Geology Continuing Education Series:
GIS Applications in Geology and Groundwater Studies
March 4, 2006

co-sponsored by
Inland Geological Society
Association of Environmental and Engineering Geologists, Inland Empire Chapter

Geosciences 825.B (.7 CEU)

This short course on GIS emphasizes analytical applications in geology and groundwater studies. It briefly describes GIS as a tool for geosciences and compares two mainstream GIS systems. The fundamentals behind USGS geologic mapping with GIS in Southern California are covered. A demonstration on how GIS can be used in geomorphological investigation of faults and debris flows as well as in the exploration and management of oil and gas fields is also included. Speakers demonstrate various 3D views with GIS on the subsurface structure and water quality as well as related GIS database to groundwater modeling with practical field examples.
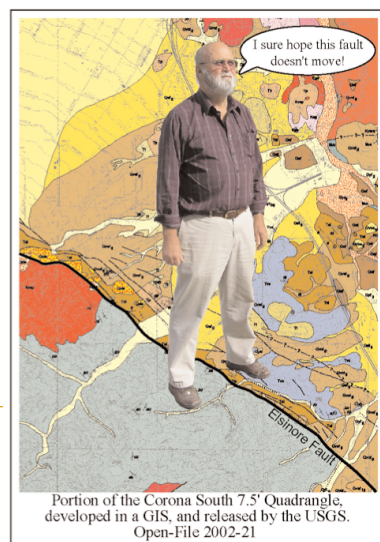
PROGRAM COORDINATOR: TIEN-LEE, Ph.D., Professor of Geophysics, UC Riverside

Date/Time: Sat. 9 am-5 pm, March 4.

Location: UC RIVERSIDE: Extension Center, 1200 University Ave.

Fee: $65 / $60 each for members of the IGS or AEG / $10 each for students (includes lunch, materials and parking, 1 meeting)

☐ **Reg #053-SCF-F55**

I sure hope this fault doesn't move!

Portion of the Corona South 7.5' Quadrangle, developed in a GIS, and released by the USGS. Open-File 2002-21

AGENDA

9 am	**Welcome / Introduction**
9:10 am	**The GIS Behind the Geologic Maps of the USGS** *Kelly Bovard*, U.S. Geological Survey
9:40 am	**GIS and Spatial Distribution of Rainfall Associated With Debris Flows in Southern California** *Russ Campbell*, U.S. Geological Survey
10:20 am	**Morphology of Fault Bounded Mountain Fronts and Debris Flow Susceptibility** *Rachel Alvares*, U.S. Geological Survey
11:00 am	**Advances in Applying GIS to Oil and Gas Exploration and Production** *Dr. John D. Grace*, Earth Science Associates
noon	Lunch – included
1:00 pm	**GIS as a Geotechnical Tool** *Woodrow L. Higdon*, Geo-Tech Imagery International
1:30 pm	**Surface Water and Groundwater Interaction Studies — Integrated Management of Clean Water and Water Reuse** *Les Chau*, Kennedy/Jenks Consultants
2:30 pm	**Managing Groundwater in the Bunker Hill Basin** *Raymond Brown*, San Bernardino Valley Water District
3:30 pm	**GIS Methods to Estimate Ambient Water Quality in Groundwater** *Andy Malone*, Wildermuth Environmental, Inc.
4:00 pm	**Discussion** (free forum)
5:00 pm	**Adjourn**

All talks include 10-15 minutes of discussion.

ENROLLMENT FORM   W06

I wish to enroll in:

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Full Name (please print)   Social Security No. (Provide if using tuition for tax credit)

_____
Home Address (street, apt. no.)

_____
City   State   ZIP Code

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Daytime Phone   E-mail Address

Are you a U.S. Citizen: ☐ Yes ☐ No If no: ☐ Permanent Resident ☐ Type of VISA _____
                                                                                    (International student fees may apply.)

TO PAY BY CHECK: Enclose check made payable to REGENTS-UC in the amount of $_____ to cover _____ enrollment(s) and parking permit.

TO USE YOUR CREDIT CARD:

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VISA/MasterCard No.   Expiration Date

_____
Authorizing Signature

            PLEASE USE A SEPARATE SHEET FOR ADDITIONAL ENROLLMENTS. THANK YOU.

UNIVERSITY of CALIFORNIA Riverside

Extension
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