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EDUCATION

- December 2013, PhD in Civil and Environmental Engineering, Department of Civil and Environmental Engineering, University of Iowa.

- March 2008, Master in Mechanical Engineering sciences. Department of Mechanical Engineering, University of Chile.

- March 2008, Mechanical Engineering. Department of Mechanical Engineering, University of Chile.

- December 2006, Bachelor on Mechanical Engineering sciences. Department of Mechanical Engineering, University of Chile.

LEAD AUTHOR PUBLICATIONS

- **Ye, X., Arab, P.,** Ahmadov, R., James, E., Grell, G. A., Pierce, B., Kumar, A., Makar, P., Chen, J., Davignon, D., Carmichael, G. R., Ferrada, G., McQueen, J., Huang, J., Kumar, R., Emmons, L., Herron-Thorpe, F. L., Parrington, M., Engelen, R., Peuch, V.-H., da Silva, A., Soja, A., Gargulinski, E., Wiggins, E., Hair, J. W., Fenn, M., Shingler, T., Kondragunta, S., Lyapustin, A., Wang, Y., Holben, B., Giles, D. M., and **Saide, P. E.:** Evaluation and intercomparison of wildfire smoke forecasts from multiple modeling systems for the 2019 Williams Flats fire, *Atmos. Chem. Phys.*, 21, 14427–14469, <https://doi.org/10.5194/acp-21-14427-2021>, 2021..

- **Saide, P. E.,** Gao, M., Lu, Z., Goldberg, D. L., Streets, D. G., Woo, J.-H., Beyersdorf, A., Corr, C. A., Thornhill, K. L., Anderson, B., Hair, J. W., Nehrir, A. R., Diskin, G. S., Jimenez, J. L., Nault, B. A., Campuzano-Jost, P., Dibb, J., Heim, E., Lamb, K. D., Schwarz, J. P., Perring, A. E., Kim, J., Choi, M., Holben, B., Pfister, G., Hodzic, A., Carmichael, G. R., Emmons, L., and Crawford, J. H.: Understanding and improving model representation of aerosol optical properties for a Chinese haze event measured during KORUS-AQ, *Atmos. Chem. Phys.*, 20, 6455–6478, <https://doi.org/10.5194/acp-20-6455-2020>, 2020.

- **Saide, P. E.,** Steinhoff, D. F., Kosovic, B., Weil, J., Downey, N., Blewitt, D., Hanna, S. R., and Delle Monache, L.: Evaluating Methods To Estimate Methane Emissions from Oil and Gas Production Facilities Using LES Simulations, *Environmental Science & Technology*, 2018.

- **Saide, P. E.,** Thompson, G., Eidhammer, T., da Silva, A. M., Pierce, R. B., and Carmichael, G. R.: Assessment of biomass burning smoke influence on environmental conditions for multi-year tornado outbreaks by combining aerosol-aware microphysics and fire emission constraints, *Journal of Geophysical Research: Atmospheres*, 2016JD025056, 2016.

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- **Saide**, P. E., Mena-Carrasco, M., Tolvett, S., Hernandez, P., and Carmichael, G. R.: Air quality forecasting for winter-time PM_{2.5} episodes occurring in multiple cities in central and southern Chile, *Journal of Geophysical Research: Atmospheres*, 2015JD023949, 2016.

- **Saide**, P. E., Peterson, D., da Silva, A., Anderson, B., Ziemba, L. D., Diskin, G., Sachse, G., Hair, J., Butler, C., Fenn, M., Jimenez, J. L., Campuzano-Jost, P., Perring, A. E., Schwarz, J. P., Markovic, M. Z., Russell, P., Redemann, J., Shinozuka, Y., Streets, D. G., Yan, F., Dibb, J., Yokelson, R., Toon, O. B., Hyer, E., and Carmichael, G. R.: Revealing important nocturnal and day-to-day variations in fire smoke emissions through a multiplatform inversion, *Geophys. Res. Lett.*, 2015GL063737, 10.1002/2015gl063737, 2015.

- **Saide**, P. E., Spak, S. N., Pierce, R. B., Otkin, J. A., Schaack, T. K., Heidinger, A. K., da Silva, A. M., Kacenelenbogen, M., Redemann, J., and Carmichael, G. R.: Central American biomass burning smoke can increase tornado severity in the U.S, *Geophys. Res. Lett.*, 2014GL062826, 10.1002/2014gl062826, 2015.

- **Saide**, P. E., Kim, J., Song, C. H., Choi, M., Cheng, Y., and Carmichael, G. R.: Assimilation of next generation geostationary aerosol optical depth retrievals to improve air quality simulations, *Geophys. Res. Lett.*, 41, 2014GL062089, 10.1002/2014gl062089, 2014.

- **Saide**, P.E., Aerosol predictions and their links to weather forecasts through online interactive atmospheric modeling and data assimilation. PhD Thesis, Iowa City, Iowa, USA, 2013. Available at <http://ir.uiowa.edu/etd/1744/>

- **Saide**, P. E., Carmichael, G. R., Liu, Z., Schwartz, C. S., Lin, H. C., da Silva, A. M., and Hyer, E.: Aerosol optical depth assimilation for a size-resolved sectional model: impacts of observationally constrained, multi-wavelength and fine mode retrievals on regional scale analyses and forecasts, *Atmos. Chem. Phys.*, 13, 10425-10444, doi:10.5194/acp-13-10425-2013, 2013.

- **Saide**, Pablo E, Gregory R. Carmichael, Scott N. Spak, Patrick Minnis, and J. Kirk Ayers. Improving aerosol distributions below clouds by assimilating satellite-retrieved cloud droplet number, *PNAS* 2012 109: 11939-11943.

- **Saide**, P. E., Spak, S. N., Carmichael, G. R., Mena-Carrasco, M. A., Yang, Q., Howell, S., Leon, D. C., Snider, J. R., Bandy, A. R., Collett, J. L., Benedict, K. B., de Szoeko, S. P., Hawkins, L. N., Allen, G., Crawford, I., Crosier, J., and Springston, S. R.: Evaluating WRF-Chem aerosol indirect effects in Southeast Pacific marine stratocumulus during VOCALS-REx, *Atmos. Chem. Phys.*, 12, 3045-3064, doi:10.5194/acp-12-3045-2012, 2012.

- **Saide**, P.E., Carmichael, G.R., Spak, S.N., Gallardo, L., Osses, A.E, Mena-Carrasco, M.A., Pagowski, M., Forecasting urban PM₁₀ and PM_{2.5} pollution episodes in very stable nocturnal conditions and complex terrain using WRF-Chem CO tracer model, *Atmospheric Environment*, Volume 45, Issue 16, May 2011, Pages 2769-2780, ISSN 1352-2310, DOI: 10.1016/j.atmosenv.2011.02.001.

Pablo E. Saide

- **Saide**, P., Bocquet, M., Osses, A. and Gallardo, L. (2011), Constraining surface emissions of air pollutants using inverse modelling: method intercomparison and a new two-step two-scale regularization approach. *Tellus B*, 63: no. doi: 10.1111/j.1600-0889.2011.00529.x
- **Saide**, P., R. Zah, M. Osses, M. Osses de Eicker, Spatial disaggregation of traffic emission inventories in large cities using simplified top-down methods, *Atmospheric Environment*, Volume 43, Issue 32, October 2009, Pages 4914-4923, ISSN 1352-2310, DOI: 10.1016/j.atmosenv.2009.07.013.
- **Saide**, P., Osses, A., Gallardo, L., and Osses, M.: Adjoint inverse modeling of a CO emission inventory at the city scale: Santiago de Chile's case, *Atmos. Chem. Phys. Discuss.*, 9, 6325-6361, doi:10.5194/acpd-9-6325-2009, 2009.
- **Saide**, P. Emisiones de monóxido de carbono en Santiago de Chile: Distribución espacial y optimización por modelación inversa. Thesis to obtain the Master in mechanical engineering sciences degree and the Mechanical Engineer title. University of Chile, Santiago, Chile, March 2008. (http://www.dim.uchile.cl/~psaide/Tesis_MSc_psaide_final.pdf)

CO-AUTHORED PUBLICATIONS

- Peterson, D. A., **Thapa, L. H., Saide, P. E.**, Soja, A. J., Gargulinski, E. M., Hyer, E. J., Weinzierl, B., Dollner, M., Schöberl, M., Papin, P. P., Kondragunta, S., Camacho, C. P., Ichoku, C., Moore, R. H., Hair, J. W., Crawford, J. H., Dennison, P. E., Kalashnikova, O. V., Bennese, C. E., Bui, T. P., DiGangi, J. P., Diskin, G. S., Fenn, M. A., Halliday, H. S., Jimenez, J., Nowak, J. B., Robinson, C., Sanchez, K., Shingler, T. J., Thornhill, L., Wiggins, E. B., Winstead, E., and Xu, C.: Measurements from inside a Thunderstorm Driven by Wildfire: The 2019 FIREX-AQ Field Experiment, *Bulletin of the American Meteorological Society*, 10.1175/bams-d-21-0049.1, 2022.
- Hyer, Edward; Christopher P. Camacho; David A. Peterson; Elizabeth A. Satterfield; **Pablo E. Saide**. "Data assimilation for Numerical Smoke Prediction". *Fire, Smoke, and Health*, ed. Nancy French and Tatiana Loboda. AGU Books, accepted.
- Lee, S., Song, C. H., Han, K. M., Henze, D. K., Lee, K., Yu, J., Woo, J.-H., Jung, J., Choi, Y., **Saide, P. E.**, and Carmichael, G. R.: Impacts of uncertainties in emissions on aerosol data assimilation and short-term PM_{2.5} predictions over Northeast Asia, *Atmospheric Environment*, 271, 118921, <https://doi.org/10.1016/j.atmosenv.2021.118921>, 2022.
- Dobracki, A., Zuidema, P., Howell, S., **Saide, P.**, Freitag, S., Aiken, A. C., Burton, S. P., Sedlacek III, A. J., Redemann, J., and Wood, R.: Non-reversible aging can increase solar absorption in African biomass burning aerosol plumes of intermediate age, *Atmos. Chem. Phys. Discuss.* [preprint], <https://doi.org/10.5194/acp-2021-1081>, in review, 2022.
- Doherty, S. J., **Saide, P. E.**, Zuidema, P., Shinozuka, Y., Ferrada, G. A., Gordon, H., Mallet, M., Meyer, K., Painemal, D., Howell, S. G., Freitag, S., Dobracki, A., Podolske, J. R., Burton, S. P., Ferrare, R. A., **Howes, C.**, Nabat, P., Carmichael, G. R., da Silva, A., Pistone, K., Chang, I.,

Pablo E. Saide

Gao, L., Wood, R., and Redemann, J.: Modeled and observed properties related to the direct aerosol radiative effect of biomass burning aerosol over the southeastern Atlantic, *Atmos. Chem. Phys.*, 22, 1–46, <https://doi.org/10.5194/acp-22-1-2022>, 2022.

- Hallar, A. G., Brown, S. S., Crosman, E., Barsanti, K. C., Cappa, C. D., Faloona, I., Fast, J., Holmes, H. A., Horel, J., Lin, J., Middlebrook, A., Mitchell, L., Murphy, J., Womack, C. C., Aneja, V., Baasandorj, M., Bahreini, R., Banta, R., Bray, C., Brewer, A., Caulton, D., de Gouw, J., De Wekker, S. F. J., Farmer, D. K., Gaston, C. J., Hoch, S., Hopkins, F., Karle, N. N., Kelly, J. T., Kelly, K., Lareau, N., Lu, K., Mauldin, R. L., Mallia, D. V., Martin, R., Mendoza, D. L., Oldroyd, H. J., Pichugina, Y., Pratt, K. A., **Saide, P. E.**, Silva, P. J., Simpson, W., Stephens, B. B., Stutz, J., and Sullivan, A.: Coupled Air Quality and Boundary-Layer Meteorology in Western U.S. Basins during Winter: Design and Rationale for a Comprehensive Study, *Bulletin of the American Meteorological Society*, 1-94, 10.1175/bams-d-20-0017.1, 2021.

- Pistone, K., Zuidema, P., Wood, R., Diamond, M., da Silva, A. M., Ferrada, G., **Saide, P. E.**, Ueyama, R., Ryoo, J.-M., Pfister, L., Podolske, J., Noone, D., Bennett, R., Stith, E., Carmichael, G., Redemann, J., Flynn, C., LeBlanc, S., Segal-Rozenhaimer, M., and Shinozuka, Y.: Exploring the elevated water vapor signal associated with the free tropospheric biomass burning plume over the southeast Atlantic Ocean, *Atmos. Chem. Phys.*, 21, 9643–9668, <https://doi.org/10.5194/acp-21-9643-2021>, 2021.

- Kumar, R., Mitchell, D. A., Steinhoff, D. F., **Saide, P.**, Kosovic, B., Downey, N., Blewitt, D., and Monache, L. D.: Evaluating the Mobile Flux Plane (MFP) Method to Estimate Methane Emissions Using Large Eddy Simulations (LES), *Journal of Geophysical Research: Atmospheres*, 126, e2020JD032663, <https://doi.org/10.1029/2020JD032663>, 2021

- Park, R. J., Oak, Y. J., Emmons, L. K., Kim, C.-H., Pfister, G. G., Carmichael, G. R., **Saide, P. E.**, Cho, S.-Y., Kim, S., Woo, J.-H., Crawford, J. H., Gaubert, B., Lee, H.-J., Park, S.-Y., Jo, Y.-J., Gao, M., Tang, B., Stanier, C. O., Shin, S. S., Park, H. Y., Bae, C., and Kim, E.: Multi-model intercomparisons of air quality simulations for the KORUS-AQ campaign, *Elementa: Science of the Anthropocene*, 9, 10.1525/elementa.2021.00139, 2021

- Redemann, J., Wood, R., Zuidema, P., Doherty, S. J., Luna, B., LeBlanc, S. E., Diamond, M. S., Shinozuka, Y., Chang, I. Y., Ueyama, R., Pfister, L., Ryoo, J.-M., Dobracki, A. N., da Silva, A. M., Longo, K. M., Kacenelenbogen, M. S., Flynn, C. J., Pistone, K., Knox, N. M., Piketh, S. J., Haywood, J. M., Formenti, P., Mallet, M., Stier, P., Ackerman, A. S., Bauer, S. E., Fridlind, A. M., Carmichael, G. R., **Saide, P. E.**, Ferrada, G. A., Howell, S. G., Freitag, S., Cairns, B., Holben, B. N., Knobelspiesse, K. D., Tanelli, S., L'Ecuyer, T. S., Dzambo, A. M., Sy, O. O., McFarquhar, G. M., Poellot, M. R., Gupta, S., O'Brien, J. R., Nenes, A., Kacarab, M., Wong, J. P. S., Small-Griswold, J. D., Thornhill, K. L., Noone, D., Podolske, J. R., Schmidt, K. S., Pilewskie, P., Chen, H., Cochrane, S. P., Sedlacek, A. J., Lang, T. J., Stith, E., Segal-Rozenhaimer, M., Ferrare, R. A., Burton, S. P., Hostetler, C. A., Diner, D. J., Seidel, F. C., Platnick, S. E., Myers, J. S., Meyer, K. G., Spangenberg, D. A., Maring, H., and Gao, L.: An overview of the ORACLES (ObseRvations of Aerosols above CLouds and their intERactionS) project: aerosol–cloud–radiation interactions in the southeast Atlantic basin, *Atmos. Chem. Phys.*, 21, 1507–1563, <https://doi.org/10.5194/acp-21-1507-2021>, 2021.

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- WMO, Training Materials and Best Practices for Chemical Weather/Air Quality Forecasting (**Pablo Saide** is Chapter lead author), ETR- No. 26, 2020.

(https://library.wmo.int/index.php?lvl=notice_display&id=21801)

- Choi, S., Lamsal, L. N., Follette-Cook, M., Joiner, J., Krotkov, N. A., Swartz, W. H., Pickering, K. E., Loughner, C. P., Appel, W., Pfister, G., **Saide, P. E.**, Cohen, R. C., Weinheimer, A. J., and Herman, J. R.: Assessment of NO₂ observations during DISCOVER-AQ and KORUS-AQ field campaigns, *Atmos. Meas. Tech.*, 13, 2523–2546, <https://doi.org/10.5194/amt-13-2523-2020>, 2020.

-Shinozuka, Y., **Saide, P. E.**, Ferrada, G. A., Burton, S. P., Ferrare, R., Doherty, S. J., Gordon, H., Longo, K., Mallet, M., Feng, Y., Wang, Q., Cheng, Y., Dobracki, A., Freitag, S., Howell, S. G., LeBlanc, S., Flynn, C., Segal-Rosenhaimer, M., Pistone, K., Podolske, J. R., Stith, E. J., Bennett, J. R., Carmichael, G. R., da Silva, A., Govindaraju, R., Leung, R., Zhang, Y., Pfister, L., Ryoo, J.-M., Redemann, J., Wood, R., and Zuidema, P.: Modeling the smoky troposphere of the southeast Atlantic: a comparison to ORACLES airborne observations from September of 2016, *Atmos. Chem. Phys.*, 20, 11491–11526, <https://doi.org/10.5194/acp-20-11491-2020>, 2020.

- Choi, M., Lim, H., Kim, J., Lee, S., Eck, T. F., Holben, B. N., Garay, M. J., Hyer, E. J., **Saide, P. E.**, and Liu, H.: Validation, comparison, and integration of GOCI, AHI, MODIS, MISR, and VIIRS aerosol optical depth over East Asia during the 2016 KORUS-AQ campaign, *Atmos. Meas. Tech.*, 12, 4619–4641, <https://doi.org/10.5194/amt-12-4619-2019>, 2019.

- Mallet, M., Nabat, P., Zuidema, P., Redemann, J., Sayer, A. M., Stengel, M., Schmidt, S., Cochrane, S., Burton, S., Ferrare, R., Meyer, K., **Saide, P.**, Jethva, H., Torres, O., Wood, R., Saint Martin, D., Roehrig, R., Hsu, C., and Formenti, P.: Simulation of the transport, vertical distribution, optical properties and radiative impact of smoke aerosols with the ALADIN regional climate model during the ORACLES-2016 and LASIC experiments, *Atmos. Chem. Phys.*, 19, 4963-4990, 2019.

- Kumar, R., Delle Monache, L., Bresch, J., **Saide, P. E.**, Tang, Y., Liu, Z., da Silva, A. M., Alessandrini, S., Pfister, G., Edwards, D., Lee, P., and Djalalova, I.: Toward Improving Short-Term Predictions of Fine Particulate Matter Over the United States Via Assimilation of Satellite Aerosol Optical Depth Retrievals, *Journal of Geophysical Research: Atmospheres*, 124, 2753-2773, 2019.

- Goldberg, D. L., **Saide, P. E.**, Lamsal, L. N., de Foy, B., Lu, Z., Woo, J.-H., Kim, Y., Kim, J., Gao, M., Carmichael, G., and Streets, D. G.: A top-down assessment using OMI NO₂ suggests an underestimate in the NO_x emissions inventory in Seoul, South Korea, during KORUS-AQ, *Atmos. Chem. Phys.*, 19, 1801-1818, <https://doi.org/10.5194/acp-19-1801-2019>, 2019.

- Hall, Alex, Neil Berg, Katharine Reich. (University of California, Los Angeles). 2018. Los Angeles Summary Report. California's Fourth Climate Change Assessment. Publication number: SUM-CCCA4-2018-007 (**P.E. Saide** is contributing author).

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- Abdi-Oskouei, M., Pfister, G., Flocke, F., Sobhani, N., **Saide, P.**, Fried, A., Richter, D., Weibring, P., Walega, J., and Carmichael, G.: Impacts of physical parameterization on prediction of ethane concentrations for oil and gas emissions in WRF-Chem, *Atmos. Chem. Phys.*, 18, 16863-16883, 2018.

- Lennartson, E. M., Wang, J., Gu, J., Castro Garcia, L., Ge, C., Gao, M., Choi, M., **Saide, P. E.**, Carmichael, G. R., Kim, J., and Janz, S. J.: Diurnal variation of aerosol optical depth and PM_{2.5} in South Korea: a synthesis from AERONET, satellite (GOCI), KORUS-AQ observation, and the WRF-Chem model, *Atmos. Chem. Phys.*, 18, 15125-15144, <https://doi.org/10.5194/acp-18-15125-2018>, 2018.

- Diamond, M. S., Dobracki, A., Freitag, S., Small Griswold, J. D., Heikkila, A., Howell, S. G., Kacarab, M. E., Podolske, J. R., **Saide, P. E.**, and Wood, R.: Time-dependent entrainment of smoke presents an observational challenge for assessing aerosol–cloud interactions over the southeast Atlantic Ocean, *Atmos. Chem. Phys.*, 18, 14623-14636, 2018.

- Burton, S. P., Hostetler, C. A., Cook, A. L., Hair, J. W., Seaman, S. T., Scola, S., Harper, D. B., Smith, J. A., Fenn, M. A., Ferrare, R. A., **Saide, P. E.**, Chemyakin, E. V., and Müller, D.: Calibration of a high spectral resolution lidar using a Michelson interferometer, with data examples from ORACLES, *Applied Optics*, 57, 6061-6075, 2018

- Gao, M., Carmichael, G. R., Wang, Y., **Saide, P. E.**, Liu, Z., Xin, J., Shan, Y., and Wang, Z.: Chemical and Meteorological Feedbacks in the Formation of Intense Haze Events, in: *Air Pollution in Eastern Asia: An Integrated Perspective*, edited by: Bouarar, I., Wang, X., and Brasseur, G. P., Springer International Publishing, Cham, 437-452, 2017.

- Gao, M., **Saide, P. E.**, Xin, J., Wang, Y., Liu, Z., Wang, Y., Wang, Z., Pagowski, M., Guttikunda, S. K., and Carmichael, G. R.: Estimates of Health Impacts and Radiative Forcing in Winter Haze in eastern China through constraints of surface PM_{2.5} predictions, *Environmental Science & Technology*, 2017.

- Gao, M., Carmichael, G. R., **Saide, P. E.**, Lu, Z., Yu, M., Streets, D. G., and Wang, Z.: Response of winter fine particulate matter concentrations to emission and meteorology changes in North China, *Atmos. Chem. Phys.*, 16, 11837-11851, 2016.

- Gao, M., Carmichael, G. R., Wang, Y., **Saide, P. E.**, Yu, M., Xin, J., Liu, Z., and Wang, Z.: Modeling study of the 2010 regional haze event in the North China Plain, *Atmos. Chem. Phys.*, 16, 1673-1691, [doi:10.5194/acp-16-1673-2016](https://doi.org/10.5194/acp-16-1673-2016), 2016.

- Yu, P., Toon, O. B., Bardeen, C. G., Bucholtz, A., Rosenlof, K. H., **Saide, P. E.**, Silva, A. D., Ziemba, L. D., Thornhill, K. L., Jimenez, J.-L., Campuzano-Jost, P., Schwarz, J. P., Perring, A. E., Froyd, K. D., Wagner, N. L., Mills, M. J., and Reid, J. S.: Surface Dimming by the 2013 Rim Fire Simulated by a Sectional Aerosol Model, *Journal of Geophysical Research: Atmospheres*, 2015JD024702, 2016.

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- Bocquet, M., Elbern, H., Eskes, H., Hirtl, M., Žabkar, R., Carmichael, G. R., Flemming, J., Inness, A., Pagowski, M., Pérez Camaño, J. L., **Saide**, P. E., San Jose, R., Sofiev, M., Vira, J., Baklanov, A., Carnevale, C., Grell, G., and Seigneur, C.: Data assimilation in atmospheric chemistry models: current status and future prospects for coupled chemistry meteorology models, *Atmos. Chem. Phys.*, 15, 5325-5358, doi:10.5194/acp-15-5325-2015, 2015.
- Kulkarni, S., Sobhani, N., Miller-Schulze, J. P., Shafer, M. M., Schauer, J. J., Solomon, P. A., **Saide**, P. E., Spak, S. N., Cheng, Y. F., Denier van der Gon, H. A. C., Lu, Z., Streets, D. G., Janssens-Maenhout, G., Wiedinmyer, C., Lantz, J., Artamonova, M., Chen, B., Imashev, S., Sverdlik, L., Deminter, J. T., Adhikary, B., D'Allura, A., Wei, C., and Carmichael, G. R.: Source sector and region contributions to BC and PM_{2.5} in Central Asia, *Atmos. Chem. Phys.*, 15, 1683-1705, 10.5194/acp-15-1683-2015, 2015.
- Gao, M., Guttikunda, S. K., Carmichael, G. R., Wang, Y., Liu, Z., Stanier, C. O., **Saide**, P. E., and Yu, M.: Health impacts and economic losses assessment of the 2013 severe haze event in Beijing area, *Science of The Total Environment*, 511, 553-561, <http://dx.doi.org/10.1016/j.scitotenv.2015.01.005>, 2015.
- Nordmann, S., Cheng, Y. F., Carmichael, G. R., Yu, M., Denier van der Gon, H. A. C., Zhang, Q., **Saide**, P. E., Pöschl, U., Su, H., Birmili, W., and Wiedensohler, A.: Atmospheric black carbon and warming effects influenced by the source and absorption enhancement in central Europe, *Atmos. Chem. Phys.*, 14, 12683-12699, 10.5194/acp-14-12683-2014, 2014.
- Mena-Carrasco, M., **Saide**, P., Delgado, R., Hernandez, P., Spak, S., Molina, L., Carmichael, G., and Jiang, X.: Regional climate feedbacks in Central Chile and their effect on air quality episodes and meteorology, *Urban Climate*, 10, Part 5, 771-781, <http://dx.doi.org/10.1016/j.uclim.2014.06.006>, 2014.
- Wyant, M. C., Bretherton, C. S., Wood, R., Carmichael, G. R., Clarke, A., Fast, J., George, R., Gustafson Jr, W. I., Hannay, C., Lauer, A., Lin, Y., Morcrette, J. J., Mulcahy, J., **Saide**, P. E., Spak, S. N., and Yang, Q.: Global and regional modeling of clouds and aerosols in the marine boundary layer during VOCALS: the VOCA intercomparison, *Atmos. Chem. Phys.*, 15, 153-172, 10.5194/acp-15-153-2015, 2015.
- Twohy, C. H., Anderson, J. R., Toohey, D. W., Andrejczuk, M., Adams, A., Lytle, M., George, R. C., Wood, R., **Saide**, P., Spak, S., Zuidema, P., and Leon, D.: Impacts of aerosol particles on the microphysical and radiative properties of stratocumulus clouds over the southeast Pacific Ocean, *Atmos. Chem. Phys.*, 13, 2541-2562, doi:10.5194/acp-13-2541-2013, 2013.
- Gallardo, L., Alonso, M., Andrade, M. de F., Silveira, V., Behrentz, E., de Castro, P., D'Angiola, A., Dawidowski, L., Freitas, S., Gómez, D., Longo, K., Doprichinski, L., Mena, M., Matus, P., Osses, A., Osses, M., Rojas, N., **Saide**, P., Sánchez-Ccoyllo, O., Toro, M.: Chapter 4: South America. In Book: WMO/IGAC Impacts of Megacities on Air Pollution and Climate, GAW Report No. 205, WMO, 2012.

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- Mena-Carrasco, M., Oliva, E., **Saide**, P., Spak, S. N., de la Maza, C., Osses, M., Tolvett, S., Campbell, J. E., Tsao, T. e. C.-C., and Molina, L. T.: Estimating the health benefits from natural gas use in transport and heating in Santiago, Chile, *Science of The Total Environment*, 429, 257-265, <http://dx.doi.org/10.1016/j.scitotenv.2012.04.037>, 2012.

- Shrivastava, M., Fast, J., Easter, R., Gustafson Jr., W. I., Zaveri, R. A., Jimenez, J. L., **Saide**, P., and Hodzic, A.: Modeling organic aerosols in a megacity: comparison of simple and complex representations of the volatility basis set approach, *Atmos. Chem. Phys.*, 11, 6639-6662, doi:10.5194/acp-11-6639-2011, 2011.

INVITED PRESENTATIONS

- October 2021, invited seminar at “ATMS 301: Current Topics in Atmospheric Science” at Howard University. Title: “Evaluating and improving wildfire smoke predictions”, Online due to COVID-19.

- September 2021, invited talk at the Harvard Atmospheric & Environmental Chemistry Seminars. Title: “Evaluating and improving wildfire smoke predictions”, Online due to COVID-19.

- August 2021, invited oral presentation at NCAR Atmospheric Chemistry Observations & Modeling seminar. Title: “Wildfire smoke predictions: gaps, solutions, and future prospects”, Online due to COVID-19.

- April 2021, invited oral presentation at NOAA GEO-XO Atmospheric Composition Town Hall. Title: “Applications of geostationary satellite measurements to fire and smoke science and management” Online due to COVID-19.

- January 2021, invited oral presentation at American Meteorological Society (AMS) 101th Annual Meeting, 23rd Conference on Atmospheric Chemistry. Title: "Evaluation and intercomparison of multiple models forecasting biomass-burning smoke during FIREX-AQ 2019", Online conference due to COVID-19.

- June 2020, Committee on Earth Observation Satellites (CEOS) Atmospheric Composition Virtual Constellation (AC-VC) 16th meeting. “Model Evaluation and Uncertainties: Study case for a Chinese haze event measured during KORUS-AQ”. Online conference due to COVID-19.

- October 2019, Atmospheric Science seminar, University of California, Berkeley. Title: “Improving regional predictions of atmospheric aerosols based on recent field campaign data”. Berkeley, CA, USA.

- September 2019, AQUARIUS (Air Quality in the Western US) workshop. Title: Insights from other regions: Development of air quality forecasts for winter-time PM_{2.5} episodes occurring on multiple cities in south-central Chile. Salt Lake City, UT, USA.

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- September 2019, Meteorology and Climate - Modeling for Air Quality Conference (MAQ-MAC) 2019. Title: A biomass burning smoke prediction system including near-real time constraints on emissions over the Western U.S. Davis, CA, USA.
- June 2019, U.S. Department of Energy (DoE) Atmospheric Radiation Measurement (ARM)/ Atmospheric System Research (ASR) Principal Investigator meeting, Shortwave-absorbing aerosol-cloud interaction breakout session. Title: "Modeling aerosol-cloud-radiation interactions in the southeast Atlantic: Understanding impacts and uncertainties". Rockville, MD, USA.
- September 2018, NASA Global Modeling and Assimilation Office (GMAO) Fall Seminar. Title: "Improvements on regional aerosol predictions and impacts driven by recent NASA field campaigns", Goddard Space Flight Center, Greenbelt, MD
- July 2018, Telluride Science Research Center Workshop, Aerosols and Clouds: Connections from the Laboratory to the Field to the Globe. Title: "Recent findings on aerosol-cloud-radiation interactions on the southeast Atlantic", Telluride, CO, USA.
- July 2018, NASA Jet Propulsion Laboratory (JPL) seminar. Title: "How can we advance the field of aerosol predictions and their effects on weather on regional to local scales?", Pasadena, CA, USA.
- January 2018, UCLA Physical Sciences Faculty Lunch Seminar. Title: "How Can We Advance the Field of Aerosol Predictions and their Effects on Weather on Regional to Local Scales?", Los Angeles, CA, USA.
- December 2016, invited oral presentation at AGU fall meeting. Title: "Forecasting biomass burning smoke over the southeast Atlantic: model variability, emission constraints and aerosol-cloud-radiation interactions", San Francisco, CA, USA.
- April 2016, invited oral presentation at the UC-Riverside Department of Chemical and Environmental Engineering seminar, Title: " Advancing predictions of aerosols and its weather impacts by regional to local scale simulations and data assimilation", Riverside, CA, USA.
- March 2016, invited oral presentation at the UCLA Department of Atmospheric and Oceanic Sciences seminar, Title: " Advancing predictions of aerosols and its weather impacts by regional to local scale simulations and data assimilation", Los Angeles, CA, USA.
- January 2016, invited oral presentation at American Meteorological Society (AMS) 96th Annual Meeting, Eighth Symposium on Aerosol-Cloud-Climate Interactions. Title: " Exploring Links Between Biomass Burning Smoke and Tornado Likelihood: from Regional to Large-eddy Scale Simulations", New Orleans, LA, USA.
- July 2015, invited oral presentation at the Thirteenth Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS XIII). Title: "Aerosol optical depth data assimilation, inverse modeling of emissions and aerosol-cloud-radiation interactions using the WRF-Chem model", Brookhaven National Laboratory, Upton, NY, USA.

ORAL PRESENTATIONS

- June 2020, 2020 ARM/ASR Joint User Facility and Principal Investigator Meeting, Shortwave-absorbing aerosols and their interactions with the large-scale environment breakout session. Title: “Hygroscopicity parameter from LASIC observations and comparison to models”. Remote meeting due to COVID-19
- May 2020, International Southeast Atlantic Workshop. Title: “Using Ascension island as a receptor to study smoke transport patterns in the marine boundary layer”. Remote meeting due to COVID-19.
- April 2020, oral presentation at the 3rd International Smoke Symposium. Title: “Evaluation of biomass burning smoke forecasts over the Western U.S. during the FIREX-AQ 2019 field campaign”, online conference due to COVID-19.
- May 2018, oral presentation at the 36th International Technical Meeting on Air Pollution and its Application (ITM). Title: “Modelling Investigating the performance of WRF-Chem aerosol forecasts coupled to AOD data assimilation in eastern Asia”, Ottawa, Canada.
- October 2015, oral presentation at the seminar at the Catholic University of Chile “Cleaning air pollution in Santiago and cities in the south of Chile”, Title: “Air quality forecasting for winter-time PM2.5 episodes occurring on multiple cities in south-central Chile”, Santiago, Chile.
- September 2015, oral presentation at the 7th Annual International Workshop on Air Quality Forecasting Research (IWAQFR), Title: “Air quality forecasting for winter-time PM2.5 episodes occurring on multiple cities in south-central Chile”, College Park, Maryland, USA.
- June 2015, oral presentation at 16th Annual WRF Users’ workshop. Title: “Recent WRF-Chem developments and applications on AOD data assimilation, inverse modeling of emissions and aerosol-cloud-radiation interactions”, Boulder, CO, USA.
- April 2015, oral presentation at NASA SEAC4RS field experiment science meeting. Title: “Revealing Important Nocturnal and Day-to-Day Variations in Fire Smoke Emissions through a Novel Multiplatform Inversion”, Pasadena, CA, USA.
- March 2015, seminar at the Center for Climate and Resilience Research, Universidad de Chile. Title: “The 2014 Melipilla fire that impacted Santiago: High resolution modeling of smoke and emissions constraint through inverse modeling”, Santiago, Chile. (<http://www.cr2.cl/?p=5408&lang=en>)
- December 2014, Oral presentation at AGU fall meeting. Title: “Multiplatform inversion of the 2013 Rim Fire smoke emissions using regional-scale modeling: important nocturnal fire activity, air quality, and climate impacts”, San Francisco, CA, USA.

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- December 2014, Oral presentation at AGU fall meeting. Title: “Radiative forcing by coastal anthropogenic emissions explains observed 20th century Southeast Pacific cooling”, San Francisco, CA, USA.
- November 2014, oral presentation at the American Meteorological Society's 27th Conference on Severe Local Storms. Title: “Central American biomass burning smoke impacts on tornado severity in the US: Mechanism and multiple episode analysis”, Madison, Wisconsin, US.
- October 2014, seminar at the Center for Climate and Resilience Research, Universidad de Chile. Title: “Improving regional air quality predictions: Assimilation of next generation geostationary retrievals and multiplatform inversion of wildfire emissions”, Santiago, Chile.
- September 2014, oral presentation at the 13th Quadrennial international Commission on Atmospheric Chemistry and Global Pollution (iCACGP) Symposium and 13th International Global Atmospheric Chemistry project (IGAC) Science conference on Atmospheric Chemistry. Title: “Central American biomass burning smoke can increase tornado severity in the US”, Natal, Brazil.
- August 2014, oral presentation at the World Weather Open Science Conference 2014. Title: “Aerosol optical properties assimilation from low-earth orbiting and geostationary satellites: Impacts on regional forecasts”, Montreal, QB, Canada.
- April 2014, oral presentation at NASA SEAC4RS field experiment science meeting. Title: “Transport pathways of smoke plumes measured during SEAC4RS: a modeling perspective”, Boulder, CO, USA.
- February 2014, oral presentation at American Meteorological Society (AMS) 94th Annual Meeting, 18th Joint Conference on the Applications of Air Pollution Meteorology with the A&WMA. Title: “Aerosol optical depth assimilation for a size-resolved sectional model: impacts of observationally constrained, multi-wavelength and fine mode retrievals on regional scale analyses and forecasts”, Atlanta, GA, USA.
- February 2014, oral presentation at American Meteorological Society (AMS) 94th Annual Meeting, Sixth Symposium on Aerosol-Cloud-Climate Interactions. Title: “Role of Central American biomass burning smoke in increasing tornado severity in the US”, Atlanta, GA, USA.
- December 2013, Oral presentation at AGU fall meeting. Title: “Aerosol optical depth assimilation for a size-resolved sectional model: impacts of observationally constrained, multi-wavelength and fine mode retrievals on regional scale analyses and forecasts”, San Francisco, CA, USA.
- October 26th, 2013, oral presentation at the Environmental Engineering Graduate Seminar. Title: "Atmospheric particles, clouds and tornadoes: Are these really connected?", U. of Iowa, Iowa City, IA, USA.

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- October 8th 2013, Oral presentation at the 5th Annual International Workshop on Air Quality Forecasting Research (IWAQFR), Title: "Aerosol optical depth assimilation for a size-resolved sectional model: impacts of observationally constrained, multi-wavelength and fine mode retrievals on regional scale analyses and forecasts", Santiago, Chile.
- August-September 2013, Oral presentations at NASA SEAC4RS field campaign science meeting. Titles: "Chemical forecast evaluation during SEAC4RS" and "UIOWA aerosol forecast versus RIM fire observations". Ellington Field, Houston, TX, USA.
- December 2012, Oral presentation at AGU fall meeting. Title: "Improving aerosol distributions by assimilating satellite-retrieved cloud droplet number and Aerosol Optical Depth", San Francisco, CA, USA.
- November 2012, Oral presentation at "Workshop on Integrated Meteorology and Chemistry Modeling". Title: "Improving aerosol distributions below clouds by assimilating satellite-retrieved cloud droplet number", Chapel Hill, North Carolina, USA.
- January 26th, 2012, oral presentation at American Meteorological Society (AMS) 92nd Annual Meeting, 14th Conference on Atmospheric Chemistry. Title: "Modeling Marine Boundary Layer and Stratocumulus Clouds in the Southeast Pacific During VOCALS Rex Using WRF-Chem: Configuration and Aerosol-Climate Interactions", New Orleans, LA, USA.
- December 9th, 2011, oral presentation at the American Geophysical Union (AGU) fall meeting. Title: "Seeing aerosol through clouds: assimilating submicron marine aerosol concentrations from satellite cloud retrievals", San Francisco, CA, USA.
- November 18th, 2011, presented at the Environmental Engineering Graduate Seminar. Title: "Modeling atmospheric aerosols, clouds, and interactions in the Southeast Pacific with linkage to air quality forecasts", U. of Iowa, Iowa City, IA, USA.
- August 2011, oral presentation at the American Chemical Society (ACS) fall meeting. Title: "Sensitivity analysis of aerosols feedbacks on chemistry and climate at urban and regional scales". Place: Denver, Colorado, USA.
- December 2010, presented a seminar at the Department of Geophysics, Engineering Faculty, University of Chile. Title: "Forecasting urban PM10 and PM2.5 pollution episodes in very stable nocturnal conditions and complex terrain using WRF-Chem CO tracer model". Place: Santiago, Chile
- April 2008. Oral presentation at "2008 South American Emissions, Megacities and Climate workshop" Title: "Improving Santiago's CO emission inventory by means of inverse modeling". Place: Ubatuba, Brazil.
- December 2007. Seminar at EMPA. Presented "Emissions assimilation, Santiago Case". Place: Dubendorf, Switzerland.

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- July 2007. Seminar at ENPC-CEREA. Presented: “BLUE method: Emissions assimilation”. Place: Paris, France.

- June 2007. Presented at “First SAEMC-IAI, STIC-AMSUD workshop, Data Assimilation theory and applications in chemical weather forecast” in the University of Chile. Oral presentation: “BLUE applied to CO emissions in Santiago” and poster “Estimation of spatial distribution of emissions using Geo Information Systems (GIS) and Inverse modeling techniques”. Place: Santiago, Chile.

ACTIVE RESEARCH GRANTS

- Thapa, Laura: Forecasting Wildfire Emissions with Machine Learning and Evaluating Effects on Biomass Burning Smoke Predictions, PI: Pablo Saide. Program Manager: Philip Larkin (philip.m.larkin@nasa.gov). Budget: \$135,000. Dates: 9/01/2020 – 8/31/2023.

- Collaborative Research: Understanding Predictions of Wildfire Smoke Emissions for Air Quality Models. PI: Pablo Saide. Program Manager: Sylvia Edgerton (sedgerto@nsf.gov), Grant number: NSF 2013461. UCLA Budget: \$632,398. Dates: 06/15/2020 – 05/31/2023.

PAST RESEARCH GRANTS

- Improving predictions of smoke events through the use of trace gas retrievals from TROPOMI and CrIS, PI: Pablo Saide. JPL contract. Budget: \$60,000. Dates: 10/01/2020 – 9/30/2021.

- Investigating model representation and associated uncertainties of aerosol-cloud interactions using ORACLES data. PI: Pablo Saide. Earth Venture Suborbital-2 PM: Hal Maring (hal.maring@nasa.gov), Grant number: NASA 80NSSC19K1463. Budget: \$49,873 Dates: 8/1/2019 – 7/31/2020.

- Coordination, Evaluation and Ensemble Prediction of Multiple Atmospheric Composition Forecasts in Support of the FIREChem Campaign, PI: Pablo Saide, 80NSSC18K0629, PM: Barry Lefer (barry.lefer@nasa.gov). Dates: 7/1/2018 – 6/30/2021.

- Investigation of boundary layer cloud behavior as a function of absorbing aerosol using LASIC datasets, PI: Paquita Zuidema, PM: Shaima Nasiri (Shaima.Nasiri@science.doe.gov). Pablo Saide is Co-PI. Budget: Budget UCLA sub award: \$199,781. Dates: 9/15/2017 - 9/14/2020. <https://asr.science.energy.gov/projects/project?id=9352>

- Improving Emissions, Predictions and Impact Assessments of Biomass Burning Smoke and Dynamic Air Quality using FIREX Observations, Ground Networks and Satellite Data, PI: Daven Henze, NA18OAR4310107, PM: Kenneth Mooney (kenneth.mooney@noaa.gov), Pablo Saide is Co-PI, UCLA sub award: \$150,198. Dates: 07/01/2018-06/30/2021

- Observations of Aerosols above Clouds and their InteractionS (ORACLES) field experiment. PI: Jens Redemann, NASA NNH13ZDA001N-EVS2, PM: Hal Maring (hal.maring@nasa.gov).

Pablo E. Saide

Pablo Saide is Co-Investigator. Budget of the U of Iowa grant (NNXAF95G): \$420,709. Dates: 2/20/15 – 2/19/2020.

- Understanding wildfire burning conditions using a satellite constellation and air quality models, JIFRESSE Summer Internship Program (JSIP). PI: Pablo Saide. Budget: \$7,350 for student stipend and administrative fees. Dates: Summer 2019.

- Regional Scale Modeling in Support of KORUS-AQ: Improving Predictions of Dynamic Air Quality using Aircraft, Ground Networks, and Satellite Data, PI: Gregory Carmichael, NNX15AU17G, PM: Barry Lefer (barry.lefer@nasa.gov), Pablo Saide is Co-Investigator. Budget: \$368,788. Dates: 10/1/2015 – 9/30/2018

- Global and Regional Chemical Forecasting and Analysis Using CAM-chem, Data Assimilation and WRF-Chem for KORUS-AQ, PI: Louisa Emmons, NNX15AT94G, PM: Barry Lefer (barry.lefer@nasa.gov), Pablo Saide is Co-Investigator. Budget: \$ 479,568. Dates: 10/1/2015 – 9/30/2018

- Using satellite data to constrain cloud radiative effects on photochemistry in air quality models, PI: Alma Hodzic, NASA NNX14ZDA001N-ACMAP, PM: Richard S. Eckman (Richard.S.Eckman@nasa.gov). Pablo Saide is Collaborator. Budget: \$ 489,594. Dates: 1/29/2015 – 1/28/2018

TEACHING ACTIVITIES

- UCLA undergraduate level courses: Fundamentals of Air and Water Pollution (AOS104, Winter 2019 and 2020), Practicum on Environmental Sciences (ENVIRON 180B,C, Winter-Spring 2019 and 2020),

- UCLA graduate level courses: Radiation and Climate: Aerosol-cloud-radiation interactions (AOS 244B, Spring 2018), Atmospheric Chemistry II: Advanced topics on aerosols: sources, processes, chemistry and observations (AOS 230B, Spring 2019).

- April 7-10 2015, organized and taught in “Global Atmospheric Watch (GAW) Urban Meteorology and Environment project (GURME) Regional Workshop in South East Asia”, Petaling Jaya, Selangor, Malaysia.

- October 7th 2013, taught in training sessions at the 5th Annual International Workshop on Air Quality Forecasting Research (IWAQFR), sessions: “Air Quality Numerical Forecast Models” and “Hysplit trajectory modeling”, Santiago, Chile.

- January 9-12, 2012, taught course at the workshop “Towards An Integrated Observing System For South America: Air Quality Assessment And Forecasting In Mega Cities”, Title: "Chemical Weather Forecast training course", Santiago, Chile.

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- October 17-21, 2011, Pablo Saide, taught course at the “Central America Air Quality Forecasting Workshop”. Title: "Numerical weather and air quality models", San José, Costa Rica.

- July 2008 – December 2008. Teaching assistant in Linear Algebra and Analytical Geometry. Place: Universidad de los Andes, Santiago, Chile.

RESEARCH STAYS AND FIELD CAMPAIGNS

- July-August 2019, 4 weeks, NOAA NASA Fire Influence on Regional to Global Environments and Air Quality (FIREX-AQ). Forecaster participating in flight planning activities and near-real time analysis.

-September 2016, 3 weeks. NASA ObseRvations of Aerosols above CLouds and their intERactionS (ORACLES). Forecaster participating in flight planning activities and near-real time analysis.

-May 2016, 3 weeks. NASA Korea-US Air quality study (KORUS-AQ). Chemical forecaster participating in flight planning activities and near-real time analysis.

- August-September 2013, 5 weeks. NASA Studies of Emissions and Atmospheric Composition, Clouds and Climate Coupling by Regional Surveys (SEAC4RS) field experiment. Chemical forecaster representing the U. of Iowa participating in flight planning activities and near-real time analysis.

- March 2011, 1 week. Place: NCAR (National Center for Atmospheric Research) Boulder, Colorado

- March 2009, 2 weeks. Place: ENPC (Ecole nationale des ponts et chaussées) – CEREAs (Centre d'Enseignement et de Recherche en Environnement Atmosphérique). Paris, France.

- August 2007 – December 2007. Place: EMPA (Materials Science and Technology Research Institute), Dübendorf, Switzerland.

- July 2007, 2 weeks. Place: ENPC (Ecole nationale des ponts et chaussées) – CEREAs (Centre d'Enseignement et de Recherche en Environnement Atmosphérique). Paris, France.

HONORS AND AWARDS

- NASA Group Achievement Award for participation as a team member in the FIREX-AQ field experiment (2020).

- NASA Group Achievement Award for participation as a team member in the ORACLES field experiment (2019).

- Pritzker Chair in Environment and Sustainability (2019-present).

- NASA Group Achievement Award for participation as a team member in the KORUS-AQ field experiment (2017).

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- Selected, funded and participated in ACCESS (Atmospheric Chemistry Colloquium for Emerging Senior Scientists) XIII (<http://www.bnl.gov/accessxiii/>) and on the 2015 Gordon Research Conference on Atmospheric Chemistry.
- NASA Group Achievement Award for participation as a team member in the SEAC4RS field experiment (2015).
- NOAA NESDIS/STAR best paper award of the year (2014-2015) for the GRL paper “Central American biomass burning smoke can increase tornado severity in the U.S”
- 2014 National Center for Atmospheric Research (NCAR) Advanced Study Program (ASP) postdoctoral fellowship recipient (<http://www.asp.ucar.edu/people.php>).
- Full tuition award, Center for global and regional Environmental Research, years 2009-2013.
- Obtaining a Fulbright-CONICYT PhD scholarship (2009-2013) to study abroad.
- IGAC financial support for assisting to IGAC 2008 congress held in Annecy, France.
- Obtaining a CONICYT Master Scholarship for the year 2007 covering full tuition and stipend.
- Obtaining a SAEMC project Scholarship (granted by IAI) for the year 2007 covering monthly stipend.
- Nominated “Outstanding Student” in Engineering, years 2002, 2003, 2004, 2005, 2006 & 2007 (<http://escuela.ing.uchile.cl/la-escuela/distinciones/alumnos-destacados>).
- Academic Excellency scholarship for 2 years (2003-2004) covering full tuition.
- Highest grades in first year of Engineering in Universidad de Chile year 2002 (from 640 students). Grades in this year: 6,4 (in a scale from 1 to 7).
- Highest grades of 2001 generation, Calasanz School.

APPOINMENTS

- November 2017 to date. Assistant Professor, Department of Atmospheric & Oceanic Sciences (AOS) and Institute of the Environment and Sustainability (IoES), University of California, Los Angeles (UCLA)
- January 2017 – October 2017. Project Scientist I, National Security Applications Program (NSAP), Research Applications Laboratory (RAL), National Center for Atmospheric Research (NCAR).
- May 2015 – January 2017. NCAR Advanced Study Program (ASP) postdoctoral fellow
- December 2014 – May 2015. Center for Climate and Resilience Research, University of Chile, Chile. Work: Adjunct Researcher.
- October 2014 – to January 2015. Ministry of Environment, Government of Chile, Chile. Work: Technical Adviser.
- January 2014 – October 2014. Center for global and regional Environmental Research (CGRER), University of Iowa, USA. Work: Postdoctoral Research Scholar. Advisor: Gregory Carmichael
- July 2009 – December 2013. Place: Center for global and regional Environmental Research (CGRER), University of Iowa, USA. Work: Research assistant working with WRF-Chem model.

Pablo E. Saide

- March 2008 – June 2009. Place: Center for Mathematical Modeling (CMM), University of Chile, Research Engineer. Work: Develop and apply inverse modeling techniques to improve emission inventories, modeling of air quality for the central zone of Chile. Santiago, Chile.

COMMITTEES

- July 2019- to date. Member of the Scientific, Technical & Modeling Peer Review (STMPR) Advisory Group from the South Coast Air Quality Management District (SCAQMD).

- August 2014- to date. Member of the Scientific Advisory Group for the World Meteorological Organization (WMO) Global Atmospheric Watch (GAW) Urban Meteorology and Environment project (GURME)

UCLA SERVICE

- Feb 2022 to date, IoES Environmental Science and Engineering program committee

- 2021-2022 academic year, IoES Graduate admission committee

- April 2020- to date. Member of the Computing Committee, UCLA Department of Atmospheric & Oceanic Sciences.

- August 2019-to date. Member of the Personnel Committee, Institute of the Environment and Sustainability (IoES)

- April 2019- to date. Member of the Seminar Committee, UCLA Department of Atmospheric & Oceanic Sciences.

- February 2018-to date. Member of the IDRE Executive Committee (<https://idre.ucla.edu/people/executives>)

- February 2018 – July 2019. Curriculum Committee in Academic year 2018/2019, Institute of the Environment and Sustainability (IoES)

- January 2018 – June 2020. Member of the Awards Committee, UCLA Department of Atmospheric & Oceanic Sciences.

- November 2017- to date. Affiliate Faculty for the UCLA Center for Diverse Leadership in Science (<https://www.ioes.ucla.edu/diversity/>)

RESEARCH MENTEES

Project Scientist

- Xinxin Ye (Summer 2018 – Fall 2021)

Pablo E. Saide

Ph.D.

- Calvin Howes (Summer 2018 – Present)
- Francis Turney (Winter 2019 – Present)
- Laura Thapa (Summer 2019 – Present)

D. Env.

- Oscar Neyra (Summer 2019 – Present)

B.S.

- Mansa Krishna (Fall 2020 – Present)
- Elena Dworak (Fall 2021 – Present)
- Mackenzie Arnold (Winter 2022 – Present)

Alumni

- Pargoal Arab (Undergraduate researcher, Fall 2019-Spring 2020, next a graduate student at UC San Diego)
- Melinda Berman (Undergraduate researcher, Fall 2019-Spring 2021, next a graduate student at University of Illinois at Urbana- Champaign)
- Mina Deshler (Undergraduate researcher, Fall 2020-Spring 2021, next a post-bac intern at Los Alamos National Lab)
- Madelyn Romberg (Undergraduate researcher, Summer 2021 – Winter 2022)

Other

- Hui Shi, visiting Master student Chinese University of Hong Kong, Summer 2018
- Kenyon Chow, M.S. Oral comprehensive exam committee, Spring 2019.
- Tianyang (Tony) Wang, D. Env thesis defense committee, Spring 2019.
- Jie Rou (Angie) Chen, Master thesis committee, Spring 2019.
- Yizhi Zhu, visiting Ph.D. student from University of Science and Technology of China, Fall 2019
- Jinhyeok Yu, Ph.D. qualifying examination committee, Fall 2019 (Gwangju Institute of Science and Technology from South Korea)
- Logan Simpson, M.S. Oral comprehensive exam committee, Winter 2020
- Min (Danny) Leung, Ph.D. Oral comprehensive exam committee Winter 2020, and Ph.D. Oral qualifying examination committee, Spring 2020.
- Katie Tuite, Ph.D. Oral qualifying examination committee, Fall 2020.
- Nathaniel Brockway, Ph.D. Oral qualifying examination committee, Fall 2020, and , Ph.D. thesis defense committee, Fall 2021.
- Javier Ustariz, Ph.D. Oral qualifying examination committee, Fall 2020 (Pontificia Universidad Católica de Chile)
- Gabriela Mancheno, Ph.D. Oral qualifying examination committee, Fall 2020 (Pontificia Universidad Católica de Chile)
- Jiaqi Shen, Ph.D. Oral comprehensive exam committee, Spring 2021, and Ph.D. Oral qualifying examination committee, Fall 2021.
- Yue Huang, Ph.D. thesis defense committee, Summer 2021.

SERVICE

Pablo E. Saide

- Session convener at 2020 AGU Fall Meeting, session title: “Smoke in the Air: Biomass Burning Emissions, Chemical Evolution, and Impacts on Air Quality and Climate”.
- Co-organizer of the 2020 Telluride Science Research Center Workshop, Aerosols and Clouds: Connections from the Laboratory to the Field to the Globe. Telluride, CO, USA. Postponed to 2022 due to COVID-19 pandemic.
- Session organizer at the 2020 AMS annual meeting, 22nd Conference on Atmospheric Chemistry, session title: “Air Quality Forecasting of Pollution Episodes”. Boston, MA
- Session convener at 2019 AGU Fall Meeting, session title: “Data Assimilation and Inverse Modeling of the Atmospheric Composition”.
- Session convener at 2018 AGU Fall Meeting, session title: “Advances in data assimilation, inverse modeling and forecasting of trace gases and aerosols”.
- Session convener at 2017 AGU Fall Meeting, session title: “Advances in Atmospheric Data Assimilation and Inverse Modeling”.
- Session convener at 2016 AGU Fall Meeting, session title: “Data Assimilation and Inverse Modeling of the Atmospheric Composition”.
- Member of the organizing committee for the 2016 NCAR ASP Summer Colloquium: “Advances in Air Quality Analysis and Prediction: The Interaction of Science and Policy”.
- Session organizer at the 2016 AMS annual meeting, Eighth Symposium on Aerosol–Cloud–Climate Interactions, session title: “Atmospheric chemistry and aerosols in weather and climate prediction and analysis”.
- Session convener at 2015 AGU Fall Meeting, session title: “Data Assimilation and Inverse Modeling for Atmospheric Composition Applications”.
- Member of The IGAC/iCACGP 2014 conference Young Scientists Program Committee, Natal, Brazil, September 2014.
- Session chair at the World Weather Open Science Conference 2014. Session title: “Observations and assimilation of atmospheric constituents”, Montreal, Canada, August 2014.
- Session chair in 5th Annual International Workshop on Air Quality Forecasting Research (IWAQFR), Hotel Gen, Santiago, Chile, October 8-9, 2013.

CONTINUING EDUCATION

- Participated in the “Fall Teaching Forum: Leaning into remote teaching” taught jointly by UCLA’s CEILS, CAT and EPIC. September 2020.

Pablo E. Saide

- Participated in the Inclusive Mentoring and Teaching Training Series organized by the UCLA's Center for Diverse Leadership in Science, January-July 2020.
- Participated in the 2019 Faculty Workshop on Best Practices in Teaching organized by the UCLA Center for Education Innovation & Learning in the Sciences (CEILS), September, 2019.
- Participated in the workshop “Improving Our Work Climate and Preventing Harassment”, organized by the ADVANCEGeo Partnership (<https://awg.org/AdvanceGeo>) in preparation for FIREX-AQ field campaign, July 2019.
- Participated in the first annual “New Faculty Teaching Engagement”, organized by the UCLA Office of Instructional Development, November 2018.
- Participated in the workshop “Advancing Mentoring Practices” organized by the Graduate Programs in Bioscience (GPB), August 2018.
- Participated in Summer Institute on Scientific Teaching organized by the UCLA Center for Education Innovation & Learning in the Sciences (CEILS), July, 2018.
- Participated in symposium “Exploring Practical Ways to Inspire and Reward Teaching Effectiveness and Instructional Innovation”, organized by the UCLA Center for Education Innovation & Learning in the Sciences (CEILS), June 2018.

PEER REVIEW OF JOURNAL AND PROPOSALS

Atmosphere: 2017 (1)

Atmospheric Chemistry and Physics: 2020 (2), 2019 (1), 2018 (2), 2017 (1), 2016 (1), 2015 (2), 2014 (1), 2013 (2), 2012 (2)

Atmospheric Environment: 2014 (2), 2011 (1)

Atmospheric Pollution Research: 2014 (1)

DoE Panel review: 2021 (5 proposals)

Environmental Research Letters: 2014 (1)

Environmental Science and Technology: 2018 (2), 2015 (1), 2014 (2)

Geophysical Research Letters: 2021(1), 2014 (1)

Geoscientific Model Development: 2021(1), 2015 (1)

International Journal of Environment and Climate Change: 2021 (1)

Journal of Atmospheric Sciences: 2016 (1)

Journal of Geophysical Research – Atmospheres: 2019 (1), 2018 (2), 2017 (2), 2016 (2), 2015 (2)

NASA Panel review: 2021 (6 proposals), 2016 (9 proposals)

NCAR internal review: 2016 (2), 2015 (1)

Netherlands Space Office Proposal Review: 2017 (1), 2015 (1)

NOAA Proposal Review: 2014 (1)

NOAA Panel review: 2020 (10 proposals)

NSF Proposal Review: 2021 (1), 2020 (1), 2015 (1)

Revista Internacional de Contaminación Ambiental: 2016 (1)

Urban Climite: 2021 (1)

AFILIATIONS

American Geophysical Union

Pablo E. Saide

PRESS ARTICLES

How large wildfires have evolved due to climate change, in Voz de America (July 2021, in Spanish): <https://www.vozdeamerica.com/episode/como-mega-incendios-forestales-han-evolucionado-causa-del-cambio-climatico-337686>

On “Central American biomass burning smoke can increase tornado severity in the U.S” 2015 GRL study:

- The University of Iowa, <http://now.uiowa.edu/2015/02/ui-researchers-link-smoke-fires-tornado-intensity>
- AGU, <http://news.agu.org/press-release/researchers-link-smoke-from-fires-to-tornado-intensity/>
- USA Today, <http://www.usatoday.com/story/weather/2015/02/03/fire-smoke-tornado-outbreak/22789533/>
- CBS News, <http://www.cbsnews.com/news/smoke-from-mexico-could-be-making-tornadoes-in-the-u-s-stronger-and-more-deadly/>
- NBC News, <http://www.nbcnews.com/nightly-news/video/smoke-from-central-america-fires-may-have-fueled-u.s.-tornadoes-393998403628>
- National Geographic, <http://news.nationalgeographic.com/news/2015/02/150209-tornado-smoke-aerosol-storm-wind/>
- Science Magazine news, <http://news.sciencemag.org/earth/2015/02/smoke-distant-fires-could-create-more-deadly-tornadoes>
- Nature, <http://www.nature.com/nature/journal/v518/n7537/full/518008d.html>
- NOAA NESDIS/STAR, http://www.star.nesdis.noaa.gov/star/news2015_201502_TornadoIntensity.php
- Live Science, <http://www.livescience.com/49681-severe-tornadoes-air-pollution-linked.html>
- IFL Science, <http://www.iflscience.com/physics/smoke-builds-tornadoes>
- Popular Science, <http://www.popsci.com/study-2011-storm-finds-smoke-could-intensify-tornadoes>
- Takepart, <http://www.takepart.com/article/2015/02/13/connection-between-central-american-farmers-and-deadlier-tornadoes-us>
- KVUE, <http://www.kvue.com/story/weather/2015/02/13/new-research-crop-burning-may-intensify-tornadoes/23373671/>
- Scientific American, <http://www.scientificamerican.com/podcast/episode/smoke-makes-twisters-more-likely-to-strike/>
- Science World Report, <http://www.scienceworldreport.com/articles/21925/20150203/smoke-fires-feeds-extreme-storms-tornadoes.htm>
- NASA Earth data: <https://earthdata.nasa.gov/user-resources/sensing-our-planet/the-power-of-particles>

On “Assimilation of next generation geostationary aerosol optical depth retrievals to improve air quality simulations” GRL study:

- The University of Iowa, <http://now.uiowa.edu/2015/01/satellites-can-improve-regional-air-quality-forecasting>
- NSF, http://nsf.gov/mobile/news/news_summ.jsp?cntn_id=134090&org=NSF&from=news
- Science Newsline, <http://www.sciencenewsline.com/summary/2015012923270069.html>

Pablo E. Saide

On “Improving aerosol distributions below clouds by assimilating satellite-retrieved cloud droplet number” PNAS study

- The University of Iowa, <http://now.uiowa.edu/2012/07/new-eyes-sky>,
<https://www.youtube.com/watch?v=w4LbsKo2DZg>

- NSF,

http://www.nsf.gov/mobile/news/news_summ.jsp?cntn_id=124809&org=NSF&from=news

- Science news, <http://www.science-news.info/17187/new-eyes-in-the-sky/>

- El Mercurio, Chilean newspaper, article on August 1st 2012.

On air quality forecasting for Chile:

- The University of Iowa, <http://hpc.uiowa.edu/recent-news/high-performance-computing-helps-researchers-predict-air-pollution-events>, <https://www.youtube.com/watch?v=YsJdqUh3J50>

- Heureka Magazine, <http://heureka-online.com/2017/05/04/modelos-de-particulas-la-carrera-contra-la-contaminacion/>

- La Hora, Chilean newspaper, <http://www.lahora.cl/2017/05/proponen-ajustar-modelo-mide-la-contaminacion-del-aire/>

- El Mercurio, Chilean newspaper, articles on April 13th 2011 and June 5th 2011.

- KWWL news, May 4th 2011.