



## Life-giving water: a gift from space?

Transcript: Video clip from *Wonders of Life*, episode five.

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Late in 2010 these glimpses of comet Hartley 2 arrived back on Earth. They were sent by Nasa's Deep Impact probe.

From its surface, dust and ice spray into space. Analysis of this water found it had a very similar mixture of isotopes to the water in our own oceans. This was the first firm evidence that icy comets must have contributed to the formation of our world's oceans.

Earth began life as a molten hell. Its internal heat drove off any trace of moisture. But soon the planet cooled and the first clouds grew.

Then 4.2 billion years ago a deluge, the like of which the Solar System had never seen before or since, rained down. And again, thanks to those hydrogen bonds, water's boiling point is high enough to have allowed it to remain on the surface of the Earth to the present day.