

# Robert S. Anderson

## Curriculum Vitae and Publications

### **contact information**

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### **personal history**

born 17 November 1952, Denver, Colorado.  
married 28 June 1987 to Suzanne Prestrud  
twin daughters Grace and Hannah born September 19, 1999

### **present position**

Professor, Department of Geological Sciences, University of Colorado, Boulder  
Fellow, Institute of Arctic and Alpine Research (INSTAAR)

### **education**

Ph.D., Department of Geological Sciences, University of Washington, Seattle, Washington, 1986  
M.S., Department of Earth Sciences, Stanford University, Stanford, California, August 1977  
B.A. in Geology, Williams College, Williamstown, Massachusetts, June 1974.

### **positions held**

Post-doctoral research fellow, Division of Physics, Mathematics and Astronomy, California Institute of Technology, Pasadena, California, 1986-1988.  
Assistant Professor, Department of Earth Sciences, University of California, Santa Cruz, 1988-1992.  
Visiting scientist, Department of Geology and Geophysics, University of Wyoming, 1995  
Associate Professor, Department of Earth Sciences, University of California, Santa Cruz, 1992-1997.  
Professor, Department of Earth Sciences, University of California, Santa Cruz, 1997-2003.  
Visiting scientist, INSTAAR, University of Colorado, 2001-2002  
Associate Professor, Department of Geological Sciences, University of Colorado, Boulder 2003-2006

### **awards**

NSF Presidential Young Investigator Award 1991-1996  
Gladys Cole Award for research in arid regions, Geological Society of America, 1995  
Fellow, American Geophysical Union, 2006  
Hazel Barnes Prize, top award at CU Boulder recognizing "the enriching relationship between teaching and research", 2014  
G.K. Gilbert award, AGU Earth and Planetary Surface Processes (EPSP) section, 2015  
University of Colorado Distinguished Professor, 2015  
AGU Citation for excellence in reviewing, JGR-Earth Surface, 2018  
Fellow, Geological Society of America, 2019

### **professional societies**

American Geophysical Union, Geological Society of America, American Quaternary Association, International Glaciological Society

## Teaching

### Courses taught at CU

#### *Fall*

**Earth catastrophes and natural hazards.** Introductory earth sciences class employing all rapid events as leverage to discuss the cosmic setting of the Earth, plate tectonics driven by deep-earth processes, and surface processes powered ultimately by the Sun.

**Geomechanics.** Graduate class in processes of heat transport and fluid mechanics from 1<sup>st</sup> principles. (taught all years except 2007 and 2011)

**Glaciers and Permafrost.** Co-taught once with Suzanne Anderson (Geography). Now taught in alternate years by Suzanne Anderson. Covers cryospheric processes and history.

**The Cryosphere.** Graduate class covering physics of cryospheric processes and both geologic and human history of exploration.

**Advanced Geomorphology.** Co-taught with Greg Tucker. Graduate course in which weekly experiments led to exploration of a variety of surface processes.

**Reading seminar on landscape evolution in southern Rockies.** Co-taught with Craig Jones in Fall 2005.

**Reading seminar in topics in geomorphology.** Co-hosted with Greg Tucker. Topics vary by semester.

**Introduction to the Geological Sciences faculty.** Organize faculty for their weekly presentations, and help to run introductory fieldtrip.

#### *Spring*

**Reading seminar in topics in geomorphology.** Co-hosted with Greg Tucker. Topics vary by semester.

**Planet Earth.** Introduction to Earth Sciences with a system focus, and emphasis on the surface of the planet and its habitability.

**Geomorphology.** Undergraduate class with a few graduate students. Survey class in processes shaping the planet's surface, with lab and major field trip.

**Modeling of landscapes.** Co-taught with Greg Tucker, roughly every other year. Introduction to numerical modeling in Earth sciences, with focus on geomorphic features.

## Advising

### Past postdoctoral researchers (4)

**Elizabeth Safran** (2000-2002 at UCSC) Ph.D. from UC Santa Barbara. Now associate professor at Lewis and Clark College in Environmental Studies Program.

**Mark Kessler** (2002-2003 at UCSC, 2003-2005 at CU) Ph.D. from UC San Diego.

**Miriam Dühnforth** (2007-2011 at CU) Ph.D. from ETH Zurich. Currently assistant professor in Geology and Tectonics at LMU Munich. ([miriam.duehnforth@lmu.de](mailto:miriam.duehnforth@lmu.de))

**Jill Marshall** (2015-2017) Ph.D. U. Oregon. Cross-CZO postdoc sharing time with Eel CZO at Berkeley, focused on the role of trees as geomorphic agents. (Assistant Professor at University of Arkansas as of Fall 2017)

### Past graduate students (23 Ph.D., 15 M.Sc.)

**Jeffrey Scott Marshall** (Masters: August 1991) Neotectonics of the Nicoya Peninsula, Costa Rica: A look at forearc response to subduction at the Middle America Trench. Obtained Ph.D. from Penn State 2000. Since 2001 Fall, Jeff has been an assistant professor at Cal Poly Pomona College. ([marshall@csupomona.edu](mailto:marshall@csupomona.edu))

**Nan Rosenbloom** (Masters: August 1992) Calibration of coupled hillslope and channel process model in a marine terraced landscape, Santa Cruz, California. Obtained Ph.D. from University of Colorado, 1997. Now employed at NCAR, Associate Scientist in Carbon dynamics group. ([nanr@ucar.edu](mailto:nanr@ucar.edu))

**Richard McDonald** (Masters: March 1993) Eolian dune dynamics as constrained by field, laboratory and numerical experiments. Permanent employee of USGS, Boulder Colorado, in charge of sediment transport model development. ([rmcd@uwsgs.gov](mailto:rmcd@uwsgs.gov))

**Kirby L. Bunas** (Masters: June 1993 -- in Computational Mathematics Program, UCSC) The mechanics of aeolian ripple sorting and stratigraphy as visualized through a cellular automaton model. Teaches at Sierra Foothill College.

**Nicholas M. Johnson** (Ph.D.: September 1994) Analysis of alluvial hydrostratigraphy using indicator geostatistics, with examples from Santa Clara Valley, California (note: my role here was to advise Nick in the aftermath of the untimely death of his advisor, Shirley Dreiss). Geological consultant, Bay Area.

**Greg S. Dick** (Masters: June 1995) Documentation of ephemeral flows in the upper Blue Hills badlands, Utah. Went on for Ph.D. at UCSC, see Greg Hancock below.

**Kirsten M. Menking** (Ph.D.: July 1995) Climate and geomorphic history of Owens Valley, CA, as deduced from analysis of the 330m USGS Owens Lake core OL92. Professor at Vassar. (kimenking@vassar.edu)

**Lawrence M. Gilpin** (Ph.D.: August 1995; co-advised by Casey Moore) Holocene paleoseismicity and coastal tectonics of the Kodiak Islands, Alaska. Principal, Gilpin and Associates (Engineering Geology), Fairfax, CA.

**Katherine Howard** (coursework Masters: March 1997). As of August 2005 a Ph.D. Student at University of Texas El Paso working on arid region geomorphology.

**Greg Sena** (coursework Masters: March 1997). Geologic consultant, southern California

**Robert W. Schultz** (M.Sc.: June 1997) Hydrological monitoring and water balance of Wilder Creek, coastal California. Geological consultant, Oakland.

**Alex L. Densmore** (Ph.D.: June 1997) Use of GPS, detailed field mapping, and landscape evolution models to constrain late Cenozoic faulting in the basin and range province of eastern California. Lecturer, University of Trinity, Dublin 1998-2001. Lecturer at ETH June 2001-2007. Professor of Geography and Deputy Director - Institute of Hazard & Risk Research, Durham, UK. (a.l.densmore@durham.ac.uk)

**James L. Repka** (Ph.D.: March 1998) Exposure ages of depositional surfaces using cosmogenic radionuclides: Applications to strath terraces in the western U.S. Professor and chair, Department of Geology, Earth and Marine Sciences, Saddleback College, Orange County CA. (jrepka@saddleback.edu)

**Gregory S. Hancock** (Ph.D.: June 1998) Bedrock channel evolution: dates and simulations of fluvial terrace development and measurements of rock erosion rates. Associate Professor, College of William and Mary, Virginia. (gshanc@facstaff.wm.edu)

**Carol V. Creasey** (Ph.D.: September 1998) Chemistry of shallow groundwater: role of colloids (note: advising of Carol was inherited from the untimely death of Shirley Dreiss. The advising was shared with Ken Bruland and Barbara Bekins.)

**David M. Schlepner** (Masters: June 1999) A hydrologic model of Wilder Creek, Wilder Ranch State Park, California. Web consultant.

**Erin R. Kraal** (Masters: September 2001) The 1999 and 2000 Hidden Lake outburst floods on the Kennicott Glacier, Wrangell St Elias mountains, Alaska. The advising was shared with Suzanne Anderson. Ph.D. candidate at UCSC working on planetary geology with Eric Asphaug (ekraal@es.ucsc.edu)

**Lesley A. Perg** (Ph.D.: September 2001) Cosmogenic radionuclide constraints on active margin coastline uplift and geomorphic rates, Santa Cruz, California, USA. Postdoc in Germany 2001-2, Assistant professor in Geology, U. Minnesota as of Fall 2002. (lperg@umn.edu)

**Kelly MacGregor** (Ph.D.: March 2002) Arrived 1996, Williams College. Modeling and field constraints on glacier dynamics, erosion and alpine landscape evolution. NASA graduate fellowship. Mendenhall post-doc with USGS 2002-2003; Assistant professor at MacAlester College as of Fall 2003. (macgregor@macalester.edu)

**Catherine A. Riihimaki** (Ph.D.: August 2003) Arrived 1998, Williams College. Two projects: Sediment output from a small glacial catchment, Alaska; late Cenozoic exhumation of the Laramide basins, western US. NSF Graduate fellowship. Teaching Fall 2003 as a sabbatical replacement at Colby College. Started Keck Postdoctoral Fellow at Department of Geology, Bryn Mawr College in Fall 2004. (criihima@brynawr.edu)

**Carissa Carter** (M.Sc. June 2004) Arrived 2002, Williams College. Evolution of slot canyons in massive sandstones of the arid southwestern US using field and experimental tools. Employed at USGS Pacific Marine Branch, Santa Cruz, California as of July 2004. Stanford experimental design program graduate. Adjunct Professor, Hasso Plattner Institute of Design, Stanford. (carissac@stanford.edu)

**Peter Adams** (Ph.D.: September 2004) Arrived 1999, Penn State; Ph.D. candidate as of February 2001) Tectonic geomorphology. Focus on two problems: the interactions of rivers with rising topography associated with blind thrusts, and evolution of coastal map-view pattern on active margins due to differential seacliff retreat. 1-year sabbatical replacement teaching position at Washington and Lee in Fall 2004. Post-doctoral position at Scripps starting Fall 2005. Associate Professor at University of Florida, Geology Department. (adamsp@ufl.edu; <http://www.clas.ufl.edu/users/padams/>)

**Greg Stock** (Ph.D.: September 2004) Arrived 1999, Humboldt State; Ph.D. candidate as of March 2002. Advising shared with Jim Zachos. Caves as archives of tectonic and paleoclimate information. Focus on sediments and speleothems from the caves of the western Sierras, dating of which constrains river incision rates, and stable isotopes in which constrain variation in the hydrologic system. Turner Postdoctoral Fellowship University of Michigan 2005. Started as Yosemite National Park Geologist January 2006. (greg\_stock@nps.gov)

**Michael Loso** (Ph.D.: December 2004) Arrived 2000, UC Santa Barbara, U. Vermont; Ph.D. candidate as of November 2002. NSF Graduate Fellowship. Advising shared with Suzanne Anderson and Dan Doak (Biology). Climate history as read through varved records in glacially dammed lakes, Alaska. Enhancement of lichometry method for dating late Holocene events. As of summer 2017, Wrangells National Park natural resources manager.

**Zack Guido** (M.Sc. July 2006) Arrived CU Fall 2004, Lafayette College 2000, followed by 3 years in Peace Corps in Bolivia. Thesis: Pacing the post-LGM demise of the Animas Valley glacier and the San Juan Mountain Icecap, Colorado. Starts his own NGO to establish water supplies for 3rd world communities late 2006; Ph.D. student University of Arizona 2009. University of Arizona Program Manager and Research Scientist, Joint University of Arizona & Columbia University International Research and Application Program (IRAP) (zguido@email.arizona.edu)

**Tim Bartholomaus** (M.Sc. June 2007) Arrived CU Fall 2005, Dartmouth 2002. Evolution of sliding on Kennicott Glacier, Alaska, in the face of seasonal, daily and outburst flood inputs of water. Lead instructor, Wildlands Institute summer fieldcourse, summer 2007, McCarthy Alaska. Summer 2007 employed at Balance Hydrologic, hydrology consulting company, Berkeley. Ph.D. University of Alaska

Fairbanks 2013. Postdoc University of Texas, Austin 2013-2015. Assistant professor, University of Idaho 2016.

**Maureen Mason Berlin** (Ph.D.: May 2009) Arrived CU in Fall 2004, UC Berkeley 2002. Ph.D. candidate as of November 2006. Landscape evolution of the Roan Plateau, western Colorado. Online teaching of geology courses, CU.

**Nora Matell** (Masters May 2009) Arrived CU in Fall 2007, B.Sc. from Williams College Spring 2005. Arctic coastal retreat, North slope of Alaska. Teaching high school sciences, Denver Public Schools 2008-2014; teaching STEM classes Thailand, 2014-15.

**Dylan Ward** (Ph.D.: May 2010) Arrived CU in Fall 2004, M.Sc. from Virginia Tech Spring 2004. Glacial sculpting of granite-cored mountain ranges. Postdoc, University of New Mexico Fall 2010. Associate professor, University of Cincinnati.

**Kali Abel** (M.Sc., April 2012) Arrived CU Fall 2009, B.Sc. from Bates College 2007. Currently environmental consultant in Portland Oregon.

**Andy Wickert** (Ph.D.: April 2014) Arrived CU Fall 2008, B.Sc. from MIT Spring 2008. Impact of Pleistocene glaciation and its geophysical effects on North American river systems. Postdoc in Potsdam Germany 2014-15. Assistant professor, U. Minnesota Fall 2015.

**Leif Anderson** (Ph.D.: November 2014) Arrived CU Fall 2007, B.Sc. from Montana State 2007. Glacier response to climate change: modeling the effects of weather and debris-cover. Postdoc in Iceland and at Simon Fraser, Canada; 2018 postdoc with Dirk Scherler, GFZ, Potsdam.

**Katy Barnhart** (Ph.D.: May 2015) Arrived Fall 2008; Masters CU with Kevin Mahan 2010. Postdoc with Annenburg School for the Science of Science Communication, U. Pennsylvania. Postdoctoral researcher with Greg Tucker, CU, on Landlab project, started October 2016.

**Melissa Foster** (Ph.D.: January 2016) Arrived Fall 2010; Masters Humboldt State 2010. Bureau of Reclamation, Lakewood Office, started May 2016.

**Eric Winchell** (Ph.D.: May 2017) Arrived Fall 2012; B.Sc., UC Berkeley. Understanding the geomorphic imprint of the northern pocket gopher on the subalpine zone of the Colorado Front Range. Modeling specialist, Navy environmental branch, San Diego, started Fall 2018.

**William Armstrong** (Ph.D.: May 2017) Arrived Fall 2012; B.Sc., Boston College. Glacier sliding from space: multi-scale remote sensing, geodesy, and numerical modeling to understand glacier mechanics. Assistant professor, Appalachian State Geology department, started Fall 2017.

**Rachel Glade** (Ph.D.: April 2019) Arrived Fall 2014; B.Sc., U. Penn. Hillslope Evolution in Block-Controlled Landscapes. Postdoctoral researcher, Los Alamos National Lab, starting Summer 2019. Assistant Professor at Rochester starting fall 2021.

**Kelly Kochanski** (Ph.D.: April 2020) Arrived Fall 2015; B.Sc., MIT (shared advising with Greg Tucker). Evolution of Snow Bedforms. Researcher at small data-intensive startup in Boulder as of summer 2020.

#### **current graduate students (2 Ph.D.)**

**Aaron Hurst**, Ph.D. (arrived Fall 2016, B.Sc., Vanderbilt)

#### **current postdoctoral fellows**

**Matt Rossi** (2016-) (shared advising with Greg Tucker and Suzanne Anderson as part of Earth Lab)  
Ph.D. Arizona State.

### undergraduate student theses (23) recent examples:

**Selena Neale**, Pinedale glaciation of Longs Peak and Glacier Gorge, Rocky Mountain National Park, October 2016. Cum laude.

**Brett Oliver**, Utilizing Remote and Numerical Methods to Provide Constraints for the Seasonal Development and Topographic Profiles of Rock Glaciers, May 2017. Summa cum laude.

**Clea Bertholet**, Snow bedform growth as a function of wind speed and snow age, May 2017. Cum laude.

**Garret Hachman**, May 2017. (reading committee member; thesis directed by Suzanne Anderson)

**Dylan Lanka**, May 2018. (reading committee member; thesis directed by Suzanne Anderson)

## publications

### 1978

1. Wobus, R.A., and Anderson, R.S. (1978), Petrology of the precambrian intrusive center at Lake George, Southern Front Range, Colorado. *Journal of Research, USGS* 6: 81-94.

### 1981

2. Hallet, B. and Anderson, R.S. (1981) Detailed glacial geomorphology of a proglacial bedrock area at Castleguard Glacier, Alberta, Canada. *Zeitschrift fur Gletscherkunde und Glazialgeologie* 16: 171-184.

### 1982

3. Anderson, R.S., Hallet, B., Aubry, B., and Walder, J. (1982), Observations in a cavity beneath the Grinnell Glacier, Montana. *Earth Surface Processes and Landforms* 7: 63-70.

### 1986

4. Anderson, R.S. and Hallet, B. (1986), Sediment transport by wind: Toward a general model. *Geological Society of America Bulletin* 97: 523-535.
5. Anderson, R.S. (1986), Erosion profiles due to particles entrained by wind: Application of an eolian sediment transport model. *Geological Society of America Bulletin* 97: 1270-1278.
6. Werner, B.T., Haff, P.K., Livi, R.P., and Anderson, R.S. (1986), The measurement of eolian ripple cross-sectional shapes. *Geology* 14: 743-745.

### 1987

7. Anderson, R.S. (1987), Eolian sediment transport as a stochastic process: The effects of a fluctuating wind on particle trajectories. *Journal of Geology* 95: 497-512.
8. Anderson, R.S. (1987), A theoretical model for aeolian impact ripples. *Sedimentology* 34: 943-956.

### 1988

9. Anderson, R.S. (1988), The pattern of grainfall deposition in the lee of aeolian dunes. *Sedimentology* 35: 175-188.
10. Sharp, M., Lawson, W., and Anderson, R.S. (1988) Tectonic processes in a surge-type glacier -- an analogue for the emplacement of thrust sheets by gravity tectonics. *Journal of Structural Geology* 10: 499-515.
11. Anderson, R.S. and Haff, P.K. (1988), Simulation of eolian saltation. *Science* 241: 820-823.

### 1989

12. Anderson, R.S. and Humphrey, N.F. (1989) Interaction of weathering and transport processes in the evolution of arid landscapes in Cross, T., editor, *Quantitative Dynamic Stratigraphy*, Prentice-Hall, p.349-361.

### 1990

13. Anderson, R.S. and Weber, G.E. (1990), Marine terrace deformation pattern: Its implications for repeat times of Loma Prieta earthquakes and for the long term evolution of the Santa Cruz Mountains in D.

- Schwartz and D. Ponti, eds., Fieldguide to neotectonics of the San Andreas Fault system, Santa Cruz Mountains, in light of the 1989 Loma Prieta Earthquake. *USGS Open file report 90-274*, p.6-14.
14. Anderson, S.P., and Anderson, R.S. (1990), Debris-flow benches: Dune-contact deposits record paleo-sand dune positions, north Panamint Valley, Inyo County, California. *Geology* 18: 524-527.
  15. Anderson, R.S., Orange, D.L., and Schwartz, S.Y. (1990), Implications of the October 17th 1989 Loma Prieta earthquake for the emergence of marine terraces along the Santa Cruz coast, and for long term evolution of the Santa Cruz Mountains in R.E. Garrison, et al., editors, *Geology and tectonics of coastal California, San Francisco to Monterey*. (Volume and Guidebook) Pacific Section AAPG, Bakersfield, California, p.205-224.
  16. Anderson, R.S. (1990), Evolution of the northern Santa Cruz Mountains by advection of crust past a San Andreas Fault bend. *Science* 249: 397-401.
  17. Schwartz, S.Y., Orange, D.L. and Anderson, R.S. (1990), Complex fault interactions in a restraining bend on the San Andreas Fault, southern Santa Cruz Mountains, California. *Geophysical Research Letters* 17: 1207-1210.
  18. Anderson, R.S. (1990), Saltation of sand: A qualitative review with biological analogy. *Proceedings of the Royal Society of Edinburgh* 96B: 149-165.

### 1991

19. Anderson, R.S. (1991), Eolian ripples as examples of self-organization in geomorphological systems. *Earth- Science Reviews* 29: 77-96.
20. Anderson, R.S., Sorenson, M.L. and Willetts, B.B. (1991), A review of recent progress in the understanding of aeolian sediment transport. *Acta Mechanica* Supplement 1: 1-20.
21. Anderson, R.S. and Haff, P.K. (1991), Wind modification and bed response during saltation of sand in air. *Acta Mechanica* Supplement 1: 21-51.

### 1992

22. Griggs, G.B., Marshall, J.S., Rosenbloom, N.A. and Anderson, R.S. (1992), Ground cracking in the Santa Cruz Mountains in Loma Prieta Earthquake: Engineering Geologic Perspectives, J. Baldwin and N. Sitar, eds. *Association of Engineering Geologists Special Publication*. 1: 25-42.
23. McDonald, R.R. and Anderson, R.S. (1992), The morphology and dynamics of natural and laboratory grain flows. ASCE, *Engineering Mechanics, proceedings of the ninth conference*. p.748-751.

### 1993

24. Haff, P.K. and Anderson, R.S. (1993), Grain-scale simulations of loose sedimentary beds: The example of grain-bed impacts in aeolian saltation *Sedimentology* 40: 175-189.
25. Anderson, R. S. and Bunas, K. L. (1993), The mechanics of aeolian ripple sorting and stratigraphy as visualized through a cellular automaton model. *Nature* 365: 740-743.

### 1994

26. Orange, D.L., Anderson, R.S. and Breen, N. (1994), Regular submarine canyon spacing in the submarine environment: the link between hydrology and geomorphology. *GSA Today* 4: 29 & 36-39.
27. Anderson, R.S. and Menking, K.M. (1994), The Quaternary marine terraces of Santa Cruz, California: Evidence for coseismic uplift on two faults, *Geological Society of America Bulletin* 106: 649-664.
28. Rosenbloom, N.A. and Anderson, R.S. (1994), Evolution of the marine terraced landscape, Santa Cruz, California. *JGR* 99: 14,013-14,030.
29. Anderson, R.S. (1994), Evolution of the Santa Cruz mountains, California, through tectonic growth and geomorphic decay. *JGR* 99: 20,161-20,179.

### 1995

30. McDonald, R.R. and Anderson, R.S. (1995), Experimental verification of aeolian saltation and lee side deposition models *Sedimentology* 42: 39-56.
31. Marshall, J. S. and Anderson, R.S. (1995), Quaternary uplift and seismic cycle deformation, Peninsula de Nicoya, Pacific Coast, Costa Rica. *Geological Society of America Bulletin* 107: 463-473.

32. Small, E. E. and Anderson, R.S. (1995), Geomorphically driven late Cenozoic rock uplift in the Sierra Nevada, California. *Science* 270: 277-280.

### 1996

33. Anderson, R.S., Repka, J.L. and Dick, G.S. (1996), Dating depositional surfaces using in situ produced cosmogenic radionuclides. *Geology* 24: 47-51.
34. Burbank, D.W., Leland, J., Fielding, E., Anderson, R.S., Brozovic, N., and Reid, M., E., and Duncan, C. (1996), Bedrock incision, uplift, and threshold hillslopes in the northwest Himalaya. *Nature* 379: 505-510.
35. Anderson, R.S. and Hallet, B. (1996), Simulating magnetic susceptibility profiles in loess as an aid in quantifying rates of dust deposition and pedogenic development. *Quaternary Research* 45: 1-16.
36. McDonald, R.R. and Anderson, R.S. (1996), Constraints on eolian grain flow dynamics through laboratory experiments on sand slopes. *Journal of Sedimentary Research* 66: 642-653.

### 1997

37. Dick, G.S., Anderson, R.S., and Sampson, D. (1997), Controls on flash flood magnitude and hydrograph shape, Upper Blue Hills badlands, Utah: Application of an acoustic sensor for stream gauging. *Geology* 25: 45-48.
38. Densmore, A.L., Anderson, R.S., McAdoo, B. and Ellis, M.E. (1997), Hillslope evolution by bedrock landslides. *Science* 275: 369-372.
39. Abbott, L.D., Silver, E.A., Anderson, R.S., Smith, R., Ingle, J.C., Kling, S.A., Haig, D., Small, E., Galewsky, J., and Sliter, W. (1997), Measurement of tectonic surface uplift rate in a young collisional mountain belt. *Nature* 385: 501-507.
40. Densmore, A.L. and Anderson, R.S., (1997), Recent tectonic geomorphology of the Ash Hill fault, Panamint Valley, California. *Basin Research* 9: 53-63.
41. Haeussler, P. and Anderson, R.S., The Twin Peaks "fault" -- not a tectonic or seismogenic structure. (1997), *USGS Professional Paper 1574, Geologic Studies in Alaska by USGS, 1995.* pp 93-100.
42. Small, E.E., Anderson, R.S., Finkel, R. and Repka, J. (1997), Erosion rates of summit flats using cosmogenic radionuclides. *Earth and Planetary Science Letters* 150: 413-425.
44. Repka, J.L., Anderson, R.S., and Finkel, R.C. (1997), Cosmogenic dating of fluvial terraces, Fremont River, Utah. *Earth and Planetary Science Letters* 152: 59-73.

### 1998

45. Small, E. E. and Anderson, R.S. (1998), Pleistocene relief production in Laramide Mountain Ranges, western U.S. *Geology* 26: 123-126.
46. Densmore, A.L., Ellis, M.E. and Anderson, R.S. (1998), A numerical model of landscape evolution by bedrock landslides *Journal of Geophysical Research* 103: 15-203-15,220.
47. Zhu, R., Coe, R.S., Guo, B., Anderson, R.S. and Zhao, X. (1998), Inconsistent paleomagnetic recording of the Blake Event in Chinese loess related to sedimentary environment. *Geophysical Journal International* 134: 867-875.
48. Hancock, G. S., Anderson, R.S. and Whipple, K. X (1998), Bedrock erosion by streams: Beyond stream power. *Rivers over Rock*, Tinkler, K. and E. Wohl, eds., pp. 35-60.
49. Anderson, R.S. (1998) Near-surface thermal profiles in alpine bedrock: Implications for the frost-weathering of rock. *Arctic and Alpine Research* 30: 362-372.
50. Small, E. E. and Anderson, R.S. (1998) Pleistocene relief production in Laramide Mountain Ranges, western U.S. (reply to comment by J. Schaffer) *Geology* 26: 123-126.

### 1999

51. Small, E. E., Anderson, R.S., Hancock, G. S., and Finkel, R. C. (1999), Estimates of regolith production from  $^{10}\text{Be}$  and  $^{26}\text{Al}$ : Evidence for steady state alpine hillslopes *Geomorphology* 27: 131-150.
52. Hancock, G.S., Anderson, R.S., Chadwick, O. A., and Finkel, R. C. (1999), Dating fluvial terraces with  $^{10}\text{Be}$  and  $^{26}\text{Al}$  profiles, Wind River, Wyoming. *Geomorphology* 27: 41-60.



53. Anderson, R. S., Densmore, A. L. and Ellis, M. A., (1999) Marine terrace generation and degradation *Basin Research* 11: 7-20.
54. Ellis, M. E., Densmore, A. L., and Anderson, R. S. (1999), Development of mountainous topography in the Basin Ranges, USA. *Basin Research* 11: 21-42.
55. Anderson, S. P., Howard, K. M., Anderson, R. S. and Humphrey, N. F. (1999), Physical and chemical characterization of a spring flood event: evidence for the storage of water. *J. Glaciology* 45 (150): 177-189.

## 2000

56. Whipple, K. X, Hancock, G. S. and Anderson, R. S. (2000), River incision into bedrock: Mechanics and the relative efficacy of plucking, abrasion, and cavitation. *GSA Bulletin*.112: 490-503.
57. Anderson, R. S. and Ito, E. (2000), A vision for Geomorphology and Quaternary Science Beyond 2000. *GSA Today* 10, 14-16.
58. Ganguli, P., Mason, R. P., Abu-saba, K. E., Anderson, R. S. and Flegal, R. Mercury speciation in mine drainage from the New Idria Quicksilver Mine, California. *Environmental Science and Technology*.
59. MacGregor, K. R., Anderson, R. S., Anderson, S. P., and Waddington, E. D. (2000), Numerical simulations of glacial-valley longitudinal profile evolution. *Geology* 28: 1031.
60. Burbank, D. W. and Anderson, R. S. (2000) **Tectonic Geomorphology**. Blackwell Science, 274 pp.
61. Anderson, R. S. (2000), A model of ablation-dominated medial moraines and the generation of debris-mantled glacier snouts. *J. Glaciology* 46 (154): 459-469.

## 2001

62. Jaeger, J., B. Hallet, T. Pavlis, J. Sauber, D. Lawson, J. Milliman, R. Powell, S. P. Anderson and R. S. Anderson (2001), Orogenic and glacial research in pristine Alaska. *Eos* 82: 213-216.
63. Perg, L. A., Anderson, R. S., and Finkel, R. C. (2001), Young ages of the Santa Cruz marine terraces determined using  $^{10}\text{Be}$  and  $^{26}\text{Al}$ . *Geology* v. 29 (10): 879 – 882

## 2002

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