CHAPTER 11

SWAT INPUT DATA: .PET

SWAT requires daily potential evapotranspiration values. If the user wishes to calculate potential evapotranspiration using a method other than Penman-Monteith, Priestley-Taylor, or Hargreaves, the potential evapotranspiration values can be read in using the .pet file. The potential evapotranspiration file holds only one record that is used for the entire watershed.

As with the precipitation file, the record in the potential evapotranspiration input file does not have to begin with the first day of simulation. SWAT is able to search for the beginning date in the potential evapotranspiration input file and all the comments made for this feature in the discussion of the precipitation file pertain to the potential evapotranspiration file as well.

Following is a brief description of the variables in the potential evapotranspiration input file. They are listed in the order they appear within the file.

Variable name	Definition
TITLE	The first line of the potential evapotranspiration file is reserved for comments. The title line is not processed by the model and may be left blank.
	Optional.
YEAR	Year (4-digit).
	Required.
DATE	Julian date.
	Required.
PETMEAS	Daily potential evapotranspiration for watershed (mm H_2O).
	Required.

The format of the potential evapotranspiration input file is:

Variable name	Line #	Position	Format	F90 Format
TITLE	1	unrestricted	character	unrestricted
YEAR	2-END	space 1-4	4-digit integer	i4
DATE	2-END	space 5-7	3-digit integer	i3
PETMEAS	2-END	space 8-12	decimal(xxx.x)	f5.1