



## Landuse change, biofuels and rural development in the La Plata Basin

### Project publications (October 2011)

Alcaraz-Segura D, Chuvieco E, Epstein HE, Kasischke E, Thishchenko A. 2010. Debating the greening vs. browning of the North American boreal forest: differences between satellite datasets. *Global Change Biology* 16(2): 760-770. doi: 10.1111/j.1365-2486.2009.01956.x

Alcaraz-Segura D, Liras E, Tabik S, Paruelo J, Cabello J. 2010. Evaluating the consistency of the 1982-1999 NDVI trends in the Iberian Peninsula across four time-series derived from the AVHRR sensor: LTDR, GIMMS, FASIR, and PAL-II. *Sensors* 10(2): 1291-1314. doi: 10.3390/s100201291

Aragón R, Jobbágy EG, Viglizzo E. 2011. Surface and groundwater dynamics in the sedimentary plains of the Western Pampas (Argentina). *Ecohydrology* 4 (3): 433–447. doi: 10.1002/eco.149

Arvor D, Jonathan M, Meirelles M, Dubreuil V, Lecerf R. 2008. Comparison of Multitemporal MODIS-EVI Smoothing Algorithms and its Contribution to Crop Monitoring. *Geoscience and Remote Sensing Symposium, 2008. IGARSS 2008. IEEE International*, II-958 - II-961

Arvor D, Meirelles MSP, Vargas R, Skorupa LA, Fidalgo ECC, Dubreuil V, Herlin, Berroir J. 2010. Monitoring land use changes around the indigenous lands of the Xingu basin in Mato Grosso, Brazil. *Geoscience and Remote Sensing Symposium (IGARSS), 2010 IEEE International*, 3190-3193

Baldi G, Noretto MD, Aragón R, Aversa F, Paruelo JM, Jobbágy EG. 2008. Long-term satellite NDVI data sets: Evaluating their ability to detect ecosystem functional changes in South America. *Sensors* 8(9): 5397-5425. doi: 10.3390/s8095397

Berthrong ST, Jobbágy EG, Jackson RB. 2009. A global meta-analysis of soil exchangeable cations, pH, carbon, and nitrogen with afforestation. *Ecological Applications*, 19:2228-2241.

Carrizo SC. 2008. Biocombustibles en Argentina, entre necesidades energéticas e intereses agroindustriales. *Revista Pampa* 4(4) Santa Fe: Universidad Nacional del Litoral, Universidad de la República. ISSN 1669-3299

Carrizo SC. 2009. Interdependencias energéticas e integración regional en la Cuenca del Plata. In: Guibert M, Carrizo SC et al. *Le Bassin du Rio de la Plata: intégration régionale et développement local*, Ed. PUM, Presses Universitaires du Mirail, Collection Hespérides Amérique, Toulouse 568p.

Carrizo SC, Ramousse D 2010. Dinámicas energéticas e integración regional en el Noroeste argentino y el Sur boliviano. *Rev. Geografía Norte Grande*, Pontificia Universidad Católica de Chile. Instituto de Geografía. Santiago de Chile, ISSN 0718-3402, 45: 51-62

- Carrizo SC, Ramousse D, Velut S. 2009. Biocombustibles en Argentina, Brasil y Colombia: Avances y limitaciones. On line: Geograficando 5 (5), 63-82. URL: [http://www.fuentesmemoria.fahce.unlp.edu.ar/art\\_revistas/pr.4443/pr.4443.pdf](http://www.fuentesmemoria.fahce.unlp.edu.ar/art_revistas/pr.4443/pr.4443.pdf)
- Clasadonte L (2008) Network companies, another way of thinking agriculture. A supply chain management vision in South America. Master Thesis, Wageningen University, 130 pp. URL: <http://www.mst.wur.nl/NR/rdonlyres/29123DDC-A2C5-4687-B319-A36671629E85/0/ClasadonteLaureSummarythesis.pdf>
- Contreras S, Jobbágy EG, Noretto MD, Villagra PE, Puigdefábregas J. 2011. Satellite-based estimate of evapotranspiration in arid regions: An ecohydrological approach for central Argentina. *Journal of Hydrology*, 397:10-22
- Duarte FG, Tourrand JF, Duarte LMG. 2010. Mudanças da base tecnológica na produção canavieira do Brasil: um olhar sobre as atuais perspectivas para o mercado de trabalho. In: Séminaire Inra-Cirad - Le travail en agriculture dans les sciences pour l'action, 23-27 March 2010. ISBN: 978-2-738012-75-3. URL: [http://publications.cirad.fr/une\\_notice.php?dk=555980](http://publications.cirad.fr/une_notice.php?dk=555980)
- Farley KA, Piñeiro G, Palmer SM, Jobbágy EG, Jackson RB. 2008. Stream acidification and base cation losses with grassland afforestation. *Water Resources Research* 44: W00A03, doi: 10.1029/2007WR006659
- Garcez CAG, Vianna JNS (2009) Brazilian biodiesel policy: Social and environmental considerations of sustainability. *Energy* 34 (5): 645-654. doi:10.1016/j.energy.2008.11.005
- Goergen GD, Roberti R, Gonçalves LGG. 2009. Estimativa da evapotranspiração sobre a bacia do Prata utilizando climatologia do IAF. *Ciência e Natura*, v. esp, p. 77-80.
- Gonçalves LGG, Shuttleworth WJ, Vila D, Larroza E, Bottino MJ, Herdies DL, Aravequia JA, Mattos JGZ, Toll DL, Rodell M & Houser P. 2009. The South American Land Data Assimilation System (SALDAS) 5-Yr Retrospective Atmospheric Forcing Datasets. *J. Hydrometeor.* 10: 999–1010. doi: 10.1175/2009JHM1049.1
- Jackson RB, Jobbágy EG, Noretto MD. 2009. Ecohydrology in a human-dominated landscape. *Ecohydrology* 2:383-389. doi: 10.1002/eco.81
- Jackson RB, Randerson JT, Canadell JG, Anderson RG, Avissar R, Baldocchi DD, Bonan GB, Caldeira K, Diffenbaugh NS, Field CB, Hungate BA, Jobbágy EG, Kueppers LM, Noretto MD & Pataki DE. 2008. Protecting climate with forests. *Environmental Research Letters* 3: 044006. doi: 10.1088/1748/9326/3/4/044006
- Jayawickreme DH, Santoni CS, Kim JH, Jobbágy EG, Jackson RB. 2011. Changes in hydrology and salinity accompanying a century of agricultural conversion in Argentina. *Ecological Applications*. doi:10.1890/10-2086.1.
- Jobbágy EG. 2009. Regímenes hidrológicos según usos de la tierra: Efectos de la actividad forestal en sistemas semiáridos y húmedos. Pp: 7-16 en: PJ Donoso (editor) *Tala Rasa: Implicancias y desafíos*. Universidad Austral de Chile, Valdivia.
- Jobbágy EG, Noretto MD 2008. Como hacer de las napas un aliado. Pautas y criterios para el monitoreo de niveles freáticos en sistemas de producción agrícola en la región pampeana. *Revista CREA* 328:32-38
- Jobbágy EG, Noretto MD. 2009. Napas freáticas: pautas para comprender y manejar su impacto en la producción. *Actas XVII Congreso AAPRESID*: 151-155.
- Jobbágy EG, Noretto MD, Santoni CC, Baldi G. 2008. El desafío ecohidrológico de las transiciones entre sistemas leñosos y herbáceos en la llanura Chaco-Pampeana. *Ecología Austral* 18: 305-322.

Jobbágy EG, MD Nosetto, PE Villagra, RB Jackson. 2011. Water subsidies from mountains to deserts: Their role sustaining groundwater-fed oases in a sandy landscape. *Ecological Applications*, 21(3): 678–694.

Laterra PE, Jobbágy EG, Paruelo JM. 2011. Valoración de Servicios ecosistémicos: conceptos, herramientas y estudio de casos. Ediciones INTA. Buenos Aires, Argentina. 744 pp

Morales Grosskopf H, Arbeletche P, Bommel P, Burges JC, Champredonde M, Corral J, Tourrand JF. 2010. Modéliser le changement dans la gestion des terres de parcours en Uruguay. *Cirad Cah Agric* 19 (2): 112-117. doi: 10.1684/agr.2010.0385

Moreira, IJM (2009) Transformações na pecuária mista na região de basalto do Uruguai: uma análise comparativa entre 1994 e 2008. M.Sc. thesis, Porto Alegre, 119 pp. URL: <http://www.lume.ufrgs.br/bitstream/handle/10183/22678/000739668.pdf?sequence=1>

Noellemeyer E, Frank F, Alvarez C, Morazzo G, Quiroga A (2008) Carbon contents and aggregation related to soil physical and biological properties under a land-use sequence in the semiarid region of central Argentina. *Soil and Tillage Research* 99 (2), 179-190

Nogar AG, Carrizo S. 2010. Pequeñas localidades rurales, cambios globales y conocimiento local. *Estudios comparados en America Latina, Mundo Agrario* 11(21), ISSN 1515-5994. URL: <http://www.scielo.org.ar/pdf/magr/v11n21/v11n21a12.pdf>

Nogar G. 2008. Agroindustria Integrada de base Rural. Estrategia componente de la multifuncionalidad territorial. INTA Bordenave. URL: <http://www.inta.gov.ar/vincula/sial/doc/Nogar.pdf>

Nogar G. 2008. El turismo rural como estrategia incluyente. Teorización e Investigación empírica. In: *Bases para el desarrollo del turismo rural*. 145 pp. URL: <http://www.turismoruralbolivia.com/img/GracielaNogar.pdf>

Nogar G, Capristo MV. 2008. Pequeñas localidades puesta en valor de recursos naturales en Benito Juárez. In: Grofman F: *Espejos en la llanura. Nuestras lagunas de la región pampeana*. Universidad Nacional de la Centro de la Provincia de Buenos Aires, Cap. XII, ISBN 978-950-658-213-5. 195 p.

Nosetto MD, Jobbágy EG, Brizuela AB, Jackson RB. 2011. The hydrologic consequences of land cover change in central Argentina. *Agriculture, Ecosystems and Environment* (online). Doi: 10.1016/j.agee.2011.01.008

Nosetto MD, Jobbágy EG, Sznaider GA, Jackson RB. 2009. Reciprocal influence of crops and shallow ground water in sandy landscapes of the Inland Pampas. *Field Crops Research* 113: 138-148. doi:10.1016/j.fcr.2009.04.016

Nosetto MD, Jobbágy EG, Mercau JL. 2011. Ambientación y aplicación variable de insumos en áreas con influencia freática. *Agricultura de Precisión y Manejo por Ambientes - AAPRESID, Revista Especial*. 15-20.

Nosetto MD, Jobbágy EG, Toth T, Jackson RB. 2008. Regional patterns and controls of ecosystem salinization with grassland afforestation across a rainfall gradient. *Global Biogeochemical Cycles* 22: GB2015. doi: 10.1029/2007GB003000

Paruelo JM, Guerschman JP, Piñeiro G, Jobbágy EG, Verón SR, Baldi G, Baez J. 2006. Cambios en el uso de la tierra en Argentina y Uruguay: marcos conceptuales para su análisis. *Agrociencia* X(2): 47-61

Piñeiro G, Jobbágy EG, Baker J, Murray B & Jackson RB. 2009. Set-asides can be better climate investment than corn-ethanol. *Ecological Applications* 19: 277-282. URL: <http://www.esajournals.org/doi/pdf/10.1890/08-0645.1>

- Piñeiro G, Paruelo JM, Jobbágy EG, Oesterheld M, Jackson RB. 2009. Grazing effects on belowground C and N stocks along a network of cattle enclosures in temperate and subtropical grasslands of South America. *Global Biogeochemical Cycles* 23: GB2003. doi: 10.1029/2007GB003168
- Pinto Teixeira FA (2009). Uma proposta metodológica para subsidiar a avaliação de sustentabilidade ambiental utilizando imagens MODIS e SIG. MSc dissertation. Rio de Janeiro. 166 pp.
- Portela SI, Andriulo AE, Jobbágy EG, Sasal MC. 2009. Water and nitrate exchange between cultivated ecosystems and groundwater in the Rolling Pampas. *Agriculture, Ecosystems & Environment* 134: 277-286. doi: 10.1016/j.agee.2009.08.001
- Santoni CS, Jobbágy EG, Contreras S. 2010. Vadose zone transport in dry forests of central Argentina: Role of land use. *Water Resources Research* 46: W10541. doi: 10.1029/2009WR008784
- Valencia LIO. 2008. Enfoque da estatística espacial em modelos dinâmicos de mudança do uso do solo. MSc Dissertation. Rio de Janeiro. 97 pp.
- Vega E, Baldi G, Jobbágy EG, Paruelo JM. 2009. Land use change patterns in the Río de la Plata grasslands: the influence of phytogeographic and political boundaries. *Agriculture, Ecosystems & Environment* 134: 287-292. doi: 10.1016/j.agee.2009.07.011
- Vianna JNS, Duarte LMG, Wehrmann MEF (2009a) O papel do etanol na mitigação das emissões de poluentes no meio urbano. In: II Jornada Luso-Brasileira de Ensino e Tecnologia em Engenharia. Porto 1. 73-83.
- Vianna JNS, Duarte LMG, Wehrmann MEF 2009. Soybean and the contribution of oilseeds to biodiesel production in Brazil. In: Duarte LMG, Pinto P (Eds.): *Sustainable Development: Energy, Environment and Natural Disasters*. Évora: Universidade de Évora e Fundação Luís Molina.
- Vianna JNS, Duarte LMG, Wehrmann MEF (2010b) The limits of biodiesel for promoting social inclusion. In: Maurício Luiz; Renata Iza Mondardo (Eds.): *Science and Technology for Environmental Studies*. Florianópolis, 2010. URL: [http://www.professores.cds.unb.br/jnildo/pub/arquivo\\_ver.cfm?arquivo=200710\\_F1DFC0C3.pdf](http://www.professores.cds.unb.br/jnildo/pub/arquivo_ver.cfm?arquivo=200710_F1DFC0C3.pdf)
- Vianna JNS, Wehrmann MEF Duarte LMG 2007. Challenges and risks of the future: biofuels as inductors of sustainable development. In: do Nascimento EP; Vianna JN (Eds.): *Dilemas e desafios do desenvolvimento sustentável no Brasil*. Rio de Janeiro: Garamond.
- Viglizzo E, Frank F, Carreño L, Jobbágy EG, Pereyra H, Clatt J, Pincén D, Ricard F. 2011. Ecological and environmental footprint of 50 years of agricultural expansion in Argentina. *Global Change Biology* 17: 959-973. doi: 10.1111/j.1365-2486.2010.02293.x
- Viglizzo EF, Jobbágy EG, Carreño LV, Frank FC, Aragón R, de Oro L, Salvador VS. 2009. The dynamics of cultivation and floods in arable lands of central Argentina. *Hydrology & Earth System Science* 13: 491-502. URL: [www.hydrol-earth-syst-sci.net/13/491/2009/](http://www.hydrol-earth-syst-sci.net/13/491/2009/)
- Viglizzo EF, Jobbágy EG. 2010. Expansion de la Frontera Agropecuaria en Argentina y su Impacto Ecologico-Ambiental. Ediciones INTA. Buenos Aires, Argentina. ISBN 978-987-1623-83-9. 102 pp. URL: <http://www.inta.gov.ar/anguil/info/pdfs/giga/Expansi%C3%B3n%20Frontera%20Agropecuaria%202010.pdf>