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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)		Geology Dept, Geographical Institute University of Düsseldorf, West Germany

PROFESSIONAL EXPERIENCE

1992-Present	Research Associate Professor, Dartmouth College Dept. of Geography; Adjunct Associate Professor, Dept. of Earth Sciences
1991-1992	JPL/Caltech Visiting Senior Scientist and Geology Program Manager, Solid Earth Sciences, NASA Headquarters, Washington, D.C.
1987-1990	Research Assistant Professor, Dartmouth College
1983-1987	Assistant Professor, Wright State University, Dept. of Geological Sciences

RECENT PROFESSIONAL ACTIVITIES

Director, Dartmouth Flood Observatory, 1995-present.

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

Federal Science Advisory Panel/Science Working Group, Land Processes Distributed Active Archive, 2003-present.

Director, NATO Science for Peace Project, 2003-2007, “Monitoring of Extreme Flood Events in Romania and Hungary using Earth Observation Data”.

Consultant, World Bank, Agriculture and Rural Development Department. Prepared report entitled: “Innovative Approaches for Flood Risk Management in Agriculture”.

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.

Media Interview examples: 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* pod

Invited Speaker examples: World Water Week, World Bank, Washington DC , “Space-based Management of Surface Water”, Flood Management Session, February 17, 2009, video available online at: <http://info.worldbank.org/etools/BSPAN/PresentationView.asp?PID=2386&EID=1075>; India-United States Conference on Space Science, Applications, and Commerce”, Bangalore, India, June 21-25, 2004; Regional Workshop on the Use of Space Technology for Disaster Management for Europe, Poiana Brasov, Romania, United Nations Office for Outer Space Affairs, 2003; Remote Sensing of Environmental Change, Implications for Diplomacy-A Roundtable Discussion, Office of the Under Secretary for Global Affairs, U.S. Department of State, December 15, 2000.

Group Achievement Award, “for outstanding achievement in the development of an operational 24/7 autonomous Earth Observing Sensorweb, integrating multiple space and ground sensors, NASA Administrator, 2007.

Peer Reviewer, NSF, NASA, and other grant proposals (geology, hydrology, and remote sensing, including many review panels), 1984-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

RECENT PUBLICATIONS (* denotes 1-3 page abstract; others are articles or book chapters)

Khan, S., Hong, Y., Wang, J., Yilmaz, K., Gourley, J. J., Policelli, F., Habid, S., and Irwin, D., submitted, 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, 2009*.

ISDR, 2009, Global Assessment Report on Disaster Risk Reduction, “Risk and Poverty in a Changing Climate”, United Nations, Geneva, Switzerland (also online at: www.preventionweb.net/gar09/co-contributor, see especially 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., in press, Sinking Deltas. *Nature Geoscience*.

Brakenridge, G.R., Nghiem, S.V., Anderson, E., and Mic, R., 2007, Orbital Microwave Measurement of River Discharge and Ice Status. Water Resources Research, v43, 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. Benoit: 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, ISPMSRS'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, May, 2007).

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.

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. 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*.
- 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*
- 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 6th AGILE, April 24-26, Lyon, France. 4p.
- 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, 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 30th 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 CUAHSL. 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. 9th International Symposium on Remote Sensing, International Society for Optical Engineering (SPIE), Crete, Greece, and Proceedings of SPIE, Vol. 4886, p. 479-485.
- And 65 other journal articles, book chapters, and meeting proceedings and abstracts (lead author of research articles in: *Journal of Geophysical Research*, *International Journal of Remote Sensing*, *Geology*, *Geological Society of America Bulletin*, *Icarus*, *Nature*, *Quaternary Research*, *Geologische Jahrbuch*, and *Journal of Arid Environments*)