

Contents

SEPÚLVEDA, S. A., GIAMBIAGI, L. B., MOREIRAS, S. M., PINTO, L., TUNIK, M., HOKE, G. D. & FARIÁS, M.	1
Geodynamic processes in the Andes of Central Chile and Argentina: an introduction	
CHARRIER, R., RAMOS, V. A., TAPIA, F. & SAGRIPANTI, L. Tectono-stratigraphic evolution of the Andean Orogen between 31 and 37°S (Chile and Western Argentina)	13
GIAMBIAGI, L., TASSARA, A., MESCUA, J., TUNIK, M., ALVAREZ, P. P., GODOY, E., HOKE, G., PINTO, L., SPAGNOTTO, S., PORRAS, H., TAPIA, F., JARA, P., BECHIS, F., GARCÍA, V. H., SURIANO, J., MOREIRAS, S. M. & PAGANO, S. D. Evolution of shallow and deep structures along the Maipo–Tunuyán transect (33°40'S): from the Pacific coast to the Andean foreland	63
JARA, P., LIKERMAN, J., WINOCUR, D., GHIGLIONE, M. C., CRISTALLINI, E. O., PINTO, L. & CHARRIER, R. Role of basin width variation in tectonic inversion: insight from analogue modelling and implications for the tectonic inversion of the Abanico Basin, 32°–34°S, Central Andes	83
WINOCUR, D. A., LITVAK, V. D. & RAMOS, V. A. Magmatic and tectonic evolution of the Oligocene Valle del Cura basin, main Andes of Argentina and Chile: evidence for generalized extension	109
NAIPAUER, M., TUNIK, M., MARQUES, J. C., ROJAS VERA, E. A., VUJOVICH, G. I., PIMENTEL, M. M. & RAMOS, V. A. U–Pb detrital zircon ages of Upper Jurassic continental successions: implications for the provenance and absolute age of the Jurassic–Cretaceous boundary in the Neuquén Basin	131
GODOY, E. The north-western margin of the Neuquén Basin in the headwater region of the Maipo drainage, Chile	155
SÁNCHEZ, M., LINCE KLINGER, F., MARTINEZ, M. P., ALVAREZ, O., RUIZ, F., WEIDMANN, C. & FOLGUERA, A. Geophysical characterization of the upper crust in the transitional zone between the Pampean flat slab and the normal subduction segment to the south (32–34°S): Andes of the Frontal Cordillera to the Sierras Pampeanas	167
ALVAREZ, O., GIMENEZ, M. E., MARTINEZ, M. P., LINCE KLINGER, F. & BRAITENBERG, C. New insights into the Andean crustal structure between 32° and 34°S from GOCE satellite gravity data and EGM2008 model	183
SAGRIPANTI, L., AGUIRRE-URRETA, B., FOLGUERA, A. & RAMOS, V. A. The Neocomian of Chachahuén (Mendoza, Argentina): evidence of a broken foreland associated with the Payenia flat-slab	203
SURIANO, J., LIMARINO, C. O., TEDESCO, A. M. & ALONSO, M. S. Sedimentation model of piggyback basins: Cenozoic examples of San Juan Precordillera, Argentina	221
COSTA, C. H., AHUMADA, E. A., GARDINI, C. E., VÁZQUEZ, F. R. & DIEDERIX, H. Quaternary shortening at the orogenic front of the Central Andes of Argentina: the Las Peñas Thrust System	245
CORTÉS, J. M., TERRIZZANO, C. M., PASINI, M. M., YAMIN, M. G. & CASA, A. L. Quaternary tectonics along oblique deformation zones in the Central Andean retro-wedge between 31°30'S and 35°S	267
ZÁRATE, M. A., MEHL, A. & PERUCCA, L. Quaternary evolution of the Cordillera Frontal piedmont between c. 33° and 34°S Mendoza, Argentina	293
GARCÍA, V. H. & CASA, A. L. Quaternary tectonics and seismic potential of the Andean retrowedge at 33–34°S	311

MOREIRAS, S. M. & SEPÚLVEDA, S. A. Megalandslides in the Andes of central Chile and Argentina (32°–34°S) and potential hazards	329
HERMANN, R. L., FAUQUÉ, L. & WILSON, C. G. J. ³⁶ Cl terrestrial cosmogenic nuclide dating suggests Late Pleistocene to Early Holocene mass movements on the south face of Aconcagua mountain and in the Las Cuevas–Horcones valleys, Central Andes, Argentina	345
MOREIRAS, S. M. & PÁEZ, M. S. Historical damage and earthquake environmental effects related to shallow intraplate seismicity of central western Argentina	369
HOKE, G. D., GRABER, N. R., MESCUA, J. F., GIAMBIAGI, L. B., FITZGERALD, P. G. & METCALF, J. R. Near pure surface uplift of the Argentine Frontal Cordillera: insights from (U–Th)/He thermochronometry and geomorphic analysis	383
CARRETIER, S., TOLORZA, V., RODRÍGUEZ, M. P., PEPIN, E., AGUILAR, G., REGARD, V., MARTINOD, J., RIQUELME, R., BONNET, S., BRICHAU, S., HÉRAIL, G., PINTO, L., FARIAS, M., CHARRIER, R. & GUYOT, J. L. Erosion in the Chilean Andes between 27°S and 39°S: tectonic, climatic and geomorphic control	401
RODRÍGUEZ, M. P., AGUILAR, G., URRESTY, C. & CHARRIER, R. Neogene landscape evolution in the Andes of north-central Chile between 28 and 32°S: interplay between tectonic and erosional processes	419
Index	447