

Spatial and temporal variability of the **vertical distribution of aerosol on the direct effect** of solar radiation for the Mediterranean basin

V. Pappas vpappas@cc.uoi.gr

N. Hatzianastassiou, C. Papadimas,
C. Matsoukas, S. Kinne, I. Vardavas

Laboratory of Met, University of Ioannina, Greece

the elements

- AOD climatology fields for coarse and fine mode aerosol
- ECHAM5/HAM vertical distr. for coarse and fine mode aerosol
- off-line radiative transfer methods (Hatzianastassiou et al, 2007)

the results ... with a focus on Mediterranean / European regions

- what are direct clear-sky radiative effects at the surface ?
- what are direct clear-sky radiative effects in the atmosphere ?