



## **Uncertainties in insolation fields at TOA as computed in numerical models for the projects AMIP-2 and IPCC-AR**

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Monthly averages of the incoming solar radiation at TOA (Top of the Atmosphere), as computed in a large number of GCMs for the purposes of the projects AMIP-2 and IPCC-AR, are compared. Results show systematically different meridional profiles in particular during the months of both transitional seasons. Such different meridional radiative forcings should cause also different transports in the climate system, as it is already manifested in preliminary numerical studies with one GCM. Furthermore in individual maps of the anomalies from zonal profiles strong anomalies have been found with amplitudes of up to  $\pm 1 \text{ Wm}^{-2}$ . We conclude that modellers should agree about an unique and generally accepted way to compute the solar forcing of the climate system.