visforce_prep script callstack

Run me script to process CRHM time-series
create_crhm_files.R

get_scenario()

Reorganize CHRM dat and txt files and create csv
convert_to_csv.R

Reorganize CHRM dat and txt files and create csv
convert_to_csv()

get_scenario()

combine_data()

calc_basinflow()

calc_swe_doy()

calc_swe_val()

calc_peak_flow()

det_cropland_areas()

calc_soil_moisture()

prep_soil_moisture()

Functions to calculate each desired parameter
preparing_parameters.R

Calculate basinflow (= streamflow)
calc_basinflow()

pivot_df_daily()

reorganize_df_daily()

Calculate snow water equivalent max value per hydrologic year
calc_swe_val()

wtr_yr()

pivot_df_yearly()

reorganize_df_yearly()

Calculate day when snow water equivalent max value is reached per hydrologic year
calc_swe_doy()

wtr_yr()

pivot_df_yearly()

reorganize_df_yearly()

Calculate peak flow per hydrologic year
calc_peak_flow()

wtr_yr()

pivot_df_yearly()

reorganize_df_yearly()

Calculate area weighted soil moisture values during growing season
calc_soil_moisture()

Misc functions used throughout
setup.R

Use filename to determine scenario temp, prec, drainage
get_scenario()

Rowbind all txt data and create a column indicating scenario
combine_data()

Tidy soil moisture data
prep_soil_moisture()

pivot_df_daily()

reorganize_df_daily()

Determine which HRUs are cropland, determine those HRU areas to perform area weighted soil moisture
det_cropland_areas()

Calculate the water year (starts in September)
wtr_yr()

Functions to tidy data
tidy.R

Pivot daily datasets
pivot_df_daily()

Pivot yearly datasets
pivot_df_yearly()

Create dummy date and reorganize columns for daily datasets
reorganize_df_daily()

Create dummy date and reorganize columns for yearly datasets
reorganize_df_yearly()

sources
sources
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sources

Process PHYDAP data
phydap.R

Aggregate to daily, reorganize, write to csv PHYDAP data
phydap_clean()

phydap_clean()

Process pre-processed VSMB data
masaki.R

Process pre-processed pesticide data
pesticide.R

LEGEND

starting point script – run me!

function defined

function called

functions contained in
script are sourced