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

Deadline for manuscript submissions

closed (30 June 2019)

Agronomy

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.7

mdpi.com/si/12914

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

mdpi.com/journal/agronomy

Agronomy

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.7

mdpi.com/journal/agronomy

MDPI

About the Journal

Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet. *Agronomy* is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

Editor-in-Chief

Prof. Dr. Leslie A. Weston
Gulbali Centre for Agriculture, Water and Environment Research, Charles Sturt University, Wagga Wagga, NSW 2678, Australia

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)