

namelist_changes

- ▶ a yaml **dictionary** with an extended functionality in ESM-Tools
- ▶ Allows changing the namelists through the **runscripts** and the **configuration files**

▶ Syntax

```
namelist_changes:  
  <namelist_name>:  
    <namelist_section-1>:  
      <variable-1>: <value-1>  
      <variable-2>: <value-2>  
  ...
```

namelist_changes

Use cases

- In the **runscripts**:
 - Make modifications in the namelists specific to the current experiment

Example

your_runscript.yaml

```
fesom:
  namelist_changes:
    namelist.config:
      paths:
        ClimateDataPath: "/work/ab0995/a270152/fesom2/input/init/"
```

namelist.config

```
&paths
MeshPath='/work/ollie/projects/clidyn/FESOM2/meshes/core2/'
ClimateDataPath='/work/ollie/projects/clidyn/FESOM2/hydrography/phc3.0/'
ResultPath='../result_tmp/'
/
```

Purpose

- User only needs to modify the runscript -> reproducibility

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Use cases

- In the **configuration files**:
 - Define the yaml variables through the ESM-Tools extended-syntax (i.e. **choose_blocks**, **variable calls**, ...)
 - Use those variables to make automatic changes into the namelists

Example

fesom-2.1.yaml

```
namelist_changes:
  namelist.config:
    clockinit:
      daynew: "${daynew}"
      yearnew: "${yearnew}"
    calendar:
      include_fleapyear: "${leapyear}"
    paths:
      MeshPath: "${mesh_dir}"
      ClimateDataPath: "${climate_data_dir}"
      ResultPath: "${work_dir}"
    timestep:
      step_per_day: "${steps_per_day}"
      run_length: "${restart_rate}"
      run_length_unit: "${restart_unit}"
```