

Jiwei Li

Ph.D.

Assistant Professor

Center for Global Discovery and Conservation Science
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Arizona State University
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Academic Appointments

- 2021 – Assistant Professor – Center for Global Discovery and Conservation Science, School of Ocean Futures, School of Earth and Space Exploration, Arizona State University
- 2019 – 2020 Postdoctoral Scholar – Center for Global Discovery and Conservation Science, Arizona State University
- 2018 – 2019 Postdoctoral Scholar – Carnegie Institution for Science, Stanford University

Education

- Ph.D. Geosciences, University of Massachusetts Amherst 2012 – 2018
- MSc. Remote Sensing, Capital Normal University 2009 – 2012
- BS Computer Science, Northwest University 2004 – 2008

Publications

Peer-reviewed journal articles

(Underline: Graduate advisee, * Corresponding author)

H-index: 18. i10-index: 20. Total citations: 1096. [Google Scholar](#)

Since 2021

In progress

- 37 Jianghai Peng, **Jiwei Li** *, Steven R. Schill, Mitchell B Lyons, Chris M Roelfsema, Dimosthenis Traganos. Global shallow nearshore seagrass and kelp mapping using a deep learning algorithm. (*In prep.*)
- 36 Will Greene*, Craig Dahlgren, **Jiwei Li**, Shallow live coral mapping using machine learning and high-resolution drone imagery. (*In prep.*)
- 35 Thomas C. Ingalls, **Jiwei Li** *. Regional scale carbon stock modeling for mangrove-coral-seagrass ecosystems. (*In prep.*)
- 34 Jianghai Peng, **Jiwei Li** *, Sean Bryan, Jennifer Vanos, Tim Lant, Vanessa Escobar, Deep learning based urban air quality downscaling in major U.S. metropolitan cities. (*In prep.*)

- 33 **Jiwei Li ***, Qian Yu, Yong Tian, Satellite monitoring of colored dissolved organic matter (CDOM) dynamics in six large Arctic rivers. (*In prep*)
- 32 Gavindya Kawshani, Sevvandi Jayakody, W.A.K.I. Wanasingha, H.D. Sisira, **Jiwei Li**, Aurelie.C. Shapiro, Fluctuations in turbidity in response to rainfall and land use associated to river basins experiencing elevated flood levels. (*In review*)
- 31 Douglas J. McCauley*, Samantha Andrzejczek, Barbara A Block, Kyle C. Cavanaugh, Hannah C. Cubaynes, Elliott L. Hazen, Chuanmin Hu, David Kroodsma, **Jiwei Li**, Hillary S. Young, Improving ocean management using insights from space. (*In review, invited by Annual Review of Marine Science*)
- 30 Will Greene*, Sam Marshall, Craig Dahlgren, **Jiwei Li**, Metashape Reef: an efficient workflow for the collection and automated processing of time-series underwater photogrammetry data for benthic habitat monitoring. (*In review*)
- 29 Jianghai Peng, **Jiwei Li ***, Thomas Ingalls, Steven R. Schill, Hannah Kerner, Gregory P Asner. Large-scale shallow seagrass meadow spatial and temporal mapping based on a deep-learning method. (*In review*)

Published

- 28 Thomas C. Ingalls, **Jiwei Li ***, Yvonne Sawall, Robert E. Martin, David Thompson, Gregory P Asner. Imaging Spectroscopy Investigations in Wet Carbon Ecosystems: A Review (1995-2022) and Future Directions (2024). *Remote Sensing of Environment*. 305: 114051. [DOI](#).
- 27 Mitchell B Lyons*, Nicholas J Murray, Emma V Kennedy, Eva M Kovacs, Carolina Castro-Sanguino, Stuart R Phinn, Rodney Borrego Acevedo, Alexandra Ordoñez Alvarez, Jeremy Wolff, Chantel Say, Paul Tudman, Kathryn Markey, Meredith Roe, Robert F Canto, Helen E Fox, Brianna Bambic, Zoë Lieb, Gregory P Asner, Paulina M Gerstner, David E Knapp, **Jiwei Li**, Matthew Skone, Eldan Goldenberg, Kirk Larsen, Chris M Roelfsema. New global area estimates for coral reefs from high-resolution mapping. *Cell Reports Sustainability*, (2024): 100015. [DOI](#)
- 26 **Jiwei Li**, Gregory P. Asner *. Global analysis of benthic complexity in shallow coral reefs. *Environmental Research Letter* 18.2 (2023): 024038. [DOI](#)
- 25 Xingguang Yan, Jing Li *, Di Yang *, **Jiwei Li**, Tianyue Ma, YiTing Su, Jiahao Shao and Rui Zhang, A Random Forest Algorithm for Landsat Image NDWI and MNDWI Chromatic Aberration Restoration Based on GEE Cloud Platform: a case study of Yucatán Peninsula, Mexico (2022). *Remote Sensing*, 14(20), 5154. [DOI](#)
- 24 Rachel Carlson *, **Jiwei Li**, Larry B. Crowder, Gregory P. Asner. Large-scale effects of turbidity on coral bleaching in the Hawaiian Islands. (2022). *Frontiers in Marine Science*, 1678.

- 23 **Jiwei Li**, Rachel R. Carlson, David E. Knapp, Gregory P. Asner *, Shallow coastal water turbidity monitoring using Planet Dove satellites (2022). *Remote Sensing in Ecology and Conservation*. 2022
- 22 Steven R. Schill *, Valerie Pietsch McNulty, F. Joseph Pollock, Fritjof L uthje, **Jiwei Li**, David E. Knapp, Joseph Kington, Trevor McDonald, George T. Raber, Ximena Escovar-Fadul, Gregory P. Asner. Regional high-resolution benthic habitat data from Planet Dove imagery for conservation decision-making and marine planning (2021). *Remote Sensing*. 2021, 13(21), 4215. [DOI](#).
- 21 Rongguang Ni, Jinyan Tian *, Xiaojuan Li, Dameng Yin, **Jiwei Li**, Huili Gong, Jie Zhang, Lin Zhu, Dongli Wu, An enhanced pixel-based phenological feature for accurate paddy rice mapping with Sentinel-2 in Google Earth Engine (2021). *ISPRS Journal of Photogrammetry and Remote Sensing*. 178: 282-296
- 20 Rachel R. Carlson, Luke J. Evans, Shawna A. Foo, Bryant Grady, **Jiwei Li**, Megan Seeley, Yaping Xu, Gregory P. Asner * (2021), Synergistic Benefits of Conserving Land-Sea Ecosystems. *Global Ecology and Conservation*, e01684.
- 19 **Jiwei Li**, David E. Knapp, Mitchell Lyons, Chris Roelfsema, Stuart Phinn, Steven R. Schill, Gregory P. Asner * (2021), Automated global coastal water bathymetry mapping using Google Earth Engine. *Remote Sensing*. 2021, 13(8), 1469. [DOI](#)
 - Selected by Remote Sensing journal as [Cover article](#).

Before 2021

- 18 Yaping Xu, Nicholas R. Vaughn, David E. Knapp, Roberta E. Martin, Christopher Balzotti, **Jiwei Li**, Shawna Foo, Greg Asner * (2020), Coral bleaching detection in the Hawaiian Islands using spatio-temporal standardized bottom reflectance and Planet Dove satellites. *Remote Sensing*. 2020, 12, 3219. [DOI](#)
- 17 **Jiwei Li**, David E. Knapp, Nicholas S. Fabina, Emma Kennedy, Kirk Larsen, Mitchell Lyons, Nicholas Murray, Stuart Phinn, Chris Roelfsema, Gregory P. Asner * (2020). A global coral reef probability map generated using convolutional neural networks. *Coral Reefs*. Sept 24, 2020. [DOI](#)
 - News coverage: [ASU now](#), [Scienmag](#), [ScienceDaily](#), [Phys.org](#), [Bioengineer.org](#), [Lab Manager](#).
- 16 Lin Guo, Huili Gong *, **Jiwei Li**, Lin Zhu *, Lin Liao, Ying Sun, Yongsheng Li, Zhenxin Zhang, Leyin Hu, Mingliang Gao, Chaofan Zhou, Rui Cheng, Jiahui Zhou (2020), Understanding uneven land subsidence in Beijing China by integrating geophysical prospecting seismic resonance and InSAR technologies. *Geophysical Research Letters*. e2020GL088676. [DOI](#)

- 15 **Jiwei Li**, Nicholas S. Fabina, David E. Knapp, Gregory P. Asner * (2020), The sensitivity of multi-spectral satellite sensors to benthic habitat change. *Remote Sensing*. 2020, 12, 532. [DOI](#)
- 14 Mitchell Lyons *, Chris Roelfsema, Emma Kennedy, Eva Kovacs, Rodney Borrego, Kat Markey, Meredith Roe, Doddy Yuwono, Daniel Harris, Stuart Phinn, Gregory P. Asner, **Jiwei Li**, David Knapp, Nicholas Fabina, Kirk Larsen, Dimosthenis Traganos, Nicholas Murray (2020), Mapping the world's coral reefs using a global multiscale earth observation framework. *Remote Sensing in Ecology and Conservation*. 25 March 2020. [DOI](#)
- 13 Jamison Gove *, Jonathan Whitney, Margaret McManus, Joey Lecky, Felipe Carvalho, Jennifer Lynch, **Jiwei Li**, Philipp Neubauer, Katharine Smith, Jana Phipps, Don Kobayashi, Karla Balagso, Emily Contreras, Mark Manuel, Mark Merrifield, Jeffrey Polovina, Gregory Asner, Jeffrey Maynard, Gareth Williams (2019), Prey-sized plastics are invading larval fish nurseries. *Proceedings of the National Academy of Sciences*. Nov 11, 2019. [DOI](#)
 - News coverage: [National Geographic](#), [EurekaAlert!](#), [BBC](#), [ASU now](#), [NOAA](#), [World Economic Forum](#), [StarAdvertiser](#), [Vice](#), and other 31 news outlets.
- 12 **Jiwei Li**, David E Knapp, Steven R. Schill, Chris Roelfsema, Stuart Phinn, Miles Silman, Joseph Mascaro, Gregory P. Asner * (2019), Adaptive bathymetry estimation for shallow coastal waters using Planet Dove satellites. *Remote Sensing of Environment*. 232: 111302. [DOI](#)
- 11 **Jiwei Li**, Steven R. Schill, David E Knapp, Gregory P. Asner * (2019), Object-based mapping of coral reef habitats using Planet Dove satellites. *Remote Sensing*. 2019, 11, 1445. [DOI](#)
 - Selected by Remote Sensing journal as [Cover article](#).
- 10 Chaofan Zhou, Huili Gong *, Beibei Chen, Xiaojuan Li, **Jiwei Li**, Xu Wang, Mingliang Gao, Yuan Si, Lin Guo, Min Shi, Guangyao Duan (2019), "Quantifying the contribution of multiple factors to land subsidence in the Beijing Plain, China with machine learning technology." *Geomorphology*. [DOI](#)
- 9 Beibei Chen, Huili Gong, Kunchao Lei, **Jiwei Li** *, Chaofan Zhou, Mingliang Gao, Hongliang Guan, Wei Lv (2019), Land subsidence lagging quantification in the main exploration aquifer layers in Beijing plain, China. *International Journal of Applied Earth Observation and Geoinformation*. 75:54-67. [DOI](#)
 - Highlighted by [UNESCO Land Subsidence International Initiative](#).
- 8 **Jiwei Li**, Qian Yu *, Yong Q. Tian, Brian L. Backer, Paul Siqueira, Nathan Torbick, Spatio-temporal variations of CDOM in shallow inland waters from a semi-analytical inversion of Landsat-8 (2018). *Remote Sensing of Environment*. 218: 189-200. [DOI](#)
 - Highlighted by [NASA Landsat team](#).

- 7 **Jiwei Li**, Qian Yu *, Yong Q. Tian, David F. Boutt (2018), Effects of Landcover, Soil property and temperature on co-variations of DOC and CDOM in inland waters. *Journal of Geophysical Research: Biogeosciences*, 123. [DOI](#)
 - Selected as AGU [EOS Research Spotlights](#).
- 6 Aifen Zhong, Anqi Wang *, **Jiwei Li**, Tingbao Xu, Dan Meng, Yinghai Ke, Xiaojuan Li, Yun Chen (2018), Downscaling of passive microwave soil moisture images based on spectral analysis. *International Journal of Remote Sensing*, 1:50-67. [DOI](#)
- 5 **Jiwei Li**, Qian Yu *, Yong Q. Tian, Brian L. Backer (2017), Remote sensing estimation of colored dissolved organic matter (CDOM) in optically shallow waters. *ISPRS Journal of Photogrammetry and Remote Sensing*, 128: 98-110. [DOI](#)
 - [AAG national student paper competition award](#).
- 4 Huijiao Qiao, Yong Q. Tian *, Qian Yu, Hunter J. Carrick, Mark Francek, **Jiwei Li** (2017), Snowpack enhanced dissolved organic carbon export during a variety of hydrologic of events in an agricultural landscape, midwestern USA. *Agricultural and Forest Meteorology*. 246 (2017): 31-41. [DOI](#)
- 3 Chaofan Zhou, Huili Gong *, Beibei Chen, **Jiwei Li**, Mingliang Gao, Feng Zhu, Wenfeng Chen, and Yue Liang (2017), InSAR time-series analysis of land subsidence under different land use types in the eastern Beijing plain, China. *Remote Sensing*. 2017, 9, 380. [DOI](#)
- 2 Beibei Chen, Huili Gong *, Xiaojuan Li, Kunchao Lei, Youquan Zhang, **Jiwei Li**, Zhaoqin Gu, Yanan Dang (2011), Spatial-temporal characteristics of land subsidence corresponding to dynamic groundwater funnel in Beijing municipality, China. *Chinese Geographical Science*, vol.21(6), pages.753-764, 2011. [DOI](#)
- 1 Kunchao Lei, Huili Gong *, Xiaojuan Li, Beibei Chen, **Jiwei Li**, Liulin Song (2011), The application of PS-InSAR technology on land subsidence in Cangzhou region. *Advanced Materials Research*, vol.268-270, pages.1934-1939, 2011. [DOI](#)

Other peer-reviewed publications

Jing Sun, Qiangqiang Yuan, **Jiwei Li**, Chunping Zhou, Huanfeng Shen * (2018), License plate image super-resolution based on the intensity-gradient prior combination. *Journal of Image and Graphics*, Vol (23):6. (In Chinese with English abstract)

Jiwei Li, Huili Gong *, Xiaojuan Li (2011), Land Subsidence Spatio-temporal Variation Analysis based on Multiple Source Data Field in Tianjin, China. *Proceeding of 7th International Symposium on Digital Earth (ISDE7)*, Perth, Australia.

Yanan Dang, Huili Gong *, Xiaojuan Li, Beibei Chen, **Jiwei Li** (2011): The analysis of land subsidence in Tianjin basing on interferometric synthetic aperture radar (InSAR) technique. *Proceeding of 2011 International Conference on Multimedia Technology (ICMT)*, Hangzhou, China

Grants: Awarded

Title	Agency	Duration	Total	ASU	ASU Team (REC/RID/IIA)
Real-time extreme events monitoring in the Phoenix urban area using Planet satellite imagery, deep learning, and multi-data fusion technology	ASU Seed	1/1/2024- 12/31/2024	100K	100K	PI: Jiwei Li (50%) CoPI: Sean Bryan
Collaborative Research: MRA: Resolving and scaling litter decomposition controls from leaf to landscape in North American drylands	NSF MRA	8/1/2023 – 7/31/2028	2.5 M	1.75 M	PI: Heather Throop CoPI: Jiwei Li (25 %)
Remote VSWIR Imaging spectroscopy for Global aquatic environment monitoring	NASA JPL	10/1/2023 – 9/31/2026	180 K	150 K	PI: Jiwei Li (50%) CoPI: Gregory Asner
A Socioeconomic Assessment of Future Geostationary Satellite Sensors to Improve Air-quality Impacts on Human Health and Wellbeing: A Case Study of Maricopa County, Arizona	NOAA	9/1/2022 – 8/31/2023	150 K	150 K	PI: Tim Lant CoPI: Jiwei Li (25 %), Sean Bryan, Jennifer Vanos

Awards

- 2017 - Joseph Hartshorn Memorial scholarship, UMASS
- Best teaching assistant award, UMASS
- 2016 - Second place of national student honors paper competition, Remote Sensing Special Group (RSSG) of the Association of American Geographers (AAG), AAG Annual Meeting, SF, CA.
- 2015 - Best teaching assistant award, UMASS
- Andrew Wise Memorial scholarship, UMASS
- Geography Alumni award, UMASS
- 2014 - IOCCG fellowship, International Ocean-Colour Coordinating Group (IOCCG) (15/135 worldwide, including 3 in the United States)
- Leo M. Hall Memorial prize, UMASS
- Gloria Radke Memorial prize, UMASS
- 2013 - Andrew Wise Memorial scholarship, UMASS
- Geography Alumni award, UMASS
- 2012 - Second place of UNESCO Chair Young Scholar summit student paper competition, UNESCO Chair in Hydroinformatics and Ecohydrology
- 2008 - Best thesis, Northwest University, China

- 2006 - Scholarship for the excellent student, Northwest University, China
2005 - Scholarship for the excellent student, Northwest University, China

Conference presentation & Invited talks

- 2023.07 Invited Talk, *A deep learning based algorithm for high resolution air quality monitoring*. NOAA GeoXO Pathfinder Tabletop.
- 2023.05 Invited Talk, *A new approach to monitor global shallow water turbidity*. NOAA Coastal Watch.
- 2022.09 Guest Lecture, Mapping and monitoring global coral reefs. ASU School of Computing and Augmented Intelligence.
- 2022.07 Invited Talk, *Satellite monitoring of global shallow waters*. ASU Grand Challenges Scholars Program Summer Institute Faculty Talk.
- 2022.05 Invited Talk, *Combing cloud-based computing, CubSats, and machine learning in global coastal water monitoring*. NASA Advancing Women's Prosperity in the Workplace, ASU, USA
- 2022.05 Invited Talk, *Multi-discipline training of environmental science program*. Nanjing University, China
- 2021.11 Invited Talk, *Coral Atlas: global monitoring of shallow water coral reefs*. The 3rd wetland remote sensing conference. Beijing, China
- 2021.10 Invited Talk, *Global coral reef monitoring system building in Google Earth Engine*. The 5th Geo-spatial big data and cloud computing conference. Beijing, China.
- 2021.09 Invited Talk, *Coastal shallow water turbidity monitoring using Planet Dove satellites*. Planet Explore 2021. US.
- 2021.08 Invited Talk, *Coral Atlas, global coral reef monitoring system*. Capital Normal University, Beijing, China.
- 2021.07 Invited Talk, *Monitoring global coral reefs*. ASU Grand Challenges Scholars Program Summer Institute Faculty Talk.
- 2021.01 Invited Talk, *Global coral reef monitoring system for conservation and management*, Arizona State University, AZ, USA
- 2020.12 Invited Talk, *Global shallow water remote sensing monitoring*, Hong Kong University of Science and Technology, Hong Kong, China
- 2019.02 Invited Talk, *Water-Land-Human nexus exploration using remote sensing technology*, Texas Tech University, TX, USA
- 2018.07 Invited Talk, *Satellite benthic mapping for the Caribbean Regions*, Planet Inc., San Francisco, USA.
- 2018.04 Invited Talk, *Estimation of water bio-optical properties in inland waters using a remote sensing approach*, SUNY College of Environmental Science and Forestry, NY, USA.

- 2018.04 Invited Talk, *Remote sensing detection of inland water quality*, 2018 NESS Annual Meeting
- 2017.12 Poster presentation. *Remote sensing estimation of terrestrially derived colored dissolved organic matter input to the Arctic Ocean*. AGU fall meeting, New Orleans, LA, USA.
- 2017.10 Oral presentation. *Land cover and hydrology effects on DOC/CDOM co-variations in freshwaters*, Umass Amherst Graduate Student Research Talks, Amherst, USA.
- 2017.08 Oral presentation. *The spatial and seasonal analysis of the CDOM based on the large satellite remote sensing data*, The 25th International Conference on Geoinformatics, Buffalo, NY, USA.
- 2017.04 Oral presentation. *Spatio-temporal Variations of Colored Dissolved Organic Matters in Lake Water Observed with Landsat-8 Operational Land Imager (OLI) Sensors*, AAG Annual Meeting, Boston, MA, USA.
- 2016.03 Oral presentation. *Remote Sensing Estimation of Colored Dissolved Organic Matter in optically shallow waters*, 2nd place of Student Honors Paper Competition, Remote Sensing Special Group (RSSG), AAG Annual Meeting, SF, CA, USA.
- 2014.07 Oral presentation. *Monitoring of Terrestrial Dissolved Organic Carbon Exportation*, IOCCG Summer Lecture Series 2014: Frontiers in Ocean Optics and Ocean Color Science, Villefranche-sur-Mer, France.
- 2012.06 Oral presentation. *Land Subsidence in Tianjin, China: Hydrogeology and Geology Control of the Ground Surface Deformation*. 2nd place of UNESCO Chair Young Scholar Summit Student Paper Award, UNESCO Chair in Hydroinformatics and Ecohydrology, Beijing, China.
- 2011.07 Poster presentation. *Land Subsidence Spatio-temporal Variation Analysis based on Multiple Source Data Field in Tianjin*, 7th International Symposium on Digital Earth (ISDE7), Perth, Australia.
- 2011.05 Poster presentation. *Tianjin Land Subsidence Monitoring through the InSAR Technology*, International InSAR Technology Seminars, Beijing, China.

Student mentoring

ASU Active Graduate Student Primary Advisees

- 2023 spring – now Will Greene (Doctoral Student, NSF GRFP fellowship)
- 2022 fall – now Jianghai Peng (Doctoral Student)
- 2022 spring – now Thomas Ingalls (Doctoral Student)

ASU Graduate Student Thesis Committee (excluding Primary Advisees)

- 2023 – now Jesús Marín Díaz (Doctoral Student)

2023 – now Ruby Hurtado (Master Student)
2023 – now Nicoletta Stork (Doctoral Student)
2023 – now Kelly van Woesik (Master Student)
2021 – 2023 Charles Kimsal (Master Student)

ASU other mentoring

2023 – 2024 Team EMIT (Sebastian Montano, Gabriela Roig, Victoria Cava, Liana Alonso) (UG Capstone project)
2022 – 2023 Team Planet (Shireen Dooling, Harrison Kervitsky, Jose Alvarado, Sophia Gill) (UG Capstone project)
2022 – 2023 Swati Mahapatra (Research internship)
2022 – 2023 Mindy Zuckerman (SESE 2nd project)
2021 –2023 Shan Gao (Research internship)
2022 summer Maria Menchu Maldonado (Summer research)
2020 Nicholas Johnson (Master student capstone project)
2020 Randy Fulford (Master student capstone project)
2020 Jingwei Lian (TNC mapping project)

Teaching History

Arizona State University

GLG 101, Exploring Geology (~200 students' undergraduate course) (Fall 2022)
SES 598, Cloud-based remote sensing (new graduate course developed at ASU) (Spring 2022, spring 2023)
SES 502, Exploring SESE research (graduate level seminar) (Fall 2021)

Umass Amherst

2017 summer Geography 397G, Intro to GIS, online course, Umass Amherst
2016 summer Geography 468, GIS and Spatial Analysis, online course, Umass Amherst

Professional activities

External service

Group member

2021- Member, NASA Surface Biology and Geology (SBG) Mission algorithm working group

2022-2023 Member, NOAA GeoXO next generation satellite mission table-top exercise committee

Journal editorial services

2021- Journal of Remote Sensing (AAAS partner journal): Editorial board member
2021- Remote Sensing (impact factor: 4.509): Guest Editor, Topical advisory panel

Journal reviewer (~60 times in past three years):

2019- Referee for: *Remote Sensing of Environment*; *Global Change Biology*; *Coral Reefs*; *ISPRS Journal of Photogrammetry and Remote Sensing*; *IEEE Transactions on Geoscience and Remote Sensing*; *Journal of Remote Sensing*; *Journal of Sea Research*, *Journal of Applied Ecology*; *Frontiers in Marine Science*; *Marine Pollution Bulletin*; *Remote Sensing*; *Progress in Physical Geography*; *GIS sciences and Remote Sensing*; *International Journal of Digital Earth*; *Remote sensing letters*; *GeoJournal*; *Sensors*; *Natural Hazards*; *Water*; *Geosciences*; *Sustainability*; *Electronics*; *Cogent Engineering*

Outreach

News coverage

2023 “Visualizing the future of Arizona” [ASU news](#)

2021 “Allen Coral Atlas provides breakthrough tools for coral reef conservation” [State Press](#)

2020 “Mapping global coral reefs”, News coverage: [ASU now](#), [Scienmag](#), [ScienceDaily](#), [Phys.org](#), [Bioengineer.org](#), [Lab Manager](#).

2018 “Refining Remote Sensing of Dissolved Organic Carbon in Waterways”, [AGU EOS](#),