Chi，Zhaohui (Ph.D)

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Formal Education

Texas A&M University, College Station, Texas	*2007~ 2012*

Doctor of Philosophy in Geography (GIS & Remote Sensing)

Sun Yat-Sen University, Guangzhou, China	*2005~ 2007*

Master of Science in GIS (Remote Sensing)

Nanjing Institute of Meteorology, Nanjing, China	*2000~ 2004*

Bachelor of Science in Urban & Rural Planning and Resources Management (GIS & Remote Sensing)

Working Experience

Lecturer

Department of Geography, Texas A&M University, College Station, TX   *01.21 ~ present*

Instructor for GEOG660: Applications in GIS and GEOG678: WEBGIS courses offered in the online Masters of Geosciences program.

Visiting Scholar

Department of Geography, Texas A&M University, College Station, TX   *09.20 ~ 12.20*

Conduct research on Antarctic ice shelves and glaciers with Dr. Andrew Klein.

Visiting Lecturer

Department of Geography, Texas A&M University, College Station, TX   *01.20 ~ 08.20*

Instructor for GEOG390: Principles of GIS and GEOG660: Applications in GIS.

Geospatial Specialist I

Department of Geography, Texas A&M University, College Station, TX   *11.18 ~ 05.20*

- Perform various remote sensing and geographic information system (GIS) in a range of application domains.
- Remote-sensing image processing, classification, and biophysical parameter estimation, GIS-based data processing and analysis, and programming.

Geospatial Analyst

Texas Conservation Science, Inc   *08.16 ~ 11.18*

Collect and process multiple spectral satellite images and other data products, address data storage and geodatabase management, analyze geospatial data using remote sensing and GIS software, and make habitat and land-use maps.

Post-doctoral Research Assistant
USGS National Wetlands Research Center, University of Louisiana at Lafayette Cooperative Ecosystem Studies Unites, Lafayette, LA.   *10.12 ~ 07.14*

- Develop remote sensing image processing products directly pertinent to advancing the detail and frequency of coastal resource monitoring, deploy the subcanopy oil detection based on fine spatial resolution SAR (Synthetic Aperture Radar) data collection, and conduct SAR workshops covering remote sensing techniques such as InSAR and Optical-SAR integration and processing carried-out of impact analysis and exposure analysis.
- Organize and arrange preliminary data analysis using ESRI Arc GIS model builder regarding Sandy Hurricane event; assist data inventory for utilization of the TerraSAR-X data.

GIS Specialist
Department of Wildlife and Fisheries Sciences, TAMU, College Station, TX
06.09~8.09; 06.10~8.10; 09.12~10.12
Knowledge Engineering Laboratory, Dept. of Entomology, TAMU, College Station, TX
06.08~ 8.08

Assist in technical and applied GIS problem solving, collect and process remote sensing data, design and maintain the GIS database, and create 3D visualization of the object-oriented simulation data.

Software Proficiencies
- Proficient in ESRI Arc GIS software (ArcGIS 10.X, ArcView 3.X), remote sensing software (ENVI, ERDAS Imagine, and PCI), and Microsoft Office.
- Experienced in graphic design software (e.g. Illustrator, Photoshop, and AutoCAD).
- Familiar with statistical software (e.g. Matlab and R).
- Computer languages: IDL, VB, C++, Python, Fortune, SQL, and XML

Selected Awards and Honors
- 2011 First Prize in Student Paper Competition of SWAAG Conference, Austin, Texas, Nov 10-11
- 2011 NASA DEVELOP National program internship, Wise, VA, Jun-Aug 2011
- 2010 PI for a proposal of utilization of RADARSAT-1 data approved by NASA Distributed Active Archive Center (DAAC)
- 2009 InSAR Workshop Grant (University Navstar Consortium, Boulder, Colorado)
- 2008 Research and Presentation Grant (Office of Graduate Studies, Texas A&M University)
- 2003 Academic Excellence Scholarship (Nanjing Institute of Meteorology, China)

Selected Publications

1. Huo, D., **Chi, Z**., Ma, A. 2020. Modeling Surface Processes on Debris-Covered Glaciers: A Review with Reference to the High Mountain Asia. *Water* 13(1), 101.

2. Xing, Z., **Chi, Z**., Huang, H., Hui, F., Cheng, X. 2020. Accuracy Evaluation of Four Greenland Digital Elevation Models (DEMs) and Assessment of River Network Extraction. *Remote Sensing*, 12(20), 3429.

3. Yuan, J., **Chi, Z**., Cheng, X., Zhang, T., Li, T. 2020. Automatic extraction of supraglacial lakes in southwest Greenland during the 2014-2018 melt seasons based on Convolutional Neural Network. *Water,* 12(3), 891.

4. Chen, Z., **Chi, Z.** Zinglersen, K. B., Wang, K., Hui, F., Cheng, X. A New Image Mosaic of Greenland Using Landsat-8 OLI images. 2019. *Science Bulletin*, 65(7), 522-524.

5. Bishop, M.P., Young, B.W., **Chi, Z.**, and Huo, D. Spatial Analysis/Modeling. 2019. Treatise on Geomorphology. Accepted.

6. Andrew, B., Bishop, M.P., Huo, D., **Chi, Z**, and Tiwaria, U. Issues in Climate Analysis and Modeling for Understanding Mountain Erosion Dynamics. 2020. Reference Module in Earth Systems and Environmental Sciences, Elsevier, doi: 10.1016/B978-0-12-818234-5.00022-5.

7. Da, H., Bishop, M. P., Haritashya, U.K., Young, B., **Chi, Z**. Numerical Modeling Issues for Understanding Complex Debris-Covered Glaciers. 2020. Reference Module in Earth Systems and Environmental Sciences, Elsevier, doi: 10.1016/B978-0-12-818234-5.00019-5.

8. Da, H., Bishop, M., Brennan, Y., **Chi, Z**. Modeling Surface Ablation and Morphological Variations on Debris-Covered Glaciers: A Case Study of the Baltoro Glacier in the Central Karakoram. 2020. Geomorphology. In submission.

9. Zhang, Z., Hui, F., Cheng, X., Shokr, M., Li, X., **Chi, Z.**, and Chen, Z. Intercomparison of Arctic Sea Ice Classifications from Ku-band and C-band Scatterometers. 2019. *IEEE Transactions on Geoscience and Remote Sensing*. Under Review.

10. Li, X., Shokr, M., Hui, F., **Chi, Z.**, Heil, P., Chen, Z., Yu, Y., Zhai, M., Cheng, X. The spatio-temporal patterns of landfast ice in Antarctica during 2006-2011 and 2016-2017 using high-resolution SAR imagery. 2019. *Remote Sensing of Environment*, 242.

11. Bishop, M. P., Young, B., Colby, J., Furfaro, R., Schiassi, E., **Chi, Z**. Theoretical Evaluation of Anisotropic Reflectance Correction Approaches for Addressing Multi-Scale Topographic Effects on the Radiation-Transfer Cascade in Mountain Environments. 2019. *Remote Sensing*, 11(23), 2728.

12. Yu, Y., Zhang, Z., Shokr, M., Hui, F., Cheng, X., **Chi, Z.**, Heil, P., Chen, Z. Automatically Extracted Antarctic Coastline Using Remotely-Sensed Data: An Update. 2019. *Remote Sensing*, 11(16), 1844.

13. Rangoonwala, A., Jones, C.E., **Chi, Z.**, and Ramsey, E.W., III, 2017, Operational Shoreline Mapping with High Spatial Resolution Radar and Geographic Processing. *Photogrammetric Engineering and Remote Sensing*, v. 83, no. 3, p. 237-246.

14. Zhai, M., Li, X., Hui, F., Cheng, X., Heil, P., Zhao, T., Jiang, T., Cheng, C., Ci, T., Liu, Y., **Chi, Z.** and Liu, J. 2015. Sea-ice Conditions in the Adelie Depression during Besetment of the Chinese Icebreaker RV Xuelong. *Annals of Glaciology*, 56 (69): 1-7.

15. Ramsey, E., Rangoonwala, A., **Chi, Z.**, Bannister, T. and Jones, C. 2014. Marsh Dieback, Loss, and Recovery Mapped with Satellite Optical, Airborne Polarimetirc Radar, and Field Data. *Remote Sensing of Environment*, 152: 364-374.
16. Hui, F., Ci, T., Cheng, X., Scambos, T., Liu, Y., Zhang, Y., **Chi, Z.**, Huang, H., Wang, X., Wang, F., Zhao, C., Jin, Z. and Wang, K. 2014. Mapping Blue Ice Areas in Antarctica Using ETM+ and MODIS data. *Annals of Glaciology*, 55(66), 129-137.