

Explanatory variable	Meaning	Multi-scale tuning parameter (start and end value)	Variant number
<i>FILL</i>	Digital Elevation Model with filled sinks	–	1
<i>SLP</i>	Slope	–	1
<i>VDC</i>	Vertical Distance above Channel Network	Catchment Area ($CA \in [10,000 : 1000,000]$)	10
<i>TCI</i>	Terrain Classification Index	Catchment Area ($CA \in [10,000:1000,000]$)	10
<i>TWI</i>	Topographic Wetness Index	–	1
<i>MBI</i>	Mass Balance Index	Curvature Transfer Constant ($T \in 0.0001 : 0.1$)	10
<i>TOP</i>	Topographic (positive) Openness	–	1
<i>TON</i>	Topographic (negative) Openness	–	1
<i>NH</i>	Normalized Height	Generalization Parameter ($t \in [2 : 1000]$)	10
<i>TPI</i>	Topographic Position Index	Scale Parameter ($S \in [20 : 1000]$)	10