Instrumentation and processing comparisons at ENEA

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A site is being prepared in a high-seismicity region of central Italy for field testing a collection of digital strong-motion recorders. Participating in the test are scientists from Italy, France, and Spain. Comparison of digital and analog recorders under field conditions continues, with a recording of a January 1991 aftershock of the Irpinia earthquake. One substantial result of tests such as these, carried out with perhaps more care and maintenance than in true field conditions, is an acceleration of the switch from analog to digital recording.

An increasing number of manufacturers are entering the sensor and recorder marketplace with exaggerated performance claims, or specifications inappropriate to strong-motion recording. This situation requires continued vigilance on the part of network personnel and testing labs. Piezoelectric sensors come to mind. Continued evaluation of noise levels, in the form of noise spectra, for example, is important.