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## Embargoed until September 15<sup>th</sup>

## **Press Release**

## The International Ozone Commission, on the 30<sup>th</sup> anniversary of the Vienna Convention for the protection of the ozone layer, warns that large ozone depletion continues to occur in Antarctica.

The United Nations has declared the 16<sup>th</sup> of September as the International Day for the Protection of the Ozone Layer to commemorate the 1987 signing of the Montreal Protocol on Substances that Deplete the Ozone Layer. The 1985 Vienna Convention was a framework agreement under which the Montreal Protocol was negotiated. It is an outstanding example of a successful cooperation between scientists, governments, non-government organizations, and industry to control production and consumption of ozone-depleting substances.

The theme of the International Day for the Preservation of the Ozone Layer on **16 September 2015 is: "30 years of healing the ozone together**"<sup>1</sup>.

The 2015 International Ozone Day follows the release of the Scientific Assessment of Ozone Depletion -2014, published by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in December 2014<sup>2</sup>.

The Scientific Assessment of Ozone Depletion – 2014, written and reviewed by the international community of ozone research scientists, reveals some remarkable successes resulting from the Montreal Protocol, and many challenges for the future.

Ozone-depleting substances (ODS) continue to decline in our atmosphere, and several studies have reported a statistically significant increase of ozone levels in the upper stratosphere, around 40 km altitude. This increase is attributable to both a decrease of ODS and to upper stratospheric cooling by increased levels of carbon dioxide.

While upper stratospheric ozone has shown signs of an increase, the global levels of total column ozone have remained relatively stable since 2000, with large year-to-year variations that could obscure the trends. Nevertheless, the long-term decline in total ozone observed until the 1990s was successfully stopped.

<sup>&</sup>lt;sup>1</sup> Please visit the web site of the Ozone Secretariat for the Vienna Convention <u>http://ozone.unep.org/en/precious-ozone</u> where you will find a description of worldwide activities on the 2015 International Ozone Day.

<sup>&</sup>lt;sup>2</sup> http://www.esrl.noaa.gov/csd/assessments/ozone/2014/report.html

The Antarctic ozone hole continues to occur each austral spring, as expected for current ODS levels. Levels of ODS over Antarctica are projected to decline back to 1980 levels in the 2070 period. Current 2015 ground, balloon, and satellite observations show that a large ozone hole is once again developing over Antarctica<sup>3</sup>. In 2014, the ozone hole reached a maximum area of 24 million km<sup>2</sup>, similar to that reached in 2013.

Our ability to follow these future ozone levels is crucially dependent on satellite and ground-based ozone observing systems. The maintenance and continuation of ozone observations is necessary for improving our scientific understanding of interactions between climate change and ozone depletion, for measuring the ongoing recovery impact of the Montreal Protocol, and for observing the ozone layer under changing climate conditions. The International Ozone Commission (IO<sub>3</sub>C) of IAMAS-IUGG urges national and international agencies to continue their support of scientific research and stratospheric ozone measurements in order to understand and observe the evolution of atmospheric ozone over the  $21^{st}$  century.

## This text was last reviewed by the IO<sub>3</sub>C members on September 15<sup>th</sup>

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IO3C: <u>http://ioc.atmos.uiuc.edu</u>, WMO Northern Hemisphere Ozone Mapping Center: <u>http://lap.physics.auth.gr/ozonemaps</u> WMO Antarctic Ozone Bulletin: <u>http://www.wmo.int/pages/prog/arep/gaw/ozone/index.html</u> World Ozone and Ultraviolet Data Center: <u>http://www.woudc.org</u> Ozone Hole Watch: <u>http://ozonewatch.gsfc.nasa.gov/</u> Assessments on the state of the ozone layer: <u>http://ozone.unep.org/en/assessment-panels/scientific-assessment-panel</u> Who is who in the Montreal Protocol: <u>http://www.unep.fr/ozonaction/montrealprotocolwhoswho/PageFlip.asp</u>

<sup>&</sup>lt;sup>3</sup> WMO ozone bulletins : http://www.wmo.int/pages/prog/arep/WMOAntarcticOzoneBulletins2015.html