

***Interactive comment on* “Estimation of hydrological drought recovery based on GRACE water storage deficit” by Alka Singh et al.**

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Please see the modified figures! Thanks a lot!!

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2019-590>, 2019.

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Discussion paper



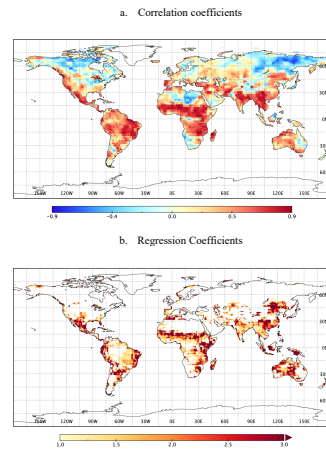


Figure 2: a) Correlation coefficients and, b) regression coefficients between cumulative detrended precipitation anomalies (cdPA) and detrended terrestrial water storage anomaly (dTWSA).

Fig. 1.

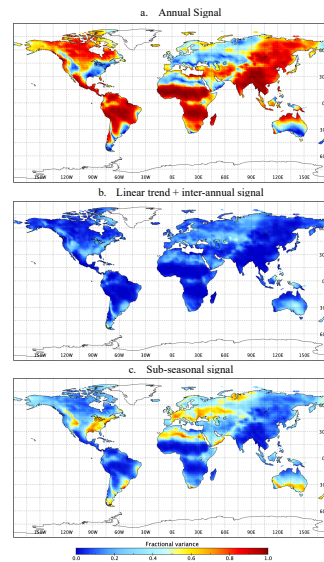


Figure 4: Fractional variance of the decomposed signal to the full signal. a. Annual Signal, b. Long-term signal, c. sub-seasonal high frequency signal

Fig. 2.

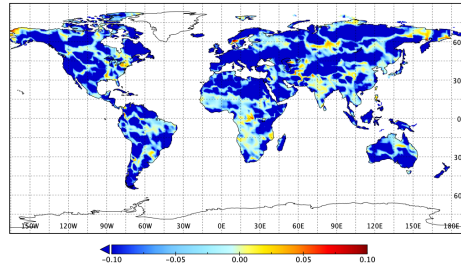


Figure 6: Nash-Sutcliffe coefficients for 2016-17 precipitation hindcasting.

Fig. 3.

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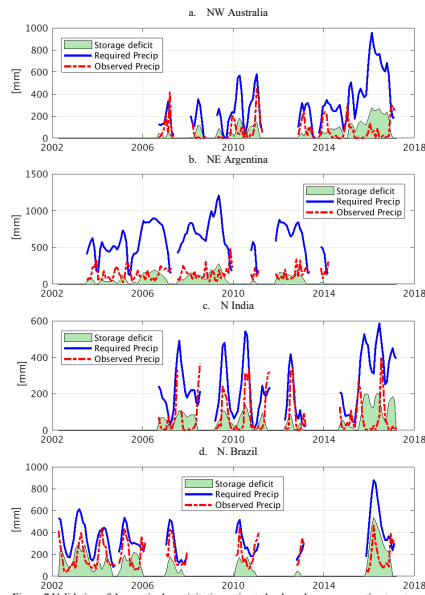


Figure 7 Validation of the required-precipitation estimate by drought recovery estimates at example locations. The different instances of drought show that drought ends (from the perspective of TWSA) whenever observed precipitation (red plot) exceeds that required-precipitation (blue plot).

Fig. 4.

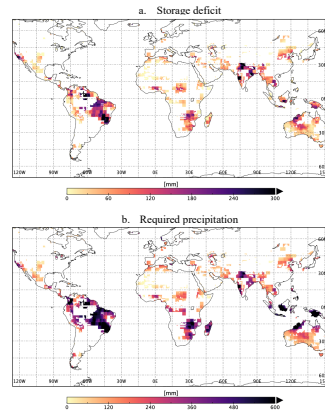


Figure 8: a) Storage deficit in an example month (January 2016). b) the amount of required-precipitation to fill the deficit.

Fig. 5.