

The mission of NASA to venture into planet Venus is based on their potential for scientific value & the feasibility of their development plans. Examine.

NASA planned to launch two missions to the planet Venus, Earth's nearest neighbour between 2028 - 2030

The Missions called

- 1) DAVINCI+ - Deep atmosphere Venus Investigation of Noble gases, chemistry & Imaging
- 2) VERITAS - Venus Emissivity, Radio Science InSAR, Topography & Spectroscopy

Both Missions are part of NASA's Discovery Program 1992, which gives scientist a chance to demonstrate their potential develop Mission at fewer resource & shorten the

The Mission helps to understand the concepts & scientific questions

- 1] Venus composition & how planet formed & evolved thus origin of terrestrial planet



- 2] Even though it is second nearest to Sun but surface temperature is higher than Mercury, because of thick cloud cover
- 3] This helps to understand the global warming & climate change on earth
- 4] Demonstrate the potential ~~of~~ spacecraft to survive longer duration in harsh environment where previous spacecraft of Russia's Venera & Japan's Akatsuki mission failed or unsuccessful
- 5] High resolution photographs of Venus geological features called "tesserae" similar to ~~plate~~ Earth continents, confirming tectonic plate feature on Venus
- 6] Volcanic activity & water vapour in Venus atmosphere speculate life on Venus on its clouds

Venus is called Earth-twin, because of its similarity. Exploring Venus helps to ~~understand~~ understand origin, evolution of terrestrial planet also step towards human ambition of living on another planet, and India's Shukrayana Mission