

**Professional Address****Birthdate**


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Senior Researcher  
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2 Nov. 1977

**Education**


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Dr. Sci. Department of Geophysics, Graduate School of Science, Kyoto University (2005)  
 M.S. Department of Geophysics, Graduate School of Science, Kyoto University (2002)  
 B.S. Department of Mathematics, Faculty of Science, Kyoto University (2000)

**Research Experience**


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04/2014 – present Senior Researcher, Meteorological Research Institute, Japan Meteorological Agency.  
 04/2022 – present Research Professor, Institute of Radiation Emergency Medicine, Hiroasaki University.  
 04/2019 – present Cooperative Researcher, Research Institute for Humanity and Nature, National Institutes for the Humanities.  
 04/2019 – present Guest Researcher, Institute of Radiation Emergency Medicine, Hiroasaki University.  
 02/2014 – 03/2014 Alternated Sponsored Fellow (ASF), Pacific Northwest National Laboratory, USA.  
 12/2013 – 03/2018 Guest researcher, Advanced Institute for Computational Science, RIKEN  
 02/2012 – 02/2013 Alternated Sponsored Fellow (ASF), Pacific Northwest National Laboratory, USA.  
 11/2010 – 03/2014 Researcher, Meteorological Research Institute, Japan Meteorological Agency.  
 04/2010 – 10/2010 Project Assistant Professor, Research Center for Advanced Science and Technology, The University of Tokyo.  
 04/2007 – 03/2010 Postdoctoral Fellow of Japan Society for the Promotion of Science (PD), Research Center for Advanced Science and Technology, University of Tokyo.  
 04/2006 – 03/2007 Postdoctoral Fellow (21st century COE program researcher), Disaster Prevention Research Institute, Kyoto University.  
 04/2005 – 03/2006 Postdoctoral Fellow of Japan Society for the Promotion of Science (PD), Disaster Prevention Research Institute, Kyoto University.  
 06/2004 – 07/2004 Visiting Researcher, Center for Global and Regional Environmental Research, University of Iowa, USA.  
 04/2004 – 03/2005 Research Fellow of Japan Society for the Promotion of Science (DC2), Disaster Prevention Research Institute, Kyoto University.  
 06/2003 – 08/2003 YSSPer (Young Scientists Summer Program), Transboundary Air Pollution research group, International Institute for Applied Systems Analysis, Austria  
 04/2002 – 03/2004 Research Assistant, Disaster Prevention Research Institute, Kyoto University.

**Education Experience**


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11/2022 – present Professor, Cooperative Graduate School System, Faculty of Life and Environmental Sciences, University of Tsukuba.

11/2016–10/2022 Associate Professor, Cooperative Graduate School System, Faculty of Life and Environmental Sciences, University of Tsukuba.  
Latter semester, 2022 Adjunct lecturer, Faculty of Agriculture, Tokyo University of Agriculture and Technology.  
First semester, 2014 Adjunct lecturer, Environmental & Renewable Energy Systems, Graduate School of Engineering, Gifu University.  
Latter semester, 2013 Adjunct lecturer, Environmental and Renewable Energy Systems, Graduate School of Engineering, Gifu University.  
Full semester, 2008 Adjunct lecturer, The Department of Elementary Education, Faculty of Letters, Tsuru University.  
Latter semester, 2007 Adjunct lecturer, Environmental & Renewable Energy Systems, Graduate School of Engineering, Gifu University.

### ***Awards***

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Research Paper Award at Japan Society for Atmospheric Environment, 2015.  
Research Paper Award at Japan Association of Aerosol Science and Technology, 2012.

### ***International publications (Peer reviewed): first author: 27, non-first corresponding: 1, contributing author: 101***

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#### ***In preparation***

133. Wang, K. Y., P. Nedelec, H. Clark, **M. Kajino**, Atmospheric responses to the January 2022 eruption of Hunga-Tonga Ha'apai volcano, to be submitted to *Sci. Rep.*

#### ***In review***

132. Inomata, Y., A. Matsuki, **M. Kajino**, Y. Chigira, H. Kaneyasu, T. Seto, Decreased trend of PM<sub>2.5</sub> and BC observed on the central and western Japanese islands and its association with interannual changes in transboundary transport patterns, submitted to *Atmos. Environ.*
131. Ching, J., **M. Kajino**, S. Hayashida, Examining air quality change during COVID-19 in Delhi from ground-based observations and regional meteorology-chemistry model simulations, *Atmos. Environ.*, in review.
130. Ching, J., **M. Kajino**, H. Matsui, Coanalysis of atmospheric warming and respiratory deposition of black carbon from a socioeconomic perspective, *Sci. Rep.*, in revision.

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144. **Kajino, M.**, Kayaba, S., Ishihara, Y., Iwamoto, Y., Okuda, T., and H. Okochi, Numerical simulation of IL-8-based relative inflammation potentials of aerosol particles from vehicle exhaust and non-exhaust emission sources, *Atmos. Environ.: X*, 21, 100237, <https://doi.org/10.1016/j.aeaoa.2024.100237>, 2024. (Jan. 18)

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128. Yamagami, A., **M. Kajino**, T. Maki, and T. Toyoda, Spatiotemporal variations in summertime Arctic aerosol optical depth caused by synoptic-scale atmospheric circulation in three reanalyses, *J. Geophys. Res.*, 128, e2022JD038007, 10 pp., <https://doi.org/10.1029/2022JD038007>, 2023. (Oct. 17)
127. Kayaba, S. and **M. Kajino**, Potential impacts of energy and vehicle transformation through 2050 on oxidative stress-inducing PM<sub>2.5</sub> metals concentration in Japan, *GeoHealth*, 7, e2023GH000789, 29 pp., <https://doi.org/10.1029/2023GH000789>, 2023. (Oct. 14)
126. Kayaba, S. and **M. Kajino**, Potential impact of battery electric vehicle penetration and changes in upstream process emissions assuming night-charging on summer O<sub>3</sub> concentrations in Japan, *J. Geophys. Res.*, 128, e2022JD037578, 21 pp., <https://doi.org/10.1029/2022JD037578>, 2023. (May 22)
125. Sato, Y., **M. Kajino**, S. Hayashi, and R. Wada, A numerical study of lightning-induced NO<sub>x</sub> and formation of NO<sub>y</sub> observed at the summit of Mt. Fuji using an explicit bulk lightning and photochemistry model, *Atmos. Environ.: X*,

- 18, 100218, <https://doi.org/10.1016/j.aeaoa.2023.100218>, 2023. (May 4)
- Corrigendum** issued at <https://doi.org/10.1016/j.aeaoa.2023.100231> (Dec. 26)
124. Kuramochi, M., **M. Kajino**, and H. Ueda, Interannual variability of dust deposition in Japan during spring season and related atmospheric circulation fields, *J. Meteor. Soc. Japan*, 101(4), 255-270, <https://doi.org/10.2151/jmsj.2023-016>, 2023. (Mar. 30)
123. Hidaka, A., S. Kawashima, **M. Kajino**, Radio-tellurium released into the environment during the complete oxidation of fuel cladding, containment venting and reactor building failure of the Fukushima accident, *J. Nucl. Sci. Technol.*, 60(7), 743-758, <https://doi.org/10.1080/00223131.2022.2142311>, 2023. (Jan 25)
122. Sekiyama, T. T., Y. Kurosaki, **M. Kajino**, M. Ishizuka, B. Buyantogtokh, J. Wu, and T. Maki, Improvement in dust storm simulation by considering stone coverage effects for stony deserts in East Asia, *J. Geophys. Res.*, 128, e2022JD037295, <https://doi.org/10.1029/2022JD037295>, 2023. (Jan. 11)
121. Wada, R., S. Yonemura, A. Tani, and **M. Kajino**, Review: Exchanges of O<sub>3</sub>, NO, and NO<sub>2</sub> between forest ecosystems and the atmosphere, *J. Agric. Meteorol.*, 79(1), 38-48, <https://doi.org/10.2480/agrmet.D-22-00023>, 2023. (Oct. 24, 2022, accepted)
120. Maki, T., K. Hosaka, K. Lee, Y. Kawabata, **M. Kajino**, M. Uto, K. Kita, and Y. Igarashi, Vertical distribution of airborne microorganisms over forest environments: a potential source of ice nucleating bioaerosols, *Atmos. Environ.*, 302, 119726, <https://doi.org/10.1016/j.atmosenv.2023.119726>, 2023. (Mar. 15)
119. Fujitani, Y., A. Furuyama, M. Hayashi, H. Hagino, and **M. Kajino**, Assessing oxidative stress induction ability and oxidative potential of PM<sub>2.5</sub> in cities in eastern and western Japan, *Chemosphere*, 324, 138308, <https://doi.org/10.1016/j.chemosphere.2023.138308>, 2023. (Mar. 6)
118. Singh, T., Y. Matsumi, T. Nakayama, S. Hayashida, P. K. Patra, N. Yasutomi, P. Khatri, **M. Kajino**, K. Yamaji, R. Imasu, M. Takigawa, S. K. Dhaka, Narendra, R. Khaiwal, S. Mor, K. Vatta, M. S. Bhatti, A. P. Dimri, A. Sharma, Very high particulate pollution over northwest India captured by a high-density in situ sensor network, *Sci. Rep.*, 13:13201, <https://doi.org/10.1038/s41598-023-39471-1>, 2023. (Aug. 14)
117. Wang, Y., H. Okochi, Y. Tani, H. Hayami, Y. Minami, N. Katsumi, M. Takeuchi, A. Sorimachi, Y. Fujii, **M. Kajino**, K. Adachi, Y. Ishihara, Y. Iwamoto, and Y. Niida, Airborn hydrophilic microplastics in cloud water at high altitudes and their role in cloud formation, *Environ. Chem. Lett.*, 21, 3055-3062, <https://doi.org/10.1007/s10311-023-01626-x>, 2023. (Aug. 14)
- (2022)
116. **Kajino, M.**, A. Kamada, N. Tanji, M. Kuramochi, M. Deushi, and T. Maki, Quantitative influences of interannual variations in meteorological factors on surface ozone concentration in the hot summer of 2018 in Japan, *Atmos. Environ.: X*, 16, 100191, <https://doi.org/10.1016/j.aeaoa.2022.100191>, 2022. (Oct. 4)
115. **Kajino, M.**, A. Watanabe, M. Ishizuka, K. Kita, Y. Zaizen, T. Kinase, R. Hirai, K. Konnai, A. Saya, K. Iwaoka, Y. Shiroma, H. Hasegawa, N. Akata, M. Hosoda, S. Tokonami, and Y. Igarashi, Reassessment of the radiocesium resuspension flux from contaminated ground surfaces in eastern Japan, *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-22-783-2022>, 2022. (Jan. 18)
114. Watanabe, M., **M. Kajino**, K. Ninomiya, Y. Nagahashi, and A. Shinohara, Eight-year variations in atmospheric radiocesium in Fukushima city, *Atmos. Chem. Phys.*, 22, 675-692, <https://doi.org/10.5194/acp-22-675-2022>, 2022. (Jan. 17) (corresponding author)
113. Yamagami, A., **M. Kajino**, T. Maki, Statistical evaluation of the temperature forecast error in the lower-level troposphere on short-range timescales induced by aerosol variability, *J. Geophys. Res.*, 127, e2022JD036595, <https://doi.org/10.1029/2022JD036595>, 2022. (Jun 15)
112. Doan, V.-Q., F. Chen, H. Kusaka, J. Wang, **M. Kajino**, and T. Takemi, Identifying a new normal in extreme precipitation at a city scale under warmer climate regimes: A case study of the Tokyo metropolitan area, Japan, *J. Geophys. Res.*, 127, e2022JD036810, <https://doi.org/10.1029/2022JD036810>, 2022. (Oct. 17, accepted)
111. Wang, K.-Y., P. Nedelec, H. Clark, N. Harris, **M. Kajino**, and Y. Igarashi, Impacts on air dose rates after the Fukushima accident over the North Pacific from 19 March 2011 to 2 September 2015, *PLoS ONE*, 17(8), e0272937, <https://doi.org/10.1371/journal.pone.0272937>, 2022. (Aug. 24)
110. Kinase, T., K. Adachi, M. Hayashi, K. Hara, K. Nishiguchi, and **M. Kajino**, Characterization of aerosol particles

- containing trace elements (Ga, As, Rb, Mo, Cd, Cs, Tl, and others) and their atmospheric concentrations with a high temporal resolution, *Atmos. Environ.*, 290, 119360, <https://doi.org/10.1016/j.atmosenv.2022.119360>, 2022. (Aug. 29)
109. Maki, T., T. Y. Tanaka, T. Koshiro, A. Shimizu, T. T. Sekiyama, **M. Kajino**, Y. Kurosaki, T. Okuro, and N. Oshima, Changes in dust emissions in the Gobi Desert due to global warming using MRI-ESM2.0, *Sci. Online Lett. Atmos.*, 18, 190-193, <https://doi.org/10.2151/sola.2022-035>, 2022 (Sep. 6)
108. Adachi, K., J. E. Dibb, E. Scheuer, J. M. Katich, J. P. Schwarz, A. E. Perring, B. Medavilla, H. Guo, P. Campuzano-Jost, J. L. Jimenez, J. Crawford, A. J. Soja, N. Oshima, **M. Kajino**, T. Kinase, L. Kleinman, A. J. Sedlacek III, R. J. Yokelson, and P. R. Buseck, Fine ash-bearing particles as a major aerosol component in biomass burning smoke, *J. Geophys. Res.*, 127, e2021JD035657, <https://doi.org/10.1029/2021JD035657>, 2022. (Jan. 19)
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107. **Kajino, M.**, N. Tanji, M. Kuramochi, Better prediction of surface ozone by a superensemble method using emission sensitivity runs in Japan, *Atmos. Environ.: X*, 12, 100120, <https://doi.org/10.1016/j.aeaoa.2021.100120>, 2021. (Jul. 21)
106. **Kajino, M.**, M. Deushi, T. T. Sekiyama, N. Oshima, K. Yumimoto, T. Y. Tanaka, J. Ching, A. Hashimoto, T. Yamamoto, M. Ikegami, A. Kamada, M. Miyashita, Y. Inomata, S. Shima, P. Khatri, A. Shimizu, H. Irie, K. Adachi, Y. Zaizen, Y. Igarashi, H. Ueda, T. Maki, M. Mikami, Comparison of three aerosol representations of NHM-Chem (v1.0) for the simulations of air quality and climate-relevant variables, *Geosci. Model Dev.*, 14, 2235-2264, <https://doi.org/10.5194/gmd-14-2235-2021>, 2021. (Apr. 30)
105. **Kajino, M.**, H. Hagino, Y. Fujitani, T. Morikawa, T. Fukui, K. Onishi, T. Okuda, and Y. Igarashi, Simulation of the transition metal-based cumulative oxidative potential in East Asia and its emission sources in Japan, *Sci. Rep.*, 11:6550, <https://doi.org/10.1038/s41598-021-85894-z>, 12 pp., 2021. (Mar. 22)
104. **Kajino, M.**, K. Adachi, Y. Igarashi, Y. Satou, M. Sawada, T. T. Sekiyama, Y. Zaizen, A. Saya, H. Tsuruta, and Y. Moriguchi, Deposition and dispersion of radio-caesium released due to the Fukushima nuclear accident: 2. Sensitivity to aerosol microphysical properties of Cs-bearing microparticles (CsMP), *J. Geophys. Res.*, 126(1), e2020JD033460, <https://doi.org/10.1029/2020JD033460>, 23 pp., 2021. (Jan. 16)
103. Nakata M., **M. Kajino**, Y. Sato, Effects of mountains on aerosols determined by AERONET/DRAGON/J-ALPS measurements and regional model simulations, *Earth Space Sci.*, 8, e2021EA001972, <https://doi.org/10.1029/2021EA001972>, 2021. (Nov. 16)
102. Sekiyama, T. T. and **M. Kajino**, Performance of a 250-m grid Eulerian dispersion simulation evaluated at two coastal monitoring stations in the vicinity of the Fukushima Daiichi Nuclear Power Plant, *J. Meteor. Soc. Japan*, 99(4), 1089-1098, <https://doi.org/10.2151/jmsj.2021-052>, 2021. (May 10)
101. Niwano, M., **M. Kajino**, T. Kajikawa, T. Aoki, Y. Kodama, T. Tanikawa, and S. Matoba, Quantifying relative contributions of light-absorbing particles from domestic and foreign sources on snow melt at Sapporo, Japan, *Geophys. Res. Lett.*, 48, e2021GL093940, 10 pp., <https://doi.org/10.1029/2021GL093940>, 2021. (Aug. 3)
100. Sekiyama, T. T., **M. Kajino**, M. Kunii, Ensemble dispersion simulation of a point-source radioactive aerosol using perturbed meteorological fields over eastern Japan, *Atmosphere*, 12, 662, <https://doi.org/10.3390/atmos12060662>, 2021. (May 22)
99. Kim, C.-H., F. Meng, **M. Kajino**, J. Lim, W. Tan, J.-J. Lee, Y. Kiriya, J.-H. Woo, K. Sato, T. Kitada, J. Kim, K. B. Lee, S. A. Roh, H.-Y. Jo, and Y.-J. Jo, Comparative numerical study of PM<sub>2.5</sub> in exit-and-entrance areas associated with transboundary transport over China, Japan, and Korea, *Atmosphere.*, 12, 469, <https://doi.org/10.3390/atmos12040479>, 20 pp., 2021. (Apr. 8)
98. Inomata, Y., M. Takeda, N. Thao, **M. Kajino**, T. Seto, H. Nakamura, and K. Hayakawa, Particulate PAH transport associated with adult chronic cough occurrence closely connected with meteorological conditions: A modelling study, *Atmosphere*, 12, 1163, <https://doi.org/10.3390/atmos12091163>, 14 pp., 2021. (Sep. 10)
97. Misra, P., M. Takigawa, P. Khatri, S. K. Dhaka, A. P. Dimri, K. Yamaji, **M. Kajino**, W. Takeuchi, R. Imasu, P. K. Patra, and S. Hayashida, Nitrogen oxides concentration and emission change detection during COVID-19 restrictions in North India, *Sci. Rep.*, 11, 9800, <https://doi.org/10.1038/s41598-021-87673-2>, 2021. (May 7)
96. Itahashi, S., B. Ge, K. Sato, Z. Wang, J. Kurokawa, T. Jiani, J. S. Fu, X. Wang, K. Yamaji, T. Nagashima, J. Li, **M.**

**Kajino**, G. R. Carmichael, and Z. Wang, Insights into seasonal variation of wet deposition over Southeast Asia via precipitation adjustment from the findings of MICS-Asia III, *Atmos. Chem. Phys.*, 21, 8709-8734, <https://doi.org/10.5194/acp-21-8709-2021>, 2021. (Jun. 9)

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95. **Kajino**, M., H. Hagino, Y. Fujitani, T. Morikawa, T. Fukui, K. Onishi, T. Okuda, T. Kajikawa, and Y. Igarashi. Modeling transition metals in East Asia and Japan and its emission sources, *GeoHealth*, 4, e2020GH000259, <https://doi.org/10.1029/2020GH000259>, 22 pp., 2020. (Aug. 13)
94. Sekiyama, T. T. and **M. Kajino**, Reproducibility of surface wind and tracer transport simulations over complex terrain using 5-, 3-, and 1-km grid models, *J. Appl. Meteorol. Clim.*, 59, 937-952, <https://doi.org/10.1175/JAMC-D-19-0241.1>, 2020. (May 01)
93. Ching, J. and **M. Kajino**, Rethinking air quality and climate change after COVID-19, *International Journal of Environmental Research and Public Health*, 17, 5167, 11 pp., <https://doi.org/10.3390/ijerph17145167>, 2020. (Jul. 17)
92. Ching, J., **M. Kajino**, H. Matsui, Resolving aerosol mixing state increases accuracy of black carbon respiratory deposition estimates, *One Earth*, 3, 763-776, <https://doi.org/10.1016/j.oneear.2020.11.004>, 2020. (Dec. 18)
91. Imamura, N., G. Katata, **M. Kajino**, M. Kobayashi, Y. Itoh, A. Akama, Fogwater deposition of radiocesium in the forested mountains of East Japan during the Fukushima Daiichi Nuclear Power Plant accident: A key process in regional radioactive contamination, *Atmos. Environ.*, 224, 117339, 11 pp., <https://doi.org/10.1016/j.atmosenv.2020.117339>, 2020. (Mar. 1)
90. Kinase, T., K. Adachi, T. T. Sekiyama, **M. Kajino**, Y. Zaizen, and Y. Igarashi, Temporal variations of <sup>90</sup>Sr and <sup>137</sup>Cs in atmospheric depositions after the Fukushima Daiichi Nuclear Power Plant accident with long-term observations, *Sci. Rep.*, 10:21627, <https://doi.org/10.1038/s41598-020-78312-3>, 8 pp., 2020. (Dec. 10)
89. Sato, Y., T. T. Sekiyama, S. Fang, **M. Kajino**, A. Quérel, D. Quélo, H. Kondo, H. Terada, M. Kadowaki, M. Takigawa, Y. Morino, J. Uchida, D. Goto, and H. Yamazawa, A Model intercomparison of atmospheric <sup>137</sup>Cs concentrations from the Fukushima Daiichi Nuclear Power Plant accident, Phase III: Simulation with an identical source term and meteorological field at 1 km resolution, *Atmos. Environ.: X*, 7, 100086, <https://doi.org/10.1016/j.aeaoa.2020.100086>, 2020. (Aug. 4)
88. Katata G., K. Matsuda, A. Sorimachi, **M. Kajino**, K. Takagi, Effects of aerosol dynamics and gas-particle conversion on dry deposition of inorganic reactive nitrogen in a temperate forest, *Atmos. Chem. Phys.*, 20, 4933-4949, <https://doi.org/10.5194/acp-20-4933-2020>, 2020. (Apr. 27)
87. Dragović, S., M. Yamauchi, M. Aoyama, **M. Kajino**, J. Petrović, M. Čujić, R. Dragović, M. Đorđević, J. Bór, Synthesis of studies on significant atmospheric electrical effects of major nuclear accidents in Chernobyl and Fukushima, *Sci. Total Environ.*, 733, 139271, 14 pp., <https://doi.org/10.1016/j.scitotenv.2020.139271>, 2020. (Sep. 1)
86. Itahashi, S., B. Ge, K. Sato, J. S. Fu, X. Wang, K. Yamaji, T. Nagashima, J. Li, **M. Kajino**, H. Liao, M. Zhang, Z. Wang, M. Li, J. Kurokawa, G. R. Carmichael, and Z. Wang, MICS-Asia III: Overview of model inter-comparison and evaluation for acid deposition over Asia, *Atmos. Chem. Phys.*, 20, 2667-2693, <https://doi.org/10.5194/acp-20-2667-2020>, 2020. (Mar. 4)
85. Takigawa, M., P. K. Patra, Y. Matsumi, S. K. Dhaka, T. Nakayama, K. Yamaji, **M. Kajino**, and S. Hayashida, Can Delhi's pollution be affected by crop fires in the Punjab region?, *Sci. Online Lett. Atmos.*, 16, 86-91, <https://doi.org/10.2151/sola.2020-015>, 2020. (May 27)
84. Dhaka, S. K., Chetna, V. Kumar, V. Panwar, A. P. Dimri, N. Singh, P. K. Patra, Y. Matsumi, M. Takigawa, T. Nakayama, K. Yamaji, **M. Kajino**, P. Misra, and S. Hayashida, PM<sub>2.5</sub> diminution and haze events over Delhi during the COVID-19 lockdown period: an interplay between the baseline pollution and meteorology, *Sci. Rep.*, 10:13442, <https://doi.org/10.1038/s41598-020-70179-8>, 2020. (Aug. 10)
83. Ge, B., S. Itahashi, K. Sato, D. Xu, J. Wang, F. Fan, Q. Tan, J. S. Fu, X. Wang, K. Yamaji, T. Nagashima, J. Li, **M. Kajino**, H. Liao, M. Zhang, Z. Wang, M. Li, J.-H. Woo, J. Kurokawa, Y. Pan, Q. Wu, X. Liu, and Z. Wang: Model Inter-Comparison Study for Asia (MICS-Asia) phase III: Multi-model comparison of reactive nitrogen deposition over China, *Atmos. Chem. Phys.*, 20, 10587-10610, <https://doi.org/10.5194/acp-20-10587-2020>, 2020. (Sep. 10)
82. Kubota, T., H. Kuroda, M. Watanabe, A. Takahashi, R. Nakazato, M. Tarui, S. Matsumoto, K. Nakagawa, Y.

- Numata, T. Ouchi, H. Hosoi, M. Nakagawa, R. Shinohara, **M. Kajino**, K. Fukushima, Y. Igarashi, N. Imamura, G. Katata, Role of advection in atmospheric ammonia: A case study at a Japanese lake basin influenced by agricultural ammonia sources, *Atmos. Environ.*, 243, 117856, <https://doi.org/10.1016/j.atmosenv.2020.117856>, 2020. (Dec. 15)
81. Kong, L., X. Tang, J. Zhu, Z. Wang, J. S. Fu, X. Wang, S. Itahashi, K. Yamaji, T. Nagashima, H.-J. Lee, C.-H. Kim, C.-Y. Lin, L. Chen, M. Zhang, Z. Tao, J. Li, **M. Kajino**, H. Liao, K. Sudo, Y. Wang, Y. Pan, G. Tang, M. Li, Q. Wu, B. Ge, G. R. Carmichael, Evaluation and uncertainty investigation of the NO<sub>2</sub>, CO and NH<sub>3</sub> modeling over China under the framework of MICS-Asia III, *Atmos. Chem. Phys.*, 20, 181-202, <https://doi.org/10.5194/acp-20-181-2020>, 2020. (Jan. 06)
80. Tan, J., J. S. Fu, G. R. Carmichael, S. Itahashi, Z. Tao, K. Huang, X. Dong, K. Yamaji, T. Nagashima, X. Wang, Y. Liu, H.-J. Lee, C.-Y. Lin, B. Ge, **M. Kajino**, J. Zhu, M. Zhang, L. Hong, and Z. Wang, Why do models perform differently on particulate matter over East Asia? A multi-model intercomparison study for MICS-Asia III, *Atmos. Chem. Phys.*, 20, 7393-7410, <https://doi.org/10.5194/acp-20-7393-2020>, 2020. (Jun. 25)
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79. **Kajino, M.**, T. T. Sekiyama, Y. Igarashi, G. Katata, M. Sawada, K. Adachi, Y. Zaizen, H. Tsuruta, T. Nakajima. Deposition and dispersion of radio-cesium released due to the Fukushima nuclear accident: Sensitivity to meteorological models and physical modules, *J. Geophys. Res.*, 124(3), 1823-1845, <https://doi.org/10.1029/2018JD028998>, 2019. (Feb. 16)
78. **Kajino, M.**, M. Deushi, T. T. Sekiyama, N. Oshima, K. Yumimoto, T. Y. Tanaka, J. Ching, A. Hashimoto, T. Yamamoto, M. Ikegami, A. Kamada, M. Miyashita, Y. Inomata, S. Shima, A. Takami, A. Shimizu, S. Hatakeyama, Y. Sadanaga, H. Irie, K. Adachi, Y. Zaizen, Y. Igarashi, H. Ueda, T. Maki, M. Mikami. NHM-Chem, the Japan Meteorological Agency's regional meteorology – chemistry model: model evaluations toward the consistent predictions of the chemical, physical, and optical properties of aerosols, *J. Meteor. Soc. Japan*, 97(2), 337-374, <https://doi.org/10.2151/jmsj.2019-020>, 2019. (Dec. 9)
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### **Research Grants (PI only)**

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- 08/2023-03/2029 Grant-in-Aid for Challenging Research (Pioneering) (JP23K17465), Japan Society for the Promotion of Science, "Design and development of a portable cloud chamber and understanding of mixed-phase microphysical and chemical processes of cloud particles by mountain observation".
- 04/2023-03/2028 Grant-in-Aid for Scientific Research (S) (JP23H05494), Japan Society for the Promotion of Science, "Seamless understanding of nonlinear meteorology-chemistry processes based on multifaceted observations using low-altitude peaks".
- 12/2019-11/2021 Grant-in-Aid for JSPS Research Fellow (19F19402), Japan Society for the Promotion of Science, "New assessment of environmental impacts of black carbon and dust by a mixing-state diversity metric".
- 04/2019-03/2023 Grant-in-Aid for Scientific Research (A) (JP19H01155), Japan Society for the Promotion of Science, "Study on interaction between environmental pollution and meteorological changes via water substances".
- 04/2017-03/2023 Fund for the Promotion of Joint International Research (Fostering Joint International Research) (JP16KK0018) "Aerosol cloud interaction study using cloud wind tunnel at the summit of an isolated mountain". JSPS Scientist for Joint International Research, Laboratoire de Météorologie Physique (LaMP), Université Clermont Auvergne (UCA), Institut de Radioprotection et de Sûreté Nucléaire (IRSN), France
- 04/2016-03/2019 Environment Research & Technology Development Fund (5-1605), Ministry of Environment, in Japan, "Studies on PM2.5 composition, oxidative potential, health hazard and their model prediction"
- 04/2015-03/2017 Grant-in-Aid for Young Scientists (B), (B15K16121), Japan Society for the Promotion of Science, "Study on aerosol scavenging processes using simultaneous physical and chemical measurement of precipitation and a meteorology-chemistry model".
- 09/2014-08/2016 Japan Society for the Promotion of Science (JSPS), Bilateral Programs (Joint Research Projects and Seminars) Japan-France (MAE) (SAKURA program), Institute for Radiological Protection and Nuclear Safety (IRSN) France, "Technology exchange on numerical modeling of atmospheric radionuclides discharged by nuclear accidents"
- 04/2011-03/2013 Postdoctoral Fellowship for Research Abroad, Japan Society for the Promotion of Science, "development of chemical meteorology model".
- 04/2007-03/2010 Grant-in-Aid for Scientific Research from Ministry of Education, Culture, Sports, Science and Technology, in Japan, "numerical study on aerosol-cloud interaction".
- 06/2004 Scholarship for young scientist 21st century COE programs of Disaster Prevention Research Institute, Kyoto University, "development of aerosol-cloud interaction modeling".
- 04/2004-03/2006 Grant-in-Aid for Scientific Research from Ministry of Education, Culture, Sports, Science and Technology, in Japan, "observational and numerical study on aerosol-cloud interaction".
- 06/2003 Scholarship of Kyoto University Education and Research Promotion Foundation, "study on environmental acidification and climate change"