

'Huge increase needed' in greenhouse gas monitoring

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A global greenhouse gas data collection network needs to be created that is ten times the size of the one currently in place, scientists say.

A team from the University of Colorado and National Oceanic and Atmospheric Administration (NOAA) says the increase is vital if regional progress in greenhouse gas reductions is to be accurately recorded.

They argue in the journal *Science* that as atmospheric carbon dioxide (CO₂) concentrations are now at 385 parts per million and rising, the need for improved regional greenhouse gas measurements is critical.

The researchers add that while the current observation network can measure CO₂ changes on a continental scale, charting regional emissions where significant mitigation efforts are underway requires a greater network.

"The question is whether scientists in the United States and around the world have what they need to monitor regional fluxes in atmospheric carbon dioxide," said Melinda Marquis, a scientist at the Cooperative Institute for Research in Environmental Sciences.

"Right now, they don't."

The *Science* study says the number of global carbon measurement sites needs to increase from about 100 to 1,000.

It claims this would decrease the uncertainty in computer models and help scientists better quantify changes.