

The program **MHD2xc_s** provides all maximum probability points (modes) of the multivariate hypergeometric distribution $MH(R_1; C_1, \dots, C_c)$ (and the probability of this points) and all maximum probability $2 \times c$ contingency tables with fixed marginal sums, (R_1, R_2) and (C_1, \dots, C_c) , and row and column independence, for c less than or equal to 80 and each C_i less than or equal to 500 (for $c > 80$ or $C_i > 500$ contact with the authors). The program implement the method developed in Requena and Martín (2003) which is based on a characterization of this maximum probability points (or $2 \times c$ contingency tables) in terms of a necessary and sufficient condition described in Requena and Martín (2000).

References:

Requena, F. and Martín, N. (2000). Characterization of maximum probability points in the Multivariate Hypergeometric Distribution. *Statist. Probab. Lett.*, 50, 39-47.

Requena, F. and Martín, N. (2003). The maximum probability $2 \times c$ contingency tables and the maximum probability points of the multivariate hypergeometric distribution. *Commun. Statist. Theory & Meth.*, 32 (9), 1737-1752.