

Eriko Nishimoto (西本 絵梨子)

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Contact

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Education

Jan 2013, Ph.D., Graduate School of Science, Kyoto University, Kyoto, Japan
Mar 2009, M.S., Graduate School of Science, Kyoto University, Kyoto, Japan
Mar 2007, B.S., School of Engineering, Osaka University, Osaka, Japan

Positions

Apr. 2018 – Dec. 2018: Project Scientist, Project Team for Advanced Climate Modeling, JAMSTEC

Apr. 2017 - Mar. 2018: Postdoctoral Researcher, Department of Seamless Environmental Prediction Research, JAMSTEC

Apr. 2013 - Mar. 2017: Program-Specific Researcher, Graduate School of Science, Kyoto University

Feb. 2013 - Mar. 2013: Part-time Researcher, Graduate School of Science, Kyoto University

Oct. 2012 - Jan. 2013: Clerical Assistant, Graduate School of Science, Kyoto University

Oct. 2012 - Mar. 2013: Part-time Researcher, Research Institute for Sustainable Humanosphere (RISH), Kyoto University

Oct. 2012-Mar. 2013: Part-time Researcher, Japan Aerospace Exploration Agency (JAXA)

Publications

Peer reviewed articles

2018

- Watanabe, S., K. Hamilton, S. Osprey, Y. Kawatani, and E. Nishimoto, 2018: First Successful Hindcasts of the 2016 Disruption of the Stratospheric Quasi-biennial Oscillation. *Geophys. Res. Lett.*, 45, 1602–1610, doi:10.1002/2017GL076406.

2017

- Bui, H.-H., E. Nishimoto, and S. Yoden, 2017: Downward Influence of QBO-Like Oscillation on Moist Convection in a Two-Dimensional Minimal Model Framework. *J. Atmos. Sci.*, 74, 3635–3655, doi:10.1175/JAS-D-17-0095.1.
- Nishimoto, E. and S. Yoden, 2017: Influence of the Stratospheric Quasi-Biennial Oscillation on the Madden–Julian Oscillation during Austral Summer. *J. Atmos. Sci.*, 74, 1105–1125, doi:10.1175/JAS-D-16-0205.1.

2016

- Nishimoto, E., S. Yoden, and H.-H. Bui, 2016: Vertical Momentum Transports Associated with Moist Convection and Gravity Waves in a Minimal Model of QBO-like Oscillation. *J. Atmos. Sci.*, 73, 2935–2957, doi:10.1175/JAS-D-15-0265.1.

2014

- Yoden, S., H-H. Bui, and E. Nishimoto, 2014: A Minimal Model of QBO-Like Oscillation in a Stratosphere-Troposphere Coupled System under a Radiative-Moist Convective Quasi-Equilibrium State. *SOLA*, 10, 112–116, doi:10.2151/sola.2014-023.

2013

- Imai, K., N. Manago, C. Mitsuda, Y. Naito, E. Nishimoto, T. Sakazaki, M. Fujiwara, L. Froidevaux, T. von Clarmann, G. P. Stiller, D. P. Murtagh, P. Rong, M. G. Mlyneczek, K. A. Walker, D. E. Kinnison, H. Akiyoshi, T. Nakamura, T. Miyasaka, T. Nishibori, S. Mizobuchi, K. Kikuchi, H. Ozeki, C. Takahashi, H. Hayashi, T. Sano, M. Suzuki, M. Takayanagi, M. Shiotani (2013), Validation of ozone data from the Superconducting Submillimeter-Wave Limb-Emission Sounder (SMILES), *J. Geophys. Res. Atmos.*, 118, 5750-5769, doi:10.1002/jgrd.50434.
- Nishimoto, E. and M. Shiotani (2013), Intraseasonal variations in the tropical tropopause temperature revealed by cluster analysis of convective activity, *J. Geophys. Res. Atmos.*, 118, 3545–3556, doi:10.1002/jgrd.50281

2012

- Nishimoto E. and M. Shiotani (2012), Seasonal and interannual variability in the temperature structure around the tropical tropopause and its relationship with convective activities, *J. Geophys. Res.*, 117, D02104, doi:10.1029/2011JD016936

2010

- Fujiwara M., H. Vömel, F. Hasebe, M. Shiotani, S.-Y. Ogino, S. Iwasaki, N. Nishi, T. Shibata, K. Shimizu, E. Nishimoto, J. Valverde-Canossa, H. B. Selkirk, and S. J. Oltmans (2010), Seasonal to decadal variations of water vapor in the tropical lower stratosphere observed with balloon-borne cryogenic frostpoint hygrometers, *J. Geophys. Res.*, 115, D18304, doi:10.1029/2010JD014179
- Nishi N., E. Nishimoto, H. Hayashi, M. Shiotani, H. Takashima, and T. Tsuda (2010), Quasi-stationary temperature structure in the upper troposphere over the tropical

indian ocean inferred from radio occultation data, *J. Geophys. Res.*, 115, D14112,
doi:10.1029/2009JD012857

Others (Japanese)

2016

- 山森美穂, 西本絵梨子, 安富奈津子, 江口菜穂, 佐藤薫: 「2015年気象学会女性の集い」開催報告, 天気, 63, 4, 2016.

2014

- 木下武也, 高麗正史, 岡本功太, 西本絵梨子, 坂崎貴俊, 関谷高志, 栗林康太, 西井和晃, 田口正和, 江口菜穂, 佐藤薫: 成層圏・対流圏過程とその気候における役割 (SPARC) 第5回総会報告, 天気, 61, 7, 2014.

2013

- 京都大学総合博物館企画展「海」実行委員会 編 『海は百面相』 (京都通信社) (2-3-03 : 「エルニーニョ・南方振動の構造」執筆) <http://www.kyoto-info.com/kyoto/books/wakuscience/umi.html>
- 稲飯洋一, 小石和成, 坂崎貴俊, 西本絵梨子, 杉立卓治, 櫻井万祐子, 山木望愛, 江口菜穂: 「熱帯対流圏界層に関する日米二国間ワークショップ: 研究の現状と観測の未来」に参加して, 天気, 60, 11, 2013.

Honors and Awards

Selected Participation to NCAR Advanced Study Program Summer Colloquium, June 2012, Boulder, Colorado, USA

Conferences (as a presenter)

International

Oral

2016

- Nishimoto E. and S. Yoden: Influence of the stratospheric Quasi-Biennial Oscillation on the Madden-Julian Oscillation during austral summer. The 5th KU-NTU Atmospheric Science Students/Young Scientists Exchange Program in 2016, Kyoto, Japan, 12 November 2016.
- Nishimoto E. and S. Yoden: Influence of the stratospheric Quasi-Biennial Oscillation on the Madden-Julian Oscillation during austral summer. SPARC QBO Workshop “The QBO and its Global Influence - Past, Present and Future”, Oxford, United Kingdom, 30 September 2016.

- Nishimoto E. and S. Yoden: Influence of the stratospheric Quasi-Biennial Oscillation on the Madden-Julian Oscillation during austral summer. International Symposium on the Whole Atmosphere (ISWA), Tokyo, Japan, 15 September 2016.
- Nishimoto E. and S. Yoden: Modulation of the Madden-Julian Oscillation by the Stratospheric Quasi-Biennial Oscillation during Austral Summer. International Workshop on the Madden-Julian Oscillation, Chengdu, China, 8 August 2016.
- Nishimoto E., S. Yoden and H-H. Bui: Vertical momentum transports associated with moist convection and gravity waves in a minimal model of QBO-like oscillation. The first international workshop on extreme weather in changing climate in the maritime continent, Bandung, Indonesia, 6 January 2016 (Invited).

2015

- Nishimoto E., S. Yoden and H-H. Bui: Vertical momentum transports associated with moist convection and gravity waves in a minimal model of QBO-like oscillation. The 1st Asian Conference on Meteorology, Kyoto, Japan, 27 October 2015.
- Nishimoto E., Shigeo YODEN, Hoang-Hai BUI: Momentum Budget Analysis in a Stratosphere-Troposphere Coupled System with Moist Convection and Gravity Waves. AOGS 12th Annual Meeting, Singapore, 6 August 2015.
- Nishimoto E., Shigeo YODEN, Masato SHIOTANI: Tropical Tropopause Temperature Response to Monsoon Convection in CMIP5 Models. AOGS 12th Annual Meeting, Singapore, 4 August 2015.
- Nishimoto E., S. Yoden and H-H. Bui: Momentum Transports associated with Moist Convection and Gravity Waves in a Minimal Model of QBO-like Oscillation. 18th Conference on Middle Atmosphere (95th American Meteorological Society Annual Meeting), Phoenix, Arizona, U.S., 8 Jan 2015.

2014

- Nishimoto E., S. Yoden and H-H. Bui: Characteristics of Gravity Waves and Moist Convection obtained from a Minimal Model of QBO-like Oscillation. Tropical Meteorology Workshop in Toyama, Japan, 11 Sep 2014.
- Nishimoto E., S. Yoden and M. Shiotani: Temperature Structure Around the Tropical Tropopause Derived from CMIP5 Models and Reanalysis Datasets. AOGS 11th Annual Meeting, Sapporo, Japan, 31 July 2014.
- Nishimoto E., S. Yoden and M. Shiotani: Stratosphere-troposphere coupling system associated with the tropical convection. Exchange program between National Taiwan University and Kyoto University, Taipei, Taiwan, 6 March 2014.

2013

- Nishimoto E. and M. Shiotani: Cluster analysis of the intraseasonal convection and its impact on the tropical tropopause temperature. Japan Geoscience Union Meeting 2013, Chiba, Japan, 24 May 2013.

- Nishimoto E. and M. Shiotani: Intraseasonal to interannual variations of the temperature structure around the tropical tropopause and their relationships with convective activities. ENSO Diversity Workshop, Boulder, CO, USA, 7 February 2013.

Poster

2017

- Nishimoto E. and S. Yoden: Thorough survey of zonal mean influence of the stratospheric QBO on the troposphere, Joint SPARC Dynamics & Observations Workshop - QBOi, FISAPS & SATIO-TCS, Kyoto, Japan, 9—14 October 2017.

2015

- Nishimoto E., S. Yoden and H-H. Bui: Evaluation of Vertical Momentum Transports associated with Moist Convection and Gravity Waves in a Minimal Model of QBO-like Oscillation, 20th Conference on Atmospheric and Oceanic Fluid Dynamics, Minneapolis, MN, 15—19 June 2015.

2014

- Nishimoto E. and M. Shiotani: Cluster Analysis of the Path of the MJO Convection - Different Impacts on the Tropical Tropopause Temperatures, AOGS 11th Annual Meeting, Sapporo, Japan, 30 July 2014.
- Nishimoto E., S. Yoden and M. Shiotani: A diagnostic tool for the temperature structure around the tropical tropopause. Stratosphere-troposphere Processes and their Role in Climate (SPARC) 2014 General Assembly, Queenstown, New Zealand, 12-17 January 2014.

2013

- Nishimoto E. and M. Shiotani: Response of temperature around the tropical tropopause to the convective activities. Workshop on Atmospheric Composition and the Asian Summer Monsoon (ACAM), Kathmandu, Nepal, 9-12 June 2013
- Nishimoto E. and M. Shiotani: Variability in the temperature structure around the tropical tropopause and its relationship with convective activity. WCRP Regional Workshop on Stratosphere-Troposphere Processes and their Role in Climate, Maskawa Hall, Kyoto University, Kyoto, Japan, 1-2 April 2013

2012

- Nishimoto E. and M. Shiotani: Intraseasonal to interannual variations of the temperature structure around the tropical tropopause and their relationships with convective activities. A U.S.-Japan Workshop on the Tropical Tropopause Layer, Honolulu, Hawaii, USA, 15-19 October 2012

2011

- Nishimoto E. and M. Shiotani: Variability of temperature structure around the tropical tropopause. WCRP OSC Climate Research in Service to Society, Boulder, CO, USA, 24-28 October 2011.

- Nishimoto E. and M. Shiotani: Zonally asymmetric temperature structure around the tropical tropopause and its relationship to deep convection. 16th Conference on Middle Atmosphere, Seattle, WA, USA, 23-27 January 2011.

2009

- Nishimoto E. and M. Shiotani: Zonally asymmetric temperature structure around the tropical tropopause and its relationship to deep convection in monsoon regions. IGAC-SPARC Joint Local Workshop in Kyoto, Kyoto, Japan. 25 October, 2009.

Domestic (Japanese)

Oral

2016

- 西本絵梨子, 余田成男: 成層圏準二年周期振動が熱帯積雲におよぼす影響について. 長期予報研究連絡会研究会「長期予報と大気大循環」. 気象庁, 東京都千代田区. 2016年12月9日.
- 西本絵梨子, 余田成男: 成層圏 QBO が南半球夏季 MJO におよぼす影響について. 日本気象学会 2016 年度秋季大会. 名古屋大学東山キャンパス, 愛知県名古屋市. 2016年10月26日.

2015

- 西本絵梨子, 余田成男, Hoang-Hai Bui: 二次元湿潤対流モデルで得られた QBO 的振動における鉛直運動量輸送の評価について. 日本気象学会 2015 年度春季大会. つくば国際会議場, 茨城県つくば市. 2015年5月21日.

2012

- 西本絵梨子, 塩谷雅人: 季節内周期振動の積雲伝播特性にもとづく分類と熱帯対流圏界面温度との関係. 日本気象学会 2012 年度秋季大会. 北海道大学, 北海道札幌市. 2012年10月3日-5日

2011

- 西本絵梨子, 塩谷雅人: 熱帯対流圏界面遷移層における東西非一様な温度場の成層圏準二年周期振動にともなう変動. 日本気象学会 2011 年度秋季大会. 名古屋大学, 愛知県名古屋市. 2011年11月16日-18日
- 西本絵梨子, 塩谷雅人: 熱帯対流圏界面遷移層における東西非一様な温度場の成層圏準二年周期振動にともなう変動. 第5回赤道大気レーダーシンポジウム(第182回生存圏シンポジウム). 京都大学宇治キャンパス, 京都府宇治市, 2011年9月8日-9日
- 西本絵梨子, 塩谷雅人: 熱帯対流圏界面遷移層における東西非一様な温度場の成層圏準二年周期振動にともなう変動. 熱帯気象研究会 2011. 京都大学吉田キャンパス, 京都府京都市. 2011年9月6日-7日

2010

- 西本絵梨子, 塩谷雅人: 熱帯対流圏界面付近にみられる馬蹄形温度構造の変動特性と熱帯域の対流活動との関係. 日本地球惑星科学連合 2010 年大会. 幕張メッセ, 千葉県千葉市. 2010 年 5 月 27 日
- 西本絵梨子, 塩谷雅人: 熱帯対流圏界面付近における東西非一様な温度構造の特性について. 第 24 回大気圏シンポジウム. JAXA 相模原キャンパス, 神奈川県相模原市. 2010 年 2 月 18 日

2009

- 西本絵梨子, 塩谷雅人: モンスーン時期の対流活動と関係した対流圏界面付近における温度構造. 日本気象学会 2009 年度春季大会. つくば国際会議場, 茨城県つくば市. 2009 年 5 月 30 日

Poster

2014

- 西本絵梨子, 余田成男, 塩谷雅人: CMIP5・再解析データセットにおける熱帯対流圏界面温度構造の再現性. 日本気象学会 2014 年度春季大会. 開港記念会館・情報文化センター(横浜市). 2014 年 5 月 21-24 日

2009

- 西本絵梨子, 塩谷雅人: 熱帯対流圏界面付近における東西非一様な温度構造の特性について. 熱帯気象研究会 2009 . 北海道大学, 北海道札幌市. 2009 年 9 月 29-30 日

Other Activities

2016

- 京都大学アカデミックデイ 2016 「成層圏と対流圏をつなぐ極端気象変動」 出展, 2016 年 9 月 18 日, 京都大学吉田キャンパス 百周年時計台記念館. [URL](#)

2015

- 2015 年気象学会女性の集い 運営メンバー, 2015 年 10 月 29 日(日本気象学会 2015 年度秋季大会第 2 日目), 京都市

2013

- 平成 25 年度 京都大学総合博物館企画展 「海」 展示協力, 2013 年 7 月 31 日—2013 年 12 月 1 日, 京都大学総合博物館.

2010

- 2010 年度気象若手会 夏の学校 運営メンバー, 2010 年 7 月 17 日—19 日, 京都府立ゼミナールハウス.

Reviews for

- Discussion of Atmospheric Chemistry and Physics (x1)
- Annales Geophysicae (x1)
- Journal of Geophysical Research: Atmospheres (x2)
- Geophysical Research Letters (x2)
- Journal of the Atmospheric Sciences (x1)