Kaoru Sato

Position: Professor

Department of Earth and Planetary Science, Graduate School of Science, The University of Tokyo

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Research Topics

- ♦ Dynamics of atmospheric gravity waves in terms of generation, propagation and dissipation
- ♦ Dynamics of trapped waves on the equator, mid-latitude tropopause and polar vortex edge
- ♦ Interaction of large-scale circulation/oscillation and waves
- ♦ Three-dimensional transport and mixing of minor constituents
- Polar atmospheric sciences such as the katabatic winds, Antarctic ozone hole, and polar stratospheric/mesospheric clouds
- ♦ Interhemispheric and intra-hemispheric couplings through global circulations

Professional Experience

- ♦ JSPS Research Fellow, Graduate School of Science, Kyoto University, 1991-1993
- ♦ Research Associate, Center for Climate System Research, The University of Tokyo, 1993-1995
- ♦ Research Associate, Graduate School of Science, Kyoto University, 1995-1999
- ♦ Associate Professor, National Institute of Polar Research, 1999-2005
- ♦ Professor, Graduate School of Science, The University of Tokyo, 2005-present

Education

- B.S. (Geophysics), The University of Tokyo Started April 1980, Conferred March 1984
- M.S. (Geophysics), The University of Tokyo Started April 1984, Conferred March 1986

Supervisor: Prof. Taroh Matsuno

♦ PhD (Geophysics), Kyoto University

Started April 1988, Conferred March 1991

Thesis title "A study of sources and propagation of atmospheric gravity waves in the troposphere and lower stratosphere observed by the MU radar"

Supervisor: Prof. Isamu Hirota

Awards

- ♦ Yamamoto-Syono Award for Outstanding Papers, the Meteorological Society of Japan, 1991
- The Award of the Meteorological Society of Japan, the Meteorological Society of Japan, 1998
- ♦ The JMSJ Award, the Meteorological Society of Japan, 2010
- Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology, Japan, 2014
- Commendation of the Contributor of the Promotion of Building the Maritime Nation of Japan by the Prime Minister, Japan, 2015

Professional Activities

- ♦ Visiting Scientist, Northwest Research Associates, 1995-2000
- ♦ Wintering Party Member, The 44th Japanese Antarctic Research Expedition, 2002-2004
- ♦ Director of the Meteorological Society of Japan
- ♦ Vice-president of the Atmospheric and Hydrospheric Science section, Japan Geoscience Union
- Member of American Meteorological Society, American Geophysical Union, Society of Geomagnetism and Earth, Planetary and Space Sciences
- ♦ Member, Science Council of Japan, 2005-present
- ♦ Assistant to the President, The University of Tokyo, 2010-2011
- ♦ Chief Editor, Journal of the Meteorological Society of Japan, 2008-2010
- ♦ Commission Member, ICMA/IAMAS/IUGG, 2002-2006
- ♦ Scientific Discipline Representative, SCOSTEP, 2002-2012
- ♦ Scientific Steering Group Member (2013-), Co-leader of Gravity Wave Activity (2014-), SPARC/WCRP
- ♦ 109 peer-reviewed articles (including 10 Japanese articles) http://www-aos.eps.s.u-tokyo.ac.jp/~kaoru/CV/ronbun.html
- ♦ 27 invited talks in international conferences in past 10 years
- ♦ PI, The Program of the Antarctic Syowa MST/IS radar, 2000-present