Sho Arakane (荒金匠)

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EDUCATION

2009/04 – 2014/09		Depart. of Earth and Planetary Science, The Univ. of Tokyo, Japan
2007/04 – 2009/03	M.S.	Depart. of Earth and Planetary Science, The Univ. of Tokyo, Japan
2001/04 – 2006/03	B.A.	Depart. of Physics, Tokyo University of Science, Japan

ADDITIONAL DEGREE

2022/03 Ph.D. Depart. of Earth and Planetary Science, The Univ. of Tokyo, Japan

EMPLOYMENT

2023/09 – present	Postdoctoral Scholar	RCEC, Academia Sinica, Taiwan
2022/04 – 2023/08	Doctoral Researcher	Faculty of Environmental Earth Science, Hokkaido Univ., Japan
2019/10 – 2022/03	Technician	Atmosphere and Ocean Research Institute, The Univ. of Tokyo, Japan
2016/01 – 2019/09	Research Assistant	RCEC, Academia Sinica, Taiwan
2014/10 – 2015/12	Technical Staff	Geosphere Environmental Technology Corp., Japan

ACADEMIC SERVICE

Journal review:

Climate Dynamics
npj Climate and Atmospheric Science
Scientific Online Letters on the Atmosphere (SOLA)
Theoretical and Applied Climatology

REPRESENTATIVE PUBLICATIONS (*: corresponding author)

1. **Arakane, S.*** and T. Horinouchi, 2024: Evaluations of actual and adjusted wind–pressure relationship of tropical cyclone using aircraft-assisted best track data. *SOLA*, 20, 23–30, doi:10.2151/sola.2024-004.
2. **Arakane, S.*** and H.-H. Hsu, 2021: Tropical cyclone footprints in long-term mean state and multiscale climate variability in the western North Pacific as seen in the JRA-55 reanalysis. *J. Climate*, 34, 7443–7460, doi:10.1175/JCLI-D-20-0887.1.

3. **Arakane, S.*** and H.-H. Hsu, 2020: A tropical cyclone removal technique based on potential vorticity inversion to better quantify tropical cyclone contribution to the background circulation. *Climate Dyn.*, 54, 3201–3226, doi:10.1007/s00382-020-05165-x.
4. **Arakane, S.**, H.-H. Hsu*, C.-Y. Tu, H.-C. Liang, Z.-Y. Yan, and S.-J. Lin, 2019: Remote effect of a tropical cyclone in the Bay of Bengal on a heavy-rainfall event in subtropical East Asia. *npj Climate Atmos. Sci.*, 2:25, doi:10.1038/s41612-019-0082-8.
5. Hirota, N.*, Y. N. Takayabu, M. Kato, and **S. Arakane**, 2016: Roles of an atmospheric river and a cutoff low in the extreme precipitation event in Hiroshima on 19 August 2014. *Mon. Wea. Rev.*, 144, 1145–1160, doi:10.1175/MWR-D-15-0299.1.
6. **Arakane, S.***, M. Satoh, and W. Yanase, 2014: Excitation of deep convection to the north of Tropical Storm Bebinca (2006). *J. Meteor. Soc. Japan*, 92, 141–161, doi:10.2151/jmsj.2014-201.

PRESENTATION (oral presentation in English)

1. Arakane, S., and H.-H. Hsu: Tropical cyclone removal dataset and its application to climate research over the western North Pacific. 6th WCRP International Conference on Reanalysis (Tokyo, Japan, 2024.10).
2. Arakane, S., H.-H. Hsu, M. Satoh, T. Miyakawa, and M. Watanabe: Effect of tropical cyclones on the northward propagation of boreal summer intraseasonal oscillation over the western North Pacific. 36th Conference on Hurricanes and Tropical Meteorology (Long Beach, United States, 2024.5).
3. Arakane, S., and H.-H. Hsu: Tropical cyclone removal technique based on potential vorticity inversion and its application in climate diagnostics. AOGS 16th Annual Meeting (Singapore, Singapore, 2019.8).
4. Arakane, S., H.-H. Hsu, C.-Y. Tu, H.-C. Liang, Z.-Y. Yan, and S.-J. Lin: Remote triggering effect of a tropical cyclone in the Bay of Bengal on a heavy rainfall event in subtropical East Asia, the 2019 Taipei Severe Weather and Extreme Precipitation Workshop (Taipei, Taiwan, 2019.4).
5. Arakane, S., and H.-H. Hsu: New tropical cyclone removal technique based on potential vorticity inversion and its application in climate diagnostics. Japan Geoscience Union Meeting (Makuhari, Japan, 2018.5).
6. Arakane, S., M. Satoh, and W. Yanase: Numerical study on the rapid development of the deep convection to the north of Typhoon Bebinca. The Fourth Japan-China-Korea Joint Conference on Meteorology (Tsukuba, Japan, 2009.11).

PRESENTATION (poster presentation in English)

1. Arakane, S., and T. Horinouchi: Evaluations of actual and adjusted wind-pressure relationship of tropical cyclone using aircraft-assisted best track data. 36th Conference on Hurricanes and Tropical Meteorology (Long Beach, United States, 2024.5).
2. Arakane, S., M. Satoh, and W. Yanase: Numerical study on the rapid development of the deep convection to the north of Typhoon Bebinca. Asian Science Seminar 2009 by Japan and Korea (Seoul, Korea, 2009.10).
3. Arakane, S., M. Satoh, and W. Yanase: Numerical study on the rapid development of the deep convection to the north of Typhoon Bebinca. University Allied Workshop (Seoul, Korea, 2009.6).