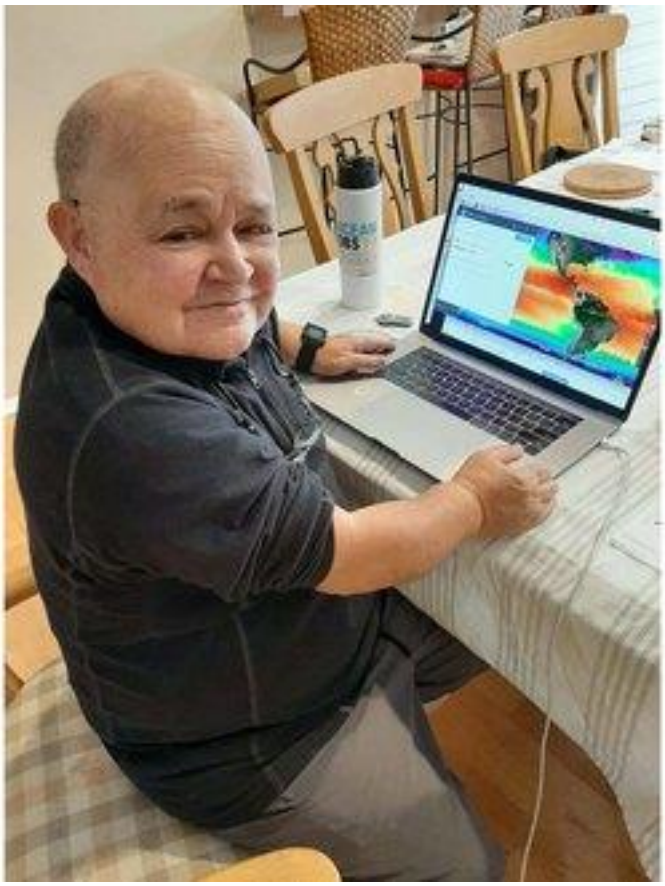
Jorge Vazquez



Address:

4800 Oak Grove Drive
M/S 300-323

Pasadena, CA 91109

Phone:

818.354.6980

Fax:

818.354.6720

Curriculum Vitae:

Click here

Member of:

Ocean Circulation And Air Sea Interaction

Technologist

Employed By

Caltech/JPL

Education

- BS, Physics, University of Miami, with honors (1980)
- MS, Oceanography, Graduate School of Oceanography, University of Rhode Island (1983)
- PHD, Geological Sciences, University of Southern California (1991)

Professional Experience

- Jet Propulsion Laboratory (1993-present)
    - Project Science Lead for Sea Surface Temperature and Sea Surface Salinity for the Physical Oceanography Distributed Active Archive Center(2002-Present)
    - Research on the validation of satellite derived sea surface temperature products (1995-2002)
    - Principal Investigator for NOAA/NASA AVHRR Oceans Pathfinder Sea Surface Temperature Project. (1995)
    - NASA representative to the Advisory Council for the Group for High Resolution Sea Surface Temperature (GHRSST). CEOS COVERAGE NASA Team (1993-2002)
- Visiting Scientist, Institute of Marine Science, Barcelona, Spain. Spanish Grant to apply remote sensing techniques to study the Mediterranean (1993)
- Guest Editor for Deep Sea Research for special edition on Satellite Oceanography and Climate change
- Guest Editor for Remote Sensing for Special Edition on Sea Surface Temperature Retrievals for satellites
- Editor Remote Sensing

Research Interests

- Applying High Resolution Remote Sensing Data to Coastal Studies
- Validation of satellite derived sea surface temperature data sets
- Development and analysis of climate data records
- Statistical Modeling of remote sensing data
- Improvement in quality of sea surface temperature data records

Selected Awards

- Voyager Award for Support of Sea Surface Temperature Products
- NASA MANNED FLIGHT AWARENESS PROGRAM in recognition of excellence and support of the NASA manned space program and its mission payloads.
- Who's Who in Science and Engineering
- NASA Group Achievement Award for implementation of the Global Data Assembly Center
- National Ocean Partnership Award for Excellence
- NASA Group Achievement Award for the Physical Oceanography Distributed Active Archive Center.
- National Ocean Partnership Award for excellence supporting joint programs between NASA and NOAA.

Selected Publications

1. Vazquez-Cuervo, J.; Steele, M.; Wethey, D.S.; Gómez-Valdés, J.; García-Reyes, M.; Spratt, R.; Wang, Y. Validation and Application of Satellite-Derived Sea Surface Temperature Gradients in the Bering Strait and Bering Sea. *Remote Sens.* **2024**, *16*, 2530. https://doi.org/10.3390/rs16142530

2. Vazquez-Cuervo, J.; Gentemann, C.; Tang, W.; Carroll, D.; Zhang, H.; Menemenlis, D.; Gomez-Valdes, J.; Bouali, M.; Steele, M. Using Saildrones to Validate Arctic Sea-Surface Salinity from the SMAP Satellite and from Ocean Models. *Remote Sens*. **2021**, *13*, 831. https://doi.org/10.3390/rs13050831
3. **Vazquez-Cuervo, J.**; Gentemann, C.; Tang, W.; Carroll, D.; Zhang, H.; Menemenlis, D.; Gomez-Valdes, J.; Bouali, M.; Steele, M., Using Saildrones to Validate Arctic Sea-Surface Salinity from the SMAP Satellite and from Ocean Models. Remote Sens. 2021, 13, 831. https://doi.org/10.3390/rs13050831
4. **Vazquez-Cuervo, J.**; Gomez-Valdes, J.; Bouali, M.; Miranda, L.E.; Van der Stocken, T.; Tang, W.; Gentemann, C., Using Saildrones to Validate Satellite-Derived Sea Surface Salinity and Sea Surface Temperature along the California/Baja Coast. Remote Sens. 2019, *11*, 1964. https://doi.org/10.3390/rs11171964
5. Bouali, M.; Polito, P. S.; Sato, O. T.; **Vazquez-Cuervo, J.** The impact of cloud masking on the climatology of sea surface temperature gradients, Remote Sensing Letters, 2020, 11 (12) : 1110-111 11
6. Minnett, PJ.; Kilpatrick, KA.; Podesta, GP; Evans, RH; Szczodrak, MD, Malgorzata D.); Izaguirre, MA , Miguel Angel; Williams, EJ (Williams, Elizabeth J.; Walsh, S; Reynolds, RM, Michael; Bailey, SW (Bailey, Sean W.; Armstrong, EM ; **Vazquez-Cuervo, J**, Skin Sea-Surface Temperature from VIIRS on Suomi-NPP-NASA Continuity Retrievals, Remote Sensing**,** 2020, 12 (20).
7. Gentemann, CL; Scott, JP; Mazzini, PLF; Pianca, C; Akella, S; Minnett, PJ; Cornillion, P; Fox-Kemper, B; Cetinic, I; Chin, TM; Gomez-Valdes, J; **Vazquez-Cuervo, J**; Tsontos, V;Yu, LS; Jenkins, R; De Halleux, S; Peacock, D; Cohen, N, Saildrone Adaptively Sampling the Marine Environment, 2020, Bulletin of the American Meterological Society, 101(6) E744-E762, DOI: 10.1175/BAMS-D-19-0015.1.

8. **Vazquez-Cuervo, J;** Gomez-Valdes, J.; Bouali, M.; Miranda, L.E.; Van der Stocken, T.; Tang, W.; Gentemann, C. Using Saildrones to Validate Satellite-Derived Sea Surface Salinity and Sea Surface Temperature along the California/Baja Coast. Remote Sens. 2019, 11, 1964. https://doi.org/10.3390/rs11171964
9. Bouali, M., P.S. Polito, OT Sato and **J. Vazquez-Cuervo**, 2019, On the use of NLSST and MCSST for the study of spatio-temporal trenin SST gradients, Remote Sensing Letters, 10 (12), 1163-1171, DOI: 10.1080/2150704X.2019.1666312.
10. Salat, J., J. Pascual, M. Flexas, T. M. Chin, and **J. Vazquez-Cuervo**, 2019, Forty-five years of oceanographic and meteorological observations at a coastal station in the NW Mediterranean: a ground truth for satellite observations, Ocean Dynamics, 69 (9), 1067-1084, DOI: 10.1007/s10236-019-01285-z.
11. O'Carroll, A. G. , E. M. Armstrong, H. M. Beggs, M. Bouali, K. S. Casey, G. K. Corlett, P. Dash, C. J. Donlon , C. L. Gentemann, J. L. Hoyer, A. Ignatov, K. Kabobah, M. Kachi,Y. Kurihara, J. Karagali, E. Maturi, C. J. Merchant, S. Marullo, P. J. Minnett, M. Pennybacker, B. Ramakrishnan, R. Santoleri, S. Sunder, S. S. Picart, **J. Vazquez-Cuervo**, W. Wimmer, 2019, Observational Needs of Sea Surface Temperature, 6, DOI: 10.3389/fmars.2019.00420.
12. Fournier, S., Reager, B. Dzwonkosk, B. and **J. Vazquez-Cuervo**, 2019, Statistical Mapping of Freshwater Origin and Fate Signatures as Land/Ocean "Regions of Influence" in the Gulf of Mexico, Journal of Geophysical Research-Oceans, 124 (7), 4954-4973, DOI: 10.1029/2018JC014784.
13. **Vazquez-Cuervo**, J., J. Gomez-Valdes, M. Bouali, L. E. Miranda, T. Van der Stocken, W. Tang, and C. Gentemann, 2019, Using Saildrones to Validate Satellite-Derived Sea Surface Salinity and Sea Surface Temperature along the California/Baja Coast, Remote Sensing, 11(17), https://doi.org/10.3390/rs11171964
14. Minnet, P. J., A. Alvera-Azacarate, T. M. Chin, G. K. Corlett, C. L. Gentemann, I. Karagali X, Li, A. Marouin, S. Marullo, S. S. Picart, M. Steele, **J. Vazquez-Cuervo**, 2019, Half a century of satellite remote sensing of sea-surface temperature, Remote Sensing of the Environment, 233, https://doi.org/10.1016/j.rse.2019.111366
15. **Vazquez-Cuervo, J.** and J. Gomez-Valdes, 2018, SMAP and CalCOFI Observe Freshening during the 2014-2016 Northeast Pacific Warm Anomaly, Remote Sensing, 10 (11), DOI: 10.3390/rs10111716.
16. **Vazquez-Cuervo, J.**, S. Fournier, B. Dzwonkowski and J. T. Reager, 2018, Intercomparison of In-Situ and Remote Sensing Salinity Products in the Gulf of Mexico, a River-Influenced System, Remote Sensing, 10 (10), DOI: 10.3390/rs10101590.
17. Chin, T. M., **Vazquez-Cuervo, J.** and E. M. Armstrong, 2017, A multi-scale high-resolution analysis of global sea surface temperature, Remote Sensing of Environment, 200, 154-169, DOI: 10.1016/j.rse.2017.07.029.
18. Relationship between SST gradients and upwelling off Peru and Chile: Model/Satellite Data Analysis, **J.Vazquez-Cuervo**, B. Dewitte, H. Torres, D. Menemenlis, T.M. Chin, E.M. Armstrong, 2017, International Journal of Remote Sensing. 38 (23), 6599-6622, doi: 10.1080/01431161.2017.1362130.
19. Evaluation of the Multi-Scale Ultra-High Resolution (MUR) Analysis of Lake Surface Temperature, E. Crosman, **J. Vazquez-Cuervo**, 2017, T. M. Chin 9, (7), doi: 10.3390/rs9070723.

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21. Sensitivity of Ocean Surface Salinity Measurements From Spaceborne L-Band Radiometers to Ancillary Sea Surface Temperature, T. F. Meissner, Wentz, J. Scott, **J. Vazquez-Cuervo**, 2016, IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, 54, (12), 7105-7111, doi: 10.1109/TGRS.2016.2596100.
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SMAP - Soil Moisture Active Passive
NASA Ocean Salinity Science Team Project

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