Supplementary materials: Wet and dry spells in Senegal: Evaluation of satellite-based and model re-analysis rainfall estimates

Cheikh Modou Noreyni Fall*, Christophe Lavaysse*, Mamadou Simina Drame*, Geremy Panthou* and Amadou Thierno Gaye*

July 19, 2019

Laboratoire de Physique de l’Atmosphère et de l’Ocean Simeon Fongang, ESP, Univ. Cheikh Anta Diop, Dakar, Senegal

Email: noreyni27@gmail.com

Additional Figures
Figure 1: Climatological (1998-2010) distribution of the number of DSC5, DSC15, DSs and DSm for: TRMM, TAMSAT, CMORPH, CHIRPS, CPC, NCEP, ERA5, BK, OK. The + represent the mean value, the − represent the median value, the box represents the 25th and 75th percentile values, and the whiskers represent the extreme values.
Figure 2: Climatological (1998-2010) distribution of the seasonal distribution of number of DSC5, DSC15, DSs and DSm for: TRMM, TAMSAT, CMORPH, CHIRPS, CPC, NCEP, ERA5, BK, OK.
Taylor Diagram of DS

Figure 3: Taylor Diagram of the occurrence of DSC5, DSC15, DSs and DSm for: TRMM, TAMSAT, CMORPH, CHIRPS, CPC, NCEP, ERA5, BK, OK. BK product is considered as reference.
Figure 5: Seasonal cycle of the occurrence of WS1, WSM, WSC5 and WSC15 (90th) percentiles averaged for the period 1998-2010, for TRMM, TAMSAT, CMORPH, CHIRPS, CPC, NCEP, ERA5, BK, OK
Figure 6: Same as figure S5 for the 95\textsuperscript{th} percentile
Figure 7: Same as figure S5 for the 99.5th percentile
Figure 8: Yearly cumulated rainfall provided by WS1, WSM, WSC5 and WSC15 (90th) percentiles, averaged for the period 1998-2010, for TRMM, TAMSAT, CMORPH, CHIRPS, CPC, NCEP, ERA5, BK, OK. The + represent the mean value, the − represent the median value, the box represents the 25th and 75th percentile values, and the whiskers represent the extreme values.
Figure 9: Same as Figure S8 for the 95\textsuperscript{th} percentiles.
Figure 10: Same as Figure S8 for the 99.5\textsuperscript{th} percentile.
Figure 11: Taylor Diagram of the spatial distribution of the number of WSC5, WS1, WSM, WSC5 and WSC15 (90th) percentiles using TRMM, TAMSAT, CMORPH, CHIRPS, CPC, NCEP, ERA5, OK. BK product is considered as reference during the period 1998-2010
Figure 12: Taylor Diagram of the occurrence of WSC5, WS1, WSM, WSC5 and WSC15 (95th) percentiles using TRMM, TAMSAT, CMORPH, CHIRPS, CPC, NCEP, ERA5, OK. BK product is considered as reference during the period 1998-2010.