

Source Code and Ancillary Data Files for the MODPATH Particle Tracking Package of the Ground-Water Flow Model MODFLOW -- Version 3, Release 1

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Abstract

This report provides diskettes containing the FORTRAN source code and ancillary data files for MODPATH and MODPATH-PLOT, a particle tracking post-processing package for the U. S. Geological Survey finite-difference ground-water flow model commonly known as MODFLOW. The source code provided in this report refers to version 3.0 of MODPATH/MODPATH-PLOT, which is documented in detail in a separate report ("User's Guide for MODPATH/MODPATH-PLOT, Version 3: A particle tracking post-processing package for MODFLOW, the U. S. Geological Survey finite-difference ground-water flow model," by David W. Pollock; USGS OFR 94-464). A complete PostScript version of the MODPATH/MODPATH-PLOT user's guide (OFR 94-464) is also included on the diskettes.

Introduction

This report includes two diskettes that contain (1) the FORTRAN source code for MODPATH and MODPATH-PLOT, (2) setup files, (3) sample problems, and (4) a PostScript version of the MODPATH/MODPATH-PLOT user's guide (Pollock, 1994). The diskettes are 3.5 inch double-sided, high-density format (1.44MB) compatible with IBM PC-compatible computers that use the DOS operating system.

These diskettes contain only the FORTRAN source code for MODPATH and MODPATH-PLOT. To generate executable versions of the code, it is necessary to have a FORTRAN-77 compiler. In addition, MODPATH-PLOT requires access to a library of graphics routines known as the Graphical Kernel System (GKS). GKS is an ANSI-standard graphics software library that is available from computer software vendors for many types of computers (ANSI, 1985).

The PostScript version of the user's guide is stored in compressed format in a file named POSTDOC.ZIP. The compressed file can be decompressed using the decompression program, PKUNZIP.EXE, which can be obtained from:

PKWARE, Inc.
7545 North Port Washington Road
Glendale, Wisconsin 53217

The PostScript files can be printed on any printer that supports the PostScript language (Adobe Systems, Inc, 1985).

Each diskette contains a "read me" file in the root directory that is a standard ASCII text file that can be viewed in most text editors or text viewing programs. The "read me" files contain (1) information about the contents and organization of the diskette, (2) instructions for decompressing compressed files, and (3) additional discussion, as appropriate, concerning the use of the files contained on the diskette. The general content of the diskettes is shown in table 1.

Table 1: Content of diskettes

Diskette	Contents
1	README1.TXT (text file with general information) FORTRAN source code for MODPATH and MODPATH-PLOT MODPATH/MODPATH-PLOT setup files Sample Problems
2	README2.TXT (text file with general information) Compressed PostScript version of MODPATH users guide (OFR 94-464)

References

Adobe Systems, Inc, 1985, PostScript Language Reference Guide: Addison-Wesley Publishing Co., Inc., New York, 321 p.

American National Standards Institute, 1985, Computer Graphics -- Graphical Kernel System (GKS) functional description, ANSI X3.124-1985, 106p.

Pollock, David W., 1994, User's guide for MODPATH/MODPATH-PLOT: a particle-tracking post-processing package for MODFLOW, the U. S. Geological Survey finite-difference ground-water flow model: U.S. Geological Survey Open-File Report 94-464, 155 p.