

TECHNOLOGICAL ASPECTS OF THE 3-DIMENSIONAL PHOTOGRAMMETRIC UPDATING OF THE ISRAELI NATIONAL GIS

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ABSTRACT:

The Survey of Israel is the National mapping Agency responsible for the National GIS. Maintenance, in terms of completion, updating and standards, among other, are the task of the Photogrammetric Division, in charge of six private companies that are producing new data and on the meticulous Quality Control processes, done in house.

This paper will describe the protocols of the 3-Dimensional digital photogrammetric updating of the National GIS spatial database. Mainly, the paper will focus on the principles and guidelines of the updating projects: (1) Quality Control of existing data in terms of aero-triangulation, digital elevation model, consistency and compliance with the newly developed standard for digital mapping in a topologically structured spatial environment; (2) Correction of all the

irregularities found according to the above mentioned procedures; and only then (3) Updating of the digital spatial data base according to the changes taken place between the two epochs of mapping (air-photography missions).

In addition, the paper will focus on the administrative maintenance in terms of preserving the original Feature-Unique-ID and Source-Code that are kept, in the Israeli National GIS, for each feature. This according to the standard adopted by the Survey on October 1991, already.

Also, the paper will discuss the new experiments with incremental updating which is envisaged as the major tool of updating and maintenance of a national core spatial database.