

Prof. Dr. Yaoming Ma

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Field of Expertise: Boundary layer meteorology and satellite remote sensing applications

Educational background:

1987, Lanzhou University, BSc in Atmosphere Science

1995, Postgraduate School of the Chinese University of Science and Technology and Lanzhou Institute of Atmospheric Physics, Chinese Academy of Sciences, MSc in Atmospheric Physics

2001, Okayama University, PhD in Atmospheric Science

2006, Wageningen University, PhD in Environmental Science

Professional experience:

Prof. Ma went to Lanzhou University on 1983 and obtained a Bachelor Degree in Atmospheric Physics in June 1987.

He obtained his Master Degree in Atmospheric Physics from the Chinese Academy of Sciences (CAS) in 1995 at the Postgraduate School of the Chinese University of Science and Technology and Lanzhou Institute of Atmospheric Physics (LIPAP), CAS.

He got his PhD in Atmospheric Physics from Okayama University in 2001 and in Environmental Science from Wageningen University in 2006.

He became employed at Lanzhou Institute of Atmospheric Physics (LIPAP), CAS in 1987.

In 2000, he became employed at Cold and Arid Regions Environmental and Engineering Research Institute (CAREERI), CAS and In March 2002, he became a professor of CAREERI, CAS.

In April 2004, he joined the Institute of Tibetan Plateau Research (ITP), CAS, and worked as a professor in ITP, CAS. He is also the director of Lhasa Branch of ITP, CAS and the Director of Qomolangma Station for Atmospheric and Environmental Observation and Research (QOMS) - Chinese Academy of Sciences, China.

Main research activities:

As an atmospheric boundary layer researcher, he has been actively involved in many land surface (sea surface) experiments in China. He has also been actively involved in the GEWEX Asia Monsoon Experiment on the Tibetan Plateau (GAME/Tibet, 1996-2000) for its entire duration. He was coordinating the participation of Chinese team in the GAME/Tibet. He is still in charge of the long term atmospheric monitoring on the Tibetan Plateau, which including one Planetary Boundary Layer (PBL) tower and radiation system station, eleven Automatic Weather Stations (AWSs), two Portable Automated Meso-net (PAM) stations, five flux measurement

towers and nine Soil Moisture and Soil Temperature Measurement Systems (SMTMSs). He is also one of the overall coordinators of Coordinated Enhanced Observing Period (CEOP) Asian-Australian Monsoon Project (CAMP) on the Tibetan Plateau (CAMP/Tibet, 2001-2010). He is also the director of Qomolangma Station for Atmospheric and Environmental Observation and Research (QOMS), Chinese Academy of Sciences. His 30 papers have been published in the international journals.

As a scientific researcher, except his domestic research work, he cooperated with the foreign scientists on atmospheric boundary layer and the application of satellite remote sensing. His cooperative institutions and universities are including Alterra (SC-DLO), Wageningen University and Research Center (WUR) and International Institute for Geo-Information Science and Earth Observation (ITC) (The Netherlands), University of Tokyo, Nagoya University, Kyoto University, Tsukuba University and Okayama University (Japan) etc.

Selected list of relevant publications:

- Ma Yaoming, M. Menenti, R. A. Feddes, J. Wang, 2008, The Analysis Of The Land Surface Heterogeneity And Its Impact On Atmospheric Variables And The Aerodynamic And Thermodynamic Roughness Lengths, *Journal Of Geophysics Research-Atmospheres*, 113, D08113, Doi:10.1029/2007JD009194.
- Fanglin Sun, Y. Ma, M. Li, W. Ma, H. Tian, S. Metzge, 2007, Boundary Layer Effects Above A Himalayan Valley Near Mount Everest, *Geophysics Research Letters*, 34, L08808, Doi:10.1029/2007GL029484.
- Ma Yaoming, M. Song, H. Ishikawa, K. Yang, T. Koike, L. Jia, M. Menenti, Z. Su, 2007, Estimation Of The Regional Evaporative Fraction Over The Tibetan Plateau Area By Using Landsat-7 ETM Data And The Field Observations, *Journal Of Meteorological Society Of Japan*, 85A: 295 – 309.
- Ma Yaoming, H. Tian, H. Ishikawa, R. Ohba, H. Ueda, J. Wen, 2007, Determination Of Regional Land Surface Heat Fluxes Over A Heterogeneous Landscape Of The Jiddah Area Of Saudi Arabia By Using Landsat-7 ETM Data, *Hydrological Processes*, 21: 1892-1900.
- Ma Yaoming., L. Zhong, Z. Su, H. Ishikawa, M. Menenti, And T. Koike, 2006, Determination Of Regional Distributions And Seasonal Variations Of Land Surface Heat Fluxes From Landsat-7 Enhanced Thematic Mapper Data Over The Central Tibetan Plateau Area, *Journal Of Geophysics Research-Atmospheres*, 111, D10305, Doi: 10.1029/2005JD006742.
- Ma Yaoming, S. Fan, H. Ishikawa, O. Tsukamoto, T. Yao, T. Koike, H. Zuo, Z. Hu, Andz. Su, 2005, Diurnal And Inter-Monthly Variation Of Land Surface Heat Fluxes Over The Central Tibetan Plateau Area, *Theoretical And Applied Climatology*, 80, 259-273.
- Ma Yaoming, M. Menenti, O. Tsukamoto, H. Ishikawa, J. Wang, And Q. Gao, 2004, Remote Sensing Parameterization Of Regional Land Surface Heat Fluxes Over Arid Area In Northwestern China, *Journal Of Arid Environments*, 57: 117-133.
- Ma Yaoming, H. Ishikawa, O. Tsukamoto, M. Menenti, Z. Su, T. Yao, T. Koike, And T. Yasunari,, 2003, Regionalization Of Surface Fluxes Over Heterogeneous Landscape Of The Tibetan Plateau By Using Satellite Remote Sensing, *Journal Of Meteorological Society Of Japan*, 81(2): 277-293.
- Ma Yaoming, 2003, Remote Sensing Parameterization Of Regional Net Radiation Over Heterogeneous Land Surface Of GAME/Tibet And HEFE, *International Journal Of Remote Sensing*, 24 (15): 3137-3148.
- Ma Yaoming, J. Wang, R. Huang, G. Wei, M. Menenti, Z. Su, Z. Hu, F. Gao, And J. Wen, 2003, Remote Sensing Parameterization Of Land Surface Heat Fluxes Over Arid And Semi-Arid Areas, *Advances In Atmospheric Sciences*, 20(4):530-539.
- Ma Yaoming, Z. Su, T. Koike, T. Yao, H. Ishikawa, K. Ueno, And M. Menenti, 2003, On Measuring And Remote Sensing Surface Energy Partitioning Over The Tibetan Plateau-From Game/Tibet To Camp/Tibet, *Physics And Chemistry Of The Earth*, 28: 63-74.

- Ma Yaoming, O. Tsukamoto, J. Wang, H. Ishikawa, And I. Tamagawa, 2002, Analysis Of Aerodynamic And Thermodynamic Parameters Over The Grassy Marshland Surface Of Tibetan Plateau, *Progress In Natural Sciences*, 12(1): 36-40.
- Ma Yaoming, O. Tsukamoto, H. Ishikawa, Z. Su, M. Menenti, J. Wang, And J. Wen, 2002, Determination Of Regional Land Surface Heat Flux Densities Over Heterogeneous Landscape Of HEIFE Integrating Satellite Remote Sensing With Field Observations, *Journal Of Meteorological Society Of Japan*, 80(3): 485-501.
- Ma Yaoming, Z. Su, Z-L. Li, T. Koike, And M.Menenti, 2002, Determination Of Regional Net Radiation And Soil Heat Flux Densities Over Heterogeneous Landscape Of The Tibetan Plateau, *Hydrological Processes*, 16(15): 2963-2971.
- Ma Yaoming, O. Tsukamoto, and H.Ishikawa, 2002, Remote sensing parameterization of energy and water cycle over desertification area, *Science in China (D)*, 45(Supp): 47-53.