



An efficient book keeping strategy for the formation of the design matrix in geodetic network adjustment

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Abstract: The aim of the present study is to offer easy formulation and computation of least square observation equation's design matrix by using an efficient book keeping strategy. Usually for a large network of many triangles and stations, a rigorous task is involved in the computation and placement of the values of the differentials of each observation with respect to its station coordinates (latitude and longitude), in their respective rows and columns. The efficient book keeping strategy seeks to eliminate or reduce this rigorous task involved, especially in large network, by simple skilful arrangement. The proposed strategy provides easy and speedy formulation and enumeration of the design matrix. This is achieved by scripting a short program written in the Matlab environment.