

Curriculum Vitae

Name	René Darío Garreaud Salazar
Date and Place of birthday	Santiago, Chile. September 30, 1968
Nationality	Chilean
Current Position	Professor, Geophysics Department, Facultad de Ciencias Físicas y Matemáticas (FCFM), Universidad de Chile
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Degrees and professional title

- Ph.D., Atmospheric Sciences, University of Washington, Seattle, WA, USA. 1998
- M.Sc. in Geophysics, Universidad de Chile, Santiago, Chile 1993
- Civil Engineering, Universidad de Chile, Santiago, Chile, 1993

University Administration & Services

- Chair, Academic Evaluation Committee, FCFM, Universidad de Chile, 2014-2015
- Chair, Geophysics Department, FCFM, Universidad de Chile, 2008-2010
- Chair, Exact Sciences committee, Research Unit, Universidad de Chile, 2006-2008
- Director, MECESUP Project "Improving Undergraduate Teaching in Earth Sciences". Universidad de Chile. 2004-2007.
- Chair, Meteorology section, Geophysics Department, FCFM, Universidad de Chile 2002-2003.
- Member, Academic Searching Committee, FCFM, Universidad de Chile. 2003-2005
- Teaching coordinator, Geophysics Department, FCFM, Universidad de Chile. 2001-2005.

Scientific Committees

- Chair of the Local Organization Committee, *11th International Conference on Southern Hemisphere Meteorology and Oceanography* (American Meteorological Society (AMS) - Universidad de Chile), Santiago, Nov. 2014
- President, Superior Science Council, FONDECYT-Chile, 2014
- Member of the Superior Science Council, FONDECYT-Chile, 2012-2013

- Member of the VOCALS Science Steering Group, 2007-2010
- Member of executive panel of the Laboratorio Internacional de Cambio Global (PUC, Chile – CSIC, Spain), 2009-2010
- Co-chair 4th Alexander von Humboldt Conference: The Andes Challenge for Geosciences (European Geoscience Union (EGU) - Universidad de Chile), Santiago, Nov. 2008.
- Panel member of the VAMOS-CLIVAR project. 2004 – 2009
- Chair of the Earth Sciences Working Group at FONDECYT, Chile, 2005-2006
- Member of the Earth Sciences Working Group at FONDECYT, Chile, 2004

Editorial Committees

- 2002, 2007: Associated Editor, *Monthly Weather Review* (American Meteorological Society).
- Enero 2003- :Associated Editor Revista Meteorológica (Sociedad Argentina de Meteorología)
- Junio 2003- : Associated Editor Revista de la Sociedad Brasileña de Meteorología
- Regular reviewer (about 1 paper per month) in several high-profile journals in atmospheric sciences: Journal of Climate, JGR, GRL, Journal of Hydrometeorology, Climatic Change, etc.

Scholarships and Awards

- Award “Docente de Pregrado Destacado”, otorgado por la Vicerrectoría de Asuntos Académicos de la Universidad de Chile. Noviembre 2003.
- First Place en el II Concurso Nacional Imágenes de la Ciencia 2002 del programa EXPLORA@CONICYT, por la contribución de la imagen satelital "Islas". Octubre 2002.
- Award to the best Student presentation. 8th Conference on Mountain Meteorology. American Meteorological Society (USA). Agosto de 1998.
- Scholarship Presidente de la República. Ministerio de Planificación, Chile. Otorgada para perfeccionamiento de post-grado en el extranjero. 1995-1998.
- Award Nacional de Hidráulica. Sociedad Chilena de Ingeniería Hidráulica. Noviembre de 1995.
- Award Ismael Valdés. Instituto de Ingenieros de Chile. Octubre de 1994.

Teaching

Main courses at Facultad de Cs. Físicas y Matemáticas, Universidad de Chile

- Introduction to Physics (Undergraduate, Spring semester, 2000 - 2006)
- Newtonian Systems (Undergraduate, Spring semester 2007 - 2015)
- Introduction to Meteorology (Undergraduate, Fall semester 2009-2015)
- Physical Meteorology (Postgraduate)
- Dynamic Meteorology (Postgraduate)
- Synoptic Meteorology (Postgraduate)
- Statistics in Climate (Postgraduate)

Ph.D. Students (Fluid Dynamics Ph.D. Program, FCFM, Universidad de Chile)

- Catalina Aguirre, 2011: Synoptic variability of the ocean off south-central Chile
- Federico Flores, 2013: Microscale atmospheric circulations
- Monica Bello, 2016 (in progress): Mesoscale ocean circulation at 30°S off the Chilean coast

Master Students (M. Sc. in Geophysics or Master in Meteorology and Climate, FCFM, Universidad de Chile)

- Sergio Gonzalez, 2016: Thermal structure in mountainous terrain.
- Camilo Barahona, 2015 (in progress): Cut off lows and precipitation (co supervisor)
- Cristian Muñoz, 2014: Orographic Precipitation in Central Chile.
- Martin Jaques Coper, 2009: The 70's climate shift in South America.
- Juan Pablo Boisier, 2008: SH Blocking and cutoff low in future climates.
- Gina Charpentier, 2004: Warm spells in southern Chile
- David Painemal, 2004, Stratocumulus over the SE Pacific (co supervisor)
- Roberto Rondanelli, 2001, Ozone intrusions in northern Chile (co supervisor)

*Postdocs (at the Department of Geophysics, Universidad de Chile, *: funded by FONDECYT)*

- * Raul Valenzuela (Chile): 2017-2019 Extreme precipitation events
- Cinthya Ramallo (Bolivia): 2015-2016: Hidro-climatology in central Chile
- * Deniz Bozkurt (Turkey), 2014-2016: Climate Dynamics
- Cartherine Van de Hoof (Belgium), 2014-2015: Precipitation-temperature co-variability
- * Maximiliano Viale (Argentina), 2012-2014: Synoptic Meteorology
- Marie Minvielle (France), 2010-2012: Climate change

- Dave Rahn (USA), 2009-2010: SE Pacific climate and weather
- Sebastian Vicuña (Chile), 2008-2009: Climate change / hydrology
- * Brad Barrett (USA), 2008-2009: Frontal precipitation
- * Mark Falvey (New Zealand), 2003-2005: Orographic precipitation

Research Projects

FONDECYT (Chile) Regular projects

- *Extended droughts in central Chile*. PI. 2014-2015.
- *Frontal modification by complex topography in south-central Chile*. PI. 2011-2013.
- *Dynamics of the Atmospheric Marine Boundary Layer off Subtropical Chile*. PI. 2009-2010.
- *Intraseasonal rainfall variability in southern Chile*. PI. 2005-2006.
- *The Stratocumulus cloud deck off the subtropical west coast of South America: High frequency variability*. PI. 2002-2004.
- *Cut-off lows in western subtropical South America: Climatology, associated mechanisms and their impacts on rainfall*. Co-PI. 2003-2005.
- *Forced downslope flow over the Andes in central Chile*. PI. 2000-2001.

CONICYT (Chile) projects

- *Center for Climate and Resilience Research (CR)²* Deputy Director and PI. **FONDAP 1511099** 2012-2017.
- *Advanced Mining Technology Center*. Co-PI. **BASAL-CONICYT**. 2009-2011.
- *Climate variability in Chile: Evaluación, Interpretación y Proyecciones*. Director. Programa Bicentenario en Ciencia y Tecnología, **PBCT-CONICYT**. 2006-2008.

Other peer reviewed projects

- *Estudio meteorológico de las tormentas de nieve en la cordillera de los Andes subtropical (sector central de Chile - Argentina)*. PI. **Proyecto Cooperación Técnica IPGH** (Instituto Panamericano de Geografía e Historia) 2.1.4.4.29. 2007.
- *Análise da distribuição, evolução e previsibilidade dos Vórtices Ciclônicos em Altos Níveis (VCAN) de origem subtropical na América do Sul*. Co-PI. Proyecto CNPq (Brazil). 2007-2008.
- *Efecto de los Andes subtropicales en los sistemas del tiempo en Sud América*. PI. **Cooperación Técnica IPGH** Proyecto GEOF 3.4.425. Instituto Panamericano de Geografía e Historia. 01-12 2002.
- *Determinación de niveles de riesgo natural por el corredor de comercio Las Leñas, VI Región*. CO-PI. **Proyecto DID-U. de Chile**: TNAC 11-02/01. 2002.

Scientific Publications

ISI Journals (71 papers, H=31, 3540 cites at Dec. 2016)

- [1] Garreaud, R., M. Falvey and A. Montecinos: Orographic precipitation in coastal southern Chile: Mean distribution, temporal variability and linear contribution. *Journal of Hydrometeorology*, **17**, 1185-1202
- [2] Bozkurt, D., R. Rondanelli, R. Garreaud and A. Arriagada, 2016: Impact of warmer eastern tropical Pacific SST on the March 2015 Atacama floods. *Mon. Wea. Rev.*, **144**, 4441-4460.
- [3] Aldunce, P., R. Borquez, C. Adler, G. Blanco and R. Garreaud, 2016: Unpacking resilience for adaptation: incorporating practitioners experiences through a transdisciplinary approach, the case of drought in Chile. *Sustainability*, **8**, 1-21.
- [4] Parada, C., S. Frusher, R. H. Bustamante, E. Di Lorenzo, P. Bernal, M. Cryer, A. Dunn, R. Garreaud, D.M. Gutierrez, S. Jennings, A. Montecino, S. Neira, R. A. Quiñones, K. Takahashi, R. Tascheri and B.Yannicelli, 2016: South Pacific Integrated Ecosystem Studies meeting: toward conservation and sustainable use of marine resources in the South Pacific. *Fisheries Oceanography* [Special Issue: South Pacific Integrated Ecosystem Studies (SPICES) Meeting] **25**, 1-4.
- [5] Muñoz, R., J. Quintana, M. Falvey, J. Rutllant and R. Garreaud, 2016: Coastal Clouds at the Eastern Margin of the Southeast Pacific: Climatology and Trends. *Journal of Climate*, **29**, 4525-4542
- [6] Bosier, J.P., R. Rondanelli, R. Garreaud, F. Muñoz, 2016: Natural and anthropogenic contributions to the Southeast Pacific precipitation decline and recent mega-drought in central Chile. *Geophys. Res. Lett.*, **43**, doi:10.1002/2015GL067265
- [7] Rubio, M.A., Lissi, E., Gramsch E., Garreaud, R., 2015: Effect of nearby forest fires on ground level ozone concentrations in Santiago of Chile. *Atmosphere*, **6**, 1926-1938 (doi:10.3390/atmos6121838).
- [8] Pino, P., Iglesias, V., Garreaud, R., Cortés, S., Canals, M., Folch, W., Burgos, S., Levy, K., Naeher, L., Steenland, K., 2015: Chile confronts its environmental future under uncertain perspectives of climate change. *Annals of Global Health*, **81** (3), 354-367.
- [9] Molina, L. T., Gallardo, L., Andrade, M., Baumgardner, D., Borbor-Córdova, M., Bórquez, R., Casassa, G., Cereceda-Balic, F., Dawidowski, L., Garreaud, R., Huneus, N., Lambert, F., McCarty, J.L., Mc Phee, J., Mena-Carrasco, M., Raga, G.B., Schmitt, C. and Schwarz, J.P., 2015: Pollution and its Impacts on the South American Cryosphere. *Earth's Future*. doi: 10.1002/2015EF000311
- [10] Viale, M., and R. Garreaud, 2015: Orographic effects of the subtropical and extratropical Andes on upwind precipitating clouds. *J. Geophys. Res. Atmos.*, **120**, DOI: 10.1002/2014JD023014.
- [11] Vuille, M., Franquist, E., Garreaud, R. Lavado, W., Bolivar Cáceres, C., 2015: Impact of the global warming *hiatus* on Andean temperature. *J. Geophys. Res. Atmos.*, **120**, DOI: 10.1002/2015JD023126.

- [12] M. Jacques-Coper and R. Garreaud, 2014: Characterization of the 1970s climate shift in South America. *Int. Journal of Climatology*. DOI: 10.1002/joc.4120
- [13] Moreno, P.I., I. Vilanova, R. Villa-Martínez, R. D. Garreaud, M. Rojas, R. De Pol-Holz, 2014: Southern Annular Mode-like changes in southwestern Patagonia at centennial timescales over the last three millennia. *Nature Communications*, **5**, DOI: 10.1038/ncomms5375
- [14] Garreaud, R., M.G. Nicora, R.E. Bürgesser, E. Ávila, 2014: Lightning in Western Patagonia. Accepted for publication in *J. Geophys. Res.* (15 March 2014).
- [15] Flores, F., R. Garreaud, and R. Munoz, 2014: OpenFOAM applied to the CFD simulation of turbulent buoyant atmospheric flows and pollutant dispersion inside large open pit mines under intense insolation. *Computer & Fluids*, **90**, 72-87, DOI:0.1016/j.compfluid.2013.11.012.
- [16] Viale, M., and R. Garreaud, 2014: Summer precipitation events over the western slope of the subtropical Andes. *Mon. Wea. Rev.*, **142**, 1074-1092; DOI: 10.1175/MWR-D-13-00259.1
- [17] Rahn, D., and R. Garreaud, 2014: A synoptic climatology of the near-surface wind along the west coast of South America. *Int. Journal of Climatology*, **34**, 780-792, DOI: 10.1002/joc.3724.
- [18] Garreaud, R., P. Lopez, M. Minvielle and M. Rojas, 2013: Large Scale Control on the Patagonia Climate. *J. of Climate*, **26**, 215-230
- [19] Garreaud, R., 2013: Warm winter storms in Central Chile. *Accepted in J. of Hydrometeorology*, March 2013.
- [20] C. R. Mechoso, R. Wood, R. Weller, C. S. Bretherton, A. D. Clarke, H. Coe, C. Fairall, J. T. Farrar, G. Feingold, R. Garreaud, C. Grados, J. McWilliams, S. P. de Szoeke, S. E. Yuter, P. Zuidema, 2013: Ocean-Cloud-Atmosphere-Land Interactions in the Southeastern Pacific: The VOCALS Program. *Accepted in Bull. Amer. Meteor. Soc.* (July 2013).
- [21] Flores, F., R. Garreaud, and R. Munoz, 2013: CFD simulations of turbulent buoyant atmospheric flows over complex geometry: Solver development in OpenFOAM. *Computer & Fluids*, **82**, 1-13
- [22] Rutllant, J.A., R.C. Muñoz and R. Garreaud, 2013: Meteorological observations in the northern Chilean coast during VOCALS-REx. *Atmospheric Chemistry and Physics*. VOCALS-REx Special Issue **13**, 3409-3422
- [23] Vicuña, S., J. McPhee and R. Garreaud, 2012: Agriculture vulnerability to climate change in a snowmelt driven basin in semiarid Chile. Accepted in *J. of Water Resources Planning and Management*. Octubre 2011
- [24] Aguirre, C., O. Pizarro, T. Strub, R. Garreaud and J. Barth, 2012: Seasonal dynamics of the alongshore flow off central Chile. *J. Geophys. Res. - Ocean*, **117**, C01006 DOI: 10.1029/2011JC007379.
- [25] Minvielle, M., and R. Garreaud, 2011: Projecting rainfall changes over the South American Altiplano. *J. of Climate*, **24**, 4577-4583.
- [26] Rahn, D., R. Garreaud and J. Rutllant, 2010: The low-level atmospheric circulation near Tongoy Bay / point Lengua de Vaca (Chilean coast, 30°S). *Mon. Wea. Rev.* **139**, 3628-3647.

- [27] Garreaud, R., J. A. Rutllant, R. C. Muñoz, D. A. Rahn, M. Ramos, and D. Figueroa, 2010: VOCALS-CUpEx: the Chilean Upwelling Experiment. *Atmospheric Chemistry and Physics* **11**, 2015-2029
- [28] R. Wood, C. S. Bretherton, C. R. Mechoso, R. A. Weller, B. Huebert, F. Straneo, B. A. Albrecht, H. Coe, G. Allen, G. Vaughan, P. Daum, C. Fairall, D. Chand, L. Gallardo Klenner, R. Garreaud, C. Grados Quispe, D. S. Covert, T. S. Bates, R. Krejci, L. M. Russell, S. de Szoeko, A. Brewer, S. E. Yuter, S. R. Springston, A. Chaigneau, T. Toniazzo, P. Minnis, R. Palikonda, S. J. Abel, W. O. J. Brown, S. Williams, J. Fochesatto, and J. Brioude, 2011: The VAMOS Ocean -Cloud- Atmosphere- Land Study Regional Experiment (VOCALS-REx): goals, platforms, and field operations. *Atmospheric Chemistry and Physics*. VOCALS-REx Special Issue, **11**, 627-654
- [29] Garreaud, R., A. Molina and M. Farias, 2010: Andean Uplift and Atacama Hyperaridity: A Climate Modeling Perspective. *Earth and Planetary Science Letters*. **292**, 39-50.
- [30] Reboita, M., Nieto, R., Gimeno, L., da Rocha, R., Ambirizzi, T., Garreaud, R., Kruger, L., 2010: Climatological Features of Cutoff Low Systems in the Southern Hemisphere. *J. Geophys. Res.- Atmospheres*, 115, doi:10.1029/2009JD013251
- [31] Vicuña, S., R. Garreaud and J. McPhee, 2010: Climate change impacts on the hydrology of a snowmelt driven basin in semiarid Chile. *Climatic Change*. DOI 10.1007/s10584 - 010-9888-4
- [32] Painemal, D., R. Garreaud, J. Rutllant and P. Zuidema, 2010: Southeast Pacific Stratocumulus: High Frequency Variability and Meso-scale Structures over San Félix Island. *Journal Appl. Meteor. and Climo.* **49**, 463-477
- [33] Rahn, D., and R. Garreaud, 2010: Marine boundary layer over the subtropical southeast Pacific during VOCALS-REx. Part I: Mean structure and diurnal cycle. *Atmospheric Chemistry and Physics*. VOCALS-REx Special Issue, **10**, 4047-4063
- [34] Rahn, D., and R. Garreaud, 2010: Marine boundary layer over the subtropical southeast Pacific during VOCALS-REx. Part II: Synoptic variability. *Atmospheric Chemistry and Physics*. VOCALS-REx Special Issue, **10**, 4491-4505
- [35] Garreaud, R. and M. Falvey, 2009: The coastal winds off western subtropical South America in future climate scenarios. *Int. J. of Climatology*, **29**, 543-554. doi: 10.1002/joc.1716
- [36] Falvey, M. and R. Garreaud, 2009: Regional cooling in a warming world: Recent temperature trends in the SE Pacific and along the west coast of subtropical South America (1979-2006). *J. Geophys. Res.*, **114**, D04102, doi:10.1029/2008JD010519.
- [37] Marin, V. H., A. Tironi, L. E. Delgado, M. Contreras, F. Novoa, M. Torres-Gomez, R. Garreaud, I. Vila, and I. Serey, 2009: On the sudden disappearance of *Egeria densa* from a Ramsar wetland site of Southern Chile: A climatic event trigger model. *Ecological Modelling*, **220**, 1752-1763.
- [38] Renault, L., B. Dewitte, M. Falvey, R. Garreaud, V. Echevin, and F. Bonjean, 2009: Impact of atmospheric coastal jet off central Chile on sea surface temperature from satellite observations (2000-2007). *Journal of Geophysical Research-Oceans*, **114**.

- [39] Reich, M., A. Zuniga, A. Amigo, G. Vargas, D. Morata, C. Palacios, M. A. Parada, and R. Garreaud, 2009: Formation of cristobalite nanofibers during explosive volcanic eruptions. *Geology*, **37**, 435-438.
- [40] Barrett, B., R. Garreaud and M. Falvey, 2009: Impacts of the Andes cordillera on precipitation from a midlatitude cold front. *Mon. Wea. Rev.*, **9**, 3092-3109.
- [41] Garreaud, R., M. Vuille, R. Compagnucci and J. Marengo, 2008: Present-day South American Climate. *PALAEO3 Special Issue (LOTRED South America)*. doi:10.1016/j.paleo.2007.10.032. .
- [42] Garreaud, R., J. Barichivich, D. A. Christie, and A. Maldonado 2008: Interannual variability of the coastal fog at Fray Jorge relict forests in semiarid Chile, *J. Geophys. Res.-Biogeosciences*, **113**, G04011, doi:10.1029/2008JG000709.
- [43] Moy, C. M., R. B. Dunbar, P. I. Moreno, J. P. Francois, R. Villa-Martinez, D. M. Mucciarone, T. P. Guilderson, and R. D. Garreaud, 2008: Isotopic evidence for hydrologic change related to the westerlies in SW Patagonia, Chile, during the last millennium. *Quaternary Science Reviews*, **27**, 1335-1349.
- [44] Garreaud, R., 2007: Precipitation and circulation covariability in the extratropics. *J. of Climate*, **20**, 4789-4797
- [45] Garreaud, R. and H. Fuenzalida, 2007: The Influence of Andes on cutoff lows: A modeling study. *Mon. Wea. Rev.*, **135**, 1596-1613.
- [46] Falvey, M. and R. Garreaud, 2007: Wintertime Precipitation Episodes in Central Chile: Associated Meteorological Conditions and Orographic Influences. *Journal of Hydrometeorology*, **8**, 171-193
- [47] Seluchi, M., R. Garreaud, F. Norte and C. Saulo, 2006: Influence of the subtropical Andes on baroclinic waves: A cold-front case study. *Mon. Wea. Rev.*, **134**, 3317-3335.
- [48] Garreaud, R., R. Munoz, 2005: The low-level jet off the subtropical west coast of South America: Structure and variability. *Mon. Wea. Rev.*, **133**, 2246-2261.
- [49] Fuenzalida, H., R. Sanchez and R. Garreaud, 2005: A climatology of cut off lows in the Southern Hemisphere. *J. Geophys. Res.* **110**, D1801, doi: 10.1029/2005JD005934.
- [50] Muñoz, R. and R. Garreaud, 2005: Dynamics of the low-level jet off the subtropical west coast of South America. *Mon. Wea. Rev.*, **133**, 3661-3677.
- [51] Falvey, M., and R. Garreaud, 2005: Moisture variability over the South American Altiplano during the SALLJEX observing season. *J. Geophys. Res.*, **110**, D22105, doi:10.1029/2005JD006152.
- [52] Vera, C., W. Higgins, J. Amador, T. Ambrizzi, R. Garreaud, D. Gochis, D. Gutzler, D. Lettenmaier, J. Marengo, and C. Mechoso, 2006: Toward a unified view of the American Monsoon Systems. *Journal of Climate*, **19**, 4977-5000.
- [53] Garreaud, R., y R. Muñoz, 2004: The diurnal cycle of circulation and cloudiness over the subtropical southeast Pacific: A modeling study. *J. of Climate*, **17**, 1699-1710.
- [54] Rutllant, J. and R. Garreaud, 2004: Episodes of strong flow down the wester slope of the subtropical Andes. *Mon. Wea. Rev.*, **132**, 611-622.

- [55] Garreaud, R., M. Vuille and A. Clements, 2003: The climate of the Altiplano: Observed current conditions and past change mechanisms. *PALEO3*, **3054**, 1-18
- [56] Garreaud, R. and J. Rutllant, 2003: Coastal lows in north-central Chile: Numerical simulation of a typical case. *Mon. Wea. Rev.*, **131**, 891-908.
- [57] Garreaud, R., J. Rutllant and H. Fuenzalida, 2002: Coastal lows in north-central Chile: Mean structure and evolution. *Mon. Wea. Rev.*, **130**, 75-88.
- [58] Rondanelli, R., L. Gallardo and R. Garreaud, 2002: Rapid changes in ozone mixing ratio at Cerro Tololo (30S, 70W, 2200 m) in connection with cutoff lows. *J. Geophys. Res.* **107**(D23): 10.1029/2001JDD001334.
- [59] Garreaud, R., 2001: Subtropical cold surges: regional aspects and lobal signatures. *Int. J. of Climatology*, **21**, 1181-1197.
- [60] Garreaud, R. D., and P. Aceituno, 2001: Interannual rainfall variability over the South American Altiplano. *J. of Climate*, **14**, 2779-2789.
- [61] Garreaud, R., J. Rutllant, J. Quintana, J. Carrasco and P. Minnis, 2001: CIMAR-5: A snapshot of the lower troposphere over the Southeast subtropical Pacific. *Bull. Amer. Meteor. Soc.* **82**, 2193-2207
- [62] Garreaud, R. D., 2000a: Intraseasonal variability of moisture and rainfall over the South American Altiplano. *Mon. Wea. Rev.*, **128**, 3337-3346.
- [63] Garreaud, R. D., 2000b: Cold air incursions over Subtropical South America: Mean structure and dynamics. *Mon. Wea. Rev.*, **128**, 2544-2559.
- [64] Garreaud, R. D., 1999a: A multi-scale analysis of the summertime precipitation over the central Andes. *Mon. Wea. Rev.*, **127**, 901-921.
- [65] Garreaud, R. D., 1999b: Cold air incursions over subtropical and tropical South America. A numerical case study. *Mon. Wea. Rev.*, **127**, 2823-2853.
- [66] Garreaud, R. D., and D. Batisti, 1999: Inter-annual (ENSO) and inter-decadal (ENSO-like) variability of the Southern Hemisphere tropospheric circulation. *J. of Climate.*, **12**, 2113-2123.
- [67] Garreaud, R. D., and J. M. Wallace, 1998: Summertime incursions of mid-latitude air into tropical and subtropical South America. *Mon. Wea. Rev.*, **126**, 2713-2733.
- [68] Garreaud, R. D., and J. M. Wallace, 1997: The diurnal march of the convective cloudiness over the Americas. *Mon. Wea. Rev.*, **125**, 3157-3171.
- [69] Garreaud, R., y J. Rutllant, 1997: Precipitación estival en los Andes de Chile central: Aspectos climatológicos. *Atmósfera*. **10**, 191-211.
- [70] Garreaud, R., y J. Rutllant, 1996: Análisis meteorológico del los aluviones de Antofagasta y Santiago de Chile en el periodo 1991-1993. *Atmósfera*. **9**, 251-271.
- [71] Rutllant J., y R. Garreaud, 1995: Meteorological air pollution potential for Santiago, Chile: towards an objective episode forecasting. *Environmental Monitoring and Assessment*, **34**: 223-244.

Other Journals

- [72] Pino, P., Iglesias, V., Garreaud, R., Cortés, S., Canals, M., Folch, W., Burgos, S., Levy, K., Naeher, L., Steenland, K., 2015: Chile confronts its environmental future under uncertain perspectives of climate change. Accepted for publication in *Journal of Environmental Health* (June 2015)
- [73] Garreaud R., and M. Viale, 2014: Análisis de los fenómenos meteorológicos y climáticos que afectan la cuenca del río Maipo. *Aquae Papers*, 5, 17-29.
- [74] Seluchi, M., and R. Garreaud, 2012: Campos Medios e procesos físicos asociados ao ciclo de vida da baixa do chaco. Aceptado *Revista Brasileira de Meteorologia*, Mayo 2012
- [75] Garreaud, R., 2011: The climate of northern Chile: Mean state, variability and trends. "Astronomical Site Testing Data Conference in Chile" *Revista Mexicana de Astronomía y Astrofísica (SC)*.
- [76] Garreaud, R., J. Rutllant, R. Muñoz, D. Rahn, M. Ramos, D. Figueroa, 2010: VOCALS-CUPEx: The Chilean Upwelling Experiment. *CLIVAR-Exchanges Newsletter*, **15(2)**, 5-7.
- [77] Grados, C., Chaigneau, A., Takahashi, K., Dewitte, B., Garreaud, R., Gallardo, L., 2010: VOCALS-REx Coastal Component / Componente Costera de VOCALS-REx. *CLIVAR-Exchanges Newsletter*, **15(1)**, 23-28.
- [78] Garreaud, R. 2009: The Andes climate and weather. *Adv. Geosciences*, **7**, 1-9.
- [79] Garreaud, R., and M. Seluchi, 2003: Pronóstico de la convección en el Altiplano Sudamericano empleando el modelo regional ETA/CPTEC. *Meteorológica (Arg.)*, **26**, 25-38.
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Garreaud R., 2015: The current Mega Drought in Central Chile: Is the future now?. 26th General Assembly of the International Union of Geodesy and Geophysics (IUGG). Praga, June 2015.

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Garreaud, R., M. Falvey and A. Montecinos, 2014: How Linear is Orographic Precipitation? Insights from Nahuelbuta Mountains in Southern Chile. EGU 2014 General Assembly, Vienna, May 2014.

Garreaud, R., 2012: La ciencia del cambio climático: Modelos, millones y víboras. XI Congreso Argentino de Meteorología. 27-31 Mayo, 2012. Mendoza, Argentina. (*)

Bravo, C. y R. Garreaud, 2011: El régimen nival en cuencas andinas de Chile central. Segundo Congreso de Oceanografía Física, Meteorología y Clima del Pacífico Sudoriental. 5-7 Octubre 2011, La Serena, Chile.

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- Garreaud, R. y M. Farias, 2009: Andean Uplift and Atacama Hyperaridity: A Climate Modeling Perspective. XII Congreso Geológico Chileno, Santiago-Chile (FCFM-UCH), 22-26 Noviembre, 2009.
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- Garreaud, R., 2008: Impacts of the Andes mountains on South American Climate. 4th Alexander von Humboldt Conference - The Andes: Challenge for Geosciences. Santiago-Chile, 24-28 Nov. 2008.
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