

The 4th Japanese-German Meeting on Urban Climatology

- Climate Analysis for Urban Planning -

CONFERENCE / Tsukuba, 30th Nov. - 2nd Dec., 2005

KLIMAATLAS WORKSHOP & EXCURSION / Nagano, 3rd - 4th Dec., 2005

<< Program >>

30th November, at NIES

9:00- 9:30 Registration

9:30- 9:40 Opening Ceremony (chair person: ICHINOSE Toshiaki)

- Welcome Speech, Vice-president; Mr. Takashi IJIMA, NIES
- Today's Schedule

9:40-12:10 Session A: Measurement of Urban Climate (chair person: ICHINOSE Toshiaki)

- A-1* Juergen BAUMUELLER
Stuttgart - on the way to a sustainable development - climatic aspects - (Keynote Lecture)
- A-2 Tadashi KIYOTA, Akira TANIGUCHI, Nobuyoshi KIYOTA and Yasuhiro NAKAMURA
A STUDY ON INFLUENCE OF LAND AND SEA BREEZE ON AIR TEMPERATURE IN HIROSHIMA WIDE AREA IN SUMMER SEASON
- A-3 Naoki TAKAGI, Kazuhiro IWAI, Takashi HAMADA and Yasuhiro YAMASHITA
MOVING MEASUREMENT RESEARCH ON THE ACTUAL CONDITION OF URBAN CLIMATE IN INLYING PROVINCIAL CITIES
- A-4 Atsumasa YOSHIDA, Masato MORIYAMA and Kazuma GONSUI
Stationary Measurement and Analysis of Thermal Environment in Osaka Area, Japan
- A-5 Yoshiki JYU-MNIMURA and Hironori WATANABE
THE ACTUAL CONDITIONS OF URBAN CLIMATE CHARACTERISTICS IN SUMMER FOR SENDAI CITY AREA -THE CLASSIFICATION OF URBAN CLIMATE CHARACTERISTICS AND THE RELEVANCE BETWEEN IT AND AIR TEMPERATURE DISTRIBUTIONS-
- A-6 Hirotooshi YODA
KlimaAtlas and action program in Fukuoka City
- A-7 J.H. EUM, D.SCHERER, U.FEHRENBACH and J.KÖPPEL
Implementing Climate-related Planning Objectives in Germany and the Application for South Korea

< Lunch >

13:30-16:00 Session B: Measurement of Micro Climate (chair person: MORIYAMA Masakazu)

- B-1* Wilhelm KUTTNER
Urban Climatology and related fields in the Air Pollution of Cities (Keynote Lecture)
- B-2 Hironori WATANABE, Akashi MOCHIDA, Kiyotaka SAKAIDA, Yoshiki JYU-NIMURA, Tatsuya IWATA, Naoko HATAYA and Hiroshi YOSHINO
Field Measurement of Thermal Comfort and Air Pollution within Street Canyons in the central part of Sendai City
- B-3 Daisuke NARUMI, Katsutoshi SAKAGUCHI, Yoshiyuki SHIMODA, Akira KONDO and Minoru MIZUNO
Effect of a change in temperature upon the amount of VOCs released from vegetation
- B-4 Toshiaki ICHINOSE and Yingjiu BAI
MITIGATION OF THERMAL STRESS BY A LARGE RESTORATION OF INNER-CITY RIVER (CHEONG-GYE STREAM IN SEOUL)
- B-5 Hirofumi SUGAWARA, Ken-ichi NARITA, Weiming SHA, Takehiko MIKAMI, Tsuyoshi HONJO, Hiroharu TANAKA and Tomoko NAKANO
Nocturnal cold outflow from large urban park
- B-6 Takashi HAMADA, Toshiaki ICHINOSE, Hiroharu TANAKA and Takehiko MIKAMI
Effect of Mountain Breeze on Urban Heat Island in Nagano, Japan
- B-7 Ryo MORIWAKI, M. KANDA and H. NITTA
HIGHLY ACCUMULATED CO₂ AND COLD-AIR DRAINAGE WITHIN A SUBURBAN CANOPY LAYER IN WINTER NIGHT

< Tea Break >

16:20-17:40 Session C: Climate Change and Urban Climate (chair person: WATANABE Hironori)

- C-1 Nami YAMAMOTO, Hiroo OHMORI and Jun MATSUMOTO
Trend of Frequency of Mid-summer Heavy Rainfalls at the Three Biggest Cities in Central Japan
- C-2 Wen-Zer LIN and Chung-Ho WANG
The Estimation of Urban Heat Island Around Taipei, Taiwan
- C-3 Andreas MATZARAKIS, Rainer RÖCKLE and Claus-Jürgen RICHTER
Urban Climate analysis of Freiburg - An integral assessment approach
- C-4 A.O. EDIANG, A.A.EDIANG, S.O.GBUYIRO and J.OKPARA
Dynamics of abrupt climatic change over the climate regions in Nigeria

18:30~ Welcome Party at Hotel OHKURA (charge:¥4,000.-)

1st December, at BRI in this morning

9:30-9:40 Morning Compliments (chair person: ASHIE Yasunobu)

- Welcome Speech, Executive Director for Building Research; Mr. Hiroshi ITO, BRI
- Today's Schedule

9:40-11:10 Session D: Remote Sensing and GIS (chair person: ASHIE Yasunobu)

- D-1* Eberhard PARLOW
Heat fluxes of urban surfaces - Results from the BUBBLE-Experiment (Keynote Lecture)
- D-2 Takahito UENO
ANALYSIS OF URBAN THERMAL ENVIRONMENT USING HIGH-RESOLUTION SATELLITE IMAGES
- D-3 Lutz JAEGER, Andreas MATZARAKIS and Geoges NAJJAR
Urban Climatology Research in Strasburg/France
- D-4 Takahiro TANAKA, Masakazu MORIYAMA
Detailed Characteristics of Summer Radiative Temperature in Urbanized Area by Using Airborne Thermal Image and GIS

11:10-12:10 Session E(1): Numerical Modeling of Urban Climate (chair person: KIYOTA Nobuyoshi)

- E-1 Daewon W. BYUN "canceled"
Effects of Urban Land Use and Land Cover Changes on Air Quality in the Houston-Galveston Area (HGA) in Texas, USA.
- E-2 Weiming SHA and Yasunobu ASHIE
Development and applications of an urban meteorological Numerical model in Cartesian coordinate
- E-3 Hongbin ZHANG, Keisuke HANAKI, Naoki SATO, Takeki IZUMI and Toshiya ARAMAKI
Meso-scale thermal environmental simulation of Tokyo with modified Regional Atmospheric Modeling System (RAMS)

12:10-12:30 Inspection of Institutions of BRI

< Lunch >

>> Afternoon sessions are held at NIES

14:00-16:00 Session E(2): Numerical Modeling of Urban Climate (chair person: Weiming SHA)

- E-4 Marcus Oliver LETZEL, Manabu KANDA and Siegfried RAASCH
A new dimension of Urban Climate Modelling with Parallel Large-eddy Simulation
- E-5 Nobuyoshi KOMATSU, Takaaki KONO and Yasunobu ASHIE
High Resolution Analysis of Urban Heat Island Phenomenon in Tokyo with Earth Simulator
- E-6 Eberhard PARLOW and Dieter SCHERER
Climate Analysis REKLISO – Conception and Results
- E-7 Dieter SCHERER, Ute FEHRENBACH and Eberhard PARLOW
Integration of a mesoscale meteorological model in a local climate and air quality assessment study in southwest Germany (REKLISO)
- E-8 Akashi MOCHIDA, Tomohiro YOSHIDA, Kiyoshi SASAKI, Hironori WATANABE and Hiroshi YOSHINO
Strategy for reducing the urban heat island effect based on the evaluation of heat balance in urban space

- E-9 Hiroyuki KUSAKA, Fei CHEN and Mukul TEWARI
NUMERICAL SIMULATION OF THE URBAN HEAT ISLAND OF TOKYO USING THE WEATHER RESEARCH AND FORECASTING (WRF) MODEL COUPLED WITH AN URBAN CANOPY MODEL

< Tea Break >

16:20-18:20 Session F: Experiments (chair parson: SUGAWARA Hirofumi)

- F-1 Helmut MAYER, Jutta ROST, Thomas HOLST, Matthias KLINGNER, Elke SÄHN, Katja ANKE and Dieter AHRENS
Effects of meteorological conditions on urban PM10 concentrations
- F-2 Dieter SCHERER
Energy eXchange and Climates of Urban Structures and Environments (EXCUSE)
- F-3 Hideki TAKEBAYASHI and Masakazu MORIYAMA
Surface Heat Budget on Green Roof and High Reflection Roof for Mitigation of Urban Heat Island
- F-4 Aya HAGISHIMA, Ken-ichi NARITA, Hirofumi SUGAWARA, Jun TANIMOTO, Satoru KIMURA and Hiroko OGAWA
Field Measurement on thermal balance of full-scale 2D canopy
- F-5 Atsumasa YOSHIDA, Kohei YAMAGUCHI and Kazuma GONSUI
Field Measurement and Evaluation on Transpiration Rate of Single Leaf and Tree
- F-6 Manabu KANDA
OUTDOOR SCALE MODELS FOR URBAN CLIMATE

2nd December, at NIES

9:00-10:20 Session G: Numerical Modeling of Micro Climate (chair parson: KUSAKA Hiroyuki)

- G-1 Akashi MOCHIDA, Tatsuaki IWATA, Kiyoshi SASAKI, Naokoi HATAYA, Hironori WATANABE and Hiroshi YOSHINO
CFD analyses of turbulent diffusion and thermal comfort within street canyons in the central part of Sendai city - Numerical investigation on the effects of roadside trees -
- G-2 Michael BRUSE
Numerical modelling of the urban microclimate - State of the art and recent research trends
- G-3 Takaaki KONO, Yasunobu ASHIE
Numerical simulation of air temperature within and above urban canopies using the spatially averaged k - ϵ model
- G-4 Toshio ABE, Yasunobu ASHIE
Observation of Thermal Structure in and above the Urban Canopy Layer by the Schlieren Method

10:20-11:50 Session H: Application for Urban Planning (chair person: KANDA Manabu)

- H-1* Helmut MAYER, Fritz KALBERLAH, Jutta ROST and Dieter AHRENS
DAQx and LAQx: two impact-related air quality indices for the application in urban planning (Keynote Lecture)

- H-2 Masakazu MORIYAMA
Urban Environmental Climate Map for Neighborhood Planning
- H-3 Lutz KATZSCHNER
THE CONTRIBUTION OF URBAN CLIMATE STUDIES TO A NEW URBANITY
- H-4 Juergen BAUMJUELLER, M.MUELLER, R.KAPP, E.KOHFINK, Th.FLASSAK and H.FRANTZ
Urban Climate Stuttgart - online, actual and interactive -

11:50-12:30 Closing Session (chair parson: ASHIE Yasunobu)

- Summary and Discussion for Future Conference, KANDA Manabu
- Explanation of Klimaatlas Workshop & Excursion in NNGANO, TAKAGI Naoki
- Closing Speech, MORIYAMA Masakazu

>> After a lunch, we'll go to Nagano.

3rd December, at NAGANO “Klimaatlas Workshop”

10:00-10:20 Morning Session (chair parson: TAKAGI Naoki)

- Welcome Speech, Dean of Faculty of Engineering, Shinshu University
Prof. NOMURA Akio
- Today's Schedule (IWAI Kazuhiro)

10:20-12:00 Special Lecture (chair parson: TAKAGI Naoki)

- Lecturer 1 (German's Researcher) 10:20-10:45
- Lecturer 2 (German's Researcher) 10:45-11:10
- Lecturer 3 (German's Researcher) 11:10-11:35
- Lecturer 4 (German's Researcher) 11:35-12:00

< Lunch >

13:00-17:00 Klimaatlas Workshop (chair parson: TAKAGI Naoki)

- Explanation of Background (WATANABE Hironori) 13:00-13:10
- Progress Schedule (IWAI Kazuhiro) 13:10-13:30
- Workshop 13:30-15:20

< Tea Break >

- Presentation, Discussion 15:30-16:30
- General Overview (ICHINOSE Toshiaki, WATANABE Hironori et al.) 16:30-17:00

18:00~ **Welcome Party** at Nagano Washington Hotel Plaza 1F (charge:¥4,000)

4th December, at NAGANO “Excursion”

9:00 Hotel Lobby (Check Out)

9:30 Zenkoji Temple (National Treasure)

11:00 M-Wave (Nagano Olympic Memorial Arena)

12:00 Obuse Town (Lunch, Hokusai Museum, Gansho-in Temple)

15:00 JR Nagano Station (Super Express)

17:00 JR Tokyo Station