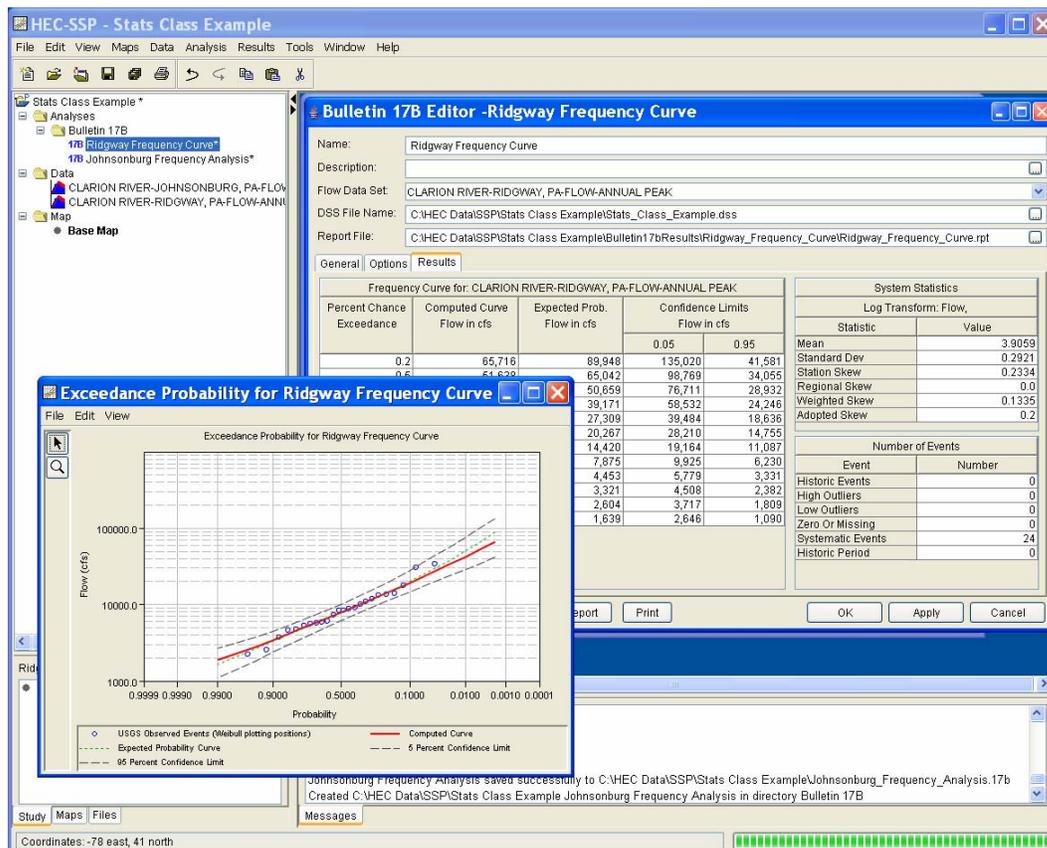




HEC-SSP

Description

Hydrologic Engineering Center-Statistical Software Package (HEC-SSP) is an integrated system of software, designed for interactive use in a multitasking environment. The system comprises a graphical user interface (GUI), separate statistical analysis components, data storage and management capabilities, mapping, graphics and reporting facilities.



Over a period of many years, the Hydrologic Engineering Center has supported a variety of statistical packages that perform frequency analysis and other statistical computations. Historically, the programs that received the most use within the U.S. Army Corps of Engineers were HEC-FFA (Flood Frequency Analysis) and STATS (Statistical Analysis of Time Series Data). FFA incorporates Bulletin 17B procedures that have been adopted by the Corps for flow frequency analysis. The STATS software package is used for statistical analysis of time series data. STATS can provide either analytical or graphical frequency analysis, specified by the user. STATS has the capability of computing monthly and annual maximum, minimum and mean values along with flow-duration analysis. Two other packages that used to receive extensive use within the Corps are REGFRQ (Regional

Frequency Computation) and MLRP (Multiple Linear Regression Program). REGFRQ performs regional frequency analysis and MLRP is a multiple linear regression analysis tool.

The goal of HEC-SSP is to ultimately combine all of the statistical analyses capabilities of HEC-FFA, STATS, REGFRQ and MLRP. The current version of HEC-SSP supports performing flood flow frequency analyses based on Bulletin 17B guidelines. New features and additional capabilities will be added in future releases.

Benefits HEC-SSP will allow Corps engineers to easily obtain and organize data in an automated way. Once data are contained within an HEC-SSP project, various statistical analyses can be performed on the data. This product will save user's time in both data preparation, as well as performing multiple statistical analyses, given that everything will be contained in one software package, rather than multiple computer programs for each different analysis.

Status The current release version of HEC-SSP is version 1.0 Beta. This version can perform flow frequency analyses following Bulletin 17B procedures, which are required by the Corps. The final version 1.0 release is scheduled for FY08. Additional capabilities will include: generalized frequency analysis, volume and stage frequency analysis, volume duration analyses, and volume-duration frequency analysis.

Distribution Source(s) HEC-SSP can be obtained from the HEC Web site at the following location:
www.hec.usace.army.mil

Available Documentation Documentation for HEC-SSP currently consists of a User's Manual, which is also downloadable from the HEC Web site. In addition to the User's manual, the software comes with some example data sets. User's can install the example data sets and use them as a teaching aid for how to use HEC-SSP.

Available Training There is currently no separate training course based solely on using HEC-SSP. However, HEC-SSP is introduced in lectures and utilized in a workshop within the "Flood Frequency Analysis" class and the "Statistical Methods in Hydrology" class offered at HEC. To find out more about these classes, and when they are offered, visit the HEC Web site and look these classes up under the training area of the Web site.

Available Support Support for HEC-SSP is available to all Corps employees. Corps users can either e-mail or call HEC with questions and/or comments. Additionally, all users of HEC-SSP can provide bug reports or comments with suggestions through the HEC Web site from the HEC-SSP specific page.

Application HEC-SSP has been used by several USACE Districts to compute flow frequency curves at gauged locations for a wide range of studies that include Bald Eagle Creek, PA.; Wailua River, HI; Mill Creek, WA; Cowlitz River, OR; Konohiki and Kainahola streams, HI; Clarion River, PA; and Delaware River, PA.

Point of Contact Gary W. Brunner (Gary.W.Brunner@usace.army.mil), Beth Faber (Beth.A.Faber@usace.army.mil), and David J. Harris (David.J.Harris@usace.army.mil), Hydrologic Engineering Center, 609 2nd St., Davis, CA. 95616, phone (530) 756-1104.

Partners N/A.