

REFERENCIAS

- Abt, D. L., Fischer, K. M., French, S.W., Ford, H. A., Yuan, H. & Romanowicz B., 2010. North American Lithospheric Discontinuity Structure Imaged By Ps and Sp Receiver Functions, *J. Geophys. Res.*, submitted.
- Aguillón-Robles, A., Calmus, T., Benoit, M., Bellon, H., Maury, R., Cotten, J., Bourgois, J., Michaud, F., 2001. Late Miocene adakites and Nb-enriched basalts from Vizcaino Peninsula, Mexico: indicators of East Pacific Rise subduction below southern Baja California?, *Geology*, 29, 531-534.
- Ammon, C.J., 1991. The isolation of receiver effects from teleseismic P waveforms, *Bull. Seis. Soc. Am.*, 81, 2504-2510.
- Angus, D. A., Wilson, D. C., Sandvol, E. & Ni, J. F., 2006. Lithospheric structure of the Arabian and Eurasian collision zone in eastern Turkey from S-wave receiver functions, *Geophys. J. Int.*, 166, 1335-1346.
- Atwater, T. M., 1970. Implications of plate tectonics for the Cenozoic tectonic evolution of western North America, *Geol. Soc. Amer. Bull.*, 81, 3513-3636.
- Atwater, T. & Stock, J., 1998. Pacific-North America plate tectonics of the Neogene Southwestern United States: An Update, *Int. Geology Rev.*, 40, 375-402.
- Benoit, M., Aguillón -Robles, A., Calmus, T., Maury, R., Bellon, H., Cotten, J., Bourgois, J., Michaud, F., 2002. Geochemical diversity of Late Miocene volcanism in southern Baja California, México: implication of mantle and crustal sources during the opening of an asthenospheric window, *J. Geol.*, 110, 627-648.
- Buck, W. R., 1991. Modes of continental lithospheric extension, *J. Geophys. Res.*, 96, 20 161-20 178.
- Calmus, T., Aguillón-Robles, A., Maury, R., Bellon, H., Benoit, M., Cotten, J., Bourgois, J. & Michaud, F., 2003. Spatial and temporal evolution of basalts and magnesian andesites ("bajaites") from Baja California, México: the role of slab melts, *Lithos.*, 66, 77-105.
- Clayton, R. W. et al., 2004. The NARS-Baja seismic array in the Gulf of California rift zone, *MARGINS Newslett.*, 13, 1-4.
- Clayton, R.W. & Wiggins, R. A., 1976. Source shape estimation and deconvolution of teleseismic bodywaves, *J. R. Astr. Soc.*, 47, 151-177.
- Conly, A., Brenan, J., Bellon, H. & Scott, S., 2005. Arc to rift transitional volcanism in the Santa Rosalía Region, Baja California Sur, Mexico, *J. Volcanol. Geotherm. Res.*, 142, 303-341.

Demant, A., 1975. Caracteres Químicos Principales del Vulcanismo Terciario y Cuaternario de Baja California Sur. Relaciones con la Evolución del Margen Continental Pacífico de México. *Revista Instituto Geología*, Universidad Nacional Autónoma de México, 75(1), 70-83.

DeMets, C. A., 1995. Reappraisal of seafloor spreading lineation in the Gulf of California: implications for the transfer of California to the Pacific plate and estimates of Pacific-North America motion, *Geophys. Res. Lett.*, 22, 3545-3548.

Dickinson, W. & Snyder, W., 1979. Geometry of subducted slabs related to San Andreas transform, *J. Geol.*, 87, 609-627.

Di Luccio, F. & Clayton, R. W., 2008. Seismic velocity in the Gulf of California from the analysis of Rayleigh wave group velocities, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract T11A-1849.

Faber, S. & Müller, G., 1980. Sp phases from the transition zone between the upper and lower mantle, *Bull. Seism. Soc. Am.*, 70, 487-508.

Farra, V. & Vinnik, L., 2000. Upper mantle stratification by P and S receiver functions, *Geophys. J. Int.*, 141, 699-712.

Fenby, S. S., & Gastil, R. G., 1991. A seism-tectonic map of the Gulf of California and surrounding areas, in Dauphin, J.P., and Simoneit, B. R., eds., *The Gulf and Peninsular Provinces of the Californias*, *American Association of Petroleum Geologists Memoir*, 47, 79-83.

Fischer, K. M., Ford, H. A., Abt, D. L. & Rychert, C. A., 2010. The lithosphere-Asthenosphere Boundary, *Annual Review of Earth and Planetary Sciences*, doi:10.1146/annurev-earth-040809-152438.

Fletcher, J. M., Grove, M., Kimbrough, D., Lovera, O. & Gehrels, G.E., 2007. Ridge-trench interactions and the Neogene tectonic evolution of the Magdalena shelf and southern Gulf of California: Insights from detrital zircon U-Pb ages from the Magdalena fan and adjacent areas: *Geolog. Soc. Am. Bull.*, 119, 1313-1336, doi:10.1130/B26067.1.

Fletcher, J. M. & Munguía, L., 2000. Active continental rifting in southern Baja California, México: Implications for plate motion partitioning and the transition to seafloor spreading in the Gulf of California, *Tectonics*, 19 (6), 1107-1123.

Gastil, R. G., 1981. Volcanic correlations across the Gulf of California, *National Geographic Society Research Reports*, 13, 231-234.

Gastil, G., Diamond, J., Knaack, C., Walawender, M., Marshall, M., Boyles, C. & Chandwick, B., 1990. The problem of the magnetite/ilmenite boundary in southern and Baja California, *Geolog. Soc. Am. Memoir*, 174, 19-32.

Gastil, R. G., Krummenacher, D. & Minch, J., 1979. The record of Cenozoic volcanism around the Gulf of California, *Geolog. Soc. Am. Bull.*, 90, 839-857.

Glazner, A.F., 2009. Drawing the curtain on slab windows in southwestern North America. *GSA*, 105th Annual Meeting, Session N° 4.

González-Fernández, A., Dañobeitia, J. J., Delgado-Argote, L. A., Michaud, F., Córdoba, D. & Bartolomé, R., 2005. Mode of extension and rifting history of upper Delfin basins, northern Gulf of California, *J. Geophys. Res.*, 110, B01313, doi:10.1029/2003JB002941.

Gripp, A. E. & Gordon, R. G., 2002. Young tracks of hotspots and current plate velocities. *Geophys. J. Int.* 150, 321-361.

Gurolla, H., Baker, G. E. & Minster, J. B., 1995. Simultaneous time domain deconvolution with application to the computation of receiver functions, *Geophys. J. Int.* 120, 537-543..

Havskov, J. & Ottemöller, L., 2010. *Routine data processing in earthquakes seismology with sample data, exercises and software*, Department of Earth Science, University of Bergen, Norway, 380 p..

Hausback, B. P., 1984. Cenozoic volcanism and tectonic evolution of Baja California Sur, Mexico. In: Frezell, V.A. (Ed.), *Geology of the Baja California Peninsula: Pacific Section, Soc. Eco. Pal. And Min.*, 39, 219-236.

Heit, B., Sodoudi, F., Yuan, X., Bianchi M. & Kind, R., 2007. An S receiver function analysis of the lithospheric structure in South America, *Geophys. Res. Lett.*, 34, L14307, doi:10.1029/2007GL030317.

Henry, C. D. & Aranda-Gomez, J. J., 2000. Plate interactions control middle-late Miocene, proto-Gulf and Basin and Range extension in the southern Basin and Range, *Tectonophysics*, 318, 1-26.

Kanasewich, E. R., 1973. *Time Sequence Analysis in Geophysics*, The University of Alberta Press., 364.

Karing, D. E. & Jensky, W., 1972. The protogulf of California, *Earth Planet Sci. Lett.*, 17, 169-174.

Klitgord, K. D., Mudie, J. D., Bischoff, J. L. & Henyey, T. L., 1974. Magnetic Anomalies in the Northern and Central Gulf of California, *Geolog. Soc. Am. Bull.*, 85, 815-820.

Kumar, P., 2005. The lithosphere-asthenosphere boundary in the North West Atlantic region. *Earth planet. Sci. Lett.*, 236, 249-257.

Kumar, P., Yuan, X., Kind, R. & Kosarev, G., 2005a. The lithosphere-asthenosphere boundary in the Tien Shan-Karakoram region from S receiver functions - evidence of continental subduction, *Geophys. Res. Lett.*, 32, L07305, doi:10.1029.

Kumar, P., Yuan, X., Kind, R. & Ni, J., 2005b. Imaging the collision of the Indian and Asian Continental lithospheres beneath Tibet, *J. Geophys. Res.*, 111, B06308, DOI:10.1029/2005JB003930.

Langston, C. A., 1979. Structure under Mount Rainer, Washington, inferred from teleseismic body waves, *J. Geophys. Res.*, 87, 6725-6750.

Larson, P. A., Mudie, J. D., & Larson, R. L., 1972. Magnetic anomalies and fracture zone trends in the Gulf of California, *Geol. Soc. Am. Bull.*, 83, 3361-3368.

Lewis, J. L., Day, S. M., Magistrale, H., Eakins, J. & Vernon, F., 2000. Regional crustal thickness variations of the Peninsular Ranges, southern California, *Geology*, 28(4), 303-306.

Li, X., Kind, R., Yuan, X., Wölbern, I. & Hanka, W., 2004. Rejuvenation of the lithosphere by the Hawaiian plume, *Nature*, 427, 827-829.

Ligorria, J. P. & Ammon, C. J., 1999. Iterative Deconvolution and Receiver Function Estimation, *Bull. Seism. Soc. Am.*, 89, 1395-1400.

Lonsdale, P., 1989. Geology and tectonic history of the Gulf of California, *Geol. Soc. Am. Bull.*, 499-522.

Lonsdale, P. 1991. Structural patterns of the Pacific floor offshore of peninsular California, in *The Gulf and Peninsular Province of the Californias*, edited by J.P. Dauphin and R. Simoneit, *AAPG Mem.*, 47, 87-125.

Lonsdale, P., 2005. Creation of the Cocos and Nazca plates by fission of the Farallon plate, *Tectonophysics*, 404, 237-264.

Mammerickx, J. & Klitgord, K. D., 1982. Northern East Pacific rise: evolution from 25 m. y. B. P. to the present. *J. Geophys. Res.* 87, 6751-6759.

Menard, H. W., 1978. Fragmentation of the Farallon plate by pivoting subduction, *J. Geol.*, 86, 99-110.

Michaud, F., Royer, J.-Y., Bourgeois, J., Dymant, J., Calmus, T., Bandy, W., Sosson, M., Mortera-Gutiérrez, C., Sichler, B., Rebolledo-Viera, M. & Pontoise, B., 2006. Oceanic ridge subduction vs. slab break off: plate tectonic evolution along the Baja California Sur continental margin since 15 Ma. *Geology*, 34, 13-16.

Mina-Uink, F. 1957. Bosquejo geológico del territorio sur de la Baja California. *Boletín de la Asociación Mexicana de Geólogos Petroleros*, 9, 139-270.

Moore, D. G., 1973. Plate-edge deformation and crustal growth, Gulf of California structural province, *Geol. Soc. Am. Bull.*, 84, 1883-1905.

Moore, D.G. & Buffington, E. C., 1968. Transform faulting and growth of the Gulf of California since the late Pliocene. *Science*, 161, 1238-1241.

Nagy, E. A. & Stock, J. M., 2000. Structural controls on the continent-ocean transition in northern Gulf of California, *J. Geophys. Res.*, 105(bB7), 16,251-16,269.

Nieto-Samaniego, A. F., Ferrari, L., Alaniz-Alvarez, S. A., Labarthe-Hernandez, G. & Rosas-Elguera, R., 1999. Variations of Cenozoic extension and volcanism across the southern Sierra Madre Occidental volcanic province, Mexico. *Geol. Soc. Am. Bull.*, 3,347-363.

Oskin, M., Rockwell, T., Miller, G., Guptil, P., Curtis, M., McArdle, S. & Elliot, P., 2000. Active parasitic folds on the Elysian Park anticline: Implications for seismic hazard in central Los Angeles, California, *Geolog. Soc. Am. Bull.*, 12, 693-707.

Oskin, M. & Stock, J., 2003. Miocene to Recent Pacific-North America plate motion and opening of the Upper Delfin Basin, northern Gulf of California, Mexico. *Geol. Soc. Amer. Bull.* 115, 1173-1190.

Owens, T. J., Zandt, G. & Taylor, S. R., 1984. Seismic evidence for an ancient rift beneath the Cumberland Plateau, Tennessee: A detailed analysis of broadband teleseismic P waveforms, *J. geophys. Res.*, 89(B9), 7783-7795.

Obrebski, M. J., 2007. Estudio de la anisotropía sísmica y su relación con la tectónica de Baja California, Tesis doctorado, CICESE, 245.

Pallares, C., Maury, R. C., Bellon, H., Royer, J.Y., Calmus, T., Aguillón-Robles, A., Cotten, J., Benoit, M., Michaud, F. & Bourgois, J., 2007. Slab-tearing following ridge-trench collision: evidence from Miocene volcanism in Baja California, México. *J. Volcanol. Geotherm. Res.* 161, 95-117. doi:10.1016/j.jvolgeores.2006.11.002.

Persaud, P., 2003. Images of early continental-breakup in and around the Gulf of California and the role of basal shear in producing wide plate boundaries, Ph.D. thesis, Calif. Inst. of Technol., Pasadena.

Persaud, P., Pérez-Campos, X. & Clayton R. W., 2007. Crustal thickness variations in the margins of the Gulf of California from receiver functions, *Geophys. J. Int.*, 170, 2, 687-699.

Romanowicz, B., 2009. The thickness of tectonic plates, *Science*, 324, 474-475.

Romo, J. M., García-Abdeslem, J., Gómez-Treviño, E., Esparza, F. & Flores-Luna, C., 2001. Resultados preliminares de un perfil geofísico a través de la región central de la península de Baja California, México, *GEOS*, 21, 96-107.

Rychert, A. C. & Shearer P. M., 2009. A Global View of the Lithosphere-Asthenosphere Boundary, *Science*, 324, 495-498.

Sawlan, M. G., & Smith, J. G., 1984. Petrologic characteristics age tectonic setting of Neogene volcanic rocks in northern Baja California Sur, Mexico. In: Frizzell Jr., V.A. (Ed.), *Geology of the Baja California Peninsula, Soc. Econ. Paleontol. Mineral., Pacific Section*, 237-251.

Seavey, J., Forsyth, D. W. & Rau, C. J., 2010. Seismic anisotropy beneath California: Constraints from Rayleigh wave tomography, AGU, Fall Meeting 2010, abstract N° DI13A-1841.

Seiler, C., Fletcher, J.M., Quigley, M.C., Gleadow, A.J.W. & Kohn, B. P., 2009. Neogene structural evolution of the Sierra San Felipe, Baja California: Evidence for proto-gulf transtension in the Gulf Extensional Province?, *Tectonophysics*, doi: 10.1016/j.tecto.2009.09.026.

Severinghaus, J. & Atwater, T.M., 1990. Cenozoic geometry and thermal state of the subducting slabs beneath North America. In: Wernicke, B.P. (Ed.), Basin and Range Extensional Tectonics Near the Latitude of Las Vegas, Nevada. *Geol. Soc. Amer. Memoir*, 176, 1-22.

Sheehan, A. F., Abers, G.A., Lerner-Lam A. L. & Jones C. H., 1995. Crustal thickness variations across the Rocky Mountain Front from teleseismic receiver functions, *J. Geophys. Res.*, 100, 20,391-20,404.

Sodoudi, F., 2005. Lithospheric structure of the Aegean obtained from P and S receiver functions, Tesis doctorado, GeoForschungs Zentrum Potsdam, Stiftung des öffentlichen rechts, 167.

Spencer J.E., & Normark, 1989. Neogene plate-tectonic evolution of the Baja California Sur continental margin and the southern Gulf of California, Mexico, en Winterer, E.L., Hussong, D.M., y Decker, R., (eds.), The eastern Pacific Ocean and Hawaii : Boulder, Colorado, The Geology of North America, *Geol. Soc. Amer. Bull*, 489-497.

Stock, J. M. & Hodges, K. V., 1989. Pre- Pliocene extension around the Gulf of California and the transfer of Baja California to the Pacific plate, *Tectonics*, 8, 99-115.

Stock, J.M., & Lee, J., 1994. Do microplates in subduction zones leave a geological record? *Tectonics* 13 (6), 1472-1487. *EOS*, 84, 4, 29-32.

Tarback, E. J. & Lutgens, F. K., 2005. Ciencias de la Tierra, 8° Edición, México, Prentice Hall, p. 736.

Trampert, J., Paulssen H., Van Wettum A., Ritsema J., Clayton R., Castro R., Rebollar C., Perez-

Van Benthem, S. A. C., Valenzuela, R. W., Obrebski, M., Castro, R. R., 2008. Measurements of upper mantle shear wave anisotropy from stations around the southern Gulf of California, *Geofísica Internacional*, 47(2), 127-144.

Vertti A., 2003. New array monitors seismic activity near the Gulf of California in Mexico, *EOS*, 84, 29-32.

Umhoefer, J. P., Dorsey, R. I. & Renne, P., 1994. Tectonics of the Pliocene Loreto Basin, Baja California Sur, México and evolution of the Gulf of California, *Geology*, 22, 649-652.

Umhoefer, P.J., Mayer, L. & Dorsey, R.J., 2002. Evolution of the margin of the Gulf of California near Loreto, Baja California Peninsula, Mexico. *Geol. Soc. Amer. Bull*, 114, 849-868.

Wittlinger, G., Farra, V. & Vergne,, J. 2004. Lithospheric and upper mantle stratifications beneath Tibet: New insights from Sp conversions, *Geophys. Res. Lett.*, 31, L19615.

Yuan, X., Kind, R., Li, X. & Wang, R., 2006. The S receiver functions: synthetics and data example, *Geophys. J. Int.*, 165(2), 555-564.

Zhang, X., Paulssen, H., Lebedev, S., & Meier, T., 2007. Surface wave tomography of the Gulf of California. *Geophys. Res. Lett.* 34 (L15305), doi 10.1029/2007GL030631.

Zhang, X., Paulssen, H., Lebedev, S. & Meier, T., 2009. 3D shear velocity structure beneath the Gulf of California from Rayleigh wave dispersion, *Earth Pl. Sci. Lett.*, 279, 255-262.

Zhu, L., & Kanamori, H., 2000. Moho depth variations in southern California from teleseismic receiver functions, *J. Geophys. Res.*, 105(B2), 2969-2980.

Páginas de internet consultadas:

<http://eqseis.geosc.psu.edu> , mayo 2011.

<http://eqseis.geosc.psu.edu/~cammon/HTML/RftnDocs/seq01.html>, mayo 2011.

<http://www.uwg.edu>, mayo 2011.

http://www.data.scec.org/NARS-Baja/nars_php/all_net_station_avail_year.php, mayo 2011.