

NASA picks Venus as hot spot for two new robotic missions

June 3 2021, by Marcia Dunn



This image made available by NASA shows the planet Venus made with data from the Magellan spacecraft and Pioneer Venus Orbiter. On Wednesday, June 2, 2021, NASA's new administrator, Bill Nelson, announced two new robotic missions to the solar system's hottest planet, during his first major address to employees. Credit: NASA/JPL-Caltech via AP

NASA is returning to sizzling Venus, our closest yet perhaps most overlooked neighbor, after decades of exploring other worlds.

The [space agency](#)'s new administrator, Bill Nelson, announced two new robotic missions to the solar system's hottest planet, during his first major address to employees Wednesday.

"These two sister missions both aim to understand how Venus became an inferno-like world capable of melting lead at the surface," Nelson said.

One mission named DaVinci Plus will analyze the thick, cloudy Venusian atmosphere in an attempt to determine whether the inferno planet ever had an ocean and was possibly habitable. A small craft will plunge through the atmosphere to measure the gases.

It will be the first U.S.-led mission to the Venusian atmosphere since 1978.

The other mission, called Veritas, will seek a [geologic history](#) by mapping the rocky planet's surface.

"It is astounding how little we know about Venus," but the new missions will give fresh views of the planet's atmosphere, made up mostly of [carbon dioxide](#), down to the core, NASA scientist Tom Wagner said in a statement. "It will be as if we have rediscovered the planet."

NASA's top science official, Thomas Zurbuchen, calls it "a new decade of Venus." Each [mission](#)—launching sometime around 2028 to 2030—will receive \$500 million for development under NASA's Discovery program.

The missions beat out two other proposed projects, to Jupiter's moon Io and Neptune's icy moon Triton.

The U.S. and the former Soviet Union sent multiple spacecraft to Venus in the early days of space exploration. NASA's Mariner 2 performed the first successful flyby in 1962, and the Soviets' Venera 7 made the first successful landing in 1970.

In 1989, NASA used a [space shuttle](#) to send its Magellan spacecraft into orbit around Venus.

The European Space Agency put a spacecraft around Venus in 2006.

More information: www.jpl.nasa.gov/news/nasa-selects-table-world-of-venus

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