

## Publication list

(Name underlined when student is the first author)

### THESIS / BOOK CHAPTERS

---

Stracher, G.B., **Prakash, A.**, and Ella, E., 2010, Editors, *World Coal Fire Atlas – Volume 1*, Elsevier. (fifteen of sixteen chapters complete; one in progress; expected publication in late 2010).

**Prakash, A.**, World's densest congregation of coal mine fires: A case study of the Jharia Coalfield, India. in *World Coal Fire Atlas – Volume 2*, edited by Stracher, Prakash and Ella. (text submitted for review; expected publication in 2011).

Quattrochi, D.A., **Prakash, A.**, Eveva, M., Wright, R., Hall, D.K., 2009, Anderson, M., Kustas, W.P., Allen, R.G., Pagano, T., and Coolbaugh, M.F., 2009, Thermal Remote Sensing: Theory, Sensors, and Applications. in *Manual of Remote Sensing*, 4<sup>th</sup> edition (in print).

Watson, I.M. and **Prakash, A.**, 2009, Satellite systems and interactions. in *Volcano Atlas*, edited by Dean, K.J. and Dehn, J. (in print).

Stracher, G.B., Finkelman R.B., Hower, J.C., Pone, D.N., **Prakash, A.**, Blake, D.R., Schroeder, P.A., Emsbo-Mattingly S.D., and O'Keefe, J.M.K., 2009, Natural and anthropogenic coal fires. in *Encyclopedia of Earth*, topic editor Dogan, A.U, encyclopedia editor Cleveland, C.J., National Council for Science and the Environment.

Janssen, L.L.F., Huurneman, G.C., Bakker, W.H., Janssen, L.L.F., Reeves, C.V., Gorte, B.G.H., Pohl, C., Weir, M.J.C., Horn, J.A., **Prakash, A.**, Woldai, T., 2004, *Principles of remote sensing : An introductory textbook* : translated into Korean. ITC Educational Textbook Series, 180 p. ISBN: 89-953256-3-1.

Parodi, G.N. and **Prakash, A.**, 2004, Radiometric correction. in *Principles of remote sensing: an introductory textbook* (Third edition), edited by N. Kerle, ITC Educational Textbook Series. 250p., ISBN: 90-6164-227-2.

**Prakash, A.**, 2001, Chapter 8 - Radiometric aspects. in *Principles and Remote Sensing* (Second edition), edited by Janssen, L.L.F. and Huurneman, G.C., ITC Educational Textbook Series. 180 p. ISBN: 90-6164-199-3.

**Prakash, A.**, 1996, *Remote sensing - GIS based geoenvironmental studies in Jharia Coalfield, India, with special reference of coalmine fires*. Ph.D. Thesis, Department of Earth Sciences, UOR, Roorkee, India, 194 p.

### REFEREED JOURNAL PAPERS

---

Oommen, T., Misra, D., and **Prakash, A.**, 2009, Multiple Regressive Pattern Recognition Technique: A Novel Approach to Marine Placer Resource Estimation. *Mathematical Geosciences*, (in submission).

South, L., Prakash, A., and Rosenberger, A., 2009, Using SAR to map and monitor open water spawning habitat for fall chum salmon in the Tanana River, Alaska. *North American Journal of Fisheries Management*, (in review).

Green, J., Duguay C., Prakash, A., Sturm, M., and Li, S., 2009, Assessing the impact of sub-grid lakes on Snow Water Equivalent estimations – North Slope, Alaska, USA, *Remote Sensing of Environment*, (in revision).

Yarker, M.B., PaiMazumder, D., Cahill, C.F., Dehn, J., **Prakash, A.,** Mölders, N., 2009. Theoretical investigations on potential impacts of high-latitude volcanic emissions of heat, aerosols and water vapor and their interactions on clouds and precipitation. *Open Atmospheric Science Journal*, (revised and resubmitted).

Wiltse, M., **Prakash, A.,** Burns, L., 2009, Image Analysis of Airborne Geophysical Data from the Salcha River – Pogo Area, Alaska. *Canadian Journal of Remote Sensing*, (in print).

Kolker, A., Engle, M., Stracher, G., Hower, J.C., **Prakash, A.,** Radke, L.F, ter Schure, A., and Heffern, E.L., 2009, Emissions from Coal Fires and Their Impact on the Environment. *US Geological Survey, Fact Sheet 2009–3084*.

Ledley, T.S., **Prakash, A.,** Manduca, C., Fox, S., and DAWG members, 2008, Recommendations for Making Geoscience Data Accessible and Usable in Education. *EOS*, 89(32), 291, (DOI: 10.1029/2008EO2003).

Smikrud, K., Prakash, A., and Nichols, J., 2008, Decision based fusion for improved fluvial landscape classification using digital aerial photographs and forward looking infrared images. *Photogrammetric Engineering and Remote Sensing*, 74(7), 903-911.

Oommen, T., Misra, D., Twarakavi, N.K., **Prakash, A.,** Sahoo B.C., and Bandopadhyay S., 2008, An objective analysis of support vector machine based classification for remote sensing. *Mathematical Geosciences*, 40(4), 409-424.

Connor, C., and **Prakash, A.,** 2008, Experiential Discoveries in Geoscience Education: The EDGE Program in Alaska. *Journal of Geoscience Education*, 56(2), 179-186.

Oommen, T., Prakash, A., Misra, D., Naidu, S., Kelley, J.J., and Bandopadhyay S., 2008, GIS Based Marine Platinum Exploration, Goodnews Bay Region, Southwest Alaska, *Marine Georesources and Geotechnology*, 26(1), 1-18.

Berthelote, A.R., Prakash, A., and Dehn, J., 2008, An empirical function to estimate the depths of linear hot sources: Applied to the Kuhio Lava tube, Hawaii. *Bulletin of Volcanology*, 70 (7), 813-824.

**Prakash, A.,** and Berthelote A.R., 2007, Subsurface coal mine fires: Laboratory simulation, numerical modeling and depth estimation. *Geological Society of America: Reviews in Engineering Geology*, 18, 211-218.

**Prakash, A.,** 2006, Introducing Geoinformatics for Earth System Science Education. *Journal of Geoscience Education*, 54(5), 555-560.

Smikrud, K. and **Prakash, A.**, 2006, Detecting and monitoring large woody debris in a part of the Unuk river, Alaska, using digital aerial photography. *GIScience and Remote Sensing*, 43 (2), 142-154.

Stracher, G.B., **Prakash, A.**, Schroeder, P., McCormack, J., Zhang, X.M., and van Dijk, P., 2005, New mineral occurrences and mineralization processes: Wuda coal-fire gas vents of Inner Mongolia. *American Mineralogist*, 90(11-12), 1729-1739.

Zhang, J., Wagner, W., **Prakash, A.**, Mehl, H. and Voigt, S., 2004, Detecting coal fires using remote sensing techniques. *International Journal of Remote Sensing*, 25(16), 3193 - 3220.

**Prakash, A.** and Vekerdy Z., 2004, Design and implementation of a dedicated prototype GIS for coal fire investigations in North China. *International Journal of Coal Geology*, 59, 107-119.

**Prakash, A.**, Fielding, E.J., Gens, R., Genderen, J.L. van and Evans, D.L., 2001, Data fusion for investigating land subsidence and coalfire hazards in a coal mining area. *International Journal of Remote Sensing*, 22(6), 921-932.

**Prakash, A.**, Gens, R. and Vekerdy Z., 1999, Monitoring coal fires using multi-temporal night-time thermal images in a coalfield in North-west China. *International Journal of Remote Sensing*, 20(14), 2883-2888.

**Prakash, A.** and Gupta, R.P., 1999, Surface fires in Jharia Coalfield, India - their distribution and estimation of area and temperature from TM data. *International Journal of Remote Sensing*, 20(10), 1935-1946.

Gupta, R.P., and **Prakash, A.**, 1998, Reflection aureoles associated with thermal anomalies due to subsurface mine fires in the Jharia Coalfield, India. *International Journal of Remote Sensing*, 19(14), 2619-2622.

**Prakash, A.** and Gupta, R.P., 1998, Land-use mapping and change detection in a coal mining area - a case study of the Jharia Coalfield, India. *International Journal of Remote Sensing*, 19(3), 391-410.

**Prakash, A.**, Gupta, R.P. and Saraf, A.K., 1997, A Landsat TM based comparative study of surface and subsurface fires in the Jharia Coalfield, India. *International Journal of Remote Sensing*, 18(11), 2463-2469.

**Prakash, A.**, Saraf, A.K., Gupta, R.P., Dutta, M. and Sundaram, R.M., 1995, Surface thermal anomalies associated with underground fires in Jharia Coal Mine, India. *International Journal of Remote Sensing*, 16(12), 2105-2109.

**Prakash, A.**, Sastry, R.G.S., Gupta, R.P. and Saraf, A.K., 1995, Estimating the depth of buried hot feature from thermal IR remote sensing data, a conceptual approach. *International Journal of Remote Sensing*, 16(13), 2503-2510.

Saraf, A.K., **Prakash, A.**, Sengupta, S. and Gupta, R.P., 1995, Landsat TM data for estimating ground temperature and depth of subsurface coal fire in Jharia Coal Field, India. *International Journal of Remote Sensing*, 16(12), 2111-2124.

## REFEREED ONLINE PRODUCTS AND PUBLICATIONS \*

---

**Prakash, A.**, Gens, R., and McClung, S., 2007, Polar Remote Sensing: A resource for undergraduate education. Rated as '*Outstanding*' by NASA Science Mission Directorate Education Product Review Panel ([www.polar-remotesensing.alaska.edu](http://www.polar-remotesensing.alaska.edu)).

McCaffrey, M., Meier, W., **Prakash, A.**, Rogan, B., and Youngman, B., 2007, Whither Arctic Sea Ice? Case Study Chapter in the Earth Exploration Toolbook. Passed NASA educational and DLESE community review (<http://serc.carleton.edu/eet/seaice/>).

**Prakash, A.**, Gens, R., and Gupta, A., 2006, Treasure Hunt in Alaska. A website for grades 4-5 school children reviewed and approved by NASA Science Mission Directorate Education Product Review Panel ([www.treasure-hunt.alaska.edu](http://www.treasure-hunt.alaska.edu)).

**Prakash, A.**, Nielsen, C., Gupta, A., and Gens, R., 2004, Alaska: A Bird's Eye View. A website for middle school children reviewed and approved by NASA Earth Science Enterprise Education Product Review Panel ([www.birds-eye-view.alaska.edu](http://www.birds-eye-view.alaska.edu)).

\* Each product is approved after a rigorous review by a 5-6 member panel consisting of scientists and educators.

## PROCEEDINGS / OTHER JOURNALS

---

**Prakash, A.**, Ohler, J, Cooper, C., McDermott, M., Heinrich, J., Johnson, R., Leeper, L., Polk, N. and Wimer, T., 2009, AMIDST: Attracting Minorities to Geosciences Through Involved Digital Story Telling. *Eos Trans. AGU* (submitted).

Kienholz, C., **Prakash, A.**, and Kolker, A., 2009, Geothermal Exploration in Akutan, Alaska, Using Multitemporal Thermal Infrared Images. *Eos Trans. AGU* (submitted).

Oommen, T., Baise, L.G., Gens, R., **Prakash, A.**, and Gupta, R.P., 2009, Documenting Liquefaction Failures Using Satellite Remote Sensing and Artificial Intelligence Algorithms. *Eos Trans. AGU* (submitted).

Orlich, A., Hutchings, J., and **Prakash, A.**, 2009, Comparing Field Observations of Arctic Sea Ice to SSM/I and AMSR-E Sea Ice Products 2006-2009. *Eos Trans. AGU* (submitted).

Taber, M.R., Ledley, T.S., **Prakash, A.** and Domenico, B., 2009, Making Geoscience Data Relevant for Students, Teachers, and the Public. *Eos Trans. AGU* (submitted).

Wyatt, C., **Prakash, A.** et al., 2009, An Integrated Multi-Scale Approach to the Study of Evapotranspiration on the Alaskan North Slope: Preliminary Characterization of Fluxes and Turbulence in the Innavaik Creek Basin. *Eos Trans. AGU* (submitted).

Kienholz, C. and **Prakash, A.**, 2009, Glaciers in the Copper River Area (Southern Alaska) – A Spatio-Temporal Analysis Based on Satellite Imagery and Aerial Photographs, *ASPRS/MAPPS Specialty Conference: From Elevation to Information*, San Antonio, TX, November 16 - 19.

Roon, D., Wipfli, M.S., Wurtz, T.L., and **Prakash, A.**, 2009, Ecological Effects of Introduced European Bird Cherry on Salmonid Food Webs in Anchorage Streams. *Annual Meeting of the American Fisheries Society*. (submitted).

Kienholz, C. and **Prakash, A.**, 2009, Use of Alaska High Altitude Program (AHAP) Imagery to Determine Changes in Alaska's Glaciers, *Geological Society of America Annual Meeting*, Portland, OR, October.

Kolker, A., Engle, M.A., Hower, J.C., O'Keefe, J., Heffern, E.L., Radke, L.F, Stracher, G.B., **Prakash, A.**, ter Schure, A., Olea, R. and Román-Colón, 2009, Quantifying atmospheric CO<sub>2</sub> emissions from coal fires: Sampling approaches and some U.S. examples, *Geological Society of America Annual Meeting*, Portland, OR, October.

Kolker, A., Engle, M.A., Hower, J.C., O'Keefe, J., Radke, L.F, Heffern, E.L., ter Schure, A., Stracher, G.B., **Prakash, A.**, Román-Colón, Y., and Olea, R., 2009, Measuring CO<sub>2</sub> emissions from coal fires in the U.S., Proceedings, *Annual International Coal Conference*, Pittsburgh, PA, September, 7 p. [Best technical paper, 2009 Conference]

**Prakash, A.**, Anderson, M., Baise, L., Csaplovics, E., Fochesatto, J., Gens, R., Gupta, R.P., Kane, D., Mumm, J., Okkonen S.R., Oommen, T., Saha, A., Trochim, E., Wilson R., and Wyatt, C., 2009, HypsIRI Preparatory Science at the University of Alaska Fairbanks, *Second HypsIRI Mission Science Workshop*, Pasadena, CA, August 11-13.

**Prakash, A.**, 2009, Investigating the Arctic Alaskan Coasts and Ecosystems: Remote-sensing and GIS based research at UAF, *HARC Workshop*, Woodlands, TX, July 23.

**Prakash, A.**, Ohler, J., and Connor, C., 2009, Enhancing Diversity in Geosciences in Alaska Through an Introduction of Geospatial Education and Digital Storytelling, *National Science Teachers Association Annual Meeting*, New Orleans, Louisiana, March 19-22, Session no. 2028.

Orlich A., Hutchings J., and **Prakash A.**, 2009, Comparing Field Observations of Arctic Sea Ice to AMSR-E Sea Ice Products During the International Polar Year 2007-2009. *Annual Meeting of the Association of American Geographers*, Las Vegas, NV, March 22-27, Session no. 4516.

Ledley, T.S., **Prakash, A.**, Manduca, C., and Fox, S., 2009, Finding Earth Science Data Relevant to You, Your Students and Your Curriculum, *National Science Teachers Association Annual Meeting*, New Orleans, Louisiana, March 19-22, Session no. 1308.

Gens, R., and **Prakash, A.**, 2009, Remote Sensing for Mapping Earth Surface Composition and Change, Technical Session at the *43rd Alaska Surveying and Mapping Conference*, Anchorage, AK, February 23 – 27.

**Prakash, A.**, Engle, K., Panda, S., Margraf, J., and Underwood, T., 2008, Nearshore Thermal Habitat and General Circulation Mapping in Arctic Alaskan Coasts Using Archived AVHRR Images. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract no. OS11D-1166.

**Prakash, A.**, and Connor, C., 2008, Recruiting first generation college students into the Geosciences: Alaska's EDGE project. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract no. ED52A-03.

Bailey, J.E., Webley, P., and **Prakash, A.**, 2008, Illustrating the Geosciences Through Google Earth. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract no. ED31A-0600.

Gens, R., **Prakash, A.**, and Li, S., 2008, Mapping deforestation in parts of the Amazon forest using JERS-1 SAR images: Case study for an area north west of Rondonia, Brazil. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract no. IN31C-1153.

Ledley, T.S., **Prakash, A.**, Manduca, C., Fox, S., Dahlman, L., Domenico, B., and Taber, M.R., 2008, Archiving Data to Facilitate Its Use in Education. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract no. U13D-05.

Oommen, T., Baise, L.G., Gens, R., **Prakash, A.**, and Gupta, R.P., 2008, Multisensor and Multispectral Approach in Documenting and Analyzing Liquefaction Hazard using Remote Sensing. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract no. IN13A-1054.

Panda, S., **Prakash, A.**, and Solie, D., 2008, Identification of Surface Signatures Indicative of Near-Surface Permafrost in the Alaska Highway Corridor. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract no. C31E-0553.

Trochim E., **Prakash, A.**, and Kane, D., 2008, Delineating Water Tracks in Headwater Drainage Basins of the Alaskan Arctic. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract no. C31E-0558.

**Prakash, A.**, Collett, T., Hanks, K., Fisk, B., Papp, K., and Sarkar, S., 2008, Terrestrial Gas Hydrate Characterization in Alaska North Slope: Exploring New Ideas and Research Directions. *Geological Society of America*, Houston, Texas. Abstract no. 138-15.

**Prakash, A.**, Bailey, J.E., and Webley, P., 2008, Integrating Virtual Globe Research Applications into the Educational Curriculum. *Geological Society of America*, Houston, Texas.

Connor, C., **Prakash, A.**, and Brownlee, M., 2008, GIS In Alaska's Grades 6-12 Earth Science Environment: The Experiential Discoveries in Geoscience Education (EDGE) Project. *Geological Society of America*, Houston, Texas.

Stracher, G., Hower, J., Hiatt, J., **Prakash, A.**, Pone, D. et al., 2008, Coal Fires: Gateway to Environmental Destruction and Human Suffering. *SpontCom2008*, Johannesburg, South Africa, September 9. Plenary address at international conference (delivered by graduate student Denis Pone).

Dixon, J.E., Lee, C.M., **Prakash, A.**, Harrison, W., and Manley, W.F., 2008, Ice Patch Archeology of Alaska's Wrangell St. Elias National Park. Conference on Ice Patch Archaeology and Holocene Climate Change, Bern, Switzerland, August 21-22.

Rosenberger, A., Triebenbach, S., **Prakash, A.**, Chapin, T., and Margraf, J., 2008, Effects of water loss on Fish communities in the Arctic: landscape perspectives and future research

directions. 138<sup>th</sup> Annual Meeting of the American Fisheries Society, Ottawa, Canada, August 17-21.

Triebenbach, S., Rosenberger, A., **Prakash, A.**, Margraf, J., and Chapin, T., 2008, GIS mapping of fish habitat in the Yukon Flats National Wildlife Refuge. 138<sup>th</sup> Annual Meeting of the American Fisheries Society, Ottawa, Canada, August 17-21.

Panda, S., **Prakash, A.**, and Solie, D., 2008, Remote Sensing-Based Study of Vegetation Distribution and Its Relation to Permafrost in and Around George Lake Area, Central Alaska. Ninth International Conference on Permafrost, Fairbanks, AK, June 29 -July 3.

Trochim, E.D., Kane, D.L., and **Prakash, A.** 2008. Examining the Temporal Variation in Headwater Drainage Networks and Potential to Thermokarst Using Remote Sensing in the Imnavait Basin. Ninth International Conference on Permafrost, Fairbanks, AK, June 29 -July 3.

Sarkar, S., Eicken., H., **Prakash, A.**, 2008, Texture based image classification of early fall lake ice in Western Prudhoe Bay region of North Slope Alaska with ERS2 SAR image. The 10<sup>th</sup> International Circumpolar Remote Sensing Symposium and 29<sup>th</sup> Canadian Symposium on Remote Sensing, Whitehorse, Yukon, Canada. June 2-5.

Trochim, E.D., Kane, D.L., and **Prakash, A.** 2008, Examining the Relationships between Thermokarst and Headwater Drainage Networks using Remote Sensing in the Upper Kuparuk Basin. The 10<sup>th</sup> International Circumpolar Remote Sensing Symposium and 29<sup>th</sup> Canadian Symposium on Remote Sensing, Whitehorse, Yukon, Canada. June 2-5.

Hook, S.J., Abrams, M., Anderson, M., Crowley, J., Eneva, M., Giglio, L., Kruse, F., Ousounov, D., **Prakash, A.**, Quattrochi, D., Realmuto, V., Roy, D., Silver, P. and Wright, R., 2008, The Thermal Infrared Instrument on the HypsIRI Mission: a key measurement for Wildfire and Water Use Ecosystems Related Research. NASA Carbon Cycle and Ecosystems Joint Science Workshop, Adelphi, MD., April 28 – May 2.

Sarkar, S., **Prakash, A.**, Layer, P., and Collett, T.S., 2008, Interpretation of soil hydrocarbon gas data for assessing thermogenic gas migration over the Eileen and West Sak Fault zones, North Slope, Northern Alaska. Alaska Geological Society Technical Conference, Anchorage, AK, April 17.

**Prakash, A.**, and Gens, R., 2007, Promoting Use of Remote Sensing Data and Technology through Polar Case Studies for Post-Secondary Education and Research. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract ED51B-0410.

Connor, C., and **Prakash, A.**, 2007, Alaska's Secondary Science Teachers and Students Receive Earth Systems Science Knowledge, GIS Know How and University Technical Support for Pre- College Research Experiences: The EDGE Project. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract ED51A-0130.

Wilson, R.A., Dehn, J., **Prakash, A.**, and Wessels, R., 2007, Lava Effusion Rates from Satellite Remote Sensing for Kliuchevskoi Volcano, Kamchatka- Russia in 2007. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract V21A-0385.

**Prakash, A.**, Connor, C., and Smikrud, K., 2007, Authentic geoscience research experiences using GPS-GIS skills to excite Alaska's middle and high school students about Earth science. *Geological Society of America*, Denver, Abstracts.

Connor, C., **Prakash, A.**, Berner, L., Hood, E., and Heavner, M., 2007, Glacier Surface Field Experiences and GIS training provide Alaska's Science Teachers with Climate Change Assessment tools for use in Middle School and High School classrooms. *Geological Society of America*, Denver, Abstracts.

Hendricksen, G.A., **Prakash, A.**, and Blake, D.R., 2007, Estimation of gas emissions from shallow subsurface coal fires in Jharia coalfield, India, using FLIR data and coal fire gas analysis. *Geological Society of America*, Denver, Abstracts.

Sarkar, S., **Prakash, A.**, and Gens, R., 2007, Detecting unique structures in early fall lake ice in Alaska North Slope using optical and SAR images, *AAAS Annual Meeting*, Anchorage, AK., September 20-21.

**Prakash, A.**, Brown, N., and Lees, R., 2007, Geospatial Workforce Development Initiative of the Alaska Space Grant Program: Inviting Industry to Partner in Earth and Space Science Research, Education and Training. *41st Annual Alaska Surveying and Mapping Conference*, Fairbanks, AK, March 19-23.

**Prakash, A.**, and Gens, R., 2007, Remote Sensing and GIS based Alaska mapping and monitoring studies: Results from last five years of UAF student projects. *41st Annual Alaska Surveying and Mapping Conference*, Fairbanks, AK, March 19-23.

Smikrud, K., Margraf, J., **Prakash, A.**, and Frenette, B., 2007, A Remote Sensing-GIS Based Approach for Assessment of Chinook Salmon Rearing Habitat In The Unuk River Floodplain. *41st Annual Alaska Surveying and Mapping Conference*, Fairbanks, AK, March 19-23.

**Prakash, A.**, Connor, C., and Brownlee, M., 2006, Empowering Alaska Teachers with GPS-GIS Skills through Experiential Discoveries in Geoscience Education: Planning, Implementing and Evaluating a Teachers Training Course. *Eos Trans. AGU*, 87(52) Fall Meet. Supplement., Abstract ED11B-1197.

Connor, C., **Prakash, A.**, Brownlee, M., Nagorski, S., and Walling, R., 2006, EDGE (Experiential Discoveries in Geoscience Education) Field Course Provides Alaskan High School and Middle School students with Earth Science and GIS Skills for Science Fair Projects and a College Experience. *Eos Trans. AGU*, 87(52) Fall Meet. Supplement, Abstract ED23B-1248.

Gens, G., **Prakash, A.**, and McClung, S., 2006, Polar Remote Sensing: A Web Resource to Promote the Use of Remote Sensing Data in Undergraduate Education and Research. *Eos Trans. AGU*, 87(52) Fall Meet. Supplement, Abstract ED43E-0962.

Lee, S.P., **Prakash, A.**, Reider, D., and Baker, D., 2007, Tested Tools You Can Use: Evaluating Earth System Science Courses. *Eos Trans. AGU*, 87(52) Fall Meet. Supplement, Abstract ED53B-0857.

Oommen, T., Misra, D., **Prakash, A.**, and Bandopadhyay, S., 2006, Marine Geodatabase and Multiple Regressive Pattern Recognition Technique: A New Approach to Marine Placer Resource Assessment. *Eos Trans. AGU*, 87(52) Fall Meet. Supplement, Abstract IN14A-05.

Papp, K., **Prakash, A.**, Hanks, K., and Collett, T., 2006, Analysis of Near Surface Hydrocarbon Distribution Pattern Around the Eileen Fault zone, Alaska North Slope. *Eos Trans. AGU*, 87(52) Fall Meet. Supplement, Abstract OS33B-1710.

**Prakash, A.**, 2006, Tracking, documenting and disseminating global information about coal fires. *Geological Society of America*, Philadelphia, Abstracts 38(7), p.94.

Stracher, G., and **Prakash, A.**, 2006, The origin of gas-vent minerals: Isochemical and mass transfer processes. *Geological Society of America*, Philadelphia, Abstracts 38(7), p.168.

Ruzek, A., **Prakash, A.**, et al., 2006, A design guide for undergraduate earth system science education. *Geological Society of America*, Philadelphia, Abstracts 38(7), p.218.

Hess, E., McCarthy, P., and **Prakash, A.**, 2006, Cold climate fluvial processes: an integrated study of the Colville River, Alaska. *Geological Society of America*, Philadelphia, Abstracts 38(7), p.282.

Ritchie, B., Lingle, C., Truffer, M., Motyka, R., Arendt, A., **Prakash, A.**, Echelmeyer, K., and Zirnheld, S., 2006, Seasonal and spatial variations in the advance of Hubbard Glacier, south-central Alaska. *36th Annual Northwest Glaciology Meeting*, Sep. 15-16, Fairbanks, Alaska.

Ritchie, B., Lingle, C., Truffer, M., Motyka, R., Arendt, A., **Prakash, A.**, Echelmeyer, K., and Zirnheld, S., 2006, Seasonal and spatial variations in the advance of Hubbard Glacier, south-central Alaska. *Geophysical Research Abstracts*, EGU, Vol. 8, 06345.

Bailey, R.D., and **Prakash, A.**, 2006, Searching for the Allochthon/Parautochthon Boundary: Using Landsat for Stratigraphic and Structural Mapping, Eastern Brooks Range, Alaska. *AAPG Pacific Section Meeting*, Anchorage, Alaska, May 8-10.

Hess, E., **Prakash, A.**, and McCarthy, P., 2006, Cold climate fluvial processes: an integrated study of the Colville River, Alaska. *AAPG Pacific Section Meeting*, Anchorage, Alaska, May 8-10.

**Prakash, A.**, 2006, Alaska: A Natural Laboratory to Learn Physics and Geophysics, *meeting of the American Association of Physics Teachers*, 23 January, Anchorage, USA.

**Prakash, A.**, 2005, INPOSE: A Proposed UAF- UArctic IPY Post Secondary Education Initiative. *Eos Trans. AGU*, 86(52), Fall Meeting Supplement, Abstract ED11D-1125.

Burger, E., and **Prakash, A.**, 2005, Monitoring Six Decades of Thermokarst Change in the Barrow Region, Alaska, Using Remote Sensing Data. *Eos Trans. AGU*, 86(52), Fall Meet. Supplement, Abstract C31A-1116.

Oommen, T., Kelley, J., Naidu, S., **Prakash, A.**, Misra, D., and Bandopadhyay, S., 2005, GIS Analysis of Marine Geophysical Signatures to Decipher Depositional Patterns of Platinum

Placer in Offshore Goodnews Bay Region, Alaska. *Eos Trans. AGU*, 86(52), Fall Meeting Supplement, Abstract IN23B-1214

Papp, K., **Prakash, A.** and Collett, T., 2005, Integrated Analysis of Permafrost Features, Gas Seeps, Gas Hydrate and Geologic Structures Southwest of Prudhoe Bay, *Eos Trans. AGU*, 86(52), Fall Meeting Supplement., Abstract C11A-1061.

**Prakash, A.**, 2005, Introducing ESS concepts for K-16 through web based stories and specialized geospatial education. *Coalition for Earth Science Education Meeting*, 23-24 September, GSFC Greenbelt, USA.

Oommen, T., **Prakash, A.**, Misra, D., Gens, R., Bandopadhyay, S., Naidu, S., and Kelley, J.J., 2005, Marine placer platinum prospects near Goodnews bay, Alaska: GIS database design and preliminary analysis. *Alaska Geological Society 2005 Geology Symposium*, April 29, Fairbanks, USA.

Dean, K., **Prakash, A.**, Hanks, C., and Collett, T., 2005, Integrated analysis of permafrost features, gas seeps, gas hydrates and geologic structures in Prudhoe Bay, Alaska. *Alaska Geological Society 2005 Geology Symposium*, April 29, Fairbanks, USA.

**Prakash, A.**, and Brown, N., 2005, Geospatial education in Alaska's high schools: A new initiative of the Alaska Space Grant Program, *EOS Transactions, AGU*, 86(18), Joint Assembly Supplement., New Orleans, USA.

**Prakash, A.**, Gens, R., and Gupta, A., 2005, Explaining earth and space science concepts to middle school children through interactive web based stories. *EOS Transactions, AGU*, 86(18), Joint Assembly Supplement, New Orleans, USA.

Stracher, G. B., **Prakash, A.**, Schroeder, P., and McCormack, J., 2004, New mineral occurrences from the Wuda coalfield fires of Inner Mongolia, *Geological Society of America*, 36(5), 42.

**Prakash, A.**, 2004, The role of space based observations in the IPY and IHY education outreach. *AGU Fall Meeting*, 13-17 December, 2004, San Francisco, USA.

Gens, R., Toniolo, H., McCarthy, P., and **Prakash, A.**, 2004, Understanding Arctic river systems: An effort to train undergraduate and graduate students. *AGU Fall Meeting*, 13-17 December, 2004, San Francisco, USA.

**Prakash A.**, and Cooper G., 2004, GIS-GPS for Alaska teachers: A reflection. *Fourth Biennial Alaska Math and Science Conference*, October 14-16, 2004, Fairbanks, USA.

**Prakash, A.**, 2004, Global dimension of coal mine fires. *GSA Annual Meeting: Geoscience in a changing world*. 7-10 November, 2004, Denver, USA.

**Prakash, A.**, Gens, R., Kelley, J., Alexander, V., Johnson, L., Yanow, G., 2004, Space-based observations in the International Polar Year: Educational opportunities to strengthen the STEM pipeline. *IEEE International Geoscience and Remote Sensing Symposium*, September 20-24, Anchorage, USA.

Venkateshwarlu, C., Gopal Rao, K., and **Prakash, A.**, 2004, Neural networks in land surface temperature mapping in urban areas from thermal infrared data. *IEEE International Geoscience and Remote Sensing Symposium*, September 20-24, Anchorage, USA.

Dean K., and **Prakash A.**, 2004, Identifying surface expressions of shallow gas hydrates using remote sensing - GIS in the Alaska North Slope. *AAPG Hedberg Research Conference*, September 12-16, Vancouver, Canada.

**Prakash, A.**, Nielsen, C., and Gupta, A., 2003, Exposing middle school students to remote sensing in Alaska. *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract ED22B-1240, 8 - 12 December 2003, San Francisco, USA.

**Prakash, A.**, Kelly, J., Naidu, S., and Gens, R., 2003, A remote sensing - GIS based approach to monitor morphodynamics of the Alaskan Arctic coasts. *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract OS52B-0912, 8 - 12 December 2003, San Francisco, USA.

Venkateshwarlu, C., Gopal Rao, K., and **Prakash, A.**, 2003, Artificial neural networks in the improvement of effective spatial resolution of thermal infrared data for improved landuse classification. *URBAN-2003: Second IEEE/ISPRS Joint Workshop on Remote Sensing and Data Fusion over Urban Areas*, 22-23 May 2003, Berlin, Germany.

**Prakash, A.**, 2003, Coal mine fire investigation and management: A novel operational application of remote sensing and GIS technology. *ASPRS 2003 Annual Conference*, May 5-9, Anchorage, USA.

**Prakash, A.**, and Gens, R., 2003, Remote sensing in optical and microwave region for detecting coal mining induced subsidence. *ASPRS 2003 Annual Conference*, May 5-9, Anchorage, USA.

O'Guinn, S., **Prakash, A.**, and McCarthy, P., 2003, Remote sensing - GIS based mapping of channel migration in parts of the Colville River, Alaska. *Alaska Geological Society 2003 Geology Symposium*, April 25, Fairbanks, USA.

Wang, C., Maathuis, B.H.P., **Prakash, A.** and van Dijk, P.M., 2003, Detection of coal fires in Xinjiang, China, using remote sensing techniques. In: Proceedings of a one day workshop on deposits and geoenvironmental models for resources exploitation and environmental security, in honour of Prof. Dr. Andrea Fabbri's early retirement from ITC : Enschede, 5 April 2002 / ed. by T. Woldai. Enschede, ITC Publication ; 82.

Wagtendonk, A.J., and **Prakash, A.**, 2003, Knowledge sharing through the web: the use of multimedia in a European research project. In the *Final project report of the GETS project- A European Research Network for the Application of Geomorphology and Environmental Impact Assessment to Transportation Systems*.

van Dijk, P., **Prakash, A.**, Maathuis, B., and Zhang, X.M., 2003, Monitoring coal fires in North China- a remote sensing and GIS approach. *American Association for the Advancement of Science Symposium 1034*, February 14, Colorado, USA.

Stracher, G.B., Taylor, T.P. and **Prakash, A.**, 2002, Coal Fires: A synopsis of their origin, remote sensing detection, and thermodynamics of sublimation, in Shannon, S., editor, Case

histories of mine reclamation and regulation. *Environmental Technology for Mining*: Robertson GeoConsultants Inc., Reno, NV; Vancouver, B.C., p. 1-8.

Das, K.D., Gopal Rao, K., **Prakash, A.**, 2001, Improvement of effective spatial resolution of thermal infrared data for urban landuse classification. *IEEE/ISPRS Joint Workshop on Remote Sensing and Data Fusion over Urban Areas*, 8-9 November 2001, Rome, Italy.

Jain, S. and **Prakash, A.**, 2000, Image fusion to study the urban expansion patterns in Delhi region, India. *SPIE's International Symposium on AeroSense - Sensor Fusion: Architectures, Algorithms, and Applications IV (OR46)*, 24-28 April 2000, Orlando, Florida USA.

**Prakash, A.**, 2000, Thermal remote sensing: Concepts, issues and applications. *XIXth ISPRS Congress*, 16-23 July 2000, Amsterdam, The Netherlands.

Vekerdy, Z., **Prakash, A.** and Gens, R., 2000, Multimédia a távérzékelés oktatásában egy képfúziós oktatóprogram példájával. *HUNGEO 2000*, 15-19 August 2000, Piliscsaba, Hungary.

**Prakash, A.**, 1999, The dynamics of coal mining and coal fires in the Jharia Coalfield, India: geoenvironmental and socioeconomic impacts. *Second International Symposium on Operationalization of Remote Sensing*, 16-20 August 1999, Enschede, The Netherlands.

**Prakash, A.**, Sharif, M. and Genderen J.L. van, 1999, Integrated application of geo-techniques for coalfire studies in North China Coalfield. *Thematic conference and exhibition on Geomatics*, NCC, Tehran-Iran. March 1999, 6p.

Vekerdy Z., Gens, R. and **Prakash, A.**, 1999, Use of optical and radar imagery to estimate and monitor the quantity of oil in storage tanks. *Twentieth Annual Conference and Exhibition of the Remote Sensing Society*, 8-10 September 1999, University of Wales at Cardiff and Swansea.

Vekerdy Z., Wang, F., Zhang, J.M. and **Prakash, A.**, 1999, Requirements for the integration of remote sensing and field data in a GIS for the management of fire fighting in coalfields *Second International Symposium on Operationalization of Remote Sensing*, 16-20 August 1999, Enschede, The Netherlands.

Vekerdy Z., **Prakash, A.** and Gens R., 1999, Data integration for the study and visualisation of subsurface coalfires. *Thirteenth International conference and workshop on Applied Geologic Remote Sensing*, Vancouver, British Columbia, Canada, 1-3 March 1999. Fetched 'Best of the Session' Award.

**Prakash, A.**, 1997, Presenter for poster entitled 'Integrated modelling for estimating the depth of underground coal fires' by Peng Wenxiang, Gaofeng Kang and John van Genderen at the *Twelfth International conference and workshop on Applied Geologic Remote Sensing*, Denver, Colorado, U.S.A., 17-19 November 1997. Fetched 'Best of the Session' Award.

**Prakash, A.**, 1996, Utility of remote sensing and GIS for petroleum exploration – A thought. *IGC Newsletter*, 4(1-2), 7-8.

**Prakash, A.**, 1995, A case study in the Jharia Coalfield based on remote sensing - GIS. *International course on 'Modern technologies for mineral resources assessment and management'*, I.G.C., UOR, Roorkee, 20 December, 1995 to 13 January, 1996, 31.1-31.8.

**Prakash, A.**, 1995, Expanding domain of geosciences. *IGC Newsletter*, **3**(1), 52.

**Prakash, A.**, 1992, Weighing geoscience as a profession for women. *International Colloquium on Role of Women Geoscientists in National Planning and Development Programmes*, New Delhi, India, 23-25 November 1992, pp. 54-55.

## **MULTIMEDIA / REPORTS / WHITE PAPERS**

---

Almberg., L., **Prakash, A.**, and Cameron, W., 2007, Alaska Volcano Explorer: Interactive Volcano Education. (<http://www.uaf.edu/asgp/k12/volcano/>).

Lee, S., **Prakash, A.**, and Reider, D., 2006, Earth System Science Education Evaluation Toolkit. ([http://essedesignguide.org/index.php?option=com\\_content&task=view&id=202&Itemid=289](http://essedesignguide.org/index.php?option=com_content&task=view&id=202&Itemid=289)).

**Prakash, A.**, 2006, Data, Tools and Models. A section in ESSE21 Design Guide. ([http://essedesignguide.org/index.php?option=com\\_content&task=view&id=21&Itemid=82](http://essedesignguide.org/index.php?option=com_content&task=view&id=21&Itemid=82)).

Caron, B, Ledley, T., Dahlman, L., Manduca, C., Mogk, D., Haberman, T., **Prakash, A.**, and Prothero, B., 2004, Building earth data resources into DLESE. A white paper from the DLESE Data Access Working Group, 29 p.

Genderen, J.L. van, Gens, R., Vekerdy, Z., **Prakash, A.**, Cornelis, J., Boekarts, P., Munteanu, A., Sahli, H., Christopoulos, V., Veen, B.S. van and Jellema, H.W., 1998, *FUSETUTOR - A tutorial on remote sensing image and data fusion*. Multimedia tutorial Ver. 2. (Enschede:ITC).

Genderen, J.L. van, **Prakash, A.**, Gens, R., Veen, B.S. van, Liding, C., Tao, T.X. and Feng, G., 2000, *Coal fire interferometry*. Netherlands Remote Sensing Board, USP-2-99-32, 63p.

**Prakash, A.**, 1999, Major contributor to Manual of Coal Fire Detection and Monitoring, NITG 99-221-C, ISBN 90-6743-640-2, 245 p.