

PUBLICATIONS

ISI journal papers

Hoscilo, A., H. Balzter, E. Bartholomé, M. Boschetti, P.A. Brivio, A. Brink, M. Clerici, J.F. Pekel, 2014, A conceptual model for assessing rainfall and vegetation trends in sub-Saharan Africa from satellite data, *International Journal of Climatology*, DOI: 10.1002/joc.4231.

Hoscilo Agata, 2014, Satelita wykryje pożar? Las Polski, 21/2014.

Boschetti, M., Nutini F., Brivio, P.A., Bartholome, E., Stroppiana, D., Hoscilo, A., 2013, Identification of environmental anomaly hot spots in West Africa from time series of NDVI and rainfall, *ISPRS Journal of Photogrammetry and Remote Sensing*, 78, 26-40.

Hoscilo, A., Tansey, K.J. and Page, S.E., 2013, Post-fire vegetation response as a proxy to quantify the magnitude of burn severity in tropical peatland, *International Journal of Remote Sensing*, 34, 2, 412-433.

Hoscilo A., Page S.E., Tansey K.J. and Rieley J.O., 2011, Effects of repeated fires on land cover change in peatland in southern Central Kalimantan, Indonesia, from 1973-2005. *International Journal on Wildland Fires*, 20, 579-588.

Dabrowska-Zielinska, K., Gruszczyńska, M., Lewinski, S., Hoscilo, A. and Bojanowski, J., 2009, Application of remote and in situ information to the management of wetlands in Poland. *Journal of Environmental Management*, 2261-2269.

Page S.E., Hoscilo A., Wösten H., Jauhainen J., Silvius M., Rieley J., Ritzema H., Tansey K., Graham L., Vasander H. and Limin S., 2009, Restoration Ecology of Lowland Tropical Peatlands in Southeast Asia - Current Knowledge and Future Research Directions. *Ecosystems*, 12, 6 888-905.

Tansey, K., Beston, J., Hoscilo, A., Page, S.E. and Paredes Hernández, C.U., 2008, The relationship between MODIS fire hotspot count and burned area in a degraded tropical peat swamp forest in Central Kalimantan, Indonesia. *Journal of Geophysical Research*, 113, D23112, doi:10.1029/2008JD010717.

Page, S.E., Rieley, J.O. and Hoscilo, A., 2007, A burning issue: Tropical peatlands and fire. *Peatlands International* 2007, 2, 28-29.

Hoscilo, A., 2005, Metodyka badania degradacji ekosystemów bagiennych na skutek pożarów torfowisk na podstawie informacji pozyskanych przez satelity teledetekcyjne (The investigation of vegetation burning and recovery in the wetland ecosystem of the Biebrza National Park using remote sensing data). *Technical Report Grant KBN Nr5 T12E025 25, archive IGiK 2005*.

Hoscilo, A., 2004, Sukcesja roślinności zaroślowej na obszarze basenu środkowego Biebrzańskiego Parku Narodowego (Succession of scrubby vegetation within middle basin of the Biebrza River National Park). *Prace Instytutu Geodezji i Kartografii*, 40, 106, 117-124.

Dabrowska-Zielinska, K., Kowalik, W., Gruszczyńska, M. and Hoscilo, A., 2003, Vegetation indices for Biebrza middle basin developed from various satellites data. Measurements techniques and data assessment in wetlands hydrology. *Agricultural University Press*, Warsaw 2003, 61-74.

Book chapters

Page, S., Rieley, J., Hoscilo, A., Spessa, A. and Weber, U., 2013, Chapter 7: Current fire regimes, impacts and the likely changes - IV: Tropical Southeast Asia. In: Goldammer, J.G. (ed) *Vegetation Fires and Global Change. Challenges for Concerted International Action*. A White Paper directed to the United Nations and International Organizations. Kessel Publishing House, Remagen-Oberwinter, Germany. pp. 89-99.

Page, S.E., Hooijer, A., Rieley, J.O., Banks, C.J. and Hoscilo, A., 2012, The Tropical Peat Swamps of Southeast Asia: Human Impacts on Biodiversity, Hydrology and Carbon Dynamics. In: Gower, D.J., Johnson, K., Richardson, J.E., Rosen, B.R., Rüber, L. & Williams, S.T. (eds) *Biotic Evolution and Environmental Change in Southeast Asia*. Cambridge University Press, pp. 406-433.

Hoscilo A., Balzter H., Bartholomé E., Boschetti M., Brivio P.A., Brink A., Clerici M. and Pekel J-F., 2012, A space based solution for monitoring land conditions in sub-Saharan Africa, in The Growing use of GMES across Europe's regions, NEREUS/ESA 2012.

Page S.E, Hoscilo A., Langner A., Tansey K., Siegert F., Limin S. and Rieley J., 2009, Tropical peatland fires in Southeast Asia. In: Cochrane et al. (eds) Tropical Fire Ecology, Climate change, Land use and Ecosystem Dynamics. Springer Verlag, 253-287.

Hoscilo, A., 2009, Fire regime, vegetation dynamics and land cover change in tropical peatland, Indonesia. PhD thesis, archive of the University of Leicester.

Conference proceedings

Hoscilo, A., Turlej, K., 2014, Use of satellite data for monitoring fire events in Poland, In proceedings of the IEEE Geoscience and Remote Sensing (IGARSS20140), Quebec, Canada, 13-18 July 2014, 828-831. 978-1-4799-5775-0/14/\$31.00 ©2014 IEEE.

Hoscilo A., Dębowska, A., Ziółkowski, D., 2014: Numeryczna mapa terenów zadrzewionych, VII Conference "Geomatyka w Lasach Państwowych", Rogów, 16-18 September 2014.

Hoscilo A., Turlej K., Napiorkowska M., 2014, Can remotely sensed data be used to support monitoring of fires in Poland?, Proceedings of the 34th EARSeL Symposium, Warsaw 16-20 June 2014.

Hoscilo A., Ciolkosz A., Ziolkowski D., Napiorkowska M., Debowska A., Gruziel M., 2014, GIO Land Monitoring component in Poland, Proceedings of the 34th EARSeL Symposium, Warsaw 16-20 June 2014

Dębowska A., Napiorkowska M., Hościlo A., Gruziel M., 2014, High Resolution Impervious and Tree Cover Layers as an additional source of data on land cover status in Poland", Conference proceedings: 14th International Multidisciplinary Scientific GeoConferences SGEM, Albena, Bulgaria, ISSN 1314-2704, June 17-26, Vol. 3, 651 - 658 pp.

Hoscilo, A., Page S. and Tansey, K., 2013, Estimating carbon losses from fires for REDD; case of tropical peatlands. In proceedings of the 9th EARSeL Forest Fire Special Interest Group Workshop 15-17 October 2013, University of Leicester, UK, pp 83-85.

Hoscilo, A. and Turlej, K, 2013, Using active fires to detect fires across vegetation types in Poland, In proceedings of the 9th EARSeL Forest Fire Special Interest Group Workshop 15-17 October 2013, University of Leicester, UK.

Tansey, K.J., Waldram, M., Page, S.E. and Hoscilo, A., 2012, Assessment of fire severity in tropical peat swamp forests of Central Kalimantan, Indonesia. ForestSAT - A conference promoting science-based applications of remote sensing and other spatial data in forested systems, Corvallis, Oregon, USA, 11-14 September 2012.

Hoscilo, A., Tansey, K., and Page, S.E. (2011), Post-fire vegetation response as a proxy to quantify the magnitude of burn severity in tropical peat swamp forest, Central Kalimantan, Indonesia. Proceedings of the 8th International EARSeL FF-SIG Workshop, 20-21 October 2011, Stresa, Italy, pp. 93-98.

Hoscilo, A., Balzter, H., Bartholomé, E., Boschetti, M., Brivio, P.A. and Brink, A., 2011, Changes in vegetation and rainfall patterns in sub-Saharan Africa over the last decade observed by satellites - a national and sub-national synthesis. Proceedings of the IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 25-29 July 2011, Vancouver, Canada. Oral presentation

Hoscilo A., Page, S.E and Tansey, K., 2010, The dynamics of fire regimes in tropical peatlands in Central Kalimantan, Borneo. Proceedings of the European Geosciences Union General Assembly, 03-07 May 2010, Vienna, Austria.

Hoscilo A., Balzter, H. and Szumski, A., 2010, Environmental indicators of land condition for Africa from remote sensing. Proceedings of the Open Science Conference "Toward a biophysical carbon accounting in Africa and perspectives for REDD and CDM", 17-19 March 2010, Pointe-Noire, Republic of Congo. http://www.carbofrica.net/c_outputs_en.asp.

Szumski, A., Hoscilo A., Palumbo, I. and Balzter, H., 2010, A comparison of active fire detection and burned

area mapping from satellite in the Congo basin. Proceedings of the Open Science Conference "Toward a biophysical carbon accounting in Africa and perspectives for REDD and CDM", 17-19 March 2010, Pointe-Noire, Republic of Congo.

Nutini, F., Boschetti, M., Brivio, P.A., Bartholomé, E., Hoscilo, A., Stroppiana, D. and Bocchi, S., 2010, Analysis of vegetation pasture climate response on Sahel region through 10 years remote sensed data. Proceedings of the SPIE Remote Sensing Symposium, 20-23 September 2010, Toulouse, France.

Hoscilo, A., Page, S.E. and Tansey, K., 2009, Assessing magnitude of burn severity in tropical forest subject to multiple fires. Proceedings of the Remote Sensing and Photogrammetry Society 2009 Annual Conference, 08-11 September 2009, Leicester, UK (Nottingham: RSPSoc), pp. 517-520.

Fuchs, R., Tansey, K., Balzter, H., Hoscilo, A., Schmullius, C. and Page S.E., 2009, Monitoring the regrowth of vegetation after disturbance using radar time series data for peatlands in Indonesia. In Proceedings of the Remote Sensing and Photogrammetry Society Annual Conference, 08-11 September 2009, Leicester, UK (Nottingham: RSPSoc), pp. 764-774.

Nicolas-Perea, V., Hoscilo A. and Monks P.S., 2009, Measurements of trace gases above the tropical forest a comparison between ozone levels in the forest and the oil palm plantation using the BAE-146 aircraft. Proceedings of the European Geosciences Union General Assembly, 19 - 24 April 2009, Vienna, Austria.

Nicolas-Perea, V., Hoscilo, A., Brookes D. and Monks P.S., 2009, Measurements of trace gases above the tropical forest using the BAE-146 aircraft. Ecosystems, Atmospheric Composition, Weather and Climate workshop. Proceedings of the Royal Meteorological Society Conference, 02 July 2009, London, UK.

Hoscilo A., Page S.E. and Tansey K., 2008, Spatial and temporal alterations of tropical peatlands (Indonesia) due to widespread and repeated fires over the last 30 years. Proceedings of the Remote Sensing and Photogrammetric Society Annual Conference, 15-17 September 2008, Falmouth, UK.

Tansey, K., Balzter, H., Luckman, A., Hoscilo, A. and Page, S. (2008): Relationships between tropical, temperate and boreal forest variables and PALSAR data, ALOS 2008 Symposium, Rhodes, Greece, 3 – 7 Nov. 2008.

Tansey, K., Beston, J., Hoscilo, A. and Page S.E., 2008, Relationships between burnt area and MODIS fire hotspot data in a degraded tropical forest in Borneo, Proceedings of the Remote Sensing and Photogrammetric Society Annual Conference, 15-17 September 2008, Falmouth, UK.

Hoscilo, A., Page, S.E. and Tansey, K., 2008, Repeated and extensive fire as the main driver of land cover change in Block C of the former Mega Rice Project area. Proceedings of the 13th International Peat Congress, 08-13 June 2008, Tullamore, Ireland, 206-208.

Hoscilo, A., Page, S.E. and Tansey, K., 2008, Development of post-fire vegetation in the tropical ecosystem of Central Kalimantan, Indonesia. Proceedings of the 13th International Peat Congress, 08-13 June 2008, Tullamore, Ireland, 202-205.

Wisniewska, E., Stankiewicz, K. and Hoscilo, A., 2007, Techniques of forest visualisation with the use of IKONOS image – Kozienice Forest case. New Developments and Challenges in Remote Sensing, 25th EARSEL Symposium, Millpress, Rotterdam 2007, 175-182.

Page, S.E., Hoscilo, A. and Tansey, K., 2006, Multi-temporal satellite observations of burnt area as a result of peat burning in Indonesia. Applications for the modelling of post-fire vegetation dynamics, Society for Ecological Restoration conference, 21-25 August 2006, Greifswald, Germany.

Tansey, K. Hoscilo, A. and Page, S.E., 2005, New observations of Indonesian peatlands in 2005 from the DMC satellite. 3rd Open Science Meeting 'Science and Society: New Challenges and Opportunities', 27-29 September 2005, 1-5 Yogyakarta, Indonesia.

Dabrowska-Zielinska, K., Ciolkosz, A., Gruszcynska, M. and Hoscilo, A., 2005, Application of Envisat MERIS, Terra ASTER and Modis data for crop yield modeling. Proceedings of the 4th EARSeL Workshop on Imaging Spectroscopy, Warsaw 2005, 667-675.

Hoscilo, A., 2005, Fire disasters at wetlands area monitored by remote sensing data. Proceedings of 24th EARSeL Symposium New Strategies for European Remote Sensing, Dubrovnik, Millpress Rotterdam, 89-94.

Dabrowska-Zielinska, K., Gruszcynska, M., Stankiewicz, K., Kowalik, W. and Hoscilo, A., 2004, Modelling of Crop-Soil Parameters from Envisat, ESA CTA-1 1427 project. Proceedings of the 4th International Symposium on Retrieval of Bio- and Geophysical Parameters from SAR Data for Land Applications, Bio Geo SAR 2004, Innsbruck, 16 –19 November 2004.

Hoscilo, A., 2003, The satellite image as a background for the tourist map of Biebrza River National Park. Proceedings of the 23rd EARSeL Symposium: Geoinformation for European-wide Integration, Ed. Tomas Benes, Multipress Rotterdam, 2003, 173-177.

Dabrowska-Zielinska, K., Kowalik, W., Gruszczynska, M., Hoscilo, A. and Stankiewicz, K., 2002, Soil vegetation indices developed from spectral signatures recorded by various satellites. Proceedings of the Recent Advances in Quantitative Remote Sensing Symposium, Ed. Jose A. Sobrino, Universitat D`VALENCIA 2002, 380-387.

Hoscilo, A., 2001, Zmiany użytkowania ziemi w latach 1956-1997 dla fragmentu Narwiańskiego Parku Narodowego (Land use changes in the Narew River National Park during period 1956-1997). *Teledetekcja Środowiska*, 32, 106-118.