



Corrigendum to "A global hydrological simulation to specify the sources of water used by humans" published in Hydrol. Earth Syst. Sci., 22, 789–817, 2018

Naota Hanasaki^{1,2}, Sayaka Yoshikawa³, Yadu Pokhrel⁴, and Shinjiro Kanae³

¹National Institute for Environmental Studies, Tsukuba, Japan

²International Institute for Applied System Analyses, Laxenburg, Austria

³Department of Civil and Environmental Engineering, Tokyo Institute of Technology, Tokyo, Japan

⁴Department of Civil and Environmental Engineering, Michigan State University, East Lansing, MI, USA

Correspondence: Naota Hanasaki (hanasaki@nies.go.jp)

Published: 1 October 2020

Due to authors' incorrect handling of computer script, the lines and performance metrics for the ALL simulation shown in Fig. 9 were inadvertently swapped with those for the ORIG simulation. Similarly, due to another issue with computer script, the lines for the observation shown in Fig. 10 were a result of using the GRACE Mascon product from the Center for Space Research (CSR) rather than the spherical harmonic solutions of equivalent water height thickness processed by the CSR with the application of scaling factor (see p. 804). The performance metrics shown in Fig. 10 were also calculated using the incorrect results. The corrected Figs. 9 and 10 are included in this corrigendum. These corrections make the performance metrics consistent among Table 4 and Figs. 9 and 10. Text and conclusions are unaffected by these corrections because these are based on Table 4, which shows all correct numbers. The authors thank Zun Yin at Laboratoire des Sciences du Climat et de l'Environnement for reporting these errors.

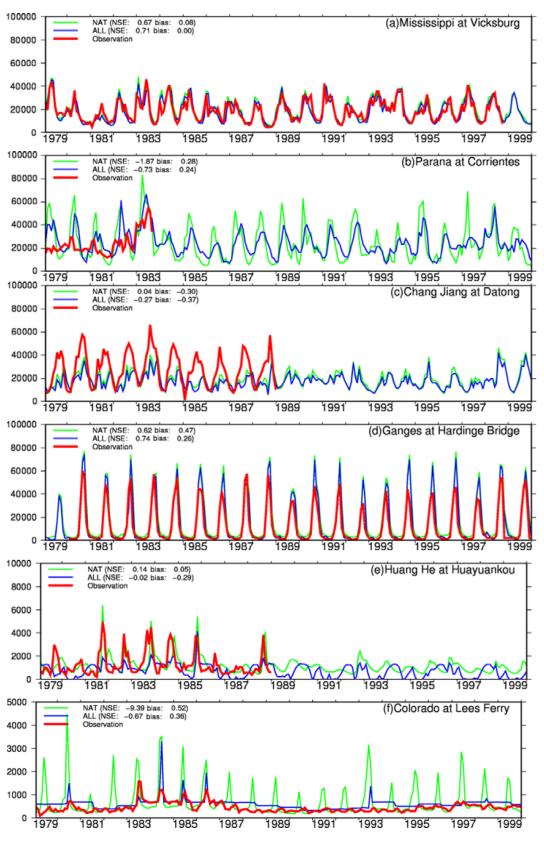


Figure 9. Monthly river discharge of (**a**) the Mississippi River at Vicksburg, (**b**) the Parana River at Corrientes, (**c**) the Chang Jiang River at Datong, (**d**) the Ganges River at Hardinge Bridge, (**e**) the Huang He River at Huayuankou, and (**f**) the Colorado River at Lees Ferry.

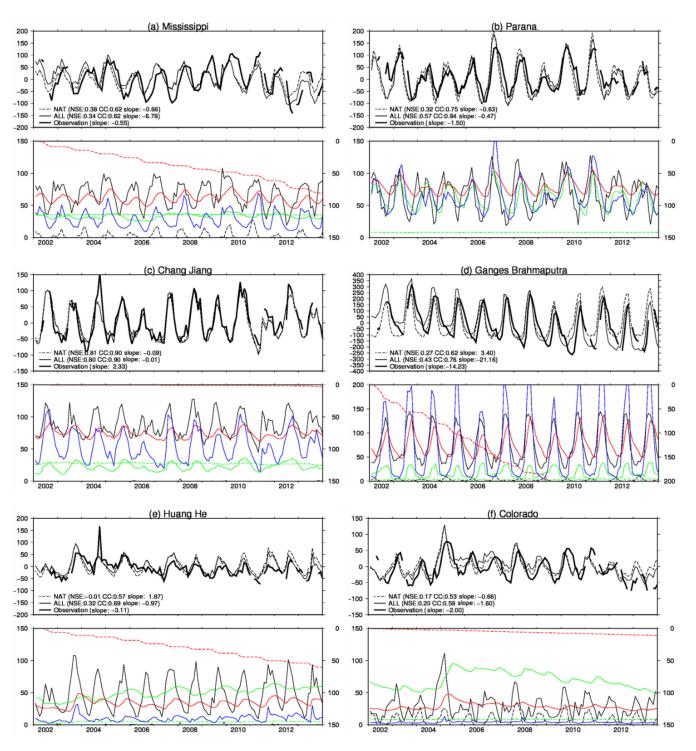


Figure 10. Terrestrial water storage (TWS) variations in the (a) Mississippi, (b) Parana, (c) Chang Jiang, (d) Ganges, (e) Huang He, and (f) Colorado river basins. The top panel of each figure shows the terrestrial water storage anomaly (TWSA) (mm). The bottom panel of each figure shows the simulated TWS component (mm): solid black (soil moisture), broken black (snow water), solid red (renewable groundwater), broken red (storage change in nonrenewable groundwater reservoir, i.e., cumulative volume of nonrenewable groundwater abstraction, right axis), solid green (storage in global reservoirs), broken green (storage in local reservoirs), and solid blue (river water). Note the sign of the cumulative volume of nonrenewable groundwater abstraction, where a positive sign denotes a decrease in water volume.