

## **G. ROBERT BRAKENRIDGE**

Director, Dartmouth Flood Observatory  
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### **EDUCATION**

Ph.D. 1982, University of Arizona, Tucson, Geosciences  
M. S. 1979, University of Arizona, Tucson, Geosciences  
B.S. 1975, Beloit College, Environmental Geology  
Postdoctoral Research, 1982 (DAAD Award Recipient), University of Düsseldorf, West Germany

### **PROFESSIONAL EXPERIENCE**

2010-Present Senior Research Scientist, University of Colorado  
1987-2011 Assistant, Associate, Full Research Professor, Dartmouth College, Dept. of Geography;  
Adjunct Professor, Dept. of Earth Sciences  
1991-1992 JPL/California Institute of Technology Visiting Senior Scientist and Geology Program  
Manager, Solid Earth Sciences, NASA Headquarters, Washington, D.C.  
1983-1987 Assistant Professor, Dept. Geology, Wright State University

### **RECENT PROFESSIONAL ACTIVITIES**

Director, Dartmouth Flood Observatory, 1993-present.  
Co-convenor, with N. Villars and T. De Groeve, “Second International Workshop on Global Flood Monitoring & Modeling”, 19-21 March 2012, Delft, the Netherlands.  
Science Working Group, NASA LANCE (Land Atmosphere Near-real time Capability for EOS), 2011-present.  
Federal Science Advisory Panel, then Science Working Group, NASA Land Processes Distributed Active Archive, 2003-present.  
Co-convenor, with T. De Groeve, International Workshop on Global Flood Monitoring and Forecasting, Ispra, Italy, 22 – 24 March 2011.  
Co-Chair, with T. De Groeve, session on Disaster Early Warning, 33rd International Symposium on Remote Sensing of the Environment, Stresa, Italy, May 5, 2009.  
Director, NATO Science for Peace Project, 2003-2007, “Monitoring of Extreme Flood Events in Romania and Hungary using Earth Observation Data”.  
Consultant, The World Bank, Agriculture and Rural Development Department. “Innovative Approaches for Flood Risk Management in Agriculture”.  
Ph.D. Dissertation Committee Member, “Resolving accelerated compaction rates in world deltas using Interferometric SAR”, Stephanie Higgins, Dept. of Geological Sciences, University of Colorado, in progress, 2011  
M.S. Thesis Committee, “Factors affecting inundation and flow hydrology in a high latitude glaciated landscape”, Heather Carlos, Dept. of Earth Sciences, Dartmouth College, 2008.

Ph.D. Dissertation Committee, "Evaluating the potential for measuring river discharge from space", David Bjerklie, University of New Hampshire, Dept. of Earth Sciences, 2002-2004.  
External Examiner, M. Soc.Sci. :Application of GIS and remote sensing in flood management: A case study of West Bengal, India", Sanyal Joy, National University of Singapore, 2004.

## RECENT MEDIA AND EDUCATIONAL OUTREACH

*New York Times*, map published, January 5, 2011, "Flooded Areas, December 28-January 4, Australia"  
*Chicago Tribune*, map published, January 5, 2011, "Underwater Down Under"  
*New American Museum of Natural History*, *NCEP Teaching Modules and online journal*, Images and maps of Mekong Delta flooding, 2010, Network of Conservation Educators and Practitioners.  
*New York Times*, August 26, 2010, "Assessing the damage as flooding in Pakistan moves south"  
*Earth and Sky*, "A Clear Voice for Science", 08-18-2008, Is flooding increasing around the world?  
EarthSky talks with Bob Brakenridge, founder of the Dartmouth Flood Observatory, about mapping global flooding in this 8-minute \*Clear Voices for Science\* podcast.  
*New York Times*, September 8, 2005, "Regaining ground", maps of flooding from Katrina.  
*Science Daily*, September 13, 2005, "Dartmouth Flood Observatory Tracks The Aftermath Of Katrina"  
"Researchers with the Dartmouth Flood Observatory at Dartmouth College have been working with state and federal officials, along with representatives from NGOs, to help map and analyze the flooding that has occurred as a result of Hurricane Katrina.  
*Scientific American*, October 13, 2000, "Satellites help find flood victims". New composite surface images from the MODIS instrument on board the NASA satellite Terra are proving themselves a huge help to researchers monitoring the current flooding in Southeast Asia.

## RECENT INVITED TALKS

Global Flood Mapping and Measurement. *Deltares Noon Seminars*, Delft, the Netherlands. Nov. 9, 2011.  
Core-collapse supernovae and the Younger Dryas/terminal Rancholabrean extinctions, *INSTAAR Noon Seminars*, University of Colorado, Boulder, CO, Sept. 12, 2011.  
Measuring River Discharge (AMSR-E) and Mapping Surface Water Change (MODIS) In Near Real Time, *International Workshop on Global Flood Monitoring and Forecasting*, European Commission Joint Research Center, Ispra, Italy, March 22, 2011  
Arctic river discharge and ice-cover using AMSR-E, *Cryospheric and Polar Processes Seminar*, National Snow and Ice Data Center, Boulder, Colorado, February 4, 2011.  
Space-based Management of Surface Water, *The World Bank*, World Water Week, Washington DC, Flood Management Session, February 17, 2009.  
Satellite-based flood detection, mapping, and river monitoring in near real time, NASA Earth Science delegate, *India-United States Bilateral Conference on Space Science, Applications, and Commerce*", Bangalore, India, June 21-25, 2004.

## AWARDS

Certificate of Appreciation, for "valuable contribution and outstanding support to the Instrument Incubator Program and the NASA Earth Science Technology Office", NASA, 2010  
Group Achievement Award, "outstanding achievement in the development of an operational Earth Observing Sensorweb, integrating space and ground sensors", NASA Administrator, 2007.

## SERVICE

Peer Reviewer, NSF, NASA, and other national and international grant proposals: geology, hydrology, remote sensing, including many review panels, 1984-present.

Performance/promotion reviews (academic tenure, or advancement to senior scientist), 2008-present.  
Peer Reviewer for GSA Bulletin, Geology, Jour. of Geophys. Res., Geophys. Res. Letters, Water Resources Res., Quaternary Res., Nature, Geomorphology, Geoarchaeology, Jour. of Hydrometeorology, Remote sensing of Environment, Physical Geography, Hydrological Sciences, Journal of Geophysics-Planets, International Journal of Remote Sensing, and other journals and book manuscripts, 1984-present.  
Fellow, Geological Society of America; Member, American Geophysical Union, Association of American Geographers

## PUBLICATIONS

(\* denotes 1-3 page abstract and lecture or poster; other entries are peer-reviewed articles, book chapters, or technical reports)

- Winsemius, H.C., Brakenridge, G. R., Westerhoff, R. Huizinga, J., Villars, N. and Bishop, C., 2012, Flood mapping by combining the strengths of optical and active radar remote sensing, *European Geophysical Union Annual Meeting 2012*, Vienna\*.
- Cohen, S., Brakenridge, G.R., Kettner, A.J., Syvitski, J.P.M., Fekete, B.M., 2012, and De Groeve, T., 2012., Calibration of orbital microwave measurements of river discharge using a global hydrology model. AGU Chapman Conference, “Remote Sensing of the Terrestrial Water Cycle”, Kona, Hawaii, USA, 19 –22 February 2012.\*
- Cohen, S., Brakenridge, G.R., Kettner, A.J., Syvitski, J.P.M., Fekete, B.M., 2012, in prep., Calibration of orbital microwave measurements of river discharge using a global hydrology model.
- Kundzewicz, Z. Pinskiwar, I., Brakenridge, G.R., 2012, in review, Large floods in Europe on the rise. *Hydrological Sciences*.
- Brakenridge; G.R., Syvitski, J.P.M., Overeem, I., Stewart-Moore, J.A., Kettner, A.J., 2012, in review, Global mapping of storm surges, 2002-present and the assessment of delta vulnerability. *Natural Hazards*.
- Syvitski, J.P.M. and Brakenridge, G.R., 2011, in review, Causation and avoidance of catastrophic flooding along the Indus River, Pakistan. *Nature Geoscience*.
- Hirpa, F.A., Hopson, T., De Groeve, T., Brakenridge, G. R., and Restrepo. P.J., 2012, in review. Upstream satellite-derived flow signals for river discharge prediction downstream: application to major rivers in South Asia. *Remote Sensing of the Environment*.
- Syvitski, J.P.M., Brakenridge, G. R, Hannon, M., 2012, in review, Floods, floodplains, deltaplains - a satellite imaging approach. *Sedimentary Geology*.
- Pinskiwar, I., Kundzewicz, Z. W., Peduzzi, P., Brakenridge, G.R., Stahl, K., Hannaford, J., 2012, in press. Changing floods in Europe. In: Kundzewicz, Z. W. (ed.) Changes in Flood Risk in Europe, Special Publication No. 10, IAHS Press, Wallingford, Oxfordshire, UK.
- Chorzynski, A., Pinskiwar, I., Kron, W., Brakenridge, R., Kundzewicz, Z. W., 2012, in press. Catalogue of large floods in Europe in the 20th century. In: Kundzewicz, Z. W. (ed.) Changes in Flood Risk in Europe, Special Publication No. 10, IAHS Press, Wallingford, Oxfordshire, UK.
- Khan, S.I., Vergara, H.J., Hong, Y., Gourley, J.J., Brakenridge, G. R., De Groeve, T., Flamig, Z.L., and Policelli, F., 2012, in press. Satellite data for hydrologic model calibration and prediction in ungauged basins. *Geophysical Research Letters*.
- Hopson, T.M., De Groeve, T.D., Brakenridge, G. R., Gebremichael, M. and Restrepo, P.J., 2011, Upstream Satellite-derived flow signals for river discharge prediction, *Fall Meeting, American Geophysical Union*, San Francisco\*
- Syvitski, J.P.M., Kettner, A.J., Brakenridge, G. R., 2011, Global overview on delivery of sediment to the coast from tropical river basins, *Fall Meeting, American Geophysical Union*, San Francisco\*

- Kettner, A. and Brakenridge, G.R., 2011, Estimating time series of fluvial suspended sediment by applying remote sensing techniques. *European Geophysical Union Annual Meeting 2011*, Vienna\*
- Brakenridge, G.R., 2011, Core-collapse supernovae and the Younger Dryas/terminal Rancholabrean extinctions, *Icarus*, doi:10.1016/j.icarus.2011.06.043.
- Brakenridge, G.R., Kettner, A.J., Syvitski, J., Policelli, F., De Groeve, T., and Nghiem, S., 2011, Predicting and managing the effects of extreme floods using orbital remote sensing. Extended abstract and talk: *IEEE International Geoscience and Remote Sensing Symposium*, Vancouver, Canada, August 1-5, 2011.
- Khan, S. I., Y. Hong, J. Wang, K. K. Yilmaz, J. J. Gourley, R. F. Adler, G. R. Brakenridge, F. Policelli, S. Habib, and D. Irwin, 2011: Satellite remote sensing and hydrological modeling for flood inundation mapping in Lake Victoria Basin: Implications for hydrologic prediction in ungauged basins. *IEEE Transactions on Geoscience and Remote Sensing*, 49, 85-95, doi: 10.1109/TGRS.2010.2057513.
- Brakenridge, G.R., Kettner, A.J., Overeem, I., Nghiem, S.V., De Groeve, T., Syvitski, J.P., 2010, Effects of Fluvial Morphology on Remote Sensing Measurements of Discharge. Abstract and Talk, *American Geophysical Union Fall Meeting*, San Francisco Abstract H41K-02, 13-17 December\*.
- Syvitski, J. P.M., Brakenridge, G. R., and Kettner, A. J., 2010, Divergent Flow of Water and Sediment in Lowland Coastal Settings. 18<sup>th</sup> International Sedimentological Congress, Mendoza Argentina\*
- Adhikari, P., Y. Hong, K. R. Douglas, D. Kirschbaum, J. J. Gourley, R. F. Adler, and G.R. Brakenridge, 2010: A digitized global flood inventory (1998-2008): Compilation and preliminary results. *J. Natural Hazards*, 55, 405-422, doi:10.1007/s11069-010-9537-2.
- Syvitski, J.P.M., Brakenridge, G.R., Kettner, A. J. and Overeem, I., 2010, Storm surge flooding of deltas made susceptible by human activities. Storm Surges Congress (LOICZ), Hamburg, Germany\*
- Kugler, Z., Brakenridge, R., and De Groeve, T., 2010, Microwave satellite data to quantify effects of global climate change on arctic rivers, *Proc. SPIE 7825*, 782508 (2010); doi:10.1117/12.866021.
- Khan, S., Hong, Y., Wang, J., Yilmaz, K., Gourley, J. J., Policelli, F., Habib, S., and Irwin, D., 2009, Satellite Remote Sensing and Hydrological Modeling for Flood Inundation Mapping in Lake Victoria Basin: Implications for Hydrologic Prediction in Ungauged Basins. *American Geophysical Union Fall Meeting, San Francisco\**.
- ISDR, 2009, Global Assessment Report on Disaster Risk Reduction, “*Risk and Poverty in a Changing Climate*”, United Nations, Geneva, Switzerland, International Strategy for Disaster Reduction, also online at: [www.preventionweb.net/gar09](http://www.preventionweb.net/gar09) (co-contributor, see pages 31-36.)
- Syvitski, J.P.M., Kettner, A.J., Hannon, M.T., Hutton, E.W.H., Overeem, I., Brakenridge, G.R., Day, J., Vorosmarty, C., Saito, Y., Giosan, L., and Nicholls R.J., 2009, Sinking Deltas. *Nature Geoscience*, v.2, 681-686.
- Lotsch, A., Dick, W., Manuamorn, O.P., 2009, Assessment of Innovative Approaches for Flood Risk Management and Financing in Agriculture. Commodity Risk Management Group Agriculture and Rural Development Department, The World Bank Group, 124 p. Background paper by Brakenridge was incorporated into this report.
- Brakenridge, G.R., Nghiem, S.V., Anderson, E., and Mic, R., 2007, Orbital Microwave Measurement of River Discharge and Ice Status. *Water Resources Research*, v.43, W0405, doi:10.1029/2006WR005238, 16p.
- Caquard, S., and G. R. Brakenridge, 2007: Floods. Glimpses of a Changing World: *Views of Planet Earth from Space*, M. D. King, C. L. Parkinson, K. C. Partington, and R. G. Williams, Eds., Cambridge University Press, 84-87.
- Kugler, Z., De Groeve, T., G. R. Brakenridge, T. Benoist, 2007, Towards Near-real Time Global Flood Detection System, The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, *10th Intl. Symposium on Physical Measurements and Signatures in Remote Sensing*, ISPMRS'07, Davos.

- DeGroeve, T., Kugler, Z, and Brakenridge, G. R., 2007, Near real time flood alerting for the global disaster alert and coordination system. In *Proceedings of the 4th International ISCRAM Conference* (B. Van de Walle, P. Burghardt, and C. Nieuwenhuis, eds., Delft, the Netherlands).
- Brakenridge, G.R., Anderson, E., and Nghiem, S.V., 2006, Orbital remote sensing of river ice, Siberia and Alaska. *Geological Society of America Annual Meeting*, Philadelphia, Pennsylvania.\*
- Brakenridge, G.R., and Anderson, E., 2006, MODIS-based flood detection, mapping, and measurement: the potential for operational hydrological applications. In: *Transboundary Floods: Reducing the Risks Through Flood Management*, Springer-Verlag, Netherlands, J. Marsalek et al, Eds, 16p.
- Brakenridge, G.R., Anderson, E., MODIS-based flood detection, mapping, and measurement: the potential for operational hydrological applications. In: *Flood Risk Management: Hazards, Vulnerability, Mitigation Measures, Proc. of NATO Advanced Research Workshop*, Ostrov u Tise, Czech Republic, Oct. 6-10 (2004), Springer-Verlag\*.
- Ip, F., Dohm, J.M., Baker V.R., Brakenridge, R., Davies, A.G. and Chien, S., Autonomous Flood Sensorweb: Multi-Sensor Rapid Response and Early Flood Detection. *Proceedings of the 3rd Biennial meeting of the International Environmental Modelling and Software Society*, Burlington, Vermont, July 9-13, 2006, 4 p.
- Brakenridge, G.R., Nghiem, S.V., Anderson, E., and Chien, S., 2005, Space-based measurement of river runoff. *EOS, Transactions of the American Geophysical Union*, v. 86, no. 19, p. 185-188.
- Brakenridge, G. R., Nghiem, S.V., Anderson, E. and Caquard, S., 2004, Optical and radar remote sensing measurements of the extreme flood of 2003, Indus River, Pakistan and NW India. American Geophysical Union, Spring Meeting 2004, abstract #U21A-01\*.
- Brakenridge, G.R. and Nghiem, S.V. 2004. Satellite-based flood detection, mapping, and river monitoring in near real time. *Natural Hazards and Disaster Management Support Symposium*, India-United States Conference on Space Science, Applications, and Commerce, Bangalore, India, p. 150.
- Nghiem, S. V., E. G. Njoku, G. R. Brakenridge, Y. Kim, and G. Neumann, Land surface water cycles observed with satellite sensors, *Joint 19th Conference on Hydrology and 16th Conference on Climate Variability and Change, 85th Amer. Meteor. Soc. Annual Meeting*, San Diego, CA, 9-13 Jan. 2004.\*
- Chien, S., and others, 2004. Using automated planning for sensorweb response. *International Workshop on Automated Planning and Scheduling for Space*, 8p. in press.
- Caquard, S, and Brakenridge, G.R., 2004. Large floods on the Kenyan Side of Lake Victoria. Report and large-scale map for the *Associated Programme on Flood Management, UN-World Meteorological Organization*, Geneva.7p.
- Caquard S., Brakenridge G. R. and Anderson E., 2004, Change in Extreme Floods since 1985: A Global Perspective. *100th AAG Annual Meeting*, Philadelphia, PA, Mar. 14-19, 2004\*.
- Mertes, L.A.K., Dekker, A.G., Brakenridge, G.R., Birkett, C.M., Le Toueneau. G. 2004. Rivers and Lakes, in “*Manual of Remote Sensing, vol. 5, Natural Resources and Environment*”, Susan Ustin, editor and Andy Rencz, general editor, John Wiley and Sons, NY, (2004) p. 345-400.
- Brakenridge R., Caquard S., Anderson E, The role of flood remote sensing in flood hazard assessment. *99th AAG Annual Meeting*, New Orleans, LA, March 5-8, 2003\*
- Dohm, J.M, Chien, S., Brakenridge, G., Baker, V. and 13 other co-authors, 2003. Streamlining spacecraft observation response to flood detection with a ground and space-based sensor web system. *Transactions of the American Geophysical Union*, Fall Meeting, San Francisco\*
- Nghiem, S. V., Barber, D. G., Brakenridge, G. R., Leshkevich, G. A., Markus, T., Neumann, G., Njoku, E. G., Perovich, D. K., Steffen, K., Sturm, M., van Woert, M. L. 2003, Surface water applications of satellite scatterometry, *Transactions of the American Geophysical Union*, Fall Meeting, San Francisco, abstract #H21H-07\*.
- Caquard S., Brakenridge R. and Anderson E., 2003, Interannual Variability, Seasonality & Global Patterning of River Floods since 1985, *Paper presented at the Global Water System Project - Open Science Conference*, Portsmouth, NH, Oct. 07-09, 2003.\*

- Caquard, S. and Brakenridge, G.R., 2003, Mapping the limits of information: A prototype for diffusing large flood events data on the internet. *Proceedings of the 6<sup>th</sup> AGILE*, April 24-26, Lyon, France. 4p.
- Nghiem, S.V., Barber, D.G., Brakenridge, G.R., and 8 co-authors. 2003. Surface water applications of satellite scatterometry. *Transactions of the American Geophysical Union*, Fall Meeting, San Francisco,\*
- Brakenridge, G.R., Anderson, E., and Carlos, H., 2002, Satellite gaging reaches: a technique for streamflow measurements from space. *Geological Society of America Annual Meeting, Denver, Abstracts with Program\**
- Brakenridge, G.R., Anderson, E., Nghiem, S.V., Caquard, S., and Shabaneh, T., 2002. Flood warnings, flood disaster assessments, and flood hazard reduction: the roles of orbital remote sensing. *Proceedings of the 30<sup>th</sup> International Symposium on Remote Sensing of the Environment*, Honolulu, Hawaii, November 10-14, 4 p
- Brakenridge R., Caquard S., Anderson E., and Carlos H., Potential Uses of space-base flood mapping for disaster management in Asia and the Pacific, *UN Regional Workshop on Space Technology*, Bangkok, Thailand, Nov. 11-15, 2002\*
- Brakenridge, G. R., H. A. Carlos, S. V. Nghiem, and E. Anderson, 2002, QuikSCAT/SeaWinds monitoring of large seasonal wetlands, *American Geophysical Union Fall Meeting*, San Francisco\*.
- Mertes, L.A.K. and Brakenridge, G.R., 2002, Remote discharge measurements and connectivity mapping for rivers and floodplains. *Report for CUAHSI, Science-based Infrastructure for the Hydrologic Sciences*.
- Brakenridge, G.R., Carlos, H., and Anderson, E., 2003. Satellite gaging reaches: a strategy for MODIS-based river monitoring. *9<sup>th</sup> International Symposium on Remote Sensing*, International Society for Optical Engineering (SPIE), Crete, Greece, and Proceedings of SPIE, Vol. 4886, p. 479-485.
- Brakenridge, G.R., 2001, MODIS capabilities for flood remote sensing. *EOS Investigators Working Group (IWG) meeting, Ft Lauderdale, Florida\**
- Brakenridge, G.R., Anderson, E., and Finnegan, D.C., 2001, Floodplain geomorphology, flood magnitudes, and flood remote sensing. *Geological Society of America Annual Meeting, Boston, Abstracts with Program\**
- Finnegan, G. R., Brakenridge, G.R., Anderson, E., and Stender, A., 2000, Measuring Floods from Space: Constraints and Opportunities. *Association of American Geographers National Meeting Abstracts\**
- Finnegan, D.C., Gomez, B. and Brakenridge, G.R., 2000, Measuring Flood Inundation Limits from Space. *American Geophysical Union Abstracts\**
- Brakenridge, G.R., 1999, River flooding and Global Climate Change: A Multisensor Approach, in *"Earth Science Enterprise Reference Handbook"*, R. Greenstone, Ed., EOS Project Science Office, Code 900, NASA/Goddard Space Flight Center, Greenbelt, Maryland, p. 163-165.
- Brakenridge, G.R., 1998. Flood remote sensing in the 21st century. *Proceedings of International Workshop on the utilization of remote sensing technology to natural disaster reduction*, Japan-United States Science and Technology Agreement (JUST). Oct 26-28, 1998, Tskuba, Japan, p. 236-238
- Brakenridge, G. R, Tracy, B. T., and Knox, J. C., 1998, Orbital remote sensing of a river flood wave. *International Journal of Remote Sensing*, v. 19, p. 1439-1445.
- Brakenridge G. R, 1998, Supernovae and the Younger Dryas: the Case for Terrestrial Environmental Effects at 11,000 yr B.P. from Vela X. *IGCP 384 Annual Meeting, Budapest.*
- Mertes, L.A.K., Brakenridge, G. R., Hirschboeck, K.K., Prestegaard, K., and Warner, W. S., 1996, River flooding and global environmental change: a multi-sensor approach. *American Geophysical Union, Union Session O4, Recent Developments in Natural Hazards Research and Technology\**

- Brakenridge, G.R., Tracy, B.T., Bryant, E. and Knox, J.C., 1996, Orbital SAR observation of extreme floods. *Proceedings of the 11<sup>th</sup> Thematic Conference, Geologic Remote Sensing, ERIM*, Las Vegas, Nevada, p. I-297.\*
- Brakenridge, G. R., and Karnes, Daniel, 1996, The Dartmouth Flood Observatory: an electronic research tool and electronic archive for investigations of extreme flood events. *Geological Society of America Annual Meeting, Geoscience Information Society Proceedings*.
- Brakenridge, G. R., 1996, Relative age determination from 1:1.5 million geological mapping, Sapas Mons FMAP, Venus. *26th Lunar and Planetary Science Conference, Houston\**.
- Brakenridge, G. R. and Oswald, W., 1995, Geomorphological framework for satellite radar-based imaging of storm runoff, northeastern Syria. *GERTEC Symposium (Geomorphic Response of Mediterranean and Arid Areas to Climate Change)*, Jerusalem, Israel, 14-21 May 1995\*.
- Brakenridge, G. R., Tracy, B. T., Knox, J. C., and Magilligan, F. J., 1994. ERS-1 remote sensing of floodwater surface profiles. *Abstract, 25th Binghamton Geomorphology Symposium\**
- Brakenridge, G. R., Knox, J. C., Magilligan, F. J., and Paylor, E., 1994. Radar remote sensing aids study of the Great Flood of 1993. *EOS, Transactions of the American Geophysical Union*, 75(45), p. 521.
- Brakenridge, G. R., 1994, Orbital Remote Sensing of the 1993 Mississippi Valley Flood. *Geological Society of America Annual Meeting\**
- Brakenridge, G. R., 1994, A Mars Pathfinder landing on a recently drained ephemeral sea: Cerberus Plains, 6° north, 188° west. *NASA/LPI Pathfinder Landing Site Selection Workshop\**
- Brakenridge, G. R., 1993, Ancient Martian valley genesis and paleoclimatic inference: the present as a key to the past. *NASA/LPI Workshop on Early Mars: How Warm and How Wet?* (July 26-28, 1993).\*
- Brakenridge, G. R., 1993, Modern shelf ice, equatorial Aeolis Quadrangle, Mars. *Abstracts of the 24th Lunar and Planetary Science Conference, Houston, Texas\**.
- Brakenridge, G. R., 1992, Geology and Global Change. *Geotimes*, June, p. 5.
- Wyckoff, D.G., Carter, B.J., Dort, W., Brakenridge, G.R., Martin, L., Theler, J.L., and Todd, L.C., 1991, Northwestern Oklahoma's Burnham Site: glimpses beyond Clovis. *Current Research in the Pleistocene*.
- Brakenridge, G.R., 1990, The origin of fluvial valleys and early geological evolution, Aeolis Quadrangle, Mars: *Journal of Geophysical Research*, v. 95, p. 17289-17308.
- Brakenridge, G.R., 1990, Quaternary geomorphology of northwestern Oklahoma County: implications for geoarchaeology. In: "A survey of archaeological resources and an evaluation of buried site potential in northwestern Oklahoma County, Oklahoma" (J. L. Hofman and R.P. Drass, Eds.), *Oklahoma Archaeological Survey Report No. 36*, p. 45-57.
- Brakenridge, G. R., Hofman, J.L., Carter, B.J., and Drass, R.R., 1989, Quaternary geomorphology of northwestern Oklahoma County: implications for soil geography and geoarchaeology: *Annual Meeting Program and Abstracts, Association of American Geographers*, p. 22. \*
- Brakenridge, G.R., Thomas, P.A., Conkey, L.E, and Schiferle, J., 1988, Fluvial sedimentation in response to postglacial uplift and environmental change, Missisquoi river, Vermont: *Quaternary Research*, v. 30, p. 190-203.
- Brakenridge, G. R., 1988, Floodplain stratigraphy and flood regime, in "Flood Geomorphology" (V.R Baker, C. Kochel, and P.C. Patton, Eds.). John Wiley and Sons, New York.
- Brakenridge, G.R., 1988, Origin of fluvial valleys and early geological history, Aeolis Quadrangle, Mars: *Geological Society of America Abstracts with Program*, v. 20, no. 7, p. A-76\*.
- Schumm, S.A., and Brakenridge, G.R., 1988, The river response, in "North America and Adjacent Oceans During The Last Deglaciation" (W.F. Ruddiman and H.E. Wright, Eds.). *Geological Society of America Centennial Special Volume K-3*, Boulder, Colorado.
- Brakenridge, G.R., 1988, Origin and implications of the terminal Rancholabrean-age Lower Domebo Member, western Oklahoma: *American Quaternary Association, Abstracts of the Tenth Biennial Meeting, University of Massachusetts, Amherst*, p. 110.

- Mills, H.H., Brakenridge, G.R., Jacobson, R.B., Newell, W.L., Pavich, M.J., and Pomeroy, J.S., 1987, Appalachian mountains and plateaus, in "Geomorphic Systems of North America" (W. L. Graf, Ed.). *Geol. Soc. of Amer. Centennial Special Volume 2*, Boulder, Colorado, p. 5-50.
- Brakenridge, G.R., and Williams, D.D., 1987, Valley genesis in relation to volcanism, tectonism, and impact cratering, Aeolis Quadrangle, Mars: *Geological Society of America Abstracts with Program*, v. 19, no. 7, p. 598.\*
- Brakenridge, G.R., 1987, Intercrater plains deposits and the origin of Martian valleys: In *MEVTV Workshop on the Nature and Composition of Surface Units on Mars*, Lunar and Planetary Institute Technical Report 88-05, Houston, p. 31-32. \*
- Brakenridge, G.R., and Schuster, J., 1986, Quaternary geology and geomorphology in relation to archeological site locations, southern Arizona: *Journal of Arid Environments*, v. 10, p. 225-239.
- Brakenridge, G.R., 1986, Small valley networks and the past and present distribution of subsurface volatiles, Aeolis Quadrangle, Mars: *17th Lunar and Planetary Science, Part 1*, p. 82-83\*.
- Brakenridge, G.R., Thomas, P.A., Schiferle, J.C., and Conkey, L.E., 1986, Floodplain sedimentation, postglacial uplift, and environmental change, Missisquoi River, Vermont: *American Quaternary Association, Abstracts of the Ninth Biennial Meeting*.\*
- Schuster, J. H. and Brakenridge, G. R., 1986, Late Quaternary geology and geomorphology along the Phase B corridor. Chapter 2, in "A class III archaeological survey of the phase B corridor, Tucson Aqueduct, Central Arizona Project", (Downum, C.E., Rankin, A.G., and Czaplicki, J.S., Eds.), Cultural Resources Management Division, Arizona State Museum., Archaeological Series 168, p. 12-28.
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