BOOK REVIEW

Rio Grande Rift: Tectonics and Magmatism. Editor: Robert E. Riecker, American Geophysical Union, Washington, D.C., 438 pp, 1979.

The advent of plate tectonics has focused a great deal of attention on the identification and understanding of continental rifts. Among other major continental rift systems such as the East Africa rift, the Baikal rift or the Rhinegraben rift, the Rio Grande rift was the latest to be recognized as a true rift structure. The last of three consecutive symposia in the 1970's on this rift was held in Santa Fe, New Mexico, in October 1978. 53 of the 87 papers presented at this International Symposium were devoted to the Rio Grande rift and 26 specially selected contributions are included in the proceedings.

Two introductory papers cover the late Cenozoic crustal spreading in the Western United States, i.e. the regional framework and the evolution of the Rio Grande rift. The tectonics of Colorado, New Mexico, the Espanola Basin and the Chihuahuan tectonic belt in northern Mexico are discussed in the next five papers. Five contributions are dedicated to the crustal structure as derived from seismic refraction and reflection work, from surface-wave dispersion measurements and gravity data. Results from seismicity, magnetotelluric sounding, recent crustal movements and a postulated extensive magma body at midcrustal depths are presented in four papers. Three papers deal with the geothermal regime in the rift and surrounding areas. Volcanological aspects, rift magmatism, geochemistry and petrology are discussed in seven papers.

This special volume represents an excellent up-to-date summary of the present geological and geophysical knowledge of the Rio Grande rift. The very clear and well reproduced figures are a valuable data set for comparison with other rift systems. The comprehensive presentation and interpretation of the data presently available – all by competent authors – is an indispensable contribution to the better understanding of continental rifts, which can obviously not be explained by a single mechanism.

A detailed separate Guidebook to the Rio Grande Rift in New Mexico and Colorado has been published as Circular 163 of the New Mexico Bureau of Mines and Mineral resources.

J. ANSORGE, ETH Zürich

Corrigendum

Typo-graphical errors have been detected in the paper, 'The influence of the time change of static stability and wind shear on baroclinic waves', by Chung-Muh Tang. The factor $[2(2r-1)+1]$ in (46), (49), and (55) should be replaced by $[2(2r-1)]$. The factor $[(2(2r-1)+1)/2]$ in (50) and (51) should be replaced by $[2r-1]$. The factor $[2(2r-1)^2+1]$ in (52) should be replaced by $[2(2r-1)]$. The exponent for the value of $\tilde{S}$, -14 , should be replaced by -8 .