

Kirsten de Beurs, PhD
Chair and President's Associates Presidential Professor
Department of Geography and Environmental Sustainability
The University of Oklahoma
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Professional Preparation

2007: Postdoctoral Fellowship, Forest Ecology and Management, University of Wisconsin
2006: Postdoctoral Fellowship, GSCE, South Dakota State University
2005: Ph.D. Natural Resource Science, University of Nebraska – Lincoln
2000: MS Agricultural System Science, Wageningen Agricultural University, the Netherlands
1996: BS Agricultural System Science, Wageningen Agricultural University, the Netherlands

Professional Appointments

2000 – 2001: Junior Consultant Remote Sensing & GIS, Netherlands Geomatics and Earth Observation
2001 – 2002: Support Engineer, ESRI Nederland

Academic Appointments

2018 – : Professor, Geography and Environmental Sustainability, OU
2013 – 2018: Associate Professor, Geography and Environmental Sustainability, OU
2010 – 2013: Assistant Professor, Geography and Environmental Sustainability, OU
2007 – 2010: Assistant Professor, Geography, Virginia Tech

Administrative Appointments

2015 – present: **Chair** Department of Geography and Environmental Sustainability, OU
2017 – 2018: **Interim Director** Center for Spatial Analysis (CSA)

Relevant University Committee Membership

(Please see later section with all department and university service)

2018 – present: **Member** University Budget Council
2017 **Member** Search Committee - Dean of the Graduate College
2013 – present: **Member** Cooperative Institute for Mesoscale Meteorological Studies Executive Board
2013 – 2016: **Member** Academic Program Council
Member Vice President for Research Advisory Board
2011 – 2014: **Research Liaison** for the Department

National and International Experience and Committee Assignments

(Please see later section with all professional service)

2015 - current: **Associate Editor** - International Journal of Applied Earth Observation
2015: **Invited Research Scientist** – Faculty of Geo-Information Science and Earth Observation, University of Twente, the Netherlands
2011: **Member** NASA Measures Review Panel
2007 – 2010: **Member** LP DAAC User Working Group
Various: **Member** Major proposal review panels for NASA (2009, 2017)

Teaching

GIS 4133/5133 Fundamentals of Remote Sensing
GIS 4553/5553 GIS Applications
GIS 4233/5233 Digital Image Processing
GEOG 3890/5990 Remote Sensing and Phenology
GIS 4923/5923 Spatial Statistics

Graduate Student Mentoring

- Number of PhD students successfully graduated as major advisor: 4
- Number of MA /MS students successfully graduated as major advisor: 6
- Number of PhD and MA /MS students currently under my supervision: 5
- Participation as member or external examiner of graduate student committees: 22

Professional Development

2017: Attended the Women in Higher Education Leadership Summit in San Diego, CA. The purpose of this summit was twofold: 1) to provide higher education leaders with the tools and education to meet the challenges that they face in their workplace, 2) to address the issues specific to women and leadership and develop women's individual leadership capacity.

Research Statistics

- 74 Published Manuscripts (64) and Book Chapters (10)
- 4084 Google Scholar Citations, 30 Google Scholar h-index
- 1908 Web of Science Citations, 20 Web of Science h-index
- About \$2.5 million in total external funding, with a little over \$1.5 million as PI.

Peer Reviewed Journal Articles **: with students

https://scholar.google.com/citations?user=gOx_69YAAAAJ&hl=en&oi=ao

1. Kaspari M, **de Beurs KM**, 2019. On the geography of activity: productivity but not temperature constrains discovery rates by ectotherm consumers. *Ecosphere*, 10 (2), 1-5.
2. Welti EAR, Sanders NJ, **de Beurs KM**, Kaspari M, 2019. A distributed experiment demonstrates widespread sodium limitation in grassland food webs. *Ecology*, 100(3), e02600.
3. Zheng B, **de Beurs KM**, Owsley BC, Henebry GM, 2019. Scaling relationship between CO pollution and population size over major US metropolitan statistical areas. *Landscape and Urban Planning*.
4. **Thompson ES**, **de Beurs KM**, 2018. Tracking the removal of buildings in rust belt cities with open-source geospatial data. *International Journal of Applied Earth Observation and Geoinformation*, 73.
5. Dilekli N, Janitz AE, Campbell JE, **de Beurs KM**, 2018. Evaluation of geoimputation strategies in a large case study. *International Journal of Health Geographies*, 17 (30).
6. **Busch J**, Soreghan M, **de Beurs KM**, McGlue M, Kimirel I, Choen A, Ryan A, 2018. Linking watershed disturbance with nearshore sedimentation and the shell beds of Lake Tanganyika (Makhale Mountains, Tanzania). *Environmental Earth Sciences*, 77(514).
7. **de Beurs KM**, Henebry GM, Owsley BC, Sokolik IN, 2018. Large scale climate oscillation impacts on temperature, precipitation and land surface phenology in Central Asia. *Environmental Research Letters*, 13 (6).

8. ****Kingfield DM**, Calhoun KM, **de Beurs KM**, Henebry GM, 2018. Effects of city size on thunderstorm evolution revealed through a multi-radar climatology of the Central United States. *Journal of Applied Meteorology and Climatology*, DOI: <https://doi.org/10.1175/JAMC-D-16-0341.1>.
9. ****Li M**, **de Beurs KM**, Stein A, Bijker W, 2017. Incorporating open source data for Bayesian classification of urban land use from VHR stereo images, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 10 (11), 4930-4943, <https://doi.org/10.1109/JSTARS.2017.2737702>.
10. Groisman P, Shugart H, Kicklighter D, Henebry GM, Tchebakova N, Maksyutov S, Monier E, Gutman G, Qi J, Prishchepov A, Kukavskaya E, Porfiriev B, Shiklomanov A, Loboda T, Shiklomanov N, Nghiem S, Bergen K, Albrechtova J, Chen J, Shahgedanova M, Shvidenko A, Speranskaya N, Soja A, **de Beurs KM**, Bulygina O, McCarty J, Zhuang Q, Zolina O, 2017. Northern Eurasia Future Initiative (NEFI): facing the challenges and pathways of global change in the twenty-first century. *Progress in Earth and Planetary Science*, DOI: <https://doi.org/10.1186/s40645-017-0154-5>.
11. ****Kingfield DM**, Calhoun KM, **de Beurs KM**, 2017. Antenna structures and cloud-to-ground lightning location: 1995–2015, *Geophysical Research Letters*, 44, 5203–5212, <http://dx.doi.org/10.1002/2017GL073449>.
12. ****Adhikari P**, **de Beurs KM**, 2017. Growth in urban extent and allometric analysis of West African cities. *Journal of Land Use Science*, <http://dx.doi.org/10.1080/1747423X.2017.1280550>.
13. Julian JP, **de Beurs KM**, Owsley BC, Davies-Colley RJ, Ausseil AE, 2017. River water quality changes in New Zealand over 26 years: response to land use intensity. *Hydrology and Earth System Sciences*, 21, 1149-1171. <http://dx.doi.org/10.5194/hess-21-1149-2017>.
14. ****Kingfield DM**, **de Beurs KM**, 2017. Landsat identification of tornado damage by land cover and an evaluation of damage recovery in forests. 2017. *Journal of Applied Meteorology and Climatology*. <http://dx.doi.org/10.1175/JAMC-D-16-0228.1>. Selected as paper of note: BAMS.
15. Trachtenberg ZV, Burns TJ, **de Beurs KM**, Ellis ST, Gates KK, Hoagland BW, Kelly JF, Neeson TM, Randall AR, Schlupp I, Soppelsa PS, Soreghan GS, Zeigles JJ, 2017. The Anthropocene Biosphere: Supporting ‘Open Interdisciplinarity’ through Blogging. *Trends in Ecology & Evolution*, 32 (1): 1-3. <https://doi.org/10.1016/j.tree.2016.10.018>.
16. ****Kamarinas I**, Julian JP, Hughes AO, Owsley BC, **de Beurs KM**, 2016. Nonlinear changes in land cover and sediment runoff in a New Zealand catchment dominated by plantation forestry and livestock grazing. *Water*, 8(436). <http://dx.doi.org/10.3390/w8100436>.
17. ****Adhikari P**, **de Beurs KM**, 2016. An evaluation of multiple land-cover data sets to estimate cropland area in West Africa. *International Journal of Remote Sensing*, 37 (22): 5344-5364. <http://dx.doi.org/10.1080/01431161.2016.1232869>.
18. ****Kelly J**, **Horton KG**, Stepanian PM, **de Beurs KM**, Fagin T, Bridge ES, Chilson PB, 2016. Novel measures of continental-scale avian migration phenology related to proximate environmental cues. *Ecosphere*, 7(9). <http://dx.doi.org/10.1002/ecs2.1434>.
19. ****Windahl E**, **de Beurs KM**, 2016. An intercomparison of Landsat land surface temperature retrieval methods under variable atmospheric conditions using in situ skin temperature. *International Journal of Applied Earth Observations and Geoinformation*, 51: 11-27. <https://doi.org/10.1016/j.jag.2016.04.003>.

20. ****Busch J**, Greer L, Harbor D, Wirth K, Lescinsky H, Curren HA, **de Beurs KM**, 2016. Quantifying exceptionally large populations of *Acropora* spp. Corals off Belize using sub-meter satellite imagery classification. *Bulletin of Marine Science*, 92(2):265-283. <http://dx.doi.org/10.5343/bms.2015.1038>.
21. Horion S, Prishchepov AV, Verbesselt J, **de Beurs KM**, Tagesson T, Fensholt R, 2016. Revealing turning points in ecosystem functioning over the Northern Eurasian agricultural frontier. *Global Change Biology*, 22 (8): 2801 – 2817. <http://dx.doi.org/10.1111/gcb.13267>.
22. ****Yan D**, **de Beurs KM**, 2016. Mapping the distributions of C3 and C4 grasses in the mixed-grass prairies of southwest Oklahoma using the Random Forest classification algorithm. *International Journal of Applied Earth Observation and Geoinformation*, 47: 125-138. <https://doi.org/10.1016/j.jag.2015.12.007>.
23. **de Beurs KM**, Owsley BC, Julian JP, 2016. Disturbance analyses of forests and grasslands with MODIS and Landsat in New Zealand. *International Journal of Applied Earth Observation and Geoinformation*, 45: 42-54. <https://doi.org/10.1016/j.jag.2015.10.009>.
24. ****Tran TV**, **de Beurs KM**, Julian JP, 2016. Monitoring forest disturbances in Southeast Oklahoma using Landsat and MODIS images. *International Journal of Applied Earth Observation and Geoinformation*, 44: 42-52. <https://doi.org/10.1016/j.jag.2015.07.001>.
25. ****Julian JP**, **Wilgruber NA**, **de Beurs KM**, Mayer PM, Jawarneh RN, 2015. Long-term impacts of land cover changes on stream channel loss. *Science of the Total Environment*, 537: 399-410. <https://doi.org/10.1016/j.scitotenv.2015.07.147>.
26. **de Beurs KM**, Henebry GM, Owsley BC, Sokolik I, 2015. Using multiple remote sensing perspectives to identify and attribute land surface dynamics in Central Asia 2001-2013. *Remote Sensing of Environment*, 170: 48-61. <https://doi.org/10.1016/j.rse.2015.08.018>.
27. ****Walker JJ**, **de Beurs KM**, Wynne R, 2015a. Phenological response of an Arizona dryland forest to short-term climatic extremes. *Remote Sensing*, 7(8): 10832-10855. <http://dx.doi.org/10.3390/rs70810832>.
28. ****Martin-Mikle CJ**, **de Beurs KM**, Julian JP, Mayer PM, 2015. Identifying priority sites for low impact development (LID) in a mixed-use watershed. *Landscape and Urban Planning*, 140: 29-41. <https://doi.org/10.1016/j.landurbplan.2015.04.002>.
29. Walker JJ, **de Beurs KM**, Henebry GM, 2015b. Land surface phenology along urban to rural gradients in the U.S. Great Plains. *Remote Sensing of Environment* 165: 42-52. <https://doi.org/10.1016/j.rse.2015.04.019>.
30. Wright CK, **de Beurs KM**, Henebry GM, 2014. Land surface anomalies preceding the 2010 Russian heat wave and a link to the North Atlantic oscillation. *Environmental Research Letters* 9 (12). <https://doi.org/10.1088/1748-9326/9/12/124015>.
31. ****Morzillo AT**, **de Beurs KM**, and **Martin-Mikle CJ**, 2014. A conceptual framework to evaluate human-wildlife interactions within coupled human and natural systems. *Ecology and Society* 19 (3): 44. <http://dx.doi.org/10.5751/ES-06883-190344>.
32. ****Tran TV**, Julian JP, **de Beurs KM**, 2014. Land Cover Heterogeneity Effects on Sub-Pixel and Per-Pixel Classifications. *ISPRS International Journal of Geo-Information* 3, no. 2: 540-553. <http://dx.doi.org/10.3390/ijgi3020540>.

33. ** Walker J, **de Beurs KM**, Wynne RH, 2014. Dryland vegetation phenology across an elevation gradient in Arizona, USA, investigated with fused MODIS and Landsat data. *Remote Sensing of Environment* 144: 85-97. <https://doi.org/10.1016/j.rse.2014.01.007>.
34. **Yan D, **de Beurs KM**, Fan J, 2013. The impacts of weather and conservation programs on vegetation dynamics in China's Loess Plateau. *Land*, 2(4): 573-594. <http://dx.doi.org/10.3390/land2040573>.
35. Ioffe G, Nefedova T, **de Beurs KM**, 2014. Agrarian transformation in the Russian breadbasket: contemporary trends as manifest in Stavropol'. *Post-Soviet Affairs*, <http://dx.doi.org/10.1080/1060586X.2013.858509>.
36. Ault TR, Henebry GM, **de Beurs KM**, Schwartz MD, Betancourt JL, Moore D, 2013. The false spring of 2012, earliest in North American record. *EOS, Transactions American Geophysical Union*, 94(20), 181-182. <http://dx.doi.org/10.1002/2013EO200001>
37. **de Beurs KM**, Ioffe G, 2013. The use of Landsat and MODIS data to remotely estimate Russia's sown area. *Journal of Land Use Science*, <http://dx.doi.org/10.1080/1747423X.2013.798038>.
38. Ioffe G, Nefedova T, **de Beurs KM**, 2012. Land abandonment in Russia. *Eurasian Geography and Economics*, 53(4), 527-549. <http://dx.doi.org/10.2747/1539-7216.53.4.527>
39. **Brown ME, **de Beurs KM**, Marshall M, 2012. Global phenological response to climate change in crop areas using satellite remote sensing of vegetation, humidity and temperature over 26 years. *Remote Sensing of Environment* 126, 174-183. <https://doi.org/10.1016/j.rse.2012.08.009>
40. Wright CK, **de Beurs KM**, Henebry GM, 2012. Combined analysis of land cover change and NDVI trends in the Northern Eurasian grain belt. *Frontiers of Earth Science*. NEESPI/MAIRS special issue, 6(2), 177-187. <http://dx.doi.org/10.1007/s11707-012-0327-x>
41. **de Beurs KM**, Ioffe G, Nefedova T, 2012. Agricultural change in the Russian grainbelt: A case study of Samara oblast. *Geography, Environment, Sustainability*, vol 12(5), 95-110. <http://dx.doi.org/10.24057/2071-9388-2012-5-2-95-110>
42. ** Walker J, **de Beurs KM**, Wynne RH, Gao F, 2012. An evaluation of data fusion products for the analysis of dryland forest phenology. *Remote Sensing of Environment*, vol 117, p. 381-393. <https://dx.doi.org/10.1016/j.rse.2011.10.014>
43. ** Zheng B, Campbell JB, **de Beurs KM**, 2012. Remote sensing of crop residue cover using multi-temporal Landsat imagery. *Remote Sensing of Environment*, vol 117, p. 177-183. <https://dx.doi.org/10.1016/j.rse.2011.09.016>
44. ** Belote T, Prisley S, Jones R, Fitzpartrick M, **de Beurs KM**, 2011. Forest productivity and tree diversity relationships depend on ecological context within mid-Atlantic and Appalachian forests (USA). *Forest Ecology and Management*, vol 261(7), p1315-1324. <https://dx.doi.org/10.1016/j.foreco.2011.01.010>
45. Vrieling A, **de Beurs KM**, Brown ME, 2011. Phenological characterization and variability of African farming systems with NDVI time series. *Climatic Change*, vol 109, p 455-477. <https://dx.doi.org/10.1007/s10584-011-0049-1>
46. ** Hudson-Dunn A, **de Beurs KM**, 2011. Land Surface Phenology of North American Mountain Environments Using Moderate Resolution Imaging Spectroradiometer data. *Remote Sensing of Environment*, vol 115(105), p1220 - 1233. <https://doi.org/10.1016/j.rse.2011.01.005>

47. Brown ME, **de Beurs KM**, Vrieling A, 2010. The response of African land surface phenology to large scale climate oscillations. *Remote Sensing of Environment*, vol 114(10), p2286-2296. <https://doi.org/10.1016/j.rse.2010.05.005>
48. **de Beurs KM**, Henebry GM, 2010. A land surface phenology assessment of the northern polar regions using MODIS reflectance time series. *Canadian Journal of Remote Sensing*, Vol 36, Suppl S1, S87-110. <https://doi.org/10.5589/m10-021>
49. **de Beurs KM**, Wright CK, Henebry GM, 2009. Dual scale trend analysis distinguishes climatic from anthropogenic effects on the vegetated land surface. *Environmental Research Letters*, 4, 045012. <http://dx.doi.org/10.1088/1748-9326/4/4/045012>
50. Wright CK, **de Beurs KM**, Akhmadieva ZK, Groisman PY, Henebry GM, 2009. Recent temperature and precipitation trends in Kazakhstan reveal significant changes in growing season weather. *Environmental Research Letters*, 4 045020. <http://dx.doi.org/10.1088/1748-9326/4/4/045020>
51. White MA, **de Beurs KM**, et al. 2009. Intercomparison, interpretation, and assessment of spring phenology in North America estimated from remote sensing for 1982 to 2006. *Global Change Biology*, 15(10): 2335-2359. <http://dx.doi.org/10.1111/j.1365-2486.2009.01910.x>
52. Townsend PA, Helmers DP, McNeil BE, **de Beurs KM**, Eshleman KN, 2009. Changes in the extent of surface mining and reclamation in the Central Appalachians: 1976-2006. *Remote Sensing of Environment*, 113: 62-72, <https://doi.org/10.1016/j.rse.2008.08.012> .
53. **de Beurs KM**, Townsend PA, 2008. Estimating the effect of gypsy moth defoliation using MODIS, *Remote Sensing of Environment*, 112:3983-3990; <https://doi.org/10.1016/j.rse.2008.07.008>.
54. **de Beurs KM**, Henebry GM, 2008. Northern Annular Mode effects on the Land Surface Phenologies of Northern Eurasia. *Journal of Climate*, 21:4257-4279. <https://doi.org/10.1175/2008JCLI2074.1>
55. **de Beurs KM**, Henebry GM, 2008. War, drought and phenology: Changes in Land Surface Phenology in Afghanistan since 1982. *Journal of Land Use Science*, 3(2-3):95-111. <http://dx.doi.org/full/10.1080/17474230701786109>
56. Brown ME, **de Beurs KM**, 2008. Evaluation of Multi-Sensor Semi-Arid Crop Season Parameters Based on NDVI and Rainfall. *Remote Sensing of Environment*, 112 (5): 2261-2271. <https://doi.org/10.1016/j.rse.2007.10.008>
57. McNeil BE, **de Beurs KM**, Eshleman KN, Foster JR, and Townsend PA, 2007. Maintenance of ecosystem nitrogen limitation by ephemeral forest disturbance: An assessment using MODIS, Hyperion, and Landsat ETM+. *Geophysical Research Letters*, 34. <http://dx.doi.org/10.1029/2007GL031387>
58. Henebry GM, **de Beurs KM**, Gitelson AA, 2005. Land surface phenologies of Uzbekistan and Turkmenistan between 1982 and 1999. *Arid Ecosystems*, 11(26-27): 25-32.
59. **de Beurs KM**, Henebry GM, 2005. Land surface phenology and temperature variation in the IGBP High-Latitude transects. *Global Change Biology*, 11: 779-790. <http://dx.doi.org/10.1111/j.1365-2486.2005.00949.x>
60. **de Beurs KM**, Henebry GM, 2005. A statistical framework for the analysis of long image time series. *International Journal of Remote Sensing*, 26(8): 1551-1573. <http://dx.doi.org/10.1080/01431160512331326657>

61. Stein A, **de Beurs KM**, 2005. Map indices as measures for semantic data quality in segmented Landsat images. *International Journal of Remote Sensing*, 26(14): 2937-2951. <http://dx.doi.org/10.1080/01431160500057749>
62. **de Beurs KM**, Henebry GM, 2004. Trend analyses of the Pathfinder AVHRR Land (PAL) NDVI data for the deserts of Central and Northern Eurasia. *IEEE Geoscience and Remote Sensing Letters*, 1(4): 282-286. <https://doi.org/10.1109/LGRS.2004.834805>
63. **de Beurs KM**, Henebry GM, 2004. Land surface phenology, climatic variation, and institutional change: analyzing agricultural land cover change in Kazakhstan. *Remote Sensing of Environment*, 89(4): 497-509. <https://doi.org/10.1016/j.rse.2003.11.006>
64. Boer E, **de Beurs KM**, Hartkamp AD, 2001. Kriging and thin plate splines for mapping climate variables, *International Journal of Applied Earth Observation and Geoinformation*, 3(2): 146-154. [https://doi.org/10.1016/S0303-2434\(01\)85006-6](https://doi.org/10.1016/S0303-2434(01)85006-6)

Peer Reviewed Book Chapters **: with students

65. **de Beurs KM**, Ioffe G, Nefedova T, Henebry GM. 2017. Land Change in European Russia: 1982 – 2011. p 223 – 241. In Gutman G, Radeloff CV (eds) Land Use and Land Cover Change in Eastern Europe after the Collapse of Socialism. Springer. https://doi.org/10.1007/978-3-319-42638-9_10
66. Brown ME, Grace K, **de Beurs KM**, 2016. Global land surface phenology and implications for food security. p. 353-364. In: P. Thenkabail (ed) Remote Sensing Handbook. Land Resources Monitoring, Modeling, and Mapping with Remote Sensing. CRC Press.
67. **de Beurs KM**, Brown ME, 2013. The effect of agricultural growing season change on market prices in Africa. p. 189 – 203. In: Tarhule A (ed) Climate Variability – Regional and Thematic Patterns. Intech. <https://doi.org/10.5772/56459>
68. Henebry GM, **de Beurs KM**, 2013. Remote Sensing of Land Surface Phenology: A prospectus. p. 385-411. In: Schwartz M (ed) Phenology: An Integrative Science, 2e. Springer. https://doi.org/10.1007/978-94-007-6925-0_21
69. **de Beurs KM**, Henebry GM, 2013. Vegetation Phenology in Global Change Studies. p. 483-502. In: Schwartz M (ed) Phenology: An Integrative Science, 2e. Springer. https://doi.org/10.1007/978-94-007-6925-0_26
70. ****de Beurs KM**, Cook R, Mazer S, Haggerty B, Hove A, Henebry GM, Beaubien E, Barnett L, Thomas CL and Pohlrad BR, 2013. p. 585-602. Phenology and Education. In: Schwartz M (ed) Phenology: An Integrative Science, 2e. Springer. https://doi.org/10.1007/978-94-007-6925-0_31
71. Lioubimtseva E, **de Beurs KM**, Henebry GM, 2013. Grain production trends in Russia, Ukraine, and Kazakhstan in the context of the global climate variability and change. In: Younos T(ed) Climate Change and Water Resources: The Handbook of Environmental Chemistry Volume 25, pp. 121-141. Springer. http://doi.org/10.1007/698_2013_225
72. Henebry GM, **de Beurs KM**, Wright CK, John R, Lioubimtseva E, 2013. p. 23 – 44. The Drylands of East Asia in Hemispheric Context. In: Chen J, Wan S, Henebry GM, Qi J, Gutman G, Sun G, Kappas M (ed) Dryland East Asia (DEA): Land dynamics amid social and climate change. HEP – De Gruyter. <https://doi.org/10.1515/9783110287912.23>
73. ** **de Beurs KM**, Yan D, Karnieli A. 2013. p. 283 – 306. The effect of large scale conservation programs on the vegetative development of China's Loess Plateau. In: Chen J, Wan S, Henebry

- GM, Qi J, Gutman G, Sun G, Kappas M (ed) Dryland East Asia (DEA): Land dynamics amid social and climate change. HEP – De Gruyter. <https://doi.org/10.1515/9783110287912.283>
74. **de Beurs KM**, Henebry GM, 2010. Spatio-temporal statistical methods for modeling land surface phenology. In: Hudson IL, Keatley MR (ed) Phenological Research: Methods for Environmental and Climate Change Analysis, Springer. https://doi.org/10.1007/978-90-481-3335-2_9

Grant Activity

Awards and Funded Proposals

Land Use Patterns and Political Instability as Predictors for the Re-emergence of Malaria in the Caucasus. NASA Land Cover / Land Use Change. My role, PI. Total: \$661,203. 2018 – 2021 (PI: Kirsten de Beurs, OU)

NRT: Aeroecology as a Test-bed for Interdisciplinary STEM Training. NSF, NRT. Total: \$3,172,750. My role, co-PI. (PI: Jeff Kelly, OU)

Change in our MIDST: Detection and analysis of land surface dynamics in North and South America using multiple sensor datastreams. NASA Terra and Aqua Program. My role, co-PI. My funding portion: \$206,146. (PI: Henebry, South Dakota State University).

Collaborative Research: Cross-scale interactions among climate change, land use change, and river water quality. NSF, Geography and Spatial Sciences. Total: \$162,262. (PI: Kirsten de Beurs)

Storms, Forms, and Complexity of the Urban Canopy: How Land Use, Settlement Patterns, and the Shapes of Cities Influence Severe Weather. NASA Interdisciplinary Science Program. Total: \$1,575,700. My role, co-PI. My funding portion: \$377,200. (PI: Henebry, South Dakota State University).

Land Management Impacts on Water Quality in New Zealand across Political Boundaries. NASA Land Cover Land Use Change. Total: \$289,851 My role: co-PI. My funding portion: \$181,000. (PI: Julian, Texas State University).

Synthesis of studies on institutional change and LCLUC effects on carbon, biodiversity, and agriculture after the collapse of the Soviet Union. NASA Land Cover Land Use Change. My role: collaborator. My funding portion: \$20,000. 2012 – 2015. (PI: Radeloff, University of Wisconsin).

Global Length of Growing Season Changes over 30 years and their Impact on Agriculture and Food Production. NASA Special Request. 2009-2010. Total: \$70,000. My role: co-PI. My funding portion: \$24,991.

Land Abandonment in Russia: Understanding Recent Trends and Assessing Future Vulnerability and Adaptation to Changing Climate and Population Dynamics. NASA Land Cover Land Use Change (my role PI; 2009-2012: \$710,417).

War, Drought and Phenology: Changes in the land surface phenology of Afghanistan since 1982. American Institute of Afghanistan studies (AIAS) post-doctoral fellowship, supported by AIAS (2006: \$6500).

Climate Change or Institutional Change? On changes in land surface phenologies in Central and Northern Eurasia. NASA's Earth System Science (ESS) Graduate Student Fellowship, supported by National Aeronautics and Space Administration (NASA) (2004: \$24,000, with successful renewal in 2005: \$24000).

NASA-MSU Professional Enhancement Award 2004 to attend US-IALE, supported by the National Aeronautics and Space Administration (NASA) and Michigan State University (\$500).

Selected to participate in NSF Summer Institute in Ecological Forecasting, 2004, June, Duke University, Durham, NC, USA.

Research Presentations

(~ invited talk, ** student presentation): Since 2012 only

- ~de Beurs KM, Hirschfeld K, Melkonyan A. 2018. Land use patterns and political instability as predictors for the re-emergence of malaria in the Caucasus. Lund University, Department of Physical Geography and Ecosystem Science, Lund, Sweden. (February 2019).
- ~de Beurs KM, Hirschfeld K, Melkonyan A. 2018. Land use patterns and political instability as predictors for the re-emergence of malaria in the Caucasus. American University of Armenia, Department of Environmental Sciences, Yerevan, Armenia. (June 2018).
- ~ de Beurs KM, Hirschfeld K, Melkonyan A. 2018. Land use patterns and political instability as predictors for the re-emergence of malaria in the Caucasus. Armenia Academy of Science, Yerevan, Armenia. (June 2018).
- ~de Beurs KM, Henebry GM, Owsley BC. 2017. Interlinked and changing effects of major climate oscillations on snow cover, polar sea ice, and land surface phenology over the northern hemisphere. JpGU – AGU Joint Meeting, Chiba, Japan.
- ~de Beurs KM, Henebry GM, Owsley BC, Sokolik I. 2017. Land Surface Phenology Changes in Central Asia. JpGU – AGU Joint Meeting, Chiba, Japan.
- Zheng B, Henebry GM, de Beurs KM, Owsley BC. 2017. Decadal changes in carbon monoxide air pollution over major cities in the US and Southeast, East and North Asia: How does urban size matter? US-IALE 2017, Baltimore, MD.
- Henebry GM, de Beurs KM, Owsley BC. 2017. Seeing by other lights: revealing the changing landscape of the Great Plains. Flat Land, Deep Identities: Mapping Nebraska and the Great Plains. Lincoln. NE.
- Julian JP, de Beurs KM, Owsley BC. 2017. River water quality changes in New Zealand over 26 years: Responses to land management and land use intensity. NASA Land Cover Land Use Change, Spring Science Team Meeting, Rockville, MD.
- Julian JP, de Beurs KM, Owsley BC, Davies-Colley RJ, Ausseil AE. 2017. River water quality changes in New Zealand over 26 years: Responses to land use intensity. American Association of Geographers annual meeting, Boston, MA.
- Thompson ES, de Beurs KM. 2017. Mapping land cover change in rustbelt shrinking cities with LiDAR and GIS. American Association of Geographers annual meeting, Boston, MA.
- Henebry GM, de Beurs KM, Krehbiel CP, Owsley BC. 2016. New perspectives on longwave remote sensing or urban-rural systems. Global Land Project Open Science Meeting, Beijing, China.
- Julian JP, de Beurs KM, Owsley BC, Davies-Colley RJ. 2016. Spatiotemporal Connections between Land Use and River Water Quality across 77 Catchments in New Zealand over 26 years. Binghamton Geomorphology Symposium, Fort Collins, CO.

- de Beurs KM, Julian JP, Owsley BC. 2016. SWAAG 2016. Determining the Relative Roles of Climate and Land Use on Land Cover Changes in New Zealand. SWAAG, Denton, TX (October 2016).
- **Kamarinas I, Julian JP, Owsley BC, de Beurs KM. SWAAG 2016. Nonlinear Relationships Between Land Use/Cover Change and Sediment Runoff on an Intensively Managed Landscape. Denton, TX (October 2016).
- Julian JP, Kamarinas I, Owsley BC, de Beurs KM. SWAAG 2016. Spatiotemporal Connections between Land Use and River Water Quality across 77 Catchments in New Zealand over 26 years. SWAAG Denton. SWAAG, Denton, TX (October 2016).
- **Li M, Stein A, Bijker W, de Beurs KM. US-IALE 2016. Urban land cover and land use extraction from very high resolution remote sensing imager. US-IALE, Asheville, NC (April 2016).
- **Thompson ES, de Beurs KM. US-IALE 2016. Abandonment in shrinking cities: mapping the contemporary urban landscape using LiDAR. US-IALE, Asheville, NC (April 2016).
- ~ de Beurs KM, Owsley BC, Henebry GM. 2016. US-IALE 2016. Using multiple remote sensing perspectives to identify and attribute land surface dynamics in the changing grasslands of the Western Hemisphere. US-IALE, Asheville, NC (April 2016).
- ~*de Beurs KM, Windahl E, Owsley BC, Adhikari P, Henebry GM. US-IALE 2016. Urban land surface phenology: An evaluation of Oklahoma City using the Oklahoma Mesonet and optical and thermal Landsat data. US-IALE, Asheville, NC (April 2016).
- Zheng, B., de Beurs, KM., Owsley, B., Krehbiel, C, Henebry, G, AGU Fall Meeting 2015, "Monitoring carbon monoxide pollution over the largest ten cities in the US using satellite observations," American Geophysical Union, San Francisco, CA. (December 16, 2015).
- Henebry, GM, Zheng, B., Valle De Carvalho E Oliveira, P., de Beurs, K., Owsley, B. AGU Fall Meeting 2015, "Comparative Perspectives on Recent Trends in Land Surface Dynamics in the Grasslands of North and South America," American Geophysical Union, San Francisco, CA. (December 14, 2015).
- Henebry GM, Zhang XY, de Beurs KM, Kimball JS, Small C. 2015. Change in our MIDST: Toward detection and analysis of urban land dynamics in North and South America. Joint Urban Remote Sensing Event (JURSE 2015). <http://dx.doi.org/10.1109/JURSE.2015.7120496>
- Owsley, B., de Beurs, K., SWAAG, "Multiple Remote Sensing Products for Trend Detection and Analysis in South America," SWAAG, San Antonio, TX. (November 6, 2015).
- **Hanson, K., Magee, C., de Beurs, KM, McPherson, R., SWAAG, "Measuring Geographic Susceptibility to Flooding in New Orleans Using LiDAR," SWAAG, San Antonio, TX. (November 6, 2015).
- **Julian, J., Kamarinas, I., de Beurs, K., Owsley, B, Davies, R., SWAAG, "Twenty-five years of changes in agricultural production, land use/cover, and river water quality in New Zealand," AAG, San Antonio, TX. (November 6, 2015).
- **Thompson, E., de Beurs, K., SWAAG, "Using LIDAR to reveal urban abandonment," AAG, San Antonio, TX. (November 6, 2015).

- de Beurs, K., "Using Big Data for Earth Observation," University of Enschede, Enschede, the Netherlands. (May 28, 2015). Oral Presentation, Research seminar for the faculty of Geo-Information Science and Earth Observation.
- de Beurs, K. (Author & Presenter), Ioffe, G. (Author), Nefedova, T. (Author), Henebry, G. (Author), NASA LCLUC Science Team Meeting, "Assessing future vulnerabilities and adaptation to climate change and population dynamics: Implications for Food Security," NASA, College Park, MD. (April 20, 2015). Oral Presentation, Conference.
- Julian, J. (Author & Presenter), de Beurs, K. (Author), NASA LCLUC Science Team Meeting, "Land Management Impacts on Water Quality in New Zealand Across Political Boundaries," NASA, College Park, MD. (April 20, 2015). Oral Presentation, Conference.
- K.M. de Beurs. Agricultural changes in European Russia: implications for food security. 2nd GLP Open Science Meeting. Land Transformations: Between Global Challenges and Local Realities. Humboldt University, Berlin. March, 2014.
- B.C. Owsley, de Beurs, K.M. A fused disturbance model for land management analysis in New Zealand. 2nd GLP Open Science Meeting. Land Transformations: Between Global Challenges and Local Realities. Humboldt University, Berlin. March, 2014.
- ~K.M. de Beurs, Ioffe, G., Henebry, G.M. Agricultural Changes in European Russia: Implications for Food Security. South Central and Eastern European Regional Information Network – Meeting 2. Krakow, Poland. June, 2014.
- B.C. Owsley, de Beurs, K.M., Julian, J.P. A fused disturbance model for land management analysis. South Central and Eastern European Regional Information Network – Meeting 2. Krakow, Poland. June, 2014.
- de Beurs, K. Agricultural Changes in European Russia: Implications for Food Security. 2014 SWAAG-GPRM Joint Regional Meeting, Albuquerque, NM. October, 2014.
- Owsley, B., K. de Beurs, and J. Julian. A Unified Disturbance Analysis for Forests and Grasslands in New Zealand. 2014 SWAAG-GPRM Joint Regional Meeting, Albuquerque, NM. October, 2014.
- Tran, T.V., K.M. de Beurs, and J.P. Julian. Monitoring and Classifying Forest Disturbances in Southeastern Oklahoma from 2000-2011 using High Spatiotemporal Resolution Imagery. 2014 SWAAG-GPRM Joint Regional Meeting, Albuquerque, NM. October, 2014.
- Adhikari, P. and K.M. de Beurs. Role of Environmental Factors in the Growth of West African Cities: A Case of Kumasi of Ghana and Ouagadougou of Burkina Faso. 2014 SWAAG-GPRM Joint Regional Meeting, Albuquerque, NM. October, 2014.
- Thompson, E.S. and K. de Beurs. Urban Dynamics of a Shrinking City: An Analysis of Detroit. 2014 SWAAG-GPRM Joint Regional Meeting, Albuquerque, NM. October, 2014.
- Windahl, E. and K. de Beurs. Comparing Methods for Land Surface Temperature Retrieval over Heterogeneous Land Cover Using Landsat-5 TM Thermal Infrared Data. 2014 SWAAG-GPRM Joint Regional Meeting, Albuquerque, NM. October, 2014.
- Henebry, G.M., K.M. de Beurs, X, Zhang, J. Kimball, C. Small. The Many Hazards of Trend Evaluation. GC41G-01 AGU Fall Meeting. San Francisco, CA. December 2014.

- ~**de Beurs, K.M., Owsley, B.C., Julian, J.P., Henebry, G.M. 2013. AVHRR, MODIS and Landsat time series for the monitoring of vegetation changes around the world. AGU Fall Meeting 2013, San Francisco, CA.
- Julian, J.P., Owsley, B.C., de Beurs, K.M., Hughes, A. 2013. Interactive effects of storms, drought, and weekly land cover changes on water quality patterns in an agricultural-dominated subtropical catchment in New Zealand. AGU Fall Meeting 2013, San Francisco, CA.
- ~de Beurs, K.M., Brown, M.E., Ahram, A., Walker, J.J., Henebry, G.M. 2013. Linkages between land surface phenology metrics and natural and anthropogenic events in drylands. AGU Fall Meeting 2013, San Francisco, CA.
- ~**Owsley, B.C., de Beurs, K.M., 2013. A fused disturbance model for disaster assessment and planning. CaGIS/ASPRS 2013 Specialty Conference. Imaging and mapping for disaster management: from the individual to the global community. San Antonio, TX, 27-30 October, 2013.
- ~**de Beurs, K.M., Walker, J.J., Henebry, G.M., Fetner, D. 2013. The effect of urban environments on severe weather. CaGIS/ASPRS 2013 Specialty Conference. Imaging and mapping for disaster management: from the individual to the global community. San Antonio, TX, 27-30 October, 2013.
- ~de Beurs, 2013. Monitoring of vegetation changes around the world with MODIS and Landsat time series. Texas State University, San Marcos, TX. October, 2013.
- Lioubimtseva, E., Henebry, G.M., de Beurs, K.M., 2013. Possible Impacts of Climate Change and Economic Globalization on Grain Production Trends in Russia and its Neighbors. 2013 Food Studies Conference. Austin, TX, 15-16 October, 2013.
- ~de Beurs, 2013. Monitoring of vegetation changes around the world with MODIS and Landsat time series. OU Department of Plant Biology. October, 2013.
- Henebry, G.M., Alemu, W.G., Wright, C.K., de Beurs, K.M.. 2013. Land surface phenologies and seasonalities using earthlight to monitor changes in high-latitude croplands. Japan Geoscience Union International Symposium. Chiba, Japan, 19-24 May.
- **Adhikari, P., de Beurs, K.M. 2013. Estimation of croplands in West Africa: Preliminary Results. US-IALE April, 2013, Austin, TX.
- ~ de Beurs, K.M., 2013. Chirp Chirp: Deriving spring green-up from social media. US-IALE April, 2013, Austin, TX.
- de Beurs, K.M., 2013. Modeling Russia's Agricultural Sustainability. US-IALE April, 2013, Austin, TX.
- **Tran, T.V., de Beurs, K.M., Julian, J.P. 2013. Detecting rapid forest disturbance in a mixed-forest landscape: Southeast Oklahoma 2000-2011. US-IALE April, 2013, Austin, TX.
- Walker, J.J., de Beurs, K.M., Wynne, R.H. 2013. Phenology variation across an elevational gradient in Central Arizona. US-IALE April, 2013, Austin, TX.
- Walker, J.J., de Beurs, K.M., Henebry, G.M. 2013. Urban influence on land surface phenologies in the U.S. Great Plains. US-IALE April, 2013, Austin, TX.
- **Yan, D., de Beurs, K.M., Hoagland, B.W., Ryan, A.C. 2013. Impacts of drought on cheatgrass (*Bromus Tectorum* L.) dynamics in mixed grass prairie of Oklahoma. US-IALE April, 2013, Austin, TX.

- ~ Brown, M.E., de Beurs, K.M. Global Phenological Response to Climate Change in Crop Areas using Satellite Remote Sensing of Vegetation, Humidity and Temperature over 26 years. AGU Fall meeting 2012. December 2012. San Francisco, CA.
- ~Henebry, G.M., de Beurs, K.M., Wright, C.K. Vegetation change in the MODIS era: Assessing the influence of human activities. AGU Fall meeting 2012. December 2012. San Francisco, CA.
- ** Walker, J.J., de Beurs, K.M., Wynne, R.H., Analysis of dryland vegetation phenology using data fusion products. Phenology 2012: Future Climate and the Living Earth. Milwaukee, WI. September 2012.
- ** Yan, D., de Beurs, K.M., Assessing the impacts of soil moisture on grassland phenology change monitoring in western Oklahoma. Phenology 2012: Future Climate and the Living Earth. Milwaukee, WI. September 2012.
- de Beurs, K.M., The use of Landsat and MODIS data to remotely estimate Russia's sown area. Phenology 2012: Future Climate and the Living Earth. Milwaukee, WI. September 2012.
- Henebry G.M., C.K. Wright, K.M. de Beurs. 2012. Land surface anomalies preceding the Russian heat wave and a link to the North Atlantic Oscillation. Impacts of extreme weather on natural, socio-economic, and land-use systems: Focus on the 2010 summer anomaly in the Volga region. Yoshkar-Ola, Russia, 17-22 June.
- de Beurs, K.M., Henebry, G.M. Remote Estimation of Russia's sown area. IAMO Forum 2012. Land Use in Transition. Halle, Germany. June 2012.
- ~de Beurs, K.M. Multiscale change analysis: To evaluate climatic and anthropogenic effects on the vegetated land surface. Faculty of Geo-Information Science and Observation, University of Enschede, the Netherlands. June 2012.
- ~ Morzillo, A., de Beurs, K.M. A conceptual framework to evaluate human-wildlife interactions as a coupled human and natural system. 2012. *Annual Landscape Ecology Meeting*. NASA-MSU symposium: Disentangling Diverse Drivers and Complex Dynamics of Coupled Human and Natural Systems (CHANS). Newport, RI. April 2012.

Posters

(~ invited talk, ** student presentation): Since 2012 only

- **Worden J, de Beurs KM. 2018. AGU Fall Meeting. H32K-2079: Open Surface Water Detection in the Caucasus Using Remotely Sensed Data. American Geophysical Union, Washington, DC. (December 2018).
- **Ashworth K, Owsley BC, Worden J, Neeson T, de Beurs KM. 2018. AGU Fall Meeting. H31K-2070: Using High-Resolution Aerial Photographs and LiDAR data to Validate Large-Scale Surface Water Datasets and Estimating Water Volumes. American Geophysical Union, Washington, DC. (December 2018).
- **McThompson NS, de Beurs KM, Owsley BC, Henebry GM. 2018. AGU Fall Meeting. NH31E-1013: Using MODIS Tasseled Cap time series to identify droughts and hurricane damage in the Caribbean. American Geophysical Union, Washington, DC. (December 2018).

- de Beurs KM, Jami M, Owsley BC. 2018. AGU Fall Meeting. GC51G-0881: Using Remotely Sensed Data to Investigate Cropland Changes in the Caucasus. American Geophysical Union, Washington, DC. (December 2018).
- Owsley BC, de Beurs KM, Henebry GM. 2017. JpGU - AGU Joint Meeting. Multiple Remote Sensing Indicators for Understand Spatiotemporal Trends Across a Changing Landscape in North and South America. Chiba, Japan.
- Owsley BC, de Beurs KM, Henebry GM. 2016. AGU Fall Meeting. GC21B-1095: Four Dimensions of Landscape Change in North and South America: Using Multiple Remote Sensing Indicators to Understand Spatiotemporal Trends. American Geophysical Union, San Francisco, CA. (December, 2016).
- ~Sokolik IN, Tatarskii V, Shiklomanov AI, Henebry GM, de Beurs KM, Laruelle M. 2016. AGU Fall Meeting. GC33A-1210: Towards A Synthesis Of Land Dynamics And Hydrological Processes Across Central Asia (Invited). American Geophysical Union, San Francisco, CA. (December, 2016).
- de Beurs KM, Henebry GM, Owsley BC, Sokolik IN. 2016. AGU Fall Meeting. GC33A-1213: The Effect of Large Scale Climate Oscillations on the Land Surface Phenology of the Northern Polar Regions and Central Asia. American Geophysical Union, San Francisco, CA. (December, 2016).
- Chen, J., Ouyang, Z., John, R., Henebry, G., Xie, Y, de Beurs, K., Fan, Y., Shao, C., Qi, J., Wu, J., Liu, Y., AGU Fall Meeting 2015, "Regulations of evapotranspiration and ecosystem productivity from biophysical and human drivers in drylands Northern Eurasia," American Geophysical Union, San Francisco, CA. (December 16, 2015).
- Henebry, G, Krehbiel, C., Zheng, B., Nguyen, L., de Beurs, K., Owsley, B., AGU Fall Meeting 2015, "New Perspectives on Longwave Imaging of Urban Heat Islands: Middle Infrared to Microwaves," American Geophysical Union, San Francisco, CA. (December 16, 2015).
- de Beurs, KM, Holtzman, L., SWAAG, "Breakpoint analysis with the BFAST algorithm in global vegetation index," AAG, San Antonio, TX. (November 6, 2015). Poster, Conference.
- **Kamarinas, I., J. Julian, B. Owsley, K. de Beurs, and A. Hughes. Identifying Critical Source Areas of Sediment Runoff and their Effect on River Water Quality Using High-resolution Spatio-temporal Datasets. 2014 SWAAG-GPRM Joint Regional Meeting, Albuquerque, NM. October, 2014.
- **Adhikari, P., K.M. de Beurs, Mapping and analyzing urban growth in West Africa PA13B-3903. AGU Fall Meeting. San Francisco, CA. December 2014.
- **Kamarinas, I., J.P. Julian, B.C. Owsley, K.M. de Beurs, A. Hughes. Assessing Landscape Connectivity and River Water Quality Changes Using an 8-Day, 30-Meter Land Cover Dataset. H31I-0755. AGU Fall Meeting. San Francisco, CA. December 2014.
- **Bamzai, A., K.M. de Beurs. Is there a climatological signature to deep root functioning? B51I-0125. AGU Fall Meeting. San Francisco, CA. December 2014.
- de Beurs, K.M., G.M. Henebry, B.C. Owsley. Trend detection and analysis in Eastern Europe and European Russia. GC31A-0443. AGU Fall Meeting, San Francisco, CA. December 2014.

- **Windahl, E., K.M. de Beurs. Comparing Methods for Land Surface Temperature Retrieval over Heterogeneous Land Cover Using Landsat-5 TM Thermal Infrared Data. GC51D-0443. AGU Fall Meeting. San Francisco, CA. December 2014.
- **Kingfield, D., K.M. de Beurs. On the Role of Urban and Vegetative Land Cover in the Identification of Tornado Damage Using Dual-Resolution Multispectral Satellite Imagery. NH11B-3701. AGU Fall Meeting. San Francisco, CA. December 2014.
- Owsley, B.C., K.M. de Beurs, J.P. Julian. A Unified Disturbance Analysis for Forests and Grasslands in New Zealand. GC31A-0442 AGU Fall Meeting. San Francisco, CA. December 2014.
- Walker, J.J., de Beurs, K.M., Henebry, 2013. Urban influences on land surface phenologies in the U.S. Great Plains. AGU Fall Meeting 2013, San Francisco, CA.
- **Adhikari, P., de Beurs, K.M. 2013. Estimation of croplands in West Africa using global land cover and land use datasets: preliminary results. AGU Fall Meeting 2013, San Francisco, CA.
- **Yan, D., de Beurs, K.M. 2013. Identification of brome grass infestations in southwest Oklahoma using multi-temporal Landsat imagery. AGU Fall Meeting 2013, San Francisco, CA.
- **Owsley, B.C., de Beurs, K.M., Julian, J.P. 2013. Landsat and MODIS fusion for disturbance analysis in New Zealand. AGU Fall Meeting 2013, San Francisco, CA.
- **Martin – Mikle, C., de Beurs, K.M., Julian, J.P. 2013. Development of a tool for siting low impact development in urban watersheds. AGU Fall Meeting 2013, San Francisco, CA.
- **Martin-Mikle, C.J., Wilgruber, N.A., de Beurs, K.M., Julian, J.P. 2013. Riparian buffer siting decision support tool for an urban watershed. US-IALE April, 2013, Austin, TX.
- **Wilgruber, N.A., Julian, J.P., de Beurs, K.M., Martin, C.J. 2013. The evolving drainage network of urban watersheds: A case study of the Lake Thunderbird watershed in central Oklahoma from 1874 to 2010. US-IALE April, 2013, Austin, TX.
- Julian, J.P., de Beurs, K.M. 2013. Land management impacts on water quality in New Zealand across political boundaries. NASA Land Cover Land Use Change Science Team Meeting, April, 2013, Rockville, MD.
- Purcell, D., de Beurs, K.M. 2013. It's hot in here: Twitter as data source for understanding perceptions of heat and drought hazards. International conference on social media and society. September, 2013, Halifax, Canada. BEST POSTER AWARD.
- ** de Beurs, K.M., Yan, D., Agricultural Change in the Russian grain belt: the effect of weather and climate. Phenology 2012: Future Climate and the Living Earth. Milwaukee, WI. September 2012.
- Henebry, G.M., de Beurs, K.M., Alternative metrics of LSP: thermal time to peak and peak height across the US Great Plains 2001-2011. Phenology 2012: Future Climate and the Living Earth. Milwaukee, WI. September 2012.
- ** Yan, D., de Beurs, K.M., Fan, J. The impacts of weather and institutional change on vegetation dynamics in China's Loess Plateau. GIS Day 2012 at the University of Oklahoma. Norman, OK. November 14, 2012.
- ** Adhikari, P., de Beurs, K.M., Estimation of Croplands over West Africa: A Review of Eight Remote Sensing Datasets, GIS Day 2012 at the University of Oklahoma. Norman, OK. November 14, 2012.

Honors and Media

- Invited to give a talk for the Women's History Month Symposium organized by the Association for Women in Science-Oklahoma. March 2017. <http://awisoklahoma.oucreate.com/past-events/>
- Invited panelist on Panel discussion that concluded the special session 'Ecological (A)synchrony of Forest Responses to Climate' at 2017 AGU Fall Meeting, San Francisco, CA.
- **NPR interview** Radio interview for NPR's "All things considered", March 21, 2008: <http://www.npr.org/templates/story/story.php?storyId=88772863>

Teaching Awards:

- 2012: I won the Dean's award for Teaching Excellence.

Student Awards:

- 2017: Dissertation article by PhD student, Darrel Kingfield, was selected by the editors of Geophysical Research Letters to be featured as a Research Spotlight on EOS.org.
- 2017: Dissertation article by PhD student, Darrel Kingfield, was selected as a "Paper of Note" by the American Meteorological Society and has an extended abstract published in the Bulletin of the American Meteorological Society.
- 2016: I mentored two undergraduate students (Ben Ignac and Emily Campbell) who were selected for the NASA Develop Internship program.
- 2015: Undergraduate student, Alex Holland, was selected for the NASA Develop Internship program.
- 2015: Two undergraduate students under my guidance, Alex Holland and Katy Franks, won the first prize in the Southwest AAG undergraduate poster competition.
- 2015: A graduate student under my guidance, Laura Holtzman, won first prize in the Southwest AAG graduate student poster competition.
- 2014: Poster by undergraduate student Braden Owsley was selected for AGU's Blogosphere during the AGU Fall meeting: <http://blogs.agu.org/geospace/2014/12/19/new-zealand-watersheds-show-dirt-logging-grazing/>
- 2013: Chelsea Martin (MA) won second prize in OU GIS Day graduate poster competition.
- 2013: Undergraduate Braden Owsley won first prize in OU GIS Day undergraduate poster competition.
- 2013: Pradeep Adhikari (PhD) student was selected for a NASA-MSU professional enhancement award.
- 2012: OU GIS Day: Two of my students won prizes for their posters at OU's GIS day poster competition.
- 2012: Pradeep Adhikari (PhD student) won a graduate fellowship from the South Central Arc User Group (SCAUG)
- 2012: Dong Yan (PhD student) won a student travel scholarship to attend the Phenology 2012 Conference in Milwaukee (WI).
- 2012: Chelsea Martin (MA student) won an EPA National Network for Environmental Management Studies (NNEMS) fellowship.

Service

Professional:

Conference Session organization:

2017	<ul style="list-style-type: none">AGU. Organizer of Fall AGU session GC027: Dynamics of Arid and Mountain Landscapes: Evaluating Change in Vulnerable, Variable Environments.
2015	<ul style="list-style-type: none">AGU. Organizer of Fall AGU session GC41G: Assessing the State of the Art in Change Detection and Analysis for Geophysical Time Series.
2014	<ul style="list-style-type: none">SWAAG. Organizer of a half-day session at the SWAAG-GPRM Joint Regional Meeting, Albuquerque, NM. October, 2014.
2011	<ul style="list-style-type: none">AGU. Organizer of Fall AGU session GC11: Climate Change, Food and Water: Biospherical and Economic Impacts
2010	<ul style="list-style-type: none">AGU. Organizer of Fall AGU session B23G: Phenologies, Change and Sustainability.Session Chair: Regional environment and biodiversity risks and socio-economic impact. ENVIROMIS 2010, International Conference on Environmental Observations, Modeling and Information Systems. Invited Presentation. Tomsk, Siberia, Russia.
2008	<ul style="list-style-type: none">AGU. Organizer Fall AGU session: Shifts in Phenology and Seasonality? Recent Evidence from Multiple Taxa, Ecoregions, and ModelsUS-IALE: Organizer of a symposium at the US-IALE meeting: Insect outbreaks in forested landscapes: spatial patterns and ecosystem responses.
2006	<ul style="list-style-type: none">Member of the Technical Program Committee of the IEEE International Geoscience & Remote Sensing Symposium - IGARSS 2006 (http://www.igarss06.org).
Various	<ul style="list-style-type: none">I have judged student poster competitions at several conferences, e.g. SWAAG, US-IALE, AGU.

Review activities: *(These are separate from my associate editor duties)*

National Reports: Review Editor, National Climate Assessment - Northern Great Plains Chapter

Journal Reviews:

I review approximately 12-15 papers per year for the following journals:

Agricultural and Forest Meteorology, Climate Research, Environmental Management, Environmental Research Letters, Geoscience and Remote Sensing Letters, Global Change Biology, International Journal of Biometeorology, International Journal of Remote Sensing, Journal of Applied Earth Observation and Geo-Information, Journal of Applied Geography, Journal of Environmental Management, Journal of Landscape Ecology, Landscape and Urban Planning, Nature, Physical Geography, Photogrammetric Engineering and Remote Sensing, Progress in Physical Geography, Remote Sensing, Remote Sensing of Environment, The Northeastern Geographer, Transactions on Geoscience and Remote Sensing

Ad-hoc proposal reviews *(Please see review panel participating at the beginning of this document)*

I worked on "mail-in" proposal reviews for the following organizations:

Dutch Science Organization, NSF, Oakridge DAAC Postdoctoral Fellowships, Oklahoma Water Resources Board, NASA.

Tenure and international dissertation reviews:

- 2019 • Dissertation review: Vegetation Observation in the Big Data Era: Sentinel-2 data for mapping seasonality of land vegetation. Zhanzhang Cai. Department of Physical Geography and Ecosystem Science. Lund University, Sweden.
- 2018 • Dissertation review: An evaluation of surface urban heat islands in two contrasting cities. Mustafa Naem Hamoodi. Department of Spatial Sciences. Curtin University, Australia
 - Tenure and Promotion review: University at Albany
 - Tenure and Promotion review: University of Vermont
- 2017 • Dissertation review: Urban land use extraction from very high resolution remote sensing images. Mengmeng Li. University of Twente, the Netherlands.
 - Promotion review: University of Michigan
- 2016 • Dissertation review: Impact of Land Use Change on Urban Surface Temperature and Urban Green Space Planning; Case Study of the Island of Bali, Indonesia. I Gusti Agung Ayu Rai Asmiwyati. Department of Spatial Sciences. Curtin University. Australia
 - Tenure and Promotion review: University of Kentucky

Workshop participation:

- 2011 I was invited for a *NASA workshop on dryland changes in East Asia* Kaifeng, Henan, China.
- 2010 I participated in a workshop by the Department of Defense: *Workshop on the Use of Remote Sensing to Support the Assessment of Political Durability in Afghanistan*. Arlington, VA.

Outreach:

Regional:

- 2016-2017: Oklahoma Science Olympiad, Remote Sensing exam preparation and proctoring with Braden Owsley

Workshop organization:

I organized and led a half day “a workshop on Land Surface Phenology” at the following conferences. Each workshop exists out of a series of lectures followed by hands-on activities using my specifically developed software and website. Workshops were attended by between 20 and 40 attendees.

- 2015 Prague (Czech Republic) → Part of the Trans Atlantic Training program
- 2014 Krakow (Poland) → Part of the Trans Atlantic Training program
- 2012 New Port (RI) → Part of the US-IALE conference
- 2010 Athens (GA) → Part of the US-IALE conference
- 2008, Madison (WI) → Part of the US-IALE conference

Academic Service:

University – level (see major university committee membership at the beginning of this document)

- 2018 Division of Regional and City Planning Search Committee member
- 2018 VPR Faculty Awards Committee
- 2017 Nancy L. Mergler Dissertation Completion Fellowship Selection Committee member
- 2017 Earth Month 2017: Committee on organization of OU’s Earth Month activities

2015 - current Faculty mentor for Bryce Lowery in the College of Architecture.
2014 Dream Major Charrette organized by the OU provost.
2013 STEM Charrette
2012- 2013 Astronaut Fellowship Committee

College-level

2017 **Search committee member** Director for the School of Meteorology
2017 **Chair** committee to evaluate the dean

Department - level

2016 – 2017 **Chair** web development committee
2016 – **Chair** committee A
2015 Put together the graduate certificate on Geospatial Information Technologies
2014 - 2015 **Chair** Search Committee GIS cluster positions (2)
Member Search Committee Physical Geography position
2013 - 2015 **Advisor** GIS Club
2013 - 2014 **Member** Search Committee for Land Use Change position
Chair Search Committee for Senior GIS position
2012 - 2014 **Member** Graduate Committee
2012 **Member** Search Committee for system administrator
2011 **Member** Web development committee
Organizer Remote sensing activities during Geography Day
2010 - 2012 **Member** Committee overseeing space issues