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JGIS > Vol.2 No.4, October 2010

OPEN ACCESS

The Influence of the Atmospheric Transmission for the Solar Radiation and Earth' s Surface Radiation on the Earth' s Climate

PDF (Size: 705KB) PP. 194-200 DOI : 10.4236/jgis.2010.24027

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ABSTRACT

The physical and mathematical model of the planetary heat balance is developed to establish the influence of the atmospheric transmission for the solar radiation in the shortwave spectrum range and for the surface IR radiation in the longwave spectrum range on the Earth' s climate. It is shown the possibility of the decreasing of the atmospheric and surface temperatures with the decreasing of the atmospheric transmission for IR spectrum range, and this decreasing can' t be equilibrated with the change of the atmospheric transmission for the incoming solar radiation.

KEYWORDS

Climate, Atmospheric Transmission, Planetary Heat Balance

Cite this paper

H. Abdussamatov, A. Bogoyavlenskii, S. Khankov and Y. Lapovok, "The Influence of the Atmospheric Transmission for the Solar Radiation and Earth' s Surface Radiation on the Earth' s Climate," *Journal of Geographic Information System*, Vol. 2 No. 4, 2010, pp. 194-200. doi: 10.4236/jgis.2010.24027.

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