Using RIST to Convert Rainfall Records into Erosion Model Inputs. (S06-dabney160026-Poster)

Authors:

- S.M.Dabney* - *USDA-ARS*
- D.C.Eagles - *USDA-ARS*

Abstract:

RIST (Rainfall Intensity Summarization Tool) is a Windows-based program designed to facilitate analysis of time-and-date stamp tipping-bucket precipitation records. RIST2.0 is a revision that outputs files suitable for input to runoff, erosion, and water quality models including RUSLE, WEPP, SWAT, and AnnAGNPS. RIST2.0 inputs text files in user-specified formats that may be time-and-date stamp, fixed interval, or variable interval. Standard outputs for RUSLE include a storm-by-storm summary of total precipitation, kinetic energy, and maximum 30-minute intensity; monthly rainfall; and bi-weekly EI distribution. Standard WEPP outputs include daily rainfall, storm duration (reduced by excluding periods greater than 30 minutes without rain), ip, and tp. Output for SWAT and AnnAGNPS include daily precipitation and, optionally, sub-daily precipitation totals. RIST2.0 includes the capability to combine and process all files within a folder as a single location if each file has the same format, and can generate precipitation totals and break-point data at any user-specified interval. Free download from http://www.sedlab.olemiss.edu/rist.html.

Corresponding Author Information:

Seth Dabney
USDA-ARS
P.O. Box 1157
Oxford, MS 38655

phone: 662-232-2975
fax: 662-232-2915
e-mail: sdabney@ars.usda.gov

Presentation Information:

Presentation Date: Tuesday, November 12, 2002
Presentation Time: 2:00-4:00 pm
Poster Board Number: 1732

Keywords:

precipitation, erosion models, tipping bucket data, rainfall intensity