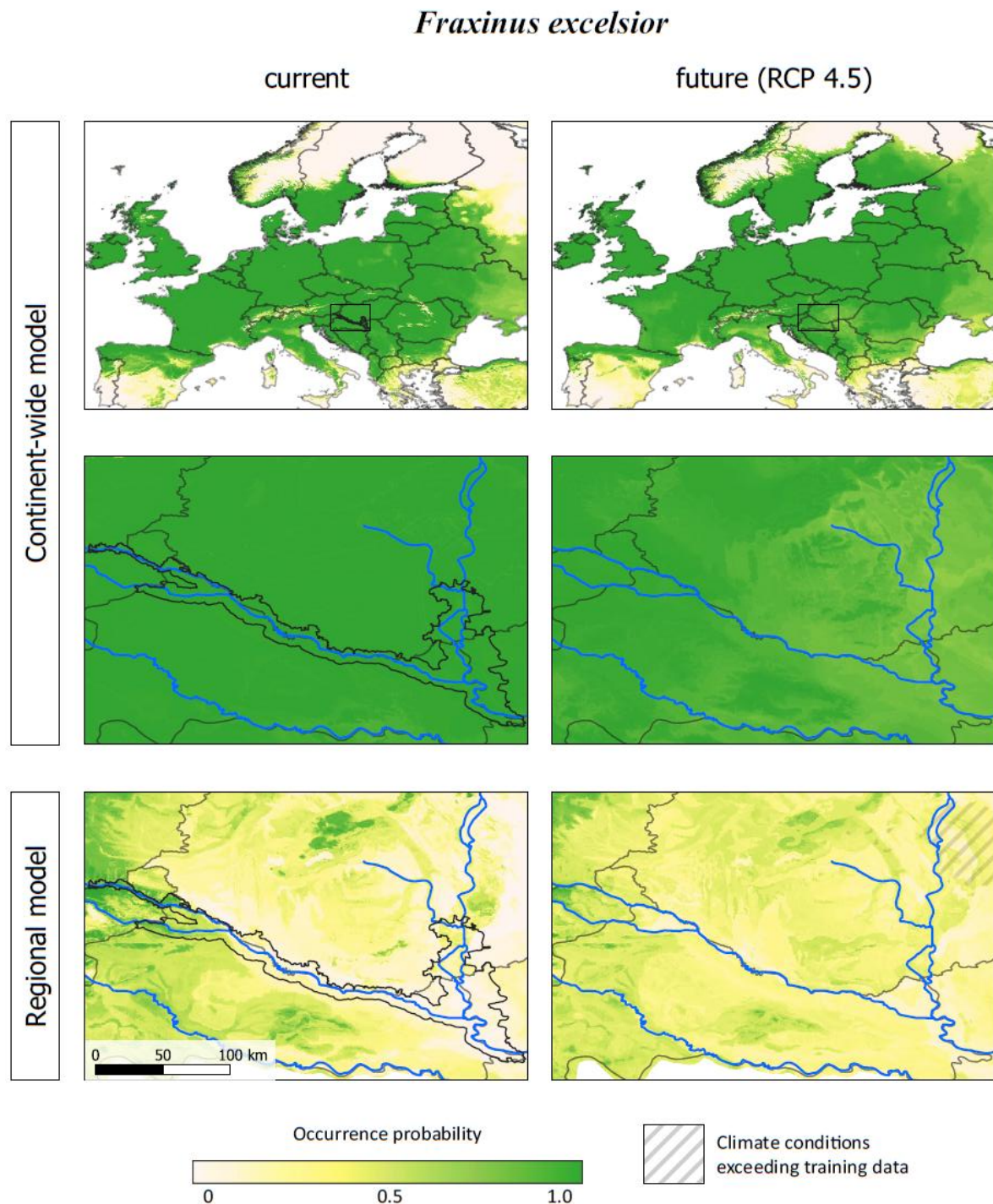


Figure 10

Current and future (RCP 4.5, 2081-2100) prediction maps for *Fraxinus excelsior* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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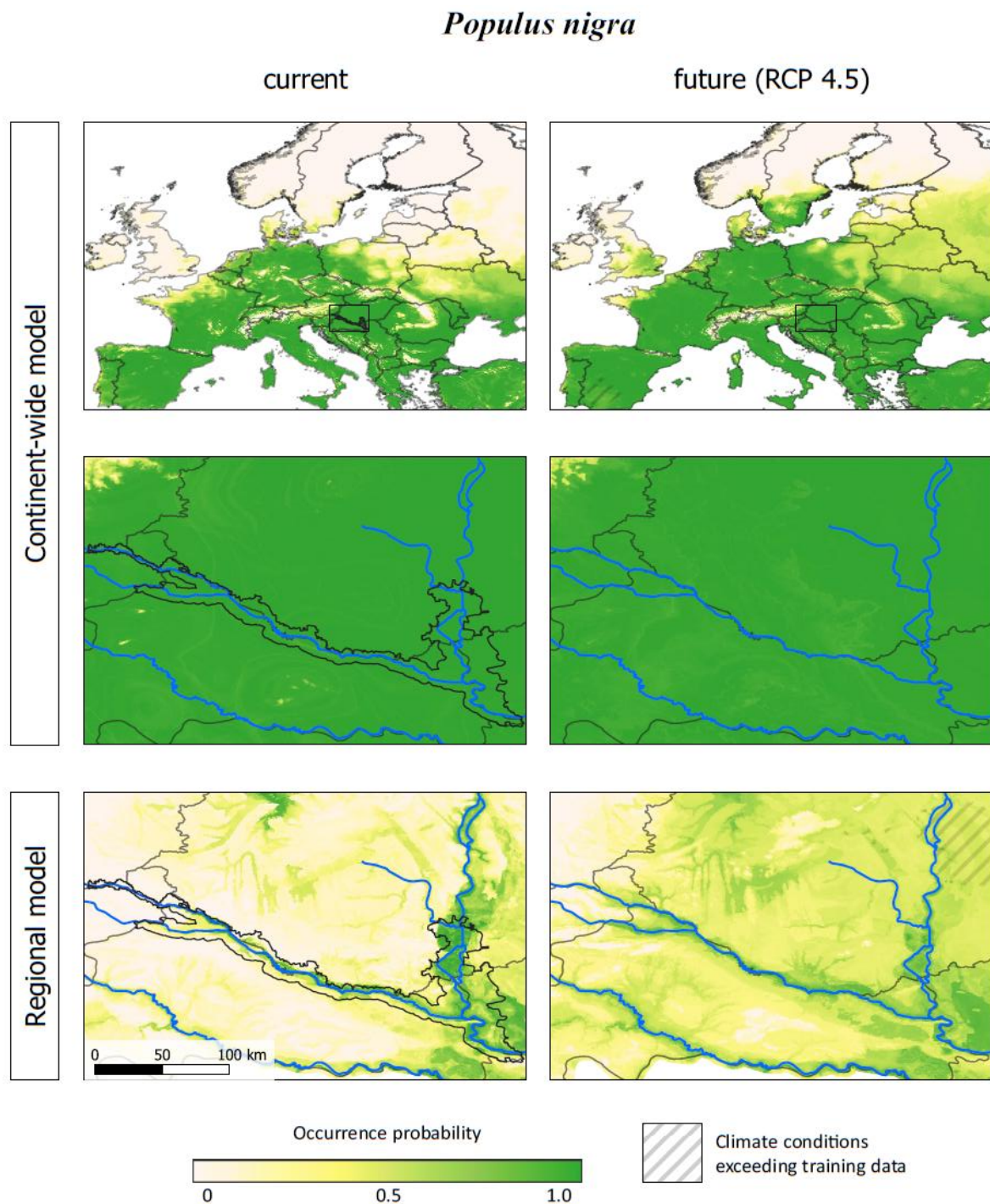


Figure 11

Current and future (RCP 4.5, 2081-2100) prediction maps for *Populus nigra* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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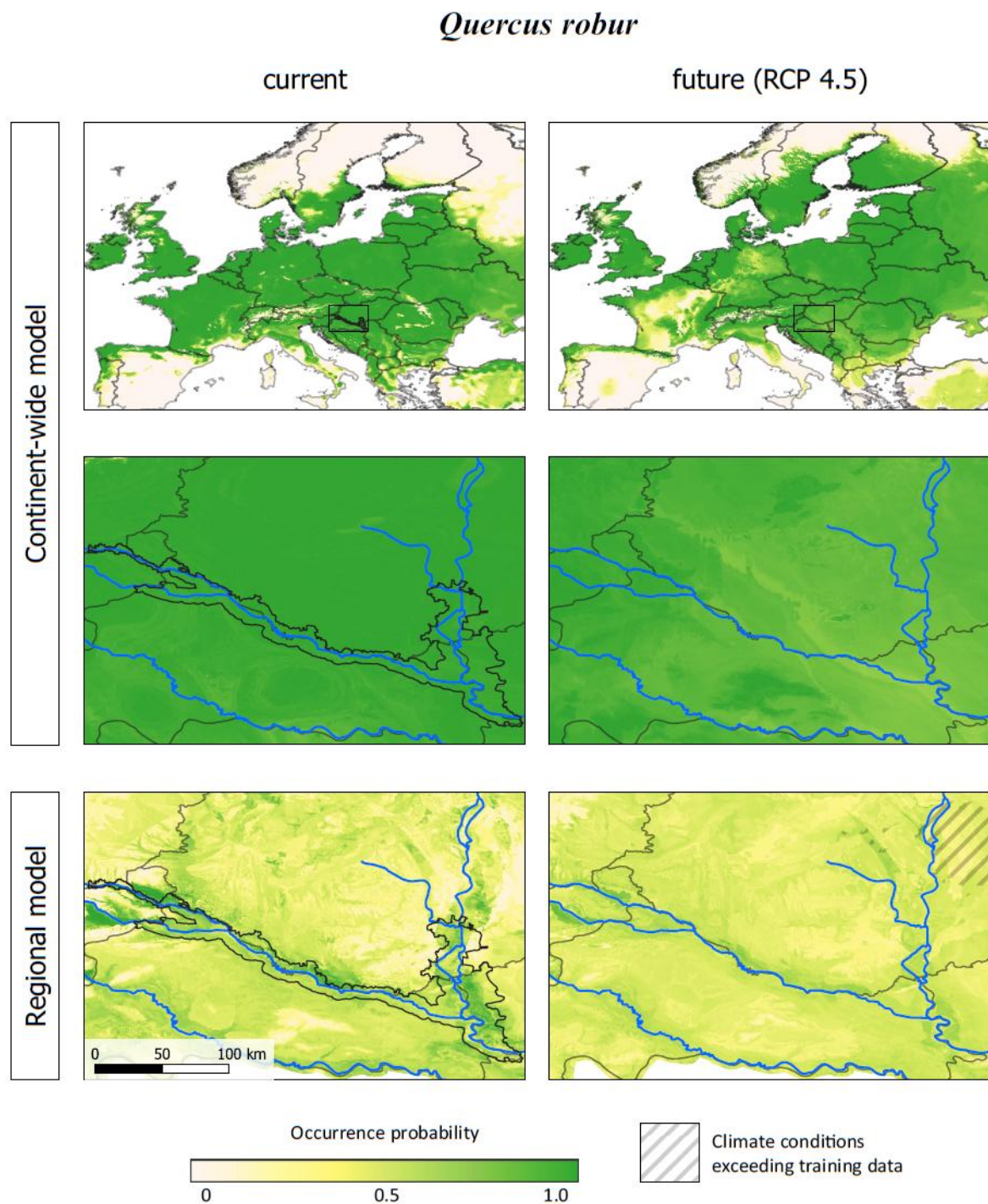


Figure 12

Current and future (RCP 4.5, 2081-2100) prediction maps for *Quercus robur* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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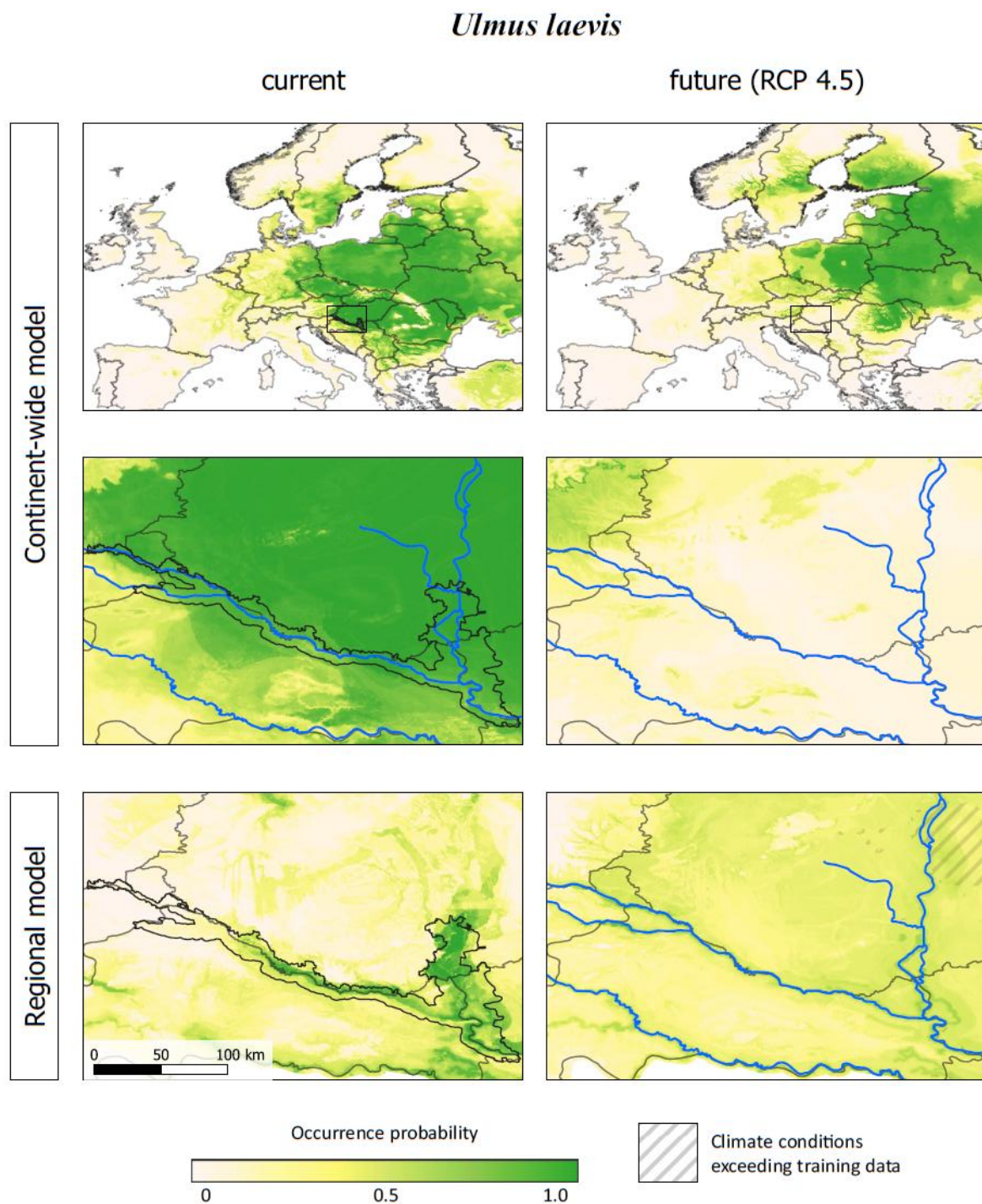


Figure 13

Current and future (RCP 4.5, 2081-2100) prediction maps for *Ulmus laevis* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.

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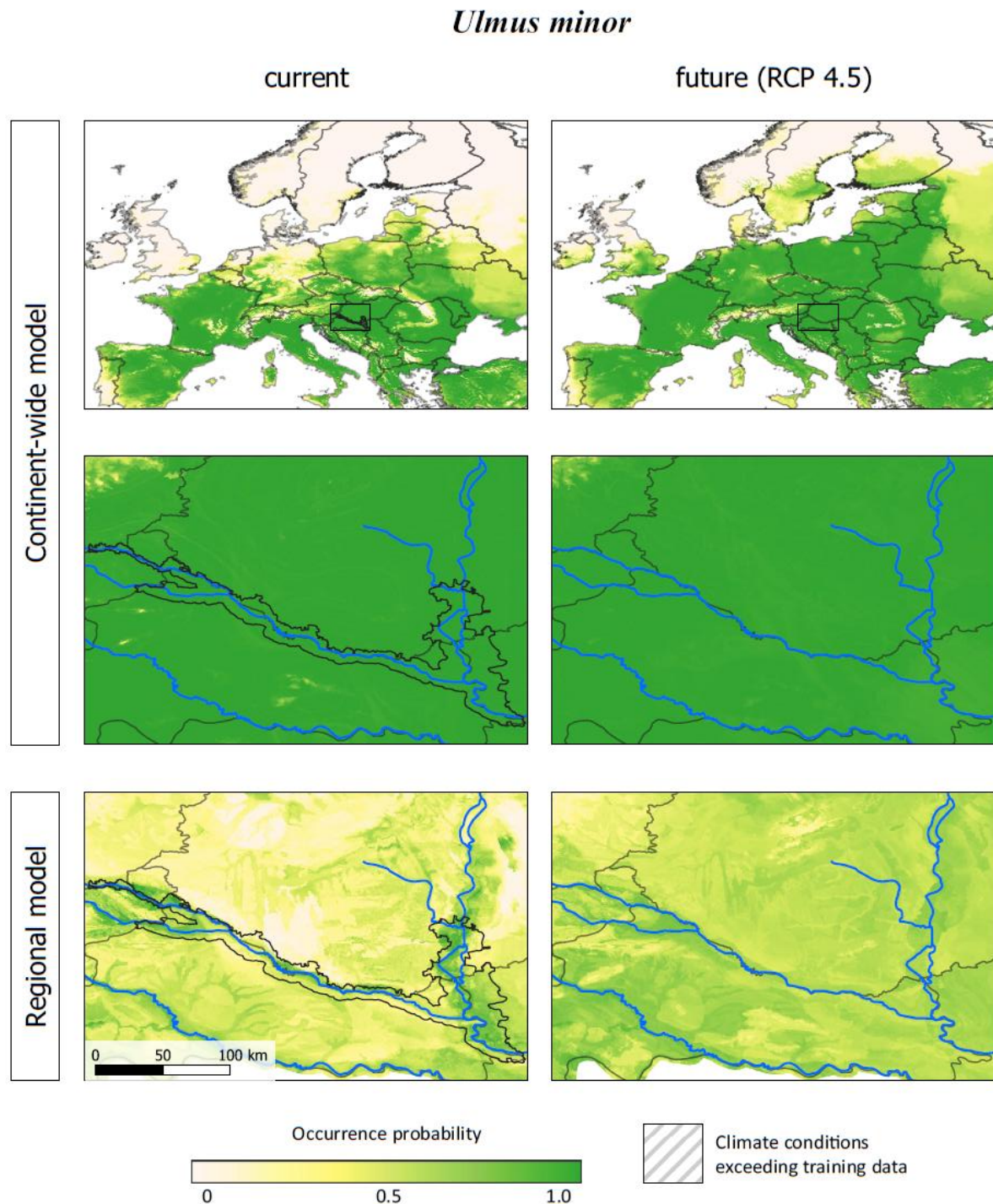


Figure 14

Current and future (RCP 4.5, 2081-2100) prediction maps for *Ulmus minor* of the continent-wide model (top and middle) and the regional model (down). The continent-wide models were trained with generalized occurrence and climate data only, while the regional models are based on precise occurrences and a larger environmental dataset comprising climate, river and soil variables. Bold black lines represent the delineation of the transboundary Biosphere Reserve Mura-Drava-Danube, blue lines major river systems, and thin grey lines country borders. Grey diagonal texture highlights areas with the future climate range exceeding the models' training data, indicating that further extrapolation of observed trends in occurrence amplitude could result in even stronger changes than displayed for these areas.