PeakFQ

Flood Frequency Analysis Based on Bulletin 17B

Program PeakFQ provides estimates of instantaneous annual-maximum peak flows for a range of recurrence intervals, including 1.5, 2, 2.33, 5, 10, 25, 50, 100, 200, and 500 years (annual-Exceedance probabilities of 0.6667, 0.50, 0.4292 0.20, 0.10, 0.04, 0.02, 0.01, 0.005, and 0.002, respectively). The Pearson Type III frequency distribution is fit to the logarithms of instantaneous annual peak flows following Bulletin 17B guidelines of the Interagency Advisory Committee on Water Data. The parameters of the Pearson Type III frequency curve are estimated by the logarithmic sample moments (mean, standard deviation, and coefficient of skewness) with adjustments for low outliers, high outliers, historic peaks, and generalized skew.

PeakFQ reads annual peaks in the WATSTORE standard format and in the Watershed Data Managaement (WDM) format. Annual peak flows are available from NWISWeb (http://nwis.waterdata.usgs.gov/usa/nwis/peak). (Retrieve data in the WATSTORE standard format, not the Tab-separated format.)

Current Version:	5.2
Release Date:	November 1, 2007
Documentation:	NOTE: Electronic and/or print versions of many U.S. Geological Survey reports can be found at the Publications Warehouse (http://infotrek.er.usgs.gov/pubs/)
	Version History (RELEASE.TXT)
	Flynn, K.M., Kirby, W.H., and Hummel, P.R., 2006, User's manual for program PeakFQ, Annual Flood Frequency Analysis Using Bulletin 17B Guidelines: U.S. Geological Survey Techniques and Methods Book 4, Chapter B4, 42 pgs. [On-line | PDF | chm]

	Flynn, K.M., Kirby, W.H., Mason, R.R., Cohn, T.A., 2006, Estimating magnitude and frequency of floods using the PeakFQ program: U,S. Geological Survey Fact Sheet 2006-3143, 2 pgs. [On-line | PDF]
	Interagency Advisory Committee on Water Data, 1982, Guidelines for determining flood-flow frequency: Bulletin 17B of the Hydrology Subcommittee, Office of Water Data Coordination, U.S. Geological Survey, Reston,Va., 183 p., http://water.usgs.gov/osw/bulletin17b/bulletin_17B.html
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Distribution Files			
Version	**Operating System**	**Download File**	**Description**
5.2 **01Nov2007**	Windows	README.TXT	Installation and usage information
		PKFQWin_5.2.exe	Self-installing executable, includes executable program, sample data, and documentation
4.1 **25Feb2002**	MS-DOS	README.TXT	Installation and usage information
		peakfq4_1.exe (2.51MB)	Self-installing executable, includes executable program, test data, source code, and documentation
	Sun Solaris	README.TXT	Installation and usage information
		peakfq4.1.Solaris.tar.gz	Compressed tar file, includes executable

		(1.3MB)	program, test data, source code, and documentation
	Unix	peakfq4.1.source.tar.gz (705K)	Compressed tar file, includes source code, test data, and documentation