Study Nuclear Winter with a radiative-convective climate model

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July 27, 2023

Abstract

1 Introduction

2 Methods

2.1 Longwave radiation

Scattering of solar radiation at high wavelength $\lambda \geq 4\,\mu\text{m}$ is negligible with respect to absorption in atmosphere, moreover radiation at these wavelenghts has lower intensities than radiation emitted by Earth's surface and atmosphere. For these reasons longwave radiation is considered to be emitted only by Earth's surface and atmosphere.[1, p. 468]

2.2 Shortwave radiation

2.3 Numerical approach

3 Results

4 Discussion

A Source code

In this section the C++ code used to obtain the results presented in this work is shown and commented.

A.1 Classes

References

[1] V. Ramanathan and J. A. Coakley Jr., "Climate modeling through radiative-convective models," *Reviews of Geophysics*, vol. 16, no. 4, pp. 465–489, 1978. DOI: https://doi.org/10.1029/RG016i004p00465. eprint: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/RG016i004p00465. [Online]. Available: https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/RG016i004p00465.