Detectability of Deuterium in the Spectra of A-type Stars

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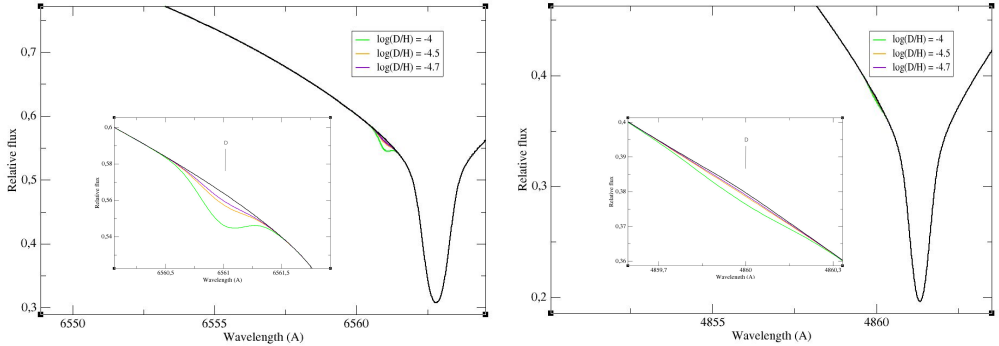
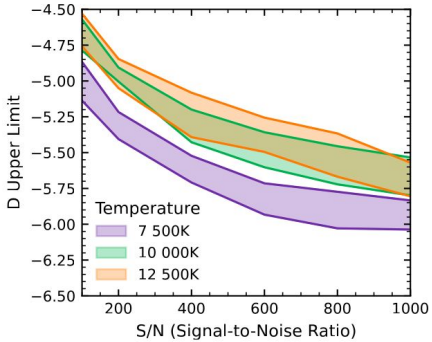
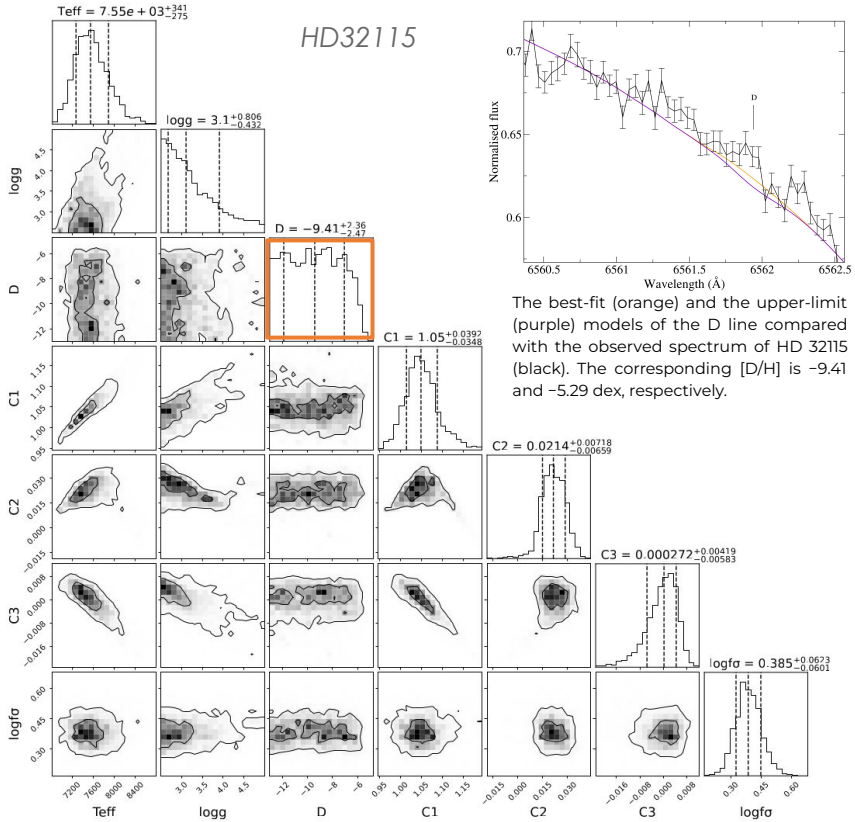


The appearance of the deuterium feature in the Hα (*left*) and Hβ (*right*) regions, considering three relative deuterium abundances: log(D/H) = -4, -4.5, and -4.7 dex for $T_{\rm eff}$ = 10 000 K.



Upper limit of deuterium detection (99 - 99.9% confidence) as a function of $T_{\rm eff}$ and S/N.



The best-fit (orange) and the upper-limit (purple) models of the D line compared with the observed spectrum of HD 32115 (black). The corresponding [D/H] is −9.41 and −5.29 dex, respectively.