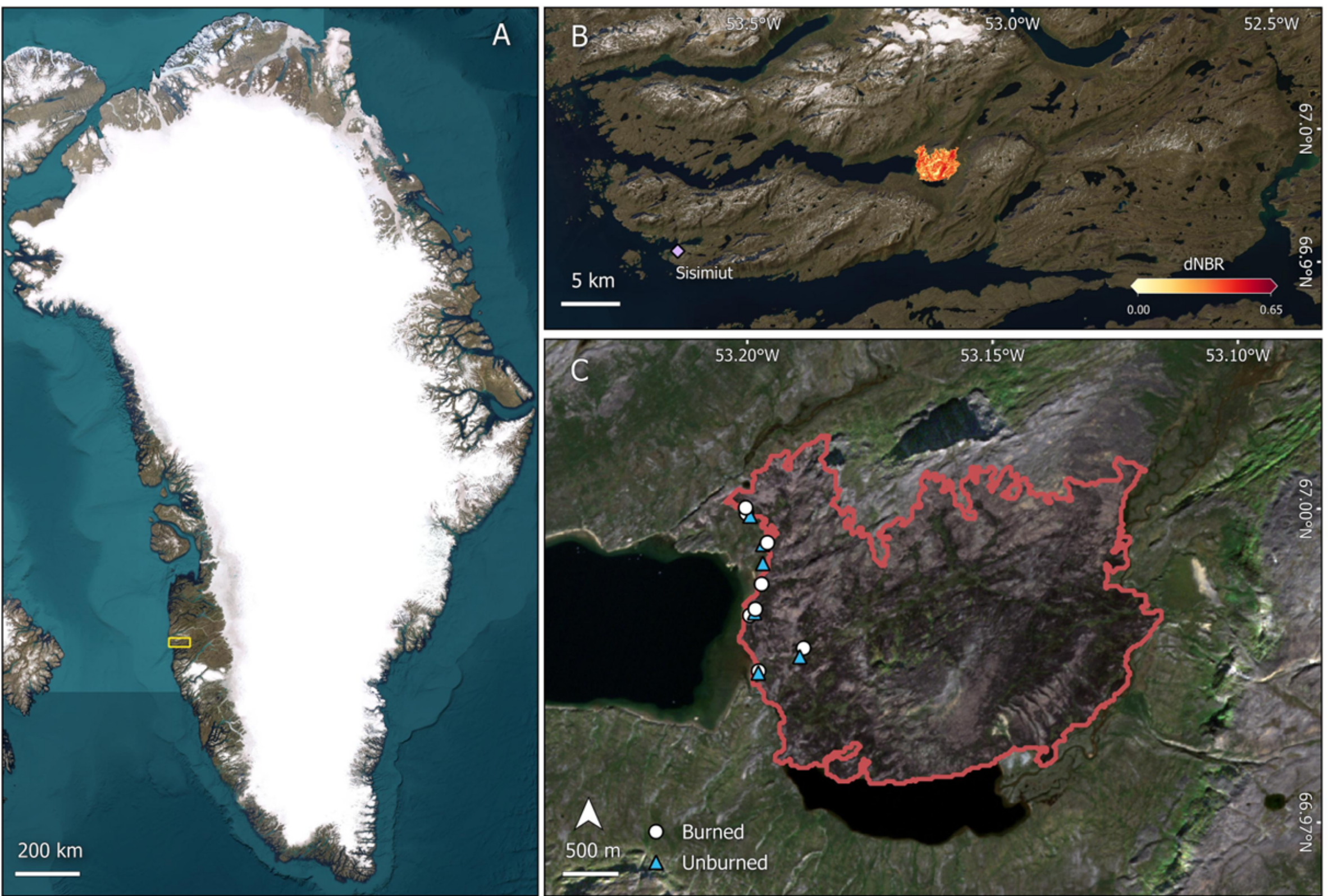


Ancient carbon stocks released from Greenland wildfire

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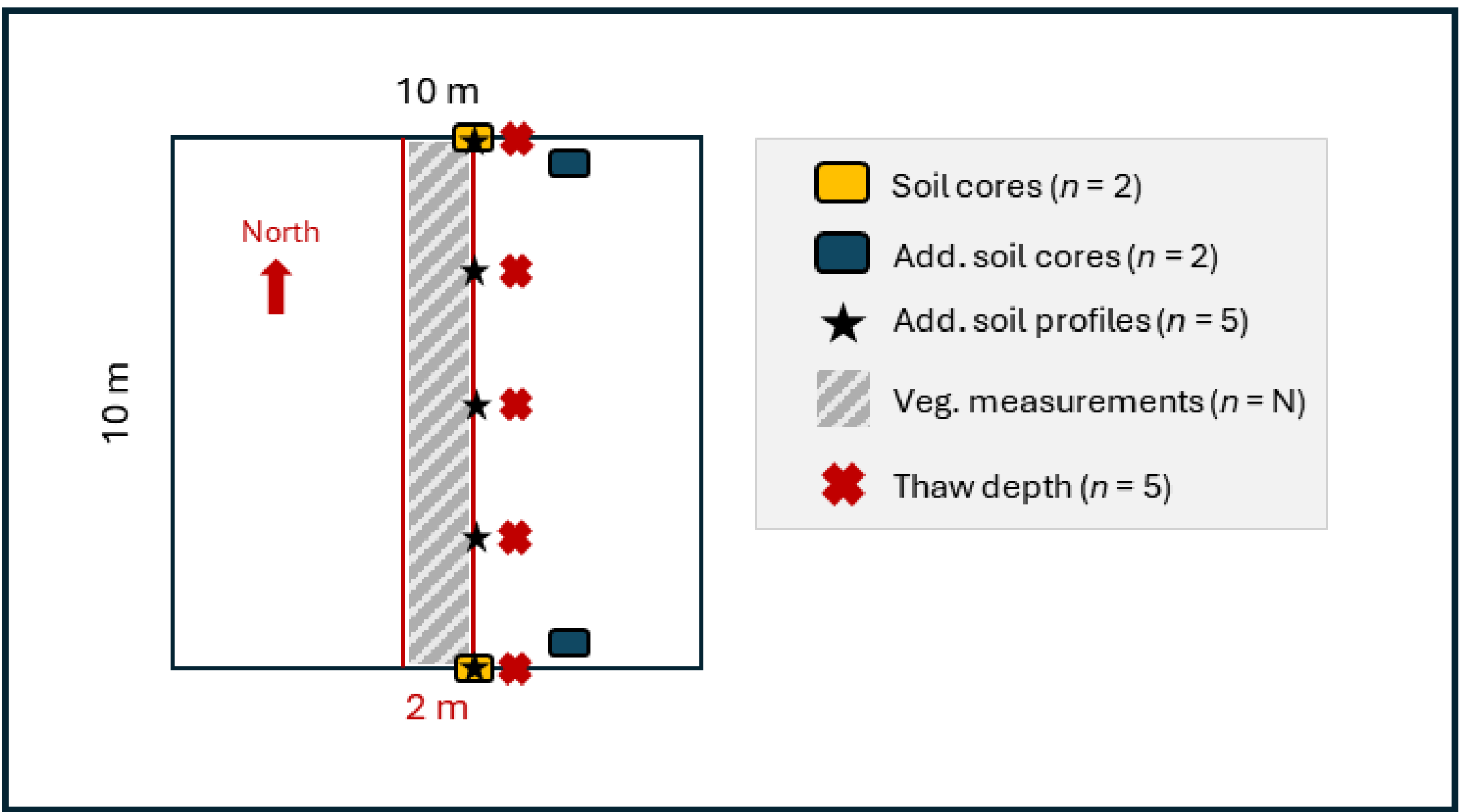
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INTRODUCTION



- The 2019 Kangerluarsuk tulleq tundra fire was the second largest wildfire ever recorded in Greenland.

METHODS



- Carbon stock estimations
- Radiocarbon analysis (graphite-AMS, standard)

RESULTS

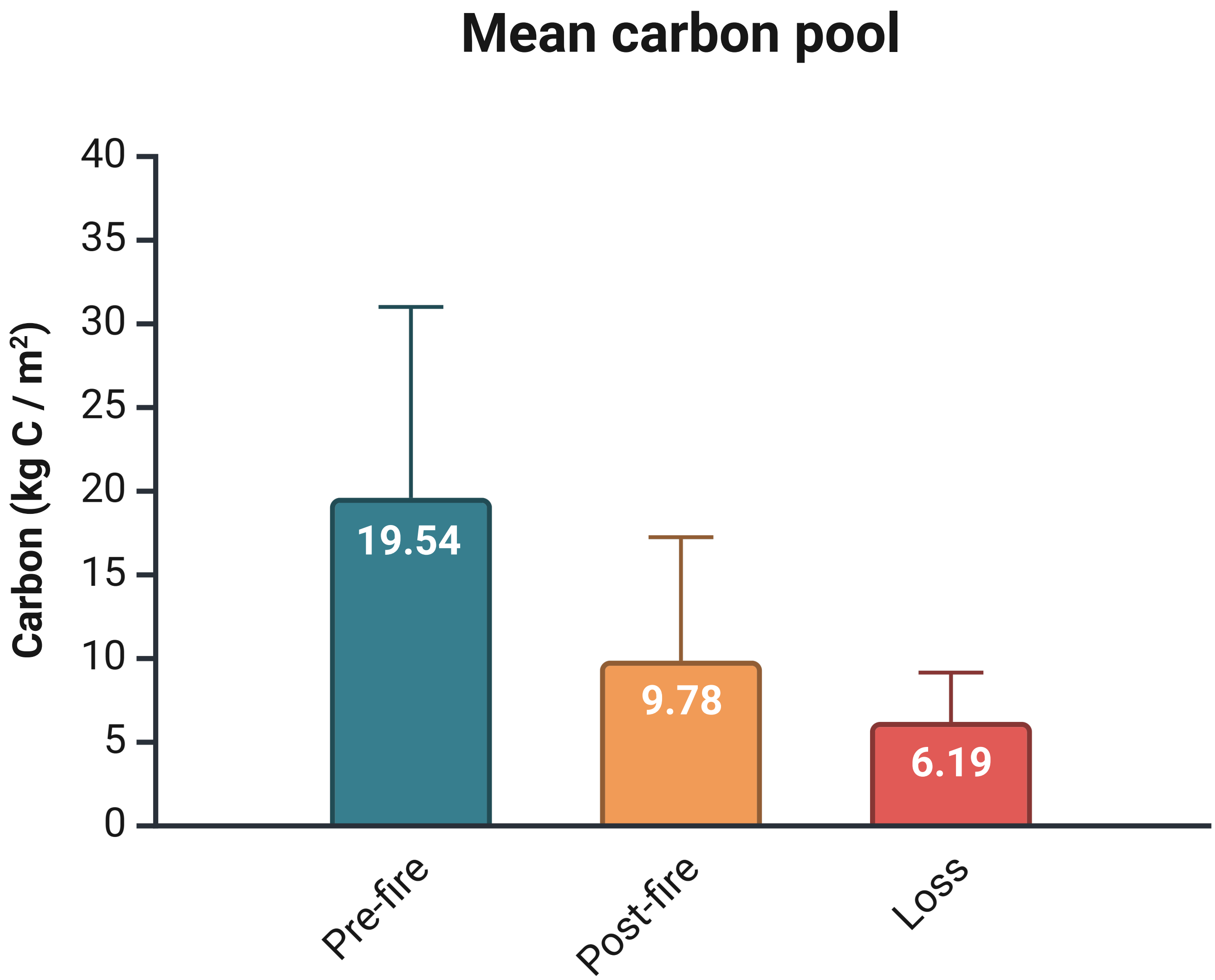


Table 1. Radiocarbon ages of plant macrofossils from mean and maximum burn depths. The core bottom indicates the oldest organic material at the interface with the mineral layer.

	Age (calBP)
Mean burn depth (9 cm)	561 ± 31
Max burn depth (15 cm)	928 ± 67
Core bottom	1391 ± 66

CONCLUSION

- The 2019 Kangerluarsuk tulleq tundra fire released ancient carbon stocks.
- The Arctic tundra may become a major carbon source in the future.



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