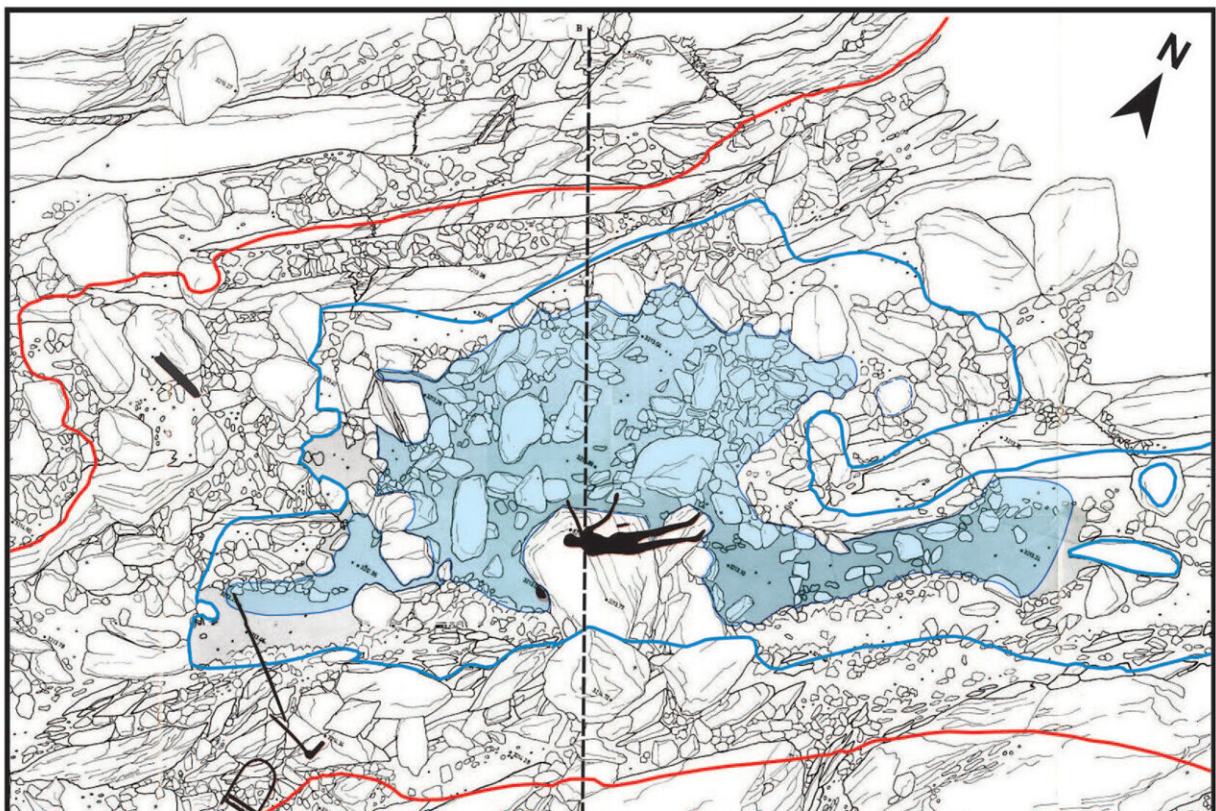


New study of Ötzi the Iceman suggests his preservation story was not a series of miracles

November 9 2022, by Bob Yirka



Above: Plan of the Ötzi find spot. Shown on the map of the excavation are the mummy with a flint dagger at the hip; a fur hat at the foot of the boulder where he lay; a quiver (upper left); and a bow, an ax and a backpack frame (lower left). Due to the activity of visitors to the site after the discovery and before the excavation, the position of the ax and backpack frame may be imprecise (Rastbichler Zissernig, 2006). Below: Profile section of the find spot. The gully

collected meltwater, which had to be drained away. Based on plan and section in Bagolini et al. (1995). Credit: *The Holocene* (2022). DOI: 10.1177/09596836221126133

A small team of researchers affiliated with institutions in Norway, Sweden and Austria, has found evidence that suggests a flaw in the original story of how Ötzi (the Iceman) remained preserved for so long. In their paper published in the journal *The Holocene*, the group details what they describe as a more plausible explanation.

In 1991, a couple of German hikers came upon the remains of a man frozen in the ice in the Ötztal Alps. Testing of the remains showed the man to be from approximately 5,300 years ago. Researchers also found wounds that suggested the man had been killed. Konrad Spindler, an Austrian archaeologist, published a theory to explain how Ötzi's remains had managed to survive for so long.

He suggested the body had freeze dried and was then encased in ice beneath a glacier (and was protected from its movement by a gully), where he was preserved in [cold storage](#) for thousands of years. His remains were found only because of warming caused by [climate change](#) melting the ice in which he had been frozen. Such a sequence of events meant that Ötzi's experience was unique, and thus it was doubtful that others like him would ever be found.

In this new effort, the researchers disagree with almost every part of Spindler's theory. The only part they believe to be true is the cause of death. They suggest instead that food in Ötzi's belly demonstrates that he died in the spring, not the fall. Also, study of the landscape showed that the remains had not been covered by a glacier, which suggests Ötzi had melted out of the ice many times; thus, there was no [time capsule](#). There

was also evidence that Ötzi had been immersed in water several times.

And that, the researchers suggest, indicates that Ötzi's weapons and tools had been damaged by the elements, not by a struggle with an unknown foe. And finally, the researchers also found evidence suggesting that Ötzi had not died where he was found in the gully—instead, he had been transported down the mountain by natural environmental processes.

The researchers conclude that since their evidence shows that Ötzi's remains had survived for so long due to common conditions, it is likely that others like him will be found as conditions in the area continue to grow warmer.

More information: Lars Pilø et al, Ötzi, 30 years on: A reappraisal of the depositional and post-depositional history of the find, *The Holocene* (2022). [DOI: 10.1177/09596836221126133](https://doi.org/10.1177/09596836221126133)

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