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EDUCATION

Graduate School of Mathematical Sciences, University of Tokyo (1996–2001)

- Ph. D in Mathematical Sciences (March 29, 2001)

Graduate School of Science, University of Tokyo (1994–1996)

- M.S. in Earth and Planetary Physics

Tokyo Institute of Technology (1990–1994)

- B.S. in Applied Physics

EXPERIENCE

Assistan Professor (2002–present)

- Division of Earth and Planetary Sciences, Graduate School of Science, Hokkaido University (see <http://www.ep.sci.hokudai.ac.jp/>)
- Numerical modeling of planetary atmospheres
- Network management

Post doctoral fellow (2001–2002)

- Supported by Japan Society for the Promotion of Science (see <http://www.jsps.go.jp/>)
- Examine atmospheric convection in the Martian atmosphere by using numerical simulation.

Technical Assistant (1998–1999)

- Coordinate construction of official www and other Internet servers (see <http://www.ep.sci.hokudai.ac.jp>)

Teaching Assistant (1996–1997)

- Instruct Internet literacy and installation of Operating Systems (Windows, Linux)

PAPERS PRESENTED

Journals

- Y.O. Takahashi, H. Fujiwara, H. Fukunishi, M. Odaka, Y.-Y. Hayashi, S. Watanabe, 2003: Topographically induced north-south asymmetry of the meridional circulation in the Martian atmosphere, *J. Geophys. Res.*, 108(E7), 5018 5-1 – 5-16, doi:10.1029/2001JE001638.
- Yokohata, T., M. Odaka, and K. Kuramoto, 2002: Role of H₂O and CO₂ ices in Martian climate change, *Icarus*, 159, 439–448.
- Odaka M., K. Nakajima, M. Ishiwatari, and Y.-Y. Hayashi, 2001: A numerical simulation of thermal convection in the Martian lower atmosphere with a two-dimensional anelastic model. Nagare multimedia 2001, <http://www.nagare.or.jp/mm/2001/odaka/>
- Odaka M., 2001: A numerical simulation of Martian atmospheric convection with a two-dimensional anelastic model: A case of dust-free Mars. *Geophysical Research Letters*, 28, 895–898.
- Odaka, M., Nakajima, K., Takehiro, S., Ishiwatari, M., and Hayashi, Y.-Y., 1998: A numerical study of the Martian atmospheric convection with a two dimensional anelastic model. *Earth, Planet and Space*, 50, 431-0437.

Proceedings

- Takayama, K., T. Yokohata, M. Odaka, and K. Kuramoto, 2002: Partitioning of CO₂ and climate change on Mars, *Proc. of the 35th ISAS Lunar and Planetary Symposium, The Institute of Space and Astronautical Science.*, 9-12.

- Yokohata, T., Y. Kosugita, M. Odaka, and K. Kuramoto 2002: Radiative Absorption by CO₂ Ice Clouds on Early Mars: Implication to the Stability and Greenhouse Effect of the Clouds, *Proc. of the 35th ISAS Lunar and Planetary Symposium, The Institute of Space and Astronautical Science.*, 13-16.
- Odaka, M., K. Nakajima, M. Ishiwatari, and Y.-Y. Hayashi, 2001: A numerical simulation of Martian atmospheric convection with a two-dimensional anelastic model: dust injection due to convective wind *Proc. of the 34rd ISAS Lunar and Planetary Symposium, The Institute of Space and Astronautical Science.*, 17-21.
- Sugiyama, K., M. Odaka, K. Kuramoto, and Y.-Y. Hayashi, 2001: Thermodynamic calculation of the atmospheres of the Jovian planets, *Proc. of the 34rd ISAS Lunar and Planetary Symposium, The Institute of Space and Astronautical Science.*, 53-56.
- Odaka, M., K. Nakajima, M. Ishiwatari, and Y.-Y. Hayashi, 2000: A two-dimensional numerical simulation of Martian atmospheric convection: Comparison with a one-dimensional model with parameterized convection. *Proc. of the 33rd ISAS Lunar and Planetary Symposium, The Institute of Space and Astronautical Science.*, 181-184.
- Odaka, M., K. Nakajima, M. Ishiwatari, and Y.-Y. Hayashi, 1999: A two-dimensional numerical simulation of Martian atmospheric convection: Comparison with a one-dimensional model with parameterized convection. *Proc. of the 33rd ISAS Lunar and Planetary Symposium, The Institute of Space and Astronautical Science.*, 181-184.
- Odaka, M., K. Nakajima, M. Ishiwatari, and Y.-Y. Hayashi, 1999: A numerical simulation of Martian atmospheric convection driven by radiative forcing. *Proc. of the 32nd ISAS Lunar and Planetary Symposium, The Institute of Space and Astronautical Science.*, 200-203.
- Odaka, M., K. Nakajima, M. Ishiwatari, S. Takehiro, and Y.-Y. Hayashi, 1998: A numerical study of the Martian atmospheric convection with a two-dimensional anelastic model. *Proc. of the 31st ISAS Lunar and Planetary Symposium, The Institute of Space and Astronautical Science.*, 70-73.

OTHER PRODUCTS

Takehiro, S., K. Ishioka, Y. Morikawa, M. Odaka, M. Ishiwatari, Y.-Y. Hayashi, SPMODEL Development Group, 2004: Hierarchical Spectral Models for GFD (SPMODEL), <http://www.gfd-dennou.org/arch/spmodel/>, GFD Dennou Club.

Morikawa, Y., M. Odaka, M. Ishiwatari, Y.-Y. Hayashi, Gtool4 Development Group, 2004: gtool4 Fortran90 netCDF I/O library with gtool4 conventions, <http://www.gfd-dennou.org/arch/gtool4/>, GFD Dennou Club.