*Curriculum Vitae* Marc G. Kramer

Assistant Professor of Environmental Chemistry, Washington State University, School of the Environment, Vancouver WA/ Tel: 415-608-8712. email: [marc.kramer@wsu.edu](mailto:mkramer@ucsc.edu)

**EDUCATION**

2001-2003 American Academy of Sciences Postdoctoral Fellow. NASA Ames Research Center.

2001 PhD. Oregon State University.

1997 M.S. Montana State University.

1993 B.A. University of California, Berkeley. Environmental Sciences

**WORK EXPERIENCE**

2015- Assistant Professor, School of the Environment, Washington State University, Vancouver WA.

2013-2015 Associate Professor (non-tenured), Soil and Water Science Department, University of Florida.

2011-2013 Senior Climate Change Scientist US Forest Service. R6 Pacific Northwest Region. Portland, Oregon.

2006-2011 Research Scientist (Associate Rank), University of California, Santa Cruz, Earth and Planetary Sciences Department.

2003-2007 Senior Scientist, NASA Ames Research Center.

2003-2005 Adjunct Assistant Professor, Earth Systems Science & Policy Institute Cal State Monterey Bay.

2001-2003 NRC American Academy of Sciences Postdoctoral Research Fellow at NASA Ames.

1997-2001 Graduate Research Assistant. Oregon State University, Corvallis, OR (school year).

1995-1997 Graduate Research Assistant. Montana State University, Bozeman, MT.

1992-1996 Senior Computer Programmer. U.C. Berkeley, Department of Environmental Policy and Management. Berkeley, CA.

**AWARDS/HONORS**

* 2016. American Geophysical Union. AGU Liaison to the U.S. National Committee for Soil Science. The National Academies of Sciences, Engineering, and Medicine. 2018-2020 appointment.
* 2017. American Geophysical Union Nominee. Selected for Climate Science Day on the Capitol Hill. (one of 30 scientists nationally, to meet with US Congressionals and discuss climate science and it’s role in policy and funding priorities**.** March 2017
* Selected. 2014 Pacific Northwest National Laboratory (Department of Energy) Visiting Scholar 2014-2016 “Fundamental biochemical research on terrestrial and subsurface ecosystem processes”.
* 2014 Top 25 Reviewer Biogeochemistry. “Certificate of Excellence.”
* 2008 Tied for 1st place. Best Paper in Session. Deep Soil Symposium. Geological Society of America.
* 2004 Recipient. NASA Ames University Affiliated Research Center. Distinguished Scholar. Nominated Distinguished Senior Research Fellow.
* 2002 Recipient. NRC American Academy of Sciences 2 year fellowship (one of 6 recipients in a nationally competitive program) to model surface water flow dynamics on Earth and Mars.
* 2000 Recipient. National Science Foundation. Best student paper (fourth place). 4th International Conference on Integrating GIS and Environmental Modeling, Banff, Canada, Sept, 2000.
* 1996 Recipient. MSU Mountain Research Center Outstanding Student Fellowship.
* 1992 Recipient. UC Berkeley, Planning Department Award for Prototype Campus Trees GIS project.

**RECENT AWARDED AND PENDING GRANTS**

**PENDING WSU GRANTS**

* NSF DEB “Climatic Thresholds in Carbon Stabilization” PI Kramer. Invited for Full Submission 5/2017
* US Fish and Wildlife Service. Natal origins of migratory monarchs in western North America

$75K. PI Shultz, CoPI Kramer

* Exploratory Grant: A novel multi-isotope labeling technique to study the fate and function of organic amendments in sustainable farming systems. $100K. USDA AFRI. PI Kramer. Invited. 4/2017

**RECENTLY FUNDED (>$7M total)**

**WSU Grants (2015-present)**

**2016**

* Murdock Charitable Trust, WSU Vancouver Water Instrumentation (co-PI), $178,000.
* “Quantifying the flux of water isotopes to the atmosphere from spatially heterogeneous landscapes” WSU Mini Grant $7,500 CoPI. Satus: Roughly half of the funds have been spent for this grant.

**University of Florida Grants (2013-2015)**

**2015**

* USDA AFRI. 2014 Strengthening U.S. graduate education in agricultural sciences through international research focused on managing water scarcity in diverse agro-ecosystems. CoPI. Kramer. $262,453. 2015-2019 (At University of Florida). Status: Grant remained at Florida. Included funding for multiple PhD Scholarships in Agroecology.

**2014**

* Very high resolution molecular characterization using FTICR of dissolved organic matter combined with metatranscriptomics from terrestrial ecosystems. Kramer.PI. US Department of Energy. Pacific Northwest National Laboratory. 2014-2016. User Proposal. $56,000 in instrument and technician time for FTICR work. Status: Samples were run and analyses of data underway.
* Collaborative Research Initiative on Sustainability and Protection of Florida Springs – St. Johns River Water Management District. Springs Protection Initiative. $3M. 2014-2018. (Co-PI). Marc Kramer. $297,000 to Kramer. Quantifying Excess Nitrogen and Phosphorous in the Soil Zone’. Status: Grant remained in Florida. Kramer’s portion included support for two PhD students who remained at Florida and are now working on the project.

**2011**

* NASA/USDA. North American Carbon Program. Soil Carbon Dynamics in Management Intensive Grazing Dairy Systems $600K (Co-PI). 2011-2016. Marc Kramer. $150,000 portion. Status: The grant was transferred to Florida and resulted in a single student lead paper in *Nature Communications*. Grant is now closed.

**GRANTS FUNDED AS PI 2004-2010 ($2,343,500)**

**2010**

* AT&T. High Resolution Mapping of Foehn Winds to Reduce Fire Risk Along Utility Pole Lines Across the State of California. $30K (PI) Marc Kramer. 2010.
* Kearney Foundation of Soil Science. Davis, California. Litter Photodegradation Impacts On Dissolved Organic Matter Formation And Persistence In California Grassland Soils. $100K (PI) Marc Kramer. 2010-2012.
* United States Department of Agriculture. Agricultural Research Service –High Performance Computing Support for Environmental Modeling. $42K. (PI) Marc Kramer. 2010.

**2009**

* Institut für Bodenkunde. Collaborative Research 14C dating for Hawaii Ecosystem Research. $6K, (PI) Marc Kramer. 2009.
* Craighead Institute. Mapping seasonal wind patterns in Coastal Canada for Assessment of Wind Power Generation on Bird Migration Routes Across the Pacific Flyway. (PI) Marc Kramer. $4K. 2009.

**2008**

* British Petroleum. Evaluation of an Ultralight High-Resolution Multispectral Lidar to Assess Soils Along Gas Pipeline Corridors. $50,000 Year 2. (PI) Marc Kramer. 2008.

**2007**

* USDA CSREES. Early Career/Young Investigator Award. Pedogenic and Climatic Thresholds in Carbon Stabilization. Competitive Proposals Award. 4 years. $380,000 (PI) Marc Kramer, UC Santa Cruz. 2007-2011
* British Petroleum. Evaluation of an Ultralight High-Resolution Multispectral Lidar to Assess Soils Along Gas Pipeline Corridors. $42,000 Year 1. (PI) Marc Kramer. 2007.

**2006**

* NASA. Explicit Biological Control Agent Modeling of Invasive Species Using NASA Remote Sensing and Micro Climate Models . $1M. (PI) Marc Kramer 2006-2010

* NASA. Lidar Visualization Software Development: Intelligent Data Understanding Program. $50K (PI) Marc Kramer. (Host Institution: UC Santa Cruz). 2006.

**2003-2005**

* NASA Ames. Surface Wind and Climate Simulation Using Next Generation Technologies (PI). $450K. 2004-2007. (Host Institution: CSUMB).
* NASA Ames. Supporting funds to Host Conference: Second International Conference on Mechanisms of Organic Matter Stabilization In Soil. $7.5K (PI). 2005.
* NSF. N-isotope fractionation and measures of organic matter alteration across ecosystems. (PI). $71K. 2003-2006. (Host Institution: CSUMB).
* Wilberforce and Bullit Foundation. Biomass dynamics across a temperate rainforest biome: The Lidar transect. (PI). Wilberforce and Bullit Foundation. 2003-2005. (Host Institution: CSUMB).
* NASA Ames. Surface Wind and Climate Simulation Using Next Generation Technologies (PI). $450K. NASA. 2005- 2006. Host Institution: UC Santa Cruz –(UARC).

**GRANTS FUNDED AS CoI 2004-2007 ($1,290,000)**

* USDA. Key role of nitrogenous compounds in the stabilization of organic matter in mineral soils. 2006-2009. (Host Institution: UC Santa Cruz). $300K.

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| * NASA. Modeling and Synthesis of the Effects of Land Use Change on Carbon and Trace Gas Budgets over the Amazon Region. 2006-2008. $300K |

**2003-2005**

* NASA Office of Earth and Space Science (OES) Large-Scale Biosphere-Atmosphere Experiment in Amazonia (LBA): Controls on stream DOC flux and composition in the Amazon region, Tapajos national forest. TG-05. $600K. 2003-2005

**Manuscripts in preparation** (*within 6 monthes of submission*)

Symbols denote: \*\*postdoc, \*graduate student advising

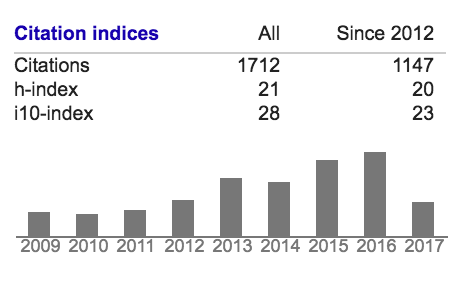
* MG Kramer, OA Chadwick, P Vitousek. [*In preparation*]. Climatic controls on dissolved organic matter retention by minerals at the global scale
* MG Kramer, OA Chadwick, P Vitousek. [*In preparation*]. Evidence for climatically controlled accumulation of oxidized plant compounds in the subsoil.
* \*Reyes, L, G. \*Kahl, MG Kramer [*In preparation*]. Biogeochemical response under contrasting land cover during a late fall extreme warm rainfall anomaly in the pacific northwest

**RECENT ARTICLES AND BOOK CHAPTERS (39 total)**

**Research Gate:** [**https://www.researchgate.net/profile/Marc\_Kramer**](https://www.researchgate.net/profile/Marc_Kramer)

**Google Scholar:** [**http://scholar.google.com/citations?user=wCaz9FkAAAAJ&hl=en**](http://scholar.google.com/citations?user=wCaz9FkAAAAJ&hl=en)

**Google Scholar:**

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Symbols denote: \*\*postdoc, \*graduate student advising

……………….. Publications at Washington State University and University of Florida…….………..……..

1. R. Jackson .K. Lajtha, S. Crow. G.Hugelius, MG Kramer, G. Piñeiro [*In Press*]. The ecology of soil carbon: pools, vulnerabilities, and biotic and abiotic controls. *Annual Review of Ecology, Evolution and Systematics*.

Impact factor 11.0 . Invited Review. Contributions: Lead author on mineral-carbon interactions section and edited manuscript throughout.

1. \*\*J. Sanderman and MG Kramer. [In Revision]*.* Dissolved organic matter retention in volcanic soils with contrasting mineralogy: a column sorption experiment. *Biogeochemistry.*

Impact factor 3.4. Contributions: Wrote grant to support work, concieved of experiment, collected and contributed primary data, co-authored paper. Post doc on the project was primary author

1. **M.G. Kramer**, K. Lajtha, A. Aufdenkampe. [*In Press*] Natural abundance 15N and C/N soil depth trends controlled more by association with minerals than by microbial decay. *Biogeochemistry Letters*

Impact factor 3.4. Contributions: Concieved of experiment, collected and contributed primary data, and was primary author on the paper.

1. **M.G. Kramer** and OA Chadwick. 2016. Controls on carbon storage and weathering in volcanic ash soils across a high elevation climate gradient on Mauna Kea, Hawaii. *Ecology.* 97 (9) 2384-2395.

Impact factor 4.7. Contributions: Concieved of experiment, collected and contributed primary data, and was primary author on the paper.

1. \*Machmuller, Megan B., **Marc G. Kramer**, Taylor K. Cyle, Nick Hill, Dennis Hancock, and Aaron Thompson. 2015. Emerging land use practices rapidly increase soil organic matter." *Nature communications* 6:6995.

Impact factor 11.3. **Contributions:** Wrote grant that funded the work, co-concieved of experiment, collected and contributed primary data, co-authored and edited paper. Provided menthorship to PhD student. PhD student on the project was primary author.

1. \*M. Mobley, D. Richter, K.Lajtha, **M.G. Kramer** [*2015*]. Surficial gains and subsoil losses of soil carbon and nitrogen during secondary forest development. *Global Change Biology.* 21 (2) 986-996.

Impact factor 8.4. **Contributions:** Provided menthorship/avdising to PhD student. Collected and

contributed primary data, co-authored and edited paper. PhD student on the project was primary author.

1. K. Lajtha, … 39 others including MG Kramer. 2017. Brave new world. *Biogeochemistry* DOI 10.1007/s10533-017-0316-y. Editorial Paper.

Impact factor 3.4. Contributions: Co-author on this editorial, edited manuscript, provided input on text.

1. S.D. Frey1, S. Ollinger1,2, K. Nadelhoffer3, R. Bowden4, E. Brzostek5, A. Burton6, B.A. Caldwell7, S. Crow8, C.L. Goodale9, A.S. Grandy1, A. Finzi10, **M.G. Kramer11**, K. Lajtha7, J. LeMoine3, M. Martin2, W.H. McDowelll, R. Minocha12, J.J. Sadowsky1, P. Templer10, and K. Wickings1[*2014*]. Chronic nitrogen additions suppress decomposition and sequester soil carbon in temperate forests. *Biogeochemistry Letters. 121*(2), 305-316 *\*\*\*Top 10 (Highly) Cited Paper in Biogeochemistry in 2016*.

Impact factor 3.4. **Contributions**: Collected and contributed primary data, edited and provided text

for my seciotn of the text which was on sequential density fracitonation results.

1. \*\*SafeeqM. G. E. Grant2, **M. G. Kramer**3, and B. Staab3 [*2014*] A geohydrologic framework for characterizing summer streamflow sensitivity to climate warming in the Pacific Northwest, USA. *Hydrology and Earth System Sciences*. *11*(3).

Impact factor:3.5. **Contributions**: Develloped the lithic permeability data set for Oregona nd Washington. Wrote sections of the paper (methods and results) on that in addition to editing throughout. Funded the post doc on project.

1. \*S. W Buettner; **M. G Kramer**; O.A Chadwick; A. Thompson. [*2014*]. Mobilization of colloidal carbon during iron reduction events in basaltic soils. *Geoderma. 221*, 139-145

Impact factor: 2.9. **Contributions:** Conceieved of experiment, contributed data, mentored student, provided edits to paper.

1. Luce, C. B.Staab, **M. G. Kramer**, S. Wenger, D. Isaak, C. McConnell. [*2014*]. Sensitivity of Summer Stream Temperatures to Climate Variability in the Pacific Northwest. *Water Resources Research. 50*(4), 3428-3443

Impact factor: 3.8. **Contributions:** Contributed stream temperature data to the project, edited and co- wrote

manuscript.

1. LajthaK. K. Townsendb, **M. G Kramerc**, F. Petersonb, C.Swanstond, R. D. Bowdene, K. Nadelhoffer[*2014*]. Changes to Particulate and Mineral-Associated Soil Carbon after 50 Years of Detrital Manipulations.  *Biogeochemistry. 119*(1-3), 341-360

Impact factor 3.4. **Contributions:** Contributed primary data to project, performed detail data analysis on 14C density fractionation portion of the project, wrote major portions of the text.

1. P. Stine, P. Hessburg,T. Spies, **M.G. Kramer**, C. Fettig, A. Hansen, J. Lehmkuhl, K. O’Hara, K. Polivka, P. Singleton. S. Charnley, A. Meschel. 2014. The Ecology and Management of Moist Mixed-conifer Forests in Eastern Oregon and Washington; a Synthesis of the Relevant Biophysical Science and Implications for Future Land Management. USDA General Technical Report. US Forest Service.

**Contributions:** Lead and wrote the climate change impacts sections of the mansucript.

1. Throop, H. L., Lajtha, K., and **Kramer, M**. (2013). Density fractionation and 13C reveal changes in soil carbon following woody encroachment in a desert ecosystem. *Biogeochemistry*, *112*(1-3), 409-422.

Impact factor 3.4. **Contrubitions:** provided primary data to paper on 15N and 13C. Edited mansucript.

1. \*\*Sanderman, J., and **Kramer, M. G.** (2013). Differential production yet chemical similarity of dissolved organic matter across a chronosequence with contrasting nutrient availability in Hawaii. *Biogeochemistry Letters*, *113*(1-3), 259-269.

Impact factor 3.4. Contributions: Wrote grant to support work, concieved of experiment, collected and contributed primary data, co-authored paper. Post doc on the project was primary author

……………….….Publications at University of California Santa Cruz and prior…….………..……..

1. **Kramer, M. G.**, Sanderman, J., Chadwick, O. A., Chorover, J., & Vitousek, P. M. (2012). Long-term carbon storage through retention of dissolved aromatic acids by reactive particles in soil. *Global Change Biology*, *18*(8), 2594-2605.
2. \*\*E. Spiotta, O.A.Chadwick, **M.G. Kramer**, M.Carriah (2011) Carbon delivery to deep mineral horizons in Hawaiian rain forest soils *J. Geophys. Res*., 116, G03011, doi:10.1029/2010JG001587
3. D. B. Richter, S. S. Andrews, S.Billings, C. A. Cambardella, N. Cavallaro, J. DeMeester, A. J. Franzluebbers, S. Grandy, S. Grunwald, J.Gruver, A. S. Hartshorn, H. Janzen, **M. G. Kramer,** J. K. Ladha, K. Lajtha, G. Liles, D. Markewitz, P. J. Megonigal, A. Mermut, C. Palm, C. Rasmussen, C. J. Richardson, D. A. Robinson, P. Smith, C Stiles, R. L. Tate, A. Thompson, A. J. Tugel, H. van Es, L. West, S. Wills, D. Yaalon, and T. M. Zobeck.(*2011*). Soils and human-soil relations are changing rapidly: Proposals from SSSA’s new Cross-Division WorkGroup on Soil Change.*SSSAJ: Volume 75: Number 5 • November–December 2011.*
4. \*\*Ge, Shaokui; Smith, R, **Kramer, M.G**.; Carruthers, R., (2011 Dynamics of photosynthetic photon flux density (PPFD) and estimates in coastal northern California. [*Theoretical and Applied Climatology*](http://www.springerlink.com/content/0177-798x/)*:* 105(1-2):107-118, DOI: 10.1007/s00704-010-0368-6.
5. \*\*Ge, Shaokui, R.I Carruthers, **M. G. Kramer**, J.H Everitt, G.L. Anderson. (2011). Multiple-level defoliation assessment with hyperspectral data: integrate continuum-removal absorption with red edge. *Int. J. Remote Sensing.* 32(21):6407-6422.
6. Kleber, Markus,Nico, P.,Plante, A.; Filley, T., **Kramer, M. G**.,Swanston, C.; Sollins, P. (2011) ) Old and stable soil organic matter is not necessarily chemically recalcitrant: implications for modeling concepts and temperature sensitivity. *Global Change Biology.* 17(2):1097–1107.
7. \*\*Robert Mikutta, K. Kaiser, N. Dörr, A. Vollmer,O. A. Chadwick , J. Chorover , **M. G. Kramer** , G. Guggenberger. *2010.* Mineral impact on organic nitrogen across a long-term soil chronosequence (0.3 4100 kyr). *Geochimica et Cosmochimica Acta.* 74(7):2142-2164.
8. **Kramer, Marc G.,** K. Lajtha, G.Thomas, P. Sollins. 2009. Contamination effects on soil density fractions from high N or C content sodium polytungstate. *Biogeochemistry* 92:177–181.
9. Phillip Sollins, **Marc G. Kramer,** Christopher Swanston, Kate Lajtha, Timothy Filley. 2009. Sequential Density Fractionation across Soils of Contrasting Mineralogy: Evidence for both Microbial-and Mineral-Controlled Soil Organic Matter Stabilization*.* *Biogeochemistry.* 96:209–231.
10. \*\*Robert Mikutta, G. Schaumann, D. Gildemeister, S. Bonnevillec, **M.G. Kramer,** J. Chorover, O. A. Chadwick, G. Guggenberger. *2009*. Biogeochemistry of mineral-organic associations across a long- term mineralogical soil gradient (0.3-4100 kyr), Hawaiian Islands. *Geochimica et Cosmochimica Acta.* 73(7):2034-2060.
11. Watson, Fred, T.. N. Anderson, M.G. Kramer, J. Detka, T. Masek, Simon Cornish, Steve Moore*.2009.* Book Chapter “Effects of Wind, Terrain and Vegetation on Snowpack *in* Ecology of Mammals in Central Yellowstone, Springer Verlag. Ch5: 67-85.
12. Sollins, Phillip, C. Swanston, and **M. Kramer.** 2007. Stabilization and destabilization of soil organic matter - a new focus. *Biogeochemistry* 85:1-7.
13. Sollins, Phillip, C. Swanston, M. Kleber, T. Filley, M.G. Kramer, S.Crow, B. Caldwell, K. Lajtha, and R. Bowden. 2006. Organic C and N stabilization in a forest soil: evidence from sequential density fractionation. *Soil Biology and Biochemistry*. 38: 3313-3324.
14. Kao, David, **M.G. Kramer** A. Love J. Dungan and A. Pang.  2005. Visualizing distributions from multi-return lidar data to understand forest structure. *Special issue on Geovisualization with The Cartographic Journal*. 41(1): 1-14.
15. DeGayner, Eugene, **M.G. Kramer**, J. G. Doerr, M. J. Robertsen. 2005. Windstorm disturbance effects on forest structure and black bear dens southeast Alaska. *Ecological Applications.* 15(4):1306-1316.
16. **Kramer, Marc, G.,** R.S. Sletten, P. Sollins. 2004. Soil carbon dynamics along a windthrow disturbance sequence in southeast Alaska. *Ecology*. 85(8): 2230-2244.
17. Harcombe Paul, A., S. Greene, **M.G. Kramer**, T. Spies, S. Acker, T. Valentine. 2004. The influence of fire and windthrow dynamics on a coastal spruce hemlock forest in Oregon, USA, based on aerial photographs spanning 40 years*. Forest Ecology and Management.* 194: 71-82.
18. Kramer, Marc G., P. Sollins, R.S. Sletten, P. Swart. 2003. N isotope fractionation and measures of organic matter alteration during decomposition. *Ecology.* 84(8): 2021-2025.
19. **Kramer, M,** C. Potter, D. Des Marias, and D. Peterson. (2003). New Insight: A Martian waterway of ancient lakes and discontinuous rivers. *Eos.* 84(1): 1,6.
20. Cabrol, N. A., E. A. Grin, M. H. Carr, B. Sutter, J. M. Moore, J. D. Farmer, R. Greeley, D. J. Des Marais, **M. G. Kramer,** H. Newsom, C. Barber, I. Thorsos, K. L. Tanaka, N. G. Barlow, D. A. Fike, M. L. Urquhart, B. Grigsby, F. D. Grant, and O. de Goursac. 2003. Exploring Gusev Crater with MER A: Review of Science Objectives and Testable Hypotheses. *JGR-Planets: Special Mars Exploration Rover (MER) mission* Issue. vol. 108, noE12, pp. ROV17.1-ROV17.21 (2 p.)
21. **Kramer, Marc G**., A.J. Hansen, M. Taper, and E. Kissinger. 2001. Abiotic controls on windthrow and forest dynamics in a coastal temperate rainforest, Kuiu Island, southeast Alaska*. Ecology.* 82(10): 2749-2768.
22. Caouette, John P., **M.G. Kramer,** and G.J. Nowacki. 2000. Deconstructing the volume-based paradigm in the Tongass National Forest: Analysis of Timber Volume and Timber Volume. General. Technical. Report. PNW-GTR-120. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. [www.fs.fed.us/pnw/pubs/gtr482.pdf](http://www.fs.fed.us/pnw/pubs/gtr482.pdf)
23. Bormann, Bernard.T., and **M.G. Kramer.** 1998. Can ecosystem process studies contribute to new management strategies in coastal Pacific Northwest and Alaska? *Northwest Science* 72(2): 77-83.
24. Nowacki, G.J., and **M.G. Kramer.** 1998. The effects of wind disturbance on temperate rain forest structure and dynamics of southeast Alaska. Review Paper: General. Technical. Report. PNW-GTR-421. Portland, OR: USDA Forest Service, Pacific Northwest Research Station.http: [www.fs.fed.us/pnw/pubs.htm](http://www.fs.fed.us/pnw/pubs.htm)

**ADDITIONAL PUBLICATIONS**

1. Chaderjian, Neal, C. Jasim U. Ahmad, Marc G. Kramer, and Terry Holst. 2006. Navier-Stokes simulation of local winds over the Earth’s Topography. Sept. NAS Technical Report, NAS-06-015. [www.nas.nasa.gov/News/Techreports/2006/PDF/nas-06-015.pdf](http://www.nas.nasa.gov/News/Techreports/2006/PDF/nas-06-015.pdf)
2. Kramer, Marc G., M. Taper. Development and application of a spatially explicit model to understand windthrow at the regional scale. 2000. [Paper] in proceedings of the 4th International Conference on Integrating GIS and Environmental Modeling (GIS/EM4): Problems, Prospects and Research Needs. Banff, Alberta, Canada, September 2–8.<http://www.colorado.edu/research/cires/banff/pubpapers/117/>
3. Completion of 17 *Climate Change Action Plans* For Forests in the Pacific Northwest. Kramer, M.G. and R6 US Forest Service. 2012.
4. Lance Craighead ,C. Fox, D. Kawai, R. Tingey, M.G. Kramer. 2009. technical report:

Identifying areas of potential conflict between marine birds and wind power development. A Report for the David Suzuki Foundation.

1. Kramer, Marc G. 2008.The use of very high resolution Light Detection and Ranging (LiDAR) to detect gas pipeline intrusion activity. White Paper for British Petroleum.
2. Kramer, Marc G. 2007. Contributing author on. “Recommendations for Research on Extreme Weather Impacts on Infrastructure.” UCAR <http://www.rap.ucar.edu/~bwb/weather-impacts/>
3. Kramer, M.G, 1992. GIS of an Urban Forest *in* Physical, Biological, and Social Aspects of Environment Issues in the Bay Area. University of California, Berkeley, Department of Environmental Sciences vol. I pp. 13-27.

##### SOFTWARE/ DECISION SUPPORT MODELS

##### Kramer M.G. MERCURY 2009 –An explicitly coupled object oriented environmental/ decision support modeling system using numerical weather prediction.

##### Carruthers, Raymond, T. Larkin, M.G Kramer. 2007. HERMES. A Spatially-Explicit Object Oriented Environmental Model Construction tool. UC Santa Cruz/USDA.

##### Kramer, M.G. and Gerald Epstein, Shaokui Ge. 2007. SOLAR. A Parellelized spatially explicit solar radiation simulation model across complex terrain. UC Santa Cruz.

##### Kramer, M.G. and G. Epstein. 2007. VisLiDAR. C/C++ software to visualize, query and process lidar data. UC Santa Cruz.

##### Kramer, M.G. and G. Epstein. 2007. VisGeo. C/C++ software to visualize, query and process complex spatio-temporal enviornmental Data. UC Santa Cruz.

1. Chaderjian, Neal, M.G. Kramer D. Sullivan and D. Kao. 2006. Overflow: fluid dynamics model to simulate extreme winds across the land surface. NASA Ames.

##### David Kao, M. G. Kramer, A. Pang.. 2005. LiDAR VIS. C/C++ Software to visualize, query and process lidar data. NASA Ames.

1. Kramer, M.G. 1997. WINDSTORM. Long-term spatially explicit predictive windthrow model. Montana State University, Bozeman, MT.
2. Stone, E.C., J. Cavallero, and M.G. Kramer. 1996. GSPACE ver 2.3 Stand Simulator. University of California, Dept. of Environmental Policy and Management, Berkeley, CA 94720.
3. Kramer, MG. 1992. Prototype GIS of the UC Berkeley Campus. Planning Department. UC Berkeley.

**OUTREACH/EDUCATION**

1. **American Geophysical Union Nominee. Selected for Climate Science Day on the Hill (one of 30 scientists nationally, to meet with US Congressions and discuss climate science and it’s role in policy and funding priorities.March 2017. Twitter Feed**
2. **2017 WSU Vancouver Office of Research Story on graduate course on soil processes**

[**https://wsuvresearchnow.com/highlights**](https://wsuvresearchnow.com/highlights)**/**

1. **2017. WSU Magazine. Story on new WSU graduate course on soil processes.** https://magazine.wsu.edu/2017/01/27/zeroing-in-on-critical-zones/
2. **Bridging the Gap Between Geoscience and Ecology; a new AGU, ESA Mou lead by Kramer**

<https://eos.org/agu-news/joint-agu-esa-event-brings-together-collaborative-networks>

1. **“New DOE EMSL Visiting Scientist Named” September 2014.** [**http://www.emsl.pnl.gov/emslweb/news/new-emsl-visiting-scientist-kramer**](http://www.emsl.pnl.gov/emslweb/news/new-emsl-visiting-scientist-kramer)

[**https://twitter.com/EMSLscience/status/499688125862391808**](https://twitter.com/EMSLscience/status/499688125862391808)

1. Study to look at impact of nitrates on Florida's springs:April 2014.<http://www.gainesville.com/article/20140325/ARTICLES/140329796/-1/rss?Title=Study-to-look-at-impact-of-nitrates-on-Florida-s-springs>
2. EDUCATIONAL VIDEO. July 2013. **Forests and Climate Change – US Forest Service, Pacific Northwest Region (R6)** (9:35)  <http://youtu.be/gqcfiVdopWc>. **REGION 6  CLIMATE CHANGE EDUCATION MODULES: (YouTube) . 996 views.**
3. Press Release on Mars Surface Water Features. <http://www.nasa.gov/centers/ames/news/releases/2003/03_12AR.html> And featured news Articles Space Daily, La Times, Chrisitian Science Monitor, Daily Planet:
4. [**NASA** Study Shows How **Water** May Have Flowed On Ancient **Mars**](http://www.google.com/url?sa=U&start=1&q=http://www.spacedaily.com/news/mars-water-science-03b.html&e=912)  
   **...** **water** network that may have existed on **Mars** at some **...** **Kramer's** co-authors are Christopher Potter, David Des Marais and David Peterson, all from **NASA** Ames. **...**   
   www.spacedaily.com/news/**mars**-**water**-science-03b.html - 9k - [Cached](http://216.239.51.104/search?q=cache:d1jrH1xu9fsJ:www.spacedaily.com/news/mars-water-science-03b.html+nasa+kramer+mars+water&hl=en&start=1) - [Similar pages](http://www.google.com/search?hl=en&lr=&ie=UTF-8&q=related:www.spacedaily.com/news/mars-water-science-03b.html)
5. [**Mars** Waterways Mapped for First Tim -- Discovery Channel **...**](http://www.google.com/url?sa=U&start=3&q=http://dsc.discovery.com/news/briefs/20030217/mars.html&e=912)  
   **...** National Research Council scientist at the **NASA** center. **...** as a single integrated **water**  
   network," **Kramer** said **...** also differs from recent work on **Mars**' large outflow **...**   
   dsc.discovery.com/news/briefs/20030217/**mars**.html - 21k - [Cached](http://216.239.51.104/search?q=cache:cK7RVe61-8oJ:dsc.discovery.com/news/briefs/20030217/mars.html+nasa+kramer+mars+water&hl=en&start=3) - [Similar pages](http://www.google.com/search?hl=en&lr=&ie=UTF-8&q=related:dsc.discovery.com/news/briefs/20030217/mars.html)

**PROFESSIONAL SERVICE**

* Editor. Synthesis and Emerging Ideas Section. *Biogeochemistry.* Appointed 2016.
* Associate Editor *Journal Geophysical Research –Biogeosciences*. Appointed 2016
* Chair of the American Geophysical Union *Biogeosciences* Soil and Critical Zone Technical Committee. Appointed 2016
* Associate Editor. *Biogeochemistry*. Appointed 2014.
* American Geophysical Union -International Critical Zone Liaison (Appointed 2013) *Biogeosciences*
* Advisory Panel - Environmental Molecular Sciences Laboratory -Quiet Wing Instrumentation. US Department of Energy. Pacific Northwest National Laboratory. 2014-
* Cross Critical Zone Observatory (CZO) Organic Matter Working Group Member. 2014
* Editorial Review Board Member. *Biogeochemistry*. 2012-.
* International Soil Carbon Network –Steering Committee. Board Member.
* North American Carbon Program (NACP) Principal Investigator. Core Project Scientist. Selected August 2008.

[www.nacarbon.org/cgi-bin/pdb/getrec.pl?name\_id=12430](http://www.nacarbon.org/cgi-bin/pdb/getrec.pl?name_id=12430)

* Co-Organizer for Conference and Chair of Local Organizing Committee: Second International Meeting on Mechanisms of Organic Matter Stabilization in Soils, Oct 9-12. 2005. Monterey, California. Conference generated $70K in supporting funds from NSF, USDA, DOE and NASA. <http://zircote.forestry.oregonstate.edu/soilconf/>
* UCSC Center for Remote Sensing member : <http://crs.ucsc.edu/personnel.html>
* Florida Climate Institute – Affiliate (2013-)
* Water Institute –University of Florida Affiliate (2013-)
* Christina River Basin Critical Zone Observatory (CZO) Participating Scientist
* NASA LBA-ECO II,III team member studying hydrochemistry and soil organics of the Amazon Basin.
* NASA LBA-ECO 9th Science Team Meeting. Session Chair. Aquatic Biogeochemistry. 2005. <http://www.lbaeco.org/cgi-bin/eco9/eco9_ab_agenda_of_abstracts.pl>
* Amazon Rivers System Research Group. Team Member. Appointed 2005. <http://boto.ocean.washington.edu/basins/amazon/researchers.html>
* Secretary of the International Commission on Tracers: International Association of Hydrological Sciences (IAHS). 2003. [www.cig.ensmp.fr/~iahs/Officers2003.htm](http://www.cig.ensmp.fr/~iahs/Officers2003.htm)
* Assistant Secretary (Appointed 2014). American Geophysical Union – [*Paleoceanography and Paleoclimatology*](http://sites.agu.org/leadership/sections-focus-groups/paleo/)
* –Outstanding Student Paper Awards (OSPA) Coordinator (Appointed 2013) American Geophysical Union .[*Paleoceanography and Paleoclimatology*](http://sites.agu.org/leadership/sections-focus-groups/paleo/)
* Senior Editor/Senior Author. New Book. Wiley Press. “Soil Processes in the Earth’s Critical Zone”. 450 page book. 2016-2018.
* Panel Proposal Reviewer. USDA. AFRI. Soil Processes and Climate Change. 2012.
* Panel Proposal Reviewer: NSF. Water, Sustainability and Climate Panel Type II Proposals. 2012.
* Panel Proposal Reviewer. NOAA. “Improving the Understanding and Modeling of Land Surface Processes" in the Earth System Science (ESS) Program.2011.
* Panel Proposal Reviewer United State Department of Agriculture, Agricultural Research Service. Soils Program. 2010.
* Co-Organizer for Conference: Third International Meeting on Mechanisms of Organic Matter Stabilization in Soils, Sept 21-26. 2007. Adelaide, Australia. Conference generated $20K in supporting funds from NSF, USDA, DOE and NASA. <http://organic.arris.net.au>
* Co-Investigator and Participating Scientist – International Soil Carbon Network
* NSF proposal reviewer. Division Environmental Biology. Ecosystems Cluster.
* NSF proposal reviewer. North American Carbon Program. Low Temperature Geochemistry.
* Czech National Science Foundation -Panel Reviewer. 2013.
* American Geophysical Union Member since 1999. Ecological Society of America since 1996.
* USDA CSREES Soil Processes Proposal Reviewer.

**WSU Service**

* SOE Quantitative Forest Ecology Search Committee Member 2016/2017
* SOE Graduate Committee Spring 2015
* SOE Experiential milestone/elective working group Spring 2015
* Participant in the WSU Water Initiative ($20M initiative)
* WSU Vancouver Science Seminar Series Organizer Fall and Spring 2015-2016

**Journal Peer Reviewer** :

*Proceedings of National Academy of Sciences , Nature Communications, Ecology, Global Change Biology, Rapid Communications in Mass Spectrometry, Soil Biology and Biochemistry,**European Journal of Soil Science, Journal of Spatial Hydrology, Journal of Geophysical Research,**Geoderma, Biogeochemistry, SilveFennica, Forest Ecology and Management***,** *Environment Science and Technology,**International Journal of Remote Sensing, Journal of Plant Ecology, Pedobiologica, Soil Science Society of America Journal, Plant and Soil*

**PUBLISHED PROCEEDINGS/PRESENTATIONS/WORKSHOPS (First Author Only)**

**\*Bold indicates since at WSU**

**2017**

**[Session Chair] Mechanisms of organic matter stabilization and destabilization. American Geophysical Union. Fall 2017.**

**[Oral Presentation]. "Soil carbon dynamics in Hawaiian soils." Marc G. Kramer. Annual Hawaii Ecosystems Meeting. Hilo Hawaii. July 2017.**

**2016**

1. **[Oral Presentation]. “Soil Organic Matter Dynamics Across a Time-Climate Matrix , Hawaii. Annual Hawaii Ecosystems Meeting. Hilo HI. July 2016.**

**2015**

1. **[Invited]. Ecological Society of America. August. 2015.Advances in Soil Carbon Research. Symposium.**
2. **[Chair]. Special AGU ESA Evening Event at the Ecological Society of America August 2015**
3. **[Session Chair] Mechanisms of organic matter stabilization and destabilization. American Geophysical Union. Fall 2015.**
4. **[Session Chair] 3 Oral Sessions + 1 Oral Session. MacroEcosystems Ecology; Thesholds in Ecological Response** across spatial and temporal scales. American Geophysical Union. Fall 2015.

**2014**

1. [Invited]. American Geophysical Union. Fall 2014. “Global Patterns of Carbon an Nitrogen in Soil” Biogeosciences Section. Soil Organic Matter.

1. [Oral]. “Carbon Storage and Weathering across a high elevation climate gradient Mauna Kea “. Sixth annual international meeting: Mechanisms of Soil Organic Matter Stabilization and Destabilization in Soil. October 2014. South Carolina.
2. [Invited Seminar] US Department of Energy Pacific Northwest National Laboratory Seminar February 2014.
3. [Invited Seminar] US Forest Service USFS Webinar Climate Change Vulnerability Toolbox March 2014.
4. [Invited Seminar] Soil Science Society of America (SSSA) Annual Meeting Invited. Nov 2014
5. [Session Co-Convener] American Geophysical Union Fall Meeting “Mechanisms of Soil Organic Stabilization and Loss”. Dec 2014
6. [Session Co-chair] American Geophysical Union Fall Meeting “International Critical Zone Opportunities and Activities”. Dec 2014
7. [Invited Presentation] Climate Change in Moist Mixed Conifer Forests. Science-Summer Workshop on Moist Mixed-Conifer Forests and Climate Change. July 2014.
8. [Oral Presentation]. “Carbon Storage and Weathering across a high elevation climate gradient Mauna Kea, Hawaii. Annual Hawaii Ecosystems Meeting. Hilo HI. June 2014.

**2013**

1. [Invited Seminar] University of Georgia. Soil and Crop Department. October 2013.
2. [Invited Seminar] Tropical Research and Education Center, Homestead, FL Nov 2013.
3. [Invited Seminar] University of Florida, Soil and Water Science -Research Symposium. Sept 2013.
4. [Invited Seminar] Sonoma State University, Department of Geography. Dec 2013.
5. [Invited Presentation] Climate Change in Moist Mixed Conifer Forests. Science-Policy Workshop on Moist Mixed-Conifer Forests.
6. [Session Co-Chair] American Geophysical Union, Fall Meeting “Thresholds in Soil Response to Global Change. “ Fall Meeting, San Francisco, CA. Dec 2013.
7. [Presenting] The Alteration Of Volcanic Ash and Soil Development Across a High Elevation Climate Gradient In Mauna Kea, Hawaii. SSSA. Tampa Meeting. Nov.
8. [Presenting] Soil Water and Nitrate Inputs Into Groundwater Across a Land Use and N Fertilization Gradient. SSSA Tamp Meeting, Nov.
9. [Presenting] 1 Poster Presentation American Geophysical Union Fall Meeting, San Francisco, CA. Dec 2013.

**2012**

1. [Invited Seminar] Portland State University, Department of Environmental Science
2. [Invited Seminar] Washington State University, Earth Science
3. [Invited Seminar] University of Florida, Dept. Soil and Water Science
4. M.G. Kramer [AGU Session Co-Convener]” Frontiers in the Environment: Global Soil Change”. American Geophysical Union. December 2012.
5. US Forest Service Specialist Meeting 3 presentations on Climate Change; Botany, Silviculture and Ecology, Hydrology
6. US Forest Service District and Supervisors Office 6 Presentations on Climate Change in the Pacific Northwest
7. US Forest Service Silviculture Training All Day Course on Climate Change

**2011**

1. M.G. Kramer [AGU Session Co-Convener]” Global Soil Change and Ecosystem Services”. American Geophysical Union. December 2011.
2. SSSA [Invited Talk] Symposium: Mineral-Organic Interactions Across Time and Space: I & II “Soil Carbon Dynamics across two contrasting Oxisol soils Using Sequential Density Fractionation”. San Antonio Texas. October 2011.
3. US Forest Service Specialist Meeting 3 presentations on Climate Change; Botany, Ecology, Hydrology.

**2010**

1. M.G. Kramer [Invited]” Global Soil Change: Mechanisms of Carbon Stabilization and Destabilization”. American Geophysical Union. December 2010.
2. M.G. Kramer [AGU Session Co-Convener]” Frontiers in the Environment: Global Soil Change”. American Geophysical Union. December 2010.
3. M.G. Kramer and Kate Lajtha, Anthony Audfenkampe, Karis McFarlane, Chris Swanston, ” Soil Carbon Dynamics across two contrasting Oxisols Using Sequential Density Fractionation ”. Fourth International Conference on Mechanisms of Organic Matter Stabilization and Destabilization, Sept 20th-24th, Marseille, France.
4. M.G. Kramer [Invited] “The dream soil carbon warming experiment”. Soil Warming Carbon Experiment Workshop, Loveland, Colorado. USDA Forest Service.
5. M.G. Kramer “Mechanisms of carbon stabilization and destabilization”. Hawaii Ecosystem Meeting, July 6-11th, Hilo, Hawaii. Stanford University.
6. M.G. Kramer [Invited**].** Non-Linear Climate and Pedogenic Thresholds in Carbon Stabilization”. USDA ARFI PI Meeting. June 2010.
7. M.G. Kramer [Invited**].** The Application of Numerical Weather Prediction to Understand and Model Environmental Processes. NASA PI Meeting. May 2010.
8. M.G. Kramer [Invited**].** 2nd NOAA/NCEP workshop on numerical modeling of weather and climate. Houston Texas. April 2010. To develop next generation land surface model.
9. M.G. Kramer [Invited]. “The influence of climate on ecosystem structure and function.” University of Nevada, Reno, Dept. of Geography. March 2010.
10. M.G. Kramer [Invited]. **“**The Application of Numerical Weather Prediction to Understand and Model Environmental Processes”. Lawrence Berkeley Laboratories. January 2010.

**2009**

1. M.G. Kramer [AGU Session Co-Convener]” Frontiers in the Environment: Global Soil Change”. American Geophysical Union. December 2009.
2. M.G. Kramer and Kate Lajtha” Soil Carbon Dynamics across two contrasting Oxisols Using Sequential Density Fractionation ”. American Geophysical Union. December 2009.
3. M.G. Kramer [Invited Speaker] “High Resolution Modeling of Plant and Insect Response to Climate Dynamics”, *State of the Laguna Conference and Science Symposium. Santa Rosa, California*. October 2009.
4. Bottom of Form
5. M. G. Kramer [Invited Speaker] “Shifts in the composition of soil organic matter during decomposition as revealed by 13-C nuclear magnetic resonance and fourier transform infra-red spectroscopy in *Advances in Biochemical Methods for Studying Organic Matter Dynamics in an Ecological Context*, Ecological Society of America Meeting, Albuquerque New Mexico, August 2009.
6. M.G. Kramer “Soil organic matter dynamics across a climate-time matrix in Hawai'i”, Hawaii Ecosystems Meeting, Hilo, Hawaii. Stanford University.
7. M. G. Kramer [Invited Speaker]“The use of climate models to understand and model environmental processes”. NSF USDA. Tahoe, California. March 2009
8. M. G. Kramer [Invited Keynote] “The use of climate models to understand and model environmental processes”. Remote Sensing Workshop. USDA ARS, California. May 2009
9. M. G. Kramer [Invited Speaker] “Sequential density fractionation to understand soil C stabilization”. Global Soil Change Workshop. NSF, Durham NC. June 2009

**2008-2007**

1. 2008 Naval Research Laboratories (NRL) [Invited] Seminar “Biogeochemical Impact of Winds on the Earths Surface”. April 6th, 2008.
2. -10 other National and International scientific presentations
3. Fall AGU 2007 -1 invited talk, and 3 other abstracts as Coauthor
4. NASA Invasive Species Workshop –Invited panelist. February 2007
5. Workshop on Weather Extreme Impacts on Infrastructure –Participant. March 2007
6. 3rd international conference on Mechanisms of Soil Organic Matter Stabilization and Destabilization in Soil, Adelaide Australia 2 abstracts/presentations
7. 4 other workshops/small conferences

**2006**

1. Attended and presented at more than 5 international conferences and workshops

**2005 and before**

1. Kramer Marc G., C. Potter, S. Klooster V. Brooks, R. Cosme de Oliveira 2005. Controls on stream DOC flux and composition in the Amazon region, Tapajos national forest [Meeting abstract]. LBA Science Meeting. Sao Paulo Brazil. October 2006.
2. Kramer Marc G., C. Potter, S. Klooster V. Brooks, R. Cosme de Oliveira 2005. Controls on stream DOC flux and composition in the Amazon region, Tapajos national forest [Meeting abstract]. LBA Science Meeting. Sao Paulo Brazil. Nov. 2005.
3. Kramer, Marc, G. O.A. Chadwick, P. Sollns, R. Sletten. 2005. Soil Carbon Dynamics Across a time-climate sequence in Hawaii. [Meeting Abstract]. 2nd International Conference on Mechanisms of Organic Matter Stabilization and Destabilization in Soil. Asilomar, Ca. Oct 9-13th.
4. Marc G. Kramer. 2005. Canopy profiles derived from LiDAR: New Visualization Techniques. [Invited Talk]. RSAC Workshop LIDAR:  Technical Workshop. May5th-7th.
5. Kramer Marc G., C. Potter, S. Klooster V. Brooks, R. Cosme de Oliveira 2004. Controls on stream hydrology in the Amazon region, Tapajos national forest [Meeting abstract]. IAHS Meeting, IGUACU, Brazil. April 2005.
6. Kramer Marc G., C. Potter, S. Klooster V. Brooks, R. Cosme de Oliveira 2004. Controls on stream DOC flux and composition in the Amazon region, Tapajos national forest [Meeting abstract]. AGU Fall Meeting San Francisco.
7. Kramer Marc G., C. Potter, S. Klooster V. Brooks, R. Cosme de Oliveira 2004. Controls on stream DOC flux and composition in the Amazon region, Tapajos national forest [Meeting abstract]. LBA. Science Meeting. Basilia, Brazil. .July.
8. Marc G. Kramer. 2004. Canopy profiles derived from LiDAR: New Visualization Techniques. [Invited Talk]. 1st Annual Forest PARC Workshop LIDAR:  Technical Workshop. May17th-19th.
9. Kramer M. G., P. Sollins, R.S. Sletten, P.K. Swart. 2003. N isotope fractionation and measures of organic matter alteration during decomposition. [Meeting Abstract] AGU Fall Meeting. San Francisco.
10. Kramer Marc G., C. Potter, S. Klooster V. Brooks, R. Cosme de Oliveira Junuar, C.A. Schenato. 2003. Controls on stream DOC flux and composition in the Amazon region, Tapajos national forest [Meeting abstract]. LBA Business/Science Meeting. Fortaleza, Brazil. November.
11. Kramer Marc G. 2003. The impact of extreme wind events on natural forest ecosystem dynamics. International conference wind effects on Trees. [Proceeding] Karshue, Germany, Sept. 16-18.
12. Kramer Marc G., M. Lefsky. 2002. Quantitative estimates of biomass and forest structure in temperate rainforest using multi-return lidar. [Meeting Absract]. AGU Fall meeting. San Francisco. California.
13. Kramer, Marc G., B T Bormann, R S Sletten, P Sollins, J J McDonnell, K Cromack JrS M Nay, B Caldwell. 2001. Hydrochemical properties of small Spodosol-dominated catchments with contrasting disturbance from windthrow in a temperate rainforest, southeast Alaska. [Meeting Abstract]. AGU Fall Meeting, San Francisco, California.
14. Kramer, Marc G., P. Sollins, M. Taper, E. Kissinger, G. Nowacki. 2001. The management implications of windthrow disturbance in southeast Alaska. Alaska Region Joint Natural Resources Conference, [Invited speaker, Meeting abstract]. Alaska Region Joint Natural Resources Conference, April 23−28. Sitka Alaska.
15. Kramer, Marc G. P. Sollins, R. Sletten, C. Cromack, B.T. Bormann, M. Nay, B. Caldwell. 2001. Soil carbon dynamics and forest hydrology along a windthrow chronosequence, High island, southeast Alaska. [Invited speaker, Meeting abstract]. Alaska Region Joint Natural Resources Conference. April 23−28, Sitka Alaska.
16. Kramer, Marc G, P.Sollins, R. Sletten. 2000. Pathways and forms of soil organic matter accumulation along a windthrow chronosequence in a temperate rainforest [Meeting Abstract], AGU. Fall Meeting. San Francisco, CA.
17. Kramer, Marc G., M. Taper. Development and application of a spatially explicit model to understand windthrow at the regional scale. 2000. [Paper] in proceedings of the 4th International Conference on Integrating GIS and Environmental Modeling (GIS/EM4): Problems, Prospects and Research Needs. Banff, Alberta, Canada, September 2 - 8[www.colorado.edu/research/cires/banff/upload/474](http://www.colorado.edu/research/cires/banff/upload/474)
18. Kramer, Marc G., B.T. Bormann, S.M. Nay, P. Sollins. 2000. The hydrochemical consequence of catastrophic windthrow in a coastal temperate rainforest, High Island, southeast Alaska.[Meeting Abstract] *Annual Ecological Society of America Metting*, Snowbird Utah. August.*.*
19. Kramer, Marc G., B.T. Bormann, S.M. Nay, and P. Sollins. 1999. Catastrophic windthrow and podzolization in watersheds with contrasting disturbance history. [Meeting Abstract]. *Annual Ecological Society of America Meeting*, Spokane, WA.
20. Kramer, Marc G. and Greg Nowacki, 1999. “Study on Regional windthrow dynamics in the Tongass National Forest” [Invited speaker]. Alaska Region Joint Natural Resources Conference, March. Juneau Alaska.
21. Kramer, Philip, M.G. Kramer. 1998. Mapping of coral reef communities using LANDSAT TM imagery and aerial photographs: Andros Barrier Reef Complex, Bahamas. [Meeting Abstract] *Fifth International Conference on Remote Sensing for Marine and Coastal Environments.* San Diego, CA
22. **Kramer, Marc** G., A.J. Hansen. 1997. Abiotic controls on large-scale wind disturbance and stand dynamics in a coastal temperate rainforest, Kuiu Island, southeast Alaska. [Meeting Abstract] *Bulletin of the Ecological Society of America. 78(4 SUPPL.). 1997. 126..*

**Current Courses at WSU Vancouver**

* + Geol/Soil Science 516/416 Soil Processes in the Earth’s Critical Zone (Every other Fall).
  + ES404 The Ecosystem Environmental Science Capstone Course (every other fall)
  + GEOLOGY 390 Living on the Edge: Global Climate Change and Earth History (Every other fall)
  + ES 492 Environmental Science Internship (Spring, Summer Fall)

**Past Courses at University of Florida**

* + Global Change and Pedogenic Thresholds (Fall).
  + Soil Processes in the Earth’s Critical Zone (Spring).
  + Outstanding (>90%) Approval Rating from both Undergraduate and Graduate Students

**Past Courses**

* + Biotic Resource Management (SF State)
  + Ecology (Mills College)
  + US Forest Service LiDAR Workshop
  + US Forest Service Climate Change and Ecosystem Services: Decision Support

**Students (Present)**

* + **Luke Reyes SOE Vancouver PhD 2016-**
  + **Alex Stambore Vancouver PhD 2017-**
  + **Geoff Kahl SOE Vancouver MS. Non-Thesis 2016-**

**Graduate Student Committees**

* + **Greg Clark SOE Vancouver MS 2016-**
  + **Sarah Hart SOE Vancouver MS 2016-**

**……………….**

**Students and Post docs (past)**

* + Amanda Desormeaux, PhD Reducing excess N leaching in Agriculture in Northern Florida through new monitoring techniques. 2019.
  + Andressa Freitas – (PhD) Land Use Change and Intensive Agriculture: Excess N and P leaching in Amazonia and Northern Florida 2019..
  + Hari Setyono (PhD) Land Use Change Impacts on Soil Chemistry in Indonesia: A Case Study for Global Change. 2019.
  + Brandon Snook (MS) Rapid Gaseous Carbon Loss Across an Intensive Grazing Dairy Chronosequence 2015.
  + Hamza Keskin (MS) \*Government of Turkey Graduate Research Fellowship in Pedogenisis and Desertification in Turkey 2015.
  + Geoffrey Kahl (MS) Chemical Dissolution Methods 2016
  + Karl Koch (MS) Environmental Impact of Fracking of Soils on Shale Deposits 2015
  + Carla Gavilen (PhD) Supervisory Committee. 2016. “Soil Carbon Storage in the Andes across Land Use”. 2018
  + Michael Sheilds. Supervisory PhD Committeee “Organic Carbon Burial within the Embryonic Prograding Delta of the Mississippi River Delta Complex”. Department of Geology. 2019
  + Xiaowen Zhang. Supervisory PhD Committee. “Paleo-reconstruction of Organic Carbon Inputs to Sediments of the Colville River Delta and Simpson’s Lagoon, Beaufort Sea, Alaska”. Department of Geology. 2019
  + Xingqian Cui. Supervisory “PhD Committee. Paleo-Reconstruction of Organic Carbon Dynamics in Fiordland, New Zealand.” Department of Geology.
  + Post-Doc Advisor to Jonathan Sanderman UC Santa Cruz 2008-2010.
  + Post-Doc Advisor Shaokui Ge UC Santa Cruz 2007-2011
  + Post-Doc Advisor for Visiting Scholar. UC Santa Cruz Erika Marin Spiotta UC Santa Cruz 2008
  + Co-advising: Russell Johnson 2008 and Jason Hoorn UC Santa Cruz 2011

**COLLABORATORS AND OTHER AFFILIATIONS**

Collaborators: Richard Waring (OSU), Mark Taper (MSU), Michael Lefsky (OSU), Ron Sletten (UW), Carla D’Antonio (UCB), Peter Swart (RSMAS), Louis Derry (Cornell), Jon Chorover (University of Arizona), Jeffrey McDonell (OSU), Bruce Caldwell (OSU), Chris Potter (NASA/AMES), Phyllis Stabeno (NOAA), Bernard Hallet (UW), Chris Swanston (USFS), Kate Lajtha (OSU), Anthony Audfenkampe (Stroud Water Center), Aaron Thompson (University of Georgia), Stephen Porder (Brown University). Tim Filley (Purdue), Oliver Chawick (UCSB), Peter Vitousek (Stanford). **Graduate and Post Doc Advisors:** A.J. Hanson –Montana State University (MS ADVISOR), P.Sollins, B.T. Bormann Oregon State University (PhD Advisors), David Peterson NASA AMES (Post-Doctoral Advisor). **Current/Previous Post Docs, Students and Staff**: Post-Doc Jonathan Sanderman, Visiting-Post Doc Erika Marin Spiotta. MS Students: Jason Horn, Russell Johnson. Undergraduates: Wesley Yuen. Senior scientists: Gerald Epstein (M.S.), Shoukui Ge (PhD). Analytic Chemist: Jonathan Giska (BA). Brandon Snook (M.S), Karl Koch (M.S.), Hamza Keskin (M.S.), Geoffrey Kahl (M.S.)