

CURRICULUM VITAE

Ning Ma

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➤ EDUCATION

- PhD, 09/2013-06/2017. Institute of Tibetan Plateau Research, Chinese Academy of Sciences. Supervisor : Prof. Yinsheng Zhang
- PhD visiting student, 09/2015-11/2016. Department of Hydrology and Atmospheric Sciences, University of Arizona. Supervisor : Prof. Guo-Yue Niu
- M.S., 09/2010-12/2012. Department of Earth and Environmental Sciences, Lanzhou University. Supervisor : Prof. Nai-Ang Wang
- B.S., 09/2006-06/2010. Department of Earth and Environmental Sciences, Lanzhou University. Supervisor : Prof. Nai-Ang Wang

➤ EMPLOYMENT

- Postdoc Researcher, 07/2017-Present. Institute of Tibetan Plateau Research, Chinese Academy of Sciences.

➤ RESEARCH INTERESTS

- Land-atmosphere energy, water and carbon exchanges
- Evapotranspiration observation and modeling
- Land surface modeling
- Hydrological cycle and climate change
- Ecohydrology

➤ PUBLICATIONS

Peer-reviewed Journals Paper

- Lei, Y., Zhu, Y., Wang, B., Yao, T., Yang, K., Zhang, X., Zhai, J., **Ma, N.**, 2019. Extreme lake level changes on the Tibetan Plateau associated with the 2015/2016 El Niño. *Geophysical Research Letters*, 46, doi: 10.1029/2019GL081946.
- **Ma, N.**, Szilagyi, J., Zhang, Y., Liu, W., 2019. Complementary-relationship-based modeling of terrestrial evapotranspiration across China during 1982-2012: Validations and spatiotemporal analyses. *Journal of Geophysical Research: Atmospheres*, 124, doi: 10.1029/2018JD0290850

- Zhang, T., Zhang, Y., Guo, Y., **Ma, N.**, Dai, D., Song, H., Qu, D., Gao, H. 2019. Controls of stable isotopes in precipitation on the central Tibetan Plateau: A seasonal perspective. *Quaternary International*, 124, doi: 10.1016/j.quaint.2019.03.031
- Zhu, L., Wang, J., Ju J., **Ma, N.**, Zhang, Y., Liu, C., Han, Bo, Liu, L., Wang, M., Ma, Q., 2019. Climatic and lake environmental changes in the Serling Co region of Tibet over a variety of timescales. *Science Bulletin*, 64(7), 422-424.
- Wang, G., Wang, P., Wang, T-Y., Zhang, Y-C., Yu, J-J., **Ma, N.**, Frolova, N., Liu, C-M., 2019. Contrasting changes in vegetation growth due to different climate forcings over the last three decades in the Selenga-Baikal Basin. *Remote Sensing*, 11(4), 426. doi:10.3390/rs11040426
- Guo, Y., Zhang, Y., **Ma, N.**, Xu, J., Zhang, T., 2019. Long-term changes in evaporation over Siling Co Lake on the Tibetan Plateau and its impact on recent rapid lake expansion. *Atmospheric Research*, 216, 141-150.
- Zhang, H., Zhang, F., Zhang, G., Che, T., Yan, W., Ye, M., **Ma, N.**, 2019. Ground-based evaluation of MODIS snowcover product V6 across China: Implications for the selection of NDSI threshold. *Science of the Total Environment*, 651, 2172-2726.
- Zhang, Y*, **Ma, N.***, 2018. Spatiotemporal variability of snow cover and snow water equivalent in the last three decades over Eurasia. *Journal of Hydrology*, 559, 238-251. [***Corresponding author**]
- Ding, J., Zhang, Y., Guo, Y., **Ma, N.**, 2018. Quantitative comparison of river inflows to a rapidly expanding lake in central Tibetan Plateau. *Hydrological Processes*, 32, 3241-3253.
- **Ma, N.**, Niu, G-Y., Xia, Y., Cai, X., Zhang, Y., Ma, Y., Fang, Y. 2017. A systematic evaluation of Noah-MP in simulating land-atmosphere energy, water and carbon exchanges over the continental United States. *Journal of Geophysical Research: Atmospheres*, 122, 22, 12245-12268.
- Ebrahimi, S., Chen, C., Chen, Q., Zhang, Y., **Ma, N.**, Zaman, Q., 2017. Effects of temporal scales and space mismatches on the TRMM 3B42 v7 precipitation product in a remote mountainous area. *Hydrological Processes*, 31, 4315-4327.
- **Ma, N.**, Zhang, Y., 2017. Comment on “Rescaling the complementary relationship for land surface evaporation” by R. Crago et al. *Water Resources Research*, 53, 6340-6342.
- **Ma, N.**, Szilagyi, J., Niu, G-Y., Zhang, Y., Zhang, T., Wang, B., Wu, Y., 2016. Evaporation variability of Nam Co Lake in the Tibetan Plateau and its role in recent rapid lake expansion. *Journal of Hydrology*, 537, 27-35.
- Guo, Y., Zhang, Y., **Ma, N.**, Song, H., Gao, H., 2016. Quantifying surface energy fluxes and evaporation over a significant expanding endorheic lake in the central Tibetan Plateau. *Journal of the Meteorological Society of Japan*, 94(5), 453-465.
- Dong, C., Wang, N., Chen, J., Li, Z., Chen, H., Chen, L., **Ma, N.**, 2016. New observational and experimental evidence for the recharge mechanism of the lake group in the Alxa Desert, north-central China. *Journal of Arid Environments*, 124, 48-61.
- **Ma, N.**, Zhang, Y., Guo, Y., Gao, H., Zhang, H., Wang, Y., 2015. Environmental and biophysical controls on the evapotranspiration over the highest alpine steppe. *Journal of Hydrology*, 529, 980-992.

- **Ma, N.**, Zhang, Y., Xu, C., Szilagyi, J., 2015. Modeling actual evapotranspiration with routine meteorological variables in the data-scarce region of the Tibetan Plateau: Comparisons and implications. *Journal of Geophysical Research: Biogeosciences*, 120, 1638-1657.
- **Ma, N.**, Zhang, Y., Szilagyi, J., Guo, Y., Zhai, J., Gao, H., 2015. Evaluating the complementary relationship of evapotranspiration in the alpine steppe of the Tibetan Plateau. *Water Resources Research*, 51, 1069-1083.
- Farhan, S., Zhang, Y., Ma, Y., Guo, Y., **Ma, N.**, 2015. Hydrological regimes under the conjunction of westerly and monsoon climates: A case investigation in the Astore Basin, Northwestern Himalaya. *Climate Dynamics*, 44, 3015-3032.
- **Ma, N.**, Wang, N., Zhao, L., Zhang, Z., Dong, C., Shen, S., 2014. Observation of mega-dune evaporation after various rain events in the hinterland of Badain Jaran Desert, China. *Chinese Science Bulletin*, 59(2), 162-170.
- Zhang, Z., Wang, N., **Ma, N.**, Wu, Y., 2014. Lake area changes and the main causes in the hinterland of Badain Jaran Desert during 1973-2010, China. *Sciences in Cold and Arid Regions*, 6(1), 22-29.
- Huang, Y., Wang, N., Cheng, H., **Ma, N.**, Lai, T., 2013. Historical desertification of the Mu Us sandy land: A perspective from the Beidachi section. *Sciences in Cold and Arid Regions*, 5(3), 293-300.
- Li, Y., Wang, N., Li, Z., **Ma, N.**, Zhou, X., Zhang, C., 2013. Lake evaporation: A possible factor affecting lake level changes tested by modern observational data in arid and semi-arid China. *Journal of Geographical Sciences*, 23(1), 123-135.
- **Ma, N.**, Wang, N. 2016. On the particularity of evaporation modeling over the lakes in the hinterland of the Badain Jaran desert. *Arid Zone Research*, 33(6): 1141-1149. (*In Chinese with English abstract*)
- **Ma, N.**, Wang, N., Huang, Y., Li, H., Lu, J., 2015. Characteristics of radiation budget and energy partitioning under different weathers on land and lake surface in the hinterland of Badain Jaran Desert in summer. *Journal of Natural Resources*, 30(5), 796-809. (*In Chinese with English abstract*)
- Guo, Y., Zhang, Y., Ma, Y., **Ma, N.**, 2014. Surface heat source intensity and surface water/energy balance in Shuanghu, northern Tibetan Plateau. *Acta Geographica Sinica*, 69(7), 983-992. (*In Chinese with English abstract*)
- Wang, N., **Ma, N.***, Chen, H., Chen, X., Dong, C., Zhang, Z., 2013. Preliminary study for the precipitation characteristics in the hinterland of Badain Jaran Desert. *Advances in Water Science*, 24(2), 153-160. (*as corresponding author, *In Chinese with English abstract*)
- Liu, H., Wu, Y., Wang, N., **Ma, N.**, 2013. Analysis of climate comfort conditions in desert tourism potential development zone in China. *Resources Science*, 35(4), 831-838. (*In Chinese with English abstract*)
- **Ma, N.**, Wang, N., Wang, P., Sun, Y., Dong, C., 2012. Temporal and spatial variation characteristics and quantification of the affect factors for reference evapotranspiration in Heihe River basin. *Journal of Natural Resources*, 27(6), 975-989. (*In Chinese with English abstract*)
- Zhang, J., Wang, P., **Ma, N.**, Zhang, C., 2012. Spatial-temporal evolution of urban heat island effect in basin Valley—A case study of Lanzhou city. *Scientia Geographica Sinica*, 32(12): 1530-1537. (*In Chinese with English abstract*)

- Zhu, J., Wang, N., Li, Z., Dong, C., Lu, Y., **Ma, N.**, 2011. RS-based monitoring seasonal changes of lake in Badain Jaran desert. *Journal of Lake Sciences*, 23(4), 657-664. (In Chinese with English abstract)
- **Ma, N.**, Wang, N., Zhu, J., Chen, X., Chen, H., Dong, C., 2011. Climate change around the Badain Jaran desert in recent 50 years. *Journal of Desert Research*, 31(6), 1541-1547. (In Chinese with English abstract)
- **Ma, N.**, Wang, N., Li, Z., Chen, X., Zhu, J., Dong, C., 2011. Analysis on climate change in the Northern and Southern marginal zones of the Badain Jaran Desert during the period 1960-2009. *Arid Zone Research*, 28(2), 242-250. (In Chinese with English abstract)

Talks and Posters (Non-peer-reviewed)

- **Ma, N.** Development of a 31-year, 0.1 degree land surface evapotranspiration product across China. *Talk in 2018 annual conference of the state key laboratory of atmospheric boundary layer and atmospheric chemistry (LAPC)*, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China, Nov 25, 2018.
- **Ma, N.** Monitoring and modeling evapotranspiration: From Tibetan Ecosystems to China. *Talk in 2018 annual conference of USCCC*, Jiujiang, China, Aug 16, 2018.
- **Ma, N.** Observation and modeling of evapotranspiration over the alpine steppe of the Tibetan Plateau. *Talk in 2016 annual conference of the state key laboratory of atmospheric boundary layer and atmospheric chemistry (LAPC)*, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China, Nov 19, 2016.
- **Ma, N.**, G-Y. Niu, A systematic assessment of Noah-MP in simulating land-atmosphere energy, water and carbon exchanges over the continental United States. *Poster in 13th Research Insights in Semiarid Environments Symposium*, Tucson, USA, Oct 8, 2016.
- **Ma, N.** Evapotranspiration over the highest grassland ecosystem: alpine steppe of the Tibetan Plateau. *Talk in Hydrology and Atmospheric Sciences Colloquium*, University of Arizona, Tucson, USA. Sept 8, 2016.
- **Ma, N.** Evapotranspiration over the highest grassland ecosystem: alpine steppe of the Tibetan Plateau. *Talk in Southwest Watershed Research Center, Agricultural Research Service, United States Department of Agriculture (USDA-ARS)*. Aug 26, 2016.
- **Ma, N.**, Zhang, Y. The land-atmosphere interactions in the hinterland of Qiangtang region of Tibetan Plateau. *Talk in 1st congress of China Geodesy and Geophysics*, Beijing, China. October 25, 2014.
- **Ma, N.**, Zhang, Y., Szilagyi, J. Evaluating the complementary relationship of evapotranspiration from alpine steppe of Tibetan Plateau. *Poster in 7th International Scientific Conference of GEWEX*, Hague, Netherlands. July 14, 2014.
- **Ma, N.**, Wang, N. Observation of precipitation in the hinterland of Badain Jaran desert. *Talk in Annual Conference of the Desert Research Community of the Geographical Society of China*, Urumqi, China. August 3, 2012.

➤ **PROFESSIONAL ACTIVITIES**

- Journal Reviewer for: *Geophysical Research Letters*, *Water Resources Research*, *Journal of Geophysical Research-Atmospheres*, *Journal of Hydrology*, *Hydrology and Earth System*

Sciences, Journal of Hydrometeorology, WIREs Water, Hydrological Processes, Hydrological Science Journal, Hydrology Research, Plos One, Theoretical and Applied Climatology, Advances in Atmospheric Sciences, Advances in Water Science, Journal of Meteorological Research

- AGU member (2015-)
- Beijing Ecological Society member (2014-)

➤ **AWARDS**

- Editor's Citation for Excellence in Refereeing for *Water Resources Research*, AGU (2019)
- Hundard Excellent PhD Thesis of Chinese Academy of Sciences. 2018
- Outstanding Contribution in Reviewing, *Journal of Hydrology*. 2018
- Presidential Outstanding Award, Chinese Academy of Sciences. 2017
- Merit Graduate Pacemaker, University of Chinese Academy of Sciences. 2017
- Graduate National Scholarship, Ministry of Education of China. 2016
- Outstanding Young Scientist Presentation Award, 2016 Annual Conference of State Key Laboratory of Atmospheric Boundary Layer and Atmospheric Chemistry (LAPC). 2016
- Zhuliyuehua Outstanding PhD Fellowship, University of Chinese Academy of Sciences. 2016
- Merit Graduate, University of Chinese Academy of Sciences. 2015
- Oversea Joint-PhD Training Scholarship, China Scholarship Council. 2015
- “Student Travel Grant” for GEWEX 7th International Conference in Hague, GEWEX. 2014.
- Paper (as the corresponding author) titled with “Preliminary study for the precipitation characteristics in the hinterland of Badain Jaran Desert” was awarded “*Frontrunner 5000-Top Articles in Sciences and Technology Journals of China*”. 2013.
- Merit Graduate, Lanzhou University. 2011.
- Master Student Fellowship, Lanzhou University. 2010, 2011, 2012.
- Excellent Bachelor Thesis, Lanzhou University. 2010.
- Undergraduate Pacemaker, Lanzhou University. 2010.
- Undergraduate First Class Scholarship, Lanzhou University. 2009.
- Undergraduate Third Class Scholarship, Lanzhou University. 2006, 2007, 2008.

➤ **LANGUAGE**

- Chinese: First language
- English: IELTS 7 (Listening 6.5, Reading 8, Writing 6.5, Speaking 6)