

# Norihiko Sugimoto

Professor

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## Education:

|           |      |   |
|-----------|------|---|
| 2002-2005 | D.Sc | Department of Geophysics, Kyoto University, Japan |
| 2000-2002 | M.Sc | Department of Geophysics, Kyoto University, Japan |
| 1996-2000 | B.Sc | Department of Physics, Kyoto University, Japan    |

## Employment:

Apr. 2020- Present: **Professor** at Keio University, Japan.

I study on geophysical fluid dynamics. I work on developing numerical model and data assimilation system for the Venus atmosphere to investigate general circulation and disturbances of the Venus atmosphere.

Apr. 2015- Mar. 2020: **Associate Professor** at Keio University, Japan.

Apr. 2014- Mar. 2016: **Visiting Researcher** at Ecole Polytechnique, Laboratoire de Meteorologie Dynamique, France.

Apr. 2008- Mar. 2015: **Lecturer** at Keio University, Japan.

Apr. 2005- Mar. 2008: **COE Researcher** at Nagoya University, Japan.

## Publication record and selected publications:

Overall 43 refereed publications (H-index 13), and more than 100 international conference contributions (oral presentations and posters) in the field of planetary sciences, geophysical fluid dynamics.

- **Generation of gravity waves from thermal tides in the Venus atmosphere**, N. Sugimoto, Y. Fujisawa, H. Kashimura, K. Noguchi, T. Kuroda, M. Takagi, and Y.-Y. Hayashi, *Nature Communications*, Vol.12, (2021), 3682, 9pp. Featured on Editors' Highlights webpage in Astronomy and planetary science.
- **Fully developed super-rotation driven by the mean meridional circulation in a Venus GCM**, N. Sugimoto, M. Takagi, and Y. Matsuda, *Geophysical Research Letters*, Vol.46, (2019), p1776–1784.
- **Planetary-scale streak structure reproduced in high-resolution simulations of the Venus atmosphere with a low-stability layer**, H. Kashimura, N. Sugimoto, M. Takagi, W. Ohfuchi, T. Enomoto, K. Nakajima, M. Ishiwatari, T. M. Sato, G. L. Hashimoto, T. Satoh, Y. O. Takahashi, and Y.-Y. Hayashi, *Nature Communications*, Vol. 10, (2019), 23, 11pp.
- **Development of an ensemble Kalman filter data assimilation system for the Venusian atmosphere**, N. Sugimoto, A. Yamazaki, T. Kouyama, H. Kashimura, T. Enomoto, and M. Takagi, *Scientific Reports*, Vol. 7, (2017), 9321, 9pp.
- **The puzzling Venusian polar atmospheric structure reproduced by a general circulation model**, H. Ando, N. Sugimoto, M. Takagi, H. Kashimura, T. Imamura, and Y. Matsuda, *Nature Communications*, Vol. 7, (2016), 10398, 8pp.

10th, November, 2022 (Date of CV)