

An Efficient Book Keeping Strategy for the Formation of the Design Matrix in Geodetic Network Adjustment

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Abstract : The focus of the study is to proffer 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 skillful arrangement and development of a short program written in the Matlab environment, the formulation and computation of least square observation equation's design matrix can be easily achieved.

Keywords : design, differential, geodetic, matrix, network, station

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