A correlation network approach to analyze the influence of geothermal environment on porcelain insulator

Abstract

This paper is to explain to what extent geothermal environment influences the quality of porcelain insulator. For that purpose, first, the equality of the correlation structure of clean porcelain insulator and that of polluted one in geothermal environment are tested. If they are not equal, both correlation structures are transformed into distance structures to construct the corresponding minimum spanning tree (MST). Based on the information extracted from MST, a recommendation will be delivered.