Andrés E. Santamaría-Artigas

Department of Geographical Sciences | University of Maryland
Terrestrial Information Systems Laboratory | NASA Goddard Space Flight Center
NASA Goddard Space Flight Center, Building 32, Room N126-1
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Appointments

Post-Doctoral Associate — *College Park, MD 20742, USA*
Department of Geographical Sciences, University of Maryland — *2021 - Present*

Research Scientist — *Greenbelt, MD 20711, USA*
Terrestrial Information Systems Laboratory, NASA Goddard Space Flight Center — *2018 - Present*

Graduate Research Assistant — *College Park, MD 20742, USA*
Department of Geographical Sciences, University of Maryland — *2015 - 2021*

Researcher — *Santiago, Chile*
Laboratory for Analysis of the Biosphere, University of Chile — *2013 - 2015*

Education

PhD Geographical Sciences — *College Park, MD 20742, USA*
Department of Geographical Sciences, University of Maryland — *2015 - 2021 (Conferred 2021)*

Engineer in Renewable Natural Resources — *Santiago, Chile*
University of Chile — *2012 - 2015 (Conferred 2015)*

Bachelor in Sciences of the Renewable Natural Resources — *Santiago, Chile*
University of Chile — *2007 - 2012 (Conferred 2014)*

Publications

Franch, B., E. Vermote, S. Skakun, A. Santamaria-Artigas, N. Kalecinski, J.-C. Roger, I. Becker-Reshef, B. Barker, C. Justice, and J.A. Sobrino (2021). "The ARYA crop yield forecasting algorithm: Application to the main wheat exporting countries". In: *International Journal of Applied Earth Observation and Geoinformation* 104, p. 102552. DOI: 10.1016/j.jag.2021.102552.

Santamaría-Artigas, Andres, Eric F Vermote, Belen Franch, Jean-Claude Roger, and Sergii Skakun (2021). "Evaluation of the AVHRR surface reflectance long term data record between 1984 and 2011". In: *International Journal of Applied Earth Observations and Geoinformation* 98, p. 102317. DOI: 10.1016/j.jag.2021.102317. URL: https://doi.org/10.1016/j.jag.2021.102317.

Skakun, Sergii, Eric F Vermote, Andrés Santamaría-Artigas, William H Rountree, and Jean-Claude Roger (2021). "An experimental sky-image-derived cloud validation dataset for Sentinel-2 and Landsat 8 satellites over NASA GSFC". In: *International Journal of Applied Earth Observations and Geoinformation* 95, p. 102253. DOI: 10.1016/j.jag.2020.102253. URL: https://doi.org/10.1016/j.jag.2020.102253.

Villaescusa-Nadal, J. L., E. Vermote, B. Franch, A. Santamaría-Artigas, J.-C. Roger, and S. Skakun (2021). "MODIS-Based AVHRR Cloud and Snow Separation Algorithm". In: *IEEE Transactions on Geoscience and Remote Sensing*, pp. 1–13. DOI: 10.1109/TGRS.2021.3059428.

Franch, Belen, Eric Vermote, Sergii Skakun, Jean-Claude Roger, Jeffrey Masek, Junchang Ju, Jose Luis Villaescusa-Nadal, and Andres Santamaría-Artigas (2019). "A Method for Landsat and Sentinel 2 (HLS) BRDF Normalization". In: *Remote Sensing* 11.6. DOI: 10.3390/rs11060632. URL: http://www.mdpi.com/2072-4292/11/6/632.

Santamaría-Artigas, Andres, Belen Franch, Pierre Guillevic, Jean-Claude Roger, Eric F. Vermote, and Sergii Skakun (2019). "Evaluation of Near-Surface Air Temperature From Reanalysis Over the United States and Ukraine: Application to Winter Wheat Yield Forecasting". In: *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, pp. 1–10. DOI: 10.1109/JSTARS.2019.2902479. URL: https://ieeexplore.ieee.org/document/8672472/.

Becker-Reshef, Inbal, Belen Franch, Brian Barker, Emilie Murphy, Andrés Santamaría-Artigas, Michael Humber, Sergii Skakun, and Eric Vermote (2018). "Prior season crop type masks for winter wheat yield forecasting: A US case study". In: *Remote Sensing* 10.10, pp. 1–20. DOI: 10.3390/rs10101659. URL: http://dx.doi.org/10.3390/rs10101659.

Franch, Belen, Eric Vermote, Sergii Skakun, Jean-Claude Roger, Andrés Santamaría-Artigas, Jose Luis Villaescusa-Nadal, and Jeff Masek (2018). "Toward Landsat and Sentinel-2 BRDF Normalization and Albedo Estimation: A Case Study in the Peruvian Amazon Forest". In: *Frontiers in Earth Science* 6.October, pp. 1–5. DOI: 10.3389/feart.2018.00185. URL: http://dx.doi.org/10.3389/feart.2018.00185.

Jimenez, Juan C., Jonathan Barichivich, Cristian Mattar, Ken Takahashi, Andrés Santamaría-Artigas, José A Sobrino, and Yadvinder Malhi (2018). "Spatio-temporal patterns of thermal anomalies and drought over tropical forests driven by recent extreme climatic anomalies". In: *Philosophical transactions of the Royal Society of London. Series B, Biological sciences* 373.1760. DOI: 10.1098/rstb.2017.0300. URL: http://dx.doi.org/10.1098/rstb.2017.0300.

Mattar, Cristian, Andrés Santamaría-Artigas, Flavio Ponzoni, Cibele T. Pinto, Carolina Barrientos, and Glynn Hulley (2018). "Atacama Field Campaign: laboratory and in-situ measurements for remote sensing applications". In: *International Journal of Digital Earth* 11.4, pp. 1–19. DOI: 10.1080/17538947.2018.1450901. URL: http://dx.doi.org/10.1080/17538947.2018.1450901.

Olivera-Guerra, L., C. Mattar, O. Merlin, C. Durán-Alarcón, A. Santamaría-Artigas, and R. Fuster (2017). "An operational method for the disaggregation of land surface temperature to estimate actual evapotranspiration in the arid region of Chile". In: *ISPRS Journal of Photogrammetry and Remote Sensing* 128, pp. 170–181. DOI: 10.1016/j.isprsjprs.2017.03.014. URL: http://dx.doi.org/10.1016/j.isprsjprs.2017.03.014.

Jiménez-Muñoz, Juan C., Cristian Mattar, Jonathan Barichivich, Andrés Santamaría-Artigas, Ken Takahashi, Yadvinder Malhi, José A. Sobrino, and Gerard van der Schrier (2016). "Record-breaking warming and extreme drought in the Amazon rainforest during the course of El Niño 2015-2016". In: *Scientific Reports* 6.September, p. 33130. DOI: 10.1038/srep33130. URL: http://dx.doi.org/10.1038/srep33130.

Mattar, Cristian, Andrés Santamaría-Artigas, Claudio Durán-Alarcón, Luis Olivera-Guerra, Rodrigo Fuster, and Dager Borvarán (2016). "The LAB-Net Soil Moisture Network: Application to Thermal Remote Sensing and Surface Energy Balance". en. In: *Data* 1.1, p. 6. DOI: 10.3390/data1010006. URL: http://dx.doi.org/10.3390/data1010006.

Santamaría-Artigas, Andres, Cristian Mattar, and Jean Pierre Wigneron (2016). "Application of a Combined Optical-Passive Microwave Method to Retrieve Soil Moisture at Regional Scale over Chile". In: *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* 9.4, pp. 1493–1504. DOI: 10.1109/JSTARS.2015.2512926. URL: http://dx.doi.org/10.1109/JSTARS.2015.2512926.

Mattar, C., C. Durán-Alarcón, J. C. Jiménez-Muñoz, A. Santamaría-Artigas, L. Olivera-Guerra, and J. A. Sobrino (2015). "Global Atmospheric Profiles from Reanalysis Information (GAPRI): a new database for earth surface temperature retrieval". In: *International Journal of Remote Sensing* 36.19-20, pp. 5045–5060. DOI: 10.1080/01431161.2015.1054965. URL: http://dx.doi.org/10.1080/01431161.2015.1054965.

Pinto, Cibele T., Flávio J. Ponzoni, C. Barrientos, Cristian Mattar, Andrés Santamaría-Artigas, and Ruy M. Castro (2015). "Spectral and Atmospheric Characterization of a Site at Atacama Desert for Earth Observation Sensor Calibration". In: *IEEE Geoscience and Remote Sensing Letters* 12.11, pp. 2227–2231. DOI: 10.1109/LGRS.2015.2460454. URL: https://dx.doi.org/10.1109/LGRS.2015.2460454.

Durán-Alarcón, C., A. Santamaría-Artigas, N. Valenzuela, and C. Mattar (2014). "RSR Calculator, a tool for Calibration / Validation activities". In: *Revista de Teledeteccion* 42, pp. 111–117. DOI: 10.4995/raet.2014.3230. URL: http://dx.doi.org/10.4995/raet.2014.3230.

Mattar, C., J. Hernández, A. Santamaría-Artigas, C. Durán-Alarcón, L. Olivera-Guerra, M. Inzunza, D. Tapia, and E. Escobar-lavín (2014). "A first in-flight absolute calibration of the Chilean Earth Observation Satellite". In: *ISPRS Journal of Photogrammetry and Remote Sensing* 92, pp. 16–25. DOI: 10.1016/j.isprsjprs.2014.02.017. URL: http://dx.doi.org/10.1016/j.isprsjprs.2014.02.017.

Santamaría-Artigas, Andrés, Cristian Mattar, Claudio Durán-Alarcón, Luis Olivera-Guerra, M. Inzunza, D. Tapia, and E. Escobar-lavín (2013). "First application of FASAT-Charlie Imagery for the assessment of semiarid prairies in Chile". In: *Revista de Teledetección* 40, pp. 78–87. URL: http://www.aet.org.es/revistas/revista40/Numero40_07.pdf.

Mattar, C., A. Santamaría-Artigas, and C. Durán-Alarcón (2012). "Estimating the burned area of the Torres del Paine National Park using remote sensing data". In: *Revista de Teledeteccion* 38, pp. 36–50. URL: http://www.aet.org.es/revistas/revista38/Numero38_04.pdf.

Projects

Long Term Multi-Instruments Land Surface Reflectance Record and Applications — *United States*
Graduate Research Assistant — *2019 - 2022*
- Funded by National Aeronautics and Space Administration (NASA) (80NSSC19M0222)

Development of Surface Reflectance Product for the National Aeronautics and Space Administration (NASA) Harmonization Landsat-8 and Sentinel-2 (HLS) Project — *United States*
Graduate Research Assistant — *2019 - 2022*
- Funded by National Aeronautics and Space Administration (NASA) (80NSSC19K1592)

Land Atmosphere Processing and Science Support — *United States*
Graduate Research Assistant — *2018 - 2021*
- Funded by National Aeronautics and Space Administration (NASA) (80NSSC18M0063)

Land Surface Reflectance Validation Research and Algorithm Refinement — *United States*
Graduate Research Assistant — *2015 - 2017*
- Funded by National Aeronautics and Space Administration (NASA) (NNX14AR70A)

Determination of snow runoff and sublimation in the upper basin of Copiapo Valley — *Copiapo, Chile*
Research Assistant — *2014 - 2015*
- Funded by National Commission for Scientific and Technological Research (CONICYT) (Regional FONDEF D13R20005)

ATACAL: CalVal field campaign at Atacama Desert — *Antofagasta, Chile*
Research Assistant — *2014*
- Funded by National Commission for Scientific and Technological Research (CONICYT), and Brazil National Institute for Space Research

Surface Temperature Anomalies Monitoring over the Amazon Forest — *Tambo Pata, Peru*
Research Assistant — *2014*
- Funded by Valencia University (UV-INV-PRECOMP13-115366)

Hydric demand dynamic model for water resources management at watershade scale — *Copiapo, Chile*
Research Assistant — *2013 - 2014*
- Funded by National Commission for Scientific and Technological Research (CONICYT) (FONDEF IDEA CA13I10102)

Estimating the surface soil moisture at regional scale by using a synergic optical-passive microwave approach and remote sensing data — *Chile*
Research Assistant — *2013 - 2014*
- Funded by National Commission for Scientific and Technological Research (CONICYT) (Initiation FONDECYT 10133359)

Implementation of Multi-Scale Agricultural Indicators Exploiting Sentinels (IMAGINES) — *Chile*
Research Assistant — *2012 - 2016*
- Funded by the European Union (SPA.2012.1.1-05)

Application of an optical-passive microwave synergic method to estimate surface soil moisture — *Chile*
Research Assistant — *2012 - 2014*
- Funded by University of Chile (U-INICIA 4/0612)

Book Chapters

Mattar, Cristian, Andrés Santamaría-Artigas, José A Sobrino, and Juan C Jiménez-Muñoz (2016). "Soil Moisture Retrieved From a Combined Optical and Passive Microwave Approach: Theory and Applications". In: *Satellite Soil Moisture Retrieval: Techniques and Applications*. Ed. by Prashant K Srivastava, George C Petropoulos, and Yann H Kerr. Elsevier. Chap. 7, pp. 135–158. DOI: 10.1016/B978-0-12-803388-3.00007-3. URL: https://dx.doi.org/10.1016/B978-0-12-803388-3.00007-3.

Proceedings

Jimenez, J C, J Gomis-Cebolla, José A Sobrino, G Soria, Drazen Skokovic, Yves Julien, S García-Monteiro, Cristian Mattar, Andrés Santamaría-Artigas, and José J. Pasapera-Gonzales (2018). "Sentinel 2 and 3 for Temperature Monitoring Over the Amazon". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Valencia, Spain, pp. 5925–5928. DOI: 10.1109/IGARSS.2018.8518130. URL: https://dx.doi.org/10.1109/IGARSS.2018.8518130.

Santamaría-Artigas, Andrés, Belen Franch, Pierre C. Guillevic, Jean-Claude Roger, and Eric F Vermote (2018). "Comparison of Surface Air Temperature Products from Reanalysis over United States and Ukraine : Application to Wheat Yield Forecasting". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Valencia, Spain, pp. 5359–5362. DOI: 10.1109/IGARSS.2018.8518644. URL: https://dx.doi.org/10.1109/IGARSS.2018.8518644.

Skakun, S., B. Franch, J. C. Roger, E. Vermote, I. Becker-Reshef, C. Justice, and Andrés Santamaría-Artigas (2016). "Incorporating yearly derived winter wheat maps into winter wheat yield forecasting model". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Beijing, China, pp. 7164–7167. DOI: 10.1109/IGARSS.2016.7730869.

Olivera-Guerra, Luis E., Olivier Merlin, Cristian Mattar, Claudio Durán-Alarcón, Andrés Santamaría-Artigas, and Vivien Stefan (2015). "Combining meteorological and lysimeter data to evaluate energy and water fluxes over a row crop for remote sensing applications". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Milan, Italy, pp. 4649–4651. DOI: 10.1109/IGARSS.2015.7326865. URL: https://dx.doi.org/10.1109/IGARSS.2015.7326865.

Santamaría-Artigas, Andrés, Cristian Mattar, Jean Pierre Wigneron, Luis Olivera-Guerra, and Claudio Durán-Alarcón (2015). "Calibration and evaluation of an optical-passive microwave approach to estimate soil moisture over several land cover types". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Milan, pp. 1992–1995. DOI: 10.1109/IGARSS.2015.7326188. URL: https://dx.doi.org/10.1109/IGARSS.2015.7326188.

Conferences

Roger, JC, Y Derimian, C Coeur, N Kalecinski, E Vermote, A Santamaría-Artigas, S Skakun, O Dubovik, and B Holben (2022). "Evolution of the Aerosol Daily Direct Radiative Efficiency using the AERONET database". In: *American Geophysical Union (AGU) Fall Meeting*. Chicago, IL, USA.

Roger, JC, E Vermote, S Skakun, A Santamaría-Artigas, WH Rountree, and N Kalecinski (2022). "Atmospheric Correction over land with LaSRC and its validation". In: *American Geophysical Union (AGU) Fall Meeting*. Chicago, IL, USA.

Rountree, WH, A Santamaría-Artigas, E Vermote, J McCorkel, S Skakun, JC Roger, and B Franch (2022). "Updates in the Development of a Surface Reflectance Validation Camera System (CAMSIS)". In: *American Geophysical Union (AGU) Fall Meeting*. Chicago, IL, USA.

Santamaría-Artigas, A, E Vermote, J McCorkel, WH Rountree, S Skakun, JC Roger, and B Franch (2022). "Satellite Surface Reflectance validation with Ground-Based Automated Camera Systems". In: *American Geophysical Union (AGU) Fall Meeting*. Chicago, IL, USA.

Santamaría-Artigas, A, S Skakun, B Franch, JC Roger, and E Vermote (2020). "Agricultural monitoring from Optical and SAR data". In: *American Meteorological Society Annual Meeting*. Boston, MA, USA.

Santamaría-Artigas, A, JC Roger, B Franch, E Vermote, and C Justice (2019). "Evaluation of the AVHRR Surface Reflectance Long-Term Data Record Over Multiple Land Surface Types". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Yokohama, Japan.

Santamaría-Artigas, A, S Skakun, B Franch, JC Roger, and E Vermote (2019). "Agricultural monitoring from Optical and SAR data". In: *American Geophysical Union (AGU) Fall Meeting*. San Francisco, CA, USA.

Vermote, E, J McCorkel, WH Rountree, A Santamaría-Artigas, S Skakun, B Franch, and JC Roger (2019). "Validation Of High Spatial Resolution Surface Reflectance Using A Camera System (CAMSIS)". In: *American Geophysical Union (AGU) Fall Meeting*. San Francisco, CA, USA.

Jimenez, J C, J Gomis-Cebolla, José A Sobrino, G Soria, Drazen Skokovic, Yves Julien, S García-Monteiro, Cristian Mattar, Andrés Santamaría-Artigas, and José J. Pasapera-Gonzales (2018). "Sentinel 2 and 3 for Temperature Monitoring Over the Amazon". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Valencia, Spain, pp. 5925–5928. DOI: 10.1109/IGARSS.2018.8518130. URL: https://dx.doi.org/10.1109/IGARSS.2018.8518130.

Puricelli, Estefania, Esteban Julian Copati, Michael Laurence Humber, Belén Franch, Sergii Skakun, Andrés Santamaría-Artigas, and Inbal Becker-Reshef (2018). "20 years of wheat in Argentina: An agronomic, economic and remote sensing perspective". In: *American Geophysical Union (AGU) Fall Meeting*.

Sahajpal, Ritvik, Inbal Becker-Reshef, Brian Barker, Joanne Hall, Andrés Santamaría-Artigas, Jie Zhang, Estefania Puricelli, and Michael Laurence Humber (2018). "Global Scale Crop Yield and Condition Forecasting System Using Multiple Earth Observation Datasets". In: *American Geophysical Union (AGU) Fall Meeting*. Washington D.C, USA.

Santamaría-Artigas, Andrés, Belen Franch, Pierre C. Guillevic, Jean-Claude Roger, and Eric F Vermote (2018). "Comparison of Surface Air Temperature Products from Reanalysis over United States and Ukraine : Application to Wheat Yield Forecasting". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Valencia, Spain, pp. 5359–5362. DOI: 10.1109/IGARSS.2018.8518644. URL: https://dx.doi.org/10.1109/IGARSS.2018.8518644.

Santamaría-Artigas, Andrés, Jean-Claude Roger, Belén Franch, Eric F Vermote, and Christopher O Justice (2018). "Evaluation of the AVHRR surface reflectance long-term data record over multiple land surface types". In: *American Geophysical Union (AGU) Fall Meeting*. Washington D.C, USA.

Vermote, Eric F, Joel McCorkel, William H Rountree, Sergii Skakun, Belén Franch, Jean-Claude Roger, Andrés Santamaría-Artigas, and Jose Luis Villaescusa-Nadal (2018). "Validation of the Sentinel 2 surface reflectance over a corn field". In: *American Geophysical Union (AGU) Fall Meeting*. Washington D.C, USA.

Jiménez-Muñoz, J C, J A Sobrino, G Soria, Y Julien, D Skokovic, J Gomis-Cebolla, C Mattar, Andrés Santamaría-Artigas, and J J Pasapera-Gonzales (2017). "Early validation results of the land surface temperature product derived from Sentinel-3 SLSTR instrument". In: *5th International Symposium on Recent Advances in Quantitative Remote Sensing*. Valencia, Spain.

Santamaría-Artigas, Andrés, Belén Franch, Eric F Vermote, Jean-Claude Roger, and Christopher O Justice (2017). "Intercomparison of 30 years of AVHRR and Landsat-5 TM Surface Reflectance using Multiple Pseudo-Invariant Calibration Sites". In: *American Geophysical Union (AGU) Fall Meeting*. New Orleans, LA, USA.

Mattar, C, A Santamaría-Artigas, Ch. Corbari, and M Mancini (2016). "An intercomparison of soil moisture retrievals in the Po Basin, Italy". In: *ESA Living Planet Symposium*. Prague, Czech Republic.

Skakun, S., B. Franch, J. C. Roger, E. Vermote, I. Becker-Reshef, C. Justice, and Andrés Santamaría-Artigas (2016). "Incorporating yearly derived winter wheat maps into winter wheat yield forecasting model". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Beijing, China, pp. 7164–7167. DOI: 10.1109/IGARSS.2016.7730869.

Jiménez-Muñoz, J C, J A Sobrino, J Gomis, C Mattar, A Santamaría-Artigas, and C Durán-Alarcón (2015). "Episodios extremos de temperatura a escala global detectados por el sensor MODIS en la última década". In: *XVI Congress of the Spanish Association of Remote Sensing*. Seville, Spain.

Latorre, C, F Camacho, C Mattar, A Santamaría-Artigas, N Leiva-Büchi, and R Lacaze (2015). "LAI, FAPAR and FVC derived from FASAT-C and in-situ data from Chimbarongo agricultural zone, Chile". In: *XVI Congress of the Spanish Association of Remote Sensing*. Seville, Spain.

Mattar, C, A Santamaría-Artigas, C Durán-Alarcón, L Olivera-Guerra, F Ponzoni, F Teixeira, C Barrientos, O Merlin, F Camacho, N Leiva-Büchi, and A Bravo (2015). "Remote Sensing Calibration / Validation Activities in Chile". In: *XVII Brazilian Remote Sensing Symposium*. Paraíba, Brazil.

Olivera-Guerra, Luis E., Olivier Merlin, Cristian Mattar, Claudio Durán-Alarcón, Andrés Santamaría-Artigas, and Vivien Stefan (2015). "Combining meteorological and lysimeter data to evaluate energy and water fluxes over a row crop for remote sensing applications". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Milan, Italy, pp. 4649–4651. DOI: 10.1109/IGARSS.2015.7326865. URL: https://dx.doi.org/10.1109/IGARSS.2015.7326865.

Santamaría-Artigas, Andrés, Cristian Mattar, Jean Pierre Wigneron, Luis Olivera-Guerra, and Claudio Durán-Alarcón (2015). "Calibration and evaluation of an optical-passive microwave approach to estimate soil moisture over several land cover types". In: *International Geoscience and Remote Sensing Symposium (IGARSS)*. Milan, pp. 1992–1995. DOI: 10.1109/IGARSS.2015.7326188. URL: https://dx.doi.org/10.1109/IGARSS.2015.7326188.

Mattar, C, A Santamaría-Artigas, C Durán-Alarcón, L Olivera-Guerra, and R Fuster (2014). "LAB-net the First Chilean soil moisture network for Remote Sensing Applications". In: *4th International Symposium on Recent Advances in Quantitative Remote Sensing*. Torrent, Spain.

Mattar, C, A Santamaría-Artigas, J P Wigneron, and P De Rosnay (2014). "A statistical calibration for a combined Optical-Passive microwave method using remote sensing and reanalysis data". In: *4th International Symposium on Recent Advances in Quantitative Remote Sensing*. Torrent, Spain.

Olivera-Guerra, Luis, Cristian Mattar, Andrés Santamaría-Artigas, Claudio Durán-Alarcón, and Rodrigo Fuster (2014). "A first evaluation of an operational method (SSEBop) to estimate Actual Evapotranspiration by using MODIS data over the semi-arid region of Chile". In: *4th International Symposium on Recent Advances in Quantitative Remote Sensing. 22 - 26 September.* Torrent, Spain.

Durán-Alarcón, C, L Olivera-Guerra, A Santamaría-Artigas, and C Mattar (2013). “Seasonal analysis of the surface temperature and NDVI of the artic tundra using MODIS data from the last decade”. In: *2nd Latin American Remote Sensing Week*. Santiago, Chile.

Mattar, C, J Hernández, A Santamaría-Artigas, C Durán-Alarcón, L Olivera-Guerra, M Inzunza, D Tapia, and E Escobar-Lavín (2013). “A First In-Flight Absolute Calibration of the Chilean Earth Observation Satellite”. In: *2nd Latin American Remote Sensing Week*. Santiago, Chile.

Academic Activities

2014	**Academic Assistant**, Remote Sensing and Image Processing	*IAAP (Peru)*
2014	**Academic Assistant**, Platforms, Sensors, and Calibration Course	*Univ. of Chile*
2013	**Academic Assistant**, Hydrology	*Univ. of Chile*
2012	**Academic Assistant**, Hydrology	*Univ. of Chile*
2012	**Academic Assistant**, Remote Sensing	*Univ. of Chile*
2012	**Academic Assistant**, Remote Sensing Applications	*Univ. of Chile*
2012	**Academic Assistant**, Quantitative Remote Sensing	*Univ. of Chile*
2012	**Academic Assistant**, Advanced Geographical Information Systems	*Univ. of Chile*
2012	**Academic Assistant**, Solar Energy	*Univ. of Chile*
2012	**Academic Assistant**, Wind Energy	*Univ. of Chile*
2011	**Academic Assistant**, Cartography and Geographical Information Systems	*Univ. of Chile*

Grants and Awards

2021	**Outstanding Graduate Research Assistant Award**, Department of Geographical Sciences	*Univ. of Maryland*
2021	**Excellence in Graduate Research Award**, Department of Geographical Sciences	*Univ. of Maryland*
2018	**Study Abroad PhD Scholarship**, National Commission for Scientific and Technological Research	*MINEDUC Chile*
2016	**Excellence in Graduate Research Award**, Department of Geographical Sciences	*Univ. of Maryland*

Skills

Programming	Python, IDL, MATLAB, R, CRBasic, Arduino, Latex.
Software	QGis, ArcMap, ENVI.
Equipment	Configuration and Installation of High-end and Low-cost Meteorological Equipment.
Languages	Spanish, English.