

Research Articles (Last 5 years)

- 1) Zhong, G., Wang, X., Guo, M., Tani, H., Chittenden, A.R., Yin, S., Sun, Z., Matsumura, S.: A Dark Target Algorithm for the GOSAT TANSO-CAI Sensor in Aerosol Optical Depth Retrieval over Land. *Remote Sensing* 9(6), 1-25, 2017.
- 2) Santoso, H., Tani, H., Wang, X.: Random forest classification model of basal stem rot disease caused by *Ganoderma boninense* in oil palm plantations. *International Journal of Remote Sensing* 38(16), 4683-4699, 2017.
- 3) Sonobe, R., Yamaya, Y., Tani, H., Wang, X., Kobayashi, N., Mochizuki, K.: Mapping crop cover using multi-temporal Landsat 8 OLI Imagery. *International Journal of Remote Sensing* 38(15), 4348-4361, 2017.
- 4) Guo, M., Li, J., Xu, J., Wang, X., He, H., Wu, L.: CO₂ emissions from the 2010 Russian wildfires using GOSAT data. *Environmental Pollution* 226, 60-68, 2017.
- 5) Yin, S., Wang, X., Xiao, Y., Tani, H., Zhong, G., Sun, Z.: Study on spatial distribution of crop residue burning and PM_{2.5} change in China. *Environmental Pollution* 220(A), 204-221, 2017.
- 6) Zhong, G., Wang, X., Tani, H., Guo, M., Chittenden, A.R., Yin, S., Sun, Z., Matsumura, S.: A Modified Aerosol Free Vegetation Index Algorithm for Aerosol Optical Depth Retrieval Using GOSAT TANSO-CAI Data. *Remote Sensing* 8(12), 1-22, 2016.
- 7) Santoso, H., Tani, H., Wang, X.: A simple method for detection and counting of oil palm trees using high-resolution multispectral satellite imagery. *International journal of remote sensing* 37(21), 5122-5134, 2016.
- 8) Sun, Z., Wang, X., Yamamoto, H., Zhang, J., Tani, H., Zhong, G., Yin, S.: Extraction of rice-planting area and identification of chilling damage by remote sensing technology: a case study of the emerging rice production region in high latitude. *Paddy and Water Environment* 14, 1-11, 2016.
- 9) Sun, Z., Wang, X., Tani, H., Zhong, G., Yin, S.: CO₂ Concentration Spatial Distribution of Different ENSO Episodes in South America Using GOSAT Data. *American Journal of Climate Change* 5(1), 77-87, 2016.
- 10) Sonobe, R., Tani, H., Wang, X.: An experimental comparison between KELM and CART for crop classification using Landsat-8 OLI data. *Geocarto International*, 1-11, 2016.
- 11) Guo, M., Xu, J., Wang, X., He, H., Li, J., Wu, J.: Estimating CO₂ concentration during the growing season from MODIS and GOSAT in East Asia. *International Journal of Remote Sensing* 36(17), 4363-4383, 2015.

- 12) Sonobe, R., Tani, H., Wang, X., Kobayashi, N., Shimamura, H.: Discrimination of crop types with TerraSAR-X-derived information. *Physics and Chemistry of the Earth*, 83-84 & 2-13, 2015.
- 13) Sonobe, R., Tani, H., Wang, X., Kojima, Y., Kobayashi, N.: Extreme-learning-machine-based crop classification using ALOS/PALSAR images. *Japan Agricultural Research Quarterly* 49(4), 377-381, 2015.
- 14) Zhong, G., Wang, X., Tani, H., Matsumura, S.: Assessment of Bamboo Forest Damage Using Temporal Sequence of Landsat Images. *Journal of Environmental Information Science* 43(5), 51-58, 2015.
- 15) Sonobe, R., Tani, H., Wang, X., Kobayashi, N., Shimamura, H.: Random forest classification of crop type using multi-temporal TerraSAR-X dualpolarimetric data. *Remote Sensing Letters* 5(2), 157-164, 2014.
- 16) Sonobe, R., Tani, H., Wang, X.: Detection of ambrosia beetles using a pan-sharpened image generated from ALOS/AVNIR-2 and ALOS/PRISM imagery. *Forest Systems* 23(1), 178-182, 2014.
- 17) Yi, K., Tani, H., Li, Q., Zhang, J., Guo, M., Bao, Y., Wang, X., Li, J.: Mapping and Evaluating the Urbanization Process in Northeast China Using DMSP/OLS Nighttime Light Data. *Sensors* 14(2), 3207-3226, 2014.
- 18) Sonobe, R., Tani, H., Wang, X., Kobayashi, N., Kimura, A., Shimamura, H. : Application of multi-temporal TerraSAR-X data to map winter wheat planted areas in Hokkaido, Japan. *Japan Agricultural Research Quarterly* 48(4), 465-470, 2014.
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- 21) Yi, K., Tani, H., Zhang, J., Guo, M., Wang, X., Zhong, G.: Long-Term Satellite Detection of Post-Fire Vegetation Trends in Boreal Forests of China. *Remote Sensing* (5), 6938-6957, 2013.
- 22) Guo, M., Wang, X., Jing Li, Tani, H.: Examining the relationships between land cover and greenhouse gas concentrations using remote-sensing data in East Asia. *International Journal of Remote Sensing* 34(12), 4281-4303, 2013.
- 23) Guo, M., Wang, X., Li, J., Yi, K., Zhong, G., Wang, H.: Spatial distribution of greenhouse gas

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- 26) Liu, Y., Wang, X., Guo, M., Tani, H.: Mapping the FTS SWIR L2 product of XCO₂ and XCH₄ data from the GOSAT by the Kriging method – a case study in East Asia. *International Journal of Remote Sensing* 33(10), 3004-3025, 2012.
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- 28) Guo, M., Wang, X., Matsuoka, N., Tani, H., Matsumura, S.: Desertification assessment using multivariate data and overlay analysis in Kerqin sandy land, China. *Journal of Environmental Information Science* 44(5), 11-22, 2012.

International Conference (Last 5 years)

- 1) Sun, Z., Wang, X., Tani, H., Zhong, G., Yin, S.: The Responses of Dry-wet Conditions to El-nino Southern Oscillation: A Case Study in China. The 37th International Symposium on Remote Sensing of Environment (ISRSE-37). Tshwane, South Africa, 8-12 May, 2017.
- 2) Yin, S., Wang, X., Tani, H., Zhong, G., Sun, Z.: The Effects of El-nino on the CO₂ Concentration Changes in Oceania Region by Using Greenhouse Gas Monitoring Satellites. The 37th International Symposium on Remote Sensing of Environment (ISRSE-37). Tshwane, South Africa, 8-12 May, 2017.
- 3) Yamaya, Y., Sonobe, R., Tani, H., Wang, X., Kobayashi, N., Mochizuki, K.: Crop Classification by Machine Learning Algorithm Using X-band dual-polarized SAR Data. International Conference on Agricultural Biodiversity and Sustainability 2016 (CABS 2016), P10, Sapporo, Japan, 22-23 August, 2016.
- 4) Santoso, H., Tani, H., Wang, X.: Detection and Counting of Oil Palm Trees Using Pansharpening Imagery. International Conference on Agricultural Biodiversity and Sustainability 2016 (CABS 2016), P34, Sapporo, Japan, 22-23 August, 2016.
- 5) Sun, Z., Wang, X., Tani, H., Zhong, G., Yin, S.: Estimation of Terrestrial Biosphere Gross Primary Production Using Satellite Data and Climate Data. International Conference on Agricultural Biodiversity and Sustainability 2016 (CABS 2016). P45, Sapporo, Japan, 22-23

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- 6) Zhong, G., Wang, X., Tani, H., Yin, S., Sun, Z.: Inversion of Aerosol Optical Depth Based on the Cloud and Aerosol Imager. International Conference on Agricultural Biodiversity and Sustainability 2016 (CABS 2016). P46, Sapporo, Japan, 22-23 August, 2016.
- 7) Yin, S., Wang, X., Zhong, G., Sun, Z., Tani, H.: Study on the Agricultural Residues Burning and PM_{2.5} Change in China by Remote Sensing Technology. European Geosciences Union (EGU) General Assembly 2016, 18:5741, Vienna, Austria, 17-22 April, 2016.
- 8) Zhong, G., Wang, X., Yin, S., Sun, Z., Tani, H.: Study on remote sensing of aerosols over land using TANSO-CAI. European Geosciences Union (EGU) General Assembly 2016, 18:5734, Vienna, Austria, 17-22 April, 2016.
- 9) Sonobe, R., Tani, H., Wang, X., Kobayashi, N., Shimamura, H.: Crop Type Classification Using TerraSAR-X Dual-polarization Data and Support Vector Machine. 2014 IEEE International Geoscience and Remote Sensing Symposium (IGARSS 2014), Quebec City, Canada, 15 July, 2014.
- 10) Zhong, G., Wang, X., Tani, H., Guo, M., Yi, K.: Using Remote Sensing and Meteorological Data to Monitor Bamboo Forest Damage. 35th International Symposium on Remote Sensing of Environment, Section 3-P-2, No.588, Beijing, China, 22-26 April, 2013.
- 11) Yi, K., Tani, H., Wang, X., Guo, M., Zhong, G.: Mapping and evaluation of urbanization dynamics from analysis of multi-temporal DMSP_OLS night time light data. 35th International Symposium on Remote Sensing of Environment, Section 7-O-1, No.308, Beijing, China, 22-26 April, 2013.
- 12) Guo, M., Wang, X., Matsuoka, N., Tani, H., Matsumura, S., Yi, K., Zhong, G.: Desertification process assessment in Asia over the Past 30 years. International Symposium on Agricultural Meteorology 2013, IB-5, Nonoichi, Japan, 26-30 March, 2013.
- 13) Guo, M., Wang, X., Yi, K., Zhong, G., Tani, H.: The Distribution of Greenhouse Gas Concentrations in Arid and Semi-Arid Areas. International Conference on Agricultural Biodiversity and Sustainability 2012(CABS 2012), CD-ROM: A17, Sapporo, Japan, 27-29 August, 2012.
- 14) Zhong, G., Wang, X., Tani, H., Guo, M., Yi, K.: Using multi-temporal Landsat data to monitor bamboo forest damage. International Conference on Agricultural Biodiversity and Sustainability 2012(CABS 2012), CD-ROM: A20, Sapporo, Japan, 27-29 August, 2012.
- 15) Yi, K.; Tani, H., Wang, X., Guo, M., Zhong, G.: In Spatio-temporal distribution of forest fires and vegetation recovery in the Northeast of China. 2012 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 6423-6426, Munich, Germany, 22-27 July, 2012.