Possible Impacts of Returning Farmland to Forest and Grassland on Local Temperature in the Ecotone between Agriculture and Animal Husbandry in China

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LUCC activities change the surface albedo, evapotranspiration and other biological geophysical processes and carbon cycling, greenhouse gas emissions and other bio-geochemical processes, so that at different time and space scale, the local, regional and global scale climate impact. Using the LUCC data, the meteorological stations were divided according to the land use types, and the adjacent sites were matched in space. The temperature difference between the paired sites was analyzed. It was found that the conversion of cropland to forest and grassland was significantly lower in the growing season effect. In the case of precipitation precipitation, the trend of summer temperature difference between the site of returning farmland to forest site and its invariable site is -1 ℃ / 10a, while that of returning farmland to grass is the most obvious in spring, the trend is -0.3 ℃ / The effect of returning farmland to forest is more obvious than that of returning farmland to grassland, and the effect of cooling is not significant.

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