

A weekly electronic news service on ozone protection & related issues compiled by: UNEP DTIE OzonAction Programme

2 April 2001

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1. Cold Polar Rings Help Form Clouds That Destroy Ozone

Newly discovered, narrow rings of cold air over Earth's poles help form colorful clouds that destroy ozone, according to a technical paper that will appear in the March 30 issue of the journal Science.

The ozone layer protects life on Earth from the sun's harmful ultraviolet radiation that could cause skin cancer in human beings and biological damage to living things. The paper's authors believe they have solved a decade-old mystery of how glowing, ozone-destroying clouds that contain nitric acid and water form road-dust-size particles that later spread to decompose ozone.

"Large polar stratospheric cloud (PSC) particles are born inside narrow temperature rings around Earth's poles in absolute darkness," according to Azadeh Tabazadeh, lead author of the paper and a scientist at NASA's Ames Research Center in California's Silicon Valley. "Strong winds blow these special clouds away from the cold rings to fill the polar air with ozone-destroying particles. The areal extent of these clouds is often larger than the United States despite the fact that the clouds initially form inside a narrow temperature ring," she said...

Full Text & Graphics @: http://amesnews.arc.nasa

Source: NASA Ames Research Center, Release: 01-20AR, 29 March 2001

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2. Thanks to ESA, KNMI offers an UV forecasting Service

A unique new service which harnesses satellite data to powerful high-speed computing could soon lead to much improved weather forecasts and help make basking in the sun a lot safer.

The "fast ozone profile" service developed by the Royal Netherlands Meteorological Institute (KNMI) within the ESA Data User Programme is a world first and it can deliver a three-dimensional map of ozone in the atmosphere worldwide within a few hours...

The service is now live, providing GOME ozone profiles to scientists around Europe including the service to offer UV indexforecasting, as well. "And we will certainly continue the service when Envisat is launched," emphasises van der A. "The SCIAMACHY instrument aboard Envisat may well allow us to improve the quality still further." To take a closer look before you decide whether to apply factor 15 or factor 50 sunblock, go to:

Ozone profiles on-line: http://www.knmi.nl/gome_fd/prof/profile.html

UV-index forecast on-line: http://www.knmi.nl/gome_fd/tm3/uv.html

Full Text: AlphaGalileo.org/ @: http://www.alphagalileo.org/ReadNotice.cfm?releaseid=5933>

Source: European Space Agency, 26 March 2001: <u>www.esa.int <http://www.esa.int></u>

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