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(Kriging)

TDS BOD,COD

Gslib

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Monitoring



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(Karamouz, Szidarovsky, Zahraie, 2003)

Sanders

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()



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Hudak and Loiciga (1993) ،

Bras and Rodrigues-Iturbe(1984)

(MCDM)

Woldt and Bogardi(1992)

(Karamouz, Torabi, Araghi-Nejad, 2003)

:(،)



$$Z_v^* = \sum_{i=1}^n \lambda_i Z_{v_i} \quad (1)$$

$$\begin{matrix} i & Z_{v_i} & i & \lambda_i & Z_v^* \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ n & & & & \end{matrix}$$

Z

$$E[Z_v - Z_v^*] = 0 \quad (2)$$

$$\sum_{i=1}^n \lambda_i = 1 \quad (3)$$

$n+1$ $n+1$

(γ)

$$AX = B \quad (4)$$

$$A = \begin{bmatrix} \gamma_{11} & \gamma_{12} & \dots & \gamma_{1n} & 1 \\ \gamma_{21} & \gamma_{22} & \dots & \gamma_{2n} & 1 \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ \gamma_{n1} & \gamma_{n2} & \dots & \gamma_{nn} & 1 \\ 1 & 1 & \dots & 1 & 1 \end{bmatrix} \quad B = \begin{bmatrix} \gamma_{1v} \\ \gamma_{2v} \\ \vdots \\ \gamma_{nv} \\ 1 \end{bmatrix} \quad X = \begin{bmatrix} \lambda_1 \\ \lambda_2 \\ \vdots \\ \lambda_n \\ -\mu \end{bmatrix}$$



(Variogram)

(Kitanids, 1999)

(Semivariogram)

(Empirical variogram)

:(Deutsch, Journal, 1998)

$$\gamma(h) = \frac{1}{2n} \sum [(Z(x_i) - Z(x_i + h))^2] \quad ()$$

, h

: $\gamma(h)$

, x_i

: $Z(x_i)$

, $x_i + h$

: $Z(x_i + h)$

: n

(Theoretical variogram)

(Power)

(Spherical)

(Hole effect)

(Gaussian)

:

C_0

(Nugget effect)

-

(C)

(Sill)

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R

(Range)

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(



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(x,y)

BOD COD,TDS

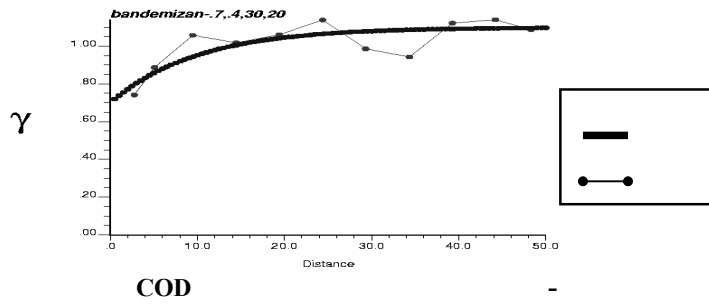
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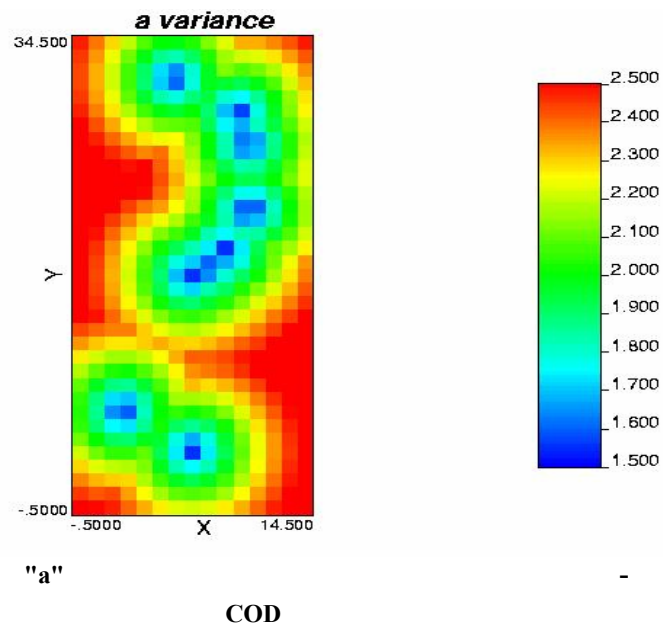
statistica



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COD



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