

README for GPCP 1DD Read Software

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This README describes the sample software for use in reading the GPCP 1DD products.

Sample FORTRAN programs are provided to assist the user in reading and manipulating the daily GPCP 1DD datasets. The programs were designed and tested on a Silicon Graphics UNIX workstation, which uses IEEE big-endian floating-point representation. Other platforms can be used by making suggested code modifications described in the comments of the individual programs. To use these programs, you will need a FORTRAN compiler installed on your platform.

The three available programs are as follows:

<code>read_1dd_header.f</code>	reads and outputs the 1440-byte ASCII header
<code>read_1dd_day.f</code>	extracts and outputs a day of GPCP 1DD precipitation estimates
<code>read_1dd_day_swap.f</code>	reads, byte-swaps, and outputs a day of GPCP 1DD precipitation estimates (this program is for use on platforms that represent floating-point numbers in IEEE little-endian format)

As well, a sample IDL procedure is provided for reading the complete file, header and all days, into an IDL structure. Subsequent processing or display are up to the user. To use this procedure, you will need IDL installed on your computer.

<code>read_1dd_file.pro</code>	reads, byte-swaps if necessary, and loads an IDL structure with the header and all days in a month file of GPCP 1DD precipitation estimates; note that the number of days returned depends on the number of days in the month being read
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Sample GrADS control files are provided for reading the complete file, header and all days, into a GrADS script. Subsequent display scripts are up to the user. To use one of these procedures, you will need GrADS installed on your computer.

<code>gpcp_1dd_p1d.ctl</code>	for big-endian machines, defines a GrADS structure with the header and all days in a month file of GPCP 1DD precipitation estimates.
<code>gpcp_1dd_p1d_swap.ctl</code>	for little-endian machines, defines a GrADS structure with the header and all days in a month file of GPCP 1DD precipitation estimates and byte-swaps the data.

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