



November 2, 2019

To: New attendees of the Practical Stats *Nondetects And Data Analysis* course
From: Dennis Helsel, PhD, Instructor

Welcome to *NADA* !

Whenever someone begins a new training course, especially an online course, there are bound to be questions. Here's a short list of FAQs for NADA:

1. Who is the instructor?

Me. I hold a PhD in Environmental Science and Engineering from Virginia Tech. I worked for 30 years for the US Geological Survey where I interpreted, and helped others interpret, water quality and soil chemistry data. I did field work in my early years. In 1986 I published my first articles on statistical methods for censored data (data with nondetects) in *Water Resources Research*. I've since published many other articles and a textbook on the topic -- *Statistics for Censored Environmental Data using Minitab and R* is the name of the 2nd edition published by Wiley in 2012. I retired from the Federal govt in 2008 and started Practical Stats, a statistical consulting and training company. After doing too much travel, in 2016 I opened our online Training Center and do most of my training that way now.

2. What does the course cover and are there pre-requisites?

The course covers everything from the basics – storing censored data in databases, computing means and other simple stats – up through regression, trend analysis and multivariate methods for data with nondetects. Prerequisites are: a. a modern basic statistics course such as our *Applied Environmental Statistics* class, and b. knowing how to use the basics of R software. That's it.

3. Will we derive equations?

No. My goal is to explain how each method works in plain language, what its assumptions/requirements are, and how to decide whether to use it or something else.

4. Does it come with the 2nd Edition of the textbook?

No, to keep the course costs down. You can purchase *Statistics for Censored Environmental Data using Minitab and R* from your favorite bookseller – Wiley sells both a printed and electronic version. Though there is more in the textbook, you can freely download a zip file of all the journal articles I've written on the topic, at:

<https://www.dropbox.com/s/6mvayh69juw6w2c/Nondetects.zip?dl=0>

5. How do I get started? First, install the software. We'll use two free software programs, R and RStudio. For most of you, installation is done by your

agency/company IT staff. If you do have admin rights and install your own software, the instructions for doing this are in the [NADA Install R Software](#) section. If your IT staff are doing the installation, forward the installation instructions to them. Then download the course materials.

6. How do I get started learning how to use R statistical software?
After you have registered and installed both R and RStudio, view the Session #1 video "Getting Started with R / RStudio". Make sure you look at the demo and do the exercise, and you're on your way.
7. How long do I have to complete the course?
Up to one year after registering. A pace of at least 2 sections per month is recommended.
8. Do I receive help along the way?
You can always email me at ask@practicalstats.com with questions and I will answer them. I recommend that you or your employer get a copy of the *Statistics for Censored Environmental Data Using Minitab and R* textbook and use it as a first source of answers. If your question is about R, the answer to every question on R that you can think of is online. Send statistical questions my way after looking in the *Statistics for Censored Environmental Data* textbook. Do not hesitate to discuss the course with others you know there who are taking it.
9. Can I get a certificate of completion?
Yes. Email me that you've completed the course materials, including doing all the exercises, and I'll send you the course certificate.

That's about it. Hope you enjoy the course. I've taught a version of it since the early 1990s and have put a lot into it, so I hope you get a lot out of it.

Regards,



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