







SAVE THIS | EMAIL THIS | Close

Earth orbit slows no more, baffling scientists

BOULDER, Colorado (AP) -- In a phenomenon that has scientists puzzled, the Earth is right on schedule for a fifth straight year.

Experts agree that the rate at which the Earth travels through space has slowed ever so slightly for millennia. To make the world's official time agree with where the Earth actually is in space, scientists in 1972 started adding an extra "leap second" on the last day of the year.

For 28 years, scientists repeated the procedure. But in 1999, they discovered the Earth was no longer lagging behind.

At the National Institute for Science and Technology in Boulder, spokesman Fred McGehan said most scientists agree the Earth's orbit around the sun has been gradually slowing for millennia. But he said they don't have a good explanation for why it's suddenly on schedule.

Possible explanations include the tides, weather and changes in the Earth's core, he said.

The leap second was an unexpected consequence of the 1955 invention of the atomic clock, which use the electromagnetic radiation emanated by Cesium atoms to measure time. It is extremely reliable.

Atomic-based Coordinated Universal Time was implemented in 1972, superseding the astronomically determined Greenwich Mean Time.

Leap seconds can be a big deal, affecting everything from communication, navigation and air traffic control systems to the computers that link global financial markets.

Copyright 2004 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten, or redistributed.

Find this article at:

http://www.cnn.com/2004/TECH/science/01/01/leap.second.ap/index.html



SAVE THIS | EMAIL THIS | Close

Check the box to include the list of links referenced in the article.



Now only \$999999 Gateway.

