

First you have to run a simulation without mixed layer ocean (`lmlo=.false.`, default) using climatological or AMIP SST. We use the last twenty years of an AMIP simulation to calculate the net heat flux for the heat flux correction of the mixed layer ocean experiment.

But it has been shown that also a 10-year mean is sufficient.

You can use the model's standard post processing output. Concatenate the BOT-files of your time period and select the code numbers 92,95,111 and 120 (LW and SW flux, latent and sensible heat flux over water) into a file called `fluxcodes` (e.g. with `cdo: cdo selcode,92,95,111,120 BOT_ANN fluxcodes`)

Then go on as follows (cdo example):

```
# Build the climatological mean:
cdo lmean fluxcodes fluxcodes_lmean
# split into single codes
cdo splitcode fluxcodes_lmean code
# add all four codes to one single code
cdo add code092.grb code095.grb code092+code095.grb
cdo add code111.grb code120.grb code111+code120.grb
cdo add code092+code095.grb code111+code120.grb heatflux
#
cdo -f nc setvar,aflux heatflux HRES_heatflux_EEE.nc
#where EEE is your experiment number, and HRES the (horizontal) resolution you
#have chosen for your experiment (e.g. T42)
#
```

You can check the contents of `HRES_heatflux_EEE.nc` using 'grads' and 'sdfopen' instead of 'open' or simply use `ncview`. Please check that your file contains the 12 months!

Now you can start with the mixed layer run:

You have to change your run-script from `lmlo=.false.` to `lmlo=.true.` or add `lmlo=.true.` in 'runctl'. Then add the line

```
'ln -s ${YOURINI}/HRES_heatflux_EEE.nc unit.42'
```

between the links into your runscript, where `YOURINI` is the path to your heatflux correction file.