

6. 成果発表

6. 1. 論文等

気象研究所の職員が、平成 28 年度に発表した原著論文や報告書、著書、翻訳、解説などの著作物について、単独・共著の区別なく掲載した。ただし、口頭発表に伴う著作物のうち学会予稿集など簡易なものについては除いている。

各著作物の情報は、整理番号、著者、発表年、タイトル、掲載誌（書名）、掲載巻、掲載頁、doi（オンライン論文誌）または ISBN（著書（分担執筆含む））の順で掲載した。整理番号の後ろに「*」を付した著作物は、原著論文査読付きであることを示している。

- 青梨和正 1* Okamoto, K., K. Aonashi, T. Kubota, and T. Tashima, 2016: Experimental assimilation of the GPM-Core DPR reflectivity profiles for Typhoon Halong (2014). *Monthly Weather Review*, **144**, 2307-2326, doi:10.1175/MWR-D-15-0399.1.
- 2* Ito, K., M. Kunii, T. Kawabata, K. Saito, K. Aonashi, and L. Duc, 2016: Mesoscale Hybrid Data Assimilation System based on JMA Nonhydrostatic Model. *Monthly Weather Review*, **144**, 3417-3439, doi:10.1175/MWR-D-16-0014.1.
- 3 齊藤和雄, 瀬古弘, 露木義, 中村晃三, 青梨和正, 竹見哲也, 2016: 第6回超高精度メソスケール気象予測研究会報告. *天気*, **63**, 869.
- 4* Aonashi, K., K. Okamoto, T. Tashima, T. Kubota, and K. Ito, 2016: Sampling Error Damping method for a Cloud-Resolving Model using a Dual-Scale Neighboring Ensemble. *Monthly Weather Review*, **44**, 4751-4770, doi:10.1175/MWR-D-15-0410.1.
- 5* Shimada, U., K. Aonashi, and Y. Miyamoto, 2017: Tropical Cyclone Intensity Change and Axisymmetry Deduced from GSMaP. *Monthly Weather Review*, **145**, 1003-1017, doi:10.1175/MWR-D-16-0244.1.
- 6 伊藤耕介, 国井勝, 川畑拓矢, 齊藤和雄, 青梨和正, Le Duc, 2017: Hybrid EnKF-4D-Var 法に基づく極端気象現象予測. *月刊海洋*, 号外 **59**, 64-73.
- 足立アホロ 1 Adachi A., Kobayashi T. and Yamauchi H., Adachi A., Kobayashi T. and Yamauchi H., A Methodology for estimating the parameters of a gamma raindrop size distribution model from polarimetric radar measurements at attenuating frequency based on the self-consistency principle, *Geophysical Research Abstracts*, **18**, EGU2016-5381, 2016.
- 足立光司 1 Satou, Y., K. Sueki, K. Sasa, K. Adachi, and Y. Igarashi, 2016: First successful isolation of radioactive particles from soil near the Fukushima Daiichi Nuclear Power Plant. *Anthropocene*, doi:10.1016/j.ancene.2016.05.001. (in press)
- 2* Kaiho, K., N. Oshima, K. Adachi, Y. Adachi, T. Mizukami, M. Fujibayashi, and R. Saito, 2016: Global climate change driven by soot at the K-Pg boundary as the cause of the mass extinction. *Scientific Reports*, **6**, 28427, doi:10.1038/srep28427.
- 3* Adachi, K., N. Moteki, Y. Kondo, Y. Igarashi, 2016: Mixing states of light-absorbing particles measured using a transmission electron microscope and a single-particle soot photometer in Tokyo, Japan. *Journal of Geophysical Research Atmosphere*, **121** Issue **15**, 9153-9164, doi:10.1002/2016JD025153.
- 4* Bateman, A. P., Gong, Z., Harder, T. H., de Sá, S. S., Wang, B., Castillo, P., China, S., Liu, Y., O'Brien, R. E., Palm, B. B., Shiu, H.-W., Cirino, G. G., Thalman, R., Adachi,

- K., Alexander, M. L., Artaxo, P., Bertram, A. K., Buseck, P. R., Gilles, M., 2017: Anthropogenic influences on the physical state of submicron particulate matter over a tropical forest. *Atmospheric Chemistry and Physics*, **17**, 1759, doi:10.5194/acp-17-1759-2017.
- 足立透 1* Sato, M., M. Mihara, T. Adachi, T. Ushio, T. Morimoto, M. Kikuchi, H. Kikuchi, M. Suzuki, A. Yamazaki, Y. Takahashi, U. Inan, I. Linscott, R. Ishida, Y. Sakamoto, K. Yoshida, and Y. Hobara, 2016: Horizontal distributions of sprites derived from the JEM-GLIMS nadir observations. *Journal of Geophysical Research Atmosphere*, **121**, 3171-3194, doi:10.1002/2015JD024311.
- 2* Adachi, T., M. Sato, T. Ushio, A. Yamazaki, M. Suzuki, M. Kikuchi, Y. Takahashi, U. Inan, I. Linscott, Y. Hobara, H. U. Frey, S. B. Mende, A. Chen, R.-R. Hsu, and K. Kusunoki, 2016: Identifying the Occurrence of Lightning and Transient Luminous Events by Nadir Spectrophotometric Observation. *Journal of Atmospheric and Solar-Terrestrial Physics*, **145**, 85-97, doi:10.1016/j.jastp.2016.04.010.
- 3 楠研一, 牛尾知雄, 菊池博史, 水谷文彦, 柏柳太郎, 佐藤晋介, 足立透, 吉田翔, 小池佳奈, 岩波越, 2016: シンポジウム「フェーズドアレイレーダー」の報告 —研究開発の現状と将来展望—. *天気*, **第63巻8号**, 587-590.
- 4* Adachi, T., K. Kusunoki, S. Yoshida, K. Arai, and T. Ushio, 2016: High-Speed Volumetric Observation of Wet Microburst using X-band Phased Array Weather Radar in Japan. *Monthly Weather Review*, **144**, 3749-3765, doi:10.1175/MWR-D-16-0125.1.
- 5* Sato, M., T. Adachi, T. Ushio, T. Morimoto, M. Kikuchi, H. Kikuchi, M. Suzuki, A. Yamazaki, Y. Takahashi, R. Ishida, Y. Sakamoto, K. Yoshida, and Y. Hobara, 2016: Identification of sprites in JEM-GLIMS nadir observations and their spatial distributions. *Terrestrial Atmospheric and Oceanic Sciences Journal*. (in press)
- 6* Inoue, H. Y., K. Kusunoki, K. Arai, N. Ishitsu, T. Adachi, S. Yoshida and C. Fujiwara, 2016: Structure and evolution of misovortices observed within a convective snowband in the Japan Sea coastal region during a cold-air outbreak on 31 December 2007. *Journal of the Meteorological Society of Japan*, **94**, 507-524, doi:10.2151/jmsj.2016-029.
- 7* Adachi, T., K. Kusunoki, S. Yoshida, H. Inoue, K. Arai, T. Ushio, 2016: Rapid Volumetric Growth of Misocyclone and Vault-like Structure in Horizontal Shear Observed by Phased Array Weather Radar. *SOLA*, **12**, 314-319, doi:10.2151/sola.2016-061.
- 8 足立透, 2017: 「ダウンバースト 発見・メカニズム・予測」小林文明 著. *天気*, **第64巻3号**. (in press)
- 9* Yoshida, S., T. Adachi, K. Kusunoki, S. Hayashi, T. Wu, T. Ushio, and E. Yoshikawa, 2017: Relationship between thunderstorm electrification and storm kinetics revealed by phased array weather radar. *Journal of Geophysical Research Atmosphere*. (in press)
- 荒木健太郎 1 Araki, K., M. Murakami, T. Kato, and T. Tajiri, 2016: Diurnal Variation of Thermodynamic Environments for Convective Cloud Development around the Central Mountains in Japan during Warm Seasons. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**, 1.03-1.04.
- 2 Araki, K., M. Murakami, H. Ishimoto, and T. Tajiri, 2016: The 1-Dimensional Variational Approach to Improve Thermodynamic Profiles in Low-Level

- Troposphere during Rain Conditions. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**, 1.05-1.06.
- 3 Araki, K., and M. Murakami, 2016: Validation of Vertical Thermodynamic Profiles by Cloud Base Temperature Obtained from a Ground-Based Infrared Radiometer in a Mountain Region of Central Japan during Warm Seasons. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**, 1.07-1.08.
 - 4 Araki, K., 2016: Influence of Cloud Microphysics Scheme and Ice Nuclei on Forecasting a Heavy Snowfall Event in Japan associated with the . *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**, 4.03-4.04.
 - 5 Nagasaki, T., K. Araki, H. Ishimoto, K. Kominami, and O. Tajima, 2016: Monitoring System for Atmospheric Water Vapor with a Ground-Based Multi-Band Radiometer: Meteorological Application of Radio Astronomy Technologies. *Journal of Low Temperature Physics*, **184**, 674-679, doi:10.1007/s10909-015-1412-9.
 - 6 荒木健太郎, 2016: 南岸低気圧. *天気*, **63**, 707-709.
 - 7 Nagasaki, T., O. Tajima, K. Araki, and H. Ishimoto, 2016: Ground-based atmospheric water vapor monitoring system with spectroscopy of radiations at 20-30 GHz and 50-60 GHz bands. *Society of Photo-Optical Instrumentation Engineers (SPIE) Proceedings*, **9906**, 99063K, doi:10.1117/12.2232277.
 - 8* Tajima, O., K. Araki, H. Ishimoto, and T. Nagasaki, 2016: Sensing of the atmospheric water vapor with millimeter wave spectrometer - KUMODES. IEEE Xplore, doi:10.1109/PIERS.2016.7735564
 - 9* 荒木健太郎, 2016: 雲が伝える突風・雷雨の危険性 —ガストフロントを可視化するアーククラウド—. *世界気象カレンダー2017年版*.
 - 10 荒木健太郎, 村上正隆, 加藤輝之, 田尻拓也, 2017: 地上マイクロ波放射計を用いた夏季中部山地における対流雲の発生環境場の解析. *天気 (論文・短報)*, **64**, 19-36.
 - 11 荒木健太郎, 2017: 局地的大雨と集中豪雨. *豪雨のメカニズムと水害対策 —降水の観測・予測から浸水対策, 自然災害に強いまちづくりまで—*, 17-27.
 - 12 荒木健太郎, 上野健一, 縫村崇行, 2017: シンポジウム「関東の大雪に備える」報告. *天気*, **64**, 193-200.
- 安藤忍
- 1 気象庁, 気象研究所, 2016: 平成 28 年 (2016 年) 熊本地震. *地震予知連絡会会報*, **96**, 492-556.
 - 2 高木朗充, 長岡優, 福井敬一, 安藤忍, 木村一洋, 土山博昭, 2017: 2013-2015 年西之島噴火のモニタリングに関する研究. *気象研究所技術報告*, **78**, 1-72, doi:10.11483/mritechrepo.78.
 - 3 気象庁, 気象研究所, 2017: 2016 年 10 月 21 日 鳥取県中部の地震. *地震予知連絡会会報*, **97**, 323-350.
 - 4 気象庁, 2017: 世界の地震活動 (2016 年 5 月~10 月) . *地震予知連絡会会報*, **97**, 478-504.
- 五十嵐康人
- 1 Satou, Y., K. Sueki, K. Sasa, K. Adachi, and Y. Igarashi, 2016: First successful isolation of radioactive particles from soil near the Fukushima Daiichi Nuclear Power Plant. *Anthropocene*, doi:10.1016/j.ancene.2016.05.001. (in press)
 - 2 木村徹, 五十嵐康人, 財前祐二, 2016: IAEA-TEL-2015-03 Proficiency Test 試料の測定. *Proceedings of the 17th Workshop on Environmental Radioactivity*, **2016-8**, 228-231.
 - 3 小西将貴, 羽田野祐子, 北和之, 五十嵐康人, 2016: 大気中 Cs-137 濃度の長期予測モデルの提案と AIC による評価. *Proceedings of the 17th Workshop on Environmental*

Radioactivity, **2016-8**, 142-147.

- 4* Adachi, K., N. Moteki, Y. Kondo, Y. Igarashi, 2016: Mixing states of light-absorbing particles measured using a transmission electron microscope and a single-particle soot photometer in Tokyo, Japan. *Journal of Geophysical Research Atmosphere*, **121**Issue **15**, 9153-9164, doi:10.1002/2016JD025153.
- 5* Kajino, M., M. Ishizuka, Y. Igarashi, K. Kita, C. Yoshikawa, and M. Inatsu, 2016: Long-term assessment of airborne radiocesium after the Fukushima nuclear accident: re-suspension from bare soil and forest ecosystems. *Atmospheric Chemistry and Physics*, **16**, 13149-13172, doi:10.5194/acp-16-13149-2016.
- 6* Ishizuka, M., M. Mikami, T. Y. Tanaka, Y. Igarashi, K. Kita, Y. Yamada, N. Yoshida, S. Toyoda, Y. Satou, T. Kinase, and K. Ninomiya, 2017: Use of a size-resolved 1-D resuspension scheme to evaluate resuspended radioactive material associated with mineral dust particles from the ground surface. *Journal of Environmental Radioactivity*, **166**, 436-448, doi:10.1016/j.jenvrad.2015.12.023. (in press)
- 7* Hirose, K., Y. Kikawada, Y. Igarashi, H. Fujiwara, D. Jugder, Y. Matsumoto, T. Oi, and M. Nomura, 2017: Plutonium, ¹³⁷Cs and uranium isotopes in Mongolian surface soils. *Journal of Environmental Radioactivity*, **166**, 97-103, doi:10.1016/j.jenvrad.2016.01.007.
- 8* Iwagami, S., M. Tsujimura, Y. Onda, M. Nishino, R. Konuma, Y. Abe, M. Hada, I. Pun, A. Sakaguchi, H. Kondo, M. Yamamoto, Y. Miyata, Y. Igarashi, 2017: Temporal changes in dissolved ¹³⁷Cs concentrations in groundwater and stream water in Fukushima after the Fukushima Dai-ichi Nuclear Power Plant accident. *Journal of Environmental Radioactivity*, **166**, 458-465, doi:10.1016/j.jenvrad.2015.03.025.
- 石井雅男 1* Hama, T., T. Inoue, R. Suzuki, H. Kashiwazaki, S. Wada, D. Sasano, N. Kosugi, and M. Ishii, 2016: Response of a phytoplankton community to nutrient addition under different CO₂ and pH conditions. *Journal of Oceanography*, **72**, 207-223, doi:10.1007/s10872-015-0322-4.
- 2* Ishidoya S., H. Uchida, D. Sasano, N. Kosugi, S. Taguchi, M. Ishii, S. Morimoto, Y. Tohjima, S. Nishino, S. Murayama, S. Aoki, K. Ishijima, R. Fujita, D. Goto and T. Nakazawa, 2016: Ship-based observations of atmospheric potential oxygen and regional air sea O₂ flux in the northern North Pacific and the Arctic Ocean. *Tellus B*, **68**, 29972, doi:10.3402/tellusb.v68.29972.
- 3* Olsen, A., R. M. Key, S. van Heuven, S. K. Lauvset A. Velo X. Lin C. Schirnick, A. Kozyr T. Tanhua, M. Hoppema, S. Jutterström, R. Steinfeldt, E. Jeansson, Masao Ishii, F. F. Pérez, and T. Suzuki, 2016: The Global Ocean Data Analysis Project version 2 (GLODAPv2) – an internally consistent data product for the world ocean. *Earth System Science Data*, **8**, 297-323, doi:10.5194/essd-8-297-2016.
- 4 Lauvset, S. K., R. M. Key, A. Olsen, S. van Heuven, A. Velo, X. Lin, C. Schirnick, A. Kozyr, T. Tanhua, M. Hoppema, S. Jutterström, R. Steinfeldt, E. Jeansson, M. Ishii, F. F. Perez, and T. Suzuki, 2016: A new global interior ocean mapped climatology: the 1° × 1° GLODAP version 2. *Earth Science System Data Discussion*, **8** (2), 325-340, doi:10.5194/essd-2015-43.
- 5* Kosugi, N., D. Sasano, M. Ishii, K. Enyo, and S. Saito, 2016: Autumn CO₂ chemistry in the Japan Sea and the impact of discharges from the Changjiang River. *Journal of Geophysical Research Oceans*, doi:10.1002/2016JC011838. (in press)
- 6* Iudicone, D., K. B. Rodgers, Y. Plancherel, O. Aumont, T. Ito, R. M. Key, G. Madec, and

- M. Ishii, 2016: The formation of the ocean's anthropogenic carbon reservoir. *Scientific Reports*, **6**, 35473, doi:10.1038/srep35473. (in press)
- 石井正好 1* Butler, A. H., A. Arribas, M. Athanassiadou, ... , Y. Imada, M. Ishii, ... , and T. Yasuda, 2016: The Climate-system Historical Forecast Project: do stratosphere-resolving models make better seasonal climate predictions in boreal winter?.. *Quarterly Journal of the Royal Meteorological Society*, **142**, 1413-1427, doi:10.1002/qj.2743.
- 2 Johnson, G. C., J. M. Lyman, J. Antonov, N. Bindoff, T. Boyer, C. M. Domingues, S. A. Good, M. Ishii, and J. K. Willis, 2016: Global Oceans: Ocean Heat Content. In State of the Climate in 2014. *Bulletin of the American Meteorological Society*, **96**, S64-S66, S68.
- 3* Day, J. J., S. Tietsche, M. Collins, H. F. Goessling, V. Guemas, A. Guillory, W. J. Hurlin, M. Ishii, S. P. E. Keeley, D. Matei, R. Msadek, M. Sigmond, H. Tatebe, and E. Hawkin, 2016: The Arctic Predictability and Prediction on Seasonal-to-Interannual TimeScales (APPOSITE) data set version 1. *Geoscientific Model Development*, 2255-2270, doi:10.5194/gmd-9-2255-2016.
- 4 Boyer, T., C. M. Domingues, S. A. Good, G. C. Johnson, J. M. Lyman, M. Ishii, V. Gouretski, J. K. Willis, J. Antonov, S. Wijffels, J. A. Church, R. Cowley, N. Bindoff, 2016: Sensitivity of Global Upper Ocean Heat Content Estimates to Mapping Methods, XBT Bias Corrections, and Baseline Climatologies. *Journal of Climate*, **29**, 4817-4842, doi:10.1175/JCLI-D-15-0801.1.
- 5* Imada, Y., H. Tatebe, M. Watanabe, M. Ishii, and M. Kimoto, 2016: South Pacific influence on the termination of El Niño in 2014. *Scientific Reports*, **6**, 30341 , doi:10.1038/srep30341.
- 6* Kawase, H., A. Murata, R. Mizuta, H. Sasaki, M. Nosaka, M. Ishii, and I. Takayabu, 2016: Enhancement of heavy daily snowfall in central Japan due to global warming as projected by large ensemble of regional climate simulations. *Climatic Change*, **139**, 265–278, doi:10.1007/s10584-016-1781-3.
- 7* Shiogama, H., Y. Imada, M. Mori, R. Mizuta, D. Stone, K. Yoshida, O. Arakawa, M. Ikea, C. Takahashi, M. Arai, M. Ishii, M. Watanabe, and M. Kimoto, 2016: Attributing Historical Changes in Probabilities of Record-Breaking Daily Temperature and Precipitation Extreme Events. *SOLA*, **12**, 225-231, doi:10.2151/sola.2016-045.
- 8* Kamae, Y., H. Shiogama, Y. Imada, M. Mori, O. Arakawa, R. Mizuta, K. Yoshida, C. Takahashi, M. Arai, M. Ishii, M. Watanabe, M. Kimoto, S.-P. Xie, and H. Ueda, 2016: Forced response and internal variability of summer climate over western North America. *Climate Dynamics*, doi:10.1007/s00382-016-3350-x.
- 9 石井正好, 2016: 国内・国際海洋データベース再構築プロジェクト: XBT Japan と IQuOD. *海洋学会ニュースレター*, 第6巻、第3号, 7-8.
- 10* Mizuta, R., A. Murata, M. Ishii, H. Shiogama, K. Hibino, N. Mori, O. Arakawa, Y. Imada, K. Yoshida, T. Aoyagi, H. Kawase, M. Mori, Y. Okada, T. Shimura, T. Nagatomo, M. Ikeda, H. Endo, M. Nosaka, M. Arai, C. Takahashi, K. Tanaka, T. Takemi, Y. Tachikaw, 2016: Over 5000 Years of Ensemble Future Climate Simulations by 60 km Global and 20 km Regional Atmospheric Models. *Bulletin of the American Meteorological Society*, doi:10.1175/BAMS-D-16-0099.1. (in press)
- 11* Endo, H., A. Kitoh, R. Mizuta, and M. Ishii, 2017: Future changes in precipitation extremes in East Asia and their uncertainty based on large ensemble simulations

with a high-resolution AGCM. *SOLA*, **13**, 7-12, doi:10.2151/sola.2017-002.

- 石元裕史 1 Masuda, K., H. Ishimoto, T. Sakai, and H. Okamoto, 2016: Backscattering properties of nonspherical ice particles calculated by Geometrical-Optics-Integral-Equation method. *EPJ Web of Conferences*, **190**, 16001, doi:10.1051/epjconf/201611916001.
- 2 Araki, K., M. Murakami, H. Ishimoto, and T. Tajiri, 2016: The 1-Dimensional Variational Approach to Improve Thermodynamic Profiles in Low-Level Troposphere during Rain Conditions. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**.
- 3 Nagasaki, T., K. Araki, H. Ishimoto, K. Kominami, and O. Tajima, 2016: Monitoring System for Atmospheric Water Vapor with a Ground-Based Multi-Band Radiometer: Meteorological Application of Radio Astronomy Technologies. *Journal of Low Temperature Physics*, **184**, 674-679, doi:10.1007/s10909-015-1412-9. (in press)
- 4 Nagasaki, T., O. Tajima, K. Araki, and H. Ishimoto, 2016: Ground-based atmospheric water vapor monitoring system with spectroscopy of radiations at 20-30 GHz and 50-60 GHz bands. *Society of Photo-Optical Instrumentation Engineers (SPIE) Proceedings*, **9906**, 99063K, doi:10.1117/12.2232277.
- 5* Letu, F., H. Ishimoto, J. Riedi, T. Y. Nakajima, L. C.-Labonnote, A. J. Baran, T. M. Nagao, and M. Sekiguchi, 2016: Investigation of ice particle habits to be used for ice cloud remote sensing for the GCOM-C satellite mission. *Atmospheric Chemistry and Physics*, **16**, 12287-12303, doi:10.5194/acp-16-12287-2016.
- 6* Konoshonkin, A., A. Borovoi, N. Kustova, H. Okamoto, H. Ishimoto, Y. Grynkko, and J. Förstner, 2016: Light scattering by ice crystals of cirrus clouds: comparison of the physical-optics approximation and exact methods. *Proceedings of SPIE*, **10035**, doi:10.1117/12.2248409.
- 7* Masuda, K., and H. Ishimoto, 2017: Backscatter ratios for nonspherical ice crystals in cirrus clouds calculated by geometrical-optics-integral-equation method. *Journal of Quantitative Spectroscopy & Radiative Transfer*, **190**, 60-68, doi:10.1016/j.jqsrt.2017.01.024.
- 泉敏治 1* Uchino, O., Sakai, T., Izumi, T., Nagai, T., Morino, I., Yamazaki, A., Deushi, M., Yumimoto, K., Maki, T., Tanaka, T. Y., Akaho, T., Okumura, H., Arai, K., Nakatsuru, T., Matsunaga, T., and Yokota, T., 2017: Lidar detection of high concentrations of ozone and aerosol transported from northeastern Asia over Saga, Japan. *Atmospheric Chemistry and Physics*, **17**, 1865-1879, doi:10.5194/acp-17-1865-2017.
- 伊藤純至 1 伊藤純至, 大泉伝, 新野宏, 2016: 注目研究 in 年会 2015 台風全域ラージ・エディ・シミュレーション. *ながれ*, **34**, 379.
- 2* Ito, J., and H. Niino, 2016: Wind-Speed-Surface Heat-Flux Feedback in Dust Devils. *Boundary-Layer Meteorology*, **161**, 229-235, doi:10.1007/s10546-016-0167-4.
- 3 Spiga, A., E. Barth, Z. Gu, F. Hoffmann, J. Ito, B. Jemmett-Smith, M. Klose, S. Nishizawa, S. Raasch, S. Rafkin, T. Takemi, D. Tyler, and W. Wei, 2016: Large-Eddy Simulations of Dust Devils and Convective Vortices. *Space Science Reviews*, **203**, 245-275, doi:10.1007/s11214-016-0284-x.
- 4 Rafkin, S., B. Jemmett-Smith, L. Fenton, R. Lorenz, T. Takemi, J. Ito, and D. Tyler, 2016: Dust Devil Formation. *Space Science Reviews*, **203**, 183-207, doi:10.1007/s11214-016-0307-7.

- 5 伊藤純至, 2017: 塵旋風の発生・発達機構と強風. *日本風工学会誌*, **42**, 39.
- 猪上華子 1* Inoue, H. Y., K. Kusunoki, K. Arai, N. Ishitsu, T. Adachi, S. Yoshida and C. Fujiwara, 2016: Structure and evolution of misovortices observed within a convective snowband in the Japan Sea coastal region during a cold-air outbreak on 31 December 2007. *Journal of the Meteorological Society of Japan*, **94**, 507-524, doi:10.2151/jmsj.2016-029.
- 2* Adachi, T., K. Kusunoki, S. Yoshida, H. Inoue, K. Arai, T. Ushio, 2016: Rapid Volumetric Growth of Misocyclone and Vault-like Structure in Horizontal Shear Observed by Phased Array Weather Radar. *SOLA*, **12**, 314-319, doi:10.2151/sola.2016-061.
- 今田由紀子 1* Butler, A. H., A. Arribas, M. Athanassiadou, ... , Y. Imada, M. Ishii, ..., and T. Yasuda, 2016: The Climate-system Historical Forecast Project: do stratosphere-resolving models make better seasonal climate predictions in boreal winter?.. *Quarterly Journal of the Royal Meteorological Society*, **142**, 1413-1427, doi:10.1002/qj.2743.
- 2* Imada, Y., H. Tatebe, M. Watanabe, M. Ishii, and M. Kimoto, 2016: South Pacific influence on the termination of El Niño in 2014. *Scientific Reports*, **6**, 30341, doi:10.1038/srep30341.
- 3* Shiogama, H., Y. Imada, M. Mori, R. Mizuta, D. Stone, K. Yoshida, O. Arakawa, M. Ikea, C. Takahashi, M. Arai, M. Ishii, M. Watanabe, and M. Kimoto, 2016: Attributing Historical Changes in Probabilities of Record-Breaking Daily Temperature and Precipitation Extreme Events. *SOLA*, **12**, 225-231, doi:10.2151/sola.2016-045.
- 4* Kamae, Y., H. Shiogama, Y. Imada, M. Mori, O. Arakawa, R. Mizuta, K. Yoshida, C. Takahashi, M. Arai, M. Ishii, M. Watanabe, M. Kimoto, S.-P. Xie, and H. Ueda, 2017: Forced response and internal variability of summer climate over western North America. *Climate Dynamics*, **49**, 403-417, doi:10.1007/s00382-016-3350-x.
- 5* Mizuta, R., A. Murata, M. Ishii, H. Shiogama, K. Hibino, N. Mori, O. Arakawa, Y. Imada, K. Yoshida, T. Aoyagi, H. Kawase, M. Mori, Y. Okada, T. Shimura, T. Nagatomo, M. Ikeda, H. Endo, M. Nosaka, M. Arai, C. Takahashi, K. Tanaka, T. Takemi, Y. Tachikaw, 2017: Over 5000 Years of Ensemble Future Climate Simulations by 60 km Global and 20 km Regional Atmospheric Models. *Bulletin of the American Meteorological Society*, **98**, 1383-1398, doi:10.1175/BAMS-D-16-0099.1.
- 6* Takahashi, C., M. Watanabe, H. Shiogama, Y. Imada and M. Mori, 2016: A persistent Japanese heat wave in early August 2015: Roles of natural variability and human-induced warming. *Bulletin of the American Meteorological Society*, **97**, S107-S112, doi:10.1175/BAMS-D-16-0157.1.
- 7* Imada, Y., S. Maeda, M. Watanabe, H. Shiogama, R. Mizuta, M. Ishii, and M. Kimoto, 2017: Recent Enhanced Seasonal Temperature Contrast in Japan from Large Ensemble High-Resolution Climate Simulations. *Atmosphere*, **8**, 57, doi:10.3390/atmos8030057.
- 8* Sugi, M., Y. Imada, T. Nakaegawa, and K. Kamiguchi, 2017: Estimating probability of extreme rainfall over Japan using Extended Regional Frequency Analysis. *Hydrological Research Letters*, **11**, 19-23, doi:10.3178/hrl.11.19.
- 9* Kimura, Y., M. Tanoue, Y. Imada, and Y. Hirabayashi, 2016: An event attribution of the 2012 Amazon flood. *Journal of Japan Society of Civil Engineers, Ser. G*, **72**, 1_1-1_6,

doi:10.2208/jscej.72.I_1.

- 入口武史 1 Nakano, M., A. Wada, M. Sawada, H. Yoshimura, R. Onishi, S. Kawahara, W. Sasaki, T. Nasuno, M. Yamaguchi, T. Iriguchi, M. Sugi, Y. Takeuchi, 2017: Global 7-km mesh nonhydrostatic Model Intercomparison Project for improving TYphoon forecast (TYMIP-G7): experimental design and preliminary results. *Geoscientific Model Development*, doi:10.5194/gmd-10-1363-2017.
- 碓氷典久 1* 西川悠, 碓氷典久, 蒲地政文, 田中裕介, 石川 洋一, 2016: 春季黒潮続流域における黒潮水—親潮水二層構造の分布とクロロフィル a 濃度の経年変動. *海の研究*, **25**, 133-144.
- 2* 藤井陽介, 蒲地政文, 広瀬直毅, 望月崇, 瀬藤聡, 美山透, 広瀬成章, 長船哲史, 韓修妍, 五十嵐弘道, 宮澤 泰正, 豊田隆寛, 干場康博, 増田周平, 石川洋一, 碓氷典久, 黒田寛, 高山勝巳, 2017: 日本の海洋データ同化研究: 20年間の功績と今後の展望. *海の研究*, **26(2)**, 15-43.
- 浦川昇吾 1 浦川昇吾, 山中吾郎, 平原幹俊, 坂本圭, 辻野博之, 中野英之, 2016: 日本沿岸海洋モデリングにおける流域雨量指数の有用性に関する検証. *測候時報*, **83(特別号)**, S33-S45.
- 2* Tanaka, K., K. Komatsu, S. Itoh, D. Yanagimoto, M. Ishizu, H. Hasumi, T. Sakamoto, S. Urakawa, and Y. Michida, 2017: Baroclinic circulation and its high frequency variability in Otsuchi Bay on the Sanriku ria coast, Japan. *Journal of Oceanography*, **73(1)**, 25-38, doi:10.1007/s10872-015-0338-9.
- 3* Sakamoto, T. T., L. S. Urakawa, H. Hasumi, M. Ishizu, S. Itoh, T. Komatsu, and K. Tanaka, 2017: Numerical Simulation of Pacific Water Intrusions into Otsuchi Bay, northeast of Japan, with a nested-grid OGCM. *Journal of Oceanography*, **73(1)**, 39-54, doi:10.1007/s10872-015-0344-y.
- 4 田中潔, 羽角博康, 小松幸生, 伊藤幸彦, 柳本大吾, 坂本天, 石津美穂, 浦川昇吾, 道田豊, 2017: 三陸沿岸の流況. *沿岸海洋研究*, **54(2)**, 97-104.
- 遠藤洋和 1* Harada, Y., H. Kamahori, C. Kobayashi, H. Endo, S. Kobayashi, Y. Ota, H. Onoda, K. Onogi, K. Miyaoka, and K. Takahashi, 2016: The JRA-55 Reanalysis: Representation of atmospheric circulation and climate variability. *Journal of the Meteorological Society of Japan*, **94**, doi:10.2151/jmsj.2016-015.
- 2* Kawai, H., T. Koshiro, H. Endo, O. Arakawa, and Y. Hagihara, 2016: Changes in Marine Fog in a Warmer Climate. *Atmospheric Science Letters*, **17**, 548-555, doi:10.1002/asl.691.
- 3* Mizuta, R., A. Murata, M. Ishii, H. Shiogama, K. Hibino, N. Mori, O. Arakawa, Y. Imada, K. Yoshida, T. Aoyagi, H. Kawase, M. Mori, Y. Okada, T. Shimura, T. Nagatomo, M. Ikeda, H. Endo, M. Nosaka, M. Arai, C. Takahashi, K. Tanaka, T. Takemi, Y. Tachikawa, 2016: Over 5000 Years of Ensemble Future Climate Simulations by 60 km Global and 20 km Regional Atmospheric Models. *Bulletin of the American Meteorological Society*, doi:10.1175/BAMS-D-16-0099.1. (in press)
- 4* Endo, H., A. Kitoh, R. Mizuta, and M. Ishii, 2017: Future changes in precipitation extremes in East Asia and their uncertainty based on large ensemble simulations with a high-resolution AGCM. *SOLA*, **13**, 7-12, doi:10.2151/sola.2017-002.
- 大島長 1* Kondo, Y., N. Moteki, N. Oshima, S. Ohata, M. Koike, Y. Shibano, N. Takegawa, and K. Kita, 2016: Effects of wet deposition on the abundance and size distribution of black carbon in East Asia. *Journal of Geophysical Research Atmosphere*, **121**, 4691-4712, doi:10.1002/2015JD024479.
- 2* Kaiho, K., N. Oshima, K. Adachi, Y. Adachi, T. Mizukami, M. Fujibayashi, and R. Saito, 2016: Global climate change driven by soot at the K-Pg boundary as the cause of

the mass extinction. *Scientific Reports*, **6**, 28427, doi:10.1038/srep28427.

- 太田芳文 1* Someya, Y., R. Imasu, N. Saitoh, Y. Ota, and K. Shiomi, 2016: A development of cloud top height retrieval using thermal infrared spectra observed with GOSAT and comparison with CALIPSO data. *Atmospheric Measurement Techniques*, **9**, 1981-1992, doi:10.5194/amt-9-1981-2016.
- 2* Ota, Y., and R. Imasu, 2016: CO2 retrieval using thermal infrared radiation observation by Interferometric Monitor for Greenhouse Gases (IMG) onboard Advanced Earth Observing Satellite (ADEOS). *Journal of the Meteorological Society of Japan*, **94**, 471-490, doi:10.2151/jmsj.2016-027.
- 大塚道子 1 Miyoshi, T., G.-Y. Lien, S. Satoh, T. Ushio, K. Bessho, H. Tomita, S. Nishizawa, R. Yoshida, S. A. Adachi, J. Liao, B. Gerofi, Y. Ishikawa, M. Kunii, J. Ruiz, Y. Maejima, S. Otsuka, M. Otsuka, K. Okamoto, and H. Seko, 2016: "Big Data Assimilation" Toward Post-Petascale Severe Weather Prediction: An Overview and Progress. *Proceedings of the IEEE*, **104**, 104, doi:10.1109/JPROC.2016.2602560.
- 2 熊本真理子, 濱上崇史, 飯島聖, 大塚道子, 藤部文昭, 2017: 軽井沢特別地域気象観測所の気温変動と周辺環境. *天気 (調査ノート)*, **64**, 49-52.
- 岡本幸三 1* Okamoto, K., K. Aonashi, T. Kubota, and T. Tashima, 2016: Experimental assimilation of the GPM-Core DPR reflectivity profiles for Typhoon Halong (2014). *Monthly Weather Review*, **144**, 2307-2326, doi:10.1175/MWR-D-15-0399.1.
- 2* Miyoshi, T., G.-Y. Lien, S. Satoh, T. Ushio, K. Bessho, H. Tomita, S. Nishizawa, R. Yoshida, S. A. Adachi, J. Liao, B. Gerofi, Y. Ishikawa, M. Kunii, J. Ruiz, Y. Maejima, S. Otsuka, M. Otsuka, K. Okamoto, H. Seko, 2016: "Big Data Assimilation" Toward Post-Petascale Severe Weather Prediction: An Overview and Progress. *Proceedings of the IEEE*, **104(11)**, 104, doi:10.1109/JPROC.2016.2602560.
- 3* Aonashi, K., K. Okamoto, T. Tashima, T. Kubota, and K. Ito, 2016: Sampling Error Damping method for a Cloud-Resolving Model using a Dual-Scale Neighboring Ensemble. *Monthly Weather Review*, **44**, 4751-4770, doi:10.1175/MWR-D-15-0410.1.
- 小木曾仁 1* Ogiso, M., S. Aoki, and M. Hoshihara, 2016: Real-time seismic intensity prediction using frequency-dependent site amplification factors. *Earth, Planets and Space*, **68**, 83, doi:10.1186/s40623-016-0467-4.
- 2 Ogiso, M., N. Hayashimoto, and M. Hoshihara, 2016: Array Observation of Strong Ground Motion for Real Time Estimation of Current Wavefield. *Cahiers Bleus*, **31**, 75-86.
- 尾瀬智昭 1* Takaya Y., T. Yasuda, Y. Fujii, T. Soga, H. Mori, M. Hirai, I. Ishikawa, H. Sato, A. Shimpō, M. Kamachi, and T. Ose, 2016: Japan Meteorological Agency/Meteorological Research Institute-Coupled Prediction System version 1 (JMA/MRI-CPS1) for operational seasonal forecasting. *Climate Dynamics*, 1-21, doi:10.1007/s00382-016-3076-9.
- 2* Ogata, T., R. Mizuta, Y. Adachi, H. Murakami, and T. Ose, 2016: Atmosphere-Ocean Coupling Effect on Intense Tropical Cyclone Distribution and its Future Change with 60km-AOGCM. *Scientific Reports*, **6**, 29800, doi:10.1038/srep29800.
- 鬼澤真也 1* Takagi, A., and S. Onizawa, 2016: Shallow pressure sources associated with the 2007 and 2014 phreatic eruptions of Mt. Ontake, Japan. *Earth, Planets and Space*, **68**, doi:10.1186/s40623-016-0515-0.
- 2* Prudencio, J., T. Taira, Y. Aoki, H. Aoyama, and S. Onizawa, 2017: Intrinsic and

- scattering attenuation images of Usu, volcano, Japan. *Bulletin of Volcanology*, **79**, 29, doi:10.1007/s00445-017-1117-9.
- 小山亮 1* Bessho, K., K. Date, M. Hayashi, A. Ikeda, T. Imai, H. Inoue, Y. Kumagai, T. Miyakawa, H. Murata, T. Ohno, A. Okuyama, R. Oyama, Y. Sasaki, Y. Shimazu, K. Shimoji, Y. Sumida, M. Suzuki, H. Taniguchi, H. Tsuchiyama, D. Uesawa, H. Yokota, and R. Yoshida, 2016: An introduction to Himawari-8/9 - Japan's new-generation geostationary meteorological satellites. *Journal of the Meteorological Society of Japan*, **94**, 151-183, doi:10.2151/jmsj.2016-009.
- 2* Oyama, R., A. Wada, and M. Sawada, 2016: Intensification of Typhoon Danas (1324) captured by MTSAT upper tropospheric Atmospheric Motion Vectors. *SOLA*, **12**, 135-139, doi:10.2151/sola.2016-029.
- 梶野瑞王 1* Sinha, P. R., L.K. Sahu, R.K. Manchanda, V. Sheel, M. Deushi, M. Kajino, M.G. Schultz, N. Nagendra, P. Kumar, D.B. Trivedi, S.K. Koli, S.K. Peshin, Y.V. Swamy, C.G. Tzanis, and S. Sreenivasan, 2016: Transport of tropospheric and stratospheric ozone over India: Balloon-borne observations and modeling analysis. *Atmospheric Environment*, **131**, 228-242, doi:10.1016/j.atmosenv.2016.02.001.
- 2* Kajino, M., M. Ishizuka, Y. Igarashi, K. Kita, C. Yoshikawa, and M. Inatsu, 2016: Long-term assessment of airborne radiocesium after the Fukushima nuclear accident: re-suspension from bare soil and forest ecosystems. *Atmospheric Chemistry and Physics*, **16**, 13149-13172, doi:10.5194/acp-16-13149-2016.
- 勝間田明男 1 気象庁, 気象研究所, 2016: 平成 28 年 (2016 年) 熊本地震. *地震予知連絡会会報*, **96**, 492-556.
- 2* 中田健嗣, 小林昭夫, 平田賢治, 対馬弘晃, 山崎明, 勝間田明男, 前田憲二, 馬場久紀, 一ノ瀬里美, 牛田堯, 石原昂典, 稲村嘉津也, 蓮澤豪, 2017: 自己浮上式海底地震計観測によって推定された紀伊半島南方の南海トラフ軸南側の地震活動. *地震*, **69**, 59-68, doi:10.4294/zisin.69.59.
- 3 上野寛, 勝間田明男, 横田崇, 2017: 震度分布を用いた即時震源域推定. *気象研究所技術報告*, **77**, doi:10.11483/mritechrepo.77.
- 4 勝間田明男, 2017: 長周期バックプロジェクション法による大すべり域の推定. *気象研究所技術報告*, **77**, doi:10.11483/mritechrepo.77.
- 5 勝間田明男, 2017: エンベロープデータを用いたイベント自動検出. *気象研究所技術報告*, **77**, doi:10.11483/mritechrepo.77.
- 加藤輝之 1 加藤輝之, 2016: 集中豪雨をもたらす線状降水帯 発生条件 ～不安定の概念から再認識してみよう～. *てんきすと*, **100**, 18-20.
- 2 Kato, T., 2016: Influence of horizontal resolution on structure changes of atmospheric stratification in the 2015 Hiroshima heavy rainfall. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**, 3-03.
- 3 Araki, K., M. Murakami, T. Kato, and T. Tajiri, 2016: Diurnal Variation of Thermodynamic Environments for Convective Cloud Development around the Central Mountains in Japan during Warm Seasons. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**.
- 4 加藤輝之, 上田博, 篠田太郎, 津口裕茂, 山田広幸, 南雲信宏, 大東忠保, 竹見哲也, 2016: 第 11 回「メソスケール気象と熱帯低気圧に関する国際会議(ICMCS-XI)」参加報告. *天気*, **63**, 719-725.
- 5 佐藤芳昭, 加藤輝之, 榎本剛, 永戸久喜, 太田洋一郎, 野口峻佑, 佐藤和敏, 松枝未遠, 小野耕介, 國井勝, 横田祥, 野原大輔, 牛山朋来, 2016: 第 9 回気象庁数値モデル研究会・第

44回メソ気象研究会・第2回観測システム予測可能性研究連絡会—アンサンブル予報の発展と展望—。天気, **63**, 843-849.

- 6* 荒木健太郎, 村上正隆, 加藤輝之, 田尻拓也, 2017: 地上マイクロ波放射計を用いた夏季中部山地における対流雲の発生環境場の解析。天気 (論文・短報), **64**, 19-36.
- 7 加藤輝之, 2017: 集中豪雨のメカニズム—線状降水帯と局地的大雨(ゲリラ豪雨)—。建築防災, 2-8.
- 釜堀弘隆 1* Harada, Y., H. Kamahori, C. Kobayashi, H. Endo, S. Kobayashi, Y. Ota, H. Onoda, K. Onogi, K. Miyaoka, and K. Takahashi, 2016: The JRA-55 Reanalysis: Representation of atmospheric circulation and climate variability. *Journal of the Meteorological Society of Japan*, **94**, doi:10.2151/jmsj.2016-015.
- 2 Nakamura, H., Y. Kawai, R. Masunaga, H. Kamahori, C. Kobayashi, and M. Koike, 2016: An Extra Product of the JRA-55 Atmospheric Reanalysis and In Situ Observations in the Kuroshio-Oyashio Extension Under the Japanese “Hotspot Project”. *CLIVAR Exchanges*, **69**, 22-26.
- 川合秀明 1* Tsushima, Y., M. A. Ringer, T. Koshiro, H. Kawai, R. Roehrig, J. Cole, M. Watanabe, T. Yokohata, A. Bodas-Salcedo, K. D. Williams, and M. J. Webb, 2016: Robustness, uncertainties, and emergent constraints in the radiative responses of stratocumulus cloud regimes to future warming. *Climate Dynamics*, **46(9)**, 3025-3039, doi:10.1007/s00382-015-2750-7.
- 2* Kawai, H., T. Koshiro, H. Endo, O. Arakawa, and Y. Hagihara, 2016: Changes in Marine Fog in a Warmer Climate. *Atmospheric Science Letters*, **17**, 548-555, doi:10.1002/asl.691.
- 川瀬宏明 1* Nosaka, M., H. Sasaki, A. Murata, H. Kawase, and M. Oh'izumi, 2016: Bias correction of snow depth by using regional frequency analysis in the non-hydrostatic regional climate model around Japan. *SOLA*, **12**, 165-169, doi:10.2151/sola.2016-034.
- 2* Kawase, H., A. Murata, R. Mizuta, H. Sasaki, M. Nosaka, M. Ishii, and I. Takayabu, 2016: Enhancement of heavy daily snowfall in central Japan due to global warming as projected by large ensemble of regional climate simulations. *Climatic Change*, **139**, 265-278, doi:10.1007/s10584-016-1781-3.
- 3* Mizuta, R., A. Murata, M. Ishii, H. Shiogama, K. Hibino, N. Mori, O. Arakawa, Y. Imada, K. Yoshida, T. Aoyagi, H. Kawase, M. Mori, Y. Okada, T. Shimura, T. Nagatomo, M. Ikeda, H. Endo, M. Nosaka, M. Arai, C. Takahashi, K. Tanaka, T. Takemi, Y. Tachikaw, 2016: Over 5000 Years of Ensemble Future Climate Simulations by 60 km Global and 20 km Regional Atmospheric Models. *Bulletin of the American Meteorological Society*, doi:10.1175/BAMS-D-16-0099.1. (in press)
- 4* Murata, A., H. Sasaki, H. Kawase, and M. Nosaka, 2016: Identification of key factors in future changes in precipitation extremes over Japan using ensemble simulations. *Hydrological Research Letters*, **10**, 126-131, doi:10.3178/hrl.10.126.
- 5* Murata, A., H. Sasaki, H. Kawase, and M. Nosaka, 2017: Evaluation of precipitation over an oceanic region of Japan in convection-permitting regional climate model simulations. *Climate Dynamics*, **48**, 1779-1792, doi:10.1007/s00382-016-3172-x.
- 川畑拓矢 1* Ito, K., M. Kunii, T. Kawabata, K. Saito, K. Aonashi, and L. Duc, 2016: Mesoscale Hybrid Data Assimilation System based on JMA Nonhydrostatic Model. *Monthly Weather Review*, **144**, 3417-3439, doi:10.1175/MWR-D-16-0014.1.
- 2 伊藤耕介, 国井勝, 川畑拓矢, 斉藤和雄, 青梨和正, Le Duc, 2017: Hybrid EnKF-4D-Var 法に基づく極端大気現象予測。月刊海洋, 号外 **59**, 64-73.

- 川端康弘 1* Shiina, T., S. Yamada, H. Senshu, N. Otobe, G. Hashimoto, and Y. Kawabata, 2016: LED minilidar for Mars rover. *Proceedings of SPIE*, **10006**, 0F, doi:10.1117/12.2241976.
- 2 Shiina, T., S. Yamada, H. Senshu, N. Otobe, G. Hashimoto, and Y. Kawabata, 2016: LED-powered mini-lidar for martian atmospheric dust studies. *SPIE Newsroom*, doi:10.1117/2.1201609.006707.
- 北村祐二 1* Kitamura, Y., 2016: Improving a turbulence scheme for the terra incognita in a dry convective boundary layer. *Journal of the Meteorological Society of Japan*, **94**, 491-506, doi:10.2151/jmsj.2016-028.
- 楠研一 1* Adachi, T., M. Sato, T. Ushio, A. Yamazaki, M. Suzuki, M. Kikuchi, Y. Takahashi, U. Inan, I. Linscott, Y. Hobara, H. U. Frey, S. B. Mende, A. Chen, R.-R. Hsu, and K. Kusunoki, 2016: Identifying the Occurrence of Lightning and Transient Luminous Events by Nadir Spectrophotometric Observation. *Journal of Atmospheric and Solar-Terrestrial Physics*, **145**, 85-97, doi:10.1016/j.jastp.2016.04.010.
- 2* Kusunoki, K., K. Arai, R. Kato, E. Sato, and C. Fujiwara, 2016: A linear array of wind and pressure sensors for high resolution in situ measurements in winter tornadoes. *電気学会論文誌 A*, **136**, 286-290, doi:10.1541/ieejfms.136.286.
- 3* Tsunomura, S., M. Nishihashi, and K. Kusunoki, 2016: Electrical charge associated with cloud-to-ground lightning discharge in the Shonai area, Tohoku district, Japan. *気象研究所研究報告*, **66**, 25-37, doi:10.2467/mripapers.66.25.
- 4 楠研一, 牛尾知雄, 菊池博史, 水谷文彦, 柏柳太郎, 佐藤晋介, 足立透, 吉田翔, 小池佳奈, 岩波越, 2016: シンポジウム「フェーズドアレイレーダー」の報告 —研究開発の現状と将来展望—. *天気*, **第63巻8号**, 587-590.
- 5* Adachi, T., K. Kusunoki, S. Yoshida, K. Arai, and T. Ushio, 2016: High-Speed Volumetric Observation of Wet Microburst using X-band Phased Array Weather Radar in Japan. *Monthly Weather Review*, **144**, 3749-3765, doi:10.1175/MWR-D-16-0125.1.
- 6* Inoue, H. Y., K. Kusunoki, K. Arai, N. Ishitsu, T. Adachi, S. Yoshida and C. Fujiwara, 2016: Structure and evolution of misovortices observed within a convective snowband in the Japan Sea coastal region during a cold-air outbreak on 31 December 2007. *Journal of the Meteorological Society of Japan*, **94**, 507-524, doi:10.2151/jmsj.2016-029.
- 7* Adachi, T., K. Kusunoki, S. Yoshida, H. Inoue, K. Arai, T. Ushio, 2016: Rapid Volumetric Growth of Misocyclone and Vault-like Structure in Horizontal Shear Observed by Phased Array Weather Radar. *SOLA*, **12**, 314-319, doi:10.2151/sola.2016-061.
- 8* Kusunoki, K., K. Arai, R. Kato, and C. Fujiwara, 2017: Observations of the Intensity and Structure Changes within a Winter Tornadic Storm during Landfall over the Japan Sea Area. *電気学会論文誌 A*, **137**, 141-146, doi:10.1541/ieejfms.137.141.
- 9* Yoshida, S., T. Adachi, K. Kusunoki, S. Hayashi, T. Wu, T. Ushio, and E. Yoshikawa, 2017: Relationship between thunderstorm electrification and storm kinetics revealed by phased array weather radar. *Journal of Geophysical Research Atmosphere*. (in press)
- 楠昌司 1* Kusunoki, S., 2016: Is the global atmospheric model MRI-AGCM3.2 better than the CMIP5 atmospheric models in simulating precipitation over East Asia?. *Climate Dynamics*, doi:10.1007/s00382-016-3335-9. (in press)

- 2* Kusunoki, S., 2016: Future changes in precipitation over East Asia projected by the global atmospheric model MRI-AGCM3.2. *Climate Dynamics*, doi:10.1007/s00382-016-3499-3. (in press)
- 工藤玲 1* Kudo, R., T. Nishizawa, and T. Aoyagi, 2016: Vertical profiles of aerosol optical properties and the solar heating rate estimated by combining sky radiometer and lidar measurements. *Atmospheric Measurement Techniques*, **9**, 3223-3243, doi:10.5194/amt-9-3223-2016.
- 2 Kudo, R., T. Nishizawa, T. Aoyagi, Y. Fujiyoshi, Y. Higuchi, M. Hayashi, A. Shimizu, and K. Aoki, 2017: Remote sensing of aerosol optical properties and solar heating rate by the combination of sky radiometer and lidar measurements. *AIP Conference Proceedings*, **1810**, doi:10.1063/1.4975518.
- 國井勝 1 福井真, 岩崎俊樹, 斉藤和雄, 瀬古弘, 国井勝, 2016: 従来型観測のみを用いた日本域再解析システムの構築に向けた同化実験. *SENAC (東北大学大型計算機センター広報)*, **49**, 5-11.
- 2 Wada, A. and M. Kunii, 2016: The effect of predicted oceanic conditions on the assimilation of Typhoon Sinlaku (2008). *WGNE Blue Book: Research Activities in Atmospheric and Ocean Modelling*, **46**, 9-05.
- 3 Miyoshi, T., M. Kunii, J. Ruiz, G.-Y. Lien, S. Satoh, T. Ushio, K. Bessho, H. Seko, H. Tomita, Y. Ishikawa, 2016: “Big Data Assimilation” revolutionizing severe weather prediction. *Bulletin of the American Meteorological Society*, **97**, 1347-1354.
- 4* Yokota, S., H. Seko, M. Kunii, H. Yamauchi, and H. Niino, 2016: The Tornadic Supercell on the Kanto Plain on 6 May 2012: Polarimetric Radar and Surface Data Assimilation with EnKF and Ensemble-Based Sensitivity Analysis. *Monthly Weather Review*, **144**, 3133-3157, doi:10.1175/MWR-D-15-0365.1.
- 5* Ito, K., M. Kunii, T. Kawabata, K. Saito, K. Aonashi, and L. Duc, 2016: Mesoscale Hybrid Data Assimilation System based on JMA Nonhydrostatic Model. *Monthly Weather Review*, **144**, 3417-3439, doi:10.1175/MWR-D-16-0014.1.
- 6 佐藤芳昭, 加藤輝之, 榎本剛, 永戸久喜, 太田洋一郎, 野口峻佑, 佐藤和敏, 松枝未遠, 小野耕介, 国井勝, 横田祥, 野原大輔, 牛山朋来, 2016: 第9回気象庁数値モデル研究会・第44回メソ気象研究会・第2回観測システム予測可能性研究連絡会—アンサンブル予報の発展と展望—. *天気*, **63**, 843-849.
- 7 Miyoshi, T., G.-Y. Lien, S. Satoh, T. Ushio, K. Bessho, H. Tomita, S. Nishizawa, R. Yoshida, S. A. Adachi, J. Liao, B. Gerofi, Y. Ishikawa, M. Kunii, J. Ruiz, Y. Maejima, S. Otsuka, M. Otsuka, K. Okamoto, and H. Seko, 2016: “Big Data Assimilation” Toward Post-Petascale Severe Weather Prediction: An Overview and Progress. *Proceedings of the IEEE*, **104**, 104, doi:10.1109/JPROC.2016.2602560.
- 8* Kunii, M., K. Ito, and A. Wada, 2017: Preliminary test of a data assimilation system with a regional high-resolution atmosphere-ocean coupled model based on an ensemble Kalman filter. *Monthly Weather Review*, doi:10.1175/MWR-D-16-0068.1.
- 9 伊藤耕介, 国井勝, 川畑拓矢, 斉藤和雄, 青梨和正, Le Duc, 2017: Hybrid EnKF-4D-Var法に基づく極端大気現象予測. *月刊海洋*, 号外 **59**, 64-73.
- 倉賀野連 1 豊田隆寛, 藤井陽介, 倉賀野連, 小杉如央, 笹野大輔, 蒲地政文, 石川洋一, 増田周平, 佐藤佳奈子, 淡路敏之, 2016: 北太平洋冬季混合層深の経年から十年規模変動. *月刊海洋*, **48**, 177-185.
- 黒田友二 1* Noguchi, S., H. Mukougawa, Y. Kuroda, R. Mizuta, S. Yabu, and H. Yoshimura, 2016: Predictability of the stratospheric polar vortex breakdown: an ensemble reforecast

- experiment for the splitting event in January 2009. *Journal of Geophysical Research Atmosphere*, **121**, 3388-3404, doi:10.1002/2015JD024581.
- 2* Tripathi, O. P., M. Baldwin, A. Charlton-Perez, M. Charron, J. CH. Cheung, S. D. Eckermann, E. Gerber, D. R. Jackson, Y. Kuroda, A. Lang, J. Mclay, R. Mizuta, C. Reynolds, G. Roff, M. Sigmond, S.-W. Son, and T. Stockdale, 2016: Examining the predictability of the Stratospheric Sudden Warming of January 2013 using multiple NWP systems. *Monthly Weather Review*, **144**, 1935-1960, doi:10.1175/MWR-D-15-0010.1.
- 3* Kuroda, Y., 2016: Influence of atmospheric waves on the formation and the maintenance of the subtropical jet during the Northern Hemisphere winter –A new method for analyzing the responses to specific forcings, *Journal of Geophysical Research*, **121**, 4674-4690, doi:10.1002/2015JD024592.
- 4* Kuroda, Y. and M. Deushi, 2016: Influence of the solar cycle on the polar-night jet oscillation in the southern hemisphere, *Journal of Geophysical Research*, **121**, 11,575-11,589, doi:10.1002/2015JD024204.
- 5* Kuroda, Y., 2017: Influence of atmospheric waves on the maintenance and variability of the southern subtropical jet in winter, *Journal of Geophysical Research*, **122**, 771-783, doi:10.1002/2016JD025814.
- 小杉如央 1* Hama, T., T. Inoue, R. Suzuki, H. Kashiwazaki, S. Wada, D. Sasano, N. Kosugi, and M. Ishii, 2016: Response of a phytoplankton community to nutrient addition under different CO₂ and pH conditions. *Journal of Oceanography*, **72**, 207-223, doi:10.1007/s10872-015-0322-4.
- 2 豊田隆寛, 藤井陽介, 倉賀野連, 小杉如央, 笹野大輔, 蒲地政文, 石川洋一, 増田周平, 佐藤佳奈子, 淡路敏之, 2016: 北太平洋冬季混合層深の経年から十年規模変動. *月刊海洋*, **48**, 177-185.
- 3* Ishidoya S., H. Uchida, D. Sasano, N. Kosugi, S. Taguchi, M. Ishii, S. Morimoto, Y. Tohjima, S. Nishino, S. Murayama, S. Aoki, K. Ishijima, R. Fujita, D. Goto and T. Nakazawa, 2016: Ship-based observations of atmospheric potential oxygen and regional air sea O₂ flux in the northern North Pacific and the Arctic Ocean. *Tellus B*, **68**, 29972, doi:10.3402/tellusb.v68.29972.
- 4* Kosugi, N., D. Sasano, M. Ishii, K. Enyo, and S. Saito, 2016: Autumn CO₂ chemistry in the Japan Sea and the impact of discharges from the Changjiang River. *Journal of Geophysical Research Oceans*, doi:10.1002/2016JC011838. (in press)
- 小寺祐貴 1 Kodera, Y., Y. Yamada, S. Adachi, M. Morimoto, Y. Nishimae, and M. Hoshiba, 2016: The Eight Years of Earthquake Early Warning Operation in the Japan Meteorological Agency. *Cahiers Bleus*, **31**, 17-30.
- 2* Kodera, Y., J. Saitou, N. Hayashimoto, S. Adachi, M. Morimoto, Y. Nishimae, and M. Hoshiba, 2016: Earthquake Early Warning for the 2016 Kumamoto Earthquake: Performance Evaluation of the Current System and the Next-Generation Methods of the Japan Meteorological Agency. *Earth, Planets and Space*, **68**, 202, doi:10.1186/s40623-016-0567-1.
- 小林昭夫 1* 小林昭夫, 弘瀬冬樹, 2016: 千葉県北部の地震活動と同期した非地震性すべり. *地震*, **69**, 1-9.
- 2 気象研究所, 2016: 海溝と直交する方向の全国の基線長変化. *地震予知連絡会会報*, **96**, 30-36.
- 3 気象研究所, 2016: 内陸部の地震空白域における地殻変動連続観測. *地震予知連絡会会報*,

- 96, 333-336.
- 4* 中田健嗣, 小林昭夫, 平田賢治, 対馬弘晃, 山崎明, 勝間田明男, 前田憲二, 馬場久紀, 一ノ瀬里美, 牛田堯, 石原昂典, 稲村嘉津也, 蓮澤豪, 2017: 自己浮上式海底地震計観測によって推定された紀伊半島南方の南海トラフ軸南側の地震活動. *地震*, **69**, 59-68, doi:10.4294/zisin.69.59.
- 5 気象研究所, 2017: 内陸部の地震空白域における地殻変動連続観測. *地震予知連絡会会報*, **97**, 287-290.
- 6 気象研究所, 2017: 海溝と直交する方向の全国の基線長変化. *地震予知連絡会会報*, **97**, 30-35.
- 小林ちあき 1* Miyazaki, K., T. Iwasaki, Y. Kawatani, C. Kobayashi, S. Sugawara, and M. I. Hegglin, 2016: Inter-comparison of stratospheric mean-meridional circulation and eddy mixing among six reanalysis data sets. *Atmospheric Chemistry and Physics*, **16**, 6131-6152, doi:10.5194/acp-16-6131-2016.
- 2* Harada, Y., H. Kamahori, C. Kobayashi, H. Endo, S. Kobayashi, Y. Ota, H. Onoda, K. Onogi, K. Miyaoka, and K. Takahashi, 2016: The JRA-55 Reanalysis: Representation of atmospheric circulation and climate variability. *Journal of the Meteorological Society of Japan*, **94**, doi:10.2151/jmsj.2016-015.
- 3 Nakamura, H., Y. Kawai, R. Masunaga, H. Kamahori, C. Kobayashi, and M. Koike, 2016: An Extra Product of the JRA-55 Atmospheric Reanalysis and In Situ Observations in the Kuroshio-Oyashio Extension Under the Japanese “Hotspot Project”. *CLIVAR Exchanges*, **69**, 22-26.
- 4* Fujiwara, M., J. S. Wright, G. L. Manney, L. J. Gray, J. Anstey, T. Birner, S. Davis, E. P. Gerber, V. L. Harvey, M. I. Hegglin, C. R. Homeyer, J. A. Knox, K. Krüger, A. Lambert, C. S. Long, P. Martineau, A. Molod, B. M. Monge-Sanz, M. L. Santee, S. Tegtme, 2017: Introduction to the SPARC Reanalysis Intercomparison Project (S-RIP) and overview of the reanalysis systems. *Atmospheric Chemistry and Physics*, **17**, 1417-1452, doi:10.5194/acp-17-1417-2017.
- 財前祐二 1 木村徹, 五十嵐康人, 財前祐二, 2016: IAEA-TEL-2015-03 Proficiency Test 試料の測定. *Proceedings of the 17th Workshop on Environmental Radioactivity*, **2016-8**, 228-231.
- 齊藤和雄 1 福井真, 岩崎俊樹, 齊藤和雄, 瀬古弘, 国井勝, 2016: 従来型観測のみを用いた日本域再解析システムの構築に向けた同化実験. *SENAC (東北大学大型計算機センター広報)*, **49**, 5-11.
- 2* Kobayashi, K., S. Otsua, Apip and K. Saito, 2016: Ensemble flood simulation for a small dam catchment in Japan using 10 and 2 km resolution nonhydrostatic model rainfalls. *Natural Hazards and Earth System Sciences*, **16**, 1821-1839, doi:10.5194/nhess-16-1821-2016.
- 3* Ito, K., M. Kunii, T. Kawabata, K. Saito, K. Aonashi, and L. Duc, 2016: Mesoscale Hybrid Data Assimilation System based on JMA Nonhydrostatic Model. *Monthly Weather Review*, **144**, 3417-3439, doi:10.1175/MWR-D-16-0014.1.
- 4 齊藤和雄, 2016: 気象災害軽減のための監視・予測技術の高度化に関する研究. *SAT 会誌*, **30**, 6-7.
- 5 齊藤和雄, 鈴木修, 2016: メソ気象の監視と予測. *気象学の新潮流*, **4**, 160pp. 朝倉書店, **4**, 朝倉書店, 160pp, ISBN: 978-4-254-16774-0.
- 6 齊藤和雄, 瀬古弘, 露木義, 中村晃三, 青梨和正, 竹見哲也, 2016: 第6回超高精度メソスケール気象予測研究会報告. *天気*, **63**, 869.

- 7 Saito, K., Y. Shoji, S. Origuchi and Le Duc, 2017: GPS PWV assimilation with the JMA nonhydrostatic 4DVAR and cloud resolving ensemble forecast for the 2008 August Tokyo metropolitan area local heavy rainfalls.. *Data Assimilation for Atmospheric, Oceanic and Hydrological Applications*, **3**, Springer , 383-404pp, ISBN: 978-3-319-43414-8, doi:10.1007/978-3-319-43415-5_17.
- 8* Duc, L. and K. Saito, 2017: On cost functions in the hybrid variational-ensemble method.. *Monthly Weather Review*, doi:10.1175/MWR-D-16-0325.1. (in press)
- 9 斉藤和雄, 2017: 「京」によるメソ気象予測研究の最前線.. 天気. (in press)
- 10 伊藤耕介, 国井勝, 川畑拓矢, 斉藤和雄, 青梨和正, Le Duc, 2017: Hybrid EnKF-4D-Var 法に基づく極端大気現象予測. *月刊海洋*, 号外 **59**, 64-73.
- 酒井哲 1 Masuda, K., H. Ishimoto, T. Sakai, and H. Okamoto, 2016: Backscattering properties of nonspherical ice particles calculated by Geometrical-Optics-Integral-Equation method . *EPJ Web of Conferences*, **190**, 16001, doi:10.1051/epjconf/201611916001.
- 2 P. P. Le. Hoai, M. Abo, and T. Sakai, 2016: Development of field-deployable diode-laser-based water vapor DIAL. *EPJ Web of Conferences*, **119**, 05011, doi:10.1051/epjconf/201611905011.
- 3 Sakai, T., O. Uchino, T. Nagai, T. Fujimoto, and I. Tabata, 2016: Long-term variation of stratospheric aerosols observed with lidar from 1982 to 2014 over Tsukuba, Japan. *EPJ Web of Conferences*, **119**, 23011, doi:10.1051/epjconf/201611923011.
- 4* Sakai, T., O. Uchino, T. Nagai, B. Liley, I. Morino, and T. Fujimoto, 2016: Long-term variation of stratospheric aerosols observed with lidars over Tsukuba, Japan, from 1982 and Lauder, New Zealand, from 1992 to 2015. *Journal of Geophysical Research Atmosphere*, **121**, 10283-10293, doi:10.1002/2016JD025132.
- 5* Ohyama, H., S. Kawakami, O. Uchino, T. Sakai, I. Morino, T. Nagai, K. Shiomi, M. Sakashita, T. Akaho, H. Okumura, and K. Arai, 2016: Seasonal variation of O3-CO correlation derived from remote sensing measurements over western Japan. *Atmospheric Environment*, **147**, 344-354, doi:10.1016/j.atmosenv.2016.10.027.
- 6* Uchino, O., Sakai, T., Izumi, T., Nagai, T., Morino, I., Yamazaki, A., Deushi, M., Yumimoto, K., Maki, T., Tanaka, T. Y., Akaho, T., Okumura, H., Arai, K., Nakatsuru, T., Matsunaga, T., and Yokota, T., 2017: Lidar detection of high concentrations of ozone and aerosol transported from northeastern Asia over Saga, Japan. *Atmospheric Chemistry and Physics*, **17**, 1865-1879, doi:10.5194/acp-17-1865-2017.
- 坂本圭 1 浦川昇吾, 山中吾郎, 平原幹俊, 坂本圭, 辻野博之, 中野英之, 2016: 日本沿岸海洋モデリングにおける流域雨量指数の有用性に関する検証. *測候時報*, **83(特別号)**, S33-S45.
- 2* Akitomo, K., M. Hirano, Y. Kinugawa, K. Sakamoto, and K. Tanaka, 2016: Scalings of the tidally induced bottom boundary layer in a shallow sea under a surface heating. *Journal of Oceanography*, **72**, 541-552, doi:10.1007/s10872-015-0343-z.
- 佐々木秀孝 1 Nosaka, M., H. Sasaki, A. Murata, H. Kawase, and M. Oh'izumi, 2016: Bias correction of snow depth by using regional frequency analysis in the non-hydrostatic regional climate model around Japan. *SOLA*, **12**, 165-169, doi:10.2151/sola.2016-034.
- 2* Kawase, H., A. Murata, R. Mizuta, H. Sasaki, M. Nosaka, M. Ishii, and I. Takayabu, 2016: Enhancement of heavy daily snowfall in central Japan due to global warming as projected by large ensemble of regional climate simulations. *Climatic Change*, **139**, 265-278, doi:10.1007/s10584-016-1781-3.

- 3* Murata, A., H. Sasaki, H. Kawase, and M. Nosaka, 2016: Identification of key factors in future changes in precipitation extremes over Japan using ensemble simulations. *Hydrological Research Letters*, **10**, 126-131, doi:10.3178/hrll.10.126.
- 4* Faye T. Cruz, and H. Sasaki, 2017: Simulation of present climate over Southeast Asia using the Non-Hydrostatic Regional Climate Model. *SOLA*, **13**, 13-18, doi:10.2151/sola.2017-003.
- 5* Murata, A., H. Sasaki, H. Kawase, and M. Nosaka, 2017: Evaluation of precipitation over an oceanic region of Japan in convection-permitting regional climate model simulations. *Climate Dynamics*, **48**, 1779-1792, doi:10.1007/s00382-016-3172-x.
- 笹野大輔 1* Hama, T., T. Inoue, R. Suzuki, H. Kashiwazaki, S. Wada, D. Sasano, N. Kosugi, and M. Ishii, 2016: Response of a phytoplankton community to nutrient addition under different CO₂ and pH conditions. *Journal of Oceanography*, **72**, 207-223, doi:10.1007/s10872-015-0322-4.
- 2 豊田隆寛, 藤井陽介, 倉賀野連, 小杉如央, 笹野大輔, 蒲地政文, 石川洋一, 増田周平, 佐藤佳奈子, 淡路敏之, 2016: 北太平洋冬季混合層深の経年から十年規模変動. *月刊海洋*, **48**, 177-185.
- 3* Ishidoya S., H. Uchida, D. Sasano, N. Kosugi, S. Taguchi, M. Ishii, S. Morimoto, Y. Tohjima, S. Nishino, S. Murayama, S. Aoki, K. Ishijima, R. Fujita, D. Goto and T. Nakazawa, 2016: Ship-based observations of atmospheric potential oxygen and regional air sea O₂ flux in the northern North Pacific and the Arctic Ocean. *Tellus B*, **68**, 29972, doi:10.3402/tellusb.v68.29972.
- 4* Kosugi, N., D. Sasano, M. Ishii, K. Enyo, and S. Saito, 2016: Autumn CO₂ chemistry in the Japan Sea and the impact of discharges from the Changjiang River. *Journal of Geophysical Research Oceans*, doi:10.1002/2016JC011838. (in press)
- 佐藤英一 1 奥田泰雄, 脇山善夫, 中川貴文, 荒木康弘, 石原直, 喜々津仁密, 鈴木修, 須田一人, 中里真久, 小鷹博之, 小司禎教, 山内洋, 佐藤英一, 前田潤滋, 丸山敬, 坂田弘安, 鈴木覚, 伊藤優, 勝村章, 植松康, 小野裕一, 小林文明, 野田稔, 田村幸雄, 松井正宏, 吉田昭仁, 岡田玲, 2016: 日本版藤田スケールの開発 全体概要. *日本風工学会誌*, **40**, 117-118, doi:10.14887/jaweam.2015.0_117.
- 2* Kusunoki, K., K. Arai, R. Kato, E. Sato, and C. Fujiwara, 2016: A linear array of wind and pressure sensors for high resolution in situ measurements in winter tornadoes. *電気学会論文誌 A*, **136**, 286-290, doi:10.1541/ieejfms.136.286.
- 3* 岩井宏徳, 石井昌憲, 川村誠治, 佐藤英一, 楠研一, 2017: Case Study on Convection Initiation Associated with an Isolated Convective Storm Developed over Flat Terrain during TOMACS. *Journal of the Meteorological Society of Japan*, **96A**, 3-23, doi:10.2151/jmsj.2017-014.
- 4 Seko, H., E. Sato, H. Yamauchi, T. Tsuda, 2017: Data Assimilation Experiments of Refractivity Observed by JMA Operational Radar. *Data Assimilation for Atmospheric, Oceanic and Hydrologic Applications (Vol. III)*, **3**, 327-336, doi:10.1007/978-3-319-43415-5_14.
- 5 日本風工学会風災害研究会, 2017: 風災害研究会 2016 年次報告. *日本風工学会誌*, **42**, 194-197, doi:10.5359/jawe.42.194.
- 澤庸介 1* Saitoh, N., S. Kimoto, R. Sugimura, R. Imasu, S. Kawakami, K. Shiomi, A. Kuze, T. Machida, Y. Sawa, and H. Matsueda, 2016: Algorithm update of the GOSAT/TANSO-FTS thermal infrared CO₂ product (version 1) and validation of the UTLS CO₂ data using CONTRAIL measurements. *Atmospheric Measurement*

Techniques, **9**, 2119-2134, doi:10.5194/amt-9-2119-2016.

- 2* Inoue, M., I. Morino, O. Uchino, T. Nakatsuru, Y. Yoshida, T. Yokota, D. Wunch, P. O. Wennberg, C. M. Roehl, D. W. T. Griffith, T. Machida, Y. Sawa, K. Tsuboi, H. Matsueda, et al., 2016: Bias corrections of GOSAT SWIR XCO₂ and XCH₄ with TCCON data and their evaluation using aircraft measurement data. *Atmospheric Measurement Techniques*, **9**, 3491-3512, doi:10.5194/amt-9-3491-2016.
- 3 Dehara, K., H. Koide, Y. Esaki, A. Takizawa, S. Takatsuji, T. Okuda, Y. Mori, S. Hosokawa, H. Matsueda, Y. Sawa, K. Tsuboi, and Y. Niwa, 2016: Greenhouse gas observation network of Japan Meteorological Agency in the Western North Pacific. *GAW Report*, **229**, 99-103.
- 4 Kawasaki, T., A. Takizawa, M. Takahashi, H. Koide, T. Nakazawa, S. Aoki, S. Morimoto, K. Kato, T. Shimosaka, N. Aoki, T. Watanabe, T. Machida, Y. Tohjima, H. Mukai, K. Katsumata, T. Fujitani, H. Matsueda, Y. Sawa, K. Tsuboi, et al., 2016: Intercomparison experiment of standard gases for JMA/WCC activity. *GAW Report*, **229**.
- 5* Umezawa, T., Y. Niwa, Y. Sawa, T. Machida, and H. Matsueda, 2016: Winter crop CO₂ uptake inferred from CONTRAIL measurements over Delhi, India. *Geophysical Research Letters*, **43**, 11859-11866, doi:10.1002/2016GL070939.
- 6* Niwa, Y., H. Tomita, M. Satoh, R. Imasu, Y. Sawa, K. Tsuboi, H. Matsueda, T. Machida, M. Sasakawa, B. Belan, and N. Saigusa, 2017: A 4D-Var inversion system based on the icosahedral grid model (NICAM-TM 4D-Var v1.0) – Part 1: Offline forward and adjoint transport models. *Geoscientific Model Development*, **10**, 1157-1174, doi:10.5194/gmd-10-1157-2017.
- 沢田雅洋 1* Shimada, U., M. Sawada, and H. Yamada, 2016: Evaluation of the Accuracy and Utility of Tropical Cyclone Intensity Estimation Using Single Ground-Based Doppler Radar Observations. *Monthly Weather Review*, **144**, 1823-1840, doi:10.1175/MWR-D-15-0254.1.
- 2* Oyama, R., A. Wada, and M. Sawada, 2016: Intensification of Typhoon Danas (1324) captured by MTSAT upper tropospheric Atmospheric Motion Vectors. *SOLA*, **12**, 135-139, doi:10.2151/sola.2016-029.
- 3* Satoh, M., K. Aramaki, and M. Sawada, 2016: Structure of Tropical Convective Systems in Aqua-Planet Experiments: Radiative-Convective Equilibrium Versus the Earth-Like Experiment. *SOLA*, **12**, 220-224, doi:10.2151/sola.2016-044.
- 4 Nakano, M., A. Wada, M. Sawada, H. Yoshimura, R. Onishi, S. Kawahara, W. Sasaki, T. Nasuno, M. Yamaguchi, T. Iriguchi, M. Sugi, Y. Takeuchi, 2016: Global 7-km mesh nonhydrostatic Model Intercomparison Project for improving TYphoon forecast (TYMIP-G7): Experimental design and preliminary results. *Geoscientific Model Development*, doi:10.5194/gmd-2016-184. (in press)
- 5 Nasuno, t., H. Yamada, M. Nakano, H. Kubota, M. Sawada, and R. Yoshida, 2016: Global cloud-permitting simulations of Typhoon Fengshen (2008). *Geoscience Letters*, **3**, doi:10.1186/s40562-016-0064-1.
- 志藤文武 1* 志藤文武, 清野直子, 山本哲, 藤部文昭, 青柳曉典, 2016: 植栽・周辺構造物による風通しの変化が気温観測に与える影響. *風工学シンポジウム論文集*, **24**, 91-96.
- 嶋田宇大 1* Shimada, U., M. Sawada, and H. Yamada, 2016: Evaluation of the Accuracy and Utility of Tropical Cyclone Intensity Estimation Using Single Ground-Based Doppler Radar Observations. *Monthly Weather Review*, **144**, 1823-1840,

doi:10.1175/MWR-D-15-0254.1.

- 2* Shimada, U., K. Aonashi, and Y. Miyamoto, 2017: Tropical Cyclone Intensity Change and Axisymmetry Deduced from GSMaP. *Monthly Weather Review*, **145**, 1003-1017, doi:10.1175/MWR-D-16-0244.1.
- 小司禎教 1 奥田泰雄, 脇山善夫, 中川貴文, 荒木康弘, 石原直, 喜々津仁密, 鈴木修, 須田一人, 中里真久, 小鷹博之, 小司禎教, 山内洋, 佐藤英一, 前田潤滋, 丸山敬, 坂田弘安, 鈴木覚, 伊藤優, 勝村章, 植松康, 小野裕一, 小林文明, 野田稔, 田村幸雄, 松井正宏, 吉田昭仁, 岡田玲, 2016: 日本版藤田スケールの開発 全体概要. *日本風工学会誌*, **40**, 117-118, doi:10.14887/jaweam.2015.0_117.
- 2* Shoji, Y., K. Sato, M. Yabuki, and T. Tsuda, 2016: PWV Retrieval over the Ocean Using Shipborne GNSS Receivers with MADOCA Real-Time Orbits. *SOLA*, **12**, 265-271, doi:10.2151/sola.2016-052.
- 3 Saito, K., Y. Shoji, S. Origuchi and Le Duc, 2017: GPS PWV assimilation with the JMA nonhydrostatic 4DVAR and cloud resolving ensemble forecast for the 2008 August Tokyo metropolitan area local heavy rainfalls.. *Data Assimilation for Atmospheric, Oceanic and Hydrological Applications*, **3**, Springer , 383-404pp, ISBN: 978-3-319-43414-8, doi:10.1007/978-3-319-43415-5_17.
- 新堀敏基 1 新堀敏基, 2016: 火山灰輸送: モデルと予測. *火山*, **61**, 399-427, doi:10.18940/kazan.61.2_399.
- 鈴木修 1 斉藤和雄, 鈴木修, 2016: メソ気象の監視と予測. *気象学の新潮流*, **4**, 160pp. 朝倉書店, **4**, 朝倉書店, 160pp, ISBN: 978-4-254-16774-0.
- 2 瀬古弘, 鈴木修, 2017: LETKF を用いた局地的大雨の発生予測のための 観測システムシミュレーション実験. *神戸大学都市安全研究 センター研究報告*, **21**, 222-227.
- 清野直子 1* 小田僚子, 橋北太樹, 菅原広史, 清野直子, 稲垣厚至, 2016: 屋外ネットワークカメラを用いた雲のステレオ観測. *環境情報科学論文集*, **30**, 37-42, doi:10.11492/ceispapers.ceis30.0_37.
- 2* 志藤文武, 清野直子, 山本哲, 藤部文昭, 青柳曉典, 2016: 植栽・周辺構造物による風通しの変化が気温観測に与える影響. *風工学シンポジウム論文集*, **24**, 91-96.
- 3* Seino, N., T. Aoyagi, H. Tsuguti, 2016: Numerical simulation of urban impact on precipitation in Tokyo: How does urban temperature rise affect precipitation?. *Urban Climate*, doi:10.1016/j.uclim.2016.11.007. (in press)
- 瀬古弘 1 福井真, 岩崎俊樹, 斉藤和雄, 瀬古弘, 国井勝, 2016: 従来型観測のみを用いた日本域再解析システムの構築に向けた同化実験. *SENAC (東北大学大型計算機センター広報)*, **49**, 5-11.
- 2 Seko, H., T. Yoshihara, and A. Senoguchi, 2016: Data assimilation experiment of SSR mode-s downlink data. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**, 1-29
- 3 Miyoshi, T., M. Kunii, J. Ruiz, G.-Y. Lien, S. Satoh, T. Ushio, K. Bessho, H. Seko, H. Tomita, and Y. Ishikawa, 2016: "Big Data Assimilation" revolutionizing severe weather prediction. *Bulletin of the American Meteorological Society*, **97**, 1347-1354.
- 4* Yokota, S., H. Seko, M. Kunii, H. Yamauchi, and H. Niino, 2016: The Tornadic Supercell on the Kanto Plain on 6 May 2012: Polarimetric Radar and Surface Data Assimilation with EnKF and Ensemble-Based Sensitivity Analysis. *Monthly Weather Review*, **144**, 3133-3157, doi:10.1175/MWR-D-15-0365.1.

- 5 Miyoshi, T., G.-Y. Lien, S. Satoh, T. Ushio, K. Bessho, H. Tomita, S. Nishizawa, R. Yoshida, S. A. Adachi, J. Liao, B. Gerofi, Y. Ishikawa, M. Kunii, J. Ruiz, Y. Maejima, S. Otsuka, M. Otsuka, K. Okamoto, and H. Seko, 2016: "Big Data Assimilation" Toward Post-Petascale Severe Weather Prediction: An Overview and Progress. *Proceedings of the IEEE*, **104**, 2155-2179, doi:10.1109/JPROC.2016.2602560.
- 6 齊藤和雄, 瀬古弘, 露木義, 中村晃三, 青梨和正, 竹見哲也, 2016: 第6回超高精度メソスケール気象予測研究会報告. *天気*, **63**, 869.
- 7 Seko, H., E. Sato, H. Yamauchi, and T. Tsuda, 2017: Data Assimilation Experiments of Refractivity Observed by JMA Operational Radar. *Data Assimilation for Atmospheric, Oceanic and Hydrologic Applications (Vol. III)*, **3**, 327-336, doi:10.1007/978-3-319-43415-5_14.
- 8 瀬古弘, 鈴木修, 2017: LETKF を用いた局地的大雨の発生予測のための 観測システムシミュレーション実験. *神戸大学都市安全研究 センター研究報告*, **21**, 222-227.
- 高木朗充 1* Miyaoka, K., and A. Takagi, 2016: Detection of crustal deformation prior to the 2014 Mt. Ontake eruption by the stacking method. *Earth, Planets and Space*, **68**, doi:10.1186/s40623-016-0439-8.
- 2* Takagi, A., and S. Onizawa, 2016: Shallow pressure sources associated with the 2007 and 2014 phreatic eruptions of Mt. Ontake, Japan. *Earth, Planets and Space*, **68**, doi:10.1186/s40623-016-0515-0.
- 3 高木朗充, 長岡優, 福井敬一, 安藤忍, 木村一洋, 土山博昭, 2017: 2013-2015年西之島噴火のモニタリングに関する研究. *気象研究所技術報告*, **78**, 1-72, doi:10.11483/mritechrepo.78.
- 高谷祐平 1* Takaya Y., T. Yasuda, Y. Fujii, S. Matsumoto, T. Soga, H. Mori, M. Hirai, I. Ishikawa, H. Sato, A. Shimpo, M. Kamachi, and T. Ose, 2017: Japan Meteorological Agency/Meteorological Research Institute-Coupled Prediction System version 1 (JMA/MRI-CPS1) for operational seasonal forecasting. *Climate Dynamics*, **48**, 313-333, doi:10.1007/s00382-016-3076-9.
- 2* Vitart, F., C. Ardilouze, A. Bonet, A. Brookshaw, M. Chen, C. Codorean, M. Déqué, L. Ferranti, E. Fucile, M. Fuentes, H. Hendon, J. Hodgson, H.S. Kang, A. Kumar, H. Lin, G. Liu, X. Liu, P. Malguzzi, I. Mallas, M. Manoussakis, D. Mastrangelo, C. MacLachlan, 2017: The Sub-seasonal to Seasonal Prediction (S2S) Project Database. *Bulletin of the American Meteorological Society*, **98**, 163-173, doi:10.1175/BAMS-D-16-0017.1.
- 高薮出 1 Yingjiu, B., I. Kaneko, H. Nishi, H. Sasaki, A. Murata, K. Kurihara, and I. Takayabu, 2016: A web platform for community-based adaptation decision-making under uncertainty. *International Journal of Climate Change: Impacts and Responses*, **8**, 33-51.
- 2* Kawase, H., A. Murata, R. Mizuta, H. Sasaki, M. Nosaka, M. Ishii, and I. Takayabu, 2016: Enhancement of heavy daily snowfall in central Japan due to global warming as projected by large ensemble of regional climate simulations. *Climatic Change*, **139**, 265-278, doi:10.1007/s10584-016-1781-3.
- 3* Mizuta, R., A. Murata, M. Ishii, H. Shiogama, K. Hibino, N. Mori, O. Arakawa, Y. Imada, K. Yoshida, T. Aoyagi, H. Kawase, M. Mori, Y. Okada, T. Shimura, T. Nagatomo, M. Ikeda, H. Endo, M. Nosaka, M. Arai, C. Takahashi, K. Tanaka, T. Takemi, Y. Tachikawa, 2016: Over 5000 Years of Ensemble Future Climate

- Simulations by 60 km Global and 20 km Regional Atmospheric Models. *Bulletin of the American Meteorological Society*, doi:10.1175/BAMS-D-16-0099.1. (in press)
- 4* Nakaegawa, T., K. Hibino, I. Takayabu, 2017: Identifying climate analogues for cities in Australia by a non-parametric approach using multi-ensemble, high-horizontal-resolution future climate projections by an atmospheric general circulation model, MRI-AGCM3.2H. *Hydrological Research Letters*, **11**, 72-78, doi:10.3178/hr.11.72.
- 竹内義明 1 Nakano, M., A. Wada, M. Sawada, H. Yoshimura, R. Onishi, S. Kawahara, W. Sasaki, T. Nasuno, M. Yamaguchi, T. Iriguchi, M. Sugi, Y. Takeuchi, 2016: Global 7-km mesh nonhydrostatic Model Intercomparison Project for improving TYphoon forecast (TYMIP-G7): Experimental design and preliminary results. *Geoscientific Model Development*, doi:10.5194/gmd-2016-184. (in press)
- 田尻拓也 1 Araki, K., M. Murakami, T. Kato, and T. Tajiri, 2016: Diurnal Variation of Thermodynamic Environments for Convective Cloud Development around the Central Mountains in Japan during Warm Seasons. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**.
- 2 Araki, K., M. Murakami, H. Ishimoto, and T. Tajiri, 2016: The 1-Dimensional Variational Approach to Improve Thermodynamic Profiles in Low-Level Troposphere during Rain Conditions. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**.
- 3* 荒木健太郎, 村上正隆, 加藤輝之, 田尻拓也, 2017: 地上マイクロ波放射計を用いた夏季中部山地における対流雲の発生環境場の解析. *天気 (論文・短報)*, **64**, 19-36.
- 田中泰宙 1* Ishizuka, M., M. Mikami, T. Y. Tanaka, Y. Igarashi, K. Kita, Y. Yamada, N. Yoshida, S. Toyoda, Y. Satou, T. Kinase, and K. Ninomiya, 2017: Use of a size-resolved 1-D resuspension scheme to evaluate resuspended radioactive material associated with mineral dust particles from the ground surface. *Journal of Environmental Radioactivity*, **166**, 436-448, doi:10.1016/j.jenvrad.2015.12.023. (in press)
- 2* Uchino, O., Sakai, T., Izumi, T., Nagai, T., Morino, I., Yamazaki, A., Deushi, M., Yumimoto, K., Maki, T., Tanaka, T. Y., Akaho, T., Okumura, H., Arai, K., Nakatsuru, T., Matsunaga, T., and Yokota, T., 2017: Lidar detection of high concentrations of ozone and aerosol transported from northeastern Asia over Saga, Japan. *Atmospheric Chemistry and Physics*, **17**, 1865-1879, doi:10.5194/acp-17-1865-2017.
- 田中昌之 1 田中昌之, 岡田正実, 2016: 中規模繰り返し相似地震の発生状況と発生確率 (2016) . *地震予知連絡会会報*, **96**, 456-461.
- 谷川朋範 1 谷川朋範, 2016: 積雪物理量のリモートセンシングに必要な放射伝達モデルと現場観測—偏光観測に焦点をあてて—. *雪氷*, **78(6)**, 401-415.
- 2* 庭野匡思, 青木輝夫, 橋本明弘, 山口悟, 本吉弘岐, 谷川朋範, 保坂征宏, 2017: 2015-2016 冬期の新潟県アメダスへの積雪変質モデル SMAP の適用. *雪氷*. (in press)
- 3* Hori, M., K. Sugiura, K. Kobayashi, T. Aoki, T. Tanikawa, K. Kuchiki, M. Niwano, and H. Enomoto, 2017: A 38-year (1978–2015) Northern Hemisphere daily snow cover extent product derived using consistent objective criteria from satellite-borne optical sensors. *Remote Sensing of Environment*, **191**, 402-418, doi:10.1016/j.rse.2017.01.023.
- 4 Stamnes, S., K. Stamnes, W. Li, Y. Fan, N. Chen, T. Tanikawa, and J. J. Stamnes, 2017: What if MODIS could measure the Q Stokes parameter?. *AIP Conference*

Proceedings, **1810**, 120008, doi:10.1063/1.4975582. (in press)

- 溜淵功史 1 気象庁, 気象研究所, 2016: 平成 28 年 (2016 年) 熊本地震. *地震予知連絡会会報*, **96**, 492-556.
- 津口裕茂 1 津口裕茂, 2016: 線状降水帯. *天気*, **63**, 727-729.
- 2 加藤輝之, 上田博, 篠田太郎, 津口裕茂, 山田広幸, 南雲信宏, 大東忠保, 竹見哲也, 2016: 第 11 回「メソスケール気象と熱帯低気圧に関する国際会議(ICMCS-XI)」参加報告. *天気*, **63**, 719-725.
- 3 藤谷徳之助, 加藤輝之, 津口裕茂, 芳村圭, 坪木和久, 2016: 「平成 27 年 9 月関東・東北豪雨及び洪水災害に関する研究会」報告. *天気*, **63**, 245-250.
- 4 下瀬健一, 津口裕茂, 栃本英伍, 鶴沼昂, 加藤亮平, 2016: 第 2 回メソ気象セミナー開催報告. *天気*, **2**, 125-129.
- 5 津口裕茂, 下瀬健一, 加藤亮平, 栃本英伍, 横田祥, 中野満寿男, 林修吾, 大泉伝, 伊藤純至, 大元秀和, 山浦剛, 吉田龍二, 鶴沼昂, 2016: 「2014 年広島豪雨に関する予測検討会」の報告. *天気*, **63**, 95-103.
- 6 津口裕茂, 2016: 「平成 27 年 9 月関東・東北豪雨」鬼怒川の決壊をもたらした豪雨のしくみ. *SAT 会誌 30 号*, **30**, 8-9.
- 7 Seino, N., T. Aoyagi, H. Tsuguti, 2016: Numerical simulation of urban impact on precipitation in Tokyo: How does urban temperature rise affect precipitation?. *Urban Climate*, doi:10.1016/j.uclim.2016.11.007. (in press)
- 辻野博之 1* Ilicak, M., H. Drange, Q. Wang, R. Gerdes, Y. Fujii, H. Tsujino, 他 32 名, 2016: An assessment of the Arctic Ocean in a suite of interannual CORE-II simulations. Part III: Hydrography and fluxes. *Ocean Modelling*, **100**, 141-161, doi:10.1016/j.ocemod.2016.02.004.
- 2 浦川昇吾, 山中吾郎, 平原幹俊, 坂本圭, 辻野博之, 中野英之, 2016: 日本沿岸海洋モデリングにおける流域雨量指数の有用性に関する検証. *測候時報*, **83(特別号)**, S33-S45.
- 3* Tseng, Y., H. Lin, H. Chen, K. Thompson, Y. Fujii, H. Tsujino, 他 24 名, 2016: North and equatorial Pacific Ocean circulation in the CORE-II hindcast simulations. *Ocean Modelling*, **104**, 143-170, doi:10.1016/j.ocemod.2016.06.003.
- 4* Chevallier, Y. Fujii, T. Toyoda, H. Tsujino, 他 23 名., 2017: Intercomparison of the Arctic sea ice cover in global ocean-sea ice reanalyses from the ORA-IP project.. *Climate Dynamics*, **49**, 1107-1136, doi:10.1007/s00382-016-2985-y.
- 5* Griffies, S. M., G. Danabasoglu, P. J. Durack, H. Tsujino, 他 35 名, 2016: OMIP contribution to CMIP6: experimental and diagnostic protocol for the physical component of the Ocean Model Intercomparison Project. *Geoscientific Model Development*, **9**, 3231-3296, doi:10.5194/gmd-9-3231-2016.
- 対馬弘晃 1* Maeda, T., H. Tsushima, and T. Furumura, 2016: An effective absorbing boundary condition for linear long-wave and linear dispersive-wave tsunami simulations. *Earth, Planets and Space*, **68:63**, doi:10.1186/s40623-016-0436-y.
- 2* Saito, T., and H. Tsushima, 2016: Synthesizing ocean bottom pressure records including seismic wave and tsunami contributions: Toward realistic tests of monitoring systems. *Journal of Geophysical Research Solid Earth*, **121**, doi:10.1002/2016JB013195.
- 3* 中田健嗣, 小林昭夫, 平田賢治, 対馬弘晃, 山崎明, 勝間田明男, 前田憲二, 馬場久紀, 一ノ瀬里美, 牛田堯, 石原昂典, 稲村嘉津也, 蓮澤豪, 2017: 自己浮上式海底地震計観測によって推定された紀伊半島南方の南海トラフ軸南側の地震活動. *地震*, **69**, 59-68,

doi:10.4294/zisin.69.59.

- 4 平田賢治, 山崎明, 対馬弘晃, 2017: 長期型自己浮上式海底地震計の整備とその試験運用について. *気象研究所技術報告*, **77**, doi:10.11483/mritechrepo.77.
- 坪井一寛 1* Inoue, M., I. Morino, O. Uchino, T. Nakatsuru, Y. Yoshida, T. Yokota, D. Wunch, P. O. Wennberg, C. M. Roehl, D. W. T. Griffith, T. Machida, Y. Sawa, K. Tsuboi, H. Matsueda, et al., 2016: Bias corrections of GOSAT SWIR XCO₂ and XCH₄ with TCCON data and their evaluation using aircraft measurement data. *Atmospheric Measurement Techniques*, **9**, 3491-3512, doi:10.5194/amt-9-3491-2016.
- 2 Dehara, K., H. Koide, Y. Esaki, A. Takizawa, S. Takatsuji, T. Okuda, Y. Mori, S. Hosokawa, H. Matsueda, Y. Sawa, K. Tsuboi, and Y. Niwa, 2016: Greenhouse gas observation network of Japan Meteorological Agency in the Western North Pacific. *GAW Report*, **229**, 99-103.
- 3 Kawasaki, T., A. Takizawa, M. Takahashi, H. Koide, T. Nakazawa, S. Aoki, S. Morimoto, K. Kato, T. Shimosaka, N. Aoki, T. Watanabe, T. Machida, Y. Tohjima, H. Mukai, K. Katsumata, T. Fujitani, H. Matsueda, Y. Sawa, K. Tsuboi, et al., 2016: Intercomparison experiment of standard gases for JMA/WCC activity. *GAW Report*, **229**.
- 4* Niwa, Y., H. Tomita, M. Satoh, R. Imasu, Y. Sawa, K. Tsuboi, H. Matsueda, T. Machida, M. Sasakawa, B. Belan, and N. Saigusa, 2017: A 4D-Var inversion system based on the icosahedral grid model (NICAM-TM 4D-Var v1.0) – Part 1: Offline forward and adjoint transport models. *Geoscientific Model Development*, **10**, 1157-1174, doi:10.5194/gmd-10-1157-2017.
- 豊田隆寛 1 豊田隆寛, 藤井陽介, 倉賀野連, 小杉如央, 笹野大輔, 蒲地政文, 石川洋一, 増田周平, 佐藤佳奈子, 淡路敏之, 2016: 北太平洋冬季混合層深の経年から十年規模変動. *月刊海洋*, **48**, 177-185.
- 2 轡田邦夫, 豊田隆寛, 吉田聡, 2016: 総論: 「海洋変動と熱・物質循環」 「グローバルな大気海洋相互作用: 空と海をつなぐもの」. *月刊海洋*, **48**, 153-161.
- 3* Chevallier, Y. Fujii, T. Toyoda, H. Tsujino, et al., 2016: Intercomparison of the Arctic sea ice cover in global ocean–sea ice reanalyses from the ORA-IP project.. *Climate Dynamics*, doi:10.1007/s00382-016-2985-y. (in press)
- 4* Igarashi, H., T. Ichii, M. Sakai, Y. Ishikawa, T. Toyoda, S. Masuda, N. Sugiura, K. Mahapatra, and T. Awaji, 2017: Possible link between interannual variation of neon flying squid (*Ommastrephes bartramii*) abundance in the North Pacific and the climate phase shift in 1998/1999. *Progress in Oceanography*, **150**, 20-34, doi:10.1016/j.pocean.2015.03.008.
- 5* Toyoda, T., and S. Okamoto, 2017: Physical forcing of late summer chlorophyll a blooms in the oligotrophic eastern North Pacific. *Journal of Geophysical Research Oceans*, doi:10.1002/2016JC012423. (in press)
- 6* 藤井陽介, 蒲地政文, 広瀬直毅, 望月崇, 瀬藤聡, 美山透, 広瀬成章, 長船哲史, 韓修妍, 五十嵐弘道, 宮澤 泰正, 豊田隆寛, 干場康博, 増田周平, 石川洋一, 碓氷典久, 黒田寛, 高山勝巳, 2017: 日本の海洋データ同化研究: 20年間の功績と今後の展望. *海の研究*, **26(2)**, 15-43. (in press)
- 永井智広 1 Sakai, T., O. Uchino, T. Nagai, T. Fujimoto, and I. Tabata, 2016: Long-term variation of stratospheric aerosols observed with lidar from 1982 to 2014 over Tsukuba, Japan. *EPJ Web of Conferences*, **119**, 23011, doi:10.1051/epjconf/201611923011.
- 2* Sakai, T., O. Uchino, T. Nagai, B. Liley, I. Morino, and T. Fujimoto, 2016: Long-term

- variation of stratospheric aerosols observed with lidars over Tsukuba, Japan, from 1982 and Lauder, New Zealand, from 1992 to 2015. *Journal of Geophysical Research Atmosphere*, **121**, 10283-10293, doi:10.1002/2016JD025132.
- 3* Ohyama, H., S. Kawakami, O. Uchino, T. Sakai, I. Morino, T. Nagai, K. Shiomi, M. Sakashita, T. Akaho, H. Okumura, and K. Arai, 2016: Seasonal variation of O₃-CO correlation derived from remote sensing measurements over western Japan. *Atmospheric Environment*, **147**, 344-354, doi:10.1016/j.atmosenv.2016.10.027.
- 4* Uchino, O., Sakai, T., Izumi, T., Nagai, T., Morino, I., Yamazaki, A., Deushi, M., Yumimoto, K., Maki, T., Tanaka, T. Y., Akaho, T., Okumura, H., Arai, K., Nakatsuru, T., Matsunaga, T., and Yokota, T., 2017: Lidar detection of high concentrations of ozone and aerosol transported from northeastern Asia over Saga, Japan. *Atmospheric Chemistry and Physics*, **17**, 1865-1879, doi:10.5194/acp-17-1865-2017.
- 仲江川敏之 1* Nakaegawa, T., 2017: Statistical evaluation of future soil moisture changes in East Asia projected in a CMIP5 multi-model ensemble. *Hydrological Research Letters*, **11**, 37-43, doi:10.3178/hr.11.37.
- 2* Sugi, M., Y. Imada, T. Nakaegawa, and K. Kamiguchi, 2017: Estimating probability of extreme rainfall over Japan using Extended Regional Frequency Analysis. *Hydrological Research Letters*, **11**, 19-23, doi:10.3178/hr.11.19.
- 3* Nakaegawa, T., K. Hibino, I. Takayabu, 2017: Identifying climate analogues for cities in Australia by a non-parametric approach using multi-ensemble, high-horizontal-resolution future climate projections by an atmospheric general circulation model, MRI-AGCM3.2H. *Hydrological Research Letters*, **11**, 72-78, doi:10.3178/hr.11.72.
- 長岡優 1 木村一洋, 長岡優, 2017: 海洋気象観測船「啓風丸」からの地形および熱観測. *気象研究所技術報告*, **78**, 1-10, doi:10.11483/mritechrepo.78.
- 2 長岡優, 2017: 西之島の二酸化硫黄放出量観測. *気象研究所技術報告*, **78**, 53-58, doi:10.11483/mritechrepo.78.
- 3 長岡優, 2017: 西之島の火山性地震の震源決定. *気象研究所技術報告*, **78**, 65-69, doi:10.11483/mritechrepo.78.
- 中田健嗣 1* 中田健嗣, 小林昭夫, 平田賢治, 対馬弘晃, 山崎明, 勝間田明男, 前田憲二, 馬場久紀, 一ノ瀬里美, 牛田堯, 石原昂典, 稲村嘉津也, 蓮澤豪, 2017: 自己浮上式海底地震計観測によって推定された紀伊半島南方の南海トラフ軸南側の地震活動. *地震*, **69**, 59-68, doi:10.4294/zisin.69.59.
- 中野英之 1 浦川昇吾, 山中吾郎, 平原幹俊, 坂本圭, 辻野博之, 中野英之, 2016: 日本沿岸海洋モデリングにおける流域雨量指数の有用性に関する検証. *測候時報*, **83(特別号)**, S33-S45.
- 2* Masuda, Y., Y. Yamanaka, T. Hirata, and H. Nakano, 2017: Competition and community assemblage dynamics within a phytoplankton functional group: Simulation using an eddy-resolving model to disentangle deterministic and random effects. *Ecological Modelling*, **343**, 1-17, doi:10.1016/j.ecolmodel.2016.10.015.
- 南雲信宏 1 加藤輝之, 上田博, 篠田太郎, 津口裕茂, 山田広幸, 南雲信宏, 大東忠保, 竹見哲也, 2016: 第11回「メソスケール気象と熱帯低気圧に関する国際会議(ICMCS-XI)」参加報告. *天気*, **63**, 719-725.
- 2* Nagumo, N., and Y. Fujiyoshi, 2016: Synoptic-scale environmental features of the long-lasting ice pellet event in northern Japan on 10 April 2005. *Mon. Wea. Rev.*,

145, 899-907.

- 丹羽洋介 1 Dehara, K., H. Koide, Y. Esaki, A. Takizawa, S. Takatsuji, T. Okuda, Y. Mori, S. Hosokawa, H. Matsueda, Y. Sawa, K. Tsuboi, and Y. Niwa, 2016: Greenhouse gas observation network of Japan Meteorological Agency in the Western North Pacific. *GAW Report*, **229**, 99-103.
- 2* Umezawa, T., Y. Niwa, Y. Sawa, T. Machida, and H. Matsueda, 2016: Winter crop CO₂ uptake inferred from CONTRAIL measurements over Delhi, India. *Geophysical Research Letters*, **43**, 11859-11866, doi:10.1002/2016GL070939.
- 3 丹羽洋介, 2017: 全球大気輸送モデル NICAM-TM を用いた二酸化炭素のフラックス解析に関する研究. *大気化学研究*, **36**, 036A07.
- 4 丹羽洋介, 2017: 4次元変分法を用いた CO₂ インバージョン解析. *月刊海洋*, 号外**59**, 60-65.
- 5* Niwa, Y., H. Tomita, M. Satoh, R. Imasu, Y. Sawa, K. Tsuboi, H. Matsueda, T. Machida, M. Sasakawa, B. Belan, and N. Saigusa, 2017: A 4D-Var inversion system based on the icosahedral grid model (NICAM-TM 4D-Var v1.0) – Part 1: Offline forward and adjoint transport models. *Geoscientific Model Development*, **10**, 1157-1174, doi:10.5194/gmd-10-1157-2017.
- 庭野匡思 1 青木輝夫, 庭野匡思, 的場澄人, 2016: 札幌における積雪観測と物理プロセスモデル開発. *低温科学*, **74**, 163-174, doi:10.14943/lowtemsci.74.163.
- 2 橋本明弘, 庭野匡思, 青木輝夫, 2016: グリーンランド雪氷フィールド観測支援のための気象予測実験. *雪氷*, **78**, 205-214.
- 3 的場澄人, 青木輝夫, 庭野匡思, 朽木勝幸, 兒玉裕二, 山口悟, 2016: 北海道大学低温科学研究所観測露場の積雪・気象観測データの公開. *北海道の雪氷*, **35**, 135-137.
- 4* 庭野匡思, 青木輝夫, 橋本明弘, 山口悟, 本吉弘岐, 谷川朋範, 保坂征宏, 2017: 2015-2016 冬期の新潟県アメダスへの積雪変質モデル SMAP の適用. *雪氷*. (in press)
- 5* Hori, M., K. Sugiura, K. Kobayashi, T. Aoki, T. Tanikawa, K. Kuchiki, M. Niwano, and H. Enomoto, 2017: A 38-year (1978–2015) Northern Hemisphere daily snow cover extent product derived using consistent objective criteria from satellite-borne optical sensors. *Remote Sensing of Environment*, **191**, 402-418, doi:10.1016/j.rse.2017.01.023.
- 6 Akihiro Hashimoto, Masashi Niwano, Teruo Aoki, Shun Tsutaki, Shin Sugiyama, Tetsuhide Yamasaki, Yoshinori Iizuka, Sumito Matoba, 2017: Numerical weather prediction system based on JMA-NHM for field observation campaigns on the Greenland ice sheet. *Low Temperature Science*, **75**, 91-104, doi:10.14943/lowtemsci.75.91.
- 野坂真也 1* Nosaka, M., H. Sasaki, A. Murata, H. Kawase, and M. Oh'izumi, 2016: Bias correction of snow depth by using regional frequency analysis in the non-hydrostatic regional climate model around Japan. *SOLA*, **12**, 165-169, doi:10.2151/sola.2016-034.
- 2* Kawase, H., A. Murata, R. Mizuta, H. Sasaki, M. Nosaka, M. Ishii, and I. Takayabu, 2016: Enhancement of heavy daily snowfall in central Japan due to global warming as projected by large ensemble of regional climate simulations. *Climatic Change*, **139**, 265–278, doi:10.1007/s10584-016-1781-3.
- 3* Mizuta, R., A. Murata, M. Ishii, H. Shiogama, K. Hibino, N. Mori, O. Arakawa, Y. Imada, K. Yoshida, T. Aoyagi, H. Kawase, M. Mori, Y. Okada, T. Shimura, T. Nagatomo, M. Ikeda, H. Endo, M. Nosaka, M. Arai, C. Takahashi, K. Tanaka, T. Takemi, Y. Tachikaw, 2016: Over 5000 Years of Ensemble Future Climate Simulations by 60 km Global and 20 km Regional Atmospheric Models. *Bulletin of*

- the American Meteorological Society*, doi:10.1175/BAMS-D-16-0099.1. (in press)
- 4* Murata, A., H. Sasaki, H. Kawase, and M. Nosaka, 2016: Identification of key factors in future changes in precipitation extremes over Japan using ensemble simulations. *Hydrological Research Letters*, **10**, 126-131, doi:10.3178/hrl.10.126.
- 5* Murata, A., H. Sasaki, H. Kawase, and M. Nosaka, 2017: Evaluation of precipitation over an oceanic region of Japan in convection-permitting regional climate model simulations. *Climate Dynamics*, **48**, 1779-1792, doi:10.1007/s00382-016-3172-x.
- 橋本明弘 1 橋本明弘, 庭野匡思, 青木輝夫, 2016: グリーンランド雪氷フィールド観測支援のための気象予測実験. *雪氷*, **78**, 205-214.
- 2* 庭野匡思, 青木輝夫, 橋本明弘, 山口悟, 本吉弘岐, 谷川朋範, 保坂征宏, 2017: 2015-2016 冬期の新潟県アメダスへの積雪変質モデル SMAP の適用. *雪氷*. (in press)
- 3 Hashimoto, A., M. Niwano, T. Aoki, S. Tsutaki, S. Sugiyama, T. Yamasaki, Y. Iizuka, S. Matoba, 2017: Numerical weather prediction system based on JMA-NHM for field observation campaigns on the Greenland ice sheet. *Low Temperature Science*, **75**, 91-104, doi:10.14943/lowtemsci.75.91.
- 林修吾 1* 林修吾, 丸井知鶴, 2016: 「一発雷」の発生頻度と季節変化. *Journal of Atmospheric Electricity*, **36**, 13-22, doi:10.1541/jae.36.13.
- 2* Yoshida, S., T. Adachi, K. Kusunoki, S. Hayashi, T. Wu, T. Ushio, and E. Yoshikawa, 2017: Relationship between thunderstorm electrification and storm kinetics revealed by phased array weather radar. *Journal of Geophysical Research Atmosphere*. (in press)
- 原田やよい 1* Harada, Y., H. Kamahori, C. Kobayashi, H. Endo, S. Kobayashi, Y. Ota, H. Onoda, K. Onogi, K. Miyaoka, and K. Takahashi, 2016: The JRA-55 Reanalysis: Representation of atmospheric circulation and climate variability. *Journal of the Meteorological Society of Japan*, **94**, doi:10.2151/jmsj.2016-015.
- 2* Fujiwara, M., J. S. Wright, G. L. Manney, L. J. Gray, J. Anstey, T. Birner, S. Davis, E. P. Gerber, V. L. Harvey, M. I. Hegglin, C. R. Homeyer, J. A. Knox, K. Krüger, A. Lambert, C. S. Long, P. Martineau, A. Molod, B. M. Monge-Sanz, M. L. Santee, S. Tegtme, 2017: Introduction to the SPARC Reanalysis Intercomparison Project (S-RIP) and overview of the reanalysis systems. *Atmospheric Chemistry and Physics*, **17**, 1417-1452, doi:10.5194/acp-17-1417-2017.
- 広瀬成章 1* 藤井陽介, 蒲地政文, 広瀬直毅, 望月崇, 瀬藤聡, 美山透, 広瀬成章, 長船哲史, 韓修妍, 五十嵐弘道, 宮澤 泰正, 豊田隆寛, 干場康博, 増田周平, 石川洋一, 碓氷典久, 黒田寛, 高山勝巳, 2017: 日本の海洋データ同化研究: 20年間の功績と今後の展望. *海の研究*, **26(2)**, 15-43.
- 2 広瀬成章, 2017: データ同化の基礎. *号外海洋*, **59**, 130-136.
- 3 五十嵐弘道, 若松剛, 田中裕介, 広瀬成章, 2017: アカイカ漁業予測のための海況予測システム SKUIDS. *号外海洋*, **59**, 83-92.
- 弘瀬冬樹 1* 小林昭夫, 弘瀬冬樹, 2016: 千葉県北部の地震活動と同期した非地震性すべり. *地震*, **69**, 1-9.
- 2 前田憲二, 弘瀬冬樹, 2016: 群発的地震活動を前震活動と仮定して行う本震の発生予測手法: 最近の活動事例による検証. *地震予知連絡会会報*, **96**, 476-480.
- 3 弘瀬冬樹, 前田憲二, 藤田健一, 2016: 紀伊半島南東沖の地震 (2016年4月1日, M6.5) による南海トラフ大地震に対する影響. *地震予知連絡会会報*, **96**, 311-316.
- 福井敬一 1 福井敬一, 2017: 衛星搭載光学センサーを用いた西之島火山における噴煙活動評価. *気象研*

究所技術報告, **78**, 11-22, doi:10.11483/mritechrepo.78.

- 藤井陽介 1* Ilicak, M., H. Drange, Q. Wang, R. Gerdes, Y. Fujii, H. Tsujino, 他 32 名, 2016: An assessment of the Arctic Ocean in a suite of interannual CORE-II simulations. Part III: Hydrography and fluxes. *Ocean Modelling*, **100**, 141-161, doi:10.1016/j.ocemod.2016.02.004.
- 2* Takaya Y., T. Yasuda, Y. Fujii, T. Soga, H. Mori, M. Hirai, I. Ishikawa, H. Sato, A. Shimpō, M. Kamachi, and T. Ose, 2017: Japan Meteorological Agency/Meteorological Research Institute-Coupled Prediction System version 1 (JMA/MRI-CPS1) for operational seasonal forecasting. *Climate Dynamics*, **48**, 313-333, doi:10.1007/s00382-016-3076-9.
- 3 豊田隆寛, 藤井陽介, 倉賀野連, 小杉如央, 笹野大輔, 蒲地政文, 石川洋一, 増田周平, 佐藤佳奈子, 淡路敏之, 2016: 北太平洋冬季混合層深の経年から十年規模変動. *月刊海洋*, **48**, 177-185.
- 4 藤井陽介, 三寺史夫, 中村知裕, 西垣肇, 美山透, 伊藤進一, 和川拓, 2016: 亜寒帯・ベーリング海に流入する黒潮系水の移動経路の解析. *月刊海洋*, **48**, 193-199.
- 5* Tseng, Y., H. Lin, H. Chen, K. Thompson, Y. Fujii, H. Tsujino, 他 24 名, 2016: North and equatorial Pacific Ocean circulation in the CORE-II hindcast simulations. *Ocean Modelling*, **104**, 143-170, doi:10.1016/j.ocemod.2016.06.003.
- 6* Chevallier, Y. Fujii, T. Toyoda, H. Tsujino, 他 23 名., 2017: Intercomparison of the Arctic sea ice cover in global ocean-sea ice reanalyses from the ORA-IP project.. *Climate Dynamics*, **49**, 1107-1136, doi:10.1007/s00382-016-2985-y.
- 7* Xue, Y., C. Wen, A. Kumar, M. Balmaseda, Y. Fujii, O. Alves, M. Martin, X. Yang, G. Vernieres, C. Desportes, T. Lee, L. Ascione, R. Gudgel, and I. Ishikawa, 2017: A Real-time Ocean Reanalyses Intercomparison Project in the Context of Tropical Pacific Observing System and ENSO Monitoring. *Climate Dynamics* **49**, 3647-3672, doi:10.1007/s00382-017-3535-y.
- 8* 藤井陽介, 蒲地政文, 広瀬直毅, 望月崇, 瀬藤聡, 美山透, 広瀬成章, 長船哲史, 韓修妍, 五十嵐弘道, 宮澤 泰正, 豊田隆寛, 干場康博, 増田周平, 石川洋一, 碓氷典久, 黒田寛, 高山勝巳, 2017: 日本の海洋データ同化研究: 20 年間の功績と今後の展望. *海の研究*, **26(2)**, 15-43.
- 9 藤井陽介, 2017: 総説: 海洋データ同化夏の学校第 20 回の記念開催に際して. *号外海洋*, **59**, 6-10.
- 10* Ando, K., Y. Kuroda, Y. Fujii, T. Fukuda, T. Hasegawa, T. Horii, Y. Ishihara, Y. Kashino, Y. Masumoto, K. Mizuno, M. Nagura, and I. Ueki, 2017: Fifteen years progress of the TRITON array in the Western Pacific and Eastern Indian Oceans. *Journal of Oceanography*, **73**, 403-426, doi:10.1007/s10872-017-0414-4.
- 藤田健一 1 気象庁, 気象研究所, 2016: 平成 28 年 (2016 年) 熊本地震. *地震予知連絡会会報*, **96**, 492-556.
- 2 弘瀬冬樹, 前田憲二, 藤田健一, 2016: 紀伊半島南東沖の地震 (2016 年 4 月 1 日, M6.5) による南海トラフ大地震に対する影響. *地震予知連絡会会報*, **96**, 311-316.
- 保坂征宏 1* 庭野匡思, 青木輝夫, 橋本明弘, 山口悟, 本吉弘岐, 谷川朋範, 保坂征宏, 2017: 2015-2016 冬期の新潟県アメダスへの積雪変質モデル SMAP の適用. *雪氷*. (in press)
- 干場充之 1* Ogiso, M., S. Aoki, and M. Hoshiba, 2016: Real-time seismic intensity prediction using frequency-dependent site amplification factors. *Earth, Planets and Space*, **68**, 83, doi:10.1186/s40623-016-0467-4.

- 2 Ogiso, M., N. Hayashimoto, and M. Hoshihara, 2016: Array Observation of Strong Ground Motion for Real Time Estimation of Current Wavefield. *Cahiers Bleus*, **31**, 75-86.
- 3 Kodera, Y., Y. Yamada, S. Adachi, M. Morimoto, Y. Nishimae, and M. Hoshihara, 2016: The Eight Years of Earthquake Early Warning Operation in the Japan Meteorological Agency. *Cahiers Bleus*, **31**, 17-30.
- 4 Oth, A., S. Parolai, C. Cauzzi, I. Iervolino, A. Ansal, M. Böse, K. Goda, T. Heaton, M. Hoshihara, and A. Zollo, 2016: Earthquake and Induced Multi-Risk Early Warning and Rapid Response, Workshop Report by the Scientific Committee. *Proceedings of the ECCGS & ESC/EAAE Joint Workshop*, The European Center for Geodynamics and Seismology, 127pp, ISBN: 978-99959-0-256-8.
- 5* Kodera, Y., J. Saitou, N. Hayashimoto, S. Adachi, M. Morimoto, Y. Nishimae, and M. Hoshihara, 2016: Earthquake Early Warning for the 2016 Kumamoto Earthquake: Performance Evaluation of the Current System and the Next-Generation Methods of the Japan Meteorological Agency. *Earth, Planets and Space*, **68**, 202, doi:10.1186/s40623-016-0567-1.
- 前田憲二 1 前田憲二, 弘瀬冬樹, 2016: 群発的地震活動を前震活動と仮定して行う本震の発生予測手法: 最近の活動事例による検証. *地震予知連絡会会報*, **96**, 476-480.
- 2 弘瀬冬樹, 前田憲二, 藤田健一, 2016: 紀伊半島南東沖の地震 (2016年4月1日, M6.5) による南海トラフ大地震に対する影響. *地震予知連絡会会報*, **96**, 311-316.
- 3* 中田健嗣, 小林昭夫, 平田賢治, 対馬弘晃, 山崎明, 勝間田明男, 前田憲二, 馬場久紀, 一ノ瀬里美, 牛田堯, 石原昂典, 稲村嘉津也, 蓮澤豪, 2017: 自己浮上式海底地震計観測によって推定された紀伊半島南方の南海トラフ軸南側の地震活動. *地震*, **69**, 59-68, doi:10.4294/zisin.69.59.
- 前田修平 1* Takemura, K., and S. Maeda, 2016: Influence of enhanced variability with zonal wavenumber 1 on Arctic Oscillation in late winter to early spring in El Niño conditions. *SOLA*, **12**, 159-164, doi:10.2151/sola.2016-033.
- 2* Maeda, S., Y. Urabe, K. Takemura, T. Yasuda, and Y. Tanimoto, 2016: Significant atmospheric circulation anomalies over the North Pacific associated with the enhanced Pacific ITCZ during the summer-fall of 2014. *SOLA*, **12**, 282-286, doi:10.2151/sola.2016-055.
- 3* Urabe, Y., T. Yasuda, and S. Maeda, 2017: Rapid Warming in Global Sea Surface Temperature since around 2013. *SOLA*, **13**, 25-30, doi:10.2151/sola.2017-005.
- 4* Imada, Y., S. Maeda, M. Watanabe, H. Shiogama, R. Mizuta, M. Ishii, and M. Kimoto, 2017: Recent Enhanced Seasonal Temperature Contrast in Japan from Large Ensemble High-Resolution Climate Simulations. *Atmosphere*, **8**, 57, doi:10.3390/atmos8030057.
- 眞木貴史 1* Uchino, O., Sakai, T., Izumi, T., Nagai, T., Morino, I., Yamazaki, A., Deushi, M., Yumimoto, K., Maki, T., Tanaka, T. Y., Akaho, T., Okumura, H., Arai, K., Nakatsuru, T., Matsunaga, T., and Yokota, T., 2017: Lidar detection of high concentrations of ozone and aerosol transported from northeastern Asia over Saga, Japan. *Atmospheric Chemistry and Physics*, **17**, 1865-1879, doi:10.5194/acp-17-1865-2017.
- 益子渉 1 益子渉, 2016: 数値シミュレーションを用いた竜巻の発生機構に関する研究. *日本気象学会 2016年度春季大会シンポジウム要旨集「竜巻の観測・予測の現状と将来」*, 12-15.
- 2* Mashiko, W., 2016: A Numerical Study of the 6 May 2012 Tsukuba City Supercell Tornado. Part II: Mechanisms of Tornadogenesis. *Monthly Weather Review*, **144**,

3077-3098, doi:10.1175/MWR-D-15-0122.1.

- 3 益子渉, 2016: 数値シミュレーションを用いた竜巻の発生機構に関する研究. *天気*, **63**, 970-973.
- 4 益子渉, 2017: 竜巻の発生機構. *日本風工学会誌*, **42**, 31-38.
- 松枝秀和 1* Saitoh, N., S. Kimoto, R. Sugimura, R. Imasu, S. Kawakami, K. Shiomi, A. Kuze, T. Machida, Y. Sawa, and H. Matsueda, 2016: Algorithm update of the GOSAT/TANSO-FTS thermal infrared CO₂ product (version 1) and validation of the UTLS CO₂ data using CONTRAIL measurements. *Atmospheric Measurement Techniques*, **9**, 2119-2134, doi:10.5194/amt-9-2119-2016.
- 2* Inoue, M., I. Morino, O. Uchino, T. Nakatsuru, Y. Yoshida, T. Yokota, D. Wunch, P. O. Wennberg, C. M. Roehl, D. W. T. Griffith, T. Machida, Y. Sawa, K. Tsuboi, H. Matsueda, et al., 2016: Bias corrections of GOSAT SWIR XCO₂ and XCH₄ with TCCON data and their evaluation using aircraft measurement data. *Atmospheric Measurement Techniques*, **9**, 3491-3512, doi:10.5194/amt-9-3491-2016.
- 3 Dehara, K., H. Koide, Y. Esaki, A. Takizawa, S. Takatsuji, T. Okuda, Y. Mori, S. Hosokawa, H. Matsueda, Y. Sawa, K. Tsuboi, and Y. Niwa, 2016: Greenhouse gas observation network of Japan Meteorological Agency in the Western North Pacific. *GAW Report*, **229**, 99-103.
- 4 Kawasaki, T., A. Takizawa, M. Takahashi, H. Koide, T. Nakazawa, S. Aoki, S. Morimoto, K. Kato, T. Shimosaka, N. Aoki, T. Watanabe, T. Machida, Y. Tohjima, H. Mukai, K. Katsumata, T. Fujitani, H. Matsueda, Y. Sawa, K. Tsuboi, et al., 2016: Intercomparison experiment of standard gases for JMA/WCC activity. *GAW Report*, **229**.
- 5* Umezawa, T., Y. Niwa, Y. Sawa, T. Machida, and H. Matsueda, 2016: Winter crop CO₂ uptake inferred from CONTRAIL measurements over Delhi, India. *Geophysical Research Letters*, **43**, 11859-11866, doi:10.1002/2016GL070939.
- 6* Niwa, Y., H. Tomita, M. Satoh, R. Imasu, Y. Sawa, K. Tsuboi, H. Matsueda, T. Machida, M. Sasakawa, B. Belan, and N. Saigusa, 2017: A 4D-Var inversion system based on the icosahedral grid model (NICAM-TM 4D-Var v1.0) – Part 1: Offline forward and adjoint transport models. *Geoscientific Model Development*, **10**, 1157-1174, doi:10.5194/gmd-10-1157-2017.
- 水田亮 1* Noguchi, S., H. Mukougawa, Y. Kuroda, R. Mizuta, S. Yabu, and H. Yoshimura, 2016: Predictability of the stratospheric polar vortex breakdown: an ensemble reforecast experiment for the splitting event in January 2009. *Journal of Geophysical Research Atmosphere*, **121**, 3388-3404, doi:10.1002/2015JD024581.
- 2 Tripathi, O. P., M. Baldwin, A. Charlton-Perez, M. Charron, J. CH. Cheung, S. D. Eckermann, E. Gerber, D. R. Jackson, Y. Kuroda, A. Lang, J. Mclay, R. Mizuta, C. Reynolds, G. Roff, M. Sigmond, S.-W. Son, and T. Stockdale, 2016: Examining the predictability of the Stratospheric Sudden Warming of January 2013 using multiple NWP systems. *Monthly Weather Review*, **144**, 1935-1960, doi:10.1175/MWR-D-15-0010.1.
- 3* Ogata, T., R. Mizuta, Y. Adachi, H. Murakami, and T. Ose, 2016: Atmosphere-Ocean Coupling Effect on Intense Tropical Cyclone Distribution and its Future Change with 60km-AOGCM. *Scientific Reports*, **6**, 29800, doi:10.1038/srep29800.
- 4* Kawase, H., A. Murata, R. Mizuta, H. Sasaki, M. Nosaka, M. Ishii, and I. Takayabu, 2016: Enhancement of heavy daily snowfall in central Japan due to global

- warming as projected by large ensemble of regional climate simulations. *Climatic Change*, **139**, 265–278, doi:10.1007/s10584-016-1781-3.
- 5* Shiogama, H., Y. Imada, M. Mori, R. Mizuta, D. Stone, K. Yoshida, O. Arakawa, M. Ikea, C. Takahashi, M. Arai, M. Ishii, M. Watanabe, and M. Kimoto, 2016: Attributing Historical Changes in Probabilities of Record-Breaking Daily Temperature and Precipitation Extreme Events. *SOLA*, **12**, 225-231, doi:10.2151/sola.2016-045.
- 6* Kamae, Y., H. Shiogama, Y. Imada, M. Mori, O. Arakawa, R. Mizuta, K. Yoshida, C. Takahashi, M. Arai, M. Ishii, M. Watanabe, M. Kimoto, S.-P. Xie, and H. Ueda, 2016: Forced response and internal variability of summer climate over western North America. *Climate Dynamics*, doi:10.1007/s00382-016-3350-x.
- 7* Haarsma, R. J., M. Roberts, P. L. Vidale, C. A. Senior, A. Bellucci, Q. Bao, P. Chang, S. Corti, N. S. Fućkar, V. Guemas, J. von Hardenberg, W. Hazeleger, C. Kodama, T. Koenigk, L.-Y. R. Leung, J. Lu, J.-J. Luo, J. Mao, M. S. Mizielski, R. Mizuta, P. No, 2016: High Resolution Model Intercomparison Project (HighResMIP v1.0) for CMIP6. *Geoscientific Model Development*, **9**, 4185-4208, doi:10.5194/gmd-9-4185-2016.
- 8* Ogata, T., R. Mizuta, and K. Yoshida, 2016: Effect of High-Resolution SST on East Asian Summer Monsoon and Tropical Cyclone Activity in a 60-km AGCM. *Hydrological Research Letters*, **10**, 95-100, doi:10.3178/hrl.10.95.
- 9* Mizuta, R., A. Murata, M. Ishii, H. Shiogama, K. Hibino, N. Mori, O. Arakawa, Y. Imada, K. Yoshida, T. Aoyagi, H. Kawase, M. Mori, Y. Okada, T. Shimura, T. Nagatomo, M. Ikeda, H. Endo, M. Nosaka, M. Arai, C. Takahashi, K. Tanaka, T. Takemi, Y. Tachikaw, 2016: Over 5000 Years of Ensemble Future Climate Simulations by 60 km Global and 20 km Regional Atmospheric Models. *Bulletin of the American Meteorological Society*, doi:10.1175/BAMS-D-16-0099.1. (in press)
- 10* Endo, H., A. Kitoh, R. Mizuta, and M. Ishii, 2017: Future changes in precipitation extremes in East Asia and their uncertainty based on large ensemble simulations with a high-resolution AGCM. *SOLA*, **13**, 7-12, doi:10.2151/sola.2017-002.
- 11* Ogata, T., S. J. Johnson, R. Schiemann, M.-E. Demory, R. Mizuta, K. Yoshida, O. Arakawa, 2017: The resolution sensitivity of the Asian summer monsoon and its inter-model comparison between MRI-AGCM and MetUM. *Climate Dynamics*, doi:10.1007/s00382-016-3517-5.
- 12* Noda, S., K. Kodera, Y. Adachi, M. Deushi, A. Kitoh, R. Mizuta, S. Murakami, K. Yoshida, and S. Yoden, 2017: Impact of interactive chemistry of stratospheric ozone on Southern Hemisphere paleoclimate simulation. *Journal of Geophysical Research Atmosphere*, **122**, 878-895, doi:10.1002/2016JD025508.
- 13* Shimura, T., N. Mori, T. Takemi, and R. Mizuta, 2017: Long-term impacts of ocean wave-dependent roughness on global climate systems. *Journal of Geophysical Research Oceans*, doi:10.1002/2016JC012621. (in press)
- 宮岡一樹 1* Miyaoka, K., and A. Takagi, 2016: Detection of crustal deformation prior to the 2014 Mt. Ontake eruption by the stacking method. *Earth, Planets and Space*, **68**, doi:10.1186/s40623-016-0439-8.
- 2 気象研究所, 2016: 内陸部の地震空白域における地殻変動連続観測. *地震予知連絡会会報*, **96**, 333-336.
- 3 気象研究所, 2017: 内陸部の地震空白域における地殻変動連続観測. *地震予知連絡会会報*,

- 97, 287-290.
- 4 気象庁, 気象研究所, 2017: 東海・南関東地域におけるひずみ観測結果 (2016年5月~10月). *地震予知連絡会会報*, **97**, 222-241.
- 村上正隆 1 Araki, K., M. Murakami, T. Kato, and T. Tajiri, 2016: Diurnal Variation of Thermodynamic Environments for Convective Cloud Development around the Central Mountains in Japan during Warm Seasons. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**.
- 2 Araki, K., M. Murakami, H. Ishimoto, and T. Tajiri, 2016: The 1-Dimensional Variational Approach to Improve Thermodynamic Profiles in Low-Level Troposphere during Rain Conditions. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**.
- 3 Araki, K., and M. Murakami, 2016: Validation of Vertical Thermodynamic Profiles by Cloud Base Temperature Obtained from a Ground-Based Infrared Radiometer in a Mountain Region of Central Japan during Warm Seasons. *CAS/JSC WGNE Research Activities in Atmospheric and Oceanic Modelling*, **46**.
- 4* 荒木健太郎, 村上正隆, 加藤輝之, 田尻拓也, 2017: 地上マイクロ波放射計を用いた夏季中部山地における対流雲の発生環境場の解析. *天気 (論文・短報)*, **64**, 19-36.
- 村田昭彦 1* Nosaka, M., H. Sasaki, A. Murata, H. Kawase, and M. Oh'izumi, 2016: Bias correction of snow depth by using regional frequency analysis in the non-hydrostatic regional climate model around Japan. *SOLA*, **12**, 165-169, doi:10.2151/sola.2016-034.
- 2* Kawase, H., A. Murata, R. Mizuta, H. Sasaki, M. Nosaka, M. Ishii, and I. Takayabu, 2016: Enhancement of heavy daily snowfall in central Japan due to global warming as projected by large ensemble of regional climate simulations. *Climatic Change*, **139**, 265-278. doi:10.1007/s10584-016-1781-3.
- 3* Murata, A., H. Sasaki, H. Kawase, and M. Nosaka, 2016: Identification of key factors in future changes in precipitation extremes over Japan using ensemble simulations. *Hydrological Research Letters*, **10**, 126-131, doi:10.3178/hrl.10.126.
- 4* Murata, A., H. Sasaki, H. Kawase, and M. Nosaka, 2017: Evaluation of precipitation over an oceanic region of Japan in convection-permitting regional climate model simulations. *Climate Dynamics*, **48**, 1779-1792, doi:10.1007/s00382-016-3172-x.
- 毛利英明 1 細道晶子, 河野 沙恵子, 梅原賢之, 小野木茂, 萩野谷成徳, 毛利英明, 2016: 露場周囲の低木植栽が気温の測定に及ぼす影響に関する風洞実験の報告. *測候時報*, **83**, 33-38.
- 2 細道晶子, 河野沙恵子, 梅原賢之, 小野木茂, 萩野谷成徳, 毛利英明, 2016: 気象官署の周辺に存在する樹木列が気温の観測値に及ぼす影響に関する風洞実験の報告. *測候時報*, **83**, 39-46.
- 谷口無我 1* Yaguchi, M., Y. Muramatsu, H. Chiba, F. Okumura, and T. Ohba, 2016: The origin and hydrochemistry of deep well waters from the northern foot of Mt. Fuji, central Japan. *Geochemical Journal*, **50**, 227-239.
- 2* 村松容一, 谷口無我, 大場武, 2016: 関東平野北部における温泉の水質および安定同位体比とその地質鉱物学的解釈. *温泉科学*, **66**, 4-20.
- 3* 村松容一, 谷口無我, 千葉仁, 奥村文章, 大場武, 2016: 糸魚川—静岡構造線南部およびその東域における高塩化物泉の成因—中央構造線に分布する鹿塩高塩化物泉の成因の類似性—. *温泉科学*.
- 山口宗彦 1* Feifan Z., M. Yamaguchi, and X. Qin, 2016: Possible sources of forecast errors generated by the global/regional assimilation and prediction system for landfalling tropical

- cyclones. Part I: Initial uncertainties. *Advances in Atmospheric Sciences*, **33**, 841-851, doi:10.1007/s00376-016-5238-4.
- 2* Nakano, M., A. Wada, M. Sawada, H. Yoshimura, R. Onishi, S. Kawahara, W. Sasaki, T. Nasuno, M. Yamaguchi, T. Iriguchi, M. Sugi, Y. Takeuchi, 2017: Global 7km mesh nonhydrostatic Model Intercomparison Project for improving TYphoon forecast (TYMIP-G7): experimental design and preliminary results. *Geoscientific Model Development*, doi:10.5194/gmd-10-1363-2017.
- 3* Yasunaga, K., T. Miyajima, and M. Yamaguchi, 2016: Relationships between Tropical Cyclone Motion and Surrounding Flow with Reference to Longest Radius and Maximum Sustained Wind. *SOLA*, **12**, 277-281, doi:10.2151/sola.2016-054.
- 4* Nishimura, M., and M. Yamaguchi, 2016: Selective ensemble mean technique for tropical cyclone track forecasts using multi-model ensembles. *Tropical Cyclone Research and Review*, **4**, 71-78, doi:10.6057/2015TCRR02.03.
- 山崎明宏 1* Uchino, O., Sakai, T., Izumi, T., Nagai, T., Morino, I., Yamazaki, A., Deushi, M., Yumimoto, K., Maki, T., Tanaka, T. Y., Akaho, T., Okumura, H., Arai, K., Nakatsuru, T., Matsunaga, T., and Yokota, T., 2017: Lidar detection of high concentrations of ozone and aerosol transported from northeastern Asia over Saga, Japan. *Atmospheric Chemistry and Physics*, **17**, 1865-1879, doi:10.5194/acp-17-1865-2017.
- 山里平 1 山里平, 2016: 噴火警戒レベル. *地質と調査*, **145**, 54-57.
- 2 山里平, 2016: 火山噴火—そのメカニズムと減災. *気象年鑑 2016年版*, 1-23.
- 3 山里平, 石原和弘, 2016: 火山防災・減災の仕組みと防災情報. *地盤工学会誌*, **703**, 76-83.
- 山田芳則 1 Ohtake, H., T. Takashima., T. Oozeki, Joao Gari da Silva Fonseca Jr, and Y. Yamada, 2016: A case study of outlier event on solar irradiance forecasts from the two NWP's with different horizontal resolutions. *Renew. Energy Environ. Sustain.* **1**, 37,1-4, doi:10.1051/rees/2016049.
- 2 Yamada, Y., 2016: Development of a two-moment three-ice bulk microphysical model for ice. *WGNE Bluebook*, 11-12.
- 山中吾郎 1 浦川昇吾, 山中吾郎, 平原幹俊, 坂本圭, 辻野博之, 中野英之, 2016: 日本沿岸海洋モデリングにおける流域雨量指数の有用性に関する検証. *測候時報*, **83(特別号)**, S33-S45.
- 山本哲 1* 志藤文武, 清野直子, 山本哲, 藤部文昭, 青柳暁典, 2016: 植栽・周辺構造物による風通しの変化が気温観測に与える影響. *風工学シンポジウム論文集*, **24**, 91-96.
- 行本誠史 1* Kodera, K., R. Thiéblemont, S. Yukimoto, and K. Matthes, 2016: How can we understand the global distribution of the solar cycle signal on the Earth's surface?. *Atmospheric Chemistry and Physics*, **16**, 12925-12944, doi:10.5194/acp-16-12925-2016.
- 弓本桂也 1* Uchino, O., Sakai, T., Izumi, T., Nagai, T., Morino, I., Yamazaki, A., Deushi, M., Yumimoto, K., Maki, T., Tanaka, T. Y., Akaho, T., Okumura, H., Arai, K., Nakatsuru, T., Matsunaga, T., and Yokota, T., 2017: Lidar detection of high concentrations of ozone and aerosol transported from northeastern Asia over Saga, Japan. *Atmospheric Chemistry and Physics*, **17**, 1865-1879, doi:10.5194/acp-17-1865-2017.
- 横田祥 1* Yokota, S., H. Seko, M. Kunii, H. Yamauchi, and H. Niino, 2016: The Tornadic Supercell on the Kanto Plain on 6 May 2012: Polarimetric Radar and Surface Data Assimilation with EnKF and Ensemble-Based Sensitivity Analysis. *Monthly Weather Review*, **144**, 3133-3157, doi:10.1175/MWR-D-15-0365.1.

- 2 佐藤芳昭, 加藤輝之, 榎本剛, 永戸久喜, 太田洋一郎, 野口峻佑, 佐藤和敏, 松枝未遠, 小野耕介, 國井勝, 横田祥, 野原大輔, 牛山朋來, 2016: 第9回気象庁数値モデル研究会・第44回メソ気象研究会・第2回観測システム予測可能性研究連絡会—アンサンブル予報の発展と展望—. *天気*, **63**, 843-849.
- 吉田康平 1* Shiogama, H., Y. Imada, M. Mori, R. Mizuta, D. Stone, K. Yoshida, O. Arakawa, M. Ikae, C. Takahashi, M. Arai, M. Ishii, M. Watanabe, and M. Kimoto, 2016: Attributing Historical Changes in Probabilities of Record-Breaking Daily Temperature and Precipitation Extreme Events. *SOLA*, **12**, 225-231, doi:10.2151/sola.2016-045.
- 2* Kamae, Y., H. Shiogama, Y. Imada, M. Mori, O. Arakawa, R. Mizuta, K. Yoshida, C. Takahashi, M. Arai, M. Ishii, M. Watanabe, M. Kimoto, S.-P. Xie, and H. Ueda, 2016: Forced response and internal variability of summer climate over western North America. *Climate Dynamics*, doi:10.1007/s00382-016-3350-x.
- 3* Ogata, T., R. Mizuta, and K. Yoshida, 2016: Effect of High-Resolution SST on East Asian Summer Monsoon and Tropical Cyclone Activity in a 60-km AGCM. *Hydrological Research Letters*, **10**, 95-100, doi:10.3178/hrl.10.95.
- 4* Mizuta, R., A. Murata, M. Ishii, H. Shiogama, K. Hibino, N. Mori, O. Arakawa, Y. Imada, K. Yoshida, T. Aoyagi, H. Kawase, M. Mori, Y. Okada, T. Shimura, T. Nagatomo, M. Ikeda, H. Endo, M. Nosaka, M. Arai, C. Takahashi, K. Tanaka, T. Takemi, Y. Tachikaw, 2016: Over 5000 Years of Ensemble Future Climate Simulations by 60 km Global and 20 km Regional Atmospheric Models. *Bulletin of the American Meteorological Society*, doi:10.1175/BAMS-D-16-0099.1. (in press)
- 5* Ogata, T., S. J. Johnson, R. Schiemann, M.-E. Demory, R. Mizuta, K. Yoshida, O. Arakawa, 2017: The resolution sensitivity of the Asian summer monsoon and its inter-model comparison between MRI-AGCM and MetUM. *Climate Dynamics*, doi:10.1007/s00382-016-3517-5.
- 6* Noda, S., K. Kodera, Y. Adachi, M. Deushi, A. Kitoh, R. Mizuta, S. Murakami, K. Yoshida, and S. Yoden, 2017: Impact of interactive chemistry of stratospheric ozone on Southern Hemisphere paleoclimate simulation. *Journal of Geophysical Research Atmosphere*, **122**, 878-895, doi:10.1002/2016JD025508.
- 吉田智 1 Yoshida, S., T. Wu, T. Ushio, and Y. Takayanagi, 2016: Lightning Observation in 3D Using a Multiple LF Sensor Network and Comparison with Radar Reflectivity. *Electrical Engineering in Japan*, **194(3)**, 188-196, doi:10.1002/eej.22780.
- 2* 吉田智, 2016: 「風力発電設備と雷—その影響と対策—」. *天気 (論文・短報)*, **63**, 59.
- 3* Adachi, T., K. Kusunoki, S. Yoshida, K. Arai, and T. Ushio, 2016: High-Speed Volumetric Observation of Wet Microburst using X-band Phased Array Weather Radar in Japan. *Monthly Weather Review*, **144**, 3749-3765, doi:10.1175/MWR-D-16-0125.1.
- 4* Inoue, H. Y., K. Kusunoki, K. Arai, N. Ishitsu, T. Adachi, S. Yoshida and C. Fujiwara, 2016: Structure and evolution of misovortices observed within a convective snowband in the Japan Sea coastal region during a cold-air outbreak on 31 December 2007. *Journal of the Meteorological Society of Japan*, **94**, 507-524, doi:10.2151/jmsj.2016-029.
- 5* Adachi, T., K. Kusunoki, S. Yoshida, H. Inoue, K. Arai, T. Ushio, 2016: Rapid Volumetric Growth of Misocyclone and Vault-like Structure in Horizontal Shear Observed by Phased Array Weather Radar. *SOLA*, **12**, 314-319,

doi:10.2151/sola.2016-061.

- 6* Yoshida, S., T. Adachi, K. Kusunoki, S. Hayashi, T. Wu, T. Ushio, and E. Yoshikawa, 2017: Relationship between thunderstorm electrification and storm kinetics revealed by phased array weather radar. *Journal of Geophysical Research Atmosphere*, **122**, 3821–3836, doi:10.1002/2016JD025947.
- 7* Morimoto, T., H. Kikuchi, S. Yoshida, T. Ushio, and Z. Kawasaki, 2017: Lightning observations of a small satellite “Maido-1”. *Journal of Atmospheric Electricity*, **Vol. 36, No. 2**, 39-53, doi:10.1541/jae.36.39.
- 8* Kikuchi, K., T. Wu, T. Ushio, S. Yoshida, and Z. Kawasaki, 2017: Application of digital beamforming method for a network of lightning location sensors. *Journal of Atmospheric Electricity*, **Vol. 36, No. 2**, 55-67, doi:10.1541/jae.36.55.
- 吉村裕正 1* Noguchi, S., H. Mukougawa, Y. Kuroda, R. Mizuta, S. Yabu, and H. Yoshimura, 2016: Predictability of the stratospheric polar vortex breakdown: an ensemble reforecast experiment for the splitting event in January 2009. *Journal of Geophysical Research Atmosphere*, **121**, 3388-3404, doi:10.1002/2015JD024581.
- 2 Nakano, M., A. Wada, M. Sawada, H. Yoshimura, R. Onishi, S. Kawahara, W. Sasaki, T. Nasuno, M. Yamaguchi, T. Iriguchi, M. Sugi, Y. Takeuchi, 2016: Global 7-km mesh nonhydrostatic Model Intercomparison Project for improving TYphoon forecast (TYMIP-G7): Experimental design and preliminary results. *Geoscientific Model Development*, doi:10.5194/gmd-2016-184. (in press)
- 和田章義 1 筆保弘徳, 和田章義, 杉本周作, 万田敦昌, 小田僚子, 猪上淳, 飯塚聡, 川合義美, 吉岡真由美, 2016: 天気と海の関係についてわかっていることとないこと. *天気と海の関係についてわかっていることとないこと*, ペレ出版, 327pp, ISBN: 978-4-86064-473-4.
- 2* Wada, A., 2016: Reexamination of Tropical Cyclone Heat Potential in the Western North Pacific. *Journal of Geophysical Research Atmosphere*, **121**, 6723-6744, doi:10.1002/2015JD024688.
- 3* Oyama, R., A. Wada, and M. Sawada, 2016: Intensification of Typhoon Danas (1324) captured by MTSAT upper tropospheric Atmospheric Motion Vectors. *SOLA*, **12**, 135-139, doi:10.2151/sola.2016-029.
- 4 Wada, A. and M. Kunii, 2016: The effect of predicted oceanic conditions on the assimilation of Typhoon Sinlaku (2008). *WGNE Blue Book: Research Activities in Atmospheric and Ocean Modelling*, **46**, 9-05.
- 5 Wada, A., 2016: Idealized storm evolution and the difference between the eastern and the western North Pacific calculated by an atmosphere-wave-ocean coupled model. *WGNE Blue Book: Research Activities in Atmospheric and Ocean Modelling*, **46**, 9-07.
- 6 Wada, A., 2016: Comparison of numerical simulations of Typhoon Haiyan in 2013 and Typhoon Mike in 1990. *WGNE Blue Book: Research Activities in Atmospheric and Ocean Modelling*, **46**, 9-09.
- 7 Wada, A., 2016: Typhoon Man-yi in 2013 simulated by an atmosphere-wave-ocean coupled model with 1.2-km horizontal resolution. *WGNE Blue Book: Research Activities in Atmospheric and Ocean Modelling*, **46**, 9-11.
- 8 Wada, A., 2016: Extremely deepening of central pressures for Typhoon Neoguri in 2014 simulated by an atmosphere-wave-ocean coupled model and its dependency on the horizontal resolution.. *WGNE Blue Book: Research Activities in Atmospheric and Ocean Modelling*, **46**, 9-13.

- 9* Nakano, M., A. Wada, M. Sawada, H. Yoshimura, R. Onishi, S. Kawahara, W. Sasaki, T. Nasuno, M. Yamaguchi, T. Iriguchi, M. Sugi, Y. Takeuchi, 2016: Global 7-km mesh nonhydrostatic Model Intercomparison Project for improving TYphoon forecast (TYMIP-G7): Experimental design and preliminary results. *Geoscientific Model Development*, **10**, 1363-1381, doi:10.5194/gmd-2016-184.
- 10 Wada, A., 2016: “Hot Spots” in the Climate System : Unusually rapid intensification of Typhoon Man-yi in 2013 under preexisting warm-water conditions near the Kuroshio front south of Japan . “*Hot Spots in the Climate System*”, 131-156, doi:10.1007/978-4-431-56053-1.
- 11* Kunii, M., K. Ito, and A. Wada, 2017: Preliminary test of a data assimilation system with a regional high-resolution atmosphere-ocean coupled model based on an ensemble Kalman filter. *Monthly Weather Review*, doi:10.1175/MWR-D-16-0068.1.
- 12* Kanada, S., and A. Wada, 2017: Different Climatological Characteristics, Inner-Core Structures, and Intensification Processes of Simulated Intense Tropical Cyclones between 20-km global and 5-km regional models. *Journal of Climate*, **30**, 1583-1603, doi:10.1175/JCLI-D-16-0093.1.
- 13 和田章義, 2017: 非静力学大気波浪海洋結合モデルを用いた台風海洋相互作用研究. 台風研究会 複合要因により強化化する台風災害の実態解明と減災に向けて, 38-41.