This dataset contains a series of land surface parameters simulated from the Noah 3.6.1 model in the Famine Early Warning Systems Network (FEWS NET) Land Data Assimilation System (FLDAS). The data are in 0.10 degree resolution and range from January 1982 to present. The temporal resolution is monthly and the spatial coverage is global (60S, 180W, 90N, 180E). The FLDAS regional monthly datasets will no longer be available and have been superseded by the global monthly dataset.

The final simulation was forced by a combination of the Modern-Era Retrospective analysis for Research and Applications version 2 (MERRA-2) data and Climate Hazards Group InfraRed Precipitation with Station (CHIRPS) 6-hourly rainfall data that has been downscaled using the NASA Land Data Toolkit.

The preliminary simulation was forced by a combination of the Global Data Assimilation System (GDAS) data and Climate Hazards Group InfraRed Precipitation preliminary 6-hourly rainfall data that has been downscaled using the NASA Land Data Toolkit.

The simulation was initialized on January 1, 1982 using soil moisture and other state fields from a FLDAS/Noah model climatology for that day of the year.

Since the values in the data sets do not represent the fluxes over open water, a water body mask needs to be applied to set the data values over inland water to null. The MOD44W MODIS Water Mask is the standard land/sea mask for FLDAS, and is available for download at:

https://modis.gsfc.nasa.gov/data/dataprod/mod44w.php

Additional data documentation may be found at:

https://disc.gsfc.nasa.gov/datasets/FLDAS_NOAH01_C_GL_M_001/summary?keywords=FLDAS

References:
McNally, A. et al. A land data assimilation system for sub-Saharan Africa food and water security applications. Sci. Data 4:170012 doi: 10.1038/sdata.2017.12 (2017).