

**L124: I do not understand this formula: Which indices are used for totalling? What does the comma in the centre mean?**

We agree, the formula was not displayed correctly. We simplified it to an additive formulation, by exchanging the  $\sum$  with +, which eliminates the comma in the center and added the totalling indexes below:

The formula of the ODI in its current version for each grid point (x,y) reads as

$$ODI(t_0) = (w_{depth} * I_{depth}(t_0) + w_{NPP} * I_{NPP}(t_0)) * I_{strat}(t_0) \quad (1)$$

given by

$$I_{depth}(t_0) = \frac{1}{\Delta t_{ref}} \int_{t_0 - \Delta t_{ref}}^{t_0} I_{depth}^*(t) dt \quad (6)$$

$$I_{NPP}(t_0) = \max\left(0, \min\left(1, \frac{\overline{NPP} - NPP_{min}}{NPP_{max} - NPP_{min}}\right)\right) \quad (9)$$

$$I_{strat}(t_0) = \min(I_{strat}(t_0, 10), I_{strat}(t_0, 30)) \quad (4)$$

**L162: This formula is wrong: Istrat cannot have one index and later two.**

We agree. We modified the wording, which might help to eliminate the confusion.

The formula is the minimum of the two indexes. One index is calculated over a reference period of 10 days, and the second one is calculated over a reference period of 30 days:

$$I_{strat}(t_0) = \min(I_{strat}(t_0, 10), I_{strat}(t_0, 30)) \quad (4)$$