

**Using MODFLOW-USG & MODFLOW 6
with
Groundwater Vistas & PEST**
Webinar

Instructor:

Jim Rumbaugh

Environmental Simulations, Inc.

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Location:

Your Home or Office!

Cost

Individual: \$950

Office: \$1,900

Contact Jim Rumbaugh (see above) to Register

Instructor Bio:

Jim Rumbaugh, hydrogeologist and groundwater modeler, has over 35 years of experience in application of groundwater models and in development of groundwater modeling software tools. He is the co-author of the Groundwater Vistas software and is President of Environmental Simulations, Inc., a company that specializes in groundwater modeling. Jim was a past Chairman of ASTM Subcommittee D18.21 on Groundwater and Vadose Zone Investigations. Subcommittee D18.21 was funded by U.S. EPA to develop standards for groundwater modeling practice. Jim was honored by the National Ground Water Association with the 1999 John Hem Excellence in Science and Engineering Award by NGWA. This award is given to those who have made a significant, recent scientific or engineering contribution to the understanding of groundwater. NGWA also presented Jim with the 2014 Technology Award, which is given to those who have made a significant contribution to the groundwater industry in the development of ideas and tools, along with exemplary service to colleagues throughout the industry in sharing these ideas. Jim teaches groundwater modeling seminars throughout the USA, Europe, Australia, and New Zealand. Jim has an active consulting practice and has worked on hundreds of groundwater modeling projects throughout the world.

Registration:

To register for this seminar, simply send Jim an email at

JRumbaugh@GroundwaterModels.com, give us a call at (610) 670-3400, or pay by credit card on our web site at www.groundwatermodels.com and click Online Store. Registration is not confirmed until we receive payment for the Webinar.

Webinar Information:

- The Webinar is divided into 6 lectures lasting between 1 and 2 hours. After each lecture, there will be computer exercises that you may work on at your own pace. Help with exercises is provided by email (support@groundwatermodels.com).
- Lectures are live **but will be recorded** in case you cannot attend all of them. There will be periodic question/answer sessions during the lecture. You will call into the Webinar using either VoIP or telephone.
- Computer exercises are based on the Advanced Version of ESI's Groundwater Vistas Version 7 software. If you do not currently have Groundwater Vistas 7 Advanced or if you have an older version, you may purchase a new license or upgrade with a 20% discount. You must order the software prior to the start of the Webinar to receive the discount.
- ESI reserves the right to cancel the Webinar if there are less than 6 participants
- Each lecture will start at 3:00 pm Eastern Time. Webinar Lectures will be on Monday, Tuesday, and Wednesday for 2 consecutive weeks. Question & Answer sessions will be held on Thursdays. Consult our webinar schedule for exact dates

Course Description:

Using MODFLOW-USG & MODFLOW 6 with Groundwater Vistas & PEST

MODFLOW-USG is a version of the popular MODFLOW model for unstructured grids. The unstructured grid concept allows modelers to create models that conform to complex boundaries and are refined only in areas of interest. Groundwater Vistas supports most of the capabilities of MODFLOW-USG, including the Transport version. This Webinar will cover the theory behind MODFLOW-USG, how to create unstructured grids in Groundwater Vistas, suggested solver settings under a variety of conditions, and how MODFLOW-USG interfaces with PEST for model calibration.

The USGS also recently introduced a completely new version of MODFLOW called MODFLOW 6. It is similar in capabilities to MODFLOW-USG and has been integrated into this webinar.

The following topics will be covered in the Webinar:

Lecture 1:

Introduction to MODFLOW-USG and MODFLOW 6

Lecture 2:

Using MODFLOW-USG and MODFLOW 6 in Groundwater Vistas

Lecture 3:

Designing Nested Grids with MODFLOW-USG

Designing Quadtree Refined Grids in MODFLOW-USG

Lecture 4:

Designing Voronoi and Triangular Meshes with AlgoMesh and Groundwater Vistas

Lecture 5:

Transport & Other Advanced Packages in MODFLOW-USG

Lecture 6:

Using PEST with MODFLOW-USG and MODFLOW 6