

The program **MHD2xc** provides a maximum probability point (mode) of the multivariate hypergeometric distribution  $MH(R_1; C_1, \dots, C_c)$  (and the probability of this point) and a maximum probability  $2 \times c$  contingency table 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 implements 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.