

Figure 7: Results for MSP winter distribution (night ionospheric conditions) and MSP summer distribution (day ionospheric conditions). The frequency is 5.5 MHz and the ERP is 600 MW. Panel a) shows electron density and panel b) shows heated electron temperature. We also show model run without MSP. In the legend, 'S' stands for summer conditions, while 'W' stands for winter conditions.

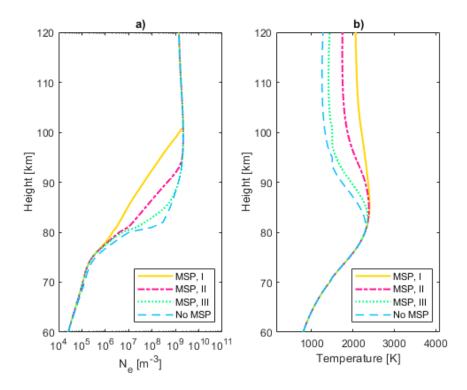


Figure 8: The different electron attachment efficiencies ( $Y_{charging}$ ), where r is the MSP radius. 'MSP, I': the probability is 1 for all MSP sizes. 'MSP, II': the probability is zero for MSP sizes below 0.25 nm, between 0.25 to 1.5 nm the probability increases linearly and for sizes larger than 1.5 nm the probability is 1. 'MSP, III': the probability is zero for MSP size below 1.5 nm and 1 for sizes larger than 1.5 nm. Note that 'MSP, II' come from Megner and Gumbel 2009.