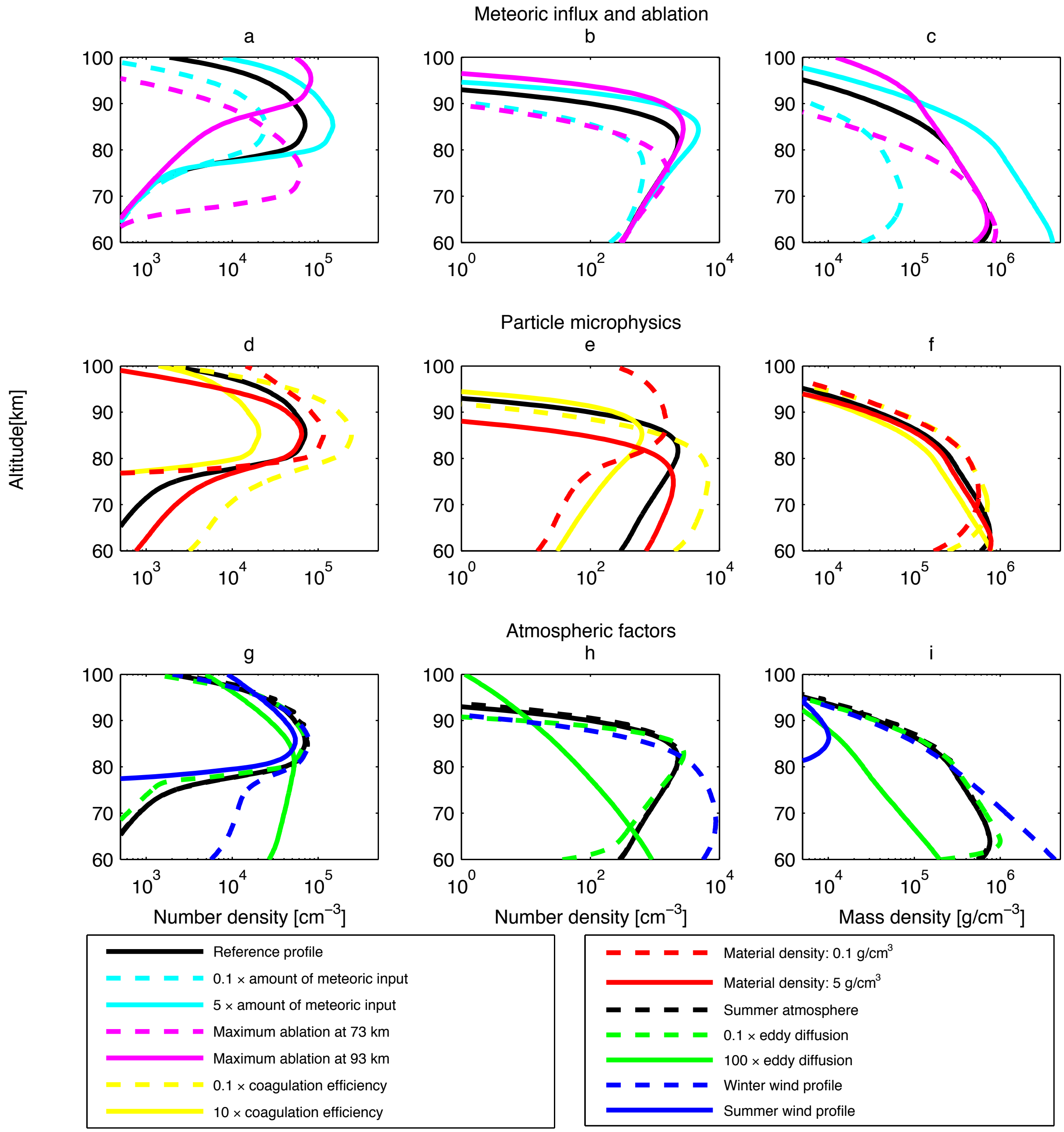

Fig. 4. Sensitivity of smoke the distribution as result of uncertainty and variability in the studied factors. The left hand panel (a,d,g) shows the total number densities, the middle panel (b,e,h) shows the number densities of particles bigger than 1 nm radius and the right hand panel (c,f,i) shows the mass density. The top panel(a,b,c) shows effects due to uncertainties in meteoric input, where the light blue lines represent the amount of input and the magenta lines the altitude of the ablation. The middle panel (d,e,f) shows the effects of internal smoke factors, yellow being the effects of coagulation uncertainties and red those of density/shape uncertainties. The bottom panel (g,h,i) shows the effect of atmospheric factors, dashed black line represents summer temperatures and densities, green line shows uncertainties due to eddy diffusion and blue lines show variations due to the vertical wind.