

Evaluation of UKCA simulated mean particle size and number concentration in the marine boundary layer in GLOMAP.

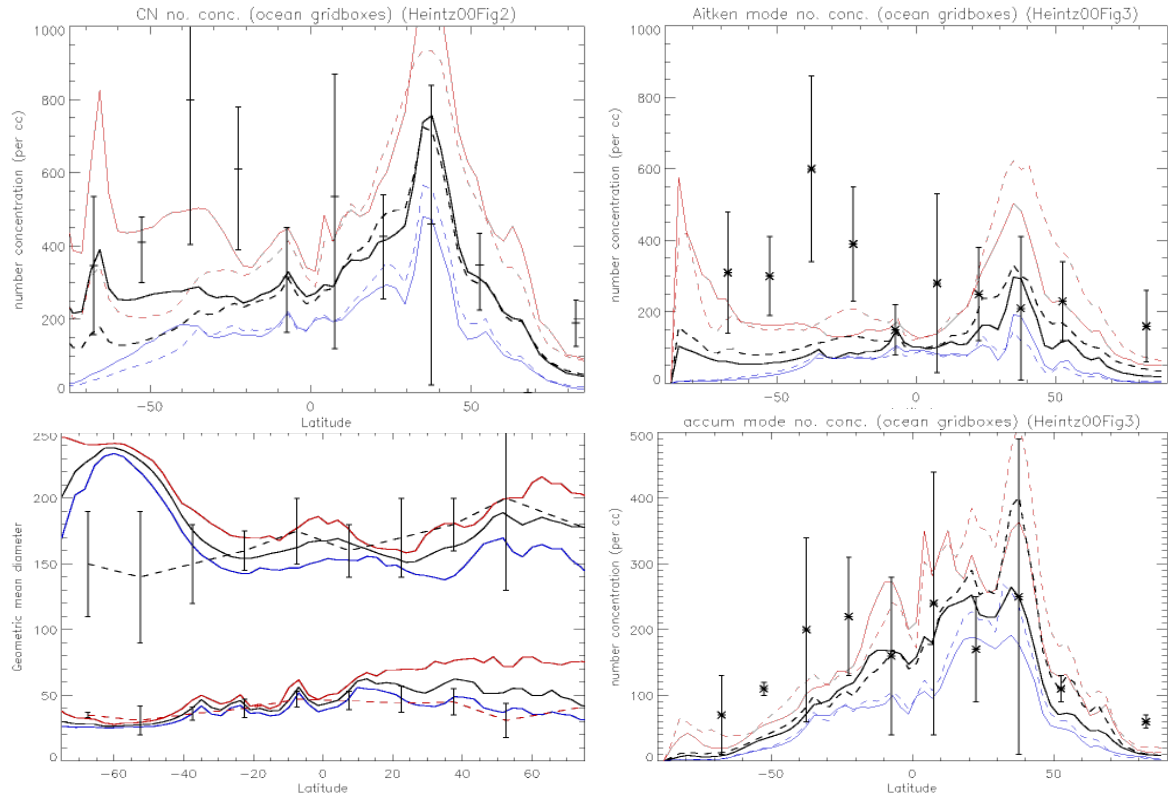


Figure 1: Zonal surface mean of particle number concentrations and mean size over the ocean in the model evaluated against the marine boundary layer observational climatology in Heintzenberg et al (2000). Shown are a) condensation nuclei ($D_p > 3\text{nm}$), b) Aitken size range ($10 < D_p < 100\text{nm}$) particle c) geometric mean radius (soluble Aitken and accumulation modes) and d) accumulation size range ($100 < D_p < 1000\text{nm}$). Plus/cross symbols indicate the observed with 1 standard deviation given by the error bars. Solid (dashed) black lines show annual mean simulated by GLOMAP-mode (GLOMAP-bin). Blue (red) lines indicate the minimum (maximum) GLOMAP simulated monthly mean in each latitudinal range for -mode (solid) and -bin (dashed)