

CV of Hongjie Xie

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I. Educational Background

Ph.D., University of Texas at El Paso, Geological Science, 2002
M.S., Beijing Research Institute of Uranium Geology and China University of Geosciences (Beijing), Geochemistry, 1993
B.S., East China Institute of Technology, Geology, 1990

II. Professional Employment History

Aug., 2004 – present, *Assistant Professor*, Department of Geological Sciences at UTSA, TX
Jul., 2002 - Aug., 2004, *Postdoctoral fellow*, New Mexico Tech, NM.
Jun., 2002 - Jul., 2002, *RA*, Dept. of Geological Sciences at U. Texas at El Paso (UTEP), TX
Feb., 2002 - Jul., 2002, *GIS Consultant*, Perspectiva Inc., El Paso, TX.
Jul., 2001 - May, 2002, *GIS/RS Specialist*, El Paso Water Utilities (EPWU), TX
Jan., 1999 – Jul., 2001, *RA and TA*, Dept. of Geological Sciences at UTEP, TX
Oct., 1998 - Dec., 1998, *Tech Support*, Singapore 3-Link System, Beijing, China
Aug., 1993 - Jul., 1998, *Research Scientist*, Beijing Res. Inst. of Uranium Geology, China.

III. Awards and Honors

2009 As the primary advisor of PhD student Burcu Cicek who awarded a **University Teaching Fellowship** (academic year 2009-2010) to improve her professional development.
2009 As the team co-leader (with my student Burcu Cicek), our **workshop** proposal entitled “Monitoring Arctic and Antarctic sea ice from various satellite products” **approved for implementation** by the International Space Science Institute (ISSI) at Bern, Switzerland. The ISSI will provide expenses for all participants (12-15 persons) except for the air tickets

- (will be funded by our NASA project). The workshop is planned for the early 2010 at the ISSI.
- 2009 As the PI and project advisor for the **NASA Earth and Space Science Fellowship** (NESSF) awarded to Ms. Penny Wagner (\$30K per year for three years) for her to continue her doctoral study on Antarctic sea ice.
- 2009 Co-author and co-advisor for **the best poster presentation** given by Dr. Blake Weissling at the Gordon Research Conference Polar Marine Science, Mar 14-19, at Lucca, Italy.
- 2009 As the PI for the project entitled "Antarctic sea ice: thickness, concentration and extent and their changes" approved as European Space Agency (ESA)'s **Category 1 project** to freely use their ENVISat radar and altimetry data (2009-2012).
- 2008 Appointed and honored as **adjunct professor** at the East China Institute of Technology (FuZhou), where I received my Bachelor degree of Science in Geology in 1990.
- 2007 Awarded a grant from the Texas Space Grant Consortium's **New Investigations Program** to study the Martian H₂O and CO₂ cycles.
- 2007 Xie and his student (Burcu Cicek) awarded **three IOKONS images** (value \$8,141) from GeoEye Foundation to study Antarctic sea ice and Mt. Erebus volcano.
- 2006 Co-author and advisor for **the second place paper presentation** given by Ms. Burcu Cicek at the ASPRS-MAPPS fall 2006 conference, Nov 6-10, San Antonio, TX.
- 2005 Faculty advisor for the Texas Space Grant Consortium **Graduate Fellowship** to Mr. Blake Weissling for studying oak wilt disease using remote sensing tech.
- 2002 **Outstanding** Dissertation Award - Science and Engineering, at University of Texas at El Paso (UTEP).
- 2002 **Outstanding** Ph.D. Dissertation, Department of Geological Sciences (UTEP).
- 2002 **Outstanding** Ph.D. Student in Geological Sciences, College of Science (UTEP).
- 2002 **1st place** oral presentation, for research topic *Examples of application of integrated remote sensing and GIS technologies*, at the Departmental 16th annual student colloquium (UTEP).
- 2001 **2nd place** oral presentation, for research paper *Automatic image registration based on a FFT algorithm and IDL/ENVI*, at the Departmental 15th annual student colloquium (UTEP),
- 1999 China National Nuclear Corporation (CNNC), the **3rd place** prize of Ministerial level, for research project *Methodology Study and Software Development of Ground Objects Frequency Spectrum Abstracted from Remote Sensing Image*.
- 1998 China National Nuclear Corporation (CNNC), the **2nd place** prize of Ministerial level, for research project *Hyperspectral Image Processing and Application in Miaoershan District, South China*.
- 1997 Beijing Geological Society, the **2nd place** award for paper Xie Hongjie and He Jianguo (1997), *Application of Radioactivity Remote Sensing Techniques to Uranium Metallogenic Environment Analyses and Prospective Prognosis in Anshan-Benxi Area, Liaoning Province, China*, "Uranium Geology", Vol. 13, 95-100.
- 1996 Beijing Research Inst. of Uranium Geology, the **1st place** award of annual achievement congress, for academic report *Hyperspectral Image Processing and Application in Miaoershan District, South China*.
- 1996 China National Nuclear Corporation(CNNC), the **2nd place** prize of Ministerial level, for research project *The Formation Mechanism and Prognosis on the Prospect of Pegmatite Type Uranium Deposit in Northern Qinling of China*.

- 1995 China National Nuclear Corporation (CNNC), the **3rd place** prize of Ministerial level, for research project *Application of Radioactivity Remote Sensing Techniques to Uranium Metallogenic Environment Analyses and Prospective Prognosis in Anshan-Benxi Area, Liaoning Province, China*.
- 1993 China Young Geologists Conference on Mineralogy, Petrology and Geochemistry, the **2nd place** award, for academic report *Geochemistry, Petrogenesis and Metallogenesis of the Caledonian Granitic Pegmatite Type Uranium Deposit in Northern Qinling of China* (My Master's Thesis).
- 1990 East China Geological Institute (now East China Institute of Technology), **Outstanding** student and **Outstanding** student leader.

IV. Research/Scholarly/Creative Activities Summary

(* denotes first author of my students)

Refereed Publications

- **Journal articles**

31. Zhu, M, **H. Xie**, and H. Guan, 2009. Algorithm development for Martian atmospheric correction and spatiotemporal variation study of atmospheric profiles. *MARS, The International Journal of Mars Science and Exploration* (in press).
30. Guan, H., J.L. Wilson, **H. Xie**, 2009. A cluster-optimizing regression-based approach for precipitation spatial downscaling in mountainous terrain. *Journal of Hydrology*, Vol 375: 578-588, doi:10.1016/j.jhydrol.2009.07.007
29. *Wang, X. and **H. Xie**, 2009. New methods for studying the spatiotemporal variation of snow cover based on combination products of MOIDS Terra and Aqua. *Journal of Hydrology*, Vol 371 (192-200). doi:10.1016/j.jhydrol.2009.03.028.
28. *Weissling, B., S.F. Ackley, P. Wagner, and **H. Xie**, 2009. EISCAM - Digital image acquisition and processing for sea ice parameters from ships. *Cold Regions Science and Technology*, 57(1): 49-60. doi:10.1016/j.coldregions.2009.01.001
27. *Ozsoy-Cicek, B., **H. Xie**, S.F. Ackley, and K. Ye. Antarctic summer sea ice concentration and extent: comparison of ODEN 2006 ship observations, satellite passive microwave and NIC sea ice charts. *The Cryosphere*, Vol.3 (1): 1-9.
26. Fan, C., D. Schulze-Makuch, **H. Xie**, and N. Lu. Investigation of water signatures at gully-exposed sites on Mars by hyperspectral image analysis. *Planetary and Space Science*, Vol.57 (1): 93-104, doi:10.1016/j.pss.2008.10.011 (in press)
25. *Weissling, B. and **H. Xie**. MODIS biophysical states and NEXRAD precipitation in statistical evaluation of antecedent moisture condition and streamflow. *Journal of the American Water Resources Association*, 45(2): 419-433, DOI: 10.1111/j.1752-1688.2009.00300.x.
24. *Wang, X., **H. Xie**, T. Liang, X. Huang, Comparison and Validation of MODIS Standard and New Combination of Terra and Aqua Snow Cover Products in Northern Xinjiang, China. *Hydrological Processes*, Vol.23 (3): 419-429, doi: 10.1002/hyp.7151.

23. Guan, H., H. Hsu, O. Makhnin, **H. Xie**, and J. Wilson, 2009. Examination of selected atmospheric and orographic effects on monthly precipitation of Taiwan using the ASOAdEK model. *International Journal of Climatology*, Vol 29 (8): 1171-1181, doi:10.1002/joc.1762.
22. Zhou, X., H. Guan, **H. Xie**, and J.L. Wilson. Analysis and optimization of NDVI definitions and areal fraction models in remote sensing of vegetation. *International Journal of Remote Sensing*, Vol. 30(3): 721-751, doi: 10.1080/01431160802392620.
21. **Xie, H.** 2009. Using remote sensing and GIS technology for an improved decision support: A case study of residential water use in El Paso, Texas. *Civil Engineering and Environmental Systems*, Vol 26(1): 53-63, doi: 10.1080/10286600802003666.
20. *Weissling, B.P. and **H. Xie**, and K. Murray. 2009. Evaluation of NRCS curve number and MODIS time series proxies for antecedent moisture condition. *Civil Engineering and Environmental Systems*, Vol 26(1):85-101, doi: 10.1080/10286600802005356.
19. *Weissling B. and **H. Xie**, 2008. Proximal watershed validation of a remote sensing-based streamflow estimation model. *Journal of Applied Remote Sensing*. Vol. 2, 023549, DOI:10.1117/1.3043664.
18. Qiang, Z. Q. Yao, W. Lejun, Y. Zhao, J. Guao, Z. Zeng, and **H. Xie**, 2008. The annular stress thermal field of satellite thermal infrared prior-earthquakes (in Chinese with English abstract). *ACTA Geoscientica SINICA*, Vol 29: 486-494
17. Liang, T., X. Zhang, **H. Xie**, C. Wu, Q. Feng, X. Huang, and Q. Chen, 2008. Toward improved daily snow cover mapping with advanced combination of MODIS and AMSR-E measurements. *Remote Sensing of Environment*, doi:10.1016/j.rse.2008.05.010.
16. Ackley, S.F., M.J. Lewis, C.H. Fritsen, and **H. Xie**, 2008. Internal melting in Antarctic sea ice: development of "Gap Layers". *Geophysical Research Letters*, 35, L11503, doi:10.1029/2008GL033644.
15. **Xie, H.**, H. Guan, M. Zhu, M. Thueson, S.F. Ackley, and Z. Yue. 2008. A conceptual model for explanation of albedo changes in Martian craters. *Planetary and Space Science*, Vol 56/7: 887-894, doi:10.1016/j.pss.2008.01.012.
14. *Wang, X., **H. Xie**, H. Sharif, and J. Zeitler, 2008. Validating NEXRDA MPE and Stage III precipitation products for uniform rainfall on the Upper Guadalupe River Basin of the Texas Hill Country. *Journal of Hydrology*, Vol. 348(1-2): 73-86, doi: 10.1016/j.jhydrol.2007.09.057.
13. *Wang, X., **H. Xie**, and T. Liang, 2008. Evaluation of MODIS snow cover and cloud mask and its applications in northern Xinjiang, China. *Remote Sensing of Environment*, doi:10.1016/j.rse.2007.05.016.
12. Guan, H., **H. Xie**, and M. Zhu, 2008. Canopy blockage and scattering effects on apparent soil spectral reflectance and its consequence in spectral mixture analysis of vegetated surfaces. *International Journal of Remote Sensing*, doi:10.1080/01431160701469081
11. *Wang, X., **H. Xie**, H. Guan, and X. Zhou, 2007. Different responses of MODIS-derived NDVI to root-zone soil moisture in semi-arid and humid regions. *Journal of Hydrology*, Vol. 340: 12-24, doi: 10.1016/j.jhydrol.2007.03.022.
10. **Xie, H.**, Y.Q. Tian, J.A. Granillo, G.R. Keller, 2007. Suitable remote sensing method and data for mapping and measuring active crop field. *International Journal of Remote Sensing* Vol. 28(2): 395-411.

9. **Xie , H.**, X. Zhou, J. Hendrickx, E. Vivoni, H. Guan, Y. Tian, and E. Small, 2006. Evaluation of NEXRAD Stage III precipitation data over a semiarid region, *Journal of the American Water Resources Association*, 42(1): 237-256.
8. Zhou, X., **H. Xie**, J. Hendrickx, 2005. Statistical evaluation of MODIS snow cover products with constraints from streamflow and SNOTEL measurement. *Remote Sensing of Environment*, Vol.94 (2), pp214-231.
7. **Xie, H.**, X. Zhou, E. Vivoni, J. Hendrickx, and E. Small, 2005. GIS Based NEXRAD Precipitation Database: automated approaches for data processing and visualization , *Computers and Geosciences*, Vol.31 (1), pp 65-76.
6. **Xie, H.**, G. Randy Keller, and Richard P. Langford, 2004. AIRSAR/TOPSAR Image Processing and Interpretation: an application example in far west Texas, USA. *Geocarto International*, Vol. 19, No. 3, pp. 33-41.
5. **Xie, H.**, N. Hicks, G. R. Keller, H. Huang, V. Kreinovich, 2003. An IDL/ENVI Implementation of the FFT Based Algorithm for Automatic Image Registration , *Computers and Geosciences*, Vol. 29, pp. 1045-1055.
4. **Xie Hongjie**, Li Jianfeng, Liu Dechang, Zhang Yingjun, Huang Shutao, Fen Jie, 1999. Hyperspectral Image Processing and Application Study in Miaoershan District (in Chinese), *Uranium Geology*, Vol.15, pp. 47-54.
3. Rong Jiashu, Feng Minyue, Sun Zhifu, Xu Zhiyang, **Xie Hongjie**, 1997. Pegmatite-type Uranium Mineralization and Regional Zonation of Pegmatite Swarm in North Qinling (in Chinese) , *Geoscience Research*, Vol. 29-30, pp. 76-88 .
2. **Xie Hongjie** , He Jianguo, 1997. Application of Radioactivity-Remote Sensing Techniques to Uranium Metallogenic Environment Analyses and Prospective Prognosis in Anshan-Benxi Area, Liaoning Province, China (in Chinese), *Uranium Geology*, Vol. 13, pp. 95-100.
1. Feng Mingyue, Rong Jiashu, Sun Zhifu, Xu Ziyang, **Xie Hongjie** , 1996. The Formation Mechanism and Prognosis on the Prospect of Pegmatite Type Uranium Deposit in Northern Qinling of China (in Chinese), *China Nuclear Science and Technology Report CNIC-01128 and BRIUG-0034* (Monograph), 9 p.

- **Book/Book Chapters and Other Publications**

3. Liu, D, **H. Xie**, Y. Zhao, J. Zhang, 2008, Hyperspectral data processing and geological application in MiaoErShan area, Guangxi Province (p 97-108), in Liu, D. Study on Post-Remote Sensing Application Technology (in Chinese), ISBN 978-7-80218-244-8, *China Astronautic Publishing House*, 226p.
2. **Xie, H.** and R.G. Keller, 2006, Fusion of Landsat and radar data to enhance the extraction of surface and subsurface information, in Sinha, A.K., ed., *Geoinformatics: Data to Knowledge*, *Geological Society of American Special Paper 397*, p. 141-151, doi:10.1130/2006.2397(10).
1. Feng Mingyue, Rong Jiashu, Sun Zhifu, Xu Ziyang, **Xie Hongjie** , 1996. Pegmatite Type Uranium Deposit of Northern Qinling (in Chinese) , ISBN 7-5022-1591-3, Published by *China Atomic Energy Press*. 144 p.

- **Conference Proceedings**

6. *Cicek, B. and H. **Xie**, 2006. Elevation and freeboard changes of Ross Sea ice and ice shelf using ICESat. *IEEE IGARSS*, July 31-August 04, Denver, CO. 4 p.
5. Roberto Araiza, **Hongjie Xie**, Scott A. Starks, and Vladik Kreinovich, 2002. Automatic Referencing of Multi-Spectral Images , Proceedings of *15th IEEE Southwest Symposium on Image Analysis and Interpretation*, April 7-9, Santa Fe, New Mexico. pp. 21-25 .
4. LeMone, D.V., R. L. Dodge, **H. Xie**, R. P. Langford, G. R. Keller, 2002, Remote Sensing Analysis of the Sierra Blanca (Faskin Ranch) Low-Level Radioactive Waste Disposal Site, Hudspeth County, Texas, Proceedings of *2002 Waste Management*. Tucson, Arizona. 18 p.
3. Srikrishnan, S., R. Araiza, **H. Xie**, S. A. Starks, and V. Kerinovich, 2001, Automatic Referencing of Satellite and Radar Images, Proceedings of the *2001 IEEE Systems, Man, and Cybernetics Conference*, October 7-10, Tucson, Arizona. pp. 2176-2181 .
2. LeMone, D.V., R. L. Dodge, **H. Xie** , G.R.Keller, 2001, Remote Sensing Analysis of the Fort Hancock Low-Level Radioactive Waste Disposal Site, Hudspeth County, Texas, Proceedings of *2001 Waste Management*. Tucson, Arizona. 20 p.
1. LeMone, DV, Petr Vaganov, Stanislav Turchenko, Rebecca Dodge, and **Hongjie Xie** , 2000, The Salmi Complex of Karelia, northwestern Russia: Potential High-level Radioactive Waste Repository, Proceedings of *2000 Waste Management*. Tucson, Arizona. 11 p..

Non-refereed Publications

- **Journals articles**

1. *Weissling, B.P., **H.Xie**, and K.E.Murray, 2007. A multitemporal remote sensing approach to parsimonious streamflow modeling in a southcentral Texas watershed, USA. *Hydrology and Earth System Sciences Discussions*, 4, 1-33 (a discussion paper).

- **Book Chapters and Reports**

4. **Xie, Hongjie**, Mao Yuxian, Liu Dechang, Zhao Yingjun, and Li Jianfeng, 1998. Methodology Study and Software Development of Ground Objects Frequency Spectrum Abstracted from Remote Sensing Image (in Chinese). *Beijing Research Institute of Uranium Geology*. 40 p.
3. **Xie, Hongjie**, Li Jianfeng, Liu Dechang, Huang Shutao, Fen Jie, and Zhao Yingjun, 1997. Hyperspectral Image Processing and Application in Miaoershan District, South China (in Chinese) . *Beijing Research Institute of Uranium Geology*. 59 p.
2. Feng Mingyue, Rong Jiashu, Sun Zhifu, Xu Ziyang, **Xie Hongjie** , 1995, The Formation Mechanism and Prognosis on the Prospect of Pegmatite Type Uranium Deposit in Northern Qinling of China (in Chinese) , *Beijing Research Institute of Uranium Geology*. 164 p.
1. **Xie, Hongjie**, He Jianguo, Liu Dechang, Rui Benshang, Hu Youming, Ouyan Hao, and Fen Jie, 1994, Application of Radioactivity Remote Sensing Techniques to Uranium Metallogenic Environment Analyses and Prospective Prognosis in Anshan-Benxi Area, Liaoning Province, China (in Chinese). *Beijing Research Institute of Uranium Geology*. 59 p.

V. Scholarly Presentations

(* denotes first author of my students)

127. **Xie, H.**, Y. Gao, X. Huang, and T. Liang, 2009. *MODIS and ICESat-based snow cover and glacier changes across three rivers headstream region of Tibetan Plateau* International Workshop on Environmental Change, Glacial and Hydrological Processes, and Related Consequence in the Third Pole Region, August 15-20, 2009, Beijing-Lhasa, China
126. **Xie, H.**, X. Wang, and T. Liang, 2009. MODIS/Terra-Aqua snow cover products, validation, and applications (invited), *SPIE Optics+Photonics: Remote Sensing and Modeling of Ecosystems for Sustainability*, 2-6 August 2009. San Diego, CA
125. **Xie, H.**, X. Huang, T. Laing, D. Yi, 2009. Estimating vertical error of SRTM and map-based DEMs using ICESat data in Tibetan Plateau, *SPIE Optics+Photonics: Remote Sensing and Modeling of Ecosystems for Sustainability*, 2-6 August 2009. San Diego, CA
124. *Lewis, M., S.F. Ackley and **H. Xie**, 2009. Evaluation of Sea Ice Interface Temperature and the Significance of Sea Ice Flooding Events, *Gordon Research Conference-Polar Marine Science/Antarctic Sea Ice Workshop*, Lucca (Barga), Italy, March 15-25.
123. *Ozsoy-Cicek, B., P. Wagner, A. Tekeli, S.F. Ackley, **H. Xie**, 2009. Intercomparisons of Antarctic Sea Ice Concentration and Properties derived from Ship Observations, Satellite Active and Passive Microwave. *Gordon Research Conference-Polar Marine Science/Antarctic Sea Ice Workshop*, Lucca (Barga), Italy, March 15-25.
122. Tekeli, A.E., S. Ackley, B. Ozsoy Cicek, **H. Xie**, 2009. Monitoring sea ice by ASAR and validating with ODEN 2008 cruise field data for Antarctica. *Gordon Research Conference-Polar Marine Science/Antarctic Sea Ice Workshop*, Lucca (Barga), Italy, March 15-25.
121. *Wagner, P., S. Ackley, B. Weissling, M. Lewis, B. Ozsoy-Cicek, **H. Xie**, 2009. ASPeCt Imagery for Ice Thickness in the Bellingshausen-Amundsen Seas SIMBA 2007. *Gordon Research Conference-Polar Marine Science/Antarctic Sea Ice Workshop*, Lucca (Barga), Italy, March 15-25.
120. Xu, D., Z. Zeng, Z. Yue, J. Wang, Z. Zhang, S. Birnbaum, **H. Xie**, and D. Yan, 2009. A case study of an application of fractal theory to gully's alcove on Mars. 40th Lunar and Planetary Science Conference, abs#2481, March 23-27, Houston City, Texas. 2 p.
119. Zeng, Z., Z. Zhang, S. Birnbaum, **H. Xie**, W. Yang, 2009. Global dynamical significance of zigzag fractures in south polar ice cap of Mars. 40th Lunar and Planetary Science Conference, abs#1225, March 23-27, Houston City, Texas. 2 p.
118. Fan, C., **H. Xie**, D. Schulze-Makuch, and S. Ackley, 2009. A likely formation mechanism for the hematite-rich spherules in the equatorial region of western Mars. 40th Lunar and Planetary Science Conference, abs#1470, March 23-27, Houston City, Texas. 2 p.
117. Xiao, Z., Z. Zeng, **H. Xie**, S. Birnbaum, and Z. Zhang, 2009. A preliminary study on the effect of Lunar-dust movement on the Lunar magnetic field. 40th Lunar and Planetary Science Conference, abs#1227, March 23-27, Houston City, Texas. 2 p.
116. **Xie, H.** and Y. Gao, 2008. Snow cover spatial and temporal variability across three rivers headstream region of Tibetan Plateau based on MODIS and AMSR-E data (2000-2008). AGU Fall meeting, San Francisco, CA, December 15-19.
115. *Yu, B., X. Zhang, **H. Xie**, 2008. Using geostatistical methods to improve radar rainfall estimates accuracy. AGU Fall meeting, San Francisco, CA, December 15-19.

114. *Huang, X., H. **Xie**, T. Laing, and D. Yi, 2008. Accuracy estimation of SRTM and map-based DEMs using ICESat elevation data in Tibetan Plateau. AGU Fall meeting, San Francisco, CA, December 15-19.
113. *Gao, Y., H. **Xie**, N. **Lu**, T. Liang, C. Xue, 2008. Advanced new daily products of cloud-free snow cover area and snow water equivalent from MODIS/Terra-Aqua & AMSR-E measurements. AGU Fall meeting, San Francisco, CA, December 15-19.
112. *Schnur, M. and H. **Xie**, 2008. Estimating root zone moisture at distant sites using MODIS NDVI and EVI in a semi-arid region. AGU Fall meeting, San Francisco, CA, December 15-19.
- 111. Xie, H.**, X. Wang, T. Liang, X. Huang, B. Yu, 2008. MODIS Terra and Aqua snow cover products, validations, and applications. 2008 International Workshop on Earth Observation and Remote Sensing Applications. Beijing, China, June 30-July 2.
110. *Cicek, B, S. Ackley, H. **Xie**, and P. Wagner, 2008. Analysis of Antarctic sea ice extent based on NIC charts (includes ENVISat) and AMSR-E data. 28th EARSel Symposium, Remote Sensing for a Changing Europe, Istanbul, Turkey, June 2-5.
109. *Wang, X. and H. **Xie**, 2008. Mapping spatiotemporal variation of snow cover from combination of MODIS terra and Aqua observations in the Central Tianshan Mountains. 2008 AAG Annual Meeting, Boston, MA
108. Hendrickx, JMH, H **Xie**, JBJ Harrison, B. Borchers and J Simunek, 2008. Global prediction of thermal soil regimes, SPIE Defense and Security Symposium 2008 proceedings 6953-33 Vol 9 (10 p.)
107. Zeng, Z., N.E. Putzig, H. **Xie**, S. Birnbaum, S.F. **Ackley**, and L. Liu, 2008. Evidence of fractures in NPLD and their significance to the formation of Martian polar spiral troughs. 39th Lunar and Planetary Science Conference, abs#2179, March 10-14, League City, Texas. 2 p.
106. Zeng, Z., H. **Xie**, S.J. Birnbaum, S.F. Ackley and L. Liu, 2008. A structural solution for the formation of dunes in the Martian polar region. 39th Lunar and Planetary Science Conference, abs#2050, March 10-14, League City, Texas. 2 p.
105. Sharif, H., S. Chintalapudi, X. Wang, H. **Xie**, and J.W. Zeitler, 2008. Hydrometeorological analysis of flooding events in San Antonio, TX. AMS 88th annual meeting, New Orleans, LA, January 20-24.
- 104. Xie, H.**, M. Lewis, and S.F. Ackley, 2007. A preliminary study of AMSR-E sea ice temperature products for snow-ice flooding detection. AGU Fall meeting, San Francisco, CA, December 10-14.
103. *Cicek, B., H., **Xie**, and S.F. Ackley, 2007. Sea ice characteristics from the West Antarctic ODEN cruise compared to satellite analyses. AGU Fall meeting, San Francisco, CA, December 10-14.
102. *Jordan, A., H. **Xie**, 2007. A.M. High Albedo events in Martian northern polar craters: an investigation using THEMIS infrared data. AGU Fall meeting, San Francisco, CA, December 10-14.
101. *Mazari, N., H. **Xie**, H., Sharif, J. Zeitler, 2007. NEXRAD reflectivity derived rainfall estimates comparison with measurement from collocated rain gauges. AGU Fall meeting, San Francisco, CA, December 10-14.
100. Qiang, Z., X. Zhao, H. **Xie**, Z. Zeng, 2007. Satellite thermal infrared stress field and earthquake prediction in short-term and imminent. AGU Fall meeting, San Francisco, CA, December 10-14.

99. *Wang, X. and H. **Xie**, 2007. New multi-day snow cover products from combination of Terra and Aqua MODIS daily snow cover data. AGU Fall meeting, San Francisco, CA, December 10-14.
98. *Wagner, P., S.F. Ackley, H. **Xie**, 2007. Similar sea ice behavior dynamics on Earth and Mars. AGU Fall meeting, San Francisco, CA, December 10-14.
97. *Yu, B., X. Wang, and H. **Xie**, 2007. MODIS-based snow cover variability of the Upper Rio Grande Basin. AGU Fall meeting, San Francisco, CA, December 10-14.
96. *Yue, Z. and H. **Xie**, 2007. Wind a potential mechanism of Mars gully formation. AGU Fall meeting, San Francisco, CA, December 10-14.
95. Zeng, Z., H. **Xie**, S. Birnbaum, L. Liu, M. Zhu, W. Yang, 2007. Terrestrial analogue and origin of the spiral troughs in Martian polar ice caps. AGU Fall meeting, San Francisco, CA, December 10-14.
94. *Wang, X. and H. **Xie**, 2007. An automatic approach to generate multi-day snow cover composite from combination of daily Terra and Aqua MODIS snow cover data. SWAAG/Mid-South ASPRS 2007 annual meeting, College Station, TX, November 1-3.
93. **Xie**, H., 2007. Remote sensing of snow and ice: from land surface, to southern ocean (Antarctic), and to the Mars. UTSA Environmental Science and Engineering Graduate Seminar. September 28.
92. Guan, H., H. **Xie**, and J. L. Wilson, 2007. A physically-based multivariate-regression approach for downscaling NEXRAD precipitation in mountainous terrain. 33rd Conference on Radar Meteorology, Cairns, Queensland, Australia. August 6-10, 2007.
91. *Cicek, B., H. **Xie**, and S. Ackley, 2007. Comparison between ice observations made aboard ships in the Antarctic sea ice and AMSR-E/Aqua geophysical products. IEEE IGARSS, Barcelona, Spain, July 23-27.
90. **Xie**, H., S. Ackley, Z. Zeng, F. Qiu, 2007. Permafrost and its implication in 'Louth' crater (70.5N, 103.2E) of Mars. The Seventh International Conference on Mars. July 9-13, Pasadena, CA. 4p.
89. *Thueson, M.A. and **H.Xie**, 2007. Water ice and carbon dioxide ice interactions: crater investigations in residual north polar ice cap. The Seventh International Conference on Mars. July 9-13, Pasadena, CA. 3p.
88. Zeng, Z., **H. Xie**, S. Birnbaum, L. Liu, W. Yang, 2007. New insight on the origin of spiral troughs in Martian polar ice caps. The Seventh International Conference on Mars. July 9-13, Pasadena, CA. 4p.
87. *Wang, X., H. **Xie**, and T. Liang, 2007. Assessing spatiotemporal distribution and variability of snow cover and SWE based on MOIDS and AMSR-E, and their applications on water source management in Yili River watershed in Xinjiang, China. ASPRS Annual conference, Tampa, FL, May 7-11.
86. **Xie**, H., 2007. Global warming from Antarctic to San Antonio. 2007 Certified GO GREEN ExpoWorkshopCinema. Live Oak Civic Center, San Antonio, TX, May 18-19.
85. **Xie**, H. and X. Wang, 2007. Statistic evaluation of the improved NEXRAD precipitation estimates using rain gauge measurements. UTSA Management Science and Statistics Graduate Seminar. April 6.
84. *Saunders, B., B. Cicek, H. **Xie**, and S.F. Ackley. Estimates of Sea Ice Concentration from the ASPeCt ship observations Data Base. Gordon Research Conference - Polar Marine Science, Ventura, CA, March 25-30, 2007.

83. *Cicek, B., H. **Xie**, and S.F. Ackley, 2007. Summer Sea Ice in the Ross Sea - ODEN Cruise. Gordon Research Conference - Polar Marine Science, Ventura, CA, March 25-30, 2007.
82. *Lewis, M., S.F. Ackley, H. **Xie**, and B. Cicek, 2007. Comparison of AMSR-E Derived Antarctic Snow-Ice Interface Temperatures with Surface Observations. Gordon Research Conference - Polar Marine Science, Ventura, CA, March 25-30, 2007.
81. Ackley, S.F., P. Wagner, H. **Xie**, 2007. Sea Ice Ridging and Rafting Structures: Is the microstructural controlled transition from Ductile to Brittle Behaviour on Earth also seen on Mars? Gordon Research Conference - Polar Marine Science, Ventura, CA, March 25-30, 2007.
80. Ackley, S.F., P. Wagner, and H. **Xie**, 2007. Sea ice ridging and rafting structures: is the microstructural controlled transition from ductile to brittle behavior on Earth also seen on Mars? 38th Lunar and Planetary Science Conference, abs#2035, March 12-16, League City, Texas. 2 p.
79. *Thueson, M. and H. **Xie**, 2007. Water ice investigation in crater of residual polar region using THEMIS data. 38th Lunar and Planetary Science Conference, abs#2355, March 12-16, League City, Texas. 2 p.
78. *Wagner, P., H. **Xie**, M. Zhu, and H. Guan, 2007. Using OMEGA data to determine the optical depths of water vapor absorption bands in the Martian atmosphere. 38th Lunar and Planetary Science Conference, abs#2065, March 12-16, League City, Texas. 2 p.
77. *Yue, Z., H. **Xie**, J. Liu, and Z. Ouyang, 2007. An introduction of Chinese Lunar exploration program. 38th Lunar and Planetary Science Conference, abs#2082, March 12-16, League City, Texas. 2 p.
76. Zeng, Z., S. Birnbaum, H. **Xie**, Li Liu, M. Zhu, W. Yang, 2007. Three-dimensional numerical modeling of Tharsis Binucleus-type vortex structure on Mars. 38th Lunar and Planetary Science Conference, abs#1210, March 12-16, League City, Texas. 2 p.
75. **Xie**, H., H. Guan, M. Zhu, and M. Thueson, 2007. A conceptual model of H₂O/CO₂ frost sublimation and condensation caused albedo change in crater interiors, Martian seasonal polar cap regions. 38th Lunar and Planetary Science Conference, abs#2079, March 12-16, League City, Texas. 2 p.
74. **Xie**, H. and B. Cicek, 2007. Antarctic expedition December 8-30, 2006. UTSA Environmental Science and Engineering Graduate Seminar. January 19.
73. *Cicek, B., H **Xie**, T. DeLiberty, 2007. A procedure development of incorporating and processing ICESat data into a GIS system. AMS 87th annual meeting, San Antonio, TX, January 14-18
72. *Weissling, BP, H. **Xie**, 2007. Streamflow prediction in ungaged watersheds: statistical modeling with remote sensing. AMS 87th annual meeting, San Antonio, TX, January 14-18
71. *Wang, X., H **Xie**, H Sharif, 2007. The impact of local and global climate variation/change on extreme weather events in the south central Texas. AMS 87th annual meeting, San Antonio, TX, January 14-18
70. *Lewis, M., SF Ackley, H **Xie**, B Cicek, 2006. Comparison of AMSR-E derived Antarctic snow-ice interface temperatures with previous surface observations, AGU Fall meeting, San Francisco, CA, December 11-15.
69. Zhou, X., H Guan, H **Xie**, JL Wilson, 2006. Unification of NDVI definitions and areal fraction models in remote sensing of vegetation. AGU Fall meeting, San Francisco, CA, December 11-15

68. *Weissling, BP, H **Xie**, 2006. A multitemporal remote sensing approach to streamflow prediction and flood vulnerability forecasting. AGU Fall meeting, San Francisco, CA, December 11-15.
67. Zeng, Z., S Birnbaum, M Zhu, H **Xie**, L Liu, 2006. Tharsis Binucleus-Type Vortex Structure (TBVS) on Mars: implications for differential rotation of Mars. AGU Fall meeting, San Francisco, CA, December 11-15.
66. *Wang, X., H. **Xie**, and T. Liang, 2006. Validation of AMSR-E snow water equivalent products in Northern Xinjiang Uygur Autonomous region, China. ASPRS/MAPPS Fall meeting, San Antonio, TX, November 6-10.
65. *Cicek, B. and H. **Xie**, 2006. Spatiotemporal variability of snow depth on sea ice in Ross Sea region of Antarctica using AMSR-E/Aqua geophysical products. ASPRS/MAPPS Fall meeting, San Antonio, TX, November 6-10.
64. *Wang, X and H. Xie, 2006. Comparison of the NEXRAD MPE and Stage III precipitation products in Texas Hill country. SWAAG annual meeting, Norman, OK, October 26-28.
63. Keller, GR, O. Quezada, H. **Xie**, J. Granillo, 2006. Intergration and formal fusion of remote sensing and geophysical data to obtain subsurface structure: some examples. GSA annual meeting, Philadelphia, PA, October 22-25.
62. Fan C., D. Schulze-Makuch, H **Xie**, 2006. Sulfate formation and its relevance to environmental conditions on early Mars. Workshop on Martian sulfates as recorders of atmospheric-fluid-rock interactions. Houston, Texas, October 22-24.
61. *Wang X., H **Xie**, 2006. Comparison of the NEXRAD MPE and Stage III precipitation products in Texas Hill Country. UTSA 2006 student conference on Engineering, Science and Biotechnology, October 20.
60. *Lewis, M. and H. **Xie**, 2006. Temporal variation in snow cover over sea ice in Antarctica using AMSR-E data product. IEEE IGARSS, Denver, CO, July 31-August 04.
59. **Xie**, H., X. Wang, and T. Liang, 2006. Spatiotemporal distribution and variability of snow cover and snow water equivalent based on MODIS and AMSR-E and their implications on snow-related disasters in Northern Xinjiang Uygur Autonomous region, China. WPGM, Beijing, China, July 24-27.
58. *Cicek, B., H. **Xie**, 2006. Elevation and freeboard changes of Ross Sea ice and ice shelf using ICESat. Scientific Committee on Antarctic Research (SCAR) International Workshop on Sea Ice Thickness, Hobart, Yasmania, Australia, July 5-7.
57. *Lewis, M., H. **Xie**, 2006. Analysis of Snow Depth and Coverage on Sea Ice in Antarctica using AMSR-E data products. Scientific Committee on Antarctic Research (SCAR) International Workshop on Sea Ice Thickness, Hobart, Yasmania, Australia, July 5-7.
56. Zhu, M., H. **Xie**, D. Liu, Y. Zhang, 2006. Hydrocarbon microseepage detection based on normalized ferric and ferrous indices of Landsat imagery. AGU Joint Assembly. Baltimore, ML, May 23-26.
55. Guan, H., J.L. Wilson, E.E. Small, 2006. Partitioning of evaporation and transpiration in semiarid ecosystems using a dual-source surface energy model (TEVT). AGU Joint Assembly. Baltimore, ML, May 23-26.
54. Guan, H., H. **Xie**, H. Hsu, O. Makhnin, J.L. Wilson, 2006. ASOADek application of gauge-based precipitation records in Taiwan and its hydroclimatic implications.
53. Guan, H., H. **Xie**, and J.L. Wilson, 2006. A physically-based multivariate-regression approach for downscaling NEXRAD precipitation in mountainous terrain. AGU Joint Assembly. Baltimore, ML, May 23-26.

52. **Xie, H.** and X. Wang, 2006. Comparison of NEXRAD Stage III and MPE precipitation products with constraints from high quality and density of raingauge networks in the Upper Guadalupe River Basin, Central Texas. AAGU Joint Assembly. Baltimore, ML, May 23-26.
51. **Xie, H.**, X.Zhou, J.M,Hendrickx, and H.Guan, 2006. Evaluation of NEXRAD Stage III precipitation data over Sevilleta National Wildlife Refuge: a semiarid region in Central New Mexico. AGU Joint Assembly. Baltimore, ML, May 23-26.
50. *Wang, X., H. Guan, and **H. Xie**, 2006. Estimation of root-zone soil moisture using MODIS-derived NDVI in semiarid and humid conditions. ASPRS annual meeting, May 1-5, Reno, Nevada. 9 p.
49. **Xie, H.**, M. Zhu, H. Guan, and R.K. Smith, 2006. Isolated water ice in an unnamed crater away from the residual north polar cap of mars: the only one? 37th Lunar and Planetary Science Conference, March 13-17, League City, Texas. 2 p.
48. Zhu, M., **H. Xie**, H. Guan, and R.K. Smith, 2006. Mineral and lithologic mapping of martian low albedo regions using OMEGA data. 37th Lunar and Planetary Science Conference, March 13-17, League City, Texas. 2 p.
47. Guan, H., **H. Xie**, and M. Zhu, 2006. Development of an alternative Martian atmospheric correction algorithm for OMEGA/Mars Express imagery. 37th Lunar and Planetary Science Conference, March 13-17, League City, Texas. 2 p.
46. *Wang, X. and **H. Xie**, 2006. Validation of the new NEXRAD precipitation product - Multisensor Precipitation Estimator (MPE) - in Texas Hill Country. AAG Annual Meeting. Chicago, IL, March 7-11.
45. *Weissling, B., **H. Xie**, P. Jurena, 2005. Early detection of oak wilt disease: A hyperspectral approach, Pecora 16 Global Priorities in Land Remote Sensing, October 23-27, Sioux Falls, South Dakota.
44. **Xie, H.**, H. Guan, and S. Ytuarte, 2005. Heat island of San Antonio, Texas detected by MODIS/Aqua temperature product. Proceedings of the 20th Biennial Workshop on Aerial Photography, Videography, High Resolution Digital Imagery for Resource Assessment. Weslaco, TX, October 4-6, 2005. 7 p.
43. *Cabico, L. and **H. Xie**, 2005. Correlation analysis of fuel moisture content from Remote Automated Weather Stations and MODIS-derived vegetation indices, West Texas High desert. Proceedings of the 20th Biennial Workshop on Aerial Photography, Videography, High Resolution Digital Imagery for Resource Assessment. Weslaco, TX, October 4-6, 2005. 10 p.
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41. *Owojori, A. and **H. Xie**, 2005. Landsat image-based LULC changes of San Antonio, Texas using advanced atmospheric correction and object-oriented image analysis approaches, Proceedings of the 5th International Symposium on Remote Sensing of Urban Areas (URS2005), March 14-16, Tempe, Arizona. 4 p.
40. Guan, H., **H. Xie**, and J. Wilson, 2005. A physical-based parsimonious approach for spatial disaggregation of NEXRAD precipitation in mountainous terrain. The 32nd Conference on Radar Meteorology, Albuquerque, NM, October 24-28.

39. Zhou, X., S. Li, H. **Xie**, H. Guan, C. Link, and M. Speece, 2005. Retrieval of liquid water content from radar backscattering coefficient for soil-snow mixed terrain. INSA Space Policy Institute '05 Conference, Big Sky, Montana, September 16-18.
38. *Mena-Fernandez, S., R. Perez, and H. **Xie**, 2005. Understanding the Olympus Mons and Valles Marineris using THEMIS imagery, South-Central Section Annual Meeting, April 1-2, San Antonio, Texas.
37. *Cabico, M.L. and H. **Xie**, 2005. Fuel moisture content based on MODIS-derived vegetation indices in west Texas high desert, South-Central Section Annual Meeting, April 1-2, San Antonio, Texas.
36. *Mena-Fernandez, S. and H. **Xie**, 2005. Understanding the Olympus Mons and Valles Marineris using THEMIS imagery, 36th Lunar and Planetary Science Conference, March 14-18, Houston, Texas.
35. **Xie, H.**, H. Guan, X. Zhou, and J. Wilson, 2005. Relation of below-root-zone soil moisture and surface NDVI from optical remote sensing imagery, ASPRS Annual Conference, March 7-11, Baltimore, Maryland.
34. **Xie, H.**, E. Vivoni, X. Zhou, and J. Hendrickx, 2005. Rainfall climatology of the monsoon season in New Mexico: Observations from NEXRAD Stage III (1996-2003), AMS Annual Conference (85th), January 9-13, San Diego, California.
33. B. Scanlon, M. Musgrove, A. Sansom, H. **Xie**, B. Wilcox, J. Sharp, C. Alexander, B. Vieux, R. Jackson, S. Archer, K. Keese, R. Reedy, 2004. Unique Aspects of proposed San Antonio/Guadalupe Hydrologic Observatory in Texas, AGU Fall Meeting, December 13-17, San Francisco, California.
32. **Xie, H.**, X. Zhou, and J. Hendrickx, 2004, Evaluation of MODIS snow-cover products with constraints from streamflow and SNOTEL data, AGU Fall Meeting, December 13-17, San Francisco, California.
31. X. Zhou, H. **Xie**, and J. Hendrickx, 2004, Statistical evaluation of MODIS daily and 8-day snow products, EOS Snow and Ice Products workshop, November 16-17, Landover, Maryland.
30. B. Scanlon, M. Musgrove, A. Sansom, H. **Xie**, J. Sharp, Z. Yang, 2004. Potential advances in quantifying water cycle in karst system using hydrologic observatory approach, GSA Annual Conference, November 7-10, Denver, Colorado.
29. **Xie, H.**, G. R. Keller, and X. Zhou, 2004. GIS-based automated time-series remote sensing data conversion and information retrieval, GSA Annual Conference, November 7-10, Denver, Colorado.
28. X. Zhou, H. **Xie**, G. Marshall, and H. Guan, 2004. Spectral signature and emissive characteristics of drought-stressed vegetation - implication for remote sensing of drought stress, ASPRS Annual Conference, May 23-28, Denver, Colorado.
27. **Xie, Hongjie**, Jan Hendrickx, Enrique R. Vivoni, and Xiaobing Zhou, 2004. Estimation of spatial-temporal rainfall frequency during the New Mexico monsoon period using archived, high-resolution NEXRAD radar products , ASPRS Annual Conference, May 23-28, Denver, Colorado.
26. Jan M.H. Hendrickx, Remke L. van Dam, Hongjie **Xie**, and Brian Borchers, 2004. Worldwide evaluation of soil thermal regimes . SPIE conference, April 13-16, Orlando, Florida, USA.

25. **Xie, Hongjie**, Eric Small, Jan Hendrickx, Matt Richmond, and Xiaobing Zhou, 2003, GIS Based NexRAD Precipitation (Stage 3) Database , Proceedings of the ESRI 2003 User Conference, July 7-11, San Diego, CA. 16 p .
24. **Xie , Hongjie**, Jose A. Granillo, and G. Randy Keller, 2003, Classification and Application of Impervious and Pervious Surfaces Using Integrated Remote Sensing and GIS Technologies , Proceedings of the ASPRS 2003 Annual Conference, May 5-9, Anchorage, Alaska. 10 p.
23. Vladik Kreinovich, Hongjie **Xie**, Scott A. Starks, Roberto Araiza, and Roberto Torres , 2003. Algorithms for Geoinformatics: From Image and Data Referencing to Database Cleaning , SIAM (Society for Industrial and Applied Mathematics) Conference on Mathematical & Computational Issues in the Geosciences, March 17-20, Austin, Texas. pp. 64
22. Randy Keller, Hongjie **Xie**, Matthew Averill, 2003, Data Fusion and Joint Inversion as Quantitative Tools for Integrated Analysis of Diverse Data Sets , SIAM (Society for Industrial and Applied Mathematics) Conference on Mathematical & Computational Issues in the Geosciences, March 17-20, Austin, Texas. pp. 69 .
21. **Xie**, Hongjie, Jan Hendrickx, Shirley Kurc, and Eric Small, 2002 , Comparison of Evapotranspiration Estimates from the Surface Energy Balance Algorithm (SEBAL) and Flux Tower Data, Middle Rio Grande Basin , AGU Annual Fall Conference, Dec. 6-10, San Francisco, CA.
20. **Xie**, Hongjie, Granillo, Jose A., Keller, G. Randy, and Langford, Richard, P., 2002, Examples of Applications of Integrated Remote Sensing and GIS Technologies to Water-Related Problems in Far West Texas , GSA abstracts with programs Vol. 34, No. 3, March 2002, GSA Southeastern/North-Central Section Meeting (36th), Alpine, TX.
19. Keller, G.R., **Xie**, H. , Langford, R.P., Quezada, O., and Andronicos, C., 2001 , Geological Motivated Examples of Remote Sensing Data Processing and Fusion , GSA Annual Meeting, November 5-8, Boston, Massachusetts.
18. **Xie, Hongjie**, Nigel Hicks, G. Randy Keller, Haitao Huang, Vladic Kreinovick, 2000, Automatic Image Registration Based on A FFT Algorithm and IDL/ENVI, Proceedings of ICORG-2000 International Conference on Remote Sensing And GIS/GPS. Dec. 1-4, Hyderabad, India. Vol. 1, pp. 397-402
17. **Xie**, H. , Keller, G.R., Langford, R., 2000 , AIRSAR/TOPSAR Image Processing and Data Fusion with TM Images and Geophysical Data in West Texas, The 14th Applied Geologic Remote Sensing Proceedings, Nov. 6-8 , Las Vegas, Nevada. pp. 338
16. **Xie**, H. , Keller, G.R., Hamlyn, E.J.W., Carranza, H., Kennedy, J., Seeley, J., and Jimenez, A., 2000 , The Use of Landsat Images, Digital Elevation Models, Gravity, and Digital Geologic Maps of the El Paso/Cd. Juarez Region as A Tool For Environmental and Water Resource Studies, The 14th Applied Geologic Remote Sensing Proceedings, Nov. 6-8 , Las Vegas, Nevada. pp. 342
15. Turchenko, S.I., Vaganov, P.A., LeMone, D.V., **Xie, H.** , Rodge, R.L., 2000 , Remote Sensing Application for Identification of a Stable Geological Block for HLRW Repository Modeling into Precambrian formation of Northwestern Russia , Prague 2000, published on CD-ROM and on Internet. 10 p .
14. Huang Xianfang, Huang Shutao, Dong Wengming, Pan Wei, Xie Zhidong, Xuan Yanxiu, **Xie Hongjie**, 1998, Application of JERS-1 SAR Data to Uranium Metallogenic Environment, Condition and Prognosis, Microwave Remote Sensing of the Atmosphere and

- Environment . Microwave Remote Sensing of the Atmosphere and Environment, Sept. 15-17, Beijing, China. pp. 36-44
13. **Xie Hongjie**, 1996 , Review on New Type Sensor Information and Image Analysis Techniques, Annual Congress of Nuclear Industry Geology Bureau's Scientific Research and Management, Beijing, China.
 12. **Xie Hongjie**, 1996 , Establishment and Study of the Field Spectrum Library and Spectrum Feature Information Extracting from Hyperspectral Image in Maoershan District, Guanxi Prov., South China, Nuclear Industry Congress of Remote Sensing Applications, Beijing, China.
 11. **Xie Hongjie** , 1996 , Study on Hyperspectral Image Processing and Application, Annual Congress of China Remote Sensing Application Association, Kunming, China.
 10. Liu Dechang, He Jianguo, **Xie Hongjie** , and et al, 1995 , The New Expansion of Application of Satellite Remote Sensing ImageLight-Energy Spectrum Integrated Image Application to Uranium Resource Exploration , The 9th China Conference of Remote Sensing, Chengdu, China.
 9. Zhao Yingjun, **Xie Hongjie**, He Jianguo, 1995 , Lithological Discrimination Model Study using Light-Energy Spertrum Integrated Technique , The 9th China Conference of Remote Sensing, Chengdu, China.
 8. **Xie Hongjie**, He Jianguo, Liu Dechang, and et al, 1995 , Study on Continental Crust Evolution and Material Sources and Genesis of Granitic Rock in An-Bei Area of China, The 3rd China Young Geologists Conference on Mineralogy, Petrology and Geochemistry, Chengdu, China.
 7. **Xie Hongjie**, Feng Mingyue, He Jianguo, and et al, 1995 , Research and Summary of Evolution and Development on Qinling-Dabie Orogenic Belt , The 3rdChina Young Geologists Conference on Mineralogy, Petrology and Geochemistry, Chengdu, China.
 6. **Xie Hongjie**, He Jianguo, Liu Dechang, and et al, 1995, Light-Energy Spectrum Integrated Technique Application in Detailed Study of Some Geologic Problems , The 9th China Conference of Remote Sensing, Chengdu, China. pp. 106-108
 5. Rong Jiashu, Feng Mingyue, **Xie Hongjie** , 1994, Uranium Deposit of Pegmatite Type in Northern Qinling Mountains, The 9th Symposium of International Association on the Genesis of Ore Deposits, Beijing, China. pp. 808-810 .
 4. **Xie Hongjie**, Rong Jiashu, Feng Mingyue, and et al, 1993, Pb-Sr-Nd Isotope Tracer Study on Material Sources of Caledonian Granodiorite Batholith in Northern Qinling Mountains, Crust-Mantle Evolution and Isotope Geochemistry of Petrogenesis and Metallogenesis , Seismis Press (in Chinese). pp. 32-33.
 3. Feng Mingyue, **Xie Hongjie**, Rong Jiashu, 1993, Metallogenic Condition Analysis of Pegmatite Type Uranium Deposite of Northern Qinling Proceedings of the 5th China Conference of Genesis of Ore Deposits, Geology Press (in Chinese). pp. 500-502.
 2. Feng Mingyue , **Xie Hongjie**, Rong Jiashu, 1993, REE and Pb-Sr-Nd Isotope Geochemistry of Pegmatite Type Uranium Deposit of Northern Qinling, pp. 502-504.
 1. **Xie Hongjie**, 1993 , Geochemistry, Petrogenesis and Metallogenesis of the Caledoninan Granitic Pegmatite Type Uranium Deposit in Nothren Qinling The 2nd China Young Geologists Conference on Mineralogy, Petrology and Geochemistry, Guiyang, China. Proceedings of the 5th China Conference of Genesis of Ore Deposits, Geology Press (in Chinese).

Invited Presentations/Lectures

- 2009, Aug 21-26**, invited by Dr. Tiangang Liang at Lanzhou University (China) and for collaborative research, Xie gave three extensive lectures for a large group of faculty and students: (1) *New progress of remote sensing of snow cover and snow water equivalent based on MODIS and AMSR-E*; (2) *Snow cover spatial and temporal variability across three rivers headstream region of Tibetan Plateau based on MODIS data (2000-2008)*; (3) *ICESat for studying lake level and glacial elevation changes*.
- 2009, Aug 15-20**, invited by Dr. Tandong Yao at Institute of Tibetan Plateau Research, CAS, Xie gave a talk *MODIS and ICESat-based snow cover and glacier changes across three rivers headstream region of Tibetan Plateau*, at the International Workshop on Environmental Change, Glacial and Hydrological Processes, and Related Consequence in the Third Pole Region, Beijing-Lhasa, China.
- 2009, Aug 13**, invited by Dr. Jinping Zhao, Xie gave a talk *Antarctic expeditions and sea ice physical properties from space and field measurements*, at the College of Physical and Environmental Oceanography, Ocean University of China, Qingdao, China.
- 2009, Aug 12**, invited by Dr. Zhijun Li, Xie gave a talk *Antarctic expeditions and sea ice physical properties from space and field measurements*, at the School of Civil and Hydraulic Engineering, Dalian U of Technology, Dalian, China.
- 2009, Aug 6**, *MODIS/Terra-Aqua snow cover products, validation, and applications*, an invited talk given at the SPIE Optics+Photonics: Remote Sensing and Modeling of Ecosystems for Sustainability, San Diego, CA.
- 2009, Apr 7**, *Antarctic expeditions and climate changes*, for Course “Global Change” (CE 6113), Department of Civil and Environmental Engineering at UTSA
- 2008, Oct 15**, *Introduction to Remote Sensing*, for Course “Special topic on water research” (CE 5313), Department of Civil and Environmental Engineering at UTSA
- 2008, Jun 19-21**, invited by Dr. Mingiang Zhu at East China Institute of Technology (FuZhou), Xie gave two extensive lectures for a large group of faculty and students: (1) *Remote Sensing of Snow and Ice: from Land Surface, to Southern Ocean (Antarctic), and to the Mars* and (2) *Current progress on remote sensing on Antarctic and Mars*.
- 2008, Jun 16-18**, invited by Dr. Zuoxun Zeng at China University of Geosciences (Wuhan), Xie gave two extensive lectures for a large group of faculty and students: (1) *Remote Sensing of Snow and Ice: from Land Surface, to Southern Ocean (Antarctic), and to the Mars* and (2) *Current progress on remote sensing on Antarctic and Mars*.
- 2008, Jun 9-15**, invited by Dr. Tiangang Liang at Lanzhou University (China) and for collaborative research, Xie gave four extensive lectures for a large group of faculty and students: (1)(2) *Antarctic expeditions and sea ice physical properties from space and field measurements*; (3) *New progress of remote sensing of snow cover based on MODIS*; and (4) *Remote sensing of rainfall and rainfall-runoff modeling*.
- 2008, Mar 14**, *Precipitation mapping, methods and accuracy*, Environmental Science and Engineering Graduate Seminar, University of Texas at San Antonio, San Antonio, Texas.
- 2007, Sep 28**, *Remote Sensing of Snow and Ice: from Land Surface, to Southern Ocean (Antarctic), and to the Mars*, Environmental Science and Engineering Graduate Seminar, University of Texas at San Antonio, San Antonio, Texas.
- 2007, May 18**, *Global warming from Antarctic to San Antonio*, 2007 Certified GO Green ExpoWorkshopCinema at Live Oak Civic Center, San Antonio, TX.

- 2007, Apr 15**, *Global warming from Antarctic to San Antonio*, Time Warner Cable Education Channel 98.
- 2007, Apr 6**, *Statistic Evaluation of the Improved NEXRAD Precipitation Estimates Using Rain Gauge Measurements*, Graduate seminar of the Department of Management Science and Statistics at UTSA.
- 2007, Jan.19**, *Antarctic expedition on December 8-30, 2006*, the joint MORE Science and UTSA Environmental Science and Engineering graduate seminar series.
- 2006, Nov 13**, *Remote sensing in hydrology: several case studies*, Graduate seminar at the CREST-RESSACA of the Texas A&M at Kingsville.
- 2006, Nov 2**, *LRSO's Mars study and preliminary results*, Texas Space Grant Consortium Annual meeting at Southwest Research Institute.
- 2006, Jul 16-23**, invited by Dr. Tiangang Liang at Lanzhou University (China) and for collaborative research, Xie gave four extensive lectures for a large group of faculty and students: (1) *Introduction to University of Texas (UT) System and Laboratory for Remote Sensing and Geoinformatics (LRSO)*; (2) *Remote sensing of precipitation (rainfall and snow)*; (3) *Remote sensing of Antarctic*; and (4) *Remote sensing of Mars*.
- 2006, Jul 11**, *LRSO at UTSA and preliminary research results on remote sensing of vegetation, hydrology, and Mars*. National Key Lab of Remote Sensing at Beijing Research Institute of Uranium Geology, Beijing, China, where Xie studied and worked for about 10 years before came to USA.
- 2006, Apr 14**, *LRSO at UTSA and preliminary research results on remote sensing of vegetation, hydrology, and Mars*, Department of Geography of Texas State U San Marcos.
- 2006, Feb 21**, *Remote sensing at UTSA*, MORE science seminar series.
- 2006, Jan 23**, *NEXRAD precipitation validation and application*, National Weather Service at New Braunfels Office.
- 2006, Jan 17**, *Remote sensing: present and developing UTSA capabilities*, USGS San Antonio Office.
- 2004, Nov. 23**, *Precipitation of proposed Texas Hydrological Observatory*, 2004, Texas Hydrological Observatory Working Groups Meeting, November 23, Austin, Texas.
- 2004, Oct. 8**, *Remote sensing and its future*, Environmental Science Graduate Seminar, University of Texas at San Antonio, San Antonio, Texas.
- 2004, Sept. 29**, *Improving NEXRAD rainfall estimates for flood prediction and water quality modeling*, SARA water quality focus group meeting, San Antonio River Authority (SARA), San Antonio, TX.
- 2004, Mar. 25**, *Remote sensing in hydrology: ET, snow cover, and rainfall*, Department of Geology, Indiana University-Purdue University Indianapolis, Indianapolis, Indiana.
- 2004, Feb. 19**, *Remote sensing in hydrology: ET, snow cover, and rainfall*, Department of Earth and Environmental Science, University of Texas at San Antonio, San Antonio, Texas.
- 2003, Nov. 24**, *Quality control of NEXRAD precipitation*, NSF EPSCoR/INRAM annual meeting, Macey Center at New Mexico Tech, Socorro, NM
- 2003, Oct. 31 and Nov. 7**, *Radar hydrology and NEXRAD precipitation*, for course "Remote Sensing in Hydrology" (HYD 571), Fall 2003, Department of Earth and Environmental Sciences, New Mexico Tech.
- 2003, Sep 29 and Oct. 7**, *Integration of remote sensing and GIS in hydrology*, for course "Remote Sensing in Hydrology" (HYD 571), Fall 2003, Department of Earth and Environmental Sciences, New Mexico Tech.

- 2003, Apr 23 and 28**, *Integration of remote sensing and GIS, and their applications*, for course "Remote Sensing with Geoscience Applications" (HYD/GEOL/GEOP 434/534), Spring 2003, Department of Earth and Environmental Sciences, New Mexico Tech.
- 2003, Apr 10**, *Batch processing of NEXRAD precipitation data to GIS grid format and time-series precipitation retrieval*, Laboratory for Environmental Spatial Analysis (LESA), New Mexico State University.
- 2003, Mar 14**, *GIS and its application to geology, agriculture, and hydrology*, Department of Geology and Environmental Geosciences, College of Charleston, Charleston, South Carolina.
- 2003, Mar 3 and 5**, *Remote sensing image classifications*, for course "Remote Sensing with Geoscience Applications" (HYD/GEOL/GEOP 434/534), Spring 2003, Department of Earth and Environmental Sciences, New Mexico Tech.
- 2002, Oct 14**, *Application of Integrated Remote Sensing and GIS Technologies to Agricultural, Water Use and Environmental Issues in Far West Texas*, Hydrology program seminar, Department of Earth and Environmental Sciences, New Mexico Tech.
- 2002, Feb 15**, *AIRSAR/TOPSAR image processing and geological application in West Texas*, Department of Geology, Southern Illinois University, Carbondale, Illinois.

VI. Granting Activities

(All grants for research and training activities)

***Title: The devolvement of NASA QuickSCAT Scatterometer data to detect sea ice extent and variability in the Antarctic**

PI: Hongjie Xie, UTSA

Student recipient: Penny Wagner

Source: NASA Earth and Space Science Fellowship (NESSF) Program

Time Devoted: No salary request

Total Amount: \$89,700

Location: UTSA

Award Period: 9/1/2009 – 8/31/2012

* Since Penny is moving to U of Delaware (UD) for her PhD study starting the fall 2009, she is taking this fellowship with her and will work on the project under changed PI (faculty advisor). I signed the NASA document to reject receiving the fellowship in UTSA and allowed her taking it to UD.

1. Title: A collaborative geospatial decision support system for managing coastal river basins

Co-PI (UTSA PI): Hongjie Xie, UTSA

Project PI: Alex Sun, SwRI

Source: NASA Applied Sciences Program

Time Devoted: 77% of 1 month salary per year

Total Amount: \$24,153 for UTSA and \$247,439 for the entire project

Location: UTSA

Award Period: 9/15/2009 – 9/14/2011

2. Title: Better understanding NEXRAD level II reflectivity using a network of four double-gauge platforms in a single radar cell

PI: Hongjie Xie, UTSA

Source: NOAA NCAR/COMET Program

Time Devoted: no salary requested

Total Amount: \$10,424

Location: UTSA

Award Period: 8/1/2008 – 7/31/2009

3. Title: Antarctic sea ice thickness from space: validating estimates from the laser and radar satellite altimeters with ship-based measurements

Co-PI: Hongjie Xie, UTSA

PI: Steve Ackley, UTSA

Source: NASA Cryosphere Program.

Time Devoted: 1.5 months salary per year

Total Amount: \$585,964

Location: UTSA

Award Period: 6/3/2008 – 6/2/2011

4. Title: Developing an algorithm for automatically producing multi-day MODIS Terra and Aqua snow cover composite for its better utilities

PI: Hongjie Xie, UTSA

Source: USGS/TexasView Remote Sensing Consortium through Stephen F. Austin State U.

Time Devoted: no salary requested

Total Amount: \$3,000

Location: UTSA

Award Period: 7/1/2007 – 12/31/2007

5. Title: Martian surface compositions and H₂O/CO₂ circulation investigations using OMEGA and THEMIS data

PI: Hongjie Xie, UTSA

Source: NASA/Texas Space Grant Consortium New Investigator Program

Time Devoted: One-week salary per year

Total Amount: \$10,000, plus \$10,000 matching fund from UTSA

Location: UTSA

Award Period: 9/1/2007 – 8/31/2009

6. Title: Imperial marginality and frontier: Kallawayas and Chunchos in the eastern Inka borders

Collaborator: Hongjie Xie, UTSA

PI: Sonia Alconini, UTSA Department of Anthropology

Source: NSF

Time Devoted: no salary request
Total Amount: \$154,269
Location: UTSA
Award Period: 1/1/2007 – 12/31/2009

7. Title: Sea ice mass balance in the Antarctic – SIMBA drift station

Co-PI: Hongjie Xie, UTSA
PI: Steve Ackley, UTSA
Source: NSF
Time Devoted: 1.5 months salary in total
Total Amount: \$594,980
Location: UTSA
Award Period: 9/1/2006 – 8/31/2010

8. Title: Enhanced short-term hydrometeorological forecasting

Co-PI: Hongjie Xie, UTSA
PI: Hatim Sharif, UTSA
Source: NOAA MSI program
Time Devoted: no salary requested
Total Amount: \$99,856
Award Period: 9/1/2006 – 8/31/2008

9. Title: Validating DSP precipitation product using 50 GBRA rain gauge rainfall

PI: Hongjie Xie, UTSA
Source: NOAA NCAR/COMET program
Time Devoted: no salary requested
Total Amount: \$9,905.50
Location: UTSA
Award Period: 8/1/2006 – 1/31/2008

10. Title: Using satellite data and fully coupled regional hydrologic, ecological and atmospheric models to study complex coastal environmental processes

Co-PI (UTSA PI): Hongjie Xie, UTSA
Project PI: Zong-liang Yang, UT Austin
Source: NASA IDS program
Time Devoted: 1-month salary per year
Total Amount: \$120,000 for UTSA and \$1,236,979 for the entire project
Location: UTSA
Award Period: 5/10/2007-5/9/2010

11. Title: Validation of remotely sensed precipitation using rain gauge data in Texas Hill Country

PI: Hongjie Xie, UTSA
Source: USGS/TexasView Remote Sensing Consortium through Stephen F. Austin State U.
Time Devoted: no salary requested

Total Amount: \$5,000
Location: UTSA
Award Period: 3/1/2006 – 8/31/2006

12. Title: NEXRDA Radar Rainfall Downscaling

PI: Hongjie Xie, UTSA
Source: New Mexico Water Resource Research Inst. Project through NM Tech
Time Devoted: no salary requested
Total Amount: \$10,000
Location: UTSA
Award Period: 1/1/2006 – 8/14/2006

13. Title: Minority Opportunities for Research Experience in Earth Science at the UTSA

PI (9/2006-9/2009): Hongjie Xie, UTSA
PI (10/2005-8/2006): Alyson Ponomarenko, UTSA
Co-PI (10/2005-8/2006): Hongjie Xie, UTSA
Source: U.S. Department of Education
Time Devoted: 1-2 months for the first three years, 0.5 month for the fourth year.
Total Amount: \$281,653
Location: UTSA
Award Period: 10/1/2005 – 9/31/2008, with one year no cost extent to 9/31/2009

14. Title: Early detection of oak wilt using hyperspectral technology

Supervising professor: Hongjie Xie, UTSA
Student recipient: Blake Wessling (PhD student)
Source: NASA/Texas Space Grant Consortium Graduate Fellowship
Time Devoted: no salary requested
Total Amount: \$5,000
Location: UTSA
Award Period: 9/1/2005 – 8/31/2006

15. Title: Establishing a Spectral Library of Oak Wilt for Early Detection using Hyperspectral Remote Sensing Approach

PI: Hongjie Xie, UTSA
Source: USGS/TexasView Remote Sensing Consortium through Stephen F. Austin State U.
Time Devoted: no salary requested
Total Amount: \$5,000
Location: UTSA
Award Period: 1/1/2005 – 8/31/2005

Institutional grants and travel supports

16. Title: Remote sensing urban heat-island phenomenon in four Texas cities: Houston, Dallas-Ft Worth, San Antonio, and El Paso

PI: Hongjie Xie, UTSA

Source: UTSA Tenure-Track Research Award Competition (TRAC)

Time Devoted: one week salary requested

Total Amount: \$22,000

Award Period: 11/15/2008 – 8/31/2009

17. Title: Mars Remote Sensing for Determining Mars's Evolution of the Surface and Interior

PI: Hongjie Xie, UTSA

Source: UTSA Faculty Research Award

Time Devoted: One summer week

Total Amount: \$5,000

Award Period: 1/1/2005 – 7/31/2005

UTSA travel support from the Office of Vice President for Research to attend a NASA workshop (March 2008) on “NASA Research Center for Minority Institutions”, at New Orleans, LA, and developed the NASA Center proposal (\$5 millions for five years) with other 10 co-PIs and 5 collaborators from UTSA and other institutions in USA and foreign countries. Our proposal entitled “NASA Center for Science and Engineering in Extreme Environments” was ranked as two “very good” and one “excellent”, though not funded.

UTSA Presidential travel support (January 2005) to attend a conference of American Meteorology Society in San Diego. **H. Xie**, E. Vivoni, X. Zhou, and J. Hendrickx, 2005. *Rainfall climatology of the monsoon season in New Mexico: Observations from NEXRAD Stage III (1996-2003)*, AMS Annual Conference (85th), January 9-13, San Diego, California

Collaborative projects funded by Chinese Agencies:

18. Title: Remote sensing monitoring and early warning system on snow-caused disaster for the pastoral agriculture area in Tibetan Plateau, China.

USA collaborator: Hongjie Xie, UTSA

PI: Tianggang Liang, Lanzhou University, China

Source: Chinese Department of Education and Lanzhou University

Time Devoted: no salary request but with travel support between USA and China and local expenses for staying there for research and lectures in Lanzhou U.

Total Amount: ¥800,000 RMB (or \$114,286)

Location: Lanzhou University

Award Period: 1/1/2009 – 12/31/2012

19. Title: A digital system for grass and animal management and decision support, in the pastoral agricultural area, Southern Gansu Province

USA collaborator: Hongjie Xie, UTSA

PI: Tianggang Liang, Lanzhou University, China

Source: Chinese High Tech Program (863 program)

Time Devoted: no salary request but with travel support between USA and China and local expenses for staying there for research and lectures in Lanzhou U.

Total Amount: ¥500,000 RMB (or \$71,428)

Location: Lanzhou University

Award Period: 9/1/2008 – 8/31/2010

20. Title: Mars Express/OMEGA surface spectra retrieving methods and mineral detection.

USA collaborator: Hongjie Xie, UTSA

PI: Minqiang Zhu, East China Institute of Technology (ECIT)

Source: National Natural Science Foundation of China

Time Devoted: no salary request but with travel support between USA and China and local expenses for staying there for research and lectures in ECIT.

Total Amount: ¥380,000 RMB (or \$54,286)

Location: East China Institute of Technology

Award Period: 1/1/2008 – 12/31/2010

21. Title: MODIS and AMSR-E based monitoring and warning system on snow-caused disasters for pastoral agriculture area in Northern Xinjiang Province, China

USA collaborator: Hongjie Xie, UTSA

PI: Tiangang Liang, Lanzhou University, China

Source: National Natural Science Foundation of China

Time Devoted: no salary request but with travel support between USA and China and local expenses for staying there for research and lectures in Lanzhou U.

Total Amount: ¥250,000 RMB (\$35,714)

Location: Lanzhou University

Award Period: 1/1/2006 – 12/31/2008

Other external travel funding:

Aug 13-17, 2007. **NSF travel support** to attend the CSIG 2007 (Geoinformatics) workshop at the San Diego Supercomputer Center, UCSD.

June 27-29, 2007, **NASA travel support** to attend the ICESAT-II workshop in Washington, DC.

Aug 23-24, 2004, **NSF travel support** for the new investigator workshop on Antarctic Research, Washington, DC.

VII. Teaching Activities

Formal courses taught

I taught eight different courses for undergraduate (course numbers 1000-4999) and graduate (course numbers 5000 -6999) levels in the five years:

- Remote Sensing 5053 (once every fall semester since Fall 2004); cross-listing with undergraduate level course Principles of Remote Sensing 4093 (since Fall 2007);
- Image Processing and Analysis 6973 now 5083 (once every other spring semester since Spring 2005);
- Remote Sensing in Hydrology 6973 now 5093 (once every other semester since Spring 2006);
- Fundamental GIS 2113 (Fall 2006), team-taught with Prof. Ryan Rudnicki;
- Environmental Science and Engineering Graduate Seminar 5981 (fall 2006 and spring 2007), team-taught with Prof. Dibs Sarker;
- Advanced GIS 6513 (once every spring semester since Spring 2007);
- Polar Marine Science Seminar 6491 (Fall 2008), team-taught with Prof. Steve Ackley.

Students/scholars mentored and completed

- **Served as primary advisor for the following graduate students:**

Lani Cabico, Misti Thueson, Newfel Mazari, Mark Schnur, Beibei Yu, Penney Wagner, Xianwei Wang (PhD), and Blake Weissling (PhD)

- **Served as committee member for the following graduate students:**

Chaojun Fan (PhD), Trevor Budge (PhD), Summer J. Barber, and Yang Gao (PhD)

- **Served as chair or committee member for Environment Science/Civil Engineering Master's degree students (non-thesis option):**

Roger Stanley, James Waclawczyk, Noreen Castellano, Yuliya Duliya, Wesley Keller, Amber Patrick, and Miguel Balderas

- **Served as host professor for the following scholars/postdocs:**

Huade Guan, Minqiang Zhu, Chaojun Fan, Zongyu Yue, Lisha Zhou, Xiaodong Huang, Hailton M. Silva, Ning Nu.

- **Served as faculty mentor for the following students for gaining research experiences in summer and/or regular semesters, funded by the U.S. Department of Education through the MORE science program:**

Penelope Wagner, Carrie Benson, Austin Jordan, Anne Ji, and Beibei Yu

On-going students/scholars mentoring as primary advisor

Mike Lewis (dissertation), Burcu Cicek (dissertation), Newfel Mazari (dissertation), Mark Schnur (dissertation), David Prado (thesis), Elizabeth Murphy (thesis), Ahmet Tekeli (postdoc); Chaojun Fan (postdoc); Guoqing Liu (visiting PhD student), and Wenlong Li (visiting professor).

VIII. Service Activities

A. Committee assignments

- Chair of Departmental Scholarship Committee (Mar 2006)
- Chair of Graduate Studies Committee in Environmental Science (Aug 2006 –Aug 2007)
- Co-Advisor of Graduate GIS Certificate (Mar 2006 –)
- Member of Departmental Policy Committee (Sep 2006 -)
- Member of Departmental Undergraduate Study Committee (Sep 2007 -)

- Member of University Standing Committee on University Libraries (Sep 06 –Aug 08)
- Member of College Subcommittee on Research Activities and Sponsorship (June 2007 -)
- Member of College Faculty Development Leaves Committee (November 2007 -)
- Member of COS Advisory Committee on Limited Submission on proposals (Dec. 2008-)
- Member of Doctoral Studies Committee of the joint Environmental Science and Engineering PhD program (Apr 2009-)

B. Invited Manuscript Reviewer

Remote Sensing of Environment (five times);
International Journal of Remote Sensing (three times);
IEEE Transactions on Geoscience and Remote Sensing (twice);
Journal of Environmental Management (twice);
Journal of the American Water Resources Association (three times);
Photogrammetric Engineering & Remote Sensing (twice);
Journal of Geographic Information Sciences (once);
Computer & Geosciences (once);
Journal of Applied Remote Sensing (six times);
Journal of Hydrometeorology (once);
Journal of Environmental Management (once);
Environmental Modeling & Assessment (twice);
Civil Engineering and Environmental Systems (twice);
Water Management (once);
Weather and Forecast (once);
IEEE Transactions on Instrumentation & Measurement (once);
Journal of Geophysical Research (Atmosphere) (two times);
Journal of Hydrology (four times);
IEEE Journal of Selected Topics in Earth Observations and Remote Sensing (once);

ICARUS (International Journal of Solar System Studies) (once);
International Journal of Climatology (once);
Environmental Modeling and Software (twice).

Abstract reviewer for World Scientific and Engineering Academy and Society (WSEAS)
2004 Conference Proceedings (Izmir, Turkey)

Paper reviewer for book entitled "Wetland and Water Resource Modeling and
Assessment: A Watershed Perspective", 2006

Abstract reviewer (5 abstracts) for IGARSS 2007 meeting, Barcelona, Spain

Abstract reviewer (4 abstracts) for IGARSS 2008 meeting, Boston, MA, USA

Abstract reviewer (5 abstracts) for IGARSS 2009 meeting, Cape Town, South Africa

C. Editorial board member

International Journal of Applied Environmental Sciences (since 2006)

D. Invited Proposal Reviewer

New Mexico Water Resources Research Institute (2004)

NOAA's Climate Prediction Program for the Americas (CPPA) (2005)

NASA's Global Climate Change Education (GCCE) (2009)

E. Professional Membership and Service

ASPRS Imaging & Geospatial Information Society (since 2002)

-- Faculty advisor for the ASPRS UTSA Chapter (since 2006)

American Geophysical Union (AGU) (since 2002)

-- Member of AGU Hydrology Remote Sensing Subcommittee (since 2007)

IEEE Geoscience & Remote Sensing Society (since 2003)

International Association of Chinese Professionals in Geographic Information Systems
(CPGIS), a lifetime member since 2004.

-- Member of Academia and Governmental Subcommittee of CPGIS (2004 -
2005)

-- Chair of Grant Development Sub-Committee of CPGIS (2005-2006)

American Meteorological Society (AMS) (since 2005).

UTSA alternate representative for CUAHESI (Consortium of Universities for the
Advancement of Hydrologic Science, Inc.), since 2007.

UTSA representative for TexasView Remote Sensing Consortium, member of the
AmericaView Remote Sensing Consortium, since 2004.

Co-convenor for the Precipitation of Remote Sensing session at the AGU Joint Assembly at Baltimore, MD, May 2006.
Convener for the Sea Ice IV: Snow on Sea Ice session (C23B) of AGU Fall Meeting in San Francisco, CA, December 2007.
Convener for Applications of Hydrologic Remote Sensing Data of AGU Fall Meeting in San Francisco, CA, December 2009.
Session chair for the Sensors and Systems at the 2008 International Workshop on Earth Observation and Remote Sensing Applications, Beijing, China, July, 2008.
Program Committee member for SPIE international conference on Remote Sensing and Modeling of Ecosystems for Sustainability, Aug 2-6, 2009, San Diego, CA.
Session chair for the Ecological Remote Sensing Theory, Techniques, and Applications III, at the SPIE international conference on Remote Sensing and Modeling of Ecosystems for Sustainability, Aug 2-6, 2009, San Diego, CA.

F. Other Community Service

Volunteer to the Graduate Program Day for College of Science on March 29, 2005;
Faculty advisor of UTSA Chinese Student and Scholar Associate (4/2006-present);
Volunteer to the orientation of new international students on August 15, 2005.
Vice principal for teaching for Chinese School of Culture and Language at the First Chinese Baptist Church at San Antonio (7/2006-5/2008);
Faculty advisor in advising my students/ASPRS student chapter to participate the San Antonio GIS Day in November each year, since 2006, to hundreds of school kids;
Member of executive council of China University of Geosciences Alumni Association of Texas (2005-2008);
Volunteer to the Greater Edwards Aquifer Alliance at the Founder's Day Celebration at San Pedro Springs on Saturday afternoon, October 16, 2004;
Judge for the 2006, 2007, 2008 EXXON/MOBIL Science and Engineer fair;
Invited speaker for the 10th GO GREEN ExpoWorkshopCinema (2007).
Member of the General Benevolence Committee of the First Chinese Baptist Church at San Antonio (fall 2007-)