

**MAGYAR VÁROSKLÍMA PUBLIKÁCIÓK ANGOLUL**  
**(HUNGARIAN PUBLICATIONS ON URBAN CLIMATE IN ENGLISH)**

**2006**

- Baros Z, 2006: Research of the characteristics of noise propagation under various weather conditions in the northern part of Debrecen (East Hungary). *Preprints 6th Int Conf on Urban Climate*, Göteborg, Sweden, 100-103
- Dezső Zs, Bartholy J and Pongrácz R, 2006: Urban heat island analysis using MODIS measurements for Central European large cities. *Preprints 6th Int Conf on Urban Climate*, Göteborg, Sweden, 806-809
- Kern A, Gelybó Gy, Bartholy J, Pongrácz R and Barcza Z, 2006: Study of the urban environment based on atmospheric profiles measured by polar orbiting satellites. *Preprints 6th Int Conf on Urban Climate*, Göteborg, Sweden, 755-758
- Kristóf G, Bányai T and Rácz N, 2006: Development of computational model for urban heat island convection using general purpose CFD solver. *Preprints 6th Int Conf on Urban Climate*, Göteborg, Sweden, 822-825
- Matzarakis A and Gulyás Á, 2006: A contribution to the thermal bioclimate of Hungary – Mapping of the Physiologically Equivalent Temperature. In Kiss A, Mezősi G és Sümegehy Z (szerk): *Táj, környezet és társadalom. Ünnepi tanulmányok Keveiné Bárány Ilona professzor asszony tiszteletére*. SZTE Éghajlattani és Tájföldrajzi Tanszék, Természeti Földrajzi és Geoinformatikai Tanszék, Szeged, 479-488
- Pongrácz R, Bartholy J and Dezső Zs, 2006: Remotely sensed thermal information applied to urban climate analysis. *Adv Space Res* 37, 2191-2196
- Sümegehy Z, Unger J, Balázs B and Gál T, 2006: Air humidity distribution along a representative urban cross-section in Szeged, Hungary. *Preprints 6th Int Conf on Urban Climate*, Göteborg, Sweden, 863-866
- Szegedi S, 2006: Heat islands in small and medium-sized towns in Hungary. *Preprints 6th Int Conf on Urban Climate*, Göteborg, Sweden, 439-442
- Unger J, Balázs B, Sümegehy Z and Gál T, 2006: Multiple variable model for estimating the maximum UHI using 2 and 3 dimensional surface parameters. *Preprints 6th Int Conf on Urban Climate*, Göteborg, Sweden, 334-337
- Unger J, Gál T, Balázs B and Sümegehy Z, 2006: Relationship between the intra-urban variation of sky view factor approximated by a software based tool and air temperature. *Preprints 6th Int Conf on Urban Climate*, Göteborg, Sweden, 346-349
- Unger J, 2006: Modelling of the annual mean maximum urban heat island with the application of 2 and 3D surface parameters. *Climate Research* 30, 215-226
- Unger J, Sümegehy Z, Gál T and Balázs B, 2006: Statistical modelling of the urban heat island using 2 and 3D surface parameters in Szeged, Hungary. *Volume of Abstracts. 8th Conf on Meteorology-Climatology-Atmospheric Physics, Athens*, 169

**2005**

- Balázs B, Gál T, Zboray Z and Sümegehy Z, 2005: Modelling the maximum development of urban heat island with the application of GIS based surface parameters in Szeged (Part 1): Temperature, surveying and geoinformatical measurement methods. *Acta Climatologica Univ Szegediensis* 38-39, 5-16
- Baros Z and Szegedi S, 2005: Comparative urban heat island measurements in various sized settlements in Hungary. *Annalen der Meteorologie* 41, 17th Int Congr of Biometeorology, Garmish Partenkirchen, Germany, 180-183
- Bottyán Z, Kircsi A, Szegedi S and Unger J, 2005: The relationship between built-up areas and the spatial development of the mean maximum urban heat island in Debrecen, Hungary. *Int J Climatol* 25, 405-418
- Dezső Zs, Bartholy J and Pongrácz R, 2005: Satellite-based analysis of the urban heat island effect. *Időjárás* 109, 217-232
- Gál T, Balázs B and Geiger J, 2005: Modelling the maximum development of urban heat island with the application of GIS based surface parameters in Szeged (Part 2): Stratified sampling and the statistical model. *Acta Climatologica Univ Szegediensis* 38-39, 59-69
- Gulyás Á, 2005: Differences in human comfort conditions within a complex urban environment: A case study. *Acta Climatologica Univ Szegediensis* 38-39, 71-84
- Jung A, Kardeván P and Tőkei L, 2005: Detection of urban effect on vegetation in a less built-up Hungarian city by hyperspectral remote sensing. *Phys Chem Earth* 30, 255-259

**2004**

- Dezső Zs, Bartholy J and Pongrácz R, 2004: Analysis of the urban heat island effect based on remotely sensed thermal information. *Geophysical Research Abstracts, Vol. 6. 04551. EGU General Assembly 2004. 1607-7962/gra/EGU04-A-04551. Nice, France, CD*
- Géczi R, Unger J and Sümegehy Z, 2004: Seasonal patterns of the urban heat island and generalization of the individual cases. *Abstracts. European Meteorol Soc 4th Annual Meeting, Nice, France, CD EMS04-A-00034*
- Pongrácz R, Bartholy J and Dezső Zs, 2004: Application of remotely sensed thermal information to urban climatology. *Abstracts. European Meteorol Soc 4th Annual Meeting, Nice, France, CD 00434*
- Pongrácz R, Bartholy J and Dezső Zs, 2004: Remotely sensed thermal information as a tool for urban climate studies. *Abstracts of the 35th COSPAR Scientific Assembly. CNES, ESA, Committee on Space Research. COSPAR04-A-03565 A1.1-0121-04, COSPAR04-A-04188 A3.1-0093-04. Paris, France, CD*

- Unger J, 2004: Intra-urban relationship between surface geometry and urban heat island: review and new approach. *Climate Research* 27, 253-264
- Unger J, Bottyán Z, Sümegehy Z and Gulyás Á, 2004: Connection between urban heat island and surface parameters: measurements and modeling. *Időjárás* 108, 173-194

## 2003

- Bartholy J, Pongrácz R and Dezső Zs, 2003: Analysis of thermal remote sensing information of urban areas. In Jürgens C (ed): *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXIV – 7/W9. (Proceedings of the ISPRS WG VII/4 Symposium on Remote Sensing of Urban Areas)*. International Society for Photogrammetry and Remote Sensing (ISPRS), Regensburg. CD 18-23
- Bartholy J, Pongrácz R and Dezső Zs, 2003: Application of satellite information to urban climatology. *Combined Preprints of the 83rd AMS Annual Meeting. Long Beach, California*, CD P1.10
- Bottyán Z and Unger J, 2003: A multiple linear statistical model for estimating mean maximum urban heat island. *Theor Appl Climatol* 75, 233-243
- Bottyán Z, Balázs B, Gál T and Zboray Z, 2003: A statistical approach for estimating mean maximum urban heat excess. *Acta Climatol Univ Szegediensis* 36-37, 17-26
- Dezső Z, Bartholy J, Pongrácz R and Barcza Z, 2003: Application of satellite-based urban climatology to Hungarian large cities. *Booklet of Abstracts of the Participants. ERCA-2003, Grenoble, France*, 13
- Dezső Z, Bartholy J, Pongrácz R and Barcza Z, 2003: Application and problems of remotely sensed thermal information to urban climatology. In Klysik K, Oke TR, Fortuniak K, Grimmond CSB and Wibig J (eds): *Proceed Fifth Int Conf on Urban Climate Vol. 2. University of Lodz, Lodz, Poland*, 315-318
- Gulyás Á, Lakatos L, Sümegehy Z. and Gál T, 2003: Spatial distribution of the phenological phases and urban heat island in the cases of two Hungarian cities. In Klysik K, Oke TR, Fortuniak K, Grimmond CSB and Wibig J (eds): *Proceed Fifth Int Conf on Urban Climate Vol. 2. University of Lodz, Lodz, Poland*, 39-42
- Gulyás Á, Unger J and Matzarakis A, 2003: Analysis of the thermophysiological significant conditions within a medium-sized city with continental climate (Szeged, Hungary). In Klysik K, Oke TR, Fortuniak K, Grimmond CSB, Wibig J (eds): *Proceed Fifth Int Conf on Urban Climate Vol. 2. University of Lodz, Lodz, Poland*, 43-46
- Gulyás Á, Unger J, Balázs B and Matzarakis A, 2003: Analysis of the bioclimatic conditions within different surface structures in a medium-sized city (Szeged, Hungary). *Acta Climatol Univ Szegediensis* 36-37, 37-44
- Kircsi A and Szegedi S, 2003: Temperature profiles in Debrecen, Hungary. In Klysik K, Oke TR, Fortuniak K, Grimmond CSB and Wibig J (eds): *Proceed Fifth Int Conf on Urban Climate Vol. 1. University of Lodz, Lodz, Poland*, 79-82
- Kircsi A and Szegedi S, 2003: The development of the urban heat island studied on temperature profiles in Debrecen. *Acta Climatol Univ Szegediensis* 36-37, 63-69
- Lajos T, Szepesi Zs, Goricsán I, Régert T, Suda J and Balczó M, 2003: Wind tunnel measurement and numerical simulation of dispersion of pollutants in urban environment. *Proceed Conf on Modelling Fluid Flow, Budapest*, 507-514
- Lakatos L and Gulyás Á, 2003: Connection between phenological phases and urban heat island in Debrecen and Szeged, Hungary. *Acta Climatol Univ Szegediensis* 36-37, 79-83
- Pongrácz R, Bartholy J, Dezső Zs and Barcza Z, 2003: Land cover classification of the Budapest metropolitan area based on satellite imagery and digital photogrammetry. In: Jürgens C (ed): *4th Int Symposium on Remote Sensing of Urban Areas. Univ of Regensburg*, 78
- Sümegehy Z and Unger J, 2003: Seasonal case studies on the urban temperature cross-section. *Acta Climatol Univ Szegediensis* 36-37, 101-109
- Sümegehy Z and Unger J, 2003: Classification of urban heat island patterns. *Acta Climatol Univ Szegediensis* 36-37, 93-100
- Sümegehy Z, Unger J, Balázs B and Zboray Z, 2003: Seasonal patterns of the urban heat island. In Klysik K, Oke TR, Fortuniak K, Grimmond CSB and Wibig J (eds): *Proceed Fifth Int Conf on Urban Climate Vol. 1. University of Lodz, Lodz, Poland*, 135-138
- Szegedi S and Kircsi A, 2003: The development of the urban heat island under various weather conditions in Debrecen, Hungary. In Klysik K, Oke TR, Fortuniak K, Grimmond CSB and Wibig J (eds): *Proceed Fifth Int Conf on Urban Climate Vol. 1. University of Lodz, Lodz, Poland*, 139-142.
- Szegedi S and Kircsi A, 2003: Effects of the synoptic conditions in the development of the urban heat island in Debrecen, Hungary. *Acta Climatol Univ Szegediensis* 36-37, 111-120
- Unger J, Bottyán Z, Kovács P, Balázs B and Géczi R, 2003: A statistical model for estimating mean maximum urban heat island. In Klysik K, Oke TR, Fortuniak K, Grimmond CSB and Wibig J (eds): *Proceed Fifth Int Conf on Urban Climate Vol. 1. University of Lodz, Lodz, Poland*, 155-158
- Unger J, Sümegehy Z, Gál T and Szegedi S, 2003: Cross-section profiles of the urban heat island. Cross-section profiles of the urban heat island. In Klysik K, Oke TR, Fortuniak K, Grimmond CSB and Wibig J (eds): *Proceed Fifth Int Conf on Urban Climate Vol. 1. University of Lodz, Lodz, Poland*, 159-162

## 2002

- Bartholy J, Pongrácz R, Dezső Zs, Barcza Z and Mészáros R, 2002: Local scale climatological characteristics of urban built-up areas for the Carpathian Basin. In McCaffery H. et al (eds): *Proceedings of the Tyndall/CIB International Conference on Climate Change and Built Environment, UMIST, Manchester, UK*, 137.1-137.8

- Bottyán Z and Unger J, 2002: The role of land-use parameters in the spatial development of urban heat island in Szeged, Hungary. *Proceed Forth Symp on the Urban Environment*, AMS, Norfolk, Virginia, 48-49
- Dezső Zs, Bartholy J, Pongrácz R and Barcza Z, 2002: Comparative analysis of urban heat island effects for large Hungarian cities using satellite imagery. *Geophysical Research Abstracts*, Vol. 4. 27th General Assembly of European Geophysical Society. GRA4 EGS02-A-00506, OA17-1TH1A-007. Nice, France, CD
- Horváth S, Makra L and Motika G, 2002: An objective assessment of the relation between meteorological parameters and the main air pollutants at Szeged. *IGU Geographical Renaissance at the Dawn of the Millennium. Climatological Pre-conference*. Durban, South-Africa
- Pongrácz R, Bartholy J and Dezső Zs, 2002: Climatological anomalies of urban areas: a comparative study for Hungarian large cities using satellite imagery. In Demaree G (ed): *Abstract Volume. Fourth European Conf on Applied Climatology. Climate-related Risk Assessment and sustainable Development in the 21st Century – More Security through Knowledge*. Royal Meteorological Institute of Belgium, Brussels, 3.7
- Pongrácz R, Bartholy J, Dezső Zs and Barcza Z, 2002: Satellite-based analysis of urban heat island effects for large cities in the Carpathian Basin. In Katsoulis BD (ed): *Proceed the 6th Hellenic Conf in Meteorology, Climatology, Atmospheric Physics*. Vol. 2, Univ of Ioannina, Greece, 780-785
- Pongrácz R, Bartholy J and Dezső Zs, 2002: Comparative study of urban heat island effects for large cities in the Carpathian Basin based on satellite imagery. *Summaries of the participants. Third Int Human Dimensions Workshop: Human Dimensions of Urbanisation and the Transition to Sustainability*. Bonn, Germany, 23.1-23.2

## 2001

- Bartholy J, Pongrácz R and Dezső Zs, 2001: Evaluation of urban heat island effect for large Hungarian cities using high resolution satellite imagery. In Hunkár M (ed): *Proceed Fifth European Conf on Applications of Meteorology ECAM 2001 and First Annual Meeting of European Meteorology Society*, Budapest, Hungary, CD P2.12
- Bartholy J, Pongrácz R, Mészáros R, Kern A, Dezső Zs and Barcza Z, 2001: Urban meteorological effects estimated for the Budapest metropolitan area. *Geophysical Research Abstracts*, Vol. 3. 26th General Assembly of European Geophysical Society, Nice, France, CD GRA3 4591
- Bottyán Z. and Unger J, 2001: Multiple non-linear statistical model for estimating mean maximum urban heat island in a medium-sized town Szeged, Hungary. *Proceed. 8th Int Meeting on Statistical Climatology*, Lüneburg, Germany
- Horváth S, Makra L, Zempléni A, Motika G and Sümeghy Z, 2001: The role of traffic in modifying air quality in a medium-sized city. *Extended Abstracts of The Third Int Conf on Urban Air Quality and Fifth Saturn Workshop. Measurement, Modelling and Management*. Loutraki, Greece, CD
- Makra L, Horváth S, Taylor CC, Zempléni A, Motika G and Sümeghy Z, 2001: Modelling air pollution data in countryside and urban environment, Hungary. *Proceed The 2nd Int Symp on Air Quality Management at Urban, Regional and Global Scales*. Istanbul, Turkey, 189-196
- Pongrácz R, Bartholy J and Dezső Zs, 2001: Analysing climatological impacts of urbanization in large Hungarian cities using high resolution satellite imagery. *Abstracts. Int Workshop on Environmental Change: Implications for Population Migrations*, Wengen, Switzerland, 4.3
- Unger J, Sümeghy Z, Mucsi L, Pál V, Kádár E and Kevei-Bárány I, 2001: Urban temperature excess as a function of urban parameters in Szeged, Part 1: Seasonal patterns. *Acta Climatol Univ Szegediensis 34-35*, 5-14
- Unger J, Bottyán Z, Gulyás Á and Kevei-Bárány I, 2001: Urban temperature excess as a function of urban parameters in Szeged, Part 2: Statistical model equations. *Acta Climatol Univ Szegediensis 34-35*, 15-21
- Unger J, Sümeghy Z and Zoboki J, 2001: Temperature cross-section features in an urban area. *Atmos Research* 58, 117-127
- Unger J, Sümeghy Z, Gulyás Á, Bottyán Z and Mucsi L, 2001: Land-use and meteorological aspects of the urban heat island. *Meteorol Applications* 8, 189-194

## 2000

- Bartholy J and Pongrácz R, 2000: Estimation of the urban heat island effect for Budapest. *Proceed 3rd European Conf on Applied Climatology*, Pisa, Italy, CD
- Szegedi S, 2000: Spatial structure of urban heat island in Debrecen. *Proceed 3rd European Conf on Applied Climatology*, Pisa, Italy, CD
- Unger J, Sümeghy Z, Gulyás Á, Zoboki J and Pál V, 2000: Maximum urban heat island as a function of urban and meteorological factors. *Proceed 3rd European Conf on Applied Climatology*, Pisa, Italy, CD
- Unger J, Bottyán Z, Sümeghy Z and Gulyás Á, 2000: Urban heat island development affected by urban surface factors. *Időjárás* 104, 253-268

## 1999

- Unger J, 1999: Urban-rural air humidity differences in Szeged, Hungary. *Int J Climatol* 19, 1509-1515
- Unger J, 1999: Comparisons of urban and rural bioclimatological conditions in the case of a Central-European city. *Int J Biometeorol* 43, 139-144
- Unger J, Sümeghy Z, Gulyás Á, Bottyán Z and Mucsi L, 1999: Modelling of the maximum urban heat island. In de Dear R and Potter JC (eds): *Proceed 15th Int Congr of Biometeorology and Int Conf on Urban Climatology*, Sydney, Australia, CD ICUC10.4.

## 1998

- Gécz R, 1998: Human bioclimatological features of Cluj. *Acta Univ Lodziensis, Folia Geographica Physica* 3, 135-144
- Unger J, 1998: Wind and heat island intensity. *Abstracts. Climate and Environmental Change Pre-regional Conf Meeting, Evora, Portugal*, 11-12
- Unger J, 1998: Urban heat island and some of its effects. *Proceed 2nd European Conf on Applied Climatology, Österreichische Beiträge zu Meteorologie und Geophysik 19, Vienna, Austria*, CD 105
- Unger J, 1998: Urban influence on human comfort (on the example of Szeged). *Acta Univ Lodziensis, Folia Geographica Physica* 3, 539-546

## 1997

- Gécz R and Loerincz K, 1997: Model of spatial differentiation of temperature in Kolozsvár (Romania). *Acta Climatol Univ Szegediensis* 31A, 27-35
- Unger J, 1997: Some features of the development of an urban heat island. *Studia Univ Babes-Bolyai, Geographia* 42/1-2, 125-131

## 1996

- Baranka G, 1996: Statistical analysis of the pollutant levels in Budapest. *Időjárás* 100, 183-192
- Gécz R, Dormány G and Unger J, 1996: Some bioclimatic indicators of Kolozsvár (Cluj-Napoca), Romania. *Acta Climatol Univ Szegediensis* 30, 41-48
- Gécz R, Unger J and Dormány G, 1996: Human bioclimatological features of Cluj-Napoca (Klausenburg), Romania and its surroundings. *Book of Abstracts. Int Conf on Urban Climatology, Essen, Germany*, 191-193
- Unger J, 1996: The main results of the nearly 30-year-old urban climatological research in Szeged, Hungary. *Acta Climatol Univ Szegediensis* 30, 99-112
- Unger J, 1996: Heat island intensity with different meteorological conditions in a medium-sized town: Szeged, Hungary. *Theor Appl Climatol* 54, 147-151
- Unger J and Csikász L, 1996: Some consequences of the urban heat island in a medium-sized town. *Book of Abstracts. Int Conf on Urban Climatology, Essen, Germany*, 225-227

## 1995

- Unger J, 1995: Urban climate research in Szeged, Hungary. *Climate Digest* 5/1-2, 7-9
- Unger J, 1995: Some aspects of the human bioclimate of Szeged, Hungary and its surroundings. *Proceed Climatology and Air Pollution Conf, Mendoza, Argentina*, 41-50
- Unger J and Ondok J, 1995: Some features of urban influence on temperature extremities. *Acta Climatol Univ Szegediensis* 28-29, 63-76

## 1994

- Unger J and Csáki A, 1994: Temperature characteristics of an urban local climate. *Proceed Contemporary Climatology Conf, Brno, Czech Republic*, 550-557

## 1993

- Unger J, 1993: The urban influence on the diurnal and annual patterns of absolute humidity in Szeged, Hungary. *Acta Climatol Univ Szegediensis* 27, 33-39.

## 1992

- Unger J, 1992: The seasonal system of urban temperature surplus in Szeged, Hungary. *Acta Climatol Univ Szegediensis* 24-26, 49-57
- Unger J, 1992: Diurnal and annual variation of the urban temperature surplus in Szeged, Hungary. *Időjárás* 96, 235-244

## 1991

- Faragó T, 1991: Quality of urban air and climate change. *Proceed Int Conf on Cities and Global Change, Toronto, Canada*, 155-166

## 1982

- Iványi Z and Mersich I, 1982: Simulation of the air pollution based on a numerical UBL model. *Atmos Environ* 16, 1835-1849

## 1978

- Lowry DO and Probáld F, 1978: An attempt to detect the effects of a steelworks on precipitation amounts in Central Hungary. *J Appl Meteorol* 17, 964-975

## 1976

*Probáld F* 1976: The role of green areas in planning the atmospheric environment of cities. *Ann Univ Sci, Sect Geogr, ELTE*, 141-159

**1974**

*Probáld F*, 1974: Air pollution and the urban climate of Budapest. In *Pécsi M and Probáld F* (eds): *Man and environment*. Akadémiai Kiadó, Budapest, 191-196

**1971**

*Probáld F*, 1971: The energy balance as the basis of the urban climate of Budapest. *Ann Univ Scientiarum Budapestinensis de Rolando Eötvös Nominata, Sectio Geographica* 7, 51-68

**1967**

*Probáld F*, 1967: Untersuchung der Stadtwirkung auf die Temperaturverhältnisse von Budapest. *Ann Univ Scientiarum Budapestinensis de Rolando Eötvös Nominata, Sectio Geographica* 2-3, 89-94