



NASA Goddard Space Flight Center
Terrestrial Information Systems Laboratory
Mail Code 619, Building 32, S036C
Greenbelt, MD 20771 USA



Phone: 301 614 5413
Fax: 301 614 5269
Email: Eric.F.Vermote@nasa.gov
Web: <http://www.geog.umd.edu/faculty-profile/Vermote/Eric.F>

EDUCATION

- 1990 Ph.D. Physics, University of Lille, France
1987 M.S. Computer Science, Hautes Etudes Industrielles, Lille, France

APPOINTMENTS

- Present Research Physical Scientist, NASA
2009-2012 Research Professor, University of Maryland
2007-2009 Senior Research Scientist, University of Maryland
1997-2007 Associate Research Scientist, University of Maryland
1991-1997 Assistant Research Scientist, University of Maryland
1990-1991 Research Scientist, University of Lille, Lille, France
1989-1990 Air Force Scientist, CERT-DERO, Toulouse, France
1987-1989 Research Engineer, University of Lille, Lille, France

PUBLICATIONS

BOOK CHAPTERS/REPORT

- Schmidt, G.L., Jenkerson, C.B., Masek, J., Vermote, E., and Gao, F., 2013, Landsat ecosystem disturbance adaptive processing system (LEDAPS) algorithm description: **U.S. Geological Survey Open-File Report** 2013-1057, 17 p. <http://pubs.usgs.gov/of/2013/1057/>
- Evan Ellicott and Eric Vermote (2012). The Science and Application of Satellite Based Fire Radiative Energy, Remote Sensing of Biomass - Principles and Applications, Dr. Lola Fatoyinbo (Ed.), ISBN: 978-953-51-0313-4, InTech, Available from: <http://www.intechopen.com/books/remote-sensing-of-biomass-principles-and-applications/the-science-and-application-of-satellite-based-fire-radiative-energy>
- Xiong X., Wolfe R., Barnes W., Guenther B., Vermote E., Saleous N.Z., Salomonson V., Terra and Aqua MODIS Design, Radiometry and Geometry in Support of Land Remote Sensing. 2011. **Land Remote Sensing and Global Environmental Change: NASA's Earth Observing System and the Science of ASTER and MODIS.** Series: Remote Sensing and Digital Image Processing, Vol. 11, Springer Verlag. 873p. ISBN: 978-1-4419-

- E. Vermote and S. Y. Kotchenova, MODIS Directional surface reflectance product: Method, error estimates and validation. 2011. **Land Remote Sensing and Global Environmental Change: NASA's Earth Observing System and the Science of ASTER and MODIS**. Series: Remote Sensing and Digital Image Processing, Vol. 11, Springer Verlag. 873p. ISBN: 978-1-4419-6748-0
- Justice C.O., Vermote E., Privette J., Sei A., The Evolution of U.S. Moderate Resolution Optical Land Remote Sensing from AVHRR to VIIRS. Ramachandran, B, Justice C.O., Abrams M.J. 2011. **Land Remote Sensing and Global Environmental Change: NASA's Earth Observing System and the Science of ASTER and MODIS**. Series: Remote Sensing and Digital Image Processing, Vol. 11, Springer Verlag. 873p. ISBN: 978-1-4419-6748-0
- Vermote E.F. and N.Z. Saleous, 2006. Operational Atmospheric Correction of MODIS Visible to Middle Infrared Land Surface Data in the Case of an Infinite Lambertian Target, in **Earth Science Satellite Remote Sensing**, J. J.Qu, W. Gao. M. Kafatos, R.E. Murphy, V. V. Salomonson, (Eds), publisher Springer.
- Privette J.L. and Vermote E.F., 2004. The Impact of Atmospheric Effects on Directional Reflectance Measurements. In **Reflection properties of Vegetation and Soil - with a BRDF database**, Maria von Schönemark, Bernhard Geiger, and Hans-Peter Röser (Eds), 2004, publisher Wissenschaft & Technik Verlag.
- Vermote E.F., 2003. Adjacency effect on Remotely Sensed Data: Theory and Correction. In **Encyclopedia of optical engineering**, Driggers R.G. and E. Lichtenstein (Eds.), publisher Marcel Dekker, Inc.
- Kinne, S., B. N. Holben, T. F. Eck, A. Smirnov, O. Dubovik, I. Slutsker, U. Lohmann, S. Ghan, M. Chin, P. Ginoux, T. Takemura, R. Kahn, E. Vermote, D. Tanré, L. Stowe, O. Torres, and M. Mishchenko, 2001. How well do aerosol retrievals from satellites and representation in global circulation models match ground-based AERONET aerosol statistics, in **Remote Sensing and Climate Modeling: Synergies and Limitations** (Advances in Global Change Research, vol. 7), edited by M. Beniston and M. M. Verstraete, Kluwer Academic Publishers, 103-158, 2001.
- Vermote E.F., and Roger J.C., 1996. Radiative Transfer Modeling for Calibration and Atmospheric Correction. In **Advances in the use of NOAA AVHRR for Land Applications**, pp. 49-72, D'Souza, G., Belward, A.S. and Malingreau, J.P (Eds.), 1996, published by Kluwer Academic Press, Dordrecht, 479pp.
- Vermote E.F. and El Saleous N.Z., 1996. Absolute Calibration of AVHRR channel 1 and 2. In **Advances in the use of NOAA AVHRR for Land Applications**, pp. 73-92, D'Souza, G., Belward, A.S and Malingreau, J.P (Eds.), 1996, published by Kluwer Academic Press, Dordrecht, 479pp.
- Vermote E.F., El Saleous N.Z., and Holben B.N., 1996. Aerosol Retrieval and atmospheric correction., In **Advances in the use of NOAA AVHRR for Land Applications**, pp. 93-124, D'Souza, G., Belward, A.S and Malingreau, J.P (Eds.), 1996, published by Kluwer Academic Press, Dordrecht, 479pp.

REFEREED ARTICLES IN PRESS

- Claverie M., Vermote E., Weiss M., Baret F., Hagolle O., Demarez V. (2013), Validation of coarse spatial resolution LAI and FAPAR time series over cropland in southwest France, **Remote Sensing of Environment** (accepted).
- Yeo I, Lang M., Vermote E., Improved understanding of suspended sediment transport process using multi-temporal Landsat data: a case study from the Old Woman Creek Estuary (Ohio), **IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing** (accepted)
- Justice, C.O., Román M.O., Csiszar I., Vermote, E.F., Wolfe, R.E., Hook, S.J., Friedl, M. , Wang, Z., Schaaf, B.C., Miura, T., Tschudi, M., Riggs, G., Hall, D.K., Lyapustin, A.I., Devadiga, S. Davidson, C., & Masuoka, E.J. "Land and cryosphere products from Suomi NPP VIIRS: Overview and status." **Journal of Geophysical Research: Atmospheres** (2013) (in press)

REFEREED ARTICLES

- Tan, B., Masek, J.G., Wolfe, R., Gao, F., Huang, C., Vermote, E.F., Sexton, J.O., & Ederer, G. (2013). Improved forest change detection with terrain illumination corrected Landsat images. **Remote Sensing of Environment**, 136, 469-483;<http://dx.doi.org/10.1016/j.rse.2013.05.013>
- Sobrino, J.A., Franch, B., Oltra-Carrió, R., Vermote, E.F., & Fedele, E. (2013). Evaluation of the MODIS Albedo product over a heterogeneous agricultural area. **International Journal of Remote Sensing**, 34, 5530-5540;DOI 10.1080/01431161.2013.792968
- Verger, A., Baret, F., Weiss, M., Kandasamy, S., & Vermote, E. (2013). The CACAO Method for Smoothing, Gap Filling, and Characterizing Seasonal Anomalies in Satellite Time Series. **IEEE Transactions on Geoscience and Remote Sensing**, 51, 1963-1972, DOI: 10.1109/TGRS.2012.2228653.
- Min Feng, Joseph O. Sexton, Chengquan Huang, Jeffrey G. Masek, Eric F. Vermote, Feng Gao, Raghuram Narasimhan, Saurabh Channan, Robert E. Wolfe, John R. Townshend, Global surface reflectance products from Landsat: Assessment using coincident MODIS observations (2013), **Remote Sensing of Environment**, Volume 134,Pages 276-293, DOI: 10.1016/j.rse.2013.02.031.
- B. O'Connell, J., Connolly, J., Vermote, E.F., & Holden, N.M. (2013). Radiometric normalization for change detection in peatlands: a modified temporal invariant cluster approach. **International Journal of Remote Sensing**, 34, 2905-2924. DOI:10.1080/01431161.2012.752886
- Vadrevu, K.P., Csiszar, I., Ellicott, E., Giglio, L., Badarinath, K.V.S., Vermote, E., & Justice, C. (2013). Hotspot Analysis of Vegetation Fires and Intensity in the Indian Region. **IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing**, 6, 224-238. doi: [10.1109/JSTARS.2012.2210699](http://dx.doi.org/10.1109/JSTARS.2012.2210699)
- B. Franch, E.F. Vermote, J.A. Sobrino, E. Fédèle, (2013) Analysis of directional effects on atmospheric correction, **Remote Sensing of Environment**, Volume 128, Pages 276-288 <http://dx.doi.org/10.1016/j.rse.2012.10.018>,
- Breon, F.M., & Vermote, E. (2012). Correction of MODIS surface reflectance time series for BRDF effects. **Remote Sensing of Environment**, 125, 1-9. DOI:0034-4257
- Townshend, J.R., Masek, J.G., Huang, C.Q., Vermote, E.F., Gao, F., Channan, S., Sexton, J.O., Feng, M., Narasimhan, R., Kim, D., Song, K., Song, D.X., Song, X.P., Noojipady, P., Tan, B., Hansen, M.C., Li, M.X., & Wolfe, R.E. (2012). Global characterization and monitoring of forest cover using Landsat data: opportunities and challenges. **International Journal of Digital Earth**, 5, 373-397 <http://dx.doi.org/10.1080/17538947.2012.713190>
- Ganguly, S., Nemani, R.R., Zhang, G., Hashimoto, H., Milesi, C., Michaelis, A., Wang, W.L., Votava, P., Samanta, A., Melton, F., Dungan, J.L., Vermote, E., Gao, F., Knyazikhin, Y., & Myneni, R.B. (2012). Generating global Leaf Area Index from Landsat: Algorithm formulation and demonstration. **Remote Sensing of Environment**, 122, 185-202. <http://dx.doi.org/10.1016/j.rse.2011.10.032>
- Ju, J., Roy, D.P., Vermote, E., Masek, J., Kovalskyy, V., 2012, Continental-scale validation of MODIS-based and LEDAPS Landsat ETM+ atmospheric correction methods, **Remote Sensing of Environment**, 122, 175-184. <http://dx.doi.org/10.1016/j.rse.2011.12.025>
- Samanta, A., Ganguly, S., Vermote, E., Nemani, R.R., & Myneni, R.B. (2012). Why Is Remote Sensing of Amazon Forest Greenness So Challenging? **Earth Interactions**, 16. doi: <http://dx.doi.org/10.1175/2012EI440.1>
- Samanta, A., Ganguly, S., Vermote, E., Nemani, R.R., & Myneni, R.B. (2012). Interpretation of variations in MODIS-measured greenness levels of Amazon forests during 2000 to 2009. **Environmental Research Letters**, 7. doi:10.1088/1748-9326/7/2/024018
- Krishna Prasad Vadrevu., Ellicott, E.,Giglio, L., Badarinath, KVS, Vermote, E., Justice, C., and Lau, B. 2012.Vegetation Fires in the Himalayan Region - Aerosol Load, Black Carbon Emissions and Smoke Plume Heights. **Atmospheric Environment**. 47-241-251. <http://dx.doi.org/10.1016/j.atmosenv.2011.11.009>

- Min Feng, Chengquan Huang, Saurabh Channan, [Eric F. Vermote](#), Jeffrey G. Masek, John R. Townshend, Quality assessment of Landsat surface reflectance products using MODIS data, **Computers & Geosciences**, Volume 38, Issue 1, January 2012, Pages 9-22, ISSN 0098-3004, 10.1016. DOI:0098-3004
- Dongdong Wang, Douglas Morton, Jeffrey Masek, Aisheng Wu, Jyoteshwar Nagol, Xiaoxiong Xiong, Robert Levy, [Eric Vermote](#), Robert Wolfe, Impact of sensor degradation on the MODIS NDVI time series, **Remote Sensing of Environment**, Volume 119, 16 April 2012, Pages 55-61, ISSN 0034-4257, 10.1016/j.rse.2011.12.001. <http://dx.doi.org/10.1016/j.rse.2011.12.001>
- Vadrevu K.P., Ellicott E., Basarinath K.V.S. and [E. Vermote](#), MODIS derived fire characteristics and aerosol optical depth variations during the agricultural residue burning season, north India, **Environmental Pollution** (2011), doi:10.1016/j.envpol.2011.03.001
- Sim, D. A., Rhaman, A. F., [Vermote E. F.](#) and Jiang Z. N., Seasonal and inter-annual variation in view angle effects on MODIS vegetation indices at three forest sites, **Remote Sensing of Environment**, 2011, 115(12) , Pages 3112-3120, DOI: 10.1016/j.rse.2011.06.018
- Pinty B., Taberner M., Haemmerle V.R., Paradise S., [Vermote E.](#), Verstraete M. M., Gobron N. and Widlowski J.L., 2011, Global-Scale Comparison of MISR and MODIS Land Surface Albedos, **Journal of Climate**, Vol 24, 732-749; DOI: 10.1175/2010JCLI3709.1
- Pinty B., Taberner M., Haemmerle V.R., Paradise S., [Vermote E.](#), Verstraete M. M., Gobron N. and Widlowski J.L., 2011, Biogeophysical effects of land use on climate: Model simulations of radiative forcing and large-scale temperature changes (vol 142, pg 216, 2007), **Journal of Climate**, Vol 24, 4769-4769; DOI: 10.1175/JCLI-D-11-00126.1
- Wang, Y. J., A. I. Lyapustin, J. L. Privette, R. B. Cook, S. K. SanthanaVannan, [E. F. Vermote](#), and C. L. Schaaf , 2010, Assessment of biases in MODIS surface reflectance due to Lambertian approximation, **Remote Sensing of Environment**, 114(11), 2791-2801.
- Inbal Becker-Reshef, Chris Justice, Mark Sullivan, [Eric Vermote](#), Compton Tucker, Assaf Anyamba, Jen Small, Ed Pak, Ed Masuoka, Jeff Schmaltz, Matthew Hansen, 3, Kyle Pittman, Charon Birkett, Derrick Williams, Curt Reynolds and Bradley Doorn , 2010, Monitoring Global Croplands with Coarse Resolution Earth Observations: The Global Agriculture Monitoring (GLAM) Project **Remote Sensing**, 2(6), 1589-1609;doi:10.3390/rs2061589
- Becker-Reshef, I., [E. Vermote](#), M. Lindeman and C. Justice, 2010. A Generalized Regression-based Model for Forecasting Winter Wheat Yields in Kansas and Ukraine Using MODIS Data, **Remote Sensing of Environment**, doi:10.1016/j.rse.2010.01.010.,114:1312-1323.
- Samanta, A., S. Ganguly, H. Hashimoto, S. Devadiga, [E. Vermote](#), Y. Knyazikhin, R. R. Nemani, and R. B. Myneni , 2010. Amazon forests did not green-up during the 2005 drought, **Journal of Geophysical Research** VOL. 37, L05401, doi:10.1029/2009GL042154.
- Roy, D.P., Ju, J., Kline, K., Scaramuzza, P.L., Kovalskyy, V., Hansen, M.C., Loveland, T.R., [Vermote, E.F.](#), Zhang, C., 2010. Web-enabled Landsat Data (WELD): Landsat ETM+ Composited Mosaics of the Conterminous United States, **Remote Sensing of Environment**, 114: 35-49.
- Cao, C., [E. Vermote](#), and X. Xiong , 2009. Using AVHRR lunar observations for NDVI long-term climate change detection, **Journal of Geophysical Research**.11410.1029/2009jd012179.
- [Vermote, E.](#), E. Ellicott, O. Dubovik, T. Lapyonok, M. Chin, L. Giglio, and G. J. Roberts, 2009. An approach to estimate global biomass burning emissions of organic and black carbon from MODIS fire radiative power, **Journal of Geophysical Research**, 11410.1029/2008jd011188.
- Ellicott, E., [E. Vermote](#), L. Giglio, and G. Roberts, 2009. Estimating biomass consumed from fire using MODIS FRE, **Geophysical Research Letters**, 36, L13401, doi: 10.1029/2009GL038581.
- Huang, C., S. Goward, J. Masek, F. Gao, [E. Vermote](#), N. Thomas, K. Schleeweis, R. Kennedy, Z. Zhu, J. Eidenshink, and J. Townshend, 2009. Development of time series stacks of Landsat images for reconstructing forest disturbance history, **International Journal of Digital Earth**, 2(3), 195-218.

- Hutchison, K. D., R. L. Mahoney, [E. F. Vermote](#), T. J. Kopp, J. M. Jackson, A. Sei, and B. D. Isager, 2009. A Geometry-Based Approach to Identifying Cloud Shadows in the VIIRS Cloud Mask Algorithm for NPOESS, **Journal of Atmospheric and Oceanic Technology**, 26(7), 1388-1397
- Eck, T. F., B. N. Holben, J. S. Reid, A. Sinyuk, E. J. Hyer, N. T. O'Neill, G. E. Shaw, J. R. Vande Castle, F. S. Chapin, O. Dubovik, A. Smirnov, [E. Vermote](#), J. S. Schafer, D. Giles, I. Slutsker, M. Sorokine, and W. W. Newcomb, 2009. Optical properties of boreal region biomass burning aerosols in central Alaska and seasonal variation of aerosol optical depth at an Arctic coastal site, **Journal of Geophysical Research**, 114
- [E. Vermote](#), C. Justice, F.M. Bréon, 2009. Toward Towards a generalized approach for correction of the BRDF effect in MODIS directional reflectances, **IEEE Transactions in Geoscience and Remote Sensing**, 47, 3898-3908.
- Ellicott, E., [Vermote, E.](#), Petitcolin, F. and Hook, S.J., 2009. Validation of a New Parametric Model for Atmospheric Correction of Thermal Infrared Data, **IEEE Transactions on Geoscience and Remote Sensing**, 47, 295-311.
- Nagol, J.R., [Vermote, E.F.](#) and Prince, S.D., 2009. Effects of atmospheric variation on AVHRR NDVI data, **Remote Sensing of Environment**, 113, 392-397.
- [Vermote, E. F.](#), and S. Kotchenova, 2008. Atmospheric correction for the monitoring of land surfaces, **Journal of Geophysical Research**, 113, D23S90, doi:10.1029/2007JD009662.
- C. E. Woodcock, R. Allen, M. Anderson, A. Belward, R. Bindschadler, W. Cohen, F. Gao, S. N. Goward, D. Helder, E. Helmer, R. Nemani, L. Oreopoulos, J. Schott, P. S. Thenkabail, [E. F. Vermote](#), J. Vogelmann, M. A. Wulder, R. Wynne, and Landsat Science Team, 2008. Free access to Landsat imagery, **Science**, vol. 320, 1011-1011.
- S. Y. Kotchenova, [E. F. Vermote](#), R. Levy, and A. Lyapustin, 2008. Radiative transfer codes for atmospheric correction and aerosol retrieval: intercomparison study, **Applied Optics**, vol. 47, 2215-2226.
- F. Maignan, FM Bréon, [E. Vermote](#), Ph Ciaï, N. Viovy, 2008. Mild winter and spring 2007 over Western Europe led to a widespread early vegetation onset, **Geophysical Research Letters**, VOL. 35, L02404, doi:10.1029/2007GL032472.
- S. Y. Kotchenova and [E. Vermote](#), 2007. Validation of a vector version of the 6S radiative transfer code for atmospheric correction of satellite data. Part II: Homogeneous Lambertian and anisotropic surfaces, **Applied Optics**, Vol. 46, Issue 20, pp. 4455-4464
- Levy, R. C., L. Remer, S. Mattoo, [E. Vermote](#), and Y. J. Kaufman, 2007: Second-generation algorithm for retrieving aerosol properties over land from MODIS spectral reflectance, **Journal of Geophysical Research**, VOL. 112, D13211, doi:10.1029/2006JD007811, 2007
- Ranga B. Myneni, Wenze Yang, Ramakrishna R. Nemani, Alfredo R. Huete, Robert E. Dickinson, Yuri Knyazikhin, Kamel Didan, Rong Fu, Robinson I. Negrón Juárez, Sasan S. Saatchi, Hirofumi Hashimoto, Kazuhito Ichii, Nikolay V. Shabanov, Bin Tan, Piyachat Ratana, Jeffrey L. Privette, Jeffrey T. Morisette, [Eric F. Vermote](#), David P. Roy, Robert E. Wolfe, Mark A. Friedl, Steven W. Running, Petr Votava, Nazmi El-Saleous, Sadashiva Devadiga, Yin Su, and Vincent V. Salomonson, 2007. Large seasonal swings in leaf area of Amazon rainforests, **Proceeding of the National Academy of Science**, USA, 104: 4821-4823
- [Vermote E.F.](#), Roger J.C., Sinyuk A., Saleous N.Z. and Dubovik O., 2007. Fusion of MODIS-MISR aerosol inversion for estimation of aerosol absorption, **Remote Sensing of Environment**, Volume 107, 1-2, 81-89
- Alexander Sinyuk A., Dubovik O., Holben B.N., Eck T.F., Breon F., Martonchik J., Kahn R., Diner D.J., [Vermote E.F.](#), Roger J.C., Lapyonok T. and Slutsker I., 2007. Simultaneous retrieval of aerosol and surface properties from a combination of AERONET and satellite data, **Remote Sensing of Environment**, Vol 107,1-2,90-108.
- [Vermote E.F.](#) and Saleous N.Z., 2006, Calibration of NOAA16 AVHRR over a desert site using MODIS data, **Remote Sensing of Environment**, Volume 105, 3, 214-220
- S. Y. Kotchenova, [E. F. Vermote](#), R. Matarrese, & F. Klemm, 2006. Validation of a new vector version of the 6S radiative transfer code for atmospheric correction of MODIS data: Part I – Path Radiance, **Applied Optics**, Vol 45., No. 26, 6762-6774..
- Roger J.C., M. Mallet, P. Dubuisson, H. Cachier, [E. Vermote](#), O. Dubovik, S. Despia, 2006, Application to an urban zone during the Expérience sur Site pour Contraindre les Modèles de Pollution et de Transport d'Emission (ESCOMPTE) experiment, **Journal of Geophysical Research**, Vol. 111, No. D13, D13208

- Masek J.G., Vermote E.F., Saleous N.E., Wolfe R., Hall F.G., Huemmrich K.F., Gao F., Kutler J., Lim T.K., 2006. A Landsat surface reflectance dataset for North America 1990-2000, **IEEE Geoscience and Remote Sensing Letters**, 3, (1), 68-72.
- Reto Stöckli, Eric F. Vermote, Nazmi Saleous, Robert Simmon, And David Herring, 2006. True Color Earth Data Set Includes Seasonal Dynamics, **EOS Vol 87, Number 5, Pages 49-55.**
- Tucker C.J., Pinzon J.E., Brown M.E., Slayback D.A., Pak E.W., Mahoney R., Vermote E.F., Saleous N.E., 2005. An extended AVHRR 8km NDVI dataset compatible with MODIS and SPOT Vegetation NDVI data, **International Journal of Remote Sensing**, 26, (20), 4485-4498.
- Eric F. Vermote and Elizabeth A Satterfield, 2005, Cover: Southern Africa, 2 February 2002 to 16 May 2002, Moderate Resolution Imaging Spectroradiometer (MODIS) 500m land surface reflectance, **International Journal of Remote Sensing**, 26, (9),4137-4139 .
- Rong-Rong Li Lorraine Remer, Yoram J. Kaufman, Shana Mattoo, Bo-Cai Gao, and Eric Vermote, 2005, Snow and Ice Mask for the MODIS Aerosol Product, **IEEE Transactions in Geoscience and Remote Sensing**, 2 (3) 306-310.
- Matarrese R., Vermote E. F., and M. Kearney, 2005. Impact of Hurricane Isabel on the water properties of the Chesapeake Bay area, K.G. Sellner (ed.), **Hurricane Isabel in Perspective**. Chesapeake Research Consortium, CRC Publication 05-160, Edgewater MD.
- Remer L.A., Kaufman Y.J., Tanré D., Mattoo S., Chu D.A., Martins J.V., Li R-R., Ichoku C, Levy R. C., Kleidman R.G., Eck T.F., Vermote E., and B.N. Holben, 2005. The MODIS Aerosol Algorithm, Products and Validation, **Journal of Atmospheric Sciences**, 62 (4),947-973.
- Jacob, F., Petitcolin, F. Schmugge, T., Vermote, E., French, A. and Ogawa, K, 2004. Comparison of land surface emissivity and radiometric temperature derived from MODIS and ASTER sensors, **Remote Sensing of Environment**, 90, 2, 137-152
- C. K. Gatebe, M. D. King, S. Platnick, G. T. Arnold, E. F. Vermote and B. Schmid, 2003. Airborne Spectral Measurements of Surface-Atmosphere Anisotropy for Several Surfaces and Ecosystem over Southern Africa,, **Journal of Geophysical Research**, Atmosphere, 108 (D13).
- Ouaidrari H., El Saleous N., Vermote E. F., Townshend J. R., Goward S. N.,2003. AVHRR Land Pathfinder II (ALP II) data set: Evaluation and inter-comparison with other data sets, **International Journal of Remote Sensing**, 24(1), 135-142.
- Ouaidrari, H., Goward, S.N. , Czajkowski, K.P. , Sobrino, J.A., Vermote, E.F., 2002. Land Surface Temperature Estimation from AVHRR Thermal Infrared Measurements: An Assessment for the AVHRR Land Pathfinder II Data Set, **Remote Sensing of Environment**, 81, 114-128.
- Vermote E.F., El Saleous N, Justice C, 2002, Atmospheric correction of the MODIS data in the visible to middle infrared: First results, **Remote Sensing of Environment**, 83, 1-2, 97-111.
- Vermote, E. F. and Roy, D.P.,2002. Land Surface Hot-Spot observed by MODIS over Central Africa, **International Journal of Remote Sensing**, Cover Letter, (11): 2141-2143.
- Justice CO, Townshend JRG, Vermote EF, Masuoka E, Wolfe RE, Saleous N, Roy DP, Morisette JT, 2002. An overview of MODIS Land data processing and product status, **Remote Sensing of Environment**, 83,1-2,3-15.
- Petitcollin F. and Vermote E. F., 2002. Land Surface Reflectance, Emissivity and Temperature from MODIS Middle and Thermal Infrared data, **Remote Sensing of Environment**, 83,1-2,112-134.
- Wang Y.J., Tian Y.H., Zhang Y, El Saleous N, Knyazikhin Y., Vermote E.F., Myneni R.B., 2001. Investigation of product accuracy as a function of input and model uncertainties - Case study with SeaWiFS and MODIS LAI/FPAR algorithm, **Remote Sensing of Environment**, 78: (3) 299-313 DEC 2001.
- Vermote E.F., C. O. Justice, J. Descloitres, N.El Saleous, J. Ray, D. Roy, B. Margerin, L. Gonzalez, 2001. A global monthly coarse resolution reflectance data set from SeaWiFS for use in Land, Ocean and Atmosphere applications, **International Journal of Remote Sensing** 22: (6) 1151-1158, 2001.
- Zhang ZY, JaJa J, Bader DA, Kalluri SNV, Song HP, El Saleous N, Vermote E, Townshend JRG, 2000. A software

system for the processing and retrieval of large-scale AVHRR data sets, **Photogrammetric Engineering and Remote Sensing**, 66: (9) 1073-1082

- El Saleous, N.Z., Vermote, E.F., Justice, C.O., Townshend, J.R.G., Tucker, C.J., Goward, S.N., 2000, Improvements in the global biospheric record from the Advanced Very High Resolution Radiometer (AVHRR), **International Journal of Remote Sensing**, 21,6,1251-1277
- Ouaidrari H. and E. F. Vermote, 1999, Operational Atmospheric Correction of Landsat TM data, **Remote Sensing of Environment**, 70:4-15.
- Holben B.N., Eck T.F., Slutsker I., Tanré D., Buis J.P., Setzer A., Vermote E.F., Reagan J.A., Kaufman Y.J., Nakajima T., Lavenue F., Jankowiak I., Smirnov A., 1998, AERONET - A federated instrument network and data archive for aerosol characterization, **Remote Sensing of Environment**, 66:(1) 1-16.
- Justice C., Vermote E.F., Townshend J.R.G., Defries R., Roy D. P., Hall D., Salomonson V., Privette J, Riggs G., Strahler A., Lucht W., Myneni R., Knjazihhin Y., Running S., and Nemani R., Wan Z, Huete A.R., Van Leeuwen W., Wolfe R.E., Giglio L., Muller J-P, Lewis P., Barnsley M.J., 1998. The Moderate Resolution Imaging Spectroradiometer (MODIS): land remote sensing for global change research, **IEEE Transaction on Geoscience and Remote Sensing**, 36,4,1228-1249.
- Wolfe R.E., Roy D.P. Vermote E.F., 1998. MODIS Land Data Storage, Gridding and Compositing Methodology: Level 2 Grid, **IEEE Transaction on Geoscience and Remote Sensing**, 36,4,1324-1338.
- Roger J.C and Vermote E. F., 1998, A method to Retrieve the Reflectivity Signature at 3.75mm from AVHRR data, **Remote Sensing of the Environment**, 64:103-114.
- Vermote E.F., El Saleous N.Z., Justice C.O., Kaufman Y.J., Privette J., Remer L., Roger J.C., Tanré D., 1997, Atmospheric correction of visible to middle infrared EOS-MODIS data over land surface, background, operational algorithm and validation, **Journal of Geophysical Research**, Vol. 102,. d14, 17,131-17,141.
- Kaufman Y.J., Tanré D., Remer L., Vermote E.F., Chu A., Holben B.N., 1997. Operational Remote Sensing of Tropospheric Aerosol Over the Land from EOS-MODIS, **Journal of Geophysical Research**, Vol.102, D14, 17,051-17,068.
- Vermote E.F.**, Tanré D., Deuzé J.L., Herman M., Morcrette J.J., 1997. Second Simulation of the Satellite Signal in the Solar Spectrum: an overview, **IEEE Transactions on Geoscience and Remote Sensing**, 35,3,675-686.
- Roger J.C. and Vermote E.F., 1997, Computation and use of the reflectivity at 3.75mm from AVHRR thermal channels, **Remote Sensing Reviews**, 15: 75-98.
- Vermote E.F., El Saleous N.Z., Kaufman Y.J., Dutton E., 1997, Stratospheric aerosol perturbing effect on the remote sensing of vegetation: Correction method for the composite NDVI after the Pinatubo eruption, **Remote Sensing Reviews**, 15: 7-21.
- Vermote E.F. and Kaufman Y.J., 1995, Absolute calibration of AVHRR visible and near infrared channels using ocean and cloud views, **International Journal of Remote Sensing**, 16, (13): 2317-2340.
- Santer R., Deuzé J.L., Devaux C., Vermote E.F., Guyot G., Gu X.F., Verbrugge M., Leroy M., 1992. Spot calibration on the test site 'La crau' France, **Remote Sensing of Environment**, 41: 227-237.
- Holben B.N., Vermote E.F., Kaufman Y.J., Tanré D., Kalb V., 1992, Aerosol Retrieval over Land from AVHRR data- Application for Atmospheric Correction, **IEEE Transaction on Geoscience and Remote Sensing**, 30, (2): 212-222.
- Vermote E.F., El Saleous N.Z., Holben B.N., Kaufman Y.J., Tucker C.J., 1992. Global aerosol Climatology over tropical belt using AVHRR data, *IRS'92 Current Problems in Atmospheric Radiation*, S. Keevallik and O. Kärner (Eds), 191-194.
- Vermote E.F. and Tanré, D., 1992. Analytical Expressions for Radiative Properties of Planar Rayleigh Scattering Media Including Polarization Contribution, **Journal of Quantitative Spectroscopy and Radiative Transfer**, 47, (4): 305-314.
- Vermote E.F., Santer R., Deschamps P.Y. and Herman M., 1992, In-flight calibration of large field of view sensors at short wavelengths using Rayleigh scattering, **International Journal of Remote Sensing**, 13, (18): 3409-3429.

CONFERENCE PROCEEDING

- Verger, A., Baret, F., Weiss, M., Lacaze, R., Makhmara, H., Pacholczyk, P., Smets, B., Kandasamy, S., & Vermote, E. (2012). LAI, FAPAR and FCOVER products derived from AVHRR long time series: principles and evaluation. In, EGU General Assembly Conference Abstracts (p. 7844)
- Roger J.C., Mallet M., Dubuisson P., Cachier H., Cœur C., Vermote E., Despiau S., Putaud J.P., Van Dingenen R., and Dubovik O., Synergetic approach for estimating the local direct aerosols forcing. Application to the ESCOMPTE experiment, IGAC, Heraklion, Crete, September 2002
- O' Neill N. O., Holben B.N., Vermote E.F., Royer A., Aube M., Blanchet J.P., Spacek L., Comparison between the aerosol transport simulation of an RCM and spatio-temporal measurements of the aerosol optical parameters, *Proceeding of the Conference and Workshop on the contribution of POLDER and the new generation of spaceborne sensors to global change studies*, Meribel, France, January 1999.
- Kinne S., Vermote E.F., Torres O., Holben B.N., Stowe L., Prins E., Veeffkind P., Hobbs P., Hignett P., Russel P., Intercomparison and validation of satellite based aerosol data , *Proceeding of the Conference and Workshop on the contribution of POLDER and the new generation of spaceborne sensors to global change studies*, Meribel, France, January 1999.
- Vermeulen A., Vermote E.F., Holben B.N., Descloitres J., Mao-Che I., Mapping monthly estimation of aerosol optical thickness from sun-photometer and satellite measurements , *Proceeding of the Conference and Workshop on the contribution of POLDER and the new generation of spaceborne sensors to global change studies*, Meribel, France, January 1999.
- Descloitres J. and Vermote E.F., Operational retrieval of the spectral surface reflectance and vegetation index at global scale from SeaWiFS data, *Proceeding of the Conference and Workshop on the contribution of POLDER and the new generation of spaceborne sensors to global change studies*, Meribel, France, January 1999.
- Sobrino J.A., Dempere L., Vermote E.F., Cuenca, J., Correction For Aerosol Effects On Satellite Sea Surface Temperatures, *Proceeding of SPIE, International Society for Optical Engineering*, Volume 3495, 1999 (In press).
- Jacqueline Le Moigne, Nazmi El Saleous , Vermote E. F., Iterative Edge- and Wavelet-Based Image Registration of AVHRR and GOES Satellite Imagery, *Proceedings of Image Registration Workshop (USRA-NASA/GSFC-IEEE/GRSS)*, NASA/GSFC, Nov. 20-21 1997.
- Ouaidrari H., Vermote E. F., El Saleous N., Roy D., 1997 , AVHRR Pathfinder II data set: Evaluation and improvements, *Proceedings of the 7th International Symposium on physical measurements and signatures in remote sensing*, Courchevel, France
- Vermote E. F., A. Vermeulen, H. Ouaidrari, and J. C. Roger, 1997 : Atmospheric correction for shortwave sensors (MODIS, ASTER, MISR, POLDER, SEAWIFS, MERIS, VEGETATION). *Proceedings of the 7th International Symposium on physical measurements and signatures in remote sensing*, Courchevel, France
- Privette, J.L. and Vermote E.F., 1995, Fitting remote sensing data with linear bidirectional reflectance models, in *Global Processes Monitoring*, D.W.Deering, Ed., Proc.SPIE.
- Holben B.N., Eck T.F., Slutsker I., Tanré D., Buis J.P., Setzer A., Vermote E.F., Reagan J.A., Kaufman Y.J., 1994, Multi-Band Automatic Sun and Sky Scanning Radiometer System for Measurements of Aerosols, *VI^e International Colloquium: Physical measurements and signatures in remote sensing*, Val d'Isère, France, January 17-21, 75-84.
- Roger J.C. and Vermote E.F., 1994, Computation and use of the reflectivity at 3.75mm from AVHRR thermals channels, *VI^e International Colloquium: Physical measurements and signatures in remote sensing*, Val d'Isère, France, January 17-21, 817-824.
- Vermote E.F., El Saleous N.Z., Kaufman Y.J., Dutton E., 1994, Stratospheric aerosol perturbing effect on the remote sensing of vegetation: Correction method for the composite NDVI after the Pinatubo eruption, *VI^e International Colloquium: Physical measurements and signatures in remote sensing*, Val d'Isère, France, January 17-21, 151-158.
- Roger J.C., Vermote E.F., El Saleous N.Z., 1994, Atmospheric Correction of MAS data during SCAR-A experiment,

Atmospheric Sensing and Modeling, Rome, Italy, September 29-30, SPIE proceedings, Vol. 2311, 83-89.

Vermote E.F., El Saleous N., Roger J.C., 1994, Operational atmospheric correction of AVHRR visible and near-infrared data, *Atmospheric Sensing and Modeling*, Rome, Italy, September 29-30, SPIE proceedings, Vol. 2311, 141-149.

Vermote E.F. and El Saleous N.Z., 1994, Stratospheric aerosol perturbing effect on remote sensing of vegetation: operational method for the correction of AVHRR composite NDVI, *Atmospheric Sensing and Modeling*, Rome, Italy, September 29-30, SPIE proceedings, Vol. 2311, 19-29.

Vermote E.F., El Saleous N.Z., Holben B.N., 1993, Atmospheric Correction of AVHRR visible and Near Infrared Data, *Proceeding of the Workshop on Atmospheric Correction of Landsat Data*, Torrance CA, June 29 - July 1, 1993.

Vermote E.F., Vassiliou, G.D., Kaufman Y.J. and Holben B.N., 1992, Calibration of the AVHRR Visible and Near IR Channels using radiances measured over remote ocean areas, *Proceeding of IGARSS'92*, Houston, Texas, Vol. 1, 9-11.

Tanré D., Vermote E.F., Holben B.N., Kaufman, Y.J., 1992, Satellite Aerosol Retrieval over Land Surface using the Structure Functions, *Proceeding of IGARSS'92*, Houston, Texas, Vol. 2, 1474-1477.

Santer R., Asmani M., Vermote E.F., Sharman M., 1990, In flight calibration of channels 1 and 2 of AVHRR using desertic sites and clouds, *V^e International Colloquium: Physical measurements and signatures in remote sensing*, Courchevel, France, Vol. 1, 77-84.

Vermote E.F., Tanré D., Herman M., 1990, Atmospheric effects on satellite imagery: Correction algorithms for ocean color or vegetation monitoring. MANAUS/ISPRS In: *International archives of photogrammetry and remote sensing*, Vol. 28, Part 1, 46-55.

Tanré D., Deuzé J.L., Herman M., Santer R., Vermote E.F., 1990, Second simulation of the satellite signal in the solar spectrum (6S), *Proceeding of IGARSS'90*, University of Maryland, College Park, May 20-24, 187.

Tanré D., Herman M., Kergomard C., Vermote E.F., 1989, Effets atmosphériques sur les données satellitaires, possibilité de correction, *Revue Française de photogrammétrie et de télédétection*, Colloque d'Orléans, France, 115, 3-4.

RECENT PRESENTATIONS/POSTERS

Eric Vermote, "VIIRS Surface Reflectance Status summary", SUOMI NPP EDR Product Review, NOAA Center for Weather and Climate Prediction, College Park, MD, August 22, 2013.

Eric Vermote, "A Terrestrial Surface Climate Data Record for Global Change Studies", NOAA's Climate Data Record Annual Meeting, National Climate Data Center, Asheville, NC, July 30-31, August 1, 2013

Eric Vermote, "Surface Reflectance over the Land in Collection 6.", MODIS Science Team Meeting, Silver Spring, MD, April 15-17, 2013.

E. Vermote, "Development of Landsat surface reflectance Climate Data Records", Landsat Science Team Meeting, Buelton CA, February 10-14, 2013

Eric Vermote, "Development of the surface reflectance Fundamental Climate Data Record from the Landsat archive, the LDCM mission and future Landsats.", Landsat Science Team Meeting on December 12-13 2012, Department of the Interior, Washington DC

E. Vermote "A Terrestrial Surface Climate Data Record for Global Change Studies", American Geophysical Union, Fall Meeting 2012.

Eric Vermote and Inbal Becker-Reshef, "A long term terrestrial data record for drought impacts studies", 4Th International Conference on Drylands, Deserts & Desertification, November 12-15, 2012, Bluastein Institutes for Desert Research, Sede Boqer Campus of Ben-Gurion University, Israel.

Eric Vermote, "BRDF corrections for the use of daily MODIS data", Regional workshop on Monitoring of Agricultural Production and Land Use Change. Potentials and limitations of remote sensing, September 25-28, 2012, Buenos Aires, Argentina

Eric Vermote, “Review of the state of the art atmospheric correction of remotely sensed data in the solar spectrum”, first international symposium on land remote sensing (ISLRS), May 31st to June 1st, 2012, Chengdu, China.

E. Vermote, C. Justice et al., “Monitoring the land surface from MODIS: from science to applications”. A Train Symposium, New Orleans, October 25-28, 2010 **plenary session presentation**.

E. Vermote, “Land Long Term Data Record Calibration”, CEOS WGCV IVOS workshop, Joint Research Centre (JRC), Ispra, Italy October 18-20, 2010.

E. Vermote et al., “A terrestrial surface climate data record for global change studies”, 3rd International symposium on recent advances in quantitative remote sensing, Torrent, Spain, September 27 to October 1, 2010.

Vermote E. et al., “A Terrestrial Surface Climate Data Record for Global Change Studies”, American Geophysical Union, Fall Meeting 2009.

Justice C., E. Vermote, “A surface reflectance standard product from LDCM and supporting activities: Update”, LDCM Workshop on surface reflectance, October 2009.

Justice C., E. Vermote, “A surface reflectance standard product from LDCM and supporting activities: Update”, LDCM Workshop on surface reflectance, June 2009.

Eric Vermote, Inbal Becker-Reshef, Chris Justice and Mark Lindeman, A Generalized Wheat Yield Model using Daily Coarse Resolution Remotely Sensed Information, presentation at the University of Maryland for the Chinese delegation, May 2009.

Crystal Schaaf, Eric Vermote, “Reflectance, Anisotropy and Albedo Land Products from MODIS”, GlobAlbedo User Consultation Meeting, ESRIN, Italy, October 2008.

Justice C., E. Vermote, “A surface reflectance standard product from LDCM and supporting activities: Update”, LDCM Science Team Meeting, July 2008.

Vermote E., “Toward establishing a Land Climate Data Record”, NASA/GSFC, Greenbelt, MD, July 11 2008.

John Jackson, Eric Vermote, Eric Shettle, “NPOESS Aerosol product retrievals from the VIIRS instrument”, IGARSS 2008, July 6-11, 2008, Boston Massachusetts, USA, oral presentation.

Vermote E., “Reflective band vicarious calibration of the MODIS and AVHRR sensors using Ocean, Clouds and Desert Observations”, IGARSS 2008, July 6-11, 2008, Boston Massachusetts, USA, **Invited talk**.

Vermote E., “Atmospheric correction in the solar spectrum: Methods and Validation”, IGARSS 2008, July 6-11, 2008, Boston Massachusetts, USA, **Invited talk**.

Vermote E., “Using MODIS and POLDER data to develop a generalized approach for correction of the BRDF effect”, MODIS Science Team Meeting, plenary session, Baltimore, MD, May 2008.

Vermote E., “Terra/Aqua band 1 and 2 calibration evaluation over Libyan desert site”, MODIS Science Team Meeting, MCST Breakout session, Baltimore, MD, May 2008.

Vermote E. and Justice C., “A surface reflectance standard product from LDCM and supporting activities”, LDCM Science Team Meeting, June 2007.

Vermote E., “Atmospheric correction for the monitoring of land surfaces”, Yoram J. Kaufman Symposium on Aerosols, Clouds and Climate, May 30, 31, and June 1, 2007, NASA GSFC.

Vermote E. (on behalf of Justice C.), “NOAA MODIS Land Processing”, Potential NESDIS Operational Products from MODIS Workshop, NOAA/NESDIS June 9th 2007

Vermote E., Schaaf C. (presenting), “Atmospheric Correction in the Reflective Domain of MODIS and AVHRR Data Uncertainties Analysis and Evaluation of AERONET Sites”, LANDFLUX Assessment and Organization Workshop, June, 2007, Toulouse, France

Schaaf C., Strahler A., Liu J., Vermote E. And Kotchenova S., “Retrieving Surface Reflectance Anisotropy and Albedo Land Products from MODIS (Collection 5)”, GCOS AOPC/TOPC Joint Working Group on Land-Surface/ Atmosphere Issues (WG-LSA) 1st meeting, European Commission Joint Research Centre, Ispra (VA), Italy, 14-15 February 2007.

- Justice C. and Vermote E., “Atmospheric correction for the monitoring of land surfaces”, Direct Readout Land/Vegetation workshop ,Mexico City, October 10 & 11, 2007.
- Levy R.C., Remer L.R., Vermote E., Castanho A. and Kahn R., “Toward a synergistic MODIS retrieval of aerosol optical depth over cities”, A Train Meeting, Lille, France, October, 2007.
- Sinyuk A., Dubovik O., Vermote E., Roger J.C., Eck T.F. and Holben B., “Using joint inversion of AERONET and satellite observations to validate surface reflectance assumptions employed in the version 2 AERONET aerosol retrieval algorithm”, A Train Meeting, Lille, France, October, 2007.
- Ellicott E., Vermote E., Layponok T., Chin M. and Dubovik O., “Global Estimates Of Biomass Burning Particulate Matter Using Fire Radiative Power”, Association Of American Geographers (AAG) Annual Meeting San Francisco, CA April 17th – 20th, 2007.
- S. Korontzi, E. Vermote, L. Giglio, C. Justice, I.Z. Gitas, A.I. Polychronaki, T.G. Katagis and G. Mallinis, ” The 2007 Fire Season in Greece” , 6th International Workshop of the EARSEL Special Interest Group on Forest Fires and Fire IT planning meeting, 27 - 29 September 2007.
- Vermote E. and Kotchenova S.Y., “Atmospheric correction of MODIS data in the visible and shortwave infrared: method, error estimates and validation”, Branch seminar at NASA GSFC, May 16, 2007.
- Kotchenova S.Y. and Vermote E., “A vector version of the 6S radiative transfer code for atmospheric correction of satellite data”, the ARFL Transmission meeting, 29th Annual review of atmospheric transmission models, Lexington, Massachusetts, USA, July 13-14, 2007, **Invited talk.**
- S.Y. Kotchenova, E. Vermote , R. Levy and A. Lyapustin, “Radiative Transfer codes for atmospheric correction and aerosol retrieval: Intercomparison study”, AEROCENTER, Fall seminar series, NASA GSFC, Greenbelt, Maryland, USA, October, 2, 2007.
- Pedelty, J.; Devadiga, S.; Masuoka, E.; Brown, M.; Pinzon, J.; Tucker, C.; Vermote, E.; Prince, S.; Nagol, J.; Justice, C.; Roy, D.; Junchang J.; Schaaf, C.; Jicheng L.; Privette, J. and Pinheiro, A., “Generating a long-term land data record from the AVHRR and MODIS Instruments,” Geoscience and Remote Sensing Symposium, 2007. IGARSS 2007. IEEE International , vol., no., pp.1021-1025, 23-28 July 2007
- Morissette, JT and Wolfe, RE and Tan, B. and Gao, F. and Pedelty, J. and Nightingale, J. and Ederer, G. and Vermote, E., 2007, “North American Landscape Phenology: a 250m spatial resolution product derived from MODIS”, American Geophysical Union, Fall Meeting 2007.
- Pedelty, J., Vermote, E., Devadiga, S., Roy, D., Schaaf, C., Privette, J., and Pinheiro, A. Prince, S., Justice, C., Nagol, J., and others “Generating a Long-term Land Data Record from the AVHRR and MODIS Instruments”, American Geophysical Union, Fall Meeting 2007
- Nagol, J.R., Vermote, E. and Prince, S. and Brown, M., “Investigation of uncertainty in surface reflectance measures derived from AVHRR caused by orbital drift and variations in viewing geometry” , American Geophysical Union, Fall Meeting 2007
- Eric Shettle, R. Halthore, E. Vermote, and J. M. Jackson, “Aerosol Measurements from the VIIRS Instrument During NPOESS”, AMS Meeting, January, 2007.
- Vermote E., “Surface reflectance”, MODIS Land Collection 5/LTDR Workshop UMUC Inn and Conference Center, January 17 - 18, 2007
- Vermote E., “Theoretical basis of the algorithms,” Workshop on Progress in Development of the NASA CAN Project “0.05 Degree Global Climate Interdisciplinary Long-Term Data Set from AVHRR, MODIS and VIIRS Instruments”, UMUC Inn and Conference Center, January 17 - 18, 2007
- Ellicott, E.A., Vermote E.F., Petitcolin, F., Hook, S.I., 2006, “Validation of A New Parametric Radiative Transfer Model For Atmospheric Correction of Thermal Infrared Channels”, AGU, 87(52), Fall Meeting.
- Jackson, .M., Vermote E., Shettle, E. P., 2006, “Measurements of Atmospheric Aerosols by the VIIRS Instrument for NPOESS”, AGU, 87(52), Fall Meeting.
- Vermote E.F., Ellicott E., Lapyonok T., Chin M., Dubovik O., 2006, “Evaluation of Global Biomass Burning Carbon Emission Estimates using Fire Radiative Power” , AGU, 87(52), Fall Meeting.

- Vermote E.F. , Dubovik O. ,Nazmi Saleous N., Petitcolin F., Lapyonok T., Kaufman Y.J. , Chin M., Giglio L., Ellicott E., “Evaluation of Global Biomass Burning Carbon Emission Estimates using Fire Radiative Power and Aerosol products from MODIS”, MODIS Science Team Meeting, October 2006, presentation at the atmosphere session.
- S. Kotchenova, E.F. Vermote, R. Matarrese, & F. Klemm, 2006 ‘Validation of a new vector version of the 6S radiative transfer code for atmospheric correction of MODIS data: Part II – Lambertian and anisotropic surfaces’ MODIS science team meeting, Baltimore, Maryland, USA, January 4-6, 2006.. Poster.
- N.Z. Saleous and E.F. Vermote, “Evaluation of MODIS Collection 5 surface reflectance product using AERONET”. MODIS science team meeting, Baltimore, Maryland, USA, January 4-6, 2006. Poster.
- Eric F. Vermote, Oleg Dubovik, Nazmi Z. Saleous, Francois Petitcolin, Tatyana Lapyonok, Yoram J. Kaufman, Mian Chin, and Louis Giglio, “Fire disturbance in the Earth-Atmosphere system”. MODIS science team meeting, Baltimore, Maryland, USA, January 4-6, 2006. Poster.
- Eric F. Vermote, Jean-Claude Roger, Alexander Sinyuk, Nazmi Saleous and Oleg Dubovik, 2005, “Fusion of MODIS-MISR aerosol inversion for estimation of aerosol absorption”, Terra Fusion Meeting I, Williamsburg, VA, August 15-17, 2005, Poster.
- E.F. Vermote & S. Kotchenova, MODIS science team meeting, Baltimore, Maryland, USA, March 22-24, 2005. ‘Validation of the 6S radiative transfer code for atmospheric correction of MODIS data.’ Presentation & Poster.
- Vermote et al., Long Term Land Data Record from AVHRR, MODIS and VIIRS, NASA Land Cover Land Use Change Meeting, University of Maryland, January, 2005.

RESEARCH GRANTS

PI OR Co-PI:

- Vermote E. (Co-PI), “NPP/VIIRS Land Product Validation Research and Algorithm Refinement: Surface Reflectance”,NOAA, (2011-present), Budget 2012 (\$120,000).
- Vermote E. (Co-PI), “A Land surface reflectance climate data record for the Terra and Aqua Missions”,NASA, (2011-2013), (\$553,457).
- Vermote E. (Co-PI), “Development of the surface reflectance Fundamental Climate Data Record from the Landsat archive, the LDCM mission and future Landsats”,NASA/USGS, (2012-2015), (\$702,030).
- Vermote E. (Co-PI), “Enhancing Compatibility of Sentinel 2 and Landsat data for improved monitoring of the Earth System”,NASA, (2011-2014), (\$208,732).
- Vermote E. et al. (Co-PI), “A Terrestrial Surface Climate Data Record for Global Change Studies”, NOAA, 9/1/2009-8/30/2013, (\$860,000)
- Vermote E., “MODIS/NPP VIIRS surface and top of the atmosphere reflectances evaluation, maintenance, validation and refinement”, NASA, 12/18/07-12/17/10 (\$978,299)
- Vermote E. (PI for UMD subcontract), “Web-enabled Landsat data (WELD) - a consistent seamless near real time MODIS-Landsat data fusion for the terrestrial user community”,2008, . , PI D. Roy, South Dakota State University, 4/1/2008-4/1-2013 (UMD budget \$383,697)
- Vermote E.F. and Justice C.O.,2006, “A Surface Reflectance Standard Product from LDCM and supporting activities”, USGS,9/15/06 to 9/14/11, (\$503,305)
- Vermote et al., 2005, Using MODIS Ocean Bands to Augment Direct Satellite Estimation of Terrestrial Carbon Flux: A Novel Approach, NASA, 9/1/04-8/31/07, (\$133,594)
- Vermote et al., 2004, Evaluation of NPP/VIIRS Land Surface Earth Data Record with respect to climate change objectives, NASA, 01/01/04-12/31/06, (\$545,482)
- Vermote et al., 2004, Refinement of MODIS Land surface reflectance in the visible to middle infrared and associated

products, NASA, 03/15/04-03/14/07, (\$1,368,510)

Vermote et al., 2004, Fires as a disturbance in the Earth-Atmosphere system, a pilot study using MODIS data and experimental algorithms, NASA, 03/15/04-03/14/07, (\$314,996)

Vermote et al., 2003, A 0.05 degree global climate/interdisciplinary long term data set from AVHRR, MODIS and VIIRS instruments, NASA, 10/15/03-10/14/08, (\$854,157)

Vermote E.F., 1996: "A Global Land Surface Reflectance Product for use in MODIS land algorithms", NASA, July 96 to October 2002, (\$2,628,102).

Roy, D. (Principal Investigator), Vermote, E.F. (Co-Principal Investigator), A study of the development of remote sensing algorithms, NASA Cooperative Agreement NCC5449-C, Total Budget \$405,644 for 01/01/2000-12/31/2002.

Townshend J.G.R., Vermote E.F., Justice C.O., Tucker C.J., Goward S.N., El Saleous N.Z., 1995: "A Version 2 AVHRR Multi-resolution Land Pathfinder Data Set". NASA NRA-944-MTPE-06, July 95 to June 99 (\$990,000).

Vermote E.F., Van de Castle J., Roger J.C., Holben B.N., Justice C.O., and Tucker C.J..1994: "Development and Testing of Operational Atmospheric Correction of Satellite Data for the NSF-LTER Sites", 1995.NASA Office of Mission to Planet Earth, April 95 to March 97 (\$200,000).

Vermote E.F., Roger J.C., Tucker C.J., Justice C.O.1995: "VEGETATION Instrument and MODIS: a joint research and development project on terrestrial monitoring", Accepted by The VEGETATION International Users Committee, Feb 95 to Nov 98 (\$42,000).

Fraser R.S. and Vermote E.F., 1995, "Calibration of Ocean Color Sensors and the Optical Properties of Aeolian Dust", NASA Office of Mission to Planet Earth, June 95 to June 97 (\$220,000).

Co-I:

Vermote E. (Co-I), "Global Agricultural Monitoring with NPP VIIRS: transitioning VIIRS Observations into the USDA FAS Decision Support System", NASA,(2011-2013),(\$826,222)

Vermote E. (Co-I), "Sentinel 3 Science Products: A US contribution", NASA Earth Science U.S. Participating Investigator (2012-2017), Co-I Budget (\$84,481)

Remer L.A., Co-PI, Kaufman Y.J., Co-PI, Feingold G., Co-I , Vermote E.F., Co-I , El Saleous N.Z., Co-I, "Satellite Study of the Smoke Indirect Radiative Forcing", NASA, October 97 to October 2000, (\$300,000).

Townshend J.G.R., "Land Cover Earth Science Information Partnership", April 1998 to April 2001 (\$3,850,000).

Ja'Ja' Joseph, "Center of Excellence at University of Maryland", 1997 (\$430,000).

Jasme M., Lemoigne J., Vermote E.F., "Co Registration of multi sensor data using wavelet transform",1995, NASA Directorate Discretionary Fund, Jan 95-Jan 96 (\$39,000).

Walthall C.L., Irons J.R., Vermote E.F.,1992, "Advanced Solid-state Array Spectrometer Data Analysis for Estimation of Photosynthetically Active Radiation and Hemispherical Reflectance", May 1992 to April 1994 (\$210,000).

Holben B.N., Kaufman Y.J., Eck T.F., Tanré D., Vermote E.F.,1991, "Correction of the NOAA-AVHRR Imagery for Atmospheric Effects and Calibration Deterioration", July 1991 to July 1993 (\$460,000).

Markham B.L., Holben B.N., Kaufman Y.J., Halthore R.N., Eck T.F., Vermote E.F., 1992, "Characterization of Atmospheric Optical Properties for BOREAS", Jan 1993 to Dec 1996 (\$511,000).

TEACHING

2009-2012, Spring Instructor, GEOG-445: "Climatology". University of Maryland College Park.

2006, Fall Main Instructor, GEOG-788 seminar course: "Advances in remote sensing of terrestrial global change: past, present & future", group teaching. University of Maryland College Park.

2004, Fall	Coordinator, GEOG-788 seminar course: “Advances in remote sensing of terrestrial global change: past, present & future”, coordinated by Vermote E. and Roy D.P. University of Maryland College Park.
2002, Aug	Lecturer, International Summer School, l’Aquila, Italy: “Atmospheric and Oceanic Science”.
2002, Jan	Lecturer, MIT/Goddard Short Course: “Remote Sensing of the Earth’s Environment from Terra”. NASA Goddard Space Flight Center.
2001, Oct	Lecturer, Master program of physics at University of Bari, “Advanced Remote Sensing”, three lectures.
2001, Sep	Guest lecturer, GEOG-609: “Global Terrestrial Satellite Observing Systems course”. University of Maryland College Park.
2001, Jul	Lecturer, NASA Summer Internship Program: “MODIS data use for land atmosphere remote sensing”. NASA Goddard Space Flight Center.
2001, Jun	Lecturer, George Mason University workshop: “Earth Science Remote Sensing Data Processing, Analysis & Applications”.
1998, Fall	Instructor, GEOG-480: “Advanced Remote Sensing”. University of Maryland College Park.
1998, Apr 4	Presenter, “NOAA-AVHRR-PM channel 1 and 2 calibration results from 1982 to present”, (GSFC), University of Maryland GEOG 789 course: The Impacts of El Nino taught by John Townshend, Jim Tucker and Bruce Douglas.
1998, Jan 29	Lecturer, MIT, Independent Activity Period (IAP) Course 12.265, 12.565, Techniques in Remote Sensing, “AVHRR and SeaWiFS Global Product”.
1996, Apr 10	Presenter/ Lab instructor, “6S: Second Simulation of the Satellite Signal in the Solar Spectrum, an overview”, UMD/Dept of Geography for Physical Fundamentals of Remote Sensing course.
1993, Dec 6-12	Lecturer, Commission of the European Communities on Remote Sensing, Joint Research Centre Ispra, Italy: “Remote Sensing and Radiative transfer modelling, Advances in the use of NOAA AVHRR for Land Applications”, EURO COURSES.
1987-1988, Sep	Lecturer, Undergraduate level engineering, HEI, Lille: “Introduction of numerical analyses and programming”.
1987, Spring	Lecturer, Undergraduate level School of Pharmacy, Lille, France: “Spread Sheet and Relational Database software”.

ADVISING

- Corinne Carter (2012-present),Phd,(Committee Member)
- Catherine Nakalembe (2012-present)),Phd,(Committee Member)
- Yolande Munzimi (2012-present),Phd,(Committee Member)
- Alyssa Whitcraft, (2011-present),Phd,(Committee Member)
- Jie Zhang, (2011-present),Phd,(Committee Member)
- Kim Do-Hyung, (2011-present), Phd, (Committee Member)
- Belen Franch Gras (2010-2013) PhD in Physics, University of Valencia, (Co-Advisor)
- Enrique Montano (2009-present) PhD, (Co-Advisor)
- Inbal Becker-Reshef (2007-2012) PhD, (Co-Advisor)
- Jyoteshwar Nagol (2006-2011) PhD, (Co-Advisor)

- Angira Baruah (2007-2012) PhD, (Committee Member)
- Evan Ellicott (2006-2009) PhD, (Co-Advisor)
- Timothy Clark (2007-2008) Master, (Co-Advisor)
- David Béal (2006) PhD, Université d'Avignon, France (External Examiner)
- Marc Mallet (2003) PhD, Université de Toulon et du Var, France (External Examiner)
- Catherine Schmetig (2000) PhD, Université du Littoral, France (External Examiner)
- Misrak Gezmu (1998), Faculty, University of West Virginia (Advisor for NASA Summer Faculty Fellowship).
- Isabelle Mao-Che, (1998) Master, University of Paris (Supervisor for Summer Internship)
- Laura Dempere Marco (1997) Master, University of Valencia (Supervisor for Summer Internship)
- Misrak Gezmu (1997) Faculty, University of West Virginia (Advisor for NASA Summer Faculty Fellowship)

COMMUNITY SERVICE

Present	Reviewer for Remote Sensing of Environment, International Journal of Remote Sensing, Journal of Geophysical Research, IEEE Transactions on Geoscience and Remote Sensing, Applied Optics, International Journal of Chemistry and Ecology, Advances in Space Research,, Journal of Zhejiang University-SCIENCE A, ISPRS Journal of Photogrammetry and Remote Sensing, Journal of the Optical Society of America, IEEE Geoscience and Remote Sensing Letters, Geophysical Research Letters, Atmospheric Research (around 20 papers reviewed each year)
Present	LDCM Science Team Member
Present	MODIS Science Team Member
Present	NPOESS/VIIRS Science Team Member
Present	Associate Editor for the Canadian Journal of Remote Sensing
2013	NASA/GSFC Code 600 Publication award committee
2013	Member of Goddard Diversity Dialogue Project team
2013-2014	Member of the International Scientific Committee for the 4th International Symposium on Recent Advances in Quantitative Remote Sensing (RAQRS'14).
2013	Member of the Scientific Committee for the ESA Living planet symposium.
2012-Present	Adjunct Professor at the University of Maryland
2012-2013	Co-Chair of the Non Tenure Track Faculty Task Force
2010	Member of the Scientific Committee for the ESA Living planet symposium.
2009-present	Associate Editor for the Canadian Journal of Remote Sensing
2008-present	Member of the GCOS (Global Climate Observing System) AOPC/TOPC Joint Working Group on Land Surface and Atmospheric issues
2007	Reviewer for NOAA Research Program/ Member of the review panel
2007	Reviewer for NASA Research Program/ Member of the review panel
2005-2007	Chair of Research Faculty Advisory Committee
2003	Reviewer for NASA Research Program/ Member of the 2 review panels
2003	Reviewer for NOAA Research Program/ Member of the review panel
2001	Reviewer for NASA Research Program/ Member of the review panels

- 2001 Reviewer NSF Research Program
- 1999 Reviewer for the Centre for Earth Observation (CEO) European program
- 1995-1996 Chairman of IEEE Geoscience and Remote Sensing Society, Washington DC/ Virginia Chapter
- 1995 Reviewer for NOAA Climate Research / Member of the review panel

AWARDS

- 2012 NASA Group Achievement award to MODIS NDVI Anomaly Team
- 2012 Hydrospheric and Biospheric Sciences (HOBI) Annual Awards – Scientific Achievement MODIS characterization Support Team & MODIS sensor working group
- 2012 Certificate of recognition for SUOMI National Polar orbiting Partnership Satellite System mission.
- 2011 University of Maryland “Research Leader” designation for level of research funding won
- 2010 Honored at the 3rd Annual University Wide Celebration of Scholarship and Research nominated by the Dean of BSOS.
- 2004-2008 University of Maryland “Rainmaker” designation for level of research funding won
- 2003 NASA group achievement award (signed by the NASA administrator), Group Achievement Award Aqua Mission Team, August 27 2003, In recognition of the talent, care, energy and devotion your outstanding group of civil servants, members of academia, and contractor personnel put into the Aqua Mission.
- 2003 NASA Goddard Space Flight Center (GSFC) group achievement award (signed by the NASA GSFC director), Outstanding Teamwork Earth Observing (EOS) Aqua Mission Team, May 16 2003, In recognition of the talent, care, energy and devotion this outstanding team of civil servants, contractors, scientists, and academia put into the Aqua Mission.
- 2003 Customer Service Excellence Award, Moderate Resolution Imaging Spectroradiometer (MODIS) Support Team, April 2003, In recognition of your support for the calibration/characterization of the MODIS instrument on the Terra spacecraft.
- 1996 Award for service as the Chairman of IEEE Geoscience and Remote Sensing Society, Washington DC/ Virginia Chapter.