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Resume:

1999-, Professor, Cold and Arid Regions Environmental and Engineering Research Institute (CAREERI), Chinese Academy of Sciences (CAS)

1991-1996, Ph.D, glaciology, Lanzhou Institute of Glaciology and Geocryology (LIGG), CAS

R&D Scopes:

glaciology, glacial hydrology, glacial hazards, remote sensing of snow and ice

Major Published Works:

1. Cunde Xiao, Shiyin Liu, Lin Zhao, et al. Observed changes of cryosphere in China over the second half of the 20th century: an overview. *Annals of Glaciology*. 2007, 46(1): 382-390.
2. Dahe Qin, Shiyin Liu, Peiji Li. Snow cover distribution, variability, and response to climate change in western China. *Journal of Climate*. 2006, 19(9): 1820-1833.
3. DING Yongjian, LIU Shiyin, LI Jing, SHANGGUAN Donghui. The retreat of glaciers in response to recent climate warming in western China. *Annals of Glaciology*, 2006, 43, 97-105
4. Donghui Shangguan, Shiyin Liu, Yongjian Ding, et al. Glacier changes in the west Kunlun Shan from 1970 to 2001 derived from Landsat TM/ETM+ and Chinese glacier inventory data. *Annals of Glaciology*. 2007, 46(1): 204-208.
5. Felix Ng, Liu Shiyin, Mavlyudov B, et al. Climatic control on the peak discharge of glacier outburst floods. *Geophysical Research Letters*. 2007, 34(21): L21503.
6. Felix Ng, Shiyin Liu. Temporal dynamics of a jokulhlaup system. *Journal of Glaciology*. 2009, 55(192): 651.
7. HAN Haidong, DING Yongjing, LIU Shiyin. A simple model to estimate ice ablation under

a thick debris layer. *Journal of Glaciology*, 2006, Vol. 52, No. 179, 528-536

8. Han Haidong, Liu Shiyin, Wang Jian, et al. Glacial runoff characteristics of the Koxkar Glacier, Tuomuer-Khan Tengri Mountain Ranges, China. *Environmental Earth Sciences*. 2010, 61(4): 665-674.

9. Han Haidong, Wang Jian, Wei Junfeng, Liu Shiyin. Backwasting rate on debris-covered Koxkar glacier, Tuomuer mountain, China. *Journal of Glaciology*. 2010, 56(196): 287-296.

10. HAN Tianding, DING Yongjian, YE Baisheng, LIU Shiyin, JIAO Keqin. Mass-balance characteristics of Urumqi glacier No. 1, Tien Shan, China. *Annals of Glaciology*, 2006, 43, 323-328

11. Li Jing, Liu Shiyin, Shangguan Donghui, et al. Identification of ice elevation change of the Shuiguan River No. 4 glacier in the Qilian Mountains, China. *Journal of Mountain Science*. 2010, 7(4): 375-379.

12. Li Jing, Shiyin Liu, Yong Zhang, DongHui Shangguan. Surface energy balance of Keqicar Glacier, Tianshan Mountains, China, during ablation period. *Sciences in Cold and Arid Regions*, 2011, 3(3)

13. Li Xiangying, Liu Shiyin, Shangguan Donghui, et al. Progresses in the ice formation of glaciers in China. *Frontiers of Earth Science in China*. 2008, 2(3): 346-355.

14. Liu Chaohai, Kang Ersi, Liu Shiyin, et al. Study on the glacier variation and its runoff responses in the arid region of Northwest China. *Science in China Series D: Earth Sciences*. 1999, 42: 64-71.

15. Liu Qiao, Liu Shiyin, Zhang Yong, et al. Recent shrinkage and hydrological response of Hailuoguo glacier, a monsoon temperate glacier on the east slope of Mount Gongga, China. *Journal of Glaciology*. 2010, 56(196): 215-224.

16. Liu Qiao, Liu Shiyin. Seasonal evolution of englacial and subglacial drainage system of temperate glacier revealed by hydrological analysis. *Sciences in Cold and Arid Regions*. 2010, 2(1): 51-58.

17. Liu Shiyin, Ninglian W, Keqin D, et al. Recent progress of glaciological studies in China. *Journal of Geographical Sciences*. 2004, 14(4): 401-410.

18. Liu Shiyin, Yong Z, Yingsong Z, et al. Estimation of glacier runoff and future trends in the Yangtze River source region, China. *Journal of Glaciology*. 2009, 55(190): 353-362.

19. Liu, Shiyin, Ding Yongjian, Shangguan Donghui, Zhang Yong, Li Jing, Han Haidong;

Wang Jian, Xie Changwei. Glacier retreat as a result of climate warming and increased precipitation in the Tarim river basin, northwest China. *Annals of Glaciology*, Volume 43, Number 1, September 2006, 91-96

20. Liu, Shiyin; Shangguan, Donghui; Ding, Yongjian; Han, Haidong; Xie, Changwei; Zhang, Yong; Li, Jing; Wang, Jian; Li, Gang. Glacier changes during the past century in the Gangrigabu mountains, southeast Qinghai-Xizang (Tibetan) Plateau, China *Annals of Glaciology*, Volume 43, 187-193(7)

21. Qian J, Wang G, Ding Y, Liu S. The land ecological evolutionary patterns in the source areas of the Yangtze and Yellow Rivers in the past 15 years, China. *Environmental Monitoring and Assessment*. 2006, 116(1): 137-156.

22. Shangguan D, Liu S, Ding Y, et al. Changes in the elevation and extent of two glaciers along the Yanglonghe river, Qilian Shan, China. *Journal of Glaciology*. 2010, 56(196): 309-317.

23. Shangguan D, Liu S, Ding Y, et al. Glacier changes during the last forty years in the Tarim Interior River basin, northwest China. *Progress in Natural Science*. 2009, 19(6): 727-732.

24. Shangguan D, Liu S, Ding Y, et al. Thinning and retreat of Xiao Dongkemadi glacier, Tibetan Plateau, since 1993. *Journal of Glaciology*. 2008, 54(188): 949.

25. Shi Y, Liu S. Estimation on the response of glaciers in China to the global warming in the 21st century. *Chinese Science Bulletin*. 2000, 45(7): 668-672.

26. Shi, Yafeng; Liu, Shiyin; Shangguan, Donghui; Li, Dongliang; Ye, Baisheng Peculiar phenomena regarding climatic and glacial variations on the Tibetan Plateau *Annals of Glaciology*, 2006 (43), 106-110

27. Xiao C, Qin D, Yao T, Ding Y, Liu S, et al. Progress on observation of cryospheric components and climate-related studies in China. *Advances in Atmospheric Sciences*. 2008, 25(2): 164-180.

28. Xie Changwei, Ding Yongjian, Liu Shiyin, Chen Caiping. Response of meltwater runoff to air-temperature fluctuations on Keqikaer glacier, south slope of Tuomuer mountain, western China. *Annals of Glaciology*, 43, 2006:275-279.

29. Xin Wang, Shiyin Liu, Wanqin Guo, et al. Assessment and simulation of glacier lake outburst floods for Longbasaba and Pida Lakes, China. *Mountain Research and Development*. 2008, 28(3): 310-317.

30. Xin Wang, Zichu Xie, Shiyin Liu, et al. Modeling the roles of precipitation increasing in glacier systems responding to climate warming. *Journal of Mountain Science*. 2005, 2(4): 306-312.
31. Yang Jianping, Ding Yongjian, Liu Shiyin, Liu Junfeng. Variations of snow cover in the source regions of the Yangtze and Yellow Rivers in China between 1960 and 1999. *Journal of Glaciology*, Vol. 53, No.182, 2007, 420-426.
32. Zhang Yong, Fujita K, Liu Shiyin, et al. Multi-decadal ice-velocity and elevation changes of a monsoonal maritime glacier: Hailuoguo glacier, China. *Journal of Glaciology*. 2010, 56(195): 65-74.
33. ZHANG Yong, Koji FUJITA, Shiyin LIU, Qiao LIU, Takayuki NUIMURA. 2011. Distribution of debris thickness and its effect on ice melt at Hailuoguo glacier, southeastern Tibetan Plateau, using in situ surveys and ASTER imagery. *Journal of Glaciology*, 57(206)
34. Zhang Yong, Liu Shiyin, Ding Yongjian. Glacier meltwater and runoff modeling, Keqicar Baqi glacier. *Journal of Glaciology*, 2007, 53 (180): 91-98.
35. Zhang Yong, Liu Shiyin, Xie Changwei, Ding Yongjian. Application of a degree-day model for the determination of contributions to glacier meltwater and runoff near Keqicar Baqi glacier, southwestern, Tien Shan. *Annals of Glaciology*, 2006 (43):280-284.
36. Zhang Yong, Liu Shiyin, Xu Junli, et al. Glacier change and glacier runoff variation in the Tuotuo River basin, the source region of Yangtze River in western China. *Environmental Geology*. 2008, 56(1): 59-68.
37. Zhang Yong, Shiyin Liu, Yongjian Ding. Glacier meltwater and runoff modelling, Keqicar Baqi glacier, southwestern Tien Shan, China. *Journal of Glaciology*. 2007, 53(180): 91-98.
38. Zhao J, Liu S, Wang J, et al. Glacial advances and ESR chronology of the Pochengzi Glaciation, Tianshan Mountains, China. *Science China (Earth Sciences)*. 2010, 53(3): 403-410.
39. Zhao J, Song Y, King J W, Liu S, et al. Glacial geomorphology and glacial history of the Muzart River valley, Tianshan Range, China. *Quaternary Science Reviews*. 2010, 29(11-12): 1453-1463.
40. hao J, Zhou S, He Y, Ye Y, Liu Shiyin. ESR dating of glacial tills and glaciations in the Urumqi River headwaters, Tianshan Mountains, China. *Quaternary International*. 2006, 144(1): 61-67.
41. Zhao Jingdong, Liu Shiyin, He Y, et al. Quaternary glacial chronology of the Ateaoynake

River Valley, Tianshan Mountains, China. *Geomorphology*. 2009, 103(2): 276-284.

42. Zhao L, Ping C, Yang D, Cheng G, Ding Y, Liu S. Changes of climate and seasonally frozen ground over the past 30 years in Qinghai-Xizang (Tibetan) Plateau, China. *Global and Planetary Change*. 2004, 43(1-2): 19-31.

43. Zhou C, Yang W, Wu L, LIU S. Glacier changes from a new inventory, Nianchu river basin, Tibetan Plateau. *Annals of glaciology*. 2009, 50(53): 87-92.

44. Liu Shiyin. Glacier changes and their trend in China. 2008. In *The Concise Glacier Inventory of China* edited by Shi Yafeng, Liu Shiyin, Ye Baisheng, Liu Chaohai and Wang Zongtai. Publishing House of Scientific Popularization Shanghai.

45. Liu Shiyin, Zhang Yinsheng, Xie Zichu, Kang Ersi and Huang Maohuan. 2008. Mass and energy balance of glaciers, In *Glaciers and Related Environments in China* edited by Shi Yafeng, Hunag Maohuan, Yao Tandong and He Yuanqing, pp131-171, Science Press, Beijing.

Research Works:

My presents projects include the risk assessment of the impact of glacier changes granted by the Ministry of Science and Technology, Cryospheric dynamics and Environment in Tianshan Mountains granted by Chinese Academy of Sciences, Interaction between glaciers and moraine-dammed lakes and its implication to the outburst floods by the National Natural Science Foundation.