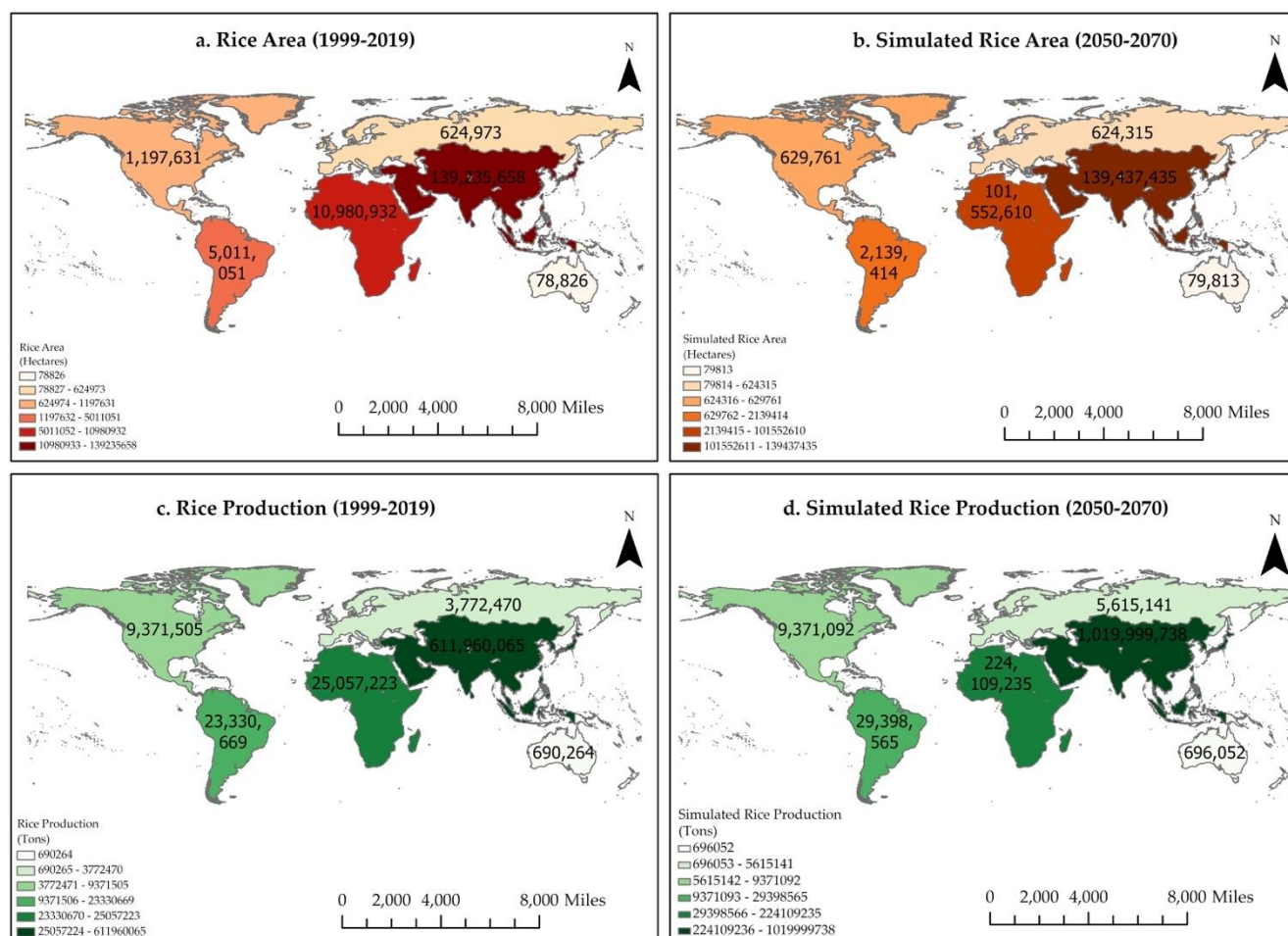


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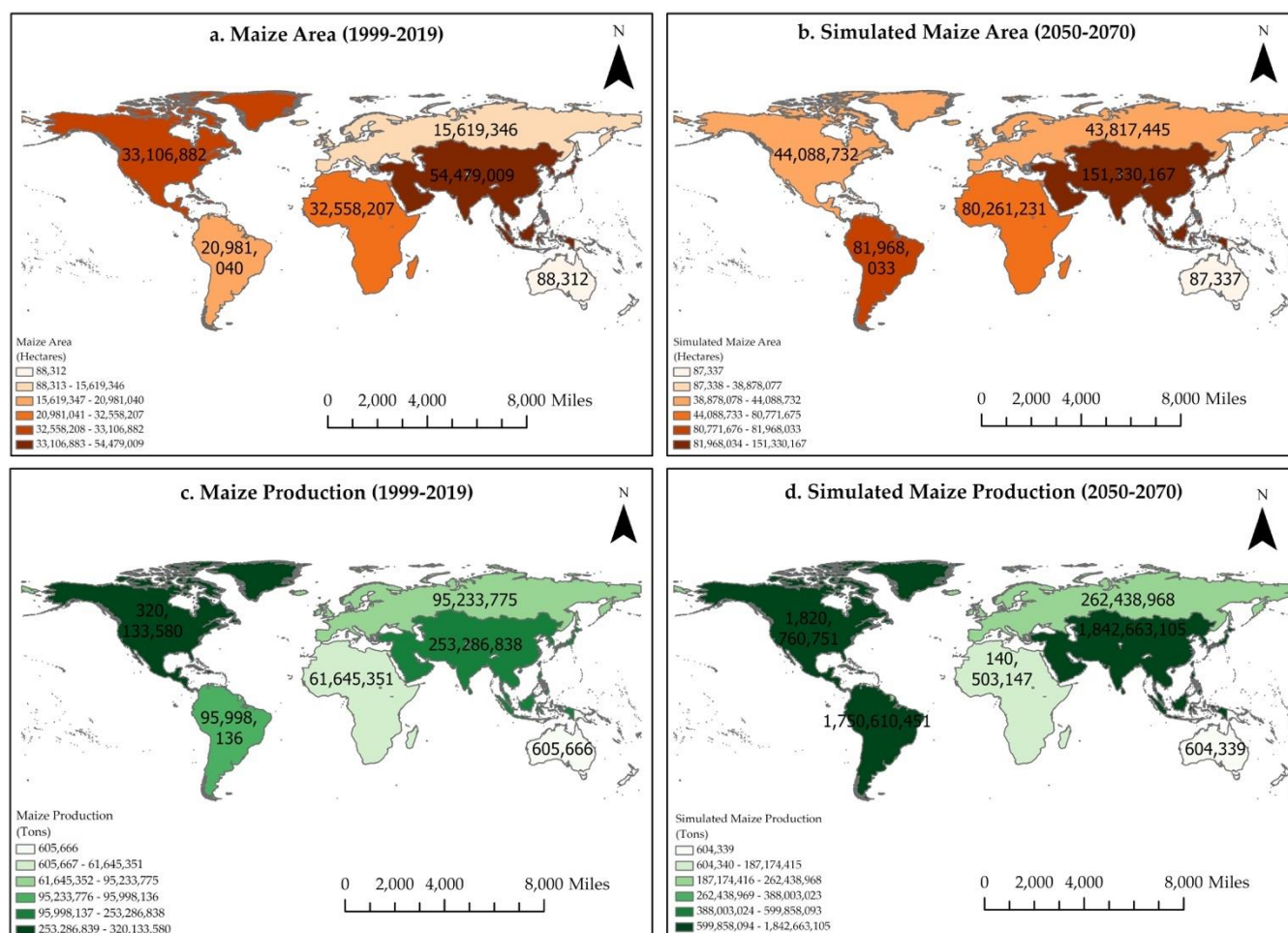
# Does Climate Change Affect the Yield of the Top Three Cereals and Food Security in the World?

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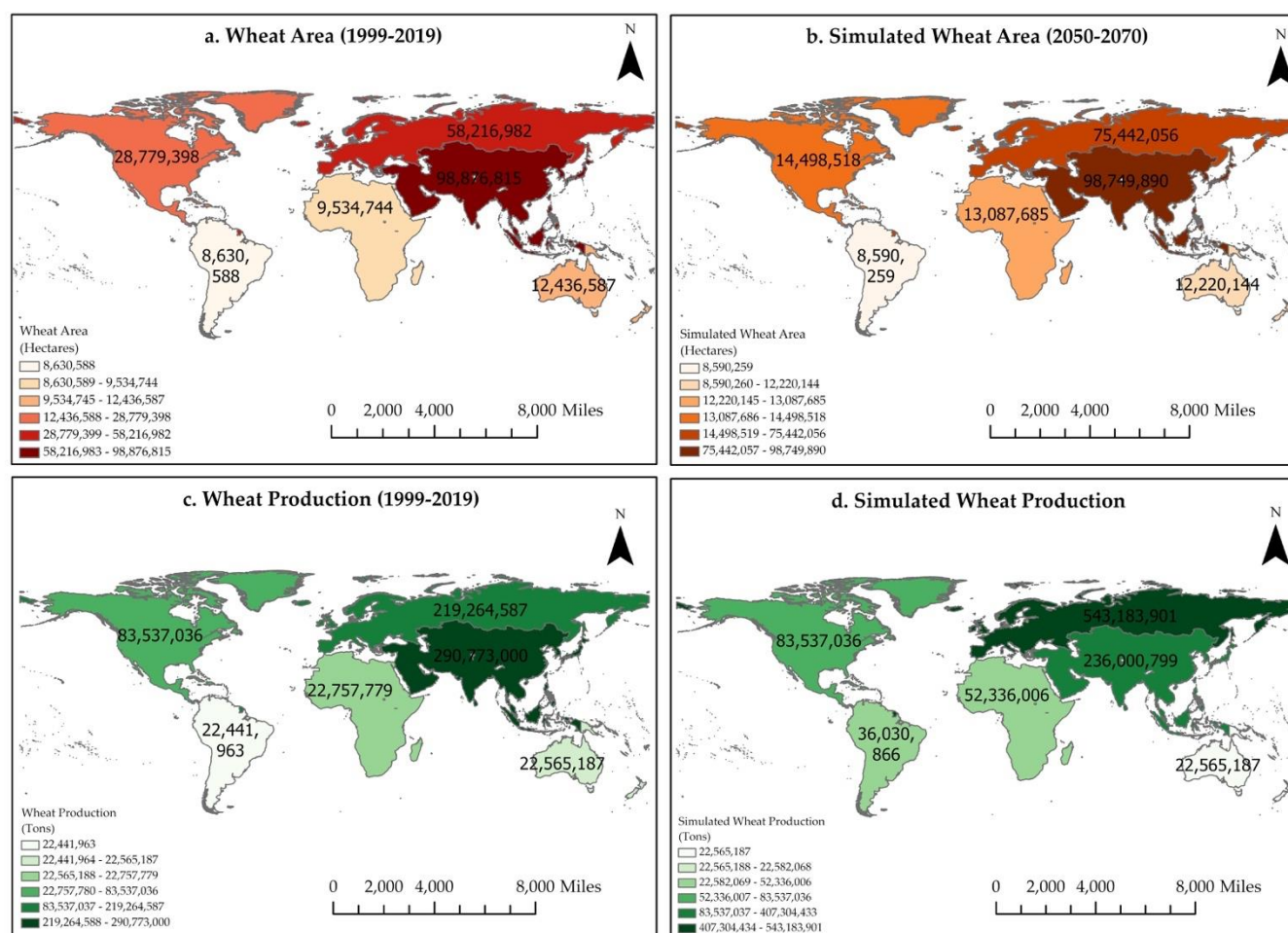
## Supplementary Figures



**Figure S1:** Average rice (a) area harvested (1999–2019), (b) simulated area (2050–2070), (c) production (1999–2019), and (d) simulated production (2050–2070) across different continents of the world. Area harvested and production were measured in hectares and tons, data source: FAOSTAT [32]. Under the Evview 12 software [35], the autoregressive integrated moving average (ARIMA) model was used to generate the simulated data for both the crop area harvested and total production. Maps were created by using ESRI ArcGIS Pro (<https://www.esri.com/en-us/arcgis/products/arcgis-pro/overview>) (Accessed on 1 November 2021).



**Figure S2:** Average maize (a) area harvested (1999–2019), (b) simulated area (2050–2070), (c) production (1999–2019), and (d) simulated production (2050–2070) across different continents of the world. Area harvested and production were measured in hectares and t tons, data source: FAOSTAT [32]. Under the Evview 12 software [35], the autoregressive integrated moving average (ARIMA) model was used to generate the simulated data for both the crop area harvested and total production. Maps were created by using ESRI ArcGIS Pro (<https://www.esri.com/en-us/arcgis/products/arcgis-pro/overview>) (Accessed on 1 November 2021).



**Figure S3:** Average wheat (a) area harvested (1999–2019), (b) simulated area (2050–2070), (c) production (1999–2019), and (d) simulated production (2050–2070) across different continents of the world. Area harvested and production were measured in hectares and tons, data source: FAOSTAT [32]. Under the Evview 12 software [35], the autoregressive integrated moving average (ARIMA) model was used to generate the simulated data for both the crop area harvested and total production. Maps were created by using ESRI ArcGIS Pro (<https://www.esri.com/en-us/arcgis/products/arcgis-pro/overview>) (Accessed on 1 November 2021).