

Special Issue

Spatial Modelling of Greenhouse Gas Emissions (GHG) from Cropland and Grassland

Message from the Guest Editor

Agriculture accounts for approximately one third of anthropogenic GHG [DM1] emissions and with the future pressures of climate change, population increase and changing dietary aspirations, as well as fibre and bioenergy requirements, it will be a challenge to reduce emissions from agriculture and land use. As experiments to determine GHG emissions from land use are expensive and need to be long term to determine actual changes in soil carbon and GHG emission trends, spatial modelling of vegetation growth and soil bio-chemical cycles of carbon and nitrogen is a tool that can be used to spatially estimate current emissions and predict future trends.

This Special Issue will focus on advances in vegetation growth, soil biogeochemical models and the underlying soil, climate and socio-economic scenario data. We welcome novel research, reviews and opinion pieces covering all related modelling topics including soil chemistry, hydrology, beneficial micro-organisms, crop genetics and improvement, novel crops, crop and grassland management solutions, case-studies from the field, model parameterization experiments and policy positions.

Guest Editor

Dr. Astley Hastings

Scottish Food Security Alliance-Crops, Climate X Change & Institute of Biological and Environmental Science, University of Aberdeen, 23 St Machar Drive, Aberdeen AB24 3UU, UK

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Agronomy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agronomy@mdpi.com

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Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research,
Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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