

# Monthly update of scientific references for ANDEX (2021-present)<sup>1</sup>

Last Update September 1st, 2023

You can find the reference file in the following link: [.bib](#)

## August 2023:

- Aguirre, F., Bozkurt, D., Sauter, T., Carrasco, J., Schneider, C., Jaña, R., et al. (2023). Snow Cover Variability in Brunswick Peninsula, Patagonia, Derived from a Combination of Spectral Fusion, Mixture Analysis and Temporal Interpolation of MODIS Data.
- Alonso-González, E., Gascoin, S., Arioli, S., and Picard, G. (2023). Exploring the potential of thermal infrared remote sensing to improve a snowpack model through an observing system simulation experiment. *The Cryosphere* 17, 3329–3342.
- Andrade, B. C. C. de (2023). Multi-scale actual evapotranspiration mapping in South America with remote sensing data and the geeSEBAL model.
- Angulo, E. C., and Pereira Filho, A. J. (2023). Extreme Droughts and Their Relationship with the Interdecadal Pacific Oscillation in the Peruvian Altiplano Region over the Last 100 Years. *Atmosphere* 14, 1233.
- Anthelme, F., Beck, S., Ginot, P., Lino, M. C. G., and Meneses, R. I. (n.d.). Ecosistemas y plantas altoandinos de la Cordillera Real.
- Callaú Medrano, S., Satgé, F., Molina-Carpio, J., Pillco Zolá, R., and Bonnet, M.-P. (2023). Downscaling Daily Satellite-Based Precipitation Estimates Using MODIS Cloud Optical and Microphysical Properties in Machine-Learning Models. *Atmosphere* 14, 1349.
- Chakraborty, A. (2023). Investigating the Impact of Forced and Internal Climate Variability on Future Convective Storm Environments in Subtropical South America: A Large Ensemble Approach.
- Coca, O., Ricaurte-Villota, C., and Cerón, W. L. (2023). Dominant morphodynamic processes of a macrotidal beach of the eastern tropical Pacific and its relationships with climate variability. *Journal of South American Earth Sciences*, 104533.
- Cullen, K. A. (2023). A review of applications of remote sensing for drought studies in the Andes region. *Journal of Hydrology: Regional Studies* 49, 101483.
- de Novaes Nascimento, M., McMichael, C. N., Kleijwegt, Z., Åkesson, C., Gredal, C., Maezumi, S. Y., et al. (2023). Fire in the clouds: How changing land use shaped an Andean biodiversity hotspot. *Quaternary Science Reviews* 317, 108278.
- Del Piero, R., Guerra, L. S., Popli, K., and Madaki, S. G. (n.d.). Evaluación Espacio-Temporal

---

<sup>1</sup> If you wish to include references that do not appear in this list, please contact: [sly.wongchuig-correa@univ-grenoble-alpes.fr](mailto:sly.wongchuig-correa@univ-grenoble-alpes.fr)

de Sequías Usando el Índice Estandarizado de Precipitación y Evapotranspiración (SPEI) en el Valle del Mantaro, Perú.

- Díaz, C., Moreno, P. I., Villacís, L. A., Sepúlveda-Zúñiga, E. A., and Maidana, N. I. (2023). Freshwater diatom evidence for Southern Westerly Wind evolution since ~ 18 ka in northwestern Patagonia. *Quaternary Science Reviews* 316, 108231.
- Díaz, R. D., Machaca, A. D., Belizario, G., and Lujano, E. (2023). Efectos del Cambio Climático Sobre los Ecosistemas de Montaña en la Cordillera Carabaya-Perú. *Revista Brasileira de Meteorologia* 38, e38230088.
- Francois, J. P., Hernandez, P., Schneider, I., and Cerda, J. (2024). Nuevos datos en torno a la historia paleoambiental del centro-sur de Chile. El registro sedimentario y palinológico del "Humedal Laguna Verde" (36° 47' S), Península Hualpén, Región del Bío-Bío, Chile. *Revista de Geografía Norte Grande*.
- Gerea, M., Soto Cárdenas, C., Garcia, P. E., Quiroga, M. V., and Queimaliños, C. (2023). Contrasting dissolved organic matter biodegradation and bacterial cytometric features in oligotrophic and ultraoligotrophic Patagonian lakes. *Journal of Plankton Research*, fbad033.
- Guerra, L. S., Popli, K., and Madaki, S. G. (2023). Spatio-Temporal Drought Assessment Using Standardized Precipitation Evapotranspiration Index (SPEI) over Mantaro Valley, Peru. *Revista de Investigaciones Altoandinas* 25, 159–170.
- Gutierrez, L., Huerta, A., Sabino, E., Bourrel, L., Frappart, F., and Lavado-Casimiro, W. (2023). Rainfall Erosivity in Peru: A New Gridded Dataset Based on GPM-IMERG and Comprehensive Assessment (2000–2020).
- Herazo, S., Berrouet, L., Hernández-Atilano, E., and Agudelo-Echavarría, D. M. (n.d.). Coevolution of flood dynamics and economical production in tropical wetlands: Insights from Bayesian Networks in Ayapel wetland, Colombia. *Journal of Geophysical Research: Biogeosciences*, e2023JG007416.
- Hiben, M. G., Awoke, A. G., and Ashenafi, A. A. (2023a). Homogeneity and change point detection of hydroclimatic variables: A case study of the Ghba River Subbasin, Ethiopia. *Journal of Geography and Cartography* 6, 2010.
- Hiben, M. G., Awoke, A. G., and Ashenafi, A. A. (2023b). Original Research Article Homogeneity and change point detection of hydroclimatic variables: A case study of the Ghba River Subbasin, Ethiopia.
- Hidalgo, M., Ramos, C., and Zolla, G. (2023). Analysis of lncRNAs in *Lupinus mutabilis* (Tarwi) and Their Potential Role in Drought Response. *Non-Coding RNA* 9, 48.
- Huguenin, C. N., Serafin, K. A., and Waylen, P. R. (2023). A spatio-temporal analysis of the role of climatic drivers influencing extreme precipitation events in a Costa Rican basin. *Weather and Climate Extremes*, 100602.
- Jaramillo-González, R., Martínez, L., Aristizábal, E., García, E., and Marín, R. J. (2023). Definition of Rainfall Thresholds for Shallow Landslides in Colombian Tropical Mountainous Catchments as Debris Flow Triggering Mechanism. in *E3S Web of*

*Conferences* (EDP Sciences), 05009.

- Loayza-Huillca, A., Atauchi, P. J., Peterson, A. T., and Yabar-Landa, A. E. (2023). Potential upslope and latitudinal range shifts for Andean potato weevils *Premnotrypes* species, in the tropical Andes of South America. *Crop Protection*, 106378.
- Lopes, R., and de Souza, M. S. (2023). Wind-blown continental dust as a fuel for paleoproductivity along the southwestern Atlantic Ocean during the last glacial period. *Pesquisas em Geociências* 50, e131140–e131140.
- Molina-Carpio, J., Rivera, I. A., Espinoza-Romero, D., Cerón, W. L., Espinoza, J.-C., and Ronchail, J. (n.d.). Regionalization of rainfall in the upper Madeira basin based on interannual and decadal variability: A multi-seasonal approach. *International Journal of Climatology*.
- Nunes, L. J. (2023). Effects of Climate Change on Temperate Forests in the Northwest Iberian Peninsula. *Climate* 11, 173.
- Ozán, I. L., Oriolo, S., Gutiérrez, L., Esnal, A. C., Latorre, A., Castro, M. A., et al. (2023). Rock Art Painting Taphonomy: the Role of Environmental and Technological Factors. *Journal of Archaeological Method and Theory*, 1–40.
- Palcsu, L. (n.d.). Danny Fernando Vargas Espin.
- Patrick, W. F. (2023). Hydrological patterns of the Chimborazo Reserve: Streamflow, climate, and glacier recession data show a loss of glacial influence on the southwestern aspect of the Chimborazo volcano, Ecuador.
- Pérez, I. (2023). Characteristics, variability and predictability of long-lived rossby wave packets in austral summer.
- Petry, I., Fan, F. M., Siqueira, V. A., Collishonn, W., de Paiva, R. C. D., Quedi, E., et al. (2023). Seasonal streamflow forecasting in South America's largest rivers. *Journal of Hydrology: Regional Studies* 49, 101487.
- Potter, E. M. (2023). An Evaluation of High-Resolution Model Simulations of Orographic Precipitation, Snowpack, Atmospheric Rivers, and Their Climate Sensitivities in the Southern Andes.
- Pozo, D., Marín, J. C., and Gutiérrez, F. (2023). Cloud properties of cold fronts affecting central Chile: Low and high freezing level storms. *Earth and Space Science* 10, e2022EA002591.
- Rendón Fernández, S. I. (n.d.). Cambio climático: efectos percibidos y prácticas socio territoriales de adaptación. Zona 7, municipio de Envigado-Colombia.
- Riechelson, H., Bova, S. C., Rosenthal, Y., Meyers, S., and Bu, K. (2023). Solar cycles forced Southern Westerly Wind migrations during the Holocene. *Geophysical Research Letters* 50, e2023GL104148.
- Ross, A. C., Mendoza, M. M., Drenkhan, F., Montoya, N., Baiker, J. R., Mackay, J. D., et al. (2023). Seasonal water storage and release dynamics of bofedal wetlands in the Central

Andes. *Hydrological processes* 37, e14940.

Salazar, J. F., Molina, R. D., Zuluaga, J. I., and Gomez-Velez, J. D. (2023). Wetting and drying trends in the Land-Atmosphere Reservoir of large basins around the world. *Hydrology and Earth System Sciences Discussions* 2023, 1–45.

Satgé, F., Pillco, R., Molina-Carpio, J., Mollinedo, P. P., and Bonnet, M.-P. (2023). Reliability of gridded temperature datasets to monitor surface air temperature variability over Bolivia. *International Journal of Climatology*.

Taborda Soto, J. E. (n.d.). Variabilidad intraestacional de la precipitación sobre el norte de Sudamérica: diagnóstico y conexiones.

Valderrama, V. H., Rojas, V. V., del Río, R. A., Torres, I. G., Volpi, E. V., and Contreras, H. U. (2023). Simulación hidrológica del caudal del estero Huillinco en la microcuenca agroforestal Huillinco (Chonchi, región de Los Lagos, Chile) bajo condiciones climáticas históricas y futuras. *Ciencia & Investigación Forestal*, 23–49.

Van Wyk de Vries, M., Ito, E., Shapley, M., Romero, M., and Brignone, G. (2023). Investigating paleoclimate and current climatic controls at Lago Argentino using sediment pixel intensity time series. *Journal of Paleolimnology*, 1–20.

Wongchuig, S., Carlo Espinoza, J., Condom, T., Junquas, C., Sierra, J. P., Fita, L., et al. (2023). Changes in the surface and atmospheric water budget due to projected Amazon deforestation: Lessons from a fully coupled model simulation. *Journal of Hydrology* 625, 130082. doi: 10.1016/j.jhydrol.2023.130082.

Yebra, L., Cortegoso, V., Marsh, E., de Porras, M. E., Maldonado, A., Castro, S., et al. (2023). Estrategias humanas y paleoclima en los Andes (34 S): Variaciones en la intensidad de ocupación de Laguna del Diamante (ca. 2000-500 años aP). *Latin American Antiquity*, 1–18.

Yilmaz, M. (2023). Consistency of spatiotemporal variability of MODIS and ERA5-Land surface warming trends over complex topography. *Environmental Science and Pollution Research*, 1–22.

Yue, W., Seftigen, K., Chen, F., Wilson, R., Zhang, H., Miao, Y., et al. (2023). *Picea schrenkiana* tree ring blue intensity reveal recent glacier mass loss in High Mountain Asia is unprecedented within the last four centuries. *Global and Planetary Change*, 104210.

## **July 2023:**

Aravena, R., Herrera, C., and Urrutia, J. (2023). Hydrochemical and isotopic evaluation of groundwater and river water in the transboundary Silala River watershed. *Wiley Interdisciplinary Reviews: Water*, e1679.

Bedoya, M. A., and Ramírez, B. H. (2023). The effects of climate and forest cover variability on the hydrological regulation of an eastern Andean Cusiana river sub basin.

- Carril, A. F., Flombaum, P., and Menéndez, C. G. (2023). Datos climáticos y prácticas recomendadas para proyectar cambios en la distribución de especies. *Darwiniana, nueva serie*, 367–389.
- Ccanccapa-Cartagena, A., Chavez-Gonzales, F. D., Paredes, B., Vera, C., Gutierrez, G., Valencia, R., et al. (2023). Seasonal differences in trace metal concentrations in the major rivers of the hyper-arid southwestern Andes basins of Peru. *Journal of Environmental Management* 344, 118493.
- Céspedes Romero, M. P. (n.d.). Análisis de la gestión del riesgo de desastres en Colombia por eventos hidrometeorológicos e hidroclimáticos extremos.
- Chitan Guerrero, D. (2023). Haemoproteus (Haemosporida, Haemoprotidae) asociados a aves migratorias y residentes en los valles interandinos del departamento de Caldas, Colombia.
- Díaz, P. A., and Figueroa, R. I. (2023). Toxic Algal Bloom Recurrence in the Era of Global Change: Lessons from the Chilean Patagonian Fjords. *Microorganisms* 11, 1874.
- Espinosa, B. B. C. M. R., Andino, P., and Christoffersen, D. J. K. S. (n.d.). Glacial-fed and páramo lake ecosystems in the tropical high Andes.
- Estay, S. A., Chávez, R. O., Lastra, J. A., Rocco, R., Gutiérrez, Á. G., and Decuyper, M. (2023). MODIS Time Series Reveal New Maximum Records of Defoliated Area by Ormiscodes amphimone in Deciduous Nothofagus Forests, Southern Chile. *Remote Sensing* 15, 3538.
- Figueroa-Villanueva, L., Castro, L., Bolaño-Ortiz, T. R., Flores, R. P., Pacheco, D., and Cereceda-Balic, F. (2023). Changes in Snow Surface Albedo and Radiative Forcing in the Chilean Central Andes Measured by In-Situ and Remote Sensing Data.
- García, J. L., Huaman, Y. E., Willems, B. L., Loayza-Muro, R., Moreira-Turcq, P., Wadham, J. L., et al. (2023). Identifying Acid Lakes and Associated Rock Exposure in Glacial Retreat Zones in the Peruvian Andes using Landsat 8 Imagery.
- Ha, K.-J., Blau, M. T., Kad, P., and Turton, J. V. (2023). Heterogeneous Warming Rates and Decline in Snow Persistence across Mountains Worldwide.
- Inostroza, K. G., Pantelis, C. B., and Baez, O. R. (2023). Uso de plantas por grupos cazadores recolectores pescadores marinos en el sitio San Juan 1, Chiloé (~ 6.000–400 años cal. ap). *Boletín de la Sociedad Chilena de Arqueología*, 314–350.
- Iriarte, J. L., Pizarro, G., and Frangopulos, M. (2023). Harmful algal blooms in Patagonian fjords and channels systems: Recent advances, gaps, and priorities in a changing ocean. *Progress in Oceanography*, 103087.
- Klein, C., Potter, E. R., Zauner, C., Gurgiser, W., Encarnación, R. C., Rapre, A. C., et al. (2023). Farmers' first rain: investigating dry season rainfall characteristics in the Peruvian Andes. *Environmental Research Communications* 5, 071004.

- Leclerc, E. L. (2023). Coast and highland paleoclimate of the north-central Peruvian Andes and its influence on coastal water availability and cultural development, 6000 to 2000 cal BP. *Quaternary Science Reviews* 314, 108209.
- Mamani Jimenez, L. C., Andreoli, R. V., Kayano, M. T., de Souza, R. A. F., and Ceron, W. L. (n.d.). Multiyear versus single-year El Niño events: Contrasting their impacts on South American seasonal precipitation. *International Journal of Climatology*.
- Mantas, V., and Caro, C. (2023). User-Relevant Land Cover Products for Informed Decision-Making in the Complex Terrain of the Peruvian Andes. *Remote Sensing* 15, 3303.
- Maragaño-Carmona, G., Fustos Toribio, I. J., Descote, P.-Y., Robledo, L. F., Villalobos, D., and Gatica, G. (2023). Rainfall-Induced Landslide Assessment under Different Precipitation Thresholds Using Remote Sensing Data: A Central Andes Case. *Water* 15, 2514.
- Marechal, E., Ezzedine, J., Uwizeye, C., Larbi, G. S., Villain, G., Louwagie, M., et al. (2023). Adaptive traits of cysts of the snow alga *Sanguina nivaloides* unveiled by 3D subcellular imaging.
- McNamara, G. (2023). Glacio-hydrological modeling of Quilcayhuanca valley, Peru.
- Müller, G. V., and Lovino, M. A. (2023). Variability and Changes in Temperature, Precipitation and Snow in the Desaguadero-Salado-Chadileuvú-Curacó Basin, Argentina. *Climate* 11, 135.
- Ombadi, M., Risser, M. D., Rhoades, A. M., and Varadharajan, C. (2023). A warming-induced reduction in snow fraction amplifies rainfall extremes. *Nature*, 1–6.
- Panetier, A., Bossier, P., and Khenchaf, A. (2023). Sensitivity of Shipborne GNSS Estimates to Processing Modeling Based on Simulated Dataset. *Sensors* 23, 6605.
- Parra, V., Muñoz, E., Arumí, J. L., and Medina, Y. (2023). Analysis of the Behavior of Groundwater Storage Systems at Different Time Scales in Basins of South Central Chile: A Study Based on Flow Recession Records. *Water* 15, 2503.
- Pino-Vargas, E., Espinoza-Molina, J., Chávarri-Velarde, E., Quille-Mamani, J., and Ingol-Blanco, E. (2023). Impacts of Groundwater Management Policies in the Caplina Aquifer, Atacama Desert. *Water* 15, 2610.
- Rauf, Z., Zarif, N., Khan, A., Siddiqui, S., Fatima, S., Iqbal, W., et al. (2023). The Western Himalayan fir tree ring record of soil moisture in Pakistan since 1855. *International Journal of Biometeorology*, 1–16.
- Rolim, L. Z. R., and de Souza Filho, F. de A. (2023). Exploring spatiotemporal chaos in hydrological data: evidence from Ceará, Brazil. *Stochastic Environmental Research and Risk Assessment*, 1–25.
- Rosas, M. R., Segovia, R. A., and Guerrero, P. C. (2023). Climatic Niche Dynamics of the *Astereae* Lineage and *Haplopappus* Species Distribution following Amphotropical Long-Distance Dispersal. *Plants* 12, 2721.

- San Juan Díaz, M. A. (2023). Evolución de la dinámica sedimentaria y sus implicancias paleoclimáticas durante el holoceno temprano del valle del río Turbio, Andes semiáridos de Chile (30° S).
- Sánchez-Cortez, J. L., Vélez-Macías, K., Macas-Espinosa, V., and Naranjo-Freire, C. (2023). Characterization of Geoheritage and Geotourism Potential of the Fluvial-Glacial Landscapes in the Culebrillas Lagoon (Ecuador). *Tourism and Hospitality* 4, 419–434.
- Shi, C., Mao, R., Gong, D.-Y., Kim, S.-J., Feng, X., Sun, Y., et al. (2023). Increased dust transport from Patagonia to eastern Antarctica during 2000–2020. *Global and Planetary Change*, 104186.
- Varuolo-Clarke, A. M. (2023). The mystery of observed and simulated precipitation trends in Southeastern South America since the early 20th century.
- Vasquez, R., and Manuel, E. (n.d.). The role of the Cordillera Blanca (Ancash, Peru) in the evolutionary history of sigmodontinae rodents in northern Peru.
- Xie, X., Chen, J. M., Yuan, W., Guan, X., Jin, H., and Leng, J. (n.d.). A practical algorithm for correcting topographical effects on global GPP products. *Journal of Geophysical Research: Biogeosciences*, e2023JG007553.

## June 2023:

- Alarcón, D., Santos, D., and Arroyo, M. T. (2023). Evidencia a nivel poblacional de adaptación al cambio climático en una planta en peligro y endémica de un hotspot de biodiversidad.
- Angulo, E. C., and Pereira Filho, A. J. (2023). Extreme Droughts and Their Relationship with the Interdecadal Pacific Oscillation over the Peruvian Altiplano Region during the Last 100 Years.
- Arias, P. A., Rendón, M. L., Martínez, J. A., and Allan, R. P. (2023). Changes in atmospheric moisture transport over tropical South America: an analysis under a climate change scenario. *Climate Dynamics*, 1–21.
- Byermoen, E. (2023). Trends and internal variability in Brazilian hydropower catchments.
- Contreras, S., Werne, J. P., Araneda, A., Tejos, E., and Moscoso, J. (2023). Abundance and distribution of plant derived leaf waxes (long chain n-alkanes & fatty acids) from lake surface sediments along the west coast of southern South America: Implications for environmental and climate reconstructions. *Science of The Total Environment*, 165065.
- Cuesta, F., Carilla, J., LLambí, L. D., Muriel, P., Lencinas, M. V., Meneses, R. I., et al. (2023). Compositional shifts of alpine plant communities across the high Andes. *Global Ecology and Biogeography*.
- Dame, J., Nüsser, M., Schmidt, S., and Zang, C. (2023). Socio-hydrological dynamics and water conflicts in the upper Huasco valley, Chile. *Frontiers in Water* 5, 1100977.
- D'Angelo del Campo, M. D., Romero, A., Salega, S., and Guichón, R. A. (2023).

- Ecogeography-related humerus morphological variation within southern Patagonia hunter-gatherers. *American Journal of Biological Anthropology*.
- DeCelles, P. G., and Carrapa, B. (2023). Differences between the central Andean and Himalayan orogenic wedges: A matter of climate. *Earth and Planetary Science Letters* 616, 118216.
- DEL CARMEN, A. (n.d.). PLAN DE PROTECCIÓN CONTRA INCENDIOS FORESTALES.
- Díaz, P. A., Álvarez, G., Figueroa, R. I., Garreaud, R., Pérez-Santos, I., Schwerter, C., et al. (2023). From lipophilic to hydrophilic toxin producers: Phytoplankton succession driven by an atmospheric river in western Patagonia. *Marine Pollution Bulletin* 193, 115214.
- Estay, J., Pinto, L., Easton, G., De Pascale, G. P., Troncoso, M., Carretier, S., et al. (2023). Active thrust tectonics along the western slope of the Central Andes southernmost Pampean flat-slab segment (~ 33° S, Chile): The Cariño Botado fault system. *Geomorphology*, 108801.
- Harries, R. M., Aron, F., and Kirstein, L. A. (2023). Climate aridity delays morphological response of Andean river valleys to tectonic uplift. *Geomorphology*, 108804.
- Hoorn, C., Lohmann, L. G., Boschman, L. M., and Condamine, F. L. (2023). Neogene History of the Amazonian Flora: A Perspective Based on Geological, Palynological, and Molecular Phylogenetic Data. *Annual Review of Earth and Planetary Sciences* 51, 419–446.
- Huerta, A., Aybar, C., Imfeld, N., Correa, K., Felipe-Obando, O., Rau, P., et al. (n.d.). High-resolution grids of daily air temperature for Peru.
- Koubek, M. (2023). Temperátní flóra Patagonie a specifické aspekty její evoluce.
- Kuo, C.-Y., Keshavmurthy, S., Huang, Y.-Y., Ho, M.-J., Hsieh, H. J., Hsiao, A.-T., et al. (2023). “Transitional coral ecosystem of Taiwan in the era of changing climate,” in *Coral Reefs of Eastern Asia under Anthropogenic Impacts* (Springer), 7–35.
- Lagos, L. O., Souto, C., Lillo-Saavedra, M., Pérez, A., Hirzel, J., Kuschel-Otárola, M., et al. (2023). Daily crop evapotranspiration and diurnal dynamics of the surface energy balance of a drip-irrigated blueberry (*Vaccinium corymbosum*) orchard. *Irrigation Science*, 1–13.
- Marín, C. H., Morello, F., and Mira, C. C. (2023). Late Pleistocene to Middle Holocene lithic industries from Southernmost Patagonia. Discussing technical variability, continuity and innovations. *L'Anthropologie*, 103137.
- Medina, W., Huang, R. M., and Pimm, S. L. (n.d.). Region-wide retreats from lower elevations of range-restricted birds across the Northern Andes. *Conservation Biology*.
- Miranda, V. F., dos Santos, D. M., Peres, L. F., Salvador, C., Nieto, R., Müller, G. V., et al. (2023). Heat stress in South America over the last four decades: a bioclimatic analysis.
- Müller, G. V., and Lovino, M. A. (2023). *Variability and Changes in Temperature*,



*Precipitation, and Snow in the Desaguadero-Salado-Chadileuvú-Curacó Basin, Argentina. Climate 2023, 11, 135.*

- Munar, A. M., Mendez, N., Narvaez, G., Campo Zambrano, F., Motta-Marques, D., Lyra Fialho Brêda, J. P., et al. (2023). Modelling the climate change impacts on river discharge and inundation extent in the Magdalena River basin–Colombia. *Hydrological Sciences Journal*, 1–15.
- Muraja, D. O. S., Klausner, V., Prestes, A., and da Silva, I. R. (2023). Ocean–atmosphere interaction identified in tree-ring time series from southern Brazil using cross-wavelet analysis. *Theoretical and Applied Climatology*, 1–13.
- Palmay, L. F. S. (2023). Facultad de Ingeniería Maestría en Hidrología con mención Ecohidrología.
- Petsch, C., Beilfuss, E. M., Ben, F. D., Schreiner, B. T., Costa, R. M., de Figueiredo, A. R., et al. (2023). Como os estudantes brasileiros percebem os Andes? Mapeando áreas de riscos sociocriosféricos no Peru. *Revista Brasileira de Educação em Geografia* 13, 05–26.
- Reinthaler, J., and Paul, F. (2023). Using a Web Map Service to map Little Ice Age glacier extents at regional scales. *Annals of Glaciology*, 1–19.
- Rodríguez-Souilla, J., Cellini, J. M., Lencinas, M. V., Roig, F. A., Chaves, J. E., Acuña, M.-C. A., et al. (2023). Variable retention harvesting and climate variations influence over natural regeneration dynamics in *Nothofagus pumilio* forests of Southern Patagonia. *Forest Ecology and Management* 544, 121221.
- Salariato, D. L., Zanotti, C., and Zuloaga, F. O. (2023). Threat patterns for endemic plants of Argentina reveal disparity of vulnerability and protection among spatially associated species groups. *Journal for Nature Conservation*, 126422.
- Salazar, A., Thatcher, M., Goubanova, K., Bernal, P., Gutiérrez, J., and Squeo, F. (2023). CMIP6 precipitation and temperature projections for Chile.
- Tao, D., Cheng, Y.-S., Hwang, C., Sun, W., and Lee, H. (n.d.). The rise and fall of Alaska and Yukon glaciers detected by TOPEX/Poseidon and Jason-2 altimeters using a novel glacier-threshold method. *Journal of Geophysical Research: Earth Surface*, e2022JF006977.
- Valdivia, J., Yarleque, C., Callañaupa, S., Villalobos-Puma, E., Guizado, D., Alvarado-Lugo, R., et al. (2023). Rethinking Water Sustainability: Precipitation Changes in the Peruvian Andes in the Face of Climate Change.
- Varas Bernales, J. I. (2023). Balance de masa geodésico y morfología superficial. Glaciar Universidad 2011-2022.
- Vásquez Anacona, H., Mattar, C., G. Alonso-de-Linaje, N., Sepúlveda, H. H., and Crisóstomo, J. (2023). Wind Simulations over Western Patagonia Using the Weather Research and Forecasting model and Reanalysis. *Atmosphere* 14, 1062.
- Vega, E., Bastidas Navarro, M., Martyniuk, N., Balseiro, E., and Modenutti, B. (2023). Glacial

recession in Andean North-Patagonia (Argentina): microbial communities in benthic biofilms of glacier-fed streams. *Hydrobiologia*, 1–15.

Wang, M., Wang, S., and An, Z. (2023). Quantifying the Spatio-Temporal Pattern Differences in Climate Change before and after the Turning Year in Southwest China over the Past 120 Years. *Atmosphere* 14, 940.

Zimmer, A., Beach, T., Luzzadder-Beach, S., Rabatel, A., Cruz Encarnación, R., Lopez Robles, J., et al. (n.d.). Proglacial Soil Formation in the Anthropocene: Soil Temperature and Initial Conditions Drive Carbon and Nitrogen Build-Up in Young Proglacial Soils in the Tropical Andes and Alps (Part Ii). Available at SSRN 4479512.

Zubieta, R., Ccanchi, Y., and Liza, R. (2023). Performance of heat spots obtained from satellite datasets to represent burned areas in Andean ecosystems of Cusco, Peru. *Remote Sensing Applications: Society and Environment*, 101020.

## May 2023:

Alarcón, D., Santos, D., and Arroyo, M. T. (2023). Population-Based Evidence of Climate Change Adaptation in an Endangered Plant Endemic to a Biodiversity Hotspot. *Plants* 12, 2017.

Apaéstegui, J., Romero, C., Vuille, M., Sulca, J., and Ampuero, A. (2023). Moisture Sources and Rainfall  $\delta^{18}\text{O}$  Variability over the Central Andes of Peru—A Case Study from the Mantaro River Basin. *Water* 15, 1867.

Aristizábal, E., Cardona, F. G., Isabel, M., and Carmona, A. (2023). Evaluación de la amenaza por avenidas torrenciales en el departamento de Antioquia a escala de cuenca. *CONTRIBUCIONES LOCALES, REGIONALES Y NACIONALES*, 92.

Arndt, M. (2023). On Thin Ice: The future of glacial runoff in La Paz, Bolivia.

Builes-Jaramillo, A., Valencia, J., and Salas, H. D. (2023). The influence of the El Niño-Southern Oscillation phase transitions over the northern South America hydroclimate. *Atmospheric Research*, 106786.

Cadaillon, A., Iachetti, C. M., Giesecke, R., Lepio, V. V., Malits, A., and Schloss, I. R. (2023). Rapid change in plankton community structure during spring along the eastern Beagle Channel. *Journal of Marine Systems*, 103906.

Carrión-Mero, P., Tiviano, I., Hervas, E., Jaya-Montalvo, M., Malavé-Hernández, J., Solórzano, J., et al. (2023). Water Sowing and harvesting application for water management on the slopes of a volcano. *Heliyon*.

Clementi, V. J. (2023). Pore Fluid and Sediment Geochemistry on the South Chilean Margin.

der wilden Tiere, D. K. (n.d.). Conservación en la Patagonia Chilena E-Book.

Díaz, M., Monfort-Lanzas, P., Quiroz-Moreno, C., Rivadeneira, E., Castillejo, P., Arnau, V., et al. (2023). The microbiome of the ice-capped Cayambe Volcanic Complex in Ecuador.

- DOS DADOS, A. T. E. E., and DE SEDIMENTOS, E. (n.d.). INSTITUTO NACIONAL DE PESQUISA DA AMAZÔNIA-INPA UNIVERSIDADE DO ESTADO DO AMAZONAS-UEA PROGRAMA DE PÓS-GRADUAÇÃO EM CLIMA E AMBIENTE-PPG CLIAMB.
- Fragkou, M., Tadeu, N. D., Empinotti, V., Fuster, R., Oré, M. T., Rojas, F., et al. (n.d.). “Water scarcity in Latin America,” in *Routledge Handbook of Latin America and the Environment* (Routledge), 87–97.
- Hakim, A. L., Saputra, D. D., Tanika, L., Kusumawati, I. A., Sari, R. R., Andreotti, F., et al. (2023). Protected spring and sacred forest institutions at the instrumental—relational value interface. *Current Opinion in Environmental Sustainability* 62, 101292.
- He, Z. (2023). The Impacts of Atlantic and Pacific Sea Surface Temperature Variability on South American and Arctic Climate.
- Malfatti, M. G. L. (n.d.). Previsibilidade da precipitação em bacias hidrográficas brasileiras na escala sazonal e potencial aplicação na gestão dos recursos hídricos.
- Morales, D., Molaes, S., and Ladio, A. (2023). Patagonian Ethnopedology and Its Role in Food Security: A Case Study of Rural Communities in Arid Environments of Argentina. *Journal of Ethnobiology*, 02780771231176364.
- Pauta, P. A. M. (2023). Facultad de Ingeniería Doctorado en Recursos Hídricos.
- Posada-Marín, J. A., Arias, P. A., Jaramillo, F., and Salazar, J. F. (2023). Global impacts of El Niño on terrestrial moisture recycling. *Geophysical Research Letters* 50, e2023GL103147.
- QUIDELLEUR, X., KALLEL, N., ELLIOT, M., and CROSTA, X. (n.d.). Composition du Jury.
- Riquelme-Buitano, T., González, P. F. O., and Donoso, P. J. (2023a). Comparación de crecimiento de *Nothofagus alpina* y *Nothofagus obliqua* en plantaciones puras y mixtas en la depresión intermedia de la Región de Los Ríos, Chile. *BOSQUE* 44, 263–272.
- Riquelme-Buitano, T., González, P. F. O., and Donoso, P. J. (2023b). Comparing growth of *Nothofagus alpina* and *Nothofagus obliqua* in pure and mixed plantations in the intermediate depression of the Los Ríos Region, Chile. *Revista Bosque* 44, 263–272.
- Rodriguez, P. C., Geiger, A. J., Ferri, L., Smedley, R. K., Garcia, J.-L., and Herrera, G. (2023). Glacial geomorphology between the Gran Campo Nevado and Estrecho de Magallanes, Chile (52–53° S, 73° W). *Journal of Maps*, 1–14.
- Santos, F., and Acosta, N. (2023). An Approach Based on Web Scraping and Denoising Encoders to Curate Food Security Datasets. *Agriculture* 13, 1015.
- Sierra, J. P., Espinoza, J.-C., Junquas, C., Wongchuig, S., Polcher, J., Moron, V., et al. (2023). Impacts of land-surface heterogeneities and Amazonian deforestation on the wet season onset in southern Amazon. *Climate Dynamics*, 1–32.

- Silva, L., Célleri, R., and Córdova, M. (2023). Diurnal to Seasonal Meteorological Cycles in an Equatorial Andean Gradient.
- Soteres García, R. L., Riquelme, F., Sagredo T, E., Kaplan, M. G., León, R., and Kaplan, M. (2023). (Paleo) glacier studies in Patagonia over the past decades (1976–2020): A bibliometric perspective based on the Web of Science.
- Spoth, M., Hall, B., Lowell, T., Diefendorf, A. F., Corcoran, M. C., and Brickle, P. (2023). Tracking the southern hemisphere westerlies during and since the last glacial maximum with multiproxy lake records from the Falkland Islands (52° S). *Quaternary Science Reviews* 311, 108135.
- Suli, S., Barriopedro, D., García–Herrera, R., and Rusticucci, M. (2023). Regionalisation of heat waves in southern South America. *Weather and Climate Extremes*, 100569.
- Torres, R. R., Giraldo, E., Muñoz, C., Caicedo, A., Hernández-Carrasco, I., and Orfila, A. (2023). Seasonal and El Niño–Southern Oscillation-related ocean variability in the Panama Bight. *Ocean Science* 19, 685–701.
- Valenzuela, J., Figueroa, M., Armijos, E., Espinoza, J.-C., Wongchuig, S., and Ramirez-Avila, J. J. (2023). Flooding risk of cropland areas by repiquetes in the western Amazon basin: A case study of Peruvian Tamshiyacu City. *Journal of Hydrology: Regional Studies* 47, 101428.
- Walk, J., Schulte, P., Bartz, M., Binnie, A., Kehl, M., Mörchen, R., et al. (2023). Pedogenesis at the coastal arid-hyperarid transition deduced from a Late Quaternary chronosequence at Paposo, Atacama Desert. *Catena* 228, 107171.
- Wunderlich, W., Lang, M., Keating, K., Perez, W. B., and Oshun, J. (2023). The role of peat-forming bofedales in sustaining baseflow in the humid puna. *Journal of Hydrology: Regional Studies* 47, 101394.
- Zelazowski, P., Jozefowicz, S., Feeley, K. J., and Malhi, Y. (2023). Establishing the Position and Drivers of the Eastern Andean Treeline with Automated Transect Sampling. *Remote Sensing* 15, 2679.

## **April 2023:**

- Akbas, A. (2023). Seasonality, persistency, regionalization, and control mechanism of extreme rainfall over complex terrain. *Theoretical and Applied Climatology*, 1–17.
- Alizadeh, M. R., Abatzoglou, J. T., Adamowski, J., Modaresi Rad, A., AghaKouchak, A., Pausata, F. S., et al. (2023). Elevation-dependent intensification of fire danger in the western United States. *Nature communications* 14, 1773.
- Arévalo, S. M. M., Delgado, R. C., Lindemann, D. da S., Gelsleichter, Y. A., Pereira, M. G., Rodrigues, R. de Á., et al. (2023). Past and Future Responses of Soil Water to Climate Change in Tropical and Subtropical Rainforest Systems in South America. *Atmosphere* 14, 755.

- Ballesteros Prada, A. M. (2023). Estudio de los foraminíferos del Holoceno en Bahía Samborombón, provincia de Buenos Aires: implicancias paleoecológicas, paleoambientales y paleoclimáticas.
- Boschat, G., Purich, A., Rudeva, I., and Arblaster, J. (2023). Impact of zonal and meridional atmospheric flow on surface climate and extremes in the Southern Hemisphere. *Journal of Climate*, 1–45.
- Castellanos, E. J., Lemos, M. F., Astigarraga, L., Chacón, N., Cuvi, N., Huggel, C., et al. (n.d.). Central and South America.
- Cox, A. J., Hartley, I. P., Meir, P., Sitch, S., Dusenge, M. E., Restrepo, Z., et al. (2023). Acclimation of photosynthetic capacity and foliar respiration in Andean tree species to temperature change. *New Phytologist*.
- da Luz, C. F. P., Horák-Terra, I., Costa, C. R., Fonseca, K., Vidal-Torrado, P., and Silva, A. C. (2023). Cenários do passado: reconstituição milenar da vegetação de Cerrado com base em grãos de pólen e outros microfósseis em turfeiras da Serra do Espinhaço Meridional. *Revista Espinhaço*.
- Duque-Gardeazabal, N., and Rodríguez, E. A. (2023). Improving Rainfall Fields in Data-Scarce Basins: Influence of the Kernel Bandwidth Value of Merging on Hydrometeorological Modeling. *Journal of Hydrologic Engineering* 28, 04023017.
- Flannery, D. (2023). Surface Morphologies in a Mars-Analog Ca-Sulfate Salar, High Andes, Northern Chile. *Mars analogs: Environment, Habitability and Biodiversity* 16648714.
- González-Orozco, C. E., Guillén, E. G., and Cuvi, N. (2023). Changes of Cinchona distribution over the past two centuries in the northern Andes. *Royal Society Open Science* 10, 230229.
- Kukla, T., Winnick, M. J., Laguë, M. M., and Xia, Z. (2023). The zonal patterns in late Quaternary tropical South American precipitation. *Paleoceanography and Paleoclimatology*, e2022PA004498.
- Kumar, S., Flores, J. L., Moya-Álvarez, A. S., Martínez-Castro, D., and Silva, Y. (2023). Characteristics of cloud properties over South America and over Andes observed using CloudSat and reanalysis data. *International Journal of Remote Sensing* 44, 1976–2004.
- Kumari, S., and Middey, A. (2023). A comprehensive appraisal on the effect of aerosol on mountain glaciers: special reference to Sikkim Himalayan region of India. *Sādhanā* 48, 50.
- Lander, E., and Steinitz, M. (2023). “Crisis of Civilization: Experiences of Progressive Governments and Debates in the Latin American Left,” in *Refeudalization and the Crisis of Civilization* (Routledge), 5–121.
- Llauca, H., Leon, K., and Lavado-Casimiro, W. (2023). Construction of a daily streamflow dataset for Peru using a similarity-based regionalization approach and a hybrid hydrological modeling framework. *Journal of Hydrology: Regional Studies* 47, 101381.
- López, A. S., López, D. R., Caballé, G., Edwards, P., and Marchelli, P. (2023). Do populations

- of *Festuca pallescens* from a rainfall gradient differ in the expression of morpho-physiological traits under drought stress? *Environmental and Experimental Botany*, 105335.
- Mata-Guel, E. O., Soh, M. C., Butler, C. W., Morris, R. J., Razgour, O., and Peh, K. S.-H. (2023). Impacts of anthropogenic climate change on tropical montane forests: an appraisal of the evidence. *Biological Reviews*.
- Medina, N. M. M., Cruz, F. W., Winter, A., Zhang, H., Ampuero, A., Vuille, M., et al. (2023). Atlantic ITCZ variability during the Holocene based on high-resolution speleothem isotope records from northern Venezuela. *Quaternary Science Reviews* 307, 108056.
- Moya-Álvarez, A. S., Estevan, R., Martínez-Castro, D., and Silva, Y. (2023). Spatial and Temporal Distribution of Black Carbon in Peru from the Analysis of Biomass Burning Sources and the Use of Numerical Models. *Earth Systems and Environment*, 1–20.
- Napoli, A., Pepin, N., Palazzi, E., and Zardi, D. (2023). A workshop on advances in our understanding of Elevation Dependent Climate Change. *Bulletin of the American Meteorological Society*.
- Oelkers, R. C., Andreu-Hayles, L., D'Arrigo, R., Pacheco-Solana, A., Rodriguez-Caton, M., Fuentes, A., et al. (2023). Recent growth increase in an endemic *Juglans boliviana* forest from the tropical Andes. *Dendrochronologia*, 126090.
- Otaola, C., Franchetti, F. R., and Giardina, M. A. (2023). Land use and systematic survey in the study of hunter-gatherers from northwestern Patagonia, Argentina. *Journal of Archaeological Science: Reports* 49, 103956.
- Paul, F., Baumann, S., Anderson, B., and Rastner, P. (2023). Deriving a year 2000 glacier inventory for New Zealand from the existing 2016 inventory. *Annals of Glaciology*, 1–11.
- Pfeiffer, M., Padarian, J., and Vega, M. P. (2023). Soil inorganic carbon distribution, stocks and environmental thresholds along a major climatic gradient. *Geoderma* 433, 116449.
- Postigo, J. C., Ñaupari, J. A., and Flores, E. R. (2023). “From Mapping to Guiding: An Emergent Framework for the Multiple Uses of Remote Sensing and GIScience in Socio-environmental Research in the Peruvian Andes,” in *Socio-Environmental Research in Latin America* (Springer), 117–138.
- Qin, Y., Wei, Y., Lu, J., Mao, J., Deng, H., Chen, X., et al. (2023). Changing temperature trends at subtropical mountains in southeastern China.
- Rodríguez Lara, N. L., Salazar Ventura, I. N., and Cedeño Oviedo, J. M. (2023). Análisis de la influencia del fenómeno de La Niña 2020-2022 en la precipitación y temperatura del aire en Chile continental.
- Rodríguez, P., Soto, I., Villamizar, J., and Rebolledo, A. (2023). Fatty Acids and Minerals as Markers Useful to Classify Hass Avocado Quality: Ripening Patterns, Internal Disorders, and Sensory Quality. *Horticulturae* 9, 460.
- Rojo-Garibaldi, B., Contreras-López, M., Giannerini, S., Salas-de-León, D. A., Vázquez-

- Guerra, V., and Cartwright, J. H. (2023). Nonlinear Time Series Analysis of Coastal Temperatures and El Niño–Southern Oscillation Events in the Eastern South Pacific. *Earth System Dynamics Discussions* 2023, 1–48.
- Rowell, C. R. (2023). Shallow subaqueous and subglacial explosive eruptions: quantifying controls on the dynamics, stability, evolution, and stratospheric injection of water-rich eruption columns.
- Stuart-Smith, R., Roe, G., Li, S., and Allen, M. (2023). Comment on ‘Attribution of Modern Andean Glacier Mass Loss Requires Successful Hindcast of Pre-Industrial Glacier Changes’ by Sebastian Lüning et al. *Available at SSRN 4410943*.
- Suryanto, J. (2023). VALIDASI CURAH HUJAN HARIAN CHIRPS PRECIPITATION SATELLITE PRODUCT DI PROVINSI KALIMANTAN BARAT. *Jurnal Ilmiah Rekayasa Pertanian dan Biosistem* 11, 73–88.
- Tobón, C., Castro, E., and Ceballos, J. L. (2023). “Ecohydrological Gradient in Neotropical Montane Ecosystems: From Tropical Montane Forests to Glacier,” in *Neotropical Gradients and Their Analysis* (Springer), 229–253.
- Vega-Briones, J., de Jong, S., Galleguillos, M., and Wanders, N. (2023). Identifying driving processes of drought recovery in the southern Andes natural catchments. *Journal of Hydrology: Regional Studies* 47, 101369.
- Velásquez, N., Vélez, J. I., Álvarez-Villa, O. D., and Salamanca, S. P. (2023). Comprehensive Analysis of Hydrological Processes in a Programmable Environment: The Watershed Modeling Framework. *Hydrology* 10, 76.
- Wang, X., Zhang, B., Zhang, Z., Tian, L., Kunstmann, H., and He, C. (2023). Identifying spatiotemporal propagation of droughts in the agro-pastoral ecotone of northern China with long-term WRF simulations. *Agricultural and Forest Meteorology* 336, 109474.
- Zhang, Q., Feng, T., Wang, M., Yang, G., Lu, H., and Sun, W. (2023). A Twenty-Year Assessment of Spatiotemporal Variation of Surface Temperature in the Yangtze River Delta, China. *Remote Sensing* 15, 2274.
- Zimmer, A., Beach, T., Regalado, S. R., Aliaga, J. S., Encarnación, R. C., and Anthelme, F. (2023). Llamas (Llama glama) enhance novel proglacial ecosystem development: an experimental approach in the Cordillera Blanca, Peru.
- Лаврентьев, И. И., Носенко, Г. А., Глазовский, А. Ф., Шейн, А. Н., Иванов, М. Н., and Леопольд, Я. К. (2023). Толщина льда и снежного покрова ледника ИГАН (Полярный Урал) по данным наземного радиозондирования в 2019 и 2021 гг. *Лёд и Снег* 63, 5–16.

### **March 2023:**

- Álvarez, M. J. S. (2023). RECONSTRUCCIÓN DE LA ALTITUD DE LA ISOTERMA 0 C EN PATAGONIA NORTE DURANTE LOS ÚLTIMOS 900 AÑOS UTILIZANDO ANILLOS DE ÁRBOLES.

- Aschero, V., de Jesús Bonjour, L., Alvarez, M. A., and Barros, A. (n.d.). Los caminos de montaña afectan a la riqueza de plantas nativas y exóticas a lo largo del gradiente de elevación en los Andes Áridos. *Boletín de la Sociedad Argentina de Botánica* 58.
- Aza-Medina, L. C., Palumbo, M., Lacasta, A. M., and González Lezcano, R. A. (2023). Characterization of the thermal behavior, mechanical resistance, and reaction to fire of totora (*Schoenoplectus californicus* (CA Mey.) Sojak) panels and their potential use as a sustainable construction material.
- Bernal-Mujica, A., Lovino, M. A., Müller, G. V., and Pierrestegui, M. J. (2023). Spatiotemporal variability of extreme precipitation events and their impacts on soil moisture and water table depth in Argentina's core crop region. *Hydrological Sciences Journal*.
- Bianchi, M. M., Giaché, Y., Irurzún, A., Gogorza, C., Fontana, S., and Gieseke, T. (2023). The effects of climate, natural disturbances, and human occupation on the rainforest boundary at the eastern foothills of Northern Patagonian Andes since the Late Glacial period. *Quaternary Science Reviews* 306, 108040.
- Burić, D., and Penjišević, I. (2023). Southern Hemisphere temperature trend in association with greenhouse gases, El Niño Southern Oscillation, and Antarctic Oscillation. *IDŐJÁRÁS/QUARTERLY JOURNAL OF THE HUNGARIAN METEOROLOGICAL SERVICE* 127, 23–42.
- Cabrera, D., Quinteros, M., Cerrada, M., Sánchez, R.-V., Gualpa, M., Sancho, F., et al. (2023). Rainfall Forecasting using a Bayesian framework and Long Short-Term Memory Multi-model Estimation based on an hourly meteorological monitoring network. Case of study: Andean Ecuadorian Tropical City. *Earth Science Informatics*, 1–16.
- Calderón Caro, E. (n.d.). Predicción temprana de heladas en cultivos de altura, empleando métodos de aprendizaje de máquinas.
- de Vries, M. V. W., Romero, M., Penprase, S. B., Ng, G.-H. C., and Wickert, A. D. (2023). Increasing rate of 21st century volume loss of the Patagonian Icefields measured from proglacial river discharge. *Journal of Glaciology*, 1–16.
- Domic, A. I., de Porras, M. E., Capriles, J. M., Zamora-Allendes, A., Ivory, S. J., and Maldonado, A. (2023). Precipitation variability, vegetation turnover, and anthropogenic disturbance over the last millennium in the Atacama highlands of northern Chile (19° S). *The Holocene*, 09596836231151834.
- dos Reis, R. S., da Rocha Ribeiro, R., Delmonte, B., Ramirez, E., Dani, N., Mayewski, P. A., et al. (2023). The Recent Relationships Between Andean Ice-Core Dust Record and Madeira River Suspended Sediments on the Wet Season. *Glaciation and climate change in the andean cordillera* 16648714.
- García-Tadeo, D. A., Montoya-Zavaleta, M., and Tan, Y. (2023). Understanding the Susceptibility of the Tropical Proglacial Environment in Peru Using Optical Imagery and Radon Measurements. *Atmosphere* 14, 568.
- Gómez, D., Aristizábal, E., García, E. F., Marín, D., Valencia, S., and Vásquez, M. (2023). Landslides forecasting using satellite rainfall estimations and machine learning in the Colombian Andean region. *Journal of South American Earth Sciences*, 104293.



- Gómez-Fontéalba, C., Flores-Aqueveque, V., and Alfaro, S. C. (2023). Teleconnection between the Surface Wind of Western Patagonia and the SAM, ENSO, and PDO Modes of Variability. *Atmosphere* 14, 608.
- Gonzalez, R. J., Giraldo, E. A., Aristizábal, E. G., and Marin, R. J. (2023). Ingles Physically-based Model applied to Rainfall Thresholds for Shallow Landslides: Literature review. *Revista de la Asociación Geológica Argentina* 80.
- Morales, M. S., Crispín-DelaCruz, D. B., Álvarez, C., Christie, D. A., Ferrero, M. E., Andreu-Hayles, L., et al. (2023). Drought increase since the mid-20th century in the northern South American Altiplano revealed by a 389-year precipitation record. *Climate of the Past* 19, 457–476.
- Muir, R., Eaves, S., Vargo, L., Anderson, B., Mackintosh, A., Sagredo, E., et al. (2023). Late glacial climate evolution in the Patagonian Andes (44–47° S) from alpine glacier modelling. *Quaternary Science Reviews* 305, 108035.
- Parra, R. R. T., Solana, S. L., Barros, J. S., and Paz, C. J. D. (2023). Water masses in the Caribbean Sea and sub-annual variability in the Guajira upwelling region. *Ocean Dynamics*, 1–19.
- Ramim, B. F. (n.d.). Avaliação da previsão sub-sazonal da precipitação nas grandes bacias das regiões Sul e Sudeste.
- Soto-Rogel, P., Aravena, J. C., Villalba, R., Meier, W. J.-H., and Griesinger, J. (2023). Tree-ring  $\delta^{18}O$  cellulose variations in two *Nothofagus* species record large-scale climatic signals in the South American sector of the Southern Ocean. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 111474.
- Tamhane, J., Thomas, Z. A., Cadd, H., Harris, M. R., Turney, C., Marjo, C. E., et al. (2023). Mid-Holocene intensification of Southern Hemisphere westerly winds and implications for regional climate dynamics. *Quaternary Science Reviews* 305, 108007.
- Ticse-Otarola, G., Vidal, O. D., Andreu-Hayles, L., Quispe-Melgar, H. R., Amoroso, M. M., Santos, G. M., et al. (2023). Age structure and climate sensitivity of a high Andean relict forest of *Polylepis rodolfo-vasquezii* in central Peru. *Dendrochronologia*, 126071.
- Torrez-Rodriguez, L., Goubanova, K., Muñoz, C., and Montecinos, A. (2023). Evaluation of temperature and precipitation from CORDEX-CORE South America and Eta-RCM regional climate simulations over the complex terrain of Subtropical Chile. *Climate Dynamics*, 1–27.
- URIBE, P. A. M. (n.d.). HOLOCENE CLIMATE VARIABILITY IN TROPICAL SOUTH AMERICA: CASE HISTORY FROM A HIGH-MOUNTAIN WET ZONE IN NW COLOMBIA BASED ON PALYNOLOGY AND X-RAY MICROFLUORESCENCE.
- Yu, A., Shi, H., Wang, Y., Yang, J., Gao, C., and Lu, Y. (2023). A Bibliometric and Visualized Analysis of Remote Sensing Methods for Glacier Mass Balance Research. *Remote Sensing* 15, 1425.

## February 2023:

- Acosta-Castellanos, P. M., Castro Ortégón, Y. A., and Perico Granados, N. R. (2023). Regionalization of IDF Curves by Interpolating the Intensity and Adjustment Parameters: Application to Boyacá, Colombia, South America. *Water* 15, 561.
- Ahmed, M. R., Ghaderpour, E., Gupta, A., Dewan, A., and Hassan, Q. K. (2023). Opportunities and Challenges of Spaceborne Sensors in Delineating Land Surface Temperature Trends: A Review. *IEEE Sensors Journal*.
- Arroyo Quinto, L. M. (2023). Estudio de la variabilidad espacio-temporal de la precipitación, el viento y la humedad en la región del Urabá antioqueño a través de resultados de WRF.
- Bamonte, F. P., Marcos, M. A., Echeverría, M. E., Sottile, G. D., Panarello, H. O., and Mancini, M. V. (2023). A new record of paleoenvironmental conditions from the northeastern San Martín Lake Basin (Patagonia, Argentina): Vegetation reconstruction from pollen and carbon isotopes since 10,200 cal. years BP. *Publicación Electrónica de la Asociación Paleontológica Argentina* 23, 1-17-1-17.
- Betancur, T., and Martínez, C. (2022). Potential and prospects for hydrogeological exploration according to lithostructural criteria in Antioquia department, Colombia. *Boletín Geológico* 49, 45–63.
- Böhrkircher, L., Leuchner, M., Bayro Kaiser, F., and Reicher, C. (2023a). “FLR Potentials and Spatial Allocation Parameters,” in *Priority-Zone Mapping for Reforestation: Case Study in the Montane Dry Forests of Bolivia* (Springer), 33–43.
- Böhrkircher, L., Leuchner, M., Bayro Kaiser, F., and Reicher, C. (2023b). “Problems of Deforestation and Its Drivers,” in *Priority-Zone Mapping for Reforestation: Case Study in the Montane Dry Forests of Bolivia* (Springer), 19–31.
- Böhrkircher, L., Leuchner, M., Kaiser, F. B., and Reicher, C. (2023c). *Priority-Zone Mapping for Reforestation: Case Study in the Montane Dry Forests of Bolivia*. Springer Nature.
- Brêda, J. P. L., de Paiva, R. C. D., Siqueira, V. A., and Collischonn, W. (2023). Assessing climate change impact on flood discharge in South America and the influence of its main drivers. *Journal of Hydrology*, 129284.
- Canales, N. A., Pérez-Escobar, O. A., Powell, R. F., Töpel, M., Kidner, C., Nesbitt, M., et al. (2022). A highly contiguous, scaffold-level nuclear genome assembly for the Fever tree (*Cinchona pubescens* Vahl) as a novel resource for research in the Rubiaceae. *bioRxiv*, 2022.04.25.489452.
- Carilla, J., Aráoz, E., Foguet, J., Casagrande, E., Halloy, S., and Grau, A. (2022). Hydroclimate and vegetation variability of high Andean ecosystems. *Frontiers in Plant Science* 13, 5609.
- Carrasco, D., Pizarro, O., Jacques-Coper, M., and Narváez, D. A. (2023). Main drivers of marine heat waves in the eastern South Pacific. *Frontiers in Marine Science*.
- Concha, P. (2023). La resiliencia climática en el sector de agua y saneamiento en América Latina y su relación con la emisión de bonos verdes.

- de Vries, M. V. W., Ito, E., Romero, M., Shapley, M., and Brignone, G. (2023). Periodicity of the Southern Annular Mode in Southern Patagonia, insight from the Lago Argentino varve record. *Quaternary Science Reviews* 304, 108009.
- Fagel, N., Pedreros, P., Alvarez, D., Israde Alcantara, I., Vega Alay, I., Namur, O., et al. (2023). Volcanic, tectonic and climate controls on lacustrine sedimentary supplies over the last millenia in NE Chilean Patagonia (Lake Esponja, Aysen, 45° S). *The Holocene*, 09596836231151828.
- González, P., Capcha-Ramos, J., Niño-de-Guzmán, P., Goodwin, Z. A., Särkinen, T., Valencia, N., et al. (2022). Distribución geográfica, estado de conservación y lectotipificación de *Pedersenia weberbaueri* (Suess.) Holub (Amaranthaceae), un arbusto endémico y muy amenazado del valle del Marañón de Perú. *Revista Peruana de Biología* 29.
- González, P., Capcha-Ramos, J., Niño-de-Guzmán, P., Goodwin, Z., Särkinen, T., Valencia, N., et al. (n.d.). Geographic distribution, conservation status and lectotypification of *Pedersenia weberbaueri* (Suess.) Holub (Amaranthaceae), an endemic and highly threatened shrub from the Marañón valley of Peru. *Revista Peruana de Biología* 29, e23214–e23214.
- Karaman, Ç. H., and Akyürek, Z. (2023). Evaluation of Near-surface Air Temperature Reanalysis Datasets and Downscaling with Machine Learning based Random Forest Method for Complex Terrain of Turkey. *Advances in Space Research*.
- Klein, C., Hänchen, L., Potter, E. R., Junquas, C., Harris, B. L., and Maussion, F. (2023). Untangling the importance of dynamic and thermodynamic drivers for wet and dry spells across the Tropical Andes. *Environmental Research Letters* 18, 034002.
- Marengo, J., Espinoza, J. C., Bettolli, L., Cunha, A. P., Molina-Carpio, J., Skansi, M., et al. (2023). A cold wave of winter 2021 in central South America: characteristics and impacts. *Climate Dynamics*, 1–23.
- Medina, L. C. A., and González-Lezcano, R. A. (2023). Characterization of the thermal behavior, mechanical resistance, and reaction to fire of totora (*Schoenoplectus tatora*) panels and their potential use as a sustainable construction material. *Journal of Building Engineering*, 105984.
- Modenutti, B., Martyniuk, N., Bastidas Navarro, M., and Balseiro, E. (2023). Glacial Influence Affects Modularity in Bacterial Community Structure in Three Deep Andean North-Patagonian Lakes. *Microbial Ecology*, 1–12.
- Montenegro, E. B. C., and Tamba, J. C. V. (n.d.). ESTIMACIÓN ACTUAL Y FUTURA DEL RETROCESO GLACIAR DEL NEVADO CAYAMBE, EN ECUADOR.
- Navarro, Á., Úbeda, J., Gómez, J., and Pellitero, R. (2023a). “1975–2018: 43 Years of Glacial Retreat in the Incachiriasca Glacier (Nevado Salcantay, Vilcabamba Range, Peru),” in *Sustainable Development Goals in Europe: A Geographical Approach* (Springer), 263–278.
- Navarro, G., MacDonell, S., and Valois, R. (2023b). A conceptual hydrological model of semiarid Andean headwater systems in Chile. *Progress in Physical Geography: Earth and Environment*, 03091333221147649.

- Noor, R., Pande, C. B., Zahra, S. M., Maqsood, A., Baig, A., Misaal, M. A., et al. (2023). “Review of Various Impacts of Climate Change in South Asia Region, Specifically Pakistan,” in *Climate Change Impacts on Natural Resources, Ecosystems and Agricultural Systems* (Springer), 269–296.
- Pacheco, K. G. M. (2023a). “Con el agua al cuello”: Una historia de batallas perdidas contra el agua y desastres por inundaciones en Colombia, 1950-2011. *Agua y territorio= Water and Landscape*, 77–91.
- Pacheco, K. M. (2023b). “Con el agua al cuello”: Una historia de batallas perdidas contra el agua y desastres por inundaciones en Colombia (1944-2011). *Agua y Territorio/Water and Landscape*, e7133–e7133.
- Pacheco, K. M. (n.d.). “Con el agua al cuello”: Una historia de batallas perdidas contra el agua y desastres por inundaciones en Colombia, 1950-2011 “In Deep Waters”: a history of lost battles against water and disastrous floods in Colombia, 1950-2011.
- Peltier, C., Kaplan, M. R., Sagredo, E. A., Moreno, P. I., Araos, J., Birkel, S. D., et al. (2023). The last two glacial cycles in central Patagonia: A precise record from the Ñirehuao glacier lobe. *Quaternary Science Reviews* 304, 107873.
- Ramírez Naranjo, R. (n.d.). Contaminación atmosférica por material particulado en un territorio urbano y de montaña. Caso de estudio Valle de Aburrá, Colombia.
- Rodriguez, D. R. O., Sánchez-Salguero, R., Hevia, A., Granato-Souza, D., Cintra, B. B., Hornink, B., et al. (2023). Climate variability of the southern Amazon inferred by a multi-proxy tree-ring approach using *Cedrela fissilis* Vell. *Science of The Total Environment*, 162064.
- Saldaña-Escorcía, R. (2023). Influencia de las variaciones climáticas y las actividades antrópicas en la recarga hídrica: estudio de caso "Humedal el Gallinazo".
- Schirmer, J.-E. (2023). *Nachhaltiges Privatrecht*. Mohr Siebeck.
- Seijo-Ellis, G., Giglio, D., and Salmun, H. (n.d.). Intrusions of Amazon river waters in the Virgin Islands basin during 2007 to 2017. *Journal of Geophysical Research: Oceans*, e2022JC018709.
- Silva, W. C. da (2023). Climatologia dos eventos extremos diários de precipitação sobre a Amazônia Central e Colômbia e suas relações com as fases do El Niño-oscilação sul.
- Srivastava, A., Shukla, S., Singh, P., and Jha, P. K. (2023). Spatio-temporal dynamics of land use/cover and land surface temperature in Prayagraj city, India. *Indoor and Built Environment*, 1420326X231159633.
- Vaideanu, P., Ionita, M., Voiculescu, M., and Rimbu, N. (2023). Deconstructing Global Observed and Reanalysis Total Cloud Cover Fields Based on Pacific Climate Modes. *Atmosphere* 14, 456.
- Valencia, S., Marín, D. E., Gómez, D., Hoyos, N., Salazar, J. F., and Villegas, J. C. (2023). Spatio-temporal assessment of Gridded precipitation products across topographic and climatic gradients of Colombia. *Atmospheric Research*, 106643.

- Vásquez Franco, D. F. (2023). Diagnóstico de las condiciones atmosféricas asociadas a eventos intensos de precipitación sobre el suroeste de Colombia.
- Vilca Bellido, I. (2023). Influencia de la estructura del paisaje en la regulación hídrica: Caso subcuena Apacheta, Cuenca Cachi, Ayacucho. periodo 1994 al 2019.
- Xiao, Y., Zhang, X.-X., Hu, Y., Wang, X., Li, P., He, Z.-H., et al. (2023). Phylogeography of *Toona ciliata* (Meliaceae) Complex in China Inferred from Cytonuclear Markers. *Genes* 14, 116.

## January 2023:

- Assa, B. G., BhowmicK, A., and Elias, B. (2023). Modeling canopy water content in the assessment for rainfall induced surface and groundwater nitrate contamination index from cropland N-fertilizer in Bilate downstream.
- Bello, C., Suarez, W., Drenkhan, F., and Vega-Jácome, F. (2023). Hydrological impacts of dam regulation for hydropower production: The case of Lake Sibinacocha, Southern Peru. *Journal of Hydrology: Regional Studies* 46, 101319.
- Benfica, N. S., da Silva Gomes, A., Drumond, C. E. I., and Zanchi, F. B. (2023). The Relation Between Net Primary Productivity And Human Activities For Three Biomes In Bahia State, Brazil. *GEOGRAPHY, ENVIRONMENT, SUSTAINABILITY* 15, 6–16.
- Caetano, L., Guallar, C., Martín, J., Vidal, M., da Cunha, L. C., Vieira, R., et al. (2023). Multiple controls on carbon dioxide sequestration in the beagle channel (Southern Patagonia) in early fall. *Journal of Marine Systems*, 103858.
- Harden, C. P., and Fernández, A. (2023). “Mountain Waterscapes: Geographies of Interactions, Transformations, and Meanings,” in *Montology Palimpsest: A Primer of Mountain Geographies* (Springer), 275–292.
- Kubiak-Wójcicka, K., Nagy, P., Pilarska, A., and Zeleňáková, M. (2023). Trend Analysis of Selected Hydroclimatic Variables for the Hornad Catchment (Slovakia). *Water* 15, 471.
- Leyba, I. M., Solman, S. A., Saraceno, M., Martinez, J. A., and Dominguez, F. (2023). The South Atlantic Ocean as a moisture source region and its relation with precipitation in South America. *Climate Dynamics*, 1–16.
- Luethje, M., Benito, X., Schneider, T., Mosquera, P. V., Baker, P., and Fritz, S. C. (2023). Paleolimnological responses of Ecuadorian páramo lakes to local and regional stressors over the last two millennia. *Journal of Paleolimnology*, 1–19.
- Méndez, C., Nuevo-Delaunay, A., and Reyes, O. (2023). The exploration of marginal spaces in Central-West Patagonia and the role of discontinuous occupation of forests and highlands. *L'Anthropologie*, 103118.
- Rozas-Davila, A., Rodbell, D. T., and Bush, M. B. (n.d.). Pleistocene megafaunal extinction in the grasslands of Junín-Peru. *Journal of Biogeography*.

- Sandoval, V. A. L. (2023). ENSO-Teleconnections Associated with Soil, Plant, Rainfall and Temperature Dynamics and their Impacts on Rice Crops Detected by Remote Sensing and Machine Learning Techniques.
- Sedlmeier, K., Imfeld, N., Gubler, S., Spirig, C., Quevedo Caiña, K., Escajadillo, Y., et al. (n.d.). The rainy season in the Southern Peruvian Andes: a climatological analysis based on the new Climandes index. *International Journal of Climatology*.
- Sharififar, A., Minasny, B., Arrouays, D., Boulonne, L., Jang, H.-J., Mcbratney, A., et al. (2023). Soil inorganic carbon, the other and equally important soil carbon pool: Distribution, controlling factors, and the impact of climate change. *Advances in Agronomy*.
- Troch, M., Bertrand, S., Wellner, J. S., Lange, C. B., and Hughen, K. A. (2023). Postglacial fluctuations of western outlet glaciers of the Southern Patagonian Icefield reconstructed from fjord sediments (Chile, 50° S). *Quaternary Science Reviews* 301, 107934.
- Ueno, K., and Nakileza, B. R. (2023). “Atmospheric Envelopes and Glacial Retreat,” in *Montology Palimpsest: A Primer of Mountain Geographies* (Springer), 169–185.
- Villacís, L. A., Moreno, P. I., Vilanova, I., Henríquez, C. A., Henríquez, W. I., Villa-Martínez, R. P., et al. (2023). A freshwater diatom perspective on the evolution of the southern westerlies for the past~ 14,000 years in southwestern Patagonia. *Quaternary Science Reviews* 301, 107929.
- Volke, M. I., Abarca-del-Rio, R., and Ulloa-Tesser, C. (2023). Impact of mobility restrictions on NO<sub>2</sub> concentrations in key Latin American cities during the first wave of the COVID-19 pandemic. *Urban Climate*, 101412.
- Yang, M., Zhao, W., Cai, J., Yang, Y., and Fu, H. (n.d.). Evaluation of Consistency among MODIS Land Surface Temperature Products for Monitoring Surface Warming Trend over the Tibetan Plateau. *Earth and Space Science*, e2022EA002611.
- Zubieta, R., Ccanchi, Y., Martínez, A., Saavedra, M., Norabuena, E., Alvarez, S., et al. (2023). The role of drought conditions on the recent increase in wildfire occurrence in the high Andean regions of Peru. *International Journal of Wildland Fire*.

## **December 2022:**

- Avila-Diaz, A., Torres, R. R., Zuluaga, C. F., Cerón, W. L., Oliveira, L., Benezoli, V., et al. (2022). Current and Future Climate Extremes Over Latin America and Caribbean: Assessing Earth System Models from High Resolution Model Intercomparison Project (HighResMIP). *Earth Systems and Environment*, 1–32.
- Bisset, R. R., Nienow, P. W., Goldberg, D. N., Wigmore, O., Loayza-Muro, R. A., Wadham, J. L., et al. (2022). Using thermal UAV imagery to model distributed debris thicknesses and sub-debris melt rates on debris-covered glaciers. *Journal of Glaciology*, 1–16.
- Chancay Sánchez, J. E. (2022). Pronóstico de inundaciones basado en un sistema acoplado de

modelación atmosférica-hidrológica en subcuencas Amazónicas del Ecuador con escasez de datos.

- Chávez, R. O., Meseguer-Ruiz, O., Olea, M., Calderón-Seguel, M., Yager, K., Meneses, R. I., et al. (2023a). Andean peatlands at risk? Spatiotemporal patterns of extreme NDVI anomalies, water extraction and drought severity in a large-scale mining area of Atacama, northern Chile. *International Journal of Applied Earth Observation and Geoinformation* 116, 103138.
- Chávez, R. O., Meseguer-Ruiz, O., Olea, M., Calderón-Seguel, M., Yager, K., Meneses, R. I., et al. (2023b). Observations and Geoinformation. *International Journal of Applied Earth Observation and Geoinformation* 116, 103138.
- Coral-Carrillo, K., Ruiz-Gutiérrez, G., Gómez-Arozamena, J., and Viguri, J. R. (2023). Sedimentation Rate and Contamination Levels Profile of Potentially Toxic Elements in the Limoncocha Lagoon RAMSAR Wetland in the Ecuadorian Amazon. *Environments* 10, 2.
- Emmer, A. (2023). Vanishing evidence? On the longevity of geomorphic GLOF diagnostic features in the Tropical Andes. *Geomorphology* 422, 108552.
- Fernández-Navarro, H., García, J.-L., Nussbaumer, S. U., Tikhomirov, D., Pérez, F., Gärtner-Roer, I., et al. (2023). Fluctuations of the Universidad Glacier in the Andes of central Chile (34° S) during the latest Holocene derived from a <sup>10</sup>Be moraine chronology. *Quaternary Science Reviews* 300, 107884.
- Fernández-Sánchez, A., Úbeda, J., Tanarro, L. M., Naranjo-Fernández, N., Álvarez-Aldegunde, J. A., and Iparraguirre, J. (2022). Climate Patterns and Their Influence in the Cordillera Blanca, Peru, Deduced from Spectral Analysis Techniques. *Atmosphere* 13, 2107.
- González, M. H., Rolla, A. L., and Sanchez, M. V. (2022). Seasonal probabilistic precipitation prediction in Comahue region (Argentina) using statistical techniques. *Theoretical and Applied Climatology*, 1–13.
- Huerta, A., Camacho, C. L. A., Imfeld, N., Correa, K., Felipe-Obando, O., Rau, P., et al. (2022). High-resolution grids of daily air temperature for Peru-the new PISCOt v1. 2 dataset.
- Kowal, K., Slater, L., López, A. G., and Van Loon, A. F. (n.d.). A comparison of seasonal rainfall forecasts over Central America using dynamic and hybrid approaches from C3S and NMME. *International Journal of Climatology*.
- Loaiza-Usuga, J. C., Toro-Quijano, M. I., and Weber, M. B. (n.d.). Alluvial soils as paleoenvironmental indicator in fluvial environments: a case study from Colombia. *Soil Science Annual*.
- Minowa, M., Skvarca, P., and Fujita, K. (2023). Climate and Surface Mass Balance at Glaciar Perito Moreno, Southern Patagonia. *Journal of Climate* 36, 625–641.
- Moreno, P. I., Méndez, C., Henríquez, C. A., Fercovic, E. I., Videla, J., Reyes, O., et al. (2023). Fires and rates of change in the temperate rainforests of northwestern Patagonia since ~ 18 ka. *Quaternary Science Reviews* 300, 107899.

- Pacheco, J., Solera, A., Avilés, A., and Tonón, M. D. (2022). Influence of ENSO on Droughts and Vegetation in a High Mountain Equatorial Climate Basin. *Atmosphere* 13, 2123.
- Rivadeneira, P., Salvati, L., and Scaccia, L. (2022). A Spatial Regression Analysis of Colombia's Narcodeforestation with Factor Decomposition of Multiple Predictors. *Available at SSRN 4297612*.
- Soteres, R. L., Riquelme, F. M., Sagredo, E. A., and Kaplan, M. R. (2022). (Paleo) glacier studies in Patagonia over the past decades (1976–2020): A bibliometric perspective based on the Web of Science. *Journal of South American Earth Sciences*, 104173.
- Taylor, L. S. (2022). Using a new generation of remote sensing to monitor Peru's mountain glaciers.
- Torres, G., Lupo, L., and Pérez, C. (2022). Reconstruction of the environmental conditions for the past 2,000 years in the Perico River basin (NW Argentina) based on fossil pollen records. *Vegetation History and Archaeobotany*, 1–17.
- Universidade de São Paulo, Instituto de Astronomia, Geofísica e Ciências Atmosféricas, Zabalaga, D. G., Rocha, R. P. D., Llopert, M. P., and Reboita, M. S. (2022). Identificação de Regiões Homogêneas de Precipitação e Projeções Climáticas com o RegCM4 no Altiplano Andino. *RBGF* 15, 2689–2703. doi: 10.26848/rbgf.v15.6.p2689-2703.
- van Dongen, R., Scherler, D., Wendi, D., Deal, E., Mao, L., Marwan, N., et al. (2022). El Niño Southern Oscillation (ENSO)-induced hydrological anomalies in central Chile. *EGUsphere*, 1–31.
- Xu, X., Zhang, X., and Li, X. (2023). Evaluation of the Applicability of Three Methods for Climatic Spatial Interpolation in the Hengduan Mountains Region. *Journal of Hydrometeorology* 24, 35–51.
- Zhao, P., He, Z., and Du, J. (2022). Implications of elevation-dependent warming to water resources over the Chinese Qilian Mountains. *Journal of Water and Climate Change*.

## **November 2022:**

- Antonoglou, N., Balidakis, K., Wickert, J., Dick, G., de la Torre, A., and Bookhagen, B. (2022). Water-Vapour Monitoring from Ground-Based GNSS Observations in Northwestern Argentina. *Remote Sensing* 14, 5427.
- Aubry-Wake, C. (2022). From processes to predictions in hydrological modelling of glacierized basins.
- Bahamonde, H. A., Aranda, I., Peri, P. L., Gyenge, J., and Fernández, V. (2022). Leaf wettability, anatomy and ultra-structure of *Nothofagus antarctica* and *N. betuloides* grown under a CO<sub>2</sub> enriched atmosphere. *Plant Physiology and Biochemistry*.



- Basantes-Serrano, R., Rabatel, A., Francou, B., Vincent, C., Soruco, A., Condom, T., et al. (2022). New insights into the decadal variability in glacier volume of a tropical ice cap, Antisana (0° 29' S, 78° 09' W), explained by the morpho-topographic and climatic context. *The Cryosphere* 16, 4659–4677.
- Bonilla, E. X. (2022). Modeling the environmental and public health impacts of smoke from biomass burning in the Amazon Basin.
- Cazorla, M., Gallardo, L., and Jimenez, R. (2022). The complex Andes region needs improved efforts to face climate extremes. *Elem Sci Anth* 10, 00092.
- Clifford, H. M., Potocki, M., Rodda, C., Dixon, D., Birkel, S., Handley, M., et al. (2022). Prefacing unexplored archives from Central Andean surface-to-bedrock ice cores through a multifaceted investigation of regional firn and ice core glaciochemistry. *Journal of Glaciology*, 1–15.
- Devi, J. P., Mahanta, C., and Barua, A. (2022). “Understanding Adaptation Strategies to Climate Change,” in *Sustainability of Water Resources* (Springer), 359–374.
- Fan, C., Liu, K., Luo, S., Chen, T., Cheng, J., Zhan, P., et al. (2022). Detection of surface water temperature variations of Mongolian lakes benefiting from the spatially and temporally gap-filled MODIS data. *International Journal of Applied Earth Observation and Geoinformation* 114, 103073.
- Faye, S., Rochon, A., St-Onge, G., Vilanova, I., de Vernal, A., and Desiagne, P.-A. (2023). Southern westerly winds and paleoceanography of the San Jorge Gulf (SW-Atlantic ocean, Argentina) during the last 14,000 years. *Quaternary Science Reviews* 299, 107858.
- Filho, D. F. F., and Pessoa, F. C. L. (n.d.). Identification of homogeneous regions based on rainfall in the Amazon River basin.
- Francina, D., Jorge, E.-B., Zhao, Y., David, B., Raquel, N., and Luis, G. (2022). Amazonian Moisture Recycling Revisited Using WRF with Water Vapor Tracers. *Authorea Preprints*.
- Kumar, P., Veerabhadrapa, S. M., Bahuguna, I. M., and Singh, D. (2022). Spatio-temporal Change Analysis of Glacial Lakes in Himalayas of Himachal Pradesh using Geospatial Technology.
- Lücke, A., Kock, S., Wissel, H., Kulemeyer, J. J., Lupo, L. C., Schäbitz, F., et al. (2022). Hydroclimatic record from an Altiplano cushion peatland (24° S) indicates large-scale reorganisation of atmospheric circulation for the late Holocene. *Plos one* 17, e0277027.
- Maksic, J., Shimizu, M. H., Kayano, M. T., Chiessi, C. M., Prange, M., and Sampaio, G. (2022). Influence of the Atlantic Multidecadal Oscillation on South American Atmosphere Dynamics and Precipitation. *Atmosphere* 13, 1778.
- Malits, A., Ibarbalz, F. M., Martín, J., and Flombaum, P. (2022). Higher biotic than abiotic natural variability of the plankton ecosystem revealed by a time series along a subantarctic transect. *Journal of Marine Systems*, 103843.

- Manciu, A., Rammig, A., Krause, A., and Quesada, B. R. (2022). Impacts of land cover changes and global warming on climate in Colombia during ENSO events. *Climate Dynamics*, 1–19.
- Marcos, M. A., Bamonte, F. P., Echeverria, M. E., Sottile, G. D., and Mancini, M. V. (2022). Paleoenvironmental Changes for the Last 3000 Cal Years BP in the Pueyrredón Lake Basin, Southern Patagonia, Argentina. *Quaternary* 5, 49.
- Moreno, P. I., Fercovic, E. I., Soteres, R. L., Ugalde, P. I., Sagredo, E. A., and Villa-Martínez, R. P. (2022). Glacier and terrestrial ecosystem evolution in the Chilotan archipelago sector of northwestern Patagonia since the Last Glacial Termination. *Earth-Science Reviews*, 104240.
- Moya-Álvarez, A. S., Silva, Y., Villalobos-Puma, E., Saavedra-Huanca, M., Del Castillo, C., and Kumar, S. (2022). Physical processes associated with summer rains in the western slope of the Peruvian Andes, using weather radar data and numerical modeling: case studies.
- Noa-Yarasca, E., Ayuque, D. C., Ccora, H. A. G., Bizarro, I. A. A., and Arancibia, A. (n.d.). Review of Statistical Water Temperature Models for a Peruvian Andean River.
- Olmo, M. E., Weber, T., Teichmann, C., and Bettolli, M. L. (2022). Compound events in South America using the CORDEX-CORE ensemble: Current climate conditions and future projections in a global warming scenario. *Journal of Geophysical Research: Atmospheres*, e2022JD037708.
- Paquis, P., Hengst, M. B., Florez, J. Z., Tapia, J., Molina, V., Pérez, V., et al. (2022). Short-term characterisation of climatic-environmental variables and microbial community diversity in a high-altitude Andean wetland (Salar de Huasco, Chile). *Science of The Total Environment*, 160291.
- Serrano-Vincenti, S., Condom, T., Campozano, L., Escobar, L. A., Walpersdorf, A., Carchipulla-Morales, D., et al. (2022). Harmonic Analysis of the Relationship between GNSS Precipitable Water Vapor and Heavy Rainfall over the Northwest Equatorial Coast, Andes, and Amazon Regions. *Atmosphere* 13, 1809.
- Shutkin, T. Y. (2022). Multi-Temporal Glacier-Climate Interactions in Peru's Queshque Valley (~ 10° S): Modeling Contemporary Glacier Change and Interpreting Geomorphic Evidence of Holocene Climate History.
- SILVA, A. C., and SOUZA, A. F. (2022). Spatial structure of the Caatinga woody flora: abundance patterns have environmental, Pleistocene, and indigenous drivers. *Anais da Academia Brasileira de Ciências* 94.
- Struve, T., Longman, J., Zander, M., Lamy, F., Winckler, G., and Pahnke, K. (2022). Systematic changes in circumpolar dust transport to the Subantarctic Pacific Ocean over the last two glacial cycles. *Proceedings of the National Academy of Sciences* 119, e2206085119.
- Valencia, J., and Mejía, J. F. (2022). Projected Changes of Day-to-Day Precipitation and Choco Low-Level Jet Relationships over the Far Eastern Tropical Pacific and Western Colombia from Two CMIP6 GCM Models. *Atmosphere* 13, 1776.

Weber, A. (2022). Amazonian Influences on the Hydrological and Mineralogical Signals Preserved in an Ice Core from the Cordillera Blanca, Peru.

Weber, U., Arduini, G., Bastos, A., Reichstein, M., and Orth, R. (n.d.). Exploring the relationship between temperature forecast errors and Earth system variables.

## October 2022:

Autin, P., Sicart, J. E., Rabatel, A., Hock, R., and Jomelli, V. (2023). Climate reconstruction of the Little Ice Age maximum extent of the tropical Zongo Glacier using a distributed energy balance model. *Comptes Rendus. Géoscience* 355, 1–18.

Balseiro, E., Modenutti, B., Bastidas Navarro, M., Martyniuk, N., Schenone, L., and Laspoumaderes, C. (2022). “North Patagonian Andean Deep Lakes: Impact of Glacial Recession and Volcanic Eruption,” in *Freshwaters and Wetlands of Patagonia* (Springer), 31–57.

Bucogen, G. G. B., Piccolo, M. C., Bohn, V. Y., and Huck, G. E. (2022). Using Chaos theory fundamentals for analysing temperature, precipitation variability and trends in Northern Patagonia, Argentina. *Journal of Southern Hemisphere Earth Systems Science*.

Carreno-Luengo, H., and Ruf, C. S. (2022). Mapping Freezing and Thawing Surface State Periods with the CYGNSS Based F/T Seasonal Threshold Algorithm. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*.

Chen, M., Huang, Y., Li, Z., Larico, A. J. M., Xue, M., Hong, Y., et al. (2022). Cross-Examining Precipitation Products by Rain Gauge, Remote Sensing, and WRF Simulations over a South American Region across the Pacific Coast and Andes. *Atmosphere* 13, 1666.

Chen, M., Huang, Y., Li, Z., Larico, A. J. M., Xue, M., Hong, Y., et al. (n.d.). Cross-Examining Precipitation Products by Rain Gauge. *Remote Sensing, and WRF Simulations over a South American Region across the Pacific Coast and Andes. Atmosphere*.

del Carmen Diéguez, M., Arcagni, M., Rizzo, A., Catán, S. P., Cárdenas, C. S., Horvat, M., et al. (2022). Mercury in Aquatic Systems of North Patagonia (Argentina): Sources, Processes, and Trophic Transfer. *Freshwaters and Wetlands of Patagonia: Ecosystems and Socioecological Aspects*, 163.

Diéguez, M. del C., Arcagni, M., Rizzo, A., Pérez Catán, S., Soto Cárdenas, C., Horvat, M., et al. (2022). Mercury in Aquatic Systems of North Patagonia (Argentina): Sources, Processes, and Trophic Transfer. *Freshwaters and Wetlands of Patagonia*, 163–194.

Escobar-González, D., Singaña-Chasi, M. S., González-Vergara, J., Erazo, B., Zambrano, M., Acosta, D., et al. (2022). Intensity-Duration-Frequency Curve for Extreme Rainfall Event Characterization, in the High Tropical Andes. *Water* 14, 2998.

Fagundes, M. V. (n.d.). Marina Vergara Fagundes,\* , Alexandre F. Souza, Rafael S. Oliveira and Gislene Ganade.

- Gibson, D. K. (2022). Investigating the Effects of Synoptic-Scale Climatic Processes on Local-Scale Hydrology by Combining Multi-Proxy Analyses of Lacustrine Sediments and Instrumental Records.
- Gibson-Carpintero, S., Venegas-González, A., Urra, V. D., Estay, S. A., and Gutiérrez, Á. G. (2022). Recent increase in autumn temperature has stabilized tree growth in forests near the tree lines in Chilean Patagonia. *Ecosphere* 13, e4266.
- Houston, J., and Latorre, C. (n.d.). The Role of the Non-Stationary Andean Dry Diagonal in Paleoclimate Reconstructions. *Hydrological Processes*, e14723.
- Jara, F. G., García, P. E., García, R. D., Sganga, J. V., and Pueta, M. (2022). Environmental heterogeneity determines patterns of abundance and distribution of aquatic organisms in small forested wetlands.
- Malone, A. G., Broglie, E. T., and Wrightsman, M. (2022). The Evolution of the Two Largest Tropical Ice Masses since the 1980s. *Geosciences* 12, 365.
- Pandey, P. C., Chauhan, A., and Maurya, N. K. (2022). Evaluation of earth observation datasets for LST trends over India and its implication in global warming. *Ecological Informatics*, 101843.
- Pedersen, O., Brunetto, E., Kröhling, D. M., BelénThalmeier, M., and Zalazar, M. C. (2022). Palaeohydrology from the Northern Salado River, a lower Parana river tributary (Argentina). *Journal of South American Earth Sciences*, 104050.
- Ritter, B., Diederich-Leicher, J. L., Binnie, S. A., Stuart, F. M., Wennrich, V., Bolten, A., et al. (2022). Impact of CaSO<sub>4</sub>-rich soil on Miocene surface preservation and Quaternary sinuous to meandering channel forms in the hyperarid Atacama Desert. *Scientific Reports* 12, 1–9.
- Rosales, A. G., Junquas, C., da Rocha, R. P., Condom, T., and Espinoza, J. C. (n.d.). Effects of the regional-local circulation on precipitation development in the tropical Andes (Rio Santa Basin).
- Rosas, M. A., Viveen, W., and Vanacker, V. (2023). Spatial variation in specific sediment yield along the Peruvian western Andes. *CATENA* 220, 106699.
- Ruiz, L., Pitte, P., Rivera, A., Schaefer, M., and Masiokas, M. H. (2022). “Current State and Recent Changes of Glaciers in the Patagonian Andes (~ 37° S to 55° S),” in *Freshwaters and Wetlands of Patagonia* (Springer), 59–91.
- Sapiains, R., Azócar, G., Moraga, P., Valenzuela, C., Aldunce, P., Cornejo, C., et al. (2022). Are Citizens Ready for Active Climate Engagement or Stuck in a Game of Blame? Local Perceptions of Climate Action and Citizen Participation in Chilean Patagonia. *Sustainability* 14, 12034.
- Schlottman, B. A. (2022). Impacts of Artificial Warming on Vegetation and Soil Fungal Communities in Two Sites in the Cruz-Verde Sumapaz Paramo Complex, Colombia.
- Sepúlveda-Zúñiga, E., Maidana, N. I., Villacís, L. A., Sagredo, E. A., and Moreno, P. I. (2022). The last millennium viewed from a fine-resolution freshwater diatom record from

northwestern Patagonia. *Quaternary Science Reviews* 296, 107806.

Temme, F., Farías-Barahona, D., Seehaus, T., Jaña, R., Arigony-Neto, J., Gonzalez, I., et al. (2022). Strategies for Regional Modelling of Surface Mass Balance at the Monte Sarmiento Massif, Tierra del Fuego. *EGU sphere*, 1–35.

Urciuolo, A. B., and Iturraspe, R. J. (2022). “Hydrologic Systems, Water Uses, and Emerging Conflicts Around Freshwater Availability in Patagonia,” in *Freshwaters and Wetlands of Patagonia* (Springer), 197–265.

Younis, A., Benders, R., Ramírez, J., de Wolf, M., and Faaij, A. (2022). Scrutinizing the Intermittency of Renewable Energy in a Long-Term Planning Model via Combining Direct Integration and Soft-Linking Methods for Colombia’s Power System. *Energies* 15, 7604.

## September 2022:

Beard, D. B., Clason, C. C., Rangelcroft, S., Poniecka, E., Ward, K. J., and Blake, W. H. (2022). Anthropogenic contaminants in glacial environments II: Release and downstream consequences. *Progress in Physical Geography: Earth and Environment*, 03091333221127342.

Bolaño-Díaz, S., Camargo-Caicedo, Y., Soro, T. D., N’Dri, A. B., and Bolaño-Ortiz, T. R. (2022). Spatio-Temporal Characterization of Fire Using MODIS Data (2000–2020) in Colombia. *Fire* 5, 134.

Cepeda, E., and Cañon, J. (2022). Performance of high-resolution precipitation datasets CHIRPS and TerraClimate in a Colombian high Andean Basin. *Geocarto International*, 1–20.

Crawford, D. W., Montero, P., and Daneri, G. (2022). Blooms of *Alexandrium catenella* in Coastal Waters of Chilean Patagonia: Is Subantarctic Surface Water. *Oceanography and Benthic Ecology of Patagonian Fjords-500 years From the Discovery of the Strait Magellan*.

dos Reis, A. A., Weerts, A., Ramos, M.-H., Wetterhall, F., and dos Santos Fernandes, W. (2022). Hydrological data and modeling to combine and validate precipitation datasets relevant to hydrological applications. *Journal of Hydrology: Regional Studies* 44, 101200.

Engelhardt, V., Pérez, T., Donoso, L., Müller, T., and Wiedensohler, A. (2022). Black carbon and particulate matter mass concentrations in the Metropolitan District of Caracas, Venezuela: An assessment of temporal variation and contributing sources. *Elem Sci Anth* 10, 00024.

Ferreira, G. W., Reboita, M. S., and Drumond, A. (2022). Evaluation of ECMWF-SEAS5 Seasonal Temperature and Precipitation Predictions over South America. *Climate* 10, 128.

Gamboa, C., Godfrey, L., Urrutia, J., Herrera, C., Liu, X., and Jordan, T. (2022). Conditions of

- groundwater recharge in the hyperarid southern Atacama Desert. *Global and Planetary Change*, 103931.
- Locatelli, B., Laurenceau, M., Chumpisuca, Y. R. C., Pramova, E., Vallet, A., Conde, Y. Q., et al. (2022). In people's minds and on the ground: Values and power in climate change adaptation. *Environmental Science & Policy* 137, 75–86.
- Lopes, A. B., Andreoli, R. V., Souza, R. A., Cerón, W. L., Kayano, M. T., Canchala, T., et al. (n.d.). Multiyear La Niña effects on the precipitation in South America. *International Journal of Climatology*.
- Lüning, S., Gałka, M., Bamonte, F. P., García-Rodríguez, F., and Vahrenholt, F. (2022). Attribution of modern Andean glacier mass loss requires successful hindcast of pre-industrial glacier changes. *Journal of South American Earth Sciences*, 104024.
- Marcuzzi, E. A., González, M. H., and del Carmen Dentoni, M. (2022). “Forecasting the Danger of the Forest Fire Season in North-West Patagonia, Argentina,” in *Applied Geomorphology and Contemporary Issues* (Springer), 257–271.
- Martin, P. B., Oruezabal, V. A., and Castañeda, M. E. (2022). “Observed Changes in the Precipitation Regime in the Argentinean Patagonia and Their Geographical Implication,” in *Applied Geomorphology and Contemporary Issues* (Springer), 537–546.
- Navas, A., Lizaga, I., Santillán, N., Gaspar, L., Latorre, B., and Dercon, G. (n.d.). Targeting the Source of Fine Sediment and Associated Geochemical Elements by Using Novel Fingerprinting Methods in Proglacial Tropical Highlands (Cordillera Blanca, Perú). *Hydrological Processes*, e14662.
- Orrison, R., Vuille, M., Smerdon, J. E., Apaéstegui, J., Azevedo, V., Campos, J. L. P., et al. (2022). South American Summer Monsoon variability over the last millennium in paleoclimate records and isotope-enabled climate models. *Climate of the Past* 18, 2045–2062.
- Ritchie, P. D., Parry, I., Clarke, J. J., Huntingford, C., and Cox, P. M. (2022). Increases in the temperature seasonal cycle indicate long-term drying trends in Amazonia. *Communications Earth & Environment* 3, 1–8.
- Sanchez, M. V., González, M. H., and Rolla, A. L. (2022). “An Attempt to Forecast Seasonal Precipitation in the Comahue River Basins (Argentina) to Increase Productivity Performance in the Region,” in *Applied Geomorphology and Contemporary Issues* (Springer), 97–126.
- Sulca, J., Takahashi, K., Tacza, J., Espinoza, J.-C., and Dong, B. (2022). Decadal variability in the austral summer precipitation over the Central Andes: Observations and the empirical-statistical downscaling model. *International Journal of Climatology* 42, 9836–9864. doi: 10.1002/joc.7867.
- Sulca Jota, J. C., Vuille, M., and Dong, B. (2022). Interdecadal variability of the austral summer precipitation over the Central Andes.
- Sunarta, I. N., Suyarto, R., Saifulloh, M., Wiyanti, W., Susila, K. D., and Kusumadewi, L. G.

- L. (2022). SURFACE URBAN HEAT ISLAND (SUHI) PHENOMENON IN BALI AND LOMBOK TOURISM AREAS BASED ON REMOTE SENSING. *Journal of Southwest Jiaotong University* 57.
- Troch, M., Bertrand, S., Amann, B., Liu, D., Placencia, J. A., and Lange, C. B. (2022). Sediment Provenance in the Baker-Martínez 48° S) Indicated by Fjord Magnetic System (Chile, Susceptibility and Inorganic Geochemistry. *Oceanography and Benthic Ecology of Patagonian Fjords-500 years From the Discovery of the Strait Magellan*.
- Ubidia Peralta, C. J. (2022). Investigating temperature effects on bridges along the andean region for the implementation of optic sensors as shm systems.
- Vázquez-Patiño, A., Samaniego, E., Campozano, L., and Avilés, A. (2022). Effectiveness of causality-based predictor selection for statistical downscaling: a case study of rainfall in an Ecuadorian Andes basin. *Theoretical and Applied Climatology*, 1–27.
- Villalobos-Puma, E., Flores-Rojas, J. L., Martínez-Castro, D., Morales, A., Lavado-Casimiro, W., Mosquera-Vásquez, K., et al. (n.d.). Summertime precipitation extremes and the influence of atmospheric flows on the western slopes of the southern Andes of Perú 1. *International Journal of Climatology*.
- Vining, B. R., Hillman, A., Contreras, D. A., and Tejedor, E. (2022). Expanded agroecological niches and redistributed risks in northern Peru's Chicama Valley during late-Holocene ENSO climate changes. *The Holocene*, 09596836221121761.
- Vizcaino, A., Jimenez-Espejo, F. J., Dunbar, R. B., Mucciarone, D., García-Alix, A., Neugebauer, I., et al. (n.d.). Southern Hemisphere Westerly Winds have modulated the formation of laminations in sediments in Lago Fagnano (Tierra del Fuego, Argentina) over the past 6.3 ka. *Boreas*.
- Welp, L. R., Olson, E. J., Valdivia, A. L., Larico, J. R., Arhuire, E. P., Paredes, L. M., et al. (n.d.). Reinterpreting Precipitation Stable Water Isotope Variability in the Andean Western Cordillera Due to Sub-seasonal Moisture Source Changes and Sub-cloud Evaporation. *Geophysical Research Letters*, e2022GL099876.

## **August 2022:**

- Ali, S. N., Singh, R., Morthekai, P., Sharma, A., Phartiyal, B., Quamar, M. F., et al. (2022). Perception of climate change from the Himalayan 'cold desert' Ladakh, India. *Journal of Palaeosciences* 71, 89–111.
- Badillo Rivera, E. N. (2022). Tecnologías de información geográfica para determinar la dinámica de los glaciares de roca como formas de permafrost en los andes tropicales del Perú.
- Crespo, N. M., Reboita, M. S., Gozzo, L. F., de Jesus, E. M., Torres-Alavez, J. A., Lagos-Zúñiga, M. Á., et al. (2022). Assessment of the RegCM4-CORDEX-CORE performance in simulating cyclones affecting the western coast of South America. *Climate Dynamics*, 1–13.
- Crosswell, J. R., Bravo, F., Pérez-Santos, I., Carlin, G., Cherukuru, N., Schwanger, C., et al.

- (2022). Geophysical controls on metabolic cycling in three Patagonian Fjords. *Progress in Oceanography*, 102866.
- DEMBELE, A., DIALLO, M., DIARRA, D., and KEITA, M. (n.d.). ANALYSE DU RÉCHAUFFEMENT TERRESTRE BASÉE SUR L'ARBRE DE DÉCISION ET LE PROCESSUS DE TRANSFORMATION SPATIALE, SUR UNE PÉRIODE DE 18 ANS.
- Enciso, A. M., Baquero, O. L., Escobar-Carbonari, D., Tapasco, J., and Cerón, W. L. (2022). Variability of Precipitation Recycling and Moisture Sources over the Colombian Pacific Region: A Precipitationshed Approach. *Atmosphere* 13, 1202.
- Fernández-Sánchez, A., Úbeda, J., Tanarro, L. M., Naranjo, N., Álvarez, J. A., and Chancafé, J. (n.d.). Climate Forcings and Their Influence in the Cordillera Blanca. *Perú, Deduced from Spectral Analysis Techniques*.
- Gallo Gordillo, O. J. (2022). Estimación de la oferta hídrica para la planificación de cultivos en una cuenca hidrográfica de la Orinoquía colombiana.
- Gateño Meneses, F. I. (2022). ¿Cómo seleccionar modelos de circulación general para estudios regionales? propuesta metodológica basada en el desempeño histórico.
- Gómez Fontalba, C. L. (2022). Variabilidad interanual de los vientos del Oeste en Patagonia Sur (51° S), implicancias para el transporte eólico de sedimentos.
- Good, E. J., Aldred, F. M., Ghent, D. J., Veal, K. L., and Jimenez, C. (n.d.). An Analysis of the Stability and Trends in the LST\_cci Land Surface Temperature Datasets over Europe. *Earth and Space Science*, e2022EA002317.
- Gorenstein, I., Prado, L. F., Bianchini, P. R., Wainer, I., Griffiths, M. L., Pausata, F. S., et al. (2022). A fully calibrated and updated mid-Holocene climate reconstruction for Eastern South America. *Quaternary Science Reviews* 292, 107646.
- Habit, E., Zurita, A., Díaz, G., Manosalva, A., Arriagada, P., Link, O., et al. (2022). Latitudinal and Altitudinal Gradients of Riverine Landscapes in Andean Rivers. *Water* 14, 2614.
- Herbert, J. N. (2022). GEOMORPHIC AND PALEOCLIMATIC IMPLICATIONS OF GLACIAL EXTENT RECORDS IN THE SIERRA NEVADA DEL COCUY, COLOMBIA DURING TERMINATION 1.
- Jerardino, A., Godino, I. B., Belardi, J. B., Faulkner, P., and Reyes, O. (2022). Omar Reyes<sup>1</sup>, <sup>2\*</sup>, César Méndez<sup>2</sup>, Manuel San Román<sup>1</sup>, Carolina Belmar<sup>3</sup> and Amalia Nuevo-Delaunay<sup>2</sup>.
- Liu, Y., Cai, W., Lin, X., and Li, Z. (2022). Increased extreme swings of Atlantic intertropical convergence zone in a warming climate. *Nature Climate Change*, 1–6.
- Martin, J. R., Thorndycraft, V. R., Davies, B. J., and Rodés, Á. (2022). Rapid glacier recession at Monte San Lorenzo (Patagonia) in response to abrupt Southern Hemisphere warming 13.0–12.0 ka BP. *Journal of Quaternary Science*.
- Martinez Medina, N. M. (n.d.). High-resolution paleoclimate reconstruction of the last 9000



years based on speleothem isotope records from northeastern Venezuela.

- Matovelle, C., Heras, D., and Solano-Peláez, J. (2022). Eficiencia de la Imputación de Datos Faltantes de Precipitaciones Utilizando Herramientas Computacionales en la Cuenca Hidrográfica, Jubones-Ecuador. *Revista Politécnica* 50, 23–30.
- Milton, E. B., Stansell, N. D., Bocherens, H., Brownlee, A., Chala-Aldana, D., and Rademaker, K. (2022). Examining surface water  $\delta^{18}\text{O}$  and  $\delta^2\text{H}$  values in the western Central Andes: A watershed moment for anthropological mobility studies. *Journal of Archaeological Science* 146, 105655.
- Moreno-Meynard, P., Méndez, C., Irarrázaval, I., and Nuevo-Delaunay, A. (2022). Past Human Mobility Corridors and Least-Cost Path Models South of General Carrera Lake, Central West Patagonia (46° S, South America). *Land* 11, 1351.
- Navas, A., Lizaga, I., Santillán, N., Gaspar, L., Latorre, B., and Dercon, G. (n.d.). Targeting the Source of Fine Sediment and Associated Geochemical Elements by Using Novel Fingerprinting Methods in Proglacial Tropical Highlands (Cordillera Blanca, Perú). *Hydrological Processes*, e14662.
- O'Neill, B., and Ford, L. B. (n.d.). SPM 16SM.
- Orejarena-Rondón, A. F., Sayol, J.-M., Hernández-Carrasco, I., Cáceres-Euse, A., Restrepo, J. C., and Orfila, A. (2022). Spatio-temporal variability of mean wave energy flux in the Caribbean Sea. *Journal of Ocean Engineering and Marine Energy*, 1–17.
- Rodriguez-Morata, C., Pacheco-Solana, A., Ticse-Otarola, G., Espinoza, T. B., Crispín-DelaCruz, D. B., Santos, G. M., et al. (2022). Revealing *Polylepis microphylla* as a suitable tree species for dendrochronology and quantitative wood anatomy in the Andean montane forests. *Dendrochronologia*, 125995.
- van der Bilt, W. G., D'Andrea, W. J., Oppedal, L. T., Bakke, J., Bjune, A. E., and Zwier, M. (2022). Stable Southern Hemisphere westerly winds throughout the Holocene until intensification in the last two millennia. *Communications Earth & Environment* 3, 1–13.
- Xiong, Q., Chen, W., Luo, S., He, L., and Li, H. (2022). Temporal and Spatial Variation of Land Surface Temperature in Recent 20 Years and Analysis of the Effect of Land Use in Jiangxi Province, China. *Atmosphere* 13, 1278.
- Zevallos Ruiz, J. A. (2022). Climate change impact on peruvian biomes.

## July 2022:

- Amador, J. A., and Arce-Fernández, D. (2022). WWLLN Hot and Cold-Spots of Lightning Activity and Their Relation to Climate in an Extended Central America Region 2012–2020. *Atmosphere* 13, 76.
- Avanzi, F., Gabellani, S., Delogu, F., Silvestro, F., Cremonese, E., Morra di Cella, U., et al. (2022). Snow Multidata Mapping and Modeling (S3M) 5.1: a distributed cryospheric model with dry and wet snow, data assimilation, glacier mass balance, and debris-driven melt. *Geoscientific Model Development* 15, 4853–4879.
- Bertossa, C., Hitchcock, P., DeGaetano, A., and Plougonven, R. (2022). Bimodality in

- Ensemble Forecasts of 2-Meter Temperature: Event Aggregation. *EGUsphere*, 1–31.
- Bonshoms, M., Ubeda, J., Liguori, G., Körner, P., Navarro, Á., and Cruz, R. (2022). Validation of ERA5-Land temperature and relative humidity on four Peruvian glaciers using on-glacier observations. *Journal of Mountain Science* 19, 1849–1873.
- Bozorg, O. (2022). Case Studies Around the World. *Climate Change in Sustainable Water Resources Management*, 361.
- Bradley, R. S., D’Andrea, W. J., Diaz, H. F., and Ning, L. (2022). “Climatology of Rapa Nui (Isla de Pascua, Easter Island),” in *The Prehistory of Rapa Nui (Easter Island)* (Springer), 259–274.
- Brand, R., Srur, A. M., and Villalba, R. (2022). Contrasting growth trends in *Nothofagus pumilio* upper-elevation forests induced by climate warming in the Southern Andes. *Agricultural and Forest Meteorology* 323, 109083.
- Bucogen, G. G. B., Piccolo, M. C., and Bohn, V. Y. (2022). Implementación de datos meteorológicos modelados en el norte patagónico argentino (1982-2017). *Investigaciones Geográficas*, 67–87.
- CANCHALA, T., OCAMPO-MARULANDA, C., ALFONSO-MORALES, W., CARVAJAL-ESCOBAR, Y., CERÓN, W. L., and CAICEDO-BRAVO, E. (2022). Techniques for monthly rainfall regionalization in southwestern Colombia. *Anais da Academia Brasileira de Ciências* 94.
- Carrasco-Escaff, T., Rojas, M., Garreaud, R., Bozkurt, D., and Schaefer, M. (2022). Climatic control of the surface mass balance of the Patagonian Icefields. *EGUsphere*, 1–32.
- Ccanccapa-Cartagena, A. D., Chavez-Gonzales, F. D., Paredes, B., Vera, C., Gutierrez, G., Valencia, R., et al. Seasonal Differences in Metal Concentrations in the Major Rivers of the Hyper-Arid Southwestern Andes Basins of Peru. Available at SSRN 4164415.
- Cepeda Arias, E., Cañon Barriga, J., and Salazar, J. F. (2022). Changes of streamflow regulation in an Andean watershed with shrinking glaciers: implications for water security. *Hydrological Sciences Journal*.
- Cereceda-Balic, F., Ruggeri, M. F., Vidal, V., Ruiz, L., and Fu, J. S. (2022). Understanding the role of anthropogenic emissions in glaciers retreat in the central Andes of Chile. *Environmental Research* 214, 113756.
- Cristina Recalde-Coronel, G., Zaitchik, B., Pan, W., and Geritana, A. (2022). Influence of Vegetation on Simulation of the Water Balance and Hydrological Response to the El Niño Southern Oscillation in Western Tropical South America. *Journal of Hydrometeorology*.
- Diaz, B. G., Almonacid, L., Bonfili, O., González, J., and Colombani, E. N. (2022). Precipitaciones durante 2021 en Santa Cruz y Sur de Chubut. Análisis de las lluvias registradas durante el año 2021 y su relación con el período normal 1995–2021. EEA Santa Cruz, INTA.
- Falaschi, D., Berthier, E., Belart, J. M., Bravo, C., Castro, M., Durand, M., et al. (2022). Increased mass loss of glaciers in Volcán Domuyo (Argentinian Andes) between 1962 and 2020, revealed by aerial photos and satellite stereo imagery. *Journal of Glaciology*, 1–17.
- Fernández-Sánchez, A., Ubeda, J., Tanarro, L. M., Naranjo, N., Álvarez, J. A., and Chancafé, J. (2022). Climate Forcings and Their Influence in the Cordillera Blanca, Perú, Deduced from Spectral Analysis Techniques. in Presented at 5th International Electronic Conference on Atmospheric Sciences, 31.
- GOUDA, K. C., Rath, S. S., Singh, N., Ghosh, S., and Lata, R. (2022). Extreme Rainfall Event Analysis Over the State of Himachal Pradesh in India.
- Gurdiel, I., Rada, C., Malz, P., Braun, M., and Casassa, G. (2022). Glacier inventory and recent variations of Santa Inés Icefield, Southern Patagonia. *Arctic, Antarctic, and Alpine*

- Research 54, 202–220.
- Han, C., Burn, L. J., Vallenga, P., Hur, S. D., Boutron, C. F., Han, Y., et al. (2022). Lead Isotopic Constraints on the Provenance of Antarctic Dust and Atmospheric Circulation Patterns Prior to the Mid-Brunhes Event (~ 430 kyr ago). *Molecules* 27, 4208.
- Henríquez, C., Calderón, M., Cury, L. F., Athayde, G., Carvajal, S., Oyarzún, P., et al. (2022). The role of physicochemical and biochemical processes on carbonate precipitation within the Laguna Timone maar in the Pali Aike Volcanic Field, southernmost extra-Andean Patagonia. *Sedimentary Geology*, 106216.
- Hosseini-Panahi, B., Bozorg-Haddad, O., Loáiciga, H., Meghwar, S. M., and Zeleňáková, M. (2022). “Case Studies Around the World,” in *Climate Change in Sustainable Water Resources Management* (Springer), 361–414.
- Klaes, B., Thiele-Bruhn, S., Wörner, G., Höschen, C., Mueller, C. W., Marx, P., et al. (2022). Iron (hydr) oxide formation in Andosols under extreme climate conditions.
- Lozano-Parra, J., Velarde, J. G., and Aguirre, I. (2022). “Extreme Precipitation Events in Chile: Latitudinal and Altitudinal Variations,” in *Analyzing Sustainability in Peripheral, Ultra-Peripheral, and Low-Density Regions* (IGI Global), 104–116.
- Matskovsky, V., Roig, F. A., Fuentes, M., Korneva, I., Araneo, D., Linderholm, H. W., et al. (2022). Summer temperature changes in Tierra del Fuego since AD 1765: atmospheric drivers and tree-ring reconstruction from the southernmost forests of the world. *Climate Dynamics*, 1–15.
- McCulloch, R. D., Mathiasen, P., and Premoli, A. C. (2022). Palaeoecological evidence of pollen morphological changes: A climate change adaptation strategy? *Palaeogeography, Palaeoclimatology, Palaeoecology*, 111157.
- Medina Burga, M. de J. (2022). Identificación de eventos meteorológicos asociados a la ocurrencia de precipitación en patrones de vientos horizontales en la tropósfera para el Altiplano peruano boliviano en invierno.
- Mehl, A. E., Lorenzo, F. R., Guerci, A., Rojo, L. D., and Zárate, M. A. (2022). Early and middle Holocene floodplain environment and vegetation dynamics at the Atuel-Diamante distributary fluvial system, Mendoza, Argentina. *Journal of South American Earth Sciences* 118, 103904.
- Moran, B. J., Boutt, D. F., McKnight, S. V., Jenckes, J., Munk, L. A., Corkran, D., et al. (2022). Relic groundwater and prolonged drought confound interpretations of water sustainability and lithium extraction in arid lands. *Earth’s Future* 10, e2021EF002555.
- Mors, R. A., Gomez, F. J., Astini, R. A., Mlewski, E. C., and Gérard, E. (2022). PHYSICO-chemical and biological controls in a travertine system in the high Andes of northwestern ARGENTINA. *Sedimentary Geology*, 106214.
- Pinto-Sánchez, N. R. Carlos. E. Guarnizo Juan M. Daza Nelsy R. Pinto-Sánchez.
- Puerta, J. A. E. Estudio del potencial eólico en Colombia y su complementariedad con fuentes de generación hidráulica.
- Rivera, J. A., Marianetti, G., and Scaglione, M. (2022). Análisis de los eventos de precipitación que afectan la distribución de agua potable en el Gran Mendoza, Argentina. *Cuadernos Geográficos* 61, 204–222.
- Rull, V., and Stevenson, C. (2022). The Prehistory of Rapa Nui (Easter Island).
- Saenz, F., Hidalgo, H. G., Muñoz, A. G., Alfaro, E. J., Amador, J. A., and Vazquez-Aguirre, J. L. (2022). Atmospheric circulation types controlling rainfall in the Central American Isthmus. *INTERNATIONAL JOURNAL OF CLIMATOLOGY*.
- Salgado, P. A., Villarosa, G., Beigt, D., and Outes, V. (2022). Water evacuations in remote tourist regions: evaluating case studies from natural hazards in North Patagonian lakes, Argentina. *Journal of mountain science* 19, 1782–1807.
- Soteres, R. L., Sagredo, E. A., Kaplan, M. R., Martini, M. A., Moreno, P. I., Reynhout, S. A.,

- et al. (2022). Glacier fluctuations in the northern Patagonian Andes (44° S) imply wind-modulated interhemispheric in-phase climate shifts during Termination 1. *Scientific reports* 12, 1–11.
- Stutz, N. S., Abello, M. A., Marivaux, L., Boivin, M., Pujos, F., Benites-Palomino, A. M., et al. (2022). Late middle Miocene Metatheria (Mammalia: Didelphimorphia and Paucituberculata) from Juan Guerra, San Martín Department, Peruvian Amazonia. *Journal of South American Earth Sciences* 118, 103902.
- Szponar, N. (2022). Tracing Atmospheric Sources of Mercury through Passive Air Sampling and Isotope Characterization.
- Taborda, A., Portela, J. P., Lopez-Sanchez, J., Daniele, L., Moreno, D., and Blessent, D. (2022). Temperature estimation of the Nevado del Ruiz Volcano geothermal reservoir: Insight from western hot springs hydrogeochemistry. *Journal of Geochemical Exploration*, 107049.
- Tetzner, D. (2022). Diatoms in Antarctic ice cores, a novel proxy for reconstructing past wind variability in the Pacific sector of the Southern Hemisphere Westerly Wind belt.
- Van de Vyver, E., Pinseel, E., Verleyen, E., Vanormelingen, P., Van Wichelen, J., de Jong, R., et al. (2022). Planktonic diatom communities in temperate South-Central Chilean lakes with a focus on *Asterionella formosa* and the genus *Aulacoseira*. *Journal of Paleolimnology*, 1–18.
- Vargas, D., Chimborazo, O., László, E., Temovski, M., and Palcsu, L. (2022). Rainwater Isotopic Composition in the Ecuadorian Andes and Amazon Reflects Cross-Equatorial Flow Seasonality. *Water* 14, 2121.

## June 2022:

- Andrango, D. T., and Rios, X. E. Z. (2022). Determinação de tendências de eventos climáticos extremos no Centro Norte da Região Interandina do Equador. *Revista Brasileira de Climatologia* 30, 668–690.
- Ángel, L. C. P. (2022). A Refinement of Biomarker-Based Tools to Study the Pliocene-Pleistocene Climate Evolution of the Northern Tropical Andes.
- Arango, J. D. P. (2022). Diagnosing the ENSO Teleconnection to Precipitation over Tropical Land Regions in Observations, Reanalysis, and Climate Models.
- Campos, M. C., Chiessi, C. M., Novello, V. F., Crivellari, S., Campos, J. L., Albuquerque, A. L. S., et al. (2022). South American precipitation dipole forced by interhemispheric temperature gradient. *Scientific Reports* 12, 1–9.
- Cataño-Álvarez, S. (2022). Coupling sediment supply from hillslope hydrology and fluvial morphodynamics at tropical mountain basins. doi: 10.13140/RG.2.2.21287.01447.
- Chapori, N. G., Laprida, C., Prete, D. L., Chiessi, C. M., Mayr, C., and Violante, R. A. (2022). Holocene palaeoceanographic history of the western South Atlantic. *Journal of South American Earth Sciences*, 103896.
- Clifford, H. (2022). Assessing Past and Present Changes in the Chemical Climate of Three High Mountain Regions: Himalayas, Andes, European Alps.
- Córdova, M., Célleri, R., and van Delden, A. (2022). Dynamics of Precipitation Anomalies in Tropical South America. *Atmosphere* 13, 972.
- Fuenzalida, H. A., Delgado, R. A., and Ramos, I. A. Aspectos meteorológicos de las inundaciones de Punta Arenas.
- Gallardo, V. B., Hadad, M. A., Ribas-Fernández, Y. A., Roig, F. A., and Tardif, J. C. (2022). Age-related tree-ring sensitivity at the dry forest-steppe boundary in northwestern Patagonia. *Trees*, 1–14.
- Garzanti, E., Capaldi, T., Tripaldi, A., Zárate, M., Limonta, M., and Vezzoli, G. (2022). Andean

- retroarc-basin dune fields and Pampean Sand Sea (Argentina): Provenance and drainage changes driven by tectonics and climate. *Earth-Science Reviews*, 104077.
- Lagos-Zúñiga, M. A., Balmaceda-Huarte, R., Regoto, P., Torrez, L., Olmo, M., Lyra, A., et al. (2022). Extreme indices of temperature and precipitation in South America: trends and intercomparison of regional climate models.
- Ledru, M.-P. (2022). Cadre environnemental des premières occupations humaines du Brésil: évolution de la végétation et du climat au cours des derniers 40 000 ans. *Brésil (s). Sciences humaines et sociales*.
- López-Bermeo, C., Montoya, R. D., Caro-Lopera, F. J., and Díaz-García, J. A. (2022). Validation of the accuracy of the CHIRPS precipitation dataset at representing climate variability in a tropical mountainous region of South America. *Physics and Chemistry of the Earth, Parts A/B/C*, 103184.
- Monteath, A., Hughes, P., Cooper, M., Groff, D., Scaife, R., and Hodgson, D. (2022). Late glacial–Holocene record of Southern Hemisphere westerly wind dynamics from the Falkland Islands, South Atlantic Ocean. *Geology*.
- Morales, M. R., Huguin, R., Oxman, B., Pirola, M., Sirolli, M. R., Carbajo, J. M., et al. Evolución ambiental y registro arqueológico de la cuenca del río Barrancas, provincia de Jujuy, Argentina Environmental evolution and archaeological record of Barrancas river basin, Jujuy province, Argentina.
- Moreno, F., Garziona, C. N., George, S. W., Williams, L., Richter, F., and Bandeian, A. (2022). Late Cretaceous through Cenozoic Paleoenvironmental History of the Bagua Basin, Peru: Paleoelevation Comparisons with the Central Andean Plateau. *Geosciences* 12, 242.
- Mosquera-Izquierdo, E., Saldaña-Vázquez, R. A., Sánchez, M. S., Villalobos, F., and Castaño, J. H. (2022). Life zone and habitat disturbance do not explain the coexistence in *Sturnira* bat species.
- Olmo, M. E., Espinoza, J. -C., Bettolli, M. L., Sierra, J. P., Junquas, C., Arias, P. A., et al. (2022). Circulation Patterns and Associated Rainfall Over South Tropical South America: GCMs Evaluation During the Dry-To-Wet Transition Season. *JGR Atmospheres* 127. doi: 10.1029/2022JD036468.
- Ozán, I. L., de Porras, M. E., Morales, M., and Barberena, R. (2022). Disentangling the Medieval Climatic Anomaly in Patagonia and its impact on human societies. *The Holocene*, 09596836221095993.
- Pacheco, K. M. (2022). Estudios sobre historia y clima. Argentina, Colombia, Chile, España, Guatemala, México y Venezuela. *Secuencia*.
- Paicho Hidalgo, M. A. (2022). Dinámicas espaciales y temporales de la vegetación zonal en la Región Altiplano andino, hotspot de biodiversidad Andes Tropicales (2000–2020).
- Pullen, A., Barbeau, D. L., Leier, A. L., Abell, J. T., Ward, M., Bruner, A., et al. (2022). A westerly wind dominated Puna Plateau during deposition of upper Pleistocene loessic sediments in the subtropical Andes, South America. *Nature communications* 13, 1–8.
- Quiroz Mosquera, G. C. (2022). Análisis del riesgo por heladas en zonas alpaqueras al sur del Perú.
- Reyes, O., Tessone, A., Belmar, C., San Román, M., Morello, F., Moraga, M., et al. (2022). Cambios y continuidades en la subsistencia e interacción entre sociedades cazadoras-recolectoras marinas y agro-alfareras durante el Holoceno tardío en el Archipiélago Septentrional), Patagonia, Chile. *Latin American Antiquity*, 1–18.
- Sayol, J.-M., Azeñas, V., Quezada, C. E., Vigo, I., and Benavides López, J.-P. (2022). Is Greenhouse Rainwater Harvesting Enough to Satisfy the Water Demand of Indoor Crops? Application to the Bolivian Altiplano. *Hydrology* 9, 107.

- Siqueira, V. A. (2022). Modelagem e previsão hidrológica em escala continental para a América do Sul.
- Tiphaine, P., Valérie, D., Ignacio, M., Monique, P., Michel, S., Ana, S., et al. (2022). Tree-ring isotopes from *Araucaria araucana* as useful proxies for climate reconstructions. *Dendrochronologia*, 125979.
- Tovar, C., Carril, A. F., Gutiérrez, A. G., Ahrends, A., Fita, L., Zaninelli, P., et al. (2022). Understanding climate change impacts on biome and plant distributions in the Andes: Challenges and opportunities. *Journal of Biogeography*, jbi.14389. doi: 10.1111/jbi.14389.
- Yan, Q., Wei, T., and Zhang, Z. (2022). Modeling the climate sensitivity of Patagonian glaciers and their responses to climatic change during the global last glacial maximum. *Quaternary Science Reviews* 288, 107582.

### **From January 1 to May 31, 2022:**

- Abatan, A. A., Tett, S. F., Dong, B., Cunningham, C., Rudorff, C. M., Klingaman, N. P., et al. (2022). Drivers and physical processes of drought events over the State of São Paulo, Brazil. *Climate Dynamics*, 1–15.
- Álvarez, D. M., and Poveda, G. (2022). Spatiotemporal Dynamics of NDVI, Soil Moisture and ENSO in Tropical South America. *Remote Sensing* 14, 2521.
- Álvarez-Barra, V., Giesecke, T., and Fontana, S. L. (2022). Holocene changes in forest composition in northern Patagonia responded to climate with little impact of disturbance. *Quaternary Science Reviews* 276, 107291.
- Alvarez-Campos, O., Olson, E. J., Welp, L. R., Frisbee, M. D., Zuñiga Medina, S. A., Díaz Rodríguez, J., et al. (2022). Evidence for high-elevation salar recharge and interbasin groundwater flow in the Western Cordillera of the Peruvian Andes. *Hydrology and Earth System Sciences* 26, 483–503.
- Amador, J. A., and Arce-Fernández, D. (2022). WWLLN Hot and Cold-Spots of Lightning Activity and Their Relation to Climate in an Extended Central America Region 2012–2020. *Atmosphere* 13, 76.
- Antico, A., and Vuille, M. (2022). ENSO and Paraná flow variability: Long-term changes in their connectivity. *International Journal of Climatology*.
- Autin, P., Sicart, J.-E., Rabatel, A., Soruco, A., and Hock, R. (2022). Climate Controls on the Interseasonal and Interannual Variability of the Surface Mass and Energy Balances of a Tropical Glacier (Zongo Glacier, Bolivia, 16° S): New Insights From the Multi-Year Application of a Distributed Energy Balance Model. *Journal of Geophysical Research: Atmospheres* 127, e2021JD035410.
- Bacon, C. D., Gutiérrez-Pinto, N., Flantua, S., Castellanos Suárez, D., Jaramillo, C., Pennington, R. T., et al. (2022). The seasonally dry tropical forest species *Cavanillesia chicamochae* has a middle Quaternary origin. *Biotropica* 54, 91–99.
- Baitzel, S. I., y La Borda, M. P., Konecky, B. L., Sae-Lim, J., and Rivera Infante, A. F. (2022). Pastoral Paleoclimate Palimpsests of the South-Central Andes: High-Altitude Herder Dwellings in the 2nd Millennium ad. *Journal of Field Archaeology*, 1–19.
- Bambach, N. E., Rhoades, A. M., Hatchett, B. J., Jones, A. D., Ullrich, P. A., and Zarzycki, C. M. (2022). Projecting climate change in South America using variable-resolution Community Earth System Model: An application to Chile. *International Journal of Climatology* 42, 2514–2542.
- Barandun, M., Bravo, C., Grobety, B., Jenk, T., Fang, L., Naegeli, K., et al. (2022). Anthropogenic influence on surface changes at the Olivares glaciers; Central Chile. *Science of the Total Environment* 833, 155068.

- Barbosa, A. M., Francelino, M. R., Thomazini, A., Schaefer, C., Anjos, L. H. C., Pereira, M. G., et al. (2022). The thermal regime and mineralogical attributes of highland volcanic-ash soils from the Cotopaxi volcano, Ecuador: Absent permafrost and little pedogenesis. *Geoderma Regional* 29, e00496.
- Benito, X., Luethje, M., Schneider, T., Fritz, S. C., Baker, P. A., Pedersen, E. J., et al. (2022). Ecological resilience in tropical Andean lakes: A paleolimnological perspective. *Limnology and Oceanography* 67, S23–S37.
- Bianchi, E., Guozden, T., and Kozulj, R. (2022). Assessing low frequency variations in solar and wind power and their climatic teleconnections. *Renewable Energy* 190, 560–571.
- Blin, N., Hausner, M., Leray, S., Lowry, C., and Suárez, F. (2022). Potential impacts of climate change on an aquifer in the arid Altiplano, northern Chile: The case of the protected wetlands of the Salar del Huasco basin. *Journal of Hydrology: Regional Studies* 39, 100996.
- Bojorquez, M., Huerta, A., and Montes, V. C. (2022). Un Estudio de Caso de un Evento de Nevada de Alto Impacto en la Sierra Sur del Perú: Dinámica y Evaluación del Modelo Eta. *Revista Brasileira de Meteorologia*.
- Bonilla-Bedoya, S., Herrera, M. Á., Vaca, A., Salazar, L., Zalakeviciute, R., Mejía, D., et al. (2022). Urban soil management in the strategies for adaptation to climate change of cities in the Tropical Andes. *Geoderma* 417, 115840.
- Borromei, A. M., and Musotto, L. L. (2022). “Late Pleistocene and Holocene palaeovegetational changes at Alero El Puesto (AEP-1) archaeological site in the northern Deseado Massif. Regional palaeoenvironmental implications and early human occupation,” in *Archaeology of Piedra Museo Locality* (Springer), 159–178.
- Bravo, C., Ross, A. N., Quincey, D. J., Cisternas, S., and Rivera, A. (2022). Surface ablation and its drivers along a west–east transect of the Southern Patagonia Icefield. *Journal of Glaciology* 68, 305–318.
- Bruner, A., Leier, A. L., Barbeau Jr, D. L., Pullen, A., Fidler, M. K., and Stubbins, B. (2022). Detrital zircon provenance and transport pathways of Pleistocene-Holocene eolian sediment in the Pampean Plains, Argentina. *GSA Bulletin*.
- Builes-Jaramillo, A., Yepes, J., and Salas, H. D. (2022). The Orinoco Low-Level Jet and its association with the hydroclimatology of northern South America. *Journal of Hydrometeorology* 23, 209–223.
- Builes-Jaramillo, A., Yepes, J., and Salas, H. D. (2022). The Orinoco Low-Level Jet during ENSO. *International Journal of Climatology*.
- Cabrera, M., Moulatlet, G. M., Valencia, B. G., Maisincho, L., Rodríguez-Barroso, R., Albendín, G., et al. (2022). Microplastics in a tropical Andean Glacier: A transportation process across the Amazon basin? *Science of The Total Environment* 805, 150334.
- Cabrera Montenegro, E. B., and Vega Tamba, J. C. (2022). Análisis del retroceso glaciario en los Andes del Norte del Ecuador durante un período de 30 años empleando teledetección.
- Cadaillon, A. M., Almandoz, G. O., Hernando, M. P., Saravia, L., Maldonado, S., and Schloss, I. R. (2022). Spatiotemporal distribution of paralytic shellfish poisoning (PSP) toxins in Beagle Channel (South America) during 2005–2017. *Progress in Oceanography* 204, 102757.
- Camacho, F., and Peyre, G. (2022). Red List and Vulnerability Assessment of the Páramo Vascular Flora in the Nevados Natural National Park (Colombia). *Tropical Conservation Science* 15, 19400829221086960.
- Camejo Aviles, A. M., Ledru, M.-P., Ricardi-Branco, F., Rodríguez-Zorro, P. A., Francischetti Garcia, R. J., and Fernandez Perdomo, J. (2022). Characterization of a glacial neotropical rainforest from pollen and spore assemblages (Colônia, São Paulo, Brazil). *Grana*, 1–43.

- Cardenas, T., Naoki, K., Landivar, C. M., Struelens, Q., Gómez, M. I., Meneses, R. I., et al. (2022). Glacier influence on bird assemblages in habitat islands of the high Bolivian Andes. *Diversity and Distributions* 28, 242–256.
- Cerón, W. L., Andreoli, R. V., Kayano, M. T., Canchala, T., Ocampo-Marulanda, C., Avila-Diaz, A., et al. (2022). Trend Pattern of Heavy and Intense Rainfall Events in Colombia from 1981–2018: A Trend-EOF Approach. *Atmosphere* 13, 156.
- Chacaliaza Vásquez, A. J. (2022). Diversidad protozoológica en dos humedales costeros de la región Lambayeque y un humedal altoandino de la región Huancavelica post FEN costero 2017.
- Charton, J., Schimmelpfennig, I., Jomelli, V., Delpéch, G., Blard, P.-H., Braucher, R., et al. (2022). New cosmogenic nuclide constraints on Late Glacial and Holocene glacier fluctuations in the sub-Antarctic Indian Ocean (Kerguelen Islands, 49° S). *Quaternary Science Reviews* 283, 107461.
- Chiari, L. C. (2022). Estudo de material particulado fino utilizando ToF-ACSM no sítio ATTO na Bacia Central da Amazônia durante o período de janeiro a julho de 2017.
- Chimborazo, O., Minder, J. R., and Vuille, M. (2022). Observations and Simulated Mechanisms of Elevation-Dependent Warming over the Tropical Andes. *Journal of Climate* 35, 1021–1044.
- Cordero, R. R., Sepúlveda, E., Feron, S., Wang, C., Damiani, A., Fernandez, F., et al. (2022). Black carbon in the Southern Andean snowpack. *Environmental Research Letters* 17, 044042.
- Córdova, M., Orellana-Alvear, J., Rollenbeck, R., and Célleri, R. (2022). Determination of climatic conditions related to precipitation anomalies in the Tropical Andes by means of the random forest algorithm and novel climate indices. *International Journal of Climatology*.
- Correa-Metrio, A., Escobar, J., Bird, B. W., Caballero-Rodríguez, D., Steinman, B. A., Rodríguez-Zorro, P. A., et al. (2022). A millennium of climatic and floristic dynamics in the Eastern Cordillera of the Colombian Andes. *Journal of Biogeography* 49, 853–865.
- Crispín-DelaCruz, D. B., Morales, M. S., Andreu-Hayles, L., Christie, D. A., Guerra, A., and Requena-Rojas, E. J. (2022). High ENSO sensitivity in tree rings from a northern population of *Polylepis tarapacana* in the Peruvian Andes. *Dendrochronologia* 71, 125902.
- Cuba, O. C., and Surco, R. G. C. (2022). Estimación Temporal y Espacial de las Sequías e Inundaciones Meteorológicas con índice China-Z en la Intercuenca Alto Apurímac, Perú. *Revista Brasileira de Meteorologia*.
- Cunha, H. P., Santos, A. B., Foerster, S. Í., Moura, G. J., and Lira, A. F. (2022). Can contrasting habitats influence predatory behavior in tropical forest scorpions? *acta ethologica* 25, 107–113.
- Currall, E. (2022). A 165 Thousand Year Fire History from the Neotropical Andes, Colombia.
- de Pasquale, G., Valois, R., Schaffer, N., and MacDonell, S. (2022). Contrasting geophysical signatures of a relict and an intact Andean rock glacier. *The Cryosphere* 16, 1579–1596.
- de Souza, D. C., Ramos da Silva, R., Gomes da Silva, P., Fetter Filho, A. F. H., Mendez, F. J., and Werth, D. (2022). A hybrid regional climate downscaling for the southern Brazil coastal region. *International Journal of Climatology*.
- Delgado, R. C., de Santana, R. O., Gelsleichter, Y. A., and Pereira, M. G. (2022). Degradation of South American biomes: What to expect for the future? *Environmental Impact Assessment Review* 96, 106815.
- Díaz, D., and Villegas, N. (2022). Wavelet coherence between ENSO indices and two precipitation databases for the Andes region of Colombia. *Atmósfera* 35, 237–271.



- Distefano, T., Isaza, A. S., Muñoz, E., and Builes, T. (2022). Sub-national water–food–labour nexus in Colombia. *Journal of Cleaner Production* 335, 130138.
- Dohbia, A.-R. (2022). EFFICACY OF LEMON BASIL (OCCIMUM BACILICUM) IN THE CONTROL OF FALL ARMYWORM-SPODOPTERA FRUGIPERDA (JE SMITH).
- Dominguez, F., Eiras-Barca, J., Yang, Z., Bock, D., Nieto, R., and Gimeno, L. (2022). Amazonian moisture recycling revisited using WRF with water vapor tracers. *Journal of Geophysical Research: Atmospheres* 127, e2021JD035259.
- Ebrahimi-Khusfi, Z. (2022). Investigating Short to Long-term Effects of Ground-based Agents on Dust Pollution Variations in Iranian Arid and Semi-arid Regions. *Desert Ecosystem Engineering Journal* 4, 27–46.
- Echeverría, M. R., Bamonte, F. P., Marcos, M. A., Sottile, G. D., and Mancini, M. V. (2022). Past vegetation reconstruction maps and paleoclimatic variability inferred by pollen records in southern Patagonia Argentina since the Late Glacial-Holocene transition. *Journal of South American Earth Sciences*, 103834.
- Emmer, A., Wood, J. L., Cook, S. J., Harrison, S., Wilson, R., Diaz-Moreno, A., et al. (2022). 160 glacial lake outburst floods (GLOFs) across the Tropical Andes since the Little Ice Age. *Global and Planetary Change* 208, 103722.
- Epele, L. B., Grech, M. G., Williams-Subiza, E. A., Stenert, C., McLean, K., Greig, H. S., et al. (2022). Perils of life on the edge: Climatic threats to global diversity patterns of wetland macroinvertebrates. *Science of The Total Environment*, 153052.
- Erfanian, A., Jiang, Y., Fomenko, L., Fu, R., Seth, A., and Wang, G. (2022). Variability, Trend, and Extremes of the South American Vegetation-Climate System: Results From a Coupled Regional Model. *Journal of Geophysical Research: Atmospheres* 127, e2021JD035691.
- Fernández, H., García, J.-L., Nussbaumer, S. U., Geiger, A. J., Gärtner-Roer, I., Pérez, F., et al. (2022). De-icing landsystem model for the Universidad Glacier (34° S) in the Central Andes of Chile during the past~ 660 years. *Geomorphology*, 108096.
- Fernandez-Palomino, C. A., Hattermann, F. F., Krysanova, V., Lobanova, A., Vega-Jácome, F., Lavado, W., et al. (2022). A Novel High-Resolution Gridded Precipitation Dataset for Peruvian and Ecuadorian Watersheds: Development and Hydrological Evaluation. *Journal of Hydrometeorology* 23, 309–336.
- Ferreira Filho, D. F., and Pessoa, F. C. L. (2022). Identification of homogeneous regions based on rainfall in the Amazon River basin. *International Journal of Climatology*.
- Ferreira, G. W., and Reboita, M. S. (2022). A New Look into the South America Precipitation Regimes: Observation and Forecast. *Atmosphere* 13, 873.
- Flores, R. P., Lara, C., Saldías, G. S., Vásquez, S. I., and Roco, A. (2022). Spatio-temporal variability of turbid freshwater plumes in the Inner Sea of Chiloé, northern Patagonia. *Journal of Marine Systems* 228, 103709.
- Freire, M. P., Góes, A. M., Fairchild, T. R., Gautheron, C., Parra, M., Pupim, F. N., et al. (2022). Quaternary ironstones in the Xingu River, eastern Amazonia (Brazil). *Quaternary Research*, 1–14.
- Gaddam, V. K., Boddapati, R., Kumar, T., Kulkarni, A. V., and Bjornsson, H. (2022). Application of “OTSU”—an image segmentation method for differentiation of snow and ice regions of glaciers and assessment of mass budget in Chandra basin, Western Himalaya using Remote Sensing and GIS techniques. *Environmental Monitoring and Assessment* 194, 1–18.
- Ganyushkin, D., Chistyakov, K., Derkach, E., Bantcev, D., Kunaeva, E., Terekhov, A., et al. (2022). Glacier Recession in Altay Mountains after the LIA Maximum.
- Garcia, M. G., Lecomte, K. L., and Depetris, P. J. (2022). Natural and anthropogenic sources of solutes in the wet precipitation of a densely populated city of Southern South

- America. *Chemosphere* 287, 132307.
- García Montoya, J. P. (2022). Evaluación y modelación de procesos erosivos y transporte de sedimentos en la cuenca del río Tonusco (Antioquia, Colombia).
- García-Delgado, H., Petley, D. N., Bermúdez, M. A., and Sepúlveda, S. A. (2022). Fatal landslides in Colombia (from historical times to 2020) and their socio-economic impacts. *Landslides*, 1–28.
- Giorgi, F., Coppola, E., Jacob, D., Teichmann, C., Abba Omar, S., Ashfaq, M., et al. (2022). The CORDEX-CORE EXP-I initiative: description and highlight results from the initial analysis. *Bulletin of the American Meteorological Society* 103, E293–E310.
- Giraldo, E. V. A., Aristizábal, E. G., Sánchez, R. M., Cardona, F. G., and Martínez, J. C. G. (2022). Rainfall-intensity effect on landslide hazard assessment due to climate change in north-western Colombian Andes. *Revista Facultad de Ingeniería Universidad de Antioquia*, 51–66.
- Giraldo-Cardenas, S., Arias, P. A., Vieira, S. C., and Zuluaga, M. D. (2022). Easterly waves and precipitation over northern South America and the Caribbean. *International Journal of Climatology* 42, 1483–1499.
- Giraldo-Osorio, J. D., Trujillo-Osorio, D. E., and Baez-Villanueva, O. M. (2022). Analysis of ENSO-Driven Variability, and Long-Term Changes, of Extreme Precipitation Indices in Colombia, Using the Satellite Rainfall Estimates CHIRPS. *Water* 14, 1733.
- Gómez, G. A., García, J.-L., Villagrán, C., Lüthgens, C., and Abarzúa, A. M. (2022). Vegetation, glacier, and climate changes before the global last glacial maximum in the Isla Grande de Chiloé, southern Chile (42° S). *Quaternary Science Reviews* 276, 107301.
- Gomez, M. L., Hoke, G., D'Ambrosio, S., Moreiras, S., and Castro, A. (2022). Hydrogeology of Northern Mendoza (Argentina), from the Andes to the eastern plains, in the context of climate change. *Hydrogeology Journal* 30, 725–750.
- Gómez-Fontalba, C., Flores-Aqueveque, V., and Alfaro, S. C. (2022). Variability of the Southwestern Patagonia (51° S) Winds in the Recent (1980–2020) Period: Implications for Past Wind Reconstructions. *Atmosphere* 13, 206.
- Gualco, L. F., Maisincho, L., Villacís, M., Campozano, L., Favier, V., Ruiz-Hernández, J.-C., et al. (2022a). Assessing the Contribution of Glacier. *Changes in Snow, Monsoon and Snow-Monsoon Relationship in the Warming Climate*.
- Gualco, L. F., Maisincho, L., Villacís, M., Campozano, L., Favier, V., Ruiz-Hernández, J.-C., et al. (2022b). Assessing the Contribution of Glacier Melt to Discharge in the Tropics: The Case of Study of the Antisana Glacier 12 in Ecuador. *Frontiers in Earth Science*, 568.
- Hadad, M. A., Flores, D., Gallardo, V., Roig, F. A., González-Reyes, Á., and Chen, F. (2022). Dendroclimatic potential of the *Adesmia pinifolia* shrub growing at high altitude in the Andes foothills. *Dendrochronologia* 72, 125919.
- Hagen, I., Huggel, C., Ramajo, L., Chacón, N., Ometto, J. P., Postigo, J. C., et al. (2022). Climate change-related risks and adaptation potential in Central and South America during the 21st century. *Environ. Res. Lett.* 17, 033002. doi: 10.1088/1748-9326/ac5271.
- Hänchen, L., Klein, C., Maussion, F., Gurgiser, W., Calanca, P., and Wohlfahrt, G. (2022). Widespread greening suggests increased dry-season plant water availability in the Rio Santa valley, Peruvian Andes. *Earth System Dynamics* 13, 595–611.
- Hernández-Vásquez, A., Vargas-Fernández, R., Rojas-Roque, C., and Gamboa-Unsihuay, J. E. (2022). Association between altitude and depression in Peru: An 8-year pooled analysis of population-based surveys. *Journal of affective disorders* 299, 536–544.
- Hilbich, C., Hauck, C., Mollaret, C., Wainstein, P., and Arenson, L. U. (2022). Towards

- accurate quantification of ice content in permafrost of the Central Andes—Part 1: Geophysics-based estimates from three different regions. *The Cryosphere* 16, 1845–1872.
- Hinman, N. W., Hofmann, M. H., Warren-Rhodes, K., Phillips, M. S., Noffke, N., Cabrol, N. A., et al. (2022). Surface Morphologies in a Mars-Analog Ca-Sulfate Salar, High Andes, Northern Chile. *Frontiers in Astronomy and Space Sciences* 8.
- Hodnebrog, Ø., Steensen, B. M., Marelle, L., Alterskjær, K., Dalsøren, S. B., and Myhre, G. (2022). Understanding model diversity in future precipitation projections for South America. *Climate Dynamics* 58, 1329–1347.
- Hou, A., Bahr, A., Chiessi, C. M., Jaeschke, A., Albuquerque, A. L. S., Pross, J., et al. (2022). Obliquity Influence on Low-Latitude Coastal Precipitation in Eastern Brazil During the Past~ 850 kyr. *Paleoceanography and Paleoclimatology* 37, e2021PA004238.
- Hu, D., Meng, Q., Schlink, U., Hertel, D., Liu, W., Zhao, M., et al. (2022). How do urban morphological blocks shape spatial patterns of land surface temperature over different seasons? A multifactorial driving analysis of Beijing, China. *International Journal of Applied Earth Observation and Geoinformation* 106, 102648.
- Huaman Navarro, Y. E. (2022). Reconstrucción paleoclimática y estimación de la acumulación de carbono en los bofedales alto-Andinos mediante estudios con datación C14 y su caracterización con fluorescencia de Rayos-X.
- Ivanova, Y., Cárdenas, E. A., Celis-Lópera, C. A., and Vargas-Guerrero, D. F. (2022). Evaluación de la contracción y expansión de cuerpos hídricos lénticos bajo la influencia del fenómeno ENSO (caso de estudio. Departamento de Córdoba, Colombia). *Tecnología y ciencias del agua* 13, 246–288.
- Jara, I. A., Maldonado, A., and de Porras, M. E. (2022). Did Modern Precipitation Drivers Influence Centennial Trends in the Highlands of the Atacama Desert During the Most Recent Millennium? *Geophysical Research Letters* 49, e2021GL095927.
- Jiménez-Iñiguez, A., Ampuero, A., Valencia, B. G., Mayta, V. C., Cruz, F. W., Vuille, M., et al. (2022). Stable isotope variability of precipitation and cave drip-water at Jumandy cave, western Amazon River basin (Ecuador). *Journal of Hydrology* 610, 127848.
- Jomelli, V., Swingedouw, D., Vuille, M., Favier, V., Goehring, B., Shakun, J., et al. (2022). In-phase millennial-scale glacier changes in the tropics and North Atlantic regions during the Holocene. *Nature communications* 13, 1–11.
- Junquas, C., Heredia, M. B., Condom, T., Ruiz-Hernández, J. C., Campozano, L., Dudhia, J., et al. (2022). Regional climate modeling of the diurnal cycle of precipitation and associated atmospheric circulation patterns over an Andean glacier region (Antisana, Ecuador). *Climate Dynamics* 58, 3075–3104.
- Junqueira, R., Amorim, J. da S., Viola, M. R., Mello, C. R. de, Uddameri, V., and Prado, L. F. (2022). Drought occurrences and impacts on the upper Grande river basin, Brazil. *Meteorology and Atmospheric Physics* 134, 1–11.
- Kang, S., Zhang, Q., Zhang, Y., Guo, W., Ji, Z., Shen, M., et al. (2022). Warming and thawing in the Mt. Everest region: A review of climate and environmental changes. *Earth-Science Reviews* 225, 103911.
- Lee, E., Ross, N., Henderson, A. C., Russell, A. J., Jamieson, S. S., and Fabel, D. (2022). Palaeoglaciation in the low latitude, low elevation tropical Andes, northern Peru. *Frontiers in Earth Science*.
- Lemenkova, P. (2022). Console-Based Mapping of Mongolia Using GMT Cartographic Scripting Toolset for Processing TerraClimate Data. *Geosciences* 12, 140.
- Lo Vecchio, A., Candela, M., Falaschi, D., Otero, F., Videla, M. A., Lenzano, M. G., et al. (2022). Cambio de área glaciar en el volcán Maipo (Andes Centrales), una aproximación morfométrica: 4 décadas de registros satelitales. *Andean geology* 49, 55–76.

- López-Franca, N., Sánchez, E., Menéndez, C., Carril, A. F., Zaninelli, P. G., and Flombaum, P. (2022). Characterization of seasons over the extratropics based on the annual daily mean temperature cycle. *International Journal of Climatology*.
- Loponte, D., and Ottalagano, F. (2022). Hunter-gatherer Mobility Analysed Through  $\delta^{18}\text{O}$  in the Patchy Environment of the Paraná Valley, South American Lowlands. *Environmental Archaeology*, 1–18.
- Lucas, C., Aguilera-Betti, I., Muñoz, A. A., Puchi, P., Sapriza, G., Profumo, L., et al. (2022). Cross-continental hydroclimate proxies: Tree-rings in Central Chile reconstruct historical streamflow in Southeastern South American rivers. *Progress in Physical Geography: Earth and Environment*, 03091333211067466.
- Luis Val, A., and Wood, C. M. (2022). Global change and physiological challenges for fish of the Amazon today and in the near future. *Journal of Experimental Biology* 225, jeb216440.
- Marconi, P., Arengo, F., and Clark, A. (2022). The arid Andean plateau waterscapes and the lithium triangle: flamingos as flagships for conservation of high-altitude wetlands under pressure from mining development. *Wetlands Ecology and Management*, 1–26.
- Marcos, M. A., Bamonte, F. P., Echeverría, M. E., Sottile, G. D., and Mancini, M. V. (2022). Changes in vegetation and human-environment interactions during the Holocene in the Lake Pueyrredon area (Southern Patagonia). *Vegetation History and Archaeobotany* 31, 291–305.
- Martinez, J. A., Arias, P. A., Junquas, C., Espinoza, J. C., Condom, T., Dominguez, F., et al. (2022). The Orinoco Low-Level Jet and the Cross-Equatorial Moisture Transport Over Tropical South America: Lessons From Seasonal WRF Simulations. *Journal of Geophysical Research: Atmospheres* 127, e2021JD035603.
- Medina, Y., Muñoz, E., Clasing, R., and Arumí, J. L. (2022). Analysis of the Relative Importance of the Main Hydrological Processes at Different Temporal Scales in Watersheds of South-Central Chile. *Water* 14, 807.
- Mehmood, M., Hassan, M., Iqbal, W., and Amin, G. (2022). Spatiotemporal variation in temperature extremes and their association with large scale circulation patterns in the Central Karakorum during 1982-2019. *Atmospheric Research* 267, 105925.
- Meixner, A., Alonso, R. N., Lucassen, F., Korte, L., and Kasemann, S. A. (2022). Lithium and Sr isotopic composition of salar deposits in the Central Andes across space and time: the Salar de Pozuelos, Argentina. *Mineralium Deposita* 57, 255–278.
- Mengo, L., Halac, S., Foray, G., Costamagna, I., and Piovano, E. (2022). A SEDIMENTARY RECORD OF THE ENVIRONMENTAL EVOLUTION AND CHANGES IN TROPHIC STATE OF SAN ROQUE RESERVOIR (CÓRDOBA, ARGENTINA) DURING THE 20TH-21ST CENTURIES.
- Molano, S. M., Cardenas, D. P., Gómez, H. S., Alvarado, D. M., Galindo, A. F., Sanabria, J. F., et al. (2022). Evaluación del retroceso glaciar de la Sierra Nevada del Cocuy, Colombia a partir de la clasificación de imágenes multisensor. *Boletín de Geología* 44, 49–73.
- Moradi, M., and Darand, M. (2022). Trend analysis of land surface temperature over Iran based on land cover and topography. *International Journal of Environmental Science and Technology*, 1–14.
- Morales, M. S., Crispín De La Cruz, D. B., Álvarez, C., Christie, D. A., Ferrero, E., Andreu-Hayles, L., et al. (2022). Drought increased since the mid-20 th century in the northern South American Altiplano revealed by a 389-year precipitation record. *Climate of the Past Discussions*, 1–32.
- Mosquera, P. V., Hampel, H., Vázquez, R. F., and Catalan, J. (2022). Water chemistry variation in tropical high-mountain lakes on old volcanic bedrocks. *Limnology and Oceanography*.

- Motschmann, A., Teutsch, C., Huggel, C., Seidel, J., León, C. D., Muñoz, R., et al. (2022). Current and future water balance for coupled human-natural systems—Insights from a glacierized catchment in Peru. *Journal of Hydrology: Regional Studies* 41, 101063.
- Mutz, S. G., and Aschauer, J. (2022). Empirical glacier mass-balance models for South America. *Journal of Glaciology*, 1–15.
- Nakamura, A., Nakatani, N., Maruyama, F., Fujiyoshi, S., Márquez-Reyes, R., Fernández, R., et al. (2022). Characteristics of PM<sub>2.5</sub> Pollution in Osorno, Chile: Ion Chromatography and Meteorological Data Analyses. *Atmosphere* 13, 168.
- Newell, F. L., Ausprey, I. J., and Robinson, S. K. (2022). Spatiotemporal climate variability in the Andes of northern Peru: Evaluation of gridded datasets to describe cloud forest microclimate and local rainfall. *International Journal of Climatology*.
- Ocampo-Marulanda, C., Fernández-Álvarez, C., Cerón, W. L., Canchala, T., Carvajal-Escobar, Y., and Alfonso-Morales, W. (2022). A spatiotemporal assessment of the high-resolution CHIRPS rainfall dataset in southwestern Colombia using combined principal component analysis. *Ain Shams Engineering Journal* 13, 101739.
- Orejarena, A. F., Sayol, J. M., Hernández-carrasco, I., Cáceres, A., Restrepo, J. C., and Orfila, A. (2022). Wave Energy Flux Variability in the Caribbean Sea.
- Pánek, T., Břežný, M., Harrison, S., Schönfeldt, E., and Winocur, D. (2022). Large landslides cluster at the margin of a deglaciated mountain belt. *Scientific reports* 12, 1–13.
- Pántano, V. C., Holzman, M. E., Penalba, O. C., and Rivas, R. (2022). ENSO Signal on Subseasonal Precipitation Distribution and Soil Moisture Response in the Argentine Pampas. *Pure and Applied Geophysics*, 1–18.
- Pérez-Consuegra, N., Hoke, G. D., Fitzgerald, P., Mora, A., Sobel, E. R., and Glodny, J. (2022). Late Miocene– Pliocene onset of fluvial incision of the Cauca River Canyon in the Northern Andes. *GSA Bulletin*.
- Pilato, G. L., Ortone Lois, A. S., Barrios, A., Saavedra, S., and Macote Yparraguirre, E. L. (2022a). Space technology applied to patagonian glaciers and their behavior as environmental indicators. *Revista cartográfica*, 133–163.
- Pilato, G. L., Ortone Lois, A. S., Barrios, A., Saavedra, S., and Macote Yparraguirre, E. L. (2022b). Tecnología espacial aplicada a glaciares patagónicos y su comportamiento como indicadores ambientales. *Revista cartográfica*, 133–163.
- Piret, L., Bertrand, S., Nguyen, N., Hawkings, J., Rodrigo, C., and Wadham, J. (2022). Long-lasting impacts of a 20th century glacial lake outburst flood on a Patagonian fjord-river system (Pascua River). *Geomorphology* 399, 108080.
- Pitte, P., Masiokas, M., Gargantini, H., Ruiz, L., Berthier, E., Hidalgo, L. F., et al. (2022). Recent mass-balance changes of Agua Negra glacier (30 S) in the Desert Andes of Argentina. *Journal of Glaciology*, 1–13.
- Prieto, M., Calderón-Seguel, M., Fragkou, M. C., and Fuster, R. (2022). The (not-so-free) Chilean water model. The case of the Antofagasta Region, Atacama Desert, Chile. *The Extractive Industries and Society*, 101081.
- Pujol, C., Pérez-Santos, I., Barth, A., and Alvera Azcarate, A. (2022). Marine Heatwaves Offshore Central and South Chile: Understanding Forcing Mechanisms During the Years 2016-2017. *Frontiers in Marine Science* 9.
- Puthalpet, J. R. (2022). *The Daunting Climate Change: Science, Impacts, Adaptation & Mitigation Strategies, Policy Responses*. CRC Press.
- Rama, F., Busico, G., Arumi, J. L., Kazakis, N., Colombani, N., Marfella, L., et al. (2022). Assessment of intrinsic aquifer vulnerability at continental scale through a critical application of the drastic framework: The case of South America. *Science of The Total Environment* 823, 153748.
- Ramírez, I. J., and Lee, J. (2022). Deconstructing the spatial effects of El Niño and vulnerability

- on cholera rates in Peru: Wavelet and GIS analyses. *Spatial and Spatio-temporal Epidemiology* 40, 100474.
- Reis, L. S., Bouloubassi, I., Mendez-Millan, M., Guimarães, J. T. F., de Araújo Romeiro, L., Sahoo, P. K., et al. (2022). Hydroclimate and vegetation changes in southeastern Amazonia over the past~ 25,000 years. *Quaternary Science Reviews* 284, 107466.
- Repetto, A. L. V., Candela, M., Falaschi, D., Otero, F., Videla, M. A., Lenzano, M. G., et al. (2022). Glacier area changes at Maipo volcano (Central Andes), a morphometric approach: 4 decades of satellite records. *Andean Geology* 49, 55–76.
- Ribeiro, G. G., Anderson, L. O., Barretos, N. J. C., Abreu, R., Alves, L., Dong, B., et al. (2022). Attributing the 2015/2016 Amazon basin drought to anthropogenic influence. *Climate Resilience and Sustainability* 1, e25.
- Ríos Hernández, J. P., Ocampo López, O. L., González Pérez, P. T., Gaviria Ortiz, F. G., and Salazar Gil, V. (2022). Perception of the inhabitants of the department of Caldas, Colombia on the effects of climate change on water quality. *Journal of Water and Climate Change* 13, 43–55.
- Roberts, S. J., McCulloch, R. D., Emmings, J. F., Davies, S. J., Van Nieuwenhuyze, W., Sterken, M., et al. (2022). Late glacial and Holocene glacial and palaeolake history of the Última Esperanza region of Southern Patagonia. *Frontiers in Earth Science* 10.
- Robson, B. A., MacDonell, S., Ayala, Á., Bolch, T., Nielsen, P. R., and Vivero, S. (2022). Glacier and Rock Glacier changes since the 1950s in the La Laguna catchment, Chile. *The Cryosphere* 16, 647–665.
- Rodrigues, M. A., Garcia, S. R., Kayano, M. T., Calheiros, A. J., and Andreoli, R. V. (2022). Onset and demise dates of the rainy season in the South American monsoon region: A cluster analysis result. *International Journal of Climatology* 42, 1354–1368.
- Rodriguez-Caton, M., Andreu-Hayles, L., Daux, V., Vuille, M., Varuolo-Clarke, A. M., Oelkers, R., et al. (2022). Hydroclimate and ENSO variability recorded by oxygen isotopes from tree rings in the South American Altiplano. *Geophysical Research Letters* 49, e2021GL095883.
- Rodríguez-Gómez, C., Echeverry, G., Jaramillo, A., and Ladino, L. A. (2022). The negative impact of biomass burning and the Orinoco low-level jet on the air quality of the Orinoco River Basin. *Atmósfera* 35, 497–520.
- Rodríguez-López, L., Lami, A., El Ouahabi, M., Fagel, N., Álvarez, D., González-Rodríguez, L., et al. (2022). Fossil Pigments and environmental conditions in the oligotrophic Laja Lake in the Chilean Andes. *Anthropocene*, 100321.
- Rodríguez-Ramírez, E. C., Crispín-DelaCruz, D. B., Ticse-Otarola, G., and Requena-Rojas, E. J. (2022). Assessing the Hydric Deficit on Two *Polylepis* Species from the Peruvian Andean Mountains: Xylem Vessel Anatomic Adjusting. *Forests* 13, 633.
- Rojas, R., Flexas, J., and Coopman, R. E. (2022). Particularities of the highest elevation treeline in the world: *Polylepis tarapacana* Phil. as a model to study ecophysiological adaptations to extreme environments. *Flora*, 152076.
- Rojas-Murillo, K., Lupo, A. R., Garcia, M., Gilles, J., Korner, A., and Rivera, M. A. (2022). ENSO and PDO related interannual variability in the north and east-central part of the Bolivian Altiplano in South America. *International Journal of Climatology* 42, 2413–2439.
- Rojo, L. D., Mehl, A. E., Pietrelli, M., Durán, V., and Barberena, R. (2022). Mid-to Late Holocene Environmental Evolution of a High Mountain Wetland in the Subtropical Andes Cordillera of Argentina. *Wetlands* 42, 1–14.
- Rollenbeck, R., Orellana-Alvear, J., Bendix, J., Rodriguez, R., Pucha-Cofrep, F., Gualpa, M., et al. (2022). The Coastal El Niño Event of 2017 in Ecuador and Peru: A Weather Radar Analysis. *Remote Sensing* 14, 824.

- Rosales, A. G., Junquas, C., da Rocha, R. P., Condom, T., and Espinoza, J.-C. (2022). Valley–Mountain Circulation Associated with the Diurnal Cycle of Precipitation in the Tropical Andes (Santa River Basin, Peru). *Atmosphere* 13, 344.
- Rozante, J. R., Ramirez, E., and Fernandes, A. de A. (2022). A newly developed South American Mapping of Temperature with estimated lapse rate corrections. *International Journal of Climatology* 42, 2135–2152.
- Ruiz-Carrascal, D., González-Duque, D., and Restrepo-Correa, I. (2022). Two-tiered reconstruction of Late Pleistocene to Holocene changes in the freezing level height in the largest glacierized areas of the Colombian Andes. *Journal of Mountain Science* 19, 615–636.
- Ruscica, R. C., Sörensson, A. A., Diaz, L. B., Vera, C., Castro, A., Papastefanou, P., et al. (2022). Evapotranspiration trends and variability in southeastern South America: The roles of land-cover change and precipitation variability. *International Journal of Climatology* 42, 2019–2038.
- Salas, H. D., Valencia, J., Builes-Jaramillo, A., and Jaramillo, A. (2022). Synoptic Time Scale Variability in Precipitation and Streamflows for River Basins over Northern South America. *Hydrology* 9, 59.
- Salazar, A., Sanchez, A., Dukes, J. S., Salazar, J. F., Clerici, N., Lasso, E., et al. (2022). Peace and the environment at the crossroads: Elections in a conflict-troubled biodiversity hotspot. *Environmental Science & Policy* 135, 77–85.
- Sánchez-Calderón, O. D., Carlón-Allende, T., Mendoza, M. E., and Villanueva-Díaz, J. (2022). Dendroclimatology in Latin America: A Review of the State of the Art. *Atmosphere* 13, 748.
- Sandor, J. A., Huckleberry, G., Hayashida, F. M., Parcero-Oubiña, C., Salazar, D., Troncoso, A., et al. (2022). Soils in ancient irrigated agricultural terraces in the Atacama Desert, Chile. *Geoarchaeology* 37, 96–119.
- Sanz-Pérez, D., Fernández, M. H., Tomassini, R. L., Montalvo, C. I., Beilinson, E., Gasparini, G. M., et al. (2022). The Pampean region (Argentina) underwent larger variation in aridity than in temperature during the late Pleistocene: New evidence from the isotopic analysis of mammalian taxa. *Quaternary Science Reviews* 286, 107555.
- Sapucci, C. R., Mayta, V. C., and da Silva Dias, P. L. (2022). Evaluation of diverse-based precipitation data over the Amazon Region. *Theoretical and Applied Climatology*, 1–27.
- Sayol, J.-M., Vásquez, L. M., Valencia, J. L., Linero-Cueto, J. R., García-García, D., Vigo, I., et al. (2022). Extension and application of an observation-based local climate index aimed to anticipate the impact of El Niño–Southern Oscillation events on Colombia. *International Journal of Climatology*.
- Schaffer, N., and MacDonell, S. (2022). Brief communication: A framework to classify glaciers for water resource evaluation and management in the Southern Andes. *The Cryosphere* 16, 1779–1791.
- Schiaffini, M. I. (2022). Distribution patterns of South American mustelids (Carnivora: Mustelidae). *Journal of Mammalogy*.
- Schickhoff, U., Bobrowski, M., Mal, S., Schwab, N., and Singh, R. B. (2022). “The World’s Mountains in the Anthropocene,” in *Mountain Landscapes in Transition* (Springer), 1–144.
- Segura, H., Espinoza, J. C., Junquas, C., Lebel, T., Vuille, M., and Condom, T. (2022). Extreme austral winter precipitation events over the South-American Altiplano: regional atmospheric features. *Climate Dynamics*, 1–18.
- Seitz, C., Vélez, M. I., and Perillo, G. M. (2022). Response of shallow lakes in the arid-semiarid Pampas of Argentina to Late Holocene hydroclimatic change. *Quaternary International*

- 607, 35–47.
- Sepúlveda, L. D., Echegoyen, C. V., Martin, M. E., Campodonico, V. A., Pasquini, A. I., Temporetti, P., et al. (2022). Isotopic signature of a glacial influenced hydrological system in northern Patagonia, Argentina. *Hydrological Processes* 36, e14504.
- Serna-González, M., Urrego-Giraldo, L. E., Santa-Ceballos, J. P., and Suzuki-Azuma, H. (2022). Flowering, floral visitors and climatic drivers of reproductive phenology of two endangered magnolias from neotropical Andean forests. *Plant Species Biology* 37, 20–37.
- Siabi, N., Sanaeinejad, S. H., and Ghahraman, B. (2022). Effective method for filling gaps in time series of environmental remote sensing data: An example on evapotranspiration and land surface temperature images. *Computers and Electronics in Agriculture* 193, 106619.
- Sierra, J. P., Junquas, C., Espinoza, J. C., Segura, H., Condom, T., Andrade, M., et al. (2022). Deforestation impacts on Amazon-Andes hydroclimatic connectivity. *Climate Dynamics* 58, 2609–2636.
- Sierra-Cárdenas, E., Usaquén-Perilla, O., Fonseca-Molano, M., Ochoa-Echeverría, M., Díaz-Gómez, J., and del Jesus, M. (2022). SIE-Climate: A methodological and technological tool for predicting local climate variability in managing socio-ecological systems. *International Journal of Climatology* 42, 868–888.
- Siqueira, V. A. (2022). Modelagem e previsão hidrológica em escala continental para a América do Sul.
- Soares, J. H., Moreira, L. S., Turcq, B., Moreira-Turcq, P., Sifeddine, A., Dornellas, N., et al. (2022). Development of lacustrine primary productivity in the Amazon Basin during the Holocene. *The Holocene*, 09596836221088233.
- Solari, F. I., Blázquez, J., and Solman, S. A. (2022). Relationship between frontal systems and extreme precipitation over southern South America. *International Journal of Climatology*.
- Souza, D. H., Parra, M., Del Rio, I. A., Sawakuchi, A. O., Pupim, F. N., Hernández-González, J. S., et al. (2022). Late Quaternary drainage rearrangement prevents the vegetation development in the La Tatacoa intermontane basin of the Colombian Andes. *Frontiers in Earth Science*, 423.
- Stansell, N. D., Mark, B. G., Licciardi, J. M., Rodbell, D. T., Fairman, J. G., Schoessow, F. S., et al. (2022). Energy mass balance and flow modeling of early Holocene glaciers in the Queshque valley, Cordillera Blanca, Peru. *Quaternary Science Reviews* 281, 107414.
- Stuart-Smith, R. F., Roe, G. H., Li, S., and Allen, M. R. (2022). El peligro de aluviones ha aumentado en la laguna Palcacocha debido al retroceso glaciario causado por la actividad humana.
- Taylor, L. S., Quincey, D. J., Smith, M. W., Potter, E. R., Castro, J., and Fyffe, C. L. (2022). Multi-Decadal Glacier Area and Mass Balance Change in the Southern Peruvian Andes. *Front. Earth Sci* 10, 863933.
- Thornton, J. M., Pepin, N., Shahgedanova, M., and Adler, C. (2022). Coverage of in situ climatological observations in the world's mountains. *Frontiers in climate* 4.
- Toledo, O., Palazzi, E., Cely Toro, I. M., and Mortarini, L. (2022). Comparison of elevation-dependent warming and its drivers in the tropical and subtropical Andes. *Climate Dynamics* 58, 3057–3074.
- Traverso Yucra, K. A., Lavado-Casimiro, W., and Felipe-Obando, O. (2022). Monitoreo hidrológico en tiempo cuasi real en la vertiente del pacífico empleando el modelo hidrológico SWAT, estudio final.
- Turpo Cayo, E. Y., Borja, M. O., Espinoza-Villar, R., Moreno, N., Camargo, R., Almeida, C., et al. (2022). Mapping Three Decades of Changes in the Tropical Andean Glaciers



- Using Landsat Data Processed in the Earth Engine. *Remote Sensing* 14, 1974.
- Uddin, A. S. M., Khan, N., Islam, A. R. M., Kamruzzaman, M., and Shahid, S. (2022). Changes in urbanization and urban heat island effect in Dhaka city. *Theoretical and Applied Climatology* 147, 891–907.
- Urrutia, J., Guimerà, J., Custodio, E., Herrera, C., Jódar, J., Acosta, O., et al. (2022). Processes explaining the origin and evolution of groundwater composition in the Andean Precordillera and Altiplano of the Tarapacá Region of northern Chile. *Science of The Total Environment* 805, 149742.
- Usaquén-Perilla, O., Fonseca-Molano, M., Ochoa-Echeverría, M., and Jesús Peñil, M. del (2022). SIE-Climate: A methodological and technological tool for predicting local climate variability in managing socio-ecological systems.
- Valdivia, J. M., Gatlin, P. N., Kumar, S., Scipión, D., Silva, Y., and Petersen, W. A. (2022). The GPM-DPR Blind Zone Effect on Satellite-Based Radar Estimation of Precipitation over the Andes from a Ground-Based Ka-band Profiler Perspective. *Journal of Applied Meteorology and Climatology* 61, 441–456.
- Valdivielso, S., Vázquez-Suñé, E., Herrera, C., and Custodio, E. (2022). Characterization of precipitation and recharge in the peripheral aquifer of the Salar de Atacama. *Science of The Total Environment* 806, 150271.
- Vargas, D., Pucha-Cofrep, D., Serrano-Vincenti, S., Burneo, A., Carlosama, L., Herrera, M., et al. (2022). ITCZ precipitation and cloud cover excursions control Cedrela nebulosa tree-ring oxygen and carbon isotopes in the northwestern Amazon. *Global and Planetary Change* 211, 103791.
- Vásquez, C., Célleri, R., Córdova, M., and Carrillo-Rojas, G. (2022). Improving reference evapotranspiration (ET<sub>o</sub>) calculation under limited data conditions in the high Tropical Andes. *Agricultural Water Management* 262, 107439.
- Venegas-González, A., Muñoz, A. A., Carpintero-Gibson, S., González-Reyes, A., Schneider, I., Gipolou-Zuñiga, T., et al. (2022). Sclerophyllous Forest Tree Growth Under the Influence of a Historic Megadrought in the Mediterranean Ecoregion of Chile. *Ecosystems*, 1–18.
- Vento, B., Rivera, J., Ontivero, M., and Carretero, E. M. (2022). Insights into the Relationships between Morphological Traits of *Larrea divaricata* and Climate Variables in Southern South America. *International Journal of Plant Sciences* 183, 220–234.
- Vergara, I., Garreaud, R., Moreiras, S., Araneo, D., and Beigt, D. (2022). Exploring the association between landslides and fluvial suspended sediment in a semi-arid basin in central Chile. *Geomorphology* 402, 108129.
- Villablanca, L., Batalla, R. J., Piqué, G., and Iroumé, A. (2022). Hydrological effects of large dams in Chilean rivers. *Journal of Hydrology: Regional Studies* 41, 101060.
- Walk, J., Bartz, M., Stauch, G., Binnie, A., Brückner, H., and Lehmkuhl, F. (2022). Weathering under coastal hyperaridity—Late Quaternary development of spectral, textural, and gravelometric alluvial fan surface characteristics. *Quaternary Science Reviews* 277, 107339.
- Wang, M., Jiang, C., and Sun, O. J. (2022a). Spatially differentiated changes in regional climate and underlying drivers in southwestern China. *Journal of Forestry Research* 33, 755–765.
- Wang, P., Yu, P., Lu, J., and Zhang, Y. (2022b). The mediation effect of land surface temperature in the relationship between land use-cover change and energy consumption under seasonal variations. *Journal of Cleaner Production* 340, 130804.
- Wiegant, D., Bakx, J., Flohr, N., van Oel, P., and Dewulf, A. (2022). Ecuadorian water funds' use of scale-sensitive strategies to stay on course in forest and landscape restoration governance. *Journal of Environmental Management* 311, 114850.

- Xu, E., and Zhang, H. (2022). A stratified environmental reference system for better understanding of the relationship between remote sensing observations and ground monitoring of karst rocky desertification. *Land Degradation & Development* 33, 1366–1382.
- Yseki, M., Turcq, B., Caquineau, S., Salvattecí, R., Solís, J., Skilbeck, C. G., et al. (2022a). Millennial variability of terrigenous transport to the central-southern Peruvian margin during the last deglaciation (18–13 kyr BP). *Climate of the Past Discussions*, 1–24.
- Yseki, M., Turcq, B., Gutierrez, D., Salvattecí, R., Espinoza-Morriberón, D., Boucher, H., et al. (2022b). Increased El Niño amplitude during the last deglacial warming.
- Yu, H., and Li, L. (2022). Inferring Land Conditions in the Tumen River Basin by Trend Analysis Based on Satellite Imagery and Geoinformation. *Sustainability* 14, 5687.
- Zevallos, J., and Lavado-Casimiro, W. (2022). Climate Change Impact on Peruvian Biomes. *Forests* 13, 238.
- Zhang, T., Zhou, Y., Zhu, Z., Li, X., and Asrar, G. R. (2022a). A global seamless 1 km resolution daily land surface temperature dataset (2003–2020). *Earth System Science Data* 14, 651–664.
- Zhang, Z., Ju, W., Zhou, Y., and Li, X. (2022b). Revisiting the cumulative effects of drought on global gross primary productivity based on new long-term series data (1982–2018). *Global Change Biology* 28, 3620–3635.
- Zhiña, D. X., Mosquera, G. M., Esquivel-Hernández, G., Córdova, M., Sánchez-Murillo, R., Orellana-Alvear, J., et al. (2022). Hydrometeorological factors controlling the stable isotopic composition of precipitation in the highlands of south Ecuador. *Journal of Hydrometeorology*.
- Zhu, L., and Fan, G. (2022). Assessment and projection of elevation-dependent warming over the Tibetan Plateau by CMIP6 models. *Theoretical and Applied Climatology*, 1–11.
- Zimmer, A., Beach, T., Klein, J. A., and Recharte Bullard, J. (2022). The need for stewardship of lands exposed by deglaciation from climate change. *Wiley Interdisciplinary Reviews: Climate Change* 13, e753.

## 2021:

- Aguayo, R., León-Muñoz, J., Garreaud, R., and Montecinos, A. (2021). Hydrological droughts in the southern Andes (40–45° S) from an ensemble experiment using CMIP5 and CMIP6 models. *Scientific reports* 11, 1–16.
- Aguilar-Lome, J., Soca-Flores, R., and Gómez, D. (2021). Evaluation of the Lake Titicaca's surface water temperature using LST MODIS time series (2000–2020). *Journal of South American Earth Sciences* 112, 103609.
- Albarracín, M., Ramón, G., González, J., Iñiguez-Armijos, C., Zakaluk, T., and Martos-Rosillo, S. (2021). The Ecohydrological Approach in Water Sowing and Harvesting Systems: The Case of the Paltas Catacocha Ecohydrology Demonstration Site, Ecuador. *Ecohydrology & Hydrobiology* 21, 454–466.
- Almazroui, M., Ashfaq, M., Islam, M. N., Rashid, I. U., Kamil, S., Abid, M. A., et al. (2021). Assessment of CMIP6 performance and projected temperature and precipitation changes over South America. *Earth Systems and Environment* 5, 155–183.
- Almonacid, L., Pessacg, N., Diaz, B. G., Bonfili, O., and Peri, P. L. (2021). Nueva base de datos reticulada de precipitación para la provincia de Santa Cruz, Argentina. Centro Argentino de Meteorólogos (CAM).
- ALMULHIM, A. I. (2021). Public Knowledge and Perception of Climate Change and Global Warming in the Context of Environmental Challenges and Policies in Saudi Arabia. *WIT Transactions on Ecology and the Environment* 253, 577–589.

- Álvarez, C., Le Quesne, C., Rojas-Badilla, M., Rozas, V., and González-Reyes, Á. (2021). Dendrochronological potential of *Prumnopitys andina* (Podocarpaceae) at the southern limit of its range in the Chilean Andes. *New Zealand Journal of Botany* 59, 423–439.
- ALVES, D. S., and AGUIAR, W. G. C. (2021). Efeito das mudanças climáticas *Gonatodes Humeralis* (Squamata: sphaerodactylidae)(Guichenot, 1855).
- Ancapichún, S., De Pol-Holz, R., Christie, D. A., Santos, G. M., Collado-Fabbri, S., Garreaud, R., et al. (2021). Radiocarbon bomb-peak signal in tree-rings from the tropical Andes register low latitude atmospheric dynamics in the Southern Hemisphere. *Science of the Total Environment* 774, 145126.
- Anderson, T. G., Christie, D. A., Chávez, R. O., Olea, M., and Anchukaitis, K. J. (2021). Spatiotemporal peatland productivity and climate relationships across the western south American Altiplano. *Journal of Geophysical Research: Biogeosciences* 126, e2020JG005994.
- Anselmo, E. M., Machado, L. A., Schumacher, C., and Kiladis, G. N. (2021). Amazonian mesoscale convective systems: Life cycle and propagation characteristics. *International Journal of Climatology* 41, 3968–3981.
- Aponte, H., and Pérez, A. (2021). El cambio climático que necesitamos. *South Sustainability* 2, ed001–ed001.
- Aragon, S., Salinas, N., Nina-Quispe, A., Qquellon, V. H., Paucar, G. R., Huaman, W., et al. (2021). Aboveground biomass in secondary montane forests in Peru: Slow carbon recovery in agroforestry legacies. *Global Ecology and Conservation* 28, e01696.
- Arango, M. I., Aristizábal, E., and Gómez, F. (2021). Morphometrical analysis of torrential flows-prone catchments in tropical and mountainous terrain of the Colombian Andes by machine learning techniques. *Natural Hazards* 105, 983–1012.
- Arias, P. A., Garreaud, R., Poveda, G., Espinoza, J. C., Molina-Carpio, J., Masiokas, M., et al. (2021a). Hydroclimate of the Andes Part II: Hydroclimate variability and sub-continental patterns. *Frontiers in Earth Science* 8, 666.
- Arias, P. A., Ortega, G., Villegas, L. D., and Martínez, J. A. (2021b). Colombian climatology in CMIP5/CMIP6 models: Persistent biases and improvements. *Revista Facultad de Ingeniería Universidad de Antioquia*, 75–96.
- Aron, P. G., Poulsen, C. J., Fiorella, R. P., Levin, N. E., Acosta, R. P., Yanites, B. J., et al. (2021). Variability and Controls on  $\delta^{18}\text{O}$ , d-excess, and  $\Delta' 17\text{O}$  in Southern Peruvian Precipitation. *Journal of Geophysical Research: Atmospheres* 126, e2020JD034009.
- Arriagada, P., Karelavic, B., and Link, O. (2021). Automatic gap-filling of daily streamflow time series in data-scarce regions using a machine learning algorithm. *Journal of Hydrology* 598, 126454.
- ASSUNÇÃO, A. C. S. (2021). analysis of in situ profiles, PROGRESS IN OCEANOGRAPHY, Volume 187, 2020, 102399, ISSN 0079-6611. *THERMOHALINE STRATIFICATION IN THE SOUTHWESTERN TROPICAL*, 30.
- Atri, M., Nedae-Tousi, S., Shahab, S., and Solgi, E. (2021). The effects of thermal-spatial behaviours of land covers on urban heat islands in semi-arid climates. *Sustainability* 13, 13824.
- Avanzi, F., Gabellani, S., Delogu, F., Silvestro, F., Cremonese, E., Morra di Cella, U., et al. (2021). S3M 5.1: a distributed cryospheric model with dry and wet snow, data assimilation, glacier mass balance, and debris-driven melt. *Geoscientific Model Development Discussions*, 1–50.
- Ayala, S. N., González, M. H., and Rolla, A. L. (2021). A statistical forecast scheme of precipitation in the Upper Bermejo River Basin in Argentina. *International Journal of River Basin Management*, 1–14.
- Ballesteros-Prada, A., Luengo, M., Vilanova, I., Fucks, E., and Bernasconi, E. (2021).

- Foraminiferal paleodiversity and paleoenvironments at the NE coastal plain of Buenos Aires province (Argentina) during the Mid-Holocene sea level highstand. *The Holocene* 31, 108–120.
- Balmaceda-Huarte, R., Olmo, M. E., Bettolli, M. L., and Poggi, M. M. (2021). Evaluation of multiple reanalyses in reproducing the spatio-temporal variability of temperature and precipitation indices over southern South America. *International Journal of Climatology* 41, 5572–5595.
- Barberena, R., Cardillo, M., Lucero, G., Le Roux, P. J., Tessone, A., Llano, C. L., et al. (2021). Bioavailable strontium, human paleogeography, and migrations in the southern Andes: A machine learning and GIS approach.
- Barraza, F., Lambert, F., MacDonell, S., Sinclair, K., Fernandoy, F., and Jorquera, H. (2021). Major atmospheric particulate matter sources for glaciers in Coquimbo Region, Chile. *Environmental Science and Pollution Research* 28, 36817–36827.
- Barrera, V. H., Delgado, J. A., and Alwang, J. R. (2021). Conservation agriculture can help the South American Andean region achieve food security.
- Barriá, P., Chadwick, C., Ocampo-Melgar, A., Galleguillos, M., Garreaud, R., Díaz-Vasconcellos, R., et al. (2021). Water management or megadrought: what caused the Chilean Aculeo Lake drying? *Regional Environmental Change* 21, 1–15.
- Barrios-Perez, C., Okada, K., Varón, G. G., Ramirez-Villegas, J., Rebolledo, M. C., and Prager, S. D. (2021). How does El Niño Southern Oscillation affect rice-producing environments in central Colombia? *Agricultural and Forest Meteorology* 306, 108443.
- Bastidas-Salamanca, M., and Bayona, J. G. (2021). Pre-feasibility assessment for identifying locations of new offshore wind projects in the Colombian Caribbean. *International Journal of Sustainable Energy Planning and Management* 32, 139–154.
- Bastidas-Salamanca, M., and Rueda-Bayona, J. G. (2021). Effect of Climate Variability Events over the Colombian Caribbean Offshore Wind Resource. *Water* 13, 3150.
- Baudena, M., Tuinenburg, O. A., Ferdinand, P. A., and Staal, A. (2021). Effects of land-use change in the Amazon on precipitation are likely underestimated. *Global Change Biology* 27, 5580–5587.
- Bayless, L. (2021). El Niño-Southern Oscillation (ENSO) Signal in an Ice Core from Huascarán, Peru, 1994-2019.
- Bek, D. (2021). Sněhové sucho a řídicí faktory ovlivňující meziroční variabilitu sněhové pokrývky na Šumavě.
- Benfield, A. J., Yu, Z., and Benavides, J. C. (2021). Environmental controls over Holocene carbon accumulation in *Distichia muscoides*-dominated peatlands in the eastern Andes of Colombia. *Quaternary Science Reviews* 251, 106687.
- Benra, F., De Frutos, A., Gaglio, M., Álvarez-Garretón, C., Felipe-Lucia, M., and Bonn, A. (2021). Mapping water ecosystem services: Evaluating InVEST model predictions in data scarce regions. *Environmental Modelling & Software* 138, 104982.
- Bícego, M. C., Santos, F. R., de Andrade Furlan, P. C., Lourenço, R. A., Taniguchi, S., de Mello e Sousa, S. H., et al. (2021). Mid-to late-Holocene analysis of the influence of the La Plata River plume on the southwestern Atlantic shelf: A paleoenvironmental reconstruction based on lipid biomarkers and benthic foraminifera. *The Holocene*, 09596836211041727.
- Böhm, C., Meyers, M., Knarr, L., and Crewell, S. (2021). The role of moisture conveyor belts for precipitation in the Atacama Desert. *Geophysical Research Letters* 48, e2021GL094372.
- Bolaños, S., Salazar, J. F., Betancur, T., and Werner, M. (2021). GRACE reveals depletion of water storage in northwestern South America between ENSO extremes. *Journal of Hydrology* 596, 125687.

- Botero, H., Barnes, A. P., Perez, L., Rios, D., and Ramirez-Villegas, J. (2021). The determinants of common bean variety selection and diversification in Colombia. *Ecological Economics* 190, 107181.
- Bradley, R. S., and Diaz, H. F. (2021). Late Quaternary Abrupt Climate Change in the Tropics and Sub-Tropics: The Continental Signal of Tropical Hydroclimatic Events (THEs). *Reviews of Geophysics* 59, e2020RG000732.
- Brandshaug, M. K. (2021). Water, Life, and Loss: Aguasociality and Environmental Change in the Peruvian Andes. *kritisk etnografi: Swedish Journal of Anthropology* 4, 45–62.
- Braz, D. F., Ambrizzi, T., Da Rocha, R. P., Algarra, I., Nieto, R., and Gimeno, L. (2021). Assessing the moisture transports associated with nocturnal low-level jets in continental South America. *Frontiers in Environmental Science* 9.
- Brêda, J. P. L. F. (2021). Impactos das mudanças climáticas sobre os recursos hídricos da América do Sul através de projeções do CMIP5.
- Brügger, A., Tobias, R., and Monge-Rodríguez, F. S. (2021a). Public perceptions of climate change in the Peruvian Andes. *Sustainability* 13, 2677.
- Brügger, A., Tobias, R., and Monge-Rodríguez, F. S. (2021b). *Public Perceptions of Climate Change in the Peruvian Andes. Sustainability 2021, 13, 2677.* s Note: MDPI stays neutral with regard to jurisdictional claims in published ....
- Builes-Jaramillo, A., and Pántano, V. (2021). Comparison of spatial and temporal performance of two Regional Climate Models in the Amazon and La Plata river basins. *Atmospheric Research* 250, 105413.
- Buzolic, B., Arumí, J. L., and Jimenez, J. (2021a). How Much Does Water Management Cost? The Case of the Water Market in the Ñuble River of South-Central Chile. *Water* 13, 258.
- Buzolic, B., Arumí, J. L., and Jimenez, J. (2021b). *How Much Does Water Management Cost? The Case of the Water Market in the Ñuble River of South-Central Chile. Water 2021, 13, 258.* s Note: MDPI stays neutral with regard to jurisdictional claims in published ....
- Caceres, A. L., Jaramillo, P., Matthews, H. S., Samaras, C., and Nijssen, B. (2021). Hydropower under climate uncertainty: Characterizing the usable capacity of Brazilian, Colombian and Peruvian power plants under climate scenarios. *Energy for Sustainable Development* 61, 217–229.
- Caillahua Argüelles, M. D. (2021). Patrones de circulación asociados a descensos bruscos de temperatura mínima del aire en la Sierra Sur y Centro del Perú.
- Cambroncro-Solano, S., Tisseaux-Navarro, A., Vargas-Hernández, J. M., Salazar-Ceciliano, J. P., Benavides-Morera, R., Quesada-Ávila, I., et al. (2021). Variabilidad hidrográfica en el Golfo de Papagayo durante el periodo 2017-2019. *Revista de Biología Tropical* 69, S74–S74.
- Cambronero-Solano, S., Tisseaux-Navarro, A., Vargas-Hernández, J.-M., Salazar-Ceciliano, J.-P., Benavides-Morera, R., Quesada-Ávila, I., et al. (2021). Hydrographic variability in the Gulf of Papagayo, Costa Rica during 2017-2019. *Revista de Biología Tropical* 69.
- Carbajal Morán, H., Márquez Camarena, J. F., Zárate Quiñones, R. H., and De la Cruz Vílchez, E. E. (2021). Monitoring the hydrogen Potential of a river in the Central Andes of Peru from the cloud. *Ecological Engineering & Environmental Technology* 22.
- Carey, M. (2021). *Glaciares, cambio climático y desastres naturales: Ciencia y sociedad en el Perú.* Institut français d'études andines.
- Carmona, A. M., Renner, M., Kleidon, A., and Poveda, G. (2021). Uncertainty of runoff sensitivity to climate change in the Amazon River basin. *Annals of the New York Academy of Sciences* 1504, 76–94.
- Caro, A., Condom, T., and Rabatel, A. (2021a). Climatic and Morphometric Explanatory

- Variables of Glacier Changes in the Andes (8–55 S): New Insights From Machine Learning Approaches. *Front. Earth Sci* 9, 713011.
- Caro, A., Gimeno, F., Rabatel, A., Condom, T., and Ruiz, J. C. (2021b). Glacier Clusters identification across Chilean Andes using Topo-Climatic variables. in *EGU General Assembly Conference Abstracts*, EGU21-10852.
- Castro, L., and Gironás, J. (2021). “Precipitation, Temperature and Evaporation,” in *Water Resources of Chile* (Springer), 31–60.
- Ccancapa-Cartagena, A., Paredes, B., Vera, C., Chavez-Gonzales, F. D., Olson, E. J., Welp, L. R., et al. (2021). Occurrence and probabilistic health risk assessment (PRA) of dissolved metals in surface water sources in Southern Peru. *Environmental Advances* 5, 100102.
- Cerón, W. L., Andreoli, R. V., Kayano, M. T., and Avila-Diaz, A. (2021a). Role of the eastern Pacific Caribbean Sea SST gradient in the Choco low-level jet variations from 1900–2015. *Climate Research* 83, 61–74.
- Ceron, W. L., Andreoli, R. V., Kayano, M. T., Canchala, T., Carvajal-Escobar, Y., and Souza, R. A. (2021). Comparison of spatial interpolation methods for annual and seasonal rainfall in two hotspots of biodiversity in South America. *Anais da Academia Brasileira de Ciências* 93.
- Cerón, W. L., Kayano, M. T., Andreoli, R. V., Avila-Diaz, A., de Souza, I. P., and Souza, R. A. (2021b). Pacific and Atlantic Multidecadal Variability Relations with the Choco and Caribbean Low-Level Jets during the 1900–2015 Period. *Atmosphere* 12, 1120.
- Cerón, W. L., Kayano, M. T., Andreoli, R. V., Canchala, T., Carvajal-Escobar, Y., and Alfonso-Morales, W. (2021c). Rainfall Variability in Southwestern Colombia: Changes in ENSO-Related Features. *Pure and Applied Geophysics* 178, 1087–1103.
- Cerón, W. L., Kayano, M. T., Ocampo-Marulanda, C., Canchala, T., Rivera, I. A., Avila-Diaz, A., et al. (2021d). Spatio-Temporal Variability of Hydroclimatology in the Upper Cauca River Basin in Southwestern Colombia: Pre-and Post-Salvajina Dam Perspective. *Atmosphere* 12, 1527.
- Charton, J., Verfaillie, D., Jomelli, V., Francou, B., and Team, A. (2021). Early Holocene rock glacier stabilisation at col du Lautaret (French Alps): Palaeoclimatic implications. *Geomorphology* 394, 107962.
- Chi, Q., Zhou, S., Wang, L., Zhu, M., Liu, D., Tang, W., et al. (2021). Quantifying the Contribution of LUCC to Surface Energy Budget: A Case Study of Four Typical Cities in the Yellow River Basin in China. *Atmosphere* 12, 1374.
- Chiavazza, H., Prieto-Olavarría, C., Hernández, F., Puebla, L., Quiroga, M., and Anzorena, J. (2021). PESCADORES DEL DESIERTO: OCUPACIÓN Y SUBSISTENCIA EN LA MARGEN OESTE DEL RÍO DESAGUADERO (CENTRO OESTE ARGENTINO) ENTRE LOS CA. 1200 Y 400 AÑOS AP. *Chungará (Arica)* 53, 215–236.
- Chica Ramirez, H. A., Gómez Gil, L. F., Bravo Bastidas, J. J., Carbonell González, J. A., and Peña Quiñones, A. J. (2021). Site-specific intra-annual rainfall patterns: a tool for agricultural planning in the Colombian sugarcane production zone. *Theoretical and Applied Climatology* 146, 543–554.
- Chiessi, C. M., Mulitza, S., Taniguchi, N. K., Prange, M., Campos, M. C., Häggi, C., et al. (2021). Mid-to late Holocene contraction of the Intertropical Convergence Zone over northeastern South America. *Paleoceanography and Paleoclimatology* 36, e2020PA003936.
- Chimborazo, O., and Vuille, M. (2021). Present-day climate and projected future temperature and precipitation changes in Ecuador. *Theoretical and Applied Climatology* 143, 1581–1597.
- Choque-Quispe, D., Froehner, S., Ligarda-Samanez, C. A., Ramos-Pacheco, B. S., Peralta-

- Guevara, D. E., Palomino-Rincón, H., et al. (2021). Insights from Water Quality of High Andean Springs for Human Consumption in Peru. *Water* 13, 2650.
- Ciccioli, P. L., Ratto, N. R., Molina, D. F., and Castañeda, M. E. (2021). MIRADAS INTERDISCIPLINARIAS SOBRE LOS PROCESOS AMBIENTALES ACTUANTES EN LA LOCALIDAD ARQUEOLÓGICA DE MISHMA (BOLSÓN DEFIAMBALÁ, DEPARTAMENTO TINOGASTA, CATAMARCA). *Relaciones* 46, 31–40.
- Ciciretti, R., Barraza, F., De la Barrera, F., Urquieta, L., and Cortes, S. (2021). Relationship between Wildfire Smoke and Children’s Respiratory Health in the Metropolitan Cities of Central-Chile. *Atmosphere* 13, 58.
- Cifuentes, F., González, C. M., and Aristizábal, B. H. (2021). Insights to WRF-Chem sensitivity in a zone of complex terrain in the tropical Andes: Effect of boundary conditions, chemical mechanisms, nesting, and domain configuration. *Atmospheric Pollution Research* 12, 101093.
- Cintra, B. B., Gloor, M., Boom, A., Schöngart, J., Baker, J. C., Cruz, F. W., et al. (2021). Tree-ring oxygen isotopes record a decrease in Amazon dry season rainfall over the past 40 years. *Climate Dynamics*, 1–14.
- Collazo, S., Barrucand, M., and Rusticucci, M. (2021). Association between El Niño and extreme temperatures in southern South America in CMIP5 models. Part 1: model evaluation in the present climate. *Climate Research* 83, 111–132.
- Cordero, R. R., Feron, S., Sepúlveda, E., Damiani, A., Carrera, J. M., Jorquera, J., et al. (2021). Evaluation of MODIS-derived estimates of the albedo over the Atacama Desert using ground-based spectral measurements. *Scientific reports* 11, 1–10.
- Córdoba González, Y. A. (2021). Efectos de los cambios en la cobertura vegetal de la cuenca del Amazonas en la evapotranspiración regional: Análisis de simulaciones con el modelo de superficie Noah-MP.
- Correa, I. C., Arias, P. A., and Rojas, M. (2021). Evaluation of multiple indices of the South American monsoon. *International Journal of Climatology* 41, E2801–E2819.
- Cosentino, N. J., Gaiero, D. M., and Lambert, F. (2021). Present-Day Patagonian Dust Emissions: Combining Surface Visibility, Mass Flux, and Reanalysis Data. *Journal of Geophysical Research: Atmospheres* 126, e2020JD034459.
- Crispin De La Cruz, D. B. (2021). Influencia de la variabilidad climática en el crecimiento radial de POLYLEPIS TARAPACANA PHILL. En Chiluyo-Tacna.
- d’Hiriart, S., Cueto, G., Ortiz, P. E., Teta, P., and Jayat, J. P. (2021). Spatial variation of small mammal communities in northwestern Argentina. *Mammalia* 85, 525–536.
- da Rocha, N. S., Veetil, B. K., de Carvalho, C. M., Käfer, P. S., Diaz, L. R., Rolim, S. B. A., et al. (2021). Potential impacts of air temperature rise in the hydric balance of Brazilian Pampa biome. *Acta Geophysica* 69, 1427–1445.
- Dallmeyer, A., Claussen, M., Lorenz, S. J., Sigl, M., Toohey, M., and Herzschuh, U. (2021). Holocene vegetation transitions and their climatic drivers in MPI-ESM1. 2. *Climate of the Past* 17, 2481–2513.
- de Azevedo, A. Q., Jiménez-Espejo, F. J., França, M. C., García-Alix, A., da Silva, F. A. B., Pessenda, L. C., et al. (2021). Hydrological influence on the evolution of a subtropical mangrove ecosystem during the late Holocene from Babitonga Bay, Brazil. *Palaeogeography, Palaeoclimatology, Palaeoecology* 574, 110463.
- de Campos Silva, G. M., Gozzo, L. F., and Reboita, M. S. (2021). Etapas de uma Previsão Climática Sazonal. *Terrae Didactica* 17, e021026–e021026.
- de Freitas, P. P., de Moraes Paiva, A., Cirano, M., Mill, G. N., da Costa, V. S., Gabioux, M., et al. (2021). Coastal trapped waves propagation along the Southwestern Atlantic Continental Shelf. *Continental Shelf Research* 226, 104496.

- De Pasquale, G., Valois, R., Bresciani, E., and Alvarez, P. (2021). Geophysical Characterization of Alluvial Aquifers in Plutonic and Volcanic Semi-Arid Andes Using Electromagnetic Methods. in *NSG2021 1st Conference on Hydrogeophysics* (European Association of Geoscientists & Engineers), 1–5.
- de Sousa, T. A., Venancio, I. M., de Morisson Valeriano, C., Heilbron, M., Carneiro, M. T. W. D., Mane, M. A., et al. (2021). Changes in sedimentary provenance and climate off the coast of Northeast Brazil since the Last Interglacial. *Marine Geology* 435, 106454.
- de Souza, D. C., and da Silva, R. R. (2021). Ocean-Land Atmosphere Model (OLAM) performance for major extreme meteorological events near the coastal region of southern Brazil. *Climate Research* 84, 1–21.
- Díaz, L. B., Saurral, R. I., and Vera, C. S. (2021). Assessment of South America summer rainfall climatology and trends in a set of global climate models large ensembles. *International Journal of Climatology* 41, E59–E77.
- Dominguez, J. M. L., and Guimarães, J. K. (2021). Effects of Holocene climate changes and anthropogenic river regulation in the development of a wave-dominated delta: The São Francisco River (eastern Brazil). *Marine Geology* 435, 106456.
- Emmer, A., Le Roy, M., Sattar, A., Veetil, B. K., Alcalá-Reygosa, J., Campos, N., et al. (2021). Glacier retreat and associated processes since the Last Glacial Maximum in the Lejiamayu valley, Peruvian Andes. *Journal of South American Earth Sciences* 109, 103254.
- English, N. B., Dettman, D. L., Hua, Q., Mendoza, J. M., Muir, D., Hultine, K. R., et al. (2021). Age-growth relationships, temperature sensitivity and palaeoclimate-archive potential of the threatened Altiplano cactus *Echinopsis atacamensis*. *Conservation physiology* 9, coaa123.
- Enyiukwu, D. N., Ononuju, C. C., Okeke, C. O., and Chukwu, L. A. (2021). Plant Parasitic Nematodes, Serious but Most Trivialized Biotic Challenge against Food Security: A spotlight on their Management for Sustainable Agriculture and Public Health.
- Escobar Londoño, M. (2021). The importance of terrestrial moisture sources for precipitation in Colombia: a combined isotopic and modelling approach.
- Eskandari Dameneh, H., Gholami, H., Telfer, M. W., Comino, J. R., Collins, A. L., and Jansen, J. D. (2021). Desertification of Iran in the early twenty-first century: assessment using climate and vegetation indices. *Scientific Reports* 11, 1–18.
- Espinoza, J.-C., Arias, P. A., Moron, V., Junquas, C., Segura, H., Sierra-Pérez, J. P., et al. (2021). Recent changes in the atmospheric circulation patterns during the dry-to-wet transition season in south tropical South America (1979–2020): Impacts on precipitation and fire season. *Journal of Climate* 34, 9025–9042.
- Estupinan-Suarez, L. M., Gans, F., Brenning, A., Gutierrez-Velez, V. H., Londono, M. C., Pabon-Moreno, D. E., et al. (2021). A regional Earth system data lab for understanding ecosystem dynamics: An example from northern South America. *Frontiers in Earth Science* 9, 574.
- Fagel, N., Pedreros, P., Alvarez, D., Tylmann, W., Namur, O., Da Silva, A. C., et al. (2021). Last millennium climate variability of the varved Lake Jeinimeni geochemical record from NE Chilean Patagonia. *Quaternary Science Reviews* 269, 107134.
- Fassoni-Andrade, A. C., Fleischmann, A. S., Papa, F., Paiva, R. C. D. de, Wongchuig, S., Melack, J. M., et al. (2021). Amazon hydrology from space: scientific advances and future challenges. *Reviews of Geophysics*. doi: <https://doi.org/10.1029/2020RG000728>.
- Favaro, E. A., Hugenholtz, C. H., and Barchyn, T. E. (2021). Antecedent controls on the spatial organization of yardangs on the Puna Plateau, north-western Argentina. *Earth Surface Processes and Landforms* 46, 3063–3077.
- Favata, T. (2021). *Seasonal Differences in the Impacts of IPO and AMO on Temperature and*



- Precipitation over South America*. State University of New York at Albany.
- Fernández, A., Schumacher, V., Ciocca, I., Rifo, A., Muñoz, A. A., and Justino, F. (2021). Validation of a 9-km WRF dynamical downscaling of temperature and precipitation for the period 1980–2005 over Central South Chile. *Theoretical and Applied Climatology* 143, 361–378.
- Fernández-Alberti, S., Abarca-del-Río, R., Bornhardt, C., and Ávila, A. (2021). Development and Validation of a Model to Evaluate the Water Resources of a Natural Protected Area as a Provider of Ecosystem Services in a Mountain Basin in Southern Chile. *Frontiers in Earth Science*, 646.
- Ferreira, J. Q. (2021). Changes in hydroclimate and vegetation in the São Francisco river drainage basin during the last 45000 years.
- Ferreira, T. A. B., da Silva, A. G. A., Perez, Y. A. R., Statterger, K., and Vital, H. (2021). Evaluation of decadal shoreline changes along the Parnaíba Delta (NE Brazil) using satellite images and statistical methods. *Ocean & Coastal Management* 202, 105513.
- Figueiredo, A. R. de (2021). Sociocriosfera andina: etnoconhecimento ancestral e a ruptura pós-colonial nos Andes centrais.
- Figueroa, R., Viguier, B., Taucare, M., Yáñez, G., Arancibia, G., Sanhueza, J., et al. (2021). Deciphering groundwater flow-paths in fault-controlled semiarid mountain front zones (Central Chile). *Science of The Total Environment* 771, 145456.
- Fletcher, M.-S., Pedro, J., Hall, T., Mariani, M., Alexander, J. A., Beck, K., et al. (2021). Northward shift of the southern westerlies during the Antarctic Cold Reversal. *Quaternary Science Reviews* 271, 107189.
- Flores-Aqueveque, V., Ortega, C., Fernández, R., Carabias, D., Simonetti, R., Cartajena, I., et al. (2021). A multi-proxy reconstruction of depositional environment of a Late Pleistocene submerged site from the Central Coast of Chile (32°): Implications for drowned sites. *Quaternary International* 601, 15–27.
- Flores-Rojas, J. L., Moya-Alvarez, A. S., Valdivia-Prado, J. M., Piñas-Laura, M., Kumar, S., Abi Karam, H., et al. (2021). On the dynamic mechanisms of intense rainfall events in the central Andes of Peru, Mantaro valley. *Atmospheric Research* 248, 105188.
- Flores-Varas, A., Heine-Fuster, I., López-Allendes, C., Pizarro, H., Castro, D., Luque, J. A., et al. (2021). Ascotán and Carcote salt flats as sensors of humidity fluctuations and anthropic impacts in the transition zone of the Andean Altiplano. *Journal of South American Earth Sciences* 105, 102934.
- Frau, D., Moran, B. J., Arengo, F., Marconi, P., Battauz, Y., Mora, C., et al. (2021). Hydroclimatological Patterns and Limnological Characteristics of Unique Wetland Systems on the Argentine High Andean Plateau. *Hydrology* 8, 164.
- Freisleben, R., Jara-Muñoz, J., Melnick, D., Martínez, J. M., and Strecker, M. R. (2021). Marine terraces of the last interglacial period along the Pacific coast of South America (1° N–40° S). *Earth System Science Data* 13, 2487–2513.
- Funatsu, B. M., Le Roux, R., Arvor, D., Espinoza, J. C., Claud, C., Ronchail, J., et al. (2021). Assessing precipitation extremes (1981–2018) and deep convective activity (2002–2018) in the Amazon region with CHIRPS and AMSU data. *Climate Dynamics*. doi: 10.1007/s00382-021-05742-8.
- Fyffe, C. L., Potter, E., Fugger, S., Orr, A., Fatichi, S., Loarte, E., et al. (2021). The energy and mass balance of Peruvian glaciers. *Journal of Geophysical Research: Atmospheres* 126, e2021JD034911.
- García, J.-L., Lüthgens, C., Vega, R. M., Rodés, Á., Hein, A. S., and Binnie, S. A. (2021a). A composite 10 Be, IR-50 and 14 C chronology of the pre-Last Glacial Maximum (LGM) full ice extent of the western Patagonian Ice Sheet on the Isla de Chiloé, south Chile (42° S). *E&G Quaternary Science Journal* 70, 105–128.

- García, M., Prieto, M., and Kalazich, F. (2021b). The protection of the mountain ecosystems of the Southern Central Andes: tensions between Aymara herding practices and conservation policies. *Journal on Protected Mountain Areas Research and Management* 13, 22–30.
- García-Sanz, I., Heine-Fuster, I., Luque, J. A., Pizarro, H., Castillo, R., Pailahual, M., et al. (2021). Limnological response from high-altitude wetlands to the water supply in the Andean Altiplano. *Scientific reports* 11, 1–13.
- Garello, N., Blettler, M. C., Espínola, L. A., Wantzen, K. M., González-Fernández, D., and Rodrigues, S. (2021). The role of hydrodynamic fluctuations and wind intensity on the distribution of plastic debris on the sandy beaches of Paraná River, Argentina. *Environmental Pollution* 291, 118168.
- Gébelin, A., Witt, C., Radkiewicz, M., and Mulch, A. (2021). Impact of the Southern Ecuadorian Andes on Oxygen and Hydrogen Isotopes in Precipitation. *Frontiers in Earth Science* 9, 400.
- Giesecke Astorga, C. R., Martín de Nascimento, J., Piñones, A., Höfer, J., Garcés Vargas, J., Flores Melo, E. X., et al. (2021). General Hydrography of the Beagle Channel, a Subantarctic Interoceanic Passage at the Southern Tip of South America.
- Giles, J. A. (2021). Impactos locales y no locales de la variabilidad de la humedad del suelo en el clima de Sudamérica: de escala diaria a interanual.
- González-González, A., Villegas, J. C., Clerici, N., and Salazar, J. F. (2021). Spatial-temporal dynamics of deforestation and its drivers indicate need for locally-adapted environmental governance in Colombia. *Ecological Indicators* 126, 107695.
- González-Reyes, Á., Jacques-Coper, M., and Muñoz, A. A. (2021). Seasonal precipitation in south-central Chile: Trends in extreme events since 1900. *Atmósfera* 34, 371–384.
- Gordillo, J., and Pineda, L. E. (2021). Unravelling runoff processes in Andean basins in northern Ecuador through hydrological signatures. *Hydrological Processes* 35, e14354.
- Gorin, A. L. (2021). Recent Tropical Andes Glacier Retreat Unprecedented in the Holocene.
- Grasset, S., Nuevo-Delaunay, A., Álvarez, J., Maldonado, A., and Méndez, C. (2021). New chronostratigraphic records of the early-to-middle Holocene in the north-central region of Chile indicate Andean foothills housed hunter-gatherers during pulses of extreme aridity. *The Holocene* 31, 1273–1287.
- Greiving, S., Fleischhauer, M., León, C. D., Schödl, L., Wachinger, G., Quintana Miralles, I. K., et al. (2021). Participatory assessment of multi risks in urban regions—The case of critical infrastructures in Metropolitan Lima. *Sustainability* 13, 2813.
- Grill, S., Lebinson, F., and Gutiérrez Téllez, B. (2021). “Siliceous Speleothems in Sedimentary Breccias, Sierras Australes of Buenos Aires Province, Argentina,” in *Advances in Geomorphology and Quaternary Studies in Argentina* (Springer), 437–455.
- Gualco, L. F., Campozano, L., Maisincho, L., Robaina, L., Muñoz, L., Ruiz-Hernández, J. C., et al. (2021). Corrections of Precipitation Particle Size Distribution Measured by a Parsivel OTT2 Disdrometer under Windy Conditions in the Antisana Massif, Ecuador. *Water* 13, 2576.
- GUIMARÃES JÚNIOR, S. da S. (2021). Modelagem de distribuição das espécies de caranguejos de água doce *Dilocarcinus pagei* E *Sylvioparcinus pictus* (DECAPODA: THICHODACTYLIDADE).
- Gutierrez, S. C., Cajachagua, H. S., Huanca, M. S., Rojas, J. F., Vidal, Y. S., and Cuxart, J. (2021). Seasonal variability of daily evapotranspiration and energy fluxes in the Central Andes of Peru using eddy covariance techniques and empirical methods. *Atmospheric Research* 261, 105760.
- Hadad, M. A., González-Reyes, Á., Roig, F. A., Matskovsky, V., and Cherubini, P. (2021a). Tree-ring-based hydroclimatic reconstruction for the northwest Argentine Patagonia

- since 1055 CE and its teleconnection to large-scale atmospheric circulation. *Global and Planetary Change* 202, 103496.
- Hadad, M. A., Roig, F. A., Molina, J. G. A., and Hackett-Pain, A. (2021b). Growth of male and female *Araucaria araucana* trees respond differently to regional mast events, creating sex-specific patterns in their tree-ring chronologies. *Ecological Indicators* 122, 107245.
- Hardy, S., and Robert, J. (2021). Entre grand système et alternatives d’approvisionnement en eau à Lima et La Paz. *EchoGéo*.
- Haro-Carrión, X., Waylen, P., and Southworth, J. (2021). Spatiotemporal changes in vegetation greenness across continental Ecuador: a Pacific-Andean-Amazonian gradient, 1982–2010. *Journal of Land Use Science* 16, 18–33.
- Hassan, Q. K., Ejiagha, I. R., Ahmed, M. R., Gupta, A., Rangelova, E., and Dewan, A. (2021). Remote Sensing of Local Warming Trend in Alberta, Canada during 2001–2020, and Its Relationship with Large-Scale Atmospheric Circulations. *Remote Sensing* 13, 3441.
- He, Z., Dai, A., and Vuille, M. (2021). The joint impacts of Atlantic and Pacific multidecadal variability on South American precipitation and temperature. *Journal of Climate* 34, 7959–7981.
- Heavens, N. G. (2021). Downscaling CESM2 in CLM5 to Hindcast Preindustrial Equilibrium Line Altitudes for Tropical Mountain Glaciers. *Geophysical Research Letters* 48, e2021GL094071.
- Heikkinen, A. M. (2021). Climate change, power, and vulnerabilities in the Peruvian Highlands. *Regional Environmental Change* 21, 1–14.
- Henríquez, C. A., Moreno, P. I., Lambert, F., and Alloway, B. V. (2021). The role of climate and disturbance regimes upon temperate rainforests during the Holocene: A stratigraphic perspective from Lago Fonk (~ 40° S), northwestern Patagonia. *Quaternary Science Reviews* 258, 106890.
- Höppner, N., Chiessi, C. M., Lucassen, F., Zavala, K., Becchio, R. A., and Kasemann, S. A. (2021). Modern isotopic signatures of Plata River sediments and changes in sediment supply to the western subtropical South Atlantic during the last 30 kyr. *Quaternary Science Reviews* 259, 106910.
- Hormazábal, V., Vargas Rojas, V., Abarca del Río, R., Little Cárdenas, C., Rivera, D., Carrasco, N., et al. (2021). Simulación hidrológica del caudal del estero Batuco en la microcuenca agroforestal Batuco (Ránquil, Región del Ñuble, Chile) bajo condiciones climáticas presentes y futuras.
- Hoyos Zarzosa, L. D. R. (2021). Influencia de la variabilidad climática en la concentración de los isótopos  $^{18}\text{O}$  y  $^2\text{H}$  y metales AL, CD, PB, ZN, AS, CU, HG, MO en el ámbito del glaciar artesonraju de la cordillera blanca en los últimos 10 años, Ancash-2019.
- Huerta, A., and Lavado-Casimiro, W. (2021). Trends and variability of precipitation extremes in the Peruvian Altiplano (1971–2013). *International Journal of Climatology* 41, 513–528.
- Huneus, N., Lapere, R., Mazzeo, A., Ordóñez, C., Donoso, N., Muñoz, R., et al. (2021). Deep winter intrusions of urban black carbon into a canyon near Santiago, Chile: A pathway towards Andean glaciers. *Environmental Pollution* 291, 118124.
- Husson, L., and Sepulchre, P. (2021). Geophysical Biogeography. *Biogeography: An Integrative Approach of the Evolution of Living*, 81–113.
- Ibañez, M., Gironás, J., Oberli, C., Chadwick, C., and Garreaud, R. D. (2021). Daily and seasonal variation of the surface temperature lapse rate and 0 C isotherm height in the western subtropical Andes. *International Journal of Climatology* 41, E980–E999.
- Ibargüengoytía, N. R., Medina, M., Laspiur, A., Qu, Y.-F., Peralta, C. A. R., Sinervo, B., et al. (2021). Looking at the past to infer into the future: Thermal traits track environmental change in Liolaemidae. *Evolution* 75, 2348–2370.

- Ilbay-Yupa, M., Lavado-Casimiro, W., Rau, P., Zubieta, R., and Castellón, F. (2021). Updating regionalization of precipitation in Ecuador. *Theoretical and Applied Climatology* 143, 1513–1528.
- Imfeld, N., Sedlmeier, K., Gubler, S., Correa Marrou, K., Davila, C. P., Huerta, A., et al. (2021). A combined view on precipitation and temperature climatology and trends in the southern Andes of Peru. *International Journal of Climatology* 41, 679–698.
- Irisarri, J. G. N., Texeira, M., Oesterheld, M., Verón, S. R., Della Nave, F., and Paruelo, J. M. (2021). Discriminating the biophysical signal from human-induced effects on long-term primary production dynamics. The case of Patagonia. *Global Change Biology* 27, 4381–4391.
- Isla, F. I., Isla, M. F., Bertola, G. R., Bedmar, J. M., Cortizo, L., and Maenza, R. A. (2021). Taton dune field: wind selection across the Southamerican arid diagonal, Puna Argentina.
- Ituarte, L. S. (2021). Exploring differential erosion patterns using volcanic edifices as a proxy in South America.
- Iturrizaga, L., and Charrier, R. (2021). Sudden glacier advances in the Cachapoal Valley, Southern Central Andes of Chile (34° S). *Journal of South American Earth Sciences* 105, 102787.
- Jana Pinninghoff, P. A. (2021). Reconstrucción de precipitaciones entre la Patagonia septentrional y zona central de Chile: ¿Hay diferencias entre periodos de sequía y mayor precipitación?.
- Jaqueto, P., Trindade, R. I., Feinberg, J. M., Carmo, J., Novello, V. F., Strikis, N. M., et al. (2021). Magnetic Mineralogy of Speleothems From Tropical-Subtropical Sites of South America. *Frontiers in Earth Science* 9, 278.
- Jara, F., Lagos-Zúñiga, M., Fuster, R., Mattar, C., and McPhee, J. (2021). Snow Processes and Climate Sensitivity in an Arid Mountain Region, Northern Chile. *Atmosphere* 12, 520.
- Jaramillo, D., Vélez, M. I., Escobar, J., Pardo-Trujillo, A., Vallejo, F., Villegas, J. C., et al. (2021). Mid to late holocene dry events in Colombia's super humid Western Cordillera reveal changes in regional atmospheric circulation. *Quaternary Science Reviews* 261, 106937.
- Jonaitis, J. A., Perry, L. B., Soulé, P. T., Thaxton, C., Andrade-Flores, M. F., Vargas, T. I., et al. (2021). Spatiotemporal patterns of ENSO-precipitation relationships in the tropical Andes of southern Peru and Bolivia. *International Journal of Climatology* 41, 4061–4076.
- Keating, C., Lee, D., Bazo, J., and Block, P. (2021). Leveraging multi-model season-ahead streamflow forecasts to trigger advanced flood preparedness in Peru. *Natural Hazards and Earth System Sciences* 21, 2215–2231.
- Keating, C. P. (2021). Probabilistic Streamflow Forecasts to Advance Flood Preparedness: Statistical Applications and User Perspectives.
- Khan, A., Ahmed, M., Gaire, N. P., Iqbal, J., Siddiqui, M. F., Khan, A., et al. (2021). Tree-ring-based temperature reconstruction from the western Himalayan region in northern Pakistan since 1705 CE. *Arabian Journal of Geosciences* 14, 1–12.
- King, C., Michelutti, N., Meyer-Jacob, C., Bindler, R., Tapia, P., Grooms, C., et al. (2021). Diatoms and other siliceous indicators track the ontogeny of a “bofedal”(wetland) ecosystem in the Peruvian Andes. *Botany* 99, 491–505.
- Klimeš, J., Novotný, J., Rapre, A. C., Balek, J., Zahradníček, P., Strozzi, T., et al. (2021). Paraglacial rock slope stability under changing environmental conditions, Safuna Lakes, Cordillera Blanca Peru. *Frontiers in Earth Science* 9, 142.
- Lalor, M. (2021). High resolution lacustrine records of Late Holocene climate change from southern New Zealand.

- Lapere, R., Mailler, S., Menut, L., and Huneus, N. (2021). Pathways for wintertime deposition of anthropogenic light-absorbing particles on the Central Andes cryosphere. *Environmental Pollution* 272, 115901.
- Laprida, C., Orgeira, M. J., Fernández, M., Tófaló, R., Mercáu, J. R., Silvestri, G. E., et al. (2021). The role of Southern Hemispheric Westerlies for Holocene hydroclimatic changes in the steppe of Tierra del Fuego (Argentina). *Quaternary International* 571, 11–25.
- Lecaros Álvarez, Y. N. (2021). Evaluación de susceptibilidad a la generación de flujo de detritos, ladera oriental entre las localidades Chancoquín y La Arena, valle del Tránsito, región de Atacama.
- Lecomte, K. L., Pasquini, A. I., Sepúlveda, L. D., Temporetti, P., Pedrozo, F., and Depetris, P. J. (2021). “The Manso River Drainage System in the Northern Patagonian Andes: Hydrological, Hydrochemical and Nutrient Dynamics,” in *Environmental Assessment of Patagonia’s Water Resources* (Springer), 27–55.
- Lenguas Francavilla, M., Negrete, L., Martínez-Aquino, A., Damborenea, C., and Brusa, F. (2021). Two new freshwater planarian species (Platyhelminthes: Tricladida: Dugesiiidae) partially sympatric in Argentinean Patagonia. *Canadian Journal of Zoology* 99, 269–278.
- León-Muñoz, J., Aguayo, R., Marcé, R., Catalán, N., Woelfl, S., Nimptsch, J., et al. (2021). Climate and Land Cover Trends Affecting Freshwater Inputs to a Fjord in Northwestern Patagonia. *Frontiers in Marine Science*, 960.
- Lima-Quispe, N., Escobar, M., Wickel, A. J., von Kaenel, M., and Purkey, D. (2021). Untangling the effects of climate variability and irrigation management on water levels in Lakes Titicaca and Poopo. *Journal of Hydrology: Regional Studies* 37, 100927.
- Lindau, F. G., Simões, J. C., Delmonte, B., Ginot, P., Baccolo, G., Paleari, C. I., et al. (2021). Giant dust particles at Nevado Illimani: a proxy of summertime deep convection over the Bolivian Altiplano. *The Cryosphere* 15, 1383–1397.
- Lira, A. F., Foerster, S. I., Albuquerque, C. M., and Moura, G. J. (2021). Contrasting patterns at interspecific and intraspecific levels in scorpion body size across a climatic gradient from rainforest to dryland vegetation. *Zoology* 146, 125908.
- Llambi, L. D., Melfo, A., Gámez, L. E., Pelayo, R. C., Cárdenas, M., Rojas, C., et al. (2021). Vegetation assembly, adaptive strategies and positive interactions during primary succession in the forefield of the last Venezuelan glacier. *Frontiers in Ecology and Evolution*, 742.
- Llano, C., Durán, V., Gasco, A., Reynals, E., and Zárate, M. S. (2021). Traditional puesteros’ perceptions of biodiversity in semi-arid Southern Mendoza, Argentina. *Journal of Arid Environments* 192, 104553.
- Llanos López, R. (2021). Estudio paleoambiental de Turberas tropicales altoandinas en la cabecera de Cuenca Cachi, Ayacucho, y su importancia como sumideros de carbono.
- López-Blanco, C., Rodríguez-Abaunza, G. A., Seitz, C., Perez, L., Cuña-Rodríguez, C., and Fontana, S. L. (2021). A 700-year multiproxy reconstruction on the Argentinian Pampas inferred from the sediments of Laguna Blanca Grande. *Journal of South American Earth Sciences* 105, 103000.
- Lörch, M., Mutke, J., Weigend, M., and Luebert, F. (2021). Historical biogeography and climatic differentiation of the Fulcaldea-Archidasphyllum-Arnaldoa clade of Barnadesioideae (Asteraceae) suggest a Miocene, aridity-mediated Andean disjunction associated with climatic niche shifts. *Global and Planetary Change* 201, 103495.
- Loriaux, T., and Ruiz, L. (2021). Spatio-Temporal Distribution of Supra-Glacial Ponds and Ice Cliffs on Verde Glacier, Chile. *Frontiers in Earth Science*, 448.
- Lozano Gacha, M. F., and Koch, M. (2021). Distributed Energy Balance Flux Modelling of

- Mass Balances in the Artesonraju Glacier and Discharge in the Basin of Artesoncocha, Cordillera Blanca, Peru. *Climate* 9, 143.
- Luebert, F. (2021). The two South American dry diagonals. *Frontiers of Biogeography*.
- Machado, C. B., Campos, T. L., Abou Rafee, S. A., Martins, J. A., Grimm, A. M., and de Freitas, E. D. (2021). Extreme Rainfall Events in the Macrometropolis of São Paulo: Trends and Connection with Climate Oscillations. *Journal of Applied Meteorology and Climatology* 60, 661–675.
- Mamani, R., and Hendrick, P. (2021). Weather research & forecasting model and MERRA-2 data for wind energy evaluation at different altitudes in Bolivia. *Wind Engineering*, 0309524X211019701.
- Manquehual-Cheque, F., and Somos-Valenzuela, M. (2021). Climate change refugia for glaciers in Patagonia. *Anthropocene* 33, 100277.
- Marchioro, C. A., Sampaio, F., and da Silva Krechmer, F. (2021). Spatio-temporal variation in voltinism of insect pests: sensitivity to location and temperature anomalies. *Neotropical Entomology* 50, 208–217.
- Marcotti, E., Amoroso, M. M., Rodriguez-Caton, M., Vega, L., Srur, A. M., and Villalba, R. (2021). Growth resilience of *Austrocedrus chilensis* to drought along a precipitation gradient in Patagonia, Argentina. *Forest Ecology and Management* 496, 119388.
- Marín, J. C., Barrett, B. S., and Pozo, D. (2021). The tornadoes of 30–31 May 2019 in south-central Chile: Sensitivity to topography and SST. *Atmospheric Research* 249, 105301.
- Marta, S., Azzoni, R. S., Fugazza, D., Tielidze, L., Chand, P., Sieron, K., et al. (2021). The Retreat of Mountain Glaciers since the Little Ice Age: A Spatially Explicit Database. *Data* 6, 107.
- Mathias, G. L., Roud, S. C., Chiessi, C. M., Campos, M. de C., Dias, B. B., Santos, T. P., et al. (2021). A Multi-Proxy Approach to Unravel Late Pleistocene Sediment Flux and Bottom Water Conditions in the Western South Atlantic Ocean. *Paleoceanography and Paleoclimatology* 36, e2020PA004058.
- McDowell, G., Koppes, M., Harris, L., Chan, K. M., Price, M. F., Lama, D. G., et al. (2021). Lived experiences of ‘peak water’ in the high mountains of Nepal and Peru. *Climate and Development*, 1–14.
- McNamara, I., Nauditt, A., Zambrano-Bigiarini, M., Ribbe, L., and Hann, H. (2021). Modelling water resources for planning irrigation development in drought-prone southern Chile. *International Journal of Water Resources Development* 37, 793–818.
- McWethy, D. B., Garreaud, R. D., Holz, A., and Pederson, G. T. (2021). Broad-Scale Surface and Atmospheric Conditions during Large Fires in South-Central Chile. *Fire* 4, 28.
- Meier, W. (2021). Past and recent climate variability and glacier fluctuations across the Southern Patagonian Andes-A multi-parameter approach using tree-ring parameters and remote sensing.
- Mejía, J. F., Yepes, J., Henao, J. J., Poveda, G., Zuluaga, M. D., Raymond, D. J., et al. (2021). Towards a mechanistic understanding of precipitation over the far eastern tropical Pacific and western Colombia, one of the rainiest spots on Earth. *J Geophys Res Atmos* 126, e2020JD033415.
- Melillo, J. R. (2021). Cronologías y extensión del Último Máximo Glacial en los andes centrales (31° S-35° S) de Argentina y Chile.
- Méndez, C., and Nuevo-Delaunay, A. (2021). “The Long-Term Relation Between Human Beings and Shellfish in the Semiarid Coast of Chile,” in *South American Contributions to World Archaeology* (Springer), 119–140.
- Méndez, C., Nuevo-Delaunay, A., Grasset, S., Maldonado, A., Seguel, R., Troncoso, A., et al. (2021). Different (ial) Human Use of Coastal Landscapes: Archaeological Contexts, Chronology, and Assemblages of El Teniente Bay (31° S, Chile, South America). *Land*

- 10, 577.
- Mendoza Villavicencio, L. M., Mendes, D., Mendes da Silva, G. A., Monteiro, F. F., and Andrade, L. D. M. B. (2021). Snow cover area analysis and its relation with the temperature in sbinacocha lake watershed, peru, during 1984–2019 using landsat and era5 data. *Remote Sensing Letters* 12, 353–363.
- Mesa, O., Urrea, V., and Ochoa, A. (2021a). Trends of hydroclimatic intensity in Colombia. *Climate* 9, 120.
- Mesa, O., Urrea, V., and Ochoa, A. (2021b). *Trends of Hydroclimatic Intensity in Colombia. Climate 2021, 9, 120.* s Note: MDPI stays neutral with regard to jurisdictional claims in published ....
- Michaels, N. G. (2021). Palaeohydrological reconstruction in the high plain of Bogotá (Colombian, Eastern Cordillera) using plant wax n-alkane biomarkers and compound-specific stable hydrogen isotope ( $\delta D_{wax}$ ) analysis.
- Mino-Rodriguez, I. (2021). A thermal comfort model for high-altitude regions in the Ecuadorian Andes.
- Mölg, T., and Kaser, G. (2021). Tropical Glaciers. *Glaciers and Ice Sheets in the Climate System*, 483–495.
- Molnar, P., and Pérez-Angel, L. C. (2021). Constraints on the paleoelevation history of the Eastern Cordillera of Colombia from its palynological record. *Geosphere* 17, 1333–1352.
- Monroy Ramírez, J. C., Espinosa Ramírez, A. J., and Jiménez Avella, W. A. (2021). Hidroclimatología local e impactos en el lago Sochagota, Paipa, Boyacá. *Ciencia e Ingeniería Neogranadina* 31, 53–72.
- Mora Pacheco, K., and Cortes Guerrero, J. D. (2021). Sob o sol escaldante e a chuva torrencial. Viajantes estrangeiros e clima colombiano no século XIX. *Anuario de Historia Regional y de las Fronteras* 26, 137–164.
- Morales, B., Lizama, E., Somos-Valenzuela, M. A., Lillo-Saavedra, M., Chen, N., and Fustos, I. (2021a). A comparative machine learning approach to identify landslide triggering factors in northern Chilean Patagonia. *Landslides* 18, 2767–2784.
- Morales, J. S., Arias, P. A., Martínez, J. A., and Durán-Quesada, A. M. (2021b). The role of low-level circulation on water vapour transport to central and northern South America: Insights from a 2D Lagrangian approach. *International Journal of Climatology* 41, E2662–E2682.
- Morales, N. S., Barrientos, G., and L’Heureux, G. L. (2021c). Diagénesis ósea en el bosque caducifolio de Patagonia meridional al este de los Andes: Modelo teórico y evidencia empírica. *Magallania (Punta Arenas)* 49.
- Morales-Acuña, E., Linero-Cueto, J. R., and Canales, F. A. (2021). Assessment of precipitation variability and trends based on satellite estimations for a heterogeneous Colombian region. *Hydrology* 8, 128.
- Moreiras, S. M., Sepúlveda, S. A., Correas-González, M., Lauro, C., Vergara, I., Jeanneret, P., et al. (2021). Debris flows occurrence in the semiarid central Andes under climate change scenario. *Geosciences* 11, 43.
- Moreno-Gonzalez, R., Giesecke, T., and Fontana, S. L. (2021). Fire and vegetation dynamics of endangered Araucaria araucana communities in the forest-steppe ecotone of northern Patagonia. *Palaeogeography, Palaeoclimatology, Palaeoecology* 567, 110276.
- Moret, P., Muriel, P., Jaramillo, R., Bernardi, A., Romoleroux, K., Barragán, Á., et al. (2021). Resurvey of vascular plants and soil arthropods on the summit of Mount Corazón (Andes of Ecuador) after 140 years. *Neotropical Biodiversity* 7, 238–245.
- Mosquera, B., and Mancini, M. V. (2021). Paleoenvironmental analysis of wet meadow in the Deseado Massif: Implications for the Holocene occupation of Argentinian Patagonia.

- The Holocene* 31, 1609–1620.
- Motschmann, A. (2021). Water resource risks in the Andes of Peru: an integrative perspective.
- Muñoz, E., Poveda, G., Arbeláez, M. P., and Vélez, I. D. (2021a). Spatiotemporal dynamics of dengue in Colombia in relation to the combined effects of local climate and ENSO. *Acta Tropica* 224, 106136.
- Muñoz, P., Orellana-Alvear, J., Bendix, J., Feyen, J., and Célleri, R. (2021b). Flood Early Warning Systems Using Machine Learning Techniques: The Case of the Tomebamba Catchment at the Southern Andes of Ecuador. *Hydrology* 8, 183.
- Muro, M. D. (2021). Evolução de campos de dunas em costas progradantes: o caso da costa extremo sul de Santa Catarina, Sul do Brasil.
- Mutz, S. G., Scherrer, S., Muceniece, I., and Ehlers, T. A. (2021). Twenty-first century regional temperature response in Chile based on empirical-statistical downscaling. *Climate Dynamics* 56, 2881–2894.
- Nanavati, W., Whitlock, C., Outes, V., and Villarosa, G. (2021). A Holocene history of monkey puzzle tree (pehuén) in northernmost Patagonia. *Journal of Biogeography*.
- Nascimento, M. N., Peters-Schulze, G., Martins, G. S., Cordeiro, R. C., Turcq, B., Moreira, L. S., et al. (2021). Limnological response to climatic changes in western Amazonia over the last millennium. *Frontiers of Biogeography* 13.
- Nauditt, A., Sycz, J., and Ribbe, L. (2021). 12 The Limari River Basin. *Sustainability of Engineered Rivers In Arid Lands: Challenge and Response*, 152.
- Ogunkoya, A., Kaplan, J., Whitlock, C., Nanavati, W., Roberts, D. W., and Poulter, B. (2021). Drivers of recent forest cover change in southern South America are linked to climate and CO<sub>2</sub>. *Landscape Ecology* 36, 3591–3606.
- Ojeda, G. E., Chiesa, J., and Ulacco, H. (2021). Seasonal Intermittent Wetlands at the Desaguadero River. Argentine. Past, Present and Future Morphodynamics.
- Olmo, M. E., and Bettolli, M. L. (2021). Extreme daily precipitation in southern South America: statistical characterization and circulation types using observational datasets and regional climate models. *Climate Dynamics* 57, 895–916.
- O'Neill, B., and Ford, L. B. (2021). ACCEPTED VERSION SUBJECT TO FINAL EDITS. *Notes* 49.
- Ordóñez-Zúñiga, S. A., Correa-Ramírez, M., Ricaurte-Villota, C., and Bastidas-Salamanca, M. (2021). The Panama Low-Level Jet: extension, annual cycle and modes of variation. *Latin American journal of aquatic research* 49, 750–762.
- Ortega, G., Arias, P. A., Villegas, J. C., Marquet, P. A., and Nobre, P. (2021). Present-day and future climate over central and South America according to CMIP5/CMIP6 models. *International Journal of Climatology* 41, 6713–6735.
- Ortega Sánchez, J. M. (2021). Evaluación del transporte de humedad atmosférica desde el océano Atlántico hacia las cuencas del Orinoco y el norte del Amazonas durante el año 2010 mediante el modelo WRF-Tracers.
- Oshun, J., Keating, K., Lang, M., and Miraya Oscco, Y. (2021a). Interdisciplinary Water Development in the Peruvian Highlands: The Case for Including the Coproduction of Knowledge in Socio-Hydrology. *Hydrology* 8, 112.
- Oshun, J., Keating, K., Lang, M., and Miraya Oscco, Y. (2021b). Interdisciplinary Water Development in the Peruvian Highlands: The Case for Including the Coproduction of Knowledge in Socio-Hydrology. *Hydrology* 2021, 8, 112. *Socio-Hydrology*, 95.
- Oughton, J. W., and Urrego, D. H. (2021). Testing the Tropical Trigger Hypothesis of Abrupt Climate Variability. *Frontiers in Earth Science* 9, 323.
- Pacheco, K. G. M., and Guerrero, J. D. C. (2021). Bajo el sol ardiente y la lluvia torrencial. Viajeros extranjeros y clima colombiano en el siglo XIX.
- Palacios, A. A. T., Condom, T., Garcia, J., Cochachin, A., and Mejia, A. (2021). Modelización



- hidro-glaciológico actual y futura de la microcuenca Yanamarey en la cordillera Blanca, Perú. *Aqua-LAC* 13, 108–127.
- Palacios Robles, E. D. (2021). Influencia del gradiente de cobertura glaciar de la cordillera blanca en la biodiversidad de macroinvertebrados bentónicos, 2019-2020.
- Páliz Larrea, P., Zapata Ríos, X., and Campozano Parra, L. (2021). Application of Neural Network Models and ANFIS for Water Level Forecasting of the Salve Faccha Dam in the Andean Zone in Northern Ecuador. *Water* 13, 2011.
- Pánek, T., Břežný, M., Kilnar, J., and Winocur, D. (2021). Complex causes of landslides after ice sheet retreat: Post-LGM mass movements in the Northern Patagonian Icefield region. *Science of The Total Environment* 758, 143684.
- Pardo, N., Espinosa, M. L., González-Arango, C., Cabrera, M. A., Salazar, S., Archila, S., et al. (2021). Worlding resilience in the Dona Juana Volcano-Paramo, Northern Andes (Colombia): A transdisciplinary view. *Natural Hazards* 107, 1845–1880.
- Paredes-Beltran, B., Sordo-Ward, A., De-Lama, B., and Garrote, L. (2021a). A Continental Assessment of Reservoir Storage and Water Availability in South America. *Water* 13, 1992.
- Paredes-Beltran, B., Sordo-Ward, A., and Garrote, L. (2021b). Dataset of Georeferenced Dams in South America (DDSA). *Earth System Science Data* 13, 213–229.
- Pareja-Quispe, D., Franchito, S. H., and Fernandez, J. P. R. (2021). Assessment of the RegCM4 Performance in Simulating the Surface Radiation Budget and Hydrologic Balance Variables in South America. *Earth Systems and Environment* 5, 499–518.
- Pasquini, A. I., Cosentino, N. J., and Depetris, P. J. (2021). “The Main Hydrological Features of Patagonia’s Santa Cruz River: An Updated Assessment,” in *Environmental Assessment of Patagonia’s Water Resources* (Springer), 195–210.
- Patarroyo, G. D., and Martinez, J. I. (2021). Composition and diversity patterns of deep sea benthic foraminifera from the Panama basin, eastern equatorial Pacific. *Deep Sea Research Part I: Oceanographic Research Papers* 169, 103470.
- Patón, D. (2021). Climatic and Biological Factors Related with Goat Grazing Management in the Arid Grassland of the Coquimbo Region (Northern Chile). *Ecologies* 2, 345–365.
- Pauca Tanco, G. A. (2021). Dinámica de los humedales altoandinos frente al cambio climático, mediante el uso de imágenes satelitales e información climática, entre los años 1985-2018: Estudio de caso.
- Peleli, S., Kouli, M., Marchese, F., Lacava, T., Vallianatos, F., and Tramutoli, V. (2021). Monitoring temporal variations in the geothermal activity of Miocene Lesvos volcanic field using remote sensing techniques and MODIS–LST imagery. *International Journal of Applied Earth Observation and Geoinformation* 95, 102251.
- Pérez Becoña, L. (2021). Variabilidad del aporte continental y la productividad de la plataforma del Océano Atlántico Sudoccidental en el último milenio y su relación frente a los cambios hidroclimáticos.
- Pérez Brand, A. O., Arias Gómez, P. A., and Vieira Agudelo, S. C. (2021). Transporte y reciclaje de humedad atmosférica en la cuenca del río Congo: comparaciones con la cuenca del río Amazonas.
- Perez, L., Barreiro, M., Etchevers, I., Crisci, C., and García-Rodríguez, F. (2021a). Centennial hydroclimatic and anthropogenic processes of South East South America modulate interannual and decadal river discharge. *Science of The Total Environment* 781, 146733.
- Perez, L., Crisci, C., Lüning, S., de Mahiques, M. M., and García-Rodríguez, F. (2021b). Last millennium intensification of decadal and interannual river discharge cycles into the Southwestern Atlantic Ocean increases shelf productivity. *Global and Planetary Change* 196, 103367.
- Pérez-Consuegra, N., Hoyos, N., Restrepo, J. C., Escobar, J., and Hoke, G. D. (2021).

- Contrasting climate controls on the hydrology of the mountainous Cauca River and its associated sedimentary basin: Implications for interpreting the sedimentary record. *Geomorphology* 377, 107590.
- Pérez-Moreno, R., Reich, M., Daniele, L., Morata, D., Held, S., and Kleinsasser, J. (2021). Stable isotope and anthropogenic tracer signature of waters in an Andean geothermal system. *Applied Geochemistry* 128, 104953.
- Pérez-Santos, I., Díaz, P. A., Silva, N., Garreaud, R., Montero, P., Henríquez-Castillo, C., et al. (2021). Oceanography time series reveals annual asynchrony input between oceanic and estuarine waters in Patagonian fjords. *Science of the Total Environment* 798, 149241.
- Pessacg, N., Blázquez, J., Lancelotti, J., and Solman, S. (2021). “Climate changes in coastal areas of Patagonia: observed trends and future projections,” in *Global Change in Atlantic Coastal Patagonian Ecosystems* (Springer), 13–42.
- Pissolito, C., Garibotti, I., and Villalba, R. (2021). Inter-annual climatic variability modulates biotic interactions on early *Nothofagus pumilio* community development. *Plant Ecology & Diversity* 14, 65–80.
- Pohl, M. J., Lehnert, L., Bader, M. Y., Gradstein, S. R., Viehweger, J., and Bendix, J. (2021). A new fog and low stratus retrieval for tropical South America reveals widespread fog in lowland forests. *Remote Sensing of Environment* 264, 112620.
- Pool, C. S., Salazar, D. R., Tapia, R. P., García-Chevesich, P., Córdova, A. I., and Fuentes, J. P. (2021). Spatial and temporal behavior of annual maximum sub-hourly rainfall intensities from 15-minute to 24-hour durations in central Chile. *Aqua-LAC* 13, 143–156.
- Postigo, J. C. (2021). The role of social institutions in indigenous Andean Pastoralists’ adaptation to climate-related water hazards. *Climate and Development* 13, 780–791.
- Prado, G. A. B., Mendoza, B. J. R., and Gil, L. J. S. (2021). Energy correlation between global solar radiation and wind speed in the Colombian Caribbean. *INGE CUC* 17.
- Preciado Vargas, M., Galindez Jamióy, C. A., Peña Quiñones, A. J., and Solarte Rodríguez, E. (2021). Influence of Weather on the Distribution of  $\mathbf{PM}_{10}$  Coming from Controlled Sugarcane Burning Events in Colombia. *Sugar Tech* 23, 661–672.
- Prieto, A. R., Azar, P. F., and Fernández, M. M. (2021). Holocene vegetation dynamics and human–environment interactions inferred from pollen and plant macrofossils from caves in northwestern Patagonia (Argentina). *Review of Palaeobotany and Palynology* 293, 104496.
- Pujol, C. (2021). Marine heatwaves offshore Central and South Chile: a global assessment and the case study of the year 2016.
- Quagraine, K. A. (2021). Dynamics of co-behaviour of climate processes over Southern Africa.
- Quintana Zagaceta, C. H. (2021). El uso de Diatomeas como indicador de cambios ambientales en sedimentos del Lago Yanacocha (Cuzco, Perú) durante el Holoceno Tardío.
- Quishpe Vásquez, C. (2021). Predicción estacional del clima de Ecuador.
- Ramírez-Valencia, V., Paez-Reyes, M., Salgado, J., Sangiorgi, F., Zúñiga-González, A. C., Amézquita, A., et al. (2021). Distribution of organic-walled dinoflagellate cysts in surface sediments of the southern Caribbean and the eastern tropical Pacific and its environmental implications. *Marine Micropaleontology* 167, 102000.
- Ramli, I., Devianti, D., Murthada, S., and Chandika, H. (2021). Analysis of unsaturated hydraulic conductivity parameter in Central Aceh District. in *IOP Conference Series: Earth and Environmental Science* (IOP Publishing), 012027.
- Rasbold, G. G., McGlue, M. M., Stevaux, J. C., Parolin, M., Silva, A., and Bergier, I. (2021). Enhanced middle Holocene organic carbon burial in tropical floodplain lakes of the Pantanal (South America). *Journal of Paleolimnology* 65, 181–199.

- Recalde Coronel, G. C. (2021). HYDROLOGICAL VARIABILITY IN WESTERN TROPICAL SOUTH AMERICA: CLIMATIC DRIVERS, MODEL SIMULATION, AND SUBSEASONAL FORECAST.
- Repetto, A. L. V. (2021). Dinámica glaciaria de la cuenca del río Santa Cruz, Andes Patagónicos Australes: el agua del futuro. *Boletín de Estudios Geográficos*, 187–214.
- Rivelli, G. M., Fernández Long, M. E., Abeledo, L. G., Calderini, D. F., Miralles, D. J., and Rondanini, D. P. (2021). Assessment of heat stress and cloudiness probabilities in post-flowering of spring wheat and canola in the Southern Cone of South America. *Theoretical and Applied Climatology* 145, 1485–1502.
- Rivera, J. A., Otta, S., Lauro, C., and Zazulie, N. (2021a). A decade of hydrological drought in Central-Western Argentina. *Frontiers in Water* 3, 28.
- Rivera, J., Lauro, C., and Otta, S. A. (2021b). Cuantificación del déficit hidrológico reciente en la región de Cuyo a partir de indicadores de caudales bajos. *Boletín de Estudios Geográficos*, 23–44.
- Rolim, L. Z. R., Oliveira da Silva, S. M., and de Souza Filho, F. de A. (2021). Analysis of precipitation dynamics at different timescales based on entropy theory: an application to the State of Ceará, Brazil. *Stochastic Environmental Research and Risk Assessment*, 1–17.
- Rollán, J. P. D. (2021). *Groundwater Modeling in the High Andes of Argentina: Resource Assessment and Potential Impacts*. University of Delaware.
- Romero, M., Torre, G., and Gaiero, D. M. (2021). Paleoenvironmental changes in southern South American dust sources during the last glacial/interglacial transition: Evidence from clay mineral assemblages of the pampean loess. *Quaternary International* 580, 11–21.
- Rosero, P., Crespo-Pérez, V., Espinosa, R., Andino, P., Barragán, Á., Moret, P., et al. (2021). Multi-taxa colonisation along the foreland of a vanishing equatorial glacier. *Ecography* 44, 1010–1021.
- Rudloff, V. M., Ruttant, J. A., Martel-Cea, A., and Maldonado, A. (2021). Hydrothermal modulation of NDVI in the high-altitude semiarid Andes of Chile (30–34° S). *Journal of Arid Environments* 186, 104397.
- Ruiz-Hernández, J.-C., Condom, T., Ribstein, P., Le Moine, N., Espinoza, J.-C., Junquas, C., et al. (2021). Spatial variability of diurnal to seasonal cycles of precipitation from a high-altitude equatorial Andean valley to the Amazon Basin. *Journal of Hydrology: Regional Studies* 38, 100924.
- Ruiz-Vásquez, M., Arias, P. A., and Martínez, J. A. (2021). ENSO Influence on Regional Atmospheric Circulation and Thermodynamics Over Northern South America.
- Salas Carreño, G. (2021). Climate Change, Moral Meteorology and Local Measures at Quyllurit'i.
- San Martín, C. N., Ponce, J. F., Montes, A., Balocchi, L. D., Gorza, C., and Coronato, A. (2021). Proglacial landform assemblage in a rapidly retreating cirque glacier due to temperature increase since 1970, Fuegian Andes, Argentina. *Geomorphology* 390, 107861.
- Santamans, C. D., Córdoba, F. E., Franco, M. G., Vignoni, P., and Lupo, L. C. (2021). Hydroclimatological variability in Lagunas de Vilama System, Argentinean Altiplano-Puna Plateau, Southern Tropical Andes (22° S), and its response to large-scale climate forcings. *Science of the Total Environment* 767, 144926.
- Santos, L. F., and Peixoto, P. S. (2021). Topography-based local spherical Voronoi grid refinement on classical and moist shallow-water finite-volume models. *Geoscientific Model Development* 14, 6919–6944.
- Schirmeister, Z. L. (2021). Future Climate Change in the Peruvian Andes as described by CORDEX data.

- Scott, W. P., Contreras, S., Bowen, G. J., Arnold, T. E., Bustamante-Ortega, R., and Werne, J. P. (2021). Lake water based isoscape in central-south Chile reflects meteoric water. *Scientific reports* 11, 1–9.
- Serrano-Notivolí, R., Tejedor, E., Sarricolea, P., Meseguer-Ruiz, O., Vuille, M., Fuentealba, M., et al. (2021). Hydroclimatic variability in Santiago (Chile) since the 16th century. *International Journal of Climatology* 41, E2015–E2030.
- Shrestha, D., Sharma, S., Talchabhadel, R., Deshar, R., Hamal, K., Khadka, N., et al. (2021). Detection of Spatial Rainfall Variation over the Andean Region Demonstrated by Satellite-Based Observations. *Atmosphere* 12, 1204.
- Siegel, F. R. (2021). “Global Warming and Water 2050: More People, Yes; Less Ice, Yes; More Water, Yes; More Fresh Water, Probably; More Accessible Fresh Water?,” in *The Earth’s Human Carrying Capacity* (Springer), 71–85.
- Sierra, J. P., Arias, P. A., Durán-Quesada, A. M., Tapias, K. A., Vieira, S. C., and Martínez, J. A. (2021). The Choco low-level jet: past, present and future. *Climate Dynamics* 56, 2667–2692.
- Sklenář, P., Romoleroux, K., Muriel, P., Jaramillo, R., Bernardi, A., Diazgranados, M., et al. (2021). Distribution changes in páramo plants from the equatorial high Andes in response to increasing temperature and humidity variation since 1880. *Alpine Botany* 131, 201–212.
- Soltaneian, M., and Seif, A. (2021). Estimating and analysis of Environmental Lapse Rate, Freezing Level Height, Equilibrium Line Altitude interaction with Hypsometric and Altimetric distribution of Dena. *Geography And Development Iranian Journal* 19, 245–268.
- Souza, A. F. (2021). A review of the structure and dynamics of araucaria mixed forests in southern Brazil and northern Argentina. *New Zealand Journal of Botany* 59, 2–54.
- Souza, A. F., de Ávila, A. L., Araújo, M. M., and Longhi, S. J. (2021). Long-lasting effects of unplanned logging on the seed rain of mixed conifer-hardwood forests in southern South America. *Journal of Forestry Research* 32, 1409–1418.
- Steinmetz, R. L. L., and Salvi, S. (2021). Brine grades in Andean salars: When basin size matters A review of the Lithium Triangle. *Earth-Science Reviews* 217, 103615.
- Stuart-Smith, R. F., Roe, G. H., Li, S., and Allen, M. R. (2021). Increased outburst flood hazard from Lake Palcacocha due to human-induced glacier retreat. *Nature Geoscience* 14, 85–90.
- Suárez, F., Leray, S., and Sanzana, P. (2021). “Groundwater Resources,” in *Water Resources of Chile* (Springer), 93–127.
- Sulca, J. C., and Rocha, R. P. da (2021). Influence of the Coupling South Atlantic Convergence Zone-El Niño-Southern Oscillation (SACZ-ENSO) on the Projected Precipitation Changes over the Central Andes. *Climate* 9, 77.
- Sulca, J., Vuille, M., Timm, O. E., Dong, B., and Zubieta, R. (2021). Empirical–statistical downscaling of austral summer precipitation over south america, with a focus on the central peruvian andes and the equatorial amazon basin. *Journal of Applied Meteorology and Climatology* 60, 65–85.
- Tanana, A. B., Casado, A., Campo, A. M., and Gil, V. (2021). Confort climático en la Argentina: un recurso intangible para el turismo. *Cuadernos Geográficos* 60, 52–72.
- Taniguchi, N. K. (2021). Evolução do aporte de metais dos últimos 150 anos no Estuário de Caeté, Bragança-PA e aplicação de proxies geoquímicos no contexto paleoclimático e dinâmica sedimentar.
- Tapia, R., Ho, S. L., Núñez-Ricardo, S., Marchant, M., Lamy, F., and Hebbeln, D. (2021). Increased marine productivity in the southern Humboldt Current System during MIS 2–4 and 10–11. *Paleoceanography and Paleoclimatology* 36, e2020PA004066.

- Teles Rego, W. H. (2021). O Papel do ENOS na Variabilidade Climática da Bacia Amazônica durante o Último Milênio em Simulações Paleoclimáticas.
- Thaler, V., Loikith, P. C., Mechoso, C. R., and Pampuch, L. A. (2021). A multivariate assessment of climate change projections over South America using the fifth phase of the Coupled Model Intercomparison Project. *International Journal of Climatology* 41, 4265–4282.
- Thalmeier, M. B., Kröhling, D. M., and Brunetto, E. (2021). The geomorphology and Late Quaternary sedimentary record of the Salado/Juramento fluvial megafan, Central Andes foreland basin (Chaco Plain, Argentina). *Geomorphology* 373, 107495.
- Thompson, L. G., Davis, M. E., Mosley-Thompson, E., Porter, S. E., Corrales, G. V., Shuman, C. A., et al. (2021). The impacts of warming on rapidly retreating high-altitude, low-latitude glaciers and ice core-derived climate records. *Global and planetary change* 203, 103538.
- Tobón, C. (2021). “Ecohydrology of Tropical Andean Cloud Forests,” in *The Andean Cloud Forest* (Springer), 61–87.
- Torcivia, C. G., Ocaña, R. E., Ríos, N., Angillieri, M. Y. E., Fernández, O. M., Alladio, C. G., et al. (2021). Procesos de remoción en masa asociados a cuencas como base para la selección de alternativas de un camino de montaña. Caso de estudio: Ruta 150, Cuesta del Viento–Pachimoco, Argentina. *Revista de la Asociación Geológica Argentina* 78, 564–577.
- Toum, E., Masiokas, M. H., Villalba, R., Pitte, P., and Ruiz, L. (2021). The HBV. IANIGLA Hydrological Model. *The R Journal* 13, 378–395.
- Vallejo-Bernal, S. M., Ramirez, J. M., and Poveda, G. (2021). A conceptual stochastic rainfall-runoff model of an order-one catchment under a stationary precipitation regime. *Stochastic Environmental Research and Risk Assessment* 35, 2187–2212.
- Vallejo-Bernal, S. M., Urrea, V., Bedoya-Soto, J. M., Posada, D., Olarte, A., Cárdenas-Posso, Y., et al. (2021). Ground validation of TRMM 3B43 V7 precipitation estimates over Colombia. Part I: Monthly and seasonal timescales. *International Journal of Climatology* 41, 601–624.
- van Dongen, R. (2021). *Discharge variability and river incision along a climate gradient in central Chile*. Freie Universitaet Berlin (Germany).
- Vasconcellos, M. M., Colli, G. R., and Cannatella, D. C. (2021). Paleotemperatures and recurrent habitat shifts drive diversification of treefrogs across distinct biodiversity hotspots in sub-Amazonian South America. *Journal of Biogeography* 48, 305–320.
- Vásquez, N., Cepeda, J., Gómez, T., Mendoza, P. A., Lagos, M., Boisier, J. P., et al. (2021). “Catchment-Scale Natural Water Balance in Chile,” in *Water Resources of Chile* (Springer), 189–208.
- Veettil, B. K., and Kamp, U. (2021). Glacial lakes in the Andes under a changing climate: A review. *Journal of Earth Science*, 1–19.
- Vega-Durán, J., Escalante-Castro, B., Canales, F. A., Acuña, G. J., and Kaźmierczak, B. (2021). Evaluation of areal monthly average precipitation estimates from MERRA2 and ERA5 reanalysis in a colombian caribbean basin. *Atmosphere* 12, 1430.
- Velásquez Fernández, S. (2021). Evaluación de la Capacidad de los Modelos CMIP6 para Simular la Evapotranspiración y Precipitación en el Norte de Suramérica.
- Vickers, A. C., Shakun, J. D., Goehring, B. M., Gorin, A., Kelly, M. A., Jackson, M. S., et al. (2021). Similar Holocene glaciation histories in tropical South America and Africa. *Geology* 49, 140–144.
- Vieira, M. de S. B., Campos, J. E. G., de Andrade Pinto, E. J., and Santos, M. S. (2021). The Relationship Between The Atlantic Multidecadal Oscillation and The Urucuia Aquifer System Recharge.

- Villa, P. M., Martorano, L. G., Martins, S. V., Rodrigues, A. L., Gonzáles, B., de Souza Rolim, G., et al. (2021). SPATIO-TEMPORAL VARIABILITY OF PRECIPITATION IN THE VENEZUELAN AMAZON. *Revista Brasileira de Climatologia* 29, 626–649.
- Villamayor, J., Khodri, M., Villalba, R., and Daux, V. (2021). Causes of the long-term variability of southwestern South America precipitation in the IPSL-CM6A-LR model. *Climate Dynamics* 57, 2391–2414.
- Villasante Benavides, J. F. (2021). Influencia del cambio climático sobre los humedales altoandinos: estudio comparativo entre un humedal manejado (Perca, Castilla, Arequipa) y uno no manejado (Ccallaccapcha, La Unión, Arequipa).
- Villegas, N., Malikov, I., and Farneti, R. (2021). Sea surface temperature in continental and insular coastal Colombian waters: observations of the recent past and near-term numerical projections. *Latin american journal of aquatic research* 49, 307–328.
- Vivero, S., Bodin, X., Farías-Barahona, D., Macdonell, S., Schaffer, N., Robson, B. A., et al. (2021). Combination of Aerial, Satellite, and UAV Photogrammetry for Quantifying Rock Glacier Kinematics in the Dry Andes of Chile (30 S) Since the 1950s. *Front. Remote Sens.* 2: 784015. doi: 10.3389/frsen.
- Walker-Crawford, D. N. (2021). *Climate Change in Court: Making Neighbourly Relations in a Warming World*. The University of Manchester (United Kingdom).
- Wang, W., Samat, A., Abuduwaili, J., and Ge, Y. (2021a). Quantifying the influences of land surface parameters on LST variations based on GeoDetector model in Syr Darya Basin, Central Asia. *Journal of Arid Environments* 186, 104415.
- Wang, Z., Zhang, F., Zhang, X., Chan, N. W., Ariken, M., Zhou, X., et al. (2021b). Regional suitability prediction of soil salinization based on remote-sensing derivatives and optimal spectral index. *Science of The Total Environment* 775, 145807.
- Warner, J., and Alaica, A. K. (2021). Contextualizing the influence of climate and culture on bivalve populations: *Donax obesulus* malacology from the north coast of Peru. *The Journal of Island and Coastal Archaeology*, 1–22.
- Wood, J. L., Harrison, S., Wilson, R., Emmer, A., Yarleque, C., Glasser, N. F., et al. (2021). Contemporary glacial lakes in the Peruvian Andes. *Global and Planetary Change* 204, 103574.
- Yager, K., Prieto, M., and Meneses, R. I. (2021). Reframing Pastoral Practices of Bofedal Management to Increase the Resilience of Andean Water Towers. *Mountain Research and Development* 41, A1–A9.
- Yu, Y., Duan, S.-B., Li, Z.-L., Chang, S., Xing, Z., Leng, P., et al. (2021). Interannual spatiotemporal variations of land surface temperature in China from 2003 to 2018. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* 14, 1783–1795.
- Zanchetta, G., Pappalardo, M., Di Roberto, A., Bini, M., Arienzo, I., Isola, I., et al. (2021a). A Holocene tephra layer within coastal aeolian deposits north of Caleta Olivia (Santa Cruz Province, Argentina). *Andean Geology* 48.
- Zanchetta, G., Pappalardo, M., Roberto, A. D., Bini, M., Arienzo, I., Isola, I., et al. (2021b). Una capa de tefra holocena intercalada en los depósitos eólicos costeros ubicados al norte de Caleta Olivia (Provincia de Santa Cruz, Argentina). *Andean geology* 48, 267–280.
- Zhao, W., Yang, M., Chang, R., Zhan, Q., and Li, Z.-L. (2021). Surface warming trend analysis based on MODIS/Terra land surface temperature product at Gongga Mountain in the southeastern Tibetan Plateau. *Journal of Geophysical Research: Atmospheres* 126, e2020JD034205.
- Zhong, R., Wang, P., Mao, G., Chen, A., and Liu, J. (2021). Spatiotemporal variation of enhanced vegetation index in the Amazon Basin and its response to climate change.

- Physics and Chemistry of the Earth, Parts A/B/C* 123, 103024.
- Zhu, J., Xie, A., Qin, X., Wang, Y., Xu, B., and Wang, Y. (2021). An assessment of ERA5 reanalysis for antarctic near-surface air temperature. *Atmosphere* 12, 217.
- Zhuravleva, A., Hüls, M., Tiedemann, R., and Bauch, H. A. (2021). A 125-ka record of northern South American precipitation and the role of high-to-low latitude teleconnections. *Quaternary Science Reviews* 270, 107159.
- Zogheib, C., Ochoa-Tocachi, B. F., Moulds, S., Ossa-Moreno, J., Villacis, M., Verano, C., et al. (2021). A methodology to downscale water demand data with application to the Andean region (Ecuador, Peru, Bolivia, Chile). *Hydrological Sciences Journal* 66, 630–639.
- Zubieta, R., Molina-Carpio, J., Laqui, W., Sulca, J., and Ilbay, M. (2021a). Comparative analysis of climate change impacts on meteorological, hydrological, and agricultural droughts in the lake Titicaca basin. *Water* 13, 175.
- Zubieta, R., Prudencio, F., Ccanchi, Y., Saavedra, M., Sulca, J., Reupo, J., et al. (2021b). Potential conditions for fire occurrence in vegetation in the Peruvian Andes. *International Journal of Wildland Fire* 30, 836–849.