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Did Viking 'Sunstones' Really Exist?

The Vikings used sundials to navigate—when the sun was visible. But what about when the sky was completely covered with gray, Northern clouds? According to Viking lore, that was when sailors made use of “sunstones,” translucent crystals that could divine the sun’s location, even behind a dark curtain.

Did sunstones really exist? Such a use for crystals is possible, in theory. Both crystals and the Earth’s atmosphere polarize light; and, as [this article in New Scientist explains](#), “crucially ... the atmosphere leaves sunlight polarized in a series of concentric rings centered on the sun.” In theory, a crystal might glow more brightly the more directly it was pointed at the sun.

But many scientists have been skeptical about whether this could work in practice. However, a study that has [just been published in the “Philosophical Transactions of the Royal Society: Biological Sciences”](#) concluded that the levels and patterns of polarization are sufficient, even in fairly dark daytime conditions, to be detected by means of crystals. In other words, Viking lore might be based in fact.

There are still some skeptics, however, partly because the authors used data from a sensitive instrument called a polarimeter to make their case. So now those authors are going to try to fashion their own sunstones from crystals mined in Iceland or Scandinavia, according to [New Scientist](#).



Men dressed as Vikings lead a torchlight procession in Edinburgh, Scotland. (Getty Images)

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