Melting snow helps trees to absorb carbon dioxide



When the snow melts, the trees can absorb carbon dioxide

Access the image

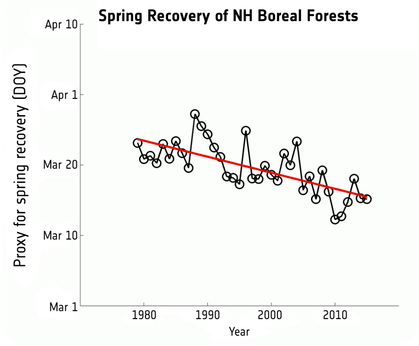
07 November 2017

Can something bad lead to something good? Maybe it can, according to new research about global warming.

Scientists know that lots of carbon dioxide in our atmosphere is a key cause of global warming. To predict how much carbon dioxide is being added to the atmosphere, it is important to think about where it is being given out, and where it is being absorbed.

We humans burn coal, use gas and oil, have many cars, and use lots of energy to heat our homes. This all releases carbon dioxide into Earth's atmosphere. As global temperatures rise, we see changes in Earth's climate. These include melting glaciers, rising sea levels, and extreme weather – all bad news.

One of the lesser-known effects of warmer temperatures is that snow covering huge forests in Canada, Russia, Scandinavia and the USA is melting earlier in the year. This uncovers lots of trees, which absorb carbon dioxide from the air. This is very useful, as it helps to put the brakes on global warming!



This graph shows when the forests are no longer covered by snow.

Access the image

To help measure levels of carbon dioxide, an ESA project called GlobSnow used satellites to watch how much snow was covering parts of the northern hemisphere from 1979 to 2015. A team of scientists recently studied all this information and found that trees and plants have been starting to grow earlier and earlier each spring. This allows them to absorb lots more carbon dioxide. So in this case, something good has come from something bad!

These new results will now be used to help us make even more accurate predictions of global warming.

Cool fact: Next year ESA will begin its Snow_cci project to make even better records of snow levels around the globe.