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### Education

2007: Ph.D., Earth and Planetary Sciences, Kyushu University, Japan

2003: M. S., Earth and Planetary Sciences, Kyushu University, Japan

2001: B. S., Earth and Planetary Sciences, Kyushu University, Japan

### Positions Held

04/2010-present: Japan Agency for Marine-Earth Science and Technology, Japan

05/2007-03/2010: Research Scientist, Advanced Earth Science & Technology  
Organization, Japan

04/2007-04/2007: Post-Doc Fellow, Kyushu University, Japan

04/2005-03/2007: Research Fellow (DC2), Japan Society for the Promotion of Science,  
Japan

### Professional Societies

Meteorological Society of Japan

American Geophysical Union

American Meteorological Society

### Referred Publications

**Nakano, M.**, and M. Matsueda, 2011: Future Projection of heatwave around Japan using a high-resolution AGCM and a RCM, *Geophys. Res. Lett.* (submitted).

Kanada, S., A. Wada, T. Kato, and **M. Nakano**, 2011: Effect of the PBL schemes on the development of an intense tropical cyclone using a cloud resolving model, *J. Geophys. Res.* (submitted).

**Nakano, M.**, T. Kato, S. Hayashi, S. Kanada, Y. Yamada, and K. Kurihara, 2011:

- Development of a 5-km-mesh cloud-system-resolving regional climate model at the Meteorological Research Institute, *J. Meteor. Soc. Japan* (in revise).
- Murata, A., **M. Nakano**, S. Kanada, K. Kurihara, and H. Sasaki, 2011: Summertime temperature extremes over Japan in the late 21st-century climate projected by a high-resolution regional climate model, *J. Meteor. Soc. Japan* (in revise).
- Kanada, S., **M. Nakano**, and T. Kato, 2011: Projection of Future Changes in Precipitation and Vertical Structures of the Frontal Zone during the Baiu Season in the vicinity of Japan Using a 5-km-mesh Regional Climate Model. *J. Meteor. Soc. Japan* (accepted).
- Nakano, M.**, S. Kanada, T. Kato, and K. Kurihara, 2011: Monthly maximum number of consecutive dry days in Japan and its reproducibility by a 5-km-mesh cloud-system resolving regional climate model, *Hydrol. Res. Lett.*, 5, 11-15.
- Kanada, S., **M. Nakano**, and T. Kato, 2010: Climatological Characteristics of Daily Precipitation over Japan in the Kakushin Regional Climate Experiments Using a Non-Hydrostatic 5-km-Mesh Model: Comparison with an Outer Global 20-km-Mesh Atmospheric Climate Model, *SOLA*, 6, 117-120.
- Kanada, S., **M. Nakano** and T. Kato, 2010: Changes in mean atmospheric structures around Japan during July due to global warming in regional climate experiments using a cloud-system resolving model, *Hydrol. Res. Lett.*, 4, 11-14.
- Nakano, M.**, S. Kanada and T. Kato, 2010: Statistical analysis of simulated direct and indirect precipitation associated with typhoons around Japan using a cloud-system resolving model, *Hydrol. Res. Lett.*, 4, 6-10.
- Oku, Y, T. Takemi, H. Ishikawa, S. Kanada and **M. Nakano**, 2010: Representation of Extreme Weather during a Typhoon Landfall in Regional Meteorological Simulations: A Model Intercomparison Study for Typhoon Songda (2004), *Hydrol. Res. Lett.*, 4, 1-5.
- Kanada, S., **M. Nakano**, S. Hayashi, T. Kato, M. Nakamura, K. Kurihara and A. Kitoh, 2008: Reproducibility of Maximum Daily Precipitation Amount over Japan by a High-resolution Non-hydrostatic Model., *SOLA*, 4, 105-108

#### Presentations (International conference only)

- Sakai, D., **M. Nakano**, and M. Matsueda, 2011: Simulated Relationship between Extreme Temperature Events in Japan and Pressure Patterns around Japan in August by MRI-AGCM3.2, AOGS 2011.
- Sakai, D., **M. Nakano**, and M. Matsueda, 2011: Simulated Relationship between Extreme Temperature Events in Japan and Pressure Patterns around Japan in

August by MRI-AGCM3.2, 2011 East Asian Climate,(EAC) Workshop.

**Nakano, M.**, S. Kanada, T. Kato and K. Kurihara, 2011: Reproducibility and future projection of monthly maximum number of consecutive dry days in Japan: Improvement by a 5-km-mesh regional climate model, 91st AMS Annual Meeting.

Kanada, S., **M. Nakano**, and T. Kato, 2010: Projection of the future change in precipitation in the vicinity of Japan during the rainy season using a 5-km-mesh regional climate model, AGU Fall Meeting.

Kanada, S., **M. Nakano**, and T. Kato, 2010: Projection of the future change in precipitation in the vicinity of Japan during the rainy season using a 5 - km - mesh regional climate model, 2010 International Workshop of TCCIP Project on Climate Change (invited).

**Nakano, M.**, H. Murakami, S. Kanada, and T. Kato, 2010: Future changes of precipitation associated with typhoons around Japan simulated by a 5-km-mesh regional climate model, 2010 International Workshop of TCCIP Project on Climate Change (invited).

**Nakano, M.**, S. Kanada, T. Kato, and K. Kurihara, 2011: Intercomparison of Precipitation-based Extremes Indices over Japan Simulated by 60km and 20km-mesh AGCMs and 5km-mesh RCM, XXV IUGG General Assembly

**Nakano, M.**, S. Kanada, and T. Kato 2011: Intercomparison of precipitation-based extremes indices over Japan simulated by 60km and 20km-mesh AGCMs and 5km-mesh RCM, EGU General Assembly 2011.

**Nakano, M.**, and, S. Kanada, H. Murakami, T. Kato, S. Hayashi, M. Nakamura, K. Kurihara,2009: Typhoons Reproduced in a 5km-mesh Regional Climate Model, MOCA-09.

Kanada, S., and, M. Nakamura, **M. Nakano**, S. Hayashi, T. Kato, H. Sasaki, T. Uchiyama, K. Aranami, Y. Honda, K. Kurihara, A. Kitoh, 2009:Projection of the Changes in the Future Extremes over Japan Using a Cloud-Resolving Non-Hydrostatic Model (JMA-NHM) with Horizontal Resolutions of Several Kilometers, MOCA-09.

Kanada, S., **M. Nakano**, M. Nakamura, S. Hayashi, T. Kato, H. Sasaki, T. Uchiyama, K. Aranami, Y. Honda, K. Kurihara, A. Kitoh, 2009, Projection of the Changes in the Future Extremes over Japan Using a Cloud-Resolving Model (JMA-NHM): Change in heavy precipitation, 2nd Lund Regional-scale Climate Modelling Workshop.

**Nakano, M.**, S. Kanada, M. Nakamura, S. Hayashi, T. kato, H. Sasaki, T. Uchiyama, K. Aranami, Y. Honda, K. Kurihara and A. Kitoh, 2009, Projection of the Changes in the Future Extremes over Japan Using a Cloud-Resolving Model (JMA-NHM):

Model Verification and First Results, 2nd Lund Regional-scale Climate Modelling Workshop.

**Nakano M.**, S.Kanada, S.Hayashi, T.Kato, H.Sasaki, T.Uchiyama, K.Aranami, Y.Honda, M.Nakamura, K.Kurihara, A.Kitoh,2009, Projection of the Changes in the Future Extremes over Japan using a Cloud-Resolving Model (JMA-NHM) (1): Model verification and first results, International Workshop on Global Change Projection: Modeling, Intercomparison, and Impact Assessment jointly with 2nd International Workshop on KAKUSHIN Program.

Kanada S., **M. Nakano**, S. Hayashi, T. Kato, H.Sasaki, T.Uchiyama, K. Aranami, Y. Honda, M. Nakamura, K. Kurihara, A. Kitoh,2009, Projection of the Changes in the Future Extremes over Japan Using Cloud-Resolving Model (JMA-NHM) (2): Change in heavy precipitation, International Workshop on Global Change Projection: Modeling, Intercomparison, and Impact Assessment jointly with 2nd International Workshop on KAKUSHIN Program.

**Nakano M.**, S.Kanada, S.Hayashi, T.Kato, H.Sasaki, T.Uchiyama, K.Aranami, Y.Honda, M.Nakamura, K.Kurihara, A.Kitoh, 2008, Projection of the change in future extremes over Japan using a cloud-resolving model: (1) Model verification and first results, AGU Fall Meeting, GC53A-0685.

Kanada S., and, M. Nakamura, **M. Nakano**, S. Hayashi, T. Kato, H. Sasaki, T. Uchiyama, K. Aranami, Y. Honda, K. Kurihara, A. Kitoh, 2008, Projection of the change in future extremes over Japan using a cloud-resolving model: (2) Precipitation Extremes and the results of the NHM-1km experiments, AGU Fall Meeting, GC53A-0686.

**Nakano, M.**, K.,Nakajima, 2006, The Effect of Vertical Wind Shear on Vortex Formation in Cooling Region, Fall meeting of the American Geophysical Union, A13E-0982.

**Nakano, M.**, K.,Nakajima, 2004, Influence of vertical wind shear on the initial vortex formation of tropical cyclone, 26th Conference on Hurricanes and Tropical Meteorology, P1.49.

#### Thesis

**M. Nakano**, 2007, A numerical study on the incipient vortices for tropical cyclones: Genesis of low level vortices induced by rain evaporation and its sensitivity to vertical wind shear, Ph.D. thesis, Kyushu University p.p.122

#### Software

Grid Modeling System: <http://www.gfd-dennou.org/library/gms/index.htm.en>

### Funds

2009: UJCC-NCAS Climate Modeling Summer School (2,600 GBP)

2005-2006: JSPS: Grant-in-Aid for JSPS Fellows (1,800,000 JPY)

2004: Kyusyu University Foundation: support for attending the 26<sup>th</sup> conference on Hurricanes and tropical meteorology of AMS in Miami (150,000 JPY)