

CURRICULUM VITAE

NAME: Luigi Boschetti

DATE: 11/15/2019

CITIZENSHIP: USA, Italian

RANK OR TITLE: Professor

DEPARTMENT: Forest, Rangeland and Fire Sciences

OFFICE LOCATION AND CAMPUS ZIP: CNR 203E, MS 1133

OFFICE PHONE: 208-885-6508

EMAIL: luigi@uidaho.edu

WEB: <https://www.uidaho.edu/cnr/faculty/boschetti>

DATE OF FIRST EMPLOYMENT AT UI: August 2012

DATE OF PRESENT RANK OR TITLE: August 2018

EDUCATION BEYOND HIGH SCHOOL:

Degrees: (List most recent degree first: Degree, institution name, city, state, date, major or area of specialization.)

- PhD Geodesy and Geomatics (2005), Politecnico di Milano, cum laude
- BSc/MSc Environmental Engineering (2000), Politecnico di Milano (Milano, Italy).

Certificates and Licenses:

- Chartered Civil / Industrial / Electronic Engineer (Italy) since 2000.

EXPERIENCE:

Teaching, Extension and Research Appointments: (List position titles and locations since receipt of Bachelor's degree)

August 2018-	Professor, University of Idaho, Department of Natural Resources and Society (2018-2019) and Department of Forest, Rangeland and Fire Sciences (2019-)
August 2012- August 2018	Associate Professor, University of Idaho, Department of Forest Rangeland and Fire Sciences (2012-2015) and Department of Natural Resources and Society (2015-2018)
November 2009 – August 2012	Research Associate Professor, University of Maryland, Department of Geographical Sciences
July 2005 – November 2009	Assistant Research Scientist, University of Maryland, Department of Geography
April 2005 – July 2005	Faculty Research Assistant, University of Maryland, Department of Geography
April 2004 – April 2005	Research Fellow, Institute for the Electromagnetic Sensing of the Environment National Research Council (CNR-IREA), Milano, Italy
March 2002 – April 2004	Research Fellow, Institute for Environment and Sustainability (IES) Joint Research Centre (JRC) of the European Commission, Ispra, Italy
October 2000 – March 2002	Visiting Scientist, Natural Resource Institute (NRI), University of Greenwich Chatham Maritime, United Kingdom

TEACHING ACCOMPLISHMENTS: (Academic and Extension teaching)

Areas of Specialization:

Remote Sensing, Carbon Monitoring, Fire

Courses Taught: (title, course number, date(s))

University of Idaho:

2013-2019 Instructor, Introduction to Geospatial Analysis (FOR 375/ NRS 375)

BOSCHETTI, Luigi

2015, 2018, 2019 Instructor, Carbon, Climate, Forests (ISEM 301-20)
2014,2016, 2017 Instructor, Remote Sensing of Fire (FOR435/535)

University of Maryland:

2012 Instructor, “Italy: Land, Culture, Development”, (winter term study abroad course, GEOG328G, ECON314, ANTH448O, HONR 328R)
2011 Instructor, “Remote Sensing for Carbon Stock Estimation” (GEOG 778)
2011 Instructor, “Italy: Land, Culture, Development”, (winter term study abroad course GEOG328G, ECON314, ANTH448O, HONR 328R))
2010 Instructor, “Introduction to Remote Sensing” (GEOG 372)
2008 Instructor, “Remote Sensing and Digital Image Processing” (GEOG472)
2006 Co-instructor, “Introduction to Remote Sensing” (GEOG 372)
2006 Lectures on geolocation and burned area mapping, course “Advances in Remote Sensing of Terrestrial Global Change: Past Present & Future”, (GEOG 778)
2005 Guest lecture on algorithms for mapping burned areas with MODIS data, University of Maryland, Department of Geography, course “Fire in the Global Environment”, coordinated by Prof. Chris Justice

Politecnico di Milano

2000-2005 Guest lectures on global Earth Observation Systems, Global Landcover Mapping and Validation, Politecnico di Milano, School of Environmental Engineering, course of Remote Sensing coordinated by Prof. Giovanmaria Lechi.
2000-2001 Guest lectures on Remote Sensing for monitoring desertification and land degradation, Politecnico di Milano, School of Environmental Engineering, course of Environmental Impact Assessment coordinated by Prof. Giulio de Leo

European Social Fund Professional Master Courses

2004 Instructor of GIS and Remote Sensing (25 hours) at the European Social Fund Master course in Remote Sensing organized by Centro Camuno Studi Preistorici, Capodiponte, Brescia, Italy
2000 Instructor of Remote Sensing (40 hours) at the European Social Fund Master course in Remote Sensing, organized by CNR-Istituto di Ricerca sul Rischio Sismico and Parco Lombardo del Ticino, Milano, Italy.

Students Advised:

Undergraduate Students: (number per year)

2018: 2 advisees
2017: 2 advisees
2016: 6 advisees
2015: 8 advisees
2014: 8 advisees
2013: 2 advisees

Graduate Students:

A) Major Professor

Advised to completion of degree (student name, degree, and date)

University of Idaho

Nuria Sanchez Lopez (Ph.D. Natural Resources), 2019

Adam Young, (Ph.D. Environmental Sciences), 2018 co-advising with Prof. Phil Higuera (University of Montana)

Erik Boren (M.S. Natural Resources - Thesis), 2015

Luca Marini (M.S., Natural Resources), 2014

Politecnico di Milano

Elena De Angelis, M.S., MSc. Environmental Engineering, 2017, (Co-advised with Prof. Maria Brovelli)

Annamaria Kunzle, MSc. Environmental Engineering, 2005. (Co-advised with Dr. Pietro Alessandro Brivio and Dr. Luigi Mussio).

Università degli Studi di Milano

Ilaria Palumbo, MSc., Environmental Sciences, 2003, Università degli Studi di Milano (Co-advised

with Prof. Carlo Maria Marino and Dr. Jean Marie Gregoire).

Currently advising:

Maria Zubkova (PhD student), started Spring 2015, advanced candidacy Fall 2017
Andrea Melchiorre (Ph.D. student), started Fall 2013, advanced candidacy Spring 2016,
Erik Boren (Ph.D. student), started Fall 2015 advanced candidacy Fall 2017

B) Committee Member

Advised to completion of degree

Carlos Alberto Silva, Ph.D. 2018, University of Idaho, major professor: Prof. Lee Vierling.
Danielle Berardi, MS, 2017, University of Idaho, major professor: Prof. Tara Hudiburg
Aaron Sparks, Ph.D, 2017, University of Idaho, major professors: Prof. Crystal Kolden – Prof.
Alistair Smith.
Sanath Kumar, PhD, 2014, South Dakota State University, GIS Centre of Excellence. Main
supervisor: Prof. David Roy.
Kelley O’Neal, PhD, 2014, University of Maryland, Department of Geography. Main supervisor:
Prof. Chris Justice.
Jessica Mc Carthy, PhD., 2009, University of Maryland, Department of Geography. Main
supervisor: Prof. Chris Justice.
Jose Roa, PhD., completed 2007, University of Maryland, Department of Geography, Main
supervisor: Prof. Michael Kearney.
Stefano Testa, PhD, 2015, University of Turin, major professor: Prof. Enrico Borgogno Mondino

External examiner

Ramin Azar, PhD, 2015, Politecnico di Milano, major professor prof. Luigi Mussio
Roberto Luciani, PhD, 2017, Universita’ di Roma La Sapienza, major professor prof. Giovanni
Laneve

Currently advising

Michael Humber, PhD student, University of Maryland, Department of Geography, major
professor: Prof. Chris Justice, defense scheduled for November 8th, 2019.

Materials Developed: (non-scholarship activity)

Courses Developed or Substantially Revised:

2015 “Climate, Carbon, Forests”
2013 “Remote Sensing of Fire” (FOR435/FOR535) for Spring 2014
2013 “Introduction to Geospatial Analysis” (FOR 375) for Fall 2013
2011 “Remote Sensing for Carbon Stock Estimation” (GEOG 778)
2006 “Introduction to Remote Sensing”(GEOG375)

Other material

2014/2017 Training material on GOFC-Gold Sourcebook on REDD+ (funded by the World Bank)

SCHOLARSHIP ACCOMPLISHMENTS: (Including scholarship of teaching and learning, artistic creativity, discovery, and application/integration)

Citation metrics:

All citations: 4213, h-index: 33, i10-index: 59. Source: Google Scholar (11-15-2019)

Publications:

Peer Reviewed Journal Articles:

* indicates graduate student authors

1. Humber, M. *, **Boschetti, L.**, Giglio, L., 2019, Assessing the shape accuracy of coarse resolution burned area identifications in the western United States, *IEEE TGRS*, <https://doi.org/10.1109/TGRS.2019.2943901>.
2. **Boschetti, L.**, Roy, D.P., Giglio, L., Huang, H., Zubkova, M. *, Humber, M.L. *, 2019, Global validation of the Collection 6 MODIS burned area product, *Remote Sensing of Environment*, 235, 111490
3. Sanchez-Lopez, N. *, **Boschetti, L.**, & Hudak, A., 2019, Reconstruction of the disturbance history of a temperate coniferous forest through stand-level analysis of airborne LiDAR data, *Forestry*, <https://doi.org/10.1093/forestry/cpz048>
4. Roy, D., Huang, H., **Boschetti, L.**, Giglio, L., Yan, L., Zhang, H. and Li, Z., 2019, Landsat-8 and Sentinel-2 burned area mapping - a combined sensor multi-temporal change detection approach., *Remote Sensing of Environment*, 231, 111254
5. Boren, E. *, **Boschetti L.**, Johnson, D., 2019, Characterizing the Variability of the Structural Parameter in the PROSPECT Leaf Optical Properties Model, *Remote Sensing*, 11(10), p.1236
6. Steady, W.D. *, Partelli Feltrin, R. *, Johnson, D.M., Sparks, A.M., Kolden, C., Talhelm, A.F., Lutz, J.A., **Boschetti, L.**, Hudak, A.T., Nelson, A.S. and Smith, A., 2019. The Survival of Pinus ponderosa Saplings Subjected to Increasing Levels of Fire Behavior and Impacts on Post-Fire Growth. *Fire*, 2(2), p.23.
7. Zubkova, M. *, **Boschetti, L.**, Abatzoglou, J., and Giglio, L., 2019, Changes in Fire Activity in Africa from 2002 to 2016 and Their Potential Drivers, *Geophysical Research Letters* DOI:10.1029/2019GL083469
8. Huo, L., Boschetti, L. and Sparks, A., (2019) Object-based classification of forest disturbance types in the conterminous United States, *Remote Sensing*, 11(5), 477 <https://doi.org/10.3390/rs11050477>
9. Sanchez-Lopez, N. *, **Boschetti, L.**, & Hudak, A. (2018). Semi-Automated Delineation of Stands in an Even-Age Dominated Forest: A LiDAR-GEOBIA Two-Stage Evaluation Strategy. *Remote Sensing*, 10(10), 1622.
10. Abatzoglou, J. T., Williams, A. P., **Boschetti, L.**, Zubkova, M. *, & Kolden, C. A. (2018). Global patterns of interannual climate–fire relationships. *Global change biology*, 24(11), 5164-5175.
11. Giglio, L., **Boschetti, L.**, Roy, D. P., Humber, M. L. *, & Justice, C. O. (2018). The Collection 6 MODIS burned area mapping algorithm and product. *Remote sensing of environment*, 217, 72-85.
12. Sparks, A. M. *, Kolden, C. A., Smith, A. M., Boschetti, L., Johnson, D. M., & Cochrane, M. A. (2018). Fire intensity impacts on post-fire temperate coniferous forest net primary productivity. *Biogeosciences*, 15(4), 1173.

13. Sparks, A. M. *, Talhelm, A. F., Feltrin, R. P., Smith, A. M., Johnson, D. M., Kolden, C. A., & **Boschetti, L.** (2018). An experimental assessment of the impact of drought and fire on western larch injury, mortality and recovery. *International Journal of Wildland Fire*, 27(7), 490-497.
14. Melchiorre, A. * and Boschetti., L., 2018, Global analysis of the burned area spectral signal persistence, *Remote Sensing*, 10(5), 750.
15. Klauberg, C., Hudak, A. T., Bright, B. C., **Boschetti, L.**, Dickinson, M. B., Kremens, R. L., & Silva, C. A. (2018). Use of ordinary kriging and Gaussian conditional simulation to interpolate airborne fire radiative energy density estimates. *International journal of wildland fire*, 27(4), 228-240.
16. Humber, M. *, **Boschetti, L.**, Giglio., L., Justice, C., 2018, Spatial and Temporal Intercomparison of Four Global Burned Area Products, *International Journal of Digital Earth*, DOI: 10.1080/17538947.2018.1433727.
17. Testa, S. *, Soudani, K., **Boschetti, L.**, Borgogno Mondino E., (2018) MODIS-derived EVI, NDVI and WDRVI time series to estimate phenological metrics in French deciduous forests, *International Journal of Applied Earth Observation and Geoinformation*, vol. 64, 132-144.
18. Huang, H., Roy, D. P., **Boschetti, L.**, Zhang, H. K., Yan, L., Kumar, S. S., ... & Li, J. (2016). Separability analysis of sentinel-2A multi-spectral instrument (MSI) data for burned area discrimination. *Remote Sensing*, 8(10), 873.
19. **Boschetti, L.**, Stehman, S. V., & Roy, D. P. (2016). A stratified random sampling design in space and time for regional to global scale burned area product validation. *Remote Sensing of Environment*, 186, 465-478.
20. Sparks, A. M. *, Kolden, C. A., Talhelm, A. F., Smith, A., Apostol, K. G., Johnson, D. M., & **Boschetti, L.** (2016). Spectral indices accurately quantify changes in seedling physiology following fire: towards mechanistic assessments of post-fire carbon cycling. *Remote Sensing*, 8(7), 572.
21. Rossi, S., Tubiello, F., Prosperi, P., Salvatore, M., Jacobs, H., Biancalani, R. and **Boschetti, L.**, 2016, FAOSTAT estimates of greenhouse gas emissions from biomass and peat fires, *Climatic Change*, 1-13.
22. Smith, A.M.S., Sparks, A.M. *, Kolden, C.A., Abatzoglou, J.T., Talhelm, A.F., Johnson, D.M., **Boschetti, L.**, Lutz, J.A., Apostol, K.,G., Yedinak, K.M., Tinkham, W.T. and Kremens, R.J, 2016, Toward a new paradigm in fire severity research using dose-response experiments, *International Journal of Wildland Fires*, 158-156.
23. Smith, A., Kolden, C., Paveglio, T., Cochrane, M., Bowman, D., Moritz., M., Kliskey, A., Alessa, L., Hudak, A., Hoffman, C., Lutz, J., Queen, L., Goetz, S., Higuera, P., **Boschetti, L.**, Flannigan, M., Yedinak, K., Watts, A., Strand, E., van Wagtenonk, J, Anderson, J, and Stocks, B., 2016, The Science of Firescapes: Achieving Fire Resilient Communities, *BioScience*, 66(2), 130-146.
24. **Boschetti, L.**, Roy, D. P., Justice, C. O., & Humber, M. L. * (2015). MODIS–Landsat fusion for large area 30m burned area mapping. *Remote Sensing of Environment*, 161, 27-42.
25. Sparks, A.M. *, **Boschetti, L.**, Tinkham, W.T., Smith, A.M.S., and Lannom, K.O., 2014, An accuracy assessment of the MTBS burned area product for shrub-steppe fires in the northern Great Basin, United States, *International Journal of Wildland Fire*, 24, 70-78
26. van Leeuwen, T. T., van der Werf, G. R., Hoffmann, A. A., Detmers, R. G., Rucker, G., French, N., Archibald, S., Carvalho Jr., J. A., Cook, G. D., de Groot, W. J., Hely, C., Kasischke, E. S., Kloster, S., McCarty, J. L., Pettinari, M. L., Savadogo, P., Alvarado, E. C., **Boschetti, L.**, Manuri, S., Meyer, C. P., Siegert, F., Trollope, L. A., Trollope, W. S., 2014., Biomass burning fuel consumption rates: a field measurement database, *Biogeosciences Discussions*, 11(6):8115-8180, doi: 10.5194/bgd-11-8115-2014.

27. Kumar, S.S. *, Roy, D.P., Cochrane, M.A., Souza JR, C.M., Barber, C., **Boschetti, L.**, 2014, A quantitative study of the proximity of satellite detected active fires to roads and rivers in the Brazilian tropical moist forest biome, *International Journal of Wildland Fire*. 23(4):532-543, doi 10.1071/WF13106
28. Smith, A.M.S., Kolden, K.A, Tinkham, W. T. *, Talhelm, A., Marshall, J., D., Hudak, A.T., Greenberg, J., Falkowski, M.J., Anderson, J. W., Kliskey, A., Alessa, L., **Boschetti, L.**, Keefe, R.F. and Gosz, J.R., Remote Sensing the Vulnerability of Vegetation in Natural Terrestrial Ecosystem, 2014, *Remote Sensing of Environment*, 254:322-337.
29. Baraldi, A., **Boschetti, L.**, and Humber, M., 2014., Probability sampling protocol for thematic and spatial quality assessments of classification maps generated from spaceborne/airborne very high resolution images. *IEEE Transactions on Geoscience and Remote Sensing*, 51(1), pp 701-760.
30. Smith, A.M.S., Tinkham, W.T. *, Roy, D.P., **Boschetti, L.**, Kremens, R.L., Kumar, S.S., Sparks, A., Falkowski, M.J., 2013, Quantification of fuel moisture effects on biomass consumed derived from fire radiative energy retrievals, *Geophysical Research Letters*, 40, 6298–6302, doi:10.1002/2013GL058232.
31. Baraldi, A., **Boschetti, L.**, and Humber, M., 2013, Quality Assessment of Pre-Classification Maps Generated from Spaceborne/Airborne Multi-Spectral Images by the Satellite Image Automatic Mapper (TM) and Atmospheric/Topographic Correction (TM)-Spectral Classification Software Products: Part 2-Experimental Results, *Remote Sensing*, 5(10), 5209-5264
32. Clerici, N., Weissteiner, C.J., Paracchini, M.L., **Boschetti, L.**, and Baraldi, A., 2013, Pan-European distribution modelling of stream riparian zones based on multi-source Earth Observation data, *Ecological Indicators* 24, 211-223.
33. Loboda, T.V., Giglio, L., **Boschetti, L.**, and Justice, C.O., 2012, Regional fire monitoring and characterization using global NASA MODIS fire products in dry lands of Central Asia, *Frontiers of Earth Science*, 1-10.
34. Baraldi, A. and **Boschetti, L.**, 2012, Operational Automatic Remote Sensing Image Understanding Systems: Beyond Geographic Object-Based and Object-Oriented Image Analysis (GEOBIA/GEOOIA). Part 1: Introduction, *Remote Sensing*, 4 (9), 2694-2735.
35. Baraldi, A. and **Boschetti, L.**, 2012, Operational Automatic Remote Sensing Image Understanding Systems: Beyond Geographic Object-Based and Object-Oriented Image Analysis (GEOBIA/GEOOIA). Part 2: Novel system architecture, information/knowledge representation, algorithm design and implementation, *Remote Sensing*, 4 (9), 2768-2817.
36. Stroppiana, D., Bordogna, G., Boschetti, M., Carrara, P., **Boschetti, L.**, Brivio, P. A., 2012, A new method for extracting burned areas from Landsat TM images by soft aggregation of spectral indices and a region growing algorithm, *ISPRS Journal of Photogrammetry and Remote Sensing*, 69, 88-102.
37. Bresciani M, Giardino C. and **Boschetti L.**, 2011, Evaluation of dynamics of bio-physical parameters in lake waters from MODIS and MERIS images, *Rivista italiana di Telerilevamento* 43(3),49-62
38. Brivio, P.A. and Boschetti. L., 2011, Introduction to Special Issue “MODIS 2000-2010: Ten Years of Success in the Earth Observation”, *Rivista italiana di Telerilevamento*, 43(3), 3-5.
39. Stroppiana, D., Bordogna, G., Boschetti, M., Carrara, P., **Boschetti, L.**, Brivio, P. A., 2011, Positive and Negative Information for Assessing and Revising Scores of Burn Evidence , *IEEE Geoscience and Remote Sensing Letters*, 10.1109/LGRS.2011.2167953.
40. Kumar, S. *, Roy, D., **Boschetti, L.**, Kremens, R., Exploiting the Power law Distribution Properties of Satellite Fire Radiative Power Retrievals - a Method to Estimate Fire Radiative Energy and Biomass Burned From Sparse Satellite Observations, 2011, *Journal of Geophysical Research-Atmospheres*, vol 166, D19303 DOI: 10.1029/2011JD015676

41. Pepe, M., **Boschetti, L.**, Brivio, P.A., Rampini, A., 2010, Comparing the performance of fuzzy and crisp classifiers on remotely sensed images: a case of snow classification, *International Journal of Remote Sensing*, 31(23):6189-6203.
42. Archibald, S., Scholes, R., Roy, D., Wooster, M. and **Boschetti, L.**, 2010 Southern African fire regimes as revealed by remote Sensing, *International Journal of Wildland Fires*, 19:861-878
43. **Boschetti L.**, Roy, D., Justice, C. and Giglio, L., 2010, Global assessment of the temporal reporting accuracy and precision of the MODIS burned area product, *International Journal of Wildland Fire*, 19(6), pp.705-709.
44. Roy, D., Boschetti, L., Maier, S. and Smith, A.M.S, 2010, Field estimation of ash color-lightness using a standard grey scale, *International Journal of Wildland Fires*, 19(6), pp.698,704.
45. Petropoulos, G, Knorr, W., Sholze, M., **Boschetti, L.** and Karantounias, G., 2010, Combining ASTER Multispectral Imagery Analysis and Support Vector Machines for Rapid and Cost-Effective Post-Fire Assessment: A case study from the Greek Wildland Fires of Year 2007, *Natural Hazards and Earth System Sciences*, vol 10, pp. 1-13.
46. **Boschetti, L.** and Roy, D, 2009, Strategies for the fusion of satellite fire radiative power with burned area data for fire radiative energy derivation, *Journal of Geophysical Research, Atmospheres*, vol.114, D20302, doi:10.1029/2008JD011645 .
47. Roy, D.P. and **Boschetti, L.**, 2009, Southern Africa Validation of the MODIS, L3JRC and GlobCarbon Burned Area Products, *IEEE transactions on Geoscience and Remote Sensing*, vol. 47(4), pp. 1032 – 1044, doi:10.1109/TGRS.2008.2009000.
48. Roy, D.P., **Boschetti, L.**, Justice, C.O. and Ju, J. 2008. The Collection 5 MODIS Burned Area Product - Global Evaluation by Comparison with the MODIS Active Fire Product, *Remote Sensing of Environment*, vol. 112, pp. 3690-3707
49. **Boschetti, L.** and Roy, D.P., 2008, Defining a fire year for reporting and analysis of global fire inter-annual variability, *Journal of Geophysical Research - Biogeosciences*, vol. 113, G03020, doi:10.1029/2008JG000686,
50. **Boschetti, L.**, Roy, D. and Justice, C., 2008, Using NASA's World Wind Virtual Globe for Interactive Visualization of the Global MODIS Burned Area Product, *International Journal of Remote Sensing*, vol 29(11), pp.3067-3072.
51. **Boschetti, L.**, Roy, D. Barbosa, P., Boca, R. and Justice, C., 2008, A MODIS assessment of the summer 2007 extent burned in Greece, *International Journal of Remote Sensing*, vol. 29, pp.2433-2436.
52. Boschetti, M., **Boschetti, L.**, Oliveri, S., and Casati, L., 2007, Tree species mapping with Airborne hyper-spectral MIVIS data: the Ticino Park study case, *International Journal of Remote Sensing*, vol 28(6), pp 1251-1261.
53. Roy, D., Lewis, P., Schaaf, C., Devadiga, S., **Boschetti, L.**, 2006, The Global impact of cloud on the production of MODIS n-day and daily rolling n-day bi-directional reflectance model based composites for terrestrial monitoring , *IEEE Geoscience and Remote Sensing Letters*, vol. 3(4), pp 452 - 456, doi:10.1109/LGRS.2006.875433
54. **Boschetti, L.**, Brivio, P. A., Eva, Hugh D., Gallego, J., Baraldi, A. and Grégoire, 2006, J-M., A Sampling Method for the Retrospective Validation of Global Burned Area Products, *IEEE-Transactions on Geoscience and Remote Sensing*, vol 44(7), pp.176-1773, doi: 10.1109/TGRS.2006.874039

55. Roy, D.P., **Boschetti, L.**, Trigg, S., Remote Sensing of Fire Severity: Assessing the performance of the Normalized Burn Ratio, 2006, *IEEE Geoscience and Remote Sensing Letters*, vol.3(1), pp.112-116, doi:10.1109/LGRS.2005.858485.
56. **Boschetti, L.**, Eva, H., Brivio, P.A. and Grégoire, J.M., 2004, Lessons to be learned from the intercalibration of three satellite-derived biomass burning products, *Geophysical Research Letters*, vol. 31(21),doi: L21501 10.1029/2004GL021229.
57. Tansey, K., Grégoire, J-M., Stroppiana, D., Sousa, A., Silva, J.M.N., Pereira, J.M.C., **Boschetti, L.**, Maggi, M., Brivio, P.A., Fraser, R., Flasse, S., Ershov, D., Binaghi, E., Graetz D. and Peduzzi, P., 2004, Vegetation burning in the year 2000: Global burned area estimates from SPOT VEGETATION data, *Journal of Geophysical. Research - Atmospheres*, vol.109, D14S03, doi:10.1029/2003JD003598.
58. Tansey K., Grégoire, J.M., Binaghi, E., **Boschetti, L.**, Brivio, P.A., Ershov, D, Flasse, S., Fraser, R., Graetz, D., Maggi, M, Peduzzi, P., Pereira, J.M.C., Silva, J.M.N. , Sousa, A. and Stroppiana, D., 2004, A global inventory of burned areas at 1km resolution for the year 2000 derived from SPOT VEGETATION data, *Climatic Change*, vol. 67(2), pp.1573-1580.
59. **Boschetti L.**, Flasse, S. and Brivio, P.A., 2004, Analysis of the conflict between omission and commission in low spatial resolution thematic products: the Pareto Boundary, *Remote Sensing of Environment*, vol. 91 (3-4), pp. 280-292.
60. **Boschetti L.**, Brivio, P.A. and Grégoire, J.M., 2003, The use of Meteosat and GMS imagery to detect burned areas in tropical environments, *Remote Sensing of Environment*, vol. 85(1), pp. 78-91.

Peer Reviewed (currently scheduled or submitted):

Submitted

1. Melchiorre, A, Boschetti, L, and Roy, D., Global evaluation of the suitability of MODIS-Terra detected cloud cover as a proxy for Landsat 7 cloud condition, *Remote Sensing*, under review
2. Prosperi, P., Bloise, M., Tubiello, F., Conchedda, G., Rossi, S., Boschetti, L., Salvatore, M., Bernoux, M., New estimates of greenhouse gas emissions from biomass burning and peat fires, *Climatic Change*, under review.

Refereed/Adjudicated: (i.e. journals, articles, proceedings, abstracts, etc.)

BOOK CHAPTERS AND MONOGRAPHS

1. Delponte, L., Pellegrin, J., Sirtori, E., Gianinetto, M., **Boschetti, L.**, 2016, *Space Market Uptake in Europe*, European Parliament, PE 569.984
2. Csiszar, I.A., Justice, C.O., Goldammer, J.G., Lynham, T. , de Groot, W.J, Prins, E.M., Elvidge, C.D., Oertel, D., Lorenz, E., Bobbe, T., Quayle, B., Davies, D., Roy, D., **Boschetti, L.** Korontzi, S., Ambrose, S., Stephens, G., 2014, The GOF/GOLD Fire Mapping and Monitoring theme: assessment and strategic plans, in “*Remote Sensing Modeling and Applications to Wildland Fires*”, Qu, J.J.; Sommers, W.; Yang, R.; Riebau, A.; Kafatos, M. (Eds.), Springer Verlag, 550p, ISBN 978-3-642-32529-8,
3. Chris Justice, Ivan Csiszar , **Luigi Boschetti**, Stefania Korontzi, Wilfrid Schroeder, Louis Giglio and David Roy, 2013, Satellite Monitoring and Inventory of Global Vegetation Fire, in *Vegetation Fires and Global Change – Challenges for Concerted International Action. A White Paper directed to the United Nations and International Organizations, A publication of the Global Fire Monitoring Center (GFMC)* (Goldammer Ed.), Kessel Publishing House
4. Roy, D.P, **Boschetti, L.**, and Smith, A.M, 2013, Satellite Remote Sensing of Fires, in *Fire Phenomena and the Earth System: An Interdisciplinary Guide to Fire Science*, Belcher, C.M. (Ed.), Wiley, London.

5. Justice C.O., Giglio L., Roy D., **Boschetti L.**, Csiszar I., Davies D., Korontzi S., Schroeder W., O'Neal K.J., Morisette J.T., 2011, Global Fire Products from the MODIS instruments, in *Land Remote Sensing and Global Environmental Change: NASA's EOS and the science Of ASTER and MODIS*", B. Ramachandran, C. Justice and M. Abrams (Eds), Springer Verlag, New York, ISBN: 978-1-4419-6749-
6. Roy, D.P, **Boschetti, L.**, and Giglio, L., 2010, Remote Sensing of Global Savanna Fire Occurrence, Extent and Properties, in *Ecosystem Function in Global Savannas: Measurement and Modeling at Landscape to Global Scales*, Michael J. Hill and Niall P. Hanan (Eds.), CRC/Taylor and Francis.
7. **Boschetti, L.**, Roy, D and Justice C, 2010, Daily global mapping of vegetation biomass burning from MODIS satellite data, in *Optical observation of vegetation properties and characteristics*, F. Maselli, M. Menenti, P.A. Brivio (Eds.), Research Signpost, Trivandrum
8. Strahler, A., **Boschetti, L.**, Foody, G., Friedl, M., Hansen, M., Harold, M., Mayaux, P., Morisette, J., Stehman, S., Wodcock, C., 2006. *Global Landcover Validation: Recommendations for Evaluation and Accuracy Assessment of Global Landcover Maps*, Luxembourg, Office for Official Publication of the European Communities, EUR 22156 EN, 58p.
9. Boschetti, M., **Boschetti, L.**, Canova, I., Casati, L., Oliveri, S., 2005, *Mappatura delle specie arboree del Parco del Ticino*, Consorzio lombardo della valle del Ticino, pp.121.
10. **Boschetti, L.**, 2005, *Methodology for accuracy assessment of global scale burned area maps derived from satellite images*, Publications of the European Commission, S.P.I.05.67, pp. 109.
11. **Boschetti L.**, S. Flasse, A. Jacques de Dixmude and S. Trigg, 2002, A multitemporal change-detection algorithm for the monitoring of burnt areas with SPOT-Vegetation data, in *Analysis of Multi-temporal Remote Sensing Images*, (L. Bruzzone and P. Smith, Eds.), World Scientific Publishing, Singapore, pp.75-82.
12. **Boschetti L.**, 2002, *Metodologia per l'individuazione delle aree bruciate in ambiente tropicale con dati di satelliti geostazionari*, Publications of the European Commission, SP. I.02.153, European Commission, pp. 151.
13. **Boschetti L.**, 2000, Burnt Area mapping from GMS-VISSR data, in *The SMOKO experiment: development and test of a multi-systems approach to burnt area mapping from optical, thermal and microwave satellite data. A joint Australia-European Union Scientific collaboration, progress report 1*, (J.M. Grégoire Ed.), report EUR 19596 EN,

CONFERENCE PROCEEDINGS AND ABSTRACTS

1. Gomez-Dans J., Brennan J., Lewis P., Roy D., Boschetti L., A linear model of spectral change for assessing the impact of fire on vegetation using Sentinel-2 and Landsat-8 data, ESA Living Planet Symposium, Milan 13-17 May 2019.
2. Roy D. , Huang H., Boschetti L., Giglio L., Yan L., Zhang H., Li Z., Landsat-8 and Sentinel-2 burned area mapping: southern Africa demonstration and validation, , ESA Living Planet Symposium, Milan 13-17 May 2019.
3. Melchiorre A., Boschetti L., Towards Landsat/Sentinel-2 global burned area mapping: temporal resolution requirements of satellite constellations for 30 m global burned area mapping, ESA Living Planet Symposium, Milan 13-17 May 2019.
4. Boschetti L., Sparks A., Roy D., Using the NASA polar orbiting fire product record to enhance and expand the Global Wildfire Information System (GWIS), ESA Living Planet Symposium, Milan 13-17 May 2019.
5. Roy, D.P., Huang, H., Boschetti, L., Zhang, H., Yan, L., Li, Z., Synergy of Landsat and Sentinel 2 data for change detection mapping burned areas, 3rd joint EARSeL LULC & NASA LCLUC Workshop, Chania, Crete, July 11-12th 2018.

6. López, N. S., Boschetti, L., & Hudak, A. T. A semi-automated LiDAR-GEOBIA methodology for forest even-aged stand delineation based on a two-stage evaluation strategy. In GEOBIA 2018-From pixels to ecosystems and global sustainability, Montpellier, June 19-23 2018.
7. Boschetti L., Roy, D., Sparks, A., Using the NASA polar orbiting fire product record to enhance and expand the Global Wildfire Information System (GWIS), Forestsat 2018, College Park (MD), October 1-5 2018.
8. López, N. S., Boschetti, L., & Hudak, A. T. A, Integration of Landsat and simulated spaceborne LiDAR data to estimate time since disturbance at the forest stand level, Forestsat 2018, College Park (MD), October 1-5 2018.
9. Humber, M., Boschetti., L. and Giglio, L., Assessing the shape accuracy of individual burn scars in the Western United States, AGU 2018 Fall Meeting, Washington DC 10-14 December 2018
10. McCarley, R., Hudak, A., Sparks, A, Boschetti, L., Meddens, A.J., Quantifying Fuel Consumption for Two Western U.S. Fires using Repeat LiDAR, AGU 2018 Fall Meeting, Washington DC 10-14 December 2018
11. Zubkova, M., Boschetti. L., Abatzoglou, J., Recent changes in fire activity in Africa and their potential drivers, AGU 2018 Fall Meeting, Washington DC 10-14 December 2018.
12. Melchiorre, A., and **Boschetti, L.**, Temporal resolution requirements of satellite constellations for 30 m global burned area mapping, AGU2017 Fall Meeting, New Orleans, 11-15th December 2017.
13. **Boschetti, L.**, Giglio, L., Roy, D.P., Humber, M., Kumar, S., Zubkova, M., Melchiorre, A., Huang, H., Huo, L-Z., Validation of the MODIS Collection 6 MCD64 Burned Area Product, AGU2017 Fall Meeting, New Orleans, 11-15th December 2017 (**invited**)
14. Zubkova, M., **Boschetti, L.**, Abatzoglou, J., Climate Controls on fire patterns in African and Australian continents, AGU2017 Fall Meeting, New Orleans, 11-15th December 2017.
15. Sanchez, N., **Boschetti, L.** and Hudak, A., Mapping of past stand-level forest disturbances and estimation of time since disturbance using simulated spaceborne LiDAR data, AGU2017 Fall Meeting, New Orleans, 11-15th December 2017.
16. Huo, L., Boschetti, L., Clerici, N., Deforestation and Industrial Forest Patterns in Colombia: a Case Study, AGU2017 Fall Meeting, New Orleans, 11-15th December 2017
17. Boren., E., Boschetti., L., Johnson, D., Optimizing spatial and temporal constraints for cropland canopy water content retrieval through coupled radiative transfer model inversion, AGU2017 Fall Meeting, New Orleans, 11-15th December 2017
18. Huang, H., Roy., D., Zhang, H., Yan, L., Boschetti., L., Combined Landsat-8 and Sentinel-2 Burned Area Mapping, AGU2017 Fall Meeting, New Orleans, 11-15th December 2017.
19. **Boschetti, L.**, Giglio, L., Roy, D.P., Humber, M., Kumar, S., Zubkova, M., Melchiorre, A., Huang, H., Huo, L-Z., The Collection 6 MODIS MCD64 Global Burned Area Product: Status and Validation, *EARSel (European Association of Remote Sensing Laboratories) Forest Fires Special Interest Group Workshop*, Chania, Greece, 25-27th September 2017.
20. Stroppiana, D., Calò, F., Imperatore, P., Pepe. A., **Boschetti, L.**, Brivio, P.A. and Lanari, R., Integration of Sentinel-1 and Sentinel-2 images for detecting burned vegetation in California, *EARSel (European Association of Remote Sensing Laboratories) Forest Fires Special Interest Group Workshop*, Chania, Greece, 25-27th September 2017.
21. Roy, D.P., Huang, H., Zhang, H.K., Yan, L., **Boschetti, L.**, Li, J., Li, Z., Toward prototyping a Landsat-8 Sentinel-2 global burned area product, *EARSel (European Association of Remote Sensing Laboratories) Forest Fires Special Interest Group Workshop*, Chania, Greece, 25-27th September 2017. **Invited Keynote Presentation**
22. Sanchez, N, Hudak, A., **Boschetti, L.**, Stand Replacing Disturbance History from Object-Based Image Analysis (OBIA) of LiDAR Data, AGU 2016 Fall Meeting, S.Francisco December 12-16 2016

23. Huo, L., **Boschetti, L.**, Forest cover loss and urban area expansion in the Conterminous Unites States in the first decade of the third millennium, AGU 2016 Fall Meeting, S.Francisco December 12-16 2016
24. **Boschetti, L.**, Huo, L., Forest disturbances, deforestation and timber harvest patterns in the Conterminous United States, AGU 2016 Fall Meeting, S.Francisco December 12-16 2016
25. Giglio, L., **Boschetti, L.**, Roy, D., Humber, L, Walsh, C., Justice, C., Advances in the Collection 6 MODIS Burned Area Product for Global and Regional Fire Monitoring, AGU 2016 Fall Meeting, S.Francisco December 12-16 2016
26. Melchiorre, A., **Boschetti., L.**, Towards global Landsat burned area mapping: revisit time and availability of cloud free observations, AGU 2016 Fall Meeting, S. Francisco December 12-16 2016
27. Boren, E, **Boschetti, L.**, Johnson, D., A comparison of different radiative transfer model inversion methods for canopy water content retrieval, AGU 2016 Fall Meeting, S.Francisco December 12-16 2016
28. Zubkova, M and **Boschetti., L.**, Characterizing Global Fire Return Intervals from the MODIS Data Record , AGU 2016 Fall Meeting, S.Francisco December 12-16 2016
29. **Boschetti, L.**, Huo, L., Monitoring forest disturbances, a Landsat spatial and temporal approach, ForestSat, Santiago (Chile), November 15-19 2016
30. **Boschetti L**, Challeges for Burned area and Active Fire Validation, GOFC-Fire Implementation Team Meeting, Santiago (Chile), November 15-16 2016
31. **Boschetti L.**, Stehman, S, Roy, D, Global Burned Area Validation: Spatial and Temporal Sampling, GOFC-Fire Implementation Team Meeting, Santiago (Chile), November 15-16 2016
32. **Boschetti, L.**, Roy, D., Stehman, S., A stratified random sampling design in space and time for regional to global scale burned area product validation, European Space Agency Living Planet Symposium, Prague May 2016
33. Roy, D., Huang, H., Kumar, S., Zhang, H., Li, J., Gomez-Dans, J., Lewis, P., **Boschetti, L.**, Early results prototyping a global Landsat-8 Sentinel-2 burned area product, European Space Agency Living Planet Symposium, Prague May 2016
34. Boren, E., **Boschetti, L**, and Johnson, D., Characterizing the Uncertainty of Vegetation Moisture Content Retrieval through Radiative Transfer Model Inversion with Landsat 8 OLI Data, AGU 2015 Fall Meeting, S.Francisco 14-18 December 2015
35. Young, A., **Boschetti, L**, Duffy, P., Hu, F., Higuera, P, Disentangling Modern Fire-Climate-Vegetation Relationships across the Boreal Forest Biome, AGU 2015 Fall Meeting, S.Francisco 14-18 December 2015
36. Melchiorre, A., **Boschetti., L.**, Global analysis of the persistence of the spectral signal associated with burned areas, AGU 2015 Fall Meeting, S.Francisco 14-18 December 2015
37. Huo, L, **Boschetti, L.**, Spatial and Temporal Analysis of Industrial Forest Clearcuts in the Conterminous United States, AGU 2015 Fall Meeting, S.Francisco 14-18 December 2015
38. **Boschetti,L.**, Roy, D., Validating long-term satellite-derived disturbance products: the case of burned areas, S. Francisco 14-18 December 2015
39. **Boschetti, L.**, Roy, D., A stratified random sampling design in space and time for global burned area validation, EARSEL SIG Fire 2015, Cyprus, 2-5 November 2015
40. Roy, D., Huang, H., Kumar, S., Zhang, H., Li, J., Gomez-Dans, J., Lewis, P., **Boschetti, L.**, Towards prototyping a global Landsat-8 Sentinel-2 Burned Area Product, EARSEL SIG Fire 2015, Cyprus, 2-5 November 2015
41. **Boschetti, L.**, Roy, D., MODIS-Landsat data fusion for 30m burned area mapping: demonstration and validation for the United States, IGARSS 2015 Symposium, Milan 26-30 July 2015.

42. Testa, S., **Boschetti, L.**, and Borgogno Bondino, E., MODIS EVI, NDVI, WDRVI, daily and composite: looking for the best choice to estimate phenological parameters from deciduous forest, IGARSS 2015 Symposium, Milan 26-30 July 2015.
43. Roy, D., Kumar, S., Zhang, H. and **Boschetti, L.**, Prototyping a Landsat-8 Sentinel-2 Burned Area Product, RSPSoc 2015, Southampton, UK, 8-11 September 2015.
44. Giglio, L., Shroeder, W., **Boschetti, L.**, Justice, C., Recent Advances in Global and Regional Fire Monitoring with the Collection 6 MODIS Fire Products (Invited), AGU, S. Francisco, 15-20 December 2014.
45. Kumar, S., Roy, D., **Boschetti, L.**, Trapezoidal Numerical Integration of Fire Radiative Power (FRP) Provides More Reliable Estimation of Fire Radiative Energy (FRE) and so Biomass Consumption Than Conventional Estimation Methods, AGU, S. Francisco, 15-20 December 2014.
46. Boren, E., **Boschetti, L.**, Understanding the Spectral Characterization of Cropland Burning, AGU, S. Francisco, 15-20 December 2014.
47. Melchiorre, A., **Boschetti, L.**, Improved fire radiative energy estimation in high latitude ecosystems, AGU, S. Francisco, 15-20 December 2014.
48. Young, A., Higuera, P., Duffy, P., Hu, F., **Boschetti, L.**, Climatic Controls of Wildfire in the Boreal Forest and Arctic Tundra Biomes across Multiple Spatial and Temporal Scales, AGU, S. Francisco, 15-20 December 2014.
49. **Boschetti, L.**, Smith, A., Keefe, R., Hudak, A., Brivio, P.A., Industrial Forest Mapping: A Landsat Spatial and Temporal Approach, (invited)ForestSat International Conference, Riva Del Garda, 4-7 November 2014
50. **Boschetti, L.**, Roy, D., Continental scale 30m burned area mapping: demonstration and validation for the conterminous United States and Alaska, AGU, S. Francisco, 15-20 December 2014.
51. **Boschetti, L.**, Mollicone, D., Jonckheere, I., Tubiello, F., REDD+ And Wildland Fires: The Contribution Of Satellite Observation Systems, IUFRO World Congress, Salt Lake City, 5-11 October 2014.
52. Marini, L., **Boschetti, L.**, Industrial Forest Mapping with Satellite Data, IUFRO World Congress, Salt Lake City, 5-11 October 2014.
53. Melchiorre, A., **Boschetti, L.**, Roy, D., Landsat-MODIS data fusion for automatic mapping of fire disturbances in forest environment, IUFRO World Congress, Salt Lake City, 5-11 October 2014.
54. **Boschetti, L.**, Roy, D., Baraldi, A., Humber, M., Justice, C., MODIS-Landsat data fusion for automated continental 30 m burned area mapping, Global Vegetation Monitoring and Modeling, Avignon, 3-7 February 2014.
55. **Boschetti, L.**, Roy, D., Baraldi, A., Humber, M., MODIS-Landsat data fusion for automated continental 30 m burned area mapping, AGU, S. Francisco 7-13 December 2013
56. Argona, A., Sparks, A., Tinkham, A., Smith, A., **Boschetti, L.**, Newingham, B., Lannom, K., Preliminary assessment of the Monitoring Trends in Burn Severity burned area accuracy for shrub-steppe wildfires, AGU, S. Francisco 7-13 December 2013
57. **Boschetti, L.**, Roy, D., Stehman S., Design-based validation of the MODIS Global Burned Area Product, 2012 Fall Meeting, AGU, San Francisco, 3-7 December 2012.
58. Kumar S, Roy D P, Souza Jr C, Cochrane M A, **Boschetti L** (2011). Assessment of the Proximity of MODIS Active Fire Detections to Roads and Navigable Rivers in the Brazilian Tropical Moist Forest Biome. In: 2011 Fall Meeting, AGU. San Francisco, California, 5-9 December 2011
59. **Boschetti L**, Roy D P (2011). MODIS-Landsat data fusion for continental scale burned area mapping 2011 Fall Meeting, AGU. San Francisco, 2011
60. Roy D., Giglio, L., **Boschetti, L.**, Justice, C., 2009, 10 years of MODIS: The MODIS fire products with an emphasis on Southern African validation”, Invited Presentation, *IGARRS Earth Observation Origins to Applications*, 13-17 July 2009, Cape Town, South Africa.

61. **Boschetti, L.**, Roy D., Chris Justice, 2009, The Global MODIS Burned Area Product: validation results, *Proceedings of the VII international EARSEL fire workshop*, Matera, Italy, 2-4 September 2009, pp 155-159.
62. David Roy, **Luigi Boschetti**, Chris Justice, 2008, The Global Modis Burned Area Product, *Proceedings of the 14th Australasian Remote Sensing and Photogrammetry Conference Incorporating NARGIS 08*, Darwin, Australia, 29 September- 3 October 2008.
63. **Luigi Boschetti** and David Roy, 2008, Defining a fire year for reporting and analysis of global inter-annual fire variability, *Proceedings of the 14th Australasian Remote Sensing and Photogrammetry Conference Incorporating NARGIS 08*, Darwin, Australia, 29 September- 3 October 2008.
64. Petropoulos, G., Knorr, W., Scholze, M., **Boschetti, L.**, and Karantounias, G., 2008, Rapid Analysis Of Wildfire Impacts Using ASTER Data And Support Vector Machines: A Case Study From The Greek Fires Season Of Summer 2007, *International Journal of Wildland Fires, Proceedings of the 4th International Conference on Information and Communication technologies in Bio and Earth Sciences*, Athens (Greece) 18-20 September 2008.
65. **Boschetti, L.**, Roy, D.P., Justice, C.O., 2007, Using NASA's World Wind Virtual Globe for Interactive Internet Visualisation and Quality Assessment of the Global MODIS Burned Area Product, *Proceedings of the 6th International Workshop of the Earsel Special Interest Group on Forest Fires*, ISBN92-79-06680-7, pp: 190-193.
66. Roy, D.P., **Boschetti, L.**, Justice, C.O., 2007, The global MODIS burned area product, *Proceedings of the 6th International Workshop of the Earsel Special Interest Group on Forest Fires*, ISBN92-79-06680-7, pp: 182-185.
67. Pepe, M., **Boschetti, L.**, Brivio, P.A. and Rampini, A., 2007, Accuracy benefits of a fuzzy classifier in remote sensing data classification of snow, *Fuzzy Systems Conference. FUZZ-IEEE 2007. IEEE International* 23-26 July 2007 Page(s):1 - 6 Digital Object Identifier 10.1109/FUZZY.2007.4295416.
68. Roy, D.P., **Boschetti, L.**, Justice, C.O., 2007, The global MODIS burned area product, *Proceedings of the 4th International Wildland Fire Conference*, Seville 13-17 May 2007.
69. **Boschetti L.**, P.A. Brivio, Kunzle A.M, Mussio, L., 2006, Non parametric statistical tests for the analysis of multiple-sensor time series of remotely sensed data, *IGARSS IEEE International Geoscience and Remote Sensing Symposium*, July 2006 pp.200 – 203. Digital Object Identifier 10.1109/IGARSS.2006.56.
70. Roy, D, **Boschetti, L.**, Justice, C., 2006, Global mapping of fire-affected areas using multitemporal MODIS data:the MCD45 product, *IGARSS IEEE International Geoscience and Remote Sensing Symposium*, July 2006 Page(s):4165 - 4168 Digital Object Identifier 10.1109/IGARSS.2006.1068
71. **Boschetti, L.**, Roy, D. and Trigg, S., 2005, È possibile utilizzare il telerilevamento satellitare per l'analisi della severità degli effetti degli incendi sulla vegetazione naturale?, *Proceedings of ASITA conference*, Catania-Italy 15-18 November 2005, vol 1, pp. 475-480.
72. Roy, D.P., **Boschetti, L.**, Justice, C.O. , Jin, Y. and Lewis, P.E., 2005, Global mapping of fire-affected area using multi-temporal MODIS data, De la Riva, J., Pérez-Cabello, F. & Chuvieco, E. (Eds), *Proceedings of the 5th International Workshop on Remote Sensing and GIS Applications to Forest Fire Management: Fire Effects Assessment*, Universidad de Zaragoza. ISBN: 84-96214-52-4.
73. **Boschetti L.**, H. Eva, P.A. Brivio and J. Gallego, 2004, the validation protocol of GBA2000 global burned area maps, *IGARSS IEEE International Geoscience and Remote Sensing Symposium, session Land Degradation and Fires, Anchorage, 20-24 September 2004*, vol. 3, pp. 2107-2110.
74. **Boschetti L.**, P.A. Brivio and S.P. Flasse, 2004, Pareto boundary: a useful tool in the accuracy assessment of low spatial resolution thematic products, *IGARSS IEEE International Geoscience and Remote Sensing Symposium, session Data Correction and Calibration*, Anchorage, 20-24 September 2004, vol.6, pp. 3759-3762.
75. Clerici N., **L. Boschetti** and H. Eva, 2004, Assessing vegetation fires activity in West and Central Africa using MODIS and TRMM data, *IGARSS IEEE Int. Geoscience & Remote Sensing Symposium, session Land Degradation and Fires*, Anchorage, 20-24 September 2004, vol.3, pp.2087-2090.

76. S. Oliveri, Boschetti M., **Boschetti L.**, Furlanetto D., Canova I., Castrovinci R., Casati L., 2004, Mappatura delle specie arboree del parco del Ticino mediante telerilevamento iperspettrale; *Proceedings 6a Conferenza Nazionale ASITA*; Roma, 14 - 17 December 2004, vol.1 pp. 1577-1582.
77. **Boschetti L.**, 2003, A multitemporal algorithm for burned area detection in Mexican woodland and shrubland environment with SPOT-VEGETATION data, *International Geoscience And Remote Sensing Symposium IGARSS 2003 - Learning from Earth's Shapes and Colors*, vol. 2, pp. 1293 – 1295.
78. Palumbo I., e **L. Boschetti**, 2003, Analisi della distribuzione spazio-temporale degli incendi nei parchi naturali in Africa nell'anno 2000, *Proceedings of the 7a Conferenza Nazionale ASITA L'Informazione Territoriale e la dimensione tempo*, 28 - 31 October 2003, Verona.
79. Palumbo I., Grégoire J-M., **L. Boschetti** and H. Eva, 2003, Fire regimes in protected areas of Sub-Saharan Africa, derived from the GBA2000 dataset, *Proceedings of the 4th International Workshop on Remote Sensing and GIS applications to Forest Fire Management: Innovative concepts and methods in fire danger estimation*, Ghent University - EARSel, ISBN: 2-908885-25-5. Editors: Emilio Chuvieco, Pilar Martin and Chris Justice (2003). pp. 139-149.
80. Grégoire J-M., K. Tansey, **L. Boschetti**, P.A. Brivio, D. Ershov, R. Fraser, D. Graetz, M. Maggi, P. Peduzzi, J.M.N. Pereira, J. Silva, A. Sousa, and D. Stroppiana, 2002, Global scale inventory of the area burnt in the year 2000. The GBA2000 dataset, *Land use and Land Cover Change (LUCC) Newsletter*, No. 8, pp. 13-14.
81. Raffo S., **L. Boschetti**, A. Baraldi, E. Binaghi, and J-M. Grégoire, 2002, Implementazione e test di un algoritmo, *unsupervised change detection*, per l'individuazione di aree bruciate, *Proceedings 6a Conferenza Nazionale ASITA Geomatica per l'ambiente, il territorio e il Patrimonio Culturale*, Vol.2, pp.1785-1790.
82. **Boschetti, L.**, Flasse, S., Trigg, S., Brivio, P.A., Maggi, M., 2001, A methodology for the validation of low resolution remotely sensed data products, *Proceeding of the 5a conferenza nazionale ASITA, Rimini 9-12 Ottobre 2001*.
83. **Boschetti, L.**, Brivio, P.A., and Grégoire, J.M., 2001, Detection of burned areas using geostationary satellite data in tropical environments, in *Remote Sensing for Agriculture, Ecosystems and Hydrology* (M. Owe, G. D'Urso, E. Zilioli, Eds.) Proc. SPIE Vol. 4171, pp. 156-165.
84. **Boschetti L.**, P.A. Brivio, and J-M. Grégoire, 2000, Metodologia per l'individuazione delle aree bruciate nella fascia tropicale del globo con dati di satelliti geostazionari. *Proceedings of the 4a Conferenza nazionale ASITA*; 3-6 October, 2000; Genova; Italy; vol.1., pp. 265-270.

Other: (reports, proceedings, papers, citations and references, performances)

WHITE PAPERS AND INTERNATIONAL REPORTS

1. **Boschetti, L.**, Justice, C., Roy, D, Csiszar, I, Chuvieco, E, Spessa A, Hoffman, A, Russell-Smith, J, Paganini M., Arino, O, 2014, Methods for estimating GHG emissions from biomass burning, in "A sourcebook of methods and procedures for monitoring and reporting anthropogenic greenhouse gas emissions and removals caused by deforestation, gains and losses of carbon stocks in forests remaining forests, and forestation", GOFc-GOLD. <http://www.gofcgold.wur.nl/redd/>
2. Chris Justice, Ivan Csiszar, **Luigi Boschetti**, Stefania Korontzi, Wilfrid Schroeder, Louis Giglio and David Roy, Satellite Monitoring and Inventory of Global Vegetation Fire, in *White Paper on Vegetation Fires and Global Change* (Goldammer Ed.), presented at the "Global Platform for Disaster Risk Reduction" workshop at the UN, Geneva, 15-19 June 2009, as the contribution of the UNISDR Wildland Fire Advisory Group to the United Nations system.
3. **Boschetti, L.**, Roy D., Justice, C., 2009, International Global Burned Area Satellite Product Validation Protocol Part I – production and standardization of validation reference data. Available online on <http://lpvs.gsfc.nasa.gov/>

- Justice, C., Giglio, L., Csiszar, I., **Boschetti, L.**, Korontzi, S. and Wooster, M., *White Paper on a NASA Fire ESDR*, available online (last accessed September 30 2009) at: http://landportal.gsfc.nasa.gov/Documents/ESDR/Fire_Justice_whitepaper.pdf

Presentations and Other Creative Activities: (i.e. slide sets, web pages, video productions, etc., provide date and location)

Since 2012:

- Roy, D., Huang, H., Boschetti, L., Yan, L., Zhang, H. and Li, Z., Moving from Prototyping a Landsat-8 Sentinel-2 global burned area product (Type II) to Production (Type 1), NASA LCLUC Science Team Meeting, Gaithersburg (MD) 3-4 April 2018
- Boschetti, L., Giglio L., Roy, D., Justice, C., The Collection 6 MODIS Burned Area Mapping Algorithm and Product, 10th Southern African Fire Network (SAFNet) Meeting, Kruger National Park, 15.-19. April 2018.
- Roy, D., Huang, H., Boschetti, L., Giglio, L., Yan, L., Zhang, H. and Li, Z., Landsat-8 and Sentinel-2 burned area mapping, 10th Southern African Fire Network (SAFNet) Meeting, Kruger National Park, 15.-19. April 2018
- Boschetti L., Roy, D., Sparks, A., Using the NASA fire products enhance the Global Wildfire Information System (GWIS), GOFC Fire Implementation Team, College Park, October 1-2 2018
- Giglio, L., Boschetti, L., Roy, D., Humber, M., Justice C., NASA MODIS & VIIRS BA Products Update, GOFC Fire Implementation Team, College Park, October 1-2 2018
- Roy, D., Huang, H., Boschetti, L., Giglio, L., Yan, L., Zhang, H. and Li, Z. Landsat & Sentinel Burned Area Updates, GOFC Fire Implementation Team, College Park, October 1-2 2018.
- Roy, D., Huang, H., Boschetti, L., Yan, L., Zhang, H. and Li, Z., Current algorithms and systems to map fire severity at landscape scale, Savannah Burning, Fire Severity Mapping Workshop, Darwin 29-30th November 2018
- Boschetti, L., Calibration and Validation of Burned Area Products (GOFC Fire IT, Windsor, UK, November 20-22 2017)
- Giglio, L., Boschetti L, Roy D, NASA MODIS and VIIRS BA products update (GOFC Fire IT, Windsor, UK, November 20-22 2017)
- Roy, D., Huang, H., Zhang, H., Yan, L., Boschetti, L., Landsat & Sentinel Burned Area Updates (GOFC Fire IT, Windsor, UK, November 20-22 2017)
- Boschetti, L., Roy, D., Using NASA fires product to enhance GWIS - Boschetti/Roy (GOFC Fire IT, Windsor, UK, November 20-22 2017)
- Boschetti, L., Roy, D., Using NASA fires product to enhance GWIS - Boschetti/Roy (NASA Applied Sciences GWIS Side Event, GEO Plenary, Washington DC October 23rd 2017)
- Boschetti, L., Validation of global burned area products for emissions and fire regime estimation, Spring 2017 meeting of the Tactical Fire Remote Sensing Advisory Committee (NASA/USFS), NASA Ames research center, May 21, 2017.
- Boschetti L., Spatial and Temporal Sampling for the validation of global burned area products, South Dakota State University, February 2nd, 2017 (**invited seminar**)
- Boschetti L, Challenges for Burned area and Active Fire Validation, GOFC-Fire Implementation Team Meeting, Santiago (Chile), November 15-16 2016
- Boschetti L., Stehman, S, Roy, D, Global Burned Area Validation: Spatial and Temporal Sampling, GOFC-Fire Implementation Team Meeting, Santiago (Chile), November 15-16 2016
- Boschetti, L., Roy, D., Stehman, S., A stratified random sampling design in space and time for regional to global scale burned area product validation, European Space Agency Living Planet Symposium, Prague May 2016
- Roy, D., Huang, H., Kumar, S., Zhang, H., Li, J., Gomez-Dans, J., Lewis, P., Boschetti, L., Early results prototyping a global Landsat-8 Sentinel-2 burned area product, European Space Agency Living Planet Symposium, Prague May 2016
- Boschetti, L., Roy, D. and Stehman, S., Stratified Sampling in Time and Space for global burned area validation, Sentinel-3 User Symposium, Venice (Italy), June 2-5 2015.
- Giglio L., Boschetti, L., MODIS Fire and Burned Area and Validation Update , GOFC Fire IT meeting, July 29th – August 1st 2014, NOAA NCWCP, MD (invitation only workshop)

21. Boschetti, L., Hoffman, A., UN-REDD Fire-GOFC source book updates and next steps, GOFC Fire IT meeting, July 29th – August 1st 2014, NOAA NCWCP, MD (invitation only workshop)
22. Giglio L., Schroeder, W., Boschetti, L., Roy, D., Justice, C., Collection 6 Fire Products, NASA MODIS Science Team Meeting, April 29-30 2014, Columbia, MD (**invited presentation**)
23. Boschetti, L., Roy, D., Humber, M., MODIS-Landsat data fusion for automated continental 30 m burned area mapping, NASA MODIS Science Team Meeting, April 29-30, Columbia, MD (poster)
24. Boschetti L., Keefe, R., Smith., A., Hudak., A, Prototyping global industrial forest mapping, a Landsat spatio-temporal approach”, NASA Land-Cover Land-Use Change Science Team Meeting, April 23-25, Rockville, Maryland (poster).
25. Boschetti, L., Tansey, K., Validation Status of the International Fire Satellite Products, CEOS LPV subgroup meeting, 30-31 January, European Space Agency, Frascati 30-31 January 2014 (Invitation only workshop)
26. Boschetti, L., Tansey, K., Status of the International Fire Satellite Products, CEOS LPV subgroup meeting, 30-31 January, European Space Agency, Frascati 30-31 January 2014 (Invitation only workshop)
27. Boschetti, L., Roy, D., Stehman, S., Justice., C., Design-Based Validation of the MODIS Global Burned Area Product., Land Product Validation and Evolution, European Space Agency, Frascati, Rome 28-30 January 2014
28. Schaepman-Strub, G., Román, M., Boschetti, L., Che, T., Dash, J., Fernandes, R., Gobron, N., Hall, D., Herold, M., Hook, S., Jackson, T., Jones, M., Nickeson, J., Olofsson, P., Plummer, S., Sanchez, A., Schaaf, C., Sobrino, J., Tansey, K., Wagner, W., Coordinating Validation of Satellite-Derived Land Surface Products – Mission and Achievements of the CEOS LPV, Land Product Validation and Evolution, European Space Agency, Frascati, Rome 28-30 January 2014, **Invited Keynote**.
29. Roy, D.P., Kovalskyy, V., Yan, L., Egorov, A., Kommareddy, I., Zhang, H., Hansen, M., Boschetti, L., Votava, P., Nemani, R., Web-Enabled Landsat Data (WELD) for monitoring contemporary terrestrial change nearly everywhere, Frontiers in Earth Observation for Land System Science - a joint workshop of the EARSeL SIG LULC and the NASA LCLUC Science Team, Humboldt-Universität, Berlin, Germany, 17-18 March, 2014, **Invited Keynote**.
30. Boscehiti L., Fire and REDD+, King’s College London, UK, October 18th 2013 (**Invited Seminar**)
31. Boschetti, L., Roy, D., Justice C., Giglio, L., Building a global fire climate record: The challenge of meeting the Essential Climate Variable requirements, 9th Earsel Fire SIG, Coventry 16 October 2013 (**Invited Keynote**)
32. Boschetti, L., Roy, D., Justice C., Giglio, L., Burned Area and Validation – next steps GOFC Symposium, Wageningen, NL, 15 April 2013
33. Boschetti, L., Hoffman, A., UN-REDD Fire-GOFC source book updates and next steps, GOFC Symposium, Wageningen, NL, 17 April 2013
34. Boschetti, L., Roy, D., Baraldi A., Justice C., systematic burned area mapping with Landsat in the context of emission estimation, invited presentation at the Workshop “Burn Severity and related ecosystem responses” organized by the Brazilian Ministry for Environment, Brasilia Dec 11-14
35. Boschetti, L., Roy, D., Baraldi A., Justice C., MODIS-Landsat Data Fusion for Continental Scale 30m Resolution Burned Area Mapping, invited presentation at the *Sentinel-3 OLCI & MERIS ATSR ESA workshop*, Frascati, Italy, 15-19 October 2013
36. Boschetti, L., Roy, D., Justice C., Giglio, L., “Global Burned Area Mapping: MODIS and beyond”, Invited presentation at the NASA Science Meeting, GOFC-GOLD and NEESPI Workshop and Regional Conference Impacts of extreme weather on natural, socio-economic, and land-use systems: Focus on the 2010 summer anomaly in the Volga region June 17 – 22, 2012 Volga State University of Technology, Yoshkar-Ola, Mari El, Russian Federation
37. Boschetti L., Roy, D., Justice C., Giglio, L., Davies, D., “MODIS RapidFire and Burned Area analysis – An operational Success Story”, invited presentation at the 2012 NASA Modis Science Team Meeting, Silver Spring May 7-9 2012

Grants and Contracts Awarded: (provide principal and co investigators, title, sponsor, funding dates, amount)

Total external funding awarded: \$10.5 M (\$1.9 M as PI, \$8.6 M as Co-I)

Active grants

Project/Proposal Title: *Africa burned area product generation, quality assessment and validation – demonstrating a Multi-Source Land Imaging (MuSLI) Landsat-8 Sentinel-2 capability*

PI: Dr. David Roy (SDSU GSCE) CO-I: Dr. Luigi Boschetti (University of Idaho), Hayian Huang (South Dakota State University)

Source of Support: NASA solicitation NNH17ZDA001N-LCLUCLand-Cover/Land-Use Change Multi-Source Land Imaging.

Proposed performance period: August 15th 2018 – August 15th 2021

Total award: \$1,102,045

Project/Proposal Title: *Using the NASA polar orbiting fire product record to enhance and expand the Global Wildfire Information System (GWIS)*

PI: Dr. Luigi Boschetti (University Idaho), CO-I: Dr. David Roy (SDSU GSCE),

Source of Support: NASA solicitation NNH16ZDA001N-GEO Group on Earth Observation Work Programme Element 3.8: Global Wildfire Information System

Proposed performance period: January 1st 2018 – December 31st 2021

Total award: \$535,996

Project/Proposal Title: *Development of a Suomi NPP VIIRS Global Burned Area Earth System Data Record*

PI: Dr. Louis Giglio, University of Maryland, College Park, MD, USA

Co-Is: Boschetti, L. (University of Idaho), Roy, D.P. (South Dakota State University),

Source of Support: NASA ROSES 2017, “Terra and Aqua – Algorithms – Existing Data Products” (NNH17ZDA001N-TASNPP)

Performance Period: December 2017 – November 2020

Total award: \$100,000

Project/Proposal Title: *Object-based aggregation of fuel structures, physics-based fire behavior and self-organizing smoke plumes for improved fuel, fire, and smoke management on military lands*

PI: Dr. Andrew T. Hudak, USFS-Rocky Mountain Research Station, Moscow, ID

Co-Is: : Boschetti, L. (University of Idaho PI), Prichard, S. (University of Washington), French, N. (Michigan Tech), Hoffman, C., (Colorado State University), Kockanski, A. (University of Utah), Clements, C. (San Jose State University), Kremens R. (Rochester Institute of Technology), Hiers K. (Tall Timbers), Ball T. (FireBall Inc.)

Source of Support: UD Department of Defense SERDP

Performance Period: May 2020 – April 2024

Total award: \$2,499,488

Past grants

July 2014 to June 2018 “*MODIS global active fire and burned area product maintenance and validation*”

PI: Dr. Louis Giglio (University of Maryland) CO-Is: Boschetti, L. (University of Idaho), Schroder, W. (University of Maryland), Roy, D.P. (SDSU), Justice, C. (University of Maryland), Csiszar, I. (NOAA) Source of Support: *NNH13ZDA001N-TERAQEA Terra and Aqua – Algorithms – Existing Data Products.* (\$397,786)

April 2014 – April 2018. “*Prototyping global industrial forest mapping, a Landsat spatio-temporal*

BOSCHETTI, Luigi

- approach*” PI: Dr. Luigi Boschetti, University of Idaho, Moscow, ID, USA Co-Is: Robert Keefe (University of Idaho), Alistair Smith (University of Idaho), Andrew Hudak (US Forest Service) Source of Support: *NASA ROSES 2012, NNH12ZDA001N-LCLUC: Land Cover/Land Use Change* (\$722,333)
- September 2014 – August 2018 “Development of a Suomi NPP VIIRS Global Burned Area Earth System Data Record” PI: Dr. Louis Giglio, University of Maryland, College Park, MD, USA Co-Is: Boschetti, L. (University of Idaho), Roy, D.P. (South Dakota State University), Vadrevu, K. (University of Maryland), Source of Support: NASA ROSES 2013, “Terra and Aqua – Algorithms – Existing Data Products” (NNH13ZDA001N-TERAQEA) (\$542,422)
- July 2015 to June 2018 “*Prototyping a Landsat-8 Sentinel-2 global burned area product*” PI: Dr. David Roy (SDSU GSCE) CO-Is: Valeriy Kovalsky, Luigi Boschetti Source of Support: *NASA NNH14ZDA001N-LCLUC, LAND-COVER/LAND-USE CHANGE: MULTI-SOURCE LAND IMAGING SCIENCE* (\$694,525)
- September 1st 2016 – August 31st 2018 “*Satellite Constellation Requirements for 30m global burned area mapping*” PI: Dr. Luigi Boschetti (University Idaho), Graduate Student: Andrea Melchiorre (University of Idaho) Source of Support: NASA solicitation NESSF16 NASA Earth and Space Science Fellowship 2017 (\$80,000)
- September 2016-August 2017 “*Impact of climate and Vegetation on Historical and Future Fire Activity in Boreal Forest and Arctic Tundra Ecosystems*” NASA Earth And Space Science Fellowship 2016 (Renewal); PI: Luigi Boschetti, graduate student: Adam Young (\$35000)
- November 2016: “Short Term Mobility” award for exchanges between personnel of Italian and Foreign research institution, funded by the Italian National Research Council (3000 EUR)
- January 2015 - September 2015, “National Forest Monitoring Systems for a transparent and truthful REDD+”, **Boschetti L.** (Principal Investigator), Source of Support: UN FAO (61,000USD)
- January 2011-December 2015 "Sentinel 3 Science Products: a US contribution". Justice C.O. (Principal Investigator), **Boschetti, L.** (Co- Principal Investigator), Giglio, L. (Co- Principal Investigator), Vermote E. (Co- Principal Investigator). Source of Support: NASA ROSES 2010 (464,117 USD)
- January 2014 - September 2014, “National Forest Monitoring Systems for a transparent and truthful REDD+”, **Boschetti L.** (Principal Investigator), Source of Support: UN FAO (79,558USD)
- January 2011-August 2014 "MODIS-Landsat data fusion for high spatial resolution multiannual wall to wall burned area mapping of the Conterminous United States", **Boschetti, L.** (Principal Investigator), Roy, D. (Co-Principal Investigator), Source of Support: NASA ROSES 2009 (278,710 USD, UI 111,056 USD)
- January 2011-February 2015 "MODIS Burned Area Maintenance, Improvement and Validation", Justice C.O. (Principal Investigator), **Boschetti, L.** (Co- Principal Investigator), Roy, D. (Co-Principal Investigator), Giglio, L. (Co- Principal Investigator) Source of Support: NASA ROSES 2009 (789,598 USD, UI 102,791USD)
- April 2011-October 2014, “Land Cover Land Use Change Scientist Program Support.” Justice C. (Principal Investigator), **Boschetti L.** (Co-Principal Investigator), Vadrevu K. (Co-Principal Investigator) Source of support: NASA (918,470 USD)
- September 2010: “Short Term Mobility” award for exchanges between personnel of Italian and Foreign research institution, funded by the Italian National Research Council (2,400 EUR)
- August 2009 - August 2010: Reconciliation between the MODIS Active Fires and Burned Area Products for Improved Biomass Burned and Uncertainty Estimation. **Boschetti, L.** (Principal Investigator), Roy, D. (Co- Principal Investigator) and Smith A.M. (Co- Principal Investigator). Source of support: NASA

BOSCHETTI, Luigi

Earth Science Applications Feasibility Studies. (91,855 USD)

July 2008: “Short Term Mobility” award for exchanges between personnel of Italian and Foreign research institution, funded by the Italian National Research Council (1,600 EUR)

December 2007 – December 2010: A Global Burned Area ESDR, Justice, C. O. (Principal Investigator), **Boschetti, L.** (Co- Principal Investigator), Roy, D. (Co- Principal Investigator), Giglio, L. (Co-Principal Investigator). Source of Support: NASA Earth System Science Research using Data and Products from the Terra, Aqua, and ACRIMSAT Satellites, (1,067,586 USD)

July 2006: “Short Term Mobility” award for exchanges between personnel of Italian and Foreign research institution, funded by the Italian National Research Council (1,600 EUR)

March 2002-April 2004: “Training through Research” grant by the European Commission, covering a Research Fellowship at the Joint Research Centre (60,000 EUR)

October 2001-February 2002: Grant for research in a foreign university, funded by Italian National Research Council (7,000 EUR)

October 2000-October 2001: Grant for research in a foreign university, funded by Politecnico di Milano (13,000 EUR)

Honors and Awards:

2015 Outstanding Continuing Education and Service Award, College of Natural Resources, University of Idaho

SERVICE:

Major Committee Assignments: (National, State, District, County, University, College, Departmental and dates)

International Committes and Working Groups

GOFC-GOLD Fire Implementation Team (2009-present)

CEOS Cal/Val, Working group on Fire validation, **co-chair** (2008-present)

CEOS Cal/Val Working Group on Global Land Products Validation (2003-present)

European Commission

JRC Institute for Environment and Sustainability Scientific Committee (2003)

National Committees

Tactical Fire Remote Sensing Advisory Committee, USFS-NASA, (2017-present)

Italian Ministry for Environment and National Research Council, Scientific Committee of the ‘Monitoring Fire in Protected Areas’ project (2005-2008)

Campus, College and Departmental Committees (University of Idaho)

Borah Committee (2017-2020)

Faculty Senate (2014-2017)

Vandal Loan Committee (2016-2018)

NKN advisory board (2016-2017)

CNR graduate council (2016-present)

CNR geospatial committee (2012-present, **chair**)

Campus IT committee (2013-2016)

Graduate Council (2013-2014, alternate CNR representative)

International Engagement Council (2013-2016)

Department of Forest, Rangeland and Fire Sciences, Graduate Committee (2013)

Search committees:

BOSCHETTI, Luigi

Department of geography, Search Committee for GIS assistant professor (2014, external member)
Department of Forest, Rangeland and Fire Sciences, Search Committee for Range Ecology and Management Assistant Professor (2014, **chair**)
Department of Natural Resources and Society, Search Committee for Water Resources Management Assistant Professor (2017)
Department of Forest, Rangeland and Fire Sciences, Search Committee for Range Ecology and Management Headed Endowed Professor (2017, external member)
Department of Natural Resources and Society, Search Committee for Remote Sensing Assistant Research Professor (2017)

Departmental Committees (University of Maryland, Department of Geography)

Research Faculty Advisory Committee (2010, **chair**)
Research Faculty voting representative in the Faculty Committee (2008-2012)
Graduate Committee (2006-2008)
Research Committee (2005-2006)
Research Faculty Merit Review Committee (2006, 2008)

Professional and Scholarly Organizations (including memberships, committee assignments, editorial services, offices held and dates)

Editorial Services

Member of the Editorial Board of the peer reviewed journals “*Fire*” and “*Remote Sensing*”, published by MDPI, 2017-present
Remote Sensing, guest editor of the special issue dedicated to the 10th International Workshop of the EARSeL Special Interest Group (SIG) on Forest Fires, Limassol (Cyprus) November 2015.
European Journal of Remote Sensing, guest editor of the special issue dedicated to the 10th anniversary of the MODIS mission, 2010.

Scientific Conference Organization and Service

Chair, “Forest fire detection and monitoring on multiple scales” session, 11th International Workshop of the EARSeL Special Interest Group (SIG) on Forest Fires, Chania (GR) September 2017
Member of Scientific committee, 11th International Workshop of the EARSeL Special Interest Group (SIG) on Forest Fires, Chania (GR) September 2017.
Member of Scientific committee, 9th International Workshop of the EARSeL Special Interest Group (SIG) on Forest Fires, Leicester (UK) October 2017.
Co-Convener, Fire Session, EGU Symposium, Vienna, Austria, April 2012
Chair, Burned Area Mapping Session, NASA LCLUC-NEESPI Workshop, Yoshkar-Ola, Russian Federation, June 2012.
Chair, Space Assets Session, 1st workshop on Remote Sensing for Sub-Saharan Africa, Nairobi, Kenya, November 2011
Chair, Special session on the 10th Anniversary of the MODIS mission, Italian Remote Sensing Conference (ASITA) Brescia, IT, 2010
Chair, Fire Validation Session, EARSEL-SIG FIRE workshop, Matera, Italy, September 2009
Member of Scientific committee, 6th International Workshop of the EARSeL Special Interest Group (SIG) on Forest Fires, Thessaloniki (Greece) September 2007.
Co-Chair Fire and Hazards session, Geoscience and Remote Sensing Symposium, 2004. IGARSS '06, Denver, USA, 31 July-5 August 2006.

Funding Agency Peer Review Service

NASA, *Peer Review Panelist* (2010, 2011, 2012, 2017)
Foundation for Polish Science, *reviewer* (2013)
Copernicus Global Land Service reviewer, European Commission (2017-2020)

Society Membership

American Geophysical Union, member, 2010-present

Outreach Service: (Including popular press, interview articles, newspaper articles, workshops-seminars-tours organized, Extension impact statements)

- GOFCC-GOLD REDD Sourcebook, member of the Core Editorial Team (2009-present); the sourcebook provides guidance for the use of satellite dataset for carbon accounting (<http://www.gofccgold.wur.nl/redd/>) a new version of the material is presented every year at the Conference Of Parties (COP) of the UN Framework Convention on Climate Change (UNFCCC)
- UN-FAO Open Foris Initiative: as part of my collaboration with FAO on the development of open source tools for carbon accounting of biomass burning, UI is one of the contributors of the Open Foris Initiative (<http://www.openforis.org/partnership.html>)
- participation in the FAO-IPCC-IFAD expert meeting on greenhouse gas inventory guidelines for agriculture and land use, Rome, 13-14 November 2014 (<http://www.fao.org/economic/ess/ess-events/fao-ipcc-ifad/en/>)

Contacts with popular press and media

AGU GeoSpace, June 27th 2019 (<https://blogs.agu.org/geospace/2019/06/27/study-finds-increased-moisture-facilitated-decline-in-african-fires-in-africa/>)

Washington Post, July 19th 2017 (<http://wapo.st/2yD8kPT>)

NASA Earth Observatory, August 11th, 2017 (<https://go.nasa.gov/2vpZhzd>)

Buzzfeed, July 27th 2017 (<http://bzfd.it/2gatwFA>)

The Atlanta Journal – Constitution, August 15th 2017 (<http://on-ajc.com/2xxfXYk>)