

List of ResearchGate publications of R.J.Oosterbaan. On www.waterlog.info public domain

Classification by subject.

Some papers have been classified under more the one subject due to overlap

1. Irrigation
2. Subsurface drainage by ditches, drains and wells
3. Soil salinity control, leaching
4. Groundwater and salt balances, hydraulics
5. Crop production, soil salinity, depth of the water table, regression analysis
6. Agro-hydro-soil-salinity models
7. Rainfall-runoff/drainage relations in time, non linear reservoir
8. Land and water management
9. Segmented linear or partial regression
10. Curved regression
11. Probability distribution fitting
12. Free models and software.

1. Irrigation

[On Efficiencies and Sufficiencies of Crop Land Irrigation, Drainage and Soil Salinity Control using the DrainApp Model in various Scenario's](#)

[Soil Salinity and Water Table Data in Irrigated Farm Lands in the Arid Aral Sea Basin, Uzbekistan, explained with a Salt Leaching Model including the Determination of Actual Evaporation and Capillary Rise](#)

[Irrigation, groundwater, wells, drainage and soil salinity control in the alluvial fan of Garmsar, Iran -assessments with the Sahysmod model](#)

[Methods to evaluate crop salt tolerance from field trials, a critical review of the Salt Farm Texel article](#)

[THE PUNATA-TIRAQUE IRRIGATION PROJECT NEAR COCHABAMBA, BOLIVIA Report of a consultancy assignment, January 1988](#)

[IMPACTS OF THE IRRIGATION IMPROVEMENT PROJECT, EGYPT, on Drainage Requirements and Water Savings Report to the Egyptian-Dutch Advisory Panel on Land Drainage and Drainage Related Water Management of a short-term consultancy mission](#)

[Variations of leaching efficiency determined with soil salinity models calibrated in farm lands and related to soil texture](#)

[Saltmod: a Tool for Interweaving of Irrigation and Drainage for Salinity Control.](#)

[Water Harvesting and Agricultural Land Development Options in the NWFR of Pakistan](#)

[Effectiveness and Social/Environmental Impacts of Irrigation Projects: a Critical Review.](#)

[Irrigation and flood/erosion control at high altitudes in the Andes.](#)

[Reclamation of a Coastal Saline Vertisol by Irrigated Rice Cropping, Interpretation of the data with a Salt Leaching Model](#)

[Huarmey drainage project, conceptual phase. Consultancy report to Ground Water International, Lima, Peru](#)

[Improvement of tidal irrigation, drainage and reclamation of salinized lands under date palms in the Abadan Island, Iran. Report of an Abvarzan Co. consultancy assignment, Tehran, Iran.](#)

[SALTMOD Model Validation and Application in Segwa Minor Canal Command Area](#)

[Research on the control of waterlogging and salinization in irrigated agricultural lands: recommendations on waterlogging and salinity control based on pilot area drainage research](#)

[Computer modeling in irrigation and drainage](#)

[Integrated pilot area research course, CSSRI, Karnal, 25 June – 14 July 2001 - Mission Report.](#)

[Drainage and Land Reclamation in the Garmsar Irrigation Project, Iran, Report of an FAO follow-up consultancy assignment. Wageningen, 19 p.](#)

[SALTMOD: A Tool for the Interweaving of Irrigation and Drainage for Salinity Control](#)

[Workplan 1997, Report of an ILRI Coordination Mission, Part 1. Indo-Dutch Network Programme for Operational Research on the Control of Waterlogging and Salinization in Irrigated Agricultural Lands](#)

[Conjunctive use of saline and non-saline waters in semi arid regions](#)

[Sub-irrigation by groundwater management with controlled subsurface drainage in semi arid areas](#)

[Salt and water balance studies to evaluate remedial measures for waterlogged saline irrigated soils](#)

[Research on water management and control in the Sunderbans, India](#)

2. Subsurface drainage by ditches, drains and wells

[Influence of the soil depth on the functioning of a subsurface drainage system analyzed with the free DrainCalc model](#)

[Influence of the soil's drainable porosity on the functioning of a subsurface drainage system analyzed with a model for drainage calculations](#)

[On Efficiencies and Sufficiencies of Crop Land Irrigation, Drainage and Soil Salinity Control using the DrainApp Model in various Scenario's](#)

[Manual of the free DrainApp model for subsurface drainage systems with emphasis on their response functions, behavior of the groundwater table, and simulation of soil salinity in 5 soil layers optimizing their leaching efficiency](#)

[The free RainOffT model, useful for analyzing the hydrology of subsurface drainage systems in transient \(non-steady\) state](#)

[Free EnDrain software designed to calculate parameters of agricultural subsurface drainage systems using the energy balance of groundwater flow](#)

[Determination of the soil's hydraulic conductivity based on measurements of drain discharge and water table level in subsurface drainage systems](#)

[RainOff, a rainfall-runoff model applied to a subsurface drainage system by calibration and validation](#)

[Simulating subsurface drain discharge and depth of the water table in transient \(non-steady\) state using the RainOff model](#)

[Drainage by wells](#)

[Subsurface drainage](#)

[Drainage equation](#)

DRAINAGE CRITERIA The development of criteria for agricultural subsurface drainage incorporates the study of drainage systems and their effects on the soil and agriculture with the aim to obtain an optimal design of the system

Agricultural hydrology is the study of water balance components intervening in agricultural water management, especially in irrigation and drainage

Comparing steady and non-steady state subsurface drainage using calculations with relevant models

Comparing drain and well spacings in deep semi-confined aquifers for water table and soil salinity control

Variations of leaching efficiency determined with soil salinity models calibrated in farm lands and related to soil texture

The study of effects of drainage on agriculture

THE ENERGY BALANCE OF GROUNDWATER FLOW APPLIED TO DITCH DRAINAGE IN (AN)ISOTROPIC SOILS

Saltmod: a Tool for Interweaving of Irrigation and Drainage for Salinity Control.

Huarney drainage project, conceptual phase. Consultancy report to Ground Water International, Lima, Peru

Computer modeling in irrigation and drainage

Integrated pilot area research course, CSSRI, Karnal, 25 June – 14 July 2001 - Mission Report.

Drainage research in farmers' fields: analysis of data

SALTMOD; description of principles, user manual, and examples of application, Version 1.1

Drainage and Land Reclamation in the Garmsar Irrigation Project, Iran, Report of an FAO follow-up consultancy assignment. Wageningen, 19 p.

Report on the Drainage Research Course. Training Course on Drainage Research: Principles and Applications, CSSRI, Karnal, 3 -21 February 1997. March 1997

Indo-Dutch Network Programme, All-India Training Course on Subsurface Drainage for Groundwater and Salinity Control

[The energy balance of groundwater flow applied to subsurface drainage in anisotropic soils by pipes or ditches with entrance resistance](#)

[Land drainage and soil salinity: some Mexican experiences](#)

[Sub-irrigation by groundwater management with controlled subsurface drainage in semi arid areas](#)
[Effect of drain depth on salinity control in irrigated lands of semi arid regions](#)

[Performance of some synthetic drain filter materials in sandy loam soils](#)

[Hooghoudt's drainage equation, adjusted for entrance resistance and sloping land](#)

[Using SALTMOD to predict drainage and salinity in the Nile Delta](#)

[Agricultural criteria for subsurface drainage: A systems analysis](#)

[SUBSURFACE LAND DRAINAGE BY TUBE WELLS WELL SPACING EQUATIONS FOR FULLY AND PARTIALLY PENETRATING WELLS IN UNIFORM OR LAYERED AQUIFERS WITH OR WITHOUT ANISOTROPY AND ENTRANCE RESISTANCE](#)

[Tubewell-Spacing Formulas for Subsurface Drainage](#)

[Agricultural Land Drainage: a wider application through caution and restraint](#)

[Indo-Dutch Network Programme for Operational Research on the Control of Waterlogging and Salinization in Irrigated Agricultural Lands. Report of a Coordination Mission. May 1997](#)

[Agricultural Drainage criteria.](#)

3. Soil salinity control

[On Efficiencies and Sufficiencies of Crop Land Irrigation, Drainage and Soil Salinity Control using the DrainApp Model in various Scenario's](#)

[Manual of the free DrainApp model for subsurface drainage systems with emphasis on their response functions, behavior of the groundwater table, and simulation of soil salinity in 5 soil layers optimizing their leaching efficiency](#)

[Computer modeling in irrigation and drainage for the control of water logging and soil salinization in agricultural lands in India using SaltMod's modernized version SaltModM](#)

LeachMod, based on water and salt balances, is a model for the leaching of saline soils and reclamation (improvement, amelioration) of salty areas in irrigated lands by a subsurface drainage system including the simulation of the depth of the water table

Soil salinity

Irrigation, groundwater, wells, drainage and soil salinity control in the alluvial fan of Garmsar, Iran -assessments with the Sahysmod model

Agro-hydro-soil-salinity characteristics of the irrigated Garmsar alluvial fan, Iran, described with the SahysMod model

Variations of leaching efficiency determined with soil salinity models calibrated in farm lands and related to soil texture

Methods to evaluate crop salt tolerance from field trials, a critical review of the Salt Farm Texel article

Saltmod: a Tool for Interweaving of Irrigation and Drainage for Salinity Control.

CROP TOLERANCE TO SOIL SALINITY, STATISTICAL ANALYSIS OF DATA MEASURED IN FARM LANDS

Reclamation of a Coastal Saline Vertisol by Irrigated Rice Cropping, Interpretation of the data with a Salt Leaching Model

Salt and water balance studies using SALTMOD for Tungabhadra command, peninsular India

Huarney drainage project, conceptual phase. Consultancy report to Ground Water International, Lima, Peru

Improvement of tidal irrigation, drainage and reclamation of salinized lands under date palms in the Abadan Island, Iran. Report of an Abvarzan Co. consultancy assignment, Tehran, Iran.

Performance of subsurface drains for reclaiming waterlogged saline lands under rolling topography in Tungabhadra irrigation project in India

A methodology for identification of waterlogging and soil salinity conditions using remote sensing

[Research on the control of waterlogging and salinization in irrigated agricultural lands: recommendations on waterlogging and salinity control based on pilot area drainage research](#)

[Computer modeling in irrigation and drainage](#)

[Integrated pilot area research course, CSSRI, Karnal, 25 June – 14 July 2001 - Mission Report.](#)

[SALTMOD; description of principles, user manual, and examples of application, Version 1.1](#)

[Drainage and Land Reclamation in the Garmsar Irrigation Project, Iran, Report of an FAO follow-up consultancy assignment. Wageningen, 19 p.](#)

[Report on the Drainage Research Course. Training Course on Drainage Research: Principles and Applications, CSSRI, Karnal, 3 -21 February 1997. March 1997](#)

[Indo-Dutch Network Programme, All-India Training Course on Subsurface Drainage for Groundwater and Salinity Control](#)

[SALTMOD: A Tool for the Interweaving of Irrigation and Drainage for Salinity Control](#)

[Workplan 1997, Report of an ILRI Coordination Mission, Part 1. Indo-Dutch Network Programme for Operational Research on the Control of Waterlogging and Salinization in Irrigated Agricultural Lands](#)

[Land drainage and soil salinity: some Mexican experiences](#)

[Regional agro-hydro-salinity model](#)

[Conjunctive use of saline and non-saline waters in semi arid regions](#)

[Salt and water balance studies to evaluate remedial measures for waterlogged saline irrigated soils](#)

[Effect of drain depth on salinity control in irrigated lands of semi arid regions](#)

[Using SALTMOD to predict drainage and salinity in the Nile Delta](#)

[Indo-Dutch Network Programme for Operational Research on the Control of Waterlogging and Salinization in Irrigated Agricultural Lands. Report of a Coordination Mission. May 1997](#)

4. Groundwater and salt balances, hydraulics

[Influence of the soil depth on the functioning of a subsurface drainage system analyzed with the free DrainCalc model](#)

[Influence of the soil's drainable porosity on the functioning of a subsurface drainage system analyzed with a model for drainage calculations](#)

[On Efficiencies and Sufficiencies of Crop Land Irrigation, Drainage and Soil Salinity Control using the DrainApp Model in various Scenario's](#)

[Manual of the free DrainApp model for subsurface drainage systems with emphasis on their response functions, behavior of the groundwater table, and simulation of soil salinity in 5 soil layers optimizing their leaching efficiency](#)

[Free EnDrain software designed to calculate parameters of agricultural subsurface drainage systems using the energy balance of groundwater flow](#)

[Determination of the soil's hydraulic conductivity based on measurements of drain discharge and water table level in subsurface drainage systems](#)

[Drainage by wells](#)

[Agricultural hydrology is the study of water balance components intervening in agricultural water management, especially in irrigation and drainage](#)

[Irrigation, groundwater, wells, drainage and soil salinity control in the alluvial fan of Garmsar, Iran -assessments with the Sahysmod model](#)

[Agro-hydro-soil-salinity characteristics of the irrigated Garmsar alluvial fan, Iran, described with the SahysMod model](#)

[The groundwater hydraulics of the Garmsar alluvial fan, Iran, assessed with the SahysMod model](#)

[Comparing drain and well spacings in deep semi-confined aquifers for water table and soil salinity control](#)

[Comparing steady and non-steady state subsurface drainage using calculations with relevant models](#)

[Reclamation of a Coastal Saline Vertisol by Irrigated Rice Cropping, Interpretation of the data with a Salt Leaching Model](#)

Salt and water balance studies using SALTMOD for Tungabhadra command, peninsular India

Huarmey drainage project, conceptual phase. Consultancy report to Ground Water International, Lima, Peru

Drainage and Land Reclamation in the Garmsar Irrigation Project, Iran, Report of an FAO follow-up consultancy assignment. Wageningen, 19 p.

The energy balance of groundwater flow applied to subsurface drainage in anisotropic soils by pipes or ditches with entrance resistance

Variations of leaching efficiency determined with soil salinity models calibrated in farm lands and related to soil texture

Hydraulic equivalent of the law of Joule in electricity for steady state groundwater flow to drains and energy supply by percolating water

Methods to evaluate crop salt tolerance from field trials, a critical review of the Salt Farm Texel article

THE ENERGY BALANCE OF GROUNDWATER FLOW APPLIED TO DITCH DRAINAGE IN (AN)ISOTROPIC SOILS

Saltmod: a Tool for Interweaving of Irrigation and Drainage for Salinity Control.

The Energy Balance of Groundwater Flow

Determining the saturated hydraulic conductivity

Salt and water balance studies to evaluate remedial measures for waterlogged saline irrigated soils

5. Crop production, soil salinity, depth of the water table, regression analysis

Segmented linear regressions of a dependent response variable on two independent (influential) variables and how the free SegRegA software accomplishes that

Methods to evaluate crop salt tolerance from field trials, a critical review of the Salt Farm Texel article entitled: “An improved methodology to evaluate crop salt tolerance from field trials”, which gives no improvement at all, to the contrary.

[Free software for the determination of positive and inverted S-curves for the response function of influential treatments or conditions with examples of crop yield versus soil salinity and depth of the water table](#)

[The potato variety "927" tested at the Salt Farm Texel, The Netherlands, proved to be highly salt tolerant](#)

[Crop yield and depth of water table, statistical analysis of data measured in farm lands](#)

[Methods to evaluate crop salt tolerance from field trials, a critical review of the Salt Farm Texel article](#)

[CROP PRODUCTION AND SOIL SALINITY: EVALUATION OF FIELD DATA FROM INDIA BY SEGMENTED LINEAR REGRESSION WITH BREAKPOINT](#)

[CROP TOLERANCE TO SOIL SALINITY, STATISTICAL ANALYSIS OF DATA MEASURED IN FARM LANDS](#)

[Soil Salinity - Wheat Yield Relationship on Farmers' Fields](#)

6. Agro-hydro-soil-salinity models

[The influence of quantity of irrigation water on the agro-hydro-salinity conditions of the soil using the SaltModM model with data from the Mashtul Pilot Area, Egypt](#)

[The role of farmers' responses in the Agro-Hydro-Salinity model SaltMod regarding water management, cropping patterns, or crop rotations, in the case of inadequate irrigation, drainage \(water logging\) problems, and/or excess soil salinity](#)

[SPATIAL AGRO-HYDRO-SALINITY MODEL Windows version DESCRIPTION OF PRINCIPLES, USER MANUAL, AND CASE STUDIES](#)

[Menu and user interface of SahysMod, a model for irrigation, drainage, soil salinity, and groundwater management in large project areas divided into polygons](#)

[SaltModMY menu, description of the user interface of the free software for surface / groundwater and soil salinity assessment in irrigation projects](#)

[Manual of the free DrainApp model for subsurface drainage systems with emphasis on their response functions, behavior of the groundwater table, and simulation of soil salinity in 5 soil layers optimizing their leaching efficiency](#)

[A new version of the agro-hydro-soil-salinity model SaltMod allowing for annually varied seasonal inputs of hydrological conditions](#)

[Soil Salinity and Water Table Data in Irrigated Farm Lands in the Arid Aral Sea Basin, Uzbekistan, explained with a Salt Leaching Model including the Determination of Actual Evaporation and Capillary Rise](#)

[Irrigation, groundwater, wells, drainage and soil salinity control in the alluvial fan of Garmsar, Iran -assessments with the Sahysmod model](#)

[Agro-hydro-soil-salinity characteristics of the irrigated Garmsar alluvial fan, Iran, described with the SahysMod model](#)

[Variations of leaching efficiency determined with soil salinity models calibrated in farm lands and related to soil texture](#)

[Mapping facilities of the spatial agro-hydro-soil-salinity model SahysMod](#)

[Saltmod: a Tool for Interweaving of Irrigation and Drainage for Salinity Control.](#)

[Salt and water balance studies using SALTMOD for Tungabhadra command, peninsular India](#)

[SALTMOD Model Validation and Application in Segwa Minor Canal Command Area](#)

[Computer modeling in irrigation and drainage](#)

[SALTMOD; description of principles, user manual, and examples of application, Version 1.1](#)

[Regional agro-hydro-salinity model](#)

[Using SALTMOD to predict drainage and salinity in the Nile Delta](#)

7. Rainfall-runoff/drainage relations in time, non linear reservoir

[Software \(FloodRoute\) for computation of the propagation \(routing\) process of flood wave discharge hydrographs in stretches \(reaches, sections\) of rivers or canals](#)

[Influence of the soil depth on the functioning of a subsurface drainage system analyzed with the free DrainCalc model](#)

[Influence of the soil's drainable porosity on the functioning of a subsurface drainage system analyzed with a model for drainage calculations](#)

[RainOff, a rainfall-runoff model applied to a subsurface drainage system by calibration and validation](#)

[Rainfall and runoff data of the "Herbornseelbach" catchment \(watershed\), Hesse, Germany, evaluated with the RainOff model by calibration and validation of catchment parameters](#)

[Rainfall and runoff data of the "Martinsthal" catchment, Hesse, Germany, evaluated with the RainOff model by calibration and validation of catchment parameters](#)

[Simulating subsurface drain discharge and depth of the water table in transient \(non-steady\) state using the RainOff model](#)

[Comparing steady and non-steady state subsurface drainage using calculations with relevant models](#)

[Comparing steady and non-steady state subsurface drainage using calculations with relevant models](#)

[RAINFALL-RUNOFF RELATIONS OF A SMALL VALLEY ASSESSED WITH A NON-LINEAR RESERVOIR MODEL](#)

8. Land and water management

[The role of farmers' responses in the Agro-Hydro-Salinity model SaltMod regarding water management, cropping patterns, or crop rotations, in the case of inadequate irrigation, drainage \(water logging\) problems, and/or excess soil salinity](#)

[SPATIAL AGRO-HYDRO-SALINITY MODEL Windows version DESCRIPTION OF PRINCIPLES, USER MANUAL, AND CASE STUDIES](#)

[Menu and user interface of SahysMod, a model for irrigation, drainage, soil salinity, and groundwater management in large project areas divided into polygons](#)

[SaltModMY menu, description of the user interface of the free software for surface / groundwater and soil salinity assessment in irrigation projects](#)

[On Efficiencies and Sufficiencies of Crop Land Irrigation, Drainage and Soil Salinity Control using the DrainApp Model in various Scenario's](#)

[Manual of the free DrainApp model for subsurface drainage systems with emphasis on their response functions, behavior of the groundwater table, and simulation of soil salinity in 5 soil layers optimizing their leaching efficiency](#)

Soil Salinity and Water Table Data in Irrigated Farm Lands in the Arid Aral Sea Basin, Uzbekistan, explained with a Salt Leaching Model including the Determination of Actual Evaporation and Capillary Rise

DRAINAGE CRITERIA The development of criteria for agricultural subsurface drainage incorporates the study of drainage systems and their effects on the soil and agriculture with the aim to obtain an optimal design of the system

Agricultural hydrology is the study of water balance components intervening in agricultural water management, especially in irrigation and drainage

Irrigation, groundwater, wells, drainage and soil salinity control in the alluvial fan of Garmsar, Iran -assessments with the Sahysmod model

Agro-hydro-soil-salinity characteristics of the irrigated Garmsar alluvial fan, Iran, described with the SahysMod model

Variations of leaching efficiency determined with soil salinity models calibrated in farm lands and related to soil texture

THE PUNATA-TIRAQUE IRRIGATION PROJECT NEAR COCHABAMBA, BOLIVIA Report of a consultancy assignment, January 1988

The study of effects of drainage on agriculture

IMPACTS OF THE IRRIGATION IMPROVEMENT PROJECT, EGYPT, on Drainage Requirements and Water Savings Report to the Egyptian-Dutch Advisory Panel on Land Drainage and Drainage Related Water Management of a short-term consultancy mission

Water Harvesting and Agricultural Land Development Options in the NWFR of Pakistan

RICE POLDERS IN THE ACID SULFATE SOILS OF THE BOLANHAS IN THE MANGROVES OF GUINEA-BISSAU

Effectiveness and Social/Environmental Impacts of Irrigation Projects: a Critical Review.

Irrigation and flood/erosion control at high altitudes in the Andes.

RAINFALL-RUNOFF RELATIONS OF A SMALL VALLEY ASSESSED WITH A NON-LINEAR RESERVOIR MODEL

Huarmey drainage project, conceptual phase. Consultancy report to Ground Water International, Lima, Peru

Improvement of tidal irrigation, drainage and reclamation of salinized lands under date palms in the Abadan Island, Iran. Report of an Abvarzan Co. consultancy assignment, Tehran, Iran.

Performance of subsurface drains for reclaiming waterlogged saline lands under rolling topography in Tungabadra irrigation project in India

SALTMOD Model Validation and Application in Segwa Minor Canal Command Area

A methodology for identification of waterlogging and soil salinity conditions using remote sensing

Research on the control of waterlogging and salinization in irrigated agricultural lands: recommendations on waterlogging and salinity control based on pilot area drainage research

Computer modeling in irrigation and drainage

Integrated pilot area research course, CSSRI, Karnal, 25 June – 14 July 2001 - Mission Report.

SALTMOD; description of principles, user manual, and examples of application, Version 1.1

Drainage and Land Reclamation in the Garmsar Irrigation Project, Iran, Report of an FAO follow-up consultancy assignment. Wageningen, 19 p.

Indo-Dutch Network Programme, All-India Training Course on Subsurface Drainage for Groundwater and Salinity Control

SALTMOD: A Tool for the Interweaving of Irrigation and Drainage for Salinity Control

Technical Advisory and Coordination Mission to ORP Network Centres. Indo-Dutch Network Operational Research Project

Land drainage and soil salinity: some Mexican experiences

Regional agro-hydro-salinity model

Research on water management and control in the Sunderbans, India

Agricultural criteria for subsurface drainage: A systems analysis

Water control for rice cultivation in small valleys of West Africa.

Development of flood-recession cropping in the molapos of the Okavango Delta, Botswana.

Agricultural Land Drainage: a wider application through caution and restraint

Indo-Dutch Network Programme for Operational Research on the Control of Waterlogging and Salinization in Irrigated Agricultural Lands. Report of a Coordination Mission. May 1997

Review of water management aspects, Pulau Petak, South Kalimantan, Indonesia. Mission Report 39, Research on Acid Sulphate Soils in the Humid Tropics (an Indonesian-Dutch research project). ILRI/LAWOO, Wageningen, 29 pp., 3 Appendices.

Modern Interferences in Traditional Water Resources in Baluchistan

REVIEW OF WATER MANAGEMENT ASPECTS PULAU PETAK, SOUTH KALIMANTAN, INDONESIA Mission Report 39 Research Project on Acid Sulphate (Sulfate) Soils in the Humid Tropics

IMPACTS OF THE IRRIGATION IMPROVEMENT PROJECT, EGYPT, On Drainage Requirements and Water Savings Report to the Egyptian-Dutch Advisory Panel on Land Drainage and Drainage Related Water Management of a short-term consultancy mission

Agricultural Drainage criteria.

Reclamation of the Nanfen iron mine tailings deposit, Benxi Government, Liaoning province, China

9. Segmented linear and partial regression

Segmented linear regressions of a dependent response variable on two independent (influential) variables and how the free SegRegA software accomplishes that

Free software for the division of the relation between Y (response variable) and X (causal variable) into segments or ranges where X is influential and where X has no effect

Methods to evaluate crop salt tolerance from field trials, a critical review of the Salt Farm Texel article entitled: “An improved methodology to evaluate crop salt tolerance from field trials”, which gives no improvement at all, to the contrary.

Statistical significance of segmented linear regression with break-point using variance analysis and F-tests

Software calculator with graphics for the confidence intervals of R squared (coefficient of determination, explanation, correlation)

F-test calculator, free two-way calculator with graphics for Fisher’s F-test used in the statistical analysis of explained and unexplained variance.

t-Tester, free two-way calculator for Student's t-test with graphics

The potato variety "927" tested at the Salt Farm Texel, The Netherlands, proved to be highly salt tolerant

Trend of the annually maximum temperatures in the Netherlands since 1900 first showing slow and after 1988 faster increases

Trend of annual averages of daily average temperatures in the Netherlands since 1900 first showing slow and then fast increases

Methods to evaluate crop salt tolerance from field trials, a critical review of the Salt Farm Texel article

CROP PRODUCTION AND SOIL SALINITY: EVALUATION OF FIELD DATA FROM INDIA BY SEGMENTED LINEAR REGRESSION WITH BREAKPOINT

CROP TOLERANCE TO SOIL SALINITY, STATISTICAL ANALYSIS OF DATA MEASURED IN FARM LANDS

Frequency and regression analysis

Crop production and soil salinity: Evaluation of field data from India by segmented linear regression with breakpoint

Soil Salinity - Wheat Yield Relationship on Farmers' Fields

10. Curved regression

Analysis of different curved regressions using free software and selection of the appropriate type based on statistical tests for goodness of fit and analysis of variance

Comparing the regressions of Y-X data by means of the amplified power function using Solver in Excel and SegRegA

Questionable mirrored S-curves used in literature on crop yield relations with soil salinity to determine salt tolerance of crops

Questionable mirrored S-curves used in literature on crop yield relations with soil salinity to determine salt tolerance of crops

Software calculator with graphics for the confidence intervals of R squared (coefficient of determination, explanation, correlation)

Polynomial regressions with 3 or 4 terms having variable exponents solved with the SegRegA software

Testing the statistical significance of the improvement of cubic regression compared to quadratic regression using analysis of variance (ANOVA)

Free software for the determination of positive and inverted S-curves for the response function of influential treatments or conditions with examples of crop yield versus soil salinity and depth of the water table

The potato variety "927" tested at the Salt Farm Texel, The Netherlands, proved to be highly salt tolerant

Trend of the annually maximum temperatures in the Netherlands since 1900 first showing slow and after 1988 faster increases

Trend of annual averages of daily average temperatures in the Netherlands since 1900 first showing slow and then fast increases

Crop yield and depth of water table, statistical analysis of data measured in farm lands

11. Probability distribution fitting

Comparing the results of applications of new, extended, joined probability distributions to Covid-19 data as found in literature with the results of the free Cumfreq program for classical distributions.

Finding a fitting bimodal probability distribution for a data set having a histogram with two peaks and a valley in between

Comparing the results of advanced, modernized, extended and transmuted probability distributions applied to the same glass fiber strength data

Comparing the results Truncated Generalized Fréchet Weibull distribution found in literature with those obtained by the free CumFreq program

Comparing the results of Extended Gumbel Type-2 Distributions found in literature with those obtained by the free CumFreq program

Comparing the results of transmuted Gumbel probability distributions found in literature with those obtained by the free CumFreq program

How to derive a probability distribution from a data set using the simple method of plotting positions and the free CumFreq model

The generalized standard and mirrored Gumbel probability distributions, composite or not, are to many datasets, either symmetrical, skew to the left, or skew to the right

Using simple transformations of probability distributions to determine their parameters by straightforward linear regression and to be able to fit symmetrical and skewed data sets easily

Left (negatively) skewed frequency histograms can be fitted to square Normal or mirrored Gumbel probability functions

NormDis, free two-way calculator for the normal probability distribution and the Z-test with graphics.

Example of an approximately normally distributed data set to which a large number of different probability distributions can be fitted

Discontinuities in time series and probability distributions of temperature in the Netherlands as a result of global warming; analyses with SegReg and CumFreq models

Trend of annual averages of daily average temperatures in the Netherlands since 1900 first showing slow and then fast increases

FITTING THE VERSATILE LINEARIZED, COMPOSITE, AND GENERALIZED LOGISTIC PROBABILITY DISTRIBUTION TO A DATA SET

SOFTWARE FOR GENERALIZED AND COMPOSITE PROBABILITY DISTRIBUTIONS

Frequency and regression analysis

12. Free models and software

Influence of the soil depth on the functioning of a subsurface drainage system analyzed with the free DrainCalc model

SPATIAL AGRO-HYDRO-SALINITY MODEL Windows version DESCRIPTION OF PRINCIPLES, USER MANUAL, AND CASE STUDIES

Menu and user interface of SahysMod, a model for irrigation, drainage, soil salinity, and groundwater management in large project areas divided into polygons

Models and software offered in website waterlog.info for agricultural land, soil, and water management

Mapping facilities of the spatial agro-hydro-soil-salinity model SahysMod

Saltmod: a Tool for Interweaving of Irrigation and Drainage for Salinity Control.

SOFTWARE FOR GENERALIZED AND COMPOSITE PROBABILITY DISTRIBUTIONS

Salt and water balance studies using SALTMOD for Tungabhadra command, peninsular India

Computer modeling in irrigation and drainage

SALTMOD; description of principles, user manual, and examples of application, Version 1.1

SALTMOD: A Tool for the Interweaving of Irrigation and Drainage for Salinity Control

Regional agro-hydro-salinity model

Using SALTMOD to predict drainage and salinity in the Nile Delta

t-Tester, free two-way calculator for Student's t-test with graphics

F-test calculator, free two-way calculator with graphics for Fisher's F-test used in the statistical analysis of explained and unexplained variance.

Software (FloodRoute) for computation of the propagation (routing) process of flood wave discharge hydrographs in stretches (reaches, sections) of rivers or canals