Explanation of Correction to Equation (7)

During proof-reading we noticed a typographical inconsistency in Equation (7).

The subscript “p” that appears on the left-hand side of the first equality should be removed, because the quantity represents the weighted-average sensitivity for grid-box i after summing over all patches. Retaining the subscript “p” implies the value is still patch-specific, which is no longer the case once the summation over p has been carried out.

Original (proof):

$$\left(\frac{\partial R}{\partial SST_i}\right)_p = \frac{\sum_P \Delta SST_P \frac{\partial R}{\partial SST_P}\frac{S_i}{S_P}}{\sum_P \Delta SST_P}$$

Corrected:

$$\frac{\partial R}{\partial SST_i} = \frac{\sum_P \Delta SST_P \frac{\partial R}{\partial SST_P}\frac{S_i}{S_P}}{\sum_P \Delta SST_P}$$

Explanation of Correction to Equation (8)

In our derivation, the residual term represents the first (reference) perturbation run.

It is not an index that varies with grid cell or experiment. Therefore, using the subscript “I” could mislead readers into treating the term as a generic, varying index. Replacing it with the numeral “1” makes clear that this residual is tied to the first perturbation run only.

Original (proof):

$$\Delta R = \Sigma_i \frac{\partial R}{\partial SST_i}\Delta SST_i + \varepsilon_I$$

Corrected:

$$\Delta R = \Sigma_i \frac{\partial R}{\partial SST_i}\Delta SST_i + \varepsilon_1$$

These edits correct typographical errors only and therefore do not alter any calculations, numerical results, or conclusions in the manuscript. All analyses and discussions remain unchanged.