

Printed: August 19, 2003

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## SELECTED PUBLICATIONS:

- Antsyferov, M. S., N. G. Antsyferova, and Y. Y. Kagan, 1964. Propagation of ultrasonic waves in dry sand under pressure, *Bull. Acad. Sci. USSR, Geophys. Ser.*, 1774-1781, (English translation).
- Kagan, Y. Y., 1968. Location of the sources of seismoacoustic pulses, *Izv. Acad. Sci. USSR, Phys. Solid Earth*, 321-325, (English translation).
- Kagan, Y. Y., 1969. A study of energy of seismoacoustic pulses arising during bursts in a coal bed, *Izv. Acad. Sci. USSR, Phys. Solid Earth*, 85-91, (English translation).
- Анцыферов, М. С., Н. Г. Анцыферова, Я. Я. Каган, 1971. Сейсмоакустические исследования и проблема прогноза динамических явлений (Antsyferov, M. S., N. G. Antsyferova, and Y. Y. Kagan, 1971. *Seismoacoustical studies and the problem of prediction of dynamic events*), Nauka, Moscow, pp. 136, (in Russian).
- Kagan, Y. Y., 1973. A probabilistic description of the seismic regime, *Izv. Acad. Sci. USSR, Phys. Solid Earth*, 213-219, (English translation).
- Kagan, Y. Y., 1973. Statistical methods in the study of the seismic process (with discussion: comments by M. S. Bartlett, A. G. Hawkes, and J. W. Tukey), *Bull. Int. Statist. Inst.*, **45(3)**, 437-453.
- Kagan, Y., and L. Knopoff, 1976. Statistical search for non-random features of the seismicity of strong earthquakes, *Phys. Earth Planet. Inter.*, **12**, 291-318.
- Kagan, Y. Y., and L. Knopoff, 1980. Spatial distribution of earthquakes: The two-point correlation function, *Geophys. J. Roy. astr. Soc.*, **62**, 303-320.
- Kagan, Y. Y., and L. Knopoff, 1981. Stochastic synthesis of earthquake catalogs, *J. Geophys. Res.*, **86**, 2853-2862.
- Kagan, Y. Y., 1982. Stochastic model of earthquake fault geometry, *Geophys. J. Roy. astr. Soc.*, **71**, 659-691.
- Kagan, Y. Y., and L. Knopoff, 1987. Statistical short-term earthquake prediction, *Science*, **236**, 1563-1567.
- Kagan, Y. Y., 1991. Seismic moment distribution, *Geophys. J. Int.*, **106**, 123-134.

- Kagan, Y. Y., and D. D. Jackson, 1991. Seismic gap hypothesis: Ten years after, *J. Geophys. Res.*, **96**, 21,419-21,431.
- Kagan, Y. Y., and D. D. Jackson, 1994. Long-term probabilistic forecasting of earthquakes, *J. Geophys. Res.*, **99**, 13,685-13,700.
- Kagan, Y. Y., 1994. Observational evidence for earthquakes as a nonlinear dynamic process, *Physica D*, **77**, 160-192.
- Kagan, Y. Y., and D. Vere-Jones, 1996. Problems in the modelling and statistical analysis of earthquakes (Joe M. Gani's Festschrift), in: *Lecture Notes in Statistics (Athens Conference on Applied Probability and Time Series Analysis)*, **114**, C. C. Heyde, Yu. V. Prohorov, R. Pyke, and S. T. Rachev, eds., New York, Springer, pp. 398-425.
- Geller, R. J., D. D. Jackson, Y. Y. Kagan, and F. Mulargia, 1997. Earthquakes cannot be predicted, *Science*, **275**, 1616-1617.
- Kagan, Y. Y., 1997. Are earthquakes predictable?, *Geophys. J. Int.*, **131**, 505-525.
- Kagan, Y. Y., 1999. Universality of the seismic moment-frequency relation, *Pure Appl. Geoph.*, **155**, 537-573.
- Kagan, Y. Y., and D. D. Jackson, 2000. Probabilistic forecasting of earthquakes, *Geophys. J. Int.*, **143**, 438-453.
- Kagan, Y. Y., and F. Schoenberg, 2001. Estimation of the upper cut-off parameter for the tapered Pareto distribution, (David Vere-Jones' Festschrift), *J. Appl. Probab.*, **38A**, 158-175.
- Kagan, Y. Y., 2002. Seismic moment distribution revisited: I. Statistical results, *Geophys. J. Int.*, **148**, 520-541.
- Kagan, Y. Y., 2002. Aftershock zone scaling, *Bull. Seismol. Soc. Amer.*, **92**(2), 641-655.
- Kagan, Y. Y., 2002. Seismic moment distribution revisited: II. Moment conservation principle, *Geophys. J. Int.*, **149**, 731-754.
- Bird, P., Kagan, Y. Y., and Jackson, D. D., 2002. Plate tectonics and earthquake potential of spreading ridges and oceanic transform faults, in: *Plate Boundary Zones, AGU Geodynamis Series Monograph Volume 30*, eds. S. Stein and J. T. Freymueller, 203-218 (doi: 10/1029/030GD12).
- Kagan, Y. Y., 2002. Modern California earthquake catalogs and their com-

- parison, *Seism. Res. Lett.*, **73**(6), 921-929.
- Kagan, Y. Y., 2003. Accuracy of modern global earthquake catalogs, *Phys. Earth Planet. Inter.*, **135**(2-3), 173-209.
- Rong, Y.-F., D. D. Jackson and Y. Y. Kagan, 2003. Seismic gaps and earthquakes, *J. Geophys. Res.*, accepted.