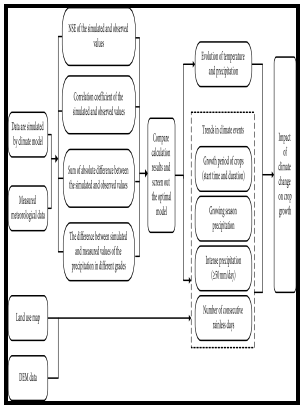
Yield--a numerical crop yield model of irrigated and rainfed agriculture

C.W. Thornthwaite Associates, Laboratory of Climatology - Yield responses of crops to changes in environment and management practices: Model sensitivity analysis. I. Maize



Description: -
-
Costa Rica -- Politics and government.
Italy -- History -- Early works to 1800.
Lombardy (Italy) -- History -- Early works to 1800.
Lombards -- History -- Early works to 1800.
Sewerage -- Ontario
Sewage disposal plants -- Equipment and supplies
Sewage -- Purification -- Aeration
Great Lakes Region (North America) -- Description and travel.
Geographical positions -- Great Lakes Region (North America)
Inland navigation -- Great Lakes (North America)
Boats and boating -- Great Lakes (North America)
Water in agriculture -- Mathematical models.
Crops and climate -- Mathematical models.
Crop yields -- Climatic factors -- Mathematical models.Yield--a numerical crop yield model of irrigated and rainfed agriculture
-
Publications in climatology (Laboratory of Climatology (C.W. Thornthwaite Associates)) -- v. 35, no. 2.
Publications in climatology -- v. 35, no. 2.Yield--a numerical crop yield model of irrigated and rainfed agriculture
Notes: Bibliography: p. 118-126.
This edition was published in 1982

Tags: #Gap #growing #between #irrigated, #rain

Yield responses of crops to changes in environment and management practices: Model sensitivity analysis. I. Maize

Hollow circles indicate that no county has statistically significant trends.

Assessing Crop Yield Simulations with Various Seasonal Climate Data

COAPS receives its base support from the Applied Research Center, funded by NOAA Climate Program Office.

Long

The main technique used in this study for producing downscaled climate data consists of Cyclostationary Empirical Orthogonal Function CSEOF analysis, multiple regression, and stochastic time series generation. Therefore, the benefit of dynamical downscaling using a regional model is obviously demonstrated in the crop simulation. Globally, WUE of wheat shows even larger variation ranging from approximately 0.

Irrigation Water Use

Grey areas show the 95%, 85%, 75% and 66% uncertainty bands Methods. Marschner H 1995 Mineral Nutrition of Higher Plants. Moreover, increasing water storage in the soil during the fallow season, so that available soil water content increases from 50 to 70% of FC in autumn at the time of winter wheat seeding, is at least as effective as a plastic cover during the growing season.

Stochastically modeling the projected impacts of climate change on rainfed and irrigated US crop yields

This also results in more concurrence of large crop yield declines across multiple crops under rainfed conditions. Dorigo et al for predicting yield

losses. Our results underline the importance of considering impacts of climate extremes on the global food system and adapting agriculture to changes in extreme events—to the extent it is possible—to meet future food demands.

A brief guide to estimating crop yields

A comprehensive discussion of the limitations of this study is included in SI section 2. Unlike other previous studies, we report a conservative estimate of the explained variances by using a cross-validation approach and reporting R 2 values from out-of-sample predictions, and by applying one statistical model in one configuration for all crop types and regions. The yield performance strongly depends on the convective scheme used.

The effects of climate extremes on global agricultural yields

Large anomalies tend to occur more frequently in the rainfed case, with more agriculturally bad years that have concurrent crop yield declines. Detrended climate predictors and yields were standardised per grid cell by dividing by their standard deviation to account for the fact that grid cells with smaller mean yields tend to have smaller anomalies and assuming that local agriculture is adapted to local mean climate variability SI section 1.

Related Books

- Une parole de Dieu - Sainte Thérèse de lEnfant-Jésus
- Anglo-russkii astronomicheskii slovar
- Romanian-English, English-Romanian dictionary.
- Economia da conservação de um recurso natural - o solo agrícola no Sul do Brasil
- 3 stitches