

Optical and near-infrared spectroscopic analysis of O-stars including clumping (#796)

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We present the results of our optical-near infrared analysis of 12 stars covering O4-O9 spectral types and luminosity classes from I to V, and study the effects of clumping.

We first compare the results obtained from each wavelength range separately using FASTWIND model grids. We emphasize differences in the derived mass-loss rate and the difficulties in the final fit.

We then introduce three different clumping laws and compare their effects. Only the optical-infrared spectrum of supergiants is significantly affected by clumping. We select one of the clumping laws and calculate a new model grid, obtaining new stellar parameters and mass-loss rates. We analyze whether the fits are improved w.r.t. the models without clumping and compare the different mass-loss rates obtained.