３．誌上発表及び口頭発表

３.１　誌上発表（査読あり）

Alexandrov G.A., Chan, D., Chen, M., Gurney, K., Higuchi, K., Ito, A., Jones, C. D., Komarov, A., Mabuchi, K., Matross, D. M., Veroustraete, F., Verstraeten, W. W. (2006). Model-data fusion in the studies of terrestrial carbon sink. In: Voinov, A., Jakeman, A., Rizzoli, A. (eds). Proceedings of the iEMSs Third Biennial Meeting: "Summit on Environmental Modelling and Software". International Environmental Modelling and Software Society, Burlington, USA, July 2006. CD ROM (ISBN 1-4243-0852-6 978-1-4243-0852-1).

Alexandrov, G.A. Carbon stock growth in a forest stand: the power of age. Carbon Balance and Management, 2:4-doi:10.1186/1750-0680-2-4, 2007.

Alexandrov, G.A. and Yamagata, Y. A peaked function for modeling temperature dependence of plant productivity. Ecological Modelling, 200:189-192, 2007.

Alexandrov, G.A. (2007) Forest growth in the light of the thermodynamic theory of ecological systems. Ecological Modelling (accepted)

Alexandrov, G.A., Matsunaga T: Normative productivity of the global vegetation. Carbon Balance and Management 2008, 3: 8. [http://dx.doi.org/10.1186/1750-0680-3-8]

Bagan, H., Takeuchi, W., Yamagata,Y., Wang, X. and Yasuoka, Y., 2009. Extended Averaged Learning Subspace Method for Hyperspectral Data Classification. Sensors 9(6), 4247-4270.

Barkley, M. P., Monks, P. S., Hewitt, A. J., Machida, T., Desai, A., Vinnichenko, N., Nakazawa, T., Yu Arshinov, M., Fedoseev, N., and Watai, T.: Assessing the near surface sensitivity of SCIAMACHY atmospheric CO2 retrieved using (FSI) WFM-DOAS, Atmos. Chem. Phys., 7, 3597-3619, 2007.

Chierici M., A. Fransson, Y. Nojiri (2006), Biogeochemical processes as drivers of surface fCO2 in contrasting provinces in the subarctic North Pacific Ocean, Global Biogeochem. Cycles, 20, GB1009, doi:10.1029/2004GB002356.

Dhakal S. *, Betsill, M.: Challenges of Urban and Regional Carbon Management and the Scientific Response, Local Environment, 12(5), 549–555, 2007

Dhakal S. (2009) Urban energy use and carbon emissions from cities in China and policy implications. ENERGY POLICY, 37 (11), 4208-4219

Dhakal S., Ram S.M. (2009) Bridging the research gaps for carbon emissions and their management in cities. ENERGY POLICY, doi 10.1016/j.enpol.2009.12.001

Fransson A., M. Chierici, Y. Nojiri (2006), Increased net CO2 outgassing in the upwelling region of the southern Bering Sea in a period of variable marine climate between 1995 and 2001, J. Geophys. Res., 111, C08008, doi:10.1029/2004JC002759.

Gloor, M. , E. Dlugokencky , C. Brenninkmeijer , L. Horowitz , D. Hurst , G.Dutton , C. Crevoisier , T. Machida , P. Tans , 3D SF6 data and tropospheric transport simulations: 1. Signals,modeling accuracy, and implications for inverse modeling, J. Geophys. Res., 112, D09313,doi:10.1029/2005JD007018, 2007.

Groisman, Clark, Kattsov, Lettenmaier, Sokolik, Aizen, Cartus, Chen, Conard,Katzenberger, Krankina, Kukkonen, Machida, Maksyutov, Qi, Ojima, Romanovsky, Santoro,Schmullius, Shiklomanov, Shimoyama, Shugart, Shuman, Sofiev, Vörösmarty, Walker, Wood: The Northern Eurasia Earth Science Partnership: An Example of Science Applied to Societal Needs, submitted to Bull. Amer. Meteorol. Soc. (2008)

H. Tanimoto, Hitoshi Mukai, Shigeru Hashimoto, James E. Norris, Intercomparison of ultraviolet

photometry and gas phase titration technique for ozone reference standards at ambient levels, J.Geophys. Res., 111, D16313, doi:10.1029/2005JD006983, 2006

H. Tanimoto, H. Mukai, T. Ohawa, I. Uno, Impact of changing climate and emissions of surface ozone distributions and evolution, "Regional Climate Variability and its Impacts in the Mediterranean Area" pp 113-127, 2007.

H. Tanimoto, Y. Sawa, S. Yonemura, K. Yumimoto, H. Matsueda, I. Uno, T. Hayasaka, H. Mukai, Y. Tohjima, K. Tsuboi, and L. Zhang, Diagnosing recent CO emissions and ozone evolution in East Asia using coordinated surface observations, adjoint inverse modeling, and MOPITT satellite data, Atmos. Chem. Phys., 8, 3867-3880, 2008.

H. Tanimoto, Increase in springtime tropospheric ozone at a mountainous site in Japan for the period 1998–2006, Atmos. Environ., 43, 1358-1363, doi:10.1016/j.atmosenv.2008.12.006, 2009.

H. Tanimoto, Keiichi Sato, Tim Butler, Mark G. Lawrence, Jenny A. Fisher, Monika Kopacz, Robert M. Yantosca, Yugo Kanaya, Shungo Kato, Tomoaki Okuda, Shigeru Tanaka, Jiye Zeng, Exploring CO pollution episodes observed at Rishiri Island by chemical weather simulations and AIRS satellite measurements: Long-range transport of burning plumes and implications for emissions inventories, Tellus B, 61, 394-407, doi: 10.1111/j.1600-0889.2008.00407.x, 2009.

H. Tanimoto, Kiyoshi Matsumoto, and Mitsuo Uematsu, Ozone–CO correlations in Siberian wildfire plumes observed at Rishiri Island, SOLA, 4, 65-68, doi:10.2151/sola.2008-017, 2008.

H. Yamagishi, Y. Tohjima, H. Muki, and K. Sasaoka (2008), Detection of regional scale sea-to-air oxygen emission related to spring bloom near Japan by using in-situ measurements of the atmospheric oxygen/nitrogen ratio, Atmos. Chem. Phys., 8, 3325-3335.

Hanaoka, T. Kainuma, M., Matsuoka, Y.: The Role of Energy Intensity Improvement in the AR4 GHG Stabilization Scenarios. Energy Efficiency, (Submitted on 25 July 2008, Accepted on 16 January 2009)

Hirata, R., Hirano, T., Saigusa, N., Fujinuma, Y., Inukai, K., Kitamori, Y., Yamamoto, S. (2007) . .Seasonal and interannual variations in carbon dioxide exchange of a temperate larch forest. Agricultural and Forest Meteorology, 147：110-124.

Hirata, R., Saigusa, N., Yamamoto, S., Ohtani, Y., Ide, R., Asanuma, J., Gamo, M., Hirano, T., Kondo, H., Kosugi, Y., Li, S-G., Nakai, Y., Takagi, K., Tani, M., Wang, H. (2008) Spatial distribution of carbon balance in forest ecosystems across East Asia. Agricultural and Forest Meteorology 148:761-775

Ichii K., Suzuki T., Kato T., Ito A., Hajima T., Ueyama M., Sasai T., Hirata R., Saigusa N., Ohtani Y., Takagi K. (2009) Multi-model analysis of terrestrial carbon cycles in Japan: reducing uncertainties in model outputs among different terrestrial biosphere models using flux observations. *Biogeosciences Discuss.*, 6, 8455–8502.

Ieda T., Kitamori Y., Mochida M., Hirata R., Hirano T., Inukai K., Fujinuma Y., Kawamura K (2007) . Diurnal variations and vertical gradients of biogenic volatile and semi-volatile organic compounds at the Tomakomai larch forest station in Japan. Tellus, 58B：177-186.

Ito, A., 2007. Simulated impacts of climate and land-cover change on soil erosion and implication for the carbon cycle, 1901 to 2100. Geophysical Research Letters 34, L09403, 10.1029/2007GL029342.

J. Moriizumi, T. Ohkura, S. Hirano, Y. Nono, H. Yamazawa, Y.-S. Kim, Q. Guo, H.Mukai, Y. Tohjima, and T. Iida (2008), Continuous observation of atmospheric 222Rn concentrations for analytic basis

of atmospheric transport in East Asia, J. Nucl. Sci. Technol., Supplement 5, 173-179.

Jang K., Kang S., Kim J., Lee C. B., Kim T., Kim J., Hirata R., Saigusa N., 2010: Mapping evapotranspiration using MODIS and MM5 Four-Dimensional Data Assimilation, *Remote Sensing of Environment,* 114, 657–673.

Kagawa, S., Kudoh, Y., Nansai, K. and Tasaki, T. (2008), The Economic and Environmental Consequences of Automobile Lifetime Extension and Fuel Economy Improvement: Japan's Case, Economic Systems Research, 20, in press.

Keisuke Nansai, Rokuta Inaba, Shigemi Kagawa and Yuichi Moriguchi (2008), Identifying common features among household consumption patterns optimized to minimize specific environmental burdens, J. Clean. Prod., 16(4), 538-548.

Keisuke Nansai, Shigemi Kagawa and Yuichi Moriguchi (2007), Proposal of a simple indicator for sustainable consumption; classifying goods and services into three types focusing on their optimal consumption levels, J. Clean. Prod., 15(10), 879-885.

Keisuke Nansai, Shigemi Kagawa, Sangwon Suh, Rokuta Inaba and Yuichi Moriguchi (2007), Simple Indicator to Identify the Environmental Soundness of Growth of Consumption and Technology: "Eco-velocity of Consumption", Environ. Sci. Technol., 41(4), 1465-1472.

Keisuke Nansai, Rokuta Inaba, Shigemi Kagawa and Yuichi Moriguchi (2008), Identifying common features among household consumption patterns optimized to minimize specific environmental burdens, J. Clean. Prod., 16(4), 538-548.

Keisuke Nansai, Shigemi Kagawa, Sangwon Suh, Minoru Fujii, Rokuta Inaba and Seiji Hashimoto (2009), Material and energy dependence of services and its implications for climate change, Environ. Sci. Technol., 43(12), 4241-4246.

Keisuke Nansai (2009), Chapter 31: Environmental Input-Output Database Building in Japan, in Suh S. (Ed). Handbook on Input-Output Economics in Industrial Ecology, Springer, Dordrecht, the Netherlands, 653-688.

Kobayashi N., Hiyama T., Fukushima Y., Lopez M.L., Fujinuma Y. (2007) Nighttime transpiration observed over a larch forest in Hokkaido, Japan. Water Resources Research, 43：W03407, doi:10.1029/2006WR005556.

Li L., Chen C., Xie S., Huang C., Cheng Z., Wang H., Huang H., Lu J., Dhakal S. (2009) Energy demand and carbon emissions under different development scenarios for Shanghai, China. ENERGY POLICY, doi:10.1016/j.enpol.2009.08.048

M. NISHIZAWA, H NAGAI, M. CHINO, J. MORIIZUMI, K. YOSHIOKA, T. OHKURA, H. YAMAZAWA, T. IIDA, H. MUKAI,Y. TOHJIMA, N. ODA and F. SHIMANO, Development of Three-Dimensional Numerical Model for 222Rn and its Decay Products Coupled with a Mesoscale Meteorological Model I. Model Description and Validation, Journal of NUCLEAR SCIENCE and TECHNOLOGY, Vol. 44, No. 11, p. 1458–1466 (2007)

Milz, M., T. v. Clarmann, P. Bernath, C. Boone, S. A. Buehler, S. Chauhan, B. Deuber, D. G. Feist, B. Funke, N. Glatthor, U. Grabowski, A. Griesfeller, A. Haefele, M. H¨ opfner, N. K¨ ampfer, S. Kellmann, A. Linden, S. Muller,H. Nakajima, H. Oelhaf, E. Remsberg, S. Rohs, J. M. Russell III, C. Schiller, G. P. Stiller, T. Sugita, T. Tanaka, H. V¨ omel, K. Walker, G. Wetzel, T. Yokota, V. Yushkov, and G. Zhang, Validation of water vapour profiles (version 13) retrieved by the IMK/IAA scientific retrieval processor based on full resolution spectra measured by MIPAS on board Envisat, Atmos. Meas. Tech. Discuss., 2, 489–559, 2009.

Miyagawa,K., T. Sasaki, H. Nakane, I. Petropavlovskikh, and R.t Evans, "Reevaluation of long-term

Umkehr Data and Ozone profiles at Japanese stations", J. Geophys. Res., 114, D07108, doi:10.1029/2008JD0010658, 2009.

Nagahama, T., Nakane H., Fujinuma Y., Morihira A., Mizuno A., Ogawa H., Fukui Y. (2007) Ground-Based Millimeter-Wave Radiometer for Measuring the Stratospheric Ozone over Rikubetsu, Japan. Metorol. Soc. Japan. 85 (4)：495-509.

Nagahama, T., H. Nakane, Y. Fujinuma, A. Morihira, A. Mizuno, H. Ogawa, and Y. Fukui, Ground-Based Millimeter-Wave Radiometer for Measuring the Stratospheric Ozone over Rikubetsu, Japan, J. Meteorol. Soc. Jpn., 85, 495-509, 2007.

Nagai, T., Imai, A., Matsushige, K., and Fukushima, T.：Effect of dissolved organic matter (DOM) and iron availability on the growth of cyanobacteria in a eutrophic lake,Aquatic Microbial Ecology, 44, 231-239.2006.

Nagai T., Imai A., Matsushige K., Yokoi K., Fukushima T. (2007) Dissolved iron and its speciation in a shallow eutrophic lake and its inflowing rivers. WATER RESEARCH, 41, 775-784

Nakaji T., Ide R., Oguma H., Saigusa H., Fujinuma Y. (2007) Utility of spectral vegetation index for estimation of gross CO2 flux under varied sky conditions..Remote Sensing Environ.109：274-284.

Nara F. W., Imai A., Yoneda M., Matsushige K., Komatsu K., Nagai T., Shibata Y., Watanabe T. (2007) Seasonal variation in sources of dissolved organic carbon in a lacustrine environment revealed by paired isotopic measurments（Δ14C and δ13C）. RADIOCARBON, 49, Watanabe F., Nara A., Imai,K., Matsushige

Nara F.W., Imai A., Matsushige K., Komatsu K. (2009) Stable carbon isotopic characterization of DOC and its humic fraction in Lake Kasumigaura, Japan, *Verh. Internt. Verein. Limnol.*, 30, Part8, 1307-1309.

Nara F.W., Imai A., Uchida M., Matsushige K., Komatsu K., Kawasaki N., Shibata Y. (2009) Radiocarbon measurements of dissolved organic carbon in sewage-treatment-plant effluent and domestic sewage, *Nuclear Instruments and Methods in Physics Research B* (in print).

Ohyama, H., I. Morino, T. Nagahama, T. Machida, H. Suto, H. Oguma, Y. Sawa, H. Matsueda, N. Sugimoto, H. Nakane, and K. Nakagawa (2009), Column-averaged volume mixing ratio of CO2 measured with ground-based Fourier transform spectrometer at Tsukuba, J. Geophys. Res., 114, D18303, doi:10.1029/2008JD011465.

Ooba M,Hirano T.,Mogami J-I.,Hirata R.,Fujinuma Y.：Comparisons of gap-filling methods for carbon flux dataset:A combination of a genetic algorithm and an artificial neural network , Ecol.Modell.,198(3-4):473-486, 2006.

Oyama Y., Matsushita B., Fukushima T., Matsushige K., Imai A. (2009) Application of spectral decomposition algorithm for mapping water quality in a turbid lake (Lake Kasumigaura, Japan) from Landsat/TM data. ISPRS *Journal of Photogrammetry and Remote Sensing*, 64, 73-85.

Park, C. B., Nakane, H., Sugimoto, N. Matsui, I., Sasano, Y. Fujinuma , Y., Ikeuchi, I., Kurokawa, J. and Furuhashi, N.: Algorithm improvement and validation of National Institute for Environmental Studies ozone differential absorption lidar at the Tsukuba Network for Detection of Stratospheric Change complementary station, Appl. Opt., 45, 3561-3576,2006.

Prabir K. Patra, Masayuki Takigawa, Kentaro Ishijima, Byoung-Choel Choi, DerekCunnold, Edward J. Dlugokencky, Paul Fraser, Angel J. Gomez-Pelaez, Tae-Young Goo, Jeong-Sik Kim, Paul Krummel, Ray Langenfelds, Frank Meinhardt, Hitoshi Mukai, Simon O'Doherty, Ronald G. Prinn, Peter Simmonds, Paul Steele, Yasunori Tohjima, Kazuhiro Tsuboi, Karin Uhse, Ray Weiss, Doug Worthy,

Takakiyo Nakazawa, Growth rate, seasonal, synoptic and diurnal variations in lower atmospheric methane, Journal of Meteorol. Society of Japan, in press, 2009.

Saigusa, N., Yamamoto, S., Hirata, R., Ohtani, Y., Ide, R., Asanuma, J., Gamo, M., Hirano, T., Kondo, H., Kosugi, Y., Li, S-G., Nakai, Y., Takagi, K., Tani, M., Wang, H. (2008) Temporal and spatial variations in the seasonal patterns of CO2 flux in boreal, temperate, and tropical forests in East Asia. Agricultural and Forest Meteorology 148:7-713

Saigusa, N., Ichii, K., Murakami, H., Hirata, R., Asanuma, J., Den, H., Han, S.-J., Ide, R., Li, S.-G., Ohta, T., Sasai, T., Wang, S.-Q., and Yu, G.-R.: Impact of meteorological anomalies in the 2003 summer on Gross Primary Productivity in East Asia, *Biogeosciences*, 7, 641-655, 2010

Sarma V. V. S. S., T. Saino, K. Sasaoka, Y. Nojiri, T. Ono, M. Ishii, H. Y. Inoue, K. Matsumoto (2006), Basin-scale pCO2 distribution using satellite sea surface temperature, Chl a, and climatological salinity in the North Pacific in spring and summer, Global Biogeochem. Cycles, 20, GB3005, doi:10.1029/2005GB002594.

Sawa Y., Tanimoto H., Yonemura S., Matsueda H., Wada A., Taguchi S., Hayasaka T., Tsuruta H., Tohjima Y., Mukai H., Kikuchi N., Katagiri S., Tsuboi K.: Widespread pollution events of carbon monoxide observed over the western North Pacific during the EAREX 2005 campaign, J. Geophys. Res., doi:10.1029/2006jd008055, 2006

Shigemi Kagawa, Keisuke Nansai and Yuki Kudoh (2009), Does Product Lifetime Extension Increase Our Income at the Expense of Energy Consumption?, Energy Economics, 31(2), 197-210.

Shigemi Kagawa, Yuko Oshita, Keisuke Nansai and Sangwon Suh (2009), How Has Dematerialization Contributed to Reducing Oil Price Pressure?: A Qualitative Input-Output Analysis for the Japanese Economy during 1990-2000, Environ. Sci. Technol., 43(2), 245-252.

Shirasuna, K., Fukushima, T., Matsushige, K., Imai, A. and Ozaki, N：Runoff and loads of nutrients and heavy metals from an urbanized area,Water Science and Technology, 53(2), 203-213.2006.

Stephens, B. B., K. R. Gurney, P. P. Tans, C. Sweeney, W. Peters, L. Bruhwiler, P. Ciais, M. Ramonet, P. Bousquet, T. Nakazawa, S. Aoki, T. Machida, G. Inoue, N. Vinnichenko. J. Lloyd, A. Jordan, M. Heimann, O. Shibistova, R. Langenfelds, L. P. Steele, R. J. Francey, and A. S. Denning: Weak northern and strong tropical land carbon uptake from vertical profiles of atmospheric CO2. Science, 316, 1732-1735., 2007.

Stohl A.,Seibert P.,Arduini A.,Eckhardt S.,Fraser P.,Greally B.R.,Lunder C.,Maione M.,Saito T.,Yokouchi Y.、An analytical inversion method for determining regional and global emissions of greenhouse gases: Sensitivity studies and application to halocarbon, Atmos.Chem.Phys.,9:1597-1620(2009)

Takagi K., Fukuzawa K., Liangz N., Kayama M., Nomura M., Hojyo H., Sugata S., Shibata H., Fukazawa T., Takahashi Y., Nakajiz T., Oguma H., Mano M., Akibayashi Y., Murayama T., Koike T., Sasa K., Fujinuma Y. (2009) Change in CO_2 balance under a series of forestry activities in a cool-temperate mixed forest with dense undergrowth. *Global Change Biol.*, 15, 1275–1288.

Takagi K., Kotsuka C., Fukuzawa K., Kayama M., Kobayashi M., Watanabe T., Nomura M., Fukazawa T., Takahashi H., Hojyo H., Ashiya D., Naniwa A., Sugata S., Kamiura T., Sugishita Y., Sakai R., Ito K., Maebayashi M., Yoshida T., Sasa K., Saigusa N., Fujinuma Y., Akibayashi Y. (2009) Allometric Relationships and Carbon and Nitrogen Contents for Three Major Tree Species (*Quercus crispula, Betula ermanii, and Abies sachalinensis*) in Northern Hokkaido, Japan. *Eurasian J. For. Res.* 12(2), 65-71.

Takahashi, Y., Liang, N., Hirata, R., Machida, T., Fujinuma, Y. (2008) Variability in carbon stable isotope ratio of heterotrophic respiration in a deciduous needle-leaf forest. Journal of Geophysical Research- Biogeosciences (113) G0122,doi:10.1029

Tatarov, B., H. Nakane, Ch. B. Park, N. Sugimoto, and I. Matsui, Lidar observation of long-term trends and variations of stratospheric ozone and temperature over Tsukuba, Japan, International Journal of Remote Sensing, 30, 3951-3960, 2009.

Tatsuro Nakaji, Hiroyuki Oguma, and Yasumi Fujinuma, Seasonal changes in the relationship between photochemical reflectance index and photosynthetic light use efficiency of Japanese larch needles. International Journal of Remote Sensing, 27, 493-509, 200

Toshiharu Sugiyama, Keisuke Nansai, Susumu Tohno and Kohei Yamamoto (2009), Compilation and Application of a Primary PM2.5 Emissions Inventory with High Sectoral Resolution in Japan, Atmos. Env., 43(4), 759-768.

Ueyama M., Ichii K., Hirata R., Takagi K., Asanuma J., Machimura T., Nakai Y., Ohta T., Saigusa N., Takahashi Y., Hirano T. (2010) Simulating carbon and water cycles of larch forests in East Asia by the BIOME-BGC model with AsiaFlux data. *Biogeosciences*, Vol. 7. (in press)

VAN GIJSEL, J.A.E., D.P.J. SWART, J.-L. BARAY, H. CLAUDE, T. FEHR, P. VON DER GATHEN, S. GODIN-BEEKMANN, G.H. HANSEN , T. LEBLANC, I.S. MCDERMID, Y.M. MEIJER, H. NAKANE, E.J. QUEL, W. STEINBRECHT, K.B. STRAWBRIDGE, B. TATAROV and E.A. WOLFRAM, "Global validation of ENVISAT ozone profiles using lidar measurements", Int. J. Remote Sensing, in press. (2008).

Van Gijsel, J. A. E., et al., Global validation of ENVISAT ozone profiles using lidar measurements, International Journal of Remote Sensing, 30, 3987-3994, 2009.

Watanabe T., Nara F., Imai A., Matsushige K., Komatsu K., Shibata Y. (2006) Application of 14C measurements for isotopic characterization of dissolved organic carbon (DOC) in lake water. The 9th symposium of Japanese AMS Society, 80-83.

Willi. A. Brand*, , Alina Chivulescu†, Lin Huang†, Hitoshi Mukai‡, Juergen M. Richter*, and Michael Rothe*, How well do we know VPDB? Variability of δ13C and δ180 in CO2 generated from NBS19-Calcite, submitted to Rapid Communications in Mass Spectrometry.

Y. Tohjima, H. Mukai, Y. Nojiri, H. Yamagishi, T. Machida, (2008) Atmospheric O2/N2 measurements at two Japanese sites: estimation of global oceanic and land biotic carbon sinks and analysis of the variations in atmospheric potential oxygen (APO), Tellus B, 60 (2) , 213–225 doi:10.1111/j.1600-0889.2007.00334.x.

Y. Tohjima, K. Katsumata, I. Morino, H. Mukai, T. Machida, I. Akama, T. Amari, U. Tsunogai (2009), Theoretical and experimental evaluation of the isotope effect of NDIR analyzer on atmospheric CO_2 measurement, *J. Geophys. Res.*, 114, D13302

Yokouchi Y., S Taguchi., Saito T., Tohjima Y., Tanimoto H., and Mukai H.: High frequency measurements of HFCs at a remote site in east Asia and their implications for Chinese emissions, Geophys. Res. Lett., 33, L21814, doi:10.1029/2006GL026403, 2006

Zhao, L., and P. P. Tans (2006), Estimating uncertainty of the WMO mole fraction scale for carbon dioxide in air, J. Geophys. Res., 111, D08S09, doi:10.1029/2005JD006003

Zhou, L., White J. W. C., Conway T. J., Mukai H., MacClune K., Zhang X., Wen Y., and Li J.: Long-term record of atmospheric CO2 and stable isotopic ratios at Waliguan Observatory: Seasonally averaged 1991–2002 source/sink signals, and a comparison of 1998–2002 record to the 11 selected sites in the Northern Hemisphere, Global Biogeochem. Cycles, 20: GB2001, doi:10.1029/2004GB002431,

2006
Zhuo, L., T. Ichinose, J. Zheng, J. Chen, P. Shi, X. Li (2009) Modelling the population density of China at the pixel level based on DMSP/OLS non-radiance-calibrated nighttime light images, International Journal of Remote Sensing, 30, 1003-1018
一之瀬俊明・大坪国順・景元書（2009）依据経済水平建立的華中一華南糧食運輸模型, 長江流域資源与環境, 18-3, 217-221（中国語）
井手慎司, 今井章雄, 田中佐代子：湖沼における有機物汚濁指標の歴史的背景と問題点,用水と廃水,48(3), 47-57.2006.
岩崎一弘, 矢木修身：遺伝子組換え微生物の第一種使用における安全性評価, J. Environ. Biotechnol., 6, 7-15,2006.
大倉毅史、山澤弘実、森泉純、平尾茂一、郭秋菊、遠嶋康徳、飯田孝夫(2009)、東アジア域における大気中 222Rn 濃度連続測定ネットワークと洋上の孤島における大気中 222Rn 濃度の後方流跡線解析、大気環境学会誌　第 44 巻　第 1 号、42-51.
木下嗣基、山形与志樹、岩男弘毅：炭素クレジットが土地利用に与える影響の予測、環境科学会誌 、21,1,37-52(2008)
志村純子・開和生・Yunqing Zhang・松永恒雄・白山義久・五箇公一， 海洋生物地理情報システム OBIS 日本ミラーサイトの現況-海洋における外来種問題の視点から， 日本生態学会保全生態学研究,第 12 巻, 第 2 号,pp.163-171,2007 年 11 月
杉原薫,園田直樹,今福太郎,永田俊輔,指宿敏幸,山野博哉 (2009) 九州西岸から隠岐諸島にかけての造礁サンゴ群集の緯度変化. 日本サンゴ礁学会誌, 11 (印刷中)
関智弥, 福島武彦, 今井章雄, 松重一夫：霞ヶ浦の濁度上昇とその要因について,土木学会論文集 VII-38, No.811, 149-161.2006.
高木健太郎 (2009) 航空機リモートセンシングを用いた森林バイオマス量の計測について. 北海道の農業気象, 61, 29-36.
高橋廣行, 高木健太郎, 野村睦, 北條元, 上浦達哉, 小塚力, 坂井励, 米康充, 福士亮太, 小熊宏之, 藤沼康実, 前林衛(2006) 航空機 LIDAR を用いた樹高と森林蓄積量の評価, 日本森林学会北海道支部会論文集　54.
谷本浩志, 向井人史, 日本におけるオゾン標準とトレーサビリテイシステムの構築, 大気環境学会会誌, 41(3), 123-134, 2006
谷本浩志, 橋本茂, 向井人史, 大気レベルのオゾン標準に関する日本における進展と世界の動向, 大気環境学会誌, 44(4), 222-226, 2009
中西理恵,小杉緑子,大久保普治郎,西田顕郎,小熊宏之,高梨聡,谷誠：温帯ひのき林における分光反射指標 PRI(Photochemical reflectance index)の季節変動,水分・水資源学会誌,19(6):475-482,2006.
中路達郎,小熊宏之,藤沼康実,リモートセンシングによるカラマツ針葉の光利用効率の推定-衛星観測時刻と天候の影響-. 日本森林学会北海道支部論文集, 54, 87-90, 2006.
福士亮太、小熊宏之、米康充、鈴木恵一、岡野哲郎、藤沼康実（2008）高解像度デジタル航空写真と LiDAR データによる DTM を組み合わせたカラマツ林の現況推定, 日本森林学会誌、90(5), 297-305
山野博哉,浪崎直子 (2009) 最前線のサンゴ：千葉県館山のエンタクミドリイシの変化. 日本サンゴ礁学会誌, 11 (印刷中)

3.2　誌上発表（査読なし）

Dhakal S., Raut A. (2008) Towards a Low-Carbon Society and its Relevance to Mountainous Regions. Asia Pacific Mountain Network (APMN) Bulletin, 9(1), 1-4

Dhakal S. (2008) Creating an Urban Movement for Sustainable Living. Global Asia, 3(3), 16-20
Dhakal S. (2008) Urban energy use and carbon emissions in China, CGER Newsletter,19(9), 17
Ichii K, Saigusa N, and Ogawa A, 2009: Workshop Summary ‘CarboEastAsia Workshop 2009: Toward Integration of Field Observations, Remote Sensing, and Modeling’, *AsiaFlux Newsletter*, No.28, 1-3.
Jiang Y., Tubiana L., Zhou W., Mao Q., Li Q., Qi Y., Jiang Y., Jiang K., Chateau B., Bressand A., Dhakal S., Eyre N., Krosse L., Mukhopadhyay P., Major M. (2009) Energy Efficiency and Urban Development (the building sector and the transport sector) CCICED Policy Research Report, 37p
Kennedy C.A., Ramaswami A., Dhakal S. (2009) Greenhouse Gas Emission Baselines for Global Cities and Metropolitan Regions. Commissioned paper by the World Bank for the Urban Research Symposium on Cities and Climate Change
Machida, T., K. Katsumata, Y. Tohjima, T. Watai and H. Mukai (2009), Preparing and Maintaining of CO_2 Calibration Scale in National Institute for Environmental Studies – NIES 95 CO_2 Scale, *GAW Report*, 186, 26-29
Mukai H., Nakazawa T., Brand W., Huang L., Levin I., Allison C., White J., Leuenberger M., and Assonov S.: About disagreements in inter-comparison activities of isotope ratio measurements for CO2, Report of 13th WMO/IAEA Meeting of Experts on CO2 concentration and related tracer measurement techniques, Boulder USA, 2005.10., 2006
Raut A., Dhakal S. (2008) Cities Must Now Lead the Climate Change Agenda: COP13 Side Event on Carbon Management in Cities. CGER Newsletter, 19(1), 15
Raut A., Dhakal S., Makido Y. (2008) International Symposium on Urban Energy and Carbon Management: Challenges for Science and Policy, and International Workshop on Urban Energy and Carbon Modeling Urban Energy and Climate Modeling Forum formed, CGER Newsletter, 19(2), 2-4
Saigusa N, Takagi K, Hirano T, 2009: Long-term monitoring of carbon and water cycles in larch forest ecosystems in East Asia, *IGBP/iLEAPS Newsletter,* Issue No. 6 (Mar. 2009), 44-45.
Takagi K, Hirata R, Wen X, Kwon H, Saigusa N, Ono K, Miyata A, 2008: Inter-comparison of eddy flux calculation and QC/QA procedures of three flux networks (ChinaFLUX, JapanFlux and KoFlux) under AsiaFlux, *AsiaFlux Newsletter,* No.26, 8-11.
Y. Nojiri, D. Lowe and E. Dlugokencky, Report on the joint NIES, NIWA, NOAA-ESRL sampling project aboard ships of the Toyofuji shipping company between Nelson, New Zealand and Osaka, Japan, A Brief Summary, IGAC Newsletter, 37, 37-38 (2007).
Yedla, S. *, Dhakal, S.: Transportation and Environment in Developing Countries, International Journal of Environment and Pollution, 30(1), 1-7, 2007
一ノ瀬俊明：中国の都市における環境問題に対するみどりの取り組み，都市緑化技術，63，38-40，2007
一ノ瀬俊明：ゴミで包囲される中国内陸都市，地理，52(4)，46-51，2007
一之瀬俊明（2010）為了在中国実現人与自然「和諧」共存的城市建設，天地人（中国語）（掲載決定）
伊藤真人、小野雅司、能登美之：陸別の分光光度計常数校正と紫外域日射量・オゾン全量、高層気象台彙報、67、33-38(2007)
小野雅司：地球に降り注ぐ紫外線、太陽紫外線防御研究委員会学術報告、17(1)、29-35(2007)
景元書・一ノ瀬俊明（2008）：北京の大気汚染～さまざまな非効率の元凶～，地理，53-6，36-39
高木健太郎（2009）森は二酸化炭素をどのくらい吸収する？森の Q&A，社団法人北方林業会，24-25.
遠嶋康徳、海洋と陸上生態系の炭素吸収力、農林経済、第 9947 号、2008 年５月
花岡達也,河瀬玲奈,松岡譲,甲斐沼美紀子:温室効果ガス排出主要国における気候安定化シナリオの要因

分析，第 24 回エネルギーシステム・経済・環境コンファレンス講演論文集，pp13-16，エネルギー資源学会，東京，2008
花岡達也,長山友祐,日比野剛,甲斐沼美紀子,松岡譲:中国・インドおよびアジア諸国における大気汚染物質・温室効果ガス排出インベントリー，第 25 回エネルギーシステム・経済・環境コンファレンス講演論文集，pp.491-494，エネルギー資源学会，東京，2009
藤沼康実（2007）富士北麓カラマツ林での炭素収支観測．グローバルネット 197 号（2007 年 4 月）30-31p
藤沼康実（2007）摩周湖の湖水の不思議．グローバルネット 199 号（2007 年 6 月）28-29p
藤沼康実（2007）モデルを用いて陸域生態系の炭素収支を評価する．グローバルネット 201 号（2007 年 8 月）30-31p
藤沼康実（2007）モニタリングネットワークから得られるもの．グローバルネット 203 号（2007 年 10 月）30-319p
藤沼康実（2007）日本長期生態学研究ネットワークと生態系モニタリングの展開．グローバルネット 205 号（2007 年 12 月）34-35p
藤沼康実（2008）酸素濃度を測って二酸化炭素の挙動を推定する．グローバルネット 207 号（2008 年 1 月）34-35p
向井人史、遠嶋康徳「陸域・海洋による二酸化炭素吸収の長期トレンド検出のための酸素及び二酸化炭素同位体に関する研究」地球環境保全試験研究費平成 17 年度研究報告集、551-596
梁乃申（2009）日本における森林土壌有機炭素放出に及ぼす温暖化の影響，関東の農業気象，35，7-11.

3.3 書籍

Alexandrov, G.A.., Matrix models. In: Jorgensen S.E (ed.), Encylopedia of Ecology -- Ecological models, Elsevier (accepted, expected date of release July 2008)
Alexandrov, G. A.., Chan, D., Chen, M., Gurney, K., Higuchi, K., Ito, A., Jones, C. D., Komarov, A., Mabuchi, K., Matross, D. M., Veroustraete, F., and Verstraeten, W. W. Model-data fusion in the studies of terrestrial carbon sink. In: Jakeman, A.., Voinov, A.., Rizzoli, E., and Chen, S.. (eds.), State of the art and Futures in Environmental Modelling and Software, Elsevier (accepted, expected date of release July 2008)
Alexandrov, G.A.., Carbon Cycle 1: Short-term Dymanics. In: Jorgensen S.E (ed.), Encylopedia of Ecology -- Global Ecology, Elsevier (accepted, expecteddate of release July 2008)
Coulter L. *, Canadell P.*, Dhakal S., Carbon Reductions and Offsets, ESSP Report No.5/Global Carbon Project Report No.6, 33p., 2008
Dhakal S. (2008) Climate Change and Cities: The Making of a Climate Friendly Future. In Droege P. ed,. Urban Energy Transition, Elsevier Publ., 173-182
GEO Year Book 2006
GEO Year Book 2007
Ichinose, T. (2009): Urban heat islands, The State of the Environment in Asia 2006/2007, Japan Environmental Council (Eds.), Springer, 264-269
JAXA et al., 2007: Global Monitoring of Greenhouse Gasses, The First 100 steps to GEOSS; Annex of Early Achievements to the GEO Report on Progress on 2007, Cape Town Ministerial Summit, Edited by GEO Secretariat, 60 (p130-131), 212pp.
Office for Coordination of Climate Change Observation, Toward the development of a comprehensive and integrated climate change observation system: Observation for the monitoring of greenhouse gases and the carbon cycle and for the assessment of the impacts of climate change; Summary,

Office for Coordination of Climate Change Observation, 13p. 2008.
Roy J., Bose C., Bose R., Das S., Dhakal S., Dasgupta M., Ghate R., Roy S.S., Konar M., Wickramasinghe A., Roy M., Chaudhuri C. (2010) Development Pathway. In: Mitra A.P.編, Global Environmental Changes in South Asia - A Regional Perspective, Capital Publishing Company, 14-53
United Nations Environment Programme: The fourth Global Environment Outlook: environment for development (GEO-4), 540p, 2007
Yedla, S. *, Dhakal, S. (ed.), Environmental Implications of Urban Transportation in Asia (Special Issue of International Journal of Environment and Pollution), Inderscience Enterprises, 176p., 2007
Zusman E., Srinivasan A, Dhakal S. (2010) Low Carbon Transport in Asia: Strategies for Optimizing Co-benefits. Earthscan, 192p, In press
一ノ瀬俊明：国境を越える大気汚染, 新世界地理　第１巻「アジアⅠ　東アジア」, 朝倉書店, 東京（掲載決定）
一ノ瀬俊明：ゴミで包囲される中国内陸都市, 新世界地理　第１巻「アジアⅠ　東アジア」, 朝倉書店, 東京（掲載決定）
一ノ瀬俊明：アジアの都市におけるヒートアイランド,「アジア環境白書 2006/07」, 東洋経済新報社, 東京, 280-283
一ノ瀬俊明 中国の都市をめぐる人と自然の和諧 COE 最終報告書 現代中国環境論(樋根勇 他編著,愛知大国際中国学研究セ,279p.),77-93(2007)
一ノ瀬俊明：中国の都市をめぐる人と自然の和諧,「中国の環境問題」, 日本評論社, 叢書「現代中国学の構築に向けて」第５巻中国の環境問題, (樋根勇編), 2008
高村典子（2009）：湖沼という環境. 生態系再生の新しい視点－湖沼からの提案、高村典子（編著）：3-48. 共立出版、 東京.
谷本浩志： 3.1 大気汚染物質， 3 .1.2 オゾン・ＰＡＮ, 環境化学, 第 5 版実験化学講座 20-2 巻, (鷲田伸明編), 丸善, 2007.
地球温暖化観測推進事務局／環境省・気象庁、地球温暖化観測推進ワーキンググループ：地球温暖化観測における連携の促進を目指して－温室効果ガス・炭素循環および温暖化影響評価に係る観測－(地球温暖化観測推進ワーキンググループ報告書　第１号), 181p, 2008
地球観測推進委員会（温暖化分野)、地球温暖化観測推進事務局／環境省・気象庁、地球温暖化観測推進ワーキンググループ：地球温暖化観測における連携の促進を目指して－温室効果ガス・炭素循環および温暖化影響評価に係る観測－(地球温暖化観測推進ワーキンググループ報告書　第１号)　概要版, 地球温暖化観測推進事務局／環境省・気象庁、15p, 2008.
地球温暖化観測推進ワーキンググループ（地球温暖化観測推進事務局／環境省・気象庁)：地球温暖化観測における連携の促進を目指して－雲・エアロゾル・放射および温暖化影響評価に関する観測－(地球温暖化観測推進ワーキンググループ報告書　第 2 号), 219p, 2010.
遠嶋康徳：2.1.2　清浄大気の調査法， 3.1.6　亜酸化窒素， 3.1.14　酸素， 環境化学, 第 5 版実験化学講座 20-2 巻, (鷲田伸明編) 丸善, 2007
独立行政法人国立環境研究所地球環境研究センター（監修)：地球 SOS 図鑑－温暖化について調べよう－環境をまもるための取り組み, PHP 研究所, 2008
野尻幸宏：3.2.8.　海洋の二酸化炭素の測定から， 環境化学, 第 5 版実験化学講座 20-2 巻, (鷲田伸明編) 丸善, 2007
町田敏暢：2.1.3.b 航空機観測， 3.1.4 二酸化炭素, 環境化学, 第 5 版 実験化学講座 20-2 巻（鷲田伸明編）, 丸善, 2007

○地球環境研究センター報告（CGER リポート）

I063-2006　CGER'S SUPERCOMPUTER MONOGRAPH REPORT Vol.11 (Development of process-based NICE model and simulation of ecosystem dynamics in the catchment of East Asia (Part I))

I064-2006　CGER' S SUPERCOMPUTER ACTIVITY REPORT Vol.13-2004

I065-2006　炭素循環および温室効果ガス観測ワークショップ講演要旨集

I066-2006　日本国温室効果ガスインベントリ報告書　2006 年 5 月版

I067-2006　Greenhouse Gas Inventory Development in Asia - Experiences from Workshops on Greenhouse Gas Inventories in Asia

I068-2006　日本国温室効果ガスインベントリ報告書 2006 年 8 月版

I069-2006　National GreenhouseGas Inventory Report of JAPAN -August, 2006-

I070-2007　CGER'S SUPERCOMPUTER ACTIVITY REPORT Vol.14-2005

I071-2007　Proceedings of the First Workshop of Japan-UK Joint Research Project “Developing Visions for a Low-Carbon Society through Sustainable Development”

I072-2007　Aligning Climate Change and Sustainability - Scenarios, modeling and policy analysis

I073-2007　CGER’S SUPERCOMPUTER MONOGRAPH REPORT Vol.12 (Climate Change Simulations with a Coupled Ocean-Atmosphere GCM Called the Model for Interdisciplinary Research on Climate: MIROC)

I074-2007　Proceedings of the 4th Workshop onGreenhouse Gas Inventories in Asia

I075-2007　National Greenhouse Gas Inventory Report of JAPAN -May, 2007

I076-2007　日本国温室効果ガスインベントリ報告書 -2007 年 5 月-

I077-2008　Proceedings of the 5th Workshop on Greenhouse Gas Inventories in Asia (WGIA5)

I078-2007　国立環境研究所スーパーコンピュータ利用研究年報　平成 18 年度　NIES Supercomputer Annual Report 2006

I079-2008　家庭･業務部門の温暖化対策

I080-2008　CGER'S SUPERCOMPUTER MONOGRAPH REPORT Vol.13 Simulations of the Stratospheric Circulation and Ozone during the Recent Past (1980-2004) with the MRI Chemistry-Climate Model

I081-2008　Global Greenhouse Gas Emissions Reduction Potentials and Mitigation Costs in 2020- Methodology and Results –

I082-2008　我が国における再生可能／分散型エネルギー導入戦略への提言

I083-2008　CGER'S SUPERCOMPUTER MONOGRAPH REPORT Vol.14 Development of Process-based NICE Model and Simulation of Ecosystem Dynamics in the Catchment of East Asia (Part II)

I084-2008　National Greenhouse Gas Inventory Report of JAPAN -May, 2008-

I085-2008　日本国温室効果ガスインベントリ報告書 -2008 年 5 月-

I086-2008　国立環境研究所スーパーコンピュータ利用研究年報　平成 19 年度 NIES Supercomputer Annual Report 2007

I087-2009　Proceedings of the 6th Workshop on Greenhouse Gas Inventories in Asia (WGIA6)

I088-2009　National Greenhouse Gas Inventory Report of JAPAN　April, 2009

I089-2009　日本国温室効果ガスインベントリ報告書　-2009 年 4 月-

I090-2009　国立環境研究所スーパーコンピュータ利用研究年報　平成 20 年度 NIES Supercomputer Annual Report 2008

I091-2009　Proceedings of the 7th Workshop on Greenhouse Gas Inventories in Asia (WGIA7)

I092-2010　CGER’S SUPERCOMPUTER MONOGRAPH REPORT Vol.15　Algorithms for carbon flux estimation using GOSAT observational data

D035-2006　グローバルカーボンプロジェクト-全球炭素循環に関する国際研究のための枠組み
D036-2006　国際研究計画・機関情報（第３版）
D037-2006　熱帯域陸上生態系の植生基礎データベース
D038-2006　Greenhouse Gas Emissions Scenarios Database and Regional Mitigation Analysis
D039-2006　陸域生態系の炭素吸収源機能評価－京都議定書の第２約束期間以降における検討にむけて－
D040-2006　マテリアルフローデータブック～日本を取りまく世界の資源のフロー～第３版
D041-2009　Carbon Sink Archives
An integrated system for storing, retrieving and analyzing 2-dimensional data related to the problem of terrestrial carbon sink
M018-2006　絵とデータで読む太陽紫外線－太陽と賢く仲良くつきあう法－
M019-2008　長期生態系モニタリングの現状と課題－温暖化影響と生態系応答

３.４　口頭発表

国外：　178 件
国内：　177 件

Ichinose, T. (2008): Urban energy use, carbon management and urban heat island: Linking mitigation and adaptation to climate change, International Workshop on Urban Energy and Carbon Modeling 招待講演, Bangkok, 平成 20 年 2 月；

Machida T., M.Sasakawa, K.Shimoyama, N.Tsuda, M.Arshinov, B.Belan, D.Davidov, A.Fofonov, O.Krasnov, N.Fedoseev, S.Maksyutov, Long-term Monitoring of Atmospheric Greenhouse Gases in Siberia, XVI International Symposium "Atmospheric and Ocean Optics. Atmospheric Physics", Tomsk, Russia, October, 2009. （招待講演）

Oguma, H. (2009) Introduction of vegetation phenology monitoring by using webcams, 北方圏の環境と文明 国際シンポジウム, 札幌　（招待講演）

Zhuo, L. and T. Ichinose (2009) Spatializing Population Census Data Based on Nighttime Light Images, Joint Urban Remote Sensing Event 招待講演, Shanghai, 平成 21 年 5 月；

一之瀬俊明（2008）：城郷和諧循環系統：一個未来城市概念,「2008 中日景観設計交流年」重慶論壇招待講演, 重慶, 平成 20 年 5 月；(中国語）.

一ノ瀬俊明（2009)「千里走単騎」中国現地考察活動の十余年, 日本地理学会学術大会中国地理研究グループ招待講演, 八王子, 平成 21 年 3 月；

三枝信子 (2009) 日本の森林による二酸化炭素吸収量は年によってどれだけ違う？―冷夏や猛暑の影響を受ける中緯度の森林―. 第 58 回日本森林学会中部支部大会シンポジウム, 同予稿集 6-7. （招待講演）