



National Water Quality Monitoring Council

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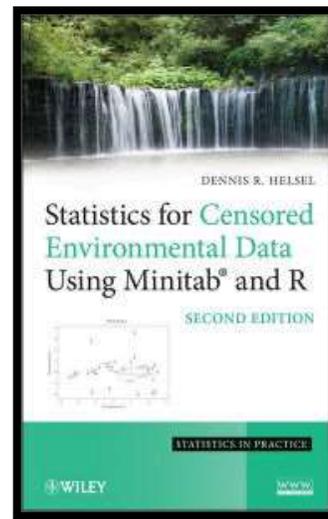
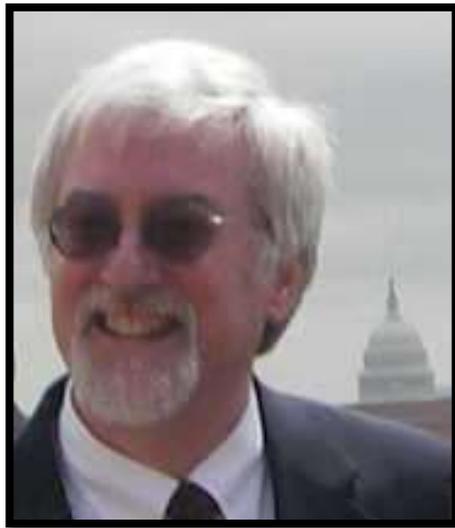
NWQMC Webinar Series

Nondetects and Data Analysis

Presented by

Dennis R. Helsel, PracticalStats.com

Tuesday, November 15th, 2016, 2:00 – 3:00 p.m. EST



Measurements of trace chemicals in environmental media (water, air, soils, biota) frequently result in values reported only as less than the laboratory's reporting limit ("less-thans", "nondetects", and "qualified values"). In statistical jargon these are "censored data". This webinar will provide an overview of methods for analysis of censored data, from estimating summary statistics to regression and hypothesis tests, including methods that incorporate data censored at multiple limits. Material is drawn from the textbook *Statistics for censored environmental data using Minitab and R* by Helsel, 2012.

What you will learn:

- the consequences of substituting one-half the reporting limit on data analysis (spoiler alert: its not good).
- what software is available for analysis of censored data.
- what nonparametric methods are available for estimating summary statistics, test for differences between groups, and for correlation/regression of censored data.
- what parametric methods are available for estimating summary statistics, test for differences between groups, and for correlation/regression of censored data.

Relevant materials will be provided online for you to digest at your leisure afterward.

The webinar is *free*; **pre-registration is required**. Please login 10 minutes early.

To register for this session:

Go to <https://doilearn2.webex.com/doilearn2/k2/j.php?MTID=t5798c766f7e440f2ad2ed554b6b770fd> and register. You will receive a confirmation email with instructions for joining the session.