



## We just beamed a signal at space aliens. Was that a bad idea?

In a valley near Tromsø, Norway, an antenna has just transmitted a radio signal to potential alien listeners.

This isn't the usual approach to the Search for Extraterrestrial Intelligence (SETI). Usually, SETI scientists use such antennas to listen, not to speak. They hope to hear a signal from so far away that they would have been broadcast tens, hundreds, or even thousands of years ago. So far, no luck.

The Tromsø transmission is an example of "active" SETI. The idea is simple: Send a signal that would alert aliens we're here, and listen for a reply. The Tromsø broadcast was beamed to one of the nearest star systems believed to have an Earth-like planet. The target is located 12 light-years from our solar system. Since radio waves travel at the speed of light, we'll have to wait more than two decades before looking for a reply.

While the broadcast from Norway is unlikely to provoke a response by any extraterrestrials, you can be sure it will provoke plenty of Earthlings.

Why is messaging aliens such an issue? To begin with, what do you say to someone you've never met, and who's a member of a different species? Do we tell aliens that we engage in war, threaten our environment, and chow down on other critters? More importantly, could sending signals endanger our

whole species? Suppose aliens do exist, and they're unfriendly. If we draw attention to ourselves with a broadcast — no matter what its content — they might respond with a fleet of interstellar missiles to take us out. Bummer.

Would aliens really do that? Why should we take the chance? Two reasons:

- **We're already making noise.** We've been broadcasting into space with high-powered transmitters (radar and TV) for more than a half-century now. Sure, those signals aren't easy to detect out there in space — at least for someone with our level of technology. But for a society a century or two ahead of us, it would be trivial. And if the aliens are not at least that advanced, they simply won't have those interstellar missiles.
- **We shouldn't silence science.** We have other needs for radio signals. To locate comets headed our way from the outer regions of our solar system, for example, we will need to use radars, ones much more powerful than the ones we have today.

Let's face it, it's impossible to know what our great-great-grandchildren will find interesting or worthwhile to do.

Personally, I hope the aliens get in touch.