## **Seminars and Conferences**

#### **UCSB On-campus**

#### 2004-2005

UCSB Family Summer Camp, lecturer, Tanya Atwater

UCSB Foundation semi-annual meeting, invited presentation Tanya Atwater and Ralph Archuleta: "Southeast Asian Earthquake and Tsunami"

UCSB Staff Development Day, invited presentation, Tanya Atwater

Half day presentation for 4-5<sup>th</sup> grade Teacher Workshop on Earth Science, UCSB Campus, Tanya Atwater

UCSB Speaker's Club: January 2005, Construction and Collapse of the Norwegian Nappe Stack: Evolution of the Nordfjord-Sogn Detachment Zone, Hornelen Region, Norway, Scott Johnston

#### **Off Campus-Invited Lectures**

#### 2004-2005

Geological Res. Div., Scripps Inst Oceanography, La Jolla, CA, Tanya Atwater

Geology Dept., University of Montana, Missoula, MT, Tanya Atwater

Dept. Earth and Ocean Sci., Univ. of British Columbia, Vancouver, BC, Tanya Atwater

Dept. Geological Sci., Central Washington University, Ellensburg, WA, Tanya Atwater

Dept. Geology and Environmental Sci., Western Washington Univ., Bellingham, WA, Tanya Atwater

Lecturer, Faults and Oilfields Short Course, Santa Clarita, CA, Tanya Atwater

Lead off speaker, SCEC Workshop: Plate Tectonophysics of Southern California at Cal Tech, Pasadena, CA, Tanya Atwater

Participant and poster presenter, Teaching with Visualizations, Workshop at the American Geophysical Union Meetings, San Francisco, CA, Tanya Atwater

*Keynote address* for SOURCE (Symp. On University Research and Creative Expression), Central Washington Univ., Ellensburg WA, Tanya Atwater

Featured speaker for Soc. of Women Geographers Triennial Meeting, Savannah, GA, Tanya Atwater

Mineralogical Society of America Distinguished Lecturer: Near-ultrahigh pressure processing of subducted continental crust: Miocene crustal xenoliths from the Pamirs, Bradley Hacker

Texas A&M University, "Phase transformations and earthquakes", Bradley Hacker

Rice University, "Phase transformations and earthquakes", Bradley Hacker

Gordon Research Conference "The Role of Water in Rock Deformation", Bradley Hacker

University of Wisconsin, "Antipodal fates of continental crust", Bradley Hacker

Augustana College, "Antipodal fates of continental crust", Bradley Hacker

- Kansas State University, "Phase transformations and earthquakes", Bradley Hacker
- European Geosciences Union "Exhumation of Ultrahigh-Pressure Rocks: Constraints from Geochronology", Bradley Hacker
- Technical University of Freiberg, "Antipodal fates of continental crust" and "Phase transformations and earthquakes", Bradley Hacker
- Technical University of Berlin/Potsdam University, "Phase transformations and earthquakes", Bradley Hacker
- University of Würzburg, "Phase transformations and earthquakes", Bradley Hacker
- University of Bucharest, "Antipodal fates of continental crust" and "Phase transformations and earthquakes", Bradley Hacker
- University of California, Davis, "Antipodal fates of continental crust", Bradley Hacker
- Goldschmidt Conference Keynote Address, "Geochronology of the Western Gneiss Region UHP Terrane", Bradley Hacker
- Geological Survey of Norway, "Evolution of the Western Gneiss Region", Bradley Hacker
- University of Arizona, "Cenozoic tectonic and magmatic evolution of the Sonoran Rifted Margin", Phillip Gans
- Pamona College, "Cenozoic tectonic and magmatic evolution of the Sonoran Rifted Margin", Phillip Gans
- Invited Presentation: Pacific Section Society of Exploration Geophysicists, Bakersfield, CA, "Decrease in natural marine hydrocarbon seepage near Coal Oil Point, California, associated with offshore oil production", March 2005, Bruce Luyendyk
- Invited Presentation: ANDRILL Workshop, Denver, CO, "Proposed Drill Sites Along Front of Ross Ice Shelf", April 2005, Bruce Luyendyk
- Invited Presentation: Colorado College, Colorado Springs, CO, Decrease in natural marine hydrocarbon seepage near Coal Oil Point, California, associated with offshore oil production, May 2005, Bruce Luyendyk
- Invited Presentation: NOAA, Boulder CO, "Marine Hydrocarbon SeepsSanta Barbara Channel", May 2005, Bruce Luyendyk
- GSA: October 2004, Pelite Thermobarometry and Monazite Geochronology Reveal Pre-Ultrahigh-Pressure Orogeny in the Hornelen Region, Norway, Scott Johnston

- AGU: December 2004, Exhumation of Norwegian Ultrahigh-Pressure Rocks: Microstructural Evolution of the Nordfjord-Sogn Detachment Zone, Hornelen Region, Norway, Scott Johnston
- GSA Annual Meeting, Time scale of seawater circulation and dolomitization within the lower Floridan Aquifer, November 2004, Jordan F. Clark
- GSA Annual Meeting, Gas transport below artificial recharge ponds: Insight from dissolved noble gases and a dual gas (SF6 and 3He) tracer Experiment, November 2004, Jordan F. Clark
- AGU Annual Meeting, Utilizing Tritium and CFC-12 to Determine Groundwater Sources in an Unconfined Aquifer Within the Abalone Cove Landslide, Palos Verdes, California, December 2004, Jordan F. Clark
- AGU Annual Meeting, Temporal Shifts in Radiocarbon in Spring Waters: Implications for Decadal Controls on Element Cycling in a Mountain Catchment, December 2004, Jordan F. Clark
- Peña Blanca OSTI Project Semi-Annual Workshop, Tracing groundwater flow and transport with sulfur hexfluoride, February 2005, invited talk, Jordan F. Clark
- GSA Cordilleran Section Meeting, A comparison of hydrogeologic models, tritium/<sup>3</sup>He, and deliberate tracer experiments to understand ground water residence time, April 2005, Jordan F. Clark
- 5<sup>th</sup> International Symposium on Managed Aquifer Recharge, Gas transport below artificial recharge ponds: Insights from dissolved noble gases and a dual gas tracer experiment, June 2005, Jordan F. Clark
- 5<sup>th</sup> International Symposium on Managed Aquifer Recharge, A sulfur hexafluoride tracer experiment as a tool to check the previous results of <sup>3</sup>H/T ages and geohydrology at the Montebello Forebay, California, June 2005, Jordan F. Clark
- 12<sup>th</sup> Biennial Symposium on Groundwater Recharge, A comparison of hydrogeologic models, June 2005, Jordan F. Clark
- GeoForschungsZentrum, Potsdam, Germany: Approach to orogenic steady state: the evolution of nascent ranges: 6 July, 2004, Douglas W. Burbank
- University of Potsdam, Germany, Himalayan erosion at decadal to million-year time scales: the interplay of climate and tectonics: 7 July, 2004, Douglas W. Burbank
- August 17, 2004, PTTC Conference, Valencia, CA, Presentation of modern and geologic hydrocarbon pathways in the Santa Barbara area, James Boles
- Invited keynote talk, "Refining the sedimentary record of orogenesis," International Association of Sedimentologists, Coimbra, Portugal, 14 September, 2004, Douglas W. Burbank
- Sept. 17, 2004, Seminar at Seismological Laboratory, Caltech, "Monitoring environment by Seismic Waves", Toshiro Tanimoto

- Oct. 19,2004, Seminar at Seismological Laboratory, UC Berkeley, "Monitoring environment by Seismic Waves", Toshiro Tanimoto
- Shoreline Preservation Class, Santa Barbara, CA, Oct. 22, 2004. Where does the tar on the Coal Oil Point beaches come from?, Ira Leifer
- UCLA: "Monsoons and mountain building: erosion and uplift of the High Himalaya" November 10, 2004, Douglas W. Burbank
- Nov. 11, 2004, SCEC Tectonophysics Workshop, "Deep structure and anisotropy in Southern California", Toshiro Tanimoto
- Nov. 23, 2004, Seminar at Institut de Physique du Globe in Paris, "Seasonality in Particle Motion of Microseims", Toshiro Tanimoto
- Nov. 25, 2004, Seminar at Institut de Physique du Globe in Strasbourg, "The Continuous Background Oscillations", Toshiro Tanimoto
- Nov. 26, 2004, Seminar at Black Forest Observatory, Germany, "Seasonality in Particle Motion of Microseims", invited talk, Toshiro Tanimoto
- Nov. 29, 2004, Seminar at Observatoire Midi Pyrenees, Toulouse, France, "The Continuous Background Oscillations", Toshiro Tanimoto
- Dec. 13, 2004, AGU Fall Meeting (S12B-03), "Seasonal variation in particle motion of microseisms and monitoring of water content at shallow depths", Toshiro Tanimoto
- American Geophysical Union Fall Meeting, Dec. 14, 2004 "Mass-Transport and Relative Sea Level Change in a Carboniferous Deglacial Succession: Jejenes Fm, Quebrada las Lajas, San Juan, Argentina", Mason Dykstra
- American Geophysical Union Fall Meeting, Dec. 15, 2004 "The Internal Structure and External Morphology of Submarine Landslides: A Causative Link", Mason Dykstra
- Dec. 15, 2004, AGU Fall Meeting (T31C-1313), "Recent tomogra[hic results in Southern California and their tectonic implications", Toshiro Tanimoto
- Invited AGU: Detrital record of Himalayan orogenesis, Dec. 17, 2004.
  UCSC: "Monsoons and mountain building: erosion and uplift of the Nepalese Himalaya", January 21, 2005, Douglas W. Burbank
  February 2, 2005 at UCLA (Dept. of Earth and Space Sciences, Seismology Seminar),
- "Monitoring Environment by Seismic Waves", Toshiro Tanimoto
- February 7, 2005, Occidental Petroleum, Long Beach, CA, Presentation to engineers and geologists on geochemistry of carbonate scaling, James Boles

- February 13-18, 2005, Calgary, CANADA, Gallagher Visiting Research Scientist Lectures on geologic and modern evidence for fault controlled hydrocarbon pathways, and evidence for disequilibrium during rapid de-gassing of CO<sub>2</sub>, James Boles
- The University of Tennessee, Knoxville, TN, February 15, 2005, "Mass Transport and the Creation of Accommodation Space on Continental Margins", Mason Dykstra
- The University of Bremen, Bremen, Germany, March 2, 2005, "Mass Transport and the Creation of Accommodation Space on Continental Margins", Mason Dykstra
- March 20-26, 2005, Seoul and other cities, SOUTH KOREA, a series of 10 hours of invited lectures on diagenesis, including the work on faults and the Mission Tunnel in the Southern California area, James Boles
- April 13, 2005, Chevron-Texaco, Lost Hills, CA, Presentation to engineers and geologists on geochemistry of carbonate scaling, James Boles
- April 30, 2005, AAPG Pacific Section Meeting, San Jose, CA, James Boles, Carbon/oxygen isotopic ratios as evidence for rapid CO2 degassing and carbonate Crystallization. (with T. Carpenter). Abstracts to Program, v.37, p.60, James Boles
- April 30, 2005, AAPG Pac Section-GSA San Jose, CA, James Boles, Numerical reactive transport modeling of the effects of leakage of methane-rich fluids along the Refugio-Carneros fault in the Santa Barbara basin. Garven presentation, with co-authors M. Appold, J. Boles, and P. Eichhubl. Abstracts to program, v.37, p.6104 Canadian presentation by R. Perez on albitization
- Leifer I., Directions in water column bubble and bubble-plume research, ONR Gassy Sediments Workshop, Bay City, Mississippi, Apr 24-27, 2005.
- Institute of Seismology, Beijing, May 16, 2005: "Single crystal dating and the detrital record of orogenesis", Douglas W. Burbank
- 15th Conference on Deformation mechanisms, Rheology and Tectonics, Invited Keynote talk: Role of surface processes in orogenic evolution: Interactions of climate, erosion, and tectonics in the Nepalese Himalaya, May 2, 2005, Douglas W. Burbank
- Leifer I, T. Del Sontro, K. Broderick, and B. Luyendyk, Time evolution of beach tar, oil slicks, and seeps in the Coal Oil Point seep field, California. 2005 International Oil Spill Conference, Miami Beach, Florida, May 15 - 19, 2005
- American Association of Petroleum Geologists' Annual Meeting, Calgary, Canada, June 21, 2005, "Meandering Turbidite Channels and the Effective Depth of Turbidity Currents", Mason Dykstra

# Workshops

# Interaction of tectonics, erosion, and climate along a transect from Tibet to the Himalayan foreland Workshops, by Douglas Burbank and collaborators

Organized by Prof. Burbank of the Institute for Crustal Studies at the Department of Hydrology and Meteorology, His Majesty's Government Nepal at various times during the year.

### **Earth Education Collaboration**

The goals are to introduce a faculty team from a variety of institutions to the EarthEd Online software system. A primary goal is to test determine how this resource fits the team's needs, and to specify what modifications and additions are needed to proceed to the beta test stage. A strategy for moving the software system from beta test to possible adoption will be developed. Also, because the team has extensive experience with online learning, another goal is to summarize "best practices" and other related issues to this learning modality.

Funding from National Science Foundation, Division of Undergraduate Education, and UCSB Office of Instructional Development http://oceanography.geol.ucsb.edu/Collab/workshp\_2004/index.html