

CURRICULUM VITAE

ANDREW C. PHILLIPS, Ph.D.

Principal Research Scientist, Quaternary
Quaternary and Engineering Geology Section
Illinois State Geological Survey
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EDUCATION

Ph.D. 1993 *Geosciences and Geotechnical Engineering*, University of Illinois at Chicago
M.S. 1989 *Geological Sciences*, University of Illinois at Chicago
B.A. 1981 *Geology*, Colgate University

POSTDOCTORAL EXPERIENCE

1993-1996 Center for Colloidal Science, College of Marine Studies, University of Delaware

PROFESSIONAL EXPERIENCE

2019-present Principal Research Scientist, Quaternary, Illinois State Geological Survey
2018-present Faculty Affiliate, Informatics Institute, University of Illinois
2014-present Adjunct Professor, Department of Geology, University of Illinois
2005-2019 Associate Quaternary Geologist, Illinois State Geological Survey, Champaign, IL
1998-2005 Assistant Quaternary Geologist, Illinois State Geological Survey, Champaign, IL
1996-1998 Consulting Geologist, Oxford, PA
1997 Environmental Analyst, WIK Associates, Inc., New Castle, DE
1996 Instructor, Summer Institute for the Gifted, Bryn Mawr, Pennsylvania
1990-1993 Lecturer, Department of Liberal Arts, School of the Art Institute of Chicago
1992 Consulting Geologist, International Engineers, Inc., Wheaton, IL
1990-1991 Lecturer, Department of Geological Sciences, University of Illinois at Chicago
1984-1992 Teaching Assistant, Department of Geological Sciences, University of Illinois at Chicago
1985-1989 Research Assistant, Department of Geological Sciences, University of Illinois at Chicago

AWARDS AND HONORS

2012-2014 Faculty Fellow, National Great Rivers Research and Education Center, Alton, IL
2012 Special Achievement by a Team: STATEMAP Team, Illinois State Geological Survey
1989 Sigma Xi Grants-In-Aid of Research
1989 Geological Society of America Research Grant
1988 Sigma Xi Grants-In-Aid of Research
1986 Student Leadership Award, University of Illinois at Chicago

RESEARCH

Updated 5 February 2019

Masters Thesis: Phillips, A.C., 1986, Structure and Depositional Processes in Prodeltaic Sediment of a Short-Headed Ice-contact Delta, Riggs Glacier, Glacier Bay, Alaska, University of Illinois at Chicago, 82 p.

Doctoral Dissertation: Phillips, A.C., 1993, Sedimentary Processes at Glacial Marine Deltas, Glacier Bay, Alaska, University of Illinois at Chicago, 214 p.

Research Interests: Process sedimentology; Quaternary Geology; glacial, fluvial, and lacustrine environments; geologic mapping; environmental geology; remote sensing; land use – landscape response; lidar analysis; geographic information systems.

CONTRACTS AND GRANTS AWARDED

- 2017 *High-resolution monitoring of Illinois Lake Michigan waves and currents to improve coastal models and public safety*, \$125,000, US National Oceanic and Atmospheric Administration (A. Anderson, D. Tecic, P.I.'s)
- 2017 *Past, Present, and Future Impacts of Weather and Climate on the Geology of the Illinois Coast*; \$99,840
- 2017 *Hydrogeologic soil research for green stormwater infrastructure planning and design: new methods for adapting urban coastal communities*, \$286,685, Illinois-Indiana Sea Grant (M. P. McGuire, P.I.)
- 2016 *Developing Algorithms and Methods for Regional LiDAR Based Landform Classification*, \$113,313, USDA Natural Resources Conservation Service, Cooperative Ecosystem Studies Unit
- 2015 *Illinois StateMap Proposal Fiscal Year 2016*, \$159,967, U.S. Geological Survey, National Cooperative Geologic Mapping Program
- 2013 *Illinois StateMap Proposal Fiscal Year 2015*, \$169,354, U.S. Geological Survey, National Cooperative Geologic Mapping Program
- 2012 *Paleoseismic Investigation of the Meadow Bank Lineament in the Wabash Valley Seismic Zone*, \$48,000, U.S. Geological Survey, National Earthquake Hazard Research Program [supplement] (T.H. Larson, P.I.)
- Paleoseismic Investigation of the Meadow Bank Lineament in the Wabash Valley Seismic Zone: Collaborative Research between the University of Illinois and the University of Kentucky*, \$6,000, U.S. Geological Survey, National Earthquake Hazard Research Program (T. Larson, P.I.)
- 2004 *Illinois River Basin Ecosystem Restoration Project: Watershed and Pool Assessments and Computerized Inventory and Database System*, \$29,000, Illinois Department of Natural Resources
- 2003 *Rapid Watershed Assessment Protocols*, \$22,000, Illinois Department of Natural Resources
- 2001 *Watershed Assessment Protocol*, \$15,000, US Army Corps of Engineers
- 2001 *Geomorphological Summary of Illinois River Basin*, \$36,000, US Army Corps of Engineers
- 1989 *Stream Dynamics Assessment, Illinois River Basin*, \$15,000, US Army Corps of Engineers.
- 1989 *Sediment Transport and Depositional Processes in Proximal Glacimarine Deltas, Glacier Bay, Alaska*, \$600, Sigma Xi Grant-in-Aid-of-Research
- 1988 *Sediment Transport and Depositional Processes in Proximal Glacimarine Deltas, Glacier Bay, Alaska*, \$1000, Geological Society of America Research Grant

PUBLICATIONS: ARTICLES, CHAPTERS, VOLUMES

- Grimley, D.A., A.C. Phillips, E.D. McKay III, and A.M. Anders, 2017, Geomorphic expression of the Illinois Episode glaciation (OIS 6) in Illinois: moraines, sublobes, subglacial lineations, and possible ice streaming: *in* A. Kehew and B.B. Curry (eds.), *Quaternary Glaciation of the Great Lakes Region*, Geological Society of America Special Paper 530, p. 1–25, doi:10.1130/2017.2530(01).
- Grimley, D.A. and A.C. Phillips, 2015, Ridges, mounds, and valleys: Glacial-interglacial history of the Kaskaskia Basin, southwestern Illinois: 55th Midwest Friends of the Pleistocene 2011 Field Conference, Illinois State Geological Survey, Guidebook 41, 124 p.
- Larson, T.H., A.C. Phillips, and S. Elrick, 2015, The Meadow Bank: A non-tectonic linear feature in the Wabash Valley Seismic Zone: *Seismological Research Letters*, v. 86, p. 1730-1736, doi: 10.1785/0220150063.
- Dey, W. S., S.D. Elrick, C.P. Korose, D.A. Grimley, A.C. Phillips, and E. Colville, 2012, Appendix B: Geological description of continuous core: *in* Dey, W.S., R.A. Locke, I.G. Krapac, C.G. Patterson, and J.L. Hurry, *Preliminary Hydrogeologic Investigation of the FutureGen 2 in Morgan County, Illinois*, Open File Series 2012-6, Illinois State Geological Survey, 61 p.
- Ismail, A., E. Smith, A. Phillips, and A. Stumpf, 2012, Pitfalls in interpretation of shallow seismic data: *Applied Geophysics*, v. 9, p. 87 – 94, doi:10.1007/s11770-012-0318-4.
- Webb, N.D., D.A. Grimley, A.C. Phillips, and B.W. Fouke, 2012, Origin of glacial ridges (OIS 6) in the Kaskaskia Sublobe, southwestern Illinois, USA. *Quaternary Research*, v. 78, 341-352.
- White, W.P., A. Phillips, and D. Devotta, 2009, Watershed Assessment: Illinois Department of Natural Resources, *Outdoor Illinois*, Springfield, p. 21-30.
- Phillips, A.C., and S. Brown, 2009, An Overview of Illinois' Geological History and Landscape: *in* J.B. Taft, C.E. Warwick, and C.A. Taylor (eds.), *Canaries in the Catbird Seat*, Illinois Natural History Survey, Champaign, p. 7-23.
- Grimley, D.A., A.C. Phillips, L.R. Follmer, H. Wang, and R.S. Nelson, 2001, Quaternary and environmental geology of the lower Illinois River valley and metro-East St. Louis area: Guidebook for Field Trips for the Thirty-fifth Annual Meeting of the North-Central Section of the Geological Society of America: Illinois State Geological Survey, ISGS Guidebook 33, p. 21-73.
- Hansel, A.K., R.C. Berg, A.C. Phillips, and V.G. Gutowski, 1999, Glacial Sediments, landforms, paleosols, and a 20,000-year-old forest bed in East-Central Illinois: Guidebook for Field Trips for the Thirty-third Annual Meeting of the North-Central Section of the Geological Society of America: Illinois State Geological Survey, ISGS Guidebook 33, 31 p.
- Frankie, W.T., A.C. Phillips, R.J. Jacobson, M.M. Killey, D.H. Wahl, J.H. Hoxmeier, and G.S. Roadcap, 1998, Guide to the geology of the Lake Shelbyville area, Shelby and Moultrie Counties, Illinois: Illinois State Geological Survey, Field Trip Guidebook 1998C, 89 p.
- Menon, M.G., R.J. Gibbs, and A.C. Phillips, 1998, Accumulation of muds and metals in the Hudson River estuary turbidity maximum: *Environmental Geology*, v. 34, p. 214-222.
- Phillips, A.C., and N.D. Smith, 1992, Delta slope processes and turbidity currents in prodeltaic submarine channels, Queen Inlet, Glacier Bay, Alaska: *Canadian Journal of Earth Sciences*, v. 29. p. 93-101.

- Carlson, P.R., R.D. Powell, and A.C. Phillips, 1992, Submarine sedimentary features on a fjord delta front, Queen Inlet, Glacier Bay, Alaska: *Canadian Journal of Earth Sciences*, v. 29, p. 565-573.
- Phillips, A.C., N.D. Smith, and R.D. Powell, 1991, Laminated Sediments in prodeltaic deposits, Glacier Bay, Alaska, in J.B. Anderson and G.M. Ashley (eds.), *Glacial-marine sedimentation: Paleoclimatic significance*: Geological Society of America, Special Paper 261, p. 51-60.
- Smith, N.D., A.C. Phillips, and R.D. Powell, 1990, Tidal drawdown: a mechanism for producing cyclic sediment laminations in glaciomarine deltas: *Geology*, v.18, p. 10-13.

PUBLICATIONS: MAPS

- Grimley, D.A., and A.C. Phillips, 2011, Surficial Geology of St. Clair County, Illinois: Illinois County Geologic Map, ICGM St. Clair County SG, 1:62,500 scale.
- Phillips, A.C., 2010, Surficial Geology of Paderborn Quadrangle, Monroe and St. Clair Counties, Illinois: Illinois Geologic Quadrangle, IGQ Paderborn-SG, 1:24,000 scale.
- Grimley, D.A., and A.C. Phillips, 2010, Surficial Geology of Prairietown Quadrangle, Madison and Macoupin Counties, Illinois: Illinois Geologic Quadrangle, IGQ Prairietown-SG, 1:24,000 scale.
- Grimley, D.A., A.C. Phillips, and S.W. Lepley, 2007, Surficial Geology of Monks Mound Quadrangle, Madison and St. Clair Counties, Illinois: Illinois Preliminary Geologic Map IPGM Monks Mound SG.
- Grimley, D.A., and A.C. Phillips, 2006, Surficial Geology of Grant Fork Quadrangle, Madison County, Illinois: Illinois Geologic Quadrangle, IGQ Grant Fork-SG, 1:24,000 scale.
- Grimley, D.A., and A.C. Phillips, 2006, Surficial Geology of Madison County, Illinois: Illinois Preliminary Geologic Map, IPGM Madison County-SG, 1:100,000 scale.
- Phillips, A.C., 2005, Surficial Geology of Highland Quadrangle: Illinois Preliminary Geologic Map, IPGM Highland-SG, Illinois State Geological Survey.
- Grimley, D.A., and A.C. Phillips, 2005, Surficial Geology of Grant Fork Quadrangle: Illinois Preliminary Geologic Map, IPGM Grant Fork-SG, Illinois State Geological Survey.
- Phillips, A.C., 2004, Surficial Geology of St. Jacob Quadrangle, Madison and St. Clair Counties: Illinois State Geological Survey, Illinois Preliminary Geologic Map, IPGM St. Jacob-SG, 1:24,000.
- Phillips, A.C., and D.A. Grimley, 2004, Surficial Geology of Marine Quadrangle, Madison County: Illinois State Geological Survey, Illinois Preliminary Geologic Map, IPGM Marine-SG, 1:24,000.
- Phillips, A.C., 2004, Surficial geology of the Collinsville quadrangle: Illinois State Geological Survey, Illinois Preliminary Geologic Map, IPGM Collinsville-SG, 1:24,000.

PUBLICATIONS: MEETING ABSTRACTS

- Phillips, A.C., B.B. Curry, H. Loope, D.A. Grimley, and S. Huot, 2018, Activity of the Laurentide ice sheet evident in sediment archives of the lower Wabash Valley: Geological Society of America Abstracts with Programs. Paper No. 140-8, online access at <https://gsa.confex.com/gsa/2018AM/meetingapp.cgi/>.
- Keefer, D.A., L.L. Gasser, and A.C. Phillips, 2018, Improving 3-D geologic mapping: moving beyond the single best prediction: Geological Society of America Abstracts with Programs. Paper No. 142-8, online access at <https://gsa.confex.com/gsa/2018AM/meetingapp.cgi/>.

- Phillips, A.C., H. Loope, B.B. Curry, D.A. Grimley, and C Lebel, 2018, Slackwater lake record of southern Wabash tributary indicates enigmatic ca. 40 ka glaciation: 52nd Annual Meeting of the North-Central Section of the Geological Society of America, Ames, Iowa, 14-18 April 2018, GSA Abstracts with Programs Vol. 50, No. 4, doi: 10.1130/abs/2018NC-313057
- Phillips, A.C., D.A. Keefer, and N. Casler, 2018, Supercomputing experiments towards multiscale machine-assisted landform identification from lidar data: 52nd Annual Meeting of the North-Central Section of the Geological Society of America, Ames, Iowa, 14-18 April 2018, GSA Abstracts with Programs Vol. 50, No. 4, doi: 10.1130/abs/2018NC-313057
- Mwakanyamale K., S. Brown, D. Ntalagiannis, A. Phillips, S. Saneiyani and E. Theuerkauf. 2017. Modeling erosion and accretion along the Illinois Lake Michigan shore using integrated airborne and waterborne methods, AGU 2017, Abstract ID # NS31A-0002
- Theuerkauf, E., S. Brown, A. Anderson, K. Mwakanyamale, and A. Phillips. 2017. Coastal monitoring and research to inform a regional sand management strategy along the Illinois Lake Michigan Coast: Coastal GeoTools 2017, Charleston, So. Carolina, 6-7 February 2017.
- Grimley, D.A. and A.C. Phillips, 2017, Geomorphology of the Illinois Episode glaciation (OIS 6) in Illinois: 51st Annual Meeting of the North-Central Section of the Geological Society of America, Pittsburgh, Pennsylvania, 19-22 May 2017 GSA Abstracts with Programs Vol. 49, No. 2, doi: 10.1130/abs/2017NE-291235.
- Phillips, A.C., 2016, Geomorphic map of the lower Wabash Valley, IL-IN-KY: 50th Annual Meeting of the Geological Society of America, Champaign, Illinois, 27-28 April 2016, GSA Abstracts with Programs Vol. 48, No. 5, doi: 10.1130/abs/2016NC-275448.
- Phillips, A.C. and O. Caron, 2015, Wagging the dog: Tales of the deglaciation of the Wabash Valley from its mouth: 49th Annual Meeting of the North-Central Section of the Geological Society of America, Madison, Wisconsin, 19-20 May 2015, GSA Abstracts with Programs Vol. 47, No. 5, p. 18.
- Phillips, A.C., O. Caron, H. Wang, T.H. Larson, and S. Elrick, 2014, Proglacial alluviation in the Wabash Valley, Illinois-Indiana, USA: Challenges in OSL chronology: 14th International Conference on Luminescence and Electron Spin Resonance Dating, Montreal, Canada, 7-11 July 2014.
- Caron, O., M. Lamothe, W. Shilts, and A.C. Phillips, 2014, IRSL as a correlation and potential dating tool for glaciolacustrine sediments: A case study from the southeastern Canadian Appalachians: 14th International Conference on Luminescence and Electron Spin Resonance Dating, Montreal, Canada, 7-11 July 2014.
- Phillips, A.C., T.H. Larson, O. Caron, and R.C. Alberts, 2014, Fluvial History of the Lower Wabash Valley: Slackwater, Torrents, Lazy Rivers: 47th Annual Meeting of the North-Central Section of the Geological Society of America, Lincoln, Nebraska, 24-25 April 2014, GSA Abstracts with Programs Vol. 46, No. 4.
- Phillips, A.C., A. Ismail, T. Larson, and J. Gemperline, 2013, Intercalating slackwater lake and outwash deposits at a bedrock valley confluence in the lower Wabash Valley: 47th Annual Meeting of the North-Central Section of the Geological Society of America, Kalamazoo, MI, 2-3 May 2013, Geological Society of America Abstracts with Programs. Vol. 45, No. 4, p.14
- Phillips, A.C., O. Caron, A. Bryk, E.W. Prokocki, and J. L. Best, 2013, Meander Cutoffs, Floodplain Lakes: Geologic Archives in the Lower Wabash Valley: 47th Annual Meeting of the North-Central Section of the Geological Society of America, Kalamazoo, MI, 2-3 May 2013, Geological Society of America Abstracts with Programs. Vol. 45, No. 4, p.5.
- Stumpf, A.J., D.A. Grimley, L.A. Atkinson, A.C. Phillips, M. Ross, N.D. Webb, A. Ismail, T.H. Larson,

- and J.M. Gemperline, 2013, Ice Streams: A Possible Control on Ice Sheet Dynamics of the Penultimate Glaciation in Illinois, United States: Canadian Quaternary Association Biennial Meeting, Edmonton, AB, Canada, August 21-24.
- Burmeister, K.C., J.A. Nittrouer, A.C. Phillips, and A.B. Bryk, 2012, Nucleation of growth faults along dewatering structures within the Namurian Tullig Formation; Killard Bay, western County Clare, Ireland: Geological Society of America Annual Meeting, Charlotte, North Carolina, 4-7 November 2012, GSA Abstracts with Programs v.44, Paper No. 253-5.
- Phillips, A.C., D.A. Grimley, and D.A. Keefer, 2011, Spatial errors for well logs used in geologic mapping: The consequences of being wrong: Geological Society of America Annual Meeting, Minneapolis, MN, 9-12 October 2011, GSA Abstracts with Programs v.43 No.5, p. 627.
- Grimley, D.A., and A. C. Phillips, 2011, Middle to Late quaternary base level fluctuations in the Kaskaskia Lowland, southwestern Illinois: Geological Society of America Annual Meeting, Minneapolis, MN, 9-12 October 2011, GSA Abstracts with Programs v.43 No.5, p. 508.
- Grimley, D.A., E.A. Oches, and A.C. Phillips, 2010, Chronology and paleoecology of pre-Illinoian and Illinoian deposits in southwestern Illinois: 44th Annual Meeting of the North-Central Section of the Geological Society of America, Branson, MO, 11-13 April 2010, GSA Abstracts with Programs v.42, No.2, p. 68.
- Phillips, A.C. and D.A. Grimley, 2010, Geochemistry of Illinois- and pre-Illinois Episode sediment in southwestern Illinois: 44th Annual Meeting of the North-Central Section of the Geological Society of America, Branson, MO, 11-13 April 2010, GSA Abstracts with Programs v.42, No.2, p. 68.
- Grimley, D.A., E. Geiger, A. Phillips, N. Webb, and A. Stumpf, 2009, Illinoian And pre-Illinoian Paleocology and Paleoenvironments in Central and Southern Illinois: 42nd Annual Meeting of the North-Central Section of the Geological Society of America, Rockford, IL, 2-3 April 2009, GSA Abstracts with Programs Vol. 41, No. 4, p. 58.
- Güneralp, Inci, Rhoads, B.L., A.C. Phillips, and G. Pociask, 2007, GIS based Analysis of Aerial Photography to Evaluate the Response of Meandering Rivers to Human Modification: Examples from Illinois, USA: Paper No. 38-6, GSA Abstracts with Programs, v. 39, n. 6, p. 106.
- Grimley, D.A., A.C. Phillips, and T. Larson, 2006, New Insights on Possible Origins of the “Ridged Drift” in southwestern Illinois: Paper No. 91 8, Geological Society of America Annual Meeting, Philadelphia, 22 25 October 2006.
- Phillips, A.C., Pociask, G.P., Smith, L.R., 2006, Aerial Imagery for Long Term Watershed Evolution Assessment: online document at <http://www.envIRON.uiuc.edu/water2006/presentations/Drew%20Phillips.pdf>, Illinois Water 2006, Urbana, IL, 3-5 October 2006.
- Stumpf, A.J., A.C. Phillips, G.E. Pociask, L.R. Smith, and W.P. White, 2006, Mass wasting and its control on channel behavior and valley formation in the Partridge Creek watershed, Illinois River valley: in Proceedings of the Second Shlemon Specialty Conference in Engineering Geology: Mass Wasting in Disturbed Watersheds, Geological Society of America, Durango CO, 3-5 May 2006.
- Phillips, A.C., A. Pugin, D.A. Grimley, and T.A. Larson, 2005, Anatomy of Drift Ridges Revealed by Shallow Seismic Shear Wave Profiling: AGU Fall Meeting, San Francisco, Paper Number U23C-02.
- Smith, E.C., D.A. Grimley, A.C. Phillips, and R. Vaiden, 2005, Unconsolidated aquifers of the Metro East region: Madison, St. Clair, and Monroe Counties, Illinois: Midwest Groundwater 2005, Champaign, Nov 1-3, 2005.
- Smith, E.C., R.C. Vaiden, and A.C. Phillips, 2004, Regional groundwater mapping in southwestern

Illinois -- Large and small scale applications: Geological Society of America, Abstracts with Programs of the North-Central Section Annual Meeting, St. Louis, Missouri, April 1-2, 2004 vol. 36, no. 3, p. 45.

- Smith, E.C., D.A. Grimley, A.C. Phillips, and R.C. Vaiden, 2004, Glacial and other unconsolidated aquifers of the Metro East Region of Southwestern Illinois: Proceedings, Illinois Water 2004, Urbana, Illinois, Oct. 13-14, 2004, p. 36
- Stohr, C.J., B.B. Curry, B. Brandon, A.B. Dixon-Warren, M.L. Barnhardt, D.R. Larson, A.C. Phillips, A.J. Stumpf, J. Duval, B. Guttman, and D. Korth, 2004, Downhole Geophysical Logging For Quaternary Mapping Applied to Hydrogeologic And Environmental Issues. Geological Society of America, Thirty-eighth Annual Meeting of the North-Central Section, Abstracts with Programs, v. 36, no. 3, p. 44.
- Curry, B.B., D.A. Grimley, and A.C. Phillips, 2003, Slackwater lake deposits along the large rivers in the Midwestern U.S. – Archives of distal glacial environments south of the Laurentide Ice Sheet: Third International Limnogeology Congress, Tucson, Arizona.
- Stumpf, A.J., and A.C. Phillips, 2003, Mapping of America's Heartland: the Status of Quadrangle-scale Geologic Mapping at the Illinois State Geological Survey. CANQUA-CGRG 2003, Annual Meeting, Halifax, Nova Scotia, Abstracts with Programs, p.116.
- Phillips, A.C., L. Smith, A.J. Stumpf, and A. Knight, 2003, Geologic Input for Watershed Assessment on the Spring Bay Quadrangle [display]: 2003 Governor's Conference on Management of the Illinois River, Peoria, October 7-9, 2003.
- Phillips, A.C., B.L. Rhoads, T.J. McTighe, T.J., and C. Klaus, 2002, Photoanalytic assessment of dynamics in tributary streams of the Illinois River basin: Thirty-sixth Annual Meeting of the North-Central Section, Abstracts with Programs, v. 34, no. 2, p. A32.
- Grimley, D.A., B.B. Curry, and A.C. Phillips, 2002, Mid-Wisconsin Episode Lacustrine Deposits Synchronous with Roxana Silt Deposition in Southwestern Illinois: Geological Society of America, Annual Meeting, Abstracts with Programs, v. 34, no. 6, p. 131
- Grimley, D.A., A.C. Phillips, and E. Oches, 2002, A New "Classic" Core from near Collinsville, Illinois, containing a four-fold succession of glacial deposits and soils. Thirty-sixth Annual Meeting of the North-Central Section, Abstracts with Programs, v.34, no. 2, p. 98
- Phillips, A.C., C. Abert, and A. Pugin, 2001, Mapping the American Bottoms region of the Mississippi River: new insights from 3D modeling and high-resolution seismic reflection tests using shear waves. Seventh International Conference on Fluvial Sedimentology, August 6-10, 2001, Lincoln, Nebraska, Fluvial Sedimentology 2001, p. 226.
- Phillips, A.C., T.J. McTighe, and C. Klaus, 2001, Stream Dynamics Assessment in the Illinois River Basin [poster]: 2001 Governor's Conference on Management of the Illinois River, Peoria, October 2-4, 2001.
- Curry, B.B., D.A. Grimley, A.C. Phillips, and R.G. Baker, 2000, Evidence for deep erosion by the Mississippi River near St. Louis under cold, dry conditions during the onset of the last glaciation: Geological Society of America, Thirty-fifth Annual Meeting of the North-Central Section, Abstracts with Programs, v. 33, no. 4, p. 16.
- Grimley, D.A., B.B. Curry, A.C. Phillips, and L.R. Follmer, 2000, Fossil Quaternary wood; new findings in Illinois and Missouri: *In* Landscape and biotic responses to climate variability; future impacts and past lessons, American Quaternary Association Conference, Program and Abstracts, v. 16, p. 65.
- Phillips, A.C., R.J. Gibbs, and G.M. Menon, 1994, Flocculation and particle size distributions in the

Hudson River estuary: AGU Spring Meeting 1994, EOS Transactions, v. 75, n. 16, p. 183.

Phillips, A.C., 1993, Relative effects of tides and source on prodeltaic sedimentation, Glacier Bay, Alaska. Geological Society of America, Annual Meeting, Abstracts with Programs, v. 24, no. 7, p. 276.

Phillips, A.C., and N.D. Smith, 1990, Turbidity currents in submarine channels, Queen Inlet, Glacier Bay, Alaska: Thirteenth International Sedimentary Congress, Nottingham, England, Proceedings, v. 13, p. 420-421.

Phillips, A.C., N.D. Smith, and R.D. Powell, 1987, Marine sediment laminations controlled by tidal fluctuations over an ice-contact delta: Geological Society of America, Twenty-first Annual Meeting of the North-Central Section, Abstracts with Programs, v. 19, no. 4, p. 238.

Phillips, A.C., and N.D. Smith, 1986, Cyclic laminations in prodeltaic glacial marine sediment: Institute of Arctic and Alpine Research, Fifteenth Annual Arctic Workshop, Proceedings, p. 56.

PUBLICATIONS: CONFERENCE PROCEEDINGS WITH PUBLISHED PAPERS

Ismail, M., Y. Kontar, E. Smith, A. Phillips and A. Stumpf, 2009, Misleading Interpretation of Shallow Seismic Methods: Three Case Studies from MASW, P-Wave Reflection and S-Wave Reflection Surveys: Proceedings of SAGEEP March 29 –April 2, 2009, Fort Worth, Texas, CD-ROM edition

Pugin, A.J.M, T.H. Larson, and A.C. Phillips, 2002, Shallow high-resolution shear-wave seismic reflection acquisition using a land-streamer in the Mississippi River flood plain: Potential for engineering and hydrogeologic applications: Symposium on the application of geophysics to environmental and engineering problems, February 10-14, 2002, Las Vegas, Nevada, Proceedings, p. 3-12.

Phillips, A.C., and W.W. Shilts, 2001, Geological history of the Illinois River Watershed: 2001 Governor's Conference on the Management of the Illinois River System, Peoria, Oct. 2-4, Proceedings, pp. 25-34.

Phillips, A.C., N.D. Smith, R.D. and Powell, 1990, Suspended sediment dynamics of glacial deltas: implications for the maintenance of submarine channels: Proceedings of the Second Glacier Bay Science Symposium, Gustavus, Alaska, September 1990, p. 47-49.

PUBLICATIONS: CONTRACT REPORTS

Phillips, A.C., D.A. Keefer, and K. Allan, 2018, Developing Algorithms and Methods for Regional LiDAR-Based Landform Classification: Project Status Report of ISGS and ISWS Activities, October 2017 through March 2018, Fund Title: 547 AG CESU 68-5A12-16-506 ISGS, USDA Natural Resources Conservation Service

Phillips, A.C., D.A. Keefer, and K. Allan, 2018, Developing Algorithms and Methods for Regional LiDAR-Based Landform Classification: Project Status Report of ISGS and ISWS Activities, March 2018 through September 2018, Fund Title: 547 AG CESU 68-5A12-16-506 ISGS, USDA Natural Resources Conservation Service

Phillips, A.C., 2017, Surficial Geology of Saint Francisville Quadrangle, Lawrence and Wabash Counties, Illinois, and Knox County, Indiana: USGS-STATEMAP award number G16AC00296, 1:24,000.

Phillips, A.C., 2016, Surficial Geology of Mount Carmel Quadrangle, Wabash County, Illinois, and Knox

- and Gibson Counties, Indiana: USGS-STATEMAP award number G15AC00505, 1:24,000.
- Phillips, A.C., O. Caron, and T.H. Larson, 2014, Surficial Geology of Maunie Quadrangle, White County, Illinois and Posey County, Indiana: USGS-STATEMAP award number G13AC00240, 1:24,000.
- Larson, T.H., A.C. Phillips, and S.D. Elrick, 2014, Paleoseismic Investigation of the Meadow Bank Lineament in the Wabash Valley Seismic Zone: U.S. Geological Survey, National Earthquake Hazard Research Program, Final Technical Report USGS Grant G12AP20045.
- Phillips, A.C., J. Gemperline, T.H. Larson, and O. Caron, 2013, Surficial Geology of Emma Quadrangle, Gallatin and White Counties, Illinois: USGS-STATEMAP award number G12AC20408, 1:24,000.
- Bryk, A., Phillips, A.C., Prokocki, E.W., and Best, J.L., 2012, Surficial Geology of the Wabash Island Quadrangle, Gallatin (Illinois), Posey (Indiana), and Union (Kentucky) Counties: University of Illinois, USGS-EDMAP award number G11AC20131, 1:24,000.
- Phillips, A.C., 2012, Surficial Geology of Grayville Quadrangle, Edwards and Wabash Counties, Illinois: Illinois State Geological Survey, USGS-STATEMAP award number G11AC20477, 1:24,000.
- Bauer, R.A., Grimley, D.A., Phillips, W.C. and Waldsmith, J., 2011, Overburden Thickness, Geologic Provinces, Shear Wave Velocity Reference Profiles for Illinois. Technical Report: Cooperative Agreement Proposal to the USGS to Complete St. Louis Area Earthquake Hazards Mapping Project's Seismic and Liquefaction Hazard Maps, United States Geological Survey Cooperative Agreement Award Number G10AC00224, 39 p.
- Phillips, A.C., 2009, Surficial Geology of Paderborn Quadrangle, Monroe and St. Clair Counties, Illinois: Illinois State Geological Survey, USGS-STATEMAP award number 08HQAG0084.
- White, W.P, J. Beardsley, A. Phillips, G. Pociask, G. Sass, J. Carrell, and L. Smith, 2009, Tenmile Creek Watershed Assessment Report: Illinois Department of Natural Resources Award Number G2006051, 95 pp.
- Phillips, A.C. 2008. Surficial Geology of New Athens West Quadrangle, St. Clair and Monroe Counties, Illinois: Illinois State Geological Survey, USGS-STATEMAP Award Number 07HQAG0109, 1:24,000.
- White, W.P, A. Phillips, J. Beardsley, D. Devotta, and G. Pociask, 2008, Senachwine Creek Watershed Assessment Report: Illinois Department of Natural Resources, Award No. G2006051, 144 p.
- Phillips, A.C., 2007, Surficial Geology of Freeburg Quadrangle, St. Clair County, Illinois: Illinois State Geological Survey, USGS-STATEMAP Award Number O6HQAG0053, 1:24,000.
- Grimley, D.A. and A.C. Phillips, 2005, Surficial Geology of Grant Fork Quadrangle, Madison County: Illinois State Geological Survey, USGS-STATEMAP Award Number 04HQAG0046, 1:24,000.
- Phillips, A.C., 2005, Surficial Geology of Highland Quadrangle, Madison and St. Clair Counties: Illinois State Geological Survey, USGS-STATEMAP Award Number 04HQAG0046, 1:24,000.
- Phillips, A.C., M.V.M. Miller, G.E. Pociask, L.R. Smith, and J.J. Miner, 2004, Long Term Geomorphic Monitoring Plan and Watershed Assessment Protocols for the Illinois River Basin: *in* M. Pegg (ed.), Watershed Assessment Protocol and Long Term Resource Monitoring Plan: U.S. Army Corps of Engineers, Rock Island District, Award Number DACW25-02-0383, 158 p.
- Phillips, A.C., 2004, Surficial Geology of St. Jacob Quadrangle, Madison and St. Clair Counties: Illinois State Geological Survey, USGS-STATEMAP Award Number 03HQAG0112, 1:24,000.
- Phillips, A.C. and D.A. Grimley, 2004, Surficial Geology of Marine Quadrangle, Madison County: Illinois State Geological Survey, USGS-STATEMAP Award Number 03HQAG0112, 1:24,000.

- Phillips, A.C., 2003, Surficial geology of the Edwardsville quadrangle: Illinois State Geological Survey, USGS-STATEMAP Award Number 02HQAG0042, 1:24,000.
- Phillips, A.C. and D.A. Grimley, 2003, Surficial geology of the Prairietown quadrangle: Illinois State Geological Survey, USGS-STATEMAP Award Number 02HQAG0042.
- Phillips, A.C. and M. Mushrush, 2002, Geomorphological Summary of the Illinois River Basin: Illinois State Geological Survey, U.S. Army Corps of Engineers, Rock Island, Award Number, DACW25-98-D-0017, 3 p., 2 maps.
- Phillips, A.C., B.L. Rhoads, T.J. McTighe, and C. Klaus, 2002, Stream Dynamics Assessment, Illinois River Basin: Illinois State Geological Survey, U.S. Army Corps of Engineers, Rock Island, Award Number DACW25-98-D-0077, 65 p., 7 tbl., 46 figs.
- Phillips, A.C., 2001, Surficial geology of the Granite City quadrangle: Illinois State Geological Survey, USGS-STATEMAP Award Number 00HQAG0151, 1:24,000.
- Phillips, A.C., 2001, Surficial geology of the Collinsville quadrangle: Illinois State Geological Survey, USGS-STATEMAP Award Number 00HQAG0151, 1:24,000.
- Grimley, D.A., A.C. Phillips, and S. Lepley, 2001, Surficial geology of the Monk's Mound quadrangle: Illinois State Geological Survey, USGS-STATEMAP Award Number 00HQAG0151, 1:24,000.
- Phillips, A.C. and B.J. Stiff, 2000, Surficial Geology and Landslide Potential Map: Illinois State Geological Survey, Final Report: Office of Water Resources, Illinois Department of Natural Resources, Agreement S99-313, 1:24,000.
- Phillips, A.C., 2000, Surficial geology of the Waterloo quadrangle: Illinois State Geological Survey, USGS-STATEMAP Award Number 99HQAG0166, 1:24,000.
- Phillips, A.C., 1999, Surficial geology of the Cahokia quadrangle: Illinois State Geological Survey, USGS-STATEMAP Award Number 1434HQ-98-AG2050, 1:24,000.

PUBLICATIONS: OTHER

- Prairie Research Institute, 2017, Assessing Progress on the 1997 Integrated Management Plan for the Illinois River Watershed: Report to Lt. Governor Sanguinetti, Illinois River Coordinating Council, 28 p. + Appendices.
- Phillips, A.C., and J. Steinfeldt, 2003, The Evolving River [trail poster]: Robert Allerton Park, Mahomet, University of Illinois at Urbana-Champaign.
- Phillips, A.C., 2001, Geological setting of Upper Macoupin Creek: Macoupin County Soil Conservation District: White paper for watershed planning, 7 p. + figs.

ACADEMIC SERVICE ACTIVITIES

Student Theses Supervised

- Schwarz, Alex, in progress, Lake ice detection from high frequency multispectral imagery [Co-advisor with C. Diao, UIUC Dept. Geography]
- Maraldo, D., in progress, Response of Coastal Glaciers in Alaska to Changes in Climate since the End of the Little Ice Age, University of Illinois at Urbana-Champaign, Natural Resources and Environmental Sciences [R. Hunter, Faculty Advisor]
- Keefer, D.A., in progress, Characterizing and Constraining Uncertainty in Geologic Modeling: Ph.D. Dissertation, University of Illinois at Urbana-Champaign, Illinois Informatics Institute

- [committee member with the late L.G. Gasser and C. Blake, Faculty Advisor]
- Stewart, C.J., 2015, Sedimentology of an Illinois Episode Ice-Contact Lake, Southwestern Illinois: B.S. Thesis, University of Illinois at Urbana-Champaign, Department of Geology
- Zhang, Q., 2015, Sedimentology and Stratigraphy of Slackwater Lake Deposits, Little Wabash River, Illinois: B.S. Thesis, University of Illinois at Urbana-Champaign, Department of Geology [with J. Best, Faculty Advisor]
- Gemperline, J.M., 2013, Surface profile and bed model of the Illinois Episode Glacier: M.S. Thesis, University of Illinois at Urbana-Champaign, Department of Geology, [external committee member; A. Anders, Faculty Advisor]
- Riggins, S., 2000, Implications of petrographic and particle size variability in a core from the American Bottoms floodplain: B.S. Thesis, University of Illinois at Urbana-Champaign, Department of Geology [S. Altaner, Faculty Advisor]
- Norton, J., 1999, A virtual field trip to Lake County, Illinois [High School Curriculum]: Continuing education project, NFSI Program

Classes Taught

- | | |
|------------|--|
| 2016, 2012 | <i>The Geology of County Clare, Western Eire: Sedimentology, paleoecology and evolution of a sedimentary basin</i> (GEOL 415/515), University of Illinois at Urbana-Champaign |
| 2013 | <i>Glacial Sedimentary Environments</i> [Guest instructor, field trip leader]: Sedimentology and Stratigraphy (GEOL 440), University of Illinois at Urbana-Champaign |
| 1998 | <i>Geomorphology</i> [Technical Advisor and Lecturer]: Developed curriculum and guest speaker series for undergraduate geomorphology course, University of Illinois at Urbana-Champaign, David Grossman, Lecturer, Fall 1998 |
| 1996 | <i>Oceanography, PSAT/SAT Math Preparatory, Mathematical Problem Solving</i> : Summer Institute for the Gifted, Bryn Mawr College, Pennsylvania |
| 1990-1993 | <i>Oceanography, Earth Science, Visualizing Fluid Mechanics, Algebra</i> : School of the Art Institute of Chicago. |
| 1991 | <i>Sedimentology and Stratigraphy</i> (EES 215): University of Illinois at Chicago |
| 1990 | <i>The Evolving Earth</i> (EES 100): University of Illinois at Chicago |
| 1984-1992 | Teaching Assistant, various undergraduate and graduate courses, University of Illinois at Chicago |

PROFESSIONAL SERVICE ACTIVITIES

Academic Committees

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| 2018- present | Member, Advisory Board, Professional Science Master's degree program in GIScience, Eastern Illinois University, Charleston, Illinois |
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Working Groups

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| 2019-present | iSEE Water Council [University of Illinois at Urbana-Champaign] |
| 2016 – present | Sand Management Working Group, Evanston, IL [Coastal Management Program] |
| 2014 – present | Cahokia Mounds slope stability working group, 2014-present |
| 2013 – present | Critical Zone Observatory, Theme A: Geology Research Group |
| 2011 – present | Abandoned Petroleum Well Hazard Study Group, Wabash and Ohio River Coordinating Council, 2011-present |
| 2009 – present | Study Team, Current Condition assessment for Illinois Stream Mitigation Guidance (Stream Assessment Method for Processing Section 404 Clean Water Act Permit Applications in the State of Illinois, U.S. Corps of Engineers, St. Louis District |

2005	Study Team, Level 4 Ecoregions delineation for Illinois, US Environmental Protection Agency
2003 – 2012	St. Louis Urban Hazard Mapping Group [Illinois, Missouri]
2003 – 2005	Tri-state Urban Hazard Mapping Group [Illinois, Indiana, Kentucky]
2000 – present	System and Technical Team, Illinois River Ecosystem Restoration Project, US Army Corps of Engineers, Rock Island, and Illinois Department of Natural Resources
2000-2002	Technical Advisor, sediment delivery and stream stabilization tasks in Judy's Branch watershed (Edwardsville area), IL Department of Natural Resources, Office of Water Resources

Offices in Professional Societies

2005 – present Secretary, Great Lakes Section – SEPM

Illinois State Geological Survey Committees

2018-2019	Search Committee Chair, <i>Assistant or Associate Research Scientist, Geophysicist</i>
2017-2018	Search Committee Chair, <i>Visiting Assistant or Associate Research Scientist, Geophysicist</i>
2017-2018	Search Committee Chair, <i>Map Standards Coordinator, Geoscience Information Stewardship Section</i>
2015 – 2016	50 th Annual Meeting North-Central Section GSA, Champaign, IL
2015 – 2016	Search Committee, <i>Coastal Geologist, Quaternary and Engineering Geology Section</i>
2014	Search Committee, <i>Sediment Hydraulic Engineer, Watershed Science Section, Illinois State Water Survey</i>
2013	Search Committee Chair, <i>Geospatial Analyst, Quaternary and Engineering Geology Section</i>
2013	Search Committee, <i>Sediment Transport Scientist, Watershed Science Section, Illinois State Water Survey</i>
2012 – present	Geophun Committee (President 2015-2017)
2010 – present	Coordinator, Illinois Geologic Mapping Advisory Committee
2010 – 2015	Planning Committee, Biennial Conference on Management of the Illinois River System
2001 – 2003	Understanding Our Earth Seminar Series

Peer Reviewer: Canadian Journal of Earth Sciences, Journal of Sedimentary Research, Journal of Glaciology, US Geological Survey Professional Papers, Illinois State Geological Survey

CONFERENCES CHAIRED

- Co-Chair, *Interactive Digital Technologies Open House, 14th Biennial Governor's Conference on Management of the Illinois River, 2-3 October 2013, Peoria*
- Co-Chair, *Interactive Digital Technologies Open House, 13th Biennial Governor's Conference on Management of the Illinois River, 4-6 October 2011, Peoria*
- Co-Chair, *Interactive Digital Technologies Open House, 12th Biennial Governor's Conference on Management of the Illinois River, 21-22 October 2009, Peoria*
- Co-Chair, *Sediment & Water, 12th Biennial Governor's Conference on Management of the Illinois River, 21-22 October 2009, Peoria*
- Chair, *The River Through Time: Environment, Culture, Resources, 11th Governor's Conference on Management of the Illinois River, 4-6 October 2007, Peoria*
- Co-Chair, *Technology You Can Use: A Workshop, 11th Governor's Conference on Management of the Illinois River, 4-6 October 2007, Peoria*

- Chair, *Twenty-first Century Resource Assessment: Remote Sensing*: Governor's Conference on the Management of the Illinois River System, Tenth Biennial Meeting, October 6, 2005
- Co-chair, *Twenty-first Century Resource Assessment*: Governor's Conference on the Management of the Illinois River System, Tenth Biennial Meeting, October 2005
- Co-chair, *Monitoring and Evaluation Techniques*: Governor's Conference on the Management of the Illinois River System, Tenth Biennial Meeting, October 2005
- Co-Chair, *Contrasting Records of Different Glacial Episodes or Different Glacial Lobes*, at North-Central GSA Conference, Normal, IL, 4/23/2001
- Co-leader, *Quaternary and Environmental Geology of St. Louis Metro East Area*, for North-Central GSA Conference, Normal, IL, 4/21-22/2001

INVITED SPEAKER

- *Geologic Mapping Present And Future At The Illinois State Geological Survey*: US Army Construction Engineering Research Laboratory, January 23, 2017
- *The Meadow Bank: Tectonics or Torrents?*: University of Illinois at Urbana-Champaign, April 10, 2014
- *Towards Construction of Three-dimensional Geologic Maps*: Tri-State Quaternary Mapping Conference, Evansville, Indiana, November 18-19, 2003
- *Suspended Sediment Dynamics at a Glacial Delta*, Rutgers University, March 1995
- *Suspended Sediment Dynamics at a Glacial Delta*, University of Delaware, May 1995

OUTREACH ACTIVITIES

- Field Instructor: *ISGS Geological Science 5th grade Field Trip to Kickapoo State Park*, 2012-2015
- Speaker: *Geology of Alaska*, presented to Osher Lifelong Learning Institute, Champaign, 4/18/2011
- Speaker: *A River, A Story: An emotional-scientific landscape of the Wabash River*, Prairie Lightning Symposium, Prairie Research Institute, Champaign, 11/16/2011
- *Naturally Illinois*: Contributor to Quaternary and Engineering Geology Exhibits, 2009-2014
- *Dendrochronology display*, ISGS Open House, 7-8 March 2008
- Co-leader: *The Future of Mapping in the Peoria Area*, Mapping Stakeholders meeting, December 2008
- Presenter: In-class and field workshops on the geology of Illinois, various elementary schools in Urbana and Champaign, 2004-present
- Writer: *Illinois River Ecosystem Monitoring Plan*, Summary for Board Report, 2005
- Speaker: *Mapping results from the Metro-East St. Louis region*, ISGS Understanding Our Earth Seminar, February 3, 2005
- Workshop Leader: *Geographic Positioning Systems and Mapping*: Summer Math and Science Academy, Central High School, Champaign, Illinois, July 2, 2003
- Reviewer: *Watershed Management Plan for Macoupin County Soil Conservation District*, 2002

SOCIETY AFFILIATIONS

- American Geophysical Union (member since 1987)

- Geological Society of America (member since 1986)
 - Quaternary Geology and Geomorphology Division (member since 1998)
 - Sedimentary Geology Division (member since 1988)
- International Association of Sedimentology (member since 1993)
- Society for Sedimentary Geology (member since 1986)
 - Great Lakes Section (Secretary since 2006; member since 2000)

PROFESSIONAL DEVELOPMENT

- Geoscene 3D software training, February 9-10, 2016
- Cardiopulmonary Resuscitation (CPR) and First Aid Certificates, December 16, 2015
- Cardiopulmonary Resuscitation (CPR) and First Aid Certificates, December 18, 2013
- GSI3D workshop, October 8, 2013
- Kepner-Tregoe Project Management Training, September 16-18, 2013
- JULIE E-Request training, January 8, 2013
- Practical Geophysics Short Course, Champaign, IL, September 27-28, 2012
- Great Lakes SEPM Field Conference, New Albany, Indiana, September 23-25, 2004
- Cardiopulmonary Resuscitation (CPR) Certificate, July 30, 2004
- Great Lakes SEPM Field Conference, Cuyahoga Falls, Ohio, September 26-28, 2003
- Learning ArcGIS 3D Analyst, ESRI short course, January 2003
- Rockworks short course, May 2002
- Adobe Illustrator short course, May 2002
- USGS Stream Restoration Workshop, February 20-22, 2002
- Soil Geomorphology (audited class), Don Johnson, Department of Geography, University of Illinois at Urbana-Champaign, Fall 2001
- Oracle short course, May 2001