

REFERENCES

Andersen, O. B. and Knudsen, P., 2001. Global marine gravity field from the ERS-1 and Geosat geodetic mission altimetry, *Journal of Geophysical Research*, Vol. 103 , No. C4 , p. 8129 (97JC02198); abstract available via <http://www.agu.org/pubs/abs/jc/97JC02198/97JC02198.html> (KMS anonymous ftp site at ftp.kms.dk cd incoming/GRAVITY)

Allmendinger, R., Jordan T. E., Kay S.M., and Isacks, B.L., 1997. The evolution of the Altiplano-Puna plateau of the central Andes. *Annu. Rev. Earth Planet. Sci.*, 25, pp. 137-174.

Araneda, M., M.S. Avendaño, H.-J. Götze, S. Schmidt, and J. Muñoz, 1999. *Carta Gravimétrica de Chile - Hoja Puerto Montt*. Servicio Nacional de Geología y Minería de Chile, Santiago. pp. 16. ISSN: 0717 – 2796

Araneda, M., M.S. Avendaño, H.-J. Götze, S. Schmidt, J. Muñoz and M. Schmitz, 1999. South central Andes gravity, new data base. *6th International Congress of the Brazilian Geophysical Society*. Abstract, 3 pages.

Araneda, M., M.S. Avendaño, H.-J. Götze, S. Schmidt, J. Muñoz and M. Schmitz, 1999a: Lithospheric structures in the Southern Andes, preliminary results (38 – 42° S). *ISAG extended abstracts*, 5 pages, Göttingen.

Araneda, M., M.S. Avendaño, S. Schmidt, H.-J. Götze and J. Muñoz, 1999b: Hoja Puerto Montt, Carta gravimétrica de Chile. SERNAGEOMIN de Chile, *Subdirección de Geología*, p. 18; Santiago. ISSN: 0717-2796.

Barazangi M. and Isacks B., 1976. Spatial distribution of earthquakes and subduction of the Nazca plate beneath South America. *Geology* 4, p.686-692.

Bangs, N.L. and Cande, S.C., 1997. The Episodic Development Of a Convergent Margin Inferred From Structures and Processes Along The Southern Chile Margin. *Tectonics, American Geophysical Union*, 489-502.

Blakely, R.J., 1996. *Potential Theory in Gravity and Magnetic Applications*. Cambridge University Press, Cambridge.

Bohm, M., Lüth S., Echtler H., Asch G., Bataille K., Bruhn C., Rietbrock A., Wigger P., 2002. The Southern Andes between 36° and 40°S latitude: seismicity and average seismic velocities. *Tectonophysics*, 356, 275-289.

Bohm, M., Asch, G., Rietbrock, A., ISSA working group, 2003. The southern Andes between 36° and 40° latitude: A 3-D image of the lithospheric structure inferred from local earthquake data. Extended Abstracts, *10th Chilean Geological Congress*, 6-10th October, Concepción, Chile, 5pp.

Bohm, M., 2004. 3-D Lokalbebentomographie der südlichen Anden zwischen 36° und 40°S. *Unpublished Dissertation*, Freie Universität Berlin, Germany.

Braitenberg, C., Ebbing, J., Götze, H.-J., 2002. Inverse modeling of elastic thickness by convolution method – the Eastern Alps as a case example. *Earth Planet. Sci.Lett.*, 202, pp.387-404.

Brasse, H. and Soyer, W., 2001. A magnetotelluric study in the Southern Chilean Andes. *Geophysical Research Letters*, 28, 3757-3760.

Breunig, M., Cremers, A.B., Götze, H.-J., Schmidt, S., Seidemann, R., Shumilov, S., Siehl, A., 1999. First Steps Towards an Interoperable 3D GIS - An Example From Southern Lower Saxony, Germany. *Physics and Chemistry of the Earth, Part A*, Vol. 24, No. 3, p. 179-190.

Breunig, M., Cremers, A.B., Götze, H.-J., Schmidt, S., Seidemann, R., Shumilov, S., Siehl, A., 2000. Geological Mapping based on 3D models using an Interoperable GIS. *Geo-Information-Systems, Journal for Spatial Information and Decision Making*, ISSN 0935-1523, Vol. 13, p. 12 - 18.

Bruhn, C., 2003. Momententensoren hochfrequenter Ereignisse in Südchile. *Unpublished Dissertation*, Universität Potsdam, Germany.

Cahill, T. and Isacks, B., 1992. Seismicity and shape of the subducted Nazca Plate. *Journal of Geophysical Research*, Vol. 97, No. B12, p. 17,503-17,529.

Cembrano, J., Schermer, E., Sanhueza, A., Lavenu, A., 2000. Along strike-variations in the nature and timing of deformation along an intra-arc shear zone, the Liquiñe Ofqui fault zone, southern Chilean Andes. *Tectonophysics*, 319, 129– 149.

Christensen, N.I. and Mooney W.D., 1995. Seismic velocity structure and composition of the continental crust: A global view. *Journal of Geophysical Research*, Vol.100, No. B7, 9761-9788

Cingolani, C., Dalla Salda, L., Hervé, F., Munizaga, F., Pankhurst, R.J., Parada, M.A., Rapela, C.W., 1991. The magmatic evolution of northern Patagonia; New impressions of pre-Andean and Andean tectonics. *Geological Society of America*, Special Paper 265, 29-45.

Cobbold, P.R., and Rossello, E.A., 2003. Aptian to recent compressional deformation, foothills of the Neuquén Basin, Argentina. *Marine and Petroleum Geology*, 20, 429-443.

Creixell, C., 2001. Petrologia y geotermobarometria de las rocas intrusivas de la Cordillera de la Costa entre los 36°30' y 38°00'. *Memoria para optar al título Geólogo (inedito)*. Universidad de Concepcion. 149 pags.

Creixell, C., Lucassen, F., Franz, G., Vasquez, P., Figueroa, O., 2002. Petrology of the Hualpen Stock: evidence of Late Triassic epizonal plutonism and crustal melting at the western margin of Gondwana (36°45'S – 73°10'W). *Fifth ISAG meeting*, Toulouse, France, 167-170.

Degro, T., 1986. Zur Interpretation gravimetrischer und magnetischer Feldgrößen mit Hilfe von Übertragungsfunktionen. *Unpublished Dissertation*, Technische Universität, Clausthal, Germany.

DeMets, C., Gordon, R.G., Argus, D.F., Stein, S., 1990. Current Plate Motions. *Geophysical Journal International*, 101, 425-478.

Díaz-Naveas, J.L., 1999. Sediment Subduction and Accretion at the Chilean Convergent Margin Between 35°S and 40°S. *Unpublished Dissertation*, Christian-Albrechts-University zu Kiel, Germany.

Dzienowski, A. and Andersen, D.L., 1981. Preliminary Reference Earth Model. *Physics of the Earth and Planetary Interiors*, 25, 297-356.

Ebbing, J., 2002. 3-D Dichteverteilung und isostatisches Verhalten der Lithosphäre in den Ostalpen. *Unpublished Dissertation*, Freie Universität Berlin, Germany. <http://www.diss.fu-berlin.de/2002/192/>

Echtler, H., Glodny, J., Gräfe, K., Rosenau, M., Melnick, D., Seifert, W., Vietor, T., 2003. Active tectonics controlled by inherited structures in the long-term stationary and non-plateau South-Central Andes. *EGU/AGU Joint Assembly*, Nice April 2003, EAE03-A-10902.

England, P., Engdahl, R., Thatcher, W., 2004. Systematic variation in the depths of slabs beneath arc volcanoes. *Geophys. J. Int.*, 156, 377-408.

Flüh, E.R., Kopp, H., Schreckenberger, B. 2002. *FS/RV Sonne Cruise Report SO161-1&4*, Subduction Prozesse Off Chile. GEOMAR REPORT 102, Kiel.

Folguera, A., and Ramos, V.A., 2000. Structural control of the Copahue volcano. Tectonics implications for the Quaternary volcanic arc (36°-39°S). *Revista de la Asociacion Geologica Argentina*, 55(3), 229-244.

Folguera, A., Ramos, V.A., Melnick, D., 2002. Partición de la deformación en la zona del arco volcánico de los Andes neuquinos (36-39°S) en los últimos 30 millones de años. *Revista Geologica de Chile*, 29(2), 227-240.

Folguera, A., Ramos, V., Melnick, D., 2003. Recurrencia en el desarrollo de cuencas de inraarco. Cordillera Neuquina (37°30'). *Revista de la Asociación Geológica Argentina*. Vol. 1.

GLOBE Task Team and others (Hastings, David A., Paula K. Dunbar, Gerald M. Elphingstone, Mark Bootz, Hiroshi Murakami, Hiroshi Maruyama, Hiroshi Masaharu, Peter Holland, John Payne, Nevin A. Bryant, Thomas L. Logan, J.-P. Muller, Gunter Schreier, and John S. MacDonald), eds., 1999. The Global Land One-kilometer Base Elevation (GLOBE) Digital Elevation Model, Version 1.0. National Oceanic and Atmospheric Administration, National Geophysical Data centre, 325 Broadway, Boulder, Colorado 80303, U.S.A. *Digital data base on the World Wide Web* (URL: <http://www.ngdc.noaa.gov/seg/topo/globe.shtml>)

Glodny, J., Lohrman, J., Seifert, W., Gräfe, K., Echtler, H., Figueroa, O. 2002. Geochronological Constraints on material cycling velocities, structural evolution, and exhumation of a Paleo Accretionary Wedge – the Bahia Mansa Complex, South Central Chile. *5th International Symposium on Andean Geodynamics*, Toulouse, France, Abstract p. 259-262.

Götze, H.-J., 1976. Ein numerisches Verfahren zur Berechnung der gravimetrischen und magnetischen Feldgrößen für dreidimensionale Modellkörper. *Unpublished Dissertation*, TU Clausthal, Germany.

Götze, H.-J., 1978. Ein numerisches Verfahren zur Berechnung der gravimetrischen Feldgrößen dreidimensionaler Modellkörper. *Arch. Met. Geoph. Biokl., Ser. A*, 25, Wien, p. 195-215.

Götze, H.-J., 1984. Über den Einsatz interaktiver Computergraphik im Rahmen 3-dimensionaler Interpretationstechniken in Gravimetrie und Magnetik. *Habil. Schrift, Techn. Univ. Clausthal, Germany*, 236 Seiten, *unpublished*.

Götze, H.-J. and Lahmeyer, B., 1988. Application of three-dimensional interactive modeling in gravity and magnetics. *Geophysics*, Vol. 53, No. 8, p. 1096-1108.

Götze, H.-J., and Schmidt, S., 1999. Komplexe Interpretation zur Kohlenwasserstoff-Exploration mit 3D Dichtemodellen und GIS-Funktionen. *Forschungspolitischer Dialog, Berliner Senat für Wissenschaft, Forschung und Kultur, Geosys TU Berlin*, pp. 49-54.

Götze, H.-J., Schmidt, S., Schreckenberger, B., 2002. Preliminary results: gravity, in Flüh, E. R., Hopp, H. & Schreckenberger, B. (eds), *Cruise Report SO161-1&4, Subduction Processes of Chile, GEOMAR Report 102*, p106–117.

Gräfe, K., Glodny, J., Seifert, W., Rosenau, M., Ehtler, H., 2002. Apatite fission track thermochronology of granitoids at the South Chilean active continental margin (37°S-42°S): implications for Denudation, tectonics and mass transfer since the Cretaceous. *5th International Symposium on Andean Geodynamics, Toulouse*, Abstract, 275-278.

Hacker, B.R., Abers, G.A., Peacock, S.M., 2003. Subduction Factory 1. Theoretical mineralogy, densities, seismic wave speeds and H₂O content. *Journal of Geophysical Research*, Vol.108, No. B1, 2029.

Hacker, B.R. and Abers, G.A., 2004. Subduction Factory 3. An Excel worksheet and macro for calculating the densities, seismic wave speeds, and H₂O contents of minerals and rocks at pressure and temperature. *Geochemistry, Geophysics, Geosystems – an Electronic Journal of the Earth Sciences*, Vol. 5, No.1, Q01005, doi:10.1029/2003GC000614.

Hamza, V.M. and Muñoz, M., 1996. Heat Flow Map of South America. *Geothermics*, Vol. 25, No.6, pp. 599-646.

Herron, E.M, 1981. Chile Margin near lat 38°S: Evidence for a genetic relationship between continental and marine geologic features or a case of curious coincidences? *Geological Society Of America*, Memoir 154.

Hervé, F., 1977. Petrology of the crystalline basement of the Nahuelbuta Mountains, southcentral Chile. Comparative Studies on the Geology of the Circum-Pacific Orogenic Belt in Japan and Chile, 1st Rept, T. Ishikawa and L.Aguirre (Eds.). *Japan Society Prom. Science*, Tokyo, p. 1-51.

Hervé, F., 1988. Late Paleozoic subduction and accretion in southern Chile. *Episodes* 11, 183-188.

Hervé, F., Munizaga, F., Parada, M-A., Brook, M., Pankhurst, R.J., Snelling, N.J., Drake, R., 1988. Granitoids of the Coast Range of central Chile: Geochronology and geologic setting. *Journal of South American Earth Sciences* 1, 185-194.

Hervé, F., 1994. *The Southern Andes between 39°S and 44°S latitude*: The geological signature of a transpressive tectonic regime related to a magmatic arc. *Tectonophysics of the Southern Central Andes*, Springer Verlag Berlin, Heidelberg, New York, p. 243-248.

Hickey-Varas, R., Abdollahi M.J., Parada M.A., López-Escobar L., Frey F.A., 1995. Crustal xenoliths from Calbuco Volcano, Andean Southern Volcanic Zone: implications for crustal composition and magma-crust interaction. *Contributions to Mineralogical Petrology*, 119, 331-344.

Hildreth, W., and Moorbath, S., 1988. Crustal contributions to arc magmatism in the Andes of Central Chile. *Contributions to Mineralogy and Petrology*, 98, 455-489.

Jordan, T.E., Isacks, B.I., Allmendinger, R.W., Brewer, J.A., Ramos, V.A., Ando, C.J., 1983. Andean tectonic related geometry of subducted Nazca plate. *Geological Society of America Bulletin*, v.94, 341-361.

Jordan, T.E., Burns, W.M., Veiga, R., Pángaro, F., Copeland, P., Kelley, S., Mpodozis, C., 2001. Extension and basin formation in the southern Andes caused by increased convergence rate: A mid Cenozoic trigger for the Andes. *Tectonics*, Vol. 20, No.3, 308-324.

Jull, M., and Kelemen, P.B., 2001. On the conditions for lower crustal convective instability. *Journal of Geophysical Research*, Vol. 106, No. B4, 6423-6446.

Kaizuka, S., Matsuda, T., Nogami, M., Yonekura, N., 1973. Quaternary tectonic and recent seismic crustal movements in the Arauco Peninsula and its environs, Central Chile. *Geographical Reports*, Tokyo Metropolitan University, 8, 1-49.

Kay, S.M., Orrell, S., Abbruzzo, J.M., 1996. Zircon and Whole Rock Nd-Pb Isotopic Evidence for Grenville Age and Laurentian Origin for the Basement of the Precordillera in Argentina. *The Journal of Geology*, Vol. 104, 637-648.

Kendrick, E., Bevisa, M., Smalley, R.Jr., Brooks, B., Vargasc, R.B., Fortese, P.S., 2003. The Nazca–South America Euler vector and its rate of change. *Journal of South American Earth Sciences* 16 (2003) 125–131.

Kirchner, A., 1997. 3D-Dichtemodellierung zur Anpassung des Schwere- und des Schwerepotentialfeldes der zentralen Anden. *Unpublished Dissertation*, Freie Universität Berlin, Germany.

Kley, J., Monaldi, C.R., Salfity, J.A., 1999. Along-strike segmentation of the Andean foreland: causes and consequences. *Tectonophysics*, 301, pp. 74-94.

Krawczyk, C. and the SPOC Team, 2003. Amphibious Seismic Survey Images Plate Interface at 1960 Chile Earthquake. *EOS, Transactions, American Geophysical Union*, Vol. 84, No. 32, 301,304-305.

Ladage, S., Diaz, J., Ranero, C., Urbina, O., Sepulveda, J. & Kus, J., 2002. Bathymetry and particular features offshore Central Chile, in Reichert, C. & Schreckenberger, B. (eds), *Cruise Report SONNE Cruise 161 Leg 2&4*, "Subduction Processes Off Chile" (BMBF-Forschungsvorhaben 03G0161A), Federal Institute for Geosciences and Natural Resources, Hanover, p72–78.

Lahmeyer, B., 1989. Anwendungen der schnellen Fouriertransformation und der Quadratischen Programmierung bei der Interpretation von Schwerefeldern. *Unpublished Dissertation*, Freie Universität Berlin, Germany.

Lambeck, K., 1988. *Geophysical Geodesy: the slow deformation of the Earth*. Oxford Science Publications, Oxford, UK, 718 pp.

Lavenu, A. and Cembrano, J., 1999. Compressional and transpressional stress pattern for Pliocene and Quaternary brittle deformation in fore arc and intraarc zones (Andes of Central and Southern Chile). *Journal of Structural Geology*, 21, 1669-1691.

López-Escobar, L., Cembrano, J., Moreno, H., 1995. Geochemistry and tectonics of the Chilean Southern Andes basaltic Quaternary volcanism (37-46°S). *Revista Geológica de Chile*, Vol. 22, No.2, 219-234.

Lohrmann, J., Kukowski, N., Adam, J., Oncken, O. 2001. The Role of Parameters Controlling Tectonically Erosive and Accretive Forearcs - Results of 2-D Sandbox Experiments. *Eos. Trans. AGU*, 82(47), Fall. Meet. Suppl.

Lüth, S., Wigger, P., and ISSA Research Group, 2003. A crustal model along 39°S from a seismic refraction profile – ISSA 2000. *Revista Geológica de Chile*, Vol. 30, No. 2, 65-83.

Lüth, S., Wigger, P., Mechie, J., Stiller, M., Krawczyk, C., Bataille, K., Reichert, C., Flüh, E. & SPOC Research Group, 2004. The crustal structure of the Chilean forearc between 36° and 40°S from combined offshore and onshore seismic wide-angle measurements. *GeoSur*, Buenos Aires, *Bollettino di Geofisica Teorica ed Applicata* Special Issue.

Marchenko, D., Meyer U., Blitzkow D., 2004. High resolution geoid models for South America based on sequential analysis. In press

McDonough, M.R., Ugalde, H., Duhart, P., Crignola P., 1997. Naturaleza del alzamiento del basamento costero y la apertura de la cuenca Osorno-Llanquihue, Xa Región:nuevos antecedentes sísmicos y observaciones de terreno, VIII Congr. Chileno, Antofagasta, 1, 164-168.

Melnick, D., Folguera, A., Rosenau, M., Echtler, H. and Potent, S. 2002. Tectonics from the Northern segment of the Liquiñe-Ofqui fault system (37°-39°S), Patagonian Andes. In *International Symposium of Andean Geodynamics*. Abstracts, p. 413-417. Toulouse.

Melnick, D., Echtler, H., Pineda, V., Bohm, M., Manzanares, A., Vietor, T., 2003. Active faulting and northward growing of the Arauco Peninsula, south-central Chile (37°30'S). *Extended Abstracts, 10th Chilean Geological Congress*, 6-10th October, Concepción, Chile, 10pp.

Mordojovich, C. 1981. Sedimentary basins of Chilean Pacific Offshore. In: Halbouty, M.T. (ed.): *Energy Resources of the Pacific Region*. American Association of Petroleum Geologists Studies in Geology, 12, 63-82.

Mpodzois, C., Ramos, V.A., 1989. The Andes of Chile and Argentina, in *Geology of the Andes and its relation to hydrocarbon and mineral resources*, edited by: Ericksen G.E., Cañas Pinochet M.T., and Reinemund J.A., Circum-Pacific council for Energy and Mineral Resources Earth Science Series, Houston – Texas, chapter 5, 59-90.

Muñoz J.B., Stern C.R., 1988. The Quaternary Volcanic Belt Of The Southern Continental Margin Of South America: Transverse Structural And Petrochemical Variations Across The Segment Between 38°S and 39°S. *Journal of South American Earth Science*, Vol. 1, No.2, 147-161.

Muñoz, M. 1999. Tectonophysics of the Andes Region: Relationships With the Heat Flow and the Thermal Structure. Fourth ISAG, Goettingen.

Muñoz, J., Troncoso, R., Duhart, P., Cringnola, P., Farmer, L. and Stern, C.R., 2000. The relation of the mid-Tertiary coastal magmatic belt in south-central Chile to the late Oligocene increase in plate convergence rate. *Rev. Geol. De Chile*, Vol. 27. No. 2. 177-203

Müller, A., 1999. Ein EDV-orientiertes Verfahren zur Berechnung der topographischen Reduktion im Hochgebirge mit digitalen Geländemodellen am Beispiel der Zentralen Anden. *Unpublished Dissertation*, Freie Universität Berlin, Germany.

Nelson, R., and Manley, W., 1992. Holocene coseismic and aseismic uplift of the Isla Mocha, south-central Chile. *Quaternary International*. Vol. 15/16. pp. 61-76.

Oleskevich, D.A., Hyndman, R.D., Wang, K., 1999. The updip and downdip limits to great subduction earthquakes: Thermal and structural models of Cascadia, south Alaska, SW Japan and Chile. *Journal of Geophysical Research*, 104(B7), 14,965-14,991.

Pankhurst, R.J., and Rapela, C.W., 1995. Production of Jurassic rhyolite by anatexis of the lower crust of Patagonia. *Earth and Planetary Science Letters* 134, 23-36.

Parada, M.A., Rivano, S., Sepulveda, P., Herve, M., Herve, F., Puig, A., Munizaga, F., Brook, M., Pankhurst, R.J., Snelling, N., 1988. Mesozoic and Cenozoic plutonic development in the Andes of central Chile (30°30'-32°30'S), *Journal of South American Earth Science*, Vol. 1, No. 3, 249-260.

Pašteka, R., 2000. 2D semi-automated interpretation methods in gravimetry and magnetometry. *Acta Geologica Universitatis Comenianae*, Nr. 55, 5 - 55

Pašteka, R., Richter, P., 2002. A simple approach to regularized gradients calculation in gravimetry and magnetometry. *EAGE 64th*, Florence, Italy.

Pineda, V., 1986. Evolución paleogeográfica de la cuenca sedimentaria Cretácico-Terciaria de Arauco. In: Frutos, J., Oyarzún R. & Pincheira, M. (eds.) *Geología y Recursos Minerales de Chile*, Tomo 1. Universidad de Concepción, 375-390.

Parker, R.L., 1972. The rapid computation of potential anomalies. *Geophy. J. R. astr. Soc.*, 31, 447-455.

Plafker, G., and Savage, J.C., 1970. Mechanism of the Chilean earthquake of May 21 and 22, 1960. *Geological Society of America Bulletin*, 81, 1001-1030.

Ramos V.A., 1978. Estructura de la Provincia de Neuquén. En *Relatorio de Geología y Recursos Naturales de la Provincia del Neuquén. VII Congreso Geológico Argentino*, Neuquén. pp. 99-118.

Reichert, C., and Schreckenberger, B. (eds), 2002. *Cruise Report SONNE Cruise 161 Leg 2&4, "Subduction Processes Off Chile"* (BMBF-Forschungsvorhaben 03G0161A), Federal Institute for Geosciences and Natural Resources, Hanover, Germany, 141pp.

Roberts, A., 2001. Curvature attributes and their application to 3D interpreted horizons. EAGE, First Break, Vol. 19.

Rosenau, M., 2004. Tectonics of the Southern Andean Intra-arc zone (38°-42°S). *Unpublished Dissertation*, Freie Universität Berlin, Germany.

Rudnick, R. L., and Fountain, D.M., 1995. Nature and composition of the continental crust: a lower crustal perspective. *Review of Geophysics* 33, 267-309.

Rummel, R., Balmino, G., Johannessen, J., Visser, P., Woodworth, P., 2002. Dedicated gravity field missions – principles and aims. *Journal of Geodynamics*, 33, pp. 3-20.

Sandwell, D. T., and Smith, W. H. F. , 1997. Marine Gravity Anomaly from Geosat and ERS-1 Altimetry, *Journal of Geophysical Research*, 102, pp.10039-10054.

Scheuber, E., and Reutter, K.-J., 1992. Magmatic arc tectonics in the Central Andes between 21°S and 25°S. *Tectonophysics*, No. 205, p. 127-140.

Schmidt, S., 1996. 3D Modeling of Geoid and Gravity using GIS-Functions.- *Österreichische Beiträge zu Meteorologie und Geophysik*, Heft 14, S. 137-144, Wien.

Schmidt, S., and Götze, H.-J., 1998: Interactive visualization and modification of 3D-models using GIS-functions. *Physics and Chemistry of the Earth*, Vol. 23, No.3, pp. 289-295.

Scholl, D.W., Christensen, M.N., von Huene, R., Marlow, M.S., 1970. Peru-Chile Trench Sediments and Sea-Floor Spreading. *Geological Society of America Bulletin*, v. 81, 1339-1360.

Schreckenberger, B., Götze, H.-J., Schmidt, S., Kewitsch, P., Barckhausen, U., 2002a. Gravity, in Flüh, E. R., Hopp, H. & Schreckenberger, B. (eds), *Cruise Report SO161-1&4*, Subduction Processes of Chile, GEOMAR Report 102, p81–94.

Schreckenberger, B., Kewitsch, P., Barckhausen, U., 2002b. Gravity Data Acquisition, in Reichert, C. & Schreckenberger, B. (eds), *Cruise Report SONNE Cruise 161 Leg 2&4*, "Subduction Processes Off Chile" (BMBF-Forschungsvorhaben 03G0161A), Federal Institute for Geosciences and Natural Resources, Hanover, p55–61.

Schweller W.J., Kulm L.D., Prince R.A., 1981. Tectonics, structure, and sedimentary framework of the Peru-Chile Trench. *Geological Society of America*, Memoir 154.

Smith, W. H. F., and D. T. Sandwell, Global seafloor topography from satellite altimetry and ship depth soundings, *Science*, v. 277, p. 1957-1962, 26 Sept., 1997.

Sobolev, S.V., and Babeyko, A.Yu., 1994. Modeling of mineralogical composition, density, and elastic wave velocities in anhydrous magmatic rocks. *Survey in Geophysics* 15, 515-544.

Somoza, R., 1998. Updated Nazca (Farallon)-South American relative motions during the last 40 My: implications for mountain building in the Andes. *Journal of South American Earth Sciences* 11, 3, 211-215.

Stern, C., 1989. Pliocene to present migration of the volcanic front, Andean Southern Volcanic Front. *Revista Geológica de Chile*, 16, (2), 145-162.

Stern, R.J., 2002. Subduction zones. *Reviews of Geophysics*, 40(4), 1012

Tassara, A. and Yáñez, 2003. Relación entre el espesor elástico de la litosfera y la segmentación tectónica del margen andino (15-47°S). *Revista Geológica de Chile*, Vol. 30, No.2

Tebbens, S.F., Cande, S.C., Kovacs, L., Parra J.C., LaBrecque, J.L., Vergara, H., 1997. The Chile Ridge: A Tectonic Framework. *Journal of Geophysical Research*, Vol. 102, No. B6, 12035-12059.

Tichelaar, B., Ruff, L.J., 1991. Seismic Coupling Along the Chilean Subduction Zone. *Journal of Geophysical Research*, Vol. 96, No. B7, pp. 11,997-12,022.

Torge, W., 1989. *Gravimetry*. 465 pp., Walter de Gruyter & Co., Berlin.

Tormey, D.R., Hickey-Vargas, R., Frey, F.A., López-Escobar, L., 1991. Recent lavas from the Andean volcanic front (33-42°S); Interpretations of along-arc compositional variations. *Geological Society of America*, Special Paper 265, 57-79.

Turcotte, D.L., Schubert, G., 2002. *Geodynamics: Application of Continuum Physics to Geological Problems*. 450 pp., John Wiley, Hoboken, N.J..

van Keken, P., 2003. The structure and dynamics of the mantle wedge. *Earth Planet. Sci. Lett.*, 215, 323-338.

von Huene, R., and Ranero, C.R., 2003. Subduction erosion and basal friction along the sediment-starved convergent margin off Antofagasta, Chile. *Journal of Geophysical Research*, Vol. 108, No. B2, 2079, doi: 10.1029/2001JB001569.

Vujovich, G.I., and Kay S.M., 1998. A Laurentian? Grenville-age oceanic arc/back-arc terrane in the Sierra de Pie de Palo, Western Sierras Pampeanas, Argentina. In *The Proto-Andean Margin of Gondwana* edited by Pankhurst R.J. & Rapela C.W., Geological Society Special Publication, No.142, 159-179.

Wang, Y., 2000. The satellite altimeter data derived mean sea surface GSFC98, *Geophys. Res. Lett.*, 27 (5), 701-704.

Wienecke, S., 2002. Homogenisierung und Interpretation des Schwerefeldes entlang der SALT- Traverse zwischen 36°–42°S. *Unpublished Diploma thesis*, Freie Universität Berlin, Germany.

Wigger, P., Baldzuhn, S., Giese, P., Heinsohn, W.-D., Schmitz, M., Araneda, M., Martínez, E., Ricaldi, E., Viramonte, A.J., 1994. Variations of the Crustal Structure of the Southern Central Andes Deduced from Seismic Refraction Investigations. - In: *Tectonics of the Southern Central Andes*, Reutter, Scheuber, Wigger (eds.), 23-48; Springer Verlag, Berlin.

Willner, A.P., Glodny, J., Gerya, T.V., Godoy, E., Massonne, H.-J., 2004. A counterclockwise PT-path of high pressure-low temperature rocks from the Coastal cordillera accretionary complex of South Central Chile: constraints for the earliest stage of subduction mass flow, *Lithos*, 75, 283–310.

Yuan, X., Sobolev, S. V., Kind, R., 2002. Moho topography in the central Andes and its geodynamic implications. *Earth and Planetary Science Letters*, 199, 389-402.

Zapata, R.D., 2001. Estudio batimétrico del magen Chileno. *Unpublished*, Departamento de Geofísica, Universidad de Chile, Santiago (Chile).