

SOFTWARE RELEASE NOTICE

1. SRN Number: GHGC-SRN- 187190 <i>187190</i>		
2. Project Title: Unsaturated and Saturated Flow under Isothermal Conditions		Project No. 20-1402-861
3. SRN Title: USCLIMATE version 1, 3/95		
4. Originator/Requestor: Randy Fedors		Date: 6-8-99
5. Summary of Actions		
<input checked="" type="checkbox"/> Release of new software <input type="checkbox"/> Release of modified software: <input type="checkbox"/> Enhancements made <input type="checkbox"/> Corrections made <input type="checkbox"/> Change of access software <input checked="" type="checkbox"/> Software Retirement		
<i>E.C. Percy 12/5/2001</i>		
6. Persons Authorized Access		
Name	Read Only/Read-Write	Addition/Change/Delete
Randy Fedors	RO	A
Jim Winterle	RO	A
David Farrell	RO	A
Amit Armstrong	RO	A
7. Element Manager Approval: English Percy <i>E.C. Percy</i>		Date: <i>6/8/99</i>
8. Remarks:		

TO: Bruce Mabrito
FROM: R. Fedors
SUBJECT: TOP-018 for USCLIMATE
DATE: June 8, 1999

R Fedors

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USCLIMATE is an off-the-shelf *basic* program used to provide precipitation probabilities and to simulate daily precipitation, temperature, and solar radiation for any locale in the contiguous United States. It uses a database of parameters for a Markov chain - mixed exponential model developed from existing weather stations that may be used directly or interpolated. Daily precipitation, temperature, and solar radiation can be simulated for an n-year period for use in stochastic-based modeling.

The USCLIMATE program and database is documented in: Hanson, C.L., K.A. Cumming, D.A. Woolhiser, and C.W. Richardson, July 1994, Microcomputer Program for Daily Weather Simulation in the Contiguous United States, ARS-114, U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS). Hanson et al. (1994) is included in the TOP-018 folder. The program is distributed in the *basic* computer language, although a Fortran version may be requested from the Northwest Watershed Research Center, USDA-ARS, 800 Park Blvd, Plaza IV, Suite 105, Boise ID 83712-7716 and telephone number of (208)334-1363. Since there was no version number associated with the USDA-ARS distribution of USCLIMATE, it was decided that this version would be called version 1 and associated with the date of March 1995 in the TOP-018 paperwork. The program and database are contained on a 1.4 MByte floppy diskette that is enclosed in the TOP-018 folder.

The installation test for USCLIMATE followed the example given on pages 12-18 in Hanson et al. (1994). The theory and implementation in the program are described in the remainder of the documentation. To run the program, start *qbasic* under a DOS emulator in WinNT. USCLIMATE.BAS was loaded and run with no difficulties. All of the results and screen displays of the example problem illustrated in Figures 2 to 17 were exactly reproduced using the WinNT machine "bubo" (Pentium 450 MHz) at the CNWRA. Thus, the installation test was successful.

enclosures (2):
floppy diskette (USCLIMATE.BAS, 3/95)
documentation (Hanson et al., 1994)

Information on Pages 4 through 47 contains Microcomputer Program for Daily Weather Simulation in the Contiguous United States copyright information and is therefore not included in this file.