

# Abstract

DATAPLOT is an interactive, command driven language for graphics, fitting, general data analysis, and mathematics. DATAPLOT commands are high-level, English-syntax, and self-descriptive (e.g., PLOT Y X). The three core commands in DATAPLOT are PLOT (for graphics), FIT (for fitting), and LET (for function operations). This document is a reference manual for the various subcommands under LET and for the library functions supported by DATAPLOT. A reference manual for the remaining DATAPLOT commands (i.e., those not under LET) are contained in a separate document.

For convenience, the manual is divided into 7 parts.

1. statistical LET subcommands (e.g., means and standard deviations);
2. mathematical LET subcommands (e.g., derivatives, integrals, and roots);
3. matrix LET subcommands;
4. generating random numbers;
5. mathematical library functions;
6. trigonometric library functions;
7. probability library functions.

Each command is documented individually (alphabetically within a section). The purpose, syntax, and examples for each command are provided. Most of the commands also include a sample program with corresponding output and plots. This manual is intended to be a complete reference for users with some prior experience with DATAPLOT. A tutorial reference for novice users will be addressed in a separate document.