

Twenty years already?

*Atque inter silvas Academi quaere verum. [And seek for truth in the grove of
Academus.]*

— Horace, *Epistles* I. XXIX. 45

In March of 1974, the Stanford Exploration Project issued its first research report. Twenty years later, you hold report number 80 in your hands[†]. Even today, we continue to pursue many of the areas of investigation begun in SEP–1. Wave propagation in inhomogeneous media has moved from 2-D acoustic to 3-D elastic. Noah’s method for multiple removal has evolved from 1-D to 2-D and 3-D settings. Migration velocity analysis continues to play a central role. The effect of pore fluids on surface measurements, robust fitting and inversion methods, and imaging with refracted and overturned waves are all “hot” topics today. Plane-wave illumination and its later generalizations by Schultz and Claerbout reappear under the name “controlled illumination” as a tool for imaging and AVO. Even parallel computing made an appearance in SEP–2 with a finite-difference method that is currently being adapted to 3-D alternating direction implicit calculations. Today the project has about 20 students, staff, and visitors, and this report contains more than 40 papers. It is significant that the list of authors in this report numbers over 30, 50 percent more than the total number of SEP researchers. This figure reflects the group’s collaboration with those outside our immediate specialty and also underscores the high reputation SEP continues to maintain in the world of geophysics. One of the defining characteristics of the Stanford Exploration Project has been the freedom and flexibility afforded its graduate students. They are expected to take initiative and responsibility; indeed, students rely on each other for much of their practical training. SEP’s role is not just to do state-of-the-art research, but to produce graduates who are capable of distinguishing themselves in the world of business and government, leading the way in new and challenging environments. We take this opportunity to thank our sponsors and supporters, past, present and future, without whom SEP would not exist, survive, and prosper. As always, we do not intend to rest on our laurels but look forward to defining and pursuing areas of interest to our sponsors in the 90’s and beyond.

[†]or are viewing it from a CD-ROM!