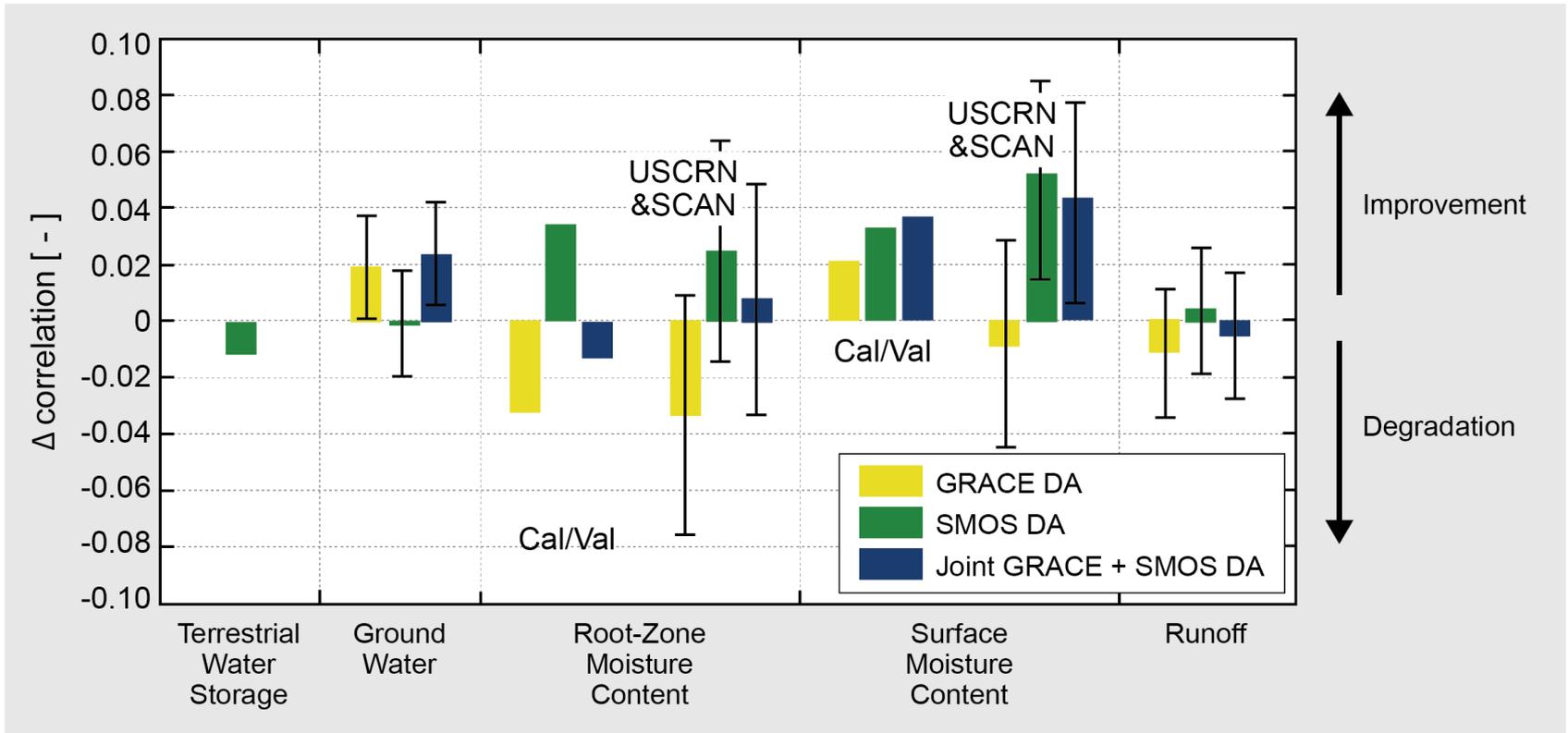# Joint Assimilation of SMOS Brightness Temperature and GRACE Terrestrial Water Storage Observations

This graph depicts the impact of assimilating GRACE terrestrial water storage data (yellow), SMOS brightness temperature data (green), and both data types (dark blue) on the skill of a hydrological model. The impact is shown by the change in skill compared to the model-only calculation. Overall, the best hydrology is achieved when both observation types (i.e., SMOS and GRACE) are assimilated simultaneously: the joint assimilation retains the advantages of each individual dataset's impact.