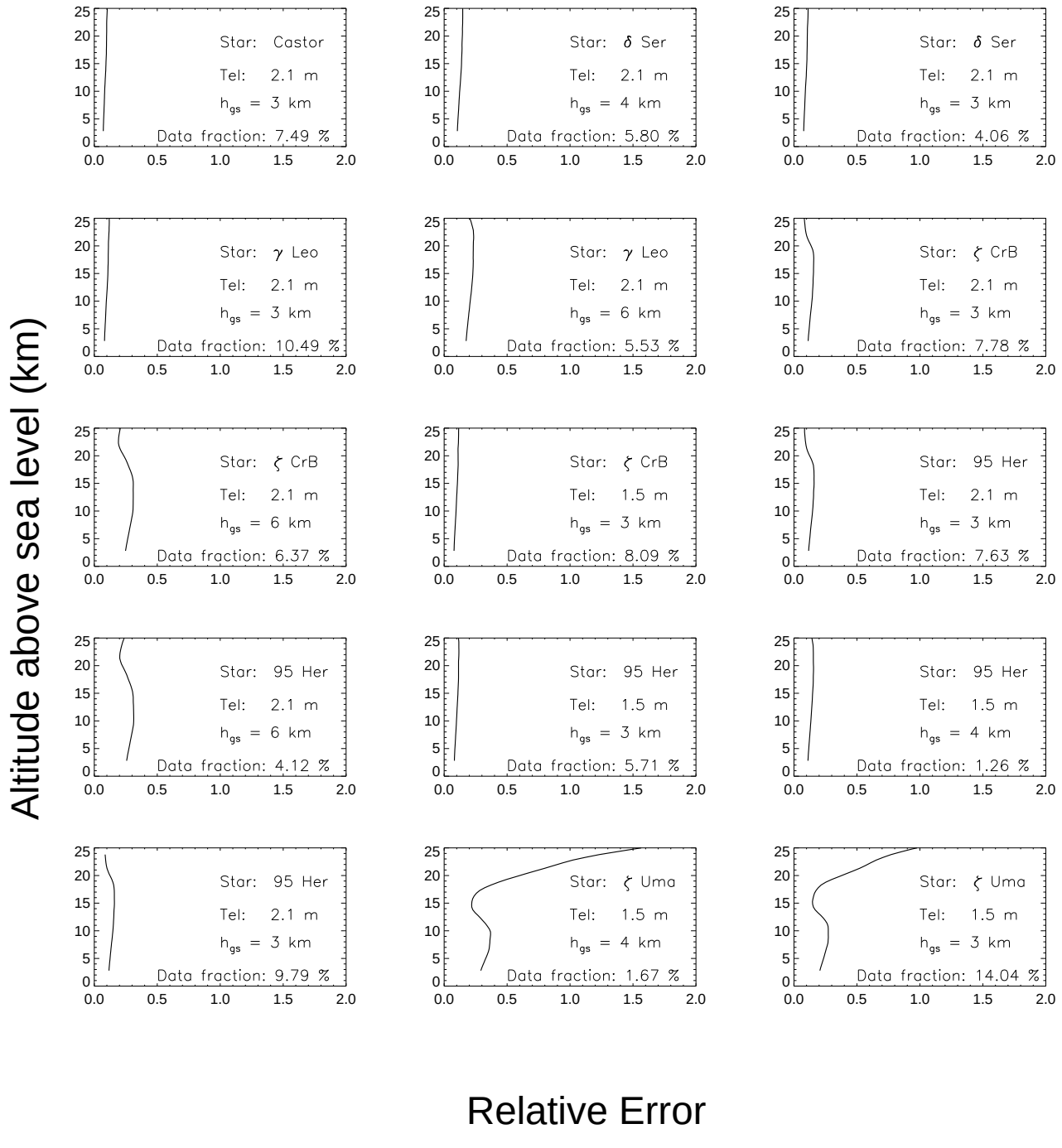

Fig. 1. Vertical profiles of the relative error. Each plot corresponds to a different combination of the parameters that define the relative error. Those parameters are indicated in each plot box together with the fraction of the data that was taken with the corresponding parameter set.

duced by each star on the detector. Those authors analyze this effect only for turbulence at ground level ($h = 0$). Avila & Cuevas (2009, hereafter AC09) generalize the analysis to turbulence at any height and provide an analytical formula for the calculation of the relative error ϵ induced on the C_N^2 values by the wrong normalization. AC09 provide exact and approximate –easier to compute– formulae for ϵ. In this paper, only the exact expression (equation 32 in AC09) is used. The general dependence of ϵ upon