A STATISTICAL STUDY OF C IV REGIONS IN 20 Oe - TYPE STARS

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In this paper, using the GR model, we analyze the UV C IV resonance lines in the spectra of 20 Oe stars of different spectral subtypes, in order to detect the structure of C IV region. We study the presence and behavior of absorption clouds and analyze their characteristics. From this analysis we can calculate the values of a group of physical parameters, such as the apparent rotational and radial velocities, the random velocities of the thermal motions of the ions, the Full Width at Half Maximum (FWHM), the optical depth, as well as the absorbed energy and the column density of the independent regions of matter which produce the main and the satellites clouds of the studied spectral lines. Finally, we present the relations between these physical parameters and the spectral subtypes of the studied stars and we give our results about the structure of the C IV region in their atmosphere.