*Supplement of*

**Flash drought onset over the contiguous United States: sensitivity of inventories and trends to quantitative definitions**

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Supplementary Figures:

Figure S1: Timeseries of standardized main climate variables formulating the different flash droughts definitions at the selected
grid point in Fig. 2 during the 2017 Northern Plains flash drought event. Red-shaded region represents the flash drought event
according to the SMVI definition. Grey horizontal lines represent ±0.5 standard deviation which is roughly equivalent to the 30th
percentile of each variable’s climatology.
Figure S2: Correlation matrices for all Bukovsky regions from (a) to (y): Appalachia, Central, CPlains, DeepSouth, Desert, East, EastCoast, GreatBasin, GreatLakes, GreatPlains, Mezquital, MidAtlantic, MiWest, NorthAtlantic, NPlains, NRockies, PacificNW, PacificSW, Prairie, Rockies, South, Southeast, Southwest, SPlains, SRockies.
Figure S3: Tempo-spatial change in NDVI within selected flash drought impacted regions in 2012. (background map: ©OpenStreetMap contributors, CC BY-SA).

Figure S4: Similar to Fig. S2 for 2017 flash drought. (background map: ©OpenStreetMap contributors, CC BY-SA).