

Cost-cutting NASA eyes three cheap space missions

December 31 2009



This file photo shows the planet Venus with sunlight reflecting off its perpetual veil of clouds. NASA has named low-cost missions to Venus, the moon and an asteroid on a shortlist to become its latest space adventure, as the US agency faces astronomical political pressure to cut costs.

NASA has named low-cost missions to Venus, the moon and an asteroid on a shortlist to become its latest space adventure, as the US agency faces astronomical political pressure to cut costs.

The proposed probes -- to the surface of Venus, the moon and to bring back a piece of a primitive asteroid -- must all come with a price tag of less than 650 million dollars, a fraction of the cost of manned space flight.



The agency, in a statement Tuesday, said the winner of the competition will be announced in mid-2011, with the project to launch by the end of 2018.

NASA has faced growing pressure to cut its budget as the US government's debt soars and as the United States buckles under the deepest <u>economic crisis</u> since the Great Depression of the 1930s.

The agency has also seen dwindling political support, with its White House and congressional paymasters reluctant to fund the type of expensive manned space exploration that saw the agency put 12 men on the moon.

A plan to return humans to the moon by 2020 came under withering criticism from a panel tasked by US President <u>Barack Obama</u> to look into the future of space exploration, as the project's initial <u>budget</u> of 28 billion dollars exploded past 44 billion.

Against this backdrop, the agency is asking scientists to come up with low-cost ideas to further space exploration.

One project led by the University of Colorado's Larry Esposito would send a explorer to Earth's sister planet, Venus.

The explorer would descend through the carbon dioxide-rich Venusian atmosphere, landing on the planet's surface in the hope of gathering evidence that could explain why it is so different from Earth, despite being close in size and <u>space</u>.

A second project would place a lander on the moon's southern pole, collecting rocks that are thought to come from the lunar core, offering an insight into how the moon and Earth developed.



Another project would travel to an asteroid to snatch around two ounces (56 grams) of material before returning the payload to Earth for extensive tests.

The winner will be the third in NASA's cost-saving New Frontiers program, which was launched in 2006.

The first mission will fly by Pluto and its moon Charon in 2015 and then a target in the Kuiper belt, at the outer reaches of the Solar System.

"These three proposals provide the best science value among eight submitted to <u>NASA</u> this year," said NASA's Ed Weiler.

"These are projects that inspire and excite young scientists, engineers and the public."

(c) 2009 AFP

Citation: Cost-cutting NASA eyes three cheap space missions (2009, December 31) retrieved 25 April 2024 from <u>https://phys.org/news/2009-12-cost-cutting-nasa-eyes-cheap-space.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.