

**READ FORMAT (SET)****PURPOSE**

Sets the (optional) Fortran format for the READ and SERIAL READ commands.

**DESCRIPTION**

The default format for the READ and SERIAL READ command is free format. This allows the analyst to input data into DATAPLOT without having to worry about how the data is residing out on the file. On the other hand, if the data happens to reside on the file in a structured format, and if the analyst knows what the format is, then the analyst can optionally specify this format information to DATAPLOT. The advantage of this is speed since formatted READs and SERIAL READs are 10 to 15 times faster. For small data sets (less than a few hundred lines), there is little to gain. However, if your data file is large (say more than 500 lines) and formatted, then the time for I/O can be drastically reduced by making use of such format information. Any Fortran-like format must contain only F (floating-point), E (exponential), and X (blanks) specifications. I (integer), D (double-precision), H (Hollerith), etc. specifications are not permitted. The restriction against I format is no restriction at all. Simply use the corresponding F format (e.g., I2 becomes F2.0, I8 becomes F8.0). Enter SET READ FORMAT with no arguments to reset free format reads.

Formatted reads are also useful for reading selective columns in a file (e.g., to read the third and eighth columns of a data file).

**SYNTAX**

```
SET READ FORMAT <s>
```

where <s> is a string containing a Fortran format.

**EXAMPLES**

```
SET READ FORMAT 4F10.0
SET READ FORMAT 5X,F6.0,F6.2,4X,2F5.0
SET READ FORMAT 10X,3E12.4,5X,F10.0
SET READ FORMAT 3F10.0
READ CALIB.DAT X Y Z
```

**DEFAULT**

Free format (i.e., no format).

**SYNONYMS**

None

**RELATED COMMANDS**

READ	=	Carries out a column-wise input of data.
SERIAL READ	=	Carries out a line-wise input of data.

**APPLICATIONS**

Data input

**IMPLEMENTATION DATE**

88/3

**PROGRAM**

```
SET READ FORMAT 2F10.1
READ X Y
21.0 110.7
31.2 120.6
55.4 100.2
END OF DATA
WRITE X Y
```