



Volcanoes on Venus

Why in News

According to a recent study, published in Nature Geoscience, **Venus is still geologically active.**

Key Points

- The study identified 37 active **volcanoes**, in the form of ring-like structures known as coronae, on the surface of Venus.
 - The coronae form when plumes of hot material deep inside the planet rise through the mantle layer and crust.
- Earlier, it was believed that the surface of Venus had no geological activity. However, scientists have known for some time that Venus has a younger surface than planets like Mars and Mercury, which have cold interiors.
- The new study will help to identify target areas for future missions such as **Europe's EnVision** that is scheduled to launch in 2032.
 - **EnVision aims** at determining the level and nature of the geological activity and the sequence of events that generated the surface features of Venus.

Venus

- It is the **second closest planet to the sun** and the **sixth-largest planet** in the solar system. It is also known as **earth's twin**.
- It is the **hottest planet in the solar system** and its **extreme temperatures (450° C)** and acidic clouds make it an **unlikely place for life**.
- **Along with Uranus** it **spins backwards** with respect to other planets i.e. Its **sun rises in the west** and sets in the east.
- Along with Mercury it has **no moons and no rings**.

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