



ABSTRACTS

1. Ben Ikhlef ILIES: *Geostatistics as a tool for interpolation and mapping of the gravity anomaly and the geoid height*

Geostatistics is a science that deals with regionalized variables that take their values in space which can be located by the GNSS coordinates, and present a characteristic that can be studied by statistical and probabilistic tools, knowing that the majority of the regionalized variables include a physical origin, which justifies the decomposition and trends used for modeling in this science. Being regionalized variables, the gravity anomaly as well as the geoid height can be modeled by geostatistics, taking into account their spatial character and their variation in space. For this purpose we need tools for variographic analysis such as the variogram or the different kind of covariance functions whose definition is based on hypothesis derived from geostatistics. Finally, geostatistics also provides methods such as Kriging which can help us to interpolate from existing data for various purposes such as cross-validation where the estimation of a grid of the same variable or another variable which depends on the previous one, and to map the studied variables which in our case are the gravity anomaly and the geoid height.

Organisers



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