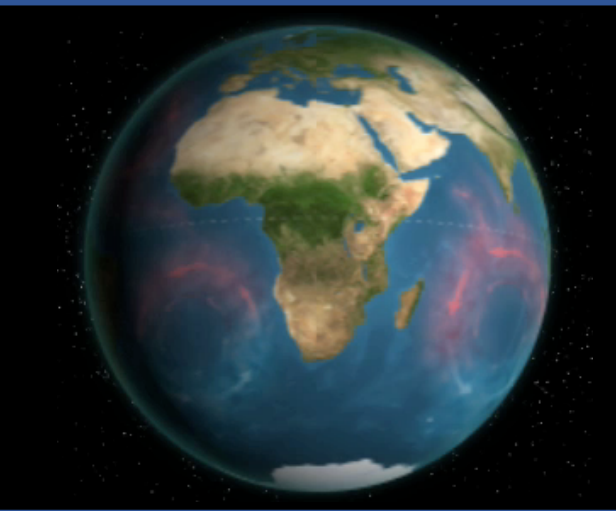
More plastic than plankton

Five Gyres

The world's oceans have an estimated 5 trillion pieces of plastic floating on the surface, making up 46% of all ocean plastic. Despite reports in the 1980s about the "Great Pacific Garbage Patch" which was "twice the size of Texas", the Plastic Oceans Team and numerous scientists found something else much more worrying.

Plastic has been found in all of the oceans around the world, not just areas where people live. Once plastic has found its way into the sea, it is caught up in one of the Earth's 5 major currents, or Gyres, and travels vast distances to the centre of these great whirlpools. Gyres are formed by the Earth's rotation and resulting predominant winds. The five gyres are found in the North and South Atlantic, North and South Pacific and Indian Ocean.



There are 5 trillion pieces of plastic floating in our oceans

Plastic Sludge

In the centre of these gyres plastic outnumbers plankton. Scientists have found that most plastic pollution is less than 1cm in diameter and is broken up into tiny microplastic through exposure to UV light, wave action and salt. Pieces of plastic become more concentrated towards the middle of a gyre and are mistaken for plankton by marine animals. A recent study estimated that the North Atlantic Gyre contains 3,440 metric tonnes of microplastic and nearly 1 million particles of plastic can be found per km^2 in the North Pacific Gyre. With 300 millions tonnes of plastic now being made annually, it is predicted that by 2025, 155 million tonnes of plastic will enter our oceans every year.