Table 3: Regression formulae to predict the values of the distribution parameters as a function of the value of the relative sediment depth (d_b^*).

Distribution	**Formulae**	R^2	**RMSE**
Gamma$[\alpha, \beta]$	$\alpha = (0.47 \pm 0.002) + (1.76 \pm 0.01)\, e^{(-0.37 \pm 0.007)\, d_b^{*(1.37 \pm 0.02)}}$	99.9%	0.017
	$\beta =$ $\begin{cases} (48.4 \pm 0.46) + (-46.91 \pm 0.46) e^{(-0.02 \pm 2E-4)\, d_b^{*(2.31 \pm 0.003)}} & d_b^* \leq 3.5 \\ (40.82 \pm 0.01) + (-32.81 \pm 0.19) e^{(-0.004 \pm 2E-4)\, d_b^{*(3.36 \pm 0.02)}} & d_b^* \geq 3.5 \end{cases}$	99.9%	$\begin{cases} 0.004 \\ 0.065 \end{cases}$
LogNormal$[\mu, \sigma]$	$\mu = (1.58 \pm 5E-4) + (-0.7 \pm 0.002)\, e^{(-0.38 \pm 0.004)\, d_b^{*(1.58 \pm 0.009)}}$	99.9%	0.003
	$\sigma = (1.39 \pm 5E-4) + (-0.63 \pm 0.001)\, e^{(-0.2 \pm 0.002)\, d_b^{*(1.74 \pm 0.009)}}$	99.9%	0.003
Fréchet$[1, q, m]$	$q = (3.18 \pm 5E-4) + (-1.22 \pm 0.002)\, e^{(-0.39 \pm 0.002)\, d_b^{*(1.84 \pm 0.005)}}$	99.9%	0.002
	$m = (-0.39 \pm 1E-4) + (0.28 \pm 5E-4)\, e^{(-0.28 \pm 0.002)\, d_b^{*(2.1 \pm 0.01)}}$	99.9%	0.001
Exponential$[\rho]$	$\boldsymbol{\rho} = (0.05 \pm 3E-4) + (0.28 \pm 0.002)\, e^{(-0.4 \pm 0.006)\, d_b^{*(1.3 \pm 0.01)}}$	99.9%	0.002