Special Issue

Crop Yield Simulations Driven by Regional Climate Models

Message from the Guest Editors

. Weather conditions have a significant impact on the growth, development, and yield of crop plants. The extent of this phenomenon is difficult to estimate, as each species and variety behaves differently. It is, therefore, crucial to determine their impact on yield using mathematical models that describe the meteorological phenomena in question and explain the processes in the soil–plant–atmosphere system. The main topics covered in this Special Issue include, but are not limited to, the following:

- Estimating the water needs of crops;
- Methods for adapting plants to climate change;
- Precision and water-saving irrigation;
- Yield estimation based on regional climate models;
- Impact of extreme weather events on crop production;
- Research into new crop varieties resistant to different conditions;
- Plant yield after the application of fertilizers and agro-technical treatments;
- Effects of biotic and abiotic stresses on plants and their parameters.

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About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

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