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Titolo	Applications of the Universal Thermal Climate Index UTCI in Biometeorology : Latest Developments and Case Studies // edited by Eduardo L. Krüger
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Altri autori (Persone)	KrugerEduardo L
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Nota di contenuto	Introduction -- Issues in UTCI Calculation from a Decade's Experience -- Literature Review on UTCI Applications -- Sensitivity of UTCI thermal comfort prediction to personal and situational factors -- residual analysis of pedestrian survey data -- Long and short-term acclimatization effects on outdoor thermal perception versus UTCI -- Regional adaptation of the UTCI: Comparisons between different datasets in Brazil -- Outdoor thermal environment and heat-related symptoms of pedestrians: An application of the UTCI for health risk assessment -- Mapping UTCI (in different scales) -- Application of the

UTCI in high-resolution urban climate modeling techniques -- The universal thermal climate index as an operational forecasting tool of human biometeorological conditions in Europe -- Proposed framework for establishing a global database for outdoor thermal comfort research -- Afterword.

Sommario/riassunto

This book introduces the UTCI (Universal Thermal Climate Index) and summarises progress in this area. The UTCI (Universal Thermal Climate Index) was developed as part of the European COST Action Program and first announced to the scientific community in 2009. Since then a decade has followed of applicability tests and research results as well as knowledge gained from applying the UTCI in human adaptation and thermal perception. These findings are of interest to researchers in the interdisciplinary areas of biometeorology, climatology and urban planning. The book summarizes this progress, discussing the limitations found and provides pointers to future developments. It also discusses UTCI applications in the areas of human biometeorology and urban planning including possibilities of using UTCI and similar indices in climate-responsive urban planning. The book's message is illustrated with many case studies from the real world. Chapter 10 is available open access under a Creative Commons Attribution 4.0 International License via link.springer.com.
