Proton shell structure of even-even Sn isotopes was studied in a lot of works. The most precise data on proton single-particle energies $E_{nlj}$ and occupation probabilities $N_{nlj}$ for stable Sn isotopes were obtained (see [1] and references therein) by the joint evaluation of the stripping and pick-up reactions data [2] on the same nucleus. In [3], scattering data and bound state data were analyzed by the dispersive optical model (DOM) and obtained magnitude of the proton imaginary surface potential of stable Sn isotopes was more than 2 times greater than that of neutron.

In the present paper, available data on $E_{nlj}$ for stable Sn isotopes and $^{100,132}\text{Sn}$ were analysed by DOM with the parameters which are determined by the method [4,5]. Calculated energies $E_{nlj}^{DOM}$ agree with the data [1] within experimental uncertainties and demonstrate $Z=50$ shell closure in the region $100 \leq A \leq 132$. Obtained imaginary part of the dispersive optical potential corresponds with the standard asymmetry dependence of the global parameters of optical model potential [6]. A comparison with the predictions of various theoretical calculations was carried out.