

Calculations for the « waves generated current » layer:

Calculating steps:

- calcul(1)

$$\frac{(4 \times \pi^2 \times [depth])}{([peak_wave_period]^2 \times 9.8)}$$

- calcul(2)

$$\sqrt{\frac{(e^{calcul(1)} - e^{-calcul(1)})}{(e^{calcul(1)} + e^{-calcul(1)})}}$$

- calcul(3)

$$\frac{(9.8 \times [peak_wave_period]^2)}{(2 \times \pi)}$$

- calcul(4)

$$calcul(2) \times calcul(3)$$

- calcul(5)

$$\frac{(2 \times \pi)}{calcul(4)}$$

- calcul(6)

$$\frac{(e^{(calcul(5) \times [depth])} - e^{(-calcul(5) \times [depth])})}{2}$$

- calcul(7) = final grid named "Waves generated current"

$$\frac{(\pi \times [wave_height] / [peak_wave_period])}{calcul(6)}$$