Supplementary material to "Improved Drought Characteristics in the Pearl River Basin Based on Reconstructed GRACE Solution with Enhanced Temporal Resolution"

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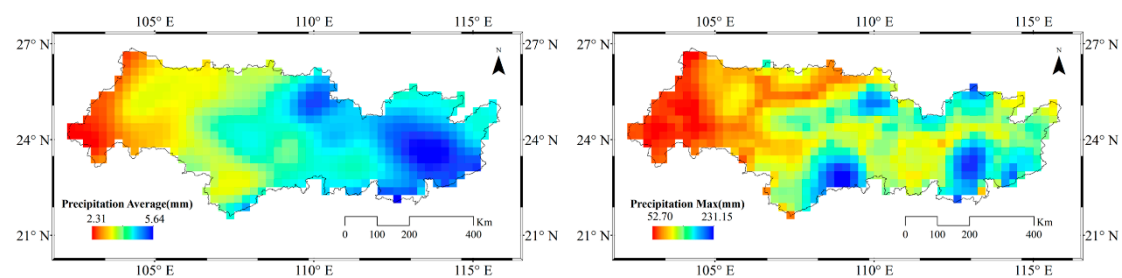[5]   College of water sciences, Beijing Normal University, Beijing 100091, China

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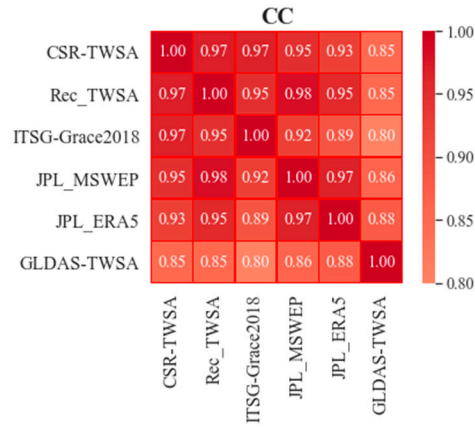*****   Correspondence: liyi_bnuphd@mail.bnu.edu.cn

Supplementary Figures S1 showing spatial distribution of mean and maximum precipitation in the Pearl River basin. The average of rainfall can reflect the drought situation in the Pearl River basin. The maximum rainfall can reflect the possible flood situation in the Pearl River basin.

Supplementary Figures S2 showing the CC between different daily TWSA products and CSR–TWSA. Here, each daily TWSA product average into the monthly scale that is consistent with the GRACE "month".

Supplementary Tables S1 highlighting the characteristics of SPI-6-identified drought events. The drought characteristics monitored by different drought indexes are conducive to a more comprehensive understanding of a drought event.

Figure S1. Spatial distribution of mean and maximum precipitation in the Pearl River basin

Figure S2. CC between different daily TWSA products and CSR–TWSA

Table S1. Statistics of SPI-6-identified drought events

ID	Duration	Duration (days)	Total severity	Minimum SPI-6(Category)	Minimum SPI-6 date
1	2003/9/18- 2004/4/16	211	-178.24	-1.33(D2)	2003/12/26
2	2005/1/1- 2005/4/24	114	-144.81	-1.74(D3)	2005/2/27
3	2005/12/3- 2006/3/12	100	-107.21	-1.50(D2)	2005/12/25
4	2009/8/20- 2010/4/30	254	-280.37	-1.64(D3)	2010/1/1
5	2011/5/27- 2012/1/23	242	-328.03	-2.13(D4)	2011/9/17
6	2021/6/6- 2021/12/15	193	-175.52	-1.31(D2)	2021/9/12