

# Cloud-locking workflow

## Step #1

Run control with hourly,  
instantaneous output

```
FINCL2 = 'CLD_rad', 'CLDFSNOV_rad', 'CONCLD_rad', 'DEI_rad',  
         'DES_rad', 'ICIWP_rad', 'ICLWP_rad', 'ICSWP_rad',  
         'LAMBDAC_rad', 'MU_rad'
```

## Step #2

Process locking data

Concatenate hourly output tapes into a single file

```
bash template_pclD.YYYYMMDD.control.RESOLUTION.MACHINE.sh
```

## Step #3

Run cloud-locking experiment adding  
following `user_nl_cam` entries

```
docosp                = .false.  
prescribed_cloud_datapath = '/path/to/cloud_locking_data/'  
prescribed_cloud_file   = 'cloud_locking_data_file.nc'  
prescribed_cloud_type    = 'CYCLICAL'  
prescribed_cloud_num_file_years = 3.0  
pertlim                 = 0.1
```