5 Comparisons with SGD-SM 1.0

In this section, we compare the proposed SGD-SM 2.0 dataset with previous SGD-SM 1.0 dataset, from the perspectives of reconstructing accuracy and time-series consistency. In contrast with SGD-SM 1.0, we fuse the global daily precipitation products into the reconstructing framework. In addition, the LSTM-CNN model is developed to fill the gap and missing regions in SGD-SM 2.0 global daily soil moisture products. Detailed comparisons between the SGD-SM 1.0 and SGD-SM 2.0 are displayed as follows.

Figure 10. Time-series daily original/SGD-SM 2.0 results of the location (38.375°N, 117.125°E) in 2005, 2010, 2015, and 2020.