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1. EDUCATIONAL BACKGROUND

- Computer Center of Russian Academy of Science** 1990
Ph D, Computer Modeling in Science and Industry
Dissertation: Modeling water cycle and production process in forest ecosystems
- Moscow State University, Russia** 1984
Qualification in Mathematics (M.S. equivalence), Applied Mathematics
Thesis: Numerical method of separation for linear systems

2. PROFESSIONAL EXPERIENCE

- Associate Professor**, Department of Tourism, Recreation & Sport Management, University of Florida, Gainesville, FL 2015 – current
- Associate Professor**, Department of Earth Systems Science and Policy, University of North Dakota, Grand Forks, ND 2006 – 2015
- Associate Researcher**, Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN 2002 – 2006
- Senior Researcher**, Center for Ecology & Forest Productivity of Russian Academy of Science, Moscow, Russia 1992 – 2002
- Visiting scientist**, European Forest Institute, Joensuu, Finland 2000 – 2001
- Research Fellow of the US National Research Council**, US EPA National Health and Environmental Effects Laboratory, Corvallis, OR 1995 – 1998
- Researcher**, Computer Center of the USSR Academy of Science, Moscow, Russia 1989 – 1992
- Junior Researcher**, Computer Center of the USSR Academy of Science, Moscow, Russia 1986 – 1989
- Software Engineer**, Academy for National Economy of Council of Ministers of the USSR, Moscow, Russia 1984 – 1986

3. TEACHING

Regular Assignments

- FNR 599 (2 credits)**, Environmental modeling 2005
- ESSP 599 (3 credits)**, Readings in Climate Change 2007 – Present
- ESSP 502, 502L, 502R (10 credits)**, Earth System Science and Policy II. Lead instructor in Global Biogeochemical Cycles 2008 – Present
- ESSP 520 (3 credits)**, Earth Systems Modeling 2008 – Present
- ESSP 599 (3 credits)**, Climate, Hydrology and Remote Sensing 2011
- ESSP 200 (3 credits)**, Sustainability Science. Co-teaching, topic: How the scientists do science 2013 – Present
- ESSP 160 (3 credits)**, Sustainability & Society. Co-teaching, topic: Climate change communication 2014 – Present
- HLP 6535 (3 credits)**, Research Methods (2015)

Guest teaching

ESSP 501, 501L Earth System Science and Policy I. Four to Six guest lectures and labs in blocks “Biodiversity” and “Energy”	2006 – Present
GEOL 105 , Geology. One guest lecture	2007
ESSP 502, 502L, 502R , Earth System Science and Policy II. Three guest lectures and labs in block “Hydrology”	2007 – Present
IDS 339 , Service and Global Citizenship. One guest lecture	2009
Non-credit, UND , Communicating Climate Change (Co-teaching undergraduate level course for students from regional colleges, funded by NASA)	2010

Graduate Student Advising (Bold font designates a committee chair assignment)

#	Student name	Degree	Dissertation, thesis or final report title	Year of defense
1	Leigh Ciofani	MS	Woody encroachment in North Dakota grasslands: using predictive modeling to examine key players and management implications	2007
2	Elliott Smith	MS	Remote sensing data integration into ecological niche modeling for two North American <i>Bombus</i> species	2009
3	Sandhuya Nepal	MEM	Addressing agro-environment policies related to wetland conservation	2009
4	Gordon Akudibillah	MEM	Predicting the global emergence of <i>chikungunya</i>	2009
5	Kristine Mattis	MS	The precautionary principle as environmental policy: is the US media undermining ecological health and environmental sustainability?	2009
6	Branden Bornemann	MEM	Assessing the impacts of human activities on the ecology of the Russian river, Alaska	2009
7	Hom Adhikari	MS	Ecosystem services assessment of Grand Forks county	2010
8	Junue Young	MS	Sensible Heat Flux Measurement Using Scintillometer and Comparison with Eddy-Correlation and Landsat Images	2011
9	Navin Thapa	MS	Agro-climatic and land suitability mapping for switchgrass grown as a bioenergy crop in North Dakota	2011
10	Ashley Tooley	MEM	Environmental internship with the City of Lakeville	2012
11	Sergey Molodtsov	MS	Climate change detection and attribution using GPS radio occultation and CMIP3 GCM data	2014
12	Tatiana Molodtsova	MS	Linking local weather to climate change: one year of Twitter in the US	2014
13	Jexia Wu	MS	Agricultural drought monitoring and prediction using soil moisture deficit index	2014
14	Seth Fore	Ph.D.	Land use change in North Dakota: Impact on ecosystem function and service	(2016)
15	Gehendra Gharel	Ph.D.	The impacts of climate, land use, economics, and policies on the hydrology of the Devils Lake basin	2015
16	Jacob Coburn	MS	Statistical downscaling for the northern great plains: A comparison of BCSD and canonical correlation analysis	2015
17	Cheri New	Ph.D.	TBA	(2016)
18	Sergey Gulbin	M.S.	TBA	(2017)

Curriculum development

Founding member of the ESSP Minor Program – Sustainability Studies

Re-designed ESSP 502 (10 credit) course, replacing the individual block-based student projects with integrated research projects spanning over three blocks and centered at solving real scientific problems. Based on project outcomes, two student-led scientific papers were published in peer-reviewed journals; one paper is in review process

Designed and implemented laboratory experiments for ESSP 501 and ESSP 502, centered at teaching on climate change

Organized a regular ESSP graduate student research seminar Brownbag Friday Discussion

Developed the following courses:

HLP 6535 Research Methods (planned for fall 2015)

ESSP 520 Earth Systems Modeling

ESSP 502 Earth System Science and Policy II, Global Biogeochemical Cycles block

ESSP 599 Readings in Climate Change

ESSP 599 Climate, Hydrology and Remote Sensing

ESSP 160 Sustainability & Society (co-teaching; topic: Climate change communication)

ESSP 200 Sustainability Science (co-teaching; topic: Methods of sustainability science)

FNR 598M Ecological Modeling with Visual Basic

4. GRANTS AND CONTRACTS

Funded (Minor travel and individual research grants not listed)

2014 - 2019. Center for Regional Climate Studies. NSF (Zhang PI; Kirilenko Co-PI), \$5,999,291.

2014 - 2015. People as sensors: Feasibility study on flood monitoring through Twitter communication data mining. UND Faculty Seed Money Award (Kirilenko PI), \$26,108.

2013. Summer Professorship Award, UND (Kirilenko PI), \$7,000; full GRA for two students.

2012. Development of conceptual and mathematical models to understand and describe the uncertainty of hydrological events in the changing conditions of the state of South Dakota, SDSU EPSCoR planning grant (Shmagin PI, Kirilenko Co-PI), \$6,512.

2011-14. Climate Change Communication: Engineering, Environmental Science, and Education (C3E3). NASA Applied Sciences Program (Primary institution: University of Texas, San Antonio; Kirilenko Co-PI), \$643,244.

2010-13. Northern Great Plains Center for People and the Environment. NASA Applied Sciences Program Grant #NNX10AH20G (Smith PI; Kirilenko Co-PI), \$3,000,014.

2009 - 2014. UND Center of Excellence in Space Technology and Operations. State of ND (Olsen PI; Kirilenko Co-I in the sub-project on application of the radio occultation data to climate change research), \$1,000,000.

2009 - 2011. The feasibility of combining NASA satellite data, general circulation models, and hydrologic model to inform decision making for flood mitigation on the Devils Lake basin of North Dakota. NASA Earth Science Applications Feasibility Studies (Zhang PI; Kirilenko Co-PI), \$114,247.

2010 - 2011. Communicating climate change. NASA Global Climate Change Education (GCCE) grant (Mullendor PI; Kirilenko Co-PI), \$149,000.

2009 - 2011. Northern Great Plains Center for People and the Environment. NASA Applied Sciences Program Grant #NNX09AQ81G (Seielstad PI; Kirilenko Co-PI). \$3,000,014.

2008 - 2009. Northern Great Plains Center for People and the Environment Phase II. NASA Applied Sciences Program Grant #NNX08AO97G (Seielstad PI; Kirilenko Co-PI) \$2,576,054.

2007 - 2008. Northern Great Plains Center for People and the Environment. NASA Applied Sciences Program Grant #NNX06AE16G (Seielstad PI; Kirilenko Co-PI), \$2,766,945.

Selected not funded

2014. People as sensors: Feasibility study on flood monitoring through Twitter communication data mining. Twitter, Inc. Data Grant (Kirilenko PI).
2013. Climate change impacts: peer-to-peer research-based Student Collaboration Network (SCoNe). THE U.S.-RUSSIA PEER-TO-PEER DIALOGUE PROGRAM, US Dept of State (Kirilenko PI), \$99,569.
2013. INnovative and Strategic Program Initiatives for Research and Education-North Dakota (INSPIRE-ND) NSF EPSCoR EPS-081442 (Zhang PI; Kirilenko Co-PI), \$20,000,000.
2010. Drought severity and climate change in Russia: from historical database to multi-model projection. US CRDF; Russian Academy of Science (Kirilenko PI), \$93,000.
2009. Climate Change and the Highway System: Impacts and Adaptation Approaches. Transportation Research Board NAS-NRC (Lim PI, Kirilenko Co-PI), \$990,554.
2008. Drought severity and climate change in Russia: from historical database to multi-model projection. US CRDF; Russian Academy of Science (Kirilenko PI), \$75,000.
2007. Reducing uncertainty in projection of climate change impact on geographical distributions of key pollinators for support of management decision. DOE National Institute for Climatic Change Research (Kirilenko PI), \$360,000.
2007. Climate change, Drought and Water Availability in Central Asia: Aral Sea case study. UND (Kirilenko PI), \$16,395.

5. PUBLICATIONS (an asterisk* designates a supervised student)

Refereed

In preparation

- Molodtsova*, T., Molodtsov*, S., **Kirilenko**, A., Zhang, Z., VanLooy, J., Evaluating Flood Potential with GRACE in the United States.
- Kharel*, G., Romsdahl, R., **Kirilenko**, A., Dealing with “wicked problems” under changing environment: a green paradiplomacy perspective.
- Kirilenko**, A., Stepchenkova, S. Sochi Olympics on Twitter: Topics, Geographical Landscape, and Temporal Dynamics.
- Romsdahl, R.J., **Kirilenko**, A.P., Wood, R.S., Hultquist, A. Changing the narrative: Assessing local governance of climate change in the United Kingdom.

In review

- Kharel*, G., Zheng, H., **Kirilenko**, A., Can land use change mitigate long-term flood risks?, Submitted to Regional Environmental Change.

Refereed Journal Articles

31. 2015. Kharel*, G., **Kirilenko**, A. Considering Climate Change in the Estimation of Long-Term Flood Risks of Devils Lake in North Dakota. *Journal of the American Water Resources Association*, DOI: 10.1111/1752-1688.12300.
30. 2015. **Kirilenko**, A., Molodtsova*, T., Stepchenkova, S. People as sensors: mass media and local temperature influence climate change discussion on Twitter. *Global Environmental Change*, 92-100, doi: 10.1016/j.gloenvcha.2014.11.003.
29. 2014. **Kirilenko**, A., Stepchenkova, S. Public microblogging on climate change: One year of Twitter worldwide. *Global Environmental Change*, 26, 171-182.
29. 2014. Stepchenkova, S., Kim, H., **Kirilenko**, A. Cultural Differences in Pictorial Destination Images: Russia through the Camera Lenses of American and Korean Tourists. *Journal of Travel Research*, 1-16, doi: 10.1177/0047287514535849.
28. 2013. Proulx*, R.A., Knudson*, M., **Kirilenko**, A., VanLooy, J.A., Zhang, X. Characterizing the Terrestrial Water Budget in the Prairie Coteau Using GRACE, NOAA, Landsat, and Groundwater Well Data. *Journal of Water Resources*, 49(9), 5756-5764.
27. 2013. Dronin, N., **Kirilenko**, A. Weathering the Soviet countryside: The impacts of climatic and political factors on dynamics of grain yields in Russia over the past five decades. *The Soviet and Post-Soviet Review*, 40, 114-143.

26. 2012. Dronin, N., **Kirilenko**, A. Rol' klimaticheskogo i politjekonomicheskogo faktora v otechestvennoi istorii XX veka (The role of climate and political economics in national history in the 20th century). *Moscow University Geography Bulletin*, **5**, 13-18 (in Russian).
25. 2012. **Kirilenko**, A., Stepchenkova, S. Climate Change Discourse in Mass Media: Application of Computer-Assisted Content Analysis. *Journal of Environmental Studies and Sciences*, **2**(2), 178-191.
24. 2012. Lemons*, R., Hewitt*, A., Kharel*, G., New*, C., **Kirilenko**, A., Zhang, X. Evaluation of satellite-derived agro-climate variables in the Northern Great Plains. *Geocarto International*, **27**(8), 613-626.
23. 2012. **Kirilenko**, A., Stepchenkova, S., Romsdahl, R., Matiss*, K. Computer-assisted analysis of public discourse: a case study of the precautionary principle in the US and UK Press. *Quantity and Quality*, **46**(2), 501-522.
22. 2011. Munski, L.B., **Kirilenko**, A., Remer, F.M., Mullendore, G.L., Baker, M.E. Undergraduates using multimedia to present how climate and land use are interrelated: an overview of the Communicating Climate Change program at the University of North Dakota. *Prairie Perspectives: Geographical Essays*, **14**, 10-16.
21. 2010. Dronin, N., **Kirilenko**, A. Climate change, food stress, and security in Russia. *Regional Environmental Change*, **11**(1), 167-178.
20. 2010. Stepchenkova, S., Tang, L., Jang, S.C., **Kirilenko**, A., Morrison, A. Benchmarking CVB website performance: spatial and structural patterns. *Tourism Management*, **31**(6), 611-620.
19. 2009. Bryant, J.P., Clausen, T.P., Landhäuser, S.M., Swihart, R.K., **Kirilenko**, A.P., Carrière, S., Stevens, M.T., Cleland, D.T., Jakubas, W.J., Williams, J.H., Veitch, A.M., Popko, R.A., Hawkins, C.D.B., Carlson, M.R., Weber, R.J., Packee, E.C., Malone, T.T., Lehmkhul, K.L., Cebrian, M., Paragi, T.F., Niemi, F.M., Picone, P.M., Brown, S.C., Moore, J.E., Glowacky, E., Kangas, A. Fire Drives Transcontinental Variation in Tree Birch Defense against Browsing by Snowshoe Hares. *American Naturalist* **174**(1), 13-23.
18. 2008. Stepchenkova, S., **Kirilenko**, A., Morrison, A. Facilitating content analysis in tourism research. *Journal of Travel Research*, **47**(4), 454-446.
17. 2008. Dronin, N., **Kirilenko**, A. Climate change and food stress in Russia: what if the market transforms as it did during the past century? *Climatic Change*, **86**(1-2): 123-150.
16. 2007. **Kirilenko**, A., Sedjo, R. Climate Change Impacts on Forestry. *PNAS*, **104**, 19697-19702.
15. 2007. Alcamo, J., Dronin, N., Endejan, M., Golubev, G., **Kirilenko**, A. A New Assessment of Climate Change Impacts on Food Production Shortfalls and Water Availability in Russia. *Global Environmental Change*, **17**(3), 429-444.
14. 2007. **Kirilenko**, A., Chivoiu, B., Crick, J., Ross-Davis, A., Schaaf, K., Shao, G., Swihart, R., Singhanian, V. An Internet-based decision support tool for non-industrial private forest landowners. *Environmental Modelling and Software*, **22**, 1498-1508.
13. 2004. **Kirilenko**, A.P., Alcamo, J., Golubev, G.N., Dronin, N.M., and Endejan, M. Modeling the Impact of Climate Changes on Agriculture in Russia. *Doklady Akademii Nauk Geografica (Reports of Russian Academy of Sciences, Geography)*, **396**(6), 819-822.
12. 2001. **Kirilenko**, A.P. On variability of predicted vegetation migration under changing climate. *Doklady Akademii Nauk Rossii. (Reports of Russian Academy of Science)*, **376**(1), 130-133.
11. 2000. **Kirilenko**, A.P., Belotelov, N.V., Bogatyrev, B.G. Global model of vegetation migration: incorporation of climatic variability. *Ecological modelling*. **132**(1-2), 125-134.
10. 1998. Lighthart, B., **Kirilenko**, A.P. Simulation of summer-time diurnal bacterial dynamics in the atmospheric surface layer. *Atmospheric Environment*, **32**(14/15), 2491-2496.
9. 1998. **Kirilenko**, A.P., Solomon, A.M. Modelling dynamic vegetation response to rapid climate change using bioclimatic classification. *Climatic Change*, **38**(1), 15-49.
8. 1997. Solomon, A.M., **Kirilenko**, A.P. Climate change and terrestrial biomass: What if trees do not migrate? *Global Ecology and Biogeography Letters*, **6**, 139-148.
7. 1997. Krankina, O.N., Dixon, R.K., **Kirilenko**, A.P., Kobak, K.I. Global climate change adaptation: examples from Russian boreal forests. *Climatic change*, **36**, 197-215.
6. 1996. Belotelov, N.V., Bogatyrev, B.G., **Kirilenko**, A.P., Venevsky, S.V. Modelling of time-dependent biome shifts under global climate changes. *Ecological Modelling*, **87**(3-4), 29-40.

5. 1996. Belotelov, N.V., Bogatyrev, B.G., **Kirilenko**, A.P. Dynamic bioclimatic approach to modeling vegetation shifts. *Phystech Journal*, **2**(4), 47-58.
4. 1994. **Kirilenko**, A.P., Belotelov, N.V., Bogatyrev, B.G. Simulation of vegetation zones' shifts and climate variability. *Doklady Akademii Nauk Rossii (Reports of Russian Academy of Science)* **338**(1), 116-118 (in Russian).
3. 1992. Tarko, A.M., Bogatyrev, B.G., **Kirilenko**, A.P. Proportion of countries and regions in the formation of global atmospheric carbon dioxide budget. *Doklady Akademii Nauk SSSR (Reports of the USSR Academy of Science)*, **322**(3), 610-613 (in Russian, English summary).
2. 1991. **Kirilenko**, A.P. Mathematical model of water cycle in forest ecosystems. *Zhurnal Obschey Biologii (Journal of General Biology)*, **52**(6), 863-867 (in Russian, English summary).

Book Chapters

17. 2015. Lioubimtseva, E., Dronin, N., **Kirilenko**, A. Grain production trends in Russia, Ukraine and Kazakhstan in the context of climate change and international trade. In: Elbehri, A (ed.) *Climate change and food systems: Global assessments and implications for food security and trade*, Chapter 7, FAO, Rome, 210-245.
16. 2014. **Kirilenko**, A.P., Romsdahl, R., Stepchenkova, S., Precautionary Principle in the US and UK. In: Michalos, A.C. (ed.) *Encyclopedia of Quality of Life and Well-Being Research*. Springer, Dordrecht, Netherlands, 5016-5020.
- 12. 2013. Milanova, E.V., **Kirilenko**, A.P., Dronin, N.M., Telnova, N.O., Kalutskova, N.N. Eastern European forest-steppes and steppes: trends in bioproductivity of ecosystems driven by climate and land use change. In: Himiyama, Y., Bičik, I. (eds.) *Land Changes in Selected Regions in the World, Vol. VIII.*, IGU-LUCC, Institute of Geography, Hokkaido University of Education, Asahikawa, Japan, 19-27.
- 13. 2011. Dronin, N., **Kirilenko**, A. Climate change, water and agriculture in the Azov sea basin. In: Lagutov V. (ed.) *Environmental security in watersheds: the Sea of Azov*. NATO science for peace and security series C: environmental security, Springer, 79-94.
- 14. 2011. **Kirilenko**, A., Dronin, N. Climate change and adaptations of agriculture in the countries of the Former Soviet Union. In: Yadav, S.S., Redden, B., Hatfield, J.L., Lotze-Campen, H., Hall, A.E. (eds.) *Crop adaptation to changing climates*. Wiley-Blackwell, 84-106.
- 15. 2010. Milanova, E., **Kirilenko**, A., Dronin, N. Land use and cover change under agricultural development and climate change in Russia. In: Himiyama, Y., Bičik, I. (eds.) *Land Changes in Selected Regions in the World, vol. V*. IGU-LUCC, Insitute of Geography, Hokkaido University of Education, Asahikawa, Japan, 25-30.
- 16. 2008. Wenkel, K.-O., Wieland, R., Mirschel, W., Schultz, A., Kampichler, C., **Kirilenko**, A., Voinov, A. Regional Models of Intermediate Complexity (REMICs) – A New Direction in Integrated Landscape Modelling. //In: A.J. Jakeman, A.A. Voinov, A.E. Rizzoli and S.H. Chen (eds.) *Developments in Integrated Environmental Assessment*, vol. 3, 285-295.
- 17. 2008. **Kirilenko**, A.P., Dronin, N.M., Ashakeeva, G. Projecting food and water security in the Aral Sea Basin Countries: climate change, irrigation, and policy. //In: White, J.R., and Robinson, W.H., *Natural Resources: Economics, Management and Policy*. Nova Science Publishers, 51-87.
- 18. 2008. Dronin, N., **Kirilenko**, A. Climate Change and Water Resources in North Caucasus and South Urals. //In: Lagutov, V. (ed.) *Rescue of Sturgeon Species in the Ural River Basin*. NATO Science for Peace and Security Series C: Environmental Security, 2008, II, 2.1, 173-189.
- 19. 2007. Easterling, W., Aggarwal, P., Batima, P., Brander, K., Erda, L., Howden, M., **Kirilenko**, A., Morton, J., Soussana, J.-F., Schmidhuber, J., Tubiello, F.N. Food, fibre and forest products. //In: M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden, C.E. Hanson (eds.) *Climate Change 2007: Impacts, Adaptation and Vulnerability*. IPCC, Cambridge University Press, Cambridge, UK, 273-313.
- 20. 2005. Alcamo, J., Endejan, M., **Kirilenko**, A.P., Golubev, G.N., Dronin, N.M. Climate Change and its Impact on Agricultural Production in Russia // In: eds. E. Milanova, Y. Himiyama, I. Bicik. *Understanding Land-Use and Land-Cover Change in Global and Regional Context*. Science Publishers, 35-46.
- 21. 2005. **Kirilenko**, A.P., Dronin, N.M. Climatic and political factors in the agricultural performance of Russia // In: eds. E. Milanova, Y. Himiyama, I. Bicik. *Understanding Land-Use and Land-Cover Change in Global and Regional Context*. Science Publishers, 305-314.
- 22. 2001. **Kirilenko**, A.P. Climate change effect on the reforestation potential of Russia. // In: Brunet India, M. and Lopez Bonillo, D. (eds.), *Detecting and Modelling Regional Climate Change*, Springer-Verlag, Berlin – Heidelberg – Paris - New York, 537-545.

- 23. 1995. Belotelov N.V., Bogatyrev B.G., **Kirilenko** A.P. Modeling dynamics of vegetation shifts under time-dependent scenarios of global climate change. In: Isaev, A.S. (ed.) Problems of Monitoring and Modeling Dynamics of Forest Ecosystems. Moscow, Nauka press, 252-277 (in Russian, English summary).
- 24. 1995. Belotelov, N.V., Bogatyrev, B.G., **Kirilenko**, A.P. Principles of landscape approach to modeling of forest vegetation dynamics. In: Isaev, A.S. (ed.) Problems of Monitoring and Modeling Dynamics of Forest Ecosystems. Moscow, Nauka press, 220-227 (in Russian, English summary).
- 25. 1989. Bogatyrev, B.G., **Kirilenko**, A.P. Structural and functional analysis of carbon dynamics in the biosphere. In: Mathematical Methods and Problems in Engineering, vol. 1. Moscow, USSR Ministry of Defense, 39-44 (in Russian).
- 26. 1988. Udalkina, M.V., Bazilevich, N.I., Bogatyrev, B.G., **Kirilenko**, A.P., and Tarko, A.M. Study of production process in forest ecosystem for temperate zone of Northern Hemisphere using database. In: Problems of Ecological Monitoring and Ecosystem Modeling, vol. XI. Leningrad, Gidrometeoizdat press, 150-159 (in Russian, English summary).

Conference Proceedings

- 26. 2014. Kharel*, G., **Kirilenko**, A. Estimating Long-term Flood Risks under Changing Climate: A Case of Devils Lake, North Dakota. In: Ames, D.P., Quinn, N.W.T., Rizzoli, A.E. (Eds.), Proceedings of the 7th International Congress on Environmental Modelling and Software, June 15-19, San Diego, California, USA. ISBN: 978-88-9035-744-2. http://www.iemss.org/sites/iemss2014/papers/iemss2014_submission_349.pdf.
- 25. 2012. Lim, Y.H., Zhang, X., **Kirilenko**, A., Teng, W., Munna, H. Flood frequency analysis of Devils Lake under current and projected future climates utilizing HEC hydrologic models, NASA satellite observations and downscaled GCM simulations. World Environmental and Water Resources Congress, Albuquerque, New Mexico, May 20-24, 2012, 1872-1881.
- 24. 2012. Dronin, N.M., **Kirilenko**, A.P., 2012. Weather-related yield of cereals in Russia in the 20th century (1958–1990) (Zavisimost' urozhaev zernovyh ot pogodnyh uslovij v Rossii v XX veke (1958–1990 gg.)) International Scientific Conference “Regional effects of global climate change in the XXI century (drivers, consequences, projections)”, Voronezh, Russia, June 26–27, 1-7.
- 23. 2012. Biesecker, M., ... **Kirilenko**, A., ... (35 authors). Uncertainty of hydrologic events under South Dakota's changing conditions: a research agenda. Proceedings of the South Dakota Academy of Science, **91**, 257-259.
- 22. 2011. Lin, Z., **Kirilenko**, A.P., Rahman, M.M. Coping with uncertainty in assessing climate change impacts on streamflows. AWRA 2011 spring specialty conference, Baltimore, April 18-20, 2011.
- 21. 2010. **Kirilenko**, A. Climate change impact on agriculture: Devils Lake basin. Proceedings of the iEMSs Fifth Biennial Meeting, Ottawa, Canada.
- 20. 2008. Stepchenkova, S., Tang, L., Jang, S., **Kirilenko**, A., Morrison, A. Mapping CVB website quality: Spatial and structural patterns. In: Advances in Hospitality and Tourism Research, Vol. XIII, Orlando, FL, January 3-5, 2008, 649-661.
- 19. 2008. **Kirilenko**, A., Hanley, R. Reducing Uncertainty in Ecological Niche Models with ANN Ensembles. In: Sánchez-Marrè, M., Béjar, J., Comas, J., Rizzoli, A.E., Guariso, G. Proceedings of the iEMSs Fourth Biennial Meeting, Universitat Politècnica de Catalunya, Barcelona, Catalonia, 1047-1054.
- 18. 2007. **Kirilenko**, A., Hanley, R. Predicting climate change impact on insect biodiversity: comparison of scenarios. Proceeding of the 32nd International Symposium on Remote Sensing of Environment. San Jose, Costa Rica, June 25-29, 2007, 453-457.
- 17. 2007. **Kirilenko**, A.P., Hanley, R.S. Using multiple methods to predict climate change impacts on bumblebees in North America. The Third IASTED International Conference on Environmental Modelling and Simulation EMS 2007, August 20-22, 2007, Honolulu HI, USA, 42-47.
- 16. 2007. Laguette, S., Hanley, R.S., **Kirilenko**, A.P. Distributional modeling of three cattails species across North America Great Plains. The Third IASTED International Conference on Environmental Modelling and Simulation EMS 2007, August 20-22, 2007, Honolulu HI, USA, 37-41.
- 15. 2007. Hanley, R.S., **Kirilenko**, A.P., Chatzimanolis, S. Ecological fingerprinting as data visualization: phyloclimatic patterns within a group of South American beetles. The Third IASTED International Conference on Environmental Modelling and Simulation EMS 2007, August 20-22, 2007, Honolulu HI, USA, 20-24.
- 14. 2006. Stepchenkova, S., **Kirilenko**, A., Morrison, A. Facilitating statistical analysis of digital textual data: a two-step approach. In: Advances in Hospitality and Tourism Research, Vol. XIII, Seattle, January 5-7, 2006, 680-689.

13. 2006. Zhang, X., **Kirilenko**, A., Estimate of chlorophyll concentration from ocean color: Uncertainty associated with unknown backscattering, Pan Ocean Remote Sensing Conference, 2006, 92-96.
12. 2004. **Kirilenko**, A. Spatially distributed integrated modeling of land use change impact on hydrology. In: L. Ubertini (ed.) Proceedings of the IASTED International Conference on Environmental Modelling and Simulation, Nov. 22-24, 2004, St. Thomas, US VI, ACTA Press, 75-79.
11. 2003. Shao, G., **Kirilenko**, A., and Martin, B. Enhancing precision in assessing forest acreage changes with remotely sensed data. Proceedings of the Second International Precision Forestry Symposium, Seattle, Washington, June 15-17, 2003, 67-74.
10. 2003. **Kirilenko**, A., Alcamo, J., Dronin, N., Endejan, M., Golubev, G. Assessment of Climate Change Impact on Agriculture. Proceeding of the 30th International Symposium on Remote Sensing of Environment. Honolulu, November 10-14, 2003.
9. 2003. **Kirilenko**, A., Dronin N. Climatic and political factors in agricultural performance of Russia. Proceedings of the Workshop in Global and Regional Land Use/Cover Changes. International Geographic Union. Moscow, July 17 - 20, 2003.
8. 2003. **Kirilenko**, A., Alcamo, J., Golubev, G., Endejan, M., Dronin N. Climate change and its impact on agricultural production in regions of Russia. . Proceedings of the Workshop in Global and Regional Land Use/Cover Changes. International Geographic Union. Moscow, July 17-20, 2003.
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11. 2002. **Kirilenko**, A.P. Simulation of long-term dynamics of wildfires in Russia with Markovian model. Internal Report No. 10. European Forest Institute, Joensuu, Finland, 29 p.
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6. PROFESSIONAL PRESENTATIONS

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9. 2013. **Kirilenko**, A., Water, food, and climate change in the Former Soviet Union. Department of Civil and Environmental Engineering, the University of Texas at San Antonio, Feb. 15, 2013.
8. 2010. **Kirilenko**, A. Climate change, water, and agriculture: Central Asia and Southern European Russia. UND, Department of Atmospheric Science. September 16, 2010.
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6. 2008. **Kirilenko**, A. Water, food and climate change. South Dakota State University. February 25, 2008.
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60. 2015. Dronin N., Kirilenko A., Liobimtseva E. Estimates of grain exports of Russia, Ukraine and Kazakhstan for the 2020s. Agriculture and Climate Change in Transition Economies, June 17-19, Halle, Germany.
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58. 2015. Kirilenko, A., Zypchin, K., Gulbin*, S. Social network data mining for flood management: 2013 Alberta flooding case study. Association of American Geographers Annual Meeting, April 21-25, Chicago, IL
57. 2015. Romsdahl, R.J., Kirilenko, A. Changing the Narrative: Assessing Local Governance of Climate Change in the United Kingdom. Midwest Political Science association, Apr. 16-19, Chicago, IL.
56. 2014. Kirilenko, A., Molodtsova*, T., Stepchenkova, S. People as sensors: mass media and local temperature influence climate change discussion on Twitter. American Geophysical Union Fall Meeting, Dec. 15-19, San Francisco, CA.
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52. 2013. Molodtsov*, S., **Kirilenko**, A., Olsen, D. Climate Change detection using GPS RO and CMIP5 data. American Geophysical Union Fall Meeting, Dec. 9-13, San Francisco, CA.
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37. 2011. **Kirilenko** A., Zhang, X., Lim, Y.H., Teng, W., Climate change impacts on North Dakota: agriculture and hydrology. American Geophysical Union Fall Meeting, Dec. 5-12, San Francisco, CA.
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35. 2010. Munski, L.B., **Kirilenko**, A., Remer, F.M., Mullendore, G.L., Baker, M.E. Undergraduates using multimedia to present how climate and land use are interrelated: an overview of the Communicating Climate Change program at the University of North Dakota. PCAG 34th Annual Conference and Annual General Meeting, University of Saskatchewan, September 24-26, 2010.
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33. 2010. Xiaodong, Z., Lim, Y.H., **Kirilenko** A., Teng, W., Combining hydrological modeling and remote sensing observations to enable data-driven decision making for Devils Lake flood mitigation in a changing climate. American Geophysical Society Fall Meeting, Dec. 14-18, San Francisco, CA.
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31. 2009. **Kirilenko** A., Dronin, N., Xiaodong, Z. Climate change, water, and agriculture: a study of two contrasting regions. American Geophysical Society Fall Meeting, Dec. 14-18, San Francisco, CA.
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28. 2009. American Meteorological Society Science 89th Annual Meeting, January 10, Phoenix, AZ (no presentation).
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20. 2006. **Kirilenko**, A., Integrated Modeling of Land Use Change. A Summit on Environmental Modelling and Software, Burlington, Vermont, July 9-12, 2006.
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13. 2003. **Kirilenko**, A., Dronin, N. Climatic and political factors in agricultural performance of Russia. Workshop on Global and Regional Land Use/Cover Changes, International Geographic Union. Moscow, Russia, July 17-20.
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6. 2012. Biesecker, M., ... **Kirilenko**, A., ... (35 authors). Development of conceptual and mathematical models to understand and describe the uncertainty of hydrological events in the changing conditions of the State of South Dakota. 2012 Western South Dakota Hydrology Conference, Rapid City, SD. April 19, 2012.
5. 2011. **Kirilenko** A., Climate change discourse in mass media: application of computer-assisted content analysis. ESSP Brownbag discussion seminar, Oct. 21, UND, Grand Forks, ND.
4. 2011. Lemons*, R., Hewitt*, A., Kharel*, G., New*, R., **Kirilenko**, A., Zhang. X. Evaluation of satellite-derived agro-climate variables in the Northern Great Plains. ND-SD joint EPSCoR conference, Oct. 4, 2011, NDSU, Fargo, ND.
3. 2004. Bhati, M.S., Chivoiu, B., Crick, J., **Kirilenko**, A., Ross-Davis, A., Schaaf, K., Shao, G., Singhanian, V., Swihart, R. 4S Tool: Building Wildlife Values into a Web-Based Support System for Forest Landowners. Fish and Wildlife at the Crossroads: Preparing for Future Challenges. 65th Annual Midwest Fish and Wildlife Conference, Indianapolis, IN, Dec. 12-15.
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20. 2014. Molodtsova*, T., **Kirilenko**, A., Stepchenkova, S. Utilizing the social media data to validate "climate change" indices. UND Graduate School Scholarly Forum. Grand Forks, ND, March 12, 2014.
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18. 2014. Kharel*, G., Kirilenko, A. Devils Lake Water Levels Under Changing Climate for Different Outlet Alternatives. UND Graduate Scholarly Forum. Grand Forks, ND, March 11, 2014.
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16. 2012. Molodtsova*, T., **Kirilenko**, A., Stepchenkova, S. Climate change discourse: Comparisons of topics and attitudes in conservative and liberal U.S. press. UND Graduate School Scholarly Forum. Grand Forks, ND, February 28, 2012.

15. 2012. Kharel*, G., **Kirilenko**, A. Zhang, X. Modeling the Devils Lake Basin using the Soil and Water Assessment Tool (SWAT). UND Graduate School Scholarly Forum. Grand Forks, ND, February 28, 2012.
14. 2012. Lemons*, R., Hewitt*, A., Kharel*, G., New*, C., **Kirilenko**, A., Zhang, X. Evaluation of Satellite-Derived Agro-Climate Variables in the Northern Great Plains of the United States. UND Graduate School Scholarly Forum. Grand Forks, ND, February 28, 2012.
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10. 2008. Hanley, R.S., **Kirilenko**, A.P. Ecological fingerprinting to estimate phyloclimatic patterns within a group of South American beetles. University of North Dakota Scholarly Forum, Grand Forks ND, February 11-12, 2008.
9. 2008. Soizik, L., Hanley, R.S., **Kirilenko**, A.P. Predictive distributional modeling of three cattails species across North American Northern Great Plains. University of North Dakota Scholarly Forum, Grand Forks ND, February 11-12, 2008.
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5. 2004. **Kirilenko**, A. Integrated Modeling with LUCI. GISCIENCE-L GIScience Coordination meeting, Indiana University – Purdue University, Indianapolis, IN. May 14
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3. 2004. Shao, G., **Kirilenko**, A., Chivoiu, B. Projecting Future Forests under Global Climate Change: An Overview. PCCRC Workshop, Climate Change Research and Education at Purdue. Purdue University, West Lafayette, IN, November 19.
2. 2004. **Kirilenko**, A., Chivoiu, B., Shao, G. Climate change impact on forests: primary effects and interactions. PCCRC Workshop, Climate Change Research and Education at Purdue. Purdue University, West Lafayette, IN, November 19.
1. 2004. Bhati, M.S., Singhanian, V., **Kirilenko**, A., Chivoiu, B. 4S Tool: An Internet based Forest Stand Software Support System. 5th Annual Environmental Research Symposium, Environmental Science & Engineering Institute (ESEI), Purdue University, West Lafayette, IN, April 8-9.

7. SERVICE

Department

Evaluation, Tenure & Promotion Committee, Chair	2014 – 2015
Brownbag Friday Discussion seminars, Chair	2007 – 2015
Evaluation, Tenure & Promotion Committee, member	2013 – 2014
Faculty Evaluations, Promotion and Tenure Departmental Guidelines development, Chair	2013 – 2014
Student Evaluation, Chair	2007 – 2013

College

School of Aerospace Curriculum Committee, member 2013 – 2015

University

UND Presidential committee on Promotions, member 2012 – 2013

UND Outstanding Faculty Awards Committee, member 2010 – 2012

Professional Associations

Coordinating Leading Author: Global Environment Outlook (GEO), United Nations Environment Programme

Leading Author: Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC AR4)

Editorial board: Carbon Balance and Management

Reviewer, journals: Environmental Modelling and Software; International Journal of Climate Change Strategies and Management; Environment, Development and Sustainability; Journal of Applied Meteorology; Climatic Change; Journal of Plant Pathology; Tourism and Management; Carbon Balance and Management; Mitigation and Adaptation Strategies for Global Change; Environmental Science and Policy; International Journal of Climate; Ecological Informatics

Reviewer, books: IPCC Climate Change 2007 WG2 Chapter 12 SOD; IPCC Climate Change 2007 WG3 SOD; Hare, W.L., Battaglini, A., Jaeger, C., Cramer, W. (eds.) Climate impact hotspots – Key vulnerable regions and climate change; IPCC Special Report on Safeguarding the Ozone Layer and the Global Climate System: Issues related to Hydrofluorocarbons and Perfluorocarbons; IPCC Climate Change 2007 WG3 Chapter 9 ZOD; IPCC Climate Change 2007 WG2 Chapter 12 FOD

Reviewer, conference submissions: IASTED International Conference on Modelling and Simulation (multiple years); International Congress on Environmental Modelling and Software (iEMSs)

Reviewer, grants and awards: NASA GCCE; UK Natural Environment Research Council; World Bank; IIASA Peccei and Mikhalevich Award; Fulbright Senior Scholars Program in Russian Federation

Professional societies: American Geophysical Union (AGU); International Environmental Modelling and Software Society (iEMSs)

Conference Organizing:

Session moderator. UND Scholarly Forum; Earth, Space & Flight Session. March 5, 2013

Session organizer, International Environmental Modelling and Software Conference (IEMSS), 2010

International Program Committee for IASTED International Conference on Modelling and Simulation EMS 2010

International Program Committee for the Fifth IASTED International Conference on Environmental Modelling and Simulation EMS 2009

International Program Committee for the Fourth IASTED International Conference on Environmental Modelling and Simulation EMS 2008

International Program Committee for the Third IASTED International Conference on Environmental Modelling and Simulation EMS 2007, August 20 – 22, 2007, Honolulu HI, USA

Judge, Best Paper Awards, Forestry and Natural Resources Graduate Student Conference, Purdue University (2005, 2006)

Session chair, the Second IASTED International Conference on Environmental Modelling and Simulation EMS-2004, St. Thomas VI

Community at Large

Committees:

Scientific advisory group for North Dakota Climate Solutions Partnership (2009 – 2014)

Participated in preparing the testimony before the ND House National Resources Committee in opposition to HCR 3038 (oppose CO2 standards) and HCR 3030 (oppose climate legislation). HCR 3030 amended; HCR 3038 withdrawn (2009)

Land Use subcommittee Chair. Green Grand Forks Resource Committee (developing suggestions for the city of Grand Forks for tangible actions on a wide range of programs and policies involving the community at large, city government and community-wide entities, 2007–2010)

Panel discussions and presentations, invited:

Public symposium "Climate Change—A 21st Century Challenge to American National Security", hosted by the UND History Department, and Phi Alpha Theta. Panel discussion. Grand Forks, ND. September 24, 2009

Climate Change and Why We Need to Address it Now. Town Hall Forum organized by Alliance for Climate Protection/ Repower North Dakota, Grand Forks, ND. September 14, 2009

Panel discussion of the movie *The Inconvenient Truth*. Northland Community and Technical College, Thief River Falls, MN. April 19, 2007

Panel discussion of the movie *The Inconvenient Truth*. Department of Geology and Geological Engineering of the University of North Dakota and the Dakota Science Center of Grand Forks, Empire Arts Center, Grand Forks, ND. April 14, 2007

Climate Change Science: What We Know Now. University of North Dakota, Grand Forks, ND. March 6, 2007

Global Warming. Purdue University School of Agriculture. Presentation to high school students, participating at the Purdue Agriculture Exploration Summer Camp. July 13, 2004

Interviews, TV appearances, and newspaper coverage:

2010. March. "Errors in Climategate". Polit.ru, scientific section (invited discussion)

2009. December. Interview, scientific.ru (leading scientific newspaper of Russia)

2009. Press-conference, Scientific advisory group for North Dakota Climate Solutions Partnership. Published in Fargo Forum, Minot Daily News, Jamestown Sun Dec. 9

2008. Interview, Grand Forks Herald, June

2007. Interview, Grand Forks Herald, December

2007. Interview, Grand Forks Cable TV Channel 3, cir. October 17

2007. Nobel Peace Prize connects with UND climate scientist. UND University letter, October 17

2007. Y. Lee. A piece of the prize. UND professor part of the panel that wins Nobel Prize. Grand Forks Herald, October 13, issue 106 (numerous reprints)

2007. UND climate change expert to comment on President Bush's global carbon emission reduction plan. UND News, June 1. <http://www2.und.edu/our/news/story.php?id=2086>

2007. K. Johnson. Scientist hopes climate study "makes a difference." Grand Forks Herald, March 6, issue 219 (numerous reprints in local newspapers)

2007. Officials say climate change will hurt Upper Midwest. Associated Press, April 8 (numerous reprints in local newspapers)

2007. Climate change would affect Midwest. Rapid City Journal, April 10

2007. UND researcher plays role in report on climate change. Associated Press, February 3

2007. A part of history. UND professor has hand in international report. Grand Forks Herald, February 3, issue 219

2007. Interview, Grand Forks Cable TV Channel 3, April 10

2004. Russian national daily newspaper *Izvestia* (News) published an article on my research in climate change impact on Russian agriculture in their Science section. Natalia Reznik, Global warming in Russia – frequent draughts and more potatoes. *Izvestia*, September 11, issue 168(26725)

7. ADDITIONAL PROFESSIONAL ACTIVITY

Authored software

NeuroNiche, software for projecting ecological niche modifications with climate change using Artificial Neural Networks.

Species Fingerprint, software for ecological niche visualization. <http://kirilenko.org/fingerprint>

WORDER, software for analysis of digital textual data. <http://kirilenko.org/worder>

4Stool, An Internet-based decision support tool for non-industrial private forest landowners. Purdue University

Professional education

MATLAB. Mathworks Corp.	2014
Grades and Grading in an Age of Assessment. Workshop. AAC&U	2009
Issues in Higher Education Leadership Seminar. UND President's program	2008 – 2009
College Teaching Workshop: Basics of Teaching. Purdue University	2006
Macromedia Dreamweaver. Purdue University	2006
Bayesian Statistics. Purdue University	2005
Microsoft Access. Purdue University	2005
ESRI ARC GIS. ESRI	2004 – 2007
Certificate of the Microsoft Certified Systems Engineer. Microsoft	2000
FORTTRAN 90 and Parallel Computing. EPA National Environmental Supercomputing Center	1997
ERDAS IMAGINE. US EPA	1996

Computer skills

Programming: C/C++, VB, .NET, Python, NLTK, Fortran 77/90/95, Stella, SQL, ESRI Mapobjects, Twitter API, Flickr API

Data Processing: ESRI ArcGIS, SPSS, MS Access, Matlab

Professional societies

American Geophysical Union (AGU)	2007 – current
International Environmental Modelling & Software Society (iEMSs)	2007 – 2014
American Meteorological Society (AMS)	2009 – 2010
International Communication Association (ICA)	2013 – 2014

8. HONORS/AWARDS

UND President's program "Issues in Higher Education Leadership Seminar"	2008 – 9
Nobel Peace Prize (shared between Al Gore and the IPCC), IPCC	2007
Certificate of Appreciation, School of Agriculture, Purdue University	2004
EFI Research Scholarship, European Forest Institute, EU	2000
Research Associateship Awards, U.S. National Research Council	1995; renewed 1996, 1997, and 1998