Emily J. Sturdivant

Geospatial Analyst Research Assistant at Woodwell Climate
Research Center, working remotely from Morelia, Mexico
esturdivant@woodwellclimate.org

Education

May 2015	M.Sc. in Geographic Information Science	**Clark University**
	Snowmelt detection from scatterometer data across the Alaskan North Slope
May 2013	B.A. with major in Geography	**Clark University**

Employment

2021–present	Research Assistant, Geospatial Analyst	**Woodwell Climate Research Center**
2019–2021	Geospatial Research Analyst	**National Autonomous University of Mexico (UNAM)**
2016–2019	Geographer	**U.S. Geological Survey** Woods Hole Coastal and Marine Science Center
2015–2016	GIS Specialist for the U.S. Geological Survey	**Natural Systems Analysts, Inc.**
Sep–Nov 2015	Team leader, Missouri River Climatology	**NASA DEVELOP National Program**
Sep–Dec 2013	Teaching assistant for Introduction to GIS	**Clark University**

Internships and projects

May–Sep 2014	Cape Cod Critical Habitats Atlas web map	**Association to Preserve Cape Cod**
Jan–May 2014	Medium resolution coastal habitat classification	**Wildlife Conservation Society**
Jun–Aug 2013	Forest conservation mapping	**Iracambi GIS**
Jun–Aug 2012	Marine-derived nutrients from salmon spawning	**NOAA NW Fisheries Science Center**
Jun–Jul 2011	Carbon cycling in arctic waterways	**The Polaris Project**

Selected peer-reviewed articles

Sturdivant, E.J., Frey, K.E., Urban, F.E., 2019, Snowmelt detection from QuikSCAT and ASCAT satellite radar scatterometer data across the Alaskan North Slope: GIScience & Remote Sensing, v. 56, no. 1, https://doi.org/10.1080/15481603.2018.1493045.

Sturdivant, E.J., Lentz, E.E., Thieler, E.R., Farris, A.S., Weber, K.M., Remsen, D.P., Miner, Simon, and Henderson, R.E., 2017, UAS-SfM for Coastal Research: Geomorphic Feature Extraction and Land Cover Classification from High-Resolution Elevation and Optical Imagery: Remote Sensing, v. 9, no. 10, https://doi.org/10.3390/rs9101020.

Published software

Sturdivant, E.J., 2019, Bi-transect-extractor: U.S. Geological Survey software code, https://doi.org/10.5066/P915UYMY.

Selected data publications

Sturdivant, E.J., Zeigler, S.L., Gutierrez, B.T., and Weber, K.M., 2019, Barrier island geomorphology and shorebird habitat metrics—Sixteen sites on the U.S. Atlantic Coast, 2013-2014: U.S. Geological Survey data release, https://doi.org/10.5066/P9V7F6UX.

Sturdivant, E.J., Thieler, E.R., Zeigler, S.L., Winslow, L.A., Hines, M.K., Read, J.S., Walker, J.I., 2018, Table and accompanying photographs for biogeomorphic classification of shorebird nesting sites on the U.S. Atlantic coast from March to September, 2016: U.S. Geological Survey data release, https://doi.org/10.5066/P98MI9C5.

Sturdivant, E.J., Thieler, E.R., Lentz, E.E., Remsen, D.P., and Miner, Simon, 2017, Topographic, imagery, and raw data associated with unmanned aerial systems (UAS) flights over Black Beach, Falmouth, Massachusetts on 18 March 2016: U.S. Geological Survey data release, https://doi.org/10.5066/F7KW5F04.

Sturdivant, E.J., Thieler, E.R., Zeigler, S.L., Winslow, L.A., Hines, M.K., Read, J.S., Walker, J.I., 2016, Biogeomorphic classification and images of shorebird nesting sites on the U.S. Atlantic coast: U.S. Geological Survey data release, https://doi.org/10.5066/F70V89X3.

Honors and awards

2019	USGS STAR (Special Thanks for Achieving Results) award
2018	Departmental Award for Outstanding Contribution to Aviation Safety (as member of group of 37)
2013	Marcia V. Szugda-Emani Environmental Scholarship Award
2013	Phi Beta Kappa, National Honors Society
2012	Marsh-Mosakowski NOAA Fellow
2012	Gamma Theta Upsilon, Geography Honors Society, Clark University

Skills

Analysis	Data management	Software	Programming	Languages
remote sensing	reproducible workflows	QGIS	R	English
geospatial analysis	documentation	ArcGIS	Python	Spanish
SfM photogrammetry	data curation	TerrSet	Matlab	
accuracy assessment	field survey design	Agisoft Metashape	Git	
	data visualization	Productivity tools		