107

are a major factor in determining the intensity of the extra-

terrestrial components. It has been observed that the extra-

terrestrial temperature cannot be obtained by integrating

the climate system (e.g., the presence of the surface of the

earth) over the surface of the earth at the surface.

In contrast, the temperature gradient over the surface of

the earth can be obtained by integrating the temperature

gradients over the surface of the earth.

INTRODUCTION

The patterns of the seasonal cycle of insolation and

insolation gradients are observed at times of ice melting.

With increasing global temperature throughout the year,

the cycle of the seasonal cycle of insolation and

insolation gradients becomes more pronounced. The

seasonal cycle of insolation and insolation gradients is

not only evident over the surface of the earth, but is

also observed in other places where the insolation and

insolation gradients are important. This is true for

locations where the insolation and insolation gradients

are important for the development of the Milankovitch

theory of climate.

BARSTOS

M. Hayes, G. Kukla, and B. Saltzman

edited by A. Berger, J. Imbrie, and C. Hays

Part II

Milankovitch

Climate and Climatic

INTEGRATION GRADIENTS AND THE PALEOClimatic RECORD
...)
Figure 2 shows a comparison of the Northern Hemisphere and Southern Hemisphere daily insolation gradients at 50°N and 50°S for the months of June, July, and August. The gradients are calculated as the difference between the maximum and minimum daily insolation values for these months. The Northern Hemisphere gradient is shown to be generally higher than the Southern Hemisphere gradient, reflecting the greater insolation at higher latitudes. The peak insolation occurs in June at both hemispheres, while the lowest insolation occurs in August. The insolation gradients at 50°N and 50°S are similar, with slight variations due to differences in latitude and atmospheric effects.
CONCLUDING REMARKS

The insolation gradient changes from the equator to the poles and cause temperature differences. For example, the air is warmer near the equator because the insolation is greater. The temperature gradient is also influenced by the distribution of land and water, with land generally having higher temperatures. The process of radiation transfer is complex and not fully understood, but it is an important factor in determining the Earth's climate system. Further research is needed to better understand the effects of insolation gradients on climate and weather patterns.