

The ice sheets were at that time still a substantial barrier to movement that would have helped to maintain separation from the Ancient Beringian population. Although members of the SNA branch have not been documented in regions that were once north of the Pleistocene glaciers^{1,18}, NNA groups (including Athabascan speakers) are present in Alaska today. Therefore, NNA are likely to be descendants of a population that moved north sometime after 11.5 ka²⁵.

The USR1 results provide direct genomic evidence that all Native Americans can be traced back to the same source population from a single Late Pleistocene founding event. Descendants of that population were present in eastern Beringia until at least 11.5 ka. By that time, however, a separate branch of Native Americans had already established itself in unglaciated North America, and diverged into the two basal groups that ultimately became the ancestors of most of the indigenous populations of the Americas.

Online Content Methods, along with any additional Extended Data display items and Source Data, are available in the online version of the paper; references unique to these sections appear only in the online paper.

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Supplementary Information is available in the online version of the paper.

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