

Gaia in one minute

How do we benefit from space?

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Investigating the Galaxy is all very well for astronomers, but what's in it for us?

Of course, the advancement of our scientific understanding is an end in itself, but that's not to say we don't get other things out of it.

For example, space technology has been used to solve the problem of packing crisps without breaking them.

Because it turns out that dropping a crisp into a packet is a bit like landing a spaceship safely on a planet.

But unbroken crisps are nothing compared to some of the other ways in which space technology has improved our lives.

From digital X-ray imaging to GPS and solar-powered cars, as well as satellite imaging to help with flood relief and natural disasters, and amazing shape-shifting metals to help repair broken bones.

Most of these spin-offs of space science were unplanned bonuses.

The Gaia mission has already given us a one billion pixel digital camera that'll be able to detect an object the width of human hair from the distance of a thousand kilometres.

Imagine the photos you'd be able to take with that!

Purely on a financial basis, it's estimated that every pound invested in space returns on average of six pounds to the wider economy.

So, while advances in space science inspire new generations to investigate and find solutions to the world's problems, we also get some great new gadgets into the bargain.