r.sim.terrain

```
input data
```
↓
```
determine steady state
or unsteady flow regime
```
↓
```
determine model
```

RUSLE3D

```
detachment limited regime
```
↓
```
event-based
erosivity factor
```
↓
```
flow accumulation
```
↓
```
3D topographic factor
```
↓
```
detachment rate
```
↓
```
change in elevation
```
↓
```
gravitional diffusion
```
↓
```
change in elevation
```

iterate

SIMWE

```
variable erosion-
deposition regime
```
↓
```
water flow
```
↓
```
sediment flow
```
↓
```
erosion-deposition
```
↓
```
change in elevation
```
↓
```
gravitional diffusion
```
↓
```
change in elevation
```

iterate

USPED

```
transport limited regime
```
↓
```
event-based
erosivity factor
```
↓
```
flow accumulation
```
↓
```
topographic sedi-
ment transport factor
```
↓
```
sediment flow at
transport capacity
```
↓
```
erosion-deposition
```
↓
```
change in elevation
```
↓
```
gravitional diffusion
```
↓
```
change in elevation
```

iterate

```
output data
```