

VARIOWIN Software for spatial data analysis in 2D.

1996. Pannatier, Yvan. Springer, New York, 3.5 disk 91pp.

Pannatier has produced 4 small integrated programs to assist the competent user of geostatistics calculate variograms to explore spatial continuity and model experimental variograms.

Prevar2D checks for duplicate points, which are not allowed, and then creates a pair comparison file.

Uario2D with PCF offers interactive exploratory variography functions. A sample location map can be plotted and samples queried by clicking on their location.

Experimental variograms, the variogram surface, variogram cloud, H-scatterplots can all be calculated. Pairs in the cloud or scatterplot can be eliminated from the variogram by clicking on them. By having several windows open simultaneously, the effects of excluding pairs can be seen instantly. Cross variography is also supported. This allows the way 2 parameters are spatially correlated to be investigated.

Model offers interactive variogram modelling facilities. Models supported are the nugget effect, spherical, exponential, Gaussian and power. Nested models are permitted. An indicative goodness of fit is given. Modelling is carried on a number of directional variograms. These are all visible in tiles and the effects of changing model parameters displayed automatically.

Grid allows grid files' of the experimental and model variogram surfaces for example, to be displayed.

So much for the software, what about the book? This is described as a methodological users guide.

Pannatier has written a user guide to his software. Read as such the book is lucid and well written. The use of screen shots to illustrate the text helps the reader learn how to operate the software.

Overall the package is expensive for a book but very reasonably priced for a variogram modelling programme. If you want easy, Windows based variography this is the package for you. If you are using the geostatistical interpolators in popular surface modelling packages, this is a must.

Paul Nathanail.