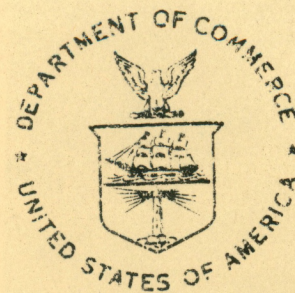


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Western Region Computer Programs and
Problems NWS WRCP - No. 1



STANDARDIZED FORMAT FOR COMPUTER SERIES

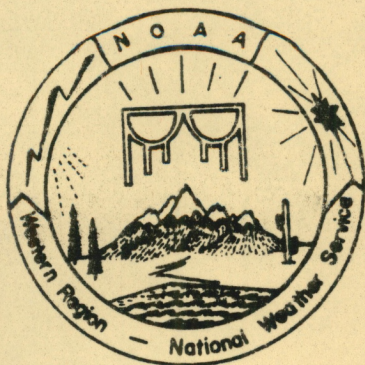
National Weather Service Western Region
Salt Lake City, Utah
June 1979

noaa

NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

National Weather
Service





This Western Region publication series is considered as a subset of our Technical Memorandum series. This series will be devoted exclusively to the exchange of information on and documentation of computer programs and related subjects. This series was initiated because it did not seem appropriate to publish computer program papers as Technical Memoranda; yet, we wanted to share this type of information with all Western Region forecasters in a systematic way. Another reason was our concern that in the developing AFOS-era there will be unnecessary and wasteful duplication of effort in writing computer programs in National Weather Service (NWS). Documentation and exchange of ideas and programs envisioned in this series hopefully will reduce such duplication. We also believe that by publishing the programming work of our forecasters, we will stimulate others to use these programs or develop their own programs to take advantage of the computing capabilities AFOS makes available.

We solicit computer-oriented papers and computer programs from forecasters for us to publish in this series. Simple and short programs should not be prejudged as unsuitable.

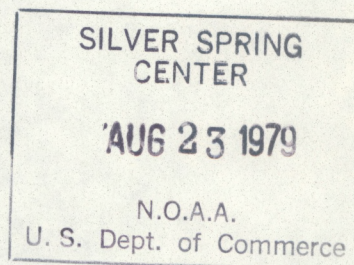
The great potential of the AFOS-era is strongly related to local computer facilities permitting meteorologists to practice in a more scientific environment. It is our hope that this new series will help in developing this potential into reality.

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NOAA Western Region Computer Programs and Problems NWS WRCP - No. 1

STANDARDIZED FORMAT FOR COMPUTER SERIES

Scientific Services Division
Western Region Headquarters
Salt Lake City, Utah
June 1979



UNITED STATES
DEPARTMENT OF COMMERCE
Juanita M. Kreps, Secretary

NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
Richard A. Frank, Administrator

National Weather
Service *Western Region*
Richard E. Hallgren, Director



EDITOR'S NOTE

We are using the first paper in our Computer Series to present a standardized format for the documentation of computer programs. We encourage you to follow it as closely as your particular program will allow.

The papers in this series will be suitable for storage in a 3-ring binder. In this way, changes or updates to a program can easily be entered in the proper place in the binder.

We will accept programs written for either the ECLIPSE computer or a Hewlett-Packard hand calculator. Both of these systems exist commonly in the Western Region.

Programs selected for publication will be those that have value to others in the Western Region. That is, programs that would have a general usage by other forecasters or that produce a result not performed by a previously published program. A short program does not imply one of little value nor does a large program guarantee its value. While most papers published will probably be computer programs, we also solicit papers involving computer problems, computer management, etc.

Since this series is a new effort in the National Weather Service, your programs will be getting wide exposure; thus, the programs presented should be carefully checked to ensure that they execute properly especially if the program is designed to run on AFOS.

We hope that the response to this new series will be large and that it will benefit the forecasters in the National Weather Service.

STANDARDIZED FORMAT
FOR
COMPUTER SERIES

I. General Information

A. Summary

Summarize the application and general functions of the software.

B. Environment

Computer system required (i.e., Eclipse, HP, etc.).

AFOS compatibility.

Language used.

C. References

List sources (articles, etc.) used in writing program or sources describing its usage (if applicable).

II. Application

A. Complete Program Description

Purpose of program.

Functions performed.

Equations used.

Special routines used (e.g., Graphics Library).

B. Machine Requirements

Core required.

Disk storage required.

Run time.

Overlay and channel requirements.

C. Structure of Software (for large programs only).

Include flow of logic from main program to subroutines indicating function of subroutines.

D. Data Base

Describe data files that are referenced, created, or changed.

III. Procedures

A. Initiation of Program

B. Input Required

Medium (file, dasher, etc.).

Format.

Sample input.

C. Output

Medium (file, dasher, etc.).

Format.

Sample output.

D. Cautions or Restrictions on Program Use

E. Complete Program Listing

NOAA SCIENTIFIC AND TECHNICAL PUBLICATIONS

NOAA, the *National Oceanic and Atmospheric Administration*, was established as part of the Department of Commerce on October 3, 1970. The mission responsibilities of NOAA are to monitor and predict the state of the solid Earth, the oceans and their living resources, the atmosphere, and the space environment of the Earth, and to assess the socioeconomic impact of natural and technological changes in the environment.

The six Major Line Components of NOAA regularly produce various types of scientific and technical information in the following kinds of publications:

PROFESSIONAL PAPERS — Important definitive research results, major techniques, and special investigations.

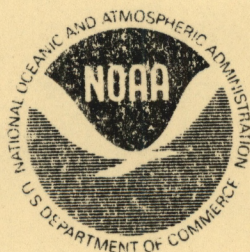
TECHNICAL REPORTS—Journal quality with extensive details, mathematical developments, or data listings.

TECHNICAL MEMORANDUMS — Reports of preliminary, partial, or negative research or technology results, interim instructions, and the like.

CONTRACT AND GRANT REPORTS—Reports prepared by contractors or grantees under NOAA sponsorship.

TECHNICAL SERVICE PUBLICATIONS—These are publications containing data, observations, instructions, etc. A partial listing: Data serials; Prediction and outlook periodicals; Technical manuals, training papers, planning reports, and information serials; and Miscellaneous technical publications.

ATLAS—Analysed data generally presented in the form of maps showing distribution of rainfall, chemical and physical conditions of oceans and atmosphere, distribution of fishes and marine mammals, ionospheric conditions, etc.



Information on availability of NOAA publications can be obtained from:

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