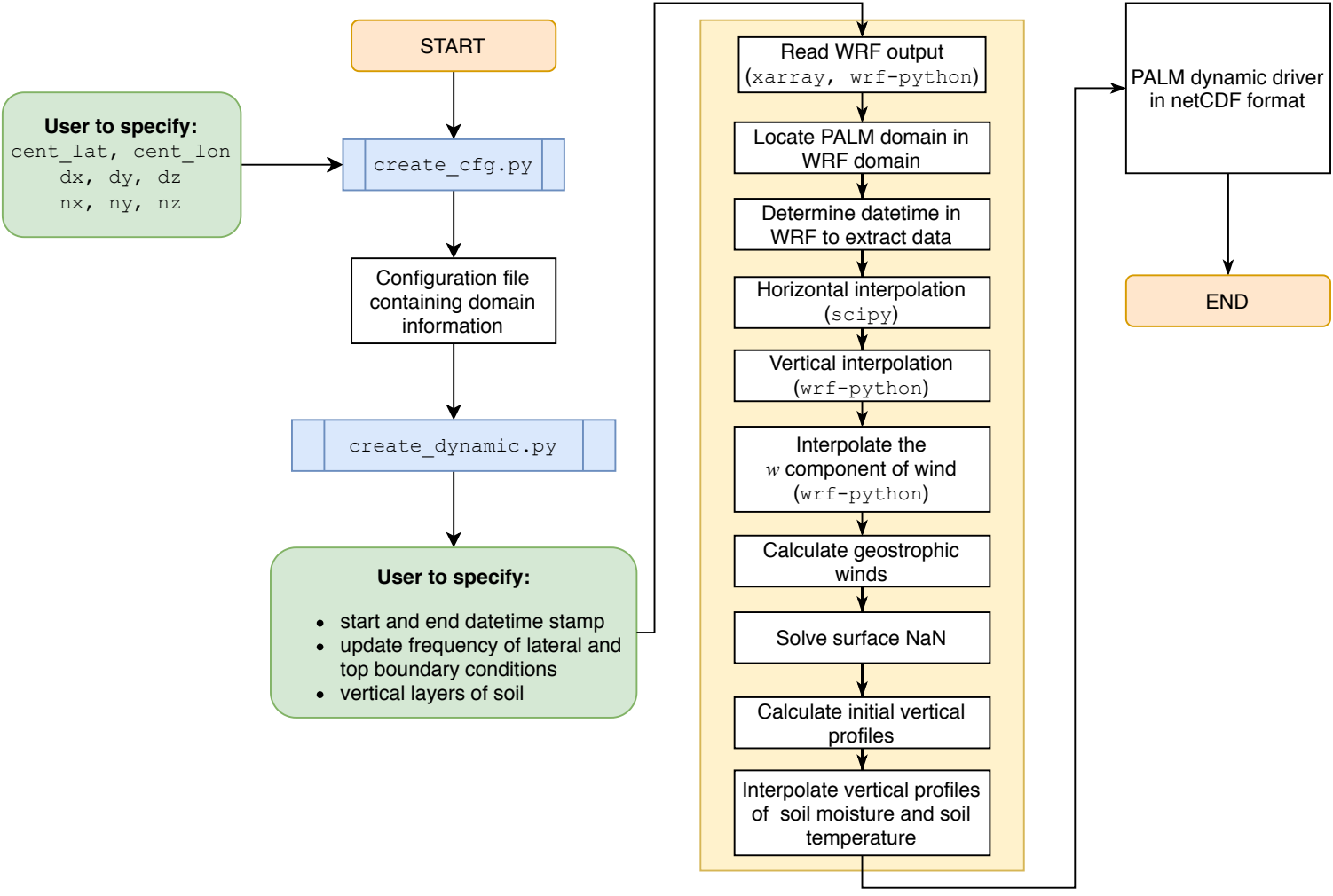
START
User to specify:
cent_lat, cent_lon
dx, dy, dz
nx, ny, nz
create_cfg.py
Configuration file containing domain information
create_dynamic.py
User to specify:
start and end datetime stamp
update frequency of lateral and top boundary conditions
vertical layers of soil
Read WRF output (xarray, wrf-python)
Locate PALM domain in WRF domain
Determine datetime in WRF to extract data
Horizontal interpolation (scipy)
Vertical interpolation (wrf-python)
Interpolate the w component of wind (wrf-python)
Calculate geostrophic winds
Solve surface NaN
Calculate initial vertical profiles
Interpolate vertical profiles of soil moisture and soil temperature
PALM dynamic driver in netCDF format
END