

## ERRATUM

### To All-Weather Model for Sky Luminance Distribution—Preliminary Configuration and Validation

by

Richard Perez, Robert Seals, and Joseph Michalsky  
*Solar Energy* 50(3), 235–245 (1993)

Paul Littlefair, from the building Research Establishment in Watford, U.K., brought to our attention that the model he had coded, as described in the *Solar Energy* article (and in a related article recently published in the *Journal of the IES*), could lead to negative luminance values for some extreme insolation conditions, namely: intermediate conditions with some direct sun, but low sky brightness, and high solar zenith angles (low sun). He uncovered the problem when testing the model against sky scan data recorded in Watford (unfortunately not in time to catch it before the article's publication).

The model was based on a large data set from Berkeley, California, where the conditions mentioned above were not encountered. In order to prevent model distortion for such extreme insolation conditions not included in the data set used to build the model, we recommend the following simple modification to the model, in reference and in addition to eqn (5) and Table 1 in the above mentioned *Solar Energy* article.

If  $\epsilon > 1.065$  and  $\epsilon < 2.8$

then:

replace  $\Delta$  by  $\Delta = \max(0.2, \Delta)$ .

Note that our goal beyond this preliminary all-weather model configuration is to develop a final version of the model based on a multi-climatic set of data (e.g., the IDMP data), where extreme insolation conditions will be well covered.

Many thanks to Paul Littlefair for pointing this out in a timely manner. We must also thank Richard Kitzler, of the Slovak Academy of Science, for suggesting that we include "preliminary configuration" in the title of our article.

Richard Perez, Robert Seals, and Joseph Michalsky  
Atmospheric Sciences Research Center  
State University of New York  
Albany, NY, U.S.A.