Seismology Texts


1963   Bullen, K.E., *An Introduction to the Theory of Seismology* (3rd edition, 1st in 1947). For many years this was the best quantitative seismology book but now rather outdated. It was revised by Bolt in 1985 (see below).

1980   Aki and Richards, *Quantitative Seismology Theory and Methods* (volumes 1 and 2). Probably still the best quantitative book, out of print but a revised volume is now available. Lots of material but unconventional in its order of topics.


1983   Kennett, B.L.N. *Seismic Wave Propagation in Stratified Media*. A mathematical treatment, largely focusing on the reflectivity method.


1998   Dahlen and Tromp, *Theoretical Global Seismology*. The normal mode seismologist's bible but not for the casual reader. A massive work that is surprisingly affordable in the paperback edition—only a little more than a penny per equation!


1999   Shearer, *Introduction to Seismology*. Need I say more?

2002 Kennett, *The Seismic Wavefield I: Interpretation of Seismograms on Regional and Global Scales*. Brian Kennett from ANU does a core dump in these two volumes. There is a lot of theoretical and observational material but it can be hard to follow.

2002 Aki and Richards, Quantitative Seismology. This is the second edition, now in a single volume. It includes some but not all of the material in the first edition.

2003 Wysession and Stein, *An Introduction to Seismology, Earthquakes, and Earth Structure*. A large book with a great deal of information at the introductory level, including plate tectonics and Fourier theory. Lots of figures, not very many equations.

2003 Pujol, *Elastic wave propagation and generation in seismology*. Another seismology book in the classical tradition, more rigorous than most but not as intimidating as Aki and Richards.