

## MONIA SANTINI

### Peer-reviewed Publications

**Santini M.**, Collalti A., Valentini R. (2014) Climate change impacts on vegetation and water cycle in the Euro-Mediterranean region, studied by a likelihood approach. *Regional Environmental Change*. DOI: 10.1007/s10113-013-0582-8.

Valentini, R., Arneth, A., Bombelli, A., Castaldi, S., Cazzolla Gatti, R., Chevallier, F., Ciais, P., Grieco, E., Hartmann, J., Henry, M., Houghton, R. A., Jung, M., Kutsch, W. L., Malhi, Y., Mayorga, E., Merbold, L., Murray-Tortarolo, G., Papale, D., Peylin, P., Poulter, B., Raymond, P. A., **Santini, M.**, Sitch, S., Vaglio Laurin, G., van der Werf, G. R., Williams, C. A., and Scholes, R. J. (2014). A full greenhouse gases budget of Africa: synthesis, uncertainties, and vulnerabilities, *Biogeosciences*, 11, 381-407, doi:10.5194/bg-11-381-2014.

**Santini M.**, Valentini R., Cervigni R. (2013) Climate projection ensemble as support to water management and irrigation in Nigeria. *Journal of Water and Climate Change*, 4(3), 287-301. doi:10.2166/wcc.2013.039.

Rulli M.C., Offeddu L., **Santini M.** (2013) Modeling post-fire water erosion mitigation strategies. *Hydrol. Earth Syst. Sci.*, 17:2323-2337, doi:10.5194/hess-17-2323-2013.

Collalti A., Perugini L., **Santini M.**, Chiti T., Nolè A., Matteucci G., Valentini R. (2014) A process-based model to simulate growth in forests with complex structure: Evaluation and use of 3D-CMCC Forest Ecosystem Model in a deciduous forest in Central Italy. *Ecological Modelling*, Volume 272, pages 362–378, DOI: 10.1016/j.ecolmodel.2013.09.016.

Kirschke S., Bousquet P., Ciais P., Saunois M., Canadell J. G. , Druckenbrod E. J., Bergamaschi P., Bergmann D., Blake D. R. , Bruhwiler L., Cameron-Smith P., Castaldi S., Chevallier F., Feng L., Fraser A., Heimann M., Hodson E. L. , Houweling S., Josse B., Fraser P. J., Krumbel P. B. , Lamarque J., Langenfelds R. L. , Le Quéré C., Naik V., O'Doherty S., Palmer P. I., Pison I., Plummer D., Poulter B., Prinn R. G. , Rigby M., Ringeval B., **Santini M.**, Schmidt M., Shindell D. T. , Simpson I. J. , Spahni R., Steele L. P. , Strode S. A. , Sudo K., Szopa S., van der Werf G. R. , Voulgarakis A., van Weele M., Weiss R. F. , Williams J. E. , Zeng G. (2013) Three decades of global methane sources and sinks. *Nature Geoscience*, 6, 813-823, DOI: 10.1038/ngeo1955.

**Santini M.**, Caccamo G. G., Laurenti A., Noce S., Valentini R. (2011) A multi-component GIS framework for desertification risk assessment by an integrated index. *Applied Geography*, 30 (3), pp. 394-415.

**Santini M.**, Valentini R. (2011) Predicting hot-spots of land use changes in Italy by ensemble forecasting. *Regional Environmental Change*, 11 (3), pp. 483 – 502.

Fratini G., **Santini M.**, Ciccioli P., Valentini R. (2009) Evaluation of a wind erosion model in a desert area of Northern Asia by Eddy Covariance. *Earth Surface Processes and Landforms*, 34, 1143-1157, DOI: 10.1002/esp.1857

**Santini M.**, Taramelli A., Sorichetta A., 2010. ASPHAA: a GIS-based algorithm to calculate cell area on a latitude-longitude (geographic) regular grid. *Transactions in GIS*, 14(3), 351-377.

**Santini M.**, Grimaldi S., Nardi F., Petroselli A., Rulli M.C., 2009. Pre-processing algorithms and landslide modelling on remotely sensed DEMs. *Geomorphology*, 113(1-2), 110-125, DOI:10.1016/j.geomorph.2009.03.023.

Nardi F., Grimaldi S., **Santini M.**, Petroselli A. and Ubertini L., 2008. Hydrogeomorphic properties of simulated drainage patterns using DEMs: the flat area issue. *Hydrological Sciences Journal*, 53(6): 1176-1193.

## Books and book chapters

Cervigni, R., Valentini, R, **Santini, M.** eds. 2013. Toward Climate-Resilient Development in Nigeria. Directions in Development. Washington, DC: World Bank. doi:10.1596/978-0-8213-9923-1.

Rulli, M.C., Gobattoni, F., and **Santini, M.**, 2013. GALLIUS: GeomorphohydrologicAl Model for Landslide Initiation Under Snowmelting. In: Margottini C., Canuti P., Sassa K. (eds.) *Landslide Science and Practice*, vol. 4, pp. 409-415.

**Santini M.**, Valentini R., 2011. Volume 2: Agriculture, Forests and Ecosystem Services and People. Introduction. In: *Regional Assessment of Climate Change in the Mediterranean, Advances in Global Change Research* Volume 51, 2013, pp 3-7.

**Santini M.**, Valentini R., 2011. Volume 2: Agriculture, Forests and Ecosystem Services and People. Summary and Major findings. In: *Regional Assessment of Climate Change in the Mediterranean, Advances in Global Change Research* Volume 51, 2013, pp 157-160.

Taramelli A., Pasqui M., Melelli L., **Santini M.** and Sorichetta A., 2011. Modelling Hurricane Related Hazards and Risk through GIS for Early Warning Systems, *Recent Hurricane Research - Climate, Dynamics, and Societal Impacts*, Anthony Lupo (Ed.), ISBN: 978-953-307-238-8, InTech.