## Accepted Manuscript

Title: Effects of climate change on outdoor meteorological parameters for building energy-saving design in the different climate zones of China

Authors: Jingfu Cao, Mingcai Li, Min Wang, Mingming

Xiong, Fanchao Meng

PII: S0378-7788(16)31914-4

DOI: http://dx.doi.org/doi:10.1016/j.enbuild.2017.04.045

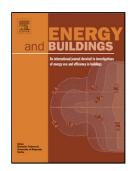
Reference: ENB 7541

To appear in: *ENB* 

Received date: 16-12-2016 Revised date: 1-4-2017 Accepted date: 17-4-2017

Please cite this article as: Jingfu Cao, Mingcai Li, Min Wang, Mingming Xiong, Fanchao Meng, Effects of climate change on outdoor meteorological parameters for building energy-saving design in the different climate zones of China, Energy and Buildingshttp://dx.doi.org/10.1016/j.enbuild.2017.04.045

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Original article

Effects of climate change on outdoor meteorological parameters

for building energy-saving design in the different climate zones of

China

Jingfu Cao <sup>1</sup>, Mingcai Li <sup>1</sup>, Min Wang<sup>2</sup>, MingmingXiong<sup>1</sup>, Fanchao Meng<sup>1</sup>

1. Tianjin Climate Center, Tianjin, 300074, China

2. Institute of Building Environment and Energy Efficiency, China Academy of

Building Research, Beijing, 100013, China

Running title: climate change effect on outdoor meteorological parameters

Corresponding author address:

Mingcai Li, Tianjin Climate Center, No. 100 Qixiangtai Road, Hexi District, Tianjin,

300074, China

Tel/Fax: +86 22 23333553;

Email: mingcaili\_qhzx@163.com

**Abstract:** Meteorological parameters are the basis for building energy-saving design

and operation of Heating, Ventilation and Air Conditioning systems (HVAC). In this

study, changes in meteorological parameters of Harbin, Tianjin, Kunming, Shanghai,

and Guangzhou, representing the five major climate zones of China, were analyzed to

determine the effects of climate change on meteorological parameters. The results

demonstrated that outdoor design temperatures for heating or air-conditioning

significantly increased in all five climate zones. The increasing rate of design

1

## Download English Version:

## https://daneshyari.com/en/article/4919215

Download Persian Version:

https://daneshyari.com/article/4919215

<u>Daneshyari.com</u>