

Study: Ice belt encircled Mars' equator

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ESA's Mars Express space probe that entered orbit at the end of 2003 may have found evidence of a band of ice that once spanned the Martian equator.

A ESA scientist says patterns of glacial activity on the planet may be a relic of an ancient belt of ice that formed about five million years ago due to a change in the tilt of Mars. That shift caused moisture from the poles to be deposited as snow at the equator.

The idea is based on work by a team of scientists led by astronomer Jacques Laskar of the Paris Observatory.

Laskar's team has shown the tilt of Mars on its axis can vary between 15 degrees and 40 degrees, largely because of its lack of a significant moon.

Researchers also found that when Mars' tilt changed to about 35 degrees, moisture trapped at the North and South Poles might have been re-deposited in equatorial regions as snow.

Eventually, the poles may have become smaller and a thick belt of ice formed around the tropics.

The study was detailed during the American Astronomical Society's Division of Planetary Sciences meeting this week in Cambridge, England.

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