

Talk at Splinter Meeting

Splinter C

## INFLUENCING FACTORS ON SURFACE TEMPERATURE A STEP-BY-STEP ANALYSIS AND ILLUSTRATION

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Investigations of the balance of radiation on planet earth and the determination of resulting surface temperatures are initial points for various following discussions both for planetary physics and investigations on the limits of renewable energies. Therefore, this basic knowledge has to be taught at school. The surface temperature of planet earth depends on different factors: time of radiation, degree of latitude, optical depth through the planets atmosphere, distribution of air density, absorption and the scattering, such as clouds and earth surface albedo. Within this talk it will be shown, how these impacts can be simplified through step-by-step assumptions and how they can be calculated and displayed graphically by using computer simulations.

