Previously unknown faults at the foot of the Himalaya discovered

Context

- Data from an oil and gas exploration company has now helped geologists discover a series of faults at the foot of the Himalaya.

Sesimic exploration data

- The team looked at seismic reflection data, which are routinely collected by exploration companies looking for oil and gas.
- In this method, seismic waves are produced by small explosions at multiple sources, and many recorders called geophones record the sound echoing off layers beneath the surface.

Composite image

- The signals are combined to make an image that looks like a slice showing layers through the top few kilometres of the Earth’s crust.
- The researchers were able to identify the faults because the pattern of layers showed bends.
- This network of faults show that the Himalayan deformation reaches further [about 40 kilometres further south] than we previously thought.