



Galactic Pollution

14 januari 2020

One of our biggest concerns on Earth today is climate change and its harmful effects on the environment, including pollution of the air and oceans. For the first time, scientists have spotted the earliest environmental pollution in the Universe.

Astronomers discovered gigantic clouds of carbon gas that spans more than 30,000 light years around young galaxies, roughly 1 billion years after the Big Bang.

In certain forms, carbon gas is one of the harmful pollutants to Earth's environment. But in space, it is a natural element that is essential to forming the earliest stars and galaxies.

Elements like carbon and oxygen did not exist in the early Universe at the time of the Big Bang. They were formed later deep inside the cores of stars and were later spread throughout the Universe. This study observed the first signs of these gases spreading into space.

Image credit: ALMA (ESO/NAOJ/NRAO), NASA/ESA Hubble Space Telescope, Fujimoto et al.

▲ COOL FACT!

All of the carbon in the universe was made inside stars. Carbon is a big part of the world we live in, from the carbon dioxide in the air to the plants we eat. And almost one-fifth of our body is made up of carbon!