

The Wow! Signal

Transcript: Video clip from Human Universe, episode three.

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On August 15th 1977, a radio telescope called the Big Ear detected a radio signal from somewhere in the vicinity of the constellation Sagittarius. And this is the print out from that night.

You can see that somewhere around quarter past ten Eastern Standard Time a very bright radio signal pulsed in. It looks something like this. You can sketch it out.

It was a pulse with the width of around 72 seconds. And the peak intensity, the peak brightness, was over 30 times the brightness of the background radio emission from the galaxy. So it's fascinating. And it came in on a wavelength that SETI believes an intelligent civilisation might choose.

The wavelength was 21 centimetres. That's the wavelength of light – radio waves emitted from hydrogen atoms. So the whole sky glows at that wavelength and back in the 1950s radio astronomers speculated that if an alien civilisation wanted to communicate with us, then they might well choose that very special natural wavelength to send their message.

So surprising was this that when it was spotted a few days later by an astronomer called Jerry Ehman he circled that pulse – that 72 second flash of radio waves – and wrote Wow! next to it. So this has become known as the Wow! signal.

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