Deep Carbon Observatory

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Why in news?

The recent report shows some important findings

What are the findings saying?

- Less than one per cent of the planet’s carbon is found above surface.
- The majority of the carbon-about 1.85 billion gigatons-is contained in the crust and mantle of the earth.
- The carbon that is found in the oceans, the land and the atmosphere, for the most part, appears to be disturbed by human activity.
- Human greenhouse gas emissions are a hundred times higher than all the volcanoes on Earth.
- Every year, human activity contributes around 10 gigatons of CO2 to the atmosphere. Natural geological processes underground, for comparison, release about 10 times less of the global warming gas.
- Carbon dioxide emissions into the atmosphere and oceans from volcanoes account for about 280 to 360 million tonnes.
- Burning fossil fuels, deforestation and other human activities add to the environment between 40 and 100 times the volume of CO2.

What is this DCO?

- It is a global community of more than 1000 scientists on a ten-year quest to understand Earth’s carbon concentrations, trends, processes and origins.
- As carbon is a vital element both positively and negatively, it becomes important to be studied