



## Corrigendum to “Global evaluation of the nutrient-enabled version of the land surface model ORCHIDEE-CNP v1.2 (r5986)” published in Geosci. Model Dev., 14, 1987–2010, 2021

Yan Sun<sup>1</sup>, Daniel S. Goll<sup>1,2</sup>, Jinfeng Chang<sup>3</sup>, Philippe Ciais<sup>1</sup>, Bertrand Guenet<sup>1,4</sup>, Julian Helfenstein<sup>5</sup>,  
Yuanyuan Huang<sup>1,6</sup>, Ronny Lauerwald<sup>1,7</sup>, Fabienne Maignan<sup>1</sup>, Victoria Naipal<sup>1,8</sup>, Yilong Wang<sup>1,9</sup>, Hui Yang<sup>1</sup>, and  
Haicheng Zhang<sup>1,7</sup>

<sup>1</sup>Laboratoire des Sciences du Climat et de l'Environnement/IPSL, CEA-CNRS-UVSQ, Université Paris-Saclay,  
Gif sur Yvette, 91191, France

<sup>2</sup>Department of Geography, University of Augsburg, Augsburg, Germany

<sup>3</sup>Ecosystems Services and Management Program, International Institute for Applied Systems Analysis (IIASA),  
Schlossplatz 1, 2361 Laxenburg, Austria

<sup>4</sup>Laboratoire de Géologie, UMR 8538, Ecole Normale Supérieure, PSL Research University, CNRS, Paris, France

<sup>5</sup>Agroecology and Environment, Agroscope, Reckenholzstrasse 191, 8046 Zurich, Switzerland

<sup>6</sup>CSIRO Oceans and Atmosphere, Aspendale 3195, Australia

<sup>7</sup>Department Geoscience, Environment & Society, Université libre de Bruxelles, 1050 Brussels, Belgium

<sup>8</sup>Department of Geography, Ludwig-Maximilian University, Munich, Germany

<sup>9</sup>Key Laboratory of Land Surface Pattern and Simulation, Institute of Geographical Sciences and Natural Resources  
Research, Chinese Academy of Sciences, Beijing, China

**Correspondence:** Yan Sun (ysun@lscce.ipsl.fr) and Daniel S. Goll (dsgoll123@gmail.com)

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During the production process, a mistake was inserted into Eq. (4). Please find the correct paragraph from Sect. 4.2 hereinafter: Here, we evaluate the resource use efficiencies of GPP for light (L), water (W), C, N and P defined by

$$\text{LUE} = \frac{\text{GPP}}{\text{fAPAR} \times \text{PAR}}, \quad (2)$$

$$\text{WUE} = \frac{\text{GPP}}{\text{ET}}, \quad (3)$$

$$\text{CUE} = \frac{\text{NPP}}{\text{GPP}}, \quad (4)$$

$$\text{NUE} = \frac{\text{GPP}}{F_N}, \quad (5)$$

$$\text{PUE} = \frac{\text{GPP}}{F_P}, \quad (6)$$

where NPP is net primary productivity ( $\text{g C m}^{-2} \text{yr}^{-1}$ ), GPP is the annual gross primary productivity ( $\text{g C m}^{-2} \text{yr}^{-1}$ ),

fAPAR the fraction of absorbed photosynthetically active radiation (%), PAR the annual photosynthetically active radiation ( $\text{W m}^{-2} \text{yr}^{-1}$ ), ET the annual evapotranspiration ( $\text{mm m}^{-2} \text{yr}^{-1}$ ), and  $F_N$  and  $F_P$  the total N uptake ( $\text{g N m}^{-2} \text{yr}^{-1}$ ) and P uptake by plants ( $\text{g P m}^{-2} \text{yr}^{-1}$ ), respectively. We calculated fAPAR in ORCHIDEE-CNP and ORCHIDEE as a function of leaf area index (LAI):  $\text{fAPAR} = 1 - \exp(-0.5 \cdot \text{LAI})$  (Ito et al., 2004).