1. Download Connectome Workbench

https://www.humanconnectome.org/software/get-connectome-workbench

Once installed, identify the installation path where the two executables `wb_command` and `wb_view` are (e.g. `/path/to/workbench/`)

2. Download surface template files

You can find the surface files at `/data00/tools/HCP_S1200_GroupAvg_v1.zip` and unzip in any directory (e.g. `/path/to/surface/`).

3. Convert nifti to gii files

Convert nifti into left hemisphere / right hemisphere / cerebellum surface metric files (i.e., one nifti file generates two `gii` files if only for L/R hemispheres, and three including cerebellum).

For example, to convert `example.nii.gz` in `/path/to/nifti`, run the following command lines in a terminal window (replace all `/path/to/xx` with real paths):

Left hemisphere -
```
/path/to/workbench/wb_command -volume-to-surface-mapping /path/to/nifti/example.nii.gz
/path/to/surface/S1200.L.midthickness_MSMAll.32k_fs_LR.surf.gii
/path/to/nifti/example_L.shape.gii -trilinear
```

Right hemisphere -
```
/path/to/workbench/wb_command -volume-to-surface-mapping /path/to/nifti/example.nii.gz
/path/to/surface/S1200.R.midthickness_MSMAll.32k_fs_LR.surf.gii
/path/to/nifti/example_R.shape.gii -trilinear
```

Cerebellum -
```
/path/to/workbench/wb_command -volume-to-surface-mapping /path/to/nifti/example.nii.gz
/path/to/surface/colin.cerebellum.inflated.native_cbllm.surf.gii
/path/to/nifti/example_CB.shape.gii -trilinear
```

Check full options here (e.g. `trilinear` or `enclosing`):
https://www.humanconnectome.org/software/workbench-command/-volume-to-surface-mapping

4. Launch wb_view and load files

Launch the workbench GUI (wb_view):
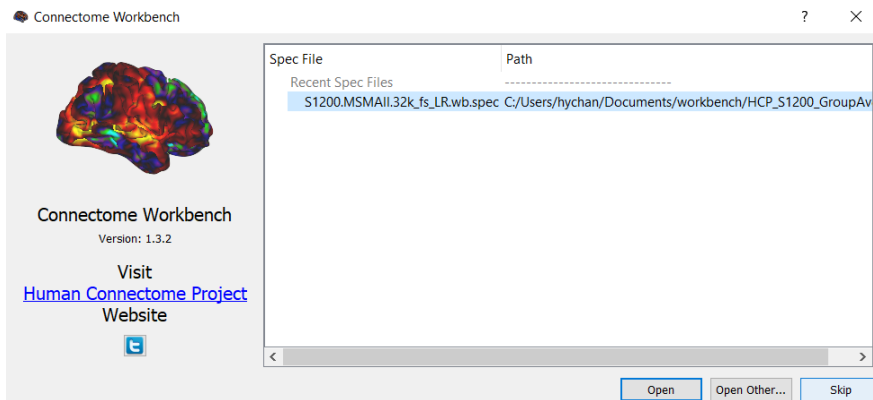
Press "Skip" in the splash window.

Open surface plot files by:
1. "File → Open File"
2. Go to where the surface files are (`/path/to/surface`)
3. Under "Files of type", choose "Surface Files (*.surf.gii)"
4. Choose any of the surface files, e.g.
   `S1200.R.midthickness_MSMAll.32k_fs_LR.surf.gii` and
   `S1200.R.midthickness_MSMAll.32k_fs_LR.surf.gii` (you can choose
   multiple files at one time)

Open metric files by:
1. "File → Open File"
2. Go to where the metric files are (`/path/to/nifti`)
3. Under "Files of type", choose "Metric Files (*.func.gii *.shape.gii)"
4. Choose the files for visualization (e.g., `example_L.shape.gii` and
   `example_R.shape.gii`). Multiple files can be chosen at the same time.

5. Configure visualization

Under Overlay Toolbox, use the dropdown menu to select both L and R files. Click the On checkboxes to make visible. Click the wrench button to configure color map, thresholding etc.
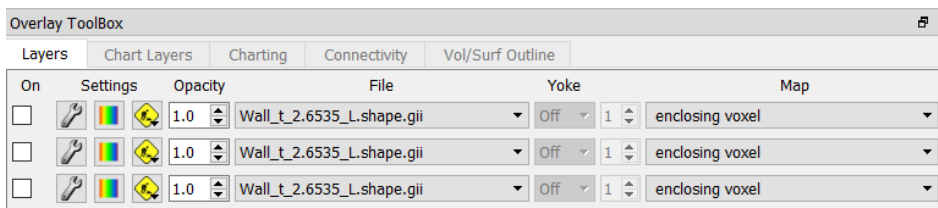
6. Output image

Output image using "File → Capture Image".