

## EXACT ONE-SIDED SIMULTANEOUS CONFIDENCE BANDS VIA UUSIPAikka'S METHOD

WEI PAN, WALTER W. PIEGORSCH AND R. WEBSTER WEST

*Department of Statistics, University of South Carolina, Columbia, SC 29208, U.S.A.*

(Received August 9, 2001; revised April 10, 2002)

**Abstract.** Computation of one-sided simultaneous confidence bands is detailed for a simple linear regression under interval restrictions on the predictor variable, using a method due to Uusipaikka (1983, *J. Amer. Statist. Assoc.*, **78**, 638–644). The case of a single interval restriction is emphasized. A WWW-based applet for computing the bands is described.

*Key words and phrases:* Simple linear regression, simultaneous confidence bounds, simultaneous inference, S-method, Web-based computing.