

## **List of Kentucky Geological Survey and UK Department of Earth and Environmental Sciences Activities Related to the Seismic Hazard Assessment at PGDP**

### **Presentations**

Cobb, J, and Z. Wang, Kentucky Seismic Hazard Mapping Issues, the USGS national seismic hazard maps, the CEUS workshop, May 9-10, 2006, Cambridge, MA.

Wang, Z., 2006, Understanding Seismic Hazard and Risk Assessments: An Example in the New Madrid Seismic Zone of the Central United States, the 8<sup>th</sup> National Conference on Earthquake Engineering/the Seismological Society of America annual meeting, April 18-22, 2006, San Francisco, CA.

Wang, Z., 2006, Seismic Safety Regulations in Western Kentucky: The Role of Geology in Public Policy, GAS-Southeastern Section-55th Annual Meeting, March 23-24, 2006, Nashville, TN

Wang, Z., 2006, "Seismic Hazard and Risk in Kentucky", Kentucky Geotechnical Engineering Group, Frankfort, Kentucky, January 10, 2006.

Wang, Z., 2005, Role of the Kentucky Geological Survey in Implementing IBC-2000 and IRC-2000 in Kentucky: Better Communication of Seismic Hazard and Risk, **AGU 2005 Fall Meeting**, San Francisco, CA., December 5-9, 2005 (invited),

Wang, Z., 2005, A Clear Definition of Seismic Hazard and Risk: A Basis for Hazard and Risk Assessment, Communication, and Management, **AGU 2005 Fall Meeting**, San Francisco, CA., December 5-9, 2005.

Anderson, C., Z. Wang, and E. Woolery, Observed Seismicity in the Jackson Purchase Region of Western Kentucky between January 2003 and June 2005, **The 77th Annual Meeting of the Eastern Section of the Seismological Society of America**, Memphis, Tennessee, October 3-4, 2005.

Wang, Z., 2005, Seismic Hazard and Risk Assessment and Communication in the Central and Eastern United States, **The 77th Annual Meeting of the Eastern Section of the Seismological Society of America**, Memphis, Tennessee, October 3-4, 2005.

Wang, Z., E.W. Woolery, D. Yuan, and L. Wang, 2005, Comparison between the Active Faults in the New Madrid Seismic Zone of the Central United States and Gansu Province in Northwestern China, **the 77th Annual Meeting of the Eastern Section of the Seismological Society of America**, Memphis, Tennessee, October 3-4, 2005.

Wang, Z., E.W. Woolery, B. Shi., and J.D. Kiefer, 2004, IBC and IRC 2000 and Seismic Hazard Assessment in the Central United States: An Example of Miscommunication between the Policy-Makers and Seismologists, **the 76th Annual Meeting of the Eastern Section of the Seismological Society of America**, Blacksburg, Virginia, October 31-November 2, 2004.

Wang, Z., E.W. Woolery, B. Shi, and J. D. Kiefer, 2004, Some Issues with Probabilistic Seismic Hazard Analysis in the Central and Eastern United States, **the 2004 Seismological Society of America**, Palm Spring, California, April 14-16, 2004.

Wang, Z., E.W. Woolery, B. Shi, and J. D. Kiefer, 2004, What is the Maximum Considered Earthquake Ground Motion (MCE)?, **the 2004 EERI Annual Meeting**, February 4-7, 2004, Los Angeles, CA.

### **Reports and Expanded Abstracts**

Shi, B., Z. Wang, E. W. Woolery, 2006, Source Scaling, Sub event Distributions, and Ground-Motion Simulation in the Composite Source Model, Kentucky Geological Survey Bulletin (in press).

Wang, Z., E.W. Woolery, 2005, Progress Report on Seismic Hazard Assessment at Paducah Gaseous Diffusion Plant (submitted in October 2005).

Wang, Z. (compiler), 2005, Better Understanding and Communication of the National Seismic Hazard Maps: Summary of USGS-KGS Meeting on Seismic Hazard Assessment in Western Kentucky, Kentucky Geological Survey, ser. 12, **Special Publication 7**, 47p.

Wang, Z., E.W. Woolery, B. Shi, and J.D. Kiefer, 2004, Seismic Hazard Assessments and Issues in the Midcontinent of the Central United States of America, **Proceedings of the 3<sup>rd</sup> International Conference on Continental Earthquakes, July 12-14, 2004**, Beijing, China.

## **Publications**

- Wang, Z., 2006, Probabilistic Seismic Hazard Analysis, Problems and Improvement (submitted to EOS).
- Wang, Z., 2006, Understanding Seismic Hazard and Risk Assessments: An Example in the New Madrid Seismic Zone of the Central United States, Proceedings of the 8<sup>th</sup> National Conference on Earthquake Engineering, April 18-22, 2006, San Francisco, CA (in press).
- Wang, Z., 2006, Seismic Hazard and Risk Assessment in the Intraplate Environment: The New Madrid Seismic Zone of the Central United States, *GSA Book, Continental Intraplate Earthquakes: Science, Hazard, and Policy Issues* (in press).
- Wang, Z., and E.W. Woolery, 2006, Recordings from the Deepest Borehole in the New Madrid Seismic Zone, *Seismological Research Letters*, **77**: 131-136.
- Wang, Z., 2005, Comment on J.U. Klügel's: Problems in the Application of the SSHAC Probability Method for Assessing Earthquake Hazards at Swiss Nuclear Power Plants, in Engineering Geology, vol. 78, pp. 285-307, *Engineering Geology*, **82**: 86-88.
- Wang, Z., 2005, Reply to "Comment on 'Comparison between probabilistic seismic hazard analysis and flood frequency analysis' by Zhenming Wang and Lindell Ormsbee" by R. M. W. Musson, *EOS, Trans., AGU*, **86**: 354.
- Wang, Z., 2005, Reply to "Comment on 'Comparison between probabilistic seismic hazard analysis and flood frequency analysis' by Zhenming Wang and Lindell Ormsbee" by Thomas L Holzer, *EOS, Trans., AGU*, **86**: 303.
- Wang, Z., B. Shi, and J. Kiefer, 2005, Comment on "How Can Seismic Hazard around the New Madrid Seismic Zone Be Similar to that in California?" by Arthur Frankel, *Seismological Research Letters*, **76**: 472-477.
- Wang, Z. and L. Ormsbee, 2005, Comparison between probabilistic seismic hazard analysis and flood frequency analysis, *EOS, Trans., AGU*, **86**: 45, 51-52.