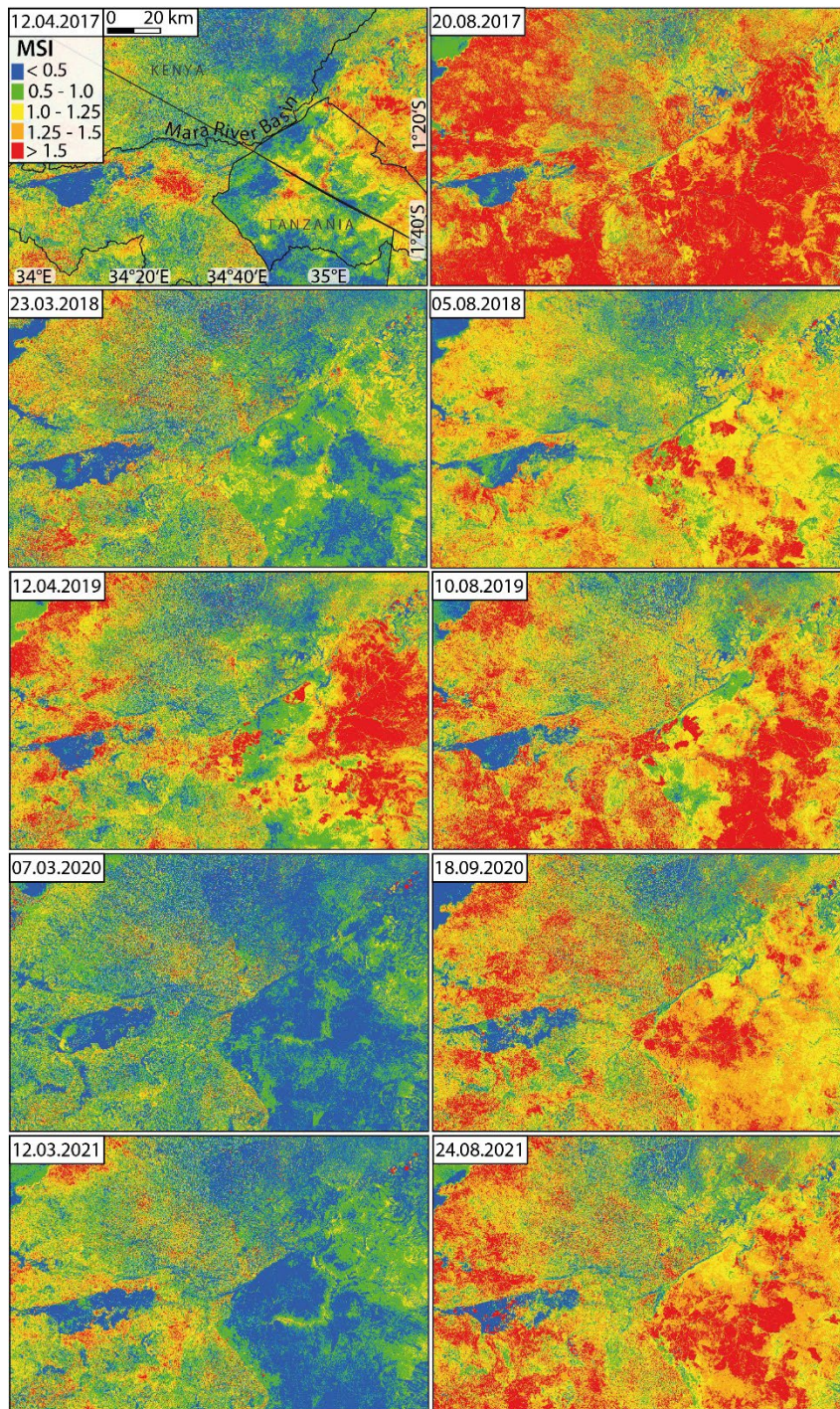


**Figure S1** Spatio-temporal distribution of Clay Mineral Ratio (CMR) in the Mara River Basin represented by 10 Sentinel-2 multispectral images from European Space Agency (ESA). For each year a rainy season (left side) and dry season (right side) scene was selected to highlight areas with perennially stable high clay mineral ratio.



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**Figure S2** Spatio-temporal distribution of Moisture Stress Index (MSI) in the Mara River Basin represented by 10 Sentinel-2 multispectral images from European Space Agency (ESA). For each year a rainy season (left side) and dry season (right side) scene was selected to highlight areas with perennially stable low moisture stress.