

Name	Cumulative distribution function	Probability density function	Parameter
GEV	$\exp \left\{ - \left[ 1 + \xi (x - \mu) / \sigma \right]^{-1/\xi} \right\}$	$\frac{1}{\sigma} \left[ 1 + \xi (x - \mu) / \sigma \right]^{-(\xi+1)/\xi} \exp \left\{ - \left[ 1 + \xi (x - \mu) / \sigma \right]^{-1/\xi} \right\}$	$\mu \in R, \sigma > 0, \xi \in R$
GLO	$1 / \left\{ 1 + \left[ 1 - \xi (x - \mu) / \sigma \right]^{1/\xi} \right\}$	$\frac{1}{\sigma} \left[ 1 + \xi (x - \mu) / \sigma \right]^{-(\xi+1)/\xi} / \left\{ 1 + \left[ 1 + \xi (x - \mu) / \sigma \right]^{1/\xi} \right\}^2$	$\mu \in R, \sigma > 0, \xi \in R$
P-III	$\frac{\beta^\alpha}{\Gamma(\alpha)} \int_{a_0}^x (x - a_0) \exp \left[ -\beta (x - a_0) \right] / dx$	$\frac{\beta^\alpha}{\Gamma(\alpha)} (x - a_0)^{\alpha-1} \exp \left[ -\beta (x - a_0) \right]$	$a_0 \in R, \alpha > 0, \beta > 0$
GNO	$\Phi (y) y = -\ln \left[ 1 - \xi (x - \mu) / \sigma \right] / \xi$	$\phi (y) / \left[ \sigma - \xi (x - \mu) \right] y = -\ln \left[ 1 - \xi (x - \mu) / \sigma \right] / \xi$	$\mu \in R, \sigma > 0, \xi \in R$