NEA DATA BANK COMPUTER PROGRAM SERVICES

PROGRAM ABSTRACT FORMAT

The definitions given here are formulated in such a way that they may serve as guidelines to authors of programs when they prepare abstracts for the NEADB.

1. NAME OR DESIGNATION OF PROGRAM OR DATA LIBRARY:

This is the name or designation given by the author except where, to avoid ambiguities, the Data Bank may add distinguishing mnemonics.

2. COMPUTER FOR WHICH THE PROGRAM IS DESIGNED AND OTHER MACHINE VERSION PACKAGES AVAILABLE:

State the name of the computer for which the original program was written, and, in addition, list names of any other computers for which the program has been converted, even though minor modifications may have been made.

3. DESCRIPTION OF PROGRAM OR FUNCTION:

A brief description of the physical problem including any basic physics approximations included in the problem formulation or objectives or scope of data libraries.

4. METHODS:

A short summary of the mathematical and numerical techniques or algorithms used in the calculation, and/or assumptions made.

5. RESTRICTIONS ON THE COMPLEXITY OF THE PROBLEM:

This item is meant to include restrictions implied by storage allocation, such as maximum number of energy groups, mesh points, etc., as well as implied argument range restrictions due to approximations used, etc.

6. TYPICAL RUNNING TIME:

Details given should enable the potential user to estimate the running time for a given choice of program parameters.

7. UNUSUAL FEATURES OF THE PROGRAM:

State distinguishing features of this program and the class of problems which most effectively benefit therefrom. This category should allow the user to select from a number of similar programs the one most suitable for a particular problem.

8. RELATED AND AUXILIARY PROGRAMS:

If this program supersedes or is an extension of an earlier program; if other programs are used in connection with this program either for processing input or output, or, as a subprogram, give details.

9. STATUS:

Normally to be filled in by the Data Bank.

10. REFERENCES:

Generally available material pertinent to the program should be listed.

PROGRAM ABSTRACT FORMAT (CONTINUED)

11. MACHINE REQUIREMENTS:
List the amount of computer memory and the disk space that is typically required.

12. PROGRAMMING LANGUAGE(S) USED:
State the programming language or languages in which the program has been written, indicating what percentage is in each. If a certain class of routines is not in one of the standard compiler languages this should be stated.

13. OPERATING SYSTEM UNDER WHICH PROGRAM IS EXECUTED:
List the operating system(s).

14. OTHER PROGRAMMING OR OPERATING INFORMATION OR RESTRICTIONS:
What is desired here is that additional information necessary to permit the reader to decide the extent of changes necessary to convert this program to his use on another operating system, programming language, and/or computer.

15. NAME AND ESTABLISHMENT OF AUTHORS:

16. MATERIAL AVAILABLE:
The Data Bank will list here the material being distributed on this program. It is meant to include program source files, operating instructions with a description of the input data and edited output, a sample problem, library data files and program description or report.

17. CATEGORIES:
Assigned by the NEA Data Bank.

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