

Summer temperatures across northern North America: Regional reconstructions from 1760 using tree-ring densities

Briffa, KR, Jones, PD and Schweingruber, FH (1994)

- [Details on UEA-eprints](#)
- [94_Canada.tar.gz](#) contains all the files necessary to run the transfer function and reconstruction

Transfer function

The following table shows the relevant configuration file for the calibration/verification combinations:

Alayuk

configuration file	calibration	verification
opsk202.dat	1901-1940	1941-1983
opsk201.dat	1941-1983	1901-1940
opsk203.dat	1901-1983	-----

Tree chronology file: `canalask.mxd`

Climate data file: `nhalaska.dat`

To execute the transfer function run: `run_recon_canalask_CH.sh`

Mackev

configuration file	calibration	verification
opsk212.dat	1901-1940	1941-1988
opsk211.dat	1941-1988	1901-1940
opsk213.dat	1901-1988	-----

Tree chronology file: `canmack.mxd`

Climate data file: `nhmacken.dat`

To execute the transfer function run: `run_recon_canmack_CH.sh`

Quebla

configuration file	calibration	verification
opsk234.dat	1901-1940	1941-1988
opsk233.dat	1941-1988	1901-1940
opsk235.dat	1901-1988	-----

Tree chronology file: `canqueb.mxd`

Climate data file: `nhquebec.dat`

To execute the transfer function run: `run_recon_canqueb_CH.sh`

For Alayuk and Quebla the above configuration reproduces the results in Table 2, Mackeva has some small discrepancies.

Reconstruction

To execute the reconstruction run:

`run_recon_canalas.sh` which picks up the coefficients file (`coeffsk203.dat`) and the parameters file (`osrrecon203.par`).

`run_recon_canmack.sh` which picks up the coefficients file (`coeffsk213.dat`) and the parameters file (`osrrecon213.par`).

`run_recon_canqueb.sh` which picks up the coefficients file (`coeffsk235.dat`) and the parameters file (`osrrecon235.par`).

The executable used is `reconnorm_canada` (compiled from `reconnorm_canada.for` - in this case an unmodified `reconnorm.for`).

The normalised output from the above

(`osrrecon203.dat`, `osrrecon213.dat` and `osrrecon235.dat`) matches the original output (`osrrecon203_ORIGINAL.dat`, `osrrecon213_ORIGINAL.dat` and `osrrecon235_ORIGINAL.dat`).

The three time series (`osrrecon_ts203.dat`, `osrrecon_ts213.dat` and `osrrecon_ts235.dat`) output visually match the plots in Figure 4.

Created: August 2012, Colin Harpham