Supplement of

How can effect the synergy of climate change, soil units and vegetation groups the potential global distribution of plants up to 2300: a modelling study for prediction of potential global distribution and migration of the $\text{N}_2$ fixing species *Alnus* spp.

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Figure S1: Distribution of grid elements (red) which were identified as potential sites with alder based on the climate functions 1...3 (see Fig. 3). Yellow: grid elements were not identified as potential distribution area for alder.

Figure S2: Distribution of grid elements (red) which were identified as potential sites with alder based on the climate functions 1...3 (see Fig. 3). In this version of the model, restriction by soil units as found in Tab. 1 was applied. Yellow: grid elements were not identified as potential distribution area for alder.
Figure S3: Distribution of grid elements (red) which were identified as potential sites with alder based on the climate functions 1...3 (see Fig. 3). In this version of the model, restriction by vegetation types (see Tab. 2) was applied. Yellow: grid elements were not identified as potential distribution area for alder.
Figure S4: The correlation between the observed and predicted alder distribution in half degree grid elements in 20 countries. Countries from the table 2 with minimum 100 data records and five data records per each noted half degree grid cell were considered. The regression and 1:1 lines are shown along with correlation coefficient ($r$). In soil and vegetation methods (see Subfigs. b and c) the climate consideration is not include.