

Figure S1. Gridcell-by-gridcell comparison of REVEALS versus KK10 simulated land use (left panel) and HYDE simulated land use (right panel). Each color represents a different preindustrial time window.

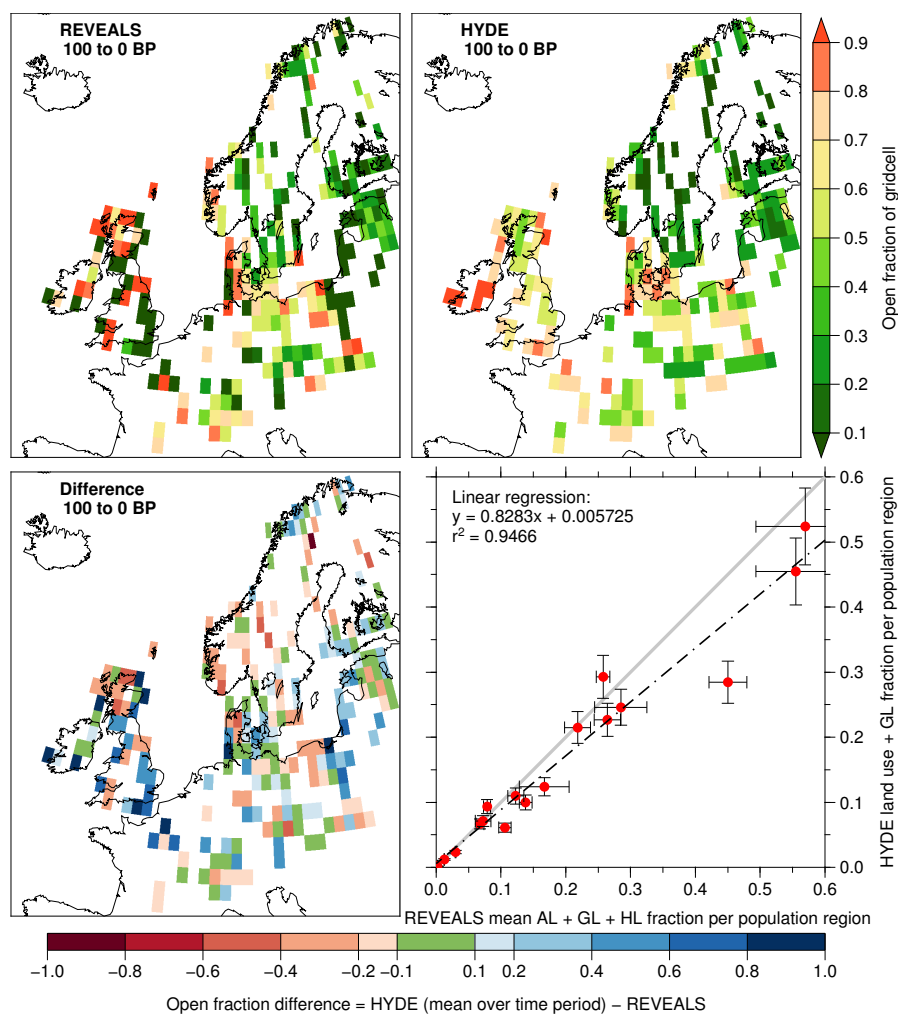


Figure S2. Identical comparison between REVEALS and HYDE as in Figure 1, for the period 100-0 BP (AD 1850 to 1950), except that the REVEALS open fraction includes heathland (HL).

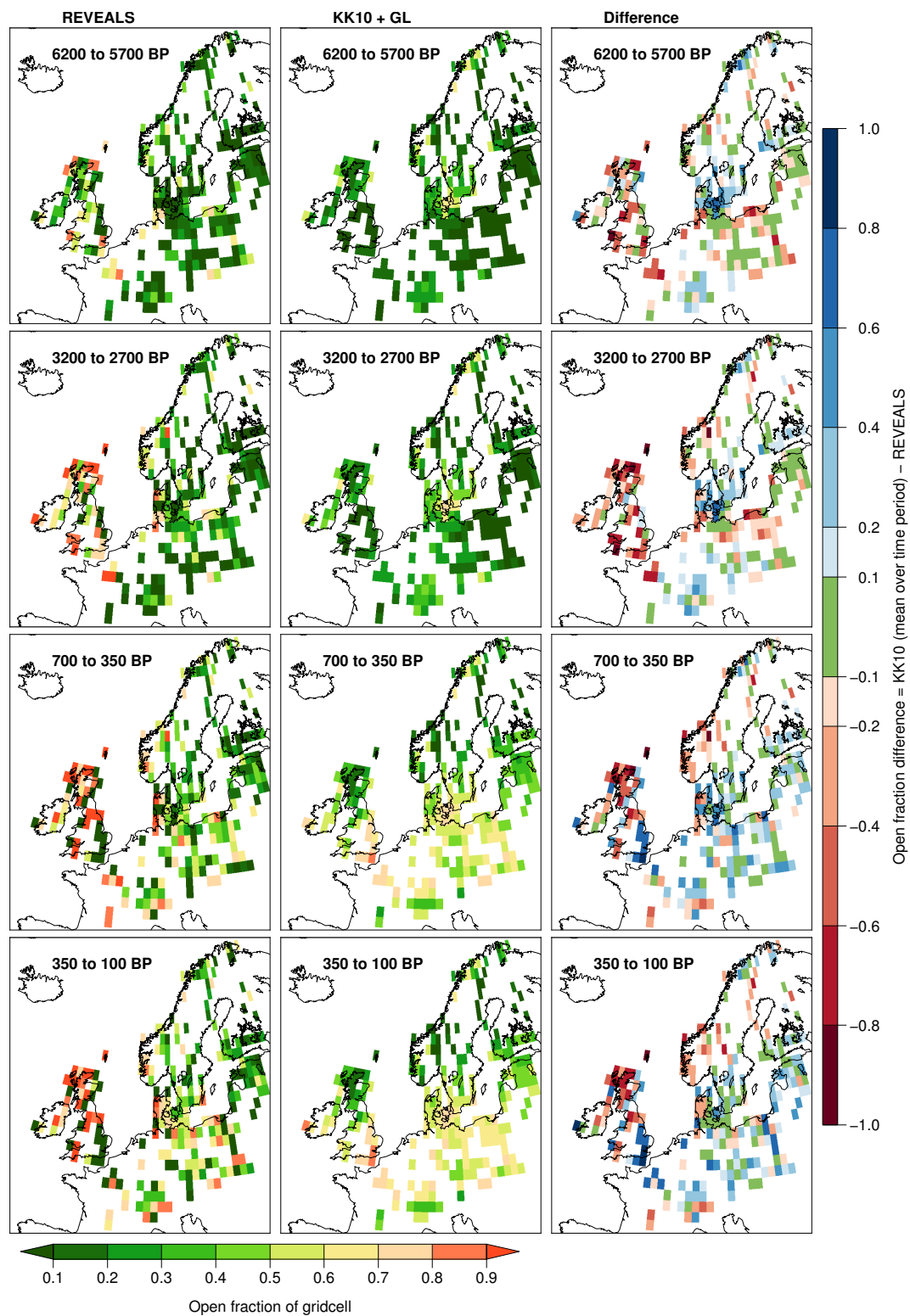


Figure S3a. REVEALS open land including heathland (AL + GL + HL) compared with land use estimates from KK10 and naturally treeless areas. The pollen-based reconstruction (left panel) is contrasted with the ALCC scenario (center panel). In the difference map (right panel), gridcells in blue show where there is more open land in the ALCC scenario, while gridcells in red show where there is more open land in the REVEALS reconstructions. Green gridcells indicate gridcells where REVEALS and the ALCC scenario agree within 10%.

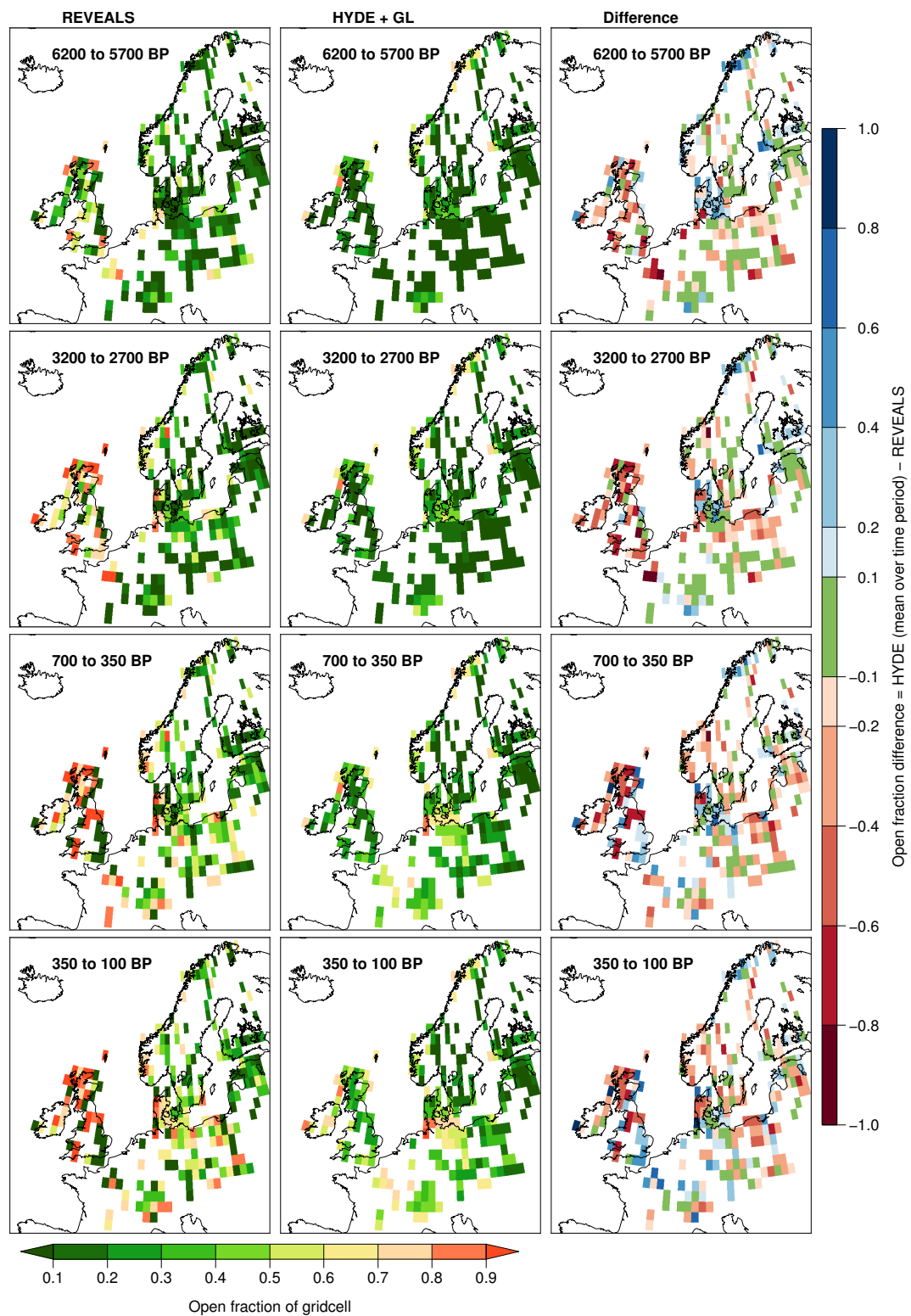


Figure S3b. As for Figure S3a above, but with REVEALS compared to HYDE.

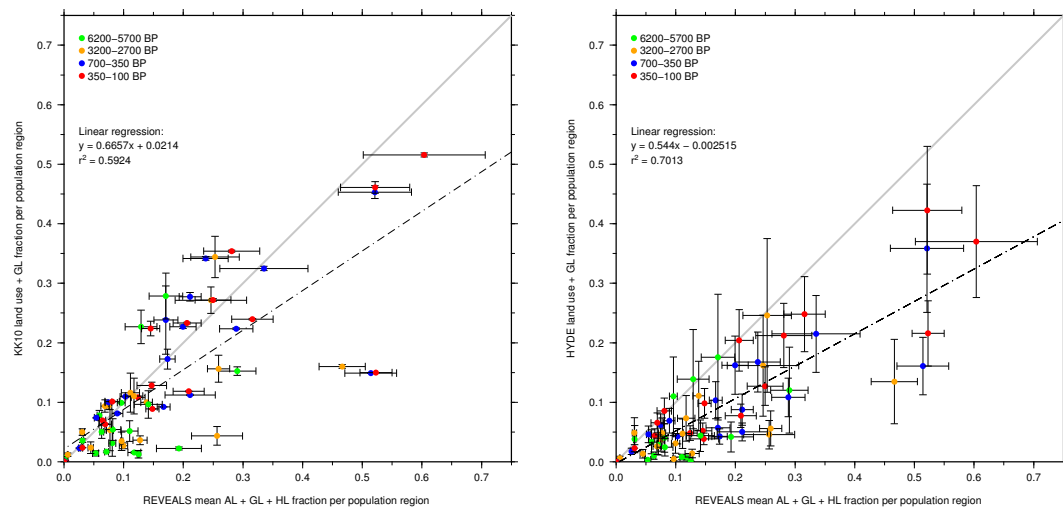


Figure S4. Correlation between REVEALS mean AL + GL + HL fractions per population region and KK10 (left panel) land use + GL fractions per population region and HYDE (right panel) crop + pasture fractions + GL per population region. A linear regression was performed on the data, while a perfect 1:1 fit is shown in light gray. The vertical error bars in the KK10 correlation indicate the range associated with the six possible KK10 scenarios, while for HYDE the error bars reflect the authors' published temporally varying uncertainty estimate (see Methods).

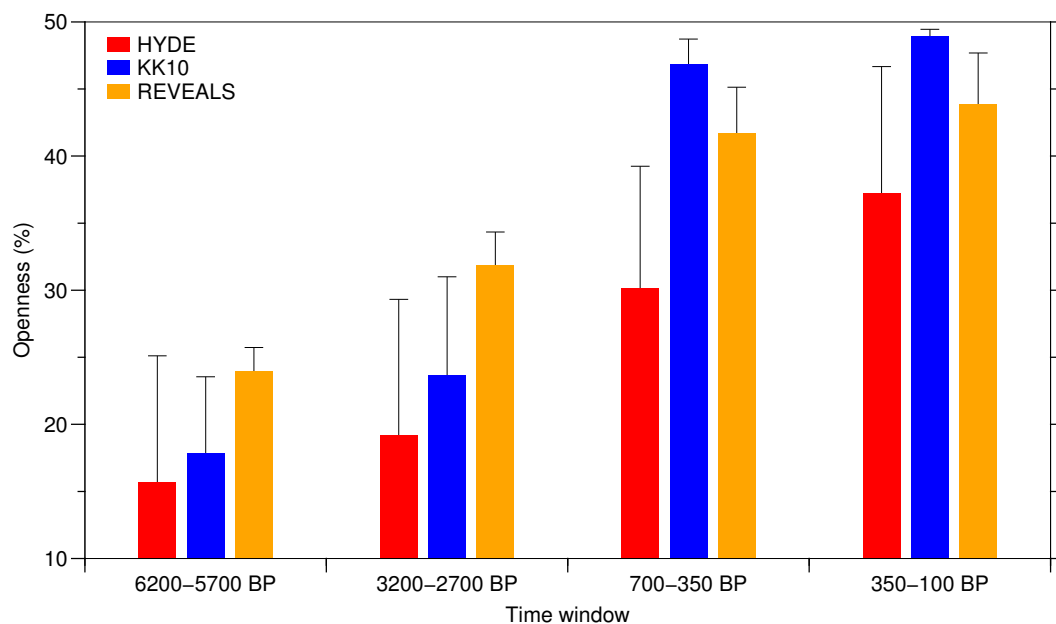


Figure S5. Percent open land (non-forested) within the study area for KK10 and HYDE modeled land use and the REVEALS reconstructions that include heathland (HL) as part of the open land. Total open areas were summed and divided by the total area of the gridcells with REVEALS data for each time period.